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Oscillator strength spectra and related quantities of 9 atoms and 23 molecules over the entire energy region

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Abstract

Datasets of oscillator strength spectra, photoabsorption cross sections, and mass absorption coefficients are evaluated for 9 atoms (H, He, Li, N, O, Ne, Na, Cl, and Ar) and 23 molecules (H_2, N_2, O_2, CO, NO, HCl, H_2O, CO_2, N_2O, NO_2, H_2S, SO_2, O_3, NH_3, CH_4, C_2H_2, C_2H_4, C_2H_6, CH_3OH, C_6H_6, SiH_4, SF_6, and C_{60}), which are based on the data compiled by Berkowitz [Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (Academic Press, 2002)]. The atomic number of adopted atoms is up to 18 (Ar) and that of constituent atoms of adopted molecules is not larger than 17 (Cl). For these atoms and molecules, experimental data are plenty to construct a reliable oscillator strength spectrum over the entire energy region. Datasets reported here are presently the most reliable because Berkowitz adopted cross sections after severe consideration of existing experimental data. The oscillator strengths are selected to satisfy the several sum rules and other theoretical bound conditions.

Keywords: Oscillator strength spectra, photoabsorption cross sections, Mass absorption coefficients

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1. Introduction

We reconstructed the oscillator-strength spectra (OSS) of 9 atoms and 23 molecules on the basis of photoabsorption cross sections compiled and published by Berkowitz [Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (Academic Press, 2002)]. He treated gaseous atoms up to Ar, the atomic number Z of which is 18. He treated gaseous molecules composed of atoms up to Cl (Z=17). For these atoms and molecules, plenty experimental data are available to construct a reliable OSS over the entire energy region. Moreover, the basic theoretical frame work for data analysis such as standard sum rules stands good for light atoms. These data were used to obtain the averaged stopping power by Kamakura *et al*. [J. Appl. Phys., 100 (2006) 064905].

2. Definitions

The *p*th energy moment of the oscillator-strength spectrum ($-2 \le p \le 2$) is defined by

$$S(p) = \sum_n f_n E_n^p + \int_{\mathrm{IP}}^{\infty} E^p \left(\frac{df}{dE} \right) dE , \qquad (1)$$

where f_n denotes the oscillator strength for discrete excitation to state *n*, and df/dE the oscillator-strength density per unit excitation energy *E* in the continuum. The lower limit IP of the integration represents the (first) ionization potential. The oscillator strength f_n for transition from the ground state 0 to an excited state *n* is defined by

$$f_n = \frac{2mE_n}{3\hbar^2} \left| \langle n | \sum_s \mathbf{r}_s | 0 \rangle \right|^2 . \qquad (2)$$

Here *m* denotes the electron mass, $\hbar$ is Planck's constant divided by 2π, E_n the excitation energy of discrete state *n* (measured from the ground state), and $\mathbf{r}_s$ the position vector of the *s*th electron in the atom or molecule. Experimental information on the oscillator-strength spectrum is obtained mainly from measurements of the photoabsorption cross section, $\sigma_{\mathrm{ph}}(E)$ at photon energy *E*. The relation between the two quantities is

$$\frac{df}{dE} = \frac{mc}{2\pi^2 \hbar e^2} \sigma_{\mathrm{ph}}(E). \qquad (3)$$

The moment $S(p)$ of Eq. (1) has the dimension of the *p*th power of the excitation energy *E*. Here we use the Rydberg energy Ry = 13.606 eV as the unit of *E* throughout, and refer to the moment value measured in $(\mathrm{Ry})^p$ as $S(p)$ for simplicity of expression.

The oscillator-strength moment $S(p)$ is often related to certain physical quantities. In the present context, $S(-2)$ and $S(0)$ are particularly important, we used these as constraints to the selection of the magnitude of a measured oscillator-strength spectrum. The quantity $S(-2)$ is proportional to the static electric-dipole polarizability, a reliably measured value of which is often available. The quantity $S(0)$ represents the total number of electrons in the system under consideration according to the Thomas-Reiche-Kuhn (TRK) sum rule, which should be accurate to ~0.1% for the atoms and molecules we treat in the present datasets.

3. Data survey

Berkowitz performed a thorough survey of photoabsorption cross sections for 32 atoms and molecules, and gave recommended cross-section data over the entire energy range [Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (Academic Press, 2002)]. The data are given in terms of the oscillator-strength spectrum. To arrive at the most probable set of data, he adjusted data obtained from various sources with the use of the sum rules of Eq. (1) as a guide. The oscillator-strength data are given in the following three forms. Firstly, many of the oscillator-strength values are tabulated for individual discrete transitions. Secondly, the continuum oscillator-strength spectrum is often shown graphically for selected energy intervals. Thirdly, at higher energies, the oscillator-strength density is usually given by a four-term polynomial, $df/dE = ay^2 + by^3 + cy^4 + dy^5$. Here the variable y is inversely proportional to the excitation energy E and a, b, c, and d are fitting coefficients.

In some energy intervals, the oscillator-strength spectrum is not given explicitly; only partial spectral moments $S(p)$ for $p = -2,-1,0,1,2$ are listed in tables. In such cases, numerical data were obtained from the original papers cited. When the oscillator-strength spectrum is given graphically, we obtained from a digitizer and read data with sufficient resolution in E.

Once the oscillator-strength data have been determined for the entire energy region, we can calculate partial values of spectral moments $S(p)$ in any given energy interval. For the energy intervals where Berkowitz does not give numerical values of the oscillator strength, values initially obtained with the digitizer were adjusted so that they gave partial values of spectral moments $S(p)$ consistent with those given by him. In those energy intervals, we judged that we used the same oscillator strengths as he used if we could reproduce $S(0)$ and $S(1)$ values within the accuracy of $\pm 1\%$. Generally a good reproduction of all the moments should be obtained if proper oscillator strengths are used. [The reason why equally good reproduction of all the partial values could not be obtained for $S(p)$ for $p = -2,-1,0,1,2$, is probably due to some difference in computational methods for each $S(p)$.]

For all the species of atoms and molecules, oscillator-strength moments, $S(p)$ for

$p = -2,-1,0,1,2$, were calculated for every energy intervals and compared with those listed in Berkowitz's book. In some cases we found significant disagreements between our values of $S(p)$ and those of Berkowitz; some values in his book were found to be incorrect and some necessary data were missing. After full communications with Berkowitz on the correct data, a final set of data of oscillator-strength spectra was established for each of the 32 atoms and molecules. The main corrections to his book are as follows.

In attempting to reproduce the calculations reported by Berkowitz [Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (Academic Press, 2002)], it was necessary to obtain further information about oscillator-strength spectra or photoabsorption cross sections. In some cases we found that numerical values given in Berkowitz's book should be corrected. In the following we draw up a list of these supplementary data and corrections for each atom or molecule. The number of Tables and pages cited below are those of his book.

For Li, the following data should be added in Table 2.7, p.22.

For O, the value of the moment $S(-1)$ in the energy range from 25.30 eV to 28.83 eV (Table 2.16, p.40) should be corrected from 0.891 to 0.1891. Oscillator-strength data used by Berkowitz to calculate the moments in the energy range from K edge to 572.8 eV are given in the following table (Table 2).

For Cl, the moment $S(0)$ in the energy range from 16.42 eV to 43 eV (Table 2.30, p.77) is corrected from 4.0105 to 4.1015.

For Ar, the correct values of moments $S(1)$ and $S(2)$ in the energy range from 243.0 eV to 253.0 eV (Table 2.34, p.89) are 3.5471 and 64.8246, respectively. The value of coefficient *c* in the energy range from 500 eV to 929.7 eV (Table 2.35, p.90) should be 8315.576, not 8315576. In this energy range, the correct value of the moment $S(1)$ is 111.9896.

For CO, the values of moments $S(p)$, $p = -2,-1,0,1,2$, in the energy range from IP to 17.712 eV (Table 4.14, p.160) are corrected slightly to 0.6587, 0.7582, 0.8771, 1.0195, and 1.1908, respectively.

For NO, the moment $S(1)$ in the energy range from 435 eV to 539 eV (Table 4.17, p.170) is corrected to 17.4857.

For HCl in the energy range from 38.0 eV to 91.5 eV, Berkowitz says that ``this is controversial region where little, if any, reliable data exist" and uses cross sections obtained by interpolating a few data with a smooth curve. Although we tried the same method on the basis of the data given in the cited references, we failed to reproduce the moment values in his book. Photoabsorption cross sections given by Berkowitz are as follows (Table 3).

It was also stated that new photoabsorption cross section data could be obtained from the following website, ftp://ftp.chem.ubc.ca/pub/cooper/. However, new data were not adopted in the present calculation because such corrections were beyond the scope of the present work.

For CO_2, the corrected value of the moment $S(2)$ in the energy range from 35.93 eV to 107.08 eV (Table 5.4, p.192) is 145.296, not 15.296.

For SO_2, the moment $S(1)$ in the energy range from IP to 16.67 eV (Table 5.13, p.223) should be corrected to 1.9237.

For NH_3, the correct values of coefficients given in Table 6.3, p.244, in the energy range from 425.0 eV to 2042.4 eV are a = 7.907258, b = 10573.86, c = 232623, and d = 987685.8.

For SiH_4, the value of the moment $S(2)$ in the energy range from 101.0 eV to 108.0 eV (Table 6.22, p.312) should be 9.4158, not 93.4158. Further, the coefficient d given in Table 6.23, p.314, in the energy range from 1872 eV to 10000 eV should have a minus sign, namely -380068525. Then the correct value of the moment $S(0)$ in this energy range is 1.4964.

Table 1. Supplementary data of energies and oscillator strengths for the 1s2s*n*p Rydberg series in atomic lithium.

Assignment	Energy (eV)	*f*
$(1s2s^3S)6p^2P$	63.951	0.005
$(1s2s^3S)7p^2P$	64.121	0.003
$(1s2s^3S)8p^2P$	64.184	0.002
$(1s2s^3S)9p^2P$	64.232	0.0014

Table 2. Energies and oscillator strengths for the energy range from the K edge to 572.8 eV in atomic oxygen.

Energy (eV)	*f*	Remarks
527	0.0452	Peak
541.2	0.00483	Peak
545.85	0.00374	Peak
542.68	0.001679	Peak
547.46	0.001404	Peak
544	0.001056	Underlying continuum, O^+
548.8	0.000939	Underlying continuum, O^+
544.5	0.004521	Underlying continuum, O^{++}
547	0.01150	Underlying continuum, O^{++}
550.5	0.01485	Underlying continuum, O^{++}
552.5 - 572.8	0.09402	

Table 3. Photoabsorption cross sections in the energy range from 38.0 eV to 91.5 eV in molecule HCl.

Energy (eV)	Cross section (Mb)	Energy (eV)	Cross section (Mb)
38.0	2.85	65.0	1.5
40.0	2.6	70.0	1.43
45.0	2.2	75.0	1.35
50.0	1.92	80.0	1.27
55.0	1.72	85.0	1.20
60.0	1.6	91.5	1.155

4. List of data

- Atoms (9)
  Atomic Hydrogen (H)
  Helium (He)
  Lithium (Li)
  Atomic Nitrogen (N)
  Atomic Oxygen (O)
  Neon (Ne)
  Sodium (Na)
  Atomic Chlorine (Cl)
  Argon (Ar)

- Diatomic molecules (6)
  Molecular Hydrogen (H_2)
  Molecular Nitrogen (N_2)
  Molecular Oxygen (O_2)
  Carbon Monoxide (CO)
  Nitric Oxide (NO)
  Hydrogen Chloride (HCl)

- Triatomic molecules (7)
  Water (H_2O)
  Carbon Dioxide (CO_2)
  Nitrous Oxide (N_2O)
  Nitrogen Dioxide (NO_2)
  Hydrogen Sulfide (H_2S)
  Sulfur Dioxide (SO_2)
  Ozone (O_3)

- Polyatomic molecules (10)
  Ammonia (NH_3)
  Methane (CH_4)
  Acetylene (C_2H_2)
  Ethylene (C_2H_4)
  Ethane (C_2H_6)

Methanol (CH_3OH)

Benzene (C_6H_6)

Silane (SiH_4)

Sulfur Hexafluoride (SF_6)

Buckminsterfullerene (C_{60})

Hydrogen Atom

Z = 1 Atomic Mass : $M_{\rm A} = 1.00794$

$\sigma_a\,({\rm Mb}) = 109.76097\ \dfrac{df}{dE}\ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.0199E+01	4.1600E-01	1.2157E+03	1.3551E+01	3.2100E-04	9.1492E+02
1.2088E+01	7.9100E-02	1.0257E+03	1.3556E+01	2.7000E-04	9.1458E+02
1.2749E+01	2.9000E-02	9.7254E+02	1.3561E+01	2.3000E-04	9.1429E+02
1.3054E+01	1.3900E-02	9.4974E+02	1.3564E+01	1.9700E-04	9.1404E+02
1.3221E+01	7.8000E-03	9.3780E+02	1.3568E+01	1.7000E-04	9.1383E+02
1.3321E+01	4.8200E-03	9.3075E+02	1.3570E+01	1.4800E-04	9.1364E+02
1.3386E+01	3.1800E-03	9.7254E+02	1.3573E+01	1.2900E-04	9.1348E+02
1.3431E+01	2.2200E-03	9.2315E+02	1.3575E+01	1.1400E-04	9.1334E+02
1.3462E+01	1.6100E-03	9.2096E+02	1.3577E+01	1.0000E-04	9.1322E+02
1.3486E+01	1.2000E-03	9.1935E+02	1.3578E+01	8.9300E-05	9.1310E+02
1.3504E+01	9.2100E-04	9.1813E+02	1.3580E+01	7.9700E-05	9.1301E+02
1.3518E+01	7.2300E-04	9.1718E+02	1.3581E+01	7.1500E-05	9.1292E+02
1.3529E+01	5.7800E-04	9.1643E+02	1.3582E+01	6.4300E-05	9.1284E+02
1.3538E+01	4.6900E-04	9.1582E+02	1.3583E+01	5.8100E-05	9.1277E+02
1.3545E+01	3.8600E-04	9.1533E+02			

The oscillator-strength density (in Rydberg unit) in the continuum is given by

$$ {\rm d}f/{\rm d}E \ = \ \frac{2^7}{3\,(1+k^2)^4}\ \exp\left(-\frac{4}{k}\ \tan^{-1}k\right)\ \left[1-\exp\left(-\frac{2\pi}{k}\right)\right]^{-1}, $$

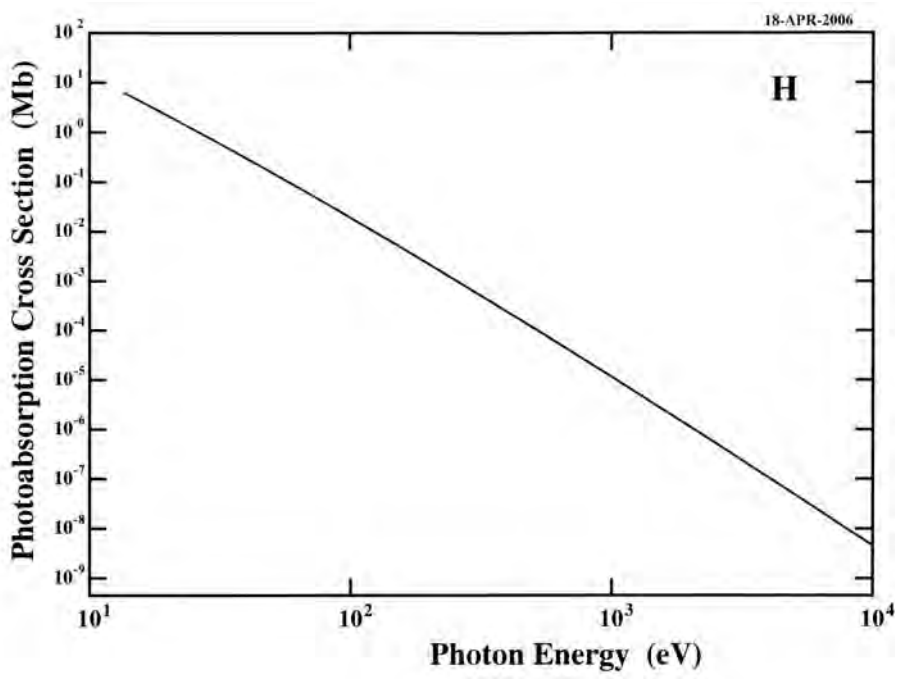
where $\epsilon = k^2$ is the electron kinetic energy, and incident photon energy $E = 1+\epsilon$. Here energies are given in Rydberg unit.

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm$^2 g^{-1}$)	λ (Å)
1.3606E+01	5.7437E-02	6.3043E+00	3.7666E+06	9.1127E+02
1.5000E+01	4.4223E-02	4.8540E+00	2.9001E+06	8.2656E+02
1.7500E+01	2.9105E-02	3.1946E+00	1.9087E+06	7.0848E+02
2.0000E+01	2.0153E-02	2.2120E+00	1.3216E+06	6.1992E+02
2.2500E+01	1.4516E-02	1.5933E+00	9.5195E+05	5.5104E+02
2.5000E+01	1.0792E-02	1.1845E+00	7.0773E+05	4.9594E+02
2.7500E+01	8.2344E-03	9.0382E-01	5.4001E+05	4.5085E+02
3.0000E+01	6.4209E-03	7.0476E-01	4.2107E+05	4.1328E+02
3.5000E+01	4.1153E-03	4.5170E-01	2.6988E+05	3.5424E+02
4.0000E+01	2.7880E-03	3.0601E-01	1.8283E+05	3.0996E+02
4.5000E+01	1.9716E-03	2.1641E-01	1.2930E+05	2.7552E+02
5.0000E+01	1.4429E-03	1.5838E-01	9.4627E+04	2.4797E+02
6.0000E+01	8.3665E-04	9.1831E-02	5.4866E+04	2.0664E+02
7.0000E+01	5.2532E-04	5.7660E-02	3.4450E+04	1.7712E+02
8.0000E+01	3.4990E-04	3.8405E-02	2.2946E+04	1.5498E+02
9.0000E+01	2.4391E-04	2.6772E-02	1.5995E+04	1.3776E+02
1.0000E+02	1.7630E-04	1.9351E-02	1.1562E+04	1.2398E+02
1.2500E+02	8.8166E-05	9.6772E-03	5.7818E+03	9.9187E+01
1.5000E+02	4.9787E-05	5.4646E-03	3.2650E+03	8.2656E+01
1.7500E+02	3.0602E-05	3.3589E-03	2.0069E+03	7.0848E+01
2.0000E+02	2.0026E-05	2.1980E-03	1.3133E+03	6.1992E+01
2.2500E+02	1.3751E-05	1.5094E-03	9.0180E+02	5.5104E+01
2.5000E+02	9.8109E-06	1.0769E-03	6.4339E+02	4.9594E+01
2.7500E+02	7.2208E-06	7.9256E-04	4.7353E+02	4.5085E+01
3.0000E+02	5.4533E-06	5.9856E-04	3.5762E+02	4.1328E+01
3.5000E+02	3.3097E-06	3.6328E-04	2.1705E+02	3.5424E+01
4.0000E+02	2.1432E-06	2.3524E-04	1.4055E+02	3.0996E+01
4.5000E+02	1.4586E-06	1.6010E-04	9.5656E+01	2.7552E+01
5.0000E+02	1.0327E-06	1.1335E-04	6.7724E+01	2.4797E+01
6.0000E+02	5.6679E-07	6.2212E-05	3.7170E+01	2.0664E+01
7.0000E+02	3.4053E-07	3.7377E-05	2.2332E+01	1.7712E+01
8.0000E+02	2.1868E-07	2.4002E-05	1.4341E+01	1.5498E+01
9.0000E+02	1.4779E-07	1.6221E-05	9.6917E+00	1.3776E+01
1.0000E+03	1.0400E-07	1.1415E-05	6.8203E+00	1.2398E+01
1.2500E+03	4.9288E-08	5.4099E-06	3.2322E+00	9.9187E+00

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, σ_a, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm$^2 g^{-1}$)	λ (Å)
1.5000E+03	2.6712E-08	2.9320E-06	1.7518E+00	8.2656E+00
1.7500E+03	1.5889E-08	1.7440E-06	1.0420E+00	7.0848E+00
2.0000E+03	1.0120E-08	1.1108E-06	6.6368E-01	6.1992E+00
2.2500E+03	6.7927E-09	7.4558E-07	4.4546E-01	5.5104E+00
2.5000E+03	4.7522E-09	5.2161E-07	3.1164E-01	4.9594E+00
2.7500E+03	3.4383E-09	3.7739E-07	2.2548E-01	4.5085E+00
3.0000E+03	2.5578E-09	2.8074E-07	1.6774E-01	4.1328E+00
3.5000E+03	1.5131E-09	1.6608E-07	9.9230E-02	3.5424E+00
4.0000E+03	9.5949E-10	1.0531E-07	6.2922E-02	3.0996E+00
4.5000E+03	6.4161E-10	7.0424E-08	4.2076E-02	2.7552E+00
5.0000E+03	4.4745E-10	4.9112E-08	2.9343E-02	2.4797E+00
6.0000E+03	2.3959E-10	2.6297E-08	1.5712E-02	2.0664E+00
7.0000E+03	1.4116E-10	1.5494E-08	9.2574E-03	1.7712E+00
8.0000E+03	8.9218E-11	9.7927E-09	5.8508E-03	1.5498E+00
9.0000E+03	5.9497E-11	6.5304E-09	3.9017E-03	1.3776E+00
1.0000E+04	4.1395E-11	4.5435E-09	2.7146E-03	1.2398E+00
1.2500E+04	1.9181E-11	2.1053E-09	1.2579E-03	9.9187E-01
1.5000E+04	1.0221E-11	1.1219E-09	6.7031E-04	8.2656E-01
1.7500E+04	5.9999E-12	6.5856E-10	3.9347E-04	7.0848E-01
2.0000E+04	3.7806E-12	4.1496E-10	2.4792E-04	6.1992E-01
2.2500E+04	2.5148E-12	2.7602E-10	1.6492E-04	5.5104E-01
2.5000E+04	1.7459E-12	1.9163E-10	1.1449E-04	4.9594E-01
2.7500E+04	1.2548E-12	1.3773E-10	8.2291E-05	4.5085E-01
3.0000E+04	9.2809E-13	1.0187E-10	6.0863E-05	4.1328E-01
3.5000E+04	5.4373E-13	5.9680E-11	3.5657E-05	3.5424E-01
4.0000E+04	3.4206E-13	3.7545E-11	2.2432E-05	3.0996E-01
4.5000E+04	2.2724E-13	2.4942E-11	1.4902E-05	2.7552E-01
5.0000E+04	1.5759E-13	1.7297E-11	1.0334E-05	2.4797E-01
6.0000E+04	8.3621E-14	9.1783E-12	5.4838E-06	2.0664E-01
7.0000E+04	4.8922E-14	5.3697E-12	3.2082E-06	1.7712E-01
8.0000E+04	3.0742E-14	3.3743E-12	2.0161E-06	1.5498E-01
9.0000E+04	2.0404E-14	2.2395E-12	1.3380E-06	1.3776E-01
1.0000E+05	1.4139E-14	1.5519E-12	9.2719E-07	1.2398E-01



H

Energy, eV	Source
Discrete	
1s $\rightarrow$ *n*p	Verner *et al*., Astron. Astrophys. Suppl. Ser., 108 (1994) 309
(up to n=30)	
Continuum	formula described in text

Helium Atom

Z = 2 Atomic Mass : $M_{\rm A} = 4.002602$

$\sigma_a({\rm Mb}) = 109.76097\ \dfrac{{\rm d}f}{{\rm d}E}\ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
2.1218E+01	2.7616E-01	5.8433E+02	2.4493E+01	1.0630E-03	5.0620E+02
2.3087E+01	7.3440E-02	5.3703E+02	2.4507E+01	8.3500E-04	5.0591E+02
2.3742E+01	2.9860E-02	5.2221E+02	2.4518E+01	6.6800E-04	5.0568E+02
2.4046E+01	1.5039E-02	5.1562E+02	2.4527E+01	5.4300E-04	5.0550E+02
2.4211E+01	8.6280E-03	5.1210E+02	2.4534E+01	4.4800E-04	5.0535E+02
2.4311E+01	5.4050E-03	5.1000E+02	2.4540E+01	3.7300E-04	5.0522E+02
2.4375E+01	3.6100E-03	5.0864E+02	2.4545E+01	3.1400E-04	5.0512E+02
2.4420E+01	2.5300E-03	5.0772E+02	2.4550E+01	2.6700E-04	5.0503E+02
2.4452E+01	1.8400E-03	5.0706E+02	2.4553E+01	2.2900E-04	5.0496E+02
2.4475E+01	1.3810E-03	5.0657E+02	2.4572E+01	2.0760E-03[a)]	5.0457E+02

[a)] Represents $\sum_{n=21}^{\infty} f_n$ for the 1 ^{1}S $\rightarrow$ n ^{1}P transitions.

Table II. Excess oscillator strength, f_n, for the two-electron excitation series.

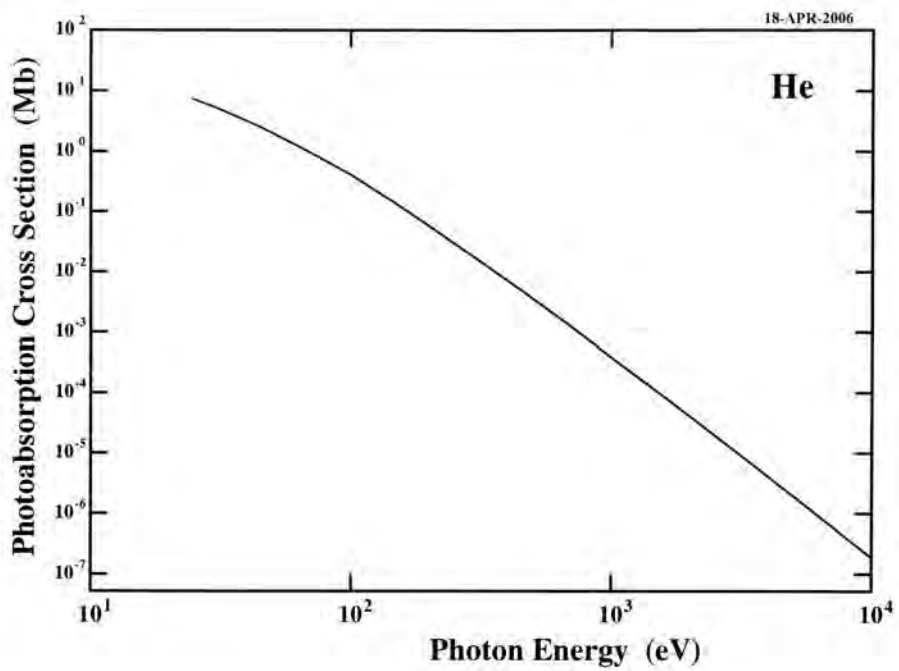
Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
6.0151E+01	4.8610E-03	2.0612E+02	6.2761E+01	3.2000E-05	1.9755E+02
6.3655E+01	8.0200E-04	1.9478E+02	6.4136E+01	5.0000E-06	1.9332E+02
6.4466E+01	3.3000E-04	1.9232E+02	6.4659E+01	4.0000E-06	1.9175E+02
6.4816E+01	1.3600E-04	1.9129E+02	7.1225E+01	5.8000E-05	1.7407E+02
6.4999E+01	7.8000E-05	1.9075E+02	7.2003E+01	6.7000E-05	1.7219E+02
6.5108E+01	4.9000E-05	1.9043E+02	7.2358E+01	4.8000E-05	1.7135E+02
6.5181E+01	2.9000E-05	1.9022E+02	7.2549E+01	5.0000E-06	1.7090E+02
6.5229E+01	1.9000E-05	1.9008E+02	7.1725E+01	2.0000E-06	1.7286E+02
6.5263E+01	1.0000E-05	1.8998E+02	7.2253E+01	6.3000E-05	1.7160E+02

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
2.4587E+01	6.7610E-02	7.4209E+00	1.1165E+06	5.0426E+02
2.5000E+01	6.5821E-02	7.2246E+00	1.0870E+06	4.9594E+02
2.7500E+01	5.6468E-02	6.1980E+00	9.3252E+05	4.5085E+02
3.0000E+01	4.8924E-02	5.3699E+00	8.0794E+05	4.1328E+02
3.5000E+01	3.7351E-02	4.0997E+00	6.1682E+05	3.5424E+02
4.0000E+01	2.9021E-02	3.1854E+00	4.7926E+05	3.0996E+02
4.5000E+01	2.2918E-02	2.5155E+00	3.7848E+05	2.7552E+02
5.0000E+01	1.8381E-02	2.0175E+00	3.0355E+05	2.4797E+02
6.0000E+01	1.2330E-02	1.3534E+00	2.0362E+05	2.0664E+02
7.0000E+01	8.6780E-03	9.5251E-01	1.4331E+05	1.7712E+02
8.0000E+01	6.3532E-03	6.9733E-01	1.0492E+05	1.5498E+02
9.0000E+01	4.8043E-03	5.2732E-01	7.9338E+04	1.3776E+02
1.0000E+02	3.7319E-03	4.0962E-01	6.1629E+04	1.2398E+02
1.2500E+02	2.0218E-03	2.2192E-01	3.3389E+04	9.9187E+01
1.5000E+02	1.2084E-03	1.3264E-01	1.9956E+04	8.2656E+01
1.7500E+02	7.7471E-04	8.5033E-02	1.2794E+04	7.0848E+01
2.0000E+02	5.2372E-04	5.7484E-02	8.6487E+03	6.1992E+01
2.2500E+02	3.6900E-04	4.0502E-02	6.0938E+03	5.5104E+01
2.5000E+02	2.6876E-04	2.9499E-02	4.4383E+03	4.9594E+01
2.7500E+02	2.0113E-04	2.2076E-02	3.3215E+03	4.5085E+01
3.0000E+02	1.5546E-04	1.7064E-02	2.5673E+03	4.1328E+01
3.5000E+02	9.7190E-05	1.0668E-02	1.6050E+03	3.5424E+01
4.0000E+02	6.4595E-05	7.0900E-03	1.0667E+03	3.0996E+01
4.5000E+02	4.4955E-05	4.9343E-03	7.4240E+02	2.7552E+01
5.0000E+02	3.2434E-05	3.5600E-03	5.3563E+02	2.4797E+01
6.0000E+02	1.8321E-05	2.0109E-03	3.0255E+02	2.0664E+01
7.0000E+02	1.1216E-05	1.2311E-03	1.8522E+02	1.7712E+01
8.0000E+02	7.2794E-06	7.9900E-04	1.2021E+02	1.5498E+01
9.0000E+02	4.9381E-06	5.4202E-04	8.1549E+01	1.3776E+01
1.0000E+03	3.5053E-06	3.8475E-04	5.7888E+01	1.2398E+01
1.2500E+03	1.7167E-06	1.8843E-04	2.8350E+01	9.9187E+00
1.5000E+03	9.5319E-07	1.0462E-04	1.5741E+01	8.2656E+00
1.7500E+03	5.7707E-07	6.3339E-05	9.5298E+00	7.0848E+00
2.0000E+03	3.7208E-07	4.0840E-05	6.1446E+00	6.1992E+00
2.2500E+03	2.5165E-07	2.7622E-05	4.1559E+00	5.5104E+00
2.5000E+03	1.7669E-07	1.9394E-05	2.9179E+00	4.9594E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.7500E+03	1.2783E-07	1.4031E-05	2.1110E+00	4.5085E+00
3.0000E+03	9.7155E-08	1.0664E-05	1.6044E+00	4.1328E+00
3.5000E+03	5.8332E-08	6.4026E-06	9.6331E-01	3.5424E+00
4.0000E+03	3.7350E-08	4.0995E-06	6.1680E-01	3.0996E+00
4.5000E+03	2.5158E-08	2.7614E-06	4.1546E-01	2.7552E+00
5.0000E+03	1.7651E-08	1.9374E-06	2.9149E-01	2.4797E+00
6.0000E+03	9.5493E-09	1.0481E-06	1.5770E-01	2.0664E+00
7.0000E+03	5.6790E-09	6.2333E-07	9.3784E-02	1.7712E+00
8.0000E+03	3.6206E-09	3.9740E-07	5.9792E-02	1.5498E+00
9.0000E+03	2.4344E-09	2.6720E-07	4.0202E-02	1.3776E+00
1.0000E+04	1.7068E-09	1.8734E-07	2.8186E-02	1.2398E+00
1.2500E+04	.80404E-10	8.8252E-08	1.3278E-02	9.9187E-01
1.5000E+04	.42443E-10	4.6586E-08	7.0091E-03	8.2656E-01
1.7500E+04	.25075E-10	2.7522E-08	4.1409E-03	7.0848E-01
2.0000E+04	.15883E-10	1.7433E-08	2.6229E-03	6.1992E-01
2.2500E+04	.10611E-10	1.1647E-08	1.7524E-03	5.5104E-01
2.5000E+04	.73945E-11	8.1163E-09	1.2211E-03	4.9594E-01
2.7500E+04	.53318E-11	5.8523E-09	8.8051E-04	4.5085E-01
3.0000E+04	.39546E-11	4.3406E-09	6.5307E-04	4.1328E-01
3.5000E+04	.23278E-11	2.5551E-09	3.8442E-04	3.5424E-01
4.0000E+04	.14701E-11	1.6136E-09	2.4277E-04	3.0996E-01
4.5000E+04	.97973E-12	1.0754E-09	1.6179E-04	2.7552E-01
5.0000E+04	.68128E-12	7.4778E-10	1.1251E-04	2.4797E-01
6.0000E+04	.36310E-12	3.9854E-10	5.9962E-05	2.0664E-01
7.0000E+04	.21315E-12	2.3396E-10	3.5200E-05	1.7712E-01
8.0000E+04	.13432E-12	1.4743E-10	2.2181E-05	1.5498E-01
9.0000E+04	.89350E-13	9.8071E-11	1.4755E-05	1.3776E-01
1.0000E+05	.62035E-13	6.8090E-11	1.0245E-05	1.2398E-01



When photon energy is higher than 13 600 eV, the oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, in Rydberg units is given by

$$\mathrm{d}f/\mathrm{d}E \;=\; 308.98E^{-3.5} - 1941.38E^{-4} + 7082.8E^{-4.5}.$$

Here E is photon energy in Rydberg units.

He

Energy, eV	Source
21.2 - 24.5874 (IP)	Berkowitz, J. Phys. B, 30 (1997) 881-892
IP - 120	Table 2.2 p.15 (Berkowitz's book*)
60 -72	Berkowitz, J. Phys. B, 30 (1997) 881-892
	Schulz et al., Phys. Rev. Lett., 77 (1996) 3086
120 -280	Table 2.2 p.15 (Berkowitz's book*)
280 - 1000	Table 2.2 p.15 (Berkowitz's book*)
1000 - 13600	Table 2.2 p.15 (Berkowitz's book*)
13600 - ∞	formura described in text
	Salpeter and Zaidi, Phys. Rev., 125 (1962) 248

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

Lithium Atom

Z = 3 Atomic Mass : $M_{\rm A} = 6.941$

$\sigma_a({\rm Mb}) = 109.76097 \, \dfrac{{\rm d}f}{{\rm d}E} \, ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n, for the $2\,^2{\rm S} \rightarrow n\,^2{\rm P}$ transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.8478E+00	7.4696E-01	6.7097E+03	5.1103E+00	1.0200E-03	2.4262E+03
3.8343E+00	4.8000E-03	3.2336E+03	5.1765E+00	6.9700E-04	2.3951E+03
4.5217E+00	4.3100E-03	2.7420E+03	5.2220E+00	4.9500E-04	2.3743E+03
4.8373E+00	2.5800E-03	2.5631E+03	5.2543E+00	3.6300E-04	2.3597E+03
5.0078E+00	1.5800E-03	2.4758E+03	5.3348E+00	1.6670E-03[a)]	2.3241E+03

[a)] Represents $\sum_{n=10.5}^{\infty} f_n$ for the $2\ ^2{\rm S} \rightarrow n\ ^2{\rm P}$ transitions. Table II. Discrete oscillator strength, f_n, for the 1s2snp Rydberg series.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
5.8910E+01	2.4000E-01	2.1046E+02	6.4184E+01	2.0000E-03	1.9317E+02
6.0396E+01	7.0000E-03	2.0529E+02	6.4232E+01	1.4000E-03	1.9303E+02
6.2419E+01	5.3000E-02	1.9863E+02	6.4260E+01	1.0000E-03	1.9294E+02
6.3356E+01	1.9000E-02	1.9569E+02	6.4046E+01	1.0000E-03	1.9359E+02
6.3753E+01	9.0000E-03	1.9448E+02	6.5290E+01	5.0000E-04	1.8990E+02
6.3951E+01	5.0000E-03	1.9387E+02	6.5650E+01	3.3000E-04	1.8886E+02
6.4121E+01	3.0000E-03	1.9336E+02			

Table III. Discrete oscillator strength, f_n, for unassigned bands and two-electron transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
6.4900E+01	3.5000E-02	1.9104E+02	7.1470E+01	7.2000E-04	1.7348E+02
6.4500E+01	3.0000E-03	1.9222E+02	7.2710E+01	1.0400E-04	1.7052E+02
6.5300E+01	3.0000E-03	1.8987E+02	7.3120E+01	1.0700E-04	1.6956E+02
6.6500E+01	2.0000E-03	1.8644E+02	7.3350E+01	5.8000E-05	1.6903E+02
6.6960E+01	1.0000E-03	1.8516E+02	7.3440E+01	9.4000E-06	1.6882E+02
6.7180E+01	5.0000E-04	1.8456E+02	7.3670E+01	2.6000E-05	1.6830E+02
7.1140E+01	3.4000E-03	1.7428E+02	7.3820E+01	3.4000E-05	1.6795E+02

Table IV. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
5.3917E+00	1.3547E-02	1.4869E+00	1.2901E+05	2.2995E+03
6.0000E+00	1.4661E-02	1.6092E+00	1.3962E+05	2.0664E+03
7.0000E+00	1.4995E-02	1.6459E+00	1.4280E+05	1.7712E+03
8.0000E+00	1.4358E-02	1.5760E+00	1.3673E+05	1.5498E+03
9.0000E+00	1.3334E-02	1.4636E+00	1.2698E+05	1.3776E+03
1.0000E+01	1.2207E-02	1.3399E+00	1.1625E+05	1.2398E+03
1.2500E+01	9.6067E-03	1.0544E+00	9.1485E+04	9.9187E+02
1.5000E+01	7.5911E-03	8.3321E-01	7.2291E+04	8.2656E+02
1.7500E+01	6.0929E-03	6.6877E-01	5.8023E+04	7.0848E+02
2.0000E+01	4.9753E-03	5.4609E-01	4.7380E+04	6.1992E+02
2.2500E+01	4.1285E-03	4.5315E-01	3.9316E+04	5.5104E+02
2.5000E+01	3.3276E-03	3.6525E-01	3.1689E+04	4.9594E+02
2.7500E+01	2.8357E-03	3.1125E-01	2.7004E+04	4.5085E+02
3.0000E+01	2.4761E-03	2.7178E-01	2.3580E+04	4.1328E+02
3.5000E+01	1.9605E-03	2.1519E-01	1.8670E+04	3.5424E+02
4.0000E+01	1.5958E-03	1.7515E-01	1.5197E+04	3.0996E+02
4.5000E+01	1.3223E-03	1.4513E-01	1.2592E+04	2.7552E+02
5.0000E+01	1.1111E-03	1.2196E-01	1.0581E+04	2.4797E+02
6.0000E+01	8.1238E-04	8.9168E-02	7.7364E+03	2.0664E+02
6.1000E+01	7.8909E-04	8.6611E-02	7.5146E+03	2.0325E+02
6.2000E+01	7.6675E-04	8.4160E-02	7.3018E+03	1.9997E+02
6.3000E+01	7.4532E-04	8.1807E-02	7.0977E+03	1.9680E+02
6.4000E+01	7.2473E-04	7.9547E-02	6.9017E+03	1.9373E+02
6.5000E+01	1.9132E-03	2.1000E-01	1.8220E+04	1.9074E+02
6.6000E+01	9.9307E-03	1.0900E+00	9.4570E+04	1.8785E+02
6.7000E+01	1.7948E-02	1.9700E+00	1.7092E+05	1.8505E+02
6.8000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.8233E+02
6.9000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.7969E+02
7.0000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.7712E+02
7.1000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.7463E+02
7.2000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.7220E+02
7.3000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.6984E+02
7.4000E+01	2.5966E-02	2.8500E+00	2.4727E+05	1.6755E+02
7.5000E+01	2.4767E-02	2.7185E+00	2.3586E+05	1.6531E+02
7.6000E+01	2.4145E-02	2.6502E+00	2.2993E+05	1.6314E+02
7.7000E+01	2.3545E-02	2.5843E+00	2.2422E+05	1.6102E+02

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m (cm^2 g^{-1})	λ (Å)
7.8000E+01	2.2967E-02	2.5209E+00	2.1872E+05	1.5895E+02
7.9000E+01	2.2409E-02	2.4596E+00	2.1340E+05	1.5694E+02
8.0000E+01	2.1870E-02	2.4004E+00	2.0827E+05	1.5498E+02
9.0000E+01	1.7320E-02	1.9011E+00	1.6494E+05	1.3776E+02
1.0000E+02	1.3905E-02	1.5262E+00	1.3242E+05	1.2398E+02
1.2500E+02	8.3786E-03	9.1964E-01	7.9790E+04	9.9187E+01
1.5000E+02	5.3117E-03	5.8301E-01	5.0583E+04	8.2656E+01
1.7500E+02	3.5135E-03	3.8565E-01	3.3459E+04	7.0848E+01
2.0000E+02	2.6282E-03	2.8847E-01	2.5028E+04	6.1992E+01
2.2500E+02	1.9230E-03	2.1108E-01	1.8313E+04	5.5104E+01
2.5000E+02	1.4424E-03	1.5832E-01	1.3736E+04	4.9594E+01
2.7500E+02	1.1062E-03	1.2141E-01	1.0534E+04	4.5085E+01
3.0000E+02	8.6500E-04	9.4944E-02	8.2375E+03	4.1328E+01
3.5000E+02	5.5563E-04	6.0986E-02	5.2913E+03	3.5424E+01
4.0000E+02	3.7644E-04	4.1318E-02	3.5848E+03	3.0996E+01
4.5000E+02	2.6600E-04	2.9197E-02	2.5332E+03	2.7552E+01
5.0000E+02	1.9446E-04	2.1344E-02	1.8519E+03	2.4797E+01
6.0000E+02	1.1248E-04	1.2346E-02	1.0711E+03	2.0664E+01
7.0000E+02	7.0450E-05	7.7327E-03	6.7090E+02	1.7712E+01
8.0000E+02	4.6806E-05	5.1374E-03	4.4573E+02	1.5498E+01
9.0000E+02	3.2424E-05	3.5588E-03	3.0877E+02	1.3776E+01
1.0000E+03	2.3430E-05	2.5717E-03	2.2313E+02	1.2398E+01
1.2500E+03	1.1730E-05	1.2875E-03	1.1170E+02	9.9187E+00
1.5000E+03	6.6379E-06	7.2858E-04	6.3213E+01	8.2656E+00
1.7500E+03	4.0887E-06	4.4878E-04	3.8937E+01	7.0848E+00
2.0000E+03	2.4581E-06	2.6980E-04	2.3408E+01	6.1992E+00
2.2500E+03	1.6957E-06	1.8612E-04	1.6148E+01	5.5104E+00
2.5000E+03	1.2136E-06	1.3320E-04	1.1557E+01	4.9594E+00
2.7500E+03	8.9513E-07	9.8250E-05	8.5244E+00	4.5085E+00
3.0000E+03	6.7705E-07	7.4313E-05	6.4476E+00	4.1328E+00
3.5000E+03	4.1151E-07	4.5168E-05	3.9189E+00	3.5424E+00
4.0000E+03	2.6640E-07	2.9241E-05	2.5370E+00	3.0996E+00
4.5000E+03	1.8098E-07	1.9865E-05	1.7235E+00	2.7552E+00
5.0000E+03	1.2770E-07	1.4017E-05	1.2161E+00	2.4797E+00
6.0000E+03	6.9306E-08	7.6071E-06	6.6001E-01	2.0664E+00
7.0000E+03	4.0933E-08	4.4928E-06	3.8981E-01	1.7712E+00

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m (cm^2 g^{-1})	λ (Å)
8.0000E+03	2.5688E-08	2.8196E-06	2.4463E-01	1.5498E+00
9.0000E+03	1.6865E-08	1.8512E-06	1.6061E-01	1.3776E+00
1.0000E+04	1.2813E-08	1.4064E-06	1.2202E-01	1.2398E+00
1.2500E+04	6.0683E-09	6.6606E-07	5.7789E-02	9.9187E-01
1.5000E+04	3.2950E-09	3.6166E-07	3.1378E-02	8.2656E-01
1.7500E+04	1.9662E-09	2.1581E-07	1.8724E-02	7.0848E-01
2.0000E+04	1.2572E-09	1.3799E-07	1.1972E-02	6.1992E-01
2.2500E+04	8.4716E-10	9.2985E-08	8.0676E-03	5.5104E-01
2.5000E+04	5.9574E-10	6.5389E-08	5.6733E-03	4.9594E-01
2.7500E+04	4.3351E-10	4.7583E-08	4.1284E-03	4.5085E-01
3.0000E+04	3.2387E-10	3.5549E-08	3.0843E-03	4.1328E-01
3.5000E+04	1.9315E-10	2.1201E-08	1.8394E-03	3.5424E-01
4.0000E+04	1.2344E-10	1.3549E-08	1.1756E-03	3.0996E-01
4.5000E+04	8.3168E-11	9.1286E-09	7.9202E-04	2.7552E-01
5.0000E+04	5.8416E-11	6.4118E-09	5.5630E-04	2.4797E-01
6.0000E+04	3.1698E-11	3.4792E-09	3.0186E-04	2.0664E-01
7.0000E+04	1.8905E-11	2.0750E-09	1.8003E-04	1.7712E-01
8.0000E+04	1.2083E-11	1.3262E-09	1.1507E-04	1.5498E-01
9.0000E+04	8.1411E-12	8.9358E-10	7.7528E-05	1.3776E-01
1.0000E+05	5.7174E-12	6.2755E-10	5.4447E-05	1.2398E-01

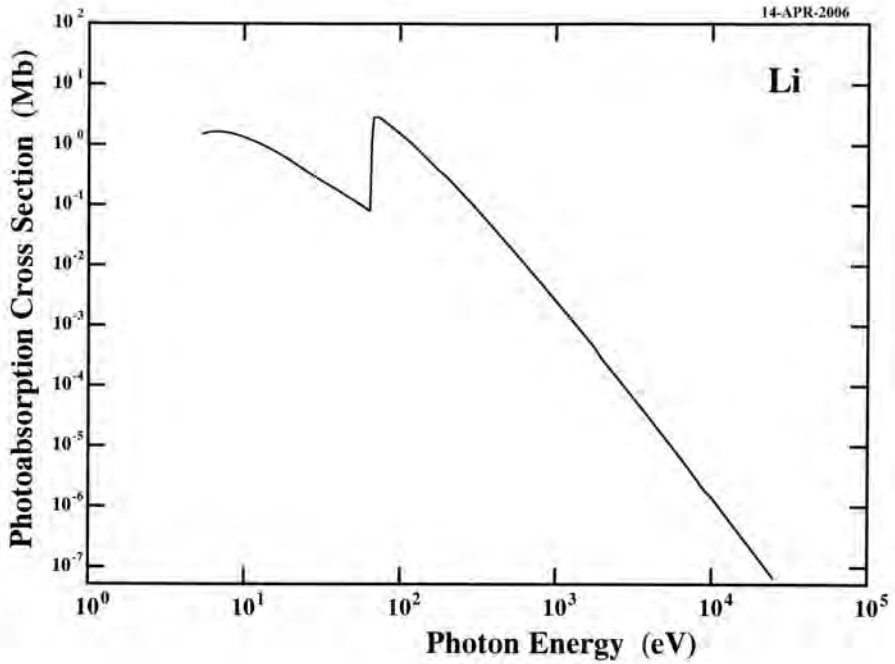
When photon energy is higher than 10^5 eV, the photoabsorption cross section, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\;,$$

where $E_\mathrm{K} \;=\; 64.4125$ eV.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Li
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^0
10^1
10^2
10^3
10^4
10^5

Li

Energy, eV	Source
0 - 5.3917 (IP)	Table 2.4 p.19 (Berkowitz's book*)
IP - 24.797	Table 2.5 p.20 (Berkowitz's book*)
24.797 - 65.0	Table 2.5 p.20 (Berkowitz's book*)
58.91 - 65.65 (resonance)	Table 2.7 p.22 (Berkowitz's book*)
64.9 - 73.82 (resonance)	Table 2.8 p.22 (Berkowitz's book*)
65.0 - 75.0	Fig. 2.6 p.23 (Berkowitz's book*)
75.0 - 200.0	Table 2.5 p.20 (Berkowitz's book*)
200.0 - 851.5	Table 2.5 p.20 (Berkowitz's book*)
851.5 - 2000	Table 2.5 p.20 (Berkowitz's book*)
2000 - 10000	Table 2.5 p.20 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Nitrogen Atom

Z = 7 Atomic Mass = 14.0067

$\sigma_a(\text{Mb}) = 109.76097 \, \frac{\mathrm{d}f}{\mathrm{d}E} \, (\text{eV}^{-1})$

$\mu_m = \sigma_a \cdot N_\text{A} \cdot M_\text{A}^{-1}$

Table I. Discrete oscillator strength, f_n.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.0332E+01	2.5900E-01	1.2000E+03	1.3000E+01	7.3000E-02	9.5369E+02
1.2862E+01	2.8200E-02	9.6398E+02	1.3680E+01	3.6900E-02	9.0634E+02
1.3606E+01	1.0900E-02	9.1127E+02	1.3991E+01	1.9700E-02	8.8619E+02
1.3928E+01	5.3500E-03	8.9021E+02	1.4184E+01	1.1700E-02	8.7410E+02
1.4176E+01	3.0400E-03	8.7459E+02	1.4383E+01	2.9200E-02[b]	8.6202E+02
1.4344E+01	1.8900E-03	8.6438E+02	1.3018E+01	6.7500E-03	9.5243E+02
1.4452E+01	1.2600E-03	8.5792E+02	1.2907E+01	1.8800E-03	9.6061E+02
1.4464E+01	4.1000E-03[a]	8.5716E+02	1.0926E+01	8.8200E-02	1.1348E+03

[a] Represents $\sum_{n=10}^{\infty} f_n$ for the ns(^{4}P) series.

[b] Represents $\sum_{n=7}^{\infty} f_n$ for the nd(^{4}P) series.

Table II. Discrete oscillator strength, f_n, for resonances between 17.9 eV and 20.3 eV and pre-K edge.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.7898E+01	5.3100E-03	6.9273E+02	2.0181E+01	4.3900E-04	6.1436E+02
1.9148E+01	2.2000E-03	6.4752E+02	2.0209E+01	3.9800E-04	6.1350E+02
1.9629E+01	1.6300E-03	6.3162E+02	2.0230E+01	3.3400E-04	6.1288E+02
1.9867E+01	8.3700E-04	6.2406E+02	2.0246E+01	2.5800E-04	6.1238E+02
2.0002E+01	7.5300E-04	6.1985E+02	2.0259E+01	2.0300E-04	6.1200E+02
2.0086E+01	5.4500E-04	6.1726E+02	2.0296E+01	1.1500E-04	6.1088E+02
2.0140E+01	3.7800E-04	6.1563E+02	4.0080E+02	1.2000E-01	3.0934E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m (cm^2 g^{-1})	λ (Å)
1.4534E+01	1.1653E-01	1.2791E+01	5.4993E+05	8.5306E+02
1.5000E+01	1.2139E-01	1.3324E+01	5.7287E+05	8.2656E+02
1.7500E+01	1.3101E-01	1.4380E+01	6.1826E+05	7.0848E+02
2.0000E+01	1.2663E-01	1.3899E+01	5.9760E+05	6.1992E+02
2.2500E+01	1.1743E-01	1.2889E+01	5.5416E+05	5.5104E+02
2.5000E+01	1.0703E-01	1.1747E+01	5.0507E+05	4.9594E+02
2.7500E+01	9.6880E-02	1.0634E+01	4.5719E+05	4.5085E+02
3.0000E+01	8.5963E-02	9.4354E+00	4.0567E+05	4.1328E+02
3.5000E+01	7.2056E-02	7.9089E+00	3.4004E+05	3.5424E+02
4.0000E+01	5.9919E-02	6.5768E+00	2.8277E+05	3.0996E+02
4.5000E+01	4.9984E-02	5.4863E+00	2.3588E+05	2.7552E+02
5.0000E+01	4.2460E-02	4.6605E+00	2.0037E+05	2.4797E+02
6.0000E+01	2.9614E-02	3.2505E+00	1.3975E+05	2.0664E+02
7.0000E+01	2.0852E-02	2.2888E+00	9.8405E+04	1.7712E+02
8.0000E+01	1.5097E-02	1.6571E+00	7.1246E+04	1.5498E+02
9.0000E+01	1.1253E-02	1.2352E+00	5.3105E+04	1.3776E+02
1.0000E+02	8.6127E-03	9.4534E-01	4.0645E+04	1.2398E+02
1.2500E+02	4.8531E-03	5.3268E-01	2.2902E+04	9.9187E+01
1.5000E+02	3.0311E-03	3.3270E-01	1.4304E+04	8.2656E+01
1.7500E+02	2.0389E-03	2.2379E-01	9.6218E+03	7.0848E+01
2.0000E+02	1.7048E-03	1.8712E-01	8.0453E+03	6.1992E+01
2.2500E+02	1.2995E-03	1.4263E-01	6.1325E+03	5.5104E+01
2.5000E+02	1.0191E-03	1.1186E-01	4.8092E+03	4.9594E+01
2.7500E+02	8.1833E-04	8.9820E-02	3.8618E+03	4.5085E+01
3.0000E+02	6.7028E-04	7.3571E-02	3.1632E+03	4.1328E+01
3.5000E+02	4.7177E-04	5.1782E-02	2.2263E+03	3.5424E+01
4.0000E+02	3.4901E-04	3.8307E-02	1.6470E+03	3.0996E+01
4.0990E+02	3.3037E-04	3.6262E-02	1.5591E+03	3.0247E+01
4.0990E+02	6.4535E-03	7.0834E-01	3.0455E+04	3.0247E+01
4.5000E+02	5.2494E-03	5.7618E-01	2.4773E+04	2.7552E+01
5.0000E+02	4.1161E-03	4.5179E-01	1.9425E+04	2.4797E+01
6.0000E+02	2.6473E-03	2.9057E-01	1.2493E+04	2.0664E+01
7.0000E+02	1.7936E-03	1.9686E-01	8.4640E+03	1.7712E+01
8.0000E+02	1.2681E-03	1.3919E-01	5.9843E+03	1.5498E+01
9.0000E+02	9.2845E-04	1.0191E-01	4.3815E+03	1.3776E+01
1.0000E+03	6.9971E-04	7.6800E-02	3.3020E+03	1.2398E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2500E+03	3.8052E-04	4.1766E-02	1.7957E+03	9.9187E+00
1.5000E+03	2.2951E-04	2.5191E-02	1.0831E+03	8.2656E+00
1.7500E+03	1.4905E-04	1.6360E-02	7.0339E+02	7.0848E+00
2.0000E+03	1.0231E-04	1.1230E-02	4.8282E+02	6.1992E+00
2.2500E+03	7.1319E-05	7.8281E-03	3.3657E+02	5.5104E+00
2.5000E+03	5.2284E-05	5.7388E-03	2.4674E+02	4.9594E+00
2.7500E+03	3.9426E-05	4.3274E-03	1.8606E+02	4.5085E+00
3.0000E+03	3.0430E-05	3.3400E-03	1.4360E+02	4.1328E+00
3.5000E+03	1.9169E-05	2.1040E-03	9.0459E+01	3.5424E+00
4.0000E+03	1.2797E-05	1.4046E-03	6.0389E+01	3.0996E+00
4.5000E+03	8.9312E-06	9.8030E-04	4.2148E+01	2.7552E+00
5.0000E+03	6.4565E-06	7.0867E-04	3.0469E+01	2.4797E+00
6.0000E+03	3.6572E-06	4.0142E-04	1.7259E+01	2.0664E+00
7.0000E+03	2.2440E-06	2.4630E-04	1.0590E+01	1.7712E+00
8.0000E+03	1.4596E-06	1.6021E-04	6.8882E+00	1.5498E+00
9.0000E+03	9.9254E-07	1.0894E-04	4.6839E+00	1.3776E+00
1.0000E+04	7.1411E-07	7.8381E-05	3.3700E+00	1.2398E+00
1.2500E+04	3.4836E-07	3.8237E-05	1.6440E+00	9.9187E-01
1.5000E+04	1.9377E-07	2.1268E-05	9.1442E-01	8.2656E-01
1.7500E+04	1.1799E-07	1.2950E-05	5.5680E-01	7.0848E-01
2.0000E+04	7.6783E-08	8.4278E-06	3.6235E-01	6.1992E-01
2.2500E+04	5.2564E-08	5.7694E-06	2.4806E-01	5.5104E-01
2.5000E+04	3.7465E-08	4.1122E-06	1.7680E-01	4.9594E-01
2.7500E+04	2.7498E-08	3.0182E-06	1.2977E-01	4.5085E-01
3.0000E+04	2.0650E-08	2.2665E-06	9.7449E-02	4.1328E-01
3.5000E+04	1.2429E-08	1.3642E-06	5.8654E-02	3.5424E-01
4.0000E+04	8.0070E-09	8.7886E-07	3.7786E-02	3.0996E-01
4.5000E+04	5.4329E-09	5.9632E-07	2.5638E-02	2.7552E-01
5.0000E+04	3.8404E-09	4.2152E-07	1.8123E-02	2.4797E-01
6.0000E+04	2.1070E-09	2.3127E-07	9.9432E-03	2.0664E-01
7.0000E+04	1.2683E-09	1.3921E-07	5.9854E-03	1.7712E-01
8.0000E+04	8.1695E-10	8.9669E-08	3.8553E-03	1.5498E-01
9.0000E+04	5.5405E-10	6.0813E-08	2.6146E-03	1.3776E-01
1.0000E+05	3.9138E-10	4.2958E-08	1.8470E-03	1.2398E-01

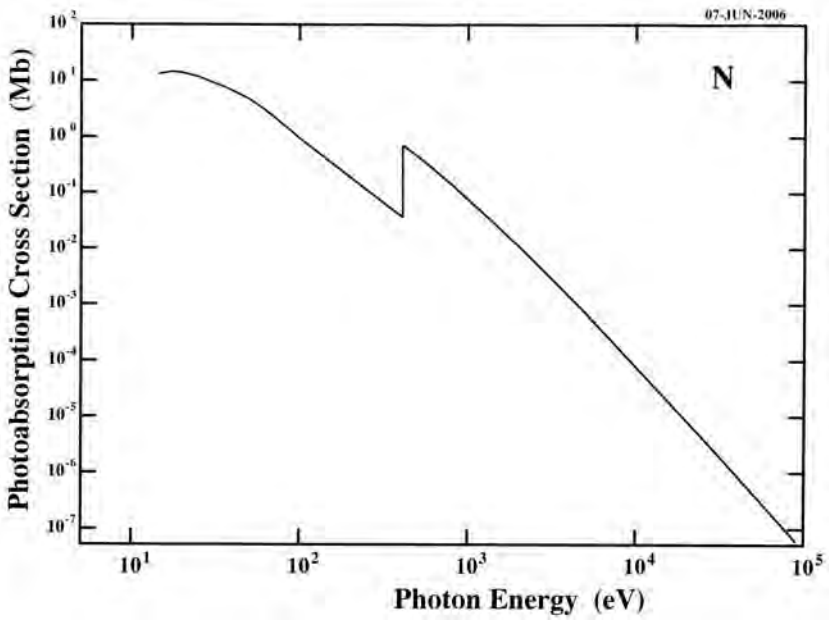
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E-E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 409.9$ eV.



N

Energy, eV	Source
Discrete - 14.534128 (IP)	Table 2.10 p.27 (Berkowitz's book*)
IP - 30.0	Table 2.12 p.33 (Berkowitz's book*)
30.0 - 49.6	Table 2.12 p.33 (Berkowitz's book*)
17.898 - 20.335 (resonance)	Dehmer et al., . Chem. Phys., 60 (1974) 2676 Carroll et al., Astrophys. J., 146 (1966) 553
49.6 - 180	Table 2.12 p.33 (Berkowitz's book*)
180 - 409.9	Table 2.12 p.33 (Berkowitz's book*)
Pre-K edge	Table 2.12 p.33 (Berkowitz's book*)
409.9 - 2042.4	Table 2.12 p.33 (Berkowitz's book*)
2042.4 - 10000	Table 2.12 p.33 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Oxygen Atom

Z = 8 Atomic Mass = 15.9994

$\sigma_a(\text{Mb}) = 109.76097 \ \frac{\mathrm{d}f}{\mathrm{d}E} \ (\text{eV}^{-1})$

$\mu_m = \sigma_a \cdot N_\text{A} \cdot M_\text{A}^{-1}$

Table I. Discrete oscillator strength, f_n, for discrete transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
9.5100E+00	5.1900E-02	1.3037E+03	1.3060E+01	6.3100E-03	9.4934E+02
1.1920E+01	9.1600E-03	1.0401E+03	1.3220E+01	8.7700E-04	9.3785E+02
1.2080E+01	2.0100E-02	1.0264E+03	1.3230E+01	3.6300E-03	9.3714E+02
1.2540E+01	5.5300E-02	9.8871E+02	1.3320E+01	5.3700E-04	9.3081E+02
1.2690E+01	3.3100E-03	9.7702E+02	1.3330E+01	2.3000E-03	9.3011E+02
1.2760E+01	1.3800E-02	9.7166E+02	1.3390E+01	1.5400E-03	9.2595E+02
1.3040E+01	1.5700E-03	9.5080E+02	1.3606E+01	2.8100E-03	9.1127E+02

Table II. Discrete oscillator strength, f_n, for autoionizing transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.4120E+01	8.0000E-02	8.7807E+02	1.6730E+01	2.0000E-03	7.4109E+02
1.5180E+01	9.0000E-03	8.1676E+02	1.6780E+01	1.0000E-03	7.3888E+02
1.5290E+01	3.8000E-03	8.1088E+02	1.6800E+01	1.0000E-03	7.3800E+02
1.5400E+01	9.3000E-03	8.0509E+02	1.6840E+01	2.5000E-03	7.3625E+02
1.5650E+01	6.6000E-02	7.9223E+02	1.7100E+01	7.4000E-03	7.2505E+02
1.6000E+01	2.9000E-03	7.7490E+02	1.7690E+01	1.7000E-03	7.0087E+02
1.6100E+01	1.7900E-02	7.7009E+02	1.7790E+01	3.4000E-03	6.9693E+02
1.6400E+01	8.5000E-03	7.5600E+02	1.8070E+01	2.6000E-03	6.8613E+02
1.6570E+01	4.1000E-03	7.4824E+02	1.8230E+01	1.2000E-03	6.8011E+02
1.6660E+01	3.0000E-03	7.4420E+02	1.8340E+01	6.0000E-04	6.7603E+02

Table III. Discrete oscillator strength, f_n, for the resonance transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
5.2700E+02	4.5200E-02	2.3526E+01	5.4400E+02	1.0560E-03	2.2791E+01
5.4120E+02	4.8300E-03	2.2909E+01	5.4880E+02	9.3900E-04	2.2592E+01
5.4585E+02	3.7400E-03	2.2714E+01	5.4450E+02	4.5210E-03	2.2770E+01
5.4268E+02	1.6790E-03	2.2847E+01	5.4700E+02	1.1500E-02	2.2666E+01
5.4746E+02	1.4040E-03	2.2647E+01	5.5050E+02	1.4850E-02	2.2522E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m (cm^2 g^{-1})	λ (Å)
1.3617E+01	6.3775E-03	7.0000E-01	2.6348E+04	9.1050E+02
1.3625E+01	1.0477E-02	1.1500E+00	4.3286E+04	9.1000E+02
1.3628E+01	2.2321E-02	2.4500E+00	9.2218E+04	9.0980E+02
1.3662E+01	2.5054E-02	2.7500E+00	1.0351E+05	9.0750E+02
1.3700E+01	2.5054E-02	2.7500E+00	1.0351E+05	9.0500E+02
1.3776E+01	2.5966E-02	2.8500E+00	1.0727E+05	9.0000E+02
1.3853E+01	2.5054E-02	2.7500E+00	1.0351E+05	8.9500E+02
1.3931E+01	2.4599E-02	2.7000E+00	1.0163E+05	8.9000E+02
1.4010E+01	2.5966E-02	2.8500E+00	1.0727E+05	8.8500E+02
1.4251E+01	2.8243E-02	3.1000E+00	1.1668E+05	8.7000E+02
1.4333E+01	2.8243E-02	3.1000E+00	1.1668E+05	8.6500E+02
1.4417E+01	2.8243E-02	3.1000E+00	1.1668E+05	8.6000E+02
1.4501E+01	2.8243E-02	3.1000E+00	1.1668E+05	8.5500E+02
1.4586E+01	2.9154E-02	3.2000E+00	1.2045E+05	8.5000E+02
1.4673E+01	2.9610E-02	3.2500E+00	1.2233E+05	8.4500E+02
1.4760E+01	3.0065E-02	3.3000E+00	1.2421E+05	8.4000E+02
1.4848E+01	3.0065E-02	3.3000E+00	1.2421E+05	8.3500E+02
1.4938E+01	3.0065E-02	3.3000E+00	1.2421E+05	8.3000E+02
1.5028E+01	3.0065E-02	3.3000E+00	1.2421E+05	8.2500E+02
1.5794E+01	3.3710E-02	3.7000E+00	1.3927E+05	7.8500E+02
1.5895E+01	3.3710E-02	3.7000E+00	1.3927E+05	7.8000E+02
1.6207E+01	3.6443E-02	4.0000E+00	1.5056E+05	7.6500E+02
1.6309E+01	3.6989E-02	4.0600E+00	1.5282E+05	7.6022E+02
1.6314E+01	3.5532E-02	3.9000E+00	1.4680E+05	7.6000E+02
1.6481E+01	3.7809E-02	4.1500E+00	1.5621E+05	7.5230E+02
1.6933E+01	4.0087E-02	4.4000E+00	1.6562E+05	7.3220E+02
1.6933E+01	7.3159E-02	8.0300E+00	3.0225E+05	7.3220E+02
1.6970E+01	7.6530E-02	8.4000E+00	3.1617E+05	7.3060E+02
1.7007E+01	8.3545E-02	9.1700E+00	3.4516E+05	7.2900E+02
1.7042E+01	8.1085E-02	8.9000E+00	3.3499E+05	7.2750E+02
1.7160E+01	8.2179E-02	9.0200E+00	3.3951E+05	7.2250E+02
1.7199E+01	8.1176E-02	8.9100E+00	3.3537E+05	7.2090E+02
1.7220E+01	8.1996E-02	9.0000E+00	3.3876E+05	7.2000E+02
1.7239E+01	8.1996E-02	9.0000E+00	3.3876E+05	7.1920E+02
1.7278E+01	8.0083E-02	8.7900E+00	3.3085E+05	7.1760E+02
1.7323E+01	8.4183E-02	9.2400E+00	3.4779E+05	7.1570E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7362E+01	8.3636E-02	9.1800E+00	3.4553E+05	7.1410E+02
1.7401E+01	8.4365E-02	9.2600E+00	3.4854E+05	7.1250E+02
1.7443E+01	8.4730E-02	9.3000E+00	3.5005E+05	7.1080E+02
1.7463E+01	8.3363E-02	9.1500E+00	3.4440E+05	7.1000E+02
1.7482E+01	8.8465E-02	9.7100E+00	3.6548E+05	7.0920E+02
1.7522E+01	9.0014E-02	9.8800E+00	3.7188E+05	7.0760E+02
1.7564E+01	8.8465E-02	9.7100E+00	3.6548E+05	7.0590E+02
1.7586E+01	8.7463E-02	9.6000E+00	3.6134E+05	7.0500E+02
1.7832E+01	8.2543E-02	9.0600E+00	3.4102E+05	6.9530E+02
1.7870E+01	8.1996E-02	9.0000E+00	3.3876E+05	6.9380E+02
1.7904E+01	8.7463E-02	9.6000E+00	3.6134E+05	6.9250E+02
1.7912E+01	8.6643E-02	9.5100E+00	3.5795E+05	6.9220E+02
1.7953E+01	8.6278E-02	9.4700E+00	3.5645E+05	6.9060E+02
1.7969E+01	8.9285E-02	9.8000E+00	3.6887E+05	6.9000E+02
1.8129E+01	8.4274E-02	9.2500E+00	3.4817E+05	6.8390E+02
1.8153E+01	8.7918E-02	9.6500E+00	3.6322E+05	6.8300E+02
1.8158E+01	8.8283E-02	9.6900E+00	3.6473E+05	6.8280E+02
1.8300E+01	9.1107E-02	1.0000E+01	3.7640E+05	6.7750E+02
1.8636E+01	8.9285E-02	9.8000E+00	3.6887E+05	6.6530E+02
1.8636E+01	1.0933E-01	1.2000E+01	4.5168E+05	6.6530E+02
1.8785E+01	1.1479E-01	1.2600E+01	4.7426E+05	6.6000E+02
1.9074E+01	1.1844E-01	1.3000E+01	4.8932E+05	6.5000E+02
1.9373E+01	1.2117E-01	1.3300E+01	5.0061E+05	6.4000E+02
1.9680E+01	1.2208E-01	1.3400E+01	5.0437E+05	6.3000E+02
1.9997E+01	1.2208E-01	1.3400E+01	5.0437E+05	6.2000E+02
2.0325E+01	1.2208E-01	1.3400E+01	5.0437E+05	6.1000E+02
2.0664E+01	1.2117E-01	1.3300E+01	5.0061E+05	6.0000E+02
2.1014E+01	1.2026E-01	1.3200E+01	4.9685E+05	5.9000E+02
2.1377E+01	1.1844E-01	1.3000E+01	4.8932E+05	5.8000E+02
2.1752E+01	1.1753E-01	1.2900E+01	4.8555E+05	5.7000E+02
2.2140E+01	1.1571E-01	1.2700E+01	4.7803E+05	5.6000E+02
2.2543E+01	1.1388E-01	1.2500E+01	4.7050E+05	5.5000E+02
2.2960E+01	1.1206E-01	1.2300E+01	4.6297E+05	5.4000E+02
2.3393E+01	1.1024E-01	1.2100E+01	4.5544E+05	5.3000E+02
2.3843E+01	1.0933E-01	1.2000E+01	4.5168E+05	5.2000E+02
2.4311E+01	1.0842E-01	1.1900E+01	4.4791E+05	5.1000E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.4797E+01	1.0842E-01	1.1900E+01	4.4791E+05	5.0000E+02
2.5303E+01	1.0933E-01	1.2000E+01	4.5168E+05	4.9000E+02
2.7500E+01	1.0584E-01	1.1618E+01	4.3728E+05	4.5085E+02
3.0000E+01	1.0276E-01	1.1279E+01	4.2453E+05	4.1328E+02
3.5000E+01	8.6247E-02	9.4665E+00	3.5632E+05	3.5424E+02
4.0000E+01	7.1687E-02	7.8685E+00	2.9617E+05	3.0996E+02
4.5000E+01	6.1282E-02	6.7264E+00	2.5318E+05	2.7552E+02
5.0000E+01	5.2724E-02	5.7870E+00	2.1782E+05	2.4797E+02
6.0000E+01	4.0268E-02	4.4198E+00	1.6636E+05	2.0664E+02
7.0000E+01	3.0997E-02	3.4023E+00	1.2806E+05	1.7712E+02
8.0000E+01	2.4162E-02	2.6520E+00	9.9821E+04	1.5498E+02
9.0000E+01	1.9116E-02	2.0982E+00	7.8975E+04	1.3776E+02
1.0000E+02	1.5355E-02	1.6854E+00	6.3439E+04	1.2398E+02
1.2500E+02	9.4364E-03	1.0357E+00	3.8985E+04	9.9187E+01
1.5000E+02	6.2343E-03	6.8428E-01	2.5756E+04	8.2656E+01
1.7500E+02	4.3574E-03	4.7828E-01	1.8002E+04	7.0848E+01
2.0000E+02	3.1832E-03	3.4939E-01	1.3151E+04	6.1992E+01
2.2500E+02	2.4088E-03	2.6439E-01	9.9517E+03	5.5104E+01
2.5000E+02	1.8757E-03	2.0588E-01	7.7493E+03	4.9594E+01
2.7500E+02	1.4955E-03	1.6415E-01	6.1785E+03	4.5085E+01
3.0000E+02	1.2012E-03	1.3184E-01	4.9626E+03	4.1328E+01
3.5000E+02	8.1762E-04	8.9743E-02	3.3779E+03	3.5424E+01
4.0000E+02	5.8213E-04	6.3895E-02	2.4050E+03	3.0996E+01
4.5000E+02	4.3047E-04	4.7249E-02	1.7784E+03	2.7552E+01
5.0000E+02	3.2850E-04	3.6057E-02	1.3572E+03	2.4797E+01
5.5250E+02	2.5439E-04	2.7922E-02	1.0510E+03	2.2441E+01
5.5250E+02	4.7376E-03	5.2000E-01	1.9573E+04	2.2441E+01
6.0000E+02	4.0547E-03	4.4505E-01	1.6752E+04	2.0664E+01
7.0000E+02	2.7714E-03	3.0419E-01	1.1450E+04	1.7712E+01
8.0000E+02	1.9843E-03	2.1780E-01	8.1978E+03	1.5498E+01
9.0000E+02	1.4702E-03	1.6137E-01	6.0740E+03	1.3776E+01
1.0000E+03	1.1192E-03	1.2284E-01	4.6238E+03	1.2398E+01
1.2500E+03	6.1900E-04	6.7942E-02	2.5573E+03	9.9187E+00
1.5000E+03	3.7623E-04	4.1296E-02	1.5544E+03	8.2656E+00
1.7500E+03	2.4474E-04	2.6862E-02	1.0111E+03	7.0848E+00
2.0000E+03	1.6757E-04	1.8393E-02	6.9230E+02	6.1992E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2500E+03	1.1943E-04	1.3109E-02	4.9341E+02	5.5104E+00
2.5000E+03	8.7906E-05	9.6486E-03	3.6317E+02	4.9594E+00
2.7500E+03	7.7197E-05	8.4732E-03	3.1893E+02	4.5085E+00
3.0000E+03	5.8920E-05	6.4671E-03	2.4342E+02	4.1328E+00
3.5000E+03	3.6536E-05	4.0102E-03	1.5094E+02	3.5424E+00
4.0000E+03	2.4152E-05	2.6509E-03	9.9781E+01	3.0996E+00
4.5000E+03	1.6755E-05	1.8390E-03	6.9220E+01	2.7552E+00
5.0000E+03	1.2070E-05	1.3248E-03	4.9866E+01	2.4797E+00
6.0000E+03	6.8239E-06	7.4900E-04	2.8192E+01	2.0664E+00
7.0000E+03	4.1976E-06	4.6073E-04	1.7342E+01	1.7712E+00
8.0000E+03	2.7454E-06	3.0134E-04	1.1342E+01	1.5498E+00
9.0000E+03	1.8812E-06	2.0648E-04	7.7720E+00	1.3776E+00
1.0000E+04	1.2956E-06	1.4221E-04	5.3527E+00	1.2398E+00
1.2500E+04	6.3555E-07	6.9759E-05	2.6257E+00	9.9187E-01
1.5000E+04	3.5509E-07	3.8975E-05	1.4670E+00	8.2656E-01
1.7500E+04	2.1708E-07	2.3827E-05	8.9683E-01	7.0848E-01
2.0000E+04	1.4173E-07	1.5557E-05	5.8555E-01	6.1992E-01
2.2500E+04	9.7312E-08	1.0681E-05	4.0203E-01	5.5104E-01
2.5000E+04	6.9518E-08	7.6304E-06	2.8721E-01	4.9594E-01
2.7500E+04	5.1142E-08	5.6134E-06	2.1129E-01	4.5085E-01
3.0000E+04	3.8477E-08	4.2232E-06	1.5896E-01	4.1328E-01
3.5000E+04	2.3222E-08	2.5488E-06	9.5938E-02	3.5424E-01
4.0000E+04	1.4996E-08	1.6460E-06	6.1956E-02	3.0996E-01
4.5000E+04	1.0197E-08	1.1192E-06	4.2127E-02	2.7552E-01
5.0000E+04	7.2215E-09	7.9264E-07	2.9835E-02	2.4797E-01
6.0000E+04	3.9751E-09	4.3632E-07	1.6423E-02	2.0664E-01
7.0000E+04	2.3997E-09	2.6339E-07	9.9140E-03	1.7712E-01
8.0000E+04	1.5490E-09	1.7002E-07	6.3997E-03	1.5498E-01
9.0000E+04	1.0520E-09	1.1547E-07	4.3464E-03	1.3776E-01
1.0000E+05	7.4386E-10	8.1647E-08	3.0732E-03	1.2398E-01

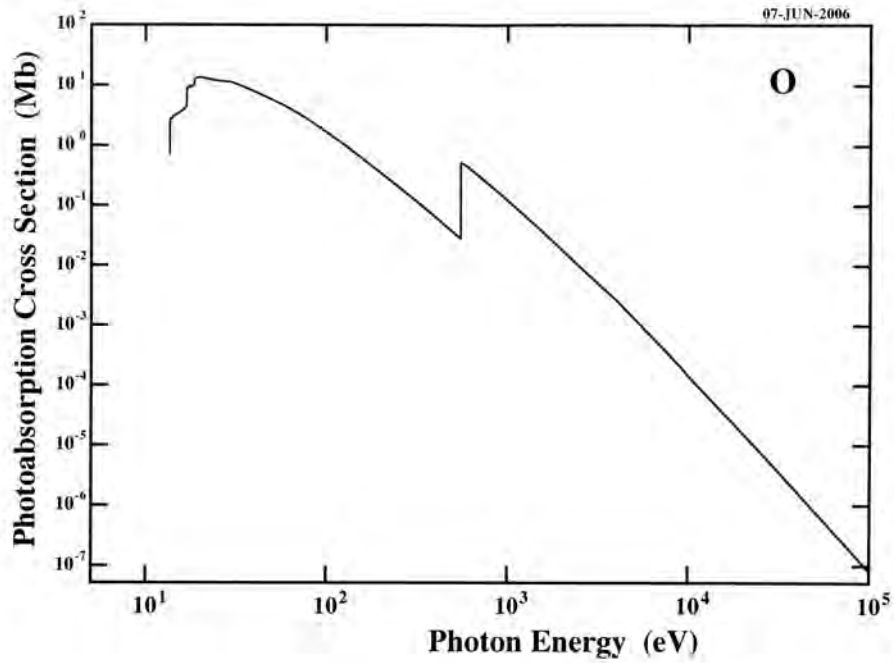
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here E represents photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E-E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 543.9$ eV.



O

Energy, eV	Source
0 - 13.618 (IP)	Table 2.14 p.36 (Berkowitz's book*)
IP - 18.64 autoionization only	Table 2.15 p.38 (Berkowitz's book*)
IP - 16.93 continuum	Angel and Samson, Phys. Rev. A, 38 (1988) 5578
16.93 - 18.64	Angel and Samson, Phys. Rev. A, 38 (1988) 5578
18.64 - 25.30	Table 2.17 p.41 (Berkowitz's book*)
25.30 - 28.83	Angel and Samson, Phys. Rev. A, 38 (1988) 5578
28.83 - 47.69	Table 2.17 p.41 (Berkowitz's book*)
47.69 - 280	Table 2.17 p.41 (Berkowitz's book*)
280 - 552.5	Table 2.17 p.41 (Berkowitz's book*)
552.5 (K edge) - 572.8	b.6 p.41 (Berkowitz's book*)
572.8 - 2622.4	Table 2.17 p.41 (Berkowitz's book*)
2622.4 - 10000	Table 2.17 p.41 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Neon Atom

Z = 10 Atomic Mass = 20.1797

$\sigma_a(\text{Mb}) = 109.76097 \, \frac{\mathrm{d}f}{\mathrm{d}E} \, (\text{eV}^{-1})$

$\mu_m = \sigma_a \cdot N_\text{A} \cdot M_\text{A}^{-1}$

Table I. Discrete oscillator strength, f_n, for nl and nl' transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.6671E+01	1.1000E-02	7.4372E+02	1.6848E+01	1.4500E-01	7.3590E+02
1.9688E+01	1.2850E-02	6.2974E+02	1.9780E+01	1.5900E-02	6.2682E+02
2.0571E+01	6.3000E-03	6.0273E+02	2.0663E+01	4.4000E-03	6.0004E+02
2.0949E+01	3.3000E-03	5.9183E+02	2.1044E+01	1.6000E-03	5.8918E+02
2.1327E+01	6.4700E-03	5.8136E+02	2.1323E+01	3.1500E-03	5.8145E+02
2.0033E+01	1.9000E-02	6.1889E+02	2.0139E+01	6.5000E-03	6.1563E+02
2.0706E+01	9.4000E-03	5.9880E+02	2.0806E+01	4.4000E-03	5.9592E+02
2.1016E+01	5.4000E-03	5.8996E+02	2.1114E+01	2.4000E-03	5.8721E+02
2.1348E+01	1.1250E-02	5.8079E+02	2.1480E+01	5.7000E-03	5.7722E+02
2.1622E+01	3.8000E-03	5.7342E+02			

Table II. Discrete oscillator strength, f_n, for resonance transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
4.5546E+01	1.4200E-03	2.7222E+02	4.8832E+01	7.3000E-04	2.5390E+02
4.7121E+01	4.6000E-04	2.6312E+02	8.6705E+02	4.1000E-03	1.4300E+01
4.7692E+01	2.1000E-04	2.5997E+02	8.6868E+02	2.0000E-03	1.4273E+01
4.8071E+01	3.2000E-04	2.5792E+02	8.6923E+02	5.8000E-04	1.4264E+01
4.4979E+01	5.6000E-04	2.7565E+02	8.6963E+02	2.2000E-04	1.4257E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m (cm^2 g^{-1})	λ (Å)
2.1661E+01	5.7632E-02	6.3258E+00	1.8878E+05	5.7238E+02
2.2500E+01	6.3600E-02	6.9808E+00	2.0833E+05	5.5104E+02
2.5000E+01	7.3604E-02	8.0788E+00	2.4109E+05	4.9594E+02
2.7500E+01	7.8106E-02	8.5729E+00	2.5584E+05	4.5085E+02
3.0000E+01	8.0157E-02	8.7981E+00	2.6256E+05	4.1328E+02
3.5000E+01	8.0435E-02	8.8287E+00	2.6347E+05	3.5424E+02
4.0000E+01	7.7798E-02	8.5392E+00	2.5483E+05	3.0996E+02
4.5000E+01	7.3653E-02	8.0842E+00	2.4125E+05	2.7552E+02
5.0000E+01	6.8318E-02	7.4987E+00	2.2378E+05	2.4797E+02
6.0000E+01	6.0710E-02	6.6636E+00	1.9886E+05	2.0664E+02
7.0000E+01	5.4340E-02	5.9644E+00	1.7799E+05	1.7712E+02
8.0000E+01	4.7276E-02	5.1890E+00	1.5485E+05	1.5498E+02
9.0000E+01	4.0503E-02	4.4456E+00	1.3267E+05	1.3776E+02
1.0000E+02	3.4528E-02	3.7898E+00	1.1310E+05	1.2398E+02
1.2500E+02	2.3400E-02	2.5684E+00	7.6649E+04	9.9187E+01
1.5000E+02	1.6407E-02	1.8009E+00	5.3742E+04	8.2656E+01
1.7500E+02	1.1938E-02	1.3103E+00	3.9104E+04	7.0848E+01
2.0000E+02	8.9794E-03	9.8559E-01	2.9413E+04	6.1992E+01
2.2500E+02	6.9482E-03	7.6264E-01	2.2759E+04	5.5104E+01
2.5000E+02	5.2869E-03	5.8029E-01	1.7317E+04	4.9594E+01
2.7500E+02	4.2119E-03	4.6230E-01	1.3796E+04	4.5085E+01
3.0000E+02	3.3982E-03	3.7299E-01	1.1131E+04	4.1328E+01
3.5000E+02	2.2927E-03	2.5165E-01	7.5098E+03	3.5424E+01
4.0000E+02	1.6214E-03	1.7796E-01	5.3109E+03	3.0996E+01
4.5000E+02	1.1901E-03	1.3063E-01	3.8983E+03	2.7552E+01
5.0000E+02	9.0038E-04	9.8827E-02	2.9492E+03	2.4797E+01
6.0000E+02	5.5322E-04	6.0722E-02	1.8121E+03	2.0664E+01
7.0000E+02	3.6536E-04	4.0102E-02	1.1968E+03	1.7712E+01
8.0000E+02	2.5470E-04	2.7956E-02	8.3427E+02	1.5498E+01
8.7025E+02	2.0281E-04	2.2260E-02	6.6430E+02	1.4247E+01
8.7025E+02	3.3058E-03	3.6285E-01	1.0828E+04	1.4247E+01
9.0000E+02	3.0431E-03	3.3402E-01	9.9679E+03	1.3776E+01
1.0000E+03	2.3400E-03	2.5684E-01	7.6649E+03	1.2398E+01
1.2500E+03	1.3220E-03	1.4510E-01	4.3302E+03	9.9187E+00
1.5000E+03	8.1888E-04	8.9881E-02	2.6823E+03	8.2656E+00
1.7500E+03	5.4243E-04	5.9538E-02	1.7768E+03	7.0848E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0000E+03	3.7810E-04	4.1501E-02	1.2385E+03	6.1992E+00
2.2500E+03	2.7431E-04	3.0109E-02	8.9853E+02	5.5104E+00
2.5000E+03	2.0553E-04	2.2559E-02	6.7321E+02	4.9594E+00
2.7500E+03	1.5812E-04	1.7355E-02	5.1793E+02	4.5085E+00
3.0000E+03	1.2298E-04	1.3498E-02	4.0283E+02	4.1328E+00
3.5000E+03	7.9354E-05	8.7100E-03	2.5993E+02	3.5424E+00
4.0000E+03	5.4014E-05	5.9286E-03	1.7692E+02	3.0996E+00
4.5000E+03	3.8327E-05	4.2068E-03	1.2554E+02	2.7552E+00
5.0000E+03	2.8117E-05	3.0861E-03	9.2099E+01	2.4797E+00
6.0000E+03	1.6346E-05	1.7942E-03	5.3543E+01	2.0664E+00
7.0000E+03	1.0269E-05	1.1272E-03	3.3637E+01	1.7712E+00
8.0000E+03	6.8324E-06	7.4993E-04	2.2380E+01	1.5498E+00
9.0000E+03	4.7508E-06	5.2145E-04	1.5561E+01	1.3776E+00
1.0000E+04	3.3811E-06	3.7111E-04	1.1075E+01	1.2398E+00
1.2500E+04	1.6929E-06	1.8581E-04	5.5452E+00	9.9187E-01
1.5000E+04	9.6208E-07	1.0560E-04	3.1513E+00	8.2656E-01
1.7500E+04	5.9402E-07	6.5201E-05	1.9458E+00	7.0848E-01
2.0000E+04	3.8919E-07	4.2718E-05	1.2748E+00	6.1992E-01
2.2500E+04	2.6802E-07	2.9418E-05	8.7792E-01	5.5104E-01
2.5000E+04	1.9199E-07	2.1073E-05	6.2888E-01	4.9594E-01
2.7500E+04	1.4163E-07	1.5545E-05	4.6391E-01	4.5085E-01
3.0000E+04	1.0688E-07	1.1731E-05	3.5008E-01	4.1328E-01
3.5000E+04	6.4857E-08	7.1188E-06	2.1244E-01	3.5424E-01
4.0000E+04	4.2081E-08	4.6188E-06	1.3784E-01	3.0996E-01
4.5000E+04	2.8732E-08	3.1536E-06	9.4113E-02	2.7552E-01
5.0000E+04	2.0424E-08	2.2418E-06	6.6900E-02	2.4797E-01
6.0000E+04	1.1316E-08	1.2420E-06	3.7065E-02	2.0664E-01
7.0000E+04	6.8669E-09	7.5372E-07	2.2493E-02	1.7712E-01
8.0000E+04	4.4579E-09	4.8930E-07	1.4602E-02	1.5498E-01
9.0000E+04	3.0524E-09	3.3503E-07	9.9982E-03	1.3776E-01
1.0000E+05	2.1766E-09	2.3891E-07	7.1296E-03	1.2398E-01

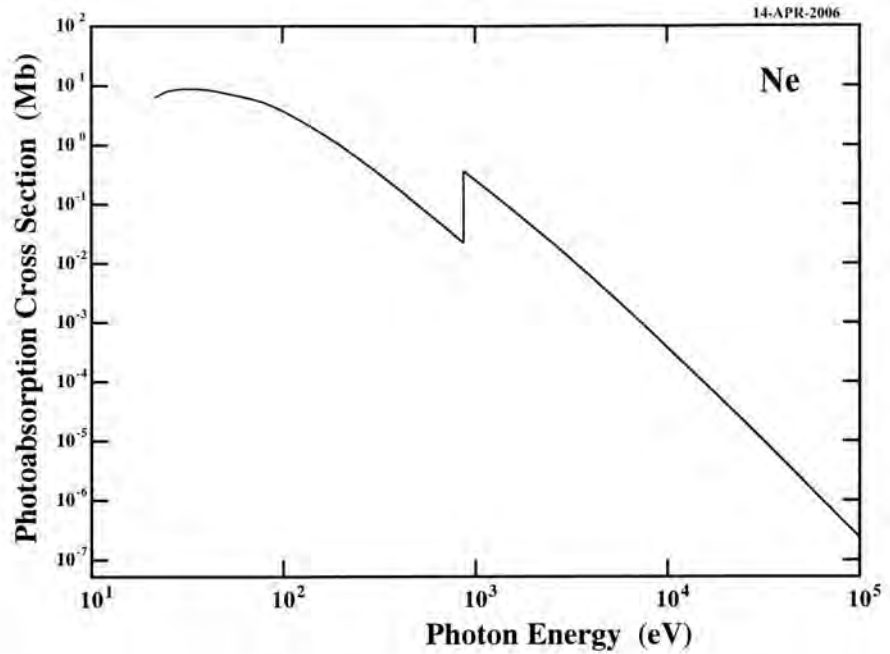
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here χ is represented by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 870.25$ eV.



Ne

Energy, eV	Source
0 - 21.661	Table 2.19 p.49 (Berkowitz's book*)
21.661 - 48.475	Table 2.21 p.52 (Berkowitz's book*)
45.5 - 48.8	Codling *et al*., Phys. Rev., 155 (1967) 26
	Aleksandrov et al., Opt. Spectrosc. (USSR), 54 (1983) 4
	Langer et al., J. Phys. B, 30 (1997) 593
48.475 - 250 0	Table 2.21 p.52 (Berkowitz's book*)
250.0 - 280.0	Table 2.21 p.52 (Berkowitz's book*)
280.0 - 870.25	Table 2.21 p.52 (Berkowitz's book*)
867.25 - 870.25	Hitchcock and Brion, J. Phys. B, 13 (1980) 3269
	Esteva *et al*., J. Phys. B, 16 (1983) L263-268
870.25 - 2984.3	Table 2.21 p.52 (Berkowitz's book*)
2984.3 - 10000	Table 2.21 p.52 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Sodium Atom

Z = 11 Atomic Mass : $M_{\mathrm{A}} = 22.989770$

$\sigma_a(\mathrm{Mb}) = 109.76097 \dfrac{\mathrm{d}f}{\mathrm{d}E}\ (\mathrm{eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\mathrm{A}} \cdot M_{\mathrm{A}}^{-1}$

Table I. Discrete oscillator strength, f_n, for 3s ^{2}S $\rightarrow$ np ^{2}P transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
2.1037E+00	9.6100E-01	5.8936E+03	4.8724E+00	1.9220E-04	2.5446E+03
3.7531E+00	1.3450E-02	3.3035E+03	4.9339E+00	1.1500E-04	2.5129E+03
4.3447E+00	1.9050E-03	2.8537E+03	4.9764E+00	7.7000E-05	2.4915E+03
4.6243E+00	7.3070E-04	2.6812E+03	5.0619E+00	2.4500E-04[a)]	2.4493E+03
4.7784E+00	3.6340E-04	2.5947E+03			

[a)] Represents $\sum_{n=11}^{\infty} f_n$.

Table II. Discrete oscillator strength, f_n, for resonance transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
3.0768E+01	1.7500E-03	4.0296E+02	3.8267E+01	6.0000E-05	3.2400E+02
3.0934E+01	1.3200E-03	4.0080E+02	3.8305E+01	5.0000E-05	3.2368E+02
3.5768E+01	6.8000E-04	3.4663E+02	3.8333E+01	3.0000E-05	3.2344E+02
3.5790E+01	2.8000E-04	3.4642E+02	3.8354E+01	3.0000E-05	3.2326E+02
3.5985E+01	1.4000E-03	3.4454E+02	3.8370E+01	2.0000E-05	3.2313E+02
3.6018E+01	4.0000E-04	3.4423E+02	3.8384E+01	2.0000E-05	3.2301E+02
3.6056E+01	8.7000E-04	3.4387E+02	3.7865E+01	2.0000E-04	3.2744E+02
3.6129E+01	5.3000E-04	3.4317E+02	3.8051E+01	4.9500E-04	3.2584E+02
3.6217E+01	7.9000E-04	3.4234E+02	3.8170E+01	3.0000E-04	3.2482E+02
3.6906E+01	8.1000E-04	3.3595E+02	3.8234E+01	2.6000E-04	3.2428E+02
3.6929E+01	6.5000E-04	3.3574E+02	3.8283E+01	1.4000E-04	3.2386E+02
3.7070E+01	2.7000E-04	3.3446E+02	3.8317E+01	1.0000E-04	3.2357E+02
3.7273E+01	2.5000E-04	3.3264E+02	3.8342E+01	8.0000E-05	3.2336E+02
3.7292E+01	2.1000E-04	3.3247E+02	3.8361E+01	6.0000E-05	3.2320E+02
3.7497E+01	2.5000E-04	3.3065E+02	3.8376E+01	5.0000E-05	3.2308E+02
3.7699E+01	2.1000E-04	3.2888E+02	3.8387E+01	4.0000E-05	3.2298E+02
3.7994E+01	2.0000E-04	3.2633E+02	3.8397E+01	3.0000E-05	3.2290E+02
3.8128E+01	1.4000E-04	3.2518E+02	3.8405E+01	3.0000E-05	3.2283E+02
3.8212E+01	9.0000E-05	3.2446E+02	3.8410E+01	2.0000E-05	3.2279E+02

Table II. Discrete oscillator strength, f_n, for resonance transitions. (Continued)

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
3.8415E+01	2.0000E-05	3.2275E+02	3.8707E+01	1.3000E-03	3.2031E+02
3.8421E+01	2.0000E-05	3.2270E+02			
3.8425E+01	1.0000E-05	3.2267E+02	6.6370E+01	1.7500E-02	1.8681E+02
3.8556E+01	2.6000E-03	3.2157E+02	6.9400E+01	4.0000E-03	1.7865E+02

Table III. Discrete oscillator strength, f_n, for the resonance transitions (around K-edge).

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.0749E+03	6.6700E-03	1.1534E+01	1.0831E+03	2.2000E-04	1.1447E+01
1.0765E+03	7.0000E-04	1.1518E+01	1.0835E+03	6.0000E-05	1.1443E+01
1.0782E+03	1.4500E-03	1.1500E+01	1.0836E+03	2.0000E-05	1.1442E+01
1.0784E+03	5.9000E-04	1.1497E+01	1.0838E+03	1.2000E-04	1.1440E+01
1.0790E+03	5.5000E-04	1.1491E+01	1.0854E+03	3.3000E-04	1.1423E+01
1.0790E+03	2.0000E-04	1.1490E+01	1.0857E+03	2.4000E-04	1.1420E+01
1.0814E+03	8.4000E-04	1.1465E+01	1.0871E+03	1.2000E-04	1.1405E+01
1.0815E+03	5.8000E-04	1.1464E+01	1.0880E+03	1.1000E-04	1.1396E+01

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.1391E+00	1.1844E-03	1.3000E-01	3.4053E+03	2.4126E+03
5.1400E+00	1.1844E-03	1.3000E-01	3.4053E+03	2.4121E+03
5.1670E+00	1.1479E-03	1.2600E-01	3.3006E+03	2.3995E+03
5.2770E+00	1.0022E-03	1.1000E-01	2.8814E+03	2.3495E+03
5.3910E+00	8.3819E-04	9.2000E-02	2.4099E+03	2.2998E+03
5.5110E+00	6.3775E-04	7.0000E-02	1.8336E+03	2.2498E+03
5.6360E+00	4.0998E-04	4.5000E-02	1.1788E+03	2.1999E+03
5.7670E+00	2.0044E-04	2.2000E-02	5.7629E+02	2.1499E+03
5.9050E+00	7.2886E-05	8.0000E-03	2.0956E+02	2.0996E+03
6.0490E+00	9.1107E-06	1.0000E-03	2.6195E+01	2.0497E+03
6.3590E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.9497E+03
6.5290E+00	2.3688E-05	2.6000E-03	6.8107E+01	1.8990E+03
6.7990E+00	8.2907E-05	9.1000E-03	2.3837E+02	1.8236E+03
7.0790E+00	1.6764E-04	1.8400E-02	4.8199E+02	1.7514E+03
7.6190E+00	3.5441E-04	3.8900E-02	1.0190E+03	1.6273E+03

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.1590E+00	5.4209E-04	5.9500E-02	1.5586E+03	1.5196E+03
8.5000E+00	6.4686E-04	7.1000E-02	1.8598E+03	1.4586E+03
9.0000E+00	7.8352E-04	8.6000E-02	2.2528E+03	1.3776E+03
9.2490E+00	8.5458E-04	9.3800E-02	2.4571E+03	1.3405E+03
9.5000E+00	9.1107E-04	1.0000E-01	2.6195E+03	1.3051E+03
1.0000E+01	1.0022E-03	1.1000E-01	2.8814E+03	1.2398E+03
1.0500E+01	1.0751E-03	1.1800E-01	3.0910E+03	1.1808E+03
1.1000E+01	1.1479E-03	1.2600E-01	3.3006E+03	1.1271E+03
1.1500E+01	1.2026E-03	1.3200E-01	3.4577E+03	1.0781E+03
1.2000E+01	1.2436E-03	1.3650E-01	3.5756E+03	1.0332E+03
1.3000E+01	1.2810E-03	1.4060E-01	3.6830E+03	9.5372E+02
1.4000E+01	1.2901E-03	1.4160E-01	3.7092E+03	8.8560E+02
1.4000E+01	1.2901E-03	1.4160E-01	3.7092E+03	8.8560E+02
1.5000E+01	1.2846E-03	1.4100E-01	3.6935E+03	8.2656E+02
1.6000E+01	1.2728E-03	1.3970E-01	3.6594E+03	7.7490E+02
1.7000E+01	1.2482E-03	1.3700E-01	3.5887E+03	7.2932E+02
1.8000E+01	1.2163E-03	1.3350E-01	3.4970E+03	6.8880E+02
1.9000E+01	1.1889E-03	1.3050E-01	3.4184E+03	6.5255E+02
2.0000E+01	1.1571E-03	1.2700E-01	3.3267E+03	6.1992E+02
2.1000E+01	1.1224E-03	1.2320E-01	3.2272E+03	5.9040E+02
2.1769E+01	1.0960E-03	1.2030E-01	3.1512E+03	5.6954E+02
2.4730E+01	9.4751E-04	1.0400E-01	2.7243E+03	5.0135E+02
2.8140E+01	8.4730E-04	9.3000E-02	2.4361E+03	4.4060E+02
3.1810E+01	7.5619E-04	8.3000E-02	2.1742E+03	3.8976E+02
3.5760E+01	6.7419E-04	7.4000E-02	1.9384E+03	3.4671E+02
3.6500E+01	6.6508E-04	7.3000E-02	1.9122E+03	3.3968E+02
3.8100E+01	3.7354E-03	4.1000E-01	1.0740E+04	3.2542E+02
4.0000E+01	8.6552E-03	9.5000E-01	2.4885E+04	3.0996E+02
4.2000E+01	1.8586E-02	2.0400E+00	5.3438E+04	2.9520E+02
4.4300E+01	3.1068E-02	3.4100E+00	8.9325E+04	2.7987E+02
4.5000E+01	4.1636E-02	4.5700E+00	1.1971E+05	2.7552E+02
4.5500E+01	4.4916E-02	4.9300E+00	1.2914E+05	2.7249E+02
4.8000E+01	5.5849E-02	6.1300E+00	1.6057E+05	2.5830E+02
4.9300E+01	6.5415E-02	7.1800E+00	1.8808E+05	2.5149E+02
5.0000E+01	6.1133E-02	6.7100E+00	1.7577E+05	2.4797E+02
5.1300E+01	6.9241E-02	7.6000E+00	1.9908E+05	2.4168E+02

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3700E+01	8.2907E-02	9.1000E+00	2.3837E+05	2.3088E+02
6.0000E+01	7.9845E-02	8.7638E+00	2.2957E+05	2.0664E+02
7.0000E+01	7.0709E-02	7.7611E+00	2.0330E+05	1.7712E+02
8.0000E+01	6.1121E-02	6.7087E+00	1.7573E+05	1.5498E+02
9.0000E+01	5.2496E-02	5.7620E+00	1.5094E+05	1.3776E+02
1.0000E+02	4.5154E-02	4.9561E+00	1.2982E+05	1.2398E+02
1.2500E+02	3.1728E-02	3.4824E+00	9.1222E+04	9.9187E+01
1.5000E+02	2.3208E-02	2.5473E+00	6.6726E+04	8.2656E+01
1.7500E+02	1.7606E-02	1.9325E+00	5.0621E+04	7.0848E+01
2.0000E+02	1.3770E-02	1.5114E+00	3.9592E+04	6.1992E+01
2.2500E+02	1.1044E-02	1.2122E+00	3.1753E+04	5.5104E+01
2.5000E+02	9.0434E-03	9.9262E-01	2.6001E+04	4.9594E+01
2.7500E+02	7.5356E-03	8.2712E-01	2.1666E+04	4.5085E+01
3.0000E+02	6.3725E-03	6.9945E-01	1.8322E+04	4.1328E+01
3.5000E+02	3.5001E-03	3.8417E-01	1.0063E+04	3.5424E+01
4.0000E+02	2.4598E-03	2.6999E-01	7.0724E+03	3.0996E+01
4.5000E+02	1.8179E-03	1.9953E-01	5.2267E+03	2.7552E+01
5.0000E+02	1.3897E-03	1.5253E-01	3.9955E+03	2.4797E+01
6.0000E+02	8.7020E-04	9.5514E-02	2.5020E+03	2.0664E+01
7.0000E+02	5.8133E-04	6.3808E-02	1.6714E+03	1.7712E+01
8.0000E+02	4.0692E-04	4.4664E-02	1.1700E+03	1.5498E+01
9.0000E+02	2.9529E-04	3.2411E-02	8.4901E+02	1.3776E+01
1.0000E+03	2.2058E-04	2.4211E-02	6.3421E+02	1.2398E+01
1.0791E+03	1.7816E-04	1.9555E-02	5.1224E+02	1.1490E+01
1.0791E+03	2.1356E-03	2.3441E-01	6.1403E+03	1.1490E+01
1.2500E+03	1.8515E-03	2.0322E-01	5.3233E+03	9.9187E+00
1.5000E+03	1.1883E-03	1.3043E-01	3.4167E+03	8.2656E+00
1.7500E+03	7.5689E-04	8.3077E-02	2.1762E+03	7.0848E+00
2.0000E+03	5.0941E-04	5.5914E-02	1.4646E+03	6.1992E+00
2.2500E+03	3.6613E-04	4.0187E-02	1.0527E+03	5.5104E+00
2.5000E+03	2.7967E-04	3.0697E-02	8.0411E+02	4.9594E+00
2.7500E+03	2.2478E-04	2.4672E-02	6.4627E+02	4.5085E+00
3.0000E+03	1.8801E-04	2.0637E-02	5.4058E+02	4.1328E+00
3.5000E+03	1.4291E-04	1.5686E-02	4.1090E+02	3.5424E+00
4.0000E+03	7.6559E-05	8.4032E-03	2.2012E+02	3.0996E+00
4.5000E+03	5.4345E-05	5.9649E-03	1.5625E+02	2.7552E+00

Table IV. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.0000E+03	3.9924E-05	4.3821E-03	1.1479E+02	2.4797E+00
6.0000E+03	2.3315E-05	2.5591E-03	6.7036E+01	2.0664E+00
7.0000E+03	1.4732E-05	1.6170E-03	4.2357E+01	1.7712E+00
8.0000E+03	9.8646E-06	1.0827E-03	2.8362E+01	1.5498E+00
9.0000E+03	6.9065E-06	7.5806E-04	1.9857E+01	1.3776E+00
1.0000E+04	5.0479E-06	5.5406E-04	1.4513E+01	1.2398E+00
1.2500E+04	2.5305E-06	2.7775E-04	7.2755E+00	9.9187E-01
1.5000E+04	1.4395E-06	1.5800E-04	4.1388E+00	8.2656E-01
1.7500E+04	8.9348E-07	9.8069E-05	2.5689E+00	7.0848E-01
2.0000E+04	5.9106E-07	6.4875E-05	1.6994E+00	6.1992E-01
2.2500E+04	4.1044E-07	4.5051E-05	1.1801E+00	5.5104E-01
2.5000E+04	2.9484E-07	3.2362E-05	8.4771E-01	4.9594E-01
2.7500E+04	2.1764E-07	2.3888E-05	6.2575E-01	4.5085E-01
3.0000E+04	1.6450E-07	1.8056E-05	4.7297E-01	4.1328E-01
3.5000E+04	1.0009E-07	1.0986E-05	2.8778E-01	3.5424E-01
4.0000E+04	6.5094E-08	7.1447E-06	1.8716E-01	3.0996E-01
4.5000E+04	4.4535E-08	4.8883E-06	1.2805E-01	2.7552E-01
5.0000E+04	3.1715E-08	3.4811E-06	9.1187E-02	2.4797E-01
6.0000E+04	1.7625E-08	1.9346E-06	5.0675E-02	2.0664E-01
7.0000E+04	1.0726E-08	1.1773E-06	3.0838E-02	1.7712E-01
8.0000E+04	6.9757E-09	7.6566E-07	2.0056E-02	1.5498E-01
9.0000E+04	4.7730E-09	5.2389E-07	1.3723E-02	1.3776E-01
1.0000E+05	3.3991E-09	3.7309E-07	9.7731E-03	1.2398E-01

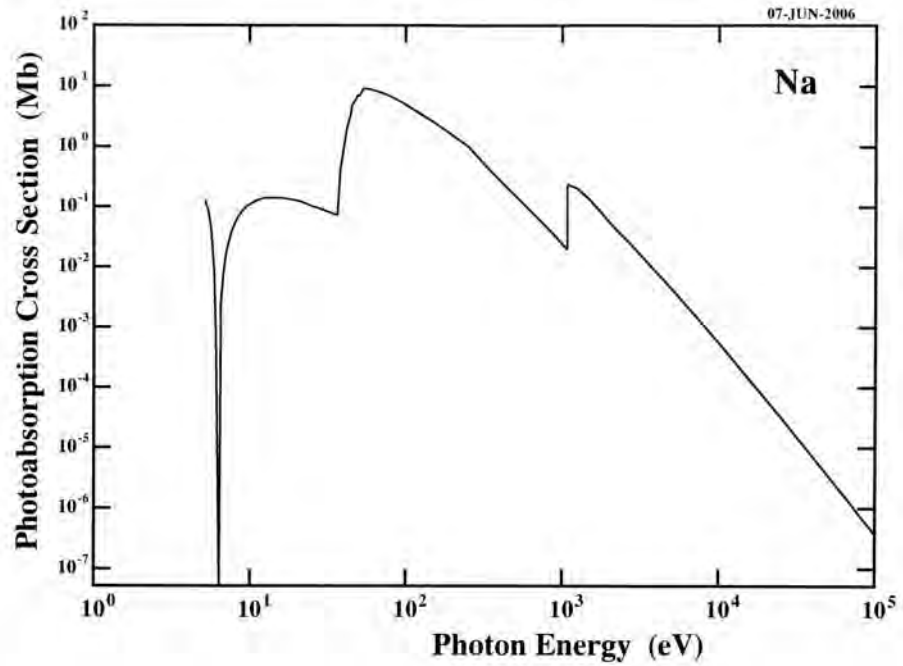
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here χ is represented by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 1079.1$ eV.



Na

Energy, eV	Source
2.1037	Table 2.22 p.56 (Berkowitz's book*)
3.7531 - 4.9764	Table 2.23 p.57 (Berkowitz's book*)
4.9764 - 5.1391	Table 2.24 p.58 (Berkowitz's book*)
5.1391 (IP) - 6.359	Table 2.25 p.60 (Berkowitz's book*)
6.359 - 14.0	Table 2.25 p.60 (Berkowitz's book*)
14.0 - 36.5	Table 2.25 p.60 (Berkowitz's book*)
30.77 - 38.71 (2p resonance)	Table 2.26 p.62 (Berkowitz's book*)
36.5 - 53.7	Table 2.25 p.60 (Berkowitz's book*)
66.4, 69.4 (2s resonance)	b.5 p.61 (Berkowitz's book*)
53.7 - 311.7	Table 2.25 p.60 and 2.27 p.63 (Berkowitz's book*)
311.7 - 1079.1	Table 2.25 p.60 and 2.27 p.63 (Berkowitz's book*)
1075 - 1088 (1s resonance)	Table 2.28 p.64 (Berkowitz's book*)
1079.1 - 3691.7	Table 2.27 p.63 (Berkowitz's book*)
3691.7 - 10000	Table 2.27 p.63 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Chlorine Atom

Z = 17 Atomic Mass : $M_{\rm A} = 35.453$

$\sigma_a({\rm Mb}) = 109.76097 \ \dfrac{{\rm d}f}{{\rm d}E} \ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
9.2259E+00	1.6800E-01	1.3439E+03	1.3570E+01	3.7900E-03	9.1367E+02
1.1505E+01	4.4000E-03	1.0777E+03	1.3876E+01	2.7900E-03	8.9349E+02
1.1962E+01	1.0600E-02	1.0365E+03	1.4049E+01	1.8300E-03	8.8249E+02
1.1320E+01	1.4900E-01	1.0953E+03	1.4240E+01	5.9300E-03	8.7070E+02
1.2200E+01	2.6300E-01	1.0163E+03	1.3759E+01	3.3240E-01	9.0112E+02
1.0431E+01	7.8240E-02	1.1886E+03	1.2590E+01	2.4400E-02	9.8482E+02
1.2779E+01	6.6000E-03	9.7022E+02	1.4756E+01	5.5000E-03	8.4022E+02
1.3606E+01	2.7000E-03	9.1127E+02	1.5563E+01	2.8700E-03	7.9666E+02
1.3606E+01	1.4000E-03	9.1127E+02	1.6079E+01	4.7000E-03	7.7108E+02
1.3849E+01	7.9500E-04	8.9527E+02	1.4618E+01	1.4000E-02	8.4818E+02
1.4305E+01	2.0000E-03	8.6673E+02	1.5451E+01	1.2500E-02	8.0244E+02
1.2636E+01	8.7000E-02	9.8118E+02	1.5823E+01	5.5000E-03	7.8355E+02
1.3424E+01	3.6200E-02	9.2361E+02	1.6011E+01	2.7300E-03	7.7435E+02
1.3805E+01	2.0600E-02	8.9809E+02	1.6237E+01	5.7000E-03	7.6358E+02
1.3976E+01	1.2100E-02	8.8710E+02	1.5420E+01	6.0840E-01	8.0407E+02
1.4231E+01	3.0800E-02	8.7122E+02	1.0613E+01	1.4000E-02	1.1683E+03
1.2661E+01	9.0000E-03	9.7923E+02			

Table II. Discrete oscillator strength, f_n, for resonance transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
2.7000E+02	8.0000E-03	4.5920E+01	2.8210E+03	6.6000E-03	4.3950E+00

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.6424E+01	3.7965E-01	4.1671E+01	7.0784E+05	7.5490E+02
1.7500E+01	4.0486E-01	4.4438E+01	7.5484E+05	7.0848E+02
2.0000E+01	3.7186E-01	4.0816E+01	6.9331E+05	6.1992E+02
2.2500E+01	2.9698E-01	3.2597E+01	5.5371E+05	5.5104E+02
2.5000E+01	2.2191E-01	2.4357E+01	4.1374E+05	4.9594E+02
2.7500E+01	1.5822E-01	1.7367E+01	2.9499E+05	4.5085E+02
3.0000E+01	1.0747E-01	1.1796E+01	2.0036E+05	4.1328E+02
3.5000E+01	3.8111E-02	4.1831E+00	7.1055E+04	3.5424E+02
3.8000E+01	1.3046E-02	1.4320E+00	2.4324E+04	3.2627E+02
3.9000E+01	1.0958E-02	1.2028E+00	2.0431E+04	3.1791E+02
4.0000E+01	9.6054E-03	1.0543E+00	1.7909E+04	3.0996E+02
4.1000E+01	8.7747E-03	9.6312E-01	1.6360E+04	3.0240E+02
4.2000E+01	8.3114E-03	9.1227E-01	1.5496E+04	2.9520E+02
4.3000E+01	8.1037E-03	8.8947E-01	1.5109E+04	2.8834E+02
4.5000E+01	8.1592E-03	8.9556E-01	1.5212E+04	2.7552E+02
5.0000E+01	9.4429E-03	1.0365E+00	1.7606E+04	2.4797E+02
6.0000E+01	1.1670E-02	1.2809E+00	2.1759E+04	2.0664E+02
7.0000E+01	1.2093E-02	1.3273E+00	2.2547E+04	1.7712E+02
8.0000E+01	1.1499E-02	1.2621E+00	2.1438E+04	1.5498E+02
9.0000E+01	1.0519E-02	1.1546E+00	1.9612E+04	1.3776E+02
1.0000E+02	9.4688E-03	1.0393E+00	1.7654E+04	1.2398E+02
1.2500E+02	7.2641E-03	7.9732E-01	1.3543E+04	9.9187E+01
1.5000E+02	5.5909E-03	6.1366E-01	1.0424E+04	8.2656E+01
1.7500E+02	4.3794E-03	4.8069E-01	8.1651E+03	7.0848E+01
2.0000E+02	3.4996E-03	3.8412E-01	6.5248E+03	6.1992E+01
2.0799E+02	3.2708E-03	3.5901E-01	6.0982E+03	5.9611E+01
2.0800E+02	4.5537E-02	4.9981E+00	8.4900E+04	5.9608E+01
2.2500E+02	2.9989E-02	3.2916E+00	5.5913E+04	5.5104E+01
2.5000E+02	2.2547E-02	2.4748E+00	4.2038E+04	4.9594E+01
2.7500E+02	2.0713E-02	2.2735E+00	3.8618E+04	4.5085E+01
3.0000E+02	1.9895E-02	2.1836E+00	3.7092E+04	4.1328E+01
3.5000E+02	1.7710E-02	1.9438E+00	3.3019E+04	3.5424E+01
4.0000E+02	1.4751E-02	1.6191E+00	2.7502E+04	3.0996E+01
4.5000E+02	1.1785E-02	1.2935E+00	2.1973E+04	2.7552E+01
5.0000E+02	9.1932E-03	1.0091E+00	1.7140E+04	2.4797E+01
5.1000E+02	5.3652E-03	5.8889E-01	1.0003E+04	2.4664E+01

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Cl

Energy, eV	Source
Valence Spec. → 16.42 (^{1}S)	Table 2.29 p.69 (Berkowitz's book*)
16.42 - 43	Table 2.31 p.78 (Berkowitz's book*) Samson et al., Phys. Rev. Lett., 56 (1986) 2020
43 - 91.5	Table 2.31 p.79 (Berkowitz's book*)
91.5 - 208	Table 2.31 p.79 (Berkowitz's book*)
208.0 - 705.0	Table 2.31 p.79 (Berkowitz's book*)
705.0 2830	Table 2.31 p.79 (Berkowitz's book*)
270	Ninomiya *et al*., J. Phys. B, 14 (1981) 1777
2821	Bodeur *et al*., Z Phys. D, 17 (1990) 291
2830 - 10000	Table 2.31 p.79 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Argon Atom

Z = 18 Atomic Mass : $M_{\rm A} = 39.948$

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n, for the ns, nd, n$\underline{\rm d}$, ns' and nd' series.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.1624E+01	5.8000E-02	1.0666E+03	1.5188E+01	4.2600E-02	8.1635E+02
1.4092E+01	2.6000E-02	8.7984E+02	1.5526E+01	5.7400E-02[c]	7.9854E+02
1.4857E+01	1.4000E-02	8.3449E+02	1.5852E+01	3.3500E-02[d]	7.8214E+02
1.5159E+01	1.3900E-02	8.1787E+02	1.1828E+01	2.2140E-01	1.0482E+03
1.5506E+01	2.1100E-02[a]	7.9957E+02	1.4257E+01	1.2000E-02	8.6963E+02
1.3606E+01	1.1000E-03	9.1127E+02	1.5025E+01	2.2100E-02	8.2518E+02
1.4717E+01	1.9000E-03	8.4248E+02	1.5572E+01	6.9000E-03[e]	7.9621E+02
1.5170E+01	4.1000E-03	8.1728E+02	1.4304E+01	1.0600E-01	8.6676E+02
1.5530E+01	6.2000E-03[b]	7.9835E+02	1.4984E+01	2.0900E-02	8.2744E+02
1.4153E+01	9.0000E-02	8.7604E+02	1.5610E+01	5.6200E-02[f]	7.9424E+02
1.4857E+01	4.8000E-02	8.3452E+02			

[a] Represents $\sum_{n=8}^{\infty} f_n$ for the ns series.

[b] Represents $\sum_{n=6}^{\infty} f_n$ for the nd series.

[c] Represents $\sum_{n=6}^{\infty} f_n$ for the n$\underline{\rm d}$ series.

[d] Represents f for underlying continuum between $^2{\rm P}_{3/2}$ and $^2{\rm P}_{1/2}$.

[e] Represents $\sum_{n=7}^{\infty} f_n$ for the ns' series.

[f] Represents $\sum_{n=5}^{\infty} f_n$ for the nd' series.

Table II. Discrete oscillator strength, f_n, for resonance transitions; between 26.6 eV and 29.2 eV and at 3203.3 eV.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
2.6614E+01	-3.2800E-02	4.6586E+02	2.8896E+01	-1.4500E-03	4.2907E+02
2.7996E+01	-1.0000E-02	4.4286E+02	2.8928E+01	-1.0900E-03	4.2860E+02
2.8509E+01	-4.4000E-03	4.3489E+02	2.9100E+01	-3.0000E-03	4.2606E+02
2.8756E+01	-2.3400E-03	4.3116E+02	3.2033E+03	2.2000E-03	3.8705E+00

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.5937E+01	2.9639E-01	3.2532E+01	4.9042E+05	7.7796E+02
1.7500E+01	3.0499E-01	3.3476E+01	5.0465E+05	7.0848E+02
2.0000E+01	3.3510E-01	3.6781E+01	5.5447E+05	6.1992E+02
2.2500E+01	3.3351E-01	3.6606E+01	5.5184E+05	5.5104E+02
2.5000E+01	3.0809E-01	3.3816E+01	5.0978E+05	4.9594E+02
2.7500E+01	2.7241E-01	2.9900E+01	4.5074E+05	4.5085E+02
3.0000E+01	1.9282E-01	2.1164E+01	3.1904E+05	4.1328E+02
3.5000E+01	8.0918E-02	8.8816E+00	1.3389E+05	3.5424E+02
4.0000E+01	2.7595E-02	3.0288E+00	4.5659E+04	3.0996E+02
4.5000E+01	8.0771E-03	8.8655E-01	1.3365E+04	2.7552E+02
4.8000E+01	4.6325E-03	5.0847E-01	7.6651E+03	2.5830E+02
5.0000E+01	6.6325E-03	7.2799E-01	1.0974E+04	2.4797E+02
6.0000E+01	9.9343E-03	1.0904E+00	1.6438E+04	2.0664E+02
7.0000E+01	1.2284E-02	1.3483E+00	2.0326E+04	1.7712E+02
8.0000E+01	1.2924E-02	1.4185E+00	2.1384E+04	1.5498E+02
9.0000E+01	1.2344E-02	1.3549E+00	2.0426E+04	1.3776E+02
1.0000E+02	1.1673E-02	1.2812E+00	1.9314E+04	1.2398E+02
1.2500E+02	9.4569E-03	1.0380E+00	1.5648E+04	9.9187E+01
1.5000E+02	7.3391E-03	8.0555E-01	1.2144E+04	8.2656E+01
1.7500E+02	5.6827E-03	6.2374E-01	9.4028E+03	7.0848E+01
2.0000E+02	4.4518E-03	4.8864E-01	7.3662E+03	6.1992E+01
2.2500E+02	3.5426E-03	3.8883E-01	5.8617E+03	5.5104E+01
2.4300E+02	3.7402E-03	4.1053E-01	6.1887E+03	5.1022E+01
2.4400E+02	5.1967E-03	5.7040E-01	8.5987E+03	5.0813E+01
2.4450E+02	7.6333E-03	8.3784E-01	1.2630E+04	5.0709E+01
2.4500E+02	6.9590E-03	7.6382E-01	1.1515E+04	5.0606E+01
2.4550E+02	5.3316E-03	5.8520E-01	8.8219E+03	5.0503E+01
2.4600E+02	5.4755E-03	6.0099E-01	9.0599E+03	5.0400E+01
2.4650E+02	9.4315E-03	1.0352E+00	1.5606E+04	5.0298E+01
2.4700E+02	1.4520E-02	1.5938E+00	2.4026E+04	5.0196E+01
2.4750E+02	1.6525E-02	1.8138E+00	2.7343E+04	5.0095E+01
2.4800E+02	1.7982E-02	1.9737E+00	2.9753E+04	4.9994E+01
2.4850E+02	2.0679E-02	2.2698E+00	3.4216E+04	4.9893E+01
2.4900E+02	2.4186E-02	2.6546E+00	4.0018E+04	4.9793E+01
2.4950E+02	2.8142E-02	3.0888E+00	4.6564E+04	4.9693E+01
2.5000E+02	3.0749E-02	3.3750E+00	5.0878E+04	4.9594E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.5050E+02	3.2277E-02	3.5428E+00	5.3407E+04	4.9495E+01
2.5100E+02	3.3896E-02	3.7204E+00	5.6085E+04	4.9396E+01
2.5150E+02	3.4705E-02	3.8092E+00	5.7424E+04	4.9298E+01
2.5200E+02	3.5424E-02	3.8882E+00	5.8614E+04	4.9200E+01
2.5250E+02	3.5424E-02	3.8882E+00	5.8614E+04	4.9103E+01
2.5300E+02	3.5694E-02	3.9178E+00	5.9061E+04	4.9006E+01
2.5350E+02	3.9774E-02	4.3657E+00	6.5812E+04	4.8909E+01
2.5400E+02	3.9471E-02	4.3323E+00	6.5310E+04	4.8813E+01
2.5450E+02	3.9370E-02	4.3212E+00	6.5142E+04	4.8717E+01
2.5500E+02	3.8560E-02	4.2324E+00	6.3803E+04	4.8621E+01
2.5550E+02	3.8256E-02	4.1990E+00	6.3300E+04	4.8526E+01
2.5600E+02	3.8054E-02	4.1768E+00	6.2965E+04	4.8431E+01
2.5650E+02	3.7345E-02	4.0991E+00	6.1793E+04	4.8337E+01
2.5700E+02	3.6941E-02	4.0546E+00	6.1123E+04	4.8243E+01
2.5750E+02	3.6738E-02	4.0324E+00	6.0788E+04	4.8149E+01
2.5800E+02	3.6232E-02	3.9769E+00	5.9951E+04	4.8056E+01
2.5850E+02	3.6131E-02	3.9658E+00	5.9784E+04	4.7963E+01
2.5900E+02	3.5928E-02	3.9435E+00	5.9449E+04	4.7870E+01
2.5950E+02	3.5220E-02	3.8658E+00	5.8277E+04	4.7778E+01
2.6000E+02	3.5321E-02	3.8769E+00	5.8444E+04	4.7686E+01
2.6050E+02	3.4714E-02	3.8102E+00	5.7439E+04	4.7595E+01
2.6100E+02	3.4410E-02	3.7769E+00	5.6937E+04	4.7504E+01
2.6150E+02	3.4815E-02	3.8213E+00	5.7607E+04	4.7413E+01
2.6200E+02	3.4309E-02	3.7658E+00	5.6769E+04	4.7322E+01
2.6250E+02	3.4208E-02	3.7547E+00	5.6602E+04	4.7232E+01
2.6300E+02	3.4006E-02	3.7325E+00	5.6267E+04	4.7142E+01
2.6350E+02	3.3904E-02	3.7214E+00	5.6100E+04	4.7053E+01
2.6400E+02	2.4696E-02	2.7106E+00	4.0863E+04	4.6964E+01
2.6450E+02	2.4549E-02	2.6945E+00	4.0619E+04	4.6875E+01
2.6500E+02	2.4696E-02	2.7106E+00	4.0863E+04	4.6786E+01
2.6550E+02	2.4549E-02	2.6945E+00	4.0619E+04	4.6698E+01
2.6600E+02	2.4549E-02	2.6945E+00	4.0619E+04	4.6611E+01
2.6650E+02	2.4622E-02	2.7026E+00	4.0741E+04	4.6523E+01
2.6700E+02	2.4622E-02	2.7026E+00	4.0741E+04	4.6436E+01
2.6750E+02	2.4696E-02	2.7106E+00	4.0863E+04	4.6349E+01
2.6800E+02	2.4549E-02	2.6945E+00	4.0619E+04	4.6263E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.6850E+02	2.4475E-02	2.6864E+00	4.0498E+04	4.6177E+01
2.6900E+02	2.4034E-02	2.6380E+00	3.9768E+04	4.6091E+01
2.6950E+02	2.3667E-02	2.5977E+00	3.9160E+04	4.6005E+01
2.7000E+02	2.3446E-02	2.5735E+00	3.8795E+04	4.5920E+01
2.7050E+02	2.3079E-02	2.5332E+00	3.8187E+04	4.5835E+01
2.7100E+02	3.0800E-02	3.3806E+00	5.0963E+04	4.5751E+01
2.7150E+02	3.0700E-02	3.3697E+00	5.0797E+04	4.5666E+01
2.7200E+02	3.0700E-02	3.3697E+00	5.0797E+04	4.5582E+01
2.7250E+02	3.0400E-02	3.3367E+00	5.0301E+04	4.5499E+01
2.7300E+02	3.0300E-02	3.3258E+00	5.0136E+04	4.5415E+01
2.7350E+02	3.0200E-02	3.3148E+00	4.9970E+04	4.5332E+01
2.7400E+02	3.0200E-02	3.3148E+00	4.9970E+04	4.5250E+01
2.7450E+02	3.0100E-02	3.3038E+00	4.9805E+04	4.5167E+01
2.7500E+02	2.9900E-02	3.2819E+00	4.9474E+04	4.5085E+01
2.7550E+02	2.9600E-02	3.2489E+00	4.8977E+04	4.5003E+01
2.7600E+02	2.9700E-02	3.2599E+00	4.9143E+04	4.4922E+01
2.7650E+02	2.9600E-02	3.2489E+00	4.8977E+04	4.4841E+01
2.7700E+02	2.9600E-02	3.2489E+00	4.8977E+04	4.4760E+01
2.7750E+02	2.9100E-02	3.1940E+00	4.8150E+04	4.4679E+01
2.7800E+02	2.9200E-02	3.2050E+00	4.8316E+04	4.4599E+01
2.7850E+02	2.9100E-02	3.1940E+00	4.8150E+04	4.4519E+01
2.7900E+02	2.9000E-02	3.1831E+00	4.7985E+04	4.4439E+01
2.7950E+02	2.9200E-02	3.2050E+00	4.8316E+04	4.4359E+01
2.8000E+02	2.8900E-02	3.1721E+00	4.7819E+04	4.4280E+01
2.8100E+02	2.8800E-02	3.1611E+00	4.7654E+04	4.4122E+01
2.8200E+02	2.8700E-02	3.1501E+00	4.7488E+04	4.3966E+01
2.8300E+02	2.8500E-02	3.1282E+00	4.7157E+04	4.3811E+01
2.8400E+02	2.8700E-02	3.1501E+00	4.7488E+04	4.3656E+01
2.8500E+02	2.8400E-02	3.1172E+00	4.6992E+04	4.3503E+01
2.8600E+02	2.8500E-02	3.1282E+00	4.7157E+04	4.3351E+01
2.8700E+02	2.8300E-02	3.1062E+00	4.6826E+04	4.3200E+01
2.8800E+02	2.8300E-02	3.1062E+00	4.6826E+04	4.3050E+01
2.8900E+02	2.8300E-02	3.1062E+00	4.6826E+04	4.2901E+01
2.9000E+02	2.8100E-02	3.0843E+00	4.6495E+04	4.2753E+01
2.9100E+02	2.7900E-02	3.0623E+00	4.6164E+04	4.2606E+01
2.9200E+02	2.7900E-02	3.0623E+00	4.6164E+04	4.2460E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

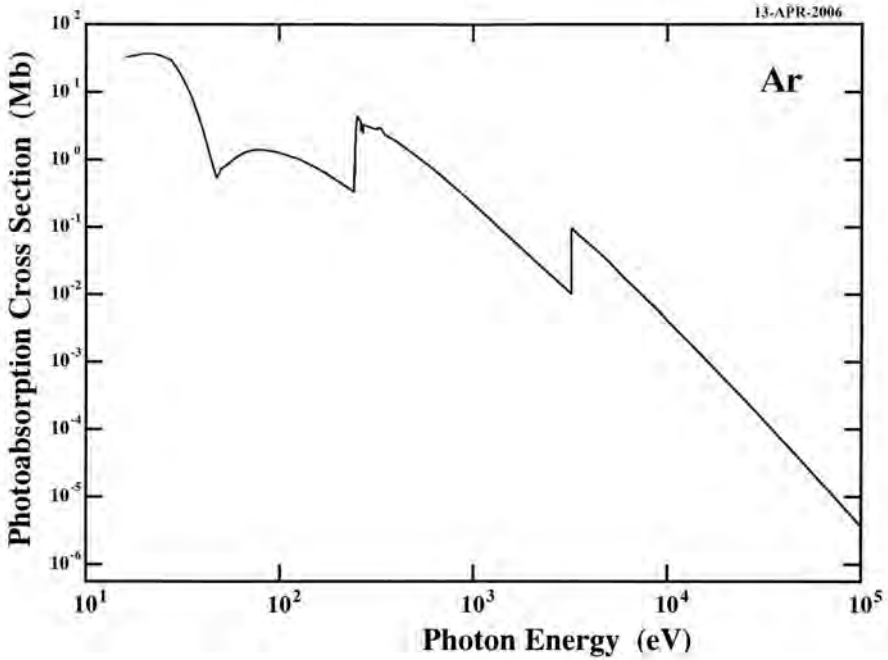
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9300E+02	2.7700E-02	3.0404E+00	4.5834E+04	4.2315E+01
2.9400E+02	2.7600E-02	3.0294E+00	4.5668E+04	4.2171E+01
2.9500E+02	2.7400E-02	3.0075E+00	4.5337E+04	4.2029E+01
2.9600E+02	2.7600E-02	3.0294E+00	4.5668E+04	4.1887E+01
2.9700E+02	2.7500E-02	3.0184E+00	4.5503E+04	4.1746E+01
2.9800E+02	2.7400E-02	3.0075E+00	4.5337E+04	4.1605E+01
2.9900E+02	2.7100E-02	2.9745E+00	4.4841E+04	4.1466E+01
3.0000E+02	2.7100E-02	2.9745E+00	4.4841E+04	4.1328E+01
3.0100E+02	2.7300E-02	2.9965E+00	4.5172E+04	4.1191E+01
3.0200E+02	2.7000E-02	2.9635E+00	4.4675E+04	4.1054E+01
3.0300E+02	2.6700E-02	2.9306E+00	4.4179E+04	4.0919E+01
3.0400E+02	2.6700E-02	2.9306E+00	4.4179E+04	4.0784E+01
3.0500E+02	2.6700E-02	2.9306E+00	4.4179E+04	4.0651E+01
3.0600E+02	2.6600E-02	2.9196E+00	4.4013E+04	4.0518E+01
3.0700E+02	2.6700E-02	2.9306E+00	4.4179E+04	4.0386E+01
3.0800E+02	2.6400E-02	2.8977E+00	4.3683E+04	4.0255E+01
3.0900E+02	2.6200E-02	2.8757E+00	4.3352E+04	4.0124E+01
3.1000E+02	2.6300E-02	2.8867E+00	4.3517E+04	3.9995E+01
3.1100E+02	2.6300E-02	2.8867E+00	4.3517E+04	3.9866E+01
3.1200E+02	2.6200E-02	2.8757E+00	4.3352E+04	3.9739E+01
3.1300E+02	2.6200E-02	2.8757E+00	4.3352E+04	3.9612E+01
3.1400E+02	2.6300E-02	2.8867E+00	4.3517E+04	3.9485E+01
3.1500E+02	2.5900E-02	2.8428E+00	4.2855E+04	3.9360E+01
3.1600E+02	2.5700E-02	2.8209E+00	4.2524E+04	3.9236E+01
3.1700E+02	2.5900E-02	2.8428E+00	4.2855E+04	3.9112E+01
3.1800E+02	2.5900E-02	2.8428E+00	4.2855E+04	3.8989E+01
3.1900E+02	2.5700E-02	2.8209E+00	4.2524E+04	3.8867E+01
3.2000E+02	2.5900E-02	2.8428E+00	4.2855E+04	3.8745E+01
3.2100E+02	2.5900E-02	2.8428E+00	4.2855E+04	3.8624E+01
3.2200E+02	2.6000E-02	2.8538E+00	4.3021E+04	3.8504E+01
3.2300E+02	2.6600E-02	2.9196E+00	4.4013E+04	3.8385E+01
3.2400E+02	2.7000E-02	2.9635E+00	4.4675E+04	3.8267E+01
3.2500E+02	2.7400E-02	3.0075E+00	4.5337E+04	3.8149E+01
3.2600E+02	2.7400E-02	3.0075E+00	4.5337E+04	3.8032E+01
3.2700E+02	2.7000E-02	2.9635E+00	4.4675E+04	3.7916E+01
3.2800E+02	2.7400E-02	3.0075E+00	4.5337E+04	3.7800E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.2900E+02	2.6900E-02	2.9526E+00	4.4510E+04	3.7685E+01
3.3000E+02	2.6900E-02	2.9526E+00	4.4510E+04	3.7571E+01
3.3100E+02	2.6500E-02	2.9087E+00	4.3848E+04	3.7457E+01
3.3200E+02	2.6100E-02	2.8648E+00	4.3186E+04	3.7345E+01
3.3300E+02	2.6400E-02	2.8977E+00	4.3683E+04	3.7232E+01
3.3400E+02	2.6200E-02	2.8757E+00	4.3352E+04	3.7121E+01
3.3500E+02	2.6100E-02	2.8648E+00	4.3186E+04	3.7010E+01
3.3600E+02	2.5800E-02	2.8318E+00	4.2690E+04	3.6900E+01
3.5000E+02	2.1537E-02	2.3639E+00	3.5636E+04	3.5424E+01
4.0000E+02	1.7165E-02	1.8840E+00	2.8401E+04	3.0996E+01
4.5000E+02	1.3523E-02	1.4843E+00	2.2376E+04	2.7552E+01
5.0000E+02	1.0759E-02	1.1810E+00	1.7803E+04	2.4797E+01
6.0000E+02	7.2255E-03	7.9307E-01	1.1956E+04	2.0664E+01
7.0000E+02	5.0022E-03	5.4905E-01	8.2769E+03	1.7712E+01
8.0000E+02	3.5914E-03	3.9420E-01	5.9425E+03	1.5498E+01
9.0000E+02	2.6659E-03	2.9261E-01	4.4112E+03	1.3776E+01
1.0000E+03	2.0260E-03	2.2237E-01	3.3523E+03	1.2398E+01
1.2500E+03	1.1203E-03	1.2297E-01	1.8537E+03	9.9187E+00
1.5000E+03	6.8751E-04	7.5462E-02	1.1376E+03	8.2656E+00
1.7500E+03	4.5498E-04	4.9940E-02	7.5284E+02	7.0848E+00
2.0000E+03	3.1862E-04	3.4972E-02	5.2720E+02	6.1992E+00
2.2500E+03	2.3309E-04	2.5584E-02	3.8567E+02	5.5104E+00
2.5000E+03	1.7653E-04	1.9376E-02	2.9209E+02	4.9594E+00
2.7500E+03	1.3751E-04	1.5093E-02	2.2753E+02	4.5085E+00
3.0000E+03	1.0963E-04	1.2033E-02	1.8139E+02	4.1328E+00
3.2030E+03	9.2533E-05	1.0157E-02	1.5311E+02	3.8709E+00
3.2060E+03	8.8381E-04	9.7008E-02	1.4624E+03	3.8673E+00
3.5000E+03	6.9649E-04	7.6448E-02	1.1524E+03	3.5424E+00
4.0000E+03	4.9993E-04	5.4873E-02	8.2720E+02	3.0996E+00
4.5000E+03	3.7261E-04	4.0898E-02	6.1654E+02	2.7552E+00
5.0000E+03	2.8118E-04	3.0863E-02	4.6526E+02	2.4797E+00
6.0000E+03	1.6089E-04	1.7659E-02	2.6622E+02	2.0664E+00
7.0000E+03	1.0546E-04	1.1575E-02	1.7449E+02	1.7712E+00
8.0000E+03	7.2513E-05	7.9591E-03	1.1998E+02	1.5498E+00
9.0000E+03	5.1988E-05	5.7063E-03	8.6022E+01	1.3776E+00
1.0000E+04	3.7082E-05	4.0702E-03	6.1358E+01	1.2398E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2500E+04	1.9470E-05	2.1370E-03	3.2216E+01	9.9187E-01
1.5000E+04	1.1420E-05	1.2535E-03	1.8896E+01	8.2656E-01
1.7500E+04	7.2078E-06	7.9113E-04	1.1926E+01	7.0848E-01
2.0000E+04	4.8403E-06	5.3128E-04	8.0090E+00	6.1992E-01
2.2500E+04	3.4070E-06	3.7395E-04	5.6373E+00	5.5104E-01
2.5000E+04	2.4887E-06	2.7317E-04	4.1180E+00	4.9594E-01
2.7500E+04	1.8660E-06	2.0481E-04	3.0875E+00	4.5085E-01
3.0000E+04	1.4256E-06	1.5647E-04	2.3588E+00	4.1328E-01
3.5000E+04	8.8390E-07	9.7018E-05	1.4625E+00	3.5424E-01
4.0000E+04	5.8435E-07	6.4139E-05	9.6689E-01	3.0996E-01
4.5000E+04	4.0566E-07	4.4526E-05	6.7123E-01	2.7552E-01
5.0000E+04	2.9269E-07	3.2125E-05	4.8429E-01	2.4797E-01
6.0000E+04	1.6638E-07	1.8262E-05	2.7530E-01	2.0664E-01
7.0000E+04	1.0298E-07	1.1303E-05	1.7039E-01	1.7712E-01
8.0000E+04	6.7465E-08	7.4051E-06	1.1163E-01	1.5498E-01
9.0000E+04	4.6388E-08	5.0916E-06	7.6756E-02	1.3776E-01
1.0000E+05	3.3182E-08	3.6421E-06	5.4905E-02	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} = 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-2\pi\chi\right)}\ .$$

Here χ is represented by

$$\chi = \sqrt{\frac{E_{\mathrm{K}}}{E-E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} = 3206.3$ eV.

Ar

Energy, eV	Source
0 - 15.93711	Table 2.33 p.88 (Berkowitz's book*)
15.937 - 29.239	Table 2.35 p.35 (Berkowitz's book*)
26.6 - 29.2	Berrah *et al.*, J. Phys. B, 29 (1996) 5351
	Madden *et al.*, Phys. Rev., 177 (1969) 136
29.239 - 48.0	Table 2.35 p.35 (Berkowitz's book*)
48.0 - 79.3	Table 2.35 p.35 (Berkowitz's book*)
79.3 - 243.0	Table 2.35 p.35 (Berkowitz's book*)
243.0 - 253.0	Cham *et al.*, Phys. Rev. A, 46 (1992) 149
253 – 264	Cham *et al.*, Phys. Rev. A, 46 (1992) 149
264 – 271	Cham *et al.*, Phys. Rev. A, 46 (1992) 149
271 – 321	Cham *et al.*, Phys. Rev. A, 46 (1992) 149
321 – 336	Cham *et al.*, Phys. Rev. A, 46 (1992) 149
336 – 500	Table 2.35 p.35 (Berkowitz's book*)
500 - 929.7	Table 2.35 p.35 (Berkowitz's book*)
929.7 – 3203	Table 2.35 p.35 (Berkowitz's book*)
3203.3	Deslattes *et al.*, Phys. Rev. A, 27 (1983) 923
3206 - 6199.3	Table 2.35 p.35 (Berkowitz's book*)
6199.3 - 10^4	Table 2.35 p.35 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Molecular Hydrogen

Z = 2 Molecular Mass : $M_{\rm A} = 2.01588$

$\sigma_a({\rm Mb}) = 109.76097 \ \dfrac{{\rm d}f}{{\rm d}E} \ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n, for the Lyman bands.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.1184E+01	1.6890E-03	1.1086E+03	1.3610E+01	3.9390E-03	9.1098E+02
1.1347E+01	5.7900E-03	1.0927E+03	1.3702E+01	3.2190E-03	9.0486E+02
1.1506E+01	1.1560E-02	1.0776E+03	1.3791E+01	2.6320E-03	8.9902E+02
1.1661E+01	1.7550E-02	1.0632E+03	1.3877E+01	2.1540E-03	8.9345E+02
1.1811E+01	2.2500E-02	1.0497E+03	1.3960E+01	1.7660E-03	8.8814E+02
1.1957E+01	2.5710E-02	1.0369E+03	1.4040E+01	1.4500E-03	8.8308E+02
1.2100E+01	2.7040E-02	1.0247E+03	1.4117E+01	1.1930E-03	8.7826E+02
1.2238E+01	2.6730E-02	1.0131E+03	1.4190E+01	9.8150E-04	8.7374E+02
1.2372E+01	2.5230E-02	1.0021E+03	1.4261E+01	8.0570E-04	8.6939E+02
1.2503E+01	2.2980E-02	9.9164E+02	1.4328E+01	6.6030E-04	8.6533E+02
1.2630E+01	2.0350E-02	9.8166E+02	1.4391E+01	5.4320E-04	8.6154E+02
1.2753E+01	1.7640E-02	9.7220E+02	1.4451E+01	4.5080E-04	8.5796E+02
1.2872E+01	1.5040E-02	9.6321E+02	1.4506E+01	3.7020E-04	8.5471E+02
1.2988E+01	1.2660E-02	9.5461E+02	1.4557E+01	2.9610E-04	8.5172E+02
1.3100E+01	1.0550E-02	9.4644E+02	1.4601E+01	2.2730E-04	8.4915E+02
1.3209E+01	8.7300E-03	9.3863E+02	1.4637E+01	1.6160E-04	8.4706E+02
1.3314E+01	7.1850E-03	9.3123E+02	1.4662E+01	8.6500E-05	8.4562E+02
1.3416E+01	5.8910E-03	9.2415E+02	1.4672E+01	1.2400E-05	8.4504E+02
1.3514E+01	4.8200E-03	9.1745E+02			

Table II. Discrete oscillator strength, f_n, for the Werner bands.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.2285E+01	4.7600E-02	1.0092E+03	1.3947E+01	1.0990E-02	8.8897E+02
1.2571E+01	7.2840E-02	9.8627E+02	1.4119E+01	7.0980E-03	8.7814E+02
1.2840E+01	6.9820E-02	9.6561E+02	1.4273E+01	2.5920E-03	8.6866E+02
1.3094E+01	5.4720E-02	9.4688E+02	1.4408E+01	2.9760E-03	8.6052E+02
1.3332E+01	3.8740E-02	9.2997E+02	1.4522E+01	1.9090E-03	8.5377E+02
1.3553E+01	2.5980E-02	9.1481E+02	1.4611E+01	1.1710E-03	8.4857E+02
1.3758E+01	1.7000E-02	9.0118E+02	1.4672E+01	5.5900E-04	8.4504E+02

Table III. Discrete oscillator strength, f_n, for $X^1\Sigma_g^+ \rightarrow 3p\sigma_u$, $B'^1\ \Sigma_u^+$ transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.3698E+01	2.9200E-03	9.0513E+02	1.4613E+01	3.1100E-03	8.4845E+02
1.3931E+01	5.9900E-03	8.8999E+02	1.4651E+01	3.4000E-04	8.4625E+02
1.4144E+01	7.3400E-03	8.7659E+02	1.4664E+01	3.3000E-04	8.4550E+02
1.4333E+01	7.0000E-03	8.6503E+02	1.4672E+01	2.2000E-04	8.4504E+02
1.4494E+01	5.5500E-03	8.5542E+02			

Table IV. Discrete oscillator strength, f_n, for $X^1\Sigma_g^+ \rightarrow 3p\pi_u$, $D^1\ \Pi_u$ transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.3994E+01	9.0100E-03	8.8598E+02	1.5772E+01	2.2800E-03	7.8610E+02
1.4270E+01	1.5230E-02	8.6884E+02	1.5928E+01	1.5500E-03	7.7840E+02
1.4530E+01	1.5900E-02	8.5330E+02	1.6068E+01	1.0600E-03	7.7162E+02
1.4775E+01	1.3440E-02	8.3915E+02	1.6191E+01	7.3000E-04	7.6576E+02
1.5003E+01	1.0150E-02	8.2640E+02	1.6299E+01	5.0000E-04	7.6069E+02
1.5218E+01	7.2000E-03	8.1472E+02	1.6390E+01	3.4000E-04	7.5646E+02
1.5418E+01	4.9800E-03	8.0415E+02	1.6462E+01	2.3000E-04	7.5315E+02
1.5602E+01	3.3900E-03	7.9467E+02	1.6516E+01	1.4000E-04	7.5069E+02

Table V. Discrete oscillator strength, f_n, for $X^1\Sigma_g^+ \rightarrow$ higher Rydberg states (up to IP) transitions.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.4598E+01	1.5000E-04	8.4932E+02	1.5181E+01	7.3000E-04	8.1671E+02
1.4872E+01	4.4800E-03	8.3368E+02	1.4840E+01	4.2200E-03	8.3547E+02
1.5135E+01	4.2500E-03	8.1919E+02	1.5105E+01	5.5300E-03	8.2082E+02
1.5368E+01	5.6200E-03	8.0677E+02	1.5357E+01	2.1500E-03	8.0735E+02
1.4740E+01	8.4800E-03	8.4114E+02	1.5132E+01	2.7800E-03	8.1935E+02
1.4975E+01	7.1100E-03	8.2794E+02	1.5401E+01	2.2200E-03	8.0504E+02
1.5203E+01	4.1200E-03	8.1552E+02	1.5050E+01	2.4100E-03	8.2382E+02
1.5402E+01	2.5900E-03	8.0499E+02	1.5329E+01	1.5900E-03	8.0882E+02
1.4886E+01	9.9000E-04	8.3289E+02	1.5024E+01	4.8900E-03	8.2524E+02
1.5141E+01	8.8000E-04	8.1886E+02	1.5294E+01	1.2100E-03	8.1067E+02

Table VI. Discrete oscillator strength, f_n, attributed to predissociation above the IP.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.5576E+01	1.0000E-03	7.9600E+02	1.5828E+01	2.0000E-04	7.8330E+02
1.5586E+01	1.0000E-03	7.9550E+02	1.5895E+01	6.0000E-04	7.8000E+02
1.5601E+01	2.4000E-03	7.9470E+02	1.5906E+01	1.3000E-03	7.7950E+02
1.5601E+01	1.5000E-03	7.9470E+02	1.6029E+01	1.5000E-03	7.7350E+02
1.5664E+01	7.0000E-04	7.9150E+02	1.6039E+01	1.5000E-03	7.7300E+02
1.5674E+01	1.6000E-03	7.9100E+02	1.6112E+01	4.0000E-04	7.6950E+02
1.5754E+01	1.4000E-03	7.8700E+02	1.6169E+01	4.0000E-04	7.6680E+02
1.5774E+01	2.0000E-04	7.8600E+02	1.6207E+01	7.0000E-04	7.6500E+02
1.5814E+01	6.0000E-04	7.8400E+02			

Table VII. Autoionization oscillator strengths, f_n, in H_2.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.5435E+01	1.2000E-03	8.0326E+02	1.5657E+01	9.0000E-05	7.9186E+02
1.5437E+01	1.7000E-04	8.0316E+02	1.5660E+01	1.4000E-04	7.9172E+02
1.5482E+01	9.4000E-04	8.0085E+02	1.5832E+01	2.2000E-04	7.8311E+02
1.5502E+01	5.0000E-05	7.9981E+02	1.5837E+01	5.0000E-05	7.8289E+02
1.5528E+01	5.3000E-04	7.9845E+02	1.5843E+01	2.8000E-04	7.8260E+02
1.5542E+01	2.6000E-04	7.9773E+02	1.5855E+01	1.2000E-04	7.8200E+02
1.5550E+01	2.7000E-04	7.9731E+02	1.5861E+01	1.6000E-04	7.8169E+02
1.5562E+01	5.7000E-04	7.9672E+02	1.5871E+01	1.7000E-04	7.8118E+02
1.5577E+01	4.0000E-05	7.9592E+02	1.5876E+01	5.0000E-05	7.8093E+02
1.5606E+01	4.5000E-04	7.9446E+02	1.5884E+01	1.5000E-04	7.8056E+02
1.5595E+01	5.0000E-05	7.9500E+02	1.5894E+01	1.6000E-04	7.8008E+02
1.5600E+01	1.0000E-05	7.9475E+02	1.5899E+01	1.3000E-04	7.7983E+02
1.5606E+01	3.1000E-04	7.9448E+02	1.5901E+01	7.2000E-04	7.7971E+02
1.5608E+01	2.0000E-05	7.9435E+02	1.5903E+01	6.0000E-04	7.7964E+02
1.5617E+01	3.0000E-04	7.9392E+02	1.5907E+01	1.4000E-04	7.7943E+02
1.5619E+01	8.0000E-05	7.9382E+02	1.5911E+01	3.0000E-05	7.7923E+02
1.5629E+01	1.6000E-04	7.9330E+02	1.5913E+01	5.0000E-05	7.7916E+02
1.5635E+01	3.0000E-05	7.9298E+02	1.5923E+01	9.0000E-05	7.7863E+02
1.5638E+01	8.0000E-05	7.9282E+02	1.5925E+01	5.0000E-05	7.7853E+02
1.5644E+01	8.0000E-05	7.9251E+02	1.5927E+01	2.0000E-05	7.7846E+02
1.5651E+01	9.0000E-05	7.9218E+02	1.5928E+01	8.0000E-05	7.7838E+02
1.5655E+01	2.0000E-05	7.9197E+02	1.5930E+01	1.0000E-04	7.7830E+02

Table VII. Autoionization oscillator strengths, f_n, in H_2. (Continued)

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.5932E+01	1.7000E-04	7.7822E+02	1.6114E+01	6.9000E-04	7.6943E+02
1.5973E+01	3.0000E-04	7.7619E+02	1.6126E+01	3.9000E-04	7.6886E+02
1.5986E+01	6.0000E-05	7.7556E+02	1.6131E+01	2.1000E-04	7.6860E+02
1.5996E+01	1.4000E-04	7.7510E+02	1.6134E+01	1.3000E-04	7.6846E+02
1.5663E+01	1.6000E-04	7.9158E+02	1.6140E+01	1.8000E-04	7.6818E+02
1.5664E+01	3.1000E-04	7.9150E+02	1.6147E+01	1.5000E-04	7.6785E+02
1.5666E+01	7.3000E-04	7.9140E+02	1.6152E+01	7.0000E-05	7.6760E+02
1.5667E+01	3.8000E-04	7.9137E+02	1.6155E+01	3.0000E-04	7.6746E+02
1.5670E+01	3.2000E-04	7.9124E+02	1.6210E+01	2.9000E-04	7.6488E+02
1.5671E+01	1.6000E-04	7.9118E+02	1.6217E+01	4.3000E-04	7.6453E+02
1.5672E+01	8.0000E-05	7.9112E+02	1.6232E+01	6.2000E-04	7.6381E+02
1.5674E+01	1.6000E-04	7.9101E+02	1.6250E+01	9.3000E-04	7.6300E+02
1.5675E+01	3.0000E-04	7.9095E+02	1.6272E+01	4.1000E-04	7.6197E+02
1.5677E+01	6.1000E-04	7.9086E+02	1.6284E+01	2.2000E-04	7.6140E+02
1.5679E+01	3.0000E-05	7.9077E+02	1.6308E+01	2.4000E-04	7.6027E+02
1.5681E+01	3.0000E-05	7.9064E+02	1.6310E+01	4.7000E-04	7.6016E+02
1.5682E+01	3.0000E-05	7.9060E+02	1.6327E+01	1.3000E-04	7.5940E+02
1.5683E+01	3.0000E-05	7.9055E+02	1.6338E+01	3.3000E-04	7.5886E+02
1.5691E+01	2.7000E-04	7.9014E+02	1.6343E+01	5.0000E-05	7.5865E+02
1.5736E+01	8.1000E-04	7.8790E+02	1.6350E+01	2.0000E-04	7.5831E+02
1.5755E+01	2.3000E-04	7.8697E+02	1.6360E+01	1.5000E-04	7.5786E+02
1.5763E+01	4.0000E-05	7.8655E+02	1.6364E+01	1.8000E-04	7.5765E+02
1.5777E+01	3.4000E-04	7.8584E+02	1.6422E+01	2.4300E-03	7.5500E+02
1.5786E+01	6.0000E-04	7.8543E+02	1.6458E+01	5.7000E-04	7.5333E+02
1.5800E+01	9.0000E-05	7.8470E+02	1.6468E+01	2.3000E-04	7.5288E+02
1.5817E+01	3.0000E-05	7.8385E+02	1.6489E+01	3.7000E-04	7.5190E+02
1.5821E+01	1.8900E-03	7.8368E+02	1.6493E+01	2.2000E-04	7.5174E+02
1.5829E+01	6.6000E-04	7.8326E+02	1.6520E+01	2.3000E-04	7.5053E+02
1.6025E+01	5.0000E-05	7.7369E+02	1.6534E+01	2.0000E-04	7.4988E+02
1.6030E+01	1.3500E-03	7.7346E+02	1.6537E+01	1.0000E-04	7.4972E+02
1.6040E+01	6.0000E-05	7.7295E+02	1.6552E+01	6.0000E-05	7.4905E+02
1.6048E+01	1.0000E-04	7.7258E+02	1.6559E+01	2.1000E-04	7.4873E+02
1.6057E+01	8.4000E-04	7.7215E+02	1.6570E+01	4.0000E-05	7.4825E+02
1.6061E+01	7.0000E-05	7.7195E+02	1.6579E+01	4.0000E-05	7.4786E+02
1.6082E+01	2.7000E-04	7.7093E+02	1.6649E+01	4.9000E-04	7.4470E+02
1.6102E+01	1.5000E-04	7.7000E+02	1.6665E+01	9.0000E-05	7.4400E+02

Table VII. Autoionization oscillator strengths, f_n, in H_2. (Continued)

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.6693E+01	1.6000E-04	7.4275E+02	1.6800E+01	8.0000E-05	7.3802E+02
1.6716E+01	1.0000E-04	7.4171E+02	1.6802E+01	1.0000E-05	7.3790E+02
1.6735E+01	8.0000E-05	7.4088E+02	1.6804E+01	4.0000E-05	7.3783E+02
1.6742E+01	1.0000E-04	7.4054E+02	1.6818E+01	1.4000E-04	7.3722E+02
1.6749E+01	2.0000E-05	7.4025E+02	1.6900E+01	8.0000E-05	7.3363E+02
1.6757E+01	3.0000E-05	7.3989E+02	1.6932E+01	3.0000E-05	7.3226E+02
1.6761E+01	3.0000E-05	7.3974E+02	1.6943E+01	3.0000E-05	7.3178E+02
1.6769E+01	2.0000E-05	7.3936E+02	1.6945E+01	2.0000E-05	7.3169E+02
1.6775E+01	1.0000E-05	7.3910E+02	1.6951E+01	4.0000E-05	7.3143E+02
1.6777E+01	1.0000E-05	7.3902E+02	1.6955E+01	3.0000E-05	7.3124E+02
1.6781E+01	1.0000E-05	7.3882E+02	1.6958E+01	4.0000E-05	7.3112E+02
1.6790E+01	8.0000E-05	7.3846E+02	1.6963E+01	5.0000E-05	7.3090E+02
1.6794E+01	1.2000E-04	7.3827E+02	1.6969E+01	5.0000E-05	7.3067E+02
1.6796E+01	4.0000E-05	7.3819E+02	1.6974E+01	2.0000E-05	7.3045E+02
1.6798E+01	2.0000E-05	7.3811E+02	1.6975E+01	1.0000E-05	7.3039E+02

Table VIII. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m.

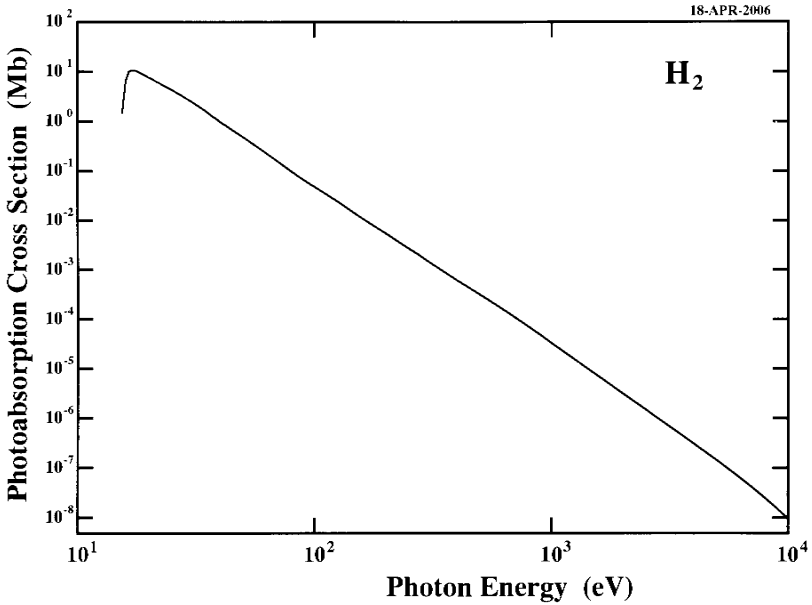
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5426E+01	1.3000E-02	1.4269E+00	4.2626E+05	8.0375E+02
1.7500E+01	9.5900E-02	1.0526E+01	3.1445E+06	7.0848E+02
2.0000E+01	6.9491E-02	7.6274E+00	2.2786E+06	6.1992E+02
2.2500E+01	5.1997E-02	5.7073E+00	1.7050E+06	5.5104E+02
2.5000E+01	3.9655E-02	4.3525E+00	1.3003E+06	4.9594E+02
2.7500E+01	3.0576E-02	3.3561E+00	1.0026E+06	4.5085E+02
3.0000E+01	2.3747E-02	2.6065E+00	7.7867E+05	4.1328E+02
3.5000E+01	1.4511E-02	1.5927E+00	4.7581E+05	3.5424E+02
4.0000E+01	9.0128E-03	9.8925E-01	2.9552E+05	3.0996E+02
4.5000E+01	6.1142E-03	6.7110E-01	2.0048E+05	2.7552E+02
5.0000E+01	4.3434E-03	4.7674E-01	1.4242E+05	2.4797E+02
6.0000E+01	2.3988E-03	2.6329E-01	7.8655E+04	2.0664E+02
7.0000E+01	1.4303E-03	1.5699E-01	4.6900E+04	1.7712E+02
8.0000E+01	8.9118E-04	9.7817E-02	2.9221E+04	1.5498E+02
9.0000E+01	6.0117E-04	6.5985E-02	1.9712E+04	1.3776E+02
1.0000E+02	4.3345E-04	4.7576E-02	1.4213E+04	1.2398E+02

Table VIII. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2500E+02	2.1951E-04	2.4094E-02	7.1978E+03	9.9187E+01
1.5000E+02	1.2004E-04	1.3176E-02	3.9360E+03	8.2656E+01
1.7500E+02	7.4923E-05	8.2236E-03	2.4567E+03	7.0848E+01
2.0000E+02	4.9610E-05	5.4452E-03	1.6267E+03	6.1992E+01
2.2500E+02	3.4339E-05	3.7691E-03	1.1260E+03	5.5104E+01
2.5000E+02	2.4686E-05	2.7096E-03	8.0945E+02	4.9594E+01
2.7500E+02	1.8326E-05	2.0115E-03	6.0091E+02	4.5085E+01
3.0000E+02	1.3771E-05	1.5116E-03	4.5156E+02	4.1328E+01
3.5000E+02	8.4064E-06	9.2270E-04	2.7564E+02	3.5424E+01
4.0000E+02	5.5759E-06	6.1202E-04	1.8283E+02	3.0996E+01
4.5000E+02	3.9046E-06	4.2857E-04	1.2803E+02	2.7552E+01
5.0000E+02	2.8404E-06	3.1177E-04	9.3136E+01	2.4797E+01
6.0000E+02	1.6264E-06	1.7852E-04	5.3329E+01	2.0664E+01
7.0000E+02	1.0009E-06	1.0986E-04	3.2819E+01	1.7712E+01
8.0000E+02	6.4705E-07	7.1021E-05	2.1216E+01	1.5498E+01
9.0000E+02	4.3335E-07	4.7565E-05	1.4209E+01	1.3776E+01
1.0000E+03	2.9781E-07	3.2688E-05	9.7652E+00	1.2398E+01
1.2500E+03	1.2487E-07	1.3706E-05	4.0945E+00	9.9187E+00
1.5000E+03	5.3812E-08	5.9065E-06	1.7645E+00	8.2656E+00
1.7500E+03	4.5596E-08	5.0047E-06	1.4951E+00	7.0848E+00
2.0000E+03	2.8916E-08	3.1739E-06	9.4814E-01	6.1992E+00
2.2500E+03	1.9416E-08	2.1311E-06	6.3665E-01	5.5104E+00
2.5000E+03	1.3620E-08	1.4949E-06	4.4658E-01	4.9594E+00
2.7500E+03	9.8886E-09	1.0854E-06	3.2424E-01	4.5085E+00
3.0000E+03	7.3825E-09	8.1031E-07	2.4207E-01	4.1328E+00
3.5000E+03	4.3918E-09	4.8205E-07	1.4400E-01	3.5424E+00
4.0000E+03	2.7908E-09	3.0632E-07	9.1509E-02	3.0996E+00
4.5000E+03	1.8626E-09	2.0444E-07	6.1074E-02	2.7552E+00
5.0000E+03	1.2909E-09	1.4169E-07	4.2327E-02	2.4797E+00
6.0000E+03	6.7382E-10	7.3959E-08	2.2094E-02	2.0664E+00
7.0000E+03	3.8030E-10	4.1742E-08	1.2470E-02	1.7712E+00
8.0000E+03	2.2606E-10	2.4813E-08	7.4124E-03	1.5498E+00
9.0000E+03	1.3894E-10	1.5250E-08	4.5556E-03	1.3776E+00
1.0000E+04	8.6984E-11	9.5474E-09	2.8522E-03	1.2398E+00
1.2500E+04	5.5394E-11	6.0801E-09	1.8163E-03	9.9187E-01
1.5000E+04	2.9520E-11	3.2401E-09	9.6793E-04	8.2656E-01

Table VIII. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7500E+04	1.7328E-11	1.9019E-09	5.6817E-04	7.0848E-01
2.0000E+04	1.0918E-11	1.1984E-09	3.5800E-04	6.1992E-01
2.2500E+04	7.2627E-12	7.9716E-10	2.3814E-04	5.5104E-01
2.5000E+04	5.0422E-12	5.5343E-10	1.6533E-04	4.9594E-01
2.7500E+04	3.6240E-12	3.9777E-10	1.1883E-04	4.5085E-01
3.0000E+04	2.6803E-12	2.9419E-10	8.7886E-05	4.1328E-01
3.5000E+04	1.5703E-12	1.7236E-10	5.1489E-05	3.5424E-01
4.0000E+04	9.8788E-13	1.0843E-10	3.2392E-05	3.0996E-01
4.5000E+04	6.5627E-13	7.2032E-11	2.1519E-05	2.7552E-01
5.0000E+04	4.5512E-13	4.9954E-11	1.4923E-05	2.4797E-01
6.0000E+04	2.4150E-13	2.6507E-11	7.9186E-06	2.0664E-01
7.0000E+04	1.4129E-13	1.5508E-11	4.6327E-06	1.7712E-01
8.0000E+04	8.8784E-14	9.7450E-12	2.9112E-06	1.5498E-01
9.0000E+04	5.8926E-14	6.4677E-12	1.9321E-06	1.3776E-01
1.0000E+05	4.0832E-14	4.4818E-12	1.3389E-06	1.2398E-01



For atomic hydrogen, the oscillator-strength density (in Rydberg unit) in the continuum is given by

$$\mathrm{d}f/\mathrm{d}E \;=\; \frac{2^7}{3\,(1+k^2)^4}\;\exp\left(-\frac{4}{k}\,\tan^{-1}k\right)\left[1-\exp\left(-\frac{2\pi}{k}\right)\right]^{-1},$$

where $\epsilon = k^2$ is the electron kinetic energy, and incident photon energy $E = 1 + \epsilon$. Here energies are given in Rydberg unit. This expression is used to calculate $\sigma(\mathrm{H})$, the photoabsorption cross section, from 10 keV to infinity. In this energy interval, the photoabsorption cross section of molecular hydrogen, $\sigma(\mathrm{H}_2)$, is given as

$$\sigma(\mathrm{H}_2) \;=\; 2.888 \times \sigma(\mathrm{H}).$$

H_2

Energy, eV	Source
11.18 - 14.67	Table 4.1 p.127 (Berkowitz's book*): Lyman bands
12.29 - 14.47	Table 4.1 p.127 (Berkowitz's book*): Werner bands
13.70 - 14.67	Table 4.2 p.128 (Berkowitz's book*)
13.99 - 16.52	Table 4.2 p.128 (Berkowitz's book*)
Higher Rydbergs	Glass-Maujean *et al.*, Z. Phys., D5 (1987) 189
- 15.4258 (IP)	a.3 p.128 (Berkowitz's book*)
Dissociation	Glass-Maujean *et al.*, Z. Phys., D5 (1987) 189
Continuum	
below IP	
Dissociation	Glass-Maujean *et al.*, Z. Phys., D5 (1987) 189
Continuum	
above IP	
Predissociation	Table 4.4 p.131 (Berkowitz's book*)
above IP	
Autoionization	Table 4.5 p.132 (Berkowitz's book*)
15.4258 (IP) - 17.0	b.4 p.131 (Berkowitz's book*)
17.0 - 18.0	b.4 p.131 (Berkowitz's book*)
18.0 - 40.0	Table 4.6 p.134 (Berkowitz's book*)
40 - 80	Table 4.6 p.134 (Berkowitz's book*)
80 - 160	Table 4.6 p.134 (Berkowitz's book*)
160 - 300	Table 4.6 p.134 (Berkowitz's book*)
300 - 1800	Table 4.6 p.134 (Berkowitz's book*)
1800 - 10^4	Table 4.6 p.134 (Berkowitz's book*)
10^4 - ∞	$\sigma(H_2) = 1.444 \times 2 \times \sigma(H)$

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

Molecular Nitrogen

Z = 14 Molecular Mass : $M_{\rm A} = 28.0134$

$\sigma_a\,({\rm Mb}) = 109.76097\ \dfrac{{\rm d}f}{{\rm d}E}\ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Discrete oscillator strength, f_n, for transitions to the valence states ($b^1\Pi_u$, $b'^1\Sigma_u^+$), the lowest Rydberg states ($c^1\Pi_u$, $c'^1\Sigma_u^+$, $o^1\Pi_u$), and higher energy bands up to the IP ($e^1\Pi_u$, $e'^1\Sigma_u^+$, $n = 5$, $^1\Pi_u$) of N_2.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
1.2500E+01	2.6264E-03	9.9187E+02	1.4532E+01	1.7888E-02	8.5318E+02
1.2578E+01	1.1684E-02	9.8572E+02	1.4690E+01	4.7047E-03	8.4400E+02
1.2665E+01	2.8125E-02	9.7895E+02	1.4750E+01	9.2750E-03	8.4057E+02
1.2754E+01	5.4388E-02	9.7212E+02	1.4808E+01	3.7534E-03	8.3728E+02
1.2838E+01	8.9027E-02	9.6576E+02	1.2912E+01	6.5659E-02	9.6022E+02
1.2981E+01	6.3384E-03	9.5512E+02	1.3208E+01	6.6176E-02	9.3871E+02
1.3061E+01	5.1700E-03	9.4927E+02	1.3476E+01	1.6027E-02	9.2004E+02
1.3156E+01	2.4506E-02	9.4242E+02	1.3992E+01	2.1714E-03	8.8611E+02
1.3461E+01	4.8184E-03	9.2106E+02	1.2934E+01	2.0163E-01	9.5859E+02
1.3437E+01	1.5200E-02	9.2271E+02	1.3188E+01	1.5200E-03	9.4013E+02
1.3529E+01	5.0046E-03	9.1643E+02	1.3720E+01	1.9646E-02	9.0367E+02
1.3617E+01	1.8715E-03	9.1051E+02	1.3982E+01	5.1286E-02	8.8674E+02
1.3788E+01	2.9986E-03	8.9922E+02	1.4237E+01	6.2040E-04	8.7086E+02
1.3390E+01	2.2334E-03	9.2595E+02	1.4482E+01	1.3959E-02	8.5613E+02
1.3663E+01	1.3235E-02	9.0744E+02	1.3345E+01	2.1817E-02	9.2907E+02
1.3755E+01	2.2748E-03	9.0138E+02	1.3584E+01	2.8642E-02	9.1272E+02
1.3834E+01	6.7624E-03	8.9623E+02	1.3818E+01	2.4402E-02	8.9727E+02
1.3916E+01	3.1330E-02	8.9095E+02	1.4048E+01	6.4108E-03	8.8258E+02
1.4077E+01	3.5259E-02	8.8076E+02	1.4275E+01	1.6027E-03	8.6854E+02
1.4155E+01	4.2291E-02	8.7590E+02	1.4330E+01	1.5820E-02	8.6521E+02
1.4228E+01	6.4728E-02	8.7141E+02	1.4585E+01	7.8687E-03	8.5008E+02
1.4304E+01	3.2881E-02	8.6678E+02	1.4364E+01	1.0754E-02	8.6316E+02
1.4408E+01	3.3708E-03	8.6052E+02	1.4839E+01	1.1684E-02	8.3553E+02
1.4467E+01	1.7164E-02	8.5701E+02			

Table II. Discrete oscillator strength, f_n, for resonances preceeding the K-edge.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
4.0100E+02	2.1000E-01	3.0918E+01	4.0680E+02	6.7000E-03	3.0478E+01
4.0560E+02	2.8000E-03	3.0568E+01			

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.4920E+01	2.4322E-02	2.6696E+00	5.7389E+04	8.3099E+02
1.4949E+01	3.2686E-02	3.5876E+00	7.7124E+04	8.2938E+02
1.4974E+01	6.3853E-02	7.0085E+00	1.5066E+05	8.2800E+02
1.4996E+01	1.2771E-01	1.4017E+01	3.0133E+05	8.2678E+02
1.5005E+01	1.6900E-01	1.8550E+01	3.9877E+05	8.2629E+02
1.5014E+01	2.0522E-01	2.2525E+01	4.8422E+05	8.2579E+02
1.5057E+01	8.0238E-02	8.8070E+00	1.8933E+05	8.2343E+02
1.5104E+01	2.1160E-01	2.3226E+01	4.9929E+05	8.2087E+02
1.5115E+01	3.1102E-01	3.4138E+01	7.3387E+05	8.2027E+02
1.5188E+01	9.0185E-02	9.8988E+00	2.1280E+05	8.1633E+02
1.5197E+01	1.1006E-01	1.2080E+01	2.5969E+05	8.1585E+02
1.5230E+01	3.0392E-01	3.3358E+01	7.1711E+05	8.1408E+02
1.5242E+01	3.3373E-01	3.6631E+01	7.8747E+05	8.1344E+02
1.5271E+01	1.4486E-01	1.5900E+01	3.4181E+05	8.1189E+02
1.5295E+01	7.8110E-02	8.5734E+00	1.8431E+05	8.1062E+02
1.5321E+01	1.1858E-01	1.3016E+01	2.7980E+05	8.0924E+02
1.5368E+01	3.4865E-01	3.8269E+01	8.2268E+05	8.0677E+02
1.5373E+01	3.7350E-01	4.0996E+01	8.8130E+05	8.0651E+02
1.5404E+01	1.7823E-01	1.9563E+01	4.2055E+05	8.0488E+02
1.5419E+01	1.4272E-01	1.5665E+01	3.3676E+05	8.0410E+02
1.5458E+01	2.7551E-01	3.0240E+01	6.5008E+05	8.0207E+02
1.5477E+01	3.0817E-01	3.3825E+01	7.2715E+05	8.0109E+02
1.5511E+01	1.4414E-01	1.5821E+01	3.4012E+05	7.9933E+02
1.5514E+01	1.2000E-01	1.3172E+01	2.8316E+05	7.9918E+02
1.5540E+01	9.8699E-02	1.0833E+01	2.3289E+05	7.9784E+02
1.5580E+01	1.7241E-01	1.8924E+01	4.0681E+05	7.9579E+02
1.5601E+01	2.7856E-01	3.0576E+01	6.5729E+05	7.9472E+02
1.5611E+01	2.8285E-01	3.1046E+01	6.6740E+05	7.9421E+02
1.5640E+01	3.9648E-01	4.3518E+01	9.3553E+05	7.9274E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5661E+01	4.6595E-01	5.1143E+01	1.0994E+06	7.9167E+02
1.5686E+01	3.6762E-01	4.0351E+01	8.6744E+05	7.9041E+02
1.5709E+01	2.5577E-01	2.8074E+01	6.0351E+05	7.8926E+02
1.5732E+01	1.6101E-01	1.7673E+01	3.7992E+05	7.8810E+02
1.5766E+01	2.3226E-01	2.5493E+01	5.4803E+05	7.8640E+02
1.5787E+01	3.4127E-01	3.7458E+01	8.0525E+05	7.8536E+02
1.5806E+01	5.6070E-01	6.1543E+01	1.3230E+06	7.8441E+02
1.5821E+01	6.3052E-01	6.9207E+01	1.4878E+06	7.8367E+02
1.5827E+01	5.9419E-01	6.5218E+01	1.4020E+06	7.8337E+02
1.5851E+01	4.0468E-01	4.4418E+01	9.5487E+05	7.8219E+02
1.5862E+01	3.6549E-01	4.0116E+01	8.6240E+05	7.8164E+02
1.5872E+01	3.5409E-01	3.8866E+01	8.3551E+05	7.8115E+02
1.5879E+01	3.2275E-01	3.5425E+01	7.6154E+05	7.8081E+02
1.5891E+01	2.6503E-01	2.9090E+01	6.2536E+05	7.8022E+02
1.5915E+01	2.1801E-01	2.3929E+01	5.1440E+05	7.7904E+02
1.5924E+01	2.1017E-01	2.3069E+01	4.9592E+05	7.7860E+02
1.5942E+01	2.2727E-01	2.4945E+01	5.3626E+05	7.7772E+02
1.5964E+01	3.5766E-01	3.9257E+01	8.4391E+05	7.7665E+02
1.5973E+01	4.3673E-01	4.7936E+01	1.0305E+06	7.7621E+02
1.5989E+01	4.6167E-01	5.0674E+01	1.0894E+06	7.7543E+02
1.6006E+01	3.2275E-01	3.5425E+01	7.6154E+05	7.7461E+02
1.6024E+01	2.6789E-01	2.9404E+01	6.3210E+05	7.7374E+02
1.6034E+01	3.0172E-01	3.3117E+01	7.1194E+05	7.7326E+02
1.6055E+01	4.1608E-01	4.5669E+01	9.8176E+05	7.7225E+02
1.6072E+01	4.3317E-01	4.7545E+01	1.0221E+06	7.7143E+02
1.6091E+01	3.0636E-01	3.3626E+01	7.2288E+05	7.7052E+02
1.6101E+01	2.5720E-01	2.8230E+01	6.0688E+05	7.7004E+02
1.6113E+01	2.3439E-01	2.5727E+01	5.5307E+05	7.6947E+02
1.6127E+01	2.4366E-01	2.6744E+01	5.7492E+05	7.6880E+02
1.6161E+01	2.2513E-01	2.4711E+01	5.3122E+05	7.6718E+02
1.6180E+01	2.8035E-01	3.0771E+01	6.6150E+05	7.6628E+02
1.6212E+01	3.7261E-01	4.0899E+01	8.7921E+05	7.6477E+02
1.6232E+01	2.9959E-01	3.2883E+01	7.0690E+05	7.6383E+02
1.6255E+01	2.5577E-01	2.8074E+01	6.0351E+05	7.6274E+02
1.6291E+01	2.9424E-01	3.2296E+01	6.9429E+05	7.6106E+02
1.6327E+01	2.3298E-01	2.5572E+01	5.4973E+05	7.5938E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6352E+01	2.6574E-01	2.9168E+01	6.2703E+05	7.5822E+02
1.6385E+01	2.6112E-01	2.8660E+01	6.1612E+05	7.5669E+02
1.6400E+01	2.4508E-01	2.6901E+01	5.7829E+05	7.5600E+02
1.6425E+01	3.0350E-01	3.3313E+01	7.1614E+05	7.5485E+02
1.6435E+01	3.3058E-01	3.6285E+01	7.8003E+05	7.5439E+02
1.6476E+01	2.0590E-01	2.2600E+01	4.8584E+05	7.5251E+02
1.6493E+01	2.0162E-01	2.2130E+01	4.7574E+05	7.5174E+02
1.6507E+01	2.0733E-01	2.2757E+01	4.8921E+05	7.5110E+02
1.6536E+01	2.6789E-01	2.9404E+01	6.3210E+05	7.4978E+02
1.6558E+01	2.4757E-01	2.7174E+01	5.8417E+05	7.4879E+02
1.6587E+01	2.4686E-01	2.7096E+01	5.8249E+05	7.4748E+02
1.6613E+01	2.3689E-01	2.6002E+01	5.5897E+05	7.4631E+02
1.6654E+01	2.7002E-01	2.9638E+01	6.3714E+05	7.4447E+02
1.6673E+01	2.4722E-01	2.7135E+01	5.8333E+05	7.4362E+02
1.6703E+01	1.9093E-01	2.0957E+01	4.5052E+05	7.4229E+02
1.6731E+01	2.0377E-01	2.2366E+01	4.8080E+05	7.4104E+02
1.6764E+01	2.3725E-01	2.6041E+01	5.5981E+05	7.3959E+02
1.6808E+01	2.3511E-01	2.5806E+01	5.5477E+05	7.3765E+02
1.6844E+01	2.1587E-01	2.3694E+01	5.0937E+05	7.3607E+02
1.6889E+01	2.1801E-01	2.3929E+01	5.1440E+05	7.3411E+02
1.6906E+01	1.9236E-01	2.1114E+01	4.5389E+05	7.3337E+02
1.6942E+01	2.0091E-01	2.2052E+01	4.7407E+05	7.3182E+02
1.7000E+01	2.2942E-01	2.5181E+01	5.4132E+05	7.2932E+02
1.7031E+01	2.4935E-01	2.7369E+01	5.8837E+05	7.2799E+02
1.7063E+01	2.9318E-01	3.2180E+01	6.9178E+05	7.2663E+02
1.7075E+01	2.9781E-01	3.2687E+01	7.0269E+05	7.2612E+02
1.7104E+01	3.7689E-01	4.1367E+01	8.8929E+05	7.2488E+02
1.7142E+01	4.3816E-01	4.8093E+01	1.0339E+06	7.2328E+02
1.7169E+01	3.4411E-01	3.7770E+01	8.1196E+05	7.2214E+02
1.7198E+01	2.7715E-01	3.0420E+01	6.5395E+05	7.2092E+02
1.7239E+01	2.6147E-01	2.8699E+01	6.1696E+05	7.1921E+02
1.7269E+01	2.3298E-01	2.5572E+01	5.4973E+05	7.1796E+02
1.7308E+01	1.9165E-01	2.1036E+01	4.5222E+05	7.1634E+02
1.7335E+01	1.8595E-01	2.0410E+01	4.3877E+05	7.1522E+02
1.7364E+01	2.2942E-01	2.5181E+01	5.4132E+05	7.1403E+02
1.7386E+01	2.4508E-01	2.6901E+01	5.7829E+05	7.1313E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7425E+01	2.5150E-01	2.7605E+01	5.9343E+05	7.1153E+02
1.7461E+01	2.3725E-01	2.6041E+01	5.5981E+05	7.1006E+02
1.7533E+01	2.3511E-01	2.5806E+01	5.5477E+05	7.0715E+02
1.7579E+01	2.3796E-01	2.6118E+01	5.6148E+05	7.0530E+02
1.7596E+01	2.3582E-01	2.5884E+01	5.5644E+05	7.0462E+02
1.7625E+01	2.2335E-01	2.4515E+01	5.2701E+05	7.0346E+02
1.7704E+01	2.2371E-01	2.4554E+01	5.2785E+05	7.0032E+02
1.7731E+01	2.1587E-01	2.3694E+01	5.0937E+05	6.9925E+02
1.7745E+01	2.2443E-01	2.4633E+01	5.2955E+05	6.9870E+02
1.7772E+01	2.2443E-01	2.4633E+01	5.2955E+05	6.9764E+02
1.7803E+01	2.4935E-01	2.7369E+01	5.8837E+05	6.9642E+02
1.7837E+01	3.3557E-01	3.6832E+01	7.9180E+05	6.9510E+02
1.7849E+01	3.5552E-01	3.9022E+01	8.3887E+05	6.9463E+02
1.7866E+01	3.5053E-01	3.8474E+01	8.2710E+05	6.9397E+02
1.7897E+01	2.5933E-01	2.8465E+01	6.1192E+05	6.9277E+02
1.7922E+01	2.4722E-01	2.7135E+01	5.8333E+05	6.9180E+02
1.7958E+01	2.0661E-01	2.2678E+01	4.8751E+05	6.9041E+02
1.8000E+01	2.2942E-01	2.5181E+01	5.4132E+05	6.8880E+02
1.8118E+01	2.4224E-01	2.6588E+01	5.7158E+05	6.8431E+02
1.8151E+01	2.8855E-01	3.1671E+01	6.8084E+05	6.8307E+02
1.8176E+01	3.0778E-01	3.3782E+01	7.2622E+05	6.8213E+02
1.8233E+01	2.2549E-01	2.4750E+01	5.3205E+05	6.8000E+02
1.8280E+01	2.2799E-01	2.5024E+01	5.3795E+05	6.7825E+02
1.8312E+01	2.4009E-01	2.6353E+01	5.6652E+05	6.7707E+02
1.8352E+01	2.8355E-01	3.1123E+01	6.6907E+05	6.7559E+02
1.8408E+01	2.2799E-01	2.5024E+01	5.3795E+05	6.7353E+02
1.8424E+01	2.3582E-01	2.5884E+01	5.5644E+05	6.7295E+02
1.8462E+01	2.6361E-01	2.8934E+01	6.2200E+05	6.7156E+02
1.8480E+01	2.4722E-01	2.7135E+01	5.8333E+05	6.7091E+02
1.8504E+01	2.4366E-01	2.6744E+01	5.7492E+05	6.7004E+02
1.8616E+01	2.4152E-01	2.6509E+01	5.6988E+05	6.6601E+02
1.8786E+01	2.4722E-01	2.7135E+01	5.8333E+05	6.5998E+02
2.0000E+01	2.1498E-01	2.3597E+01	5.0726E+05	6.1992E+02
2.2500E+01	2.2011E-01	2.4160E+01	5.1937E+05	5.5104E+02
2.5000E+01	2.1331E-01	2.3413E+01	5.0333E+05	4.9594E+02
2.7500E+01	1.9970E-01	2.1919E+01	4.7120E+05	4.5085E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0000E+01	1.8327E-01	2.0116E+01	4.3243E+05	4.1328E+02
3.5000E+01	1.5020E-01	1.6487E+01	3.5442E+05	3.5424E+02
4.0000E+01	1.2188E-01	1.3377E+01	2.8758E+05	3.0996E+02
4.5000E+01	9.9266E-02	1.0896E+01	2.3423E+05	2.7552E+02
5.0000E+01	8.1570E-02	8.9532E+00	1.9247E+05	2.4797E+02
6.0000E+01	5.6850E-02	6.2399E+00	1.3414E+05	2.0664E+02
7.0000E+01	4.1263E-02	4.5290E+00	9.7362E+04	1.7712E+02
8.0000E+01	3.1019E-02	3.4047E+00	7.3192E+04	1.5498E+02
9.0000E+01	2.4015E-02	2.6360E+00	5.6666E+04	1.3776E+02
1.0000E+02	1.9057E-02	2.0917E+00	4.4966E+04	1.2398E+02
1.2500E+02	1.1352E-02	1.2460E+00	2.6786E+04	9.9187E+01
1.5000E+02	7.5088E-03	8.2418E-01	1.7718E+04	8.2656E+01
1.7500E+02	5.1918E-03	5.6986E-01	1.2250E+04	7.0848E+01
2.0000E+02	3.7064E-03	4.0682E-01	8.7456E+03	6.1992E+01
2.2500E+02	2.7561E-03	3.0251E-01	6.5031E+03	5.5104E+01
2.5000E+02	2.1088E-03	2.3146E-01	4.9759E+03	4.9594E+01
2.7500E+02	1.6408E-03	1.8009E-01	3.8715E+03	4.5085E+01
3.0000E+02	1.2909E-03	1.4169E-01	3.0460E+03	4.1328E+01
3.5000E+02	8.1727E-04	8.9704E-02	1.9284E+03	3.5424E+01
4.0000E+02	5.2729E-04	5.7876E-02	1.2442E+03	3.0996E+01
4.0740E+02	2.0239E-03	2.2214E-01	4.7755E+03	3.0433E+01
4.0777E+02	3.1765E-03	3.4866E-01	7.4952E+03	3.0405E+01
4.0794E+02	5.5997E-03	6.1463E-01	1.3213E+04	3.0393E+01
4.0799E+02	7.6871E-03	8.4375E-01	1.8138E+04	3.0389E+01
4.0819E+02	8.1954E-03	8.9953E-01	1.9338E+04	3.0374E+01
4.0859E+02	8.3224E-03	9.1348E-01	1.9637E+04	3.0344E+01
4.0915E+02	7.7416E-03	8.4973E-01	1.8267E+04	3.0303E+01
4.0964E+02	8.7762E-03	9.6329E-01	2.0708E+04	3.0267E+01
4.1000E+02	9.2482E-03	1.0151E+00	2.1822E+04	3.0240E+01
4.1009E+02	9.1302E-03	1.0021E+00	2.1543E+04	3.0233E+01
4.1169E+02	9.5295E-03	1.0460E+00	2.2486E+04	3.0116E+01
4.1194E+02	1.0464E-02	1.1486E+00	2.4691E+04	3.0098E+01
4.1230E+02	1.1345E-02	1.2452E+00	2.6769E+04	3.0071E+01
4.1259E+02	1.2098E-02	1.3279E+00	2.8546E+04	3.0050E+01
4.1319E+02	1.4040E-02	1.5411E+00	3.3129E+04	3.0007E+01
4.1375E+02	1.5910E-02	1.7463E+00	3.7540E+04	2.9966E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.1418E+02	1.7189E-02	1.8867E+00	4.0560E+04	2.9935E+01
4.1442E+02	1.7571E-02	1.9286E+00	4.1459E+04	2.9918E+01
4.1485E+02	1.7852E-02	1.9594E+00	4.2123E+04	2.9887E+01
4.1532E+02	1.7525E-02	1.9236E+00	4.1352E+04	2.9853E+01
4.1583E+02	1.6863E-02	1.8509E+00	3.9789E+04	2.9816E+01
4.1625E+02	1.6536E-02	1.8150E+00	3.9018E+04	2.9786E+01
4.1677E+02	1.7371E-02	1.9067E+00	4.0988E+04	2.9749E+01
4.1715E+02	1.8151E-02	1.9923E+00	4.2830E+04	2.9722E+01
4.1766E+02	1.9340E-02	2.1228E+00	4.5635E+04	2.9685E+01
4.1809E+02	2.0248E-02	2.2224E+00	4.7776E+04	2.9655E+01
4.1862E+02	2.0420E-02	2.2414E+00	4.8183E+04	2.9617E+01
4.1902E+02	2.0139E-02	2.2105E+00	4.7520E+04	2.9589E+01
4.1947E+02	1.9259E-02	2.1139E+00	4.5442E+04	2.9557E+01
4.2000E+02	1.8406E-02	2.0202E+00	4.3429E+04	2.9520E+01
4.2060E+02	1.7598E-02	1.9316E+00	4.1523E+04	2.9478E+01
4.2132E+02	1.6845E-02	1.8489E+00	3.9746E+04	2.9428E+01
4.2217E+02	1.6236E-02	1.7821E+00	3.8311E+04	2.9368E+01
4.2306E+02	1.5683E-02	1.7214E+00	3.7005E+04	2.9307E+01
4.2411E+02	1.5129E-02	1.6606E+00	3.5699E+04	2.9234E+01
4.2520E+02	1.4548E-02	1.5968E+00	3.4328E+04	2.9159E+01
4.2619E+02	1.4167E-02	1.5550E+00	3.3429E+04	2.9091E+01
4.2722E+02	1.3713E-02	1.5052E+00	3.2358E+04	2.9021E+01
4.2809E+02	1.3441E-02	1.4753E+00	3.1715E+04	2.8962E+01
4.2896E+02	1.3160E-02	1.4444E+00	3.1052E+04	2.8903E+01
4.3000E+02	1.2860E-02	1.4116E+00	3.0345E+04	2.8834E+01
4.5000E+02	1.0498E-02	1.1523E+00	2.4771E+04	2.7552E+01
5.0000E+02	8.2333E-03	9.0369E-01	1.9427E+04	2.4797E+01
6.0000E+02	5.2941E-03	5.8108E-01	1.2492E+04	2.0664E+01
7.0000E+02	3.5861E-03	3.9362E-01	8.4617E+03	1.7712E+01
8.0000E+02	2.5357E-03	2.7832E-01	5.9831E+03	1.5498E+01
9.0000E+02	1.8571E-03	2.0384E-01	4.3819E+03	1.3776E+01
1.0000E+03	1.4003E-03	1.5370E-01	3.3041E+03	1.2398E+01
1.2500E+03	7.6302E-04	8.3750E-02	1.8004E+03	9.9187E+00
1.5000E+03	4.5851E-04	5.0326E-02	1.0819E+03	8.2656E+00
1.7500E+03	2.9567E-04	3.2453E-02	6.9765E+02	7.0848E+00
2.0000E+03	2.0120E-04	2.2084E-02	4.7475E+02	6.1992E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2500E+03	1.4276E-04	1.5669E-02	3.3684E+02	5.5104E+00
2.5000E+03	1.0473E-04	1.1495E-02	2.4711E+02	4.9594E+00
2.7500E+03	7.8953E-05	8.6659E-03	1.8629E+02	4.5085E+00
3.0000E+03	6.0890E-05	6.6833E-03	1.4367E+02	4.1328E+00
3.5000E+03	3.8258E-05	4.1993E-03	9.0273E+01	3.5424E+00
4.0000E+03	2.5545E-05	2.8039E-03	6.0276E+01	3.0996E+00
4.5000E+03	1.7806E-05	1.9544E-03	4.2015E+01	2.7552E+00
5.0000E+03	1.2868E-05	1.4124E-03	3.0364E+01	2.4797E+00
6.0000E+03	7.3066E-06	8.0198E-04	1.7240E+01	2.0664E+00
7.0000E+03	4.5098E-06	4.9501E-04	1.0641E+01	1.7712E+00
8.0000E+03	2.9599E-06	3.2488E-04	6.9841E+00	1.5498E+00
9.0000E+03	2.0361E-06	2.2348E-04	4.8042E+00	1.3776E+00
1.0000E+04	1.4282E-06	1.5676E-04	3.3700E+00	1.2398E+00
1.2500E+04	6.9673E-07	7.6474E-05	1.6440E+00	9.9187E-01
1.5000E+04	3.8754E-07	4.2537E-05	9.1442E-01	8.2656E-01
1.7500E+04	2.3597E-07	2.5901E-05	5.5680E-01	7.0848E-01
2.0000E+04	1.5357E-07	1.6856E-05	3.6235E-01	6.1992E-01
2.2500E+04	1.0513E-07	1.1539E-05	2.4806E-01	5.5104E-01
2.5000E+04	7.4931E-08	8.2245E-06	1.7680E-01	4.9594E-01
2.7500E+04	5.4996E-08	6.0364E-06	1.2977E-01	4.5085E-01
3.0000E+04	4.1300E-08	4.5331E-06	9.7449E-02	4.1328E-01
3.5000E+04	2.4858E-08	2.7284E-06	5.8654E-02	3.5424E-01
4.0000E+04	1.6014E-08	1.7577E-06	3.7786E-02	3.0996E-01
4.5000E+04	1.0866E-08	1.1926E-06	2.5638E-02	2.7552E-01
5.0000E+04	7.6807E-09	8.4304E-07	1.8123E-02	2.4797E-01
6.0000E+04	4.2140E-09	4.6253E-07	9.9432E-03	2.0664E-01
7.0000E+04	2.5366E-09	2.7842E-07	5.9854E-03	1.7712E-01
8.0000E+04	1.6339E-09	1.7934E-07	3.8553E-03	1.5498E-01
9.0000E+04	1.1081E-09	1.2163E-07	2.6146E-03	1.3776E-01
1.0000E+05	7.8276E-10	8.5917E-08	1.8470E-03	1.2398E-01

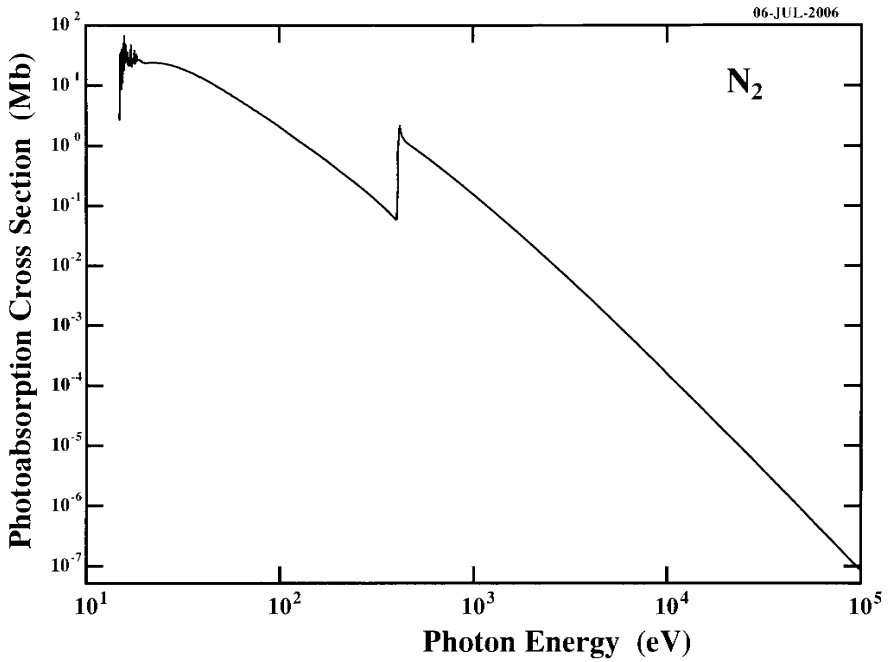
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)} \;\;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E-E_{\rm K}}} \;\;,$$

where $E_{\rm K} \;=\; 409.9$ eV.



N_2

Energy, eV	Source
12.500 - 13.788	Table 4.7 p.142 (Berkowitz's book*)
12.854 - 14.808	Table 4.7 p.142 (Berkowitz's book*)
12.912 - 13.922	Table 4.7 p.142 (Berkowitz's book*)
12.934 - 14.482	Table 4.7 p.142 (Berkowitz's book*)
13.103 - 14.275	Table 4.7 p.142 (Berkowitz's book*)
14.330 - 14.860	$e^1\Pi_u$ Chan *et al.*, Chem. Phys., 170 (1993) 81
14.364	$e^1\Sigma_u^+$ Chan *et al.*, Chem. Phys., 170 (1993) 81
14.839	n = 5, $^1\Pi_u$ Chan *et al.*, Chem. Phys., 170 (1993) 81
14.92 - 15.58 (IP)	IP Chan *et al.*, Chem. Phys., 170 (1993) 81
IP - 18.786	Chan *et al.*, Chem. Phys., 170 (1993) 81
18.786 - 107.07	Table 4.9 p.144 (Berkowitz's book*)
107.07 - 200	Henke, *et al.*, Atom. Data Nucl. Data Tables, 54 (1993) 181
200 - 407.4	Table 4.9 p.144 (Berkowitz's book*)
401.0	Table 4.8 p.143 (Berkowitz's book*)
405.6	Table 4.8 p.143 (Berkowitz's book*)
406.8	Table 4.8 p.143 (Berkowitz's book*)
407.4 - 430	Zhadenov *et al.*, Opt. Spectrosc (USSR), 62 (1987) 204
430 - 1253.6	Table 4.9 p.144 (Berkowitz's book*)
1253.6 - 3691.7	Table 4.9 p.144 (Berkowitz's book*)
3691.7 - 10^4	Table 4.9 p.144 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Molecular Oxygen

Z = 16 Molecular Mass : $M_{\rm A} = 31.9988$

$\sigma_a({\rm Mb}) = 109.76097 \ \dfrac{{\rm d}f}{{\rm d}E} \ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator strength, f_n, for sub-ionization transitions between 9.75 and 12.07 eV and a resonance transition around the K-edge.

Energy (eV)	f_n	λ (Å)
9.75 − 10.17	0.00833	1.2716E+03 − 1.2191E+03
10.17 − 10.44	0.00707	1.2191E+03 − 1.1876E+03
10.44 − 10.62	0.00077	1.1876E+03 − 1.1675E+03
10.62 − 10.71	0.00066	1.1675E+03 − 1.1576E+03
10.71 − 10.84	0.00140	1.1576E+03 − 1.1438E+03
10.84 − 10.98	0.00081	1.1438E+03 − 1.1292E+03
10.98 − 11.17	0.00076	1.1292E+03 − 1.1100E+03
11.17 − 11.33	0.00050	1.1100E+03 − 1.0943E+03
11.33 − 11.52	0.00147	1.0943E+03 − 1.0763E+03
11.52 − 11.59	0.000419	1.0763E+03 − 1.0698E+03
11.59 − 12.07	0.005496	1.0698E+03 − 1.0272E+03
5.3090E+02	5.4891E-02	2.3353E+01

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.1250E+00	2.5355E-03	2.7829E-01	5.2375E+03	1.7401E+03
7.2000E+00	5.0253E-03	5.5158E-01	1.0381E+04	1.7220E+03
7.3000E+00	8.1080E-03	8.8994E-01	1.6749E+04	1.6984E+03
7.4000E+00	1.2331E-02	1.3534E+00	2.5471E+04	1.6755E+03
7.5000E+00	1.8040E-02	1.9801E+00	3.7265E+04	1.6531E+03
7.6000E+00	2.7024E-02	2.9661E+00	5.5822E+04	1.6314E+03
7.7000E+00	3.5807E-02	3.9302E+00	7.3965E+04	1.6102E+03
7.8000E+00	4.9487E-02	5.4318E+00	1.0223E+05	1.5895E+03
7.9000E+00	6.0805E-02	6.6741E+00	1.2561E+05	1.5694E+03
8.0000E+00	7.3300E-02	8.0455E+00	1.5142E+05	1.5498E+03

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
8.1000E+00	8.5969E-02	9.4360E+00	1.7758E+05	1.5307E+03
8.2000E+00	9.6776E-02	1.0622E+01	1.9991E+05	1.5120E+03
8.3000E+00	1.0809E-01	1.1865E+01	2.2329E+05	1.4938E+03
8.4000E+00	1.1839E-01	1.2995E+01	2.4456E+05	1.4760E+03
8.5000E+00	1.2431E-01	1.3644E+01	2.5679E+05	1.4586E+03
8.6000E+00	1.2836E-01	1.4089E+01	2.6515E+05	1.4417E+03
8.7000E+00	1.2903E-01	1.4163E+01	2.6655E+05	1.4251E+03
8.8000E+00	1.2836E-01	1.4089E+01	2.6515E+05	1.4089E+03
8.9000E+00	1.2380E-01	1.3588E+01	2.5573E+05	1.3931E+03
9.0000E+00	1.1519E-01	1.2643E+01	2.3795E+05	1.3776E+03
9.1000E+00	8.9516E-02	9.8254E+00	1.8491E+05	1.3625E+03
9.2000E+00	4.7289E-02	5.1905E+00	9.7685E+04	1.3477E+03
9.2530E+00	2.1615E-02	2.3725E+00	4.4650E+04	1.3399E+03
9.3000E+00	2.1953E-02	2.4096E+00	4.5348E+04	1.3332E+03
9.4000E+00	1.0133E-02	1.1122E+00	2.0931E+04	1.3190E+03
9.5000E+00	2.8729E-03	3.1533E-01	5.9346E+03	1.3051E+03
9.6000E+00	4.5602E-03	5.0053E-01	9.4199E+03	1.2915E+03
9.7000E+00	1.6873E-03	1.8520E-01	3.4854E+03	1.2782E+03
9.7500E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.2716E+03
1.2070E+01	2.6995E-02	2.9630E+00	5.5764E+04	1.0272E+03
1.2091E+01	6.7168E-02	7.3724E+00	1.3875E+05	1.0254E+03
1.2100E+01	2.3701E-02	2.6014E+00	4.8959E+04	1.0247E+03
1.2155E+01	1.6014E-02	1.7577E+00	3.3080E+04	1.0200E+03
1.2216E+01	2.1871E-02	2.4005E+00	4.5178E+04	1.0149E+03
1.2228E+01	4.3924E-03	4.8212E-01	9.0734E+03	1.0139E+03
1.2243E+01	2.0407E-02	2.2398E+00	4.2154E+04	1.0127E+03
1.2290E+01	7.3207E-03	8.0353E-01	1.5122E+04	1.0088E+03
1.2304E+01	2.4067E-02	2.6416E+00	4.9715E+04	1.0077E+03
1.2315E+01	1.2445E-02	1.3660E+00	2.5708E+04	1.0068E+03
1.2323E+01	2.5531E-02	2.8023E+00	5.2739E+04	1.0061E+03
1.2337E+01	2.1871E-02	2.4005E+00	4.5178E+04	1.0050E+03
1.2347E+01	6.1311E-02	6.7296E+00	1.2665E+05	1.0042E+03
1.2363E+01	4.0081E-02	4.3993E+00	8.2795E+04	1.0029E+03
1.2372E+01	1.4550E-02	1.5970E+00	3.0056E+04	1.0021E+03
1.2381E+01	3.0656E-02	3.3648E+00	6.3325E+04	1.0014E+03
1.2386E+01	9.5169E-03	1.0446E+00	1.9659E+04	1.0010E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2406E+01	2.2603E-02	2.4809E+00	4.6690E+04	9.9936E+02
1.2426E+01	1.5282E-02	1.6774E+00	3.1568E+04	9.9776E+02
1.2447E+01	2.3335E-02	2.5613E+00	4.8203E+04	9.9608E+02
1.2466E+01	6.5704E-02	7.2117E+00	1.3572E+05	9.9456E+02
1.2480E+01	2.1633E-01	2.3744E+01	4.4687E+05	9.9348E+02
1.2488E+01	1.9482E-01	2.1384E+01	4.0244E+05	9.9280E+02
1.2500E+01	3.3950E-02	3.7264E+00	7.0130E+04	9.9184E+02
1.2516E+01	3.1388E-02	3.4451E+00	6.4837E+04	9.9064E+02
1.2531E+01	2.1139E-02	2.3202E+00	4.3666E+04	9.8944E+02
1.2553E+01	3.6512E-02	4.0076E+00	7.5423E+04	9.8768E+02
1.2578E+01	7.8057E-02	8.5676E+00	1.6124E+05	9.8576E+02
1.2593E+01	4.4839E-02	4.9216E+00	9.2624E+04	9.8456E+02
1.2599E+01	8.7574E-02	9.6122E+00	1.8090E+05	9.8408E+02
1.2609E+01	4.3055E-01	4.7258E+01	8.8938E+05	9.8328E+02
1.2628E+01	6.9364E-02	7.6134E+00	1.4328E+05	9.8184E+02
1.2630E+01	3.3950E-02	3.7264E+00	7.0130E+04	9.8168E+02
1.2645E+01	2.4067E-02	2.6416E+00	4.9715E+04	9.8048E+02
1.2651E+01	3.6512E-02	4.0076E+00	7.5423E+04	9.8000E+02
1.2680E+01	2.2603E-02	2.4809E+00	4.6690E+04	9.7782E+02
1.2695E+01	5.1794E-02	5.6850E+00	1.0699E+05	9.7661E+02
1.2711E+01	2.4131E-01	2.6486E+01	4.9847E+05	9.7540E+02
1.2724E+01	6.0579E-02	6.6492E+00	1.2514E+05	9.7444E+02
1.2742E+01	4.5462E-01	4.9899E+01	9.3910E+05	9.7306E+02
1.2758E+01	7.5861E-02	8.3266E+00	1.5671E+05	9.7181E+02
1.2776E+01	2.2603E-02	2.4809E+00	4.6690E+04	9.7048E+02
1.2802E+01	2.8459E-02	3.1237E+00	5.8788E+04	9.6847E+02
1.2818E+01	9.8464E-02	1.0807E+01	2.0340E+05	9.6726E+02
1.2837E+01	4.5022E-01	4.9417E+01	9.3002E+05	9.6581E+02
1.2849E+01	3.6265E-01	3.9805E+01	7.4912E+05	9.6496E+02
1.2864E+01	9.9562E-02	1.0928E+01	2.0566E+05	9.6379E+02
1.2879E+01	5.3990E-02	5.9260E+00	1.1153E+05	9.6266E+02
1.2893E+01	1.4815E-01	1.6261E+01	3.0604E+05	9.6161E+02
1.2908E+01	5.4722E-02	6.0064E+00	1.1304E+05	9.6052E+02
1.2925E+01	2.6995E-02	2.9630E+00	5.5764E+04	9.5928E+02
1.2942E+01	7.0828E-02	7.7742E+00	1.4631E+05	9.5798E+02
1.2949E+01	1.2875E-01	1.4132E+01	2.6596E+05	9.5746E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2958E+01	3.3053E-01	3.6279E+01	6.8277E+05	9.5682E+02
1.2964E+01	3.0720E-01	3.3718E+01	6.3457E+05	9.5635E+02
1.2970E+01	5.5564E-01	6.0988E+01	1.1478E+06	9.5595E+02
1.2989E+01	1.0725E-01	1.1772E+01	2.2154E+05	9.5452E+02
1.2993E+01	4.3741E-02	4.8011E+00	9.0356E+04	9.5421E+02
1.3009E+01	3.2120E-02	3.5255E+00	6.6349E+04	9.5310E+02
1.3021E+01	4.2277E-02	4.6404E+00	8.7332E+04	9.5222E+02
1.3056E+01	4.1545E-02	4.5600E+00	8.5819E+04	9.4960E+02
1.3067E+01	9.7732E-02	1.0727E+01	2.0188E+05	9.4881E+02
1.3082E+01	5.3341E-01	5.8547E+01	1.1019E+06	9.4778E+02
1.3105E+01	1.1457E-01	1.2575E+01	2.3666E+05	9.4611E+02
1.3109E+01	5.2526E-02	5.7653E+00	1.0850E+05	9.4583E+02
1.3116E+01	3.2120E-02	3.5255E+00	6.6349E+04	9.4532E+02
1.3139E+01	3.9074E-02	4.2888E+00	8.0716E+04	9.4365E+02
1.3156E+01	5.1062E-02	5.6046E+00	1.0548E+05	9.4238E+02
1.3171E+01	4.3741E-02	4.8011E+00	9.0356E+04	9.4135E+02
1.3185E+01	8.1718E-02	8.9694E+00	1.6880E+05	9.4032E+02
1.3190E+01	1.7259E-01	1.8943E+01	3.5651E+05	9.4000E+02
1.3201E+01	4.5755E-01	5.0221E+01	9.4515E+05	9.3921E+02
1.3221E+01	6.2043E-02	6.8099E+00	1.2816E+05	9.3778E+02
1.3233E+01	4.3741E-02	4.8011E+00	9.0356E+04	9.3690E+02
1.3267E+01	4.6304E-02	5.0823E+00	9.5649E+04	9.3452E+02
1.3275E+01	5.9847E-02	6.5689E+00	1.2363E+05	9.3397E+02
1.3286E+01	7.1469E-02	7.8445E+00	1.4763E+05	9.3317E+02
1.3300E+01	2.8679E-01	3.1478E+01	5.9242E+05	9.3218E+02
1.3304E+01	1.6710E-01	1.8341E+01	3.4517E+05	9.3190E+02
1.3316E+01	1.2335E-01	1.3539E+01	2.5481E+05	9.3111E+02
1.3323E+01	1.4815E-01	1.6261E+01	3.0604E+05	9.3060E+02
1.3326E+01	3.0427E-01	3.3397E+01	6.2852E+05	9.3040E+02
1.3339E+01	5.1428E-02	5.6448E+00	1.0623E+05	9.2952E+02
1.3382E+01	5.3990E-02	5.9260E+00	1.1153E+05	9.2651E+02
1.3400E+01	1.0139E-01	1.1129E+01	2.0944E+05	9.2524E+02
1.3414E+01	2.1743E-01	2.3865E+01	4.4913E+05	9.2428E+02
1.3421E+01	1.7259E-01	1.8943E+01	3.5651E+05	9.2381E+02
1.3429E+01	8.7574E-02	9.6122E+00	1.8090E+05	9.2325E+02
1.3437E+01	9.9196E-02	1.0888E+01	2.0491E+05	9.2270E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3454E+01	5.6187E-02	6.1671E+00	1.1606E+05	9.2151E+02
1.3484E+01	5.2526E-02	5.7653E+00	1.0850E+05	9.1952E+02
1.3500E+01	8.4646E-02	9.2908E+00	1.7485E+05	9.1839E+02
1.3513E+01	2.4158E-01	2.6516E+01	4.9904E+05	9.1751E+02
1.3532E+01	7.8789E-02	8.6480E+00	1.6275E+05	9.1622E+02
1.3541E+01	5.6553E-02	6.2073E+00	1.1682E+05	9.1562E+02
1.3555E+01	7.8789E-02	8.6480E+00	1.6275E+05	9.1466E+02
1.3566E+01	5.2526E-02	5.7653E+00	1.0850E+05	9.1390E+02
1.3573E+01	6.7168E-02	7.3724E+00	1.3875E+05	9.1349E+02
1.3582E+01	4.8866E-02	5.3636E+00	1.0094E+05	9.1285E+02
1.3605E+01	6.5704E-02	7.2117E+00	1.3572E+05	9.1132E+02
1.3613E+01	8.9770E-02	9.8533E+00	1.8544E+05	9.1076E+02
1.3618E+01	1.5904E-01	1.7457E+01	3.2853E+05	9.1044E+02
1.3628E+01	1.3717E-01	1.5056E+01	2.8336E+05	9.0976E+02
1.3635E+01	1.5328E-01	1.6824E+01	3.1662E+05	9.0932E+02
1.3651E+01	6.6070E-02	7.2519E+00	1.3648E+05	9.0827E+02
1.3672E+01	4.5572E-02	5.0020E+00	9.4137E+04	9.0683E+02
1.3706E+01	6.6436E-02	7.2920E+00	1.3724E+05	9.0458E+02
1.3715E+01	8.9770E-02	9.8533E+00	1.8544E+05	9.0402E+02
1.3731E+01	9.6725E-02	1.0617E+01	1.9980E+05	9.0297E+02
1.3739E+01	7.4397E-02	8.1659E+00	1.5368E+05	9.0241E+02
1.3763E+01	1.3278E-01	1.4574E+01	2.7428E+05	9.0088E+02
1.3776E+01	7.0462E-02	7.7340E+00	1.4555E+05	9.0000E+02
1.3795E+01	5.2526E-02	5.7653E+00	1.0850E+05	8.9874E+02
1.3817E+01	5.9847E-02	6.5689E+00	1.2363E+05	8.9732E+02
1.3823E+01	8.0253E-02	8.8087E+00	1.6578E+05	8.9696E+02
1.3846E+01	5.6187E-02	6.1671E+00	1.1606E+05	8.9542E+02
1.3864E+01	9.9196E-02	1.0888E+01	2.0491E+05	8.9432E+02
1.3872E+01	1.0725E-01	1.1772E+01	2.2154E+05	8.9379E+02
1.3891E+01	5.9115E-02	6.4885E+00	1.2211E+05	8.9258E+02
1.3913E+01	1.0615E-01	1.1651E+01	2.1927E+05	8.9112E+02
1.3934E+01	5.3258E-02	5.8457E+00	1.1002E+05	8.8982E+02
1.3973E+01	5.9115E-02	6.4885E+00	1.2211E+05	8.8730E+02
1.3993E+01	9.9562E-02	1.0928E+01	2.0566E+05	8.8604E+02
1.4003E+01	1.7222E-01	1.8903E+01	3.5575E+05	8.8544E+02
1.4022E+01	5.7651E-02	6.3278E+00	1.1909E+05	8.8422E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4061E+01	5.4722E-02	6.0064E+00	1.1304E+05	8.8178E+02
1.4089E+01	6.7168E-02	7.3724E+00	1.3875E+05	8.8000E+02
1.4126E+01	1.2592E-01	1.3821E+01	2.6010E+05	8.7769E+02
1.4149E+01	6.1311E-02	6.7296E+00	1.2665E+05	8.7625E+02
1.4193E+01	6.1311E-02	6.7296E+00	1.2665E+05	8.7354E+02
1.4230E+01	1.0359E-01	1.1370E+01	2.1398E+05	8.7131E+02
1.4246E+01	7.2933E-02	8.0052E+00	1.5066E+05	8.7028E+02
1.4264E+01	8.7574E-02	9.6122E+00	1.8090E+05	8.6924E+02
1.4292E+01	6.3507E-02	6.9706E+00	1.3119E+05	8.6749E+02
1.4323E+01	6.8632E-02	7.5331E+00	1.4177E+05	8.6566E+02
1.4337E+01	8.6842E-02	9.5319E+00	1.7939E+05	8.6478E+02
1.4359E+01	8.9770E-02	9.8533E+00	1.8544E+05	8.6343E+02
1.4390E+01	7.0462E-02	7.7340E+00	1.4555E+05	8.6159E+02
1.4411E+01	7.7325E-02	8.4873E+00	1.5973E+05	8.6032E+02
1.4417E+01	6.9638E-02	7.6436E+00	1.4385E+05	8.6000E+02
1.4452E+01	6.9181E-02	7.5934E+00	1.4291E+05	8.5791E+02
1.4468E+01	9.2882E-02	1.0195E+01	1.9186E+05	8.5698E+02
1.4500E+01	6.6893E-02	7.3423E+00	1.3818E+05	8.5508E+02
1.4521E+01	7.0096E-02	7.6938E+00	1.4480E+05	8.5385E+02
1.4533E+01	9.3797E-02	1.0295E+01	1.9376E+05	8.5313E+02
1.4537E+01	1.1100E-01	1.2184E+01	2.2929E+05	8.5291E+02
1.4545E+01	1.1054E-01	1.2133E+01	2.2835E+05	8.5239E+02
1.4565E+01	7.6136E-02	8.3567E+00	1.5727E+05	8.5126E+02
1.4576E+01	8.5652E-02	9.4013E+00	1.7693E+05	8.5060E+02
1.4588E+01	8.6385E-02	9.4817E+00	1.7844E+05	8.4989E+02
1.4605E+01	7.2018E-02	7.9047E+00	1.4877E+05	8.4891E+02
1.4635E+01	7.5678E-02	8.3065E+00	1.5633E+05	8.4716E+02
1.4646E+01	9.9653E-02	1.0938E+01	2.0585E+05	8.4656E+02
1.4658E+01	1.6353E-01	1.7949E+01	3.3780E+05	8.4585E+02
1.4666E+01	1.6279E-01	1.7868E+01	3.3628E+05	8.4536E+02
1.4684E+01	9.4803E-02	1.0406E+01	1.9583E+05	8.4437E+02
1.4702E+01	1.0633E-01	1.1671E+01	2.1965E+05	8.4331E+02
1.4729E+01	7.7325E-02	8.4873E+00	1.5973E+05	8.4175E+02
1.4740E+01	8.8215E-02	9.6825E+00	1.8222E+05	8.4115E+02
1.4750E+01	9.0136E-02	9.8935E+00	1.8619E+05	8.4055E+02
1.4763E+01	1.1933E-01	1.3098E+01	2.4649E+05	8.3984E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4777E+01	2.2365E-01	2.4548E+01	4.6199E+05	8.3901E+02
1.4780E+01	1.9976E-01	2.1926E+01	4.1265E+05	8.3887E+02
1.4785E+01	2.1788E-01	2.3915E+01	4.5008E+05	8.3857E+02
1.4791E+01	1.8027E-01	1.9787E+01	3.7239E+05	8.3824E+02
1.4802E+01	1.0029E-01	1.1008E+01	2.0718E+05	8.3764E+02
1.4817E+01	1.2290E-01	1.3489E+01	2.5387E+05	8.3676E+02
1.4826E+01	1.5511E-01	1.7025E+01	3.2040E+05	8.3626E+02
1.4834E+01	1.4559E-01	1.5980E+01	3.0075E+05	8.3582E+02
1.4848E+01	8.9862E-02	9.8633E+00	1.8563E+05	8.3500E+02
1.4856E+01	1.0222E-01	1.1219E+01	2.1115E+05	8.3459E+02
1.4872E+01	9.4803E-02	1.0406E+01	1.9583E+05	8.3368E+02
1.4886E+01	1.3049E-01	1.4323E+01	2.6956E+05	8.3291E+02
1.4895E+01	2.9777E-01	3.2684E+01	6.1510E+05	8.3236E+02
1.4905E+01	2.5037E-01	2.7481E+01	5.1718E+05	8.3181E+02
1.4914E+01	1.9647E-01	2.1565E+01	4.0585E+05	8.3132E+02
1.4918E+01	1.2079E-01	1.3258E+01	2.4952E+05	8.3110E+02
1.4929E+01	9.7274E-02	1.0677E+01	2.0094E+05	8.3049E+02
1.4938E+01	1.2775E-01	1.4022E+01	2.6389E+05	8.3000E+02
1.4949E+01	2.0480E-01	2.2479E+01	4.2305E+05	8.2940E+02
1.4961E+01	1.7140E-01	1.8813E+01	3.5405E+05	8.2869E+02
1.4972E+01	1.0084E-01	1.1069E+01	2.0831E+05	8.2809E+02
1.4996E+01	1.1384E-01	1.2495E+01	2.3515E+05	8.2678E+02
1.5008E+01	2.6108E-01	2.8656E+01	5.3930E+05	8.2612E+02
1.5017E+01	2.3847E-01	2.6175E+01	4.9261E+05	8.2560E+02
1.5020E+01	2.6080E-01	2.8626E+01	5.3873E+05	8.2546E+02
1.5027E+01	2.2438E-01	2.4628E+01	4.6350E+05	8.2508E+02
1.5032E+01	1.7277E-01	1.8963E+01	3.5689E+05	8.2481E+02
1.5042E+01	2.1367E-01	2.3453E+01	4.4138E+05	8.2426E+02
1.5053E+01	1.3800E-01	1.5147E+01	2.8506E+05	8.2366E+02
1.5068E+01	2.4991E-01	2.7431E+01	5.1624E+05	8.2281E+02
1.5074E+01	2.1532E-01	2.3634E+01	4.4479E+05	8.2251E+02
1.5091E+01	1.4074E-01	1.5448E+01	2.9073E+05	8.2158E+02
1.5114E+01	1.5465E-01	1.6975E+01	3.1946E+05	8.2033E+02
1.5119E+01	1.7744E-01	1.9476E+01	3.6653E+05	8.2008E+02
1.5125E+01	2.7224E-01	2.9881E+01	5.6236E+05	8.1973E+02
1.5131E+01	2.5732E-01	2.8244E+01	5.3155E+05	8.1940E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5149E+01	1.6536E-01	1.8150E+01	3.4158E+05	8.1842E+02
1.5161E+01	2.0626E-01	2.2639E+01	4.2607E+05	8.1781E+02
1.5179E+01	3.8416E-01	4.2165E+01	7.9355E+05	8.1683E+02
1.5197E+01	2.2438E-01	2.4628E+01	4.6350E+05	8.1582E+02
1.5211E+01	1.5236E-01	1.6723E+01	3.1473E+05	8.1508E+02
1.5220E+01	1.8906E-01	2.0751E+01	3.9053E+05	8.1462E+02
1.5230E+01	2.0159E-01	2.2127E+01	4.1643E+05	8.1410E+02
1.5244E+01	2.9173E-01	3.2021E+01	6.0263E+05	8.1333E+02
1.5262E+01	2.4158E-01	2.6516E+01	4.9904E+05	8.1235E+02
1.5275E+01	2.7288E-01	2.9952E+01	5.6369E+05	8.1169E+02
1.5300E+01	4.6779E-01	5.1346E+01	9.6632E+05	8.1036E+02
1.5318E+01	1.8439E-01	2.0239E+01	3.8089E+05	8.0940E+02
1.5331E+01	2.4616E-01	2.7019E+01	5.0849E+05	8.0874E+02
1.5346E+01	3.1122E-01	3.4160E+01	6.4289E+05	8.0792E+02
1.5354E+01	2.9960E-01	3.2884E+01	6.1888E+05	8.0751E+02
1.5369E+01	2.5266E-01	2.7732E+01	5.2191E+05	8.0672E+02
1.5380E+01	2.8496E-01	3.1277E+01	5.8864E+05	8.0612E+02
1.5398E+01	3.4883E-01	3.8288E+01	7.2058E+05	8.0519E+02
1.5408E+01	4.2826E-01	4.7007E+01	8.8466E+05	8.0470E+02
1.5423E+01	3.0381E-01	3.3346E+01	6.2758E+05	8.0391E+02
1.5434E+01	2.1688E-01	2.3805E+01	4.4800E+05	8.0333E+02
1.5444E+01	2.3920E-01	2.6255E+01	4.9412E+05	8.0279E+02
1.5457E+01	2.9731E-01	3.2633E+01	6.1416E+05	8.0210E+02
1.5477E+01	2.3133E-01	2.5392E+01	4.7787E+05	8.0109E+02
1.5485E+01	2.4762E-01	2.7179E+01	5.1151E+05	8.0066E+02
1.5497E+01	2.6666E-01	2.9269E+01	5.5083E+05	8.0005E+02
1.5512E+01	3.0235E-01	3.3186E+01	6.2455E+05	7.9930E+02
1.5521E+01	3.3858E-01	3.7163E+01	6.9941E+05	7.9882E+02
1.5542E+01	2.2392E-01	2.4578E+01	4.6255E+05	7.9774E+02
1.5551E+01	2.7892E-01	3.0614E+01	5.7616E+05	7.9726E+02
1.5559E+01	2.4058E-01	2.6406E+01	4.9696E+05	7.9688E+02
1.5578E+01	1.8302E-01	2.0088E+01	3.7806E+05	7.9591E+02
1.5586E+01	2.0068E-01	2.2027E+01	4.1454E+05	7.9548E+02
1.5592E+01	1.9327E-01	2.1213E+01	3.9923E+05	7.9516E+02
1.5610E+01	2.4158E-01	2.6516E+01	4.9904E+05	7.9425E+02
1.5615E+01	2.8102E-01	3.0846E+01	5.8051E+05	7.9403E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5640E+01	2.0086E-01	2.2047E+01	4.1492E+05	7.9274E+02
1.5653E+01	2.3875E-01	2.6205E+01	4.9318E+05	7.9207E+02
1.5677E+01	1.8302E-01	2.0088E+01	3.7806E+05	7.9086E+02
1.5691E+01	2.1688E-01	2.3805E+01	4.4800E+05	7.9016E+02
1.5705E+01	2.3710E-01	2.6024E+01	4.8978E+05	7.8946E+02
1.5714E+01	2.2621E-01	2.4829E+01	4.6728E+05	7.8902E+02
1.5726E+01	2.2896E-01	2.5130E+01	4.7295E+05	7.8842E+02
1.5737E+01	1.9766E-01	2.1695E+01	4.0830E+05	7.8783E+02
1.5749E+01	2.0644E-01	2.2660E+01	4.2645E+05	7.8726E+02
1.5752E+01	2.2392E-01	2.4578E+01	4.6255E+05	7.8712E+02
1.5762E+01	1.7817E-01	1.9556E+01	3.6804E+05	7.8658E+02
1.5778E+01	2.1788E-01	2.3915E+01	4.5008E+05	7.8582E+02
1.5790E+01	2.2292E-01	2.4467E+01	4.6048E+05	7.8522E+02
1.5796E+01	1.9784E-01	2.1715E+01	4.0868E+05	7.8489E+02
1.5815E+01	2.2063E-01	2.4216E+01	4.5575E+05	7.8397E+02
1.5838E+01	1.7423E-01	1.9124E+01	3.5991E+05	7.8285E+02
1.5872E+01	1.2171E-01	1.3359E+01	2.5141E+05	7.8117E+02
1.5884E+01	1.9135E-01	2.1002E+01	3.9526E+05	7.8054E+02
1.5895E+01	2.2621E-01	2.4829E+01	4.6728E+05	7.8000E+02
1.5907E+01	2.3829E-01	2.6155E+01	4.9223E+05	7.7945E+02
1.5929E+01	2.0580E-01	2.2589E+01	4.2513E+05	7.7835E+02
1.5944E+01	2.5083E-01	2.7531E+01	5.1813E+05	7.7764E+02
1.5963E+01	1.7487E-01	1.9194E+01	3.6124E+05	7.7668E+02
1.6008E+01	1.1869E-01	1.3027E+01	2.4517E+05	7.7450E+02
1.6025E+01	1.3049E-01	1.4323E+01	2.6956E+05	7.7368E+02
1.6049E+01	2.2758E-01	2.4980E+01	4.7012E+05	7.7253E+02
1.6077E+01	1.9235E-01	2.1113E+01	3.9734E+05	7.7121E+02
1.6081E+01	2.0626E-01	2.2639E+01	4.2607E+05	7.7099E+02
1.6096E+01	1.9674E-01	2.1595E+01	4.0641E+05	7.7027E+02
1.6112E+01	1.5145E-01	1.6623E+01	3.1284E+05	7.6950E+02
1.6127E+01	1.6600E-01	1.8220E+01	3.4290E+05	7.6878E+02
1.6137E+01	1.7863E-01	1.9606E+01	3.6899E+05	7.6833E+02
1.6157E+01	1.5584E-01	1.7105E+01	3.2192E+05	7.6739E+02
1.6166E+01	1.7423E-01	1.9124E+01	3.5991E+05	7.6694E+02
1.6179E+01	1.5977E-01	1.7537E+01	3.3005E+05	7.6633E+02
1.6188E+01	1.7002E-01	1.8662E+01	3.5122E+05	7.6589E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6195E+01	1.6261E-01	1.7848E+01	3.3591E+05	7.6558E+02
1.6201E+01	1.8119E-01	1.9887E+01	3.7428E+05	7.6528E+02
1.6217E+01	1.8723E-01	2.0550E+01	3.8675E+05	7.6453E+02
1.6243E+01	1.4605E-01	1.6030E+01	3.0169E+05	7.6333E+02
1.6264E+01	1.8814E-01	2.0651E+01	3.8864E+05	7.6233E+02
1.6277E+01	1.6581E-01	1.8200E+01	3.4252E+05	7.6172E+02
1.6286E+01	1.7487E-01	1.9194E+01	3.6124E+05	7.6128E+02
1.6296E+01	1.6279E-01	1.7868E+01	3.3628E+05	7.6083E+02
1.6308E+01	1.6673E-01	1.8300E+01	3.4441E+05	7.6028E+02
1.6314E+01	1.8183E-01	1.9958E+01	3.7560E+05	7.6000E+02
1.6328E+01	1.5401E-01	1.6904E+01	3.1814E+05	7.5934E+02
1.6337E+01	1.5749E-01	1.7286E+01	3.2532E+05	7.5890E+02
1.6347E+01	1.4541E-01	1.5960E+01	3.0037E+05	7.5843E+02
1.6363E+01	1.6865E-01	1.8511E+01	3.4838E+05	7.5769E+02
1.6383E+01	1.4422E-01	1.5830E+01	2.9791E+05	7.5679E+02
1.6390E+01	1.5557E-01	1.7075E+01	3.2135E+05	7.5648E+02
1.6413E+01	1.6536E-01	1.8150E+01	3.4158E+05	7.5538E+02
1.6422E+01	1.5584E-01	1.7105E+01	3.2192E+05	7.5497E+02
1.6436E+01	1.9976E-01	2.1926E+01	4.1265E+05	7.5434E+02
1.6449E+01	1.9180E-01	2.1052E+01	3.9621E+05	7.5376E+02
1.6464E+01	1.4541E-01	1.5960E+01	3.0037E+05	7.5308E+02
1.6491E+01	1.3122E-01	1.4403E+01	2.7107E+05	7.5181E+02
1.6503E+01	1.5840E-01	1.7386E+01	3.2721E+05	7.5126E+02
1.6518E+01	1.5977E-01	1.7537E+01	3.3005E+05	7.5060E+02
1.6528E+01	1.4074E-01	1.5448E+01	2.9073E+05	7.5016E+02
1.6551E+01	2.3024E-01	2.5271E+01	4.7560E+05	7.4909E+02
1.6573E+01	1.6325E-01	1.7919E+01	3.3723E+05	7.4813E+02
1.6589E+01	1.4138E-01	1.5518E+01	2.9205E+05	7.4738E+02
1.6618E+01	1.9510E-01	2.1414E+01	4.0301E+05	7.4610E+02
1.6632E+01	1.6893E-01	1.8541E+01	3.4895E+05	7.4545E+02
1.6664E+01	1.8961E-01	2.0811E+01	3.9167E+05	7.4401E+02
1.6693E+01	1.6408E-01	1.8009E+01	3.3893E+05	7.4273E+02
1.6706E+01	1.8512E-01	2.0319E+01	3.8241E+05	7.4214E+02
1.6716E+01	1.8860E-01	2.0701E+01	3.8959E+05	7.4171E+02
1.6722E+01	2.0535E-01	2.2539E+01	4.2418E+05	7.4144E+02
1.6740E+01	1.8000E-01	1.9757E+01	3.7182E+05	7.4064E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6763E+01	2.2163E-01	2.4327E+01	4.5783E+05	7.3963E+02
1.6785E+01	2.2694E-01	2.4909E+01	4.6879E+05	7.3866E+02
1.6799E+01	2.6391E-01	2.8967E+01	5.4516E+05	7.3805E+02
1.6819E+01	3.1260E-01	3.4311E+01	6.4572E+05	7.3716E+02
1.6832E+01	2.9713E-01	3.2613E+01	6.1378E+05	7.3658E+02
1.6845E+01	3.0445E-01	3.3417E+01	6.2890E+05	7.3603E+02
1.6870E+01	3.3840E-01	3.7143E+01	6.9903E+05	7.3495E+02
1.6883E+01	3.3593E-01	3.6872E+01	6.9393E+05	7.3437E+02
1.6895E+01	3.2083E-01	3.5215E+01	6.6274E+05	7.3384E+02
1.6923E+01	2.9713E-01	3.2613E+01	6.1378E+05	7.3263E+02
1.6941E+01	5.0330E-01	5.5243E+01	1.0397E+06	7.3184E+02
1.6951E+01	2.7553E-01	3.0243E+01	5.6917E+05	7.3142E+02
1.6974E+01	3.1141E-01	3.4180E+01	6.4327E+05	7.3042E+02
1.6984E+01	2.8981E-01	3.1810E+01	5.9866E+05	7.3000E+02
1.6999E+01	2.6227E-01	2.8786E+01	5.4176E+05	7.2936E+02
1.7019E+01	2.5064E-01	2.7511E+01	5.1775E+05	7.2852E+02
1.7029E+01	2.6776E-01	2.9389E+01	5.5310E+05	7.2807E+02
1.7045E+01	2.7691E-01	3.0394E+01	5.7200E+05	7.2741E+02
1.7055E+01	2.7178E-01	2.9831E+01	5.6142E+05	7.2698E+02
1.7068E+01	2.8304E-01	3.1066E+01	5.8467E+05	7.2643E+02
1.7088E+01	4.7100E-01	5.1697E+01	9.7293E+05	7.2556E+02
1.7103E+01	2.2447E-01	2.4638E+01	4.6369E+05	7.2492E+02
1.7108E+01	2.2941E-01	2.5181E+01	4.7390E+05	7.2471E+02
1.7123E+01	2.3307E-01	2.5582E+01	4.8146E+05	7.2407E+02
1.7134E+01	2.4451E-01	2.6838E+01	5.0509E+05	7.2360E+02
1.7151E+01	2.2530E-01	2.4729E+01	4.6539E+05	7.2291E+02
1.7163E+01	2.3957E-01	2.6296E+01	4.9488E+05	7.2241E+02
1.7172E+01	2.3472E-01	2.5763E+01	4.8486E+05	7.2201E+02
1.7202E+01	2.3307E-01	2.5582E+01	4.8146E+05	7.2077E+02
1.7215E+01	2.4003E-01	2.6346E+01	4.9582E+05	7.2021E+02
1.7234E+01	3.1717E-01	3.4813E+01	6.5518E+05	7.1942E+02
1.7248E+01	2.2978E-01	2.5221E+01	4.7465E+05	7.1884E+02
1.7259E+01	2.2612E-01	2.4819E+01	4.6709E+05	7.1837E+02
1.7269E+01	2.4003E-01	2.6346E+01	4.9582E+05	7.1797E+02
1.7283E+01	2.5796E-01	2.8314E+01	5.3287E+05	7.1737E+02
1.7292E+01	2.4552E-01	2.6948E+01	5.0717E+05	7.1700E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7305E+01	2.4753E-01	2.7169E+01	5.1132E+05	7.1647E+02
1.7319E+01	2.6858E-01	2.9480E+01	5.5480E+05	7.1589E+02
1.7330E+01	2.6043E-01	2.8586E+01	5.3798E+05	7.1542E+02
1.7342E+01	2.5385E-01	2.7862E+01	5.2437E+05	7.1495E+02
1.7351E+01	2.6574E-01	2.9168E+01	5.4894E+05	7.1458E+02
1.7358E+01	2.8697E-01	3.1498E+01	5.9280E+05	7.1429E+02
1.7376E+01	3.1818E-01	3.4923E+01	6.5726E+05	7.1353E+02
1.7392E+01	2.9466E-01	3.2342E+01	6.0867E+05	7.1289E+02
1.7419E+01	3.2852E-01	3.6058E+01	6.7862E+05	7.1179E+02
1.7453E+01	2.8404E-01	3.1177E+01	5.8675E+05	7.1037E+02
1.7469E+01	3.8040E-01	4.1753E+01	7.8580E+05	7.0973E+02
1.7474E+01	2.4735E-01	2.7149E+01	5.1095E+05	7.0955E+02
1.7486E+01	2.2566E-01	2.4769E+01	4.6615E+05	7.0904E+02
1.7537E+01	2.3591E-01	2.5894E+01	4.8732E+05	7.0697E+02
1.7565E+01	2.1550E-01	2.3654E+01	4.4516E+05	7.0585E+02
1.7580E+01	2.4936E-01	2.7370E+01	5.1511E+05	7.0526E+02
1.7614E+01	5.6571E-01	6.2093E+01	1.1686E+06	7.0388E+02
1.7628E+01	2.7608E-01	3.0303E+01	5.7030E+05	7.0335E+02
1.7646E+01	2.2941E-01	2.5181E+01	4.7390E+05	7.0261E+02
1.7660E+01	2.6263E-01	2.8827E+01	5.4251E+05	7.0207E+02
1.7681E+01	1.7286E-01	1.8973E+01	3.5708E+05	7.0122E+02
1.7701E+01	2.0590E-01	2.2599E+01	4.2532E+05	7.0042E+02
1.7715E+01	3.2650E-01	3.5837E+01	6.7446E+05	6.9987E+02
1.7736E+01	2.0535E-01	2.2539E+01	4.2418E+05	6.9905E+02
1.7748E+01	2.3792E-01	2.6115E+01	4.9148E+05	6.9858E+02
1.7760E+01	2.4854E-01	2.7280E+01	5.1340E+05	6.9810E+02
1.7779E+01	3.2486E-01	3.5657E+01	6.7105E+05	6.9737E+02
1.7790E+01	2.7261E-01	2.9921E+01	5.6312E+05	6.9695E+02
1.7802E+01	2.6959E-01	2.9590E+01	5.5688E+05	6.9645E+02
1.7818E+01	1.7304E-01	1.8993E+01	3.5745E+05	6.9584E+02
1.7837E+01	1.8860E-01	2.0701E+01	3.8959E+05	6.9510E+02
1.7852E+01	2.8121E-01	3.0866E+01	5.8089E+05	6.9453E+02
1.7877E+01	1.6426E-01	1.8029E+01	3.3931E+05	6.9353E+02
1.7888E+01	1.7323E-01	1.9014E+01	3.5783E+05	6.9310E+02
1.7900E+01	1.7634E-01	1.9355E+01	3.6426E+05	6.9263E+02
1.7927E+01	3.1690E-01	3.4783E+01	6.5461E+05	6.9160E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7946E+01	1.5794E-01	1.7336E+01	3.2626E+05	6.9089E+02
1.7964E+01	2.0288E-01	2.2268E+01	4.1908E+05	6.9018E+02
1.7969E+01	2.1084E-01	2.3142E+01	4.3552E+05	6.9000E+02
1.7981E+01	2.1349E-01	2.3433E+01	4.4101E+05	6.8954E+02
1.7989E+01	2.3426E-01	2.5713E+01	4.8392E+05	6.8922E+02
1.8007E+01	1.4568E-01	1.5990E+01	3.0093E+05	6.8852E+02
1.8019E+01	1.5511E-01	1.7025E+01	3.2040E+05	6.8807E+02
1.8028E+01	1.9693E-01	2.1615E+01	4.0679E+05	6.8772E+02
1.8041E+01	1.5099E-01	1.6573E+01	3.1190E+05	6.8724E+02
1.8058E+01	2.4735E-01	2.7149E+01	5.1095E+05	6.8660E+02
1.8069E+01	2.1248E-01	2.3322E+01	4.3893E+05	6.8617E+02
1.8081E+01	2.0901E-01	2.2941E+01	4.3174E+05	6.8571E+02
1.8089E+01	1.5181E-01	1.6663E+01	3.1360E+05	6.8542E+02
1.8096E+01	1.7954E-01	1.9707E+01	3.7088E+05	6.8515E+02
1.8100E+01	1.6893E-01	1.8541E+01	3.4895E+05	6.8499E+02
1.8119E+01	2.4936E-01	2.7370E+01	5.1511E+05	6.8429E+02
1.8147E+01	1.5227E-01	1.6713E+01	3.1454E+05	6.8322E+02
1.8165E+01	1.6490E-01	1.8100E+01	3.4063E+05	6.8255E+02
1.8172E+01	2.0471E-01	2.2469E+01	4.2286E+05	6.8228E+02
1.8190E+01	1.7286E-01	1.8973E+01	3.5708E+05	6.8161E+02
1.8203E+01	2.0571E-01	2.2579E+01	4.2494E+05	6.8113E+02
1.8214E+01	1.8165E-01	1.9938E+01	3.7522E+05	6.8070E+02
1.8221E+01	1.8897E-01	2.0741E+01	3.9035E+05	6.8043E+02
1.8230E+01	1.6893E-01	1.8541E+01	3.4895E+05	6.8011E+02
1.8243E+01	1.9061E-01	2.0922E+01	3.9375E+05	6.7961E+02
1.8252E+01	2.1468E-01	2.3564E+01	4.4346E+05	6.7930E+02
1.8280E+01	1.6655E-01	1.8280E+01	3.4403E+05	6.7826E+02
1.8311E+01	1.8796E-01	2.0631E+01	3.8827E+05	6.7709E+02
1.8321E+01	1.7917E-01	1.9666E+01	3.7012E+05	6.7675E+02
1.8339E+01	2.0004E-01	2.1956E+01	4.1322E+05	6.7608E+02
1.8350E+01	1.8329E-01	2.0118E+01	3.7863E+05	6.7566E+02
1.8387E+01	1.9757E-01	2.1685E+01	4.0811E+05	6.7431E+02
1.8414E+01	1.8036E-01	1.9797E+01	3.7258E+05	6.7332E+02
1.8447E+01	1.9263E-01	2.1143E+01	3.9791E+05	6.7210E+02
1.8517E+01	2.0141E-01	2.2107E+01	4.1605E+05	6.6957E+02
1.8542E+01	1.9226E-01	2.1103E+01	3.9715E+05	6.6867E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8569E+01	2.0123E-01	2.2087E+01	4.1568E+05	6.6771E+02
1.8641E+01	2.0937E-01	2.2981E+01	4.3250E+05	6.6511E+02
1.8668E+01	2.0535E-01	2.2539E+01	4.2418E+05	6.6415E+02
1.8693E+01	2.1633E-01	2.3744E+01	4.4687E+05	6.6327E+02
1.8785E+01	2.2447E-01	2.4638E+01	4.6369E+05	6.6000E+02
1.8840E+01	2.3179E-01	2.5442E+01	4.7881E+05	6.5808E+02
1.8908E+01	2.4689E-01	2.7099E+01	5.1000E+05	6.5574E+02
1.8955E+01	2.4936E-01	2.7370E+01	5.1511E+05	6.5410E+02
1.8969E+01	2.5751E-01	2.8264E+01	5.3193E+05	6.5362E+02
1.8998E+01	2.6208E-01	2.8766E+01	5.4138E+05	6.5261E+02
1.9029E+01	2.5796E-01	2.8314E+01	5.3287E+05	6.5154E+02
1.9051E+01	2.8285E-01	3.1046E+01	5.8429E+05	6.5080E+02
1.9062E+01	2.4616E-01	2.7019E+01	5.0849E+05	6.5042E+02
1.9074E+01	2.3371E-01	2.5653E+01	4.8278E+05	6.5000E+02
1.9116E+01	2.2987E-01	2.5231E+01	4.7484E+05	6.4860E+02
1.9138E+01	2.3234E-01	2.5502E+01	4.7995E+05	6.4785E+02
1.9165E+01	2.5568E-01	2.8063E+01	5.2815E+05	6.4692E+02
1.9175E+01	2.7846E-01	3.0564E+01	5.7522E+05	6.4658E+02
1.9192E+01	2.3133E-01	2.5392E+01	4.7787E+05	6.4602E+02
1.9206E+01	2.3298E-01	2.5572E+01	4.8127E+05	6.4556E+02
1.9223E+01	2.2639E-01	2.4849E+01	4.6766E+05	6.4498E+02
1.9241E+01	2.1706E-01	2.3825E+01	4.4838E+05	6.4439E+02
1.9261E+01	2.1578E-01	2.3684E+01	4.4573E+05	6.4370E+02
1.9289E+01	2.2923E-01	2.5161E+01	4.7352E+05	6.4276E+02
1.9309E+01	2.6263E-01	2.8827E+01	5.4251E+05	6.4210E+02
1.9323E+01	2.2950E-01	2.5191E+01	4.7409E+05	6.4165E+02
1.9334E+01	2.3234E-01	2.5502E+01	4.7995E+05	6.4127E+02
1.9373E+01	2.2548E-01	2.4749E+01	4.6577E+05	6.4000E+02
1.9396E+01	2.2575E-01	2.4779E+01	4.6634E+05	6.3923E+02
1.9423E+01	2.3637E-01	2.5944E+01	4.8826E+05	6.3834E+02
1.9437E+01	2.5138E-01	2.7591E+01	5.1926E+05	6.3789E+02
1.9449E+01	2.3829E-01	2.6155E+01	4.9223E+05	6.3748E+02
1.9472E+01	2.4433E-01	2.6818E+01	5.0471E+05	6.3673E+02
1.9507E+01	2.4653E-01	2.7059E+01	5.0925E+05	6.3559E+02
1.9546E+01	2.5073E-01	2.7521E+01	5.1794E+05	6.3432E+02
1.9561E+01	2.6602E-01	2.9198E+01	5.4951E+05	6.3384E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9569E+01	2.3198E-01	2.5462E+01	4.7919E+05	6.3359E+02
1.9590E+01	2.1605E-01	2.3714E+01	4.4630E+05	6.3291E+02
1.9628E+01	2.3701E-01	2.6014E+01	4.8959E+05	6.3168E+02
1.9640E+01	2.3701E-01	2.6014E+01	4.8959E+05	6.3127E+02
1.9664E+01	2.5943E-01	2.8475E+01	5.3590E+05	6.3050E+02
1.9684E+01	2.7416E-01	3.0092E+01	5.6633E+05	6.2986E+02
1.9694E+01	2.8597E-01	3.1388E+01	5.9072E+05	6.2955E+02
1.9705E+01	2.5568E-01	2.8063E+01	5.2815E+05	6.2919E+02
1.9740E+01	2.1312E-01	2.3393E+01	4.4025E+05	6.2810E+02
1.9772E+01	2.4232E-01	2.6597E+01	5.0055E+05	6.2706E+02
1.9795E+01	2.6730E-01	2.9339E+01	5.5215E+05	6.2633E+02
1.9807E+01	2.7755E-01	3.0464E+01	5.7333E+05	6.2597E+02
1.9822E+01	2.5385E-01	2.7862E+01	5.2437E+05	6.2548E+02
1.9838E+01	2.3170E-01	2.5432E+01	4.7862E+05	6.2498E+02
1.9850E+01	2.3609E-01	2.5914E+01	4.8770E+05	6.2462E+02
1.9878E+01	2.2731E-01	2.4950E+01	4.6955E+05	6.2371E+02
1.9910E+01	2.6318E-01	2.8887E+01	5.4365E+05	6.2271E+02
1.9949E+01	2.8798E-01	3.1609E+01	5.9488E+05	6.2152E+02
1.9977E+01	2.0937E-01	2.2981E+01	4.3250E+05	6.2063E+02
2.0002E+01	2.3435E-01	2.5723E+01	4.8410E+05	6.1986E+02
2.0021E+01	2.4671E-01	2.7079E+01	5.0962E+05	6.1928E+02
2.0038E+01	2.6510E-01	2.9098E+01	5.4762E+05	6.1873E+02
2.0053E+01	2.4570E-01	2.6968E+01	5.0754E+05	6.1828E+02
2.0068E+01	2.7883E-01	3.0604E+01	5.7597E+05	6.1783E+02
2.0081E+01	2.9539E-01	3.2422E+01	6.1019E+05	6.1742E+02
2.0111E+01	1.9610E-01	2.1525E+01	4.0509E+05	6.1649E+02
2.0138E+01	2.4232E-01	2.6597E+01	5.0055E+05	6.1566E+02
2.0151E+01	2.3920E-01	2.6255E+01	4.9412E+05	6.1527E+02
2.0170E+01	2.6940E-01	2.9570E+01	5.5650E+05	6.1470E+02
2.0183E+01	2.6355E-01	2.8927E+01	5.4440E+05	6.1430E+02
2.0196E+01	2.4415E-01	2.6798E+01	5.0433E+05	6.1389E+02
2.0216E+01	2.7224E-01	2.9881E+01	5.6236E+05	6.1330E+02
2.0235E+01	2.4744E-01	2.7159E+01	5.1114E+05	6.1271E+02
2.0250E+01	2.1532E-01	2.3634E+01	4.4479E+05	6.1226E+02
2.0276E+01	2.5449E-01	2.7933E+01	5.2569E+05	6.1147E+02
2.0289E+01	2.4369E-01	2.6748E+01	5.0339E+05	6.1108E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0306E+01	2.7041E-01	2.9680E+01	5.5858E+05	6.1059E+02
2.0325E+01	2.4296E-01	2.6667E+01	5.0187E+05	6.1000E+02
2.0341E+01	2.6318E-01	2.8887E+01	5.4365E+05	6.0954E+02
2.0356E+01	2.5824E-01	2.8345E+01	5.3344E+05	6.0909E+02
2.0366E+01	2.5009E-01	2.7451E+01	5.1662E+05	6.0877E+02
2.0379E+01	2.3298E-01	2.5572E+01	4.8127E+05	6.0838E+02
2.0408E+01	2.6043E-01	2.8586E+01	5.3798E+05	6.0753E+02
2.0420E+01	2.4570E-01	2.6968E+01	5.0754E+05	6.0717E+02
2.0435E+01	2.6629E-01	2.9228E+01	5.5008E+05	6.0671E+02
2.0449E+01	2.4515E-01	2.6908E+01	5.0641E+05	6.0630E+02
2.0472E+01	2.5934E-01	2.8465E+01	5.3571E+05	6.0562E+02
2.0511E+01	2.4790E-01	2.7210E+01	5.1208E+05	6.0447E+02
2.0534E+01	2.5888E-01	2.8415E+01	5.3476E+05	6.0379E+02
2.0547E+01	2.5257E-01	2.7722E+01	5.2172E+05	6.0342E+02
2.0564E+01	2.6227E-01	2.8786E+01	5.4176E+05	6.0292E+02
2.0576E+01	2.5293E-01	2.7762E+01	5.2248E+05	6.0256E+02
2.0587E+01	2.5888E-01	2.8415E+01	5.3476E+05	6.0224E+02
2.0617E+01	2.5870E-01	2.8395E+01	5.3439E+05	6.0137E+02
2.0639E+01	2.5732E-01	2.8244E+01	5.3155E+05	6.0073E+02
2.0664E+01	2.6043E-01	2.8586E+01	5.3798E+05	6.0000E+02
2.0706E+01	2.6400E-01	2.8977E+01	5.4535E+05	5.9877E+02
2.0743E+01	2.6474E-01	2.9058E+01	5.4686E+05	5.9773E+02
2.0790E+01	2.5897E-01	2.8425E+01	5.3495E+05	5.9636E+02
2.0857E+01	2.0956E-01	2.3001E+01	4.3288E+05	5.9445E+02
2.0894E+01	2.0553E-01	2.2559E+01	4.2456E+05	5.9341E+02
2.0929E+01	2.1267E-01	2.3343E+01	4.3930E+05	5.9241E+02
2.0971E+01	2.1184E-01	2.3252E+01	4.3760E+05	5.9123E+02
2.1014E+01	1.9748E-01	2.1675E+01	4.0793E+05	5.9000E+02
2.1040E+01	1.8704E-01	2.0530E+01	3.8638E+05	5.8927E+02
2.1068E+01	1.8650E-01	2.0470E+01	3.8524E+05	5.8850E+02
2.1118E+01	1.9857E-01	2.1796E+01	4.1019E+05	5.8709E+02
2.1194E+01	2.1230E-01	2.3302E+01	4.3855E+05	5.8500E+02
2.1287E+01	2.2109E-01	2.4267E+01	4.5670E+05	5.8245E+02
2.1377E+01	2.2877E-01	2.5110E+01	4.7257E+05	5.8000E+02
2.1526E+01	2.3573E-01	2.5874E+01	4.8694E+05	5.7597E+02
2.1752E+01	2.4195E-01	2.6557E+01	4.9979E+05	5.7000E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.1958E+01	2.4588E-01	2.6989E+01	5.0792E+05	5.6464E+02
2.2140E+01	2.4671E-01	2.7079E+01	5.0962E+05	5.6000E+02
2.2194E+01	2.4671E-01	2.7079E+01	5.0962E+05	5.5863E+02
2.2241E+01	2.5046E-01	2.7491E+01	5.1737E+05	5.5747E+02
2.2386E+01	2.4680E-01	2.7089E+01	5.0981E+05	5.5385E+02
2.2543E+01	2.4570E-01	2.6968E+01	5.0754E+05	5.5000E+02
2.2707E+01	2.4259E-01	2.6627E+01	5.0112E+05	5.4602E+02
2.2749E+01	2.4259E-01	2.6627E+01	5.0112E+05	5.4500E+02
2.2813E+01	2.3417E-01	2.5703E+01	4.8373E+05	5.4349E+02
2.2845E+01	2.1788E-01	2.3915E+01	4.5008E+05	5.4272E+02
2.2885E+01	2.5641E-01	2.8144E+01	5.2966E+05	5.4177E+02
2.2937E+01	2.5128E-01	2.7581E+01	5.1907E+05	5.4054E+02
2.2998E+01	2.5019E-01	2.7461E+01	5.1681E+05	5.3912E+02
2.3025E+01	2.5412E-01	2.7893E+01	5.2493E+05	5.3847E+02
2.3054E+01	2.7663E-01	3.0363E+01	5.7144E+05	5.3781E+02
2.3086E+01	2.1010E-01	2.3061E+01	4.3401E+05	5.3705E+02
2.3112E+01	2.2630E-01	2.4839E+01	4.6747E+05	5.3645E+02
2.3146E+01	2.3362E-01	2.5643E+01	4.8259E+05	5.3566E+02
2.3221E+01	2.4021E-01	2.6366E+01	4.9620E+05	5.3393E+02
2.3273E+01	2.2017E-01	2.4166E+01	4.5480E+05	5.3273E+02
2.3311E+01	2.2676E-01	2.4889E+01	4.6841E+05	5.3188E+02
2.3347E+01	2.3161E-01	2.5422E+01	4.7843E+05	5.3104E+02
2.3393E+01	2.3335E-01	2.5613E+01	4.8203E+05	5.3000E+02
2.3536E+01	2.3408E-01	2.5693E+01	4.8354E+05	5.2678E+02
2.3581E+01	2.3106E-01	2.5361E+01	4.7730E+05	5.2579E+02
2.3612E+01	2.2209E-01	2.4377E+01	4.5877E+05	5.2508E+02
2.3639E+01	2.5064E-01	2.7511E+01	5.1775E+05	5.2448E+02
2.3684E+01	2.4836E-01	2.7260E+01	5.1303E+05	5.2350E+02
2.3712E+01	2.5778E-01	2.8294E+01	5.3250E+05	5.2287E+02
2.3744E+01	2.1001E-01	2.3051E+01	4.3382E+05	5.2218E+02
2.3761E+01	2.1871E-01	2.4005E+01	4.5178E+05	5.2180E+02
2.3782E+01	2.2292E-01	2.4467E+01	4.6048E+05	5.2134E+02
2.3809E+01	2.2209E-01	2.4377E+01	4.5877E+05	5.2074E+02
2.3831E+01	2.4287E-01	2.6657E+01	5.0168E+05	5.2027E+02
2.3865E+01	2.3866E-01	2.6195E+01	4.9299E+05	5.1953E+02
2.3894E+01	2.3673E-01	2.5984E+01	4.8902E+05	5.1890E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.3924E+01	2.2493E-01	2.4688E+01	4.6463E+05	5.1824E+02
2.3958E+01	2.2575E-01	2.4779E+01	4.6634E+05	5.1750E+02
2.3975E+01	2.4488E-01	2.6878E+01	5.0584E+05	5.1714E+02
2.4003E+01	2.4964E-01	2.7400E+01	5.1567E+05	5.1654E+02
2.4036E+01	2.1926E-01	2.4066E+01	4.5291E+05	5.1582E+02
2.4057E+01	2.2575E-01	2.4779E+01	4.6634E+05	5.1538E+02
2.4088E+01	2.3024E-01	2.5271E+01	4.7560E+05	5.1472E+02
2.4126E+01	2.2914E-01	2.5150E+01	4.7333E+05	5.1390E+02
2.4145E+01	2.2465E-01	2.4658E+01	4.6407E+05	5.1349E+02
2.4173E+01	2.5302E-01	2.7772E+01	5.2267E+05	5.1291E+02
2.4200E+01	2.2950E-01	2.5191E+01	4.7409E+05	5.1234E+02
2.4225E+01	2.2520E-01	2.4719E+01	4.6520E+05	5.1181E+02
2.4253E+01	2.2767E-01	2.4990E+01	4.7031E+05	5.1121E+02
2.4277E+01	2.3829E-01	2.6155E+01	4.9223E+05	5.1071E+02
2.4303E+01	2.2621E-01	2.4829E+01	4.6728E+05	5.1016E+02
2.4317E+01	2.2648E-01	2.4859E+01	4.6785E+05	5.0986E+02
2.4338E+01	2.3445E-01	2.5733E+01	4.8429E+05	5.0942E+02
2.4396E+01	2.2703E-01	2.4919E+01	4.6898E+05	5.0822E+02
2.4456E+01	2.3161E-01	2.5422E+01	4.7843E+05	5.0696E+02
2.4491E+01	2.2658E-01	2.4869E+01	4.6804E+05	5.0625E+02
2.4530E+01	2.2832E-01	2.5060E+01	4.7163E+05	5.0544E+02
2.5000E+01	2.1499E-01	2.3598E+01	4.4410E+05	4.9594E+02
2.7500E+01	1.9289E-01	2.1172E+01	3.9846E+05	4.5085E+02
3.0000E+01	1.8327E-01	2.0116E+01	3.7858E+05	4.1328E+02
3.5000E+01	1.6830E-01	1.8473E+01	3.4765E+05	3.5424E+02
4.0000E+01	1.5076E-01	1.6548E+01	3.1143E+05	3.0996E+02
4.5000E+01	1.3240E-01	1.4532E+01	2.7349E+05	2.7552E+02
5.0000E+01	1.1520E-01	1.2644E+01	2.3796E+05	2.4797E+02
6.0000E+01	8.6911E-02	9.5395E+00	1.7953E+05	2.0664E+02
7.0000E+01	6.6422E-02	7.2906E+00	1.3721E+05	1.7712E+02
8.0000E+01	5.1760E-02	5.6812E+00	1.0692E+05	1.5498E+02
9.0000E+01	4.1143E-02	4.5159E+00	8.4988E+04	1.3776E+02
1.0000E+02	3.3309E-02	3.6561E+00	6.8807E+04	1.2398E+02
1.2500E+02	1.8936E-02	2.0785E+00	3.9117E+04	9.9187E+01
1.5000E+02	1.2627E-02	1.3860E+00	2.6084E+04	8.2656E+01
1.7500E+02	8.7755E-03	9.6321E-01	1.8127E+04	7.0848E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0000E+02	6.2207E-03	6.8279E-01	1.2850E+04	6.1992E+01
2.2500E+02	4.9790E-03	5.4650E-01	1.0285E+04	5.5104E+01
2.5000E+02	3.7812E-03	4.1503E-01	7.8109E+03	4.9594E+01
2.7500E+02	2.9737E-03	3.2640E-01	6.1428E+03	4.5085E+01
3.0000E+02	2.3958E-03	2.6297E-01	4.9490E+03	4.1328E+01
3.5000E+02	1.6343E-03	1.7939E-01	3.3761E+03	3.5424E+01
4.0000E+02	1.1680E-03	1.2820E-01	2.4127E+03	3.0996E+01
4.5000E+02	8.6342E-04	9.4769E-02	1.7835E+03	2.7552E+01
5.0000E+02	6.5542E-04	7.1939E-02	1.3539E+03	2.4797E+01
5.0600E+02	8.1298E-04	8.9233E-02	1.6794E+03	2.4503E+01
5.1000E+02	8.0817E-04	8.8705E-02	1.6694E+03	2.4311E+01
5.1300E+02	8.0336E-04	8.8177E-02	1.6595E+03	2.4168E+01
5.1600E+02	7.9374E-04	8.7121E-02	1.6396E+03	2.4028E+01
5.1900E+02	7.8411E-04	8.6065E-02	1.6197E+03	2.3889E+01
5.2200E+02	7.7930E-04	8.5537E-02	1.6098E+03	2.3752E+01
5.2500E+02	7.7209E-04	8.4745E-02	1.5949E+03	2.3616E+01
5.3000E+02	1.1690E-03	1.2831E-01	2.4147E+03	2.3393E+01
5.3250E+02	1.7318E-03	1.9008E-01	3.5773E+03	2.3283E+01
5.3500E+02	2.9152E-03	3.1997E-01	6.0218E+03	2.3175E+01
5.3630E+02	4.9212E-03	5.4015E-01	1.0166E+04	2.3118E+01
5.3770E+02	9.6307E-03	1.0571E+00	1.9894E+04	2.3058E+01
5.3850E+02	1.4460E-02	1.5872E+00	2.9871E+04	2.3024E+01
5.3990E+02	1.9242E-02	2.1120E+00	3.9748E+04	2.2964E+01
5.4100E+02	1.8232E-02	2.0011E+00	3.7661E+04	2.2918E+01
5.4130E+02	1.8953E-02	2.0803E+00	3.9152E+04	2.2905E+01
5.4200E+02	2.1166E-02	2.3232E+00	4.3723E+04	2.2875E+01
5.4360E+02	1.9276E-02	2.1157E+00	3.9818E+04	2.2808E+01
5.4500E+02	1.4432E-02	1.5840E+00	2.9811E+04	2.2749E+01
5.4600E+02	1.1593E-02	1.2725E+00	2.3948E+04	2.2708E+01
5.4700E+02	1.1160E-02	1.2250E+00	2.3054E+04	2.2666E+01
5.4800E+02	1.1064E-02	1.2144E+00	2.2855E+04	2.2625E+01
5.4900E+02	1.1112E-02	1.2197E+00	2.2955E+04	2.2584E+01
5.5000E+02	1.1016E-02	1.2091E+00	2.2756E+04	2.2543E+01
5.5100E+02	1.0872E-02	1.1933E+00	2.2458E+04	2.2502E+01
5.5200E+02	1.0727E-02	1.1775E+00	2.2160E+04	2.2461E+01
5.5300E+02	1.0583E-02	1.1616E+00	2.1861E+04	2.2420E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.5400E+02	1.0391E-02	1.1405E+00	2.1464E+04	2.2380E+01
5.5500E+02	1.0246E-02	1.1247E+00	2.1166E+04	2.2339E+01
5.5600E+02	1.0174E-02	1.1167E+00	2.1017E+04	2.2299E+01
5.5700E+02	1.0126E-02	1.1115E+00	2.0917E+04	2.2259E+01
5.5800E+02	1.0078E-02	1.1062E+00	2.0818E+04	2.2219E+01
5.5900E+02	1.0102E-02	1.1088E+00	2.0868E+04	2.2180E+01
5.6000E+02	1.0174E-02	1.1167E+00	2.1017E+04	2.2140E+01
5.6100E+02	1.0150E-02	1.1141E+00	2.0967E+04	2.2101E+01
5.6200E+02	1.0102E-02	1.1088E+00	2.0868E+04	2.2061E+01
5.6300E+02	1.0054E-02	1.1035E+00	2.0768E+04	2.2022E+01
5.6400E+02	9.9578E-03	1.0930E+00	2.0570E+04	2.1983E+01
5.6500E+02	9.9097E-03	1.0877E+00	2.0470E+04	2.1944E+01
5.6600E+02	9.8616E-03	1.0824E+00	2.0371E+04	2.1905E+01
5.6700E+02	9.7894E-03	1.0745E+00	2.0222E+04	2.1867E+01
5.6800E+02	9.7653E-03	1.0719E+00	2.0172E+04	2.1828E+01
5.6900E+02	9.7413E-03	1.0692E+00	2.0122E+04	2.1790E+01
5.7000E+02	9.7172E-03	1.0666E+00	2.0073E+04	2.1752E+01
5.7100E+02	9.6691E-03	1.0613E+00	1.9973E+04	2.1714E+01
5.7200E+02	9.6451E-03	1.0587E+00	1.9924E+04	2.1676E+01
5.7300E+02	9.5970E-03	1.0534E+00	1.9824E+04	2.1638E+01
5.7400E+02	9.5489E-03	1.0481E+00	1.9725E+04	2.1600E+01
5.7500E+02	9.4767E-03	1.0402E+00	1.9576E+04	2.1562E+01
5.7600E+02	9.4046E-03	1.0323E+00	1.9427E+04	2.1525E+01
5.7700E+02	9.3565E-03	1.0270E+00	1.9328E+04	2.1488E+01
5.7800E+02	9.2843E-03	1.0191E+00	1.9178E+04	2.1451E+01
5.7900E+02	9.2362E-03	1.0138E+00	1.9079E+04	2.1414E+01
5.8200E+02	9.0438E-03	9.9265E-01	1.8682E+04	2.1303E+01
5.8500E+02	8.9476E-03	9.8209E-01	1.8483E+04	2.1194E+01
5.8800E+02	8.8273E-03	9.6889E-01	1.8234E+04	2.1086E+01
5.9100E+02	8.7070E-03	9.5569E-01	1.7986E+04	2.0979E+01
5.9400E+02	8.6108E-03	9.4513E-01	1.7787E+04	2.0873E+01
5.9700E+02	8.4665E-03	9.2929E-01	1.7489E+04	2.0768E+01
6.0000E+02	8.3222E-03	9.1345E-01	1.7191E+04	2.0664E+01
7.0000E+02	5.5519E-03	6.0938E-01	1.1468E+04	1.7712E+01
8.0000E+02	3.9716E-03	4.3593E-01	8.2042E+03	1.5498E+01
9.0000E+02	2.9383E-03	3.2251E-01	6.0696E+03	1.3776E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0000E+03	2.2340E-03	2.4521E-01	4.6149E+03	1.2398E+01
1.2500E+03	1.2350E-03	1.3556E-01	2.5512E+03	9.9187E+00
1.5000E+03	7.5278E-04	8.2625E-02	1.5550E+03	8.2656E+00
1.7500E+03	4.9222E-04	5.4027E-02	1.0168E+03	7.0848E+00
2.0000E+03	3.3935E-04	3.7247E-02	7.0098E+02	6.1992E+00
2.2500E+03	2.4381E-04	2.6761E-02	5.0364E+02	5.5104E+00
2.5000E+03	1.8107E-04	1.9874E-02	3.7403E+02	4.9594E+00
2.7500E+03	1.3731E-04	1.5071E-02	2.8364E+02	4.5085E+00
3.0000E+03	1.0655E-04	1.1695E-02	2.2011E+02	4.1328E+00
3.5000E+03	6.7597E-05	7.4195E-03	1.3963E+02	3.5424E+00
4.0000E+03	4.5365E-05	4.9793E-03	9.3710E+01	3.0996E+00
4.5000E+03	3.1823E-05	3.4930E-03	6.5737E+01	2.7552E+00
5.0000E+03	2.3133E-05	2.5391E-03	4.7786E+01	2.4797E+00
6.0000E+03	1.3277E-05	1.4573E-03	2.7426E+01	2.0664E+00
7.0000E+03	8.2788E-06	9.0869E-04	1.7102E+01	1.7712E+00
8.0000E+03	5.4879E-06	6.0236E-04	1.1336E+01	1.5498E+00
9.0000E+03	3.8127E-06	4.1849E-04	7.8759E+00	1.3776E+00
1.0000E+04	2.5916E-06	2.8446E-04	5.3534E+00	1.2398E+00
1.2500E+04	1.2711E-06	1.3951E-04	2.6256E+00	9.9187E-01
1.5000E+04	7.1030E-07	7.7964E-05	1.4673E+00	8.2656E-01
1.7500E+04	4.3422E-07	4.7661E-05	8.9697E-01	7.0848E-01
2.0000E+04	2.8347E-07	3.1113E-05	5.8555E-01	6.1992E-01
2.2500E+04	1.9462E-07	2.1362E-05	4.0203E-01	5.5104E-01
2.5000E+04	1.3904E-07	1.5261E-05	2.8721E-01	4.9594E-01
2.7500E+04	1.0228E-07	1.1227E-05	2.1129E-01	4.5085E-01
3.0000E+04	7.6953E-08	8.4465E-06	1.5896E-01	4.1328E-01
3.5000E+04	4.6444E-08	5.0977E-06	9.5938E-02	3.5424E-01
4.0000E+04	2.9993E-08	3.2920E-06	6.1956E-02	3.0996E-01
4.5000E+04	2.0394E-08	2.2384E-06	4.2127E-02	2.7552E-01
5.0000E+04	1.4443E-08	1.5853E-06	2.9835E-02	2.4797E-01
6.0000E+04	7.9503E-09	8.7263E-07	1.6423E-02	2.0664E-01
7.0000E+04	4.7994E-09	5.2678E-07	9.9140E-03	1.7712E-01
8.0000E+04	3.0981E-09	3.4005E-07	6.3997E-03	1.5498E-01
9.0000E+04	2.1041E-09	2.3095E-07	4.3464E-03	1.3776E-01
1.0000E+05	1.4877E-09	1.6329E-07	3.0732E-03	1.2398E-01

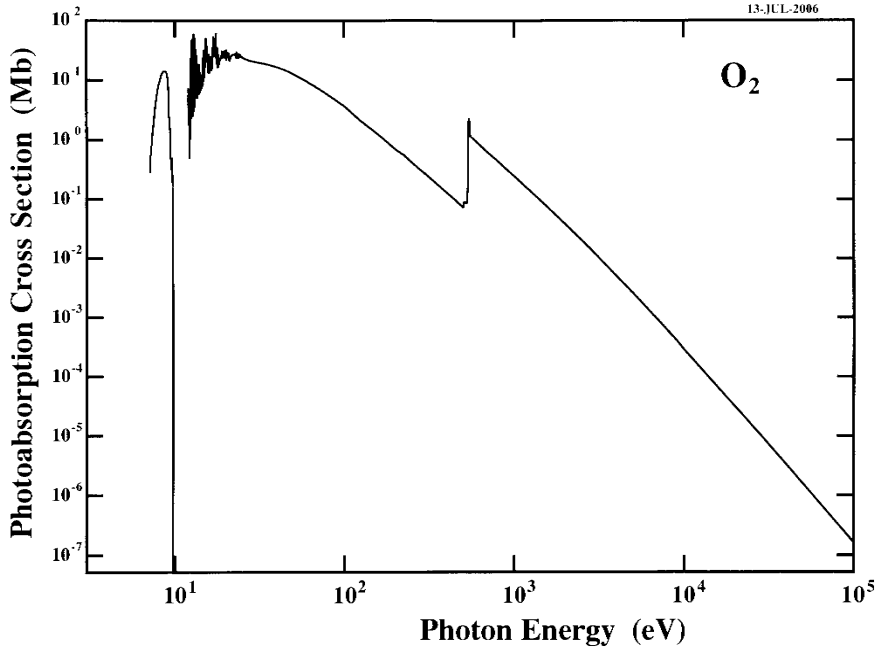
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 543.9$ eV.



O_2

Energy, eV	Source
7.125 - 12.07 (IP)	Table 4.10 p.151 (Berkowitz's book*)
IP - 24.53	Holland *et al.*, Chem. Phys., 173 (1993) 315
24.53 - 107.07	Table 4.12 p.153 (Berkowitz's book*)
107.07 - 206.06	Table 4.12 p.153 (Berkowitz's book*)
206.06 - 506	Table 4.12 p.153 (Berkowitz's book*)
530.9	Barrus *et al.*, Phys. Rev. A, 20 (1979) 1045
506 - 600	Barrus *et al.*, Phys. Rev. A, 20 (1979) 1045
600 - 2622.4	Table 4.12 p.153 (Berkowitz's book*)
2622.4 - 10^4	Table 4.12 p.153 (Berkowitz's book*)
10^4 - 10^5	$\sigma(O_2) = 2\times\sigma(O)$, Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Carbon Monoxide

Z = 14 Molecular Mass : $M_{\rm A}$ = 28.0101

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator strength, f_n, for transitions to the A$^1\Pi$, B$^1\Sigma^+$, C$^1\Sigma^+$, and E$^1\Pi$ states.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
8.0278E+00	1.5465E-02	1.5444E+03	9.6718E+00	3.9139E-04	1.2819E+03
8.2115E+00	3.3506E-02	1.5099E+03	9.8130E+00	1.7183E-04	1.2635E+03
8.3907E+00	3.8375E-02	1.4776E+03	9.9498E+00	8.5914E-05	1.2461E+03
8.5659E+00	3.3125E-02	1.4474E+03	1.0776E+01	7.6654E-03	1.1505E+03
8.7367E+00	2.3101E-02	1.4191E+03	1.1034E+01	1.2601E-03	1.1236E+03
8.9032E+00	1.3842E-02	1.3926E+03	1.1396E+01	1.1236E-01	1.0879E+03
9.0654E+00	7.6845E-03	1.3677E+03	1.1663E+01	3.3984E-03	1.0631E+03
9.2234E+00	3.9520E-03	1.3442E+03	1.1522E+01	6.7395E-02	1.0761E+03
9.3771E+00	1.9283E-03	1.3222E+03	1.1789E+01	3.3697E-03	1.0517E+03
9.5266E+00	9.0687E-04	1.3015E+03			

Table II. Oscillator strength, f_n, for the pre-K-edge resonances of carbon and oxygen atoms.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
2.8740E+02	1.7000E-01	4.3140E+01	5.3411E+02	7.6001E-02	2.3213E+01

Table III. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.2130E+01	1.6158E-01	1.7735E+01	3.8131E+05	1.0221E+03
1.2500E+01	1.3839E-01	1.5190E+01	3.2658E+05	9.9187E+02
1.3000E+01	3.4086E-01	3.7413E+01	8.0437E+05	9.5372E+02
1.3500E+01	4.9921E-01	5.4794E+01	1.1781E+06	9.1840E+02
1.4000E+01	5.0793E-01	5.5751E+01	1.1986E+06	8.8560E+02
1.4013E+01	5.0595E-01	5.5534E+01	1.1940E+06	8.8478E+02
1.4014E+01	3.2179E-01	3.5320E+01	7.5937E+05	8.8470E+02

Table III. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.4017E+01	2.8797E-01	3.1608E+01	6.7956E+05	8.8450E+02
1.4025E+01	2.3037E-01	2.5286E+01	5.4365E+05	8.8400E+02
1.4070E+01	4.8955E-01	5.3733E+01	1.1553E+06	8.8120E+02
1.4075E+01	3.8396E-01	4.2144E+01	9.0608E+05	8.8090E+02
1.4089E+01	3.8396E-01	4.2144E+01	9.0608E+05	8.8000E+02
1.4116E+01	2.9117E-01	3.1959E+01	6.8711E+05	8.7830E+02
1.4129E+01	3.3596E-01	3.6876E+01	7.9282E+05	8.7750E+02
1.4137E+01	2.1758E-01	2.3881E+01	5.1345E+05	8.7700E+02
1.4153E+01	2.2557E-01	2.4759E+01	5.3232E+05	8.7600E+02
1.4170E+01	1.6158E-01	1.7735E+01	3.8131E+05	8.7500E+02
1.4186E+01	2.0958E-01	2.3003E+01	4.9457E+05	8.7400E+02
1.4194E+01	2.0318E-01	2.2301E+01	4.7947E+05	8.7350E+02
1.4213E+01	2.4797E-01	2.7218E+01	5.8518E+05	8.7230E+02
1.4227E+01	4.3195E-01	4.7411E+01	1.0193E+06	8.7150E+02
1.4240E+01	3.1197E-01	3.4242E+01	7.3619E+05	8.7070E+02
1.4251E+01	3.5836E-01	3.9334E+01	8.4568E+05	8.7000E+02
1.4267E+01	2.2717E-01	2.4935E+01	5.3610E+05	8.6900E+02
1.4289E+01	3.0717E-01	3.3715E+01	7.2486E+05	8.6770E+02
1.4300E+01	3.6476E-01	4.0036E+01	8.6078E+05	8.6700E+02
1.4309E+01	3.5196E-01	3.8632E+01	8.3057E+05	8.6650E+02
1.4325E+01	3.2636E-01	3.5822E+01	7.7017E+05	8.6550E+02
1.4340E+01	2.7517E-01	3.0203E+01	6.4936E+05	8.6460E+02
1.4358E+01	3.0397E-01	3.3364E+01	7.1731E+05	8.6350E+02
1.4367E+01	2.6237E-01	2.8798E+01	6.1916E+05	8.6300E+02
1.4397E+01	2.9437E-01	3.2310E+01	6.9466E+05	8.6120E+02
1.4413E+01	2.2078E-01	2.4233E+01	5.2100E+05	8.6020E+02
1.4417E+01	2.1758E-01	2.3881E+01	5.1345E+05	8.6000E+02
1.4434E+01	1.5998E-01	1.7560E+01	3.7753E+05	8.5900E+02
1.4445E+01	1.7278E-01	1.8965E+01	4.0774E+05	8.5830E+02
1.4450E+01	1.7918E-01	1.9667E+01	4.2284E+05	8.5800E+02
1.4464E+01	2.3197E-01	2.5462E+01	5.4742E+05	8.5720E+02
1.4481E+01	1.7918E-01	1.9667E+01	4.2284E+05	8.5620E+02
1.2994E+01	2.3357E-01	2.5637E+01	5.5120E+05	9.5420E+02
1.4525E+01	2.1758E-01	2.3881E+01	5.1345E+05	8.5360E+02
1.4540E+01	2.2078E-01	2.4233E+01	5.2100E+05	8.5270E+02
1.4547E+01	2.2398E-01	2.4584E+01	5.2855E+05	8.5230E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4554E+01	2.2398E-01	2.4584E+01	5.2855E+05	8.5190E+02
1.4569E+01	2.4477E-01	2.6866E+01	5.7763E+05	8.5100E+02
1.4604E+01	2.3517E-01	2.5813E+01	5.5497E+05	8.4900E+02
1.4612E+01	2.5597E-01	2.8096E+01	6.0405E+05	8.4850E+02
1.4621E+01	2.6877E-01	2.9500E+01	6.3426E+05	8.4800E+02
1.4641E+01	1.6318E-01	1.7911E+01	3.8508E+05	8.4680E+02
1.4650E+01	1.8878E-01	2.0721E+01	4.4549E+05	8.4630E+02
1.4661E+01	1.8398E-01	2.0194E+01	4.3416E+05	8.4570E+02
1.4673E+01	1.5038E-01	1.6506E+01	3.5488E+05	8.4500E+02
1.4690E+01	2.0958E-01	2.3003E+01	4.9457E+05	8.4400E+02
1.4707E+01	1.2799E-01	1.4048E+01	3.0203E+05	8.4300E+02
1.4739E+01	1.4718E-01	1.6155E+01	3.4733E+05	8.4120E+02
1.4760E+01	1.1519E-01	1.2643E+01	2.7182E+05	8.4000E+02
1.4786E+01	2.0478E-01	2.2477E+01	4.8324E+05	8.3850E+02
1.4827E+01	2.9117E-01	3.1959E+01	6.8711E+05	8.3620E+02
1.4875E+01	1.3758E-01	1.5101E+01	3.2468E+05	8.3350E+02
1.4895E+01	1.8558E-01	2.0369E+01	4.3794E+05	8.3240E+02
1.4923E+01	1.4718E-01	1.6155E+01	3.4733E+05	8.3080E+02
1.4940E+01	1.8238E-01	2.0018E+01	4.3039E+05	8.2990E+02
1.4956E+01	1.3439E-01	1.4750E+01	3.1713E+05	8.2900E+02
1.4978E+01	3.1197E-01	3.4242E+01	7.3619E+05	8.2780E+02
1.4992E+01	2.0478E-01	2.2477E+01	4.8324E+05	8.2700E+02
1.5003E+01	2.3677E-01	2.5989E+01	5.5875E+05	8.2640E+02
1.5021E+01	1.9518E-01	2.1423E+01	4.6059E+05	8.2540E+02
1.5037E+01	2.7837E-01	3.0554E+01	6.5691E+05	8.2450E+02
1.5065E+01	1.1839E-01	1.2994E+01	2.7938E+05	8.2300E+02
1.5092E+01	1.6158E-01	1.7735E+01	3.8131E+05	8.2150E+02
1.5102E+01	1.4558E-01	1.5979E+01	3.4356E+05	8.2100E+02
1.5124E+01	2.1118E-01	2.3179E+01	4.9834E+05	8.1980E+02
1.5148E+01	2.2078E-01	2.4233E+01	5.2100E+05	8.1850E+02
1.5157E+01	4.9594E-01	5.4435E+01	1.1704E+06	8.1800E+02
1.5176E+01	1.9198E-01	2.1072E+01	4.5304E+05	8.1700E+02
1.5187E+01	1.8238E-01	2.0018E+01	4.3039E+05	8.1640E+02
1.5224E+01	3.6796E-01	4.0388E+01	8.6833E+05	8.1440E+02
1.5250E+01	1.1199E-01	1.2292E+01	2.6427E+05	8.1300E+02
1.5288E+01	1.8078E-01	1.9843E+01	4.2661E+05	8.1100E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5303E+01	1.5358E-01	1.6857E+01	3.6243E+05	8.1020E+02
1.5335E+01	2.1118E-01	2.3179E+01	4.9834E+05	8.0850E+02
1.5362E+01	6.4953E-01	7.1293E+01	1.5328E+06	8.0710E+02
1.5379E+01	2.3997E-01	2.6340E+01	5.6630E+05	8.0620E+02
1.5396E+01	2.9597E-01	3.2486E+01	6.9844E+05	8.0530E+02
1.5408E+01	1.6798E-01	1.8438E+01	3.9641E+05	8.0470E+02
1.5440E+01	1.1839E-01	1.2994E+01	2.7938E+05	8.0300E+02
1.5498E+01	2.1438E-01	2.3530E+01	5.0590E+05	8.0000E+02
1.5504E+01	1.9678E-01	2.1599E+01	4.6437E+05	7.9970E+02
1.5517E+01	2.1438E-01	2.3530E+01	5.0590E+05	7.9900E+02
1.5537E+01	4.8315E-01	5.3031E+01	1.1402E+06	7.9800E+02
1.5551E+01	3.9996E-01	4.3899E+01	9.4383E+05	7.9730E+02
1.5560E+01	4.4795E-01	4.9167E+01	1.0571E+06	7.9680E+02
1.5576E+01	1.4718E-01	1.6155E+01	3.4733E+05	7.9600E+02
1.5584E+01	1.7438E-01	1.9140E+01	4.1151E+05	7.9560E+02
1.5594E+01	1.2159E-01	1.3345E+01	2.8693E+05	7.9510E+02
1.5615E+01	1.7598E-01	1.9316E+01	4.1529E+05	7.9400E+02
1.5631E+01	1.3439E-01	1.4750E+01	3.1713E+05	7.9320E+02
1.5664E+01	3.1996E-01	3.5120E+01	7.5507E+05	7.9150E+02
1.5682E+01	2.0798E-01	2.2828E+01	4.9079E+05	7.9060E+02
1.5714E+01	4.4795E-01	4.9167E+01	1.0571E+06	7.8900E+02
1.5772E+01	1.0719E-01	1.1765E+01	2.5295E+05	7.8610E+02
1.5794E+01	1.8078E-01	1.9843E+01	4.2661E+05	7.8500E+02
1.5806E+01	1.5678E-01	1.7209E+01	3.6998E+05	7.8440E+02
1.5839E+01	3.2316E-01	3.5471E+01	7.6262E+05	7.8280E+02
1.5853E+01	3.1676E-01	3.4768E+01	7.4752E+05	7.8210E+02
1.5861E+01	3.3276E-01	3.6524E+01	7.8527E+05	7.8170E+02
1.5885E+01	1.4238E-01	1.5628E+01	3.3601E+05	7.8050E+02
1.5906E+01	2.6877E-01	2.9500E+01	6.3426E+05	7.7950E+02
1.5936E+01	1.0239E-01	1.1238E+01	2.4162E+05	7.7800E+02
1.5969E+01	1.5998E-01	1.7560E+01	3.7753E+05	7.7640E+02
1.5994E+01	2.6397E-01	2.8974E+01	6.2293E+05	7.7520E+02
1.6006E+01	2.3677E-01	2.5989E+01	5.5875E+05	7.7460E+02
1.6014E+01	2.0158E-01	2.2125E+01	4.7569E+05	7.7420E+02
1.6031E+01	2.4957E-01	2.7393E+01	5.8895E+05	7.7340E+02
1.6037E+01	2.3037E-01	2.5286E+01	5.4365E+05	7.7310E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6050E+01	2.9757E-01	3.2661E+01	7.0221E+05	7.7250E+02
1.6068E+01	1.5358E-01	1.6857E+01	3.6243E+05	7.7160E+02
1.6079E+01	1.8238E-01	2.0018E+01	4.3039E+05	7.7110E+02
1.6102E+01	1.0079E-01	1.1063E+01	2.3785E+05	7.7000E+02
1.6148E+01	2.2557E-01	2.4759E+01	5.3232E+05	7.6780E+02
1.6154E+01	2.2398E-01	2.4584E+01	5.2855E+05	7.6750E+02
1.6165E+01	2.3997E-01	2.6340E+01	5.6630E+05	7.6700E+02
1.6175E+01	2.3997E-01	2.6340E+01	5.6630E+05	7.6650E+02
1.6194E+01	1.6638E-01	1.8262E+01	3.9264E+05	7.6560E+02
1.6226E+01	3.6476E-01	4.0036E+01	8.6078E+05	7.6410E+02
1.6233E+01	2.9917E-01	3.2837E+01	7.0599E+05	7.6380E+02
1.6250E+01	2.0798E-01	2.2828E+01	4.9079E+05	7.6300E+02
1.6271E+01	1.2319E-01	1.3521E+01	2.9070E+05	7.6200E+02
1.6299E+01	1.4718E-01	1.6155E+01	3.4733E+05	7.6070E+02
1.6307E+01	1.3758E-01	1.5101E+01	3.2468E+05	7.6030E+02
1.6335E+01	2.3037E-01	2.5286E+01	5.4365E+05	7.5900E+02
1.6346E+01	2.3677E-01	2.5989E+01	5.5875E+05	7.5850E+02
1.6374E+01	2.7837E-01	3.0554E+01	6.5691E+05	7.5720E+02
1.6398E+01	2.4637E-01	2.7042E+01	5.8140E+05	7.5610E+02
1.6417E+01	2.8797E-01	3.1608E+01	6.7956E+05	7.5520E+02
1.6433E+01	1.7118E-01	1.8789E+01	4.0396E+05	7.5450E+02
1.6465E+01	1.7598E-01	1.9316E+01	4.1529E+05	7.5300E+02
1.6487E+01	1.9198E-01	2.1072E+01	4.5304E+05	7.5200E+02
1.6505E+01	1.7598E-01	1.9316E+01	4.1529E+05	7.5120E+02
1.6533E+01	2.4317E-01	2.6691E+01	5.7385E+05	7.4990E+02
1.6542E+01	2.4317E-01	2.6691E+01	5.7385E+05	7.4950E+02
1.6549E+01	2.7197E-01	2.9852E+01	6.4181E+05	7.4920E+02
1.6569E+01	1.8878E-01	2.0721E+01	4.4549E+05	7.4830E+02
1.6593E+01	2.8157E-01	3.0905E+01	6.6446E+05	7.4720E+02
1.6615E+01	1.7118E-01	1.8789E+01	4.0396E+05	7.4620E+02
1.6638E+01	1.8558E-01	2.0369E+01	4.3794E+05	7.4520E+02
1.6653E+01	1.7598E-01	1.9316E+01	4.1529E+05	7.4450E+02
1.6721E+01	2.7517E-01	3.0203E+01	6.4936E+05	7.4150E+02
1.6746E+01	1.8558E-01	2.0369E+01	4.3794E+05	7.4040E+02
1.6766E+01	2.1438E-01	2.3530E+01	5.0590E+05	7.3950E+02
1.6793E+01	1.8398E-01	2.0194E+01	4.3416E+05	7.3830E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6816E+01	2.0798E-01	2.2828E+01	4.9079E+05	7.3730E+02
1.6892E+01	2.6077E-01	2.8622E+01	6.1538E+05	7.3400E+02
1.6910E+01	2.7197E-01	2.9852E+01	6.4181E+05	7.3320E+02
1.6926E+01	2.3357E-01	2.5637E+01	5.5120E+05	7.3250E+02
1.6938E+01	2.4157E-01	2.6515E+01	5.7008E+05	7.3200E+02
1.6979E+01	1.8558E-01	2.0369E+01	4.3794E+05	7.3020E+02
1.6996E+01	2.2078E-01	2.4233E+01	5.2100E+05	7.2950E+02
1.7042E+01	2.4317E-01	2.6691E+01	5.7385E+05	7.2750E+02
1.7054E+01	2.3037E-01	2.5286E+01	5.4365E+05	7.2700E+02
1.7080E+01	4.9275E-01	5.4084E+01	1.1628E+06	7.2590E+02
1.7125E+01	2.5917E-01	2.8447E+01	6.1160E+05	7.2400E+02
1.7149E+01	2.2717E-01	2.4935E+01	5.3610E+05	7.2300E+02
1.7196E+01	2.8157E-01	3.0905E+01	6.6446E+05	7.2100E+02
1.7244E+01	2.1598E-01	2.3706E+01	5.0967E+05	7.1900E+02
1.7292E+01	2.0158E-01	2.2125E+01	4.7569E+05	7.1700E+02
1.7304E+01	2.6557E-01	2.9149E+01	6.2671E+05	7.1650E+02
1.7377E+01	2.0318E-01	2.2301E+01	4.7947E+05	7.1350E+02
1.7414E+01	2.3037E-01	2.5286E+01	5.4365E+05	7.1200E+02
1.7463E+01	1.9358E-01	2.1247E+01	4.5682E+05	7.1000E+02
1.7512E+01	2.0318E-01	2.2301E+01	4.7947E+05	7.0800E+02
1.7549E+01	1.8718E-01	2.0545E+01	4.4171E+05	7.0650E+02
1.7586E+01	2.1758E-01	2.3881E+01	5.1345E+05	7.0500E+02
1.7712E+01	1.9518E-01	2.1423E+01	4.6059E+05	7.0000E+02
1.7712E+01	2.4137E-01	2.6493E+01	5.6961E+05	7.0000E+02
1.8000E+01	2.3671E-01	2.5982E+01	5.5861E+05	6.8880E+02
1.8500E+01	2.1206E-01	2.3276E+01	5.0044E+05	6.7018E+02
1.9000E+01	2.0678E-01	2.2696E+01	4.8796E+05	6.5255E+02
1.9500E+01	2.0508E-01	2.2510E+01	4.8395E+05	6.3582E+02
2.0000E+01	1.9929E-01	2.1874E+01	4.7030E+05	6.1992E+02
2.0500E+01	2.0258E-01	2.2236E+01	4.7807E+05	6.0480E+02
2.0680E+01	2.0215E-01	2.2189E+01	4.7705E+05	5.9954E+02
2.0680E+01	2.0133E-01	2.2098E+01	4.7510E+05	5.9954E+02
2.1000E+01	2.0056E-01	2.2014E+01	4.7329E+05	5.9040E+02
2.1500E+01	2.0026E-01	2.1981E+01	4.7259E+05	5.7667E+02
2.2000E+01	2.0096E-01	2.2057E+01	4.7423E+05	5.6356E+02
2.2500E+01	1.9629E-01	2.1545E+01	4.6321E+05	5.5104E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.3000E+01	1.9678E-01	2.1599E+01	4.6438E+05	5.3906E+02
2.3500E+01	1.9470E-01	2.1370E+01	4.5946E+05	5.2759E+02
2.4000E+01	1.9360E-01	2.1250E+01	4.5688E+05	5.1660E+02
2.4500E+01	1.9112E-01	2.0977E+01	4.5101E+05	5.0606E+02
2.5000E+01	1.8913E-01	2.0759E+01	4.4632E+05	4.9594E+02
2.5500E+01	1.8953E-01	2.0803E+01	4.4726E+05	4.8621E+02
2.6000E+01	1.9241E-01	2.1119E+01	4.5406E+05	4.7686E+02
2.6500E+01	1.8983E-01	2.0836E+01	4.4796E+05	4.6786E+02
2.6840E+01	1.8726E-01	2.0554E+01	4.4191E+05	4.6194E+02
2.7500E+01	1.7929E-01	1.9679E+01	4.2310E+05	4.5085E+02
3.0000E+01	1.5426E-01	1.6932E+01	3.6403E+05	4.1328E+02
3.5000E+01	1.2893E-01	1.4152E+01	3.0426E+05	3.5424E+02
4.0000E+01	1.1138E-01	1.2225E+01	2.6284E+05	3.0996E+02
4.5000E+01	9.6007E-02	1.0538E+01	2.2656E+05	2.7552E+02
5.0000E+01	8.2467E-02	9.0517E+00	1.9461E+05	2.4797E+02
6.0000E+01	6.0933E-02	6.6881E+00	1.4379E+05	2.0664E+02
7.0000E+01	4.5679E-02	5.0138E+00	1.0780E+05	1.7712E+02
8.0000E+01	3.4937E-02	3.8347E+00	8.2446E+04	1.5498E+02
9.0000E+01	2.7273E-02	2.9935E+00	6.4359E+04	1.3776E+02
1.0000E+02	2.1699E-02	2.3817E+00	5.1207E+04	1.2398E+02
1.2500E+02	1.2803E-02	1.4053E+00	3.0213E+04	9.9187E+01
1.5000E+02	8.7021E-03	9.5515E-01	2.0536E+04	8.2656E+01
1.7500E+02	6.1732E-03	6.7758E-01	1.4568E+04	7.0848E+01
2.0000E+02	4.4602E-03	4.8956E-01	1.0526E+04	6.1992E+01
2.2500E+02	3.2643E-03	3.5830E-01	7.7033E+03	5.5104E+01
2.5000E+02	2.4144E-03	2.6501E-01	5.6977E+03	4.9594E+01
2.7500E+02	1.8013E-03	1.9772E-01	4.2509E+03	4.5085E+01
2.9250E+02	3.7194E-03	4.0824E-01	8.7771E+03	4.2388E+01
2.9300E+02	5.1234E-03	5.6235E-01	1.2090E+04	4.2315E+01
2.9350E+02	1.2209E-02	1.3400E+00	2.8811E+04	4.2243E+01
2.9400E+02	7.2341E-03	7.9403E-01	1.7071E+04	4.2171E+01
2.9450E+02	5.1141E-03	5.6133E-01	1.2069E+04	4.2100E+01
2.9500E+02	8.2756E-03	9.0833E-01	1.9529E+04	4.2029E+01
2.9600E+02	7.1784E-03	7.8790E-01	1.6940E+04	4.1887E+01
2.9700E+02	6.9831E-03	7.6647E-01	1.6479E+04	4.1746E+01
2.9800E+02	7.2063E-03	7.9096E-01	1.7006E+04	4.1605E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9900E+02	8.9172E-03	9.7876E-01	2.1043E+04	4.1466E+01
3.0000E+02	1.0661E-02	1.1701E+00	2.5157E+04	4.1328E+01
3.0100E+02	1.3250E-02	1.4544E+00	3.1268E+04	4.1191E+01
3.0200E+02	1.1539E-02	1.2666E+00	2.7231E+04	4.1054E+01
3.0300E+02	1.2460E-02	1.3676E+00	2.9403E+04	4.0919E+01
3.0350E+02	1.3278E-02	1.4574E+00	3.1334E+04	4.0851E+01
3.0400E+02	1.3492E-02	1.4809E+00	3.1839E+04	4.0784E+01
3.0500E+02	1.3706E-02	1.5044E+00	3.2344E+04	4.0651E+01
3.0550E+02	1.3585E-02	1.4911E+00	3.2058E+04	4.0584E+01
3.0600E+02	1.3111E-02	1.4390E+00	3.0939E+04	4.0518E+01
3.0700E+02	1.2655E-02	1.3890E+00	2.9864E+04	4.0386E+01
3.0800E+02	1.1837E-02	1.2992E+00	2.7933E+04	4.0255E+01
3.1000E+02	1.0842E-02	1.1900E+00	2.5585E+04	3.9995E+01
3.1200E+02	9.8470E-03	1.0808E+00	2.3237E+04	3.9739E+01
3.1500E+02	9.0845E-03	9.9713E-01	2.1438E+04	3.9360E+01
3.2000E+02	8.2105E-03	9.0119E-01	1.9375E+04	3.8745E+01
3.2500E+02	7.6805E-03	8.4302E-01	1.8125E+04	3.8149E+01
3.3000E+02	7.0947E-03	7.7872E-01	1.6742E+04	3.7571E+01
3.3500E+02	6.5647E-03	7.2054E-01	1.5492E+04	3.7010E+01
3.4000E+02	6.0533E-03	6.6441E-01	1.4285E+04	3.6466E+01
3.4500E+02	5.7557E-03	6.3175E-01	1.3583E+04	3.5937E+01
3.5000E+02	5.4117E-03	5.9399E-01	1.2771E+04	3.5424E+01
4.0000E+02	4.9206E-03	5.4009E-01	1.1612E+04	3.0996E+01
4.5000E+02	3.6698E-03	4.0280E-01	8.6602E+03	2.7552E+01
5.0000E+02	2.8107E-03	3.0851E-01	6.6329E+03	2.4797E+01
5.3950E+02	3.9388E-03	4.3233E-01	9.2950E+03	2.2981E+01
5.4000E+02	4.1654E-03	4.5720E-01	9.8298E+03	2.2960E+01
5.4100E+02	4.8776E-03	5.3538E-01	1.1511E+04	2.2918E+01
5.4200E+02	5.5035E-03	6.0407E-01	1.2988E+04	2.2875E+01
5.4300E+02	5.9352E-03	6.5145E-01	1.4006E+04	2.2833E+01
5.4400E+02	6.3237E-03	6.9409E-01	1.4923E+04	2.2791E+01
5.4500E+02	6.8201E-03	7.4858E-01	1.6094E+04	2.2749E+01
5.4600E+02	7.4244E-03	8.1491E-01	1.7520E+04	2.2708E+01
5.4700E+02	7.9639E-03	8.7413E-01	1.8794E+04	2.2666E+01
5.4800E+02	8.6330E-03	9.4757E-01	2.0373E+04	2.2625E+01
5.4900E+02	9.5179E-03	1.0447E+00	2.2461E+04	2.2584E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.5000E+02	1.0273E-02	1.1276E+00	2.4243E+04	2.2543E+01
5.5100E+02	1.0273E-02	1.1276E+00	2.4243E+04	2.2502E+01
5.5200E+02	9.7337E-03	1.0684E+00	2.2970E+04	2.2461E+01
5.5300E+02	9.1294E-03	1.0021E+00	2.1544E+04	2.2420E+01
5.5400E+02	8.8488E-03	9.7126E-01	2.0882E+04	2.2380E+01
5.5500E+02	8.6330E-03	9.4757E-01	2.0373E+04	2.2339E+01
5.5600E+02	8.3740E-03	9.1914E-01	1.9761E+04	2.2299E+01
5.5700E+02	8.2014E-03	9.0019E-01	1.9354E+04	2.2259E+01
5.5800E+02	8.0503E-03	8.8361E-01	1.8997E+04	2.2219E+01
5.5900E+02	7.9208E-03	8.6939E-01	1.8692E+04	2.2180E+01
5.6000E+02	7.8129E-03	8.5755E-01	1.8437E+04	2.2140E+01
5.6100E+02	7.7481E-03	8.5044E-01	1.8284E+04	2.2101E+01
5.6200E+02	7.7050E-03	8.4570E-01	1.8183E+04	2.2061E+01
5.6300E+02	7.6618E-03	8.4097E-01	1.8081E+04	2.2022E+01
5.6400E+02	7.6186E-03	8.3623E-01	1.7979E+04	2.1983E+01
5.6500E+02	7.5755E-03	8.3149E-01	1.7877E+04	2.1944E+01
5.6600E+02	7.5539E-03	8.2912E-01	1.7826E+04	2.1905E+01
5.6700E+02	7.5107E-03	8.2438E-01	1.7724E+04	2.1867E+01
5.6800E+02	7.4675E-03	8.1965E-01	1.7622E+04	2.1828E+01
5.6900E+02	7.4114E-03	8.1349E-01	1.7490E+04	2.1790E+01
5.7000E+02	7.3467E-03	8.0638E-01	1.7337E+04	2.1752E+01
5.7100E+02	7.2776E-03	7.9880E-01	1.7174E+04	2.1714E+01
5.7200E+02	7.1870E-03	7.8885E-01	1.6960E+04	2.1676E+01
5.7300E+02	7.0791E-03	7.7700E-01	1.6706E+04	2.1638E+01
5.7600E+02	6.9064E-03	7.5805E-01	1.6298E+04	2.1525E+01
5.7900E+02	6.7337E-03	7.3910E-01	1.5891E+04	2.1414E+01
5.8200E+02	6.6258E-03	7.2726E-01	1.5636E+04	2.1303E+01
5.8500E+02	6.5179E-03	7.1541E-01	1.5381E+04	2.1194E+01
5.8800E+02	6.3884E-03	7.0120E-01	1.5076E+04	2.1086E+01
5.9100E+02	6.2373E-03	6.8462E-01	1.4719E+04	2.0979E+01
5.9400E+02	6.1079E-03	6.7040E-01	1.4414E+04	2.0873E+01
5.9700E+02	6.0345E-03	6.6235E-01	1.4240E+04	2.0768E+01
5.9800E+02	5.9986E-03	6.5842E-01	1.4156E+04	2.0733E+01
6.0000E+02	5.6248E-03	6.1738E-01	1.3274E+04	2.0664E+01
7.0000E+02	3.8378E-03	4.2124E-01	9.0567E+03	1.7712E+01
8.0000E+02	2.7310E-03	2.9976E-01	6.4448E+03	1.5498E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0000E+02	2.0100E-03	2.2062E-01	4.7434E+03	1.3776E+01
1.0000E+03	1.5209E-03	1.6694E-01	3.5892E+03	1.2398E+01
1.2500E+03	8.3205E-04	9.1327E-02	1.9635E+03	9.9187E+00
1.5000E+03	5.0690E-04	5.5637E-02	1.1962E+03	8.2656E+00
1.7500E+03	3.2886E-04	3.6096E-02	7.7606E+02	7.0848E+00
2.0000E+03	2.2541E-04	2.4741E-02	5.3194E+02	6.1992E+00
2.2500E+03	1.6108E-04	1.7681E-02	3.8014E+02	5.5104E+00
2.5000E+03	1.1897E-04	1.3058E-02	2.8075E+02	4.9594E+00
2.7500E+03	9.0249E-05	9.9058E-03	2.1297E+02	4.5085E+00
3.0000E+03	6.9998E-05	7.6831E-03	1.6519E+02	4.1328E+00
3.5000E+03	4.4424E-05	4.8760E-03	1.0483E+02	3.5424E+00
4.0000E+03	2.9740E-05	3.2643E-03	7.0182E+01	3.0996E+00
4.5000E+03	2.0808E-05	2.2839E-03	4.9103E+01	2.7552E+00
5.0000E+03	1.5065E-05	1.6536E-03	3.5552E+01	2.4797E+00
6.0000E+03	8.5697E-06	9.4062E-04	2.0223E+01	2.0664E+00
7.0000E+03	5.3000E-06	5.8173E-04	1.2507E+01	1.7712E+00
8.0000E+03	3.4893E-06	3.8299E-04	8.2342E+00	1.5498E+00
9.0000E+03	2.4110E-06	2.6463E-04	5.6895E+00	1.3776E+00
1.0000E+04	1.6515E-06	1.8127E-04	3.8973E+00	1.2398E+00
1.2500E+04	8.0790E-07	8.8675E-05	1.9065E+00	9.9187E-01
1.5000E+04	4.5038E-07	4.9435E-05	1.0628E+00	8.2656E-01
1.7500E+04	2.7483E-07	3.0166E-05	6.4856E-01	7.0848E-01
2.0000E+04	1.7916E-07	1.9665E-05	4.2279E-01	6.1992E-01
2.2500E+04	1.2282E-07	1.3481E-05	2.8985E-01	5.5104E-01
2.5000E+04	8.7654E-08	9.6210E-06	2.0685E-01	4.9594E-01
2.7500E+04	6.4435E-08	7.0724E-06	1.5206E-01	4.5085E-01
3.0000E+04	4.8412E-08	5.3137E-06	1.1424E-01	4.1328E-01
3.5000E+04	2.9194E-08	3.2044E-06	6.8894E-02	3.5424E-01
4.0000E+04	1.8834E-08	2.0673E-06	4.4446E-02	3.0996E-01
4.5000E+04	1.2796E-08	1.4045E-06	3.0197E-02	2.7552E-01
5.0000E+04	9.0556E-09	9.9395E-07	2.1370E-02	2.4797E-01
6.0000E+04	4.9777E-09	5.4636E-07	1.1747E-02	2.0664E-01
7.0000E+04	3.0015E-09	3.2944E-07	7.0830E-03	1.7712E-01
8.0000E+04	1.9361E-09	2.1250E-07	4.5688E-03	1.5498E-01
9.0000E+04	1.3145E-09	1.4428E-07	3.1019E-03	1.3776E-01
1.0000E+05	9.2901E-10	1.0197E-07	2.1923E-03	1.2398E-01

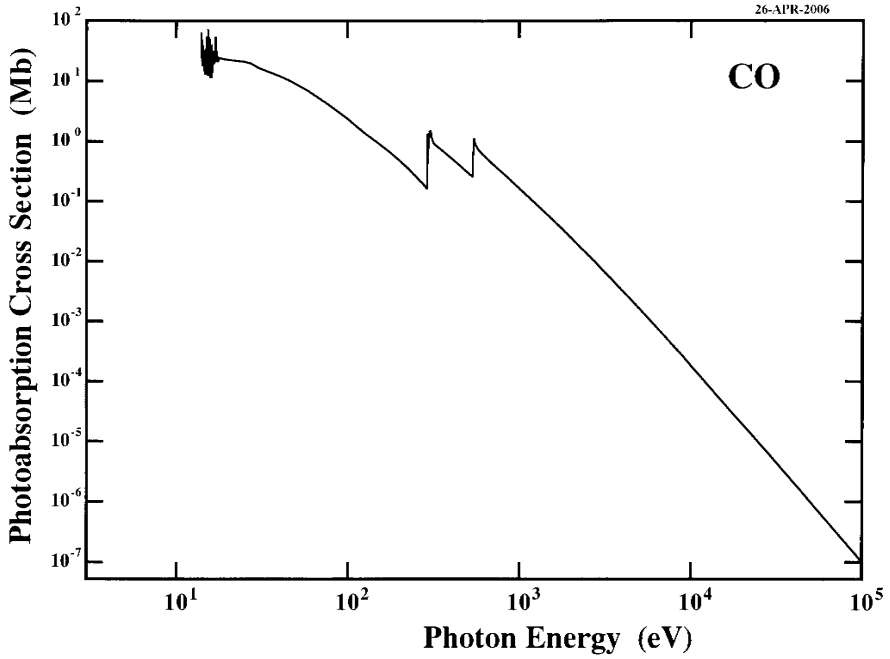
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of atoms, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)} \;\;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E-E_{\rm K}}} \;\;,$$

where $E_{\rm K} \;=\; 296.2$ and 543.9 eV for carbon and oxygen atoms, respectively.



CO

Energy, eV	Source
8.028 - 9.950	Table 4.13 p.159 (Berkowitz's book*)
10.776 - 11.034	Table 4.13 p.159 (Berkowitz's book*)
11.397 - 11.662	Table 4.13 p.159 (Berkowitz's book*)
11.522 - 11.789	Table 4.13 p.159 (Berkowitz's book*)
12.130 - 14.013	Chan *et al.*, Chem. Phys., 170 (1993) 123
14.0136 (IP) - 17.712	Chan *et al.*, Can. J. Phys., 43 (1965) 1706
17.712 - 20.68	Chan *et al.*, Can. J. Phys., 43 (1965) 1706
20.68 - 26.84	Chan *et al.*, Can. J. Phys., 43 (1965) 1706
26.84 - 124.37	Table 4.15 p.161 (Berkowitz's book*)
124.37 - 292.5	Table 4.15 p.161 (Berkowitz's book*)
287.4	Table 4.14 p.160 (Berkowitz's book*)
292.5 - 350	Fig. 4.6 (Berkowitz's book*)
350 - 539.5	Table 4.15 p.161 (Berkowitz's book*)
534.1	Table 4.14 p.160 (Berkowitz's book*)
539.5 - 598	Barrus *et al.*, Can. Phys. Rev. A, 20 (1979) 1045
598 - 1486.7	Table 4.15 p.161 (Berkowitz's book*)
1486.7 - 3691.7	Table 4.15 p.161 (Berkowitz's book*)
3691.7 - 10^4	Table 4.15 p.161 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Nitric Oxide

Z = 15 Molecular Mass : $M_{\rm A}$ = 30.0061

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator strength, f_n, for transitions to the valence state ($A^2\Sigma^+$, $B^2\Pi$) and the lowest Rydberg states ($C^2\Pi$, $D^2\Sigma^+$).

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
5.4800E+00	4.1000E-04	2.2625E+03	6.7830E+00	3.0000E-05	1.8279E+03
5.7703E+00	8.0600E-04	2.1487E+03	6.9380E+00	3.6200E-04	1.7870E+03
6.0566E+00	7.0200E-04	2.0471E+03	7.0370E+00	2.2000E-03	1.7619E+03
6.3389E+00	3.5800E-04	1.9559E+03	7.1680E+00	1.0000E-05	1.7297E+03
5.6410E+00	2.4600E-08	2.1979E+03	7.2590E+00	2.0100E-04	1.7080E+03
5.7640E+00	2.2500E-07	2.1510E+03	7.3980E+00	7.9000E-04	1.6759E+03
5.8930E+00	1.5500E-06	2.1039E+03	6.4930E+00	2.2150E-03	1.9095E+03
6.0100E+00	4.6100E-06	2.0630E+03	6.7820E+00	5.8950E-03	1.8281E+03
6.1350E+00	1.3800E-05	2.0209E+03	7.0620E+00	2.9100E-03	1.7557E+03
6.2560E+00	2.7700E-05	1.9818E+03	7.3670E+00	9.7800E-04	1.6830E+03
6.3750E+00	4.1600E-05	1.9448E+03	6.6072E+00	2.5250E-03	1.8765E+03
6.4950E+00	3.6000E-04	1.9089E+03	6.8899E+00	4.6050E-03	1.7995E+03
6.6050E+00	1.2000E-04	1.8771E+03	7.1669E+00	3.4950E-03	1.7300E+03
6.7200E+00	3.3600E-04	1.8450E+03	7.4374E+00	1.7900E-03	1.6670E+03

Table II. Oscillator strength, f_n, for the pre-K-edge resonances of nitrogen and oxygen atoms.

Energy (eV)	f_n	λ (Å)	Energy (eV)	f_n	λ (Å)
3.9970E+02	5.3000E-02	3.1019E+01	5.3270E+02	2.4740E-02	2.3275E+01

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.5170E+00	3.4000E-03	3.7319E-01	7.4898E+03	1.6494E+03
7.5600E+00	8.4000E-03	9.2199E-01	1.8504E+04	1.6400E+03
7.5710E+00	8.4000E-03	9.2199E-01	1.8504E+04	1.6376E+03
7.6040E+00	5.5000E-03	6.0369E-01	1.2116E+04	1.6305E+03

Table III. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.6390E+00	1.4500E-02	1.5915E+00	3.1942E+04	1.6230E+03
7.6780E+00	1.5500E-02	1.7013E+00	3.4145E+04	1.6148E+03
7.7080E+00	2.2400E-02	2.4586E+00	4.9344E+04	1.6085E+03
7.7300E+00	1.4400E-02	1.5806E+00	3.1721E+04	1.6039E+03
7.7490E+00	6.2000E-03	6.8052E-01	1.3658E+04	1.6000E+03
7.7800E+00	3.7000E-03	4.0612E-01	8.1506E+03	1.5936E+03
7.8070E+00	6.1000E-03	6.6954E-01	1.3438E+04	1.5881E+03
7.8490E+00	1.9700E-02	2.1623E+00	4.3397E+04	1.5796E+03
7.8610E+00	1.9000E-02	2.0855E+00	4.1855E+04	1.5772E+03
7.9000E+00	7.0000E-03	7.6833E-01	1.5420E+04	1.5694E+03
7.9090E+00	6.3000E-03	6.9149E-01	1.3878E+04	1.5676E+03
7.9520E+00	2.1500E-02	2.3599E+00	4.7362E+04	1.5592E+03
7.9920E+00	3.6500E-02	4.0063E+00	8.0405E+04	1.5514E+03
8.0040E+00	3.5400E-02	3.8855E+00	7.7982E+04	1.5490E+03
8.0310E+00	1.8600E-02	2.0416E+00	4.0973E+04	1.5438E+03
8.0560E+00	9.5000E-03	1.0427E+00	2.0927E+04	1.5390E+03
8.0660E+00	9.3000E-03	1.0208E+00	2.0487E+04	1.5371E+03
8.1220E+00	2.8800E-02	3.1611E+00	6.3443E+04	1.5265E+03
8.1450E+00	1.7400E-02	1.9098E+00	3.8330E+04	1.5222E+03
8.1850E+00	9.7000E-03	1.0647E+00	2.1368E+04	1.5148E+03
8.1980E+00	9.3000E-03	1.0208E+00	2.0487E+04	1.5124E+03
8.2230E+00	1.9000E-02	2.0855E+00	4.1855E+04	1.5078E+03
8.2630E+00	4.3500E-02	4.7746E+00	9.5825E+04	1.5005E+03
8.2770E+00	4.4800E-02	4.9173E+00	9.8689E+04	1.4979E+03
8.2910E+00	4.2700E-02	4.6868E+00	9.4063E+04	1.4954E+03
8.3140E+00	2.5300E-02	2.7770E+00	5.5733E+04	1.4913E+03
8.3270E+00	8.2000E-03	9.0004E-01	1.8064E+04	1.4889E+03
8.3400E+00	2.0400E-02	2.2391E+00	4.4939E+04	1.4866E+03
8.3660E+00	3.0500E-02	3.3477E+00	6.7188E+04	1.4820E+03
8.3830E+00	3.1700E-02	3.4794E+00	6.9831E+04	1.4790E+03
8.3930E+00	3.0000E-02	3.2928E+00	6.6086E+04	1.4772E+03
8.4180E+00	1.6000E-02	1.7562E+00	3.5246E+04	1.4728E+03
8.4320E+00	1.2100E-02	1.3281E+00	2.6655E+04	1.4704E+03
8.4440E+00	1.2600E-02	1.3830E+00	2.7756E+04	1.4683E+03
8.4860E+00	2.7100E-02	2.9745E+00	5.9698E+04	1.4610E+03
8.5120E+00	3.0500E-02	3.3477E+00	6.7188E+04	1.4566E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.5380E+00	4.3900E-02	4.8185E+00	9.6706E+04	1.4521E+03
8.5520E+00	4.6700E-02	5.1258E+00	1.0287E+05	1.4498E+03
8.5780E+00	4.0800E-02	4.4782E+00	8.9877E+04	1.4454E+03
8.6290E+00	1.6700E-02	1.8330E+00	3.6788E+04	1.4368E+03
8.6400E+00	1.6200E-02	1.7781E+00	3.5687E+04	1.4350E+03
8.6550E+00	2.1500E-02	2.3599E+00	4.7362E+04	1.4325E+03
8.6960E+00	3.1900E-02	3.5014E+00	7.0272E+04	1.4258E+03
8.7080E+00	3.0200E-02	3.3148E+00	6.6527E+04	1.4238E+03
8.7340E+00	1.9700E-02	2.1623E+00	4.3397E+04	1.4196E+03
8.7430E+00	1.7600E-02	1.9318E+00	3.8771E+04	1.4181E+03
8.7590E+00	2.1500E-02	2.3599E+00	4.7362E+04	1.4155E+03
8.7990E+00	4.2500E-02	4.6648E+00	9.3622E+04	1.4091E+03
8.8140E+00	4.4900E-02	4.9283E+00	9.8909E+04	1.4067E+03
8.8490E+00	2.3200E-02	2.5465E+00	5.1107E+04	1.4011E+03
8.8600E+00	2.0000E-02	2.1952E+00	4.4057E+04	1.3994E+03
8.8720E+00	2.1900E-02	2.4038E+00	4.8243E+04	1.3975E+03
8.8900E+00	2.5200E-02	2.7660E+00	5.5512E+04	1.3946E+03
8.9020E+00	2.6900E-02	2.9526E+00	5.9257E+04	1.3928E+03
8.9290E+00	1.9400E-02	2.1294E+00	4.2736E+04	1.3886E+03
8.9400E+00	1.8400E-02	2.0196E+00	4.0533E+04	1.3868E+03
8.9530E+00	2.0400E-02	2.2391E+00	4.4939E+04	1.3848E+03
8.9950E+00	3.2900E-02	3.6111E+00	7.2475E+04	1.3784E+03
9.0090E+00	3.0500E-02	3.3477E+00	6.7188E+04	1.3762E+03
9.0310E+00	2.3700E-02	2.6013E+00	5.2208E+04	1.3729E+03
9.0470E+00	2.5100E-02	2.7550E+00	5.5292E+04	1.3704E+03
9.0720E+00	3.3200E-02	3.6441E+00	7.3135E+04	1.3667E+03
9.0850E+00	3.4300E-02	3.7648E+00	7.5559E+04	1.3647E+03
9.0980E+00	3.2200E-02	3.5343E+00	7.0932E+04	1.3628E+03
9.1250E+00	2.1000E-02	2.3050E+00	4.6260E+04	1.3587E+03
9.1370E+00	1.9000E-02	2.0855E+00	4.1855E+04	1.3569E+03
9.1510E+00	1.8900E-02	2.0745E+00	4.1634E+04	1.3549E+03
9.1790E+00	2.0900E-02	2.2940E+00	4.6040E+04	1.3507E+03
9.2200E+00	1.8800E-02	2.0635E+00	4.1414E+04	1.3447E+03
9.2320E+00	2.0100E-02	2.2062E+00	4.4278E+04	1.3430E+03
9.2460E+00	1.9700E-02	2.1623E+00	4.3397E+04	1.3409E+03
9.2580E+00	2.3000E-02	2.5245E+00	5.0666E+04	1.3392E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.2643E+00	2.4000E-02	2.6343E+00	5.2869E+04	1.3383E+03
9.2685E+00	3.1740E-02	3.4838E+00	6.9919E+04	1.3377E+03
9.2712E+00	3.1670E-02	3.4761E+00	6.9764E+04	1.3373E+03
9.2823E+00	3.6164E-02	3.9694E+00	7.9664E+04	1.3357E+03
9.2872E+00	3.8270E-02	4.2006E+00	8.4305E+04	1.3350E+03
9.2935E+00	3.0967E-02	3.3990E+00	6.8217E+04	1.3341E+03
9.2970E+00	2.8545E-02	3.1331E+00	6.2880E+04	1.3336E+03
9.3046E+00	2.5174E-02	2.7631E+00	5.5455E+04	1.3325E+03
9.3151E+00	1.5413E-02	1.6918E+00	3.3954E+04	1.3310E+03
9.3270E+00	2.1417E-02	2.3508E+00	4.7180E+04	1.3293E+03
9.3397E+00	3.9324E-02	4.3162E+00	8.6625E+04	1.3275E+03
9.3432E+00	3.1494E-02	3.4568E+00	6.9377E+04	1.3270E+03
9.3531E+00	3.9675E-02	4.3547E+00	8.7398E+04	1.3256E+03
9.3573E+00	2.9423E-02	3.2294E+00	6.4814E+04	1.3250E+03
9.3608E+00	3.4162E-02	3.7497E+00	7.5255E+04	1.3245E+03
9.3693E+00	3.2934E-02	3.6148E+00	7.2548E+04	1.3233E+03
9.3722E+00	3.4057E-02	3.7381E+00	7.5023E+04	1.3229E+03
9.3764E+00	2.9001E-02	3.1832E+00	6.3886E+04	1.3223E+03
9.3785E+00	2.6087E-02	2.8633E+00	5.7466E+04	1.3220E+03
9.3999E+00	1.8328E-02	2.0117E+00	4.0373E+04	1.3190E+03
9.4077E+00	1.6748E-02	1.8382E+00	3.6893E+04	1.3179E+03
9.4170E+00	1.6958E-02	1.8614E+00	3.7357E+04	1.3166E+03
9.4256E+00	1.6151E-02	1.7727E+00	3.5578E+04	1.3154E+03
9.4306E+00	1.4465E-02	1.5877E+00	3.1866E+04	1.3147E+03
9.4435E+00	2.1804E-02	2.3932E+00	4.8030E+04	1.3129E+03
9.4479E+00	2.0680E-02	2.2699E+00	4.5555E+04	1.3123E+03
9.4543E+00	2.4367E-02	2.6745E+00	5.3677E+04	1.3114E+03
9.4572E+00	2.1874E-02	2.4009E+00	4.8185E+04	1.3110E+03
9.4637E+00	2.0996E-02	2.3045E+00	4.6252E+04	1.3101E+03
9.4833E+00	1.9030E-02	2.0887E+00	4.1920E+04	1.3074E+03
9.4891E+00	2.3524E-02	2.5820E+00	5.1820E+04	1.3066E+03
9.5007E+00	2.1207E-02	2.3277E+00	4.6716E+04	1.3050E+03
9.5073E+00	1.8152E-02	1.9924E+00	3.9987E+04	1.3041E+03
9.5197E+00	1.6256E-02	1.7843E+00	3.5810E+04	1.3024E+03
9.5241E+00	2.0259E-02	2.2236E+00	4.4627E+04	1.3018E+03
9.5394E+00	1.7625E-02	1.9346E+00	3.8827E+04	1.2997E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.5439E+00	2.1382E-02	2.3469E+00	4.7102E+04	1.2991E+03
9.5571E+00	2.0961E-02	2.3007E+00	4.6174E+04	1.2973E+03
9.5645E+00	2.8510E-02	3.1292E+00	6.2803E+04	1.2963E+03
9.5696E+00	2.1909E-02	2.4047E+00	4.8263E+04	1.2956E+03
9.5770E+00	2.3805E-02	2.6128E+00	5.2439E+04	1.2946E+03
9.5859E+00	1.9697E-02	2.1620E+00	4.3390E+04	1.2934E+03
9.6030E+00	1.5905E-02	1.7458E+00	3.5037E+04	1.2911E+03
9.6082E+00	1.7415E-02	1.9115E+00	3.8363E+04	1.2904E+03
9.6156E+00	2.1733E-02	2.3855E+00	4.7876E+04	1.2894E+03
9.6276E+00	2.9984E-02	3.2911E+00	6.6052E+04	1.2878E+03
9.6373E+00	2.8685E-02	3.1485E+00	6.3190E+04	1.2865E+03
9.6426E+00	3.0722E-02	3.3720E+00	6.7676E+04	1.2858E+03
9.6538E+00	2.7983E-02	3.0714E+00	6.1643E+04	1.2843E+03
9.6621E+00	2.1382E-02	2.3469E+00	4.7102E+04	1.2832E+03
9.6742E+00	2.1804E-02	2.3932E+00	4.8030E+04	1.2816E+03
9.6787E+00	1.8995E-02	2.0849E+00	4.1843E+04	1.2810E+03
9.6855E+00	2.1101E-02	2.3161E+00	4.6484E+04	1.2801E+03
9.6893E+00	1.6432E-02	1.8036E+00	3.6197E+04	1.2796E+03
9.7007E+00	1.6045E-02	1.7612E+00	3.5346E+04	1.2781E+03
9.7014E+00	1.7696E-02	1.9423E+00	3.8981E+04	1.2780E+03
9.7113E+00	1.8925E-02	2.0772E+00	4.1688E+04	1.2767E+03
9.7182E+00	1.6361E-02	1.7958E+00	3.6042E+04	1.2758E+03
9.7311E+00	2.3454E-02	2.5743E+00	5.1666E+04	1.2741E+03
9.7349E+00	2.3980E-02	2.6321E+00	5.2826E+04	1.2736E+03
9.7380E+00	2.2400E-02	2.4587E+00	4.9345E+04	1.2732E+03
9.7395E+00	2.2400E-02	2.4587E+00	4.9345E+04	1.2730E+03
9.7480E+00	1.9276E-02	2.1157E+00	4.2462E+04	1.2719E+03
9.7518E+00	1.9767E-02	2.1697E+00	4.3545E+04	1.2714E+03
9.7579E+00	2.2506E-02	2.4703E+00	4.9577E+04	1.2706E+03
9.7648E+00	1.7696E-02	1.9423E+00	3.8981E+04	1.2697E+03
9.7702E+00	2.2330E-02	2.4510E+00	4.9191E+04	1.2690E+03
9.7772E+00	2.3700E-02	2.6013E+00	5.2207E+04	1.2681E+03
9.7841E+00	1.9276E-02	2.1157E+00	4.2462E+04	1.2672E+03
9.7895E+00	2.0645E-02	2.2660E+00	4.5478E+04	1.2665E+03
9.7957E+00	1.8889E-02	2.0733E+00	4.1611E+04	1.2657E+03
9.8073E+00	1.6958E-02	1.8614E+00	3.7357E+04	1.2642E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.8174E+00	1.9837E-02	2.1774E+00	4.3699E+04	1.2629E+03
9.8205E+00	1.8047E-02	1.9808E+00	3.9755E+04	1.2625E+03
9.8268E+00	1.8925E-02	2.0772E+00	4.1688E+04	1.2617E+03
9.8408E+00	2.0153E-02	2.2121E+00	4.4395E+04	1.2599E+03
9.8494E+00	2.2400E-02	2.4587E+00	4.9345E+04	1.2588E+03
9.8564E+00	1.9592E-02	2.1504E+00	4.3158E+04	1.2579E+03
9.8627E+00	2.0575E-02	2.2583E+00	4.5323E+04	1.2571E+03
9.8651E+00	2.1417E-02	2.3508E+00	4.7180E+04	1.2568E+03
9.8745E+00	1.9205E-02	2.1080E+00	4.2307E+04	1.2556E+03
9.8808E+00	1.8152E-02	1.9924E+00	3.9987E+04	1.2548E+03
9.8847E+00	1.8328E-02	2.0117E+00	4.0373E+04	1.2543E+03
9.8903E+00	1.7415E-02	1.9115E+00	3.8363E+04	1.2536E+03
9.9029E+00	2.0329E-02	2.2313E+00	4.4782E+04	1.2520E+03
9.9084E+00	2.5455E-02	2.7940E+00	5.6074E+04	1.2513E+03
9.9116E+00	2.4683E-02	2.7092E+00	5.4373E+04	1.2509E+03
9.9203E+00	2.6333E-02	2.8903E+00	5.8008E+04	1.2498E+03
9.9243E+00	2.5209E-02	2.7670E+00	5.5533E+04	1.2493E+03
9.9402E+00	1.9241E-02	2.1119E+00	4.2384E+04	1.2473E+03
9.9490E+00	1.8082E-02	1.9847E+00	3.9832E+04	1.2462E+03
9.9514E+00	1.8749E-02	2.0579E+00	4.1302E+04	1.2459E+03
9.9570E+00	1.8644E-02	2.0463E+00	4.1070E+04	1.2452E+03
9.9634E+00	2.3173E-02	2.5435E+00	5.1047E+04	1.2444E+03
9.9706E+00	1.7977E-02	1.9731E+00	3.9600E+04	1.2435E+03
9.9746E+00	2.0224E-02	2.2198E+00	4.4550E+04	1.2430E+03
9.9874E+00	1.8538E-02	2.0348E+00	4.0838E+04	1.2414E+03
1.0002E+01	1.8012E-02	1.9770E+00	3.9677E+04	1.2396E+03
1.0008E+01	1.9837E-02	2.1774E+00	4.3699E+04	1.2389E+03
1.0012E+01	1.9241E-02	2.1119E+00	4.2384E+04	1.2384E+03
1.0015E+01	1.9767E-02	2.1697E+00	4.3545E+04	1.2380E+03
1.0028E+01	2.2646E-02	2.4857E+00	4.9887E+04	1.2364E+03
1.0034E+01	1.9978E-02	2.1928E+00	4.4009E+04	1.2357E+03
1.0037E+01	2.1558E-02	2.3662E+00	4.7489E+04	1.2353E+03
1.0046E+01	2.0048E-02	2.2005E+00	4.4163E+04	1.2342E+03
1.0051E+01	2.0048E-02	2.2005E+00	4.4163E+04	1.2336E+03
1.0054E+01	2.2997E-02	2.5242E+00	5.0660E+04	1.2332E+03
1.0064E+01	2.0504E-02	2.2506E+00	4.5169E+04	1.2320E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0079E+01	1.7871E-02	1.9616E+00	3.9368E+04	1.2301E+03
1.0088E+01	1.7309E-02	1.8999E+00	3.8130E+04	1.2290E+03
1.0094E+01	1.8644E-02	2.0463E+00	4.1070E+04	1.2283E+03
1.0104E+01	2.5631E-02	2.8132E+00	5.6461E+04	1.2271E+03
1.0112E+01	2.2014E-02	2.4163E+00	4.8495E+04	1.2261E+03
1.0116E+01	2.1488E-02	2.3585E+00	4.7334E+04	1.2256E+03
1.0122E+01	2.3840E-02	2.6167E+00	5.2516E+04	1.2249E+03
1.0134E+01	1.9627E-02	2.1542E+00	4.3235E+04	1.2235E+03
1.0146E+01	2.4226E-02	2.6591E+00	5.3367E+04	1.2220E+03
1.0153E+01	2.0645E-02	2.2660E+00	4.5478E+04	1.2211E+03
1.0171E+01	1.9908E-02	2.1851E+00	4.3854E+04	1.2190E+03
1.0184E+01	2.2576E-02	2.4780E+00	4.9732E+04	1.2174E+03
1.0192E+01	2.1944E-02	2.4086E+00	4.8340E+04	1.2165E+03
1.0199E+01	2.2962E-02	2.5204E+00	5.0583E+04	1.2157E+03
1.0213E+01	2.4472E-02	2.6861E+00	5.3909E+04	1.2140E+03
1.0222E+01	2.2857E-02	2.5088E+00	5.0351E+04	1.2129E+03
1.0235E+01	2.0048E-02	2.2005E+00	4.4163E+04	1.2114E+03
1.0241E+01	2.1417E-02	2.3508E+00	4.7180E+04	1.2107E+03
1.0253E+01	2.0294E-02	2.2275E+00	4.4705E+04	1.2092E+03
1.0256E+01	2.0750E-02	2.2776E+00	4.5710E+04	1.2089E+03
1.0268E+01	1.8573E-02	2.0386E+00	4.0915E+04	1.2075E+03
1.0275E+01	1.9627E-02	2.1542E+00	4.3235E+04	1.2066E+03
1.0280E+01	1.9802E-02	2.1735E+00	4.3622E+04	1.2061E+03
1.0290E+01	1.9662E-02	2.1581E+00	4.3313E+04	1.2049E+03
1.0299E+01	2.1242E-02	2.3315E+00	4.6793E+04	1.2039E+03
1.0310E+01	2.0680E-02	2.2699E+00	4.5555E+04	1.2026E+03
1.0317E+01	2.0680E-02	2.2699E+00	4.5555E+04	1.2018E+03
1.0327E+01	2.2436E-02	2.4625E+00	4.9423E+04	1.2006E+03
1.0336E+01	2.1312E-02	2.3392E+00	4.6948E+04	1.1995E+03
1.0341E+01	2.1628E-02	2.3739E+00	4.7644E+04	1.1990E+03
1.0346E+01	2.0469E-02	2.2467E+00	4.5091E+04	1.1984E+03
1.0362E+01	2.1944E-02	2.4086E+00	4.8340E+04	1.1965E+03
1.0374E+01	2.1136E-02	2.3200E+00	4.6561E+04	1.1951E+03
1.0379E+01	2.0364E-02	2.2352E+00	4.4859E+04	1.1946E+03
1.0381E+01	2.0399E-02	2.2390E+00	4.4937E+04	1.1943E+03
1.0390E+01	2.0996E-02	2.3045E+00	4.6252E+04	1.1933E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0397E+01	2.3103E-02	2.5358E+00	5.0892E+04	1.1925E+03
1.0404E+01	2.1172E-02	2.3238E+00	4.6638E+04	1.1917E+03
1.0410E+01	2.4577E-02	2.6976E+00	5.4141E+04	1.1910E+03
1.0424E+01	2.2120E-02	2.4279E+00	4.8727E+04	1.1894E+03
1.0428E+01	2.2365E-02	2.4548E+00	4.9268E+04	1.1889E+03
1.0437E+01	2.3384E-02	2.5666E+00	5.1511E+04	1.1879E+03
1.0444E+01	2.5666E-02	2.8171E+00	5.6538E+04	1.1871E+03
1.0449E+01	2.6649E-02	2.9250E+00	5.8704E+04	1.1866E+03
1.0458E+01	2.5947E-02	2.8479E+00	5.7157E+04	1.1855E+03
1.0468E+01	2.2295E-02	2.4471E+00	4.9113E+04	1.1844E+03
1.0480E+01	2.2084E-02	2.4240E+00	4.8649E+04	1.1831E+03
1.0485E+01	2.2049E-02	2.4202E+00	4.8572E+04	1.1825E+03
1.0490E+01	2.3032E-02	2.5281E+00	5.0738E+04	1.1819E+03
1.0496E+01	2.2260E-02	2.4433E+00	4.9036E+04	1.1813E+03
1.0503E+01	2.2681E-02	2.4895E+00	4.9964E+04	1.1805E+03
1.0514E+01	2.5771E-02	2.8287E+00	5.6770E+04	1.1792E+03
1.0522E+01	2.3138E-02	2.5396E+00	5.0970E+04	1.1783E+03
1.0531E+01	2.4296E-02	2.6668E+00	5.3522E+04	1.1773E+03
1.0536E+01	2.2681E-02	2.4895E+00	4.9964E+04	1.1768E+03
1.0544E+01	2.3700E-02	2.6013E+00	5.2207E+04	1.1759E+03
1.0557E+01	2.4507E-02	2.6899E+00	5.3986E+04	1.1744E+03
1.0568E+01	3.1073E-02	3.4106E+00	6.8449E+04	1.1732E+03
1.0578E+01	2.5771E-02	2.8287E+00	5.6770E+04	1.1721E+03
1.0592E+01	2.7175E-02	2.9828E+00	5.9864E+04	1.1706E+03
1.0605E+01	2.3735E-02	2.6051E+00	5.2284E+04	1.1691E+03
1.0608E+01	2.4472E-02	2.6861E+00	5.3909E+04	1.1688E+03
1.0613E+01	2.4367E-02	2.6745E+00	5.3677E+04	1.1682E+03
1.0622E+01	2.5034E-02	2.7477E+00	5.5146E+04	1.1672E+03
1.0626E+01	2.6227E-02	2.8788E+00	5.7776E+04	1.1668E+03
1.0632E+01	2.3700E-02	2.6013E+00	5.2207E+04	1.1661E+03
1.0643E+01	2.6438E-02	2.9019E+00	5.8240E+04	1.1649E+03
1.0652E+01	2.3454E-02	2.5743E+00	5.1666E+04	1.1639E+03
1.0662E+01	2.5385E-02	2.7863E+00	5.5920E+04	1.1629E+03
1.0676E+01	2.3770E-02	2.6090E+00	5.2362E+04	1.1613E+03
1.0682E+01	2.6438E-02	2.9019E+00	5.8240E+04	1.1607E+03
1.0690E+01	2.5841E-02	2.8364E+00	5.6925E+04	1.1598E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0700E+01	2.4507E-02	2.6899E+00	5.3986E+04	1.1587E+03
1.0706E+01	2.9458E-02	3.2333E+00	6.4891E+04	1.1581E+03
1.0712E+01	2.9423E-02	3.2294E+00	6.4814E+04	1.1574E+03
1.0716E+01	2.7316E-02	2.9982E+00	6.0173E+04	1.1570E+03
1.0721E+01	2.7316E-02	2.9982E+00	6.0173E+04	1.1565E+03
1.0726E+01	2.9423E-02	3.2294E+00	6.4814E+04	1.1559E+03
1.0735E+01	2.8475E-02	3.1254E+00	6.2726E+04	1.1549E+03
1.0746E+01	3.0335E-02	3.3296E+00	6.6825E+04	1.1538E+03
1.0762E+01	2.9001E-02	3.1832E+00	6.3886E+04	1.1521E+03
1.0773E+01	2.6930E-02	2.9558E+00	5.9323E+04	1.1509E+03
1.0780E+01	2.8931E-02	3.1755E+00	6.3731E+04	1.1501E+03
1.0794E+01	2.8615E-02	3.1408E+00	6.3035E+04	1.1486E+03
1.0802E+01	3.1670E-02	3.4761E+00	6.9764E+04	1.1478E+03
1.0819E+01	2.9668E-02	3.2564E+00	6.5355E+04	1.1460E+03
1.0831E+01	3.2372E-02	3.5532E+00	7.1311E+04	1.1447E+03
1.0834E+01	3.1283E-02	3.4337E+00	6.8913E+04	1.1444E+03
1.0846E+01	3.2266E-02	3.5416E+00	7.1079E+04	1.1431E+03
1.0860E+01	2.9914E-02	3.2834E+00	6.5897E+04	1.1417E+03
1.0864E+01	2.7772E-02	3.0483E+00	6.1179E+04	1.1412E+03
1.0876E+01	3.1038E-02	3.4067E+00	6.8372E+04	1.1400E+03
1.0888E+01	3.4092E-02	3.7420E+00	7.5101E+04	1.1387E+03
1.0895E+01	3.4303E-02	3.7651E+00	7.5565E+04	1.1380E+03
1.0900E+01	3.5813E-02	3.9308E+00	7.8891E+04	1.1375E+03
1.0908E+01	3.1986E-02	3.5108E+00	7.0460E+04	1.1366E+03
1.0914E+01	2.8264E-02	3.1023E+00	6.2262E+04	1.1360E+03
1.0920E+01	2.9563E-02	3.2449E+00	6.5123E+04	1.1354E+03
1.0930E+01	2.6789E-02	2.9404E+00	5.9013E+04	1.1343E+03
1.0935E+01	2.5631E-02	2.8132E+00	5.6461E+04	1.1338E+03
1.0940E+01	2.5350E-02	2.7824E+00	5.5842E+04	1.1333E+03
1.0945E+01	2.6192E-02	2.8749E+00	5.7698E+04	1.1328E+03
1.0954E+01	2.5947E-02	2.8479E+00	5.7157E+04	1.1319E+03
1.0958E+01	2.9001E-02	3.1832E+00	6.3886E+04	1.1314E+03
1.0968E+01	3.0160E-02	3.3104E+00	6.6438E+04	1.1304E+03
1.0976E+01	2.9317E-02	3.2179E+00	6.4582E+04	1.1296E+03
1.0981E+01	3.5813E-02	3.9308E+00	7.8891E+04	1.1291E+03
1.0989E+01	3.4127E-02	3.7458E+00	7.5178E+04	1.1283E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0998E+01	4.0026E-02	4.3933E+00	8.8172E+04	1.1273E+03
1.1002E+01	3.1038E-02	3.4067E+00	6.8372E+04	1.1269E+03
1.1009E+01	3.1810E-02	3.4915E+00	7.0073E+04	1.1262E+03
1.1011E+01	3.0827E-02	3.3836E+00	6.7908E+04	1.1260E+03
1.1020E+01	3.0511E-02	3.3489E+00	6.7212E+04	1.1251E+03
1.1023E+01	3.2512E-02	3.5686E+00	7.1620E+04	1.1248E+03
1.1031E+01	3.1705E-02	3.4799E+00	6.9841E+04	1.1240E+03
1.1045E+01	3.2231E-02	3.5377E+00	7.1002E+04	1.1225E+03
1.1057E+01	3.4900E-02	3.8306E+00	7.6880E+04	1.1213E+03
1.1074E+01	3.5110E-02	3.8538E+00	7.7344E+04	1.1196E+03
1.1079E+01	3.6164E-02	3.9694E+00	7.9664E+04	1.1191E+03
1.1087E+01	3.6164E-02	3.9694E+00	7.9664E+04	1.1183E+03
1.1091E+01	3.6515E-02	4.0079E+00	8.0438E+04	1.1179E+03
1.1095E+01	3.7919E-02	4.1621E+00	8.3531E+04	1.1175E+03
1.1105E+01	4.1430E-02	4.5474E+00	9.1266E+04	1.1165E+03
1.1119E+01	4.3537E-02	4.7787E+00	9.5906E+04	1.1151E+03
1.1126E+01	4.3537E-02	4.7787E+00	9.5906E+04	1.1144E+03
1.1138E+01	4.7399E-02	5.2026E+00	1.0441E+05	1.1132E+03
1.1146E+01	4.9155E-02	5.3953E+00	1.0828E+05	1.1124E+03
1.1154E+01	5.4421E-02	5.9733E+00	1.1988E+05	1.1116E+03
1.1165E+01	6.0039E-02	6.5899E+00	1.3226E+05	1.1105E+03
1.1171E+01	6.3901E-02	7.0138E+00	1.4077E+05	1.1099E+03
1.1181E+01	5.7581E-02	6.3202E+00	1.2684E+05	1.1089E+03
1.1187E+01	5.4421E-02	5.9733E+00	1.1988E+05	1.1083E+03
1.1192E+01	4.5644E-02	5.0099E+00	1.0055E+05	1.1078E+03
1.1198E+01	4.7750E-02	5.2411E+00	1.0519E+05	1.1072E+03
1.1210E+01	4.1430E-02	4.5474E+00	9.1266E+04	1.1060E+03
1.1220E+01	4.1079E-02	4.5089E+00	9.0492E+04	1.1050E+03
1.1226E+01	3.8973E-02	4.2777E+00	8.5852E+04	1.1044E+03
1.1232E+01	3.3952E-02	3.7266E+00	7.4791E+04	1.1038E+03
1.1239E+01	4.0026E-02	4.3933E+00	8.8172E+04	1.1032E+03
1.1250E+01	3.7217E-02	4.0850E+00	8.1984E+04	1.1021E+03
1.1255E+01	3.8270E-02	4.2006E+00	8.4305E+04	1.1016E+03
1.1265E+01	4.1781E-02	4.5860E+00	9.2039E+04	1.1006E+03
1.1276E+01	4.1781E-02	4.5860E+00	9.2039E+04	1.0995E+03
1.1293E+01	4.5644E-02	5.0099E+00	1.0055E+05	1.0979E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1301E+01	4.7399E-02	5.2026E+00	1.0441E+05	1.0971E+03
1.1313E+01	5.0559E-02	5.5494E+00	1.1138E+05	1.0959E+03
1.1327E+01	4.7048E-02	5.1640E+00	1.0364E+05	1.0946E+03
1.1339E+01	4.9506E-02	5.4338E+00	1.0905E+05	1.0934E+03
1.1347E+01	5.0208E-02	5.5109E+00	1.1060E+05	1.0927E+03
1.1357E+01	5.0910E-02	5.5879E+00	1.1215E+05	1.0917E+03
1.1363E+01	5.2666E-02	5.7806E+00	1.1602E+05	1.0911E+03
1.1375E+01	5.4772E-02	6.0119E+00	1.2066E+05	1.0900E+03
1.1388E+01	6.0741E-02	6.6670E+00	1.3380E+05	1.0887E+03
1.1399E+01	7.0572E-02	7.7460E+00	1.5546E+05	1.0877E+03
1.1408E+01	8.3212E-02	9.1334E+00	1.8330E+05	1.0868E+03
1.1416E+01	8.9883E-02	9.8656E+00	1.9800E+05	1.0861E+03
1.1431E+01	7.2679E-02	7.9773E+00	1.6010E+05	1.0846E+03
1.1448E+01	8.0052E-02	8.7866E+00	1.7634E+05	1.0830E+03
1.1463E+01	1.0709E-01	1.1754E+01	2.3590E+05	1.0816E+03
1.1482E+01	8.3563E-02	9.1719E+00	1.8408E+05	1.0798E+03
1.1503E+01	9.4798E-02	1.0405E+01	2.0883E+05	1.0778E+03
1.1512E+01	8.1105E-02	8.9022E+00	1.7866E+05	1.0770E+03
1.1523E+01	7.3381E-02	8.0543E+00	1.6165E+05	1.0760E+03
1.1530E+01	6.9519E-02	7.6304E+00	1.5314E+05	1.0753E+03
1.1545E+01	6.7061E-02	7.3607E+00	1.4773E+05	1.0739E+03
1.1553E+01	6.7061E-02	7.3607E+00	1.4773E+05	1.0732E+03
1.1558E+01	6.3550E-02	6.9753E+00	1.3999E+05	1.0727E+03
1.1564E+01	6.4252E-02	7.0524E+00	1.4154E+05	1.0722E+03
1.1572E+01	6.0741E-02	6.6670E+00	1.3380E+05	1.0714E+03
1.1580E+01	6.3550E-02	6.9753E+00	1.3999E+05	1.0707E+03
1.1588E+01	5.9337E-02	6.5128E+00	1.3071E+05	1.0699E+03
1.1599E+01	6.3550E-02	6.9753E+00	1.3999E+05	1.0689E+03
1.1604E+01	6.6359E-02	7.2836E+00	1.4618E+05	1.0685E+03
1.1613E+01	7.4785E-02	8.2085E+00	1.6474E+05	1.0676E+03
1.1620E+01	8.6021E-02	9.4417E+00	1.8949E+05	1.0670E+03
1.1626E+01	1.0533E-01	1.1561E+01	2.3203E+05	1.0664E+03
1.1641E+01	1.2921E-01	1.4182E+01	2.8463E+05	1.0651E+03
1.1657E+01	1.1200E-01	1.2293E+01	2.4673E+05	1.0636E+03
1.1668E+01	9.4798E-02	1.0405E+01	2.0883E+05	1.0626E+03
1.1678E+01	7.5838E-02	8.3241E+00	1.6706E+05	1.0617E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1702E+01	9.0234E-02	9.9041E+00	1.9877E+05	1.0595E+03
1.1710E+01	1.1235E-01	1.2332E+01	2.4750E+05	1.0588E+03
1.1736E+01	1.1481E-01	1.2602E+01	2.5291E+05	1.0564E+03
1.1746E+01	1.1165E-01	1.2255E+01	2.4595E+05	1.0555E+03
1.1755E+01	1.0919E-01	1.1985E+01	2.4054E+05	1.0547E+03
1.1761E+01	1.2991E-01	1.4259E+01	2.8617E+05	1.0542E+03
1.1781E+01	1.2113E-01	1.3295E+01	2.6684E+05	1.0524E+03
1.1801E+01	8.9532E-02	9.8271E+00	1.9723E+05	1.0506E+03
1.1807E+01	7.9701E-02	8.7480E+00	1.7557E+05	1.0501E+03
1.1814E+01	7.3381E-02	8.0543E+00	1.6165E+05	1.0495E+03
1.1833E+01	8.6723E-02	9.5188E+00	1.9104E+05	1.0478E+03
1.1841E+01	1.0182E-01	1.1176E+01	2.2430E+05	1.0471E+03
1.1846E+01	1.1481E-01	1.2602E+01	2.5291E+05	1.0466E+03
1.1861E+01	1.4395E-01	1.5800E+01	3.1711E+05	1.0453E+03
1.1875E+01	1.5449E-01	1.6957E+01	3.4031E+05	1.0441E+03
1.1882E+01	1.5449E-01	1.6957E+01	3.4031E+05	1.0435E+03
1.1888E+01	1.5800E-01	1.7342E+01	3.4805E+05	1.0429E+03
1.1893E+01	1.6151E-01	1.7727E+01	3.5578E+05	1.0425E+03
1.1911E+01	1.5800E-01	1.7342E+01	3.4805E+05	1.0409E+03
1.1923E+01	1.1481E-01	1.2602E+01	2.5291E+05	1.0399E+03
1.1932E+01	7.0572E-02	7.7460E+00	1.5546E+05	1.0391E+03
1.1943E+01	1.3307E-01	1.4606E+01	2.9313E+05	1.0381E+03
1.1954E+01	1.5800E-01	1.7342E+01	3.4805E+05	1.0372E+03
1.1962E+01	1.4395E-01	1.5800E+01	3.1711E+05	1.0365E+03
1.1973E+01	1.4044E-01	1.5415E+01	3.0938E+05	1.0355E+03
1.1987E+01	1.6151E-01	1.7727E+01	3.5578E+05	1.0343E+03
1.1995E+01	1.6853E-01	1.8498E+01	3.7125E+05	1.0336E+03
1.2015E+01	1.2991E-01	1.4259E+01	2.8617E+05	1.0319E+03
1.2028E+01	8.6372E-02	9.4802E+00	1.9027E+05	1.0308E+03
1.2035E+01	8.4265E-02	9.2490E+00	1.8563E+05	1.0302E+03
1.2045E+01	9.4447E-02	1.0367E+01	2.0805E+05	1.0293E+03
1.2058E+01	1.1200E-01	1.2293E+01	2.4673E+05	1.0282E+03
1.2071E+01	1.3869E-01	1.5222E+01	3.0551E+05	1.0271E+03
1.2088E+01	1.8257E-01	2.0040E+01	4.0219E+05	1.0257E+03
1.2100E+01	2.0715E-01	2.2737E+01	4.5633E+05	1.0247E+03
1.2115E+01	2.3875E-01	2.6206E+01	5.2594E+05	1.0234E+03

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2127E+01	2.1768E-01	2.3893E+01	4.7953E+05	1.0224E+03
1.2146E+01	2.4226E-01	2.6591E+01	5.3367E+05	1.0208E+03
1.2162E+01	2.0153E-01	2.2121E+01	4.4395E+05	1.0194E+03
1.2182E+01	2.0715E-01	2.2737E+01	4.5633E+05	1.0178E+03
1.2192E+01	2.1066E-01	2.3123E+01	4.6406E+05	1.0169E+03
1.2203E+01	1.8257E-01	2.0040E+01	4.0219E+05	1.0160E+03
1.2225E+01	1.7555E-01	1.9269E+01	3.8672E+05	1.0142E+03
1.2233E+01	1.7204E-01	1.8883E+01	3.7898E+05	1.0135E+03
1.2248E+01	1.4746E-01	1.6186E+01	3.2484E+05	1.0123E+03
1.2257E+01	1.4395E-01	1.5800E+01	3.1711E+05	1.0115E+03
1.2266E+01	1.5097E-01	1.6571E+01	3.3258E+05	1.0108E+03
1.2276E+01	1.6151E-01	1.7727E+01	3.5578E+05	1.0100E+03
1.2283E+01	1.7555E-01	1.9269E+01	3.8672E+05	1.0094E+03
1.2290E+01	1.8257E-01	2.0040E+01	4.0219E+05	1.0088E+03
1.2305E+01	1.8609E-01	2.0425E+01	4.0992E+05	1.0076E+03
1.2322E+01	1.9311E-01	2.1196E+01	4.2539E+05	1.0062E+03
1.2331E+01	2.0013E-01	2.1966E+01	4.4086E+05	1.0055E+03
1.2342E+01	1.9662E-01	2.1581E+01	4.3313E+05	1.0046E+03
1.2349E+01	2.1066E-01	2.3123E+01	4.6406E+05	1.0040E+03
1.2366E+01	2.4226E-01	2.6591E+01	5.3367E+05	1.0026E+03
1.2375E+01	2.6684E-01	2.9289E+01	5.8781E+05	1.0019E+03
1.2390E+01	2.9142E-01	3.1986E+01	6.4195E+05	1.0007E+03
1.2398E+01	2.6684E-01	2.9289E+01	5.8781E+05	1.0000E+03
1.2413E+01	2.5280E-01	2.7747E+01	5.5688E+05	9.9880E+02
1.2428E+01	2.1768E-01	2.3893E+01	4.7953E+05	9.9760E+02
1.2441E+01	1.6151E-01	1.7727E+01	3.5578E+05	9.9660E+02
1.2447E+01	1.6151E-01	1.7727E+01	3.5578E+05	9.9610E+02
1.2458E+01	1.5449E-01	1.6957E+01	3.4031E+05	9.9520E+02
1.2471E+01	1.8257E-01	2.0040E+01	4.0219E+05	9.9420E+02
1.2482E+01	1.8960E-01	2.0810E+01	4.1766E+05	9.9330E+02
1.2502E+01	1.5800E-01	1.7342E+01	3.4805E+05	9.9170E+02
1.2516E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.9060E+02
1.2529E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.8960E+02
1.2543E+01	1.7555E-01	1.9269E+01	3.8672E+05	9.8850E+02
1.2563E+01	1.8257E-01	2.0040E+01	4.0219E+05	9.8690E+02
1.2573E+01	1.9662E-01	2.1581E+01	4.3313E+05	9.8610E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2592E+01	2.5280E-01	2.7747E+01	5.5688E+05	9.8460E+02
1.2603E+01	2.7737E-01	3.0445E+01	6.1102E+05	9.8380E+02
1.2624E+01	2.8439E-01	3.1215E+01	6.2648E+05	9.8210E+02
1.2635E+01	1.8960E-01	2.0810E+01	4.1766E+05	9.8130E+02
1.2650E+01	1.6151E-01	1.7727E+01	3.5578E+05	9.8010E+02
1.2662E+01	1.7555E-01	1.9269E+01	3.8672E+05	9.7920E+02
1.2671E+01	1.8609E-01	2.0425E+01	4.0992E+05	9.7850E+02
1.2684E+01	1.9662E-01	2.1581E+01	4.3313E+05	9.7750E+02
1.2694E+01	1.6853E-01	1.8498E+01	3.7125E+05	9.7670E+02
1.2701E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.7620E+02
1.2722E+01	1.8960E-01	2.0810E+01	4.1766E+05	9.7460E+02
1.2737E+01	1.9662E-01	2.1581E+01	4.3313E+05	9.7340E+02
1.2749E+01	2.0715E-01	2.2737E+01	4.5633E+05	9.7250E+02
1.2778E+01	1.9662E-01	2.1581E+01	4.3313E+05	9.7030E+02
1.2792E+01	2.0364E-01	2.2352E+01	4.4859E+05	9.6920E+02
1.2804E+01	2.0013E-01	2.1966E+01	4.4086E+05	9.6830E+02
1.2815E+01	1.8609E-01	2.0425E+01	4.0992E+05	9.6750E+02
1.2835E+01	1.8257E-01	2.0040E+01	4.0219E+05	9.6600E+02
1.2851E+01	1.6502E-01	1.8113E+01	3.6352E+05	9.6480E+02
1.2860E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.6410E+02
1.2877E+01	1.7555E-01	1.9269E+01	3.8672E+05	9.6280E+02
1.2892E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.6170E+02
1.2906E+01	1.9311E-01	2.1196E+01	4.2539E+05	9.6070E+02
1.2915E+01	1.8960E-01	2.0810E+01	4.1766E+05	9.6000E+02
1.2937E+01	1.5800E-01	1.7342E+01	3.4805E+05	9.5840E+02
1.2945E+01	1.6151E-01	1.7727E+01	3.5578E+05	9.5780E+02
1.2957E+01	1.6151E-01	1.7727E+01	3.5578E+05	9.5690E+02
1.2973E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.5570E+02
1.2985E+01	1.8257E-01	2.0040E+01	4.0219E+05	9.5480E+02
1.3000E+01	1.5835E-01	1.7380E+01	3.4882E+05	9.5370E+02
1.3019E+01	1.3096E-01	1.4374E+01	2.8849E+05	9.5230E+02
1.3039E+01	1.3834E-01	1.5184E+01	3.0473E+05	9.5090E+02
1.3055E+01	1.3693E-01	1.5030E+01	3.0164E+05	9.4970E+02
1.3063E+01	1.2605E-01	1.3835E+01	2.7766E+05	9.4910E+02
1.3077E+01	1.4395E-01	1.5800E+01	3.1711E+05	9.4810E+02
1.3096E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.4670E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3106E+01	1.8960E-01	2.0810E+01	4.1766E+05	9.4600E+02
1.3117E+01	2.0364E-01	2.2352E+01	4.4859E+05	9.4520E+02
1.3123E+01	2.1066E-01	2.3123E+01	4.6406E+05	9.4480E+02
1.3145E+01	3.4057E-01	3.7381E+01	7.5023E+05	9.4320E+02
1.3159E+01	3.2302E-01	3.5455E+01	7.1156E+05	9.4220E+02
1.3167E+01	3.8973E-01	4.2777E+01	8.5852E+05	9.4160E+02
1.3187E+01	2.9142E-01	3.1986E+01	6.4195E+05	9.4020E+02
1.3224E+01	1.7204E-01	1.8883E+01	3.7898E+05	9.3760E+02
1.3233E+01	1.5097E-01	1.6571E+01	3.3258E+05	9.3690E+02
1.3243E+01	1.4746E-01	1.6186E+01	3.2484E+05	9.3620E+02
1.3252E+01	1.4395E-01	1.5800E+01	3.1711E+05	9.3560E+02
1.3266E+01	1.4395E-01	1.5800E+01	3.1711E+05	9.3460E+02
1.3289E+01	2.0013E-01	2.1966E+01	4.4086E+05	9.3300E+02
1.3310E+01	2.8791E-01	3.1601E+01	6.3422E+05	9.3150E+02
1.3327E+01	3.0546E-01	3.3528E+01	6.7289E+05	9.3030E+02
1.3332E+01	2.9493E-01	3.2372E+01	6.4969E+05	9.3000E+02
1.3349E+01	2.7386E-01	3.0059E+01	6.0328E+05	9.2880E+02
1.3378E+01	3.2653E-01	3.5840E+01	7.1930E+05	9.2680E+02
1.3389E+01	3.1248E-01	3.4298E+01	6.8836E+05	9.2600E+02
1.3392E+01	3.1599E-01	3.4684E+01	6.9609E+05	9.2580E+02
1.3402E+01	3.0897E-01	3.3913E+01	6.8063E+05	9.2510E+02
1.3407E+01	3.2302E-01	3.5455E+01	7.1156E+05	9.2480E+02
1.3412E+01	3.3004E-01	3.6225E+01	7.2703E+05	9.2440E+02
1.3418E+01	3.1248E-01	3.4298E+01	6.8836E+05	9.2400E+02
1.3427E+01	3.1248E-01	3.4298E+01	6.8836E+05	9.2340E+02
1.3443E+01	2.8791E-01	3.1601E+01	6.3422E+05	9.2230E+02
1.3456E+01	2.7737E-01	3.0445E+01	6.1102E+05	9.2140E+02
1.3477E+01	3.0897E-01	3.3913E+01	6.8063E+05	9.2000E+02
1.3491E+01	3.2653E-01	3.5840E+01	7.1930E+05	9.1900E+02
1.3509E+01	2.9493E-01	3.2372E+01	6.4969E+05	9.1780E+02
1.3521E+01	2.9493E-01	3.2372E+01	6.4969E+05	9.1700E+02
1.3535E+01	2.8439E-01	3.1215E+01	6.2648E+05	9.1600E+02
1.3553E+01	2.6333E-01	2.8903E+01	5.8008E+05	9.1480E+02
1.3562E+01	2.6684E-01	2.9289E+01	5.8781E+05	9.1420E+02
1.3574E+01	2.5631E-01	2.8132E+01	5.6461E+05	9.1340E+02
1.3593E+01	2.7035E-01	2.9674E+01	5.9555E+05	9.1210E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3604E+01	2.7737E-01	3.0445E+01	6.1102E+05	9.1140E+02
1.3617E+01	3.0195E-01	3.3142E+01	6.6516E+05	9.1050E+02
1.3647E+01	4.2484E-01	4.6630E+01	9.3586E+05	9.0850E+02
1.3661E+01	5.0910E-01	5.5879E+01	1.1215E+06	9.0760E+02
1.3673E+01	4.7048E-01	5.1640E+01	1.0364E+06	9.0680E+02
1.3683E+01	3.8621E-01	4.2391E+01	8.5078E+05	9.0610E+02
1.3698E+01	2.6684E-01	2.9289E+01	5.8781E+05	9.0510E+02
1.3720E+01	2.3875E-01	2.6206E+01	5.2594E+05	9.0370E+02
1.3733E+01	2.3173E-01	2.5435E+01	5.1047E+05	9.0280E+02
1.3739E+01	2.3524E-01	2.5820E+01	5.1820E+05	9.0240E+02
1.3753E+01	2.4928E-01	2.7362E+01	5.4914E+05	9.0150E+02
1.3761E+01	2.6333E-01	2.8903E+01	5.8008E+05	9.0100E+02
1.3782E+01	3.9324E-01	4.3162E+01	8.6625E+05	8.9960E+02
1.3796E+01	7.4785E-01	8.2085E+01	1.6474E+06	8.9870E+02
1.3807E+01	1.4817E+00	1.6263E+02	3.2639E+06	8.9800E+02
1.3817E+01	3.1564E+00	3.4645E+02	6.9532E+06	8.9730E+02
1.3824E+01	1.5729E+00	1.7265E+02	3.4650E+06	8.9690E+02
1.3828E+01	9.3043E-01	1.0212E+02	2.0496E+06	8.9660E+02
1.3844E+01	3.5813E-01	3.9308E+01	7.8891E+05	8.9560E+02
1.3861E+01	2.3173E-01	2.5435E+01	5.1047E+05	8.9450E+02
1.3862E+01	2.3173E-01	2.5435E+01	5.1047E+05	8.9440E+02
1.3889E+01	1.6853E-01	1.8498E+01	3.7125E+05	8.9270E+02
1.3900E+01	1.7204E-01	1.8883E+01	3.7898E+05	8.9200E+02
1.3917E+01	2.3875E-01	2.6206E+01	5.2594E+05	8.9090E+02
1.3940E+01	6.6710E-01	7.3221E+01	1.4695E+06	8.8940E+02
1.3956E+01	2.1768E-01	2.3893E+01	4.7953E+05	8.8840E+02
1.3964E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.8790E+02
1.3968E+01	1.7906E-01	1.9654E+01	3.9445E+05	8.8760E+02
1.3973E+01	1.7555E-01	1.9269E+01	3.8672E+05	8.8730E+02
1.3981E+01	1.6151E-01	1.7727E+01	3.5578E+05	8.8680E+02
1.3989E+01	1.9311E-01	2.1196E+01	4.2539E+05	8.8630E+02
1.3998E+01	3.1599E-01	3.4684E+01	6.9609E+05	8.8570E+02
1.4005E+01	3.3706E-01	3.6996E+01	7.4250E+05	8.8530E+02
1.4010E+01	3.5813E-01	3.9308E+01	7.8891E+05	8.8500E+02
1.4021E+01	1.8609E-01	2.0425E+01	4.0992E+05	8.8430E+02
1.4025E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.8400E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4035E+01	1.9662E-01	2.1581E+01	4.3313E+05	8.8340E+02
1.4041E+01	2.6333E-01	2.8903E+01	5.8008E+05	8.8300E+02
1.4049E+01	3.2302E-01	3.5455E+01	7.1156E+05	8.8250E+02
1.4052E+01	2.8439E-01	3.1215E+01	6.2648E+05	8.8230E+02
1.4060E+01	3.4408E-01	3.7767E+01	7.5797E+05	8.8180E+02
1.4072E+01	2.1944E-01	2.4086E+01	4.8340E+05	8.8110E+02
1.4086E+01	1.6853E-01	1.8498E+01	3.7125E+05	8.8020E+02
1.4092E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.7980E+02
1.4099E+01	1.6151E-01	1.7727E+01	3.5578E+05	8.7940E+02
1.4107E+01	1.7906E-01	1.9654E+01	3.9445E+05	8.7890E+02
1.4112E+01	1.8609E-01	2.0425E+01	4.0992E+05	8.7860E+02
1.4118E+01	1.9311E-01	2.1196E+01	4.2539E+05	8.7820E+02
1.4123E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.7790E+02
1.4141E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.7680E+02
1.4145E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.7650E+02
1.4150E+01	1.3307E-01	1.4606E+01	2.9313E+05	8.7620E+02
1.4152E+01	1.3377E-01	1.4683E+01	2.9468E+05	8.7610E+02
1.4157E+01	1.3307E-01	1.4606E+01	2.9313E+05	8.7580E+02
1.4162E+01	1.2499E-01	1.3719E+01	2.7534E+05	8.7550E+02
1.4168E+01	1.2499E-01	1.3719E+01	2.7534E+05	8.7510E+02
1.4173E+01	1.1902E-01	1.3064E+01	2.6220E+05	8.7480E+02
1.4181E+01	1.2008E-01	1.3180E+01	2.6452E+05	8.7430E+02
1.4186E+01	1.2815E-01	1.4066E+01	2.8230E+05	8.7400E+02
1.4200E+01	1.3588E-01	1.4914E+01	2.9932E+05	8.7310E+02
1.4205E+01	1.3166E-01	1.4452E+01	2.9004E+05	8.7280E+02
1.4217E+01	1.2850E-01	1.4105E+01	2.8308E+05	8.7210E+02
1.4223E+01	1.3061E-01	1.4336E+01	2.8772E+05	8.7170E+02
1.4228E+01	1.2534E-01	1.3758E+01	2.7612E+05	8.7140E+02
1.4233E+01	1.4009E-01	1.5376E+01	3.0860E+05	8.7110E+02
1.4246E+01	2.1066E-01	2.3123E+01	4.6406E+05	8.7030E+02
1.4251E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.7000E+02
1.4261E+01	2.4226E-01	2.6591E+01	5.3367E+05	8.6940E+02
1.4269E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.6890E+02
1.4274E+01	1.8609E-01	2.0425E+01	4.0992E+05	8.6860E+02
1.4289E+01	1.3061E-01	1.4336E+01	2.8772E+05	8.6770E+02
1.4299E+01	1.2359E-01	1.3565E+01	2.7225E+05	8.6710E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4305E+01	1.3553E-01	1.4875E+01	2.9855E+05	8.6670E+02
1.4312E+01	1.2710E-01	1.3951E+01	2.7998E+05	8.6630E+02
1.4319E+01	1.3658E-01	1.4991E+01	3.0087E+05	8.6590E+02
1.4328E+01	1.0674E-01	1.1715E+01	2.3513E+05	8.6530E+02
1.4333E+01	1.0147E-01	1.1137E+01	2.2352E+05	8.6500E+02
1.4338E+01	1.0814E-01	1.1870E+01	2.3822E+05	8.6470E+02
1.4343E+01	1.2429E-01	1.3642E+01	2.7380E+05	8.6440E+02
1.4350E+01	1.4746E-01	1.6186E+01	3.2484E+05	8.6400E+02
1.4355E+01	2.0715E-01	2.2737E+01	4.5633E+05	8.6370E+02
1.4362E+01	1.9662E-01	2.1581E+01	4.3313E+05	8.6330E+02
1.4368E+01	2.3875E-01	2.6206E+01	5.2594E+05	8.6290E+02
1.4378E+01	1.3904E-01	1.5261E+01	3.0628E+05	8.6230E+02
1.4383E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.6200E+02
1.4392E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.6150E+02
1.4398E+01	1.6151E-01	1.7727E+01	3.5578E+05	8.6110E+02
1.4407E+01	2.0364E-01	2.2352E+01	4.4859E+05	8.6060E+02
1.4413E+01	1.2394E-01	1.3604E+01	2.7302E+05	8.6020E+02
1.4420E+01	1.2289E-01	1.3488E+01	2.7070E+05	8.5980E+02
1.4425E+01	1.2324E-01	1.3527E+01	2.7148E+05	8.5950E+02
1.4432E+01	1.1762E-01	1.2910E+01	2.5910E+05	8.5910E+02
1.4447E+01	1.2850E-01	1.4105E+01	2.8308E+05	8.5820E+02
1.4452E+01	1.2675E-01	1.3912E+01	2.7921E+05	8.5790E+02
1.4457E+01	1.4746E-01	1.6186E+01	3.2484E+05	8.5760E+02
1.4467E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.5700E+02
1.4472E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.5670E+02
1.4479E+01	1.7555E-01	1.9269E+01	3.8672E+05	8.5630E+02
1.4491E+01	1.3588E-01	1.4914E+01	2.9932E+05	8.5560E+02
1.4513E+01	1.7555E-01	1.9269E+01	3.8672E+05	8.5430E+02
1.4538E+01	2.0715E-01	2.2737E+01	4.5633E+05	8.5280E+02
1.4552E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.5200E+02
1.4564E+01	2.1417E-01	2.3508E+01	4.7180E+05	8.5130E+02
1.4592E+01	1.3869E-01	1.5222E+01	3.0551E+05	8.4970E+02
1.4607E+01	1.3939E-01	1.5299E+01	3.0705E+05	8.4880E+02
1.4612E+01	1.4044E-01	1.5415E+01	3.0938E+05	8.4850E+02
1.4638E+01	1.2289E-01	1.3488E+01	2.7070E+05	8.4700E+02
1.4680E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.4460E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4699E+01	2.1768E-01	2.3893E+01	4.7953E+05	8.4350E+02
1.4709E+01	2.2120E-01	2.4279E+01	4.8727E+05	8.4290E+02
1.4716E+01	1.7906E-01	1.9654E+01	3.9445E+05	8.4250E+02
1.4725E+01	1.3798E-01	1.5145E+01	3.0396E+05	8.4200E+02
1.4734E+01	1.2008E-01	1.3180E+01	2.6452E+05	8.4150E+02
1.4751E+01	1.3693E-01	1.5030E+01	3.0164E+05	8.4050E+02
1.4760E+01	1.3412E-01	1.4721E+01	2.9545E+05	8.4000E+02
1.4765E+01	1.2886E-01	1.4143E+01	2.8385E+05	8.3970E+02
1.4772E+01	1.3131E-01	1.4413E+01	2.8927E+05	8.3930E+02
1.4786E+01	1.1411E-01	1.2525E+01	2.5137E+05	8.3850E+02
1.4802E+01	1.2956E-01	1.4220E+01	2.8540E+05	8.3760E+02
1.4808E+01	1.2780E-01	1.4028E+01	2.8153E+05	8.3730E+02
1.4832E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.3590E+02
1.4838E+01	1.7204E-01	1.8883E+01	3.7898E+05	8.3560E+02
1.4845E+01	2.1066E-01	2.3123E+01	4.6406E+05	8.3520E+02
1.4856E+01	1.9311E-01	2.1196E+01	4.2539E+05	8.3460E+02
1.4861E+01	1.9662E-01	2.1581E+01	4.3313E+05	8.3430E+02
1.4866E+01	1.6151E-01	1.7727E+01	3.5578E+05	8.3400E+02
1.4872E+01	1.7204E-01	1.8883E+01	3.7898E+05	8.3370E+02
1.4880E+01	1.9662E-01	2.1581E+01	4.3313E+05	8.3320E+02
1.4888E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.3280E+02
1.4893E+01	1.2359E-01	1.3565E+01	2.7225E+05	8.3250E+02
1.4909E+01	1.1516E-01	1.2640E+01	2.5369E+05	8.3160E+02
1.4918E+01	1.2464E-01	1.3681E+01	2.7457E+05	8.3110E+02
1.4929E+01	1.0287E-01	1.1291E+01	2.2662E+05	8.3050E+02
1.4949E+01	1.3237E-01	1.4529E+01	2.9159E+05	8.2940E+02
1.4954E+01	1.2254E-01	1.3450E+01	2.6993E+05	8.2910E+02
1.4961E+01	1.2394E-01	1.3604E+01	2.7302E+05	8.2870E+02
1.4972E+01	1.4044E-01	1.5415E+01	3.0938E+05	8.2810E+02
1.4978E+01	1.4220E-01	1.5608E+01	3.1324E+05	8.2780E+02
1.4988E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.2720E+02
1.4994E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.2690E+02
1.4999E+01	1.5800E-01	1.7342E+01	3.4805E+05	8.2660E+02
1.5007E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.2620E+02
1.5017E+01	1.2218E-01	1.3411E+01	2.6916E+05	8.2560E+02
1.5023E+01	1.1762E-01	1.2910E+01	2.5910E+05	8.2530E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5030E+01	1.1095E-01	1.2178E+01	2.4441E+05	8.2490E+02
1.5037E+01	1.2324E-01	1.3527E+01	2.7148E+05	8.2450E+02
1.5047E+01	1.1270E-01	1.2371E+01	2.4827E+05	8.2400E+02
1.5052E+01	1.1516E-01	1.2640E+01	2.5369E+05	8.2370E+02
1.5065E+01	7.4434E-02	8.1700E+00	1.6397E+05	8.2300E+02
1.5074E+01	7.5136E-02	8.2470E+00	1.6552E+05	8.2250E+02
1.5091E+01	1.4009E-01	1.5376E+01	3.0860E+05	8.2160E+02
1.5098E+01	1.3447E-01	1.4760E+01	2.9623E+05	8.2120E+02
1.5103E+01	1.5097E-01	1.6571E+01	3.3258E+05	8.2090E+02
1.5111E+01	1.4044E-01	1.5415E+01	3.0938E+05	8.2050E+02
1.5116E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.2020E+02
1.5122E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.1990E+02
1.5129E+01	1.6151E-01	1.7727E+01	3.5578E+05	8.1950E+02
1.5142E+01	1.1200E-01	1.2293E+01	2.4673E+05	8.1880E+02
1.5148E+01	1.0463E-01	1.1484E+01	2.3048E+05	8.1850E+02
1.5153E+01	1.0849E-01	1.1908E+01	2.3899E+05	8.1820E+02
1.5159E+01	9.3394E-02	1.0251E+01	2.0573E+05	8.1790E+02
1.5164E+01	8.9883E-02	9.8656E+00	1.9800E+05	8.1760E+02
1.5170E+01	1.0393E-01	1.1407E+01	2.2894E+05	8.1730E+02
1.5179E+01	1.0638E-01	1.1677E+01	2.3435E+05	8.1680E+02
1.5185E+01	1.0709E-01	1.1754E+01	2.3590E+05	8.1650E+02
1.5190E+01	1.0814E-01	1.1870E+01	2.3822E+05	8.1620E+02
1.5198E+01	8.8127E-02	9.6729E+00	1.9413E+05	8.1580E+02
1.5203E+01	8.9180E-02	9.7885E+00	1.9645E+05	8.1550E+02
1.5213E+01	7.4785E-02	8.2085E+00	1.6474E+05	8.1500E+02
1.5222E+01	7.5838E-02	8.3241E+00	1.6706E+05	8.1450E+02
1.5241E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.1350E+02
1.5246E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.1320E+02
1.5256E+01	2.2822E-01	2.5049E+01	5.0273E+05	8.1270E+02
1.5265E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.1220E+02
1.5295E+01	9.5851E-01	1.0521E+02	2.1115E+06	8.1060E+02
1.5312E+01	6.0741E-01	6.6670E+01	1.3380E+06	8.0970E+02
1.5318E+01	6.7412E-01	7.3992E+01	1.4850E+06	8.0940E+02
1.5326E+01	3.3355E-01	3.6611E+01	7.3477E+05	8.0900E+02
1.5339E+01	1.7555E-01	1.9269E+01	3.8672E+05	8.0830E+02
1.5348E+01	2.2120E-01	2.4279E+01	4.8727E+05	8.0780E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5358E+01	1.7906E-01	1.9654E+01	3.9445E+05	8.0730E+02
1.5364E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.0700E+02
1.5373E+01	1.4395E-01	1.5800E+01	3.1711E+05	8.0650E+02
1.5383E+01	1.2078E-01	1.3257E+01	2.6606E+05	8.0600E+02
1.5394E+01	1.7906E-01	1.9654E+01	3.9445E+05	8.0540E+02
1.5400E+01	1.6502E-01	1.8113E+01	3.6352E+05	8.0510E+02
1.5406E+01	1.8609E-01	2.0425E+01	4.0992E+05	8.0480E+02
1.5413E+01	2.1417E-01	2.3508E+01	4.7180E+05	8.0440E+02
1.5419E+01	1.8257E-01	2.0040E+01	4.0219E+05	8.0410E+02
1.5427E+01	2.0364E-01	2.2352E+01	4.4859E+05	8.0370E+02
1.5446E+01	2.5631E-01	2.8132E+01	5.6461E+05	8.0270E+02
1.5457E+01	3.1950E-01	3.5069E+01	7.0383E+05	8.0210E+02
1.5471E+01	2.4928E-01	2.7362E+01	5.4914E+05	8.0140E+02
1.5492E+01	3.2653E-01	3.5840E+01	7.1930E+05	8.0030E+02
1.5498E+01	3.0897E-01	3.3913E+01	6.8063E+05	8.0000E+02
1.5504E+01	3.5813E-01	3.9308E+01	7.8891E+05	7.9970E+02
1.5512E+01	2.0364E-01	2.2352E+01	4.4859E+05	7.9930E+02
1.5529E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.9840E+02
1.5537E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.9800E+02
1.5543E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.9770E+02
1.5549E+01	1.6151E-01	1.7727E+01	3.5578E+05	7.9740E+02
1.5558E+01	1.8609E-01	2.0425E+01	4.0992E+05	7.9690E+02
1.5566E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.9650E+02
1.5586E+01	1.8609E-01	2.0425E+01	4.0992E+05	7.9550E+02
1.5607E+01	1.5097E-01	1.6571E+01	3.3258E+05	7.9440E+02
1.5617E+01	1.4395E-01	1.5800E+01	3.1711E+05	7.9390E+02
1.5653E+01	3.1950E-01	3.5069E+01	7.0383E+05	7.9210E+02
1.5692E+01	1.6151E-01	1.7727E+01	3.5578E+05	7.9010E+02
1.5706E+01	1.6502E-01	1.8113E+01	3.6352E+05	7.8940E+02
1.5722E+01	1.2675E-01	1.3912E+01	2.7921E+05	7.8860E+02
1.5734E+01	1.3588E-01	1.4914E+01	2.9932E+05	7.8800E+02
1.5746E+01	1.7906E-01	1.9654E+01	3.9445E+05	7.8740E+02
1.5752E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.8710E+02
1.5760E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.8670E+02
1.5770E+01	1.4395E-01	1.5800E+01	3.1711E+05	7.8620E+02
1.5778E+01	1.6151E-01	1.7727E+01	3.5578E+05	7.8580E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5792E+01	1.9662E-01	2.1581E+01	4.3313E+05	7.8510E+02
1.5808E+01	2.1417E-01	2.3508E+01	4.7180E+05	7.8430E+02
1.5822E+01	1.0217E+00	1.1214E+02	2.2507E+06	7.8360E+02
1.5847E+01	1.1025E-01	1.2101E+01	2.4286E+05	7.8240E+02
1.5857E+01	1.2008E-01	1.3180E+01	2.6452E+05	7.8190E+02
1.5865E+01	8.1807E-02	8.9792E+00	1.8021E+05	7.8150E+02
1.5871E+01	8.4616E-02	9.2875E+00	1.8640E+05	7.8120E+02
1.5881E+01	7.0572E-02	7.7460E+00	1.5546E+05	7.8070E+02
1.5891E+01	7.7945E-02	8.5553E+00	1.7170E+05	7.8020E+02
1.5904E+01	7.9350E-02	8.7095E+00	1.7480E+05	7.7960E+02
1.5951E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.7730E+02
1.5959E+01	1.5097E-01	1.6571E+01	3.3258E+05	7.7690E+02
1.5965E+01	1.6151E-01	1.7727E+01	3.5578E+05	7.7660E+02
1.5977E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.7600E+02
1.5984E+01	1.3904E-01	1.5261E+01	3.0628E+05	7.7570E+02
1.5994E+01	1.4395E-01	1.5800E+01	3.1711E+05	7.7520E+02
1.6006E+01	9.7256E-02	1.0675E+01	2.1424E+05	7.7460E+02
1.6019E+01	9.7607E-02	1.0713E+01	2.1502E+05	7.7400E+02
1.6027E+01	1.1622E-01	1.2756E+01	2.5601E+05	7.7360E+02
1.6033E+01	1.1938E-01	1.3103E+01	2.6297E+05	7.7330E+02
1.6039E+01	1.3693E-01	1.5030E+01	3.0164E+05	7.7300E+02
1.6046E+01	1.2464E-01	1.3681E+01	2.7457E+05	7.7270E+02
1.6052E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.7240E+02
1.6058E+01	1.2499E-01	1.3719E+01	2.7534E+05	7.7210E+02
1.6075E+01	6.6359E-01	7.2836E+01	1.4618E+06	7.7130E+02
1.6089E+01	1.3834E-01	1.5184E+01	3.0473E+05	7.7060E+02
1.6098E+01	1.7555E-01	1.9269E+01	3.8672E+05	7.7020E+02
1.6119E+01	9.1287E-02	1.0020E+01	2.0109E+05	7.6920E+02
1.6129E+01	9.9714E-02	1.0945E+01	2.1966E+05	7.6870E+02
1.6135E+01	8.3914E-02	9.2105E+00	1.8485E+05	7.6840E+02
1.6152E+01	9.9011E-02	1.0868E+01	2.1811E+05	7.6760E+02
1.6159E+01	9.9714E-02	1.0945E+01	2.1966E+05	7.6730E+02
1.6167E+01	1.1235E-01	1.2332E+01	2.4750E+05	7.6690E+02
1.6173E+01	1.0884E-01	1.1947E+01	2.3977E+05	7.6660E+02
1.6180E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.6630E+02
1.6186E+01	1.4044E-01	1.5415E+01	3.0938E+05	7.6600E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6196E+01	1.7555E-01	1.9269E+01	3.8672E+05	7.6550E+02
1.6203E+01	1.4044E-01	1.5415E+01	3.0938E+05	7.6520E+02
1.6216E+01	4.0026E-01	4.3933E+01	8.8172E+05	7.6460E+02
1.6230E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.6390E+02
1.6243E+01	1.2289E-01	1.3488E+01	2.7070E+05	7.6330E+02
1.6256E+01	1.2991E-01	1.4259E+01	2.8617E+05	7.6270E+02
1.6262E+01	1.2991E-01	1.4259E+01	2.8617E+05	7.6240E+02
1.6275E+01	1.1235E-01	1.2332E+01	2.4750E+05	7.6180E+02
1.6282E+01	1.3693E-01	1.5030E+01	3.0164E+05	7.6150E+02
1.6288E+01	1.1938E-01	1.3103E+01	2.6297E+05	7.6120E+02
1.6303E+01	3.0897E-01	3.3913E+01	6.8063E+05	7.6050E+02
1.6316E+01	1.2991E-01	1.4259E+01	2.8617E+05	7.5990E+02
1.6324E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.5950E+02
1.6331E+01	1.1235E-01	1.2332E+01	2.4750E+05	7.5920E+02
1.6342E+01	1.2991E-01	1.4259E+01	2.8617E+05	7.5870E+02
1.6348E+01	1.3693E-01	1.5030E+01	3.0164E+05	7.5840E+02
1.6359E+01	2.4928E-01	2.7362E+01	5.4914E+05	7.5790E+02
1.6370E+01	1.2991E-01	1.4259E+01	2.8617E+05	7.5740E+02
1.6376E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.5710E+02
1.6381E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.5690E+02
1.6402E+01	2.4577E-01	2.6976E+01	5.4141E+05	7.5590E+02
1.6415E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.5530E+02
1.6430E+01	1.7906E-01	1.9654E+01	3.9445E+05	7.5460E+02
1.6441E+01	1.1095E-01	1.2178E+01	2.4441E+05	7.5410E+02
1.6454E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.5350E+02
1.6461E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.5320E+02
1.6470E+01	1.7906E-01	1.9654E+01	3.9445E+05	7.5280E+02
1.6481E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.5230E+02
1.6489E+01	1.4395E-01	1.5800E+01	3.1711E+05	7.5190E+02
1.6507E+01	1.9662E-01	2.1581E+01	4.3313E+05	7.5110E+02
1.6514E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.5080E+02
1.6520E+01	2.0364E-01	2.2352E+01	4.4859E+05	7.5050E+02
1.6531E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.5000E+02
1.6538E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.4970E+02
1.6544E+01	1.6151E-01	1.7727E+01	3.5578E+05	7.4940E+02
1.6553E+01	1.8960E-01	2.0810E+01	4.1766E+05	7.4900E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6562E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.4860E+02
1.6573E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.4810E+02
1.6580E+01	1.3518E-01	1.4837E+01	2.9777E+05	7.4780E+02
1.6587E+01	1.3693E-01	1.5030E+01	3.0164E+05	7.4750E+02
1.6598E+01	1.4044E-01	1.5415E+01	3.0938E+05	7.4700E+02
1.6618E+01	1.8609E-01	2.0425E+01	4.0992E+05	7.4610E+02
1.6624E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.4580E+02
1.6638E+01	2.4226E-01	2.6591E+01	5.3367E+05	7.4520E+02
1.6649E+01	2.0715E-01	2.2737E+01	4.5633E+05	7.4470E+02
1.6656E+01	2.1417E-01	2.3508E+01	4.7180E+05	7.4440E+02
1.6671E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.4370E+02
1.6682E+01	1.6502E-01	1.8113E+01	3.6352E+05	7.4320E+02
1.6689E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.4290E+02
1.6712E+01	1.7555E-01	1.9269E+01	3.8672E+05	7.4190E+02
1.6725E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.4130E+02
1.6732E+01	1.3342E-01	1.4644E+01	2.9391E+05	7.4100E+02
1.6748E+01	1.3693E-01	1.5030E+01	3.0164E+05	7.4030E+02
1.6786E+01	2.5631E-01	2.8132E+01	5.6461E+05	7.3860E+02
1.6802E+01	2.3875E-01	2.6206E+01	5.2594E+05	7.3790E+02
1.6814E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.3740E+02
1.6827E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.3680E+02
1.6837E+01	1.5800E-01	1.7342E+01	3.4805E+05	7.3640E+02
1.6848E+01	1.7906E-01	1.9654E+01	3.9445E+05	7.3590E+02
1.6862E+01	1.7204E-01	1.8883E+01	3.7898E+05	7.3530E+02
1.6873E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.3480E+02
1.6880E+01	1.4395E-01	1.5800E+01	3.1711E+05	7.3450E+02
1.6889E+01	1.5097E-01	1.6571E+01	3.3258E+05	7.3410E+02
1.6928E+01	2.4226E-01	2.6591E+01	5.3367E+05	7.3240E+02
1.6935E+01	2.4226E-01	2.6591E+01	5.3367E+05	7.3210E+02
1.6945E+01	2.5982E-01	2.8518E+01	5.7234E+05	7.3170E+02
1.6954E+01	2.1066E-01	2.3123E+01	4.6406E+05	7.3130E+02
1.6968E+01	2.0715E-01	2.2737E+01	4.5633E+05	7.3070E+02
1.6986E+01	2.7386E-01	3.0059E+01	6.0328E+05	7.2990E+02
1.6996E+01	2.8791E-01	3.1601E+01	6.3422E+05	7.2950E+02
1.7005E+01	3.1950E-01	3.5069E+01	7.0383E+05	7.2910E+02
1.7028E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.2810E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7038E+01	2.1066E-01	2.3123E+01	4.6406E+05	7.2770E+02
1.7045E+01	2.1066E-01	2.3123E+01	4.6406E+05	7.2740E+02
1.7066E+01	2.7035E-01	2.9674E+01	5.9555E+05	7.2650E+02
1.7078E+01	2.5631E-01	2.8132E+01	5.6461E+05	7.2600E+02
1.7087E+01	2.5280E-01	2.7747E+01	5.5688E+05	7.2560E+02
1.7094E+01	2.2822E-01	2.5049E+01	5.0273E+05	7.2530E+02
1.7115E+01	2.2120E-01	2.4279E+01	4.8727E+05	7.2440E+02
1.7125E+01	2.1768E-01	2.3893E+01	4.7953E+05	7.2400E+02
1.7132E+01	2.0715E-01	2.2737E+01	4.5633E+05	7.2370E+02
1.7139E+01	1.7555E-01	1.9269E+01	3.8672E+05	7.2340E+02
1.7146E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.2310E+02
1.7160E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.2250E+02
1.7172E+01	1.7204E-01	1.8883E+01	3.7898E+05	7.2200E+02
1.7177E+01	1.6853E-01	1.8498E+01	3.7125E+05	7.2180E+02
1.7213E+01	2.3524E-01	2.5820E+01	5.1820E+05	7.2030E+02
1.7225E+01	2.0715E-01	2.2737E+01	4.5633E+05	7.1980E+02
1.7237E+01	2.1768E-01	2.3893E+01	4.7953E+05	7.1930E+02
1.7246E+01	2.1417E-01	2.3508E+01	4.7180E+05	7.1890E+02
1.7256E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.1850E+02
1.7266E+01	2.1066E-01	2.3123E+01	4.6406E+05	7.1810E+02
1.7280E+01	1.9662E-01	2.1581E+01	4.3313E+05	7.1750E+02
1.7299E+01	1.4746E-01	1.6186E+01	3.2484E+05	7.1670E+02
1.7355E+01	2.0715E-01	2.2737E+01	4.5633E+05	7.1440E+02
1.7370E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.1380E+02
1.7389E+01	2.0013E-01	2.1966E+01	4.4086E+05	7.1300E+02
1.7404E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.1240E+02
1.7416E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.1190E+02
1.7448E+01	1.5449E-01	1.6957E+01	3.4031E+05	7.1060E+02
1.7485E+01	2.1417E-01	2.3508E+01	4.7180E+05	7.0910E+02
1.7500E+01	1.9311E-01	2.1196E+01	4.2539E+05	7.0850E+02
1.7507E+01	2.0364E-01	2.2352E+01	4.4859E+05	7.0820E+02
1.7514E+01	1.8609E-01	2.0425E+01	4.0992E+05	7.0790E+02
1.7561E+01	2.5982E-01	2.8518E+01	5.7234E+05	7.0600E+02
1.7596E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.0460E+02
1.7624E+01	2.0364E-01	2.2352E+01	4.4859E+05	7.0350E+02
1.7659E+01	1.7906E-01	1.9654E+01	3.9445E+05	7.0210E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7679E+01	1.7555E-01	1.9269E+01	3.8672E+05	7.0130E+02
1.7697E+01	1.8960E-01	2.0810E+01	4.1766E+05	7.0060E+02
1.7707E+01	1.8257E-01	2.0040E+01	4.0219E+05	7.0020E+02
1.7715E+01	1.8960E-01	2.0810E+01	4.1766E+05	6.9990E+02
1.7725E+01	1.7906E-01	1.9654E+01	3.9445E+05	6.9950E+02
1.7735E+01	1.7555E-01	1.9269E+01	3.8672E+05	6.9910E+02
1.7765E+01	2.1768E-01	2.3893E+01	4.7953E+05	6.9790E+02
1.7793E+01	2.0013E-01	2.1966E+01	4.4086E+05	6.9680E+02
1.7822E+01	2.7035E-01	2.9674E+01	5.9555E+05	6.9570E+02
1.7857E+01	1.7204E-01	1.8883E+01	3.7898E+05	6.9430E+02
1.7899E+01	2.0715E-01	2.2737E+01	4.5633E+05	6.9270E+02
1.7925E+01	1.8960E-01	2.0810E+01	4.1766E+05	6.9170E+02
1.7958E+01	2.2471E-01	2.4664E+01	4.9500E+05	6.9040E+02
1.8005E+01	1.7555E-01	1.9269E+01	3.8672E+05	6.8860E+02
1.8037E+01	2.2120E-01	2.4279E+01	4.8727E+05	6.8740E+02
1.8052E+01	2.1417E-01	2.3508E+01	4.7180E+05	6.8680E+02
1.8081E+01	1.6853E-01	1.8498E+01	3.7125E+05	6.8570E+02
1.8108E+01	1.8257E-01	2.0040E+01	4.0219E+05	6.8470E+02
1.8134E+01	1.6853E-01	1.8498E+01	3.7125E+05	6.8370E+02
1.8169E+01	1.9311E-01	2.1196E+01	4.2539E+05	6.8240E+02
1.8204E+01	1.7555E-01	1.9269E+01	3.8672E+05	6.8110E+02
1.8440E+01	1.7204E-01	1.8883E+01	3.7898E+05	6.7237E+02
1.8835E+01	1.9490E-01	2.1392E+01	4.2934E+05	6.5826E+02
1.8967E+01	2.0905E-01	2.2945E+01	4.6050E+05	6.5368E+02
1.9044E+01	2.1088E-01	2.3146E+01	4.6454E+05	6.5104E+02
1.9122E+01	2.3215E-01	2.5481E+01	5.1139E+05	6.4839E+02
1.9369E+01	2.0650E-01	2.2666E+01	4.5490E+05	6.4012E+02
1.9640E+01	2.1200E-01	2.3269E+01	4.6700E+05	6.3128E+02
1.9919E+01	2.1851E-01	2.3984E+01	4.8135E+05	6.2244E+02
2.0035E+01	2.3540E-01	2.5838E+01	5.1857E+05	6.1884E+02
2.0103E+01	2.3215E-01	2.5481E+01	5.1139E+05	6.1674E+02
2.0213E+01	2.5739E-01	2.8251E+01	5.6699E+05	6.1339E+02
2.0309E+01	2.2767E-01	2.4989E+01	5.0153E+05	6.1049E+02
2.0437E+01	2.3215E-01	2.5481E+01	5.1139E+05	6.0667E+02
2.0518E+01	2.3978E-01	2.6319E+01	5.2821E+05	6.0427E+02
2.0638E+01	2.3540E-01	2.5838E+01	5.1857E+05	6.0076E+02

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0805E+01	2.4161E-01	2.6520E+01	5.3224E+05	5.9593E+02
2.0894E+01	2.4782E-01	2.7201E+01	5.4592E+05	5.9340E+02
2.0930E+01	2.3469E-01	2.5760E+01	5.1700E+05	5.9238E+02
2.2500E+01	2.4376E-01	2.6756E+01	5.3698E+05	5.5104E+02
2.5000E+01	2.3652E-01	2.5961E+01	5.2103E+05	4.9594E+02
2.7500E+01	2.1766E-01	2.3890E+01	4.7947E+05	4.5085E+02
3.0000E+01	1.9631E-01	2.1547E+01	4.3244E+05	4.1328E+02
3.5000E+01	1.4948E-01	1.6407E+01	3.2929E+05	3.5424E+02
4.0000E+01	1.2962E-01	1.4227E+01	2.8553E+05	3.0996E+02
4.5000E+01	1.1476E-01	1.2596E+01	2.5280E+05	2.7552E+02
5.0000E+01	1.0011E-01	1.0988E+01	2.2053E+05	2.4797E+02
6.0000E+01	7.3310E-02	8.0466E+00	1.6149E+05	2.0664E+02
7.0000E+01	5.2488E-02	5.7611E+00	1.1562E+05	1.7712E+02
8.0000E+01	3.9587E-02	4.3451E+00	8.7204E+04	1.5498E+02
9.0000E+01	2.9198E-02	3.2048E+00	6.4319E+04	1.3776E+02
1.0000E+02	2.3638E-02	2.5945E+00	5.2070E+04	1.2398E+02
1.2500E+02	1.4805E-02	1.6250E+00	3.2614E+04	9.9187E+01
1.5000E+02	1.0598E-02	1.1633E+00	2.3346E+04	8.2656E+01
1.7500E+02	7.5631E-03	8.3013E-01	1.6661E+04	7.0848E+01
2.0000E+02	5.3703E-03	5.8945E-01	1.1830E+04	6.1992E+01
2.2500E+02	3.9088E-03	4.2904E-01	8.6107E+03	5.5104E+01
2.5000E+02	2.9346E-03	3.2210E-01	6.4645E+03	4.9594E+01
2.7500E+02	2.2709E-03	2.4925E-01	5.0024E+03	4.5085E+01
3.0000E+02	1.8062E-03	1.9825E-01	3.9789E+03	4.1328E+01
3.5000E+02	1.2244E-03	1.3439E-01	2.6972E+03	3.5424E+01
4.0000E+02	8.9194E-04	9.7900E-02	1.9648E+03	3.0996E+01
4.0500E+02	9.4183E-04	1.0338E-01	2.0747E+03	3.0613E+01
4.0586E+02	1.2527E-03	1.3750E-01	2.7596E+03	3.0549E+01
4.0633E+02	4.9377E-03	5.4197E-01	1.0877E+04	3.0513E+01
4.0695E+02	1.3259E-03	1.4553E-01	2.9207E+03	3.0467E+01
4.0742E+02	7.3060E-03	8.0192E-01	1.6094E+04	3.0432E+01
4.0801E+02	1.3442E-03	1.4754E-01	2.9610E+03	3.0388E+01
4.0875E+02	7.3792E-03	8.0994E-01	1.6255E+04	3.0333E+01
4.0922E+02	3.1089E-03	3.4124E-01	6.8486E+03	3.0298E+01
4.0934E+02	5.2395E-03	5.7509E-01	1.1542E+04	3.0289E+01
4.0949E+02	3.5387E-03	3.8841E-01	7.7953E+03	3.0278E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.0969E+02	5.1846E-03	5.6907E-01	1.1421E+04	3.0263E+01
4.0984E+02	3.7124E-03	4.0748E-01	8.1780E+03	3.0252E+01
4.1089E+02	7.1780E-03	7.8786E-01	1.5812E+04	3.0175E+01
4.1155E+02	9.1440E-03	1.0036E+00	2.0143E+04	3.0126E+01
4.1217E+02	1.0442E-02	1.1462E+00	2.3003E+04	3.0081E+01
4.1310E+02	1.1384E-02	1.2495E+00	2.5078E+04	3.0013E+01
4.1376E+02	1.1622E-02	1.2756E+00	2.5602E+04	2.9965E+01
4.1438E+02	1.1979E-02	1.3148E+00	2.6387E+04	2.9920E+01
4.1597E+02	1.0516E-02	1.1542E+00	2.3164E+04	2.9806E+01
4.1678E+02	9.9486E-03	1.0920E+00	2.1916E+04	2.9748E+01
4.1744E+02	8.5405E-03	9.3741E-01	1.8814E+04	2.9701E+01
4.1860E+02	7.8364E-03	8.6013E-01	1.7263E+04	2.9619E+01
4.1922E+02	7.4980E-03	8.2299E-01	1.6517E+04	2.9575E+01
4.2000E+02	7.2512E-03	7.9589E-01	1.5973E+04	2.9520E+01
4.2089E+02	7.1597E-03	7.8586E-01	1.5772E+04	2.9458E+01
4.2182E+02	6.9494E-03	7.6277E-01	1.5309E+04	2.9393E+01
4.2349E+02	6.9494E-03	7.6277E-01	1.5309E+04	2.9277E+01
4.2531E+02	6.9677E-03	7.6478E-01	1.5349E+04	2.9151E+01
4.2671E+02	7.0774E-03	7.7682E-01	1.5591E+04	2.9056E+01
4.2849E+02	6.8580E-03	7.5274E-01	1.5107E+04	2.8935E+01
4.3000E+02	6.5288E-03	7.1661E-01	1.4382E+04	2.8834E+01
4.3163E+02	6.2453E-03	6.8549E-01	1.3758E+04	2.8725E+01
4.3349E+02	6.0624E-03	6.6542E-01	1.3355E+04	2.8601E+01
4.3500E+02	5.9070E-03	6.4836E-01	1.3012E+04	2.8502E+01
4.5000E+02	5.5644E-03	6.1075E-01	1.2258E+04	2.7552E+01
5.0000E+02	4.4460E-03	4.8800E-01	9.7940E+03	2.4797E+01
5.3900E+02	3.5916E-03	3.9422E-01	7.9118E+03	2.3003E+01
5.3933E+02	3.9471E-03	4.3324E-01	8.6949E+03	2.2989E+01
5.3965E+02	3.6919E-03	4.0522E-01	8.1327E+03	2.2975E+01
5.4021E+02	4.1294E-03	4.5325E-01	9.0966E+03	2.2951E+01
5.4047E+02	4.9772E-03	5.4630E-01	1.0964E+04	2.2940E+01
5.4051E+02	4.5578E-03	5.0027E-01	1.0040E+04	2.2938E+01
5.4109E+02	3.7648E-03	4.1323E-01	8.2933E+03	2.2914E+01
5.4142E+02	4.2023E-03	4.6125E-01	9.2572E+03	2.2900E+01
5.4150E+02	5.1321E-03	5.6331E-01	1.1305E+04	2.2896E+01
5.4183E+02	4.9589E-03	5.4430E-01	1.0924E+04	2.2882E+01

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.4190E+02	5.4876E-03	6.0233E-01	1.2089E+04	2.2880E+01
5.4212E+02	5.2962E-03	5.8132E-01	1.1667E+04	2.2870E+01
5.4242E+02	5.6882E-03	6.2434E-01	1.2530E+04	2.2858E+01
5.4316E+02	6.4813E-03	7.1139E-01	1.4277E+04	2.2826E+01
5.4382E+02	7.4658E-03	8.1945E-01	1.6446E+04	2.2799E+01
5.4426E+02	8.3773E-03	9.1950E-01	1.8454E+04	2.2780E+01
5.4467E+02	9.1157E-03	1.0005E+00	2.0081E+04	2.2763E+01
5.4500E+02	9.6809E-03	1.0626E+00	2.1326E+04	2.2749E+01
5.4552E+02	1.0292E-02	1.1296E+00	2.2671E+04	2.2728E+01
5.4600E+02	1.0684E-02	1.1726E+00	2.3535E+04	2.2708E+01
5.4670E+02	1.0802E-02	1.1856E+00	2.3796E+04	2.2679E+01
5.4740E+02	1.0410E-02	1.1426E+00	2.2932E+04	2.2650E+01
5.4780E+02	9.9999E-03	1.0976E+00	2.2029E+04	2.2633E+01
5.4832E+02	9.5441E-03	1.0476E+00	2.1024E+04	2.2612E+01
5.4895E+02	9.1157E-03	1.0005E+00	2.0081E+04	2.2586E+01
5.4946E+02	8.8058E-03	9.6653E-01	1.9398E+04	2.2565E+01
5.5000E+02	8.5141E-03	9.3451E-01	1.8755E+04	2.2543E+01
5.5094E+02	8.1950E-03	8.9949E-01	1.8053E+04	2.2504E+01
5.5201E+02	7.9215E-03	8.6948E-01	1.7450E+04	2.2460E+01
5.5311E+02	7.6845E-03	8.4346E-01	1.6928E+04	2.2416E+01
5.5418E+02	7.5843E-03	8.3246E-01	1.6707E+04	2.2373E+01
5.5532E+02	7.4840E-03	8.2145E-01	1.6486E+04	2.2327E+01
5.5654E+02	7.4840E-03	8.2145E-01	1.6486E+04	2.2278E+01
5.5798E+02	7.5478E-03	8.2845E-01	1.6627E+04	2.2220E+01
5.5879E+02	7.5843E-03	8.3246E-01	1.6707E+04	2.2188E+01
5.6000E+02	7.4840E-03	8.2145E-01	1.6486E+04	2.2140E+01
5.6141E+02	7.3472E-03	8.0644E-01	1.6185E+04	2.2084E+01
5.6274E+02	7.2652E-03	7.9744E-01	1.6004E+04	2.2032E+01
5.6388E+02	7.2470E-03	7.9543E-01	1.5964E+04	2.1988E+01
5.6500E+02	7.2287E-03	7.9343E-01	1.5924E+04	2.1944E+01
6.0000E+02	6.7028E-03	7.3570E-01	1.4765E+04	2.0664E+01
7.0000E+02	4.5643E-03	5.0099E-01	1.0055E+04	1.7712E+01
8.0000E+02	3.2520E-03	3.5694E-01	7.1637E+03	1.5498E+01
9.0000E+02	2.3985E-03	2.6326E-01	5.2836E+03	1.3776E+01
1.0000E+03	1.8188E-03	1.9964E-01	4.0067E+03	1.2398E+01
1.2500E+03	9.9934E-04	1.0969E-01	2.2014E+03	9.9187E+00

Table III. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5000E+03	6.0536E-04	6.6444E-02	1.3335E+03	8.2656E+00
1.7500E+03	3.9327E-04	4.3166E-02	8.6633E+02	7.0848E+00
2.0000E+03	2.6931E-04	2.9560E-02	5.9326E+02	6.1992E+00
2.2500E+03	1.9283E-04	2.1165E-02	4.2478E+02	5.5104E+00
2.5000E+03	1.4223E-04	1.5611E-02	3.1332E+02	4.9594E+00
2.7500E+03	1.0790E-04	1.1843E-02	2.3768E+02	4.5085E+00
3.0000E+03	8.3739E-05	9.1912E-03	1.8447E+02	4.1328E+00
3.5000E+03	5.3231E-05	5.8427E-03	1.1726E+02	3.5424E+00
4.0000E+03	3.5771E-05	3.9263E-03	7.8799E+01	3.0996E+00
4.5000E+03	2.5077E-05	2.7525E-03	5.5242E+01	2.7552E+00
5.0000E+03	1.8177E-05	1.9952E-03	4.0043E+01	2.4797E+00
6.0000E+03	1.0309E-05	1.1316E-03	2.2710E+01	2.0664E+00
7.0000E+03	6.3069E-06	6.9225E-04	1.3893E+01	1.7712E+00
8.0000E+03	4.0772E-06	4.4752E-04	8.9817E+00	1.5498E+00
9.0000E+03	2.7480E-06	3.0162E-04	6.0534E+00	1.3776E+00
1.0000E+04	2.0097E-06	2.2059E-04	4.4271E+00	1.2398E+00
1.2500E+04	9.8392E-07	1.0800E-04	2.1674E+00	9.9187E-01
1.5000E+04	5.4885E-07	6.0242E-05	1.2090E+00	8.2656E-01
1.7500E+04	3.3507E-07	3.6778E-05	7.3812E-01	7.0848E-01
2.0000E+04	2.1852E-07	2.3985E-05	4.8136E-01	6.1992E-01
2.2500E+04	1.4988E-07	1.6451E-05	3.3016E-01	5.5104E-01
2.5000E+04	1.0699E-07	1.1743E-05	2.3568E-01	4.9594E-01
2.7500E+04	7.8664E-08	8.6343E-06	1.7329E-01	4.5085E-01
3.0000E+04	5.9108E-08	6.4878E-06	1.3021E-01	4.1328E-01
3.5000E+04	3.5651E-08	3.9130E-06	7.8534E-02	3.5424E-01
4.0000E+04	2.3004E-08	2.5249E-06	5.0674E-02	3.0996E-01
4.5000E+04	1.5630E-08	1.7156E-06	3.4431E-02	2.7552E-01
5.0000E+04	1.1062E-08	1.2141E-06	2.4367E-02	2.4797E-01
6.0000E+04	6.0821E-09	6.6758E-07	1.3398E-02	2.0664E-01
7.0000E+04	3.6678E-09	4.0258E-07	8.0796E-03	1.7712E-01
8.0000E+04	2.3659E-09	2.5968E-07	5.2117E-03	1.5498E-01
9.0000E+04	1.6062E-09	1.7630E-07	3.5382E-03	1.3776E-01
1.0000E+05	1.1351E-09	1.2459E-07	2.5005E-03	1.2398E-01

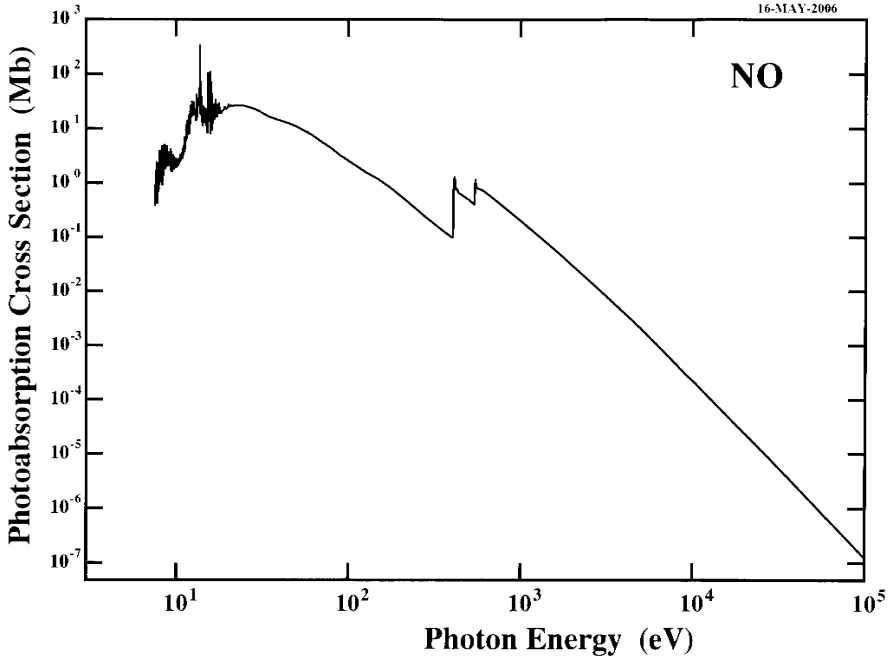
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of atoms, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)} \;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E-E_{\rm K}}} \;,$$

where $E_{\rm K} \;=\; 410.3$ and 543.3 eV for nitrogen and oxygen atoms, respectively.



NO

Energy, eV	Source
5.480 - 7.437	Table 4.16 p.169 (Berkowitz's book*)
7.517 - 9.264 (IP)	Chan *et al.*, Chem. Phys., 170 (1993) 111
IP - 18.44	Chan *et al.*, Chem. Phys., 170 (1993) 111
18.44 - 20.93	Chan *et al.*, Chem. Phys., 170 (1993) 111
20.93 - 32.0	Table 4.18 p.171 (Berkowitz's book*)
32.0 - 80	Table 4.18 p.171 (Berkowitz's book*)
80 - 150	Table 4.18 p.171 (Berkowitz's book*)
150 -405	Table 4.18 p.171 (Berkowitz's book*)
399.7	Table 4.17 p.170 (Berkowitz's book*)
405 - 435	Fig. 4.8 p.172 (Berkowitz's book*)
435 - 539	$\sigma(NO) = \sigma(N)+\sigma(O)$, Henke, et al., Atom. Data Nucl. Data Tables, 54 (1993) 181
532.7	Table 4.17 p.170 (Berkowitz's book*)
539 - 565	Fig. 4.9 p.173 (Berkowitz's book*)
565 - 2042.4	Table 4.18 p.171 (Berkowitz's book*)
2042.4 - 10^4	Table 4.18 p.171 (Berkowitz's book*)
10^4 - 10^5	$\sigma(NO) = \sigma(N)+\sigma(O)$ Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Hydrogen Chloride (HCl)

Z = 18 Molecular Mass : $M_{\rm A} = 36.46094$

$\sigma_a(\text{Mb}) = 109.76097 \ \dfrac{\mathrm{d}f}{\mathrm{d}E} \ (\text{eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for energy intervals from 9.301 to 12.7458 eV.

Energy (eV)	f	λ (Å)
9.301 – 9.336	0.0026	1333.0 – 1328.0
9.581 – 9.634	0.1280	1294.1 – 1286.9
9.649 – 9.671	0.0049	1284.9 – 1282.0
9.918 – 9.999	0.0173	1250.1 – 1240.0
10.021 – 10.925	0.0077	1237.2 – 1134.9
10.925 – 11.627	0.1834	1134.9 – 1066.3
11.627 – 12.527	0.3953	1066.3 – 989.74
12.527 – 12.7458	0.1030	989.74 – 972.74

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
6.7098E+00	2.6177E-03	2.8732E-01	4.7456E+03	1.8478E+03
6.7937E+00	3.2423E-03	3.5588E-01	5.8779E+03	1.8250E+03
6.8880E+00	4.4914E-03	4.9298E-01	8.1425E+03	1.8000E+03
6.9850E+00	6.1355E-03	6.7344E-01	1.1123E+04	1.7750E+03
7.0848E+00	8.2664E-03	9.0733E-01	1.4986E+04	1.7500E+03
7.1875E+00	1.0976E-02	1.2047E+00	1.9898E+04	1.7250E+03
7.2932E+00	1.3915E-02	1.5273E+00	2.5227E+04	1.7000E+03
7.4020E+00	1.7442E-02	1.9145E+00	3.1621E+04	1.6750E+03
7.5142E+00	2.1180E-02	2.3248E+00	3.8398E+04	1.6500E+03
7.6298E+00	2.4799E-02	2.7220E+00	4.4958E+04	1.6250E+03
7.7490E+00	2.7959E-02	3.0688E+00	5.0686E+04	1.6000E+03
7.8720E+00	2.9603E-02	3.2493E+00	5.3667E+04	1.5750E+03
7.9990E+00	2.9869E-02	3.2785E+00	5.4150E+04	1.5500E+03
8.1301E+00	2.9337E-02	3.2200E+00	5.3184E+04	1.5250E+03
8.2656E+00	2.8225E-02	3.0980E+00	5.1169E+04	1.5000E+03
8.4057E+00	2.6315E-02	2.8883E+00	4.7706E+04	1.4750E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
8.5506E+00	2.4000E-02	2.6343E+00	4.3510E+04	1.4500E+03
8.7006E+00	2.1245E-02	2.3318E+00	3.8514E+04	1.4250E+03
8.8560E+00	1.8085E-02	1.9850E+00	3.2786E+04	1.4000E+03
9.0170E+00	1.4264E-02	1.5657E+00	2.5859E+04	1.3750E+03
9.1326E+00	1.1398E-02	1.2511E+00	2.0664E+04	1.3576E+03
9.2004E+00	1.1160E-02	1.2249E+00	2.0231E+04	1.3476E+03
9.2498E+00	1.3640E-02	1.4971E+00	2.4727E+04	1.3404E+03
1.2746E+01	4.9051E-01	5.3839E+01	8.8924E+05	9.7270E+02
1.2757E+01	4.6254E-01	5.0769E+01	8.3854E+05	9.7190E+02
1.2774E+01	4.8895E-01	5.3667E+01	8.8641E+05	9.7060E+02
1.2791E+01	4.6309E-01	5.0830E+01	8.3954E+05	9.6930E+02
1.2795E+01	4.0983E-01	4.4983E+01	7.4297E+05	9.6900E+02
1.2826E+01	4.5943E-01	5.0427E+01	8.3289E+05	9.6670E+02
1.2847E+01	4.4751E-01	4.9119E+01	8.1128E+05	9.6510E+02
1.2855E+01	4.2009E-01	4.6110E+01	7.6158E+05	9.6450E+02
1.2887E+01	5.0811E-01	5.5771E+01	9.2115E+05	9.6210E+02
1.2902E+01	4.7501E-01	5.2138E+01	8.6115E+05	9.6100E+02
1.2961E+01	4.9876E-01	5.4744E+01	9.0419E+05	9.5660E+02
1.2935E+01	4.1441E-01	4.5486E+01	7.5128E+05	9.5850E+02
1.2951E+01	4.0148E-01	4.4067E+01	7.2784E+05	9.5730E+02
1.2968E+01	4.2945E-01	4.7136E+01	7.7854E+05	9.5610E+02
1.3009E+01	3.9323E-01	4.3161E+01	7.1288E+05	9.5310E+02
1.3059E+01	4.0983E-01	4.4983E+01	7.4297E+05	9.4940E+02
1.3142E+01	3.6893E-01	4.0495E+01	6.6884E+05	9.4340E+02
1.3169E+01	3.8388E-01	4.2135E+01	6.9593E+05	9.4150E+02
1.3235E+01	3.4611E-01	3.7989E+01	6.2745E+05	9.3680E+02
1.3256E+01	3.6325E-01	3.9871E+01	6.5853E+05	9.3530E+02
1.3381E+01	3.2649E-01	3.5835E+01	5.9188E+05	9.2660E+02
1.3421E+01	3.1869E-01	3.4980E+01	5.7775E+05	9.2380E+02
1.3437E+01	3.3730E-01	3.7023E+01	6.1149E+05	9.2270E+02
1.3525E+01	3.2804E-01	3.6006E+01	5.9471E+05	9.1670E+02
1.3538E+01	3.0943E-01	3.3964E+01	5.6097E+05	9.1580E+02
1.3577E+01	3.3006E-01	3.6228E+01	5.9836E+05	9.1320E+02
1.3626E+01	2.9183E-01	3.2031E+01	5.2905E+05	9.0990E+02
1.3679E+01	2.9495E-01	3.2374E+01	5.3470E+05	9.0640E+02
1.3718E+01	3.4042E-01	3.7365E+01	6.1715E+05	9.0380E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3749E+01	3.0008E-01	3.2937E+01	5.4401E+05	9.0180E+02
1.3774E+01	2.8871E-01	3.1689E+01	5.2340E+05	9.0010E+02
1.3822E+01	3.1044E-01	3.4074E+01	5.6279E+05	8.9700E+02
1.3841E+01	2.9696E-01	3.2595E+01	5.3836E+05	8.9580E+02
1.3884E+01	3.6893E-01	4.0495E+01	6.6884E+05	8.9300E+02
1.3936E+01	3.0576E-01	3.3561E+01	5.5432E+05	8.8970E+02
1.4011E+01	3.4253E-01	3.7596E+01	6.2097E+05	8.8490E+02
1.4022E+01	3.9066E-01	4.2880E+01	7.0823E+05	8.8420E+02
1.4043E+01	4.0873E-01	4.4862E+01	7.4097E+05	8.8290E+02
1.4059E+01	3.7150E-01	4.0776E+01	6.7349E+05	8.8190E+02
1.4089E+01	3.6893E-01	4.0495E+01	6.6884E+05	8.8000E+02
1.4113E+01	3.3840E-01	3.7144E+01	6.1349E+05	8.7850E+02
1.4128E+01	3.5289E-01	3.8734E+01	6.3975E+05	8.7760E+02
1.4171E+01	3.7251E-01	4.0887E+01	6.7532E+05	8.7490E+02
1.4191E+01	4.1083E-01	4.5094E+01	7.4480E+05	8.7370E+02
1.4228E+01	4.1285E-01	4.5315E+01	7.4845E+05	8.7140E+02
1.4295E+01	3.7462E-01	4.1119E+01	6.7914E+05	8.6730E+02
1.4333E+01	4.1964E-01	4.6060E+01	7.6075E+05	8.6500E+02
1.4370E+01	4.1909E-01	4.5999E+01	7.5976E+05	8.6280E+02
1.4415E+01	3.8810E-01	4.2598E+01	7.0358E+05	8.6010E+02
1.4423E+01	4.1312E-01	4.5344E+01	7.4894E+05	8.5960E+02
1.4450E+01	4.1414E-01	4.5456E+01	7.5078E+05	8.5800E+02
1.4518E+01	6.0617E-01	6.6534E+01	1.0989E+06	8.5400E+02
1.4562E+01	4.7845E-01	5.2515E+01	8.6738E+05	8.5140E+02
1.4638E+01	4.3629E-01	4.7888E+01	7.9095E+05	8.4700E+02
1.4704E+01	7.0813E-01	7.7725E+01	1.2838E+06	8.4320E+02
1.4753E+01	5.2999E-01	5.8172E+01	9.6082E+05	8.4040E+02
1.4822E+01	4.3629E-01	4.7888E+01	7.9095E+05	8.3650E+02
1.4852E+01	4.7540E-01	5.2180E+01	8.6185E+05	8.3480E+02
1.4884E+01	6.7309E-01	7.3879E+01	1.2202E+06	8.3300E+02
1.4925E+01	5.1146E-01	5.6138E+01	9.2721E+05	8.3070E+02
1.4994E+01	4.0950E-01	4.4947E+01	7.4238E+05	8.2690E+02
1.5050E+01	6.3138E-01	6.9301E+01	1.1446E+06	8.2380E+02
1.5109E+01	4.7020E-01	5.1610E+01	8.5242E+05	8.2060E+02
1.5155E+01	4.3471E-01	4.7714E+01	7.8808E+05	8.1810E+02
1.5181E+01	4.7743E-01	5.2404E+01	8.6553E+05	8.1670E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5220E+01	5.7939E-01	6.3594E+01	1.0504E+06	8.1460E+02
1.5250E+01	4.6511E-01	5.1051E+01	8.4320E+05	8.1300E+02
1.5288E+01	5.2479E-01	5.7602E+01	9.5139E+05	8.1100E+02
1.5292E+01	5.8142E-01	6.3817E+01	1.0540E+06	8.1080E+02
1.5318E+01	6.0776E-01	6.6708E+01	1.1018E+06	8.0940E+02
1.5328E+01	5.3508E-01	5.8731E+01	9.7004E+05	8.0890E+02
1.5346E+01	5.5260E-01	6.0654E+01	1.0018E+06	8.0790E+02
1.5371E+01	5.8865E-01	6.4611E+01	1.0672E+06	8.0660E+02
1.5396E+01	5.2434E-01	5.7552E+01	9.5057E+05	8.0530E+02
1.5427E+01	4.2081E-01	4.6188E+01	7.6287E+05	8.0370E+02
1.5457E+01	4.2488E-01	4.6635E+01	7.7025E+05	8.0210E+02
1.5498E+01	6.8755E-01	7.5467E+01	1.2465E+06	8.0000E+02
1.5527E+01	6.1442E-01	6.7440E+01	1.1139E+06	7.9850E+02
1.5578E+01	5.9589E-01	6.5405E+01	1.0803E+06	7.9590E+02
1.5611E+01	4.3731E-01	4.7999E+01	7.9279E+05	7.9420E+02
1.5641E+01	4.7280E-01	5.1895E+01	8.5713E+05	7.9270E+02
1.5684E+01	7.0654E-01	7.7551E+01	1.2809E+06	7.9050E+02
1.5718E+01	5.7939E-01	6.3594E+01	1.0504E+06	7.8880E+02
1.5742E+01	6.4121E-01	7.0380E+01	1.1624E+06	7.8760E+02
1.5762E+01	5.2581E-01	5.7713E+01	9.5323E+05	7.8660E+02
1.5782E+01	5.4649E-01	5.9984E+01	9.9073E+05	7.8560E+02
1.5806E+01	4.8263E-01	5.2974E+01	8.7496E+05	7.8440E+02
1.5857E+01	7.1434E-01	7.8407E+01	1.2950E+06	7.8190E+02
1.5910E+01	5.7792E-01	6.3433E+01	1.0477E+06	7.7930E+02
1.5949E+01	4.3731E-01	4.7999E+01	7.9279E+05	7.7740E+02
1.5979E+01	5.2694E-01	5.7837E+01	9.5528E+05	7.7590E+02
1.6002E+01	4.6557E-01	5.1101E+01	8.4402E+05	7.7480E+02
1.6037E+01	7.0406E-01	7.7278E+01	1.2764E+06	7.7310E+02
1.6066E+01	5.4435E-01	5.9748E+01	9.8684E+05	7.7170E+02
1.6121E+01	4.3629E-01	4.7888E+01	7.9095E+05	7.6910E+02
1.6161E+01	5.2897E-01	5.8061E+01	9.5897E+05	7.6720E+02
1.6182E+01	4.9902E-01	5.4773E+01	9.0467E+05	7.6620E+02
1.6224E+01	6.2776E-01	6.8904E+01	1.1381E+06	7.6420E+02
1.6254E+01	5.9589E-01	6.5405E+01	1.0803E+06	7.6280E+02
1.6273E+01	4.3629E-01	4.7888E+01	7.9095E+05	7.6190E+02
1.6286E+01	3.7345E-01	4.0990E+01	6.7702E+05	7.6130E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6312E+01	4.2386E-01	4.6523E+01	7.6841E+05	7.6010E+02
1.6340E+01	5.2118E-01	5.7205E+01	9.4483E+05	7.5880E+02
1.6368E+01	4.6557E-01	5.1101E+01	8.4402E+05	7.5750E+02
1.6387E+01	4.9337E-01	5.4153E+01	8.9443E+05	7.5660E+02
1.6402E+01	5.6605E-01	6.2130E+01	1.0262E+06	7.5590E+02
1.6428E+01	4.1357E-01	4.5394E+01	7.4976E+05	7.5470E+02
1.6470E+01	3.6316E-01	3.9861E+01	6.5837E+05	7.5280E+02
1.6514E+01	4.6918E-01	5.1498E+01	8.5058E+05	7.5080E+02
1.6531E+01	4.4454E-01	4.8793E+01	8.0591E+05	7.5000E+02
1.6560E+01	4.9902E-01	5.4773E+01	9.0467E+05	7.4870E+02
1.6593E+01	3.9402E-01	4.3248E+01	7.1431E+05	7.4720E+02
1.6631E+01	3.9605E-01	4.3471E+01	7.1800E+05	7.4550E+02
1.6660E+01	4.5788E-01	5.0257E+01	8.3008E+05	7.4420E+02
1.6718E+01	4.3007E-01	4.7205E+01	7.7968E+05	7.4160E+02
1.6727E+01	4.0227E-01	4.4153E+01	7.2927E+05	7.4120E+02
1.6768E+01	3.9402E-01	4.3248E+01	7.1431E+05	7.3940E+02
1.6784E+01	4.2804E-01	4.6982E+01	7.7599E+05	7.3870E+02
1.6855E+01	4.3369E-01	4.7602E+01	7.8623E+05	7.3560E+02
1.6871E+01	4.0329E-01	4.4265E+01	7.3111E+05	7.3490E+02
1.6901E+01	4.2702E-01	4.6870E+01	7.7414E+05	7.3360E+02
1.6954E+01	4.3833E-01	4.8111E+01	7.9464E+05	7.3130E+02
1.6970E+01	4.1877E-01	4.5965E+01	7.5919E+05	7.3060E+02
1.7000E+01	4.0441E-01	4.4389E+01	7.3316E+05	7.2932E+02
1.7500E+01	3.9443E-01	4.3293E+01	7.1506E+05	7.0848E+02
1.8000E+01	3.8919E-01	4.2717E+01	7.0555E+05	6.8880E+02
1.8500E+01	3.8174E-01	4.1900E+01	6.9205E+05	6.7018E+02
1.9000E+01	3.6973E-01	4.0581E+01	6.7027E+05	6.5255E+02
1.9500E+01	3.6067E-01	3.9588E+01	6.5386E+05	6.3582E+02
2.0000E+01	3.4688E-01	3.8074E+01	6.2886E+05	6.1992E+02
2.0500E+01	3.3301E-01	3.6551E+01	6.0371E+05	6.0480E+02
2.1000E+01	3.1981E-01	3.5103E+01	5.7978E+05	5.9040E+02
2.1500E+01	3.0602E-01	3.3589E+01	5.5478E+05	5.7667E+02
2.2000E+01	2.9274E-01	3.2131E+01	5.3070E+05	5.6356E+02
2.2500E+01	2.7878E-01	3.0599E+01	5.0539E+05	5.5104E+02
2.3000E+01	2.6059E-01	2.8602E+01	4.7241E+05	5.3906E+02
2.3500E+01	2.4874E-01	2.7302E+01	4.5094E+05	5.2759E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.4000E+01	2.3605E-01	2.5909E+01	4.2793E+05	5.1660E+02
2.4500E+01	2.2590E-01	2.4795E+01	4.0953E+05	5.0606E+02
2.5000E+01	2.1405E-01	2.3495E+01	3.8805E+05	4.9594E+02
2.5500E+01	2.0094E-01	2.2055E+01	3.6428E+05	4.8621E+02
2.6000E+01	1.8698E-01	2.0523E+01	3.3897E+05	4.7686E+02
2.6500E+01	1.7471E-01	1.9176E+01	3.1673E+05	4.6786E+02
2.7000E+01	1.6413E-01	1.8016E+01	2.9756E+05	4.5920E+02
2.7500E+01	1.5314E-01	1.6808E+01	2.7762E+05	4.5085E+02
2.8000E+01	1.4214E-01	1.5601E+01	2.5768E+05	4.4280E+02
2.8500E+01	1.3114E-01	1.4394E+01	2.3774E+05	4.3503E+02
2.9000E+01	1.2099E-01	1.3280E+01	2.1933E+05	4.2753E+02
2.9500E+01	1.0956E-01	1.2026E+01	1.9863E+05	4.2029E+02
3.0000E+01	1.0068E-01	1.1051E+01	1.8252E+05	4.1328E+02
3.1000E+01	8.4606E-02	9.2864E+00	1.5338E+05	3.9995E+02
3.2000E+01	6.7684E-02	7.4291E+00	1.2270E+05	3.8745E+02
3.3000E+01	5.5840E-02	6.1290E+00	1.0123E+05	3.7571E+02
3.4000E+01	4.5687E-02	5.0146E+00	8.2825E+04	3.6466E+02
3.5000E+01	3.8072E-02	4.1789E+00	6.9021E+04	3.5424E+02
3.6000E+01	3.0458E-02	3.3431E+00	5.5217E+04	3.4440E+02
3.7000E+01	3.4688E-02	3.8074E+00	6.2886E+04	3.3509E+02
3.8000E+01	2.5994E-02	2.8531E+00	4.7124E+04	3.2627E+02
4.0000E+01	2.3714E-02	2.6028E+00	4.2990E+04	3.0996E+02
4.2500E+01	2.1889E-02	2.4026E+00	3.9683E+04	2.9173E+02
4.5000E+01	2.0065E-02	2.2024E+00	3.6376E+04	2.7552E+02
4.7500E+01	1.8515E-02	2.0322E+00	3.3565E+04	2.6102E+02
5.0000E+01	1.7512E-02	1.9221E+00	3.1747E+04	2.4797E+02
5.5000E+01	1.5687E-02	1.7219E+00	2.8440E+04	2.2543E+02
6.0000E+01	1.4593E-02	1.6017E+00	2.6455E+04	2.0664E+02
6.5000E+01	1.3681E-02	1.5016E+00	2.4802E+04	1.9074E+02
7.0000E+01	1.3042E-02	1.4316E+00	2.3645E+04	1.7712E+02
7.5000E+01	1.2313E-02	1.3515E+00	2.2322E+04	1.6531E+02
8.0000E+01	1.1583E-02	1.2714E+00	2.0999E+04	1.5498E+02
8.5000E+01	1.0945E-02	1.2013E+00	1.9842E+04	1.4586E+02
9.0000E+01	1.0580E-02	1.1613E+00	1.9180E+04	1.3776E+02
9.1500E+01	1.0534E-02	1.1563E+00	1.9098E+04	1.3550E+02
1.0000E+02	9.6455E-03	1.0587E+00	1.7486E+04	1.2398E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2500E+02	7.3515E-03	8.0691E-01	1.3327E+04	9.9187E+01
1.5000E+02	5.6393E-03	6.1898E-01	1.0224E+04	8.2656E+01
1.7500E+02	4.4096E-03	4.8400E-01	7.9941E+03	7.0848E+01
1.9800E+02	3.9102E-03	4.2919E-01	7.0888E+03	6.2618E+01
1.9853E+02	4.0605E-03	4.4569E-01	7.3613E+03	6.2451E+01
1.9902E+02	4.5115E-03	4.9519E-01	8.1788E+03	6.2297E+01
1.9949E+02	5.3540E-03	5.8766E-01	9.7063E+03	6.2151E+01
2.0000E+02	6.6772E-03	7.3290E-01	1.2105E+04	6.1992E+01
2.0034E+02	8.0607E-03	8.8475E-01	1.4613E+04	6.1887E+01
2.0063E+02	9.5352E-03	1.0466E+00	1.7286E+04	6.1797E+01
2.0094E+02	1.0738E-02	1.1786E+00	1.9466E+04	6.1702E+01
2.0127E+02	1.1370E-02	1.2479E+00	2.0612E+04	6.1601E+01
2.0157E+02	1.1309E-02	1.2413E+00	2.0503E+04	6.1509E+01
2.0200E+02	1.0828E-02	1.1885E+00	1.9630E+04	6.1378E+01
2.0236E+02	1.0377E-02	1.1390E+00	1.8812E+04	6.1269E+01
2.0274E+02	1.0016E-02	1.0993E+00	1.8158E+04	6.1154E+01
2.0317E+02	9.5946E-03	1.0531E+00	1.7394E+04	6.1025E+01
2.0359E+02	9.4146E-03	1.0334E+00	1.7068E+04	6.0899E+01
2.0384E+02	9.6549E-03	1.0597E+00	1.7503E+04	6.0824E+01
2.0400E+02	1.0437E-02	1.1456E+00	1.8921E+04	6.0777E+01
2.0409E+02	1.4919E-02	1.6375E+00	2.7046E+04	6.0750E+01
2.0423E+02	1.8919E-02	2.0766E+00	3.4298E+04	6.0708E+01
2.0436E+02	1.5144E-02	1.6623E+00	2.7455E+04	6.0669E+01
2.0443E+02	1.1430E-02	1.2546E+00	2.0721E+04	6.0649E+01
2.0445E+02	8.2111E-03	9.0125E-01	1.4886E+04	6.0643E+01
2.0458E+02	7.6395E-03	8.3852E-01	1.3850E+04	6.0604E+01
2.0468E+02	8.1211E-03	8.9138E-01	1.4723E+04	6.0575E+01
2.0482E+02	1.0122E-02	1.1110E+00	1.8349E+04	6.0533E+01
2.0483E+02	1.2031E-02	1.3206E+00	2.1811E+04	6.0530E+01
2.0493E+02	1.4137E-02	1.5517E+00	2.5628E+04	6.0501E+01
2.0502E+02	1.2663E-02	1.3899E+00	2.2957E+04	6.0474E+01
2.0513E+02	1.0136E-02	1.1126E+00	1.8376E+04	6.0442E+01
2.0523E+02	7.7304E-03	8.4850E-01	1.4014E+04	6.0412E+01
2.0531E+02	6.4063E-03	7.0316E-01	1.1614E+04	6.0389E+01
2.0537E+02	7.1282E-03	7.8240E-01	1.2923E+04	6.0371E+01
2.0543E+02	9.5046E-03	1.0432E+00	1.7231E+04	6.0353E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0547E+02	1.2363E-02	1.3569E+00	2.2412E+04	6.0342E+01
2.0553E+02	1.3235E-02	1.4527E+00	2.3993E+04	6.0324E+01
2.0560E+02	1.7626E-02	1.9346E+00	3.1953E+04	6.0304E+01
2.0567E+02	2.3220E-02	2.5486E+00	4.2095E+04	6.0283E+01
2.0573E+02	2.8169E-02	3.0918E+00	5.1066E+04	6.0265E+01
2.0579E+02	2.8966E-02	3.1793E+00	5.2511E+04	6.0248E+01
2.0590E+02	2.4513E-02	2.6906E+00	4.4440E+04	6.0216E+01
2.0595E+02	2.0964E-02	2.3011E+00	3.8006E+04	6.0201E+01
2.0600E+02	1.9340E-02	2.1228E+00	3.5062E+04	6.0186E+01
2.0605E+02	1.8468E-02	2.0271E+00	3.3481E+04	6.0172E+01
2.0611E+02	1.5821E-02	1.7365E+00	2.8681E+04	6.0154E+01
2.0623E+02	1.2543E-02	1.3767E+00	2.2738E+04	6.0119E+01
2.0635E+02	1.4227E-02	1.5615E+00	2.5791E+04	6.0084E+01
2.0643E+02	1.6618E-02	1.8240E+00	3.0126E+04	6.0061E+01
2.0649E+02	1.9957E-02	2.1904E+00	3.6179E+04	6.0044E+01
2.0660E+02	2.3882E-02	2.6213E+00	4.3295E+04	6.0012E+01
2.0669E+02	2.2183E-02	2.4348E+00	4.0215E+04	5.9986E+01
2.0677E+02	2.0273E-02	2.2252E+00	3.6753E+04	5.9962E+01
2.0682E+02	1.8543E-02	2.0353E+00	3.3617E+04	5.9948E+01
2.0703E+02	2.0845E-02	2.2879E+00	3.7789E+04	5.9887E+01
2.0719E+02	2.3762E-02	2.6081E+00	4.3078E+04	5.9841E+01
2.0732E+02	2.6559E-02	2.9151E+00	4.8148E+04	5.9803E+01
2.0739E+02	2.7641E-02	3.0340E+00	5.0111E+04	5.9783E+01
2.0749E+02	2.7762E-02	3.0472E+00	5.0330E+04	5.9754E+01
2.0757E+02	2.7476E-02	3.0158E+00	4.9811E+04	5.9731E+01
2.0765E+02	2.6258E-02	2.8821E+00	4.7603E+04	5.9708E+01
2.0774E+02	2.4544E-02	2.6940E+00	4.4496E+04	5.9682E+01
2.0782E+02	2.2589E-02	2.4794E+00	4.0951E+04	5.9659E+01
2.0793E+02	2.2197E-02	2.4364E+00	4.0241E+04	5.9628E+01
2.0800E+02	2.2258E-02	2.4430E+00	4.0351E+04	5.9608E+01
2.1000E+02	2.8323E-02	3.1087E+00	5.1346E+04	5.9040E+01
2.1250E+02	3.0193E-02	3.3140E+00	5.4737E+04	5.8345E+01
2.1500E+02	3.1542E-02	3.4621E+00	5.7182E+04	5.7667E+01
2.1750E+02	3.2293E-02	3.5445E+00	5.8543E+04	5.7004E+01
2.2000E+02	3.2636E-02	3.5822E+00	5.9166E+04	5.6356E+01
2.2250E+02	3.2420E-02	3.5584E+00	5.8774E+04	5.5723E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

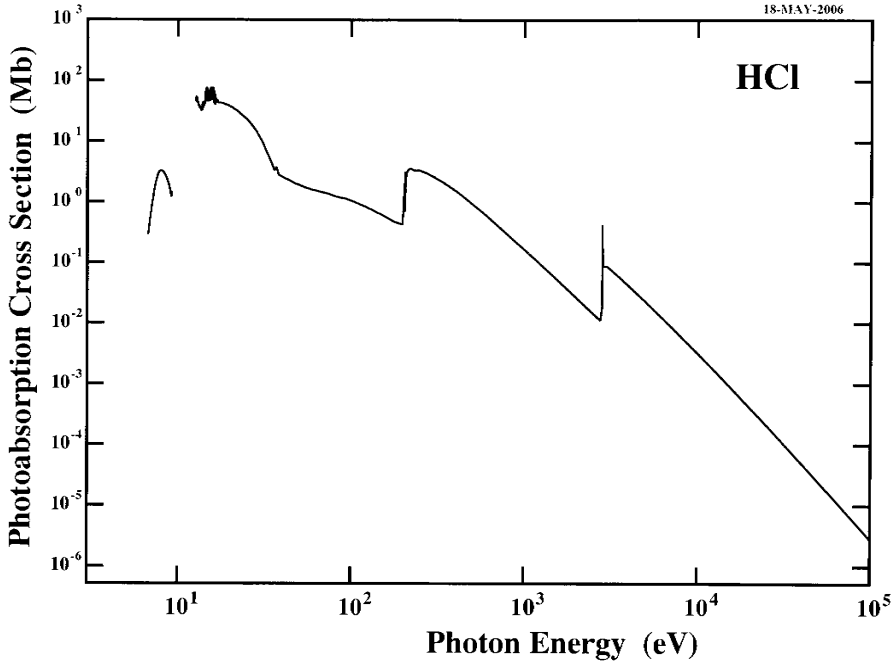
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2500E+02	3.1987E-02	3.5110E+00	5.7989E+04	5.5104E+01
2.2750E+02	3.1287E-02	3.4341E+00	5.6721E+04	5.4499E+01
2.3000E+02	3.0766E-02	3.3769E+00	5.5775E+04	5.3906E+01
2.3200E+02	3.0550E-02	3.3531E+00	5.5383E+04	5.3441E+01
2.5000E+02	3.0388E-02	3.3354E+00	5.5090E+04	4.9594E+01
2.7500E+02	2.7156E-02	2.9807E+00	4.9232E+04	4.5085E+01
3.0000E+02	2.3912E-02	2.6246E+00	4.3351E+04	4.1328E+01
3.5000E+02	1.8278E-02	2.0063E+00	3.3137E+04	3.5424E+01
4.0000E+02	1.4003E-02	1.5370E+00	2.5386E+04	3.0996E+01
4.5000E+02	1.0855E-02	1.1915E+00	1.9679E+04	2.7552E+01
5.0000E+02	8.5374E-03	9.3707E-01	1.5477E+04	2.4797E+01
6.0000E+02	5.5115E-03	6.0494E-01	9.9917E+03	2.0664E+01
7.0000E+02	3.7425E-03	4.1078E-01	6.7847E+03	1.7712E+01
8.0000E+02	2.6499E-03	2.9086E-01	4.8040E+03	1.5498E+01
9.0000E+02	1.9836E-03	2.1772E-01	3.5961E+03	1.3776E+01
1.0000E+03	1.5121E-03	1.6596E-01	2.7412E+03	1.2398E+01
1.2500E+03	8.4489E-04	9.2736E-02	1.5317E+03	9.9187E+00
1.5000E+03	5.2161E-04	5.7252E-02	9.4561E+02	8.2656E+00
1.7500E+03	3.4557E-04	3.7931E-02	6.2649E+02	7.0848E+00
2.0000E+03	2.4136E-04	2.6492E-02	4.3757E+02	6.1992E+00
2.2500E+03	1.7564E-04	1.9279E-02	3.1842E+02	5.5104E+00
2.5000E+03	1.3208E-04	1.4497E-02	2.3945E+02	4.9594E+00
2.7500E+03	1.0202E-04	1.1198E-02	1.8496E+02	4.5085E+00
2.8200E+03	9.5305E-05	1.0461E-02	1.7278E+02	4.3966E+00
2.8217E+03	1.7365E-04	1.9060E-02	3.1480E+02	4.3940E+00
2.8220E+03	2.9826E-04	3.2738E-02	5.4072E+02	4.3934E+00
2.8223E+03	5.4760E-04	6.0106E-02	9.9275E+02	4.3931E+00
2.8228E+03	1.4245E-03	1.5636E-01	2.5825E+03	4.3923E+00
2.8231E+03	2.5464E-03	2.7950E-01	4.6164E+03	4.3917E+00
2.8234E+03	3.3700E-03	3.6990E-01	6.1095E+03	4.3913E+00
2.8238E+03	3.8909E-03	4.2706E-01	7.0537E+03	4.3906E+00
2.8240E+03	3.8463E-03	4.2218E-01	6.9730E+03	4.3903E+00
2.8242E+03	3.4412E-03	3.7771E-01	6.2385E+03	4.3900E+00
2.8246E+03	2.7000E-03	2.9636E-01	4.8948E+03	4.3895E+00
2.8251E+03	1.3979E-03	1.5343E-01	2.5342E+03	4.3887E+00
2.8254E+03	7.7458E-04	8.5019E-02	1.4042E+03	4.3882E+00

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8257E+03	6.3211E-04	6.9381E-02	1.1460E+03	4.3877E+00
2.8259E+03	4.9857E-04	5.4724E-02	9.0386E+02	4.3875E+00
2.8261E+03	4.9857E-04	5.4724E-02	9.0386E+02	4.3871E+00
2.8264E+03	6.2771E-04	6.8898E-02	1.1380E+03	4.3866E+00
2.8268E+03	1.0640E-03	1.1679E-01	1.9290E+03	4.3861E+00
2.8272E+03	1.9855E-03	2.1793E-01	3.5995E+03	4.3854E+00
2.8276E+03	2.8625E-03	3.1419E-01	5.1894E+03	4.3848E+00
2.8276E+03	3.5302E-03	3.8748E-01	6.3999E+03	4.3848E+00
2.8279E+03	3.5970E-03	3.9481E-01	6.5210E+03	4.3844E+00
2.8281E+03	2.5553E-03	2.8048E-01	4.6325E+03	4.3840E+00
2.8285E+03	1.4112E-03	1.5490E-01	2.5584E+03	4.3834E+00
2.8286E+03	1.3512E-03	1.4830E-01	2.4495E+03	4.3832E+00
2.8289E+03	1.5759E-03	1.7298E-01	2.8570E+03	4.3828E+00
2.8293E+03	1.9320E-03	2.1206E-01	3.5026E+03	4.3822E+00
2.8295E+03	1.8297E-03	2.0083E-01	3.3170E+03	4.3818E+00
2.8300E+03	1.7985E-03	1.9741E-01	3.2605E+03	4.3811E+00
2.8331E+03	1.6294E-03	1.7884E-01	2.9539E+03	4.3762E+00
2.8361E+03	1.4691E-03	1.6125E-01	2.6632E+03	4.3717E+00
2.8381E+03	1.4380E-03	1.5783E-01	2.6069E+03	4.3685E+00
2.8400E+03	1.2999E-03	1.4268E-01	2.3566E+03	4.3656E+00
2.8430E+03	1.1219E-03	1.2314E-01	2.0338E+03	4.3610E+00
2.8444E+03	1.1308E-03	1.2412E-01	2.0500E+03	4.3589E+00
2.8472E+03	9.4823E-04	1.0408E-01	1.7190E+03	4.3545E+00
2.8550E+03	9.0374E-04	9.9196E-02	1.6384E+03	4.3427E+00
3.0000E+03	7.9941E-04	8.7744E-02	1.4492E+03	4.1328E+00
3.5000E+03	5.4014E-04	5.9286E-02	9.7922E+02	3.5424E+00
4.0000E+03	3.8061E-04	4.1776E-02	6.9001E+02	3.0996E+00
4.5000E+03	2.7771E-04	3.0482E-02	5.0346E+02	2.7552E+00
5.0000E+03	2.0859E-04	2.2895E-02	3.7815E+02	2.4797E+00
6.0000E+03	1.2613E-04	1.3845E-02	2.2867E+02	2.0664E+00
7.0000E+03	8.1926E-05	8.9923E-03	1.4852E+02	1.7712E+00
8.0000E+03	5.6165E-05	6.1648E-03	1.0182E+02	1.5498E+00
9.0000E+03	4.0163E-05	4.4083E-03	7.2811E+01	1.3776E+00
1.0000E+04	2.9739E-05	3.2642E-03	5.3914E+01	1.2398E+00
1.2500E+04	1.5545E-05	1.7062E-03	2.8181E+01	9.9187E-01
1.5000E+04	9.0109E-06	9.8905E-04	1.6336E+01	8.2656E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7500E+04	5.6818E-06	6.2364E-04	1.0301E+01	7.0848E-01
2.0000E+04	3.8111E-06	4.1830E-04	6.9090E+00	6.1992E-01
2.2500E+04	2.6798E-06	2.9413E-04	4.8581E+00	5.5104E-01
2.5000E+04	1.9558E-06	2.1467E-04	3.5456E+00	4.9594E-01
2.7500E+04	1.4651E-06	1.6081E-04	2.6560E+00	4.5085E-01
3.0000E+04	1.1183E-06	1.2275E-04	2.0273E+00	4.1328E-01
3.5000E+04	6.9225E-07	7.5983E-05	1.2550E+00	3.5424E-01
4.0000E+04	4.5701E-07	5.0161E-05	8.2850E-01	3.0996E-01
4.5000E+04	3.1687E-07	3.4779E-05	5.7444E-01	2.7552E-01
5.0000E+04	2.2836E-07	2.5065E-05	4.1399E-01	2.4797E-01
6.0000E+04	1.2946E-07	1.4209E-05	2.3469E-01	2.0664E-01
7.0000E+04	7.9586E-08	8.7355E-06	1.4428E-01	1.7712E-01
8.0000E+04	5.2138E-08	5.7227E-06	9.4520E-02	1.5498E-01
9.0000E+04	3.5895E-08	3.9399E-06	6.5074E-02	1.3776E-01
1.0000E+05	2.5715E-08	2.8225E-06	4.6618E-02	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of atoms, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} = 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi = \sqrt{\frac{E_{\mathrm{K}}}{E-E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} = 13.6$ and 2830.2 eV for hydrogen and chlorine atoms, respectively.

HCl

Energy, eV	Source
6.71- 9.25	Neo *et al.*, J. Chem. Phys., 85 (1986) 719
9.301 - 9.336	Table 4.19 p.178 (Berkowitz's book*)
9.581 - 9.634	Table 4.19 p.178 (Berkowitz's book*)
9.649 - 9.671	Table 4.19 p.178 (Berkowitz's book*)
9.918 - 9.999	Table 4.19 p.178 (Berkowitz's book*)
10.021 - 10.925	Table 4.19 p.178 (Berkowitz's book*)
10.925 - 11.627	Table 4.19 p.178 (Berkowitz's book*)
11.627 - 12.527	Table 4.19 p.178 (Berkowitz's book*)
12.527 - 12.7458 (IP)	Table 4.19 p.178 (Berkowitz's book*)
IP - 14.415	Frohlich and Glass-Maujean, Phys. Rev. A, 42 (1990) 1396
14.415 - 14.423	Table 4.19 p.178 (Berkowitz's book*)
14.423 - 16.97	Frohlich and Glass-Maujean, Phys. Rev. A, 42 (1990) 1396
16.97 - 38.0	Daviel *et al.*, Chem. Phys., 83 (1984) 319
38.0 - 91.5	Table 4.19 p.178 (Berkowitz's book*)
91.5 - 198	Table 4.20 p.179 (Berkowitz's book*)
198 - 208	Hayes and Brown, Phys. Rev. A, 6 (1972) 21
208 - 232	Ninomiya *et al.*, J. Phys. B, 14 (1981) 1777
232 - 2820	Table 4.20 p.179 (Berkowitz's book*)
2820 - 2855	Bodeur *et al.*, Z. Phys. D, 17 (1990) 291
2855 - 10^4	Table 4.20 p.179 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Water (H_2O)

Z = 10 Molecular Mass : $M_{\rm A}$ = 18.01528

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for transitions below the IP.

Energy (eV)	f	λ (Å)
7.4 band	0.0460	–
9.7 band	0.0732	–
9.994	0.0052	1240.6
10.168 – 10.171	0.0140	1219.4 – 1219.0
10.332 – 10.338	0.0107	1200.0 – 1199.3
10.559 – 10.575	0.0092	1174.2 – 1172.4
10.765 – 10.780	0.0069	1151.7 – 1150.1
10.990 – 11.057	0.0218	1128.2 – 1121.3
11.122	0.0223	1114.8
11.200 – 12.617	0.1240	1107.0 – 982.68

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.2617E+01	1.1797E-01	1.2949E+01	4.3286E+05	9.8264E+02
1.2629E+01	1.2077E-01	1.3256E+01	4.4312E+05	9.8171E+02
1.2641E+01	1.4832E-01	1.6280E+01	5.4421E+05	9.8080E+02
1.2677E+01	1.3411E-01	1.4720E+01	4.9207E+05	9.7800E+02
1.2688E+01	1.3411E-01	1.4720E+01	4.9207E+05	9.7720E+02
1.2735E+01	1.3322E-01	1.4623E+01	4.8881E+05	9.7360E+02
1.2749E+01	1.3411E-01	1.4720E+01	4.9207E+05	9.7250E+02
1.2782E+01	1.2257E-01	1.3453E+01	4.4970E+05	9.7000E+02
1.2803E+01	1.5720E-01	1.7255E+01	5.7679E+05	9.6840E+02
1.2818E+01	1.5632E-01	1.7157E+01	5.7354E+05	9.6730E+02
1.2843E+01	1.4832E-01	1.6280E+01	5.4421E+05	9.6540E+02
1.2871E+01	1.5809E-01	1.7352E+01	5.8005E+05	9.6330E+02
1.2904E+01	1.5720E-01	1.7255E+01	5.7679E+05	9.6080E+02
1.2918E+01	1.7230E-01	1.8912E+01	6.3219E+05	9.5980E+02

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.2939E+01	1.6520E-01	1.8132E+01	6.0612E+05	9.5820E+02
1.3022E+01	1.7941E-01	1.9692E+01	6.5826E+05	9.5210E+02
1.3036E+01	1.7941E-01	1.9692E+01	6.5826E+05	9.5110E+02
1.3059E+01	1.8296E-01	2.0082E+01	6.7130E+05	9.4940E+02
1.3079E+01	1.7763E-01	1.9497E+01	6.5175E+05	9.4800E+02
1.3116E+01	1.8296E-01	2.0082E+01	6.7130E+05	9.4530E+02
1.3142E+01	1.9362E-01	2.1252E+01	7.1040E+05	9.4340E+02
1.3153E+01	2.1405E-01	2.3494E+01	7.8535E+05	9.4260E+02
1.3173E+01	2.0339E-01	2.2324E+01	7.4625E+05	9.4120E+02
1.3242E+01	1.9539E-01	2.1447E+01	7.1692E+05	9.3630E+02
1.3263E+01	2.0872E-01	2.2909E+01	7.6580E+05	9.3480E+02
1.3277E+01	2.1582E-01	2.3689E+01	7.9187E+05	9.3380E+02
1.3297E+01	2.1316E-01	2.3396E+01	7.8209E+05	9.3240E+02
1.3332E+01	1.7141E-01	1.8815E+01	6.2893E+05	9.3000E+02
1.3369E+01	2.0783E-01	2.2811E+01	7.6254E+05	9.2740E+02
1.3386E+01	2.2559E-01	2.4761E+01	8.2772E+05	9.2620E+02
1.3399E+01	2.1049E-01	2.3104E+01	7.7232E+05	9.2530E+02
1.3421E+01	1.9984E-01	2.1934E+01	7.3321E+05	9.2380E+02
1.3497E+01	2.0339E-01	2.2324E+01	7.4625E+05	9.1860E+02
1.3513E+01	2.1405E-01	2.3494E+01	7.8535E+05	9.1750E+02
1.3525E+01	2.2826E-01	2.5054E+01	8.3749E+05	9.1670E+02
1.3543E+01	1.9984E-01	2.1934E+01	7.3321E+05	9.1550E+02
1.3602E+01	1.8740E-01	2.0569E+01	6.8759E+05	9.1150E+02
1.3625E+01	2.0605E-01	2.2617E+01	7.5602E+05	9.1000E+02
1.3640E+01	2.1493E-01	2.3591E+01	7.8861E+05	9.0900E+02
1.3653E+01	2.1316E-01	2.3396E+01	7.8209E+05	9.0810E+02
1.3700E+01	1.6964E-01	1.8620E+01	6.2242E+05	9.0500E+02
1.3730E+01	1.9273E-01	2.1154E+01	7.0714E+05	9.0300E+02
1.3771E+01	2.1493E-01	2.3591E+01	7.8861E+05	9.0030E+02
1.3862E+01	2.0250E-01	2.2227E+01	7.4299E+05	8.9440E+02
1.3884E+01	2.1049E-01	2.3104E+01	7.7232E+05	8.9300E+02
1.3909E+01	1.9184E-01	2.1057E+01	7.0388E+05	8.9140E+02
1.3972E+01	1.8474E-01	2.0277E+01	6.7782E+05	8.8740E+02
1.3997E+01	2.0072E-01	2.2032E+01	7.3647E+05	8.8580E+02
1.4036E+01	1.8207E-01	1.9984E+01	6.6804E+05	8.8330E+02
1.4105E+01	1.9273E-01	2.1154E+01	7.0714E+05	8.7900E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4126E+01	1.8207E-01	1.9984E+01	6.6804E+05	8.7770E+02
1.4184E+01	1.8207E-01	1.9984E+01	6.6804E+05	8.7410E+02
1.4212E+01	1.8296E-01	2.0082E+01	6.7130E+05	8.7240E+02
1.4248E+01	1.8207E-01	1.9984E+01	6.6804E+05	8.7020E+02
1.4286E+01	1.7674E-01	1.9400E+01	6.4849E+05	8.6790E+02
1.4304E+01	1.7586E-01	1.9302E+01	6.4523E+05	8.6680E+02
1.4333E+01	1.7497E-01	1.9205E+01	6.4197E+05	8.6500E+02
1.4375E+01	1.6964E-01	1.8620E+01	6.2242E+05	8.6250E+02
1.4400E+01	1.5809E-01	1.7352E+01	5.8005E+05	8.6100E+02
1.4430E+01	1.7497E-01	1.9205E+01	6.4197E+05	8.5920E+02
1.4459E+01	1.7586E-01	1.9302E+01	6.4523E+05	8.5750E+02
1.4498E+01	1.6697E-01	1.8327E+01	6.1264E+05	8.5520E+02
1.4542E+01	1.6520E-01	1.8132E+01	6.0612E+05	8.5260E+02
1.4568E+01	1.7586E-01	1.9302E+01	6.4523E+05	8.5110E+02
1.4607E+01	1.6253E-01	1.7840E+01	5.9635E+05	8.4880E+02
1.4687E+01	1.6697E-01	1.8327E+01	6.1264E+05	8.4420E+02
1.4822E+01	1.6520E-01	1.8132E+01	6.0612E+05	8.3650E+02
1.4872E+01	1.5632E-01	1.7157E+01	5.7354E+05	8.3370E+02
1.4943E+01	1.5987E-01	1.7547E+01	5.8657E+05	8.2970E+02
1.5080E+01	1.5720E-01	1.7255E+01	5.7679E+05	8.2220E+02
1.5202E+01	1.5187E-01	1.6670E+01	5.5724E+05	8.1560E+02
1.5333E+01	1.4921E-01	1.6377E+01	5.4747E+05	8.0860E+02
1.5450E+01	1.4566E-01	1.5988E+01	5.3443E+05	8.0250E+02
1.5498E+01	1.4211E-01	1.5598E+01	5.2140E+05	8.0000E+02
1.5623E+01	1.4832E-01	1.6280E+01	5.4421E+05	7.9360E+02
1.5814E+01	1.5276E-01	1.6767E+01	5.6050E+05	7.8400E+02
1.5963E+01	1.5809E-01	1.7352E+01	5.8005E+05	7.7670E+02
1.6173E+01	1.7319E-01	1.9010E+01	6.3545E+05	7.6660E+02
1.6342E+01	1.7141E-01	1.8815E+01	6.2893E+05	7.5870E+02
1.6531E+01	1.9273E-01	2.1154E+01	7.0714E+05	7.5000E+02
1.6709E+01	1.7763E-01	1.9497E+01	6.5175E+05	7.4200E+02
1.6880E+01	1.9362E-01	2.1252E+01	7.1040E+05	7.3450E+02
1.7153E+01	1.9362E-01	2.1252E+01	7.1040E+05	7.2280E+02
1.7712E+01	1.9007E-01	2.0862E+01	6.9737E+05	7.0000E+02
1.8233E+01	1.9023E-01	2.0879E+01	6.9795E+05	6.8000E+02
1.8785E+01	1.9228E-01	2.1105E+01	7.0548E+05	6.6000E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9373E+01	1.9228E-01	2.1105E+01	7.0548E+05	6.4000E+02
1.9997E+01	1.9165E-01	2.1035E+01	7.0317E+05	6.2000E+02
2.0664E+01	1.8786E-01	2.0620E+01	6.8929E+05	6.0000E+02
2.2500E+01	1.9219E-01	2.1095E+01	7.0518E+05	5.5104E+02
2.5000E+01	1.7531E-01	1.9243E+01	6.4324E+05	4.9594E+02
2.7500E+01	1.5811E-01	1.7354E+01	5.8012E+05	4.5085E+02
3.0000E+01	1.4196E-01	1.5581E+01	5.2086E+05	4.1328E+02
3.5000E+01	1.1442E-01	1.2559E+01	4.1982E+05	3.5424E+02
4.0000E+01	9.3078E-02	1.0216E+01	3.4151E+05	3.0996E+02
4.5000E+01	7.6699E-02	8.4185E+00	2.8141E+05	2.7552E+02
5.0000E+01	6.4046E-02	7.0298E+00	2.3499E+05	2.4797E+02
6.0000E+01	4.6311E-02	5.0831E+00	1.6992E+05	2.0664E+02
7.0000E+01	3.4886E-02	3.8292E+00	1.2800E+05	1.7712E+02
8.0000E+01	2.7158E-02	2.9809E+00	9.9647E+04	1.5498E+02
9.0000E+01	2.1711E-02	2.3830E+00	7.9659E+04	1.3776E+02
1.0000E+02	1.7737E-02	1.9468E+00	6.5078E+04	1.2398E+02
1.2500E+02	1.0323E-02	1.1330E+00	3.7874E+04	9.9187E+01
1.5000E+02	6.9341E-03	7.6109E-01	2.5442E+04	8.2656E+01
1.7500E+02	4.8812E-03	5.3576E-01	1.7909E+04	7.0848E+01
2.0000E+02	3.5513E-03	3.8980E-01	1.3030E+04	6.1992E+01
2.2500E+02	2.6532E-03	2.9122E-01	9.7350E+03	5.5104E+01
2.5000E+02	2.0270E-03	2.2249E-01	7.4373E+03	4.9594E+01
2.7500E+02	1.5785E-03	1.7325E-01	5.7915E+03	4.5085E+01
3.0000E+02	1.2497E-03	1.3717E-01	4.5853E+03	4.1328E+01
3.5000E+02	8.1667E-04	8.9639E-02	2.9964E+03	3.5424E+01
4.0000E+02	5.5840E-04	6.1291E-02	2.0488E+03	3.0996E+01
4.5000E+02	3.9582E-04	4.3446E-02	1.4523E+03	2.7552E+01
5.0000E+02	2.8890E-04	3.1710E-02	1.0600E+03	2.4797E+01
5.3300E+02	2.3788E-04	2.6110E-02	8.7279E+02	2.3262E+01
5.3300E+02	1.4254E-03	1.5645E-01	5.2299E+03	2.3262E+01
5.3340E+02	6.3599E-03	6.9807E-01	2.3335E+04	2.3244E+01
5.3402E+02	1.3183E-02	1.4470E+00	4.8370E+04	2.3217E+01
5.3454E+02	8.9079E-03	9.7774E-01	3.2684E+04	2.3195E+01
5.3504E+02	4.0979E-03	4.4979E-01	1.5036E+04	2.3173E+01
5.3541E+02	1.1206E-02	1.2300E+00	4.1115E+04	2.3157E+01
5.3567E+02	1.9116E-02	2.0982E+00	7.0137E+04	2.3146E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3618E+02	1.4573E-02	1.5995E+00	5.3468E+04	2.3124E+01
5.3651E+02	9.6380E-03	1.0579E+00	3.5363E+04	2.3109E+01
5.3696E+02	1.2595E-02	1.3825E+00	4.6213E+04	2.3090E+01
5.3730E+02	1.0467E-02	1.1488E+00	3.8404E+04	2.3075E+01
5.3751E+02	8.9427E-03	9.8156E-01	3.2812E+04	2.3066E+01
5.3798E+02	8.4089E-03	9.2297E-01	3.0853E+04	2.3046E+01
5.3840E+02	8.9079E-03	9.7774E-01	3.2684E+04	2.3028E+01
5.3930E+02	8.3909E-03	9.2100E-01	3.0787E+04	2.2990E+01
5.3958E+02	8.4975E-03	9.3269E-01	3.1178E+04	2.2978E+01
5.4000E+02	7.9423E-03	8.7176E-01	2.9141E+04	2.2960E+01
5.4200E+02	7.3233E-03	8.0381E-01	2.6870E+04	2.2875E+01
5.4400E+02	6.6067E-03	7.2515E-01	2.4240E+04	2.2791E+01
5.4600E+02	6.1906E-03	6.7948E-01	2.2714E+04	2.2708E+01
5.4800E+02	5.9259E-03	6.5043E-01	2.1743E+04	2.2625E+01
5.5000E+02	5.8373E-03	6.4071E-01	2.1418E+04	2.2543E+01
5.5200E+02	6.1289E-03	6.7271E-01	2.2487E+04	2.2461E+01
5.5400E+02	6.1031E-03	6.6988E-01	2.2393E+04	2.2380E+01
5.5600E+02	6.0493E-03	6.6397E-01	2.2195E+04	2.2299E+01
5.5800E+02	5.8900E-03	6.4649E-01	2.1611E+04	2.2219E+01
5.6000E+02	5.7846E-03	6.3492E-01	2.1224E+04	2.2140E+01
5.6200E+02	5.3416E-03	5.8630E-01	1.9599E+04	2.2061E+01
5.6400E+02	5.3069E-03	5.8249E-01	1.9471E+04	2.1983E+01
5.6600E+02	5.2362E-03	5.7473E-01	1.9212E+04	2.1905E+01
5.8000E+02	4.3838E-03	4.8117E-01	1.6084E+04	2.1377E+01
5.9000E+02	4.2102E-03	4.6212E-01	1.5448E+04	2.1014E+01
6.0000E+02	4.0454E-03	4.4403E-01	1.4843E+04	2.0664E+01
7.0000E+02	2.7806E-03	3.0520E-01	1.0202E+04	1.7712E+01
8.0000E+02	1.9879E-03	2.1819E-01	7.2938E+03	1.5498E+01
9.0000E+02	1.4687E-03	1.6121E-01	5.3888E+03	1.3776E+01
1.0000E+03	1.1154E-03	1.2242E-01	4.0924E+03	1.2398E+01
1.2500E+03	6.1604E-04	6.7617E-02	2.2603E+03	9.9187E+00
1.5000E+03	3.7620E-04	4.1292E-02	1.3803E+03	8.2656E+00
1.7500E+03	2.4696E-04	2.7106E-02	9.0610E+02	7.0848E+00
2.0000E+03	1.7116E-04	1.8786E-02	6.2799E+02	6.1992E+00
2.2500E+03	1.2374E-04	1.3582E-02	4.5401E+02	5.5104E+00
2.5000E+03	9.2531E-05	1.0156E-02	3.3950E+02	4.9594E+00

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.7500E+03	6.8694E-05	7.5399E-03	2.5204E+02	4.5085E+00
3.0000E+03	5.3417E-05	5.8630E-03	1.9599E+02	4.1328E+00
3.5000E+03	3.3990E-05	3.7308E-03	1.2471E+02	3.5424E+00
4.0000E+03	2.2846E-05	2.5076E-03	8.3824E+01	3.0996E+00
4.5000E+03	1.6030E-05	1.7595E-03	5.8815E+01	2.7552E+00
5.0000E+03	1.1642E-05	1.2778E-03	4.2716E+01	2.4797E+00
6.0000E+03	6.6520E-06	7.3013E-04	2.4407E+01	2.0664E+00
7.0000E+03	4.1180E-06	4.5200E-04	1.5109E+01	1.7712E+00
8.0000E+03	2.7046E-06	2.9686E-04	9.9234E+00	1.5498E+00
9.0000E+03	1.8586E-06	2.0400E-04	6.8193E+00	1.3776E+00
1.0000E+04	1.2947E-06	1.4211E-04	4.7505E+00	1.2398E+00
1.2500E+04	6.3555E-07	6.9759E-05	2.3319E+00	9.9187E-01
1.5000E+04	3.5511E-07	3.8977E-05	1.3029E+00	8.2656E-01
1.7500E+04	2.1708E-07	2.3827E-05	7.9650E-01	7.0848E-01
2.0000E+04	1.4174E-07	1.5558E-05	5.2007E-01	6.1992E-01
2.2500E+04	9.7320E-08	1.0682E-05	3.5708E-01	5.5104E-01
2.5000E+04	6.9551E-08	7.6340E-06	2.5519E-01	4.9594E-01
2.7500E+04	5.1157E-08	5.6151E-06	1.8770E-01	4.5085E-01
3.0000E+04	3.8478E-08	4.2233E-06	1.4118E-01	4.1328E-01
3.5000E+04	2.3223E-08	2.5490E-06	8.5207E-02	3.5424E-01
4.0000E+04	1.4997E-08	1.6461E-06	5.5025E-02	3.0996E-01
4.5000E+04	1.0197E-08	1.1193E-06	3.7415E-02	2.7552E-01
5.0000E+04	7.2219E-09	7.9268E-07	2.6498E-02	2.4797E-01
6.0000E+04	3.9753E-09	4.3633E-07	1.4586E-02	2.0664E-01
7.0000E+04	2.3998E-09	2.6340E-07	8.8050E-03	1.7712E-01
8.0000E+04	1.5491E-09	1.7003E-07	5.6838E-03	1.5498E-01
9.0000E+04	1.0521E-09	1.1548E-07	3.8602E-03	1.3776E-01
1.0000E+05	7.4389E-10	8.1650E-08	2.7294E-03	1.2398E-01

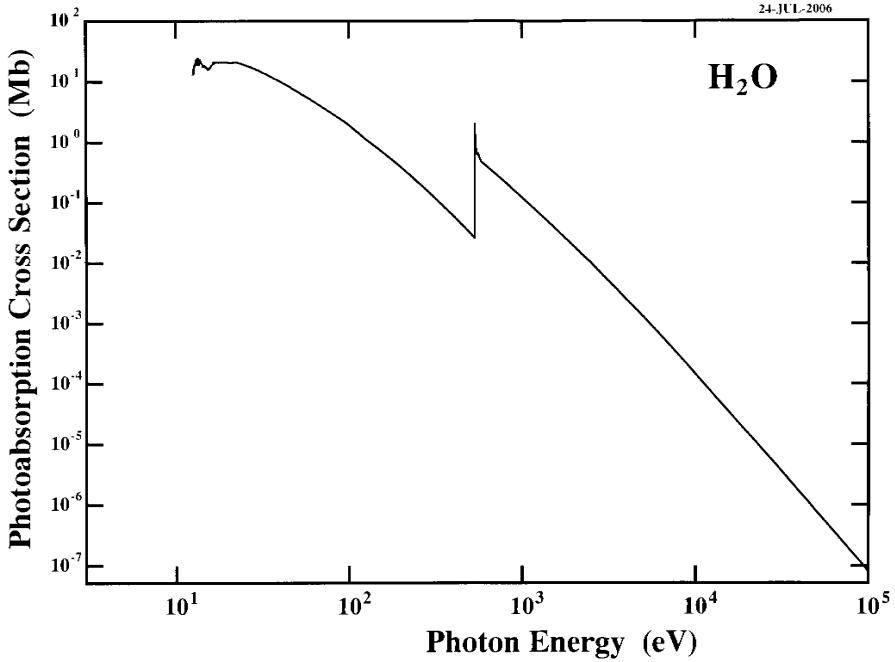
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\;\;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E-E_{\rm K}}}\;\;,$$

where $E_{\rm K} \;=\; 13.6$ and 539.9 eV for hydrogen and oxygen atoms, respectively.



H_2O

Energy, eV	Source
6.60 - 12.6174 (IP)	Table 5.1 p.185 (Berkowitz's book*)
IP - 20.66	Katayama *et al*., J. Chem. Phys., 59 (1973) 4309
	Fig. 5.3 p.184 (Berkowitz's book*)
20.66 - 124.0	Table 5.3 p.186 (Berkowitz's book*)
124.0 - 533	Table 5.3 p.186 (Berkowitz's book*)
534.0	Table 5.2 p.186 (Berkowitz's book*)
535.9	Table 5.2 p.186 (Berkowitz's book*)
537.0	Table 5.2 p.186 (Berkowitz's book*)
537.8	Table 5.2 p.186 (Berkowitz's book*)
538.4	Table 5.2 p.186 (Berkowitz's book*)
533 - 566	Ishii *et al*., J. Chem. Phys., 87 (1987) 4344-4360
566 - 2622.4	Table 5.3 p.186 (Berkowitz's book*)
2622.4 - 10000.0	Table 5.3 p.186 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Carbon Dioxide (CO_2)

Z = 22 Molecular Mass : $M_{\rm A}$ = 44.0095

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.0000E+00	6.1469E-05	6.7469E-03	9.2323E+01	1.7712E+03
7.3120E+00	3.1820E-04	3.4926E-02	4.7791E+02	1.6956E+03
7.5360E+00	8.0672E-04	8.8547E-02	1.2116E+03	1.6452E+03
7.7130E+00	1.5882E-03	1.7432E-01	2.3854E+03	1.6075E+03
7.8620E+00	2.4704E-03	2.7115E-01	3.7104E+03	1.5770E+03
8.0170E+00	3.3637E-03	3.6920E-01	5.0520E+03	1.5465E+03
8.1810E+00	4.1131E-03	4.5146E-01	6.1776E+03	1.5155E+03
8.3290E+00	4.5395E-03	4.9826E-01	6.8181E+03	1.4886E+03
8.5750E+00	4.5749E-03	5.0214E-01	6.8712E+03	1.4459E+03
8.7380E+00	4.6581E-03	5.1128E-01	6.9962E+03	1.4189E+03
8.8800E+00	5.0341E-03	5.5255E-01	7.5610E+03	1.3962E+03
9.0360E+00	5.6927E-03	6.2484E-01	8.5501E+03	1.3721E+03
9.2060E+00	6.4952E-03	7.1291E-01	9.7553E+03	1.3468E+03
9.3480E+00	6.7601E-03	7.4200E-01	1.0153E+04	1.3263E+03
9.4850E+00	6.3867E-03	7.0101E-01	9.5924E+03	1.3072E+03
9.5720E+00	5.9022E-03	6.4783E-01	8.8647E+03	1.2953E+03
9.6760E+00	5.0417E-03	5.5338E-01	7.5723E+03	1.2814E+03
9.8120E+00	3.7598E-03	4.1268E-01	5.6470E+03	1.2636E+03
9.9500E+00	2.4656E-03	2.7063E-01	3.7032E+03	1.2461E+03
1.0080E+01	1.5562E-03	1.7081E-01	2.3373E+03	1.2300E+03
1.0170E+01	9.6040E-04	1.0541E-01	1.4425E+03	1.2191E+03
1.0330E+01	4.4613E-04	4.8968E-02	6.7006E+02	1.2002E+03
1.0660E+01	1.5412E-02	1.6916E+00	2.3148E+04	1.1631E+03
1.0715E+01	2.9501E-02	3.2380E+00	4.4308E+04	1.1571E+03
1.0727E+01	2.4157E-02	2.6515E+00	3.6283E+04	1.1558E+03
1.0794E+01	5.2350E-02	5.7460E+00	7.8627E+04	1.1486E+03
1.0842E+01	1.3622E-01	1.4952E+01	2.0459E+05	1.1436E+03
1.0875E+01	1.4498E-01	1.5913E+01	2.1776E+05	1.1401E+03
1.0923E+01	3.2952E-01	3.6168E+01	4.9492E+05	1.1351E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.0978E+01	7.5429E-01	8.2791E+01	1.1329E+06	1.1294E+03
1.0990E+01	7.2415E-01	7.9483E+01	1.0876E+06	1.1282E+03
1.1045E+01	1.0143E+00	1.1133E+02	1.5235E+06	1.1225E+03
1.1071E+01	6.1202E-01	6.7176E+01	9.1922E+05	1.1199E+03
1.1112E+01	3.4966E-01	3.8379E+01	5.2516E+05	1.1158E+03
1.1133E+01	3.1533E-01	3.4611E+01	4.7361E+05	1.1137E+03
1.1167E+01	1.6547E-01	1.8162E+01	2.4852E+05	1.1103E+03
1.1193E+01	1.3838E-01	1.5189E+01	2.0784E+05	1.1077E+03
1.1241E+01	1.1472E-01	1.2592E+01	1.7230E+05	1.1030E+03
1.1262E+01	9.1836E-02	1.0080E+01	1.3793E+05	1.1009E+03
1.1322E+01	1.9668E-01	2.1587E+01	2.9539E+05	1.0951E+03
1.1336E+01	3.1640E-01	3.4728E+01	4.7521E+05	1.0937E+03
1.1377E+01	7.9074E-01	8.6792E+01	1.1876E+06	1.0898E+03
1.1403E+01	2.8511E-01	3.1293E+01	4.2821E+05	1.0873E+03
1.1418E+01	2.2143E-01	2.4304E+01	3.3257E+05	1.0859E+03
1.1470E+01	1.4361E-01	1.5763E+01	2.1570E+05	1.0809E+03
1.1492E+01	1.8251E-01	2.0032E+01	2.7411E+05	1.0789E+03
1.1525E+01	2.6333E-01	2.8903E+01	3.9551E+05	1.0758E+03
1.1544E+01	2.0384E-01	2.2374E+01	3.0616E+05	1.0740E+03
1.1585E+01	2.1373E-01	2.3460E+01	3.2102E+05	1.0702E+03
1.1621E+01	1.5004E-01	1.6469E+01	2.2536E+05	1.0669E+03
1.1666E+01	2.3621E-01	2.5926E+01	3.5477E+05	1.0628E+03
1.1714E+01	1.6946E-01	1.8600E+01	2.5451E+05	1.0584E+03
1.1735E+01	1.8012E-01	1.9771E+01	2.7053E+05	1.0565E+03
1.1769E+01	1.6410E-01	1.8012E+01	2.4647E+05	1.0535E+03
1.1817E+01	2.5789E-01	2.8306E+01	3.8733E+05	1.0492E+03
1.1843E+01	1.6597E-01	1.8217E+01	2.4928E+05	1.0469E+03
1.1876E+01	1.5757E-01	1.7295E+01	2.3667E+05	1.0440E+03
1.1917E+01	1.7472E-01	1.9177E+01	2.6242E+05	1.0404E+03
1.1924E+01	1.9951E-01	2.1898E+01	2.9965E+05	1.0398E+03
1.1965E+01	3.8595E-01	4.2363E+01	5.7968E+05	1.0362E+03
1.2017E+01	1.9528E-01	2.1434E+01	2.9330E+05	1.0317E+03
1.2053E+01	2.2310E-01	2.4488E+01	3.3508E+05	1.0287E+03
1.2087E+01	2.5130E-01	2.7583E+01	3.7744E+05	1.0258E+03
1.2139E+01	4.9838E-01	5.4703E+01	7.4854E+05	1.0214E+03
1.2180E+01	2.7606E-01	3.0300E+01	4.1462E+05	1.0179E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2221E+01	2.6307E-01	2.8875E+01	3.9512E+05	1.0145E+03
1.2254E+01	3.0082E-01	3.3018E+01	4.5181E+05	1.0118E+03
1.2295E+01	4.8955E-01	5.3733E+01	7.3527E+05	1.0084E+03
1.2357E+01	3.4729E-01	3.8119E+01	5.2161E+05	1.0034E+03
1.2405E+01	3.7206E-01	4.0838E+01	5.5882E+05	9.9947E+02
1.2438E+01	4.5060E-01	4.9458E+01	6.7678E+05	9.9682E+02
1.2471E+01	6.6222E-01	7.2686E+01	9.9462E+05	9.9418E+02
1.2526E+01	4.1396E-01	4.5436E+01	6.2174E+05	9.8981E+02
1.2565E+01	3.2014E-01	3.5139E+01	4.8083E+05	9.8674E+02
1.2601E+01	4.1279E-01	4.5308E+01	6.1999E+05	9.8392E+02
1.2634E+01	5.6378E-01	6.1881E+01	8.4677E+05	9.8135E+02
1.2675E+01	3.6853E-01	4.0451E+01	5.5351E+05	9.7818E+02
1.2701E+01	3.4717E-01	3.8106E+01	5.2143E+05	9.7618E+02
1.2742E+01	2.8118E-01	3.0863E+01	4.2232E+05	9.7304E+02
1.2801E+01	3.4370E-01	3.7724E+01	5.1621E+05	9.6855E+02
1.2823E+01	3.2006E-01	3.5130E+01	4.8070E+05	9.6689E+02
1.2842E+01	3.3949E-01	3.7262E+01	5.0989E+05	9.6546E+02
1.2918E+01	5.3470E-01	5.8689E+01	8.0308E+05	9.5978E+02
1.2937E+01	5.0342E-01	5.5256E+01	7.5611E+05	9.5837E+02
1.2971E+01	5.0646E-01	5.5589E+01	7.6066E+05	9.5586E+02
1.3033E+01	6.5210E-01	7.1575E+01	9.7941E+05	9.5131E+02
1.3093E+01	4.6218E-01	5.0729E+01	6.9416E+05	9.4695E+02
1.3160E+01	5.3118E-01	5.8303E+01	7.9780E+05	9.4213E+02
1.3167E+01	5.7350E-01	6.2948E+01	8.6137E+05	9.4163E+02
1.3196E+01	5.8950E-01	6.4704E+01	8.8539E+05	9.3956E+02
1.3229E+01	6.5088E-01	7.1442E+01	9.7759E+05	9.3722E+02
1.3262E+01	5.9367E-01	6.5162E+01	8.9166E+05	9.3488E+02
1.3296E+01	6.5848E-01	7.2275E+01	9.8900E+05	9.3249E+02
1.3344E+01	6.1538E-01	6.7545E+01	9.2426E+05	9.2914E+02
1.3411E+01	6.4967E-01	7.1308E+01	9.7576E+05	9.2450E+02
1.3432E+01	6.4433E-01	7.0722E+01	9.6774E+05	9.2305E+02
1.3458E+01	6.9389E-01	7.6162E+01	1.0422E+06	9.2127E+02
1.3485E+01	6.5536E-01	7.1933E+01	9.8431E+05	9.1942E+02
1.3518E+01	6.8853E-01	7.5574E+01	1.0341E+06	9.1718E+02
1.3559E+01	6.9614E-01	7.6409E+01	1.0456E+06	9.1441E+02
1.3592E+01	6.7134E-01	7.3687E+01	1.0083E+06	9.1219E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3621E+01	7.2204E-01	7.9252E+01	1.0845E+06	9.1024E+02
1.3647E+01	7.5330E-01	8.2683E+01	1.1314E+06	9.0851E+02
1.3681E+01	7.4375E-01	8.1635E+01	1.1171E+06	9.0625E+02
1.3729E+01	8.1580E-01	8.9543E+01	1.2253E+06	9.0308E+02
1.3755E+01	8.0627E-01	8.8497E+01	1.2110E+06	9.0138E+02
1.3776E+01	8.2532E-01	9.0588E+01	1.2396E+06	8.9998E+02
1.3780E+01	7.7897E-01	8.5500E+01	1.1700E+06	8.9973E+02
1.3783E+01	8.0191E-01	8.8018E+01	1.2044E+06	8.9954E+02
1.3786E+01	7.9264E-01	8.7001E+01	1.1905E+06	8.9936E+02
1.3790E+01	8.4592E-01	9.2849E+01	1.2705E+06	8.9910E+02
1.3794E+01	7.8927E-01	8.6631E+01	1.1854E+06	8.9881E+02
1.3796E+01	8.1740E-01	8.9718E+01	1.2277E+06	8.9867E+02
1.3799E+01	7.7445E-01	8.5005E+01	1.1632E+06	8.9849E+02
1.3803E+01	6.8043E-01	7.4685E+01	1.0220E+06	8.9827E+02
1.3806E+01	7.6628E-01	8.4108E+01	1.1509E+06	8.9805E+02
1.3814E+01	7.0666E-01	7.7564E+01	1.0614E+06	8.9753E+02
1.3818E+01	7.3589E-01	8.0772E+01	1.1053E+06	8.9729E+02
1.3821E+01	7.9953E-01	8.7758E+01	1.2009E+06	8.9709E+02
1.3825E+01	7.1698E-01	7.8697E+01	1.0769E+06	8.9682E+02
1.3827E+01	7.3178E-01	8.0320E+01	1.0991E+06	8.9666E+02
1.3831E+01	6.8957E-01	7.5687E+01	1.0357E+06	8.9643E+02
1.3835E+01	7.0103E-01	7.6945E+01	1.0529E+06	8.9619E+02
1.3839E+01	6.7621E-01	7.4221E+01	1.0156E+06	8.9590E+02
1.3843E+01	7.3245E-01	8.0395E+01	1.1001E+06	8.9566E+02
1.3846E+01	7.3762E-01	8.0962E+01	1.1079E+06	8.9545E+02
1.3849E+01	7.5574E-01	8.2951E+01	1.1351E+06	8.9526E+02
1.3853E+01	7.1353E-01	7.8318E+01	1.0717E+06	8.9498E+02
1.3857E+01	7.3572E-01	8.0754E+01	1.1050E+06	8.9474E+02
1.3863E+01	6.4243E-01	7.0513E+01	9.6489E+05	8.9433E+02
1.3868E+01	7.2309E-01	7.9367E+01	1.0860E+06	8.9403E+02
1.3872E+01	7.5010E-01	8.2331E+01	1.1266E+06	8.9377E+02
1.3874E+01	7.3343E-01	8.0502E+01	1.1016E+06	8.9363E+02
1.3878E+01	6.7679E-01	7.4285E+01	1.0165E+06	8.9340E+02
1.3881E+01	6.5901E-01	7.2333E+01	9.8979E+05	8.9317E+02
1.3884E+01	6.1200E-01	6.7173E+01	9.1918E+05	8.9302E+02
1.3887E+01	6.0458E-01	6.6359E+01	9.0804E+05	8.9278E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3891E+01	6.1308E-01	6.7292E+01	9.2081E+05	8.9255E+02
1.3894E+01	6.3194E-01	6.9362E+01	9.4913E+05	8.9236E+02
1.3902E+01	5.6603E-01	6.2128E+01	8.5015E+05	8.9184E+02
1.3908E+01	6.8296E-01	7.4962E+01	1.0258E+06	8.9148E+02
1.3914E+01	6.0780E-01	6.6713E+01	9.1288E+05	8.9105E+02
1.3916E+01	5.9299E-01	6.5087E+01	8.9064E+05	8.9092E+02
1.3921E+01	6.1703E-01	6.7725E+01	9.2674E+05	8.9062E+02
1.3925E+01	5.7407E-01	6.3011E+01	8.6223E+05	8.9034E+02
1.3933E+01	5.6369E-01	6.1871E+01	8.4662E+05	8.8986E+02
1.3937E+01	5.7625E-01	6.3250E+01	8.6550E+05	8.8961E+02
1.3938E+01	5.9919E-01	6.5768E+01	8.9995E+05	8.8952E+02
1.3942E+01	5.7216E-01	6.2801E+01	8.5935E+05	8.8929E+02
1.3947E+01	5.5511E-01	6.0930E+01	8.3375E+05	8.8895E+02
1.3950E+01	5.5844E-01	6.1295E+01	8.3874E+05	8.8879E+02
1.3953E+01	5.4177E-01	5.9465E+01	8.1370E+05	8.8856E+02
1.3959E+01	5.5211E-01	6.0600E+01	8.2923E+05	8.8822E+02
1.3962E+01	5.3618E-01	5.8852E+01	8.0531E+05	8.8798E+02
1.3965E+01	5.4172E-01	5.9460E+01	8.1363E+05	8.8784E+02
1.3972E+01	5.0172E-01	5.5069E+01	7.5355E+05	8.8736E+02
1.3982E+01	5.1648E-01	5.6690E+01	7.7573E+05	8.8674E+02
1.3984E+01	5.0907E-01	5.5877E+01	7.6460E+05	8.8659E+02
1.3988E+01	5.0906E-01	5.5874E+01	7.6457E+05	8.8635E+02
1.3995E+01	4.8904E-01	5.3678E+01	7.3451E+05	8.8593E+02
1.3999E+01	4.7015E-01	5.1604E+01	7.0614E+05	8.8564E+02
1.4002E+01	4.7976E-01	5.2659E+01	7.2057E+05	8.8549E+02
1.4008E+01	4.7864E-01	5.2535E+01	7.1888E+05	8.8511E+02
1.4012E+01	4.6381E-01	5.0909E+01	6.9662E+05	8.8486E+02
1.4014E+01	4.7342E-01	5.1963E+01	7.1105E+05	8.8472E+02
1.4019E+01	4.7747E-01	5.2408E+01	7.1713E+05	8.8438E+02
1.4026E+01	4.5339E-01	4.9765E+01	6.8096E+05	8.8396E+02
1.4030E+01	4.5745E-01	5.0210E+01	6.8706E+05	8.8372E+02
1.4035E+01	4.4817E-01	4.9191E+01	6.7312E+05	8.8338E+02
1.4038E+01	4.1670E-01	4.5738E+01	6.2586E+05	8.8318E+02
1.4041E+01	4.5333E-01	4.9757E+01	6.8087E+05	8.8299E+02
1.4047E+01	4.3443E-01	4.7683E+01	6.5249E+05	8.8265E+02
1.4050E+01	4.3553E-01	4.7804E+01	6.5414E+05	8.8247E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4059E+01	4.0626E-01	4.4592E+01	6.1018E+05	8.8189E+02
1.4065E+01	4.1955E-01	4.6050E+01	6.3014E+05	8.8150E+02
1.4072E+01	3.9029E-01	4.2839E+01	5.8620E+05	8.8108E+02
1.4077E+01	3.8509E-01	4.2268E+01	5.7838E+05	8.8074E+02
1.4083E+01	3.6619E-01	4.0194E+01	5.5000E+05	8.8040E+02
1.4087E+01	3.7579E-01	4.1248E+01	5.6442E+05	8.8011E+02
1.4093E+01	3.8206E-01	4.1935E+01	5.7383E+05	8.7974E+02
1.4104E+01	3.5796E-01	3.9290E+01	5.3763E+05	8.7906E+02
1.4112E+01	3.6201E-01	3.9734E+01	5.4371E+05	8.7858E+02
1.4130E+01	3.3676E-01	3.6963E+01	5.0580E+05	8.7748E+02
1.4137E+01	3.3452E-01	3.6717E+01	5.0243E+05	8.7704E+02
1.4142E+01	3.3894E-01	3.7203E+01	5.0907E+05	8.7671E+02
1.4153E+01	3.1484E-01	3.4557E+01	4.7288E+05	8.7604E+02
1.4189E+01	2.8731E-01	3.1535E+01	4.3152E+05	8.7378E+02
1.4194E+01	2.8952E-01	3.1777E+01	4.3483E+05	8.7349E+02
1.4200E+01	2.7875E-01	3.0596E+01	4.1867E+05	8.7310E+02
1.4206E+01	2.8318E-01	3.1082E+01	4.2531E+05	8.7278E+02
1.4215E+01	2.7351E-01	3.0021E+01	4.1080E+05	8.7220E+02
1.4223E+01	2.7348E-01	3.0018E+01	4.1076E+05	8.7171E+02
1.4246E+01	2.4638E-01	2.7043E+01	3.7005E+05	8.7028E+02
1.4254E+01	2.4745E-01	2.7161E+01	3.7166E+05	8.6979E+02
1.4290E+01	2.2511E-01	2.4708E+01	3.3810E+05	8.6763E+02
1.4296E+01	2.2620E-01	2.4828E+01	3.3974E+05	8.6724E+02
1.4308E+01	2.1764E-01	2.3888E+01	3.2688E+05	8.6653E+02
1.4318E+01	2.1760E-01	2.3884E+01	3.2682E+05	8.6595E+02
1.4349E+01	1.9861E-01	2.1800E+01	2.9830E+05	8.6408E+02
1.4356E+01	2.0080E-01	2.2040E+01	3.0159E+05	8.6364E+02
1.4403E+01	1.8175E-01	1.9949E+01	2.7297E+05	8.6085E+02
1.4456E+01	1.6600E-01	1.8220E+01	2.4932E+05	8.5767E+02
1.4465E+01	1.6782E-01	1.8420E+01	2.5206E+05	8.5711E+02
1.4504E+01	1.5547E-01	1.7064E+01	2.3350E+05	8.5485E+02
1.4513E+01	1.5728E-01	1.7263E+01	2.3622E+05	8.5432E+02
1.4542E+01	1.4903E-01	1.6357E+01	2.2383E+05	8.5259E+02
1.4611E+01	1.4026E-01	1.5395E+01	2.1066E+05	8.4859E+02
1.4663E+01	1.3156E-01	1.4440E+01	1.9759E+05	8.4557E+02
1.4671E+01	1.2856E-01	1.4111E+01	1.9309E+05	8.4508E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4680E+01	1.3149E-01	1.4433E+01	1.9750E+05	8.4460E+02
1.4710E+01	1.2621E-01	1.3853E+01	1.8956E+05	8.4287E+02
1.4752E+01	1.2198E-01	1.3388E+01	1.8320E+05	8.4047E+02
1.4805E+01	1.1772E-01	1.2921E+01	1.7680E+05	8.3744E+02
1.4836E+01	1.1539E-01	1.2665E+01	1.7331E+05	8.3571E+02
1.4847E+01	1.2164E-01	1.3351E+01	1.8269E+05	8.3508E+02
1.4862E+01	1.1752E-01	1.2899E+01	1.7650E+05	8.3426E+02
1.4878E+01	1.1746E-01	1.2893E+01	1.7642E+05	8.3334E+02
1.4898E+01	1.2368E-01	1.3575E+01	1.8576E+05	8.3224E+02
1.4921E+01	1.1175E-01	1.2266E+01	1.6785E+05	8.3095E+02
1.4938E+01	1.1170E-01	1.2260E+01	1.6776E+05	8.3000E+02
1.4943E+01	1.1136E-01	1.2223E+01	1.6726E+05	8.2974E+02
1.4961E+01	1.1484E-01	1.2605E+01	1.7248E+05	8.2873E+02
1.4977E+01	1.3849E-01	1.5201E+01	2.0801E+05	8.2785E+02
1.4985E+01	1.4121E-01	1.5500E+01	2.1209E+05	8.2741E+02
1.5007E+01	1.2066E-01	1.3243E+01	1.8122E+05	8.2618E+02
1.5023E+01	1.1747E-01	1.2894E+01	1.7643E+05	8.2528E+02
1.5043E+01	1.3818E-01	1.5167E+01	2.0754E+05	8.2420E+02
1.5062E+01	1.2057E-01	1.3234E+01	1.8110E+05	8.2316E+02
1.5081E+01	1.3459E-01	1.4773E+01	2.0215E+05	8.2214E+02
1.5086E+01	1.4119E-01	1.5498E+01	2.1207E+05	8.2185E+02
1.5097E+01	1.4098E-01	1.5474E+01	2.1175E+05	8.2123E+02
1.5106E+01	1.5710E-01	1.7243E+01	2.3595E+05	8.2074E+02
1.5114E+01	1.5888E-01	1.7439E+01	2.3863E+05	8.2035E+02
1.5124E+01	1.4623E-01	1.6051E+01	2.1963E+05	8.1979E+02
1.5134E+01	1.3836E-01	1.5187E+01	2.0781E+05	8.1922E+02
1.5139E+01	1.2966E-01	1.4232E+01	1.9474E+05	8.1899E+02
1.5144E+01	1.3627E-01	1.4957E+01	2.0466E+05	8.1869E+02
1.5159E+01	1.3215E-01	1.4505E+01	1.9849E+05	8.1788E+02
1.5178E+01	1.6245E-01	1.7831E+01	2.4400E+05	8.1685E+02
1.5187E+01	1.7093E-01	1.8761E+01	2.5672E+05	8.1641E+02
1.5194E+01	1.6216E-01	1.7799E+01	2.4356E+05	8.1599E+02
1.5208E+01	1.5327E-01	1.6823E+01	2.3020E+05	8.1523E+02
1.5225E+01	1.6447E-01	1.8052E+01	2.4702E+05	8.1435E+02
1.5239E+01	1.6707E-01	1.8338E+01	2.5093E+05	8.1358E+02
1.5252E+01	1.6397E-01	1.7997E+01	2.4627E+05	8.1292E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5256E+01	1.5813E-01	1.7357E+01	2.3750E+05	8.1268E+02
1.5268E+01	1.5601E-01	1.7123E+01	2.3431E+05	8.1206E+02
1.5282E+01	1.6053E-01	1.7620E+01	2.4111E+05	8.1129E+02
1.5289E+01	1.6999E-01	1.8659E+01	2.5532E+05	8.1095E+02
1.5323E+01	1.8757E-01	2.0588E+01	2.8172E+05	8.0916E+02
1.5328E+01	1.7981E-01	1.9736E+01	2.7007E+05	8.0888E+02
1.5342E+01	1.7573E-01	1.9288E+01	2.6393E+05	8.0816E+02
1.5348E+01	1.7849E-01	1.9591E+01	2.6807E+05	8.0782E+02
1.5363E+01	1.9642E-01	2.1559E+01	2.9501E+05	8.0704E+02
1.5366E+01	1.9253E-01	2.1132E+01	2.8916E+05	8.0685E+02
1.5371E+01	1.9245E-01	2.1123E+01	2.8904E+05	8.0661E+02
1.5384E+01	1.7399E-01	1.9097E+01	2.6132E+05	8.0591E+02
1.5394E+01	1.6903E-01	1.8553E+01	2.5388E+05	8.0543E+02
1.5401E+01	1.7082E-01	1.8749E+01	2.5656E+05	8.0505E+02
1.5413E+01	1.8401E-01	2.0197E+01	2.7637E+05	8.0441E+02
1.5425E+01	1.9625E-01	2.1540E+01	2.9475E+05	8.0378E+02
1.5437E+01	1.9028E-01	2.0886E+01	2.8579E+05	8.0316E+02
1.5448E+01	1.8913E-01	2.0759E+01	2.8406E+05	8.0259E+02
1.5463E+01	2.0324E-01	2.2307E+01	3.0525E+05	8.0181E+02
1.5480E+01	2.2784E-01	2.5008E+01	3.4220E+05	8.0093E+02
1.5486E+01	2.2774E-01	2.4997E+01	3.4205E+05	8.0064E+02
1.5495E+01	2.0841E-01	2.2875E+01	3.1302E+05	8.0018E+02
1.5511E+01	1.8416E-01	2.0214E+01	2.7660E+05	7.9933E+02
1.5529E+01	1.8577E-01	2.0390E+01	2.7901E+05	7.9842E+02
1.5542E+01	1.9894E-01	2.1836E+01	2.9880E+05	7.9774E+02
1.5545E+01	1.9507E-01	2.1411E+01	2.9298E+05	7.9760E+02
1.5550E+01	1.9783E-01	2.1714E+01	2.9713E+05	7.9731E+02
1.5563E+01	2.2732E-01	2.4951E+01	3.4142E+05	7.9666E+02
1.5567E+01	2.1669E-01	2.3784E+01	3.2546E+05	7.9643E+02
1.5581E+01	2.3754E-01	2.6073E+01	3.5677E+05	7.9574E+02
1.5584E+01	2.3462E-01	2.5752E+01	3.5238E+05	7.9560E+02
1.5590E+01	2.4314E-01	2.6687E+01	3.6518E+05	7.9530E+02
1.5604E+01	2.1988E-01	2.4134E+01	3.3025E+05	7.9456E+02
1.5612E+01	2.1400E-01	2.3489E+01	3.2141E+05	7.9418E+02
1.5615E+01	2.0531E-01	2.2535E+01	3.0836E+05	7.9399E+02
1.5633E+01	1.9637E-01	2.1553E+01	2.9493E+05	7.9309E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5640E+01	1.9913E-01	2.1857E+01	2.9908E+05	7.9275E+02
1.5655E+01	1.8929E-01	2.0776E+01	2.8429E+05	7.9200E+02
1.5668E+01	1.9096E-01	2.0960E+01	2.8681E+05	7.9132E+02
1.5680E+01	2.0801E-01	2.2831E+01	3.1242E+05	7.9073E+02
1.5685E+01	2.0887E-01	2.2926E+01	3.1371E+05	7.9044E+02
1.5707E+01	2.4491E-01	2.6881E+01	3.6783E+05	7.8936E+02
1.5712E+01	2.6111E-01	2.8660E+01	3.9217E+05	7.8911E+02
1.5716E+01	2.5242E-01	2.7705E+01	3.7911E+05	7.8892E+02
1.5723E+01	2.7051E-01	2.9691E+01	4.0629E+05	7.8857E+02
1.5725E+01	2.7045E-01	2.9685E+01	4.0620E+05	7.8843E+02
1.5731E+01	2.8376E-01	3.1146E+01	4.2619E+05	7.8813E+02
1.5735E+01	2.9617E-01	3.2507E+01	4.4482E+05	7.8797E+02
1.5738E+01	3.5264E-01	3.8706E+01	5.2964E+05	7.8778E+02
1.5744E+01	4.1195E-01	4.5216E+01	6.1872E+05	7.8749E+02
1.5749E+01	3.3330E-01	3.6583E+01	5.0060E+05	7.8727E+02
1.5753E+01	2.6614E-01	2.9212E+01	3.9972E+05	7.8704E+02
1.5763E+01	2.0848E-01	2.2882E+01	3.1312E+05	7.8656E+02
1.5774E+01	1.8816E-01	2.0652E+01	2.8260E+05	7.8600E+02
1.5784E+01	2.0428E-01	2.2422E+01	3.0682E+05	7.8551E+02
1.5790E+01	2.3291E-01	2.5565E+01	3.4982E+05	7.8520E+02
1.5795E+01	2.3475E-01	2.5766E+01	3.5258E+05	7.8496E+02
1.5806E+01	2.0581E-01	2.2590E+01	3.0911E+05	7.8441E+02
1.5812E+01	2.0762E-01	2.2789E+01	3.1184E+05	7.8412E+02
1.5820E+01	2.1612E-01	2.3721E+01	3.2459E+05	7.8373E+02
1.5843E+01	2.6076E-01	2.8621E+01	3.9165E+05	7.8259E+02
1.5853E+01	2.7017E-01	2.9654E+01	4.0578E+05	7.8210E+02
1.5863E+01	2.9204E-01	3.2055E+01	4.3863E+05	7.8160E+02
1.5871E+01	2.9861E-01	3.2776E+01	4.4850E+05	7.8121E+02
1.5878E+01	3.9432E-01	4.3281E+01	5.9224E+05	7.8084E+02
1.5886E+01	5.2931E-01	5.8097E+01	7.9499E+05	7.8048E+02
1.5894E+01	4.3046E-01	4.7248E+01	6.4653E+05	7.8009E+02
1.5897E+01	3.9303E-01	4.3140E+01	5.9031E+05	7.7993E+02
1.5905E+01	2.5969E-01	2.8504E+01	3.9004E+05	7.7952E+02
1.5908E+01	2.5198E-01	2.7657E+01	3.7845E+05	7.7938E+02
1.5914E+01	2.4901E-01	2.7331E+01	3.7400E+05	7.7910E+02
1.5921E+01	2.6326E-01	2.8896E+01	3.9540E+05	7.7875E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5924E+01	2.9099E-01	3.1939E+01	4.3705E+05	7.7858E+02
1.5932E+01	3.5314E-01	3.8761E+01	5.3040E+05	7.7819E+02
1.5937E+01	3.2624E-01	3.5808E+01	4.8999E+05	7.7798E+02
1.5944E+01	2.5233E-01	2.7695E+01	3.7898E+05	7.7761E+02
1.5946E+01	2.4367E-01	2.6745E+01	3.6598E+05	7.7752E+02
1.5951E+01	2.3880E-01	2.6210E+01	3.5866E+05	7.7729E+02
1.5956E+01	2.4446E-01	2.6832E+01	3.6716E+05	7.7704E+02
1.5962E+01	2.4723E-01	2.7136E+01	3.7133E+05	7.7675E+02
1.5976E+01	2.7670E-01	3.0371E+01	4.1559E+05	7.7605E+02
1.5985E+01	2.7654E-01	3.0354E+01	4.1535E+05	7.7562E+02
1.5992E+01	2.8601E-01	3.1392E+01	4.2957E+05	7.7528E+02
1.5997E+01	3.1660E-01	3.4751E+01	4.7552E+05	7.7506E+02
1.6004E+01	3.3277E-01	3.6525E+01	4.9980E+05	7.7471E+02
1.6010E+01	3.6621E-01	4.0196E+01	5.5003E+05	7.7444E+02
1.6014E+01	4.5717E-01	5.0180E+01	6.8665E+05	7.7422E+02
1.6021E+01	5.5576E-01	6.1001E+01	8.3472E+05	7.7389E+02
1.6029E+01	4.4734E-01	4.9101E+01	6.7188E+05	7.7351E+02
1.6033E+01	4.3578E-01	4.7832E+01	6.5452E+05	7.7333E+02
1.6036E+01	3.5714E-01	3.9201E+01	5.3641E+05	7.7316E+02
1.6042E+01	2.6600E-01	2.9197E+01	3.9952E+05	7.7285E+02
1.6047E+01	2.5155E-01	2.7610E+01	3.7781E+05	7.7262E+02
1.6054E+01	2.6389E-01	2.8964E+01	3.9634E+05	7.7228E+02
1.6063E+01	3.3658E-01	3.6943E+01	5.0552E+05	7.7188E+02
1.6070E+01	4.0641E-01	4.4608E+01	6.1040E+05	7.7153E+02
1.6077E+01	3.4689E-01	3.8074E+01	5.2100E+05	7.7120E+02
1.6078E+01	3.0757E-01	3.3759E+01	4.6195E+05	7.7114E+02
1.6087E+01	2.7388E-01	3.0061E+01	4.1135E+05	7.7069E+02
1.6091E+01	2.7574E-01	3.0265E+01	4.1414E+05	7.7054E+02
1.6096E+01	2.5840E-01	2.8362E+01	3.8810E+05	7.7027E+02
1.6101E+01	2.4011E-01	2.6355E+01	3.6064E+05	7.7005E+02
1.6109E+01	2.5914E-01	2.8443E+01	3.8921E+05	7.6965E+02
1.6114E+01	2.5522E-01	2.8013E+01	3.8332E+05	7.6941E+02
1.6120E+01	2.6566E-01	2.9159E+01	3.9901E+05	7.6911E+02
1.6122E+01	2.7619E-01	3.0315E+01	4.1482E+05	7.6906E+02
1.6127E+01	2.7993E-01	3.0726E+01	4.2044E+05	7.6881E+02
1.6131E+01	3.2010E-01	3.5135E+01	4.8077E+05	7.6859E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6139E+01	4.0909E-01	4.4902E+01	6.1443E+05	7.6822E+02
1.6148E+01	4.3387E-01	4.7622E+01	6.5165E+05	7.6782E+02
1.6156E+01	6.0814E-01	6.6750E+01	9.1339E+05	7.6743E+02
1.6164E+01	5.3518E-01	5.8742E+01	8.0381E+05	7.6706E+02
1.6173E+01	4.8616E-01	5.3361E+01	7.3018E+05	7.6662E+02
1.6182E+01	5.3584E-01	5.8814E+01	8.0480E+05	7.6619E+02
1.6190E+01	6.7178E-01	7.3735E+01	1.0090E+06	7.6579E+02
1.6200E+01	7.9237E-01	8.6971E+01	1.1901E+06	7.6535E+02
1.6214E+01	6.0624E-01	6.6541E+01	9.1053E+05	7.6469E+02
1.6222E+01	4.7481E-01	5.2115E+01	7.1313E+05	7.6428E+02
1.6228E+01	3.9326E-01	4.3165E+01	5.9066E+05	7.6402E+02
1.6235E+01	3.5576E-01	3.9049E+01	5.3433E+05	7.6367E+02
1.6240E+01	3.9210E-01	4.3037E+01	5.8891E+05	7.6344E+02
1.6243E+01	4.2943E-01	4.7134E+01	6.4497E+05	7.6331E+02
1.6249E+01	4.2167E-01	4.6283E+01	6.3332E+05	7.6303E+02
1.6257E+01	4.5221E-01	4.9635E+01	6.7919E+05	7.6267E+02
1.6272E+01	3.9638E-01	4.3507E+01	5.9533E+05	7.6195E+02
1.6284E+01	4.3356E-01	4.7588E+01	6.5118E+05	7.6139E+02
1.6291E+01	4.1428E-01	4.5471E+01	6.2222E+05	7.6108E+02
1.6293E+01	4.2287E-01	4.6414E+01	6.3512E+05	7.6097E+02
1.6297E+01	4.6784E-01	5.1351E+01	7.0267E+05	7.6079E+02
1.6305E+01	4.1117E-01	4.5131E+01	6.1755E+05	7.6041E+02
1.6311E+01	3.1236E-01	3.4285E+01	4.6915E+05	7.6011E+02
1.6315E+01	2.9252E-01	3.2107E+01	4.3935E+05	7.5994E+02
1.6324E+01	2.9217E-01	3.2069E+01	4.3882E+05	7.5954E+02
1.6331E+01	3.1377E-01	3.4440E+01	4.7127E+05	7.5920E+02
1.6337E+01	3.4166E-01	3.7501E+01	5.1316E+05	7.5892E+02
1.6342E+01	3.4460E-01	3.7824E+01	5.1757E+05	7.5870E+02
1.6349E+01	2.6927E-01	2.9555E+01	4.0443E+05	7.5835E+02
1.6355E+01	2.3153E-01	2.5413E+01	3.4775E+05	7.5809E+02
1.6360E+01	2.0942E-01	2.2986E+01	3.1453E+05	7.5784E+02
1.6371E+01	2.0586E-01	2.2596E+01	3.0920E+05	7.5734E+02
1.6386E+01	2.3967E-01	2.6306E+01	3.5996E+05	7.5665E+02
1.6395E+01	2.7369E-01	3.0040E+01	4.1106E+05	7.5622E+02
1.6413E+01	3.2615E-01	3.5798E+01	4.8985E+05	7.5541E+02
1.6430E+01	3.9110E-01	4.2928E+01	5.8741E+05	7.5461E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6434E+01	4.4723E-01	4.9089E+01	6.7172E+05	7.5444E+02
1.6437E+01	5.4092E-01	5.9371E+01	8.1242E+05	7.5431E+02
1.6441E+01	6.9394E-01	7.6168E+01	1.0423E+06	7.5412E+02
1.6444E+01	5.8127E-01	6.3801E+01	8.7304E+05	7.5398E+02
1.6447E+01	4.9361E-01	5.4179E+01	7.4138E+05	7.5384E+02
1.6451E+01	4.9972E-01	5.4850E+01	7.5055E+05	7.5368E+02
1.6456E+01	5.8391E-01	6.4091E+01	8.7700E+05	7.5341E+02
1.6461E+01	7.4319E-01	8.1573E+01	1.1162E+06	7.5321E+02
1.6465E+01	1.0432E+00	1.1450E+02	1.5668E+06	7.5303E+02
1.6469E+01	1.6370E+00	1.7968E+02	2.4587E+06	7.5282E+02
1.6474E+01	2.4059E+00	2.6407E+02	3.6135E+06	7.5261E+02
1.6479E+01	3.1717E+00	3.4813E+02	4.7637E+06	7.5238E+02
1.6483E+01	2.4899E+00	2.7329E+02	3.7397E+06	7.5218E+02
1.6487E+01	9.8288E-01	1.0788E+02	1.4762E+06	7.5202E+02
1.6491E+01	4.5749E-01	5.0215E+01	6.8713E+05	7.5183E+02
1.6493E+01	2.8858E-01	3.1675E+01	4.3343E+05	7.5172E+02
1.6498E+01	2.0711E-01	2.2733E+01	3.1107E+05	7.5151E+02
1.6501E+01	1.6947E-01	1.8601E+01	2.5454E+05	7.5137E+02
1.6506E+01	1.5366E-01	1.6866E+01	2.3079E+05	7.5116E+02
1.6523E+01	1.3111E-01	1.4391E+01	1.9692E+05	7.5038E+02
1.6535E+01	1.5250E-01	1.6738E+01	2.2904E+05	7.4981E+02
1.6547E+01	1.8019E-01	1.9778E+01	2.7063E+05	7.4929E+02
1.6556E+01	2.5800E-01	2.8318E+01	3.8749E+05	7.4888E+02
1.6563E+01	2.6397E-01	2.8973E+01	3.9646E+05	7.4855E+02
1.6569E+01	3.0438E-01	3.3409E+01	4.5716E+05	7.4829E+02
1.6575E+01	4.1360E-01	4.5397E+01	6.2120E+05	7.4804E+02
1.6581E+01	5.4776E-01	6.0122E+01	8.2270E+05	7.4773E+02
1.6586E+01	1.9742E-01	2.1669E+01	2.9651E+05	7.4751E+02
1.6591E+01	1.7537E-01	1.9249E+01	2.6340E+05	7.4732E+02
1.6598E+01	1.9072E-01	2.0934E+01	2.8645E+05	7.4699E+02
1.6609E+01	1.9652E-01	2.1570E+01	2.9516E+05	7.4647E+02
1.6619E+01	2.7434E-01	3.0111E+01	4.1204E+05	7.4606E+02
1.6624E+01	2.6788E-01	2.9403E+01	4.0234E+05	7.4583E+02
1.6627E+01	2.9275E-01	3.2132E+01	4.3969E+05	7.4566E+02
1.6631E+01	2.8010E-01	3.0744E+01	4.2069E+05	7.4549E+02
1.6639E+01	1.5787E-01	1.7327E+01	2.3710E+05	7.4514E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6646E+01	1.2635E-01	1.3868E+01	1.8976E+05	7.4484E+02
1.6664E+01	1.2563E-01	1.3789E+01	1.8869E+05	7.4401E+02
1.6669E+01	1.4423E-01	1.5830E+01	2.1662E+05	7.4382E+02
1.6681E+01	1.5939E-01	1.7494E+01	2.3939E+05	7.4327E+02
1.6692E+01	2.2774E-01	2.4997E+01	3.4205E+05	7.4277E+02
1.6696E+01	2.4008E-01	2.6351E+01	3.6058E+05	7.4258E+02
1.6701E+01	2.2427E-01	2.4616E+01	3.3684E+05	7.4237E+02
1.6708E+01	2.7403E-01	3.0078E+01	4.1158E+05	7.4208E+02
1.6713E+01	3.6137E-01	3.9664E+01	5.4275E+05	7.4184E+02
1.6719E+01	5.8938E-01	6.4691E+01	8.8522E+05	7.4159E+02
1.6723E+01	2.6094E-01	2.8642E+01	3.9192E+05	7.4140E+02
1.6725E+01	1.9835E-01	2.1771E+01	2.9792E+05	7.4133E+02
1.6728E+01	1.7010E-01	1.8671E+01	2.5549E+05	7.4119E+02
1.6734E+01	1.8862E-01	2.0703E+01	2.8329E+05	7.4090E+02
1.6739E+01	1.6344E-01	1.7940E+01	2.4548E+05	7.4071E+02
1.6745E+01	1.4442E-01	1.5852E+01	2.1691E+05	7.4041E+02
1.6750E+01	1.5051E-01	1.6520E+01	2.2606E+05	7.4022E+02
1.6753E+01	1.8788E-01	2.0622E+01	2.8219E+05	7.4005E+02
1.6757E+01	2.4403E-01	2.6785E+01	3.6651E+05	7.3991E+02
1.6760E+01	1.6575E-01	1.8193E+01	2.4895E+05	7.3977E+02
1.6768E+01	1.3416E-01	1.4725E+01	2.0150E+05	7.3939E+02
1.6787E+01	1.2722E-01	1.3963E+01	1.9107E+05	7.3859E+02
1.6798E+01	1.2056E-01	1.3232E+01	1.8107E+05	7.3811E+02
1.6801E+01	1.2982E-01	1.4249E+01	1.9498E+05	7.3797E+02
1.6820E+01	1.5097E-01	1.6570E+01	2.2675E+05	7.3712E+02
1.6824E+01	1.7272E-01	1.8958E+01	2.5942E+05	7.3697E+02
1.6827E+01	1.7259E-01	1.8943E+01	2.5921E+05	7.3681E+02
1.6833E+01	2.0052E-01	2.2009E+01	3.0116E+05	7.3657E+02
1.6836E+01	2.0352E-01	2.2339E+01	3.0567E+05	7.3643E+02
1.6841E+01	1.9394E-01	2.1287E+01	2.9128E+05	7.3619E+02
1.6848E+01	2.5620E-01	2.8121E+01	3.8480E+05	7.3588E+02
1.6856E+01	4.4036E-01	4.8335E+01	6.6140E+05	7.3554E+02
1.6862E+01	2.9633E-01	3.2526E+01	4.4507E+05	7.3529E+02
1.6864E+01	3.1503E-01	3.4578E+01	4.7315E+05	7.3521E+02
1.6870E+01	5.7743E-01	6.3379E+01	8.6726E+05	7.3496E+02
1.6878E+01	2.5510E-01	2.8000E+01	3.8315E+05	7.3460E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6881E+01	2.3307E-01	2.5582E+01	3.5006E+05	7.3444E+02
1.6885E+01	1.9229E-01	2.1106E+01	2.8881E+05	7.3427E+02
1.6889E+01	2.1716E-01	2.3836E+01	3.2616E+05	7.3410E+02
1.6892E+01	3.0457E-01	3.3430E+01	4.5745E+05	7.3396E+02
1.6897E+01	4.7012E-01	5.1600E+01	7.0609E+05	7.3378E+02
1.6899E+01	2.7306E-01	2.9972E+01	4.1013E+05	7.3368E+02
1.6902E+01	2.1044E-01	2.3098E+01	3.1606E+05	7.3356E+02
1.6905E+01	1.9156E-01	2.1025E+01	2.8771E+05	7.3342E+02
1.6909E+01	1.4140E-01	1.5520E+01	2.1237E+05	7.3326E+02
1.6913E+01	1.4438E-01	1.5848E+01	2.1685E+05	7.3309E+02
1.6916E+01	1.6924E-01	1.8576E+01	2.5419E+05	7.3292E+02
1.6922E+01	1.5654E-01	1.7182E+01	2.3511E+05	7.3269E+02
1.6933E+01	1.7799E-01	1.9536E+01	2.6733E+05	7.3219E+02
1.6936E+01	1.3725E-01	1.5064E+01	2.0614E+05	7.3207E+02
1.6944E+01	1.3696E-01	1.5033E+01	2.0571E+05	7.3174E+02
1.6952E+01	1.6480E-01	1.8089E+01	2.4752E+05	7.3138E+02
1.6964E+01	1.6435E-01	1.8039E+01	2.4685E+05	7.3086E+02
1.6969E+01	1.7352E-01	1.9046E+01	2.6062E+05	7.3063E+02
1.6976E+01	2.1392E-01	2.3480E+01	3.2129E+05	7.3034E+02
1.6981E+01	2.0125E-01	2.2089E+01	3.0226E+05	7.3015E+02
1.6986E+01	2.2606E-01	2.4813E+01	3.3953E+05	7.2991E+02
1.6989E+01	3.0412E-01	3.3380E+01	4.5676E+05	7.2979E+02
1.6993E+01	3.8838E-01	4.2629E+01	5.8332E+05	7.2962E+02
1.6996E+01	3.1010E-01	3.4037E+01	4.6575E+05	7.2948E+02
1.6998E+01	2.1313E-01	2.3393E+01	3.2011E+05	7.2942E+02
1.7003E+01	1.7230E-01	1.8912E+01	2.5879E+05	7.2920E+02
1.7009E+01	1.9081E-01	2.0944E+01	2.8659E+05	7.2892E+02
1.7021E+01	2.5603E-01	2.8103E+01	3.8455E+05	7.2842E+02
1.7024E+01	2.4029E-01	2.6374E+01	3.6090E+05	7.2828E+02
1.7028E+01	2.9329E-01	3.2192E+01	4.4050E+05	7.2811E+02
1.7031E+01	4.0573E-01	4.4533E+01	6.0938E+05	7.2799E+02
1.7035E+01	5.9004E-01	6.4763E+01	8.8621E+05	7.2781E+02
1.7038E+01	4.0234E-01	4.4161E+01	6.0429E+05	7.2768E+02
1.7041E+01	3.3033E-01	3.6258E+01	4.9614E+05	7.2756E+02
1.7044E+01	3.5522E-01	3.8989E+01	5.3352E+05	7.2742E+02
1.7050E+01	3.8626E-01	4.2397E+01	5.8015E+05	7.2716E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7054E+01	4.8931E-01	5.3707E+01	7.3491E+05	7.2701E+02
1.7056E+01	6.3615E-01	6.9825E+01	9.5546E+05	7.2691E+02
1.7059E+01	7.7050E-01	8.4571E+01	1.1573E+06	7.2681E+02
1.7063E+01	8.1411E-01	8.9357E+01	1.2227E+06	7.2662E+02
1.7066E+01	7.5774E-01	8.3170E+01	1.1381E+06	7.2650E+02
1.7071E+01	6.0437E-01	6.6336E+01	9.0772E+05	7.2629E+02
1.7073E+01	5.8240E-01	6.3925E+01	8.7473E+05	7.2620E+02
1.7076E+01	4.1658E-01	4.5725E+01	6.2568E+05	7.2607E+02
1.7079E+01	3.6647E-01	4.0224E+01	5.5042E+05	7.2595E+02
1.7083E+01	4.0069E-01	4.3980E+01	6.0181E+05	7.2576E+02
1.7103E+01	3.1054E-01	3.4085E+01	4.6641E+05	7.2491E+02
1.7108E+01	2.4817E-01	2.7239E+01	3.7273E+05	7.2471E+02
1.7112E+01	2.5947E-01	2.8480E+01	3.8971E+05	7.2455E+02
1.7118E+01	1.8819E-01	2.0656E+01	2.8266E+05	7.2430E+02
1.7124E+01	2.1746E-01	2.3869E+01	3.2661E+05	7.2402E+02
1.7133E+01	1.8651E-01	2.0471E+01	2.8013E+05	7.2364E+02
1.7143E+01	2.5610E-01	2.8110E+01	3.8465E+05	7.2323E+02
1.7152E+01	1.6705E-01	1.8336E+01	2.5090E+05	7.2287E+02
1.7156E+01	1.6497E-01	1.8108E+01	2.4778E+05	7.2269E+02
1.7161E+01	1.9644E-01	2.1561E+01	2.9504E+05	7.2246E+02
1.7165E+01	1.9878E-01	2.1819E+01	2.9856E+05	7.2232E+02
1.7170E+01	2.3025E-01	2.5272E+01	3.4582E+05	7.2210E+02
1.7175E+01	2.3265E-01	2.5536E+01	3.4942E+05	7.2189E+02
1.7177E+01	2.2156E-01	2.4318E+01	3.3276E+05	7.2180E+02
1.7180E+01	2.3731E-01	2.6048E+01	3.5643E+05	7.2167E+02
1.7184E+01	3.4913E-01	3.8321E+01	5.2437E+05	7.2151E+02
1.7188E+01	4.9893E-01	5.4762E+01	7.4936E+05	7.2135E+02
1.7192E+01	2.1760E-01	2.3884E+01	3.2682E+05	7.2119E+02
1.7198E+01	1.7761E-01	1.9494E+01	2.6675E+05	7.2094E+02
1.7201E+01	1.9559E-01	2.1468E+01	2.9376E+05	7.2080E+02
1.7206E+01	2.0918E-01	2.2960E+01	3.1418E+05	7.2058E+02
1.7211E+01	2.7411E-01	3.0086E+01	4.1169E+05	7.2039E+02
1.7214E+01	2.5189E-01	2.7647E+01	3.7832E+05	7.2026E+02
1.7225E+01	3.7960E-01	4.1665E+01	5.7013E+05	7.1980E+02
1.7226E+01	3.5954E-01	3.9464E+01	5.4001E+05	7.1974E+02
1.7240E+01	2.5951E-01	2.8484E+01	3.8976E+05	7.1917E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7242E+01	2.5062E-01	2.7508E+01	3.7642E+05	7.1910E+02
1.7244E+01	2.5963E-01	2.8498E+01	3.8996E+05	7.1901E+02
1.7245E+01	2.7531E-01	3.0218E+01	4.1350E+05	7.1897E+02
1.7248E+01	2.5085E-01	2.7534E+01	3.7676E+05	7.1883E+02
1.7251E+01	2.8448E-01	3.1224E+01	4.2727E+05	7.1869E+02
1.7257E+01	3.8742E-01	4.2523E+01	5.8188E+05	7.1847E+02
1.7259E+01	3.5845E-01	3.9344E+01	5.3838E+05	7.1838E+02
1.7262E+01	2.7143E-01	2.9793E+01	4.0768E+05	7.1826E+02
1.7264E+01	2.4249E-01	2.6616E+01	3.6420E+05	7.1815E+02
1.7270E+01	2.6727E-01	2.9335E+01	4.0142E+05	7.1790E+02
1.7275E+01	2.7859E-01	3.0578E+01	4.1842E+05	7.1772E+02
1.7281E+01	3.4583E-01	3.7959E+01	5.1942E+05	7.1745E+02
1.7284E+01	3.5931E-01	3.9438E+01	5.3966E+05	7.1735E+02
1.7292E+01	5.3383E-01	5.8593E+01	8.0177E+05	7.1701E+02
1.7298E+01	3.2406E-01	3.5569E+01	4.8672E+05	7.1676E+02
1.7302E+01	2.8624E-01	3.1418E+01	4.2991E+05	7.1658E+02
1.7307E+01	2.3280E-01	2.5553E+01	3.4966E+05	7.1638E+02
1.7311E+01	2.4859E-01	2.7285E+01	3.7336E+05	7.1620E+02
1.7317E+01	2.3763E-01	2.6083E+01	3.5691E+05	7.1595E+02
1.7320E+01	2.2207E-01	2.4375E+01	3.3353E+05	7.1586E+02
1.7323E+01	2.4227E-01	2.6591E+01	3.6387E+05	7.1574E+02
1.7327E+01	3.6753E-01	4.0341E+01	5.5201E+05	7.1554E+02
1.7330E+01	3.9666E-01	4.3538E+01	5.9576E+05	7.1543E+02
1.7334E+01	1.8682E-01	2.0506E+01	2.8059E+05	7.1527E+02
1.7341E+01	1.6694E-01	1.8324E+01	2.5074E+05	7.1499E+02
1.7347E+01	1.8950E-01	2.0799E+01	2.8461E+05	7.1475E+02
1.7350E+01	2.0303E-01	2.2284E+01	3.0493E+05	7.1459E+02
1.7355E+01	1.7191E-01	1.8869E+01	2.5820E+05	7.1440E+02
1.7357E+01	1.7422E-01	1.9122E+01	2.6166E+05	7.1431E+02
1.7360E+01	2.2348E-01	2.4529E+01	3.3565E+05	7.1418E+02
1.7362E+01	2.4810E-01	2.7232E+01	3.7263E+05	7.1411E+02
1.7366E+01	2.6388E-01	2.8963E+01	3.9633E+05	7.1395E+02
1.7371E+01	1.4566E-01	1.5987E+01	2.1877E+05	7.1375E+02
1.7376E+01	1.5029E-01	1.6496E+01	2.2573E+05	7.1354E+02
1.7383E+01	1.8628E-01	2.0446E+01	2.7978E+05	7.1325E+02
1.7387E+01	1.7524E-01	1.9235E+01	2.6320E+05	7.1309E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7390E+01	1.5971E-01	1.7530E+01	2.3987E+05	7.1298E+02
1.7391E+01	1.7091E-01	1.8759E+01	2.5670E+05	7.1293E+02
1.7393E+01	1.7994E-01	1.9751E+01	2.7026E+05	7.1282E+02
1.7397E+01	2.1358E-01	2.3442E+01	3.2078E+05	7.1266E+02
1.7402E+01	1.5788E-01	1.7330E+01	2.3713E+05	7.1248E+02
1.7406E+01	1.7366E-01	1.9061E+01	2.6082E+05	7.1232E+02
1.7414E+01	1.7169E-01	1.8845E+01	2.5787E+05	7.1200E+02
1.7420E+01	1.8308E-01	2.0095E+01	2.7498E+05	7.1173E+02
1.7424E+01	2.0107E-01	2.2070E+01	3.0200E+05	7.1159E+02
1.7427E+01	2.0789E-01	2.2818E+01	3.1224E+05	7.1146E+02
1.7430E+01	2.3258E-01	2.5528E+01	3.4931E+05	7.1132E+02
1.7433E+01	2.7511E-01	3.0196E+01	4.1319E+05	7.1121E+02
1.7439E+01	2.1277E-01	2.3354E+01	3.1957E+05	7.1096E+02
1.7443E+01	2.4864E-01	2.7291E+01	3.7345E+05	7.1080E+02
1.7445E+01	2.9116E-01	3.1958E+01	4.3731E+05	7.1071E+02
1.7449E+01	2.9574E-01	3.2461E+01	4.4419E+05	7.1057E+02
1.7455E+01	3.8979E-01	4.2784E+01	5.8544E+05	7.1030E+02
1.7459E+01	4.7702E-01	5.2359E+01	7.1646E+05	7.1016E+02
1.7463E+01	5.3747E-01	5.8993E+01	8.0725E+05	7.1000E+02
1.7469E+01	7.0298E-01	7.7159E+01	1.0558E+06	7.0975E+02
1.7475E+01	4.6642E-01	5.1195E+01	7.0054E+05	7.0948E+02
1.7482E+01	2.9689E-01	3.2587E+01	4.4591E+05	7.0921E+02
1.7485E+01	2.9698E-01	3.2597E+01	4.4605E+05	7.0910E+02
1.7492E+01	2.3243E-01	2.5512E+01	3.4909E+05	7.0882E+02
1.7494E+01	1.9899E-01	2.1842E+01	2.9888E+05	7.0873E+02
1.7497E+01	2.0357E-01	2.2345E+01	3.0576E+05	7.0860E+02
1.7503E+01	2.5515E-01	2.8005E+01	3.8321E+05	7.0837E+02
1.7508E+01	1.8160E-01	1.9933E+01	2.7275E+05	7.0817E+02
1.7512E+01	1.6610E-01	1.8231E+01	2.4947E+05	7.0801E+02
1.7515E+01	1.6843E-01	1.8487E+01	2.5297E+05	7.0789E+02
1.7518E+01	1.9088E-01	2.0951E+01	2.8669E+05	7.0776E+02
1.7524E+01	2.0449E-01	2.2445E+01	3.0713E+05	7.0751E+02
1.7527E+01	1.8674E-01	2.0497E+01	2.8047E+05	7.0737E+02
1.7531E+01	2.0697E-01	2.2718E+01	3.1086E+05	7.0721E+02
1.7535E+01	2.9422E-01	3.2294E+01	4.4191E+05	7.0705E+02
1.7538E+01	3.0770E-01	3.3773E+01	4.6214E+05	7.0696E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7540E+01	3.1226E-01	3.4274E+01	4.6900E+05	7.0685E+02
1.7543E+01	3.6150E-01	3.9679E+01	5.4296E+05	7.0674E+02
1.7548E+01	7.5928E-01	8.3340E+01	1.1404E+06	7.0653E+02
1.7552E+01	1.2330E+00	1.3533E+02	1.8518E+06	7.0637E+02
1.7555E+01	5.5848E-01	6.1299E+01	8.3880E+05	7.0626E+02
1.7556E+01	3.5968E-01	3.9479E+01	5.4022E+05	7.0624E+02
1.7559E+01	2.6820E-01	2.9438E+01	4.0282E+05	7.0612E+02
1.7566E+01	1.9027E-01	2.0884E+01	2.8577E+05	7.0583E+02
1.7571E+01	2.0386E-01	2.2376E+01	3.0618E+05	7.0560E+02
1.7576E+01	1.6826E-01	1.8469E+01	2.5272E+05	7.0542E+02
1.7582E+01	2.0198E-01	2.2170E+01	3.0336E+05	7.0517E+02
1.7586E+01	1.9094E-01	2.0958E+01	2.8678E+05	7.0501E+02
1.7591E+01	2.1343E-01	2.3426E+01	3.2056E+05	7.0483E+02
1.7593E+01	1.9790E-01	2.1721E+01	2.9723E+05	7.0472E+02
1.7599E+01	1.9585E-01	2.1497E+01	2.9416E+05	7.0449E+02
1.7605E+01	2.5190E-01	2.7649E+01	3.7834E+05	7.0424E+02
1.7610E+01	1.8283E-01	2.0067E+01	2.7460E+05	7.0404E+02
1.7615E+01	2.0085E-01	2.2046E+01	3.0167E+05	7.0386E+02
1.7617E+01	1.9199E-01	2.1073E+01	2.8835E+05	7.0376E+02
1.7627E+01	2.2359E-01	2.4541E+01	3.3582E+05	7.0338E+02
1.7631E+01	2.0808E-01	2.2839E+01	3.1253E+05	7.0322E+02
1.7633E+01	2.2380E-01	2.4565E+01	3.3613E+05	7.0313E+02
1.7638E+01	2.6194E-01	2.8751E+01	3.9342E+05	7.0292E+02
1.7643E+01	2.2636E-01	2.4845E+01	3.3997E+05	7.0274E+02
1.7648E+01	2.4665E-01	2.7072E+01	3.7045E+05	7.0252E+02
1.7655E+01	3.6971E-01	4.0580E+01	5.5529E+05	7.0227E+02
1.7664E+01	4.7724E-01	5.2383E+01	7.1679E+05	7.0190E+02
1.7671E+01	3.4122E-01	3.7453E+01	5.1250E+05	7.0161E+02
1.7674E+01	2.4527E-01	2.6921E+01	3.6838E+05	7.0150E+02
1.7678E+01	2.1411E-01	2.3501E+01	3.2158E+05	7.0136E+02
1.7686E+01	1.8983E-01	2.0835E+01	2.8511E+05	7.0102E+02
1.7694E+01	2.1688E-01	2.3804E+01	3.2573E+05	7.0072E+02
1.7697E+01	2.8847E-01	3.1663E+01	4.3327E+05	7.0059E+02
1.7701E+01	3.0871E-01	3.3884E+01	4.6366E+05	7.0043E+02
1.7707E+01	6.5737E-01	7.2153E+01	9.8733E+05	7.0020E+02
1.7712E+01	1.0618E+00	1.1655E+02	1.5948E+06	7.0002E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7713E+01	5.7269E-01	6.2859E+01	8.6015E+05	6.9995E+02
1.7716E+01	2.5780E-01	2.8297E+01	3.8720E+05	6.9986E+02
1.7721E+01	1.9767E-01	2.1696E+01	2.9688E+05	6.9966E+02
1.7727E+01	2.0010E-01	2.1964E+01	3.0054E+05	6.9941E+02
1.7731E+01	1.8459E-01	2.0260E+01	2.7724E+05	6.9927E+02
1.7733E+01	1.9362E-01	2.1252E+01	2.9080E+05	6.9916E+02
1.7736E+01	1.9818E-01	2.1752E+01	2.9765E+05	6.9905E+02
1.7740E+01	2.1172E-01	2.3238E+01	3.1799E+05	6.9889E+02
1.7745E+01	1.8283E-01	2.0067E+01	2.7460E+05	6.9870E+02
1.7754E+01	1.9205E-01	2.1080E+01	2.8845E+05	6.9836E+02
1.7763E+01	2.2364E-01	2.4547E+01	3.3590E+05	6.9798E+02
1.7768E+01	2.7070E-01	2.9712E+01	4.0658E+05	6.9780E+02
1.7772E+01	3.4457E-01	3.7820E+01	5.1752E+05	6.9762E+02
1.7774E+01	3.9600E-01	4.3466E+01	5.9477E+05	6.9755E+02
1.7778E+01	4.2292E-01	4.6420E+01	6.3521E+05	6.9741E+02
1.7781E+01	3.8058E-01	4.1772E+01	5.7160E+05	6.9730E+02
1.7784E+01	2.7568E-01	3.0259E+01	4.1406E+05	6.9718E+02
1.7789E+01	2.3342E-01	2.5620E+01	3.5058E+05	6.9698E+02
1.7792E+01	2.3351E-01	2.5630E+01	3.5072E+05	6.9687E+02
1.7795E+01	2.4924E-01	2.7357E+01	3.7434E+05	6.9675E+02
1.7798E+01	2.5831E-01	2.8352E+01	3.8796E+05	6.9660E+02
1.7802E+01	2.9193E-01	3.2043E+01	4.3847E+05	6.9646E+02
1.7808E+01	7.3217E-01	8.0364E+01	1.0997E+06	6.9623E+02
1.7813E+01	2.3642E-01	2.5950E+01	3.5509E+05	6.9605E+02
1.7817E+01	2.2316E-01	2.4494E+01	3.3517E+05	6.9589E+02
1.7820E+01	2.0317E-01	2.2300E+01	3.0515E+05	6.9576E+02
1.7828E+01	1.9001E-01	2.0856E+01	2.8538E+05	6.9546E+02
1.7832E+01	2.0131E-01	2.2096E+01	3.0236E+05	6.9530E+02
1.7838E+01	2.2386E-01	2.4572E+01	3.3623E+05	6.9505E+02
1.7842E+01	2.4408E-01	2.6791E+01	3.6659E+05	6.9492E+02
1.7846E+01	3.1346E-01	3.4406E+01	4.7080E+05	6.9476E+02
1.7847E+01	3.7159E-01	4.0786E+01	5.5811E+05	6.9469E+02
1.7851E+01	4.0745E-01	4.4722E+01	6.1197E+05	6.9455E+02
1.7853E+01	3.7849E-01	4.1543E+01	5.6847E+05	6.9446E+02
1.7856E+01	3.1155E-01	3.4196E+01	4.6792E+05	6.9437E+02
1.7858E+01	2.9377E-01	3.2245E+01	4.4123E+05	6.9426E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7861E+01	3.0279E-01	3.3234E+01	4.5477E+05	6.9417E+02
1.7864E+01	3.6544E-01	4.0111E+01	5.4887E+05	6.9403E+02
1.7867E+01	4.1691E-01	4.5761E+01	6.2618E+05	6.9392E+02
1.7871E+01	5.5329E-01	6.0730E+01	8.3101E+05	6.9378E+02
1.7874E+01	2.5185E-01	2.7643E+01	3.7826E+05	6.9365E+02
1.7875E+01	2.1614E-01	2.3724E+01	3.2463E+05	6.9360E+02
1.7881E+01	1.8730E-01	2.0558E+01	2.8131E+05	6.9337E+02
1.7888E+01	2.0090E-01	2.2051E+01	3.0174E+05	6.9312E+02
1.7892E+01	2.2114E-01	2.4273E+01	3.3214E+05	6.9296E+02
1.7895E+01	2.8378E-01	3.1148E+01	4.2622E+05	6.9285E+02
1.7897E+01	3.2852E-01	3.6059E+01	4.9342E+05	6.9278E+02
1.7901E+01	3.6663E-01	4.0241E+01	5.5065E+05	6.9262E+02
1.7906E+01	2.5510E-01	2.8000E+01	3.8315E+05	6.9242E+02
1.7908E+01	2.7528E-01	3.0215E+01	4.1345E+05	6.9233E+02
1.7911E+01	2.9549E-01	3.2433E+01	4.4380E+05	6.9222E+02
1.7914E+01	4.6087E-01	5.0586E+01	6.9220E+05	6.9210E+02
1.7919E+01	2.0640E-01	2.2654E+01	3.0999E+05	6.9190E+02
1.7926E+01	2.1333E-01	2.3415E+01	3.2041E+05	6.9163E+02
1.7931E+01	2.7826E-01	3.0542E+01	4.1793E+05	6.9144E+02
1.7935E+01	3.6998E-01	4.0609E+01	5.5568E+05	6.9129E+02
1.7940E+01	3.0088E-01	3.3025E+01	4.5191E+05	6.9110E+02
1.7942E+01	3.0317E-01	3.3277E+01	4.5535E+05	6.9104E+02
1.7945E+01	4.2166E-01	4.6282E+01	6.3331E+05	6.9092E+02
1.7948E+01	2.2966E-01	2.5208E+01	3.4494E+05	6.9079E+02
1.7950E+01	2.0739E-01	2.2763E+01	3.1148E+05	6.9072E+02
1.7956E+01	2.7012E-01	2.9649E+01	4.0571E+05	6.9049E+02
1.7959E+01	3.1043E-01	3.4073E+01	4.6624E+05	6.9038E+02
1.7962E+01	3.9541E-01	4.3400E+01	5.9388E+05	6.9027E+02
1.7965E+01	3.1286E-01	3.4340E+01	4.6990E+05	6.9013E+02
1.7968E+01	3.7549E-01	4.1214E+01	5.6397E+05	6.9004E+02
1.7972E+01	2.2375E-01	2.4559E+01	3.3605E+05	6.8986E+02
1.7978E+01	2.9765E-01	3.2670E+01	4.4705E+05	6.8963E+02
1.7981E+01	3.3794E-01	3.7092E+01	5.0756E+05	6.8954E+02
1.7983E+01	3.0897E-01	3.3913E+01	4.6406E+05	6.8945E+02
1.7986E+01	3.0906E-01	3.3923E+01	4.6419E+05	6.8933E+02
1.7989E+01	2.3989E-01	2.6331E+01	3.6031E+05	6.8924E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7994E+01	2.9591E-01	3.2479E+01	4.4444E+05	6.8904E+02
1.7996E+01	3.2724E-01	3.5918E+01	4.9149E+05	6.8897E+02
1.7998E+01	3.1616E-01	3.4702E+01	4.7486E+05	6.8886E+02
1.8002E+01	2.6937E-01	2.9567E+01	4.0458E+05	6.8872E+02
1.8006E+01	3.2982E-01	3.6201E+01	4.9537E+05	6.8856E+02
1.8010E+01	2.9642E-01	3.2536E+01	4.4521E+05	6.8843E+02
1.8012E+01	2.9758E-01	3.2662E+01	4.4694E+05	6.8834E+02
1.8014E+01	3.0924E-01	3.3942E+01	4.6446E+05	6.8825E+02
1.8022E+01	3.0965E-01	3.3987E+01	4.6507E+05	6.8797E+02
1.8025E+01	3.3453E-01	3.6718E+01	5.0244E+05	6.8783E+02
1.8028E+01	3.0323E-01	3.3283E+01	4.5543E+05	6.8772E+02
1.8034E+01	2.9625E-01	3.2516E+01	4.4495E+05	6.8751E+02
1.8044E+01	2.9950E-01	3.2873E+01	4.4983E+05	6.8714E+02
1.8047E+01	2.9864E-01	3.2779E+01	4.4854E+05	6.8699E+02
1.8057E+01	3.1455E-01	3.4525E+01	4.7243E+05	6.8664E+02
1.8062E+01	3.0714E-01	3.3712E+01	4.6130E+05	6.8643E+02
1.8068E+01	3.2434E-01	3.5600E+01	4.8714E+05	6.8620E+02
1.8072E+01	3.0058E-01	3.2992E+01	4.5145E+05	6.8606E+02
1.8078E+01	2.9744E-01	3.2647E+01	4.4674E+05	6.8584E+02
1.8082E+01	2.9999E-01	3.2928E+01	4.5057E+05	6.8567E+02
1.8091E+01	3.1733E-01	3.4830E+01	4.7660E+05	6.8535E+02
1.8096E+01	3.1802E-01	3.4906E+01	4.7765E+05	6.8515E+02
1.8101E+01	3.2769E-01	3.5967E+01	4.9216E+05	6.8495E+02
1.8106E+01	3.0791E-01	3.3796E+01	4.6246E+05	6.8476E+02
1.8119E+01	3.2835E-01	3.6040E+01	4.9317E+05	6.8427E+02
1.8125E+01	3.2464E-01	3.5633E+01	4.8760E+05	6.8405E+02
1.8129E+01	3.1596E-01	3.4680E+01	4.7455E+05	6.8389E+02
1.8138E+01	3.4425E-01	3.7785E+01	5.1704E+05	6.8357E+02
1.8146E+01	3.3826E-01	3.7127E+01	5.0804E+05	6.8327E+02
1.8150E+01	3.4564E-01	3.7938E+01	5.1913E+05	6.8312E+02
1.8152E+01	3.4721E-01	3.8110E+01	5.2148E+05	6.8304E+02
1.8156E+01	3.5871E-01	3.9372E+01	5.3876E+05	6.8287E+02
1.8164E+01	3.4647E-01	3.8029E+01	5.2038E+05	6.8260E+02
1.8168E+01	3.5016E-01	3.8433E+01	5.2591E+05	6.8243E+02
1.8172E+01	3.3565E-01	3.6841E+01	5.0412E+05	6.8229E+02
1.8179E+01	3.1002E-01	3.4029E+01	4.6564E+05	6.8200E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8186E+01	2.9779E-01	3.2685E+01	4.4726E+05	6.8174E+02
1.8199E+01	2.9506E-01	3.2386E+01	4.4316E+05	6.8127E+02
1.8220E+01	2.9217E-01	3.2069E+01	4.3882E+05	6.8049E+02
1.8239E+01	2.7961E-01	3.0691E+01	4.1996E+05	6.7979E+02
1.8241E+01	2.7264E-01	2.9925E+01	4.0949E+05	6.7970E+02
1.8245E+01	2.7150E-01	2.9800E+01	4.0777E+05	6.7954E+02
1.8253E+01	2.5527E-01	2.8018E+01	3.8339E+05	6.7925E+02
1.8260E+01	2.5668E-01	2.8173E+01	3.8551E+05	6.7901E+02
1.8274E+01	2.7528E-01	3.0215E+01	4.1345E+05	6.7849E+02
1.8277E+01	2.7684E-01	3.0386E+01	4.1579E+05	6.7836E+02
1.8288E+01	2.9217E-01	3.2069E+01	4.3882E+05	6.7794E+02
1.8293E+01	2.9387E-01	3.2255E+01	4.4137E+05	6.7777E+02
1.8294E+01	2.9685E-01	3.2583E+01	4.4585E+05	6.7772E+02
1.8299E+01	2.9926E-01	3.2847E+01	4.4947E+05	6.7755E+02
1.8307E+01	3.0251E-01	3.3204E+01	4.5436E+05	6.7726E+02
1.8311E+01	3.0307E-01	3.3265E+01	4.5520E+05	6.7710E+02
1.8324E+01	3.0675E-01	3.3669E+01	4.6071E+05	6.7664E+02
1.8332E+01	3.0474E-01	3.3448E+01	4.5770E+05	6.7633E+02
1.8339E+01	3.0472E-01	3.3446E+01	4.5767E+05	6.7606E+02
1.8342E+01	3.0330E-01	3.3291E+01	4.5554E+05	6.7594E+02
1.8353E+01	3.0484E-01	3.3460E+01	4.5785E+05	6.7554E+02
1.8363E+01	3.0439E-01	3.3410E+01	4.5718E+05	6.7518E+02
1.8370E+01	3.0751E-01	3.3752E+01	4.6185E+05	6.7493E+02
1.8379E+01	3.0522E-01	3.3501E+01	4.5842E+05	6.7458E+02
1.8393E+01	3.0447E-01	3.3419E+01	4.5730E+05	6.7407E+02
1.8412E+01	3.0230E-01	3.3181E+01	4.5404E+05	6.7340E+02
1.8419E+01	3.0073E-01	3.3008E+01	4.5167E+05	6.7313E+02
1.8422E+01	3.0342E-01	3.3304E+01	4.5572E+05	6.7304E+02
1.8432E+01	3.0084E-01	3.3020E+01	4.5184E+05	6.7265E+02
1.8439E+01	3.0481E-01	3.3457E+01	4.5781E+05	6.7239E+02
1.8444E+01	3.0053E-01	3.2987E+01	4.5139E+05	6.7221E+02
1.8451E+01	3.0422E-01	3.3391E+01	4.5692E+05	6.7196E+02
1.8458E+01	3.0548E-01	3.3530E+01	4.5881E+05	6.7172E+02
1.8459E+01	3.0747E-01	3.3748E+01	4.6180E+05	6.7167E+02
1.8465E+01	3.0903E-01	3.3919E+01	4.6414E+05	6.7146E+02
1.8469E+01	3.0717E-01	3.3715E+01	4.6135E+05	6.7131E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8476E+01	3.1085E-01	3.4119E+01	4.6688E+05	6.7106E+02
1.8489E+01	3.1097E-01	3.4132E+01	4.6706E+05	6.7058E+02
1.8498E+01	3.0740E-01	3.3740E+01	4.6169E+05	6.7027E+02
1.8503E+01	3.1066E-01	3.4098E+01	4.6659E+05	6.7006E+02
1.8513E+01	3.1376E-01	3.4439E+01	4.7125E+05	6.6973E+02
1.8518E+01	3.1332E-01	3.4391E+01	4.7059E+05	6.6953E+02
1.8524E+01	3.1531E-01	3.4609E+01	4.7358E+05	6.6933E+02
1.8526E+01	3.1373E-01	3.4436E+01	4.7121E+05	6.6925E+02
1.8530E+01	3.1529E-01	3.4607E+01	4.7355E+05	6.6909E+02
1.8534E+01	3.1728E-01	3.4825E+01	4.7653E+05	6.6896E+02
1.8545E+01	3.0616E-01	3.3604E+01	4.5983E+05	6.6857E+02
1.8551E+01	3.0274E-01	3.3229E+01	4.5470E+05	6.6834E+02
1.8558E+01	3.0500E-01	3.3477E+01	4.5809E+05	6.6810E+02
1.8588E+01	3.0750E-01	3.3751E+01	4.6184E+05	6.6701E+02
1.8624E+01	3.1297E-01	3.4352E+01	4.7007E+05	6.6571E+02
1.8629E+01	3.1595E-01	3.4679E+01	4.7454E+05	6.6554E+02
1.8633E+01	3.1494E-01	3.4569E+01	4.7303E+05	6.6539E+02
1.8644E+01	3.1876E-01	3.4988E+01	4.7876E+05	6.6501E+02
1.8649E+01	3.1805E-01	3.4909E+01	4.7769E+05	6.6482E+02
1.8661E+01	3.2599E-01	3.5781E+01	4.8962E+05	6.6442E+02
1.8674E+01	3.5654E-01	3.9134E+01	5.3550E+05	6.6394E+02
1.8686E+01	3.0261E-01	3.3215E+01	4.5451E+05	6.6353E+02
1.8697E+01	3.0075E-01	3.3010E+01	4.5170E+05	6.6314E+02
1.8705E+01	2.9589E-01	3.2477E+01	4.4441E+05	6.6284E+02
1.8718E+01	2.7112E-01	2.9759E+01	4.0721E+05	6.6239E+02
1.8730E+01	2.9399E-01	3.2269E+01	4.4156E+05	6.6194E+02
1.8740E+01	3.0450E-01	3.3422E+01	4.5734E+05	6.6161E+02
1.8751E+01	3.0761E-01	3.3763E+01	4.6201E+05	6.6120E+02
1.8764E+01	3.0829E-01	3.3839E+01	4.6304E+05	6.6076E+02
1.8771E+01	3.1084E-01	3.4118E+01	4.6686E+05	6.6051E+02
1.8796E+01	3.1307E-01	3.4362E+01	4.7021E+05	6.5962E+02
1.8799E+01	3.1164E-01	3.4206E+01	4.6806E+05	6.5951E+02
1.8806E+01	3.1675E-01	3.4767E+01	4.7574E+05	6.5929E+02
1.8809E+01	3.1802E-01	3.4906E+01	4.7765E+05	6.5917E+02
1.8820E+01	3.2014E-01	3.5139E+01	4.8083E+05	6.5880E+02
1.8823E+01	3.2226E-01	3.5372E+01	4.8402E+05	6.5867E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8831E+01	3.2523E-01	3.5698E+01	4.8848E+05	6.5842E+02
1.8840E+01	3.3617E-01	3.6898E+01	5.0490E+05	6.5809E+02
1.8851E+01	3.1268E-01	3.4320E+01	4.6963E+05	6.5772E+02
1.8855E+01	3.0343E-01	3.3305E+01	4.5573E+05	6.5756E+02
1.8858E+01	3.0797E-01	3.3803E+01	4.6256E+05	6.5746E+02
1.8867E+01	3.1179E-01	3.4223E+01	4.6829E+05	6.5716E+02
1.8875E+01	3.1292E-01	3.4346E+01	4.6999E+05	6.5688E+02
1.8890E+01	3.1403E-01	3.4468E+01	4.7165E+05	6.5636E+02
1.8903E+01	3.2126E-01	3.5261E+01	4.8251E+05	6.5589E+02
1.8908E+01	3.2637E-01	3.5822E+01	4.9018E+05	6.5571E+02
1.8919E+01	3.4810E-01	3.8208E+01	5.2283E+05	6.5534E+02
1.8929E+01	3.0258E-01	3.3211E+01	4.5445E+05	6.5501E+02
1.8936E+01	2.9161E-01	3.2008E+01	4.3798E+05	6.5474E+02
1.8941E+01	2.7738E-01	3.0445E+01	4.1661E+05	6.5457E+02
1.8949E+01	2.9727E-01	3.2629E+01	4.4649E+05	6.5432E+02
1.8956E+01	3.0651E-01	3.3643E+01	4.6036E+05	6.5408E+02
1.8963E+01	3.1303E-01	3.4358E+01	4.7015E+05	6.5381E+02
1.8969E+01	3.1473E-01	3.4545E+01	4.7271E+05	6.5361E+02
1.8980E+01	3.1670E-01	3.4762E+01	4.7567E+05	6.5324E+02
1.8982E+01	3.1826E-01	3.4932E+01	4.7801E+05	6.5316E+02
1.8996E+01	3.1923E-01	3.5039E+01	4.7947E+05	6.5267E+02
1.9006E+01	3.2575E-01	3.5755E+01	4.8926E+05	6.5233E+02
1.9011E+01	3.2432E-01	3.5598E+01	4.8711E+05	6.5217E+02
1.9018E+01	3.0667E-01	3.3661E+01	4.6060E+05	6.5193E+02
1.9024E+01	3.0823E-01	3.3832E+01	4.6294E+05	6.5173E+02
1.9025E+01	3.1022E-01	3.4050E+01	4.6593E+05	6.5168E+02
1.9034E+01	3.1205E-01	3.4251E+01	4.6868E+05	6.5139E+02
1.9040E+01	3.1602E-01	3.4686E+01	4.7464E+05	6.5118E+02
1.9047E+01	3.1786E-01	3.4888E+01	4.7740E+05	6.5093E+02
1.9056E+01	3.3803E-01	3.7102E+01	5.0770E+05	6.5064E+02
1.9068E+01	2.8596E-01	3.1387E+01	4.2950E+05	6.5023E+02
1.9073E+01	3.0216E-01	3.3165E+01	4.5382E+05	6.5004E+02
1.9078E+01	3.1083E-01	3.4117E+01	4.6685E+05	6.4988E+02
1.9082E+01	3.1438E-01	3.4506E+01	4.7217E+05	6.4975E+02
1.9090E+01	3.1507E-01	3.4583E+01	4.7322E+05	6.4947E+02
1.9097E+01	3.2104E-01	3.5237E+01	4.8218E+05	6.4924E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9104E+01	3.2557E-01	3.5735E+01	4.8899E+05	6.4899E+02
1.9115E+01	3.1474E-01	3.4546E+01	4.7272E+05	6.4863E+02
1.9121E+01	3.1530E-01	3.4608E+01	4.7356E+05	6.4843E+02
1.9130E+01	3.1884E-01	3.4996E+01	4.7887E+05	6.4810E+02
1.9135E+01	3.3106E-01	3.6337E+01	4.9723E+05	6.4793E+02
1.9144E+01	2.8965E-01	3.1793E+01	4.3504E+05	6.4763E+02
1.9155E+01	3.1481E-01	3.4553E+01	4.7282E+05	6.4728E+02
1.9160E+01	3.2049E-01	3.5177E+01	4.8135E+05	6.4710E+02
1.9168E+01	3.2645E-01	3.5831E+01	4.9031E+05	6.4683E+02
1.9173E+01	3.2259E-01	3.5408E+01	4.8451E+05	6.4665E+02
1.9176E+01	3.1818E-01	3.4923E+01	4.7788E+05	6.4655E+02
1.9180E+01	3.1490E-01	3.4564E+01	4.7296E+05	6.4641E+02
1.9192E+01	3.2854E-01	3.6061E+01	4.9344E+05	6.4603E+02
1.9198E+01	3.0022E-01	3.2953E+01	4.5092E+05	6.4583E+02
1.9211E+01	3.2864E-01	3.6072E+01	4.9359E+05	6.4539E+02
1.9218E+01	3.2095E-01	3.5228E+01	4.8205E+05	6.4515E+02
1.9224E+01	3.1795E-01	3.4898E+01	4.7754E+05	6.4496E+02
1.9230E+01	3.2235E-01	3.5381E+01	4.8414E+05	6.4474E+02
1.9235E+01	3.1281E-01	3.4334E+01	4.6982E+05	6.4458E+02
1.9237E+01	3.0314E-01	3.3273E+01	4.5529E+05	6.4451E+02
1.9242E+01	3.1337E-01	3.4396E+01	4.7066E+05	6.4434E+02
1.9250E+01	3.1847E-01	3.4956E+01	4.7832E+05	6.4408E+02
1.9259E+01	3.1633E-01	3.4720E+01	4.7510E+05	6.4377E+02
1.9261E+01	3.1376E-01	3.4439E+01	4.7125E+05	6.4370E+02
1.9263E+01	3.0920E-01	3.3938E+01	4.6440E+05	6.4364E+02
1.9267E+01	3.1588E-01	3.4671E+01	4.7443E+05	6.4350E+02
1.9280E+01	3.1927E-01	3.5043E+01	4.7952E+05	6.4308E+02
1.9285E+01	3.1230E-01	3.4278E+01	4.6905E+05	6.4291E+02
1.9294E+01	3.1882E-01	3.4994E+01	4.7885E+05	6.4261E+02
1.9303E+01	3.1184E-01	3.4228E+01	4.6836E+05	6.4232E+02
1.9308E+01	3.1879E-01	3.4991E+01	4.7880E+05	6.4213E+02
1.9315E+01	3.1408E-01	3.4474E+01	4.7173E+05	6.4191E+02
1.9322E+01	3.1962E-01	3.5082E+01	4.8006E+05	6.4169E+02
1.9328E+01	3.1733E-01	3.4831E+01	4.7662E+05	6.4146E+02
1.9339E+01	3.1732E-01	3.4829E+01	4.7659E+05	6.4110E+02
1.9344E+01	3.1887E-01	3.5000E+01	4.7893E+05	6.4094E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9350E+01	3.1658E-01	3.4748E+01	4.7549E+05	6.4075E+02
1.9357E+01	3.1828E-01	3.4935E+01	4.7803E+05	6.4050E+02
1.9365E+01	3.1997E-01	3.5121E+01	4.8058E+05	6.4025E+02
1.9370E+01	3.1797E-01	3.4900E+01	4.7757E+05	6.4010E+02
1.9376E+01	3.2081E-01	3.5212E+01	4.8183E+05	6.3989E+02
1.9387E+01	3.1694E-01	3.4788E+01	4.7603E+05	6.3951E+02
1.9394E+01	3.1622E-01	3.4708E+01	4.7494E+05	6.3928E+02
1.9398E+01	3.1322E-01	3.4380E+01	4.7044E+05	6.3917E+02
1.9403E+01	3.1563E-01	3.4644E+01	4.7406E+05	6.3900E+02
1.9410E+01	3.1634E-01	3.4721E+01	4.7512E+05	6.3876E+02
1.9418E+01	3.1973E-01	3.5094E+01	4.8022E+05	6.3850E+02
1.9427E+01	3.1772E-01	3.4873E+01	4.7720E+05	6.3820E+02
1.9431E+01	3.1928E-01	3.5044E+01	4.7953E+05	6.3807E+02
1.9441E+01	3.1997E-01	3.5121E+01	4.8058E+05	6.3775E+02
1.9447E+01	3.1911E-01	3.5026E+01	4.7929E+05	6.3755E+02
1.9459E+01	3.1908E-01	3.5023E+01	4.7925E+05	6.3715E+02
1.9472E+01	3.2290E-01	3.5442E+01	4.8498E+05	6.3674E+02
1.9486E+01	3.1805E-01	3.4909E+01	4.7769E+05	6.3628E+02
1.9496E+01	3.1831E-01	3.4939E+01	4.7809E+05	6.3596E+02
1.9510E+01	3.2042E-01	3.5170E+01	4.8125E+05	6.3548E+02
1.9523E+01	3.1940E-01	3.5058E+01	4.7973E+05	6.3508E+02
1.9528E+01	3.2167E-01	3.5307E+01	4.8312E+05	6.3491E+02
1.9539E+01	3.2278E-01	3.5429E+01	4.8480E+05	6.3455E+02
1.9550E+01	3.2135E-01	3.5271E+01	4.8264E+05	6.3420E+02
1.9551E+01	3.2006E-01	3.5131E+01	4.8072E+05	6.3417E+02
1.9556E+01	3.2076E-01	3.5207E+01	4.8176E+05	6.3400E+02
1.9574E+01	3.2130E-01	3.5266E+01	4.8257E+05	6.3340E+02
1.9579E+01	3.2314E-01	3.5468E+01	4.8534E+05	6.3324E+02
1.9586E+01	3.2157E-01	3.5295E+01	4.8297E+05	6.3304E+02
1.9589E+01	3.2042E-01	3.5170E+01	4.8125E+05	6.3293E+02
1.9594E+01	3.2311E-01	3.5465E+01	4.8530E+05	6.3276E+02
1.9599E+01	3.2026E-01	3.5152E+01	4.8101E+05	6.3261E+02
1.9600E+01	3.2168E-01	3.5308E+01	4.8314E+05	6.3257E+02
1.9612E+01	3.2309E-01	3.5462E+01	4.8526E+05	6.3220E+02
1.9621E+01	3.2164E-01	3.5303E+01	4.8308E+05	6.3189E+02
1.9634E+01	3.2134E-01	3.5270E+01	4.8263E+05	6.3149E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9636E+01	3.2261E-01	3.5410E+01	4.8454E+05	6.3141E+02
1.9642E+01	3.2160E-01	3.5299E+01	4.8303E+05	6.3121E+02
1.9651E+01	3.2344E-01	3.5501E+01	4.8578E+05	6.3093E+02
1.9659E+01	3.2201E-01	3.5344E+01	4.8363E+05	6.3066E+02
1.9665E+01	3.2313E-01	3.5467E+01	4.8533E+05	6.3049E+02
1.9670E+01	3.2312E-01	3.5466E+01	4.8531E+05	6.3033E+02
1.9673E+01	3.2383E-01	3.5544E+01	4.8637E+05	6.3021E+02
1.9679E+01	3.2225E-01	3.5371E+01	4.8401E+05	6.3002E+02
1.9684E+01	3.2281E-01	3.5432E+01	4.8484E+05	6.2986E+02
1.9703E+01	3.2264E-01	3.5413E+01	4.8458E+05	6.2926E+02
1.9712E+01	3.2077E-01	3.5208E+01	4.8178E+05	6.2899E+02
1.9718E+01	3.2318E-01	3.5472E+01	4.8539E+05	6.2878E+02
1.9736E+01	3.2315E-01	3.5469E+01	4.8535E+05	6.2822E+02
1.9748E+01	3.2427E-01	3.5592E+01	4.8703E+05	6.2782E+02
1.9771E+01	3.2337E-01	3.5494E+01	4.8568E+05	6.2711E+02
1.9785E+01	3.2449E-01	3.5616E+01	4.8736E+05	6.2667E+02
1.9790E+01	3.2533E-01	3.5709E+01	4.8863E+05	6.2650E+02
1.9798E+01	3.2518E-01	3.5692E+01	4.8839E+05	6.2626E+02
1.9806E+01	3.2374E-01	3.5534E+01	4.8623E+05	6.2599E+02
1.9815E+01	3.2457E-01	3.5625E+01	4.8749E+05	6.2571E+02
1.9838E+01	3.2440E-01	3.5606E+01	4.8722E+05	6.2499E+02
1.9863E+01	3.2520E-01	3.5695E+01	4.8844E+05	6.2419E+02
1.9950E+01	3.2576E-01	3.5756E+01	4.8927E+05	6.2149E+02
1.9980E+01	3.2714E-01	3.5907E+01	4.9134E+05	6.2053E+02
1.9996E+01	3.2583E-01	3.5763E+01	4.8937E+05	6.2005E+02
2.0005E+01	3.2752E-01	3.5949E+01	4.9192E+05	6.1977E+02
2.0029E+01	3.2973E-01	3.6191E+01	4.9523E+05	6.1902E+02
2.0379E+01	3.3279E-01	3.6527E+01	4.9983E+05	6.0839E+02
2.0696E+01	3.3453E-01	3.6718E+01	5.0244E+05	5.9908E+02
2.0897E+01	3.3559E-01	3.6835E+01	5.0404E+05	5.9331E+02
2.1041E+01	3.3497E-01	3.6766E+01	5.0310E+05	5.8926E+02
2.1196E+01	3.3534E-01	3.6808E+01	5.0367E+05	5.8493E+02
2.1455E+01	3.3301E-01	3.6551E+01	5.0016E+05	5.7788E+02
2.1641E+01	3.3206E-01	3.6448E+01	4.9874E+05	5.7292E+02
2.2001E+01	3.2618E-01	3.5802E+01	4.8991E+05	5.6354E+02
2.2248E+01	3.2224E-01	3.5369E+01	4.8398E+05	5.5728E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2537E+01	3.1681E-01	3.4774E+01	4.7583E+05	5.5013E+02
2.2851E+01	3.1101E-01	3.4137E+01	4.6712E+05	5.4258E+02
2.3122E+01	3.0498E-01	3.3475E+01	4.5806E+05	5.3622E+02
2.3521E+01	2.9685E-01	3.2583E+01	4.4585E+05	5.2712E+02
2.3767E+01	2.9083E-01	3.1921E+01	4.3680E+05	5.2167E+02
2.3964E+01	2.8781E-01	3.1590E+01	4.3228E+05	5.1737E+02
2.4344E+01	2.8208E-01	3.0961E+01	4.2366E+05	5.0930E+02
2.4724E+01	2.7836E-01	3.0553E+01	4.1808E+05	5.0148E+02
2.4997E+01	2.7588E-01	3.0280E+01	4.1435E+05	4.9600E+02
2.5406E+01	2.7415E-01	3.0091E+01	4.1176E+05	4.8802E+02
2.5708E+01	2.7244E-01	2.9903E+01	4.0919E+05	4.8228E+02
2.5934E+01	2.7328E-01	2.9996E+01	4.1046E+05	4.7808E+02
2.6105E+01	2.7258E-01	2.9918E+01	4.0940E+05	4.7495E+02
2.6530E+01	2.7464E-01	3.0145E+01	4.1249E+05	4.6734E+02
2.6962E+01	2.7716E-01	3.0421E+01	4.1627E+05	4.5985E+02
2.7216E+01	2.7561E-01	3.0251E+01	4.1395E+05	4.5555E+02
2.7515E+01	2.7174E-01	2.9826E+01	4.0813E+05	4.5060E+02
2.7862E+01	2.6771E-01	2.9385E+01	4.0209E+05	4.4500E+02
2.8167E+01	2.6577E-01	2.9171E+01	3.9917E+05	4.4018E+02
2.8394E+01	2.6306E-01	2.8874E+01	3.9510E+05	4.3666E+02
2.8659E+01	2.6105E-01	2.8653E+01	3.9207E+05	4.3262E+02
2.8807E+01	2.6158E-01	2.8711E+01	3.9287E+05	4.3039E+02
2.9010E+01	2.6034E-01	2.8575E+01	3.9102E+05	4.2739E+02
2.9207E+01	2.6103E-01	2.8651E+01	3.9205E+05	4.2450E+02
2.9644E+01	2.5854E-01	2.8377E+01	3.8830E+05	4.1824E+02
2.9876E+01	2.5622E-01	2.8123E+01	3.8482E+05	4.1499E+02
3.0161E+01	2.5428E-01	2.7910E+01	3.8191E+05	4.1107E+02
3.0601E+01	2.5542E-01	2.8035E+01	3.8363E+05	4.0517E+02
3.1011E+01	2.5486E-01	2.7974E+01	3.8279E+05	3.9981E+02
3.1328E+01	2.5331E-01	2.7803E+01	3.8045E+05	3.9576E+02
3.1745E+01	2.4883E-01	2.7311E+01	3.7372E+05	3.9056E+02
3.1979E+01	2.4742E-01	2.7158E+01	3.7162E+05	3.8770E+02
3.2331E+01	2.5035E-01	2.7478E+01	3.7601E+05	3.8348E+02
3.2677E+01	2.5025E-01	2.7468E+01	3.7587E+05	3.7942E+02
3.3097E+01	2.4662E-01	2.7069E+01	3.7041E+05	3.7461E+02
3.3598E+01	2.4182E-01	2.6542E+01	3.6320E+05	3.6902E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.3850E+01	2.4043E-01	2.6389E+01	3.6111E+05	3.6628E+02
3.4046E+01	2.4235E-01	2.6601E+01	3.6399E+05	3.6417E+02
3.4328E+01	2.3941E-01	2.6278E+01	3.5958E+05	3.6118E+02
3.4934E+01	2.3777E-01	2.6098E+01	3.5712E+05	3.5491E+02
3.5155E+01	2.3838E-01	2.6165E+01	3.5804E+05	3.5268E+02
3.5376E+01	2.3537E-01	2.5834E+01	3.5351E+05	3.5048E+02
3.5546E+01	2.3236E-01	2.5504E+01	3.4898E+05	3.4880E+02
3.5643E+01	2.3675E-01	2.5986E+01	3.5559E+05	3.4785E+02
3.5930E+01	2.3135E-01	2.5393E+01	3.4747E+05	3.4507E+02
3.6160E+01	2.2234E-01	2.4404E+01	3.3394E+05	3.4288E+02
3.6670E+01	2.2161E-01	2.4324E+01	3.3285E+05	3.3811E+02
3.7190E+01	2.1914E-01	2.4053E+01	3.2913E+05	3.3338E+02
3.7700E+01	2.1882E-01	2.4018E+01	3.2865E+05	3.2887E+02
3.8210E+01	2.1449E-01	2.3543E+01	3.2215E+05	3.2448E+02
3.8720E+01	2.1109E-01	2.3169E+01	3.1704E+05	3.2021E+02
3.9230E+01	2.0089E-01	2.2050E+01	3.0172E+05	3.1604E+02
3.9740E+01	2.0025E-01	2.1980E+01	3.0076E+05	3.1199E+02
4.0030E+01	1.9433E-01	2.1330E+01	2.9187E+05	3.0973E+02
4.1070E+01	1.8347E-01	2.0138E+01	2.7556E+05	3.0189E+02
4.2100E+01	1.7981E-01	1.9736E+01	2.7006E+05	2.9450E+02
4.3130E+01	1.7047E-01	1.8710E+01	2.5603E+05	2.8747E+02
4.4170E+01	1.6193E-01	1.7774E+01	2.4322E+05	2.8070E+02
4.5200E+01	1.5659E-01	1.7188E+01	2.3519E+05	2.7430E+02
4.6230E+01	1.5041E-01	1.6509E+01	2.2591E+05	2.6819E+02
4.7270E+01	1.4660E-01	1.6092E+01	2.2019E+05	2.6229E+02
4.8300E+01	1.4248E-01	1.5639E+01	2.1399E+05	2.5670E+02
4.9330E+01	1.3928E-01	1.5287E+01	2.0919E+05	2.5134E+02
5.0370E+01	1.3690E-01	1.5027E+01	2.0562E+05	2.4615E+02
5.1400E+01	1.3650E-01	1.4982E+01	2.0501E+05	2.4121E+02
5.2430E+01	1.3287E-01	1.4584E+01	1.9956E+05	2.3648E+02
5.3470E+01	1.3257E-01	1.4550E+01	1.9910E+05	2.3188E+02
5.4500E+01	1.2945E-01	1.4208E+01	1.9442E+05	2.2749E+02
5.5530E+01	1.2726E-01	1.3968E+01	1.9114E+05	2.2327E+02
5.6570E+01	1.2424E-01	1.3637E+01	1.8660E+05	2.1917E+02
5.7600E+01	1.2121E-01	1.3304E+01	1.8205E+05	2.1525E+02
5.8630E+01	1.2120E-01	1.3304E+01	1.8204E+05	2.1147E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.9670E+01	1.1472E-01	1.2592E+01	1.7230E+05	2.0778E+02
6.0700E+01	1.1230E-01	1.2326E+01	1.6867E+05	2.0426E+02
6.1730E+01	1.0789E-01	1.1842E+01	1.6204E+05	2.0085E+02
6.2770E+01	1.0410E-01	1.1426E+01	1.5635E+05	1.9752E+02
6.3800E+01	1.0093E-01	1.1079E+01	1.5160E+05	1.9433E+02
6.4830E+01	9.6501E-02	1.0592E+01	1.4494E+05	1.9125E+02
6.5870E+01	9.1747E-02	1.0070E+01	1.3780E+05	1.8823E+02
6.6900E+01	8.9929E-02	9.8707E+00	1.3507E+05	1.8533E+02
6.7930E+01	8.6319E-02	9.4744E+00	1.2965E+05	1.8252E+02
6.8970E+01	8.3440E-02	9.1585E+00	1.2532E+05	1.7977E+02
7.0000E+01	8.1294E-02	8.9229E+00	1.2210E+05	1.7712E+02
7.1030E+01	7.8617E-02	8.6291E+00	1.1808E+05	1.7455E+02
7.2070E+01	7.5619E-02	8.3000E+00	1.1358E+05	1.7203E+02
7.3100E+01	7.4096E-02	8.1328E+00	1.1129E+05	1.6961E+02
7.4130E+01	7.1300E-02	7.8260E+00	1.0709E+05	1.6725E+02
7.5170E+01	6.9453E-02	7.6232E+00	1.0431E+05	1.6494E+02
7.6200E+01	6.7073E-02	7.3619E+00	1.0074E+05	1.6271E+02
7.7230E+01	6.6809E-02	7.3330E+00	1.0034E+05	1.6054E+02
7.8270E+01	6.3149E-02	6.9313E+00	9.4846E+04	1.5841E+02
7.9300E+01	6.2670E-02	6.8787E+00	9.4126E+04	1.5635E+02
8.0050E+01	6.0687E-02	6.6611E+00	9.1149E+04	1.5488E+02
8.2100E+01	5.7805E-02	6.3447E+00	8.6819E+04	1.5102E+02
8.4150E+01	5.5126E-02	6.0507E+00	8.2796E+04	1.4734E+02
8.6200E+01	5.2972E-02	5.8142E+00	7.9561E+04	1.4383E+02
8.8250E+01	5.0490E-02	5.5418E+00	7.5833E+04	1.4049E+02
9.0300E+01	4.8321E-02	5.3038E+00	7.2575E+04	1.3730E+02
9.2340E+01	4.5823E-02	5.0295E+00	6.8823E+04	1.3427E+02
9.4390E+01	4.4176E-02	4.8488E+00	6.6350E+04	1.3135E+02
9.6440E+01	4.2094E-02	4.6202E+00	6.3222E+04	1.2856E+02
9.8490E+01	4.0328E-02	4.4264E+00	6.0570E+04	1.2589E+02
1.0054E+02	3.8664E-02	4.2438E+00	5.8071E+04	1.2332E+02
1.0259E+02	3.6995E-02	4.0606E+00	5.5564E+04	1.2085E+02
1.0464E+02	3.5103E-02	3.8530E+00	5.2723E+04	1.1849E+02
1.0669E+02	3.3857E-02	3.7162E+00	5.0851E+04	1.1621E+02
1.0708E+02	3.3596E-02	3.6875E+00	5.0459E+04	1.1579E+02
1.2500E+02	2.2946E-02	2.5185E+00	3.4463E+04	9.9187E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5000E+02	1.5587E-02	1.7109E+00	2.3411E+04	8.2656E+01
1.7500E+02	1.1014E-02	1.2089E+00	1.6542E+04	7.0848E+01
2.0000E+02	7.9562E-03	8.7328E-01	1.1950E+04	6.1992E+01
2.2500E+02	5.8478E-03	6.4186E-01	8.7830E+03	5.5104E+01
2.5000E+02	4.3620E-03	4.7878E-01	6.5515E+03	4.9594E+01
2.7500E+02	3.2952E-03	3.6168E-01	4.9491E+03	4.5085E+01
2.8000E+02	3.1196E-03	3.4241E-01	4.6855E+03	4.4280E+01
2.8522E+02	2.9966E-03	3.2891E-01	4.5007E+03	4.3470E+01
2.8737E+02	5.3084E-03	5.8265E-01	7.9728E+03	4.3144E+01
2.8867E+02	8.2183E-03	9.0205E-01	1.2343E+04	4.2950E+01
2.8933E+02	1.0833E-02	1.1891E+00	1.6271E+04	4.2852E+01
2.8967E+02	1.3569E-02	1.4893E+00	2.0379E+04	4.2802E+01
2.9006E+02	2.5525E-02	2.8017E+00	3.8337E+04	4.2744E+01
2.9036E+02	3.7362E-02	4.1009E+00	5.6116E+04	4.2700E+01
2.9071E+02	9.1203E-02	1.0011E+01	1.3698E+05	4.2649E+01
2.9105E+02	1.0916E-01	1.1982E+01	1.6395E+05	4.2599E+01
2.9132E+02	9.1203E-02	1.0011E+01	1.3698E+05	4.2559E+01
2.9175E+02	3.7714E-02	4.1395E+00	5.6644E+04	4.2497E+01
2.9194E+02	2.5339E-02	2.7813E+00	3.8058E+04	4.2469E+01
2.9213E+02	1.3262E-02	1.4556E+00	1.9918E+04	4.2441E+01
2.9217E+02	1.0109E-02	1.1096E+00	1.5183E+04	4.2436E+01
2.9247E+02	8.9174E-03	9.7879E-01	1.3393E+04	4.2392E+01
2.9286E+02	9.2732E-03	1.0178E+00	1.3928E+04	4.2336E+01
2.9336E+02	1.1770E-02	1.2919E+00	1.7678E+04	4.2263E+01
2.9366E+02	9.1513E-03	1.0045E+00	1.3745E+04	4.2220E+01
2.9397E+02	8.1977E-03	8.9979E-01	1.2313E+04	4.2176E+01
2.9466E+02	7.6002E-03	8.3420E-01	1.1415E+04	4.2077E+01
2.9547E+02	9.7984E-03	1.0755E+00	1.4717E+04	4.1962E+01
2.9601E+02	7.5355E-03	8.2710E-01	1.1318E+04	4.1885E+01
2.9631E+02	7.5343E-03	8.2697E-01	1.1316E+04	4.1843E+01
2.9697E+02	8.3051E-03	9.1158E-01	1.2474E+04	4.1750E+01
2.9793E+02	8.0039E-03	8.7852E-01	1.2021E+04	4.1615E+01
2.9904E+02	9.0704E-03	9.9558E-01	1.3623E+04	4.1461E+01
3.0031E+02	9.2441E-03	1.0146E+00	1.3884E+04	4.1285E+01
3.0153E+02	1.0845E-02	1.1904E+00	1.6289E+04	4.1118E+01
3.0284E+02	1.1138E-02	1.2225E+00	1.6729E+04	4.0940E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0384E+02	1.2859E-02	1.4115E+00	1.9314E+04	4.0806E+01
3.0453E+02	1.3035E-02	1.4308E+00	1.9578E+04	4.0713E+01
3.0560E+02	1.2258E-02	1.3454E+00	1.8411E+04	4.0571E+01
3.0698E+02	1.2609E-02	1.3840E+00	1.8938E+04	4.0388E+01
3.0852E+02	1.4090E-02	1.5465E+00	2.1162E+04	4.0187E+01
3.1002E+02	1.5988E-02	1.7548E+00	2.4013E+04	3.9992E+01
3.1128E+02	1.7708E-02	1.9437E+00	2.6597E+04	3.9830E+01
3.1224E+02	1.8241E-02	2.0021E+00	2.7396E+04	3.9708E+01
3.1328E+02	1.7582E-02	1.9298E+00	2.6407E+04	3.9576E+01
3.1424E+02	1.7578E-02	1.9294E+00	2.6401E+04	3.9455E+01
3.1539E+02	1.6443E-02	1.8048E+00	2.4696E+04	3.9311E+01
3.1650E+02	1.5011E-02	1.6476E+00	2.2546E+04	3.9174E+01
3.1785E+02	1.3697E-02	1.5034E+00	2.0572E+04	3.9007E+01
3.1996E+02	1.2261E-02	1.3458E+00	1.8416E+04	3.8750E+01
3.2245E+02	1.1003E-02	1.2077E+00	1.6525E+04	3.8451E+01
3.2545E+02	9.8603E-03	1.0823E+00	1.4810E+04	3.8096E+01
3.2875E+02	8.8957E-03	9.7640E-01	1.3361E+04	3.7714E+01
3.3193E+02	8.2884E-03	9.0974E-01	1.2449E+04	3.7353E+01
3.3593E+02	7.8564E-03	8.6233E-01	1.1800E+04	3.6908E+01
3.3904E+02	7.7849E-03	8.5447E-01	1.1692E+04	3.6569E+01
3.4134E+02	7.7164E-03	8.4696E-01	1.1590E+04	3.6323E+01
3.5000E+02	7.5712E-03	8.3102E-01	1.1371E+04	3.5424E+01
4.0000E+02	5.5024E-03	6.0395E-01	8.2643E+03	3.0996E+01
4.5000E+02	4.0997E-03	4.4998E-01	6.1575E+03	2.7552E+01
5.0000E+02	3.1384E-03	3.4447E-01	4.7137E+03	2.4797E+01
5.2490E+02	2.7739E-03	3.0446E-01	4.1662E+03	2.3621E+01
5.2490E+02	3.1787E-03	3.4889E-01	4.7742E+03	2.3621E+01
5.2954E+02	3.3725E-03	3.7017E-01	5.0653E+03	2.3414E+01
5.3096E+02	3.7672E-03	4.1350E-01	5.6582E+03	2.3351E+01
5.3214E+02	4.7651E-03	5.2302E-01	7.1569E+03	2.3299E+01
5.3282E+02	6.6668E-03	7.3175E-01	1.0013E+04	2.3269E+01
5.3319E+02	2.3455E-02	2.5744E+00	3.5227E+04	2.3253E+01
5.3373E+02	4.3609E-02	4.7866E+00	6.5498E+04	2.3230E+01
5.3448E+02	2.7128E-02	2.9776E+00	4.0744E+04	2.3197E+01
5.3503E+02	1.1251E-02	1.2349E+00	1.6898E+04	2.3173E+01
5.3526E+02	9.9572E-03	1.0929E+00	1.4955E+04	2.3163E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3561E+02	9.1825E-03	1.0079E+00	1.3792E+04	2.3148E+01
5.3604E+02	8.7094E-03	9.5595E-01	1.3081E+04	2.3130E+01
5.3642E+02	8.9703E-03	9.8459E-01	1.3473E+04	2.3113E+01
5.3691E+02	1.1518E-02	1.2643E+00	1.7300E+04	2.3092E+01
5.3717E+02	1.3591E-02	1.4918E+00	2.0413E+04	2.3081E+01
5.3743E+02	1.4239E-02	1.5629E+00	2.1386E+04	2.3070E+01
5.3774E+02	1.4240E-02	1.5630E+00	2.1388E+04	2.3057E+01
5.3812E+02	1.3897E-02	1.5253E+00	2.0872E+04	2.3040E+01
5.3851E+02	1.3985E-02	1.5350E+00	2.1005E+04	2.3024E+01
5.3904E+02	1.4591E-02	1.6016E+00	2.1915E+04	2.3001E+01
5.3996E+02	1.5027E-02	1.6494E+00	2.2570E+04	2.2962E+01
5.4084E+02	1.4643E-02	1.6072E+00	2.1993E+04	2.2924E+01
5.4226E+02	1.3441E-02	1.4753E+00	2.0188E+04	2.2864E+01
5.4403E+02	1.2586E-02	1.3815E+00	1.8904E+04	2.2790E+01
5.4568E+02	1.2420E-02	1.3633E+00	1.8655E+04	2.2721E+01
5.4725E+02	1.2903E-02	1.4162E+00	1.9379E+04	2.2656E+01
5.4855E+02	1.2692E-02	1.3931E+00	1.9063E+04	2.2602E+01
5.4920E+02	1.2868E-02	1.4124E+00	1.9327E+04	2.2575E+01
5.5054E+02	1.3910E-02	1.5268E+00	2.0892E+04	2.2520E+01
5.5245E+02	1.5904E-02	1.7456E+00	2.3886E+04	2.2443E+01
5.5360E+02	1.6383E-02	1.7982E+00	2.4607E+04	2.2396E+01
5.5567E+02	1.6392E-02	1.7992E+00	2.4620E+04	2.2313E+01
5.5693E+02	1.7046E-02	1.8709E+00	2.5601E+04	2.2262E+01
5.5781E+02	1.7351E-02	1.9045E+00	2.6061E+04	2.2227E+01
5.5835E+02	1.7181E-02	1.8858E+00	2.5805E+04	2.2205E+01
5.5938E+02	1.6453E-02	1.8059E+00	2.4711E+04	2.2165E+01
5.6007E+02	1.5937E-02	1.7493E+00	2.3937E+04	2.2137E+01
5.6080E+02	1.5294E-02	1.6787E+00	2.2970E+04	2.2108E+01
5.6292E+02	1.4095E-02	1.5471E+00	2.1169E+04	2.2025E+01
5.6495E+02	1.3284E-02	1.4581E+00	1.9952E+04	2.1946E+01
5.6760E+02	1.2735E-02	1.3978E+00	1.9127E+04	2.1844E+01
5.7009E+02	1.2445E-02	1.3659E+00	1.8691E+04	2.1748E+01
5.7280E+02	1.2198E-02	1.3389E+00	1.8321E+04	2.1645E+01
6.0000E+02	9.6747E-03	1.0619E+00	1.4531E+04	2.0664E+01
7.0000E+02	6.6135E-03	7.2591E-01	9.9331E+03	1.7712E+01
8.0000E+02	4.7164E-03	5.1768E-01	7.0838E+03	1.5498E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0000E+02	3.4788E-03	3.8184E-01	5.2250E+03	1.3776E+01
1.0000E+03	2.6378E-03	2.8953E-01	3.9618E+03	1.2398E+01
1.2500E+03	1.4498E-03	1.5914E-01	2.1776E+03	9.9187E+00
1.5000E+03	8.7972E-04	9.6559E-02	1.3213E+03	8.2656E+00
1.7500E+03	5.7310E-04	6.2904E-02	8.6076E+02	7.0848E+00
2.0000E+03	3.9385E-04	4.3230E-02	5.9154E+02	6.1992E+00
2.2500E+03	2.8218E-04	3.0973E-02	4.2382E+02	5.5104E+00
2.5000E+03	2.0860E-04	2.2896E-02	3.1330E+02	4.9594E+00
2.7500E+03	1.5872E-04	1.7422E-02	2.3839E+02	4.5085E+00
3.0000E+03	1.2325E-04	1.3528E-02	1.8512E+02	4.1328E+00
3.5000E+03	7.8225E-05	8.5861E-03	1.1749E+02	3.5424E+00
4.0000E+03	5.2472E-05	5.7594E-03	7.8809E+01	3.0996E+00
4.5000E+03	3.6765E-05	4.0354E-03	5.5219E+01	2.7552E+00
5.0000E+03	2.6679E-05	2.9283E-03	4.0071E+01	2.4797E+00
6.0000E+03	1.5241E-05	1.6729E-03	2.2891E+01	2.0664E+00
7.0000E+03	9.4478E-06	1.0370E-03	1.4190E+01	1.7712E+00
8.0000E+03	6.2207E-06	6.8279E-04	9.3431E+00	1.5498E+00
9.0000E+03	4.2896E-06	4.7084E-04	6.4428E+00	1.3776E+00
1.0000E+04	2.9471E-06	3.2348E-04	4.4264E+00	1.2398E+00
1.2500E+04	1.4434E-06	1.5843E-04	2.1680E+00	9.9187E-01
1.5000E+04	8.0547E-07	8.8410E-05	1.2098E+00	8.2656E-01
1.7500E+04	4.9190E-07	5.3992E-05	7.3881E-01	7.0848E-01
2.0000E+04	3.2088E-07	3.5221E-05	4.8195E-01	6.1992E-01
2.2500E+04	2.2016E-07	2.4165E-05	3.3067E-01	5.5104E-01
2.5000E+04	1.5719E-07	1.7253E-05	2.3608E-01	4.9594E-01
2.7500E+04	1.1557E-07	1.2685E-05	1.7358E-01	4.5085E-01
3.0000E+04	8.6897E-08	9.5379E-06	1.3051E-01	4.1328E-01
3.5000E+04	5.2416E-08	5.7532E-06	7.8726E-02	3.5424E-01
4.0000E+04	3.3831E-08	3.7134E-06	5.0813E-02	3.0996E-01
4.5000E+04	2.2993E-08	2.5237E-06	3.4534E-02	2.7552E-01
5.0000E+04	1.6276E-08	1.7865E-06	2.4446E-02	2.4797E-01
6.0000E+04	8.9530E-09	9.8269E-07	1.3447E-02	2.0664E-01
7.0000E+04	5.4009E-09	5.9281E-07	8.1119E-03	1.7712E-01
8.0000E+04	3.4849E-09	3.8251E-07	5.2341E-03	1.5498E-01
9.0000E+04	2.3666E-09	2.5976E-07	3.5544E-03	1.3776E-01
1.0000E+05	1.6729E-09	1.8362E-07	2.5126E-03	1.2398E-01

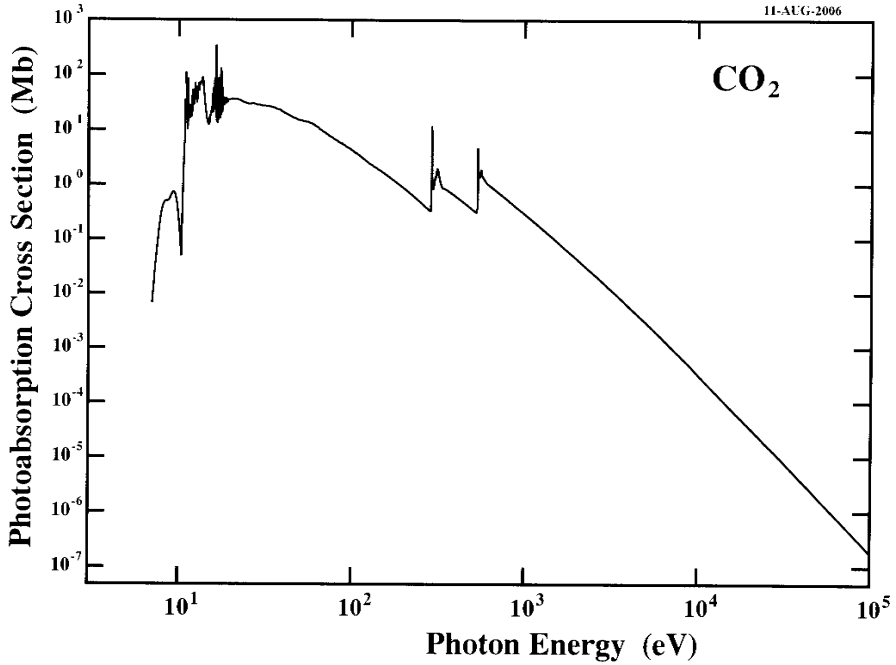
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\;\;.$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E-E_{\rm K}}}\;\;,$$

where $E_{\rm K} \;=\; 297.65$ and 541.1 eV for carbon and oxygen atoms, respectively.



CO_2

Energy, eV	Source
7.0 - 10.33	Chan *et al*., Chem. Phys., 178 (1993) 401
10.66 -13.7763 (IP)	Chan *et al*., Chem. Phys., 178 (1993) 401
IP - 35.93	Chan *et al*., Chem. Phys., 178 (1993) 401
35.93 - 107.08	Fig. 5.5 p.194 (Berkowitz's book*)
107.08 - 290.0	Table 5.5 p.194 (Berkowitz's book*)
291.0	Table 5.4 p.192 (Berkowitz's book*)
290 - 341.3	Table 5.4 p.192 (Berkowitz's book*)
341.3 - 524.9	Table 5.5 p.194 (Berkowitz's book*)
534.6	Table 5.4 p.192 (Berkowitz's book*)
524.9 -572.8	Table 5.4 p.192 (Berkowitz's book*)
572.8 - 2293.2	Table 5.5 p.194 (Berkowitz's book*)
2293.2 - 10000	Table 5.5 p.194 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Nitrous Oxide (N_2O)

Z = 22 Molecular Mass : $M_{\rm A} = 44.0128$

$\sigma_a({\rm Mb}) = 109.76097 \ \dfrac{{\rm d}f}{{\rm d}E} \ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for transitions below the IP.

Energy (eV)	f	λ (Å)
5.70 − 8.0	0.0015	2175.2 − 1549.8
8.0 − 9.0	0.0255	1549.8 − 1377.6
9.0 − 10.23	0.3780	1377.6 − 1212.0
10.23 − 11.80	0.3547	1212.0 − 1050.7
11.80 − 12.8898(IP)	0.2324	1050.7 − 961.88

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.2890E+01	8.8566E-02	9.7211E+00	1.3301E+05	9.6188E+02
1.2911E+01	1.0872E-01	1.1933E+01	1.6327E+05	9.6027E+02
1.2923E+01	1.0162E-01	1.1154E+01	1.5262E+05	9.5939E+02
1.2934E+01	1.1683E-01	1.2824E+01	1.7546E+05	9.5858E+02
1.2937E+01	1.1577E-01	1.2707E+01	1.7386E+05	9.5837E+02
1.2946E+01	1.2567E-01	1.3793E+01	1.8873E+05	9.5769E+02
1.2951E+01	1.0654E-01	1.1694E+01	1.6001E+05	9.5732E+02
1.2956E+01	9.4507E-02	1.0373E+01	1.4193E+05	9.5696E+02
1.2963E+01	1.0157E-01	1.1149E+01	1.5255E+05	9.5644E+02
1.2980E+01	9.0586E-02	9.9428E+00	1.3604E+05	9.5518E+02
1.3003E+01	1.0047E-01	1.1028E+01	1.5089E+05	9.5349E+02
1.3021E+01	1.0045E-01	1.1026E+01	1.5086E+05	9.5216E+02
1.3047E+01	9.1569E-02	1.0051E+01	1.3752E+05	9.5030E+02
1.3055E+01	9.7581E-02	1.0711E+01	1.4655E+05	9.4973E+02
1.3099E+01	1.0248E-01	1.1249E+01	1.5391E+05	9.4655E+02
1.3124E+01	9.9615E-02	1.0934E+01	1.4960E+05	9.4469E+02
1.3156E+01	1.0560E-01	1.1590E+01	1.5859E+05	9.4242E+02
1.3175E+01	1.0133E-01	1.1122E+01	1.5218E+05	9.4109E+02
1.3198E+01	1.0732E-01	1.1780E+01	1.6118E+05	9.3945E+02

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.3672E+01	4.1826E-01	4.5909E+01	6.2815E+05	9.0688E+02
1.3208E+01	1.1651E-01	1.2788E+01	1.7498E+05	9.3872E+02
1.3218E+01	1.1048E-01	1.2126E+01	1.6592E+05	9.3799E+02
1.3281E+01	1.1324E-01	1.2429E+01	1.7007E+05	9.3355E+02
1.3307E+01	1.1817E-01	1.2971E+01	1.7747E+05	9.3172E+02
1.3349E+01	1.2414E-01	1.3626E+01	1.8644E+05	9.2882E+02
1.3417E+01	1.3220E-01	1.4511E+01	1.9855E+05	9.2410E+02
1.3482E+01	1.4912E-01	1.6368E+01	2.2396E+05	9.1966E+02
1.3515E+01	1.4909E-01	1.6364E+01	2.2390E+05	9.1739E+02
1.3542E+01	1.5720E-01	1.7254E+01	2.3608E+05	9.1554E+02
1.3587E+01	1.7308E-01	1.8997E+01	2.5993E+05	9.1251E+02
1.3614E+01	1.7906E-01	1.9654E+01	2.6891E+05	9.1073E+02
1.3649E+01	1.8079E-01	1.9844E+01	2.7152E+05	9.0838E+02
1.3721E+01	2.0584E-01	2.2593E+01	3.0914E+05	9.0358E+02
1.3745E+01	2.0688E-01	2.2708E+01	3.1070E+05	9.0201E+02
1.3761E+01	2.1394E-01	2.3482E+01	3.2130E+05	9.0100E+02
1.3768E+01	2.2987E-01	2.5231E+01	3.4522E+05	9.0055E+02
1.3778E+01	2.2277E-01	2.4452E+01	3.3457E+05	8.9987E+02
1.3820E+01	2.4998E-01	2.7439E+01	3.7543E+05	8.9716E+02
1.3836E+01	2.5280E-01	2.7747E+01	3.7966E+05	8.9611E+02
1.3863E+01	2.6976E-01	2.9609E+01	4.0513E+05	8.9434E+02
1.3890E+01	3.5291E-01	3.8735E+01	5.3000E+05	8.9263E+02
1.3905E+01	4.4314E-01	4.8639E+01	6.6552E+05	8.9166E+02
1.3918E+01	2.9766E-01	3.2672E+01	4.4704E+05	8.9081E+02
1.3929E+01	2.3289E-01	2.5562E+01	3.4976E+05	8.9014E+02
1.3951E+01	2.1375E-01	2.3461E+01	3.2101E+05	8.8868E+02
1.3963E+01	2.2683E-01	2.4897E+01	3.4066E+05	8.8792E+02
1.3976E+01	2.4770E-01	2.7188E+01	3.7200E+05	8.8711E+02
1.3982E+01	2.8273E-01	3.1033E+01	4.2461E+05	8.8674E+02
1.3995E+01	3.1280E-01	3.4334E+01	4.6978E+05	8.8593E+02
1.4007E+01	2.5864E-01	2.8389E+01	3.8843E+05	8.8513E+02
1.4020E+01	2.1863E-01	2.3997E+01	3.2835E+05	8.8432E+02
1.4036E+01	2.0870E-01	2.2907E+01	3.1344E+05	8.8335E+02
1.4063E+01	2.5858E-01	2.8382E+01	3.8835E+05	8.8165E+02
1.4073E+01	2.6459E-01	2.9042E+01	3.9737E+05	8.8098E+02
1.4088E+01	2.1149E-01	2.3213E+01	3.1762E+05	8.8009E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4117E+01	2.0154E-01	2.2121E+01	3.0268E+05	8.7827E+02
1.4129E+01	2.2065E-01	2.4218E+01	3.3137E+05	8.7751E+02
1.4152E+01	2.3549E-01	2.5847E+01	3.5366E+05	8.7612E+02
1.4174E+01	2.2449E-01	2.4640E+01	3.3715E+05	8.7472E+02
1.4198E+01	2.4146E-01	2.6503E+01	3.6263E+05	8.7323E+02
1.4210E+01	2.6658E-01	2.9260E+01	4.0036E+05	8.7249E+02
1.4233E+01	2.2656E-01	2.4868E+01	3.4026E+05	8.7109E+02
1.4243E+01	2.3150E-01	2.5410E+01	3.4768E+05	8.7051E+02
1.4257E+01	2.1131E-01	2.3194E+01	3.1735E+05	8.6963E+02
1.4269E+01	2.1130E-01	2.3193E+01	3.1734E+05	8.6890E+02
1.4276E+01	2.2722E-01	2.4940E+01	3.4125E+05	8.6845E+02
1.4302E+01	2.3428E-01	2.5715E+01	3.5185E+05	8.6689E+02
1.4317E+01	2.2117E-01	2.4275E+01	3.3215E+05	8.6600E+02
1.4328E+01	2.2930E-01	2.5168E+01	3.4437E+05	8.6535E+02
1.4356E+01	2.3139E-01	2.5398E+01	3.4751E+05	8.6365E+02
1.4371E+01	2.5014E-01	2.7456E+01	3.7567E+05	8.6276E+02
1.4385E+01	2.3030E-01	2.5278E+01	3.4588E+05	8.6188E+02
1.4393E+01	2.4233E-01	2.6599E+01	3.6394E+05	8.6143E+02
1.4402E+01	2.3312E-01	2.5587E+01	3.5010E+05	8.6091E+02
1.4423E+01	2.6142E-01	2.8693E+01	3.9260E+05	8.5965E+02
1.4471E+01	2.6632E-01	2.9232E+01	3.9997E+05	8.5678E+02
1.4480E+01	2.5322E-01	2.7793E+01	3.8029E+05	8.5626E+02
1.4497E+01	2.6736E-01	2.9346E+01	4.0153E+05	8.5522E+02
1.4505E+01	2.6027E-01	2.8568E+01	3.9089E+05	8.5477E+02
1.4523E+01	2.7122E-01	2.9770E+01	4.0733E+05	8.5368E+02
1.4578E+01	2.7130E-01	2.9778E+01	4.0744E+05	8.5046E+02
1.4598E+01	2.8157E-01	3.0905E+01	4.2287E+05	8.4931E+02
1.4617E+01	3.5407E-01	3.8863E+01	5.3175E+05	8.4820E+02
1.4636E+01	3.1441E-01	3.4510E+01	4.7219E+05	8.4709E+02
1.4644E+01	3.1715E-01	3.4811E+01	4.7630E+05	8.4663E+02
1.4662E+01	3.0074E-01	3.3009E+01	4.5166E+05	8.4561E+02
1.4695E+01	3.1306E-01	3.4362E+01	4.7017E+05	8.4372E+02
1.4737E+01	4.2045E-01	4.6149E+01	6.3145E+05	8.4132E+02
1.4763E+01	4.8748E-01	5.3506E+01	7.3211E+05	8.3984E+02
1.4764E+01	5.1552E-01	5.6584E+01	7.7423E+05	8.3975E+02
1.4775E+01	5.2510E-01	5.7635E+01	7.8861E+05	8.3915E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4796E+01	4.4236E-01	4.8554E+01	6.6435E+05	8.3795E+02
1.4801E+01	4.6082E-01	5.0580E+01	6.9208E+05	8.3767E+02
1.4813E+01	7.6858E-01	8.4360E+01	1.1543E+06	8.3698E+02
1.4823E+01	1.0565E+00	1.1596E+02	1.5867E+06	8.3643E+02
1.4830E+01	1.1057E+00	1.2137E+02	1.6606E+06	8.3606E+02
1.4846E+01	9.2315E-01	1.0133E+02	1.3864E+06	8.3513E+02
1.4859E+01	8.3084E-01	9.1193E+01	1.2478E+06	8.3440E+02
1.4868E+01	9.0059E-01	9.8850E+01	1.3525E+06	8.3389E+02
1.4876E+01	5.8942E-01	6.4696E+01	8.8521E+05	8.3347E+02
1.4885E+01	3.5896E-01	3.9400E+01	5.3910E+05	8.3296E+02
1.4912E+01	3.4051E-01	3.7374E+01	5.1138E+05	8.3144E+02
1.4942E+01	3.3094E-01	3.6324E+01	4.9702E+05	8.2978E+02
1.4950E+01	3.5556E-01	3.9027E+01	5.3399E+05	8.2932E+02
1.4966E+01	3.0222E-01	3.3172E+01	4.5389E+05	8.2844E+02
1.4988E+01	4.0960E-01	4.4959E+01	6.1515E+05	8.2724E+02
1.4997E+01	4.4996E-01	4.9388E+01	6.7576E+05	8.2673E+02
1.5010E+01	4.6706E-01	5.1265E+01	7.0145E+05	8.2599E+02
1.5025E+01	4.5407E-01	4.9839E+01	6.8194E+05	8.2521E+02
1.5032E+01	4.3903E-01	4.8188E+01	6.5934E+05	8.2479E+02
1.5037E+01	4.4313E-01	4.8638E+01	6.6551E+05	8.2452E+02
1.5048E+01	3.8158E-01	4.1883E+01	5.7307E+05	8.2392E+02
1.5059E+01	3.8091E-01	4.1809E+01	5.7206E+05	8.2331E+02
1.5088E+01	3.3783E-01	3.7081E+01	5.0737E+05	8.2175E+02
1.5103E+01	3.4604E-01	3.7982E+01	5.1970E+05	8.2091E+02
1.5115E+01	3.4331E-01	3.7682E+01	5.1559E+05	8.2027E+02
1.5130E+01	3.1939E-01	3.5056E+01	4.7967E+05	8.1948E+02
1.5142E+01	3.2691E-01	3.5882E+01	4.9096E+05	8.1879E+02
1.5154E+01	3.4811E-01	3.8209E+01	5.2281E+05	8.1814E+02
1.5163E+01	3.8232E-01	4.1964E+01	5.7418E+05	8.1768E+02
1.5171E+01	4.3292E-01	4.7518E+01	6.5018E+05	8.1727E+02
1.5184E+01	2.8521E-01	3.1305E+01	4.2834E+05	8.1653E+02
1.5195E+01	2.9342E-01	3.2206E+01	4.4067E+05	8.1597E+02
1.5216E+01	2.8044E-01	3.0781E+01	4.2117E+05	8.1482E+02
1.5229E+01	2.4693E-01	2.7103E+01	3.7084E+05	8.1413E+02
1.5247E+01	2.1206E-01	2.3275E+01	3.1847E+05	8.1316E+02
1.5261E+01	2.1685E-01	2.3801E+01	3.2567E+05	8.1242E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5285E+01	2.0797E-01	2.2827E+01	3.1233E+05	8.1113E+02
1.5295E+01	2.1481E-01	2.3578E+01	3.2261E+05	8.1062E+02
1.5316E+01	2.1550E-01	2.3654E+01	3.2364E+05	8.0951E+02
1.5333E+01	2.0388E-01	2.2378E+01	3.0620E+05	8.0859E+02
1.5343E+01	2.1346E-01	2.3429E+01	3.2058E+05	8.0808E+02
1.5367E+01	1.9637E-01	2.1554E+01	2.9491E+05	8.0683E+02
1.5384E+01	1.9911E-01	2.1854E+01	2.9903E+05	8.0591E+02
1.5402E+01	1.9638E-01	2.1555E+01	2.9493E+05	8.0499E+02
1.5420E+01	2.2717E-01	2.4934E+01	3.4116E+05	8.0406E+02
1.5436E+01	3.3727E-01	3.7020E+01	5.0653E+05	8.0323E+02
1.5452E+01	2.3949E-01	2.6287E+01	3.5967E+05	8.0240E+02
1.5463E+01	2.0735E-01	2.2759E+01	3.1140E+05	8.0180E+02
1.5475E+01	2.2308E-01	2.4485E+01	3.3503E+05	8.0120E+02
1.5490E+01	2.2309E-01	2.4486E+01	3.3504E+05	8.0042E+02
1.5511E+01	3.7423E-01	4.1076E+01	5.6203E+05	7.9931E+02
1.5523E+01	6.3617E-01	6.9826E+01	9.5541E+05	7.9871E+02
1.5535E+01	8.2902E-01	9.0995E+01	1.2451E+06	7.9811E+02
1.5547E+01	6.5396E-01	7.1779E+01	9.8213E+05	7.9746E+02
1.5551E+01	6.9773E-01	7.6584E+01	1.0479E+06	7.9728E+02
1.5559E+01	4.2623E-01	4.6783E+01	6.4012E+05	7.9686E+02
1.5578E+01	2.8125E-01	3.0870E+01	4.2238E+05	7.9589E+02
1.5587E+01	2.6689E-01	2.9294E+01	4.0082E+05	7.9543E+02
1.5601E+01	3.3665E-01	3.6951E+01	5.0559E+05	7.9474E+02
1.5618E+01	2.2176E-01	2.4341E+01	3.3305E+05	7.9386E+02
1.5636E+01	1.9304E-01	2.1189E+01	2.8992E+05	7.9294E+02
1.5646E+01	2.0810E-01	2.2841E+01	3.1253E+05	7.9243E+02
1.5663E+01	2.5939E-01	2.8471E+01	3.8956E+05	7.9155E+02
1.5671E+01	3.7566E-01	4.1233E+01	5.6417E+05	7.9118E+02
1.5674E+01	3.6677E-01	4.0257E+01	5.5083E+05	7.9100E+02
1.5678E+01	3.7429E-01	4.1083E+01	5.6212E+05	7.9081E+02
1.5686E+01	5.5211E-01	6.0600E+01	8.2917E+05	7.9040E+02
1.5695E+01	7.5523E-01	8.2895E+01	1.1342E+06	7.8994E+02
1.5707E+01	4.2627E-01	4.6788E+01	6.4019E+05	7.8934E+02
1.5713E+01	3.7225E-01	4.0859E+01	5.5906E+05	7.8906E+02
1.5717E+01	4.0234E-01	4.4161E+01	6.0425E+05	7.8887E+02
1.5730E+01	2.6146E-01	2.8698E+01	3.9267E+05	7.8818E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5741E+01	2.0471E-01	2.2469E+01	3.0744E+05	7.8763E+02
1.5750E+01	2.1360E-01	2.3445E+01	3.2079E+05	7.8721E+02
1.5770E+01	1.8488E-01	2.0293E+01	2.7766E+05	7.8620E+02
1.5779E+01	1.8420E-01	2.0218E+01	2.7664E+05	7.8573E+02
1.5784E+01	2.0541E-01	2.2546E+01	3.0848E+05	7.8550E+02
1.5792E+01	3.5176E-01	3.8610E+01	5.2829E+05	7.8509E+02
1.5807E+01	2.2115E-01	2.4273E+01	3.3213E+05	7.8435E+02
1.5817E+01	2.7996E-01	3.0729E+01	4.2046E+05	7.8389E+02
1.5827E+01	4.5983E-01	5.0471E+01	6.9058E+05	7.8338E+02
1.5834E+01	6.6363E-01	7.2840E+01	9.9665E+05	7.8301E+02
1.5841E+01	1.1916E+00	1.3079E+02	1.7895E+06	7.8269E+02
1.5857E+01	6.8552E-01	7.5243E+01	1.0295E+06	7.8190E+02
1.5872E+01	3.1965E-01	3.5085E+01	4.8006E+05	7.8116E+02
1.5891E+01	2.6768E-01	2.9380E+01	4.0200E+05	7.8024E+02
1.5902E+01	2.9572E-01	3.2459E+01	4.4413E+05	7.7969E+02
1.5911E+01	3.0461E-01	3.3434E+01	4.5747E+05	7.7922E+02
1.5916E+01	3.3265E-01	3.6512E+01	4.9958E+05	7.7899E+02
1.5924E+01	2.6701E-01	2.9307E+01	4.0100E+05	7.7862E+02
1.5932E+01	2.5469E-01	2.7955E+01	3.8250E+05	7.7821E+02
1.5941E+01	2.8205E-01	3.0958E+01	4.2359E+05	7.7779E+02
1.5951E+01	4.1678E-01	4.5746E+01	6.2594E+05	7.7729E+02
1.5960E+01	5.5972E-01	6.1436E+01	8.4061E+05	7.7682E+02
1.5974E+01	4.4415E-01	4.8751E+01	6.6704E+05	7.7618E+02
1.5984E+01	5.9597E-01	6.5414E+01	8.9504E+05	7.7567E+02
1.5995E+01	4.6536E-01	5.1078E+01	6.9888E+05	7.7516E+02
1.6002E+01	6.8557E-01	7.5249E+01	1.0296E+06	7.7479E+02
1.6009E+01	9.3652E-01	1.0279E+02	1.4065E+06	7.7447E+02
1.6027E+01	4.6126E-01	5.0628E+01	6.9273E+05	7.7359E+02
1.6035E+01	2.9781E-01	3.2688E+01	4.4726E+05	7.7322E+02
1.6049E+01	2.1712E-01	2.3831E+01	3.2607E+05	7.7253E+02
1.6057E+01	2.4242E-01	2.6609E+01	3.6408E+05	7.7216E+02
1.6066E+01	1.9387E-01	2.1279E+01	2.9116E+05	7.7170E+02
1.6084E+01	2.4928E-01	2.7361E+01	3.7437E+05	7.7087E+02
1.6092E+01	3.5596E-01	3.9071E+01	5.3459E+05	7.7045E+02
1.6098E+01	5.0095E-01	5.4985E+01	7.5234E+05	7.7018E+02
1.6107E+01	4.0316E-01	4.4251E+01	6.0547E+05	7.6976E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6118E+01	6.4731E-01	7.1049E+01	9.7215E+05	7.6925E+02
1.6127E+01	3.9359E-01	4.3201E+01	5.9111E+05	7.6879E+02
1.6131E+01	2.6092E-01	2.8638E+01	3.9185E+05	7.6861E+02
1.6136E+01	2.3356E-01	2.5636E+01	3.5077E+05	7.6837E+02
1.6148E+01	3.8607E-01	4.2375E+01	5.7981E+05	7.6782E+02
1.6160E+01	2.9034E-01	3.1868E+01	4.3604E+05	7.6722E+02
1.6167E+01	4.6131E-01	5.0633E+01	6.9280E+05	7.6690E+02
1.6172E+01	4.7157E-01	5.1760E+01	7.0821E+05	7.6667E+02
1.6176E+01	4.6268E-01	5.0784E+01	6.9487E+05	7.6648E+02
1.6184E+01	5.7757E-01	6.3395E+01	8.6741E+05	7.6607E+02
1.6190E+01	4.5379E-01	4.9809E+01	6.8152E+05	7.6579E+02
1.6196E+01	2.9718E-01	3.2619E+01	4.4632E+05	7.6551E+02
1.6201E+01	2.2743E-01	2.4962E+01	3.4155E+05	7.6528E+02
1.6211E+01	1.8092E-01	1.9858E+01	2.7172E+05	7.6482E+02
1.6222E+01	3.1703E-01	3.4797E+01	4.7612E+05	7.6431E+02
1.6229E+01	4.5723E-01	5.0186E+01	6.8668E+05	7.6399E+02
1.6244E+01	2.4454E-01	2.6841E+01	3.6726E+05	7.6325E+02
1.6250E+01	2.8557E-01	3.1345E+01	4.2888E+05	7.6297E+02
1.6253E+01	3.9910E-01	4.3806E+01	5.9938E+05	7.6283E+02
1.6261E+01	5.0921E-01	5.5891E+01	7.6474E+05	7.6247E+02
1.6269E+01	3.4576E-01	3.7951E+01	5.1928E+05	7.6210E+02
1.6274E+01	2.7395E-01	3.0070E+01	4.1143E+05	7.6187E+02
1.6278E+01	4.0253E-01	4.4182E+01	6.0453E+05	7.6168E+02
1.6284E+01	5.5025E-01	6.0396E+01	8.2638E+05	7.6140E+02
1.6297E+01	2.8970E-01	3.1797E+01	4.3507E+05	7.6080E+02
1.6304E+01	3.5262E-01	3.8704E+01	5.2957E+05	7.6043E+02
1.6310E+01	3.2526E-01	3.5701E+01	4.8848E+05	7.6016E+02
1.6316E+01	3.6493E-01	4.0055E+01	5.4807E+05	7.5988E+02
1.6323E+01	3.3142E-01	3.6377E+01	4.9774E+05	7.5956E+02
1.6336E+01	4.1417E-01	4.5460E+01	6.2202E+05	7.5896E+02
1.6342E+01	3.8613E-01	4.2383E+01	5.7991E+05	7.5868E+02
1.6349E+01	4.4359E-01	4.8688E+01	6.6619E+05	7.5836E+02
1.6360E+01	3.3075E-01	3.6303E+01	4.9672E+05	7.5785E+02
1.6372E+01	3.0955E-01	3.3977E+01	4.6489E+05	7.5729E+02
1.6378E+01	3.2323E-01	3.5478E+01	4.8544E+05	7.5702E+02
1.6384E+01	4.0598E-01	4.4561E+01	6.0971E+05	7.5674E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6390E+01	4.0051E-01	4.3961E+01	6.0150E+05	7.5646E+02
1.6397E+01	4.3061E-01	4.7264E+01	6.4670E+05	7.5614E+02
1.6409E+01	3.1777E-01	3.4879E+01	4.7724E+05	7.5559E+02
1.6414E+01	3.3965E-01	3.7281E+01	5.1010E+05	7.5536E+02
1.6419E+01	4.1010E-01	4.5013E+01	6.1589E+05	7.5512E+02
1.6423E+01	4.0326E-01	4.4262E+01	6.0563E+05	7.5494E+02
1.6426E+01	4.1967E-01	4.6064E+01	6.3027E+05	7.5480E+02
1.6439E+01	3.3897E-01	3.7206E+01	5.0908E+05	7.5420E+02
1.6445E+01	3.9301E-01	4.3137E+01	5.9023E+05	7.5392E+02
1.6450E+01	3.9916E-01	4.3813E+01	5.9948E+05	7.5369E+02
1.6461E+01	3.4104E-01	3.7432E+01	5.1218E+05	7.5319E+02
1.6470E+01	3.9917E-01	4.3814E+01	5.9949E+05	7.5277E+02
1.6477E+01	3.7455E-01	4.1111E+01	5.6252E+05	7.5245E+02
1.6482E+01	4.0054E-01	4.3964E+01	6.0154E+05	7.5222E+02
1.6494E+01	4.0055E-01	4.3965E+01	6.0155E+05	7.5171E+02
1.6505E+01	3.7115E-01	4.0737E+01	5.5740E+05	7.5120E+02
1.6514E+01	3.5884E-01	3.9387E+01	5.3892E+05	7.5078E+02
1.6525E+01	3.5989E-01	3.9502E+01	5.4049E+05	7.5029E+02
1.6536E+01	3.8429E-01	4.2180E+01	5.7713E+05	7.4978E+02
1.6558E+01	3.7172E-01	4.0800E+01	5.5826E+05	7.4880E+02
1.6571E+01	3.6990E-01	4.0601E+01	5.5553E+05	7.4819E+02
1.6577E+01	3.9700E-01	4.3575E+01	5.9623E+05	7.4792E+02
1.6588E+01	4.0531E-01	4.4488E+01	6.0871E+05	7.4744E+02
1.6595E+01	3.8921E-01	4.2720E+01	5.8452E+05	7.4711E+02
1.6606E+01	3.8918E-01	4.2717E+01	5.8448E+05	7.4661E+02
1.6618E+01	3.7307E-01	4.0948E+01	5.6028E+05	7.4610E+02
1.6625E+01	3.7394E-01	4.1044E+01	5.6159E+05	7.4577E+02
1.6634E+01	3.6230E-01	3.9767E+01	5.4412E+05	7.4535E+02
1.6658E+01	3.6463E-01	4.0022E+01	5.4760E+05	7.4431E+02
1.6666E+01	3.7741E-01	4.1425E+01	5.6681E+05	7.4392E+02
1.6703E+01	4.0176E-01	4.4097E+01	6.0337E+05	7.4228E+02
1.6737E+01	3.6355E-01	3.9903E+01	5.4599E+05	7.4076E+02
1.6778E+01	3.8043E-01	4.1757E+01	5.7134E+05	7.3895E+02
1.6797E+01	3.8128E-01	4.1849E+01	5.7261E+05	7.3812E+02
1.6816E+01	3.8868E-01	4.2662E+01	5.8373E+05	7.3731E+02
1.6850E+01	3.6924E-01	4.0528E+01	5.5454E+05	7.3582E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6901E+01	3.6912E-01	4.0515E+01	5.5436E+05	7.3361E+02
1.6919E+01	3.8666E-01	4.2440E+01	5.8069E+05	7.3282E+02
1.6931E+01	3.9258E-01	4.3090E+01	5.8959E+05	7.3228E+02
1.6972E+01	3.6568E-01	4.0137E+01	5.4918E+05	7.3054E+02
1.6983E+01	3.6476E-01	4.0036E+01	5.4780E+05	7.3003E+02
1.6996E+01	3.7307E-01	4.0948E+01	5.6028E+05	7.2948E+02
1.7007E+01	3.6977E-01	4.0586E+01	5.5533E+05	7.2903E+02
1.7019E+01	3.7391E-01	4.1041E+01	5.6155E+05	7.2852E+02
1.7032E+01	3.9086E-01	4.2901E+01	5.8701E+05	7.2794E+02
1.7063E+01	3.7649E-01	4.1324E+01	5.6543E+05	7.2663E+02
1.7079E+01	3.7467E-01	4.1124E+01	5.6268E+05	7.2593E+02
1.7091E+01	3.6868E-01	4.0467E+01	5.5370E+05	7.2542E+02
1.7114E+01	3.7131E-01	4.0756E+01	5.5765E+05	7.2445E+02
1.7133E+01	3.8616E-01	4.2386E+01	5.7995E+05	7.2366E+02
1.7155E+01	3.8879E-01	4.2674E+01	5.8390E+05	7.2275E+02
1.7167E+01	3.8281E-01	4.2018E+01	5.7491E+05	7.2223E+02
1.7184E+01	3.6847E-01	4.0444E+01	5.5338E+05	7.2151E+02
1.7198E+01	3.7530E-01	4.1193E+01	5.6363E+05	7.2094E+02
1.7206E+01	3.7676E-01	4.1354E+01	5.6583E+05	7.2057E+02
1.7214E+01	3.7109E-01	4.0731E+01	5.5731E+05	7.2026E+02
1.7232E+01	3.7760E-01	4.1446E+01	5.6709E+05	7.1948E+02
1.7246E+01	3.7519E-01	4.1181E+01	5.6346E+05	7.1893E+02
1.7270E+01	3.9032E-01	4.2842E+01	5.8620E+05	7.1790E+02
1.7281E+01	3.8673E-01	4.2448E+01	5.8080E+05	7.1747E+02
1.7293E+01	3.7418E-01	4.1071E+01	5.6196E+05	7.1696E+02
1.7313E+01	3.8338E-01	4.2080E+01	5.7577E+05	7.1615E+02
1.7334E+01	3.7410E-01	4.1061E+01	5.6183E+05	7.1527E+02
1.7352E+01	3.8418E-01	4.2168E+01	5.7698E+05	7.1454E+02
1.7387E+01	3.9006E-01	4.2814E+01	5.8581E+05	7.1308E+02
1.7405E+01	3.7989E-01	4.1698E+01	5.7054E+05	7.1235E+02
1.7433E+01	3.8311E-01	4.2050E+01	5.7536E+05	7.1120E+02
1.7445E+01	3.8726E-01	4.2506E+01	5.8160E+05	7.1071E+02
1.7457E+01	3.8812E-01	4.2601E+01	5.8289E+05	7.1023E+02
1.7472E+01	3.9643E-01	4.3513E+01	5.9538E+05	7.0963E+02
1.7501E+01	4.0054E-01	4.3964E+01	6.0154E+05	7.0844E+02
1.7515E+01	4.0737E-01	4.4713E+01	6.1179E+05	7.0789E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7529E+01	4.0048E-01	4.3957E+01	6.0146E+05	7.0732E+02
1.7553E+01	4.1979E-01	4.6077E+01	6.3045E+05	7.0634E+02
1.7563E+01	3.9117E-01	4.2935E+01	5.8747E+05	7.0595E+02
1.7568E+01	3.5064E-01	3.8486E+01	5.2660E+05	7.0572E+02
1.7575E+01	3.2710E-01	3.5902E+01	4.9124E+05	7.0544E+02
1.7590E+01	3.4583E-01	3.7958E+01	5.1937E+05	7.0484E+02
1.7619E+01	3.7258E-01	4.0894E+01	5.5954E+05	7.0368E+02
1.7634E+01	3.7761E-01	4.1447E+01	5.6710E+05	7.0311E+02
1.7655E+01	3.7250E-01	4.0886E+01	5.5943E+05	7.0228E+02
1.7675E+01	3.7663E-01	4.1340E+01	5.6564E+05	7.0147E+02
1.7701E+01	3.6913E-01	4.0516E+01	5.5437E+05	7.0044E+02
1.7710E+01	3.5720E-01	3.9206E+01	5.3645E+05	7.0008E+02
1.7719E+01	3.4839E-01	3.8240E+01	5.2322E+05	6.9972E+02
1.7742E+01	2.7335E-01	3.0003E+01	4.1053E+05	6.9882E+02
1.7758E+01	2.5643E-01	2.8146E+01	3.8511E+05	6.9819E+02
1.7773E+01	2.6888E-01	2.9513E+01	4.0382E+05	6.9759E+02
1.7806E+01	3.0785E-01	3.3790E+01	4.6234E+05	6.9632E+02
1.7831E+01	3.3117E-01	3.6350E+01	4.9736E+05	6.9533E+02
1.7843E+01	3.3756E-01	3.7051E+01	5.0696E+05	6.9486E+02
1.7862E+01	3.2767E-01	3.5966E+01	4.9211E+05	6.9413E+02
1.7911E+01	3.2577E-01	3.5757E+01	4.8925E+05	6.9224E+02
1.7951E+01	3.3759E-01	3.7054E+01	5.0700E+05	6.9067E+02
1.7969E+01	3.3951E-01	3.7265E+01	5.0989E+05	6.8998E+02
1.8007E+01	3.3313E-01	3.6565E+01	5.0031E+05	6.8854E+02
1.8041E+01	3.4209E-01	3.7548E+01	5.1375E+05	6.8725E+02
1.8163E+01	3.4052E-01	3.7375E+01	5.1140E+05	6.8262E+02
1.8185E+01	3.4851E-01	3.8253E+01	5.2341E+05	6.8178E+02
1.8228E+01	3.7279E-01	4.0918E+01	5.5986E+05	6.8019E+02
1.8247E+01	4.3443E-01	4.7683E+01	6.5244E+05	6.7946E+02
1.8267E+01	4.7244E-01	5.1856E+01	7.0952E+05	6.7873E+02
1.8297E+01	4.2901E-01	4.7089E+01	6.4430E+05	6.7763E+02
1.8309E+01	3.9995E-01	4.3899E+01	6.0066E+05	6.7716E+02
1.8347E+01	3.6387E-01	3.9939E+01	5.4648E+05	6.7576E+02
1.8429E+01	3.5942E-01	3.9451E+01	5.3979E+05	6.7277E+02
1.8451E+01	3.5304E-01	3.8751E+01	5.3021E+05	6.7198E+02
1.8497E+01	3.6934E-01	4.0540E+01	5.5469E+05	6.7028E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8511E+01	3.8659E-01	4.2432E+01	5.8059E+05	6.6978E+02
1.8522E+01	4.3067E-01	4.7270E+01	6.4679E+05	6.6938E+02
1.8541E+01	5.5362E-01	6.0766E+01	8.3144E+05	6.6869E+02
1.8558E+01	6.6828E-01	7.3351E+01	1.0036E+06	6.6809E+02
1.8571E+01	5.7439E-01	6.3045E+01	8.6263E+05	6.6761E+02
1.8592E+01	4.7156E-01	5.1759E+01	7.0820E+05	6.6688E+02
1.8602E+01	5.4661E-01	5.9996E+01	8.2091E+05	6.6652E+02
1.8616E+01	4.0642E-01	4.4609E+01	6.1037E+05	6.6602E+02
1.8629E+01	3.7767E-01	4.1454E+01	5.6720E+05	6.6553E+02
1.8659E+01	3.6044E-01	3.9562E+01	5.4131E+05	6.6449E+02
1.8679E+01	3.5757E-01	3.9247E+01	5.3700E+05	6.6376E+02
1.8732E+01	3.3522E-01	3.6794E+01	5.0345E+05	6.6189E+02
1.8798E+01	3.3524E-01	3.6796E+01	5.0347E+05	6.5957E+02
1.8841E+01	3.5696E-01	3.9181E+01	5.3610E+05	6.5804E+02
1.8860E+01	3.4770E-01	3.8164E+01	5.2219E+05	6.5738E+02
1.8880E+01	3.6592E-01	4.0163E+01	5.4954E+05	6.5671E+02
1.8890E+01	3.0716E-01	3.3714E+01	4.6130E+05	6.5634E+02
1.8908E+01	3.2249E-01	3.5397E+01	4.8432E+05	6.5574E+02
1.8948E+01	3.2985E-01	3.6204E+01	4.9537E+05	6.5434E+02
1.8963E+01	3.1069E-01	3.4101E+01	4.6660E+05	6.5381E+02
1.8976E+01	2.7204E-01	2.9860E+01	4.0856E+05	6.5338E+02
1.8992E+01	2.9089E-01	3.1928E+01	4.3686E+05	6.5282E+02
1.9027E+01	3.0814E-01	3.3822E+01	4.6277E+05	6.5161E+02
1.9049E+01	3.0718E-01	3.3717E+01	4.6134E+05	6.5088E+02
1.9065E+01	3.1996E-01	3.5120E+01	4.8053E+05	6.5032E+02
1.9084E+01	3.5414E-01	3.8871E+01	5.3186E+05	6.4966E+02
1.9109E+01	4.4453E-01	4.8792E+01	6.6761E+05	6.4882E+02
1.9119E+01	4.3175E-01	4.7390E+01	6.4842E+05	6.4849E+02
1.9130E+01	4.4453E-01	4.8792E+01	6.6761E+05	6.4813E+02
1.9147E+01	3.6151E-01	3.9679E+01	5.4292E+05	6.4753E+02
1.9178E+01	3.2989E-01	3.6209E+01	4.9544E+05	6.4649E+02
1.9196E+01	3.4076E-01	3.7402E+01	5.1176E+05	6.4589E+02
1.9209E+01	3.6056E-01	3.9575E+01	5.4150E+05	6.4546E+02
1.9223E+01	4.1933E-01	4.6026E+01	6.2976E+05	6.4497E+02
1.9247E+01	5.2663E-01	5.7804E+01	7.9091E+05	6.4419E+02
1.9263E+01	4.4807E-01	4.9181E+01	6.7293E+05	6.4363E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9267E+01	4.7426E-01	5.2055E+01	7.1226E+05	6.4351E+02
1.9279E+01	3.6696E-01	4.0278E+01	5.5111E+05	6.4310E+02
1.9298E+01	3.2449E-01	3.5616E+01	4.8732E+05	6.4247E+02
1.9320E+01	3.1172E-01	3.4214E+01	4.6814E+05	6.4174E+02
1.9362E+01	3.0981E-01	3.4005E+01	4.6528E+05	6.4034E+02
1.9378E+01	3.2802E-01	3.6003E+01	4.9262E+05	6.3981E+02
1.9387E+01	2.9545E-01	3.2428E+01	4.4371E+05	6.3951E+02
1.9400E+01	3.0918E-01	3.3936E+01	4.6434E+05	6.3908E+02
1.9417E+01	3.0822E-01	3.3831E+01	4.6290E+05	6.3854E+02
1.9432E+01	2.7821E-01	3.0536E+01	4.1782E+05	6.3804E+02
1.9439E+01	2.9099E-01	3.1939E+01	4.3701E+05	6.3781E+02
1.9452E+01	3.0472E-01	3.3447E+01	4.5764E+05	6.3738E+02
1.9471E+01	3.6061E-01	3.9581E+01	5.4158E+05	6.3677E+02
1.9486E+01	4.6729E-01	5.1290E+01	7.0178E+05	6.3628E+02
1.9508E+01	3.5072E-01	3.8496E+01	5.2673E+05	6.3555E+02
1.9517E+01	3.4242E-01	3.7584E+01	5.1426E+05	6.3525E+02
1.9527E+01	3.5711E-01	3.9197E+01	5.3632E+05	6.3495E+02
1.9538E+01	4.3089E-01	4.7295E+01	6.4712E+05	6.3458E+02
1.9551E+01	5.4938E-01	6.0300E+01	8.2507E+05	6.3415E+02
1.9563E+01	4.4175E-01	4.8487E+01	6.6343E+05	6.3378E+02
1.9569E+01	4.1206E-01	4.5228E+01	6.1884E+05	6.3359E+02
1.9580E+01	3.2615E-01	3.5798E+01	4.8982E+05	6.3323E+02
1.9596E+01	3.0539E-01	3.3520E+01	4.5865E+05	6.3269E+02
1.9623E+01	3.0923E-01	3.3941E+01	4.6441E+05	6.3183E+02
1.9635E+01	2.9646E-01	3.2539E+01	4.4523E+05	6.3146E+02
1.9653E+01	2.9102E-01	3.1943E+01	4.3707E+05	6.3086E+02
1.9667E+01	3.2360E-01	3.5519E+01	4.8600E+05	6.3043E+02
1.9679E+01	4.1654E-01	4.5720E+01	6.2557E+05	6.3002E+02
1.9695E+01	3.4246E-01	3.7588E+01	5.1431E+05	6.2953E+02
1.9702E+01	3.3351E-01	3.6607E+01	5.0088E+05	6.2929E+02
1.9708E+01	3.4629E-01	3.8009E+01	5.2007E+05	6.2910E+02
1.9723E+01	4.8713E-01	5.3468E+01	7.3159E+05	6.2862E+02
1.9741E+01	3.2171E-01	3.5311E+01	4.8315E+05	6.2806E+02
1.9746E+01	3.0638E-01	3.3628E+01	4.6012E+05	6.2789E+02
1.9769E+01	3.0383E-01	3.3349E+01	4.5630E+05	6.2716E+02
1.9779E+01	3.1629E-01	3.4716E+01	4.7501E+05	6.2686E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.9787E+01	3.3002E-01	3.6223E+01	4.9564E+05	6.2660E+02
1.9798E+01	4.1114E-01	4.5127E+01	6.1746E+05	6.2624E+02
1.9812E+01	3.5174E-01	3.8608E+01	5.2826E+05	6.2581E+02
1.9827E+01	4.3095E-01	4.7301E+01	6.4721E+05	6.2533E+02
1.9841E+01	3.3642E-01	3.6926E+01	5.0525E+05	6.2490E+02
1.9848E+01	3.1183E-01	3.4227E+01	4.6831E+05	6.2467E+02
1.9862E+01	3.2173E-01	3.5313E+01	4.8318E+05	6.2424E+02
1.9873E+01	3.7699E-01	4.1378E+01	5.6617E+05	6.2387E+02
1.9885E+01	3.7699E-01	4.1378E+01	5.6617E+05	6.2351E+02
1.9893E+01	3.9423E-01	4.3271E+01	5.9207E+05	6.2327E+02
1.9916E+01	3.1823E-01	3.4929E+01	4.7792E+05	6.2254E+02
1.9928E+01	3.6710E-01	4.0293E+01	5.5131E+05	6.2217E+02
1.9937E+01	3.7156E-01	4.0783E+01	5.5802E+05	6.2187E+02
1.9955E+01	3.2558E-01	3.5736E+01	4.8897E+05	6.2131E+02
1.9971E+01	3.7317E-01	4.0960E+01	5.6044E+05	6.2082E+02
1.9984E+01	3.4539E-01	3.7911E+01	5.1872E+05	6.2041E+02
1.9996E+01	3.6711E-01	4.0294E+01	5.5133E+05	6.2004E+02
2.0008E+01	3.5977E-01	3.9489E+01	5.4031E+05	6.1968E+02
2.0017E+01	3.7318E-01	4.0961E+01	5.6045E+05	6.1938E+02
2.0038E+01	3.4987E-01	3.8402E+01	5.2544E+05	6.1875E+02
2.0113E+01	3.5723E-01	3.9210E+01	5.3650E+05	6.1645E+02
2.0151E+01	3.4702E-01	3.8089E+01	5.2116E+05	6.1529E+02
2.0190E+01	3.4206E-01	3.7545E+01	5.1372E+05	6.1409E+02
2.0280E+01	3.4071E-01	3.7397E+01	5.1169E+05	6.1136E+02
2.0790E+01	3.3671E-01	3.6958E+01	5.0568E+05	5.9636E+02
2.1310E+01	3.3501E-01	3.6771E+01	5.0313E+05	5.8181E+02
2.1830E+01	3.2801E-01	3.6003E+01	4.9262E+05	5.6795E+02
2.2340E+01	3.2031E-01	3.5158E+01	4.8105E+05	5.5499E+02
2.2860E+01	3.1781E-01	3.4883E+01	4.7730E+05	5.4236E+02
2.3370E+01	3.0621E-01	3.3610E+01	4.5988E+05	5.3053E+02
2.3890E+01	2.9871E-01	3.2787E+01	4.4861E+05	5.1898E+02
2.4400E+01	2.8751E-01	3.1557E+01	4.3179E+05	5.0813E+02
2.4920E+01	2.7981E-01	3.0712E+01	4.2023E+05	4.9753E+02
2.5430E+01	2.7791E-01	3.0504E+01	4.1737E+05	4.8755E+02
2.5560E+01	2.7521E-01	3.0207E+01	4.1332E+05	4.8507E+02
2.5950E+01	2.6740E-01	2.9350E+01	4.0158E+05	4.7778E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.6460E+01	2.6699E-01	2.9306E+01	4.0098E+05	4.6857E+02
2.6980E+01	2.6589E-01	2.9185E+01	3.9933E+05	4.5954E+02
2.7490E+01	2.6790E-01	2.9404E+01	4.0233E+05	4.5102E+02
2.8010E+01	2.6579E-01	2.9174E+01	3.9918E+05	4.4264E+02
2.8530E+01	2.6649E-01	2.9251E+01	4.0023E+05	4.3457E+02
2.9040E+01	2.6760E-01	2.9372E+01	4.0188E+05	4.2694E+02
2.9560E+01	2.6189E-01	2.8745E+01	3.9331E+05	4.1943E+02
3.0070E+01	2.5808E-01	2.8328E+01	3.8760E+05	4.1232E+02
3.0590E+01	2.4988E-01	2.7427E+01	3.7527E+05	4.0531E+02
3.1100E+01	2.5398E-01	2.7877E+01	3.8143E+05	3.9866E+02
3.1620E+01	2.5228E-01	2.7690E+01	3.7888E+05	3.9211E+02
3.2130E+01	2.4357E-01	2.6734E+01	3.6580E+05	3.8588E+02
3.2650E+01	2.4507E-01	2.6899E+01	3.6805E+05	3.7974E+02
3.3160E+01	2.3886E-01	2.6218E+01	3.5873E+05	3.7390E+02
3.3680E+01	2.3876E-01	2.6207E+01	3.5858E+05	3.6812E+02
3.4190E+01	2.3736E-01	2.6053E+01	3.5648E+05	3.6263E+02
3.4710E+01	2.3015E-01	2.5262E+01	3.4565E+05	3.5720E+02
3.5220E+01	2.3055E-01	2.5306E+01	3.4625E+05	3.5203E+02
3.5740E+01	2.2705E-01	2.4921E+01	3.4099E+05	3.4691E+02
3.6260E+01	2.2345E-01	2.4526E+01	3.3558E+05	3.4193E+02
3.6770E+01	2.1614E-01	2.3724E+01	3.2460E+05	3.3719E+02
3.7290E+01	2.0833E-01	2.2866E+01	3.1288E+05	3.3249E+02
3.7800E+01	2.0202E-01	2.2174E+01	3.0340E+05	3.2800E+02
3.8320E+01	1.9171E-01	2.1042E+01	2.8792E+05	3.2355E+02
3.8830E+01	1.8941E-01	2.0790E+01	2.8446E+05	3.1930E+02
3.9350E+01	1.8841E-01	2.0680E+01	2.8296E+05	3.1508E+02
3.9860E+01	1.8320E-01	2.0108E+01	2.7514E+05	3.1105E+02
4.0030E+01	1.8410E-01	2.0207E+01	2.7649E+05	3.0973E+02
4.1070E+01	1.7459E-01	1.9163E+01	2.6221E+05	3.0189E+02
4.2100E+01	1.7019E-01	1.8680E+01	2.5559E+05	2.9450E+02
4.3130E+01	1.6268E-01	1.7856E+01	2.4432E+05	2.8747E+02
4.4160E+01	1.5707E-01	1.7241E+01	2.3590E+05	2.8076E+02
4.5200E+01	1.5267E-01	1.6757E+01	2.2928E+05	2.7430E+02
4.6230E+01	1.4786E-01	1.6230E+01	2.2206E+05	2.6819E+02
4.7260E+01	1.4546E-01	1.5966E+01	2.1846E+05	2.6234E+02
4.8300E+01	1.4396E-01	1.5801E+01	2.1620E+05	2.5670E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.9330E+01	1.4046E-01	1.5416E+01	2.1094E+05	2.5134E+02
5.0360E+01	1.3865E-01	1.5219E+01	2.0823E+05	2.4620E+02
5.1390E+01	1.3595E-01	1.4922E+01	2.0417E+05	2.4126E+02
5.2430E+01	1.3225E-01	1.4515E+01	1.9861E+05	2.3648E+02
5.3460E+01	1.3014E-01	1.4285E+01	1.9545E+05	2.3192E+02
5.4490E+01	1.2854E-01	1.4109E+01	1.9305E+05	2.2754E+02
5.5520E+01	1.2514E-01	1.3735E+01	1.8794E+05	2.2331E+02
5.6560E+01	1.2213E-01	1.3406E+01	1.8343E+05	2.1921E+02
5.7590E+01	1.1893E-01	1.3054E+01	1.7861E+05	2.1529E+02
5.8620E+01	1.1643E-01	1.2779E+01	1.7486E+05	2.1150E+02
5.9660E+01	1.1072E-01	1.2153E+01	1.6629E+05	2.0782E+02
6.0690E+01	1.0802E-01	1.1856E+01	1.6223E+05	2.0429E+02
6.1720E+01	1.0391E-01	1.1406E+01	1.5606E+05	2.0088E+02
6.2750E+01	1.0141E-01	1.1131E+01	1.5230E+05	1.9758E+02
6.3790E+01	9.7408E-02	1.0692E+01	1.4629E+05	1.9436E+02
6.4820E+01	9.2502E-02	1.0153E+01	1.3892E+05	1.9127E+02
6.5850E+01	8.9499E-02	9.8235E+00	1.3441E+05	1.8828E+02
6.6890E+01	8.5795E-02	9.4169E+00	1.2885E+05	1.8536E+02
6.7920E+01	8.3492E-02	9.1642E+00	1.2539E+05	1.8254E+02
6.8950E+01	8.0489E-02	8.8345E+00	1.2088E+05	1.7982E+02
6.9980E+01	7.7385E-02	8.4939E+00	1.1622E+05	1.7717E+02
7.1020E+01	7.5884E-02	8.3291E+00	1.1396E+05	1.7458E+02
7.2050E+01	7.2780E-02	7.9884E+00	1.0930E+05	1.7208E+02
7.3080E+01	7.1379E-02	7.8346E+00	1.0720E+05	1.6966E+02
7.4110E+01	6.8275E-02	7.4940E+00	1.0254E+05	1.6730E+02
7.5150E+01	6.5773E-02	7.2193E+00	9.8779E+04	1.6498E+02
7.6180E+01	6.4171E-02	7.0435E+00	9.6373E+04	1.6275E+02
7.7210E+01	6.2769E-02	6.8896E+00	9.4269E+04	1.6058E+02
7.8250E+01	5.9265E-02	6.5050E+00	8.9006E+04	1.5845E+02
7.9280E+01	5.8264E-02	6.3951E+00	8.7503E+04	1.5639E+02
8.0050E+01	5.6763E-02	6.2303E+00	8.5248E+04	1.5488E+02
8.2100E+01	5.3759E-02	5.9007E+00	8.0737E+04	1.5102E+02
8.4150E+01	5.0856E-02	5.5820E+00	7.6377E+04	1.4734E+02
8.6200E+01	4.8554E-02	5.3293E+00	7.2919E+04	1.4383E+02
8.8250E+01	4.5851E-02	5.0326E+00	6.8860E+04	1.4049E+02
9.0300E+01	4.3748E-02	4.8019E+00	6.5702E+04	1.3730E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.2340E+01	4.1646E-02	4.5711E+00	6.2545E+04	1.3427E+02
9.4390E+01	3.9744E-02	4.3623E+00	5.9688E+04	1.3135E+02
9.6440E+01	3.7541E-02	4.1206E+00	5.6381E+04	1.2856E+02
9.8490E+01	3.6240E-02	3.9777E+00	5.4426E+04	1.2589E+02
1.0054E+02	3.4438E-02	3.7799E+00	5.1720E+04	1.2332E+02
1.0259E+02	3.3036E-02	3.6261E+00	4.9615E+04	1.2085E+02
1.0464E+02	3.0934E-02	3.3954E+00	4.6458E+04	1.1849E+02
1.0669E+02	2.9633E-02	3.2525E+00	4.4503E+04	1.1621E+02
1.0850E+02	2.8481E-02	3.1262E+00	4.2774E+04	1.1427E+02
1.2500E+02	2.1475E-02	2.3571E+00	3.2251E+04	9.9187E+01
1.5000E+02	1.4357E-02	1.5759E+00	2.1562E+04	8.2656E+01
1.7500E+02	1.0038E-02	1.1018E+00	1.5076E+04	7.0848E+01
2.0000E+02	7.2490E-03	7.9566E-01	1.0887E+04	6.1992E+01
2.2500E+02	5.3737E-03	5.8983E-01	8.0704E+03	5.5104E+01
2.5000E+02	4.0726E-03	4.4701E-01	6.1163E+03	4.9594E+01
2.7500E+02	3.1454E-03	3.4525E-01	4.7239E+03	4.5085E+01
3.0000E+02	2.4694E-03	2.7105E-01	3.7087E+03	4.1328E+01
3.5000E+02	1.5858E-03	1.7405E-01	2.3815E+03	3.5424E+01
3.8908E+02	1.2960E-03	1.4225E-01	1.9464E+03	3.1866E+01
3.9863E+02	3.7557E-03	4.1223E-01	5.6404E+03	3.1103E+01
3.9900E+02	9.4601E-03	1.0384E+00	1.4207E+04	3.1074E+01
3.9964E+02	1.8920E-02	2.0767E+00	2.8415E+04	3.1024E+01
4.0011E+02	2.8380E-02	3.1151E+00	4.2622E+04	3.0988E+01
4.0036E+02	4.1530E-02	4.5584E+00	6.2371E+04	3.0968E+01
4.0137E+02	1.5432E-01	1.6939E+01	2.3177E+05	3.0890E+01
4.0222E+02	4.1889E-02	4.5978E+00	6.2911E+04	3.0825E+01
4.0253E+02	2.8380E-02	3.1151E+00	4.2622E+04	3.0801E+01
4.0265E+02	1.8920E-02	2.0767E+00	2.8415E+04	3.0792E+01
4.0283E+02	1.1343E-02	1.2450E+00	1.7035E+04	3.0778E+01
4.0310E+02	1.2014E-02	1.3187E+00	1.8043E+04	3.0758E+01
4.0349E+02	1.8920E-02	2.0767E+00	2.8415E+04	3.0728E+01
4.0375E+02	2.8380E-02	3.1151E+00	4.2622E+04	3.0708E+01
4.0431E+02	4.1530E-02	4.5584E+00	6.2371E+04	3.0666E+01
4.0514E+02	1.7260E-01	1.8945E+01	2.5922E+05	3.0603E+01
4.0566E+02	4.2031E-02	4.6134E+00	6.3124E+04	3.0564E+01
4.0569E+02	1.8239E-02	2.0019E+00	2.7392E+04	3.0561E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.0624E+02	1.8438E-02	2.0237E+00	2.7690E+04	3.0520E+01
4.0651E+02	1.7624E-02	1.9344E+00	2.6469E+04	3.0500E+01
4.0725E+02	1.2241E-02	1.3436E+00	1.8384E+04	3.0444E+01
4.0764E+02	1.3575E-02	1.4900E+00	2.0388E+04	3.0415E+01
4.0822E+02	1.4417E-02	1.5824E+00	2.1652E+04	3.0372E+01
4.0871E+02	1.3254E-02	1.4547E+00	1.9905E+04	3.0335E+01
4.0912E+02	1.2147E-02	1.3332E+00	1.8242E+04	3.0305E+01
4.1000E+02	1.3093E-02	1.4371E+00	1.9663E+04	3.0240E+01
4.1082E+02	1.2374E-02	1.3582E+00	1.8583E+04	3.0180E+01
4.1160E+02	1.1598E-02	1.2730E+00	1.7418E+04	3.0122E+01
4.1258E+02	1.1466E-02	1.2585E+00	1.7219E+04	3.0051E+01
4.1356E+02	1.2412E-02	1.3623E+00	1.8640E+04	2.9980E+01
4.1432E+02	1.2989E-02	1.4257E+00	1.9507E+04	2.9925E+01
4.1522E+02	1.3093E-02	1.4371E+00	1.9663E+04	2.9860E+01
4.1601E+02	1.3547E-02	1.4869E+00	2.0345E+04	2.9803E+01
4.1731E+02	1.6621E-02	1.8244E+00	2.4963E+04	2.9710E+01
4.1842E+02	1.9403E-02	2.1297E+00	2.9140E+04	2.9632E+01
4.1899E+02	1.9989E-02	2.1940E+00	3.0020E+04	2.9591E+01
4.2000E+02	1.9951E-02	2.1899E+00	2.9964E+04	2.9520E+01
4.2050E+02	2.0273E-02	2.2252E+00	3.0447E+04	2.9485E+01
4.2118E+02	2.1569E-02	2.3674E+00	3.2393E+04	2.9437E+01
4.2218E+02	2.2761E-02	2.4983E+00	3.4183E+04	2.9368E+01
4.2358E+02	2.3471E-02	2.5762E+00	3.5249E+04	2.9271E+01
4.2523E+02	2.2988E-02	2.5232E+00	3.4524E+04	2.9157E+01
4.2694E+02	2.1957E-02	2.4100E+00	3.2976E+04	2.9040E+01
4.2835E+02	2.0926E-02	2.2968E+00	3.1427E+04	2.8945E+01
4.3000E+02	1.9630E-02	2.1546E+00	2.9480E+04	2.8834E+01
4.3250E+02	1.7558E-02	1.9272E+00	2.6369E+04	2.8667E+01
4.3500E+02	1.5969E-02	1.7527E+00	2.3982E+04	2.8502E+01
4.3750E+02	1.4417E-02	1.5824E+00	2.1652E+04	2.8339E+01
4.4000E+02	1.3443E-02	1.4755E+00	2.0189E+04	2.8178E+01
4.4250E+02	1.2667E-02	1.3904E+00	1.9024E+04	2.8019E+01
4.4500E+02	1.1920E-02	1.3083E+00	1.7901E+04	2.7862E+01
4.4750E+02	1.1399E-02	1.2512E+00	1.7120E+04	2.7706E+01
4.5000E+02	1.1182E-02	1.2273E+00	1.6793E+04	2.7552E+01
4.5250E+02	1.0917E-02	1.1983E+00	1.6395E+04	2.7400E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.5500E+02	1.0851E-02	1.1910E+00	1.6296E+04	2.7249E+01
5.0000E+02	8.7044E-03	9.5540E-01	1.3072E+04	2.4797E+01
5.0600E+02	8.3990E-03	9.2188E-01	1.2614E+04	2.4503E+01
5.1000E+02	8.3076E-03	9.1185E-01	1.2477E+04	2.4311E+01
5.1250E+02	8.2162E-03	9.0182E-01	1.2339E+04	2.4192E+01
5.1500E+02	8.0609E-03	8.8477E-01	1.2106E+04	2.4075E+01
5.1750E+02	7.9238E-03	8.6972E-01	1.1900E+04	2.3958E+01
5.2000E+02	7.8598E-03	8.6270E-01	1.1804E+04	2.3843E+01
5.2250E+02	7.8324E-03	8.5969E-01	1.1763E+04	2.3729E+01
5.2500E+02	7.8324E-03	8.5969E-01	1.1763E+04	2.3616E+01
5.2750E+02	7.7958E-03	8.5568E-01	1.1708E+04	2.3504E+01
5.3000E+02	7.8324E-03	8.5969E-01	1.1763E+04	2.3393E+01
5.3300E+02	8.1248E-03	8.9179E-01	1.2202E+04	2.3262E+01
5.3332E+02	1.4440E-02	1.5850E+00	2.1687E+04	2.3248E+01
5.3356E+02	1.8525E-02	2.0334E+00	2.7822E+04	2.3237E+01
5.3459E+02	8.2729E-02	9.0804E+00	1.2424E+05	2.3192E+01
5.3561E+02	1.8553E-02	2.0364E+00	2.7863E+04	2.3148E+01
5.3659E+02	2.7007E-02	2.9643E+00	4.0559E+04	2.3106E+01
5.3712E+02	1.8571E-02	2.0384E+00	2.7891E+04	2.3083E+01
5.3761E+02	9.1393E-03	1.0031E+00	1.3726E+04	2.3062E+01
5.3834E+02	2.0664E-02	2.2681E+00	3.1034E+04	2.3031E+01
5.3888E+02	3.8604E-02	4.2373E+00	5.7977E+04	2.3008E+01
5.3951E+02	2.0618E-02	2.2631E+00	3.0965E+04	2.2981E+01
5.3980E+02	2.1843E-02	2.3975E+00	3.2804E+04	2.2969E+01
5.4098E+02	1.7228E-02	1.8909E+00	2.5873E+04	2.2918E+01
5.4190E+02	1.4559E-02	1.5980E+00	2.1865E+04	2.2880E+01
5.4312E+02	1.2018E-02	1.3191E+00	1.8049E+04	2.2828E+01
5.4500E+02	1.1927E-02	1.3091E+00	1.7912E+04	2.2749E+01
5.4829E+02	1.2137E-02	1.3322E+00	1.8228E+04	2.2613E+01
5.5107E+02	1.2612E-02	1.3843E+00	1.8941E+04	2.2499E+01
5.5327E+02	1.3069E-02	1.4345E+00	1.9628E+04	2.2409E+01
5.5561E+02	1.2841E-02	1.4094E+00	1.9285E+04	2.2315E+01
5.5834E+02	1.3416E-02	1.4726E+00	2.0149E+04	2.2206E+01
5.6000E+02	1.2795E-02	1.4044E+00	1.9216E+04	2.2140E+01
5.6268E+02	1.2064E-02	1.3241E+00	1.8118E+04	2.2035E+01
5.6600E+02	1.1634E-02	1.2770E+00	1.7473E+04	2.1905E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.7000E+02	1.1333E-02	1.2439E+00	1.7020E+04	2.1752E+01
5.7500E+02	1.0921E-02	1.1988E+00	1.6402E+04	2.1562E+01
5.8000E+02	1.0629E-02	1.1667E+00	1.5963E+04	2.1377E+01
5.8500E+02	1.0282E-02	1.1285E+00	1.5441E+04	2.1194E+01
5.9000E+02	1.0008E-02	1.0984E+00	1.5030E+04	2.1014E+01
5.9500E+02	9.8704E-03	1.0834E+00	1.4824E+04	2.0838E+01
6.0000E+02	9.6237E-03	1.0563E+00	1.4453E+04	2.0664E+01
6.0300E+02	9.4135E-03	1.0332E+00	1.4137E+04	2.0561E+01
7.0000E+02	6.3505E-03	6.9703E-01	9.5373E+03	1.7712E+01
8.0000E+02	4.5175E-03	4.9584E-01	6.7845E+03	1.5498E+01
9.0000E+02	3.3283E-03	3.6532E-01	4.9985E+03	1.3776E+01
1.0000E+03	2.5215E-03	2.7676E-01	3.7868E+03	1.2398E+01
1.2500E+03	1.3817E-03	1.5166E-01	2.0751E+03	9.9187E+00
1.5000E+03	8.3435E-04	9.1579E-02	1.2530E+03	8.2656E+00
1.7500E+03	5.4005E-04	5.9277E-02	8.1107E+02	7.0848E+00
2.0000E+03	3.6832E-04	4.0427E-02	5.5315E+02	6.1992E+00
2.2500E+03	2.6416E-04	2.8994E-02	3.9672E+02	5.5104E+00
2.5000E+03	1.9452E-04	2.1351E-02	2.9213E+02	4.9594E+00
2.7500E+03	1.4732E-04	1.6170E-02	2.2125E+02	4.5085E+00
3.0000E+03	1.1416E-04	1.2530E-02	1.7145E+02	4.1328E+00
3.5000E+03	7.2386E-05	7.9452E-03	1.0871E+02	3.5424E+00
4.0000E+03	4.8552E-05	5.3291E-03	7.2917E+01	3.0996E+00
4.5000E+03	3.3993E-05	3.7311E-03	5.1052E+01	2.7552E+00
5.0000E+03	2.4620E-05	2.7023E-03	3.6975E+01	2.4797E+00
6.0000E+03	1.3955E-05	1.5317E-03	2.0958E+01	2.0664E+00
7.0000E+03	8.5420E-06	9.3758E-04	1.2829E+01	1.7712E+00
8.0000E+03	5.5299E-06	6.0697E-04	8.3050E+00	1.5498E+00
9.0000E+03	3.7349E-06	4.0995E-04	5.6092E+00	1.3776E+00
1.0000E+04	2.7237E-06	2.9896E-04	4.0906E+00	1.2398E+00
1.2500E+04	1.3323E-06	1.4623E-04	2.0009E+00	9.9187E-01
1.5000E+04	7.4260E-07	8.1509E-05	1.1153E+00	8.2656E-01
1.7500E+04	4.5307E-07	4.9729E-05	6.8043E-01	7.0848E-01
2.0000E+04	2.9530E-07	3.2412E-05	4.4349E-01	6.1992E-01
2.2500E+04	2.0245E-07	2.2221E-05	3.0405E-01	5.5104E-01
2.5000E+04	1.4445E-07	1.5855E-05	2.1693E-01	4.9594E-01
2.7500E+04	1.0614E-07	1.1650E-05	1.5940E-01	4.5085E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0000E+04	7.9771E-08	8.7557E-06	1.1980E-01	4.1328E-01
3.5000E+04	4.8079E-08	5.2772E-06	7.2207E-02	3.5424E-01
4.0000E+04	3.1010E-08	3.4037E-06	4.6572E-02	3.0996E-01
4.5000E+04	2.1063E-08	2.3119E-06	3.1633E-02	2.7552E-01
5.0000E+04	1.4902E-08	1.6357E-06	2.2380E-02	2.4797E-01
6.0000E+04	8.1890E-09	8.9883E-07	1.2298E-02	2.0664E-01
7.0000E+04	4.9360E-09	5.4178E-07	7.4131E-03	1.7712E-01
8.0000E+04	3.1828E-09	3.4935E-07	4.7801E-03	1.5498E-01
9.0000E+04	2.1603E-09	2.3712E-07	3.2444E-03	1.3776E-01
1.0000E+05	1.5264E-09	1.6754E-07	2.2924E-03	1.2398E-01

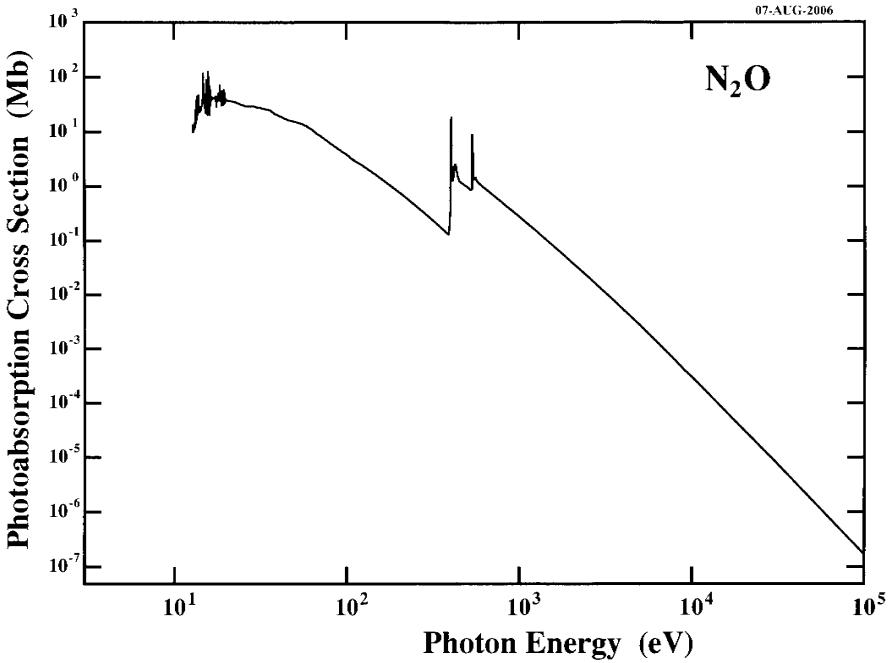
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 412.6$ and 541.4 eV for nitrogen and oxygen atoms, respectively.


07-AUG-2006
N_2O
Photoabsorption Cross Section (Mb)
10^3
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^1
10^2
10^3
10^4
10^5
Photon Energy (eV)

N_2O

Energy, eV	Source
5.70 -12.8898 (IP)	Table 5.6 p.199 (Berkowitz's book*)
IP - 20.19	Chan *et al*., Chem. Phys., 180 (1994) 77-88
20.19 - 25.56	Chan *et al*., Chem. Phys., 180 (1994) 77-88
25.56 - 108.5	Chan *et al*., Chem. Phys., 180 (1994) 77-88
108.5 - 400.0	Table 5.8 p.203 (Berkowitz's book*)
401.16	Table 5.7 p.201 (Berkowitz's book*)
404.92	Table 5.7 p.201 (Berkowitz's book*)
405 - 455	Fig. 5.7 p.203 (Berkowitz's book*)
455 - 506	Henke *et al*., Atom. Data Nucl. Data Tables, 54 (1993) 181
506 - 533	Table 5.7 p.201, Fig. 5.8 p.204 (Berkowitz's book*)
533 - 545	Fig. 5.8 p.204 (Berkowitz's book*)
545 - 603	Fig. 5.8 p.204 (Berkowitz's book*)
603 - 2042.4	Table 5.8 p.203 (Berkowitz's book*)
2042 - 10000	Table 5.8 p.203 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Nitrogen Dioxide (NO_2)

Z = 22 Molecular Mass : $M_{\rm A} = 46.0055$

$\sigma_a({\rm Mb}) = 109.76097 \ \dfrac{{\rm d}f}{{\rm d}E} \ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.8000E+00	5.0950E-05	5.5923E-03	7.3204E+01	6.8880E+03
2.0000E+00	2.8819E-04	3.1632E-02	4.1406E+02	6.1992E+03
2.2000E+00	8.1281E-04	8.9215E-02	1.1678E+03	5.6356E+03
2.4000E+00	1.7952E-03	1.9704E-01	2.5793E+03	5.1660E+03
2.6000E+00	3.4216E-03	3.7556E-01	4.9161E+03	4.7686E+03
2.8000E+00	4.7933E-03	5.2612E-01	6.8869E+03	4.4280E+03
3.0000E+00	5.8943E-03	6.4696E-01	8.4688E+03	4.1328E+03
3.2000E+00	5.8608E-03	6.4329E-01	8.4207E+03	3.8745E+03
3.4000E+00	4.9286E-03	5.4097E-01	7.0813E+03	3.6466E+03
3.6000E+00	3.8961E-03	4.2764E-01	5.5978E+03	3.4440E+03
3.8000E+00	2.6590E-03	2.9185E-01	3.8203E+03	3.2627E+03
4.0000E+00	1.7618E-03	1.9337E-01	2.5312E+03	3.0996E+03
4.2000E+00	9.4815E-04	1.0407E-01	1.3623E+03	2.9520E+03
4.4000E+00	6.0981E-04	6.6933E-02	8.7616E+02	2.8178E+03
4.6000E+00	3.5585E-04	3.9059E-02	5.1128E+02	2.6953E+03
4.8000E+00	1.6093E-04	1.7664E-02	2.3122E+02	2.5830E+03
5.0000E+00	2.1939E-04	2.4080E-02	3.1521E+02	2.4797E+03
5.2000E+00	9.5114E-04	1.0440E-01	1.3666E+03	2.3843E+03
5.4000E+00	2.3851E-03	2.6179E-01	3.4268E+03	2.2960E+03
5.6000E+00	4.1849E-03	4.5933E-01	6.0127E+03	2.2140E+03
5.8000E+00	4.6828E-03	5.1399E-01	6.7281E+03	2.1377E+03
6.0000E+00	5.0775E-03	5.5732E-01	7.2953E+03	2.0664E+03
6.2000E+00	5.5899E-03	6.1355E-01	8.0314E+03	1.9997E+03
6.3000E+00	9.1646E-03	1.0059E+00	1.3167E+04	1.9680E+03
6.5000E+00	1.1246E-02	1.2344E+00	1.6159E+04	1.9074E+03
6.7400E+00	2.1568E-02	2.3674E+00	3.0989E+04	1.8395E+03
7.0000E+00	7.3134E-02	8.0273E+00	1.0508E+05	1.7712E+03
7.2000E+00	1.1532E-01	1.2658E+01	1.6570E+05	1.7220E+03
7.3500E+00	1.5096E-01	1.6569E+01	2.1689E+05	1.6869E+03

Table I. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.5000E+00	1.6128E-01	1.7702E+01	2.3172E+05	1.6531E+03
7.6800E+00	1.5284E-01	1.6776E+01	2.1959E+05	1.6144E+03
7.8500E+00	1.3441E-01	1.4753E+01	1.9311E+05	1.5794E+03
8.0000E+00	1.4148E-01	1.5530E+01	2.0328E+05	1.5498E+03
8.2500E+00	1.0286E-01	1.1290E+01	1.4779E+05	1.5028E+03
8.5000E+00	1.1862E-01	1.3020E+01	1.7043E+05	1.4586E+03
8.6300E+00	1.3853E-01	1.5205E+01	1.9904E+05	1.4367E+03
8.7300E+00	1.2608E-01	1.3839E+01	1.8115E+05	1.4202E+03
9.0000E+00	1.0120E-01	1.1107E+01	1.4540E+05	1.3776E+03
9.1900E+00	8.5436E-02	9.3775E+00	1.2275E+05	1.3491E+03
9.3800E+00	4.1472E-02	4.5520E+00	5.9586E+04	1.3218E+03
9.3828E+00	5.6416E-02	6.1923E+00	8.1057E+04	1.3214E+03
9.3942E+00	7.5159E-02	8.2495E+00	1.0799E+05	1.3198E+03
9.3970E+00	5.4868E-02	6.0224E+00	7.8833E+04	1.3194E+03
9.4013E+00	5.1803E-02	5.6859E+00	7.4429E+04	1.3188E+03
9.4084E+00	5.8590E-02	6.4309E+00	8.4181E+04	1.3178E+03
9.4127E+00	7.3705E-02	8.0899E+00	1.0590E+05	1.3172E+03
9.4199E+00	6.4799E-02	7.1124E+00	9.3102E+04	1.3162E+03
9.4234E+00	8.5366E-02	9.3699E+00	1.2265E+05	1.3157E+03
9.4306E+00	5.5029E-02	6.0400E+00	7.9064E+04	1.3147E+03
9.4363E+00	8.3442E-02	9.1586E+00	1.1989E+05	1.3139E+03
9.4428E+00	5.6356E-02	6.1857E+00	8.0971E+04	1.3130E+03
9.4479E+00	6.9077E-02	7.5819E+00	9.9248E+04	1.3123E+03
9.4515E+00	7.7206E-02	8.4742E+00	1.1093E+05	1.3118E+03
9.4529E+00	6.7443E-02	7.4026E+00	9.6901E+04	1.3116E+03
9.4616E+00	7.0688E-02	7.7587E+00	1.0156E+05	1.3104E+03
9.4666E+00	8.2069E-02	9.0080E+00	1.1792E+05	1.3097E+03
9.4695E+00	9.0773E-02	9.9634E+00	1.3042E+05	1.3093E+03
9.4709E+00	9.8045E-02	1.0762E+01	1.4087E+05	1.3091E+03
9.4782E+00	9.3443E-02	1.0256E+01	1.3426E+05	1.3081E+03
9.4833E+00	8.5881E-02	9.4263E+00	1.2339E+05	1.3074E+03
9.4891E+00	9.0180E-02	9.8983E+00	1.2957E+05	1.3066E+03
9.4898E+00	1.1592E-01	1.2723E+01	1.6655E+05	1.3065E+03
9.4934E+00	1.3457E-01	1.4771E+01	1.9335E+05	1.3060E+03
9.4985E+00	1.4136E-01	1.5516E+01	2.0310E+05	1.3053E+03
9.5080E+00	1.4805E-01	1.6250E+01	2.1272E+05	1.3040E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.5146E+00	1.4996E-01	1.6459E+01	2.1545E+05	1.3031E+03
9.5219E+00	1.4349E-01	1.5749E+01	2.0616E+05	1.3021E+03
9.5314E+00	1.2698E-01	1.3937E+01	1.8244E+05	1.3008E+03
9.5402E+00	1.2806E-01	1.4056E+01	1.8400E+05	1.2996E+03
9.5497E+00	1.5145E-01	1.6623E+01	2.1760E+05	1.2983E+03
9.5600E+00	1.9284E-01	2.1167E+01	2.7707E+05	1.2969E+03
9.5630E+00	2.4208E-01	2.6571E+01	3.4782E+05	1.2965E+03
9.5704E+00	2.6817E-01	2.9435E+01	3.8530E+05	1.2955E+03
9.5726E+00	3.2814E-01	3.6017E+01	4.7147E+05	1.2952E+03
9.5815E+00	3.5837E-01	3.9335E+01	5.1490E+05	1.2940E+03
9.5860E+00	3.7292E-01	4.0932E+01	5.3581E+05	1.2934E+03
9.5978E+00	3.1481E-01	3.4553E+01	4.5231E+05	1.2918E+03
9.6060E+00	2.6848E-01	2.9468E+01	3.8574E+05	1.2907E+03
9.6119E+00	2.1386E-01	2.3474E+01	3.0728E+05	1.2899E+03
9.6194E+00	2.4374E-01	2.6753E+01	3.5020E+05	1.2889E+03
9.6239E+00	1.8084E-01	1.9849E+01	2.5983E+05	1.2883E+03
9.6351E+00	2.5581E-01	2.8078E+01	3.6754E+05	1.2868E+03
9.6433E+00	3.3896E-01	3.7204E+01	4.8700E+05	1.2857E+03
9.6471E+00	4.1357E-01	4.5393E+01	5.9420E+05	1.2852E+03
9.6599E+00	5.6701E-01	6.2235E+01	8.1466E+05	1.2835E+03
9.6681E+00	4.9752E-01	5.4609E+01	7.1483E+05	1.2824E+03
9.6764E+00	3.5777E-01	3.9269E+01	5.1403E+05	1.2813E+03
9.6870E+00	2.4513E-01	2.6906E+01	3.5220E+05	1.2799E+03
9.6923E+00	1.9750E-01	2.1678E+01	2.8377E+05	1.2792E+03
9.6969E+00	2.1265E-01	2.3341E+01	3.0554E+05	1.2786E+03
9.7014E+00	1.8659E-01	2.0480E+01	2.6808E+05	1.2780E+03
9.7166E+00	2.3962E-01	2.6301E+01	3.4428E+05	1.2760E+03
9.7281E+00	2.8580E-01	3.1370E+01	4.1064E+05	1.2745E+03
9.7296E+00	3.6705E-01	4.0288E+01	5.2737E+05	1.2743E+03
9.7334E+00	3.8850E-01	4.2642E+01	5.5819E+05	1.2738E+03
9.7388E+00	4.2068E-01	4.6174E+01	6.0443E+05	1.2731E+03
9.7449E+00	3.6083E-01	3.9605E+01	5.1843E+05	1.2723E+03
9.7503E+00	3.7547E-01	4.1212E+01	5.3947E+05	1.2716E+03
9.7572E+00	3.2480E-01	3.5651E+01	4.6667E+05	1.2707E+03
9.7671E+00	2.5581E-01	2.8078E+01	3.6754E+05	1.2694E+03
9.7864E+00	1.7379E-01	1.9075E+01	2.4969E+05	1.2669E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.7895E+00	1.8395E-01	2.0191E+01	2.6430E+05	1.2665E+03
9.7942E+00	1.7085E-01	1.8752E+01	2.4547E+05	1.2659E+03
9.7972E+00	1.8084E-01	1.9849E+01	2.5983E+05	1.2655E+03
9.8027E+00	1.8084E-01	1.9849E+01	2.5983E+05	1.2648E+03
9.8050E+00	2.1754E-01	2.3878E+01	3.1256E+05	1.2645E+03
9.8097E+00	2.9072E-01	3.1910E+01	4.1770E+05	1.2639E+03
9.8221E+00	3.3039E-01	3.6264E+01	4.7470E+05	1.2623E+03
9.8385E+00	2.8825E-01	3.1639E+01	4.1415E+05	1.2602E+03
9.8572E+00	2.3027E-01	2.5275E+01	3.3085E+05	1.2578E+03
9.8784E+00	2.0906E-01	2.2946E+01	3.0037E+05	1.2551E+03
9.8918E+00	2.5148E-01	2.7603E+01	3.6133E+05	1.2534E+03
9.8974E+00	2.3027E-01	2.5275E+01	3.3085E+05	1.2527E+03
9.9068E+00	2.3962E-01	2.6301E+01	3.4428E+05	1.2515E+03
9.9179E+00	2.1754E-01	2.3878E+01	3.1256E+05	1.2501E+03
9.9251E+00	1.9583E-01	2.1494E+01	2.8136E+05	1.2492E+03
9.9362E+00	2.2832E-01	2.5060E+01	3.2804E+05	1.2478E+03
9.9490E+00	1.9750E-01	2.1678E+01	2.8377E+05	1.2462E+03
9.9546E+00	1.7931E-01	1.9681E+01	2.5763E+05	1.2455E+03
9.9594E+00	1.6141E-01	1.7716E+01	2.3191E+05	1.2449E+03
9.9650E+00	1.6940E-01	1.8593E+01	2.4339E+05	1.2442E+03
9.9706E+00	1.6049E-01	1.7616E+01	2.3059E+05	1.2435E+03
9.9786E+00	1.8239E-01	2.0020E+01	2.6206E+05	1.2425E+03
9.9850E+00	1.6279E-01	1.7868E+01	2.3389E+05	1.2417E+03
9.9939E+00	1.6418E-01	1.8021E+01	2.3589E+05	1.2406E+03
9.9987E+00	1.7628E-01	1.9348E+01	2.5327E+05	1.2400E+03
1.0007E+01	1.6049E-01	1.7616E+01	2.3059E+05	1.2390E+03
1.0009E+01	1.8084E-01	1.9849E+01	2.5983E+05	1.2387E+03
1.0015E+01	1.6279E-01	1.7868E+01	2.3389E+05	1.2380E+03
1.0026E+01	1.8084E-01	1.9849E+01	2.5983E+05	1.2366E+03
1.0033E+01	1.5511E-01	1.7025E+01	2.2286E+05	1.2358E+03
1.0042E+01	1.3648E-01	1.4981E+01	1.9610E+05	1.2347E+03
1.0061E+01	1.2286E-01	1.3485E+01	1.7652E+05	1.2323E+03
1.0066E+01	1.3417E-01	1.4727E+01	1.9278E+05	1.2317E+03
1.0079E+01	1.1059E-01	1.2139E+01	1.5890E+05	1.2301E+03
1.0081E+01	1.1607E-01	1.2739E+01	1.6676E+05	1.2299E+03
1.0087E+01	1.2286E-01	1.3485E+01	1.7652E+05	1.2291E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0110E+01	1.1154E-01	1.2242E+01	1.6025E+05	1.2263E+03
1.0125E+01	1.1346E-01	1.2453E+01	1.6301E+05	1.2245E+03
1.0134E+01	9.8985E-02	1.0865E+01	1.4222E+05	1.2234E+03
1.0139E+01	1.0537E-01	1.1566E+01	1.5140E+05	1.2228E+03
1.0152E+01	9.2721E-02	1.0177E+01	1.3322E+05	1.2213E+03
1.0162E+01	9.7311E-02	1.0681E+01	1.3981E+05	1.2201E+03
1.0172E+01	8.4900E-02	9.3187E+00	1.2198E+05	1.2189E+03
1.0178E+01	8.8348E-02	9.6972E+00	1.2694E+05	1.2182E+03
1.0194E+01	8.2287E-02	9.0319E+00	1.1823E+05	1.2163E+03
1.0199E+01	8.4900E-02	9.3187E+00	1.2198E+05	1.2156E+03
1.0202E+01	9.1934E-02	1.0091E+01	1.3209E+05	1.2153E+03
1.0215E+01	8.9868E-02	9.8640E+00	1.2912E+05	1.2138E+03
1.0222E+01	7.7078E-02	8.4602E+00	1.1074E+05	1.2129E+03
1.0223E+01	8.2287E-02	9.0319E+00	1.1823E+05	1.2128E+03
1.0227E+01	1.0810E-01	1.1866E+01	1.5532E+05	1.2123E+03
1.0231E+01	8.7100E-02	9.5602E+00	1.2514E+05	1.2119E+03
1.0236E+01	8.0207E-02	8.8036E+00	1.1524E+05	1.2113E+03
1.0247E+01	8.7100E-02	9.5602E+00	1.2514E+05	1.2100E+03
1.0258E+01	7.9076E-02	8.6794E+00	1.1361E+05	1.2086E+03
1.0264E+01	7.9526E-02	8.7288E+00	1.1426E+05	1.2079E+03
1.0274E+01	6.7249E-02	7.3813E+00	9.6621E+04	1.2068E+03
1.0280E+01	7.0577E-02	7.7466E+00	1.0140E+05	1.2061E+03
1.0290E+01	5.8671E-02	6.4397E+00	8.4297E+04	1.2049E+03
1.0294E+01	6.2992E-02	6.9141E+00	9.0506E+04	1.2044E+03
1.0307E+01	6.8988E-02	7.5722E+00	9.9121E+04	1.2029E+03
1.0323E+01	5.9173E-02	6.4948E+00	8.5018E+04	1.2010E+03
1.0331E+01	6.1576E-02	6.7586E+00	8.8471E+04	1.2001E+03
1.0338E+01	5.7677E-02	6.3307E+00	8.2869E+04	1.1993E+03
1.0344E+01	6.4622E-02	7.0930E+00	9.2847E+04	1.1986E+03
1.0351E+01	5.4181E-02	5.9469E+00	7.7845E+04	1.1978E+03
1.0355E+01	5.5429E-02	6.0839E+00	7.9638E+04	1.1973E+03
1.0365E+01	4.9611E-02	5.4454E+00	7.1280E+04	1.1962E+03
1.0376E+01	5.0753E-02	5.5707E+00	7.2920E+04	1.1949E+03
1.0380E+01	5.8172E-02	6.3850E+00	8.3580E+04	1.1944E+03
1.0385E+01	4.9893E-02	5.4763E+00	7.1685E+04	1.1939E+03
1.0387E+01	5.5429E-02	6.0839E+00	7.9638E+04	1.1937E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0393E+01	4.7270E-02	5.1884E+00	6.7916E+04	1.1930E+03
1.0395E+01	5.4645E-02	5.9978E+00	7.8512E+04	1.1927E+03
1.0407E+01	4.4657E-02	4.9016E+00	6.4162E+04	1.1913E+03
1.0414E+01	5.8671E-02	6.4397E+00	8.4297E+04	1.1905E+03
1.0424E+01	5.7677E-02	6.3307E+00	8.2869E+04	1.1894E+03
1.0433E+01	4.9893E-02	5.4763E+00	7.1685E+04	1.1884E+03
1.0439E+01	6.3529E-02	6.9730E+00	9.1276E+04	1.1877E+03
1.0443E+01	5.2365E-02	5.7477E+00	7.5237E+04	1.1872E+03
1.0449E+01	5.7677E-02	6.3307E+00	8.2869E+04	1.1866E+03
1.0455E+01	4.9893E-02	5.4763E+00	7.1685E+04	1.1859E+03
1.0467E+01	6.2992E-02	6.9141E+00	9.0506E+04	1.1845E+03
1.0479E+01	6.0018E-02	6.5877E+00	8.6233E+04	1.1832E+03
1.0483E+01	6.7823E-02	7.4443E+00	9.7446E+04	1.1827E+03
1.0489E+01	6.3529E-02	6.9730E+00	9.1276E+04	1.1820E+03
1.0500E+01	6.9978E-02	7.6809E+00	1.0054E+05	1.1808E+03
1.0510E+01	5.9678E-02	6.5503E+00	8.5744E+04	1.1797E+03
1.0515E+01	5.7350E-02	6.2948E+00	8.2400E+04	1.1791E+03
1.0522E+01	6.6111E-02	7.2564E+00	9.4986E+04	1.1783E+03
1.0534E+01	5.7350E-02	6.2948E+00	8.2400E+04	1.1770E+03
1.0546E+01	6.5175E-02	7.1537E+00	9.3643E+04	1.1756E+03
1.0552E+01	6.1576E-02	6.7586E+00	8.8471E+04	1.1750E+03
1.0563E+01	5.7677E-02	6.3307E+00	8.2869E+04	1.1738E+03
1.0575E+01	6.8988E-02	7.5722E+00	9.9121E+04	1.1724E+03
1.0592E+01	7.1182E-02	7.8130E+00	1.0227E+05	1.1706E+03
1.0598E+01	6.2992E-02	6.9141E+00	9.0506E+04	1.1699E+03
1.0603E+01	6.6111E-02	7.2564E+00	9.4986E+04	1.1693E+03
1.0611E+01	5.7350E-02	6.2948E+00	8.2400E+04	1.1684E+03
1.0613E+01	6.7823E-02	7.4443E+00	9.7446E+04	1.1682E+03
1.0619E+01	7.1790E-02	7.8798E+00	1.0315E+05	1.1676E+03
1.0628E+01	6.6674E-02	7.3183E+00	9.5796E+04	1.1666E+03
1.0633E+01	7.2818E-02	7.9926E+00	1.0462E+05	1.1660E+03
1.0641E+01	7.6425E-02	8.3885E+00	1.0981E+05	1.1652E+03
1.0650E+01	6.9978E-02	7.6809E+00	1.0054E+05	1.1642E+03
1.0664E+01	5.4181E-02	5.9469E+00	7.7845E+04	1.1626E+03
1.0673E+01	6.2635E-02	6.8748E+00	8.9992E+04	1.1617E+03
1.0686E+01	5.6381E-02	6.1884E+00	8.1007E+04	1.1602E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, mu_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0702E+01	6.4075E-02	7.0330E+00	9.2062E+04	1.1585E+03
1.0708E+01	6.2635E-02	6.8748E+00	8.9992E+04	1.1579E+03
1.0710E+01	6.9978E-02	7.6809E+00	1.0054E+05	1.1576E+03
1.0718E+01	6.6674E-02	7.3183E+00	9.5796E+04	1.1568E+03
1.0723E+01	7.2818E-02	7.9926E+00	1.0462E+05	1.1562E+03
1.0729E+01	5.7350E-02	6.2948E+00	8.2400E+04	1.1556E+03
1.0735E+01	4.9611E-02	5.4454E+00	7.1280E+04	1.1549E+03
1.0742E+01	5.0753E-02	5.5707E+00	7.2920E+04	1.1542E+03
1.0746E+01	5.9678E-02	6.5503E+00	8.5744E+04	1.1538E+03
1.0770E+01	5.2812E-02	5.7967E+00	7.5879E+04	1.1512E+03
1.0794E+01	5.6381E-02	6.1884E+00	8.1007E+04	1.1486E+03
1.0810E+01	6.5736E-02	7.2152E+00	9.4448E+04	1.1469E+03
1.0825E+01	8.7100E-02	9.5602E+00	1.2514E+05	1.1454E+03
1.0833E+01	1.2112E-01	1.3295E+01	1.7403E+05	1.1445E+03
1.0841E+01	1.5644E-01	1.7171E+01	2.2476E+05	1.1437E+03
1.0850E+01	1.6701E-01	1.8331E+01	2.3995E+05	1.1427E+03
1.0887E+01	1.0126E-01	1.1115E+01	1.4549E+05	1.1388E+03
1.0895E+01	1.0903E-01	1.1967E+01	1.5665E+05	1.1380E+03
1.0912E+01	1.1607E-01	1.2739E+01	1.6676E+05	1.1362E+03
1.0920E+01	9.9835E-02	1.0958E+01	1.4344E+05	1.1354E+03
1.0932E+01	1.0389E-01	1.1403E+01	1.4926E+05	1.1341E+03
1.0943E+01	9.5939E-02	1.0530E+01	1.3784E+05	1.1330E+03
1.0952E+01	1.0628E-01	1.1665E+01	1.5270E+05	1.1321E+03
1.0971E+01	1.0213E-01	1.1210E+01	1.4674E+05	1.1301E+03
1.0981E+01	1.0478E-01	1.1500E+01	1.5054E+05	1.1291E+03
1.0997E+01	8.4900E-02	9.3187E+00	1.2198E+05	1.1274E+03
1.1009E+01	8.9868E-02	9.8640E+00	1.2912E+05	1.1262E+03
1.1021E+01	8.0207E-02	8.8036E+00	1.1524E+05	1.1250E+03
1.1036E+01	8.7595E-02	9.6145E+00	1.2585E+05	1.1235E+03
1.1054E+01	9.4317E-02	1.0352E+01	1.3551E+05	1.1216E+03
1.1066E+01	8.2287E-02	9.0319E+00	1.1823E+05	1.1204E+03
1.1076E+01	9.6486E-02	1.0590E+01	1.3863E+05	1.1194E+03
1.1095E+01	1.1706E-01	1.2849E+01	1.6819E+05	1.1175E+03
1.1120E+01	1.3648E-01	1.4981E+01	1.9610E+05	1.1150E+03
1.1135E+01	1.2181E-01	1.3370E+01	1.7502E+05	1.1135E+03
1.1161E+01	1.1541E-01	1.2667E+01	1.6582E+05	1.1109E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1177E+01	1.2497E-01	1.3717E+01	1.7955E+05	1.1093E+03
1.1184E+01	1.0628E-01	1.1665E+01	1.5270E+05	1.1086E+03
1.1187E+01	1.1541E-01	1.2667E+01	1.6582E+05	1.1083E+03
1.1194E+01	1.2112E-01	1.3295E+01	1.7403E+05	1.1076E+03
1.1197E+01	1.2712E-01	1.3953E+01	1.8264E+05	1.1073E+03
1.1204E+01	1.2010E-01	1.3182E+01	1.7255E+05	1.1066E+03
1.1212E+01	1.2391E-01	1.3600E+01	1.7803E+05	1.1058E+03
1.1219E+01	1.0478E-01	1.1500E+01	1.5054E+05	1.1051E+03
1.1225E+01	1.0903E-01	1.1967E+01	1.5665E+05	1.1045E+03
1.1235E+01	1.0069E-01	1.1052E+01	1.4467E+05	1.1036E+03
1.1240E+01	1.5675E-01	1.7205E+01	2.2521E+05	1.1031E+03
1.1245E+01	1.4714E-01	1.6150E+01	2.1141E+05	1.1026E+03
1.1252E+01	1.8125E-01	1.9894E+01	2.6042E+05	1.1019E+03
1.1265E+01	1.4701E-01	1.6136E+01	2.1123E+05	1.1006E+03
1.1271E+01	1.5148E-01	1.6627E+01	2.1765E+05	1.1000E+03
1.1275E+01	1.5077E-01	1.6549E+01	2.1662E+05	1.0996E+03
1.1291E+01	1.4334E-01	1.5733E+01	2.0594E+05	1.0981E+03
1.1301E+01	1.4686E-01	1.6119E+01	2.1100E+05	1.0971E+03
1.1309E+01	1.4402E-01	1.5808E+01	2.0693E+05	1.0963E+03
1.1318E+01	1.3413E-01	1.4722E+01	1.9271E+05	1.0955E+03
1.1325E+01	1.3624E-01	1.4953E+01	1.9574E+05	1.0948E+03
1.1340E+01	1.5423E-01	1.6928E+01	2.2159E+05	1.0933E+03
1.1349E+01	1.6234E-01	1.7819E+01	2.3325E+05	1.0925E+03
1.1353E+01	1.6304E-01	1.7896E+01	2.3425E+05	1.0921E+03
1.1358E+01	1.6056E-01	1.7623E+01	2.3069E+05	1.0916E+03
1.1367E+01	1.5243E-01	1.6731E+01	2.1901E+05	1.0907E+03
1.1381E+01	1.2452E-01	1.3668E+01	1.7891E+05	1.0894E+03
1.1392E+01	1.6158E-01	1.7736E+01	2.3216E+05	1.0883E+03
1.1403E+01	1.2838E-01	1.4091E+01	1.8445E+05	1.0873E+03
1.1409E+01	1.3332E-01	1.4633E+01	1.9155E+05	1.0867E+03
1.1425E+01	1.7426E-01	1.9127E+01	2.5037E+05	1.0852E+03
1.1443E+01	1.3151E-01	1.4435E+01	1.8896E+05	1.0835E+03
1.1462E+01	1.3008E-01	1.4278E+01	1.8690E+05	1.0817E+03
1.1477E+01	1.1876E-01	1.3035E+01	1.7063E+05	1.0803E+03
1.1485E+01	1.1946E-01	1.3112E+01	1.7163E+05	1.0795E+03
1.1494E+01	1.4382E-01	1.5786E+01	2.0663E+05	1.0787E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1507E+01	2.0277E-01	2.2256E+01	2.9133E+05	1.0775E+03
1.1512E+01	1.5863E-01	1.7411E+01	2.2791E+05	1.0770E+03
1.1526E+01	1.2436E-01	1.3650E+01	1.7868E+05	1.0757E+03
1.1545E+01	1.4870E-01	1.6321E+01	2.1365E+05	1.0739E+03
1.1554E+01	1.5258E-01	1.6747E+01	2.1922E+05	1.0731E+03
1.1564E+01	1.6987E-01	1.8645E+01	2.4406E+05	1.0722E+03
1.1571E+01	1.6633E-01	1.8257E+01	2.3898E+05	1.0715E+03
1.1578E+01	1.6985E-01	1.8643E+01	2.4404E+05	1.0709E+03
1.1580E+01	1.7762E-01	1.9495E+01	2.5519E+05	1.0707E+03
1.1589E+01	2.2174E-01	2.4339E+01	3.1860E+05	1.0698E+03
1.1598E+01	1.7301E-01	1.8989E+01	2.4857E+05	1.0690E+03
1.1604E+01	1.3416E-01	1.4726E+01	1.9276E+05	1.0685E+03
1.1614E+01	1.1579E-01	1.2709E+01	1.6636E+05	1.0675E+03
1.1623E+01	1.2072E-01	1.3250E+01	1.7345E+05	1.0667E+03
1.1631E+01	1.2778E-01	1.4025E+01	1.8359E+05	1.0660E+03
1.1638E+01	1.2706E-01	1.3946E+01	1.8256E+05	1.0653E+03
1.1650E+01	1.4294E-01	1.5689E+01	2.0537E+05	1.0642E+03
1.1658E+01	1.7436E-01	1.9137E+01	2.5051E+05	1.0635E+03
1.1668E+01	2.0754E-01	2.2779E+01	2.9818E+05	1.0626E+03
1.1677E+01	1.5456E-01	1.6965E+01	2.2207E+05	1.0618E+03
1.1682E+01	1.2913E-01	1.4174E+01	1.8553E+05	1.0613E+03
1.1696E+01	1.1535E-01	1.2661E+01	1.6573E+05	1.0601E+03
1.1714E+01	1.2098E-01	1.3279E+01	1.7382E+05	1.0584E+03
1.1725E+01	1.2450E-01	1.3665E+01	1.7887E+05	1.0574E+03
1.1739E+01	1.5273E-01	1.6764E+01	2.1944E+05	1.0562E+03
1.1751E+01	1.8026E-01	1.9786E+01	2.5900E+05	1.0551E+03
1.1761E+01	1.4211E-01	1.5598E+01	2.0418E+05	1.0542E+03
1.1770E+01	1.1739E-01	1.2885E+01	1.6866E+05	1.0534E+03
1.1784E+01	1.2302E-01	1.3503E+01	1.7675E+05	1.0521E+03
1.1797E+01	1.3360E-01	1.4665E+01	1.9196E+05	1.0510E+03
1.1808E+01	1.3218E-01	1.4508E+01	1.8991E+05	1.0500E+03
1.1822E+01	1.3923E-01	1.5282E+01	2.0004E+05	1.0488E+03
1.1834E+01	1.2050E-01	1.3226E+01	1.7313E+05	1.0477E+03
1.1848E+01	1.0777E-01	1.1829E+01	1.5485E+05	1.0465E+03
1.1855E+01	1.0847E-01	1.1906E+01	1.5585E+05	1.0458E+03
1.1862E+01	1.1270E-01	1.2370E+01	1.6192E+05	1.0452E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1878E+01	1.4058E-01	1.5430E+01	2.0198E+05	1.0438E+03
1.1884E+01	1.4340E-01	1.5740E+01	2.0603E+05	1.0433E+03
1.1891E+01	1.4374E-01	1.5778E+01	2.0653E+05	1.0427E+03
1.1894E+01	1.4092E-01	1.5467E+01	2.0247E+05	1.0424E+03
1.1906E+01	1.4161E-01	1.5543E+01	2.0346E+05	1.0414E+03
1.1912E+01	1.3702E-01	1.5039E+01	1.9686E+05	1.0408E+03
1.1924E+01	1.2535E-01	1.3758E+01	1.8010E+05	1.0398E+03
1.1936E+01	1.2533E-01	1.3757E+01	1.8008E+05	1.0387E+03
1.1951E+01	1.4121E-01	1.5499E+01	2.0289E+05	1.0374E+03
1.1961E+01	1.4685E-01	1.6118E+01	2.1099E+05	1.0366E+03
1.1979E+01	1.4930E-01	1.6388E+01	2.1452E+05	1.0350E+03
1.1993E+01	1.4294E-01	1.5689E+01	2.0537E+05	1.0338E+03
1.2000E+01	1.4258E-01	1.5649E+01	2.0485E+05	1.0332E+03
1.2008E+01	1.3727E-01	1.5067E+01	1.9722E+05	1.0325E+03
1.2020E+01	1.4149E-01	1.5530E+01	2.0329E+05	1.0315E+03
1.2030E+01	1.4961E-01	1.6421E+01	2.1495E+05	1.0306E+03
1.2053E+01	1.3864E-01	1.5217E+01	1.9919E+05	1.0287E+03
1.2072E+01	1.5521E-01	1.7036E+01	2.2300E+05	1.0270E+03
1.2080E+01	1.5344E-01	1.6842E+01	2.2046E+05	1.0264E+03
1.2094E+01	1.6261E-01	1.7848E+01	2.3363E+05	1.0252E+03
1.2104E+01	1.7637E-01	1.9358E+01	2.5340E+05	1.0243E+03
1.2122E+01	1.5622E-01	1.7147E+01	2.2446E+05	1.0228E+03
1.2132E+01	1.6080E-01	1.7650E+01	2.3104E+05	1.0220E+03
1.2135E+01	1.7174E-01	1.8851E+01	2.4676E+05	1.0217E+03
1.2139E+01	1.7704E-01	1.9432E+01	2.5437E+05	1.0214E+03
1.2148E+01	2.1517E-01	2.3617E+01	3.0915E+05	1.0206E+03
1.2159E+01	1.8019E-01	1.9778E+01	2.5890E+05	1.0197E+03
1.2170E+01	1.6818E-01	1.8460E+01	2.4164E+05	1.0188E+03
1.2184E+01	1.8053E-01	1.9815E+01	2.5937E+05	1.0176E+03
1.2204E+01	1.6391E-01	1.7991E+01	2.3550E+05	1.0159E+03
1.2219E+01	1.7802E-01	1.9540E+01	2.5578E+05	1.0147E+03
1.2228E+01	2.0379E-01	2.2368E+01	2.9280E+05	1.0139E+03
1.2238E+01	1.6423E-01	1.8026E+01	2.3596E+05	1.0131E+03
1.2247E+01	1.5398E-01	1.6901E+01	2.2124E+05	1.0124E+03
1.2266E+01	1.7727E-01	1.9457E+01	2.5469E+05	1.0108E+03
1.2284E+01	1.5394E-01	1.6897E+01	2.2118E+05	1.0093E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2293E+01	1.5817E-01	1.7361E+01	2.2726E+05	1.0086E+03
1.2300E+01	1.7123E-01	1.8795E+01	2.4602E+05	1.0080E+03
1.2305E+01	1.8535E-01	2.0344E+01	2.6631E+05	1.0076E+03
1.2318E+01	1.5815E-01	1.7359E+01	2.2722E+05	1.0065E+03
1.2332E+01	1.6025E-01	1.7590E+01	2.3025E+05	1.0054E+03
1.2343E+01	1.7543E-01	1.9255E+01	2.5205E+05	1.0045E+03
1.2348E+01	1.8425E-01	2.0224E+01	2.6473E+05	1.0041E+03
1.2354E+01	1.8107E-01	1.9874E+01	2.6015E+05	1.0036E+03
1.2360E+01	1.8283E-01	2.0067E+01	2.6268E+05	1.0031E+03
1.2366E+01	1.7223E-01	1.8904E+01	2.4745E+05	1.0026E+03
1.2375E+01	1.6516E-01	1.8128E+01	2.3729E+05	1.0019E+03
1.2385E+01	1.7080E-01	1.8747E+01	2.4540E+05	1.0011E+03
1.2390E+01	1.6938E-01	1.8591E+01	2.4336E+05	1.0007E+03
1.2395E+01	1.6514E-01	1.8126E+01	2.3726E+05	1.0003E+03
1.2408E+01	1.6972E-01	1.8628E+01	2.4385E+05	9.9923E+02
1.2411E+01	1.8560E-01	2.0372E+01	2.6667E+05	9.9898E+02
1.2415E+01	1.9195E-01	2.1069E+01	2.7579E+05	9.9863E+02
1.2420E+01	2.0642E-01	2.2657E+01	2.9659E+05	9.9823E+02
1.2425E+01	2.0819E-01	2.2851E+01	2.9912E+05	9.9788E+02
1.2427E+01	2.1207E-01	2.3277E+01	3.0470E+05	9.9768E+02
1.2433E+01	2.0571E-01	2.2579E+01	2.9556E+05	9.9719E+02
1.2438E+01	2.0712E-01	2.2733E+01	2.9758E+05	9.9679E+02
1.2453E+01	1.7321E-01	1.9011E+01	2.4886E+05	9.9565E+02
1.2464E+01	1.6790E-01	1.8429E+01	2.4123E+05	9.9476E+02
1.2481E+01	1.7141E-01	1.8814E+01	2.4628E+05	9.9337E+02
1.2486E+01	1.7741E-01	1.9473E+01	2.5490E+05	9.9302E+02
1.2487E+01	1.9153E-01	2.1023E+01	2.7519E+05	9.9287E+02
1.2490E+01	1.9894E-01	2.1836E+01	2.8584E+05	9.9266E+02
1.2494E+01	2.0212E-01	2.2185E+01	2.9040E+05	9.9237E+02
1.2495E+01	2.0777E-01	2.2805E+01	2.9852E+05	9.9226E+02
1.2503E+01	2.1094E-01	2.3153E+01	3.0307E+05	9.9162E+02
1.2508E+01	2.0352E-01	2.2339E+01	2.9241E+05	9.9122E+02
1.2514E+01	1.8868E-01	2.0710E+01	2.7109E+05	9.9078E+02
1.2518E+01	1.9009E-01	2.0865E+01	2.7312E+05	9.9043E+02
1.2525E+01	1.7949E-01	1.9701E+01	2.5789E+05	9.8989E+02
1.2529E+01	1.6042E-01	1.7608E+01	2.3049E+05	9.8959E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2535E+01	1.5653E-01	1.7181E+01	2.2490E+05	9.8910E+02
1.2543E+01	1.4240E-01	1.5630E+01	2.0460E+05	9.8850E+02
1.2554E+01	1.4592E-01	1.6017E+01	2.0966E+05	9.8761E+02
1.2557E+01	1.5227E-01	1.6714E+01	2.1878E+05	9.8736E+02
1.2562E+01	1.5686E-01	1.7217E+01	2.2538E+05	9.8701E+02
1.2569E+01	1.7875E-01	1.9619E+01	2.5682E+05	9.8641E+02
1.2572E+01	1.8227E-01	2.0007E+01	2.6189E+05	9.8621E+02
1.2574E+01	1.9251E-01	2.1130E+01	2.7660E+05	9.8606E+02
1.2578E+01	2.0981E-01	2.3029E+01	3.0145E+05	9.8570E+02
1.2584E+01	2.1263E-01	2.3338E+01	3.0550E+05	9.8526E+02
1.2589E+01	2.0133E-01	2.2098E+01	2.8926E+05	9.8486E+02
1.2593E+01	2.0344E-01	2.2330E+01	2.9230E+05	9.8456E+02
1.2606E+01	1.6883E-01	1.8530E+01	2.4256E+05	9.8353E+02
1.2611E+01	1.6741E-01	1.8375E+01	2.4053E+05	9.8318E+02
1.2617E+01	1.5187E-01	1.6669E+01	2.1820E+05	9.8269E+02
1.2632E+01	1.6562E-01	1.8179E+01	2.3796E+05	9.8154E+02
1.2637E+01	1.7727E-01	1.9457E+01	2.5470E+05	9.8109E+02
1.2647E+01	1.8221E-01	1.9999E+01	2.6179E+05	9.8034E+02
1.2659E+01	2.1044E-01	2.3099E+01	3.0236E+05	9.7939E+02
1.2670E+01	1.8748E-01	2.0578E+01	2.6936E+05	9.7855E+02
1.2677E+01	1.8924E-01	2.0771E+01	2.7189E+05	9.7800E+02
1.2685E+01	1.7440E-01	1.9142E+01	2.5057E+05	9.7741E+02
1.2704E+01	1.4367E-01	1.5769E+01	2.0642E+05	9.7598E+02
1.2718E+01	1.6131E-01	1.7705E+01	2.3176E+05	9.7488E+02
1.2724E+01	1.6342E-01	1.7937E+01	2.3480E+05	9.7438E+02
1.2735E+01	1.8778E-01	2.0610E+01	2.6979E+05	9.7358E+02
1.2744E+01	1.9130E-01	2.0997E+01	2.7485E+05	9.7288E+02
1.2751E+01	1.8741E-01	2.0570E+01	2.6926E+05	9.7234E+02
1.2754E+01	1.8034E-01	1.9795E+01	2.5912E+05	9.7209E+02
1.2763E+01	1.8139E-01	1.9910E+01	2.6062E+05	9.7145E+02
1.2775E+01	1.6973E-01	1.8630E+01	2.4387E+05	9.7050E+02
1.2786E+01	1.7396E-01	1.9094E+01	2.4994E+05	9.6971E+02
1.2798E+01	1.8525E-01	2.0333E+01	2.6616E+05	9.6881E+02
1.2804E+01	1.8489E-01	2.0293E+01	2.6564E+05	9.6831E+02
1.2812E+01	1.8947E-01	2.0797E+01	2.7223E+05	9.6772E+02
1.2820E+01	1.8982E-01	2.0835E+01	2.7273E+05	9.6712E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2834E+01	1.9369E-01	2.1259E+01	2.7828E+05	9.6603E+02
1.2846E+01	1.9015E-01	2.0871E+01	2.7320E+05	9.6513E+02
1.2860E+01	1.8166E-01	1.9939E+01	2.6101E+05	9.6414E+02
1.2867E+01	1.8766E-01	2.0598E+01	2.6962E+05	9.6359E+02
1.2873E+01	1.8906E-01	2.0752E+01	2.7164E+05	9.6314E+02
1.2875E+01	1.9153E-01	2.1023E+01	2.7519E+05	9.6299E+02
1.2880E+01	1.9259E-01	2.1139E+01	2.7671E+05	9.6260E+02
1.2887E+01	1.9788E-01	2.1720E+01	2.8431E+05	9.6210E+02
1.2897E+01	1.9399E-01	2.1292E+01	2.7872E+05	9.6135E+02
1.2905E+01	1.9398E-01	2.1291E+01	2.7870E+05	9.6071E+02
1.2918E+01	1.8620E-01	2.0438E+01	2.6753E+05	9.5981E+02
1.2922E+01	1.8584E-01	2.0398E+01	2.6701E+05	9.5947E+02
1.2932E+01	1.8195E-01	1.9971E+01	2.6143E+05	9.5877E+02
1.2943E+01	1.8759E-01	2.0590E+01	2.6953E+05	9.5793E+02
1.2956E+01	1.8193E-01	1.9969E+01	2.6139E+05	9.5693E+02
1.2975E+01	1.9639E-01	2.1556E+01	2.8217E+05	9.5559E+02
1.2990E+01	1.7959E-01	1.9712E+01	2.5804E+05	9.5446E+02
1.3003E+01	1.7529E-01	1.9240E+01	2.5185E+05	9.5353E+02
1.3012E+01	1.7564E-01	1.9278E+01	2.5235E+05	9.5287E+02
1.3022E+01	1.7019E-01	1.8680E+01	2.4452E+05	9.5211E+02
1.3045E+01	1.8975E-01	2.0828E+01	2.7263E+05	9.5043E+02
1.3062E+01	1.7733E-01	1.9464E+01	2.5479E+05	9.4918E+02
1.3067E+01	1.7654E-01	1.9377E+01	2.5365E+05	9.4880E+02
1.3081E+01	1.6645E-01	1.8269E+01	2.3915E+05	9.4782E+02
1.3095E+01	1.6716E-01	1.8348E+01	2.4017E+05	9.4682E+02
1.3109E+01	1.7789E-01	1.9526E+01	2.5559E+05	9.4582E+02
1.3122E+01	1.7707E-01	1.9435E+01	2.5440E+05	9.4488E+02
1.3132E+01	1.7354E-01	1.9048E+01	2.4934E+05	9.4412E+02
1.3149E+01	1.7269E-01	1.8955E+01	2.4812E+05	9.4291E+02
1.3160E+01	1.7496E-01	1.9204E+01	2.5138E+05	9.4213E+02
1.3215E+01	1.6777E-01	1.8415E+01	2.4105E+05	9.3818E+02
1.3229E+01	1.6925E-01	1.8577E+01	2.4318E+05	9.3724E+02
1.3256E+01	1.6181E-01	1.7760E+01	2.3248E+05	9.3532E+02
1.3283E+01	1.6747E-01	1.8382E+01	2.4062E+05	9.3339E+02
1.3312E+01	1.8085E-01	1.9850E+01	2.5984E+05	9.3139E+02
1.3334E+01	1.7920E-01	1.9670E+01	2.5748E+05	9.2985E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3372E+01	1.8753E-01	2.0583E+01	2.6943E+05	9.2719E+02
1.3393E+01	1.8396E-01	2.0192E+01	2.6431E+05	9.2571E+02
1.3409E+01	1.8544E-01	2.0354E+01	2.6643E+05	9.2461E+02
1.3432E+01	1.8148E-01	1.9919E+01	2.6075E+05	9.2307E+02
1.3457E+01	1.8407E-01	2.0204E+01	2.6447E+05	9.2136E+02
1.3476E+01	1.8399E-01	2.0195E+01	2.6435E+05	9.2004E+02
1.3485E+01	1.8742E-01	2.0572E+01	2.6929E+05	9.1943E+02
1.3501E+01	1.8774E-01	2.0607E+01	2.6974E+05	9.1832E+02
1.3513E+01	1.9579E-01	2.1490E+01	2.8131E+05	9.1754E+02
1.3524E+01	1.9652E-01	2.1570E+01	2.8235E+05	9.1677E+02
1.3528E+01	1.9341E-01	2.1229E+01	2.7789E+05	9.1650E+02
1.3535E+01	1.9415E-01	2.1311E+01	2.7896E+05	9.1600E+02
1.3545E+01	1.9064E-01	2.0925E+01	2.7391E+05	9.1535E+02
1.3575E+01	1.9553E-01	2.1461E+01	2.8093E+05	9.1330E+02
1.3590E+01	1.9508E-01	2.1412E+01	2.8029E+05	9.1231E+02
1.3604E+01	2.0351E-01	2.2337E+01	2.9239E+05	9.1136E+02
1.3613E+01	2.0540E-01	2.2544E+01	2.9511E+05	9.1076E+02
1.3634E+01	1.9875E-01	2.1815E+01	2.8557E+05	9.0939E+02
1.3648E+01	2.0024E-01	2.1978E+01	2.8769E+05	9.0845E+02
1.3664E+01	2.0056E-01	2.2013E+01	2.8816E+05	9.0740E+02
1.3685E+01	2.0625E-01	2.2639E+01	2.9634E+05	9.0596E+02
1.3713E+01	2.0151E-01	2.2118E+01	2.8953E+05	9.0415E+02
1.3719E+01	2.0457E-01	2.2454E+01	2.9393E+05	9.0376E+02
1.3727E+01	2.0184E-01	2.2154E+01	2.9000E+05	9.0321E+02
1.3732E+01	2.0220E-01	2.2194E+01	2.9052E+05	9.0288E+02
1.3737E+01	2.0719E-01	2.2742E+01	2.9769E+05	9.0255E+02
1.3744E+01	2.0678E-01	2.2696E+01	2.9710E+05	9.0211E+02
1.3753E+01	2.1138E-01	2.3201E+01	3.0370E+05	9.0149E+02
1.3767E+01	2.0707E-01	2.2728E+01	2.9752E+05	9.0056E+02
1.3844E+01	2.0676E-01	2.2694E+01	2.9707E+05	8.9561E+02
1.3868E+01	2.1284E-01	2.3361E+01	3.0580E+05	8.9406E+02
1.3874E+01	2.1165E-01	2.3231E+01	3.0410E+05	8.9367E+02
1.3881E+01	2.0776E-01	2.2804E+01	2.9851E+05	8.9318E+02
1.3897E+01	2.0847E-01	2.2882E+01	2.9953E+05	8.9214E+02
1.3906E+01	2.1230E-01	2.3302E+01	3.0502E+05	8.9158E+02
1.3911E+01	2.2307E-01	2.4485E+01	3.2051E+05	8.9124E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3918E+01	2.2459E-01	2.4651E+01	3.2269E+05	8.9085E+02
1.3934E+01	2.2221E-01	2.4390E+01	3.1927E+05	8.8980E+02
1.3948E+01	2.2293E-01	2.4469E+01	3.2030E+05	8.8892E+02
1.3960E+01	2.1323E-01	2.3405E+01	3.0637E+05	8.8811E+02
1.3967E+01	2.1321E-01	2.3402E+01	3.0633E+05	8.8772E+02
1.3978E+01	2.2088E-01	2.4244E+01	3.1735E+05	8.8700E+02
1.3994E+01	2.2120E-01	2.4279E+01	3.1781E+05	8.8595E+02
1.4013E+01	2.1418E-01	2.3509E+01	3.0773E+05	8.8475E+02
1.4023E+01	2.1376E-01	2.3462E+01	3.0712E+05	8.8414E+02
1.4044E+01	2.2100E-01	2.4258E+01	3.1753E+05	8.8281E+02
1.4050E+01	2.2484E-01	2.4679E+01	3.2304E+05	8.8248E+02
1.4063E+01	2.2363E-01	2.4546E+01	3.2131E+05	8.8165E+02
1.4076E+01	2.2474E-01	2.4667E+01	3.2290E+05	8.8082E+02
1.4093E+01	2.1502E-01	2.3601E+01	3.0894E+05	8.7973E+02
1.4109E+01	2.1419E-01	2.3510E+01	3.0775E+05	8.7874E+02
1.4126E+01	2.2030E-01	2.4180E+01	3.1652E+05	8.7769E+02
1.4144E+01	2.1521E-01	2.3622E+01	3.0921E+05	8.7659E+02
1.4164E+01	2.1629E-01	2.3740E+01	3.1076E+05	8.7533E+02
1.4186E+01	2.1389E-01	2.3477E+01	3.0732E+05	8.7401E+02
1.4198E+01	2.2310E-01	2.4488E+01	3.2055E+05	8.7328E+02
1.4209E+01	2.2537E-01	2.4737E+01	3.2381E+05	8.7256E+02
1.4228E+01	2.3263E-01	2.5534E+01	3.3424E+05	8.7140E+02
1.4246E+01	2.2755E-01	2.4976E+01	3.2694E+05	8.7030E+02
1.4264E+01	2.2632E-01	2.4841E+01	3.2517E+05	8.6920E+02
1.4324E+01	2.3149E-01	2.5409E+01	3.3260E+05	8.6556E+02
1.4349E+01	2.2870E-01	2.5102E+01	3.2859E+05	8.6408E+02
1.4409E+01	2.3850E-01	2.6178E+01	3.4267E+05	8.6048E+02
1.4423E+01	2.4269E-01	2.6638E+01	3.4870E+05	8.5965E+02
1.4444E+01	2.4262E-01	2.6630E+01	3.4858E+05	8.5838E+02
1.4508E+01	2.5549E-01	2.8043E+01	3.6708E+05	8.5457E+02
1.4535E+01	2.5732E-01	2.8244E+01	3.6971E+05	8.5302E+02
1.4561E+01	2.5414E-01	2.7895E+01	3.6514E+05	8.5148E+02
1.4584E+01	2.5560E-01	2.8055E+01	3.6723E+05	8.5016E+02
1.4604E+01	2.5321E-01	2.7792E+01	3.6380E+05	8.4895E+02
1.4625E+01	2.5506E-01	2.7996E+01	3.6646E+05	8.4774E+02
1.4657E+01	2.4993E-01	2.7433E+01	3.5910E+05	8.4593E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	λ (Å)	
1.4700E+01	2.5672E-01	2.8178E+01	3.6885E+05	8.4344E+02
1.4728E+01	2.5623E-01	2.8125E+01	3.6815E+05	8.4184E+02
1.4756E+01	2.5806E-01	2.8325E+01	3.7078E+05	8.4024E+02
1.4781E+01	2.5527E-01	2.8019E+01	3.6677E+05	8.3882E+02
1.4823E+01	2.6168E-01	2.8723E+01	3.7598E+05	8.3644E+02
1.4837E+01	2.5855E-01	2.8379E+01	3.7148E+05	8.3567E+02
1.4842E+01	2.6122E-01	2.8672E+01	3.7532E+05	8.3534E+02
1.4863E+01	2.6424E-01	2.9003E+01	3.7965E+05	8.3418E+02
1.4880E+01	2.6572E-01	2.9166E+01	3.8178E+05	8.3324E+02
1.4902E+01	2.5678E-01	2.8184E+01	3.6893E+05	8.3198E+02
1.4916E+01	2.5711E-01	2.8221E+01	3.6941E+05	8.3121E+02
1.4924E+01	2.5438E-01	2.7921E+01	3.6549E+05	8.3078E+02
1.4943E+01	2.5663E-01	2.8168E+01	3.6873E+05	8.2973E+02
1.4972E+01	2.5229E-01	2.7691E+01	3.6248E+05	8.2813E+02
1.4999E+01	2.5412E-01	2.7892E+01	3.6511E+05	8.2659E+02
1.5023E+01	2.4941E-01	2.7375E+01	3.5834E+05	8.2527E+02
1.5042E+01	2.4318E-01	2.6691E+01	3.4939E+05	8.2424E+02
1.5068E+01	2.4038E-01	2.6385E+01	3.4538E+05	8.2281E+02
1.5102E+01	2.3371E-01	2.5652E+01	3.3579E+05	8.2100E+02
1.5131E+01	2.3631E-01	2.5938E+01	3.3953E+05	8.1940E+02
1.5141E+01	2.3512E-01	2.5807E+01	3.3782E+05	8.1885E+02
1.5156E+01	2.3006E-01	2.5251E+01	3.3054E+05	8.1808E+02
1.5171E+01	2.3078E-01	2.5331E+01	3.3158E+05	8.1726E+02
1.5191E+01	2.2685E-01	2.4899E+01	3.2593E+05	8.1616E+02
1.5209E+01	2.2718E-01	2.4935E+01	3.2640E+05	8.1522E+02
1.5226E+01	2.2982E-01	2.5225E+01	3.3020E+05	8.1428E+02
1.5258E+01	2.4013E-01	2.6356E+01	3.4501E+05	8.1256E+02
1.5271E+01	2.4202E-01	2.6564E+01	3.4772E+05	8.1190E+02
1.5287E+01	2.4196E-01	2.6557E+01	3.4764E+05	8.1102E+02
1.5340E+01	2.5220E-01	2.7682E+01	3.6235E+05	8.0825E+02
1.5367E+01	2.6137E-01	2.8688E+01	3.7552E+05	8.0681E+02
1.5390E+01	2.6746E-01	2.9357E+01	3.8428E+05	8.0559E+02
1.5423E+01	2.5733E-01	2.8244E+01	3.6972E+05	8.0389E+02
1.5454E+01	2.4488E-01	2.6878E+01	3.5184E+05	8.0226E+02
1.5495E+01	2.3627E-01	2.5933E+01	3.3946E+05	8.0018E+02
1.5522E+01	2.2576E-01	2.4780E+01	3.2437E+05	7.9876E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5539E+01	2.2571E-01	2.4774E+01	3.2430E+05	7.9791E+02
1.5567E+01	2.1921E-01	2.4060E+01	3.1495E+05	7.9643E+02
1.5645E+01	2.1635E-01	2.3747E+01	3.1085E+05	7.9247E+02
1.5659E+01	2.1858E-01	2.3992E+01	3.1405E+05	7.9178E+02
1.5704E+01	2.1204E-01	2.3273E+01	3.0465E+05	7.8953E+02
1.5780E+01	2.1334E-01	2.3417E+01	3.0653E+05	7.8570E+02
1.5797E+01	2.1595E-01	2.3702E+01	3.1027E+05	7.8485E+02
1.5844E+01	2.1318E-01	2.3399E+01	3.0629E+05	7.8251E+02
1.5902E+01	2.2002E-01	2.4150E+01	3.1612E+05	7.7969E+02
1.5917E+01	2.2697E-01	2.4913E+01	3.2611E+05	7.7892E+02
1.5938E+01	2.2257E-01	2.4429E+01	3.1978E+05	7.7790E+02
1.5985E+01	2.2774E-01	2.4997E+01	3.2722E+05	7.7564E+02
1.6009E+01	2.2730E-01	2.4949E+01	3.2659E+05	7.7448E+02
1.6026E+01	2.2990E-01	2.5234E+01	3.3032E+05	7.7363E+02
1.6051E+01	2.2549E-01	2.4750E+01	3.2398E+05	7.7245E+02
1.6098E+01	2.2802E-01	2.5028E+01	3.2761E+05	7.7019E+02
1.6112E+01	2.3289E-01	2.5563E+01	3.3462E+05	7.6950E+02
1.6127E+01	2.3059E-01	2.5310E+01	3.3130E+05	7.6878E+02
1.6153E+01	2.3430E-01	2.5717E+01	3.3664E+05	7.6754E+02
1.6163E+01	2.3749E-01	2.6068E+01	3.4123E+05	7.6707E+02
1.6190E+01	2.3629E-01	2.5935E+01	3.3950E+05	7.6583E+02
1.6216E+01	2.4265E-01	2.6634E+01	3.4864E+05	7.6459E+02
1.6257E+01	2.4746E-01	2.7162E+01	3.5555E+05	7.6263E+02
1.6274E+01	2.5441E-01	2.7925E+01	3.6553E+05	7.6185E+02
1.6320E+01	2.8246E-01	3.1003E+01	4.0583E+05	7.5970E+02
1.6340E+01	2.7296E-01	2.9960E+01	3.9218E+05	7.5877E+02
1.6350E+01	2.7293E-01	2.9958E+01	3.9215E+05	7.5830E+02
1.6393E+01	2.5412E-01	2.7892E+01	3.6511E+05	7.5632E+02
1.6415E+01	2.5444E-01	2.7928E+01	3.6558E+05	7.5530E+02
1.6432E+01	2.5988E-01	2.8525E+01	3.7340E+05	7.5452E+02
1.6436E+01	2.6309E-01	2.8877E+01	3.7800E+05	7.5435E+02
1.6454E+01	2.5926E-01	2.8457E+01	3.7250E+05	7.5350E+02
1.6465E+01	2.5924E-01	2.8454E+01	3.7246E+05	7.5303E+02
1.6480E+01	2.5013E-01	2.7454E+01	3.5938E+05	7.5233E+02
1.6526E+01	2.3981E-01	2.6322E+01	3.4456E+05	7.5025E+02
1.6553E+01	2.3823E-01	2.6149E+01	3.4229E+05	7.4901E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6574E+01	2.4442E-01	2.6828E+01	3.5117E+05	7.4807E+02
1.6578E+01	2.4762E-01	2.7179E+01	3.5578E+05	7.4790E+02
1.6603E+01	2.4284E-01	2.6654E+01	3.4891E+05	7.4675E+02
1.6624E+01	2.3957E-01	2.6296E+01	3.4421E+05	7.4582E+02
1.6662E+01	2.3835E-01	2.6162E+01	3.4246E+05	7.4411E+02
1.6680E+01	2.3359E-01	2.5639E+01	3.3561E+05	7.4332E+02
1.6692E+01	2.3620E-01	2.5926E+01	3.3937E+05	7.4279E+02
1.6704E+01	2.4317E-01	2.6690E+01	3.4937E+05	7.4224E+02
1.6722E+01	2.4633E-01	2.7038E+01	3.5393E+05	7.4143E+02
1.6744E+01	2.3665E-01	2.5974E+01	3.4001E+05	7.4045E+02
1.6764E+01	2.3717E-01	2.6032E+01	3.4076E+05	7.3960E+02
1.6798E+01	2.4994E-01	2.7434E+01	3.5911E+05	7.3810E+02
1.6819E+01	2.4346E-01	2.6723E+01	3.4980E+05	7.3717E+02
1.6851E+01	2.5132E-01	2.7585E+01	3.6109E+05	7.3576E+02
1.6883E+01	2.4369E-01	2.6748E+01	3.5013E+05	7.3436E+02
1.6905E+01	2.5120E-01	2.7572E+01	3.6092E+05	7.3342E+02
1.6925E+01	2.5059E-01	2.7505E+01	3.6004E+05	7.3257E+02
1.6941E+01	2.5641E-01	2.8144E+01	3.6840E+05	7.3187E+02
1.6964E+01	2.5806E-01	2.8325E+01	3.7077E+05	7.3085E+02
1.6981E+01	2.6217E-01	2.8777E+01	3.7669E+05	7.3013E+02
1.7006E+01	2.6174E-01	2.8729E+01	3.7606E+05	7.2906E+02
1.7041E+01	2.6696E-01	2.9301E+01	3.8355E+05	7.2757E+02
1.7065E+01	2.7219E-01	2.9876E+01	3.9108E+05	7.2654E+02
1.7083E+01	2.8028E-01	3.0764E+01	4.0270E+05	7.2576E+02
1.7107E+01	2.7701E-01	3.0405E+01	3.9801E+05	7.2475E+02
1.7133E+01	2.8111E-01	3.0855E+01	4.0389E+05	7.2367E+02
1.7146E+01	2.9015E-01	3.1848E+01	4.1689E+05	7.2311E+02
1.7164E+01	3.0882E-01	3.3897E+01	4.4371E+05	7.2237E+02
1.7177E+01	3.5321E-01	3.8769E+01	5.0748E+05	7.2180E+02
1.7190E+01	4.1139E-01	4.5155E+01	5.9108E+05	7.2126E+02
1.7215E+01	3.0398E-01	3.3366E+01	4.3676E+05	7.2020E+02
1.7245E+01	3.2905E-01	3.6117E+01	4.7278E+05	7.1894E+02
1.7250E+01	3.4454E-01	3.7817E+01	4.9503E+05	7.1875E+02
1.7267E+01	3.6000E-01	3.9514E+01	5.1724E+05	7.1805E+02
1.7271E+01	3.7927E-01	4.1629E+01	5.4493E+05	7.1786E+02
1.7279E+01	3.8889E-01	4.2685E+01	5.5875E+05	7.1755E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7304E+01	4.0377E-01	4.4318E+01	5.8012E+05	7.1651E+02
1.7328E+01	4.4265E-01	4.8585E+01	6.3598E+05	7.1553E+02
1.7355E+01	3.3146E-01	3.6381E+01	4.7623E+05	7.1442E+02
1.7395E+01	3.3893E-01	3.7202E+01	4.8697E+05	7.1276E+02
1.7408E+01	3.4533E-01	3.7904E+01	4.9616E+05	7.1223E+02
1.7421E+01	3.3717E-01	3.7008E+01	4.8444E+05	7.1169E+02
1.7440E+01	3.3127E-01	3.6361E+01	4.7596E+05	7.1092E+02
1.7462E+01	3.3765E-01	3.7061E+01	4.8513E+05	7.1004E+02
1.7482E+01	3.0548E-01	3.3530E+01	4.3891E+05	7.0922E+02
1.7512E+01	2.8841E-01	3.1656E+01	4.1437E+05	7.0800E+02
1.7531E+01	2.8893E-01	3.1713E+01	4.1513E+05	7.0723E+02
1.7549E+01	2.9362E-01	3.2228E+01	4.2187E+05	7.0651E+02
1.7585E+01	2.8503E-01	3.1286E+01	4.0953E+05	7.0506E+02
1.7622E+01	2.7532E-01	3.0219E+01	3.9557E+05	7.0358E+02
1.7652E+01	2.8489E-01	3.1270E+01	4.0933E+05	7.0239E+02
1.7675E+01	2.6991E-01	2.9626E+01	3.8780E+05	7.0147E+02
1.7712E+01	2.5907E-01	2.8435E+01	3.7222E+05	7.0002E+02
1.7785E+01	2.5834E-01	2.8356E+01	3.7118E+05	6.9713E+02
1.7817E+01	2.6357E-01	2.8930E+01	3.7869E+05	6.9589E+02
1.7843E+01	2.7542E-01	3.0230E+01	3.9572E+05	6.9486E+02
1.7867E+01	2.6781E-01	2.9395E+01	3.8479E+05	6.9393E+02
1.7907E+01	2.8436E-01	3.1212E+01	4.0856E+05	6.9237E+02
1.7927E+01	3.1796E-01	3.4900E+01	4.5684E+05	6.9162E+02
1.7945E+01	3.8048E-01	4.1762E+01	5.4667E+05	6.9091E+02
1.7958E+01	3.4455E-01	3.7818E+01	4.9504E+05	6.9043E+02
1.7970E+01	3.4944E-01	3.8355E+01	5.0206E+05	6.8996E+02
1.7985E+01	3.7870E-01	4.1566E+01	5.4411E+05	6.8937E+02
1.7995E+01	3.7282E-01	4.0921E+01	5.3566E+05	6.8899E+02
1.8012E+01	3.8186E-01	4.1913E+01	5.4864E+05	6.8835E+02
1.8033E+01	3.3438E-01	3.6701E+01	4.8042E+05	6.8755E+02
1.8039E+01	3.3701E-01	3.6991E+01	4.8421E+05	6.8733E+02
1.8055E+01	3.2243E-01	3.5390E+01	4.6326E+05	6.8671E+02
1.8074E+01	3.2560E-01	3.5738E+01	4.6781E+05	6.8599E+02
1.8116E+01	2.9887E-01	3.2804E+01	4.2941E+05	6.8440E+02
1.8131E+01	3.0318E-01	3.3278E+01	4.3561E+05	6.8384E+02
1.8156E+01	3.2014E-01	3.5139E+01	4.5997E+05	6.8289E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8180E+01	3.0252E-01	3.3205E+01	4.3465E+05	6.8197E+02
1.8203E+01	2.9397E-01	3.2266E+01	4.2237E+05	6.8113E+02
1.8213E+01	2.9338E-01	3.2202E+01	4.2152E+05	6.8074E+02
1.8223E+01	2.8901E-01	3.1723E+01	4.1525E+05	6.8036E+02
1.8238E+01	2.9163E-01	3.2010E+01	4.1901E+05	6.7981E+02
1.8257E+01	3.1560E-01	3.4640E+01	4.5344E+05	6.7910E+02
1.8268E+01	3.3920E-01	3.7231E+01	4.8735E+05	6.7868E+02
1.8287E+01	3.9152E-01	4.2973E+01	5.6252E+05	6.7799E+02
1.8297E+01	3.8714E-01	4.2493E+01	5.5624E+05	6.7761E+02
1.8308E+01	3.8996E-01	4.2802E+01	5.6029E+05	6.7722E+02
1.8335E+01	3.0921E-01	3.3939E+01	4.4426E+05	6.7621E+02
1.8358E+01	2.9196E-01	3.2046E+01	4.1948E+05	6.7538E+02
1.8381E+01	2.8870E-01	3.1688E+01	4.1480E+05	6.7453E+02
1.8402E+01	2.9301E-01	3.2161E+01	4.2099E+05	6.7375E+02
1.8438E+01	3.2545E-01	3.5722E+01	4.6760E+05	6.7245E+02
1.8448E+01	3.8099E-01	4.1818E+01	5.4740E+05	6.7209E+02
1.8454E+01	4.4354E-01	4.8683E+01	6.3726E+05	6.7185E+02
1.8467E+01	4.5164E-01	4.9573E+01	6.4891E+05	6.7137E+02
1.8492E+01	3.0569E-01	3.3553E+01	4.3921E+05	6.7046E+02
1.8511E+01	2.7560E-01	3.0250E+01	3.9597E+05	6.6978E+02
1.8529E+01	2.9919E-01	3.2839E+01	4.2987E+05	6.6915E+02
1.8547E+01	3.1031E-01	3.4060E+01	4.4584E+05	6.6850E+02
1.8560E+01	3.2370E-01	3.5530E+01	4.6508E+05	6.6802E+02
1.8586E+01	3.8035E-01	4.1748E+01	5.4648E+05	6.6710E+02
1.8594E+01	3.7221E-01	4.0854E+01	5.3478E+05	6.6681E+02
1.8612E+01	3.2511E-01	3.5685E+01	4.6711E+05	6.6615E+02
1.8630E+01	3.4114E-01	3.7444E+01	4.9015E+05	6.6552E+02
1.8635E+01	3.6476E-01	4.0036E+01	5.2408E+05	6.6533E+02
1.8642E+01	3.8175E-01	4.1902E+01	5.4850E+05	6.6507E+02
1.8657E+01	3.1388E-01	3.4451E+01	4.5097E+05	6.6454E+02
1.8670E+01	3.0100E-01	3.3038E+01	4.3247E+05	6.6408E+02
1.8679E+01	3.1062E-01	3.4094E+01	4.4629E+05	6.6377E+02
1.8694E+01	3.6295E-01	3.9837E+01	5.2147E+05	6.6324E+02
1.8709E+01	3.4477E-01	3.7843E+01	4.9536E+05	6.6271E+02
1.8728E+01	3.8594E-01	4.2361E+01	5.5451E+05	6.6203E+02
1.8739E+01	3.1580E-01	3.4663E+01	4.5373E+05	6.6164E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8750E+01	3.2164E-01	3.5303E+01	4.6212E+05	6.6125E+02
1.8756E+01	3.1634E-01	3.4721E+01	4.5451E+05	6.6104E+02
1.8769E+01	3.4410E-01	3.7768E+01	4.9439E+05	6.6059E+02
1.8816E+01	2.9638E-01	3.2531E+01	4.2583E+05	6.5894E+02
1.8829E+01	2.9806E-01	3.2715E+01	4.2824E+05	6.5847E+02
1.8853E+01	2.8667E-01	3.1465E+01	4.1188E+05	6.5763E+02
1.8869E+01	2.8891E-01	3.1711E+01	4.1510E+05	6.5708E+02
1.8878E+01	2.8190E-01	3.0942E+01	4.0503E+05	6.5678E+02
1.8891E+01	2.8339E-01	3.1105E+01	4.0717E+05	6.5631E+02
1.8893E+01	2.8017E-01	3.0752E+01	4.0254E+05	6.5623E+02
1.8918E+01	2.8069E-01	3.0809E+01	4.0329E+05	6.5538E+02
1.8970E+01	2.9162E-01	3.2009E+01	4.1899E+05	6.5357E+02
1.8985E+01	2.9197E-01	3.2047E+01	4.1949E+05	6.5305E+02
1.9002E+01	2.9702E-01	3.2601E+01	4.2675E+05	6.5248E+02
1.9020E+01	2.9808E-01	3.2717E+01	4.2827E+05	6.5186E+02
1.9035E+01	3.0277E-01	3.3232E+01	4.3501E+05	6.5134E+02
1.9046E+01	3.0239E-01	3.3191E+01	4.3447E+05	6.5098E+02
1.9085E+01	3.0958E-01	3.3980E+01	4.4480E+05	6.4964E+02
1.9139E+01	3.1568E-01	3.4649E+01	4.5356E+05	6.4782E+02
1.9189E+01	3.2177E-01	3.5318E+01	4.6232E+05	6.4612E+02
1.9209E+01	3.2211E-01	3.5355E+01	4.6280E+05	6.4545E+02
1.9258E+01	3.2749E-01	3.5945E+01	4.7052E+05	6.4379E+02
1.9293E+01	3.2745E-01	3.5941E+01	4.7047E+05	6.4265E+02
1.9355E+01	3.3353E-01	3.6609E+01	4.7921E+05	6.4058E+02
1.9385E+01	3.3386E-01	3.6645E+01	4.7969E+05	6.3960E+02
1.9408E+01	3.3637E-01	3.6920E+01	4.8329E+05	6.3883E+02
1.9435E+01	3.3526E-01	3.6798E+01	4.8169E+05	6.3795E+02
1.9522E+01	3.3697E-01	3.6987E+01	4.8416E+05	6.3511E+02
1.9603E+01	3.4015E-01	3.7335E+01	4.8871E+05	6.3248E+02
1.9672E+01	3.4767E-01	3.8161E+01	4.9952E+05	6.3025E+02
1.9732E+01	3.5195E-01	3.8631E+01	5.0568E+05	6.2834E+02
1.9787E+01	3.5009E-01	3.8426E+01	5.0300E+05	6.2658E+02
1.9844E+01	3.4821E-01	3.8220E+01	5.0031E+05	6.2478E+02
1.9901E+01	3.5612E-01	3.9088E+01	5.1166E+05	6.2302E+02
1.9958E+01	3.5787E-01	3.9280E+01	5.1418E+05	6.2121E+02
1.9994E+01	3.6580E-01	4.0150E+01	5.2557E+05	6.2012E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0015E+01	3.6505E-01	4.0068E+01	5.2450E+05	6.1945E+02
2.0117E+01	3.3021E-01	3.6244E+01	4.7444E+05	6.1632E+02
2.0142E+01	3.3272E-01	3.6520E+01	4.7804E+05	6.1555E+02
2.0207E+01	3.4713E-01	3.8101E+01	4.9875E+05	6.1358E+02
2.0244E+01	3.5360E-01	3.8812E+01	5.0805E+05	6.1244E+02
2.0292E+01	3.5682E-01	3.9164E+01	5.1266E+05	6.1099E+02
2.0323E+01	3.5678E-01	3.9161E+01	5.1262E+05	6.1006E+02
2.0363E+01	3.6145E-01	3.9673E+01	5.1932E+05	6.0887E+02
2.0389E+01	3.6106E-01	3.9630E+01	5.1876E+05	6.0809E+02
2.0410E+01	3.6357E-01	3.9906E+01	5.2237E+05	6.0747E+02
2.0462E+01	3.6063E-01	3.9583E+01	5.1815E+05	6.0593E+02
2.0514E+01	3.6275E-01	3.9816E+01	5.2119E+05	6.0438E+02
2.0551E+01	3.5620E-01	3.9097E+01	5.1178E+05	6.0330E+02
2.0586E+01	3.4965E-01	3.8378E+01	5.0237E+05	6.0227E+02
2.0629E+01	3.5504E-01	3.8970E+01	5.1012E+05	6.0102E+02
2.0646E+01	3.5539E-01	3.9008E+01	5.1061E+05	6.0051E+02
2.0707E+01	3.6401E-01	3.9954E+01	5.2300E+05	5.9875E+02
2.0748E+01	3.6506E-01	4.0069E+01	5.2451E+05	5.9756E+02
2.0817E+01	3.5776E-01	3.9268E+01	5.1402E+05	5.9560E+02
2.0853E+01	3.5990E-01	3.9502E+01	5.1709E+05	5.9457E+02
2.0884E+01	3.6313E-01	3.9857E+01	5.2173E+05	5.9369E+02
2.0927E+01	3.5911E-01	3.9416E+01	5.1595E+05	5.9245E+02
2.0964E+01	3.6088E-01	3.9610E+01	5.1850E+05	5.9142E+02
2.0997E+01	3.5832E-01	3.9329E+01	5.1482E+05	5.9049E+02
2.1049E+01	3.6189E-01	3.9721E+01	5.1995E+05	5.8904E+02
2.1078E+01	3.6078E-01	3.9599E+01	5.1836E+05	5.8822E+02
2.1257E+01	3.6966E-01	4.0574E+01	5.3112E+05	5.8326E+02
2.1465E+01	3.7888E-01	4.1587E+01	5.4437E+05	5.7762E+02
2.1701E+01	3.8519E-01	4.2279E+01	5.5343E+05	5.7132E+02
2.2000E+01	3.8747E-01	4.2529E+01	5.5671E+05	5.6356E+02
2.2500E+01	3.7516E-01	4.1178E+01	5.3902E+05	5.5104E+02
2.3000E+01	3.6436E-01	3.9992E+01	5.2350E+05	5.3906E+02
2.3500E+01	3.5465E-01	3.8927E+01	5.0956E+05	5.2759E+02
2.4000E+01	3.4215E-01	3.7555E+01	4.9160E+05	5.1660E+02
2.4500E+01	3.2815E-01	3.6018E+01	4.7148E+05	5.0606E+02
2.5000E+01	3.1735E-01	3.4832E+01	4.5596E+05	4.9594E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.5500E+01	3.1005E-01	3.4031E+01	4.4547E+05	4.8621E+02
2.6000E+01	3.0185E-01	3.3131E+01	4.3368E+05	4.7686E+02
2.6500E+01	2.9474E-01	3.2351E+01	4.2348E+05	4.6786E+02
2.7000E+01	2.8954E-01	3.1781E+01	4.1601E+05	4.5920E+02
2.7500E+01	2.8684E-01	3.1484E+01	4.1213E+05	4.5085E+02
2.8000E+01	2.8044E-01	3.0782E+01	4.0293E+05	4.4280E+02
2.8500E+01	2.7664E-01	3.0364E+01	3.9747E+05	4.3503E+02
2.9000E+01	2.7514E-01	3.0200E+01	3.9532E+05	4.2753E+02
2.9500E+01	2.7114E-01	2.9761E+01	3.8957E+05	4.2029E+02
3.0000E+01	2.6824E-01	2.9442E+01	3.8540E+05	4.1328E+02
3.1000E+01	2.5984E-01	2.8520E+01	3.7333E+05	3.9995E+02
3.2000E+01	2.5454E-01	2.7938E+01	3.6571E+05	3.8745E+02
3.3000E+01	2.4574E-01	2.6972E+01	3.5307E+05	3.7571E+02
3.4000E+01	2.4094E-01	2.6445E+01	3.4617E+05	3.6466E+02
3.5000E+01	2.3474E-01	2.5765E+01	3.3726E+05	3.5424E+02
3.6000E+01	2.3063E-01	2.5315E+01	3.3137E+05	3.4440E+02
3.7000E+01	2.2583E-01	2.4788E+01	3.2447E+05	3.3509E+02
3.8000E+01	2.1873E-01	2.4008E+01	3.1427E+05	3.2627E+02
3.9000E+01	2.1093E-01	2.3152E+01	3.0306E+05	3.1791E+02
4.0000E+01	2.0233E-01	2.2208E+01	2.9070E+05	3.0996E+02
4.1000E+01	1.9593E-01	2.1505E+01	2.8151E+05	3.0240E+02
4.2000E+01	1.9133E-01	2.1000E+01	2.7490E+05	2.9520E+02
4.3000E+01	1.8673E-01	2.0495E+01	2.6829E+05	2.8834E+02
4.4000E+01	1.8443E-01	2.0243E+01	2.6498E+05	2.8178E+02
4.5000E+01	1.8023E-01	1.9782E+01	2.5895E+05	2.7552E+02
4.6000E+01	1.7813E-01	1.9551E+01	2.5593E+05	2.6953E+02
4.7000E+01	1.7263E-01	1.8948E+01	2.4803E+05	2.6380E+02
4.8000E+01	1.6793E-01	1.8432E+01	2.4127E+05	2.5830E+02
4.9000E+01	1.6142E-01	1.7718E+01	2.3193E+05	2.5303E+02
5.0000E+01	1.5512E-01	1.7026E+01	2.2288E+05	2.4797E+02
5.5000E+01	1.3022E-01	1.4293E+01	1.8710E+05	2.2543E+02
6.0000E+01	1.1132E-01	1.2218E+01	1.5994E+05	2.0664E+02
6.5000E+01	9.6915E-02	1.0637E+01	1.3924E+05	1.9074E+02
7.0000E+01	8.4513E-02	9.2762E+00	1.2143E+05	1.7712E+02
7.5000E+01	7.5211E-02	8.2553E+00	1.0806E+05	1.6531E+02
8.0000E+01	6.5810E-02	7.2234E+00	9.4554E+04	1.5498E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.5000E+01	5.7609E-02	6.3232E+00	8.2771E+04	1.4586E+02
9.0000E+01	5.1078E-02	5.6064E+00	7.3388E+04	1.3776E+02
1.0000E+02	4.1759E-02	4.5835E+00	5.9998E+04	1.2398E+02
1.2500E+02	2.5812E-02	2.8332E+00	3.7087E+04	9.9187E+01
1.5000E+02	1.7436E-02	1.9138E+00	2.5052E+04	8.2656E+01
1.7500E+02	1.2366E-02	1.3573E+00	1.7768E+04	7.0848E+01
2.0000E+02	8.7729E-03	9.6292E-01	1.2605E+04	6.1992E+01
2.2500E+02	6.3560E-03	6.9765E-01	9.1322E+03	5.5104E+01
2.5000E+02	4.8363E-03	5.3084E-01	6.9487E+03	4.9594E+01
2.7500E+02	3.7953E-03	4.1657E-01	5.4529E+03	4.5085E+01
3.0000E+02	3.0420E-03	3.3389E-01	4.3706E+03	4.1328E+01
3.5000E+02	2.0416E-03	2.2408E-01	2.9333E+03	3.5424E+01
4.0000E+02	1.4281E-03	1.5674E-01	2.0518E+03	3.0996E+01
4.0110E+02	3.1783E-02	3.4885E+00	4.5665E+04	3.0911E+01
4.0184E+02	5.7353E-03	6.2952E-01	8.2404E+03	3.0854E+01
4.0228E+02	3.2859E-03	3.6066E-01	4.7210E+03	3.0820E+01
4.0265E+02	3.3456E-02	3.6722E+00	4.8069E+04	3.0792E+01
4.0317E+02	6.5956E-02	7.2394E+00	9.4765E+04	3.0752E+01
4.0361E+02	1.0323E-01	1.1331E+01	1.4832E+05	3.0719E+01
4.0390E+02	6.6076E-02	7.2525E+00	9.4936E+04	3.0697E+01
4.0405E+02	3.3456E-02	3.6722E+00	4.8069E+04	3.0685E+01
4.0435E+02	3.3456E-03	3.6722E-01	4.8069E+03	3.0663E+01
4.0479E+02	2.2703E-03	2.4919E-01	3.2619E+03	3.0629E+01
4.0567E+02	1.4935E-03	1.6393E-01	2.1459E+03	3.0563E+01
4.0678E+02	1.2546E-03	1.3770E-01	1.8025E+03	3.0479E+01
4.0773E+02	1.7326E-03	1.9017E-01	2.4893E+03	3.0408E+01
4.0832E+02	2.6884E-03	2.9509E-01	3.8627E+03	3.0364E+01
4.0891E+02	2.3777E-02	2.6098E+00	3.4163E+04	3.0321E+01
4.0921E+02	1.0216E-02	1.1213E+00	1.4678E+04	3.0298E+01
4.0972E+02	8.0055E-03	8.7869E-01	1.1502E+04	3.0261E+01
4.1002E+02	1.4757E-02	1.6197E+00	2.1202E+04	3.0239E+01
4.1039E+02	1.1889E-02	1.3049E+00	1.7081E+04	3.0211E+01
4.1076E+02	1.8879E-02	2.0722E+00	2.7125E+04	3.0184E+01
4.1112E+02	1.4517E-02	1.5935E+00	2.0858E+04	3.0158E+01
4.1157E+02	1.8162E-02	1.9934E+00	2.6094E+04	3.0125E+01
4.1179E+02	1.4517E-02	1.5935E+00	2.0858E+04	3.0109E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

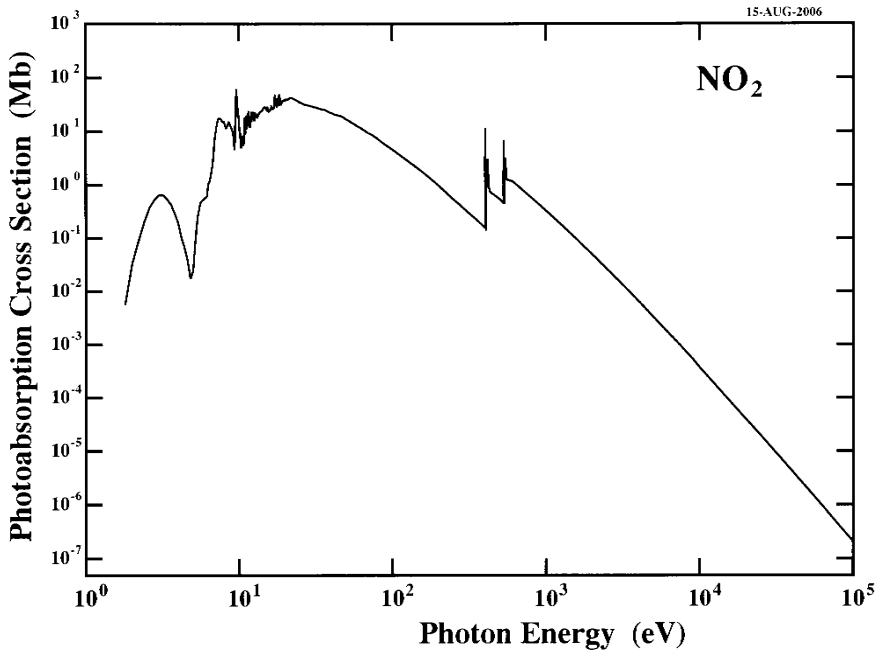
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.1215E+02	1.7923E-02	1.9673E+00	2.5752E+04	3.0082E+01
4.1252E+02	1.4935E-02	1.6393E+00	2.1459E+04	3.0055E+01
4.1341E+02	1.5234E-02	1.6721E+00	2.1888E+04	2.9991E+01
4.1400E+02	1.5892E-02	1.7443E+00	2.2833E+04	2.9948E+01
4.1451E+02	1.7206E-02	1.8885E+00	2.4721E+04	2.9911E+01
4.1495E+02	1.9775E-02	2.1705E+00	2.8412E+04	2.9879E+01
4.1554E+02	2.3120E-02	2.5377E+00	3.3219E+04	2.9837E+01
4.1576E+02	2.5391E-02	2.7869E+00	3.6481E+04	2.9821E+01
4.1628E+02	2.6825E-02	2.9443E+00	3.8541E+04	2.9784E+01
4.1694E+02	2.7422E-02	3.0099E+00	3.9400E+04	2.9737E+01
4.1768E+02	2.5929E-02	2.8460E+00	3.7254E+04	2.9684E+01
4.1842E+02	2.2463E-02	2.4656E+00	3.2275E+04	2.9632E+01
4.1923E+02	1.8222E-02	2.0001E+00	2.6181E+04	2.9574E+01
4.2004E+02	1.3980E-02	1.5344E+00	2.0086E+04	2.9517E+01
4.2129E+02	1.1172E-02	1.2263E+00	1.6052E+04	2.9430E+01
4.2239E+02	9.5586E-03	1.0492E+00	1.3734E+04	2.9353E+01
4.2365E+02	8.6625E-03	9.5081E-01	1.2446E+04	2.9266E+01
4.2564E+02	7.9458E-03	8.7214E-01	1.1416E+04	2.9129E+01
4.2873E+02	7.2289E-03	7.9345E-01	1.0386E+04	2.8919E+01
4.3241E+02	6.5717E-03	7.2132E-01	9.4421E+03	2.8673E+01
4.5000E+02	6.1224E-03	6.7200E-01	8.7965E+03	2.7552E+01
5.0000E+02	4.8469E-03	5.3200E-01	6.9639E+03	2.4797E+01
5.2800E+02	4.1326E-03	4.5360E-01	5.9376E+03	2.3482E+01
5.2925E+02	6.7656E-03	7.4259E-01	9.7206E+03	2.3426E+01
5.2968E+02	1.6587E-02	1.8206E+00	2.3831E+04	2.3407E+01
5.3033E+02	3.0009E-02	3.2938E+00	4.3116E+04	2.3379E+01
5.3149E+02	1.0476E-02	1.1498E+00	1.5051E+04	2.3328E+01
5.3185E+02	2.9954E-02	3.2878E+00	4.3038E+04	2.3312E+01
5.3257E+02	6.2363E-02	6.8451E+00	8.9602E+04	2.3280E+01
5.3315E+02	3.9339E-02	4.3179E+00	5.6521E+04	2.3255E+01
5.3351E+02	2.0842E-02	2.2877E+00	2.9946E+04	2.3239E+01
5.3387E+02	1.0258E-02	1.1259E+00	1.4738E+04	2.3224E+01
5.3402E+02	7.9112E-03	8.6834E-01	1.1367E+04	2.3217E+01
5.3626E+02	3.9830E-03	4.3718E-01	5.7227E+03	2.3120E+01
5.3712E+02	4.0921E-03	4.4915E-01	5.8794E+03	2.3083E+01
5.3763E+02	1.0694E-02	1.1738E+00	1.5365E+04	2.3061E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3821E+02	8.7847E-03	9.6422E-01	1.2622E+04	2.3036E+01
5.3879E+02	1.7787E-02	1.9523E+00	2.5555E+04	2.3012E+01
5.3958E+02	2.7226E-02	2.9884E+00	3.9118E+04	2.2978E+01
5.4001E+02	2.5862E-02	2.8387E+00	3.7158E+04	2.2960E+01
5.4059E+02	2.9190E-02	3.2040E+00	4.1940E+04	2.2935E+01
5.4305E+02	1.7787E-02	1.9523E+00	2.5555E+04	2.2831E+01
5.4435E+02	1.9479E-02	2.1380E+00	2.7986E+04	2.2777E+01
5.4500E+02	2.0624E-02	2.2637E+00	2.9633E+04	2.2749E+01
5.4522E+02	2.2206E-02	2.4374E+00	3.1905E+04	2.2740E+01
5.4594E+02	2.2807E-02	2.5033E+00	3.2768E+04	2.2710E+01
5.4666E+02	2.2916E-02	2.5153E+00	3.2925E+04	2.2680E+01
5.4724E+02	2.1388E-02	2.3475E+00	3.0729E+04	2.2656E+01
5.4760E+02	1.9205E-02	2.1080E+00	2.7594E+04	2.2641E+01
5.4796E+02	1.7514E-02	1.9224E+00	2.5164E+04	2.2627E+01
5.4876E+02	1.5659E-02	1.7187E+00	2.2498E+04	2.2594E+01
5.5006E+02	1.4186E-02	1.5570E+00	2.0381E+04	2.2540E+01
5.5194E+02	1.2985E-02	1.4253E+00	1.8657E+04	2.2463E+01
5.5425E+02	1.2113E-02	1.3295E+00	1.7403E+04	2.2370E+01
5.5678E+02	1.1294E-02	1.2397E+00	1.6227E+04	2.2268E+01
6.0000E+02	1.0753E-02	1.1802E+00	1.5449E+04	2.0664E+01
7.0000E+02	7.3400E-03	8.0565E-01	1.0546E+04	1.7712E+01
8.0000E+02	5.2376E-03	5.7488E-01	7.5252E+03	1.5498E+01
9.0000E+02	3.8675E-03	4.2450E-01	5.5567E+03	1.3776E+01
1.0000E+03	2.9357E-03	3.2223E-01	4.2180E+03	1.2398E+01
1.2500E+03	1.6168E-03	1.7746E-01	2.3230E+03	9.9187E+00
1.5000E+03	9.8180E-04	1.0776E-01	1.4106E+03	8.2656E+00
1.7500E+03	6.3948E-04	7.0190E-02	9.1879E+02	7.0848E+00
2.0000E+03	4.3909E-04	4.8195E-02	6.3088E+02	6.1992E+00
2.2500E+03	3.1417E-04	3.4484E-02	4.5140E+02	5.5104E+00
2.5000E+03	2.3260E-04	2.5531E-02	3.3420E+02	4.9594E+00
2.7500E+03	1.7672E-04	1.9397E-02	2.5391E+02	4.5085E+00
3.0000E+03	1.3724E-04	1.5064E-02	1.9718E+02	4.1328E+00
3.5000E+03	8.7213E-05	9.5726E-03	1.2531E+02	3.5424E+00
4.0000E+03	5.8517E-05	6.4228E-03	8.4075E+01	3.0996E+00
4.5000E+03	4.0931E-05	4.4927E-03	5.8809E+01	2.7552E+00
5.0000E+03	2.9663E-05	3.2558E-03	4.2619E+01	2.4797E+00

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($cm^2\ g^{-1}$)	λ (Å)
6.0000E+03	1.6936E-05	1.8589E-03	2.4333E+01	2.0664E+00
7.0000E+03	1.0521E-05	1.1548E-03	1.5116E+01	1.7712E+00
8.0000E+03	6.9155E-06	7.5905E-04	9.9360E+00	1.5498E+00
9.0000E+03	4.7589E-06	5.2234E-04	6.8374E+00	1.3776E+00
1.0000E+04	3.3053E-06	3.6279E-04	4.7490E+00	1.2398E+00
1.2500E+04	1.6195E-06	1.7775E-04	2.3268E+00	9.9187E-01
1.5000E+04	9.0394E-07	9.9217E-05	1.2988E+00	8.2656E-01
1.7500E+04	5.5215E-07	6.0604E-05	7.9331E-01	7.0848E-01
2.0000E+04	3.6025E-07	3.9541E-05	5.1760E-01	6.1992E-01
2.2500E+04	2.4719E-07	2.7132E-05	3.5516E-01	5.5104E-01
2.5000E+04	1.7649E-07	1.9371E-05	2.5357E-01	4.9594E-01
2.7500E+04	1.2978E-07	1.4244E-05	1.8646E-01	4.5085E-01
3.0000E+04	9.7603E-08	1.0713E-05	1.4023E-01	4.1328E-01
3.5000E+04	5.8872E-08	6.4619E-06	8.4586E-02	3.5424E-01
4.0000E+04	3.8000E-08	4.1709E-06	5.4597E-02	3.0996E-01
4.5000E+04	2.5827E-08	2.8348E-06	3.7108E-02	2.7552E-01
5.0000E+04	1.8283E-08	2.0068E-06	2.6269E-02	2.4797E-01
6.0000E+04	1.0057E-08	1.1039E-06	1.4450E-02	2.0664E-01
7.0000E+04	6.0674E-09	6.6596E-07	8.7175E-03	1.7712E-01
8.0000E+04	3.9150E-09	4.2971E-07	5.6249E-03	1.5498E-01
9.0000E+04	2.6583E-09	2.9178E-07	3.8194E-03	1.3776E-01
1.0000E+05	1.8787E-09	2.0621E-07	2.6993E-03	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_a = 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi = \sqrt{\frac{E_K}{E-E_K}}\ ,$$

where E_K = 412.6 and 541.3 eV for nitrogen and oxygen atoms, respectively.

NO_2

Energy, eV	Source
1.24 - 4.86	Au *et al*., Chem. Phys., 218 (1997) 109 Fig. 2 (a)
4.80 - 6.30	Au *et al*., Chem. Phys., 218 (1997) 109 Fig. 2 (a)
6.30 - 7.85	Au *et al*., Chem. Phys., 218 (1997) 109 Fig. 3
7.85 - 8.25	Au *et al*., Chem. Phys., 218 (1997) 109 Fig. 3
8.25 - 9.38	Au *et al*., Chem. Phys., 218 (1997) 109 Fig. 3
9.38 - 9.58595 (AIP)	Table 5.9 (Berkowitz's book*) Nakayama *et al*., J. Chem. Phys., 30 (1959) 1180
AIP - 11.24	Table 5.9 p.208 (Berkowitz's book*) Nakayama *et al*., J. Chem. Phys., 30 (1959) 1180
11.24 - 22.00	Data from Morioka *et al*. nomarized to that from Au *et al*. Morioka *et al*., Can. J. Phys., 56 (1978) 962 Au *et al*., Chem. Phys., 218 (1997) 109
22.0 - 90.0	Au *et al*., Chem. Phys., 218 (1997) 109
90.0 - 200.0	Au *et al*., Chem. Phys., 218 (1997) 109
200.0 - 437.5	Table 5.10 p.211 (Berkowitz's book*)
400 - 437.5	Table 5.9 p.208, Fig. 5.10 p.211 (Berkowitz's book*)
437.5 - 566.3	Henke *et al*., Atom. Data Nucl. Data Tables, 54 (1993) 181
528.0 - 566.3	Table 5.9 p.208, Fig. 5.10 p.211 (Berkowitz's book*)
566.3 - 2293.2	Table 5.10 p.211 (Berkowitz's book*)
2293.2 - 10000	Table 5.10 p.211 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Hydrogen Sulfide (H_2S)

Z = 18 Molecular Mass : $M_{\rm A}$ = 34.08088

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
5.2200E+00	1.1366E-03	1.2475E-01	2.2043E+03	2.3752E+03
5.3050E+00	1.8409E-03	2.0205E-01	3.5703E+03	2.3371E+03
5.3909E+00	3.2698E-03	3.5890E-01	6.3418E+03	2.2999E+03
5.4717E+00	5.2436E-03	5.7555E-01	1.0170E+04	2.2659E+03
5.5526E+00	7.7609E-03	8.5185E-01	1.5052E+04	2.2329E+03
5.6303E+00	1.0461E-02	1.1482E+00	2.0288E+04	2.2021E+03
5.7159E+00	1.4245E-02	1.5635E+00	2.7628E+04	2.1691E+03
5.8086E+00	1.9296E-02	2.1180E+00	3.7425E+04	2.1345E+03
5.8925E+00	2.4802E-02	2.7223E+00	4.8103E+04	2.1041E+03
5.9591E+00	3.0130E-02	3.3071E+00	5.8436E+04	2.0806E+03
6.0239E+00	3.6363E-02	3.9913E+00	7.0526E+04	2.0582E+03
6.0872E+00	4.4409E-02	4.8743E+00	8.6130E+04	2.0368E+03
6.1681E+00	5.6705E-02	6.2240E+00	1.0998E+05	2.0101E+03
6.1912E+00	5.9597E-02	6.5414E+00	1.1559E+05	2.0026E+03
6.2076E+00	6.0137E-02	6.6007E+00	1.1664E+05	1.9973E+03
6.2310E+00	5.8957E-02	6.4711E+00	1.1435E+05	1.9898E+03
6.2524E+00	5.8320E-02	6.4012E+00	1.1311E+05	1.9830E+03
6.2745E+00	5.8497E-02	6.4207E+00	1.1345E+05	1.9760E+03
6.2863E+00	5.9400E-02	6.5198E+00	1.1521E+05	1.9723E+03
6.3393E+00	6.4551E-02	7.0851E+00	1.2520E+05	1.9558E+03
6.3549E+00	6.5001E-02	7.1346E+00	1.2607E+05	1.9510E+03
6.3706E+00	6.4456E-02	7.0748E+00	1.2501E+05	1.9462E+03
6.4071E+00	5.9924E-02	6.5773E+00	1.1622E+05	1.9351E+03
6.4334E+00	5.5938E-02	6.1398E+00	1.0849E+05	1.9272E+03
6.4545E+00	5.4848E-02	6.0202E+00	1.0638E+05	1.9209E+03
6.4778E+00	5.4754E-02	6.0099E+00	1.0620E+05	1.9140E+03
6.4995E+00	5.5113E-02	6.0492E+00	1.0689E+05	1.9076E+03
6.5193E+00	5.4024E-02	5.9297E+00	1.0478E+05	1.9018E+03
6.5448E+00	5.0490E-02	5.5418E+00	9.7924E+04	1.8944E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
6.5942E+00	4.2789E-02	4.6965E+00	8.2989E+04	1.8802E+03
6.6316E+00	4.0610E-02	4.4574E+00	7.8764E+04	1.8696E+03
6.6615E+00	3.8525E-02	4.2285E+00	7.4719E+04	1.8612E+03
6.7037E+00	3.4355E-02	3.7708E+00	6.6631E+04	1.8495E+03
6.7456E+00	2.8737E-02	3.1542E+00	5.5735E+04	1.8380E+03
6.7948E+00	2.5653E-02	2.8157E+00	4.9753E+04	1.8247E+03
6.8303E+00	2.3022E-02	2.5270E+00	4.4652E+04	1.8152E+03
6.8640E+00	1.9488E-02	2.1390E+00	3.7797E+04	1.8063E+03
6.9087E+00	1.6586E-02	1.8205E+00	3.2168E+04	1.7946E+03
6.9537E+00	1.4226E-02	1.5615E+00	2.7592E+04	1.7830E+03
7.0542E+00	1.0049E-02	1.1030E+00	1.9490E+04	1.7576E+03
7.1975E+00	5.6866E-03	6.2417E-01	1.1029E+04	1.7226E+03
7.3424E+00	2.9537E-03	3.2420E-01	5.7287E+03	1.6886E+03
7.5074E+00	1.5767E-03	1.7306E-01	3.0580E+03	1.6515E+03
7.6600E+00	1.1072E-03	1.2152E-01	2.1473E+03	1.6186E+03
7.7519E+00	1.2783E-03	1.4031E-01	2.4793E+03	1.5994E+03
7.8000E+00	2.5512E-03	2.8002E-01	4.9481E+03	1.5895E+03
7.8061E+00	1.2646E-02	1.3880E+00	2.4526E+04	1.5883E+03
7.8219E+00	4.1805E-02	4.5885E+00	8.1080E+04	1.5851E+03
7.8387E+00	1.0346E-01	1.1356E+01	2.0067E+05	1.5817E+03
7.8506E+00	5.7879E-02	6.3528E+00	1.1226E+05	1.5793E+03
7.8580E+00	5.6208E-02	6.1694E+00	1.0901E+05	1.5778E+03
7.8760E+00	2.8464E-02	3.1242E+00	5.5205E+04	1.5742E+03
7.8895E+00	7.4785E-04	8.2084E-02	1.4504E+03	1.5715E+03
7.9380E+00	4.5090E-04	4.9491E-02	8.7451E+02	1.5619E+03
7.9554E+00	1.3350E-02	1.4653E+00	2.5891E+04	1.5585E+03
7.9625E+00	1.8182E-02	1.9957E+00	3.5264E+04	1.5571E+03
7.9692E+00	3.4396E-02	3.7753E+00	6.6711E+04	1.5558E+03
7.9810E+00	4.4077E-02	4.8380E+00	8.5488E+04	1.5535E+03
7.9902E+00	8.4657E-02	9.2921E+00	1.6419E+05	1.5517E+03
8.0010E+00	1.1873E-01	1.3032E+01	2.3028E+05	1.5496E+03
8.0078E+00	1.9670E-01	2.1590E+01	3.8150E+05	1.5483E+03
8.0166E+00	3.6245E-01	3.9783E+01	7.0296E+05	1.5466E+03
8.0202E+00	4.8433E-01	5.3161E+01	9.3936E+05	1.5459E+03
8.0347E+00	3.0057E-01	3.2991E+01	5.8296E+05	1.5431E+03
8.0467E+00	1.8022E-01	1.9781E+01	3.4953E+05	1.5408E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.0609E+00	9.0738E-02	9.9595E+00	1.7599E+05	1.5381E+03
8.0735E+00	5.4902E-02	6.0261E+00	1.0648E+05	1.5357E+03
8.0903E+00	3.2047E-02	3.5175E+00	6.2155E+04	1.5325E+03
8.1094E+00	4.0063E-02	4.3973E+00	7.7701E+04	1.5289E+03
8.1269E+00	9.3599E-02	1.0274E+01	1.8154E+05	1.5256E+03
8.1365E+00	5.9410E-02	6.5209E+00	1.1523E+05	1.5238E+03
8.1435E+00	5.6119E-02	6.1597E+00	1.0884E+05	1.5225E+03
8.1515E+00	7.7204E-02	8.4739E+00	1.4974E+05	1.5210E+03
8.1633E+00	1.4866E-01	1.6317E+01	2.8832E+05	1.5188E+03
8.1719E+00	2.5101E-01	2.7551E+01	4.8683E+05	1.5172E+03
8.1757E+00	7.0611E-01	7.7503E+01	1.3695E+06	1.5165E+03
8.1789E+00	3.3874E-01	3.7181E+01	6.5699E+05	1.5159E+03
8.1827E+00	2.4282E-01	2.6652E+01	4.7095E+05	1.5152E+03
8.1886E+00	3.0618E-01	3.3607E+01	5.9383E+05	1.5141E+03
8.2011E+00	1.7281E-01	1.8968E+01	3.3517E+05	1.5118E+03
8.2120E+00	4.4258E-01	4.8578E+01	8.5838E+05	1.5098E+03
8.2169E+00	2.2799E-01	2.5025E+01	4.4219E+05	1.5089E+03
8.2436E+00	1.3357E-01	1.4661E+01	2.5906E+05	1.5040E+03
8.2508E+00	1.6603E-01	1.8224E+01	3.2202E+05	1.5027E+03
8.2607E+00	2.7000E-01	2.9636E+01	5.2367E+05	1.5009E+03
8.2662E+00	8.4863E-01	9.3146E+01	1.6459E+06	1.4999E+03
8.2711E+00	1.9192E-01	2.1066E+01	3.7224E+05	1.4990E+03
8.2772E+00	2.4553E-01	2.6950E+01	4.7621E+05	1.4979E+03
8.2805E+00	3.2029E-01	3.5155E+01	6.2119E+05	1.4973E+03
8.2816E+00	2.5039E-01	2.7483E+01	4.8562E+05	1.4971E+03
8.2866E+00	2.1460E-01	2.3554E+01	4.1621E+05	1.4962E+03
8.2866E+00	2.1460E-01	2.3554E+01	4.1621E+05	1.4962E+03
8.2888E+00	1.3656E-01	1.4989E+01	2.6486E+05	1.4958E+03
8.2977E+00	6.1745E-02	6.7772E+00	1.1975E+05	1.4942E+03
8.3094E+00	1.9171E-01	2.1042E+01	3.7182E+05	1.4921E+03
8.3149E+00	2.8271E-01	3.1031E+01	5.4832E+05	1.4911E+03
8.3177E+00	4.7775E-01	5.2438E+01	9.2658E+05	1.4906E+03
8.3205E+00	2.8268E-01	3.1027E+01	5.4825E+05	1.4901E+03
8.3244E+00	2.5015E-01	2.7457E+01	4.8516E+05	1.4894E+03
8.3267E+00	1.9975E-01	2.1924E+01	3.8741E+05	1.4890E+03
8.3412E+00	1.6553E-01	1.8169E+01	3.2104E+05	1.4864E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.3463E+00	1.3787E-01	1.5133E+01	2.6741E+05	1.4855E+03
8.3536E+00	7.1188E-02	7.8137E+00	1.3807E+05	1.4842E+03
8.3598E+00	7.1155E-02	7.8100E+00	1.3800E+05	1.4831E+03
8.3683E+00	3.8600E-02	4.2368E+00	7.4865E+04	1.4816E+03
8.3762E+00	4.1807E-02	4.5888E+00	8.1084E+04	1.4802E+03
8.3915E+00	7.2607E-02	7.9694E+00	1.4082E+05	1.4775E+03
8.4012E+00	1.1157E-01	1.2245E+01	2.1638E+05	1.4758E+03
8.4057E+00	2.0257E-01	2.2234E+01	3.9288E+05	1.4750E+03
8.4148E+00	8.2233E-02	9.0260E+00	1.5949E+05	1.4734E+03
8.4257E+00	1.0981E-01	1.2053E+01	2.1298E+05	1.4715E+03
8.4354E+00	9.1873E-02	1.0084E+01	1.7819E+05	1.4698E+03
8.4423E+00	9.9964E-02	1.0972E+01	1.9388E+05	1.4686E+03
8.4481E+00	1.3894E-01	1.5250E+01	2.6947E+05	1.4676E+03
8.4562E+00	2.3317E-01	2.5593E+01	4.5223E+05	1.4662E+03
8.4585E+00	3.5995E-01	3.9509E+01	6.9812E+05	1.4658E+03
8.4648E+00	2.8514E-01	3.1298E+01	5.5303E+05	1.4647E+03
8.4723E+00	2.5259E-01	2.7725E+01	4.8990E+05	1.4634E+03
8.4921E+00	1.3708E-01	1.5046E+01	2.6586E+05	1.4600E+03
8.5020E+00	1.6954E-01	1.8609E+01	3.2883E+05	1.4583E+03
8.5055E+00	3.0443E-01	3.3414E+01	5.9043E+05	1.4577E+03
8.5096E+00	1.9063E-01	2.0924E+01	3.6973E+05	1.4570E+03
8.5142E+00	1.3696E-01	1.5033E+01	2.6563E+05	1.4562E+03
8.5195E+00	1.3694E-01	1.5030E+01	2.6559E+05	1.4553E+03
8.5318E+00	9.2986E-02	1.0206E+01	1.8035E+05	1.4532E+03
8.5383E+00	1.0921E-01	1.1987E+01	2.1181E+05	1.4521E+03
8.5442E+00	1.3193E-01	1.4481E+01	2.5589E+05	1.4511E+03
8.5500E+00	1.3190E-01	1.4478E+01	2.5582E+05	1.4501E+03
8.5565E+00	1.9039E-01	2.0897E+01	3.6925E+05	1.4490E+03
8.5619E+00	2.4724E-01	2.7138E+01	4.7953E+05	1.4481E+03
8.5701E+00	1.5455E-01	1.6964E+01	2.9976E+05	1.4467E+03
8.5749E+00	1.6428E-01	1.8032E+01	3.1862E+05	1.4459E+03
8.5820E+00	1.2523E-01	1.3745E+01	2.4288E+05	1.4447E+03
8.5891E+00	8.6184E-02	9.4597E+00	1.6715E+05	1.4435E+03
8.5969E+00	1.2028E-01	1.3202E+01	2.3328E+05	1.4422E+03
8.6112E+00	9.2571E-02	1.0161E+01	1.7954E+05	1.4398E+03
8.6268E+00	1.1849E-01	1.3006E+01	2.2982E+05	1.4372E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.6352E+00	1.8509E-01	2.0316E+01	3.5898E+05	1.4358E+03
8.6412E+00	2.5658E-01	2.8163E+01	4.9764E+05	1.4348E+03
8.6503E+00	4.5646E-01	5.0102E+01	8.8530E+05	1.4333E+03
8.6533E+00	6.4175E-01	7.0439E+01	1.2447E+06	1.4328E+03
8.6563E+00	5.1821E-01	5.6879E+01	1.0051E+06	1.4323E+03
8.6617E+00	6.2382E-01	6.8471E+01	1.2099E+06	1.4314E+03
8.6660E+00	6.3193E-01	6.9362E+01	1.2256E+06	1.4307E+03
8.6684E+00	7.0669E-01	7.7567E+01	1.3706E+06	1.4303E+03
8.6745E+00	5.9776E-01	6.5611E+01	1.1593E+06	1.4293E+03
8.6866E+00	3.8151E-01	4.1875E+01	7.3994E+05	1.4273E+03
8.6958E+00	2.9044E-01	3.1879E+01	5.6330E+05	1.4258E+03
8.7104E+00	2.0421E-01	2.2415E+01	3.9607E+05	1.4234E+03
8.7221E+00	1.9116E-01	2.0982E+01	3.7075E+05	1.4215E+03
8.7337E+00	2.2360E-01	2.4543E+01	4.3368E+05	1.4196E+03
8.7553E+00	1.6823E-01	1.8465E+01	3.2628E+05	1.4161E+03
8.7702E+00	2.1855E-01	2.3988E+01	4.2387E+05	1.4137E+03
8.7770E+00	3.5668E-01	3.9149E+01	6.9178E+05	1.4126E+03
8.7851E+00	1.1108E+00	1.2192E+02	2.1544E+06	1.4113E+03
8.8057E+00	2.0405E+00	2.2397E+02	3.9576E+06	1.4080E+03
8.8113E+00	1.1400E+00	1.2512E+02	2.2110E+06	1.4071E+03
8.8207E+00	4.2960E-01	4.7154E+01	8.3321E+05	1.4056E+03
8.8346E+00	3.3526E-01	3.6798E+01	6.5022E+05	1.4034E+03
8.8738E+00	2.8468E-01	3.1247E+01	5.5214E+05	1.3972E+03
8.8865E+00	4.8292E-01	5.3006E+01	9.3662E+05	1.3952E+03
8.8992E+00	1.0892E+00	1.1955E+02	2.1125E+06	1.3932E+03
8.9037E+00	9.1194E-01	1.0010E+02	1.7687E+06	1.3925E+03
8.9114E+00	2.0839E+00	2.2873E+02	4.0417E+06	1.3913E+03
8.9152E+00	8.3388E-01	9.1527E+01	1.6173E+06	1.3907E+03
8.9242E+00	1.5686E+00	1.7217E+02	3.0422E+06	1.3893E+03
8.9326E+00	7.0701E-01	7.7602E+01	1.3712E+06	1.3880E+03
8.9410E+00	2.5184E-01	2.7642E+01	4.8844E+05	1.3867E+03
8.9779E+00	1.5089E-01	1.6562E+01	2.9266E+05	1.3810E+03
9.0046E+00	1.6051E-01	1.7618E+01	3.1132E+05	1.3769E+03
9.0190E+00	1.8971E-01	2.0823E+01	3.6794E+05	1.3747E+03
9.0348E+00	1.8801E-01	2.0636E+01	3.6464E+05	1.3723E+03
9.0638E+00	2.1063E-01	2.3119E+01	4.0851E+05	1.3679E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0798E+00	1.9593E-01	2.1505E+01	3.8000E+05	1.3655E+03
9.0984E+00	2.4622E-01	2.7026E+01	4.7755E+05	1.3627E+03
9.1084E+00	2.5755E-01	2.8269E+01	4.9952E+05	1.3612E+03
9.1279E+00	1.8758E-01	2.0589E+01	3.6381E+05	1.3583E+03
9.1481E+00	1.7447E-01	1.9150E+01	3.3839E+05	1.3553E+03
9.1650E+00	1.9066E-01	2.0926E+01	3.6977E+05	1.3528E+03
9.1847E+00	1.8731E-01	2.0559E+01	3.6328E+05	1.3499E+03
9.1963E+00	2.3927E-01	2.6263E+01	4.6406E+05	1.3482E+03
9.2113E+00	2.8960E-01	3.1787E+01	5.6167E+05	1.3460E+03
9.2147E+00	4.2937E-01	4.7128E+01	8.3275E+05	1.3455E+03
9.2161E+00	3.1721E-01	3.4817E+01	6.1523E+05	1.3453E+03
9.2243E+00	2.7166E-01	2.9818E+01	5.2688E+05	1.3441E+03
9.2319E+00	2.9600E-01	3.2489E+01	5.7409E+05	1.3430E+03
9.2360E+00	2.6185E-01	2.8741E+01	5.0785E+05	1.3424E+03
9.2512E+00	2.3252E-01	2.5522E+01	4.5098E+05	1.3402E+03
9.2629E+00	2.3247E-01	2.5516E+01	4.5087E+05	1.3385E+03
9.2858E+00	2.1774E-01	2.3899E+01	4.2230E+05	1.3352E+03
9.3053E+00	3.2656E-01	3.5844E+01	6.3336E+05	1.3324E+03
9.3102E+00	1.0808E+00	1.1863E+02	2.0962E+06	1.3317E+03
9.3179E+00	3.9315E-01	4.3152E+01	7.6251E+05	1.3306E+03
9.3235E+00	5.2803E-01	5.7957E+01	1.0241E+06	1.3298E+03
9.3298E+00	3.2158E-01	3.5297E+01	6.2370E+05	1.3289E+03
9.3439E+00	1.9473E-01	2.1374E+01	3.7768E+05	1.3269E+03
9.3524E+00	1.7682E-01	1.9408E+01	3.4294E+05	1.3257E+03
9.3630E+00	1.9465E-01	2.1365E+01	3.7752E+05	1.3242E+03
9.4127E+00	1.4891E-01	1.6345E+01	2.8882E+05	1.3172E+03
9.4227E+00	1.6187E-01	1.7767E+01	3.1395E+05	1.3158E+03
9.4407E+00	2.3657E-01	2.5966E+01	4.5883E+05	1.3133E+03
9.4428E+00	5.9415E-01	6.5215E+01	1.1524E+06	1.3130E+03
9.4500E+00	2.3815E-01	2.6140E+01	4.6189E+05	1.3120E+03
9.4572E+00	4.5593E-01	5.0044E+01	8.8428E+05	1.3110E+03
9.4601E+00	3.0963E-01	3.3986E+01	6.0053E+05	1.3106E+03
9.4637E+00	2.9824E-01	3.2735E+01	5.7843E+05	1.3101E+03
9.4738E+00	1.2752E-01	1.3997E+01	2.4733E+05	1.3087E+03
9.4869E+00	1.1121E-01	1.2207E+01	2.1569E+05	1.3069E+03
9.5116E+00	1.6962E-01	1.8617E+01	3.2897E+05	1.3035E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.5263E+00	2.2482E-01	2.4676E+01	4.3604E+05	1.3015E+03
9.5321E+00	3.8572E-01	4.2337E+01	7.4810E+05	1.3007E+03
9.5350E+00	7.4818E-01	8.2121E+01	1.4511E+06	1.3003E+03
9.5394E+00	7.1403E-01	7.8372E+01	1.3848E+06	1.2997E+03
9.5490E+00	1.1822E+00	1.2975E+02	2.2928E+06	1.2984E+03
9.5630E+00	3.4982E-01	3.8397E+01	6.7848E+05	1.2965E+03
9.5748E+00	2.5225E-01	2.7687E+01	4.8923E+05	1.2949E+03
9.5837E+00	3.0260E-01	3.3213E+01	5.8688E+05	1.2937E+03
9.5948E+00	6.9754E-01	7.6563E+01	1.3529E+06	1.2922E+03
9.6052E+00	7.3650E-01	8.0839E+01	1.4284E+06	1.2908E+03
9.6119E+00	1.4028E+00	1.5398E+02	2.7208E+06	1.2899E+03
9.6149E+00	7.6897E-01	8.4403E+01	1.4914E+06	1.2895E+03
9.6216E+00	7.4781E-01	8.2081E+01	1.4504E+06	1.2886E+03
9.6321E+00	3.8530E-01	4.2291E+01	7.4729E+05	1.2872E+03
9.6478E+00	2.7958E-01	3.0687E+01	5.4224E+05	1.2851E+03
9.6659E+00	2.8600E-01	3.1392E+01	5.5470E+05	1.2827E+03
9.7802E+00	1.5714E-01	1.7247E+01	3.0476E+05	1.2677E+03
9.7864E+00	1.7661E-01	1.9385E+01	3.4254E+05	1.2669E+03
9.7911E+00	2.8712E-01	3.1515E+01	5.5687E+05	1.2663E+03
9.7957E+00	5.3092E-01	5.8275E+01	1.0297E+06	1.2657E+03
9.7988E+00	2.9198E-01	3.2048E+01	5.6629E+05	1.2653E+03
9.8050E+00	3.8784E-01	4.2570E+01	7.5222E+05	1.2645E+03
9.8143E+00	1.8463E-01	2.0265E+01	3.5809E+05	1.2633E+03
9.8330E+00	8.5406E-02	9.3743E+00	1.6564E+05	1.2609E+03
9.8478E+00	2.5276E-01	2.7744E+01	4.9024E+05	1.2590E+03
9.8525E+00	1.7635E-01	1.9357E+01	3.4204E+05	1.2584E+03
9.8572E+00	2.3485E-01	2.5777E+01	4.5549E+05	1.2578E+03
9.8714E+00	9.6633E-02	1.0607E+01	1.8742E+05	1.2560E+03
9.8792E+00	1.3561E-01	1.4885E+01	2.6302E+05	1.2550E+03
9.8879E+00	4.5253E-01	4.9671E+01	8.7769E+05	1.2539E+03
9.8966E+00	7.3371E-01	8.0532E+01	1.4230E+06	1.2528E+03
9.9037E+00	5.2399E-01	5.7514E+01	1.0163E+06	1.2519E+03
9.9116E+00	7.0763E-01	7.7671E+01	1.3725E+06	1.2509E+03
9.9164E+00	6.3122E-01	6.9284E+01	1.2243E+06	1.2503E+03
9.9227E+00	8.2950E-01	9.1046E+01	1.6088E+06	1.2495E+03
9.9307E+00	4.7350E-01	5.1971E+01	9.1834E+05	1.2485E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.9394E+00	4.1982E-01	4.6080E+01	8.1424E+05	1.2474E+03
9.9466E+00	2.8651E-01	3.1448E+01	5.5568E+05	1.2465E+03
9.9714E+00	1.7427E-01	1.9128E+01	3.3799E+05	1.2434E+03
9.9915E+00	1.8069E-01	1.9833E+01	3.5045E+05	1.2409E+03
1.0008E+01	1.6763E-01	1.8399E+01	3.2511E+05	1.2389E+03
1.0026E+01	2.8946E-01	3.1771E+01	5.6140E+05	1.2366E+03
1.0034E+01	2.5854E-01	2.8378E+01	5.0144E+05	1.2356E+03
1.0063E+01	1.3490E-01	1.4807E+01	2.6165E+05	1.2321E+03
1.0074E+01	2.5189E-01	2.7648E+01	4.8854E+05	1.2307E+03
1.0082E+01	5.1193E-01	5.6190E+01	9.9289E+05	1.2298E+03
1.0091E+01	8.7274E-01	9.5793E+01	1.6927E+06	1.2287E+03
1.0108E+01	4.4518E-01	4.8864E+01	8.6343E+05	1.2266E+03
1.0122E+01	1.8507E-01	2.0313E+01	3.5894E+05	1.2249E+03
1.0139E+01	1.2811E-01	1.4062E+01	2.4848E+05	1.2228E+03
1.0149E+01	1.4271E-01	1.5664E+01	2.7678E+05	1.2216E+03
1.0153E+01	1.9145E-01	2.1014E+01	3.7132E+05	1.2212E+03
1.0167E+01	2.4666E-01	2.7074E+01	4.7840E+05	1.2195E+03
1.0181E+01	1.6697E-01	1.8327E+01	3.2384E+05	1.2178E+03
1.0187E+01	2.6285E-01	2.8850E+01	5.0979E+05	1.2171E+03
1.0192E+01	7.3420E-01	8.0587E+01	1.4240E+06	1.2165E+03
1.0209E+01	3.2941E-01	3.6157E+01	6.3889E+05	1.2145E+03
1.0215E+01	2.4649E-01	2.7055E+01	4.7807E+05	1.2138E+03
1.0225E+01	2.1232E-01	2.3304E+01	4.1179E+05	1.2126E+03
1.0233E+01	2.5780E-01	2.8296E+01	5.0000E+05	1.2116E+03
1.0247E+01	1.8623E-01	2.0441E+01	3.6120E+05	1.2100E+03
1.0247E+01	2.1874E-01	2.4009E+01	4.2424E+05	1.2099E+03
1.0256E+01	2.6096E-01	2.8644E+01	5.0614E+05	1.2089E+03
1.0264E+01	5.0475E-01	5.5402E+01	9.7897E+05	1.2080E+03
1.0270E+01	2.7879E-01	3.0601E+01	5.4072E+05	1.2072E+03
1.0284E+01	2.1860E-01	2.3994E+01	4.2397E+05	1.2056E+03
1.0290E+01	2.5760E-01	2.8274E+01	4.9961E+05	1.2049E+03
1.0294E+01	4.1036E-01	4.5042E+01	7.9590E+05	1.2044E+03
1.0305E+01	2.9655E-01	3.2550E+01	5.7516E+05	1.2032E+03
1.0327E+01	2.4446E-01	2.6832E+01	4.7412E+05	1.2006E+03
1.0334E+01	3.0295E-01	3.3252E+01	5.8757E+05	1.1998E+03
1.0343E+01	2.8504E-01	3.1286E+01	5.5282E+05	1.1987E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0350E+01	3.4027E-01	3.7348E+01	6.5995E+05	1.1979E+03
1.0364E+01	2.5245E-01	2.7709E+01	4.8963E+05	1.1963E+03
1.0367E+01	3.0608E-01	3.3596E+01	5.9365E+05	1.1960E+03
1.0371E+01	4.0197E-01	4.4121E+01	7.7962E+05	1.1955E+03
1.0379E+01	3.8243E-01	4.1976E+01	7.4172E+05	1.1946E+03
1.0387E+01	4.0678E-01	4.4649E+01	7.8895E+05	1.1936E+03
1.0394E+01	3.5149E-01	3.8580E+01	6.8172E+05	1.1928E+03
1.0414E+01	3.4980E-01	3.8395E+01	6.7844E+05	1.1905E+03
1.0422E+01	3.1238E-01	3.4287E+01	6.0586E+05	1.1896E+03
1.0436E+01	3.2859E-01	3.6067E+01	6.3731E+05	1.1881E+03
1.0467E+01	3.2919E-01	3.6133E+01	6.3847E+05	1.1846E+03
1.0700E+01	3.4640E-01	3.8021E+01	6.7183E+05	1.1587E+03
1.1200E+01	3.8726E-01	4.2506E+01	7.5109E+05	1.1070E+03
1.1700E+01	4.1252E-01	4.5278E+01	8.0007E+05	1.0597E+03
1.2200E+01	4.1102E-01	4.5114E+01	7.9717E+05	1.0163E+03
1.2700E+01	4.2280E-01	4.6406E+01	8.2001E+05	9.7625E+02
1.3200E+01	4.9175E-01	5.3974E+01	9.5374E+05	9.3927E+02
1.3700E+01	5.4188E-01	5.9477E+01	1.0510E+06	9.0499E+02
1.4200E+01	5.4376E-01	5.9684E+01	1.0546E+06	8.7313E+02
1.4700E+01	5.2847E-01	5.8005E+01	1.0250E+06	8.4343E+02
1.5200E+01	5.1689E-01	5.6734E+01	1.0025E+06	8.1569E+02
1.5700E+01	5.0290E-01	5.5199E+01	9.7537E+05	7.8971E+02
1.6200E+01	4.8870E-01	5.3641E+01	9.4784E+05	7.6533E+02
1.6700E+01	4.7003E-01	5.1591E+01	9.1162E+05	7.4242E+02
1.7200E+01	4.4990E-01	4.9382E+01	8.7258E+05	7.2084E+02
1.7700E+01	4.2820E-01	4.6999E+01	8.3049E+05	7.0048E+02
1.8200E+01	4.0933E-01	4.4928E+01	7.9388E+05	6.8123E+02
1.8700E+01	3.8878E-01	4.2673E+01	7.5403E+05	6.6302E+02
1.9200E+01	3.6230E-01	3.9766E+01	7.0268E+05	6.4575E+02
1.9700E+01	3.4239E-01	3.7581E+01	6.6406E+05	6.2936E+02
2.0200E+01	3.1641E-01	3.4729E+01	6.1367E+05	6.1378E+02
2.0700E+01	2.9538E-01	3.2421E+01	5.7288E+05	5.9896E+02
2.1200E+01	2.7798E-01	3.0511E+01	5.3914E+05	5.8483E+02
2.1700E+01	2.5941E-01	2.8473E+01	5.0313E+05	5.7136E+02
2.2200E+01	2.4167E-01	2.6526E+01	4.6872E+05	5.5849E+02
2.2700E+01	2.2382E-01	2.4567E+01	4.3410E+05	5.4619E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.3200E+01	2.0892E-01	2.2932E+01	4.0521E+05	5.3441E+02
2.3700E+01	1.8830E-01	2.0668E+01	3.6520E+05	5.2314E+02
2.4200E+01	1.7298E-01	1.8986E+01	3.3549E+05	5.1233E+02
2.4700E+01	1.5981E-01	1.7541E+01	3.0995E+05	5.0196E+02
2.5200E+01	1.4784E-01	1.6228E+01	2.8674E+05	4.9200E+02
2.5500E+01	1.3081E-01	1.4358E+01	2.5371E+05	4.8621E+02
2.5700E+01	1.2536E-01	1.3760E+01	2.4313E+05	4.8243E+02
2.6200E+01	1.1385E-01	1.2496E+01	2.2080E+05	4.7322E+02
2.6700E+01	1.0243E-01	1.1243E+01	1.9867E+05	4.6436E+02
2.7200E+01	9.3647E-02	1.0279E+01	1.8163E+05	4.5582E+02
2.7700E+01	8.3449E-02	9.1595E+00	1.6185E+05	4.4760E+02
2.8200E+01	7.6885E-02	8.4390E+00	1.4912E+05	4.3966E+02
2.8700E+01	6.9918E-02	7.6743E+00	1.3561E+05	4.3200E+02
2.9200E+01	6.2650E-02	6.8765E+00	1.2151E+05	4.2460E+02
2.9700E+01	5.6391E-02	6.1895E+00	1.0937E+05	4.1746E+02
3.0200E+01	5.1848E-02	5.6909E+00	1.0056E+05	4.1054E+02
3.0700E+01	4.6196E-02	5.0705E+00	8.9597E+04	4.0386E+02
3.1200E+01	4.2663E-02	4.6827E+00	8.2744E+04	3.9739E+02
3.1700E+01	4.0340E-02	4.4278E+00	7.8240E+04	3.9112E+02
3.2200E+01	3.8422E-02	4.2172E+00	7.4518E+04	3.8504E+02
3.2700E+01	3.6200E-02	3.9734E+00	7.0211E+04	3.7916E+02
3.3200E+01	3.2669E-02	3.5858E+00	6.3361E+04	3.7345E+02
3.3700E+01	3.0953E-02	3.3974E+00	6.0033E+04	3.6791E+02
3.4200E+01	2.8329E-02	3.1095E+00	5.4945E+04	3.6253E+02
3.4700E+01	2.8529E-02	3.1314E+00	5.5332E+04	3.5730E+02
3.5200E+01	2.5402E-02	2.7882E+00	4.9267E+04	3.5223E+02
3.5700E+01	2.6408E-02	2.8986E+00	5.1219E+04	3.4729E+02
3.6200E+01	2.3988E-02	2.6329E+00	4.6524E+04	3.4250E+02
3.6700E+01	2.3281E-02	2.5553E+00	4.5153E+04	3.3783E+02
3.7200E+01	2.3279E-02	2.5551E+00	4.5150E+04	3.3329E+02
3.7700E+01	2.2371E-02	2.4554E+00	4.3387E+04	3.2887E+02
3.8200E+01	2.1361E-02	2.3446E+00	4.1430E+04	3.2457E+02
3.8700E+01	2.0554E-02	2.2560E+00	3.9864E+04	3.2037E+02
3.9200E+01	1.9646E-02	2.1563E+00	3.8103E+04	3.1629E+02
3.9700E+01	1.9745E-02	2.1672E+00	3.8296E+04	3.1230E+02
4.0200E+01	1.9341E-02	2.1229E+00	3.7512E+04	3.0842E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.1200E+01	1.8835E-02	2.0673E+00	3.6530E+04	3.0093E+02
4.2200E+01	1.8026E-02	1.9786E+00	3.4962E+04	2.9380E+02
4.3200E+01	1.7420E-02	1.9120E+00	3.3786E+04	2.8700E+02
4.4200E+01	1.6713E-02	1.8344E+00	3.2414E+04	2.8051E+02
4.5200E+01	1.6308E-02	1.7900E+00	3.1629E+04	2.7430E+02
4.6200E+01	1.5903E-02	1.7455E+00	3.0844E+04	2.6836E+02
4.7200E+01	1.5398E-02	1.6900E+00	2.9863E+04	2.6268E+02
4.8200E+01	1.5094E-02	1.6567E+00	2.9274E+04	2.5723E+02
4.9200E+01	1.4689E-02	1.6123E+00	2.8489E+04	2.5200E+02
5.0200E+01	1.4385E-02	1.5789E+00	2.7900E+04	2.4698E+02
5.1200E+01	1.4082E-02	1.5456E+00	2.7311E+04	2.4216E+02
5.2200E+01	1.3878E-02	1.5233E+00	2.6917E+04	2.3752E+02
5.3200E+01	1.3776E-02	1.5121E+00	2.6718E+04	2.3305E+02
5.4200E+01	1.3271E-02	1.4567E+00	2.5740E+04	2.2875E+02
5.5200E+01	1.3169E-02	1.4455E+00	2.5541E+04	2.2461E+02
5.6200E+01	1.3067E-02	1.4342E+00	2.5343E+04	2.2061E+02
5.7200E+01	1.2663E-02	1.3899E+00	2.4560E+04	2.1676E+02
5.8200E+01	1.2259E-02	1.3456E+00	2.3777E+04	2.1303E+02
5.9200E+01	1.2057E-02	1.3234E+00	2.3384E+04	2.0943E+02
6.0200E+01	1.1955E-02	1.3121E+00	2.3186E+04	2.0595E+02
6.1200E+01	1.1652E-02	1.2789E+00	2.2598E+04	2.0259E+02
6.2200E+01	1.1550E-02	1.2677E+00	2.2400E+04	1.9933E+02
6.3200E+01	1.1046E-02	1.2124E+00	2.1423E+04	1.9618E+02
6.4200E+01	1.1145E-02	1.2233E+00	2.1615E+04	1.9312E+02
6.5200E+01	1.0742E-02	1.1790E+00	2.0833E+04	1.9016E+02
6.6200E+01	1.0740E-02	1.1789E+00	2.0831E+04	1.8729E+02
6.7200E+01	1.0538E-02	1.1567E+00	2.0438E+04	1.8450E+02
6.8200E+01	1.0336E-02	1.1345E+00	2.0046E+04	1.8179E+02
6.9200E+01	1.0134E-02	1.1123E+00	1.9654E+04	1.7917E+02
7.0200E+01	9.9318E-03	1.0901E+00	1.9263E+04	1.7662E+02
7.1200E+01	9.7298E-03	1.0680E+00	1.8871E+04	1.7414E+02
7.2200E+01	9.5279E-03	1.0458E+00	1.8479E+04	1.7172E+02
7.3200E+01	9.4263E-03	1.0346E+00	1.8282E+04	1.6938E+02
7.4200E+01	9.1242E-03	1.0015E+00	1.7696E+04	1.6709E+02
7.5200E+01	9.1229E-03	1.0013E+00	1.7694E+04	1.6487E+02
7.6200E+01	8.9212E-03	9.7920E-01	1.7303E+04	1.6271E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.7200E+01	8.8197E-03	9.6806E-01	1.7106E+04	1.6060E+02
7.8200E+01	8.6181E-03	9.4593E-01	1.6715E+04	1.5855E+02
7.9200E+01	8.4165E-03	9.2381E-01	1.6324E+04	1.5655E+02
8.0200E+01	8.2150E-03	9.0169E-01	1.5933E+04	1.5459E+02
8.1200E+01	8.2139E-03	9.0156E-01	1.5931E+04	1.5269E+02
8.2200E+01	8.1126E-03	8.9045E-01	1.5734E+04	1.5083E+02
8.3200E+01	7.9112E-03	8.6834E-01	1.5344E+04	1.4902E+02
8.4200E+01	7.7099E-03	8.4624E-01	1.4953E+04	1.4725E+02
8.5200E+01	7.7088E-03	8.4613E-01	1.4951E+04	1.4552E+02
8.6200E+01	7.6076E-03	8.3502E-01	1.4755E+04	1.4383E+02
8.7200E+01	7.5065E-03	8.2392E-01	1.4559E+04	1.4218E+02
8.8200E+01	7.3053E-03	8.0184E-01	1.4169E+04	1.4057E+02
8.9200E+01	7.4044E-03	8.1271E-01	1.4361E+04	1.3900E+02
9.0200E+01	7.1032E-03	7.7966E-01	1.3777E+04	1.3745E+02
9.2200E+01	6.9012E-03	7.5749E-01	1.3385E+04	1.3447E+02
9.4200E+01	6.6994E-03	7.3533E-01	1.2993E+04	1.3162E+02
9.6200E+01	6.4976E-03	7.1318E-01	1.2602E+04	1.2888E+02
9.8200E+01	6.2959E-03	6.9105E-01	1.2211E+04	1.2626E+02
1.0020E+02	6.1943E-03	6.7989E-01	1.2014E+04	1.2374E+02
1.0220E+02	5.9928E-03	6.5778E-01	1.1623E+04	1.2132E+02
1.0420E+02	5.7915E-03	6.3568E-01	1.1232E+04	1.1899E+02
1.0620E+02	5.6900E-03	6.2454E-01	1.1036E+04	1.1675E+02
1.0820E+02	5.5887E-03	6.1342E-01	1.0839E+04	1.1459E+02
1.1020E+02	5.3876E-03	5.9135E-01	1.0449E+04	1.1251E+02
1.1220E+02	5.2864E-03	5.8024E-01	1.0253E+04	1.1050E+02
1.1420E+02	5.1852E-03	5.6913E-01	1.0057E+04	1.0857E+02
1.1620E+02	4.9844E-03	5.4709E-01	9.6672E+03	1.0670E+02
1.1820E+02	4.8833E-03	5.3600E-01	9.4712E+03	1.0489E+02
1.2020E+02	4.7824E-03	5.2492E-01	9.2753E+03	1.0315E+02
1.2220E+02	4.6814E-03	5.1384E-01	9.0796E+03	1.0146E+02
1.2420E+02	4.5806E-03	5.0277E-01	8.8840E+03	9.9826E+01
1.2620E+02	4.4797E-03	4.9170E-01	8.6884E+03	9.8244E+01
1.2820E+02	4.3790E-03	4.8064E-01	8.4930E+03	9.6712E+01
1.3020E+02	4.2783E-03	4.6959E-01	8.2977E+03	9.5226E+01
1.3220E+02	4.1776E-03	4.5854E-01	8.1025E+03	9.3785E+01
1.3420E+02	4.0770E-03	4.4750E-01	7.9074E+03	9.2388E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3620E+02	4.0759E-03	4.4737E-01	7.9052E+03	9.1031E+01
1.3820E+02	3.9754E-03	4.3634E-01	7.7102E+03	8.9714E+01
1.4020E+02	3.7756E-03	4.1441E-01	7.3227E+03	8.8434E+01
1.4220E+02	3.6752E-03	4.0339E-01	7.1280E+03	8.7190E+01
1.4420E+02	3.6742E-03	4.0328E-01	7.1260E+03	8.5981E+01
1.4620E+02	3.5739E-03	3.9227E-01	6.9315E+03	8.4805E+01
1.4820E+02	3.5729E-03	3.9216E-01	6.9296E+03	8.3660E+01
1.5020E+02	3.3735E-03	3.7027E-01	6.5428E+03	8.2546E+01
1.5220E+02	3.4717E-03	3.8106E-01	6.7334E+03	8.1461E+01
1.5420E+02	3.3716E-03	3.7007E-01	6.5392E+03	8.0405E+01
1.5620E+02	3.3707E-03	3.6997E-01	6.5374E+03	7.9375E+01
1.5670E+02	3.2713E-03	3.5906E-01	6.3446E+03	7.9122E+01
1.5720E+02	3.2711E-03	3.5904E-01	6.3442E+03	7.8870E+01
1.5770E+02	3.3700E-03	3.6989E-01	6.5360E+03	7.8620E+01
1.5820E+02	3.1715E-03	3.4811E-01	6.1511E+03	7.8372E+01
1.5870E+02	3.2704E-03	3.5896E-01	6.3429E+03	7.8125E+01
1.5920E+02	3.2702E-03	3.5894E-01	6.3424E+03	7.7880E+01
1.5970E+02	3.2699E-03	3.5891E-01	6.3420E+03	7.7636E+01
1.6020E+02	3.2697E-03	3.5889E-01	6.3416E+03	7.7393E+01
1.6070E+02	3.2695E-03	3.5886E-01	6.3411E+03	7.7153E+01
1.6120E+02	3.2692E-03	3.5884E-01	6.3407E+03	7.6913E+01
1.6170E+02	3.1700E-03	3.4794E-01	6.1481E+03	7.6675E+01
1.6220E+02	3.2688E-03	3.5879E-01	6.3398E+03	7.6439E+01
1.6270E+02	3.1695E-03	3.4789E-01	6.1473E+03	7.6204E+01
1.6320E+02	3.1693E-03	3.4787E-01	6.1468E+03	7.5971E+01
1.6350E+02	3.1692E-03	3.4785E-01	6.1466E+03	7.5831E+01
1.6388E+02	4.5131E-03	4.9537E-01	8.7532E+03	7.5655E+01
1.6408E+02	4.8591E-03	5.3334E-01	9.4242E+03	7.5563E+01
1.6420E+02	5.8668E-03	6.4395E-01	1.1379E+04	7.5508E+01
1.6428E+02	8.7675E-03	9.6233E-01	1.7004E+04	7.5471E+01
1.6431E+02	9.9521E-03	1.0924E+00	1.9302E+04	7.5457E+01
1.6439E+02	1.1883E-02	1.3043E+00	2.3047E+04	7.5421E+01
1.6452E+02	1.3413E-02	1.4722E+00	2.6014E+04	7.5361E+01
1.6470E+02	1.5418E-02	1.6923E+00	2.9903E+04	7.5279E+01
1.6490E+02	1.7396E-02	1.9094E+00	3.3740E+04	7.5187E+01
1.6513E+02	1.9561E-02	2.1471E+00	3.7939E+04	7.5083E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6531E+02	2.0662E-02	2.2679E+00	4.0074E+04	7.5001E+01
1.6549E+02	2.1166E-02	2.3233E+00	4.1052E+04	7.4919E+01
1.6561E+02	2.1224E-02	2.3295E+00	4.1163E+04	7.4865E+01
1.6574E+02	2.0981E-02	2.3029E+00	4.0693E+04	7.4806E+01
1.6589E+02	2.0404E-02	2.2396E+00	3.9574E+04	7.4739E+01
1.6602E+02	1.9537E-02	2.1444E+00	3.7891E+04	7.4680E+01
1.6615E+02	1.8214E-02	1.9992E+00	3.5326E+04	7.4622E+01
1.6629E+02	1.6582E-02	1.8201E+00	3.2161E+04	7.4559E+01
1.6640E+02	1.5370E-02	1.6870E+00	2.9810E+04	7.4510E+01
1.6651E+02	1.4364E-02	1.5766E+00	2.7859E+04	7.4461E+01
1.6664E+02	1.3600E-02	1.4927E+00	2.6377E+04	7.4402E+01
1.6675E+02	1.2574E-02	1.3802E+00	2.4388E+04	7.4353E+01
1.6691E+02	1.0673E-02	1.1714E+00	2.0699E+04	7.4282E+01
1.6703E+02	9.5447E-03	1.0476E+00	1.8512E+04	7.4229E+01
1.6717E+02	8.9861E-03	9.8633E-01	1.7429E+04	7.4167E+01
1.6728E+02	9.0145E-03	9.8945E-01	1.7484E+04	7.4118E+01
1.6738E+02	9.4903E-03	1.0417E+00	1.8406E+04	7.4073E+01
1.6748E+02	1.1683E-02	1.2823E+00	2.2658E+04	7.4029E+01
1.6757E+02	1.4425E-02	1.5833E+00	2.7976E+04	7.3989E+01
1.6764E+02	1.5852E-02	1.7399E+00	3.0745E+04	7.3959E+01
1.6770E+02	1.7139E-02	1.8812E+00	3.3242E+04	7.3932E+01
1.6774E+02	1.9069E-02	2.0931E+00	3.6985E+04	7.3915E+01
1.6781E+02	2.4162E-02	2.6520E+00	4.6861E+04	7.3884E+01
1.6784E+02	2.4665E-02	2.7073E+00	4.7838E+04	7.3870E+01
1.6788E+02	2.4004E-02	2.6347E+00	4.6555E+04	7.3853E+01
1.6794E+02	2.1132E-02	2.3195E+00	4.0985E+04	7.3826E+01
1.6808E+02	1.7728E-02	1.9459E+00	3.4384E+04	7.3765E+01
1.6815E+02	1.6749E-02	1.8384E+00	3.2485E+04	7.3734E+01
1.6820E+02	1.3849E-02	1.5201E+00	2.6861E+04	7.3712E+01
1.6826E+02	1.1024E-02	1.2100E+00	2.1380E+04	7.3686E+01
1.6830E+02	1.0707E-02	1.1752E+00	2.0766E+04	7.3669E+01
1.6838E+02	1.2106E-02	1.3288E+00	2.3480E+04	7.3634E+01
1.6846E+02	1.7283E-02	1.8970E+00	3.3520E+04	7.3599E+01
1.6850E+02	2.4585E-02	2.6984E+00	4.7682E+04	7.3581E+01
1.6856E+02	3.1020E-02	3.4048E+00	6.0162E+04	7.3555E+01
1.6859E+02	3.1785E-02	3.4887E+00	6.1646E+04	7.3542E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6863E+02	3.1150E-02	3.4191E+00	6.0416E+04	7.3524E+01
1.6873E+02	2.7066E-02	2.9708E+00	5.2495E+04	7.3481E+01
1.6883E+02	2.4241E-02	2.6607E+00	4.7015E+04	7.3437E+01
1.6892E+02	2.5770E-02	2.8286E+00	4.9982E+04	7.3398E+01
1.6900E+02	2.2479E-02	2.4674E+00	4.3599E+04	7.3363E+01
1.6907E+02	1.9626E-02	2.1541E+00	3.8064E+04	7.3333E+01
1.6915E+02	2.0820E-02	2.2852E+00	4.0380E+04	7.3298E+01
1.6926E+02	2.4961E-02	2.7398E+00	4.8412E+04	7.3251E+01
1.6931E+02	2.6015E-02	2.8555E+00	5.0457E+04	7.3229E+01
1.6937E+02	2.6855E-02	2.9476E+00	5.2085E+04	7.3203E+01
1.6944E+02	3.0101E-02	3.3039E+00	5.8380E+04	7.3173E+01
1.6949E+02	3.0315E-02	3.3274E+00	5.8795E+04	7.3151E+01
1.6952E+02	2.9970E-02	3.2895E+00	5.8126E+04	7.3138E+01
1.6960E+02	2.6539E-02	2.9130E+00	5.1472E+04	7.3104E+01
1.6964E+02	2.6250E-02	2.8812E+00	5.0911E+04	7.3087E+01
1.6969E+02	2.6968E-02	2.9601E+00	5.2305E+04	7.3065E+01
1.6974E+02	2.9626E-02	3.2518E+00	5.7459E+04	7.3044E+01
1.6979E+02	3.2209E-02	3.5353E+00	6.2470E+04	7.3022E+01
1.6984E+02	3.3347E-02	3.6602E+00	6.4676E+04	7.3001E+01
1.6989E+02	3.3665E-02	3.6951E+00	6.5292E+04	7.2979E+01
1.6994E+02	3.3292E-02	3.6541E+00	6.4569E+04	7.2958E+01
1.6997E+02	3.1874E-02	3.4986E+00	6.1820E+04	7.2945E+01
1.7005E+02	2.7707E-02	3.0411E+00	5.3737E+04	7.2910E+01
1.7009E+02	2.6728E-02	2.9337E+00	5.1838E+04	7.2893E+01
1.7016E+02	2.5860E-02	2.8385E+00	5.0156E+04	7.2863E+01
1.7027E+02	2.5301E-02	2.7771E+00	4.9072E+04	7.2816E+01
1.7031E+02	2.5301E-02	2.7771E+00	4.9072E+04	7.2799E+01
1.7039E+02	2.6048E-02	2.8591E+00	5.0520E+04	7.2765E+01
1.7048E+02	2.7419E-02	3.0096E+00	5.3179E+04	7.2727E+01
1.7057E+02	2.7942E-02	3.0669E+00	5.4193E+04	7.2688E+01
1.7061E+02	2.8502E-02	3.1284E+00	5.5279E+04	7.2671E+01
1.7069E+02	3.1719E-02	3.4815E+00	6.1519E+04	7.2637E+01
1.7073E+02	3.2009E-02	3.5133E+00	6.2081E+04	7.2620E+01
1.7078E+02	3.1002E-02	3.4028E+00	6.0127E+04	7.2599E+01
1.7082E+02	2.8736E-02	3.1541E+00	5.5733E+04	7.2582E+01
1.7088E+02	2.6703E-02	2.9310E+00	5.1791E+04	7.2556E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7093E+02	2.6442E-02	2.9023E+00	5.1284E+04	7.2535E+01
1.7096E+02	2.6918E-02	2.9546E+00	5.2208E+04	7.2522E+01
1.7099E+02	2.9371E-02	3.2238E+00	5.6965E+04	7.2510E+01
1.7101E+02	3.1115E-02	3.4152E+00	6.0347E+04	7.2501E+01
1.7107E+02	3.2374E-02	3.5534E+00	6.2790E+04	7.2476E+01
1.7111E+02	3.1880E-02	3.4992E+00	6.1831E+04	7.2459E+01
1.7116E+02	3.1433E-02	3.4501E+00	6.0963E+04	7.2438E+01
1.7120E+02	3.1275E-02	3.4327E+00	6.0657E+04	7.2421E+01
1.7170E+02	3.1388E-02	3.4452E+00	6.0877E+04	7.2210E+01
1.7220E+02	3.2075E-02	3.5206E+00	6.2210E+04	7.2000E+01
1.7270E+02	3.2071E-02	3.5201E+00	6.2201E+04	7.1792E+01
1.7320E+02	3.2234E-02	3.5380E+00	6.2518E+04	7.1584E+01
1.7370E+02	3.3068E-02	3.6296E+00	6.4136E+04	7.1378E+01
1.7420E+02	3.2885E-02	3.6095E+00	6.3780E+04	7.1173E+01
1.7470E+02	3.3869E-02	3.7175E+00	6.5689E+04	7.0970E+01
1.7520E+02	3.4177E-02	3.7512E+00	6.6285E+04	7.0767E+01
1.7570E+02	3.4643E-02	3.8025E+00	6.7191E+04	7.0566E+01
1.7620E+02	3.5595E-02	3.9069E+00	6.9036E+04	7.0366E+01
1.7670E+02	3.6207E-02	3.9741E+00	7.0224E+04	7.0166E+01
1.7720E+02	3.6810E-02	4.0403E+00	7.1393E+04	6.9969E+01
1.7770E+02	3.7403E-02	4.1054E+00	7.2544E+04	6.9772E+01
1.7820E+02	3.7667E-02	4.1344E+00	7.3055E+04	6.9576E+01
1.7870E+02	3.7447E-02	4.1102E+00	7.2628E+04	6.9381E+01
1.7920E+02	3.7702E-02	4.1382E+00	7.3123E+04	6.9188E+01
1.7970E+02	3.7637E-02	4.1310E+00	7.2996E+04	6.8995E+01
1.8020E+02	3.8352E-02	4.2095E+00	7.4383E+04	6.8804E+01
1.8070E+02	3.8278E-02	4.2014E+00	7.4240E+04	6.8613E+01
1.8120E+02	3.8202E-02	4.1931E+00	7.4093E+04	6.8424E+01
1.8170E+02	3.8893E-02	4.2690E+00	7.5433E+04	6.8236E+01
1.8220E+02	3.8503E-02	4.2262E+00	7.4677E+04	6.8048E+01
1.8270E+02	3.8267E-02	4.2003E+00	7.4219E+04	6.7862E+01
1.8320E+02	3.8031E-02	4.1744E+00	7.3761E+04	6.7677E+01
1.8370E+02	3.7945E-02	4.1649E+00	7.3594E+04	6.7493E+01
1.8420E+02	3.7708E-02	4.1389E+00	7.3135E+04	6.7310E+01
1.8470E+02	3.7916E-02	4.1616E+00	7.3537E+04	6.7127E+01
1.8520E+02	3.7970E-02	4.1676E+00	7.3643E+04	6.6946E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

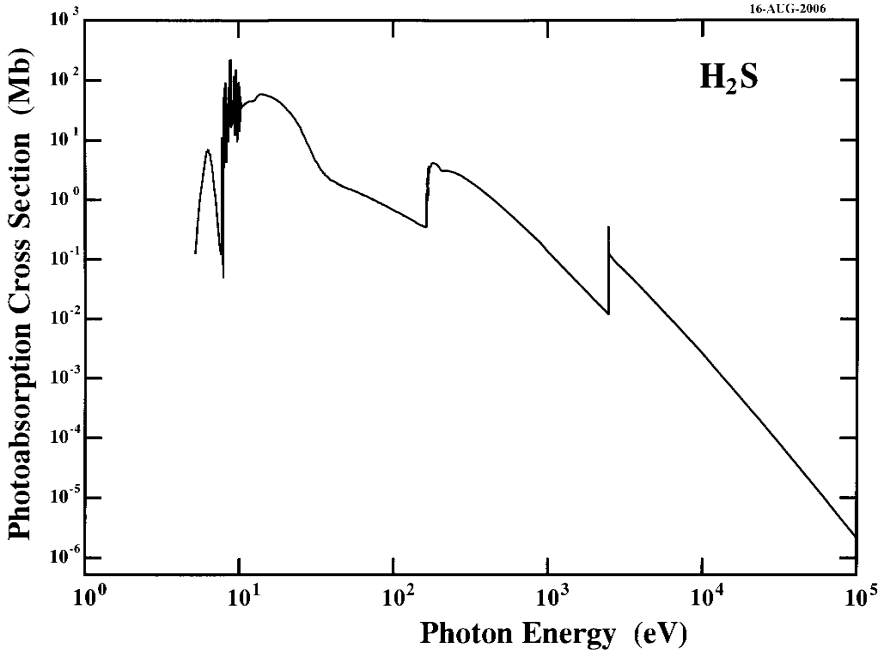
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8570E+02	3.7290E-02	4.0930E+00	7.2323E+04	6.6766E+01
1.8620E+02	3.7196E-02	4.0827E+00	7.2142E+04	6.6587E+01
1.8670E+02	3.7101E-02	4.0722E+00	7.1957E+04	6.6408E+01
1.8720E+02	3.7003E-02	4.0615E+00	7.1768E+04	6.6231E+01
1.8770E+02	3.7047E-02	4.0663E+00	7.1852E+04	6.6054E+01
1.8820E+02	3.6803E-02	4.0395E+00	7.1379E+04	6.5879E+01
1.8870E+02	3.6841E-02	4.0437E+00	7.1452E+04	6.5704E+01
1.8920E+02	3.6595E-02	4.0167E+00	7.0976E+04	6.5531E+01
1.8970E+02	3.6350E-02	3.9898E+00	7.0500E+04	6.5358E+01
1.9020E+02	3.6242E-02	3.9780E+00	7.0292E+04	6.5186E+01
1.9120E+02	3.5750E-02	3.9239E+00	6.9336E+04	6.4845E+01
1.9220E+02	3.5525E-02	3.8993E+00	6.8900E+04	6.4508E+01
1.9320E+02	3.4368E-02	3.7722E+00	6.6656E+04	6.4174E+01
1.9420E+02	3.4532E-02	3.7903E+00	6.6975E+04	6.3844E+01
1.9520E+02	3.4036E-02	3.7358E+00	6.6012E+04	6.3516E+01
1.9620E+02	3.2653E-02	3.5840E+00	6.3331E+04	6.3193E+01
1.9720E+02	3.2793E-02	3.5994E+00	6.3602E+04	6.2872E+01
1.9820E+02	3.2301E-02	3.5453E+00	6.2647E+04	6.2555E+01
1.9920E+02	3.1687E-02	3.4780E+00	6.1457E+04	6.2241E+01
2.0020E+02	3.1077E-02	3.4110E+00	6.0274E+04	6.1930E+01
2.0120E+02	3.0354E-02	3.3316E+00	5.8871E+04	6.1622E+01
2.0220E+02	2.9753E-02	3.2657E+00	5.7706E+04	6.1318E+01
2.0320E+02	2.9043E-02	3.1878E+00	5.6328E+04	6.1016E+01
2.0420E+02	2.8452E-02	3.1229E+00	5.5182E+04	6.0717E+01
2.2500E+02	2.8484E-02	3.1265E+00	5.5245E+04	5.5104E+01
2.5000E+02	2.6182E-02	2.8738E+00	5.0780E+04	4.9594E+01
2.7500E+02	2.3171E-02	2.5433E+00	4.4941E+04	4.5085E+01
3.0000E+02	2.0203E-02	2.2174E+00	3.9183E+04	4.1328E+01
3.5000E+02	1.5211E-02	1.6696E+00	2.9502E+04	3.5424E+01
4.0000E+02	1.1554E-02	1.2682E+00	2.2409E+04	3.0996E+01
4.5000E+02	8.9264E-03	9.7977E-01	1.7313E+04	2.7552E+01
5.0000E+02	7.0223E-03	7.7077E-01	1.3620E+04	2.4797E+01
6.0000E+02	4.5691E-03	5.0150E-01	8.8617E+03	2.0664E+01
7.0000E+02	3.1455E-03	3.4525E-01	6.1006E+03	1.7712E+01
8.0000E+02	2.2655E-03	2.4866E-01	4.3939E+03	1.5498E+01
9.0000E+02	1.6921E-03	1.8573E-01	3.2818E+03	1.3776E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0000E+03	1.2304E-03	1.3505E-01	2.3863E+03	1.2398E+01
1.2500E+03	6.7479E-04	7.4066E-02	1.3087E+03	9.9187E+00
1.5000E+03	4.1222E-04	4.5246E-02	7.9950E+02	8.2656E+00
1.7500E+03	2.7189E-04	2.9843E-02	5.2734E+02	7.0848E+00
2.0000E+03	1.8986E-04	2.0839E-02	3.6823E+02	6.1992E+00
2.2500E+03	1.3853E-04	1.5205E-02	2.6867E+02	5.5104E+00
2.4700E+03	1.0806E-04	1.1861E-02	2.0958E+02	5.0196E+00
2.4708E+03	4.1261E-04	4.5288E-02	8.0025E+02	5.0180E+00
2.4715E+03	8.4348E-04	9.2581E-02	1.6359E+03	5.0166E+00
2.4721E+03	1.9974E-03	2.1923E-01	3.8738E+03	5.0153E+00
2.4727E+03	3.3264E-03	3.6511E-01	6.4516E+03	5.0141E+00
2.4735E+03	2.0375E-03	2.2364E-01	3.9518E+03	5.0125E+00
2.4741E+03	9.5298E-04	1.0460E-01	1.8483E+03	5.0113E+00
2.4747E+03	6.5725E-04	7.2141E-02	1.2747E+03	5.0101E+00
2.4753E+03	1.0480E-03	1.1503E-01	2.0325E+03	5.0089E+00
2.4758E+03	2.0777E-03	2.2805E-01	4.0297E+03	5.0078E+00
2.4761E+03	1.7308E-03	1.8997E-01	3.3569E+03	5.0072E+00
2.4765E+03	1.0041E-03	1.1021E-01	1.9475E+03	5.0064E+00
2.4769E+03	1.2379E-03	1.3587E-01	2.4008E+03	5.0056E+00
2.4772E+03	1.3072E-03	1.4348E-01	2.5354E+03	5.0050E+00
2.4775E+03	1.2415E-03	1.3626E-01	2.4078E+03	5.0044E+00
2.4801E+03	1.1940E-03	1.3106E-01	2.3158E+03	4.9992E+00
2.4831E+03	1.1903E-03	1.3065E-01	2.3086E+03	4.9931E+00
2.4871E+03	1.1867E-03	1.3026E-01	2.3016E+03	4.9851E+00
2.4895E+03	1.1758E-03	1.2905E-01	2.2804E+03	4.9803E+00
2.4909E+03	1.1501E-03	1.2624E-01	2.2307E+03	4.9775E+00
2.4919E+03	1.1685E-03	1.2825E-01	2.2663E+03	4.9755E+00
2.4937E+03	1.1466E-03	1.2585E-01	2.2237E+03	4.9719E+00
2.4986E+03	1.1356E-03	1.2464E-01	2.2025E+03	4.9621E+00
2.5029E+03	1.1064E-03	1.2144E-01	2.1458E+03	4.9536E+00
2.5066E+03	1.0954E-03	1.2023E-01	2.1246E+03	4.9463E+00
2.5100E+03	1.0845E-03	1.1903E-01	2.1033E+03	4.9396E+00
2.7500E+03	8.1592E-04	8.9556E-02	1.5825E+03	4.5085E+00
3.0000E+03	6.5532E-04	7.1929E-02	1.2710E+03	4.1328E+00
3.5000E+03	4.3867E-04	4.8149E-02	8.5081E+02	3.5424E+00
4.0000E+03	3.0677E-04	3.3671E-02	5.9497E+02	3.0996E+00

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($cm^2\ g^{-1}$)	λ (Å)
4.5000E+03	2.2251E-04	2.4423E-02	4.3156E+02	2.7552E+00
5.0000E+03	1.6640E-04	1.8264E-02	3.2272E+02	2.4797E+00
6.0000E+03	1.0008E-04	1.0985E-02	1.9410E+02	2.0664E+00
7.0000E+03	6.4863E-05	7.1194E-03	1.2580E+02	1.7712E+00
8.0000E+03	4.4471E-05	4.8812E-03	8.6251E+01	1.5498E+00
9.0000E+03	3.1851E-05	3.4960E-03	6.1776E+01	1.3776E+00
1.0000E+04	2.3518E-05	2.5813E-03	4.5612E+01	1.2398E+00
1.2500E+04	1.2104E-05	1.3286E-03	2.3476E+01	9.9187E-01
1.5000E+04	7.0009E-06	7.6843E-04	1.3578E+01	8.2656E-01
1.7500E+04	4.4079E-06	4.8381E-04	8.5491E+00	7.0848E-01
2.0000E+04	2.9529E-06	3.2411E-04	5.7271E+00	6.1992E-01
2.2500E+04	2.0739E-06	2.2763E-04	4.0223E+00	5.5104E-01
2.5000E+04	1.5124E-06	1.6601E-04	2.9334E+00	4.9594E-01
2.7500E+04	1.1322E-06	1.2427E-04	2.1959E+00	4.5085E-01
3.0000E+04	8.6250E-07	9.4669E-05	1.6728E+00	4.1328E-01
3.5000E+04	5.3326E-07	5.8531E-05	1.0343E+00	3.5424E-01
4.0000E+04	3.5153E-07	3.8584E-05	6.8179E-01	3.0996E-01
4.5000E+04	2.4341E-07	2.6717E-05	4.7209E-01	2.7552E-01
5.0000E+04	1.7522E-07	1.9232E-05	3.3983E-01	2.4797E-01
6.0000E+04	9.8578E-08	1.0820E-05	1.9119E-01	2.0664E-01
7.0000E+04	6.0487E-08	6.6392E-06	1.1731E-01	1.7712E-01
8.0000E+04	3.9615E-08	4.3481E-06	7.6832E-02	1.5498E-01
9.0000E+04	2.7263E-08	2.9924E-06	5.2876E-02	1.3776E-01
1.0000E+05	1.9507E-08	2.1411E-06	3.7833E-02	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_a = 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi = \sqrt{\frac{E_K}{E-E_K}}\ ,$$

where E_K = 13.6 and 2478.5 eV for hydrogen and sulfur atoms, respectively.

H_2S

Energy, eV	Source
5.22 -7.80	Feng *et al*., Chem. Phys., 244 (1999) 127-142
7.80 - 10.446	Feng *et al*., Chem. Phys., 244 (1999) 127-142
10.446 - 10.4666 (IP)	Table 5.11 p.216 (Berkowitz's book*)
IP - 11.69	Feng *et al*., Chem. Phys., 244 (1999) 127-142
11.7 - 25.5	Feng *et al*., Chem. Phys., 244 (1999) 127-142
25.5 - 163.5	Feng *et al*., Chem. Phys., 244 (1999) 127-142
163.5 - 171.1	Table 5.11 p.216 (Berkowitz's book*)
171.2 - 220.2	Feng *et al*., Chem. Phys., 244 (1999) 127-142
220.1 - 929 7	Table 5.12 p.219 (Berkowitz's book*)
929.7 - 2470.0	Table 5.12 p.219 (Berkowitz's book*)
2470 - 2510	Table 5.11 p.216 (Berkowitz's book*)
2510 - 10000	Table 5.12 p.219 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Sulfur Dioxide (SO_2)

Z = 32 Molecular Mass : $M_{\rm A}$ = 64.0638

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
3.8035E+00	7.3483E-04	8.0656E-02	7.5818E+02	3.2597E+03
3.8555E+00	9.5531E-04	1.0486E-01	9.8567E+02	3.2158E+03
3.9306E+00	1.6167E-03	1.7745E-01	1.6681E+03	3.1543E+03
4.0000E+00	2.7925E-03	3.0650E-01	2.8812E+03	3.0996E+03
4.0751E+00	4.1887E-03	4.5975E-01	4.3218E+03	3.0425E+03
4.1792E+00	6.7608E-03	7.4207E-01	6.9756E+03	2.9667E+03
4.2486E+00	8.0100E-03	8.7919E-01	8.2646E+03	2.9182E+03
4.3237E+00	8.9656E-03	9.8407E-01	9.2505E+03	2.8675E+03
4.4277E+00	8.2305E-03	9.0339E-01	8.4920E+03	2.8002E+03
4.5087E+00	6.9812E-03	7.6627E-01	7.2031E+03	2.7499E+03
4.6243E+00	5.2911E-03	5.8075E-01	5.4592E+03	2.6811E+03
4.7572E+00	3.3803E-03	3.7103E-01	3.4878E+03	2.6062E+03
4.8497E+00	2.3515E-03	2.5811E-01	2.4263E+03	2.5565E+03
4.9827E+00	1.6167E-03	1.7745E-01	1.6681E+03	2.4883E+03
5.1040E+00	1.0288E-03	1.1292E-01	1.0615E+03	2.4292E+03
5.2542E+00	3.8277E-04	4.2013E-02	3.9493E+02	2.3597E+03
5.3294E+00	6.0948E-04	6.6898E-02	6.2885E+02	2.3264E+03
5.4504E+00	2.5481E-03	2.7968E-01	2.6290E+03	2.2748E+03
5.5649E+00	6.8650E-03	7.5351E-01	7.0831E+03	2.2280E+03
5.7116E+00	1.9805E-02	2.1739E+00	2.0435E+04	2.1707E+03
5.8403E+00	3.4976E-02	3.8390E+00	3.6087E+04	2.1229E+03
5.9742E+00	5.1781E-02	5.6835E+00	5.3427E+04	2.0753E+03
6.0859E+00	6.5538E-02	7.1935E+00	6.7621E+04	2.0372E+03
6.2173E+00	7.1640E-02	7.8633E+00	7.3917E+04	1.9942E+03
6.3279E+00	6.9564E-02	7.6354E+00	7.1775E+04	1.9593E+03
6.4468E+00	5.9312E-02	6.5101E+00	6.1197E+04	1.9232E+03
6.6134E+00	4.4825E-02	4.9201E+00	4.6250E+04	1.8747E+03
6.7746E+00	2.8778E-02	3.1587E+00	2.9693E+04	1.8301E+03
6.9346E+00	1.6595E-02	1.8215E+00	1.7123E+04	1.7879E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.1634E+00	6.7212E-03	7.3773E-01	6.9348E+03	1.7308E+03
7.2858E+00	4.2000E-03	4.6100E-01	4.3335E+03	1.7017E+03
7.4500E+00	2.4898E-03	2.7328E-01	2.5689E+03	1.6642E+03
7.5991E+00	4.8620E-03	5.3365E-01	5.0165E+03	1.6316E+03
7.7833E+00	1.4847E-02	1.6296E+00	1.5319E+04	1.5930E+03
7.9443E+00	3.0131E-02	3.3072E+00	3.1089E+04	1.5607E+03
8.0997E+00	4.2376E-02	4.6512E+00	4.3723E+04	1.5307E+03
8.2205E+00	5.0044E-02	5.4928E+00	5.1634E+04	1.5082E+03
8.4168E+00	4.6372E-02	5.0898E+00	4.7845E+04	1.4731E+03
8.6190E+00	3.8149E-02	4.1873E+00	3.9362E+04	1.4385E+03
8.9076E+00	3.4537E-02	3.7908E+00	3.5634E+04	1.3919E+03
9.1386E+00	3.0128E-02	3.3068E+00	3.1085E+04	1.3567E+03
9.2074E+00	4.0799E-02	4.4782E+00	4.2096E+04	1.3466E+03
9.2358E+00	5.2963E-02	5.8133E+00	5.4646E+04	1.3424E+03
9.2972E+00	1.0842E-01	1.1900E+01	1.1187E+05	1.3336E+03
9.3323E+00	9.6299E-02	1.0570E+01	9.9359E+04	1.3285E+03
9.3667E+00	1.0239E-01	1.1239E+01	1.0565E+05	1.3237E+03
9.4119E+00	1.2898E-01	1.4157E+01	1.3308E+05	1.3173E+03
9.4464E+00	1.3205E-01	1.4494E+01	1.3625E+05	1.3125E+03
9.4468E+00	1.2142E-01	1.3327E+01	1.2528E+05	1.3124E+03
9.4874E+00	1.1537E-01	1.2663E+01	1.1904E+05	1.3068E+03
9.5273E+00	1.2830E-01	1.4083E+01	1.3238E+05	1.3014E+03
9.5839E+00	1.5794E-01	1.7336E+01	1.6296E+05	1.2937E+03
9.6117E+00	1.8529E-01	2.0337E+01	1.9118E+05	1.2899E+03
9.6224E+00	2.0882E-01	2.2921E+01	2.1546E+05	1.2885E+03
9.6598E+00	2.9084E-01	3.1923E+01	3.0008E+05	1.2835E+03
9.7013E+00	4.1916E-01	4.6007E+01	4.3248E+05	1.2780E+03
9.7448E+00	6.4844E-01	7.1173E+01	6.6904E+05	1.2723E+03
9.7970E+00	9.5663E-01	1.0500E+02	9.8703E+05	1.2655E+03
9.8537E+00	9.8554E-01	1.0817E+02	1.0169E+06	1.2582E+03
9.9518E+00	6.6906E-01	7.3437E+01	6.9033E+05	1.2458E+03
1.0054E+01	4.0648E-01	4.4615E+01	4.1939E+05	1.2332E+03
1.0102E+01	3.5109E-01	3.8536E+01	3.6225E+05	1.2273E+03
1.0125E+01	3.4579E-01	3.7954E+01	3.5678E+05	1.2245E+03
1.0154E+01	3.5036E-01	3.8456E+01	3.6150E+05	1.2210E+03
1.0177E+01	3.4354E-01	3.7708E+01	3.5446E+05	1.2183E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0309E+01	2.1229E-01	2.3302E+01	2.1904E+05	1.2027E+03
1.0363E+01	1.5388E-01	1.6890E+01	1.5877E+05	1.1964E+03
1.0410E+01	1.1520E-01	1.2644E+01	1.1886E+05	1.1910E+03
1.0533E+01	7.8076E-02	8.5697E+00	8.0557E+04	1.1771E+03
1.0608E+01	8.1919E-02	8.9915E+00	8.4522E+04	1.1688E+03
1.0672E+01	7.4368E-02	8.1627E+00	7.6731E+04	1.1618E+03
1.0740E+01	1.0553E-01	1.1583E+01	1.0888E+05	1.1544E+03
1.0809E+01	2.5589E-01	2.8087E+01	2.6402E+05	1.1470E+03
1.0863E+01	2.0733E-01	2.2757E+01	2.1392E+05	1.1413E+03
1.0899E+01	3.1516E-01	3.4592E+01	3.2517E+05	1.1376E+03
1.0934E+01	3.2504E-01	3.5677E+01	3.3537E+05	1.1339E+03
1.0963E+01	3.1899E-01	3.5013E+01	3.2913E+05	1.1309E+03
1.0975E+01	2.9470E-01	3.2347E+01	3.0407E+05	1.1297E+03
1.1020E+01	3.3421E-01	3.6683E+01	3.4483E+05	1.1251E+03
1.1056E+01	3.0083E-01	3.3020E+01	3.1039E+05	1.1214E+03
1.1081E+01	2.2341E-01	2.4522E+01	2.3051E+05	1.1189E+03
1.1112E+01	1.8244E-01	2.0025E+01	1.8824E+05	1.1158E+03
1.1129E+01	1.7334E-01	1.9026E+01	1.7885E+05	1.1141E+03
1.1153E+01	1.7488E-01	1.9195E+01	1.8044E+05	1.1117E+03
1.1170E+01	1.6426E-01	1.8029E+01	1.6948E+05	1.1100E+03
1.1194E+01	1.4454E-01	1.5865E+01	1.4913E+05	1.1076E+03
1.1264E+01	1.2561E-01	1.3787E+01	1.2960E+05	1.1007E+03
1.1275E+01	1.3093E-01	1.4371E+01	1.3509E+05	1.0996E+03
1.1356E+01	1.3097E-01	1.4376E+01	1.3513E+05	1.0918E+03
1.1373E+01	1.2947E-01	1.4211E+01	1.3359E+05	1.0902E+03
1.1431E+01	1.4393E-01	1.5798E+01	1.4851E+05	1.0846E+03
1.1447E+01	1.7734E-01	1.9465E+01	1.8297E+05	1.0831E+03
1.1493E+01	1.7737E-01	1.9469E+01	1.8301E+05	1.0788E+03
1.1545E+01	1.6905E-01	1.8555E+01	1.7442E+05	1.0739E+03
1.1591E+01	1.8275E-01	2.0059E+01	1.8856E+05	1.0697E+03
1.1631E+01	1.8353E-01	2.0144E+01	1.8936E+05	1.0660E+03
1.1654E+01	1.9417E-01	2.1312E+01	2.0034E+05	1.0639E+03
1.1694E+01	1.9875E-01	2.1816E+01	2.0507E+05	1.0602E+03
1.1711E+01	1.9421E-01	2.1316E+01	2.0038E+05	1.0587E+03
1.1746E+01	2.0107E-01	2.2069E+01	2.0745E+05	1.0555E+03
1.1774E+01	2.1778E-01	2.3904E+01	2.2470E+05	1.0530E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1850E+01	1.8140E-01	1.9910E+01	1.8716E+05	1.0463E+03
1.1966E+01	1.6932E-01	1.8585E+01	1.7470E+05	1.0361E+03
1.2041E+01	1.7240E-01	1.8923E+01	1.7788E+05	1.0297E+03
1.2098E+01	1.8534E-01	2.0344E+01	1.9123E+05	1.0248E+03
1.2189E+01	2.3323E-01	2.5599E+01	2.4064E+05	1.0172E+03
1.2296E+01	2.9327E-01	3.2189E+01	3.0259E+05	1.0083E+03
1.2350E+01	3.5742E-01	3.9230E+01	3.6877E+05	1.0039E+03
1.2589E+01	3.6882E-01	4.0482E+01	3.8054E+05	9.8490E+02
1.2778E+01	3.9589E-01	4.3454E+01	4.0847E+05	9.7030E+02
1.2927E+01	4.2726E-01	4.6897E+01	4.4084E+05	9.5910E+02
1.3159E+01	4.5223E-01	4.9637E+01	4.6660E+05	9.4220E+02
1.3423E+01	4.6135E-01	5.0638E+01	4.7601E+05	9.2370E+02
1.3671E+01	4.5511E-01	4.9953E+01	4.6957E+05	9.0690E+02
1.3821E+01	4.3135E-01	4.7345E+01	4.4506E+05	8.9710E+02
1.3994E+01	3.9480E-01	4.3334E+01	4.0735E+05	8.8600E+02
1.4166E+01	3.5868E-01	3.9369E+01	3.7008E+05	8.7520E+02
1.4357E+01	3.2945E-01	3.6161E+01	3.3992E+05	8.6360E+02
1.4629E+01	3.4747E-01	3.8139E+01	3.5852E+05	8.4750E+02
1.4824E+01	3.6462E-01	4.0021E+01	3.7621E+05	8.3640E+02
1.4958E+01	4.2132E-01	4.6244E+01	4.3471E+05	8.2890E+02
1.5107E+01	4.6718E-01	5.1278E+01	4.8202E+05	8.2070E+02
1.5324E+01	4.2752E-01	4.6925E+01	4.4111E+05	8.0910E+02
1.5498E+01	3.7106E-01	4.0728E+01	3.8285E+05	8.0000E+02
1.5778E+01	4.2764E-01	4.6938E+01	4.4123E+05	7.8580E+02
1.6023E+01	4.5547E-01	4.9993E+01	4.6995E+05	7.7380E+02
1.6385E+01	4.7765E-01	5.2427E+01	4.9283E+05	7.5670E+02
1.6670E+01	4.6962E-01	5.1545E+01	4.8454E+05	7.4376E+02
1.7000E+01	4.8375E-01	5.3097E+01	4.9913E+05	7.2932E+02
1.7500E+01	5.1963E-01	5.7035E+01	5.3614E+05	7.0848E+02
1.8000E+01	5.4651E-01	5.9986E+01	5.6388E+05	6.8880E+02
1.8500E+01	5.5403E-01	6.0811E+01	5.7164E+05	6.7018E+02
1.9000E+01	5.4977E-01	6.0343E+01	5.6724E+05	6.5255E+02
1.9500E+01	5.4759E-01	6.0104E+01	5.6499E+05	6.3582E+02
2.0000E+01	5.3218E-01	5.8412E+01	5.4909E+05	6.1992E+02
2.0500E+01	5.1170E-01	5.6164E+01	5.2796E+05	6.0480E+02
2.1000E+01	4.8948E-01	5.3726E+01	5.0503E+05	5.9040E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.1500E+01	4.7115E-01	5.1713E+01	4.8612E+05	5.7667E+02
2.2000E+01	4.4564E-01	4.8913E+01	4.5980E+05	5.6356E+02
2.2500E+01	4.2334E-01	4.6467E+01	4.3680E+05	5.5104E+02
2.3000E+01	4.1115E-01	4.5129E+01	4.2422E+05	5.3906E+02
2.3500E+01	3.9264E-01	4.3097E+01	4.0512E+05	5.2759E+02
2.4000E+01	3.7401E-01	4.1052E+01	3.8590E+05	5.1660E+02
2.4500E+01	3.6254E-01	3.9793E+01	3.7406E+05	5.0606E+02
2.5000E+01	3.4981E-01	3.8396E+01	3.6093E+05	4.9594E+02
2.5500E+01	3.4109E-01	3.7439E+01	3.5193E+05	4.8621E+02
2.6000E+01	3.3275E-01	3.6523E+01	3.4332E+05	4.7686E+02
2.6500E+01	3.2305E-01	3.5458E+01	3.3332E+05	4.6786E+02
2.7000E+01	3.1430E-01	3.4498E+01	3.2429E+05	4.5920E+02
2.7500E+01	3.0689E-01	3.3684E+01	3.1664E+05	4.5085E+02
2.8000E+01	2.9524E-01	3.2406E+01	3.0462E+05	4.4280E+02
2.8500E+01	2.8973E-01	3.1801E+01	2.9893E+05	4.3503E+02
2.9000E+01	2.8488E-01	3.1269E+01	2.9394E+05	4.2753E+02
2.9500E+01	2.7253E-01	2.9913E+01	2.8119E+05	4.2029E+02
3.0000E+01	2.6324E-01	2.8894E+01	2.7161E+05	4.1328E+02
3.0500E+01	2.6088E-01	2.8635E+01	2.6917E+05	4.0651E+02
3.1000E+01	2.5033E-01	2.7476E+01	2.5828E+05	3.9995E+02
3.1500E+01	2.4458E-01	2.6845E+01	2.5235E+05	3.9360E+02
3.2000E+01	2.3921E-01	2.6256E+01	2.4681E+05	3.8745E+02
3.2500E+01	2.2940E-01	2.5179E+01	2.3669E+05	3.8149E+02
3.3000E+01	2.2691E-01	2.4906E+01	2.3413E+05	3.7571E+02
3.3500E+01	2.1670E-01	2.3785E+01	2.2358E+05	3.7010E+02
3.4000E+01	2.1643E-01	2.3755E+01	2.2330E+05	3.6466E+02
3.4500E+01	2.0948E-01	2.2993E+01	2.1614E+05	3.5937E+02
3.5000E+01	2.0466E-01	2.2464E+01	2.1116E+05	3.5424E+02
3.5500E+01	1.9383E-01	2.1275E+01	1.9999E+05	3.4925E+02
3.6000E+01	1.9025E-01	2.0882E+01	1.9630E+05	3.4440E+02
3.6500E+01	1.8560E-01	2.0372E+01	1.9150E+05	3.3968E+02
3.7000E+01	1.7862E-01	1.9606E+01	1.8430E+05	3.3509E+02
3.7500E+01	1.7862E-01	1.9605E+01	1.8430E+05	3.3062E+02
3.8000E+01	1.7386E-01	1.9083E+01	1.7939E+05	3.2627E+02
3.8500E+01	1.6531E-01	1.8144E+01	1.7056E+05	3.2204E+02
3.9000E+01	1.6238E-01	1.7823E+01	1.6754E+05	3.1791E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.9500E+01	1.6091E-01	1.7662E+01	1.6603E+05	3.1388E+02
4.0000E+01	1.5857E-01	1.7405E+01	1.6361E+05	3.0996E+02
4.1000E+01	1.5445E-01	1.6953E+01	1.5936E+05	3.0240E+02
4.2000E+01	1.5013E-01	1.6478E+01	1.5490E+05	2.9520E+02
4.3000E+01	1.4492E-01	1.5907E+01	1.4953E+05	2.8834E+02
4.4000E+01	1.4273E-01	1.5666E+01	1.4727E+05	2.8178E+02
4.5000E+01	1.3770E-01	1.5114E+01	1.4207E+05	2.7552E+02
4.6000E+01	1.3540E-01	1.4861E+01	1.3970E+05	2.6953E+02
4.7000E+01	1.3201E-01	1.4490E+01	1.3620E+05	2.6380E+02
4.8000E+01	1.3068E-01	1.4343E+01	1.3483E+05	2.5830E+02
4.9000E+01	1.2728E-01	1.3970E+01	1.3132E+05	2.5303E+02
5.0000E+01	1.2515E-01	1.3737E+01	1.2913E+05	2.4797E+02
5.1000E+01	1.1987E-01	1.3157E+01	1.2368E+05	2.4311E+02
5.2000E+01	1.2009E-01	1.3182E+01	1.2391E+05	2.3843E+02
5.3000E+01	1.1568E-01	1.2697E+01	1.1936E+05	2.3393E+02
5.4000E+01	1.1501E-01	1.2624E+01	1.1867E+05	2.2960E+02
5.5000E+01	1.1237E-01	1.2334E+01	1.1594E+05	2.2543E+02
5.6000E+01	1.1100E-01	1.2184E+01	1.1453E+05	2.2140E+02
5.7000E+01	1.0696E-01	1.1740E+01	1.1036E+05	2.1752E+02
5.8000E+01	1.0419E-01	1.1436E+01	1.0750E+05	2.1377E+02
5.9000E+01	1.0122E-01	1.1111E+01	1.0444E+05	2.1014E+02
6.0000E+01	9.9542E-02	1.0926E+01	1.0271E+05	2.0664E+02
6.1000E+01	9.8054E-02	1.0763E+01	1.0117E+05	2.0325E+02
6.2000E+01	9.2979E-02	1.0205E+01	9.5934E+04	1.9997E+02
6.3000E+01	9.3275E-02	1.0238E+01	9.6239E+04	1.9680E+02
6.4000E+01	9.1276E-02	1.0019E+01	9.4177E+04	1.9373E+02
6.5000E+01	8.8075E-02	9.6672E+00	9.0874E+04	1.9074E+02
6.6000E+01	8.4668E-02	9.2932E+00	8.7358E+04	1.8785E+02
6.7000E+01	8.2253E-02	9.0282E+00	8.4867E+04	1.8505E+02
6.8000E+01	8.1537E-02	8.9496E+00	8.4128E+04	1.8233E+02
6.9000E+01	8.0417E-02	8.8267E+00	8.2973E+04	1.7969E+02
7.0000E+01	7.7991E-02	8.5603E+00	8.0469E+04	1.7712E+02
7.1000E+01	7.5659E-02	8.3045E+00	7.8064E+04	1.7463E+02
7.2000E+01	7.3323E-02	8.0480E+00	7.5653E+04	1.7220E+02
7.3000E+01	7.1888E-02	7.8905E+00	7.4173E+04	1.6984E+02
7.4000E+01	6.9845E-02	7.6663E+00	7.2065E+04	1.6755E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.5000E+01	6.9513E-02	7.6298E+00	7.1722E+04	1.6531E+02
7.6000E+01	6.7362E-02	7.3937E+00	6.9503E+04	1.6314E+02
7.7000E+01	6.6622E-02	7.3125E+00	6.8739E+04	1.6102E+02
7.8000E+01	6.3958E-02	7.0201E+00	6.5990E+04	1.5895E+02
7.9000E+01	6.3111E-02	6.9272E+00	6.5117E+04	1.5694E+02
8.0000E+01	6.0640E-02	6.6559E+00	6.2567E+04	1.5498E+02
8.1000E+01	6.0195E-02	6.6070E+00	6.2107E+04	1.5307E+02
8.2000E+01	5.9646E-02	6.5468E+00	6.1541E+04	1.5120E+02
8.3000E+01	5.7062E-02	6.2632E+00	5.8875E+04	1.4938E+02
8.4000E+01	5.6509E-02	6.2025E+00	5.8305E+04	1.4760E+02
8.4110E+01	5.5334E-02	6.0735E+00	5.7092E+04	1.4741E+02
8.5000E+01	5.3913E-02	5.9175E+00	5.5626E+04	1.4586E+02
8.6000E+01	5.2211E-02	5.7307E+00	5.3870E+04	1.4417E+02
8.7000E+01	5.1810E-02	5.6867E+00	5.3456E+04	1.4251E+02
8.8000E+01	5.0508E-02	5.5438E+00	5.2113E+04	1.4089E+02
8.9000E+01	4.9107E-02	5.3900E+00	5.0667E+04	1.3931E+02
9.0000E+01	4.8305E-02	5.3021E+00	4.9840E+04	1.3776E+02
9.1000E+01	4.6404E-02	5.0934E+00	4.7879E+04	1.3625E+02
9.2000E+01	4.6403E-02	5.0932E+00	4.7878E+04	1.3477E+02
9.3000E+01	4.7602E-02	5.2248E+00	4.9115E+04	1.3332E+02
9.4000E+01	4.5401E-02	4.9832E+00	4.6843E+04	1.3190E+02
9.5000E+01	4.3100E-02	4.7307E+00	4.4469E+04	1.3051E+02
9.6000E+01	4.2999E-02	4.7196E+00	4.4365E+04	1.2915E+02
9.7000E+01	4.0698E-02	4.4670E+00	4.1991E+04	1.2782E+02
9.8000E+01	4.1197E-02	4.5218E+00	4.2506E+04	1.2651E+02
9.9000E+01	3.8296E-02	4.2034E+00	3.9513E+04	1.2524E+02
1.0000E+02	3.8895E-02	4.2692E+00	4.0131E+04	1.2398E+02
1.0100E+02	3.7594E-02	4.1264E+00	3.8789E+04	1.2276E+02
1.0200E+02	3.7093E-02	4.0714E+00	3.8272E+04	1.2155E+02
1.0300E+02	3.6693E-02	4.0274E+00	3.7859E+04	1.2037E+02
1.0400E+02	3.5492E-02	3.8956E+00	3.6620E+04	1.1922E+02
1.0500E+02	3.5391E-02	3.8846E+00	3.6516E+04	1.1808E+02
1.0600E+02	3.4091E-02	3.7418E+00	3.5174E+04	1.1697E+02
1.0700E+02	3.3490E-02	3.6759E+00	3.4554E+04	1.1587E+02
1.0800E+02	3.3989E-02	3.7307E+00	3.5069E+04	1.1480E+02
1.0900E+02	3.2489E-02	3.5660E+00	3.3521E+04	1.1375E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1000E+02	3.1488E-02	3.4562E+00	3.2489E+04	1.1271E+02
1.1200E+02	3.0487E-02	3.3463E+00	3.1456E+04	1.1070E+02
1.1400E+02	2.8887E-02	3.1706E+00	2.9805E+04	1.0876E+02
1.1600E+02	2.7586E-02	3.0278E+00	2.8462E+04	1.0688E+02
1.1800E+02	2.6885E-02	2.9509E+00	2.7739E+04	1.0507E+02
1.2000E+02	2.5884E-02	2.8411E+00	2.6707E+04	1.0332E+02
1.2200E+02	2.4884E-02	2.7313E+00	2.5674E+04	1.0163E+02
1.2400E+02	2.4183E-02	2.6543E+00	2.4951E+04	9.9987E+01
1.2600E+02	2.3282E-02	2.5555E+00	2.4022E+04	9.8400E+01
1.2800E+02	2.1982E-02	2.4128E+00	2.2681E+04	9.6863E+01
1.3000E+02	2.1382E-02	2.3469E+00	2.2061E+04	9.5372E+01
1.3200E+02	2.0681E-02	2.2700E+00	2.1339E+04	9.3927E+01
1.3400E+02	1.9881E-02	2.1822E+00	2.0513E+04	9.2526E+01
1.3600E+02	1.9281E-02	2.1163E+00	1.9894E+04	9.1165E+01
1.3800E+02	1.8680E-02	2.0504E+00	1.9274E+04	8.9844E+01
1.4000E+02	1.8280E-02	2.0064E+00	1.8861E+04	8.8560E+01
1.4200E+02	1.7680E-02	1.9406E+00	1.8242E+04	8.7313E+01
1.4400E+02	1.6780E-02	1.8418E+00	1.7313E+04	8.6100E+01
1.4600E+02	1.6480E-02	1.8088E+00	1.7003E+04	8.4921E+01
1.4800E+02	1.6179E-02	1.7758E+00	1.6693E+04	8.3773E+01
1.5000E+02	1.5579E-02	1.7100E+00	1.6074E+04	8.2656E+01
1.5200E+02	1.4480E-02	1.5893E+00	1.4940E+04	8.1569E+01
1.5400E+02	1.4579E-02	1.6002E+00	1.5042E+04	8.0509E+01
1.5600E+02	1.4079E-02	1.5453E+00	1.4527E+04	7.9477E+01
1.5800E+02	1.3779E-02	1.5124E+00	1.4217E+04	7.8471E+01
1.6000E+02	1.3079E-02	1.4356E+00	1.3495E+04	7.7490E+01
1.6050E+02	1.2880E-02	1.4137E+00	1.3289E+04	7.7249E+01
1.6100E+02	1.2780E-02	1.4027E+00	1.3186E+04	7.7009E+01
1.6150E+02	1.2879E-02	1.4136E+00	1.3289E+04	7.6770E+01
1.6200E+02	1.2580E-02	1.3807E+00	1.2979E+04	7.6533E+01
1.6250E+02	1.2579E-02	1.3807E+00	1.2979E+04	7.6298E+01
1.6300E+02	1.2479E-02	1.3698E+00	1.2876E+04	7.6064E+01
1.6398E+02	1.6689E-02	1.8318E+00	1.7219E+04	7.5609E+01
1.6435E+02	1.6388E-02	1.7987E+00	1.6908E+04	7.5439E+01
1.6441E+02	1.6932E-02	1.8584E+00	1.7470E+04	7.5412E+01
1.6446E+02	1.8119E-02	1.9888E+00	1.8695E+04	7.5389E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6450E+02	1.7128E-02	1.8800E+00	1.7673E+04	7.5370E+01
1.6455E+02	1.7128E-02	1.8800E+00	1.7673E+04	7.5347E+01
1.6457E+02	1.7524E-02	1.9234E+00	1.8081E+04	7.5338E+01
1.6463E+02	1.7572E-02	1.9288E+00	1.8131E+04	7.5311E+01
1.6471E+02	2.3020E-02	2.5267E+00	2.3751E+04	7.5274E+01
1.6475E+02	1.9949E-02	2.1896E+00	2.0583E+04	7.5256E+01
1.6479E+02	1.9205E-02	2.1080E+00	1.9815E+04	7.5238E+01
1.6483E+02	2.0988E-02	2.3037E+00	2.1655E+04	7.5219E+01
1.6489E+02	1.8610E-02	2.0427E+00	1.9202E+04	7.5192E+01
1.6496E+02	2.1333E-02	2.3415E+00	2.2011E+04	7.5160E+01
1.6502E+02	1.8361E-02	2.0153E+00	1.8945E+04	7.5133E+01
1.6507E+02	1.9302E-02	2.1186E+00	1.9915E+04	7.5110E+01
1.6514E+02	1.6874E-02	1.8521E+00	1.7410E+04	7.5078E+01
1.6521E+02	1.6724E-02	1.8357E+00	1.7256E+04	7.5046E+01
1.6528E+02	1.5535E-02	1.7051E+00	1.6028E+04	7.5015E+01
1.6540E+02	1.4840E-02	1.6288E+00	1.5311E+04	7.4960E+01
1.6551E+02	1.4542E-02	1.5961E+00	1.5004E+04	7.4910E+01
1.6566E+02	1.4441E-02	1.5851E+00	1.4900E+04	7.4843E+01
1.6573E+02	1.5282E-02	1.6774E+00	1.5768E+04	7.4811E+01
1.6579E+02	1.8946E-02	2.0795E+00	1.9548E+04	7.4784E+01
1.6582E+02	1.7064E-02	1.8730E+00	1.7607E+04	7.4770E+01
1.6587E+02	1.6271E-02	1.7859E+00	1.6788E+04	7.4748E+01
1.6591E+02	1.7360E-02	1.9055E+00	1.7912E+04	7.4730E+01
1.6598E+02	1.5873E-02	1.7423E+00	1.6378E+04	7.4698E+01
1.6601E+02	1.6418E-02	1.8021E+00	1.6940E+04	7.4685E+01
1.6605E+02	1.8746E-02	2.0575E+00	1.9341E+04	7.4667E+01
1.6609E+02	1.7061E-02	1.8726E+00	1.7603E+04	7.4649E+01
1.6612E+02	1.6565E-02	1.8182E+00	1.7092E+04	7.4635E+01
1.6617E+02	1.7753E-02	1.9486E+00	1.8317E+04	7.4613E+01
1.6624E+02	1.5425E-02	1.6930E+00	1.5915E+04	7.4581E+01
1.6630E+02	1.5424E-02	1.6929E+00	1.5914E+04	7.4555E+01
1.6637E+02	1.4086E-02	1.5461E+00	1.4534E+04	7.4523E+01
1.6642E+02	1.4036E-02	1.5406E+00	1.4482E+04	7.4501E+01
1.6655E+02	1.3044E-02	1.4317E+00	1.3458E+04	7.4443E+01
1.6676E+02	1.2547E-02	1.3771E+00	1.2945E+04	7.4349E+01
1.6711E+02	1.2096E-02	1.3277E+00	1.2481E+04	7.4193E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6750E+02	1.1696E-02	1.2837E+00	1.2067E+04	7.4020E+01
1.6785E+02	1.1445E-02	1.2562E+00	1.1809E+04	7.3866E+01
1.6810E+02	1.1789E-02	1.2939E+00	1.2163E+04	7.3756E+01
1.6834E+02	1.3023E-02	1.4294E+00	1.3437E+04	7.3651E+01
1.6855E+02	1.5795E-02	1.7336E+00	1.6297E+04	7.3559E+01
1.6875E+02	2.2181E-02	2.4346E+00	2.2886E+04	7.3472E+01
1.6893E+02	3.2431E-02	3.5597E+00	3.3462E+04	7.3394E+01
1.6905E+02	3.9958E-02	4.3858E+00	4.1227E+04	7.3342E+01
1.6914E+02	4.3027E-02	4.7227E+00	4.4394E+04	7.3303E+01
1.6920E+02	4.3769E-02	4.8041E+00	4.5160E+04	7.3277E+01
1.6927E+02	4.3124E-02	4.7334E+00	4.4495E+04	7.3246E+01
1.6936E+02	4.0450E-02	4.4398E+00	4.1735E+04	7.3207E+01
1.6948E+02	3.5149E-02	3.8579E+00	3.6265E+04	7.3156E+01
1.6959E+02	3.1185E-02	3.4229E+00	3.2176E+04	7.3108E+01
1.6967E+02	2.9748E-02	3.2652E+00	3.0694E+04	7.3074E+01
1.6972E+02	2.9648E-02	3.2542E+00	3.0590E+04	7.3052E+01
1.6981E+02	3.1232E-02	3.4280E+00	3.2224E+04	7.3013E+01
1.6996E+02	3.8016E-02	4.1726E+00	3.9224E+04	7.2949E+01
1.7007E+02	4.3759E-02	4.8030E+00	4.5149E+04	7.2902E+01
1.7016E+02	4.6928E-02	5.1509E+00	4.8419E+04	7.2863E+01
1.7024E+02	4.7917E-02	5.2594E+00	4.9440E+04	7.2829E+01
1.7031E+02	4.7471E-02	5.2104E+00	4.8979E+04	7.2799E+01
1.7037E+02	4.6133E-02	5.0636E+00	4.7599E+04	7.2773E+01
1.7049E+02	4.2170E-02	4.6286E+00	4.3510E+04	7.2722E+01
1.7060E+02	3.7266E-02	4.0903E+00	3.8450E+04	7.2675E+01
1.7074E+02	2.9588E-02	3.2476E+00	3.0528E+04	7.2616E+01
1.7090E+02	2.3395E-02	2.5679E+00	2.4139E+04	7.2548E+01
1.7099E+02	2.2304E-02	2.4481E+00	2.3013E+04	7.2510E+01
1.7106E+02	2.2749E-02	2.4969E+00	2.3472E+04	7.2480E+01
1.7113E+02	2.5027E-02	2.7470E+00	2.5822E+04	7.2450E+01
1.7119E+02	3.3396E-02	3.6656E+00	3.4457E+04	7.2425E+01
1.7120E+02	4.9590E-02	5.4431E+00	5.1166E+04	7.2421E+01
1.7123E+02	6.5190E-02	7.1553E+00	6.7262E+04	7.2408E+01
1.7125E+02	8.0295E-02	8.8133E+00	8.2847E+04	7.2400E+01
1.7135E+02	5.8305E-02	6.3997E+00	6.0158E+04	7.2357E+01
1.7140E+02	4.2753E-02	4.6927E+00	4.4112E+04	7.2336E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7145E+02	3.4383E-02	3.7739E+00	3.5476E+04	7.2315E+01
1.7154E+02	2.9034E-02	3.1868E+00	2.9956E+04	7.2277E+01
1.7178E+02	2.2494E-02	2.4689E+00	2.3208E+04	7.2176E+01
1.7195E+02	1.7687E-02	1.9414E+00	1.8249E+04	7.2105E+01
1.7199E+02	1.7439E-02	1.9141E+00	1.7993E+04	7.2088E+01
1.7216E+02	1.2980E-02	1.4247E+00	1.3392E+04	7.2017E+01
1.7222E+02	1.2533E-02	1.3757E+00	1.2931E+04	7.1992E+01
1.7232E+02	1.3969E-02	1.5333E+00	1.4413E+04	7.1950E+01
1.7237E+02	1.9069E-02	2.0930E+00	1.9675E+04	7.1929E+01
1.7243E+02	2.5408E-02	2.7888E+00	2.6215E+04	7.1904E+01
1.7244E+02	3.9770E-02	4.3652E+00	4.1034E+04	7.1900E+01
1.7246E+02	5.6163E-02	6.1645E+00	5.7948E+04	7.1892E+01
1.7252E+02	4.0016E-02	4.3922E+00	4.1288E+04	7.1867E+01
1.7257E+02	2.9665E-02	3.2561E+00	3.0608E+04	7.1846E+01
1.7261E+02	2.6099E-02	2.8646E+00	2.6928E+04	7.1829E+01
1.7265E+02	3.0606E-02	3.3593E+00	3.1578E+04	7.1812E+01
1.7271E+02	2.7980E-02	3.0711E+00	2.8869E+04	7.1787E+01
1.7273E+02	3.4467E-02	3.7832E+00	3.5562E+04	7.1779E+01
1.7276E+02	3.6745E-02	4.0332E+00	3.7913E+04	7.1767E+01
1.7282E+02	3.0158E-02	3.3102E+00	3.1116E+04	7.1742E+01
1.7285E+02	2.3719E-02	2.6034E+00	2.4473E+04	7.1729E+01
1.7290E+02	2.0301E-02	2.2283E+00	2.0947E+04	7.1709E+01
1.7293E+02	2.0103E-02	2.2065E+00	2.0742E+04	7.1696E+01
1.7296E+02	2.2480E-02	2.4674E+00	2.3194E+04	7.1684E+01
1.7299E+02	2.8126E-02	3.0871E+00	2.9019E+04	7.1671E+01
1.7301E+02	3.2781E-02	3.5980E+00	3.3822E+04	7.1663E+01
1.7305E+02	3.3523E-02	3.6795E+00	3.4589E+04	7.1646E+01
1.7310E+02	3.1393E-02	3.4457E+00	3.2390E+04	7.1626E+01
1.7316E+02	2.5102E-02	2.7553E+00	2.5900E+04	7.1601E+01
1.7321E+02	1.9802E-02	2.1735E+00	2.0432E+04	7.1580E+01
1.7326E+02	1.8217E-02	1.9995E+00	1.8796E+04	7.1560E+01
1.7330E+02	1.8266E-02	2.0049E+00	1.8847E+04	7.1543E+01
1.7337E+02	1.6433E-02	1.8037E+00	1.6955E+04	7.1514E+01
1.7342E+02	1.6037E-02	1.7602E+00	1.6546E+04	7.1494E+01
1.7344E+02	1.4996E-02	1.6460E+00	1.5473E+04	7.1485E+01
1.7350E+02	1.4451E-02	1.5861E+00	1.4910E+04	7.1461E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7356E+02	1.6579E-02	1.8197E+00	1.7106E+04	7.1436E+01
1.7364E+02	1.9302E-02	2.1187E+00	1.9916E+04	7.1403E+01
1.7366E+02	2.2125E-02	2.4285E+00	2.2828E+04	7.1395E+01
1.7372E+02	2.4353E-02	2.6730E+00	2.5126E+04	7.1370E+01
1.7378E+02	3.0098E-02	3.3035E+00	3.1054E+04	7.1345E+01
1.7382E+02	3.0246E-02	3.3198E+00	3.1207E+04	7.1329E+01
1.7388E+02	3.6336E-02	3.9883E+00	3.7491E+04	7.1304E+01
1.7395E+02	2.9748E-02	3.2652E+00	3.0694E+04	7.1276E+01
1.7401E+02	2.2913E-02	2.5150E+00	2.3641E+04	7.1251E+01
1.7405E+02	2.0932E-02	2.2975E+00	2.1597E+04	7.1235E+01
1.7413E+02	2.6428E-02	2.9008E+00	2.7268E+04	7.1202E+01
1.7420E+02	2.9696E-02	3.2595E+00	3.0640E+04	7.1173E+01
1.7427E+02	3.4697E-02	3.8084E+00	3.5800E+04	7.1145E+01
1.7429E+02	3.4103E-02	3.7431E+00	3.5186E+04	7.1137E+01
1.7435E+02	3.0685E-02	3.3680E+00	3.1660E+04	7.1112E+01
1.7438E+02	2.7515E-02	3.0200E+00	2.8389E+04	7.1100E+01
1.7444E+02	2.6920E-02	2.9548E+00	2.7775E+04	7.1076E+01
1.7450E+02	2.5235E-02	2.7698E+00	2.6037E+04	7.1051E+01
1.7456E+02	2.5978E-02	2.8514E+00	2.6803E+04	7.1027E+01
1.7463E+02	2.3996E-02	2.6338E+00	2.4759E+04	7.0998E+01
1.7468E+02	2.3549E-02	2.5848E+00	2.4298E+04	7.0978E+01
1.7487E+02	2.6222E-02	2.8781E+00	2.7055E+04	7.0901E+01
1.7494E+02	3.0034E-02	3.2966E+00	3.0989E+04	7.0872E+01
1.7499E+02	2.9985E-02	3.2912E+00	3.0938E+04	7.0852E+01
1.7505E+02	3.0875E-02	3.3889E+00	3.1857E+04	7.0828E+01
1.7514E+02	2.8200E-02	3.0952E+00	2.9096E+04	7.0791E+01
1.7525E+02	2.6762E-02	2.9374E+00	2.7613E+04	7.0747E+01
1.7533E+02	2.8445E-02	3.1222E+00	2.9349E+04	7.0715E+01
1.7540E+02	3.0376E-02	3.3341E+00	3.1342E+04	7.0687E+01
1.7549E+02	2.8988E-02	3.1818E+00	2.9910E+04	7.0650E+01
1.7559E+02	3.0869E-02	3.3882E+00	3.1850E+04	7.0610E+01
1.7567E+02	3.0323E-02	3.3283E+00	3.1287E+04	7.0578E+01
1.7570E+02	3.1066E-02	3.4098E+00	3.2053E+04	7.0566E+01
1.7630E+02	3.3783E-02	3.7081E+00	3.4857E+04	7.0326E+01
1.7700E+02	3.5632E-02	3.9110E+00	3.6764E+04	7.0048E+01
1.7750E+02	3.7837E-02	4.1531E+00	3.9040E+04	6.9850E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7800E+02	3.8738E-02	4.2519E+00	3.9969E+04	6.9654E+01
1.7850E+02	3.9437E-02	4.3286E+00	4.0690E+04	6.9459E+01
1.7900E+02	3.9534E-02	4.3393E+00	4.0791E+04	6.9265E+01
1.7950E+02	3.9531E-02	4.3390E+00	4.0787E+04	6.9072E+01
1.8000E+02	3.9428E-02	4.3276E+00	4.0681E+04	6.8880E+01
1.8050E+02	3.8321E-02	4.2062E+00	3.9539E+04	6.8689E+01
1.8100E+02	3.7817E-02	4.1508E+00	3.9018E+04	6.8500E+01
1.8150E+02	3.7112E-02	4.0734E+00	3.8291E+04	6.8311E+01
1.8200E+02	3.6407E-02	3.9960E+00	3.7564E+04	6.8123E+01
1.8250E+02	3.6203E-02	3.9737E+00	3.7354E+04	6.7937E+01
1.8300E+02	3.5699E-02	3.9184E+00	3.6834E+04	6.7751E+01
1.8350E+02	3.5295E-02	3.8740E+00	3.6417E+04	6.7566E+01
1.8400E+02	3.4992E-02	3.8407E+00	3.6104E+04	6.7383E+01
1.8450E+02	3.5290E-02	3.8734E+00	3.6411E+04	6.7200E+01
1.8500E+02	3.5287E-02	3.8731E+00	3.6408E+04	6.7018E+01
1.8550E+02	3.5284E-02	3.8728E+00	3.6406E+04	6.6838E+01
1.8600E+02	3.5382E-02	3.8835E+00	3.6506E+04	6.6658E+01
1.8650E+02	3.5680E-02	3.9162E+00	3.6813E+04	6.6479E+01
1.8700E+02	3.6078E-02	3.9599E+00	3.7224E+04	6.6302E+01
1.8750E+02	3.6275E-02	3.9816E+00	3.7428E+04	6.6125E+01
1.8800E+02	3.6874E-02	4.0473E+00	3.8045E+04	6.5949E+01
1.8850E+02	3.6871E-02	4.0470E+00	3.8043E+04	6.5774E+01
1.8900E+02	3.7068E-02	4.0687E+00	3.8246E+04	6.5600E+01
1.8950E+02	3.7366E-02	4.1013E+00	3.8553E+04	6.5427E+01
1.9000E+02	3.7964E-02	4.1670E+00	3.9170E+04	6.5255E+01
1.9100E+02	3.8158E-02	4.1883E+00	3.9371E+04	6.4913E+01
1.9200E+02	3.9655E-02	4.3525E+00	4.0915E+04	6.4575E+01
1.9300E+02	4.0149E-02	4.4068E+00	4.1425E+04	6.4241E+01
1.9400E+02	4.0843E-02	4.4830E+00	4.2141E+04	6.3909E+01
1.9500E+02	4.2038E-02	4.6142E+00	4.3374E+04	6.3582E+01
1.9600E+02	4.1932E-02	4.6024E+00	4.3264E+04	6.3257E+01
1.9700E+02	4.1525E-02	4.5578E+00	4.2844E+04	6.2936E+01
1.9800E+02	4.1718E-02	4.5791E+00	4.3044E+04	6.2618E+01
1.9900E+02	4.1112E-02	4.5125E+00	4.2418E+04	6.2304E+01
2.0000E+02	4.0005E-02	4.3910E+00	4.1276E+04	6.1992E+01
2.0100E+02	3.9499E-02	4.3354E+00	4.0754E+04	6.1684E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0200E+02	3.9193E-02	4.3018E+00	4.0438E+04	6.1378E+01
2.0300E+02	3.8787E-02	4.2573E+00	4.0019E+04	6.1076E+01
2.0400E+02	3.8181E-02	4.1908E+00	3.9394E+04	6.0777E+01
2.0500E+02	3.6876E-02	4.0475E+00	3.8048E+04	6.0480E+01
2.0600E+02	3.6770E-02	4.0359E+00	3.7939E+04	6.0186E+01
2.0700E+02	3.6265E-02	3.9805E+00	3.7417E+04	5.9896E+01
2.0800E+02	3.6459E-02	4.0018E+00	3.7618E+04	5.9608E+01
2.0900E+02	3.5954E-02	3.9463E+00	3.7097E+04	5.9323E+01
2.1000E+02	3.5150E-02	3.8580E+00	3.6267E+04	5.9040E+01
2.1100E+02	3.4944E-02	3.8355E+00	3.6055E+04	5.8760E+01
2.1200E+02	3.5238E-02	3.8678E+00	3.6358E+04	5.8483E+01
2.1300E+02	3.4734E-02	3.8124E+00	3.5838E+04	5.8209E+01
2.1400E+02	3.4429E-02	3.7790E+00	3.5523E+04	5.7937E+01
2.1500E+02	3.4224E-02	3.7565E+00	3.5312E+04	5.7667E+01
2.1550E+02	3.4521E-02	3.7890E+00	3.5618E+04	5.7533E+01
2.1600E+02	3.4318E-02	3.7668E+00	3.5409E+04	5.7400E+01
2.1650E+02	3.3817E-02	3.7118E+00	3.4892E+04	5.7268E+01
2.1700E+02	3.3814E-02	3.7115E+00	3.4889E+04	5.7136E+01
2.1750E+02	3.3911E-02	3.7222E+00	3.4989E+04	5.7004E+01
2.1800E+02	3.3809E-02	3.7109E+00	3.4883E+04	5.6873E+01
2.1850E+02	3.3308E-02	3.6559E+00	3.4366E+04	5.6743E+01
2.1900E+02	3.3903E-02	3.7213E+00	3.4981E+04	5.6614E+01
2.1950E+02	3.2904E-02	3.6115E+00	3.3949E+04	5.6485E+01
2.2000E+02	3.3599E-02	3.6879E+00	3.4667E+04	5.6356E+01
2.2050E+02	3.3198E-02	3.6438E+00	3.4253E+04	5.6229E+01
2.2100E+02	3.3594E-02	3.6873E+00	3.4661E+04	5.6101E+01
2.2150E+02	3.2794E-02	3.5995E+00	3.3836E+04	5.5975E+01
2.2200E+02	3.3290E-02	3.6539E+00	3.4347E+04	5.5849E+01
2.2250E+02	3.2888E-02	3.6098E+00	3.3933E+04	5.5723E+01
2.2300E+02	3.2686E-02	3.5877E+00	3.3725E+04	5.5598E+01
2.2350E+02	3.2584E-02	3.5765E+00	3.3620E+04	5.5474E+01
2.2400E+02	3.2582E-02	3.5762E+00	3.3617E+04	5.5350E+01
2.2450E+02	3.2579E-02	3.5759E+00	3.3614E+04	5.5227E+01
2.2500E+02	3.2676E-02	3.5866E+00	3.3715E+04	5.5104E+01
2.2550E+02	3.2574E-02	3.5753E+00	3.3609E+04	5.4982E+01
2.2600E+02	3.2970E-02	3.6188E+00	3.4018E+04	5.4860E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2650E+02	3.2967E-02	3.6185E+00	3.4015E+04	5.4739E+01
2.2700E+02	3.3463E-02	3.6729E+00	3.4526E+04	5.4619E+01
2.2750E+02	3.3659E-02	3.6945E+00	3.4729E+04	5.4499E+01
2.2800E+02	3.4553E-02	3.7925E+00	3.5651E+04	5.4379E+01
2.2850E+02	3.4849E-02	3.8250E+00	3.5956E+04	5.4260E+01
2.2900E+02	3.5344E-02	3.8794E+00	3.6467E+04	5.4142E+01
2.2950E+02	3.4246E-02	3.7589E+00	3.5334E+04	5.4024E+01
2.3000E+02	3.3148E-02	3.6384E+00	3.4202E+04	5.3906E+01
2.3050E+02	3.2250E-02	3.5398E+00	3.3275E+04	5.3789E+01
2.3100E+02	3.2148E-02	3.5286E+00	3.3169E+04	5.3673E+01
2.3150E+02	3.1747E-02	3.4846E+00	3.2756E+04	5.3557E+01
2.3200E+02	3.1446E-02	3.4516E+00	3.2445E+04	5.3441E+01
2.3250E+02	3.1941E-02	3.5059E+00	3.2956E+04	5.3327E+01
2.3300E+02	3.3232E-02	3.6476E+00	3.4288E+04	5.3212E+01
2.3350E+02	3.3627E-02	3.6910E+00	3.4696E+04	5.3098E+01
2.3400E+02	3.2630E-02	3.5815E+00	3.3667E+04	5.2985E+01
2.3450E+02	3.1931E-02	3.5048E+00	3.2946E+04	5.2872E+01
2.3500E+02	3.1531E-02	3.4608E+00	3.2533E+04	5.2759E+01
2.3550E+02	3.1230E-02	3.4278E+00	3.2222E+04	5.2647E+01
2.3600E+02	3.1128E-02	3.4166E+00	3.2117E+04	5.2536E+01
2.3650E+02	3.0827E-02	3.3836E+00	3.1807E+04	5.2425E+01
2.3700E+02	3.0427E-02	3.3397E+00	3.1394E+04	5.2314E+01
2.3750E+02	3.0425E-02	3.3394E+00	3.1392E+04	5.2204E+01
2.3800E+02	3.0621E-02	3.3610E+00	3.1594E+04	5.2094E+01
2.3850E+02	3.0321E-02	3.3280E+00	3.1284E+04	5.1985E+01
2.3900E+02	3.0020E-02	3.2950E+00	3.0974E+04	5.1876E+01
2.3950E+02	3.0316E-02	3.3275E+00	3.1279E+04	5.1768E+01
2.4000E+02	2.9816E-02	3.2727E+00	3.0764E+04	5.1660E+01
2.4050E+02	2.9516E-02	3.2397E+00	3.0454E+04	5.1553E+01
2.4100E+02	2.9613E-02	3.2504E+00	3.0554E+04	5.1446E+01
2.4150E+02	3.0008E-02	3.2937E+00	3.0962E+04	5.1339E+01
2.4200E+02	3.0105E-02	3.3044E+00	3.1062E+04	5.1233E+01
2.4250E+02	3.0003E-02	3.2932E+00	3.0957E+04	5.1128E+01
2.4300E+02	2.9306E-02	3.2166E+00	3.0237E+04	5.1022E+01
2.4350E+02	2.9403E-02	3.2273E+00	3.0337E+04	5.0918E+01
2.4400E+02	2.8705E-02	3.1507E+00	2.9617E+04	5.0813E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.4450E+02	2.9497E-02	3.2377E+00	3.0435E+04	5.0709E+01
2.4500E+02	2.8999E-02	3.1829E+00	2.9920E+04	5.0606E+01
2.4550E+02	2.9195E-02	3.2045E+00	3.0123E+04	5.0503E+01
2.4600E+02	2.8795E-02	3.1606E+00	2.9710E+04	5.0400E+01
2.4650E+02	2.8793E-02	3.1604E+00	2.9708E+04	5.0298E+01
2.4700E+02	2.9486E-02	3.2364E+00	3.0423E+04	5.0196E+01
2.4750E+02	2.8292E-02	3.1054E+00	2.9191E+04	5.0095E+01
2.4800E+02	2.8786E-02	3.1596E+00	2.9701E+04	4.9994E+01
2.4850E+02	2.8486E-02	3.1267E+00	2.9392E+04	4.9893E+01
2.4900E+02	2.8286E-02	3.1046E+00	2.9184E+04	4.9793E+01
2.4950E+02	2.8383E-02	3.1153E+00	2.9284E+04	4.9693E+01
2.5000E+02	2.9472E-02	3.2349E+00	3.0408E+04	4.9594E+01
2.5100E+02	2.8773E-02	3.1581E+00	2.9687E+04	4.9396E+01
2.5200E+02	2.8371E-02	3.1141E+00	2.9273E+04	4.9200E+01
2.5300E+02	2.7970E-02	3.0700E+00	2.8859E+04	4.9006E+01
2.5400E+02	2.7470E-02	3.0151E+00	2.8343E+04	4.8813E+01
2.5500E+02	2.7961E-02	3.0691E+00	2.8850E+04	4.8621E+01
2.5600E+02	2.8155E-02	3.0903E+00	2.9050E+04	4.8431E+01
2.5700E+02	2.7259E-02	2.9919E+00	2.8125E+04	4.8243E+01
2.5800E+02	2.7254E-02	2.9915E+00	2.8120E+04	4.8056E+01
2.5900E+02	2.7250E-02	2.9910E+00	2.8116E+04	4.7870E+01
2.6000E+02	2.6949E-02	2.9579E+00	2.7805E+04	4.7686E+01
2.7500E+02	2.6204E-02	2.8761E+00	2.7036E+04	4.5085E+01
3.0000E+02	2.2562E-02	2.4764E+00	2.3279E+04	4.1328E+01
3.5000E+02	1.6725E-02	1.8358E+00	1.7257E+04	3.5424E+01
4.0000E+02	1.2635E-02	1.3869E+00	1.3037E+04	3.0996E+01
4.5000E+02	9.7768E-03	1.0731E+00	1.0087E+04	2.7552E+01
5.0000E+02	7.7400E-03	8.4955E-01	7.9859E+03	2.4797E+01
5.2500E+02	6.9407E-03	7.6182E-01	7.1612E+03	2.3616E+01
5.2695E+02	9.4585E-03	1.0382E+00	9.7591E+03	2.3529E+01
5.2877E+02	9.2449E-03	1.0147E+00	9.5387E+03	2.3448E+01
5.2950E+02	1.0667E-02	1.1708E+00	1.1006E+04	2.3415E+01
5.2975E+02	1.3370E-02	1.4675E+00	1.3794E+04	2.3404E+01
5.3002E+02	2.4535E-02	2.6930E+00	2.5314E+04	2.3392E+01
5.3026E+02	3.9896E-02	4.3790E+00	4.1163E+04	2.3382E+01
5.3043E+02	4.0749E-02	4.4726E+00	4.2044E+04	2.3374E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

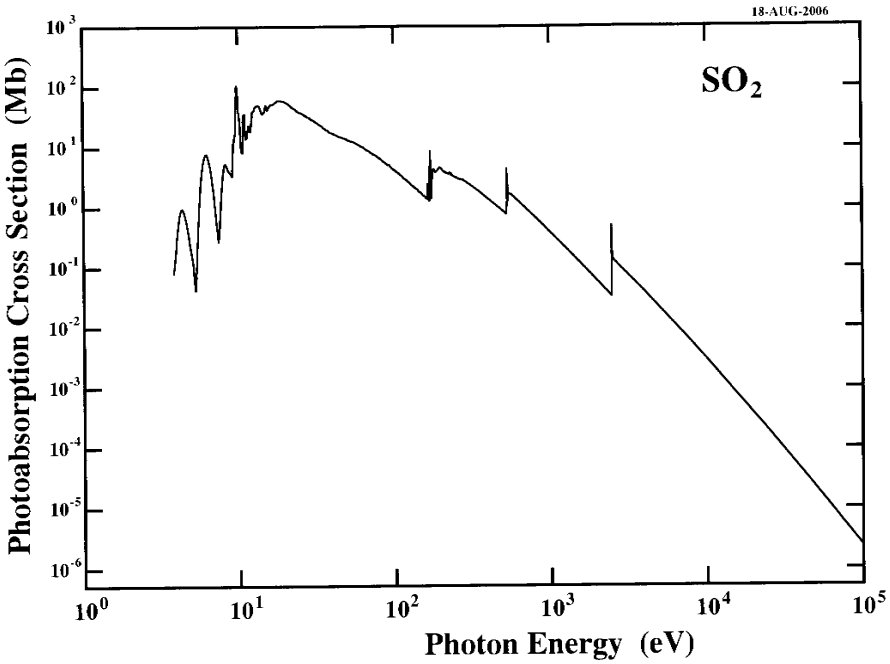
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3054E+02	3.9469E-02	4.3321E+00	4.0723E+04	2.3369E+01
5.3100E+02	2.0054E-02	2.2012E+00	2.0692E+04	2.3349E+01
5.3116E+02	1.5645E-02	1.7172E+00	1.6142E+04	2.3342E+01
5.3149E+02	1.1450E-02	1.2567E+00	1.1814E+04	2.3328E+01
5.3192E+02	1.0027E-02	1.1006E+00	1.0346E+04	2.3309E+01
5.3352E+02	9.4585E-03	1.0382E+00	9.7591E+03	2.3239E+01
5.3404E+02	1.2089E-02	1.3270E+00	1.2474E+04	2.3216E+01
5.3444E+02	1.9130E-02	2.0997E+00	1.9738E+04	2.3199E+01
5.3474E+02	2.0837E-02	2.2871E+00	2.1499E+04	2.3186E+01
5.3523E+02	2.1121E-02	2.3183E+00	2.1793E+04	2.3165E+01
5.3583E+02	1.8348E-02	2.0138E+00	1.8931E+04	2.3139E+01
5.3610E+02	2.1334E-02	2.3417E+00	2.2012E+04	2.3127E+01
5.3640E+02	1.8917E-02	2.0763E+00	1.9518E+04	2.3114E+01
5.3689E+02	1.1236E-02	1.2333E+00	1.1593E+04	2.3093E+01
5.3721E+02	1.4863E-02	1.6314E+00	1.5336E+04	2.3079E+01
5.3746E+02	1.4294E-02	1.5690E+00	1.4749E+04	2.3069E+01
5.3762E+02	1.5361E-02	1.6860E+00	1.5849E+04	2.3062E+01
5.3789E+02	1.8205E-02	1.9982E+00	1.8784E+04	2.3050E+01
5.3822E+02	1.5930E-02	1.7485E+00	1.6436E+04	2.3036E+01
5.4142E+02	1.5645E-02	1.7172E+00	1.6142E+04	2.2900E+01
5.4505E+02	1.5290E-02	1.6782E+00	1.5776E+04	2.2747E+01
5.5037E+02	1.5148E-02	1.6626E+00	1.5629E+04	2.2527E+01
5.5528E+02	1.4792E-02	1.6236E+00	1.5262E+04	2.2328E+01
5.6003E+02	1.5076E-02	1.6548E+00	1.5555E+04	2.2139E+01
5.6500E+02	1.4650E-02	1.6080E+00	1.5115E+04	2.1944E+01
6.0000E+02	1.2699E-02	1.3939E+00	1.3103E+04	2.0664E+01
7.0000E+02	8.6846E-03	9.5323E-01	8.9606E+03	1.7712E+01
8.0000E+02	6.1919E-03	6.7963E-01	6.3886E+03	1.5498E+01
9.0000E+02	4.5671E-03	5.0129E-01	4.7122E+03	1.3776E+01
1.0000E+03	3.4645E-03	3.8027E-01	3.5746E+03	1.2398E+01
1.2500E+03	1.9101E-03	2.0966E-01	1.9708E+03	9.9187E+00
1.5000E+03	1.1650E-03	1.2788E-01	1.2021E+03	8.2656E+00
1.7500E+03	7.6393E-04	8.3849E-02	7.8820E+02	7.0848E+00
2.0000E+03	5.2888E-04	5.8050E-02	5.4569E+02	6.1992E+00
2.2500E+03	3.8194E-04	4.1923E-02	3.9408E+02	5.5104E+00
2.4700E+03	2.9500E-04	3.2380E-02	3.0438E+02	5.0196E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.4710E+03	4.7566E-04	5.2209E-02	4.9078E+02	5.0176E+00
2.4720E+03	7.3804E-04	8.1008E-02	7.6149E+02	5.0155E+00
2.4731E+03	4.6228E-03	5.0740E-01	4.7697E+03	5.0133E+00
2.4740E+03	1.3092E-03	1.4370E-01	1.3508E+03	5.0115E+00
2.4750E+03	5.9525E-04	6.5335E-02	6.1417E+02	5.0095E+00
2.4760E+03	6.1310E-04	6.7294E-02	6.3258E+02	5.0074E+00
2.4770E+03	1.3324E-03	1.4625E-01	1.3747E+03	5.0054E+00
2.4779E+03	3.1298E-03	3.4352E-01	3.2292E+03	5.0037E+00
2.4784E+03	2.8620E-03	3.1414E-01	2.9530E+03	5.0025E+00
2.4788E+03	2.9513E-03	3.2393E-01	3.0450E+03	5.0019E+00
2.4793E+03	2.1124E-03	2.3186E-01	2.1795E+03	5.0008E+00
2.4800E+03	1.1307E-03	1.2411E-01	1.1666E+03	4.9994E+00
2.4810E+03	1.8206E-03	1.9983E-01	1.8784E+03	4.9974E+00
2.4816E+03	1.5707E-03	1.7240E-01	1.6206E+03	4.9962E+00
2.4820E+03	1.6001E-03	1.7563E-01	1.6510E+03	4.9953E+00
2.4840E+03	1.4698E-03	1.6133E-01	1.5165E+03	4.9913E+00
2.4860E+03	1.4636E-03	1.6064E-01	1.5101E+03	4.9873E+00
2.4880E+03	1.3859E-03	1.5212E-01	1.4300E+03	4.9833E+00
2.4900E+03	1.4395E-03	1.5800E-01	1.4852E+03	4.9793E+00
2.4920E+03	1.5466E-03	1.6975E-01	1.5957E+03	4.9753E+00
2.4940E+03	1.5644E-03	1.7171E-01	1.6141E+03	4.9713E+00
2.4960E+03	1.5823E-03	1.7367E-01	1.6326E+03	4.9673E+00
2.4980E+03	1.5591E-03	1.7113E-01	1.6086E+03	4.9633E+00
2.5000E+03	1.5055E-03	1.6525E-01	1.5534E+03	4.9594E+00
2.5020E+03	1.4279E-03	1.5673E-01	1.4733E+03	4.9554E+00
2.5040E+03	1.3681E-03	1.5016E-01	1.4116E+03	4.9514E+00
2.5060E+03	1.3092E-03	1.4370E-01	1.3508E+03	4.9475E+00
2.5080E+03	1.2556E-03	1.3782E-01	1.2956E+03	4.9435E+00
2.5100E+03	1.2316E-03	1.3518E-01	1.2707E+03	4.9396E+00
2.7500E+03	9.5321E-04	1.0462E-01	9.8350E+02	4.5085E+00
3.0000E+03	7.6214E-04	8.3653E-02	7.8636E+02	4.1328E+00
3.5000E+03	5.0668E-04	5.5613E-02	5.2278E+02	3.5424E+00
4.0000E+03	3.5248E-04	3.8688E-02	3.6368E+02	3.0996E+00
4.5000E+03	2.5459E-04	2.7944E-02	2.6268E+02	2.7552E+00
5.0000E+03	1.8969E-04	2.0820E-02	1.9572E+02	2.4797E+00
6.0000E+03	1.1338E-04	1.2445E-02	1.1699E+02	2.0664E+00

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($cm^2\ g^{-1}$)	λ (Å)
7.0000E+03	7.3101E-05	8.0237E-03	7.5424E+01	1.7712E+00
8.0000E+03	4.9882E-05	5.4751E-03	5.1467E+01	1.5498E+00
9.0000E+03	3.5571E-05	3.9043E-03	3.6702E+01	1.3776E+00
1.0000E+04	2.6105E-05	2.8653E-03	2.6934E+01	1.2398E+00
1.2500E+04	1.3377E-05	1.4683E-03	1.3802E+01	9.9187E-01
1.5000E+04	7.7108E-06	8.4634E-04	7.9558E+00	8.2656E-01
1.7500E+04	4.8421E-06	5.3147E-04	4.9959E+00	7.0848E-01
2.0000E+04	3.2363E-06	3.5522E-04	3.3391E+00	6.1992E-01
2.2500E+04	2.2686E-06	2.4900E-04	2.3406E+00	5.5104E-01
2.5000E+04	1.6510E-06	1.8122E-04	1.7035E+00	4.9594E-01
2.7500E+04	1.2336E-06	1.3540E-04	1.2728E+00	4.5085E-01
3.0000E+04	9.3997E-07	1.0317E-04	9.6984E-01	4.1328E-01
3.5000E+04	5.7955E-07	6.3612E-05	5.9796E-01	3.5424E-01
4.0000E+04	3.8149E-07	4.1873E-05	3.9361E-01	3.0996E-01
4.5000E+04	2.6384E-07	2.8959E-05	2.7222E-01	2.7552E-01
5.0000E+04	1.8965E-07	2.0817E-05	1.9568E-01	2.4797E-01
6.0000E+04	1.0653E-07	1.1693E-05	1.0991E-01	2.0664E-01
7.0000E+04	6.5286E-08	7.1659E-06	6.7361E-02	1.7712E-01
8.0000E+04	4.2713E-08	4.6882E-06	4.4070E-02	1.5498E-01
9.0000E+04	2.9367E-08	3.2233E-06	3.0300E-02	1.3776E-01
1.0000E+05	2.0994E-08	2.3044E-06	2.1662E-02	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_a = 680\,(Z-0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-2\pi\chi\right)}\ .$$

Here E is photon energy in eV and χ is given by

$$\chi = \sqrt{\frac{E_K}{E-E_K}}\ ,$$

where E_K = 539.84 and 2483.7 eV for oxygen and sulfur atoms, respectively.

SO_2

Energy, eV	Source
3.07 - 5.27	Feng *et al*., Chem. Phys., 240 (1999) 371 Fig. 4
5.27 - 7.45	Feng *et al*., Chem. Phys., 240 (1999) 371 Fig. 4
7.45 - 9.20	Feng *et al*., Chem. Phys., 240 (1999) 371 Fig. 4
9.20 - 11.65	Feng *et al*., Chem. Phys., 240 (1999) 371 Fig. 4
11.65 - 12.35 (IP)	Table 5.13 p.223 (Berkowitz's book*) Feng *et al*., Chem. Phys., 240 (1999) 371 Fig. 4
IP - 16.67	Holland *et al*., Chem. Phys., 201 (1995) 299
16.67 - 84.11	Hamdy *et al*., J. Phys. B, 24 (1991) 4803
84.11 - 163.0	Feng *et al*., Chem. Phys., 240 (1999) 371
163.0 - 177.0	Feng *et al*., Chem. Phys., 240 (1999) 371
177.0 - 260.0	Feng *et al*., Chem. Phys., 240 (1999) 371
260.0 - 525.0	Table 5.14 p.225 (Berkowitz's book*)
525.0 - 565.0	Table 5.13 p.223 (Berkowitz's book*)
565.0 - 2470.0	Table 5.14 p.225 (Berkowitz's book*)
2470 - 2510	Reynaud *et al*., J. Phys. B, 29 (1996) 5403
2510 - 10000	Table 5.14 p.225 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Ozone (O_3)

Z = 24 Molecular Mass : $M_{\rm A}$ = 47.9982

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.6500E+00	4.2879E-06	4.7064E-04	5.9050E+00	7.5142E+03
1.6581E+00	4.1338E-06	4.5373E-04	5.6928E+00	7.4773E+03
1.6646E+00	4.0878E-06	4.4868E-04	5.6294E+00	7.4483E+03
1.6741E+00	4.1111E-06	4.5124E-04	5.6615E+00	7.4061E+03
1.6844E+00	4.3038E-06	4.7239E-04	5.9269E+00	7.3609E+03
1.6955E+00	4.8832E-06	5.3598E-04	6.7247E+00	7.3127E+03
1.7074E+00	5.4586E-06	5.9914E-04	7.5172E+00	7.2617E+03
1.7193E+00	6.3802E-06	7.0029E-04	8.7863E+00	7.2114E+03
1.7265E+00	6.5692E-06	7.2104E-04	9.0466E+00	7.1813E+03
1.7328E+00	6.7207E-06	7.3767E-04	9.2553E+00	7.1550E+03
1.7464E+00	7.2160E-06	7.9203E-04	9.9373E+00	7.0994E+03
1.7590E+00	7.8971E-06	8.6679E-04	1.0875E+01	7.0485E+03
1.7708E+00	9.0775E-06	9.9635E-04	1.2501E+01	7.0015E+03
1.7851E+00	1.0520E-05	1.1547E-03	1.4488E+01	6.9454E+03
1.8007E+00	1.2114E-05	1.3297E-03	1.6683E+01	6.8855E+03
1.8071E+00	1.2500E-05	1.3720E-03	1.7214E+01	6.8609E+03
1.8286E+00	1.4604E-05	1.6029E-03	2.0112E+01	6.7803E+03
1.8475E+00	1.7029E-05	1.8691E-03	2.3451E+01	6.7110E+03
1.8538E+00	1.8256E-05	2.0038E-03	2.5141E+01	6.6881E+03
1.8694E+00	2.0192E-05	2.2163E-03	2.7807E+01	6.6322E+03
1.8870E+00	2.2664E-05	2.4877E-03	3.1212E+01	6.5706E+03
1.9045E+00	2.4853E-05	2.7279E-03	3.4226E+01	6.5099E+03
1.9224E+00	2.7371E-05	3.0043E-03	3.7694E+01	6.4493E+03
1.9462E+00	3.2182E-05	3.5323E-03	4.4318E+01	6.3706E+03
1.9690E+00	3.6194E-05	3.9727E-03	4.9844E+01	6.2967E+03
1.9872E+00	3.8609E-05	4.2378E-03	5.3170E+01	6.2390E+03
2.0138E+00	4.4252E-05	4.8571E-03	6.0940E+01	6.1566E+03
2.0345E+00	4.9566E-05	5.4404E-03	6.8258E+01	6.0940E+03
2.0456E+00	5.1136E-05	5.6128E-03	7.0421E+01	6.0609E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
2.0578E+00	4.9714E-05	5.4567E-03	6.8463E+01	6.0252E+03
2.0646E+00	4.5182E-05	4.9592E-03	6.2221E+01	6.0052E+03
2.0842E+00	4.1488E-05	4.5537E-03	5.7134E+01	5.9488E+03
2.1035E+00	4.1471E-05	4.5519E-03	5.7111E+01	5.8941E+03
2.1188E+00	4.3159E-05	4.7372E-03	5.9436E+01	5.8515E+03
2.1399E+00	4.5101E-05	4.9503E-03	6.2109E+01	5.7939E+03
2.1624E+00	4.3298E-05	4.7524E-03	5.9626E+01	5.7336E+03
2.1789E+00	4.0874E-05	4.4864E-03	5.6289E+01	5.6903E+03
2.1974E+00	3.6514E-05	4.0078E-03	5.0284E+01	5.6424E+03
2.2069E+00	3.4477E-05	3.7842E-03	4.7479E+01	5.6180E+03
2.2214E+00	3.2272E-05	3.5422E-03	4.4442E+01	5.5813E+03
2.2491E+00	3.0265E-05	3.3219E-03	4.1679E+01	5.5125E+03
2.2646E+00	2.8571E-05	3.1360E-03	3.9346E+01	5.4749E+03
2.2799E+00	2.6690E-05	2.9295E-03	3.6756E+01	5.4382E+03
2.3063E+00	2.6451E-05	2.9033E-03	3.6426E+01	5.3760E+03
2.3205E+00	2.4707E-05	2.7119E-03	3.4025E+01	5.3430E+03
2.3360E+00	2.1249E-05	2.3323E-03	2.9262E+01	5.3075E+03
2.3632E+00	1.6748E-05	1.8383E-03	2.3064E+01	5.2465E+03
2.3997E+00	1.4245E-05	1.5635E-03	1.9617E+01	5.1666E+03
2.4112E+00	1.4364E-05	1.5766E-03	1.9780E+01	5.1421E+03
2.4187E+00	1.4889E-05	1.6342E-03	2.0503E+01	5.1260E+03
2.4304E+00	1.5076E-05	1.6547E-03	2.0761E+01	5.1014E+03
2.4385E+00	1.4449E-05	1.5859E-03	1.9898E+01	5.0845E+03
2.4506E+00	1.2191E-05	1.3381E-03	1.6789E+01	5.0593E+03
2.4624E+00	1.0028E-05	1.1007E-03	1.3810E+01	5.0351E+03
2.4747E+00	8.7881E-06	9.6459E-04	1.2102E+01	5.0101E+03
2.4797E+00	8.3863E-06	9.2048E-04	1.1549E+01	4.9999E+03
2.4862E+00	8.0711E-06	8.8590E-04	1.1115E+01	4.9868E+03
2.4985E+00	7.8821E-06	8.6515E-04	1.0855E+01	4.9623E+03
2.5066E+00	7.6179E-06	8.3614E-04	1.0491E+01	4.9464E+03
2.5180E+00	7.0104E-06	7.6947E-04	9.6542E+00	4.9240E+03
2.5271E+00	7.0090E-06	7.6931E-04	9.6523E+00	4.9061E+03
2.5375E+00	7.5958E-06	8.3372E-04	1.0460E+01	4.8861E+03
2.5410E+00	7.8569E-06	8.6238E-04	1.0820E+01	4.8794E+03
2.5523E+00	7.8216E-06	8.5851E-04	1.0771E+01	4.8577E+03
2.5587E+00	7.2921E-06	8.0039E-04	1.0042E+01	4.8456E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.5733E+00	5.5439E-06	6.0850E-04	7.6346E+00	4.8181E+03
2.5871E+00	4.2156E-06	4.6271E-04	5.8054E+00	4.7924E+03
2.5978E+00	3.9212E-06	4.3039E-04	5.4000E+00	4.7727E+03
2.6117E+00	3.9114E-06	4.2932E-04	5.3865E+00	4.7473E+03
2.6292E+00	3.3068E-06	3.6296E-04	4.5539E+00	4.7157E+03
2.6354E+00	3.1823E-06	3.4929E-04	4.3824E+00	4.7045E+03
2.6521E+00	3.6128E-06	3.9655E-04	4.9753E+00	4.6749E+03
2.6554E+00	3.7693E-06	4.1372E-04	5.1908E+00	4.6692E+03
2.6586E+00	3.8091E-06	4.1809E-04	5.2456E+00	4.6635E+03
2.6651E+00	3.7367E-06	4.1014E-04	5.1459E+00	4.6522E+03
2.6741E+00	3.2894E-06	3.6104E-04	4.5299E+00	4.6365E+03
2.6852E+00	2.5713E-06	2.8222E-04	3.5409E+00	4.6173E+03
2.6969E+00	1.9844E-06	2.1780E-04	2.7327E+00	4.5973E+03
2.7057E+00	1.8227E-06	2.0006E-04	2.5100E+00	4.5824E+03
2.7225E+00	1.8649E-06	2.0469E-04	2.5682E+00	4.5541E+03
2.7397E+00	1.4795E-06	1.6239E-04	2.0374E+00	4.5254E+03
2.7465E+00	1.4148E-06	1.5529E-04	1.9484E+00	4.5142E+03
2.7534E+00	1.4448E-06	1.5859E-04	1.9897E+00	4.5029E+03
2.7581E+00	1.5494E-06	1.7007E-04	2.1338E+00	4.4952E+03
2.7693E+00	1.6580E-06	1.8198E-04	2.2832E+00	4.4771E+03
2.7774E+00	1.5754E-06	1.7291E-04	2.1695E+00	4.4640E+03
2.7872E+00	1.3898E-06	1.5255E-04	1.9140E+00	4.4483E+03
2.8090E+00	8.3669E-07	9.1836E-05	1.1522E+00	4.4138E+03
2.8126E+00	8.1391E-07	8.9336E-05	1.1209E+00	4.4082E+03
2.8253E+00	8.3110E-07	9.1222E-05	1.1445E+00	4.3883E+03
2.8356E+00	8.1009E-07	8.8917E-05	1.1156E+00	4.3724E+03
2.8505E+00	6.1201E-07	6.7175E-05	8.4282E-01	4.3495E+03
2.8561E+00	5.9280E-07	6.5066E-05	8.1636E-01	4.3411E+03
2.8623E+00	6.0417E-07	6.6314E-05	8.3201E-01	4.3316E+03
2.8699E+00	6.4784E-07	7.1108E-05	8.9216E-01	4.3202E+03
2.8787E+00	6.7012E-07	7.3553E-05	9.2283E-01	4.3069E+03
2.8887E+00	6.1422E-07	6.7417E-05	8.4586E-01	4.2920E+03
2.9004E+00	4.6608E-07	5.1157E-05	6.4185E-01	4.2748E+03
2.9127E+00	3.5215E-07	3.8652E-05	4.8495E-01	4.2567E+03
2.9191E+00	3.3892E-07	3.7200E-05	4.6673E-01	4.2473E+03
2.9328E+00	3.4535E-07	3.7906E-05	4.7559E-01	4.2275E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9444E+00	3.0987E-07	3.4012E-05	4.2673E-01	4.2108E+03
2.9605E+00	2.3462E-07	2.5752E-05	3.2310E-01	4.1879E+03
2.9645E+00	2.3163E-07	2.5424E-05	3.1899E-01	4.1823E+03
2.9712E+00	2.3509E-07	2.5803E-05	3.2374E-01	4.1728E+03
2.9774E+00	2.4786E-07	2.7205E-05	3.4133E-01	4.1642E+03
2.9842E+00	2.5421E-07	2.7902E-05	3.5008E-01	4.1547E+03
2.9916E+00	2.4674E-07	2.7083E-05	3.3980E-01	4.1444E+03
3.0029E+00	2.1041E-07	2.3095E-05	2.8976E-01	4.1288E+03
3.0107E+00	1.6766E-07	1.8403E-05	2.3089E-01	4.1181E+03
3.0180E+00	1.3997E-07	1.5364E-05	1.9276E-01	4.1082E+03
3.0270E+00	1.3586E-07	1.4913E-05	1.8710E-01	4.0960E+03
3.0382E+00	1.3728E-07	1.5068E-05	1.8906E-01	4.0809E+03
3.0465E+00	1.3156E-07	1.4440E-05	1.8117E-01	4.0697E+03
3.0631E+00	1.0110E-07	1.1097E-05	1.3923E-01	4.0477E+03
3.0729E+00	8.9197E-08	9.7904E-06	1.2284E-01	4.0348E+03
3.0859E+00	9.1666E-08	1.0061E-05	1.2624E-01	4.0178E+03
3.0927E+00	9.7959E-08	1.0752E-05	1.3490E-01	4.0089E+03
3.1008E+00	9.4476E-08	1.0370E-05	1.3011E-01	3.9985E+03
3.1175E+00	7.1540E-08	7.8522E-06	9.8519E-02	3.9771E+03
3.1182E+00	6.7983E-08	7.4618E-06	9.3621E-02	3.9762E+03
3.1346E+00	6.1255E-08	6.7234E-06	8.4356E-02	3.9553E+03
3.1439E+00	6.2825E-08	6.8957E-06	8.6518E-02	3.9436E+03
3.1559E+00	6.4024E-08	7.0273E-06	8.8168E-02	3.9287E+03
3.1672E+00	5.1669E-08	5.6712E-06	7.1154E-02	3.9146E+03
3.1799E+00	4.6065E-08	5.0561E-06	6.3437E-02	3.8990E+03
3.2038E+00	5.5150E-08	6.0533E-06	7.5948E-02	3.8699E+03
3.2130E+00	4.6635E-08	5.1187E-06	6.4222E-02	3.8588E+03
3.2283E+00	5.0322E-08	5.5234E-06	6.9300E-02	3.8405E+03
3.2390E+00	6.8433E-08	7.5112E-06	9.4240E-02	3.8279E+03
3.2484E+00	5.6772E-08	6.2314E-06	7.8183E-02	3.8168E+03
3.2593E+00	4.1823E-08	4.5906E-06	5.7596E-02	3.8040E+03
3.2680E+00	4.9658E-08	5.4505E-06	6.8385E-02	3.7939E+03
3.2743E+00	6.6683E-08	7.3192E-06	9.1831E-02	3.7866E+03
3.2905E+00	1.1573E-07	1.2703E-05	1.5937E-01	3.7679E+03
3.3014E+00	1.0518E-07	1.1544E-05	1.4484E-01	3.7555E+03
3.3055E+00	6.1747E-08	6.7774E-06	8.5034E-02	3.7509E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.3067E+00	6.8659E-08	7.5361E-06	9.4552E-02	3.7495E+03
3.3115E+00	7.3007E-08	8.0133E-06	1.0054E-01	3.7440E+03
3.3195E+00	1.1841E-07	1.2997E-05	1.6307E-01	3.7350E+03
3.3234E+00	1.2485E-07	1.3704E-05	1.7194E-01	3.7306E+03
3.3335E+00	1.1203E-07	1.2296E-05	1.5428E-01	3.7193E+03
3.3351E+00	1.3704E-07	1.5041E-05	1.8872E-01	3.7176E+03
3.3408E+00	1.3879E-07	1.5234E-05	1.9113E-01	3.7112E+03
3.3460E+00	1.5795E-07	1.7336E-05	2.1751E-01	3.7055E+03
3.3557E+00	1.2243E-07	1.3438E-05	1.6860E-01	3.6947E+03
3.3614E+00	1.5926E-07	1.7481E-05	2.1932E-01	3.6885E+03
3.3664E+00	1.7299E-07	1.8988E-05	2.3823E-01	3.6830E+03
3.3703E+00	2.4135E-07	2.6491E-05	3.3237E-01	3.6787E+03
3.3774E+00	3.7359E-07	4.1005E-05	5.1448E-01	3.6710E+03
3.3786E+00	4.0494E-07	4.4447E-05	5.5766E-01	3.6697E+03
3.3872E+00	3.7195E-07	4.0825E-05	5.1222E-01	3.6604E+03
3.3916E+00	4.4069E-07	4.8371E-05	6.0689E-01	3.6556E+03
3.3930E+00	2.6487E-07	2.9073E-05	3.6476E-01	3.6541E+03
3.3951E+00	1.9390E-07	2.1283E-05	2.6703E-01	3.6519E+03
3.4088E+00	2.6368E-07	2.8942E-05	3.6313E-01	3.6372E+03
3.4164E+00	3.2667E-07	3.5856E-05	4.4987E-01	3.6291E+03
3.4205E+00	3.3864E-07	3.7170E-05	4.6636E-01	3.6247E+03
3.4286E+00	4.8258E-07	5.2969E-05	6.6458E-01	3.6162E+03
3.4377E+00	6.7604E-07	7.4203E-05	9.3099E-01	3.6066E+03
3.4432E+00	7.8922E-07	8.6626E-05	1.0869E+00	3.6008E+03
3.4558E+00	6.3559E-07	6.9763E-05	8.7529E-01	3.5877E+03
3.4651E+00	9.2118E-07	1.0111E-04	1.2686E+00	3.5781E+03
3.4786E+00	1.3379E-06	1.4685E-04	1.8424E+00	3.5642E+03
3.4831E+00	7.7066E-07	8.4589E-05	1.0613E+00	3.5596E+03
3.4933E+00	1.0110E-06	1.1096E-04	1.3922E+00	3.5492E+03
3.5026E+00	9.6879E-07	1.0634E-04	1.3342E+00	3.5398E+03
3.5106E+00	1.1926E-06	1.3090E-04	1.6423E+00	3.5317E+03
3.5205E+00	1.8695E-06	2.0520E-04	2.5746E+00	3.5218E+03
3.5266E+00	2.4527E-06	2.6921E-04	3.3777E+00	3.5157E+03
3.5364E+00	3.6774E-06	4.0363E-04	5.0642E+00	3.5059E+03
3.5400E+00	2.1227E-06	2.3299E-04	2.9232E+00	3.5024E+03
3.9000E+00	3.3744E-04	3.7038E-02	4.6470E+02	3.1791E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.0000E+00	1.0189E-03	1.1183E-01	1.4031E+03	3.0996E+03
4.1000E+00	2.8573E-03	3.1362E-01	3.9348E+03	3.0240E+03
4.2000E+00	7.2331E-03	7.9391E-01	9.9608E+03	2.9520E+03
4.3000E+00	1.5721E-02	1.7256E+00	2.1650E+04	2.8834E+03
4.4000E+00	3.1060E-02	3.4092E+00	4.2774E+04	2.8178E+03
4.5000E+00	5.1850E-02	5.6911E+00	7.1404E+04	2.7552E+03
4.6000E+00	7.4552E-02	8.1829E+00	1.0267E+05	2.6953E+03
4.7000E+00	9.0542E-02	9.9380E+00	1.2469E+05	2.6380E+03
4.8000E+00	1.0243E-01	1.1243E+01	1.4106E+05	2.5830E+03
4.9000E+00	1.0354E-01	1.1364E+01	1.4258E+05	2.5303E+03
5.0000E+00	9.9939E-02	1.0969E+01	1.3763E+05	2.4797E+03
5.1000E+00	8.7674E-02	9.6232E+00	1.2074E+05	2.4311E+03
5.2000E+00	6.9879E-02	7.6700E+00	9.6232E+04	2.3843E+03
5.3000E+00	5.1864E-02	5.6926E+00	7.1423E+04	2.3393E+03
5.4000E+00	3.7826E-02	4.1518E+00	5.2091E+04	2.2960E+03
5.5000E+00	2.5739E-02	2.8251E+00	3.5446E+04	2.2543E+03
5.6000E+00	1.7513E-02	1.9223E+00	2.4118E+04	2.2140E+03
5.7000E+00	1.1953E-02	1.3120E+00	1.6461E+04	2.1752E+03
5.8000E+00	7.9696E-03	8.7475E-01	1.0975E+04	2.1377E+03
5.9000E+00	5.6012E-03	6.1479E-01	7.7136E+03	2.1014E+03
6.0000E+00	4.3553E-03	4.7804E-01	5.9978E+03	2.0664E+03
6.1000E+00	3.4804E-03	3.8201E-01	4.7929E+03	2.0325E+03
6.2000E+00	3.3709E-03	3.6999E-01	4.6421E+03	1.9997E+03
6.3000E+00	3.5199E-03	3.8635E-01	4.8474E+03	1.9680E+03
6.4000E+00	3.9319E-03	4.3157E-01	5.4147E+03	1.9373E+03
6.5000E+00	4.8740E-03	5.3498E-01	6.7121E+03	1.9074E+03
6.6000E+00	5.8060E-03	6.3728E-01	7.9957E+03	1.8785E+03
6.7000E+00	7.1386E-03	7.8354E-01	9.8307E+03	1.8505E+03
6.7451E+00	7.8589E-03	8.6260E-01	1.0823E+04	1.8381E+03
6.9586E+00	8.1797E-03	8.9781E-01	1.1264E+04	1.7817E+03
7.1392E+00	1.0358E-02	1.1369E+00	1.4265E+04	1.7367E+03
7.1688E+00	9.6684E-03	1.0612E+00	1.3315E+04	1.7295E+03
7.3166E+00	1.0664E-02	1.1705E+00	1.4686E+04	1.6946E+03
7.4184E+00	1.0705E-02	1.1750E+00	1.4742E+04	1.6713E+03
7.4645E+00	1.0256E-02	1.1257E+00	1.4124E+04	1.6610E+03
7.6090E+00	1.0315E-02	1.1322E+00	1.4205E+04	1.6294E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.6978E+00	8.9481E-03	9.8215E-01	1.2323E+04	1.6106E+03
7.7142E+00	9.8901E-03	1.0855E+00	1.3620E+04	1.6072E+03
7.7766E+00	9.9160E-03	1.0884E+00	1.3656E+04	1.5943E+03
7.8586E+00	1.1586E-02	1.2717E+00	1.5956E+04	1.5777E+03
7.9243E+00	1.2080E-02	1.3260E+00	1.6636E+04	1.5646E+03
7.9603E+00	1.3967E-02	1.5330E+00	1.9234E+04	1.5575E+03
7.9997E+00	1.3982E-02	1.5347E+00	1.9256E+04	1.5499E+03
8.0883E+00	1.6357E-02	1.7954E+00	2.2526E+04	1.5329E+03
8.2129E+00	1.9448E-02	2.1346E+00	2.6783E+04	1.5096E+03
8.3013E+00	2.2759E-02	2.4980E+00	3.1342E+04	1.4936E+03
8.3896E+00	2.7472E-02	3.0154E+00	3.7833E+04	1.4778E+03
8.4813E+00	3.1720E-02	3.4816E+00	4.3682E+04	1.4619E+03
8.5861E+00	3.6440E-02	3.9997E+00	5.0182E+04	1.4440E+03
8.7041E+00	3.9762E-02	4.3644E+00	5.4758E+04	1.4244E+03
8.8058E+00	4.1675E-02	4.5742E+00	5.7391E+04	1.4080E+03
8.8846E+00	4.2876E-02	4.7061E+00	5.9045E+04	1.3955E+03
8.9337E+00	4.4065E-02	4.8367E+00	6.0684E+04	1.3878E+03
8.9729E+00	4.7589E-02	5.2234E+00	6.5536E+04	1.3818E+03
9.0183E+00	5.5092E-02	6.0470E+00	7.5869E+04	1.3748E+03
9.0315E+00	5.4396E-02	5.9705E+00	7.4910E+04	1.3728E+03
9.0537E+00	6.4462E-02	7.0754E+00	8.8773E+04	1.3694E+03
9.0856E+00	7.5935E-02	8.3347E+00	1.0457E+05	1.3646E+03
9.0948E+00	8.4593E-02	9.2850E+00	1.1650E+05	1.3632E+03
9.1151E+00	1.1758E-01	1.2905E+01	1.6192E+05	1.3602E+03
9.1280E+00	1.2063E-01	1.3240E+01	1.6612E+05	1.3583E+03
9.1479E+00	1.1829E-01	1.2984E+01	1.6290E+05	1.3553E+03
9.1672E+00	1.2322E-01	1.3524E+01	1.6968E+05	1.3525E+03
9.1728E+00	1.3561E-01	1.4885E+01	1.8676E+05	1.3517E+03
9.1887E+00	1.4216E-01	1.5604E+01	1.9577E+05	1.3493E+03
9.2046E+00	1.4849E-01	1.6298E+01	2.0448E+05	1.3470E+03
9.2350E+00	1.3844E-01	1.5196E+01	1.9065E+05	1.3425E+03
9.2572E+00	1.4850E-01	1.6300E+01	2.0451E+05	1.3393E+03
9.2711E+00	1.3986E-01	1.5351E+01	1.9261E+05	1.3373E+03
9.2815E+00	1.3238E-01	1.4530E+01	1.8230E+05	1.3358E+03
9.2944E+00	1.3589E-01	1.4916E+01	1.8714E+05	1.3340E+03
9.3138E+00	1.3965E-01	1.5328E+01	1.9231E+05	1.3312E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.3306E+00	1.3450E-01	1.4763E+01	1.8523E+05	1.3288E+03
9.3379E+00	1.2562E-01	1.3788E+01	1.7299E+05	1.3278E+03
9.3618E+00	1.1510E-01	1.2634E+01	1.5851E+05	1.3244E+03
9.4065E+00	1.3033E-01	1.4305E+01	1.7948E+05	1.3181E+03
9.4203E+00	1.2284E-01	1.3484E+01	1.6917E+05	1.3161E+03
9.4505E+00	1.1444E-01	1.2561E+01	1.5760E+05	1.3119E+03
9.4595E+00	1.2543E-01	1.3768E+01	1.7274E+05	1.3107E+03
9.4850E+00	1.3504E-01	1.4822E+01	1.8597E+05	1.3072E+03
9.4999E+00	1.1352E-01	1.2461E+01	1.5634E+05	1.3051E+03
9.5308E+00	9.6230E-02	1.0562E+01	1.3252E+05	1.3009E+03
9.5446E+00	8.8284E-02	9.6901E+00	1.2158E+05	1.2990E+03
9.5654E+00	7.5195E-02	8.2535E+00	1.0355E+05	1.2962E+03
9.5761E+00	6.4908E-02	7.1244E+00	8.9387E+04	1.2947E+03
9.5997E+00	5.7434E-02	6.3040E+00	7.9094E+04	1.2915E+03
9.6361E+00	5.3941E-02	5.9206E+00	7.4283E+04	1.2867E+03
9.6892E+00	4.7413E-02	5.2041E+00	6.5294E+04	1.2796E+03
9.7914E+00	4.3478E-02	4.7722E+00	5.9875E+04	1.2663E+03
9.8826E+00	5.2871E-02	5.8032E+00	7.2811E+04	1.2546E+03
9.9244E+00	6.4816E-02	7.1143E+00	8.9260E+04	1.2493E+03
9.9729E+00	7.3723E-02	8.0920E+00	1.0153E+05	1.2432E+03
1.0013E+01	1.0649E-01	1.1688E+01	1.4665E+05	1.2382E+03
1.0054E+01	1.6661E-01	1.8287E+01	2.2944E+05	1.2332E+03
1.0074E+01	2.0965E-01	2.3012E+01	2.8872E+05	1.2307E+03
1.0092E+01	2.2159E-01	2.4322E+01	3.0515E+05	1.2285E+03
1.0109E+01	2.1575E-01	2.3680E+01	2.9711E+05	1.2265E+03
1.0145E+01	2.5762E-01	2.8277E+01	3.5478E+05	1.2221E+03
1.0156E+01	2.4780E-01	2.7199E+01	3.4126E+05	1.2208E+03
1.0173E+01	2.3939E-01	2.6276E+01	3.2967E+05	1.2188E+03
1.0216E+01	2.7917E-01	3.0642E+01	3.8445E+05	1.2136E+03
1.0236E+01	2.3217E-01	2.5483E+01	3.1973E+05	1.2113E+03
1.0245E+01	2.1065E-01	2.3122E+01	2.9010E+05	1.2102E+03
1.0261E+01	2.0622E-01	2.2635E+01	2.8399E+05	1.2083E+03
1.0287E+01	2.1769E-01	2.3894E+01	2.9979E+05	1.2053E+03
1.0298E+01	2.0343E-01	2.2329E+01	2.8015E+05	1.2040E+03
1.0310E+01	1.7606E-01	1.9325E+01	2.4246E+05	1.2026E+03
1.0325E+01	1.4918E-01	1.6374E+01	2.0544E+05	1.2008E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0346E+01	1.3936E-01	1.5296E+01	1.9192E+05	1.1984E+03
1.0358E+01	1.4569E-01	1.5991E+01	2.0063E+05	1.1970E+03
1.0372E+01	1.3843E-01	1.5195E+01	1.9064E+05	1.1954E+03
1.0387E+01	1.1459E-01	1.2578E+01	1.5781E+05	1.1936E+03
1.0408E+01	9.6119E-02	1.0550E+01	1.3237E+05	1.1912E+03
1.0432E+01	9.0749E-02	9.9607E+00	1.2497E+05	1.1885E+03
1.0444E+01	9.4496E-02	1.0372E+01	1.3013E+05	1.1871E+03
1.0465E+01	8.8190E-02	9.6798E+00	1.2145E+05	1.1848E+03
1.0479E+01	7.9074E-02	8.6793E+00	1.0890E+05	1.1832E+03
1.0512E+01	6.9967E-02	7.6796E+00	9.6353E+04	1.1795E+03
1.0545E+01	7.4891E-02	8.2201E+00	1.0313E+05	1.1758E+03
1.0568E+01	7.4900E-02	8.2211E+00	1.0315E+05	1.1732E+03
1.0601E+01	7.1873E-02	7.8889E+00	9.8979E+04	1.1696E+03
1.0623E+01	7.5625E-02	8.3007E+00	1.0415E+05	1.1671E+03
1.0644E+01	6.9085E-02	7.5828E+00	9.5139E+04	1.1648E+03
1.0658E+01	5.4356E-02	5.9662E+00	7.4855E+04	1.1633E+03
1.0671E+01	5.0151E-02	5.5047E+00	6.9065E+04	1.1619E+03
1.0688E+01	5.2029E-02	5.7108E+00	7.1651E+04	1.1600E+03
1.0711E+01	5.0167E-02	5.5064E+00	6.9087E+04	1.1575E+03
1.0747E+01	4.5271E-02	4.9690E+00	6.2344E+04	1.1537E+03
1.0773E+01	5.9548E-02	6.5361E+00	8.2005E+04	1.1509E+03
1.0788E+01	6.7974E-02	7.4609E+00	9.3609E+04	1.1493E+03
1.0811E+01	7.3129E-02	8.0267E+00	1.0071E+05	1.1468E+03
1.0834E+01	7.3606E-02	8.0790E+00	1.0136E+05	1.1444E+03
1.0898E+01	8.8366E-02	9.6992E+00	1.2169E+05	1.1377E+03
1.0923E+01	1.0638E-01	1.1677E+01	1.4650E+05	1.1351E+03
1.0959E+01	1.1318E-01	1.2423E+01	1.5587E+05	1.1313E+03
1.0978E+01	1.1717E-01	1.2861E+01	1.6136E+05	1.1294E+03
1.0992E+01	1.1320E-01	1.2425E+01	1.5589E+05	1.1279E+03
1.1008E+01	1.1601E-01	1.2733E+01	1.5976E+05	1.1263E+03
1.1024E+01	1.1321E-01	1.2426E+01	1.5590E+05	1.1247E+03
1.1053E+01	1.2772E-01	1.4019E+01	1.7589E+05	1.1217E+03
1.1067E+01	1.1557E-01	1.2685E+01	1.5915E+05	1.1203E+03
1.1087E+01	1.0786E-01	1.1839E+01	1.4854E+05	1.1183E+03
1.1125E+01	1.2752E-01	1.3997E+01	1.7561E+05	1.1145E+03
1.1143E+01	1.0858E-01	1.1918E+01	1.4953E+05	1.1127E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1160E+01	1.0297E-01	1.1302E+01	1.4181E+05	1.1110E+03
1.1179E+01	1.1397E-01	1.2509E+01	1.5695E+05	1.1091E+03
1.1198E+01	1.1842E-01	1.2998E+01	1.6308E+05	1.1072E+03
1.1216E+01	1.0065E-01	1.1048E+01	1.3861E+05	1.1054E+03
1.1223E+01	9.4116E-02	1.0330E+01	1.2961E+05	1.1047E+03
1.1240E+01	8.7802E-02	9.6373E+00	1.2091E+05	1.1031E+03
1.1770E+01	5.5161E-02	6.0546E+00	7.5964E+04	1.0534E+03
1.2710E+01	8.9945E-02	9.8724E+00	1.2387E+05	9.7549E+02
1.3360E+01	1.3067E-01	1.4343E+01	1.7995E+05	9.2803E+02
1.4110E+01	1.8266E-01	2.0049E+01	2.5155E+05	8.7870E+02
1.5000E+01	2.4828E-01	2.7252E+01	3.4192E+05	8.2656E+02
1.5660E+01	2.9816E-01	3.2726E+01	4.1060E+05	7.9173E+02
1.6350E+01	3.5384E-01	3.8838E+01	4.8728E+05	7.5831E+02
1.7140E+01	3.4128E-01	3.7460E+01	4.6999E+05	7.2336E+02
1.8310E+01	3.3398E-01	3.6658E+01	4.5994E+05	6.7714E+02
1.9600E+01	3.2794E-01	3.5996E+01	4.5162E+05	6.3257E+02
2.0660E+01	3.0540E-01	3.3521E+01	4.2057E+05	6.0012E+02
2.5000E+01	2.6881E-01	2.9505E+01	3.7019E+05	4.9594E+02
3.0000E+01	2.3769E-01	2.6090E+01	3.2734E+05	4.1328E+02
3.5000E+01	2.1120E-01	2.3182E+01	2.9085E+05	3.5424E+02
4.0000E+01	1.8701E-01	2.0527E+01	2.5754E+05	3.0996E+02
4.5000E+01	1.6643E-01	1.8268E+01	2.2920E+05	2.7552E+02
5.0000E+01	1.4677E-01	1.6109E+01	2.0211E+05	2.4797E+02
5.5000E+01	1.2997E-01	1.4266E+01	1.7899E+05	2.2543E+02
6.0000E+01	1.1568E-01	1.2697E+01	1.5930E+05	2.0664E+02
6.5000E+01	1.0333E-01	1.1342E+01	1.4230E+05	1.9074E+02
7.0000E+01	9.1812E-02	1.0077E+01	1.2644E+05	1.7712E+02
7.5000E+01	8.1964E-02	8.9964E+00	1.1287E+05	1.6531E+02
8.0000E+01	7.3227E-02	8.0375E+00	1.0084E+05	1.5498E+02
8.5000E+01	6.6910E-02	7.3441E+00	9.2143E+04	1.4586E+02
9.0000E+01	6.0587E-02	6.6501E+00	8.3436E+04	1.3776E+02
9.5000E+01	5.3887E-02	5.9146E+00	7.4209E+04	1.3051E+02
1.0000E+02	4.8675E-02	5.3427E+00	6.7032E+04	1.2398E+02
1.0500E+02	4.3367E-02	4.7600E+00	5.9722E+04	1.1808E+02
1.0850E+02	3.9826E-02	4.3713E+00	5.4845E+04	1.1427E+02
1.2500E+02	3.0434E-02	3.3405E+00	4.1912E+04	9.9187E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5000E+02	2.0499E-02	2.2500E+00	2.8230E+04	8.2656E+01
1.7500E+02	1.4457E-02	1.5868E+00	1.9909E+04	7.0848E+01
2.0000E+02	1.0531E-02	1.1559E+00	1.4503E+04	6.1992E+01
2.2500E+02	7.8753E-03	8.6440E-01	1.0845E+04	5.5104E+01
2.5000E+02	6.0205E-03	6.6082E-01	8.2911E+03	4.9594E+01
2.7500E+02	4.6907E-03	5.1485E-01	6.4597E+03	4.5085E+01
3.0000E+02	3.7152E-03	4.0778E-01	5.1163E+03	4.1328E+01
3.5000E+02	2.4292E-03	2.6663E-01	3.3453E+03	3.5424E+01
4.0000E+02	1.6616E-03	1.8238E-01	2.2882E+03	3.0996E+01
4.5000E+02	1.1781E-03	1.2931E-01	1.6224E+03	2.7552E+01
5.0000E+02	8.5998E-04	9.4392E-02	1.1843E+03	2.4797E+01
5.2750E+02	7.3095E-04	8.0229E-02	1.0066E+03	2.3504E+01
5.2750E+02	9.5393E-04	1.0470E-01	1.3137E+03	2.3504E+01
5.2773E+02	1.3290E-03	1.4587E-01	1.8302E+03	2.3494E+01
5.2802E+02	2.2676E-03	2.4890E-01	3.1228E+03	2.3481E+01
5.2821E+02	4.4594E-03	4.8947E-01	6.1412E+03	2.3473E+01
5.2840E+02	9.2192E-03	1.0119E+00	1.2696E+04	2.3464E+01
5.2856E+02	1.4857E-02	1.6307E+00	2.0459E+04	2.3457E+01
5.2868E+02	2.0117E-02	2.2081E+00	2.7704E+04	2.3452E+01
5.2897E+02	2.4501E-02	2.6893E+00	3.3741E+04	2.3439E+01
5.2914E+02	2.3091E-02	2.5345E+00	3.1799E+04	2.3431E+01
5.2940E+02	1.8048E-02	1.9809E+00	2.4854E+04	2.3420E+01
5.2954E+02	1.2755E-02	1.4000E+00	1.7565E+04	2.3414E+01
5.2974E+02	9.8100E-03	1.0768E+00	1.3510E+04	2.3405E+01
5.3006E+02	5.8942E-03	6.4696E-01	8.1171E+03	2.3391E+01
5.3020E+02	5.2361E-03	5.7472E-01	7.2108E+03	2.3384E+01
5.3036E+02	4.7345E-03	5.1966E-01	6.5199E+03	2.3377E+01
5.3043E+02	3.1684E-03	3.4776E-01	4.3632E+03	2.3374E+01
5.3053E+02	7.8781E-04	8.6471E-02	1.0849E+03	2.3370E+01
5.3079E+02	7.8701E-04	8.6383E-02	1.0838E+03	2.3358E+01
5.3082E+02	1.2880E-03	1.4137E-01	1.7738E+03	2.3357E+01
5.3098E+02	1.1623E-03	1.2757E-01	1.6006E+03	2.3350E+01
5.3101E+02	7.8634E-04	8.6310E-02	1.0829E+03	2.3349E+01
5.3127E+02	8.1686E-04	8.9660E-02	1.1249E+03	2.3337E+01
5.3147E+02	2.2256E-03	2.4428E-01	3.0649E+03	2.3329E+01
5.3157E+02	8.1593E-04	8.9557E-02	1.1236E+03	2.3324E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.3209E+02	8.1434E-04	8.9383E-02	1.1215E+03	2.3301E+01
5.3215E+02	1.0960E-03	1.2030E-01	1.5094E+03	2.3299E+01
5.3280E+02	1.0627E-03	1.1665E-01	1.4635E+03	2.3270E+01
5.3290E+02	8.1188E-04	8.9113E-02	1.1181E+03	2.3266E+01
5.3348E+02	7.7882E-04	8.5484E-02	1.0725E+03	2.3241E+01
5.3365E+02	1.3420E-03	1.4730E-01	1.8482E+03	2.3233E+01
5.3371E+02	1.5924E-03	1.7479E-01	2.1930E+03	2.3231E+01
5.3397E+02	1.7482E-03	1.9188E-01	2.4075E+03	2.3219E+01
5.3410E+02	2.4682E-03	2.7091E-01	3.3990E+03	2.3214E+01
5.3426E+02	3.1880E-03	3.4992E-01	4.3903E+03	2.3207E+01
5.3445E+02	4.5342E-03	4.9768E-01	6.2442E+03	2.3198E+01
5.3461E+02	7.2584E-03	7.9669E-01	9.9958E+03	2.3192E+01
5.3484E+02	1.2519E-02	1.3742E+00	1.7241E+04	2.3182E+01
5.3493E+02	1.6903E-02	1.8553E+00	2.3278E+04	2.3178E+01
5.3512E+02	2.0557E-02	2.2564E+00	2.8310E+04	2.3169E+01
5.3550E+02	2.3533E-02	2.5830E+00	3.2407E+04	2.3153E+01
5.3590E+02	2.1654E-02	2.3767E+00	2.9820E+04	2.3136E+01
5.3626E+02	1.8147E-02	1.9918E+00	2.4990E+04	2.3120E+01
5.3721E+02	1.0537E-02	1.1565E+00	1.4510E+04	2.3079E+01
5.3747E+02	1.0099E-02	1.1084E+00	1.3907E+04	2.3068E+01
5.3763E+02	8.4391E-03	9.2628E-01	1.1622E+04	2.3061E+01
5.3780E+02	8.3453E-03	9.1599E-01	1.1493E+04	2.3054E+01
5.3819E+02	7.7819E-03	8.5415E-01	1.0717E+04	2.3037E+01
5.3851E+02	8.0642E-03	8.8513E-01	1.1105E+04	2.3024E+01
5.3858E+02	8.4087E-03	9.2295E-01	1.1580E+04	2.3021E+01
5.3880E+02	8.2523E-03	9.0578E-01	1.1365E+04	2.3011E+01
5.3897E+02	8.6284E-03	9.4706E-01	1.1882E+04	2.3004E+01
5.3913E+02	8.5659E-03	9.4020E-01	1.1796E+04	2.2997E+01
5.3926E+02	9.0358E-03	9.9178E-01	1.2444E+04	2.2992E+01
5.3952E+02	9.2867E-03	1.0193E+00	1.2789E+04	2.2980E+01
5.3968E+02	9.1615E-03	1.0056E+00	1.2617E+04	2.2974E+01
5.3997E+02	9.4747E-03	1.0400E+00	1.3048E+04	2.2961E+01
5.4017E+02	1.0039E-02	1.1019E+00	1.3826E+04	2.2953E+01
5.4030E+02	1.0321E-02	1.1328E+00	1.4213E+04	2.2947E+01
5.4053E+02	1.0008E-02	1.0985E+00	1.3783E+04	2.2938E+01
5.4059E+02	1.0290E-02	1.1294E+00	1.4170E+04	2.2935E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.4065E+02	1.0322E-02	1.1329E+00	1.4214E+04	2.2932E+01
5.4082E+02	1.0854E-02	1.1913E+00	1.4947E+04	2.2925E+01
5.4114E+02	1.0855E-02	1.1914E+00	1.4948E+04	2.2912E+01
5.4140E+02	1.0541E-02	1.1570E+00	1.4517E+04	2.2901E+01
5.4169E+02	1.1575E-02	1.2705E+00	1.5940E+04	2.2888E+01
5.4192E+02	1.1513E-02	1.2637E+00	1.5855E+04	2.2879E+01
5.4221E+02	1.2171E-02	1.3359E+00	1.6760E+04	2.2866E+01
5.4238E+02	1.1670E-02	1.2809E+00	1.6071E+04	2.2859E+01
5.4286E+02	1.0762E-02	1.1812E+00	1.4820E+04	2.2839E+01
5.4312E+02	1.0981E-02	1.2053E+00	1.5122E+04	2.2828E+01
5.4322E+02	1.0887E-02	1.1950E+00	1.4993E+04	2.2824E+01
5.4351E+02	1.1263E-02	1.2363E+00	1.5511E+04	2.2812E+01
5.4368E+02	1.1045E-02	1.2123E+00	1.5210E+04	2.2805E+01
5.4394E+02	1.1641E-02	1.2777E+00	1.6031E+04	2.2794E+01
5.4416E+02	1.0733E-02	1.1780E+00	1.4780E+04	2.2785E+01
5.4423E+02	9.9803E-03	1.0954E+00	1.3744E+04	2.2782E+01
5.4452E+02	9.4175E-03	1.0337E+00	1.2969E+04	2.2769E+01
5.4462E+02	8.8535E-03	9.7177E-01	1.2192E+04	2.2765E+01
5.4482E+02	8.4153E-03	9.2367E-01	1.1589E+04	2.2757E+01
5.4540E+02	7.9461E-03	8.7217E-01	1.0943E+04	2.2733E+01
5.4560E+02	8.0716E-03	8.8594E-01	1.1116E+04	2.2724E+01
5.4596E+02	7.1950E-03	7.8973E-01	9.9085E+03	2.2709E+01
5.4612E+02	7.0072E-03	7.6912E-01	9.6498E+03	2.2703E+01
5.4625E+02	7.2893E-03	8.0008E-01	1.0038E+04	2.2697E+01
5.4641E+02	7.2895E-03	8.0010E-01	1.0039E+04	2.2691E+01
5.4664E+02	6.8199E-03	7.4856E-01	9.3919E+03	2.2681E+01
5.4687E+02	6.6949E-03	7.3484E-01	9.2197E+03	2.2672E+01
5.4706E+02	6.1627E-03	6.7642E-01	8.4868E+03	2.2664E+01
5.4745E+02	5.4114E-03	5.9396E-01	7.4522E+03	2.2648E+01
5.4752E+02	5.6620E-03	6.2147E-01	7.7974E+03	2.2645E+01
5.4768E+02	5.3490E-03	5.8712E-01	7.3663E+03	2.2638E+01
5.4778E+02	5.7875E-03	6.3525E-01	7.9702E+03	2.2634E+01
5.4794E+02	5.4745E-03	6.0089E-01	7.5391E+03	2.2627E+01
5.4817E+02	5.5061E-03	6.0435E-01	7.5825E+03	2.2618E+01
5.4830E+02	5.3496E-03	5.8718E-01	7.3671E+03	2.2612E+01
5.4849E+02	5.6631E-03	6.2158E-01	7.7988E+03	2.2605E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.4856E+02	5.4125E-03	5.9409E-01	7.4538E+03	2.2602E+01
5.4875E+02	5.2248E-03	5.7348E-01	7.1953E+03	2.2594E+01
5.4908E+02	5.2565E-03	5.7695E-01	7.2388E+03	2.2580E+01
5.4934E+02	4.9749E-03	5.4605E-01	6.8510E+03	2.2570E+01
5.4966E+02	5.4137E-03	5.9421E-01	7.4553E+03	2.2557E+01
5.4986E+02	5.0381E-03	5.5299E-01	6.9381E+03	2.2548E+01
5.5009E+02	5.2576E-03	5.7708E-01	7.2404E+03	2.2539E+01
5.5022E+02	5.0385E-03	5.5303E-01	6.9386E+03	2.2534E+01
5.5035E+02	5.3204E-03	5.8398E-01	7.3269E+03	2.2528E+01
5.5051E+02	5.6338E-03	6.1837E-01	7.7585E+03	2.2522E+01
5.5074E+02	5.3209E-03	5.8403E-01	7.3275E+03	2.2512E+01
5.5090E+02	4.9766E-03	5.4623E-01	6.8533E+03	2.2506E+01
5.5119E+02	5.4466E-03	5.9782E-01	7.5006E+03	2.2494E+01
5.5145E+02	5.0084E-03	5.4973E-01	6.8973E+03	2.2483E+01
5.5161E+02	5.1339E-03	5.6350E-01	7.0700E+03	2.2477E+01
5.5174E+02	5.0087E-03	5.4976E-01	6.8977E+03	2.2471E+01
5.5187E+02	5.4160E-03	5.9447E-01	7.4585E+03	2.2466E+01
5.5200E+02	5.0717E-03	5.5667E-01	6.9843E+03	2.2461E+01
5.5213E+02	5.2284E-03	5.7388E-01	7.2002E+03	2.2456E+01
5.5256E+02	4.9469E-03	5.4298E-01	6.8125E+03	2.2438E+01
5.5265E+02	5.0723E-03	5.5674E-01	6.9852E+03	2.2434E+01
5.5275E+02	4.7592E-03	5.2238E-01	6.5541E+03	2.2430E+01
5.5298E+02	5.0414E-03	5.5335E-01	6.9426E+03	2.2421E+01
5.5321E+02	4.7910E-03	5.2587E-01	6.5978E+03	2.2412E+01
5.5337E+02	5.3236E-03	5.8433E-01	7.3313E+03	2.2405E+01
5.5360E+02	5.2926E-03	5.8092E-01	7.2885E+03	2.2396E+01
5.5373E+02	5.4493E-03	5.9812E-01	7.5044E+03	2.2391E+01
5.5379E+02	5.1048E-03	5.6031E-01	7.0299E+03	2.2388E+01
5.5428E+02	4.9487E-03	5.4317E-01	6.8150E+03	2.2369E+01
5.5441E+02	4.7610E-03	5.2257E-01	6.5565E+03	2.2363E+01
5.5454E+02	5.2935E-03	5.8102E-01	7.2898E+03	2.2358E+01
5.5473E+02	5.6069E-03	6.1542E-01	7.7214E+03	2.2350E+01
5.5490E+02	5.0120E-03	5.5012E-01	6.9022E+03	2.2344E+01
5.5503E+02	5.0748E-03	5.5701E-01	6.9886E+03	2.2338E+01
5.5509E+02	5.3881E-03	5.9140E-01	7.4200E+03	2.2336E+01
5.5522E+02	5.4821E-03	6.0172E-01	7.5496E+03	2.2331E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.5535E+02	5.8581E-03	6.4299E-01	8.0673E+03	2.2325E+01
5.5551E+02	5.4824E-03	6.0176E-01	7.5500E+03	2.2319E+01
5.5584E+02	5.2009E-03	5.7086E-01	7.1623E+03	2.2306E+01
5.5590E+02	1.4601E-02	1.6026E+00	2.0108E+04	2.2303E+01
6.0000E+02	1.2149E-02	1.3335E+00	1.6731E+04	2.0664E+01
7.0000E+02	8.3269E-03	9.1397E-01	1.1467E+04	1.7712E+01
8.0000E+02	5.9568E-03	6.5383E-01	8.2033E+03	1.5498E+01
9.0000E+02	4.4070E-03	4.8371E-01	6.0689E+03	1.3776E+01
1.0000E+03	3.3507E-03	3.6778E-01	4.6144E+03	1.2398E+01
1.2500E+03	1.8523E-03	2.0331E-01	2.5508E+03	9.9187E+00
1.5000E+03	1.1290E-03	1.2392E-01	1.5548E+03	8.2656E+00
1.7500E+03	7.3820E-04	8.1026E-02	1.0166E+03	7.0848E+00
2.0000E+03	5.0891E-04	5.5858E-02	7.0083E+02	6.1992E+00
2.2500E+03	3.6563E-04	4.0131E-02	5.0351E+02	5.5104E+00
2.5000E+03	2.7152E-04	2.9803E-02	3.7392E+02	4.9594E+00
2.7500E+03	2.0608E-04	2.2620E-02	2.8380E+02	4.5085E+00
3.0000E+03	1.6025E-04	1.7589E-02	2.2068E+02	4.1328E+00
3.5000E+03	1.0197E-04	1.1192E-02	1.4043E+02	3.5424E+00
4.0000E+03	6.8538E-05	7.5228E-03	9.4386E+01	3.0996E+00
4.5000E+03	4.8090E-05	5.2784E-03	6.6226E+01	2.7552E+00
5.0000E+03	3.4926E-05	3.8335E-03	4.8098E+01	2.4797E+00
6.0000E+03	1.9956E-05	2.1904E-03	2.7482E+01	2.0664E+00
7.0000E+03	1.2354E-05	1.3560E-03	1.7013E+01	1.7712E+00
8.0000E+03	8.1138E-06	8.9058E-04	1.1174E+01	1.5498E+00
9.0000E+03	5.5757E-06	6.1200E-04	7.6785E+00	1.3776E+00
1.0000E+04	3.8874E-06	4.2668E-04	5.3534E+00	1.2398E+00
1.2500E+04	1.9066E-06	2.0927E-04	2.6256E+00	9.9187E-01
1.5000E+04	1.0655E-06	1.1695E-04	1.4673E+00	8.2656E-01
1.7500E+04	6.5134E-07	7.1491E-05	8.9697E-01	7.0848E-01
2.0000E+04	4.2520E-07	4.6670E-05	5.8555E-01	6.1992E-01
2.2500E+04	2.9194E-07	3.2043E-05	4.0203E-01	5.5104E-01
2.5000E+04	2.0855E-07	2.2891E-05	2.8721E-01	4.9594E-01
2.7500E+04	1.5343E-07	1.6840E-05	2.1129E-01	4.5085E-01
3.0000E+04	1.1543E-07	1.2670E-05	1.5896E-01	4.1328E-01
3.5000E+04	6.9665E-08	7.6465E-06	9.5938E-02	3.5424E-01
4.0000E+04	4.4989E-08	4.9380E-06	6.1956E-02	3.0996E-01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.5000E+04	3.0590E-08	3.3576E-06	4.2127E-02	2.7552E-01
5.0000E+04	2.1665E-08	2.3779E-06	2.9835E-02	2.4797E-01
6.0000E+04	1.1925E-08	1.3089E-06	1.6423E-02	2.0664E-01
7.0000E+04	7.1991E-09	7.9018E-07	9.9140E-03	1.7712E-01
8.0000E+04	4.6471E-09	5.1007E-07	6.3997E-03	1.5498E-01
9.0000E+04	3.1561E-09	3.4642E-07	4.3464E-03	1.3776E-01
1.0000E+05	2.2316E-09	2.4494E-07	3.0732E-03	1.2398E-01

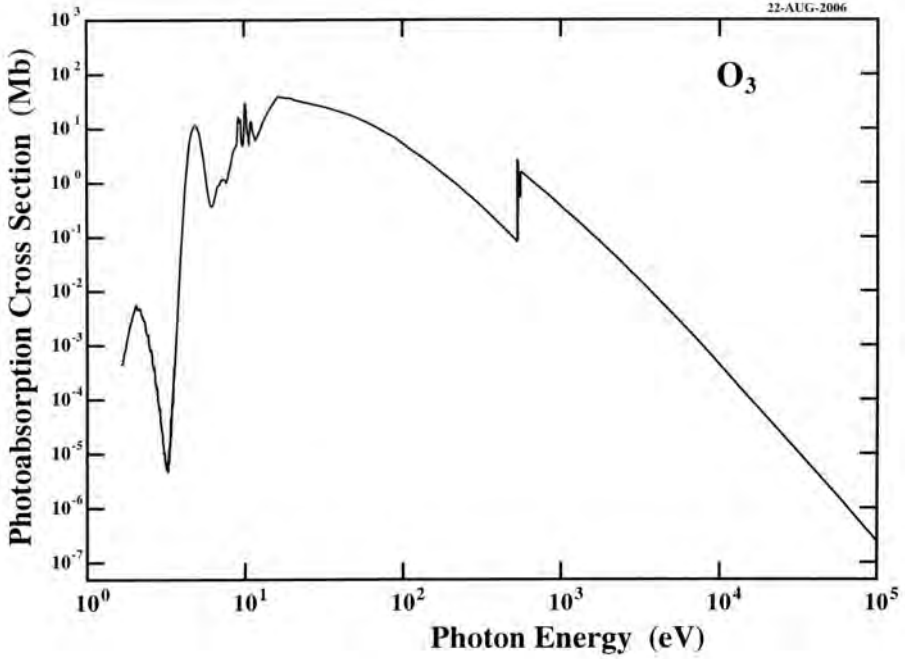
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z_\mathrm{c}-0.3)^6\left(\frac{Ry}{E}\right)^4\,\frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_c denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 541.5$ eV for oxygen atoms in ozone.


22-AUG-2006
O_3
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^3
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^0
10^1
10^2
10^3
10^4
10^5

O_3

Energy, eV	Source
1.31 - 1.65	—
1.65 - 2.75	Table 5.15 p.232 (Berkowitz's book*) Brion *et al.*, J. Atmos. Chem., 30 (1998) 291
2.75 - 3.54	Brion et al., J. Atmos. Chem., 30 (1998) 291
3.54 - 6.70	Mason *et al.*, J. Phys. B, 29 (1996) 3075
6.70 - 11.24	Fig. 5.12 p.229 (Berkowitz's book*)
11.24 - 20.66	Fig. 5.12 p.229 (Berkowitz's book*)
20.66 - 108.5	Fig. 5.13 p.230 (Berkowitz's book*)
108.5 - 535	Table 5.16 p.234 (Berkowitz's book*)
527.5 - 555.9	Table 5.15 p.232 (Berkowitz's book*)
555.9 - 2622.4	Table 5.16 p.234 (Berkowitz's book*)
2622.4 - 10000	Table 5.16 p.234 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Ammonia (NH_3)

Z = 10

Molecular Mass : $M_{\rm A}$ = 17.03052

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for transitions below the IP.

Energy (eV)	f	λ (Å)
5.67 − 5.78	0.000233	2186.7 − 2145.1
5.78 − 5.89	0.000974	2145.1 − 2105.0
5.89 − 6.00	0.002807	2105.0 − 2066.4
6.00 − 6.12	0.004642	2066.4 − 2025.9
6.12 − 6.24	0.007357	2025.9 − 1986.9
6.24 − 6.35	0.009147	1986.9 − 1952.5
6.35 − 6.46	0.010415	1952.5 − 1919.3
6.46 − 6.58	0.009927	1919.3 − 1884.3
6.58 − 6.70	0.009990	1884.3 − 1850.5
6.70 − 6.82	0.008667	1850.5 − 1817.9
6.82 − 6.94	0.006670	1817.9 − 1786.5
6.94 − 7.06	0.004555	1786.5 − 1756.1
7.06 − 7.18	0.003107	1756.1 − 1726.8
7.18 − 7.29	0.001992	1726.8 − 1700.7
7.29 − 7.42	0.001381	1700.7 − 1670.9
7.42 − 7.52	0.000781	1670.9 − 1648.7
7.52 − 7.65	0.000682	1648.7 − 1620.7
7.65 − 7.75	0.000646	1620.7 − 1599.8
7.75 − 7.87	0.001004	1599.8 − 1575.4
7.87 − 8.00	0.001772	1575.4 − 1549.8
8.00 − 8.11	0.001910	1549.8 − 1528.8
8.11 − 8.25	0.001999	1528.8 − 1502.8
8.25 − 8.36	0.000992	1502.8 − 1483.1
8.36 − 8.49	0.001486	1483.1 − 1460.4
8.49 − 8.62	0.001787	1460.4 − 1438.3
8.62 − 8.68	0.001364	1438.3 − 1428.4
8.68 − 8.83	0.005964	1428.4 − 1404.1
8.83 − 8.95	0.009211	1404.1 − 1385.3
8.95 − 9.07	0.012787	1385.3 − 1367.0

Table I. Integrated oscillator strength, f, for transitions below the IP. (Continued)

Energy (eV)	f	λ (Å)
9.07 − 9.20	0.013773	1367.0 − 1347.7
9.20 − 9.32	0.016364	1347.7 − 1330.3
9.32 − 9.45	0.015797	1330.3 − 1312.0
9.45 − 9.59	0.014738	1312.0 − 1292.8
9.59 − 9.72	0.016062	1292.8 − 1275.6
9.72 − 9.84	0.014614	1275.6 − 1260.0
9.84 − 9.97	0.014255	1260.0 − 1243.6
9.97 − 10.09	0.012459	1243.6 − 1228.8
10.09 − 10.186	0.011324	1228.8 − 1217.2

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.0186E+01	1.5940E-01	1.7496E+01	6.1866E+05	1.2171E+03
1.0194E+01	8.9942E-02	9.8721E+00	3.4909E+05	1.2163E+03
1.0196E+01	8.3149E-02	9.1265E+00	3.2272E+05	1.2160E+03
1.0200E+01	7.9482E-02	8.7240E+00	3.0849E+05	1.2155E+03
1.0203E+01	5.4420E-02	5.9732E+00	2.1122E+05	1.2152E+03
1.0204E+01	6.9551E-02	7.6340E+00	2.6994E+05	1.2150E+03
1.0208E+01	7.0064E-02	7.6903E+00	2.7193E+05	1.2146E+03
1.0212E+01	7.5274E-02	8.2622E+00	2.9216E+05	1.2141E+03
1.0214E+01	6.1695E-02	6.7717E+00	2.3945E+05	1.2139E+03
1.0215E+01	5.9603E-02	6.5421E+00	2.3134E+05	1.2138E+03
1.0219E+01	4.1843E-02	4.5927E+00	1.6240E+05	1.2133E+03
1.0226E+01	5.6962E-02	6.2522E+00	2.2108E+05	1.2124E+03
1.0231E+01	9.0356E-02	9.9176E+00	3.5070E+05	1.2119E+03
1.0235E+01	1.1436E-01	1.2552E+01	4.4386E+05	1.2114E+03
1.0236E+01	9.8173E-02	1.0776E+01	3.8103E+05	1.2112E+03
1.0239E+01	7.5718E-02	8.3109E+00	2.9388E+05	1.2109E+03
1.0242E+01	1.0338E-01	1.1347E+01	4.0122E+05	1.2105E+03
1.0243E+01	1.0703E-01	1.1747E+01	4.1539E+05	1.2104E+03
1.0245E+01	1.3678E-01	1.5013E+01	5.3087E+05	1.2102E+03
1.0247E+01	1.2163E-01	1.3351E+01	4.7209E+05	1.2099E+03
1.0248E+01	1.1797E-01	1.2949E+01	4.5789E+05	1.2098E+03
1.0253E+01	9.3951E-02	1.0312E+01	3.6465E+05	1.2093E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0254E+01	6.8887E-02	7.5611E+00	2.6737E+05	1.2091E+03
1.0257E+01	9.1848E-02	1.0081E+01	3.5648E+05	1.2088E+03
1.0259E+01	9.4976E-02	1.0425E+01	3.6863E+05	1.2085E+03
1.0261E+01	1.2368E-01	1.3576E+01	4.8005E+05	1.2083E+03
1.0264E+01	9.4431E-02	1.0365E+01	3.6651E+05	1.2079E+03
1.0266E+01	1.0852E-01	1.1911E+01	4.2120E+05	1.2077E+03
1.0269E+01	1.1113E-01	1.2197E+01	4.3131E+05	1.2074E+03
1.0274E+01	2.3640E-01	2.5948E+01	9.1753E+05	1.2068E+03
1.0279E+01	1.1580E-01	1.2711E+01	4.4946E+05	1.2062E+03
1.0283E+01	8.8641E-02	9.7294E+00	3.4404E+05	1.2057E+03
1.0287E+01	7.9235E-02	8.6969E+00	3.0753E+05	1.2053E+03
1.0287E+01	8.9151E-02	9.7853E+00	3.4602E+05	1.2052E+03
1.0290E+01	8.0792E-02	8.8678E+00	3.1357E+05	1.2049E+03
1.0293E+01	7.8172E-02	8.5802E+00	3.0340E+05	1.2045E+03
1.0295E+01	6.7203E-02	7.3763E+00	2.6083E+05	1.2043E+03
1.0298E+01	8.2857E-02	9.0945E+00	3.2159E+05	1.2040E+03
1.0302E+01	6.5618E-02	7.2023E+00	2.5468E+05	1.2035E+03
1.0304E+01	8.1797E-02	8.9781E+00	3.1747E+05	1.2033E+03
1.0305E+01	9.0146E-02	9.8945E+00	3.4988E+05	1.2032E+03
1.0308E+01	8.2828E-02	9.0913E+00	3.2147E+05	1.2028E+03
1.0310E+01	1.0214E-01	1.1211E+01	3.9642E+05	1.2026E+03
1.0313E+01	1.0422E-01	1.1439E+01	4.0449E+05	1.2022E+03
1.0317E+01	1.2404E-01	1.3615E+01	4.8145E+05	1.2018E+03
1.0318E+01	1.1203E-01	1.2297E+01	4.3483E+05	1.2016E+03
1.0320E+01	1.0211E-01	1.1208E+01	3.9631E+05	1.2014E+03
1.0322E+01	1.0994E-01	1.2067E+01	4.2669E+05	1.2012E+03
1.0329E+01	7.8593E-02	8.6265E+00	3.0504E+05	1.2004E+03
1.0330E+01	6.9191E-02	7.5944E+00	2.6855E+05	1.2002E+03
1.0333E+01	7.4927E-02	8.2240E+00	2.9081E+05	1.1999E+03
1.0336E+01	7.4395E-02	8.1656E+00	2.8874E+05	1.1995E+03
1.0338E+01	8.3266E-02	9.1393E+00	3.2317E+05	1.1993E+03
1.0341E+01	5.9244E-02	6.5027E+00	2.2994E+05	1.1990E+03
1.0343E+01	7.2287E-02	7.9343E+00	2.8056E+05	1.1987E+03
1.0346E+01	6.5495E-02	7.1888E+00	2.5420E+05	1.1984E+03
1.0349E+01	8.7409E-02	9.5941E+00	3.3926E+05	1.1980E+03
1.0351E+01	7.9051E-02	8.6767E+00	3.0681E+05	1.1978E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0359E+01	1.0461E-01	1.1482E+01	4.0603E+05	1.1969E+03
1.0360E+01	1.1557E-01	1.2685E+01	4.4856E+05	1.1968E+03
1.0363E+01	1.1452E-01	1.2570E+01	4.4447E+05	1.1964E+03
1.0367E+01	1.2912E-01	1.4172E+01	5.0114E+05	1.1959E+03
1.0369E+01	1.1606E-01	1.2739E+01	4.5046E+05	1.1957E+03
1.0373E+01	1.3171E-01	1.4457E+01	5.1121E+05	1.1953E+03
1.0379E+01	1.1447E-01	1.2565E+01	4.4430E+05	1.1946E+03
1.0380E+01	1.2021E-01	1.3194E+01	4.6657E+05	1.1944E+03
1.0384E+01	1.4995E-01	1.6459E+01	5.8201E+05	1.1940E+03
1.0387E+01	1.0401E-01	1.1417E+01	4.0370E+05	1.1937E+03
1.0394E+01	1.1025E-01	1.2101E+01	4.2791E+05	1.1929E+03
1.0395E+01	1.4731E-01	1.6169E+01	5.7175E+05	1.1927E+03
1.0398E+01	2.0421E-01	2.2414E+01	7.9259E+05	1.1924E+03
1.0403E+01	1.4050E-01	1.5422E+01	5.4532E+05	1.1918E+03
1.0407E+01	1.3527E-01	1.4848E+01	5.2502E+05	1.1914E+03
1.0409E+01	1.2692E-01	1.3931E+01	4.9260E+05	1.1911E+03
1.0413E+01	8.7231E-02	9.5745E+00	3.3856E+05	1.1907E+03
1.0414E+01	9.4533E-02	1.0376E+01	3.6690E+05	1.1905E+03
1.0420E+01	8.5645E-02	9.4005E+00	3.3241E+05	1.1899E+03
1.0423E+01	9.5032E-02	1.0431E+01	3.6884E+05	1.1895E+03
1.0428E+01	8.4057E-02	9.2261E+00	3.2624E+05	1.1890E+03
1.0442E+01	1.1743E-01	1.2889E+01	4.5577E+05	1.1874E+03
1.0443E+01	1.1011E-01	1.2086E+01	4.2737E+05	1.1872E+03
1.0449E+01	1.3150E-01	1.4434E+01	5.1039E+05	1.1866E+03
1.0463E+01	7.7173E-02	8.4706E+00	2.9953E+05	1.1850E+03
1.0480E+01	1.0740E-01	1.1789E+01	4.1686E+05	1.1831E+03
1.0488E+01	1.3296E-01	1.4594E+01	5.1606E+05	1.1821E+03
1.0492E+01	1.2825E-01	1.4077E+01	4.9777E+05	1.1817E+03
1.0504E+01	1.4753E-01	1.6193E+01	5.7261E+05	1.1803E+03
1.0509E+01	1.5848E-01	1.7395E+01	6.1511E+05	1.1798E+03
1.0517E+01	1.1514E-01	1.2638E+01	4.4688E+05	1.1789E+03
1.0520E+01	1.4801E-01	1.6246E+01	5.7447E+05	1.1786E+03
1.0525E+01	1.7567E-01	1.9281E+01	6.8181E+05	1.1780E+03
1.0528E+01	1.4329E-01	1.5728E+01	5.5615E+05	1.1777E+03
1.0533E+01	1.5006E-01	1.6471E+01	5.8244E+05	1.1771E+03
1.0537E+01	1.2604E-01	1.3834E+01	4.8919E+05	1.1766E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0543E+01	1.0410E-01	1.1426E+01	4.0402E+05	1.1760E+03
1.0553E+01	1.0095E-01	1.1080E+01	3.9179E+05	1.1749E+03
1.0557E+01	1.0563E-01	1.1594E+01	4.0998E+05	1.1744E+03
1.0558E+01	1.1189E-01	1.2281E+01	4.3425E+05	1.1743E+03
1.0564E+01	1.1866E-01	1.3024E+01	4.6054E+05	1.1737E+03
1.0569E+01	1.1186E-01	1.2278E+01	4.3415E+05	1.1731E+03
1.0571E+01	1.0664E-01	1.1705E+01	4.1388E+05	1.1729E+03
1.0572E+01	1.1133E-01	1.2220E+01	4.3210E+05	1.1728E+03
1.0577E+01	1.4629E-01	1.6057E+01	5.6780E+05	1.1722E+03
1.0586E+01	1.0972E-01	1.2043E+01	4.2586E+05	1.1712E+03
1.0598E+01	1.0134E-01	1.1123E+01	3.9334E+05	1.1699E+03
1.0601E+01	1.1647E-01	1.2784E+01	4.5204E+05	1.1696E+03
1.0603E+01	1.1229E-01	1.2325E+01	4.3583E+05	1.1693E+03
1.0607E+01	1.1855E-01	1.3012E+01	4.6011E+05	1.1689E+03
1.0611E+01	1.2063E-01	1.3240E+01	4.6818E+05	1.1685E+03
1.0621E+01	1.5139E-01	1.6617E+01	5.8760E+05	1.1673E+03
1.0625E+01	1.4408E-01	1.5814E+01	5.5920E+05	1.1669E+03
1.0632E+01	1.5606E-01	1.7129E+01	6.0571E+05	1.1661E+03
1.0635E+01	1.7693E-01	1.9420E+01	6.8672E+05	1.1658E+03
1.0639E+01	1.4769E-01	1.6211E+01	5.7322E+05	1.1654E+03
1.0642E+01	1.4090E-01	1.5465E+01	5.4686E+05	1.1650E+03
1.0643E+01	1.4664E-01	1.6095E+01	5.6913E+05	1.1649E+03
1.0649E+01	1.4923E-01	1.6380E+01	5.7921E+05	1.1643E+03
1.0652E+01	1.6488E-01	1.8098E+01	6.3996E+05	1.1640E+03
1.0655E+01	1.7218E-01	1.8899E+01	6.6829E+05	1.1636E+03
1.0658E+01	1.5182E-01	1.6664E+01	5.8925E+05	1.1633E+03
1.0663E+01	1.6433E-01	1.8037E+01	6.3781E+05	1.1628E+03
1.0666E+01	1.3926E-01	1.5286E+01	5.4051E+05	1.1624E+03
1.0672E+01	1.3768E-01	1.5112E+01	5.3438E+05	1.1618E+03
1.0677E+01	1.2357E-01	1.3564E+01	4.7962E+05	1.1612E+03
1.0690E+01	1.3242E-01	1.4534E+01	5.1394E+05	1.1598E+03
1.0696E+01	1.2770E-01	1.4017E+01	4.9565E+05	1.1592E+03
1.0698E+01	1.3553E-01	1.4876E+01	5.2603E+05	1.1590E+03
1.0702E+01	1.3813E-01	1.5161E+01	5.3610E+05	1.1585E+03
1.0704E+01	1.5588E-01	1.7109E+01	6.0499E+05	1.1583E+03
1.0710E+01	1.2767E-01	1.4013E+01	4.9551E+05	1.1576E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0714E+01	1.3183E-01	1.4470E+01	5.1168E+05	1.1572E+03
1.0716E+01	1.4175E-01	1.5558E+01	5.5016E+05	1.1570E+03
1.0723E+01	1.2711E-01	1.3952E+01	4.9335E+05	1.1562E+03
1.0728E+01	1.3962E-01	1.5325E+01	5.4191E+05	1.1557E+03
1.0732E+01	1.3022E-01	1.4293E+01	5.0540E+05	1.1553E+03
1.0736E+01	1.4325E-01	1.5724E+01	5.5601E+05	1.1548E+03
1.0742E+01	1.4325E-01	1.5723E+01	5.5597E+05	1.1542E+03
1.0743E+01	1.5472E-01	1.6982E+01	6.0051E+05	1.1541E+03
1.0749E+01	1.6776E-01	1.8413E+01	6.5111E+05	1.1535E+03
1.0751E+01	1.7976E-01	1.9731E+01	6.9770E+05	1.1532E+03
1.0753E+01	1.6931E-01	1.8584E+01	6.5714E+05	1.1530E+03
1.0758E+01	1.6095E-01	1.7666E+01	6.2468E+05	1.1525E+03
1.0761E+01	1.6982E-01	1.8640E+01	6.5911E+05	1.1522E+03
1.0763E+01	1.7190E-01	1.8868E+01	6.6718E+05	1.1519E+03
1.0767E+01	1.8807E-01	2.0642E+01	7.2994E+05	1.1515E+03
1.0775E+01	1.5882E-01	1.7433E+01	6.1643E+05	1.1507E+03
1.0777E+01	1.6560E-01	1.8176E+01	6.4272E+05	1.1505E+03
1.0782E+01	1.7812E-01	1.9550E+01	6.9131E+05	1.1499E+03
1.0791E+01	1.6609E-01	1.8230E+01	6.4462E+05	1.1490E+03
1.0793E+01	1.7704E-01	1.9433E+01	6.8715E+05	1.1487E+03
1.0797E+01	1.6451E-01	1.8056E+01	6.3849E+05	1.1483E+03
1.0805E+01	1.5143E-01	1.6621E+01	5.8774E+05	1.1475E+03
1.0808E+01	1.5769E-01	1.7308E+01	6.1202E+05	1.1471E+03
1.0814E+01	1.4514E-01	1.5931E+01	5.6332E+05	1.1465E+03
1.0820E+01	1.5191E-01	1.6674E+01	5.8961E+05	1.1459E+03
1.0823E+01	1.4512E-01	1.5929E+01	5.6325E+05	1.1456E+03
1.0828E+01	1.6442E-01	1.8047E+01	6.3817E+05	1.1450E+03
1.0832E+01	1.5867E-01	1.7415E+01	6.1582E+05	1.1446E+03
1.0835E+01	1.6336E-01	1.7931E+01	6.3404E+05	1.1443E+03
1.0837E+01	1.4770E-01	1.6212E+01	5.7326E+05	1.1441E+03
1.0840E+01	1.5395E-01	1.6898E+01	5.9753E+05	1.1438E+03
1.0845E+01	1.5185E-01	1.6667E+01	5.8936E+05	1.1432E+03
1.0849E+01	1.4662E-01	1.6093E+01	5.6906E+05	1.1428E+03
1.0855E+01	1.6174E-01	1.7753E+01	6.2777E+05	1.1422E+03
1.0859E+01	1.4869E-01	1.6320E+01	5.7709E+05	1.1418E+03
1.0862E+01	1.5859E-01	1.7407E+01	6.1554E+05	1.1414E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0867E+01	1.6067E-01	1.7635E+01	6.2361E+05	1.1409E+03
1.0876E+01	1.7683E-01	1.9409E+01	6.8633E+05	1.1400E+03
1.0878E+01	1.8674E-01	2.0496E+01	7.2477E+05	1.1398E+03
1.0886E+01	1.7419E-01	1.9119E+01	6.7607E+05	1.1389E+03
1.0895E+01	1.9714E-01	2.1638E+01	7.6515E+05	1.1380E+03
1.0905E+01	1.7989E-01	1.9745E+01	6.9820E+05	1.1370E+03
1.0911E+01	1.9710E-01	2.1633E+01	7.6497E+05	1.1363E+03
1.0916E+01	1.8299E-01	2.0085E+01	7.1021E+05	1.1358E+03
1.0922E+01	1.9029E-01	2.0886E+01	7.3854E+05	1.1352E+03
1.0934E+01	1.7251E-01	1.8935E+01	6.6955E+05	1.1339E+03
1.0939E+01	1.8137E-01	1.9907E+01	7.0394E+05	1.1334E+03
1.0944E+01	1.7404E-01	1.9103E+01	6.7550E+05	1.1329E+03
1.0952E+01	1.7455E-01	1.9159E+01	6.7747E+05	1.1321E+03
1.0953E+01	1.8133E-01	1.9903E+01	7.0379E+05	1.1320E+03
1.0958E+01	1.8549E-01	2.0360E+01	7.1993E+05	1.1314E+03
1.0965E+01	1.7817E-01	1.9556E+01	6.9153E+05	1.1307E+03
1.0969E+01	1.7921E-01	1.9670E+01	6.9555E+05	1.1303E+03
1.0977E+01	1.7031E-01	1.8693E+01	6.6101E+05	1.1295E+03
1.0982E+01	1.8021E-01	1.9780E+01	6.9945E+05	1.1290E+03
1.0990E+01	1.7706E-01	1.9435E+01	6.8723E+05	1.1282E+03
1.1003E+01	1.8904E-01	2.0749E+01	7.3370E+05	1.1268E+03
1.1004E+01	1.9321E-01	2.1206E+01	7.4988E+05	1.1267E+03
1.1007E+01	1.9425E-01	2.1321E+01	7.5393E+05	1.1264E+03
1.1008E+01	2.0468E-01	2.2466E+01	7.9442E+05	1.1263E+03
1.1017E+01	1.9369E-01	2.1260E+01	7.5178E+05	1.1254E+03
1.1024E+01	1.9942E-01	2.1889E+01	7.7401E+05	1.1247E+03
1.1028E+01	2.0986E-01	2.3034E+01	8.1450E+05	1.1243E+03
1.1037E+01	2.0253E-01	2.2230E+01	7.8606E+05	1.1234E+03
1.1042E+01	2.0826E-01	2.2858E+01	8.0830E+05	1.1228E+03
1.1047E+01	2.0041E-01	2.1997E+01	7.7785E+05	1.1223E+03
1.1055E+01	2.0353E-01	2.2339E+01	7.8993E+05	1.1215E+03
1.1058E+01	2.0665E-01	2.2682E+01	8.0206E+05	1.1212E+03
1.1060E+01	2.0038E-01	2.1993E+01	7.7771E+05	1.1210E+03
1.1067E+01	1.9619E-01	2.1534E+01	7.6146E+05	1.1203E+03
1.1080E+01	1.9564E-01	2.1473E+01	7.5931E+05	1.1190E+03
1.1094E+01	2.0186E-01	2.2157E+01	7.8348E+05	1.1176E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1110E+01	1.9190E-01	2.1063E+01	7.4482E+05	1.1160E+03
1.1122E+01	1.9658E-01	2.1577E+01	7.6297E+05	1.1148E+03
1.1142E+01	2.1532E-01	2.3633E+01	8.3569E+05	1.1128E+03
1.1154E+01	2.0798E-01	2.2828E+01	8.0722E+05	1.1116E+03
1.1163E+01	2.2101E-01	2.4258E+01	8.5779E+05	1.1107E+03
1.1171E+01	2.1681E-01	2.3798E+01	8.4150E+05	1.1099E+03
1.1178E+01	2.2201E-01	2.4369E+01	8.6169E+05	1.1092E+03
1.1183E+01	2.1365E-01	2.3451E+01	8.2924E+05	1.1087E+03
1.1194E+01	2.1885E-01	2.4021E+01	8.4939E+05	1.1076E+03
1.1207E+01	2.1307E-01	2.3387E+01	8.2698E+05	1.1063E+03
1.1218E+01	2.1618E-01	2.3728E+01	8.3903E+05	1.1052E+03
1.1225E+01	2.1668E-01	2.3783E+01	8.4100E+05	1.1045E+03
1.1229E+01	2.2085E-01	2.4241E+01	8.5718E+05	1.1041E+03
1.1235E+01	2.1667E-01	2.3781E+01	8.4093E+05	1.1036E+03
1.1244E+01	2.1559E-01	2.3664E+01	8.3677E+05	1.1027E+03
1.1261E+01	2.1816E-01	2.3946E+01	8.4674E+05	1.1010E+03
1.1275E+01	2.2700E-01	2.4916E+01	8.8106E+05	1.0996E+03
1.1287E+01	2.2333E-01	2.4513E+01	8.6679E+05	1.0985E+03
1.1297E+01	2.2904E-01	2.5139E+01	8.8895E+05	1.0975E+03
1.1303E+01	2.2641E-01	2.4851E+01	8.7876E+05	1.0969E+03
1.1307E+01	2.2849E-01	2.5080E+01	8.8683E+05	1.0965E+03
1.1316E+01	2.2378E-01	2.4562E+01	8.6854E+05	1.0957E+03
1.1328E+01	2.2688E-01	2.4903E+01	8.8059E+05	1.0945E+03
1.1340E+01	2.2476E-01	2.4670E+01	8.7235E+05	1.0933E+03
1.1362E+01	2.2889E-01	2.5123E+01	8.8838E+05	1.0912E+03
1.1375E+01	2.2625E-01	2.4833E+01	8.7812E+05	1.0900E+03
1.1401E+01	2.2827E-01	2.5055E+01	8.8597E+05	1.0875E+03
1.1414E+01	2.2563E-01	2.4765E+01	8.7572E+05	1.0862E+03
1.1429E+01	2.2873E-01	2.5106E+01	8.8777E+05	1.0848E+03
1.1442E+01	2.2713E-01	2.4930E+01	8.8156E+05	1.0836E+03
1.1460E+01	2.2814E-01	2.5041E+01	8.8547E+05	1.0819E+03
1.1484E+01	2.2547E-01	2.4748E+01	8.7511E+05	1.0796E+03
1.1493E+01	2.2650E-01	2.4860E+01	8.7909E+05	1.0788E+03
1.1503E+01	2.2542E-01	2.4743E+01	8.7493E+05	1.0778E+03
1.1541E+01	2.3109E-01	2.5364E+01	8.9691E+05	1.0743E+03
1.1550E+01	2.2950E-01	2.5190E+01	8.9074E+05	1.0735E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1568E+01	2.3207E-01	2.5472E+01	9.0071E+05	1.0718E+03
1.1588E+01	2.2837E-01	2.5066E+01	8.8637E+05	1.0699E+03
1.1622E+01	2.3038E-01	2.5286E+01	8.9415E+05	1.0668E+03
1.1650E+01	2.2821E-01	2.5049E+01	8.8576E+05	1.0642E+03
1.1697E+01	2.2779E-01	2.5002E+01	8.8409E+05	1.0600E+03
1.1808E+01	2.1867E-01	2.4002E+01	8.4873E+05	1.0500E+03
1.1922E+01	2.2232E-01	2.4402E+01	8.6288E+05	1.0400E+03
1.2037E+01	2.0956E-01	2.3002E+01	8.1337E+05	1.0300E+03
1.2155E+01	2.0319E-01	2.2302E+01	7.8861E+05	1.0200E+03
1.2276E+01	1.9772E-01	2.1702E+01	7.6739E+05	1.0100E+03
1.2398E+01	1.9043E-01	2.0902E+01	7.3910E+05	1.0000E+03
1.2524E+01	1.8223E-01	2.0002E+01	7.0728E+05	9.9000E+02
1.2651E+01	1.7312E-01	1.9002E+01	6.7191E+05	9.8000E+02
1.2782E+01	1.6310E-01	1.7901E+01	6.3301E+05	9.7000E+02
1.2915E+01	1.5489E-01	1.7001E+01	6.0118E+05	9.6000E+02
1.3051E+01	1.4761E-01	1.6201E+01	5.7289E+05	9.5000E+02
1.3190E+01	1.4305E-01	1.5701E+01	5.5521E+05	9.4000E+02
1.3332E+01	1.4943E-01	1.6401E+01	5.7997E+05	9.3000E+02
1.3477E+01	1.6218E-01	1.7801E+01	6.2948E+05	9.2000E+02
1.3625E+01	1.7858E-01	1.9602E+01	6.9313E+05	9.1000E+02
1.3776E+01	1.9316E-01	2.1202E+01	7.4971E+05	9.0000E+02
1.3931E+01	2.0501E-01	2.2502E+01	7.9569E+05	8.9000E+02
1.4089E+01	2.1685E-01	2.3802E+01	8.4166E+05	8.8000E+02
1.4251E+01	2.2688E-01	2.4902E+01	8.8056E+05	8.7000E+02
1.4417E+01	2.3690E-01	2.6002E+01	9.1946E+05	8.6000E+02
1.4586E+01	2.4601E-01	2.7002E+01	9.5482E+05	8.5000E+02
1.4760E+01	2.5694E-01	2.8202E+01	9.9726E+05	8.4000E+02
1.4938E+01	2.6697E-01	2.9302E+01	1.0362E+06	8.3000E+02
1.5120E+01	2.7790E-01	3.0503E+01	1.0786E+06	8.2000E+02
1.5307E+01	2.8610E-01	3.1403E+01	1.1104E+06	8.1000E+02
1.5498E+01	2.9248E-01	3.2103E+01	1.1352E+06	8.0000E+02
1.5694E+01	2.9612E-01	3.2503E+01	1.1493E+06	7.9000E+02
1.5895E+01	2.9977E-01	3.2903E+01	1.1635E+06	7.8000E+02
1.6102E+01	3.0159E-01	3.3103E+01	1.1705E+06	7.7000E+02
1.6314E+01	3.0250E-01	3.3203E+01	1.1741E+06	7.6000E+02
1.6531E+01	3.0250E-01	3.3203E+01	1.1741E+06	7.5000E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6665E+01	3.0159E-01	3.3103E+01	1.1705E+06	7.4400E+02
1.6755E+01	3.0068E-01	3.3003E+01	1.1670E+06	7.4000E+02
1.6846E+01	3.0068E-01	3.3003E+01	1.1670E+06	7.3600E+02
1.6984E+01	2.9886E-01	3.2803E+01	1.1599E+06	7.3000E+02
1.7220E+01	2.9612E-01	3.2503E+01	1.1493E+06	7.2000E+02
1.7463E+01	2.9157E-01	3.2003E+01	1.1316E+06	7.1000E+02
1.7712E+01	2.8610E-01	3.1403E+01	1.1104E+06	7.0000E+02
1.7969E+01	2.8337E-01	3.1103E+01	1.0998E+06	6.9000E+02
1.8233E+01	2.8063E-01	3.0803E+01	1.0892E+06	6.8000E+02
1.8505E+01	2.7881E-01	3.0603E+01	1.0821E+06	6.7000E+02
1.8785E+01	2.7608E-01	3.0302E+01	1.0715E+06	6.6000E+02
1.9074E+01	2.7334E-01	3.0002E+01	1.0609E+06	6.5000E+02
1.9373E+01	2.6970E-01	2.9602E+01	1.0468E+06	6.4000E+02
1.9680E+01	2.6697E-01	2.9302E+01	1.0362E+06	6.3000E+02
1.9997E+01	2.6241E-01	2.8802E+01	1.0185E+06	6.2000E+02
2.0325E+01	2.5877E-01	2.8402E+01	1.0043E+06	6.1000E+02
2.0664E+01	2.5421E-01	2.7902E+01	9.8665E+05	6.0000E+02
2.1014E+01	2.4874E-01	2.7302E+01	9.6543E+05	5.9000E+02
2.1377E+01	2.4328E-01	2.6702E+01	9.4421E+05	5.8000E+02
2.1752E+01	2.3781E-01	2.6102E+01	9.2300E+05	5.7000E+02
2.2140E+01	2.3325E-01	2.5602E+01	9.0531E+05	5.6000E+02
2.2543E+01	2.2870E-01	2.5102E+01	8.8763E+05	5.5000E+02
2.2960E+01	2.2505E-01	2.4702E+01	8.7349E+05	5.4000E+02
2.3393E+01	2.1959E-01	2.4102E+01	8.5227E+05	5.3000E+02
2.3843E+01	2.1230E-01	2.3302E+01	8.2398E+05	5.2000E+02
2.4311E+01	2.0501E-01	2.2502E+01	7.9569E+05	5.1000E+02
2.4797E+01	1.9772E-01	2.1702E+01	7.6739E+05	5.0000E+02
2.5303E+01	1.9134E-01	2.1002E+01	7.4264E+05	4.9000E+02
2.5830E+01	1.8678E-01	2.0502E+01	7.2496E+05	4.8000E+02
2.6380E+01	1.7858E-01	1.9602E+01	6.9313E+05	4.7000E+02
2.6953E+01	1.7130E-01	1.8802E+01	6.6484E+05	4.6000E+02
2.7552E+01	1.6765E-01	1.8402E+01	6.5069E+05	4.5000E+02
2.8178E+01	1.6310E-01	1.7901E+01	6.3301E+05	4.4000E+02
2.8834E+01	1.5672E-01	1.7201E+01	6.0826E+05	4.3000E+02
2.9520E+01	1.5034E-01	1.6501E+01	5.8350E+05	4.2000E+02
3.0240E+01	1.4396E-01	1.5801E+01	5.5875E+05	4.1000E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0996E+01	1.3758E-01	1.5101E+01	5.3399E+05	4.0000E+02
3.1791E+01	1.3029E-01	1.4301E+01	5.0570E+05	3.9000E+02
3.2627E+01	1.2300E-01	1.3501E+01	4.7741E+05	3.8000E+02
3.3509E+01	1.1572E-01	1.2701E+01	4.4912E+05	3.7000E+02
3.4440E+01	1.0934E-01	1.2001E+01	4.2437E+05	3.6000E+02
3.5424E+01	1.0205E-01	1.1201E+01	3.9607E+05	3.5000E+02
3.6466E+01	9.5670E-02	1.0501E+01	3.7132E+05	3.4000E+02
3.7571E+01	9.0203E-02	9.9008E+00	3.5010E+05	3.3000E+02
3.8745E+01	8.4737E-02	9.3008E+00	3.2888E+05	3.2000E+02
3.9995E+01	7.9270E-02	8.7007E+00	3.0767E+05	3.1000E+02
4.1328E+01	7.3803E-02	8.1007E+00	2.8645E+05	3.0000E+02
4.2753E+01	6.8336E-02	7.5006E+00	2.6523E+05	2.9000E+02
4.4280E+01	6.3325E-02	6.9506E+00	2.4578E+05	2.8000E+02
4.5920E+01	5.8496E-02	6.4205E+00	2.2704E+05	2.7000E+02
4.7686E+01	5.3575E-02	5.8805E+00	2.0794E+05	2.6000E+02
4.9594E+01	4.9020E-02	5.3804E+00	1.9026E+05	2.5000E+02
5.1660E+01	4.4646E-02	4.9004E+00	1.7328E+05	2.4000E+02
5.3906E+01	4.0273E-02	4.4204E+00	1.5631E+05	2.3000E+02
5.6356E+01	3.6446E-02	4.0003E+00	1.4146E+05	2.2000E+02
5.9040E+01	3.2619E-02	3.5803E+00	1.2660E+05	2.1000E+02
6.1992E+01	2.8974E-02	3.1803E+00	1.1246E+05	2.0000E+02
6.5255E+01	2.5694E-02	2.8202E+00	9.9726E+04	1.9000E+02
6.8880E+01	2.2505E-02	2.4702E+00	8.7349E+04	1.8000E+02
7.2932E+01	1.9590E-02	2.1502E+00	7.6032E+04	1.7000E+02
7.7490E+01	1.6856E-02	1.8502E+00	6.5423E+04	1.6000E+02
8.2656E+01	1.4305E-02	1.5701E+00	5.5521E+04	1.5000E+02
8.8560E+01	1.2300E-02	1.3501E+00	4.7741E+04	1.4000E+02
9.5372E+01	1.0478E-02	1.1501E+00	4.0668E+04	1.3000E+02
1.0332E+02	8.7470E-03	9.6008E-01	3.3949E+04	1.2000E+02
1.1271E+02	6.9247E-03	7.6006E-01	2.6876E+04	1.1000E+02
1.2500E+02	5.6752E-03	6.2291E-01	2.2027E+04	9.9187E+01
1.5000E+02	3.7558E-03	4.1225E-01	1.4577E+04	8.2656E+01
1.7500E+02	2.6006E-03	2.8544E-01	1.0093E+04	7.0848E+01
2.0000E+02	1.8656E-03	2.0477E-01	7.2410E+03	6.1992E+01
2.2500E+02	1.3780E-03	1.5126E-01	5.3485E+03	5.5104E+01
2.5000E+02	1.0432E-03	1.1450E-01	4.0488E+03	4.9594E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.7500E+02	8.0631E-04	8.8501E-02	3.1295E+03	4.5085E+01
3.0000E+02	6.3450E-04	6.9644E-02	2.4627E+03	4.1328E+01
3.5000E+02	4.1085E-04	4.5096E-02	1.5946E+03	3.5424E+01
4.0000E+02	3.1621E-04	3.4707E-02	1.2273E+03	3.0996E+01
4.0038E+02	2.1343E-03	2.3426E-01	8.2837E+03	3.0967E+01
4.0071E+02	6.2503E-03	6.8604E-01	2.4259E+04	3.0941E+01
4.0082E+02	1.3142E-02	1.4425E+00	5.1009E+04	3.0933E+01
4.0094E+02	1.5359E-02	1.6858E+00	5.9612E+04	3.0923E+01
4.0120E+02	9.7305E-03	1.0680E+00	3.7766E+04	3.0903E+01
4.0136E+02	6.0043E-03	6.5904E-01	2.3304E+04	3.0891E+01
4.0159E+02	5.2883E-03	5.8044E-01	2.0525E+04	3.0873E+01
4.0187E+02	6.4733E-03	7.1052E-01	2.5125E+04	3.0852E+01
4.0207E+02	2.2080E-02	2.4235E+00	8.5698E+04	3.0836E+01
4.0223E+02	4.2520E-02	4.6671E+00	1.6503E+05	3.0824E+01
4.0237E+02	4.4737E-02	4.9104E+00	1.7364E+05	3.0813E+01
4.0257E+02	4.1645E-02	4.5710E+00	1.6163E+05	3.0798E+01
4.0275E+02	3.1976E-02	3.5097E+00	1.2411E+05	3.0784E+01
4.0279E+02	2.5637E-02	2.8139E+00	9.9502E+04	3.0781E+01
4.0313E+02	2.1037E-02	2.3090E+00	8.1649E+04	3.0755E+01
4.0319E+02	1.6282E-02	1.7871E+00	6.3193E+04	3.0751E+01
4.0337E+02	1.4695E-02	1.6130E+00	5.7036E+04	3.0737E+01
4.0364E+02	1.6910E-02	1.8560E+00	6.5630E+04	3.0717E+01
4.0391E+02	1.5242E-02	1.6730E+00	5.9158E+04	3.0696E+01
4.0420E+02	1.7775E-02	1.9510E+00	6.8989E+04	3.0674E+01
4.0455E+02	1.9355E-02	2.1244E+00	7.5120E+04	3.0647E+01
4.0496E+02	1.8240E-02	2.0020E+00	7.0792E+04	3.0616E+01
4.0549E+02	1.6966E-02	1.8622E+00	6.5849E+04	3.0576E+01
4.0652E+02	1.5368E-02	1.6868E+00	5.9647E+04	3.0499E+01
4.0786E+02	1.4004E-02	1.5371E+00	5.4354E+04	3.0399E+01
4.0908E+02	1.2959E-02	1.4224E+00	5.0297E+04	3.0308E+01
4.1096E+02	1.1905E-02	1.3067E+00	4.6205E+04	3.0169E+01
4.1292E+02	1.0929E-02	1.1996E+00	4.2418E+04	3.0026E+01
4.1437E+02	1.0514E-02	1.1541E+00	4.0809E+04	2.9921E+01
4.1625E+02	1.0094E-02	1.1080E+00	3.9179E+04	2.9786E+01
4.1855E+02	9.6689E-03	1.0613E+00	3.7527E+04	2.9622E+01
4.2092E+02	9.4804E-03	1.0406E+00	3.6796E+04	2.9456E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.2310E+02	9.2943E-03	1.0202E+00	3.6074E+04	2.9304E+01
4.2500E+02	9.1892E-03	1.0086E+00	3.5666E+04	2.9173E+01
4.5000E+02	5.2494E-03	5.7618E-01	2.0374E+04	2.7552E+01
5.0000E+02	4.1161E-03	4.5179E-01	1.5976E+04	2.4797E+01
6.0000E+02	2.6473E-03	2.9057E-01	1.0275E+04	2.0664E+01
7.0000E+02	1.7936E-03	1.9686E-01	6.9612E+03	1.7712E+01
8.0000E+02	1.2681E-03	1.3919E-01	4.9218E+03	1.5498E+01
9.0000E+02	9.2845E-04	1.0191E-01	3.6035E+03	1.3776E+01
1.0000E+03	6.9971E-04	7.6800E-02	2.7157E+03	1.2398E+01
1.2500E+03	3.8052E-04	4.1766E-02	1.4769E+03	9.9187E+00
1.5000E+03	2.2951E-04	2.5191E-02	8.9077E+02	8.2656E+00
1.7500E+03	1.4905E-04	1.6360E-02	5.7850E+02	7.0848E+00
2.0000E+03	1.0231E-04	1.1230E-02	3.9709E+02	6.1992E+00
2.2500E+03	7.1319E-05	7.8281E-03	2.7681E+02	5.5104E+00
2.5000E+03	5.2284E-05	5.7388E-03	2.0293E+02	4.9594E+00
2.7500E+03	3.9426E-05	4.3274E-03	1.5302E+02	4.5085E+00
3.0000E+03	3.0430E-05	3.3400E-03	1.1811E+02	4.1328E+00
3.5000E+03	1.9169E-05	2.1040E-03	7.4398E+01	3.5424E+00
4.0000E+03	1.2797E-05	1.4046E-03	4.9667E+01	3.0996E+00
4.5000E+03	8.9313E-06	9.8030E-04	3.4664E+01	2.7552E+00
5.0000E+03	6.4565E-06	7.0868E-04	2.5059E+01	2.4797E+00
6.0000E+03	3.6572E-06	4.0142E-04	1.4195E+01	2.0664E+00
7.0000E+03	2.2440E-06	2.4630E-04	8.7094E+00	1.7712E+00
8.0000E+03	1.4596E-06	1.6021E-04	5.6652E+00	1.5498E+00
9.0000E+03	9.9254E-07	1.0894E-04	3.8523E+00	1.3776E+00
1.0000E+04	7.1417E-07	7.8388E-05	2.7719E+00	1.2398E+00
1.2500E+04	3.4842E-07	3.8243E-05	1.3523E+00	9.9187E-01
1.5000E+04	1.9379E-07	2.1271E-05	7.5215E-01	8.2656E-01
1.7500E+04	1.1802E-07	1.2953E-05	4.5805E-01	7.0848E-01
2.0000E+04	7.6795E-08	8.4291E-06	2.9806E-01	6.1992E-01
2.2500E+04	5.2559E-08	5.7689E-06	2.0400E-01	5.5104E-01
2.5000E+04	3.7468E-08	4.1125E-06	1.4542E-01	4.9594E-01
2.7500E+04	2.7502E-08	3.0187E-06	1.0674E-01	4.5085E-01
3.0000E+04	2.0651E-08	2.2667E-06	8.0152E-02	4.1328E-01
3.5000E+04	1.2430E-08	1.3644E-06	4.8245E-02	3.5424E-01
4.0000E+04	8.0082E-09	8.7899E-07	3.1082E-02	3.0996E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.5000E+04	5.4337E-09	5.9641E-07	2.1089E-02	2.7552E-01
5.0000E+04	3.8408E-09	4.2157E-07	1.4907E-02	2.4797E-01
6.0000E+04	2.1072E-09	2.3128E-07	8.1784E-03	2.0664E-01
7.0000E+04	1.2684E-09	1.3922E-07	4.9231E-03	1.7712E-01
8.0000E+04	8.1707E-10	8.9682E-08	3.1712E-03	1.5498E-01
9.0000E+04	5.5415E-10	6.0824E-08	2.1508E-03	1.3776E-01
1.0000E+05	3.9134E-10	4.2954E-08	1.5189E-03	1.2398E-01

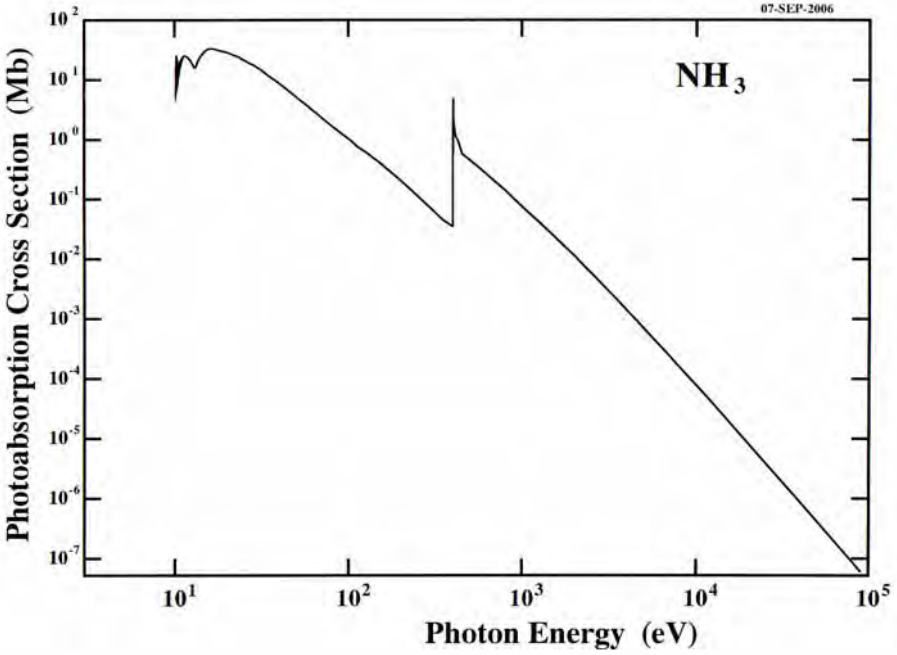
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 13.6$ and 405.6 eV for hydrogen and nitrogen atoms, respectively.


07-SEP-2006
NH3
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^1
10^2
10^3
10^4
10^5

NH_3

Energy, eV	Source
5.67 - 10.1864 (IP)	Table 6.1 p.240 (Berkowitz's book*)
IP - 11.65	Xia *et al.*, J. Quant. Spectrosc. Radiat. Transfer, 45 (1991) 77
11.65 - 112.71	Samson *et al.*, J. Chem. Phys., 87 (1987) 6416
112.71 - 400.0	Table 6.3 p.244 (Berkowitz's book*)
400.66	Table 6.2 p.242 (Berkowitz's book*)
402.33	Table 6.2 p.242 (Berkowitz's book*)
400 - 425	Table 6.2 p.242 (Berkowitz's book*)
425 - 2042.4	Table 6.3 p.244 (Berkowitz's book*)
2042.4 - 10^4	Table 6.3 p.244 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Methane (CH_4)

Z = 10 Molecular Mass : $M_{\rm A} = 16.04246$

$\sigma_a({\rm Mb}) = 109.76097\ \dfrac{{\rm d}f}{{\rm d}E}\ ({\rm eV}^{-1})$

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
8.6100E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.4400E+03
9.0000E+00	3.6349E-02	3.9896E+00	1.4977E+05	1.3776E+03
9.2130E+00	8.4045E-02	9.2248E+00	3.4629E+05	1.3458E+03
9.5000E+00	1.5240E-01	1.6727E+01	6.2792E+05	1.3051E+03
9.6900E+00	1.6986E-01	1.8644E+01	6.9988E+05	1.2795E+03
1.0050E+01	1.5851E-01	1.7399E+01	6.5313E+05	1.2337E+03
1.0425E+01	1.7598E-01	1.9316E+01	7.2509E+05	1.1893E+03
1.0700E+01	1.6508E-01	1.8119E+01	6.8016E+05	1.1587E+03
1.0913E+01	1.5195E-01	1.6679E+01	6.2610E+05	1.1361E+03
1.1270E+01	1.8943E-01	2.0792E+01	7.8051E+05	1.1001E+03
1.1500E+01	2.6153E-01	2.8706E+01	1.0776E+06	1.0781E+03
1.1713E+01	2.7411E-01	3.0086E+01	1.1294E+06	1.0585E+03
1.1900E+01	2.7049E-01	2.9689E+01	1.1145E+06	1.0419E+03
1.2125E+01	2.8713E-01	3.1516E+01	1.1831E+06	1.0225E+03
1.2375E+01	3.0912E-01	3.3929E+01	1.2736E+06	1.0019E+03
1.2610E+01	3.6077E-01	3.9598E+01	1.4865E+06	9.8322E+02
1.3000E+01	4.1187E-01	4.5208E+01	1.6970E+06	9.5372E+02
1.3325E+01	4.4068E-01	4.8369E+01	1.8157E+06	9.3046E+02
1.3620E+01	4.4691E-01	4.9053E+01	1.8414E+06	9.1031E+02
1.4000E+01	4.4725E-01	4.9090E+01	1.8428E+06	8.8560E+02
1.4500E+01	4.4408E-01	4.8742E+01	1.8297E+06	8.5506E+02
1.5000E+01	4.3963E-01	4.8255E+01	1.8114E+06	8.2656E+02
1.5500E+01	4.2921E-01	4.7111E+01	1.7685E+06	7.9990E+02
1.6000E+01	4.1797E-01	4.5877E+01	1.7222E+06	7.7490E+02
1.6500E+01	4.0673E-01	4.4643E+01	1.6758E+06	7.5142E+02
1.7000E+01	3.9413E-01	4.3260E+01	1.6239E+06	7.2932E+02
1.7500E+01	3.7745E-01	4.1429E+01	1.5552E+06	7.0848E+02
1.8000E+01	3.6394E-01	3.9947E+01	1.4996E+06	6.8880E+02

Table II. Oscillator-strength density, ${\rm d}f/{\rm d}E$, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.8500E+01	3.4999E-01	3.8415E+01	1.4420E+06	6.7018E+02
1.9000E+01	3.3693E-01	3.6982E+01	1.3883E+06	6.5255E+02
1.9500E+01	3.2479E-01	3.5649E+01	1.3382E+06	6.3582E+02
2.0000E+01	3.1300E-01	3.4355E+01	1.2897E+06	6.1992E+02
2.0500E+01	2.9768E-01	3.2674E+01	1.2265E+06	6.0480E+02
2.1000E+01	2.8680E-01	3.1480E+01	1.1817E+06	5.9040E+02
2.1500E+01	2.7602E-01	3.0296E+01	1.1373E+06	5.7667E+02
2.2000E+01	2.6559E-01	2.9152E+01	1.0943E+06	5.6356E+02
2.2500E+01	2.5254E-01	2.7719E+01	1.0405E+06	5.5104E+02
2.3000E+01	2.4175E-01	2.6535E+01	9.9610E+05	5.3906E+02
2.3500E+01	2.3178E-01	2.5441E+01	9.5501E+05	5.2759E+02
2.4000E+01	2.2145E-01	2.4306E+01	9.1243E+05	5.1660E+02
2.4500E+01	2.0955E-01	2.3001E+01	8.6341E+05	5.0606E+02
2.5000E+01	2.0043E-01	2.1999E+01	8.2582E+05	4.9594E+02
2.5500E+01	1.9658E-01	2.1576E+01	8.0995E+05	4.8621E+02
2.6000E+01	1.8386E-01	2.0181E+01	7.5756E+05	4.7686E+02
2.6500E+01	1.7433E-01	1.9134E+01	7.1828E+05	4.6786E+02
2.7000E+01	1.6838E-01	1.8481E+01	6.9377E+05	4.5920E+02
2.7500E+01	1.6073E-01	1.7642E+01	6.6227E+05	4.5085E+02
2.8000E+01	1.5328E-01	1.6825E+01	6.3158E+05	4.4280E+02
2.8500E+01	1.4444E-01	1.5854E+01	5.9513E+05	4.3503E+02
2.9000E+01	1.3998E-01	1.5364E+01	5.7674E+05	4.2753E+02
2.9500E+01	1.3561E-01	1.4885E+01	5.5876E+05	4.2029E+02
3.0000E+01	1.2985E-01	1.4252E+01	5.3502E+05	4.1328E+02
3.0500E+01	1.2399E-01	1.3609E+01	5.1086E+05	4.0651E+02
3.1000E+01	1.2041E-01	1.3217E+01	4.9614E+05	3.9995E+02
3.1500E+01	1.1115E-01	1.2200E+01	4.5799E+05	3.9360E+02
3.2000E+01	1.0369E-01	1.1381E+01	4.2723E+05	3.8745E+02
3.2500E+01	9.9114E-02	1.0879E+01	4.0838E+05	3.8149E+02
3.3000E+01	9.7633E-02	1.0716E+01	4.0228E+05	3.7571E+02
3.3500E+01	9.3555E-02	1.0269E+01	3.8548E+05	3.7010E+02
3.4000E+01	9.1474E-02	1.0040E+01	3.7690E+05	3.6466E+02
3.4500E+01	8.6795E-02	9.5267E+00	3.5762E+05	3.5937E+02
3.5000E+01	8.2513E-02	9.0567E+00	3.3998E+05	3.5424E+02
3.5500E+01	8.0828E-02	8.8718E+00	3.3304E+05	3.4925E+02
3.6000E+01	7.6845E-02	8.4345E+00	3.1662E+05	3.4440E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.6500E+01	7.4059E-02	8.1288E+00	3.0514E+05	3.3968E+02
3.7000E+01	7.2072E-02	7.9107E+00	2.9696E+05	3.3509E+02
3.7500E+01	6.9784E-02	7.6596E+00	2.8753E+05	3.3062E+02
3.8000E+01	6.7496E-02	7.4084E+00	2.7810E+05	3.2627E+02
3.8500E+01	6.3306E-02	6.9486E+00	2.6084E+05	3.2204E+02
3.9000E+01	6.3617E-02	6.9827E+00	2.6212E+05	3.1791E+02
3.9500E+01	6.0526E-02	6.6434E+00	2.4939E+05	3.1388E+02
4.0000E+01	5.8435E-02	6.4139E+00	2.4077E+05	3.0996E+02
4.1000E+01	5.4951E-02	6.0315E+00	2.2641E+05	3.0240E+02
4.2000E+01	5.1865E-02	5.6927E+00	2.1370E+05	2.9520E+02
4.3000E+01	4.7475E-02	5.2109E+00	1.9561E+05	2.8834E+02
4.4000E+01	4.4685E-02	4.9047E+00	1.8412E+05	2.8178E+02
4.5000E+01	4.2595E-02	4.6753E+00	1.7550E+05	2.7552E+02
4.6000E+01	3.9802E-02	4.3687E+00	1.6400E+05	2.6953E+02
4.7000E+01	3.7910E-02	4.1610E+00	1.5620E+05	2.6380E+02
4.8000E+01	3.5715E-02	3.9201E+00	1.4716E+05	2.5830E+02
4.9000E+01	3.4823E-02	3.8223E+00	1.4348E+05	2.5303E+02
5.0000E+01	3.1924E-02	3.5040E+00	1.3153E+05	2.4797E+02
5.1000E+01	3.0327E-02	3.3288E+00	1.2496E+05	2.4311E+02
5.2000E+01	2.8931E-02	3.1755E+00	1.1920E+05	2.3843E+02
5.3000E+01	2.7333E-02	3.0000E+00	1.1262E+05	2.3393E+02
5.4000E+01	2.6336E-02	2.8907E+00	1.0851E+05	2.2960E+02
5.5000E+01	2.4334E-02	2.6709E+00	1.0026E+05	2.2543E+02
5.6000E+01	2.2732E-02	2.4951E+00	9.3664E+04	2.2140E+02
5.7000E+01	2.1935E-02	2.4076E+00	9.0378E+04	2.1752E+02
5.8000E+01	2.1137E-02	2.3200E+00	8.7090E+04	2.1377E+02
5.9000E+01	1.9835E-02	2.1771E+00	8.1726E+04	2.1014E+02
6.0000E+01	1.8633E-02	2.0452E+00	7.6772E+04	2.0664E+02
6.1000E+01	1.8437E-02	2.0237E+00	7.5967E+04	2.0325E+02
6.2000E+01	1.7536E-02	1.9248E+00	7.2255E+04	1.9997E+02
6.3000E+01	1.7038E-02	1.8701E+00	7.0201E+04	1.9680E+02
6.4000E+01	1.6035E-02	1.7600E+00	6.6069E+04	1.9373E+02
6.5000E+01	1.5031E-02	1.6499E+00	6.1934E+04	1.9074E+02
6.6000E+01	1.4835E-02	1.6283E+00	6.1123E+04	1.8785E+02
6.7000E+01	1.4234E-02	1.5623E+00	5.8647E+04	1.8505E+02
6.8000E+01	1.3229E-02	1.4520E+00	5.4505E+04	1.8233E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.9000E+01	1.3031E-02	1.4303E+00	5.3691E+04	1.7969E+02
7.0000E+01	1.2732E-02	1.3975E+00	5.2459E+04	1.7712E+02
7.1000E+01	1.2635E-02	1.3868E+00	5.2060E+04	1.7463E+02
7.2000E+01	1.1527E-02	1.2652E+00	4.7494E+04	1.7220E+02
7.3000E+01	1.1025E-02	1.2101E+00	4.5426E+04	1.6984E+02
7.4000E+01	1.0725E-02	1.1772E+00	4.4190E+04	1.6755E+02
7.5000E+01	1.0222E-02	1.1220E+00	4.2119E+04	1.6531E+02
7.6000E+01	9.9219E-03	1.0890E+00	4.0881E+04	1.6314E+02
7.7000E+01	9.5200E-03	1.0449E+00	3.9225E+04	1.6102E+02
7.8000E+01	9.3205E-03	1.0230E+00	3.8403E+04	1.5895E+02
7.9000E+01	9.0195E-03	9.8999E-01	3.7163E+04	1.5694E+02
8.0000E+01	8.6169E-03	9.4580E-01	3.5504E+04	1.5498E+02
8.2000E+01	8.2168E-03	9.0188E-01	3.3855E+04	1.5120E+02
8.4000E+01	7.5115E-03	8.2448E-01	3.0950E+04	1.4760E+02
8.6000E+01	7.1101E-03	7.8041E-01	2.9296E+04	1.4417E+02
8.8000E+01	6.7082E-03	7.3630E-01	2.7640E+04	1.4089E+02
9.0000E+01	6.3057E-03	6.9212E-01	2.5981E+04	1.3776E+02
9.2000E+01	5.9027E-03	6.4789E-01	2.4321E+04	1.3477E+02
9.4000E+01	5.7028E-03	6.2595E-01	2.3497E+04	1.3190E+02
9.6000E+01	5.2989E-03	5.8161E-01	2.1833E+04	1.2915E+02
9.8000E+01	5.0984E-03	5.5961E-01	2.1007E+04	1.2651E+02
1.0000E+02	4.7956E-03	5.2637E-01	1.9759E+04	1.2398E+02
1.0200E+02	4.6966E-03	5.1550E-01	1.9351E+04	1.2155E+02
1.0400E+02	4.3931E-03	4.8219E-01	1.8101E+04	1.1922E+02
1.0600E+02	4.2937E-03	4.7128E-01	1.7691E+04	1.1697E+02
1.0800E+02	4.0919E-03	4.4913E-01	1.6860E+04	1.1480E+02
1.1000E+02	3.8898E-03	4.2695E-01	1.6027E+04	1.1271E+02
1.1200E+02	3.6874E-03	4.0474E-01	1.5193E+04	1.1070E+02
1.1270E+02	3.5289E-03	3.8734E-01	1.4540E+04	1.1001E+02
1.1900E+02	3.1742E-03	3.4841E-01	1.3079E+04	1.0419E+02
1.2500E+02	2.8107E-03	3.0851E-01	1.1581E+04	9.9187E+01
1.3291E+02	2.5358E-03	2.7834E-01	1.0448E+04	9.3284E+01
1.4286E+02	2.1280E-03	2.3357E-01	8.7679E+03	8.6787E+01
1.5000E+02	1.8461E-03	2.0263E-01	7.6063E+03	8.2656E+01
1.7500E+02	1.3386E-03	1.4693E-01	5.5154E+03	7.0848E+01
2.0000E+02	9.8876E-04	1.0853E-01	4.0740E+03	6.1992E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2500E+02	7.3852E-04	8.1060E-02	3.0429E+03	5.5104E+01
2.5000E+02	5.5672E-04	6.1107E-02	2.2939E+03	4.9594E+01
2.7500E+02	4.2309E-04	4.6438E-02	1.7432E+03	4.5085E+01
2.8500E+02	3.7985E-04	4.1692E-02	1.5651E+03	4.3503E+01
2.8591E+02	7.6704E-04	8.4191E-02	3.1604E+03	4.3365E+01
2.8640E+02	1.4355E-03	1.5756E-01	5.9145E+03	4.3291E+01
2.8671E+02	3.5206E-03	3.8643E-01	1.4506E+04	4.3244E+01
2.8695E+02	4.5629E-03	5.0083E-01	1.8801E+04	4.3208E+01
2.8701E+02	9.5899E-03	1.0526E+00	3.9513E+04	4.3199E+01
2.8704E+02	1.1444E-02	1.2561E+00	4.7154E+04	4.3194E+01
2.8708E+02	9.6017E-03	1.0539E+00	3.9562E+04	4.3188E+01
2.8712E+02	6.4380E-03	7.0664E-01	2.6527E+04	4.3182E+01
2.8716E+02	3.8042E-03	4.1755E-01	1.5674E+04	4.3176E+01
2.8725E+02	3.0250E-03	3.3202E-01	1.2464E+04	4.3162E+01
2.8734E+02	3.3047E-03	3.6272E-01	1.3616E+04	4.3149E+01
2.8739E+02	4.3685E-03	4.7949E-01	1.8000E+04	4.3141E+01
2.8759E+02	4.1356E-03	4.5392E-01	1.7040E+04	4.3111E+01
2.8768E+02	5.2068E-03	5.7151E-01	2.1454E+04	4.3098E+01
2.8776E+02	7.0680E-03	7.7579E-01	2.9122E+04	4.3086E+01
2.8781E+02	1.0511E-02	1.1537E+00	4.3308E+04	4.3078E+01
2.8786E+02	1.6857E-02	1.8502E+00	6.9455E+04	4.3071E+01
2.8790E+02	2.9012E-02	3.1844E+00	1.1954E+05	4.3065E+01
2.8793E+02	5.5694E-02	6.1130E+00	2.2948E+05	4.3061E+01
2.8795E+02	9.2941E-02	1.0201E+01	3.8294E+05	4.3058E+01
2.8798E+02	1.2781E-01	1.4028E+01	5.2659E+05	4.3053E+01
2.8801E+02	1.1223E-01	1.2318E+01	4.6241E+05	4.3049E+01
2.8803E+02	9.0309E-02	9.9124E+00	3.7210E+05	4.3046E+01
2.8805E+02	6.7599E-02	7.4197E+00	2.7853E+05	4.3043E+01
2.8808E+02	5.0963E-02	5.5937E+00	2.0998E+05	4.3038E+01
2.8810E+02	4.0137E-02	4.4055E+00	1.6538E+05	4.3035E+01
2.8812E+02	3.7500E-02	4.1161E+00	1.5451E+05	4.3032E+01
2.8815E+02	4.0675E-02	4.4645E+00	1.6759E+05	4.3028E+01
2.8817E+02	4.1734E-02	4.5808E+00	1.7196E+05	4.3025E+01
2.8823E+02	3.9101E-02	4.2918E+00	1.6111E+05	4.3016E+01
2.8827E+02	3.9637E-02	4.3506E+00	1.6332E+05	4.3010E+01
2.8832E+02	3.8324E-02	4.2065E+00	1.5791E+05	4.3002E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8836E+02	4.0178E-02	4.4100E+00	1.6554E+05	4.2996E+01
2.8839E+02	4.2561E-02	4.6715E+00	1.7536E+05	4.2992E+01
2.8843E+02	3.5700E-02	3.9185E+00	1.4709E+05	4.2986E+01
2.8849E+02	2.4087E-02	2.6439E+00	9.9247E+04	4.2977E+01
2.8853E+02	1.9340E-02	2.1228E+00	7.9686E+04	4.2971E+01
2.8855E+02	1.8815E-02	2.0652E+00	7.7524E+04	4.2968E+01
2.8860E+02	2.1728E-02	2.3849E+00	8.9526E+04	4.2961E+01
2.8865E+02	3.0187E-02	3.3134E+00	1.2438E+05	4.2953E+01
2.8868E+02	3.3627E-02	3.6909E+00	1.3855E+05	4.2949E+01
2.8876E+02	2.5715E-02	2.8225E+00	1.0595E+05	4.2937E+01
2.8881E+02	2.1761E-02	2.3885E+00	8.9660E+04	4.2929E+01
2.8883E+02	2.0180E-02	2.2150E+00	8.3149E+04	4.2926E+01
2.8888E+02	1.5698E-02	1.7230E+00	6.4680E+04	4.2919E+01
2.8894E+02	1.1217E-02	1.2312E+00	4.6219E+04	4.2910E+01
2.8901E+02	9.6433E-03	1.0585E+00	3.9733E+04	4.2900E+01
2.8908E+02	1.0976E-02	1.2047E+00	4.5223E+04	4.2889E+01
2.8912E+02	1.2039E-02	1.3214E+00	4.9603E+04	4.2883E+01
2.8920E+02	1.0466E-02	1.1487E+00	4.3121E+04	4.2871E+01
2.8926E+02	9.4189E-03	1.0338E+00	3.8809E+04	4.2863E+01
2.8933E+02	1.0750E-02	1.1799E+00	4.4292E+04	4.2852E+01
2.8936E+02	1.4189E-02	1.5574E+00	5.8463E+04	4.2848E+01
2.8941E+02	2.6610E-02	2.9208E+00	1.0964E+05	4.2840E+01
2.8944E+02	3.1105E-02	3.4142E+00	1.2816E+05	4.2836E+01
2.8949E+02	2.2926E-02	2.5164E+00	9.4461E+04	4.2828E+01
2.8952E+02	1.6328E-02	1.7921E+00	6.7274E+04	4.2824E+01
2.8956E+02	1.4221E-02	1.5609E+00	5.8593E+04	4.2818E+01
2.8958E+02	1.5809E-02	1.7352E+00	6.5138E+04	4.2815E+01
2.8964E+02	2.0572E-02	2.2580E+00	8.4763E+04	4.2806E+01
2.8968E+02	1.7938E-02	1.9689E+00	7.3909E+04	4.2800E+01
2.8971E+02	1.3717E-02	1.5056E+00	5.6517E+04	4.2796E+01
2.8975E+02	1.2402E-02	1.3613E+00	5.1101E+04	4.2790E+01
2.8979E+02	1.4258E-02	1.5649E+00	5.8746E+04	4.2784E+01
2.8984E+02	1.8756E-02	2.0586E+00	7.7278E+04	4.2777E+01
2.8989E+02	1.8764E-02	2.0595E+00	7.7312E+04	4.2769E+01
2.8993E+02	2.1939E-02	2.4080E+00	9.0395E+04	4.2763E+01
2.8996E+02	2.3528E-02	2.5825E+00	9.6944E+04	4.2759E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

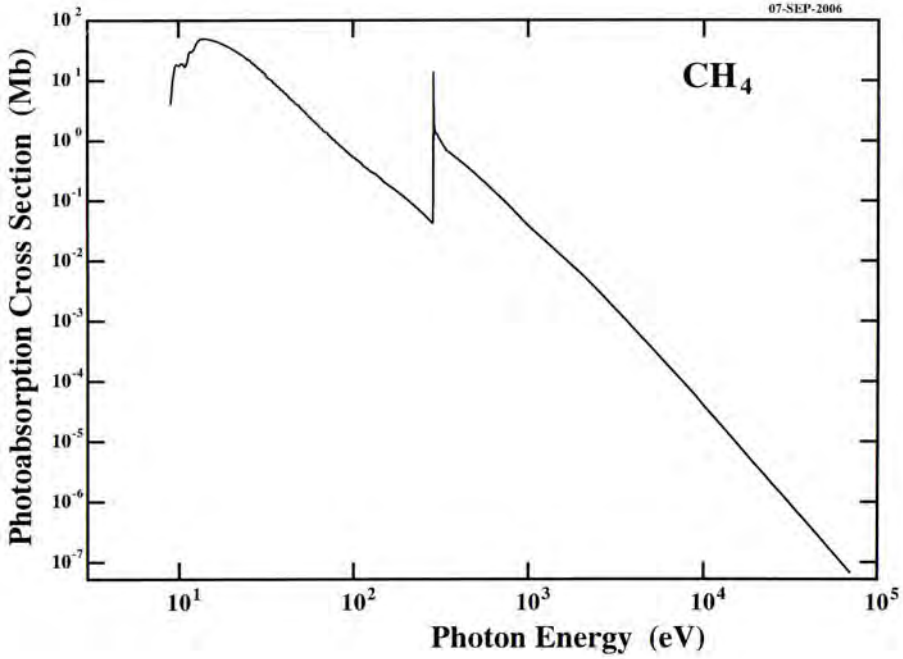
Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9003E+02	1.7994E-02	1.9750E+00	7.4140E+04	4.2749E+01
2.9011E+02	1.2723E-02	1.3964E+00	5.2421E+04	4.2737E+01
2.9015E+02	1.1673E-02	1.2813E+00	4.8097E+04	4.2731E+01
2.9018E+02	1.2734E-02	1.3977E+00	5.2469E+04	4.2727E+01
2.9022E+02	1.6703E-02	1.8333E+00	6.8821E+04	4.2721E+01
2.9026E+02	1.6973E-02	1.8629E+00	6.9932E+04	4.2715E+01
2.9029E+02	1.6449E-02	1.8054E+00	6.7774E+04	4.2710E+01
2.9034E+02	1.9098E-02	2.0963E+00	7.8691E+04	4.2703E+01
2.9037E+02	1.9896E-02	2.1838E+00	8.1978E+04	4.2699E+01
2.9048E+02	1.5160E-02	1.6639E+00	6.2462E+04	4.2683E+01
2.9054E+02	1.3848E-02	1.5200E+00	5.7058E+04	4.2674E+01
2.9063E+02	1.6239E-02	1.7824E+00	6.6909E+04	4.2660E+01
2.9071E+02	1.5723E-02	1.7258E+00	6.4784E+04	4.2649E+01
2.9076E+02	1.6525E-02	1.8138E+00	6.8087E+04	4.2641E+01
2.9085E+02	1.5482E-02	1.6993E+00	6.3789E+04	4.2628E+01
2.9103E+02	1.5511E-02	1.7025E+00	6.3908E+04	4.2602E+01
2.9126E+02	1.5283E-02	1.6774E+00	6.2969E+04	4.2568E+01
2.9150E+02	1.5057E-02	1.6526E+00	6.2037E+04	4.2533E+01
2.9223E+02	1.3957E-02	1.5320E+00	5.7509E+04	4.2427E+01
2.9366E+02	1.3045E-02	1.4318E+00	5.3748E+04	4.2220E+01
2.9590E+02	1.2217E-02	1.3409E+00	5.0337E+04	4.1901E+01
2.9776E+02	1.1805E-02	1.2958E+00	4.8641E+04	4.1639E+01
3.0025E+02	1.1729E-02	1.2874E+00	4.8328E+04	4.1294E+01
3.0224E+02	1.1652E-02	1.2789E+00	4.8008E+04	4.1022E+01
3.0342E+02	1.1488E-02	1.2609E+00	4.7333E+04	4.0862E+01
3.0479E+02	1.0825E-02	1.1881E+00	4.4601E+04	4.0679E+01
3.0628E+02	1.0245E-02	1.1245E+00	4.2212E+04	4.0481E+01
3.0821E+02	1.0084E-02	1.1068E+00	4.1548E+04	4.0227E+01
3.0908E+02	9.8360E-03	1.0796E+00	4.0527E+04	4.0114E+01
3.1120E+02	9.7582E-03	1.0711E+00	4.0206E+04	3.9841E+01
3.1275E+02	9.3457E-03	1.0258E+00	3.8507E+04	3.9643E+01
3.1580E+02	9.0208E-03	9.9013E-01	3.7168E+04	3.9260E+01
3.1934E+02	8.6138E-03	9.4546E-01	3.5491E+04	3.8825E+01
3.2451E+02	7.8778E-03	8.6468E-01	3.2459E+04	3.8207E+01
3.2961E+02	7.3084E-03	8.0217E-01	3.0113E+04	3.7615E+01
3.3495E+02	6.7395E-03	7.3974E-01	2.7769E+04	3.7016E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.4000E+02	6.3284E-03	6.9461E-01	2.6075E+04	3.6466E+01
3.5000E+02	5.9296E-03	6.5084E-01	2.4432E+04	3.5424E+01
4.0000E+02	4.3455E-03	4.7697E-01	1.7905E+04	3.0996E+01
4.5000E+02	3.2575E-03	3.5755E-01	1.3422E+04	2.7552E+01
5.0000E+02	2.4917E-03	2.7349E-01	1.0267E+04	2.4797E+01
6.0000E+02	1.5349E-03	1.6847E-01	6.3242E+03	2.0664E+01
7.0000E+02	9.9984E-04	1.0974E-01	4.1196E+03	1.7712E+01
8.0000E+02	6.8062E-04	7.4706E-02	2.8044E+03	1.5498E+01
9.0000E+02	4.7992E-04	5.2676E-02	1.9774E+03	1.3776E+01
1.0000E+03	3.4821E-04	3.8220E-02	1.4347E+03	1.2398E+01
2.0000E+03	5.4970E-05	6.0336E-03	2.2649E+02	6.1992E+00
2.2500E+03	3.8796E-05	4.2583E-03	1.5985E+02	5.5104E+00
2.5000E+03	2.8348E-05	3.1115E-03	1.1680E+02	4.9594E+00
2.7500E+03	2.1309E-05	2.3389E-03	8.7800E+01	4.5085E+00
3.0000E+03	1.6400E-05	1.8000E-03	6.7571E+01	4.1328E+00
3.5000E+03	1.0280E-05	1.1284E-03	4.2358E+01	3.5424E+00
4.0000E+03	6.8375E-06	7.5049E-04	2.8172E+01	3.0996E+00
4.5000E+03	4.7590E-06	5.2235E-04	1.9609E+01	2.7552E+00
5.0000E+03	3.4336E-06	3.7688E-04	1.4148E+01	2.4797E+00
6.0000E+03	1.9409E-06	2.1304E-04	7.9971E+00	2.0664E+00
7.0000E+03	1.1906E-06	1.3068E-04	4.9056E+00	1.7712E+00
8.0000E+03	7.7531E-07	8.5099E-05	3.1945E+00	1.5498E+00
9.0000E+03	5.2836E-07	5.7993E-05	2.1770E+00	1.3776E+00
1.0000E+04	3.5606E-07	3.9082E-05	1.4671E+00	1.2398E+00
1.2500E+04	1.7242E-07	1.8925E-05	7.1042E-01	9.9187E-01
1.5000E+04	9.5342E-08	1.0465E-05	3.9284E-01	8.2656E-01
1.7500E+04	5.7770E-08	6.3409E-06	2.3803E-01	7.0848E-01
2.0000E+04	3.7435E-08	4.1089E-06	1.5424E-01	6.1992E-01
2.2500E+04	2.5530E-08	2.8022E-06	1.0519E-01	5.5104E-01
2.5000E+04	1.8128E-08	1.9898E-06	7.4694E-02	4.9594E-01
2.7500E+04	1.3273E-08	1.4569E-06	5.4689E-02	4.5085E-01
3.0000E+04	9.9538E-09	1.0925E-06	4.1013E-02	4.1328E-01
3.5000E+04	5.9748E-09	6.5580E-07	2.4618E-02	3.5424E-01
4.0000E+04	3.8398E-09	4.2147E-07	1.5821E-02	3.0996E-01
4.5000E+04	2.5999E-09	2.8536E-07	1.0712E-02	2.7552E-01
5.0000E+04	1.8343E-09	2.0134E-07	7.5579E-03	2.4797E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.0000E+04	1.0031E-09	1.1010E-07	4.1332E-03	2.0664E-01
7.0000E+04	6.0210E-10	6.6087E-08	2.4808E-03	1.7712E-01
8.0000E+04	3.8712E-10	4.2491E-08	1.5951E-03	1.5498E-01
9.0000E+04	2.6242E-10	2.8804E-08	1.0813E-03	1.3776E-01
1.0000E+05	1.8543E-10	2.0353E-08	7.6403E-04	1.2398E-01



When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1 - \exp\left(-\,2\pi\chi\right)} \quad .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}} \quad ,$$

where $E_{\mathrm{K}} \;=\; 13.6$ and 290.707 eV for hydrogen and carbon atoms, respectively.

CH_4

Energy, eV	Source
8.61 - 11.27	Fig. 6.3 p.246 (Berkowitz's book*)
11.27 - 12.61 (IP)	Fig. 6.3 p.246 (Berkowitz's book*)
IP - 13.62	Fig. 6.3 p.246 (Berkowitz's book*)
13.62 - 24.0	Fig. 6.3 p.246 (Berkowitz's book*)
24.0 - 112.7	Fig. 6.4 p.250 (Berkowitz's book*)
112.7 - 150.0	Fig. 6.4 p.250 (Berkowitz's book*)
150.0 - 285.0	Table 6.5 p.250 (Berkowitz's book*)
285.0 - 340.0	Kivimäki *et al.*, J. Phys. B, 29 (1996) 2701
340.0 - 1740.0	Table 6.5 p.250 (Berkowitz's book*)
1740.0 - 10^4	Table 6.5 p.250 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Acetylene (C_2H_2)

Z = 14 Molecular Mass : $M_{\rm A}$ = 26.03728

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for transitions below the IP.

Energy (eV)	f	λ (Å)	Remarks
5.865 − 6.640	0.0011	2114.0 − 1867.2	$\tilde{X} \rightarrow \tilde{A}$
6.68 − 8.00	0.0108	1856.1 − 1549.8	$\tilde{X} \rightarrow \tilde{B}$
8.161 − 11.126	0.8571	1519.2 − 1114.4	$\tilde{X} \rightarrow \tilde{R}$
9.102 − 9.619	0.1233	1362.2 − 1289.0	$\tilde{X} \rightarrow \tilde{E}$
11.126 − 11.400	0.0718	1114.4 − 1087.6	–

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.1401E+01	2.4028E-01	2.6374E+01	6.1000E+05	1.0875E+03
1.1407E+01	2.5152E-01	2.7607E+01	6.3851E+05	1.0869E+03
1.1409E+01	2.7308E-01	2.9974E+01	6.9326E+05	1.0867E+03
1.1413E+01	3.1309E-01	3.4365E+01	7.9482E+05	1.0863E+03
1.1416E+01	3.2971E-01	3.6190E+01	8.3703E+05	1.0861E+03
1.1418E+01	3.3870E-01	3.7176E+01	8.5984E+05	1.0859E+03
1.1423E+01	3.0766E-01	3.3769E+01	7.8104E+05	1.0854E+03
1.1424E+01	2.7529E-01	3.0216E+01	6.9886E+05	1.0853E+03
1.1428E+01	2.3572E-01	2.5872E+01	5.9840E+05	1.0849E+03
1.1431E+01	2.1638E-01	2.3750E+01	5.4931E+05	1.0846E+03
1.1433E+01	2.0963E-01	2.3009E+01	5.3217E+05	1.0844E+03
1.1437E+01	2.0557E-01	2.2564E+01	5.2188E+05	1.0841E+03
1.1440E+01	2.1410E-01	2.3500E+01	5.4354E+05	1.0838E+03
1.1444E+01	2.4871E-01	2.7298E+01	6.3138E+05	1.0834E+03
1.1447E+01	2.8152E-01	3.0899E+01	7.1467E+05	1.0831E+03
1.1448E+01	2.9455E-01	3.2330E+01	7.4776E+05	1.0830E+03
1.1451E+01	2.8600E-01	3.1392E+01	7.2606E+05	1.0827E+03
1.1452E+01	2.6127E-01	2.8678E+01	6.6328E+05	1.0826E+03

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.1455E+01	2.4868E-01	2.7295E+01	6.3131E+05	1.0824E+03
1.1457E+01	2.4418E-01	2.6801E+01	6.1988E+05	1.0822E+03
1.1460E+01	2.4372E-01	2.6751E+01	6.1873E+05	1.0819E+03
1.1462E+01	2.4865E-01	2.7293E+01	6.3125E+05	1.0817E+03
1.1474E+01	2.2210E-01	2.4378E+01	5.6384E+05	1.0806E+03
1.1478E+01	2.2838E-01	2.5068E+01	5.7979E+05	1.0802E+03
1.1481E+01	2.4456E-01	2.6843E+01	6.2085E+05	1.0799E+03
1.1482E+01	2.6119E-01	2.8669E+01	6.6308E+05	1.0798E+03
1.1483E+01	2.6883E-01	2.9507E+01	6.8246E+05	1.0797E+03
1.1485E+01	2.7152E-01	2.9802E+01	6.8929E+05	1.0795E+03
1.1489E+01	2.5443E-01	2.7926E+01	6.4591E+05	1.0792E+03
1.1493E+01	2.4587E-01	2.6987E+01	6.2419E+05	1.0788E+03
1.1495E+01	2.3957E-01	2.6296E+01	6.0819E+05	1.0786E+03
1.1496E+01	2.4407E-01	2.6789E+01	6.1961E+05	1.0785E+03
1.1500E+01	2.2967E-01	2.5209E+01	5.8306E+05	1.0781E+03
1.1503E+01	2.1078E-01	2.3136E+01	5.3510E+05	1.0778E+03
1.1507E+01	2.0447E-01	2.2443E+01	5.1908E+05	1.0775E+03
1.1509E+01	2.0672E-01	2.2690E+01	5.2479E+05	1.0773E+03
1.1511E+01	2.2559E-01	2.4761E+01	5.7271E+05	1.0771E+03
1.1512E+01	2.3098E-01	2.5353E+01	5.8638E+05	1.0770E+03
1.1516E+01	2.3726E-01	2.6042E+01	6.0233E+05	1.0766E+03
1.1517E+01	2.4131E-01	2.6487E+01	6.1261E+05	1.0765E+03
1.1518E+01	2.4401E-01	2.6782E+01	6.1945E+05	1.0764E+03
1.1521E+01	2.3725E-01	2.6041E+01	6.0230E+05	1.0762E+03
1.1528E+01	2.2645E-01	2.4855E+01	5.7487E+05	1.0755E+03
1.1529E+01	2.2914E-01	2.5151E+01	5.8171E+05	1.0754E+03
1.1530E+01	2.4127E-01	2.6482E+01	6.1250E+05	1.0753E+03
1.1533E+01	2.5385E-01	2.7863E+01	6.4444E+05	1.0750E+03
1.1534E+01	2.6914E-01	2.9541E+01	6.8324E+05	1.0749E+03
1.1538E+01	2.7677E-01	3.0379E+01	7.0262E+05	1.0746E+03
1.1543E+01	2.6417E-01	2.8995E+01	6.7063E+05	1.0741E+03
1.1546E+01	2.6056E-01	2.8599E+01	6.6148E+05	1.0738E+03
1.1548E+01	2.6101E-01	2.8648E+01	6.6260E+05	1.0736E+03
1.1556E+01	2.4120E-01	2.6474E+01	6.1232E+05	1.0729E+03
1.1564E+01	2.4118E-01	2.6472E+01	6.1227E+05	1.0722E+03
1.1566E+01	2.3443E-01	2.5731E+01	5.9513E+05	1.0720E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1570E+01	2.3712E-01	2.6026E+01	6.0196E+05	1.0716E+03
1.1573E+01	2.4250E-01	2.6618E+01	6.1564E+05	1.0713E+03
1.1576E+01	2.4385E-01	2.6765E+01	6.1904E+05	1.0710E+03
1.1578E+01	2.5058E-01	2.7504E+01	6.3614E+05	1.0709E+03
1.1580E+01	2.4609E-01	2.7011E+01	6.2473E+05	1.0707E+03
1.1582E+01	2.5597E-01	2.8095E+01	6.4981E+05	1.0705E+03
1.1583E+01	2.4877E-01	2.7305E+01	6.3154E+05	1.0704E+03
1.1585E+01	2.4697E-01	2.7107E+01	6.2696E+05	1.0702E+03
1.1591E+01	2.3166E-01	2.5428E+01	5.8811E+05	1.0697E+03
1.1595E+01	2.3076E-01	2.5328E+01	5.8581E+05	1.0693E+03
1.1597E+01	2.2580E-01	2.4784E+01	5.7322E+05	1.0691E+03
1.1602E+01	2.2579E-01	2.4783E+01	5.7320E+05	1.0686E+03
1.1610E+01	2.3880E-01	2.6211E+01	6.0623E+05	1.0679E+03
1.1616E+01	2.5228E-01	2.7690E+01	6.4045E+05	1.0674E+03
1.1617E+01	2.5227E-01	2.7689E+01	6.4043E+05	1.0673E+03
1.1619E+01	2.5811E-01	2.8330E+01	6.5525E+05	1.0671E+03
1.1621E+01	2.5136E-01	2.7590E+01	6.3813E+05	1.0669E+03
1.1623E+01	2.5000E-01	2.7441E+01	6.3468E+05	1.0667E+03
1.1625E+01	2.5000E-01	2.7440E+01	6.3465E+05	1.0665E+03
1.1630E+01	2.5178E-01	2.7636E+01	6.3919E+05	1.0661E+03
1.1636E+01	2.6481E-01	2.9066E+01	6.7226E+05	1.0655E+03
1.1642E+01	2.6299E-01	2.8866E+01	6.6763E+05	1.0650E+03
1.1646E+01	2.5264E-01	2.7730E+01	6.4138E+05	1.0646E+03
1.1648E+01	2.5264E-01	2.7729E+01	6.4135E+05	1.0644E+03
1.1650E+01	2.4184E-01	2.6544E+01	6.1394E+05	1.0642E+03
1.1660E+01	2.3147E-01	2.5406E+01	5.8762E+05	1.0633E+03
1.1669E+01	2.4988E-01	2.7427E+01	6.3436E+05	1.0625E+03
1.1670E+01	2.5572E-01	2.8068E+01	6.4918E+05	1.0624E+03
1.1672E+01	2.5886E-01	2.8413E+01	6.5717E+05	1.0622E+03
1.1676E+01	2.5256E-01	2.7722E+01	6.4117E+05	1.0619E+03
1.1680E+01	2.4761E-01	2.7177E+01	6.2858E+05	1.0615E+03
1.1690E+01	2.4533E-01	2.6928E+01	6.2281E+05	1.0606E+03
1.1698E+01	2.3991E-01	2.6333E+01	6.0905E+05	1.0599E+03
1.1700E+01	2.3856E-01	2.6185E+01	6.0562E+05	1.0597E+03
1.1808E+01	2.5469E-01	2.7955E+01	6.4657E+05	1.0500E+03
1.2096E+01	2.7991E-01	3.0723E+01	7.1060E+05	1.0250E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2398E+01	3.0623E-01	3.3612E+01	7.7740E+05	1.0000E+03
1.2716E+01	3.3408E-01	3.6669E+01	8.4811E+05	9.7500E+02
1.3051E+01	3.7618E-01	4.1290E+01	9.5499E+05	9.5000E+02
1.3260E+01	4.1057E-01	4.5064E+01	1.0423E+06	9.3500E+02
1.3335E+01	4.2225E-01	4.6347E+01	1.0719E+06	9.2980E+02
1.3458E+01	4.2708E-01	4.6877E+01	1.0842E+06	9.2130E+02
1.3643E+01	4.1314E-01	4.5347E+01	1.0488E+06	9.0880E+02
1.3776E+01	3.6440E-01	3.9997E+01	9.2509E+05	9.0000E+02
1.3986E+01	3.3224E-01	3.6467E+01	8.4345E+05	8.8650E+02
1.4124E+01	3.8854E-01	4.2647E+01	9.8638E+05	8.7780E+02
1.4253E+01	3.0437E-01	3.3408E+01	7.7268E+05	8.6990E+02
1.4373E+01	3.4728E-01	3.8117E+01	8.8161E+05	8.6260E+02
1.4457E+01	3.2906E-01	3.6117E+01	8.3536E+05	8.5760E+02
1.4641E+01	3.4400E-01	3.7757E+01	8.7329E+05	8.4680E+02
1.4723E+01	3.7834E-01	4.1527E+01	9.6048E+05	8.4210E+02
1.4831E+01	4.0512E-01	4.4467E+01	1.0285E+06	8.3600E+02
1.4967E+01	5.0424E-01	5.5346E+01	1.2801E+06	8.2840E+02
1.5041E+01	4.9786E-01	5.4646E+01	1.2639E+06	8.2430E+02
1.5127E+01	5.3585E-01	5.8816E+01	1.3603E+06	8.1960E+02
1.5226E+01	5.3585E-01	5.8816E+01	1.3603E+06	8.1430E+02
1.5297E+01	5.4606E-01	5.9936E+01	1.3862E+06	8.1050E+02
1.5419E+01	5.0798E-01	5.5756E+01	1.2896E+06	8.0410E+02
1.5543E+01	5.5517E-01	6.0936E+01	1.4094E+06	7.9770E+02
1.5692E+01	5.1071E-01	5.6056E+01	1.2965E+06	7.9010E+02
1.5849E+01	5.0588E-01	5.5526E+01	1.2843E+06	7.8230E+02
1.5967E+01	5.1608E-01	5.6646E+01	1.3102E+06	7.7650E+02
1.6068E+01	4.7427E-01	5.2056E+01	1.2040E+06	7.7160E+02
1.6177E+01	4.8930E-01	5.3706E+01	1.2422E+06	7.6640E+02
1.6314E+01	4.6944E-01	5.1526E+01	1.1917E+06	7.6000E+02
1.6531E+01	4.5332E-01	4.9756E+01	1.1508E+06	7.5000E+02
1.6761E+01	4.2170E-01	4.6287E+01	1.0706E+06	7.3970E+02
1.6961E+01	4.0248E-01	4.4177E+01	1.0218E+06	7.3100E+02
1.7075E+01	4.0248E-01	4.4177E+01	1.0218E+06	7.2610E+02
1.7297E+01	3.9119E-01	4.2937E+01	9.9309E+05	7.1680E+02
1.7712E+01	3.8636E-01	4.2407E+01	9.8083E+05	7.0000E+02
1.7852E+01	3.7779E-01	4.1467E+01	9.5909E+05	6.9450E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7997E+01	3.8208E-01	4.1937E+01	9.6996E+05	6.8890E+02
1.8134E+01	3.7406E-01	4.1057E+01	9.4961E+05	6.8370E+02
1.8268E+01	3.7725E-01	4.1407E+01	9.5770E+05	6.7870E+02
1.8530E+01	3.7032E-01	4.0647E+01	9.4012E+05	6.6910E+02
1.8791E+01	3.6440E-01	3.9997E+01	9.2509E+05	6.5980E+02
1.9074E+01	3.5584E-01	3.9057E+01	9.0335E+05	6.5000E+02
1.9762E+01	3.3489E-01	3.6757E+01	8.5016E+05	6.2740E+02
2.0660E+01	3.0778E-01	3.3782E+01	7.8135E+05	6.0012E+02
2.1000E+01	3.0138E-01	3.3080E+01	7.6510E+05	5.9040E+02
2.1500E+01	2.9558E-01	3.2443E+01	7.5038E+05	5.7667E+02
2.2000E+01	2.8128E-01	3.0874E+01	7.1408E+05	5.6356E+02
2.2500E+01	2.7158E-01	2.9809E+01	6.8946E+05	5.5104E+02
2.3000E+01	2.5978E-01	2.8514E+01	6.5950E+05	5.3906E+02
2.3500E+01	2.4819E-01	2.7241E+01	6.3006E+05	5.2759E+02
2.4000E+01	2.3509E-01	2.5803E+01	5.9680E+05	5.1660E+02
2.4500E+01	2.2529E-01	2.4728E+01	5.7192E+05	5.0606E+02
2.5000E+01	2.2249E-01	2.4420E+01	5.6482E+05	4.9594E+02
2.5500E+01	2.0939E-01	2.2983E+01	5.3156E+05	4.8621E+02
2.6000E+01	2.0099E-01	2.2061E+01	5.1024E+05	4.7686E+02
2.6500E+01	1.9509E-01	2.1413E+01	4.9526E+05	4.6786E+02
2.7000E+01	1.8869E-01	2.0711E+01	4.7902E+05	4.5920E+02
2.7500E+01	1.8199E-01	1.9975E+01	4.6201E+05	4.5085E+02
2.8000E+01	1.7459E-01	1.9163E+01	4.4322E+05	4.4280E+02
2.8500E+01	1.6939E-01	1.8592E+01	4.3002E+05	4.3503E+02
2.9000E+01	1.6359E-01	1.7956E+01	4.1530E+05	4.2753E+02
2.9500E+01	1.5789E-01	1.7330E+01	4.0083E+05	4.2029E+02
3.0000E+01	1.5239E-01	1.6727E+01	3.8687E+05	4.1328E+02
3.1000E+01	1.4139E-01	1.5519E+01	3.5894E+05	3.9995E+02
3.2000E+01	1.3309E-01	1.4608E+01	3.3787E+05	3.8745E+02
3.3000E+01	1.2749E-01	1.3994E+01	3.2366E+05	3.7571E+02
3.4000E+01	1.1899E-01	1.3061E+01	3.0208E+05	3.6466E+02
3.5000E+01	1.1309E-01	1.2413E+01	2.8710E+05	3.5424E+02
3.6000E+01	1.0819E-01	1.1875E+01	2.7467E+05	3.4440E+02
3.7000E+01	1.0269E-01	1.1272E+01	2.6070E+05	3.3509E+02
3.8000E+01	9.6794E-02	1.0624E+01	2.4573E+05	3.2627E+02
3.9000E+01	9.3194E-02	1.0229E+01	2.3659E+05	3.1791E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.0000E+01	8.8895E-02	9.7572E+00	2.2567E+05	3.0996E+02
4.1000E+01	8.4695E-02	9.2962E+00	2.1501E+05	3.0240E+02
4.2000E+01	8.0795E-02	8.8682E+00	2.0511E+05	2.9520E+02
4.3000E+01	7.6295E-02	8.3743E+00	1.9369E+05	2.8834E+02
4.4000E+01	7.3496E-02	8.0669E+00	1.8658E+05	2.8178E+02
4.5000E+01	7.0296E-02	7.7157E+00	1.7846E+05	2.7552E+02
4.6000E+01	6.6696E-02	7.3206E+00	1.6932E+05	2.6953E+02
4.7000E+01	6.2896E-02	6.9036E+00	1.5967E+05	2.6380E+02
4.8000E+01	6.0696E-02	6.6621E+00	1.5409E+05	2.5830E+02
4.9000E+01	5.8097E-02	6.3767E+00	1.4749E+05	2.5303E+02
5.0000E+01	5.4797E-02	6.0145E+00	1.3911E+05	2.4797E+02
5.1000E+01	5.2097E-02	5.7182E+00	1.3226E+05	2.4311E+02
5.2000E+01	5.0097E-02	5.4987E+00	1.2718E+05	2.3843E+02
5.3000E+01	4.7597E-02	5.2243E+00	1.2083E+05	2.3393E+02
5.4000E+01	4.4797E-02	4.9170E+00	1.1372E+05	2.2960E+02
5.5000E+01	4.3197E-02	4.7414E+00	1.0966E+05	2.2543E+02
5.6000E+01	3.9898E-02	4.3792E+00	1.0129E+05	2.2140E+02
5.7000E+01	3.8698E-02	4.2475E+00	9.8240E+04	2.1752E+02
5.8000E+01	3.6298E-02	3.9841E+00	9.2148E+04	2.1377E+02
5.9000E+01	3.4998E-02	3.8414E+00	8.8848E+04	2.1014E+02
6.0000E+01	3.3398E-02	3.6658E+00	8.4786E+04	2.0664E+02
6.1000E+01	3.2198E-02	3.5341E+00	8.1740E+04	2.0325E+02
6.2000E+01	3.0198E-02	3.3146E+00	7.6663E+04	1.9997E+02
7.0000E+01	2.0899E-02	2.2939E+00	5.3056E+04	1.7712E+02
8.0000E+01	1.5648E-02	1.7175E+00	3.9724E+04	1.5498E+02
9.0000E+01	1.1604E-02	1.2737E+00	2.9459E+04	1.3776E+02
1.0000E+02	9.1528E-03	1.0046E+00	2.3236E+04	1.2398E+02
1.2500E+02	5.6913E-03	6.2469E-01	1.4448E+04	9.9187E+01
1.5000E+02	3.7941E-03	4.1644E-01	9.6319E+03	8.2656E+01
1.7500E+02	2.6268E-03	2.8832E-01	6.6686E+03	7.0848E+01
2.0000E+02	1.8722E-03	2.0549E-01	4.7528E+03	6.1992E+01
2.2500E+02	1.3671E-03	1.5005E-01	3.4705E+03	5.5104E+01
2.5000E+02	1.0190E-03	1.1185E-01	2.5869E+03	4.9594E+01
2.7500E+02	7.7309E-04	8.4855E-02	1.9626E+03	4.5085E+01
2.8365E+02	7.0518E-04	7.7401E-02	1.7902E+03	4.3710E+01
2.8420E+02	2.1184E-03	2.3252E-01	5.3780E+03	4.3626E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8456E+02	5.2146E-03	5.7236E-01	1.3238E+04	4.3570E+01
2.8481E+02	1.0429E-02	1.1447E+00	2.6476E+04	4.3532E+01
2.8506E+02	3.7318E-02	4.0960E+00	9.4737E+04	4.3494E+01
2.8535E+02	7.5287E-02	8.2636E+00	1.9113E+05	4.3450E+01
2.8553E+02	1.1342E-01	1.2449E+01	2.8793E+05	4.3422E+01
2.8561E+02	1.3346E-01	1.4649E+01	3.3881E+05	4.3410E+01
2.8579E+02	1.4454E-01	1.5865E+01	3.6695E+05	4.3383E+01
2.8597E+02	1.3215E-01	1.4505E+01	3.3549E+05	4.3356E+01
2.8611E+02	1.0625E-01	1.1662E+01	2.6972E+05	4.3334E+01
2.8629E+02	6.7791E-02	7.4408E+00	1.7210E+05	4.3307E+01
2.8651E+02	3.7480E-02	4.1139E+00	9.5150E+04	4.3274E+01
2.8673E+02	1.4992E-02	1.6456E+00	3.8060E+04	4.3241E+01
2.8684E+02	9.4514E-03	1.0374E+00	2.3994E+04	4.3224E+01
2.8702E+02	5.5406E-03	6.0814E-01	1.4066E+04	4.3197E+01
2.8730E+02	2.7073E-03	2.9716E-01	6.8729E+03	4.3155E+01
2.8733E+02	3.2075E-03	3.5206E-01	8.1427E+03	4.3150E+01
2.8735E+02	3.0998E-03	3.4023E-01	7.8693E+03	4.3147E+01
2.8736E+02	3.9292E-03	4.3127E-01	9.9749E+03	4.3146E+01
2.8739E+02	3.4359E-03	3.7713E-01	8.7227E+03	4.3141E+01
2.8743E+02	4.1579E-03	4.5638E-01	1.0555E+04	4.3135E+01
2.8746E+02	3.2228E-03	3.5374E-01	8.1816E+03	4.3131E+01
2.8747E+02	3.9976E-03	4.3878E-01	1.0149E+04	4.3129E+01
2.8750E+02	4.1669E-03	4.5737E-01	1.0578E+04	4.3125E+01
2.8752E+02	3.3960E-03	3.7275E-01	8.6212E+03	4.3122E+01
2.8754E+02	4.0061E-03	4.3971E-01	1.0170E+04	4.3119E+01
2.8755E+02	4.8349E-03	5.3069E-01	1.2274E+04	4.3117E+01
2.8756E+02	4.2294E-03	4.6422E-01	1.0737E+04	4.3116E+01
2.8759E+02	4.5081E-03	4.9481E-01	1.1444E+04	4.3111E+01
2.8763E+02	7.2737E-03	7.9837E-01	1.8465E+04	4.3105E+01
2.8766E+02	7.6638E-03	8.4119E-01	1.9456E+04	4.3101E+01
2.8774E+02	1.5680E-02	1.7211E+00	3.9807E+04	4.3089E+01
2.8777E+02	1.6678E-02	1.8306E+00	4.2339E+04	4.3084E+01
2.8781E+02	1.5358E-02	1.6857E+00	3.8988E+04	4.3078E+01
2.8785E+02	1.5307E-02	1.6801E+00	3.8859E+04	4.3073E+01
2.8789E+02	1.6139E-02	1.7714E+00	4.0971E+04	4.3067E+01
2.8791E+02	1.6418E-02	1.8021E+00	4.1680E+04	4.3064E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8798E+02	1.8304E-02	2.0091E+00	4.6468E+04	4.3053E+01
2.8801E+02	1.8307E-02	2.0094E+00	4.6475E+04	4.3049E+01
2.8808E+02	1.4174E-02	1.5558E+00	3.5984E+04	4.3038E+01
2.8814E+02	1.1034E-02	1.2111E+00	2.8010E+04	4.3029E+01
2.8818E+02	1.0653E-02	1.1693E+00	2.7044E+04	4.3023E+01
2.8821E+02	1.0711E-02	1.1757E+00	2.7192E+04	4.3019E+01
2.8827E+02	1.1879E-02	1.3038E+00	3.0156E+04	4.3010E+01
2.8830E+02	1.2102E-02	1.3284E+00	3.0724E+04	4.3005E+01
2.8837E+02	1.0620E-02	1.1657E+00	2.6960E+04	4.2995E+01
2.8842E+02	9.7974E-03	1.0754E+00	2.4872E+04	4.2987E+01
2.8849E+02	9.5840E-03	1.0519E+00	2.4330E+04	4.2977E+01
2.8857E+02	1.0257E-02	1.1258E+00	2.6039E+04	4.2965E+01
2.8863E+02	1.2031E-02	1.3205E+00	3.0542E+04	4.2956E+01
2.8867E+02	1.6012E-02	1.7575E+00	4.0649E+04	4.2950E+01
2.8871E+02	2.5017E-02	2.7459E+00	6.3510E+04	4.2944E+01
2.8874E+02	3.6340E-02	3.9887E+00	9.2255E+04	4.2940E+01
2.8876E+02	4.2029E-02	4.6132E+00	1.0670E+05	4.2937E+01
2.8879E+02	4.3634E-02	4.7893E+00	1.1077E+05	4.2932E+01
2.8881E+02	4.2699E-02	4.6867E+00	1.0840E+05	4.2929E+01
2.8884E+02	4.0548E-02	4.4506E+00	1.0294E+05	4.2925E+01
2.8889E+02	3.3154E-02	3.6390E+00	8.4167E+04	4.2917E+01
2.8891E+02	2.7691E-02	3.0393E+00	7.0297E+04	4.2914E+01
2.8894E+02	2.3498E-02	2.5792E+00	5.9653E+04	4.2910E+01
2.8896E+02	2.2175E-02	2.4340E+00	5.6295E+04	4.2907E+01
2.8898E+02	2.2233E-02	2.4403E+00	5.6441E+04	4.2904E+01
2.8900E+02	2.3504E-02	2.5799E+00	5.9670E+04	4.2901E+01
2.8904E+02	2.7098E-02	2.9743E+00	6.8793E+04	4.2895E+01
2.8906E+02	2.8150E-02	3.0898E+00	7.1464E+04	4.2892E+01
2.8909E+02	2.7104E-02	2.9750E+00	6.8808E+04	4.2888E+01
2.8914E+02	2.3466E-02	2.5756E+00	5.9572E+04	4.2880E+01
2.8917E+02	1.8831E-02	2.0670E+00	4.7806E+04	4.2876E+01
2.8924E+02	1.5416E-02	1.6921E+00	3.9136E+04	4.2866E+01
2.8927E+02	1.4094E-02	1.5470E+00	3.5781E+04	4.2861E+01
2.8930E+02	1.3435E-02	1.4747E+00	3.4108E+04	4.2857E+01
2.8932E+02	1.3272E-02	1.4567E+00	3.3693E+04	4.2854E+01
2.8937E+02	1.2118E-02	1.3301E+00	3.0764E+04	4.2846E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8943E+02	1.0082E-02	1.1066E+00	2.5595E+04	4.2837E+01
2.8948E+02	9.5906E-03	1.0527E+00	2.4347E+04	4.2830E+01
2.8952E+02	1.0093E-02	1.1078E+00	2.5621E+04	4.2824E+01
2.8955E+02	1.1312E-02	1.2416E+00	2.8717E+04	4.2820E+01
2.8959E+02	1.4905E-02	1.6360E+00	3.7838E+04	4.2814E+01
2.8961E+02	2.1369E-02	2.3454E+00	5.4248E+04	4.2811E+01
2.8964E+02	2.9323E-02	3.2185E+00	7.4440E+04	4.2806E+01
2.8966E+02	3.1313E-02	3.4369E+00	7.9492E+04	4.2803E+01
2.8967E+02	3.0321E-02	3.3281E+00	7.6974E+04	4.2802E+01
2.8971E+02	2.2925E-02	2.5163E+00	5.8200E+04	4.2796E+01
2.8975E+02	1.6249E-02	1.7835E+00	4.1251E+04	4.2790E+01
2.8976E+02	1.5202E-02	1.6686E+00	3.8592E+04	4.2789E+01
2.8980E+02	1.3385E-02	1.4691E+00	3.3979E+04	4.2783E+01
2.8982E+02	1.3442E-02	1.4754E+00	3.4125E+04	4.2780E+01
2.8985E+02	1.4495E-02	1.5910E+00	3.6797E+04	4.2775E+01
2.8988E+02	1.6651E-02	1.8277E+00	4.2272E+04	4.2771E+01
2.8991E+02	2.1845E-02	2.3978E+00	5.5458E+04	4.2766E+01
2.8993E+02	2.4884E-02	2.7313E+00	6.3173E+04	4.2763E+01
2.8996E+02	2.6600E-02	2.9197E+00	6.7528E+04	4.2759E+01
2.9000E+02	2.5721E-02	2.8232E+00	6.5297E+04	4.2753E+01
2.9004E+02	2.2745E-02	2.4965E+00	5.7741E+04	4.2747E+01
2.9009E+02	1.6510E-02	1.8122E+00	4.1914E+04	4.2740E+01
2.9014E+02	1.3866E-02	1.5219E+00	3.5201E+04	4.2733E+01
2.9017E+02	1.3869E-02	1.5223E+00	3.5208E+04	4.2728E+01
2.9019E+02	1.4645E-02	1.6075E+00	3.7179E+04	4.2725E+01
2.9023E+02	1.7853E-02	1.9595E+00	4.5322E+04	4.2719E+01
2.9025E+02	1.8627E-02	2.0446E+00	4.7289E+04	4.2716E+01
2.9028E+02	2.3214E-02	2.5480E+00	5.8932E+04	4.2712E+01
2.9030E+02	2.4266E-02	2.6635E+00	6.1603E+04	4.2709E+01
2.9033E+02	2.2558E-02	2.4760E+00	5.7267E+04	4.2705E+01
2.9037E+02	1.7261E-02	1.8946E+00	4.3821E+04	4.2699E+01
2.9039E+02	1.6435E-02	1.8039E+00	4.1723E+04	4.2696E+01
2.9040E+02	1.6106E-02	1.7678E+00	4.0888E+04	4.2694E+01
2.9044E+02	1.6164E-02	1.7742E+00	4.1036E+04	4.2688E+01
2.9046E+02	1.7383E-02	1.9079E+00	4.4129E+04	4.2685E+01
2.9050E+02	1.8270E-02	2.0054E+00	4.6382E+04	4.2680E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9057E+02	2.1812E-02	2.3941E+00	5.5374E+04	4.2669E+01
2.9060E+02	2.0822E-02	2.2855E+00	5.2861E+04	4.2665E+01
2.9063E+02	1.8120E-02	1.9888E+00	4.6000E+04	4.2660E+01
2.9066E+02	1.6413E-02	1.8015E+00	4.1666E+04	4.2656E+01
2.9068E+02	1.6304E-02	1.7895E+00	4.1389E+04	4.2653E+01
2.9070E+02	1.6969E-02	1.8625E+00	4.3079E+04	4.2650E+01
2.9073E+02	1.8297E-02	2.0083E+00	4.6451E+04	4.2646E+01
2.9075E+02	1.9570E-02	2.1481E+00	4.9682E+04	4.2643E+01
2.9080E+02	1.9135E-02	2.1003E+00	4.8577E+04	4.2636E+01
2.9083E+02	1.9359E-02	2.1248E+00	4.9145E+04	4.2631E+01
2.9085E+02	1.9195E-02	2.1069E+00	4.8730E+04	4.2628E+01
2.9086E+02	1.9363E-02	2.1253E+00	4.9155E+04	4.2627E+01
2.9090E+02	1.8759E-02	2.0590E+00	4.7623E+04	4.2621E+01
2.9094E+02	1.7881E-02	1.9626E+00	4.5394E+04	4.2615E+01
2.9097E+02	1.8271E-02	2.0055E+00	4.6384E+04	4.2611E+01
2.9099E+02	1.8328E-02	2.0118E+00	4.6530E+04	4.2608E+01
2.9102E+02	1.9105E-02	2.0970E+00	4.8501E+04	4.2603E+01
2.9104E+02	1.9108E-02	2.0973E+00	4.8508E+04	4.2600E+01
2.9107E+02	1.8670E-02	2.0492E+00	4.7396E+04	4.2596E+01
2.9111E+02	1.8950E-02	2.0800E+00	4.8107E+04	4.2590E+01
2.9118E+02	1.8738E-02	2.0567E+00	4.7570E+04	4.2580E+01
2.9121E+02	1.8576E-02	2.0389E+00	4.7157E+04	4.2576E+01
2.9125E+02	1.8968E-02	2.0819E+00	4.8152E+04	4.2570E+01
2.9132E+02	1.9142E-02	2.1010E+00	4.8594E+04	4.2559E+01
2.9136E+02	1.8869E-02	2.0711E+00	4.7902E+04	4.2554E+01
2.9138E+02	1.9038E-02	2.0897E+00	4.8331E+04	4.2551E+01
2.9140E+02	1.8930E-02	2.0778E+00	4.8057E+04	4.2548E+01
2.9142E+02	1.9097E-02	2.0962E+00	4.8482E+04	4.2545E+01
2.9146E+02	1.8717E-02	2.0544E+00	4.7515E+04	4.2539E+01
2.9150E+02	1.8886E-02	2.0729E+00	4.7945E+04	4.2533E+01
2.9190E+02	1.9555E-02	2.1464E+00	4.9644E+04	4.2475E+01
2.9298E+02	2.0533E-02	2.2537E+00	5.2126E+04	4.2318E+01
2.9385E+02	1.9392E-02	2.1285E+00	4.9229E+04	4.2193E+01
2.9476E+02	2.0044E-02	2.2001E+00	5.0885E+04	4.2063E+01
2.9552E+02	2.2651E-02	2.4862E+00	5.7503E+04	4.1955E+01
2.9588E+02	2.3466E-02	2.5756E+00	5.9572E+04	4.1904E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9649E+02	2.1837E-02	2.3968E+00	5.5436E+04	4.1817E+01
2.9703E+02	1.9718E-02	2.1643E+00	5.0057E+04	4.1741E+01
2.9761E+02	1.8578E-02	2.0391E+00	4.7162E+04	4.1660E+01
2.9852E+02	1.8414E-02	2.0211E+00	4.6747E+04	4.1533E+01
2.9949E+02	1.8578E-02	2.0391E+00	4.7162E+04	4.1398E+01
2.9996E+02	1.9066E-02	2.0927E+00	4.8403E+04	4.1334E+01
3.0034E+02	1.8955E-02	2.0805E+00	4.8119E+04	4.1281E+01
3.0077E+02	1.9347E-02	2.1235E+00	4.9114E+04	4.1222E+01
3.0124E+02	1.8907E-02	2.0752E+00	4.7997E+04	4.1158E+01
3.0184E+02	1.8833E-02	2.0672E+00	4.7811E+04	4.1076E+01
3.0334E+02	1.9300E-02	2.1183E+00	4.8995E+04	4.0873E+01
3.0467E+02	1.9912E-02	2.1855E+00	5.0549E+04	4.0695E+01
3.0622E+02	2.0231E-02	2.2206E+00	5.1360E+04	4.0489E+01
3.0777E+02	2.0477E-02	2.2475E+00	5.1983E+04	4.0285E+01
3.0910E+02	2.0697E-02	2.2718E+00	5.2544E+04	4.0111E+01
3.1030E+02	2.0674E-02	2.2692E+00	5.2484E+04	3.9956E+01
3.1197E+02	2.0627E-02	2.2640E+00	5.2365E+04	3.9742E+01
3.1425E+02	1.9821E-02	2.1756E+00	5.0319E+04	3.9454E+01
3.1675E+02	1.8870E-02	2.0712E+00	4.7904E+04	3.9143E+01
3.2018E+02	1.7455E-02	1.9159E+00	4.4313E+04	3.8723E+01
3.2341E+02	1.6259E-02	1.7846E+00	4.1277E+04	3.8337E+01
3.2702E+02	1.5187E-02	1.6669E+00	3.8554E+04	3.7913E+01
3.3003E+02	1.4505E-02	1.5921E+00	3.6824E+04	3.7568E+01
3.3342E+02	1.3872E-02	1.5226E+00	3.5215E+04	3.7186E+01
3.3656E+02	1.3361E-02	1.4665E+00	3.3919E+04	3.6839E+01
3.4000E+02	1.2875E-02	1.4132E+00	3.2686E+04	3.6466E+01
3.4335E+02	1.2462E-02	1.3679E+00	3.1638E+04	3.6110E+01
3.4683E+02	1.2123E-02	1.3306E+00	3.0776E+04	3.5748E+01
3.5013E+02	1.1734E-02	1.2879E+00	2.9788E+04	3.5411E+01
3.5344E+02	1.1395E-02	1.2507E+00	2.8927E+04	3.5079E+01
3.5731E+02	1.1104E-02	1.2188E+00	2.8189E+04	3.4699E+01
3.6000E+02	1.1087E-02	1.2169E+00	2.8145E+04	3.4440E+01
4.0000E+02	8.6520E-03	9.4965E-01	2.1964E+04	3.0996E+01
4.5000E+02	6.4978E-03	7.1320E-01	1.6496E+04	2.7552E+01
5.0000E+02	4.9966E-03	5.4843E-01	1.2685E+04	2.4797E+01
6.0000E+02	3.1358E-03	3.4419E-01	7.9607E+03	2.0664E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.0000E+02	2.0973E-03	2.3020E-01	5.3243E+03	1.7712E+01
8.0000E+02	1.4737E-03	1.6176E-01	3.7412E+03	1.5498E+01
9.0000E+02	1.0769E-03	1.1820E-01	2.7339E+03	1.3776E+01
1.0000E+03	8.1227E-04	8.9156E-02	2.0621E+03	1.2398E+01
1.2500E+03	4.4592E-04	4.8945E-02	1.1320E+03	9.9187E+00
1.5000E+03	2.7302E-04	2.9967E-02	6.9311E+02	8.2656E+00
1.7500E+03	1.6270E-04	1.7858E-02	4.1304E+02	7.0848E+00
2.0000E+03	1.0994E-04	1.2067E-02	2.7910E+02	6.1992E+00
2.2500E+03	7.7592E-05	8.5166E-03	1.9698E+02	5.5104E+00
2.5000E+03	5.6696E-05	6.2231E-03	1.4393E+02	4.9594E+00
2.7500E+03	4.2618E-05	4.6778E-03	1.0819E+02	4.5085E+00
3.0000E+03	3.2799E-05	3.6001E-03	8.3266E+01	4.1328E+00
3.5000E+03	2.0561E-05	2.2568E-03	5.2196E+01	3.5424E+00
4.0000E+03	1.3675E-05	1.5010E-03	3.4716E+01	3.0996E+00
4.5000E+03	9.5180E-06	1.0447E-03	2.4163E+01	2.7552E+00
5.0000E+03	6.8673E-06	7.5376E-04	1.7434E+01	2.4797E+00
6.0000E+03	3.8818E-06	4.2607E-04	9.8546E+00	2.0664E+00
7.0000E+03	2.3812E-06	2.6136E-04	6.0450E+00	1.7712E+00
8.0000E+03	1.5506E-06	1.7020E-04	3.9365E+00	1.5498E+00
9.0000E+03	1.0567E-06	1.1599E-04	2.6826E+00	1.3776E+00
1.0000E+04	7.1188E-07	7.8137E-05	1.8072E+00	1.2398E+00
1.2500E+04	3.4473E-07	3.7837E-05	8.7514E-01	9.9187E-01
1.5000E+04	1.9063E-07	2.0923E-05	4.8393E-01	8.2656E-01
1.7500E+04	1.1551E-07	1.2678E-05	2.9323E-01	7.0848E-01
2.0000E+04	7.4848E-08	8.2153E-06	1.9001E-01	6.1992E-01
2.2500E+04	5.1045E-08	5.6028E-06	1.2959E-01	5.5104E-01
2.5000E+04	3.6246E-08	3.9784E-06	9.2017E-02	4.9594E-01
2.7500E+04	2.6539E-08	2.9129E-06	6.7373E-02	4.5085E-01
3.0000E+04	1.9902E-08	2.1845E-06	5.0525E-02	4.1328E-01
3.5000E+04	1.1946E-08	1.3112E-06	3.0327E-02	3.5424E-01
4.0000E+04	7.6776E-09	8.4271E-07	1.9491E-02	3.0996E-01
4.5000E+04	5.1984E-09	5.7058E-07	1.3197E-02	2.7552E-01
5.0000E+04	3.6677E-09	4.0257E-07	9.3109E-03	2.4797E-01
6.0000E+04	2.0057E-09	2.2015E-07	5.0919E-03	2.0664E-01
7.0000E+04	1.2039E-09	1.3214E-07	3.0563E-03	1.7712E-01
8.0000E+04	7.7405E-10	8.4961E-08	1.9650E-03	1.5498E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0000E+04	5.2472E-10	5.7593E-08	1.3321E-03	1.3776E-01
1.0000E+05	3.7077E-10	4.0696E-08	9.4125E-04	1.2398E-01

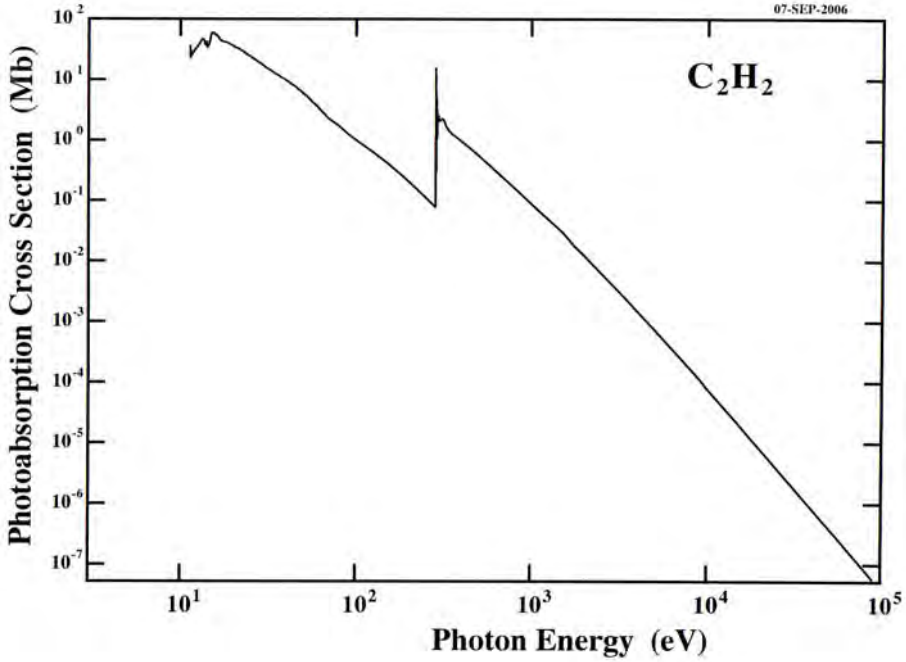
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} = 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-4\chi\ \arctan(\chi^{-1})\right]}{1 - \exp\left(-2\pi\chi\right)} \ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi = \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}} \ ,$$

where $E_{\mathrm{K}} = 13.6$ and 291.1 eV for hydrogen and carbon atoms, respectively.



C_2H_2

Energy, eV	Source
5.865 - 11.4011 (IP)	Table 6.6 p.254 (Berkowitz's book*)
IP - 11.70	Table 6.7 p.257 (Berkowitz's book*)
	Xia *et al.*, J. Quant. Spectr. Rad. Transf., 45 (1991) 77
11.70 - 13.26	Fig. 6.5 p.255 (Berkowitz's book*)
13.26 - 20.66	Ukai *et al.*, J. Chem. Phys., 95 (1991) 4142
20.66 - 61.99	Cooper *et al.*, J. Electron Spectrosc., 73 (1995) 139
62 - 285	Henke, *et al.*, Atom. Data Nucl. Data Tables, 54 (1993) 181
	Table 6.8 p.258 (Berkowitz's book*)
285.9	Table 6.7 p.257 (Berkowitz's book*)
286.5 - 360	Kivimäki *et al.*, J. Phys. B 30 (1997) 4279
	Kempgens *et al.*, J. Chem. Phys. 107 (1997) 4219
360 - 1740	Table 6.8 p.258 (Berkowitz's book*)
1740.0 - 10^4	Table 6.8 p.258 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Ethylene (C_2H_4)

Z = 16 Molecular Mass : $M_{\rm A}$ = 28.05316

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
6.6199E+00	1.0039E-03	1.1019E-01	2.3655E+03	1.8729E+03
6.6863E+00	4.1114E-03	4.5127E-01	9.6873E+03	1.8543E+03
6.7167E+00	2.2947E-03	2.5187E-01	5.4069E+03	1.8459E+03
6.7892E+00	8.9418E-03	9.8146E-01	2.1069E+04	1.8262E+03
6.8243E+00	6.2149E-03	6.8215E-01	1.4644E+04	1.8168E+03
6.8777E+00	1.6400E-02	1.8000E+00	3.8641E+04	1.8027E+03
6.9219E+00	1.5922E-02	1.7476E+00	3.7515E+04	1.7912E+03
6.9744E+00	3.5186E-02	3.8620E+00	8.2906E+04	1.7777E+03
7.0075E+00	2.7728E-02	3.0434E+00	6.5333E+04	1.7693E+03
7.0366E+00	3.7721E-02	4.1403E+00	8.8880E+04	1.7620E+03
7.0787E+00	8.3643E-02	9.1807E+00	1.9708E+05	1.7515E+03
7.0941E+00	2.0194E-01	2.2165E+01	4.7581E+05	1.7477E+03
7.1080E+00	5.3501E-01	5.8724E+01	1.2606E+06	1.7443E+03
7.1337E+00	1.5772E-01	1.7312E+01	3.7163E+05	1.7380E+03
7.1485E+00	1.9582E-01	2.1493E+01	4.6139E+05	1.7344E+03
7.1671E+00	4.1137E-01	4.5152E+01	9.6927E+05	1.7299E+03
7.1783E+00	1.5160E-01	1.6640E+01	3.5721E+05	1.7272E+03
7.1996E+00	1.0674E-01	1.1716E+01	2.5151E+05	1.7221E+03
7.2235E+00	1.2919E-01	1.4180E+01	3.0441E+05	1.7164E+03
7.2450E+00	2.1486E-01	2.3584E+01	5.0626E+05	1.7113E+03
7.2778E+00	5.8053E-01	6.3719E+01	1.3679E+06	1.7036E+03
7.3160E+00	2.5972E-01	2.8508E+01	6.1197E+05	1.6947E+03
7.3320E+00	3.5901E-01	3.9405E+01	8.4591E+05	1.6910E+03
7.3472E+00	5.1478E-01	5.6503E+01	1.2129E+06	1.6875E+03
7.3603E+00	2.4408E-01	2.6791E+01	5.7511E+05	1.6845E+03
7.3796E+00	2.0056E-01	2.2014E+01	4.7256E+05	1.6801E+03
7.4113E+00	2.3456E-01	2.5745E+01	5.5267E+05	1.6729E+03
7.4220E+00	3.3518E-01	3.6790E+01	7.8977E+05	1.6705E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.4532E+00	4.5772E-01	5.0240E+01	1.0785E+06	1.6635E+03
7.4802E+00	2.9847E-01	3.2760E+01	7.0326E+05	1.6575E+03
7.4910E+00	4.4927E-01	4.9312E+01	1.0586E+06	1.6551E+03
7.5101E+00	4.6694E-01	5.1252E+01	1.1002E+06	1.6509E+03
7.5425E+00	2.8233E-01	3.0989E+01	6.6523E+05	1.6438E+03
7.5623E+00	2.9453E-01	3.2328E+01	6.9397E+05	1.6395E+03
7.5683E+00	3.4138E-01	3.7470E+01	8.0436E+05	1.6382E+03
7.5952E+00	4.0043E-01	4.3951E+01	9.4350E+05	1.6324E+03
7.6317E+00	3.0810E-01	3.3818E+01	7.2596E+05	1.6246E+03
7.6751E+00	3.9159E-01	4.2982E+01	9.2269E+05	1.6154E+03
7.6928E+00	2.9931E-01	3.2852E+01	7.0524E+05	1.6117E+03
7.7129E+00	2.7418E-01	3.0094E+01	6.4603E+05	1.6075E+03
7.7587E+00	3.3247E-01	3.6492E+01	7.8337E+05	1.5980E+03
7.7968E+00	2.7537E-01	3.0225E+01	6.4883E+05	1.5902E+03
7.3638E+00	2.9847E-01	3.2760E+01	7.0326E+05	1.6837E+03
7.8755E+00	2.3253E-01	2.5523E+01	5.4790E+05	1.5743E+03
7.9188E+00	2.7127E-01	2.9775E+01	6.3918E+05	1.5657E+03
7.9605E+00	2.3050E-01	2.5300E+01	5.4312E+05	1.5575E+03
7.9697E+00	2.4951E-01	2.7387E+01	5.8791E+05	1.5557E+03
7.9990E+00	2.4680E-01	2.7089E+01	5.8151E+05	1.5500E+03
8.0582E+00	2.1620E-01	2.3730E+01	5.0942E+05	1.5386E+03
8.0930E+00	2.2232E-01	2.4402E+01	5.2384E+05	1.5320E+03
8.1237E+00	2.0396E-01	2.2387E+01	4.8058E+05	1.5262E+03
8.1585E+00	2.1280E-01	2.3357E+01	5.0140E+05	1.5197E+03
8.2179E+00	1.8289E-01	2.0074E+01	4.3093E+05	1.5087E+03
8.2656E+00	1.9107E-01	2.0972E+01	4.5021E+05	1.5000E+03
8.2899E+00	1.7891E-01	1.9638E+01	4.2156E+05	1.4956E+03
8.3289E+00	1.8274E-01	2.0057E+01	4.3057E+05	1.4886E+03
8.3858E+00	1.4916E-01	1.6372E+01	3.5145E+05	1.4785E+03
8.4165E+00	1.5298E-01	1.6791E+01	3.6046E+05	1.4731E+03
8.4839E+00	1.2747E-01	1.3991E+01	3.0035E+05	1.4614E+03
8.5394E+00	1.2323E-01	1.3525E+01	2.9035E+05	1.4519E+03
8.5707E+00	9.9553E-02	1.0927E+01	2.3457E+05	1.4466E+03
8.6034E+00	1.2021E-01	1.3194E+01	2.8323E+05	1.4411E+03
8.6424E+00	8.1616E-02	8.9582E+00	1.9230E+05	1.4346E+03
8.6751E+00	1.0418E-01	1.1435E+01	2.4547E+05	1.4292E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.7184E+00	6.0734E-02	6.6662E+00	1.4310E+05	1.4221E+03
8.7659E+00	8.7314E-02	9.5837E+00	2.0573E+05	1.4144E+03
8.8120E+00	4.5550E-02	4.9996E+00	1.0733E+05	1.4070E+03
8.8776E+00	6.4711E-02	7.1028E+00	1.5247E+05	1.3966E+03
8.9088E+00	3.2348E-01	3.5505E+01	7.6219E+05	1.3917E+03
8.9326E+00	2.3708E-01	2.6022E+01	5.5862E+05	1.3880E+03
8.9610E+00	3.6731E-01	4.0316E+01	8.6546E+05	1.3836E+03
9.0046E+00	6.3832E-02	7.0062E+00	1.5040E+05	1.3769E+03
9.0400E+00	2.6217E-01	2.8776E+01	6.1774E+05	1.3715E+03
9.0625E+00	2.4772E-01	2.7189E+01	5.8367E+05	1.3681E+03
9.0824E+00	3.0688E-01	3.3684E+01	7.2308E+05	1.3651E+03
9.1071E+00	2.9112E-01	3.1954E+01	6.8595E+05	1.3614E+03
9.1319E+00	3.0688E-01	3.3684E+01	7.2308E+05	1.3577E+03
9.1718E+00	1.1321E-01	1.2426E+01	2.6674E+05	1.3518E+03
9.2401E+00	2.2431E-01	2.4620E+01	5.2852E+05	1.3418E+03
9.2622E+00	1.9834E-01	2.1770E+01	4.6734E+05	1.3386E+03
9.2865E+00	2.0855E-01	2.2891E+01	4.9140E+05	1.3351E+03
9.3193E+00	1.6729E-01	1.8361E+01	3.9416E+05	1.3304E+03
9.3622E+00	1.5237E-01	1.6724E+01	3.5902E+05	1.3243E+03
9.4091E+00	1.6025E-01	1.7589E+01	3.7758E+05	1.3177E+03
9.4414E+00	1.2342E-01	1.3546E+01	2.9080E+05	1.3132E+03
9.4927E+00	1.3451E-01	1.4764E+01	3.1693E+05	1.3061E+03
9.5102E+00	1.6514E-01	1.8126E+01	3.8912E+05	1.3037E+03
9.5394E+00	1.4407E-01	1.5813E+01	3.3946E+05	1.2997E+03
9.5918E+00	1.6105E-01	1.7677E+01	3.7947E+05	1.2926E+03
9.6501E+00	3.4031E-01	3.7352E+01	8.0184E+05	1.2848E+03
9.6825E+00	2.8994E-01	3.1824E+01	6.8316E+05	1.2805E+03
9.7105E+00	3.0229E-01	3.3180E+01	7.1227E+05	1.2768E+03
9.7349E+00	2.6045E-01	2.8587E+01	6.1368E+05	1.2736E+03
9.7549E+00	2.8608E-01	3.1400E+01	6.7406E+05	1.2710E+03
9.7880E+00	2.8780E-01	3.1589E+01	6.7811E+05	1.2667E+03
9.8166E+00	2.7820E-01	3.0535E+01	6.5549E+05	1.2630E+03
9.8588E+00	2.7583E-01	3.0275E+01	6.4991E+05	1.2576E+03
9.8910E+00	2.6133E-01	2.8684E+01	6.1575E+05	1.2535E+03
9.9243E+00	2.6898E-01	2.9523E+01	6.3378E+05	1.2493E+03
9.9346E+00	3.6123E-01	3.9649E+01	8.5113E+05	1.2480E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.9682E+00	2.7969E-01	3.0699E+01	6.5901E+05	1.2438E+03
1.0001E+01	3.1598E-01	3.4683E+01	7.4453E+05	1.2397E+03
1.0071E+01	2.4466E-01	2.6854E+01	5.7646E+05	1.2311E+03
1.0102E+01	3.1598E-01	3.4683E+01	7.4453E+05	1.2273E+03
1.0128E+01	2.8351E-01	3.1119E+01	6.6802E+05	1.2242E+03
1.0158E+01	2.9036E-01	3.1870E+01	6.8415E+05	1.2205E+03
1.0229E+01	2.1498E-01	2.3596E+01	5.0654E+05	1.2121E+03
1.0275E+01	2.5663E-01	2.8168E+01	6.0467E+05	1.2067E+03
1.0321E+01	2.0771E-01	2.2799E+01	4.8941E+05	1.2013E+03
1.0349E+01	2.2649E-01	2.4860E+01	5.3366E+05	1.1980E+03
1.0421E+01	1.9956E-01	2.1904E+01	4.7022E+05	1.1897E+03
1.0465E+01	2.1368E-01	2.3453E+01	5.0347E+05	1.1848E+03
1.0513E+01	1.9402E-01	2.1296E+01	4.5715E+05	1.1793E+03
1.0656E+01	1.6657E-01	1.8283E+01	3.9249E+05	1.1635E+03
1.0712E+01	1.5318E-01	1.6813E+01	3.6093E+05	1.1574E+03
1.0818E+01	1.4163E-01	1.5545E+01	3.3371E+05	1.1461E+03
1.0867E+01	1.3860E-01	1.5213E+01	3.2657E+05	1.1409E+03
1.0916E+01	1.3313E-01	1.4612E+01	3.1368E+05	1.1358E+03
1.1005E+01	1.3132E-01	1.4414E+01	3.0943E+05	1.1266E+03
1.1051E+01	1.3255E-01	1.4549E+01	3.1232E+05	1.1219E+03
1.1128E+01	1.6854E-01	1.8499E+01	3.9711E+05	1.1142E+03
1.1153E+01	1.6915E-01	1.8566E+01	3.9856E+05	1.1117E+03
1.1189E+01	1.7769E-01	1.9503E+01	4.1867E+05	1.1081E+03
1.1247E+01	1.8685E-01	2.0509E+01	4.4026E+05	1.1024E+03
1.1278E+01	1.8686E-01	2.0510E+01	4.4028E+05	1.0993E+03
1.1304E+01	1.8198E-01	1.9975E+01	4.2880E+05	1.0968E+03
1.1389E+01	1.8505E-01	2.0312E+01	4.3603E+05	1.0886E+03
1.1444E+01	1.9543E-01	2.1451E+01	4.6049E+05	1.0834E+03
1.1521E+01	2.2714E-01	2.4931E+01	5.3519E+05	1.0762E+03
1.1575E+01	2.6677E-01	2.9281E+01	6.2857E+05	1.0711E+03
1.1592E+01	2.6982E-01	2.9616E+01	6.3576E+05	1.0696E+03
1.1654E+01	3.0336E-01	3.3297E+01	7.1478E+05	1.0639E+03
1.1728E+01	3.8504E-01	4.2263E+01	9.0725E+05	1.0572E+03
1.1784E+01	3.8872E-01	4.2666E+01	9.1591E+05	1.0521E+03
1.1814E+01	3.8811E-01	4.2600E+01	9.1448E+05	1.0495E+03
1.1895E+01	4.1068E-01	4.5076E+01	9.6765E+05	1.0423E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1930E+01	4.1191E-01	4.5211E+01	9.7054E+05	1.0393E+03
1.1990E+01	4.3386E-01	4.7621E+01	1.0223E+06	1.0341E+03
1.2037E+01	4.3326E-01	4.7555E+01	1.0209E+06	1.0300E+03
1.2068E+01	4.2839E-01	4.7021E+01	1.0094E+06	1.0274E+03
1.2189E+01	4.3146E-01	4.7358E+01	1.0166E+06	1.0172E+03
1.2226E+01	4.3696E-01	4.7961E+01	1.0296E+06	1.0141E+03
1.2276E+01	4.3697E-01	4.7962E+01	1.0296E+06	1.0100E+03
1.2345E+01	4.2358E-01	4.6492E+01	9.9804E+05	1.0043E+03
1.2447E+01	4.4493E-01	4.8836E+01	1.0484E+06	9.9611E+02
1.2473E+01	4.4249E-01	4.8569E+01	1.0426E+06	9.9406E+02
1.2511E+01	4.3032E-01	4.7232E+01	1.0139E+06	9.9098E+02
1.2577E+01	4.4313E-01	4.8638E+01	1.0441E+06	9.8584E+02
1.2609E+01	4.3704E-01	4.7970E+01	1.0298E+06	9.8327E+02
1.2649E+01	4.1694E-01	4.5763E+01	9.8240E+05	9.8019E+02
1.2682E+01	4.1695E-01	4.5764E+01	9.8242E+05	9.7762E+02
1.2722E+01	4.2732E-01	4.6903E+01	1.0069E+06	9.7454E+02
1.2783E+01	4.0539E-01	4.4495E+01	9.5518E+05	9.6992E+02
1.2837E+01	3.9625E-01	4.3493E+01	9.3366E+05	9.6581E+02
1.2872E+01	4.0235E-01	4.4163E+01	9.4804E+05	9.6324E+02
1.2920E+01	3.9262E-01	4.3094E+01	9.2509E+05	9.5965E+02
1.2954E+01	3.7921E-01	4.1623E+01	8.9351E+05	9.5708E+02
1.3045E+01	3.7740E-01	4.1424E+01	8.8924E+05	9.5040E+02
1.3109E+01	3.6888E-01	4.0489E+01	8.6917E+05	9.4578E+02
1.3181E+01	3.7986E-01	4.1694E+01	8.9505E+05	9.4065E+02
1.3246E+01	3.8171E-01	4.1896E+01	8.9939E+05	9.3602E+02
1.3326E+01	3.7806E-01	4.1496E+01	8.9080E+05	9.3037E+02
1.3467E+01	3.9394E-01	4.3239E+01	9.2820E+05	9.2062E+02
1.3566E+01	3.9151E-01	4.2972E+01	9.2248E+05	9.1394E+02
1.3658E+01	3.9580E-01	4.3443E+01	9.3259E+05	9.0778E+02
1.3759E+01	4.1592E-01	4.5652E+01	9.8001E+05	9.0110E+02
1.3830E+01	4.1228E-01	4.5252E+01	9.7142E+05	8.9648E+02
1.3958E+01	4.4521E-01	4.8867E+01	1.0490E+06	8.8826E+02
1.4039E+01	4.6230E-01	5.0742E+01	1.0893E+06	8.8313E+02
1.4097E+01	4.8363E-01	5.3084E+01	1.1395E+06	8.7953E+02
1.4163E+01	4.8364E-01	5.3085E+01	1.1396E+06	8.7542E+02
1.4196E+01	4.9706E-01	5.4558E+01	1.1712E+06	8.7337E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4263E+01	5.2450E-01	5.7569E+01	1.2358E+06	8.6926E+02
1.4314E+01	5.2328E-01	5.7436E+01	1.2330E+06	8.6618E+02
1.4425E+01	5.4707E-01	6.0047E+01	1.2890E+06	8.5950E+02
1.4468E+01	5.4403E-01	5.9713E+01	1.2819E+06	8.5693E+02
1.4521E+01	5.5013E-01	6.0383E+01	1.2962E+06	8.5385E+02
1.4573E+01	5.5623E-01	6.1053E+01	1.3106E+06	8.5077E+02
1.4644E+01	5.4162E-01	5.9449E+01	1.2762E+06	8.4666E+02
1.4679E+01	5.4284E-01	5.9583E+01	1.2791E+06	8.4461E+02
1.4724E+01	5.5077E-01	6.0453E+01	1.2977E+06	8.4204E+02
1.4824E+01	5.3921E-01	5.9184E+01	1.2705E+06	8.3639E+02
1.4897E+01	5.4836E-01	6.0189E+01	1.2921E+06	8.3228E+02
1.4999E+01	5.4533E-01	5.9856E+01	1.2849E+06	8.2663E+02
1.5064E+01	5.5204E-01	6.0592E+01	1.3007E+06	8.2304E+02
1.5121E+01	5.4717E-01	6.0058E+01	1.2893E+06	8.1996E+02
1.5159E+01	5.3560E-01	5.8788E+01	1.2620E+06	8.1790E+02
1.5255E+01	5.4354E-01	5.9659E+01	1.2807E+06	8.1277E+02
1.5303E+01	5.3684E-01	5.8924E+01	1.2649E+06	8.1020E+02
1.5322E+01	5.2709E-01	5.7854E+01	1.2420E+06	8.0917E+02
1.5361E+01	5.2893E-01	5.8055E+01	1.2463E+06	8.0712E+02
1.5420E+01	5.3990E-01	5.9260E+01	1.2721E+06	8.0404E+02
1.5509E+01	5.1675E-01	5.6719E+01	1.2176E+06	7.9941E+02
1.5579E+01	5.3322E-01	5.8527E+01	1.2564E+06	7.9582E+02
1.5660E+01	5.1007E-01	5.5986E+01	1.2018E+06	7.9171E+02
1.5732E+01	5.2714E-01	5.7859E+01	1.2421E+06	7.8812E+02
1.5814E+01	5.0765E-01	5.5721E+01	1.1961E+06	7.8401E+02
1.5887E+01	5.1985E-01	5.7059E+01	1.2249E+06	7.8041E+02
1.5960E+01	5.0828E-01	5.5789E+01	1.1976E+06	7.7682E+02
1.6045E+01	5.1804E-01	5.6861E+01	1.2206E+06	7.7271E+02
1.6131E+01	5.1135E-01	5.6126E+01	1.2048E+06	7.6860E+02
1.6196E+01	5.1806E-01	5.6863E+01	1.2207E+06	7.6552E+02
1.6273E+01	5.1624E-01	5.6663E+01	1.2164E+06	7.6192E+02
1.6428E+01	5.2358E-01	5.7468E+01	1.2337E+06	7.5473E+02
1.6608E+01	5.3639E-01	5.8875E+01	1.2639E+06	7.4652E+02
1.6911E+01	5.6324E-01	6.1822E+01	1.3271E+06	7.3316E+02
1.7176E+01	5.7912E-01	6.3565E+01	1.3645E+06	7.2186E+02
1.7299E+01	5.8584E-01	6.4302E+01	1.3804E+06	7.1673E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7386E+01	5.8097E-01	6.3768E+01	1.3689E+06	7.1313E+02
1.7461E+01	5.8038E-01	6.3703E+01	1.3675E+06	7.1005E+02
1.7563E+01	5.7063E-01	6.2633E+01	1.3445E+06	7.0594E+02
1.7640E+01	5.7186E-01	6.2768E+01	1.3474E+06	7.0286E+02
1.7783E+01	5.6334E-01	6.1832E+01	1.3274E+06	6.9721E+02
1.7862E+01	5.5542E-01	6.0964E+01	1.3087E+06	6.9413E+02
1.7941E+01	5.5605E-01	6.1032E+01	1.3102E+06	6.9105E+02
1.8049E+01	5.5057E-01	6.0431E+01	1.2973E+06	6.8694E+02
1.8144E+01	5.3960E-01	5.9227E+01	1.2714E+06	6.8335E+02
1.8226E+01	5.3961E-01	5.9228E+01	1.2714E+06	6.8027E+02
1.8449E+01	5.2623E-01	5.7759E+01	1.2399E+06	6.7205E+02
1.8534E+01	5.2624E-01	5.7760E+01	1.2399E+06	6.6897E+02
1.8619E+01	5.1954E-01	5.7025E+01	1.2242E+06	6.6589E+02
1.8663E+01	5.2259E-01	5.7360E+01	1.2313E+06	6.6434E+02
1.8764E+01	5.1590E-01	5.6625E+01	1.2156E+06	6.6075E+02
1.9212E+01	5.0619E-01	5.5559E+01	1.1927E+06	6.4534E+02
1.9650E+01	4.9648E-01	5.4494E+01	1.1698E+06	6.3096E+02
2.0346E+01	4.7398E-01	5.2024E+01	1.1168E+06	6.0939E+02
2.0873E+01	4.5269E-01	4.9687E+01	1.0666E+06	5.9399E+02
2.1563E+01	4.2470E-01	4.6616E+01	1.0007E+06	5.7498E+02
2.2116E+01	4.1133E-01	4.5148E+01	9.6918E+05	5.6060E+02
2.3023E+01	3.8518E-01	4.2278E+01	9.0758E+05	5.3852E+02
2.3701E+01	3.6328E-01	3.9874E+01	8.5597E+05	5.2311E+02
2.4800E+01	3.2480E-01	3.5650E+01	7.6530E+05	4.9994E+02
2.4900E+01	3.2239E-01	3.5386E+01	7.5963E+05	4.9793E+02
2.5400E+01	3.0716E-01	3.3714E+01	7.2374E+05	4.8813E+02
2.5900E+01	2.8802E-01	3.1613E+01	6.7864E+05	4.7870E+02
2.6400E+01	2.7970E-01	3.0700E+01	6.5904E+05	4.6964E+02
2.6900E+01	2.6497E-01	2.9083E+01	6.2433E+05	4.6091E+02
2.7400E+01	2.5755E-01	2.8269E+01	6.0685E+05	4.5250E+02
2.7900E+01	2.4082E-01	2.6432E+01	5.6742E+05	4.4439E+02
2.8400E+01	2.2548E-01	2.4749E+01	5.3129E+05	4.3656E+02
2.8900E+01	2.2017E-01	2.4166E+01	5.1878E+05	4.2901E+02
2.9400E+01	2.1456E-01	2.3550E+01	5.0555E+05	4.2171E+02
2.9900E+01	1.9792E-01	2.1724E+01	4.6636E+05	4.1466E+02
3.0900E+01	1.8149E-01	1.9920E+01	4.2763E+05	4.0124E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.1900E+01	1.6646E-01	1.8270E+01	3.9221E+05	3.8867E+02
3.2900E+01	1.5704E-01	1.7237E+01	3.7001E+05	3.7685E+02
3.3900E+01	1.4271E-01	1.5664E+01	3.3625E+05	3.6574E+02
3.4900E+01	1.3339E-01	1.4641E+01	3.1429E+05	3.5526E+02
3.5900E+01	1.2557E-01	1.3783E+01	2.9587E+05	3.4536E+02
3.6900E+01	1.1805E-01	1.2958E+01	2.7816E+05	3.3600E+02
3.7900E+01	1.1014E-01	1.2089E+01	2.5951E+05	3.2714E+02
3.8900E+01	1.0322E-01	1.1330E+01	2.4321E+05	3.1873E+02
3.9900E+01	9.7609E-02	1.0714E+01	2.2999E+05	3.1074E+02
4.0900E+01	9.2599E-02	1.0164E+01	2.1818E+05	3.0314E+02
4.1900E+01	8.6185E-02	9.4597E+00	2.0307E+05	2.9590E+02
4.2900E+01	8.0773E-02	8.8658E+00	1.9032E+05	2.8901E+02
4.3900E+01	7.6765E-02	8.4258E+00	1.8088E+05	2.8242E+02
4.4900E+01	7.3057E-02	8.0188E+00	1.7214E+05	2.7613E+02
4.5900E+01	6.7846E-02	7.4468E+00	1.5986E+05	2.7012E+02
4.6900E+01	6.5240E-02	7.1608E+00	1.5372E+05	2.6436E+02
4.7900E+01	6.1833E-02	6.7868E+00	1.4569E+05	2.5884E+02
4.8900E+01	5.9227E-02	6.5008E+00	1.3955E+05	2.5355E+02
4.9900E+01	5.5018E-02	6.0388E+00	1.2964E+05	2.4847E+02
5.0900E+01	5.3515E-02	5.8738E+00	1.2609E+05	2.4358E+02
5.1900E+01	5.0909E-02	5.5878E+00	1.1995E+05	2.3889E+02
5.2900E+01	4.8003E-02	5.2689E+00	1.1311E+05	2.3437E+02
5.3900E+01	4.5498E-02	4.9939E+00	1.0720E+05	2.3003E+02
5.4900E+01	4.3894E-02	4.8179E+00	1.0342E+05	2.2584E+02
5.5900E+01	4.1289E-02	4.5319E+00	9.7285E+04	2.2180E+02
5.6900E+01	3.9785E-02	4.3669E+00	9.3743E+04	2.1790E+02
5.7900E+01	3.7380E-02	4.1029E+00	8.8076E+04	2.1414E+02
5.8900E+01	3.5977E-02	3.9489E+00	8.4770E+04	2.1050E+02
5.9900E+01	3.4274E-02	3.7619E+00	8.0756E+04	2.0699E+02
6.0900E+01	3.3372E-02	3.6629E+00	7.8631E+04	2.0359E+02
6.1900E+01	3.1768E-02	3.4869E+00	7.4853E+04	2.0030E+02
6.2900E+01	3.0666E-02	3.3659E+00	7.2256E+04	1.9711E+02
6.3900E+01	2.9363E-02	3.2229E+00	6.9186E+04	1.9403E+02
6.4900E+01	2.8461E-02	3.1239E+00	6.7061E+04	1.9104E+02
6.5900E+01	2.6858E-02	2.9479E+00	6.3283E+04	1.8814E+02
6.6900E+01	2.6457E-02	2.9039E+00	6.2338E+04	1.8533E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.7900E+01	2.5254E-02	2.7719E+00	5.9505E+04	1.8260E+02
6.8900E+01	2.3551E-02	2.5849E+00	5.5490E+04	1.7995E+02
6.9900E+01	2.2448E-02	2.4639E+00	5.2893E+04	1.7737E+02
7.0900E+01	2.2148E-02	2.4309E+00	5.2185E+04	1.7487E+02
7.1900E+01	2.1246E-02	2.3319E+00	5.0059E+04	1.7244E+02
7.3900E+01	1.9642E-02	2.1559E+00	4.6281E+04	1.6777E+02
7.5900E+01	1.8239E-02	2.0019E+00	4.2976E+04	1.6335E+02
7.7900E+01	1.6836E-02	1.8479E+00	3.9670E+04	1.5916E+02
7.9900E+01	1.5734E-02	1.7270E+00	3.7072E+04	1.5517E+02
8.0000E+01	1.5528E-02	1.7043E+00	3.6586E+04	1.5498E+02
9.0000E+01	1.2024E-02	1.3198E+00	2.8332E+04	1.3776E+02
1.0000E+02	9.5964E-03	1.0533E+00	2.2611E+04	1.2398E+02
1.2500E+02	5.8833E-03	6.4576E-01	1.3862E+04	9.9187E+01
1.5000E+02	3.8632E-03	4.2403E-01	9.1026E+03	8.2656E+01
1.7500E+02	2.6650E-03	2.9251E-01	6.2793E+03	7.0848E+01
2.0000E+02	1.9114E-03	2.0980E-01	4.5038E+03	6.1992E+01
2.2500E+02	1.4153E-03	1.5534E-01	3.3347E+03	5.5104E+01
2.5000E+02	1.0760E-03	1.1810E-01	2.5352E+03	4.9594E+01
2.7500E+02	8.3647E-04	9.1812E-02	1.9709E+03	4.5085E+01
2.8300E+02	7.7493E-04	8.5057E-02	1.8259E+03	4.3811E+01
2.8359E+02	1.7762E-03	1.9496E-01	4.1852E+03	4.3720E+01
2.8376E+02	2.0593E-03	2.2604E-01	4.8523E+03	4.3693E+01
2.8393E+02	2.7873E-03	3.0594E-01	6.5676E+03	4.3667E+01
2.8400E+02	3.2264E-03	3.5413E-01	7.6020E+03	4.3656E+01
2.8411E+02	4.4027E-03	4.8324E-01	1.0374E+04	4.3640E+01
2.8422E+02	7.2082E-03	7.9118E-01	1.6984E+04	4.3623E+01
2.8428E+02	1.1202E-02	1.2295E+00	2.6394E+04	4.3613E+01
2.8433E+02	1.7121E-02	1.8792E+00	4.0341E+04	4.3606E+01
2.8436E+02	2.4967E-02	2.7404E+00	5.8827E+04	4.3601E+01
2.8442E+02	6.2722E-02	6.8844E+00	1.4779E+05	4.3592E+01
2.8444E+02	9.0411E-02	9.9236E+00	2.1303E+05	4.3589E+01
2.8446E+02	1.0685E-01	1.1728E+01	2.5175E+05	4.3586E+01
2.8447E+02	1.1159E-01	1.2248E+01	2.6292E+05	4.3584E+01
2.8448E+02	1.1395E-01	1.2508E+01	2.6850E+05	4.3583E+01
2.8450E+02	1.1395E-01	1.2507E+01	2.6848E+05	4.3580E+01
2.8453E+02	1.1128E-01	1.2215E+01	2.6221E+05	4.3575E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8455E+02	1.0891E-01	1.1955E+01	2.5663E+05	4.3572E+01
2.8458E+02	1.0891E-01	1.1954E+01	2.5661E+05	4.3567E+01
2.8459E+02	1.1024E-01	1.2100E+01	2.5975E+05	4.3566E+01
2.8461E+02	1.1024E-01	1.2100E+01	2.5975E+05	4.3563E+01
2.8463E+02	1.0802E-01	1.1857E+01	2.5452E+05	4.3560E+01
2.8466E+02	1.0017E-01	1.0995E+01	2.3602E+05	4.3555E+01
2.8470E+02	8.9059E-02	9.7752E+00	2.0984E+05	4.3549E+01
2.8473E+02	8.0172E-02	8.7997E+00	1.8890E+05	4.3544E+01
2.8476E+02	7.4838E-02	8.2143E+00	1.7634E+05	4.3540E+01
2.8480E+02	7.0245E-02	7.7102E+00	1.6551E+05	4.3534E+01
2.8481E+02	6.9800E-02	7.6613E+00	1.6447E+05	4.3532E+01
2.8482E+02	6.9799E-02	7.6612E+00	1.6446E+05	4.3531E+01
2.8485E+02	7.1871E-02	7.8886E+00	1.6934E+05	4.3526E+01
2.8488E+02	7.8976E-02	8.6685E+00	1.8608E+05	4.3522E+01
2.8489E+02	8.1196E-02	8.9121E+00	1.9132E+05	4.3520E+01
2.8491E+02	8.2527E-02	9.0583E+00	1.9445E+05	4.3517E+01
2.8493E+02	8.1934E-02	8.9931E+00	1.9305E+05	4.3514E+01
2.8497E+02	7.5120E-02	8.2452E+00	1.7700E+05	4.3508E+01
2.8503E+02	6.7119E-02	7.3670E+00	1.5815E+05	4.3499E+01
2.8507E+02	6.3859E-02	7.0092E+00	1.5047E+05	4.3493E+01
2.8509E+02	5.8230E-02	6.3914E+00	1.3720E+05	4.3489E+01
2.8515E+02	4.8156E-02	5.2857E+00	1.1347E+05	4.3480E+01
2.8520E+02	3.9268E-02	4.3101E+00	9.2524E+04	4.3473E+01
2.8523E+02	3.5415E-02	3.8872E+00	8.3447E+04	4.3468E+01
2.8527E+02	3.2007E-02	3.5131E+00	7.5415E+04	4.3462E+01
2.8531E+02	2.9783E-02	3.2690E+00	7.0176E+04	4.3456E+01
2.8536E+02	2.7114E-02	2.9760E+00	6.3886E+04	4.3448E+01
2.8542E+02	2.2667E-02	2.4879E+00	5.3408E+04	4.3439E+01
2.8549E+02	1.8220E-02	1.9999E+00	4.2931E+04	4.3429E+01
2.8553E+02	1.6144E-02	1.7720E+00	3.8039E+04	4.3422E+01
2.8559E+02	1.2585E-02	1.3813E+00	2.9653E+04	4.3413E+01
2.8568E+02	8.7289E-03	9.5809E-01	2.0567E+04	4.3400E+01
2.8579E+02	6.0555E-03	6.6466E-01	1.4268E+04	4.3383E+01
2.8590E+02	4.4181E-03	4.8493E-01	1.0410E+04	4.3366E+01
2.8593E+02	3.3795E-03	3.7094E-01	7.9629E+03	4.3362E+01
2.8600E+02	3.2264E-03	3.5413E-01	7.6020E+03	4.3351E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8615E+02	1.7344E-03	1.9037E-01	4.0866E+03	4.3328E+01
2.8630E+02	1.5756E-03	1.7294E-01	3.7124E+03	4.3306E+01
2.8646E+02	1.2677E-03	1.3915E-01	2.9870E+03	4.3281E+01
2.8666E+02	1.4846E-03	1.6296E-01	3.4981E+03	4.3251E+01
2.8683E+02	2.3754E-03	2.6072E-01	5.5969E+03	4.3226E+01
2.8690E+02	3.2661E-03	3.5849E-01	7.6957E+03	4.3215E+01
2.8695E+02	4.7508E-03	5.2145E-01	1.1194E+04	4.3208E+01
2.8700E+02	7.4973E-03	8.2291E-01	1.7665E+04	4.3200E+01
2.8704E+02	1.5663E-02	1.7191E+00	3.6905E+04	4.3194E+01
2.8706E+02	2.2269E-02	2.4443E+00	5.2471E+04	4.3191E+01
2.8709E+02	2.5387E-02	2.7865E+00	5.9818E+04	4.3187E+01
2.8714E+02	1.7444E-02	1.9147E+00	4.1103E+04	4.3179E+01
2.8715E+02	1.5663E-02	1.7191E+00	3.6905E+04	4.3177E+01
2.8717E+02	1.4772E-02	1.6214E+00	3.4806E+04	4.3174E+01
2.8720E+02	1.6479E-02	1.8087E+00	3.8828E+04	4.3170E+01
2.8723E+02	1.8112E-02	1.9880E+00	4.2676E+04	4.3165E+01
2.8725E+02	1.8483E-02	2.0288E+00	4.3551E+04	4.3162E+01
2.8727E+02	1.7963E-02	1.9717E+00	4.2326E+04	4.3159E+01
2.8728E+02	1.6999E-02	1.8658E+00	4.0053E+04	4.3158E+01
2.8732E+02	1.5737E-02	1.7273E+00	3.7080E+04	4.3152E+01
2.8735E+02	1.6108E-02	1.7681E+00	3.7955E+04	4.3147E+01
2.8739E+02	2.0710E-02	2.2732E+00	4.8798E+04	4.3141E+01
2.8741E+02	2.2343E-02	2.4524E+00	5.2646E+04	4.3138E+01
2.8743E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.3135E+01
2.8745E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.3132E+01
2.8748E+02	1.9894E-02	2.1836E+00	4.6875E+04	4.3128E+01
2.8752E+02	1.7666E-02	1.9391E+00	4.1626E+04	4.3122E+01
2.8762E+02	1.7741E-02	1.9472E+00	4.1801E+04	4.3107E+01
2.8766E+02	1.8409E-02	2.0206E+00	4.3376E+04	4.3101E+01
2.8770E+02	2.3457E-02	2.5746E+00	5.5269E+04	4.3095E+01
2.8773E+02	3.4369E-02	3.7724E+00	8.0981E+04	4.3090E+01
2.8775E+02	4.6393E-02	5.0922E+00	1.0931E+05	4.3087E+01
2.8777E+02	5.1293E-02	5.6300E+00	1.2086E+05	4.3084E+01
2.8780E+02	4.7062E-02	5.1656E+00	1.1089E+05	4.3080E+01
2.8783E+02	3.9119E-02	4.2938E+00	9.2174E+04	4.3075E+01
2.8785E+02	3.1771E-02	3.4872E+00	7.4859E+04	4.3073E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8787E+02	2.9543E-02	3.2427E+00	6.9611E+04	4.3070E+01
2.8788E+02	2.8653E-02	3.1450E+00	6.7512E+04	4.3068E+01
2.8790E+02	2.7985E-02	3.0717E+00	6.5939E+04	4.3065E+01
2.8792E+02	2.9840E-02	3.2753E+00	7.0311E+04	4.3062E+01
2.8794E+02	3.1622E-02	3.4709E+00	7.4509E+04	4.3059E+01
2.8797E+02	3.2364E-02	3.5523E+00	7.6257E+04	4.3055E+01
2.8799E+02	3.1622E-02	3.4709E+00	7.4509E+04	4.3052E+01
2.8803E+02	2.7094E-02	2.9738E+00	6.3839E+04	4.3046E+01
2.8806E+02	2.3531E-02	2.5828E+00	5.5444E+04	4.3041E+01
2.8812E+02	2.2566E-02	2.4769E+00	5.3171E+04	4.3032E+01
2.8814E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.3029E+01
2.8817E+02	2.1675E-02	2.3791E+00	5.1071E+04	4.3025E+01
2.8819E+02	2.0264E-02	2.2242E+00	4.7747E+04	4.3022E+01
2.8823E+02	1.9820E-02	2.1754E+00	4.6700E+04	4.3016E+01
2.8827E+02	2.5387E-02	2.7865E+00	5.9818E+04	4.3010E+01
2.8829E+02	2.8579E-02	3.1368E+00	6.7337E+04	4.3007E+01
2.8831E+02	2.9915E-02	3.2835E+00	7.0486E+04	4.3004E+01
2.8834E+02	2.7391E-02	3.0065E+00	6.4539E+04	4.2999E+01
2.8837E+02	2.1082E-02	2.3139E+00	4.9673E+04	4.2995E+01
2.8840E+02	1.6257E-02	1.7844E+00	3.8305E+04	4.2990E+01
2.8842E+02	1.4401E-02	1.5806E+00	3.3931E+04	4.2987E+01
2.8845E+02	1.3732E-02	1.5073E+00	3.2356E+04	4.2983E+01
2.8847E+02	1.4326E-02	1.5725E+00	3.3756E+04	4.2980E+01
2.8851E+02	1.4624E-02	1.6051E+00	3.4456E+04	4.2974E+01
2.8856E+02	1.2693E-02	1.3932E+00	2.9908E+04	4.2967E+01
2.8857E+02	1.0615E-02	1.1651E+00	2.5011E+04	4.2965E+01
2.8862E+02	8.7592E-03	9.6141E-01	2.0639E+04	4.2958E+01
2.8866E+02	8.9818E-03	9.8585E-01	2.1163E+04	4.2952E+01
2.8868E+02	9.9465E-03	1.0917E+00	2.3436E+04	4.2949E+01
2.8870E+02	1.0541E-02	1.1570E+00	2.4836E+04	4.2946E+01
2.8873E+02	1.0689E-02	1.1733E+00	2.5186E+04	4.2941E+01
2.8879E+02	8.3880E-03	9.2068E-01	1.9764E+04	4.2932E+01
2.8883E+02	7.8684E-03	8.6365E-01	1.8540E+04	4.2926E+01
2.8887E+02	8.6849E-03	9.5326E-01	2.0464E+04	4.2920E+01
2.8891E+02	1.1134E-02	1.2221E+00	2.6234E+04	4.2914E+01
2.8896E+02	1.7147E-02	1.8821E+00	4.0403E+04	4.2907E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8900E+02	2.5758E-02	2.8272E+00	6.0691E+04	4.2901E+01
2.8901E+02	2.7465E-02	3.0146E+00	6.4714E+04	4.2900E+01
2.8906E+02	2.2641E-02	2.4850E+00	5.3346E+04	4.2892E+01
2.8909E+02	1.9671E-02	2.1591E+00	4.6349E+04	4.2888E+01
2.8911E+02	1.8112E-02	1.9880E+00	4.2676E+04	4.2885E+01
2.8914E+02	2.0487E-02	2.2487E+00	4.8273E+04	4.2880E+01
2.8918E+02	2.6722E-02	2.9331E+00	6.2964E+04	4.2874E+01
2.8920E+02	2.9098E-02	3.1939E+00	6.8563E+04	4.2871E+01
2.8922E+02	2.9915E-02	3.2835E+00	7.0486E+04	4.2868E+01
2.8927E+02	2.7762E-02	3.0472E+00	6.5414E+04	4.2861E+01
2.8928E+02	2.8356E-02	3.1123E+00	6.6812E+04	4.2860E+01
2.8932E+02	3.1845E-02	3.4953E+00	7.5034E+04	4.2854E+01
2.8933E+02	3.2438E-02	3.5605E+00	7.6432E+04	4.2852E+01
2.8936E+02	3.1399E-02	3.4464E+00	7.3984E+04	4.2848E+01
2.8939E+02	2.7614E-02	3.0309E+00	6.5064E+04	4.2843E+01
2.8944E+02	2.3605E-02	2.5909E+00	5.5619E+04	4.2836E+01
2.8947E+02	2.2789E-02	2.5014E+00	5.3696E+04	4.2831E+01
2.8949E+02	2.3531E-02	2.5828E+00	5.5444E+04	4.2828E+01
2.8953E+02	2.3902E-02	2.6236E+00	5.6319E+04	4.2823E+01
2.8955E+02	2.3160E-02	2.5420E+00	5.4569E+04	4.2820E+01
2.8959E+02	2.0487E-02	2.2487E+00	4.8273E+04	4.2814E+01
2.8962E+02	1.9448E-02	2.1347E+00	4.5824E+04	4.2809E+01
2.8965E+02	1.9968E-02	2.1917E+00	4.7050E+04	4.2805E+01
2.8969E+02	2.4124E-02	2.6479E+00	5.6842E+04	4.2799E+01
2.8972E+02	2.4941E-02	2.7376E+00	5.8768E+04	4.2794E+01
2.8975E+02	2.4867E-02	2.7294E+00	5.8593E+04	4.2790E+01
2.8977E+02	2.3680E-02	2.5991E+00	5.5794E+04	4.2787E+01
2.8981E+02	2.2937E-02	2.5176E+00	5.4044E+04	4.2781E+01
2.8984E+02	2.2937E-02	2.5176E+00	5.4044E+04	4.2777E+01
2.8988E+02	2.3754E-02	2.6072E+00	5.5969E+04	4.2771E+01
2.8993E+02	2.3308E-02	2.5583E+00	5.4919E+04	4.2763E+01
2.8998E+02	2.1453E-02	2.3547E+00	5.0548E+04	4.2756E+01
2.9000E+02	2.0562E-02	2.2569E+00	4.8448E+04	4.2753E+01
2.9003E+02	2.0117E-02	2.2080E+00	4.7400E+04	4.2749E+01
2.9005E+02	2.0710E-02	2.2732E+00	4.8798E+04	4.2746E+01
2.9007E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2743E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9010E+02	2.3308E-02	2.5583E+00	5.4919E+04	4.2738E+01
2.9016E+02	2.3457E-02	2.5746E+00	5.5269E+04	4.2730E+01
2.9020E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2724E+01
2.9024E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.2718E+01
2.9028E+02	2.3234E-02	2.5502E+00	5.4744E+04	4.2712E+01
2.9033E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2705E+01
2.9036E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2700E+01
2.9039E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2696E+01
2.9045E+02	2.2269E-02	2.4443E+00	5.2471E+04	4.2687E+01
2.9046E+02	2.2789E-02	2.5014E+00	5.3696E+04	4.2685E+01
2.9048E+02	2.2492E-02	2.4687E+00	5.2996E+04	4.2683E+01
2.9057E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2669E+01
2.9060E+02	2.2195E-02	2.4361E+00	5.2296E+04	4.2665E+01
2.9065E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2658E+01
2.9068E+02	2.2566E-02	2.4769E+00	5.3171E+04	4.2653E+01
2.9085E+02	2.2418E-02	2.4606E+00	5.2821E+04	4.2628E+01
2.9109E+02	2.2418E-02	2.4606E+00	5.2821E+04	4.2593E+01
2.9129E+02	2.2641E-02	2.4850E+00	5.3346E+04	4.2564E+01
2.9196E+02	2.6051E-02	2.8594E+00	6.1382E+04	4.2466E+01
2.9241E+02	2.6658E-02	2.9261E+00	6.2813E+04	4.2401E+01
2.9303E+02	2.5668E-02	2.8174E+00	6.0480E+04	4.2311E+01
2.9320E+02	2.5187E-02	2.7645E+00	5.9346E+04	4.2287E+01
2.9354E+02	2.4679E-02	2.7088E+00	5.8150E+04	4.2238E+01
2.9382E+02	2.4654E-02	2.7060E+00	5.8090E+04	4.2197E+01
2.9426E+02	2.4856E-02	2.7282E+00	5.8566E+04	4.2134E+01
2.9468E+02	2.5413E-02	2.7893E+00	5.9878E+04	4.2074E+01
2.9509E+02	2.5589E-02	2.8087E+00	6.0294E+04	4.2016E+01
2.9574E+02	2.5056E-02	2.7502E+00	5.9038E+04	4.1923E+01
2.9605E+02	2.4726E-02	2.7140E+00	5.8260E+04	4.1879E+01
2.9677E+02	2.5790E-02	2.8307E+00	6.0766E+04	4.1778E+01
2.9712E+02	2.5966E-02	2.8501E+00	6.1183E+04	4.1729E+01
2.9736E+02	2.5992E-02	2.8529E+00	6.1242E+04	4.1695E+01
2.9774E+02	2.5738E-02	2.8250E+00	6.0644E+04	4.1642E+01
2.9856E+02	2.5635E-02	2.8138E+00	6.0403E+04	4.1527E+01
2.9932E+02	2.5254E-02	2.7719E+00	5.9503E+04	4.1422E+01
2.9983E+02	2.5202E-02	2.7662E+00	5.9381E+04	4.1351E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0090E+02	2.4922E-02	2.7354E+00	5.8721E+04	4.1204E+01
3.0142E+02	2.4719E-02	2.7131E+00	5.8243E+04	4.1133E+01
3.0176E+02	2.4540E-02	2.6935E+00	5.7822E+04	4.1087E+01
3.0293E+02	2.3626E-02	2.5932E+00	5.5668E+04	4.0928E+01
3.0406E+02	2.2636E-02	2.4845E+00	5.3335E+04	4.0776E+01
3.0578E+02	2.1873E-02	2.4008E+00	5.1538E+04	4.0547E+01
3.0864E+02	2.0196E-02	2.2167E+00	4.7586E+04	4.0171E+01
3.1101E+02	1.9204E-02	2.1078E+00	4.5248E+04	3.9865E+01
3.1307E+02	1.8415E-02	2.0212E+00	4.3389E+04	3.9603E+01
3.1593E+02	1.7549E-02	1.9262E+00	4.1349E+04	3.9244E+01
3.1981E+02	1.6479E-02	1.8087E+00	3.8828E+04	3.8768E+01
3.2480E+02	1.5356E-02	1.6855E+00	3.6182E+04	3.8172E+01
3.1741E+02	1.7167E-02	1.8843E+00	4.0449E+04	3.9061E+01
3.2232E+02	1.5892E-02	1.7443E+00	3.7445E+04	3.8466E+01
3.2735E+02	1.4845E-02	1.6294E+00	3.4979E+04	3.7875E+01
3.2975E+02	1.4309E-02	1.5706E+00	3.3716E+04	3.7599E+01
3.3237E+02	1.3899E-02	1.5256E+00	3.2750E+04	3.7303E+01
3.3491E+02	1.3465E-02	1.4779E+00	3.1727E+04	3.7020E+01
3.3742E+02	1.3081E-02	1.4358E+00	3.0823E+04	3.6745E+01
3.4000E+02	1.2748E-02	1.3992E+00	3.0036E+04	3.6466E+01
3.5000E+02	1.1842E-02	1.2998E+00	2.7903E+04	3.5424E+01
4.0000E+02	8.6627E-03	9.5083E-01	2.0411E+04	3.0996E+01
4.5000E+02	6.5061E-03	7.1412E-01	1.5330E+04	2.7552E+01
5.0000E+02	5.0032E-03	5.4915E-01	1.1789E+04	2.4797E+01
6.0000E+02	3.1400E-03	3.4465E-01	7.3986E+03	2.0664E+01
7.0000E+02	2.1002E-03	2.3051E-01	4.9484E+03	1.7712E+01
8.0000E+02	1.4758E-03	1.6198E-01	3.4772E+03	1.5498E+01
9.0000E+02	1.0784E-03	1.1837E-01	2.5410E+03	1.3776E+01
1.0000E+03	8.1341E-04	8.9281E-02	1.9166E+03	1.2398E+01
1.2500E+03	4.4655E-04	4.9013E-02	1.0522E+03	9.9187E+00
1.5000E+03	2.7341E-04	3.0009E-02	6.4421E+02	8.2656E+00
1.7500E+03	1.6276E-04	1.7865E-02	3.8351E+02	7.0848E+00
2.0000E+03	1.0998E-04	1.2072E-02	2.5914E+02	6.1992E+00
2.2500E+03	7.7620E-05	8.5196E-03	1.8289E+02	5.5104E+00
2.5000E+03	5.6716E-05	6.2253E-03	1.3364E+02	4.9594E+00
2.7500E+03	4.2633E-05	4.6795E-03	1.0045E+02	4.5085E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0000E+03	3.2810E-05	3.6013E-03	7.7309E+01	4.1328E+00
3.5000E+03	2.0567E-05	2.2575E-03	4.8461E+01	3.5424E+00
4.0000E+03	1.3679E-05	1.5014E-03	3.2230E+01	3.0996E+00
4.5000E+03	9.5203E-06	1.0450E-03	2.2432E+01	2.7552E+00
5.0000E+03	6.8686E-06	7.5390E-04	1.6184E+01	2.4797E+00
6.0000E+03	3.8820E-06	4.2609E-04	9.1469E+00	2.0664E+00
7.0000E+03	2.3809E-06	2.6133E-04	5.6100E+00	1.7712E+00
8.0000E+03	1.5502E-06	1.7015E-04	3.6526E+00	1.5498E+00
9.0000E+03	1.0562E-06	1.1593E-04	2.4886E+00	1.3776E+00
1.0000E+04	7.1196E-07	7.8145E-05	1.6775E+00	1.2398E+00
1.2500E+04	3.4476E-07	3.7842E-05	8.1234E-01	9.9187E-01
1.5000E+04	1.9065E-07	2.0925E-05	4.4920E-01	8.2656E-01
1.7500E+04	1.1552E-07	1.2679E-05	2.7219E-01	7.0848E-01
2.0000E+04	7.4855E-08	8.2162E-06	1.7638E-01	6.1992E-01
2.2500E+04	5.1050E-08	5.6033E-06	1.2029E-01	5.5104E-01
2.5000E+04	3.6250E-08	3.9788E-06	8.5413E-02	4.9594E-01
2.7500E+04	2.6541E-08	2.9132E-06	6.2537E-02	4.5085E-01
3.0000E+04	1.9904E-08	2.1847E-06	4.6898E-02	4.1328E-01
3.5000E+04	1.1947E-08	1.3114E-06	2.8151E-02	3.5424E-01
4.0000E+04	7.6783E-09	8.4278E-07	1.8092E-02	3.0996E-01
4.5000E+04	5.1988E-09	5.7063E-07	1.2250E-02	2.7552E-01
5.0000E+04	3.6680E-09	4.0260E-07	8.6426E-03	2.4797E-01
6.0000E+04	2.0059E-09	2.2017E-07	4.7264E-03	2.0664E-01
7.0000E+04	1.2040E-09	1.3215E-07	2.8369E-03	1.7712E-01
8.0000E+04	7.7412E-10	8.4968E-08	1.8240E-03	1.5498E-01
9.0000E+04	5.2476E-10	5.7598E-08	1.2365E-03	1.3776E-01
1.0000E+05	3.7080E-10	4.0699E-08	8.7369E-04	1.2398E-01

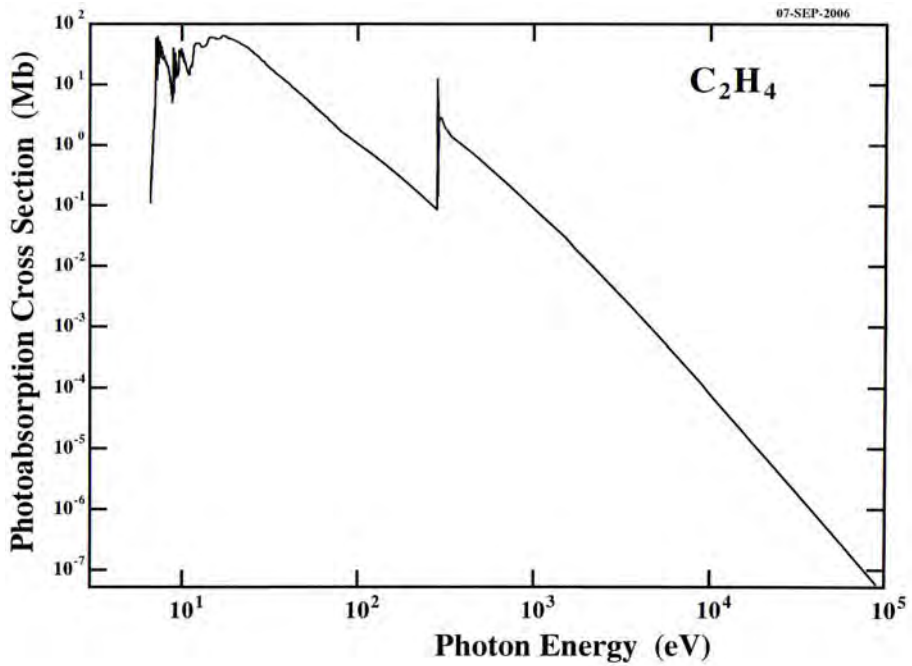
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z_\mathrm{c}-0.3)^6\left(\frac{Ry}{E}\right)^4\,\frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_c denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi = \sqrt{\frac{E_{\rm K}}{E - E_{\rm K}}} \ ,$$

where $E_{\rm K} = 13.6$ and 291.1 eV for hydrogen and carbon atoms, respectively.



C_2H_4

Energy, eV	Source
6.62 - 10.513 (IP)	Zelikoff *et al.*, J. Opt. Soc. Am., 43 (1953) 756
IP - 24.8	Holland *et al.*, Chem. Phys., 219 (1997) 91
24.8 - 80.0	Cooper *et al.*, Chem. Phys., 194 (1995b) 175
80.0 - 200.0	Table 6.10 p.265 (Berkowitz's book*)
200.0 - 285.0	Table 6.10 p.265 (Berkowitz's book*)
284.5	Table 6.9 p.262 (Berkowitz's book*)
286 - 340	Kempgens *et al.*, Cem. Phys. Lett., 246 (1995) 347
	Kempgens *et al.*, J. Electron Spectrosc., 93 (1998) 39
340 - 1740	Table 6.10 p.265 (Berkowitz's book*)
1740.0 - 10^4	Table 6.10 p.265 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Ethane (C_2H_6)

Z = 18 Molecular Mass : $M_{\rm A}$ = 30.06904

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
8.1300E+00	3.7676E-03	4.1354E-01	8.2822E+03	1.5250E+03
8.2800E+00	1.1988E-02	1.3158E+00	2.6353E+04	1.4974E+03
8.5200E+00	2.6145E-02	2.8697E+00	5.7474E+04	1.4552E+03
8.6400E+00	3.2082E-02	3.5213E+00	7.0524E+04	1.4350E+03
8.7500E+00	4.5554E-02	5.0001E+00	1.0014E+05	1.4170E+03
8.8500E+00	9.0309E-02	9.9124E+00	1.9852E+05	1.4010E+03
8.9100E+00	8.2774E-02	9.0853E+00	1.8196E+05	1.3915E+03
9.0000E+00	1.5516E-01	1.7030E+01	3.4108E+05	1.3776E+03
9.0500E+00	1.4922E-01	1.6379E+01	3.2803E+05	1.3700E+03
9.1300E+00	2.3805E-01	2.6128E+01	5.2329E+05	1.3580E+03
9.2000E+00	2.2012E-01	2.4161E+01	4.8388E+05	1.3477E+03
9.2700E+00	3.0369E-01	3.3334E+01	6.6760E+05	1.3375E+03
9.3400E+00	2.6899E-01	2.9524E+01	5.9130E+05	1.3275E+03
9.4200E+00	3.2082E-01	3.5213E+01	7.0524E+05	1.3162E+03
9.4900E+00	2.7869E-01	3.0589E+01	6.1263E+05	1.3065E+03
9.5600E+00	3.1043E-01	3.4073E+01	6.8241E+05	1.2969E+03
9.6500E+00	2.6419E-01	2.8998E+01	5.8076E+05	1.2848E+03
9.7200E+00	2.8508E-01	3.1291E+01	6.2669E+05	1.2756E+03
9.8000E+00	2.5072E-01	2.7519E+01	5.5115E+05	1.2651E+03
9.8800E+00	2.6716E-01	2.9324E+01	5.8729E+05	1.2549E+03
9.9400E+00	2.5152E-01	2.7607E+01	5.5290E+05	1.2473E+03
9.9900E+00	2.5814E-01	2.8334E+01	5.6746E+05	1.2411E+03
1.0310E+01	2.6693E-01	2.9299E+01	5.8678E+05	1.2026E+03
1.0580E+01	2.9684E-01	3.2582E+01	6.5254E+05	1.1719E+03
1.0670E+01	3.2162E-01	3.5301E+01	7.0700E+05	1.1620E+03
1.0740E+01	3.1705E-01	3.4800E+01	6.9696E+05	1.1544E+03
1.0810E+01	3.4251E-01	3.7594E+01	7.5293E+05	1.1469E+03
1.0880E+01	3.2265E-01	3.5414E+01	7.0926E+05	1.1396E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.0950E+01	3.4628E-01	3.8008E+01	7.6121E+05	1.1323E+03
1.1030E+01	3.2310E-01	3.5464E+01	7.1026E+05	1.1241E+03
1.1100E+01	3.5153E-01	3.8584E+01	7.7276E+05	1.1170E+03
1.1180E+01	3.4171E-01	3.7507E+01	7.5117E+05	1.1090E+03
1.1240E+01	3.9183E-01	4.3008E+01	8.6135E+05	1.1031E+03
1.1330E+01	3.9857E-01	4.3747E+01	8.7616E+05	1.0943E+03
1.1410E+01	4.4127E-01	4.8434E+01	9.7003E+05	1.0866E+03
1.1520E+01	4.6365E-01	5.0890E+01	1.0192E+06	1.0763E+03
1.1949E+01	4.8350E-01	5.3070E+01	1.0629E+06	1.0376E+03
1.2208E+01	5.1718E-01	5.6766E+01	1.1369E+06	1.0156E+03
1.2621E+01	5.0692E-01	5.5640E+01	1.1143E+06	9.8240E+02
1.2819E+01	5.2181E-01	5.7274E+01	1.1471E+06	9.6720E+02
1.3056E+01	6.1332E-01	6.7318E+01	1.3482E+06	9.4960E+02
1.3258E+01	6.7015E-01	7.3556E+01	1.4732E+06	9.3520E+02
1.3655E+01	6.8848E-01	7.5569E+01	1.5135E+06	9.0800E+02
1.3900E+01	7.3315E-01	8.0471E+01	1.6117E+06	8.9200E+02
1.4179E+01	7.4686E-01	8.1976E+01	1.6418E+06	8.7440E+02
1.4511E+01	7.3315E-01	8.0471E+01	1.6117E+06	8.5440E+02
1.5083E+01	7.4341E-01	8.1597E+01	1.6342E+06	8.2200E+02
1.5792E+01	7.3887E-01	8.1099E+01	1.6242E+06	7.8510E+02
1.6441E+01	7.2398E-01	7.9465E+01	1.5915E+06	7.5410E+02
1.7052E+01	6.8385E-01	7.5061E+01	1.5033E+06	7.2710E+02
1.8016E+01	6.5353E-01	7.1733E+01	1.4366E+06	6.8820E+02
1.8619E+01	6.4609E-01	7.0915E+01	1.4203E+06	6.6590E+02
1.9550E+01	5.9571E-01	6.5385E+01	1.3095E+06	6.3420E+02
2.0664E+01	5.4178E-01	5.9467E+01	1.1910E+06	6.0000E+02
2.1500E+01	4.7847E-01	5.2518E+01	1.0518E+06	5.7667E+02
2.2000E+01	4.6503E-01	5.1042E+01	1.0223E+06	5.6356E+02
2.2500E+01	4.3884E-01	4.8168E+01	9.6469E+05	5.5104E+02
2.3000E+01	4.1988E-01	4.6086E+01	9.2301E+05	5.3906E+02
2.3500E+01	4.0413E-01	4.4358E+01	8.8838E+05	5.2759E+02
2.4000E+01	3.8978E-01	4.2783E+01	8.5684E+05	5.1660E+02
2.4500E+01	3.6681E-01	4.0261E+01	8.0633E+05	5.0606E+02
2.5000E+01	3.5356E-01	3.8807E+01	7.7722E+05	4.9594E+02
2.5500E+01	3.3610E-01	3.6891E+01	7.3885E+05	4.8621E+02
2.6000E+01	3.3309E-01	3.6561E+01	7.3223E+05	4.7686E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.6500E+01	3.0952E-01	3.3973E+01	6.8040E+05	4.6786E+02
2.7000E+01	2.9126E-01	3.1969E+01	6.4026E+05	4.5920E+02
2.7500E+01	2.8654E-01	3.1451E+01	6.2989E+05	4.5085E+02
2.8000E+01	2.6788E-01	2.9403E+01	5.8887E+05	4.4280E+02
2.8500E+01	2.6186E-01	2.8742E+01	5.7564E+05	4.3503E+02
2.9000E+01	2.4571E-01	2.6969E+01	5.4013E+05	4.2753E+02
2.9500E+01	2.3748E-01	2.6066E+01	5.2204E+05	4.2029E+02
3.0000E+01	2.2203E-01	2.4370E+01	4.8808E+05	4.1328E+02
3.1000E+01	2.0116E-01	2.2080E+01	4.4220E+05	3.9995E+02
3.2000E+01	1.9253E-01	2.1133E+01	4.2324E+05	3.8745E+02
3.3000E+01	1.7327E-01	1.9018E+01	3.8089E+05	3.7571E+02
3.4000E+01	1.6243E-01	1.7829E+01	3.5707E+05	3.6466E+02
3.5000E+01	1.4999E-01	1.6463E+01	3.2972E+05	3.5424E+02
3.6000E+01	1.3986E-01	1.5351E+01	3.0745E+05	3.4440E+02
3.7000E+01	1.3133E-01	1.4415E+01	2.8870E+05	3.3509E+02
3.8000E+01	1.2461E-01	1.3677E+01	2.7392E+05	3.2627E+02
3.9000E+01	1.1458E-01	1.2576E+01	2.5187E+05	3.1791E+02
4.0000E+01	1.0866E-01	1.1926E+01	2.3886E+05	3.0996E+02
4.1000E+01	1.0033E-01	1.1012E+01	2.2055E+05	3.0240E+02
4.2000E+01	9.3106E-02	1.0219E+01	2.0467E+05	2.9520E+02
4.3000E+01	8.7989E-02	9.6578E+00	1.9342E+05	2.8834E+02
4.4000E+01	8.3575E-02	9.1732E+00	1.8372E+05	2.8178E+02
4.5000E+01	7.8458E-02	8.6116E+00	1.7247E+05	2.7552E+02
4.6000E+01	7.6552E-02	8.4024E+00	1.6828E+05	2.6953E+02
4.7000E+01	7.1535E-02	7.8518E+00	1.5725E+05	2.6380E+02
4.8000E+01	6.7622E-02	7.4223E+00	1.4865E+05	2.5830E+02
4.9000E+01	6.2606E-02	6.8717E+00	1.3762E+05	2.5303E+02
5.0000E+01	6.0298E-02	6.6184E+00	1.3255E+05	2.4797E+02
5.1000E+01	5.6285E-02	6.1779E+00	1.2373E+05	2.4311E+02
5.2000E+01	5.4078E-02	5.9356E+00	1.1888E+05	2.3843E+02
5.3000E+01	5.2071E-02	5.7154E+00	1.1447E+05	2.3393E+02
5.4000E+01	4.9663E-02	5.4511E+00	1.0917E+05	2.2960E+02
5.5000E+01	4.5249E-02	4.9665E+00	9.9469E+04	2.2543E+02
5.6000E+01	4.3744E-02	4.8014E+00	9.6160E+04	2.2140E+02
5.7000E+01	4.1737E-02	4.5811E+00	9.1749E+04	2.1752E+02
5.8000E+01	4.0232E-02	4.4159E+00	8.8441E+04	2.1377E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.9000E+01	3.7022E-02	4.0635E+00	8.1383E+04	2.1014E+02
6.0000E+01	3.5316E-02	3.8763E+00	7.7634E+04	2.0664E+02
6.2000E+01	3.2407E-02	3.5570E+00	7.1238E+04	1.9997E+02
6.4000E+01	2.9999E-02	3.2927E+00	6.5945E+04	1.9373E+02
6.6000E+01	2.7791E-02	3.0504E+00	6.1093E+04	1.8785E+02
6.8000E+01	2.5383E-02	2.7861E+00	5.5799E+04	1.8233E+02
7.0000E+01	2.3577E-02	2.5879E+00	5.1830E+04	1.7712E+02
7.2000E+01	2.2073E-02	2.4227E+00	4.8521E+04	1.7220E+02
7.4000E+01	2.0166E-02	2.2135E+00	4.4331E+04	1.6755E+02
7.6000E+01	1.8762E-02	2.0593E+00	4.1243E+04	1.6314E+02
7.8000E+01	1.7357E-02	1.9051E+00	3.8155E+04	1.5895E+02
8.0000E+01	1.6354E-02	1.7950E+00	3.5950E+04	1.5498E+02
8.2000E+01	1.5250E-02	1.6739E+00	3.3524E+04	1.5120E+02
8.4000E+01	1.3846E-02	1.5197E+00	3.0436E+04	1.4760E+02
8.6000E+01	1.3344E-02	1.4646E+00	2.9333E+04	1.4417E+02
8.8000E+01	1.2642E-02	1.3875E+00	2.7789E+04	1.4089E+02
9.0000E+01	1.1839E-02	1.2995E+00	2.6025E+04	1.3776E+02
9.2000E+01	1.1036E-02	1.2114E+00	2.4261E+04	1.3477E+02
9.4000E+01	1.0635E-02	1.1673E+00	2.3378E+04	1.3190E+02
9.6000E+01	1.0234E-02	1.1233E+00	2.2496E+04	1.2915E+02
9.8000E+01	9.6317E-03	1.0572E+00	2.1173E+04	1.2651E+02
1.0000E+02	9.1300E-03	1.0021E+00	2.0070E+04	1.2398E+02
1.0200E+02	8.9294E-03	9.8009E-01	1.9629E+04	1.2155E+02
1.0400E+02	8.4277E-03	9.2503E-01	1.8526E+04	1.1922E+02
1.0600E+02	8.1267E-03	8.9200E-01	1.7865E+04	1.1697E+02
1.0800E+02	7.8257E-03	8.5896E-01	1.7203E+04	1.1480E+02
1.1000E+02	7.6251E-03	8.3693E-01	1.6762E+04	1.1271E+02
1.1200E+02	7.1234E-03	7.8187E-01	1.5659E+04	1.1070E+02
1.1400E+02	6.9228E-03	7.5985E-01	1.5218E+04	1.0876E+02
1.1600E+02	6.7221E-03	7.3782E-01	1.4777E+04	1.0688E+02
1.1800E+02	6.6218E-03	7.2681E-01	1.4556E+04	1.0507E+02
1.2000E+02	6.3208E-03	6.9377E-01	1.3895E+04	1.0332E+02
1.2200E+02	6.0198E-03	6.6074E-01	1.3233E+04	1.0163E+02
1.2400E+02	5.9195E-03	6.4973E-01	1.3013E+04	9.9987E+01
1.2600E+02	5.6185E-03	6.1669E-01	1.2351E+04	9.8400E+01
1.2800E+02	5.4178E-03	5.9466E-01	1.1910E+04	9.6863E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3000E+02	5.2171E-03	5.7264E-01	1.1469E+04	9.5372E+01
1.3200E+02	5.3175E-03	5.8365E-01	1.1689E+04	9.3927E+01
1.3400E+02	5.1168E-03	5.6163E-01	1.1248E+04	9.2526E+01
1.3600E+02	4.7155E-03	5.1758E-01	1.0366E+04	9.1165E+01
1.3800E+02	4.7155E-03	5.1758E-01	1.0366E+04	8.9844E+01
1.4000E+02	4.5148E-03	4.9555E-01	9.9248E+03	8.8560E+01
1.4200E+02	4.4145E-03	4.8454E-01	9.7042E+03	8.7313E+01
1.4400E+02	4.2139E-03	4.6252E-01	9.2631E+03	8.6100E+01
1.4600E+02	4.2139E-03	4.6252E-01	9.2631E+03	8.4921E+01
1.4800E+02	4.1135E-03	4.5150E-01	9.0426E+03	8.3773E+01
1.5000E+02	4.0132E-03	4.4049E-01	8.8220E+03	8.2656E+01
1.7500E+02	2.7672E-03	3.0373E-01	6.0830E+03	7.0848E+01
2.0000E+02	1.9748E-03	2.1676E-01	4.3412E+03	6.1992E+01
2.2500E+02	1.4283E-03	1.5677E-01	3.1397E+03	5.5104E+01
2.5000E+02	1.0423E-03	1.1440E-01	2.2912E+03	4.9594E+01
2.7500E+02	7.6506E-04	8.3974E-02	1.6818E+03	4.5085E+01
2.8000E+02	7.1950E-04	7.8973E-02	1.5816E+03	4.4280E+01
2.8618E+02	1.0941E-03	1.2009E-01	2.4050E+03	4.3324E+01
2.8638E+02	2.2763E-03	2.4984E-01	5.0038E+03	4.3294E+01
2.8670E+02	9.7735E-03	1.0727E+00	2.1485E+04	4.3245E+01
2.8698E+02	1.6678E-02	1.8306E+00	3.6664E+04	4.3202E+01
2.8723E+02	1.7366E-02	1.9061E+00	3.8175E+04	4.3166E+01
2.8739E+02	1.8253E-02	2.0035E+00	4.0125E+04	4.3142E+01
2.8763E+02	3.3250E-02	3.6496E+00	7.3093E+04	4.3106E+01
2.8771E+02	4.8744E-02	5.3501E+00	1.0715E+05	4.3094E+01
2.8775E+02	5.6341E-02	6.1840E+00	1.2385E+05	4.3088E+01
2.8799E+02	5.9398E-02	6.5196E+00	1.3057E+05	4.3051E+01
2.8811E+02	5.3673E-02	5.8912E+00	1.1799E+05	4.3033E+01
2.8819E+02	5.2686E-02	5.7829E+00	1.1582E+05	4.3021E+01
2.8827E+02	4.9922E-02	5.4795E+00	1.0974E+05	4.3009E+01
2.8847E+02	3.7782E-02	4.1470E+00	8.3055E+04	4.2979E+01
2.8860E+02	3.2748E-02	3.5944E+00	7.1989E+04	4.2961E+01
2.8872E+02	2.8108E-02	3.0852E+00	6.1789E+04	4.2943E+01
2.8892E+02	2.7515E-02	3.0200E+00	6.0484E+04	4.2913E+01
2.8912E+02	2.8598E-02	3.1390E+00	6.2866E+04	4.2883E+01
2.8940E+02	3.1950E-02	3.5069E+00	7.0235E+04	4.2842E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8960E+02	3.4218E-02	3.7558E+00	7.5220E+04	4.2812E+01
2.8984E+02	3.6387E-02	3.9938E+00	7.9987E+04	4.2776E+01
2.9017E+02	3.8456E-02	4.2210E+00	8.4537E+04	4.2729E+01
2.9057E+02	3.9932E-02	4.3830E+00	8.7781E+04	4.2669E+01
2.9089E+02	4.0323E-02	4.4259E+00	8.8641E+04	4.2622E+01
2.9129E+02	4.0418E-02	4.4363E+00	8.8850E+04	4.2563E+01
2.9158E+02	3.9725E-02	4.3602E+00	8.7326E+04	4.2522E+01
2.9182E+02	3.8143E-02	4.1867E+00	8.3849E+04	4.2487E+01
2.9206E+02	3.6661E-02	4.0239E+00	8.0590E+04	4.2452E+01
2.9238E+02	3.5869E-02	3.9370E+00	7.8849E+04	4.2405E+01
2.9246E+02	3.4980E-02	3.8394E+00	7.6894E+04	4.2393E+01
2.9295E+02	3.3395E-02	3.6655E+00	7.3412E+04	4.2323E+01
2.9339E+02	3.1812E-02	3.4917E+00	6.9931E+04	4.2259E+01
2.9411E+02	3.0324E-02	3.3284E+00	6.6661E+04	4.2155E+01
2.9472E+02	2.9431E-02	3.2303E+00	6.4696E+04	4.2069E+01
2.9552E+02	2.8140E-02	3.0887E+00	6.1859E+04	4.1954E+01
2.9657E+02	2.6650E-02	2.9251E+00	5.8583E+04	4.1806E+01
2.9770E+02	2.5355E-02	2.7830E+00	5.5737E+04	4.1648E+01
2.9883E+02	2.4850E-02	2.7276E+00	5.4628E+04	4.1490E+01
3.0012E+02	2.3950E-02	2.6288E+00	5.2648E+04	4.1312E+01
3.0060E+02	2.3452E-02	2.5741E+00	5.1554E+04	4.1246E+01
3.0132E+02	2.3148E-02	2.5408E+00	5.0886E+04	4.1146E+01
3.0257E+02	2.2051E-02	2.4203E+00	4.8474E+04	4.0977E+01
3.0330E+02	2.1353E-02	2.3437E+00	4.6939E+04	4.0879E+01
3.0390E+02	2.1051E-02	2.3105E+00	4.6275E+04	4.0797E+01
3.0451E+02	2.1045E-02	2.3099E+00	4.6262E+04	4.0717E+01
3.0547E+02	1.9950E-02	2.1897E+00	4.3855E+04	4.0588E+01
3.0608E+02	1.9154E-02	2.1023E+00	4.2105E+04	4.0508E+01
3.0692E+02	1.8751E-02	2.0581E+00	4.1219E+04	4.0396E+01
3.0757E+02	1.8548E-02	2.0358E+00	4.0773E+04	4.0311E+01
3.0829E+02	1.8047E-02	1.9809E+00	3.9672E+04	4.0216E+01
3.0914E+02	1.7940E-02	1.9691E+00	3.9436E+04	4.0106E+01
3.1015E+02	1.7141E-02	1.8814E+00	3.7680E+04	3.9976E+01
3.1127E+02	1.6340E-02	1.7935E+00	3.5919E+04	3.9831E+01
3.1196E+02	1.6234E-02	1.7819E+00	3.5688E+04	3.9744E+01
3.1280E+02	1.5733E-02	1.7269E+00	3.4585E+04	3.9636E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.1421E+02	1.5226E-02	1.6712E+00	3.3470E+04	3.9459E+01
3.1538E+02	1.4918E-02	1.6374E+00	3.2793E+04	3.9312E+01
3.1607E+02	1.4220E-02	1.5609E+00	3.1260E+04	3.9227E+01
3.1728E+02	1.4307E-02	1.5703E+00	3.1450E+04	3.9078E+01
3.1820E+02	1.3607E-02	1.4935E+00	2.9911E+04	3.8964E+01
3.1909E+02	1.3697E-02	1.5034E+00	3.0109E+04	3.8856E+01
3.2000E+02	1.3491E-02	1.4807E+00	2.9656E+04	3.8745E+01
3.5000E+02	1.1806E-02	1.2959E+00	2.5953E+04	3.5424E+01
4.0000E+02	8.6318E-03	9.4743E-01	1.8975E+04	3.0996E+01
4.5000E+02	6.4894E-03	7.1228E-01	1.4265E+04	2.7552E+01
5.0000E+02	4.9967E-03	5.4844E-01	1.0984E+04	2.4797E+01
6.0000E+02	3.1422E-03	3.4489E-01	6.9073E+03	2.0664E+01
7.0000E+02	2.1032E-03	2.3085E-01	4.6234E+03	1.7712E+01
8.0000E+02	1.4774E-03	1.6217E-01	3.2478E+03	1.5498E+01
9.0000E+02	1.0784E-03	1.1837E-01	2.3706E+03	1.3776E+01
1.0000E+03	8.1199E-04	8.9125E-02	1.7850E+03	1.2398E+01
1.2500E+03	4.4306E-04	4.8631E-02	9.7396E+02	9.9187E+00
1.5000E+03	2.6926E-04	2.9554E-02	5.9190E+02	8.2656E+00
1.7500E+03	1.6280E-04	1.7869E-02	3.5787E+02	7.0848E+00
2.0000E+03	1.1002E-04	1.2076E-02	2.4186E+02	6.1992E+00
2.2500E+03	7.7649E-05	8.5228E-03	1.7069E+02	5.5104E+00
2.5000E+03	5.6732E-05	6.2270E-03	1.2471E+02	4.9594E+00
2.7500E+03	4.2640E-05	4.6802E-03	9.3735E+01	4.5085E+00
3.0000E+03	3.2812E-05	3.6015E-03	7.2130E+01	4.1328E+00
3.5000E+03	2.0565E-05	2.2573E-03	4.5208E+01	3.5424E+00
4.0000E+03	1.3677E-05	1.5012E-03	3.0065E+01	3.0996E+00
4.5000E+03	9.5193E-06	1.0449E-03	2.0926E+01	2.7552E+00
5.0000E+03	6.8687E-06	7.5392E-04	1.5099E+01	2.4797E+00
6.0000E+03	3.8840E-06	4.2631E-04	8.5380E+00	2.0664E+00
7.0000E+03	2.3838E-06	2.6165E-04	5.2403E+00	1.7712E+00
8.0000E+03	1.5535E-06	1.7051E-04	3.4149E+00	1.5498E+00
9.0000E+03	1.0596E-06	1.1630E-04	2.3292E+00	1.3776E+00
1.0000E+04	7.1204E-07	7.8154E-05	1.5653E+00	1.2398E+00
1.2500E+04	3.4480E-07	3.7846E-05	7.5796E-01	9.9187E-01
1.5000E+04	1.9066E-07	2.0928E-05	4.1913E-01	8.2656E-01
1.7500E+04	1.1553E-07	1.2681E-05	2.5396E-01	7.0848E-01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.0000E+04	7.4862E-08	8.2170E-06	1.6457E-01	6.1992E-01
2.2500E+04	5.1055E-08	5.6038E-06	1.1223E-01	5.5104E-01
2.5000E+04	3.6253E-08	3.9792E-06	7.9694E-02	4.9594E-01
2.7500E+04	2.6544E-08	2.9135E-06	5.8350E-02	4.5085E-01
3.0000E+04	1.9906E-08	2.1849E-06	4.3758E-02	4.1328E-01
3.5000E+04	1.1948E-08	1.3115E-06	2.6266E-02	3.5424E-01
4.0000E+04	7.6790E-09	8.4286E-07	1.6880E-02	3.0996E-01
4.5000E+04	5.1993E-09	5.7068E-07	1.1429E-02	2.7552E-01
5.0000E+04	3.6683E-09	4.0264E-07	8.0639E-03	2.4797E-01
6.0000E+04	2.0060E-09	2.2018E-07	4.4098E-03	2.0664E-01
7.0000E+04	1.2042E-09	1.3217E-07	2.6471E-03	1.7712E-01
8.0000E+04	7.7416E-10	8.4973E-08	1.7018E-03	1.5498E-01
9.0000E+04	5.2476E-10	5.7598E-08	1.1536E-03	1.3776E-01
1.0000E+05	3.7094E-10	4.0715E-08	8.1543E-04	1.2398E-01

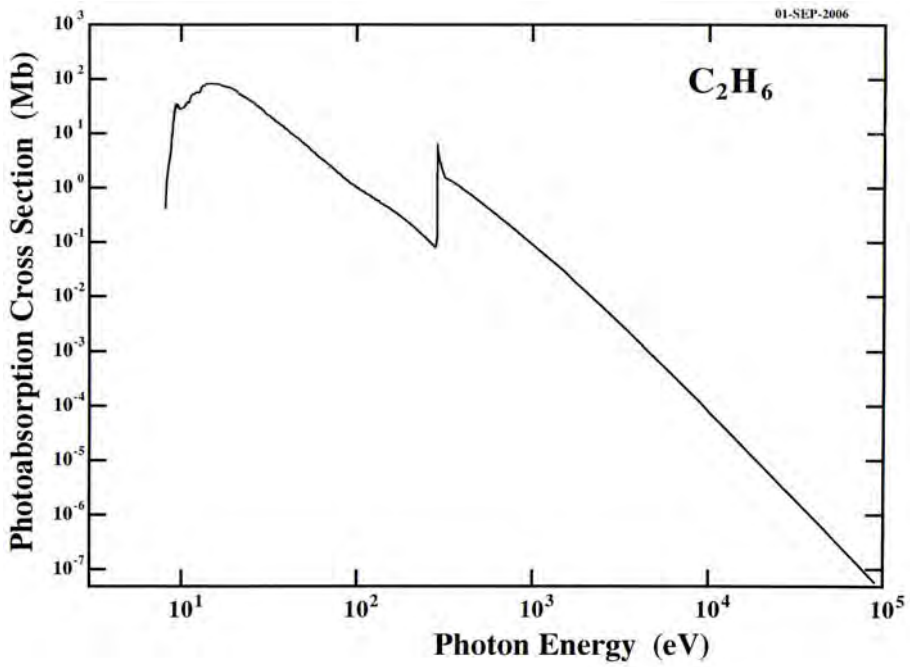
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 13.6$ and 290.7 eV for hydrogen and carbon atoms, respectively.


01-SEP-2006
C_2H_6
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^3
10^2
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^1
10^2
10^3
10^4
10^5

C_2H_6

Energy, eV	Source
7.86 - 11.52 (IP)	Fig. 6.10 p.269 (Berkowitz's book*)
	Au *et al.*, Chem. Phys., 173 (1993a) 241
IP - 21.5	Fig. 6.10 p.269 (Berkowitz's book*)
	Fig. 6.11 p.271 (Berkowitz's book*)
	Kameta *et al.*, J. Electron Spectrosc., 79 (1996) 391
21.5 - 150	Fig. 6.12 p.272 (Berkowitz's book*)
150 - 288	Fig. 6.12 p.272 (Berkowitz's book*)
	Hitchcock *et al.*, Phys. Scripta, T31 (1990) 159
	Sette *et al.*, J. Chem. Phys., 81 (1984) 4906
288 - 320	Fig. 6.11 p.271 (Berkowitz's book*)
320 - 1740	Fig. 6.12 p.272 (Berkowitz's book*)
1740.0 - 10^4	Fig. 6.12 p.272 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Methanol (CH_3OH)

Z = 18 Molecular Mass : $M_{\rm A}$ = 32.04186

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
6.2600E+00	8.9857E-04	9.8628E-02	1.8537E+03	1.9806E+03
6.3026E+00	1.0493E-03	1.1517E-01	2.1646E+03	1.9672E+03
6.3341E+00	1.2446E-03	1.3660E-01	2.5674E+03	1.9574E+03
6.3598E+00	1.4621E-03	1.6048E-01	3.0161E+03	1.9495E+03
6.3903E+00	1.8328E-03	2.0117E-01	3.7809E+03	1.9402E+03
6.4151E+00	2.2914E-03	2.5151E-01	4.7270E+03	1.9327E+03
6.4451E+00	2.8593E-03	3.1384E-01	5.8985E+03	1.9237E+03
6.4713E+00	3.4055E-03	3.7379E-01	7.0253E+03	1.9159E+03
6.4991E+00	3.8860E-03	4.2653E-01	8.0165E+03	1.9077E+03
6.5289E+00	4.3663E-03	4.7925E-01	9.0073E+03	1.8990E+03
6.5631E+00	4.7806E-03	5.2472E-01	9.8620E+03	1.8891E+03
6.5974E+00	5.1293E-03	5.6299E-01	1.0581E+04	1.8793E+03
6.6344E+00	5.3682E-03	5.8922E-01	1.1074E+04	1.8688E+03
6.6683E+00	5.5635E-03	6.1066E-01	1.1477E+04	1.8593E+03
6.7080E+00	5.6708E-03	6.2244E-01	1.1698E+04	1.8483E+03
6.7482E+00	5.7344E-03	6.2941E-01	1.1830E+04	1.8373E+03
6.7784E+00	5.7547E-03	6.3164E-01	1.1871E+04	1.8291E+03
6.8345E+00	5.6860E-03	6.2410E-01	1.1730E+04	1.8141E+03
6.8918E+00	5.5077E-03	6.0453E-01	1.1362E+04	1.7990E+03
6.9455E+00	5.3296E-03	5.8499E-01	1.0995E+04	1.7851E+03
7.0012E+00	5.1295E-03	5.6302E-01	1.0582E+04	1.7709E+03
7.0530E+00	4.9298E-03	5.4110E-01	1.0170E+04	1.7579E+03
7.1092E+00	4.6641E-03	5.1194E-01	9.6216E+03	1.7440E+03
7.1688E+00	4.3983E-03	4.8276E-01	9.0733E+03	1.7295E+03
7.2340E+00	4.1103E-03	4.5115E-01	8.4793E+03	1.7139E+03
7.2945E+00	3.8226E-03	4.1958E-01	7.8858E+03	1.6997E+03
7.3848E+00	3.3583E-03	3.6861E-01	6.9279E+03	1.6789E+03
7.4465E+00	3.0268E-03	3.3223E-01	6.2441E+03	1.6650E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.5160E+00	2.6733E-03	2.9342E-01	5.5147E+03	1.6496E+03
7.5306E+00	7.5171E-04	8.2509E-02	1.5507E+03	1.6464E+03
7.5453E+00	7.2498E-04	7.9575E-02	1.4956E+03	1.6432E+03
7.5582E+00	1.0880E-03	1.1942E-01	2.2445E+03	1.6404E+03
7.5739E+00	2.7976E-03	3.0707E-01	5.7712E+03	1.6370E+03
7.5920E+00	6.6280E-03	7.2749E-01	1.3673E+04	1.6331E+03
7.6129E+00	1.1998E-02	1.3169E+00	2.4751E+04	1.6286E+03
7.6354E+00	1.8911E-02	2.0757E+00	3.9012E+04	1.6238E+03
7.6538E+00	2.6796E-02	2.9412E+00	5.5279E+04	1.6199E+03
7.6600E+00	3.4704E-02	3.8092E+00	7.1592E+04	1.6186E+03
7.6675E+00	4.1644E-02	4.5709E+00	8.5908E+04	1.6170E+03
7.6713E+00	5.3612E-02	5.8845E+00	1.1060E+05	1.6162E+03
7.6756E+00	6.0364E-02	6.6256E+00	1.2453E+05	1.6153E+03
7.6813E+00	7.5611E-02	8.2992E+00	1.5598E+05	1.6141E+03
7.6870E+00	8.6804E-02	9.5276E+00	1.7907E+05	1.6129E+03
7.6913E+00	9.3745E-02	1.0290E+01	1.9339E+05	1.6120E+03
7.6975E+00	9.7601E-02	1.0713E+01	2.0134E+05	1.6107E+03
7.7042E+00	9.1211E-02	1.0011E+01	1.8816E+05	1.6093E+03
7.7081E+00	8.6186E-02	9.4599E+00	1.7780E+05	1.6085E+03
7.7129E+00	7.5363E-02	8.2719E+00	1.5547E+05	1.6075E+03
7.7196E+00	6.2604E-02	6.8715E+00	1.2915E+05	1.6061E+03
7.7292E+00	5.5441E-02	6.0853E+00	1.1437E+05	1.6041E+03
7.7355E+00	5.5624E-02	6.1053E+00	1.1475E+05	1.6028E+03
7.7427E+00	5.9088E-02	6.4855E+00	1.2189E+05	1.6013E+03
7.7505E+00	6.5448E-02	7.1837E+00	1.3501E+05	1.5997E+03
7.7592E+00	7.4704E-02	8.1995E+00	1.5411E+05	1.5979E+03
7.7709E+00	8.2795E-02	9.0876E+00	1.7080E+05	1.5955E+03
7.7806E+00	8.8959E-02	9.7642E+00	1.8351E+05	1.5935E+03
7.7889E+00	9.1840E-02	1.0080E+01	1.8946E+05	1.5918E+03
7.8027E+00	9.3554E-02	1.0269E+01	1.9299E+05	1.5890E+03
7.8086E+00	9.0455E-02	9.9285E+00	1.8660E+05	1.5878E+03
7.8312E+00	8.1340E-02	8.9279E+00	1.6780E+05	1.5832E+03
7.8615E+00	6.7190E-02	7.3749E+00	1.3861E+05	1.5771E+03
7.8685E+00	6.5826E-02	7.2251E+00	1.3579E+05	1.5757E+03
7.8785E+00	6.7355E-02	7.3929E+00	1.3895E+05	1.5737E+03
7.8905E+00	7.5060E-02	8.2387E+00	1.5484E+05	1.5713E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.9001E+00	7.4658E-02	8.1945E+00	1.5401E+05	1.5694E+03
7.9167E+00	6.6904E-02	7.3435E+00	1.3802E+05	1.5661E+03
7.9274E+00	6.0128E-02	6.5997E+00	1.2404E+05	1.5640E+03
7.9380E+00	5.5475E-02	6.0890E+00	1.1444E+05	1.5619E+03
7.9528E+00	5.3326E-02	5.8531E+00	1.1001E+05	1.5590E+03
7.9625E+00	4.8675E-02	5.3426E+00	1.0041E+05	1.5571E+03
7.9810E+00	4.7293E-02	5.1909E+00	9.7561E+04	1.5535E+03
8.0098E+00	4.8985E-02	5.3766E+00	1.0105E+05	1.5479E+03
8.0295E+00	4.7793E-02	5.2458E+00	9.8593E+04	1.5441E+03
8.0483E+00	4.7377E-02	5.2001E+00	9.7734E+04	1.5405E+03
8.0961E+00	4.1314E-02	4.5347E+00	8.5227E+04	1.5314E+03
8.1200E+00	4.0697E-02	4.4669E+00	8.3954E+04	1.5269E+03
8.1424E+00	3.7185E-02	4.0815E+00	7.6710E+04	1.5227E+03
8.1569E+00	3.7162E-02	4.0789E+00	7.6661E+04	1.5200E+03
8.1687E+00	3.8496E-02	4.2254E+00	7.9414E+04	1.5178E+03
8.1859E+00	3.9049E-02	4.2860E+00	8.0554E+04	1.5146E+03
8.1984E+00	4.1347E-02	4.5383E+00	8.5295E+04	1.5123E+03
8.2185E+00	4.6723E-02	5.1284E+00	9.6386E+04	1.5086E+03
8.2343E+00	5.4039E-02	5.9314E+00	1.1148E+05	1.5057E+03
8.2563E+00	7.0422E-02	7.7296E+00	1.4527E+05	1.5017E+03
8.2651E+00	8.0065E-02	8.7880E+00	1.6517E+05	1.5001E+03
8.2822E+00	9.6070E-02	1.0545E+01	1.9818E+05	1.4970E+03
8.2949E+00	1.0860E-01	1.1920E+01	2.2404E+05	1.4947E+03
8.3005E+00	1.1130E-01	1.2217E+01	2.2961E+05	1.4937E+03
8.3099E+00	1.0859E-01	1.1918E+01	2.2400E+05	1.4920E+03
8.3256E+00	8.9437E-02	9.8167E+00	1.8450E+05	1.4892E+03
8.3345E+00	7.8802E-02	8.6494E+00	1.6256E+05	1.4876E+03
8.3491E+00	6.6033E-02	7.2478E+00	1.3622E+05	1.4850E+03
8.3598E+00	6.4086E-02	7.0341E+00	1.3220E+05	1.4831E+03
8.3671E+00	6.5813E-02	7.2237E+00	1.3577E+05	1.4818E+03
8.3790E+00	7.8157E-02	8.5785E+00	1.6123E+05	1.4797E+03
8.3892E+00	9.3207E-02	1.0231E+01	1.9228E+05	1.4779E+03
8.3989E+00	1.0671E-01	1.1712E+01	2.2013E+05	1.4762E+03
8.4086E+00	1.1404E-01	1.2517E+01	2.3525E+05	1.4745E+03
8.4160E+00	1.1615E-01	1.2749E+01	2.3961E+05	1.4732E+03
8.4343E+00	1.0975E-01	1.2047E+01	2.2641E+05	1.4700E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.4492E+00	9.8522E-02	1.0814E+01	2.0324E+05	1.4674E+03
8.4642E+00	8.1894E-02	8.9888E+00	1.6894E+05	1.4648E+03
8.4787E+00	7.2989E-02	8.0113E+00	1.5057E+05	1.4623E+03
8.4926E+00	6.4084E-02	7.0339E+00	1.3220E+05	1.4599E+03
8.5002E+00	6.2529E-02	6.8632E+00	1.2899E+05	1.4586E+03
8.5101E+00	6.3480E-02	6.9677E+00	1.3095E+05	1.4569E+03
8.5277E+00	6.5580E-02	7.1981E+00	1.3529E+05	1.4539E+03
8.5377E+00	6.5952E-02	7.2389E+00	1.3605E+05	1.4522E+03
8.5489E+00	6.4777E-02	7.1099E+00	1.3363E+05	1.4503E+03
8.5713E+00	5.7792E-02	6.3433E+00	1.1922E+05	1.4465E+03
8.5963E+00	4.9066E-02	5.3855E+00	1.0122E+05	1.4423E+03
8.6184E+00	4.2081E-02	4.6189E+00	8.6810E+04	1.4386E+03
8.6310E+00	3.9554E-02	4.3414E+00	8.1596E+04	1.4365E+03
8.6539E+00	3.8170E-02	4.1896E+00	7.8741E+04	1.4327E+03
8.6891E+00	3.7928E-02	4.1631E+00	7.8243E+04	1.4269E+03
8.7074E+00	3.7324E-02	4.0967E+00	7.6996E+04	1.4239E+03
8.7202E+00	3.5762E-02	3.9252E+00	7.3773E+04	1.4218E+03
8.7436E+00	3.0901E-02	3.3917E+00	6.3746E+04	1.4180E+03
8.7628E+00	2.7784E-02	3.0496E+00	5.7317E+04	1.4149E+03
8.7851E+00	2.6981E-02	2.9615E+00	5.5660E+04	1.4113E+03
8.8051E+00	2.7535E-02	3.0222E+00	5.6802E+04	1.4081E+03
8.8472E+00	3.0569E-02	3.3553E+00	6.3062E+04	1.4014E+03
8.8617E+00	3.1129E-02	3.4167E+00	6.4216E+04	1.3991E+03
8.8973E+00	3.1662E-02	3.4753E+00	6.5316E+04	1.3935E+03
8.9178E+00	3.2793E-02	3.5994E+00	6.7650E+04	1.3903E+03
8.9313E+00	3.3742E-02	3.7035E+00	6.9606E+04	1.3882E+03
8.9590E+00	3.7762E-02	4.1447E+00	7.7899E+04	1.3839E+03
8.9714E+00	3.9290E-02	4.3125E+00	8.1052E+04	1.3820E+03
8.9844E+00	3.9854E-02	4.3744E+00	8.2214E+04	1.3800E+03
8.9967E+00	4.1962E-02	4.6058E+00	8.6564E+04	1.3781E+03
9.0466E+00	5.2907E-02	5.8071E+00	1.0914E+05	1.3705E+03
9.0566E+00	5.4826E-02	6.0178E+00	1.1310E+05	1.3690E+03
9.0705E+00	5.6161E-02	6.1642E+00	1.1585E+05	1.3669E+03
9.1018E+00	5.8439E-02	6.4143E+00	1.2055E+05	1.3622E+03
9.1232E+00	6.0923E-02	6.6869E+00	1.2568E+05	1.3590E+03
9.1609E+00	6.3966E-02	7.0210E+00	1.3196E+05	1.3534E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.1752E+00	6.5300E-02	7.1674E+00	1.3471E+05	1.3513E+03
9.1867E+00	6.3741E-02	6.9963E+00	1.3149E+05	1.3496E+03
9.1915E+00	6.3349E-02	6.9533E+00	1.3068E+05	1.3489E+03
9.2381E+00	5.7778E-02	6.3417E+00	1.1919E+05	1.3421E+03
9.3263E+00	6.9334E-02	7.6102E+00	1.4303E+05	1.3294E+03
9.4163E+00	8.1681E-02	8.9653E+00	1.6850E+05	1.3167E+03
9.4963E+00	9.9588E-02	1.0931E+01	2.0544E+05	1.3056E+03
9.5146E+00	1.0426E-01	1.1444E+01	2.1509E+05	1.3031E+03
9.5328E+00	1.0658E-01	1.1698E+01	2.1987E+05	1.3006E+03
9.5755E+00	1.0724E-01	1.1770E+01	2.2122E+05	1.2948E+03
9.5911E+00	1.0877E-01	1.1938E+01	2.2438E+05	1.2927E+03
9.6022E+00	1.1150E-01	1.2239E+01	2.3002E+05	1.2912E+03
9.6366E+00	1.2679E-01	1.3917E+01	2.6156E+05	1.2866E+03
9.6553E+00	1.3226E-01	1.4517E+01	2.7284E+05	1.2841E+03
9.6946E+00	1.2267E-01	1.3464E+01	2.5306E+05	1.2789E+03
9.7113E+00	1.2105E-01	1.3286E+01	2.4971E+05	1.2767E+03
9.7304E+00	1.2138E-01	1.3323E+01	2.5040E+05	1.2742E+03
9.7549E+00	1.2683E-01	1.3922E+01	2.6165E+05	1.2710E+03
9.7687E+00	1.2956E-01	1.4221E+01	2.6727E+05	1.2692E+03
9.7864E+00	1.3030E-01	1.4302E+01	2.6880E+05	1.2669E+03
9.8283E+00	1.2781E-01	1.4029E+01	2.6366E+05	1.2615E+03
9.8541E+00	1.3089E-01	1.4367E+01	2.7002E+05	1.2582E+03
9.8659E+00	1.2929E-01	1.4191E+01	2.6671E+05	1.2567E+03
9.8808E+00	1.3200E-01	1.4489E+01	2.7231E+05	1.2548E+03
9.9164E+00	1.3190E-01	1.4478E+01	2.7211E+05	1.2503E+03
9.9530E+00	1.3575E-01	1.4900E+01	2.8004E+05	1.2457E+03
9.9899E+00	1.3565E-01	1.4889E+01	2.7983E+05	1.2411E+03
1.0012E+01	1.3755E-01	1.5098E+01	2.8376E+05	1.2384E+03
1.0048E+01	1.3430E-01	1.4741E+01	2.7705E+05	1.2339E+03
1.0123E+01	1.3331E-01	1.4632E+01	2.7500E+05	1.2248E+03
1.0137E+01	1.3209E-01	1.4498E+01	2.7248E+05	1.2231E+03
1.0155E+01	1.3165E-01	1.4450E+01	2.7158E+05	1.2209E+03
1.0199E+01	1.2679E-01	1.3917E+01	2.6156E+05	1.2157E+03
1.0236E+01	1.2157E-01	1.3343E+01	2.5078E+05	1.2112E+03
1.0254E+01	1.2073E-01	1.3251E+01	2.4905E+05	1.2091E+03
1.0274E+01	1.2541E-01	1.3765E+01	2.5872E+05	1.2068E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0281E+01	1.2816E-01	1.4067E+01	2.6438E+05	1.2060E+03
1.0293E+01	1.3010E-01	1.4280E+01	2.6838E+05	1.2045E+03
1.0330E+01	1.2724E-01	1.3966E+01	2.6248E+05	1.2002E+03
1.0357E+01	1.2401E-01	1.3611E+01	2.5582E+05	1.1971E+03
1.0384E+01	1.2354E-01	1.3560E+01	2.5486E+05	1.1940E+03
1.0421E+01	1.2740E-01	1.3984E+01	2.6282E+05	1.1898E+03
1.0465E+01	1.3044E-01	1.4318E+01	2.6910E+05	1.1848E+03
1.0518E+01	1.3032E-01	1.4304E+01	2.6883E+05	1.1788E+03
1.0542E+01	1.3183E-01	1.4470E+01	2.7195E+05	1.1761E+03
1.0583E+01	1.3766E-01	1.5109E+01	2.8397E+05	1.1715E+03
1.0634E+01	1.3673E-01	1.5008E+01	2.8207E+05	1.1659E+03
1.0676E+01	1.4177E-01	1.5560E+01	2.9245E+05	1.1613E+03
1.0730E+01	1.4322E-01	1.5719E+01	2.9544E+05	1.1555E+03
1.0777E+01	1.4941E-01	1.6400E+01	3.0823E+05	1.1505E+03
1.0845E+01	1.5399E-01	1.6902E+01	3.1767E+05	1.1432E+03
1.0859E+01	1.5475E-01	1.6985E+01	3.1923E+05	1.1418E+03
1.0850E+01	1.6145E-01	1.7721E+01	3.3305E+05	1.1427E+03
1.1210E+01	2.1965E-01	2.4109E+01	4.5313E+05	1.1060E+03
1.1510E+01	2.9275E-01	3.2133E+01	6.0392E+05	1.0772E+03
1.1780E+01	3.4778E-01	3.8172E+01	7.1744E+05	1.0525E+03
1.2000E+01	3.6321E-01	3.9867E+01	7.4928E+05	1.0332E+03
1.2300E+01	3.6203E-01	3.9737E+01	7.4684E+05	1.0080E+03
1.2680E+01	3.4369E-01	3.7724E+01	7.0901E+05	9.7779E+02
1.3020E+01	4.0271E-01	4.4202E+01	8.3076E+05	9.5226E+02
1.3280E+01	4.6183E-01	5.0691E+01	9.5271E+05	9.3362E+02
1.3590E+01	5.0587E-01	5.5524E+01	1.0436E+06	9.1232E+02
1.4000E+01	5.4537E-01	5.9860E+01	1.1250E+06	8.8560E+02
1.4270E+01	5.4428E-01	5.9740E+01	1.1228E+06	8.6884E+02
1.4700E+01	5.2766E-01	5.7916E+01	1.0885E+06	8.4343E+02
1.5020E+01	5.0360E-01	5.5275E+01	1.0389E+06	8.2546E+02
1.5390E+01	4.9043E-01	5.3830E+01	1.0117E+06	8.0562E+02
1.5730E+01	5.1104E-01	5.6092E+01	1.0542E+06	7.8820E+02
1.6000E+01	5.1794E-01	5.6850E+01	1.0685E+06	7.7490E+02
1.6590E+01	5.1395E-01	5.6411E+01	1.0602E+06	7.4734E+02
1.7190E+01	5.1159E-01	5.6152E+01	1.0554E+06	7.2126E+02
1.7640E+01	5.0305E-01	5.5215E+01	1.0378E+06	7.0286E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8000E+01	4.9216E-01	5.4019E+01	1.0153E+06	6.8880E+02
1.8660E+01	4.9043E-01	5.3830E+01	1.0117E+06	6.6444E+02
1.9260E+01	4.9561E-01	5.4398E+01	1.0224E+06	6.4374E+02
2.0000E+01	4.8934E-01	5.3710E+01	1.0095E+06	6.1992E+02
2.0620E+01	4.7472E-01	5.2106E+01	9.7931E+05	6.0128E+02
2.1210E+01	4.5556E-01	5.0003E+01	9.3978E+05	5.8456E+02
2.1500E+01	4.2364E-01	4.6500E+01	8.7394E+05	5.7667E+02
2.2000E+01	4.0865E-01	4.4853E+01	8.4300E+05	5.6356E+02
2.2500E+01	3.9703E-01	4.3578E+01	8.1903E+05	5.5104E+02
2.3000E+01	3.8266E-01	4.2002E+01	7.8940E+05	5.3906E+02
2.3500E+01	3.6703E-01	4.0286E+01	7.5715E+05	5.2759E+02
2.4000E+01	3.5415E-01	3.8871E+01	7.3057E+05	5.1660E+02
2.4500E+01	3.4115E-01	3.7445E+01	7.0377E+05	5.0606E+02
2.5000E+01	3.2764E-01	3.5962E+01	6.7588E+05	4.9594E+02
2.5500E+01	3.1221E-01	3.4269E+01	6.4407E+05	4.8621E+02
2.6000E+01	2.9838E-01	3.2750E+01	6.1553E+05	4.7686E+02
2.6500E+01	2.8856E-01	3.1672E+01	5.9527E+05	4.6786E+02
2.7000E+01	2.7778E-01	3.0490E+01	5.7304E+05	4.5920E+02
2.7500E+01	2.6754E-01	2.9365E+01	5.5191E+05	4.5085E+02
2.8000E+01	2.6141E-01	2.8693E+01	5.3927E+05	4.4280E+02
2.8500E+01	2.5317E-01	2.7788E+01	5.2227E+05	4.3503E+02
2.9000E+01	2.4493E-01	2.6884E+01	5.0528E+05	4.2753E+02
2.9500E+01	2.3585E-01	2.5887E+01	4.8654E+05	4.2029E+02
3.0000E+01	2.1688E-01	2.3805E+01	4.4740E+05	4.1328E+02
3.0500E+01	2.0777E-01	2.2805E+01	4.2861E+05	4.0651E+02
3.1000E+01	1.9826E-01	2.1762E+01	4.0900E+05	3.9995E+02
3.1500E+01	1.9576E-01	2.1487E+01	4.0384E+05	3.9360E+02
3.2000E+01	1.9176E-01	2.1048E+01	3.9558E+05	3.8745E+02
3.2500E+01	1.8505E-01	2.0312E+01	3.8175E+05	3.8149E+02
3.3000E+01	1.7915E-01	1.9663E+01	3.6957E+05	3.7571E+02
3.3500E+01	1.7524E-01	1.9235E+01	3.6151E+05	3.7010E+02
3.4000E+01	1.7164E-01	1.8840E+01	3.5408E+05	3.6466E+02
3.4500E+01	1.6574E-01	1.8191E+01	3.4190E+05	3.5937E+02
3.5000E+01	1.5923E-01	1.7477E+01	3.2848E+05	3.5424E+02
3.6000E+01	1.5893E-01	1.7444E+01	3.2786E+05	3.4440E+02
3.7000E+01	1.4942E-01	1.6401E+01	3.0825E+05	3.3509E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.8000E+01	1.4422E-01	1.5830E+01	2.9751E+05	3.2627E+02
3.9000E+01	1.3361E-01	1.4665E+01	2.7563E+05	3.1791E+02
4.0000E+01	1.2771E-01	1.4017E+01	2.6344E+05	3.0996E+02
4.1000E+01	1.2470E-01	1.3687E+01	2.5725E+05	3.0240E+02
4.2000E+01	1.1700E-01	1.2842E+01	2.4135E+05	2.9520E+02
4.3000E+01	1.1219E-01	1.2314E+01	2.3144E+05	2.8834E+02
4.4000E+01	1.0649E-01	1.1688E+01	2.1967E+05	2.8178E+02
4.5000E+01	9.9982E-02	1.0974E+01	2.0625E+05	2.7552E+02
4.6000E+01	9.7580E-02	1.0711E+01	2.0130E+05	2.6953E+02
4.7000E+01	9.7180E-02	1.0667E+01	2.0047E+05	2.6380E+02
4.8000E+01	9.2276E-02	1.0128E+01	1.9036E+05	2.5830E+02
4.9000E+01	8.8873E-02	9.7548E+00	1.8334E+05	2.5303E+02
5.0000E+01	8.3769E-02	9.1946E+00	1.7281E+05	2.4797E+02
5.1000E+01	8.2768E-02	9.0847E+00	1.7074E+05	2.4311E+02
5.2000E+01	7.8064E-02	8.5684E+00	1.6104E+05	2.3843E+02
5.3000E+01	7.4561E-02	8.1839E+00	1.5381E+05	2.3393E+02
5.4000E+01	7.2760E-02	7.9862E+00	1.5010E+05	2.2960E+02
5.5000E+01	6.9057E-02	7.5797E+00	1.4246E+05	2.2543E+02
5.6000E+01	6.6855E-02	7.3381E+00	1.3792E+05	2.2140E+02
5.7000E+01	6.5854E-02	7.2282E+00	1.3585E+05	2.1752E+02
5.8000E+01	6.3953E-02	7.0195E+00	1.3193E+05	2.1377E+02
5.9000E+01	6.1150E-02	6.7119E+00	1.2615E+05	2.1014E+02
6.0000E+01	5.4945E-02	6.0308E+00	1.1335E+05	2.0664E+02
6.1000E+01	5.7147E-02	6.2725E+00	1.1789E+05	2.0325E+02
6.2000E+01	5.4345E-02	5.9649E+00	1.1211E+05	1.9997E+02
6.3000E+01	5.4044E-02	5.9320E+00	1.1149E+05	1.9680E+02
6.4000E+01	5.2843E-02	5.8002E+00	1.0901E+05	1.9373E+02
6.5000E+01	5.2343E-02	5.7452E+00	1.0798E+05	1.9074E+02
6.6000E+01	4.7939E-02	5.2619E+00	9.8895E+04	1.8785E+02
6.7000E+01	4.9040E-02	5.3827E+00	1.0117E+05	1.8505E+02
6.8000E+01	4.6438E-02	5.0971E+00	9.5798E+04	1.8233E+02
6.9000E+01	4.3636E-02	4.7895E+00	9.0017E+04	1.7969E+02
7.0000E+01	4.3035E-02	4.7236E+00	8.8778E+04	1.7712E+02
7.1000E+01	4.1734E-02	4.5808E+00	8.6094E+04	1.7463E+02
7.2000E+01	4.0433E-02	4.4380E+00	8.3410E+04	1.7220E+02
7.3000E+01	3.8732E-02	4.2512E+00	7.9901E+04	1.6984E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.4000E+01	3.8231E-02	4.1963E+00	7.8868E+04	1.6755E+02
7.5000E+01	3.8632E-02	4.2403E+00	7.9694E+04	1.6531E+02
7.6000E+01	3.8031E-02	4.1744E+00	7.8455E+04	1.6314E+02
7.7000E+01	3.6430E-02	3.9986E+00	7.5152E+04	1.6102E+02
7.8000E+01	3.4829E-02	3.8228E+00	7.1849E+04	1.5895E+02
7.9000E+01	3.5129E-02	3.8558E+00	7.2468E+04	1.5694E+02
8.0000E+01	3.4028E-02	3.7349E+00	7.0197E+04	1.5498E+02
8.5000E+01	2.8924E-02	3.1747E+00	5.9667E+04	1.4586E+02
9.0000E+01	2.5521E-02	2.8012E+00	5.2648E+04	1.3776E+02
9.5000E+01	2.2919E-02	2.5156E+00	4.7280E+04	1.3051E+02
1.0000E+02	2.0117E-02	2.2080E+00	4.1499E+04	1.2398E+02
1.0500E+02	1.8215E-02	1.9993E+00	3.7576E+04	1.1808E+02
1.1000E+02	1.6614E-02	1.8235E+00	3.4273E+04	1.1271E+02
1.1500E+02	1.5012E-02	1.6478E+00	3.0969E+04	1.0781E+02
1.2000E+02	1.3311E-02	1.4610E+00	2.7459E+04	1.0332E+02
1.2500E+02	1.2610E-02	1.3841E+00	2.6014E+04	9.9187E+01
1.3000E+02	1.1309E-02	1.2413E+00	2.3330E+04	9.5372E+01
1.3500E+02	1.0509E-02	1.1534E+00	2.1678E+04	9.1840E+01
1.4000E+02	9.7080E-03	1.0656E+00	2.0027E+04	8.8560E+01
1.4500E+02	9.2076E-03	1.0106E+00	1.8994E+04	8.5506E+01
1.5000E+02	8.9219E-03	9.7928E-01	1.8405E+04	8.2656E+01
1.7500E+02	6.2966E-03	6.9112E-01	1.2989E+04	7.0848E+01
2.0000E+02	4.5302E-03	4.9724E-01	9.3454E+03	6.1992E+01
2.2500E+02	3.3108E-03	3.6340E-01	6.8300E+03	5.5104E+01
2.5000E+02	2.4527E-03	2.6921E-01	5.0597E+03	4.9594E+01
2.7500E+02	1.8381E-03	2.0175E-01	3.7918E+03	4.5085E+01
2.8615E+02	1.6213E-03	1.7796E-01	3.3447E+03	4.3328E+01
2.8690E+02	4.3436E-03	4.7676E-01	8.9604E+03	4.3215E+01
2.8696E+02	4.4577E-03	4.8928E-01	9.1958E+03	4.3206E+01
2.8700E+02	4.5147E-03	4.9553E-01	9.3134E+03	4.3200E+01
2.8724E+02	6.2242E-03	6.8317E-01	1.2840E+04	4.3164E+01
2.8758E+02	1.4487E-02	1.5901E+00	2.9886E+04	4.3113E+01
2.8786E+02	2.4060E-02	2.6408E+00	4.9633E+04	4.3071E+01
2.8802E+02	2.6340E-02	2.8911E+00	5.4336E+04	4.3047E+01
2.8852E+02	2.2637E-02	2.4846E+00	4.6697E+04	4.2972E+01
2.8870E+02	2.3092E-02	2.5347E+00	4.7638E+04	4.2946E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8883E+02	2.4346E-02	2.6723E+00	5.0224E+04	4.2926E+01
2.8898E+02	3.0330E-02	3.3290E+00	6.2567E+04	4.2904E+01
2.8916E+02	4.4062E-02	4.8363E+00	9.0896E+04	4.2877E+01
2.8925E+02	6.1042E-02	6.7000E+00	1.2592E+05	4.2864E+01
2.8934E+02	6.2242E-02	6.8317E+00	1.2840E+05	4.2851E+01
2.8940E+02	6.0985E-02	6.6938E+00	1.2581E+05	4.2842E+01
2.8956E+02	5.5231E-02	6.0622E+00	1.1394E+05	4.2818E+01
2.8969E+02	4.7082E-02	5.1678E+00	9.7127E+04	4.2799E+01
2.8988E+02	3.7168E-02	4.0796E+00	7.6675E+04	4.2771E+01
2.9001E+02	3.2041E-02	3.5168E+00	6.6097E+04	4.2752E+01
2.9029E+02	3.3352E-02	3.6607E+00	6.8802E+04	4.2710E+01
2.9048E+02	3.2327E-02	3.5482E+00	6.6687E+04	4.2683E+01
2.9064E+02	3.2327E-02	3.5482E+00	6.6687E+04	4.2659E+01
2.9082E+02	3.3296E-02	3.6546E+00	6.8686E+04	4.2633E+01
2.9101E+02	3.5233E-02	3.8672E+00	7.2683E+04	4.2605E+01
2.9129E+02	3.6031E-02	3.9548E+00	7.4329E+04	4.2564E+01
2.9141E+02	3.5462E-02	3.8923E+00	7.3155E+04	4.2546E+01
2.9176E+02	3.5406E-02	3.8861E+00	7.3039E+04	4.2495E+01
2.9207E+02	3.4665E-02	3.8049E+00	7.1511E+04	4.2450E+01
2.9251E+02	3.4438E-02	3.7799E+00	7.1042E+04	4.2386E+01
2.9298E+02	3.2729E-02	3.5924E+00	6.7518E+04	4.2318E+01
2.9376E+02	3.0167E-02	3.3111E+00	6.2231E+04	4.2206E+01
2.9438E+02	2.7546E-02	3.0235E+00	5.6826E+04	4.2117E+01
2.9517E+02	2.5154E-02	2.7610E+00	5.1891E+04	4.2004E+01
2.9564E+02	2.3446E-02	2.5734E+00	4.8367E+04	4.1938E+01
2.9595E+02	2.3446E-02	2.5735E+00	4.8368E+04	4.1894E+01
2.9639E+02	2.1966E-02	2.4110E+00	4.5314E+04	4.1831E+01
2.9698E+02	2.1055E-02	2.3110E+00	4.3434E+04	4.1748E+01
2.9754E+02	2.0258E-02	2.2235E+00	4.1791E+04	4.1670E+01
2.9785E+02	1.9404E-02	2.1298E+00	4.0028E+04	4.1626E+01
2.9832E+02	1.9234E-02	2.1111E+00	3.9678E+04	4.1561E+01
2.9910E+02	1.8380E-02	2.0174E+00	3.7917E+04	4.1452E+01
2.9945E+02	1.8324E-02	2.0113E+00	3.7801E+04	4.1404E+01
3.0063E+02	1.7015E-02	1.8676E+00	3.5101E+04	4.1241E+01
3.0091E+02	1.7301E-02	1.8989E+00	3.5690E+04	4.1203E+01
3.0135E+02	1.6845E-02	1.8490E+00	3.4751E+04	4.1143E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0163E+02	1.6960E-02	1.8615E+00	3.4986E+04	4.1105E+01
3.0210E+02	1.6505E-02	1.8116E+00	3.4049E+04	4.1041E+01
3.0238E+02	1.6733E-02	1.8366E+00	3.4519E+04	4.1003E+01
3.0276E+02	1.6335E-02	1.7930E+00	3.3698E+04	4.0951E+01
3.0426E+02	1.5540E-02	1.7057E+00	3.2057E+04	4.0749E+01
3.0466E+02	1.5540E-02	1.7057E+00	3.2058E+04	4.0696E+01
3.0482E+02	1.5256E-02	1.6745E+00	3.1471E+04	4.0675E+01
3.0513E+02	1.5427E-02	1.6933E+00	3.1825E+04	4.0633E+01
3.0601E+02	1.4403E-02	1.5809E+00	2.9713E+04	4.0516E+01
3.0660E+02	1.4404E-02	1.5810E+00	2.9714E+04	4.0438E+01
3.0841E+02	1.3382E-02	1.4688E+00	2.7605E+04	4.0201E+01
3.0903E+02	1.3667E-02	1.5001E+00	2.8194E+04	4.0120E+01
3.0928E+02	1.2927E-02	1.4189E+00	2.6667E+04	4.0088E+01
3.0960E+02	1.3156E-02	1.4440E+00	2.7139E+04	4.0047E+01
3.1066E+02	1.2473E-02	1.3691E+00	2.5731E+04	3.9910E+01
3.1110E+02	1.2759E-02	1.4004E+00	2.6321E+04	3.9853E+01
3.1213E+02	1.2248E-02	1.3443E+00	2.5266E+04	3.9722E+01
3.1297E+02	1.1794E-02	1.2945E+00	2.4329E+04	3.9615E+01
3.1319E+02	1.2136E-02	1.3320E+00	2.5035E+04	3.9588E+01
3.1375E+02	1.1396E-02	1.2508E+00	2.3509E+04	3.9517E+01
3.1453E+02	1.1454E-02	1.2572E+00	2.3628E+04	3.9419E+01
3.1590E+02	1.0317E-02	1.1324E+00	2.1283E+04	3.9248E+01
3.1640E+02	1.0660E-02	1.1700E+00	2.1990E+04	3.9186E+01
3.1800E+02	9.7504E-03	1.0702E+00	2.0114E+04	3.8989E+01
3.1856E+02	1.0264E-02	1.1266E+00	2.1174E+04	3.8920E+01
3.1903E+02	9.5237E-03	1.0453E+00	1.9647E+04	3.8863E+01
3.1965E+02	9.8671E-03	1.0830E+00	2.0355E+04	3.8787E+01
3.2000E+02	9.4774E-03	1.0402E+00	1.9551E+04	3.8745E+01
3.2200E+02	9.0784E-03	9.9645E-01	1.8728E+04	3.8504E+01
3.2400E+02	9.1781E-03	1.0074E+00	1.8934E+04	3.8267E+01
3.2600E+02	8.8788E-03	9.7455E-01	1.8316E+04	3.8032E+01
3.2800E+02	8.8788E-03	9.7455E-01	1.8316E+04	3.7800E+01
3.3000E+02	8.5795E-03	9.4170E-01	1.7699E+04	3.7571E+01
3.3500E+02	8.2803E-03	9.0885E-01	1.7081E+04	3.7010E+01
3.4000E+02	7.8812E-03	8.6505E-01	1.6258E+04	3.6466E+01
3.4500E+02	7.9810E-03	8.7600E-01	1.6464E+04	3.5937E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.5000E+02	7.7815E-03	8.5410E-01	1.6052E+04	3.5424E+01
4.0000E+02	4.9272E-03	5.4082E-01	1.0164E+04	3.0996E+01
4.5000E+02	3.6736E-03	4.0321E-01	7.5782E+03	2.7552E+01
5.0000E+02	2.8145E-03	3.0892E-01	5.8060E+03	2.4797E+01
5.3200E+02	2.4028E-03	2.6374E-01	4.9568E+03	2.3305E+01
5.3346E+02	5.3970E-03	5.9238E-01	1.1134E+04	2.3242E+01
5.3374E+02	9.2082E-03	1.0107E+00	1.8996E+04	2.3229E+01
5.3404E+02	1.0389E-02	1.1403E+00	2.1432E+04	2.3216E+01
5.3426E+02	9.1691E-03	1.0064E+00	1.8915E+04	2.3207E+01
5.3454E+02	6.1573E-03	6.7583E-01	1.2702E+04	2.3195E+01
5.3471E+02	5.2802E-03	5.7956E-01	1.0893E+04	2.3187E+01
5.3493E+02	4.5555E-03	5.0002E-01	9.3977E+03	2.3178E+01
5.3555E+02	7.8707E-03	8.6389E-01	1.6237E+04	2.3151E+01
5.3597E+02	1.0233E-02	1.1232E+00	2.1110E+04	2.3133E+01
5.3619E+02	1.1224E-02	1.2319E+00	2.3154E+04	2.3123E+01
5.3655E+02	1.3739E-02	1.5080E+00	2.8342E+04	2.3108E+01
5.3694E+02	1.6597E-02	1.8217E+00	3.4238E+04	2.3091E+01
5.3719E+02	1.6940E-02	1.8593E+00	3.4945E+04	2.3080E+01
5.3755E+02	1.6329E-02	1.7922E+00	3.3685E+04	2.3065E+01
5.3772E+02	1.5758E-02	1.7296E+00	3.2507E+04	2.3057E+01
5.3817E+02	1.5566E-02	1.7086E+00	3.2112E+04	2.3038E+01
5.3833E+02	1.5108E-02	1.6583E+00	3.1167E+04	2.3031E+01
5.3859E+02	1.4841E-02	1.6290E+00	3.0616E+04	2.3020E+01
5.3898E+02	1.4269E-02	1.5661E+00	2.9435E+04	2.3003E+01
5.3939E+02	1.3391E-02	1.4698E+00	2.7624E+04	2.2986E+01
5.3995E+02	1.2398E-02	1.3609E+00	2.5577E+04	2.2962E+01
5.4090E+02	1.0872E-02	1.1933E+00	2.2428E+04	2.2922E+01
5.4157E+02	9.9557E-03	1.0927E+00	2.0538E+04	2.2893E+01
5.4187E+02	9.8789E-03	1.0843E+00	2.0379E+04	2.2881E+01
5.4210E+02	9.3830E-03	1.0299E+00	1.9356E+04	2.2871E+01
5.4257E+02	9.2677E-03	1.0172E+00	1.9118E+04	2.2851E+01
5.4302E+02	8.8475E-03	9.7112E-01	1.8252E+04	2.2832E+01
5.4330E+02	8.4277E-03	9.2503E-01	1.7386E+04	2.2821E+01
5.4349E+02	8.6179E-03	9.4591E-01	1.7778E+04	2.2813E+01
5.4377E+02	8.3124E-03	9.1238E-01	1.7148E+04	2.2801E+01
5.4461E+02	7.9678E-03	8.7456E-01	1.6437E+04	2.2766E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.4494E+02	7.9671E-03	8.7448E-01	1.6436E+04	2.2752E+01
5.4522E+02	7.6235E-03	8.3677E-01	1.5727E+04	2.2740E+01
5.4597E+02	7.5840E-03	8.3243E-01	1.5645E+04	2.2709E+01
5.4656E+02	7.4305E-03	8.1557E-01	1.5328E+04	2.2684E+01
5.4686E+02	7.2392E-03	7.9458E-01	1.4934E+04	2.2672E+01
5.4714E+02	7.3911E-03	8.1125E-01	1.5247E+04	2.2660E+01
5.4801E+02	7.0845E-03	7.7760E-01	1.4615E+04	2.2624E+01
5.5004E+02	6.8138E-03	7.4789E-01	1.4056E+04	2.2541E+01
5.5216E+02	6.8098E-03	7.4745E-01	1.4048E+04	2.2454E+01
5.5403E+02	6.7300E-03	7.3869E-01	1.3883E+04	2.2379E+01
5.5698E+02	6.6863E-03	7.3389E-01	1.3793E+04	2.2260E+01
5.6002E+02	6.5661E-03	7.2071E-01	1.3545E+04	2.2139E+01
5.6220E+02	6.4858E-03	7.1188E-01	1.3380E+04	2.2053E+01
5.6406E+02	6.3297E-03	6.9476E-01	1.3058E+04	2.1981E+01
5.6607E+02	6.2115E-03	6.8178E-01	1.2814E+04	2.1903E+01
5.6800E+02	6.0934E-03	6.6882E-01	1.2570E+04	2.1828E+01
6.0000E+02	5.6224E-03	6.1712E-01	1.1599E+04	2.0664E+01
7.0000E+02	3.8382E-03	4.2128E-01	7.9179E+03	1.7712E+01
8.0000E+02	2.7310E-03	2.9976E-01	5.6338E+03	1.5498E+01
9.0000E+02	2.0097E-03	2.2058E-01	4.1458E+03	1.3776E+01
1.0000E+03	1.5205E-03	1.6690E-01	3.1367E+03	1.2398E+01
1.2500E+03	8.3215E-04	9.1338E-02	1.7167E+03	9.9187E+00
1.5000E+03	5.0341E-04	5.5254E-02	1.0385E+03	8.2656E+00
1.7500E+03	3.2725E-04	3.5919E-02	6.7508E+02	7.0848E+00
2.0000E+03	2.2455E-04	2.4647E-02	4.6323E+02	6.1992E+00
2.2500E+03	1.6031E-04	1.7596E-02	3.3070E+02	5.5104E+00
2.5000E+03	1.1830E-04	1.2984E-02	2.4404E+02	4.9594E+00
2.7500E+03	8.9781E-05	9.8545E-03	1.8521E+02	4.5085E+00
3.0000E+03	6.9708E-05	7.6512E-03	1.4380E+02	4.1328E+00
3.5000E+03	4.4342E-05	4.8670E-03	9.1474E+01	3.5424E+00
4.0000E+03	2.9811E-05	3.2721E-03	6.1498E+01	3.0996E+00
4.5000E+03	2.0904E-05	2.2945E-03	4.3124E+01	2.7552E+00
5.0000E+03	1.5154E-05	1.6633E-03	3.1262E+01	2.4797E+00
6.0000E+03	8.5931E-06	9.4319E-04	1.7727E+01	2.0664E+00
7.0000E+03	5.2540E-06	5.7669E-04	1.0839E+01	1.7712E+00
8.0000E+03	3.3936E-06	3.7248E-04	7.0006E+00	1.5498E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0000E+03	2.2845E-06	2.5075E-04	4.7127E+00	1.3776E+00
1.0000E+04	1.6517E-06	1.8129E-04	3.4073E+00	1.2398E+00
1.2500E+04	8.0797E-07	8.8684E-05	1.6668E+00	9.9187E-01
1.5000E+04	4.5043E-07	4.9439E-05	9.2919E-01	8.2656E-01
1.7500E+04	2.7485E-07	3.0168E-05	5.6699E-01	7.0848E-01
2.0000E+04	1.7917E-07	1.9665E-05	3.6960E-01	6.1992E-01
2.2500E+04	1.2284E-07	1.3483E-05	2.5341E-01	5.5104E-01
2.5000E+04	8.7646E-08	9.6201E-06	1.8081E-01	4.9594E-01
2.7500E+04	6.4415E-08	7.0703E-06	1.3288E-01	4.5085E-01
3.0000E+04	4.8430E-08	5.3158E-06	9.9908E-02	4.1328E-01
3.5000E+04	2.9197E-08	3.2046E-06	6.0230E-02	3.5424E-01
4.0000E+04	1.8836E-08	2.0675E-06	3.8857E-02	3.0996E-01
4.5000E+04	1.2797E-08	1.4046E-06	2.6398E-02	2.7552E-01
5.0000E+04	9.0558E-09	9.9398E-07	1.8681E-02	2.4797E-01
6.0000E+04	4.9783E-09	5.4642E-07	1.0270E-02	2.0664E-01
7.0000E+04	3.0018E-09	3.2948E-07	6.1924E-03	1.7712E-01
8.0000E+04	1.9362E-09	2.1251E-07	3.9941E-03	1.5498E-01
9.0000E+04	1.3145E-09	1.4428E-07	2.7116E-03	1.3776E-01
1.0000E+05	9.2929E-10	1.0200E-07	1.9170E-03	1.2398E-01

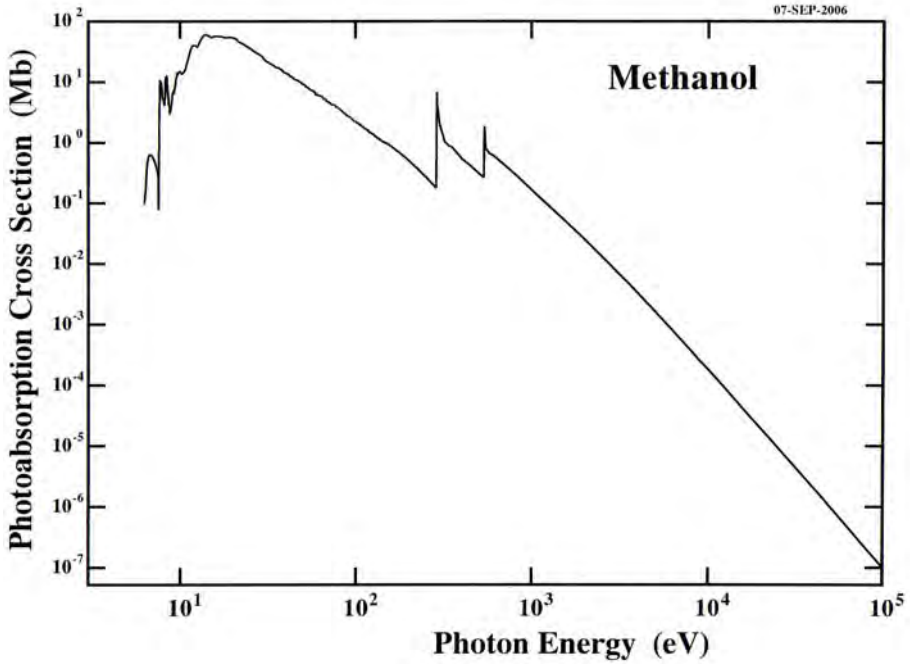
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a, in Mb is given by

$$\sigma_\mathrm{a} \;=\; 680\,(Z_\mathrm{c}-0.3)^6\left(\frac{Ry}{E}\right)^4\frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_c denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_\mathrm{K}}{E-E_\mathrm{K}}}\ ,$$

where $E_\mathrm{K} \;=\; 13.6$, 292.4 and 539.0 eV for hydrogen, carbon, and oxygen atoms, respectively.


07-SEP-2006
Methanol
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^1
10^2
10^3
10^4
10^5

CH_3OH

Energy, eV	Source
6.26 - 10.85 (IP)	Nee *et al.*, Chem. Phys., 98 (1985) 147
IP - 21.21	Fig. 6.14 p.277 (Berkowitz's book*)
21.21 - 30.0	Burton *et al.*, Chem. Phys., 167 (1992) 349
30.0 - 150.0	Burton *et al.*, Chem. Phys., 167 (1992) 349
150.0 - 287.0	Table 6.14 p.278 (Berkowitz's book*)
288.1	Table 6.13 p.276 (Berkowitz's book*)
289.4	Table 6.13 p.276 (Berkowitz's book*)
286.15 - 320.0	Wight *et al.*, J. Electron Spectrosc. 4 (1974) 25
287.0 - 320.0	Burton *et al.*, Chem. Phys., 167 (1992) 349
	Ishii and Hitchcock, J. Electron Spectrosc. 46 (1988) 55
320.0 - 350.0	Burton *et al.*, Chem. Phys., 167 (1992) 349
350.0 - 532.0	Table 6.14 p.278 (Berkowitz's book*)
532.0 - 568.0	Ishii and Hitchcock, J. Electron Spectrosc. 46 (1988) 55
568.0 - 2042.4	Table 6.14 p.278 (Berkowitz's book*)
2042.4 - 10^4	Table 6.14 p.278 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Benzene (C_6H_6)

Z = 42 Molecular Mass : $M_{\rm A}$ = 78.11184

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Integrated oscillator strength, f, for transitions below the IP.

Energy (eV)	f	λ (Å)	Remarks
4.9000E+00	1.3000E-03	2.5303E+03	$^1A_{1g} \rightarrow {}^1B_{2u}$
6.1900E+00	9.0100E-02	2.0030E+03	$^1A_{1g} \rightarrow {}^1B_{1u}$
6.9600E+00	9.5300E-01	1.7814E+03	$^1A_{1g} \rightarrow {}^1E_{1u}$
6.9300E+00	7.5000E-02	1.7891E+03	$^1A_{1g} \rightarrow$ Rydberg
9.0000E+00	1.2070E-01	1.3776E+03	–

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
9.2439E+00	4.0026E-01	4.3933E+01	3.3871E+05	1.3413E+03
9.2484E+00	4.1849E-01	4.5933E+01	3.5413E+05	1.3406E+03
9.2505E+00	4.1588E-01	4.5648E+01	3.5193E+05	1.3403E+03
9.2539E+00	3.9677E-01	4.3550E+01	3.3576E+05	1.3398E+03
9.2595E+00	3.3339E-01	3.6593E+01	2.8212E+05	1.3390E+03
9.2622E+00	3.4554E-01	3.7927E+01	2.9240E+05	1.3386E+03
9.2657E+00	3.2644E-01	3.5830E+01	2.7624E+05	1.3381E+03
9.2726E+00	3.4380E-01	3.7735E+01	2.9093E+05	1.3371E+03
9.2754E+00	3.6029E-01	3.9546E+01	3.0488E+05	1.3367E+03
9.2830E+00	3.4291E-01	3.7639E+01	2.9018E+05	1.3356E+03
9.2858E+00	3.5160E-01	3.8592E+01	2.9753E+05	1.3352E+03
9.2893E+00	3.4291E-01	3.7639E+01	2.9018E+05	1.3347E+03
9.2963E+00	3.3770E-01	3.7066E+01	2.8577E+05	1.3337E+03
9.3018E+00	3.4724E-01	3.8114E+01	2.9384E+05	1.3329E+03
9.3046E+00	3.5158E-01	3.8590E+01	2.9751E+05	1.3325E+03
9.3088E+00	3.6895E-01	4.0496E+01	3.1221E+05	1.3319E+03
9.3130E+00	3.8110E-01	4.1829E+01	3.2249E+05	1.3313E+03
9.3151E+00	3.7675E-01	4.1352E+01	3.1881E+05	1.3310E+03

Table II. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
9.3207E+00	3.8369E-01	4.2114E+01	3.2469E+05	1.3302E+03
9.3214E+00	3.9064E-01	4.2877E+01	3.3057E+05	1.3301E+03
9.3312E+00	4.0452E-01	4.4401E+01	3.4231E+05	1.3287E+03
9.3341E+00	4.1321E-01	4.5354E+01	3.4966E+05	1.3283E+03
9.3383E+00	4.0886E-01	4.4877E+01	3.4598E+05	1.3277E+03
9.3425E+00	4.1580E-01	4.5639E+01	3.5186E+05	1.3271E+03
9.3446E+00	4.0972E-01	4.4971E+01	3.4671E+05	1.3268E+03
9.3488E+00	4.2100E-01	4.6209E+01	3.5626E+05	1.3262E+03
9.3672E+00	4.0796E-01	4.4778E+01	3.4522E+05	1.3236E+03
9.3679E+00	4.1317E-01	4.5350E+01	3.4963E+05	1.3235E+03
9.3714E+00	4.1144E-01	4.5160E+01	3.4816E+05	1.3230E+03
9.3757E+00	4.2185E-01	4.6303E+01	3.5698E+05	1.3224E+03
9.3800E+00	4.1403E-01	4.5444E+01	3.5036E+05	1.3218E+03
9.3807E+00	4.1924E-01	4.6016E+01	3.5477E+05	1.3217E+03
9.3871E+00	4.0534E-01	4.4490E+01	3.4300E+05	1.3208E+03
9.3956E+00	3.9231E-01	4.3060E+01	3.3198E+05	1.3196E+03
9.4041E+00	3.7493E-01	4.1153E+01	3.1728E+05	1.3184E+03
9.4106E+00	3.8362E-01	4.2106E+01	3.2462E+05	1.3175E+03
9.4149E+00	3.7667E-01	4.1343E+01	3.1874E+05	1.3169E+03
9.4184E+00	3.8534E-01	4.2295E+01	3.2608E+05	1.3164E+03
9.4256E+00	3.8099E-01	4.1818E+01	3.2240E+05	1.3154E+03
9.4292E+00	3.7579E-01	4.1247E+01	3.1800E+05	1.3149E+03
9.4363E+00	3.7751E-01	4.1436E+01	3.1946E+05	1.3139E+03
9.4407E+00	3.8619E-01	4.2389E+01	3.2680E+05	1.3133E+03
9.4486E+00	3.9661E-01	4.3532E+01	3.3562E+05	1.3122E+03
9.4507E+00	3.8879E-01	4.2674E+01	3.2900E+05	1.3119E+03
9.4558E+00	3.9573E-01	4.3436E+01	3.3487E+05	1.3112E+03
9.4623E+00	3.8530E-01	4.2291E+01	3.2605E+05	1.3103E+03
9.4637E+00	3.9399E-01	4.3244E+01	3.3340E+05	1.3101E+03
9.4702E+00	3.7575E-01	4.1243E+01	3.1797E+05	1.3092E+03
9.4854E+00	3.5490E-01	3.8954E+01	3.0032E+05	1.3071E+03
9.4985E+00	3.5402E-01	3.8857E+01	2.9958E+05	1.3053E+03
9.5073E+00	3.6877E-01	4.0477E+01	3.1206E+05	1.3041E+03
9.5160E+00	3.8265E-01	4.2000E+01	3.2381E+05	1.3029E+03
9.5219E+00	3.8699E-01	4.2476E+01	3.2748E+05	1.3021E+03
9.5248E+00	3.8264E-01	4.1999E+01	3.2380E+05	1.3017E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.5285E+00	3.9046E-01	4.2857E+01	3.3041E+05	1.3012E+03
9.5571E+00	3.5483E-01	3.8947E+01	3.0027E+05	1.2973E+03
9.5645E+00	3.5917E-01	3.9423E+01	3.0394E+05	1.2963E+03
9.5704E+00	3.5135E-01	3.8565E+01	2.9732E+05	1.2955E+03
9.5822E+00	3.5307E-01	3.8754E+01	2.9878E+05	1.2939E+03
9.5844E+00	3.5828E-01	3.9325E+01	3.0318E+05	1.2936E+03
9.5933E+00	3.6262E-01	3.9801E+01	3.0685E+05	1.2924E+03
9.6089E+00	3.5653E-01	3.9133E+01	3.0170E+05	1.2903E+03
9.6216E+00	3.4523E-01	3.7892E+01	2.9214E+05	1.2886E+03
9.6313E+00	3.4088E-01	3.7415E+01	2.8846E+05	1.2873E+03
9.6764E+00	3.3824E-01	3.7125E+01	2.8622E+05	1.2813E+03
9.7143E+00	3.3647E-01	3.6931E+01	2.8473E+05	1.2763E+03
9.7418E+00	3.4166E-01	3.7501E+01	2.8912E+05	1.2727E+03
9.7564E+00	3.3557E-01	3.6833E+01	2.8397E+05	1.2708E+03
9.7702E+00	3.2861E-01	3.6069E+01	2.7808E+05	1.2690E+03
9.8151E+00	3.3292E-01	3.6542E+01	2.8172E+05	1.2632E+03
9.8439E+00	3.3029E-01	3.6253E+01	2.7950E+05	1.2595E+03
9.8784E+00	3.3634E-01	3.6917E+01	2.8462E+05	1.2551E+03
9.8934E+00	3.3025E-01	3.6249E+01	2.7947E+05	1.2532E+03
9.9410E+00	3.3629E-01	3.6911E+01	2.8457E+05	1.2472E+03
9.9474E+00	3.4062E-01	3.7387E+01	2.8824E+05	1.2464E+03
9.9522E+00	3.3715E-01	3.7006E+01	2.8530E+05	1.2458E+03
9.9690E+00	3.3714E-01	3.7005E+01	2.8529E+05	1.2437E+03
9.9722E+00	3.4321E-01	3.7671E+01	2.9043E+05	1.2433E+03
9.9770E+00	3.4060E-01	3.7385E+01	2.8823E+05	1.2427E+03
1.0005E+01	3.4405E-01	3.7763E+01	2.9114E+05	1.2392E+03
1.0022E+01	3.5360E-01	3.8811E+01	2.9922E+05	1.2371E+03
1.0044E+01	3.6920E-01	4.0524E+01	3.1243E+05	1.2344E+03
1.0053E+01	3.6052E-01	3.9571E+01	3.0508E+05	1.2333E+03
1.0065E+01	3.6051E-01	3.9570E+01	3.0507E+05	1.2318E+03
1.0082E+01	3.5355E-01	3.8806E+01	2.9918E+05	1.2297E+03
1.0087E+01	3.5789E-01	3.9282E+01	3.0285E+05	1.2291E+03
1.0097E+01	3.5788E-01	3.9281E+01	3.0284E+05	1.2279E+03
1.0100E+01	3.5353E-01	3.8804E+01	2.9917E+05	1.2276E+03
1.0108E+01	3.5700E-01	3.9185E+01	3.0210E+05	1.2266E+03
1.0115E+01	3.6308E-01	3.9852E+01	3.0724E+05	1.2258E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0127E+01	3.6220E-01	3.9755E+01	3.0650E+05	1.2243E+03
1.0162E+01	3.5417E-01	3.8875E+01	2.9971E+05	1.2201E+03
1.0180E+01	3.5198E-01	3.8634E+01	2.9785E+05	1.2179E+03
1.0208E+01	3.6129E-01	3.9656E+01	3.0573E+05	1.2146E+03
1.0214E+01	3.5826E-01	3.9323E+01	3.0317E+05	1.2139E+03
1.0246E+01	3.6531E-01	4.0096E+01	3.0913E+05	1.2101E+03
1.0278E+01	3.6700E-01	4.0283E+01	3.1056E+05	1.2063E+03
1.0308E+01	3.8091E-01	4.1809E+01	3.2233E+05	1.2028E+03
1.0329E+01	3.8254E-01	4.1988E+01	3.2372E+05	1.2004E+03
1.0341E+01	3.9407E-01	4.3253E+01	3.3347E+05	1.1989E+03
1.0348E+01	3.9104E-01	4.2921E+01	3.3091E+05	1.1982E+03
1.0355E+01	3.9337E-01	4.3177E+01	3.3288E+05	1.1973E+03
1.0361E+01	4.0028E-01	4.3935E+01	3.3872E+05	1.1966E+03
1.0366E+01	4.1253E-01	4.5279E+01	3.4909E+05	1.1961E+03
1.0372E+01	4.2784E-01	4.6960E+01	3.6205E+05	1.1954E+03
1.0378E+01	4.6302E-01	5.0822E+01	3.9182E+05	1.1947E+03
1.0384E+01	5.1348E-01	5.6360E+01	4.3451E+05	1.1940E+03
1.0388E+01	5.4254E-01	5.9549E+01	4.5910E+05	1.1935E+03
1.0392E+01	5.3949E-01	5.9215E+01	4.5653E+05	1.1931E+03
1.0394E+01	5.2269E-01	5.7371E+01	4.4231E+05	1.1929E+03
1.0399E+01	4.7000E-01	5.1588E+01	3.9772E+05	1.1923E+03
1.0404E+01	4.3488E-01	4.7733E+01	3.6800E+05	1.1917E+03
1.0411E+01	4.2651E-01	4.6814E+01	3.6092E+05	1.1909E+03
1.0418E+01	4.3724E-01	4.7992E+01	3.7000E+05	1.1901E+03
1.0423E+01	4.3726E-01	4.7995E+01	3.7002E+05	1.1895E+03
1.0429E+01	4.2660E-01	4.6824E+01	3.6100E+05	1.1888E+03
1.0434E+01	4.2433E-01	4.6575E+01	3.5907E+05	1.1883E+03
1.0440E+01	4.3506E-01	4.7752E+01	3.6815E+05	1.1876E+03
1.0441E+01	4.4041E-01	4.8340E+01	3.7268E+05	1.1875E+03
1.0448E+01	4.5267E-01	4.9685E+01	3.8306E+05	1.1867E+03
1.0450E+01	4.7255E-01	5.1867E+01	3.9988E+05	1.1864E+03
1.0454E+01	4.8403E-01	5.3127E+01	4.0959E+05	1.1860E+03
1.0456E+01	5.0084E-01	5.4973E+01	4.2382E+05	1.1858E+03
1.0459E+01	5.0927E-01	5.5898E+01	4.3095E+05	1.1854E+03
1.0463E+01	5.2686E-01	5.7828E+01	4.4583E+05	1.1850E+03
1.0467E+01	5.6126E-01	6.1604E+01	4.7495E+05	1.1845E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0469E+01	5.7426E-01	6.3031E+01	4.8595E+05	1.1843E+03
1.0473E+01	5.8268E-01	6.3955E+01	4.9307E+05	1.1839E+03
1.0481E+01	5.5063E-01	6.0438E+01	4.6595E+05	1.1829E+03
1.0485E+01	5.6211E-01	6.1698E+01	4.7567E+05	1.1825E+03
1.0489E+01	5.9423E-01	6.5223E+01	5.0285E+05	1.1820E+03
1.0493E+01	6.2710E-01	6.8831E+01	5.3066E+05	1.1816E+03
1.0496E+01	6.4927E-01	7.1265E+01	5.4943E+05	1.1812E+03
1.0500E+01	6.4012E-01	7.0260E+01	5.4168E+05	1.1808E+03
1.0505E+01	5.4235E-01	5.9529E+01	4.5895E+05	1.1802E+03
1.0513E+01	4.7438E-01	5.2069E+01	4.0143E+05	1.1793E+03
1.0519E+01	4.6219E-01	5.0730E+01	3.9111E+05	1.1787E+03
1.0529E+01	4.5536E-01	4.9981E+01	3.8534E+05	1.1776E+03
1.0537E+01	4.6916E-01	5.1495E+01	3.9701E+05	1.1767E+03
1.0552E+01	5.1737E-01	5.6787E+01	4.3780E+05	1.1750E+03
1.0555E+01	5.2120E-01	5.7207E+01	4.4105E+05	1.1747E+03
1.0559E+01	5.2275E-01	5.7377E+01	4.4236E+05	1.1742E+03
1.0561E+01	5.2886E-01	5.8049E+01	4.4753E+05	1.1740E+03
1.0564E+01	5.2735E-01	5.7883E+01	4.4625E+05	1.1737E+03
1.0568E+01	5.3272E-01	5.8472E+01	4.5080E+05	1.1732E+03
1.0574E+01	5.5414E-01	6.0823E+01	4.6893E+05	1.1725E+03
1.0577E+01	5.6409E-01	6.1915E+01	4.7734E+05	1.1722E+03
1.0581E+01	5.6869E-01	6.2420E+01	4.8124E+05	1.1718E+03
1.0585E+01	5.5573E-01	6.0997E+01	4.7027E+05	1.1713E+03
1.0586E+01	5.3510E-01	5.8733E+01	4.5281E+05	1.1712E+03
1.0590E+01	5.0533E-01	5.5465E+01	4.2762E+05	1.1708E+03
1.0596E+01	4.8931E-01	5.3707E+01	4.1406E+05	1.1701E+03
1.0600E+01	4.8092E-01	5.2786E+01	4.0696E+05	1.1697E+03
1.0603E+01	4.8246E-01	5.2955E+01	4.0827E+05	1.1693E+03
1.0609E+01	4.7332E-01	5.1952E+01	4.0053E+05	1.1687E+03
1.0610E+01	4.7486E-01	5.2121E+01	4.0183E+05	1.1686E+03
1.0619E+01	4.6419E-01	5.0950E+01	3.9281E+05	1.1676E+03
1.0623E+01	4.6881E-01	5.1457E+01	3.9671E+05	1.1671E+03
1.0628E+01	4.7723E-01	5.2382E+01	4.0384E+05	1.1666E+03
1.0631E+01	4.7649E-01	5.2300E+01	4.0321E+05	1.1662E+03
1.0638E+01	4.6888E-01	5.1465E+01	3.9677E+05	1.1655E+03
1.0643E+01	4.7043E-01	5.1635E+01	3.9809E+05	1.1649E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0647E+01	4.7656E-01	5.2308E+01	4.0328E+05	1.1645E+03
1.0648E+01	4.8421E-01	5.3147E+01	4.0975E+05	1.1644E+03
1.0652E+01	4.9034E-01	5.3820E+01	4.1493E+05	1.1640E+03
1.0655E+01	5.0640E-01	5.5583E+01	4.2852E+05	1.1636E+03
1.0662E+01	5.1407E-01	5.6424E+01	4.3501E+05	1.1629E+03
1.0664E+01	5.1103E-01	5.6091E+01	4.3244E+05	1.1626E+03
1.0670E+01	5.0570E-01	5.5506E+01	4.2793E+05	1.1620E+03
1.0674E+01	5.0420E-01	5.5341E+01	4.2666E+05	1.1615E+03
1.0680E+01	5.1645E-01	5.6686E+01	4.3703E+05	1.1609E+03
1.0684E+01	5.1418E-01	5.6436E+01	4.3510E+05	1.1605E+03
1.0688E+01	5.0426E-01	5.5348E+01	4.2672E+05	1.1600E+03
1.0698E+01	4.9667E-01	5.4515E+01	4.2029E+05	1.1589E+03
1.0709E+01	4.9977E-01	5.4855E+01	4.2291E+05	1.1578E+03
1.0716E+01	4.8836E-01	5.3602E+01	4.1325E+05	1.1570E+03
1.0721E+01	4.7386E-01	5.2011E+01	4.0099E+05	1.1565E+03
1.0735E+01	4.5865E-01	5.0342E+01	3.8812E+05	1.1549E+03
1.0741E+01	4.7090E-01	5.1686E+01	3.9848E+05	1.1543E+03
1.0745E+01	4.6785E-01	5.1352E+01	3.9591E+05	1.1539E+03
1.0747E+01	4.7398E-01	5.2024E+01	4.0109E+05	1.1537E+03
1.0753E+01	4.7859E-01	5.2531E+01	4.0499E+05	1.1530E+03
1.0773E+01	4.7792E-01	5.2457E+01	4.0442E+05	1.1509E+03
1.0777E+01	4.8252E-01	5.2962E+01	4.0832E+05	1.1505E+03
1.0781E+01	4.9320E-01	5.4134E+01	4.1735E+05	1.1500E+03
1.0784E+01	4.9767E-01	5.4625E+01	4.2114E+05	1.1497E+03
1.0793E+01	4.8429E-01	5.3156E+01	4.0982E+05	1.1487E+03
1.0801E+01	4.8700E-01	5.3453E+01	4.1211E+05	1.1479E+03
1.0809E+01	5.0042E-01	5.4927E+01	4.2347E+05	1.1470E+03
1.0814E+01	5.1831E-01	5.6890E+01	4.3860E+05	1.1465E+03
1.0821E+01	5.5497E-01	6.0914E+01	4.6962E+05	1.1458E+03
1.0824E+01	5.8894E-01	6.4643E+01	4.9837E+05	1.1455E+03
1.0827E+01	6.0592E-01	6.6507E+01	5.1274E+05	1.1451E+03
1.0830E+01	6.1398E-01	6.7391E+01	5.1956E+05	1.1448E+03
1.0839E+01	5.6128E-01	6.1606E+01	4.7496E+05	1.1439E+03
1.0844E+01	5.5146E-01	6.0528E+01	4.6665E+05	1.1433E+03
1.0848E+01	5.6398E-01	6.1903E+01	4.7725E+05	1.1429E+03
1.0852E+01	5.7025E-01	6.2592E+01	4.8256E+05	1.1425E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0861E+01	6.2032E-01	6.8087E+01	5.2492E+05	1.1416E+03
1.0868E+01	6.7396E-01	7.3974E+01	5.7031E+05	1.1408E+03
1.0871E+01	6.9095E-01	7.5839E+01	5.8469E+05	1.1405E+03
1.0876E+01	6.9632E-01	7.6429E+01	5.8924E+05	1.1400E+03
1.0881E+01	6.7846E-01	7.4468E+01	5.7412E+05	1.1395E+03
1.0884E+01	6.7758E-01	7.4372E+01	5.7338E+05	1.1391E+03
1.0888E+01	6.4363E-01	7.0646E+01	5.4465E+05	1.1387E+03
1.0896E+01	6.1595E-01	6.7608E+01	5.2123E+05	1.1379E+03
1.0907E+01	6.4994E-01	7.1338E+01	5.4999E+05	1.1367E+03
1.0911E+01	6.7765E-01	7.4380E+01	5.7344E+05	1.1363E+03
1.0917E+01	6.9107E-01	7.5853E+01	5.8480E+05	1.1357E+03
1.0926E+01	6.9289E-01	7.6052E+01	5.8634E+05	1.1348E+03
1.0938E+01	7.4207E-01	8.1451E+01	6.2796E+05	1.1335E+03
1.0944E+01	7.6443E-01	8.3904E+01	6.4687E+05	1.1329E+03
1.0947E+01	7.7248E-01	8.4788E+01	6.5368E+05	1.1326E+03
1.0950E+01	7.8143E-01	8.5770E+01	6.6126E+05	1.1323E+03
1.0955E+01	7.8859E-01	8.6556E+01	6.6732E+05	1.1318E+03
1.0957E+01	7.9664E-01	8.7440E+01	6.7413E+05	1.1316E+03
1.0962E+01	8.0559E-01	8.8422E+01	6.8170E+05	1.1310E+03
1.0966E+01	7.8951E-01	8.6658E+01	6.6810E+05	1.1306E+03
1.0968E+01	7.8505E-01	8.6168E+01	6.6432E+05	1.1304E+03
1.0974E+01	7.6004E-01	8.3423E+01	6.4316E+05	1.1298E+03
1.0976E+01	7.5558E-01	8.2933E+01	6.3938E+05	1.1296E+03
1.0982E+01	7.6810E-01	8.4308E+01	6.4998E+05	1.1290E+03
1.0987E+01	7.7170E-01	8.4702E+01	6.5302E+05	1.1285E+03
1.0993E+01	7.8959E-01	8.6666E+01	6.6816E+05	1.1278E+03
1.0997E+01	7.8602E-01	8.6274E+01	6.6514E+05	1.1274E+03
1.1000E+01	7.9229E-01	8.6963E+01	6.7045E+05	1.1271E+03
1.1006E+01	7.9230E-01	8.6964E+01	6.7046E+05	1.1265E+03
1.1013E+01	8.1198E-01	8.9124E+01	6.8711E+05	1.1258E+03
1.1016E+01	8.1914E-01	8.9910E+01	6.9317E+05	1.1255E+03
1.1020E+01	8.3345E-01	9.1481E+01	7.0528E+05	1.1251E+03
1.1028E+01	8.4688E-01	9.2954E+01	7.1664E+05	1.1243E+03
1.1034E+01	8.6209E-01	9.4624E+01	7.2951E+05	1.1237E+03
1.1042E+01	8.7998E-01	9.6587E+01	7.4465E+05	1.1228E+03
1.1047E+01	8.7463E-01	9.6000E+01	7.4013E+05	1.1223E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1050E+01	8.5319E-01	9.3647E+01	7.2199E+05	1.1220E+03
1.1055E+01	8.4964E-01	9.3257E+01	7.1898E+05	1.1215E+03
1.1058E+01	8.3713E-01	9.1884E+01	7.0839E+05	1.1212E+03
1.1064E+01	8.5144E-01	9.3455E+01	7.2051E+05	1.1206E+03
1.1067E+01	8.5413E-01	9.3750E+01	7.2278E+05	1.1203E+03
1.1078E+01	8.9706E-01	9.8462E+01	7.5911E+05	1.1192E+03
1.1090E+01	8.1130E-01	8.9049E+01	6.8654E+05	1.1180E+03
1.1097E+01	8.0774E-01	8.8659E+01	6.8353E+05	1.1173E+03
1.1099E+01	8.0149E-01	8.7972E+01	6.7823E+05	1.1171E+03
1.1104E+01	8.0418E-01	8.8268E+01	6.8052E+05	1.1166E+03
1.1107E+01	7.9615E-01	8.7386E+01	6.7372E+05	1.1163E+03
1.1115E+01	7.8009E-01	8.5623E+01	6.6012E+05	1.1155E+03
1.1123E+01	7.7295E-01	8.4840E+01	6.5409E+05	1.1147E+03
1.1125E+01	7.6850E-01	8.4351E+01	6.5032E+05	1.1145E+03
1.1135E+01	7.6853E-01	8.4354E+01	6.5034E+05	1.1135E+03
1.1137E+01	7.7300E-01	8.4845E+01	6.5413E+05	1.1133E+03
1.1143E+01	7.7391E-01	8.4945E+01	6.5489E+05	1.1127E+03
1.1150E+01	7.8644E-01	8.6321E+01	6.6550E+05	1.1120E+03
1.1157E+01	8.0343E-01	8.8186E+01	6.7988E+05	1.1113E+03
1.1164E+01	7.8468E-01	8.6127E+01	6.6401E+05	1.1106E+03
1.1167E+01	7.8023E-01	8.5638E+01	6.6024E+05	1.1103E+03
1.1171E+01	7.6326E-01	8.3776E+01	6.4589E+05	1.1099E+03
1.1178E+01	7.5881E-01	8.3287E+01	6.4212E+05	1.1092E+03
1.1185E+01	7.6508E-01	8.3976E+01	6.4742E+05	1.1085E+03
1.1192E+01	7.8744E-01	8.6430E+01	6.6635E+05	1.1078E+03
1.1198E+01	7.4278E-01	8.1528E+01	6.2855E+05	1.1072E+03
1.1205E+01	7.3028E-01	8.0156E+01	6.1798E+05	1.1065E+03
1.1215E+01	7.4014E-01	8.1238E+01	6.2632E+05	1.1055E+03
1.1220E+01	7.4016E-01	8.1240E+01	6.2633E+05	1.1050E+03
1.1229E+01	7.5627E-01	8.3009E+01	6.3997E+05	1.1041E+03
1.1238E+01	7.6790E-01	8.4286E+01	6.4981E+05	1.1033E+03
1.1247E+01	7.5095E-01	8.2425E+01	6.3547E+05	1.1024E+03
1.1251E+01	7.6169E-01	8.3603E+01	6.4455E+05	1.1020E+03
1.1257E+01	7.7868E-01	8.5468E+01	6.5893E+05	1.1014E+03
1.1265E+01	8.0104E-01	8.7923E+01	6.7785E+05	1.1006E+03
1.1270E+01	7.8408E-01	8.6061E+01	6.6350E+05	1.1001E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1274E+01	7.7962E-01	8.5572E+01	6.5973E+05	1.0997E+03
1.1277E+01	7.6800E-01	8.4297E+01	6.4990E+05	1.0994E+03
1.1281E+01	7.3942E-01	8.1160E+01	6.2571E+05	1.0991E+03
1.1288E+01	7.2514E-01	7.9592E+01	6.1362E+05	1.0984E+03
1.1294E+01	7.3767E-01	8.0968E+01	6.2423E+05	1.0978E+03
1.1302E+01	7.4037E-01	8.1263E+01	6.2651E+05	1.0970E+03
1.1306E+01	7.5022E-01	8.2344E+01	6.3485E+05	1.0966E+03
1.1309E+01	7.4396E-01	8.1658E+01	6.2955E+05	1.0963E+03
1.1314E+01	7.4308E-01	8.1561E+01	6.2881E+05	1.0958E+03
1.1323E+01	7.2613E-01	7.9701E+01	6.1446E+05	1.0950E+03
1.1326E+01	7.2881E-01	7.9995E+01	6.1674E+05	1.0947E+03
1.1332E+01	7.2436E-01	7.9506E+01	6.1296E+05	1.0941E+03
1.1338E+01	7.3778E-01	8.0980E+01	6.2432E+05	1.0935E+03
1.1346E+01	7.6729E-01	8.4218E+01	6.4929E+05	1.0928E+03
1.1354E+01	7.4051E-01	8.1279E+01	6.2663E+05	1.0920E+03
1.1355E+01	7.2174E-01	7.9218E+01	6.1075E+05	1.0919E+03
1.1362E+01	7.1282E-01	7.8240E+01	6.0320E+05	1.0912E+03
1.1366E+01	7.2713E-01	7.9810E+01	6.1531E+05	1.0908E+03
1.1375E+01	7.3251E-01	8.0401E+01	6.1986E+05	1.0900E+03
1.1383E+01	7.1823E-01	7.8834E+01	6.0778E+05	1.0892E+03
1.1387E+01	7.2451E-01	7.9522E+01	6.1309E+05	1.0888E+03
1.1394E+01	7.3613E-01	8.0799E+01	6.2293E+05	1.0882E+03
1.1400E+01	7.2543E-01	7.9624E+01	6.1387E+05	1.0876E+03
1.1406E+01	7.2276E-01	7.9331E+01	6.1161E+05	1.0870E+03
1.1410E+01	7.1831E-01	7.8842E+01	6.0784E+05	1.0866E+03
1.1417E+01	7.1921E-01	7.8942E+01	6.0861E+05	1.0860E+03
1.1424E+01	7.3085E-01	8.0219E+01	6.1846E+05	1.0853E+03
1.1429E+01	7.3444E-01	8.0613E+01	6.2150E+05	1.0848E+03
1.1434E+01	7.1747E-01	7.8750E+01	6.0714E+05	1.0843E+03
1.1438E+01	7.1391E-01	7.8359E+01	6.0412E+05	1.0840E+03
1.1441E+01	7.0498E-01	7.7380E+01	5.9657E+05	1.0837E+03
1.1448E+01	7.1661E-01	7.8656E+01	6.0641E+05	1.0830E+03
1.1454E+01	7.1395E-01	7.8364E+01	6.0416E+05	1.0825E+03
1.1459E+01	7.2469E-01	7.9543E+01	6.1324E+05	1.0820E+03
1.1464E+01	7.0950E-01	7.7876E+01	6.0040E+05	1.0815E+03
1.1469E+01	7.1667E-01	7.8662E+01	6.0646E+05	1.0810E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.1473E+01	7.0863E-01	7.7780E+01	5.9966E+05	1.0807E+03
1.1476E+01	7.1758E-01	7.8763E+01	6.0723E+05	1.0804E+03
1.1492E+01	6.9349E-01	7.6118E+01	5.8684E+05	1.0789E+03
1.1502E+01	6.9888E-01	7.6709E+01	5.9140E+05	1.0779E+03
1.1552E+01	6.8828E-01	7.5546E+01	5.8243E+05	1.0733E+03
1.1568E+01	6.7313E-01	7.3883E+01	5.6962E+05	1.0718E+03
1.1616E+01	6.6252E-01	7.2719E+01	5.6064E+05	1.0674E+03
1.1621E+01	6.7326E-01	7.3898E+01	5.6972E+05	1.0669E+03
1.1634E+01	6.4648E-01	7.0958E+01	5.4706E+05	1.0657E+03
1.1638E+01	6.5454E-01	7.1842E+01	5.5388E+05	1.0653E+03
1.1659E+01	6.2420E-01	6.8513E+01	5.2821E+05	1.0634E+03
1.1663E+01	6.3225E-01	6.9397E+01	5.3503E+05	1.0631E+03
1.1667E+01	6.3673E-01	6.9888E+01	5.3881E+05	1.0627E+03
1.1673E+01	6.2334E-01	6.8419E+01	5.2748E+05	1.0621E+03
1.1677E+01	6.3408E-01	6.9597E+01	5.3657E+05	1.0618E+03
1.1684E+01	6.3141E-01	6.9304E+01	5.3431E+05	1.0611E+03
1.1692E+01	6.3768E-01	6.9993E+01	5.3962E+05	1.0604E+03
1.1702E+01	6.2342E-01	6.8427E+01	5.2755E+05	1.0595E+03
1.1707E+01	6.3236E-01	6.9408E+01	5.3511E+05	1.0591E+03
1.1713E+01	6.2343E-01	6.8429E+01	5.2756E+05	1.0585E+03
1.1728E+01	6.2258E-01	6.8335E+01	5.2684E+05	1.0572E+03
1.1735E+01	6.0651E-01	6.6571E+01	5.1324E+05	1.0565E+03
1.1740E+01	6.1903E-01	6.7946E+01	5.2384E+05	1.0561E+03
1.1746E+01	6.0565E-01	6.6476E+01	5.1251E+05	1.0555E+03
1.1749E+01	6.1816E-01	6.7850E+01	5.2310E+05	1.0553E+03
1.1760E+01	6.1015E-01	6.6970E+01	5.1632E+05	1.0543E+03
1.1764E+01	6.1016E-01	6.6971E+01	5.1633E+05	1.0539E+03
1.1769E+01	6.2178E-01	6.8248E+01	5.2616E+05	1.0535E+03
1.1774E+01	6.0571E-01	6.6483E+01	5.1256E+05	1.0530E+03
1.1777E+01	6.1376E-01	6.7367E+01	5.1938E+05	1.0528E+03
1.1790E+01	6.1469E-01	6.7469E+01	5.2016E+05	1.0516E+03
1.1798E+01	6.2453E-01	6.8550E+01	5.2849E+05	1.0509E+03
1.1804E+01	6.2634E-01	6.8748E+01	5.3002E+05	1.0504E+03
1.1811E+01	6.0848E-01	6.6787E+01	5.1491E+05	1.0497E+03
1.1926E+01	6.5898E-01	7.2331E+01	5.5764E+05	1.0396E+03
1.2009E+01	7.1917E-01	7.8937E+01	6.0857E+05	1.0324E+03

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2045E+01	7.5462E-01	8.2827E+01	6.3857E+05	1.0293E+03
1.2070E+01	7.7446E-01	8.5005E+01	6.5536E+05	1.0272E+03
1.2097E+01	7.9171E-01	8.6898E+01	6.6996E+05	1.0249E+03
1.2123E+01	8.0569E-01	8.8433E+01	6.8179E+05	1.0227E+03
1.2139E+01	8.1318E-01	8.9255E+01	6.8813E+05	1.0214E+03
1.2162E+01	8.2034E-01	9.0041E+01	6.9419E+05	1.0194E+03
1.2197E+01	8.2523E-01	9.0578E+01	6.9832E+05	1.0165E+03
1.2215E+01	8.2426E-01	9.0471E+01	6.9750E+05	1.0150E+03
1.2244E+01	8.1549E-01	8.9509E+01	6.9008E+05	1.0126E+03
1.2274E+01	8.0379E-01	8.8225E+01	6.8018E+05	1.0101E+03
1.2310E+01	7.8722E-01	8.6406E+01	6.6616E+05	1.0072E+03
1.2345E+01	7.7683E-01	8.5266E+01	6.5737E+05	1.0043E+03
1.2370E+01	7.7066E-01	8.4589E+01	6.5215E+05	1.0023E+03
1.2401E+01	7.6514E-01	8.3983E+01	6.4748E+05	9.9981E+02
1.2430E+01	7.6288E-01	8.3734E+01	6.4556E+05	9.9748E+02
1.2454E+01	7.6060E-01	8.3485E+01	6.4364E+05	9.9553E+02
1.2481E+01	7.6225E-01	8.3665E+01	6.4503E+05	9.9340E+02
1.2491E+01	7.6485E-01	8.3951E+01	6.4723E+05	9.9262E+02
1.2505E+01	7.6712E-01	8.4200E+01	6.4915E+05	9.9146E+02
1.2527E+01	7.6746E-01	8.4237E+01	6.4944E+05	8.8971E+02
1.2557E+01	7.7137E-01	8.4666E+01	6.5275E+05	9.8738E+02
1.2564E+01	7.7430E-01	8.4988E+01	6.5523E+05	9.8680E+02
1.2579E+01	7.7528E-01	8.5096E+01	6.5606E+05	9.8563E+02
1.2624E+01	7.6976E-01	8.4490E+01	6.5139E+05	9.8214E+02
1.2646E+01	7.6523E-01	8.3992E+01	6.4755E+05	9.8039E+02
1.2679E+01	7.5775E-01	8.3172E+01	6.4122E+05	9.7786E+02
1.2709E+01	7.4735E-01	8.2030E+01	6.3242E+05	9.7553E+02
1.2760E+01	7.3469E-01	8.0641E+01	6.2171E+05	9.7165E+02
1.2793E+01	7.2982E-01	8.0106E+01	6.1759E+05	9.6913E+02
1.2811E+01	7.3080E-01	8.0214E+01	6.1842E+05	9.6777E+02
1.2835E+01	7.3342E-01	8.0501E+01	6.2063E+05	9.6602E+02
1.2858E+01	7.3928E-01	8.1144E+01	6.2559E+05	9.6427E+02
1.2907E+01	7.6302E-01	8.3750E+01	6.4568E+05	9.6058E+02
1.2960E+01	7.8548E-01	8.6215E+01	6.6469E+05	9.5670E+02
1.2983E+01	7.9654E-01	8.7429E+01	6.7404E+05	9.5495E+02
1.3018E+01	8.0533E-01	8.8394E+01	6.8149E+05	9.5243E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3036E+01	8.0793E-01	8.8680E+01	6.8369E+05	9.5107E+02
1.3055E+01	8.0957E-01	8.8859E+01	6.8507E+05	9.4971E+02
1.3076E+01	8.0794E-01	8.8681E+01	6.8370E+05	9.4816E+02
1.3111E+01	8.0080E-01	8.7897E+01	6.7765E+05	9.4563E+02
1.3149E+01	7.8813E-01	8.6506E+01	6.6693E+05	9.4291E+02
1.3190E+01	7.7319E-01	8.4866E+01	6.5429E+05	9.4000E+02
1.3234E+01	7.6247E-01	8.3690E+01	6.4522E+05	9.3689E+02
1.3275E+01	7.5468E-01	8.2834E+01	6.3862E+05	9.3398E+02
1.3302E+01	7.5209E-01	8.2550E+01	6.3643E+05	9.3204E+02
1.3330E+01	7.4494E-01	8.1766E+01	6.3038E+05	9.3010E+02
1.3347E+01	7.3974E-01	8.1195E+01	6.2598E+05	9.2893E+02
1.3395E+01	7.3618E-01	8.0804E+01	6.2297E+05	9.2563E+02
1.3420E+01	7.3001E-01	8.0126E+01	6.1774E+05	9.2388E+02
1.3471E+01	7.2548E-01	7.9629E+01	6.1391E+05	9.2039E+02
1.3496E+01	7.2548E-01	7.9629E+01	6.1391E+05	9.1864E+02
1.3519E+01	7.2321E-01	7.9380E+01	6.1200E+05	9.1709E+02
1.3548E+01	7.2127E-01	7.9167E+01	6.1035E+05	9.1515E+02
1.3586E+01	7.2388E-01	7.9454E+01	6.1256E+05	9.1262E+02
1.3641E+01	7.2130E-01	7.9170E+01	6.1037E+05	9.0893E+02
1.3664E+01	7.2390E-01	7.9456E+01	6.1258E+05	9.0738E+02
1.3720E+01	7.2424E-01	7.9493E+01	6.1286E+05	9.0369E+02
1.3800E+01	7.3271E-01	8.0423E+01	6.2003E+05	8.9845E+02
1.3851E+01	7.4411E-01	8.1674E+01	6.2968E+05	8.9515E+02
1.3896E+01	7.5192E-01	8.2532E+01	6.3629E+05	8.9223E+02
1.3963E+01	7.6170E-01	8.3604E+01	6.4456E+05	8.8796E+02
1.4027E+01	7.6984E-01	8.4498E+01	6.5145E+05	8.8388E+02
1.4102E+01	7.7506E-01	8.5072E+01	6.5587E+05	8.7922E+02
1.4167E+01	7.8321E-01	8.5965E+01	6.6276E+05	8.7515E+02
1.4230E+01	7.9135E-01	8.6859E+01	6.6965E+05	8.7126E+02
1.4242E+01	7.9721E-01	8.7502E+01	6.7461E+05	8.7053E+02
1.4314E+01	8.0987E-01	8.8892E+01	6.8533E+05	8.6618E+02
1.4386E+01	8.3063E-01	9.1171E+01	7.0289E+05	8.6182E+02
1.4451E+01	8.5947E-01	9.4337E+01	7.2730E+05	8.5796E+02
1.4508E+01	8.9988E-01	9.8772E+01	7.6150E+05	8.5460E+02
1.4542E+01	9.4607E-01	1.0384E+02	8.0058E+05	8.5259E+02
1.4565E+01	9.8302E-01	1.0790E+02	8.3185E+05	8.5124E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.4574E+01	9.9576E-01	1.0930E+02	8.4263E+05	8.5074E+02
1.4585E+01	9.9567E-01	1.0929E+02	8.4256E+05	8.5007E+02
1.4594E+01	9.8183E-01	1.0777E+02	8.3084E+05	8.4957E+02
1.4614E+01	9.4607E-01	1.0384E+02	8.0058E+05	8.4840E+02
1.4634E+01	9.3103E-01	1.0219E+02	7.8785E+05	8.4723E+02
1.4654E+01	9.3910E-01	1.0308E+02	7.9468E+05	8.4606E+02
1.4678E+01	9.6331E-01	1.0573E+02	8.1517E+05	8.4471E+02
1.4692E+01	9.7376E-01	1.0688E+02	8.2401E+05	8.4387E+02
1.4707E+01	9.7486E-01	1.0700E+02	8.2494E+05	8.4304E+02
1.4724E+01	9.6101E-01	1.0548E+02	8.1323E+05	8.4203E+02
1.4748E+01	9.3791E-01	1.0295E+02	7.9367E+05	8.4070E+02
1.4765E+01	9.4249E-01	1.0345E+02	7.9755E+05	8.3969E+02
1.4801E+01	9.7486E-01	1.0700E+02	8.2494E+05	8.3768E+02
1.4813E+01	9.8293E-01	1.0789E+02	8.3177E+05	8.3701E+02
1.4822E+01	9.8522E-01	1.0814E+02	8.3371E+05	8.3650E+02
1.4851E+01	9.7825E-01	1.0737E+02	8.2781E+05	8.3483E+02
1.4863E+01	9.7825E-01	1.0737E+02	8.2781E+05	8.3416E+02
1.4887E+01	9.8751E-01	1.0839E+02	8.3565E+05	8.3282E+02
1.4929E+01	1.0187E+00	1.1181E+02	8.6203E+05	8.3047E+02
1.4975E+01	1.0175E+00	1.1168E+02	8.6102E+05	8.2796E+02
1.5042E+01	1.0498E+00	1.1522E+02	8.8833E+05	8.2427E+02
1.5057E+01	1.0555E+00	1.1586E+02	8.9322E+05	8.2343E+02
1.5085E+01	1.0601E+00	1.1636E+02	8.9710E+05	8.2192E+02
1.5109E+01	1.0683E+00	1.1726E+02	9.0401E+05	8.2058E+02
1.5150E+01	1.0902E+00	1.1966E+02	9.2255E+05	8.1840E+02
1.5174E+01	1.1029E+00	1.2105E+02	9.3326E+05	8.1706E+02
1.5224E+01	1.1167E+00	1.2257E+02	9.4497E+05	8.1438E+02
1.5306E+01	1.1479E+00	1.2599E+02	9.7136E+05	8.1002E+02
1.5405E+01	1.1779E+00	1.2928E+02	9.9673E+05	8.0482E+02
1.5535E+01	1.2136E+00	1.3321E+02	1.0270E+06	7.9812E+02
1.5646E+01	1.2448E+00	1.3663E+02	1.0534E+06	7.9242E+02
1.5689E+01	1.2597E+00	1.3827E+02	1.0660E+06	7.9024E+02
1.5713E+01	1.2759E+00	1.4004E+02	1.0797E+06	7.8906E+02
1.5743E+01	1.2979E+00	1.4246E+02	1.0983E+06	7.8755E+02
1.5760E+01	1.3128E+00	1.4410E+02	1.1109E+06	7.8671E+02
1.5773E+01	1.3117E+00	1.4398E+02	1.1100E+06	7.8604E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5803E+01	1.2713E+00	1.3954E+02	1.0758E+06	7.8454E+02
1.5834E+01	1.2701E+00	1.3941E+02	1.0748E+06	7.8303E+02
1.5854E+01	1.2770E+00	1.4016E+02	1.0806E+06	7.8203E+02
1.5885E+01	1.2920E+00	1.4181E+02	1.0933E+06	7.8052E+02
1.5898E+01	1.2885E+00	1.4143E+02	1.0904E+06	7.7985E+02
1.5919E+01	1.2654E+00	1.3889E+02	1.0708E+06	7.7885E+02
1.5940E+01	1.2642E+00	1.3876E+02	1.0698E+06	7.7784E+02
1.5960E+01	1.2677E+00	1.3915E+02	1.0728E+06	7.7684E+02
1.5991E+01	1.2805E+00	1.4054E+02	1.0836E+06	7.7533E+02
1.6008E+01	1.2850E+00	1.4105E+02	1.0874E+06	7.7449E+02
1.6047E+01	1.2746E+00	1.3990E+02	1.0786E+06	7.7265E+02
1.6085E+01	1.2827E+00	1.4079E+02	1.0854E+06	7.7081E+02
1.6127E+01	1.3023E+00	1.4294E+02	1.1020E+06	7.6879E+02
1.6162E+01	1.3012E+00	1.4282E+02	1.1011E+06	7.6712E+02
1.6208E+01	1.3208E+00	1.4497E+02	1.1177E+06	7.6494E+02
1.6223E+01	1.3149E+00	1.4433E+02	1.1127E+06	7.6427E+02
1.6254E+01	1.2976E+00	1.4243E+02	1.0981E+06	7.6277E+02
1.6287E+01	1.3011E+00	1.4281E+02	1.1010E+06	7.6126E+02
1.6308E+01	1.3184E+00	1.4471E+02	1.1157E+06	7.6025E+02
1.6326E+01	1.3277E+00	1.4573E+02	1.1235E+06	7.5941E+02
1.6366E+01	1.3126E+00	1.4408E+02	1.1108E+06	7.5757E+02
1.6388E+01	1.3149E+00	1.4433E+02	1.1127E+06	7.5657E+02
1.6424E+01	1.3369E+00	1.4673E+02	1.1313E+06	7.5489E+02
1.6439E+01	1.3369E+00	1.4673E+02	1.1313E+06	7.5422E+02
1.6468E+01	1.3253E+00	1.4547E+02	1.1215E+06	7.5288E+02
1.6512E+01	1.3334E+00	1.4635E+02	1.1283E+06	7.5087E+02
1.6545E+01	1.3495E+00	1.4812E+02	1.1420E+06	7.4936E+02
1.6586E+01	1.3334E+00	1.4635E+02	1.1283E+06	7.4752E+02
1.6620E+01	1.3368E+00	1.4672E+02	1.1312E+06	7.4601E+02
1.6668E+01	1.3460E+00	1.4774E+02	1.1390E+06	7.4383E+02
1.6714E+01	1.3413E+00	1.4723E+02	1.1351E+06	7.4182E+02
1.6759E+01	1.3494E+00	1.4811E+02	1.1419E+06	7.3981E+02
1.6793E+01	1.3517E+00	1.4836E+02	1.1438E+06	7.3831E+02
1.6820E+01	1.3517E+00	1.4836E+02	1.1438E+06	7.3713E+02
1.6893E+01	1.3633E+00	1.4963E+02	1.1536E+06	7.3395E+02
1.6959E+01	1.3690E+00	1.5027E+02	1.1585E+06	7.3110E+02

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7056E+01	1.3828E+00	1.5178E+02	1.1701E+06	7.2691E+02
1.7202E+01	1.3981E+00	1.5346E+02	1.1831E+06	7.2074E+02
1.7488E+01	1.4382E+00	1.5786E+02	1.2170E+06	7.0895E+02
1.7756E+01	1.4549E+00	1.5969E+02	1.2311E+06	6.9825E+02
1.7921E+01	1.4615E+00	1.6041E+02	1.2367E+06	6.9184E+02
1.8145E+01	1.4480E+00	1.5893E+02	1.2253E+06	6.8331E+02
1.8549E+01	1.4042E+00	1.5412E+02	1.1882E+06	6.6842E+02
1.9002E+01	1.3436E+00	1.4748E+02	1.1370E+06	6.5247E+02
1.9643E+01	1.2796E+00	1.4045E+02	1.0829E+06	6.3119E+02
2.0222E+01	1.2123E+00	1.3307E+02	1.0259E+06	6.1312E+02
2.0949E+01	1.1350E+00	1.2457E+02	9.6042E+05	5.9185E+02
2.1728E+01	1.0307E+00	1.1313E+02	8.7219E+05	5.7062E+02
2.2438E+01	9.5340E-01	1.0465E+02	8.0679E+05	5.5256E+02
2.3197E+01	8.8944E-01	9.7626E+01	7.5266E+05	5.3448E+02
2.3911E+01	8.4230E-01	9.2452E+01	7.1277E+05	5.1852E+02
2.4722E+01	7.7837E-01	8.5435E+01	6.5867E+05	5.0151E+02
2.6106E+01	6.7744E-01	7.4356E+01	5.7326E+05	4.7493E+02
2.7720E+01	5.8656E-01	6.4381E+01	4.9635E+05	4.4728E+02
2.9324E+01	5.1248E-01	5.6250E+01	4.3367E+05	4.2281E+02
3.1043E+01	4.4848E-01	4.9225E+01	3.7951E+05	3.9939E+02
3.3071E+01	3.9454E-01	4.3305E+01	3.3386E+05	3.7490E+02
3.5000E+01	3.4786E-01	3.8181E+01	2.9436E+05	3.5424E+02
4.0000E+01	2.5154E-01	2.7609E+01	2.1286E+05	3.0996E+02
4.5000E+01	1.8982E-01	2.0835E+01	1.6063E+05	2.7552E+02
5.0000E+01	1.4764E-01	1.6205E+01	1.2493E+05	2.4797E+02
6.0000E+01	9.5298E-02	1.0460E+01	8.0643E+04	2.0664E+02
7.0000E+01	6.5521E-02	7.1916E+00	5.5445E+04	1.7712E+02
8.0000E+01	4.7195E-02	5.1801E+00	3.9937E+04	1.5498E+02
9.0000E+01	3.5249E-02	3.8690E+00	2.9829E+04	1.3776E+02
1.0000E+02	2.7526E-02	3.0213E+00	2.3293E+04	1.2398E+02
1.2500E+02	1.7119E-02	1.8790E+00	1.4486E+04	9.9187E+01
1.5000E+02	1.1391E-02	1.2503E+00	9.6395E+03	8.2656E+01
1.7500E+02	7.8770E-03	8.6459E-01	6.6657E+03	7.0848E+01
2.0000E+02	5.6117E-03	6.1594E-01	4.7487E+03	6.1992E+01
2.2500E+02	4.0986E-03	4.4987E-01	3.4683E+03	5.5104E+01
2.5000E+02	3.0575E-03	3.3560E-01	2.5873E+03	4.9594E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.7500E+02	2.3225E-03	2.5492E-01	1.9653E+03	4.5085E+01
2.8450E+02	2.1008E-03	2.3059E-01	1.7778E+03	4.3580E+01
2.8460E+02	7.8215E-03	8.5850E-01	6.6187E+03	4.3564E+01
2.8470E+02	1.2691E-02	1.3930E+00	1.0740E+04	4.3549E+01
2.8479E+02	2.1501E-02	2.3600E+00	1.8195E+04	4.3535E+01
2.8486E+02	3.6228E-02	3.9764E+00	3.0656E+04	4.3525E+01
2.8491E+02	5.8836E-02	6.4579E+00	4.9788E+04	4.3517E+01
2.8494E+02	8.8338E-02	9.6960E+00	7.4753E+04	4.3512E+01
2.8497E+02	1.2670E-01	1.3907E+01	1.0722E+05	4.3508E+01
2.8499E+02	1.9261E-01	2.1141E+01	1.6299E+05	4.3505E+01
2.8501E+02	2.7919E-01	3.0645E+01	2.3626E+05	4.3502E+01
2.8503E+02	3.6774E-01	4.0363E+01	3.1119E+05	4.3499E+01
2.8504E+02	4.2283E-01	4.6410E+01	3.5781E+05	4.3497E+01
2.8506E+02	4.6514E-01	5.1054E+01	3.9361E+05	4.3494E+01
2.8507E+02	4.5430E-01	4.9864E+01	3.8444E+05	4.3493E+01
2.8511E+02	3.7853E-01	4.1547E+01	3.2032E+05	4.3486E+01
2.8514E+02	3.5489E-01	3.8953E+01	3.0031E+05	4.3482E+01
2.8517E+02	3.5192E-01	3.8627E+01	2.9780E+05	4.3477E+01
2.8519E+02	3.4700E-01	3.8087E+01	2.9364E+05	4.3474E+01
2.8521E+02	3.3518E-01	3.6789E+01	2.8363E+05	4.3471E+01
2.8523E+02	3.4205E-01	3.7544E+01	2.8945E+05	4.3468E+01
2.8525E+02	3.4205E-01	3.7544E+01	2.8945E+05	4.3465E+01
2.8527E+02	3.2728E-01	3.5923E+01	2.7695E+05	4.3462E+01
2.8530E+02	2.7610E-01	3.0305E+01	2.3364E+05	4.3457E+01
2.8531E+02	2.6429E-01	2.9008E+01	2.2364E+05	4.3456E+01
2.8534E+02	2.3673E-01	2.5983E+01	2.0032E+05	4.3451E+01
2.8538E+02	2.0915E-01	2.2957E+01	1.7699E+05	4.3445E+01
2.8541E+02	1.9437E-01	2.1335E+01	1.6448E+05	4.3441E+01
2.8543E+02	1.9240E-01	2.1118E+01	1.6281E+05	4.3438E+01
2.8547E+02	2.0615E-01	2.2627E+01	1.7445E+05	4.3432E+01
2.8549E+02	2.1008E-01	2.3059E+01	1.7778E+05	4.3429E+01
2.8550E+02	2.0417E-01	2.2409E+01	1.7277E+05	4.3427E+01
2.8552E+02	1.8645E-01	2.0464E+01	1.5777E+05	4.3424E+01
2.8556E+02	1.5593E-01	1.7115E+01	1.3195E+05	4.3418E+01
2.8560E+02	1.3327E-01	1.4628E+01	1.1278E+05	4.3412E+01
2.8565E+02	1.1652E-01	1.2789E+01	9.8602E+04	4.3404E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8568E+02	1.1159E-01	1.2248E+01	9.4430E+04	4.3400E+01
2.8571E+02	1.0272E-01	1.1274E+01	8.6920E+04	4.3395E+01
2.8575E+02	8.0069E-02	8.7885E+00	6.7756E+04	4.3389E+01
2.8581E+02	6.1346E-02	6.7334E+00	5.1912E+04	4.3380E+01
2.8588E+02	4.7536E-02	5.2175E+00	4.0225E+04	4.3369E+01
2.8592E+02	4.1608E-02	4.5670E+00	3.5210E+04	4.3363E+01
2.8599E+02	3.0752E-02	3.3754E+00	2.6023E+04	4.3353E+01
2.8609E+02	2.4799E-02	2.7219E+00	2.0985E+04	4.3337E+01
2.8615E+02	2.4771E-02	2.7189E+00	2.0961E+04	4.3328E+01
2.8625E+02	1.9802E-02	2.1735E+00	1.6757E+04	4.3313E+01
2.8638E+02	1.2852E-02	1.4106E+00	1.0875E+04	4.3294E+01
2.8650E+02	8.8549E-03	9.7193E-01	7.4932E+03	4.3275E+01
2.8680E+02	1.0097E-02	1.1082E+00	8.5439E+03	4.3230E+01
2.8691E+02	1.2245E-02	1.3440E+00	1.0362E+04	4.3214E+01
2.8697E+02	1.7401E-02	1.9100E+00	1.4725E+04	4.3205E+01
2.8703E+02	3.8239E-02	4.1972E+00	3.2359E+04	4.3196E+01
2.8707E+02	6.2085E-02	6.8145E+00	5.2537E+04	4.3190E+01
2.8709E+02	6.7456E-02	7.4041E+00	5.7083E+04	4.3187E+01
2.8711E+02	6.3375E-02	6.9561E+00	5.3629E+04	4.3184E+01
2.8714E+02	6.0366E-02	6.6258E+00	5.1083E+04	4.3179E+01
2.8720E+02	7.6479E-02	8.3944E+00	6.4718E+04	4.3170E+01
2.8723E+02	7.2183E-02	7.9228E+00	6.1082E+04	4.3165E+01
2.8725E+02	6.2730E-02	6.8853E+00	5.3083E+04	4.3162E+01
2.8728E+02	5.6500E-02	6.2015E+00	4.7811E+04	4.3158E+01
2.8730E+02	5.3922E-02	5.9185E+00	4.5630E+04	4.3155E+01
2.8733E+02	5.4567E-02	5.9893E+00	4.6175E+04	4.3150E+01
2.8735E+02	5.2418E-02	5.7534E+00	4.4357E+04	4.3147E+01
2.8740E+02	4.3395E-02	4.7631E+00	3.6722E+04	4.3140E+01
2.8744E+02	3.7380E-02	4.1029E+00	3.1632E+04	4.3134E+01
2.8749E+02	3.2654E-02	3.5841E+00	2.7632E+04	4.3126E+01
2.8752E+02	3.2224E-02	3.5370E+00	2.7269E+04	4.3122E+01
2.8756E+02	2.7283E-02	2.9946E+00	2.3088E+04	4.3116E+01
2.8762E+02	2.3846E-02	2.6173E+00	2.0179E+04	4.3107E+01
2.8770E+02	2.1912E-02	2.4051E+00	1.8542E+04	4.3095E+01
2.8775E+02	2.3846E-02	2.6173E+00	2.0179E+04	4.3087E+01
2.8777E+02	2.6638E-02	2.9239E+00	2.2542E+04	4.3084E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8782E+02	4.6617E-02	5.1167E+00	3.9448E+04	4.3077E+01
2.8785E+02	5.0914E-02	5.5884E+00	4.3085E+04	4.3073E+01
2.8789E+02	4.2536E-02	4.6687E+00	3.5994E+04	4.3067E+01
2.8792E+02	4.0818E-02	4.4802E+00	3.4541E+04	4.3062E+01
2.8794E+02	4.3180E-02	4.7395E+00	3.6540E+04	4.3059E+01
2.8798E+02	4.4899E-02	4.9282E+00	3.7995E+04	4.3053E+01
2.8800E+02	4.2751E-02	4.6924E+00	3.6177E+04	4.3050E+01
2.8803E+02	3.6091E-02	3.9614E+00	3.0541E+04	4.3046E+01
2.8809E+02	3.8669E-02	4.2443E+00	3.2722E+04	4.3037E+01
2.8815E+02	3.3084E-02	3.6313E+00	2.7996E+04	4.3028E+01
2.8819E+02	3.3513E-02	3.6784E+00	2.8359E+04	4.3022E+01
2.8820E+02	3.6306E-02	3.9850E+00	3.0723E+04	4.3020E+01
2.8823E+02	3.8884E-02	4.2680E+00	3.2904E+04	4.3016E+01
2.8826E+02	3.7165E-02	4.0793E+00	3.1450E+04	4.3011E+01
2.8830E+02	3.2010E-02	3.5134E+00	2.7087E+04	4.3005E+01
2.8834E+02	3.1579E-02	3.4662E+00	2.6723E+04	4.2999E+01
2.8835E+02	3.3728E-02	3.7020E+00	2.8541E+04	4.2998E+01
2.8839E+02	3.5017E-02	3.8435E+00	2.9632E+04	4.2992E+01
2.8843E+02	3.3513E-02	3.6784E+00	2.8359E+04	4.2986E+01
2.8851E+02	3.4372E-02	3.7727E+00	2.9087E+04	4.2974E+01
2.8854E+02	3.3084E-02	3.6313E+00	2.7996E+04	4.2969E+01
2.8862E+02	3.4372E-02	3.7727E+00	2.9087E+04	4.2958E+01
2.8865E+02	3.7380E-02	4.1029E+00	3.1632E+04	4.2953E+01
2.8873E+02	6.1011E-02	6.6966E+00	5.1628E+04	4.2941E+01
2.8875E+02	6.4878E-02	7.1211E+00	5.4901E+04	4.2938E+01
2.8879E+02	6.9390E-02	7.6163E+00	5.8719E+04	4.2932E+01
2.8882E+02	7.7338E-02	8.4887E+00	6.5445E+04	4.2928E+01
2.8884E+02	8.5716E-02	9.4083E+00	7.2534E+04	4.2925E+01
2.8887E+02	8.9797E-02	9.8563E+00	7.5988E+04	4.2920E+01
2.8893E+02	8.7435E-02	9.5969E+00	7.3989E+04	4.2911E+01
2.8899E+02	9.0442E-02	9.9270E+00	7.6534E+04	4.2903E+01
2.8902E+02	9.0228E-02	9.9035E+00	7.6352E+04	4.2898E+01
2.8908E+02	9.1947E-02	1.0092E+01	7.7807E+04	4.2889E+01
2.8916E+02	8.4856E-02	9.3139E+00	7.1807E+04	4.2877E+01
2.8922E+02	8.0775E-02	8.8659E+00	6.8353E+04	4.2868E+01
2.8926E+02	7.7124E-02	8.4652E+00	6.5263E+04	4.2863E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8930E+02	6.9174E-02	7.5926E+00	5.8536E+04	4.2857E+01
2.8935E+02	6.5092E-02	7.1446E+00	5.5082E+04	4.2849E+01
2.8941E+02	6.1656E-02	6.7674E+00	5.2174E+04	4.2840E+01
2.8943E+02	6.1226E-02	6.7202E+00	5.1810E+04	4.2837E+01
2.8948E+02	5.7789E-02	6.3429E+00	4.8902E+04	4.2830E+01
2.8953E+02	5.8003E-02	6.3665E+00	4.9083E+04	4.2823E+01
2.8957E+02	5.6715E-02	6.2251E+00	4.7993E+04	4.2817E+01
2.8964E+02	5.1559E-02	5.6592E+00	4.3630E+04	4.2806E+01
2.8968E+02	5.1988E-02	5.7063E+00	4.3993E+04	4.2800E+01
2.8972E+02	5.1344E-02	5.6355E+00	4.3448E+04	4.2794E+01
2.8976E+02	4.8981E-02	5.3762E+00	4.1448E+04	4.2789E+01
2.8980E+02	4.9195E-02	5.3997E+00	4.1630E+04	4.2783E+01
2.8986E+02	4.5973E-02	5.0461E+00	3.8903E+04	4.2774E+01
2.8990E+02	4.7047E-02	5.1640E+00	3.9812E+04	4.2768E+01
2.8999E+02	4.7262E-02	5.1875E+00	3.9994E+04	4.2755E+01
2.9007E+02	4.8551E-02	5.3290E+00	4.1084E+04	4.2743E+01
2.9019E+02	5.4567E-02	5.9893E+00	4.6175E+04	4.2725E+01
2.9030E+02	6.1656E-02	6.7674E+00	5.2174E+04	4.2709E+01
2.9038E+02	6.5092E-02	7.1446E+00	5.5082E+04	4.2697E+01
2.9046E+02	6.6597E-02	7.3097E+00	5.6355E+04	4.2685E+01
2.9056E+02	6.6167E-02	7.2625E+00	5.5991E+04	4.2671E+01
2.9068E+02	6.3804E-02	7.0032E+00	5.3992E+04	4.2653E+01
2.9081E+02	6.1870E-02	6.7909E+00	5.2356E+04	4.2634E+01
2.9087E+02	6.1441E-02	6.7438E+00	5.1993E+04	4.2625E+01
2.9095E+02	6.1870E-02	6.7909E+00	5.2356E+04	4.2614E+01
2.9110E+02	6.4449E-02	7.0739E+00	5.4538E+04	4.2592E+01
2.9116E+02	6.5308E-02	7.1683E+00	5.5265E+04	4.2583E+01
2.9134E+02	6.4878E-02	7.1211E+00	5.4901E+04	4.2557E+01
2.9150E+02	6.1729E-02	6.7755E+00	5.2236E+04	4.2533E+01
2.9184E+02	6.3965E-02	7.0209E+00	5.4129E+04	4.2484E+01
2.9219E+02	6.9532E-02	7.6319E+00	5.8839E+04	4.2433E+01
2.9258E+02	7.9356E-02	8.7102E+00	6.7152E+04	4.2376E+01
2.9273E+02	8.4174E-02	9.2390E+00	7.1229E+04	4.2354E+01
2.9307E+02	9.3810E-02	1.0297E+01	7.9384E+04	4.2305E+01
2.9340E+02	1.0196E-01	1.1191E+01	8.6282E+04	4.2258E+01
2.9365E+02	1.0438E-01	1.1457E+01	8.8327E+04	4.2222E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9374E+02	1.0568E-01	1.1600E+01	8.9432E+04	4.2209E+01
2.9385E+02	1.0477E-01	1.1499E+01	8.8654E+04	4.2193E+01
2.9404E+02	1.0181E-01	1.1174E+01	8.6151E+04	4.2166E+01
2.9441E+02	9.4058E-02	1.0324E+01	7.9593E+04	4.2113E+01
2.9463E+02	9.0182E-02	9.8985E+00	7.6314E+04	4.2081E+01
2.9482E+02	8.5935E-02	9.4323E+00	7.2720E+04	4.2054E+01
2.9513E+02	8.1510E-02	8.9466E+00	6.8975E+04	4.2010E+01
2.9557E+02	7.8014E-02	8.5629E+00	6.6017E+04	4.1947E+01
2.9618E+02	7.7673E-02	8.5254E+00	6.5728E+04	4.1861E+01
2.9664E+02	7.8064E-02	8.5684E+00	6.6059E+04	4.1796E+01
2.9697E+02	7.8819E-02	8.6513E+00	6.6698E+04	4.1750E+01
2.9774E+02	8.2943E-02	9.1039E+00	7.0188E+04	4.1642E+01
2.9870E+02	8.8028E-02	9.6621E+00	7.4491E+04	4.1508E+01
2.9896E+02	8.8419E-02	9.7049E+00	7.4822E+04	4.1472E+01
3.0017E+02	8.6457E-02	9.4896E+00	7.3162E+04	4.1305E+01
3.0165E+02	8.5670E-02	9.4033E+00	7.2496E+04	4.1102E+01
3.0191E+02	8.4886E-02	9.3172E+00	7.1832E+04	4.1067E+01
3.0226E+02	8.4885E-02	9.3171E+00	7.1832E+04	4.1019E+01
3.0409E+02	7.8030E-02	8.5647E+00	6.6031E+04	4.0772E+01
3.0574E+02	7.0980E-02	7.7908E+00	6.0064E+04	4.0552E+01
3.0783E+02	6.3732E-02	6.9953E+00	5.3931E+04	4.0277E+01
3.1052E+02	5.6483E-02	6.1996E+00	4.7797E+04	3.9928E+01
3.1478E+02	5.0598E-02	5.5537E+00	4.2817E+04	3.9388E+01
3.1843E+02	4.7846E-02	5.2516E+00	4.0488E+04	3.8936E+01
3.2261E+02	4.6071E-02	5.0568E+00	3.8986E+04	3.8432E+01
3.2591E+02	4.5277E-02	4.9697E+00	3.8314E+04	3.8042E+01
3.2739E+02	4.4099E-02	4.8403E+00	3.7317E+04	3.7870E+01
3.3130E+02	4.2520E-02	4.6670E+00	3.5981E+04	3.7424E+01
3.3235E+02	4.1539E-02	4.5593E+00	3.5151E+04	3.7305E+01
3.3730E+02	3.8783E-02	4.2568E+00	3.2819E+04	3.6758E+01
3.4200E+02	3.6811E-02	4.0404E+00	3.1150E+04	3.6253E+01
3.4643E+02	3.5621E-02	3.9098E+00	3.0143E+04	3.5789E+01
3.5000E+02	3.4631E-02	3.8012E+00	2.9306E+04	3.5424E+01
4.0000E+02	2.5961E-02	2.8495E+00	2.1968E+04	3.0996E+01
4.5000E+02	1.9497E-02	2.1400E+00	1.6499E+04	2.7552E+01
5.0000E+02	1.4993E-02	1.6457E+00	1.2688E+04	2.4797E+01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.0000E+02	9.4101E-03	1.0329E+00	7.9630E+03	2.0664E+01
7.0000E+02	6.2937E-03	6.9080E-01	5.3258E+03	1.7712E+01
8.0000E+02	4.4223E-03	4.8539E-01	3.7422E+03	1.5498E+01
9.0000E+02	3.2313E-03	3.5467E-01	2.7344E+03	1.3776E+01
1.0000E+03	2.4370E-03	2.6749E-01	2.0623E+03	1.2398E+01
1.2500E+03	1.3375E-03	1.4680E-01	1.1318E+03	9.9187E+00
1.5000E+03	8.1861E-04	8.9852E-02	6.9272E+02	8.2656E+00
1.7500E+03	4.8811E-04	5.3575E-02	4.1304E+02	7.0848E+00
2.0000E+03	3.2982E-04	3.6202E-02	2.7910E+02	6.1992E+00
2.2500E+03	2.3278E-04	2.5550E-02	1.9698E+02	5.5104E+00
2.5000E+03	1.7009E-04	1.8669E-02	1.4393E+02	4.9594E+00
2.7500E+03	1.2785E-04	1.4033E-02	1.0819E+02	4.5085E+00
3.0000E+03	9.8397E-05	1.0800E-02	8.3266E+01	4.1328E+00
3.5000E+03	6.1682E-05	6.7703E-03	5.2196E+01	3.5424E+00
4.0000E+03	4.1025E-05	4.5029E-03	3.4716E+01	3.0996E+00
4.5000E+03	2.8554E-05	3.1341E-03	2.4163E+01	2.7552E+00
5.0000E+03	2.0602E-05	2.2613E-03	1.7434E+01	2.4797E+00
6.0000E+03	1.1645E-05	1.2782E-03	9.8546E+00	2.0664E+00
7.0000E+03	7.1436E-06	7.8408E-04	6.0450E+00	1.7712E+00
8.0000E+03	4.6518E-06	5.1059E-04	3.9365E+00	1.5498E+00
9.0000E+03	3.1702E-06	3.4796E-04	2.6826E+00	1.3776E+00
1.0000E+04	2.1356E-06	2.3441E-04	1.8072E+00	1.2398E+00
1.2500E+04	1.0342E-06	1.1351E-04	8.7514E-01	9.9187E-01
1.5000E+04	5.7188E-07	6.2770E-05	4.8393E-01	8.2656E-01
1.7500E+04	3.4652E-07	3.8034E-05	2.9323E-01	7.0848E-01
2.0000E+04	2.2454E-07	2.4646E-05	1.9001E-01	6.1992E-01
2.2500E+04	1.5314E-07	1.6808E-05	1.2959E-01	5.5104E-01
2.5000E+04	1.0874E-07	1.1935E-05	9.2017E-02	4.9594E-01
2.7500E+04	7.9617E-08	8.7388E-06	6.7373E-02	4.5085E-01
3.0000E+04	5.9707E-08	6.5534E-06	5.0525E-02	4.1328E-01
3.5000E+04	3.5839E-08	3.9337E-06	3.0327E-02	3.5424E-01
4.0000E+04	2.3033E-08	2.5281E-06	1.9491E-02	3.0996E-01
4.5000E+04	1.5595E-08	1.7117E-06	1.3197E-02	2.7552E-01
5.0000E+04	1.1003E-08	1.2077E-06	9.3109E-03	2.4797E-01
6.0000E+04	6.0172E-09	6.6046E-07	5.0919E-03	2.0664E-01
7.0000E+04	3.6117E-09	3.9642E-07	3.0563E-03	1.7712E-01

Table II. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.0000E+04	2.3222E-09	2.5488E-07	1.9650E-03	1.5498E-01
9.0000E+04	1.5742E-09	1.7278E-07	1.3321E-03	1.3776E-01
1.0000E+05	1.1123E-09	1.2209E-07	9.4125E-04	1.2398E-01

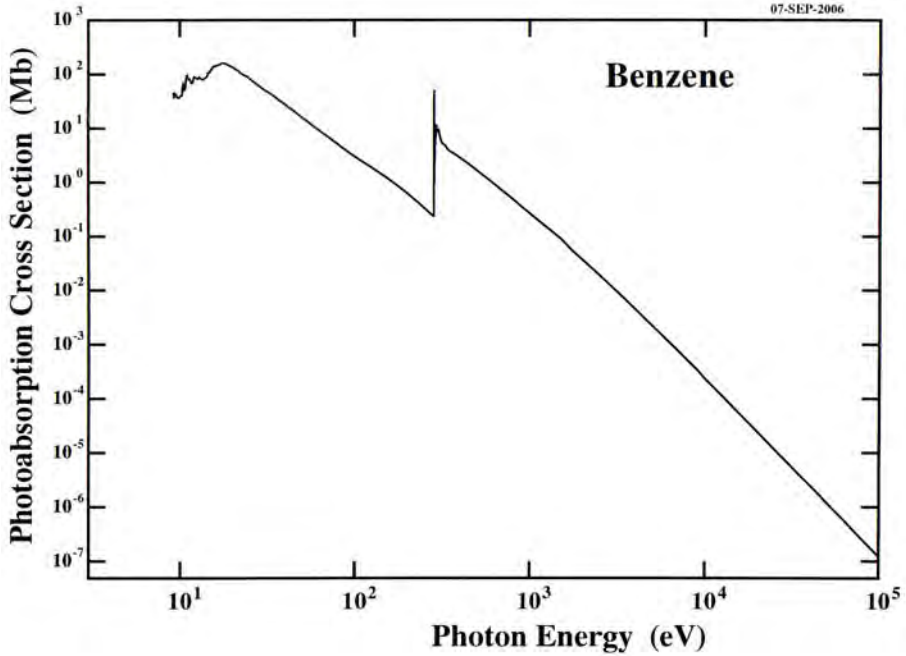
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1 - \exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} = 13.6$ and 290.42 for hydrogen and carbon atoms, respectively.


07-SEP-2006
Benzene
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^1
10^2
10^3
10^4
10^5

C_6H_6

Energy, eV	Source
4.90	Table 6.15 p.284 (Berkowitz's book*)
6.19	Table 6.15 p.284 (Berkowitz's book*)
6.96	Table 6.15 p.284 (Berkowitz's book*)
6.93	Table 6.15 p.284 (Berkowitz's book*)
9.0	Table 6.15 p.284 (Berkowitz's book*)
9.24384 (IP) - 35.0	Rennie *et al.*, Chem. Phys., 229 (1998) 107
35.0 - 91.5	Table 6.16 p.285 (Berkowitz's book*)
91.5 - 284.5	Table 6.16 p.285 (Berkowitz's book*)
284.5 - 350.0	Rennie *et al.*, J. Chem. Phys., 133 (2000) 7362
350 - 1740	Table 6.16 p.285 (Berkowitz's book*)
1740.0 - 10^4	Table 6.16 p.285 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Silane (SiH_4)

Z = 18 Molecular Mass : $M_{\rm A}$ = 32.11726

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
7.6800E+00	3.6575E-03	4.0145E-01	7.5273E+03	1.6144E+03
7.9145E+00	7.3148E-03	8.0288E-01	1.5054E+04	1.5665E+03
8.0399E+00	2.0116E-02	2.2079E+00	4.1400E+04	1.5421E+03
8.2051E+00	4.9376E-02	5.4195E+00	1.0162E+05	1.5111E+03
8.3476E+00	1.1155E-01	1.2244E+01	2.2958E+05	1.4853E+03
8.5128E+00	2.2128E-01	2.4288E+01	4.5541E+05	1.4564E+03
8.6496E+00	3.1088E-01	3.4122E+01	6.3981E+05	1.4334E+03
8.7806E+00	3.8586E-01	4.2352E+01	7.9412E+05	1.4120E+03
8.9402E+00	4.4438E-01	4.8775E+01	9.1456E+05	1.3868E+03
9.0940E+00	4.8461E-01	5.3191E+01	9.9735E+05	1.3634E+03
9.1966E+00	5.1936E-01	5.7005E+01	1.0689E+06	1.3482E+03
9.3561E+00	5.9616E-01	6.5435E+01	1.2269E+06	1.3252E+03
9.3960E+00	6.1993E-01	6.8045E+01	1.2759E+06	1.3195E+03
9.5214E+00	6.6382E-01	7.2862E+01	1.3662E+06	1.3022E+03
9.6239E+00	6.9856E-01	7.6675E+01	1.4377E+06	1.2883E+03
9.6980E+00	7.1136E-01	7.8080E+01	1.4640E+06	1.2785E+03
9.8803E+00	7.0953E-01	7.7879E+01	1.4603E+06	1.2549E+03
9.9886E+00	7.0771E-01	7.7679E+01	1.4565E+06	1.2413E+03
1.0108E+01	7.2965E-01	8.0088E+01	1.5017E+06	1.2266E+03
1.0245E+01	7.8085E-01	8.5707E+01	1.6071E+06	1.2102E+03
1.0365E+01	8.5035E-01	9.3336E+01	1.7501E+06	1.1962E+03
1.0473E+01	9.3630E-01	1.0277E+02	1.9270E+06	1.1838E+03
1.0553E+01	1.0168E+00	1.1161E+02	2.0927E+06	1.1749E+03
1.0581E+01	1.0350E+00	1.1360E+02	2.1301E+06	1.1718E+03
1.0610E+01	1.0771E+00	1.1823E+02	2.2168E+06	1.1686E+03
1.0707E+01	1.1046E+00	1.2124E+02	2.2733E+06	1.1580E+03
1.0729E+01	1.0972E+00	1.2043E+02	2.2581E+06	1.1556E+03
1.0758E+01	1.0625E+00	1.1662E+02	2.1866E+06	1.1525E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.0809E+01	1.0460E+00	1.1481E+02	2.1528E+06	1.1470E+03
1.0826E+01	1.0259E+00	1.1260E+02	2.1113E+06	1.1452E+03
1.0906E+01	1.0003E+00	1.0979E+02	2.0587E+06	1.1368E+03
1.0946E+01	1.0003E+00	1.0979E+02	2.0587E+06	1.1327E+03
1.0986E+01	9.7836E-01	1.0739E+02	2.0135E+06	1.1286E+03
1.1031E+01	9.8936E-01	1.0859E+02	2.0362E+06	1.1240E+03
1.1077E+01	9.6556E-01	1.0598E+02	1.9872E+06	1.1193E+03
1.1117E+01	9.8572E-01	1.0819E+02	2.0287E+06	1.1153E+03
1.1162E+01	9.6007E-01	1.0538E+02	1.9759E+06	1.1108E+03
1.1185E+01	9.8201E-01	1.0779E+02	2.0211E+06	1.1085E+03
1.1214E+01	9.8384E-01	1.0799E+02	2.0248E+06	1.1056E+03
1.1236E+01	9.6373E-01	1.0578E+02	1.9834E+06	1.1035E+03
1.1259E+01	9.6007E-01	1.0538E+02	1.9759E+06	1.1012E+03
1.1282E+01	9.7104E-01	1.0658E+02	1.9985E+06	1.0990E+03
1.1339E+01	9.3813E-01	1.0297E+02	1.9307E+06	1.0934E+03
1.1356E+01	9.1435E-01	1.0036E+02	1.8818E+06	1.0918E+03
1.1379E+01	9.2350E-01	1.0136E+02	1.9006E+06	1.0896E+03
1.1402E+01	8.9789E-01	9.8554E+01	1.8479E+06	1.0874E+03
1.1419E+01	8.8143E-01	9.6747E+01	1.8141E+06	1.0858E+03
1.1487E+01	8.6680E-01	9.5141E+01	1.7839E+06	1.0793E+03
1.1527E+01	8.3023E-01	9.1127E+01	1.7087E+06	1.0756E+03
1.1567E+01	8.3389E-01	9.1529E+01	1.7162E+06	1.0719E+03
1.1618E+01	8.0829E-01	8.8719E+01	1.6635E+06	1.0672E+03
1.1652E+01	8.1194E-01	8.9120E+01	1.6710E+06	1.0641E+03
1.1709E+01	7.9183E-01	8.6912E+01	1.6296E+06	1.0589E+03
1.1744E+01	7.9731E-01	8.7514E+01	1.6409E+06	1.0557E+03
1.1772E+01	7.8451E-01	8.6109E+01	1.6146E+06	1.0532E+03
1.1812E+01	7.8268E-01	8.5908E+01	1.6108E+06	1.0496E+03
1.1909E+01	7.5160E-01	8.2497E+01	1.5469E+06	1.0411E+03
1.1949E+01	7.4977E-01	8.2296E+01	1.5431E+06	1.0376E+03
1.1994E+01	7.2599E-01	7.9686E+01	1.4941E+06	1.0337E+03
1.2051E+01	7.2782E-01	7.9887E+01	1.4979E+06	1.0288E+03
1.2137E+01	7.2234E-01	7.9285E+01	1.4866E+06	1.0215E+03
1.2262E+01	7.2965E-01	8.0088E+01	1.5017E+06	1.0111E+03
1.2370E+01	7.1685E-01	7.8683E+01	1.4753E+06	1.0023E+03
1.2536E+01	6.9125E-01	7.5873E+01	1.4227E+06	9.8903E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.2570E+01	6.9856E-01	7.6675E+01	1.4377E+06	9.8635E+02
1.2718E+01	6.7662E-01	7.4267E+01	1.3925E+06	9.7487E+02
1.2809E+01	6.6199E-01	7.2661E+01	1.3624E+06	9.6795E+02
1.2855E+01	6.6930E-01	7.3464E+01	1.3775E+06	9.6448E+02
1.2906E+01	6.5284E-01	7.1657E+01	1.3436E+06	9.6067E+02
1.3000E+01	6.4187E-01	7.0453E+01	1.3210E+06	9.5372E+02
1.3147E+01	6.3407E-01	6.9596E+01	1.3050E+06	9.4306E+02
1.3378E+01	5.9869E-01	6.5713E+01	1.2322E+06	9.2678E+02
1.3500E+01	5.8422E-01	6.4125E+01	1.2024E+06	9.1840E+02
1.3629E+01	5.7937E-01	6.3592E+01	1.1924E+06	9.0971E+02
1.3880E+01	5.6038E-01	6.1508E+01	1.1533E+06	8.9326E+02
1.4170E+01	5.7097E-01	6.2670E+01	1.1751E+06	8.7498E+02
1.4208E+01	5.8412E-01	6.4113E+01	1.2022E+06	8.7264E+02
1.4324E+01	5.9065E-01	6.4830E+01	1.2156E+06	8.6557E+02
1.4401E+01	5.9967E-01	6.5820E+01	1.2342E+06	8.6094E+02
1.4421E+01	6.0870E-01	6.6812E+01	1.2528E+06	8.5975E+02
1.4536E+01	6.2182E-01	6.8251E+01	1.2797E+06	8.5295E+02
1.4749E+01	6.2420E-01	6.8513E+01	1.2847E+06	8.4063E+02
1.4942E+01	6.1182E-01	6.7154E+01	1.2592E+06	8.2977E+02
1.5038E+01	5.9452E-01	6.5255E+01	1.2236E+06	8.2447E+02
1.5077E+01	5.7479E-01	6.3089E+01	1.1830E+06	8.2234E+02
1.5154E+01	5.6325E-01	6.1823E+01	1.1592E+06	8.1816E+02
1.5270E+01	5.2622E-01	5.7758E+01	1.0830E+06	8.1195E+02
1.5463E+01	4.7766E-01	5.2428E+01	9.8306E+05	8.0181E+02
1.5509E+01	4.5173E-01	4.9583E+01	9.2970E+05	7.9943E+02
1.5580E+01	4.3538E-01	4.7788E+01	8.9605E+05	7.9579E+02
1.5619E+01	4.2075E-01	4.6182E+01	8.6593E+05	7.9380E+02
1.5669E+01	4.0641E-01	4.4608E+01	8.3642E+05	7.9127E+02
1.5697E+01	3.9149E-01	4.2970E+01	8.0571E+05	7.8986E+02
1.5719E+01	3.9465E-01	4.3318E+01	8.1222E+05	7.8875E+02
1.5746E+01	4.1933E-01	4.6026E+01	8.6302E+05	7.8740E+02
1.5763E+01	4.2766E-01	4.6941E+01	8.8016E+05	7.8655E+02
1.5774E+01	4.2910E-01	4.7098E+01	8.8312E+05	7.8600E+02
1.5794E+01	4.1819E-01	4.5901E+01	8.6067E+05	7.8501E+02
1.5807E+01	4.1562E-01	4.5619E+01	8.5537E+05	7.8436E+02
1.5813E+01	4.0930E-01	4.4925E+01	8.4236E+05	7.8406E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.5846E+01	4.0241E-01	4.4169E+01	8.2820E+05	7.8243E+02
1.5871E+01	3.9209E-01	4.3036E+01	8.0694E+05	7.8120E+02
1.5904E+01	3.7975E-01	4.1682E+01	7.8156E+05	7.7958E+02
1.5919E+01	3.7774E-01	4.1462E+01	7.7743E+05	7.7884E+02
1.5934E+01	3.8062E-01	4.1777E+01	7.8335E+05	7.7811E+02
1.5949E+01	3.9956E-01	4.3856E+01	8.2232E+05	7.7738E+02
1.5968E+01	4.1821E-01	4.5904E+01	8.6071E+05	7.7645E+02
1.5979E+01	4.2109E-01	4.6219E+01	8.6663E+05	7.7592E+02
1.5990E+01	4.2167E-01	4.6283E+01	8.6783E+05	7.7539E+02
1.6000E+01	4.2081E-01	4.6189E+01	8.6606E+05	7.7490E+02
1.6039E+01	4.0215E-01	4.4141E+01	8.2766E+05	7.7302E+02
1.6080E+01	3.9441E-01	4.3291E+01	8.1173E+05	7.7105E+02
1.6098E+01	3.8609E-01	4.2378E+01	7.9461E+05	7.7018E+02
1.6141E+01	3.8007E-01	4.1717E+01	7.8221E+05	7.6813E+02
1.6175E+01	3.9787E-01	4.3671E+01	8.1884E+05	7.6652E+02
1.6196E+01	4.0534E-01	4.4491E+01	8.3422E+05	7.6552E+02
1.6235E+01	3.9099E-01	4.2915E+01	8.0468E+05	7.6368E+02
1.6334E+01	3.6920E-01	4.0523E+01	7.5983E+05	7.5906E+02
1.6358E+01	3.6863E-01	4.0461E+01	7.5866E+05	7.5794E+02
1.6373E+01	3.7006E-01	4.0619E+01	7.6162E+05	7.5725E+02
1.6390E+01	3.7552E-01	4.1217E+01	7.7284E+05	7.5646E+02
1.6403E+01	3.7552E-01	4.1217E+01	7.7284E+05	7.5586E+02
1.6442E+01	3.6835E-01	4.0430E+01	7.5808E+05	7.5407E+02
1.6541E+01	3.4770E-01	3.8164E+01	7.1560E+05	7.4956E+02
1.6561E+01	3.4626E-01	3.8006E+01	7.1264E+05	7.4865E+02
1.6606E+01	3.4771E-01	3.8165E+01	7.1562E+05	7.4662E+02
1.6638E+01	3.5776E-01	3.9268E+01	7.3630E+05	7.4519E+02
1.6662E+01	3.6292E-01	3.9835E+01	7.4692E+05	7.4411E+02
1.6686E+01	3.4944E-01	3.8355E+01	7.1917E+05	7.4304E+02
1.6709E+01	3.3711E-01	3.7001E+01	6.9379E+05	7.4202E+02
1.6813E+01	3.1904E-01	3.5018E+01	6.5660E+05	7.3743E+02
1.6828E+01	3.1962E-01	3.5082E+01	6.5780E+05	7.3677E+02
1.6851E+01	3.3627E-01	3.6909E+01	6.9206E+05	7.3577E+02
1.6871E+01	3.5406E-01	3.8862E+01	7.2869E+05	7.3490E+02
1.6881E+01	3.5607E-01	3.9083E+01	7.3282E+05	7.3446E+02
1.6892E+01	3.5292E-01	3.8736E+01	7.2633E+05	7.3398E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6920E+01	3.3082E-01	3.6312E+01	6.8086E+05	7.3277E+02
1.6951E+01	3.2221E-01	3.5367E+01	6.6314E+05	7.3143E+02
1.6959E+01	3.2221E-01	3.5367E+01	6.6314E+05	7.3108E+02
1.7030E+01	3.0128E-01	3.3069E+01	6.2006E+05	7.2803E+02
1.7058E+01	3.0559E-01	3.3541E+01	6.2892E+05	7.2684E+02
1.7078E+01	3.2740E-01	3.5936E+01	6.7381E+05	7.2599E+02
1.7088E+01	3.3170E-01	3.6408E+01	6.8267E+05	7.2556E+02
1.7097E+01	3.3285E-01	3.6534E+01	6.8503E+05	7.2518E+02
1.7108E+01	3.3286E-01	3.6535E+01	6.8505E+05	7.2471E+02
1.7138E+01	3.1593E-01	3.4677E+01	6.5021E+05	7.2345E+02
1.7175E+01	3.0703E-01	3.3700E+01	6.3190E+05	7.2189E+02
1.7185E+01	3.0962E-01	3.3984E+01	6.3722E+05	7.2147E+02
1.7198E+01	3.1077E-01	3.4110E+01	6.3958E+05	7.2092E+02
1.7215E+01	3.0905E-01	3.3922E+01	6.3605E+05	7.2021E+02
1.7254E+01	2.9069E-01	3.1907E+01	5.9827E+05	7.1858E+02
1.7276E+01	2.9529E-01	3.2411E+01	6.0772E+05	7.1767E+02
1.7304E+01	3.1222E-01	3.4269E+01	6.4257E+05	7.1651E+02
1.7323E+01	3.1223E-01	3.4270E+01	6.4259E+05	7.1572E+02
1.7345E+01	3.0075E-01	3.3011E+01	6.1897E+05	7.1481E+02
1.7390E+01	2.9415E-01	3.2286E+01	6.0538E+05	7.1296E+02
1.7420E+01	2.9846E-01	3.2760E+01	6.1426E+05	7.1173E+02
1.7442E+01	2.9732E-01	3.2634E+01	6.1190E+05	7.1084E+02
1.7476E+01	2.8556E-01	3.1343E+01	5.8770E+05	7.0945E+02
1.7500E+01	2.9072E-01	3.1910E+01	5.9833E+05	7.0848E+02
1.7519E+01	2.9876E-01	3.2793E+01	6.1488E+05	7.0771E+02
1.7532E+01	2.9934E-01	3.2856E+01	6.1607E+05	7.0719E+02
1.7541E+01	2.9245E-01	3.2100E+01	6.0189E+05	7.0683E+02
1.7584E+01	2.8185E-01	3.0936E+01	5.8006E+05	7.0510E+02
1.7648E+01	2.8529E-01	3.1314E+01	5.8715E+05	7.0254E+02
1.7694E+01	2.7583E-01	3.0276E+01	5.6768E+05	7.0071E+02
1.7704E+01	2.8071E-01	3.0811E+01	5.7771E+05	7.0032E+02
1.7724E+01	2.8272E-01	3.1032E+01	5.8187E+05	6.9953E+02
1.7750E+01	2.8101E-01	3.0844E+01	5.7833E+05	6.9850E+02
1.7788E+01	2.7097E-01	2.9742E+01	5.5767E+05	6.9701E+02
1.7831E+01	2.7441E-01	3.0120E+01	5.6477E+05	6.9533E+02
1.7877E+01	2.6782E-01	2.9397E+01	5.5120E+05	6.9354E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7959E+01	2.6869E-01	2.9492E+01	5.5299E+05	6.9037E+02
1.7993E+01	2.6267E-01	2.8831E+01	5.4059E+05	6.8907E+02
1.8055E+01	2.6182E-01	2.8738E+01	5.3885E+05	6.8670E+02
1.8144E+01	2.5753E-01	2.8266E+01	5.3001E+05	6.8333E+02
1.8299E+01	2.4894E-01	2.7324E+01	5.1233E+05	6.7755E+02
1.8499E+01	2.4085E-01	2.6436E+01	4.9568E+05	6.7022E+02
1.9175E+01	2.1109E-01	2.3170E+01	4.3445E+05	6.4659E+02
1.9928E+01	1.8295E-01	2.0081E+01	3.7652E+05	6.2216E+02
2.0681E+01	1.5642E-01	1.7169E+01	3.2193E+05	5.9951E+02
2.1568E+01	1.2990E-01	1.4258E+01	2.6734E+05	5.7485E+02
2.2359E+01	1.1143E-01	1.2231E+01	2.2933E+05	5.5452E+02
2.3208E+01	1.0020E-01	1.0998E+01	2.0623E+05	5.3423E+02
2.4191E+01	8.8991E-02	9.7677E+00	1.8315E+05	5.1252E+02
2.5271E+01	8.2618E-02	9.0682E+00	1.7003E+05	4.9062E+02
2.6235E+01	7.6236E-02	8.3677E+00	1.5690E+05	4.7259E+02
2.7334E+01	6.9058E-02	7.5799E+00	1.4213E+05	4.5359E+02
2.8240E+01	6.4284E-02	7.0559E+00	1.3230E+05	4.3904E+02
2.9281E+01	6.0324E-02	6.6212E+00	1.2415E+05	4.2343E+02
3.0360E+01	5.6367E-02	6.1869E+00	1.1601E+05	4.0838E+02
3.1710E+01	5.0816E-02	5.5776E+00	1.0458E+05	3.9099E+02
3.3059E+01	4.6876E-02	5.1452E+00	9.6474E+04	3.7504E+02
3.4736E+01	4.1346E-02	4.5382E+00	8.5093E+04	3.5693E+02
3.6163E+01	3.8216E-02	4.1946E+00	7.8651E+04	3.4285E+02
3.7724E+01	3.5901E-02	3.9405E+00	7.3886E+04	3.2866E+02
3.8997E+01	3.2761E-02	3.5959E+00	6.7424E+04	3.1793E+02
4.0000E+01	2.8000E-02	3.0733E+00	5.7626E+04	3.0996E+02
4.1000E+01	2.6600E-02	2.9196E+00	5.4745E+04	3.0240E+02
4.2000E+01	2.4700E-02	2.7111E+00	5.0834E+04	2.9520E+02
4.3000E+01	2.3100E-02	2.5355E+00	4.7541E+04	2.8834E+02
4.4000E+01	2.2500E-02	2.4696E+00	4.6307E+04	2.8178E+02
4.5000E+01	2.1100E-02	2.3160E+00	4.3425E+04	2.7552E+02
4.6000E+01	2.0200E-02	2.2172E+00	4.1573E+04	2.6953E+02
4.7000E+01	1.9200E-02	2.1074E+00	3.9515E+04	2.6380E+02
4.8000E+01	1.8600E-02	2.0416E+00	3.8280E+04	2.5830E+02
4.9000E+01	1.7500E-02	1.9208E+00	3.6016E+04	2.5303E+02
5.0000E+01	1.6800E-02	1.8440E+00	3.4576E+04	2.4797E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
5.1000E+01	1.6200E-02	1.7781E+00	3.3341E+04	2.4311E+02
5.2000E+01	1.4900E-02	1.6354E+00	3.0665E+04	2.3843E+02
5.3000E+01	1.4700E-02	1.6135E+00	3.0254E+04	2.3393E+02
5.4000E+01	1.4600E-02	1.6025E+00	3.0048E+04	2.2960E+02
5.5000E+01	1.3300E-02	1.4598E+00	2.7372E+04	2.2543E+02
5.6000E+01	1.3100E-02	1.4379E+00	2.6961E+04	2.2140E+02
5.7000E+01	1.2400E-02	1.3610E+00	2.5520E+04	2.1752E+02
5.8000E+01	1.2200E-02	1.3391E+00	2.5108E+04	2.1377E+02
5.9000E+01	1.1100E-02	1.2183E+00	2.2845E+04	2.1014E+02
6.0000E+01	1.0600E-02	1.1635E+00	2.1816E+04	2.0664E+02
6.1000E+01	1.0700E-02	1.1744E+00	2.2021E+04	2.0325E+02
6.2000E+01	1.0400E-02	1.1415E+00	2.1404E+04	1.9997E+02
6.3000E+01	9.6000E-03	1.0537E+00	1.9757E+04	1.9680E+02
6.4000E+01	9.7000E-03	1.0647E+00	1.9963E+04	1.9373E+02
6.5000E+01	8.9000E-03	9.7687E-01	1.8317E+04	1.9074E+02
6.6000E+01	8.8000E-03	9.6590E-01	1.8111E+04	1.8785E+02
6.7000E+01	8.8000E-03	9.6590E-01	1.8111E+04	1.8505E+02
6.8000E+01	8.3000E-03	9.1102E-01	1.7082E+04	1.8233E+02
6.9000E+01	8.3000E-03	9.1102E-01	1.7082E+04	1.7969E+02
7.0000E+01	7.7000E-03	8.4516E-01	1.5847E+04	1.7712E+02
7.1000E+01	7.4000E-03	8.1223E-01	1.5230E+04	1.7463E+02
7.2000E+01	7.5000E-03	8.2321E-01	1.5436E+04	1.7220E+02
7.3000E+01	7.3000E-03	8.0126E-01	1.5024E+04	1.6984E+02
7.4000E+01	6.5000E-03	7.1345E-01	1.3377E+04	1.6755E+02
7.6000E+01	6.6000E-03	7.2442E-01	1.3583E+04	1.6314E+02
7.8000E+01	6.0000E-03	6.5857E-01	1.2348E+04	1.5895E+02
8.0000E+01	6.0000E-03	6.5857E-01	1.2348E+04	1.5498E+02
8.2000E+01	5.4000E-03	5.9271E-01	1.1114E+04	1.5120E+02
8.4000E+01	5.6000E-03	6.1466E-01	1.1525E+04	1.4760E+02
8.6000E+01	5.0000E-03	5.4880E-01	1.0290E+04	1.4417E+02
8.8000E+01	4.7000E-03	5.1588E-01	9.6729E+03	1.4089E+02
9.0000E+01	4.5000E-03	4.9392E-01	9.2613E+03	1.3776E+02
9.2000E+01	4.3000E-03	4.7197E-01	8.8497E+03	1.3477E+02
9.4000E+01	4.1000E-03	4.5002E-01	8.4381E+03	1.3190E+02
9.6000E+01	3.5000E-03	3.8416E-01	7.2032E+03	1.2915E+02
9.8000E+01	3.8000E-03	4.1709E-01	7.8207E+03	1.2651E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0000E+02	3.2000E-03	3.5124E-01	6.5858E+03	1.2398E+02
1.0050E+02	3.9000E-03	4.2807E-01	8.0265E+03	1.2337E+02
1.0100E+02	3.7000E-03	4.0612E-01	7.6149E+03	1.2276E+02
1.0188E+02	4.2454E-03	4.6597E-01	8.7373E+03	1.2170E+02
1.0205E+02	7.0411E-03	7.7283E-01	1.4491E+04	1.2149E+02
1.0225E+02	1.5118E-02	1.6593E+00	3.1113E+04	1.2126E+02
1.0241E+02	2.3608E-02	2.5912E+00	4.8587E+04	1.2107E+02
1.0246E+02	2.6715E-02	2.9323E+00	5.4981E+04	1.2101E+02
1.0251E+02	2.8889E-02	3.1709E+00	5.9456E+04	1.2095E+02
1.0257E+02	3.1063E-02	3.4095E+00	6.3930E+04	1.2088E+02
1.0266E+02	3.3238E-02	3.6482E+00	6.8406E+04	1.2077E+02
1.0273E+02	3.6344E-02	3.9892E+00	7.4799E+04	1.2069E+02
1.0282E+02	4.2143E-02	4.6256E+00	8.6733E+04	1.2058E+02
1.0294E+02	5.0220E-02	5.5122E+00	1.0336E+05	1.2044E+02
1.0300E+02	5.6122E-02	6.1600E+00	1.1550E+05	1.2037E+02
1.0304E+02	5.8710E-02	6.4441E+00	1.2083E+05	1.2033E+02
1.0313E+02	6.1298E-02	6.7282E+00	1.2616E+05	1.2022E+02
1.0320E+02	5.9228E-02	6.5009E+00	1.2189E+05	1.2014E+02
1.0328E+02	5.5500E-02	6.0917E+00	1.1422E+05	1.2005E+02
1.0336E+02	5.1358E-02	5.6371E+00	1.0570E+05	1.1995E+02
1.0343E+02	4.9391E-02	5.4212E+00	1.0165E+05	1.1987E+02
1.0357E+02	4.8045E-02	5.2734E+00	9.8879E+04	1.1971E+02
1.0365E+02	4.6181E-02	5.0688E+00	9.5043E+04	1.1962E+02
1.0381E+02	3.7069E-02	4.0688E+00	7.6291E+04	1.1943E+02
1.0392E+02	2.9200E-02	3.2050E+00	6.0096E+04	1.1931E+02
1.0402E+02	2.4126E-02	2.6481E+00	4.9652E+04	1.1919E+02
1.0417E+02	1.7292E-02	1.8980E+00	3.5588E+04	1.1902E+02
1.0441E+02	1.0872E-02	1.1933E+00	2.2375E+04	1.1875E+02
1.0450E+02	8.6980E-03	9.5470E-01	1.7901E+04	1.1865E+02
1.0466E+02	6.8340E-03	7.5011E-01	1.4065E+04	1.1846E+02
1.0472E+02	7.7659E-03	8.5239E-01	1.5983E+04	1.1840E+02
1.0481E+02	1.6877E-02	1.8525E+00	3.4735E+04	1.1829E+02
1.0484E+02	2.3194E-02	2.5458E+00	4.7734E+04	1.1826E+02
1.0489E+02	3.0235E-02	3.3187E+00	6.2226E+04	1.1820E+02
1.0494E+02	3.2824E-02	3.6028E+00	6.7553E+04	1.1815E+02
1.0499E+02	2.9614E-02	3.2505E+00	6.0948E+04	1.1809E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0505E+02	2.1331E-02	2.3413E+00	4.3900E+04	1.1802E+02
1.0512E+02	1.7914E-02	1.9662E+00	3.6867E+04	1.1795E+02
1.0526E+02	1.8017E-02	1.9776E+00	3.7080E+04	1.1779E+02
1.0534E+02	1.9984E-02	2.1935E+00	4.1129E+04	1.1770E+02
1.0540E+02	2.8578E-02	3.1368E+00	5.8816E+04	1.1763E+02
1.0544E+02	3.5723E-02	3.9210E+00	7.3520E+04	1.1759E+02
1.0548E+02	3.7276E-02	4.0915E+00	7.6717E+04	1.1754E+02
1.0550E+02	3.5826E-02	3.9323E+00	7.3733E+04	1.1752E+02
1.0554E+02	3.0650E-02	3.3641E+00	6.3079E+04	1.1748E+02
1.0562E+02	2.0916E-02	2.2958E+00	4.3047E+04	1.1739E+02
1.0565E+02	1.9673E-02	2.1594E+00	4.0489E+04	1.1735E+02
1.0571E+02	1.9467E-02	2.1367E+00	4.0064E+04	1.1729E+02
1.0573E+02	2.2158E-02	2.4321E+00	4.5603E+04	1.1726E+02
1.0579E+02	2.4230E-02	2.6595E+00	4.9867E+04	1.1720E+02
1.0582E+02	2.1848E-02	2.3981E+00	4.4965E+04	1.1717E+02
1.0588E+02	1.8846E-02	2.0685E+00	3.8786E+04	1.1710E+02
1.0591E+02	1.9052E-02	2.0912E+00	3.9211E+04	1.1707E+02
1.0600E+02	2.7025E-02	2.9663E+00	5.5619E+04	1.1697E+02
1.0604E+02	2.9096E-02	3.1936E+00	5.9881E+04	1.1692E+02
1.0607E+02	2.8268E-02	3.1027E+00	5.8177E+04	1.1689E+02
1.0615E+02	2.1020E-02	2.3071E+00	4.3260E+04	1.1680E+02
1.0617E+02	1.8949E-02	2.0799E+00	3.8998E+04	1.1678E+02
1.0624E+02	1.7292E-02	1.8980E+00	3.5588E+04	1.1670E+02
1.0627E+02	1.7292E-02	1.8980E+00	3.5588E+04	1.1667E+02
1.0630E+02	2.0294E-02	2.2275E+00	4.1767E+04	1.1664E+02
1.0639E+02	2.3298E-02	2.5572E+00	4.7949E+04	1.1654E+02
1.0645E+02	2.1537E-02	2.3640E+00	4.4325E+04	1.1647E+02
1.0656E+02	1.8535E-02	2.0344E+00	3.8146E+04	1.1635E+02
1.0668E+02	2.2366E-02	2.4549E+00	4.6031E+04	1.1622E+02
1.0676E+02	2.0399E-02	2.2390E+00	4.1982E+04	1.1613E+02
1.0685E+02	1.8638E-02	2.0457E+00	3.8358E+04	1.1604E+02
1.0689E+02	1.9777E-02	2.1707E+00	4.0702E+04	1.1599E+02
1.0699E+02	2.1331E-02	2.3413E+00	4.3900E+04	1.1588E+02
1.0710E+02	2.0191E-02	2.2162E+00	4.1555E+04	1.1576E+02
1.0719E+02	1.8535E-02	2.0344E+00	3.8146E+04	1.1567E+02
1.0726E+02	1.9467E-02	2.1367E+00	4.0064E+04	1.1559E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.0734E+02	1.9777E-02	2.1707E+00	4.0702E+04	1.1551E+02
1.0761E+02	1.8638E-02	2.0457E+00	3.8358E+04	1.1522E+02
1.0781E+02	1.9052E-02	2.0912E+00	3.9211E+04	1.1500E+02
1.0800E+02	1.8327E-02	2.0116E+00	3.7718E+04	1.1480E+02
1.0950E+02	2.3200E-02	2.5465E+00	4.7747E+04	1.1323E+02
1.1000E+02	2.3300E-02	2.5574E+00	4.7953E+04	1.1271E+02
1.1050E+02	2.3600E-02	2.5904E+00	4.8570E+04	1.1220E+02
1.1100E+02	2.3800E-02	2.6123E+00	4.8982E+04	1.1170E+02
1.1150E+02	2.4600E-02	2.7001E+00	5.0629E+04	1.1120E+02
1.1200E+02	2.5600E-02	2.8099E+00	5.2687E+04	1.1070E+02
1.1250E+02	2.6200E-02	2.8757E+00	5.3921E+04	1.1021E+02
1.1300E+02	2.6100E-02	2.8648E+00	5.3716E+04	1.0972E+02
1.1350E+02	2.7100E-02	2.9745E+00	5.5774E+04	1.0924E+02
1.1400E+02	2.7100E-02	2.9745E+00	5.5774E+04	1.0876E+02
1.1450E+02	2.7600E-02	3.0294E+00	5.6803E+04	1.0828E+02
1.1500E+02	2.8100E-02	3.0843E+00	5.7832E+04	1.0781E+02
1.1550E+02	2.8700E-02	3.1501E+00	5.9067E+04	1.0735E+02
1.1600E+02	2.9000E-02	3.1831E+00	5.9684E+04	1.0688E+02
1.1650E+02	2.9500E-02	3.2379E+00	6.0713E+04	1.0642E+02
1.1700E+02	3.0200E-02	3.3148E+00	6.2154E+04	1.0597E+02
1.1750E+02	3.0500E-02	3.3477E+00	6.2771E+04	1.0552E+02
1.1800E+02	3.1300E-02	3.4355E+00	6.4418E+04	1.0507E+02
1.1850E+02	3.2400E-02	3.5563E+00	6.6682E+04	1.0463E+02
1.1900E+02	3.2600E-02	3.5782E+00	6.7093E+04	1.0419E+02
1.1950E+02	3.3000E-02	3.6221E+00	6.7916E+04	1.0375E+02
1.2000E+02	3.3500E-02	3.6770E+00	6.8945E+04	1.0332E+02
1.2100E+02	3.4600E-02	3.7977E+00	7.1209E+04	1.0247E+02
1.2200E+02	3.5300E-02	3.8746E+00	7.2650E+04	1.0163E+02
1.2300E+02	3.6200E-02	3.9733E+00	7.4502E+04	1.0080E+02
1.2400E+02	3.7000E-02	4.0612E+00	7.6149E+04	9.9987E+01
1.2500E+02	3.7700E-02	4.1380E+00	7.7589E+04	9.9187E+01
1.2600E+02	3.8300E-02	4.2038E+00	7.8824E+04	9.8400E+01
1.2700E+02	3.9200E-02	4.3026E+00	8.0676E+04	9.7625E+01
1.2800E+02	3.9200E-02	4.3026E+00	8.0676E+04	9.6863E+01
1.2900E+02	3.9900E-02	4.3795E+00	8.2117E+04	9.6112E+01
1.3000E+02	4.0000E-02	4.3904E+00	8.2323E+04	9.5372E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.3100E+02	4.1100E-02	4.5112E+00	8.4587E+04	9.4644E+01
1.3200E+02	4.0500E-02	4.4453E+00	8.3352E+04	9.3927E+01
1.3300E+02	4.0700E-02	4.4673E+00	8.3764E+04	9.3221E+01
1.3400E+02	4.1200E-02	4.5222E+00	8.4793E+04	9.2526E+01
1.3500E+02	4.1400E-02	4.5441E+00	8.5204E+04	9.1840E+01
1.3600E+02	4.0200E-02	4.4124E+00	8.2734E+04	9.1165E+01
1.3700E+02	4.0500E-02	4.4453E+00	8.3352E+04	9.0499E+01
1.3800E+02	4.0200E-02	4.4124E+00	8.2734E+04	8.9844E+01
1.3900E+02	4.0400E-02	4.4343E+00	8.3146E+04	8.9197E+01
1.4000E+02	3.9900E-02	4.3795E+00	8.2117E+04	8.8560E+01
1.4100E+02	4.0000E-02	4.3904E+00	8.2323E+04	8.7932E+01
1.4200E+02	3.9500E-02	4.3356E+00	8.1294E+04	8.7313E+01
1.4300E+02	3.9400E-02	4.3246E+00	8.1088E+04	8.6702E+01
1.4400E+02	3.8400E-02	4.2148E+00	7.9030E+04	8.6100E+01
1.4500E+02	3.8800E-02	4.2587E+00	7.9853E+04	8.5506E+01
1.4600E+02	3.8500E-02	4.2258E+00	7.9236E+04	8.4921E+01
1.4700E+02	3.8400E-02	4.2148E+00	7.9030E+04	8.4343E+01
1.4800E+02	3.7500E-02	4.1160E+00	7.7178E+04	8.3773E+01
1.4900E+02	3.7300E-02	4.0941E+00	7.6766E+04	8.3211E+01
1.5000E+02	3.7300E-02	4.0941E+00	7.6766E+04	8.2656E+01
1.5100E+02	3.7400E-02	4.1051E+00	7.6972E+04	8.2109E+01
1.5200E+02	3.7400E-02	4.1051E+00	7.6972E+04	8.1569E+01
1.5300E+02	3.7800E-02	4.1490E+00	7.7795E+04	8.1035E+01
1.5400E+02	3.8200E-02	4.1929E+00	7.8618E+04	8.0509E+01
1.5500E+02	4.0100E-02	4.4014E+00	8.2529E+04	7.9990E+01
1.5600E+02	4.0300E-02	4.4234E+00	8.2940E+04	7.9477E+01
1.5700E+02	3.8800E-02	4.2587E+00	7.9853E+04	7.8971E+01
1.5800E+02	3.9500E-02	4.3356E+00	8.1294E+04	7.8471E+01
1.5900E+02	3.8200E-02	4.1929E+00	7.8618E+04	7.7977E+01
1.6000E+02	3.8000E-02	4.1709E+00	7.8207E+04	7.7490E+01
1.6100E+02	3.8200E-02	4.1929E+00	7.8618E+04	7.7009E+01
1.6200E+02	3.6600E-02	4.0173E+00	7.5325E+04	7.6533E+01
1.6300E+02	3.7300E-02	4.0941E+00	7.6766E+04	7.6064E+01
1.6400E+02	3.6200E-02	3.9733E+00	7.4502E+04	7.5600E+01
1.6500E+02	3.6500E-02	4.0063E+00	7.5120E+04	7.5142E+01
1.6600E+02	3.5900E-02	3.9404E+00	7.3885E+04	7.4689E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6700E+02	3.6100E-02	3.9624E+00	7.4296E+04	7.4242E+01
1.6800E+02	3.5100E-02	3.8526E+00	7.2238E+04	7.3800E+01
1.6900E+02	3.5700E-02	3.9185E+00	7.3473E+04	7.3363E+01
1.7000E+02	3.5000E-02	3.8416E+00	7.2032E+04	7.2932E+01
1.7100E+02	3.4600E-02	3.7977E+00	7.1209E+04	7.2505E+01
1.7200E+02	3.4700E-02	3.8087E+00	7.1415E+04	7.2084E+01
1.7300E+02	3.4100E-02	3.7428E+00	7.0180E+04	7.1667E+01
1.7400E+02	3.4300E-02	3.7648E+00	7.0592E+04	7.1255E+01
1.7500E+02	3.3800E-02	3.7099E+00	6.9563E+04	7.0848E+01
1.7600E+02	3.3600E-02	3.6880E+00	6.9151E+04	7.0446E+01
1.7700E+02	3.3300E-02	3.6550E+00	6.8534E+04	7.0048E+01
1.7800E+02	3.2900E-02	3.6111E+00	6.7711E+04	6.9654E+01
1.7900E+02	3.2000E-02	3.5124E+00	6.5858E+04	6.9265E+01
1.8000E+02	3.2700E-02	3.5892E+00	6.7299E+04	6.8880E+01
1.8200E+02	3.1700E-02	3.4794E+00	6.5241E+04	6.8123E+01
1.8400E+02	3.2200E-02	3.5343E+00	6.6270E+04	6.7383E+01
1.8600E+02	3.1000E-02	3.4026E+00	6.3800E+04	6.6658E+01
1.8800E+02	3.1100E-02	3.4136E+00	6.4006E+04	6.5949E+01
1.9000E+02	3.0600E-02	3.3587E+00	6.2977E+04	6.5255E+01
1.9200E+02	3.0100E-02	3.3038E+00	6.1948E+04	6.4575E+01
1.9400E+02	2.9700E-02	3.2599E+00	6.1125E+04	6.3909E+01
1.9600E+02	2.8900E-02	3.1721E+00	5.9478E+04	6.3257E+01
1.9800E+02	2.8700E-02	3.1501E+00	5.9067E+04	6.2618E+01
2.0000E+02	2.8100E-02	3.0843E+00	5.7832E+04	6.1992E+01
2.0200E+02	2.7800E-02	3.0514E+00	5.7214E+04	6.1378E+01
2.0400E+02	2.7900E-02	3.0623E+00	5.7420E+04	6.0777E+01
2.0600E+02	2.6900E-02	2.9526E+00	5.5362E+04	6.0186E+01
2.0800E+02	2.6700E-02	2.9306E+00	5.4951E+04	5.9608E+01
2.1000E+02	2.6600E-02	2.9196E+00	5.4745E+04	5.9040E+01
2.1200E+02	2.5700E-02	2.8209E+00	5.2892E+04	5.8483E+01
2.1400E+02	2.6100E-02	2.8648E+00	5.3716E+04	5.7937E+01
2.1600E+02	2.5600E-02	2.8099E+00	5.2687E+04	5.7400E+01
2.1800E+02	2.4900E-02	2.7330E+00	5.1246E+04	5.6873E+01
2.2000E+02	2.3900E-02	2.6233E+00	4.9188E+04	5.6356E+01
2.2200E+02	2.3400E-02	2.5684E+00	4.8159E+04	5.5849E+01
2.2400E+02	2.4100E-02	2.6452E+00	4.9600E+04	5.5350E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2600E+02	2.3700E-02	2.6013E+00	4.8776E+04	5.4860E+01
2.2800E+02	2.3400E-02	2.5684E+00	4.8159E+04	5.4379E+01
2.3000E+02	2.3300E-02	2.5574E+00	4.7953E+04	5.3906E+01
2.3200E+02	2.2000E-02	2.4147E+00	4.5278E+04	5.3441E+01
2.3400E+02	2.2000E-02	2.4147E+00	4.5278E+04	5.2985E+01
2.3600E+02	2.1800E-02	2.3928E+00	4.4866E+04	5.2536E+01
2.3800E+02	2.1500E-02	2.3599E+00	4.4249E+04	5.2094E+01
2.4000E+02	2.1800E-02	2.3928E+00	4.4866E+04	5.1660E+01
2.4200E+02	2.1100E-02	2.3160E+00	4.3425E+04	5.1233E+01
2.4400E+02	2.1300E-02	2.3379E+00	4.3837E+04	5.0813E+01
2.4600E+02	1.9900E-02	2.1842E+00	4.0956E+04	5.0400E+01
2.4800E+02	2.0400E-02	2.2391E+00	4.1985E+04	4.9994E+01
2.5000E+02	2.0200E-02	2.2172E+00	4.1573E+04	4.9594E+01
2.5200E+02	1.9300E-02	2.1184E+00	3.9721E+04	4.9200E+01
2.5400E+02	1.9900E-02	2.1842E+00	4.0956E+04	4.8813E+01
2.5600E+02	1.9500E-02	2.1403E+00	4.0132E+04	4.8431E+01
2.5800E+02	1.9300E-02	2.1184E+00	3.9721E+04	4.8056E+01
2.6000E+02	1.8600E-02	2.0416E+00	3.8280E+04	4.7686E+01
2.6400E+02	1.8200E-02	1.9976E+00	3.7457E+04	4.6964E+01
2.6800E+02	1.8100E-02	1.9867E+00	3.7251E+04	4.6263E+01
2.7200E+02	1.7700E-02	1.9428E+00	3.6428E+04	4.5582E+01
2.7600E+02	1.6500E-02	1.8111E+00	3.3958E+04	4.4922E+01
2.8000E+02	1.6500E-02	1.8111E+00	3.3958E+04	4.4280E+01
2.8400E+02	1.6300E-02	1.7891E+00	3.3547E+04	4.3656E+01
2.8800E+02	1.5200E-02	1.6684E+00	3.1283E+04	4.3050E+01
2.9200E+02	1.6100E-02	1.7672E+00	3.3135E+04	4.2460E+01
2.9600E+02	1.5000E-02	1.6464E+00	3.0871E+04	4.1887E+01
3.0000E+02	1.4700E-02	1.6135E+00	3.0254E+04	4.1328E+01
3.0400E+02	1.4100E-02	1.5476E+00	2.9019E+04	4.0784E+01
3.0800E+02	1.4400E-02	1.5806E+00	2.9636E+04	4.0255E+01
3.1200E+02	1.4200E-02	1.5586E+00	2.9225E+04	3.9739E+01
3.1600E+02	1.4300E-02	1.5696E+00	2.9430E+04	3.9236E+01
3.2000E+02	1.3300E-02	1.4598E+00	2.7372E+04	3.8745E+01
3.2400E+02	1.3200E-02	1.4488E+00	2.7167E+04	3.8267E+01
3.2800E+02	1.3300E-02	1.4598E+00	2.7372E+04	3.7800E+01
3.3200E+02	1.3100E-02	1.4379E+00	2.6961E+04	3.7345E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.3600E+02	1.1100E-02	1.2183E+00	2.2845E+04	3.6900E+01
3.4000E+02	1.1900E-02	1.3062E+00	2.4491E+04	3.6466E+01
3.4400E+02	1.1200E-02	1.2293E+00	2.3050E+04	3.6042E+01
3.4800E+02	1.1000E-02	1.2074E+00	2.2639E+04	3.5628E+01
3.5000E+02	9.7000E-03	1.0647E+00	1.9963E+04	3.5424E+01
4.0000E+02	6.5935E-03	7.2371E-01	1.3570E+04	3.0996E+01
4.5000E+02	4.9747E-03	5.4603E-01	1.0238E+04	2.7552E+01
5.0000E+02	3.8495E-03	4.2252E-01	7.9225E+03	2.4797E+01
6.0000E+02	2.4501E-03	2.6892E-01	5.0424E+03	2.0664E+01
7.0000E+02	1.6619E-03	1.8241E-01	3.4203E+03	1.7712E+01
8.0000E+02	1.1835E-03	1.2991E-01	2.4358E+03	1.5498E+01
9.0000E+02	8.5832E-04	9.4210E-02	1.7665E+03	1.3776E+01
1.0000E+03	6.5596E-04	7.1999E-02	1.3500E+03	1.2398E+01
1.2500E+03	3.6904E-04	4.0506E-02	7.5950E+02	9.9187E+00
1.5000E+03	2.2570E-04	2.4773E-02	4.6451E+02	8.2656E+00
1.7500E+03	1.4574E-04	1.5997E-02	2.9995E+02	7.0848E+00
1.8400E+03	1.2580E-04	1.3808E-02	2.5890E+02	6.7383E+00
1.8404E+03	7.7501E-04	8.5066E-02	1.5950E+03	6.7368E+00
1.8406E+03	8.6044E-04	9.4443E-02	1.7708E+03	6.7361E+00
1.8409E+03	9.8250E-04	1.0784E-01	2.0221E+03	6.7350E+00
1.8414E+03	1.6965E-03	1.8621E-01	3.4914E+03	6.7331E+00
1.8416E+03	2.6302E-03	2.8869E-01	5.4131E+03	6.7324E+00
1.8418E+03	3.7469E-03	4.1126E-01	7.7114E+03	6.7317E+00
1.8421E+03	4.1374E-03	4.5413E-01	8.5151E+03	6.7306E+00
1.8424E+03	4.3572E-03	4.7825E-01	8.9674E+03	6.7295E+00
1.8426E+03	4.2534E-03	4.6685E-01	8.7537E+03	6.7288E+00
1.8430E+03	3.5577E-03	3.9050E-01	7.3220E+03	6.7273E+00
1.8432E+03	2.8741E-03	3.1547E-01	5.9152E+03	6.7266E+00
1.8434E+03	2.6852E-03	2.9473E-01	5.5263E+03	6.7258E+00
1.8437E+03	2.5934E-03	2.8466E-01	5.3374E+03	6.7247E+00
1.8440E+03	2.8255E-03	3.1013E-01	5.8151E+03	6.7237E+00
1.8442E+03	2.9109E-03	3.1950E-01	5.9908E+03	6.7229E+00
1.8444E+03	2.8194E-03	3.0946E-01	5.8025E+03	6.7222E+00
1.8446E+03	2.2213E-03	2.4381E-01	4.5716E+03	6.7215E+00
1.8447E+03	2.0687E-03	2.2706E-01	4.2576E+03	6.7211E+00
1.8450E+03	1.9894E-03	2.1836E-01	4.0943E+03	6.7200E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8456E+03	2.1480E-03	2.3577E-01	4.4208E+03	6.7178E+00
1.8458E+03	2.1725E-03	2.3845E-01	4.4711E+03	6.7171E+00
1.8484E+03	2.1359E-03	2.3443E-01	4.3957E+03	6.7076E+00
1.8489E+03	2.1236E-03	2.3309E-01	4.3706E+03	6.7058E+00
1.8507E+03	2.0687E-03	2.2706E-01	4.2576E+03	6.6993E+00
1.8524E+03	2.1359E-03	2.3443E-01	4.3957E+03	6.6932E+00
1.8529E+03	2.1480E-03	2.3577E-01	4.4208E+03	6.6914E+00
1.8541E+03	2.1053E-03	2.3108E-01	4.3329E+03	6.6870E+00
1.8546E+03	2.0992E-03	2.3041E-01	4.3204E+03	6.6852E+00
1.8555E+03	2.0382E-03	2.2372E-01	4.1948E+03	6.6820E+00
1.8561E+03	2.0138E-03	2.2104E-01	4.1445E+03	6.6798E+00
1.8570E+03	2.0504E-03	2.2505E-01	4.2199E+03	6.6766E+00
1.8576E+03	2.0687E-03	2.2706E-01	4.2576E+03	6.6744E+00
1.8586E+03	2.0565E-03	2.2573E-01	4.2325E+03	6.6708E+00
1.8597E+03	2.0565E-03	2.2573E-01	4.2325E+03	6.6669E+00
1.8607E+03	2.0260E-03	2.2238E-01	4.1697E+03	6.6633E+00
1.8616E+03	2.0260E-03	2.2238E-01	4.1697E+03	6.6601E+00
1.8630E+03	1.9894E-03	2.1836E-01	4.0943E+03	6.6551E+00
1.8645E+03	1.9406E-03	2.1300E-01	3.9939E+03	6.6497E+00
1.8652E+03	1.9467E-03	2.1367E-01	4.0064E+03	6.6472E+00
1.8663E+03	1.9039E-03	2.0898E-01	3.9185E+03	6.6433E+00
1.8673E+03	1.8918E-03	2.0764E-01	3.8934E+03	6.6398E+00
1.8689E+03	1.8551E-03	2.0362E-01	3.8180E+03	6.6341E+00
1.8713E+03	1.8185E-03	1.9960E-01	3.7426E+03	6.6256E+00
1.8720E+03	1.8063E-03	1.9826E-01	3.7175E+03	6.6231E+00
2.0000E+03	1.4568E-03	1.5990E-01	2.9983E+03	6.1992E+00
2.2500E+03	1.0374E-03	1.1387E-01	2.1351E+03	5.5104E+00
2.5000E+03	7.6617E-04	8.4095E-02	1.5768E+03	4.9594E+00
2.7500E+03	5.8252E-04	6.3938E-02	1.1989E+03	4.5085E+00
3.0000E+03	4.5357E-04	4.9785E-02	9.3349E+02	4.1328E+00
3.5000E+03	2.9107E-04	3.1948E-02	5.9904E+02	3.5424E+00
4.0000E+03	1.9810E-04	2.1744E-02	4.0770E+02	3.0996E+00
4.5000E+03	1.4102E-04	1.5478E-02	2.9023E+02	2.7552E+00
5.0000E+03	1.0401E-04	1.1416E-02	2.1406E+02	2.4797E+00
6.0000E+03	6.1378E-05	6.7369E-03	1.2632E+02	2.0664E+00
7.0000E+03	3.9274E-05	4.3107E-03	8.0828E+01	1.7712E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.0000E+03	2.6671E-05	2.9274E-03	5.4890E+01	1.5498E+00
9.0000E+03	1.8957E-05	2.0807E-03	3.9015E+01	1.3776E+00
1.0000E+04	1.3638E-05	1.4969E-03	2.8067E+01	1.2398E+00
1.2500E+04	6.9334E-06	7.6102E-04	1.4269E+01	9.9187E-01
1.5000E+04	3.9902E-06	4.3797E-04	8.2121E+00	8.2656E-01
1.7500E+04	2.5013E-06	2.7455E-04	5.1479E+00	7.0848E-01
2.0000E+04	1.6692E-06	1.8321E-04	3.4354E+00	6.1992E-01
2.2500E+04	1.1684E-06	1.2824E-04	2.4046E+00	5.5104E-01
2.5000E+04	8.4914E-07	9.3203E-05	1.7476E+00	4.9594E-01
2.7500E+04	6.3421E-07	6.9611E-05	1.3052E+00	4.5085E-01
3.0000E+04	4.8330E-07	5.3048E-05	9.9467E-01	4.1328E-01
3.5000E+04	2.9842E-07	3.2755E-05	6.1417E-01	3.5424E-01
4.0000E+04	1.9623E-07	2.1539E-05	4.0386E-01	3.0996E-01
4.5000E+04	1.3471E-07	1.4786E-05	2.7724E-01	2.7552E-01
5.0000E+04	9.6218E-08	1.0561E-05	1.9802E-01	2.4797E-01
6.0000E+04	5.3747E-08	5.8993E-06	1.1061E-01	2.0664E-01
7.0000E+04	3.2855E-08	3.6063E-06	6.7619E-02	1.7712E-01
8.0000E+04	2.1455E-08	2.3550E-06	4.4157E-02	1.5498E-01
9.0000E+04	1.4734E-08	1.6173E-06	3.0324E-02	1.3776E-01
1.0000E+05	1.0528E-08	1.1555E-06	2.1667E-02	1.2398E-01

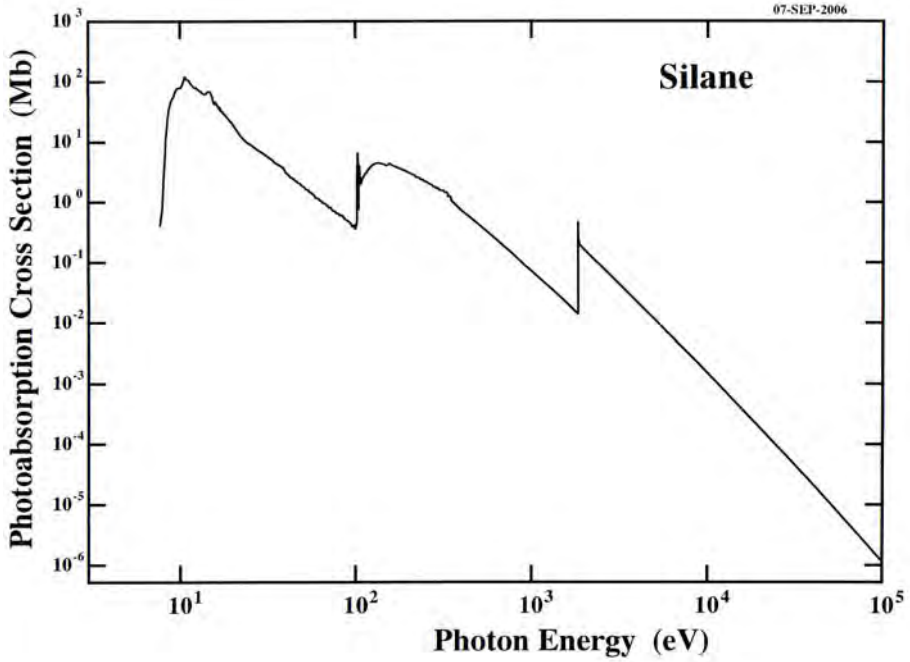
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}}-0.3)^6\left(\frac{Ry}{E}\right)^4\frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1-\exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E-E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 13.6$ and 1847.42 eV for hydrogen and silicon atoms, respectively.


07-SEP-2006
Silane
Photoabsorption Cross Section (Mb)
Photon Energy (eV)
10^3
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^1
10^2
10^3
10^4
10^5

SiH_4

Energy, eV	Source
7.68 - 11.00	Cooper *et al.*, Chem. Phys., 196 (1995) 293
11.00 - 11.60	Cooper *et al.*, Chem. Phys., 196 (1995) 293
11.60 - 13.50	Cooper *et al.*, Chem. Phys., 196 (1995) 293
13.50 - 22.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
22.0 - 40.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
40.0 - 101.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
101.0 - 108.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
108.0 - 194.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
194.0 - 350.0	Cooper *et al.*, Chem. Phys., 196 (1995) 293
350.0 - 851.5	Table 6.23 p.314 (Berkowitz's book*)
851.5 - 1840	Table 6.23 p.314 (Berkowitz's book*)
1840 - 1872	Table 6.22 p.312 (Berkowitz's book*)
1872 - 10^4	Table 6.23 p.314 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305

Sulfur Hexafluoride (SF_6)

Z = 70 Molecular Mass : $M_{\rm A}$ = 146.0554192

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
9.5572E+00	1.3415E-02	1.4724E+00	6.0710E+03	1.2973E+03
9.9631E+00	2.6830E-02	2.9449E+00	1.2142E+04	1.2444E+03
1.0000E+01	2.9513E-02	3.2394E+00	1.3357E+04	1.2398E+03
1.0332E+01	5.0975E-02	5.5951E+00	2.3070E+04	1.2000E+03
1.0590E+01	9.6585E-02	1.0601E+01	4.3711E+04	1.1708E+03
1.0812E+01	1.5293E-01	1.6785E+01	6.9209E+04	1.1467E+03
1.0923E+01	2.0390E-01	2.2380E+01	9.2279E+04	1.1351E+03
1.0996E+01	2.5487E-01	2.7974E+01	1.1534E+05	1.1275E+03
1.1070E+01	2.7902E-01	3.0625E+01	1.2627E+05	1.1200E+03
1.1255E+01	2.9513E-01	3.2394E+01	1.3357E+05	1.1016E+03
1.1439E+01	3.0316E-01	3.3276E+01	1.3720E+05	1.0839E+03
1.1624E+01	2.9781E-01	3.2688E+01	1.3478E+05	1.0666E+03
1.1734E+01	2.7634E-01	3.0331E+01	1.2506E+05	1.0566E+03
1.1882E+01	2.3342E-01	2.5620E+01	1.0564E+05	1.0435E+03
1.2066E+01	1.7975E-01	1.9730E+01	8.1350E+04	1.0275E+03
1.2325E+01	1.3415E-01	1.4724E+01	6.0710E+04	1.0060E+03
1.2620E+01	9.3902E-02	1.0307E+01	4.2497E+04	9.8244E+02
1.2768E+01	9.1219E-02	1.0012E+01	4.1283E+04	9.7105E+02
1.2952E+01	1.1805E-01	1.2957E+01	5.3424E+04	9.5726E+02
1.3026E+01	1.8244E-01	2.0024E+01	8.2565E+04	9.5182E+02
1.3137E+01	1.6097E-01	1.7669E+01	7.2851E+04	9.4378E+02
1.3210E+01	1.2341E-01	1.3546E+01	5.5852E+04	9.3856E+02
1.3358E+01	9.3902E-02	1.0307E+01	4.2497E+04	9.2816E+02
1.3579E+01	8.0488E-02	8.8345E+00	3.6426E+04	9.1306E+02
1.3653E+01	1.1268E-01	1.2368E+01	5.0996E+04	9.0811E+02
1.3727E+01	1.6902E-01	1.8552E+01	7.6494E+04	9.0321E+02
1.3764E+01	2.2268E-01	2.4442E+01	1.0078E+05	9.0079E+02
1.3838E+01	2.7366E-01	3.0037E+01	1.2385E+05	8.9597E+02

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
1.3911E+01	2.8707E-01	3.1509E+01	1.2992E+05	8.9127E+02
1.4059E+01	2.9513E-01	3.2394E+01	1.3357E+05	8.8188E+02
1.4133E+01	2.8707E-01	3.1509E+01	1.2992E+05	8.7727E+02
1.4207E+01	2.6024E-01	2.8565E+01	1.1778E+05	8.7270E+02
1.4280E+01	2.1462E-01	2.3557E+01	9.7131E+04	8.6824E+02
1.4502E+01	1.9585E-01	2.1497E+01	8.8636E+04	8.5495E+02
1.4576E+01	2.1195E-01	2.3263E+01	9.5919E+04	8.5061E+02
1.4686E+01	2.2000E-01	2.4148E+01	9.9565E+04	8.4423E+02
1.4871E+01	2.3074E-01	2.5326E+01	1.0442E+05	8.3373E+02
1.4900E+01	2.3342E-01	2.5620E+01	1.0564E+05	8.3211E+02
1.4957E+01	2.5580E-01	2.8077E+01	1.1577E+05	8.2894E+02
1.5032E+01	2.7467E-01	3.0148E+01	1.2431E+05	8.2480E+02
1.5062E+01	2.7267E-01	2.9929E+01	1.2340E+05	8.2314E+02
1.5123E+01	2.9950E-01	3.2873E+01	1.3554E+05	8.1983E+02
1.5154E+01	3.0446E-01	3.3418E+01	1.3779E+05	8.1817E+02
1.5236E+01	3.5813E-01	3.9309E+01	1.6208E+05	8.1374E+02
1.5310E+01	4.2373E-01	4.6509E+01	1.9177E+05	8.0985E+02
1.5373E+01	4.9033E-01	5.3819E+01	2.2190E+05	8.0652E+02
1.5415E+01	5.4898E-01	6.0256E+01	2.4845E+05	8.0429E+02
1.5453E+01	5.8476E-01	6.4184E+01	2.6464E+05	8.0235E+02
1.5495E+01	6.0861E-01	6.6801E+01	2.7543E+05	8.0014E+02
1.5554E+01	6.2550E-01	6.8656E+01	2.8308E+05	7.9710E+02
1.5712E+01	6.2248E-01	6.8324E+01	2.8171E+05	7.8910E+02
1.5895E+01	6.3336E-01	6.9519E+01	2.8664E+05	7.8000E+02
1.5946E+01	6.2739E-01	6.8863E+01	2.8393E+05	7.7752E+02
1.6094E+01	5.5378E-01	6.0783E+01	2.5062E+05	7.7038E+02
1.6128E+01	5.3886E-01	5.9145E+01	2.4387E+05	7.6874E+02
1.6180E+01	5.2891E-01	5.8053E+01	2.3936E+05	7.6626E+02
1.6262E+01	5.2093E-01	5.7178E+01	2.3575E+05	7.6240E+02
1.6363E+01	5.1295E-01	5.6302E+01	2.3214E+05	7.5772E+02
1.6441E+01	5.1592E-01	5.6628E+01	2.3349E+05	7.5413E+02
1.6519E+01	5.3280E-01	5.8481E+01	2.4113E+05	7.5054E+02
1.6593E+01	5.6560E-01	6.2081E+01	2.5597E+05	7.4722E+02
1.6661E+01	6.0834E-01	6.6772E+01	2.7531E+05	7.4417E+02
1.6773E+01	6.9182E-01	7.5935E+01	3.1309E+05	7.3918E+02
1.6868E+01	7.7433E-01	8.4991E+01	3.5043E+05	7.3501E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6964E+01	8.4390E-01	9.2627E+01	3.8192E+05	7.3085E+02
1.7009E+01	8.5781E-01	9.4154E+01	3.8821E+05	7.2892E+02
1.7081E+01	8.6177E-01	9.4589E+01	3.9001E+05	7.2588E+02
1.7165E+01	8.5182E-01	9.3496E+01	3.8550E+05	7.2230E+02
1.7284E+01	8.4483E-01	9.2729E+01	3.8234E+05	7.1734E+02
1.7364E+01	8.4481E-01	9.2727E+01	3.8233E+05	7.1404E+02
1.7438E+01	8.3286E-01	9.1416E+01	3.7692E+05	7.1101E+02
1.7580E+01	7.8611E-01	8.6284E+01	3.5577E+05	7.0524E+02
1.7733E+01	7.5327E-01	8.2680E+01	3.4090E+05	6.9918E+02
1.7959E+01	7.0749E-01	7.7655E+01	3.2019E+05	6.9038E+02
1.8161E+01	6.7166E-01	7.3722E+01	3.0397E+05	6.8268E+02
1.8302E+01	6.5373E-01	7.1754E+01	2.9586E+05	6.7744E+02
1.8452E+01	6.3879E-01	7.0114E+01	2.8909E+05	6.7194E+02
1.8643E+01	6.2881E-01	6.9019E+01	2.8458E+05	6.6505E+02
1.9005E+01	6.1981E-01	6.8031E+01	2.8050E+05	6.5237E+02
1.9441E+01	6.1874E-01	6.7913E+01	2.8002E+05	6.3776E+02
1.9653E+01	6.2268E-01	6.8346E+01	2.8180E+05	6.3087E+02
1.9835E+01	6.3658E-01	6.9871E+01	2.8809E+05	6.2507E+02
1.9941E+01	6.3656E-01	6.9869E+01	2.8808E+05	6.2177E+02
2.0264E+01	6.0767E-01	6.6699E+01	2.7501E+05	6.1185E+02
2.0513E+01	5.8178E-01	6.3857E+01	2.6330E+05	6.0442E+02
2.0607E+01	5.7481E-01	6.3092E+01	2.6014E+05	6.0166E+02
2.0721E+01	5.7281E-01	6.2872E+01	2.5923E+05	5.9836E+02
2.0923E+01	5.9068E-01	6.4834E+01	2.6732E+05	5.9256E+02
2.1041E+01	5.9663E-01	6.5486E+01	2.7001E+05	5.8925E+02
2.1130E+01	5.9164E-01	6.4939E+01	2.6776E+05	5.8677E+02
2.1260E+01	5.9461E-01	6.5265E+01	2.6910E+05	5.8319E+02
2.1361E+01	6.0254E-01	6.6136E+01	2.7269E+05	5.8043E+02
2.1515E+01	6.3932E-01	7.0172E+01	2.8933E+05	5.7628E+02
2.1702E+01	6.8502E-01	7.5189E+01	3.1002E+05	5.7130E+02
2.2099E+01	8.1720E-01	8.9697E+01	3.6984E+05	5.6105E+02
2.2398E+01	9.4244E-01	1.0344E+02	4.2651E+05	5.5356E+02
2.2740E+01	1.1115E+00	1.2200E+02	5.0301E+05	5.4522E+02
2.2892E+01	1.1820E+00	1.2974E+02	5.3493E+05	5.4161E+02
2.3057E+01	1.2386E+00	1.3595E+02	5.6057E+05	5.3773E+02
2.3272E+01	1.2794E+00	1.4043E+02	5.7901E+05	5.3275E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.3394E+01	1.2903E+00	1.4162E+02	5.8394E+05	5.2999E+02
2.3553E+01	1.2843E+00	1.4097E+02	5.8123E+05	5.2641E+02
2.3652E+01	1.2694E+00	1.3933E+02	5.7449E+05	5.2421E+02
2.3814E+01	1.2415E+00	1.3627E+02	5.6188E+05	5.2064E+02
2.3966E+01	1.2028E+00	1.3202E+02	5.4434E+05	5.1734E+02
2.4184E+01	1.1401E+00	1.2513E+02	5.1595E+05	5.1268E+02
2.4418E+01	1.0665E+00	1.1706E+02	4.8267E+05	5.0775E+02
2.4524E+01	1.0208E+00	1.1204E+02	4.6197E+05	5.0556E+02
2.4671E+01	9.3527E-01	1.0266E+02	4.2327E+05	5.0256E+02
2.4779E+01	9.3817E-01	1.0297E+02	4.2458E+05	5.0035E+02
2.5336E+01	8.4469E-01	9.2714E+01	3.8228E+05	4.8936E+02
2.5653E+01	7.9197E-01	8.6927E+01	3.5842E+05	4.8332E+02
2.5814E+01	7.4919E-01	8.2232E+01	3.3906E+05	4.8030E+02
2.5918E+01	7.4720E-01	8.2013E+01	3.3816E+05	4.7837E+02
2.6234E+01	7.0442E-01	7.7318E+01	3.1880E+05	4.7260E+02
2.6380E+01	6.8635E-01	7.5335E+01	3.1062E+05	4.6999E+02
2.6642E+01	6.6757E-01	7.3273E+01	3.0212E+05	4.6537E+02
2.6928E+01	6.6468E-01	7.2956E+01	3.0081E+05	4.6043E+02
2.7245E+01	6.6831E-01	7.3354E+01	3.0245E+05	4.5507E+02
2.7783E+01	6.9363E-01	7.6133E+01	3.1391E+05	4.4626E+02
2.8163E+01	7.1244E-01	7.8199E+01	3.2243E+05	4.4024E+02
2.8512E+01	7.2330E-01	7.9390E+01	3.2734E+05	4.3485E+02
2.8797E+01	7.2836E-01	7.9946E+01	3.2963E+05	4.3055E+02
2.9115E+01	7.2114E-01	7.9154E+01	3.2636E+05	4.2584E+02
2.9466E+01	7.0453E-01	7.7329E+01	3.1884E+05	4.2077E+02
2.9944E+01	6.8213E-01	7.4871E+01	3.0871E+05	4.1405E+02
3.0485E+01	6.5540E-01	7.1937E+01	2.9661E+05	4.0671E+02
3.0740E+01	6.4528E-01	7.0827E+01	2.9203E+05	4.0333E+02
3.1089E+01	6.3950E-01	7.0193E+01	2.8942E+05	3.9880E+02
3.1788E+01	6.4459E-01	7.0751E+01	2.9172E+05	3.9003E+02
3.2518E+01	6.4823E-01	7.1151E+01	2.9337E+05	3.8128E+02
3.3153E+01	6.4898E-01	7.1232E+01	2.9370E+05	3.7398E+02
3.3661E+01	6.4538E-01	7.0838E+01	2.9208E+05	3.6833E+02
3.4011E+01	6.4032E-01	7.0282E+01	2.8979E+05	3.6454E+02
3.4488E+01	6.3817E-01	7.0046E+01	2.8881E+05	3.5950E+02
3.4964E+01	6.3963E-01	7.0207E+01	2.8948E+05	3.5461E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.5345E+01	6.3892E-01	7.0129E+01	2.8915E+05	3.5078E+02
3.5758E+01	6.3604E-01	6.9813E+01	2.8785E+05	3.4673E+02
3.6362E+01	6.2594E-01	6.8704E+01	2.8328E+05	3.4097E+02
3.7094E+01	6.0717E-01	6.6643E+01	2.7478E+05	3.3424E+02
3.7921E+01	5.8478E-01	6.4186E+01	2.6465E+05	3.2695E+02
3.8843E+01	5.6457E-01	6.1967E+01	2.5550E+05	3.1919E+02
3.9605E+01	5.5736E-01	6.1176E+01	2.5224E+05	3.1305E+02
4.0114E+01	5.5159E-01	6.0543E+01	2.4963E+05	3.0908E+02
4.0972E+01	5.3426E-01	5.8641E+01	2.4179E+05	3.0261E+02
4.1545E+01	5.1982E-01	5.7056E+01	2.3525E+05	2.9843E+02
4.2118E+01	5.0539E-01	5.5472E+01	2.2872E+05	2.9437E+02
4.2626E+01	4.9961E-01	5.4838E+01	2.2611E+05	2.9087E+02
4.3452E+01	4.9241E-01	5.4047E+01	2.2285E+05	2.8534E+02
4.4310E+01	4.7870E-01	5.2542E+01	2.1664E+05	2.7981E+02
4.5264E+01	4.6138E-01	5.0641E+01	2.0880E+05	2.7391E+02
4.6091E+01	4.4116E-01	4.8422E+01	1.9966E+05	2.6900E+02
4.6537E+01	4.2671E-01	4.6837E+01	1.9312E+05	2.6642E+02
4.6887E+01	4.1515E-01	4.5568E+01	1.8788E+05	2.6443E+02
4.7745E+01	4.0000E-01	4.3904E+01	1.8103E+05	2.5968E+02
4.9144E+01	3.8125E-01	4.1846E+01	1.7254E+05	2.5229E+02
5.0288E+01	3.7044E-01	4.0660E+01	1.6765E+05	2.4655E+02
5.1622E+01	3.6470E-01	4.0030E+01	1.6505E+05	2.4018E+02
5.2956E+01	3.6329E-01	3.9875E+01	1.6441E+05	2.3413E+02
5.4575E+01	3.6335E-01	3.9881E+01	1.6444E+05	2.2718E+02
5.5337E+01	3.6337E-01	3.9884E+01	1.6445E+05	2.2405E+02
5.6640E+01	3.5908E-01	3.9413E+01	1.6251E+05	2.1890E+02
5.8069E+01	3.5478E-01	3.8941E+01	1.6056E+05	2.1351E+02
5.9499E+01	3.4616E-01	3.7994E+01	1.5666E+05	2.0838E+02
6.1055E+01	3.3391E-01	3.6651E+01	1.5112E+05	2.0307E+02
6.2644E+01	3.2167E-01	3.5307E+01	1.4558E+05	1.9792E+02
6.4074E+01	3.1159E-01	3.4201E+01	1.4102E+05	1.9350E+02
6.5853E+01	3.0370E-01	3.3335E+01	1.3744E+05	1.8827E+02
6.8330E+01	2.9583E-01	3.2470E+01	1.3388E+05	1.8145E+02
7.0141E+01	2.9010E-01	3.1841E+01	1.3129E+05	1.7676E+02
7.0850E+01	2.8718E-01	3.1521E+01	1.2997E+05	1.7500E+02
8.0000E+01	2.3853E-01	2.6181E+01	1.0795E+05	1.5498E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
9.0000E+01	1.9309E-01	2.1194E+01	8.7387E+04	1.3776E+02
1.0000E+02	1.5735E-01	1.7271E+01	7.1210E+04	1.2398E+02
1.2500E+02	9.9339E-02	1.0904E+01	4.4957E+04	9.9187E+01
1.5000E+02	6.7383E-02	7.3960E+00	3.0495E+04	8.2656E+01
1.7100E+02	3.8792E-02	4.2579E+00	1.7556E+04	7.2505E+01
1.7130E+02	3.9288E-02	4.3123E+00	1.7780E+04	7.2378E+01
1.7161E+02	4.3332E-02	4.7561E+00	1.9610E+04	7.2248E+01
1.7190E+02	5.1339E-02	5.6350E+00	2.3234E+04	7.2126E+01
1.7212E+02	5.9427E-02	6.5227E+00	2.6895E+04	7.2034E+01
1.7232E+02	6.1326E-02	6.7313E+00	2.7754E+04	7.1950E+01
1.7245E+02	6.0336E-02	6.6225E+00	2.7306E+04	7.1896E+01
1.7263E+02	5.7530E-02	6.3145E+00	2.6036E+04	7.1821E+01
1.7274E+02	5.6621E-02	6.2148E+00	2.5625E+04	7.1775E+01
1.7289E+02	5.6787E-02	6.2330E+00	2.5700E+04	7.1713E+01
1.7309E+02	6.1740E-02	6.7767E+00	2.7941E+04	7.1630E+01
1.7327E+02	6.6775E-02	7.3293E+00	3.0220E+04	7.1555E+01
1.7344E+02	6.8261E-02	7.4924E+00	3.0893E+04	7.1485E+01
1.7360E+02	6.7189E-02	7.3747E+00	3.0407E+04	7.1419E+01
1.7377E+02	6.3392E-02	6.9580E+00	2.8689E+04	7.1350E+01
1.7411E+02	5.2416E-02	5.7533E+00	2.3722E+04	7.1210E+01
1.7440E+02	4.5732E-02	5.0196E+00	2.0697E+04	7.1092E+01
1.7455E+02	4.3422E-02	4.7660E+00	1.9651E+04	7.1031E+01
1.7477E+02	4.2431E-02	4.6573E+00	1.9203E+04	7.0941E+01
1.7550E+02	4.2184E-02	4.6301E+00	1.9091E+04	7.0646E+01
1.7639E+02	4.2434E-02	4.6576E+00	1.9204E+04	7.0290E+01
1.7665E+02	4.3259E-02	4.7481E+00	1.9577E+04	7.0186E+01
1.7727E+02	4.2932E-02	4.7123E+00	1.9430E+04	6.9941E+01
1.7734E+02	4.3509E-02	4.7756E+00	1.9691E+04	6.9913E+01
1.7749E+02	4.9121E-02	5.3916E+00	2.2230E+04	6.9854E+01
1.7763E+02	4.3838E-02	4.8117E+00	1.9840E+04	6.9799E+01
1.7780E+02	4.3014E-02	4.7212E+00	1.9467E+04	6.9732E+01
1.7809E+02	4.2851E-02	4.7033E+00	1.9393E+04	6.9619E+01
1.7822E+02	4.3346E-02	4.7577E+00	1.9617E+04	6.9568E+01
1.7855E+02	4.2440E-02	4.6582E+00	1.9207E+04	6.9439E+01
1.7864E+02	4.5822E-02	5.0295E+00	2.0738E+04	6.9404E+01
1.7882E+02	4.5822E-02	5.0295E+00	2.0738E+04	6.9335E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.7889E+02	4.4173E-02	4.8485E+00	1.9991E+04	6.9307E+01
1.7922E+02	4.1201E-02	4.5223E+00	1.8646E+04	6.9180E+01
1.7950E+02	4.3267E-02	4.7490E+00	1.9581E+04	6.9072E+01
1.7973E+02	4.1700E-02	4.5770E+00	1.8872E+04	6.8984E+01
1.7988E+02	4.1700E-02	4.5770E+00	1.8872E+04	6.8926E+01
1.8001E+02	4.3101E-02	4.7308E+00	1.9506E+04	6.8876E+01
1.8052E+02	4.1866E-02	4.5952E+00	1.8947E+04	6.8682E+01
1.8070E+02	4.2856E-02	4.7039E+00	1.9395E+04	6.8613E+01
1.8107E+02	4.2609E-02	4.6768E+00	1.9283E+04	6.8473E+01
1.8154E+02	4.3270E-02	4.7493E+00	1.9582E+04	6.8296E+01
1.8194E+02	4.4593E-02	4.8945E+00	2.0181E+04	6.8146E+01
1.8222E+02	4.6985E-02	5.1571E+00	2.1264E+04	6.8041E+01
1.8260E+02	5.1772E-02	5.6825E+00	2.3430E+04	6.7899E+01
1.8255E+02	5.1690E-02	5.6736E+00	2.3393E+04	6.7918E+01
1.8282E+02	5.8211E-02	6.3893E+00	2.6344E+04	6.7818E+01
1.8306E+02	7.4965E-02	8.2282E+00	3.3926E+04	6.7729E+01
1.8321E+02	9.2298E-02	1.0131E+01	4.1771E+04	6.7673E+01
1.8330E+02	1.0171E-01	1.1163E+01	4.6029E+04	6.7640E+01
1.8343E+02	1.0327E-01	1.1335E+01	4.6738E+04	6.7592E+01
1.8356E+02	9.9806E-02	1.0955E+01	4.5169E+04	6.7544E+01
1.8377E+02	8.8583E-02	9.7230E+00	4.0090E+04	6.7467E+01
1.8390E+02	8.6439E-02	9.4876E+00	3.9119E+04	6.7419E+01
1.8403E+02	9.2216E-02	1.0122E+01	4.1734E+04	6.7372E+01
1.8423E+02	1.0963E-01	1.2033E+01	4.9615E+04	6.7299E+01
1.8436E+02	1.2886E-01	1.4144E+01	5.8318E+04	6.7251E+01
1.8444E+02	1.3587E-01	1.4914E+01	6.1492E+04	6.7222E+01
1.8455E+02	1.4017E-01	1.5385E+01	6.3434E+04	6.7182E+01
1.8471E+02	1.3159E-01	1.4443E+01	5.9551E+04	6.7124E+01
1.8491E+02	1.0534E-01	1.1562E+01	4.7673E+04	6.7051E+01
1.8507E+02	8.3469E-02	9.1617E+00	3.7775E+04	6.6993E+01
1.8527E+02	6.7130E-02	7.3682E+00	3.0381E+04	6.6921E+01
1.8541E+02	6.0775E-02	6.6707E+00	2.7505E+04	6.6870E+01
1.8563E+02	5.4997E-02	6.0365E+00	2.4890E+04	6.6791E+01
1.8596E+02	5.0213E-02	5.5114E+00	2.2725E+04	6.6673E+01
1.8629E+02	4.7818E-02	5.2485E+00	2.1641E+04	6.6554E+01
1.8658E+02	4.6416E-02	5.0947E+00	2.1006E+04	6.6451E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.8693E+02	4.6335E-02	5.0857E+00	2.0969E+04	6.6327E+01
1.8755E+02	4.5015E-02	4.9409E+00	2.0372E+04	6.6107E+01
1.8877E+02	4.4441E-02	4.8779E+00	2.0112E+04	6.5680E+01
1.8990E+02	4.4443E-02	4.8782E+00	2.0114E+04	6.5289E+01
1.9058E+02	4.5268E-02	4.9687E+00	2.0487E+04	6.5056E+01
1.9151E+02	4.7581E-02	5.2226E+00	2.1534E+04	6.4740E+01
1.9259E+02	5.2042E-02	5.7122E+00	2.3552E+04	6.4377E+01
1.9330E+02	5.7325E-02	6.2920E+00	2.5943E+04	6.4141E+01
1.9401E+02	6.4918E-02	7.1254E+00	2.9379E+04	6.3906E+01
1.9469E+02	7.4410E-02	8.1673E+00	3.3675E+04	6.3683E+01
1.9520E+02	8.1840E-02	8.9828E+00	3.7038E+04	6.3516E+01
1.9560E+02	8.7122E-02	9.5626E+00	3.9429E+04	6.3387E+01
1.9595E+02	9.0013E-02	9.8799E+00	4.0737E+04	6.3273E+01
1.9626E+02	9.0590E-02	9.9432E+00	4.0998E+04	6.3173E+01
1.9666E+02	8.9270E-02	9.7983E+00	4.0400E+04	6.3045E+01
1.9712E+02	8.4404E-02	9.2642E+00	3.8198E+04	6.2898E+01
1.9765E+02	7.7388E-02	8.4942E+00	3.5023E+04	6.2729E+01
1.9812E+02	7.1284E-02	7.8241E+00	3.2260E+04	6.2580E+01
1.9869E+02	6.5343E-02	7.1721E+00	2.9572E+04	6.2401E+01
1.9947E+02	6.0226E-02	6.6105E+00	2.7256E+04	6.2157E+01
2.0044E+02	5.5937E-02	6.1397E+00	2.5315E+04	6.1856E+01
2.0091E+02	5.5360E-02	6.0764E+00	2.5054E+04	6.1711E+01
2.0197E+02	5.3382E-02	5.8592E+00	2.4159E+04	6.1387E+01
2.0354E+02	5.2971E-02	5.8141E+00	2.3973E+04	6.0914E+01
2.0398E+02	5.3469E-02	5.8688E+00	2.4198E+04	6.0783E+01
2.0478E+02	5.3551E-02	5.8778E+00	2.4235E+04	6.0545E+01
2.0555E+02	5.3140E-02	5.8327E+00	2.4049E+04	6.0318E+01
2.0593E+02	5.2976E-02	5.8147E+00	2.3975E+04	6.0207E+01
2.0624E+02	5.2566E-02	5.7696E+00	2.3789E+04	6.0116E+01
2.0666E+02	5.2566E-02	5.7696E+00	2.3789E+04	5.9994E+01
2.0705E+02	5.2155E-02	5.7245E+00	2.3603E+04	5.9881E+01
2.0836E+02	5.1991E-02	5.7066E+00	2.3530E+04	5.9505E+01
2.1000E+02	5.1913E-02	5.6980E+00	2.3494E+04	5.9040E+01
2.1238E+02	5.7506E-02	6.3119E+00	2.6025E+04	5.8378E+01
2.1745E+02	5.6829E-02	6.2376E+00	2.5719E+04	5.7017E+01
2.2242E+02	5.6687E-02	6.2220E+00	2.5654E+04	5.5743E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.2566E+02	5.6547E-02	6.2066E+00	2.5591E+04	5.4943E+01
2.2934E+02	5.6140E-02	6.1620E+00	2.5407E+04	5.4061E+01
2.3225E+02	5.6134E-02	6.1614E+00	2.5404E+04	5.3384E+01
2.3387E+02	5.6397E-02	6.1902E+00	2.5524E+04	5.3014E+01
2.3506E+02	5.6929E-02	6.2485E+00	2.5764E+04	5.2746E+01
2.3614E+02	5.7994E-02	6.3655E+00	2.6246E+04	5.2505E+01
2.3722E+02	5.9859E-02	6.5702E+00	2.7090E+04	5.2265E+01
2.3819E+02	6.2259E-02	6.8336E+00	2.8176E+04	5.2053E+01
2.3863E+02	6.3458E-02	6.9652E+00	2.8719E+04	5.1957E+01
2.3917E+02	6.4525E-02	7.0823E+00	2.9202E+04	5.1839E+01
2.4003E+02	6.4523E-02	7.0821E+00	2.9201E+04	5.1654E+01
2.4057E+02	6.3188E-02	6.9356E+00	2.8597E+04	5.1538E+01
2.4187E+02	5.8783E-02	6.4521E+00	2.6603E+04	5.1261E+01
2.4306E+02	5.5580E-02	6.1005E+00	2.5154E+04	5.1010E+01
2.4435E+02	5.3176E-02	5.8367E+00	2.4066E+04	5.0740E+01
2.4586E+02	5.2107E-02	5.7193E+00	2.3582E+04	5.0429E+01
2.4727E+02	5.1970E-02	5.7043E+00	2.3520E+04	5.0141E+01
2.5029E+02	5.1831E-02	5.6891E+00	2.3457E+04	4.9536E+01
2.5407E+02	5.2091E-02	5.7175E+00	2.3575E+04	4.8799E+01
2.5667E+02	5.2219E-02	5.7316E+00	2.3632E+04	4.8305E+01
2.5958E+02	5.3281E-02	5.8482E+00	2.4113E+04	4.7763E+01
2.6261E+02	5.3808E-02	5.9061E+00	2.4352E+04	4.7212E+01
2.6542E+02	5.3669E-02	5.8908E+00	2.4289E+04	4.6712E+01
2.6866E+02	5.3130E-02	5.8316E+00	2.4045E+04	4.6149E+01
2.7233E+02	5.1922E-02	5.6991E+00	2.3498E+04	4.5527E+01
2.7600E+02	5.0314E-02	5.5226E+00	2.2771E+04	4.4922E+01
2.7700E+02	4.9912E-02	5.4784E+00	2.2589E+04	4.4760E+01
3.0000E+02	4.8135E-02	5.2834E+00	2.1784E+04	4.1328E+01
3.5000E+02	2.3421E-02	2.5707E+00	1.0600E+04	3.5424E+01
4.0000E+02	1.7405E-02	1.9104E+00	7.8770E+03	3.0996E+01
4.5000E+02	1.3217E-02	1.4507E+00	5.9814E+03	2.7552E+01
5.0000E+02	1.0222E-02	1.1220E+00	4.6262E+03	2.4797E+01
6.0000E+02	6.4064E-03	7.0317E-01	2.8993E+03	2.0664E+01
6.8500E+02	4.4847E-03	4.9224E-01	2.0296E+03	1.8100E+01
6.8600E+02	9.1362E-03	1.0028E+00	4.1347E+03	1.8073E+01
6.8651E+02	1.0155E-02	1.1146E+00	4.5957E+03	1.8060E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.8691E+02	1.2396E-02	1.3606E+00	5.6099E+03	1.8050E+01
6.8753E+02	2.0646E-02	2.2661E+00	9.3438E+03	1.8033E+01
6.8804E+02	3.2391E-02	3.5553E+00	1.4659E+04	1.8020E+01
6.8852E+02	4.2983E-02	4.7178E+00	1.9453E+04	1.8007E+01
6.8868E+02	4.5428E-02	4.9863E+00	2.0559E+04	1.8003E+01
6.8876E+02	4.6142E-02	5.0645E+00	2.0882E+04	1.8001E+01
6.8889E+02	4.6480E-02	5.1017E+00	2.1035E+04	1.7998E+01
6.8908E+02	4.6039E-02	5.0533E+00	2.0836E+04	1.7993E+01
6.8927E+02	4.4445E-02	4.8783E+00	2.0114E+04	1.7988E+01
6.8976E+02	3.5482E-02	3.8945E+00	1.6058E+04	1.7975E+01
6.9014E+02	2.6589E-02	2.9184E+00	1.2033E+04	1.7965E+01
6.9044E+02	2.0885E-02	2.2923E+00	9.4516E+03	1.7957E+01
6.9082E+02	1.5861E-02	1.7409E+00	7.1781E+03	1.7947E+01
6.9101E+02	1.4401E-02	1.5807E+00	6.5176E+03	1.7942E+01
6.9128E+02	1.4130E-02	1.5509E+00	6.3948E+03	1.7935E+01
6.9146E+02	1.4707E-02	1.6143E+00	6.6560E+03	1.7931E+01
6.9195E+02	1.9868E-02	2.1807E+00	8.9914E+03	1.7918E+01
6.9240E+02	2.5197E-02	2.7656E+00	1.1403E+04	1.7906E+01
6.9278E+02	2.9239E-02	3.2093E+00	1.3232E+04	1.7897E+01
6.9294E+02	3.0833E-02	3.3843E+00	1.3954E+04	1.7892E+01
6.9366E+02	3.4805E-02	3.8202E+00	1.5752E+04	1.7874E+01
6.9433E+02	3.9932E-02	4.3830E+00	1.8072E+04	1.7857E+01
6.9455E+02	4.0918E-02	4.4912E+00	1.8518E+04	1.7851E+01
6.9476E+02	4.1290E-02	4.5321E+00	1.8687E+04	1.7846E+01
6.9506E+02	4.0748E-02	4.4725E+00	1.8441E+04	1.7838E+01
6.9555E+02	3.8609E-02	4.2377E+00	1.7473E+04	1.7825E+01
6.9598E+02	3.5350E-02	3.8800E+00	1.5998E+04	1.7814E+01
6.9649E+02	3.2261E-02	3.5410E+00	1.4600E+04	1.7801E+01
6.9695E+02	3.0056E-02	3.2990E+00	1.3602E+04	1.7790E+01
6.9722E+02	2.9343E-02	3.2207E+00	1.3280E+04	1.7783E+01
6.9757E+02	2.8970E-02	3.1798E+00	1.3111E+04	1.7774E+01
6.9789E+02	2.9445E-02	3.2319E+00	1.3326E+04	1.7766E+01
6.9832E+02	3.1178E-02	3.4221E+00	1.4110E+04	1.7755E+01
6.9872E+02	3.4911E-02	3.8319E+00	1.5800E+04	1.7744E+01
6.9921E+02	4.1667E-02	4.5734E+00	1.8857E+04	1.7732E+01
6.9942E+02	4.4179E-02	4.8491E+00	1.9994E+04	1.7727E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
6.9961E+02	4.6216E-02	5.0727E+00	2.0916E+04	1.7722E+01
6.9988E+02	4.7031E-02	5.1621E+00	2.1285E+04	1.7715E+01
7.0009E+02	4.6386E-02	5.0914E+00	2.0993E+04	1.7710E+01
7.0042E+02	4.3468E-02	4.7710E+00	1.9672E+04	1.7701E+01
7.0066E+02	4.0513E-02	4.4468E+00	1.8335E+04	1.7695E+01
7.0107E+02	3.4811E-02	3.8209E+00	1.5754E+04	1.7685E+01
7.0145E+02	2.9890E-02	3.2807E+00	1.3527E+04	1.7675E+01
7.0174E+02	2.7276E-02	2.9938E+00	1.2344E+04	1.7668E+01
7.0207E+02	2.5646E-02	2.8149E+00	1.1606E+04	1.7660E+01
7.0261E+02	2.4153E-02	2.6511E+00	1.0931E+04	1.7646E+01
7.0323E+02	2.3474E-02	2.5766E+00	1.0624E+04	1.7631E+01
7.0412E+02	2.3136E-02	2.5394E+00	1.0470E+04	1.7608E+01
7.0608E+02	2.3272E-02	2.5544E+00	1.0532E+04	1.7560E+01
7.0788E+02	2.3544E-02	2.5843E+00	1.0655E+04	1.7515E+01
7.0901E+02	2.4157E-02	2.6515E+00	1.0933E+04	1.7487E+01
7.0982E+02	2.5007E-02	2.7447E+00	1.1317E+04	1.7467E+01
7.1066E+02	2.6433E-02	2.9013E+00	1.1963E+04	1.7446E+01
7.1138E+02	2.8197E-02	3.0950E+00	1.2761E+04	1.7429E+01
7.1206E+02	2.9930E-02	3.2851E+00	1.3545E+04	1.7412E+01
7.1265E+02	3.1085E-02	3.4120E+00	1.4068E+04	1.7398E+01
7.1316E+02	3.1424E-02	3.4491E+00	1.4221E+04	1.7385E+01
7.1356E+02	3.1390E-02	3.4454E+00	1.4206E+04	1.7375E+01
7.1397E+02	3.0915E-02	3.3933E+00	1.3991E+04	1.7365E+01
7.1459E+02	2.9966E-02	3.2891E+00	1.3562E+04	1.7350E+01
7.1548E+02	2.8303E-02	3.1066E+00	1.2809E+04	1.7329E+01
7.1669E+02	2.6877E-02	2.9501E+00	1.2164E+04	1.7300E+01
7.1763E+02	2.6132E-02	2.8683E+00	1.1827E+04	1.7277E+01
7.1865E+02	2.5760E-02	2.8274E+00	1.1658E+04	1.7252E+01
7.1989E+02	2.5623E-02	2.8125E+00	1.1596E+04	1.7223E+01
7.2156E+02	2.5930E-02	2.8461E+00	1.1735E+04	1.7183E+01
7.2269E+02	2.5864E-02	2.8388E+00	1.1705E+04	1.7156E+01
7.2380E+02	2.5593E-02	2.8092E+00	1.1583E+04	1.7130E+01
7.2592E+02	2.5323E-02	2.7795E+00	1.1460E+04	1.7080E+01
7.2894E+02	2.5053E-02	2.7498E+00	1.1338E+04	1.7009E+01
7.2953E+02	2.4884E-02	2.7313E+00	1.1262E+04	1.6995E+01
7.3244E+02	2.4784E-02	2.7203E+00	1.1217E+04	1.6928E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
7.3500E+02	2.4920E-02	2.7353E+00	1.1278E+04	1.6869E+01
8.0000E+02	1.9096E-02	2.0960E+00	8.6424E+03	1.5498E+01
9.0000E+02	1.4347E-02	1.5748E+00	6.4930E+03	1.3776E+01
1.0000E+03	1.1025E-02	1.2101E+00	4.9894E+03	1.2398E+01
1.2500E+03	6.1953E-03	6.8000E-01	2.8038E+03	9.9187E+00
1.5000E+03	3.8144E-03	4.1867E-01	1.7263E+03	8.2656E+00
1.7500E+03	2.5129E-03	2.7582E-01	1.1373E+03	7.0848E+00
2.0000E+03	1.7434E-03	1.9136E-01	7.8901E+02	6.1992E+00
2.2500E+03	1.2597E-03	1.3827E-01	5.7011E+02	5.5104E+00
2.4800E+03	9.6175E-04	1.0556E-01	4.3525E+02	4.9994E+00
2.4810E+03	1.4162E-03	1.5544E-01	6.4092E+02	4.9973E+00
2.4820E+03	1.6298E-03	1.7889E-01	7.3761E+02	4.9953E+00
2.4832E+03	1.6307E-03	1.7899E-01	7.3801E+02	4.9929E+00
2.4836E+03	1.9504E-03	2.1408E-01	8.8270E+02	4.9921E+00
2.4841E+03	3.1931E-03	3.5048E-01	1.4451E+03	4.9911E+00
2.4848E+03	5.7848E-03	6.3495E-01	2.6180E+03	4.9897E+00
2.4852E+03	1.0754E-02	1.1804E+00	4.8671E+03	4.9889E+00
2.4857E+03	1.5050E-02	1.6519E+00	6.8112E+03	4.9879E+00
2.4863E+03	1.6505E-02	1.8116E+00	7.4697E+03	4.9867E+00
2.4868E+03	1.2921E-02	1.4182E+00	5.8476E+03	4.9857E+00
2.4871E+03	6.9578E-03	7.6370E-01	3.1489E+03	4.9851E+00
2.4877E+03	5.2189E-03	5.7284E-01	2.3619E+03	4.9839E+00
2.4882E+03	2.7701E-03	3.0405E-01	1.2536E+03	4.9829E+00
2.4891E+03	2.2383E-03	2.4568E-01	1.0130E+03	4.9811E+00
2.4901E+03	1.8131E-03	1.9900E-01	8.2053E+02	4.9791E+00
2.4910E+03	1.6008E-03	1.7570E-01	7.2445E+02	4.9773E+00
2.4920E+03	1.5305E-03	1.6799E-01	6.9264E+02	4.9753E+00
2.4930E+03	1.7087E-03	1.8755E-01	7.7329E+02	4.9733E+00
2.4942E+03	1.5675E-03	1.7205E-01	7.0941E+02	4.9709E+00
2.4952E+03	1.5328E-03	1.6824E-01	6.9368E+02	4.9689E+00
2.4971E+03	1.6406E-03	1.8008E-01	7.4249E+02	4.9651E+00
2.4972E+03	1.4885E-03	1.6338E-01	6.7363E+02	4.9649E+00
2.4992E+03	1.5810E-03	1.7353E-01	7.1551E+02	4.9610E+00
2.5011E+03	1.6210E-03	1.7792E-01	7.3359E+02	4.9572E+00
2.5020E+03	1.6738E-03	1.8372E-01	7.5750E+02	4.9554E+00
2.5041E+03	1.8847E-03	2.0686E-01	8.5294E+02	4.9512E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.5050E+03	2.0033E-03	2.1988E-01	9.0661E+02	4.9495E+00
2.5061E+03	2.2401E-03	2.4588E-01	1.0138E+03	4.9473E+00
2.5072E+03	2.2010E-03	2.4159E-01	9.9611E+02	4.9451E+00
2.5092E+03	1.9912E-03	2.1855E-01	9.0114E+02	4.9412E+00
2.5101E+03	1.9914E-03	2.1858E-01	9.0126E+02	4.9394E+00
2.5112E+03	2.0312E-03	2.2294E-01	9.1923E+02	4.9372E+00
2.5132E+03	1.9265E-03	2.1146E-01	8.7188E+02	4.9333E+00
2.5153E+03	1.8350E-03	2.0141E-01	8.3047E+02	4.9292E+00
2.5173E+03	1.8882E-03	2.0725E-01	8.5451E+02	4.9253E+00
2.5211E+03	1.9549E-03	2.1457E-01	8.8471E+02	4.9179E+00
2.5231E+03	1.9948E-03	2.1896E-01	9.0280E+02	4.9140E+00
2.5252E+03	1.9560E-03	2.1469E-01	8.8520E+02	4.9099E+00
2.5273E+03	1.9039E-03	2.0898E-01	8.6165E+02	4.9058E+00
2.5300E+03	1.7995E-03	1.9751E-01	8.1438E+02	4.9006E+00
2.5332E+03	1.8397E-03	2.0193E-01	8.3260E+02	4.8944E+00
2.5361E+03	1.8142E-03	1.9913E-01	8.2104E+02	4.8888E+00
2.5390E+03	1.7887E-03	1.9633E-01	8.0950E+02	4.8832E+00
2.5400E+03	1.8021E-03	1.9780E-01	8.1556E+02	4.8813E+00
2.5421E+03	1.9078E-03	2.0940E-01	8.6340E+02	4.8772E+00
2.5440E+03	1.9609E-03	2.1523E-01	8.8743E+02	4.8736E+00
2.5461E+03	2.0929E-03	2.2972E-01	9.4719E+02	4.8696E+00
2.5481E+03	2.2249E-03	2.4421E-01	1.0069E+03	4.8658E+00
2.5501E+03	2.3175E-03	2.5437E-01	1.0488E+03	4.8619E+00
2.5521E+03	2.3311E-03	2.5587E-01	1.0550E+03	4.8581E+00
2.5530E+03	2.3577E-03	2.5878E-01	1.0670E+03	4.8564E+00
2.5561E+03	2.3322E-03	2.5598E-01	1.0555E+03	4.8505E+00
2.5581E+03	2.2802E-03	2.5027E-01	1.0319E+03	4.8467E+00
2.5601E+03	2.2544E-03	2.4744E-01	1.0202E+03	4.8429E+00
2.5630E+03	2.1894E-03	2.4031E-01	9.9085E+02	4.8375E+00
2.5669E+03	2.1378E-03	2.3465E-01	9.6751E+02	4.8301E+00
2.5690E+03	2.1384E-03	2.3471E-01	9.6777E+02	4.8262E+00
2.5720E+03	2.1260E-03	2.3335E-01	9.6216E+02	4.8205E+00
2.5750E+03	2.0479E-03	2.2478E-01	9.2683E+02	4.8149E+00
2.5781E+03	2.0487E-03	2.2487E-01	9.2718E+02	4.8091E+00
2.5800E+03	2.0493E-03	2.2493E-01	9.2742E+02	4.8056E+00
2.7500E+03	1.4516E-03	1.5933E-01	6.5696E+02	4.5085E+00

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.0000E+03	1.1515E-03	1.2639E-01	5.2112E+02	4.1328E+00
3.5000E+03	7.5639E-04	8.3022E-02	3.4232E+02	3.5424E+00
4.0000E+03	5.2155E-04	5.7245E-02	2.3603E+02	3.0996E+00
4.5000E+03	3.7407E-04	4.1058E-02	1.6929E+02	2.7552E+00
5.0000E+03	2.7710E-04	3.0415E-02	1.2541E+02	2.4797E+00
6.0000E+03	1.6410E-04	1.8012E-02	7.4267E+01	2.0664E+00
7.0000E+03	1.0502E-04	1.1527E-02	4.7527E+01	1.7712E+00
8.0000E+03	7.1209E-05	7.8160E-03	3.2227E+01	1.5498E+00
9.0000E+03	5.0497E-05	5.5426E-03	2.2853E+01	1.3776E+00
1.0000E+04	3.6451E-05	4.0009E-03	1.6496E+01	1.2398E+00
1.2500E+04	1.8561E-05	2.0373E-03	8.4002E+00	9.9187E-01
1.5000E+04	1.0627E-05	1.1665E-03	4.8096E+00	8.2656E-01
1.7500E+04	6.6295E-06	7.2766E-04	3.0003E+00	7.0848E-01
2.0000E+04	4.4061E-06	4.8361E-04	1.9940E+00	6.1992E-01
2.2500E+04	3.0723E-06	3.3722E-04	1.3904E+00	5.5104E-01
2.5000E+04	2.2281E-06	2.4456E-04	1.0084E+00	4.9594E-01
2.7500E+04	1.6589E-06	1.8208E-04	7.5076E-01	4.5085E-01
3.0000E+04	1.2597E-06	1.3826E-04	5.7009E-01	4.1328E-01
3.5000E+04	7.7351E-07	8.4901E-05	3.5006E-01	3.5424E-01
4.0000E+04	5.0705E-07	5.5654E-05	2.2947E-01	3.0996E-01
4.5000E+04	3.4937E-07	3.8348E-05	1.5811E-01	2.7552E-01
5.0000E+04	2.5042E-07	2.7486E-05	1.1333E-01	2.4797E-01
6.0000E+04	1.4010E-07	1.5378E-05	6.3405E-02	2.0664E-01
7.0000E+04	8.5623E-08	9.3981E-06	3.8750E-02	1.7712E-01
8.0000E+04	5.5888E-08	6.1343E-06	2.5293E-02	1.5498E-01
9.0000E+04	3.8354E-08	4.2097E-06	1.7358E-02	1.3776E-01
1.0000E+05	2.7378E-08	3.0050E-06	1.2390E-02	1.2398E-01

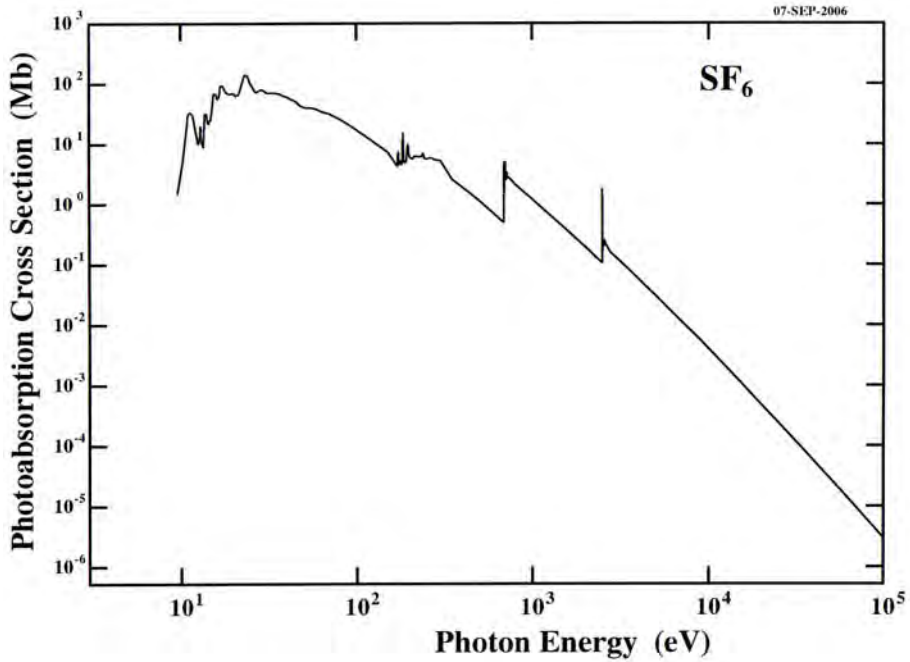
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, $\sigma_{\rm a}$, in Mb is given by

$$\sigma_{\rm a} \;=\; 680\,(Z_{\rm c} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\,\arctan(\chi^{-1})\right]}{1 - \exp\left(-\,2\pi\chi\right)} \;\;.$$

Here $Z_{\rm c}$ denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\rm K}}{E - E_{\rm K}}} \;\;,$$

where $E_{\rm K} \;=\; 696.7$ and 2472.0 eV for fluorine and sulfur atoms, respectively.



SF_6

Energy, eV	Source
10.0 - 14.9	Blechschmidt *et al.*, Chem. Phys. Lett., 14 (1972) 33
14.9 - 26.38	Holland *et al.*, J. Phys. B, 25 (1992) 4823
26.38 - 70.85	Fig. 6.23 p.303 (Berkowitz's book*)
70.85 - 171.0	Table 6.21 p.305 (Berkowitz's book*)
172.3 - 173.4	Table 6.20 p.304 (Berkowitz's book*)
177.4 - 177.5	Table 6.20 p.304 (Berkowitz's book*)
180.9	Table 6.20 p.304 (Berkowitz's book*)
183.4 - 184.6	Table 6.20 p.304 (Berkowitz's book*)
196.2	Table 6.20 p.304 (Berkowitz's book*)
205.8	Table 6.20 p.304 (Berkowitz's book*)
241.2	Table 6.20 p.304 (Berkowitz's book*)
171.0 - 210	Table 6.20 p.304 (Berkowitz's book*)
210 - 243	Table 6.20 p.304 (Berkowitz's book*)
243 - 277	Table 6.20 p.304 (Berkowitz's book*)
277 - 685	Table 6.21 p.305 (Berkowitz's book*)
689.0	Table 6.20 p.304 (Berkowitz's book*)
694.7	Table 6.20 p.304 (Berkowitz's book*)
699.9	Table 6.20 p.304 (Berkowitz's book*)
713.2	Table 6.20 p.304 (Berkowitz's book*)
685 - 735	Table 6.20 p.304 (Berkowitz's book*)
735 - 2490	Table 6.21 p.305 (Berkowitz's book*)
2486	Table 6.20 p.304 (Berkowitz's book*)
2490 - 2580	Table 6.20 p.304 (Berkowitz's book*)
	Lavilla *et al.*, J. Chem. Phys., 57 (1972) 899
2580 - 10^4	Table 6.21 p.305 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977)
(Plenum), p.305

Buckminsterfullerene (C_{60})

Z = 360 Molecular Mass : $M_{\rm A}$ = 720.642

σ_a(Mb) = 109.76097 $\frac{{\rm d}f}{{\rm d}E}$ (eV^{-1})

$\mu_m = \sigma_a \cdot N_{\rm A} \cdot M_{\rm A}^{-1}$

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$.

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
3.0000E+00	6.5128E-02	7.1485E+00	5.9737E+03	4.1328E+03
3.1062E+00	8.1250E-02	8.9181E+00	7.4526E+03	3.9915E+03
3.2464E+00	1.4608E-01	1.6034E+01	1.3399E+04	3.8191E+03
3.3943E+00	2.4351E-01	2.6728E+01	2.2335E+04	3.6527E+03
3.5043E+00	3.3560E-01	3.6836E+01	3.0783E+04	3.5381E+03
3.5725E+00	4.2782E-01	4.6958E+01	3.9241E+04	3.4705E+03
3.6521E+00	6.1238E-01	6.7216E+01	5.6170E+04	3.3949E+03
3.7052E+00	7.4814E-01	8.2117E+01	6.8622E+04	3.3462E+03
3.7469E+00	7.9691E-01	8.7470E+01	7.3095E+04	3.3090E+03
3.7924E+00	7.8595E-01	8.6266E+01	7.2090E+04	3.2693E+03
3.8569E+00	6.9335E-01	7.6103E+01	6.3596E+04	3.2146E+03
3.9100E+00	6.2256E-01	6.8332E+01	5.7103E+04	3.1710E+03
3.9858E+00	5.7887E-01	6.3537E+01	5.3096E+04	3.1106E+03
4.0427E+00	5.6784E-01	6.2327E+01	5.2084E+04	3.0669E+03
4.1450E+00	6.1104E-01	6.7069E+01	5.6047E+04	2.9912E+03
4.2322E+00	6.8690E-01	7.5395E+01	6.3005E+04	2.9295E+03
4.3043E+00	7.8452E-01	8.6110E+01	7.1959E+04	2.8805E+03
4.3649E+00	8.9303E-01	9.8020E+01	8.1912E+04	2.8405E+03
4.4218E+00	1.0668E+00	1.1710E+02	9.7852E+04	2.8039E+03
4.5052E+00	1.3981E+00	1.5346E+02	1.2824E+05	2.7520E+03
4.5772E+00	1.7240E+00	1.8923E+02	1.5814E+05	2.7087E+03
4.6493E+00	2.1042E+00	2.3096E+02	1.9301E+05	2.6667E+03
4.7137E+00	2.4139E+00	2.6495E+02	2.2141E+05	2.6303E+03
4.7820E+00	2.6963E+00	2.9595E+02	2.4731E+05	2.5927E+03
4.8464E+00	2.9353E+00	3.2218E+02	2.6923E+05	2.5583E+03
4.8881E+00	3.0112E+00	3.3051E+02	2.7620E+05	2.5364E+03
4.9374E+00	2.9078E+00	3.1917E+02	2.6672E+05	2.5111E+03
4.9678E+00	2.7393E+00	3.0067E+02	2.5126E+05	2.4958E+03

Table I. Oscillator-strength density, df/dE, photoabsorption cross section, $\sigma_{\rm a}$, and mass absorption coefficient, $\mu_{\rm m}$. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	$\mu_{\rm m}$ (cm^2 g^{-1})	λ (Å)
4.9905E+00	2.5110E+00	2.7561E+02	2.3032E+05	2.4844E+03
5.0246E+00	2.2283E+00	2.4458E+02	2.0438E+05	2.4675E+03
5.0663E+00	2.0380E+00	2.2369E+02	1.8693E+05	2.4472E+03
5.1081E+00	1.9183E+00	2.1055E+02	1.7595E+05	2.4272E+03
5.1498E+00	1.8638E+00	2.0457E+02	1.7095E+05	2.4076E+03
5.2028E+00	1.8637E+00	2.0456E+02	1.7094E+05	2.3830E+03
5.3014E+00	1.9558E+00	2.1467E+02	1.7939E+05	2.3387E+03
5.4076E+00	2.0859E+00	2.2895E+02	1.9133E+05	2.2928E+03
5.5251E+00	2.2758E+00	2.4980E+02	2.0875E+05	2.2440E+03
5.6085E+00	2.5147E+00	2.7602E+02	2.3066E+05	2.2106E+03
5.6881E+00	2.8243E+00	3.0999E+02	2.5905E+05	2.1797E+03
5.7791E+00	3.2643E+00	3.5829E+02	2.9941E+05	2.1454E+03
5.8512E+00	3.5684E+00	3.9167E+02	3.2731E+05	2.1190E+03
5.9118E+00	3.8291E+00	4.2029E+02	3.5122E+05	2.0972E+03
5.9763E+00	3.9213E+00	4.3041E+02	3.5968E+05	2.0746E+03
6.0218E+00	3.9430E+00	4.3279E+02	3.6166E+05	2.0589E+03
6.0825E+00	3.9374E+00	4.3217E+02	3.6115E+05	2.0384E+03
6.1355E+00	3.8612E+00	4.2381E+02	3.5416E+05	2.0208E+03
6.2114E+00	3.6761E+00	4.0350E+02	3.3719E+05	1.9961E+03
6.2531E+00	3.5510E+00	3.8977E+02	3.2571E+05	1.9828E+03
6.3327E+00	3.2139E+00	3.5276E+02	2.9478E+05	1.9578E+03
6.4009E+00	2.8930E+00	3.1754E+02	2.6536E+05	1.9370E+03
6.4464E+00	2.5831E+00	2.8353E+02	2.3693E+05	1.9233E+03
6.4995E+00	2.3112E+00	2.5368E+02	2.1199E+05	1.9076E+03
6.5716E+00	1.9034E+00	2.0892E+02	1.7459E+05	1.8867E+03
6.6436E+00	1.6043E+00	1.7609E+02	1.4715E+05	1.8662E+03
6.6853E+00	1.0419E+00	1.1437E+02	9.5571E+04	1.8546E+03
6.8470E+00	8.8277E-01	9.6893E+01	8.0970E+04	1.8108E+03
7.1009E+00	7.7109E-01	8.4635E+01	7.0726E+04	1.7460E+03
7.3549E+00	7.3884E-01	8.1095E+01	6.7768E+04	1.6857E+03
7.6000E+00	7.6000E-01	8.3418E+01	6.9709E+04	1.6314E+03
7.6781E+00	9.1304E-01	1.0022E+02	8.3747E+04	1.6148E+03
7.7743E+00	1.0501E+00	1.1526E+02	9.6317E+04	1.5948E+03
7.8544E+00	1.1282E+00	1.2383E+02	1.0348E+05	1.5785E+03
7.9507E+00	1.1171E+00	1.2261E+02	1.0246E+05	1.5594E+03
8.0791E+00	9.7210E-01	1.0670E+02	8.9164E+04	1.5346E+03

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
8.1594E+00	8.8289E-01	9.6907E+01	8.0981E+04	1.5195E+03
8.3198E+00	7.9369E-01	8.7116E+01	7.2800E+04	1.4902E+03
8.5284E+00	7.7145E-01	8.4676E+01	7.0760E+04	1.4538E+03
8.6727E+00	7.8265E-01	8.5904E+01	7.1787E+04	1.4296E+03
8.8811E+00	1.0393E+00	1.1407E+02	9.5327E+04	1.3960E+03
9.0573E+00	1.3628E+00	1.4959E+02	1.2500E+05	1.3689E+03
9.1534E+00	1.5859E+00	1.7407E+02	1.4547E+05	1.3545E+03
9.2976E+00	1.7868E+00	1.9612E+02	1.6389E+05	1.3335E+03
9.4419E+00	1.9542E+00	2.1449E+02	1.7925E+05	1.3131E+03
9.6183E+00	2.0770E+00	2.2797E+02	1.9050E+05	1.2890E+03
9.8588E+00	2.1886E+00	2.4023E+02	2.0075E+05	1.2576E+03
1.0035E+01	2.2555E+00	2.4757E+02	2.0689E+05	1.2355E+03
1.0324E+01	2.3226E+00	2.5493E+02	2.1304E+05	1.2009E+03
1.0677E+01	2.3338E+00	2.5616E+02	2.1407E+05	1.1612E+03
1.1030E+01	2.3452E+00	2.5741E+02	2.1511E+05	1.1241E+03
1.1238E+01	2.4344E+00	2.6720E+02	2.2329E+05	1.1033E+03
1.1462E+01	2.7357E+00	3.0028E+02	2.5093E+05	1.0817E+03
1.1735E+01	3.0369E+00	3.3334E+02	2.7856E+05	1.0565E+03
1.1959E+01	3.2935E+00	3.6150E+02	3.0209E+05	1.0367E+03
1.2072E+01	3.4275E+00	3.7621E+02	3.1438E+05	1.0270E+03
1.2168E+01	3.5836E+00	3.9334E+02	3.2870E+05	1.0189E+03
1.2264E+01	3.7845E+00	4.1539E+02	3.4713E+05	1.0110E+03
1.2424E+01	3.9630E+00	4.3498E+02	3.6350E+05	9.9794E+02
1.2584E+01	4.1416E+00	4.5458E+02	3.7988E+05	9.8525E+02
1.2777E+01	4.2643E+00	4.6806E+02	3.9114E+05	9.7037E+02
1.2953E+01	4.3648E+00	4.7908E+02	4.0035E+05	9.5719E+02
1.3354E+01	4.5323E+00	4.9747E+02	4.1571E+05	9.2844E+02
1.3867E+01	4.7444E+00	5.2075E+02	4.3517E+05	8.9410E+02
1.4364E+01	4.9342E+00	5.4158E+02	4.5258E+05	8.6316E+02
1.4990E+01	5.1463E+00	5.6486E+02	4.7204E+05	8.2711E+02
1.5407E+01	5.3361E+00	5.8570E+02	4.8945E+05	8.0473E+02
1.5695E+01	5.5704E+00	6.1141E+02	5.1094E+05	7.8996E+02
1.5872E+01	5.7936E+00	6.3591E+02	5.3141E+05	7.8115E+02
1.6080E+01	6.2845E+00	6.8979E+02	5.7643E+05	7.7105E+02
1.6256E+01	6.7641E+00	7.4244E+02	6.2043E+05	7.6270E+02
1.6384E+01	7.0765E+00	7.7673E+02	6.4908E+05	7.5674E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
1.6624E+01	7.5005E+00	8.2326E+02	6.8797E+05	7.4581E+02
1.6897E+01	7.8575E+00	8.6245E+02	7.2072E+05	7.3376E+02
1.7153E+01	8.0807E+00	8.8695E+02	7.4119E+05	7.2281E+02
1.7490E+01	8.2370E+00	9.0410E+02	7.5552E+05	7.0889E+02
1.7955E+01	8.3711E+00	9.1882E+02	7.6783E+05	6.9053E+02
1.8388E+01	8.6500E+00	9.4943E+02	7.9341E+05	6.7427E+02
1.8869E+01	8.9960E+00	9.8741E+02	8.2514E+05	6.5708E+02
1.9494E+01	9.5540E+00	1.0487E+03	8.7633E+05	6.3601E+02
2.0023E+01	1.0023E+01	1.1001E+03	9.1930E+05	6.1921E+02
2.0584E+01	1.0503E+01	1.1528E+03	9.6333E+05	6.0233E+02
2.1113E+01	1.0860E+01	1.1920E+03	9.9609E+05	5.8724E+02
2.1514E+01	1.1083E+01	1.2165E+03	1.0166E+06	5.7630E+02
2.1739E+01	1.1172E+01	1.2263E+03	1.0247E+06	5.7033E+02
2.1979E+01	1.1195E+01	1.2287E+03	1.0268E+06	5.6410E+02
2.2172E+01	1.1061E+01	1.2140E+03	1.0145E+06	5.5919E+02
2.2397E+01	1.0849E+01	1.1908E+03	9.9509E+05	5.5357E+02
2.2734E+01	1.0403E+01	1.1418E+03	9.5418E+05	5.4537E+02
2.3183E+01	9.7225E+00	1.0672E+03	8.9178E+05	5.3481E+02
2.3633E+01	9.1202E+00	1.0010E+03	8.3654E+05	5.2462E+02
2.4018E+01	8.6407E+00	9.4841E+02	7.9256E+05	5.1621E+02
2.4548E+01	8.1054E+00	8.8966E+02	7.4345E+05	5.0507E+02
2.5094E+01	7.6148E+00	8.3581E+02	6.9845E+05	4.9408E+02
2.5639E+01	7.1465E+00	7.8441E+02	6.5550E+05	4.8358E+02
2.6056E+01	6.8008E+00	7.4647E+02	6.2379E+05	4.7584E+02
2.6538E+01	6.4329E+00	7.0608E+02	5.9004E+05	4.6719E+02
2.6731E+01	6.2990E+00	6.9139E+02	5.7777E+05	4.6382E+02
2.7533E+01	6.0204E+00	6.6081E+02	5.5221E+05	4.5031E+02
2.8415E+01	5.7753E+00	6.3390E+02	5.2973E+05	4.3633E+02
2.9394E+01	5.5079E+00	6.0455E+02	5.0520E+05	4.2180E+02
3.0308E+01	5.2627E+00	5.7764E+02	4.8271E+05	4.0908E+02
3.1367E+01	4.9953E+00	5.4829E+02	4.5818E+05	3.9527E+02
3.2009E+01	4.8282E+00	5.2995E+02	4.4286E+05	3.8734E+02
3.2731E+01	4.5496E+00	4.9937E+02	4.1730E+05	3.7880E+02
3.3677E+01	4.1930E+00	4.6022E+02	3.8459E+05	3.6816E+02
3.4351E+01	3.9477E+00	4.3331E+02	3.6210E+05	3.6093E+02
3.5009E+01	3.6913E+00	4.0516E+02	3.3858E+05	3.5415E+02

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.5779E+01	3.4016E+00	3.7336E+02	3.1201E+05	3.4653E+02
3.6662E+01	3.0894E+00	3.3910E+02	2.8337E+05	3.3818E+02
3.7544E+01	2.7551E+00	3.0241E+02	2.5271E+05	3.3024E+02
3.8362E+01	2.4654E+00	2.7061E+02	2.2614E+05	3.2320E+02
3.9229E+01	2.1422E+00	2.3513E+02	1.9649E+05	3.1605E+02
3.9838E+01	1.8970E+00	2.0821E+02	1.7400E+05	3.1122E+02
4.0800E+01	1.5402E+00	1.6906E+02	1.4127E+05	3.0388E+02
4.5000E+01	1.2804E+00	1.4054E+02	1.1744E+05	2.7552E+02
5.0000E+01	1.1043E+00	1.2120E+02	1.0129E+05	2.4797E+02
6.0000E+01	7.9019E-01	8.6732E+01	7.2479E+04	2.0664E+02
7.0000E+01	5.7542E-01	6.3158E+01	5.2779E+04	1.7712E+02
8.0000E+01	4.3341E-01	4.7571E+01	3.9753E+04	1.5498E+02
9.0000E+01	3.3715E-01	3.7006E+01	3.0924E+04	1.3776E+02
1.0000E+02	2.6962E-01	2.9593E+01	2.4730E+04	1.2398E+02
1.2500E+02	1.6818E-01	1.8459E+01	1.5426E+04	9.9187E+01
1.5000E+02	1.1196E-01	1.2289E+01	1.0269E+04	8.2656E+01
1.7500E+02	7.9574E-02	8.7341E+00	7.2988E+03	7.0848E+01
2.0000E+02	5.6231E-02	6.1719E+00	5.1577E+03	6.1992E+01
2.2500E+02	4.0365E-02	4.4305E+00	3.7024E+03	5.5104E+01
2.5000E+02	2.9605E-02	3.2494E+00	2.7154E+03	4.9594E+01
2.7500E+02	2.2190E-02	2.4356E+00	2.0353E+03	4.5085E+01
2.8000E+02	2.1463E-02	2.3558E+00	1.9687E+03	4.4280E+01
2.8109E+02	2.7814E-02	3.0529E+00	2.5512E+03	4.4108E+01
2.8177E+02	3.6096E-02	3.9619E+00	3.3108E+03	4.4002E+01
2.8246E+02	4.6242E-02	5.0756E+00	4.2415E+03	4.3894E+01
2.8296E+02	6.3879E-02	7.0115E+00	5.8592E+03	4.3817E+01
2.8322E+02	8.1557E-02	8.9518E+00	7.4807E+03	4.3777E+01
2.8339E+02	1.0857E-01	1.1917E+01	9.9585E+03	4.3750E+01
2.8355E+02	1.6078E-01	1.7647E+01	1.4747E+04	4.3726E+01
2.8367E+02	5.1887E-01	5.6952E+01	4.7592E+04	4.3707E+01
2.8383E+02	9.1706E-01	1.0066E+02	8.4116E+04	4.3683E+01
2.8400E+02	1.3629E+00	1.4959E+02	1.2501E+05	4.3656E+01
2.8426E+02	1.0923E+00	1.1989E+02	1.0019E+05	4.3616E+01
2.8446E+02	6.9500E-01	7.6284E+01	6.3748E+04	4.3586E+01
2.8459E+02	4.8048E-01	5.2738E+01	4.4071E+04	4.3566E+01
2.8489E+02	1.8293E-01	2.0079E+01	1.6779E+04	4.3520E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.8494E+02	5.3824E-01	5.9078E+01	4.9369E+04	4.3512E+01
2.8507E+02	8.2547E-01	9.0604E+01	7.5714E+04	4.3493E+01
2.8519E+02	9.8861E-01	1.0851E+02	9.0679E+04	4.3474E+01
2.8529E+02	1.0036E+00	1.1015E+02	9.2052E+04	4.3459E+01
2.8555E+02	9.6528E-01	1.0595E+02	8.8539E+04	4.3419E+01
2.8567E+02	8.6640E-01	9.5097E+01	7.9469E+04	4.3401E+01
2.8580E+02	9.8016E-01	1.0758E+02	8.9904E+04	4.3381E+01
2.8598E+02	1.0034E+00	1.1013E+02	9.2035E+04	4.3354E+01
2.8605E+02	9.8852E-01	1.0850E+02	9.0670E+04	4.3344E+01
2.8626E+02	6.7792E-01	7.4409E+01	6.2181E+04	4.3312E+01
2.8641E+02	4.0092E-01	4.4005E+01	3.6774E+04	4.3289E+01
2.8643E+02	3.5988E-01	3.9500E+01	3.3009E+04	4.3286E+01
2.8661E+02	3.3187E-01	3.6426E+01	3.0440E+04	4.3259E+01
2.8679E+02	3.4677E-01	3.8062E+01	3.1807E+04	4.3232E+01
2.8714E+02	5.2203E-01	5.7299E+01	4.7882E+04	4.3179E+01
2.8745E+02	6.9078E-01	7.5821E+01	6.3361E+04	4.3132E+01
2.8763E+02	7.0754E-01	7.7661E+01	6.4898E+04	4.3105E+01
2.8788E+02	6.8512E-01	7.5200E+01	6.2841E+04	4.3068E+01
2.8841E+02	5.9270E-01	6.5055E+01	5.4364E+04	4.2989E+01
2.8892E+02	4.9563E-01	5.4401E+01	4.5461E+04	4.2913E+01
2.8922E+02	4.6854E-01	5.1427E+01	4.2976E+04	4.2868E+01
2.8952E+02	4.6848E-01	5.1421E+01	4.2971E+04	4.2824E+01
2.8983E+02	4.9921E-01	5.4794E+01	4.5789E+04	4.2778E+01
2.9006E+02	5.5140E-01	6.0522E+01	5.0576E+04	4.2744E+01
2.9031E+02	6.9498E-01	7.6281E+01	6.3746E+04	4.2708E+01
2.9064E+02	8.6373E-01	9.4803E+01	7.9224E+04	4.2659E+01
2.9069E+02	8.1802E-01	8.9786E+01	7.5031E+04	4.2652E+01
2.9087E+02	7.9187E-01	8.6917E+01	7.2633E+04	4.2625E+01
2.9117E+02	7.7131E-01	8.4660E+01	7.0747E+04	4.2581E+01
2.9145E+02	7.7127E-01	8.4655E+01	7.0743E+04	4.2540E+01
2.9186E+02	7.8985E-01	8.6695E+01	7.2448E+04	4.2481E+01
2.9211E+02	8.1686E-01	8.9659E+01	7.4925E+04	4.2444E+01
2.9231E+02	8.4946E-01	9.3238E+01	7.7915E+04	4.2415E+01
2.9267E+02	8.6619E-01	9.5074E+01	7.9450E+04	4.2363E+01
2.9294E+02	8.5029E-01	9.3328E+01	7.7991E+04	4.2324E+01
2.9317E+02	7.9616E-01	8.7388E+01	7.3027E+04	4.2291E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
2.9332E+02	7.5697E-01	8.3086E+01	6.9432E+04	4.2269E+01
2.9345E+02	7.3270E-01	8.0422E+01	6.7206E+04	4.2251E+01
2.9370E+02	7.1774E-01	7.8780E+01	6.5833E+04	4.2215E+01
2.9398E+02	7.4381E-01	8.1641E+01	6.8225E+04	4.2174E+01
2.9441E+02	8.2767E-01	9.0846E+01	7.5917E+04	4.2113E+01
2.9479E+02	9.3203E-01	1.0230E+02	8.5488E+04	4.2058E+01
2.9492E+02	9.5067E-01	1.0435E+02	8.7199E+04	4.2040E+01
2.9517E+02	9.5811E-01	1.0516E+02	8.7881E+04	4.2004E+01
2.9550E+02	9.4874E-01	1.0414E+02	8.7022E+04	4.1957E+01
2.9571E+02	9.4029E-01	1.0321E+02	8.6247E+04	4.1928E+01
2.9583E+02	9.2165E-01	1.0116E+02	8.4536E+04	4.1911E+01
2.9611E+02	9.2808E-01	1.0187E+02	8.5126E+04	4.1871E+01
2.9669E+02	9.7373E-01	1.0688E+02	8.9314E+04	4.1789E+01
2.9697E+02	9.9330E-01	1.0903E+02	9.1108E+04	4.1750E+01
2.9730E+02	1.0044E+00	1.1025E+02	9.2128E+04	4.1703E+01
2.9804E+02	9.8843E-01	1.0849E+02	9.0662E+04	4.1600E+01
2.9857E+02	9.9761E-01	1.0950E+02	9.1504E+04	4.1526E+01
2.9905E+02	1.0237E+00	1.1236E+02	9.3897E+04	4.1459E+01
2.9933E+02	1.0423E+00	1.1440E+02	9.5599E+04	4.1421E+01
2.9976E+02	1.0488E+00	1.1512E+02	9.6198E+04	4.1361E+01
3.0016E+02	1.0459E+00	1.1480E+02	9.5936E+04	4.1306E+01
3.0103E+02	9.9256E-01	1.0894E+02	9.1041E+04	4.1187E+01
3.0224E+02	9.1592E-01	1.0053E+02	8.4011E+04	4.1022E+01
3.0356E+02	8.3271E-01	9.1399E+01	7.6378E+04	4.0843E+01
3.0503E+02	7.4853E-01	8.2160E+01	6.8658E+04	4.0647E+01
3.0650E+02	6.7182E-01	7.3740E+01	6.1621E+04	4.0452E+01
3.0746E+02	6.3063E-01	6.9218E+01	5.7843E+04	4.0325E+01
3.0873E+02	5.8659E-01	6.4385E+01	5.3804E+04	4.0159E+01
3.0997E+02	5.5002E-01	6.0371E+01	5.0450E+04	3.9999E+01
3.1134E+02	5.2182E-01	5.7275E+01	4.7863E+04	3.9823E+01
3.1258E+02	4.9923E-01	5.4796E+01	4.5791E+04	3.9665E+01
3.1405E+02	4.8314E-01	5.3029E+01	4.4315E+04	3.9479E+01
3.1557E+02	4.6797E-01	5.1365E+01	4.2924E+04	3.9289E+01
3.1696E+02	4.5748E-01	5.0213E+01	4.1961E+04	3.9117E+01
3.1861E+02	4.4695E-01	4.9058E+01	4.0996E+04	3.8914E+01
3.2000E+02	4.3367E-01	4.7600E+01	3.9778E+04	3.8745E+01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_a, and mass absorption coefficient, μ_m. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
3.5000E+02	3.5478E-01	3.8941E+01	3.2541E+04	3.5424E+01
4.0000E+02	2.5953E-01	2.8486E+01	2.3805E+04	3.0996E+01
4.5000E+02	1.9491E-01	2.1394E+01	1.7878E+04	2.7552E+01
5.0000E+02	1.4988E-01	1.6451E+01	1.3748E+04	2.4797E+01
6.0000E+02	9.4061E-02	1.0324E+01	8.6276E+03	2.0664E+01
7.0000E+02	6.2909E-02	6.9050E+00	5.7702E+03	1.7712E+01
8.0000E+02	4.4205E-02	4.8520E+00	4.0546E+03	1.5498E+01
9.0000E+02	3.2302E-02	3.5455E+00	2.9629E+03	1.3776E+01
1.0000E+03	2.4365E-02	2.6743E+00	2.2348E+03	1.2398E+01
1.2500E+03	1.3377E-02	1.4682E+00	1.2270E+03	9.9187E+00
1.5000E+03	8.1908E-03	8.9903E-01	7.5129E+02	8.2656E+00
1.7500E+03	4.8811E-03	5.3575E-01	4.4771E+02	7.0848E+00
2.0000E+03	3.2982E-03	3.6202E-01	3.0252E+02	6.1992E+00
2.2500E+03	2.3278E-03	2.5550E-01	2.1351E+02	5.5104E+00
2.5000E+03	1.7009E-03	1.8669E-01	1.5601E+02	4.9594E+00
2.7500E+03	1.2786E-03	1.4034E-01	1.1727E+02	4.5085E+00
3.0000E+03	9.8398E-04	1.0800E-01	9.0254E+01	4.1328E+00
3.5000E+03	6.1682E-04	6.7703E-02	5.6577E+01	3.5424E+00
4.0000E+03	4.1025E-04	4.5029E-02	3.7629E+01	3.0996E+00
4.5000E+03	2.8554E-04	3.1341E-02	2.6191E+01	2.7552E+00
5.0000E+03	2.0602E-04	2.2613E-02	1.8897E+01	2.4797E+00
6.0000E+03	1.1645E-04	1.2782E-02	1.0682E+01	2.0664E+00
7.0000E+03	7.1436E-05	7.8409E-03	6.5524E+00	1.7712E+00
8.0000E+03	4.6519E-05	5.1060E-03	4.2669E+00	1.5498E+00
9.0000E+03	3.1702E-05	3.4796E-03	2.9078E+00	1.3776E+00
1.0000E+04	2.1353E-05	2.3437E-03	1.9586E+00	1.2398E+00
1.2500E+04	1.0341E-05	1.1350E-03	9.4849E-01	9.9187E-01
1.5000E+04	5.7181E-06	6.2762E-04	5.2448E-01	8.2656E-01
1.7500E+04	3.4649E-06	3.8031E-04	3.1782E-01	7.0848E-01
2.0000E+04	2.2452E-06	2.4644E-04	2.0594E-01	6.1992E-01
2.2500E+04	1.5312E-06	1.6807E-04	1.4045E-01	5.5104E-01
2.5000E+04	1.0873E-06	1.1934E-04	9.9730E-02	4.9594E-01
2.7500E+04	7.9609E-07	8.7380E-05	7.3020E-02	4.5085E-01
3.0000E+04	5.9701E-07	6.5528E-05	5.4760E-02	4.1328E-01
3.5000E+04	3.5836E-07	3.9334E-05	3.2870E-02	3.5424E-01
4.0000E+04	2.3031E-07	2.5279E-05	2.1125E-02	3.0996E-01

Table I. Oscillator-strength density, $\mathrm{d}f/\mathrm{d}E$, photoabsorption cross section, σ_{a}, and mass absorption coefficient, μ_{m}. (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_{m} ($\mathrm{cm}^2\ \mathrm{g}^{-1}$)	λ (Å)
4.5000E+04	1.5594E-07	1.7116E-05	1.4303E-02	2.7552E-01
5.0000E+04	1.1002E-07	1.2076E-05	1.0091E-02	2.4797E-01
6.0000E+04	6.0167E-08	6.6040E-06	5.5187E-03	2.0664E-01
7.0000E+04	3.6114E-08	3.9639E-06	3.3125E-03	1.7712E-01
8.0000E+04	2.3220E-08	2.5486E-06	2.1298E-03	1.5498E-01
9.0000E+04	1.5740E-08	1.7277E-06	1.4437E-03	1.3776E-01
1.0000E+05	1.1122E-08	1.2208E-06	1.0202E-03	1.2398E-01

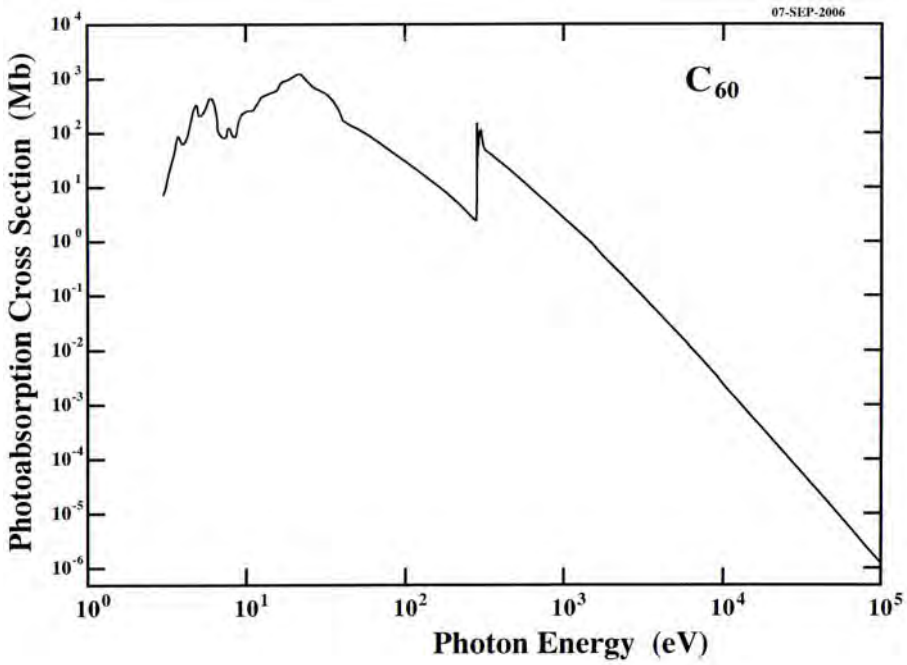
When photon energy, E, is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_{a}, in Mb is given by

$$\sigma_{\mathrm{a}} \;=\; 680\,(Z_{\mathrm{c}} - 0.3)^6 \left(\frac{Ry}{E}\right)^4 \frac{\exp\left[-\,4\chi\ \arctan(\chi^{-1})\right]}{1 - \exp\left(-\,2\pi\chi\right)}\ .$$

Here Z_{c} denotes the atomic number of constituent atoms and E is photon energy in eV. The quantity χ is given by

$$\chi \;=\; \sqrt{\frac{E_{\mathrm{K}}}{E - E_{\mathrm{K}}}}\ ,$$

where $E_{\mathrm{K}} \;=\; 290.1$ eV.



C_{60}

Energy, eV	Source
3.1 - 7.6 (IP)	Table 6.17 p.288 (Berkowitz's book*)
7.6 - 40.8	Table 6.19 p.295 (Berkowitz's book*)
40.8 - 280	Henke, *et al.*, Atom. Data Nucl. Data Tables, 54 (1993) 181
280 - 320	Fig. 6.21 p.295 (Berkowitz's book*)
320 - 1740	Table 6.19 p.295 (Berkowitz's book*)
1740.0 - 10^4	Table 6.19 p.295 (Berkowitz's book*)
10^4 - 10^5	Chantler, J. Phys. Chem. Ref. Data, 24 (1995) 71
10^5 - ∞	Bethe and Salpeter** (K-shell only)

* Atomic and Molecular Photoabsorption: Absolute Total Cross Sections (2002) (Academic Press)

** Quantum Mechanics of One and Two-Electron Atoms (1977) (Plenum), p.305