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Bibliography of Electron and Photon Cross Sections
with Atoms and Molecules
Published in the 20th Century
– Xenon –

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Bibliography of Electron and Photon Cross Sections

with Atoms and Molecules

Published in the 20th Century

— Xenon —*

Makoto Hayashi

(Gaseous Electronics Institute)

A bibliographies of original and review reports of experiments or theories of electron and photon cross sections and also electron swarm data are presented for atomic or molecular species with specified targets. These works covered 17 atoms and 51 molecules. The present bibliography is only for xenon (Xe). About 1180 papers were compiled. A comprehensive author index is included. The bibliography covers the period 1921 through 2000 for Xe. Finally, author's recommended Xe electron collision cross section set is given by number tables

Keywords : Xe atom, collision cross section, electron, elastic scattering, electronic excitation, ionization, photon, photoabsorption, photodissociation, photoexcitation, photoionization, electron swarm, drift velocity, diffusion coefficient, ionization coefficient, excitation and ionization energies, transition probability, lifetimes of excited states

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Introduction

History

This bibliography is the result of a continuing literature survey which was begun in around 1970 and originally encompassed only electron collision cross section and electron swarm data. The organization responsible for continuing this survey is Nagoya Institute of Technology, Nagoya. From 1994, the work continued to Gaseous Electronics Insititute, Nagoya. In 1997, the collection of photon cross section references was begun. The search for references in both cases was retrospective and included all papers reporting measurements, calculations or reviews of such cross sections and electron swarm data.

Scope

This bibliograthy contains references to original research papers which report experiments or theoretical calculations of cross sections for electron and photon collisions with xenon (Xe) atom. The review papers on this subject are also included. Some xenon cluster papers are included. Some conference reports, company or agency reports and PhD thesis are added. Xenon ion papers and positron collision papers are not included in principle.

Papers of the following quantities are included.

For electron collision cross section :

- 1) elastic scattering
- 2) electronic excitation
- 3) ionization
- 4) grand total scattering (sum of elastic and inelastic cross sections)
- 5) metastable xenon
- 6) electron swarm parameters (drift velocity, diffusion coefficient)
- 7) excitation and ionization coefficients

For photon collision cross section :

- 1) photoabsorption
- 2) photoexcitation and fluorescence
- 3) photodissociation
- 4) photoionization

For some related data :

- 1) excitation and ionization energies
- 2) transition probabilitiy
- 3) lifetime of excited states
- 4) the others

Author Index

In this section all authors are listed alphabetically by surname. After each author's name is a list of page numbers indicating which references he or she authored or coauthored. (Author Index of Addenda of References for Xe (2) is not complete and some selected authors are listed. I am sorry about it.)

Electron Collision Cross Section Set for Xenon (Xe)

Electron collision cross section set of elastic, electronic excitation and ionization collision for xenon recommended by the author are given by the tables. Final conclusions are given and detailed discussions are not shown here. Elastic total and elastic momentum transfer cross sections are obtained from author's recommended elastic differential cross sections. These values of the set are not final, in other words, tentative values. The author would like to improve this cross section set slightly.

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Institute for Molecular Science, Okazaki

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- O M. Ya. Amusia, N. B. Avdonina, L. V. Chernysheva and M. Yu. Kuchiev : J. Phys. B18, L791-L796 (1985a)
'Stripping' of the atom in bremsstrahlung. [T, Xe, La]
- O M. Ya. Amusia, V. K. Ivanov and V. A. Kupchenko : J. Phys. B18, 3871-3879 (1985b)
The effect of atomic rearrangement on the photoionisation cross section for 3d subshells of the isoelectronic Xe series. [T, $h\nu$, Xe]
- O M. Ya. Amusia : Comments At. Mol. Phys. 16, 143-155 (1985c) ·
Spectroscopic factor and the renormalization of interelectron interaction. [comments, $h\nu$, Ar - Xe]
- O M. Ya. Amusia, I. M. Band, V. K. Ivanov, V. A. Kupchenko and M. B. Trzhaskovskaya : Bull. Acad. Sci. USSR Phys. Ser. 50, No. 7, 19-25 (1986)
Nonphysical characteristics of the photoionization cross sections of internal shells. [T, $h\nu$, Ar - Xe, Cu, Hg]
- O M. Ya. Amusia and A. V. Korol : Nucl. Instrum. Meth. B79, 146-149 (1993) ·
Recent developments of "polarizational" bremsstrahlung. [T, Xe, He, Ne]
- EX N. Anderson, J. W. Gallager and I. V. Hertel : Phys. Rep. 165, 1-188 (1988)
Collisional alignment and orientation of atomic outer shells. I. Direct excitation by electron and atomic impact. [review, He - Xe, H, Li, Na, K, Hg, Ba]
- ME E. A. Andreev and A. E. Bodrov : Chem. Phys. Lett. 109, 450-455 (1984) ·
Inelastic scattering of low-energy electrons by metastable atoms. [T, He - Xe, C, N, O]
- α T. Aoyama : Nucl. Instrum. Meth. A234, 125-131 (1985)
Generalized gas gain formula for proportional counters. [T, Xe + CO₂, Ar + CH₄, etc.]
- O I. Arcon, A. Kodre, M. Stuhec and D. Glavic-Cindro : Phys. Rev. A51, 147-154 (1995)
Multielectron excitations in the L-subshell photoabsorption of xenon. [E, $h\nu$, Xe]
- O G. B. Armen, J. Tulkki, T. Aberg and B. Crasemann : Phys. Rev. A36, 5606-5614 (1987b)
Quantum theory of post-collision interaction in inner-shell photoionization : Final-state interaction between two continuum electrons. [T, $h\nu$, Xe, Ar]
- O U. Arp, K. Iemura, G. Kutluk, T. Nagata, S. Yagi and A. Yagishita : J. Phys. B32, 1295-1304 (1999)
3d photoionization of Xe, Cs and Ba and the collapse of the 4f wavefunction. [E, $h\nu$, Xe, Cs, Ba]
- O T. U. Arslanbekov, F. A. Iskanderov and R. Ya. Pirogovskii : Bull. Acad. Sci. USSR Phys. Ser. 52, No. 6, 122-123 (1988)
Highly charged inert-gas ions produced by nanosecond laser pulses. [E, $h\nu$, Ar - Xe]

- O T. Auguste, P. Monot, L. A. Lompre, G. Mainfray and C. Manus : J. Phys. B25, 4181-4194 (1992)
Multiply charged ion produced in noble gases by a 1 ps laser pulse at $\lambda = 1053$ nm. [E, $h\nu$, Xe, He - Ar]
- O L. Avaldi, R. I. Hall, G. Dawber, P. M. Rutter and G. C. King : J. Phys. B24, 427-438 (1991)
A study of post-collision interaction effects in Kr 3d and Xe 4d near-threshold photoionization. [E, $h\nu$, Xe, Kr]
- I L. Avaldi, R. Camilloni, R. Multari, G. Stefani, X. Zhang, H. R. J. Walters and C. T. Whelan : Phys. Rev. A48, 1195-1203 (1993)
Coplanar asymmetric (e, 2e) experiments on xenon 4p and 5p orbitals. [E, Xe]
- I L. Avaldi, P. Bolognesi, R. Camilloni and G. Stefani : Phys. Rev. Lett. 75, 1915-1918 (1995)
Observation of angle dependent postcollision interaction in the electron impact ionization of Xe $4d_{5/2}$. [E, Xe; 1000 eV]
- EX L. Avaldi, P. Bolognesi, R. Camilloni, E. Fainelli, R. A. Multari and G. Stefani :
I Phys. Rev. A54, 2930-2943 (1996)
Formation and decay of Xe $4d^{-1}$ vacancies studied via electron-electron coincidence experiments. [E, Xe]
- E B. Awe, F. Kemper, F. Rosicky and R. Feder : J. Phys. B16, 603-612 (1983)
Electron scattering of slow electrons from xenon atoms. [T, Xe; relativistic Hartree-Fock]
- I M. Aydinol : J. Phys. B14, 741-750 (1981)
L-subshell ionization cross sections of xenon by electron impact near threshold region. [E, Xe; 6 - 14 keV]
- S A. Bagheri, K. L. Baluja and S. M. Datta : Z. Phys. D32, 211-217 (1994)
Density dependence of electron mobility in dense gases. [T, He - Xe, H₂, N₂, O₂, CO₂; multiple-scattering approach]
- E P. Baille, J. -S. Chang, A. Claude, R. M. Hobson, G. L. Ogram and A. W. Yau : J. Phys. B14, 1485-1495 (1981)
Effective collision frequency of electrons in noble gases. [T, He - Xe; assuming Maxwellian distribution]
- O S. J. Bajic, R. N. Compton, X. Tang and P. Lambropoulos : Phys. Rev. A44, 2102-2112 (1991)
Resonantly enhanced multiphoton-ionization photoelectron spectroscopy of krypton and xenon : Experiment and theory. [E and T, $h\nu$, Xe, Kr]

- EX K. Bartschat and D. H. Madison : J. Phys. B20, 5839-5863 (1987) .
 Erratum 25, 1361-1361 (1992)
 Electron impact excitation of rare gases : Differential cross sections
 and angular correlation parameters for neon, argon, krypton and xenon.
 [T, Ne - Xe]
- E K. Bartschat : Phys. Rep. 180, 1-81 (1989) .
- EX Excitation and ionization of atoms by interaction with electrons,
 I positrons, protons and photons.
 O [review, Xe, Kr, Ar, Ca, Zn, etc. ; general density matrix theory]
- EX K. Bartschat and D. H. Madison : J. Phys. B25, 4619-4626 (1992) .
 Non-statistical branching ratios for excitation of $[np^5(n+1)s]^1,^3P^{\circ}_{0,1,2}$
 states in noble gases. [T, Ne - Xe]
- EX K. Becker, A. Crowe and J. W. McConkey : J. Phys. B25, 3885-3913 (1992)
 A critical look at electron-photon coincidence experiments with heavy
 noble gases in the regime of large impact parameters.
 [review, Ne - Xe]
- O U. Becker, T. Prescher, E. Schmidt, B. Sonntag and H. -E. Wetzel : Phys. Rev. A33,
 3891-3899 (1986)
 Decay channels of the discrete and continuum Xe 4d resonances.
 [E, $h\nu$, Xe]
- O U. Becker, H. G. Kerckhoff, M. Kupsch, B. Langer, D. Szostak and R. Wehlitz : J. Physique
 48, C9, 497-500 (1987)
 Photoionization of xenon with soft X-rays. [E, $h\nu$, Xe; 250 - 1000 eV]
- O U. Becker, D. Szostak, M. Kupsch, H. G. Kerckhoff, B. Langer and R. Wehlitz : J. Phys.
 B22, 749-762 (1989a)
 Decay of the Xe 4d \rightarrow np excitations : resonant shake-off versus shake-
 up and spectator transitions. [E, $h\nu$, Xe]
- O U. Becker, D. Szostak, H. G. Kerckhoff, M. Kupsch, B. Langer, R. Wehlitz, A. Yagishita and
 T. Hayaishi : Phys. Rev. A39, 3902-3911 (1989b)
 Subshell photoionization of Xe between 40 and 1000 eV. [E, $h\nu$, Xe]
- O U. Becker and D. A. Shirley : Phys. Scr. T31, 56-66 (1990) .
 Threshold behaviour and resonances in the photoionization of atoms and
 molecules. [review, $h\nu$, Ne - Xe, Li, CO, N₂]
- I C. Belenger, P. Defrance, E. Salzborn, V. P. Shevelko, H. Tawara and D. B. Uskov :
 J. Phys. B30, 2667-2679 (1997)
 Double ionization of neutral atoms, positive and negative ions by
 electron impact. [E and T, Ne - Xe, Cu, etc.]
- O P. Borejny, P. M. Millet, M. Saissac and Y. Salamero : J. Phys. B26, 3339-3353 (1993)
 Spectroscopic and kinetic study of xenon after a multiphonic excitation
 of the $5d | 5/2 | j=3$ and $5d | 7/2 | j=3$ states. [E, $h\nu$, Xe]

- E H. P. Berg : Phys. Lett. 88A, 292-294 (1982) ·
The elastic scattering of low energy electrons from xenon.
[T. Xe; 5.5 - 10 eV]
- E O. Berger and J. Kessler : J. Phys. B19, 3539-3557 (1986) ·
Elastic scattering of polarised electrons from mercury and xenon.
[E, Xe, Hg; 40 - 350 eV]
- E D. Bessis, A. Haffad and A. Z. Msezane : Phys. Rev. A49, 3366-3375 (1994) ·
EX Momentum-transfer dispersion relations for electron-atom cross sections.
[T. Ar - Xe; 100 - 500 eV]
- ME A. B. Blagoev, T. M. Mishonov and Tc. K. Popov : J. Phys. B17, 435-441 (1984a) ·
Superelastic collisions between slow electrons and excited Kr and Xe atoms.
Possible reaction mechanism for rare-gas atoms. [E, Ar - Xe]
- EX A. Blagoev, Iv. Ivanov, T. Mishonov and Tc. Popov : J. Phys. B17, L647-L652 (1984b) ·Z
Absolute calibration of arbitrary cross sections for electron impact
excitation of Xe metastable states in the near-threshold region.
[E, Xe; th. - 12.5 eV]
- EX D. P. Bochkova and A. P. Moritts : Opt. Spectrosc. 56, 104-106 (1984)
Rate of deexcitation of the xenon $^3P_2(6s[11/2]_2)$ state by slow electrons
as a function of electron impact in the 0.1 - 1-eV range.
[E, Xe]
- EX I. P. Bogdanova and S. V. Yurgenson : Opt. Spectrosc. 70, 285-286 (1991) ·
Cross sections for direct electronic excitation of atomic levels :
Measurements using a pulsed electron beam and time scanning of radiation.
V : Xenon, $5p^56p$ levels. [E, Xe]
- O J. J. Bolick and M. S. Banna : Phys. Rev. A40, 2756-2757 (1989)
Experimental xenon 4d photoionization cross sections in the 75 - 140-eV
photon energy range. [E, $h\nu$, Xe]
- O C. Bordas, M. J. Dyer, T. Fairfield, H. Helm and K. C. Kulander : Phys. Rev. A51,
3726-3734 (1995)
Unexpected product fine-structure distributions in (3+1)-photon
ionization of xenon. [E, $h\nu$, Xe]
- O A. B. Borisov, A. McPherson, K. Boyer and C. K. Rhodes : J. Phys. B29, L43-L50 (1996)
Intensity dependence of the multiphoton-induced Xe(L) spectrum
produced by subpicosecond 248 nm excitation of Xe clusters. [E, $h\nu$, Xe]
- O M. Borst and V. Schmidt : Phys. Rev. A33, 4456-4458 (1986)
Vanishing post collision interaction in inner-shell photoionization.
[E, $h\nu$, Xe; 70 - 120 eV]
- EX S. Braidwood, M. Brunger and E. Weigold : Phys. Rev. A47, 2927-2936 (1993)
Satellite structure of the xenon valence shell by electron-momentum
spectroscopy. [E, Xe]

- I C. E. Brion, Y. Zheng, J. Rolke, J. Neville, E. R. Davidson and I. E. McCarthy : 20th ICPEAC, Vienna TU101 (1997)
Distorted wave effects at low momentum in (e, 2e) cross sections for a orbital ionization. [E, Xe, Mo(CO)₆]
- E J. P. Bromberg : J. Chem. Phys. 61, 963-969 (1974) ○ Z
Absolute differential cross sections of electrons elastically scattered by the rare gases. I. Small angle scattering between 200 and 700 eV. [E, He - Xe; 300 - 700 eV, 3 - 25°]
- I I. K. Bronic, M. Kimura, M. Inokuti and M. A. Dillon : Nucl. Instrum. Meth. B71, 366-370 (1992) ·
The Fano factor for electrons in gas mixtures. [T, He - Xe, H₂, N₂, O₂, CO₂, CH₄, C₂H₂]
- S H. L. Brooks, M. C. Cornell, J. Fletcher, I. M. Littlewood and K. J. Nygaard : J. Phys. D15, L51-L53 (1982)
Electron drift velocities in xenon. [E, Xe; 1 - 60 Td]
- EX M. J. Brunger, S. W. Braidwood, I. E. McCarthy and E. Weigold : J. Phys. B27, L597-L601 (1994)
An electron momentum spectroscopy investigation of the 4d core states of xenon. [E, Xe; 1000 eV]
- EX J. N. H. Brunt, G. C. King and F. H. Read : J. Phys. B9, 2195-2207 (1976) · Z
A study of resonance structure in neon, argon, krypton and xenon using metastable excitation by electron impact with high energy resolution. [E, Ne - Xe; th. - 13.8 eV]
- EX J. N. H. Brunt, G. C. King and F. H. Read : J. Phys. B10, 3781-3796 (1977) Z
Near-threshold electron impact excitation of ultraviolet-emitting levels of neon, argon, krypton and xenon atoms. [E, Ne - Xe; th. - 13.8 eV]
- QT R. S. Brusa, G. P. Karwasz and A. Zecca : J. Phys. D38, 279-287 (1996) ·
Analytical partitioning of total cross sections for electron scattering on noble gases. [empirical formula, He - Xe, 20 - 5000 eV]
- EX S. J. Buckman, G. C. King and F. H. Read : 12th ICPEAC, Gatlinburg I, 200-201 (1981) ·
High resolution electron impact excitation of negative ion resonances in Ne, Ar, Kr and Xe. [E, Ne - Xe]
- EX S. J. Buckman, P. Hammond, G. C. King and F. H. Read : J. Phys. B16, 4219-4236 (1983) ○ Z
High-resolution electron impact excitation functions of metastable states of neon, argon, krypton and xenon. [E, Ne - Xe]
- EX S. J. Buckman and C. W. Clark : Rev. Mod. Phys. 66, 536-655 (1994) ○
Atomic negative-ion resonances. [review, for Xe, p. 599-603, 607-608]

- E S. J. Buckman, D. R. Lunt, J. C. Gibson, L. J. Allen, R. P. McEachran and L. A. Parcell :
J. Phys. B30, L619-L626 (1997) -
The extraction of Sherman functions from unpolarized, low-energy electron
scattering from xenon. [E and T, Xe; DCS at 1 eV]
- O P. H. Bucksbaum, L. D. Van Woerkom, R. R. Freeman and D. W. Schumacher : Phys. Rev. A41,
4119-4122 (1990)
Nonresonant above-threshold ionization by circularly polarized
subpicosecond pulses. [E, $h\nu$, Xe; 140 fs]
- O C. D. Caldwell : Nucl. Instrum. Meth. B56/57, 188-191 (1991)
Details of electron correlation explored with VUV and soft X-radiation.
[E, $h\nu$, Xe only]
- O C. D. Caldwell and S. Hallman : Phys. Rev. A53, 3344-3347 (1996)
Angular distribution of decay electrons from the 6p resonance excitations
in xenon. [E, $h\nu$, Xe]
- O R. J. Cedolin, R. K. Hanson and M. A. Cappelli : Phys. Rev. A54, 335-342 (1996)
Laser-induced fluorescence measurements of resonance broadening in
xenon. [E, $h\nu$, Xe]
- O W. F. Chan, G. Cooper, X. Guo, G. R. Burton and C. E. Brion : Phys. Rev. A46, 149-171
(1992) -, Erratum A48, 858-860 (1993)
Absolute optical oscillator strengths for the electronic excitation of
atoms at high resolution. III. The photoabsorption of argon, krypton, and
xenon. [E, $h\nu$, Ar - Xe]
- O T. N. Chang and Y. S. Kim : Phys. Rev. A26, 2728-2732 (1982) -
Photoionization from the excited p states of the rare-gas atoms.
[T, $h\nu$, Ne - Xe]
- O D. Charalambidis, B. H. Feng and C. Fotakis : Z. Phys. D14, 223-227 (1989)
Angular distributions of photoelectrons in resonantly enhanced
multiphoton ionization via the $7s[1\ 1/2]^{\circ}_1$ and $8s[1\ 1/2]^{\circ}_1$ states of
Xe. [E, $h\nu$, Xe]
- O D. Charalambidis, X. Xing, J. Petrakis and C. Fotakis : Phys. Rev. A44, R24-R27 (1991)
Cancellation effects in four-photon-resonant five-photon ionization
through the nf J=2 states of Xe. [E, $h\nu$, Xe]
- S Y. Chatelus, P. Ramanantsizehena, J. Gresser and G. Schultz : Nucl. Instrum. Meth.
171, 127-134 (1980)
Drift velocities in argon-ethane and xenon-ethane gas mixtures.
[E, Xe + C₂H₆, etc.]
- I M. A. Chaudhry, A. J. Duncan, R. Hippler and H. Kleinpoppen : Phys. Rev. A39, 530-536
(1989)
Partial doubly differential cross sections for multiple ionization of
argon, krypton and xenon atoms by electron impact. [E, Ar - Xe]

- E S. Chen, R. P. McEachran and A. D. Stauffer : 20th ICPEAC, Vienna TH008 (1997)
Relativistic optical potential method for electron and positron scattering from heavy noble gases. [T, Xe; 20 - 150 eV]
- EX Z. Chen and A. Z. Msezane : Phys. Rev. A55, 812-814 (1997)
Formula for the calculation of integral cross sections in a Fourier expansion method. [T, Xe, N₂; 100 and 500 eV for Xe]
- O K. T. Cheng and W. R. Johnson : Phys. Rev. A28, 2820-2828 (1983)
Orbital collapse and the photoionization of the inner 4d shells for Xe-like ions. [T, hν, Xe, Cs⁺, etc.]
- S R. V. Chiflikyan : Plasma Phys. Rep. 22, 66-75 (1996)
Negative differential electron conductivity in He : Kr and He : Xe gas-discharge plasmas. [T, Xe + He, Kr + He]
- O S. L. Chin, F. Yergeau and P. Lavigne : J. Phys. B18, L213-L215 (1985)
Tunnel ionisation of Xe in an ultra-intense CO₂ laser field (10¹⁴ Wcm⁻²) with multiple charge creation. [E, hν, Xe]
- S L. G. Christophorou, D. V. Maxey, D. L. McCorkle and J. G. Carter : Nucl. Instrum. Meth. 171, 491-495 (1980)
Xe-containing fast gas mixtures for gas-filled detectors. [E, Xe, Xe + CF₄, Xe + C₂H₂, etc.]
- S L. G. Christophorou : in The Liquid State and Its Electrical Properties, Plenum Press 283-316 (1988)
Gas/liquid transitions : Interface physics. [review]
- I J. P. D. Cook, I. E. McCarthy, J. D. Mitroy and E. Weigold : Phys. Rev. A33, 211-221 (1986)
Electron momentum spectroscopy of xenon : A detailed analysis. [E, Xe; 1000 eV]
- O J. Cooper : Phys. Rev. A47, 1841-1851 (1993)
Photoelectron-angular-distribution parameters for rare-gas subshells. [T, hν, He - Xe, Ba]
- EX R. Cooper and M. C. Sauer, Jr. : Phys. Rev. A50, 4812-4818 (1994)
Subexcitation electron interactions in rare gases : Production of electronic excited states in helium or neon mixtures with argon, krypton, or xenon. [E, Xe + He, Xe + Ne, etc.]
- EX J. J. Corr, P. Plessis and J. W. McConkey : Phys. Rev. A42, 5240-5243 (1990)
Coherent excitation of Xe[3/2]₁^o 6s by 30-eV electrons. [E, Xe; Stokes parameter, 3 - 50°]
- EX J. J. Corr, P. J. M. van der Burgt, P. Plessis, M. A. Khakoo, P. Hammond and J. W. McConkey : J. Phys. B24, 1069-1085 (1991)
Coherence parameter measurements for electron scattering off heavy noble gas targets. [E, Ne - Xe; 30 - 80 eV, 5 - 50°, Stokes parameter]

- O M. Crance : J. Phys. B18, L155-L160 (1985)
 Multiphoton stripping of heavy atoms by UV light : a statistical interpretation. [T, $h\nu$, Ar - Xe, I, U]
- O Z. Crljen and G. Wendin : Phys. Rev. A35, 1571-1581 (1987)
 Many-body theory of effective local potentials for electronic excitations. III. Application to giant dipole resonances. [T, $h\nu$, Xe, Kr, Ba]
- O D. Cubric, A. A. Wills, E. Sokell, J. Comer and M. A. MacDonald : J. Phys. B26, 4425-4435 (1993)
 Auger emission from Xe above and below the 4d ionization threshold. [E, $h\nu$, Xe]
- QT M. S. Dababneh, W. E. Kauppila, J. P. Downing, F. Laperriere, V. Pol, J. H. Smart and T. S. Stein : Phys. Rev. A22, 1872-1877 (1980) OZ
 Measurements of total scattering cross sections for low-energy positrons and electrons colliding with krypton and xenon. [E, Xe, Kr; 2.8 - 49.6 eV for Xe]
- QT M. S. Dababneh, Y. F. Hsieh, W. E. Kauppila, V. Pol and T. S. Stein : Phys. Rev. A26, 1252-1259 (1982) OZ
 Total-scattering cross-section measurements for intermediate-energy positrons and electrons colliding with Kr and Xe. [E, Xe, Kr; 20 - 750 eV]
- I C. Dal Cappello, H. Hda and A. C. Roy : Phys. Rev. A51, 3735-3744 (1995)
 Angular distributions in the double ionization of the noble gases by electron impact. [T, Ne - Xe; 5.5 keV]
- S G. Dall'Armi, K. L. Beown, P. H. Purdie and J. Fletcher : Aust. J. Phys. 45, 185-191 (1992)
 α Electron swarm transport through low pressure noble gases. [E, He - Xe; W, ND_L, α]
- O N. Damany, P. Laporte, J. L. Subtil and H. Damany : Phys. Rev. A32, 3418-3424 (1985)
 Multiphoton excitation and decay processes in xenon : Off-breakdown and breakdown emission at densities up to 1.4×10^{21} atoms cm⁻³. [E, $h\nu$, Xe]
- S A. J. Davies, J. Dutton, C. J. Evans, A. Goodings and P. K. Stewart : J. Phys. D17, 287-299 (1984)
 Monte Carlo simulation of electron drift velocities in binary inert gas mixtures. [T, He - Xe, He/Ne - Kr/Xe]
- O M. P. de Boer, L. D. Noordam and H. G. Muller : Phys. Rev. A47, R45-R48 (1993)
 High-angular-momentum states as population traps in multiphoton ionization. [E, $h\nu$, Xe; 100 fs, 597 nm light pulses]
- E F. J. de Heer, R. H. J. Jansen and W. van der Kaay : J. Phys. B12, 979-1002 (1979) OZ
 I Total cross sections for electron scattering by Ne, Ar, Kr and Xe.
 QT [E and compilation, Ne - Xe; 20 - 3000 eV]

- EX C. A. DeJoseph, Jr. and J. D. Clark : J. Phys. B23, 1879-1891 (1990) ·
Electron impact infrared excitation functions from the 5d levels of Xe.
[E, Xe]
- O A. Dellafiore and F. Matera : Phys. Rev. A41, 4958-4965 (1990)
Dynamic response of the Thomas-Fermi atom. [T, $h\nu$, Xe]
- O N. B. Delone, B. A. Zon and V. P. Krainov : Bull. Acad. Sci. USSR Phys. Ser. 50, No. 4,
132-136 (1986)
An evaporating model for the formation of highly charged ions in a
strong electromagnetic field. [T, Xe; laser beam]
- O L. Deng, W. R. Garrett, J. Y. Zhang and M. G. Payne : Phys. Rev. A52, 489-497 (1995)
Effect of quantum interference on the suppression of the ac Stark
shifting of a multiphoton resonance. [E, $h\nu$, Xe only]
- O P. C. Deshmukh and S. T. Manson : Phys. Rev. A32, 3109-3109 (1985)
Application of the relativistic random-phase approximation to Xe 5s
photoionization. [T, $h\nu$, Xe]
- I H. Deutsch and T. D. Mark : Int. J. Mass Spectrom. Ion Process. 79, R1-R8 (1987) ·
Calculation of absolute electron impact ionization cross-section
functions for single ionization of He, Ne, Ar, Kr, Xe, N and F.
[T, He - Xe, N, F]
- I H. Deutsch and T. D. Mark : Contrib. Plasma Phys. 34, 19-24 (1994) ·
Calculation of absolute outer-shell electron impact ionization cross
sections. [T, Ne - Xe; th. - 600 eV for Xe]
- I H. Deutsch, K. Becker and T. D. Mark : J. Phys. B29, L497-L503 (1996) ·
A semiclassical method for the calculation of cross sections for multiple
ionization of atoms by electron impact. [T, Ne - Xe, Mg, Fe, Cu, U]
- I H. Deutsch, K. Becker, D. P. Almeida and T. D. Mark : Int. J. Mass Spectrom. Ion
Process. 171, 119-126 (1997) ·
Extension of the DM formalism for the calculation of cross sections for
the multiple ionization of atoms to the formation of highly charged ions.
[T, Ar - Xe; Xe⁶⁺ - Xe¹³⁺]
- O M. Deutsch, G. Brill and R. Kizler : Phys. Rev. A43, 2591-2594 (1991)
Near-K-edge photoabsorption measurements in Xe. [E, $h\nu$, Xe]
- O M. Deutsch and P. Kizler : Phys. Rev. A45, 2112-2115 (1992)
X-ray multielectronic photoexcitations near the K edge of xenon.
[E, $h\nu$, Xe]
- O C. Dezarnaud, F. Guillot and M. Tronc : J. Phys. B25, L123-L126 (1992)
Near L-edge (4.7 - 5.5 keV) photoionization in xenon. [E, $h\nu$, Xe]

- S T. H. V. T. Dias, A. D. Stauffer and C. A. N. Conde : J. Phys. D19, 527-545 (1986)
A unidimensional Monte Carlo simulation of electron velocities and electroluminescence in argon, krypton and xenon. [T, Ar - Xe]
- S T. H. V. T. Dias, F. P. Santos, A. D. Stauffer and C. A. N. Conde : Phys. Rev. A48, 2887-2902 (1993) ·
Monte Carlo simulation of X-ray absorption and electron drift in gaseous xenon. [T, Xe]
- S V. V. Dmitrenko, A. S. Romanyuk, S. I. Suchkov and Z. M. Uteshev : Sov. Phys. Tech. Phys. 28, 1440-1444 (1983) ·
Electron mobility in dense xenon gas. [E, Xe]
- O M. Dondera and V. Florescu : Phys. Rev. A48, 4267-4271 (1993) ·
Results from the nonrelativistic dipole-approximation theory of two-photon electron bremsstrahlung in the Coulomb field.
[T, $h\nu$, Ar - Xe, Cu, etc.]
- I A. Dorn, A. Elliott, X. Guo, J. Hurn, J. Lower, S. Mazevet, I. E. McCarthy, Y. Shen and E. Weigold : J. Phys. B30, 4097-4121 (1997a)
(e, 2e) collisions on xenon with spin-polarized electrons.
[E and T, Xe; 147 eV]
- E A. Dorn, A. Elliott, J. Lower, S. Mazevet, R. P. McEachran, I. E. McCarthy and E. Weigold : 20th ICPEAC, Vienna TH043 (1997b) ·
Spin polarized elastic electron scattering from xenon.
[E, Xe; Sherman function at 50 eV]
- I A. Dorn, A. Elliott, J. Lower, S. Mazevet, I. E. McCarthy and E. Weigold : 20th ICPEAC, Vienna TU118 (1997c) ·
Spin resolved (e, 2e) studies on xenon. [E and T, Xe]
- E A. Dorn, A. Elliott, J. Lower, S. F. Mazevet, R. P. McEachran, I. E. McCarthy and E. Weigold : J. Phys. B31, 547-561 (1998)
The elastic scattering of spin-polarized electrons from xenon.
[E and T, Xe; 30 - 160 eV, Sherman function]
- E D. Dube, D. Tremblay and D. Roy : Phys. Rev. A47, 2893-2903 (1993) ·
Analysis of the first Feshbach resonances in electron collisions in rare gases. [E and T, He - Xe; 7.77 eV for Xe]
- O A. Dulcic : Phys. Rev. A35, 1673-1681 (1987)
Modulation theory of above-threshold ionization. [T, $h\nu$, Xe, Ne, He]
- E M. Dummler, G. F. Hanne and J. Kessler : 18th ICPEAC, Aarhus 144-144 (1993)
EX Left-right asymmetries in elastic and inelastic scattering of polarized electrons from noble gas atoms. [E, Xe, Kr; 4 - 15 eV]
- E M. Dummler, G. F. Hanne and J. Kessler : J. Phys. B28, 2985-3001 (1995)
EX Left-right asymmetries in elastic and inelastic scattering of polarized electrons from argon, krypton and xenon atoms. [E, Ar - Xe; 30 - 125 eV]

- O C. Duzy and H. A. Hyman : Phys. Rev. A22, 1878-1883 (1980)
Photoionization of excited rare-gas atoms. [T, $h\nu$, Ne - Xe]
- O M. Edwards, L. Pan and L. Armstrong, Jr. : J. Phys. B18, 1927-1946 (1985)
Model study of above threshold multiphoton ionisation in strong fields. [T, $h\nu$, Xe; see P. Kruit (1983)]
- E W. F. Egelhoff, Jr. : Phys. Rev. Lett. 71, 2883-2886 (1993)
Semiclassical explanation of the generalized Ramsauer-Townsend minima in electron-atom scattering. [T, Ar - Xe]
- S M. T. Elford, S. Sasaki and K. F. Ness : Aust. J. Phys. 47, 253-264 (1994) · Z
Drift velocity and D_T/μ ratio for electrons in a 0.5 % hydrogen-xenon mixture at 295 K. [E, Xe + H₂]
- E T. Ester and J. Kessler : J. Phys. B27, 4295-4308 (1994) ○ Z
EX Absolute elastic and inelastic electron scattering cross sections for xenon in the 15 - 100 eV impact-energy region. [E, Xe]
- EX I. I. Fabrikant, O. B. Shepenik, A. N. Snegursky and A. N. Zaviolpulo : Phys. Rep. 159, 1-97 (1988) ○
Electron impact formation of metastable atoms. [review, He - Xe, H, Hg]
- O A. Fahlman, M. O. Krause, T. A. Carlson and A. Svensson : Phys. Rev. A30, 812-819 (1984b)
Xe 5s, 5p correlation satellite in the region of strong interchannel interactions, 28 - 75 eV. [E, $h\nu$, Xe]
- O D. Feldmann, D. Petring, G. Otto and K. H. Welge : Z. Phys. D6, 35-42 (1987)
Angular distribution of photoelectrons from above-threshold-ionization (ATI) of xenon by 532 nm, 355 nm, and 266 nm radiation. [E, $h\nu$, Xe]
- E Z. Felfli, P. Ozimba, A. Z. Msezane, T. Ester, J. Kessler, M. Zubek, N. Gully, A. Danjo, G. C. King, B. Marinkovic, D. Filipovic and L. Vuskovic : 20th ICPEAC, Vienna MO107 (1997)
Determination of small-angle electron differential cross sections from their larger angle measurements. [T, Xe, Hg, N₂O]
- QT J. Ferch, F. Simon and G. Strakeljahn : 15th ICPEAC, Brighton 132-132 (1987) Z
The electron total cross section for Kr and Xe at low energies. [E, Xe, Kr]
- EX D. Filipovic, B. Marinkovic, V. Pejcev and L. Vuskovic : Phys. Rev. A37, 356-364 (1988) ○ Z
Electron-impact excitation of xenon at incident energies between 15 and 80 eV. [E, Xe; 20 lowest states, 15 - 80 eV, 5 - 150°]
- O M. G. J. Fink and W. R. Johnson : Phys. Rev. A42, 3801-3818 (1990)
Electron correlations and spin-orbit interaction in two-photon ionization of closed-shell atoms : A relativistic time-dependent Dirac-Fock approach. [T, $h\nu$, He - Xe]

- O M. R. Flannery, K. J. McCann and N. W. Winter : J. Phys. B14, 3789-3796 (1981)
 I Cross sections for electron impact ionisation of metastable rare-gas
 excimers (He_2^* , Kr_2^* , Xe_2^*). [T. Xe_2^* , He_2^* , Kr_2^*]
- O M. G. Flemming, J. -Z. Wu, C. D. Caldwell and M. O. Krause : Phys. Rev. A44, 1733-1740
 (1991) -
 Partial cross sections and photoelectron angular distributions in the
 region of the $4s \rightarrow 4p$ and $5s \rightarrow 6p$ resonances in krypton and xenon.
 [E. $h\nu$, Xe, Kr]
- EX J. T. Fons and C. C. Lin : Phys. Rev. A58, 4603-4615 (1998) ○
 Measurement of the cross sections for electron-impact excitation into
 the $5p^56p$ levels of xenon. [E. Xe; th. - 150 eV]
- EX C. J. Fontes : J. Phys. B31, 175-181 (1998) -
 The role of the $5p^55d$ configuration and spin-orbit coupling in the
 electron-impact excitation of the lowest-lying $J = 0$ and $J = 2$ levels
 of xenon and krypton. [T. Xe, Kr; DCS, 20 eV for Xe]
- S M. M. F. R. Fraga and C. M. Ferreira : 15th ICPEAC, Brighton 206-206 (1988)
 Transport coefficients of electrons in Ar, Kr, and Xe for intermediate
 E/p values. [E, Ar - Xe]
- S G. W. Fraser and E. Mathieson : Nucl. Instrum. Meth. A257, 339-345 (1987) -
 Monte Carlo calculation of electron transport coefficients in counting
 gas mixtures. III. Xenon or argon with ethane; xenon with methane or
 carbon dioxide. [T. Xe, Xe + (CH_4 , C_2H_6 , CO_2), etc.]
- S G. R. Freeman : in Electron and Ion Swarms, 2nd Int. Swarm Seminar, Pergamon
 93-102 (1981) -
 Electron transport in dense gases and low density liquids : Mechanism of
 transition. [review, Xe, He, CH_4 , etc.]
- E G. R. Freeman and N. H. March : Chem. Phys. 173, 451-455 (1993) -
 Common features in slow electron scattering by methane and the heavier
 noble gases. [T. Xe, CH_4 , Ar, Kr]
- E L. Fritsche, J. Noffke and H. Gollisch : J. Phys. B17, 1637-1657 (1984)
 A new local exchange potential for low-energy electron scattering by
 atoms based on first principles.
 [T. Xe, Ne; 25 - 150 eV for Xe]
- EX J. E. Furst, W. M. K. P. Wijayarathna, D. H. Madison and T. J. Gay : Phys. Rev. A47,
 3775-3787 (1993)
 Investigation of spin-orbit effects in the excitation of noble gases
 by spin-polarized electrons. [E, Ne - Xe; Stokes parameters]
- O J. W. Gallagher, J. R. Rumble, Jr. and B. C. Beaty : NBS Special Publ. 426, Suppl. 1
 1-106 (1979)
 Bibliography of low energy electron and photon cross section data.
 (January 1975 through December 1977). [see L. J. Kieffer (1976)]

- O J. W. Gallagher and B. C. Beaty : JILA Information Center Report No. 18, 1-142 (1980)
Bibliography of low energy electron and photon cross section data (1978).
- O J. W. Gallagher and B. C. Beaty : JILA Information Center Report No. 21, 1-122 (1981)
Bibliography of low energy electron and photon cross section data (1979).
- O P. Gangopadhyay, X. Tang, P. Lambropoulos and R. Shakeshaft : 14th ICPEAC, Palo Alto 78-78 (1985) ·
Theory of multiphoton ionization and autoionization of Xe. [T, $h\nu$, Xe]
- O P. Gangopadhyay, X. Tang, P. Lambropoulos and R. Shakeshaft : Phys. Rev. A34, 2998-3002 (1986)
Theory of autoionization of Xe under two- and three-photon excitation. [T, $h\nu$, Xe]
- O C. Garcia-Rosales, H. Muller and J. Kessler : J. Phys. B21, L477-L481 (1988) ·
EX Experimental double check of the Sherman function for xenon. [E, Xe; 30 eV]
- O T. J. Gay, J. E. Furst and W. M. K. P. Wijayarathna : in AIP Conf. Proc. 295, The Physics of Electronic and Atomic Collisions, Aarhus 276-285 (1993)
Some new developments in polarized electron science and technology. [E, He - Xe]
- O T. J. Gay, J. E. Furst, K. W. Trantham and W. M. K. P. Wijayarathna : Phys. Rev. A53, 1623-1629 (1996)
Optical electron polarimetry with heavy noble gases. [E, $h\nu$, He - Xe]
- E F. A. Gianturco and J. A. Rodriguez-Ruiz : Z. Phys. D31, 149-159 (1994) ·
Elastic scattering of low and intermediate-energy electrons by Kr and Xe atoms. [T, Xe, Kr; DCS, 0.17 - 150 eV]
- O G. Gibson, T. S. Luk and C. K. Rhodes : Phys. Rev. A41, 5049-5052 (1990) ·
Tunneling ionization in the multiphoton regime. [E, $h\nu$, He - Xe]
- E J. C. Gibson, D. R. Lun, S. J. Buckman, L. J. Allen, R. P. McEachran and L. Parcell : 20th ICPEAC, Vienna TH029 (1997) ·
Probing relativistic effects in low energy elastic scattering from xenon using unpolarized electrons. [E, Xe; DCS and Sherman function at 2 eV]
- E J. C. Gibson, D. R. Lun, L. J. Allen, R. P. McEachran, L. A. Parcell and S. J. Buckman : J. Phys. B31, 3949-3964 (1998) ○
Low-energy electron scattering from xenon. [E and T, Xe; DCS, 0.67 - 50 eV]

- O E. V. Gnatchenko, A. A. Tkachenko and E. T. Verkhovtseva : Opt. Spectrosc. 65, 292-293 (1988)
Emission spectrum of gaseous xenon in the 110 - 180-eV photon energy range. [E, $h\nu$, Xe]
- I B. Granitza, X. Guo, J. M. Hurn, J. Lower, S. Mazevet, I. E. McCarthy, Y. Shen and E. Weigold : Aust. J. Phys. 49, 383-401 (1996)
Spin effects in the (e, 2e) cross section of xenon. [E, Xe]
- E A. E. S. Green, D. E. Rio and T. Ueda : Phys. Rev. A24, 3010-3018 (1981)
Analytic velocity-dependent potential for bound and scattering states of electrons and atoms. [T, Ne - Xe; DCS, 100 - 300 eV for Xe]
- O D. G. Gregory, P. F. Dittner and D. H. Crandall : Phys. Rev. A27, 724-736 (1983a)
I Absolute-cross-section measurements for electron-impact ionization of triply charged inert-gas ions : Ne^{3+} , Ar^{3+} , Kr^{3+} , and Xe^{3+} . [E, Ne^{3+} - Xe^{3+} ; 32.5 - 1481 eV for Xe^{3+}]
- O D. G. Gregory and D. H. Crandall : Phys. Rev. A27, 2338-2341 (1983b)
I Measurement of the cross section for electron-impact ionization of Xe^{6+} ions. [E, Xe^{6+} ; 88.8 - 1482 eV]
- O D. C. Griffin, C. Bottcher, M. S. Pindzola, S. N. Younger, D. C. Gregory and D. H. Crandall :
I Phys. Rev. A29, 1729-1741 (1984)
Electron-impact ionization in the xenon isonuclear sequence. [E, Xe^{2+} , Xe^{4+} , Xe^{5+} ; 23.3 - 1490 eV, see D. G. Gregory (1983ab)]
- I X. Guo, J. M. Hurn, J. Lower, S. Mazevet, Y. Shen, E. Weigold, B. Granitza and I. E. McCarthy : Phys. Rev. Lett. 76, 1228-1231 (1996)
Fine structure effect in electron impact ionization. [E, Xe]
- O Y. Guo, M. C. Wrinn and M. A. Whitehead : Phys. Rev. A40, 6685-6688 (1989)
Electron affinities for rare gases and some actinides from local-spin-density-functional theory. [T, He - Rn, etc.; see C. A. Nicolaides (1991)]
- O H. Haberland, T. Kolar and T. Reiners : Phys. Rev. Lett. 63, 1219-1222 (1989)
Negatively charged xenon atoms and clusters. [E, Xe, Xe_n ; lifetime of Xe^- is 10^{-4} s]
- E R. Haberland, L. Fritsche and J. Noffke : Phys. Rev. A33, 2305-2314 (1986a)
Elastic scattering of low energy electrons by Ne, Ar, Kr, and Xe. [T, Ne - Xe; DCS, 5 - 100 eV]
- E R. Haberland and L. Fritsche : Int. J. Quant. Chem. : Quant. Chem. Sympo. 20, 289-297 (1986b)
A generalized Kohn-Sham theory for low-energy electron scattering by atoms including relativistic effects. [T, Xe, Hg, Na, K, Rb, Bi]

- EX A. Haffad, Z. Felfli, A. Z. Msezane and D. Bessis : Phys. Rev. Lett. 76, 2456-2459 (1996)
 Differential cross-section representation from dispersion relations : a Regge pole approach. [T, Xe; 100 and 500 eV]
- I U. Hahn, J. Semke, H. Merz and J. Kessler : J. Phys. B18, L417-L422 (1985)
 Spin polarization and angular distribution measurement of MNN Auger electrons from krypton and xenon. [E, Xe, Kr; 1.5 keV]
- O R. I. Hall, L. Avaldi, G. Dawber, M. Zubek and G. C. King : J. Phys. B23, 4469-4485 (1990)
 Observation of the krypton and xenon photoelectron satellite spectra near threshold. [E, $h\nu$, Xe, Kr]
- O R. I. Hall, A. McConkey, K. Ellis, G. Dawber, M. A. MacDonald and G. C. King : J. Phys. B25, 799-810 (1992a)
 Near-threshold single photon double ionization of neon, argon, krypton and xenon observed by electron-electron coincidence spectroscopy. [E, $h\nu$, Ne - Xe]
- O R. I. Hall, G. Dawber, A. G. McConkey, M. A. MacDonald and G. C. King : Z. Phys. D23, 377-381 (1992b)
 Threshold photoelectrons coincidence spectroscopy of the rare gases Ne, Ar, Kr and Xe. [E, $h\nu$, Ne - Xe]
- EX P. Hammond : PhD Thesis, University of Manchester (1982)
- EX P. Hammond, F. H. Read and G. C. King : J. Phys. B17, 2925-2941 (1984) ·
 Near-threshold electron impact excitation functions of high- n states of Ar, Kr, Xe, H₂, N₂, and CO. [E, Ar - Xe, H₂, N₂, CO]
- EX P. Hammond, F. H. Reed and G. C. King : J. Phys. B21, 3121-3129 (1988) ·
 Excitation of atomic states of high angular momentum by near-threshold electron impact. [E, Xe, Kr]
- EX G. F. Hanne : Phys. Rep. 95, 95-165 (1983) ·
 Spin effects in inelastic electron-atom collisions. [review]
- O P. Hansch, M. A. Walker and L. D. Van Woerkom : Phys. Rev. A54, R2559-R2562 (1996)
 Spatially dependent multiphoton multiple ionization. [E, $h\nu$, Xe]
- O J. E. Hansen and W. Persson : Phys. Scr. 25, 487-490 (1982) ·
 Revised analysis of the $5p^4$ ground configuration of two-times ionized Xe (Xe III) and reevaluation of transition probabilities for forbidden lines within this configuration. [T and E, $h\nu$, Xe; energy levels]
- E K. Hasenburger, K. Bartschat, R. P. McEachran and A. D. Stauffer : J. Phys. B20, 5165-5174 (1987) ·
 Differential cross sections for elastic electron and positron scattering from xenon atoms. [T, Xe]

- O T. Hayaishi, T. Morioka, Y. Kageyama, M. Watanabe, I. H. Suzuki, A. Mikuni, G. Isoyama, S. Asaoka and M. Nakamura : J. Phys. B17, 3511-3527 (1984)
Multiple photoionisation of the rare gases in the XUV region.
[E, $h\nu$, Xe, Kr, Ar]
- O T. Hayaishi, A. Yagishita, E. Shigemasa, E. Murakami and Y. Morioka : J. Phys. B23, 4431-4439 (1990)
Photoion spectra in coincidence with threshold electrons near the Xe 4d ionization limits. [E, $h\nu$, Xe; Xe²⁺, Xe³⁺]
- O T. Hayaishi, E. Murakami, Y. Lu, E. Shigemasa, A. Yagishita, F. Koike and Y. Morioka : Phys. Rev. A54, 4064-4068 (1996)
Post collision interaction effects induced by Auger cascades following Xe L₃-shell ionization. [E, $h\nu$, Xe]
- E M. Hayashi : IPPJ-AM-19, Institute of Plasma Physics, Nagoya Univ. Report. QT 1-62 (1981)
Recommended values of transport cross sections for elastic collision and total collision cross section for electrons in atomic and molecular gases. [compilation, He - Xe, H₂, N₂, O₂, CO, CO₂]
- O M. Hayashi : J. Phys. D15, 1411-1418 (1982)
Luminous layers in the prebreakdown region of low pressure noble gases. [T, He - Xe; very old c. s. set for Xe]
- EX M. Hayashi : J. Phys. D16, 581-589 (1983a) Z
Determination of electron-xenon total excitation cross-sections, from threshold to 100 eV, from experimental values of Townsend's α . [T, Xe]
- S M. Hayashi : J. Phys. D16, 591-599 (1983b)
Calculation of swarm parameters in xenon at high E/N by a Monte Carlo simulation method. [T, Xe]
- S M. Hayashi and S. Ushiroda : J. Chem. Phys. 78, 2621-2625 (1983c)
Calculations of drift velocity of electrons in inert gases at low E/N. [T, He - Xe]
- O C. Heckenkamp, F. Schafers, G. Schonhense and U. Heinzmann : Phys. Rev. A32, 1252-1255 (1985)
Resonance of the photoelectron spin-polarization parameters in the 5p autoionization range of xenon. [E, $h\nu$, Xe]
- O C. Heckenkamp, F. Schafers, G. Schonhense and U. Heinzmann : Z. Phys. D2, 257-274 (1986)
Experimental characterization of the Xe 5p photoionization by angle- and spin-resolved photoelectron spectroscopy. [E, $h\nu$, Xe]

- EX D. W. O. Heddle and J. W. Gallagher : Rev. Mod. Phys. 61, 221-278 (1989) ○
Measurements of electron impact optical excitation functions.
[review, He - Xe, Li - Cs, etc.]
- O P. A. Heimann, D. W. Lindle, T. A. Ferrett, S. H. Liu, L. J. Medhurst, M. N. Piancastelli,
D. A. Shirley, U. Becker, H. G. Kerkhoff, B. Langer, D. Szostak and R. Wehlitz : J. Phys.
B20, 5005-5022 (1987)
Shake-off on inner-shell resonances of Ar, Kr and Xe. [E, $h\nu$, Ar - Xe]
- O U. Hergenbahn, B. Lohmann, N. M. Kabachnik and U. Becker : J. Phys. B26, L117-L121
(1993)
Angular anisotropy in the Auger decays of resonantly excited Kr $3d_{5/2}^{-1}5p$
and Xe $4d_{5/2}^{-1}6p$ states. [T, $h\nu$, Xe, Kr]
- I R. Hippler, H. Klar, K. Saeed, I. McGregor, A. J. Duncan and H. Kleinpoppen : J. Phys.
B16, L617-L621 (1983)
Threshold behaviour of Ar, Kr and Xe L_3 ionisation by electron impact.
[E, Ar - Xe]
- O R. Hippler : Phys. Rev. Lett. 66, 2197-2199 (1991)
Two-photon bremsstrahlung of free atoms. [E, $h\nu$, Ar - Xe; 7 - 15 keV]
- G. Holtkamp : Diplomarbeit, University of Munster (1981)
- O K.-N. Huang and A. F. Starace : Phys. Rev. A21, 697-709 (1980a)
Photoionization of the 5s subshell of xenon : A multichannel K-matrix
calculation including spin-orbit interactions. [T, $h\nu$, Xe]
- O K.-N. Huang, W. R. Johnson and K. T. Cheng : Atomic Data Nucl. Data Tables 26,
33-45 (1981)
Theoretical photoionization parameters for the noble gases argon,
krypton, and xenon. [T, $h\nu$, Ar - Xe]
- O H. J. Humpert, H. Schwier, R. Hippler and H. O. Lutz : Phys. Rev. A32, 3787-3789 (1985)
Angular distribution of photoelectrons from above-threshold ionization
of Xe. [E, $h\nu$, Xe]
- S S. R. Hunter, J. G. Carter and L. G. Christophorou : Proc. 5th Int. Swarm Seminar,
E Birmingham 5-8 (1987)
Low-energy electron drift and scattering in krypton and xenon.
[E, Xe, Kr]
- S S. R. Hunter, J. G. Carter and L. G. Christophorou : Phys. Rev. A38, 5539-5551 (1988) Z
E Low-energy electron drift and scattering in krypton and xenon.
[E, Xe, Kr]
- EX H. A. Hyman : Phys. Rev. A24, 1094-1095 (1981)
Electron-impact-excitation cross sections for the transition
 $(n-1)p^5ns \rightarrow (n-1)p^5np$ in the rare gases. [T, Ne - Xe]

- S I. T. Iakubov : Contrib. Plasma Phys. 33, 544-552 (1993)
Excess electron coupled with dense gases and liquid. [T, Xe, Ar]
- I H. Ishii, Y. Iketaki, T. Watabe, T. Takayanagi, K. Wakiya and H. Suzuki : Phys. Rev. A43, 134-142 (1991) -
Post-collision interaction in Auger-electron emission of rare-gas atoms following electron-impact ionization. [E, Ar - Xe]
- O V. A. Ivanov and A. S. Prikhodko : Opt. Spectrosc. 70, 294-296 (1991) ·
ME Destruction of metastable Xe 6s (3P_2) atoms by slow electrons. [E, Xe]
- α L. Jacques, W. Bruynooghe, R. Boucique and W. Wieme : J. Phys. D19, 1731-1739 (1986)
Experimental determination of the primary and secondary ionisation coefficients in krypton and xenon. [E, Xe, Kr]
- E R. H. Jansen and F. J. de Heer : J. Phys. B9, 213-226 (1976) ○ Z
Absolute differential cross sections for elastic scattering of electrons by krypton and xenon. [E, Xe, Kr; 100 - 3000 eV, 5 - 54°]
- E W. Jaskolski, J. Karwowski and J. Kobus : Phys. Scr. 36, 436-440 (1987) ·
Quasirelativistic calculations of the elastic scattering of slow electrons from Xe atoms. [T, Xe; non-relativistic Hartree-Fock-Slater approach; DCS, spin polarization, 2 - 100 eV]
- O W. R. Johnson and K. T. Cheng : Phys. Rev. A46, 2952-2954 (1992)
Relaxed relativistic random-phase-approximation calculations of photoionization amplitudes and phases for the 4d subshell of xenon. [T, $h\nu$, Xe]
- E W. R. Johnson and C. Guet : Phys. Rev. A49, 1041-1048 (1994) ·,
Errata A64, 019901 (2001)
Elastic scattering of electrons from Xe, Cs⁺, and Ba²⁺. [T, Xe, xenon like ions; optical potential, 0 - 10 eV]
- O R. R. Jones, D. W. Schumacher and P. H. Bucksbaum : Phys. Rev. A47, R49-R52 (1993)
Population trapping in Kr and Xe in intense laser fields. [E, $h\nu$, Xe, Kr]
- QT K. Jost, P. G. F. Bisling, F. Eschen, M. Felsmann and F. Walther : 13th ICPEAC, Berlin 91-91 (1983) ○ Z
Total cross sections for electron scattering from N₂, Xe, Kr and Ar. [E, Ar - Xe, N₂ ; 0.2 - 60 eV, error 5%]
- O B. Kaemmerling, B. Krassig and V. Schmidt : J. Phys. B23, 4487-4503 (1990)
Connection between the angular distribution of Auger electrons and spectator autoionization electrons following 4d ionization / excitation in xenon. [E, $h\nu$, Xe]

- O J. Z. Kaminski and F. Ehlötzky : Phys. Rev. A55, 4625-4628 (1997)
Sidelobes in multiphoton ionization of inert gases. [T, $h\nu$, Ne - Xe]
- O B. Kammerling and V. Schmidt : J. Phys. B26, 1141-1161 (1993)
Prediction for complete fragmentation patterns of $4d_{5/2}$ photoelectrons and $N_5 - O_{23}O_{23} \ ^1S_0$ Auger electrons of xenon based on experimental data at 94.5 eV photon energy. [E, $h\nu$, Xe]
- O R. Kau, D. Klar, S. Schohl, S. Baier and H. Hotop : Z. Phys. D36, 23-30 (1996) ·
Laser photoionization of metastable $Xe^*(J = 0)$ atoms in the range 462 - 430 nm. [E, $h\nu$, Xe]
- O R. Kau, I. D. Petrov, V. L. Sukhorukov and H. Hotop : Z. Phys. D39, 267-281 (1997) ·
Erratum D42, 318-318 (1997) ·
Experimental and theoretical cross sections for photoionization of metastable $Xe^*(6s \ ^3P_2, \ ^3P_0)$ atoms near threshold. [E, $h\nu$, Xe]
- QT W. E. Kauppila and T. S. Stein : in Advances in Atomic, Molecular, and Optical Physics, Vol. 26, Academic Press 1-50 (1990) ·
Comparisons of positron and electron scattering by gases.
[review, He - Xe, CH_4 , CF_4 , SiH_4 , SF_6 , etc.]
- EX S. Kaur, R. Srivastava, R. P. McEachran and A. D. Stauffer : 20th ICPEAC, Vienna MO101 (1997) ·
Electron impact excitation of the $np^5(n+1)p$ states of Ne ($n=2$), Ar ($n=3$), Kr ($n=4$) and Xe ($n=5$) atoms. [T, Ne - Xe; DCS, 20 - 100 eV]
- EX S. Kaur, R. Srivastava, R. P. McEachran and A. D. Stauffer : J. Phys. B31, 4833-4852 (1998)
Electron impact excitation of the $np^5(n+1)p$ states of Ar ($n=3$), Kr ($n=4$) and Xe ($n=5$) atoms. [T, Ar - Xe; DCS, 20 - 100 eV]
- O A. K. Kazansky and V. N. Ostrovsky : Phys. Rev. A51, 3712-3717 (1995a)
Wannier-ridge theory of angular distribution. [T, $h\nu$, Xe, He]
- O A. K. Kazansky and V. N. Ostrovsky : Phys. Rev. A52, 1775-1778 (1995b)
Electron correlation in double photoionization : Comparative study of secondary structure for Ne and Xe. [T, $h\nu$, Xe, Ne]
- O H. P. Kelly : Phys. Scr. T17, 109-119 (1987)
Many body calculations of photoionization cross sections.
[T, review, $h\nu$, Xe, Cd, Ba, Cl, Mn, He, etc.]
- E F. Kemper, F. Rosicky and R. Feder : J. Phys. B18, 1223-1228 (1985)
Relativistic two-channel calculations of the elastic scattering of slow electrons from Ar, Kr, and Xe atoms.
[T, Ar - Xe; 20 - 200 eV; J. Phys. B17, 3763 (1984) for He and Ne]
- O J. Kessler : Comments At. Mol. Phys. 14, 275-284 (1984)
Synopsis of International Symposium on Polarization and Correlation in Electron-Atom Collisions. I. Polarization Phenomena.
[comments, Xe, Hg, Li - K]

- O J. Kessler : Comments At. Mol. Phys. 17, 15-35 (1985) ·
Exploration of spin-dependent interactions using polarized electrons.
[comments, Xe, Hg]
- E J. Kessler : Comments At. Mol. Phys. 18, 279-288 (1986) ·
- EX Absolute cross sections for electron scattering in the light of complete experiments — A fresh look at an old topic.
[comments, Xe; DCS, 100 eV]
- EX M. A. Khakoo, T. Tran, D. Bordelon and G. Csanak : Phys. Rev. A45, 219-224 (1992) ○
Excitation of the $| (n + 1)^3P_2 \rangle$ and $| (n + 1)^3P_0 \rangle$ metastable levels of the heavy rare gases from the $| n^1S_0 \rangle$ ground state by electron impact.
[E and T, Ne, Ar, Xe ; DCS ratio, 30 eV, 10 - 120°]
- EX M. A. Khakoo, C. E. Beckmann, S. Trajmar and G. Csanak : J. Phys. B27, 3159-3147 (1994) ○ Z
Electron-impact excitation of the $ns [3/2]^{\circ}_{J=2,1,2}$ and $ns' [1/2]^{\circ}_{J=0,1}$ levels of Ne, Ar, Kr and Xe. [E and T, Ne - Xe]
- EX M. A. Khakoo, S. Trajmar, L. R. LeClair, I. Kanik, G. Csanak and C. J. Fontes : J. Phys. B29, 3455-3475 (1996a) ○
Differential cross sections for electron impact excitation of Xe :
Excitation of the five lowest levels; experiment and theory.
[E and T, Xe; 10 - 30 eV, 0 - 135°]
- EX M. A. Khakoo, S. Trajmar, S. Wang, I. Kanik, A. Aguirre, C. J. Fontes, R. E. H. Clark and J. Abdallah, Jr. : J. Phys. B29, 3477-3486 (1996b) ○
Differential cross sections for electron impact excitation of Xe :
Excitation of the sixth to twentieth lowest levels; experiment and theory.
[E and T, Xe; 10 - 30 eV, 0 - 135°]
- I S. P. Khare, P. Sinha and J. M. Wadehra : Phys. Lett. A184, 204-208 (1994a) ·
 L_3 -shell ionization of xenon and gold by electron and positron impacts.
[T, Xe, Au; th. - 100 keV]
- I S. P. Khare, P. Sinha and J. M. Wadehra : Hyperfine Interactions 89, 107-118 (1994b) ·
Inner-shell ionization of atoms by electron, positron and photon impacts.
[T, e and $h\nu$, Xe, Cu, Ta, Au, Bi]
- I A. S. Kheifets and M. Ya. Amusia : Phys. Rev. A46, 1261-1269 (1992) ·
Relativistic ab initio calculation of the xenon 5s ionization spectra for the (γ, e) and $(e, 2e)$ reactions. [T, Xe]
- O K. P. Killeen and J. E. Eden : J. Chem. Phys. 84, 6048-6074 (1986) ·
Gerade Rydberg states and $ns^3\Sigma_u^+ (1_u, 0_u^-)$ photoionization spectra of the rare gas dimers ($n = 2 - 6$). [E, $h\nu$, He₂ - Xe₂]

- E M. Klewer, M. J. M. Beerlage and M. J. van der Wiel : J. Phys. B13, 571-586 (1980) Z
Angular distributions of electrons elastically scattered from xenon at
energies between 2 and 300 eV.
[E, Xe; DCS, relative, 2 - 300 eV, 30 - 120°]
- O K. A. Klopovskii, A. V. Luk'yanova, A. T. Rakhimiv and N. V. Suetin : Sov. J. Quant.
Elect. 19, 133-137 (1989) ·
Numerical modeling of an atomic xenon laser. [T, $h\nu$, Xe]
- S I. V. Kochetov, A. P. Napartovich, C. Ye and D. Lo : J. Appl. Phys. 84, 1863-1869 (1998) ·
Negative differential conductivity of electrons in electron-beam
sustained discharge in pure xenon. [T, Xe]
- O A. G. Kochur, V. L. Sukhorukov, A. I. Dudenko and Ph. V. Demekhin : J. Phys. B28,
387-402 (1995)
Direct Hartree-Fock calculation of the cascade decay production of
multiply charged ions following inner-shell ionization of Ne, Ar, Kr
and Xe. [T, $h\nu$, Ne - Xe]
- O S. M. Koeckhoven, W. J. Buma and C. A. de Lange : Phys. Rev. A51, 1097-1109 (1995)
Four-photon excitation of autoionizing states of Ar, Kr, and Xe between
the $^2P_{3/2}$ and $^2P_{1/2}$ ionic limits. [E, $h\nu$, Ar - Xe]
- S T. Koizumi, E. Shirakawa and I. Ogawa : J. Phys. B19, 2331-2342 (1986) · Z
E Momentum transfer cross sections for low-energy electrons in krypton
and xenon from characteristic energies.
[E, Xe, Kr]
- O T. Koizumi, T. Hayaishi, T. Matsuo, K. Shima, H. Tawara, T. Tonuma and A. Yagishita :
J. Phys. Soc. Jpn. 58, 13-16 (1989)
Photoionization cross sections of xenon in the L edge region.
[E, $h\nu$, Xe; 4.6 - 6.1 keV photon energy]
- O N. B. Kolokolov and A. B. Blagoev : Phys. -Usp. 36, 152-170 (1993) ·
Ionization and quenching of excited atoms with the production of fast
electrons. [review, He - Xe, Hg; $A^* + e \rightarrow A + e$]
- EX A. I. Korotkov, L. K. Mitryuhin, N. I. Petrov and G. M. Sorokin : Opt. Spectrosc. 64,
174-177 (1988)
Electron-impact measurement of excitation functions of lower metastable
states of Xe I atom. [E, Xe]
- O A. I. Korotkov and N. A. Khromov : Opt. Spectrosc. 69, 721-723 (1991)
Radiative lifetime of magnetic-dipole and magnetic-quadrupole transitions
in atoms of inert gases. [T, Ne - Xe]
- O K. Koura : J. Chem. Phys. 82, 2566-2572 (1985a)
Monte Carlo simulation of electron thermalization in gases. V.
Subexcitation electrons in rare gases. [T, He - Xe]

- O K. Koura : J. Chem. Phys. 82, 4724-4726 (1985b)
On the empirical equation for electron energy-loss rate in rare gases.
[T, He - Xe]
- α T. Z. Kowalski : Nucl. Instrum. Meth. A244, 533-536 (1986)
On the generalized gas gain formula for proportional counters.
[E and compilation, Ar - Xe, Xe + H₂, etc.]
- I E. Krishnakumar and S. K. Srivastava : J. Phys. B21, 1055-1082 (1988) ○
Ionisation cross sections of rare-gas atoms by electron impact.
[E, He - Xe; th. - 10³ eV, normalized with the results of D. Rapp (1965)]
- O S. Kroll and W. K. Bischel : Phys. Rev. A41, 1340-1349 (1990)
Two-photon absorption and photoionization cross-section measurements in
the 5p⁵6p configuration of xenon. [E, h ν , Xe]
- O P. Kruit, J. Kimman, H. G. Muller and M. J. van der Wiel : Phys. Rev. A28, 248-255
(1983)
Electron spectra from multiphoton ionization of xenon at 1064, 532, and
355 nm. [E, h ν , Xe]
- O M. Yu. Kuchiev and S. A. Sheinerman : J. Phys. B18, L551-L556 (1985)
The post collision interaction in the inner-shell photoionisation of Ar
and Xe. [T, h ν , Xe, Ar]
- O M. Yu. Kuchiev and S. A. Sheinerman : Sov. Phys. Usp. 32, 569-587 (1989) ·
Post-collision interaction in atomic processes.
[review, h ν , He - Xe]
- O M. Kutzner, V. Radojevic and H. P. Kelly : Phys. Rev. A40, 5052-5057 (1989)
Extended photoionization calculations for xenon. [T, h ν , Xe]
- O B. M. Lagutin, I. D. Petrov, V. L. Sukhorukov, S. B. Whitfield, B. Langer, J. Viefhaus,
R. Wehlitz, N. Berrah, W. Mahler and U. Becker : J. Phys. B29, 937-976 (1996)
Cross sections and angular distributions of the photoelectron
correlation satellites of the Xe atom. [E and T, h ν , Xe]
- I H. Lebius, J. Binder, H. R. Koslowski, K. Wiesemann and B. A. Huber : J. Phys. B22,
83-97 (1989) ·
Partial and state-selective cross sections for multiple ionisation of
rare-gas atoms by electron impact. [E, Xe, Ne, Kr]
- EX L. R. LeClair and S. Trajmar : J. Phys. B29, 5527-5542 (1996a)
Electron impact excitation of autoionizing levels of Kr and Xe between
the ²P_{3/2} and ²P_{1/2} ionic limits. [E, Xe, Kr]
- EX L. R. LeClair and S. Trajmar : J. Phys. B29, 5543-5566 (1996b) ○
Absolute inelastic differential electron scattering cross sections for
He, Xe, N₂ and CO at near-threshold impact energies for 90° scattering
angle. [E, Xe, He, N₂, CO]

- O L. A. Levin, S. E. Moody, E. L. Klosterman, R. E. Center and J. J. Ewing : IEEE J. Quant. Elect. QE-17, 2282-2289 (1981)
Kinetic model for long-pulse XeCl laser performance.
[T, Xe, Ne, HCl]
- O A. L'Huillier and G. Wendin : J. Phys. B20, L37-L44 (1987a)
Two-photon one-electron ionisation cross section of the 5p shell of xenon including screening effects. [T, $h\nu$, Xe]
- O A. L'Huillier : J. Physique 48, C9, 415-425 (1987b)
Multiple ionization of atoms through multiphoton absorption. [T, $h\nu$, Xe]
- O A. L'Huillier and G. Wendin : J. Physique 48, C9, 483-486 (1987b)
A many-body approach to two- and three-photon double ionization and excitation of xenon. [T, $h\nu$, Xe]
- EX C. C. Lin and L. W. Anderson : in Advances in Atomic, Molecular, and Optical Physics, Vol. 29, Academic Press 1-32 (1992) ○
Studies of electron excitation of rare-gas atoms into and out of meta-stable levels using optical and laser techniques. [review, He - Xe]
- O D. W. Lindle, T. A. Ferett, P. A. Heimann and D. A. Shirley : Phys. Rev. A37, 3808-3812 (1988)
Photoemission from Xe in the vicinity of the 4d Cooper minimum.
[E, $h\nu$, Xe]
- O B. Lohmann, U. Hergenhahn and N. M. Kabachnik : J. Phys. B26, 3327-3338 (1993)
Spin polarization of Auger electrons from noble gases after photo-ionization with circularly polarized light. [T, $h\nu$, Ar - Xe]
- O L. A. Lompre, A. L'Huillier, G. Mainfray and C. Manus : J. Opt. Soc. Am. B2, 1906-1912 (1985)
Laser-intensity effects in the energy distribution of electrons produced in multiphoton ionization of rare gases. [E, $h\nu$, Xe, Ne, He]
- S S. Longo and M. Capitelli : Plasma Chem. Plasma Process. 14, 1-13 (1994)
A simple approach to treat anisotropic elastic collisions in Monte Carlo calculations of the electron energy distribution function in cold plasmas. [T, Xe + Ne + HCl]
- O T. S. Luk, U. Johann, H. Egger, H. Pummer and C. K. Phodes : Phys. Rev. A32, 214-224 (1985)
Collision-free multiple photon ionization of atoms and molecules at 193 nm. [E, $h\nu$, He - Xe, etc.]
- E D. R. Lun, S. J. Buckman, L. J. Allen and K. Amos : 20th ICPEAC, Vienna TH030 (1997)
Phaseshift analysis by unitary conditions for spin-orbit interactions.
[T, Xe; DCS at 5 eV]

- O M. A. MacDonald, S. H. Southworth, J. C. Levin, A. Henins, R. D. Deslattes, T. LeBrun, Y. Azuma, P. L. Cowan and B. A. Karlin : Phys. Rev. A51, 3598-3603 (1995)
Evolution of X-ray resonance Raman scattering into X-ray fluorescence from the excitation of xenon near the L_3 edge. [E, $h\nu$, Xe]
- I D. H. Madison, V. D. Kravtsov, S. Jones and R. P. McEachran : Phys. Rev. A53, 2399-2406 (1996)
Fine-structure effect for (e, 2e) collisions.
[T, Xe, Ar; TDCS, 147 eV for Xe]
- O K. Maeda, K. Ueda and K. Ito : J. Phys. B26, 1541-1555 (1993) ·
High-resolution measurement for photoabsorption cross sections in the autoionization regions of Ar, Kr, and Xe. [E, $h\nu$, Ar - Xe]
- O V. S. Marchenko : Sov. Phys. JETP 58, 292-298 (1983) ·
Dissociation of homonuclear ions by electron impact.
[T, He_2^+ - Xe_2^+ , H_2^+ ; 1 - 10 eV]
- I D. Margreiter, H. Deutsch and T. D. Mark : Contrib. Plasma Phys. 30, 487-495 (1990) ·
ME Absolute electron impact cross sections for single ionization of metastable atoms of H, He, Ne, Ar, Kr, Xe and Rn. [T, He - Rn, H]
- I D. Margreiter, H. Deutsch and T. D. Mark : Int. J. Mass Spectrom. Ion Process. 139, 127-139 (1994) ·
A semiclassical approach to the calculation of electron impact ionization cross-sections of atoms : from hydrogen to uranium.
[T, He - Xe, Li - Cs, Hg, from H to U]
- E B. Marinkovic, V. Pejcev, D. Filipovic and L. Vuskovic : 13th ICPEAC, Berlin EX 85-85 (1983)
Relative differential cross sections for elastic and inelastic scattering of electrons by xenon in the energy range of 15 to 80 eV.
[E, Xe; 15 - 80 eV, see D. Filipovic (1988)]
- I T. D. Mark and G. H. Dunn (Ed) : Electron Impact Ionization, Springer (1985)
- I T. D. Mark : in Electron Impact Ionization, Springer 137-197 (1985) ·
Partial ionization cross sections. [review]
- I P. Marmet and M. Proulx : J. Phys. B23, 549-560 (1990)
Electron atom interaction mechanism : Xenon states between the $2P_{(3/2)}$ and $2P_{(1/2)}$ limits. [E, Xe; 12.1 - 13.5 eV]
- O P. Martin, J. A. Cabrera and J. Campos : Phys. Rev. A32, 3110-3113 (1985)
Transition probabilities of $6p - nd$ ($n = 7, 8, 9$) lines of Xe I.
[E, $h\nu$, Xe]

- EX K. E. Martus, S. H. Zheng and K. Becker : Phys. Rev. A44, 1682-1693 (1991)
Electron-photon coincidence study of heavy-noble-gas excitation at small scattering angles.
[E, Ne - Xe; coherent parameters]
- EX N. J. Mason and W. R. Newell : J. Phys. B20, 1357-1377 (1987) ○ Z
Total cross sections for metastable excitation in the rare gases.
[E, He - Xe; th. - 140 eV]
- O S. Masui, E. Shigemasa, A. Yagishita and I. A. Sellin : J. Phys. B28, 4529-4536 (1995)
New measurements of the widths of the Xe 4d levels.
[E, $h\nu$, Xe; resonance widths]
- I D. Mathur and C. Badrinathan : Int. J. Mass Spectrosc. Ion Phys. 68, 9-14 (1986) - Z
On the ionization of xenon by electrons. [E, Xe; th. - 150 eV]
- I D. Mathur and C. Badrinathan : Phys. Rev. A35, 1033-1042 (1987) -
Ionization of xenon by electrons : Partial cross sections for single, double, and triple ionization. [E, Xe; th. - 100 eV, relative]
- I I. E. McCarthy : Z. Phys. D23, 287-293 (1992) -
Range of validity of distorted wave Born and impulse approximations for (e, 2e). [T, Xe, H, He - Ar]
- O E. W. McDaniel, M. R. Flannery, E. W. Thomas and S. T. Manson : Atomic Data Nucl. Data Tables 33, 1-148 (1985)
Selected bibliography on atomic collisions : Data collections, bibliographies, review articles, books, and papers of particular tutorial value. [compilation]
- E R. P. McEachran and A. D. Stauffer : J. Phys. B17, 2507-2518 (1984) -
Elastic scattering of electrons from krypton and xenon. [T, Xe, Kr]
- E R. P. McEachran and A. D. Stauffer : J. Phys. B19, 3523-3538 (1986) -
Spin polarization of electrons elastically scattered from xenon.
[T, Xe]
- E R. P. McEachran and A. D. Stauffer : J. Phys. B20, 3483-3486 (1987) -
Relativistic low-energy elastic and momentum transfer cross sections for electron scattering from xenon. [T, Xe; 0 - 10 eV]
- EX I. McGregor, D. Hils, R. Hippler, N. A. Malik, J. F. Williams, A. A. Zaidi and H. Kleinpoppen : J. Phys. B15, L411-L414 (1982)
Electron-photon angular correlations from electron impact excitation of heavy rare-gas atoms. [E, Xe, Kr]
- I C. Mette, C. Herting and G. F. Hanne : 20th ICPEAC, Vienna TU119 (1997) -
Spin asymmetries in the triple differential cross section of xenon atoms.
[E, Xe; 200 eV]

- I C. Mette, T. Simon, C. Herting and G. F. Hanne : J. Phys. B31, 4689-4700 (1998)
Spin-resolved triple differential cross sections of Xe.
[E. Xe; 40 - 200 eV]
- O V. Mikhelsoo, P. Mlidla, V. Peet, A. Sherman, R. Sorkina, E. Tamme and A. Treshchalov :
J. Phys. B22, 1489-1504 (1989)
Theoretical simulation of physical processes in a discharge XeCl laser.
[T. Xe]
- I B.-S. Min, Y. Yoshinari, T. Watabe, Y. Tanaka, C. Takayanagi, T. Takayanagi, K. Wakiya
and H. Suzuki : J. Phys. Soc. Jpn. 62, 1183-1192 (1993)
Measurements of ionization cross sections of 4d - electrons in xenon by
electron impact. [E. Xe; 70 - 4000 eV]
- EX A. A. Mityureva, N. P. Penkin and V. V. Smirnov : 15th ICPEAC, Brighton 189-189
(1987)
Electron excitation cross section of Ar, Kr, Xe to the metastable states.
[E. Ar - Xe; th. - 64 eV]
- ME A. A. Mityureva, V. V. Smirnov and T. Yu. Grigor'eva : 17th ICPEAC, Brisbane
691-691 (1991)
Step-by-step excitation cross-sections from metastable states to 2p-
levels of Xe by electron impact. [E. Xe]
- ME A. A. Mityureva and V. V. Smirnov : Opt. Spectrosc. 74, 6-8 (1993a) -
Cross-section measurements for stepwise excitation of inert-gas atoms
from metastable states by electron impact. [E. Xe only; 4 - 9 eV]
- ME A. A. Mityureva and V. V. Smirnov : Opt. Spectrosc. 75, 417-419 (1993b) -
Electronic-excitation cross sections of 3p and d levels from metastable
states of the xenon atom.
[E. Xe; from 1s₅ meta. to 3p, 5d and 6d levels]
- EX A. A. Mityureva and V. V. Smirnov : J. Phys. B27, 1869-1880 (1994) ○
Excitation of heavy rare gases to metastable states by electron impact.
[E. Ne - Xe; th. - 30/50 eV for Xe]
- E E. Mollenkamp, W. Wubker, O. Berger, K. Jost and J. Kessler : J. Phys. B17, 1107-1121
(1984) -
Elastic scattering of polarised electrons from mercury and xenon to
obtain the complete information on the scattering process.
[E. Xe, Hg; 18 - 360 eV]
- O Y. Morioka, M. Watanabe, T. Akahori, A. Yagishita and M. Nakamura : J. Phys. B18,
71-77 (1985)
Angular distributions of photoelectrons from the autoionising states
between the ²P_{3/2} and ²P_{1/2} ionisation threshold of Kr and Xe.
[E. hν, Xe, Kr]

- S A. Mozumder : J. Chem. Phys. 72, 6289-6298 (1980)
Electron thermalization in gases. II. Neon, argon, krypton and xenon.
[T. Ne - Xe]
- EX A. Z. Msezane and Z. Chen : Phys. Rev. A49, 3083-3085 (1994) ·
Small-angle differential cross sections for Xe $5p^5(2P_{3/2})6s$. [T. Xe]
- EX A. Z. Msezane and Z. Felfli : J. Mol. Struct. (Theochem) 454, 187-200 (1998)
Recent theoretical advances in small-angle electron scattering.
[review. Xe, H, He, Na, F₂, SF₆, N₂]
- EX H. Muller and J. Kessler : J. Phys. B27, 5893-5901 (1994)
Cross-check of Sherman-function measurements for xenon using two
independent methods. [E. Xe; 50 - 150 eV]
- S R. Nagpal and A. Garscadden : Phys. Rev. Lett. 73, 1598-1560 (1994)
Electron transport in helium-rare-gas mixtures. [T. Xe + He, etc.]
- I P. Nagy, A. Skutlartz and V. Schmidt : J. Phys. B13, 1249-1267 (1980) Z
Absolute ionisation cross sections for electron impact in rare gases.
[E. He - Xe; 0.5 - 5 keV]
- EX S. Nakazaki, K. A. Berrington, W. B. Eissner and Y. Itikawa : 20th ICPEAC, Vienna
MO102 (1997a) ·
Electron impact excitation of xenon. [T. Xe; 3P_1 and 3P_2 at 15 eV]
- EX S. Nakazaki, K. A. Berrington, W. B. Eissner and Y. Itikawa : J. Phys. B30, L59-L66
(1997b)
Theory and practice in low-energy electron excitation of the $5p^56s$ levels
of xenon. [T. Xe; 3P_0 , 3P_1 , 3P_1 , 1P_1 at 15 eV]
- EX S. Nakazaki, K. A. Berrington, W. B. Eissner and Y. Itikawa : J. Phys. B30, 5805-5818
(1997c)
Excitation of xenon by electron impact. [T. Xe; lowest nine ex. levels]
- O R. K. Nesbet : Phys. Rev. A56, 2778-2783 (1997) ·
Local response model of the generalized polarization potential.
[T. e. He - Xe, H; long-range interactions]
- QT J. N. Nickel, K. Imre, D. F. Register and S. Trajmar : J. Phys. B18, 125-133 (1985) ○ Z
Total electron scattering cross sections : I. He, Ne, Ar, Xe.
[E. Xe, He - Ar; 4 - 300 eV, error 2 - 3 % ; 13th ICPEAC, 93 (1983)]
- O C. A. Nicolaides and G. Aspromallis : Phys. Rev. A44, 2217-2219 (1991) ·
Binding of an electron by He and Xe. [T. Xe, He]
- E H. Nishimura, A. Danjo and T. Matsuda : 14th ICPEAC, Palo Alto, 108-108 (1985) ·
EX Differential scattering cross sections of electrons from Xe.
[E. Xe; 5 - 200 eV]

- EX H. Nishimura, A. Danjo and A. Takahashi : J. Phys. B19, L167-L172 (1986)
Electron-photon angular correlations for electron impact excitation of Xe. [E, Xe; λ , $|\chi|$, $|\epsilon|$, 30 - 80 eV, 10 - 30°]
- E H. Nishimura, T. Matsuda and A. Danjo : J. Phys. Soc. Jpn. 56, 70-78 (1987) ○ Z
Elastic scattering of electrons from xenon.
[E, Xe; DCS, 5 - 200 eV, 10/15 - 125°]
- QT H. Nishimura, K. Hosaka and H. Tawara : Annual Report of NIFS, April 1994-March 1995, 128-128 (1995)
Measurements of the total electron scattering cross sections of Kr and Xe. [E, Xe, Kr; 5 - 3000 eV]
- QT H. Nishimura, H. Tawara and K. Hosaka : Annual Report of NIFS, April 1995-March 1996, 135-135 (1996)
Measurements of the total electron scattering cross sections of Kr and Xe - II. [E, Kr, Xe; 5 - 3000 eV]
- EX C. Noren, W. L. Karras, J. W. McConkey and P. Hammond : Phys. Rev. A54, 510-521 (1996)
Polarization studies of rare-gas resonance radiation : Argon, krypton, and xenon. [E, Ar - Xe; th. - 12.5 eV for Xe]
- E J. K. O'Connell and N. F. Lane : Phys. Rev. A27, 1893-1903 (1983)
Nonadjustable exchange-correlation model for electron scattering from closed-shell atoms and molecules. [T, He - Xe]
- S I. Ogawa : in Swarm of Ions and Electrons in Gases, Innsbruck, Springer Verlag 265-283 (1984)
Electrons in inert gases. [review, He - Xe]
- EX M. Ohwa, T. J. Moratz and M. J. Kushner : J. Appl. Phys. 66, 5131-5145 (1989) .
O Excitation mechanisms of the electron-beam-pumped atomic xenon (5d - 6p) laser in Ar/Xe mixtures. [T, Xe + Ar]
- E K. Ohya and I. Mori : Jpn. J. Appl. Phys. 29, 2145-2146 (1990)
Anisotropy of elastic scattering of low-energy electrons in noble gases [T, He - Xe; DCS, 0 - 16 eV]
- O W. Ong and S. T. Manson : Phys. Rev. A21, 842-850 (1980)
Dirac-Fock calculations of atomic photoionization : Branching ratios and angular distributions in the outer p shells of the noble gases.
[T, $h\nu$, Ne - Xe]
- S J. L. Pack, R. E. Voshall, A. V. Phelps and L. E. Kline : in Nonequilibrium Effects in Ion and Electron Transport, Plenum Press 371-372 (1990)
Longitudinal diffusion to mobility ratios for electrons in noble gases.
[E, He, Ar - Xe]

- S J. L. Pack, R. E. Voshall, A. V. Phelps and L. E. Kline : J. Appl. Phys. 71, 5363-5371 (1992) -
Longitudinal electron diffusion coefficients in gases : Noble gases.
[T, He, Ar - Xe]
- EX R. Padma and P. C. Deshmukh : Phys. Rev. A46, 2513-2518 (1992)
Calculations of generalized oscillator strength for electron-impact excitation of krypton and xenon using a relativistic local-density potential. [T, Xe, Kr]
- O S. C. Page, L. Mei, D. Palfreyman and F. H. Read : Rev. Sci. Instrum. 64, 2574-2578 (1993)
A linear magnetic field spectrometer for electron energy-loss measurements.
[E, Xe; inner-shell states]
- I C. Pan and A. F. Starace : Phys. Rev. A45, 4588-4603 (1992)
Angular distributions for near-threshold (e, 2e) processes for H, He, and other rare-gas targets. [T, He - Xe, H]
- O F. A. Parpia, W. R. Johnson and V. Radojevic : Phys. Rev. A29, 3173-3180 (1984)
Application of the relativistic local-density approximation to photoionization of the outer shells of neon, argon, krypton, and xenon.
[T, $h\nu$, Ne - Xe]
- E S. H. Patil : J. Phys. B27, 1823-1832 (1994) -
Electron charge density in neon and other inert gas atoms. [T, Ne - Xe]
- EX N. P. Penkin and V. V. Smirnov : Opt. Spectrosc. 61, 412-413 (1986)
Effective cross section for electron-excitation of Xe I into the 3P_2 metastable state. [E, Xe; th. - 32 eV]
- O I. D. Petrov, V. L. Sukhorukov and H. Hotop : J. Phys. B32, 973-986 (1999)
The influence of core polarization on photon-ionization of alkali and metastable rare gas atoms near threshold.
[E, $h\nu$, Ne* - Xe*, Na - Cs]
- EX P. Plessis, M. A. Khakoo, P. Hammond and J. W. McConkey : J. Phys. B21, L483-L488 (1988) -
Target reflection-symmetry-breaking collisions of electrons with heavy noble gases. [E, Xe, Kr; 50 or 60 eV]
- S A. Ya. Polischuk : J. Phys. B17, 4789-4795 (1984) -
Concerning a theory of electron mobility in simple fluids. [T, Xe, Ar]
- O S. D. Price and J. H. D. Eland : J. Phys. B22, L153-L158 (1989)
Single-photon double ionisation of xenon. [E, $h\nu$, Xe; 40.8 eV photons]

- S V. Puech and S. Mizzi : J. Phys. D24, 1974-1985 (1991) ·
Collision cross sections and transport parameters in neon and xenon.
[T and compilation, Xe, Ne; 13 excitation levels for Xe]
- S P. J. B. M. Rachinhas, T. H. V. T. Dias, F. P. Santos, A. D. Stauffer and C. A. N. Conde :
IEEE Trans. Nucl. Sci. 41, 984-988 (1994) ·
Monte Carlo simulation of xenon filled cylindrical proportional counters.
[T, Xe]
- I D. Rapp and P. Englander-Golden : J. Chem. Phys. 43, 1464-1479 (1965) ○Z
Total cross sections for ionization and attachment in gases by electron
impact I. Positive ionization. [E, He - Xe, H₂, etc.]
- I J. Rasch, M. Zitnik, L. Avaldi, C. T. Whelan, G. Stefani, R. Camilloni, R. J. Allan and
H. R. J. Walters : Phys. Rev. A56, 4644-4655 (1997)
Theoretical and experimental investigation of the triplet-differential
cross sections for electron-impact ionization of Kr(4p) and Xe(5p)
at 1 keV impact energy. [E and T, Xe, Kr; 1000 eV]
- EX F. H. Read and P. Hammond : J. Phys. B21, 4225-4238 (1988) ·
Post-collision interaction in excitation of autoionising states of krypton
and xenon by electron impact within 100 meV of threshold. [E, Xe, Kr]
- D. F. Register, L. Vuskovic and S. Trajmar : 7th ICAP, Boston (1980)
- E D. Register, L. Vuskovic, L. T. Sin Fai Lam and S. Trajmar : 13th ICPEAC, Berlin
87-87 (1983)
Relativistic phase shift analysis for elastic scattering of electrons by
xenon below the first inelastic threshold. [E and T, Xe]
- E D. F. Register, L. Vuskovic and S. Trajmar : J. Phys. B19, 1685-1697 (1986) ○Z
Elastic electron scattering cross sections for Xe in the 1 - 100 eV impact
energy region. [E, Xe; 1 - 100 eV, 10 - 146°]
- E D. D. Reid and J. M. Wadehra : Phys. Rev. A50, 4859-4867 (1994a) ·
Low-energy differential scattering of electrons and positrons from noble
gases. [T, He - Xe]
- E D. D. Reid and J. M. Wadehra : Hyperfine Interact. 89, 435-444 (1994b) ·
Differential cross section surfaces for low energy scattering of
electrons and positrons from rare gas atoms. [T, He - Xe]
- E G. Reisfeld and U. Asaf : Phys. Rev. A49, 348-349 (1994) ·
Relation between the electron scattering length and the van der Waals
approximation to the equation of state.
[T, He - Xe; see K. Rupnik (1990)]

- E R. E. Robson and A. Prytz : Aust. J. Phys. 46, 465-495 (1993) ·
The discrete ordinate/pseudo-spectral method : Review and application
from a physicist's perspective.
[T, q_m for Ne - Xe; 0 - 100 eV; Xe values from K. F. Ness (1989)]
- I T. Rosel, K. Jung, H. Ehrhardt, X. Zhang, C. T. Whelan and H. R. J. Walters : J. Phys.
B23, L649-L653 (1990)
The electron impact ionization of Xe in coplanar symmetric geometry.
[E, Xe; triple DCS, 200 eV]
- O H. Rottke, B. Wolff, M. Tapernon, K. H. Welge and D. Feldmann : Z. Phys. D15, 133-139
(1990)
Resonant multiphoton ionization of xenon in intense sub-ps laser pulses.
[E, $h\nu$, Xe; around 600 nm]
- O H. Rottke, J. Ludwig and W. Sandner : J. Phys. B29, 1479-1487 (1996)
'Short' pulse MPI of xenon : The $^2P_{1/2}$ ionization channel.
[E, $h\nu$, Xe; 0.7 ps]
- O B. F. Rozsnyai : Phys. Rev. A42, 286-290 (1990)
Inner-shell photoionization of barium, xenon, and krypton.
[T, $h\nu$, Xe, Kr, Ba]
- E K. Rupnik, U. Asaf and S. P. McGlynn : J. Chem. Phys. 92, 2303-2304 (1990) · Z
Electron scattering in dense atomic and molecular gases : An empirical
correlation of polarizability and electron scattering length.
[T, He - Xe, H₂, N₂, CH₄]
- O O. -P. Sairanen, A. Kivimaki, E. Nommiste, H. Aksela and S. Aksela : Phys. Rev. A54,
2834-2839 (1996)
High-resolution pre-edge structure in the inner-shell ionization threshold
region of rare gases Xe, Kr, and Ar. [E, $h\nu$, Ar - Xe]
- O N. Saito and I. H. Suzuki : J. Phys. B25, 1785-1793 (1992a)
Yield of multicharged Xe ions in the M-shell transition region.
[E, $h\nu$, Xe; 650 - 1270 eV]
- EX Y. Sakai, S. Sawada and H. Tagashira : J. Phys. D24, 283-289 (1991) Z
Boltzmann equation analysis of electron swarm parameters in Ar/Ne,
Kr/Ne, Xe/Ne, Hg/Ar and Hg/Kr mixtures and derived effective excitation
cross section for metastable states of rare atoms.
[T, Xe + Ne, etc; q_e for Ne - Xe, th. - 100 eV]
- E F. Salvat, R. Mayol and J. D. Martinez : J. Phys. B20, 6597-6612 (1987) ·
Elastic scattering of electrons by atoms : a semiphenomenological
approach. [T, He - Xe, Hg]
- S F. P. Santos, T. H. V. T. Dias, A. D. Stauffer and C. A. N. Conde : J. Phys. D27, 42-48
(1994) ·
Three-dimensional Monte Carlo calculation of the VUV electroluminescence
and other electron transport parameters in xenon. [T, Xe; 3 - 16 Td]

- O N. N. Sazhina, N. N. Ustinovskii and I. V. Kholin : Sov. J. Quant. Elect. 21, 949-953 (1991) -
Deexcitation of the 6s states of the Xe atom in high-pressure Ar-Xe mixtures. [E, Xe, Xe + Ar]
- O S. J. Schaphorst, A. F. Kodre, J. Ruscheinski, B. Crasemann, T. Aberg, J. Tulkki, M. H. Chen, Y. Azuma and G. S. Brown : Phys. Rev. A47, 1953-1966 (1993)
Multielectron inner-shell photoexcitation in absorption spectra of Kr : Theory and experiment. [T and E, $h\nu$, Xe, Kr]
- EX K. -H. Schartner, B. Kraus, W. Poffel and K. Reymann : Nucl. Instrum. Meth. B27, 519-526 (1987) -
Electron impact excitation and radiometric applications.
[E, He - Xe, H₂, N₂]
- O K. -H. Schartner, P. Lenz, B. Mobus, H. Schmaranzer and M. Wildberger : J. Phys. B22, 1573-1581 (1989)
Structure at the Xe 5s threshold studied by photon-induced fluorescence spectroscopy. [E, $h\nu$, Xe; 23 - 26.5 eV]
- O I. Schechter, H. Schroder and K. L. Kompa : Chem. Phys. Lett. 194, 128-134 (1992)
A simplified method for absolute MPI cross-section measurements.
Application to three-photon nonresonant ionization of Xe at 266 nm.
[E, $h\nu$, Xe; multi-photon ionization]
- S B. Schmidt : Nucl. Instrum. Meth. A252, 579-585 (1986) -
Drift properties of electrons in methane and methane noble gas mixtures.
[E, (He - Xe) + CH₄, CH₄, CF₄, C₂H₆, i-C₄H₁₀]
- S B. Schmidt, K. Berkhan, B. Gotz and M. Muller : Phys. Scr. T53, 30-42 (1994) -Z
New experimental techniques in the study of electron swarms in gases and their impact on the determination of low energy electron scattering cross sections. [E, Ar - Xe, H₂]
- O V. Schmidt : Z. Phys. D2, 275-283 (1986)
Photoionization in rare gases with synchrotron radiation : some basic aspects for critical tests with theory. [E, $h\nu$, Xe, Ar, Ne]
- O S. Schohl, D. Klar, T. Kraft, H. A. J. Meijer, M. -W. Ruf, U. Schmitz, S. J. Smith and H. Hotop : Z. Phys. D21, 25-39 (1991) -
Absolute detection of metastable rare gas atoms by a cw laser photoionization method. [E, $h\nu$, Ne - Xe]
- I B. L. Schram, H. R. Moustafa-Moussa, J. Schutten and F. J. de Heer : Physica 32, 734-740 (1966b) ○Z
Ionization cross sections for electrons (100 - 600 eV) in noble and diatomic gases. [E, He - Xe, H₂, N₂, O₂]
- O R. Shakeshaft : Z. Phys. D14, 271-272 (1989)
Ejection of high-energy photoelectrons by intense laser light.
[T, $h\nu$, no example]

- EX D. A. Shaw, G. C. King and F. H. Read : Chem. Phys. Lett. 139, 17-23 (1986)
Observation of inner-shell triplet states of CO₂ and N₂O and of inner-shell five structure in Kr and Xe. [E, Xe, Kr, CO₂, N₂O]
- I V. P. Shevelko and H. Tawara : Phys. Scr. 52, 649-653 (1995a) ·
Semiempirical formula for multiple ionization cross sections of atoms by electron impact. [T, Ne - Xe, Mg, Fe, Cu, U, etc.]
- I V. P. Shevelko and H. Tawara : J. Phys. B28, L589-L591 (1995b)
Semiempirical formula for multiple ionization cross sections of neutral atoms and positive ions by electron impact. [T, Xe, Kr, Rb]
- I V. P. Shevelko, H. Tawara and E. Salzborn : NIFS-DATA-27, 1-40 (1995c)
Multiple-ionization cross sections of atoms and positive ions by electron impact. [T, Ne - Xe, etc.]
- E H. Shimamori and T. Sunagawa : Int. Sympo. Electron-Molecule Collisions and
EX Ion and Electron Swarms, Engelberg P57 (1997)
Electron energy-loss rates in Ar, Kr, and Xe determined from transient microwave conductivity. [E, Ar - Xe]
- E I. Shimamura : Sci. Paper Inst. Phys. Chem. Res. 82, 1-51 (1989)
EX Cross sections for collisions of electrons with atoms and molecules.
I, QT [compilation]
- S B. Shizgal and D. R. A. McMahon : J. Phys. Chem. 88, 4854-4862 (1984)
Electron distribution functions and thermalization times in inert gas moderators. [T, He - Xe]
- ME O. B. Shpenik, A. N. Zaviolopulo, A. V. Snegursky and I. I. Fabrikant : J. Phys. B17,
EX 887-904 (1984) ○
Excitation of metastable levels of noble-gas atoms in crossed electron and gas dynamical atomic beams. [E, He - Xe]
- E J. E. Sienkiewicz and W. E. Baylis : J. Phys. B22, 3733-3745 (1989) ·
Low-energy elastic e⁻ - Xe scattering : The effect of exchange in the polarisation potential. [T, Xe]
- E J. E. Sienkiewicz and W. E. Baylis : J. Phys. B24, 265-274 (1991) ·
The polarization of electrons elastically scattered from xenon.
[T, Xe]
- QT G. Sinapius, W. Raith and W. G. Wilson : J. Phys. B13, 4079-4090 (1980) 2
Scattering of low energy positrons from noble-gas atoms.
[E, electron, He - Xe; 1 - 6 eV]
- E L. T. Sin Fai Lam : J. Phys. B15, 119-142 (1982) ·
Relativistic effects in electron scattering by atoms. III. Elastic scattering by krypton, xenon and radon. [T, Kr - Rn, 0.01 - 30 eV]

- EX J. Slevin : Rep. Prog. Phys. 47, 461-512 (1984)
Coherence in inelastic low-energy electron scattering.
[review, He, H, Na, Hg]
- O F. Smend, D. Schaupp, H. Czerwinski, M. Schumacher, A. M. Millhouse and L. Kissel :
Phys. Rev. A36, 5189-5199 (1987)
Large-angle Rayleigh scattering of linearly polarized, hard synchrotron
X rays by krypton and xenon. [T, $h\nu$, Xe, Kr]
- O K. Soejima, M. Shimbo, A. Danjo, K. Okuno, E. Shigemasa and A. Yagishita : J. Phys.
B29, L367-L371 (1996)
Circular dichroism in fragmentation patterns for two-step double
photoionization of Xe. [E, $h\nu$, Xe]
- O T. J. Sommerer : J. Phys. D29, 769-778 (1996)
Model of a weakly ionized, low-pressure xenon dc positive column discharge
plasma. [T, Xe]
- α L. T. Specht, S. A. Lawton and T. A. De Temple : J. Appl. Phys. 51, 166-170 (1980)
Electron ionization and excitation coefficients for argon, krypton and
xenon in the low E/N region. [E, Ar - Xe]
- EX R. Srivastava, R. P. McEachran and A. D. Stauffer : J. Phys. B28, 869-877 (1995)
Relativistic distorted-wave calculation of the excitation of the 3D_3
state of heavy noble gases. [T, Ar - Xe; 3D_3 state at 30 eV]
- EX R. Srivastava, K. Blum, R. P. McEachran and A. D. Stauffer : J. Phys. B29, 5947-5960
(1996)
Excitation of the lowest 3P_1 and 4P_1 states in argon and xenon by
polarized electrons. [T, Xe, Ar; Stokes and spin asymmetry parameters]
- E A. D. Stauffer, T. H. V. T. Dias and C. A. N. Conde : Nucl. Instrum. Meth. A242, 327-337
(1986)
Analytical expressions for phase shifts and cross sections for low
energy electron-atom scattering in noble gases. [T, He - Xe; 0 - 20 eV]
- I K. Stephan and T. D. Mark : J. Chem. Phys. 81, 3116-3117 (1984) - Z
Absolute partial electron impact ionization cross sections of Xe from
threshold up to 180 eV. [E, Xe]
- QT K. P. Subramanian and V. Kumar : J. Phys. B20, 5505-5515 (1987) \odot Z
Total electron scattering cross sections for argon, krypton and xenon at
low electron energies. [E, Ar - Xe; 0.73 - 9.14 eV, error 2.7%]
- O V. L. Sukhorukov, I. D. Petrov, V. F. Demekhin and S. V. Lavrent'ev : Bull. Acad. Sci.
USSR Phys. Ser. 49, No. 8, 6-13 (1985)
X-ray processes with the participation of subvalent electrons in Ar, Xe,
and HCl. [review, $h\nu$, Xe, Ar, HCl]

- O E. Suzuki and Y. Hatano : J. Chem. Phys. 84, 4915-4918 (1986)
Electron thermalization processes in rare gases with the Ramsauer minimum. [E, Ar - Xe]
- I H. Suzuki, T. Takayanagi, K. Morita and Y. Iketaki : in Electron-Molecule Collisions and Photoionization Processes, Verlag Chemie International (1983)
Measurements of cross sections for inner shell ionization in rare-gas atoms by electron impact. [E, - Xe]
- EX T. Y. Suzuki, Y. Sakai, B. S. Min, T. Takayanagi, W. Wakiya and H. Suzuki : Phys. Rev. A43, 5867-5873 (1991) ○ Z
Measurement of cross sections and oscillator strengths for Xe by electron impact.
[E, Xe; DCS, 2 transitions, 100 - 400 eV, 1.4 - 32.55° depend on energy]
- EX T. Y. Suzuki, H. Suzuki, F. J. Currell, S. Ohtani, T. Takayanagi and K. Wakiya : Phys. Rev. A53, 4138-4144 (1996) ·
Measurements of cross sections and oscillator strengths by electron impact for the 5d and 7s levels of Xe. [E, Xe; DCS, 400 and 500 eV]
- I J. A. Syage : Phys. Rev. A46, 5666-5679 (1992) Z
Electron-impact cross sections for multiple ionization of Kr and Xe.
[E, Xe, Kr, Ar; th. - 470 eV, X^{n+} (n = 1 - 6) for Xe and Kr]
- E E. Szmola and J. Herbak : Atomki Report B/4, Hungarian Acad. Sci. 19-47 (1986)
Elastic scattering of electrons by noble gases : The present state of the experiments and theory. [review, He - Xe]
- QT Cz. Szmytkowski, K. Maciag and G. Karwasz : Phys. Scr. 54, 271-280 (1996) ○ Z
Absolute electron scattering total cross section measurements for noble gas atoms and diatomic molecules.
[E, He - Xe, H₂, N₂, CO, NO, O₂; 0.5 - 250 eV]
- E R. Szmytkowski : Fizika 22, 481-487 (1990) ·
Calculation of the electron scattering lengths for noble atoms.
[T, He - Xe]
- E R. Szmytkowski : J. Phys. B24, 3895-3904 (1991)
The relativistic polarized orbital theory of the elastic electron and positron scattering from closed-shell atoms. [T, general theory]
- E R. Szmytkowski and J. E. Sienkiewicz : J. Phys. B27, 2277-2282 (1994)
Spin polarization of slow electrons elastically scattered from xenon atoms. [T, Xe; 2 - 10 eV]
- E R. Szmytkowski : Phys. Rev. A51, 853-854 (1995) ·
Calculation of the electron-scattering lengths for rare-gas atoms.
[T, He - Xe]

- O A. Szoke, O. L. Landen and M. D. Perry : Phys. Rev. A40, 2766-2769 (1989)
Experimental study of atomic structure in strong electromagnetic fields.
[E. $h\nu$, Xe; energy spectrum of photoelectrons]
- EX T. Takayanagi : in AIP Conf. Proc. 295, 18th ICPEAC, Aarhus 326-335 (1993) ·
Subshell and innershell excitation in rare gas atoms by electron impact.
[E. $h\nu$, Xe, Ne; 4d-ionization, 70 - 4000 eV for Xe]
- O A. Talebpour, C. -Y. Chien and S. L. Chin : J. Phys. B29, L677-L680 (1996)
The effects of dissociative recombination in multiphoton ionization of O₂.
[E. $h\nu$, Xe, O₂]
- O A. Talebpour, C. -Y. Chien, Y. Liang, S. Larochelle and S. L. Chin : J. Phys. B30,
1721-1730 (1997)
Non-sequential ionization of Xe and Kr in an intense femtosecond
Ti : Sapphire laser pulse. [E. $h\nu$, Xe, Kr; 200 fs]
- O V. D. Taranukhin : Sov. J. Quant. Elect. 21, 1159-1160 (1991)
Tunneling ionization of atoms and ions in very strong laser fields.
[, $h\nu$, Xe,
- I H. Tawara, T. Kato and M. Ohnishi : IPPJ-AM-37, Nagoya University, 1-321 (1985)
Ionization cross sections of atoms and ions by electron impact.
[compilation, He - Xe, etc.]
- I H. Tawara and T. Kato : Atomic Data Nucl. Data Tables 36, 167-353 (1987)
Total and partial ionization cross sections of atoms and ions by electron
impact. [compilation, He - Xe, etc.]
- I H. Tawara and M. Kato : NIFS-DATA-51, National Institute for Fusion Science
1-256 (1999)
Electron impact ionization data for atoms and ions - updated in 1998.
[compilation, He - Xe, etc.]
- E I. S. Tilinin : Sov. Phys. JETP 67, 1570-1574 (1988) ·
Elastic scattering of electrons and positrons by complex atoms at medium
energies. [T, Xe, Ne, Ar, N₂, O₂, Ti, Cu, etc.]
- O T. Tonuma, A. Yagishita, H. Shibata, T. Koizumi, T. Matsuo, K. Shima, T. Mukoyama and
H. Tawara : J. Phys. B20, L31-L36 (1987)
Multiple photoionization of Xe atoms between 4.1 and 8.0 keV : mean charge
of Xe ions. [E. $h\nu$, Xe]
- S. Trajmar and J. W. McConkey : in Advances in Atomic, Molecular and Optical
Physics, Vol. 33, Academic Press 63-96 (1994)
Benchmark measurements of cross sections for electron collisions :
Analysis of scattered electrons. [review, He - Xe, H, H₂, SF₆, etc.]
- O K. Ueda : Phys. Rev. A35, 2484-2492 (1987)
Spectral line shapes of autoionizing Rydberg series.
[T, $h\nu$, Xe, Ge, Ca, Sr]

- EX M. Uhrig, G. F. Hanne and J. Kessler : J. Phys. B27, 4009-4023 (1994)
Electron-photon coincidence experiment after polarized-electron impact on xenon. [E, Xe; Stokes parameters]
- O M. Ukai, N. Terazawa, Y. Chikahiro, K. Kameta, N. Kouchi and Y. Hatano : Phys. Rev. A45, R15-R18 (1992)
Optical threshold excitation functions of Xe 5s, 5p photoionization satellites near the 5s⁻¹ Cooper minimum. [E, h ν , Xe]
- S M. Ukai, T. Odaka, H. Yamada, K. Isoda, K. Shinsaka, N. Kouchi and Y. Hatano : Int. J. Mass Spectrom. Ion Process. 149/150, 451-467 (1995)
Electron/ion recombination in dense gaseous Xe. [E, Xe]
- S Z. M. Uteshev and I. V. Chernysheva : Tech. Phys. 41, 418-424 (1996) ·
- E Transport cross section for electron scattering in gaseous xenon. [T, Xe; q_m for 10⁻⁴ - 20 eV]
- I C. Vallance, P. W. Harland and R. G. A. R. MacLagan : J. Phys. Chem. 100, 15021-15026 (1996) ·
Quantum mechanical calculation of maximum electron impact single ionization cross sections for the inert gases and small molecules. [T, He - Xe, H₂, H₂O, NH₃, CH₄, CH₃Cl, etc.]
- I C. Vallance, S. A. Harris, J. E. Hudson and P. W. Harland : J. Phys. B30, 2465-2475 (1997) ·
Absolute electron impact ionization cross sections for CH₃X, where X = H, F, Cl, Br, and I. [E and T, He - Xe, CH₄, CH₃F, CH₃Cl, CH₃Br, CH₃I, CHCl₃]
- S R. V. Vasil'eva, A. D. Zuev and V. A. Shingarkina : Sov. Phys. Tech. Phys. 9, 647-652 (1983) ·
Ionization of xenon by electron impact at moderate temperatures. [E, Xe; ioniz. coeff. at T_e = 7800 - 9200 K]
- O R. Velotta, L. Avaldi, R. Camilloni, F. Giammanco, N. Spinelli and G. Stefani : Phys. Rev. A54, 2482-2485 (1996)
Direct measurement of macroscopic electric fields produced by collective effects in electron-impact experiments. [T, Xe, He; Xe N00 spectra]
- EX E. T. Verkhovtseva and P. S. Pogrebnyak : Opt. Spectrosc. 48, 473-475 (1980a) ·
Evidence of many-electron effects in ultrasoft X-ray spectra of krypton and xenon emission. [E, Xe, Kr]
- EX E. T. Verkhovtseva and P. S. Pogrebnyak : J. Phys. B13, 3535-3543 (1980b) ·
Manifestation of the dipole relaxation process of super-Coster-Kronig type in soft X-ray emission spectra of Kr and Xe. [E, Xe, Kr; 0.6 - 1 keV]
- EX E. T. Verkhovtseva, E. V. Gnatchenko and P. S. Pogrebnyak : J. Phys. B16, L613-L616 (1983) ·
Investigation of the connection between 'giant' resonances and 'atomic' bremsstrahlung. [E, Xe; 600 eV]

- EX E. T. Verkhoviseva, E. V. Gnatchenko, P. S. Pogrebnyak and A. A. Tkachenko : J. Phys. B 19, 2089-2108 (1986) ·
Electron-produced ultrasoft X-ray spectrum of Xe. [E, Xe; 140 - 2000 eV]
- QT R. W. Wagenaar and F. J. de Heer : J. Phys. B13, 3855-3866 (1980) ○Z.
Corrigenda 19, 2599-2599 (1986)
Total cross sections for electron scattering from Ne, Ar, Kr and Xe.
[E, Ne - Xe, 17.5 - 750 eV, error 5%]
- E R. Wagenaar : PhD Thesis, Amsterdam 1-190 (1984) ·
Small angle elastic scattering of electrons by noble gas atoms.
[E, He - Xe]
- QT R. W. Wagenaar and F. J. de Heer : J. Phys. B18, 2021-2036 (1985) ○Z
Total cross sections for electron scattering from Ar, Kr and Xe.
[E, Ar - Xe, 17.5 - 750 eV, error 5%]
- E R. W. Wagenaar, A. de Boer, T. van Tubergen, J. Los and F. J. de Heer : J. Phys. B19, 3121-3143 (1986) ○Z
Absolute differential cross sections for elastic scattering of electrons over small angles from noble-gas atoms.
[E, He - Xe, 20 - 200 eV, 1 - 9°]
- O M. Walhourt, A. Witte and S. L. Rolston : Phys. Rev. Lett. 72, 2843-2846 (1994) ·
Precision measurement of the metastable $6s [3/2]_2$ lifetime in xenon.
[E, Xe; ^{132}Xe 42.9 s, ^{136}Xe 42.4 s]
- O B. Walker, E. Mevel, B. Yang, P. Breger, J. P. Chambaret, A. Antonetti, L. F. DiMauro and P. Agostini : Phys. Rev. A48, R894-R897 (1993)
Double ionization in the perturbative and tunneling regimes.
[E, $h\nu$, Xe, He]
- O B. Wannberg, H. Veenhuizen, K. -E. Norell, L. Karlsson, L. Mattsson and K. Siegbahn : J. Phys. B19, 2267-2277 (1986)
Angular distribution of photoelectrons from p levels in Ar, Kr and Xe close to threshold. [E, $h\nu$, Xe, Kr, Ar]
- S J. M. Warman, U. Sowada and M. R. De Haas : Phys. Rev. A31, 1974-1976 (1985)
Transient negative mobility of hot electrons in gaseous xenon.
[E, Xe; 10 atm., 295 K]
- I R. C. Wetzel, F. A. Baiocchi, T. R. Hayes and R. S. Freund : Phys. Rev. A35, 559-577 (1987) ○Z
Absolute cross sections for electron-impact ionization of the rare-gas atoms by the fast-neutral-beam method. [E, He - Xe; th. - 200 eV]
- E M. Weyhreter, B. Barzick and F. Linder : 13th ICPEAC, Berlin 78-78 (1983)
Measurements of differential cross sections for e - Ar, Kr, Xe scattering at E = 50 meV - 2 eV. [E, Ar - Xe]

- E M. Weyhreter, B. Barzick and F. Linder : 13th ICPEAC, Berlin 547-552 (1984) -
Measurements of differential cross sections for e - Ar, Kr, Xe scattering
at E = 50 meV - 2 eV. [E, Ar - Xe]
- E M. Weyhreter, B. Barzick, A. Mann and F. Linder : Z. Phys. D7, 333-347 (1988) ○Z
Measurements of differential cross sections for e - Ar, Kr, Xe scattering
at E = 0.05 - 2 eV.
[E, Ar - Xe ; 0.05 eV, 70 - 100° ; 0.2 eV, 40 - 100° ; 1.5 eV, 20 - 100°]
- I C. T. Whelan, R. J. Allan and H. R. J. Walters : J. Physique IV, 3, C6, 39-48 (1993) -
PCI, polarisation and exchange effects in (e, 2e) collisions.
[E, Xe, Ar, He, H; post collision interaction]
- O S. B. Whitfield, C. D. Caldwell, D. X. Huang and M. O. Krause : J. Phys. B25, 4755-4771
(1992)
Near threshold 4d photoexcitation and photoionization of xenon.
[E, hν, Xe]
- E J. F. Williams and A. Crowe : J. Phys. B8, 2233-2248 (1975) ○Z
The scattering of electron from inert gases II. Absolute differential
elastic cross sections for neon, krypton and xenon atoms.
[E, Xe, Ne, Kr; 20 - 400 eV, 20 - 150°]
- O A. A. Wills, A. A. Cafolla and J. Comer : J. Phys. B23, 2029-2036 (1990)
Resonance structure in the 5p, 5s and satellite photoelectron lines of
xenon. [E, hν, Xe]
- O J. Z. Wu, S. B. Whitfield, C. D. Caldwell, M. O. Krause, P. van der Meulen and A. Fahlman :
Phys. Rev. A42, 1350-1357 (1990)
High-resolution photoelectron spectroscopy of selected ns' and nd'
autoionization resonances in Ar, Kr, and Xe. [E, hν, Ar - Xe]
- E W. Wubker, R. Mollenkamp and J. Kessler : Phys. Rev. Lett. 49, 272-275 (1982) -
"Perfect" elastic e⁻ - Xe scattering experiment. [E, Xe]
- O B. W. Yates, K. H. Tan, L. L. Coatsworth and G. M. Bancroft : Phys. Rev. A31, 1529-1534
(1985)
High-resolution gas-phase photoelectron spectra using synchrotron
radiation : Xe 4d linewidths and the 4d_{5/2}:4d_{3/2} branching ratio.
[E, hν, Xe]
- E A. W. Yau, R. P. McEachran and A. D. Stauffer : J. Phys. B13, 377-384 (1980)
Electron scattering from noble gases. II : Argon, krypton and xenon.
[T, Ar - Xe]
- O J. J. Yeh and I. Lindau : Atomic Data Nucl. Data Tables 32, 1-155 (1985)
Atomic subshell photoionization cross sections and asymmetry parameters :
1 ≤ Z ≤ 103. [T, hν, He - Xe, etc.]
- O F. Yergeau, G. Petite and P. Agostini : J. Phys. B19, L663-L669 (1986)
Above-threshold ionisation without space charge.
[E, hν, Xe; Nd: YAG laser]

- I S. M. Younger : Phys. Rev. A35, 2841-2851 (1987)
Giant resonance effects in the electron-impact ionization of heavy atoms and ions. [T, Xe, Cs⁺, etc.; 4d subshell, Z > 50]
- I S. M. Younger : Phys. Rev. A37, 4125-4132 (1988)
Electron-impact ionization cross sections for the xenon isoelectronic sequence. [T, Xe, Cs⁺, Ba²⁺, etc.]
- E S. Y. Yousfi and J. A. D. Matthew : J. Phys. B19, 3305-3311 (1986)
Local-density approximations to the elastic scattering slow electrons from Ne, Ar, Kr and Xe atoms. [T, Ne - Xe]
- E J. Yuan and Z. Zhang : J. Phys. B22, 2581-2588 (1989)
Low-energy electron scattering from Kr and Xe atoms. [T, Xe, Kr; 0.1 - 20 eV]
- E J. Yuan and Z. Zhang : J. Phys. B24, 275-285 (1991)
Application of the quasirelativistic approach to low-energy electron-atom scattering : Xe. [T, Xe]
- E J. Yuan and Z. Zhang : 18th ICPEAC, Aarhus 143-143 (1993)
Energy and angular dependence of electron spin polarization elastically scattered from Kr and Xe atoms in the Ramsauer-Townsend region. [T, Xe, Kr; 0.1 - 1.5 eV]
- O I. Zakrzewski : J. Phys. B19, L315-L319 (1986)
On the Geltman-Hartree model of multiple ionisation by intense laser pulses. [T, h ν , Xe]
- EX A. N. Zaviopulo, A. V. Snegursky, O. B. Shpenik and N. N. Kutsina : Sov. Phys. JETP 54, 449-453 (1981)
Excitation of metastable states of rare-gas atoms by electron impact in the near-threshold energy range. [E, He - Xe; no DCS data for Xe]
- QT A. Zecca, G. Karwasz, R. S. Brusa and R. Grisenti : J. Phys. B24, 2737-3746 (1991) ○ Z
Absolute total cross section measurements for intermediate-energy electron scattering : IV. Kr and Xe. [E, Xe, Kr; 81 - 4000 eV, error 5%]
- E A. Zecca, G. P. Karwasz and R. S. Brusa : Rivista Nuovo Cimento 19, 1-146 (1996) ○
- EX One century of experiments on electron-atom and molecule scattering :
I a critical review of integral cross-sections. I. - Atomic and diatomic
QT molecules. [compilation, He - Xe, Li - Cs, H₂, etc.]
- EX V. Zeman, K. Bartschat, C. Noren and J. W. McConkey : Phys. Rev. A58, 1275-1281 (1998) ○
Near-threshold electron-impact excitation of the vacuum-ultraviolet resonance transitions in Ne, Ar, Kr, and Xe. [E and T, Ne - Xe]
- I X. Zhang, C. T. Whelan and H. R. J. Walters : Z. Phys. D18, 309-310 (1991)
Electron impact ionization of the noble gases in coplanar symmetric geometry over the energy range 100 to 1000 eV. [T, He - Xe]

- I X. Zhang, C. T. Whelan and H. R. J. Walters : Z. Phys. D23, 301-308 (1992)
Distorted-wave Born approximation calculations of (e, 2e) reactions.
[T, Xe, He, Ar]
- O B. Zhou, L. Kissel and R. H. Pratt : Phys. Rev. A45, 2983-2988 (1992)
Near-threshold structures in anomalous scattering factors.
[T, h ν , Xe, Ar, Ne, Zn]
- E V. J. Zigman : Z. Phys. D22, 611-618 (1992)
Evaluation of the viscosity cross sections for elastic electron-atom
collisions in krypton and xenon at low electron energies. [T, Xe, Kr]
- E V. J. Zigman : 20th ICPEAC, Vienna TH031 (1997)
The viscosity cross section for elastic electron-xenon collisions
including relativistic effects. [T, Xe]
- O B. A. Zon : J. Exp. Theor. Phys. 80, 655-656 (1995)
Bremsstrahlung in intermediate-energy electron scattering by noble gas
atoms. [T, Kr, Xe]
- E M. Zubek, J. M. Channing, G. C. King and F. H. Read : 20th ICPEAC, Vienna TH015
(1997) .
Observation of resonance structures in elastic electron scattering
in the backward hemisphere. [E, Ar - Xe; relative DCS at 180°]
- E M. Zubek, B. Mielewska, J. Channing, G. C. King and F. H. Read : J. Phys. B32, 1351-1363
(1999) ○
A study of resonance structures in elastic electron scattering from
helium, neon, argon, krypton and xenon over the angular range from 100°
to 180°. [E, He - Xe]
- EX T. Zuo, R. P. McEachran and A. D. Stauffer : J. Phys. B24, 2853-2870 (1991a) .
Relativistic distorted-wave calculation of electron impact excitation of
xenon. [T, Xe]
- EX T. Zuo, R. P. McEachran and A. D. Stauffer : Atomic and Molecular Phys., 3rd
US/Mexico Symp., Morelos 191-197 (1991b)
Alignment and orientation parameters for electron excitation of xenon.
[T, Xe]
- EX T. Zuo, R. P. McEachran and A. D. Stauffer : J. Phys. B25, 3393-3403 (1992) .
Relativistic distorted-wave calculation of electron excitation of heavy
noble gases. [T, Ar - Xe]

- O M. Ya. Amusia, V. K. Ivanov, N. A. Cherepkov and L. V. Chernysheva : Sov. Phys. JETP 39, 752-758 (1974)
Inter shell and intersubshell effects in photoionization of atoms.
[T. $h\nu$, Ne - Xe, Ca, Zn]
- I M. Ya. Amusia, N. B. Rerezina and L. V. Chernysheva : Phys. Lett. 51A, 101-102 (1975a)
Single ionization of Xe by fast electrons in the vicinity of the $4d^{10}$ subshell threshold. [T, Xe]
- I M. Ya. Amusia, N. B. Berezina and L. V. Chernysheva : 9th ICPEAC, Seattle 2, 889-890 (1975b)
Single charge ionization by electron impact of Kr and Xe outer shells in the vicinity of the inner shell threshold. [T, Kr, Xe]
- EX M. Ya. Amusia, S. I. Sheftel and L. V. Chernysheva : 9th ICPEAC, Seattle 2, 1102-1103 (1975c)
Inelastic electron scattering on the outer shell of Xe with account of correlations. [T, Xe; 3 keV]
- EX M. Ya. Amusia and N. A. Cherepkov : in Case Studies in Atomic Collision Physics 5, 47-179 (1975d)
Many-electron correlations in scattering processes. [review]
- EX M. Ya. Amusia, V. K. Ivanov and S. A. Sheinerman : J. Phys. B9, 1537-1553 (1976a)
Inner-shell correlation in the inelastic scattering of fast electrons of the outer subshells in Ar and Xe.
[T, Xe, Ar; generalized oscill. strengths]
- E M. Ya. Amus'ya, N. A. Cherepkov, L. V. Chernysheva, S. G. Shapiro and A. Tanchich : Sov. Phys. JETP 41, 1012-1016 (1976b) ·
Elastic scattering of slow electrons by atoms. [T, Xe, Ar, He]
- EX M. Ya. Amus'ya, V. K. Ivanov and S. A. Sheinerman : Sov. Phys. Tech. Phys. 21, 1299-1300 (1976c) ·
Generalized oscillator strengths for discrete excitations of the Xe $5s^2$ subshell. [T, Xe]
- O M. Ya. Amusia, V. K. Ivanov and L. V. Chernysheva : Phys. Lett. A59, 191-193 (1976d)
Photoionization cross section of $4d^{10}$ Xe, Cs, and Ba subshells with account of electron shell rearrangement. [T. $h\nu$, Xe, Cs, Ba]
- O M. Ya. Amusia and V. K. Ivanov : Phys. Lett. A59, 194-196 (1976e)
The peculiarities of photoelectron angular distribution and ionization cross section of $5p^6$ subshell in Xe. [T, $h\nu$, Xe]
- O M. Ya. Amusia, I. S. Li and S. I. Sheftel : Bull. Acad. Sci. USSR Phys. Ser. 41, 57-64 (1977)
Photoionization from the excited states of argon and xenon atoms.
[T, $h\nu$, Xe, Ar]

- O G. S. Argyropoulos and M. A. Casteel : J. Appl. Phys. 41, 4162-4165 (1970)
Tables of interaction parameters for computation of Ohm's law coefficients
in various gases. [T, Xe, Ar, He, CO, CO₂]
- O L. Armstrong, Jr. and J. R. Swanson : 10th ICPEAC, Paris 2, 1178-1179 (1977)
Multiconfiguration Hartree Fock calculation of photoionization cross
sections. [T, h ν , Xe]
- E F. L. Arnot : Proc. Roy. Soc. London A133, 615-636 (1931)
The diffraction of electrons in gases.
[E, Ne - Xe, H₂, N₂, CO, CH₄; DCS, relative, 42 - 780 eV, 20 - 120°]
- I R. K. Asundi : 6th ICPIG, Paris 1, 29-32 (1963a)
Ionization cross-sections near the threshold for the rare gases.
[E, He - Xe]
- I R. K. Asundi and M. V. Kurepa : J. Elect. Control 15, 41-50 (1963b)
Ionization cross sections in He, Ne, Ar, Kr and Xe by electron impact.
[E, He - Xe; th. - 100 eV]
- α V. M. Atrazhev, I. T. Yakubov and V. I. Roldugin : J. Phys. D9, 1735-1742 (1976)
The Townsend coefficient of ionization in dense gases and fluids.
- O A. Aymar : Physica 57, 178-190 (1972)
Etude theorique des probabilites de transitions et des interactions de
configurations proches dans les spectres des gaz rares. [T, h ν , Ne - Xe]
- O M. Aymar and M. Coulombe : Atomic Data Nucl. Data Tables 21, 537-566 (1978)
Theoretical transition probabilities and lifetimes in Kr I and Xe I
spectra. [T and compilation, Xe, Kr]
- O V. I. Baskakov, V. K. Chernyatin, et al. (total 16 persons) : Nucl. Instrum. Meth.
159, 83-92 (1979)
Multiple-plate total-absorption ionization spectrometer based on
compressed gas. [E, h ν , Xe; up to 25 atm]
- O R. Ch. Bass and R. H. J. Jansen : Comput. Phys. Comm. 12, 267-276 (1976)
Computer analysis of experimental results on differential scattering of
electrons by gases. [program, inert gases, see R. H. J. Jansen (1976)]
- I A. K. Batabyal, A. K. Barua and B. N. Srivastava : Indian J. Phys. 39, 219-226 (1965)
Ionization cross-section of atoms and molecules by electron impact.
[T, Ne - Xe, H₂, N₂, O₂]
- O E. C. Beaty, J. Dutton and L. C. Pitchford : JILA Information Center Report No. 20,
1-240 (1979)
A bibliography of electron swarm data. [compilation]
- I J. A. Beran and L. Kevan : J. Phys. Chem. 73, 3866-3876 (1969)
Molecular electron ionization cross sections at 70 eV.
[E, He - Xe, 57 hydrocarbons, fluorocarbons and others]

- I E. Berezhko and N. M. Kabachnik : J. Phys. B10, 2467-2477 (1977) -
Theoretical study of inner-shell alignment of atoms in electron impact
ionisation : angular distribution and polarisation of X-rays and Auger
electrons. [T. Xe($4d_{3/2,5/2}$), Kr, Ar, Mg]
- E R. A. Berg, J. E. Purcell and A. E. S. Green : Phys. Rev. A3, 508-510 (1971)
Addendum to "Potential-scattering model for electrons on helium and
other atoms." [T. Ar - Xe ; for Xe, 100 - 300 eV]
- I R. A. Berg and A. E. S. Green : in Advances in Quantum Chemistry 7, Academic
Press 277-288 (1973)
An analytic independent particle model for atoms. III. Ionization of rare
gas atoms by electrons in the Born approximation. [T. Ne - Xe]
- O H. Beutler : Z. Phys. 93, 177-196 (1935)
Uber Absorptionsserien von Argon, Krypton und Xenon zu Termen zwischen
den beiden Ionisierungsgrenzen $^2P^o_{3/2}$ und $^2P^o_{1/2}$.
[E. $h\nu$, Ar - Xe; 1070 - 600 Å]
- α A. K. Bhattacharya : Phys. Rev. A13, 1219-1225 (1976)
Measurement of breakdown potentials and Townsend ionization coefficients
for the Penning mixtures of neon and xenon. [E. Ne + Xe]
- QT H. J. Blaauw : PhD Thesis, Amsterdam 1-174 (1979)
On the forward dispersion relation for electron-atom scattering.
[E. ; 15 - 750 eV]
- O H. E. Blackwell, G. S. Bajwa, G. S. Shipp and G. L. Weissler : J. Quant. Spectrosc.
Radiat. Transf. 4, 249-269 (1964)
Vacuum ultraviolet radiation as a probe of rare gas plasmas.
[E. $h\nu$, Ar - Xe]
- I C. Blanc, D. Blanc, A. Degeilh and C. Malessat : J. Phys. Radium 23, 219-222 (1962)
Application de la spectrometrie de masse a l'etude de l'ionisation
des gaz. [E. He - Xe, C_6H_6 ; 33 - 43 eV for Xe^{2+}]
- E R. A. Bonham and H. L. Cox, Jr. : J. Chem. Phys. 47, 3508-3517 (1967)
40-kV electron scattering from Ne, Ar, Kr, and Xe measured by the
sector-microphotometer electron-diffraction method. [E. Ne - Xe]
- E R. A. Bonham : J. Chem. Phys. 52, 2387-2391 (1970)
Absorptive part of charge polarization corrections for electron
scattering in the kiloelectron volt energy range. [T. Xe, Ne]
- EX V. S. Borozdin and Yu. M. Smirnov : Opt. Spectrosc. 46, 634-636 (1979) -
Excitation of Xe I infrared lines by low-energy electrons.
[E. Xe; emission, th. - 50 eV]
- O W. L. Borst : Rev. Sci. Instrum. 42, 1543-1544 (1971)
Secondary electron yields from Cu-Be-O surface by thermal CO, N₂, and
noble gas metastables. [E. He^m - Xe^m, CO^m, N₂^m]

- S J. C. Bowe : Phys. Rev. 117, 1411-1415 (1960a)
Drift velocity of electrons in nitrogen, helium, neon, argon, krypton and xenon. [E, He - Xe, N₂]
- E J. C. Bowe : Phys. Rev. 117, 1416-1420 (1960b) -
Transport collision cross sections from electron drift-velocity data. [T, He - Xe, N₂]
- S J. C. Bowe : Phys. Rev. 134, A355-A361 (1964)
Mobility of electrons in the noble gases. [T, Ne - Xe]
- E G. L. Braglia : Phys. Lett. 17, 260-261 (1965a) -
Momentum-transfer cross sections for slow electrons in krypton and xenon. [compilation, Xe, Kr]
- E G. L. Braglia, G. M. deMumari and G. Mambriani : Comitato Nazionale Energia Nucleare RT/FI (65) 60, 1-14 (1965b)
Elastic cross sections of low energy electrons in rare gases. [compilation, He - Xe]
- S G. L. Braglia and L. Ferrari : Nuovo Cimento B67, 167-202 (1970)
"Stationarization" of the velocity distribution function of electrons in a gas in an electric field. [T, He - Xe]
- S G. L. Braglia and L. Ferrari : Nuovo Cimento B4, 245-261 (1971a)
Time-dependent electron speed distribution function in an electric field in a gas. I. "Stationarization" in Ar, Kr and Xe. [T, Ar - Xe]
- S G. L. Braglia and L. Ferrari : Nuovo Cimento B4, 262-274 (1971b)
Time-dependent electron speed distribution function in an electric field in a gas. II. Gas temperature effects. [T, Xe; E/N = 15 Td, T = 300 and 0 K]
- O W. Brandt and S. Lundqvist : J. Quant. Spectrosc. Radiat. Transf. 7, 411-421 (1967)
Collective effects in the photoabsorption cross sections of atoms and molecules. [T, h ν , Xe]
- O B. Brehm : Z. Naturforsch. 21a, 196-209 (1966)
Massenspektrometrische untersuchung der Photoionisation von Molekullen. [E, h ν , Xe, Hg, O₂, H₂O, D₂O, C₂H₂, C₂H₄, C₆H₆, CH₄, etc.]
- EX C. E. Brion, C. R. Eaton, L. A. R. Olsen and G. E. Thomas : Chem. Phys. Lett. 3, 600-602 I (1969) -
Threshold excitation and ionization of xenon by electron impact. [E, Xe]
- EX C. E. Brion and L. A. R. Olsen : Phys. Rev. 187, 111-113 (1969b) -
Threshold electron-impact excitation of the 5s electron in xenon. [E, Xe]
- EX C. E. Brion and L. A. R. Olsen : J. Phys. B3, 1020-1033 (1970)
Threshold electron impact excitation of the rare gases. [E, He - Xe]
- QT R. B. Brode : Rev. Mod. Phys. 5, 257-279 (1933) -
The quantitative study of the collisions of electrons with atoms. [review, He - Xe, Na - Cs, CO₂, etc.]

- O J. E. Brolley, L. E. Porter, R. H. Sherman, J. K. Theobald and J. C. Fong : J. Geophys. Res. 78, 1627-1632 (1973)
Photoabsorption cross section of H₂, D₂, N₂, O₂, Ar, Kr and Xe at the 584-A line of neutral helium. [E, hν, Ar - Xe, H₂, etc.]
- E J. P. Bromberg : J. Chem. Phys. 61, 963-969 (1974) ○ Z
Absolute differential cross sections of electrons elastically scattered by the rare gases. I. Small angle scattering between 200 and 700 eV. [E, He - Xe; 300 - 700 eV, 3 - 25°]
- EX J. N. H. Brunt, G. C. King and F. H. Read : J. Phys. B9, 2195-2207 (1976) · Z
A study of resonance structure in neon, argon, krypton and xenon using metastable excitation by electron impact with high energy resolution. [E, Ne - Xe; th. - 16 eV]
- EX J. N. H. Brunt, G. C. King and F. H. Read : J. Phys. B10, 3781-3796 (1977) ○ Z
Near-threshold electron impact excitation of ultraviolet-emitting levels of neon, argon, krypton and xenon atoms. [E, Ne - Xe; th. - 13.8 eV]
- E S. J. Buckman, P. J. O. Teubner and H. Ariola : Report FIAS-R-33, Flinders Univ. (1978)
[E, Xe; 50 - 400 eV, 15 - 140°]
- I C. J. Burkley and M. C. Sexton : Brit. J. Appl. Phys. 18, 443-445 (1967)
Ionization rates in the inert gases. [E, Xe, He, Ar; microwave]
- I J. F. Burns : in Atomic Collision Processes, 3rd ICPEAC, London 451-460 (1964)
Auto-ionization and the ionization efficiency curves for krypton and xenon. [E, Xe, Kr; 11.8 - 14 eV for Xe]
- O R. B. Cairns, H. Harrison and R. I. Schoen : Phys. Rev. 183, 52-56 (1969)
Multiple photo-ionization of xenon. [E, hν, Xe; 28 - 83 eV]
- O R. B. Cairns, H. Harrison and R. I. Schoen : Phil. Trans. Roy. Soc. London A268, 163-167 (1970)
Multiple photoelectron processes and their relationship to electron energy spectra. [, hν, Xe.
- EX J. D. Carette and D. Roy : J. Elect. Spectrosc. Relat. Phenom. 9, 783- (1976)
The fine structure of the electroexcitation functions of the Kr 4p⁵5s and Xe 5p⁵5s states in the autoionization. [E, Xe, Kr]
- O T. A. Carlson and A. E. Jonas : J. Chem. Phys. 55, 4913-4924 (1971)
Angular distribution of the photoelectron spectra for Ar, Kr, Xe, H₂, N₂ and CO. [E, hν, Ar - Xe, etc.]
- O V. L. Carter and R. D. Hudson : J. Opt. Soc. Am. 63, 733-735 (1973)
Absorption spectra of krypton and xenon in their regions of auto-ionization. [E, hν, Xe, Kr; 918 - 990 Å for Xe]

- I S. Chandra, H. P. Mital and U. Narain : Physica C83, 384-388 (1976) .
Ionization cross sections and rate coefficients for atoms, ions and molecules. [T, Ar - Xe, Hg, H₂, N₂, O₂, CO, NO, etc.]
- E C. L. Chen : Phys. Rev. 131, 2550-2555 (1963)
Atomic processes in helium-krypton and helium-xenon mixtures.
[E, Xe + He, Kr + He]
- O N. A. Cherepkov : Phys. Lett. A66, 204-206 (1978)
Angular distribution and spin polarization of Xe 5s → ε p photons.
[T, hν, Xe]
- I C. Chiandusso and F. C. Farnoux : Compt. Rend. Acad. Sci. B277, 463-466 (1973)
Calcul de la section efficace d'ionisation par impact électronique pour la sous-couche 4d du xenon. [T, Xe]
- O P. D. Chopra and D. W. O. Heddle : J. Phys. B7, 2421-2428 (1974)
Polarization free measurements of Rayleigh scattering of Lyman α.
[E, hν, Ar - Xe, H₂, N₂]
- E M. H. Choudhury : Phys. Rev. 186, 66-82 (1969) .
Pressure shifts of high-series spectral lines and cross sections for scattering of very slow electrons from rare-gas atoms.
[T, He - Xe; 0.03 - 0.2 eV]
- E M. H. Choudhury and J. Dunning-Davies : Phys. Rev. A7, 1549-1554 (1973) .
Pressure shifts of high-series spectral lines and cross sections for scattering of very slow electrons from rare-gas atoms. II.
[T, no example]
- I G. G. Cloutier and H. I. Schiff : J. Chem. Phys. 31, 793-799 (1959)
Electron impact study of nitric oxide using a modified retarding potential difference method.
[E, Xe, NO; 12 - 14 eV for Xe, attachment for NO, CO, SF₆]
- I E. M. Clarke : Can. J. Phys. 32, 764-774 (1954)
Ionization probability curves using an electron selector. [E, Xe, N₂]
- EX K. Codling and R. P. Madden : Phys. Rev. Lett. 12, 106-108 (1964) .
Optically observed inner shell electron excitation in neutral Kr and Xe.
[E, Xe, Kr]
- O K. Codling and R. P. Madden : Phys. Rev. A4, 2261-2263 (1971)
Resonances in the photoionization continuum of Kr and Xe.
[E, hν, Xe, Kr]
- I J. H. Collins and R. E. Winters : J. Chem. Phys. 49, 2469-2472 (1968)
Fine structure in energy-distribution-difference ionization-efficiency curves. [E, Xe, C₂H₂; for Xe th. - 13.5 eV]
- O F. J. Comes and H. G. Salzer : Phys. Rev. 152, 29-35 (1966)
Configuration interaction and absorption spectra of gases.
[T, hν, Xe; see R. E. Huffman (1963)]

- O F. J. Comes, H. G. Salzer und G. Schumpe : Z. Naturforsch. 23a, 137-151 (1968)
Autoionisation in Atomspektren. [T, $h\nu$, Xe, Kr, Ar]
- O J. W. Cooper : Phys. Rev. Lett. 13, 762-764 (1964)
Interaction of maxima in the absorption of soft X rays.
[T, $h\nu$, Xe, Ar]
- O R. Cooper, F. Grieser and M. C. Sauer, Jr. : J. Phys. Chem. 81, 1889-1894 (1977a)
A kinetic study of the formation of excited states in the pulse radiolysis of gaseous xenon-iodine systems. [E, Xe + I₂]
- O R. Cooper, F. Grieser, M. C. Sauer, Jr. and D. F. Sangster : J. Phys. Chem. 81, 2215-2220 (1977b)
Formation and decay kinetics of the 2p levels of neon, argon, krypton and xenon produced by electron-beam pulses. [E, Ne - Xe]
- E A. Crowe and J. F. Williams : 9th ICPEAC, Seattle I, 451-452 (1975)
Absolute differential cross sections for the elastic scattering of electrons from neon, krypton and xenon.
[E, Xe, Ne, Kr; see J. F. Williams (1975)]
- I N. R. Daly : Proc. Phys. Soc. London 85, 897-907 (1965)
Higher autoionization processes in argon and xenon.
[E, Xe, Ar; th. - 240 eV for Xe]
- O V. A. Davidenko, B. A. Dolgoshein, S. V. Somov and V. N. Staroseltsev : Sov. Phys. JETP 30, 49-53 (1970)
Study of electron collisions in noble gases by means of a streamer chamber. [E, Xe, Ne, He, H₂O, N₂O, N₂]
- E F. J. de Heer, R. H. J. Jansen and W. van der Kaay : J. Phys. B12, 979-1002 (1979) ○ Z
I Total cross sections for electron scattering by Ne, Ar, Kr and Xe.
QT [E and compilation, Ne - Xe ; 20 - 3000 eV]
- EX A. Delage and C. -D. Carette : Phys. Rev. A14, 1345-1353 (1976)
Oscillator strengths of Xe I electronic transitions measured by electron spectrometry. [E, Xe; 15 - 450 eV, 0 - 90°]
- EX A. Delage, D. Roy and J. -D. Carette : J. Phys. B10, 1487-1496 (1977) Z
Electroexcitation of Xe I energy levels in the 18 - 24 eV autoionization region. [E, Xe; 18 - 24 eV]
- I F. de la Ripelle : J Phys. Radium 10, 319-329 (1949)
Etude sur les coefficients spécifiques d'ionisation.
[T, He - Xe, H, Na]
- S G. M. de' Munari, G. Mambriani and F. Giusiano : Lett. Nuovo Cimento 3, 849- (1970) .
Electron resonance-trapping in rare gases in an electric field and transport properties. [E, Xe only; E/N = 1.41 and 2.54 Td]

- EX G. M. de' Munari, G. Mambriani, L. Gabba and F. Giusiano : Lett. Nuovo Cimento 2, 68-72 (1971a)
Electroluminescence of rare gases and electron bremsstrahlung.
[T. Xe, He]
- EX G. M. de' Munari, G. Mambriani, L. Gabba and F. Giusiano : Lett. Nuovo Cimento 2, 527-530 (1971b)
Electroluminescence of rare gases and dimer excitation. [T, Xe]
- O E. Dershem and M. Schein : Phys. Rev. 37, 1238-1245 (1931)
The absorption of the $K\alpha$ line of carbon in various gases and its dependence upon atomic number.
[E, $h\nu$, He - Xe, C, N, O, N_2 , O_2 , CO_2 , etc.]
- O R. D. Deslattes : Phys. Rev. Lett. 20, 483-485 (1968)
Photoionization of the M shell of xenon. [E, $h\nu$, Xe; 670 - 800 eV]
- E D. P. Dewangan and H. R. J. Walters : J. Phys. B11, 3983-4017 (1978)
I Electron loss from H(2s), H(1s), He(1^1S), He(2^3S), Li(2^2S), H^- and He^- projectiles passing through the inert gases - the free-collision model.
[T, electron, He - Xe]
- O D. Dill : Phys. Rev. A7, 1976-1987 (1973)
Resonances in photoelectron angular distributions. [T, $h\nu$, Xe, Hg]
- EX A. J. Dixon and A. von Engel : Int. J. Elect. 25, 233-237 (1968)
Total inelastic cross sections for slow electrons in xenon.
[E, Xe; 8 - 12 eV]
- I A. J. Dixon, I. E. McCarthy, C. J. Noble and E. Weigold : Phys. Rev. A17, 597-603 (1978)
Factorized distorted-wave approximation for the (e, 2e) reaction on atoms : Noncoplanar symmetric. [T, Xe, Ne; 400 - 2500 eV]
- O A. Dobay-Szegleth : Acta Phys. Acad. Sci. Hung. 21, 235- (1966)
Calculation of atomic form factors from the statistical electron-density distributions. [T, Xe, Kr, Ar]
- EX G. G. Dolgov-Savelev and V. E. Panchenko : Opt. Spectrosc. 28, 575-578 (1970)
Electron-excitation cross sections for X-ray series of chlorine, argon, and xenon. [E, Xe, Cl, Ar; 3 - 16 keV]
- I F. H. Dorman, J. D. Morrison and A. J. C. Nicholson : J. Chem. Phys. 31, 1335-1337 (1959)
Probability of multiple ionization by electron impact. [E, Xe, Ar]
- I F. H. Dorman and J. D. Morrison : J. Chem. Phys. 34, 1407-1410 (1961)
Ionization potentials of multiply charged krypton, xenon, and mercury.
[E, Xe, Kr, Hg]
- EX J. T. Dowell : Thesis, University of California 1-49 (1966)
Production of metastable atoms by electron impact. [E, Xe, Kr, Ar]

- O M. J. Druyvesteyn and F. M. Penning : Rev. Mod. Phys. 12, 87-174 (1940) -
The mechanism of electrical discharges in gases of low pressure.
[review. He - Xe, etc.]
- O T. L. Dutt : J. Phys. B2, 234-246 (1966)
Investigations of the afterglows of pulsed rare gas discharges in the
frequency range 200 - 1500 MHz. [E, Xe, Kr, Ar, He]
- S J. Dutton : J. Phys. Chem. Ref. Data 4, 577-856 (1975) ○
A survey of electron swarm data. [compilation, Xe, etc.]
- O D. L. Ederer : Phys. Rev. Lett. 13, 760-762 (1964)
Photoionization of the 4d electrons in xenon. [E, $h\nu$, Xe]
- O D. L. Ederer : Phys. Rev. A4, 2263-2270 (1971)
Cross-section profiles of resonances in the photoionization continuum
of krypton and xenon (600 - 400 Å). [E, $h\nu$, Xe, Kr]
- O D. L. Ederer and M. Manalis : J. Opt. Soc. Am. 65, 634-637 (1975)
Photoabsorption of the 4d electrons in xenon. [E, $h\nu$, Xe]
- I F. Egger and T. D. Mark : Z. Naturforsch. A33, 1111-1113 (1978) -
Cross section ratios for the electron impact production of singly and
multiply ionized rare gas ions. [E, He - Xe]
- I Th. M. El-Sherbini, M. J. van der Wiel and F. J. de Heer : Physica 48, 157-164
(1970) -
Multiple ionization of Kr and Xe by 2 - 14 keV electrons. [E, Xe, Kr]
- I Th. M. El-Sherbini and M. J. van der Wiel : Physica 62, 119-138 (1972) -
Oscillator strengths for multiple ionization in the outer and first
inner shells of Kr and Xe. [E, Xe, Kr]
- EX S. B. Elston, S. A. Lawton and F. M. J. Pichanick : 8th ICPEAC, Belgrade 480-481
(1973) -
High resolution studies of electron excitation processes in xenon.
[E, Xe; uv intensity from 3P_1 and 1P_1 states, 8 - 13 eV]
- I P. Englander-Golden and D. Rapp : Report LMSC-6-74-64-12, Lockheed Missiles
and Space Company, 1-50 (1964)
Total cross sections for ionization of atoms and molecules by electron
impact.
[E, He - Xe, etc.; These q_1 values are different from D. Rapp (1965)]
- S W. N. English and G. C. Hanna : Can. J. Phys. 31, 768-797 (1953) -
Grid ionization chamber measurements of electron drift velocities in gas
mixtures. [E, Xe, (Ne - Xe) + (CO₂, CH₄), etc.]
- S A. P. Ershov and A. A. Kuzovnikov : J. Physique 40, C7, Grenoble 521-522 (1979)
α Electron energy distribution function in Xe plasma in the presence of
Coulomb collisions. [T, Xe; as a function of ionization degree]

- O J. J. Ewing and C. A. Brau : Phys. Rev. A12, 129132 (1975) ·
Emission spectrum of XeI in electron-beam-excited Xe/I₂ mixtures.
[E. hν, Xe + I₂]
- E H. Faxen and J. Holtsmark : Z. Phys. 45, 307-324 (1927)
Beitrag zur Theorie des Durchganges langsamer Elektronen durch gase.
[T. Ar - Xe, H, Cs]
- EX P. V. Feltsan and I. P. Zapesochinyi : Ukr. Fiz. Zh. 13, 205-210 (1968)
Excitation of inert gases at electron-atom collisions. V. Xenon.
[. Xe]
- E M. Fink and J. Kessler : Z. Phys. 196, 1-15 (1966)
Absolute Wirkungsquerschnitte für Elektronenstreuung um kleine
Winkel. Experimente zum Gültigkeitsbereich der ersten Bornschen
Näherung. [E, Ar - Xe, 37 - 100 keV]
- E M. Fink and A. C. Yates : Atomic Data 1, 385-456 (1970a)
Theoretical electron scattering amplitudes and spin polarizations.
Selected targets, electron energies 100 to 1500 eV.
[T. He - Xe; DCS]
- E M. Fink and A. C. Yates : Technical Rep. No. 88, Univ. of Texas, AD-711, 664, 1-152
(1970b)
Tables of scattering amplitudes and spin polarization of 25, 50, 75, 150,
175, 200, 300, 400, 600, 800 eV electrons scattered elastically from H,
He, C, Ne, Ar, Kr, Rb, Xe, Cs, Au, Hg, Pb, and Bi-I. [T. Xe, etc.]
- O C. D. Finney and A. G. Harrison : Int. J. Mass Spectrom. Ion. Phys. 9, 221-233 (1972)
A third-derivative method for determining electron-impact onset
potentials. [E, Xe, CH₄, C₃H₈, CH₃OH, C₆H₆, etc.]
- I S. N. Foner and B. H. Nall : Phys. Rev. 122, 512-524 (1961)
Structure in the ionization near threshold of rare gases by electron
impact. [E, Ar - Xe]
- EX G. R. Fournier : Opt. Commun. 13, 385-389 (1975) ·
A model for electron-beam excited VUV fluorescence from xenon. [., Xe]
- I R. E. Fox, W. M. Hickam and T. Kjeldaas : Phys. Rev. 89, 555-558 (1953)
Ionization probability curves for krypton and xenon near threshold.
[E, Xe, Kr]
- I R. E. Fox and W. H. Hickam : J. Chem. Phys. 22, 2059-2063 (1954)
Study of carbon monoxide, nitrogen, propylene, and benzene ionization
probability curves near threshold.
[E, Xe, N₂, CO, C₃H₆, C₆H₆; th. - 16.5 eV for Xe]
- I R. E. Fox : in Advances in Mass Spectrometry, Pergamon Press 397-412 (1958)
Study of multiple ionization in helium and xenon by electron impact.
[E, Xe, He]

- I R. E. Fox : J. Chem. Phys. 32, 385-386 (1960)
Threshold ionization of HCl by electron impact.
[E, Xe; th. - 15 eV; HCl]
- EX R. S. Freund and W. Klemperer : J. Chem. Phys. 47, 2897-2904 (1967) -
Molecular beam time-of-flight measurements for the study of metastable
and repulsive electronic states. [E, He - Xe, N₂, CO, C₆H₆, N₂O, CO₂]
- S L. S. Frost and A. V. Phelps : Phys. Rev. 136, A1538-A1545 (1964)
E Momentum-transfer cross sections for slow electrons in He, Ar, Kr and Xe
from transport coefficients. [E, He, Ar - Xe; q_m, 0.001 - 25 eV]
- E C. Fuchtbauer und F. Gossler : Z. Phys. 93, 648-655 (1935)
Verschiebung und Verbreiterung hoher Serienglieder des Cäsiums durch
Quecksilber und Xenon. Verbreiterung von Kalium durch Argon.
[E, hν, Xe, Ar, Hg]
- EX P. S. Ganas and A. E. S. Green : Phys. Rev. A4, 182-193 (1971)
Electron impact excitation of the rare gases. [T, Ne - Xe; th. - 10³ eV]
- E J. Geiger : Z. Phys. 177, 138-145 (1964)
Streuung von 25 keV-Elektronen an Gasen. II. Streuung an Neon, Argon,
Krypton and Xenon. [E, Ne - Xe]
- O S. Geltman : J. Quant. Spectrom. Radiat. Transf. 13, 601-613 (1973)
Free-free radiation in electron-neutral atom collisions.
[T, He - Xe, C, N, O]
- O G. N. Gerasimov and S. Ya. Petrov : Opt. Spectrosc. 41, 108-111 (1976)
Experimental investigation of the deactivation of metastable xenon
atoms in the afterglow. [E, Xe]
- I F. Grasso : Int. J. Mass Spectrom. Ion Phys. 2, 357-365 (1969) -
Optically-forbidden transitions to the Xe autoionizing levels evidenced
by electron impact. [E, Xe; 12 - 13.5 eV]
- I J. T. Grissom, R. N. Compton and W. R. Garrett : Oak Ridge National Lab., ORNL-TM-
2618, 1-163 (1970)
Electron impact excitation and ionization studies of the rare gases.
[E, He - Xe; 15 - 150 eV for Xe]
- E M. Gryzinski : J. Chem. Phys. 62, 2620-2628 (1975) -
Classical theory of atomic collisions. II. Low energy scattering.
[T, Ne - Xe, C_nH_{2n+2}, H₂, H₂O, NH₃, Li, Na]
- EX S. S. Guk and A. M. Devyatov : Vestn. Mosk. Univ. Ser. Mat. Mekh. Astron. Fiz. Khim. 1,
63-71 (1957)
Determination of excitation functions. I. Excitation functions of
several spectral lines of Kr and Xe. [E, Xe, Kr]

- E Yu. K. Gus'kov, R. V. Savvov and V. A. Slobodyanyuk : Sov. Phys. Tech. Phys. 23, 167-171 (1978) -Z
Time-of-flight measurement of the total cross section for elastic scattering of low-energy electrons ($E = 0.025 - 10$ eV) by He, Ne, Ar, Kr, and Xe. [E, He - Xe]
- O T. Gustafsson : Chem. Phys. Lett. 51, 383-385 (1977)
Photoionization cross sections of the 5s electrons in Xe measured with synchrotron radiation. [E, $h\nu$, Xe]
- O R. Haensel, G. Keitel, P. Schreiber and C. Kunz : Phys. Rev. Lett. 22, 398-400 (1969)
Experimental comparison of photoabsorption of solid and gaseous xenon near the $N_{IV,V}$ edge. [E, $h\nu$, Xe]
- I H. D. Hagstrum : Phys. Rev. 104, 309-316 (1956)
Metastable ions of the noble gases. [E, He - Xe]
- EX W. Hanle and D. Riede : Z. Phys. 133, 537-540 (1952)
I Anregungs- und Ionisierungsfunktionen beim Stoss schneller Elektronen. [E, Xe, He; 0.8 - 15 keV for Xe]
- EX W. Hanle, E. Kugler and A. Schmillen : Ann. Phys. 13, 252-273 (1964) -
Uber die Lumineszenz von Edelgasen bei Anregung mit schnellen Elektronen. (Luminescence of rare gases under excitation by fast electrons.) [E, Ne - Xe; 50 keV]
- I A. G. Harrison, E. G. Jones, S. K. Gupta and G. P. Nagy : Can. J. Chem. 44, 1967-1973 (1966) -
Total cross sections for ionization by electron impact. [E, He - Xe, H_2S , C_2H_6 , etc.; q_1 at 75 eV for many atoms and molecules]
- O T. W. Hartquist : J. Phys. B11, 2101-2106 (1978)
Photoionisation cross sections of excited noble-gas atoms and dimers. [T, $h\nu$, He - Xe]
- E J. B. Hasted : Contemp. Phys. 14, 357-387 (1973)
Electron scattering spectroscopy. [review, He - Xe, H_2 , N_2 , O_2 , CO, CS_2 , N_2O , H_2O , C_6H_6]
- E T. Heindorff, J. Hoffft and P. Dabkiewicz : J. Phys. B9, 89-99 (1976) -Z
Elastic electron scattering from krypton and xenon for collision energies up to 10.5 eV. [E, Xe, Kr; 3 - 7.5 eV for Xe]
- O U. Heinzmann, F. Schafers, K. Thimm, A. Wolcke and J. Kessler : J. Phys. B12, L679-L683 (1979)
Polarised photoelectrons produced at xenon atoms by circularly polarised synchrotron radiation. [E, $h\nu$, Xe]
- O U. Heinzmann : Appl. Opt. 19, 4087-4091 (1980)
Spin polarized photoelectrons from atoms and molecules. [review, E, $h\nu$, Ar - Xe, N_2O]

- O H. Helm, K. Stephan and T. D. Mark : Phys. Rev. A19, 2154-2160 (1979)
 I Electron-impact ionization of Ar₂, ArKr, Kr₂, KrXe, and Xe₂.
 [E, Xe₂, KrXe, etc.]
- O B. L. Henke, R. L. Elgin, R. E. Lent and R. B. Ledingham : Norelco Rept. 14, 112-134
 (1967a)
 X-ray absorption in the 2 to 200 Å region. [E, hν, Xe]
- O B. L. Henke, R. L. Elgin, R. E. Lent and R. B. Ledingham : Report AFOSR 67-1254,
 Pomona College, Claremont, CA, AD-654315, 1-39 (1967b)
 X-ray absorption in the 2 to 200 Å region. [E, hν, Xe]
- EX H. Hertz : Z. Phys. A274, 289-291 (1975)
 VUV emission of XeIII levels excited by electron impact via N_{4,5} 00
 Auger transitions. [E, Xe]
- I W. M. Hickam, R. E. Fox and T. Kjeldaas, Jr. : Phys. Rev. 96, 63-65 (1954)
 Probability curves near threshold for the formation of He⁺, Ne⁺⁺,
 Ar⁺⁺, Kr⁺⁺, and Xe⁺⁺ by electron impact. [E, He - Xe]
- E C. R. Hoffmann and H. M. Skarsgard : Phys. Rev. 178, 168-175 (1969) Z
 Momentum-transfer cross sections and conductivity ratios for low-energy
 electrons in He, Ne, Kr, and Xe.
 [E, Xe, Kr, Ne, He; 0.04 - 0.8 eV for Xe]
- O D. Hofsaess : J. Quant. Spectrosc. Radiat. Transf. 19, 339-352 (1978)
 Emission continua of rare gas plasmas. [T, hν, He - Xe; 300 - 10⁴ Å]
- O D. M. P. Holland, K. Codling, J. B. West and G. V. Marr : J. Phys. B12, 2465-2484 (1979)
 Multiple photoionisation in the rare gases from threshold to 280 eV.
 [E, hν, He - Xe; 65 - 280 eV for Xe]
- O S. T. Hood, A. Hamnett and C. E. Brion : J. Elect. Spectrosc. Relat. Phenom. 11, 205-224
 (1977) -
 Molecular orbital momentum distributions and binding energies for H₂O
 using an electron impact coincidence spectrometer. [E, Xe, CH₄, H₂O]
- S S. -S. Huang and G. R. Freeman : J. Chem. Phys. 68, 1355-1362 (1978)
 Electron mobilities in gaseous, critical, and liquid xenon : Density,
 electric field, and temperature effects : Quasilocalization.
 [E, Xe]
- O J. H. Hubbell, W. L. Veigele, E. A. Briggs, R. T. Brown, D. T. Cromer and R. J. Howerton :
 J. Phys. Chem. Ref. Data 4, 471-538 (1975)
 Atomic form factors, incoherent scattering functions, and photon
 scattering cross sections. [compilation, T, Z = 1 - 100]
- O E. E. Huber, Jr., L. R. Jones, E. V. George and R. M. Lerner : IEEE J. Quant. Electron.
 12, 353-359 (1976)
 Sustainer enhancement of the VUV fluorescence in high-pressure xenon.
 [E, hν, Xe]

- O R. D. Hudson and L. J. Kieffer : Atomic Data 2, 205-262 (1971)
 Compilation of atomic ultraviolet photoabsorption cross sections for
 wavelengths between 3000 and 10 Å.
 [compilation, $h\nu$, He - Xe, Li - Cs, etc.]
- O R. E. Huffman, Y. Tanaka and J. C. Larrabee : J. Chem. Phys. 39, 902-909 (1963)
 Absorption coefficients of xenon and argon in the 600 - 1025 Å
 wavelength regions. [E, $h\nu$, Xe, Ar]
- ME H. A. Hyman : Phys. Rev. A20, 855-859 (1979)
 Electron-impact ionization cross sections for excited states of the
 rare gases (Ne, Ar, Kr, Xe), cadmium, and mercury.
 [T, Ne - Xe, Cd, Hg]
- EX H. A. Hyman : Phys. Rev. A24, 1094-1095 (1981)
 Electron-impact-excitation cross sections for the transition $(n-1)p^5ns$
 $\rightarrow (n-1)p^5np$ in the rare gases. [T, Ne - Xe]
- E Y. Itikawa : Argonne Natio. Labo. Report, ANL-7939, 1-32 (1972) ·
 Momentum transfer cross sections for electron collisions on atoms and
 molecules and their application to effective collision frequencies.
 [compilation, H, He - Xe, O, Cs, Hg, H₂, N₂, O₂, CO, NO, H₂O, CO₂, N₂O,
 NH₃, CH₄, 0.01 - 10 eV]
- E Y. Itikawa : Phys. Fluids 16, 831-835 (1973)
 Effective collision frequency of electrons in gases.
 [H, He - Xe, O, Cs, Hg, 10 molecules]
- E Y. Itikawa : Atomic Data Nucl. Data Tables 14, 1-10 (1974)
 Momentum-transfer cross sections for electron collisions with atoms and
 molecules. [compilation, He - Xe, etc.]
- E Y. Itikawa : Atomic Data Nucl. Data Tables 21, 69-75 (1978) ·
 Momentum-transfer cross sections for electron collisions with atoms and
 molecules. Revision and supplement, 1977. [compilation, He - Xe, etc.]
- E R. H. Jansen and F. J. de Heer : J. Phys. B9, 213-226 (1976) ○ Z
 Absolute differential cross section for elastic scattering of electrons
 by krypton and xenon. [E, Kr, Xe; 100 - 3000 eV, 5 - 55°]
- EX E. Jimenez and J. Campos : An. Fis. 72, 162-165 (1977)
 Poblacion indirecta de algunos niveles de Xe I en la excitacion con
 electrons. [, Xe]

- O T. L. John : Mon. Notic. Roy. Astron. Soc. 170, 5-6 (1975a)
The free-free transitions of atomic and molecular negative ions in the infrared. [T, He⁻ - Xe⁻, Li⁻, Na⁻, Cs⁻, H₂⁻, H₂O⁻, etc.]
- O T. L. John : Mon. Notic. Roy. Astron. Soc. 172, 305-311 (1975b)
The continuous absorption coefficient of atomic and molecular negative ions. [T, He⁻ - Xe⁻, Li⁻, Na⁻, Cs⁻, H₂⁻, H₂O⁻, etc.]
- I L. P. Johnson and J. D. Morrison : Int. J. Mass Spectrom. Ion Phys. 18, 355-366 (1975) ·
Double ionization to low-lying states of the doubly-charged rare gases. [E, He - Xe, 43 - 50 eV]
- I L. P. Johnson, J. D. Morrison and A. L. Wahrhaftig : Int. J. Mass Spectrosc. Ion Phys. 26, 1-21 (1978) ·
Electrostatic electron energy analysers and the application of the cylindrical mirror system to the study of ionization efficiencies by electron impact. [E, Kr, Xe, N₂]
- O W. R. Johnson and K. T. Cheng : Phys. Rev. A20, 978-988 (1979)
Photoionization of the outer shells of neon, argon, krypton and xenon using the relativistic random-phase approximations. [T, hν, Ne - Xe]
- I K. Kadota and Y. Kaneko : J. Phys. Soc. Jpn. 38, 524-531 (1975) ·
Neutralization method for detection of metastable ions and its application to the production of metastable rare gas ions by electron impact. [E, He - Xe, H₂, N₂, O₂, CO]
- E V. Karaiyanov : Izv. Fiz. Inst. S. Aneb. Bulgar. Akad. Nauk 17, 293-299 (1968)
Elastic scattering of electrons by the xenon atom. [, Xe]
- E P. A. Kazaks and E. J. Kuster : Am. J. Phys. 42, 474-477 (1974)
Absorption model for electron-rare gas atom scattering. [T, Ar - Xe]
- O P. C. Kemeny, R. T. Poole, J. G. Jenkin, J. Liesegang and R. C. G. Leckey : Phys. Rev. A10, 190-199 (1974) ·
Measurements of relative subshell photoionization cross sections in the noble gases by ultraviolet photoelectron spectroscopy. [E, hν, Ne - Xe]
- O D. J. Kennedy and S. T. Manson : Phys. Rev. A5, 227-247 (1972)
Photoionization of the noble gases : Cross sections and angular distributions. [T, hν, Ne - Xe]
- O C. Kenty : J. Chem. Phys. 47, 2545-2551 (1964) ·
Diffuse continua-emitting discharges in the rare gases with and without nitrogen. [E, Xe, Ar, Ne, Xe + N₂]
- E J. Kessler : Z. Phys. 182, 137-152 (1964a)
Streuung mittelschneller Elektronen um kleinste Winkel - Vergleich von Absolutmessungen an Gasen mit theoretischen Ergebnissen nach Lenz.
(Medium speed electron scattering at very small-angles - Comparison of absolute measurement in gases with theoretical results of Lenz.)
[E, Ne - Xe; 100 keV]

- E J. Kessler : Z. Phys. 182, 153-165 (1964b)
Bestimmung der Wirkungsquerschnitt für die Kleinstwinkelstreuung von Elektronen.
(Determination of effective cross sections for small-angle scattering of electrons.) [E, Ne - Xe, O₂]
- E J. Kessler : Phys. Lett. 15, 307-308 (1965) -
Determination of screening angles from plural-scattering experiments in gases. [T, Ne - Xe]
- E J. Kessler, C. B. Lucas and L. Vuskovic : J. Phys. B10, 847-860 (1977)
The polarization of electrons elastically scattered from xenon at energies between 150 - 1200 eV. [E, Xe; 150 - 1200 eV, 20 - 155°]
- O J. W. Keto, R. E. Gleason, Jr., T. O. Bonifield, G. K. Walters and F. K. Soley : Chem. Phys. Lett. 42, 125-128 (1976)
Collisional mixing of the lowest bound molecular states in xenon and argon. [E, Xe, Ar; Xe₂⁺ + e]
- I S. P. Khare, B. D. Padalis and R. M. Nayak : Can. J. Phys. 52, 1755-1758 (1974) -
Electron impact ionization of inert gases. [T, Ne - Xe; th. - 20 keV]
- S A. G. Kharpak and I. T. Yakubov : Sov. Phys. JETP 42, 1036-1040 (1975)
Contribution to the theory of the states of electrons injected into a dense gas. [T, Xe, He, H₂]
- O A. L. Khomkin : High Temp. 12, 766-769 (1974) -
Electrical conductivity of argon and xenon plasma. [T, Xe, Ar]
- O M. H. Kibel, F. J. Leng and G. L. Nyberg : J. Elect. Spectrosc. Relat. Phenom. 15, 281-286 (1979) -
Angular-distribution He(I)/Ne(I) photoelectron spectra of H₂, N₂ and other small molecules. [E, hν, Xe, Ar; H₂, N₂, O₂, CO, CO₂]
- I L. J. Kieffer and G. H. Dunn : Rev. Mod. Phys. 38, 1-35 (1966)
Electron impact ionization cross-section data for atoms, atomic ions and diatomic molecules : I. Experimental data. [compilation]
- I L. J. Kieffer : Atomic Data 1, 19-89 (1969a),
Erratum 1, 359-359 (1970)
Low-energy electron-collision cross-section data. Part I : Ionization, dissociation, vibrational excitation.
[compilation, Tozer('60), Asundi('63), Rapp('65) and Schram('66b)]
- EX L. J. Kieffer : Atomic Data 1, 121-287 (1969b),
Erratum and addenda 2, 393-399 (1971)
Low-energy electron-collision cross-section data. Part II : Electronic-excitation cross sections. [compilation]

- E L. J. Kieffer : Atomic Data 2, 293-391 (1971)
- QT Low-energy electron-collision cross-section data. Part III : Total scattering ; Differential elastic scattering. [compilation]
- O L. J. Kieffer : NBS Special Publication 426, 1-212 (1976) ·
Bibliography of low energy electron and photon cross section data (through December 1974). [compilation]
- EX Y. -K. Kim, M. Inokuti, G. E. Chamberlain and S. R. Mielczarek : Phys. Rev. Lett. 21, 1146-1148 (1968) ·
Minima of generalized oscillator strengths. [T, Xe]
- EX G. C. King, M. Tronc, F. H. Read and R. C. Bradford : J. Phys. B10, 2479-2495 (1977)
An investigation of the structure near the $L_{2,3}$ edges of argon, the $M_{4,5}$ edges of krypton and the $N_{4,5}$ edges of xenon using electron impact with high resolution. [E, Ar - Xe]
- I A. E. Kingston : Proc. Phys. Soc. London 86, 467-476 (1965)
The ionization of inert gas atoms by electron and proton impact at high energies. [T, He - Xe]
- I R. W. Kiser : J. Chem. Phys. 36, 2964-2968 (1962)
Studies of the shapes of ionization-efficiency curves of multiply charged monatomic ions. I. Instrumentation and relative electronic-transition probabilities for krypton and xenon ions. [E, Xe, Kr]
- EX E. Kisker : Z. Phys. 257, 51-61 (1972a)
Optical measurement of electron-impact excitation of xenon and molecular nitrogen in the threshold electron-impact region with high energy-resolution. [E, Xe, N₂]
- E E. Kisker : Phys. Lett. 41A, 173-174 (1972b) ·
Die Energien der elastischen Resonanzen in Edelgasen.
[compilation, Xe, He, Ne, Kr; 7.89 eV for Xe]
- E B. Kivel : Phys. Rev. 116, 1484-1485 (1959)
Electron scattering by noble gases in the limit of zero energy.
[T, He - Xe]
- O H. A. Koehler, L. J. Ferderber, D. L. Redhead and P. J. Ebert : Appl. Phys. Lett. 21, EX 198-200 (1972)
Stimulated VUV emission in high-pressure xenon excited by high-current relativistic electron beams. [E, Xe; Febetron 705]
- EX H. A. Koehler, L. J. Ferderber, D. L. Redhead and P. J. Ebert : Phys. Rev. A9, 768-781 (1974)
Vacuum-ultraviolet emission from high-pressure xenon and argon excited by high current relativistic electron beams. [E, Xe, Ar]
- E R. Kollath : Ann. Phys. 87, 259-284 (1928)
Über die senkrechte Ablenkung langsamer Elektronen an Gasmoleküln.
[E, He - Xe, H₂, N₂, CO, CO₂, N₂O, CH₄]

- E A. A. Konkov and A. V. Vorontsov : Opt. Spectrosc. 38, 138-140 (1975) ·
Infrared radiation of a thermal xenon plasma. [E, Xe]
- O I. V. Kosinskaya and L. P. Polozova : Opt. Spectrosc. 30, 458-460 (1971)
Molecular absorption of xenon in the vacuum ultraviolet.
[E, $h\nu$, Xe, Xe₂; 300 - 900 K]
- I M. Krauss, R. M. Reese and V. H. Dibeler : J. Res. Natl. Bur. Stand. 63A, 201-204 (1959)
Multiple ionization of rare gases by electron impact. [E, He - Ar, Xe]
- α A. A. Kruithof : Physica 7, 519-540 (1940)
Townsend's ionization coefficients for neon, argon, krypton and xenon.
[E, Ne - Xe]
- I A. Kumar and B. N. Roy : Can. J. Phys. 56, 1255-1260 (1978)
Binary encounter calculations on electron impact double ionization of
noble gas atoms. [T, He - Xe]
- O S. E. Kupriyanov, Z. Z. Latypov and A. A. Perov : Sov. Phys. JETP 20, 14-15 (1965a) ·
Long-lived highly excited states of positive ions. [E, Xe, He]
- I S. E. Kupriyanov and Z. Z. Latypov : Sov. Phys. JETP 20, 36-41 (1965b) ·
O Detection of long-lived excited ions of inert gases and mercury.
[E, Ne - Xe, Hg; Xe⁺, Xe²⁺, Xe³⁺, 30 - 150 eV]
- EX S. E. Kupriyanov : Opt. Spectrosc. 20, 85-86 (1966) ·
Excitation function of high energy long-lived states of inert gas atoms.
[E, He - Xe; th. - 150 eV]
- EX S. E. Kupriyanov and A. A. Perov : Sov. Phys. JETP 29, 818-822 (1969) ·
Long-lived autoionizing states of noble-gas atoms and ions. [E, Ar - Xe]
- I M. V. Kurepa : Bull. Boris Kidrich Inst. Nucl. Sci. 14, 187-197 (1963)
Comparison of experimental and theoretical results for ionization cross
sections of inert gases. [E, Xe, Kr, Ar,
- E C. E. Kuyatt and J. A. Simpson : 6th ICPEAC, Paris 1, 33-36 (1963) ·
Structure beyond the ionization limit in inelastic electron scattering
in the rare gases. [E, He - Xe]
- EX C. E. Kuyatt and J. A. Simpson : in Atomic Collision Processes, 3rd ICPEAC,
London 191-200 (1964)
Inelastic electron scattering from rare gases ; determination of
oscillator strengths in the continuum. [E, Xe, He, Ne; 500 - 1000 eV]
- E C. E. Kuyatt, J. A. Simpson and S. R. Mielczarek : Phys. Rev. 138, A385-A399 (1965)
Elastic resonances in electron scattering from He, Ne, Ar, Kr, Xe and Hg.
[E, He - Xe, Hg]
- E P. Laborie, J. M. Rocard, J. A. Rees, J. L. Delcroix and J. D. Craggs : in
EX Tables de Sections Efficaces Electroniques et Coefficients Macroscopiques.
I 1-Hydrogene et Gaz Rares, Dunod, Paris 179-196 (1968)

- I F. W. Lampe, J. L. Franklin and F. H. Field : J. Am. Chem. Soc. 79, 6129-6132 (1957)
Cross sections for ionization by electrons.
[E, He - Xe, H₂S, NH₃, etc.; 75 eV]
- O J. Lang and W. S. Watson : J. Phys. B8, L339-L343 (1975)
The photoabsorption coefficients of krypton and xenon from 48 Å to 210 Å.
[E, hν, Xe, Kr; 5 % accuracy]
- O C. J. Latimer, W. P. West, T. B. Cook, F. B. Dunning and R. F. Stebbings : 9th ICPEAC, Seattle 2, 849-850 (1975)
Studies of xenon atoms in high Rydberg states. [, Xe]
- EX S. T. Lee, R. A. Rosenberg, E. Matthias and D. A. Shirley : J. Elect. Spectrosc. Relat. Phenom. 10, 203-214 (1977) ·
Glow discharge lamps as electron sources for electron impact excitation.
[E, Xe, Kr, K, Na]
- S H. Lehrke und K. G. Muller : Z. Naturforsch. 31a, 915-923 (1976)
Elektronentransport in nichtthermischen Edelgasplasmen.
[T, He - Xe]
- E B. R. Lewis, I. E. McCarthy, P. J. O. Teubner and E. Weigold : J. Phys. B7, 2549-2556 (1974) ·
The elastic scattering of electrons from krypton, neon and xenon.
[E, Ne, Kr, Xe; DCS 60 eV, 15 - 140° for Xe]
- S J. J. Lowke and J. H. Parker, Jr. : Phys. Rev. 181, 302-311 (1969)
Theory of electron diffusion parallel to electric fields. II. Application to real gases. [T, Ar - Xe, He, H₂, D₂, N₂, O₂, CO₂, H₂O, CO]
- E C. B. Lucas and J. Liedtke : 9th ICPEAC, Seattle 460-461 (1975) ·
Critical energies for elastic electron scattering by argon, krypton and xenon atoms. [E, Ar - Xe]
- E C. B. Lucas and I. E. McCarthy : J. Phys. B11, L301-L304 (1978)
Electron spin polarization in the optical model. [T, Xe; 150 - 400 eV]
- O A. P. Lukirskii, I. A. Brytov and T. M. Zimkina : Opt. Spectrosc. 17, 234-237 (1964)
Photoionization absorption of He, Kr, Xe, CH₄ and methylal in the 23.6 - 250 Å region. [E, hν, Xe, He, Kr, CH₄, methylal]
- O A. P. Lukirskii, I. A. Brytov and S. A. Gribovskii : Opt. Spectrosc. 20, 203-204 (1966)
Photoionization absorption of Ar, Xe, alcohol, and methylal in the 7 - 44 Å wavelength range. [E, hν, Xe, Ar, C₂H₅OH, methylal]
- I B. F. J. Luyken, F. J. de Heer and R. Ch. Baas : Physica 61, 200-219 (1972) ·
The role of the outer s shell in single ionization of Ne, Ar, Kr and Xe by electron impact. [E, Ne - Xe, th. - 20 keV]
- S T. Makabe and T. Mori : J. Phys. B11, 3785-3793 (1978)
Experiment and theoretical analysis of the electron energy distribution functions in Townsend discharges in xenon. [E and T, Xe]

- O S. T. Manson and J. W. Cooper : Phys. Rev. 165, 126-138 (1968)
Photo-ionization in the soft X-ray range. Z dependence in a central-potential model. [T, $h\nu$, Ar - Xe, Cu, Au, etc.]
- O S. T. Manson and D. J. Kennedy : Chem. Phys. Lett. 7, 387-389 (1970a)
Angular distribution of photoelectrons in argon and xenon.
[T, $h\nu$, Xe, Ar]
- O S. T. Manson and J. W. Cooper : Phys. Rev. A2, 2170-2171 (1970b)
Angular distribution of photoelectrons : Outer shells of noble gases.
[T, $h\nu$, Ne - Xe; 0 - 27.2 eV]
- O S. T. Manson : Phys. Rev. Lett. 26, 219-220 (1971)
Oscillations in the energy dependence of the angular distribution of photoelectrons. [T, $h\nu$, Xe]
- EX S. T. Manson : Phys. Rev. A5, 668-677 (1972)
Theoretical study of generalized oscillator strengths in atoms comparison with experiment and other calculations. [T, Xe, He, Ar, Hg, Na, K]
- I T. D. Mark, F. Egger, E. Hille, M. Cheret, H. Stori and K. Stephan : 10th ICPEAC, Paris 2, 1070-1071 (1977)
Mass spectrometric study of the electron impact ionization of the rare gases. [E, Xe]
- I P. Marmet, E. Bolduc and J. J. Quemener : J. Chem. Phys. 56, 3463-3468 (1972)
Autoionizing and negative ion states of Xe and Kr below the $^2P_{1/2}$ limits.
[E, Xe, Kr; 12 - 14 eV for Xe]
- I P. Marmet : J. Chem. Phys. 63, 249-255 (1975)
Relative cross sections in electroionization. [E, Xe, Ar, NO, O₂]
- EX A. R. Martin : J. Phys. B7, 1161-1166 (1974)
I Atomic excitation processes in the discharges of rare gas ion engines.
ME [T, Ne - Xe]
- E Yu. V. Martynenko, O. B. Firsov and M. I. Chibisov : Sov. Phys. JETP 17, 154-157 (1963)
Scattering of slow electrons on atoms. [T, Ar - Xe, H, He]
- E H. S. W. Massey and C. B. O. Mohr : Proc. Roy. Soc. London A177, 341-357 (1941)
The polarization of electrons by double scattering. [T, Xe, Kr, Au]
- O F. M. Matsunaga, R. S. Jackson and K. Watanabe : J. Quant. Spectrosc. Radiat. Transf. 5, 329-333 (1965)
Photoionization yield and absorption coefficient of xenon in the region of 860 - 1022 Å. [E, $h\nu$, Xe]
- O K. J. McCann and M. R. Flannery : Appl. Phys. Lett. 31, 599-601 (1977)
Photoionization of metastable rare-gas atoms (He*, Ne*, Ar*, Kr*, Xe*).
[T, $h\nu$, He* - Xe*; 300 - 3000 Å]

- I I. E. McCarthy and E. Weigold : Phys. Rep. 27C, 275-371 (1976)
(e, 2e) spectroscopy.
[review, He - Xe, CO, N₂, H₂, D₂, CH₄, C₂H₆, NH₃, H₂O]
- E I. E. McCarthy, C. J. Noble, B. A. Phillips and A. D. Turnbull : Phys. Rev. A15, 2173-2185 (1977)
Optical model for electron scattering from inert gases.
[T, He - Xe; 20 - 3000 eV]
- O M. McChesney and N. R. Jones : Proc. Phys. Soc. London 84, 983-1000 (1964)
Equilibrium properties of shock ionized xenon. [, Xe]
- O J. W. McGowan, D. A. Vroom and A. R. Comeaux : J. Chem. Phys. 51, 5626-5635 (1969)
Atomic and molecular photoelectron angular distributions measured near threshold. [E, h ν , Ar - Xe, H₂, N₂, O₂]
- O E. J. McGuire : Thesis, Cornell University 1-106 (1965a)
A model for atomic excited states and its application to photoabsorption calculations. [T, h ν .
- O E. J. McGuire : Report TR-12, Lab. of Atomic and Solid State Phys., Cornell Univ. AD-623 909, 1-47 (1965b)
The photoionization cross section of some atomic systems. [T, h ν .
- O E. J. McGuire : Phys. Rev. 161, 51-59 (1967)
Atomic photo-ionization cross sections from a semiempirical central potential. [T, Xe, Kr, He, Li - Cs]
- O E. J. McGuire : Phys. Rev. 175, 20-30 (1968)
Photo-ionization cross sections of the elements helium to xenon.
[T, h ν , He - Xe]
- EX E. J. McGuire : Phys. Rev. A9, 1840-1851 (1974)
Atomic N-shell Coster-Kronig, Auger, and radiative rates and fluorescence yields for $38 \leq Z \leq 103$. [T, Z = 54 for Xe]
- I E. J. McGuire : Phys. Rev. A16, 62-72 (1977)
Electron ionization cross sections in the Born approximation.
[T, Ne - Xe, O, N, etc.]
- E J. Mehr : Z. Phys. 198, 345-350 (1967)
Winkelverteilungen elastisch an Edelgas-Atomstrahlen gestreuter Elektronen ; Spinpolarisation eines an Argon gestreuten 40 eV - Elektronenstrahls. [E, He - Xe; DCS, relative, 5 - 1000 eV, 20 - 155°]
- E H. J. Meister and H. F. Weiss : Z. Phys. 216, 165-171 (1968)
Numerical comparison between relativistic and nonrelativistic theory for scattering of slow electrons from atoms. [T, Xe, Ar, Hg]
- O P. H. Metzger and G. R. Cook : J. Opt. Soc. Am. 55, 516-520 (1965)
Flux distribution of the Hopfield helium continuum from the photo-ionization of Ar, Kr and Xe. [E, h ν , Ar - Xe]

- EX R. Minkowski und H. Sponer : Z. Phys. 15, 399-408 (1923)
 Über die freie Weglänge langsamer Elektronen in Gasen. [E, He - Xe]
- EX B. L. Moiseiwitsch and S. J. Smith : Rev. Mod. Phys. 40, 238-353 (1968).
 Erratum 41, 574-574 (1969).
 Electron impact excitation of atoms.
 [review, He - Xe, Li - Cs, H, Hg, O, N]
- O A. G. Molchanov and Yu. M. Popov : Sov. J. Quant. Elect. 4, 613-615 (1974) -
 Possibility of electric-ionization excitation of the stimulated emission
 of vacuum ultraviolet radiation in compressed xenon. [E, $h\nu$, Xe₂]
- O J. J. Monaghan : Aust. J. Phys. 27, 667-672 (1974)
 Collective oscillations in many electron atoms. III. Photoabsorption.
 [, $h\nu$, Xe.
- O C. E. Moore : Atomic Energy Levels, Vol. 3, NSRDS-NBS Pub. 35, (1957)
- I J. D. Morrison : J. Chem. Phys. 21, 1767-1772 (1953) -
 Studies of ionization efficiency. Part III. The detection and interpreta-
 tion of fine structure. [E, He - Xe, Hg, N₂, C₆H₆, HCl, CO₂]
- I J. D. Morrison and A. J. C. Nicholson : J. Chem. Phys. 31, 1320-1323 (1959)
 Probability of double ionization by electron impact for neon, argon,
 and xenon. [E, Xe, Ne, Ar]
- I J. D. Morrison : J. Chem. Phys. 39, 200-207 (1963)
 On the optimum use of ionization-efficiency data. [E, Xe, He, O₂]
- I J. D. Morrison : J. Chem. Phys. 40, 2488-2492 (1964)
 Threshold laws for processes of autoionization. [E, Xe, Kr; 12 - 14 eV]
- I J. D. Morrison and C. J. Traeger : Int. J. Mass Spectrom. Ion Phys. 7, 391-397 (1971) -
 Electron-impact induced autoionization of the outer s electrons in the
 rare gases. [E, Ne - Xe; 12 - 32 eV]
- O A. Msezane, R. F. Reilman, S. T. Manson, J. R. Swanson and L. Armstrong, Jr. : Phys. Rev.
 A15, 668-674 (1977)
 Photoionization of positive ions : Outer p subshells of the noble-gas
 isoelectronic sequence. [T, $h\nu$, Ne - Xe; Xe 5p isoelectronic sequences]
- EX I. A. Mukhitdinova and V. E. Yakhontova : Opt. Spectrosc. 24, 232-232 (1968) -
 Excitation of the resonance line of xenon by electron impact.
 [E, Xe; 1470 Å line, 10 - 90 eV]
- α H. Neu : Z. Phys. 152, 294-305 (1958)
 Eine Erweiterung der Townsendschen Näherungsformel für die Ionisierung
 im homogenen elektrischen Feld. [T, He - Xe, H₂, N₂]
- O A. J. C. Nicholson : J. Chem. Phys. 39, 954-961 (1963)
 Photo-ionization efficiency curves. Measurement of ionization potentials
 and interpretation of fine structure. [E, $h\nu$, Xe, O₂, NO]

- O A. Niehaus and M. W. Ruf : Z. Phys. 252, 84-94 (1972)
The variation of photoelectron angular distributions with energy.
[E, $h\nu$, Ar - Xe, Hg]
- O G. N. Ogurtsov, V. M. Mikyshkin and I. P. Flaks : Pisma. Zh. Tekh. Fiz. 4, 14- (1978)
Koster-Kronig transitions in N-shell of xenon. [, Xe]
- I S. Ohtani, H. Nishimura, H. Suzuki and K. Wakiya : Phys. Rev. Lett. 36, 863-866 (1976)
Auger-electron ejections from xenon $N_{4.5}00$ and krypton $M_{4.5}NN$ processes
by electron impact near threshold. [E, Xe, Kr]
- E T. F. O'Malley : Phys. Rev. 130, 1020-1029 (1963)
Extrapolation of electron-rare gas atom cross sections to zero energy.
[T, He - Xe; 0 - 1.16 eV]
- O W. Ong and S. T. Manson : J. Phys. B11, L65-L67 (1978a)
The photoelectron angular distribution of xenon 5s. [T, $h\nu$, Xe]
- O W. Ong and S. T. Manson : J. Phys. B11, L163-L165 (1978b)
Photoelectron branching ratio in the 5p subshell of xenon. [T, $h\nu$, Xe]
- O W. Ong and S. T. Manson : Phys. Rev. A19, 688-693 (1979)
Dirac-Fock calculations of photoelectron angular distributions of the
outer s shells of the noble gases. [T, $h\nu$, Ne - Xe]
- I Y. Oono and Y. Nishimura : Bull. Chem. Soc. Jpn. 50, 1379-1381 (1977) .
Simple relations between scattering cross sections and molecular
diameters. [compilation, He - Xe, 34 atoms and molecules for Q_1]
- I C. B. Opal, W. K. Peterson and B. C. Beaty : J. Chem. Phys. 55, 4100-4106 (1971a)
Measurements of secondary-electron spectra produced by electron impact
ionization of a number of simple gases. [E, He - Xe, H₂, CO₂, H₂O, etc.]
- I C. B. Opal, E. C. Beaty and W. K. Peterson : JILA Report No. 108, Colorado 1-117
(1971b)
Tables of energy and angular distribution of electrons ejected from
simple gases by electron impact. [E, He - Xe, H₂, N₂, H₂O, etc.]
- I C. B. Opal, E. C. Beaty and W. K. Peterson : Atomic Data 4, 209-253 (1972) .
Tables of secondary-electron-production cross sections.
[E, He - Xe, H₂, N₂, O₂, CO, NO, CO₂, H₂O, NH₃, CH₄]
- I J. W. Otvos and D. P. Stevenson : J. Am. Chem. Soc. 78, 546-551 (1956)
Cross-sections of molecules for ionization by electrons.
[E, He - Xe, CH₄ - C₅H₁₂, etc.]
- S J. L. Pack, R. E. Voshall and A. V. Phelps : Phys. Rev. 127, 2084-2089 (1962)
Drift velocities of slow electrons in krypton, xenon, deuterium, carbon
monoxide, carbon dioxide, water vapor, nitrous oxide, and ammonia.
[E, Xe, NH₃, etc.]

- I V. -F. Z. Papp, V. S. Shevera and I. P. Zapesochnyi : JETP Lett. 25, 29-32 (1977) :
Investigation of double ionization of inert-gas atoms by simultaneous
knockout of s and p electrons by the bombarding electron beam.
[E, Ne - Xe; th. - 400 eV]
- EX P. A. Pavlov and V. E. Yakhontova : Opt. Spectrosc. 39, 130-133 (1975)
Effect of radiation diffusion on the intensity of lines excited by
an electron beam passing through a gas. [E, Xe, Kr]
- I J. Peresse : Methodes Phys. Anal. , 133-141 (1965)
Determination experimentale des sections efficaces d'ionisation de H₂,
He, Ne, Ar, Kr, Xe, par chocs electroniques. [E, He - Xe, H₂]
- I J. Peresse : Phys. Lett. 28A, 563-564 (1969)
Nouveaux processus d'ionisation du xenon par impacts d'electrons.
[E, Xe]
- E R. Peterkop and V. Veldre : in Advances in Atomic and Molecular Physics, Vol. 2
Academic Press 263-326 (1966) .
The theory of electron-atom collisions. [review]
- O B. Petersson : Ark. Fys. 27, 317-319 (1964) .
Remeasured Ne I, Ar I, Kr I, and Xe I lines in the vacuum ultraviolet.
[E, h ν , Ne - Xe]
- α S. Pfau and H. Scheibner : Beit. Plasmaphys. 9, 425-433 (1966).
Berechnung des l. Townsendschen Ionisierungskoeffizienten der Edelgase.
[T, He - Xe]
- S S. Pfau and A. Rutscher : Ann. Phys. 22, 166-179 (1969)
Beweglichkeit und Diffusionskoeffizient der Elektronen.
[T, He - Xe; B. Eq.]
- E A. V. Phelps, O. T. Fundingsland and S. C. Brown : Phys. Rev. 84, 559-562 (1951)
Microwave determination of the probability of collision of slow electrons
in gases. [E, He - Xe, H₂, N₂]
- EX F. M. J. Pichanick and J. A. Simpson : Phys. Rev. 168, 64-70 (1968)
Resonances in the total cross sections for metastable excitation of noble
gases by electron impact. [E, He - Xe]
- QT C. Ramsauer : Ann. Phys. 66, 546-558 (1921)
Über den Wirkungsquerschnitt der Gasmolekule gegenüber langsamen
Elektronen. I. Fortsetzung. [E, Ar - Xe; 15 - 35 eV]
- QT C. Ramsauer : Ann. Phys. 72, 345-352 (1923a)
Über den Wirkungsquerschnitt der Gasmolekule gegenüber langsamen
Elektronen. II. Fortsetzung und Schluss. [E, Ar - Xe; 1 - 64 eV]
- QT C. Ramsauer : Jahrb. Radioakt. Elektron. 19, 345-354 (1923b)
Über den Wirkungsquerschnitt der Edelgasmolekule gegenüber langsamen
Elektronen. [E, He - Xe, H₂, N₂]

- QT C. Ramsauer : Phys. Z. 29, 823-830 (1928)
 Über den Wirkungsquerschnitt neutraler Gasmoleküle gegenüber langsame
 Elektronen. [E, He - Xe, H₂, N₂]
- QT C. Ramsauer und R. Kollath : Ann. Phys. 3, 536-564 (1929)
 Über den Wirkungsquerschnitt der Edelgasmoleküle gegenüber Elektronen
 unterhalb 1 Volt. [E, He - Xe]
- E C. Ramsauer and R. Kollath : Ann. Phys. 10, 143-154 (1931)
 Die Winkelverteilung bei der Streuung langsamer Elektronen an
 Gasmolekülen. I. Fortsetzung. [E, Xe, Ne, Kr, N₂, CO, CO₂, CH₄; DCS]
- E C. Ramsauer und R. Kollath : Ann. Phys. 12, 837-849 (1932)
 Die Winkelverteilung bei der Streuung langsamer Elektronen an Gasmolekülen.
 III. Fortsetzung und Schluss.
 [E, Ar - Xe; DCS, 0.6 - 12.5 eV, 15 - 165.5°]
- I D. Rapp and P. Englander-Golden : J. Chem. Phys. 43, 1464-1479 (1965) OZ
 Total cross sections for ionization and attachment in gases by electron
 impact I. Positive ionization. [E, He - Xe, H₂, etc.]
- E F. H. Read, J. N. H. Brunt and G. C. King : J. Phys. B9, 2209-2219 (1976)
 EX The classification of resonances in electron impact on neon, argon,
 krypton and xenon. [E, Ne - Xe]
- I P. A. Redhead : Can. J. Phys. 45, 1791-1812 (1967)
 Multiple ionization of the rare gases by successive electron impacts
 (0 - 250 eV). I. Appearance potentials and metastable ion formation.
 [E, He - Xe]
- I F. F. Rieke and W. Prepejchal : Phys. Rev. A6, 1507-1519 (1972) ·
 Ionization cross sections of gaseous atoms and molecules for high-energy
 electrons and positrons.
 [E, He - Xe, Hg, H₂, CO₂, etc., 40 gases; 0.1 - 2.7 MeV]
- E M. E. Riley, C. J. MacCallum and F. Biggs : Atomic Data Nucl. Data Tables 15,
 443-476 (1975); Erratum 28, 379-379 (1983)
 Theoretical electron-atom elastic scattering cross sections. Selected
 elements, 1 keV to 256 keV. [T, Xe, etc.; DCS]
- ME E. J. Robinson : Phys. Rev. 182, 196-200 (1969)
 Electron scattering by the metastable rare gases. [T, He - Xe]
- EX G. S. Rostovikova, V. P. Samoïlov and Yu. M. Smirnov : Opt. Spectrosc. 34, 3-5 (1973a)
 I Measurements of cross section for excitation of xenon lines by electron
 impact. [E, Xe; 36 Xe I lines, 58 Xe II lines from Xe I]
- EX G. S. Rostovikova, V. P. Samoïlov and Yu. M. Smirnov : Zh. Prikl. Spektrosk. 18,
 I 790-792 (1973b)
 Excitation cross section of lines of multicharged xenon ion during
 electronic collision. [E, Xe]

- I B. N. Roy, D. N. Tripathi and D. K. Rai : Can. J. Phys. 50, 2961-2966 (1972)
Electron impact double ionization of noble gas atoms.
[T. He - Xe; 40 - 600 eV for Xe]
- EX D. Roy and J. -D. Carette : J. Elect. Spectrosc. Relat. Phenom. 9, 483-486 (1976)
The fine structure of the electroexcitation function of the Kr $4p^{55s}$ and
Xe $5p^{55s}$ states in the autoionization region. [E, Xe, Kr]
- O R. D. Rundel, F. B. Dunning, H. C. Goldwire, Jr. and R. F. Stebbings : J. Opt. Soc. Am.
ME 65, 628-633 (1975)
Near-threshold photoionization of xenon metastable atoms.
[E, $h\nu$, Xe; 2700 - 4622 Å]
- O O. P. Rustgi, E. I. Fisher and C. H. Fuller : J. Opt. Soc. Am. 54, 745-746 (1964)
Absorption cross sections and F values of krypton and xenon in their
ionization continuum. [E, $h\nu$, Xe, Kr]
- EX V. P. Samoïlov, Yu. M. Smirnov and G. S. Starikova : Opt. Spectrosc. 38, 707-708
(1975)
Transition probabilities and cross sections for excitation of Xe II.
[E, Xe; emission c. s. of many lines]
- O J. A. R. Samson : Phys. Rev. 132, 2122-2124 (1963)
Observed and predicted new autoionized energy levels in krypton, argon,
and xenon. [E, $h\nu$, Xe, Kr, Ar]
- O J. A. R. Samson : J. Opt. Soc. Am. 54, 842-843 (1964)
Photoionization cross sections of xenon from the $^2P_{1/2}$ edge to 280 Å.
[E, $h\nu$, Xe]
- O J. A. R. Samson and R. B. Cairns : Phys. Rev. 173, 80-85 (1968)
Photoelectron spectroscopy of the rare gases. [E, $h\nu$, Ne - Xe]
- O J. A. R. Samson and J. L. Gardner : Phys. Rev. Lett. 33, 671-673 (1974)
Photoionization cross section of the outer s-shell electrons in the rare
gases. [E, $h\nu$, Ar - Xe]
- O J. A. R. Samson, J. L. Gardner and A. F. Starace : Phys. Rev. A12, 1459-1463 (1975a)
 $^2P_{3/2} : ^2P_{1/2}$ partial photoionization cross-section ratios in the rare
gases. [E, $h\nu$, Ne - Xe]
- I J. A. R. Samson and G. N. Haddad : 9th ICPEAC, Seattle 2, 1133-1134 (1975b)
O Average energy loss per ion pair formation by photons and electron impact.
[E, Xe]
- I J. A. R. Samson and G. N. Haddad : Radiat. Res. 66, 1-10 (1976)
O Average energy loss per ion pair formation by photon and electron impact
on xenon between threshold and 90 eV. [E, Xe]
- E L. Sanche and G. J. Schulz : Phys. Rev. A5, 1672-1683 (1972) Z
EX Electron transmission spectroscopy : Rare gases. [E, He - Xe]

- E K. Schackert : Z. Phys. 213, 316-322 (1968)
Spinpolarisation langsamer elektronen durch elastische Streuung an Edelgasatomstrahlen. [E, He - Xe; relative DCS, 40 - 150 eV, 30 - 150°]
- EX M. Schaper und H. Scheibner : Beitr. Plasmaphys. 9, 45-57 (1969) -
Absolutbestimmung der Gesamtanregungsquerschnitte der Edelgase durch Elektronenstoss. [E, He - Xe]
- O V. Schmidt, N. Sandner, W. Mehlhorn, M. Y. Adam and F. Wuilleumier : Phys. Rev. Lett. 38, 63-66 (1977)
Post-collision interaction in the xenon $N_{4.5-00}$ Auger spectrum excited by photon impact. [E, $h\nu$, Xe]
- I B. L. Schram, F. J. de Heer, M. J. van der Wiel and J. Kistemaker : Physica 31, 94-112 (1965) -
Ionization cross sections for electrons (0.6 - 20 keV) in noble and diatomic gases. [E, He - Xe, H₂, D₂, N₂, O₂]
- I B. L. Schram : Physica 32, 197-208 (1966a)
Partial ionization cross sections of noble gases for electrons with energy 0.5 - 18 keV. H. Argon, krypton and xenon. [E, Ar - Xe]
- I B. L. Schram, H. R. Moustafa-Moussa, J. Schutten and F. J. de Heer : Physica 32, 734-740 (1966b) ○ Z
Ionization cross sections for electrons (100 - 600 eV) in noble and diatomic gases. [E, He - Xe, H₂, N₂, O₂]
- I B. L. Schram, A. J. H. Boerboom, M. J. van der Wiel, F. J. de Heer and J. Kistemaker : Advances in Mass Spectrom. 3, 273-286 (1966c)
Ionization cross-section measurements for 0.6 - to 20-keV electrons in atomic and molecular gases. [E, He - Xe, H₂, D₂, N₂, O₂, etc.]
- I B. L. Schram : Thesis. University of Amsterdam, 1-103 (1966d)
Ionization of noble and molecular gases by high energy electrons. [E, He - Xe, CH₄ - n-C₆H₁₄, etc.]
- E G. J. Schulz : Phys. Rev. 136, A650-A656 (1964)
Experiments on resonances in the elastic cross section of electrons on rare-gas atoms. [E, He - Xe]
- E G. J. Schulz : Rev. Mod. Phys. 45, 378-422 (1973) ○
- EX Resonances in electron impact on atoms. [review]
- E W. H. E. Schwarz : Chem. Phys. Lett. 16, 89-91 (1972)
Few-electron corrections of statistical exchange potential in low-energy electron scattering. [T, He - Xe; 0 - 10 eV]
- O J. H. Scofield : J. Elect. Spectrosc. Relat. Phenom. 8, 129-137 (1976)
Hartree-Slater subshell photoionization cross-sections at 1254 and 1487 eV. [E, $h\nu$, He - Xe, etc., Z = 1 - 96]

- O S. A. Shannon, K. Codling and J. B. West : J. Phys. B10, 825-830 (1977)
The absolute photoionization cross sections of the spin-orbit component of the xenon 4d electron from 70 - 130 eV. [E, $h\nu$, Xe]
- O Shardanand : J. Quant. Spectrosc. Radiat. Transf. 8, 1373-1378 (1968a)
Photo-attenuation cross sections of Xe and Xe₂ between 1050-1550 Å. [E, $h\nu$, Xe, Xe₂]
- O Shardanand : J. Quant. Spectrosc. Radiat. Transf. 8, 1533-1536 (1968b)
Attenuation cross sections of Xe and Xe₂ near resonance line 1469.6 Å. [E, $h\nu$, Xe, Xe₂]
- EX W. N. Shelton and E. S. Leherissey : J. Chem. Phys. 54, 1130-1136 (1971)
Electron impact excitation of rare-gas atoms in the distorted-wave approximation. [T, no example]
- EX J. A. Shiavone, S. M. Tarr and R. S. Freund : Phys. Rev. A20, 71-81 (1979) ○
Electron-impact excitation of the rare-gas atom to high-Rydberg states. [E, He - Xe; 15 - 200 eV]
- EX J. A. Simpson, S. R. Mielczarek and J. Cooper : J. Opt. Soc. Am. 54, 269-270 (1964)
Observation of optically forbidden transitions in the continuum of the rare gases by electron energy loss measurements. [E, He - Xe, 100 or 90 eV]
- O Yu. F. Skachkov : Sov. Phys. JETP 28, 1081-1084 (1969)
Time correlation of photons emitted by excited xenon atoms. [E, $h\nu$, Xe, Ne]
- EX Yu. M. Smirnov : Opt Spectrosc. 32, 684-684 (1972)
Optical cross sections of NeI and XeI. [analysis, Xe, Ne]
- E K. Smith : in Reports on Progress in Physics, Vol. 29, The Inst. Phys. 373-443 (1966)
Resonant scattering of electrons by atomic systems. [review, He - Xe]
- E D. Spence : Phys. Rev. A15, 883-887 (1977)
- EX New aid to the classification Feshbach resonances. Application to Ne, Kr, Ar and Xe. [E, Ne - Xe]
- I V. Srinivasan and J. A. Rees : Brit. J. Appl. Phys. 18, 59-64 (1967)
A note on the total ionization cross sections for electrons in the inert gases and carbon monoxide. [E, He - Xe, CO]
- O J. R. Stallcop : Astron. Astrophys. 30, 293-296 (1974)
Free-free absorption of infrared radiation in collisions of electrons with neutral rare-gas atoms. [T, $h\nu$, He - Xe]
- O A. F. Starace : Phys. Rev. A2, 118-121 (1970)
Photoionization of argon and xenon including final-state correlation. [T, $h\nu$, Xe, Ar]

- EX H. Statz, C. L. Tange and G. F. Koster : J. Appl. Phys. 34, 2625-2632 (1963)
Approximate electromagnetic transition probabilities and relative electron excitation cross sections for rare-gases masers. [T, Ne - Xe]
- O R. F. Stebbings, F. B. Dunning and R. D. Rundel : in Atomic Physics 4, Plenum, 4th Int. Conf. on Atomic Physics, Heidelberg 713-730 (1975)
Photoionization and autoionization of excited rare gas atoms. [review, E, $h\nu$, Ar - Xe, He]
- I F. A. Stuber : J. Chem. Phys. 42, 2639-2643 (1965)
Multiple ionization in neon, argon, krypton and xenon. [E, Ne - Xe; th. - 2000 eV for Xe⁺ - Xe⁹⁺, relative]
- EX G. A. Surskii and S. E. Kupriyanov : Sov. Phys. JETP 27, 61-62 (1968)
Excitation of Rydberg states in He, Ne, Ar, Xe and Hg atoms due to electron collisions. [E, Xe, He - Ar, Hg]
- O P. Swan : Proc. Roy. Soc. London A228, 10-33 (1955)
The relation between zero-energy scattering phase-shifts, the Pauli exclusion principle and the number of composite bound states. [T, He - Xe, H]
- O J. R. Swanson and L. Armstrong, Jr. : Phys. Rev. A15, 661-667 (1977a)
Multiconfiguration Hartree-Fock calculation of photoionization cross sections of the rare gases. [T, $h\nu$, Ne - Xe]
- O J. R. Swanson and L. Armstrong, Jr. : Phys. Rev. A16, 1117-1123 (1977b)
Multiconfiguration Hartree-Fock calculation of photoionization cross sections of the rare gases. II. Final-state correlation. [T, $h\nu$, Ne - Xe]
- EX N. Swanson, R. J. Celotta and C. E. Kuyatt : 8th ICPEAC, Belgrade 478-479 (1973)
Resonant structure in electron impact excitation of xenon. [E, Xe; first four states, 8.8 - 11.2 eV, 45°]
- O C. A. Swarts, D. L. Miller and J. D. Dow : Phys. Rev. A19, 734-740 (1979)
Comparison of theoretical calculations of angular distributions of photoelectrons emitted from rare-gas atoms. [T, $h\nu$, Ne - Xe]
- O K. Takayanagi : Atomic Collisions : Bibliography, Electron Collisions with Atoms and Molecules (Experimental) Part II (1961-1967), 1-117 (1973)
- E A. R. Tancic, M. Ya. Amusia, N. K. Cherepkov and S. G. Shapiro : 9th ICPEAC, Seattle 1, 465-466 (1975)
Elastic scattering of slow electrons on the atoms with many-electron correlations. [T, Xe, He, Ar]
- I J. T. Tate and P. T. Smith : Phys. Rev. 46, 773-776 (1934)
Ionization potentials and probabilities for the formation of multiply charged ions in the alkali vapors and in krypton and xenon. [E, Xe, Kr, Na, Rb, Cs; th. - 600 eV for Xe]

- O R. L. Taylor and G. Caledonia : J. Quant. Spectro. Radiat. Transf. 9, 657-679 (1969)
Experimental determination of the cross-sections for neutral bremsstrahlung. I. Ne, Ar and Xe. [E, $h\nu$, Xe, Ne, Ar]
- EX P. K. Tien, D. MacNair and H. L. Hodges : Phys. Rev. Lett. 12, 30-33 (1964)
Electron beam excitation of gas laser transitions and measurements of cross sections of excitation.
[E, Xe, Ne, He + Ne; q_e for Ne at 30 - 50 eV]
- ME D. Ton-That and M. R. Flannery : Phys. Rev. A15, 517-526 (1977)
Cross sections for ionization of metastable rare-gas atoms (Ne^* , Ar^* , Kr^* , Xe^*) and of metastable N_2^* , CO^* molecules by electron impact.
[E, Ne - Xe, N_2 , CO]
- O L. Torop, J. Morton and J. B. West : J. Phys. B9, 2035-2041 (1976)
The angular distribution of photoelectrons from xenon. [E, $h\nu$, Xe]
- I B. A. Tozer and J. D. Craggs : J. Elect. Control 8, 103-107 (1960)
Cross sections for ionization of the inert gases by electron impact.
[E, Ar - Xe; th. - 100 eV]
- I R. J. Tweed, F. Gelebart and J. Peresse : J. Phys. B9, 2643-2656 (1976)
Autoionization by electron impact : Experiments on Ar, Kr and Xe.
[E, Ar - Xe]
- I A. Ugbabe, E. Weigold and I. E. McCarthy : Phys. Rev. A11, 576-585 (1975)
(e, 2e) reaction in inert gases : Coplanar symmetric geometry.
[E, He - Xe]
- O M. J. van der Wiel and G. R. Wight : Phys. Lett. A54, 83-84 (1975)
Single photoionization of Kr and Xe near the outer d-subshell threshold.
[E, $h\nu$, Xe, Kr; 50 - 150 eV]
- I M. J. van der Wiel and T. N. Chang : J. Phys. B11, L125-L129 (1978)
Intershell correlation in double-electron ejection from the outermost shell of Xe. [E, Xe; 70 - 80 eV]
- EX A. F. J. van Raan : Physica 65, 566-578 (1973)
I An absolute intensity-calibration method for vacuum ultraviolet spectrometry based on electron impact excitation.
[E, He - Xe; emission c. s.]
- EX V. Ya. Veldre, A. V. Lyash, L. L. Rabik and L. A. Fridkin : Latv. PSR Zinat. Akad. Vestis. Fiz. Teh. Zinat. Ser. 4, 3-12 (1965a)
Total effective cross sections of excitation of atoms by electron impact, using a classical approximation. [T, - Xe]
- EX V. Ya. Veldre, A. V. Lyash and L. L. Rabik : Akad. Nauk Latv. SSR Inst. Fiz. Riga. Atomic Collisions, Part 3, 85-144 (1965b)
Excitation of noble gas atoms by electron bombardment. [T, He - Xe]

- O D. Villarejo, R. R. Herm and M. G. Inghram : J. Chem. Phys. 46, 4995-4996 (1967)
Measurement of threshold electrons in the photoionization of Ar, Kr and Xe. [E, $h\nu$, Ar - Xe]
- E Yu. M. Volkov, O. A. Zinov'ev and D. D. Malyuta : High Temp. 6, 207-215 (1968) ·
Measurement of diffusion cross sections of slow electrons in inert gases by a microwave method. [E, He - Xe]
- EX L. M. Volkova, A. M. Devyatov and A. V. Kuralova : Bull. Acad. Sci. USSR, Phys. Ser. 24, 952-954 (1960)
Excitation cross sections for some spectrum lines of krypton and xenon. [E, Xe, Kr]
- I L. Vriens : Physica 31, 385-395 (1965) ·
A semi-empirical formula for calculation of absolute cross sections for ionization and excitation of atoms by electrons.
[T, He - Xe, H, H₂, N₂, O₂]
- O D. A. Vroom : Thesis, University of British Columbia 1-202 (1967)
Photoelectron spectroscopy of gases. [E, $h\nu$, Xe]
- S K. H. Wagner : Z. Phys. 178, 64-81 (1964)
Mittlere Energien und Driftgeschwindigkeiten von Elektronen in Stickstoff, Argon und Xenon, ermittelt aus Bildverstärkeraufnahmen von Elektronenlawinen. [E, Xe, N₂, Ar]
- E D. W. Walker : Adv. Phys. 20, 257-323 (1971) ·
Relativistic effects in low energy electron scattering from atoms.
[review, T, He - Xe, Hg; DCS, 2 - 1800 eV]
- O T. E. H. Walker and J. T. Waber : J. Phys. B7, 674-692 (1974)
Spin-orbit coupling and photoionization. [T, $h\nu$, Xe, Zn, Cd, Hg]
- O T. Watanabe : Phys. Rev. 137, 1380-1382 (1965)
Measurement of the L absorption spectra of xenon. [E, $h\nu$, Xe]
- I E. Weigold, A. J. Dixon, I. E. McCarthy and C. J. Noble : 10th ICPEAC, Paris 1, 364-365 (1977)
The noncoplanar symmetric (e, 2e) reaction on atoms.
[E, Xe, Ne; 0.4 - 2.5 keV]
- O G. Wendin : J. Phys. B5, 110-132 (1972)
Collective effects in atomic photoionization spectra II. 5p⁶ shell in Xe.
[T, $h\nu$, Xe]
- O G. Wendin : Phys. Lett. A37, 445-446 (1971)
Collective resonance in the 4d¹⁰ shell in atomic Xe.
[T, $h\nu$, Xe; photoabsorption]
- O J. B. West, P. R. Woodruff, K. Codling and R. G. Houlgate : J. Phys. B9, 407-410 (1976)
The 4d, 5s and 5p partial photoionization cross sections of xenon above the 4d threshold. [E, $h\nu$, Xe; 60 - 135 eV]

- O M. G. White, S. H. Southworth, P. Kobrin, E. D. Poliakoff, R. A. Rosenberg and D. A. Shirley : Phys. Rev. Lett. 43, 1661-1664 (1979). Erratum 44, 620-620 (1980) Angular distribution of Xe 5s \rightarrow ϵ p photoelectron near the Cooper minimum. [E, $h\nu$, Xe]
- O T. N. White : Phys. Rev. 46, 865-867 (1934) Measurement of the X-ray absorption coefficient of xenon. [E, $h\nu$, Xe]
- I G. R. Wight and M. J. van der Wiel : J. Phys. B10, 601-610 (1977) Post-collision interaction in 4d ionization of xenon. [E, Xe]
- E J. F. Williams and A. Crowe : J. Phys. B8, 2233-2248 (1975) \circ Z The scattering of electrons from inert gases. II. Absolute differential elastic cross sections for neon, krypton and xenon atoms. [E, Xe, Ne, Kr]
- E W. Williams, S. Trajmar and A. Kuppermann : J. Chem. Phys. 62, 3031-3035 (1975) \circ Z EX Angular distributions in the electron impact excitation of Xe at 20 eV. [E, Xe; 20 eV, 5 - 135°]
- I R. E. Winters, J. H. Collins and W. L. Courchene : J. Chem. Phys. 45, 1931-1937 (1966) Resolution of fine structure in ionization-efficiency curves. [E, Xe, Ar, CO, N₂, O₂; 12 - 14.5 eV for Xe]
- E T. C. Wong, J. S. Lee and R. A. Bonham : Phys. Rev. A11, 1963-1967 (1975) Maxima and minima in the angular dependence of the [Np] (n+1) s] transition in the rare gases observed by high-energy electron impact spectroscopy. [E, Ne - Xe, 25 keV]
- O Y. H. Woo and C. P. Sun : Sci. Rept. Natl. Tsing Hua Univ. Ser. A4, 398-418 (1947) On the absorption of X-rays. [, $h\nu$, Xe, Kr, Ar]
- O F. Wuilleumier et F. C. Farnoux : Compt. Rend. Acad. Sci. 269, 968-971 (1969) Etude de la photoionisation du xenon au voisinage de la discontinuite d'absorption M_{III}. [, $h\nu$, Xe]
- E A. C. Yates and R. A. Bonham : J. Chem. Phys. 50, 1056-1058 (1969) Use of relativistic electron scattering factor in electron-diffraction analysis. [E, Xe, Na; 37 keV]
- EX I. P. Zapesochnyi and P. V. Feltsan : Opt. Spectrosc. 20, 291-291 (1966) On the excitation cross sections of 2p levels of argon, krypton and xenon. [E, Ar - Xe; th. - 100 eV]
- EX I. P. Zapesochnyi, I. G. Zhukov and P. V. Feltsan : Sov. Phys. JETP 38, 675-679 (1974) I Ultrasoft X-ray study of the s-ionization mechanism for noble gases. [E, Ne - Xe; th. - 600 eV]
- O B. Zauderer : 7th ICPIG, Belgrade 2, 99-104 (1966) Measurement of electrical transport properties in a shock tube. [E,]

- O V. P. Zhdanov : Sov. J. Plasma Phys. 4, 71-75 (1978) ·
Bremsstrahlung spectra of electrons at 0.4 - 5 keV in collisions with
neutral and weakly ionized atoms. [T, Xe, Ar, Cu, Pb, etc.]
- EX I. G. Zhukov, I. P. Zapesochnyi and P. V. Feltsan : Opt. Spectrosc. 34, 475-476
(1973)
Electronic excitation of some Kr and Xe lines in the vacuum ultraviolet.
[E, Xe, Kr]
- O R. J. Zollweg : J. Chem. Phys. 50, 4251-4261 (1969)
Electron affinities of the heavy elements.
[T, He - Xe, Cu, Hg, etc. ; -0.45 eV for Xe]

Addenda of References for Xe (I) (1997 - 1999)

- O H. Aksela, S. Alitalo, J. Jauhiainen, A. Kivimäki, T. Matila, T. Kylli, E. Nommiste and S. Aksela : Phys. Rev. A59, R2563-R2566 (1999)
Ionization through the Auger decay of doubly excited $4d^9 5p^5 n l n' l'$ states in Xe. [E and T, $h\nu$, Xe]
- I C. E. Brion, Y. Zheng, J. Rolke, J. J. Neville, I. E. McCarthy and J. Wang : J. Phys. B31, L223-L230 (1998)
Distorted-wave effects at low momentum in binary (e, 2e) cross sections for d-orbital ionization. [E and T, Xe, Cd, Cr, etc.]
- O S. Cavalieri, R. Eramo, L. Fini, M. Materazzi, O. Faucher and D. Charalambidis : Phys. Rev. A57, 2915-2919 (1998)
Controlling ionization products through laser-induced continuum structure. [E, $h\nu$, Xe]
- O D. Cubric, D. B. Thompson, D. R. Cooper, G. C. King and F. H. Read : J. Phys. B30, L857-L864 (1997)
A study of photoelectron angular distributions in xenon using a new magnetic angle-changing technique. [E, $h\nu$, Xe]
- O T. Ditmire, P. K. Patel, R. A. Smith, J. S. Wark, S. J. Rose, D. Milathianaki, R. S. Marjoribanks and M. H. R. Hutchinson : J. Phys. B31, 2825-2831 (1998)
KeV X-ray spectroscopy of plasmas produced by the intense picosecond irradiation of a gas of xenon clusters. [E, $h\nu$, Xe]
- O A. Ehresmann, H. Schaffer, F. Vollweiler, G. Mentzel, B. Magel, K. -H. Scharfner and H. Schmoranzler : J. Phys. B31, 1487-1501 (1998)
Alignment of Xe II and Xe III ionic states after the decay of the Xe I $4d^9 5s/26p^1 P_1$ autoionization resonance. [E, $h\nu$, Xe]
- O P. Hansch, M. A. Walker and L. D. Van Woerkom : Phys. Rev. A57, R709-R712 (1998)
Eight- and nine-photon resonances in multiphoton ionization of xenon. [E, $h\nu$, Xe]
- O A. N. Hopersky, V. A. Yavna and V. A. Popov : J. Phys. B30, 5131-5139 (1997)
Many-electron effects in anomalous elastic scattering of linearly polarized X-ray photons by Xe near the K-edge. [T, $h\nu$, Xe]
- O Y. Ito, A. M. Vlaicu, T. Tochio, T. Mukoyama, M. Takahashi, S. Emura and Y. Azuma : Phys. Rev. A57, 873-878 (1998)
X-ray-absorption features from multielectron excitations above Xe L edges. [E, $h\nu$, Xe]

- I V. Kara, K. Paludan, J. Moxom, P. Ashley and G. Laricchia : J. Phys. B30, 3933-3949 (1997)
Single and double ionization of neon, krypton and xenon by positron impact.
[E, mostly e^+ , Xe, Kr, Ne]
- O J. Karvonen, A. Kivimaki, H. Aksela, S. Aksela, R. Camilloni, L. Avaldi, M. Coreno, M. de Simone and K. C. Prince : Phys. Rev. A59, 315-319 (1999)
Angular distribution in xenon $M_{4.5}N_{4.5}N_{4.5}$ Auger decay. [E, $h\nu$, Xe]
- O S. F. J. Larochelle, A. Talebpour and S. L. Chin : J. Phys. B31, 1201-1214 (1998a)
Non-sequential multiple ionization of rare gas atoms in a Ti:sapphire laser field. [E, $h\nu$, Xe, Ar, Ne]
- O S. F. J. Larochelle, A. Talebpour and S. L. Chin : J. Phys. B31, 1215-1224 (1998b)
Coulomb effect in multiphoton ionization of rare-gas atoms.
[E. $h\nu$, He - Xe; 200 fs, 800 nm, Ti:sapphire laser pulses]
- O T. Luhmann, C. Gerth, M. Martins, B. Obst, M. Richter and P. Zimmermann : Phys. Rev. A57, 282-291 (1998)
Final ion-charge resolving electron spectroscopy for the investigation of atomic photoionization processes : Xe in the region of the $4d \rightarrow \epsilon f$ resonance. [E, $h\nu$, Xe]
- I D. H. Madison, V. D. Kravtsov and S. Mazevet : J. Phys. B31, L17-L25 (1998)
Role of exchange scattering in spin-dependent ($e, 2e$) collisions.
[T, Xe; 147 eV]
- I S. Mazevet, I. E. McCarthy and E. Weigold : Phys. Rev. A57, 1881-1891 (1998a)
Parametrization of a spin-polarized ($e, 2e$) experiment. [T, Xe]
- I S. Mazevet, I. E. McCarthy, D. H. Madison and E. Weigold : J. Phys. B31, 2187-2202 (1998b)
Semirelativistic DWBA for the ionization of closed shell atoms at intermediate energies. [T, Xe; 50 - 150 eV]
- I K. Paludan, G. Laaricchia, P. Ashley, V. Kara, J. Moxom, H. Bluhme, H. Knudsen, U. Mikkelsen, S. P. Moller, E. Uggerhoj and E. Morenzoni : J. Phys. B30, L581-L587 (1997)
Ionization of rare gases by particle-antiparticle impact.
[E and T, Ne - Xe]
- O J. A. Ramswell, V. G. Stavros, J. Lei, Q. Hong and H. H. Fielding : Phys. Rev. A59, 2186-2189 (1999)
Observation of autoionizing Rydberg-electron wave packet in Xe.
[E, $h\nu$, Xe]
- O P. Selles, J. Mazeau, P. Lablanquie, L. Malegat and A. Heutz : J. Phys. B31, L353-L360 (1998)
Interference effects in inner-shell double photoionization of xenon.
[E, $h\nu$, Xe]

- 0 S. A. Sheinerman : J. Phys. B31, L361-L368 (1998)
 Post-collision interaction in double Auger processes. [T, $h\nu$, Xe]
- 0 R. C. Shiell, M. Evans, S. Stimson, C. -W. Hsu, C. Y. Ng and J. W. Hepburn : Phys. Rev. A
 59, 2903-2909 (1999)
 Characteristics of correlation satellites below 25 eV in xenon probed by
 pulsed-field-ionization-zero-kinetic-energy photoelectron spectroscopy.
 [E, $h\nu$, Xe]
- 0 C. J. G. J. Uiterwaal, D. Xenakis, D. Charalambidis, P. Maragakis, H. Schroder and
 P. Lambropoulos : Phys. Rev. A57, 392-400 (1998)
 Generalized multiphoton-ionization cross sections of the rare gases for
 500-fs, 248.6-nm pulses. [E, $h\nu$, He - Xe]
- 0 M. A. Walker, P. Hansch and L. D. Van Woerkom : Phys. Rev. A57, R701-R704 (1998)
 Intensity-resolved multiphoton ionization : Circumventing spatial
 averaging. [T, $h\nu$, Xe]

Addenda of References for Xe (2)

2000 (4 pages)

- O M. Ya. Amusya, L. V. Chernysheva, Z. Felfli and A. Z. Msezane : Phys. Rev. A64, 032711/1-12 (2001)
Many-electron correlation effects in the generalized oscillator strengths of noble-gas atoms. [T, Ne - Xe]
- O H. M. Boechat-Roberty, J. D. Freitas, D. P. Almeida and G. G. B. de Souza : J. Phys. B35, 1409-1420 (2002)
Generalized oscillator strength and inelastic cross sections for the Xe 4d resonances.
[E, Xe; energy-loss spectra, 1045 eV, energy-loss range 40 - 180 eV]
- EX J. B. Boffard, M. F. Gehrke, M. E. Lagus, L. W. Anderson and C. C. Lin : Eur. Phys. J. D8, 193-198 (2000)
Use of a fast beam target for the determination and reduction of the cascade contribution to electron excitation cross-section measurements.
[E, He, Ar; method for reducing the influence of cascades for q_e]
- O P. Bolognesi, S. J. Cavanagh, L. Avaldi, R. Camilloni, M. Zitnik, M. Stuhec and G. C. King : J. Phys. B33, 4723-4734 (2000)
A study of the doubly charged states of Xe and their satellites by threshold photoelectron-threshold photoelectron coincidence (TPeSCO) spectroscopy. [E, $h\nu$, Xe]
- EX Z. Chen and A. Z. Msezane : J. Phys. B33, 5397-5402 (2000)
Minima and maxima in generalized oscillator strengths of Ne, Kr and Xe.
[T, Xe, Ne, Kr]
- O J. W. Cooper : in Landolt-Bornstein, Photon and Electron Interactions with Atoms, Molecules and Ions, Subvolume A, Springer 1-1 - 1-77 (2000)
Photon interactions with atoms. [review, He - Xe, O, N, Li - Cs]
- O A. De Fanis, N. Saito, M. Kitajima, Y. Shimizu, K. Okada, H. Tanaka, I. Koyano and K. Ueda : J. Phys. B34, L377-L382 (2001)
High resolution measurement for the resonant Auger emission of Xe following $3d_{5/2} \rightarrow 6p$ excitation. [E, $h\nu$, Xe; 671.8 eV]
- E M. T. Elford and S. J. Buckman : in Landolt-Bornstein, Photon and Electron Interactions with Atoms, Molecules and Ions, Subvolume A, Springer 2-35 - 2-54 (2000)
Momentum transfer cross sections.
[review, He - Xe, H, Li - K, O, Mg, Mn, Cu, Zn, Cs, Ba, Hg]
- EX Z. Felfli, N. Embaye, P. Ozimba and A. Z. Msezane : Phys. Rev. A63, 012709/1-10 (2000)
Electron-impact excitation at small scattering angles : The LaSettre limit and attendant normalization of measured relative differential cross sections. [T, Xe, He, H, N₂O]

- O J. R. Fuhr and W. L. Wiese : in CRC Handbook of Chemistry and Physics. CRC Press, 81st (Ed), 10 - 88-146 (2000)
NIST atomic transition probability tables. [compilation, atoms]
- QT G. Garcia, J. L. de Pablos, F. Blanco and A. Williart : J. Phys. B35, 4657-4667 (2002)
E Total and elastic electron scattering cross sections from Xe at intermediate and high energies.
[E, Xe; Q_T 300 - 5000 eV, error 3%, Ne - Xe, 500 - 10^4 eV]
- EX A. N. Grum-Grzhimailo and K. Bartschat : J. Phys. B35, 3479-3495 (2002)
Near-threshold electron-impact excitation of $5p^56s$ states in Xe : an R-matrix study. [T, Xe; 8.2 - 10.5 eV, DCS]
- O M. Hanif, M. Aslam, R. Ali, A. Nadeem, M. Riaz, S. A. Bhatti and M. A. Baig : J. Phys. B33, 4647-4655 (2000)
Laser optogalvanic spectroscopy of $5p^5nf$ $J = 1 - 5$ even-parity Rydberg levels of xenon. [E, $h\nu$, Xe; Nd:YAG pumped dye laser]
- O T. Hayaishi, T. Matsui, H. Yoshii, A. Higurashi, E. Murakami, A. Yagishita, T. Aoto, T. Onuma and Y. Morita : J. Phys. B35, 141-148 (2002)
Post-collision interaction effects following 4p-shell ionization of Xe. [E, $h\nu$, Xe; 138 - 152 eV]
- QT M. Inokuti : in Landolt-Bornstein, Photon and Electron Interactions with Atoms, Molecules and Ions, Subvolume A, Springer 2-1 - 2-34 (2000)
Electron collisions with atoms.
[review, Xe, H, Li, O, Na, Hg, etc.]
- EX I. Kanik, P. V. Johnson and G. K. James : J. Phys. B34, 1685-1693 (2001)
Electron-impact-induced emission and excitation cross sections of xenon at low energies. [E, Xe; th. - 100 eV; see M. A. Khakoo (1996)]
- O M. Kitajima, M. Okamoto, M. Hoshino, H. Tanaka, S. Fritzsche, N. M. Kabachnik, I. P. Sazhina, Y. Shimizu and K. Ueda : J. Phys. B35, 3327-3335 (2002)
Experimental and theoretical study of the Auger cascade following $4d \rightarrow 6p$ photoexcitation in Xe. [E, $h\nu$, Xe; error of ratios is 1.3 %]
- O A. Kivimaki, U. Hergenhahn, B. Kempgens, R. Hentges, M. N. Piancastelli, K. Maier, A. Rudel, J. J. Tulkki and A. M. Bradshaw : Phys. Rev. A63, 012716/1-7 (2001)
Near-threshold study of Xe 3d photoionization.
[E, $h\nu$, Xe; 670 - 725 eV]
- I A. Kobayashi, G. Fujiki, A. Okaji and T. Masuoka : J. Phys. B35, 2087-2103 (2002)
Ionization cross section ratios of rare-gas atoms (Ne, Ar, Kr and Xe) by electron-impact from threshold to 1 keV. [E, Ne - Xe]
- I H. Kust and W. Mehlhorn : J. Phys. B34, 4155-4167 (2001)
Alignment after L_3 ionization of Xe atoms by electron impact near threshold. [E, Xe; 5 - 6 keV]

- O P. Lablanquie, S. Sheinerman, F. Penent, R. I. Hall, M. Akmad, T. Aoto, Y. Hikosaka and K. Ito : J. Phys. B35, 3265-3295 (2002)
Photoemission of threshold electrons in the vicinity of the xenon 4d hole : dynamics of Auger decay. [E, $h\nu$, Xe; 64 - 76 eV]
- O B. M. Lagutin, I. D. Petrov, Ph. V. Demekhin, V. L. Sukhorukov, F. Vollweiler, H. Liebel, A. Ehresmann, S. Lauer, H. Schmoranzer, O. Wilhelmi, B. Zimmermann and K. -H. Scharfner : J. Phys. B33, 1337-1356 (2000)
Alignment of ions after autoionization decay of atomic resonances : I. The $4d^{9}_{5/2}6p_{3/2}$ ($J = 1$) resonance in Xe. [E and T, Xe]
- E A. Lovell and K. Amos : Phys. Rev. A63, 012707/1-9 (2001)
Fixed-energy inversion of 5-eV e - Xe-atom scattering. [T, Xe; DCS]
- EX G. N. Malovic, A. I. Strinic, Z. Lj. Petrovic, J. V. Bozin and S. S. Manola : Eur. Phys. J. D10, 147-151 (2000)
Electron excitation coefficients for 2p and 3p levels for Xe. [E, Xe; E/N = 90 - 1000 Td]
- I D. L. Moores : Nucl. Instrum. Meth. B179, 316-324 (2001)
Calculations of integral cross-sections for electron and positron impact of rare gas atoms. [T, He - Xe; ionization, th. - 1000 eV]
- O B. Schmidtke, T. Khalil, M. Dreacher, N. Muller, N. M. Kabachnik and U. Heinzmann : J. Phys. B33, 5225-5242 (2000)
Testing the feasibility of a complete Auger decay experiment by spin- and angle-resolved electron spectroscopy on Xe $N_{4}O_{2.3}O_{2.3} \ ^{3}P_{1}$. [E, $h\nu$, Xe]
- E J. E. Sienkiewicz, S. Fritzsche and P. Syty : Acta Phys. Pol. A98, 41-46 (2000)
Exchange contributions to spin polarization in low-energy electron scattering from Xe and Hg. [T, Xe, Hg; 1.5 eV]
- O A. E. Slattery, J. P. Wightman, M. A. MacDonald, S. Cvejanovic and T. J. Reddish : J. Phys. B33, 4833-4848 (2000)
Threshold photoelectron studies of Kr and Xe. [E, $h\nu$, Xe, Kr; 23.3 - 34.8 eV for Xe]
- I A. A. Sorokin, L. A. Shmaenok, S. V. Bobashev, B. Mobus, M. Richter and G. Ulm : Phys. Rev. A61, 022723/1-11 (2000) ○
Measurements of electron-impact ionization cross sections of argon, krypton, and xenon by comparison with photoionization. [E, Xe, Kr, Ar; 140 - 4000 eV, error of q_{1} 2 %]
- O I. H. Suzuki and N. Sato : J. Elect. Spectrosc. Relat. Phenom. 129, 71-79 (2003)
Absolute photoabsorption cross-sections of Ne and Xe in the sub-keV X-ray region. [E, $h\nu$, Xe, Ne]
- O D. Toffoli, M. Stener and P. Decleva : J. Phys. B35, 1275-1305 (2002)
Application of the relativistic time-dependent density functional theory to the photoionization of xenon. [T, $h\nu$, Xe; th. - 740 eV]

EX D. H. Yu, P. A. Hayes, J. F. Williams, V. Zeman and K. Bartschat : J. Phys. B33, 1881-1894 (2000)
Internal spin-orbit coupling and electron exchange in the excitation of $np^5(n+1)p$ states of neon, krypton and xenon atoms by polarized electrons. [E and T, Xe, Kr, Ne; Stokes parameters]

Addenda (1980 - 1999)

- 0 V. A. Adamovich, A. V. Dem'yanov, N. A. Dyatko, I. V. Kochetov, A. P. Napartovich and A. P. Strel'tsov : Sov. Phys. Tech. Phys. 32, 568-572 (1987).
Kinetics of slow electrons in an electron-beam pumped excimer laser. [T, Xe, HCl, Ar]
- 0 M. Agentoft, T. Anderson, J. E. Handen, W. Persson and S.-G. Pettersson : Phys. Scr. 29, 57-60 (1984)
A study of the $ns^0np^6\ ^1S$ states in the rare gas ions. [T, $h\nu$, Ne - Xe]
- 0 M. Ahmed, M. A. Baig and B. Suleman : J. Phys. B31, 4017-4028 (1998).
Laser optogalvanic spectroscopic study of xenon. [E, $h\nu$, Xe]
- 0 H. Aksela, S. Aksela and H. Patana : Phys. Rev. A30, 858-864 (1984a)
Auger energies of free atoms : Comparison between experiment and relativistic theory.
[E and T, $h\nu$, Ne - Xe, Na, K, Cs, Cu, Cd, Hg, etc.]
- 0 H. Aksela, S. Aksela and H. Pulkkinen : Phys. Rev. A30, 865-871 (1984b)
Auger-electron study of correlation effects in $5s^05p^6$ and $5s^15p^5$ configurations of xenon. [E, $h\nu$, Xe]
- 0 H. Aksela, S. Aksela, G. M. Bancroft, K. H. Tan and H. Pulkkinen : Phys. Rev. A33, 3867-3875 (1986)
 $N_{4.500}$ resonance Auger spectra of Xe studied with selective excitation by synchrotron radiation. [E, $h\nu$, Xe]
- 0 H. Aksela, S. Aksela, H. Pulkkinen, A. Kivimaki and O.-P. Sairanen : Phys. Scr. 41, 425-428 (1990)
Shake processes in Auger decay of resonantly excited states of rare gases. [E, $h\nu$, Ne - Xe]
- 0 M. B. Amar and F. Combet Farnoux : J. Phys. B16, 2339-2358 (1983)
Numerical solution of Lippmann-Schwinger equations in photoemission : application to xenon. [E, $h\nu$, Xe]
- 0 M. Ya. Amusia, L. V. Chernysheva, G. F. Gribakin and K. L. Tsemekhman : J. Phys. B23, 393-402 (1990).
Single and double photoionisation in Xe and Ba above the 4d threshold.
[T, $h\nu$, Xe, Ba]
- 0 M. Ya. Amusia, et al. : Nucl. Instrum. Meth. B79, 146-149 (1993) see p. 2

- 0 M. Ya. Amusia, Z. Chen, L. V. Chernysheva and A. Z. Msezane : 21st ICPEAC, Sendai 274-274 (1999) ·
Multielectron correlations in the generalized oscillator strengths.
[T, Xe, Ar, Ne]
- 0 H. M. Anderson, S. D. Bergeson, D. A. Doughty and J. E. Lawler : Phys. Rev. A51, 211-217 (1995)
Xenon 147-nm resonance f value and trapped decay rates. [E, $h\nu$, Xe]
- 0 G. B. Armen, A. Aberg, J. C. Levin, B. Crasemann, M. H. Chen, G. E. Ice and G. S. Brown : Phys. Rev. Lett. 54, 1142-1145 (1985)
Threshold excitation of short-lived atomic inner-shell hole states with synchrotron radiation. [E, $h\nu$, Xe]
- 0 G. B. Armen, S. L. Sorensen, S. B. Whitfield, G. E. Ice, J. C. Levin, G. S. Brown and B. Crasemann : Phys. Rev. A35, 3966-3969 (1987a)
Vanishing post-collision interaction during photon-excited Coster-Kronig decay. [E, $h\nu$, Xe]
- 0 G. B. Armen, et al. : Phys. Rev. A36, 5606-5614 (1987b) see p. 2
- 0 G. B. Armen : Phys. Rev. A37, 995-998 (1988)
Angle dependence of post-collision-interaction Auger line shapes.
[T, $h\nu$, Xe]
- 0 M. B. Aymar and F. Combet Farnoux : J. Phys. B16, 2339-2358 (1983)
Numerical solution of the Lippmann-Schwinger equations in photoemission : application to xenon. [T, $h\nu$, Xe]
- EX K. Bartschat and D. H. Madison : J. Phys. B21, 2621-2634 (1988) ·
Scattering of spin-1/2 particles from unpolarised targets. [T, Xe, Hg]
- 0 N. Beatham, I. P. Grant, B. J. McKenzie and S. J. Rose : Phys. Scr. 21, 423-431 (1980)
Spectroscopic studies with a multiconfiguration Dirac-Fock program.
[T, $h\nu$, Ar - Xe, Hg, Ba]
- 0 A. Becker and F. H. M. Faisal : J. Phys. B32, L335-L343 (1999)
S-matrix analysis of ionization yields of noble gas atoms at the focus of Ti:sapphire laser pulses. [T, $h\nu$, He - Xe]
- 0 N. N. Bezuglov, E. N. Borisov and Ya. F. Verolainen : Sov. Phys. Usp. 34, 1-15 (1991) ·
Distribution of the radiative lifetimes over the excited states of atoms and ions. [review, Xe, He - Ar, Li - Cs, Hg, Cd, Ba, etc.]
- 0 M. Breinig, M. H. Chen, G. E. Ice, F. Parente, B. Crasemann and G. S. Brown : Phys. Rev. A22, 520-528 (1980)
Atomic inner-shell level energies determined by absorption spectrometry with synchrotron radiation. [E, $h\nu$, Ar - Xe]
- 0 D. J. Bristow, J. S. Tse and G. M. Bancroft : Phys. Rev. A25, 1-6 (1982)
Experimental and theoretical shake-up studies. The rare gases.
[E and T, $h\nu$, Ne - Xe]

- 0 G. S. Brown, M. H. Chen, B. Crasemann and G. E. Ice : Phys. Rev. Lett. 45, 1937-1940 (1980)
Observation of the Auger resonant Raman effect. [E, $h\nu$, Xe]
- 0 T. A. Carlson, D. R. Mullins, C. E. Beall, B. W. Yates, J. W. Taylor, D. W. Lindle and F. A. Grimm : Phys. Rev. A39, 1170-1185 (1989)
Angular distribution of ejected electrons in resonant Auger processes of Ar, Kr, and Xe. [E, $h\nu$, Ar - Xe]
- 0 M. -C. Castex : J. Chem. Phys. 74, 759-771 (1981)
Experimental determination of the lowest excited Xe₂ molecular states from VUV absorption spectra. [T and E, $h\nu$, Xe₂]
- 0 M. H. Chen, B. Crasemann and H. Mark : Phys. Rev. A21, 436-441 (1980a)
Relativistic K-shell Auger rates, level widths, and fluorescence yields. [T, $h\nu$, Ar - Xe, Ba, Hg, etc.]
- 0 M. H. Chen, B. Crasemann and H. Mark : Phys. Rev. A21, 442-448 (1980b)
Relativistic K-LL Auger spectra in the intermediate-coupling scheme with configuration interaction. [T, $h\nu$, Ar - Xe, Z = 18 (Ar) - 96 (Cm)]
- 0 M. H. Chen, B. Crasemann and H. Mark : Phys. Rev. A24, 177-182 (1981)
Width and fluorescence yields of atomic L-shell vacancy states. [T, $h\nu$, Ar - Xe, Z = 18 (Ar) - 100]
- 0 M. H. Chen : Phys. Rev. A31, 177-186 (1985)
Effects of relativity and correlation on L-MM Auger spectra. [T, $h\nu$, Ar - Xe, Hg; ten elements with Z = 18 (Ar) - 92 (U)]
- 0 K. T. Cheng, K. -N. Huang and W. R. Johnson : J. Phys. B13, L45-L49 (1980)
Spin polarisation of $ns \rightarrow \epsilon p$ photoelectrons from xenon, krypton and argon atoms. [T, $h\nu$, Ar - Xe]
- 0 K. T. Cheng and C. Froese Fischer : Phys. Rev. A28, 2811-2819 (1983a)
Collapse of the 4f orbital for Xe-like ions. [T, $h\nu$, Xe, Cs⁺, etc.]
- 0 K. T. Cheng and W. R. Johnson : Phys. Rev. A28, 2820 (1983b) see p. 8
- 0 N. A. Cherepkov : J. Phys. B13, L689-L692 (1980)
On the applicability of non-relativistic theory for photoelectron polarisation calculations. [T, $h\nu$, Xe, Ar]
- 0 T. -C. Chiang, D. E. Eastman, F. J. Himpsel, G. Kaindl and M. Aono : Phys. Rev. Lett. 45, 1846-1849 (1980)
Observation of the transition from uncollapsed to collapsed excited f-wave functions in I⁻, Xe, and Cs⁺ via the giant post-collision-interaction Auger effect. [E, $h\nu$, Xe, I⁻, Cs⁺]
- 0 K. Codling, J. B. West, A. C. Parr, J. L. Dehmer and R. L. Stockbauer : J. Phys. B13, L693-L697 (1980)
Measurement of β values and branching ratios in the region of the 3s3p⁶4p ¹P₁^o resonance in Ar and the 5s5p⁶6p ¹P₁^o resonance in Xe. [T, $h\nu$, Xe, Ar]

- 0 J. P. Connerade : J. Phys. B16, L329-L335 (1983)
On Rydberg series of autoionising resonances. [T, $h\nu$, Xe]
- 0 J. W. Cooper, D. W. Lindle, T. A. Carlson, D. R. Mullins, C. E. Beall, B. W. Yates,
J. W. Taylor and F. A. Grimm : J. Elect. Spectrosc. Relat. Phenom. 51, 397-406 (1990)
Parity-unfavored transitions in resonant photoemission from Ar, Kr, and
Xe : Experimental and theoretical results.
[E, $h\nu$, Ar - Xe; eV for Xe]
- EX Dayashankar : Indian J. Pure Appl. Phys. 25, 363-364 (1987)
I Stopping cross-sections of krypton and xenon for low energy electrons.
[T, Xe, Kr; < 4 keV]
- 0 H. Derenbach and V. Schmidt : J. Phys. B16, L337-L342 (1983)
Angular distribution of Xe 5s \rightarrow ϵp photoelectrons : a sensitive test
of theory. [E, $h\nu$, Xe]
- I H. Deutsch, K. Becker, S. Matt and T. D. Mark : J. Phys. B32, 4249-4259 (1999)
ME Calculated cross sections for the electron-impact ionization of
metastable atoms. [T, He - Xe, Cd, Hg]
- 0 G. Doolen and D. A. Liberman : Phys. Scr. 36, 77-79 (1987) .
Calculations of photoabsorption by atoms using a linear response method.
[T, $h\nu$, Xe, Ar, Mn, U]
- 0 K. G. Dyall and F. P. Larkins : J. Phys. B15, 203-217 (1982a)
Satellite structure in atomic spectra I. Theoretical framework and
application to excited states of the singly ionized rare gases.
[T, $h\nu$, Ne - Xe]
- 0 K. G. Dyall and F. P. Larkins : J. Phys. B15, 219-231 (1982b)
Satellite structure in atomic spectra II. The outer-shell photoelectron
spectra of the rare gases. [T, $h\nu$, Ne - Xe]
- 0 D. L. Ederer, A. C. Parr, J. B. West, D. Holland and J. L. Dehmer : Phys. Rev. A25,
2006-2011 (1982)
Measurement of the spin-orbit branching ratios and the angular asymmetry
parameter in the region of the 4s4p⁶5p resonances in krypton and the
5s5p⁶6p resonances in xenon. [E, $h\nu$, Xe, Kr]
- 0 J. H. D. Eland, F. S. Wort, P. Lablanquie and I. Nenner : Z. Phys. D4, 31-42 (1986) .
Mass spectrometric and coincidence studies of double photoionization of
small molecules. [E, $h\nu$, Xe, CO, OCS, N₂O, NH₃, SF₆, etc.]
- EX I. I. Fabrikant, O. B. Shpenik, A. V. Snegurskii and A. N. Zaviolopulo : Opt. Spectrosc.
ME 56, 454-456 (1984)
Characteristics of electron-impact excitation of metastable states of
inert gas atom. [E, Ne - Xe; 8 - 100 eV for Xe]
- 0 A. Fahlman, T. A. Carlson and M. O. Krause : Phys. Rev. Lett. 50, 1114-1117 (1983)
Angular distribution of Xe 5s \rightarrow ϵp photoelectrons : Disagreement
between experiment and theory. [E, $h\nu$, Xe; 28 - 65 eV]

- O A. Fahlman, M. O. Krause and T. A. Carlson : J. Phys. B17, L217-L222 (1984a)
Strong channels in the Xe 5s, 5p satellite spectrum in the region of the
Xe 5s Cooper minimum. [E, $h\nu$, Xe]
- O A. Fahlman, et al. : Phys. Rev. A30, 812 (1984b) see p. 12
- O F. H. M. Faisal and A. Becker : Comments on Mod. Phys. I, Part D, 15-27 (1999) ·
Double and multiple ionisation of noble gas atoms in intense laser fields.
[comments, $h\nu$, Xe, He]
- O W. R. Ferrel, M. G. Payne and W. R. Garret : Phys. Rev. A35, 5020-5031 (1987)
Determination of optical constants in noble gases through multiphoton
ionization measurements. [E, $h\nu$, Xe, Kr]
- QT G. Garcia, A. Willart and F. Blanco : 21st ICPEAC, Sendai 259 (1999) ·
Electron scattering by noble gases (Ar, Kr and Xe) at intermediate and
high energies, 30 - 10000 eV. [E, Ar - Xe]
- O J. C. M. Garcia, W. Botticher and M. Kock : J. Quant. Spectrosc. Radiat. Transf. 55,
169-179 (1996) ·
Oscillator strengths of Kr I and Xe I resonance lines.
[E, $h\nu$, Xe, Kr; 1140 - 1500 Å]
- O J. C. M. Garcia : J. Quant. Spectrosc. Radiat. Transf. 57, 533-550 (1997)
Absorption measurements of krypton and xenon resonance lines.
[E, $h\nu$, Xe, Kr; 292 K]
- O W. R. Garrett, S. D. Henderson and M. G. Payne : Phys. Rev. A35, 5032-5037 (1987)
Multiphoton ionization spectra and tunable fifth-harmonic production
near five-photon resonances in Xe and Ar. [E, $h\nu$, Xe, Ar]
- O V. E. Gavrilov : Opt. Spectrosc. 86, 175-179 (1999)
Effect of temperature and electron density on the intensity of the
continuum emitted by a weakly nonideal xenon plasma. [E, Xe]
- EX X. Guo, D. F. Mathews, G. Mikaelian, M. A. Khakoo, A. Crowe, I. Kanik, S. Trajmar, V. Zeman,
O T. Hayaishi, E. Murakami, Y. Morioka, H. Aksela, S. Aksela, E. Shigemasa and
S. Yagishita : Phys. Rev. A44, R2771-R2774 (1991)
Manifestation of Kr 3d and Xe 4d conjugate shake-up satellites in
threshold-electron spectra. [E and T, $h\nu$, Xe, Kr]
- A H. Haberland, T. Kolar and T. Reiners : Phys. Rev. Lett. 63, 1219-1222 (1989) ·
Negatively charged xenon atoms and clusters. [E, Xe, Xe_n]
- O R. I. Hall, L. Avaldi, G. Dawber, M. Zubek and G. C. King : J. Phys. B23, 4469-4485
(1990)
Observation of the krypton and xenon photoelectron satellite spectra
near threshold. [E, $h\nu$, Xe, Kr]
- O J. E. Hansen, et al. : Phys. Scr. 25, 487-490 (1982) see p. 16

- 0 J. E. Hansen, F. G. Meijer, M. Outred, W. Persson and H. O. Di Rocco : Phys. Scr. 27, 254-255 (1983)
Identification of the $4d^{10}5p^6 \ ^1S_0$ level in XeIII using optical spectroscopy. [T and E, $h\nu$, Xe]
- 0 J. E. Hansen and W. Persson : Phys. Rev. A30, 1565-1567 (1984)
Interpretation of the satellite spectrum that follows ionization in the 5s and 5p shells of Xe at low photon energy. [T, $h\nu$, Xe; 33.0 and 40.8 eV]
- 0 J. E. Hansen and W. Persson : Phys. Scr. 36, 602-643 (1987)
Revised analysis of singly ionized xenon, XeII. [E, $h\nu$, Xe]
- 0 T. Hayaishi, E. Murakami, Y. Morioka, H. Aksela, S. Aksela, E. Shigemasa and A. Yagishita : Phys. Rev. A44, R2771-R2774 (1991)
Manifestation of Kr 3d and Xe 4d conjugate shake-up satellites in threshold-electron spectra. [E, $h\nu$, Xe, Kr]
- 0 Ch. Heckenkamp, F. Schafers, G. Schonhense and U. Heinzmann : Phys. Rev. Lett. 52, 421-424 (1984)
Angular dependence of the spin-polarization transfer from circularly polarized synchrotron radiation onto photoelectrons from atomic Xe $5p^6$. [E, $h\nu$, Xe]
- 0 U. Heinzmann : J. Phys. B13, 4353-4366 (1980a)
Experimental determination of the phase differences of continuum wavefunctions describing the photoionisation process of xenon atoms. I. Measurements of the spin polarisations of photoelectrons and their comparison with theoretical results. [E, $h\nu$, Xe; 12 - 41 eV]
- 0 U. Heinzmann : J. Phys. B13, 4367-4381 (1980b)
Experimental determination of the phase differences of continuum wavefunctions describing the photoionisation process of xenon atoms. II. Evaluation of the matrix elements and the phase differences and their comparison with data in the discrete spectral range in application of the multichannel quantum defect theory. [T, $h\nu$, Xe]
- 0 W. T. HillIII, K. T. Cheng, W. R. Johnson, T. B. Lucatorto, T. J. McIlrath and J. Sugar : Phys. Rev. Lett. 49, 1631-1635 (1982)
Influence of increasing nuclear charge on the Rydberg spectra of Xe, Cs⁺, and Ba⁺⁺ : Correlation, term dependence, and autoionization. [E, $h\nu$, Xe, Cs⁺, Ba⁺⁺]
- 0 D. M. P. Holland, A. C. Parr, D. L. Ederer, J. L. Dehmer and J. B. West : Nucl. Instrum. Meth. 195, 331-337 (1982)
The angular distribution parameters of argon, krypton and xenon for use in calibration of electron spectrometers. [E, $h\nu$, Ar - Xe; th. - 25 eV]
- 0 K.-N. Huang and A. F. Starace : Phys. Rev. A21, 697-709 (1980a)
Photoionization of the 5s subshell of xenon : A multichannel K-matrix calculation including spin-orbit interactions. [T, $h\nu$, Xe]

- O K. -N. Huang, W. R. Johnson and K. T. Cheng : Phys. Lett. 77A, 234-236 (1980b)
Totally polarized electrons from photoionization of outer $p_{1/2}$ subshells of rare gases : A relativistic random phase approximation calculations.
[T, $h\nu$, Ar - Xe]
- I W. M. Huo and Y. -K. Kim : 21st ICPEAC, Sendai 229 (1999) .
Use of relativistic effective core potential in the calculation of electron-impact total ionization cross sections. [T, Ar - Xe, WF_6]
- O T. H. Johnson, H. E. Cartland, T. C. Genoni and A. M. Hunter : J. Appl. Phys. 66, 5707-5725 (1989) .
A comprehensive kinetic model of the electron-beam-excited xenon chloride laser. [T, Xe, HCl, Ne, Ar, Cl_2]
- O W. R. Johnson, K. T. Cheng, K. -N. Huang and M. Le Dourneuf : Phys. Rev. A22, 989-997 (1980a)
Analysis of Beutler-Fano autoionizing resonances in the rare-gas atoms using the relativistic multichannel quantum-defect theory.
[T, $h\nu$, Ar - Xe]
- O W. R. Johnson, C. D. Lin, K. T. Cheng and C. M. Lee : Phys. Scr. 21, 409-422 (1980b)
Relativistic random-phase approximation. [T, Ar - Xe, Be, etc.]
- O N. M. Kabachnik and I. P. Sazhina : J. Phys. B21, 267-276 (1988a)
Spin-polarised Auger-electron spectroscopy of the d atomic shell. Model calculation for noble-gas atoms. [T, $h\nu$, Ar - Xe]
- O N. M. Kabachnik, I. P. Sazhina, I. S. Lee and O. V. Lee : J. Phys. B21, 3695-3707 (1988b)
The effect of many-electron correlations on the angular distribution and spin polarisation of Auger electrons in Kr and Xe. [T, $h\nu$, Xe, Kr]
- O N. M. Kabachnik and O. V. Lee : J. Phys. B22, 2705-2716 (1989)
Spin polarisation of Auger electrons following atomic photoionisation by circularly polarised X-rays. [T, $h\nu$, Xe, Kr]
- O N. M. Kabachnik and O. V. Lee : Z. Phys. D17, 169-170 (1990)
Effect of intermediate coupling in angular distribution of Auger electrons. [T, $h\nu$, Xe]
- O B. Kammerling, H. Kossmann and V. Schmidt : J. Phys. B22, 841-854 (1989)
4d photoionisation in xenon : absolute partial cross section and relative strength of 4d many-electron processes. [E, $h\nu$, Xe]
- O B. Kammerling, B. Krassig and V. Schmidt : J. Phys. B23, 4487-4503 (1990)
Connection between the angular distribution of Auger electrons and spectator autoionization electrons following 4d ionization/excitation in xenon. [E, $h\nu$, Xe]
- EX I. Kanik, S. Trajmar, M. A. Khakoo and G. K. James : 21st ICPEAC, Sendai 251 (1999)
Electron-impact emission and excitation cross sections of xenon at low energies. [E, Xe; 15 - 30 eV]

- O R. I. Karaziya : Sov. Phys. Usp. 24, 775-794 (1981)
Excited electron orbit collapse and atomic spectra.
[review, $h\nu$, Xe, Cs, Ba, etc.; 108 references]
- EX S. Kaur, R. Srivastava, R. P. McEachran and A. D. Stauffer : J. Phys. B31, 4833-4852 (1998)
Electron impact excitation of the $np^5(n+1)p$ states of Ar ($n=3$), Kr ($n=4$) and Xe ($n=5$) atoms. [T, Ar - Xe; 15 - 100 eV]
- EX S. Kaur, R. Srivastava, R. P. McEachran and A. D. Stauffer : 21st ICPEAC, Sendai 193 (1999a)
Integrated state multipoles and Stokes parameters for the excitation of the $(n+1)p$ states of the noble gases. [T, Ne - Xe]
- EX S. Kaur, R. Srivastava, R. P. McEachran and A. D. Stauffer : J. Phys. B32, 4331-4359 (1999b)
Excitation of the $np^5(n+1)p$ ($J = 1, 2$ and 3) states of the inert gases by spin-polarized electrons : Integrated state multipoles and Stokes parameters. [T, Ne - Xe]
- EX S. Kaur and R. Srivastava : Indian J. Phys. 73B, 259-269 (1999c)
Electron impact excitation of the np^5nd and $np^5(n+2)s$ states of Ar ($n = 3$) and Xe ($n = 5$) atoms. [T, Xe, Ar; 15 - 100 eV]
- O J. Kessler : in Advances in Atomic and Molecular Physics, Vol. 27, Academic 81-163 (1991)
Electron-polarization phenomena in electron-atom collisions.
[review, Xe, Li - K, Cs, Hg, He(2^3S), etc.]
- O M. Kink, R. Kink, J. Maksimov, H. Niedrais, M. Selg and P. Vaino : Phys. Scr. 45, 79-82 (1992)
VUV laser spectroscopy of gaseous xenon.
[E, $h\nu$, Xe; 1400 - 1600 Å, Xe₂]
- O V. I. Kogan and A. B. Kukushkin : Sov. Phys. JETP 60, 665-675 (1984)
Radiation emission by quasiclassical electrons in an atomic potential.
[T, $h\nu$, Xe, Kr, Hg]
- O A. V. Korol : J. Phys. B27, 155-174 (1994)
Calculation of the parameters of the 'ordinary' two-photon bremsstrahlung for a 8.82 keV electron on He, Ne, Ar, Kr and Xe. [T, $h\nu$, He - Xe]
- EX A. I. Korotkov, L. K. Mitryukhin and O. B. Shpenik : Opt. Spectrosc. 70, 275-277 (1991)
Near-threshold differential cross sections for electron excitation of lower levels of inert gas atoms.
[E, He - Xe; data for Ar, Kr, DCS at 90°]
- O M. O. Krause, T. A. Carlson and P. R. Woodruff : Phys. Rev. A24, 1374-1379 (1981)
Angular distribution of photoelectrons of Xe 5p spin-orbit components between 20 and 105 eV. [E, $h\nu$, Xe]

- 0 J. Kreile and A. Schweig : J. Elect. Spectrosc. Relat. Phenom. 20, 191-211 (1980)
Photoelectron asymmetry parameters of Ar, Kr, Xe, H₂, N₂, O₂, CO and CO₂ : New measurements and a reconsideration of literature data.
[E, hν, Ar - Xe, H₂, CO₂, etc.]
- 0 S. Laroche, A. Talebpour and S. L. Lin : J. Phys. B31, 1215-1224 (1998)
Coulomb effect in multiphoton ionization of rare-gas atoms.
[E, hν, He - Xe]
- 0 S. Lauer, H. Liebel, F. Vollweiler, H. Schmoranzner, B. M. Lagutin, Ph. V. Demekhin, I. D. Petrov and V. L. Sukhorukov : J. Phys. B32, 2015-2030 (1999)
Lifetimes of the ns¹np⁶ ²S_{1/2} states of singly ionized argon, krypton and xenon. [E, Ar II - Xe II]
- I H. Lebius, H. R. Koslowski, K. Wiesemann and B. A. Huber : Ann. Phys. 48, 103-114 (1991)
Threshold behaviour of electron impact ionisation cross sections for rare gas atoms. [E, Xe, He, Ne, Kr; 31 - 150 eV for Xe]
- 0 H. J. Levinson, I. T. McGovern and T. Gustafsson : J. Phys. B13, 253-258 (1980)
Photoelectron studies of the xenon 5p branching ratio using synchrotron radiation. [E, hν, Xe; 16 - 33 eV]
- 0 R. H. Lipson, P. E. LaRocque and B. P. Stoicheff : J. Chem. Phys. 82, 4470-4478 (1985)
Vacuum ultraviolet laser spectroscopy. II. Spectra of Xe₂ and excited state constants. [E, hν, Xe₂]
- 0 A. V. Loginov and G. S. Soloveva : Opt. Spectrosc. 63, 263-265 (1987)
Continua of diatomic molecules of inert gases in the VUV region.
[T, hν, Xe₂, Kr₂]
- 0 A. V. Loginov : Opt. Spectrosc. 76, 351-354 (1994)
Semiempirical calculation of dipole-moment functions for electronic transitions in diatomic molecules. Application to the rare-gas dimers.
[T, hν, Xe₂, Kr₂]
- 0 B. Lohmann : J. Phys. B23, 3147-3165 (1990)
Analyses and model calculations on the angular distribution and spin polarization of Auger electrons. [T, hν, Xe, Kr, Rn]
- I X. Long, M. Liu, F. Ho and X. Peng : Atomic Data Nucl. Data Tables 45, 353-366 (1990)
Cross sections for K-shell ionization by electron impact.
[compilation, E, Ne - Xe, Ba, etc., Z = 6 - 92]
- 0 B. P. Luo and E. Zeitler : J. Elect. Spectrosc. Relat. Phenom. 57, 285-295 (1991) -
EX M-shell cross-sections for fast electron inelastic collisions based on photoabsorption data. [T, Xe, Kr, Rb, Cs, Br, I, Ba, Cd, etc.]
- 0 A. A. Madej and B. P. Stoicheff : Phys. Rev. A38, 3456-3466 (1988)
Vacuum-ultraviolet laser spectroscopy : Radiative lifetimes of A_{1u} states of Ar₂, Kr₂, Xe₂, and dependence on inter-nuclear distance.
[E, hν, Ar₂ - Xe₂]

- O G. Mainfray and C. Manus : Rep. Prog. Phys. 54, 1333-1372 (1991)
Multiphoton ionization of atoms. [review, $h\nu$, Xe, He, Ar, etc.]
- O A. A. Maiste, R. E. Ruus, S. A. Kuchas, R. I. Karaziya and M. A. Elango : Sov. Phys. JETP 51, 474-479 (1980)
Collapse of 4f-electron in the configuration $3d^9 4f$ in xenonlike ions.
[E, $h\nu$, Xe, I^- , Cs^+ , Ba^{2+} , etc.; 600 - 1000 eV]
- O T. J. McIlrath, P. H. Bucksbaum, R. R. Freeman and M. Bashkansky : Phys. Rev. A35, 4611-4623 (1987)
Above-threshold ionization processes in xenon and krypton.
[E, $h\nu$, Xe, Kr]
- O W. Miehle, O. Kandler, T. Leisner and O. Echt : J. Chem. Phys. 91, 5940-5952 (1989)
Mass spectrometric evidence for icosahedral structure in large rare gas clusters : Ar, Kr, Xe. [E, Xe_n , Ar_n , Kr_n ; $n = 11 - 960$]
- S W. L. Morgan : JILA Report 33, Boulder 1-82 (1990)
A bibliography of electron scattering data 1978 - 1989. [compilation]
- EX A. Z. Msezane, N. Embaye, P. Ozimba, Z. Felfli and D. Bessis : 21st ICPEAC, Sendai 238 (1999)
Regge pole normalization of relative electron differential cross sections. [T, Xe, He, H, N_2O]
- O X. Mu and B. Crasemann : Phys. Rev. Lett. 57, 3039-3041 (1986)
Two-photon transitions in atomic inner shells : Relativistic self-consistent-field calculation for Xe. [T, $h\nu$, Xe]
- O A. Nagy : Phys. Rep. 298, 1-79 (1998)
Density functional. Theory and application to atoms and molecules.
[review, He - Xe, Cl, Hg, etc.]
- O M. Ohno : Phys. Scr. 21, 589-593 (1980)
Strong dynamical effects in the X-ray photoemission spectra and X-ray emission spectra of the elements Pd to Xe. [T, $h\nu$, Pd - Xe ($Z=46-54$)]
- O M. Ohno : J. Phys. B15, 513-520 (1982)
Breakdown of the one-electron picture $3d^{-1} \rightarrow 4p^{-1}$ X-ray emission spectrum of Xe. [T, $h\nu$, Xe]
- O M. Ohno and G. Wendin : Z. Phys. D5, 233-240 (1987)
Dynamic screening and interference effects in X-ray and Auger emission spectra. [T, $h\nu$, Xe]
- O M. Ohno : Phys. Rev. A38, 3473-3478 (1988a)
Green's-function calculation of the Auger energy. [T, $h\nu$, Xe]
- O M. Ohno and R. E. LaVilla : Phys. Rev. A38, 3479-3483 (1988b)
Anomalous $L \gamma_{2,3}$ X-ray emission spectrum of Xe. [E and T, $h\nu$, Xe]

- O K. Okuyama, J. H. D. Eland and K. Kimura : Phys. Rev. A41, 4930-4935 (1990)
Decay of the 4d hole states of Xe studied by photoelectron-photoelectron coincidence spectroscopy. [E, $h\nu$, Xe]
- O T. N. Olney, N. M. Cann, G. Cooper and C. E. Brion : Chem. Phys. 223, 59-98 (1997) -
Absolute scale determination for photoabsorption spectra and the calculation of molecular properties using dipole sum-rules.
[review, $h\nu$, He - Xe, H₂, Cl₂ - I₂, etc.; 52 small molecules]
- EX P. A. Ozimba and A. Z. Msezane : J. Phys. B32, 2433-2438 (1999a) -
Electron impact excitation at forward scattering. [T, Xe, H, Cd]
- O P. A. Ozimba and A. Z. Msezane : Chem. Phys. 246, 87-102 (1999b)
Regge pole representation of the limiting behavior of optically forbidden transitions in atoms and molecules. [T, Xe, He, Ne, SF₆, C₆H₆, etc.]
- I V. -F. Z. Papp, M. M. Povch and L. L. Shimon : 21st ICPEAC, Sendai 230 (1999) -
Electron impact double ionization of krypton and xenon by ejection of outer shell s- and p- electrons. [E, Xe, Kr; th. - 450 eV]
- O F. A. Parpia and W. R. Johnson : J. Phys. B17, 531-540 (1984a)
The relativistic time-dependent local-density approximation.
[T, $h\nu$, Xe]
- O F. A. Parpia, W. R. Johnson and V. Radojevic : Phys. Rev. A29, 3173-3180 (1984b)
Application of the relativistic local-density approximation to photoionization of the outer shells of neon, argon, krypton, and xenon.
[T, $h\nu$, Ne - Xe]
- E S. H. Patil : Phys. Scr. 54, 471-482 (1996) -
Extrapolated model potential for low-energy scattering of electrons from inert gas atoms, and Be, Mg, Zn, Cd, Hg. [T, He - Xe, Cd, Hg, etc.]
- S E. L. Patrick, M. L. Andrews and A. Garscadden : Appl. Phys. Lett. 59, 3239-3240 (1991) -
Electron drift velocities in xenon and xenon-nitrogen gas mixtures.
[E, Xe, Xe + N₂; E/N = 0.1 - 21 Td]
- O W. Persson, C. -G. Wahlstrom, G. Bertuccelli, H. O. Di Rocco, J. G. Reyna Almandos and M. Gallardo : Phys. Scr. 38, 347-369 (1988)
Spectrum of doubly ionized xenon (XeIII). [E, $h\nu$, Xe]
- O S. D. Price, et al. : J. Phys. B22, L153-L158 (1989) see p. 30
- O S. D. Price and J. H. D. Eland : J. Elect. Spectrosc. Relat. Phenom. 52, 649-660 (1990)
Photoelectron-photoelectron coincidence spectroscopy.
[E, $h\nu$, Xe, Ar, HI, CH₃I, OCS]
- O H. Pulkkinen, H. Aksela and S. Aksela : Phys. Rev. A34, 1195-1199 (1986)
Correlation effects in the M_{4.5}N_{4.5}O Auger spectra of Xe.
[E and T, $h\nu$, Xe]

- E P. J. B. M. Rachinhas, T. H. V. T. Dias, F. P. Santos, C. A. N. Conde and A. D. Stauffer :
EX 21st ICPEAC, Sendai 266 (1999) -
- I A Monte Carlo study of the electron cloud produced in xenon by electrons with energies up to 200 keV. [T, Xe]
- 0 J. S. Risley and W. B. Westervelt : Appl. Opt. 28, 389-400 (1989) -
Electron-atom source as a primary radiometric standard for the EUV spectral region.
[E, compilation, $h\nu$, He - Xe, N₂, O₂, CS₂, SO₂, CH₄, SF₆, etc.]
- 0 A. Russek and W. Mehlhorn : J. Phys. B19, 911-927 (1986)
Post-collision interaction and the Auger lineshape. [T, $h\nu$, Xe, Ar]
- 0 N. Saito and I. H. Suzuki : J. Phys. B25, 1785-1793 (1992a) see p. 32
- 0 N. Saito and I. H. Suzuki : Int. J. Mass Spectrom. Ion Process. 115, 157-172 (1992b)
Multiple photoionization in Ne, Ar, Kr and Xe from 44 to 1300 eV.
[E, $h\nu$, Ne - Xe]
- 0 J. A. R. Samson and L. Yin : J. Opt. Soc. Am. B6, 2326-2333 (1989)
Precision measurements of photoabsorption cross sections of Ar, Kr, Xe, and selected molecules at 58.4, 73.6, and 74.4 nm.
[E, Ar - Xe, H₂, N₂, O₂, CO, N₂O, CO₂, CH₄]
- 0 S. J. Schaphorst, Q. Qian, B. Krassig, P. Van Kampen, N. Scherer and V. Schmidt :
J. Phys. B30, 4003-4017 (1997)
Matrix elements for 4d_{5/2} photoionization in xenon derived from coincidence electron spectrometry. [E, $h\nu$, Xe]
- 0 V. Schmidt, S. Krummacher, F. Wuilleumier and P. Dhez : Phys. Rev. A24, 1803-1811 (1981)
Post-collision interaction in inner-shell ionization : The xenon case.
[E, $h\nu$, Xe]
- 0 V. Schmidt, et al. : Z. Phys. D2, 275-283 (1986) see p. 33
- 0 V. Schmidt : Rep. Prog. Phys. 55, 1483-1659 (1992)
Photoionization of atoms using synchrotron radiation.
[review, $h\nu$, He - Xe]
- 0 A. Schmitt and H. Schmoranzer : Phys. Lett. A263, 193-198 (1999) -
Radiative lifetimes of the 5p⁵6p-fine-structure levels of xenon measured by beam-gas-laser spectroscopy. [E, Xe]
- 0 G. Schonhense : Phys. Rev. Lett. 44, 640-643 (1980)
Angular dependence of the polarization of photoelectrons ejected by plane-polarized radiation from argon and xenon atoms. [E, $h\nu$, Xe, Ar]
- 0 M. J. Seaton : Rep. Prog. Phys. 46, 167-257 (1983)
Quantum defect theory. [review, He - Xe, H₂, etc.]

- 0 V. Selvaraj and M. S. Gopinathan : Phys. Rev. A29, 3007-3017 (1984)
Relativistic E method for atoms. [T, Ne - Xe, etc.]
- 0 V. Selvaraj and M. S. Gopinathan : J. Phys. B18, 3267-3283 (1985)
Theoretical calculations of shake-up transitions and intensities using
the relativistic local-density RE method. [T, $h\nu$, Ne - Xe, Li - Cs]
- 0 N. Shanthi and P. C. Deshmukh : Phys. Rev. A40, 2400-2403 (1989)
Xenon 4p photoionization near the 4d Cooper minimum : Interchannel
coupling effects. [T, $h\nu$, Xe; see D. W. Lindle (1988)]
- 0 B. M. Smirnov and A. S. Yatsenko : Phys. Usp. 39, 211-230 (1996)
Properties of dimers. [review, He₂ - Xe₂, H₂, F₂ - I₂, Li₂ - Cs₂, etc.]
- 0 G. Snell, M. Drescher, N. Muller, U. Heinzmann, U. Hergenhahn and U. Becker : J. Phys.
B32, 2361-2369 (1999a)
Spin-resolved electron spectroscopy of the xenon N_{4.5}O_{2.3}O_{2.3} Auger
lines. [E, $h\nu$, Xe; 93.8 eV photon]
- 0 G. Snell : 21th ICPEAC, Sendai, progress report (1999b)
Spin-polarized Auger and photoelectron spectroscopy in xenon.
[E, $h\nu$, Xe]
- 0 B. Sonntag, T. Nagata, Y. Sato, Y. Satow, A. Yagishita and M. Yanagihara : J. Phys.
B17, L55-L58 (1984)
Collapse of the f-symmetric final-state wavefunction in the 3d excitation
spectra of atomic Xe, Cs and Ba. [E, $h\nu$, Xe, Cs, Ba; 770 - 810 eV]
- I A. A. Sorokin, L. A. Shmaenok, S. V. Bobashev, M. Richter and G. Ulm : 21st ICPEAC,
Sendai 242 (1999)
Measurements of electron-impact ionization cross sections of argon,
krypton, and xenon by comparison with photoionization.
[E, Xe, Kr, Ar; error of q_1 2 %; see A. A. Sorokin (2000)]
- 0 S. Southworth, P. H. Kobrin, C. M. Truesdale, D. Lindle, S. Owaki and D. A. Shirley :
Phys. Rev. A24, 2257-2260 (1981)
Photoelectron and Auger electron asymmetries : Alignment of Xe⁺² D_{5/2}
by photoionization. [E, $h\nu$, Xe]
- 0 S. Southworth, U. Becker, C. M. Truesdale, P. H. Kobrin, D. W. Lindle, S. Owaki and
D. Shirley : Phys. Rev. A28, 261-279 (1983)
Electron-spectroscopy study of inner-shell photoexcitation and ionization
of Xe. [E, $h\nu$, Xe; 60 - 190 eV]
- 0 S. H. Southworth, A. C. Parr, J. E. Hardis, J. L. Dehmer and D. M. Holland : Nucl.
Instrum. Meth. A246, 782-786 (1986)
Calibration of a monochromator/spectrometer system for the measurement
of photoelectron angular distributions and branching ratios.
[E, $h\nu$, Ne - Xe]

- O S. Svensson, B. Eriksson, N. Martensson, G. Wendin and U. Gelius : J. Elect. Spectrosc. Relat. Phenom. 47, 327-384 (1988)
Electron shake-up and correlation satellites and continuum shake-off distributions in X-ray photoelectron spectra of the rare gas atoms. [E, $h\nu$, He - Xe, H]
- O J. D. Talman, B. M. Bancroft and D. D. Johnston : Phys. Rev. A24, 669-672 (1981)
Calculation of shake-up states in rare-gas ions using an optimized potential model. [T, Ne - Xe]
- O H. Tawara and R. A. Phaneuf : Comments At. Mol. Phys. 21, 177-193 (1988)
Atomic and molecular data requirements for fusion plasma edge studies. [comments, He - Xe, H, D, T, O, O₂, etc.]
- S R. L. Tembe and A. Mozumder : Phys. Rev. A27, 3274-3278 (1983)
Electron thermalization in gas mixtures. [T, Xe + N₂, Ar + N₂]
- O J. Tulkki : Phys. Rev. A32, 3153-3155 (1985)
Relativistic and relaxation effects in the near-edge K photoabsorption of xenon and radon. [T, $h\nu$, Xe, Rn]
- O J. Tulkki, G. B. Armen, T. Aberg, B. Crasemann and M. H. Chen : Z. Phys. D5, 241-252 (1987)
Quantum theory of post-collision interaction in inner-shell photoionization. [T, $h\nu$, Xe, Ar]
- O J. Tulkki : Phys. Rev. Lett. 62, 2817-2820 (1989)
Multiple excitation at xenon 5s photoionization threshold. [T, $h\nu$, Xe]
- O C. J. G. J. Uiterwaal, D. Xenakis, D. Charalambidis, P. Maragakis, H. Schroder and P. Lambropoulos : Phys. Rev. A57, 392-400 (1998)
Generalized multiphoton-ionization cross sections of the rare gases for 500-fs, 248.6-nm pulses. [E, $h\nu$, He - Xe]
- O P. van der Straten, R. Morgenstern and A. Niehaus : J. Phys. D8, 35-45 (1988)
Angular dependent post-collision interaction in Auger processes. [T, $h\nu$, Xe, Ar]
- EX E. T. Verkhovtseva, E. V. Gnatchenko, B. A. Zon, A. A. Nekipelov and A. A. Tkachenko : Sov. Phys. JETP 71, 443-448 (1990)
Bremsstrahlung in electron scattering by xenon. [E and T, Xe]
- O E. von Raven, M. Meyer, M. Pahler and B. Sonntag : J. Elect. Spectrosc. Relat. Phenom. 52, 677-688 (1990)
Electron-electron coincidence studies of the decay of photoexcited rare gas core resonances. [E, $h\nu$, Ar - Xe]
- O G. Wendin and A. F. Starace : Phys. Rev. A28, 3143-3146 (1983)
Ionic-configuration-interaction effects on Xe 5s-subshell photoionization processes. [T, $h\nu$, Xe]

- O Y. -J. Wu and J. -M. Li : J. Phys. B21, 1509-1517 (1988)
Non-relativistic self-consistent-field calculation of two-photon transitions in atomic inner shells for Xe. [T, $h\nu$, Xe]
- O O. Yagci and J. E. Wilson : J. Phys. C16, 383-391 (1983)
3d photoabsorption in gaseous and solid xenon.
[E, $h\nu$, Xe; 670 - 720 eV]
- EX D. H. Yu, P. A. Hayes, X. J. Chen and J. F. Williams : 21st ICPEAC, Sendai 195 (1999) -
Electron exchange and spin-orbit effects in the excitations of inert gases by polarized electrons. [E, Xe, Kr, Ne]
- O A. Zangwill and P. Soven : Phys. Rev. A21, 1561-1572 (1980)
Density-functional approach to local-field effects in finite systems : Photoabsorption in the rare gases. [T, $h\nu$, Ne - Xe]
- E V. Zigman : Eur. Phys. J. D7, 11-16 (1999) -
The viscosity cross-section for elastic electron-xenon collisions including electron spin polarization. [T, Xe]

Addenda (1901 - 1979)

- O M. Y. Adam, F. Wuilleumier, S. Sandner, V. Schmidt and G. Wendin : J. Physiq. 39, 129-135 (1978)
Satellite lines in the 5s - 5p photoelectron spectrum of xenon.
[E, $h\nu$, Xe; 75 - 100 eV]
- O D. K. Anderson : Phys. Rev. 137, A21-A26 (1965)
Lifetimes of the (5p⁵6s) ¹P₁ and ³P₁ states of xenon. [E, Xe]
- O J. A. Barker, R. O. Watts, J. K. Lee, T. P. Schafer and Y. T. Lee : J. Chem. Phys. 61, 3081-3089 (1974)
Interatomic potentials for krypton and xenon.
[E and T, Xe-Xe, Kr-Kr]
- O J. E. Broolly, L. E. Porter, R. H. Sherman, J. K. Theobald and J. C. Fong : J. Geophys. Res. 78, 1627-1632 (1973)
Photoabsorption cross sections of H₂, D₂, N₂, O₂, Ar, Kr, and Xe at the 584-A line of neutral helium. [E, $h\nu$, Ar - Xe, etc.]
- QT E. Bruche : Ergebn. der exakt. Naturwiss. 8, 185-228 (1929)
Freie Elektronen als Sonden des Baues der Molekeln. (Kenntnis von Wirkungsquerschnitt und Molekelbau.)
[review, He - Xe, H₂, N₂, CO, NO, O₂, etc.]
- O M. -C. Castex : Chem. Phys. 5, 448-455 (1974a)
High resolution spectrum of the xenon molecule in the vacuum ultraviolet region (1150 - 1300 A). [E, $h\nu$, Xe₂; 1150 - 1300 A]

- O M. -C. Castex and N. Damany : Chem. Phys. Lett. 24, 437-440 (1974b)
High resolution spectrum of Xe₂ in the vacuum ultraviolet region.
Molecular systems related to the two lower resonance lines.
[E, hν, Xe₂; 1290 - 1500 Å]
- O G. I. Chashchina and E. Y. Shreider : Opt. Spectrosc. 20, 283-284 (1966)
Determination of oscillator strengths of the resonance lines of xenon.
[E, hν, Xe; 147.0 and 129.6 nm]
- O M. Chenevier et P. A. Moskowitz : J. Physiq. 35, 401-409 (1974)
Mesures par resonance magnetique de durees de vie et de facteurs de
Lande de niveaux excites d'atomes d'argon et de xenon.
(Magnetic resonance measurements of lifetimes and Lande g factors of
excited levels of argon and xenon.) [E, Xe, Ar]
- O W. Dietrich : Z. Phys. 152, 87-97 (1958)
Verscharfte Messung diskreter Energieverluste von 35 keV-Elektronen an
Gasen. [E, He - Xe, N₂, O₂; 35 keV]
- O J. D. Dow and R. S. Knox : Phys. Rev. 152, 50-56 (1966)
Excited-state wave functions, excitation energies, and oscillator
strengths for krypton and xenon. [T, Ne - Xe]
- O W. Eberhardt, G. Kalkoffen and C. Kunz : Phys. Rev. Lett. 41, 156-159 (1978) ·
Measurement of the Auger decay after resonance excitation of Xe 4d and
Kr 3d resonance lines. [E, hν, Xe, Kr]
- O W. L. Faust and R. A. McFarlane : J. Appl. Phys. 35, 2010-2015 (1964)
Line strengths for noble-gas maser transitions; Calculations of
gain/inversion at various wavelengths. [T, Ne - Xe]
- EX P. V. Feltsan and I. P. Zapesochny : Ukrayin Fiz. Zh. 13, 205-210 (1968)
Excitation of inert gases at electron-atom collisions. V. Xenon.
[E, Xe]
- O D. E. Freeman, K. Yoshino and Y. Tanaka : J. Chem. Phys. 61, 4880-4889 (1974)
Vacuum ultraviolet absorption spectrum of the van der Waals molecule Xe₂.
I. Ground state vibrational structure, potential well depth, and shape.
[E, hν, Xe₂]
- E J. Geiger : Z. Phys. 177, 138-145 (1964) see p. 54
- O J. Geiger : Z. Phys. A276, 219-224 (1976)
Xenon : Oscillator strengths and photoionization. [T, hν, Xe]
- EX J. Geiger : Z. Phys. A282, 129-141 (1977)
Energy loss spectra of xenon and krypton and their analysis of energy-
dependent multichannel quantum defect theory. [E and T, Xe, Kr]
- O U. Gelius : J. Elect. Spectrosc. Relat. Phenom. 5, 985-1057 (1974) ·
Recent progress in ESCA studies of gases.
[review, Xe, Ne, N₂, CO, N₂O, CH₄, CF₄, C₂H₄, SF₆, C₆H₆, etc.]

- 0 P. M. Griffin and J. W. Hutcherson : J. Opt. Soc. Am. 59, 1607-1613 (1969).
Erratum 61, 136-136 (1970)
Oscillator strengths of the resonance lines of krypton and xenon.
[E, $h\nu$, Xe, Kr]
- 0 P. F. Gruzdev : Opt. Spectrosc. 22, 170-171 (1967)
Oscillator strengths of resonance lines in the spectra of Ne I, Ar I,
Kr I, Xe I atoms and Na II and Rb II ions. [T, Ne - Xe, Na⁺, Rb⁺]
- 0 J. E. Hansen and W. Persson : Phys. Rev. A18, 1459-1463 (1978)
Interpretation of the 5s photoelectron satellite spectrum of atomic Xe.
[revised analysis, $h\nu$, Xe]
- 0 R. E. Huffman, J. C. Larrabee and Y. Tanaka : Appl. Opt. 4, 1581-1588 (1965)
Rare gas continuum light sources for photoelectric scanning in the
vacuum ultraviolet. [E, $h\nu$, Xe, Kr, Ar, He]
- 0 X. Husson and J. Margerie : Opt. Comm. 5, 139-142 (1972)
Hanle effect of 2p₃, 2p₆, 2p₇, 2p₈, 2p₉ and 3p₈ levels of Xe I. [E, Xe]
- 0 E. Jimenez, J. Campos and C. Sanchez del Rio : J. Opt. Soc. Am. 64, 1009-1010
(1974)
Radiative lifetimes of some levels of Xe I and Xe II.
[E, Xe; 14 + 16 levels for Xe and Xe⁺]
- 0 P. Laporte and H. Damany : J. Physiq. 40, 9-22 (1979)
High density self-broadening of the first xenon and krypton resonance
line. [E, $h\nu$, Xe, Kr; 146.96 nm Xe line, Xe₂]
- 0 C.-M. Lee and K. T. Lu : Phys. Rev. A8, 1241-1257 (1973)
Spectroscopy and collision theory. II. The Ar absorption spectrum.
[T, $h\nu$, Ar; see K. T. Lu : Phys. Rev. A4, 579 (1971) for Xe]
- 0 E. L. Lewis : Proc. Phys. Soc. London 92, 817-825 (1967)
Self-broadening and oscillator strengths in the rare gases.
[T, $h\nu$, He - Xe]
- 0 A. V. Loginov and P. F. Gruzdev : Opt. Spectrosc. 41, 104-106 (1976)
Radiation lifetimes of xenon levels. [T, Xe]
- 0 K. T. Lu : Phys. Rev. A4, 579-596 (1971)
Spectroscopy and collision theory. The Xe absorption spectrum.
[T, $h\nu$, Xe, Ar]
- 0 E. Matthias, R. A. Rosenberg, E. D. Poliakoff, M. G. White, S. T. Lee and D. A. Shirley :
Chem. Phys. Lett. 52, 239-244 (1977)
Time resolved VUV spectroscopy using synchrotron radiation : Fluorescent
lifetimes of atomic Kr and Xe. [E, $h\nu$, Xe, Kr]
- 0 R. S. Mulliken : J. Chem. Phys. 52, 5170-5180 (1970)
Potential curves of diatomic rare-gas molecules and their ions, with
particular reference to Xe₂. [T, Xe₂]

- 0 C. Y. Ng, D. J. Trevor, B. H. Mahan and Y. T. Lee : J. Chem. Phys. 66, 446-449 (1977) ·
Photoionization studies of the Kr₂ and Ar₂ van der Waals molecules.
[E, hν, Xe₂, Kr₂, Ar₂]
- 0 M. Outred : J. Phys. Chem. Ref. Data 7, 1-262 (1978)
Tables of atomic spectral lines for the 10,000 Å to 40,000 Å region.
[compilation, He - Xe, Li, F - I, Ba, Cu, Hg, etc. 57 elements]
- 0 H. R. Schlossberg and A. Javan : Phys. Rev. Lett. 17, 1242-1244 (1966)
Hyperfine structure and paramagnetic properties of excited states of
xenon studied with a gas laser. [E, hν, Xe]
- 0 Shardanand : Phys. Rev. 160, 67-71 (1967)
Experimental evidence for Xe₂ molecules. [E, Xe₂]
- 0 S. Suzer and N. S. Hush : J. Phys. B10, L705-L709 (1977)
Satellites in the 304 Å photoelectron spectrum of Xe. [E, hν, Xe]
- 0 T. Suzuki and K. Shimoda : J. Phys. Soc. Jpn. 43, 233-242 (1977)
Lifetimes and cross-sections of laser levels of xenon measured by Hanle
effect. [E, Xe]
- EX N. Swanson, R. J. Celotta and C. E. Kuyatt : in Electron and Photon Interactions
with Atoms, Ed. by H. Kleinpoppen and M. R. C. McDowell, Plenum 661-667 (1976) ·
Electron excitation of xenon near threshold.
[E, Xe; four lowest excited states, 8 - 14 eV, 45°]
- 0 M. Tsukakoshi and K. Shimoda : J. Phys. Soc. Jpn. 26, 758-769 (1969)
Zero-field level-crossing effects in a cascade process induced by highly
saturated xenon laser field. [E, Xe; lifetimes]
- 0 Wm. J. Veigele : Atomic Data 5, 51-111 (1973)
Photon cross sections from 0.1 keV to 1 MeV for elements Z = 1 to Z = 94.
[compilation, hν, He - Xe, etc.]
- 0 Ya. F. Verolainen and A. L. Osherovich : Opt. Spectrosc. 27, 14-15 (1969)
Lifetimes of certain xenon levels. [E, Xe]
- 0 J. E. West, P. R. Woodruff, K. Codling and R. G. Houlgate : J. Phys. B9, 407-410 (1976)
The 4d, 5s and 5p partial photoionization cross sections of xenon above
the 4d threshold. [E, hν, Xe; 60 - 135 eV]
- 0 W. Wieme and P. Mortier : Physica 65, 198-202 (1973)
Oscillator strength of the resonance lines of xenon. [E, hν, Xe]

Addenda of References for Xe (3)

- S N. L. Aleksandrov, N. A. Dyatko, I. V. Kochetov, A. P. Napartovich and D. Lo : Phys. Rev. E53, 2730-2734 (1996) -
Negative differential conductivity of electrons in pure rare gases.
[T, Ar - Xe]
- O E. A. Bondarenko, E. T. Verkhovtseva, Yu. S. Doronin and A. M. Ratner : Opt. Spectrosc. 70, 595-598 (1991) -
Formation of a four-atom complex consisting of an R_2^+ excimer and an R_2^+ molecular ion in inert-gas clusters during electron bombardment.
[E, Ar_N - Xe_N]
- O C. J. Chen and R. H. Garstang : J. Quant. Spectrosc. Radiat. Transf. 10, 1347-1348 (1970)
Transition probabilities for Xe I. [T, Xe]
- I J. P. D. Cook, J. Mitroy and E. Weigold : Phys. Rev. Lett. 52, 1116-1118 (1984)
Direct observations of relativistic effects in single-electron momentum distributions in xenon outer shells. [E, Xe; 1200 eV]
- O B. L. Henke, P. Lee, T. J. Tanaka, R. L. Shimabukuro and B. K. Fujikawa : Atomic Data Nucl. Data Tables 27, 1-144 (1982)
Low-energy X-ray interaction coefficients : Photoabsorption, scattering, and reflection. E = 100 - 2000 eV, Z = 1 - 94.
[compilation, $h\nu$, Xe, etc.; H - Pu]
- O B. L. Henke, E. M. Gullikson and J. C. Davis : Atomic Data Nucl. Data Tables 54, 181-342 (1993)
X-ray interactions : Photoabsorption, scattering, transmission, and reflection at 50 - 30,000 eV, Z = 1 - 92.
[compilation, $h\nu$, Xe, etc.; H - U]
- I R. Hippler, I. McGregor, M. Aydinol and H. Kleinpoppen : Phys. Rev. A23, 1730-1736 (1981)
Ionization of xenon L subshells by low-energy electron impact.
[E, Xe; 6 - 14 keV]
- EX R. E. LaVilla, M. Ohno, P. Glans and J. Nordgren : Phys. Rev. A49, 2185-2187 (1994)
Additional features in the 3d - 4p X-ray-emission spectrum of Xe.
[E, Xe; 515 - 547 eV]
- O M. H. Miller, R. A. Roig and R. D. Bengtson : Phys. Rev. A8, 480-486 (1973)
Transition probabilities of Xe I and Xe II.
[E, Xe, Xe⁺; 3800 - 8400 Å]
- O C. Y. Ng, D. J. Trevor, B. H. Mahan and Y. T. Lee : J. Chem. Phys. 65, 4327-4329 (1976)
Photoionization study of the Xe₂ van der Waals molecule.
[E, $h\nu$, Xe₂]

- O C. Y. Ng, D. J. Trevor, B. H. Mahan and Y. T. Lee : J. Chem. Phys. 66, 446-449 (1977)
Photoionization studies of the Kr₂ and Ar₂ van der Waals molecules.
[E, hν, Xe₂, Kr₂, Ar₂]
- O E. D. Poliakoff, P. M. Dehmer and J. L. Dehmer : J. Chem. Phys. 75, 1568-1569 (1981)
The photoelectron spectrum of Xe₃ by the photoelectron-photoion
coincidence technique. [E, hν, Xe₃]
- O S. Puri, B. Chand, D. Mehta, M. L. Garg, N. Singh and P. N. Trehan : Atomic Data Nucl.
Data Tables 61, 289-311 (1995)
K and L shell X-ray fluorescence cross sections.
[T, hν, Xe, etc; Z = 13 - 92, 1 - 200 keV]
- EX C. Quarles and M. Semaan : Phys. Rev. A26, 3147-3151 (1982)
Characteristic X-ray production by electron bombardment of argon,
krypton, and xenon from 4 to 10 keV. [E, Ar - Xe]
- O V. Radojevic, D. M. Davidovic and M. Ya. Amusia : Phys. Rev. A67, 022719/1-6 (2003)
Near-threshold photoionization of the Xe 3d spin-orbit doublet :
Relativistic, relaxation, and intershell interaction effects.
[T, hν, Xe]
- EX J. A. Schiavone, S. M. Tarr and R. S. Freund : Phys. Rev. A20, 71-81 (1979)○
Electron-impact excitation of the rare-gas atoms to high-Rydberg states.
[E, He - Xe; th. - 300 eV]
- EX B. M. Smirnov : Sov. Phys. Usp. 23, 450-471 (1980) .
O Highly excited atomic states. [review, He - Xe, Na, Rb, Cs]
- O B. M. Smirnov : Sov. Phys. Usp. 27, 1-18 (1984) .
van der Waals molecules. [review, He₂ - Xe₂, XeF, XeCl, etc.]
- EX S. M. Tarr, J. A. Schiavone and R. S. Freund : Phys. Rev. A22, 2899-2900 (1980)○
Direct excitation of high-orbital-angular-momentum states of rare-gas
atoms by electron impact. [E, He - Xe; 12 - 21 eV for Xe]
- O T. G. Walker, K. Bonin and W. Happer : Phys. Rev. A35, 3749-3752 (1987)
Electron-noble-gas spin-flip scattering at low energy. [T, He - Xe, Rn]

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Electron Collision Cross Section Set for Xenon (Xe)

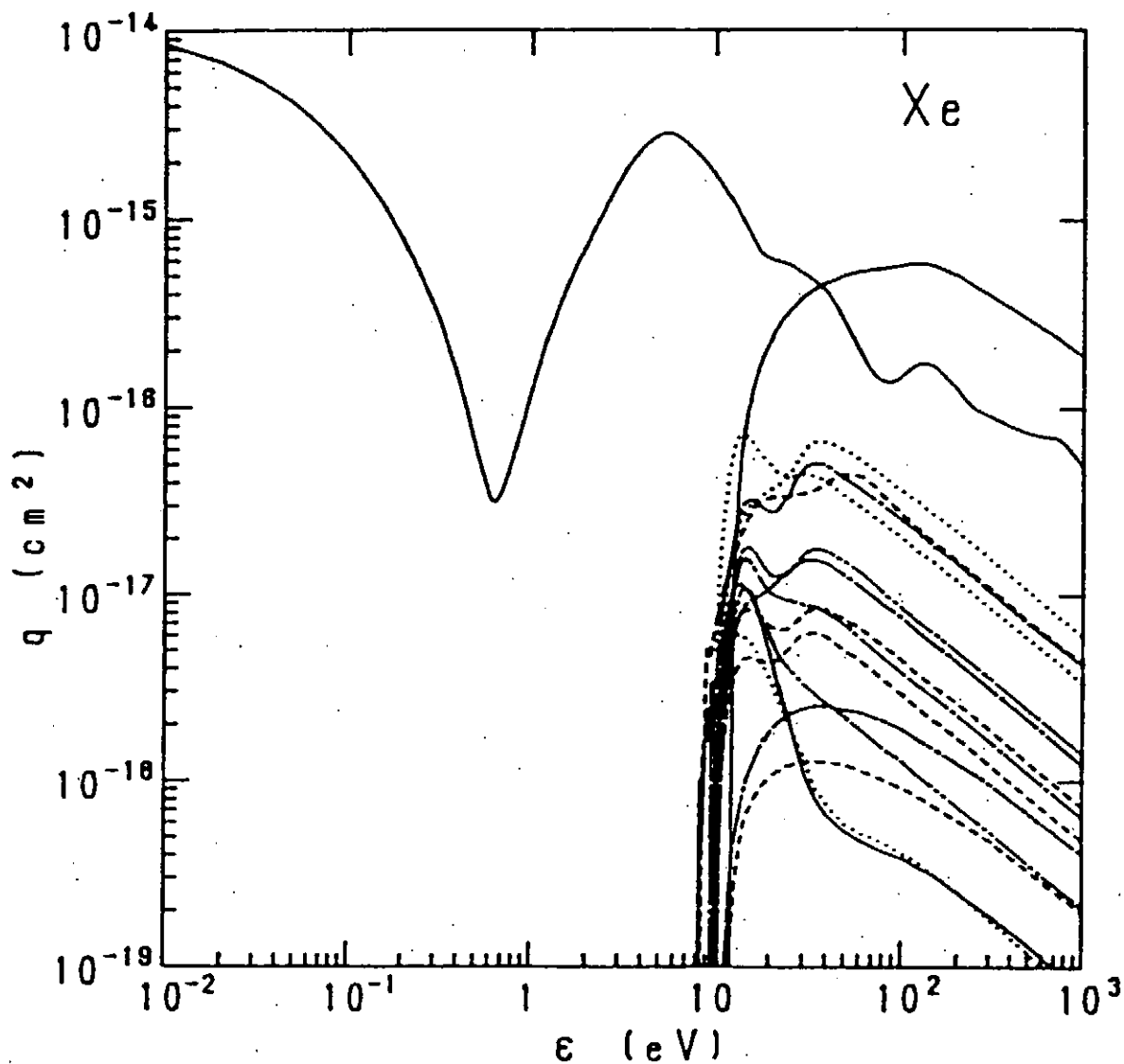


Figure 1. Electron collision cross section set for Xe.

Elastic momentum transfer cross section q_m . Electronic excitation cross sections $q_{e1} - q_{e14}$ divided into fourteen energy levels as shown in the next table. Total ionization cross section q_i . Detailed cross section values are shown in the following tables.

Important Energy Levels for Xenon

| | Pachen notation | designation | energy (eV) | resolved feature | |
|----|---|------------------------|-------------|------------------|----------------------|
| 0 | P ₀ | 5p ⁶ | 0 | | |
| 1 | 1s ₅ | 6s [3/2] ₂ | 8.315 | Qe1 | metastable state |
| | 1s ₄ | 6s [3/2] ₁ | 8.437 | Qe2 | |
| | 1s ₃ | 6s' [1/2] ₀ | 9.447 | Qe3 | metastable state |
| | 1s ₂ | 6s' [1/2] ₁ | 9.570 | Qe4 | |
| 5 | 2p ₁₀ | 6p [1/2] ₁ | 9.580 | } Qe5 | |
| | 2p ₉ | 6p [5/2] ₂ | 9.686 | | |
| | 2p ₈ | 6p [5/2] ₃ | 9.721 | } Qe6 | |
| | 2p ₇ | 6p [3/2] ₁ | 9.789 | | |
| | 2p ₆ | 6p [3/2] ₂ | 9.821 | | |
| 10 | 3d ₆ | 5d [1/2] ₀ | 9.891 | } Qe7 | |
| | 3d ₅ | 5d [1/2] ₁ | 9.917 | | |
| | 2p ₅ | 6p [1/2] ₀ | 9.934 | | |
| | 3d ₄ ' | 5d [7/2] ₄ | 9.943 | | |
| | 3d ₃ | 5d [3/2] ₂ | 9.959 | | |
| 15 | 3d ₄ | 5d [7/2] ₃ | 10.039 | Qe8 | |
| | 3d ₁ ' | 5d [5/2] ₂ | 10.158 | Qe9 | |
| | 3d ₁ ' | 5d [5/2] ₃ | 10.220 | Qe10 | |
| | 3d ₂ | 5d [3/2] ₁ | 10.401 | Qe11 | |
| | 2s ₅ | 7s [3/2] ₂ | 10.562 | } Qe12 | |
| 20 | 2s ₄ | 7s [3/2] ₁ | 10.593 | | |
| | 3p ₁₀ | 7p [1/2] ₁ | 10.902 | | |
| | 3p ₉ | 7p [5/2] ₂ | 10.954 | | |
| | 2p ₄ | 6p' [3/2] ₁ | 10.958 | | |
| 25 | 3p ₈ | 7p [5/2] ₃ | 10.969 | | |
| | 4d ₆ | 6d [1/2] ₀ | 10.972 | | |
| | 4d ₅ | 6d [1/2] ₁ | 10.979 | | |
| | 3p ₆ | 7p [3/2] ₂ | 10.996 | | |
| | 4d ₃ | 6d [3/2] ₂ | 10.999 | | |
| 30 | 3p ₇ | 7p [3/2] ₁ | 11.008 | | |
| | 3p ₅ | 7p [1/2] ₀ | 11.015 | | |
| | 4d ₄ ' | 6d [7/2] ₄ | 11.024 | | |
| | 4d ₄ | 6d [7/2] ₃ | 11.038 | | |
| | 2p ₃ | 6p' [3/2] ₂ | 11.055 | | |
| 35 | 4d ₁ ' | 6d [5/2] ₂ | 11.065 | | |
| | 2p ₂ | 6p [1/2] ₁ | 11.069 | | |
| | 4d ₁ ' | 6d [5/2] ₃ | 11.101 | | |
| | 2p ₁ | 6p' [1/2] ₀ | 11.141 | | |
| 39 | 4d ₂ | 6d [3/2] ₁ | 11.163 | } Qe13 | |
| | 3s ₅ | 8s [3/2] ₂ | 11.259 | | |
| 74 | 4s ₅ | 9s [3/2] ₂ | 11.580 | Qe14 | |
| | 2p ₀ _{3/2} (Xe ⁺) | | 12.130 | | ionization potential |

Cross Section Set for Xe

determined at 1990. 2. 24.

elastic momentum transfer cross section Q_m for xenon

| ϵ (eV) | Q_m (10^{-16}cm^2) | ϵ (eV) | Q_m (10^{-16}cm^2) | ϵ (eV) | Q_m (10^{-16}cm^2) |
|--------------------|-------------------------------------|--------------------|-------------------------------------|--------------------|-------------------------------------|
| 0 | 131 | 1. 3 | 2. 77 | 35 | 4. 60 |
| 0. 001 | 123 | 1. 4 | 3. 38 | 40 | 4. 05 |
| 0. 0025 | 113 | 1. 6 | 4. 68 | 45 | 3. 40 |
| 0. 005 | 99. 0 | 1. 8 | 5. 98 | 50 | 2. 78 |
| 0. 01 | 84. 3 | 2 | 7. 39 | 55 | 2. 30 |
| 0. 02 | 67. 1 | 2. 2 | 8. 95 | 60 | 1. 95 |
| 0. 03 | 55. 7 | 2. 4 | 10. 6 | 65 | 1. 70 |
| 0. 04 | 47. 2 | 2. 6 | 12. 4 | 70 | 1. 52 |
| 0. 05 | 40. 8 | 2. 8 | 14. 3 | 75 | 1. 43 |
| 0. 06 | 35. 3 | 3 | 16. 1 | 80 | 1. 39 |
| 0. 08 | 27. 3 | 3. 3 | 18. 8 | 85 | 1. 38 |
| 0. 1 | 21. 5 | 3. 6 | 21. 1 | 90 | 1. 39 |
| 0. 12 | 17. 2 | 4 | 24. 1 | 95 | 1. 43 |
| 0. 16 | 11. 4 | 4. 4 | 26. 2 | 100 | 1. 50 |
| 0. 2 | 7. 79 | 4. 8 | 27. 7 | 110 | 1. 62 |
| 0. 24 | 5. 45 | 5 | 28. 3 | 120 | 1. 70 |
| 0. 28 | 3. 91 | 5. 2 | 28. 7 | 125 | 1. 73 |
| 0. 32 | 2. 87 | 5. 4 | 28. 8 | 130 | 1. 73 |
| 0. 35 | 2. 16 | 5. 6 | 28. 7 | 140 | 1. 71 |
| 0. 4 | 1. 47 | 6 | 28. 0 | 150 | 1. 65 |
| 0. 45 | 0. 970 | 6. 5 | 26. 8 | 200 | 1. 24 |
| 0. 5 | 0. 640 | 7 | 25. 5 | 220 | 1. 10 |
| 0. 55 | 0. 450 | 8 | 22. 5 | 250 | 0. 980 |
| 0. 6 | 0. 340 | 9 | 19. 5 | 300 | 0. 910 |
| 0. 62 | 0. 320 | 10 | 17. 0 | 400 | 0. 800 |
| 0. 64 | 0. 315 | 11 | 14. 9 | 500 | 0. 740 |
| 0. 66 | 0. 320 | 12 | 13. 1 | 600 | 0. 710 |
| 0. 7 | 0. 360 | 13 | 11. 6 | 700 | 0. 700 |
| 0. 75 | 0. 440 | 15 | 9. 04 | 750 | 0. 680 |
| 0. 8 | 0. 540 | 17 | 7. 10 | 800 | 0. 650 |
| 0. 9 | 0. 810 | 18 | 6. 55 | 1000 | 0. 490 |
| 1 | 1. 21 | 20 | 6. 12 | 2000 | 0. |
| 1. 1 | 1. 66 | 25 | 5. 73 | 4000 | 0. |
| 1. 2 | 2. 21 | 30 | 5. 11 | 8000 | 0. |

error 3 - 5 %

Xenon 1

electronic excitation of $1s_5$

| ϵ (eV) | q_{e1} (10^{-16}cm^2) | ϵ (eV) | q_{e1} (10^{-16}cm^2) |
|--------------------|--|--------------------|--|
| 8.315 | 0.00 | 50 | 0.00540 |
| 8.35 | 0.00552 | 60 | 0.00480 |
| 8.4 | 0.0101 | 80 | 0.00420 |
| 8.5 | 0.00420 | 100 | 0.00384 |
| 8.6 | 0.00540 | 120 | 0.00348 |
| 8.7 | 0.00840 | 150 | 0.00312 |
| 8.8 | 0.0122 | 200 | 0.00252 |
| 8.9 | 0.0181 | 300 | 0.00192 |
| 9.0 | 0.0228 | 500 | 0.00132 |
| 9.07 | 0.0244 | 1000 | 0.000720 |
| 9.2 | 0.0176 | 10000 | 0.00 |

electronic excitation of $1s_4$

| ϵ (eV) | q_{e2} (10^{-16}cm^2) | ϵ (eV) | q_{e2} (10^{-16}cm^2) |
|--------------------|--|--------------------|--|
| 8.437 | 0.00 | 16 | 0.286 |
| 8.5 | 0.00115 | 17.5 | 0.316 |
| 8.6 | 0.00720 | 20 | 0.334 |
| 8.7 | 0.0130 | 22 | 0.338 |
| 8.8 | 0.0202 | 25 | 0.342 |
| 8.9 | 0.0288 | 30 | 0.352 |
| 9.0 | 0.0418 | 32 | 0.355 |
| 9.1 | 0.0533 | 35 | 0.370 |
| 9.2 | 0.0461 | 40 | 0.410 |
| 9.3 | 0.0446 | 45 | 0.430 |
| 9.4 | 0.0461 | 50 | 0.442 |
| 9.5 | 0.0490 | 55 | 0.440 |
| 9.6 | 0.0518 | 60 | 0.434 |
| 9.7 | 0.0562 | 70 | 0.390 |
| 9.8 | 0.0590 | 80 | 0.341 |
| 9.9 | 0.0619 | 100 | 0.270 |
| 10.0 | 0.0677 | 120 | 0.230 |
| 10.5 | 0.0840 | 150 | 0.190 |
| 11.0 | 0.101 | 200 | 0.151 |
| 12 | 0.137 | 300 | 0.110 |
| 13 | 0.175 | 500 | 0.0730 |
| 14 | 0.215 | 1000 | 0.0430 |
| 15 | 0.253 | 10000 | 0.00 |

error 30 - 50 %

electronic excitation of $1s_3$ electronic excitation of $1s_2$ and $2p_{10}$ electronic excitation of $2p_9$ and $2p_8$

| ϵ (eV) | q_{e3} (10^{-16}cm^2) | ϵ (eV) | q_{e4} (10^{-16}cm^2) | ϵ (eV) | q_{e5} (10^{-16}cm^2) |
|--------------------|--|--------------------|--|--------------------|--|
| 9.447 | 0.00 | 9.570 | 0.00 | 9.686 | 0.00 |
| 9.52 | 0.00408 | 9.6 | 0.0202 | 10 | 0.0100 |
| 9.55 | 0.00756 | 9.62 | 0.0259 | 10.2 | 0.0180 |
| 9.59 | 0.00516 | 9.7 | 0.0144 | 10.5 | 0.0280 |
| 9.63 | 0.00780 | 9.8 | 0.0175 | 10.7 | 0.0350 |
| 9.68 | 0.00576 | 9.9 | 0.0230 | 11 | 0.0460 |
| 9.73 | 0.00504 | 10 | 0.0288 | 11.5 | 0.0660 |
| 9.78 | 0.00516 | 10.5 | 0.0550 | 12 | 0.0900 |
| 9.83 | 0.00780 | 11 | 0.0850 | 12.5 | 0.112 |
| 9.9 | 0.00924 | 11.5 | 0.117 | 13 | 0.135 |
| 9.94 | 0.00888 | 12 | 0.152 | 13.5 | 0.156 |
| 10.0 | 0.0102 | 12.5 | 0.191 | 14 | 0.171 |
| 10.25 | 0.0166 | 13 | 0.232 | 14.5 | 0.178 |
| 10.5 | 0.0220 | 13.5 | 0.267 | 15 | 0.180 |
| 10.75 | 0.0259 | 14 | 0.294 | 16 | 0.174 |
| 11 | 0.0312 | 14.5 | 0.312 | 17 | 0.160 |
| 11.5 | 0.0432 | 15 | 0.320 | 18 | 0.146 |
| 12 | 0.0516 | 16 | 0.322 | 20 | 0.126 |
| 12.5 | 0.0570 | 18 | 0.296 | 22 | 0.125 |
| 13 | 0.0600 | 20 | 0.276 | 25 | 0.135 |
| 14 | 0.0612 | 21 | 0.278 | 30 | 0.167 |
| 15 | 0.0576 | 22 | 0.287 | 32 | 0.173 |
| 16 | 0.0540 | 25 | 0.350 | 35 | 0.177 |
| 18 | 0.0432 | 27 | 0.420 | 40 | 0.170 |
| 20 | 0.0354 | 30 | 0.480 | 50 | 0.150 |
| 22 | 0.0270 | 32 | 0.500 | 60 | 0.132 |
| 25 | 0.0204 | 35 | 0.510 | 80 | 0.103 |
| 30 | 0.0134 | 40 | 0.490 | 100 | 0.0840 |
| 35 | 0.00912 | 50 | 0.420 | 120 | 0.0730 |
| 40 | 0.00756 | 60 | 0.370 | 150 | 0.0620 |
| 50 | 0.00588 | 80 | 0.300 | 200 | 0.0490 |
| 60 | 0.00528 | 100 | 0.250 | 300 | 0.0630 |
| 80 | 0.00468 | 120 | 0.220 | 500 | 0.0240 |
| 100 | 0.00408 | 150 | 0.180 | 1000 | 0.0140 |
| 120 | 0.00372 | 200 | 0.146 | 10000 | 0.00 |
| 150 | 0.00312 | 300 | 0.105 | | |
| 200 | 0.00252 | 500 | 0.070 | | |
| 300 | 0.00180 | 1000 | 0.0420 | | |
| 500 | 0.00120 | 10000 | 0.00 | | |
| 1000 | 0.000720 | | | | |
| 10000 | 0.00 | | | | |

error 30 - 50 %

Xenon 3

electronic excitation
of $2p_7$ and $2p_6$

electronic excitation
of $3d_6$, $3d_5$, $2p_5$, $3d_4'$
and $3d_3$

electronic excitation
of $3d_4$

| ϵ (eV) | q_{e6} (10^{-16}cm^2) | ϵ (eV) | q_{e7} (10^{-16}cm^2) | ϵ (eV) | q_{e8} (10^{-16}cm^2) |
|--------------------|--|--------------------|--|--------------------|--|
| 9.789 | 0.00 | 9.891 | 0.00 | 10.039 | 0.00 |
| 10 | 0.00400 | 10 | 0.0170 | 10.2 | 0.00600 |
| 10.2 | 0.00800 | 10.2 | 0.0560 | 10.5 | 0.0170 |
| 10.5 | 0.0150 | 10.5 | 0.120 | 10.7 | 0.0250 |
| 10.7 | 0.0200 | 10.7 | 0.160 | 11 | 0.0380 |
| 11 | 0.0270 | 11 | 0.225 | 11.2 | 0.0460 |
| 11.5 | 0.0390 | 11.2 | 0.275 | 11.5 | 0.0580 |
| 12 | 0.0490 | 11.5 | 0.347 | 12 | 0.0800 |
| 12.5 | 0.0590 | 12 | 0.472 | 12.5 | 0.101 |
| 13 | 0.0680 | 12.5 | 0.597 | 13 | 0.123 |
| 13.5 | 0.0750 | 13 | 0.672 | 13.5 | 0.141 |
| 14 | 0.0790 | 13.5 | 0.710 | 14 | 0.153 |
| 14.5 | 0.0820 | 14 | 0.720 | 14.5 | 0.157 |
| 15 | 0.0830 | 14.5 | 0.712 | 15 | 0.155 |
| 16 | 0.0810 | 15 | 0.697 | 15.5 | 0.151 |
| 17 | 0.0780 | 15.5 | 0.677 | 16 | 0.144 |
| 18 | 0.0750 | 16 | 0.652 | 18 | 0.118 |
| 20 | 0.0670 | 18 | 0.560 | 20 | 0.102 |
| 22 | 0.0640 | 20 | 0.494 | 22 | 0.0970 |
| 25 | 0.0660 | 22 | 0.450 | 25 | 0.0930 |
| 30 | 0.0790 | 25 | 0.430 | 30 | 0.0890 |
| 32 | 0.0820 | 30 | 0.450 | 35 | 0.0860 |
| 35 | 0.0840 | 35 | 0.430 | 40 | 0.0800 |
| 40 | 0.0820 | 40 | 0.400 | 50 | 0.0690 |
| 50 | 0.0740 | 50 | 0.340 | 60 | 0.0580 |
| 60 | 0.0660 | 60 | 0.296 | 80 | 0.0460 |
| 80 | 0.0530 | 80 | 0.240 | 100 | 0.0380 |
| 100 | 0.0440 | 100 | 0.200 | 120 | 0.0330 |
| 120 | 0.0380 | 120 | 0.173 | 150 | 0.0280 |
| 150 | 0.0320 | 150 | 0.148 | 200 | 0.0225 |
| 200 | 0.0260 | 200 | 0.118 | 300 | 0.0164 |
| 300 | 0.0190 | 300 | 0.0860 | 500 | 0.0110 |
| 500 | 0.0125 | 500 | 0.0580 | 1000 | 0.00640 |
| 1000 | 0.00730 | 1000 | 0.0340 | 10000 | 0.000 |
| 10000 | 0.00 | 10000 | 0.00 | | |

error 30 - 50 %

electronic excitation
of 3d''

electronic excitation
of 3d₁'

electronic excitation
of 3d₂

| ϵ (eV) | q_{e9} (10^{-16}cm^2) | ϵ (eV) | q_{e10} (10^{-16}cm^2) | ϵ (eV) | q_{e11} (10^{-16}cm^2) |
|--------------------|--|--------------------|---|--------------------|---|
| 10.158 | 0.00 | 10.220 | 0.00 | 10.401 | 0.00 |
| 10.2 | 0.00100 | 10.5 | 0.00300 | 10.6 | 0.0180 |
| 10.5 | 0.00900 | 10.7 | 0.00700 | 11 | 0.0550 |
| 10.7 | 0.0160 | 11 | 0.0120 | 11.2 | 0.0760 |
| 11 | 0.0250 | 11.2 | 0.0150 | 11.5 | 0.102 |
| 11.2 | 0.0310 | 11.5 | 0.0210 | 12 | 0.148 |
| 11.5 | 0.0410 | 12 | 0.0275 | 12.5 | 0.185 |
| 12 | 0.0570 | 12.5 | 0.0346 | 13 | 0.216 |
| 12.5 | 0.0730 | 13 | 0.0390 | 13.5 | 0.240 |
| 13 | 0.0870 | 13.5 | 0.0420 | 14 | 0.259 |
| 13.5 | 0.0990 | 14 | 0.0440 | 14.5 | 0.277 |
| 14 | 0.106 | 14.5 | 0.0453 | 15 | 0.290 |
| 14.5 | 0.108 | 15 | 0.0460 | 15.5 | 0.304 |
| 15 | 0.107 | 15.5 | 0.0460 | 16 | 0.315 |
| 15.5 | 0.104 | 16 | 0.0460 | 18 | 0.345 |
| 16 | 0.100 | 18 | 0.0430 | 20 | 0.370 |
| 18 | 0.0750 | 20 | 0.0430 | 22 | 0.390 |
| 20 | 0.0590 | 22 | 0.0440 | 25 | 0.440 |
| 22 | 0.0480 | 25 | 0.0510 | 30 | 0.600 |
| 25 | 0.0400 | 28 | 0.0590 | 32 | 0.640 |
| 30 | 0.0330 | 30 | 0.0610 | 35 | 0.670 |
| 35 | 0.0290 | 35 | 0.0630 | 40 | 0.660 |
| 40 | 0.0260 | 40 | 0.0590 | 50 | 0.600 |
| 50 | 0.0220 | 50 | 0.0500 | 60 | 0.530 |
| 60 | 0.0190 | 60 | 0.0440 | 80 | 0.430 |
| 80 | 0.0150 | 80 | 0.0350 | 100 | 0.360 |
| 100 | 0.0127 | 100 | 0.0290 | 120 | 0.320 |
| 120 | 0.0109 | 120 | 0.0250 | 150 | 0.270 |
| 150 | 0.00920 | 150 | 0.0210 | 200 | 0.218 |
| 200 | 0.00730 | 200 | 0.0170 | 300 | 0.158 |
| 300 | 0.00540 | 300 | 0.0123 | 500 | 0.105 |
| 500 | 0.00360 | 500 | 0.00820 | 1000 | 0.0600 |
| 1000 | 0.00210 | 1000 | 0.00480 | 10000 | 0.00 |
| 10000 | 0.00 | 10000 | 0.000 | | |

error 30 - 50 %

electronic excitation of $2s_5 - 4d_2$ electronic excitation of $3s_5 -$ electronic excitation of $4s_5 -$

| ϵ (eV) | q_{e12} (10^{-16}cm^2) | ϵ (eV) | q_{e13} (10^{-16}cm^2) | ϵ (eV) | q_{e14} (10^{-16}cm^2) |
|--------------------|---|--------------------|---|--------------------|---|
| 10.562 | 0.00 | 11.259 | 0.00 | 11.580 | 0.00 |
| 10.6 | 0.00300 | 11.5 | 0.00105 | 12 | 0.000900 |
| 11 | 0.0135 | 12 | 0.00255 | 12.5 | 0.00195 |
| 11.2 | 0.0188 | 12.5 | 0.00405 | 13 | 0.00300 |
| 11.5 | 0.0270 | 13 | 0.00525 | 13.5 | 0.00390 |
| 12 | 0.0420 | 13.5 | 0.00645 | 14 | 0.00495 |
| 12.5 | 0.0555 | 14 | 0.00750 | 14.5 | 0.00585 |
| 13 | 0.0675 | 14.5 | 0.00885 | 15 | 0.00660 |
| 13.5 | 0.0758 | 15 | 0.0102 | 15.5 | 0.00705 |
| 14 | 0.0825 | 15.5 | 0.0113 | 16 | 0.00765 |
| 14.5 | 0.0878 | 16 | 0.0122 | 18 | 0.00930 |
| 15 | 0.0900 | 18 | 0.0158 | 20 | 0.0105 |
| 15.5 | 0.0930 | 20 | 0.0186 | 22 | 0.0113 |
| 16 | 0.0945 | 22 | 0.0206 | 25 | 0.0122 |
| 18 | 0.101 | 25 | 0.0228 | 30 | 0.0128 |
| 20 | 0.110 | 30 | 0.0245 | 35 | 0.0128 |
| 22 | 0.119 | 35 | 0.0252 | 40 | 0.0126 |
| 25 | 0.134 | 40 | 0.0251 | 50 | 0.0123 |
| 27 | 0.144 | 50 | 0.0240 | 60 | 0.0114 |
| 30 | 0.153 | 60 | 0.0234 | 80 | 0.0102 |
| 32 | 0.155 | 80 | 0.0210 | 100 | 0.00915 |
| 35 | 0.153 | 100 | 0.0191 | 120 | 0.00840 |
| 40 | 0.147 | 120 | 0.0170 | 150 | 0.00735 |
| 50 | 0.128 | 150 | 0.0149 | 200 | 0.00615 |
| 60 | 0.111 | 200 | 0.0125 | 300 | 0.00480 |
| 80 | 0.0885 | 300 | 0.00975 | 500 | 0.00330 |
| 100 | 0.0750 | 500 | 0.00675 | 1000 | 0.00195 |
| 120 | 0.0645 | 1000 | 0.00405 | 10000 | 0.00 |
| 150 | 0.0540 | 10000 | 0.00 | | |
| 200 | 0.0435 | | | | |
| 300 | 0.0315 | | | | |
| 500 | 0.0213 | | | | |
| 1000 | 0.0123 | | | | |
| 10000 | 0.00 | | | | |

error 50 %

ionization cross sections Q_1 for xenon

| ϵ (eV) | Q_1 (10^{-16} cm ²) | ϵ (eV) | Q_1 (10^{-16} cm ²) |
|--------------------|---|--------------------|---|
| 12.130 | 0.00 | 45 | 4.87 |
| 12.5 | 0.105 | 50 | 5.09 |
| 13 | 0.247 | 55 | 5.23 |
| 13.5 | 0.409 | 60 | 5.34 |
| 14 | 0.570 | 65 | 5.40 |
| 14.5 | 0.751 | 70 | 5.46 |
| 15 | 0.931 | 75 | 5.50 |
| 15.5 | 1.09 | 80 | 5.51 |
| 16 | 1.25 | 85 | 5.60 |
| 17 | 1.56 | 90 | 5.63 |
| 18 | 1.82 | 95 | 5.69 |
| 19 | 2.06 | 100 | 5.76 |
| 20 | 2.30 | 105 | 5.80 |
| 21 | 2.54 | 110 | 5.88 |
| 22 | 2.76 | 115 | 5.87 |
| 23 | 2.96 | 120 | 5.87 |
| 24 | 3.14 | 125 | 5.88 |
| 25 | 3.29 | 130 | 5.85 |
| 26 | 3.41 | 135 | 5.80 |
| 27 | 3.55 | 140 | 5.76 |
| 28 | 3.70 | 145 | 5.71 |
| 29 | 3.82 | 150 | 5.63 |
| 30 | 3.92 | 160 | 5.48 |
| 31 | 4.02 | 170 | 5.36 |
| 32 | 4.11 | 180 | 5.23 |
| 33 | 4.21 | 190 | 5.10 |
| 34 | 4.28 | 200 | 5.02 |
| 35 | 4.36 | 250 | 4.37 |
| 36 | 4.43 | 300 | 3.96 |
| 37 | 4.48 | 500 | 2.97 |
| 38 | 4.55 | 700 | 2.43 |
| 39 | 4.61 | 1000 | 1.90 |
| 40 | 4.66 | 10000 | 0.00 |

error 10 %

elastic total cross sections Q_t for xenon

| ϵ (eV) | Q_t (10^{-16} cm ²) | ϵ (eV) | Q_t (10^{-16} cm ²) |
|--------------------|---|--------------------|---|
| 0.05 | 60.0 | 6 | 39.7 |
| 0.1 | 36.5 | 8 | 42.0 |
| 0.15 | 23.0 | 10 | 40.5 |
| 0.2 | 15.3 | 12 | 37.7 |
| 0.25 | 10.8 | 15 | 33.6 |
| 0.3 | 7.96 | 20 | 27.5 |
| 0.4 | 4.51 | 25 | 20.9 |
| 0.5 | 2.66 | 30 | 15.8 |
| 0.6 | 1.74 | 40 | 10.1 |
| 0.7 | 1.35 | 50 | 7.21 |
| 0.8 | 1.30 | 60 | 5.79 |
| 0.9 | 1.44 | 80 | 4.77 |
| 1 | 1.77 | 100 | 4.71 |
| 1.2 | 2.80 | 125 | 4.76 |
| 1.5 | 4.81 | 150 | 4.65 |
| 1.75 | 6.75 | 200 | 4.30 |
| 2 | 8.91 | 250 | 3.96 |
| 2.5 | 13.7 | 300 | 3.73 |
| 2.75 | 16.3 | 400 | 3.40 |
| 3 | 18.7 | 500 | 3.17 |
| 4 | 28.5 | 700 | 2.83 |
| 5 | 35.9 | 1000 | 2.30 |

error 5 %

comparison of Σq and Q_T for xenon

$$\Sigma q = q_t + \Sigma q_e + q_i$$

Q_T : grand total cross sections measured by experiments

| ϵ (eV) | q_t | Σq_e | q_i (10^{-16} cm^2) | Σq | Q_T |
|--------------------|-------|--------------|--------------------------------------|------------|-------|
| 10 | 40.5 | 0.15 | 0 | 40.7 | 38.8 |
| 12 | 37.7 | 1.40 | 0 | 39.1 | 37.4 |
| 15 | 33.6 | 2.41 | 0.93 | 36.9 | 35.6 |
| 20 | 27.5 | 2.09 | 2.30 | 31.9 | 33.3 |
| 25 | 20.9 | 2.15 | 3.29 | 26.3 | 27.0 |
| 30 | 15.8 | 2.53 | 3.92 | 22.3 | 19.8 |
| 40 | 10.1 | 2.58 | 4.66 | 17.34 | 14.9 |
| 50 | 7.21 | 2.34 | 5.09 | 14.64 | 13.0 |
| 60 | 5.79 | 2.10 | 5.34 | 13.23 | 12.0 |
| 80 | 4.77 | 1.69 | 5.51 | 11.97 | 11.1 |
| 100 | 4.71 | 1.40 | 5.76 | 11.87 | 10.7 |
| 150 | 4.65 | 1.02 | 5.63 | 11.30 | 10.0 |
| 200 | 4.30 | 0.82 | 5.02 | 10.14 | 9.5 |
| 300 | 3.73 | 0.60 | 3.96 | 8.29 | 8.1 |
| 500 | 3.17 | 0.40 | 2.97 | 6.54 | 6.4 |
| 1000 | 2.30 | 0.23 | 1.90 | 4.43 | 4.35 |

Numbers of References
on Electron and Photon Collisions
with Atoms and Molecules
published in the 20th Century

| Atoms (17) | | Molecules (51) | | | |
|-----------------------------------|--------|-----------------------------------|--------|----------------------------------|-------|
| A + e. | A + hν | | M + e. | M + hν. | |
| He 2 | 2170 * | 2 H ₂ , D ₂ | 1870 | 5 CH ₄ | 780 |
| Ne 10 | 1140 * | N ₂ | 2240 ○ | | |
| Ar 18 | 1960 ○ | O ₂ | 1700 | CF ₄ | 390 |
| Kr 36 | 1000 | CO | 1190 | CCl ₄ | 210 |
| Xe 54 | 1180 ○ | NO | 880 | CCl ₂ F ₂ | 250 |
| | | | | CH ₃ Cl | 90 |
| Li 3 | 450 | F ₂ | 190 | | |
| Na 11 | 800 | Cl ₂ | 360 | SiH ₄ | 230 |
| | | Br ₂ | 140 | SiF ₄ | 140 |
| K 19 | 370 | I ₂ | 240 | GeH ₄ | 50 |
| Rb 37 | 220 | | | | |
| Cs 55 | 370 | HF | 260 | 6 C ₂ H ₄ | 370 |
| | | HCl | 320 | CH ₃ OH | 240 |
| O 8 | 390 | HBr | 200 | | |
| | | HI | 130 | 7 SF ₆ | 920 ○ |
| F 9 | 90 | | | | |
| Cl 17 | 130 | 3 CO ₂ | 1240 ○ | | |
| | | | | 8 C ₂ H ₆ | 260 |
| Cu 29 | 180 | H ₂ O | 900 | C ₂ F ₆ | 150 |
| Cd 48 | 210 | H ₂ S | 270 | Si ₂ H ₆ | 70 |
| Ba 56 | 340 | O ₃ | 480 | | |
| | | N ₂ O | 450 | 9 C ₃ H ₆ | 120 |
| Hg 80 | 600 | NO ₂ | 300 | C ₂ H ₅ OH | 60 |
| | | SO ₂ | 260 | | |
| | | CS ₂ | 260 | | |
| | | OCS | 280 | 11 C ₃ H ₈ | 190 |
| not final, but finished mostly | | 4 C ₂ H ₂ | 390 | C ₃ F ₈ | 100 |
| include electron swarm papers | | NH ₃ | 500 | 12 C ₄ F ₈ | 100 |
| | | NF ₃ | 110 | C ₆ H ₆ | 240 |
| | | BF ₃ | 110 | C ₆ F ₆ | 100 |
| include review papers | | BCl ₃ | 90 | | |
| | | PH ₃ | 80 | 60 C ₆ O | 300 |
| | | H ₂ CO | 180 | M _r + M _v | 850 |

* He (Ne) + e only. Not include He (Ne) + hν papers.

○ The bibliography was published already.

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- NIFS-DATA-61 U.I. Safronova, C. Namba, I. Murakami, W.R. Johnson and M.S. Safronova,
E1.E2, M1, and M2 Transitions in the Neon Isoelectronic Sequence: Jan. 2001
- NIFS-DATA-62 R. K. Janev, Yu. V. Raichenko, T. Kenmotsu,
Unified Analytic Formula for Physical Sputtering Yield at Normal Ion Incidence: Apr. 2001
- NIFS-DATA-63 Y. Itikawa,
Bibliography on Electron Collisions with Molecules: Rotational and Vibrational Excitations, 1980-2000 Apr. 2001
- NIFS-DATA-64 R.K. Janev, J.G. Wang and T.Kato,
Cross Sections and Rate Coefficients for Charge Exchange Reactions of Protons with Hydrocarbon Molecules: May 2001
- NIFS-DATA-65 T. Kenmotsu, Y. Yamamura, T. Ono and T. Kawamura,
A New Formula of the Energy Spectrum of Sputtered Atoms from a Target Material Bombarded with Light Ions at Normal Incidence: May 2001
- NIFS-DATA-66 I. Murakami, U. I. Safronova and T. Kato,
Dielectronic Recombination Rate Coefficients to Excited States of Be-like Oxygen: May 2001
- NIFS-DATA-67 N. Matsunami, E. Hatanaka, J. Kondoh, H. Hosaka, K. Tsumori, H. Sakaue and H. Tawara,
Secondary Charged Particle Emission from Proton Conductive Oxides by Ion Impact: July 2001
- NIFS-DATA-68 R.K. Janev, J.G. Wang, I. Murakami and T. Kato,
Cross Sections and Rate Coefficients for Electron-Impact Ionization of Hydrocarbon Molecules: Oct. 2001
- NIFS-DATA-69 S. Zou, T. Kato, I. Murakami,
Charge Exchange Recombination Spectroscopy of Li III Ions for Fusion Plasma Diagnostics: Oct. 2001
- NIFS-DATA-70 I. Murakami, T. Kato, A. Igarashi, M. Imai, Y. Itikawa, D. Kato, M. Kimura, T. Kusakabe, K. Moribayashi, T. Morishita, K. Motohashi, L. Pichl
AMDIS and CHART update (1): Oct. 2002
- NIFS-DATA-71 S. Zou, L. Pichl, M. Kimura and T. Kato
Total, Partial and Differential Ionization Cross Sections in Proton-hydrogen Collisions at Low Energy: Jan. 2003
- NIFS-DATA-72 M. Hayashi
Bibliography of Electron and Photon Cross Sections with Atoms and Molecules Published in the 20th Century – Argon –: Jan. 2003
- NIFS-DATA-73 J. Horacek, K. Houfek, M. Cizek, I. Murakami and T. Kato
Rate Coefficients for Low-Energy Electron Dissociative Attachment to Molecular Hydrogen: Feb. 2003
- NIFS-DATA-74 M. Hayashi
Bibliography of Electron and Photon Cross Sections with Atoms and Molecules Published in the 20th Century – Carbon Dioxide –: Apr. 2003
- NIFS-DATA-75 X. Ma, H.P. Liu, Z.H. Yang, Y.D. Wang, X.M. Chen, Z.Y. Liu, I. Murakami and C. Namba
Cross-section Data Measured at Low Impact Energies for Ar^{9+} Ions on Argon and Neon Targets. Apr. 2003
- NIFS-DATA-76 M. Hayashi
Bibliography of Electron and Photon Cross Sections with Atoms and Molecules Published in the 20th Century – Sulphur Hexafluoride –: May 2003
- NIFS-DATA-77 M. Hayashi
Bibliography of Electron and Photon Cross Sections with Atoms and Molecules Published in the 20th Century – Nitrogen Molecule –: June 2003
- NIFS-DATA-78 A. Iwamae, T. Fujimoto, H. Zhang, D. P. Kilcrease, G. Csanak and K.A. Berrington
Population Alignment Collisional Radiative Model for Helium-like Carbon: Polarization of Emission Lines and Anisotropy of the Electron Velocity Distribution Function in Plasmas: Aug. 2003
- NIFS-DATA-79 M. Hayashi
Bibliography of Electron and Photon Cross Sections with Atoms and Molecules Published in the 20th Century – Xenon –: Sep. 2003