

NATIONAL INSTITUTE FOR FUSION SCIENCE

Data Compilation of Angular Distributions of Sputtered Atoms

Y. Yamamura, T. Takiguchi and H. Tawara

(Received — June 14, 1989)

NIFS-DATA-1

Jan. 1990

RESEARCH REPORT NIFS-DATA Series

This report was prepared as a preprint of compilation of evaluated atomic, molecular, plasma-wall interaction, or nuclear data for fusion research, performed as a collaboration research of the Data and Planning Center, the National Institute for Fusion Science (NIFS) of Japan. This document is intended for future publication in a journal or data book after some rearrangements of its contents.

Inquiries about copyright and reproduction should be addressed to the Research Information Center, National Institute for Fusion Science, Nagoya 464-01, Japan.

DATA COMPILATION OF ANGULAR DISTRIBUTIONS
OF SPUTTERED ATOMS

Yasunori YAMAMURA^a, Takashi TAKIGUCHI^a
and
Hiro TAWARA

National Institute for Fusion Science
Chikusa-ku, Nagoya 464-01, Japan

Permanent address:

a) Department of Applied Physics, Okayama University of
Science, Ridai-cho, Okayama 700, Japan

I. INTRODUCTION

Sputtering at a surface is generally caused by a collision cascade developed near the surface. The process is in principle the same as those causing radiation damage in the bulk of a solid. Sputtering has long been regarded as an undesired dirty effect which destroys the cathodes and grids in gas discharge tubes or ion sources and contaminates a plasma and the surrounding walls. However, sputtering is used today for many applications. The removal of atoms from a surface is successfully applied in sputter ion sources, a mass spectrometer and to the deposition of thin films on a large variety of substrates. Plasma contamination and surface erosion of the first wall due to sputtering are still one major problem in fusion research.

From the early 1960's a lot of measured angular distributions of sputtered atoms at normal incidence and oblique incidence have been accumulated. For better understanding of the sputtering phenomena and for the extensive use of the sputtering data for the design of the fusion reactors, we need to compile experimental data of the energy dependent sputtering yields and the differential sputtering yields such as angular distribution and energy distribution of sputtered particles. Concerning the energy-dependent sputtering yields a series of IPPJ-AM reports have been published at the Institute of Plasma Physics, Nagoya University [1,2,3].

The angular distribution of particles sputtered from solid surfaces can possibly provide more detailed informations on the collision cascade in the interior of the target. This report presents a compilation of the angular distribution of sputtered atoms at normal incidence and at oblique incidence for various combinations of incident ions and target atoms. The main concern of this report is the angular distribution of sputtered atoms from monatomic solids at normal incidence and oblique incidence.

II. ANGULAR DISTRIBUTIONS OF SPUTTERED ATOMS FROM MONATOMIC SOLID AT NORMAL INCIDENCE

The collision cascade theory of sputtering [4], which is generally considered to give a good quantitative description of the sputtering process, predicts a cosine distribution of the sputtered atoms. According to the linear collision theory, the recoil flux per incident ion with energy E and angle of incidence θ is the average number of recoils flying at depth x with energy (E_0, dE_0) in the direction $(\Omega_0,$

$d\Omega_0$) per unit time which is given as [5]

$$F(E, \theta ; E_0, \Omega_0) dE_0 d\Omega_0 = dE_0 d\Omega_0 \frac{\Gamma F_D(E, \theta ; x)}{4\pi E_0^2}, \quad (1)$$

where $F_D(E, \theta ; x)$ is the average energy deposited into recoils at depth (x, dx) and Γ is a numerical constant. The corresponding angular distributions $Y(E, 0; \theta_2)$ at normal incidence show the cosine distribution, i.e.,

$$Y_2(E, 0; \theta_2) = \frac{\Gamma F_D(E, 0, 0) \cos \theta_2}{8\pi (1-m)(1-2m)U_s^{1-2m}}, \quad (2)$$

where U_s is the surface binding energy, θ_2 is the ejection angle of a sputtered atom, and m is the number between 0 and 1 for the power approximation.

It has long been realized that the expected cosine distribution was not found universally even for the ion energy in the region where cascade theory describes the yields with good accuracy and that the experimental angular distribution varies with energy of incidence [6]. At very low energy - close to the threshold - it is difficult that a low-energy projectile produces a well-developed collision cascade [7,8], and the resulting distributions are heart-shaped in the polar diagram. At higher projectile energies, a cosine distributions is obtained but at even higher energies the distributions becomes over-cosine, i.e., more outward peaked than the cosine.

Now, there are two possible explanations for the over-cosine distributions. The one possibility is that the surface introduces an asymmetry causing the recoil flux in the cascade to be anisotropic at the surface [9]. Another explanation is done by so called "missing-plane model" that the distributions are strongly influenced by outward scattering neighboring atoms at the topmost layer. Within the solid such a scattering does also take place within any plane but is compensated by scattering in the plane at the surface above. The nonexistence of this "-1" plane at the surface makes the angular distributions outward peaked [10].

The over-cosine distributions are well fitted by the fitting formula $\cos^n \theta$, and the exponent n is a good index of the over cosine distribution. The sputtering yields are measured under the rough sur-

face of which the topography is induced by heavy ion-bombardment used for the measurement, mostly larger than 10^{18} ions/cm². The ion-induced surface roughness reduces the degree of the over cosine distribution. Another important factor which affect the angular distribution is a surface contamination. The surface contamination brings the strong outward-peaked distribution.

III . ANGULAR DISTRIBUTIONS OF SPUTTERED ATOMS FROM MONATOMIC SOLID AT OBLIQUE INCIDENCE.

The angular distributions of sputtered atoms at grazing incidence are composed of two parts, i.e., the random part and a few collision process, where the random part means the contribution of well developed collision cascades near the surface. Since the well-developed cascades do not have the memory of the ion-beam direction, the angular distribution of sputtered atoms due to well-developed cascades will obey the cosine distribution. While the angular distributions due to a few-collision process have the explicit preferential angle of ejection.

It is very difficult to estimate analytically the preferential ejection angle due to a few collision process. In place of a few collision process for sputtering, let us consider a single collision process for sputtering, i.e., a direct knock-out process. According to the direct knock-out model [11], the preferential angle β of ejection due to a single collision between an incident ion with energy E and a target atom is roughly given as [11]

$$\beta = \sin^{-1} \{ (\cos \theta + q)(\cos \theta + 2q) \}^{1/2} , \quad (3)$$

where $q = [U_s/\gamma E]^{1/2}$ with $\gamma = 4M_1M_2/(M_1 + M_2)^2$, and β is measured from the surface normal. This simple relation tells us that we can get the following scaling rule for the preferential ejection angle

$$\frac{\sin \beta}{\cos \theta} = \{ (1 + X)(1 + 2X) \}^{1/2} , \quad (4)$$

where $X = [U_s/\gamma E]^{1/2}/\cos \theta$.

IV . COMPILATION OF THE DATA OF ANGULAR DISTRIBUTIONS OF SPUTTERED ATOMS

The angular distribution of sputtered atoms for all available combinations of the incident ions and target atoms up to the early 1989 have been compiled and stored in the computer. Table 1 shows a classification of available papers concerning angular distributions of sputtered atoms published for these four decades. Table 2 shows a list of available publications, and we classified these references into four categories, i.e., monatomic target (Table 3), multi-component material (Table 4), theory and computer simulation (Table 5) and review work (Table 6). Table 7 shows brief reviews of experimental works listed in Tables 3 and 4. In order to know the magnitude of the over-cosine distributions of sputtered atoms from monatomic solids we employed the fitting formula $\cos^n \theta$. In Table 8 the best-fit n values of experimental angular distributions at normal incidence are listed for monatomic solids, and these n values are plotted against γE in Fig. 1. Table 9 shows experimental preferential ejection angles, where the ejection angle is measured from the surface normal. Plots of $\sin \beta_{ex} / \cos \theta$ are shown in Fig. 2 for various angles of incidence, various ion-target combinations in monatomic solids. All compiled experimental angular distributions are presented in the polar diagram in Fig. 3, where angular distributions of sputtered atoms from multi-component solids are also included.

REFERENCES

- [1] N. Matsunami, Y. Yamamura, Y. Itikawa, N. Itoh, Y. Kazumata, S. Miyagawa, K. Morita and R. Shimizu, IPPJ-AM-14, Institute of Plasma Physics, Nagoya University (1980)
- [2] N. Matsunami, Y. Yamamura, Y. Itikawa, N. Itoh, Y. Kazumata, S. Miyagawa, K. Morita, R. Shimizu and H. TAWARA, IPPJ-AM-32, Institute of Plasma Physics, Nagoya University (1983)
- [3] N. Matsunami, Y. Yamamura, N. Itoh, H. Tawara and K. Kawamura, IPPJ-AM-32, Institute of Plasma Physics, Nagoya University (1987)
- [4] P. Sigmund, Phys. Rev. 184 (1969) 383; Phys. Rev. 187 (1969) 768.
- [5] P. Sigmund, in: Sputtering by particle bombardment I, ed., R. Behrisch (Springer, Berlin-Heidelberg-New York, 1981)p. 9.
- [6] F.R. Vossen, J. Vac. Sci. Technol. 1 (1974) 875.
- [7] H.E. Roosendaal and J.B. Sanders, Rad. Eff. 52 (1980) 137.
- [8] Y. Yamamura, Rad. Eff. 55 (1981) 381.
- [9] Y. Yamamura and K. Muraoka, Nucl. Instr. Meth. (in press)
- [10] H.H. Andersen, Nucl. Instr. Meth. B33 (1988) 466.
- [11] Y. Yamamura, Rad. Eff. 80 (1984) 193.

Captions of tables

- Table 1 Classification of papers concerning the angular distribution of sputtered atoms published from 1960 to 1988.
- Table 2 List of publications concerning the angular distribution of sputtered atoms, where the references are numbered in a chronological order, and this numbering of references is used in the following tables and figures.
- Table 3 List of publications of experimental works on the angular distribution of sputtered atoms from a monatomic solid.
- Table 4 List of publications of experimental works on the angular distribution of sputtered atoms from a multi-component solid.
- Table 5 List of theoretical and computational works on the angular distribution of sputtered atoms.
- Table 6 List of review papers.
- Table 7 Brief review of experimental works on the angular distribution of sputtered atoms. A crystal target is denoted by "CRYS" in the column of "STRUCTURE".
- Table 8 The best-fit n values of an empirical fitting formula $\cos^n \theta$ for the angular distribution at normal incidence on a monatomic solid.
- Table 9 The preferential ejection angle β of measured angular distributions at oblique incidence on a monatomic solid.

Table 1 Classification of papers concerning the angular distribution of sputtered atoms published from 1960 to 1989

	EXPERIMENT						SIMULATION	THEORY	REVIEW
	Monatomic			Multi-component					
	Polycrystal Amorphous	Crystal	Normal Oblique	Polycrystal Amorphous	Crystal	Normal Oblique			
1950	1	0	0	0	0	0	0	0	
1960	3	1	0	0	0	0	1	5	
1970	5	7	9	2	2	1	2	7	
1980	31	16	8	14	6	1	11	15	
Sum	40	24	17	16	8	2	13	23	18

Table 2 List of publications concerning the angular distribution
of sputtered atoms

REFERENCES (ALL)

- 57 1 G.K.WEHNER
PHYSICAL REV. 108 (1957) 35-45
- 60 1 G.K.WEHNER, D.ROSENBERG
J. APPL. PHYS. 31 (1960) 177-179
- 61 2 H.PATTERSON, D.H.TOMLIN
PROCEEDINGS OF THE ROYAL SOCIETY 265 (1961) 474-488
- 64 1 R.BEHRISCH
ERGEBN. EXAKT. NATURW 35 (1964) 295
- 65 1 M.KAMINSKY
ATOMIC AND IONIC IMPACT PHENOMENE ON METAL SURFACES (1965)
- 68 1 G.CARTER, T.S.COLLIGON
ION BOMBARDMENT OF SURFACE (1968)
- 68 2 N.V.PLESHIVFSEV
CATHODE SPUTTERING (1968)
- 68 3 M.W.THOMPSON
DEFECTS AND RADIATION DAMEGE IN METALS (1968)
- 69 1 P.SIGMUND
PHYSICAL REV. 184 (1969) 383-416
- 69 2 B.M.GURMIN, YU.A.RYZHOV, I.I.SKHARBAN
33 (1969) 752
- 70 2 V.E.DUBINSKI, S.YA.LEBEDEV
PHYS. LETT. 31A 10 MAY (1970) 533-534
- 70 3 V.E.DUBINSKII, S.YA.LEBEDEV
PHYS. LETT. 32A (1970) 457-458
- 70 4 O.I.KAPUSTA, S.YA.LEBEDEV
SOV. PHYS. SOLID STATE 11 (1970) 2902-2904
- 70 5 A.V.VEEN, J.M.FLUIT
ATOMIC COLLISION PHENOMENA IN SOLIDS (1970) 246-257
- 70 6 R.J.MACDONALD
ADV. PHYS. 19 (1970) 457-524
- 72 1 P.BRYCE, J.C.KELLY
J. PHYS. C:SOLID STATE PHYS 5 (1972) 1604-1614
- 72 2 P.SIGMUND
REV. ROUM. PHYS. 17 (1972) 1079
- 73 1 V.M.BUKHANOV, V.G.MOROZOV, V.E.YURASOVA
RADIAT. EFF. 19 (1973) 215-218
- 73 2 D.P.JACKSON
RADIAT. EFF. 18 (1973) 185-189
- 73 4 J.RICHARDS, J.C.KELLY
RADIAT. EFF. 19 (1973) 185-188
- 73 5 V.E.YURASOVA, A.A.SYSOEV, G.A.SAMSONOV, V.M.BUKHANOV,
L.N.NEVZOROVA, L.B.SHELYAKIN
RADIAT. EFF. 20 (1973) 89-93
- 73 6 R.BEHRISCH
RADIAT. EFF. 18&19 (1973)
- 74 1 K.RODELSPERGER, W.KRUGER, A.SCHARMANN
Z. PHYS. 269 (1974) 83-88

Table 2 (continued)

REFERENCES (ALL)

- 74 2 J.L.VOSSEN
J. VAC. SCI. AND TECHNOL. 11 (1974) 875-877
- 74 3 V.E.DUBINSKII
SOV. PHYS. SOLID STATE 16 (1974) 135-136
- 74 4 S.YA.LEBEDEV, G.V.LYSOVA, V.E.DUBINSKII
SOV. PHYS. SOLID STATE 15 (1974) 2380-2383
- 75 1 K.RODELSPERGER, W.KRUGER, A.SCHARMANN
Z. PHYS. A 272 (1975) 127-130
- 75 2 H.OECHSNER
APPL. PHYS. 8 (1975) 185-198
- 75 4 D.P.JACKSON
CAN. J. PHYS 53 (1975) 1513-1523
- 75 5 G.M.MACCRAKEN
REP. PROG. PHYS. 38 (1975) 241-327
- 76 1 K.RODELSPERGER, A.SCHARMANN
NUCL. INSTRUM. AND METHODS 132 (1976) 355-362
- 76 2 S.YA.LEBEDEV, G.V.LYSOVA
SOV. PHYS. SOLID STATE 17 (1976) 2014-2015
- 77 1 D.HILDEBRANDT, R.MANNS
RADIAT. EFF. 31 (1977) 153-156
- 77 2 R.R.OLSON, G.K.WEHNER
J. VAC. SCI. AND TECHNOL. 14 JAN/FEB (1977) 319-321
- 77 3 K.RODELSPERGER, A.SCHARMANN
Z. PHYS. B 28 (1977) 37-42
- 77 4 Y.CHOUAN, D.COLLOBERT
J. APPL. PHYS. 48 JUNE (1977) 2274-2279
- 77 5 P.SIGMUND
INELASTIC ION-SURFACE COLLISIONS (1977)
- 78 2 P.ERLENWEIN
PHYSICA STATUS SOLIDI (A) 47 (1978) K9-K10
- 78 3 UFFE LITTMARK, W.O.HOFER
J. MATER. SCI. 13 (1978) 2577-2586
- 78 4 P.HUCKS, G.STOCKLIN, E.VIETZKE, K.VOGELBRUCH
J. NUCL. MATER. 76&77 (1978) 136-142
- 78 5 B.ENMOTH, TH.FRIED, M.BRAUN
J. NUCL. MATER. 76-77 (1978) 129-135
- 79 1 J.N.SMITH.JR
IEEE. TRANS. NUCL. SCI. NS-26 FEBRUARY (1979) 1292-1295
- 79 2 J.ROTH, J.BOHDANSKY, W.OTTENBERGER
IPP IPP 9/26 MAY (1979) 73-81
- 79 3 R.R.OLSON, M.E.KING, G.K.WEHNER
J. APPL. PHYS. 50(5) MAY (1979) 3677-3683
- 79 4 G.FENSKE, L.HIVELY, G.MILEY, M.KAMINSKY
J. NUCL. MATER. 85&86 (1979) 1037-1043
- 79 5 D.HILDEBRANDT, R.MANNS
RADIAT. EFF. 41 (1979) 193-194
- 79 6 J.N.SMITH.JR
J. NUCL. MATER. 80 (1979) 356-360

Table 2 (continued)

REFERENCES (ALL)

- 79 7 R.YAMADA, K.SONE, M.SAIDOH
J. NUCL. MATER. 84 (1979) 101-108
- 79 8 D.HILDEBRANDT, R.MANNS
PHYSICA STATUS SOLIDI 51 (1979) K151-154
- 80 1 T.OKUTANI, M.SHİKATA, S.ICHIKURA, R.SHIMIZU
J. APPL. PHYS. 51(5) MAY (1980) 2884-2887
- 80 3 J.L.WHITTON, W.D.HOFER, U.LITTMARK, M.BRAUN, B.EMMOTH
APPL. PHYS. LETT. 36(7) APRIL (1980) 531-533
- 80 4 V.S.CHERNYSH, A.JOHANSEN, L.SARHOLT-KRISTENSEN
RADIAT. EFF. LETT. 57 (1980) 119-124
- 80 5 H.E.ROSENDAAL, J.B.SANDERS
RADIAT. EFF. 52 (1980) 137-144
- 80 6 M.M.JAKAS, M.M.R.WILLIAMS
J. PHYS. D:APPL PHYS 13 (1980) 1169-1180
- 80 7 H.L.BAY, J.BOHDANSKY, W.D.HOFER, J.ROTH
APPL. PHYS. 21 (1980) 327-333
- 80 8 A.V.LUSNIKOV
SOV. PHYS. TECH. PHYS. 25 (1980) 1459
- 81 1 H.TSUGE, S.ESHO
J. APPL. PHYS. 52 JULY (1981) 4391-4395
- 81 2 H.H.ANDERSEN, J.CHEVALLIER, V.CHERNYSH
NUCL. INSTRUM. AND METHODS 191 (1981) 241-244
- 81 3 J.BOHDANSKY, G.L.CHEN, W.ECKSTEIN, J.ROTH
J. NUCL. MATER. 103&104 (1981) 339-344
- 81 5 S.YA.LEBEDEV, G.V.LYSOVA
RADIAT. EFF. LETT. 58(1-2) (1981) 47-52
- 81 7 M.P.SEAH, C.LEA
THIN SOLID FILIMS. 81 (1981) 257-270
- 81 8 Y.YAMAMURA
RADIAT. EFF. 55 (1981) 49-56
- 81 9 DON E.HARRISON,JR.
J. APPL. PHYS. 52 MARCH (1981) 1499-1508
- 81 10 K.SAIKI, H.TANAKA, S.TANAKA, A.KOMA
J. NUCL. MATER. 97 (1987) 173-178
- 81 12 M.MANNAMI, K.KIMURA, A.KYOSHIMA
NUCL. INSTRUM. AND METHODS 185 (1981) 533-537
- 81 13 D.HILDEBRANDT, R.MANNS, H.DUSTERHOFT
PHYSICA STATUS SOLIDI (A)64 (1981) K27-K30
- 81 15 R.BEHRISCH
TOP. APPL. PHYS. 47 (1981)
- 82 1 H.H.ANDERSEN, V.CHERNYSH, B.STENUM, T.SØRENSEN, H.J.WHITLOW
SUR. SCI. 123 (1982) 39-46
- 82 2 J.BOHDANSKY, G.L.CHEN, W.ECKSTEIN, J.ROTH, B.M.U.SCHERZER,
R.BEHRISCH
J. NUCL. MATER. 111&112 (1982) 717-725
- 82 3 R.G.ALLAS, A.R.KNUDSON, J.H.LAMBERT, P.A.TREADO, G.W.REYNOLDS
NUCL. INSTRUM. AND METHODS 194 (1982) 615-619
- 82 4 Y.YAMAMURA
NUCL. INSTRUM. AND METHODS 194 (1982) 515-522

Table 2 (continued)

REFERENCES (ALL)

- 82 5 W.SZYMCZAK, K.WITTMACK
 NUCL. INSTRUM. AND METHODS 194 (1982) 561-565
- 82 7 W.O.HOFER, H.L.BAY, P.J.MARTIN
 J. NUCL. MATER. 76-77 (1982) 156-162
- 82 8 T.MOTOHIRO, Y.TAGA, K.NAKAJIMA
 SUR. SCI. 118 (1982) 66-74
- 82 9 P.SIGHUND, A.OLIVA, G.FALCONE
 NUCL. INSTRUM. AND METHODS 194 (1982) 541-548
- 82 10 T.OKUTANI, R.SHIMIZU
 JPN. J. APPL. PHYS. 21 (1982) 570-573
- 82 11 V.ORLINOV, G.MLADENOV, I PETROV, M.BRAUN, B.EMMOTH
 VACUUM 32 (1982) 747-752
- 83 1 M.F.DUMKE, T.A.TOMBRELLO, R.A.WELLER, R.M.HOUSLEY, E.H.CIRLIN
 SUR. SCI. 124 (1983) 407-422
- 83 2 H.J.KANG, Y.MATSUDA, R.SHIMIZU
 SUR. SCI. 127 (1983) L179-L185
- 83 3 M.ROSEN, G.P.MUELLER, W.A.FRASER
 NUCL. INSTRUM. AND METHODS 209-210 (1983) 63-66
- 83 4 M.R.WELLER
 NUCL. INSTRUM. AND METHODS 212 (1983) 419-426
- 83 5 J.ROTH, J.BOHDANSKY, W.ECKSTEIN
 NUCL. INSTRUM. AND METHODS PHYS.RES. 218 (1983) 751-756
- 83 7 H.H.ANDERSEN, B.STENUM, T.SORENSEN, H.J.WHITLOW
 NUCL. INSTRUM. AND METHODS 209-210 (1983) 487-494
- 83 9 R.BEHRISCH
 TOP. APPL. PHYS. 52 (1983)
- 84 1 S.ICHIKURA, H.SHIMIZU, H.MURAKAMI, Y.ICHIDA
 J. NUCL. MATER. 128&129 (1984) 601-604
- 84 2 H.H.ANDERSEN, B.STENUM, T.SORENSEN, H.J.WHITLOW
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 2 (1984) 623-626
- 84 3 P.R.MALMBERG, R.G.ALLAS, J.M.LAMBERT, P.A.TREADO, G.W.REYNOLDS
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 2 (1984) 679-683
- 84 4 J.LINDERS, H.NIEDRIG, M.STERNBERG
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 2 (1984) 649-654
- 84 5 R.BECERRA-ACEVEDO, J.BOHDANSKY, W.ECKSTEIN, J.ROTH
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 2 (1984) 631-634
- 84 6 L.G.HAGGMARK, J.P.BIERSACK
 J. NUCL. MATER. 103&104 (1984) 345-350
- 85 1 HEE JEA KANG, EIZOH KAWATO, RYUICHI SIMIZU
 JPN. J. APPL. PHYS. 24 NOVEMBER (1985) 1409-1416
- 85 2 G.BRAUER, D.HASSELKAMP, W.KRUGER, A.SCHARMANN
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 12 (1985) 458-463
- 85 3 S.KUNDU, D.GHOSE, D.BASU, S.B.KARMOHAPATRO
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 12 (1985) 352-357
- 85 4 H.H.ANDERSEN, B.STENUM, T.SORENSEN, H.J.WHITLOW
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 6 (1985) 459-465
- 85 5 T.MOTIHIRO, F.OZAWA, Y.TAGA
 THIN SOLID FILMS. 128 (1985) L37-L39

Table 2 (continued)

REFERENCES (ALL)

- 85 6 D.S.KARPUZOV, J.S.COLLIGON, H.KHEYRANDISH, A.E.HILL
NUCL. INSTRUM. AND METHODS PHYS.RES. B 6 (1985) 474-478
- 85 7 M.HAUTALA, H.J.WHITLOW
NUCL. INSTRUM. AND METHODS PHYS.RES. B 6 (1985) 466-473
- 85 10 W.ECKSTEIN, J.P.BIERSACK
APPL. PHYS. A37 (1985) 95-108
- 85 11 V.A.BURDOVITSIN, I.E.BURKOVA, V.M.ZAVODCHIKOV
PHYS. CHEM. MECH. SURFACES 3 (1985) 715-719
- 85 13 I.I.BONDAR, N.P.DUBININ, L.H.GERT, D.S.GORNYI
PHYS. CHEM. MECH. SURFACES 2 (1985) 1947-1954
- 86 1 H.J.KANG, R.SHIMIZU
SUR. SCI. 169 (1986) 337-346
- 86 2 J.P.O'CONNOR, L.M.BAUMEL, P.G.BLAUNER, K.M.HUBBARD, M.R.WELLER
R.A.WELLER
NUCL. INSTRUM. AND METHODS PHYS.RES. B 13 (1986) 365-368
- 86 3 YASUHIRO NAGAI, TOMOYUKI TOSHIMA
J. VAC. SCI. AND TECHNOL. A4(2) MAR/APR (1986) 179-183
- 86 5 B.J.GARRISON
NUCL. INSTRUM. AND METHODS PHYS.RES. B 17 (1986) 305-308
- 86 6 Y.MATSUDA, Y.YAMAMURA, Y.UEDA, K.UCHINO
K.MURAOKA, M.MAEDA, H.AKAZAKI
JPN. J. APPL. PHYS. 25 (1986) 8-11
- 86 7 M.SZYMONSKI, W.HUANG, T.ONSGAARD
NUCL. INSTRUM. AND METHODS PHYS.RES. B 14 (1986) 263-267
- 86 8 F.LAMA, J.A.STRAIN, P.D.TOWNSEND
RADIAT. EFF. 99 (1986) 301-311
- 86 9 M.ERDMANN, J.LINDERS, H.NIEDRIG, M.STERNBERG
NUCL. INSTRUM. AND METHODS PHYS. RES. B 13 (1986) 353-356
- 86 11 D.Y.LO, T.A.TOMBRELLO, N.H.SHAPIRO
NUCL. INSTRUM. AND METHODS PHYS.RES. B 17 (1986) 207-212
- 86 12 M.SAIDOH, H.L.BAY, J.BOHDANSKY, J.ROTH
NUCL. INSTRUM. AND METHODS PHYS. RES. B 13 (1986) 403-407
- 86 13 C.COURDRAY, G.SLODZIAN
NUCL. INSTRUM. AND METHODS PHYS. RES. B 15 (1986) 29-33
- 86 14 J.P.BAXTER, G.A.SCHICK, J.SINGH, P.H.KOBRIN, N.WINOGRAD
J. VAC. SCI. AND TECHNOL. A4(3) (1986) 1218-1221
- 86 15 J.P.BAXTER, J.SINGH, G.A.SCHICK, P.H.KOBRIN, N.WINOGRAD
NUCL. INSTRUM. AND METHODS B17 (1986) 300-304
- 86 16 E.TAGLAUER, J.ONSGAARD
APPL. PHYS. LETT. 48(9) (1986) 575-577
- 86 17 W.HUANG, J.ONSGAARD, M.SZYMONSKI
EROSION AND GROWTH OF SOLIDS STIMULATED BY (1986) 440-443
- 86 18 S.KUNDU, D.GHOSE, D.BASU, S.B.KARNOHAPATRO
INDIAN J. PHYS 60A (1986) 245-248
- 86 19 K.KANAYA, N.BABA, Y.MURANAKA, K.ADACHI
RES. REP. KOGAKUIN UNIV. (1986) 74-80
- 87 2 C.SCHWEBEL, C.PELLET, G.GAUTHERIN
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 525-528

Table 2 (continued)

REFERENCES (ALL)

- 87 3 M.SAIDOH, H.L.BAY, H.GNASER, W.O.HOFER, J.BOHDANSKY, J.ROTH
J. NUCL. MATER. 145-147 (1987) 387-390
- 87 4 S.C.PARK, R.A.STANSFIELD, D.C.CLARY
J. PHYS. D:APPL.PHYS. 20 (1987) 880-888
- 87 5 H.SHIMIZU, S.ICHIKURA, H.MURAKAMI, H.AGARI
J. NUCL. MATER. 145-147 (1987) 408-411
- 87 6 J.A.SPRAGUE, P.R.MALMBERG, J.M.LAMBERT, P.A.TREADO, G.W.REYNOLDS
G.P.MUELLER, M.ROSEN, A.VINCENZ
NUCL. INSTRUM. AND METHODS PHYS.RES. B 19-20 (1987) 75-79
- 87 7 K.T.WALDEER, H.M.URBASSEK
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 518-524
- 87 8 R.A.HARING, H.E.ROOSEDAAL, P.C.ZALM
NUCL. INSTRUM. AND METHODS PHYS.RES. B 28 (1987) 205-213
- 87 9 K.J.SNOWDON, R.A.HARING
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 596-599
- 87 10 Y.YAHAMURA, C.MOSSNER, H.OECHSNER
RADIAT. EFF. 105 (1987) 31-41
- 87 11 W.O.HOFER, H.GNASER
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 605-608
- 87 12 Y.MATSUDA, S.MATSUBAGUCHI, C.HONDA, H.MAEDA, T.OKADA
Y.YAHAMURA, K.MURAOKA, H.AKAZAKI
J. NUCL. MATER. 145-147 (1987) 421-424
- 87 13 V.A.BURDOVITSIN
PHYS. CHEM. MECH. SURFACES 4 (1987) 2209-2215
- 87 15 R.A.HARING
MAT. RES. SOC. SYMP. PROC 75 (1987) 483-490
- 87 17 H.H.ANDERSEN
NUCL. INSTRUM. AND METHODS B18 (1987) 321
- 87 18 P.SIGMUND
NUCL. INSTRUM. AND METHODS B27 (1987) 1
- 88 1 W.HUANG
SUR. SCI. 202 (1988) 603-606
- 88 2 A.I.DODONOV, S.D.FEDOROVICH, E.A.KRYLOVA, E.S.MASHKOVA
V.A.MOLCHANOV
NUCL. INSTRUM. AND METHODS B33 (1988) 534-537
- 88 3 ZHENG LIPING, CUI FUZHAI
CHINESE PHYS. LETT. 5 (1988)
- 88 4 H.H.ANDERSEN
NUCL. INSTRUM. AND METHODS B33 (1988) 466-473
- 88 5 M.VICANEK, J.J.JIMENEZ, P.SIGMUND
NUCL. INSTRUM. AND METHODS B36 (1988) 124-136

Table 3 List of publications of experimental works concerning
the angular distributions from a monatomic solid.

REFERENCES (EXPERIMENT : MONOATOMIC)

- 57 1 G.K.WEINER
PHYSICAL REV. 108 (1957) 35-45
- 60 1 G.K.WEINER, D.ROSENBERG
J. APPL. PHYS. 31 (1960) 177-179
- 61 2 H.PATTERSON, D.H.TOMLIN
PROCEEDINGS OF THE ROYAL SOCIETY 265 (1961) 474-488
- 69 2 B.M.GURMIN, YU.A.RYZHOV, I.I.SKHARBAN
33 (1969) 752
- 70 2 V.E.DUBINSKI, S.YA.LEBEDEV
PHYS. LETT. 31A 10 MAY (1970) 533-534
- 70 3 V.E.DUBINSKII, S.YA.LEBEDEV
PHYS. LETT. 32A (1970) 457-458
- 70 4 O.I.KAPUSTA, S.YA.LEBEDEV
SOV. PHYS. SOLID STATE 11 (1970) 2902-2904
- 70 5 A.V.VEEN, J.M.FLUIT
ATOMIC COLLISION PHENOMENA IN SOLIDS (1970) 246-257
- 73 1 V.M.BUKHANOV, V.G.MOROZOV, V.E.YURASOVA
RADIAT. EFF. 19 (1973) 215-218
- 74 1 K.RODELSPERGER, W.KRUGER, A.SCHARMANN
Z. PHYS. 269 (1974) 83-88
- 74 4 S.YA.LEBEDEV, G.V.LYSOVA, V.E.DUBINSKII
SOV. PHYS. SOLID STATE 15 (1974) 2380-2383
- 76 1 K.RODELSPERGER, A.SCHARMANN
NUCL. INSTRUM. AND METHODS 132 (1976) 355-362
- 76 2 S.YA.LEBEDEV, G.V.LYSOVA
SOV. PHYS. SOLID STATE 17 (1976) 2014-2015
- 77 1 D.HILDEBRANDT, R.MANNS
RADIAT. EFF. 31 (1977) 153-156
- 77 3 K.RODELSPERGER, A.SCHARMANN
Z. PHYS. B 28 (1977) 37-42
- 77 4 Y.CHOUAN, D.COLLOBERT
J. APPL. PHYS. 48 JUNE (1977) 2274-2279
- 78 2 P.ERLENWEIN
PHYSICA STATUS SOLIDI (A) 47 (1978) K9-K10
- 78 4 P.HUCKS, G.STOCKLIN, E.VIETZKE, K.VOGELBRUCH
J. NUCL. MATER. 76&77 (1978) 136-142
- 78 5 B.EMMOTH, TH.FRIED, M.BRAUN
J. NUCL. MATER. 76-77 (1978) 129-135
- 79 2 J.ROTH, J.BOHDANSKY, W.OTTENBERGER
IPP IPP 9/26 MAY (1979) 73-81
- 79 7 R.YAMADA, K.SONE, M.SAIDOH
J. NUCL. MATER. 84 (1979) 101-108
- 79 8 D.HILDEBRANDT, R.MANNS
PHYSICA STATUS SOLIDI 51 (1979) K151-154
- 80 1 T.OKUTANI, H.SHIKATA, S.ICHIMURA, R.SHIMIZU
J. APPL. PHYS. 51(5) MAY (1980) 2884-2887
- 80 3 J.L.WHITTON, W.O.HOFER, U.LITTMARK, M.BRAUN, B.EMMOTH
APPL. PHYS. LETT. 36(7) APRIL (1980) 531-533

Table 3 (continued)

REFERENCES (EXPERIMENT : MONOATOMIC)

- 86 6 Y.MATSUDA, Y.YAMAMURA, Y.UEDA, K.UCHINO
K.MURAOKA, M.MAEDA, M.AKAZAKI
JPN. J. APPL. PHYS. 25 (1986) 8-11
- 86 7 M.SZYMONSKI, W.HUANG, T.ONSGAARD
NUCL. INSTRUM. AND METHODS PHYS.RES. B 14 (1986) 263-267
- 86 9 M.EROMANN, J.LINDERS, H.NIEDRIG, M.STERNBERG
NUCL. INSTRUM. AND METHODS PHYS. RES. B 13 (1986) 353-356
- 86 12 M.SAIDOH, H.L.BAY, J.BOHDANSKY, J.ROTH
NUCL. INSTRUM. AND METHODS PHYS. RES. B 13 (1986) 403-407
- 86 14 J.P.BAXTER, G.A.SCHICK, J.SINGH, P.H.KOBRIN, N.WINOGRAD
J. VAC. SCI. AND TECHNOL. A4(3) (1986) 1218-1221
- 86 15 J.P.BAXTER, J.SINGH, G.A.SCHICK, P.H.KOBRIN, N.WINOGRAD
NUCL. INSTRUM. AND METHODS 817 (1986) 300-304
- 86 16 E.TAGLAUER, J.ONSGAARD
APPL. PHYS. LETT. 48(9) (1986) 575-577
- 86 17 W.HUANG, J.ONSGAARD, M.SZYMONSKI
EROSION AND GROWTH OF SOLIDS STIMULATED BY (1986) 440-443
- 86 18 S.KUNDU, D.GHOSE, D.BASU, S.B.KARMOHAPATRO
INDIAN J. PHYS 60A (1986) 245-248
- 87 2 C.SCHWEBEL, C.PELLET, G.GAUTHERIN
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 525-528
- 87 3 M.SAIDOH, H.L.BAY, H.GNASER, W.O.HOFER, J.BOHDANSKY, J.ROTH
J. NUCL. MATER. 145-147 (1987) 387-390
- 87 5 H.SHIMIZU, S.ICHIHARA, H.MURAKAMI, H.AGARI
J. NUCL. MATER. 145-147 (1987) 408-411
- 87 6 J.A.SPRAGUE, P.R.MALMBERG, J.M.LAMBERT, P.A.TREADO, G.W.REYNOLDS
G.P.MUELLER, M.ROSEN, A.VINCENZ
NUCL. INSTRUM. AND METHODS PHYS.RES. B 19-20 (1987) 75-79
- 87 11 W.O.HOFER, H.GNASER
NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 605-608
- 87 12 Y.MATSUDA, S.MATSUBAGUCHI, C.HONDA, M.MAEDA, T.OKADA
Y.YAMAMURA, K.MURAOKA, M.AKAZAKI
J. NUCL. MATER. 145-147 (1987) 421-424
- 88 1 W.HUANG
SUR. SCI. 202 (1988) 603-606
- 88 2 A.I.DODONOV, S.D.FEDOROVICH, E.A.KRYLOVA, E.S.MASHKOVA
V.A.MOLCHANOV
NUCL. INSTRUM. AND METHODS 833 (1988) 534-537

Table 4 List of publications of experimental works concerning
the angular distribution from a multi-component solid.

REFERENCES (EXPERIMENT : MULTICOMPONENT)

- 73 4 J.RICHARDS, J.C.KELLY
RADIAT. EFF. 19 (1973) 185-188
- 73 5 V.E.YURASOVA, A.A.SYSDEV, G.A.SAMSONOV, V.M.BUKHANOV,
L.N.NEVZOROVA, L.B.SHELYAKIN
RADIAT. EFF. 20 (1973) 89-93
- 77 2 R.R.OLSON, G.K.WEHNER
J. VAC. SCI. AND TECHNOL. 14 JAN/FEB (1977) 319-321
- 79 1 J.N.SMITH.JR
IEEE. TRANS. NUCL. SCI. NS-26 FEBRUARY (1979) 1292-1295
- 79 3 R.R.OLSON, M.E.KING, G.K.WEHNER
J. APPL. PHYS. 50(5) MAY (1979) 3677-3683
- 79 6 J.N.SMITH.JR
J. NUCL. MATER. 80 (1979) 356-360
- 81 2 H.H.ANDERSEN, J.CHEVALLIER, V.CHERNYSH
NUCL. INSTRUM. AND METHODS 191 (1981) 241-244
- 81 3 J.BOHDANSKY, G.L.CHEN, W.ECKSTEIN, J.ROTH
J. NUCL. MATER. 103&104 (1981) 339-344
- 82 1 H.H.ANDERSEN, V.CHERNYSH, B.STENUM, T.SORENSEN, H.J.WHITLOW
SUR. SCI. 123 (1982) 39-46
- 82 8 T.MOTOHIRO, Y.TAGA, K.NAKAJIMA
SUR. SCI. 118 (1982) 66-74
- 82 11 V.ORLINOV, G.NLADENOV, I.PETROV, M.BRAUN, B.EMMOTH
VACUUM 32 (1982) 747-752
- 83 1 H.F.DUMKE, T.A.TOMBRELLO, R.A.WELLER, R.M.HOUSLEY, E.H.CIRLIN
SUR. SCI. 124 (1983) 407-422
- 83 2 H.J.KANG, Y.MATSUDA, R.SHIMIZU
SUR. SCI. 127 (1983) L179-L185
- 83 4 M.R.WELLER
NUCL. INSTRUM. AND METHODS 212 (1983) 419-426
- 83 5 J.ROTH, J.BOHDANSKY, W.ECKSTEIN
NUCL. INSTRUM. AND METHODS PHYS.RES. 218 (1983) 751-756
- 83 7 H.H.ANDERSEN, B.STENUM, T.SORENSEN, H.J.WHITLOW
NUCL. INSTRUM. AND METHODS 209-210 (1983) 487-494
- 84 1 S.ICHIMURA, H.SHINIZU, H.MURAKAMI, Y.ICHIDA
J. NUCL. MATER. 128&129 (1984) 601-604
- 84 2 H.H.ANDERSEN, B.STENUM, T.SORENSEN, H.J.WHITLOW
NUCL. INSTRUM. AND METHODS PHYS.RES. B 2 (1984) 623-626
- 85 11 V.A.BURDOVITSIN, I.E.BURKOVA, V.M.ZAVODCHIKOV
PHYS. CHEM. MECH. SURFACES 3 (1985) 715-719
- 86 1 H.J.KANG, R.SHIMIZU
SUR. SCI. 169 (1986) 337-346
- 86 3 YASUHIRO NAGAI, TOMYUKI TOSHIMA
J. VAC. SCI. AND TECHNOL. A4(2) MAR/APR (1986) 179-183
- 86 8 F.LAMA, J.A.STRAIN, P.D.TOWNSEND
RADIAT. EFF. 99 (1986) 301-311

Table 5 List of publications of theoretical and computational works on the angular distribution of sputtered atoms.

REFERENCES (THEORY & SIMULATION)

- 69 1 P.SIGMUND
PHYSICAL REV. 184 (1969) 383-416
- 72 1 P.BRYCE, J.C.KELLY
J. PHYS. C:SOLID STATE PHYS 5 (1972) 1604-1614
- 73 2 D.P.JACKSON
RADIAT. EFF. 18 (1973) 185-189
- 74 3 V.E.DUBINSKII
SOV. PHYS. SOLID STATE 16 (1974) 135-136
- 75 1 K.RODELSPERGER, W.KRUGER, A.SCHARMANN
Z. PHYS. A 272 (1975) 127-130
- 75 4 D.P.JACKSON
CAN. J. PHYS 53 (1975) 1513-1523
- 78 3 UFFE LITTMARK, W.O.HOFER
J. MATER. SCI. 13 (1978) 2577-2586
- 79 4 G.FENSKE, L.HIVELY, G.WILEY, M.KAMINSKY
J. NUCL. MATER. 85&86 (1979) 1037-1043
- 79 5 D.HILDEBRANDT, R.MANNS
RADIAT. EFF. 41 (1979) 193-194
- 80 5 H.E.ROOSEDAAL, J.B.SANDERS
RADIAT. EFF. 52 (1980) 137-144
- 80 6 M.M.JAKAS, M.M.R.WILLIAMS
J. PHYS. D:APPL PHYS 13 (1980) 1169-1180
- 80 8 A.V.LUSNIKOV
SOV. PHYS. TECH. PHYS. 25 (1980) 1459
- 81 7 M.P.SEAH, C.LEA
THIN SOLID FILIMS. 81 (1981) 257-270
- 81 8 Y.YAMAMURA
RADIAT. EFF. 55 (1981) 49-56
- 81 9 DON E.HARRISON,JR.
J. APPL. PHYS. 52 MARCH (1981) 1499-1508
- 82 4 Y.YAMAMURA
NUCL. INSTRUM. AND METHODS 194 (1982) 515-522
- 82 9 P.SIGHUND, A.OLIVA, G.FALCONE
NUCL. INSTRUM. AND METHODS 194 (1982) 541-548
- 82 10 T.OKUTANI, R.SHIMIZU
JPN. J. APPL. PHYS. 21 (1982) 570-573
- 83 3 H.ROSEN, G.P.MUELLER, W.A.FRASER
NUCL. INSTRUM. AND METHODS 209-210 (1983) 63-66
- 84 6 L.G.HAGGMARK, J.P.BIERSACK
J. NUCL. MATER. 103&104 (1984) 345-350
- 85 1 HEE JEA KANG, EIZOH KAWATOH, RYUICHI SIMIZU
JPN. J. APPL. PHYS. 24 NOVEMBER (1985) 1409-1416
- 85 6 D.S.KARPUZOV, J.S.COLLIGON, H.KHEYRANDISH, A.E.HILL
NUCL. INSTRUM. AND METHODS PHYS.RES. B 6 (1985) 474-478
- 85 7 H.HAUTALA, H.J.WHITLOW
NUCL. INSTRUM. AND METHODS PHYS.RES. B 6 (1985) 466-473
- 85 10 W.ECKSTEIN, J.P.BIERSACK
APPL. PHYS. A37 (1985) 95-108

Table 5 (continued)

REFERENCES (THEORY & SIMULATION)

- 86 5 B.J.GARRISON
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 17 (1986) 305-308
- 86 11 D.Y.LO, T.A.TOMBRELLO, M.H.SHAPIRO
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 17 (1986) 207-212
- 86 13 C.COURDRAY, G.SLODZIAN
 NUCL. INSTRUM. AND METHODS PHYS. RES. B 15 (1986) 29-33
- 87 4 S.C.PARK, R.A.STANSFIELD, D.C.CLARY
 J. PHYS. D:APPL.PHYS. 20 (1987) 880-888
- 87 7 K.T.WALDEER, H.M.URBASSEK
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 518-524
- 87 8 R.A.HARING, H.E.ROOSEDAAL, P.C.ZALM
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 28 (1987) 205-213
- 87 9 K.J.SNOWDON, R.A.HARING
 NUCL. INSTRUM. AND METHODS PHYS.RES. B 18 (1987) 596-599
- 87 10 Y.YAMAMURA, C.MOSSNER, H.OECHSNER
 RADIAT. EFF. 105 (1987) 31-41
- 87 13 V.A.BURDOVITSIN
 PHYS. CHEM. MECH. SURFACES 4 (1987) 2209-2215
- 87 15 R.A.HARING
 MAT. RES. SOC. SYMP. PROC 75 (1987) 483-490
- 88 3 ZHENG LIPING, CUI FUZHAI
 CHINESE PHYS. LETT. 5 (1988)
- 88 5 M.VICANEK, J.J.JIMENEZ, P.SIGMUND
 NUCL. INSTRUM. AND METHODS B36 (1988) 124-136

Table 6 List of review papers

REFERENCES (REVIEW)

-
- 64 1 R.BEHRISCH
ERGEBN. EXAKT. NATURW 35 (1964) 295
- 65 1 M.KAHINSKY
ATOMIC AND IONIC IMPACT PHENOMENE ON METAL SURFACES (1965)
- 68 1 G.CARTER, T.S.COLLIGON
ION BOMBARDMENT OF SURFACE (1968)
- 68 2 N.V.PLESHIVSEV
CATHODE SPUTTERING (1968)
- 68 3 H.W.THOMPSON
DEFECTS AND RADIATION DANEGE IN METALS (1968)
- 70 6 R.J.MACDONALD
ADV. PHYS. 19 (1970) 457-524
- 72 2 P.SIGHUND
REV. ROUM. PHYS. 17 (1972) 1079
- 73 6 R.BEHRISCH
RADIAT. EFF. 18&19 (1973)
- 74 2 J.L.VOSSEN
J. VAC. SCI. AND TECHNOL. 11 (1974) 875-877
- 75 2 H.DECHSNER
APPL. PHYS. 8 (1975) 185-198
- 75 5 G.H.MACCRAKEN
REP. PROG. PHYS. 38 (1975) 241-327
- 77 5 P.SIGHUND
INELASTIC ION-SURFACE COLLISIONS (1977)
- 81 15 R.BEHRISCH
TOP. APPL. PHYS. 47 (1981)
- 83 9 R.BEHRISCH
TOP. APPL. PHYS. 52 (1983)
- 86 19 K.KANAYA, N.BABA, Y.HURANAKA, K.ADACHI
RES. REP. KOGAKUIN UNIV. (1986) 74-80
- 87 17 H.H.ANDERSEN
NUCL. INSTRUM. AND METHODS B18 (1987) 321
- 87 18 P.SIGHUND
NUCL. INSTRUM. AND METHODS B27 (1987) 1
- 88 4 H.H.ANDERSEN
NUCL. INSTRUM. AND METHODS B33 (1988) 466-473

Table 7 Brief review of experimental works on the angular distributions of sputtered atoms

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE
57	1 G.K.WEHRER	HG	0.03-0.4	0	CU, AG,	
					AU, V, ZR,	
					NB, SI, C,	
					PT, AL, FE	
60	1 G.K.WEHRER	HG	0.1-1	0	NI, PT,	
					GE, FE, MO	
61	2 H.PATTERSON	A	5, 8, 10	0, 20	AU	
69	2 B.M.GURMIN	KR	5, 10, 19	60	W	
70	2 V.E.DUBINSKI	AR	70		TA	CRYST
70	3 V.E.DUBINSKI	AR, N2	70		AU, TA, W	CRYST
70	4 O.I.KAPUSTA					
70	5 A.V.VEEN	KR	250	70	AG	CRYST
73	1 V.M.BUKHANOV	NE	22		CU(001)	CRYST
73	4 J.RICHARDS	AR	15	45	K-BR,	CRYST
					NA-CL	
73	5 V.E.YURASOVA	IN, CU, NE	9, 5	0, 45	CU, IN-SB	CRYST
74	1 K.RODELSPERGER					

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE		
74	4	1	S.YA.LEBEDEV	AR, N	70		AU	CRYST
		1						
		1						
		1						
		1						
76	1	1	K.RODELSPERGER	AR	130, 300, 1000	0, 60	FE, CU, AU	
		1						
		1						
		1						
		1						
76	2	1	S.YA.LEBEDEV					CRYST
		1						
		1						
		1						
		1						
77	1	1	D.HILDEBRANDT	NE, AR, KR	5-15	0	CU, ZN, PB	
		1						
		1						
		1						
		1						
77	2	1	R.R.OLSON	HG, AR	1		NI-CU, FE-NI	
		1						
		1						
		1						
		1						
77	3	1	K.RODELSPERGER	AR	130, 300, 1000	0, 60	AU, PT, CU, FE, TA	
		1						
		1						
		1						
		1						
77	4	1	Y.CHOUAN	AR	1.8		TA	
		1						
		1						
		1						
		1						
78	2	1	P.ERLENWEIN					
		1						
		1						
		1						
		1						
78	4	1	P.HUCKS	AR, HE, H	15, 30	70	AU, CU	
		1						
		1						
		1						
		1						
78	5	1	B.EMMOTH	HE, AR	20, 40, 65	0	MO, AG	
		1						
		1						
		1						
		1						
79	1	1	J.N.SMITH.JR	H3	5-10	30, 45, 60, 75	CR	
		1						
		1						
		1						
		1						
79	2	1	J.ROTH	H, HE	1, 4	0-80	NI, W, TA-C	
		1						
		1						
		1						
		1						

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE
79	3	I R.R. OLSON	I HG, AR	I 0.3	I	I NI-FE, I
		I	I	I	I	I AG-AU, I
		I	I	I	I	I NI-CU I
		I	I	I	I	I I
		I	I	I	I	I I
79	6	I J.N. SMITH, JR	I H3	I 10	I 30, 45, I	I CR I
		I	I	I	I 60, 75 I	I I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
79	7	I R. YAMADA	I NE	I 0.6, 1.5	I 45	I MO I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
79	8	I D. HILDEBRANDT	I NE, AR, KR	I 10	I 0, 40, 60	I AL, NB, I
		I	I	I	I	I AG, PB I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
80	1	I T. OKUTANI	I AR	I 3, 10	I 0, 60	I SI I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
80	3	I J.L. WHITTON	I AR	I 40	I	I CU I
		I	I	I	I	I CRYST I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
80	4	I V.S. CHERNYSH	I A, H	I 80, 400	I	I CO I
		I	I	I	I	I CRYST I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
80	7	I H.L. BAY	I H, HE	I 1, 4	I 0, 20, 40, I	I NI, W I
		I	I	I	I 60, 70, 80 I	I I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
81	1	I H. TSUGE	I AR	I 0.5, 1.0	I 0	I AU, PT, AL I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
81	2	I H.H. ANDERSEN	I AR	I 20, 80	I	I AG-AU, I
		I	I	I	I	I CU-PT I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I
81	3	I J. BOHDANSKY	I H, D	I 0.45, 1.0, I	I 0, 20, 40, I	I NI, NB-B2 I
		I	I	I 4.0, 0.4, I	I 60, 80, 0, I	I I
		I	I	I 2.0, 8.0 I	I 30, 50, 70 I	I I
		I	I	I	I	I I
		I	I	I	I	I I
81	5	I S.YA. LEBEDEV	I	I 70	I 80, 90	I I
		I	I	I	I	I CRYST I
		I	I	I	I	I I
		I	I	I	I	I I
		I	I	I	I	I I

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE
81 10	I K.SAIKI	I HE	I 0.3, 1, 6	I 0	I MO	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
81 12	I M.MANNAMI	I AR	I 50	I 0, 30, 52,	I AU	I
	I	I	I	I 80	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
81 13	I D.HILDEBRANDT	I KR, NE, I AR, XE	I 10, 20, 30	I -40, 0, 45	I AL, NB, AG	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 1	I H.H.ANDERSEN	I AR	I 160	I 0	I PT-CU	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 2	I J.BOHDANSKY	I D, HE	I 50, 100	I 0, 25, 50,	I MO	I
	I	I	I	I 75	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 3	I R.G.ALLAS	I CU, NI, AL	I 60, 90, I 120	I	I CU, NI, AL	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 5	I W.SZYMCZAK	I NE, XE	I 0.2-30	I 0	I AU	I CRYST
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 7	I W.O.HOFER	I HE, H	I 0.5, 4	I 0	I V	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 8	I T.MOTOHIRO	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
82 11	I V.ORLINOV	I AR	I 40	I 0	I AL, AL2O3	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
83 1	I M.F.DUMKE	I AR	I 15	I 0	I GA, I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
83 2	I H.J.KANG	I AR	I 3	I 0	I AU-CU	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE	
83	4	I M.R.WELLER	I AR	I 100	I 0	I AU-AG	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
83	5	I J.ROTH	I NI, MO, W	I 0.3-50	I	I NB-B2,	I
		I	I	I	I	I TI-B2,	I
		I	I	I	I	I B4-C,	I
		I	I	I	I	I TA-C, C	I
		I	I	I	I	I	I
83	7	I H.H.ANDERSEN	I BI, AR, O	I 1.25-320	I 0	I CU-PT, CU,	I
		I	I	I	I	I NI5-PD	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
84	1	I S.ICHIKURA	I AR	I 3	I 0	I CU-NI,	I
		I	I	I	I	I CO-NI,	I
		I	I	I	I	I FE-NI	I
		I	I	I	I	I	I
		I	I	I	I	I	I
84	2	I H.H.ANDERSEN	I AR	I 20, 80	I	I CU-PT	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
84	3	I P.R.MALMBERG	I AU	I 125	I 0-60	I CU	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
84	4	I J.LINDERS	I AR	I 20, 40	I 80	I AG	I CRYST
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
84	5	I R.BECERRA-ACEVEDO	I D	I 4, 1.33	I 80	I NI, MO	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
85	2	I G.BRAUER	I AR, XE	I 100-900	I 0, 80, 85	I CU, ZR, AU	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
85	3	I S.KUNDU	I NE, AR, I KR, XE	I 20-30	I 0-40(DEG)	I AG	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
85	4	I H.H.ANDERSEN	I AR,	I 1.25-320	I 0-90(DEG)	I CU, PT, GE	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
85	5	I T.MOTIHIRO	I AR	I 2.35, 5.0, I 7.8	I 0 (DEG)	I AU	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I
		I	I	I	I	I	I

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE
85 11	I V.A.BURDOVITSIN	I N, N2, AR	I 10	I 0-75	I SI-N	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
85 13	I I.I.BONDAR	I	I	I 30 45	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 1	I H.J.KANG	I AR	I 0.8	I 0, 60	I AU-CU	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 2	I J.P.O'CONNOR	I BR	I 70, 100	I	I NB	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 3	I YASUHIRO NAGAI	I AR	I 1	I 0-60	I NI-FE	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 6	I Y.MATSUDA	I AR	I 0.6, 1, 2, 3	I 0	I FE	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 7	I M.SZYMONSKI	I AR	I 5	I	I AG	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 8	I F.LAMA	I AR	I 5-20	I	I U-O2	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 9	I M.ERDMANN	I AR, O2	I 20, 22, 24, 40	I	I AG, AU	I CRYST
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 12	I M.SAIDOH	I HE, AR	I 2.5-6	I 70	I MO	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 14	I J.P.BAXTER	I AR	I 5	I 0	I RH	I AMOR, CRYST
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 15	I J.P.BAXTER	I AR	I 5	I 0	I IN, RH	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I

Table 7 (continued)

NO.	REFERENCE	ION	ENERGY(KEV)	ANGLE	TARGET	STRUCTURE
86 16	I E.TAGLAUER	I AR	I 2	I 0	I CU	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 17	I W.HUANG	I AR N2	I 5	I 0	I AG	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
86 18	I S.KUNDU	I AR	I 20	I 0 40	I AG	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 2	I C.SCHWEBEL	I XE, AR, KR	I 10-20	I 15, 45	I SI	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 3	I M.SAIDOH	I HE	I 6	I 70	I MO	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 5	I H.SHIMIZU	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 6	I J.A.SPRAGUE	I CU	I 100	I 0	I CU	I CRYST
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 11	I W.O.HOFER	I AR	I 5	I 0	I CU(111)	I CRYST
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
87 12	I Y.MATSUDA	I AR	I 1, 2, 3	I 0	I TI, FE	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
88 1	I W.HUANG	I N	I 5	I 0	I AG, AR	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
88 2	I A.I.DODONOV	I AR	I 30	I 96, 94, I 92,88, 85, I 75,70, 65, I 60,50, 40, I 0	I CU	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I
	I	I	I	I	I	I

Table 8 The best-fit n values of an empirical fitting formula $\cos^n \theta$

ENERGY(KEV)	ION	TARGET	N-VALUE	REF.	NO.
0.30	HG	NI	0.45	60. 1.	1
0.30	HG	NI	0.48	60. 1.	2
0.10	HG	PT	0.29	60. 1.	3
0.25	HG	PT	0.55	60. 1.	4
0.50	HG	PT	0.54	60. 1.	5
0.75	HG	PT	0.58	60. 1.	6
1.00	HG	PT	0.62	60. 1.	7
0.10	HG	NI	0.02	60. 1.	8
0.25	HG	NI	0.71	60. 1.	9
0.50	HG	NI	0.66	60. 1.	10
0.75	HG	NI	0.85	60. 1.	11
1.00	HG	NI	1.09	60. 1.	12
0.15	HG	GE	0.11	60. 1.	13
0.25	HG	GE	0.43	60. 1.	14
0.50	HG	GE	0.69	60. 1.	15
0.75	HG	GE	0.91	60. 1.	16
1.00	HG	GE	1.06	60. 1.	17
0.15	HG	MO	0.01	60. 1.	18
0.25	HG	MO	0.47	60. 1.	19
0.50	HG	MO	0.29	60. 1.	20
0.75	HG	MO	0.55	60. 1.	21
1.00	HG	MO	0.64	60. 1.	22
0.15	HG	FE	0.03	60. 1.	23
0.25	HG	FE	0.22	60. 1.	24
0.50	HG	FE	0.48	60. 1.	25
0.75	HG	FE	0.54	60. 1.	26
1.00	HG	FE	0.89	60. 1.	27
300.00	AR	AU	1.49	76. 1.	4
300.00	AR	AU	1.17	76. 1.	5
5.00	KR	CU	0.33	77. 1.	1
8.00	KR	CU	0.44	77. 1.	2
14.00	KR	CU	0.46	77. 1.	3
300.00	AR	PT	2.28	77. 3.	2
130.00	AR	AU	1.85	77. 3.	4
130.00	AR	AU	1.44	77. 3.	5
1000.00	AR	AU	2.28	77. 3.	8

Table 8 (continued)

ENERGY (KEV)	ION	TARGET	N-VALUE	REF.	NO.
130.00	AR	CU	1.71	77. 3.	10
300.00	AR	CU	1.82	77. 3.	12
300.00	AR	TA	0.99	77. 3.	16
65.00	HE	MO	0.88	78. 5.	1
40.00	HE	AG	1.22	78. 5.	2
40.00	AR	MO	1.08	78. 5.	3
20.00	AR	AG	2.56	78. 5.	4
1.00	H3	NI	2.09	79. 2.	6
4.00	H2	NI	1.63	79. 2.	12
4.00	HE	NI	0.72	79. 2.	16
4.00	H2	W	0.73	79. 2.	19
3.00	AR	SI	1.54	80. 1.	1
10.00	AR	SI	0.87	80. 1.	2
1.00	AR	AU	1.36	81. 1.	1
1.00	AR	AL	0.60	81. 1.	2
1.00	AR	AL	0.44	81. 1.	4
1.00	AR	AU	1.08	81. 1.	5
1.00	AR	PT	0.79	81. 1.	6
1.00	AR	PT	0.76	81. 1.	7
1.00	AR	TA	0.81	81. 1.	8
1.00	AR	SI	0.72	81. 1.	9
0.50	AR	AU	1.19	81. 1.	10
0.50	AR	SI	0.58	81. 1.	14
0.45	H	NI	1.15	81. 3.	1
0.45	H	NI	0.75	81. 3.	5
1.00	H	NI	0.81	81. 3.	6
4.00	H	NI	1.54	81. 3.	7
50.00	AR	AU	2.27	81.12.	1
100.00	D	MO	1.29	82. 2.	4
100.00	HE	MO	1.11	82. 2.	8
50.00	HE	MO	1.11	82. 2.	12
60.00	CU	CU	1.26	82. 3.	1
90.00	CU	CU	1.35	82. 3.	2
120.00	CU	CU	1.33	82. 3.	3
60.00	NI	NI	1.05	82. 3.	4
90.00	NI	NI	0.90	82. 3.	5
120.00	NI	NI	0.75	82. 3.	6

Table 8 (continued)

ENERGY(KEY)	ION	TARGET	N-VALUE	REF.	NO.
90.00	CU	CU	1.30	82. 3.	7
90.00	CU	CU	1.00	82. 3.	8
90.00	CU	CU	0.77	82. 3.	9
90.00	CU	CU	1.35	82. 3.	10
90.00	CU	CU	0.82	82. 3.	11
90.00	CU	CU	1.07	82. 3.	12
4.00	HE	V	1.19	82. 7.	1
4.00	HE	V	0.93	82. 7.	2
0.50	H	V	1.17	82. 7.	3
40.00	AR	AL	0.96	82.11.	1
40.00	AR	AL	0.86	82.11.	2
125.00	AU	CU	1.99	84. 3.	1
125.00	AU	CU	2.35	84. 3.	2
125.00	AU	CU	2.01	84. 3.	6
125.00	AU	CU	2.14	84. 3.	7
500.00	AR	AU	2.02	85. 2.	1
500.00	AR	CU	1.99	85. 2.	6
500.00	AR	ZR	1.33	85. 2.	12
30.00	NE	AG	0.98	85. 3.	1
20.00	AR	AG	0.84	85. 3.	2
20.00	KR	AG	1.15	85. 3.	3
30.00	XE	AG	1.31	85. 3.	4
80.00	AR	GE	1.17	85. 4.	1
80.00	AR	CU	1.82	85. 4.	2
80.00	AR	PT	1.96	85. 4.	3
2.30	AR	AU	0.54	85. 5.	1
5.00	AR	AU	0.30	85. 5.	2
7.80	AR	AU	1.04	85. 5.	3
100.00	BR	NB	1.36	86. 2.	2
1.00	AR	FE	1.12	86. 6.	1
3.00	AR	FE	1.45	86. 6.	2
2.00	AR	FE	1.31	86. 6.	3
0.60	AR	FE	0.93	86. 6.	4
5.00	AR	AG	1.18	86. 7.	1
5.00	AR	AG	0.20	86. 7.	2
5.00	AR	AG	1.74	86. 7.	3
5.00	AR	RH	1.11	86.14.	1

Table 8 (continued)

ENERGY(KEV)	ION	TARGET	N-VALUE	REF.	NO.
5.00	AR	RH	2.03	86.14.	2
5.00	AR	IN	1.31	86.15.	1
5.00	AR	RH	1.81	86.15.	2
5.00	AR	IN	1.06	86.15.	3
5.00	AR	IN	1.31	86.15.	4
5.00	AR	IN	1.49	86.15.	5
5.00	AR	RH	1.22	86.15.	6
5.00	AR	RH	1.56	86.15.	7
5.00	AR	RH	2.11	86.15.	8
2.00	AR	CU	0.72	86.16.	1
2.00	AR	CU	0.88	86.16.	2
2.00	AR	CU	1.12	86.16.	3
2.00	AR	CU	1.17	86.16.	4
5.00	AR	AG	1.23	86.17.	1
5.00	AR	AG	1.77	86.17.	2
5.00	N2	AG	1.11	86.17.	3
5.00	N2	AG	1.38	86.17.	4
20.00	AR	AG	0.85	86.18.	1
5.00	N	AG	0.88	88. 1.	1
5.00	N	AR	1.13	88. 1.	2
30.00	AR	CU	3.26	88. 2.	12

Table 9 The preferential ejection angle β of measured distributions at oblique incidence on a monatomic solid.

ENERGY (KEV)	ION	TARGET	θ	β	REF.	NO.
5.00	KR	W	60.0	53.8	69. 2.	1
10.00	KR	W	60.0	50.0	69. 2.	2
19.00	KR	W	60.0	23.0	69. 2.	3
130.00	AR	CU	60.0	0.0	76. 1.	1
300.00	AR	CU	60.0	30.0	76. 1.	2
300.00	AR	CU	60.0	0.0	76. 1.	3
130.00	AR	AU	60.0	0.0	76. 1.	6
130.00	AR	PT	60.0	0.0	76. 1.	7
130.00	AR	CU	60.0	5.0	76. 1.	8
130.00	AR	FE	60.0	5.0	76. 1.	9
130.00	AR	TA	60.0	5.0	76. 1.	10
1000.00	AR	AU	60.0	5.0	76. 1.	11
1000.00	AR	PT	60.0	5.0	76. 1.	12
1000.00	AR	CU	60.0	0.0	76. 1.	13
1000.00	AR	FE	60.0	20.0	76. 1.	14
1000.00	AR	TA	60.0	0.0	76. 1.	15
130.00	AR	PT	60.0	10.0	77. 3.	1
300.00	AR	PT	60.0	10.0	77. 3.	3
130.00	AR	AU	60.0	0.0	77. 3.	6
130.00	AR	AU	60.0	0.0	77. 3.	7
1000.00	AR	AU	60.0	0.0	77. 3.	9
130.00	AR	CU	60.0	0.0	77. 3.	11
300.00	AR	CU	60.0	0.0	77. 3.	13
1000.00	AR	CU	60.0	0.0	77. 3.	14
130.00	AR	TA	60.0	29.0	77. 3.	15
1000.00	AR	TA	60.0	0.0	77. 3.	17
130.00	AR	FE	60.0	20.0	77. 3.	18
130.00	AR	FE	60.0	0.0	77. 3.	19
130.00	AR	FE	60.0	0.0	77. 3.	20
1000.00	AR	FE	60.0	20.0	77. 3.	21
1.00	H3	NI	80.0	45.0	79. 2.	1
1.00	H3	NI	70.0	43.0	79. 2.	2
1.00	H3	CR	60.0	49.0	79. 2.	3
1.00	H3	NI	40.0	50.0	79. 2.	4
1.00	H3	NI	20.0	50.0	79. 2.	5
4.00	H2	NI	80.0	21.0	79. 2.	7

Table 9 (continued)

² ENERGY (KEV)	IDH	TARGET	θ	β	REF.	NO.
4.00	H2	NI	70.0	33.7	79. 2.	8
4.00	H2	NI	60.0	42.0	79. 2.	9
4.00	H2	NI	40.0	50.0	79. 2.	10
4.00	H2	NI	20.0	50.0	79. 2.	11
4.00	HE	NI	80.0	15.0	79. 2.	13
1.30	H3	NI	60.0	50.0	79. 2.	14
4.00	HE	NI	40.0	55.0	79. 2.	15
4.00	H2	W	80.0	45.0	79. 2.	17
4.00	H2	W	60.0	45.0	79. 2.	18
3.00	AR	SI	60.0	20.0	80. 1.	3
10.00	AR	SI	60.0	15.0	80. 1.	4
0.45	H	NI	40.0	45.9	81. 3.	2
0.45	H	NI	60.0	45.0	81. 3.	3
0.45	H	NI	80.0	49.3	81. 3.	4
100.00	D	MO	75.0	20.0	82. 2.	1
100.00	D	MO	50.0	50.0	82. 2.	2
100.00	D	MO	25.0	50.0	82. 2.	3
50.00	D	MO	75.0	25.0	82. 2.	5
50.00	D	MO	50.0	45.0	82. 2.	6
50.00	D	MO	25.0	45.0	82. 2.	7
100.00	HE	MO	25.0	60.0	82. 2.	9
100.00	HE	MO	50.0	50.0	82. 2.	10
100.00	HE	MO	75.0	5.0	82. 2.	11
50.00	HE	MO	75.0	0.0	82. 2.	13
50.00	HE	MO	50.0	40.0	82. 2.	14
50.00	HE	MO	25.0	40.0	82. 2.	15
2.00	D	MO	80.0	25.0	83. 5.	1
125.00	AU	CU	30.0	0.0	84. 3.	3
125.00	AU	CU	45.0	0.0	84. 3.	4
125.00	AU	CU	60.0	30.0	84. 3.	5
125.00	AU	CU	30.0	0.0	84. 3.	8
125.00	AU	CU	45.0	0.0	84. 3.	9
125.00	AU	CU	60.0	0.0	84. 3.	10
500.00	AR	AU	85.0	10.0	85. 2.	2
150.00	AR	AU	85.0	5.0	85. 2.	3
900.00	AR	AU	85.0	5.0	85. 2.	4
200.00	XE	AU	85.0	5.0	85. 2.	5

Table 9 (continued)

ENERGY(KEV)	ION	TARGET	θ	β	REF.	NO.
500.00	AR	CU	80.0	10.0	85. 2.	7
500.00	AR	CU	85.0	5.0	85. 2.	8
150.00	AR	CU	85.0	5.0	85. 2.	9
900.00	AR	CU	85.0	5.0	85. 2.	10
200.00	XE	CU	85.0	5.0	85. 2.	11
500.00	AR	ZR	80.0	11.0	85. 2.	13
500.00	AR	ZR	85.0	9.0	85. 2.	14
150.00	AR	ZR	85.0	9.0	85. 2.	15
900.00	AR	ZR	85.0	8.0	85. 2.	16
200.00	XE	ZR	85.0	5.0	85. 2.	17
6.00	HE	MO	70.0	35.0	86.12.	1
6.00	HE	MO	70.0	30.0	86.12.	2
6.00	HE	MO	70.0	30.0	86.12.	3
20.00	XE	SI	15.0	13.9	87. 2.	1
20.00	XE	SI	45.0	52.2	87. 2.	2
20.00	XE	SI	45.0	0.0	87. 2.	3
20.00	AR	SI	45.0	0.0	87. 2.	4
20.00	AR	SI	45.0	52.2	87. 2.	5
20.00	KR	SI	45.0	10.0	87. 2.	6
20.00	KR	SI	45.0	45.9	87. 2.	7
20.00	XE	SI	45.0	0.0	87. 2.	8
20.00	XE	SI	45.0	52.2	87. 2.	9
6.00	HE	MO	70.0	29.2	87. 3.	1
6.00	HE	MO	70.0	25.0	87. 3.	2
30.00	AR	CU	86.0	10.0	88. 2.	1
30.00	AR	CU	84.0	15.0	88. 2.	2
30.00	AR	CU	82.0	15.0	88. 2.	3
30.00	AR	CU	78.0	20.0	88. 2.	4
30.00	AR	CU	75.0	25.7	88. 2.	5
30.00	AR	CU	65.0	30.0	88. 2.	6
30.00	AR	CU	60.0	29.7	88. 2.	7
30.00	AR	CU	55.0	30.5	88. 2.	8
30.00	AR	CU	50.0	0.0	88. 2.	9
30.00	AR	CU	40.0	0.0	88. 2.	10
30.00	AR	CU	30.0	0.0	88. 2.	11

Fig. 1

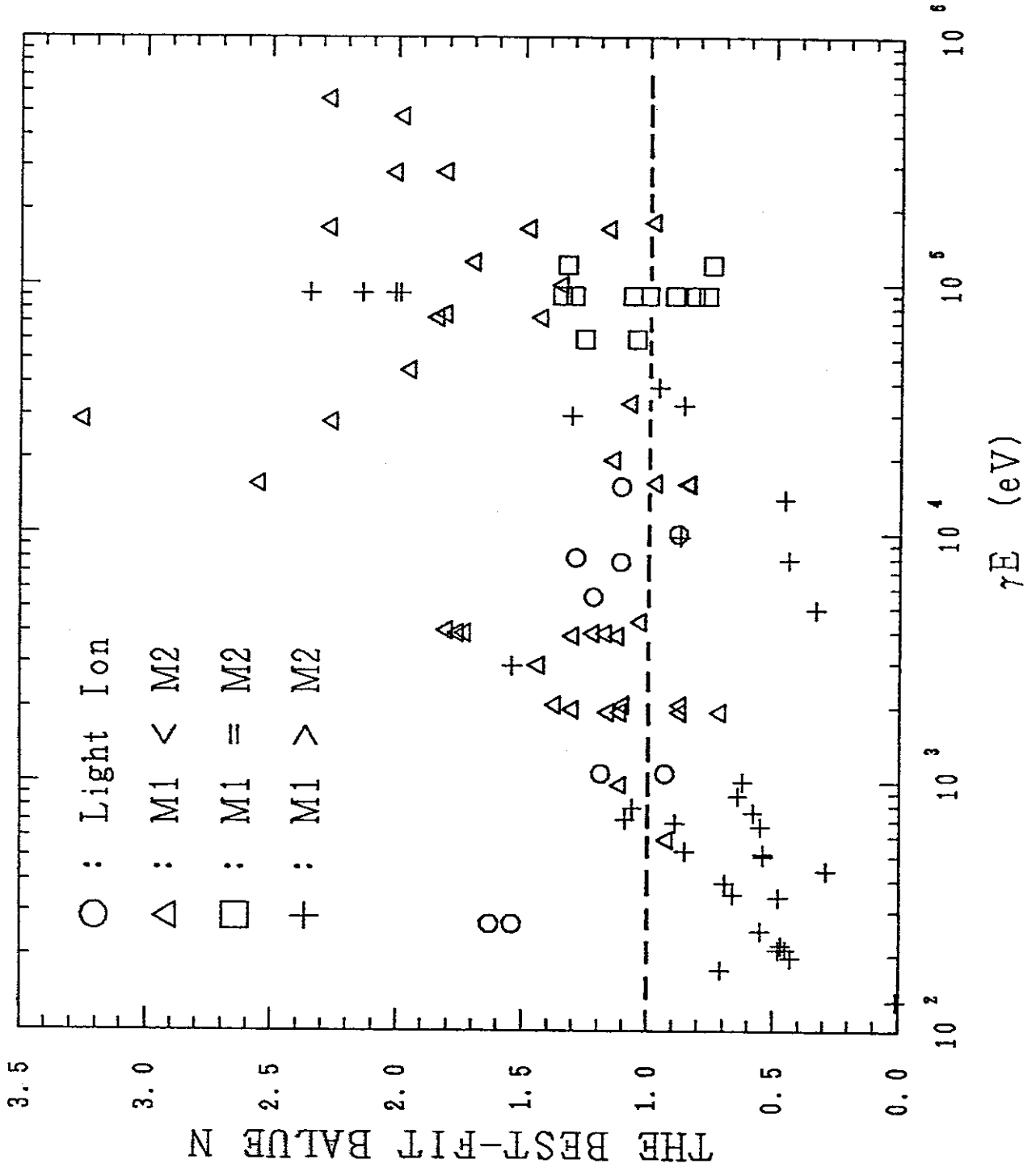


Fig. 1

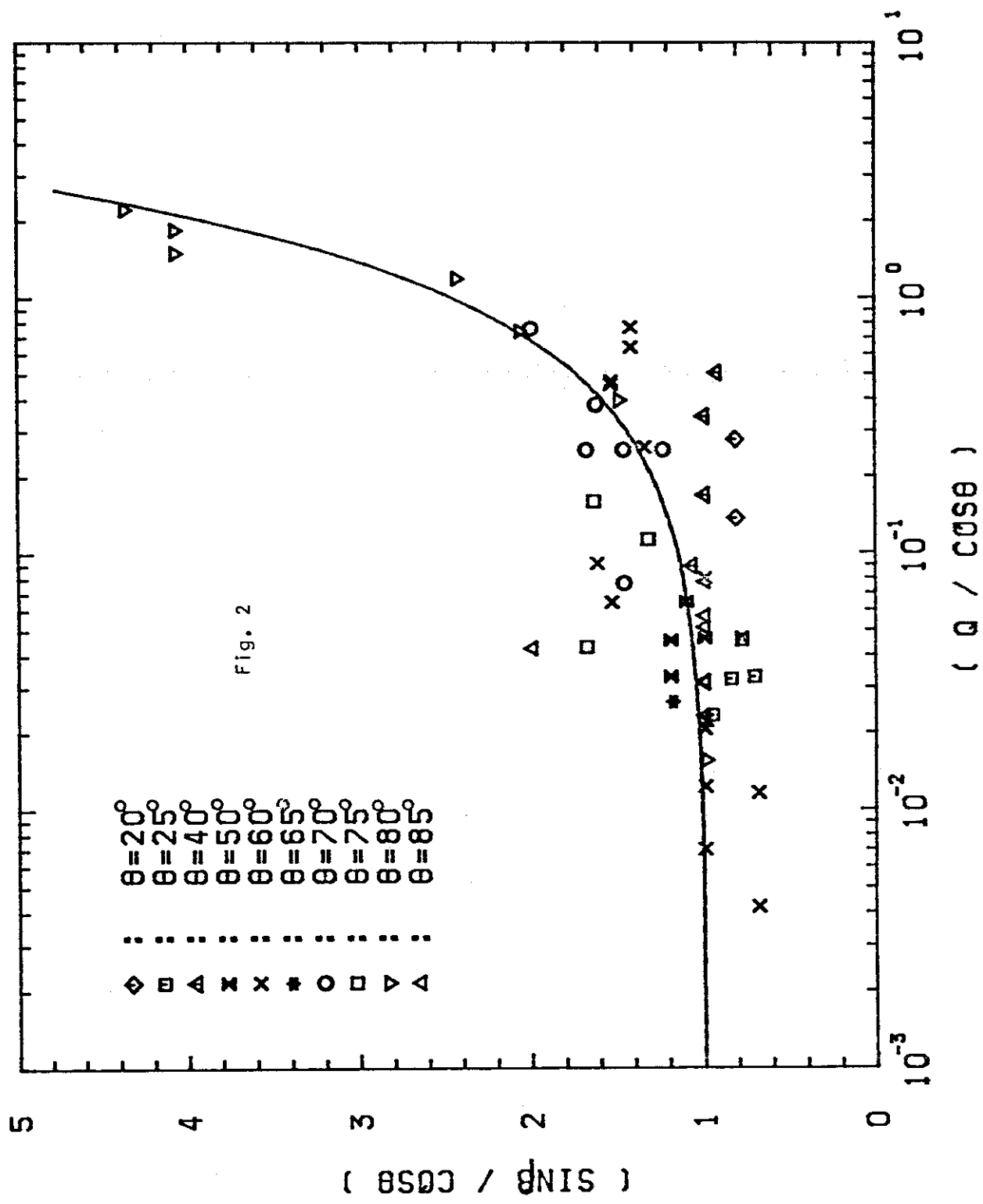


Fig. 2

Captions of figures

Fig. 1 The best-fit n values of the fitting formula $\cos^n \theta$ of angular distributions of sputtered atoms from monatomic solids are plotted as a function of γE for various ion-target combination.

Fig. 2 The scaling rule for the preferential ejection angle β , where the ratio $\sin \beta_{ex} / \cos \theta$ are plotted against X . The solid line is

$$\frac{\sin \beta}{\cos \theta} = \{ (1 + X)(1 + 2X) \}^{1/2},$$

where $X = [U_s / \gamma E]^{1/2} / \cos \theta$.

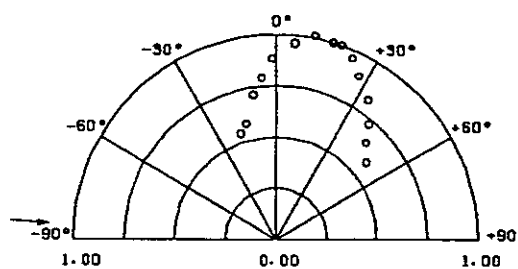
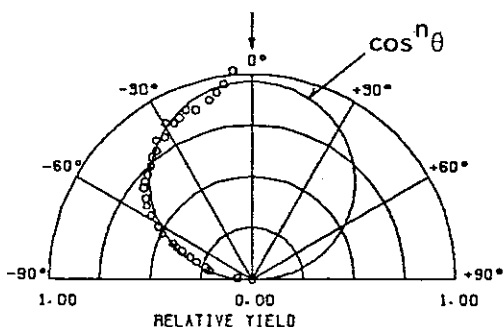
Fig. 3 Plots of all experimental angular distributions reported from 1960 to 1988. The notations used in the figures are indicated below:

INFORMATION			
88 1 1		N ⇒ AG	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00 × 10 ³
TARGET	POLY	EPSILON	1.21 × 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	1.02 × 10 ⁻¹
SPUTTERED ATOM(S)	AG	0	3.81 × 10 ⁻²
		cos ⁿ	N
			8.80 × 10 ⁻¹
ION	N 7 14.0	REFERENCE	88.1
TARGET	AG 47 108		
	↑		
	atomic number		
		↘	
		mass number	

INFORMATION			
88 2 1		AR ⇒ CU	
INCIDENT ANGLE	86°	ENERGY (EV)	3.00 × 10 ⁴
TARGET	POLY	EPSILON	3.21 × 10 ⁻¹
ENVIRONMENT	---	GAMMA	2.37 × 10 ⁻¹
SPUTTERED ATOM(S)	CU	0	1.11 × 10 ⁻²
		EJECTION ANGLE	
		EXP.	10.8°
		CAL.	4.94°
ION	AR 18 39.9	REFERENCE	88.2
TARGET	CU 29 63.5		

P=3.5E-8 TORR F=2.5E17 ← fluence
IONS/SQ. CM

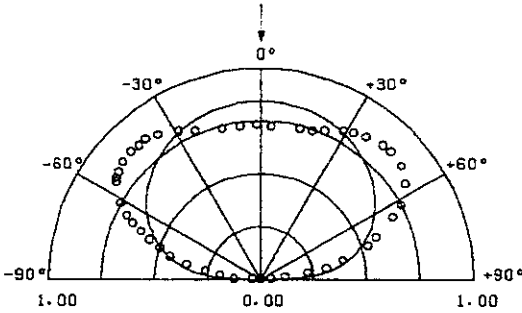
β calculated from Eq. (3)



INFORMATION

60 1 1		HG ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ²
TARGET	POLY	EPSILON	2.11 X10 ⁻⁴
ENVIRONMENT	-----	GAMMA	7.01 X10 ⁻¹
SPUTTERED ATOM (S)	NI	0	1.45 X10 ⁻¹
		COS ⁿ	N 4.50 X10 ⁻¹
ION HG 80 201		REFERENCE 60.1	
TARGET NI 28 58.7			

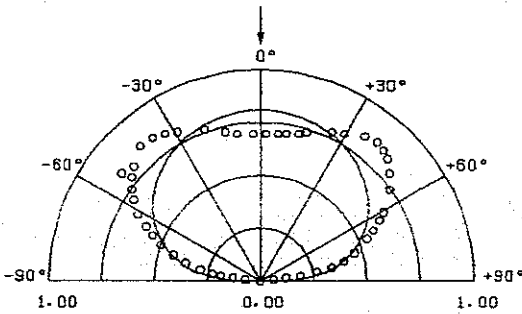
TRANSVERSE DIRECTION



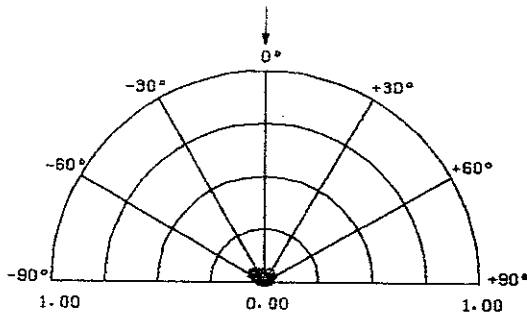
INFORMATION

60 1 2		HG ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ²
TARGET	POLY	EPSILON	2.11 X10 ⁻⁴
ENVIRONMENT	-----	GAMMA	7.01 X10 ⁻¹
SPUTTERED ATOM (S)	NI	0	1.45 X10 ⁻¹
		COS ⁿ	N 4.80 X10 ⁻¹
ION HG 80 201		REFERENCE 60.1	
TARGET NI 28 58.7			

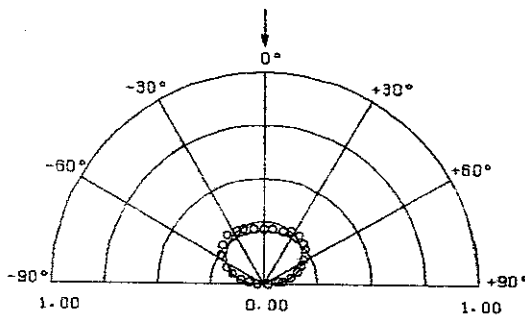
ROLLING DIRECTION



INFORMATION			
60 1 3		HG ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ²
TARGET	POLY	EPSILON	4.78 X10 ⁻⁵
ENVIRONMENT	-----	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	PT	Q	2.42 X10 ⁻¹
		COS ^θ	N 2.90 X10 ⁻¹
ION	HG 80 201		
TARGET	PT 78 195	REFERENCE	60.1

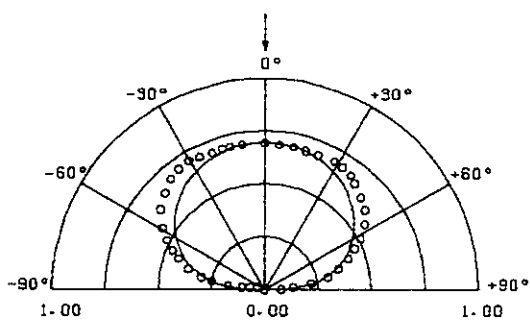


INFORMATION			
60 1 4		HG ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.50 X10 ²
TARGET	POLY	EPSILON	1.20 X10 ⁻⁴
ENVIRONMENT	-----	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	PT	Q	1.53 X10 ⁻¹
		COS ^θ	N 5.50 X10 ⁻¹
ION	HG 80 201		
TARGET	PT 78 195	REFERENCE	60.1



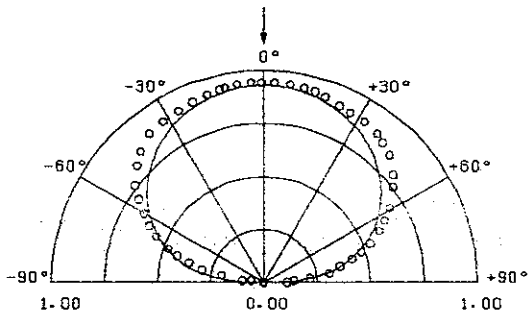
INFORMATION

60 1 5		HG ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 x10 ²
TARGET	POLY	EPSILON	2.39 x10 ⁻⁴
ENVIRONMENT	-----	GAMMA	10.00x10 ⁻¹
SPUTTERED ATOM(S)	PT	Q	1.09 x10 ⁻¹
		COS ^θ	N 5.40 x10 ⁻¹
ION	HG 80 201		
TARGET	PT 78 195	REFERENCE	60.1

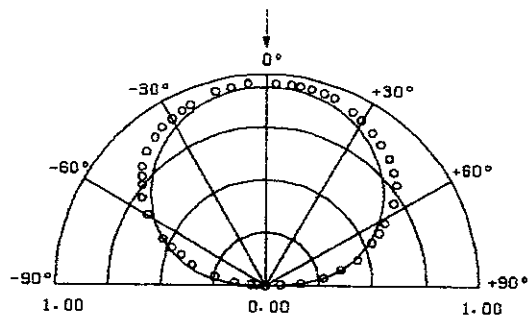


INFORMATION

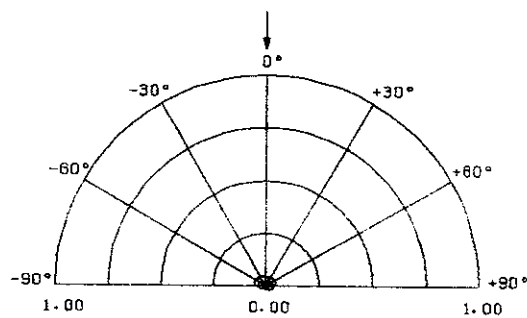
60 1 6		HG ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	7.50 x10 ²
TARGET	POLY	EPSILON	3.59 x10 ⁻⁴
ENVIRONMENT	-----	GAMMA	10.00x10 ⁻¹
SPUTTERED ATOM(S)	PT	Q	8.83 x10 ⁻²
		COS ^θ	N 5.80 x10 ⁻¹
ION	HG 80 201		
TARGET	PT 78 195	REFERENCE	60.1



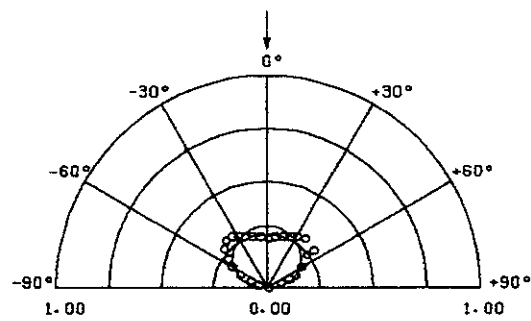
INFORMATION			
60 1 7			
HG		⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.78×10^{-4}
ENVIRONMENT	-----	GAMMA	10.00×10^{-1}
SPUTTERED ATOM(S)	PT	Q	7.64×10^{-2}
		COS ^α	N
			6.20×10^{-1}
ION	HG 80 201	REFERENCE 60.1	
TARGET	PT 78 195		



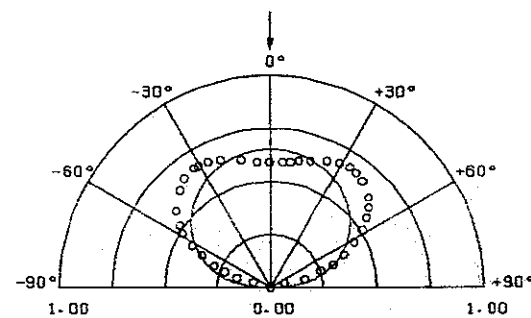
INFORMATION			
60 1 8			
HG		⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^2
TARGET	POLY	EPSILON	7.04×10^{-5}
ENVIRONMENT	-----	GAMMA	7.01×10^{-1}
SPUTTERED ATOM(S)	NI	Q	2.52×10^{-1}
		COS ^α	N
			2.00×10^{-2}
ION	HG 80 201	REFERENCE 60.1	
TARGET	NI 28 58.7		



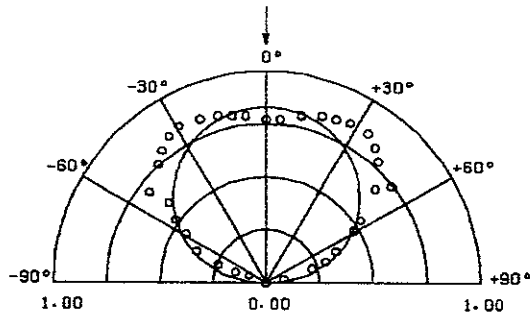
INFORMATION			
60 1 8			
HG \Rightarrow NI			
INCIDENT ANGLE	0 °	ENERGY (EV)	2.50×10^2
TARGET	POLY	EPSILON	1.76×10^{-4}
ENVIRONMENT	-----	GAMMA	7.01×10^{-1}
SPUTTERED ATOM (S)	NI	Q	1.59×10^{-1}
		COS $^{\theta}$	
		N	7.10×10^{-1}
ION	HG 80 201	REFERENCE	60 - 1
TARGET	NI 28 58.7		



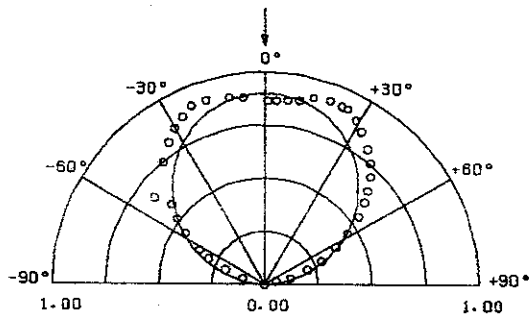
INFORMATION			
60 1 10			
HG \Rightarrow NI			
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^2
TARGET	POLY	EPSILON	3.52×10^{-4}
ENVIRONMENT	-----	GAMMA	7.01×10^{-1}
SPUTTERED ATOM (S)	NI	Q	1.13×10^{-1}
		COS $^{\theta}$	
		N	6.60×10^{-1}
ION	HG 80 201	REFERENCE	60 - 1
TARGET	NI 28 58.7		



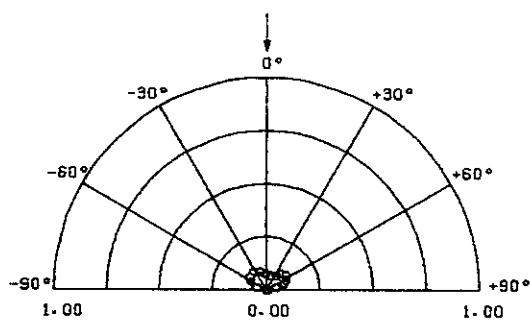
INFORMATION			
60 1 11		HG ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	7.50×10^2
TARGET	POLY	EPSILON	5.28×10^{-4}
ENVIRONMENT	-----	GAMMA	7.01×10^{-1}
SPUTTERED ATOM(S)	NI	Q	9.19×10^{-2}
		COS "	
		N	8.50×10^{-1}
ION	HG 80 201	REFERENCE	60.1
TARGET	NI 28 58.7		



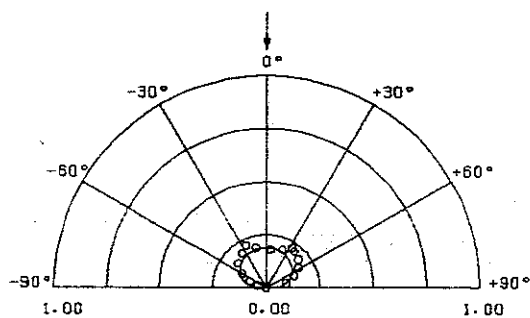
INFORMATION			
60 1 12		HG ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	7.04×10^{-4}
ENVIRONMENT	-----	GAMMA	7.01×10^{-1}
SPUTTERED ATOM(S)	NI	Q	7.96×10^{-2}
		COS "	
		N	1.09
ION	HG 80 201	REFERENCE	60.1
TARGET	NI 28 58.7		



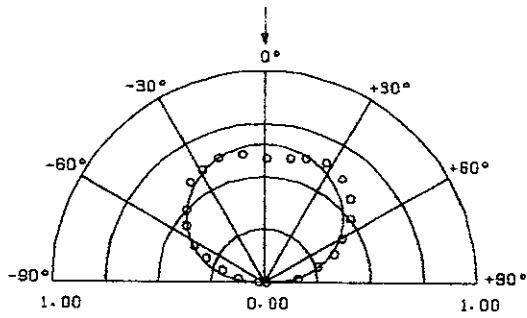
INFORMATION			
60 1 13		HG ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.50×10^2
TARGET	POLY	EPSILON	1.07×10^{-4}
ENVIRONMENT	-----	GAMMA	7.80×10^{-1}
SPUTTERED ATOM (S)	GE	Q	1.81×10^{-1}
		COS ^N	N
			1.10×10^{-1}
ION	HG 80 201		
TARGET	GE 32 72.5	REFERENCE	60.1



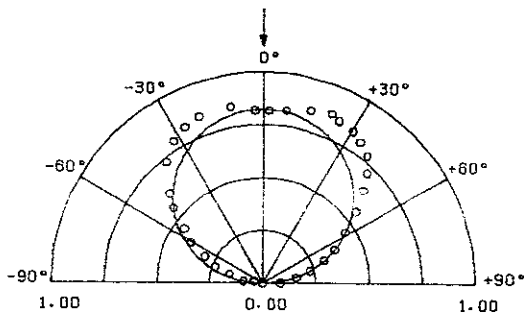
INFORMATION			
60 1 14		HG ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.50×10^2
TARGET	POLY	EPSILON	1.78×10^{-4}
ENVIRONMENT	-----	GAMMA	7.80×10^{-1}
SPUTTERED ATOM (S)	GE	Q	1.40×10^{-1}
		COS ^N	N
			4.30×10^{-1}
ION	HG 80 201		
TARGET	GE 32 72.5	REFERENCE	60.1



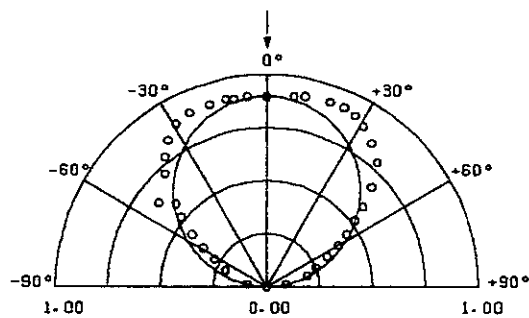
INFORMATION			
60 1 15		HG ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (eV)	5.00×10^2
TARGET	POLY	EPSILON	3.56×10^{-4}
ENVIRONMENT	-----	GAMMA	7.80×10^{-1}
SPUTTERED ATOM(S)	GE	Q	9.93×10^{-2}
		cos θ	N 6.90×10^{-1}
ION	HG 80 201		
TARGET	GE 32 72.5	REFERENCE	60.1



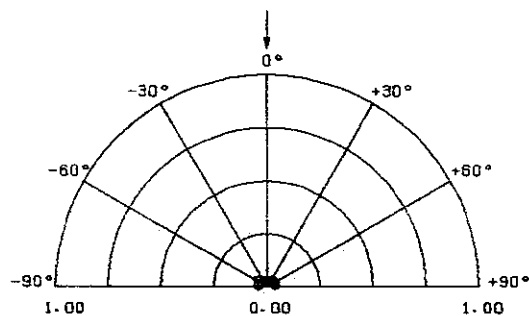
INFORMATION			
60 1 18		HG ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (eV)	7.50×10^2
TARGET	POLY	EPSILON	5.34×10^{-4}
ENVIRONMENT	-----	GAMMA	7.80×10^{-1}
SPUTTERED ATOM(S)	GE	Q	8.11×10^{-2}
		cos θ	N 9.10×10^{-1}
ION	HG 80 201		
TARGET	GE 32 72.5	REFERENCE	60.1



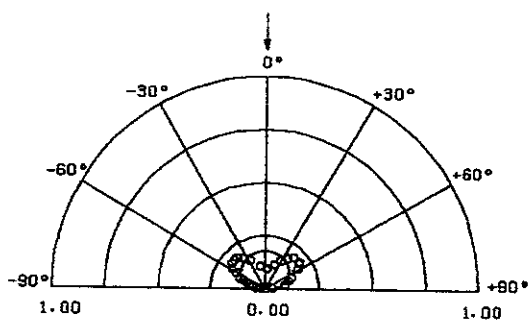
INFORMATION			
60 1 17		HG ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	7.12×10^{-4}
ENVIRONMENT	-----	GAMMA	7.80×10^{-1}
SPUTTERED ATOM (SI)	GE	Q	7.02×10^{-2}
		COS "	N 1.06
IGN	HG 80 201		
TARGET	GE 32 72.5	REFERENCE	60.1



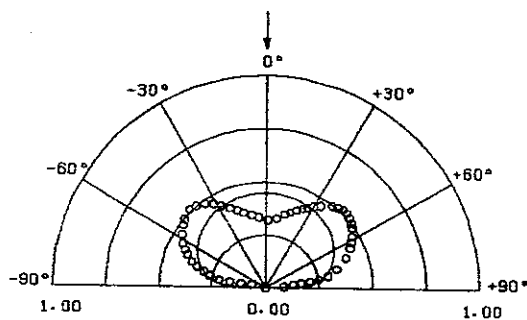
INFORMATION			
60 1 18		HG ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.50×10^2
TARGET	POLY	EPSILON	9.59×10^{-5}
ENVIRONMENT	-----	GAMMA	8.76×10^{-1}
SPUTTERED ATOM (SI)	MO	Q	2.28×10^{-1}
		COS "	N 10.0×10^{-3}
IGN	HG 80 201		
TARGET	MO 42 95.9	REFERENCE	60.1



INFORMATION			
80 1 18		HG ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.50×10^2
TARGET	POLY	EPSILON	1.60×10^{-4}
ENVIRONMENT	-----	GAMMA	8.76×10^{-1}
SPUTTERED ATOM(S)	MO	Q	1.77×10^{-1}
		COS °	N 4.70×10^{-1}
ION	HG 80 201	REFERENCE	60.1
TARGET	MO 42 95.9		

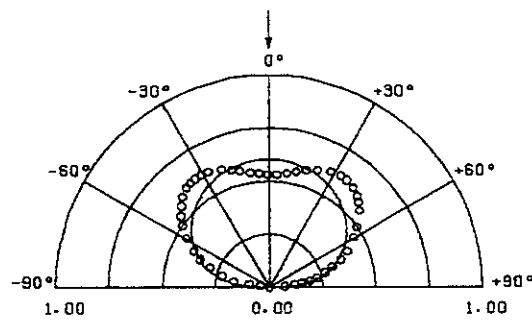


INFORMATION			
80 1 20		HG ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^2
TARGET	POLY	EPSILON	3.20×10^{-4}
ENVIRONMENT	-----	GAMMA	8.76×10^{-1}
SPUTTERED ATOM(S)	MO	Q	1.25×10^{-1}
		COS °	N 2.90×10^{-1}
ION	HG 80 201	REFERENCE	60.1
TARGET	MO 42 95.9		



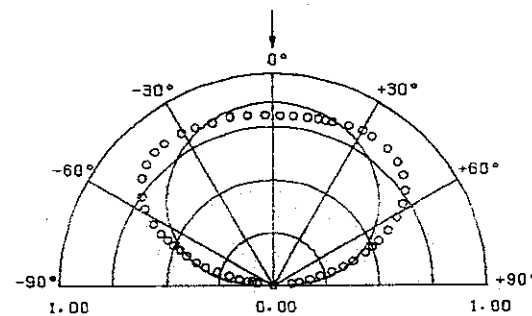
INFORMATION

60 1 21		HG ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	7.50×10^{-2}
TARGET	POLY	EPSILON	4.79×10^{-4}
ENVIRONMENT	-----	GAMMA	8.76×10^{-1}
SPUTTERED ATOM(S)	MO	Q	1.02×10^{-1}
		COS ^θ	N 5.50×10^{-1}
ION HG 80 201		REFERENCE 60.1	
TARGET MO 42 95.9			

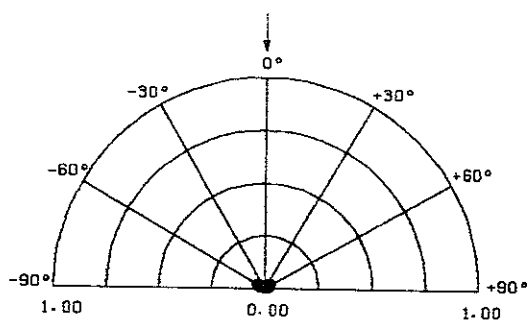


INFORMATION

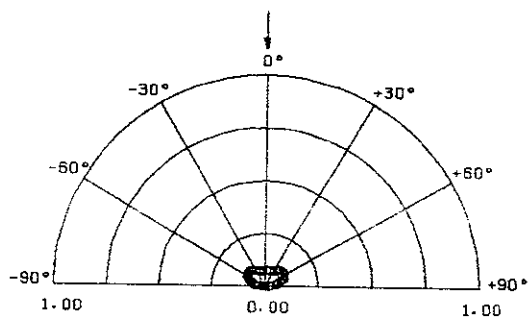
60 1 22		HG ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^{-3}
TARGET	POLY	EPSILON	6.39×10^{-4}
ENVIRONMENT	-----	GAMMA	8.76×10^{-1}
SPUTTERED ATOM(S)	MO	Q	9.89×10^{-2}
		COS ^θ	N 6.40×10^{-1}
ION HG 80 201		REFERENCE 60.1	
TARGET MO 42 95.9			



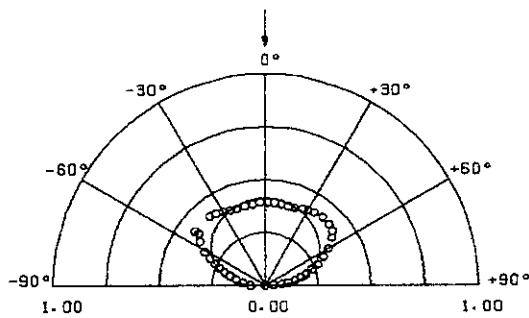
INFORMATION			
60 1 29		HG ⇒ FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.50×10^2
TARGET	POLY	EPSILON	1.10×10^{-4}
ENVIRONMENT	-----	GAMMA	6.82×10^{-1}
SPUTTERED ATOM(S)	FE	Q	2.05×10^{-1}
		COS "	N 3.00×10^{-2}
ION	HG 80 201	REFERENCE	60.1
TARGET	FE 26 55.8		



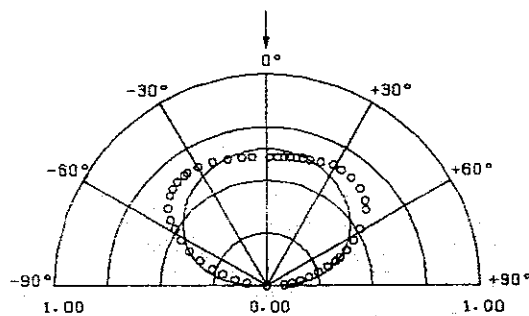
INFORMATION			
60 1 24		HG ⇒ FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.50×10^2
TARGET	POLY	EPSILON	1.84×10^{-4}
ENVIRONMENT	-----	GAMMA	6.82×10^{-1}
SPUTTERED ATOM(S)	FE	Q	1.58×10^{-1}
		COS "	N 2.20×10^{-1}
ION	HG 80 201	REFERENCE	60.1
TARGET	FE 26 55.8		



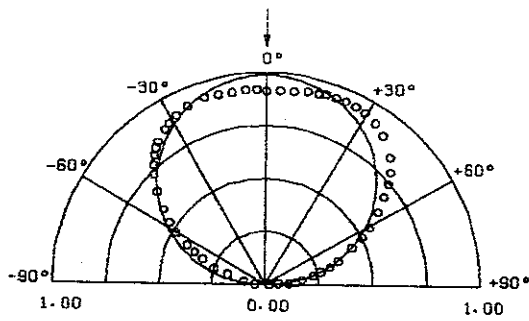
INFORMATION			
60 1 25 HG ⇒ FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^2
TARGET	POLY	EPSILON	3.68×10^{-4}
ENVIRONMENT	-----	GAMMA	6.82×10^{-1}
SPUTTERED ATOM(S)	FE	Q	1.12×10^{-1}
		COS ^θ	N
			4.80×10^{-1}
ION	HG 80 201		
TARGET	FE 26 55.8	REFERENCE	60-1



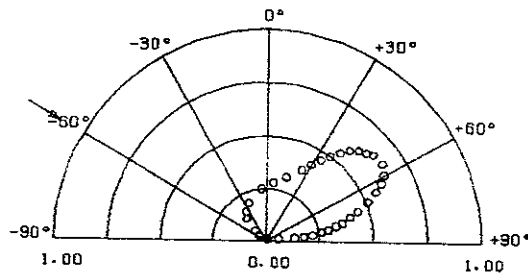
INFORMATION			
60 1 25 HG ⇒ FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	7.50×10^2
TARGET	POLY	EPSILON	5.52×10^{-4}
ENVIRONMENT	-----	GAMMA	6.82×10^{-1}
SPUTTERED ATOM(S)	FE	Q	9.15×10^{-2}
		COS ^θ	N
			5.40×10^{-1}
ION	HG 80 201		
TARGET	FE 26 55.8	REFERENCE	60-1



INFORMATION			
60 1 27		HG ⇒ FE	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	7.36 X 10 ⁻⁴
ENVIRONMENT	-----	GAMMA	6.82 X 10 ⁻¹
SPUTTERED ATOM(S)	FE	Q	7.92 X 10 ⁻²
		COS ²	N 8.90 X 10 ⁻¹
ION	HG 80 201	REFERENCE 60.1	
TARGET	FE 26 55.8		

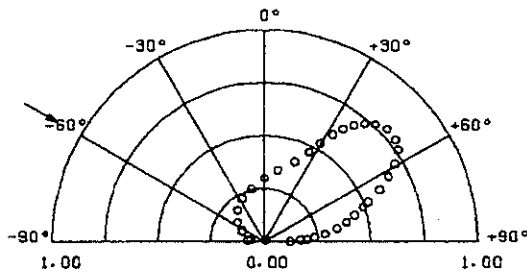


INFORMATION			
69 2 1		KR ⇒ W	
INCIDENT ANGLE	60°	ENERGY (EV)	5.00 X 10 ³
TARGET	POLY	EPSILON	8.87 X 10 ⁻³
ENVIRONMENT	-----	GAMMA	8.60 X 10 ⁻¹
SPUTTERED ATOM(S)	W	Q	4.55 X 10 ⁻²
		EJECTION ANGLE	
ION	KR 36 83.8	EXP.	53.8°
TARGET	W 74 184	CAL.	34.6°
		REFERENCE 69.2	



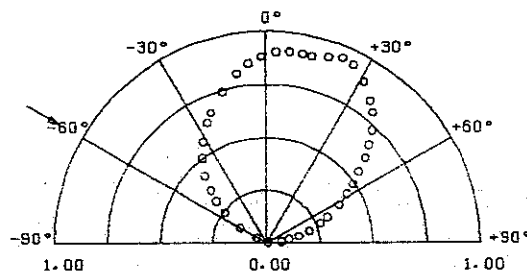
INFORMATION

69 2 2		KR ⇒ W	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	1.77×10^{-2}
ENVIRONMENT	-----	GAMMA	8.60×10^{-1}
SPUTTERED ATOM(S)	W	0	3.22×10^{-2}
		EJECTION ANGLE	
		EXP.	50.0°
		CAL.	33.2°
ION	KR 36 83.8		
TARGET	W 74 184		
		REFERENCE	69.2



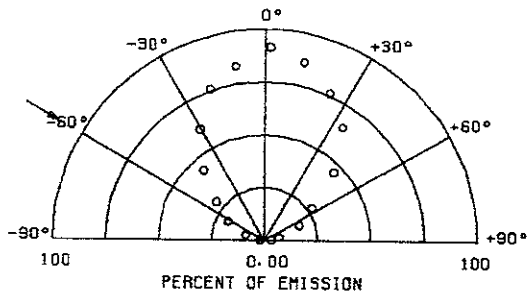
INFORMATION

69 2 3		KR ⇒ W	
INCIDENT ANGLE	60°	ENERGY (EV)	1.90×10^4
TARGET	POLY	EPSILON	3.37×10^{-2}
ENVIRONMENT	-----	GAMMA	8.60×10^{-1}
SPUTTERED ATOM(S)	W	0	2.33×10^{-2}
		EJECTION ANGLE	
		EXP.	23.0°
		CAL.	32.3°
ION	KR 36 83.8		
TARGET	W 74 184		
		REFERENCE	69.2



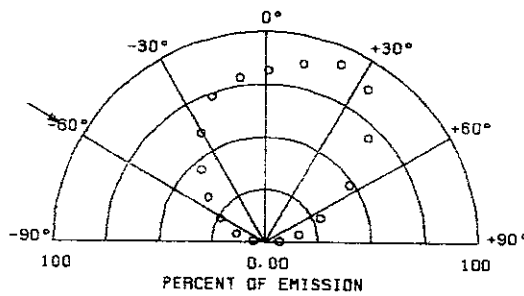
INFORMATION			
76 1 1		AR ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	HV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	σ	5.32 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	30.5°
		REFERENCE	76.1

1.7 MICRO-METER
MAX. EMISSION=86.0



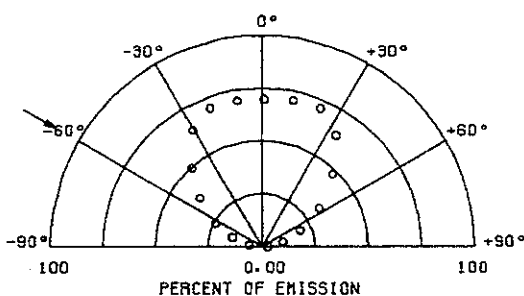
INFORMATION			
76 1 2		AR ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	3.00 X10 ⁵
TARGET	POLY	EPSILON	3.21
ENVIRONMENT	HV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	σ	3.50 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	30.0°
		CAL.	30.3°
		REFERENCE	76.1

ERODED SURFACE
11.1 MICRO-METER



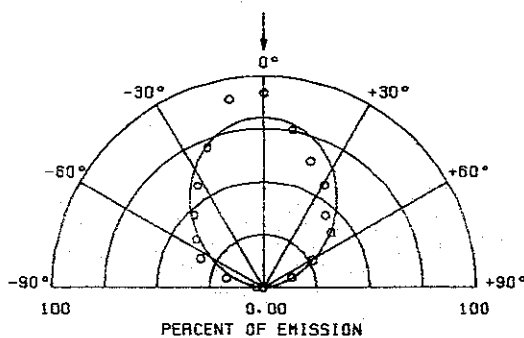
INFORMATION			
76 1 3			
AR ⇒ CU			
INCIDENT ANGLE	60°	ENERGY (EV)	3.00×10^5
TARGET	POLY	EPSILON	3.21
ENVIRONMENT	HV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	3.50×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	CU 29 63.5	CAL.	30.3°
		REFERENCE	76.1

SMOOTH SURFACE
11.1 MICRO-METER



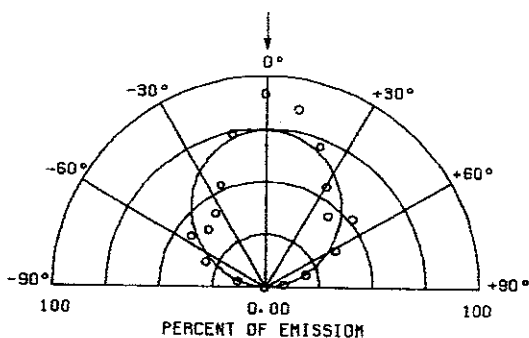
INFORMATION			
76 1 4			
AR ⇒ AU			
INCIDENT ANGLE	0°	ENERGY (EV)	3.00×10^5
TARGET	POLY	EPSILON	1.28
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	4.75×10^{-3}
		COS ⁿ N	1.49
ION	AR 18 39.9	REFERENCE	76.1
TARGET	AU 79 197		

MAX. EMISSION=57.0
7.3 MICRO-METER

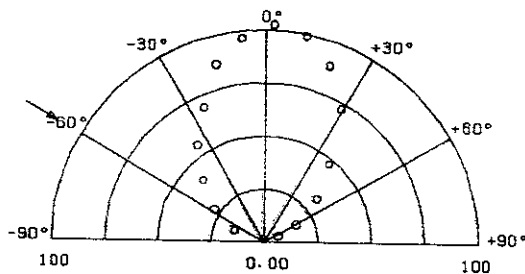


INFORMATION			
76 1 5		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ⁵
TARGET	POLY	EPSILON	1.28
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	σ	4.76 X10 ⁻³
		COS ²	N 1.17
ION	AR 18 39.9	REFERENCE	76.1
TARGET	AU 79 197		

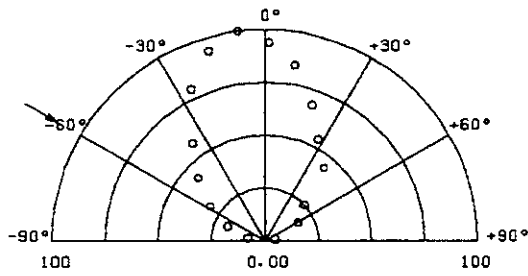
MAX. EMISSION=63.0
7MICRO-METER



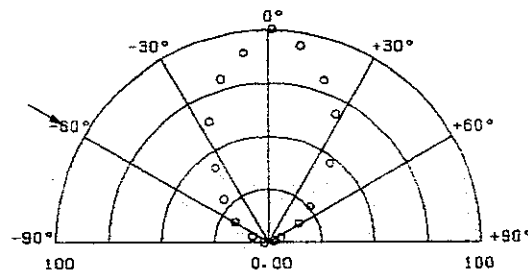
INFORMATION			
76 1 8		AR ⇒ AU	
INCIDENT ANGLE	60 °	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	5.55 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	σ	7.23 X10 ⁻³
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00 °
TARGET	AU 79 197	CAL.	30.7 °
		REFERENCE	76.1



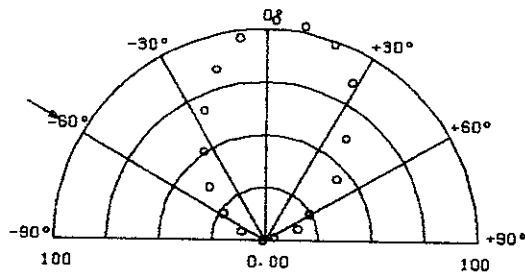
INFORMATION			
76 : 7			
AR ⇒ PT			
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	5.63×10^{-1}
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	8.92×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET PT 78 195		EXP.	0.00°
		CAL.	30.9°
REFERENCE 76.1			



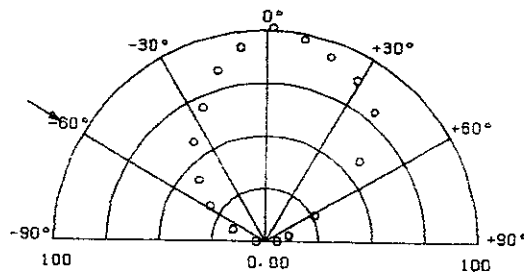
INFORMATION			
76 : 8			
AR ⇒ CU			
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	HV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	5.32×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	5.00°
		CAL.	30.5°
REFERENCE 76.1			



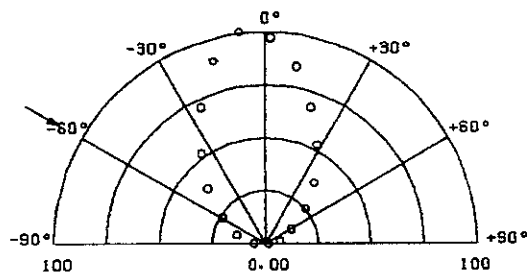
INFORMATION			
76 1 8		AR ⇒ FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	1.50
ENVIRONMENT	HV	GAMMA	9.72 X10 ⁻¹
SPUTTERED ATOM(S)	FE	Q	5.82 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET FE 26 55.8		EXP.	5.00°
		CAL.	30.6°
		REFERENCE	76.1



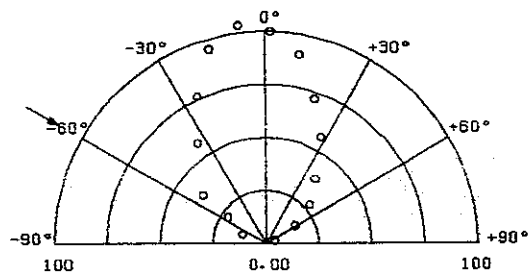
INFORMATION			
76 1 10		AR ⇒ TA	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	6.04 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.93 X10 ⁻¹
SPUTTERED ATOM(S)	TA	Q	1.03 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET TA 73 161		EXP.	5.00°
		CAL.	31.0°
		REFERENCE	76.1



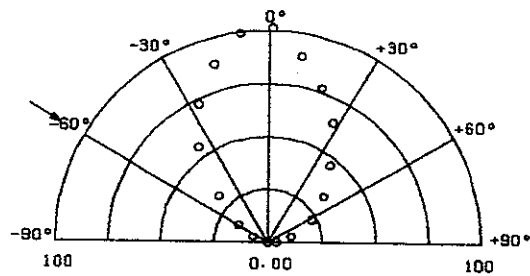
INFORMATION			
76 1 11		AR ⇒ AU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X10 ⁶
TARGET	POLY	EPSILON	4.27
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	2.61 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	5.00°
		CAL.	30.3°
		REFERENCE	76.1



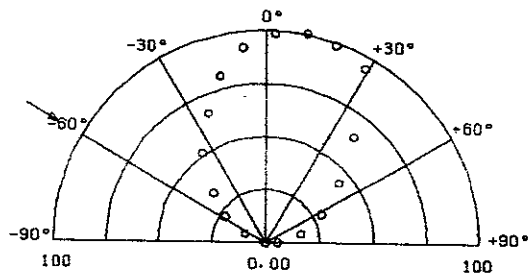
INFORMATION			
76 1 12		AR ⇒ PT	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X10 ⁶
TARGET	POLY	EPSILON	4.33
ENVIRONMENT	HV	GAMMA	5.64 X10 ⁻¹
SPUTTERED ATOM(S)	PT	Q	3.22 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET PT 78 195		EXP.	5.00°
		CAL.	30.3°
		REFERENCE	76.1



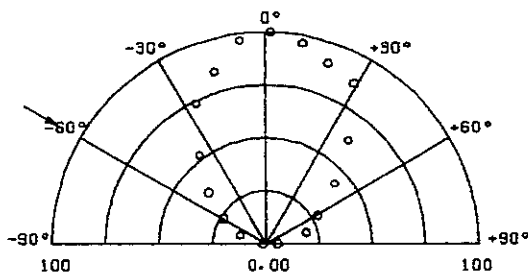
76 1 19				AR ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X10 ⁶		
TARGET	POLY	EPSILON	1.07 X10 ⁻¹		
ENVIRONMENT	HV	GAMMA	9.48 X10 ⁻¹		
SPUTTERED ATOM(S)	CU	Q	1.92 X10 ⁻³		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	0.00°		
TARGET	CU 29 63.5	CAL.	30.2°		
			REFERENCE	76.1	



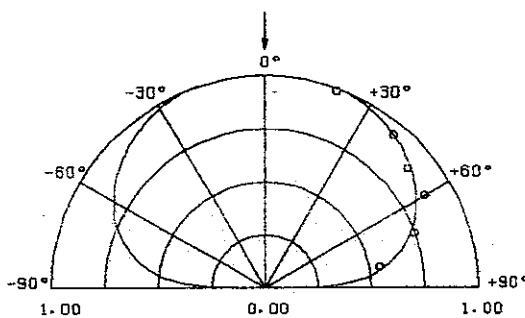
76 1 14				AR ⇒ FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X10 ⁶		
TARGET	POLY	EPSILON	1.16 X10 ⁻¹		
ENVIRONMENT	HV	GAMMA	9.72 X10 ⁻¹		
SPUTTERED ATOM(S)	FE	Q	2.10 X10 ⁻³		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	20.0°		
TARGET	FE 26 55.8	CAL.	30.2°		
			REFERENCE	76.1	



INFORMATION			
76 1 15		AR ⇒ TA	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^6
TARGET	POLY	EPSILON	4.64
ENVIRONMENT	HV	GAMMA	5.93×10^{-1}
SPUTTERED ATOM(S)	TA	σ	3.70×10^{-3}
ION AR 10 39.9		EJECTION ANGLE	
TARGET TA 73 181		EXP.	0.00°
		CAL.	30.4°
REFERENCE 76-1			

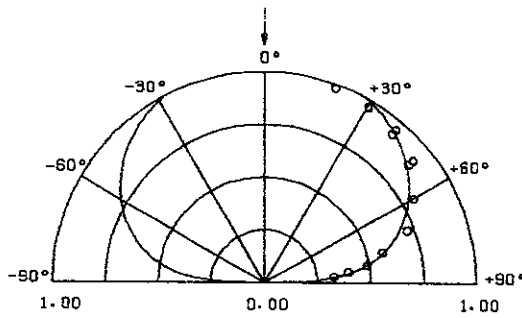


INFORMATION			
77 1 1		KR ⇒ CU	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00×10^3
TARGET	POLY	EPSILON	1.68×10^{-2}
ENVIRONMENT	HV	GAMMA	9.81×10^{-1}
SPUTTERED ATOM(S)	CU	σ	2.67×10^{-2}
ION KR 36 83.8		COS ⁿ	
TARGET CU 29 63.5		N	3.30×10^{-1}
REFERENCE 77-1			



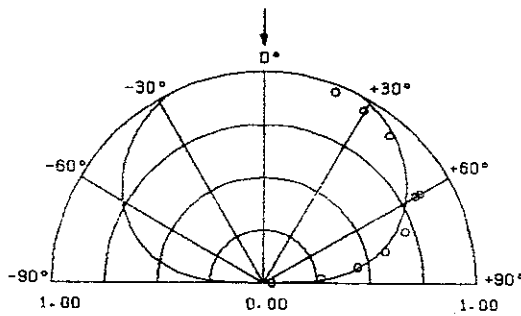
INFORMATION

77 1 2		KR ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	8.00 X10 ³		
TARGET	POLY	EPSILON	2.69 X10 ⁻²		
ENVIRONMENT	HV	GAMMA	9.81 X10 ⁻¹		
SPUTTERED ATOM(S)	CU	D	2.11 X10 ⁻²		
		COS θ	N 4.40 X10 ⁻¹		
ION KR 36 83.8		REFERENCE 77.1			
TARGET CU 29 63.5					

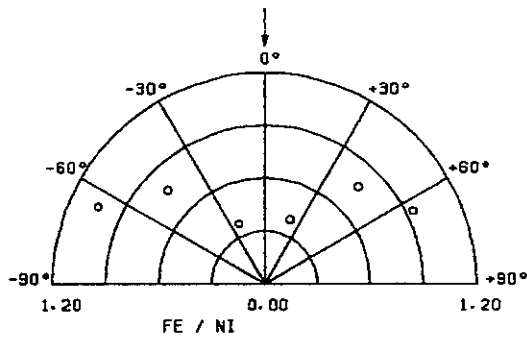


INFORMATION

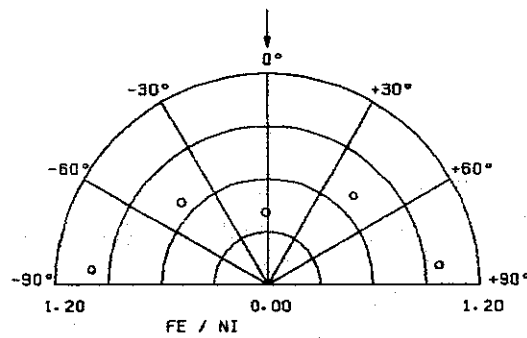
77 1 3		KR ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	1.40 X10 ⁴		
TARGET	POLY	EPSILON	4.71 X10 ⁻²		
ENVIRONMENT	HV	GAMMA	9.81 X10 ⁻¹		
SPUTTERED ATOM(S)	CU	D	1.59 X10 ⁻²		
		COS θ	N 4.60 X10 ⁻¹		
ION KR 36 83.8		REFERENCE 77.1			
TARGET CU 29 63.5					



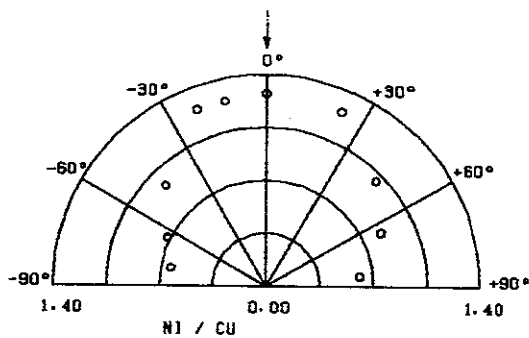
INFORMATION			
77 2 1	HG	⇒ FE-NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.40 X10 ⁴
TARGET	POLY		
ENVIRONMENT	-----	REFERENCE	77.2
SPUTTERED ATOM (S)	FE / NI		
ION	HG 80 201		
TARGET	FE 26 55.8		
	NI 28 58.7		



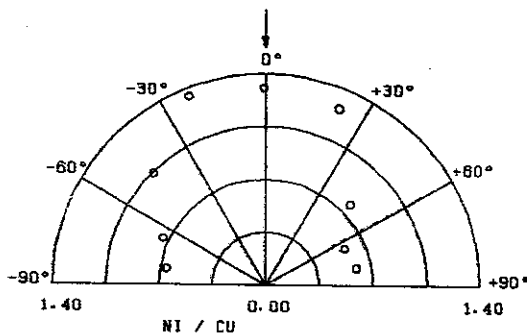
INFORMATION			
77 2 2	HG	⇒ FE-NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.40 X10 ⁴
TARGET	POLY		
ENVIRONMENT	-----	REFERENCE	77.2
SPUTTERED ATOM (S)	FE / NI		
ION	HG 80 201		
TARGET	FE 26 55.8		
	NI 28 58.7		



INFORMATION			
77 2 3	HG ⇒ NI-CU		
INCIDENT ANGLE	0 °	ENERGY (EV)	1.40 X10 ⁴
TARGET	POLY		
ENVIRONMENT	-----		
SPUTTERED ATOM(S)	NI / CU	REFERENCE	77.2
<hr/>			
ION	HG 80	201	
TARGET	NI 28	58.7	
	CU 29	63.5	

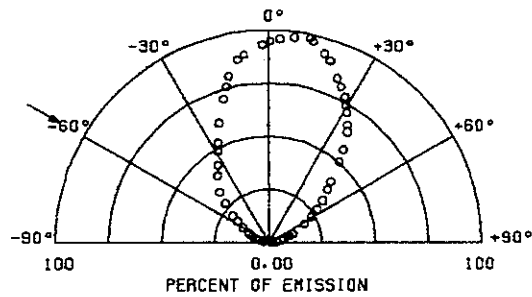


INFORMATION			
77 2 4	AR ⇒ NI-CU		
INCIDENT ANGLE	0 °	ENERGY (EV)	1.40 X10 ⁴
TARGET	POLY		
ENVIRONMENT	-----		
SPUTTERED ATOM(S)	NI / CU	REFERENCE	77.2
<hr/>			
ION	AR 18	39.9	
TARGET	NI 28	58.7	
	CU 29	63.5	



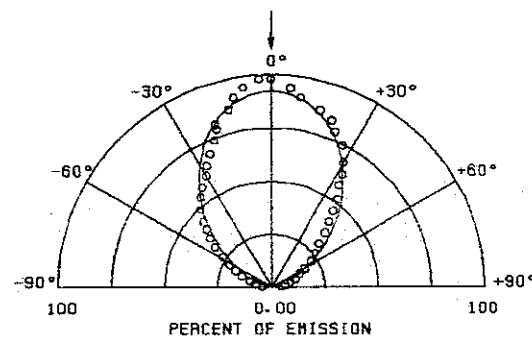
INFORMATION			
77 3 1		AR ⇒ PT	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	5.63×10^{-1}
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	8.92×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	10.08
TARGET	PT 78 195	CAL.	30.9°
		REFERENCE	77-3

REMOVAL-0.48 MICRO-METER



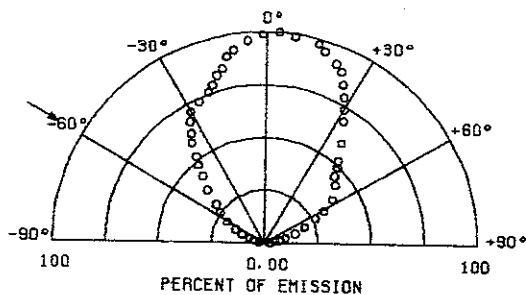
INFORMATION			
77 3 2		AR ⇒ PT	
INCIDENT ANGLE	0°	ENERGY (EV)	3.00×10^5
TARGET	POLY	EPSILON	1.30
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	5.87×10^{-3}
		COS ^N	
		N	2.28
ION	AR 18 39.9	REFERENCE	77-3
TARGET	PT 78 195		

REMOVAL-1.3 MICRO-METER



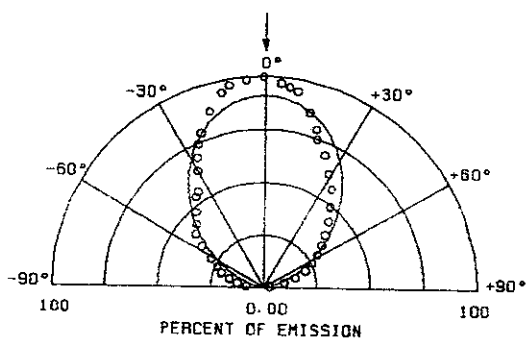
INFORMATION			
77 3 3		AR ⇒ PT	
INCIDENT ANGLE	60°	ENERGY (EV)	3.00×10^5
TARGET	POLY	EPSILON	1.30
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	5.87×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET PT 78 195		EXP.	10.08
		CAL.	30.6°
		REFERENCE	77.3

REMOVAL=0.44 MICRO-METER



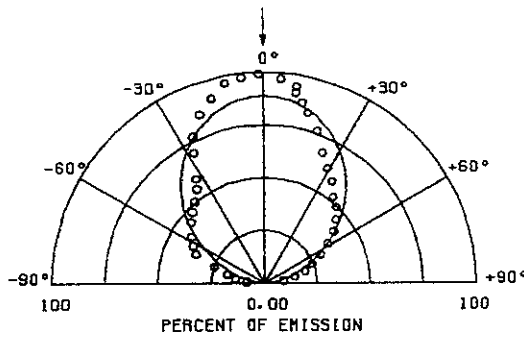
INFORMATION			
77 3 4		AR ⇒ AU	
INCIDENT ANGLE	0°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	5.55×10^{-1}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	7.23×10^{-3}
ION AR 18 39.9		COS ² N	1.85
TARGET AU 79 197		REFERENCE	77.3

REMOVAL=0.49 MICRO-METER



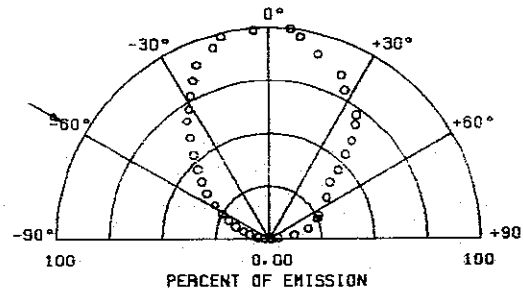
INFORMATION			
77 3 5		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	5.55 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	7.23 X10 ⁻³
		COS ⁿ	N 1.44
ION	AR 18 39.9	REFERENCE 77.3	
TARGET	AU 79 197		

REMOVAL=4.6 MICRO-METER



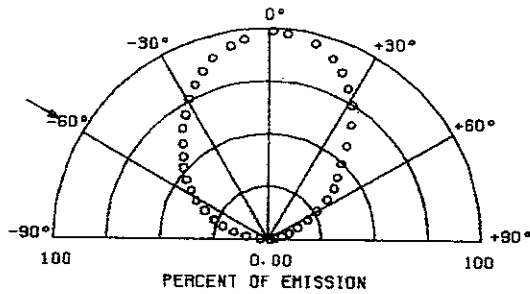
INFORMATION			
77 3 6		AR ⇒ AU	
INCIDENT ANGLE	60 °	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	5.55 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	7.23 X10 ⁻³
		EJECTION ANGLE	
		EXP.	0.00 °
		CAL.	30.7 °
ION	AR 18 39.9	REFERENCE 77.3	
TARGET	AU 79 197		

REMOVAL=0.096 MICRO-METER

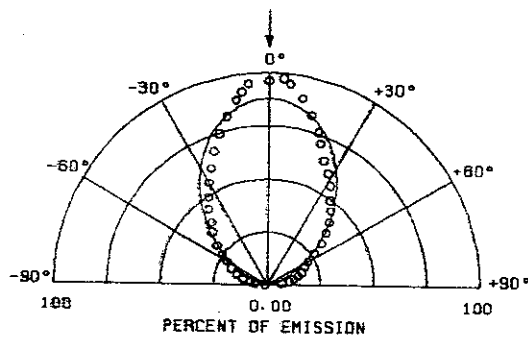


INFORMATION			
77 3 7		AR \Rightarrow AU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	5.55×10^{-1}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	θ	7.23×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	AU 79 197	CAL.	30.7°
		REFERENCE	77.3

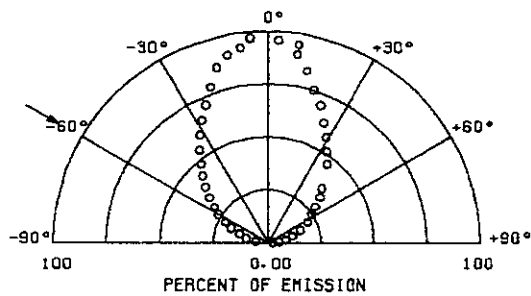
REMOVAL=2.7 MICRO-METER



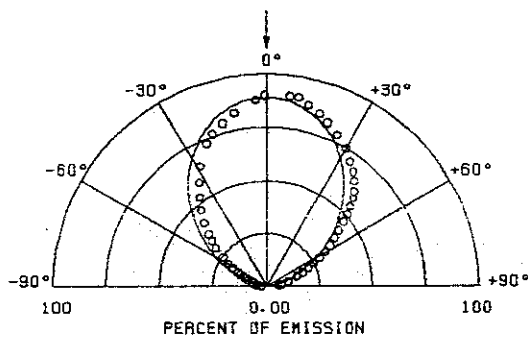
INFORMATION			
77 3 8		AR \Rightarrow AU	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00×10^6
TARGET	POLY	EPSILON	4.27
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	θ	2.61×10^{-3}
		CDS "	
		N	2.28
ION	AR 18 39.9	REFERENCE	77.3
TARGET	AU 79 197		



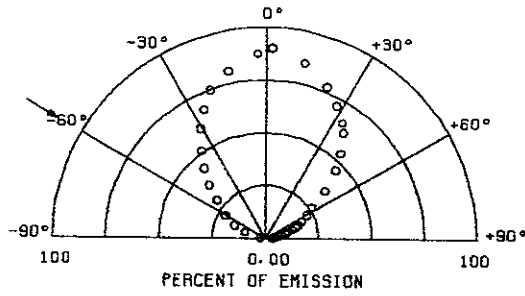
INFORMATION			
77 3 9		AR \Rightarrow AU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^8
TARGET	POLY	EPSILON	4.27
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Ω	2.61×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	AU 79 197	CAL.	90.3°
		REFERENCE	77.3



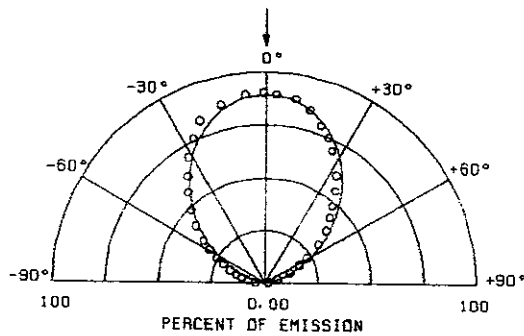
INFORMATION			
77 3 10		AR \Rightarrow CU	
INCIDENT ANGLE	0°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	HV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Ω	5.32×10^{-3}
		COS ² N	1.71
ION	AR 18 39.9	REFERENCE	77.3
TARGET	CU 29 63.5		



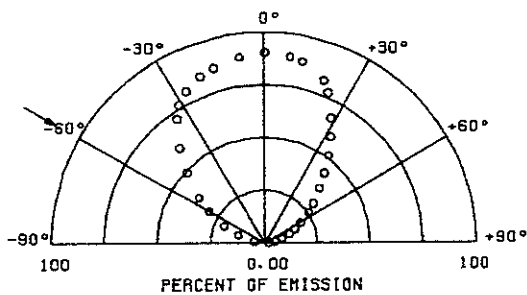
INFORMATION			
77 3 11		AR ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X 10 ⁵
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	HV	GAMMA	9.48 X 10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	5.32 X 10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	30.5°
		REFERENCE	77.3



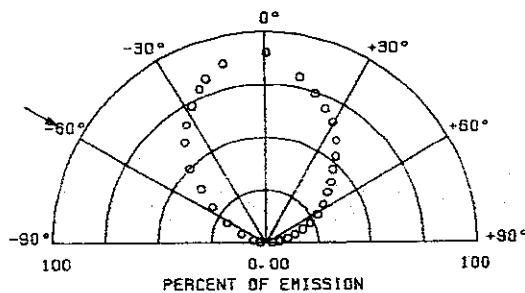
INFORMATION			
77 3 12		AR ⇒ CU	
INCIDENT ANGLE	0°	ENERGY (EV)	3.00 X 10 ⁵
TARGET	POLY	EPSILON	3.21
ENVIRONMENT	HV	GAMMA	9.48 X 10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	3.50 X 10 ⁻³
ION AR 18 39.9		COS ² N	1.82
TARGET CU 29 63.5		REFERENCE	77.3



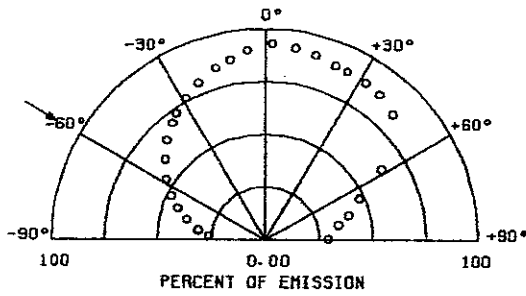
INFORMATION			
77 3 13			
AR		⇒ CU	
INCIDENT ANGLE	60°	ENERGY (eV)	3.00×10^5
TARGET	POLY	EPSILON	3.21
ENVIRONMENT	HV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	3.50×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	CU 29 63.5	CAL.	30.3°
		REFERENCE	77.3



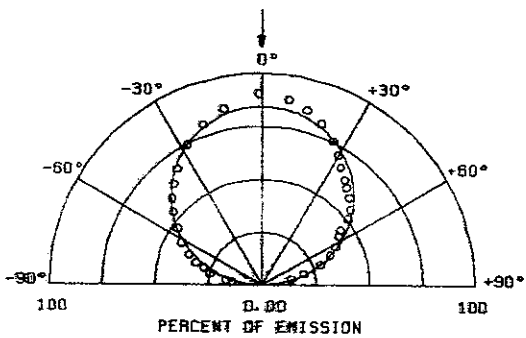
INFORMATION			
77 3 14			
AR		⇒ CU	
INCIDENT ANGLE	60°	ENERGY (eV)	1.00×10^6
TARGET	POLY	EPSILON	1.07×10^1
ENVIRONMENT	HV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	1.92×10^{-3}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	CU 29 63.5	CAL.	30.2°
		REFERENCE	77.3



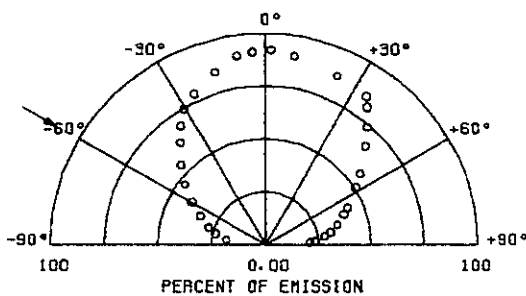
INFORMATION			
77 3 15		AR ⇒ TA	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X10 ⁵
TARGET	POLY	EPSILON	6.04 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.93 X10 ⁻¹
SPUTTERED ATOM(S)	TA	Q	1.03 X10 ⁻²
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	29.0°
TARGET	TA 73 181	CAL.	31.0°
		REFERENCE	77.3



INFORMATION			
77 3 18		AR ⇒ TA	
INCIDENT ANGLE	0°	ENERGY (EV)	3.00 X10 ⁵
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	HV	GAMMA	5.93 X10 ⁻¹
SPUTTERED ATOM(S)	TA	Q	6.75 X10 ⁻²
		CDS *	
		N	9.90 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	77.3
TARGET	TA 73 181		

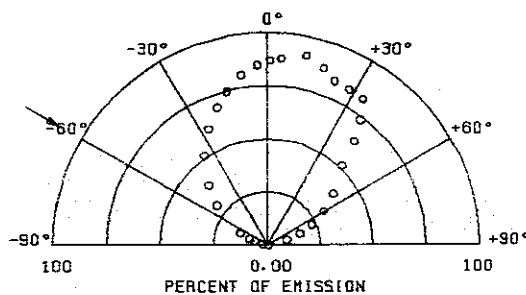


INFORMATION			
77 3 17		AR ⇒ TA	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X 10 ⁵
TARGET	POLY	EPSILON	4.64
ENVIRONMENT	HV	GAMMA	5.93 X 10 ⁻¹
SPUTTERED ATOM(S)	TA	Q	3.70 X 10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET TA 73 181		EXP.	0.00°
		CAL.	30.4°
		REFERENCE	77.3



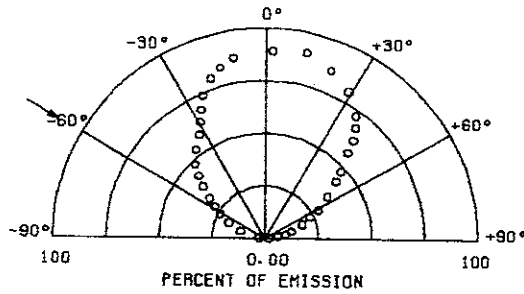
INFORMATION			
77 3 18		AR ⇒ FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X 10 ⁵
TARGET	POLY	EPSILON	1.50
ENVIRONMENT	HV	GAMMA	9.72 X 10 ⁻¹
SPUTTERED ATOM(S)	FE	Q	5.82 X 10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET FE 26 55.8		EXP.	20.0°
		CAL.	30.6°
		REFERENCE	77.3

0.22 MICRO-METER



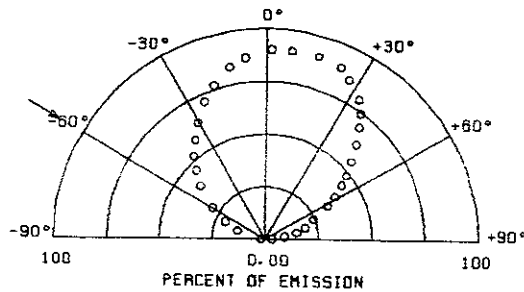
INFORMATION			
77 9 18		AR ⇒ FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	1.50
ENVIRONMENT	HV	GAMMA	9.72×10^{-1}
SPUTTERED ATOM(S)	FE	D	5.82×10^{-9}
ION AR 18 39.9		EJECTION ANGLE	
TARGET FE 26 55.8		EXP. 0.00°	
		CAL. 30.6°	
		REFERENCE 77.3	

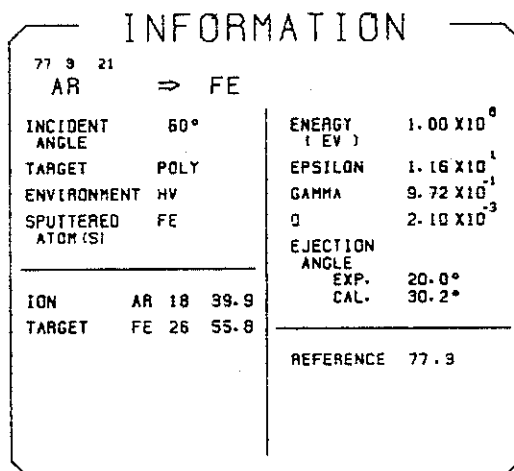
0.94 MICRO-METER



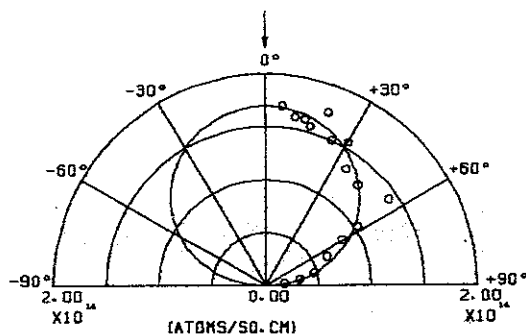
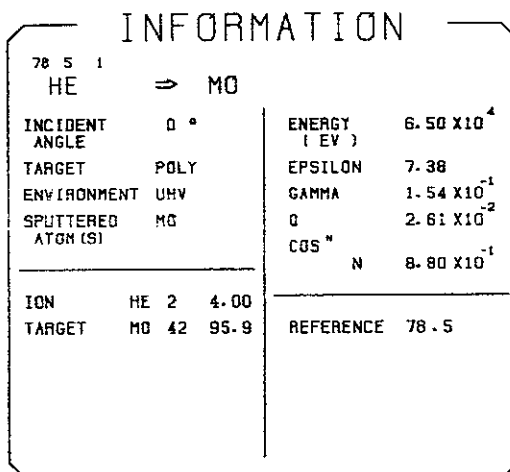
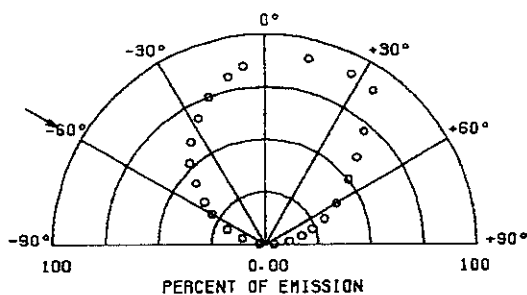
INFORMATION			
77 9 20		AR ⇒ FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.30×10^5
TARGET	POLY	EPSILON	1.50
ENVIRONMENT	HV	GAMMA	9.72×10^{-1}
SPUTTERED ATOM(S)	FE	D	5.82×10^{-9}
ION AR 18 39.9		EJECTION ANGLE	
TARGET FE 26 55.8		EXP. 0.00°	
		CAL. 30.6°	
		REFERENCE 77.3	

2.00 MICRO-METER



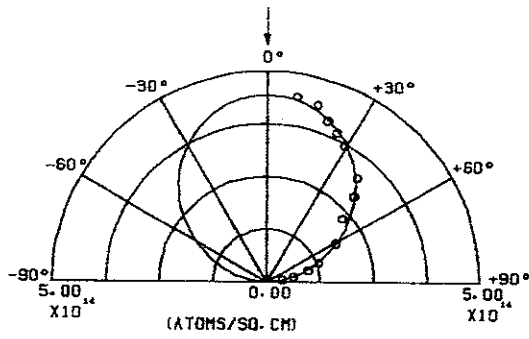


1.10 MICRO-METER



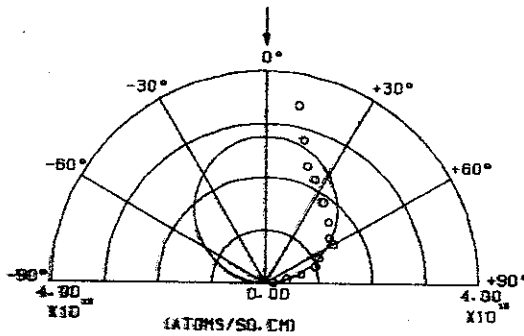
INFORMATION

78 5 2		HE ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	3.94
ENVIRONMENT	UHV	GAMMA	1.38 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	2.31 X10 ⁻²
		COS θ	N 1.22
ION HE 2 4.00		REFERENCE 78.5	
TARGET AG 47 108			



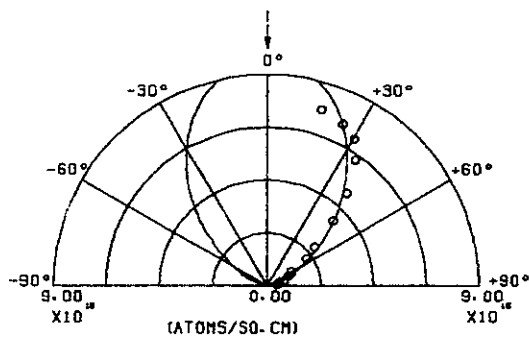
INFORMATION

78 5 3		AR ⇒ MO	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	3.15 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	8.30 X10 ⁻¹
SPUTTERED ATOM(S)	MO	Q	1.43 X10 ⁻²
		COS θ	N 1.08
ION AR 18 39.9		REFERENCE 78.5	
TARGET MO 42 95.9			



INFORMATION

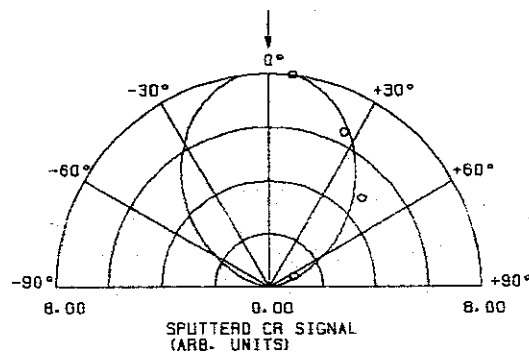
78 5 4		AR ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ⁴
TARGET	POLY	EPSILON	1.42 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	1.97 X10 ⁻²
		COS ²	N 2.56
ION AR 18 39.9		REFERENCE 78.5	
TARGET AG 47 108			



INFORMATION

79 1 1		H3 ⇒ 304 S. S.	
INCIDENT ANGLE	0 °	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97 X10 ⁻²
SPUTTERED ATOM(S)	CR	Q	0.00
		COS ²	N 1.81
ION H 1 1.01		REFERENCE 79.1	
TARGET FE 26 55.8			
CR 24 52.0			

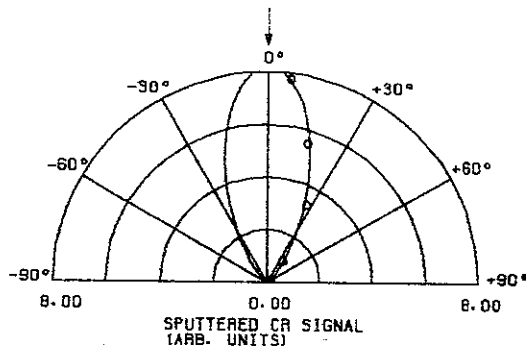
ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



INFORMATION

79 1 2		⇒ 304 S. S.	
INCIDENT ANGLE	0°	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97×10^{-2}
SPUTTERED ATOM (S)	CR	Q	0.00
		COS ² N	8.97
ION H 1 1.01		REFERENCE 79.1	
TARGET FE 26 55.8			
CR 24 52.0			

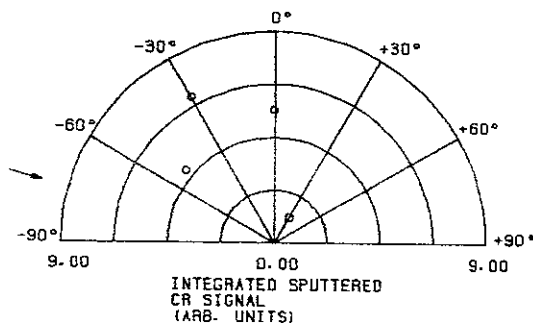
ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



INFORMATION

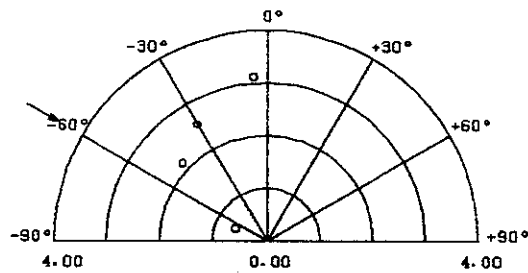
79 1 3		⇒ 304 S. S.	
INCIDENT ANGLE	75°	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97×10^{-2}
SPUTTERED ATOM (S)	CR	Q	0.00
		EJECTION ANGLE	
		EXP.	30.0°
		CAL.	0.00°
ION H 1 1.01		REFERENCE 79.1	
TARGET FE 26 55.8			
CR 24 52.0			

ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



INFORMATION			
79 1 4			
H3 ⇒ 304 S.S.			
INCIDENT ANGLE	60°	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97×10^{-2}
SPUTTERED ATOM(S)	CR	0	0.00
ION		EJECTION ANGLE	
H 1 1.01		EXP. 4.81°	
TARGET		CAL. 0.00°	
FE 26 55.8		REFERENCE 79.1	
CR 24 52.0			

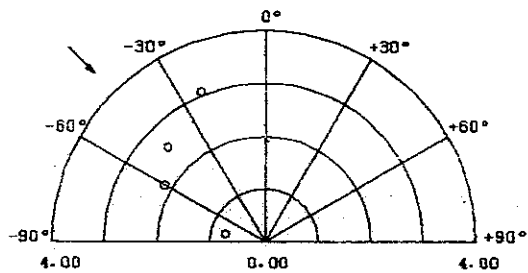
ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



INTEGRATED SPUTTERED
CR SIGNAL
(ARB. UNITS)

INFORMATION			
79 1 5			
H3 ⇒ 304 S.S.			
INCIDENT ANGLE	45°	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97×10^{-2}
SPUTTERED ATOM(S)	CR	0	0.00
ION		EJECTION ANGLE	
H 1 1.01		EXP. 22.8°	
TARGET		CAL. 0.00°	
FE 26 55.8		REFERENCE 79.1	
CR 24 52.0			

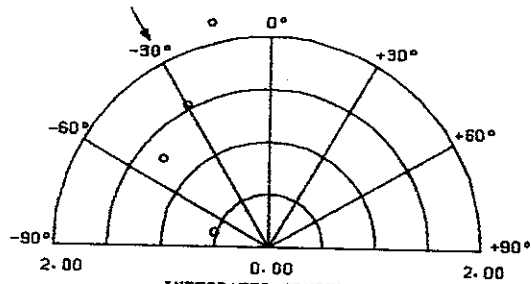
ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



INTEGRATED SPUTTERED
CR SIGNAL
(ARB. UNITS)

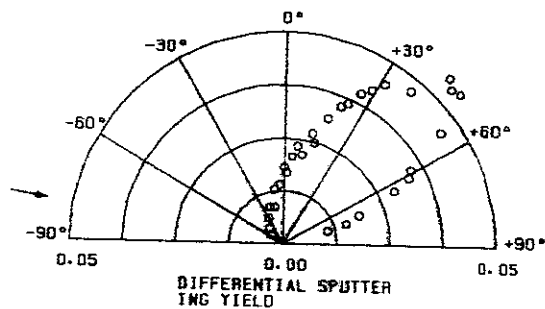
INFORMATION			
79 1 6		H3 ⇒ 304 S.S.	
INCIDENT ANGLE	30°	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	6.97×10^{-2}
SPUTTERED ATOM(S)	CR	Q	0.00
ION H 1 1.01		EJECTION ANGLE	
TARGET FE 26 55.8		EXP.	14.5°
CR 24 52.0		CAL.	0.00°
		REFERENCE	79.1

ENERGY RANGE 5-10KEV
TARGET: STAINLESS STEEL



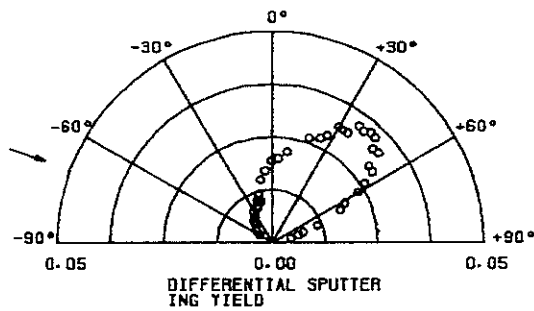
INTEGRATED SPUTTERED
CR SIGNAL
(ARB. UNITS)

INFORMATION			
79 2 1		H3 ⇒ NI	
INCIDENT ANGLE	80°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.09×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	Q	2.59×10^{-1}
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	45.0°
		CAL.	35.1°
		REFERENCE	79.2

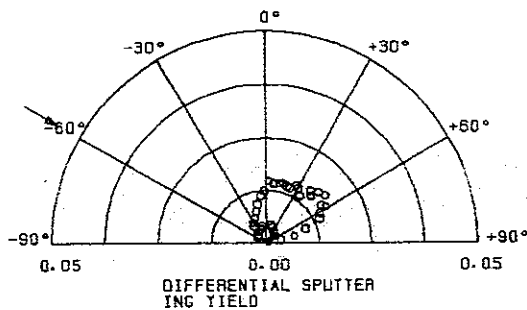


DIFFERENTIAL SPUTTER
ING YIELD

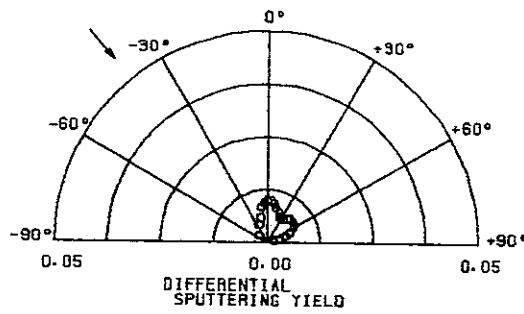
INFORMATION			
78 2 2		H3 ⇒ NI	
INCIDENT ANGLE	70°	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	4.03 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	6.64 X 10 ⁻²
SPUTTERED ATOM(S)	NI	G	2.59 X 10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	43.0°
		CAL.	45.9°
		REFERENCE	79.2



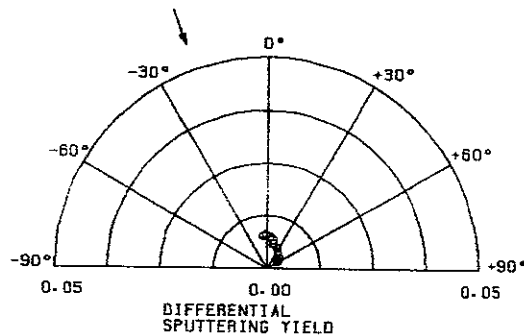
INFORMATION			
78 2 3		H3 ⇒ CR	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	4.92 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.46 X 10 ⁻²
SPUTTERED ATOM(S)	CR	G	2.34 X 10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET CR 24 52.0		EXP.	49.0°
		CAL.	57.5°
		REFERENCE	79.2



INFORMATION			
79 2 4 H3 ⇒ NI			
INCIDENT ANGLE	40°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.03×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	σ	2.59×10^{-1}
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	50.0°
		CAL.	90.0°
		REFERENCE	79.2

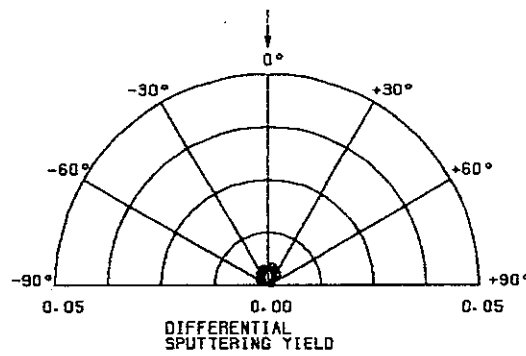


INFORMATION			
79 2 5 H3 ⇒ NI			
INCIDENT ANGLE	20°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.03×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	σ	2.59×10^{-1}
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	50.0°
		CAL.	90.0°
		REFERENCE	79.2



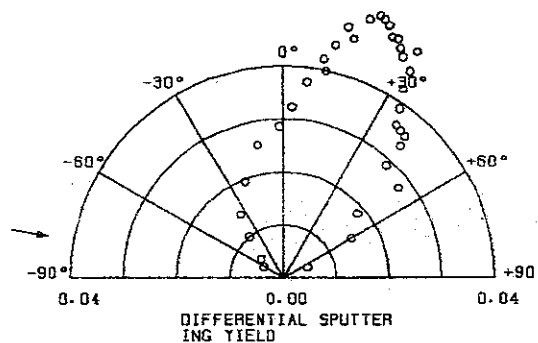
INFORMATION

78 2 6		H3 ⇒ NI			
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³		
TARGET	POLY	EPSILON	4.03 X10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	8.64 X10 ⁻²		
SPUTTERED ATOM(S)	NI	Q	2.59 X10 ⁻¹		
		COS ⁿ	N 2.08		
ION H 1 1.01					
TARGET NI 28 58.7		REFERENCE 79.2			

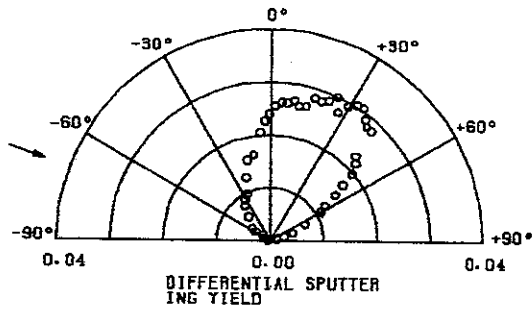


INFORMATION

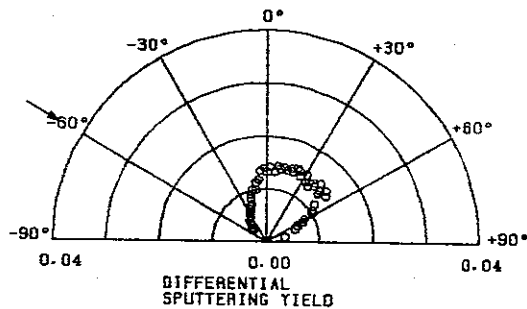
79 2 7		H2 ⇒ NI			
INCIDENT ANGLE	80 °	ENERGY (EV)	4.00 X10 ³		
TARGET	POLY	EPSILON	1.61		
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²		
SPUTTERED ATOM(S)	NI	Q	1.29 X10 ⁻¹		
		EJECTION ANGLE			
		EXP. CAL.	21.0° 21.2°		
ION H 1 1.01					
TARGET NI 28 58.7		REFERENCE 79.2			



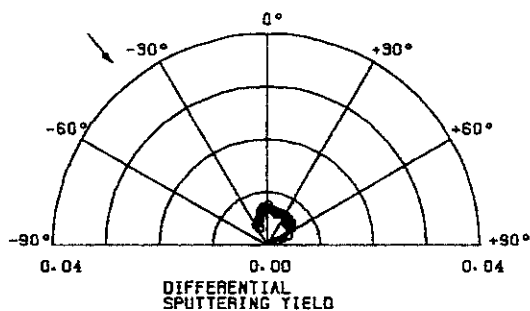
INFORMATION			
79 2 8 H2 ⇒ NI			
INCIDENT ANGLE	70°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	1.29 X10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	33.7°
		CAL.	32.1°
		REFERENCE	79.2



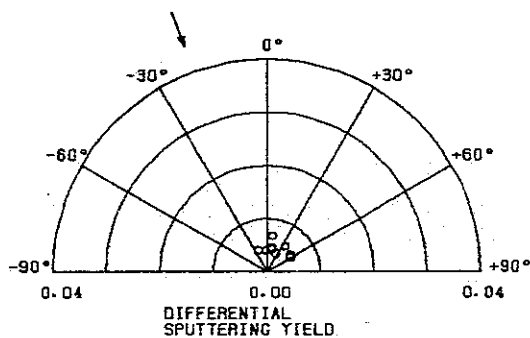
INFORMATION			
79 2 9 H2 ⇒ NI			
INCIDENT ANGLE	60°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	1.29 X10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	42.0°
		CAL.	43.7°
		REFERENCE	79.2



INFORMATION			
78 2 10		H2 ⇒ NI	
INCIDENT ANGLE	40°	ENERGY (EV)	4.00 X 10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X 10 ⁻²
SPUTTERED ATOM(S)	NI	0	1.29 X 10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP. 50.0°	
		CAL. 73.3°	
		REFERENCE 78.2	



INFORMATION			
79 2 11		H2 ⇒ NI	
INCIDENT ANGLE	20°	ENERGY (EV)	4.00 X 10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X 10 ⁻²
SPUTTERED ATOM(S)	NI	0	1.29 X 10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP. 50.0°	
		CAL. 90.0°	
		REFERENCE 79.2	



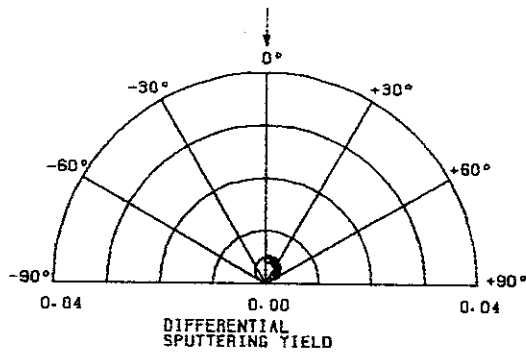
INFORMATION

79 2 12
H2 ⇒ NI

INCIDENT ANGLE	0°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	1.29 X10 ⁻¹
		COS ² θ	N 1.63

ION	H	1	1.01
TARGET	NI	28	58.7

REFERENCE	79.2
-----------	------



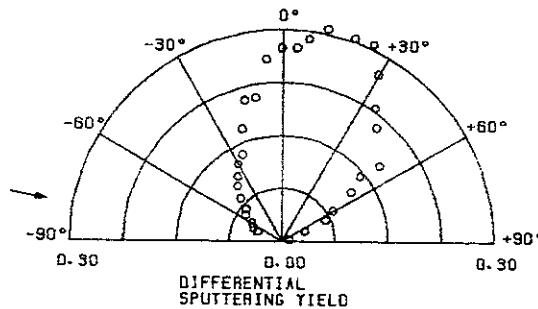
INFORMATION

79 2 13
HE ⇒ NI

INCIDENT ANGLE	80°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	7.47 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.39 X10 ⁻¹
SPUTTERED ATOM(S)	NI	Q	6.81 X10 ⁻²
		EJECTION ANGLE	
		EXP.	15.0°
		CAL.	15.9°

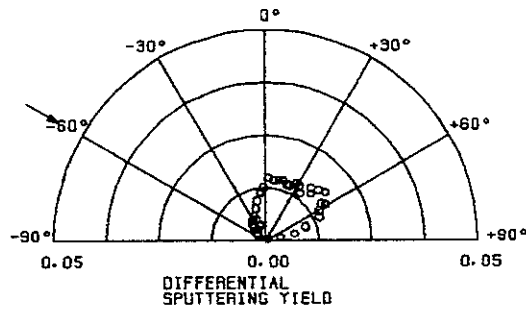
ION	HE	2	4.00
TARGET	NI	28	58.7

REFERENCE	79.2
-----------	------



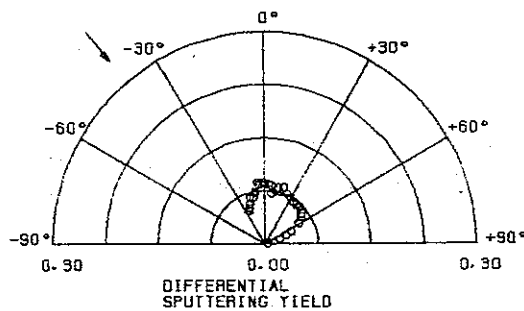
INFORMATION

79 2 14		H3 ⇒ NI			
INCIDENT ANGLE	60°	ENERGY (EV)	1.30 X 10 ³		
TARGET	POLY	EPSILON	5.24 X 10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	8.64 X 10 ⁻²		
SPUTTERED ATOM(S)	NI	Q	2.27 X 10 ⁻¹		
		EJECTION ANGLE			
		EXP.	50.0°		
		CAL.	56.4°		
ION	H 1 1.01				
TARGET	NI 28 58.7				
		REFERENCE	79.2		



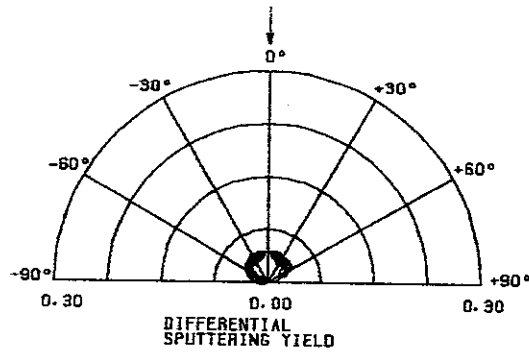
INFORMATION

79 2 15		HE ⇒ NI			
INCIDENT ANGLE	40°	ENERGY (EV)	4.00 X 10 ³		
TARGET	POLY	EPSILON	7.47 X 10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	2.39 X 10 ⁻¹		
SPUTTERED ATOM(S)	NI	Q	6.61 X 10 ⁻²		
		EJECTION ANGLE			
		EXP.	55.0°		
		CAL.	60.2°		
ION	HE 2 4.00				
TARGET	NI 28 58.7				
		REFERENCE	79.2		



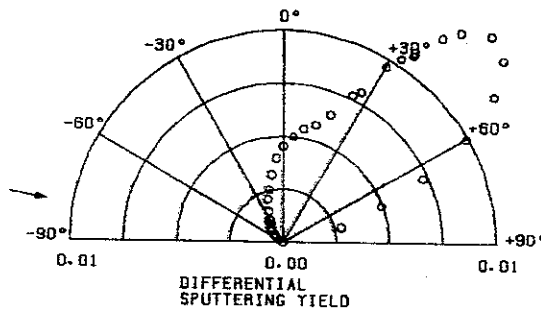
INFORMATION

79 2 16 HE ⇒ NI			
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	7.47 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.39 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	6.81 X10 ⁻²
		COS ²	N 7.20 X10 ⁻¹
ION HE 2 4.00		REFERENCE 79.2	
TARGET NI 28 58.7			

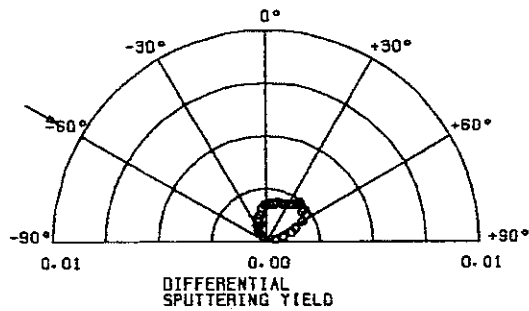


INFORMATION

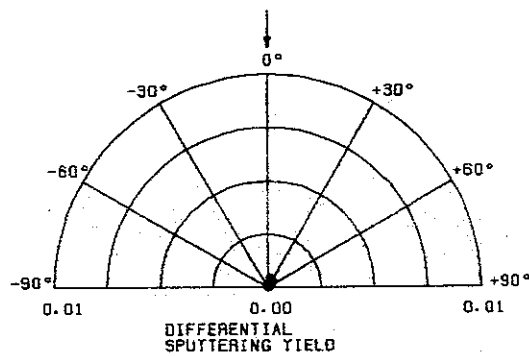
79 2 17 H2 ⇒ W			
INCIDENT ANGLE	80 °	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	4.58 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.17 X10 ⁻²
SPUTTERED ATOM(S)	W	Q	3.20 X10 ⁻¹
		EJECTION ANGLE	
		EXP.	45.0 °
		CAL.	39.4 °
ION H 1 1.01		REFERENCE 79.2	
TARGET W 74 184			



INFORMATION			
79 2 10 H2 ⇒ W			
INCIDENT ANGLE	60°	ENERGY (EV)	4.00 X 10 ³
TARGET	POLY	EPSILON	4.58 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.17 X 10 ⁻²
SPUTTERED ATOM(S)	W	0	3.20 X 10 ⁻¹
		EJECTION ANGLE	
		EXP.	45.0°
		CAL.	75.3°
ION	H 1 1.01		
TARGET	W 74 184		
		REFERENCE	79.2

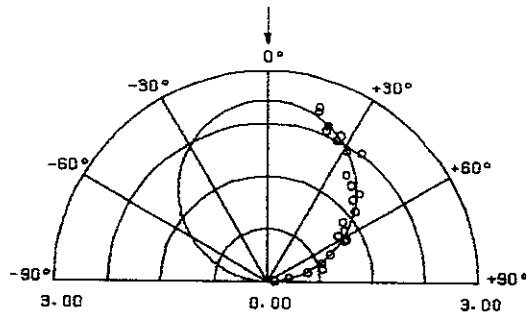


INFORMATION			
79 2 10 H2 ⇒ W			
INCIDENT ANGLE	0°	ENERGY (EV)	4.00 X 10 ³
TARGET	POLY	EPSILON	4.58 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.17 X 10 ⁻²
SPUTTERED ATOM(S)	W	0	3.20 X 10 ⁻¹
		COS ⁿ	
		N	7.30 X 10 ⁻¹
ION	H 1 1.01		
TARGET	W 74 184		
		REFERENCE	79.2



INFORMATION					
78 2 20		H2 ⇒ TA-C			
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³		
TARGET	POLY	EPSILON	4.66 X10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	2.20 X10 ⁻²		
SPUTTERED ATOM(S)	TA	Q	3.03 X10 ⁻¹		
		COS θ	N 1.05		
ION	H 1 1.01	REFERENCE	79.2		
TARGET	TA 73 181 C 6 12.0				

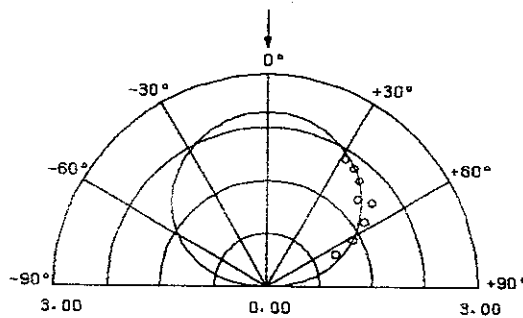
NORMALIZED
TA



DIFFERENTIAL
SPUTTERING YIELD
(ARB. UNITS)

INFORMATION					
79 2 21		H2 ⇒ TA-C			
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³		
TARGET	POLY	EPSILON	1.09 X10 ¹		
ENVIRONMENT	UHV	GAMMA	2.20 X10 ⁻²		
SPUTTERED ATOM(S)	C	Q	8.03 X10 ⁻²		
		COS θ	N 7.70 X10 ⁻¹		
ION	H 1 1.01	REFERENCE	79.2		
TARGET	TA 73 181 C 6 12.0				

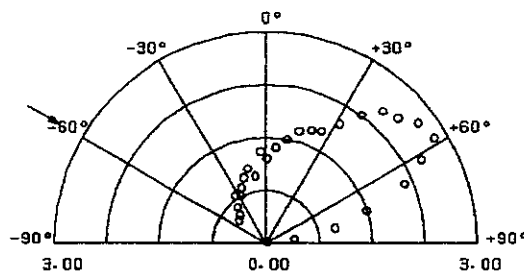
NORMALIZED
C



DIFFERENTIAL
SPUTTERING YIELD
(ARB. UNITS)

INFORMATION			
79 2 22			
H2 ⇒ TA-C			
INCIDENT ANGLE	60°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	4.66 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.20 X10 ⁻²
SPUTTERED ATOM(S)	TA	Q	3.03 X10 ⁻¹
ION H 1 1.01		EJECTION ANGLE	
TARGET TA 73 181		EXP.	58.0°
C 6 12.0		CAL.	70.5°
		REFERENCE	79.2

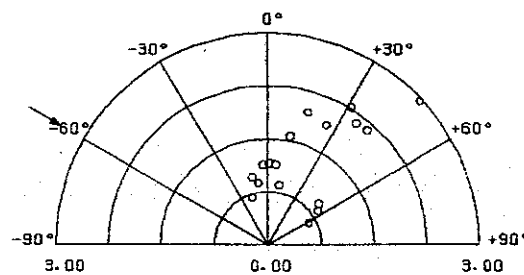
NORMALIZED
TA



DIFFERENTIAL
SPUTTERING YIELD
(ARB. UNITS)

INFORMATION			
79 2 23			
H2 ⇒ TA-C			
INCIDENT ANGLE	60°	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	1.09 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.20 X10 ⁻²
SPUTTERED ATOM(S)	C	Q	8.03 X10 ⁻²
ION H 1 1.01		EJECTION ANGLE	
TARGET TA 73 181		EXP.	46.6°
C 6 12.0		CAL.	38.3°
		REFERENCE	79.2

NORMALIZED
C



DIFFERENTIAL
SPUTTERING YIELD
(ARB. UNITS)

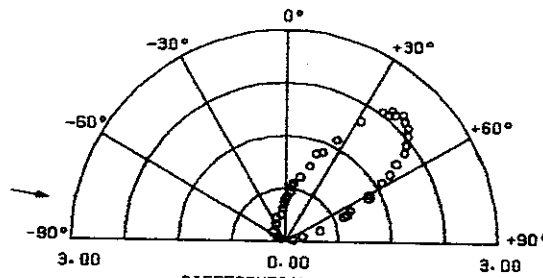
INFORMATION

79 2 24
H2 ⇒ TA-C

INCIDENT ANGLE	80°	ENERGY (EV)	4.00×10^3
TARGET	POLY	EPSILON	4.66×10^{-1}
ENVIRONMENT	UHV	GAMMA	2.20×10^{-2}
SPUTTERED ATOM(S)	TA	Q	3.03×10^{-1}
		EJECTION ANGLE	
		EXP.	42.4°
		CAL.	37.6°
		REFERENCE	79.2

ION	H	1	1.01
TARGET	TA	73	181
	C	6	12.0

NORMALIZED TA



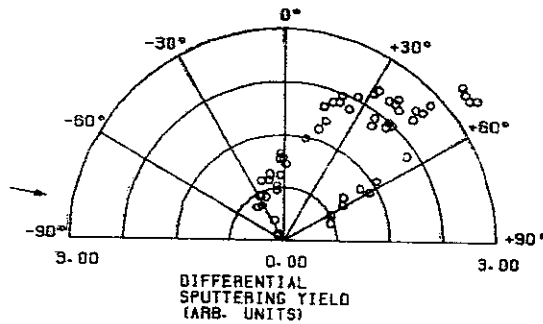
INFORMATION

79 2 25
H2 ⇒ TA-C

INCIDENT ANGLE	80°	ENERGY (EV)	4.00×10^3
TARGET	POLY	EPSILON	1.09×10^1
ENVIRONMENT	UHV	GAMMA	2.20×10^{-2}
SPUTTERED ATOM(S)	C	Q	8.09×10^{-2}
		EJECTION ANGLE	
		EXP.	53.7°
		CAL.	16.9°
		REFERENCE	79.2

ION	H	1	1.01
TARGET	TA	73	181
	C	6	12.0

NORMALIZED C



INFORMATION

78 8 1

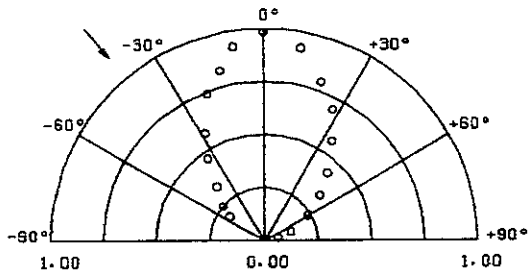
NEARKR ⇒ AG

INCIDENT ANGLE 40°
 TARGET POLY
 ENVIRONMENT UHV
 SPUTTERED ATOM(S) AG

ENERGY (EV) 1.00 X 10⁴

REFERENCE 79.8

ION	KR	96	83.8
	NE	10	20.2
TARGET	AG	47	108



INFORMATION

78 8 2

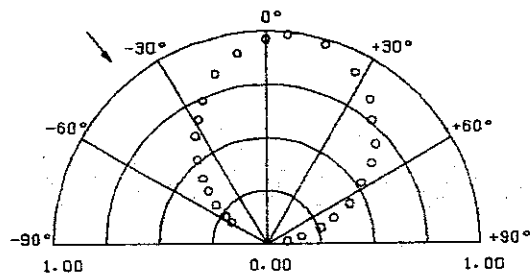
NEARKR ⇒ NB

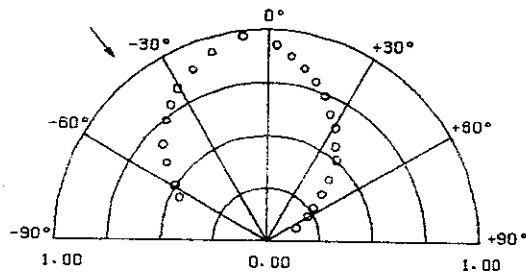
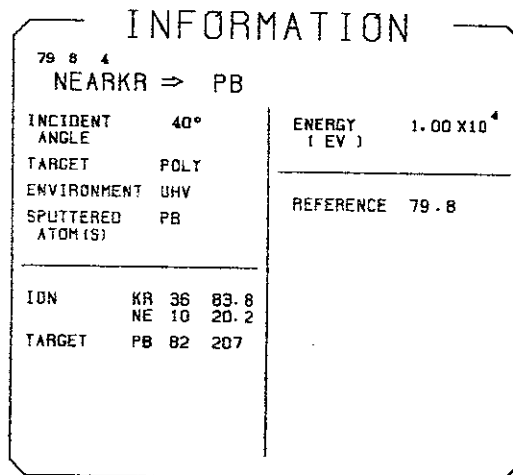
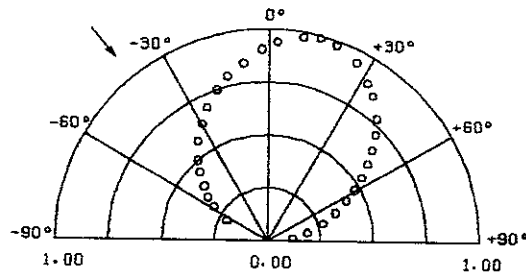
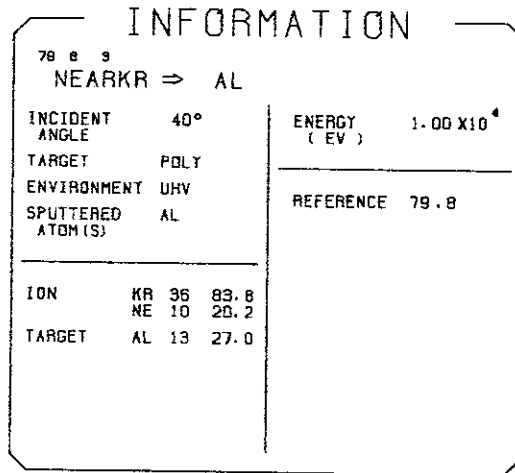
INCIDENT ANGLE 40°
 TARGET POLY
 ENVIRONMENT UHV
 SPUTTERED ATOM(S) NB

ENERGY (EV) 1.00 X 10⁴

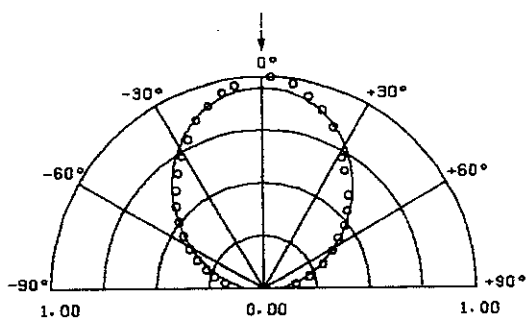
REFERENCE 79.8

ION	KR	96	83.8
	NE	10	20.2
TARGET	NB	41	92.9

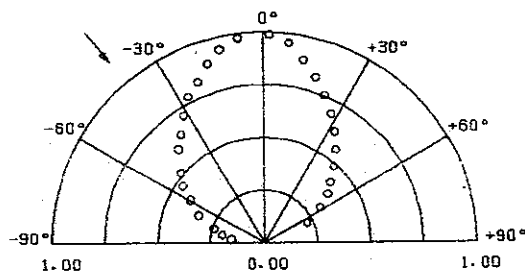


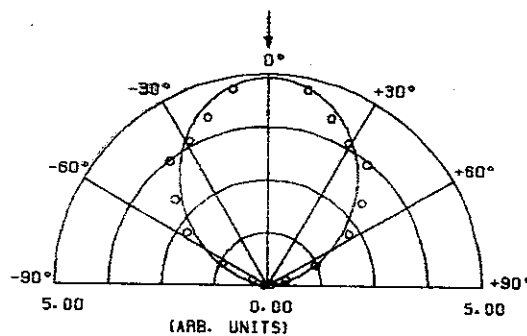
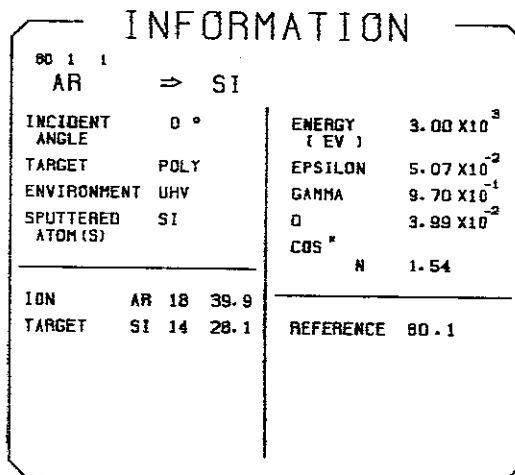
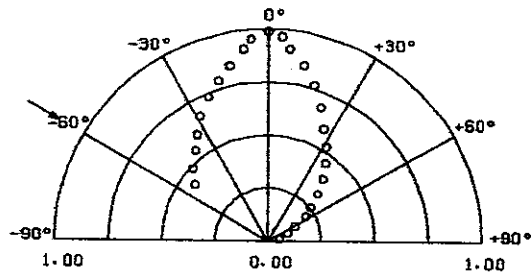
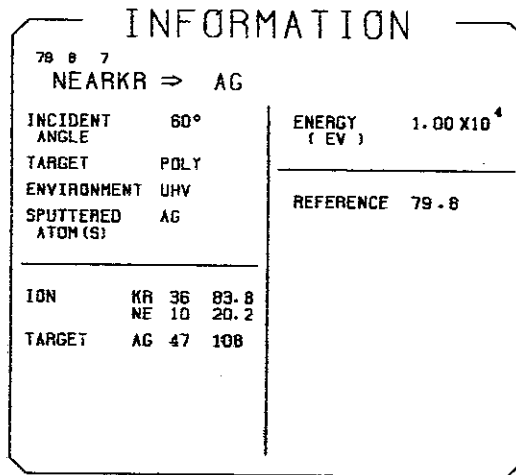


INFORMATION		
79 8 5		
NEARKR ⇒ AG		
INCIDENT ANGLE	0°	ENERGY (EV) 1.00 X 10 ⁴
TARGET	POLY	REFERENCE 79.8
ENVIRONMENT	UHV	
SPUTTERED ATOM(S)	AG	
ION KR 36 83.8		
	NE 10 20.2	
TARGET	AG 47 108	

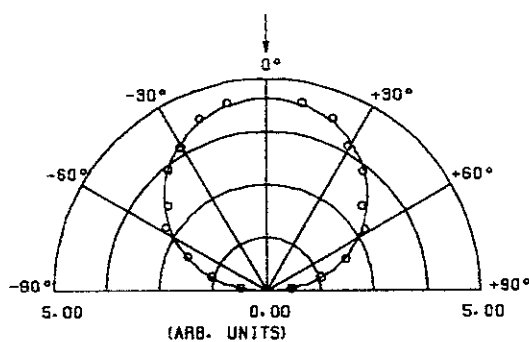


INFORMATION		
79 8 6		
NEARKR ⇒ AG		
INCIDENT ANGLE	40°	ENERGY (EV) 1.00 X 10 ⁴
TARGET	POLY	REFERENCE 79.8
ENVIRONMENT	UHV	
SPUTTERED ATOM(S)	AG	
ION KR 36 83.8		
	NE 10 20.2	
TARGET	AG 47 108	

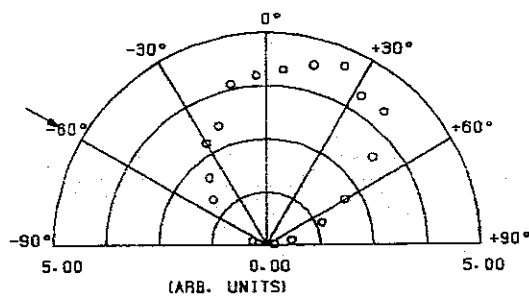




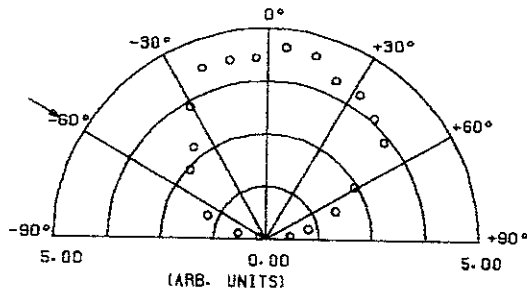
INFORMATION			
80 1 2		AR \Rightarrow SI	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	1.69×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.70×10^{-1}
SPUTTERED ATOM (SI)	SI	0	2.19×10^{-2}
		COS ⁿ	N 8.70×10^{-1}
ION	AR 18 39.9	REFERENCE 80.1	
TARGET	SI 14 28.1		



INFORMATION			
80 1 3		AR \Rightarrow SI	
INCIDENT ANGLE	60°	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	5.07×10^{-2}
ENVIRONMENT	UHV	GAMMA	9.70×10^{-1}
SPUTTERED ATOM (SI)	SI	0	3.99×10^{-2}
		EJECTION ANGLE	
		EXP.	20.0°
		CAL.	34.0°
ION	AR 18 39.9	REFERENCE 80.1	
TARGET	SI 14 28.1		

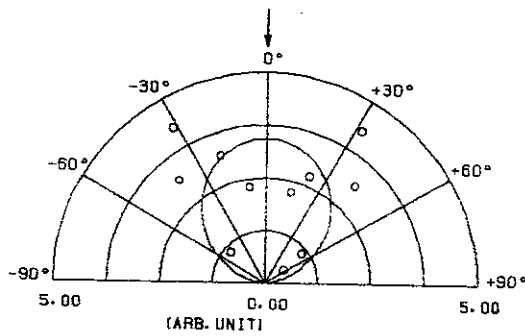


INFORMATION			
80 1 4			
AR		=> SI	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X 10 ⁴
TARGET	POLY	EPSILON	1.69 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X 10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.19 X 10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	15.0°
		CAL.	32.2°
		REFERENCE	80.1



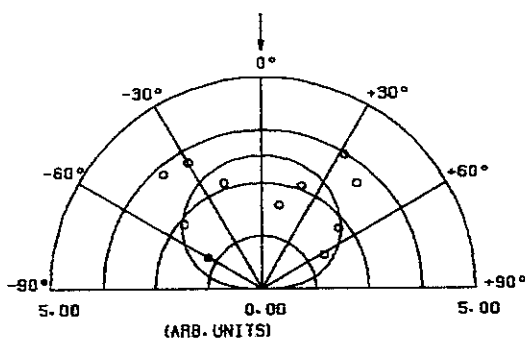
INFORMATION			
81 1 1			
AR		=> AU	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	4.27 X 10 ⁻²
ENVIRONMENT	HV	GAMMA	5.61 X 10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	8.24 X 10 ⁻²
ION AR 18 39.9		CDS *	N 1.36
TARGET AU 79 197		REFERENCE	81.1

TEXTURE



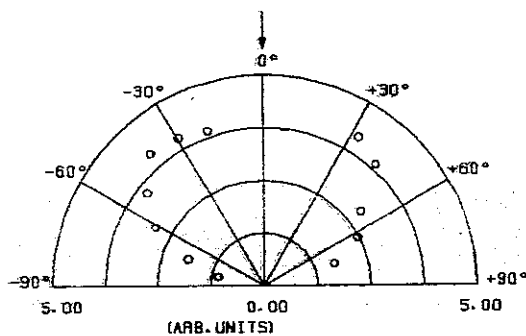
INFORMATION			
81 1 2		AR ⇒ AL	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	1.80 X 10 ⁻²
ENVIRONMENT	HV	GAMMA	9.62 X 10 ⁻¹
SPUTTERED ATOM (S)	AL	Q	5.93 X 10 ⁻²
		CGS * N	6.00 X 10 ⁻¹
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	AL 13 27.0		

TEXTURE



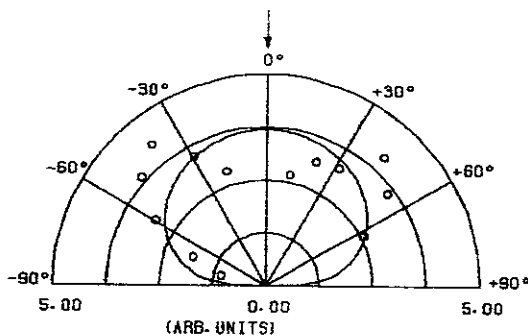
INFORMATION			
81 1 3		AR ⇒ NI-FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	REFERENCE 81.1	
ENVIRONMENT	HV		
SPUTTERED ATOM (S)	NI, FE		
ION	AR 18 39.9		
TARGET	NI 28 58.7		
	FE 26 55.8		

TEXTURE



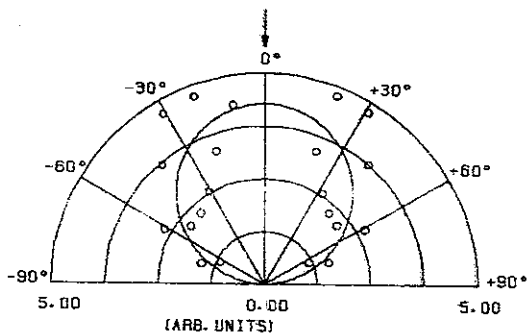
INFORMATION			
81 1 4		AR ⇒ AL	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.80 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM(S)	AL	Q	5.93 X10 ⁻²
		COS ²	N 4.40 X10 ⁻¹
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	AL 13 27.0		

TEXTURE



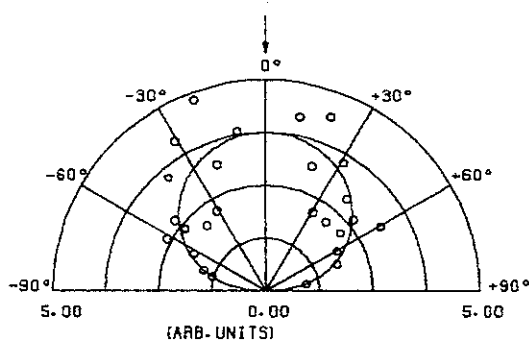
INFORMATION			
81 1 5		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	4.27 X10 ⁻²
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	8.24 X10 ⁻²
		COS ²	N 1.08
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	AU 79 197		

TEXTURE



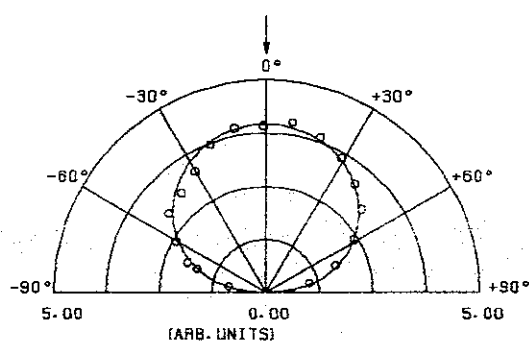
INFORMATION			
81 1 6		AR ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.33×10^{-2}
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	1.02×10^{-1}
		COS ² N	7.90×10^{-1}
ION	AR 18 39.9	REFERENCE	81.1
TARGET	PT 78 195		

TEXTURE



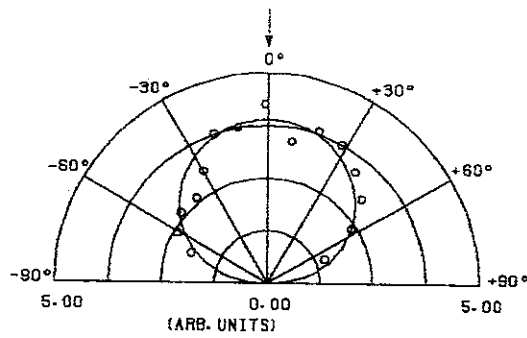
INFORMATION			
81 1 7		AR ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.33×10^{-2}
ENVIRONMENT	HV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	1.02×10^{-1}
		COS ² N	7.60×10^{-1}
ION	AR 18 39.9	REFERENCE	81.1
TARGET	PT 78 195		

TEXTURE



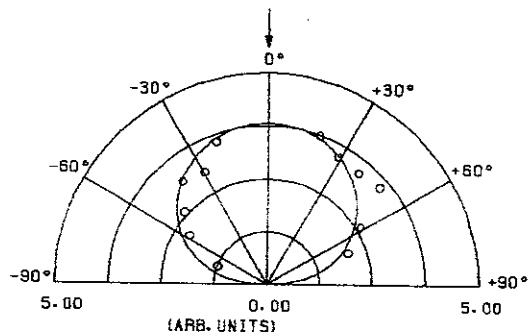
INFORMATION			
81 1 8		AR ⇒ TA	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	4.64 X10 ⁻³
ENVIRONMENT	HV	GAMMA	5.93 X10 ⁻¹
SPUTTERED ATOM(S)	TA	Q	1.17 X10 ⁻¹
		COS ²	N 8.10 X10 ⁻¹
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	TA 73 181		

TEXTURE



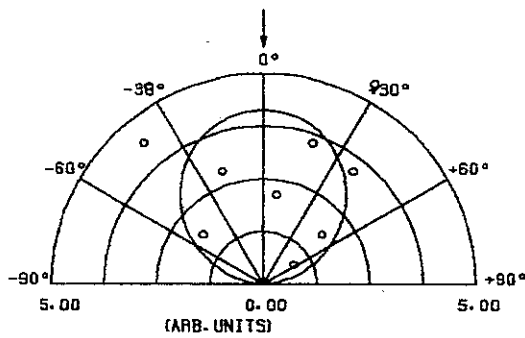
INFORMATION			
81 1 8		AR ⇒ SI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.69 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	6.92 X10 ⁻²
		COS ²	N 7.20 X10 ⁻¹
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	SI 14 28.1		

TEXTURE



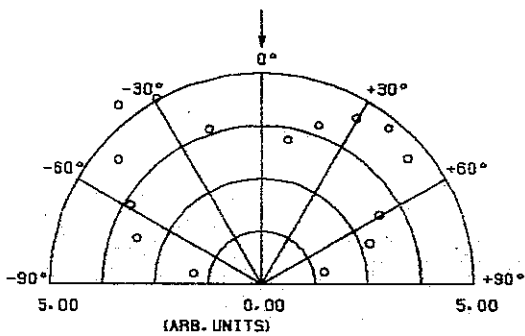
INFORMATION			
81 1 10		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ²
TARGET	POLY	EPSILON	2.14 X10 ⁻⁹
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	1.17 X10 ⁻¹
		COS ²	N 1.19
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	AU 79 197		

TEXTURE



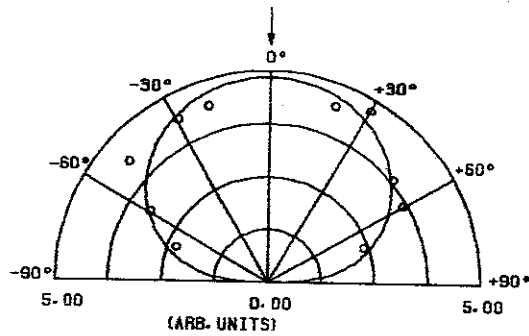
INFORMATION			
81 1 12		AR ⇒ NI-FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ²
TARGET	POLY	REFERENCE 81.1	
ENVIRONMENT	HV		
SPUTTERED ATOM(S)	NI, FE		
ION	AR 18 39.9		
TARGET	NI 28 58.7		
	FE 26 55.8		

TEXTURE



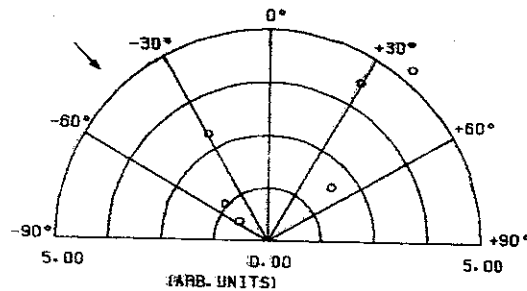
INFORMATION			
81 1 14		AR ⇒ SI	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00×10^2
TARGET	POLY	EPSILON	8.45×10^{-2}
ENVIRONMENT	HV	GAMMA	9.70×10^{-1}
SPUTTERED ATOM(S)	SI	D	9.78×10^{-2}
		COB N	5.80×10^{-1}
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	SI 14 28.1		

TEXTURE



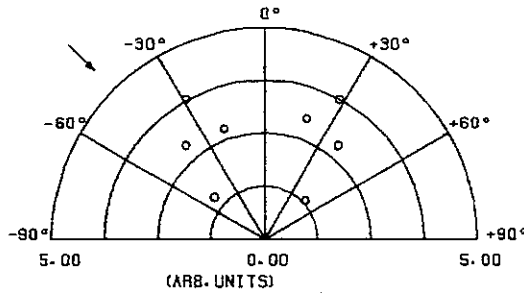
INFORMATION			
81 1 18		AR ⇒ AU	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.27×10^{-2}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	D	8.24×10^{-2}
		EJECTION ANGLE	
		EXP.	49.0°
		CAL.	56.1°
ION	AR 18 39.9	REFERENCE 81.1	
TARGET	AU 79 197		

TEXTURE



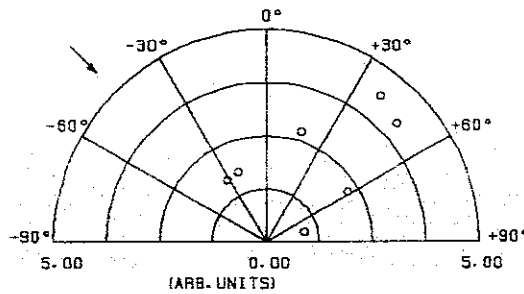
INFORMATION			
81 1 17		AR ⇒ AU	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	4.27 X10 ⁻²
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	8.24 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	46.5°
		CAL.	56.1°
		REFERENCE	81-1

TEXTURE



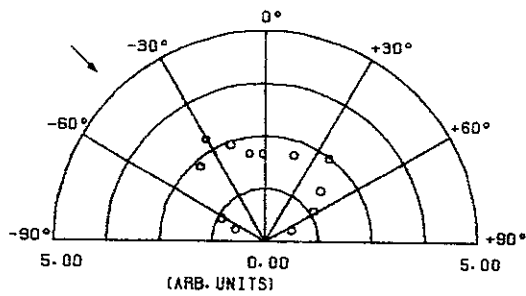
INFORMATION			
81 1 18		AR ⇒ AL	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.80 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM(S)	AL	Q	5.93 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET AL 13 27.0		EXP.	47.8°
		CAL.	52.7°
		REFERENCE	81-1

TEXTURE



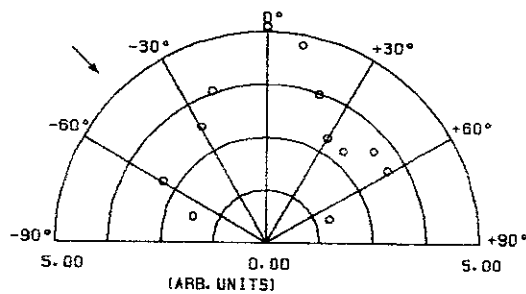
INFORMATION			
01 1 19			
AR ⇒ AL			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	1.80×10^{-2}
ENVIRONMENT	HV	GAMMA	9.62×10^{-1}
SPUTTERED ATOM(S)	AL	D	5.93×10^{-2}
ION AR 18 39.9		EJECTION ANGLE	
TARGET AL 13 27.0		EXP.	47.2°
		CAL.	52.7°
REFERENCE 01.1			

TEXTURE



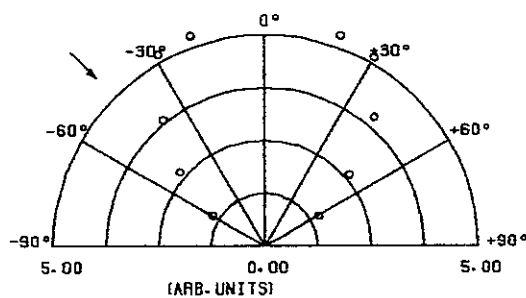
INFORMATION			
01 1 20			
AR ⇒ AU			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	4.27×10^{-3}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	D	8.24×10^{-2}
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	49.9°
		CAL.	56.1°
REFERENCE 01.1			

TEXTURE



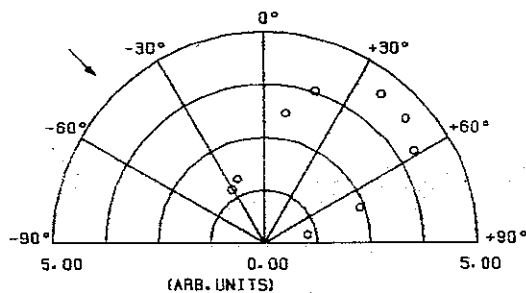
INFORMATION			
81 1 21			
AR ⇒ AU			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	4.27 X10 ⁻⁹
ENVIRONMENT	HV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	6.24 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	49.7°
		CAL.	56.1°
REFERENCE 81.1			

TEXTURE



INFORMATION			
81 1 22			
AR ⇒ SI			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.69 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	6.92 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	48.5°
		CAL.	54.1°
REFERENCE 81.1			

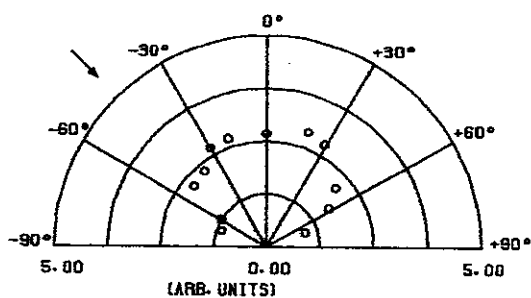
TEXTURE



INFORMATION

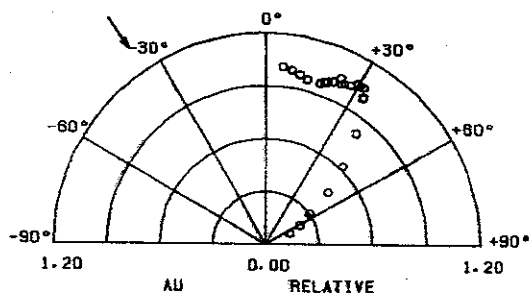
81 1 29		AR ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X 10 ³
TARGET	POLY	EPSILON	1.69 X 10 ⁻²
ENVIRONMENT	HV	GAMMA	9.70 X 10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	6.92 X 10 ⁻²
		EJECTION ANGLE	
		EXP.	49.0°
		CAL.	54.1°
ION	AR 18 39.9		
TARGET	SI 14 28.1		
		REFERENCE	81.1

TEXTURE



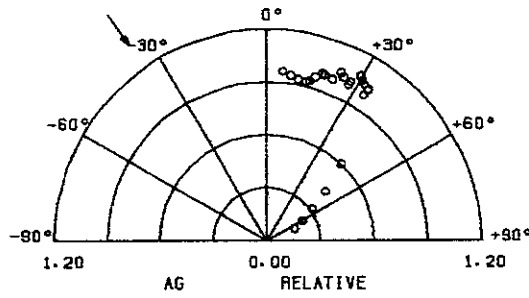
INFORMATION

81 2 1		AR ⇒ AG-AU	
INCIDENT ANGLE	35°	ENERGY (EV)	8.00 X 10 ⁴
TARGET	POLY	EPSILON	3.42 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X 10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	9.22 X 10 ⁻³
		EJECTION ANGLE	
		EXP.	55.1°
		CAL.	56.4°
ION	AR 18 39.9		
TARGET	AG 47 108 AU 79 197		
		REFERENCE	81.2



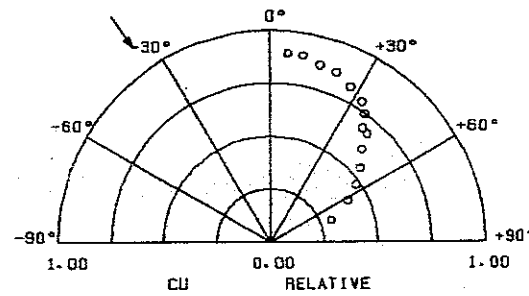
INFORMATION

81 2 2		AR ⇒ AG-AU			
INCIDENT ANGLE	35°	ENERGY (EV)	8.00 X 10 ⁴		
TARGET	POLY	EPSILON	5.68 X 10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	7.89 X 10 ⁻¹		
SPUTTERED ATOM(S)	AG	0	6.84 X 10 ⁻³		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	55.2°		
TARGET	AG 47 108	CAL.	56.0°		
	AU 79 197				
			REFERENCE	81.2	

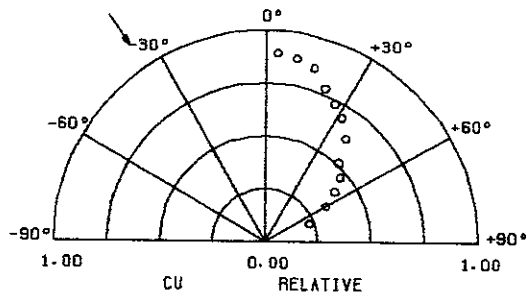


INFORMATION

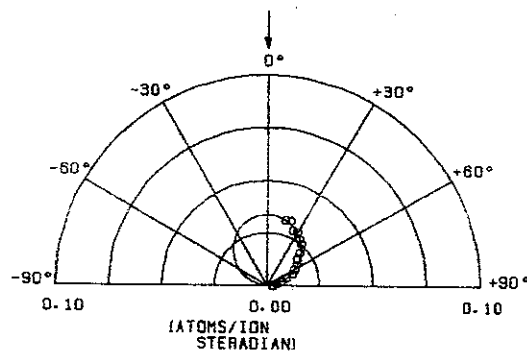
81 2 3		AR ⇒ CU-PT			
INCIDENT ANGLE	35°	ENERGY (EV)	2.00 X 10 ⁴		
TARGET	POLY	EPSILON	2.14 X 10 ⁻¹		
ENVIRONMENT	UHV	GAMMA	9.48 X 10 ⁻¹		
SPUTTERED ATOM(S)	CU	0	1.36 X 10 ⁻²		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	56.1°		
TARGET	CU 29 63.5	CAL.	57.1°		
	PT 78 195				
			REFERENCE	81.2	



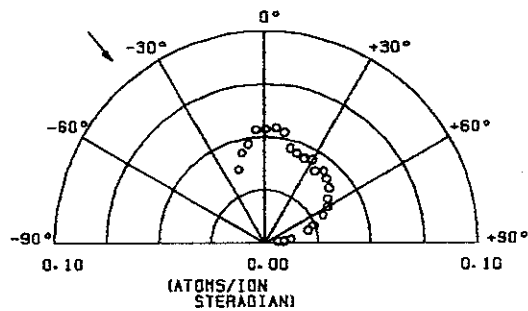
INFORMATION			
81 2 4		AR ⇒ CU-PT	
INCIDENT ANGLE	35°	ENERGY (EV)	8.00×10^4
TARGET	POLY	EPSILON	8.56×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	6.78×10^{-3}
		EJECTION ANGLE	
		EXP.	60.0°
		CAL.	56.0°
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		
		REFERENCE	81.2



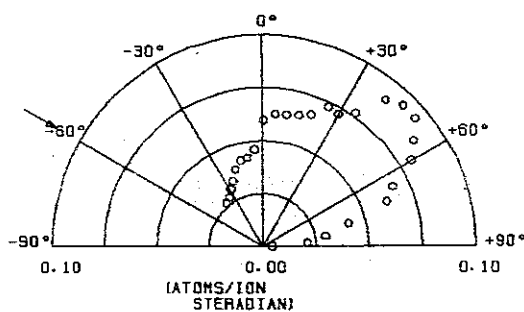
INFORMATION			
81 3 1		H ⇒ NI	
INCIDENT ANGLE	0°	ENERGY (EV)	4.50×10^2
TARGET	POLY	EPSILON	1.82×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	Q	3.85×10^{-1}
		COS ² N	1.15
ION	H 1 1.01		
TARGET	NI 28 58.7		
		REFERENCE	81.3



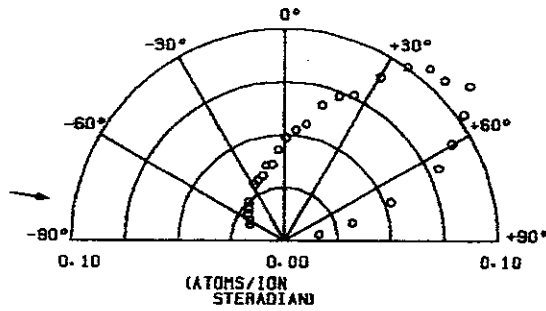
INFORMATION			
81 3 2			
H \Rightarrow NI			
INCIDENT ANGLE	40°	ENERGY (EV)	4.50×10^2
TARGET	POLY	EPSILON	1.82×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	Q	3.85×10^{-1}
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	45.9°
		CAL.	90.0°
		REFERENCE	81.3



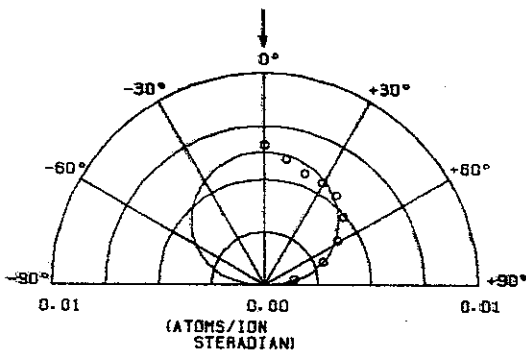
INFORMATION			
81 3 3			
H \Rightarrow NI			
INCIDENT ANGLE	60°	ENERGY (EV)	4.50×10^2
TARGET	POLY	EPSILON	1.82×10^{-1}
ENVIRONMENT	UHV	GAMMA	6.64×10^{-2}
SPUTTERED ATOM(S)	NI	Q	3.85×10^{-1}
ION H 1 1.01		EJECTION ANGLE	
TARGET NI 28 58.7		EXP.	45.0°
		CAL.	90.0°
		REFERENCE	81.3



INFORMATION			
81 3 4		H ⇒ NI	
INCIDENT ANGLE	80°	ENERGY (EV)	4.50 X10 ²
TARGET	POLY	EPSILON	1.82 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	3.85 X10 ⁻¹
ION H 1 1.01		EJECTION ANGLE EXP.	49.3°
TARGET NI 28 58.7		EJECTION ANGLE CAL.	46.6°
		REFERENCE	81.3

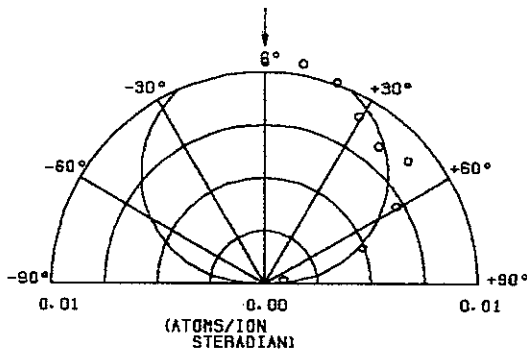


INFORMATION			
81 3 5		H ⇒ NI	
INCIDENT ANGLE	0°	ENERGY (EV)	4.50 X10 ²
TARGET	POLY	EPSILON	1.82 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM(S)	NI	Q	3.85 X10 ⁻¹
ION H 1 1.01		COS ² N	7.50 X10 ⁻¹
TARGET NI 28 58.7		REFERENCE	81.3



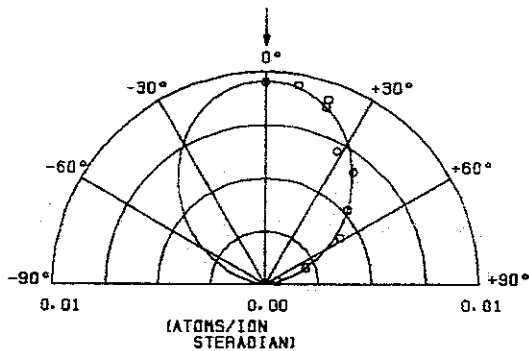
INFORMATION

81 3 6		H ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	4.03 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM (S)	NI	Q	2.59 X10 ⁻¹
		COS ² N	8.10 X10 ⁻¹
ION H 1 1.01		REFERENCE 81.3	
TARGET NI 28 58.7			



INFORMATION

81 3 7		H ⇒ NI	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	6.64 X10 ⁻²
SPUTTERED ATOM (S)	NI	Q	1.29 X10 ⁻¹
		COS ² N	1.54
ION H 1 1.01		REFERENCE 81.3	
TARGET NI 28 58.7			

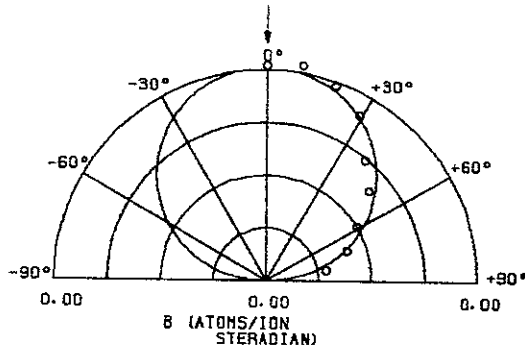


INFORMATION

81 3 8
D ⇒ NB-B2

INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ²
TARGET	POLY	EPSILON	1.25
ENVIRONMENT	UHV	GAMMA	8.25 X10 ⁻²
SPUTTERED ATOM(S)	B	Q	1.65 X10 ⁻¹
		COS ^θ	N 9.20 X10 ⁻¹

ION	H 1 2.00		
TARGET	NB 41 92.9	REFERENCE	81.3
	B 5 10.8		

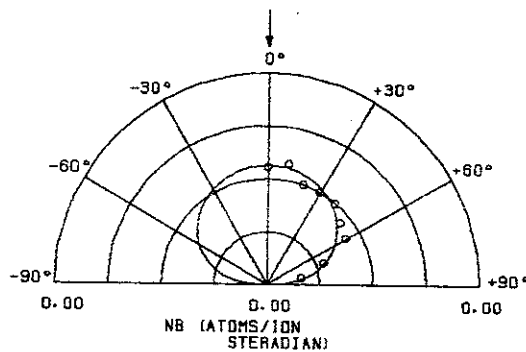


INFORMATION

81 3 8
D ⇒ NB-B2

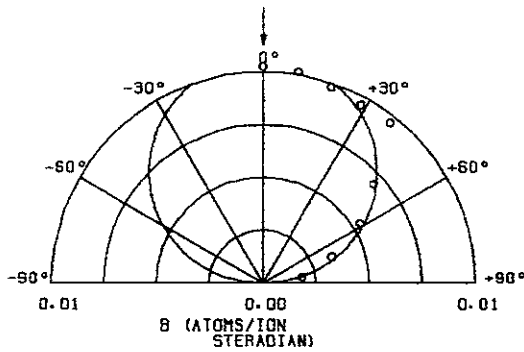
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ²
TARGET	POLY	EPSILON	9.77 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.25 X10 ⁻²
SPUTTERED ATOM(S)	NB	Q	4.79 X10 ⁻¹
		COS ^θ	N 6.10 X10 ⁻¹

ION	H 1 2.00		
TARGET	NB 41 92.9	REFERENCE	81.3
	B 5 10.8		



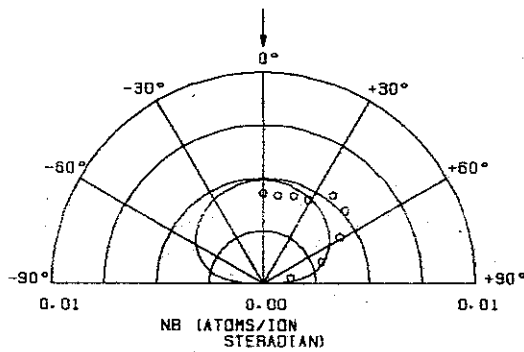
INFORMATION

81 3 10		D ⇒ NB-B2	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	EPSILON	6.26
ENVIRONMENT	UHV	GAMMA	8.25 X10 ⁻²
SPUTTERED ATOM (S)	B	Q	7.40 X10 ⁻²
		COS ² N	9.78 X10 ⁻¹
ION H 1 2.00		REFERENCE 81.3	
TARGET NB 41 92.9			
B 5 10.8			

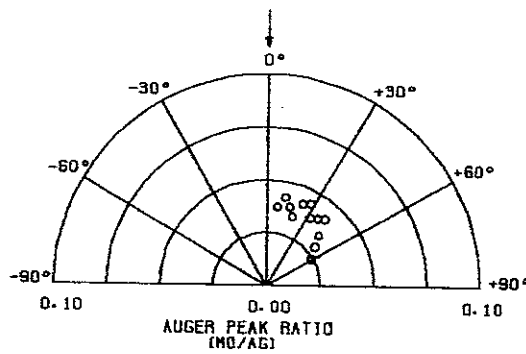


INFORMATION

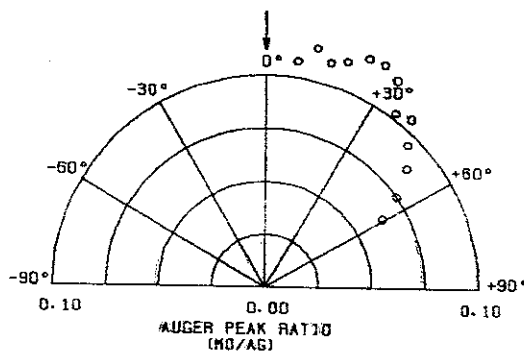
81 3 11		D ⇒ NB-B2	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	EPSILON	4.89 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	8.25 X10 ⁻²
SPUTTERED ATOM (S)	NB	Q	2.14 X10 ⁻¹
		COS ² N	4.40 X10 ⁻¹
ION H 1 2.00		REFERENCE 81.3	
TARGET NB 41 92.9			
B 5 10.8			



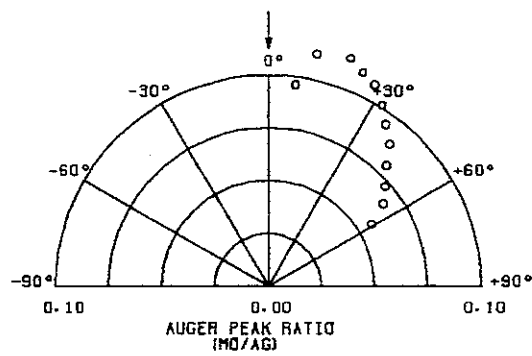
INFORMATION			
81 10 1		HE ⇒ MO-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	ALLOY	REFERENCE 81-10	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	MO / AG		
<hr/>			
ION	HE 2	4.00	
TARGET	MO 42	95.9	
	AG 47	108	



INFORMATION			
81 10 2		HE ⇒ MO-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	ALLOY	REFERENCE 81-10	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	MO / AG		
<hr/>			
ION	HE 2	4.00	
TARGET	MO 42	95.9	
	AG 47	108	

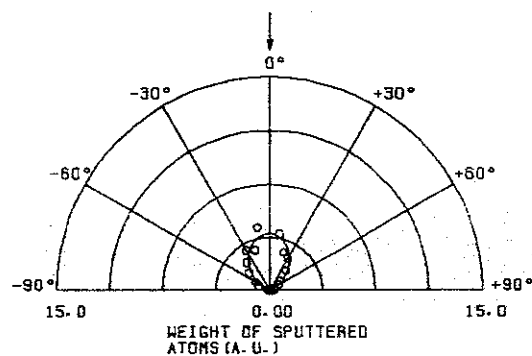


INFORMATION			
81 10 9		HE ⇒ MO-AG	
INCIDENT ANGLE	0 °	ENERGY (eV)	2.00 X 10 ³
TARGET	ALLOY		
ENVIRONMENT	UHV	REFERENCE	81 - 10
SPUTTERED ATOM (S)	MO / AG		
<hr/>			
ION	HE 2	4.00	
TARGET	MO 42	95.9	
	AG 47	108	



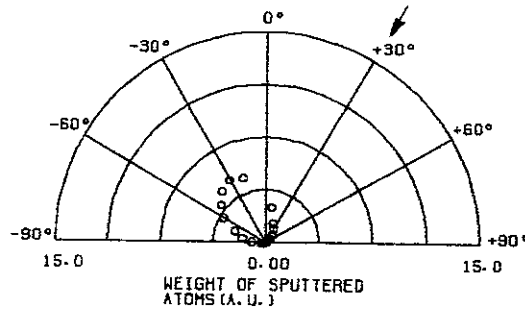
INFORMATION			
81 12 1		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (eV)	5.00 X 10 ⁴
TARGET	POLY	EPSILON	2.14 X 10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.61 X 10 ⁻¹
SPUTTERED ATOM (S)	AU	Q	1.17 X 10 ⁻²
		cos ⁿ	N 2.27
<hr/>			
ION	AR 18	39.9	
TARGET	AU 79	197	
		REFERENCE	81 - 12

TEMP. 300C



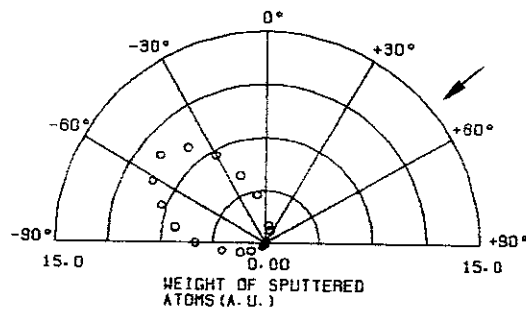
INFORMATION			
81 12 2			
AR \Rightarrow AU			
INCIDENT ANGLE	30°	ENERGY (EV)	5.00×10^3
TARGET	POLY	EPSILON	2.14×10^{-2}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	3.69×10^{-2}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	70.8°
TARGET	AU 79 197	CAL.	67.1°
		REFERENCE	81.12

TEMP. 300C



INFORMATION			
81 12 3			
AR \Rightarrow AU			
INCIDENT ANGLE	52°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	2.14×10^{-1}
ENVIRONMENT	HV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	1.17×10^{-2}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	49.5°
TARGET	AU 79 197	CAL.	38.3°
		REFERENCE	81.12

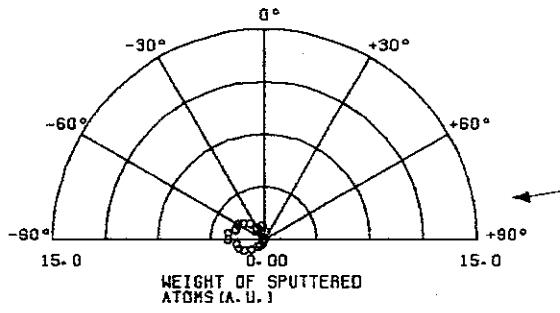
TEMP. 300C



INFORMATION

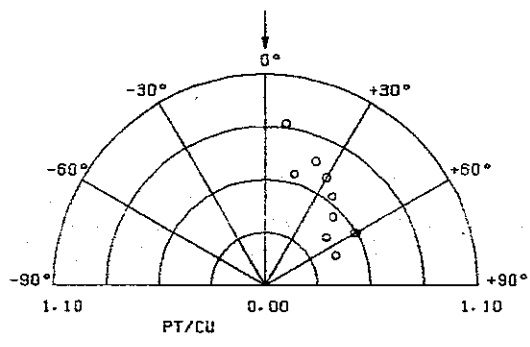
81 12 4		AR ⇒ AU	
INCIDENT ANGLE	80°	ENERGY (EV)	5.00 X 10 ⁴
TARGET	POLY	EPSILON	2.14 X 10 ⁻¹
ENVIRONMENT	HV	GAMMA	5.61 X 10 ⁻¹
SPUTTERED ATOM (S)	AU	0	1.17 X 10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP. CAL.	60.6°
			11.0°
		REFERENCE	81.12

TEMP. 300C



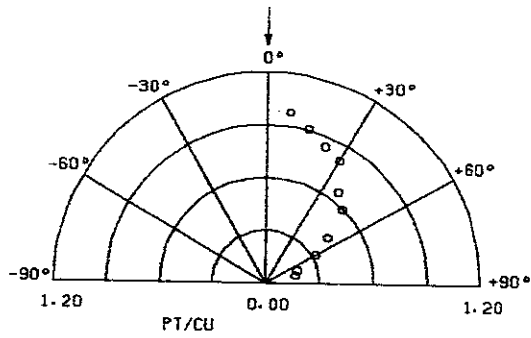
INFORMATION

82 1 1		AR ⇒ CU-PT	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00 X 10 ⁴
TARGET	POLY		
ENVIRONMENT	UHV	REFERENCE	82.1
SPUTTERED ATOM (S)	PT / CU		
ION AR 18 39.9			
TARGET CU 29 63.5			
PT 78 195			



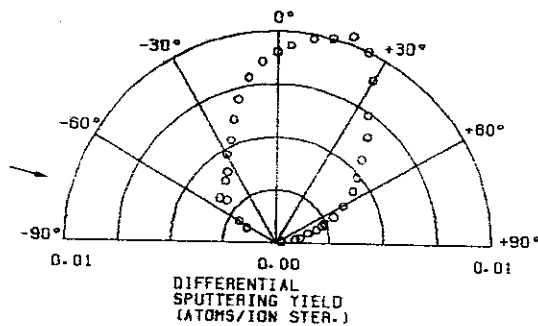
INFORMATION

82 1 2		AR ⇒ CU-PT	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00×10^4
TARGET	POLY	REFERENCE 82.1	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	NI / CU		
ION AR 18 39.9			
TARGET CU 29 63.5			
NI 28 58.7			

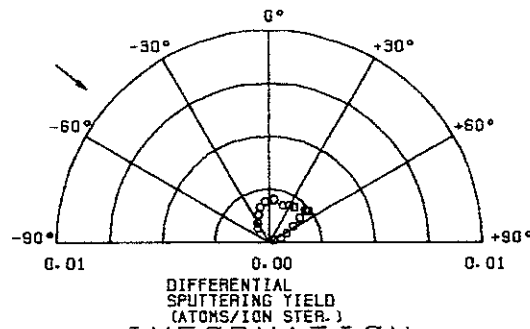


INFORMATION

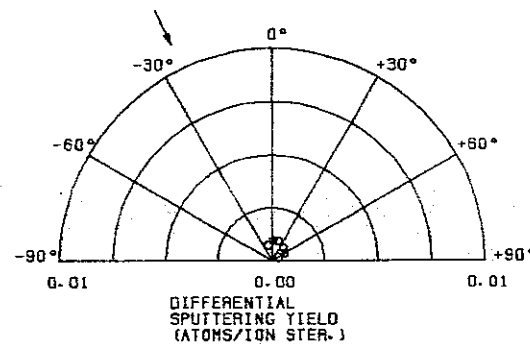
82 2 1		D ⇒ MO	
INCIDENT ANGLE	75°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	2.37×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	Q	2.92×10^{-2}
ION H 1 2.00		EJECTION ANGLE	
		EXP. CAL.	20.0° 17.6°
TARGET MO 42 95.9		REFERENCE 82.2	



INFORMATION			
82 2 2			
D ⇒ MO			
INCIDENT ANGLE	50°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	2.37×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	0	2.92×10^{-2}
		EJECTION ANGLE	
		EXP.	50.0°
		CAL.	43.3°
ION	H 1 2.00		
TARGET	MO 42 95.9		
REFERENCE 82.2			

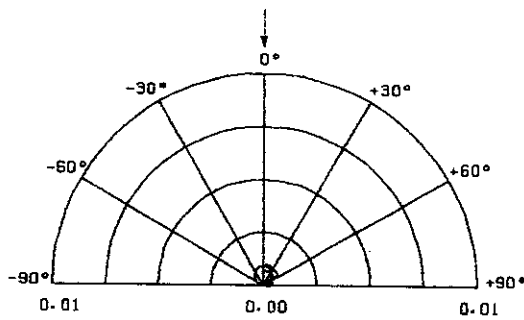


INFORMATION			
82 2 3			
D ⇒ MO			
INCIDENT ANGLE	25°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	2.37×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	0	2.92×10^{-2}
		EJECTION ANGLE	
		EXP.	50.0°
		CAL.	71.8°
ION	H 1 2.00		
TARGET	MO 42 95.9		
REFERENCE 82.2			



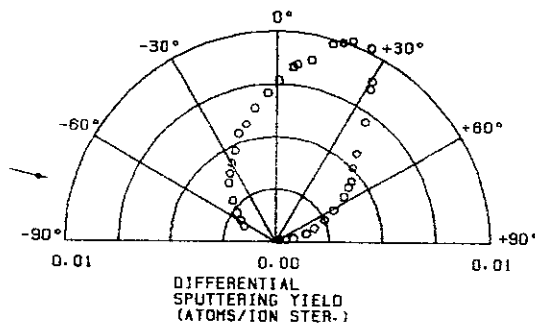
INFORMATION

82 2 4		D ⇒ MO	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	2.37×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	D	2.92×10^{-2}
		COS ² N	1.29
ION	H 1 2.00		
TARGET	MO 42 95.9	REFERENCE	82.2

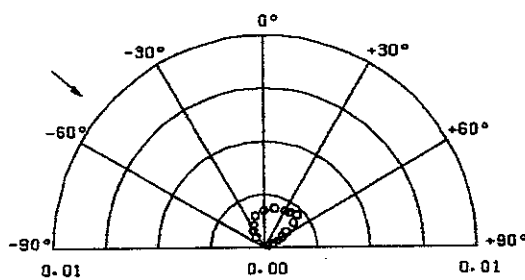


INFORMATION

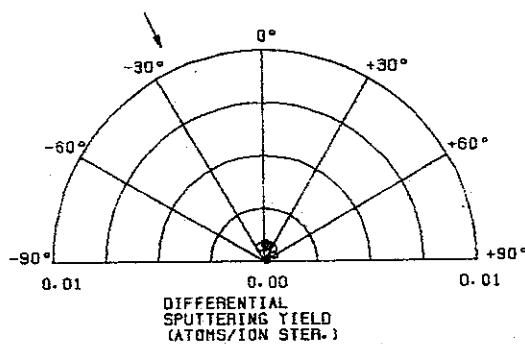
82 2 5		D ⇒ MO	
INCIDENT ANGLE	75°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	1.18×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	D	4.13×10^{-2}
		EJECTION ANGLE	
		EXP.	25.0°
		CAL.	18.7°
ION	H 1 2.00		
TARGET	MO 42 95.9	REFERENCE	82.2



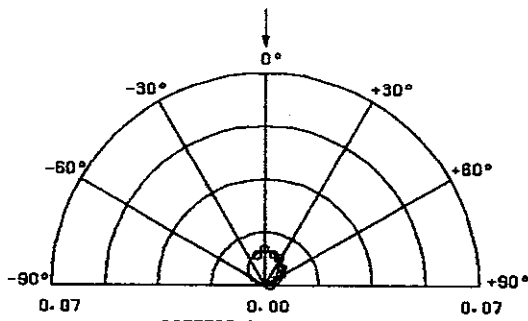
INFORMATION			
82 2 6		D ⇒ MO	
INCIDENT ANGLE	50°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	1.18×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	Q	4.13×10^{-2}
ION H 1 2.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	45.0°
		CAL.	44.8°
		REFERENCE	82-2



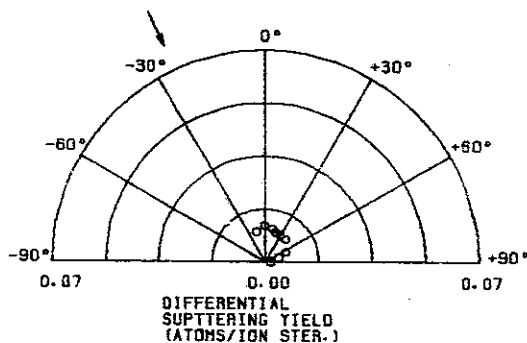
INFORMATION			
82 2 7		D ⇒ MO	
INCIDENT ANGLE	25°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	1.18×10^1
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM(S)	MO	Q	4.13×10^{-2}
ION H 1 2.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	45.0°
		CAL.	75.5°
		REFERENCE	82-2



INFORMATION			
82 2 8			
HE		⇒ MO	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X 10 ⁵
TARGET	POLY	EPSILON	1.14 X 10 ¹
ENVIRONMENT	UHV	GAMMA	1.54 X 10 ⁻¹
SPUTTERED ATOM(S)	NO	Q	2.11 X 10 ⁻²
		COS*	N 1.11
ION HE 2 4.00		REFERENCE 82.2	
TARGET MO 42 95.9			

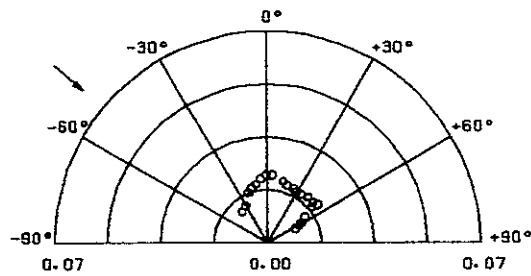


INFORMATION			
82 2 9			
HE		⇒ MO	
INCIDENT ANGLE	25°	ENERGY (EV)	1.00 X 10 ⁵
TARGET	POLY	EPSILON	1.14 X 10 ¹
ENVIRONMENT	UHV	GAMMA	1.54 X 10 ⁻¹
SPUTTERED ATOM(S)	NO	Q	2.11 X 10 ⁻²
		EJECTION ANGLE	
ION HE 2 4.00		EXP.	80.0°
TARGET MO 42 95.9		CAL.	89.7°
		REFERENCE 82.2	



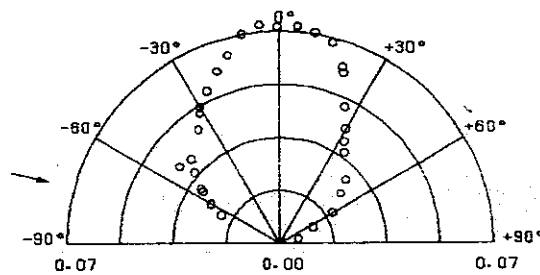
INFORMATION

82 2 10		HE \Rightarrow MO	
INCIDENT ANGLE	50°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	1.14×10^{-1}
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	σ	2.11×10^{-2}
ION		EJECTION ANGLE	
HE	2 4.00	EXP.	50.0°
TARGET	MO 42 95.9	CAL.	42.4°
		REFERENCE 82-2	



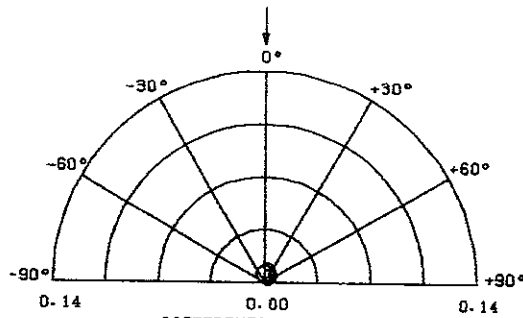
INFORMATION

82 2 11		HE \Rightarrow MO	
INCIDENT ANGLE	75°	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	1.14×10^{-1}
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	σ	2.11×10^{-2}
ION		EJECTION ANGLE	
HE	2 4.00	EXP.	5.00°
TARGET	MO 42 95.9	CAL.	16.9°
		REFERENCE 82-2	



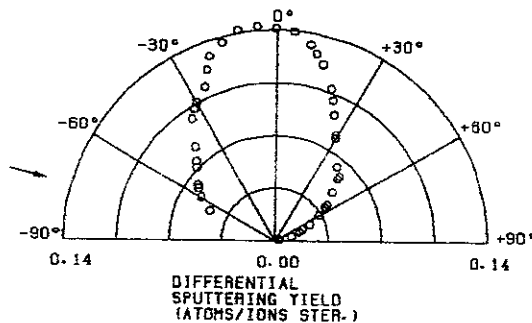
INFORMATION

82 2 12		HE → MO			
INCIDENT ANGLE	0°	ENERGY (EV)	5.00 X 10 ⁴		
TARGET	POLY	EPSILON	5.68		
ENVIRONMENT	UHV	GAMMA	1.54 X 10 ⁻¹		
SPUTTERED ATOM(S)	MO	Q	2.98 X 10 ⁻²		
		COS ² N	1.11		
ION HE 2 4.00		REFERENCE 82.2			
TARGET MO 42 95.9					

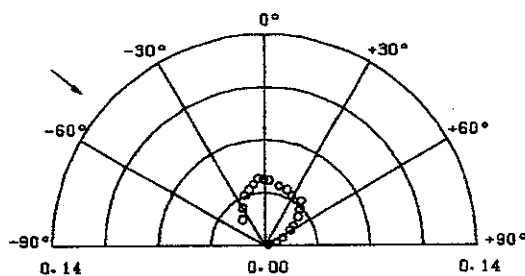


INFORMATION

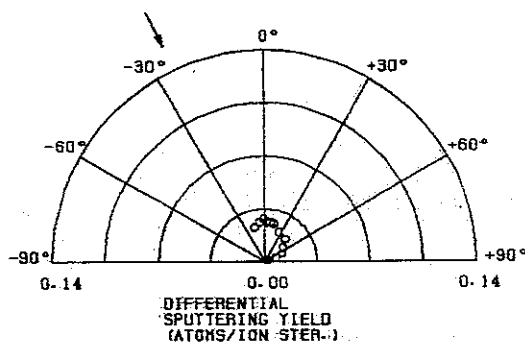
82 2 15		HE → MO			
INCIDENT ANGLE	75°	ENERGY (EV)	5.00 X 10 ⁴		
TARGET	POLY	EPSILON	5.68		
ENVIRONMENT	UHV	GAMMA	1.54 X 10 ⁻¹		
SPUTTERED ATOM(S)	MO	Q	2.98 X 10 ⁻²		
		EJECTION ANGLE			
		EXP.	0.00°		
		CAL.	17.6°		
ION HE 2 4.00		REFERENCE 82.2			
TARGET MO 42 95.9					



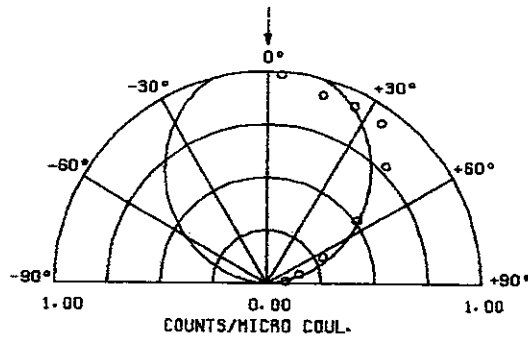
INFORMATION			
82 2 14			
HE \Rightarrow MO			
INCIDENT ANGLE	50°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	5.68
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	Q	2.98×10^{-2}
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP. 40.0°	
		CAL. 43.4°	
REFERENCE 82.2			



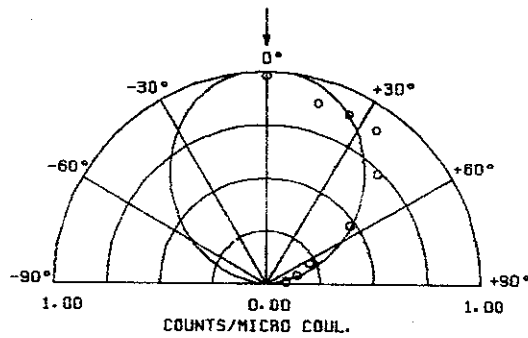
INFORMATION			
82 2 15			
HE \Rightarrow MO			
INCIDENT ANGLE	25°	ENERGY (EV)	5.00×10^4
TARGET	POLY	EPSILON	5.68
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	Q	2.98×10^{-2}
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP. 40.0°	
		CAL. 72.0°	
REFERENCE 82.2			



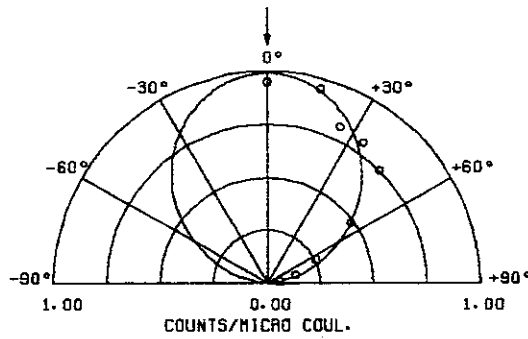
INFORMATION			
82 3 1			
CU ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	6.00 X10 ⁴
TARGET	POLY	EPSILON	3.02 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	7.63 X10 ⁻³
		COS ² θ	N 1.26
ION	CU 29 63.5		
TARGET	CU 29 63.5	REFERENCE	82.3



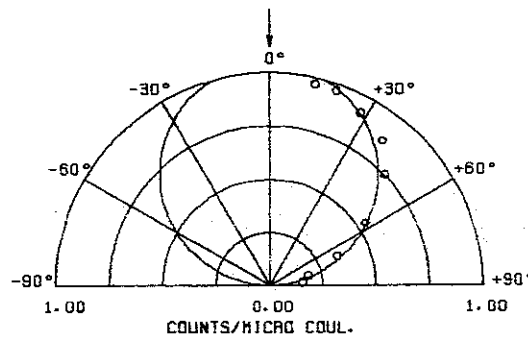
INFORMATION			
82 3 2			
CU ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.23 X10 ⁻³
		COS ² θ	N 1.35
ION	CU 29 63.5		
TARGET	CU 29 63.5	REFERENCE	82.3



INFORMATION			
82 3 3			
CU ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	1.20 X10 ⁵
TARGET	POLY	EPSILON	6.03 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM (S)	CU	Q	5.39 X10 ⁻³
		CGS °	N 1.33
ION	CU 29 63.5	REFERENCE	82.3
TARGET	CU 29 63.5		



INFORMATION			
82 3 4			
NI ⇒ NI			
INCIDENT ANGLE	0 °	ENERGY (EV)	6.00 X10 ⁴
TARGET	POLY	EPSILON	3.27 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM (S)	NI	Q	8.60 X10 ⁻³
		CGS °	N 1.05
ION	NI 28 58.7	REFERENCE	82.3
TARGET	NI 28 58.7		

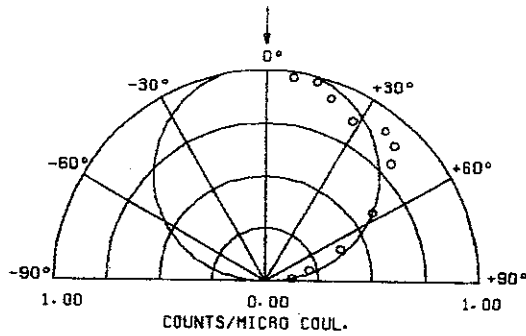


INFORMATION

02 3 5
 NI ⇒ NI

INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.91 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	NI	Ω	7.02 X10 ⁻³
		COS ² θ	N 9.00 X10 ⁻¹

ION	NI 28 58.7	REFERENCE	82.3
TARGET	NI 28 58.7		

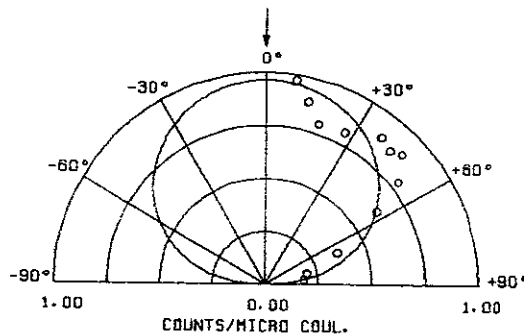


INFORMATION

02 3 8
 NI ⇒ NI

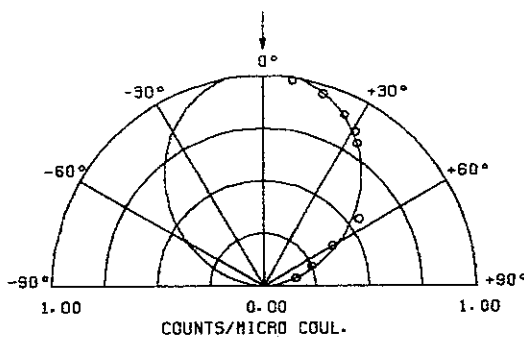
INCIDENT ANGLE	0 °	ENERGY (EV)	1.20 X10 ⁵
TARGET	POLY	EPSILON	6.55 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	NI	Ω	5.08 X10 ⁻³
		COS ² θ	N 7.50 X10 ⁻¹

ION	NI 28 58.7	REFERENCE	82.3
TARGET	NI 28 58.7		



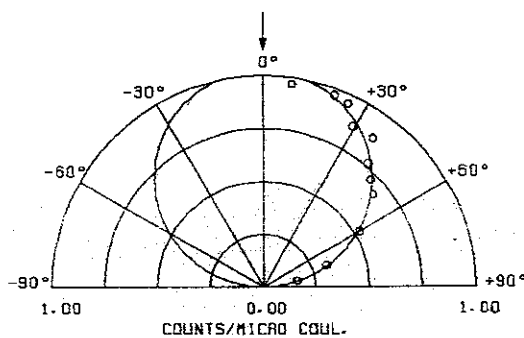
INFORMATION			
82 3 7			
CU ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	0	6.23 X10 ⁻³
		COS ⁿ	N 1.30
ION	CU 29 63.5		
TARGET	CU 29 63.5	REFERENCE	82.3

(RBS) FOIL II
 FLUENCE = 12E+17 CU/SQ. CENTI-M



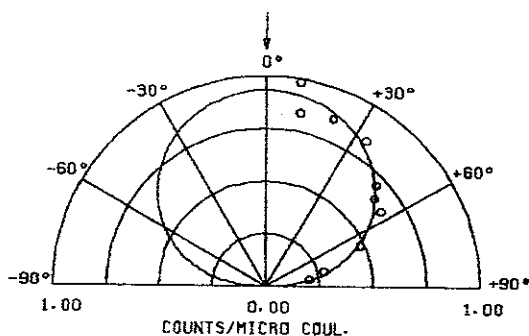
INFORMATION			
82 3 8			
CU ⇒ CU			
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	0	6.23 X10 ⁻³
		COS ⁿ	N 1.00
ION	CU 29 63.5		
TARGET	CU 29 63.5	REFERENCE	82.3

(RBS) FOIL III
 FLUENCE = 5.2E+17 CU/SQ. CENTI-M



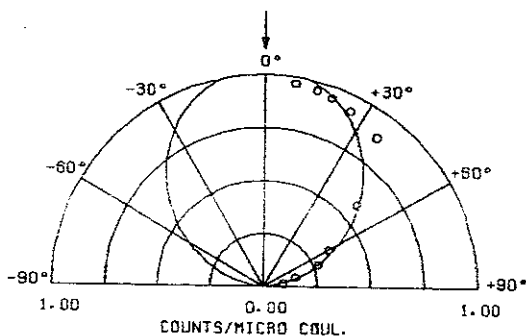
INFORMATION			
82 3 9		CU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.23 X10 ⁻³
		COS ²	N 7.70 X10 ⁻¹
ION	CU 29 63.5	REFERENCE 82.3	
TARGET	CU 29 63.5		

(RBS) FOIL V
 FLUENCE = 1.9E+17 CU/SQ.CENTI-M



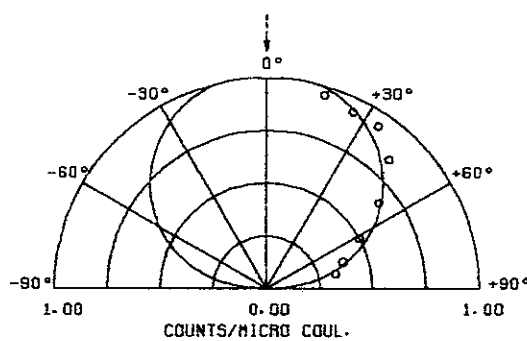
INFORMATION			
82 3 10		CU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00 X10 ⁴
TARGET	POLY	EPSILON	4.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	10.00X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.23 X10 ⁻³
		COS ²	N 1.35
ION	CU 29 63.5	REFERENCE 82.3	
TARGET	CU 29 63.5		

(PIXE) FOIL II
 FLUENCE = 12E+17 CU/SQ.CENTI-M



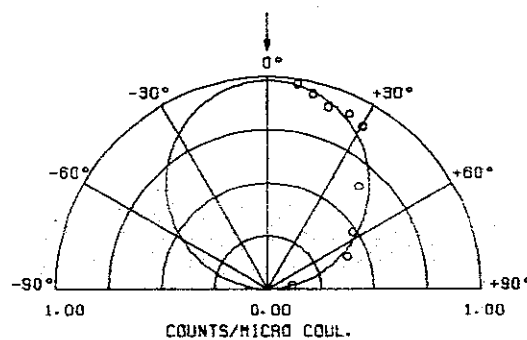
INFORMATION			
82 3 11		CU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00×10^4
TARGET	POLY	EPSILON	4.52×10^{-1}
ENVIRONMENT	UHV	GAMMA	10.00×10^{-1}
SPUTTERED ATOM (S)	CU	Q	6.23×10^{-3}
		COS θ	N
			8.20×10^{-1}
ION	CU 29 63.5	REFERENCE	82.3
TARGET	CU 29 63.5		

(PIXE) FOIL III
 FLUENCE = $5.2E+17$ CU/SQ. CENTI-M



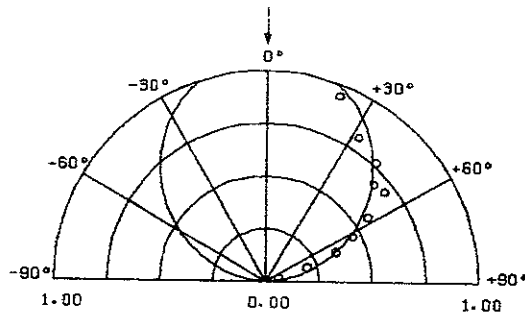
INFORMATION			
82 3 12		CU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	9.00×10^4
TARGET	POLY	EPSILON	4.52×10^{-1}
ENVIRONMENT	UHV	GAMMA	10.00×10^{-1}
SPUTTERED ATOM (S)	CU	Q	6.23×10^{-3}
		COS θ	N
			1.07
ION	CU 29 63.5	REFERENCE	82.3
TARGET	CU 29 63.5		

(PIXE) FOIL V
 FLUENCE = $1.3E+17$ CU/SQ. CENTI-M



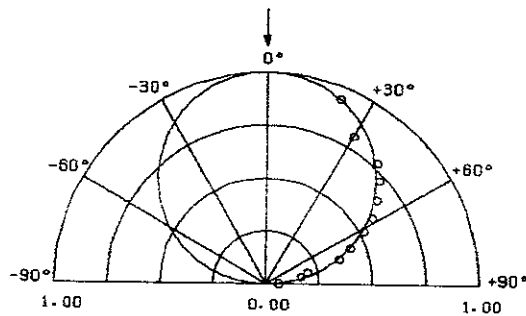
INFORMATION			
82 7 1		HE ⇒ V	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	9.52 X10 ⁻¹
ENVIRONMENT	---	GAMMA	2.70 X10 ⁻¹
SPUTTERED ATOM(S)	V	Q	7.01 X10 ⁻²
		COS ²	N 1.19
ION	HE 2 4.00	REFERENCE	82.7
TARGET	V 23 50.9		

OXYGEN EXPOSED

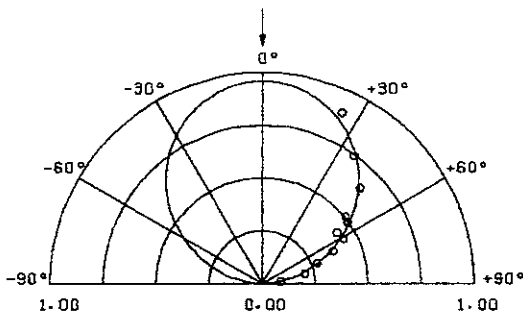


INFORMATION			
82 7 2		HE ⇒ V	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ³
TARGET	POLY	EPSILON	9.52 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	2.70 X10 ⁻¹
SPUTTERED ATOM(S)	V	Q	7.01 X10 ⁻²
		COS ²	N 9.30 X10 ⁻¹
ION	HE 2 4.00	REFERENCE	82.7
TARGET	V 23 50.9		

CLEAN METAL

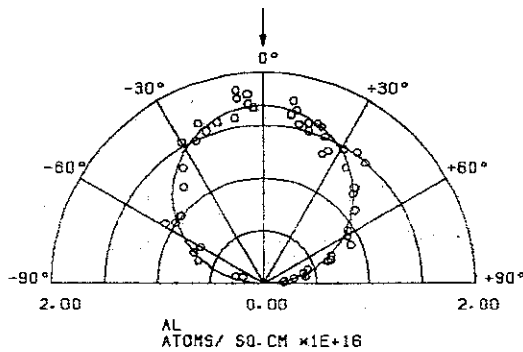


INFORMATION			
82 7 3		H ⇒ V	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ²
TARGET	POLY	EPSILON	2.60 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.61 X10 ⁻²
SPUTTERED ATOM (S)	V	0	3.74 X10 ⁻¹
		COS ² N	1.17
ION	H 1 1.01		
TARGET	V 23 50.9	REFERENCE	82.7



INFORMATION			
82 11 1		AR ⇒ AL	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	7.19 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM (S)	AL	0	9.38 X10 ⁻³
		COS ² N	9.60 X10 ⁻¹
ION	AR 18 39.9		
TARGET	AL 13 27.0	REFERENCE	82.11
	0 8 16.0		

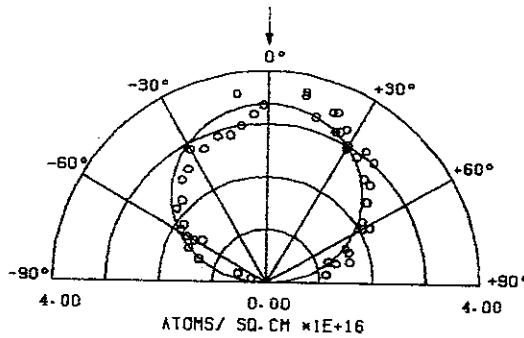
1-4E-4 PA



INFORMATION

82 11 2		AR ⇒ AL	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	8.85 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM(S)	0	Q	8.92 X10 ⁻³
		COS ² N	8.60 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	82.11
TARGET	AL 13 27.0		
	O 8 16.0		

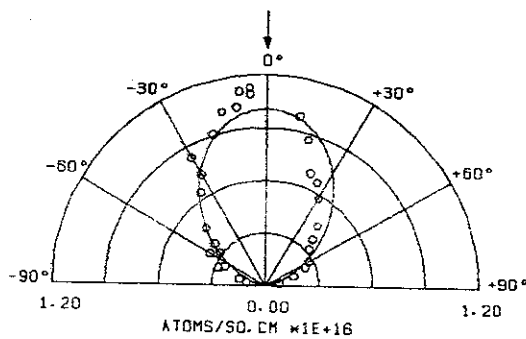
OXYGEN
1-4E-4 PA.



INFORMATION

82 11 3		AR ⇒ AL2-03	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	7.19 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM(S)	AL	Q	9.38 X10 ⁻³
		COS ² N	2.12
ION	AR 18 39.9	REFERENCE	82.11
TARGET	AL 13 27.0		
	O 8 16.0		

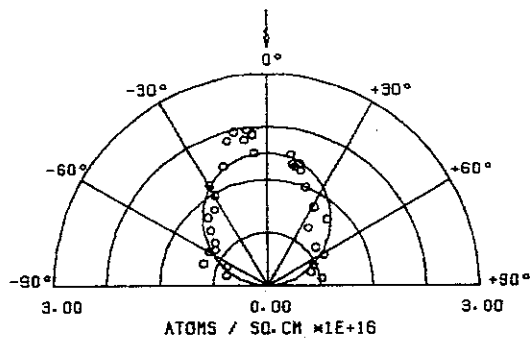
AL 1 - 4E-4 PA



INFORMATION

82 11 4		AR ⇒ AL2-O3	
INCIDENT ANGLE	0 °	ENERGY (EV)	4.00 X10 ⁴
TARGET	POLY	EPSILON	8.85 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	9.62 X10 ⁻¹
SPUTTERED ATOM(S)	0	0	8.92 X10 ⁻³
		CBS ^m	N 1.12
ION	AR 18 39.9		
TARGET	AL 13 27.0	REFERENCE	82.11
	O 8 16.0		

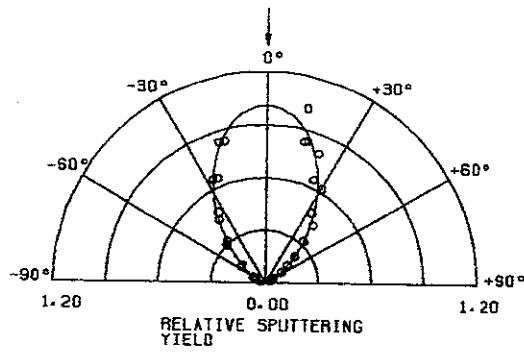
OXYGEN 1 - 4E-4 PA



INFORMATION

83 1 1		AR ⇒ GA-I	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.50 X10 ⁴
TARGET	POLY	EPSILON	1.53 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.26 X10 ⁻¹
SPUTTERED ATOM (S)	GA	Q	1.42 X10 ⁻²
		COS ² N	3.84
ION		REFERENCE 83.1	
TARGET	AR 18 39.9		
	GA 31 69.7		
	I 53 127		

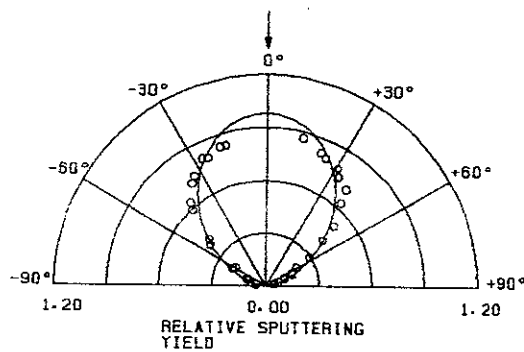
GA



INFORMATION

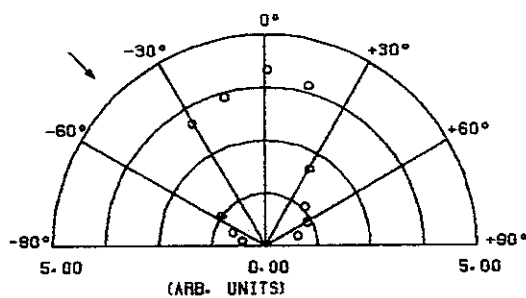
83 1 2		AR ⇒ GA-I	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.50 X10 ⁴
TARGET	POLY	EPSILON	9.59 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.26 X10 ⁻¹
SPUTTERED ATOM (S)	I	Q	1.01 X10 ⁻²
		COS ² N	1.85
ION		REFERENCE 83.1	
TARGET	AR 18 39.9		
	GA 31 69.7		
	I 53 127		

I



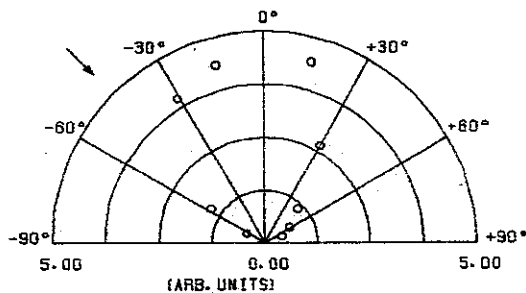
INFORMATION			
89 2 1		AR ⇒ AU-CU	
INCIDENT ANGLE	45°	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	3.21×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	CU	Q	3.50×10^{-2}
ION		EJECTION ANGLE	
	AR 18 39.9	EXP.	45.8°
TARGET	AU 79 197	CAL.	49.4°
	CU 29 63.5	REFERENCE	83.2

CU 43 ATZ



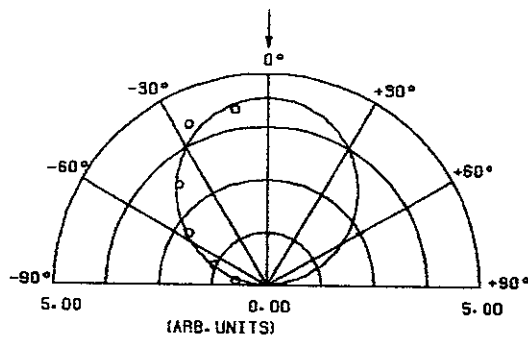
INFORMATION			
89 2 2		AR ⇒ AU-CU	
INCIDENT ANGLE	45°	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	1.28×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	4.76×10^{-2}
ION		EJECTION ANGLE	
	AR 18 39.9	EXP.	57.9°
TARGET	AU 79 197	CAL.	51.1°
	CU 29 63.5	REFERENCE	83.2

AU 43 ATZ



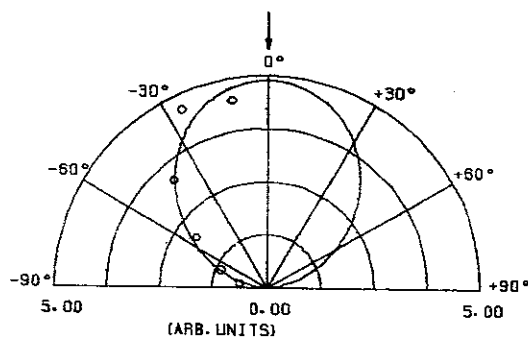
INFORMATION			
83 2 3		AR ⇒ AU-CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	3.21×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	CU	Q	3.50×10^{-2}
		COS ^N	N 1.15
ION	AR 18 39.9	REFERENCE	83.2
TARGET	AU 79 197 CU 29 63.5		

CU 43 ATX



INFORMATION			
83 2 4		AR ⇒ AU-CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	1.28×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	4.76×10^{-2}
		COS ^N	N 1.42
ION	AR 18 39.9	REFERENCE	83.2
TARGET	AU 79 197 CU 29 63.5		

AU 43 ATX



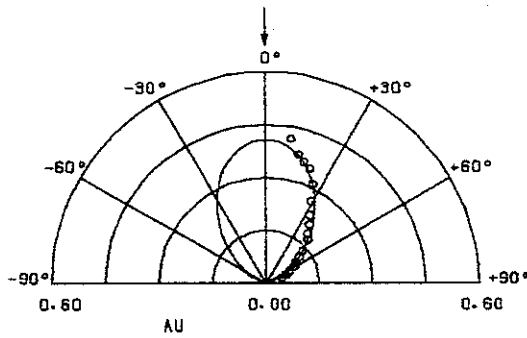
INFORMATION

83 4 1
AR ⇒ AG-AU

INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	EPSILON	4.27 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	8.24 X10 ⁻³
		COS ² N	2.70

ION	AR 18 39.9	REFERENCE	83.4
TARGET	AG 47 108 AU 79 197		

STRIP 1



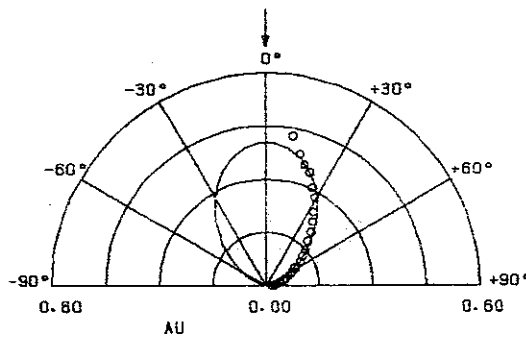
INFORMATION

83 4 2
AR ⇒ AG-AU

INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	EPSILON	4.27 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	8.24 X10 ⁻³
		COS ² N	2.40

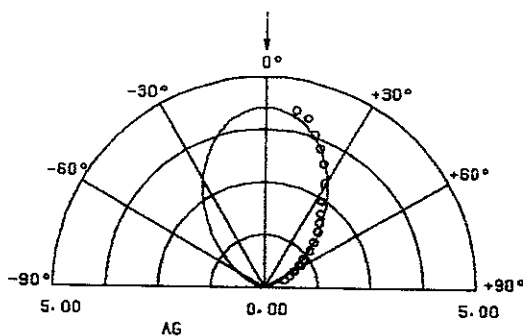
ION	AR 18 39.9	REFERENCE	83.4
TARGET	AG 47 108 AU 79 197		

STRIP 4



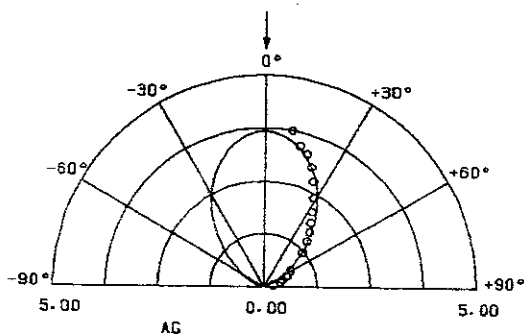
INFORMATION			
89 4 3		AR ⇒ AG-AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	EPSILON	7.10 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM (S)	AG	Q	6.12 X10 ⁻³
		COS ⁿ	N 2.60
ION	AR 18 39.9	REFERENCE	63.4
TARGET	AG 47 108 AU 79 197		

STRIP 1



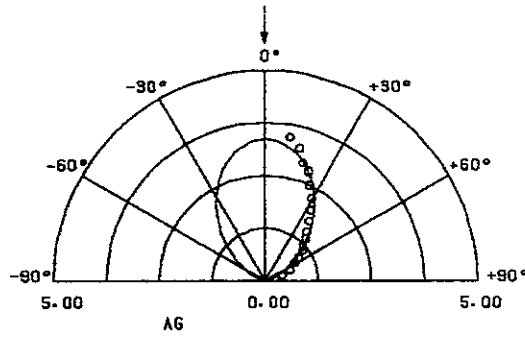
INFORMATION			
89 4 4		AR ⇒ AG-AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	EPSILON	7.10 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM (S)	AG	Q	6.12 X10 ⁻³
		COS ⁿ	N 2.74
ION	AR 18 39.9	REFERENCE	83.4
TARGET	AG 47 108 AU 79 197		

STRIP 3



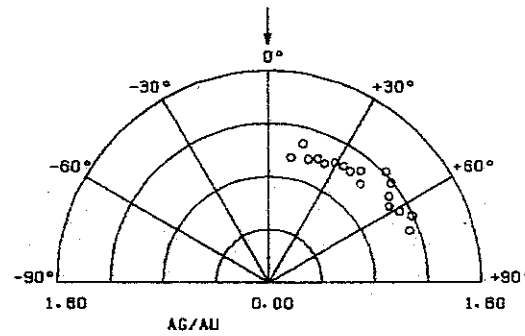
INFORMATION			
89 4 5		AR ⇒ AG-AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	EPSILON	7.10 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	6.12 X10 ⁻³
		QOS ^h	N 2.59
ION AR 18 39.9		REFERENCE 83.4	
TARGET	AG 47 108 AU 79 197		

STRIP 5



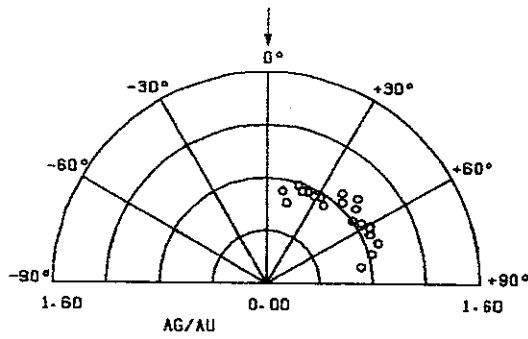
INFORMATION			
89 4 6		AR ⇒ AU-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	REFERENCE 83.4	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	AG / AU		
ION AR 18 39.9			
TARGET	AU 79 197 AG 47 108		

STRIP 1 R-1.26



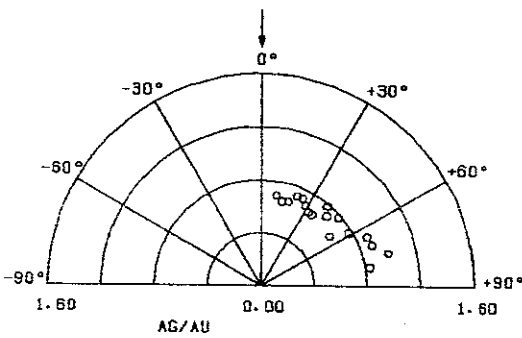
INFORMATION			
89 4 7		AR ⇒ AU-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	REFERENCE 83.4	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	AG / AU		
<hr/>			
ION	AR 18 39.9		
TARGET	AU 79 197		
	AG 47 108		

STRIP 2 R=1.1



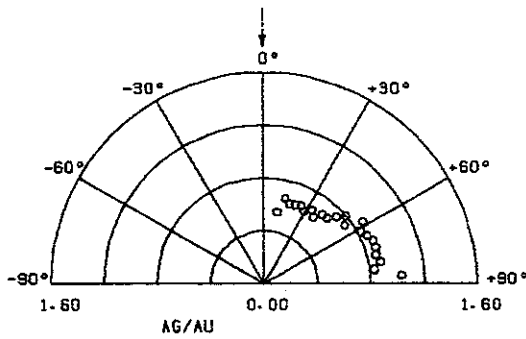
INFORMATION			
89 4 8		AR ⇒ AU-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	REFERENCE 83.4	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	AG / AU		
<hr/>			
ION	AR 18 39.9		
TARGET	AU 79 197		
	AG 47 108		

STRIP 3 R=1.05



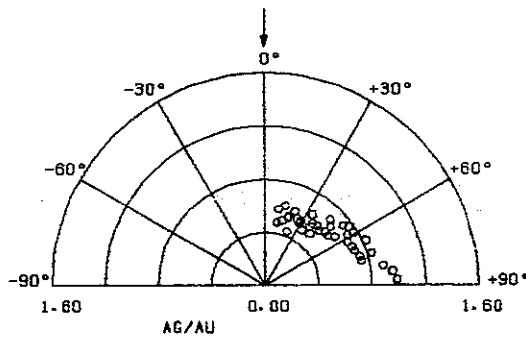
INFORMATION			
83 4 9		AR => AU-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	REFERENCE 83.4	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	AG / AU		
<hr/>			
ION	AR 18	39.9	
TARGET	AU 79	197	
	AG 47	108	

STRIP 4 R=1.03



INFORMATION			
83 4 10		AR => AU-AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ⁵
TARGET	POLY	REFERENCE 83.4	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	AG / AU		
<hr/>			
ION	AR 18	39.9	
TARGET	AU 79	197	
	AG 47	108	

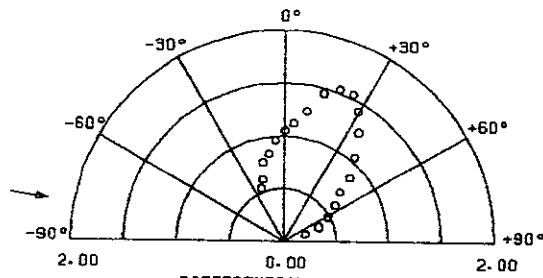
STRIP 5 R=1.01



INFORMATION

83 5 1
D ⇒ MO

INCIDENT ANGLE	80°	ENERGY (EV)	2.00×10^3
TARGET	POLY	EPSILON	4.74×10^{-1}
ENVIRONMENT	UHV	GAMMA	8.00×10^{-2}
SPUTTERED ATOM (S)	MO	0	2.06×10^{-1}
		EJECTION ANGLE	
ION	H 1 2.00	EXP.	25.0°
TARGET	MO 42 95.9	CAL.	28.2°
		REFERENCE	83.5

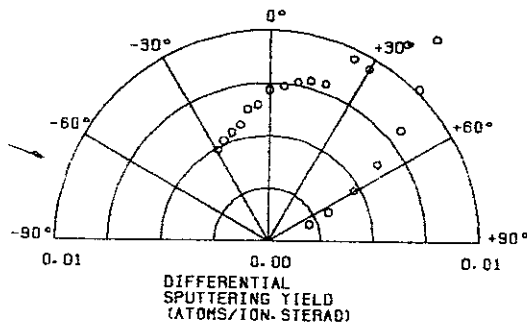


INFORMATION

83 5 2
D ⇒ NB-B2

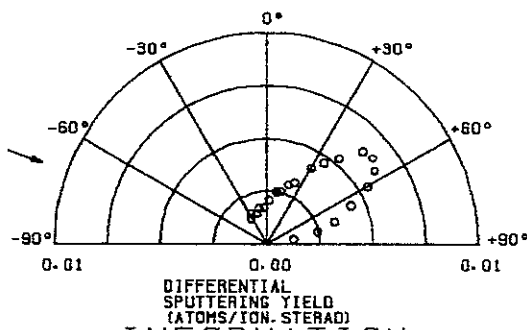
INCIDENT ANGLE	70°	ENERGY (EV)	2.00×10^3
TARGET	POLY	EPSILON	6.26
ENVIRONMENT	UHV	GAMMA	8.25×10^{-2}
SPUTTERED ATOM (S)	B	0	7.40×10^{-2}
		EJECTION ANGLE	
ION	H 1 2.00	EXP.	39.8°
TARGET	NB 41 92.9 B 5 10.8	CAL.	26.8°
		REFERENCE	83.5

B DISTRIBUTION

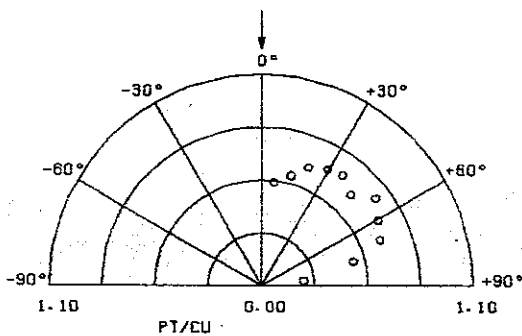


INFORMATION			
89 5 9		D ⇒ NB-B2	
INCIDENT ANGLE	70°	ENERGY (EV)	2.00×10^3
TARGET	POLY	EPSILON	4.89×10^{-1}
ENVIRONMENT	UHV	GAMMA	8.25×10^{-2}
SPUTTERED ATOM(S)	NB	0	2.14×10^{-1}
ION H 1 2.00		EJECTION ANGLE	
TARGET NB 41 92.9		EXP.	50.6°
B 5 10.8		CAL.	40.9°
		REFERENCE	83.5

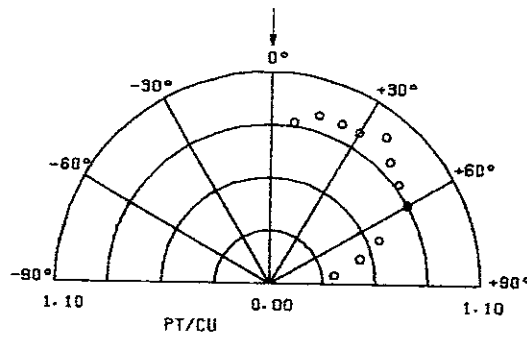
NB DISTRIBUTION



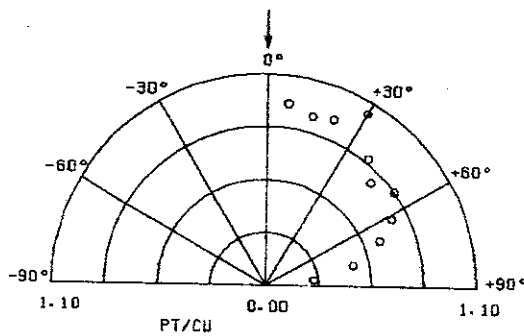
INFORMATION			
89 7 1		AR ⇒ CU-PT	
INCIDENT ANGLE	0°	ENERGY (EV)	2.00×10^3
TARGET	POLY	REFERENCE	83.7
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION AR 18 39.9			
TARGET CU 29 63.5			
PT 78 195			



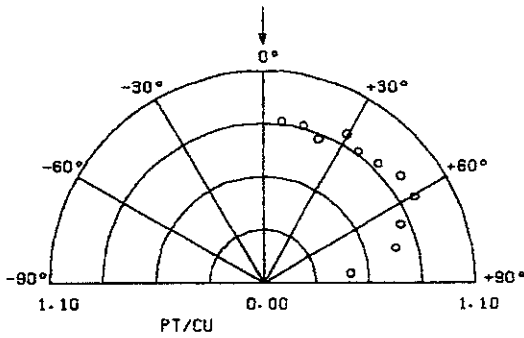
INFORMATION			
83 7 2		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	



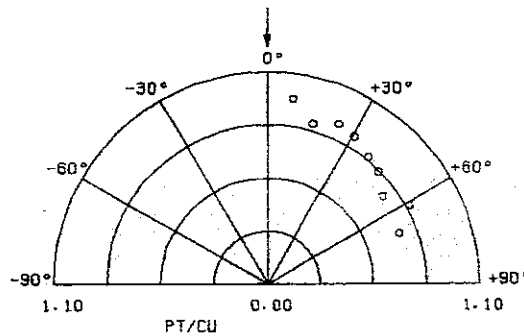
INFORMATION			
83 7 3		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	



INFORMATION			
83 7 4		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

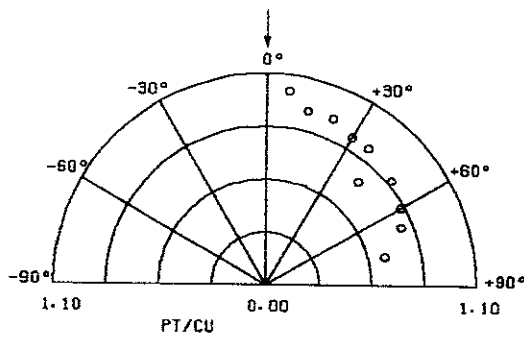


INFORMATION			
83 7 5		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		



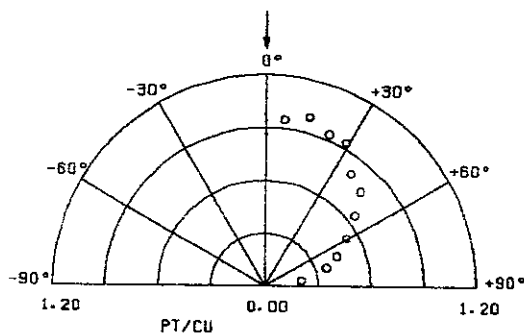
INFORMATION

85 7 6		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
<hr/>			
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

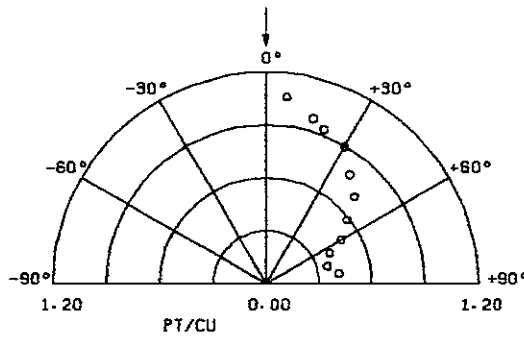


INFORMATION

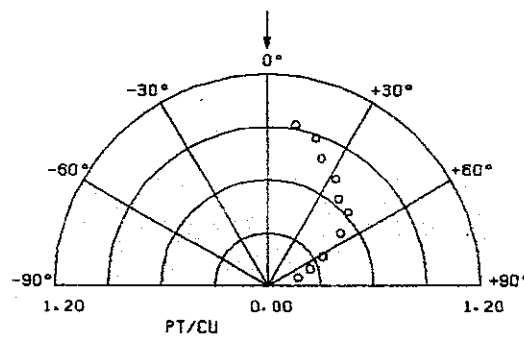
85 7 7		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
<hr/>			
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		



INFORMATION			
83 7 8		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (eV)	2.00 X 10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
<hr/>			
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	



INFORMATION			
83 7 9		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (eV)	2.00 X 10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
<hr/>			
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	

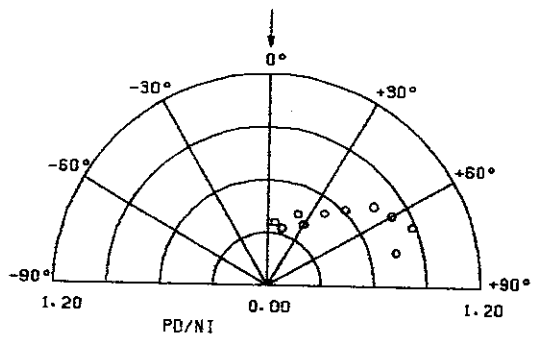


INFORMATION

83 7 10
AR ⇒ NIS-PD

INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PD / NI		

ION	AR	18	39.9
TARGET	NI	28	58.7
	PD	46	106

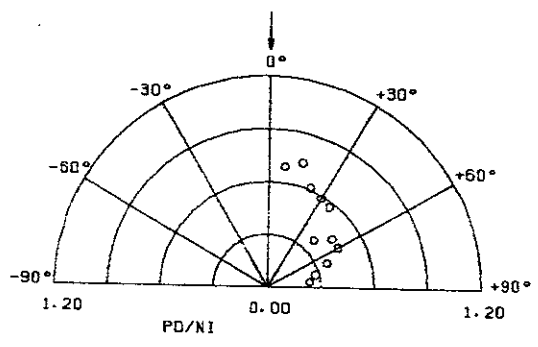


INFORMATION

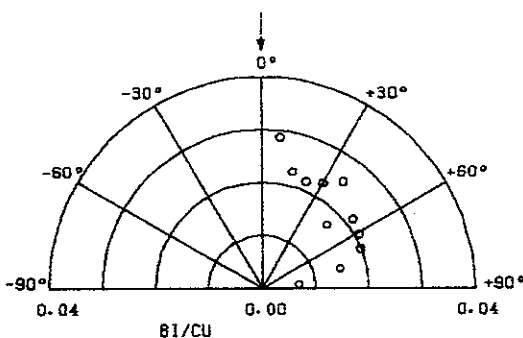
83 7 11
0 ⇒ NIS-PD

INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PD / NI		

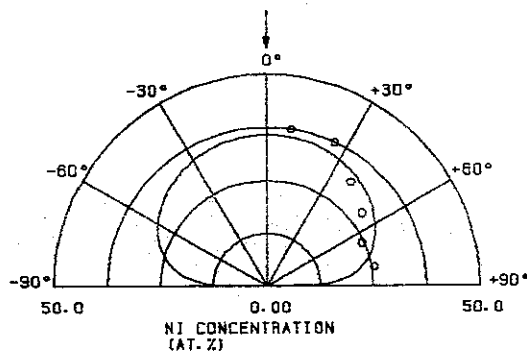
ION	0	8	16.0
TARGET	NI	28	58.7
	PD	46	106



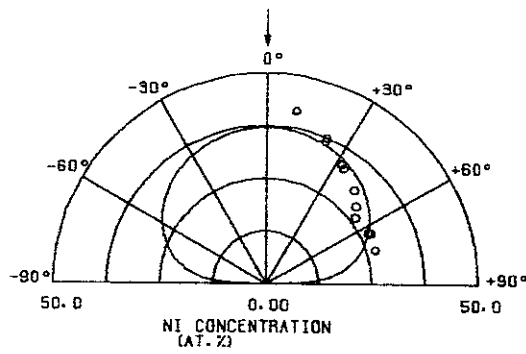
INFORMATION			
83 7 12		BI ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	REFERENCE 83.7	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	BI / CU		
ION	BI 83 209		
TARGET	CU 29 63.5		



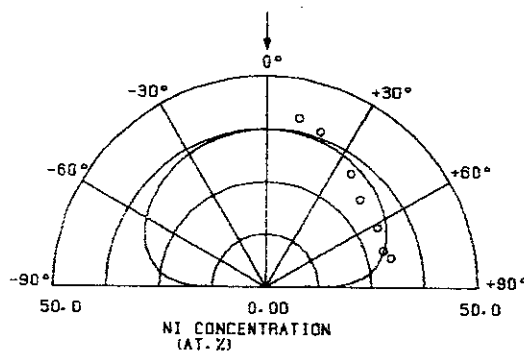
INFORMATION			
84 1 1		AR ⇒ NI-CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	EPSILON	3.24 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM (S)	NI	Q	3.92 X10 ⁻²
		COS ² N	2.80 X10 ⁻¹
ION	AR 18 39.9	REFERENCE 84.1	
TARGET	NI 28 58.7		
	CU 29 63.5		



INFORMATION			
84 1 2		AR ⇒ NI-CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	EPSILON	3.24 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM (S)	NI	D	3.92 X10 ⁻²
		COS ⁿ	N 3.98 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	84.1
TARGET	NI 28 58.7 CU 29 63.5		

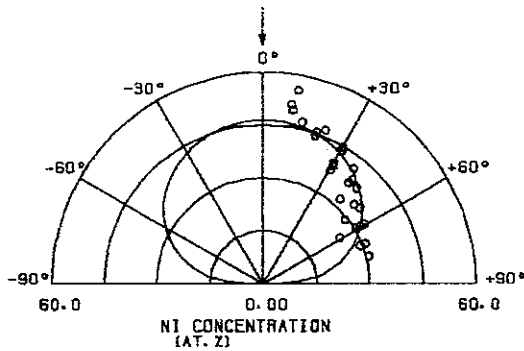


INFORMATION			
84 1 3		AR ⇒ NI-CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	EPSILON	3.24 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM (S)	NI	D	3.92 X10 ⁻²
		COS ⁿ	N 2.00 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	84.1
TARGET	NI 28 58.7 CU 29 63.5		



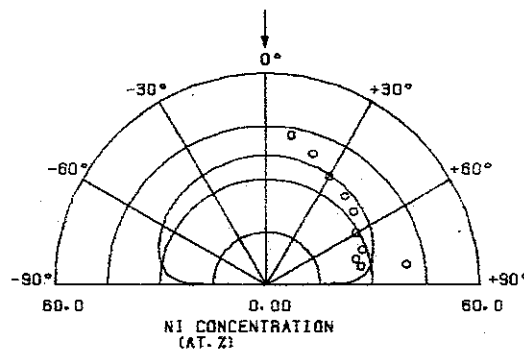
INFORMATION

84 1 4 AR ⇒ NI-CU			
INCIDENT ANGLE	0 °	ENERGY (eV)	3.00 X10 ³
TARGET	POLY	EPSILON	3.24 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM(S)	NI	Q	3.92 X10 ⁻²
		cos ^α	N 5.60 X10 ⁻¹
ION AR 18 39.9			
TARGET	NI 28 58.7 CU 29 63.5	REFERENCE	84.1



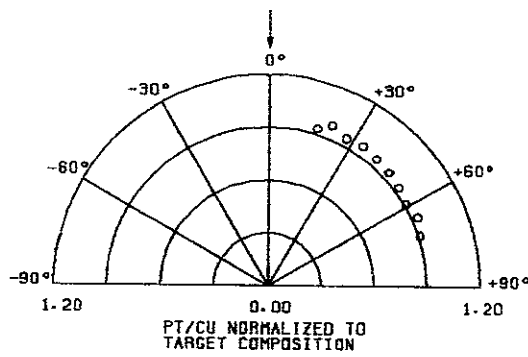
INFORMATION

84 1 5 AR ⇒ NI-CU			
INCIDENT ANGLE	0 °	ENERGY (eV)	3.00 X10 ³
TARGET	POLY	EPSILON	3.24 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM(S)	NI	Q	3.92 X10 ⁻²
		cos ^α	N 1.20 X10 ⁻¹
ION AR 18 39.9			
TARGET	NI 28 58.7 CU 29 63.5	REFERENCE	84.1



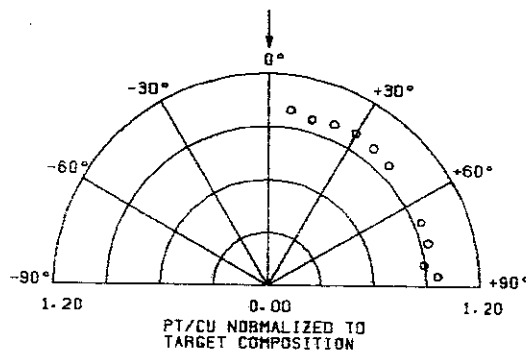
INFORMATION			
84 2 1		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

-196C



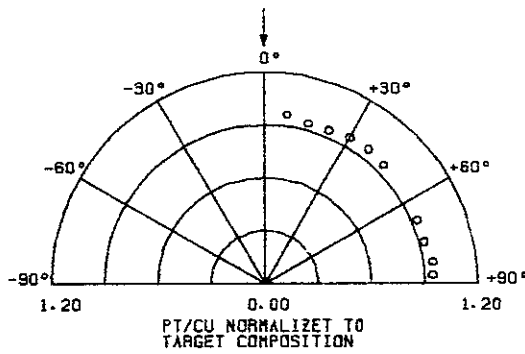
INFORMATION			
84 2 2		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

200C



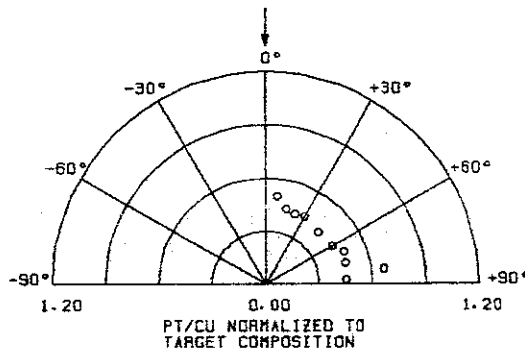
INFORMATION			
84 2 3		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

300C



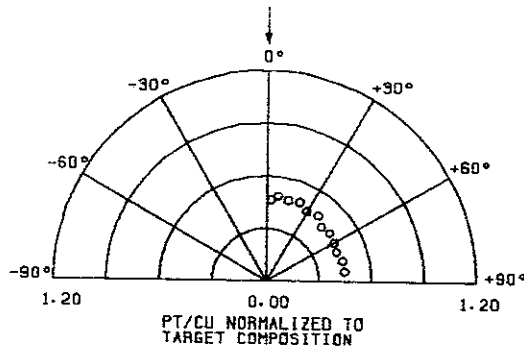
INFORMATION			
84 2 4		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

400C



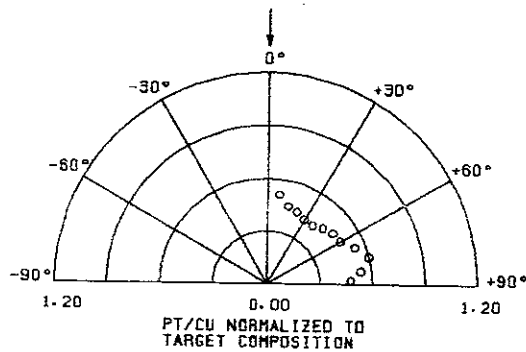
INFORMATION			
84 2 5	AR ⇒ CU-PT		
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84-2	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PT / CU		
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	

450C



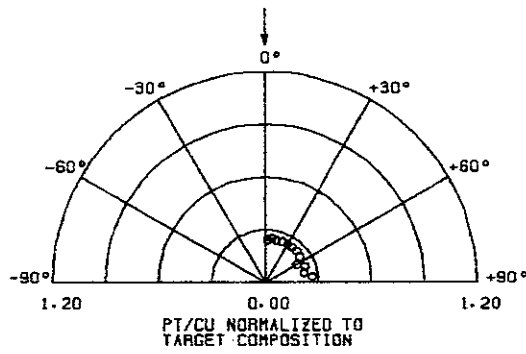
INFORMATION			
84 2 5	AR ⇒ CU-PT		
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84-2	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PT / CU		
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	

500C



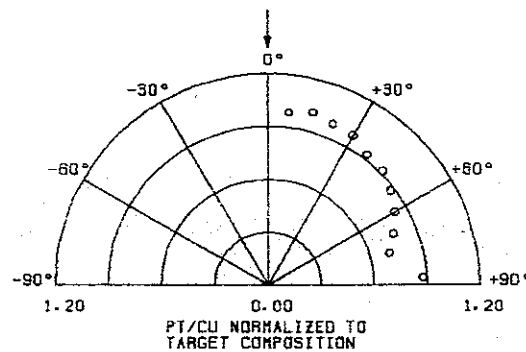
INFORMATION			
84 2 7	AR ⇒ CU-PT		
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

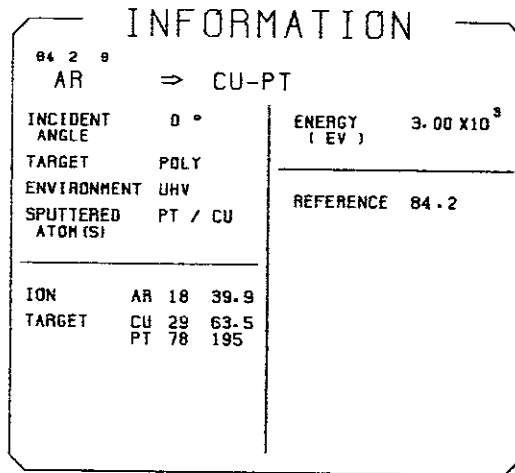
550C



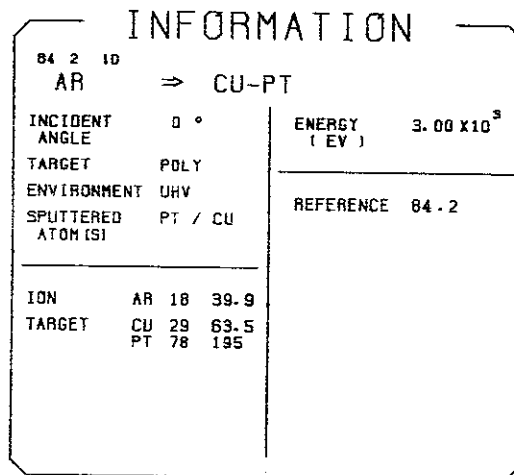
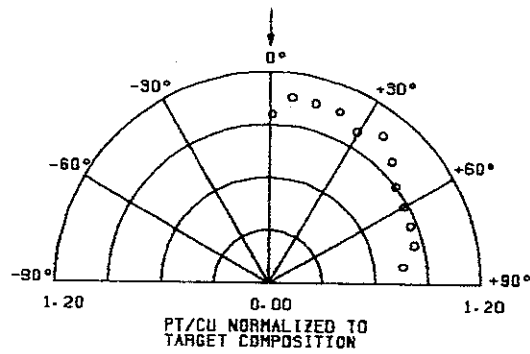
INFORMATION			
84 2 8	AR ⇒ CU-PT		
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	PT / CU		
ION	AR 18 39.9		
TARGET	CU 29 63.5		
	PT 78 195		

-196C

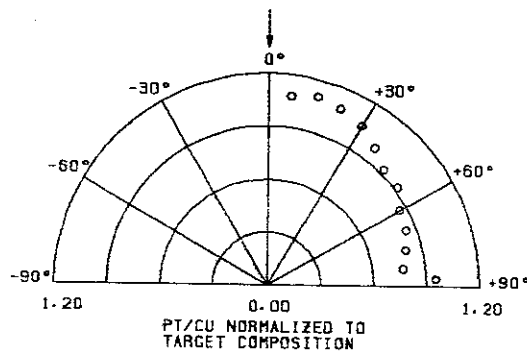




200C

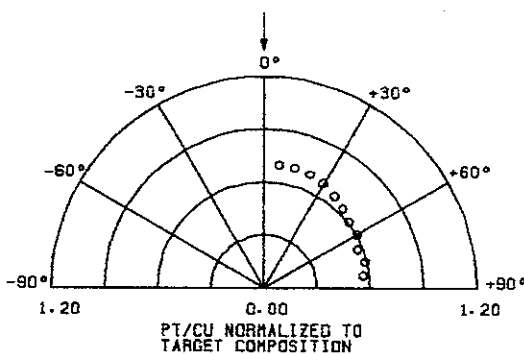


300C



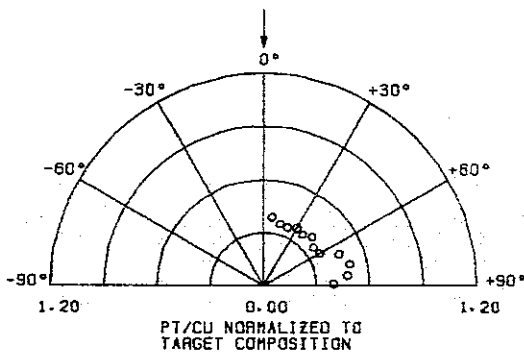
INFORMATION			
84 2 11		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PT / CU		
<hr/>			
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	

400C



INFORMATION			
84 2 12		AR ⇒ CU-PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ³
TARGET	POLY	REFERENCE 84.2	
ENVIRONMENT	UHV		
SPUTTERED ATOM (S)	PT / CU		
<hr/>			
ION	AR 18	39.9	
TARGET	CU 29	63.5	
	PT 78	195	

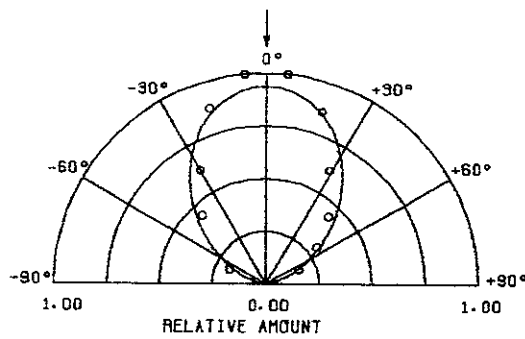
500C



INFORMATION

84 3 1		AU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM (S)	CU	0	6.15×10^{-3}
		COS ⁿ	N 1.99
ION	AU 79 197	REFERENCE	84.3
TARGET	CU 29 63.5		

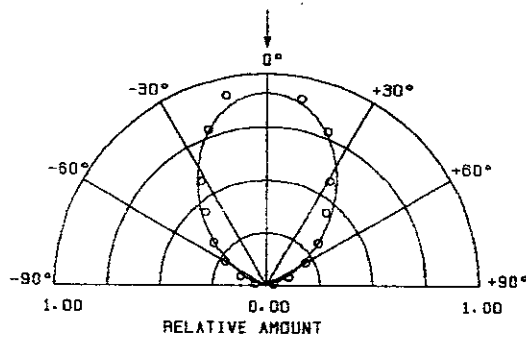
PIXE



INFORMATION

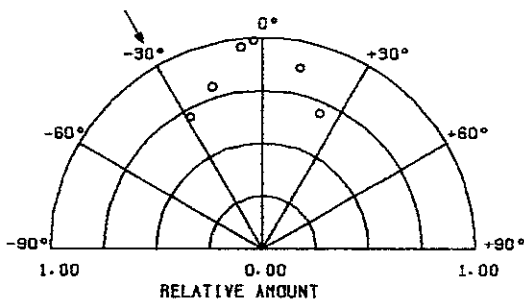
84 3 2		AU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM (S)	CU	0	6.15×10^{-3}
		COS ⁿ	N 2.35
ION	AU 79 197	REFERENCE	84.3
TARGET	CU 29 63.5		

RBS



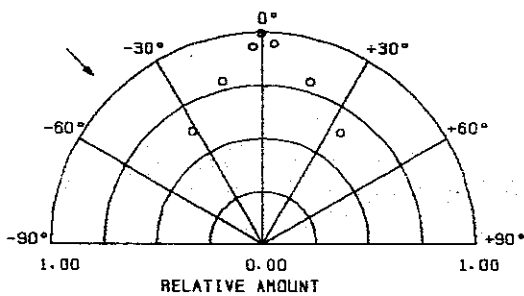
INFORMATION			
84 3 3		AU ⇒ CU	
INCIDENT ANGLE	30°	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM(S)	CU	Q	6.15×10^{-3}
ION AU 79 197		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	61.1°
		REFERENCE	84.3

PIXE



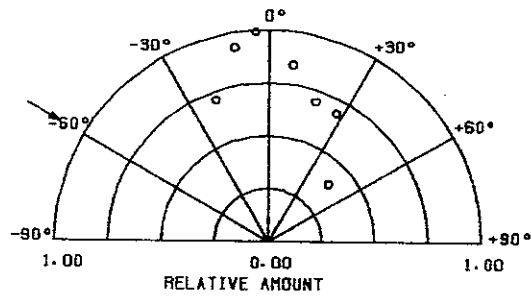
INFORMATION			
84 3 4		AU ⇒ CU	
INCIDENT ANGLE	45°	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM(S)	CU	Q	6.15×10^{-3}
ION AU 79 197		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	45.8°
		REFERENCE	84.3

PIXE



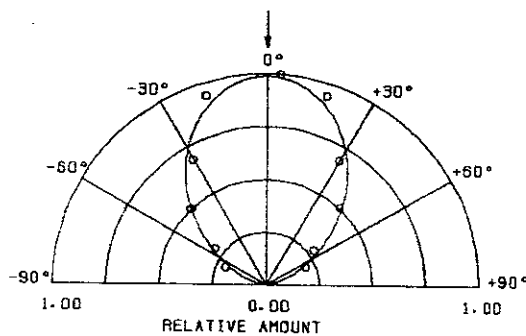
INFORMATION			
84 3 5		AU ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.25 X 10 ⁵
TARGET	POLY	EPSILON	9.26 X 10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.38 X 10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.15 X 10 ⁻³
ION AU 79 197		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	30.0°
		CAL.	30.6°
		REFERENCE	84.3

PIXE



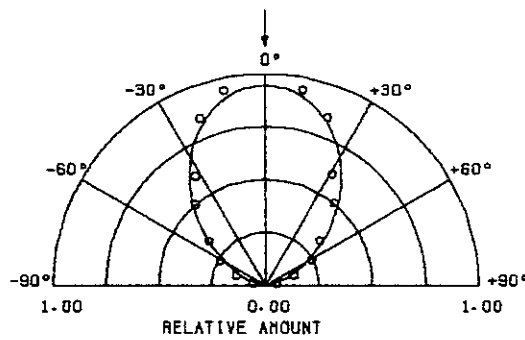
INFORMATION			
84 3 6		AU ⇒ CU	
INCIDENT ANGLE	0°	ENERGY (EV)	1.25 X 10 ⁵
TARGET	POLY	EPSILON	9.26 X 10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.38 X 10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.15 X 10 ⁻³
ION AU 79 197		COS ² N	2.01
TARGET CU 29 63.5		REFERENCE	84.3

PIXE



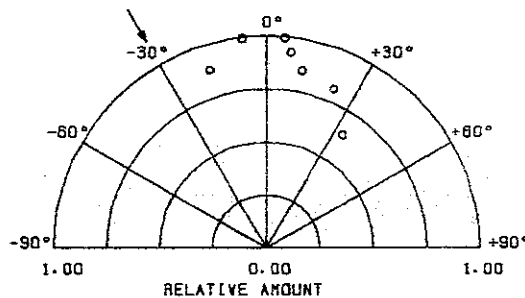
INFORMATION			
04 9 7		AU ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM (S)	CU	Q	6.15×10^{-3}
		COS ² N	2.14
ION	AU 79 197	REFERENCE	84.3
TARGET	CU 29 63.5		

RBS



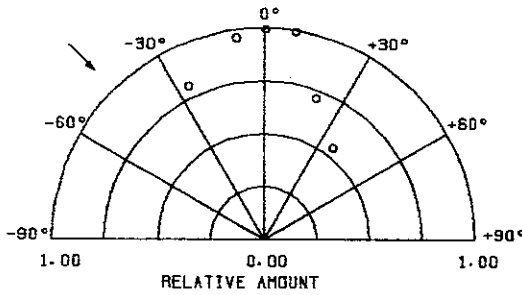
INFORMATION			
04 9 8		AU ⇒ CU	
INCIDENT ANGLE	30 °	ENERGY (EV)	1.25×10^5
TARGET	POLY	EPSILON	9.26×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.38×10^{-1}
SPUTTERED ATOM (S)	CU	Q	6.15×10^{-3}
		EJECTION ANGLE	
ION	AU 79 197	EXP.	0.00 °
TARGET	CU 29 63.5	CAL.	61.1 °
		REFERENCE	84.3

PIXE



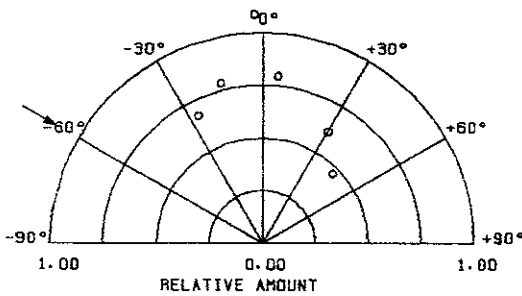
INFORMATION			
84 3 9		AU ⇒ CU	
INCIDENT ANGLE	45°	ENERGY (EV)	1.25 X10 ⁵
TARGET	POLY	EPSILON	9.26 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.38 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.15 X10 ⁻³
ION AU 79 197		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	45.8°
		REFERENCE	84.3

PIXE



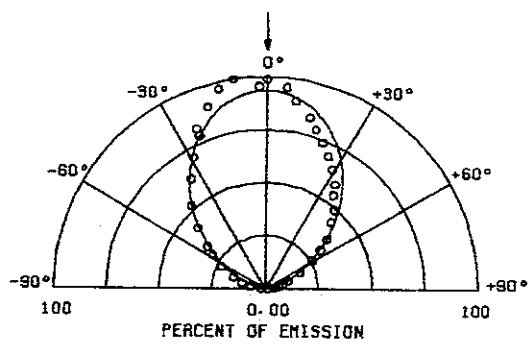
INFORMATION			
84 3 10		AU ⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	1.25 X10 ⁵
TARGET	POLY	EPSILON	9.26 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.38 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	6.15 X10 ⁻³
ION AU 79 197		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	30.6°
		REFERENCE	84.3

PIXE



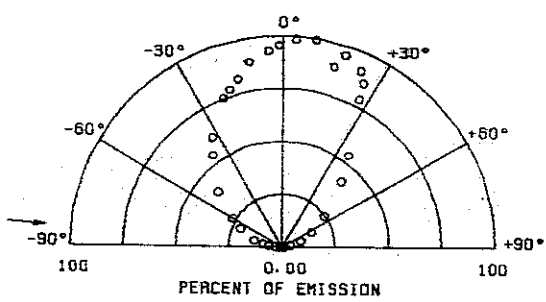
INFORMATION			
85 2 1			
AR ⇒ AU			
INCIDENT ANGLE	0°	ENERGY (EV)	5.00 X 10 ⁵
TARGET	POLY	EPSILON	2.14
ENVIRONMENT	UHV	GAMMA	5.61 X 10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	3.69 X 10 ⁻³
		COS ²	N 2.02
ION AR 18 39.9			
TARGET AU 79 197		REFERENCE 85.2	

D=1.3 N=3.3 F=1.4E+18 ION/SQ.CM



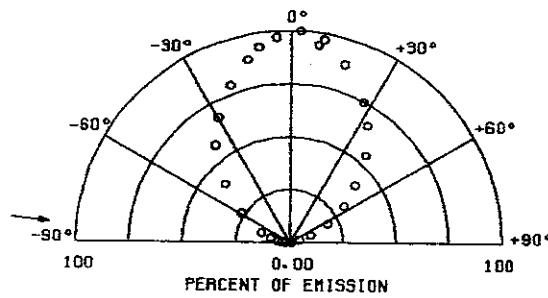
INFORMATION			
85 2 2			
AR ⇒ AU			
INCIDENT ANGLE	85°	ENERGY (EV)	5.00 X 10 ⁵
TARGET	POLY	EPSILON	2.14
ENVIRONMENT	UHV	GAMMA	5.61 X 10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	3.69 X 10 ⁻³
		EJECTION ANGLE	
ION AR 18 39.9		EXP.	10.00
TARGET AU 79 197		CAL.	5.32°
		REFERENCE 85.2	

D=0.5 N=1.4 F=5.4E+18 ION/SQ.CM



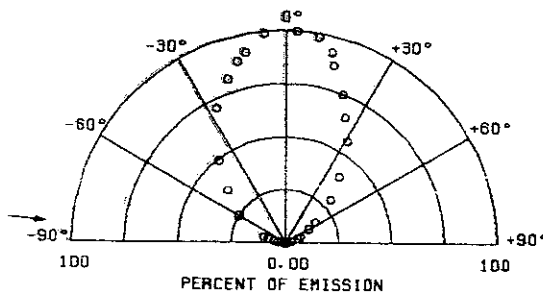
INFORMATION			
65 2 3		AR ⇒ AU	
INCIDENT ANGLE	85°	ENERGY (EV)	1.50×10^5
TARGET	POLY	EPSILON	6.41×10^{-1}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	6.73×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	5.00°
		CAL.	5.58°
		REFERENCE	85.2

D=0.5 F=2.6E+16 ION/SQ.CM



INFORMATION			
65 2 4		AR ⇒ AU	
INCIDENT ANGLE	85°	ENERGY (EV)	9.00×10^5
TARGET	POLY	EPSILON	3.84
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	Q	2.75×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET AU 79 197		EXP.	5.00°
		CAL.	5.24°
		REFERENCE	85.2

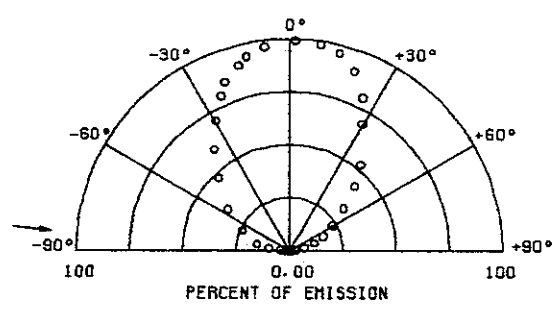
D=0.5 N=1.3 F=5.7E+16 ION/SQ.CM



INFORMATION

85 2 5 XE ⇒ AU			
INCIDENT ANGLE	85°	ENERGY (EV)	2.00 X10 ⁵
TARGET	POLY	EPSILON	1.81 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.60 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	4.45 X10 ⁻³
		EJECTION ANGLE	
ION	XE 54 131	EXP.	5.00°
TARGET	AU 79 197	CAL.	5.38°
		REFERENCE	85.2

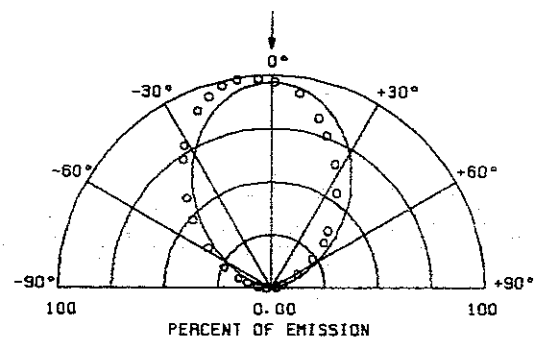
D=0.5 N=1.4 F=1.6E+16 IONS/SQ. CM



INFORMATION

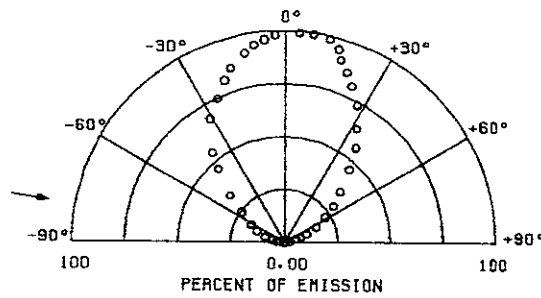
85 2 6 AR ⇒ CU			
INCIDENT ANGLE	0°	ENERGY (EV)	5.00 X10 ⁵
TARGET	POLY	EPSILON	5.35
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	2.71 X10 ⁻³
		COS ² N	1.89
ION	AR 18 39.9	REFERENCE	85.2
TARGET	CU 29 63.5		

D=4.4 N=1.6 F=7.4E+16 IONS/SQ. CM



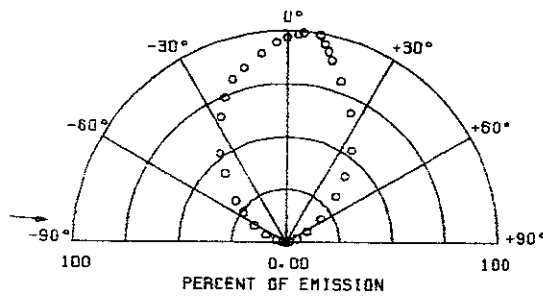
INFORMATION					
85 2 7					
AR ⇒ CU					
INCIDENT ANGLE	80°	ENERGY (EV)	5.00 X10 ⁵		
TARGET	POLY	EPSILON	5.35		
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹		
SPUTTERED ATOM(S)	CU	Q	2.71 X10 ⁻⁹		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	10.08		
TARGET	CU 29 63.5	CAL.	10.2°		
		REFERENCE	85.2		

D=3.2 N=1.7 F=1.0E+18 IONS/SQ. CM



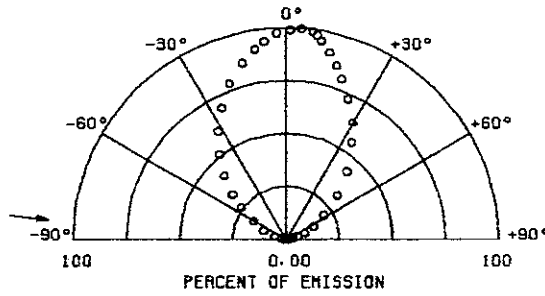
INFORMATION					
85 2 6					
AR ⇒ CU					
INCIDENT ANGLE	85°	ENERGY (EV)	5.00 X10 ⁵		
TARGET	POLY	EPSILON	5.35		
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹		
SPUTTERED ATOM(S)	CU	Q	2.71 X10 ⁻⁹		
		EJECTION ANGLE			
ION	AR 18 39.9	EXP.	5.00°		
TARGET	CU 29 63.5	CAL.	5.23°		
		REFERENCE	85.2		

D=0.2 N=0.6 F=5.8E+16 IONS/SQ. CM



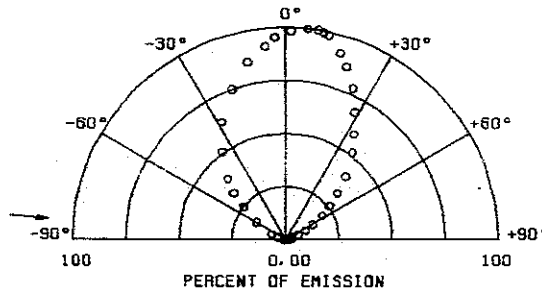
INFORMATION			
85 2 9		AR ⇒ CU	
INCIDENT ANGLE	85°	ENERGY (EV)	1.50 X10 ⁵
TARGET	POLY	EPSILON	1.61
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	4.95 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	5.00°
		CAL.	5.43°
		REFERENCE	85.2

D=0.1 N=1.3 F=2.3E+16 IONS/SQ. CM



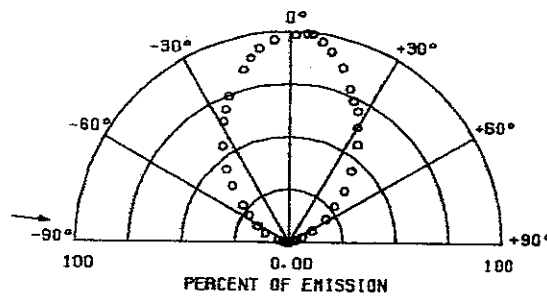
INFORMATION			
85 2 10		AR ⇒ CU	
INCIDENT ANGLE	85°	ENERGY (EV)	9.00 X10 ⁵
TARGET	POLY	EPSILON	9.63
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	2.02 X10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	5.00°
		CAL.	5.17°
		REFERENCE	85.2

D=0.3 N=0.8 F=9.3E+16 IONS/SQ. CM



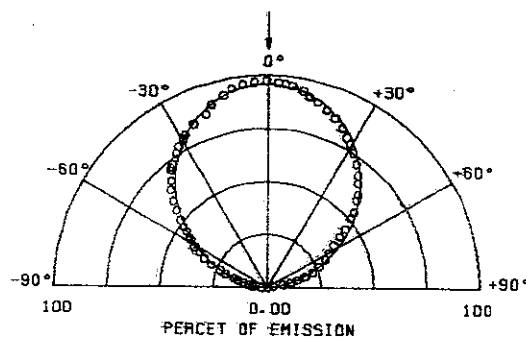
INFORMATION			
85 2 11		XE ⇒ CU	
INCIDENT ANGLE	85°	ENERGY (EV)	2.00×10^5
TARGET	POLY	EPSILON	3.14×10^{-1}
ENVIRONMENT	UHV	GAMMA	8.79×10^{-1}
SPUTTERED ATOM(S)	CU	0	4.46×10^{-3}
		EJECTION ANGLE	
ION	XE 54 131	EXP.	5.00°
TARGET	CU 29 63.5	CAL.	5.38°
		REFERENCE	85.2

D=0.5 N=1.4 F=4.4E+16 IONS/SQ. CM



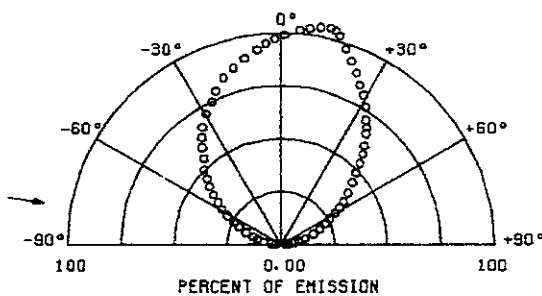
INFORMATION			
85 2 12		AR ⇒ ZR	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00×10^5
TARGET	POLY	EPSILON	4.12
ENVIRONMENT	UHV	GAMMA	8.47×10^{-1}
SPUTTERED ATOM(S)	ZR	0	3.84×10^{-3}
		COS ² N	1.33
ION	AR 18 39.9	REFERENCE	85.2
TARGET	ZR 40 91.2		

D=0.3 MICRO-METER N=3.5
F=6.0E+16 IONS/SQ. CM



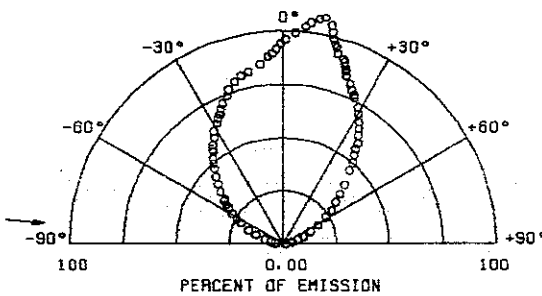
INFORMATION			
85 2 13		AR ⇒ ZR	
INCIDENT ANGLE	80°	ENERGY (EV)	5.00 X 10 ⁵
TARGET	POLY	EPSILON	4.12
ENVIRONMENT	UHV	GAMMA	8.47 X 10 ⁻¹
SPUTTERED ATOM(S)	ZR	Q	3.84 X 10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET ZR 40 91.2		EXP.	11.0°
		CAL.	10.3°
		REFERENCE	85.2

D=4.2 MICRO-METER N=1.7
F=2.8E+18 IONS/SQ. CM



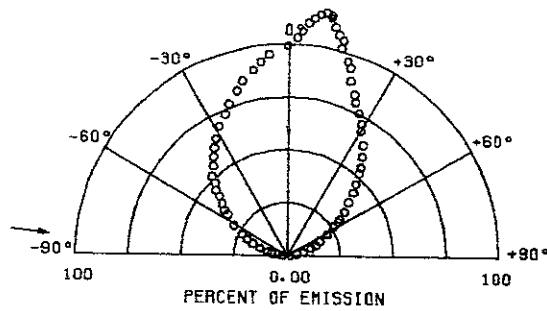
INFORMATION			
85 2 14		AR ⇒ ZR	
INCIDENT ANGLE	85°	ENERGY (EV)	5.00 X 10 ⁵
TARGET	POLY	EPSILON	4.12
ENVIRONMENT	UHV	GAMMA	8.47 X 10 ⁻¹
SPUTTERED ATOM(S)	ZR	Q	3.84 X 10 ⁻³
ION AR 18 39.9		EJECTION ANGLE	
TARGET ZR 40 91.2		EXP.	9.00°
		CAL.	5.33°
		REFERENCE	85.2

D=0.1 MICRO-METER N=3.5
F=6.0E+16 IONS/SQ. CM



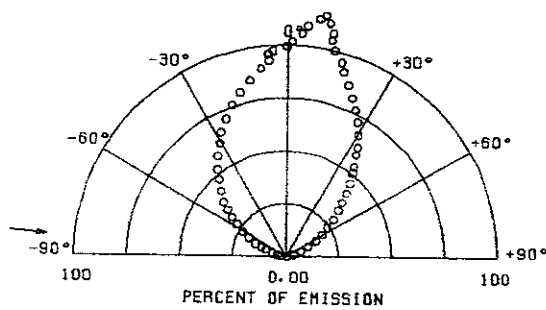
INFORMATION			
85 2 15		AR \Rightarrow ZR	
INCIDENT ANGLE	85°	ENERGY (EV)	1.50×10^5
TARGET	POLY	EPSILON	1.24
ENVIRONMENT	UHV	GAMMA	8.47×10^{-1}
SPUTTERED ATOM(S)	ZR	θ	7.01×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET ZR 40 91.2		EXP.	9.00°
		CAL.	5.60°
		REFERENCE	85.2

D=0.08 MICRO-METER N=2.2
F=4.1E+16 IONS/SQ. CM



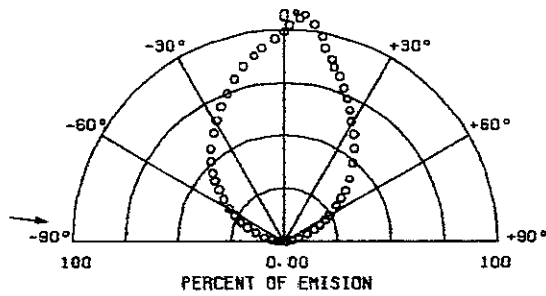
INFORMATION			
85 2 16		AR \Rightarrow ZR	
INCIDENT ANGLE	85°	ENERGY (EV)	9.00×10^5
TARGET	POLY	EPSILON	7.41
ENVIRONMENT	UHV	GAMMA	8.47×10^{-1}
SPUTTERED ATOM(S)	ZR	θ	2.86×10^{-3}
ION AR 18 39.9		EJECTION ANGLE	
TARGET ZR 40 91.2		EXP.	8.00°
		CAL.	5.25°
		REFERENCE	85.2

D=0.1 MICRO-METER N=3.3
F=7.0E+16 IONS/SQ. CM



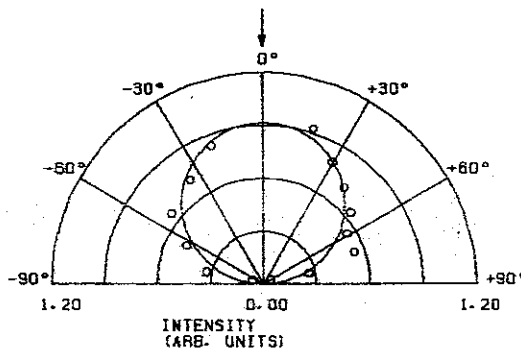
INFORMATION			
85 2 17		XE ⇒ ZR	
INCIDENT ANGLE	85°	ENERGY (EV)	2.00×10^5
TARGET	POLY	EPSILON	2.74×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.68×10^{-1}
SPUTTERED ATOM(S)	ZR	Q	5.68×10^{-3}
ION XE 54 131		EJECTION ANGLE	
TARGET ZR 40 91.2		EXP.	5.00°
		CAL.	5.49°
		REFERENCE	85.2

D=0.05 MICRO-METER N=1.1
 F=6.6E+15 IONS/SQ. CM



INFORMATION			
85 3 1		NE ⇒ AG	
INCIDENT ANGLE	0°	ENERGY (EV)	3.00×10^4
TARGET	POLY	EPSILON	4.70×10^{-1}
ENVIRONMENT	HV	GAMMA	5.31×10^{-1}
SPUTTERED ATOM(S)	AG	Q	1.36×10^{-2}
ION NE 10 20.2		COS ² N	9.80×10^{-1}
TARGET AG 47 108		REFERENCE	85.3

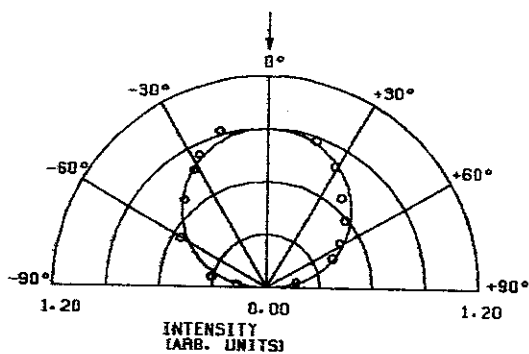
10E-5TORR 1.0E+19 IONS/SQ. CM



INFORMATION

85 3 2		AR ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00×10^4
TARGET	POLY	EPSILON	1.42×10^{-1}
ENVIRONMENT	HV	GAMMA	7.89×10^{-1}
SPUTTERED ATOM(S)	AG	0	1.37×10^{-2}
		cos ⁿ N	8.40×10^{-1}
ION AR 18 39.9		REFERENCE 85.3	
TARGET AG 47 108			

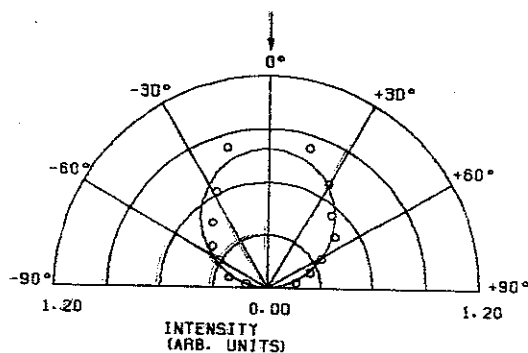
2.0E+19 IONS/SQ. CM



INFORMATION

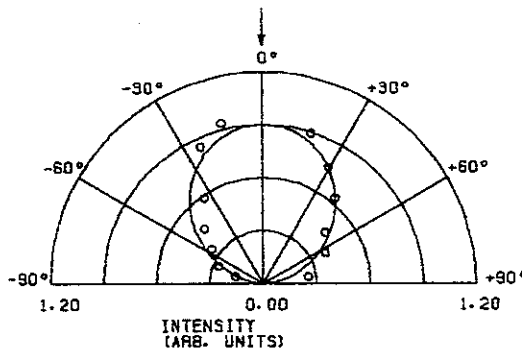
85 3 3		KR ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00×10^4
TARGET	POLY	EPSILON	5.00×10^{-2}
ENVIRONMENT	HV	GAMMA	9.84×10^{-1}
SPUTTERED ATOM(S)	AG	0	1.22×10^{-2}
		cos ⁿ N	1.15
ION KR 36 83.8		REFERENCE 85.3	
TARGET AG 47 108			

1.0E+19 IONS/SQ. CM

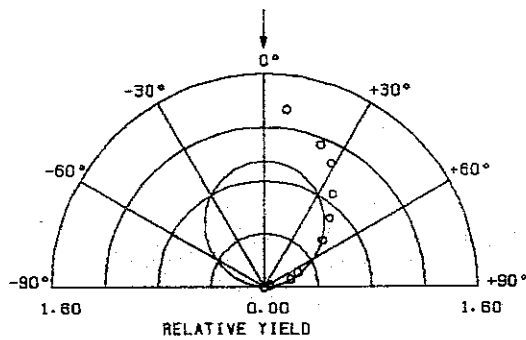


INFORMATION			
85 9 4		XE ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.75 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.90 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	9.96 X10 ⁻³
		COS ²	N 1.31
ION	XE 54 131	REFERENCE	85.3
TARGET	AG 47 108		

7.8E+18 IONS/SQ. CM

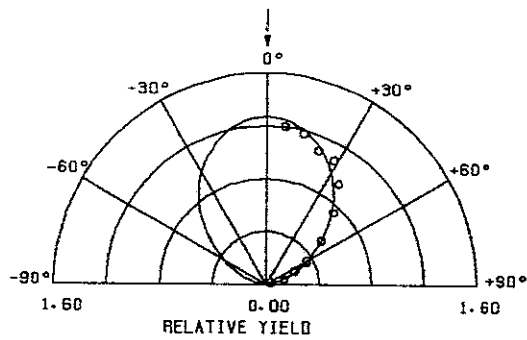


INFORMATION			
85 4 1		AR ⇒ GE	
INCIDENT ANGLE	0 °	ENERGY (EV)	8.00 X10 ⁴
TARGET	POLY	EPSILON	7.99 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.16 X10 ⁻¹
SPUTTERED ATOM(S)	GE	Q	7.25 X10 ⁻³
		COS ²	N 1.17
ION	AR 18 39.9	REFERENCE	85.4
TARGET	GE 32 72.5		



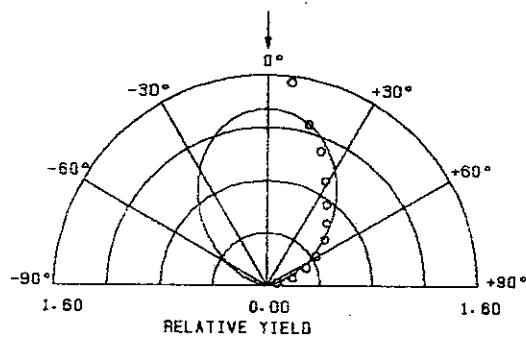
INFORMATION

85 4 2		AR ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	8.00×10^4
TARGET	POLY	EPSILON	8.56×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	6.78×10^{-3}
		COS ⁿ	N 1.82
ION AR 18 39.9		REFERENCE 85.4	
TARGET CU 29 63.5			

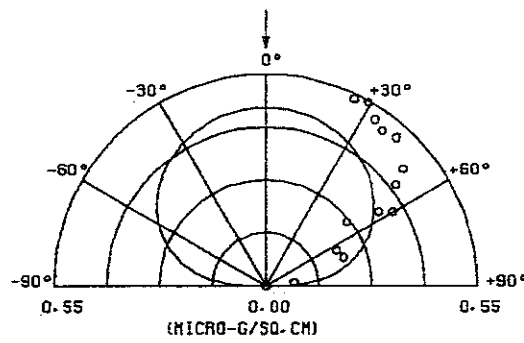


INFORMATION

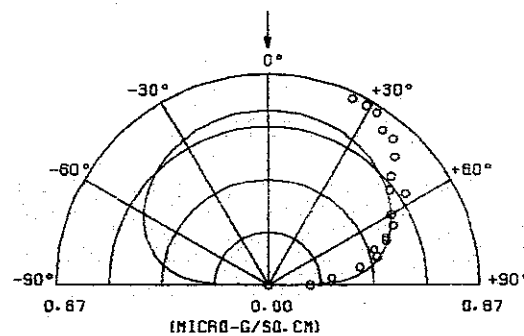
85 4 3		AR ⇒ PT	
INCIDENT ANGLE	0 °	ENERGY (EV)	8.00×10^4
TARGET	POLY	EPSILON	3.47×10^{-1}
ENVIRONMENT	UHV	GAMMA	5.64×10^{-1}
SPUTTERED ATOM(S)	PT	Q	1.14×10^{-2}
		COS ⁿ	N 1.96
ION AR 18 39.9		REFERENCE 85.4	
TARGET PT 78 195			



INFORMATION			
85 5 1		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.30 X10 ³
TARGET	POLY	EPSILON	9.83 X10 ⁻³
ENVIRONMENT	UHV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	5.44 X10 ⁻²
		COS ² N	5.40 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	85.5
TARGET	AU 79 197		

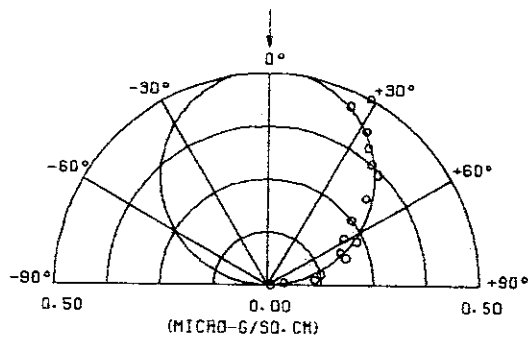


INFORMATION			
85 5 2		AR ⇒ AU	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	2.14 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	5.61 X10 ⁻¹
SPUTTERED ATOM(S)	AU	Q	3.69 X10 ⁻²
		COS ² N	3.00 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	85.5
TARGET	AU 79 197		



INFORMATION

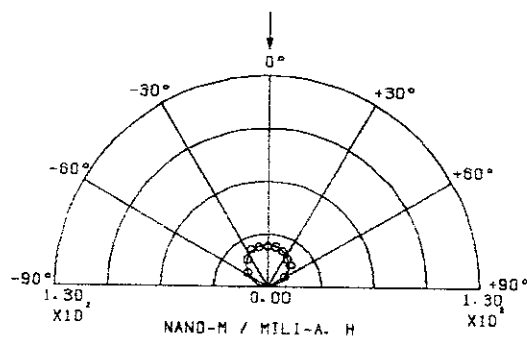
05 5 3 AR => AU	
INCIDENT ANGLE 0 °	ENERGY 7.80 X10 ³ (EV)
TARGET POLY	EPSILON 3.33 X10 ⁻²
ENVIRONMENT UHV	GAMMA 5.61 X10 ⁻¹
SPUTTERED ATOM(S)	Q 2.95 X10 ⁻²
	COS ^θ N 1.04
<hr/>	
ION AR 18 39.9	REFERENCE 85.5
TARGET AU 79 197	



INFORMATION

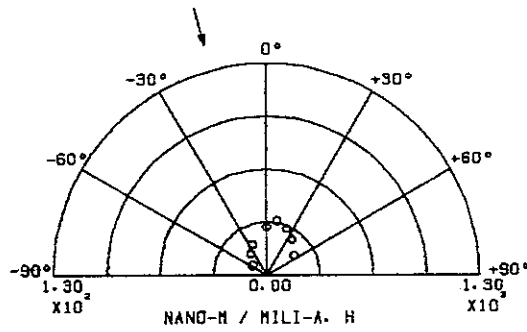
05 11 1 N => SI-N	
INCIDENT ANGLE 0 °	ENERGY 1.00 X10 ⁴ (EV)
TARGET POLY	EPSILON 8.13 X10 ⁻¹
ENVIRONMENT UHV	GAMMA 8.88 X10 ⁻¹
SPUTTERED ATOM(S)	Q 2.29 X10 ⁻²
	COS ^θ N 1.03
<hr/>	
ION N 7 14.0	REFERENCE 85.11
TARGET SI 14 28.1 N 7 14.0	

SI



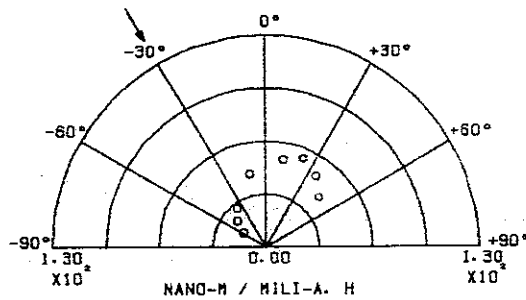
INFORMATION			
85 11 2		N ⇒ SI-N	
INCIDENT ANGLE	15°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	8.13 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.29 X10 ⁻²
ION N 7 14.0		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	83.7°
N 7 14.0		CAL.	90.0°
		REFERENCE	85.11

SI



INFORMATION			
85 11 3		N ⇒ SI-N	
INCIDENT ANGLE	90°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	8.13 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.29 X10 ⁻²
ION N 7 14.0		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	83.7°
N 7 14.0		CAL.	64.2°
		REFERENCE	85.11

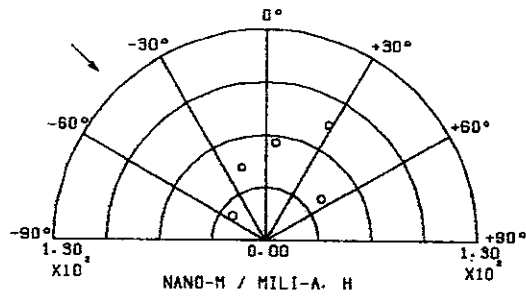
SI



INFORMATION

85 11 4		N ⇒ SI-N	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	8.13×10^{-1}
ENVIRONMENT	UHV	GAMMA	8.88×10^{-1}
SPUTTERED ATOM(S)	SI	Q	2.29×10^{-2}
EJECTION ANGLE		EXP.	53.3°
		CAL.	47.6°
ION	N 7 14.0	REFERENCE 85.11	
TARGET	SI 14 28.1 N 7 14.0		

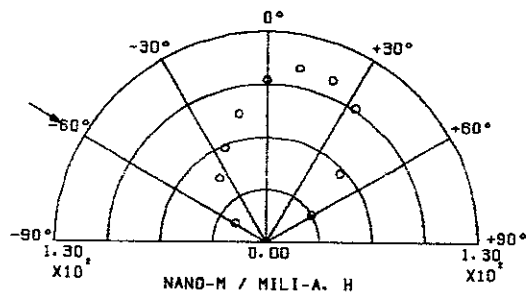
SI



INFORMATION

85 11 5		N ⇒ SI-N	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	8.13×10^{-1}
ENVIRONMENT	UHV	GAMMA	8.88×10^{-1}
SPUTTERED ATOM(S)	SI	Q	2.29×10^{-2}
EJECTION ANGLE		EXP.	33.9°
		CAL.	32.3°
ION	N 7 14.0	REFERENCE 85.11	
TARGET	SI 14 28.1 N 7 14.0		

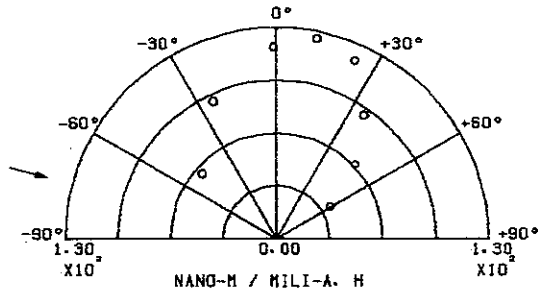
SI



INFORMATION

85 11 6		N ⇒ SI-N	
INCIDENT ANGLE	75°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	8.13 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.29 X10 ⁻²
		EJECTION ANGLE	
ION	N 7 14.0	EXP.	23.8°
TARGET	SI 14 28.1	CAL.	17.0°
	N 7 14.0		
		REFERENCE	85.11

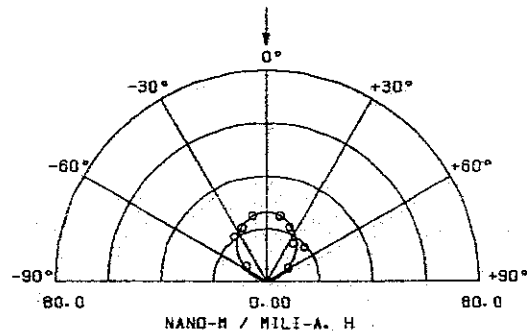
SI



INFORMATION

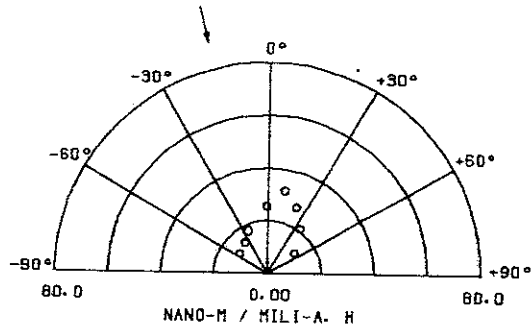
85 11 7		N ⇒ SI-N	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	N	Q	2.22 X10 ⁻²
		COS ²	
ION	N 7 14.0	N	1.57
TARGET	SI 14 28.1		
	N 7 14.0	REFERENCE	85.11

N



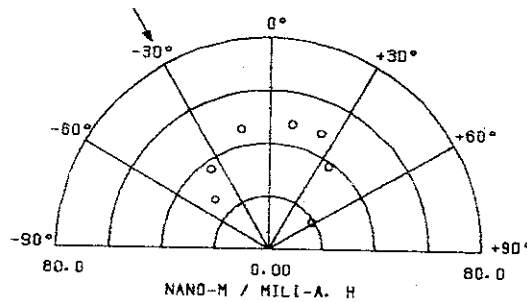
INFORMATION			
85 11 8			
N ⇒ SI-N			
INCIDENT ANGLE	15°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	N	Q	2.22 X10 ⁻²
ION N 7 14.0		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	11.4°
N 7 14.0		CAL.	87.8°
REFERENCE 85.11			

N



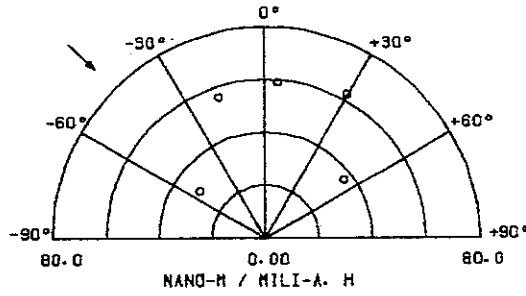
INFORMATION			
85 11 9			
N ⇒ SI-N			
INCIDENT ANGLE	30°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	N	Q	2.22 X10 ⁻²
ION N 7 14.0		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	29.8°
N 7 14.0		CAL.	64.1°
REFERENCE 85.11			

N



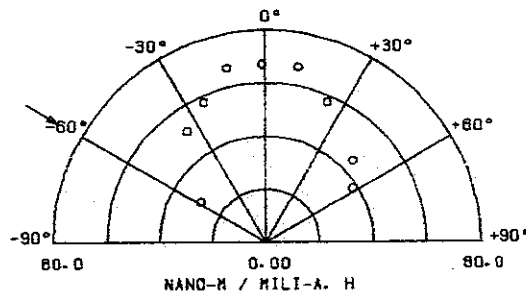
INFORMATION			
85 11 10			
N ⇒ SI-N			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X 10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X 10 ⁻¹
SPUTTERED ATOM(S)	N	Q	2.22 X 10 ⁻²
ION		EJECTION ANGLE	
	N 7 14.0	EXP.	53.3°
TARGET	SI 14 28.1	CAL.	47.8°
	N 7 14.0	REFERENCE 85.11	

N



INFORMATION			
85 11 11			
N ⇒ SI-N			
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X 10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X 10 ⁻¹
SPUTTERED ATOM(S)	N	Q	2.22 X 10 ⁻²
ION		EJECTION ANGLE	
	N 7 14.0	EXP.	46.7°
TARGET	SI 14 28.1	CAL.	32.2°
	N 7 14.0	REFERENCE 85.11	

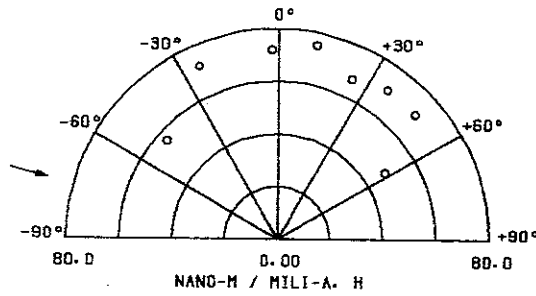
N



INFORMATION

85 11 12		N ⇒ SI-N	
INCIDENT ANGLE	75°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.39
ENVIRONMENT	UHV	GAMMA	8.88 X10 ⁻¹
SPUTTERED ATOM(S)	N	□	2.22 X10 ⁻²
EJECTION ANGLE			
EXP.		36.2°	
CAL.		17.0°	
ION	N 7 14.0		
TARGET	SI 14 28.1		
	N 7 14.0		
		REFERENCE	85-11

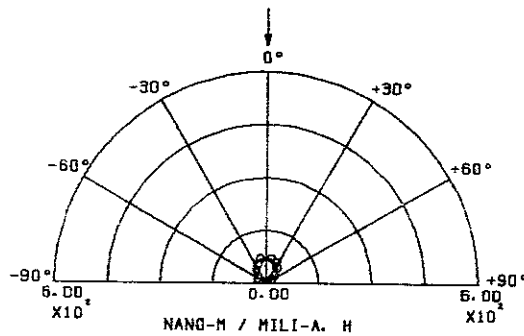
N



INFORMATION

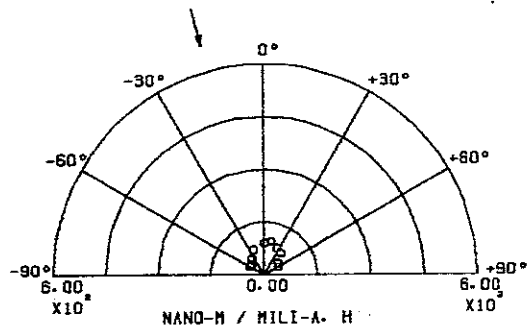
85 11 19		AR ⇒ SI-N	
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.68 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	□	2.19 X10 ⁻²
COS ²			
N		5.18 X10 ⁻¹	
ION	AR 18 39.9		
TARGET	SI 14 28.1		
	N 7 14.0		
		REFERENCE	85-11

SI



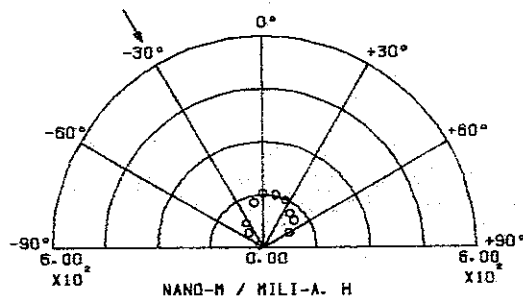
INFORMATION			
85 11 14			
AR \Rightarrow SI-N			
INCIDENT ANGLE	15°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	1.69×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.70×10^{-1}
SPUTTERED ATOM(S)	SI	Q	2.19×10^{-2}
ION		EJECTION ANGLE	
AR	18 39.9	EXP.	12.6°
TARGET	SI 14 28.1	CAL.	87.1°
N	7 14.0	REFERENCE 85.11	

SI



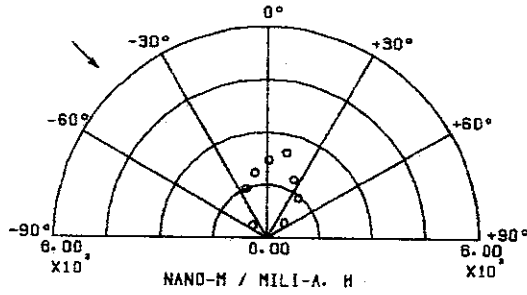
INFORMATION			
85 11 15			
AR \Rightarrow SI-N			
INCIDENT ANGLE	30°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	1.69×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.70×10^{-1}
SPUTTERED ATOM(S)	SI	Q	2.19×10^{-2}
ION		EJECTION ANGLE	
AR	18 39.9	EXP.	60.0°
TARGET	SI 14 28.1	CAL.	84.0°
N	7 14.0	REFERENCE 85.11	

SI



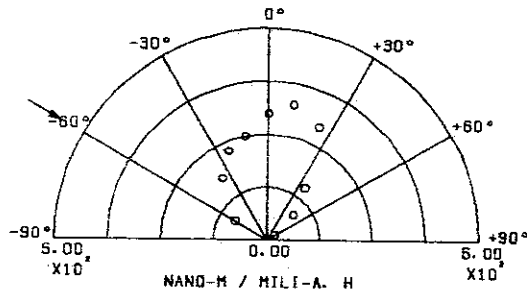
INFORMATION			
85 11 16			
AR ⇒ SI-N			
INCIDENT ANGLE	45°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.69 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	0	2.19 X10 ⁻²
		EJECTION ANGLE	
		EXP.	50.2°
		CAL.	47.7°
ION	AR 18	39.9	
TARGET	SI 14	28.1	
	N 7	14.0	
			REFERENCE 85.11

SI



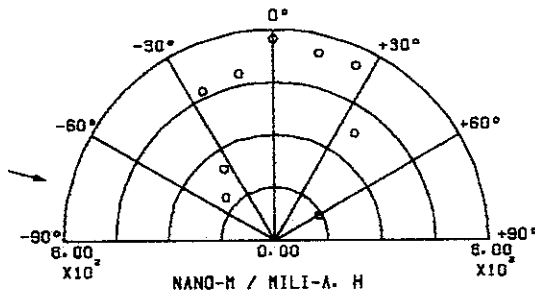
INFORMATION			
85 11 17			
AR ⇒ SI-N			
INCIDENT ANGLE	60°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.69 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	0	2.19 X10 ⁻²
		EJECTION ANGLE	
		EXP.	36.0°
		CAL.	32.2°
ION	AR 18	39.9	
TARGET	SI 14	28.1	
	N 7	14.0	
			REFERENCE 85.11

SI



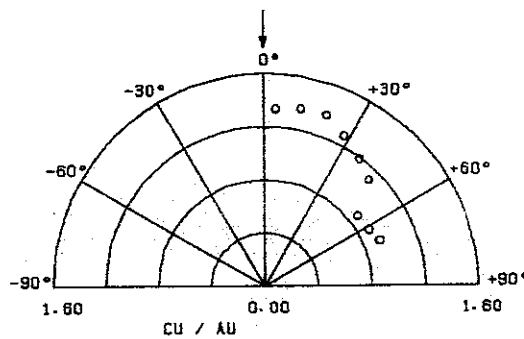
INFORMATION			
85 11 18			
AR ⇒ SI-N			
INCIDENT ANGLE	75°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	EPSILON	1.69 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.19 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	25.2°
N 7 14.0		CAL.	16.9°
REFERENCE 85.11			

SI



INFORMATION			
86 1 1			
AR ⇒ AU-CU			
INCIDENT ANGLE	0°	ENERGY (EV)	1.00 X10 ⁴
TARGET	POLY	REFERENCE 86.1	
ENVIRONMENT	UHV		
SPUTTERED ATOM(S)	CU / AU		
ION AR 18 39.9			
TARGET AU 79 197			
CU 29 63.5			

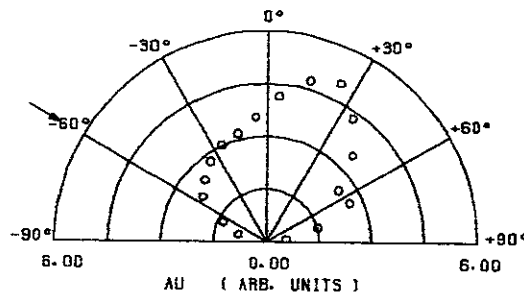
AU-CU (43 AT %)



INFORMATION

86 1 2		AR ⇒ AU-CU	
INCIDENT ANGLE	60°	ENERGY (EV)	8.00×10^2
TARGET	POLY	EPSILON	3.42×10^{-3}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	AU	D	9.22×10^{-2}
ION		EJECTION ANGLE	
	AR 18 39.9	EXP.	34.9°
TARGET	AU 79 197	CAL.	39.5°
	CU 29 63.5	REFERENCE	86.1

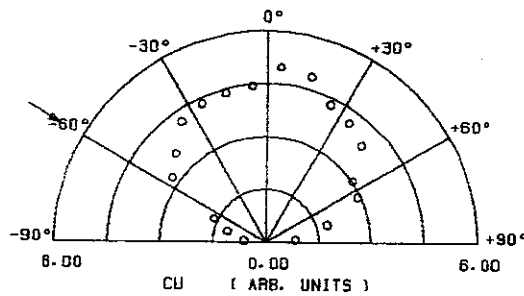
OBLIQUE INCIDENCE



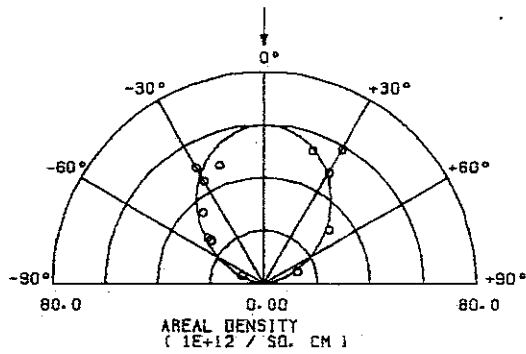
INFORMATION

86 1 3		AR ⇒ AU-CU	
INCIDENT ANGLE	60°	ENERGY (EV)	8.00×10^2
TARGET	POLY	EPSILON	8.56×10^{-3}
ENVIRONMENT	UHV	GAMMA	5.61×10^{-1}
SPUTTERED ATOM(S)	CU	D	6.78×10^{-2}
ION		EJECTION ANGLE	
	AR 18 39.9	EXP.	34.8°
TARGET	AU 79 197	CAL.	36.9°
	CU 29 63.5	REFERENCE	86.1

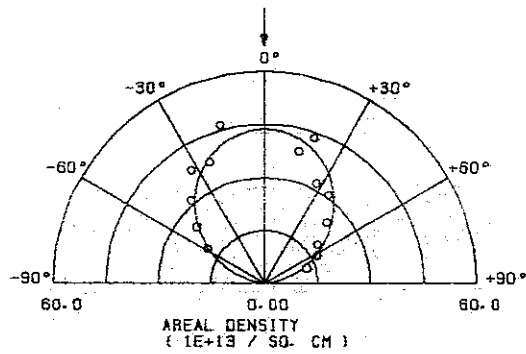
OBLIQUE INCIDENCE



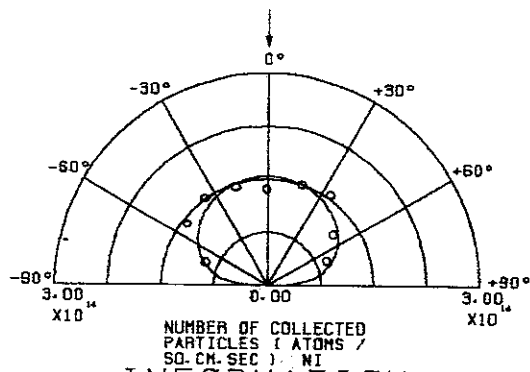
INFORMATION			
86 2 1			
BR		⇒ NB	
INCIDENT ANGLE	0 °	ENERGY (EV)	0.00
TARGET	POLY	EPSILON	0.00
ENVIRONMENT	UHV	GAMMA	9.94×10^{-1}
SPUTTERED ATOM(S)	NB	Q	0.00
		COS ²	N 1.61
ION	BR 35 79.9	REFERENCE	86.2
TARGET	NB 41 92.9		



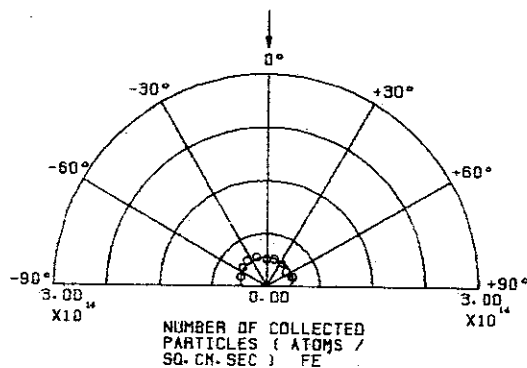
INFORMATION			
86 2 2			
BR		⇒ NB	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^5
TARGET	POLY	EPSILON	2.90×10^{-1}
ENVIRONMENT	UHV	GAMMA	9.94×10^{-1}
SPUTTERED ATOM(S)	NB	Q	8.73×10^{-3}
		COS ²	N 1.36
ION	BR 35 79.9	REFERENCE	86.2
TARGET	NB 41 92.9		



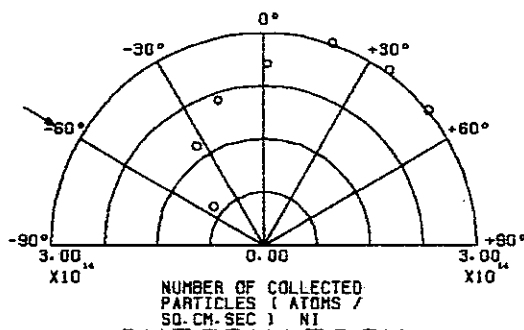
INFORMATION			
06 3 1			
AR ⇒ NI-FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.08 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM (S)	NI	Q	6.79 X10 ⁻²
		COS ² N	4.50 X10 ⁻¹
ION	AR 18 39.9		
TARGET	NI 28 58.7	REFERENCE	06.3
	FE 26 55.8		



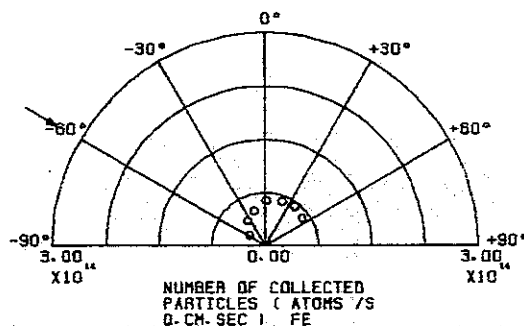
INFORMATION			
06 3 2			
AR ⇒ NI-FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00 X10 ³
TARGET	POLY	EPSILON	1.16 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.64 X10 ⁻¹
SPUTTERED ATOM (S)	FE	Q	6.63 X10 ⁻²
		COS ² N	6.00 X10 ⁻²
ION	AR 18 39.9		
TARGET	NI 28 58.7	REFERENCE	06.3
	FE 26 55.8		



INFORMATION			
86 3 3		AR ⇒ NI-FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	1.08×10^{-2}
ENVIRONMENT	HV	GAMMA	9.64×10^{-1}
SPUTTERED ATOM(S)	NI	Q	6.79×10^{-2}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	35.6°
TARGET	NI 28 58.7	CAL.	38.9°
	FE 26 55.8		
		REFERENCE	86.3

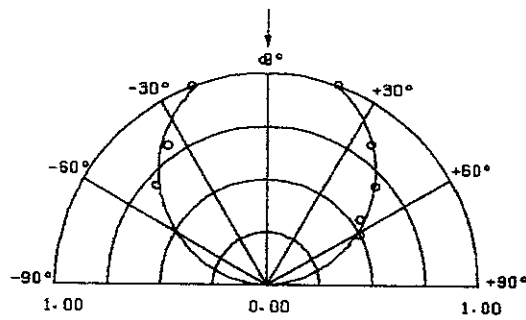


INFORMATION			
88 3 4		AR ⇒ NI-FE	
INCIDENT ANGLE	60°	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	1.16×10^{-2}
ENVIRONMENT	HV	GAMMA	9.64×10^{-1}
SPUTTERED ATOM(S)	FE	Q	6.63×10^{-2}
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	36.7°
TARGET	NI 28 58.7	CAL.	36.8°
	FE 26 55.8		
		REFERENCE	86.3



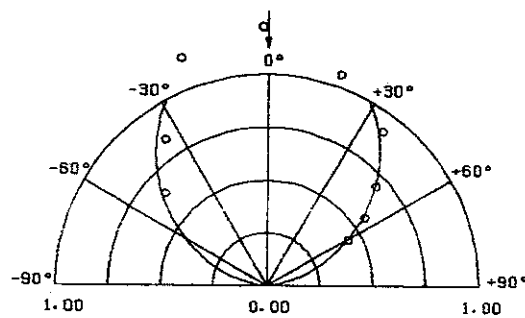
INFORMATION

86 6 1		AR ⇒ FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	1.00×10^3
TARGET	POLY	EPSILON	1.16×10^{-2}
ENVIRONMENT	HV	GAMMA	9.72×10^{-1}
SPUTTERED ATOM (S)	FE	Q	6.63×10^{-2}
		COS θ	N 1.12
ION	AR 18 39.9	REFERENCE	86.6
TARGET	FE 26 55.8		

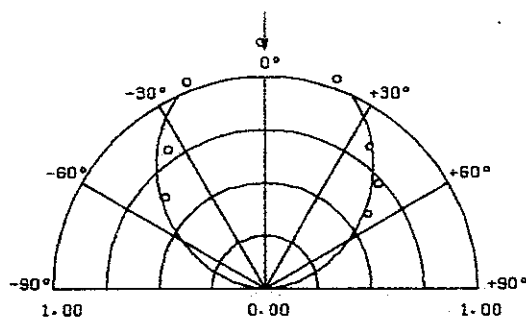


INFORMATION

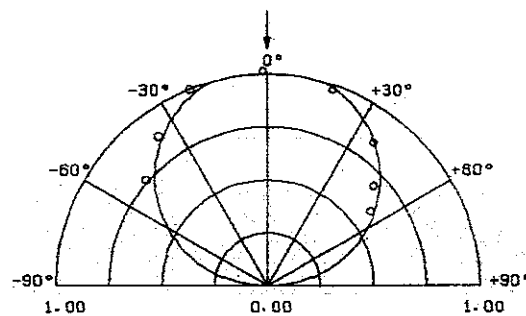
86 6 2		AR ⇒ FE	
INCIDENT ANGLE	0 °	ENERGY (EV)	3.00×10^3
TARGET	POLY	EPSILON	3.47×10^{-2}
ENVIRONMENT	HV	GAMMA	9.72×10^{-1}
SPUTTERED ATOM (S)	FE	Q	3.83×10^{-2}
		COS θ	N 1.45
ION	AR 18 39.9	REFERENCE	86.6
TARGET	FE 26 55.8		



INFORMATION			
86 6 3			
AR ⇒ FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	EPSILON	2.31 X10 ⁻²
ENVIRONMENT	HV	GAMMA	9.72 X10 ⁻¹
SPUTTERED ATOM(S)	FE	Q	4.69 X10 ⁻²
		COS ^θ	N 1.31
ION	AR 18 39.9		
TARGET	FE 26 55.8	REFERENCE	86.6

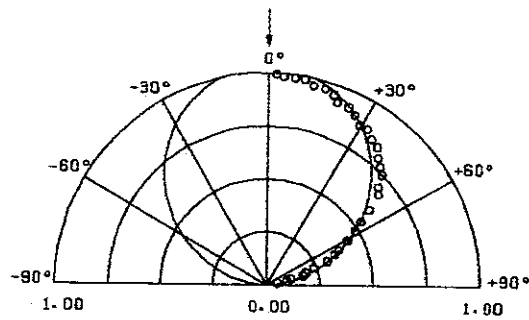


INFORMATION			
86 6 4			
AR ⇒ FE			
INCIDENT ANGLE	0 °	ENERGY (EV)	6.00 X10 ²
TARGET	POLY	EPSILON	6.94 X10 ⁻³
ENVIRONMENT	HV	GAMMA	9.72 X10 ⁻¹
SPUTTERED ATOM(S)	FE	Q	8.56 X10 ⁻²
		COS ^θ	N 9.30 X10 ⁻¹
ION	AR 18 39.9		
TARGET	FE 26 55.8	REFERENCE	86.6



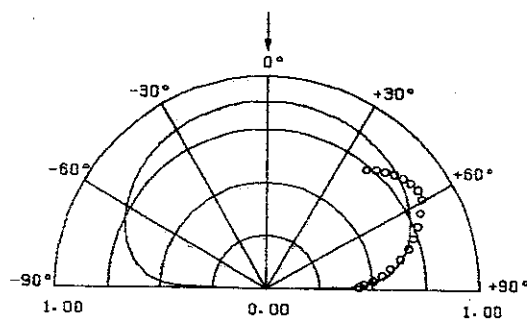
INFORMATION			
86 7 1			
AR		⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.55 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM (S)	AG	Q	2.73 X10 ⁻²
		COS ⁿ	
		N	1.18
ION	AR 18 39.9		
TARGET	AG 47 108	REFERENCE	86.7

TOTAL FLUENCE 1.5E+17 UHV



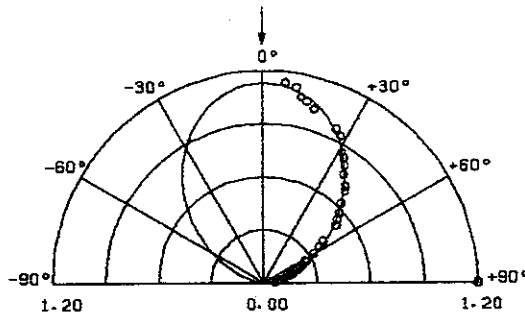
INFORMATION			
86 7 2			
AR		⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.55 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM (S)	AG	Q	2.73 X10 ⁻²
		COS ⁿ	
		N	2.00 X10 ⁻¹
ION	AR 18 39.9		
TARGET	AG 47 108	REFERENCE	86.7

TOTAL FLUENCE 5E+17 HIGH DOSE

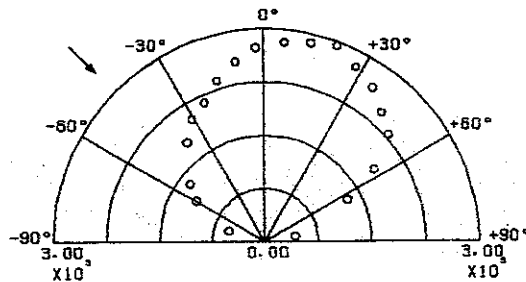


INFORMATION			
06 7 3		AR ⇒ AG	
INCIDENT ANGLE	0°	ENERGY (EV)	5.00×10^3
TARGET	POLY	EPSILON	3.55×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.89×10^{-1}
SPUTTERED ATOM(S)	AG	Q	2.73×10^{-2}
		COS ²	N 1.74
ION	AR 18 39.9	REFERENCE 86.7	
TARGET	AG 47 108		

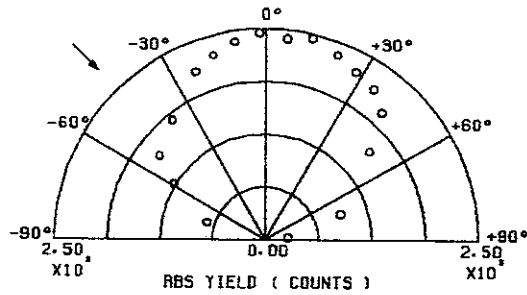
TOTAL FLUENCE (IONS / SQ. CM)
2E-5 TORR



INFORMATION			
06 8 1		XE ⇒ U-02	
INCIDENT ANGLE	45°	ENERGY (EV)	8.00×10^3
TARGET	POLY	EPSILON	6.48×10^{-3}
ENVIRONMENT	-----	GAMMA	9.16×10^{-1}
SPUTTERED ATOM(S)	U	Q	2.75×10^{-2}
		EJECTION ANGLE	
		EXP.	49.2°
		CAL.	48.4°
ION	XE 54 131	REFERENCE 86.8	
TARGET	U 92 238		
	Q 8 16.0		

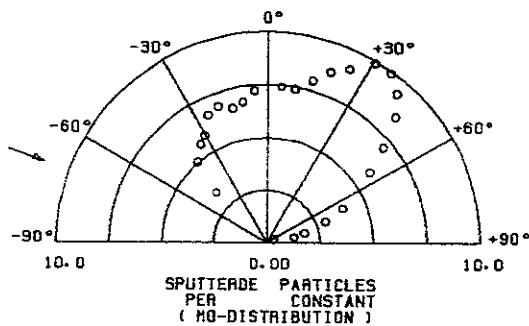


INFORMATION			
86 8 2		AR ⇒ U-02	
INCIDENT ANGLE	45°	ENERGY (EV)	1.00×10^4
TARGET	POLY	EPSILON	8.09×10^{-9}
ENVIRONMENT	-----	GAMMA	9.16×10^{-1}
SPUTTERED ATOM(S)	U	0	2.46×10^{-2}
ION XE 54 131		EJECTION ANGLE	
TARGET	U 92 238	EXP.	49.3°
	O 8 16.0	CAL.	48.1°
		REFERENCE	86.8



INFORMATION			
86 12 1		HE ⇒ MO	
INCIDENT ANGLE	70°	ENERGY (EV)	6.00×10^3
TARGET	POLY	EPSILON	6.81×10^{-1}
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	0	8.60×10^{-2}
ION HE 2 4.00		EJECTION ANGLE	
TARGET	MO 42 95.9	EXP.	35.0°
		CAL.	28.0°
		REFERENCE	86.12

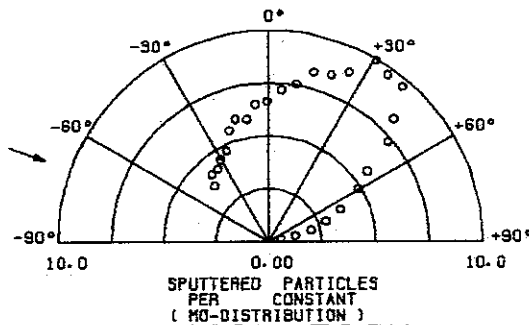
5E-8 TORR



INFORMATION

86 12 2		HE ⇒ MO	
INCIDENT ANGLE	70°	ENERGY (EV)	6.00 X10 ³
TARGET	POLY	EPSILON	6.81 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	1.54 X10 ⁻¹
SPUTTERED ATOM(S)	MO	Q	8.60 X10 ⁻²
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	30.0°
		CAL.	28.0°
		REFERENCE	86.12

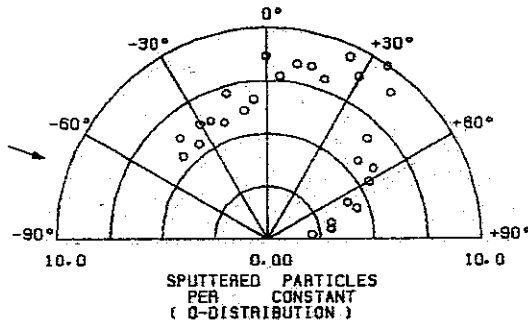
2E-5 TORR



INFORMATION

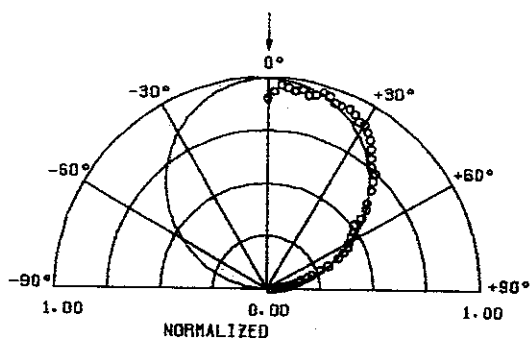
88 12 3		HE ⇒ MO	
INCIDENT ANGLE	70°	ENERGY (EV)	6.00 X10 ³
TARGET	POLY	EPSILON	4.66
ENVIRONMENT	HV	GAMMA	1.54 X10 ⁻¹
SPUTTERED ATOM(S)	0	Q	2.60 X10 ⁻²
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	30.0°
		CAL.	22.4°
		REFERENCE	86.12

2E-5 TORR



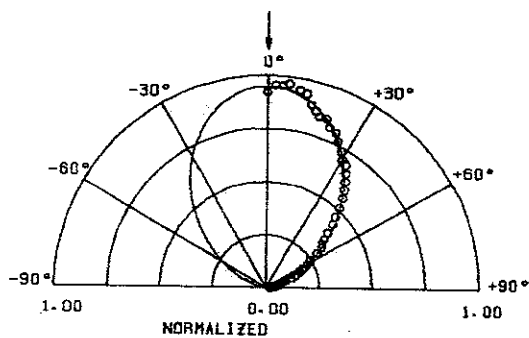
INFORMATION			
86 14 1		AR ⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.70 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.06 X10 ⁻¹
SPUTTERED ATOM (S)	RH	Q	3.78 X10 ⁻²
		COS ^N	N 1.11
ION	AR 18 39.9	REFERENCE	86.14
TARGET	RH 45 103		

ENERGY-RESOLVED DISTRIBUTION
2EV



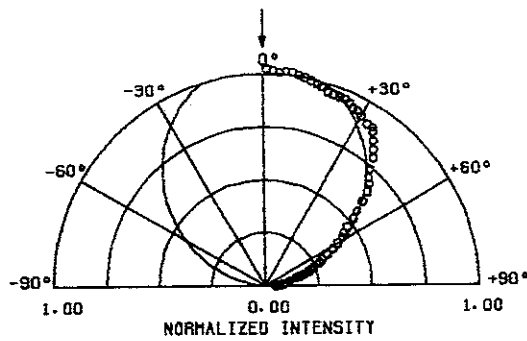
INFORMATION			
86 14 2		AR ⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.70 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.06 X10 ⁻¹
SPUTTERED ATOM (S)	RH	Q	3.78 X10 ⁻²
		COS ^N	N 2.03
ION	AR 18 39.9	REFERENCE	86.14
TARGET	RH 45 103		

ENERGY-RESOLVED DISTRIBUTION
12EV



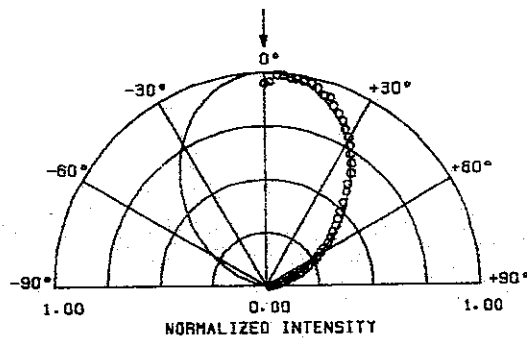
INFORMATION			
86 15 1			
AR		⇒ IN	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^3
TARGET	POLY	EPSILON	3.43×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.66×10^{-1}
SPUTTERED ATOM(S)	IN	Ω	2.57×10^{-2}
		COS θ	N 1.31
ION	AR 18 39.9		
TARGET	IN 49 115	REFERENCE	86.15

ENERGY-INTEGRATED POLAR ANGLE DISTRIBUTION



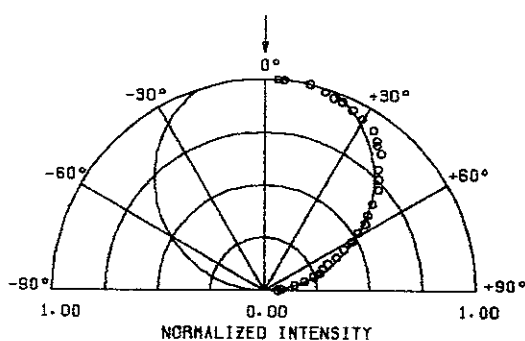
INFORMATION			
86 15 2			
AR		⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^3
TARGET	POLY	EPSILON	3.70×10^{-2}
ENVIRONMENT	UHV	GAMMA	8.06×10^{-1}
SPUTTERED ATOM(S)	RH	Ω	3.76×10^{-2}
		COS θ	N 1.81
ION	AR 18 39.9		
TARGET	RH 45 103	REFERENCE	86.15

ENERGY-INTEGRATED POLAR ANGLE DISTRIBUTION



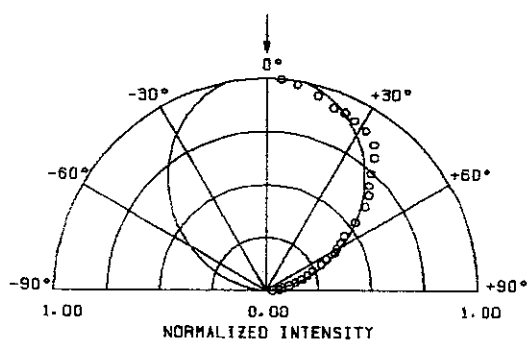
INFORMATION			
86 15 3			
AR ⇒ IN			
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^{-3}
TARGET	POLY	EPSILON	3.43×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.66×10^{-1}
SPUTTERED ATOM(S)	IN	Q	2.57×10^{-2}
		cos θ	
		N	1.06
ION	AR 18 39.9		
TARGET	IN 49 115	REFERENCE	86.15

ENRGY-RESOLVED POLAR ANGLE
DISTRIBUTION 2-4eV



INFORMATION			
86 15 4			
AR ⇒ IN			
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00×10^{-3}
TARGET	POLY	EPSILON	3.43×10^{-2}
ENVIRONMENT	UHV	GAMMA	7.66×10^{-1}
SPUTTERED ATOM(S)	IN	Q	2.57×10^{-2}
		cos θ	
		N	1.31
ION	AR 18 39.9		
TARGET	IN 49 115	REFERENCE	86.15

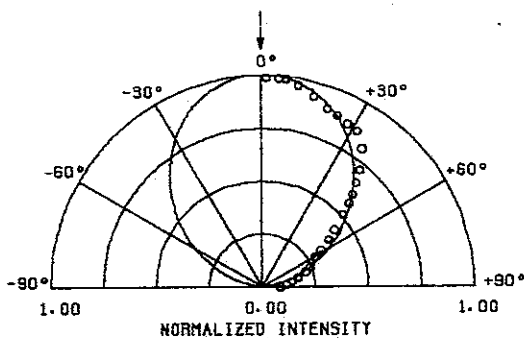
ENRGY-RESOLVED POLAR ANGLE
DISTRIBUTION 4-6eV



INFORMATION

86 15 5		AR ⇒ IN	
INCIDENT ANGLE	0 °	ENERGY (eV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.43 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.66 X10 ⁻¹
SPUTTERED ATOM(S)	IN	Q	2.57 X10 ⁻²
		cos ² θ	N 1.49
ION AR 16 39.9		REFERENCE 86.15	
TARGET IN 49 115			

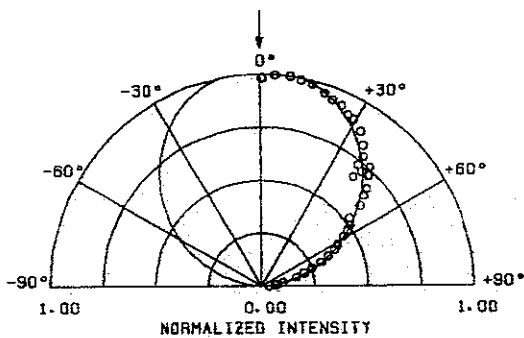
ENRGY-RESOLVED POLAR ANGLE DISTRIBUTION 14-16eV



INFORMATION

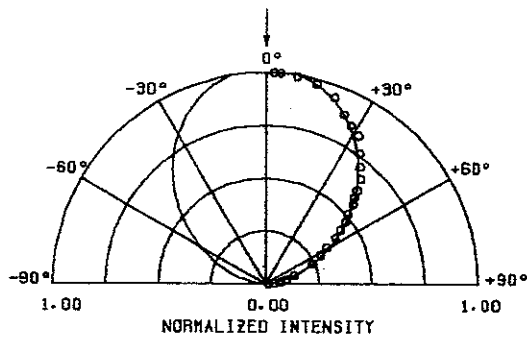
86 15 6		AR ⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (eV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.70 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.06 X10 ⁻¹
SPUTTERED ATOM(S)	RH	Q	3.78 X10 ⁻²
		cos ² θ	N 1.22
ION AR 16 39.9		REFERENCE 86.15	
TARGET RH 45 103			

ENRGY-RESOLVED POLAR ANGLE DISTRIBUTION 2-4eV



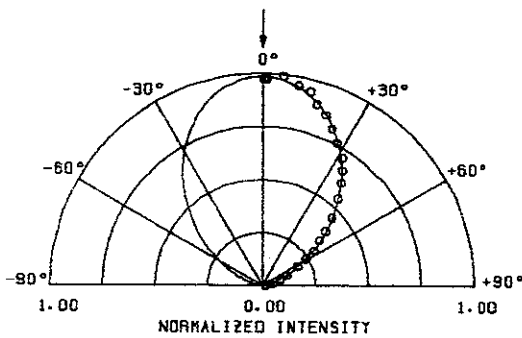
INFORMATION			
86 15 7			
AR		⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.70 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.06 X10 ⁻¹
SPUTTERED ATOM (S)	RH	Q	3.78 X10 ⁻²
		COS ⁿ	N
			1.56
ION	AR 18 39.9	REFERENCE 86.15	
TARGET	RH 45 103		

ENERGY-RESOLVED POLAR ANGLE DISTRIBUTION 4-6eV



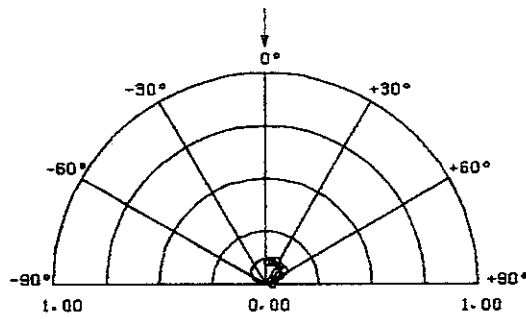
INFORMATION			
86 15 8			
AR		⇒ RH	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.70 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	8.06 X10 ⁻¹
SPUTTERED ATOM (S)	RH	Q	3.78 X10 ⁻²
		COS ⁿ	N
			2.11
ION	AR 18 39.9	REFERENCE 86.15	
TARGET	RH 45 103		

ENERGY-RESOLVED POLAR ANGLE DISTRIBUTION 14-16eV



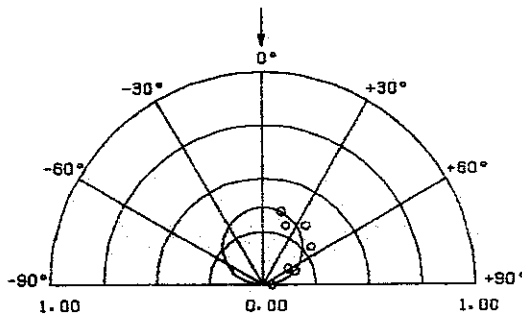
INFORMATION			
86 18 1		AR \Rightarrow CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00×10^3
TARGET	POLY	EPSILON	2.14×10^{-2}
ENVIRONMENT	UHV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	4.29×10^{-2}
		COS $^{\circ}$	
		N	7.20×10^{-1}
ION	AR 18 39.9	REFERENCE	86.16
TARGET	CU 29 63.5		

F=1.9E+17 IONS/SQ. CM



INFORMATION			
86 18 2		AR \Rightarrow CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00×10^3
TARGET	POLY	EPSILON	2.14×10^{-2}
ENVIRONMENT	UHV	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	4.29×10^{-2}
		COS $^{\circ}$	
		N	8.80×10^{-1}
ION	AR 18 39.9	REFERENCE	86.16
TARGET	CU 29 63.5		

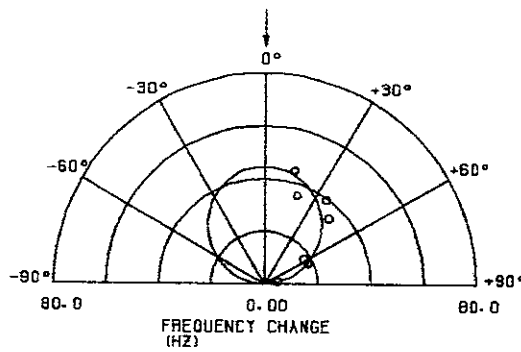
F=4.8E+17 IONS/SQ. CM



INFORMATION

86 16 3		AR ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	EPSILON	2.14 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM (S)	CU	Q	4.29 X10 ⁻²
		COS ^N	N 1.12
ION AR 18 39.9		REFERENCE 86.16	
TARGET CU 29 63.5			

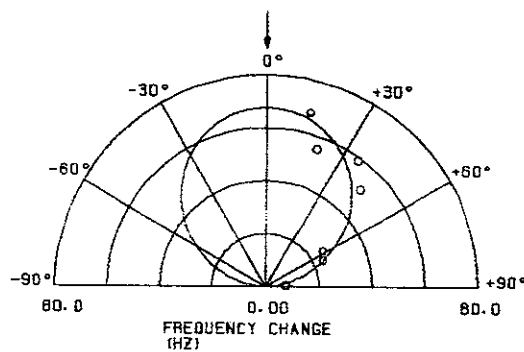
F=7.4E+17 IONS/SQ. CM



INFORMATION

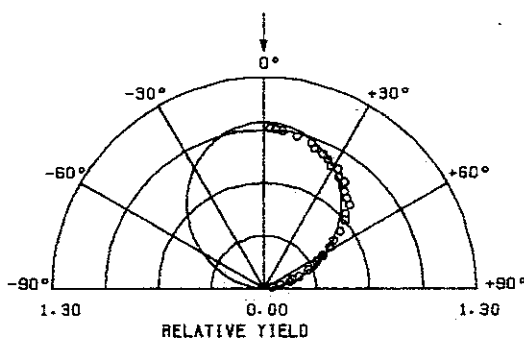
86 16 4		AR ⇒ CU	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ³
TARGET	POLY	EPSILON	2.14 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM (S)	CU	Q	4.29 X10 ⁻²
		COS ^N	N 1.17
ION AR 18 39.9		REFERENCE 86.16	
TARGET CU 29 63.5			

F=1.1E+18 IONS/SQ. CM



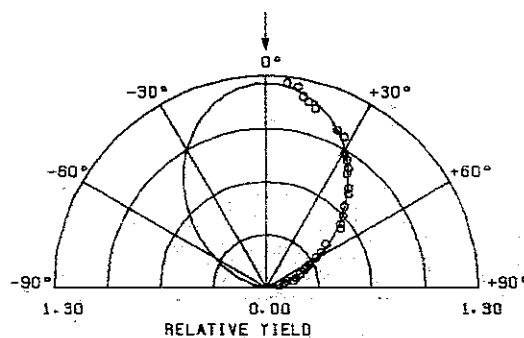
INFORMATION			
86 17 1			
AR		=> AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.55 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	2.73 X10 ⁻²
		COS ²	N 1.23
ION	AR 18 39.9		
TARGET	AG 47 108	REFERENCE	86.17

P=6.8E-8 TORR
F=1.5E+17 IONS/SQ. CM



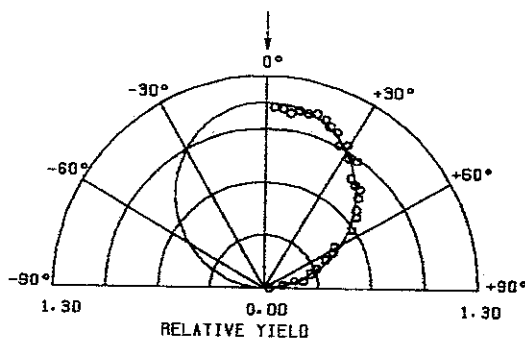
INFORMATION			
86 17 2			
AR		=> AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.55 X10 ⁻²
ENVIRONMENT	HV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	2.73 X10 ⁻²
		COS ²	N 1.77
ION	AR 18 39.9		
TARGET	AG 47 108	REFERENCE	86.17

P=4E-5 TORR
F=2E+17 IONS/SQ. CM



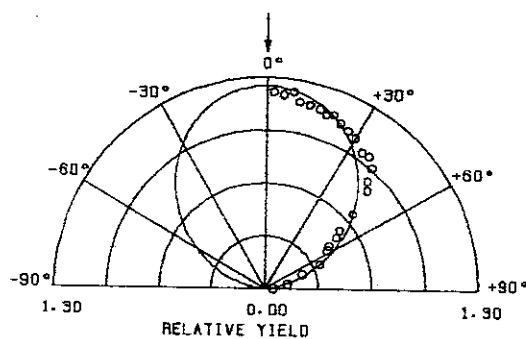
INFORMATION			
86 17 3		N2 ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	1.21 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	4.07 X10 ⁻¹
SPUTTERED ATOM (S)	AG	D	3.81 X10 ⁻²
		COS "	N 1.11
ION	N 7 14.0	REFERENCE	86.17
TARGET	AG 47 108		

P=1.2E-7 TORR
F=9E+17 IONS/SQ. CM

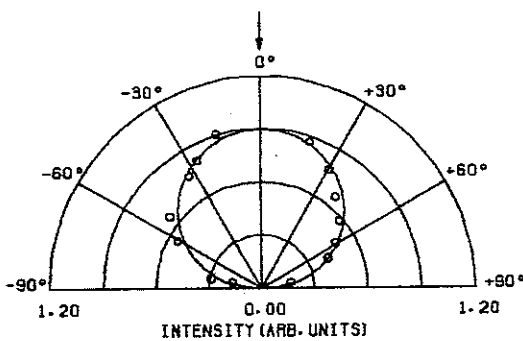


INFORMATION			
88 17 4		N2 ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	1.21 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	4.07 X10 ⁻¹
SPUTTERED ATOM (S)	AG	D	3.81 X10 ⁻²
		COS "	N 1.38
ION	N 7 14.0	REFERENCE	86.17
TARGET	AG 47 108		

P=4E-5 TORR
F=3E+17 IONS/SQ. CM

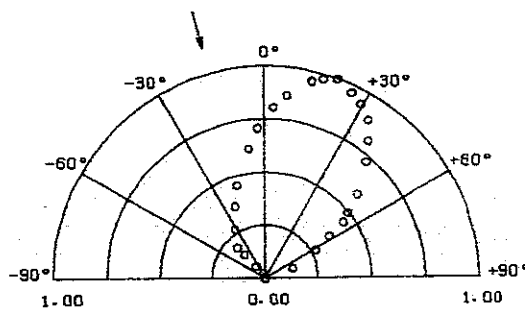


INFORMATION			
86 18 1			
AR		⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	2.00 X10 ⁴
TARGET	POLY	EPSILON	1.42 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	7.89 X10 ⁻¹
SPUTTERED ATOM (S)	AG	Q	1.37 X10 ⁻²
		COS ²	N 8.50 X10 ⁻¹
ION	AR 18 39.9	REFERENCE	86.18
TARGET	AG 47 108		



INFORMATION			
87 2 1			
XE		⇒ SI	
INCIDENT ANGLE	15 °	ENERGY (EV)	2.00 X10 ⁴
TARGET	POLY	EPSILON	3.82 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	5.81 X10 ⁻¹
SPUTTERED ATOM (S)	SI	Q	2.00 X10 ⁻²
		EJECTION ANGLE	
ION	XE 54 131	EXP.	13.9 °
TARGET	SI 14 28.1	CAL.	84.8 °
		REFERENCE	87.2

TRAPPED XE

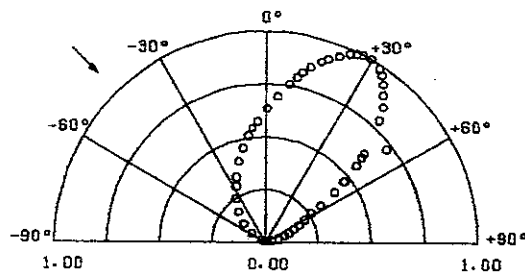


INFORMATION

87 2 2
XE ⇒ SI

INCIDENT ANGLE	45°	ENERGY (EV)	2.00×10^4
TARGET	POLY	EPSILON	3.82×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.81×10^{-1}
SPUTTERED ATOM (SI)	SI	Q	2.00×10^{-2}
ION XE 54 131		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	52.2°
		CAL.	47.5°
			REFERENCE 87.2

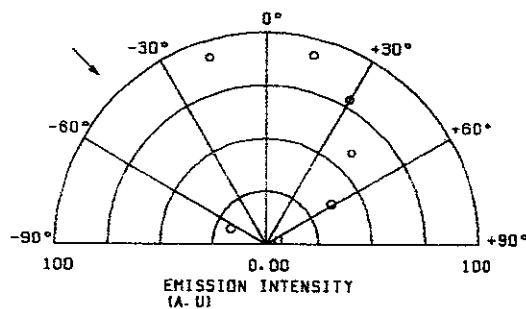
TRAPPED XE



INFORMATION

87 2 3
XE ⇒ SI

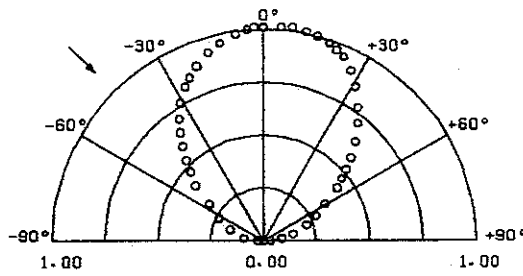
INCIDENT ANGLE	45°	ENERGY (EV)	2.00×10^4
TARGET	POLY	EPSILON	3.82×10^{-2}
ENVIRONMENT	UHV	GAMMA	5.81×10^{-1}
SPUTTERED ATOM (SI)	SI	Q	2.00×10^{-2}
ION XE 54 131		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	0.00°
		CAL.	47.5°
			REFERENCE 87.2



INFORMATION

87 2 4		AR ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X 10 ⁴
TARGET	POLY	EPSILON	3.38 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X 10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	1.55 X 10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET SI 14 28.1		EXP. 0.00°	
		CAL. 46.9°	
REFERENCE 87.2			

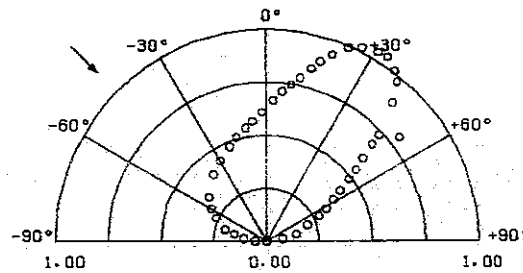
SI



INFORMATION

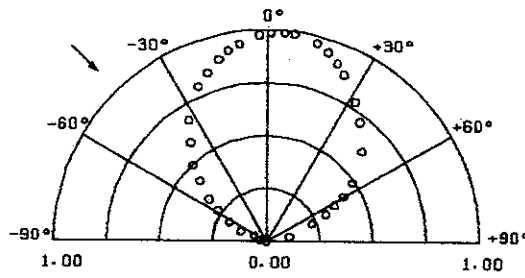
87 2 5		AR ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X 10 ⁴
TARGET	POLY	EPSILON	3.38 X 10 ⁻¹
ENVIRONMENT	UHV	GAMMA	9.70 X 10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	1.55 X 10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET SI 14 28.1		EXP. 52.2°	
		CAL. 46.9°	
REFERENCE 87.2			

TRAPPED AR



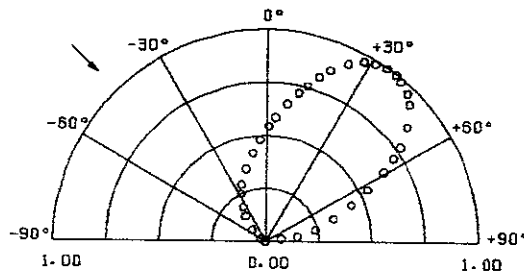
INFORMATION			
87 2 6		KR ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X 10 ⁴
TARGET	POLY	EPSILON	8.95 X 10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.52 X 10 ⁻¹
SPUTTERED ATOM (SI)	SI	δ	1.76 X 10 ⁻²
		EJECTION ANGLE	
ION	KR 36 83.8	EXP.	10.08
TARGET	SI 14 28.1	CAL.	47.2°
		REFERENCE	87.2

SI



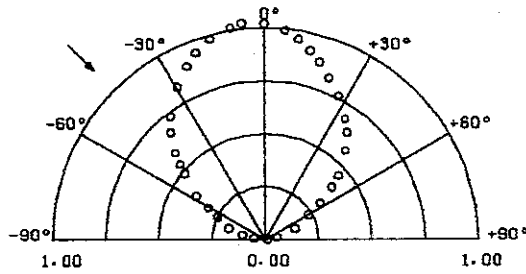
INFORMATION			
87 2 7		KR ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X 10 ⁴
TARGET	POLY	EPSILON	8.95 X 10 ⁻²
ENVIRONMENT	UHV	GAMMA	7.52 X 10 ⁻¹
SPUTTERED ATOM (SI)	SI	δ	1.76 X 10 ⁻²
		EJECTION ANGLE	
ION	KR 36 83.8	EXP.	45.9°
TARGET	SI 14 28.1	CAL.	47.2°
		REFERENCE	87.2

TRAPPED KR



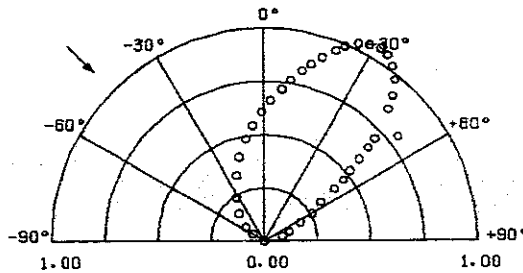
INFORMATION			
87 2 8		XE ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X10 ⁴
TARGET	POLY	EPSILON	3.82 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	5.81 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.00 X10 ⁻²
ION XE 54 131		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	0.00°
		CAL.	47.5°
		REFERENCE	87.2

SI



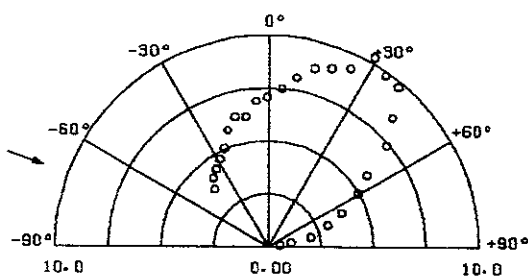
INFORMATION			
87 2 9		XE ⇒ SI	
INCIDENT ANGLE	45°	ENERGY (EV)	2.00 X10 ⁴
TARGET	POLY	EPSILON	3.82 X10 ⁻²
ENVIRONMENT	UHV	GAMMA	5.81 X10 ⁻¹
SPUTTERED ATOM(S)	SI	Q	2.00 X10 ⁻²
ION XE 54 131		EJECTION ANGLE	
TARGET SI 14 28.1		EXP.	52.2°
		CAL.	47.5°
		REFERENCE	87.2

TRAPPED XE



INFORMATION			
87 3 1			
HE ⇒ MO			
INCIDENT ANGLE	70°	ENERGY (EV)	6.00×10^3
TARGET	POLY	EPSILON	6.81×10^{-1}
ENVIRONMENT	UHV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	Q	8.60×10^{-2}
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	29.2°
		CAL.	28.0°
		REFERENCE	87.3

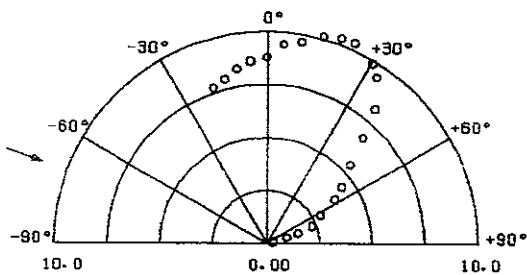
2.5E-5 MBAR O2



DIFFERENTIAL SPUTTERING YIELD (NORMALIZED)

INFORMATION			
87 3 2			
HE ⇒ MO			
INCIDENT ANGLE	70°	ENERGY (EV)	6.00×10^3
TARGET	POLY	EPSILON	6.81×10^{-1}
ENVIRONMENT	HV	GAMMA	1.54×10^{-1}
SPUTTERED ATOM(S)	MO	Q	8.60×10^{-2}
ION HE 2 4.00		EJECTION ANGLE	
TARGET MO 42 95.9		EXP.	25.0°
		CAL.	28.0°
		REFERENCE	87.3

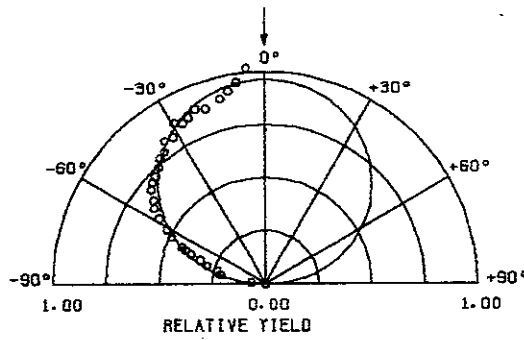
640C AND 1.0E-5 MBAR O2



DIFFERENTIAL SPUTTERING YIELD (NORMALIZED)

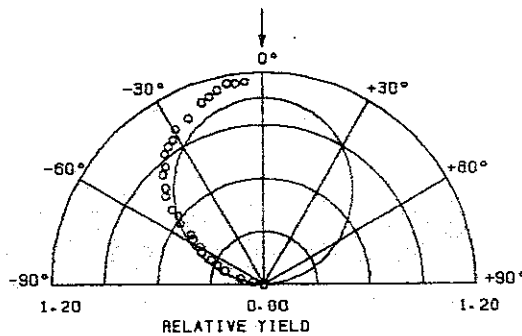
INFORMATION			
88 1 1		N ⇒ AG	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	1.21 X10 ⁻¹
ENVIRONMENT	UHV	GAMMA	4.07 X10 ⁻¹
SPUTTERED ATOM(S)	AG	Q	3.81 X10 ⁻²
		COS ²	N 8.80 X10 ⁻¹
ION	N 7 14.0	REFERENCE	88.1
TARGET	AG 47 108		

P=3.5E-8 TORR F=2.5E17 IONS/SQ. CM

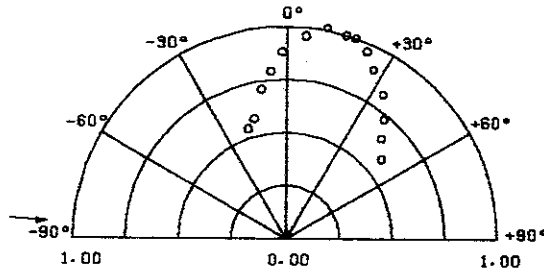


INFORMATION			
88 1 2		N ⇒ AR	
INCIDENT ANGLE	0 °	ENERGY (EV)	5.00 X10 ³
TARGET	POLY	EPSILON	3.33 X10 ⁻¹
ENVIRONMENT	HV	GAMMA	7.69 X10 ⁻¹
SPUTTERED ATOM(S)	AR	Q	4.56 X10 ⁻³
		COS ²	N 1.13
ION	N 7 14.0	REFERENCE	88.1
TARGET	AR 18 39.9		

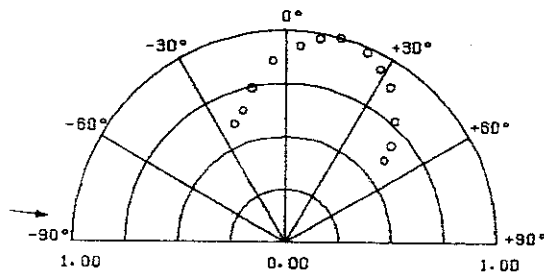
P=2E-5 TORR F=1.7E+17 IONS/SQ. CM



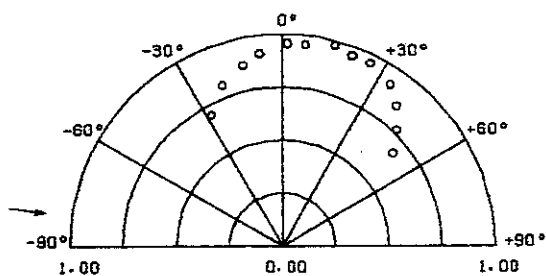
INFORMATION			
88 2 1		AR ⇒ CU	
INCIDENT ANGLE	86°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	10.08
		CAL.	4.94°
		REFERENCE	88.2



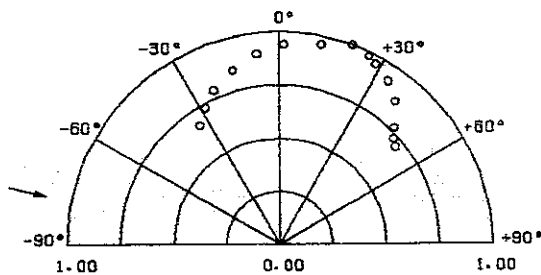
INFORMATION			
88 2 2		AR ⇒ CU	
INCIDENT ANGLE	84°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	15.0°
		CAL.	6.95°
		REFERENCE	88.2



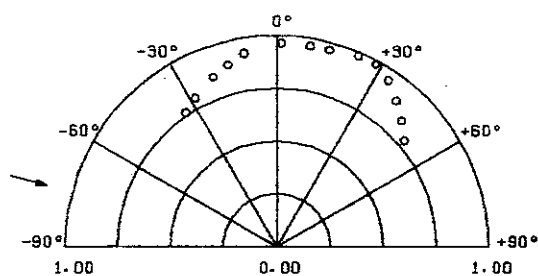
INFORMATION			
00 2 3			
AR		⇒ CU	
INCIDENT ANGLE	82°	ENERGY (EV)	3.00×10^4
TARGET	POLY	EPSILON	3.21×10^{-1}
ENVIRONMENT	-----	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	1.11×10^{-2}
ION		EJECTION ANGLE	
AR	18 39.9	EXP.	15.0°
TARGET	CU 29 63.5	CAL.	8.96°
		REFERENCE 88.2	



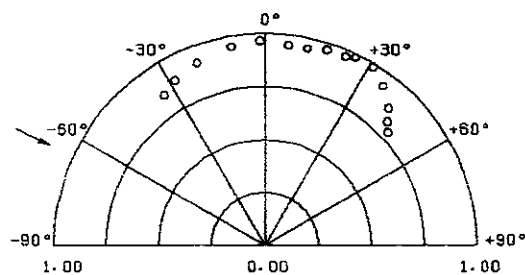
INFORMATION			
00 2 4			
AR		⇒ CU	
INCIDENT ANGLE	78°	ENERGY (EV)	3.00×10^4
TARGET	POLY	EPSILON	3.21×10^{-1}
ENVIRONMENT	-----	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	Q	1.11×10^{-2}
ION		EJECTION ANGLE	
AR	18 39.9	EXP.	20.0°
TARGET	CU 29 63.5	CAL.	13.0°
		REFERENCE 88.2	



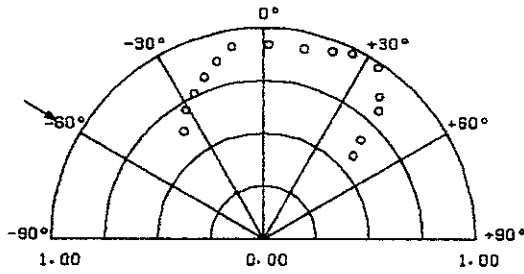
INFORMATION			
08 2 5			
AR		⇒ CU	
INCIDENT ANGLE	75°	ENERGY (EV)	3.00×10^4
TARGET	POLY	EPSILON	3.21×10^{-1}
ENVIRONMENT	-----	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	0	1.11×10^{-2}
ION		EJECTION ANGLE	
AR	18	39.9	EXP. 25.7°
TARGET	CU	29	63.5
		CAL. 16.0°	
REFERENCE 08.2			



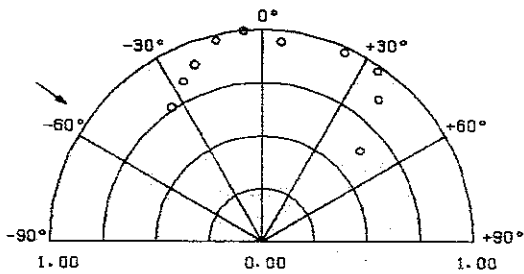
INFORMATION			
08 2 8			
AR		⇒ CU	
INCIDENT ANGLE	65°	ENERGY (EV)	3.00×10^4
TARGET	POLY	EPSILON	3.21×10^{-1}
ENVIRONMENT	-----	GAMMA	9.48×10^{-1}
SPUTTERED ATOM(S)	CU	0	1.11×10^{-2}
ION		EJECTION ANGLE	
AR	18	39.9	EXP. 30.0°
TARGET	CU	29	63.5
		CAL. 26.1°	
REFERENCE 08.2			



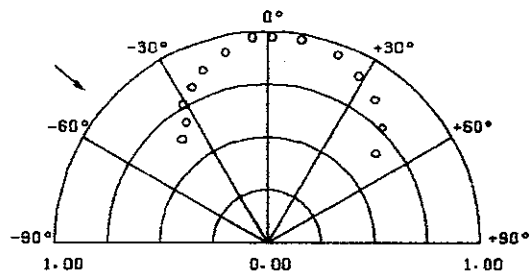
INFORMATION			
88 2 7			
AR		⇒ CU	
INCIDENT ANGLE	60°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	29.7°
		CAL.	31.1°
REFERENCE 88.2			



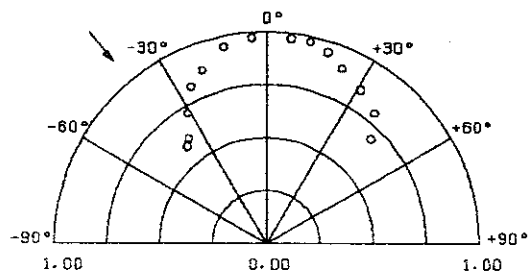
INFORMATION			
88 2 8			
AR		⇒ CU	
INCIDENT ANGLE	55°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	30.5°
		CAL.	35.2°
REFERENCE 88.2			



INFORMATION			
88 2 9		AR ⇒ CU	
INCIDENT ANGLE	50°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	41.3°
		REFERENCE	88.2

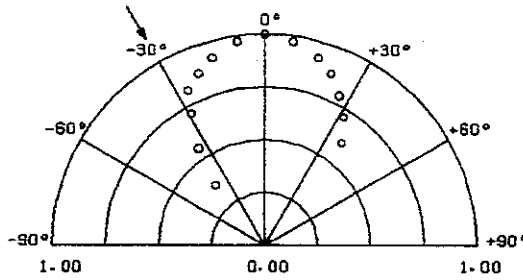


INFORMATION			
88 2 10		AR ⇒ CU	
INCIDENT ANGLE	40°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
ION AR 18 39.9		EJECTION ANGLE	
TARGET CU 29 63.5		EXP.	0.00°
		CAL.	51.5°
		REFERENCE	88.2



INFORMATION

88 2 11		AR ⇒ CU	
INCIDENT ANGLE	30°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY.	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
		EJECTION ANGLE	
ION	AR 18 39.9	EXP.	0.00°
TARGET	CU 29 63.5	CAL.	62.0°
		REFERENCE	88.2



INFORMATION

88 2 12		AR ⇒ CU	
INCIDENT ANGLE	0°	ENERGY (EV)	3.00 X10 ⁴
TARGET	POLY	EPSILON	3.21 X10 ⁻¹
ENVIRONMENT	-----	GAMMA	9.48 X10 ⁻¹
SPUTTERED ATOM(S)	CU	Q	1.11 X10 ⁻²
		COS ² N	3.26
ION	AR 18 39.9	REFERENCE	88.2
TARGET	CU 29 63.5		

