

NIST
PUBLICATIONS

NATL INST OF STAND & TECH R IC

A111104 023872

NISTIR 5188

Elastic Scattering of Electrons and Positrons by Atoms: Database ELAST

**M. J. Berger
S. M. Seltzer
R. Wang
A. Schechter**

U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Institute of Standards
and Technology
Physics Laboratory
Ionizing Radiation Division
Gaithersburg, MD 20899

Prepared for:

National Institute of Standards and Technology
Office of Standard Reference Data

U.S. Department of Energy
Office of Health and Environmental Research
Washington, D.C. 20585

QC
100
.U56
#5188
1993

NIST

Elastic Scattering of Electrons and Positrons by Atoms: Database ELAST

**M. J. Berger
S. M. Seltzer
R. Wang
A. Schechter**

U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Institute of Standards
and Technology
Physics Laboratory
Ionizing Radiation Division
Gaithersburg, MD 20899

Prepared for:

National Institute of Standards and Technology
Office of Standard Reference Data

U.S. Department of Energy
Office of Health and Environmental Research
Washington, D.C. 20585

May 1993



**U.S. DEPARTMENT OF COMMERCE
Ronald H. Brown, Secretary**

**NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY
Raymond G. Kammer, Acting Director**

Elastic Scattering of Electrons and Positrons by Atoms: Database ELAST*

M. J. Berger,¹ S. M. Seltzer, R. Wang,² and A. Schechter³
Ionizing Radiation Division⁴
National Institute of Standards and Technology
Gaithersburg, MD 20899

Database ELAST consists of cross sections for the elastic scattering of electrons and positrons by atoms. ELAST includes differential, total and transport cross sections, for scattering targets with atomic numbers Z from 1 to 100, at selected energies from 1 keV to 1024 keV. The cross sections were calculated with a computer code of Riley, based on the partial-wave expansion method. The electrons and positrons were assumed to be scattered by static, screened Coulomb potentials. Screening was calculated with the use of density distributions of atomic electrons obtained with a relativistic Dirac-Fock wave-function program of Desclaux. An interpolation program is included with which one can obtain elastic scattering cross sections at any energy between 1 keV and 1024 keV. Cross section tables for electrons are presented for 23 elements at 27 energies between 1 MeV and 1 keV.

*Work supported by the National Institute of Standards and Technology, Office of Standard Reference Data, and by the U.S. Department of Energy, Office of Health and Environmental Research.

¹Work carried out under Contract 50SBNB9C5555 with the National Institute of Standards and Technology.

²Guest Scientist. Permanent address: Dalian Institute of Chemical Physics, Chinese Academy of Sciences, Dalian, PR China.

³Summer student

⁴Physics Laboratory, Technology Administration, U.S. Department of Commerce.

1. Introduction

This report describes a database, called ELAST, which contains cross sections for the elastic scattering of electrons and positrons by atoms. The database was developed in order to provide improved input for transport calculations. The cross sections in ELAST have already been used in a calculation of electron back-scattering [1],⁵ in a comparison of the multiple scattering of electrons and positrons [2], and in a refinement of the Monte Carlo code ETRAN [3]. The ELAST and associated software, suitable for use on IBM-compatible personal computers, are distributed on two floppy disks, as described in the Appendix.

The cross sections were calculated by a relativistic partial-wave expansion method, using a computer code developed by Riley [4]. This code treats scattering by a static, screened Coulomb potential, and evaluates phase shifts through the numerical solution of the Dirac equation combined with use of the WKB approximation. The screened Coulomb potentials are obtained by solving the Poisson equation, using as input a density distribution of atomic electrons.

Riley, MacCallum, and Biggs [5] made extensive use of Riley's code, and published cross-section tables for electrons, for 24 elements, 33 deflection angles and nine energies (1, 2, 4, 8, 16, 32, 64, 128, and 256 keV). They estimated the accuracy of their results to be better than 1 percent, except for large-angle high-energy scattering from light elements where the uncertainties are several times larger. Their total and transport cross sections are stated to be accurate to three significant figures. These error estimates pertain only to the numerical evaluation, and do not include errors that may arise from the use of a static potential. Riley et al. [5], also presented 12-parameter fits to the cross sections at the above nine energies for all elements.

The use of a static potential implies neglect of the polarization of the target atom. Riley [4] estimated that for mercury atoms at 1 keV the inclusion of polarization effects would increase the elastic-scattering cross section by a factor 3.4 at 0 degrees, but by only 3 percent at 10 degrees. At higher energies the error due to the omission of polarization effects is much smaller and confined to extremely small deflection angles.

Database ELAST is an extension of the compilation of Riley, MacCallum and Biggs in the following respects: (a) the range of energies treated has been extended from 256 keV to 1024 keV; (b) the grid of angles, and the grid of energies below 8 keV was made finer; (c) cross sections are included not only for electrons but also for positrons; (d) ELAST is a computer-readable database, and software is provided for obtaining, by interpolation, cross sections at any energy between 1 keV and 1024 keV.

The calculations of Riley, MacCallum and Biggs involved the use of electron density distributions derived from non-relativistic Hartree-Fock wave functions of Mann [6] for atomic numbers Z between 1 and 35, and from

⁵Figures in brackets indicate literature references at the end of this paper.

relativistic wave functions of Mann and Waber [7] for higher atomic numbers. We used electron density distributions based on wave functions obtained with the relativistic multi-configuration code of Desclaux [8]. The use of electron-density distributions from [8] rather than from [6] and [7] results in cross section differences, which are smaller than the estimated uncertainties of the cross sections themselves.

In the version of Riley's code used in [5] and in the present work, exchange effects are neglected, even though an approximation for including them is discussed in [4]. The neglect of exchange effects is not expected to introduce significant errors in the energy region above 1 keV covered in the present database.

2. Illustrative Plots of Differential Cross Sections

This Section contains illustrative plots of the differential elastic scattering cross section as a function of the deflection angle. Figures 1a and 1b pertain to scattering of electrons by hydrogen, and figures 1c and 1d to scattering by uranium. For a hydrogen target there is a family of smooth curves at energies from 1024 keV to 1 keV. For uranium, however, there is a family of smooth curves only down to 8 keV, whereas at lower energies the cross sections exhibit an increasingly complex pattern characterized by resonances. The occurrence of these resonances is attributed to the existence of virtual bound states. Figures 2a, 2b, 2c and 2d illustrate the elastic scattering cross sections in the energy region 1 keV to 16 keV, for scattering by aluminum, copper, silver, and tungsten, respectively. For aluminum and copper, resonances are absent even down to 1 keV, but make an appearance for silver and tungsten at 1 keV or 2 keV.

The effects of screening on the elastic scattering cross sections are illustrated in figure 3a for carbon, and in figure 3b for tungsten. In these figures the results with screening were calculated with Riley's code, and those for a pure Coulomb potential from the theory of Mott [9].

The cross sections for the elastic scattering of positrons and electrons are compared in figures 4a, 4b and 4c for scattering by aluminum, silver, and gold. It can be seen that the cross sections for positron scattering are always smooth, even for high-Z targets down to 1 keV. The absence of resonances for positron scattering is due to the fact that virtual bound states do not occur with a repulsive potential.

3. Organization of the Database ELAST

ELAST contains differential as well as total and transport elastic scattering cross sections. The transport cross section (in atomic theory also referred to as momentum-transfer cross section) is

$$\sigma_{tr} = 2\pi \int_0^\pi \sigma_{el}(\theta) (1-\cos\theta) \sin\theta d\theta \quad , \quad (1)$$

where θ is the scattering angle, and $\sigma_{el}(\theta)$ is the differential cross section per unit solid angle. The transport cross section is of interest because it is the single most important quantity governing the penetration and diffusion of electrons and positrons in bulk matter.

Database ELAST consists of three parts: ELAST1 and ELAST2 for electrons, and ELAST3, for positrons:

ELAST1: total and transport cross sections, and differential cross sections for electrons at 65 angles (see table 1), at 20 energies between 1 keV and 1024 keV, ($2^{n/4}$ keV, $n=0,1,\dots,12$, and 2^n keV, $n=4,5,\dots,10$).

ELAST2: total and transport cross sections, and differential cross sections for electrons at 193 angles (see table 2), at 13 energies between 1 keV and 8 keV, ($2^{n/4}$ keV, $n=0,1,\dots,12$).

ELAST3: total and transport cross sections, and differential cross sections for positrons at 65 angles (see table 1), at 11 energies between 1 keV and 1024 keV, (2^n keV, $n=0,1,\dots,10$).

Each of these three parts of the database consists of 100 files:

ELAST1.EXT
ELAST2.EXT EXT = 001, 002,, 100.
ELAST3.EXT

The extension EXT represents the atomic number of the scattering material.

For convenience, the 100 data files in ELAST1 were compressed and stored in a self-extracting archive file ELAST1.EXE, the 100 files in ELAST2 in file ELAST2.EXE and the 100 files in ELAST3 in file ELAST3.EXE. The archive files can be decompressed, using an IBM-compatible PC, by the commands ELAST1, ELAST2 or ELAST3.

The program ELINT and the data files are stored on two 1.44 Mb disks:

Disk 1: ELAST1.EXE Compressed data file
 ELAST3.EXE Compressed data file
 ELINT.FOR Fortran source code for interpolation program ELINT
 ELINT.EXE Executable code, for IBM-compatible PC

Disk 2: ELAST2.EXE Compressed data file

4. Contents of Individual Data Files

The files in the database are in ASCII format. The following Fortran code fragment indicates how these files can be read:

Code Fragment #1:

```
DO 30 J=1,JMAX
  READ (7,10) IZ,T(J)
10 FORMAT(I6,F12.5)
  READ (7,20) SIGTOT(J),SIGTRA(J)
  READ (7,20) (SIG(I,J),I=1,IMAX)
20 FORMAT(1P6E12.5)
30 CONTINUE
```

The variables have the following meaning:

JMAX: number of energies, 20 for ELAST1,
13 for ELAST2,
11 for ELAST3;

IMAX: number of angles, 65 for ELAST1,
193 for ELAST2,
65 for ELAST3;

IZ: atomic number;

T(J): j'th energy, in keV;

SIGTOT(J): total cross section at energy T(J), in units of 10^{-16} cm²;

SIGTRA(J): transport cross section at energy T(J), in units of 10^{-16} cm²;

SIG(I,J): differential cross section per unit solid angle, at i'th angle and j'th energy, in units of 10^{-16} cm²/sr.

5. Interpolation

The calculation of elastic-scattering cross sections by the partial-wave expansion method requires a large computing effort, because many phase shifts (many hundreds, or even thousands at energies near 1 MeV) must be calculated. It would be rather impractical to carry out such lengthy calculations for the large number of energies for which cross sections are required for transport calculations. Fortunately it is possible to limit the partial-wave calculations to a moderate number of energies, and to obtain cross sections at other energies accurately by interpolation.

The following interpolation procedure was found to be satisfactory. For each deflection angle, the logarithm of the differential cross section was approximated by a cubic spline as a function of the logarithm of the particle energy. This spline function was then used for interpolation. A similar procedure was applied to the total and transport cross sections.

The results of such interpolations vs. energy are illustrated in figure 5 for the scattering of electrons by gold, at angles of 60, 90, 120 and 150 degrees. The curves were calculated by interpolation, whereas the

circles, squares, and triangles represent cross sections in the data base. It would appear that the cross sections in the database are spaced closely enough in energy to allow reliable interpolation.

In order to obtain benchmarks for checking the accuracy of the interpolation, additional elastic scattering cross section were calculated by the partial-wave-expansion method for the elements oxygen and gold, at energies other than those included in the database. Table 3 (for oxygen), and table 4 (for gold), show comparisons between interpolated and directly-computed cross sections at many energies and for many deflection angles. The interpolation errors generally amount to only a fraction of a percent, and are smaller than the estimated 1-percent uncertainties of the cross sections. The only exceptions to this occur at the small deflection angle of 0.5 degrees at an energy of 768 keV, where the error was found to be 2.6 percent in oxygen and 1.3 percent in gold.

6. Interpolation Code ELINT

The interpolation is done with a program called ELINT, which can be run for electrons (requiring the files ELAST1.EXT and/or ELAST2.EXT) or for positrons (requiring the files ELAST3.EXT). Listings of the Fortran source code for ELINT and the required subroutines can be found in the Appendix.

ELINT runs rather quickly on a personal computer (with a mathematical co-processor), but can of course be used also on other computer systems for which a Fortran 77 compiler is available. The energies to which the cross sections are to be interpolated can be supplied by an input file that provides the number of energies of interest, followed by a list of energies (in keV). Alternatively, a single energy can be entered by the user directly from the keyboard.

ELINT has five output options:

- 1) A table at 1 energy, for 65 deflection angles;
- 2) A table at 1 energy (below 8 keV), for 193 angles;
- 3) A table at many energies, for 65 angles. The user can choose the number of energies (not to exceed 9) for which cross sections will be printed on the same page.
- 4) A cross section array at one or many energies, for 65 angles;
- 5) A cross section array at 1 or many energies, all below 8 keV, for 193 angles.

Tables 5 and 6 show cross-section tables from sample runs of ELINT with output options 1 and 2 for electrons in tungsten at 100 keV and 5 keV. Tables 7 and 8 show results of sample runs with output option 1 for positrons in tungsten at 100 keV and 5 keV. The cross sections for electrons and positrons at 0 degrees should in principle be identical, whereas the electron-positron differences in the above table are 0.4 percent at 100 keV and 0.04 percent at 5 keV, well within the estimated uncertainties of the cross sections. Using ELINT, elastic-scattering cross sections were tabulated at 27 energies between 1 MeV and 1 keV for elements with 23 different atomic numbers. These results are presented in table 9.

Options 4) and 5) produce cross section arrays in a format convenient for use in other computer calculations. The following Fortran code fragment indicates how such arrays can be accessed:

Code Fragment #2:

```
      READ (7,10) IZ,KPART,MENG,IMAX
10  FORMAT(4I6)
      DO 40 M=1,MENG
      READ (7,20) IMAX,ENG(M),SIGTOT(M),SIGTRA(M)
20  FORMAT(I6,0PF12.3,1P2E12.5)
      READ (7,30) (SIG(I,M),I=1,IMAX)
30  FORMAT(1P6E12.5)
40  CONTINUE
```

The variables have the following meaning:

IZ: atomic number
KPART: 1 for electrons, 2 for positrons
MENG: number of energies
IMAX: number of angles, 65 for ELAST1,
193 for ELAST2,
65 for ELAST3;
E(M): m'th energy, in keV;
SIGTOT(J): total cross section at energy E(M), in units of 10^{-16} cm²;
SIGTRA(M): transport cross section at energy E(M), in units of
 10^{-16} cm²;
SIG(I,M): differential cross section per unit solid angle, at i'th
angle and m'th energy, in units of 10^{-16} cm²/sr.

References

1. Ruqing Wang, Nucl. Inst. Meth. B, 51, 385 (1990).
2. M. J. Berger, Appl. Radiat. Isotopes, 42, 905 (1991).
3. S. M. Seltzer, Appl. Radiat. Isotopes, 42, 917 (1991).
4. M. E. Riley, Relativistic, elastic electron scattering from atoms at energies greater than 1 keV, Report SLA-74-0107, Sandia Laboratories (May 1974).
5. M. E. Riley, C. J. MacCallum, and F. Biggs, Atomic Data and Nuclear Data Tables 15, 391-442 (1975).
6. J. B. Mann, Atomic Data and Nuclear Data Tables 12, 1 (1973).
7. J. B. Mann and J. T. Waber, Atomic Data 5, 201 (1973).
8. J. P. Desclaux. Comp. Phys. Comm. 9, 31 (1975).
9. N. F. Mott, Proc. Roy. Soc (London), A124, 426 (1929).

Table 1. List of 65 angles at which elastic scattering cross sections are stored in database files ELAST1 and ELAST3.

N	Angle (deg)	N	Angle (deg)
1	0.0	33	35.0
2	0.25	34	37.5
3	0.5	35	40.0
4	0.75	36	42.5
5	1.0	37	45.0
6	1.5	38	47.5
7	2.0	39	50.0
8	2.5	40	55.0
9	3.0	41	60.0
10	3.5	42	65.0
11	4.0	43	70.0
12	4.5	44	75.0
13	5.0	45	80.0
14	5.5	46	85.0
15	6.0	47	90.0
16	6.5	48	95.0
17	7.0	49	100.0
18	7.5	50	105.0
19	8.0	51	110.0
20	8.5	52	115.0
21	9.0	53	120.0
22	9.5	54	125.0
23	10.0	55	130.0
24	12.5	56	135.0
25	15.0	57	140.0
26	17.5	58	145.0
27	20.0	59	150.0
28	22.5	60	155.0
29	25.0	61	160.0
30	27.5	62	165.0
31	30.0	63	170.0
32	32.5	64	175.0
		65	180.0

Table 2. List of 193 angles at which elastic scattering cross sections are stored in database files ELAST2.

n	Angle (deg)	n	Angle (deg)	n	Angle (deg)	n	Angle (deg)
1	0.00	49	36.0	97	84.0	145	132.0
2	0.25	50	37.0	98	85.0	146	133.0
3	0.5	51	38.0	99	86.0	147	134.0
4	0.75	52	39.0	100	87.0	148	135.0
5	1.0	53	40.0	101	88.0	149	136.0
6	1.5	54	41.0	102	89.0	150	137.0
7	2.0	55	42.0	103	90.0	151	138.0
8	2.5	56	43.0	104	91.0	152	139.0
9	3.0	57	44.0	105	92.0	153	140.0
10	3.5	58	45.0	106	93.0	154	141.0
11	4.0	59	46.0	107	94.0	155	142.0
12	4.5	60	47.0	108	95.0	156	143.0
13	5.0	61	48.0	109	96.0	157	144.0
14	5.5	62	49.0	110	97.0	158	145.0
15	6.0	63	50.0	111	98.0	159	146.0
16	6.5	64	51.0	112	99.0	160	147.0
17	7.0	65	52.0	113	100.0	161	148.0
18	7.5	66	53.0	114	101.0	162	149.0
19	8.0	67	54.0	115	102.0	163	150.0
20	8.5	68	55.0	116	103.0	164	151.0
21	9.0	69	56.0	117	104.0	165	152.0
22	9.5	70	57.0	118	105.0	166	153.0
23	10.0	71	58.0	119	106.0	167	154.0
24	11.0	72	59.0	120	107.0	168	155.0
25	12.0	73	60.0	121	108.0	169	156.0
26	13.0	74	61.0	122	109.0	170	157.0
27	14.0	75	62.0	123	110.0	171	158.0
28	15.0	76	63.0	124	111.0	172	159.0
29	16.0	77	64.0	125	112.0	173	160.0
30	17.0	78	65.0	126	113.0	174	161.0
31	18.0	79	66.0	127	114.0	175	162.0
32	19.0	80	67.0	128	115.0	176	163.0
33	20.0	81	68.0	129	116.0	177	164.0
34	21.0	82	69.0	130	117.0	178	165.0
35	22.0	83	70.0	131	118.0	179	166.0
36	23.0	84	71.0	132	119.0	180	167.0
37	24.0	85	72.0	133	120.0	181	168.0
38	25.0	86	73.0	134	121.0	182	169.0
39	26.0	87	74.0	135	122.0	183	170.0
40	27.0	88	75.0	136	123.0	184	171.0
41	28.0	89	76.0	137	124.0	185	172.0
42	29.0	90	77.0	138	125.0	186	173.0
43	30.0	91	78.0	139	126.0	187	174.0
44	31.0	92	79.0	140	127.0	188	175.0
45	32.0	93	80.0	141	128.0	189	176.0
46	33.0	94	81.0	142	129.0	190	177.0
47	34.0	95	82.0	143	130.0	191	178.0
48	35.0	96	83.0	144	131.0	192	179.0
						193	180.0

Table 3. Percentage deviation of interpolated from directly computed elastic scattering cross sections in oxygen, for electrons of kinetic energy T.

Angle (deg)	T(keV)	1.5	3.0	6.0	12.0	24.0
0.0		-0.002	0.000	0.000	0.000	-0.004
0.5		-0.002	0.000	0.000	0.000	0.004
1.0		-0.002	0.000	0.002	0.004	0.004
2.0		-0.002	0.000	0.007	0.008	-0.002
3.0		-0.002	0.000	0.012	-0.001	-0.017
5.0		-0.003	0.002	0.018	-0.022	-0.027
10.0		-0.005	0.003	0.013	-0.009	0.043
15.0		-0.004	0.003	0.007	0.040	0.013
20.0		-0.002	0.004	0.005	0.040	-0.021
30.0		-0.002	0.005	0.006	-0.004	-0.011
45.0		-0.001	0.004	0.007	-0.008	0.004
60.0		0.000	0.004	0.006	0.002	0.003
90.0		0.004	0.005	0.005	0.008	0.000
120.0		0.005	0.005	0.004	0.006	-0.003
150.0		0.005	0.006	0.004	0.004	-0.001
180.0		0.005	0.005	0.004	0.002	0.004

Angle (deg)	T(keV)	8.0	96.0	192.0	384.0	768.0
0.0		0.000	-0.025	0.077	-0.267	1.077
0.5		0.012	0.059	-0.159	0.765	-2.644
1.0		0.008	0.001	0.022	-0.106	0.044
2.0		0.017	-0.018	-0.076	0.161	-0.215
3.0		-0.031	-0.020	0.006	0.245	-0.640
5.0		-0.005	0.056	0.004	0.070	-0.341
10.0		-0.015	-0.014	-0.014	0.059	-0.155
15.0		0.020	-0.006	-0.003	0.055	-0.141
20.0		0.010	0.007	0.002	0.052	-0.134
30.0		-0.002	0.003	-0.003	0.047	-0.120
45.0		-0.001	0.014	0.008	0.037	-0.088
60.0		0.001	-0.006	-0.005	0.026	-0.037
90.0		0.003	0.007	0.011	-0.029	0.146
120.0		0.007	-0.010	0.023	-0.127	0.434
150.0		0.002	0.000	0.029	-0.092	0.224
180.0		0.016	-0.087	-0.434	0.300	-1.208

Table 4. Percentage deviation of interpolated from directly computed elastic scattering cross sections in gold, for electrons of kinetic energy T.

T(keV)	1.3	1.5	1.8	2.5	3.0	3.5	5.0	6.0	7.0
Angle (deg)									
0.0	-0.006	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	0.000	-0.003
0.5	-0.006	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	0.001	-0.005
1.0	-0.005	0.000	-0.001	-0.001	-0.001	0.000	-0.001	0.003	-0.010
2.0	-0.003	0.000	-0.001	-0.001	0.000	0.000	-0.002	0.008	-0.019
3.0	0.000	0.000	0.000	0.000	0.000	0.000	-0.001	0.010	-0.021
5.0	0.004	-0.001	0.001	0.001	0.001	0.001	-0.001	0.009	-0.017
10.0	0.005	0.000	0.002	0.002	0.002	0.002	0.002	0.005	-0.005
15.0	-0.001	0.002	0.002	0.002	0.002	0.002	0.000	0.008	-0.012
20.0	0.017	-0.002	0.003	0.002	0.001	0.001	0.003	-0.001	0.012
30.0	0.049	-0.009	0.005	0.002	0.001	0.002	0.002	0.008	-0.011
45.0	-0.145	0.032	-0.010	0.002	0.005	0.004	-0.003	0.023	-0.053
60.0	0.249	-0.068	0.019	0.013	0.005	-0.001	-0.006	0.027	-0.063
90.0	-1.042	0.143	-0.012	0.000	0.002	0.003	0.012	-0.018	0.068
120.0	0.162	-0.042	0.010	0.132	0.056	-0.068	-0.011	0.042	-0.095
150.0	0.253	-0.071	0.016	0.003	0.003	0.005	0.003	0.013	-0.015
180.0	0.130	-0.035	0.012	0.008	0.010	0.007	0.006	-0.001	0.023

T(keV)	10.0	12.0	14.0	24.0	48.0	96.0	192.0	384.0	768.0
Angle (deg)									
0.0	-0.004	-0.003	0.000	0.000	-0.003	-0.026	0.075	-0.257	1.042
0.5	-0.002	-0.002	0.000	0.007	-0.009	0.027	-0.090	0.396	-1.327
1.0	0.000	0.001	0.001	0.004	-0.011	0.008	-0.016	0.073	-0.515
2.0	-0.007	-0.008	-0.003	0.006	-0.007	-0.015	-0.041	0.319	-0.754
3.0	-0.006	-0.007	-0.002	0.007	-0.022	0.004	0.107	-0.160	-0.153
5.0	-0.011	-0.016	-0.012	0.034	0.001	-0.001	-0.069	0.173	-0.473
10.0	-0.004	-0.003	0.003	-0.038	0.096	-0.179	0.165	-0.039	-0.180
15.0	0.089	0.109	0.046	0.075	-0.301	0.288	-0.169	0.171	-0.396
20.0	0.276	0.364	0.235	-0.420	0.133	0.100	-0.167	0.227	-0.421
30.0	-0.205	-0.265	-0.141	-0.038	0.239	-0.210	0.130	0.002	-0.236
45.0	-0.377	-0.491	-0.305	0.567	-0.338	0.191	-0.108	0.126	-0.299
60.0	0.258	0.373	0.224	-0.158	0.061	-0.031	-0.016	0.098	-0.280
90.0	-0.120	-0.214	-0.127	-0.031	0.035	-0.015	0.004	0.048	-0.151
120.0	-0.065	-0.095	-0.073	0.236	-0.096	0.034	-0.016	-0.023	0.145
150.0	0.136	0.185	0.109	-0.091	0.046	-0.009	0.028	-0.171	0.525
180.0	0.323	0.388	0.210	-0.261	0.134	-0.127	-0.538	0.288	-1.137

Table 5. Sample electron run with program ELINT (output option 1).

ELECTRONS, Z = 74

ENERGY (keV) = 100.0

ANG = angle, degrees

SIG = elastic scattering cross section, 10^{-16} cm²/sr

ANG	SIG	ANG	SIG	ANG	SIG
.00	1.933E+02	10.00	7.344E-02	80.00	7.353E-05
.25	1.622E+02	12.50	3.401E-02	85.00	6.207E-05
.50	1.060E+02	15.00	1.797E-02	90.00	5.307E-05
.75	6.443E+01	17.50	1.048E-02	95.00	4.591E-05
1.00	4.039E+01	20.00	6.585E-03	100.00	4.014E-05
1.50	1.837E+01	22.50	4.374E-03	105.00	3.546E-05
2.00	9.563E+00	25.00	3.035E-03	110.00	3.164E-05
2.50	5.450E+00	27.50	2.181E-03	115.00	2.849E-05
3.00	3.335E+00	30.00	1.616E-03	120.00	2.588E-05
3.50	2.157E+00	32.50	1.228E-03	125.00	2.372E-05
4.00	1.455E+00	35.00	9.545E-04	130.00	2.192E-05
4.50	1.015E+00	37.50	7.570E-04	135.00	2.043E-05
5.00	7.286E-01	40.00	6.110E-04	140.00	1.919E-05
5.50	5.362E-01	42.50	5.009E-04	145.00	1.817E-05
6.00	4.037E-01	45.00	4.164E-04	150.00	1.734E-05
6.50	3.103E-01	47.50	3.504E-04	155.00	1.666E-05
7.00	2.428E-01	50.00	2.980E-04	160.00	1.614E-05
7.50	1.931E-01	55.00	2.156E-04	165.00	1.575E-05
8.00	1.558E-01	60.00	1.702E-04	170.00	1.548E-05
8.50	1.272E-01	65.00	1.340E-04	175.00	1.530E-05
9.00	1.050E-01	70.00	1.078E-04	180.00	1.524E-05
9.50	8.743E-02	75.00	8.833E-05		

TOTAL CROSS SECTION = 2.093E-01 10^{-16} cm²
 TRANSPORT CROSS SECTION = 1.275E-03 10^{-16} cm²

Table 6. Sample electron run with program ELINT (output option 2).

ELECTRONS, Z = 74

ENERGY (keV) = 5.0

ANG = angle, degrees

SIG = elastic scattering cross section, 10^{-16} cm²/sr

ANG	SIG	ANG	SIG	ANG	SIG	ANG	SIG
.00	8.266E+01	36.00	4.393E-02	84.00	6.064E-03	132.00	5.672E-03
.25	8.181E+01	37.00	4.096E-02	85.00	5.863E-03	133.00	5.904E-03
.50	7.932E+01	38.00	3.825E-02	86.00	5.667E-03	134.00	6.143E-03
.75	7.542E+01	39.00	3.579E-02	87.00	5.477E-03	135.00	6.391E-03
1.00	7.042E+01	40.00	3.354E-02	88.00	5.292E-03	136.00	6.645E-03
1.50	5.861E+01	41.00	3.148E-02	89.00	5.113E-03	137.00	6.906E-03
2.00	4.655E+01	42.00	2.961E-02	90.00	4.940E-03	138.00	7.172E-03
2.50	3.594E+01	43.00	2.790E-02	91.00	4.773E-03	139.00	7.444E-03
3.00	2.742E+01	44.00	2.633E-02	92.00	4.613E-03	140.00	7.722E-03
3.50	2.091E+01	45.00	2.490E-02	93.00	4.459E-03	141.00	8.004E-03
4.00	1.606E+01	46.00	2.359E-02	94.00	4.312E-03	142.00	8.291E-03
4.50	1.247E+01	47.00	2.239E-02	95.00	4.172E-03	143.00	8.581E-03
5.00	9.807E+00	48.00	2.128E-02	96.00	4.040E-03	144.00	8.873E-03
5.50	7.808E+00	49.00	2.027E-02	97.00	3.915E-03	145.00	9.168E-03
6.00	6.288E+00	50.00	1.934E-02	98.00	3.797E-03	146.00	9.465E-03
6.50	5.118E+00	51.00	1.847E-02	99.00	3.688E-03	147.00	9.763E-03
7.00	4.206E+00	52.00	1.768E-02	100.00	3.587E-03	148.00	1.006E-02
7.50	3.487E+00	53.00	1.694E-02	101.00	3.495E-03	149.00	1.036E-02
8.00	2.916E+00	54.00	1.626E-02	102.00	3.412E-03	150.00	1.066E-02
8.50	2.458E+00	55.00	1.562E-02	103.00	3.337E-03	151.00	1.095E-02
9.00	2.089E+00	56.00	1.503E-02	104.00	3.272E-03	152.00	1.124E-02
9.50	1.788E+00	57.00	1.448E-02	105.00	3.216E-03	153.00	1.154E-02
10.00	1.541E+00	58.00	1.396E-02	106.00	3.170E-03	154.00	1.182E-02
11.00	1.170E+00	59.00	1.347E-02	107.00	3.134E-03	155.00	1.210E-02
12.00	9.095E-01	60.00	1.301E-02	108.00	3.108E-03	156.00	1.238E-02
13.00	7.224E-01	61.00	1.258E-02	109.00	3.092E-03	157.00	1.266E-02
14.00	5.840E-01	62.00	1.217E-02	110.00	3.087E-03	158.00	1.292E-02
15.00	4.790E-01	63.00	1.178E-02	111.00	3.092E-03	159.00	1.318E-02
16.00	3.977E-01	64.00	1.140E-02	112.00	3.107E-03	160.00	1.343E-02
17.00	3.337E-01	65.00	1.105E-02	113.00	3.134E-03	161.00	1.368E-02
18.00	2.827E-01	66.00	1.071E-02	114.00	3.171E-03	162.00	1.391E-02
19.00	2.416E-01	67.00	1.038E-02	115.00	3.219E-03	163.00	1.414E-02
20.00	2.082E-01	68.00	1.006E-02	116.00	3.278E-03	164.00	1.436E-02
21.00	1.810E-01	69.00	9.759E-03	117.00	3.349E-03	165.00	1.456E-02
22.00	1.587E-01	70.00	9.464E-03	118.00	3.430E-03	166.00	1.476E-02
23.00	1.402E-01	71.00	9.178E-03	119.00	3.522E-03	167.00	1.494E-02
24.00	1.247E-01	72.00	8.900E-03	120.00	3.625E-03	168.00	1.512E-02
25.00	1.117E-01	73.00	8.631E-03	121.00	3.739E-03	169.00	1.528E-02
26.00	1.007E-01	74.00	8.368E-03	122.00	3.864E-03	170.00	1.542E-02
27.00	9.128E-02	75.00	8.112E-03	123.00	3.999E-03	171.00	1.556E-02
28.00	8.312E-02	76.00	7.863E-03	124.00	4.146E-03	172.00	1.568E-02
29.00	7.600E-02	77.00	7.619E-03	125.00	4.302E-03	173.00	1.579E-02
30.00	6.974E-02	78.00	7.381E-03	126.00	4.469E-03	174.00	1.588E-02
31.00	6.419E-02	79.00	7.148E-03	127.00	4.646E-03	175.00	1.596E-02
32.00	5.925E-02	80.00	6.921E-03	128.00	4.833E-03	176.00	1.603E-02
33.00	5.481E-02	81.00	6.699E-03	129.00	5.029E-03	177.00	1.608E-02
34.00	5.082E-02	82.00	6.482E-03	130.00	5.235E-03	178.00	1.612E-02
35.00	4.720E-02	83.00	6.270E-03	131.00	5.449E-03	179.00	1.614E-02
						180.00	1.615E-02

TOTAL CROSS SECTION = 1.256E+00 10^{-16} cm²
 TRANSPORT CROSS SECTION = 1.084E-01 10^{-16} cm²

Table 7. Sample positron run with program ELINT (output option 1).

POSITRONS, Z = 74

ENERGY (keV) = 100.0

ANG = angle, degrees

SIG = elastic scattering cross section, 10^{-16} cm²/sr

ANG	SIG	ANG	SIG	ANG	SIG
.00	1.925E+02	10.00	6.785E-02	80.00	3.509E-05
.25	1.614E+02	12.50	3.096E-02	85.00	2.863E-05
.50	1.053E+02	15.00	1.612E-02	90.00	2.375E-05
.75	6.393E+01	17.50	9.242E-03	95.00	2.000E-05
1.00	3.999E+01	20.00	5.695E-03	100.00	1.708E-05
1.50	1.811E+01	22.50	3.706E-03	105.00	1.478E-05
2.00	9.382E+00	25.00	2.515E-03	110.00	1.294E-05
2.50	5.323E+00	27.50	1.768E-03	115.00	1.146E-05
3.00	3.244E+00	30.00	1.278E-03	120.00	1.026E-05
3.50	2.090E+00	32.50	9.476E-04	125.00	9.287E-06
4.00	1.405E+00	35.00	7.177E-04	130.00	8.487E-06
4.50	9.773E-01	37.50	5.540E-04	135.00	7.831E-06
5.00	6.991E-01	40.00	4.348E-04	140.00	7.293E-06
5.50	5.127E-01	42.50	3.465E-04	145.00	6.854E-06
6.00	3.846E-01	45.00	2.798E-04	150.00	6.497E-06
6.50	2.944E-01	47.50	2.287E-04	155.00	6.212E-06
7.00	2.295E-01	50.00	1.891E-04	160.00	5.989E-06
7.50	1.818E-01	55.00	1.330E-04	165.00	5.822E-06
8.00	1.460E-01	60.00	9.335E-05	170.00	5.707E-06
8.50	1.188E-01	65.00	7.251E-05	175.00	5.638E-06
9.00	9.763E-02	70.00	5.572E-05	180.00	5.617E-06
9.50	8.104E-02	75.00	4.378E-05		

TOTAL CROSS SECTION = 2.043E-01 10^{-16} cm²

TRANSPORT CROSS SECTION = 8.803E-04 10^{-16} cm²

Table 8. Sample positron run with program ELINT (output option 1).

POSITRONS, Z = 74

ENERGY (keV) = 5.0

ANG = angle, degrees

SIG = elastic scattering cross section, 10^{-16} cm²/sr

ANG	SIG	ANG	SIG	ANG	SIG
.00	8.269E+01	10.00	1.512E+00	80.00	3.798E-03
.25	8.183E+01	12.50	7.878E-01	85.00	3.211E-03
.50	7.934E+01	15.00	4.643E-01	90.00	2.751E-03
.75	7.544E+01	17.50	2.972E-01	95.00	2.385E-03
1.00	7.043E+01	20.00	2.016E-01	100.00	2.091E-03
1.50	5.859E+01	22.50	1.432E-01	105.00	1.853E-03
2.00	4.651E+01	25.00	1.057E-01	110.00	1.659E-03
2.50	3.587E+01	27.50	8.051E-02	115.00	1.499E-03
3.00	2.734E+01	30.00	6.296E-02	120.00	1.368E-03
3.50	2.082E+01	32.50	5.028E-02	125.00	1.258E-03
4.00	1.597E+01	35.00	4.082E-02	130.00	1.167E-03
4.50	1.239E+01	37.50	3.360E-02	135.00	1.091E-03
5.00	9.726E+00	40.00	2.798E-02	140.00	1.028E-03
5.50	7.731E+00	42.50	2.353E-02	145.00	9.763E-04
6.00	6.217E+00	45.00	1.997E-02	150.00	9.338E-04
6.50	5.054E+00	47.50	1.708E-02	155.00	8.995E-04
7.00	4.149E+00	50.00	1.473E-02	160.00	8.724E-04
7.50	3.437E+00	55.00	1.116E-02	165.00	8.522E-04
8.00	2.871E+00	60.00	8.420E-03	170.00	8.378E-04
8.50	2.419E+00	65.00	6.871E-03	175.00	8.297E-04
9.00	2.053E+00	70.00	5.548E-03	180.00	8.264E-04
9.50	1.756E+00	75.00	4.556E-03		

TOTAL CROSS SECTION = 1.194E+00 10^{-16} cm²
 TRANSPORT CROSS SECTION = 4.932E-02 10^{-16} cm²

Table 9. Cross sections for the elastic scattering of electrons by atoms with atomic numbers Z = 1, 2, 4, 6, 7, 8, 10, 13, 14, 18, 22, 26, 29, 32, 36, 42, 47, 54, 73, 74, 79, 82, and 92. Results were obtained with program ELINT, output option 3.

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 1

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	2.453E+00	1.863E+00	1.330E+00	1.095E+00	8.875E-01	7.045E-01	6.211E-01	5.425E-01	4.687E-01
0.25	5.382E-01	5.540E-01	5.629E-01	5.555E-01	5.306E-01	4.853E-01	4.565E-01	4.259E-01	3.932E-01
0.50	6.880E-02	8.984E-02	1.232E-01	1.460E-01	1.723E-01	2.015E-01	2.169E-01	2.326E-01	2.481E-01
0.75	1.516E-02	2.123E-02	3.227E-02	4.136E-02	5.466E-02	7.515E-02	8.975E-02	1.087E-01	1.339E-01
1.00	4.921E-03	7.033E-03	1.106E-02	1.462E-02	2.032E-02	3.033E-02	3.847E-02	5.049E-02	6.926E-02
1.50	9.829E-04	1.418E-03	2.272E-03	3.060E-03	4.393E-03	6.967E-03	9.294E-03	1.314E-02	2.023E-02
2.00	3.117E-04	4.505E-04	7.248E-04	9.800E-04	1.419E-03	2.288E-03	3.100E-03	4.498E-03	7.244E-03
2.50	1.277E-04	1.848E-04	2.976E-04	4.029E-04	5.847E-04	9.484E-04	1.292E-03	1.894E-03	3.106E-03
3.00	6.162E-05	8.914E-05	1.437E-04	1.946E-04	2.827E-04	4.596E-04	6.277E-04	9.235E-04	1.528E-03
3.50	3.326E-05	4.812E-05	7.757E-05	1.051E-04	1.527E-04	2.486E-04	3.399E-04	5.011E-04	8.324E-04
4.00	1.950E-05	2.821E-05	4.548E-05	6.163E-05	8.959E-05	1.459E-04	1.996E-04	2.945E-04	4.903E-04
4.50	1.217E-05	1.762E-05	2.840E-05	3.849E-05	5.595E-05	9.115E-05	1.247E-04	1.842E-04	3.070E-04
5.00	7.987E-06	1.156E-05	1.863E-05	2.525E-05	3.672E-05	5.983E-05	8.189E-05	1.209E-04	2.018E-04
5.50	5.456E-06	7.895E-06	1.273E-05	1.725E-05	2.508E-05	4.087E-05	5.596E-05	8.266E-05	1.380E-04
6.00	3.852E-06	5.574E-06	8.988E-06	1.218E-05	1.771E-05	2.887E-05	3.952E-05	5.840E-05	9.750E-05
6.50	2.797E-06	4.047E-06	6.526E-06	8.845E-06	1.286E-05	2.096E-05	2.870E-05	4.241E-05	7.083E-05
7.00	2.079E-06	3.009E-06	4.852E-06	6.577E-06	9.564E-06	1.559E-05	2.135E-05	3.155E-05	5.269E-05
7.50	1.578E-06	2.283E-06	3.682E-06	4.991E-06	7.258E-06	1.183E-05	1.620E-05	2.395E-05	4.000E-05
8.00	1.219E-06	1.764E-06	2.844E-06	3.856E-06	5.607E-06	9.141E-06	1.252E-05	1.850E-05	3.091E-05
8.50	9.563E-07	1.384E-06	2.232E-06	3.025E-06	4.400E-06	7.173E-06	9.824E-06	1.452E-05	2.426E-05
9.00	7.608E-07	1.101E-06	1.776E-06	2.407E-06	3.501E-06	5.708E-06	7.817E-06	1.156E-05	1.931E-05
9.50	6.128E-07	8.869E-07	1.430E-06	1.939E-06	2.820E-06	4.598E-06	6.298E-06	9.310E-06	1.556E-05
10.00	4.990E-07	7.223E-07	1.165E-06	1.579E-06	2.297E-06	3.746E-06	5.130E-06	7.584E-06	1.268E-05
12.50	2.043E-07	2.957E-07	4.770E-07	6.468E-07	9.410E-07	1.535E-06	2.103E-06	3.110E-06	5.199E-06
15.00	9.845E-08	1.425E-07	2.300E-07	3.120E-07	4.540E-07	7.408E-07	1.015E-06	1.502E-06	2.512E-06
17.50	5.309E-08	7.689E-08	1.241E-07	1.684E-07	2.451E-07	4.002E-07	5.486E-07	8.119E-07	1.359E-06
20.00	3.107E-08	4.502E-08	7.270E-08	9.865E-08	1.437E-07	2.347E-07	3.219E-07	4.765E-07	7.979E-07
22.50	1.937E-08	2.807E-08	4.536E-08	6.157E-08	8.971E-08	1.466E-07	2.012E-07	2.980E-07	4.993E-07
25.00	1.269E-08	1.840E-08	2.974E-08	4.039E-08	5.888E-08	9.633E-08	1.322E-07	1.960E-07	3.286E-07
27.50	8.650E-09	1.255E-08	2.029E-08	2.757E-08	4.021E-08	6.584E-08	9.042E-08	1.341E-07	2.250E-07
30.00	6.093E-09	8.841E-09	1.431E-08	1.945E-08	2.839E-08	4.652E-08	6.393E-08	9.488E-08	1.594E-07
32.50	4.414E-09	6.408E-09	1.038E-08	1.411E-08	2.062E-08	3.382E-08	4.651E-08	6.908E-08	1.161E-07
35.00	3.273E-09	4.754E-09	7.706E-09	1.049E-08	1.533E-08	2.518E-08	3.464E-08	5.151E-08	8.668E-08
37.50	2.475E-09	3.598E-09	5.837E-09	7.947E-09	1.163E-08	1.912E-08	2.633E-08	3.918E-08	6.601E-08
40.00	1.906E-09	2.772E-09	4.502E-09	6.133E-09	8.983E-09	1.479E-08	2.038E-08	3.036E-08	5.121E-08
42.50	1.491E-09	2.170E-09	3.528E-09	4.809E-09	7.051E-09	1.162E-08	1.604E-08	2.391E-08	4.038E-08
45.00	1.181E-09	1.721E-09	2.801E-09	3.821E-09	5.608E-09	9.259E-09	1.279E-08	1.909E-08	3.228E-08
47.50	9.475E-10	1.381E-09	2.251E-09	3.073E-09	4.516E-09	7.468E-09	1.032E-08	1.543E-08	2.613E-08
50.00	7.687E-10	1.122E-09	1.830E-09	2.501E-09	3.679E-09	6.095E-09	8.434E-09	1.262E-08	2.141E-08
55.00	5.198E-10	7.601E-10	1.243E-09	1.703E-09	2.512E-09	4.176E-09	5.793E-09	8.693E-09	1.480E-08
60.00	3.632E-10	5.323E-10	8.736E-10	1.199E-09	1.774E-09	2.962E-09	4.120E-09	6.201E-09	1.059E-08
65.00	2.603E-10	3.825E-10	6.300E-10	8.670E-10	1.287E-09	2.159E-09	3.012E-09	4.549E-09	7.802E-09
70.00	1.910E-10	2.815E-10	4.656E-10	6.426E-10	9.577E-10	1.615E-09	2.260E-09	3.426E-09	5.902E-09
75.00	1.427E-10	2.110E-10	3.506E-10	4.854E-10	7.266E-10	1.232E-09	1.730E-09	2.634E-09	4.558E-09
80.00	1.084E-10	1.609E-10	2.688E-10	3.735E-10	5.617E-10	9.587E-10	1.351E-09	2.067E-09	3.595E-09
85.00	8.348E-11	1.245E-10	2.092E-10	2.919E-10	4.413E-10	7.584E-10	1.074E-09	1.649E-09	2.883E-09
90.00	6.504E-11	9.748E-11	1.649E-10	2.311E-10	3.515E-10	6.086E-10	8.655E-10	1.336E-09	2.351E-09
95.00	5.127E-11	7.729E-11	1.318E-10	1.856E-10	2.841E-10	4.959E-10	7.086E-10	1.100E-09	1.946E-09
100.00	4.070E-11	6.176E-11	1.062E-10	1.505E-10	2.319E-10	4.084E-10	5.867E-10	9.160E-10	1.631E-09
105.00	3.264E-11	4.990E-11	8.665E-11	1.235E-10	1.919E-10	3.412E-10	4.928E-10	7.739E-10	1.387E-09
110.00	2.630E-11	4.056E-11	7.122E-11	1.022E-10	1.601E-10	2.877E-10	4.180E-10	6.606E-10	1.192E-09
115.00	2.136E-11	3.326E-11	5.913E-11	8.554E-11	1.352E-10	2.456E-10	3.590E-10	5.710E-10	1.037E-09
120.00	1.743E-11	2.745E-11	4.949E-11	7.221E-11	1.153E-10	2.118E-10	3.116E-10	4.989E-10	9.122E-10
125.00	1.429E-11	2.278E-11	4.174E-11	6.147E-11	9.920E-11	1.845E-10	2.731E-10	4.404E-10	8.110E-10
130.00	1.179E-11	1.908E-11	3.558E-11	5.294E-11	8.640E-11	1.627E-10	2.424E-10	3.933E-10	7.289E-10
135.00	9.757E-12	1.604E-11	3.050E-11	4.590E-11	7.581E-11	1.445E-10	2.168E-10	3.543E-10	6.615E-10
140.00	8.154E-12	1.365E-11	2.650E-11	4.036E-11	6.749E-11	1.303E-10	1.967E-10	3.233E-10	6.071E-10
145.00	6.836E-12	1.167E-11	2.319E-11	3.577E-11	6.055E-11	1.184E-10	1.798E-10	2.975E-10	5.623E-10
150.00	5.804E-12	1.011E-11	2.060E-11	3.218E-11	5.516E-11	1.091E-10	1.666E-10	2.771E-10	5.264E-10
155.00	4.983E-12	8.868E-12	1.852E-11	2.930E-11	5.083E-11	1.016E-10	1.559E-10	2.607E-10	4.977E-10
160.00	4.343E-12	7.893E-12	1.688E-11	2.705E-11	4.744E-11	9.570E-11	1.475E-10	2.477E-10	4.753E-10
165.00	3.890E-12	7.199E-12	1.573E-11	2.547E-11	4.509E-11	9.164E-11	1.417E-10	2.385E-10	4.587E-10
170.00	3.541E-12	6.662E-12	1.483E-11	2.422E-11	4.320E-11	8.830E-11	1.369E-10	2.313E-10	4.469E-10
175.00	3.383E-12	6.419E-12	1.443E-11	2.369E-11	4.244E-11	8.703E-11	1.350E-10	2.282E-10	4.405E-10
180.00	3.256E-12	6.241E-12	1.417E-11	2.334E-11	4.180E-11	8.550E-11	1.326E-10	2.247E-10	4.364E-10
TOTAL	1.235E-04	1.295E-04	1.389E-04	1.468E-04	1.593E-04	1.812E-04	1.991E-04	2.262E-04	2.717E-04
TRANS	8.142E-09	1.148E-08	1.791E-08	2.381E-08	3.383E-08	5.362E-08	7.217E-08	1.045E-07	1.699E-07

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 1

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	4.002E-01	3.745E-01	3.496E-01	3.375E-01	3.256E-01	3.139E-01	3.081E-01	3.024E-01	2.967E-01
0.25	3.579E-01	3.428E-01	3.273E-01	3.196E-01	3.118E-01	3.039E-01	3.000E-01	2.960E-01	2.920E-01
0.50	2.622E-01	2.671E-01	2.713E-01	2.732E-01	2.750E-01	2.766E-01	2.773E-01	2.780E-01	2.786E-01
0.75	1.680E-01	1.848E-01	2.040E-01	2.147E-01	2.260E-01	2.381E-01	2.445E-01	2.512E-01	2.580E-01
1.00	1.007E-01	1.194E-01	1.437E-01	1.585E-01	1.758E-01	1.958E-01	2.071E-01	2.193E-01	2.326E-01
1.50	3.553E-02	4.708E-02	6.529E-02	7.856E-02	9.621E-02	1.204E-01	1.358E-01	1.543E-01	1.767E-01
2.00	1.392E-02	1.961E-02	2.975E-02	3.804E-02	5.032E-02	6.947E-02	8.324E-02	1.014E-01	1.258E-01
2.50	6.222E-03	9.054E-03	1.446E-02	1.922E-02	2.678E-02	3.977E-02	5.000E-02	6.459E-02	8.630E-02
3.00	3.123E-03	4.621E-03	7.601E-03	1.034E-02	1.490E-02	2.327E-02	3.032E-02	4.104E-02	5.832E-02
3.50	1.720E-03	2.568E-03	4.296E-03	5.927E-03	8.723E-03	1.410E-02	1.885E-02	2.641E-02	3.943E-02
4.00	1.019E-03	1.530E-03	2.584E-03	3.597E-03	5.366E-03	8.873E-03	1.208E-02	1.737E-02	2.693E-02
4.50	6.400E-04	9.639E-04	1.638E-03	2.293E-03	3.451E-03	5.796E-03	7.991E-03	1.171E-02	1.869E-02
5.00	4.215E-04	6.361E-04	1.085E-03	1.524E-03	2.307E-03	3.917E-03	5.450E-03	8.091E-03	1.321E-02
5.50	2.886E-04	4.361E-04	7.461E-04	1.050E-03	1.596E-03	2.730E-03	3.822E-03	5.731E-03	9.512E-03
6.00	2.041E-04	3.087E-04	5.290E-04	7.459E-04	1.137E-03	1.954E-03	2.749E-03	4.152E-03	6.979E-03
6.50	1.484E-04	2.245E-04	3.853E-04	5.438E-04	8.303E-04	1.433E-03	2.022E-03	3.071E-03	5.212E-03
7.00	1.104E-04	1.672E-04	2.871E-04	4.055E-04	6.200E-04	1.073E-03	1.518E-03	2.315E-03	3.958E-03
7.50	8.386E-05	1.270E-04	2.182E-04	3.084E-04	4.721E-04	8.186E-04	1.160E-03	1.775E-03	3.052E-03
8.00	6.482E-05	9.818E-05	1.688E-04	2.387E-04	3.656E-04	6.349E-04	9.012E-04	1.382E-03	2.387E-03
8.50	5.089E-05	7.710E-05	1.326E-04	1.875E-04	2.874E-04	4.998E-04	7.101E-04	1.091E-03	1.891E-03
9.00	4.051E-05	6.138E-05	1.056E-04	1.494E-04	2.291E-04	3.987E-04	5.669E-04	8.721E-04	1.516E-03
9.50	3.264E-05	4.947E-05	8.511E-05	1.204E-04	1.848E-04	3.218E-04	4.579E-04	7.052E-04	1.229E-03
10.00	2.660E-05	4.031E-05	6.937E-05	9.819E-05	1.507E-04	2.625E-04	3.738E-04	5.762E-04	1.006E-03
12.50	1.092E-05	1.655E-05	2.850E-05	4.036E-05	6.197E-05	1.082E-04	1.542E-04	2.384E-04	4.184E-04
15.00	5.277E-06	8.003E-06	1.379E-05	1.953E-05	3.000E-05	5.240E-05	7.476E-05	1.157E-04	2.035E-04
17.50	2.856E-06	4.333E-06	7.466E-06	1.058E-05	1.626E-05	2.841E-05	4.054E-05	6.277E-05	1.105E-04
20.00	1.678E-06	2.547E-06	4.391E-06	6.223E-06	9.565E-06	1.672E-05	2.387E-05	3.697E-05	6.513E-05
22.50	1.051E-06	1.596E-06	2.752E-06	3.902E-06	5.999E-06	1.049E-05	1.498E-05	2.320E-05	4.089E-05
25.00	6.924E-07	1.052E-06	1.814E-06	2.573E-06	3.956E-06	6.920E-06	9.883E-06	1.531E-05	2.699E-05
27.50	4.747E-07	7.212E-07	1.245E-06	1.766E-06	2.717E-06	4.753E-06	6.790E-06	1.052E-05	1.855E-05
30.00	3.365E-07	5.116E-07	8.836E-07	1.254E-06	1.929E-06	3.377E-06	4.824E-06	7.479E-06	1.319E-05
32.50	2.455E-07	3.735E-07	6.455E-07	9.161E-07	1.410E-06	2.469E-06	3.528E-06	5.470E-06	9.650E-06
35.00	1.835E-07	2.792E-07	4.829E-07	6.856E-07	1.056E-06	1.849E-06	2.643E-06	4.099E-06	7.233E-06
37.50	1.399E-07	2.131E-07	3.688E-07	5.238E-07	8.070E-07	1.414E-06	2.022E-06	3.136E-06	5.535E-06
40.00	1.087E-07	1.657E-07	2.870E-07	4.078E-07	6.285E-07	1.102E-06	1.575E-06	2.444E-06	4.316E-06
42.50	8.587E-08	1.310E-07	2.270E-07	3.227E-07	4.975E-07	8.727E-07	1.248E-06	1.937E-06	3.420E-06
45.00	6.876E-08	1.049E-07	1.820E-07	2.589E-07	3.994E-07	7.009E-07	1.003E-06	1.557E-06	2.749E-06
47.50	5.575E-08	8.516E-08	1.479E-07	2.104E-07	3.248E-07	5.702E-07	8.160E-07	1.267E-06	2.239E-06
50.00	4.576E-08	6.997E-08	1.216E-07	1.731E-07	2.673E-07	4.696E-07	6.722E-07	1.044E-06	1.845E-06
55.00	3.175E-08	4.863E-08	8.470E-08	1.207E-07	1.866E-07	3.282E-07	4.701E-07	7.307E-07	1.292E-06
60.00	2.284E-08	3.505E-08	6.118E-08	8.728E-08	1.351E-07	2.379E-07	3.409E-07	5.301E-07	9.381E-07
65.00	1.690E-08	2.600E-08	4.548E-08	6.496E-08	1.007E-07	1.775E-07	2.546E-07	3.963E-07	7.018E-07
70.00	1.285E-08	1.981E-08	3.474E-08	4.968E-08	7.710E-08	1.362E-07	1.954E-07	3.043E-07	5.393E-07
75.00	9.980E-09	1.543E-08	2.713E-08	3.885E-08	6.037E-08	1.068E-07	1.533E-07	2.390E-07	4.239E-07
80.00	7.916E-09	1.226E-08	2.162E-08	3.101E-08	4.826E-08	8.549E-08	1.229E-07	1.917E-07	3.402E-07
85.00	6.389E-09	9.928E-09	1.756E-08	2.522E-08	3.931E-08	6.971E-08	1.003E-07	1.565E-07	2.781E-07
90.00	5.242E-09	8.166E-09	1.448E-08	2.083E-08	3.252E-08	5.778E-08	8.319E-08	1.300E-07	2.311E-07
95.00	4.367E-09	6.823E-09	1.214E-08	1.749E-08	2.735E-08	4.867E-08	7.012E-08	1.096E-07	1.951E-07
100.00	3.687E-09	5.778E-09	1.031E-08	1.488E-08	2.329E-08	4.152E-08	5.987E-08	9.370E-08	1.669E-07
105.00	3.155E-09	4.959E-09	8.876E-09	1.283E-08	2.013E-08	3.593E-08	5.186E-08	8.122E-08	1.448E-07
110.00	2.733E-09	4.308E-09	7.734E-09	1.119E-08	1.759E-08	3.144E-08	4.541E-08	7.119E-08	1.270E-07
115.00	2.394E-09	3.786E-09	6.817E-09	9.883E-09	1.555E-08	2.786E-08	4.027E-08	6.317E-08	1.128E-07
120.00	2.121E-09	3.364E-09	6.077E-09	8.824E-09	1.391E-08	2.494E-08	3.608E-08	5.664E-08	1.012E-07
125.00	1.900E-09	3.021E-09	5.472E-09	7.957E-09	1.256E-08	2.255E-08	3.265E-08	5.130E-08	9.173E-08
130.00	1.719E-09	2.741E-09	4.980E-09	7.252E-09	1.146E-08	2.062E-08	2.987E-08	4.696E-08	8.401E-08
135.00	1.571E-09	2.512E-09	4.575E-09	6.669E-09	1.055E-08	1.900E-08	2.755E-08	4.335E-08	7.762E-08
140.00	1.450E-09	2.324E-09	4.244E-09	6.197E-09	9.820E-09	1.771E-08	2.569E-08	4.043E-08	7.242E-08
145.00	1.352E-09	2.172E-09	3.973E-09	5.806E-09	9.208E-09	1.662E-08	2.412E-08	3.800E-08	6.812E-08
150.00	1.272E-09	2.048E-09	3.754E-09	5.493E-09	8.722E-09	1.576E-08	2.288E-08	3.606E-08	6.466E-08
155.00	1.208E-09	1.949E-09	3.579E-09	5.241E-09	8.329E-09	1.506E-08	2.188E-08	3.449E-08	6.188E-08
160.00	1.159E-09	1.872E-09	3.442E-09	5.043E-09	8.018E-09	1.451E-08	2.109E-08	3.326E-08	5.969E-08
165.00	1.121E-09	1.814E-09	3.340E-09	4.899E-09	7.797E-09	1.412E-08	2.052E-08	3.237E-08	5.809E-08
170.00	1.096E-09	1.775E-09	3.269E-09	4.792E-09	7.624E-09	1.381E-08	2.008E-08	3.168E-08	5.691E-08
175.00	1.080E-09	1.750E-09	3.227E-09	4.737E-09	7.547E-09	1.368E-08	1.989E-08	3.137E-08	5.631E-08
180.00	1.077E-09	1.745E-09	3.213E-09	4.708E-09	7.485E-09	1.355E-08	1.971E-08	3.113E-08	5.596E-08
TOTAL	3.636E-04	4.330E-04	5.489E-04	6.418E-04	7.812E-04	1.014E-03	1.200E-03	1.479E-03	1.944E-03
TRANS	3.429E-07	5.083E-07	8.495E-07	1.180E-06	1.767E-06	2.986E-06	4.168E-06	6.275E-06	1.064E-05

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 1

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	2.911E-01	2.889E-01	2.867E-01	2.856E-01	2.845E-01	2.835E-01	2.830E-01	2.825E-01	2.818E-01
0.25	2.880E-01	2.865E-01	2.849E-01	2.841E-01	2.833E-01	2.826E-01	2.822E-01	2.819E-01	2.815E-01
0.50	2.791E-01	2.793E-01	2.796E-01	2.797E-01	2.798E-01	2.799E-01	2.800E-01	2.802E-01	2.806E-01
0.75	2.651E-01	2.680E-01	2.710E-01	2.725E-01	2.740E-01	2.756E-01	2.764E-01	2.772E-01	2.791E-01
1.00	2.471E-01	2.532E-01	2.596E-01	2.629E-01	2.662E-01	2.697E-01	2.714E-01	2.732E-01	2.771E-01
1.50	2.041E-01	2.167E-01	2.305E-01	2.378E-01	2.456E-01	2.537E-01	2.579E-01	2.622E-01	2.714E-01
2.00	1.596E-01	1.769E-01	1.969E-01	2.081E-01	2.202E-01	2.334E-01	2.405E-01	2.478E-01	2.637E-01
2.50	1.202E-01	1.393E-01	1.629E-01	1.769E-01	1.927E-01	2.106E-01	2.204E-01	2.309E-01	2.542E-01
3.00	8.845E-02	1.070E-01	1.317E-01	1.471E-01	1.652E-01	1.867E-01	1.989E-01	2.123E-01	2.433E-01
3.50	6.435E-02	8.102E-02	1.046E-01	1.202E-01	1.393E-01	1.630E-01	1.771E-01	1.929E-01	2.312E-01
4.00	4.672E-02	6.092E-02	8.222E-02	9.706E-02	1.160E-01	1.407E-01	1.559E-01	1.735E-01	2.183E-01
4.50	3.406E-02	4.577E-02	6.428E-02	7.779E-02	9.575E-02	1.202E-01	1.359E-01	1.546E-01	2.048E-01
5.00	2.504E-02	3.451E-02	5.018E-02	6.211E-02	7.856E-02	1.020E-01	1.176E-01	1.368E-01	1.911E-01
5.50	1.861E-02	2.619E-02	3.924E-02	4.956E-02	6.426E-02	8.611E-02	1.012E-01	1.203E-01	1.774E-01
6.00	1.400E-02	2.004E-02	3.081E-02	3.960E-02	5.252E-02	7.246E-02	8.669E-02	1.053E-01	1.640E-01
6.50	1.067E-02	1.549E-02	2.432E-02	3.174E-02	4.295E-02	6.087E-02	7.408E-02	9.178E-02	1.509E-01
7.00	8.228E-03	1.209E-02	1.933E-02	2.556E-02	3.520E-02	5.111E-02	6.320E-02	7.982E-02	1.384E-01
7.50	6.425E-03	9.526E-03	1.547E-02	2.069E-02	2.894E-02	4.296E-02	5.389E-02	6.930E-02	1.265E-01
8.00	5.075E-03	7.584E-03	1.247E-02	1.685E-02	2.389E-02	3.616E-02	4.597E-02	6.011E-02	1.153E-01
8.50	4.054E-03	6.096E-03	1.014E-02	1.380E-02	1.980E-02	3.050E-02	3.926E-02	5.214E-02	1.049E-01
9.00	3.271E-03	4.945E-03	8.297E-03	1.138E-02	1.649E-02	2.581E-02	3.358E-02	4.524E-02	9.529E-02
9.50	2.665E-03	4.047E-03	6.841E-03	9.441E-03	1.381E-02	2.190E-02	2.878E-02	3.929E-02	8.642E-02
10.00	2.191E-03	3.339E-03	5.681E-03	7.882E-03	1.161E-02	1.865E-02	2.473E-02	3.417E-02	7.829E-02
12.50	9.230E-04	1.422E-03	2.469E-03	3.485E-03	5.270E-03	8.835E-03	1.210E-02	1.750E-02	4.749E-02
15.00	4.513E-04	6.989E-04	1.225E-03	1.743E-03	2.671E-03	4.584E-03	6.400E-03	9.517E-03	2.907E-02
17.50	2.457E-04	3.815E-04	6.718E-04	9.601E-04	1.482E-03	2.577E-03	3.638E-03	5.504E-03	1.823E-02
20.00	1.451E-04	2.255E-04	3.981E-04	5.704E-04	8.843E-04	1.550E-03	2.203E-03	3.368E-03	1.179E-02
22.50	9.116E-05	1.418E-04	2.508E-04	3.598E-04	5.591E-04	9.844E-04	1.405E-03	2.164E-03	7.868E-03
25.00	6.020E-05	9.371E-05	1.659E-04	2.382E-04	3.707E-04	6.546E-04	9.370E-04	1.449E-03	5.413E-03
27.50	4.140E-05	6.447E-05	1.142E-04	1.641E-04	2.556E-04	4.523E-04	6.486E-04	1.006E-03	3.831E-03
30.00	2.945E-05	4.587E-05	8.127E-05	1.168E-04	1.821E-04	3.227E-04	4.634E-04	7.206E-04	2.781E-03
32.50	2.155E-05	3.357E-05	5.949E-05	8.554E-05	1.334E-04	2.367E-04	3.401E-04	5.297E-04	2.065E-03
35.00	1.615E-05	2.517E-05	4.463E-05	6.417E-05	1.001E-04	1.777E-04	2.556E-04	3.985E-04	1.566E-03
37.50	1.237E-05	1.927E-05	3.418E-05	4.916E-05	7.673E-05	1.363E-04	1.961E-04	3.060E-04	1.209E-03
40.00	9.646E-06	1.503E-05	2.666E-05	3.836E-05	5.988E-05	1.064E-04	1.531E-04	2.391E-04	9.491E-04
42.50	7.645E-06	1.192E-05	2.114E-05	3.042E-05	4.750E-05	8.439E-05	1.215E-04	1.899E-04	7.562E-04
45.00	6.148E-06	9.584E-06	1.701E-05	2.447E-05	3.822E-05	6.793E-05	9.783E-05	1.529E-04	6.108E-04
47.50	5.009E-06	7.810E-06	1.386E-05	1.994E-05	3.115E-05	5.539E-05	7.979E-05	1.247E-04	4.993E-04
50.00	4.129E-06	6.438E-06	1.143E-05	1.645E-05	2.569E-05	4.568E-05	6.581E-05	1.029E-04	4.128E-04
55.00	2.893E-06	4.514E-06	8.013E-06	1.154E-05	1.802E-05	3.206E-05	4.620E-05	7.228E-05	2.907E-04
60.00	2.102E-06	3.279E-06	5.824E-06	8.385E-06	1.310E-05	2.331E-05	3.360E-05	5.258E-05	2.119E-04
65.00	1.574E-06	2.456E-06	4.364E-06	6.284E-06	9.821E-06	1.748E-05	2.520E-05	3.945E-05	1.592E-04
70.00	1.210E-06	1.889E-06	3.357E-06	4.835E-06	7.559E-06	1.345E-05	1.940E-05	3.037E-05	1.227E-04
75.00	9.521E-07	1.487E-06	2.643E-06	3.807E-06	5.953E-06	1.060E-05	1.529E-05	2.393E-05	9.675E-05
80.00	7.646E-07	1.195E-06	2.124E-06	3.061E-06	4.786E-06	8.523E-06	1.229E-05	1.925E-05	7.787E-05
85.00	6.256E-07	9.776E-07	1.739E-06	2.506E-06	3.920E-06	6.981E-06	1.007E-05	1.577E-05	6.384E-05
90.00	5.203E-07	8.135E-07	1.448E-06	2.086E-06	3.264E-06	5.816E-06	8.388E-06	1.314E-05	5.321E-05
95.00	4.395E-07	6.873E-07	1.224E-06	1.764E-06	2.760E-06	4.916E-06	7.092E-06	1.111E-05	4.502E-05
100.00	3.764E-07	5.889E-07	1.049E-06	1.512E-06	2.366E-06	4.218E-06	6.085E-06	9.534E-06	3.863E-05
105.00	3.267E-07	5.112E-07	9.107E-07	1.313E-06	2.055E-06	3.663E-06	5.286E-06	8.282E-06	3.358E-05
110.00	2.869E-07	4.492E-07	8.005E-07	1.154E-06	1.807E-06	3.222E-06	4.650E-06	7.287E-06	2.955E-05
115.00	2.549E-07	3.992E-07	7.116E-07	1.026E-06	1.607E-06	2.866E-06	4.136E-06	6.482E-06	2.629E-05
120.00	2.290E-07	3.586E-07	6.395E-07	9.225E-07	1.445E-06	2.576E-06	3.719E-06	5.828E-06	2.365E-05
125.00	2.077E-07	3.255E-07	5.805E-07	8.376E-07	1.312E-06	2.341E-06	3.378E-06	5.295E-06	2.149E-05
130.00	1.903E-07	2.983E-07	5.322E-07	7.681E-07	1.203E-06	2.146E-06	3.097E-06	4.856E-06	1.971E-05
135.00	1.760E-07	2.759E-07	4.925E-07	7.107E-07	1.114E-06	1.987E-06	2.869E-06	4.497E-06	1.826E-05
140.00	1.643E-07	2.576E-07	4.598E-07	6.637E-07	1.040E-06	1.855E-06	2.678E-06	4.200E-06	1.705E-05
145.00	1.546E-07	2.426E-07	4.331E-07	6.251E-07	9.795E-07	1.749E-06	2.525E-06	3.958E-06	1.607E-05
150.00	1.468E-07	2.303E-07	4.113E-07	5.938E-07	9.308E-07	1.661E-06	2.398E-06	3.761E-06	1.527E-05
155.00	1.406E-07	2.206E-07	3.939E-07	5.688E-07	8.915E-07	1.591E-06	2.297E-06	3.603E-06	1.464E-05
160.00	1.357E-07	2.129E-07	3.803E-07	5.491E-07	8.607E-07	1.537E-06	2.219E-06	3.480E-06	1.414E-05
165.00	1.320E-07	2.072E-07	3.701E-07	5.345E-07	8.380E-07	1.495E-06	2.159E-06	3.386E-06	1.376E-05
170.00	1.294E-07	2.032E-07	3.630E-07	5.242E-07	8.217E-07	1.468E-06	2.120E-06	3.324E-06	1.350E-05
175.00	1.280E-07	2.008E-07	3.588E-07	5.182E-07	8.124E-07	1.449E-06	2.093E-06	3.283E-06	1.334E-05
180.00	1.274E-07	2.000E-07	3.576E-07	5.164E-07	8.098E-07	1.448E-06	2.090E-06	3.276E-06	1.330E-05
TOTAL	2.875E-03	3.574E-03	4.737E-03	5.669E-03	7.066E-03	9.395E-03	1.126E-02	1.405E-02	2.804E-02
TRANS	2.243E-05	3.381E-05	5.733E-05	8.008E-05	1.204E-04	2.036E-04	2.837E-04	4.254E-04	1.484E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 2

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	1.530E+00	1.162E+00	8.298E-01	6.834E-01	5.537E-01	4.395E-01	3.875E-01	3.385E-01	2.924E-01
0.25	7.101E-01	6.364E-01	5.496E-01	4.978E-01	4.381E-01	3.716E-01	3.372E-01	3.035E-01	2.703E-01
0.50	1.769E-01	1.985E-01	2.243E-01	2.356E-01	2.410E-01	2.378E-01	2.328E-01	2.261E-01	2.174E-01
0.75	5.045E-02	6.421E-02	8.534E-02	9.929E-02	1.149E-01	1.317E-01	1.403E-01	1.490E-01	1.576E-01
1.00	1.808E-02	2.446E-02	3.538E-02	4.373E-02	5.494E-02	7.038E-02	8.038E-02	9.250E-02	1.073E-01
1.50	3.840E-03	5.437E-03	8.429E-03	1.101E-02	1.503E-02	2.185E-02	2.724E-02	3.500E-02	4.685E-02
2.00	1.236E-03	1.774E-03	2.812E-03	3.749E-03	5.291E-03	8.137E-03	1.059E-02	1.446E-02	2.110E-02
2.50	5.092E-04	7.340E-04	1.174E-03	1.578E-03	2.259E-03	3.568E-03	4.746E-03	6.692E-03	1.028E-02
3.00	2.461E-04	3.554E-04	5.706E-04	7.699E-04	1.110E-03	1.776E-03	2.390E-03	3.432E-03	5.431E-03
3.50	1.330E-04	1.922E-04	3.092E-04	4.179E-04	6.046E-04	9.744E-04	1.320E-03	1.915E-03	3.086E-03
4.00	7.800E-05	1.128E-04	1.816E-04	2.457E-04	3.562E-04	5.763E-04	7.836E-04	1.144E-03	1.865E-03
4.50	4.871E-05	7.046E-05	1.135E-04	1.537E-04	2.230E-04	3.617E-04	4.929E-04	7.224E-04	1.186E-03
5.00	3.197E-05	4.625E-05	7.452E-05	1.009E-04	1.466E-04	2.381E-04	3.249E-04	4.774E-04	7.879E-04
5.50	2.184E-05	3.160E-05	5.092E-05	6.899E-05	1.002E-04	1.630E-04	2.226E-04	3.276E-04	5.425E-04
6.00	1.542E-05	2.232E-05	3.597E-05	4.874E-05	7.082E-05	1.152E-04	1.575E-04	2.321E-04	3.852E-04
6.50	1.120E-05	1.620E-05	2.612E-05	3.540E-05	5.145E-05	8.376E-05	1.145E-04	1.689E-04	2.808E-04
7.00	8.327E-06	1.205E-05	1.943E-05	2.633E-05	3.827E-05	6.232E-05	8.526E-05	1.258E-04	2.094E-04
7.50	6.319E-06	9.145E-06	1.474E-05	1.998E-05	2.905E-05	4.732E-05	6.475E-05	9.558E-05	1.592E-04
8.00	4.882E-06	7.065E-06	1.139E-05	1.544E-05	2.245E-05	3.657E-05	5.006E-05	7.391E-05	1.232E-04
8.50	3.831E-06	5.544E-06	8.939E-06	1.212E-05	1.762E-05	2.871E-05	3.930E-05	5.804E-05	9.681E-05
9.00	3.048E-06	4.411E-06	7.113E-06	9.641E-06	1.402E-05	2.285E-05	3.128E-05	4.621E-05	7.710E-05
9.50	2.455E-06	3.553E-06	5.730E-06	7.767E-06	1.130E-05	1.841E-05	2.521E-05	3.724E-05	6.216E-05
10.00	2.000E-06	2.894E-06	4.667E-06	6.327E-06	9.201E-06	1.500E-05	2.054E-05	3.035E-05	5.067E-05
12.50	8.188E-07	1.185E-06	1.912E-06	2.592E-06	3.771E-06	6.150E-06	8.424E-06	1.245E-05	2.081E-05
15.00	3.948E-07	5.716E-07	9.223E-07	1.251E-06	1.820E-06	2.970E-06	4.069E-06	6.018E-06	1.006E-05
17.50	2.130E-07	3.084E-07	4.978E-07	6.753E-07	9.830E-07	1.605E-06	2.200E-06	3.255E-06	5.445E-06
20.00	1.247E-07	1.806E-07	2.917E-07	3.958E-07	5.764E-07	9.414E-07	1.291E-06	1.911E-06	3.199E-06
22.50	7.776E-08	1.127E-07	1.820E-07	2.471E-07	3.600E-07	5.884E-07	8.071E-07	1.195E-06	2.003E-06
25.00	5.096E-08	7.388E-08	1.194E-07	1.621E-07	2.363E-07	3.866E-07	5.305E-07	7.862E-07	1.318E-06
27.50	3.474E-08	5.039E-08	8.149E-08	1.107E-07	1.615E-07	2.643E-07	3.629E-07	5.382E-07	9.028E-07
30.00	2.448E-08	3.552E-08	5.748E-08	7.811E-08	1.140E-07	1.868E-07	2.566E-07	3.809E-07	6.395E-07
32.50	1.774E-08	2.575E-08	4.170E-08	5.670E-08	8.282E-08	1.358E-07	1.867E-07	2.773E-07	4.661E-07
35.00	1.316E-08	1.911E-08	3.097E-08	4.214E-08	6.159E-08	1.011E-07	1.391E-07	2.068E-07	3.479E-07
37.50	9.954E-09	1.447E-08	2.347E-08	3.194E-08	4.673E-08	7.681E-08	1.058E-07	1.573E-07	2.650E-07
40.00	7.667E-09	1.115E-08	1.810E-08	2.466E-08	3.611E-08	5.943E-08	8.189E-08	1.220E-07	2.057E-07
42.50	5.998E-09	8.729E-09	1.419E-08	1.934E-08	2.835E-08	4.672E-08	6.443E-08	9.606E-08	1.622E-07
45.00	4.754E-09	6.924E-09	1.127E-08	1.537E-08	2.255E-08	3.722E-08	5.138E-08	7.668E-08	1.296E-07
47.50	3.814E-09	5.559E-09	9.055E-09	1.236E-08	1.816E-08	3.002E-08	4.149E-08	6.199E-08	1.050E-07
50.00	3.095E-09	4.515E-09	7.363E-09	1.006E-08	1.480E-08	2.451E-08	3.390E-08	5.072E-08	8.601E-08
55.00	2.093E-09	3.060E-09	5.004E-09	6.852E-09	1.010E-08	1.679E-08	2.329E-08	3.494E-08	5.945E-08
60.00	1.463E-09	2.144E-09	3.517E-09	4.827E-09	7.139E-09	1.192E-08	1.657E-08	2.493E-08	4.257E-08
65.00	1.049E-09	1.541E-09	2.537E-09	3.491E-09	5.181E-09	8.686E-09	1.211E-08	1.829E-08	3.136E-08
70.00	7.700E-10	1.134E-09	1.875E-09	2.588E-09	3.855E-09	6.497E-09	9.088E-09	1.377E-08	2.371E-08
75.00	5.752E-10	8.505E-10	1.412E-09	1.955E-09	2.925E-09	4.958E-09	6.959E-09	1.059E-08	1.832E-08
80.00	4.371E-10	6.487E-10	1.083E-09	1.504E-09	2.262E-09	3.857E-09	5.435E-09	8.307E-09	1.444E-08
85.00	3.367E-10	5.019E-10	8.430E-10	1.176E-09	1.777E-09	3.051E-09	4.317E-09	6.630E-09	1.159E-08
90.00	2.623E-10	3.930E-10	6.645E-10	9.310E-10	1.415E-09	2.448E-09	3.480E-09	5.371E-09	9.442E-09
95.00	2.068E-10	3.116E-10	5.308E-10	7.475E-10	1.143E-09	1.995E-09	2.849E-09	4.420E-09	7.816E-09
100.00	1.642E-10	2.490E-10	4.279E-10	6.059E-10	9.332E-10	1.643E-09	2.359E-09	3.681E-09	6.552E-09
105.00	1.316E-10	2.011E-10	3.490E-10	4.973E-10	7.721E-10	1.372E-09	1.981E-09	3.109E-09	5.567E-09
110.00	1.061E-10	1.635E-10	2.868E-10	4.115E-10	6.442E-10	1.156E-09	1.680E-09	2.653E-09	4.785E-09
115.00	8.611E-11	1.340E-10	2.380E-10	3.442E-10	5.438E-10	9.870E-10	1.442E-09	2.293E-09	4.162E-09
120.00	7.026E-11	1.106E-10	1.992E-10	2.904E-10	4.634E-10	8.509E-10	1.251E-09	2.002E-09	3.660E-09
125.00	5.757E-11	9.175E-11	1.679E-10	2.472E-10	3.986E-10	7.407E-10	1.096E-09	1.767E-09	3.253E-09
130.00	4.751E-11	7.681E-11	1.431E-10	2.128E-10	3.470E-10	6.530E-10	9.727E-10	1.578E-09	2.923E-09
135.00	3.929E-11	6.454E-11	1.226E-10	1.844E-10	3.043E-10	5.799E-10	8.698E-10	1.421E-09	2.652E-09
140.00	3.281E-11	5.487E-11	1.065E-10	1.620E-10	2.708E-10	5.226E-10	7.887E-10	1.296E-09	2.433E-09
145.00	2.749E-11	4.688E-11	9.309E-11	1.435E-10	2.429E-10	4.745E-10	7.207E-10	1.192E-09	2.253E-09
150.00	2.332E-11	4.060E-11	8.262E-11	1.290E-10	2.211E-10	4.371E-10	6.675E-10	1.110E-09	2.109E-09
155.00	2.001E-11	3.558E-11	7.424E-11	1.174E-10	2.037E-10	4.070E-10	6.246E-10	1.044E-09	1.993E-09
160.00	1.742E-11	3.164E-11	6.764E-11	1.083E-10	1.900E-10	3.832E-10	5.907E-10	9.919E-10	1.903E-09
165.00	1.559E-11	2.884E-11	6.299E-11	1.020E-10	1.805E-10	3.669E-10	5.672E-10	9.549E-10	1.836E-09
170.00	1.419E-11	2.668E-11	5.934E-11	9.692E-11	1.729E-10	3.534E-10	5.481E-10	9.262E-10	1.789E-09
175.00	1.354E-11	2.569E-11	5.775E-11	9.483E-11	1.699E-10	3.484E-10	5.405E-10	9.132E-10	1.763E-09
180.00	1.308E-11	2.495E-11	5.640E-11	9.283E-11	1.665E-10	3.420E-10	5.317E-10	9.024E-10	1.752E-09
TOTAL	1.866E-04	1.956E-04	2.098E-04	2.217E-04	2.406E-04	2.737E-04	3.007E-04	3.416E-04	4.104E-04
TRANS	2.961E-08	4.165E-08	6.477E-08	8.589E-08	1.218E-07	1.923E-07	2.583E-07	3.730E-07	6.046E-07

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 2

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	2.497E-01	2.336E-01	2.181E-01	2.105E-01	2.031E-01	1.958E-01	1.922E-01	1.886E-01	1.851E-01
0.25	2.377E-01	2.247E-01	2.119E-01	2.055E-01	1.993E-01	1.930E-01	1.899E-01	1.869E-01	1.838E-01
0.50	2.060E-01	2.006E-01	1.947E-01	1.916E-01	1.884E-01	1.851E-01	1.835E-01	1.817E-01	1.800E-01
0.75	1.653E-01	1.679E-01	1.702E-01	1.712E-01	1.721E-01	1.729E-01	1.733E-01	1.737E-01	1.740E-01
1.00	1.254E-01	1.338E-01	1.427E-01	1.475E-01	1.525E-01	1.577E-01	1.604E-01	1.632E-01	1.660E-01
1.50	6.621E-02	7.757E-02	9.222E-02	1.012E-01	1.115E-01	1.236E-01	1.304E-01	1.378E-01	1.458E-01
2.00	3.408E-02	4.304E-02	5.621E-02	6.522E-02	7.665E-02	9.142E-02	1.005E-01	1.109E-01	1.231E-01
2.50	1.811E-02	2.413E-02	3.388E-02	4.118E-02	5.117E-02	6.533E-02	7.472E-02	8.629E-02	1.008E-01
3.00	1.012E-02	1.400E-02	2.073E-02	2.612E-02	3.396E-02	4.599E-02	5.453E-02	6.570E-02	8.066E-02
3.50	5.964E-03	8.463E-03	1.302E-02	1.686E-02	2.273E-02	3.231E-02	3.953E-02	4.946E-02	6.363E-02
4.00	3.692E-03	5.332E-03	8.436E-03	1.115E-02	1.545E-02	2.284E-02	2.870E-02	3.711E-02	4.980E-02
4.50	2.387E-03	3.491E-03	5.635E-03	7.565E-03	1.071E-02	1.634E-02	2.097E-02	2.790E-02	3.886E-02
5.00	1.603E-03	2.365E-03	3.875E-03	5.262E-03	7.573E-03	1.185E-02	1.549E-02	2.109E-02	3.034E-02
5.50	1.112E-03	1.652E-03	2.736E-03	3.749E-03	5.465E-03	8.720E-03	1.157E-02	1.607E-02	2.377E-02
6.00	7.943E-04	1.185E-03	1.979E-03	2.730E-03	4.019E-03	6.517E-03	8.749E-03	1.236E-02	1.872E-02
6.50	5.813E-04	8.702E-04	1.463E-03	2.028E-03	3.009E-03	4.942E-03	6.701E-03	9.584E-03	1.484E-02
7.00	4.348E-04	6.525E-04	1.102E-03	1.534E-03	2.291E-03	3.801E-03	5.195E-03	7.524E-03	1.184E-02
7.50	3.314E-04	4.983E-04	8.448E-04	1.180E-03	1.770E-03	2.962E-03	4.076E-03	5.960E-03	9.518E-03
8.00	2.569E-04	3.869E-04	6.577E-04	9.208E-04	1.387E-03	2.337E-03	3.234E-03	4.767E-03	7.710E-03
8.50	2.021E-04	3.047E-04	5.193E-04	7.285E-04	1.101E-03	1.866E-03	2.593E-03	3.848E-03	6.291E-03
9.00	1.611E-04	2.432E-04	4.152E-04	5.834E-04	8.840E-04	1.505E-03	2.099E-03	3.134E-03	5.172E-03
9.50	1.300E-04	1.964E-04	3.358E-04	4.724E-04	7.174E-04	1.226E-03	1.716E-03	2.574E-03	4.281E-03
10.00	1.060E-04	1.603E-04	2.744E-04	3.865E-04	5.879E-04	1.008E-03	1.414E-03	2.130E-03	3.569E-03
12.50	4.365E-05	6.610E-05	1.135E-04	1.604E-04	2.454E-04	4.248E-04	6.012E-04	9.177E-04	1.573E-03
15.00	2.113E-05	3.202E-05	5.509E-05	7.795E-05	1.195E-04	2.078E-04	2.953E-04	4.538E-04	7.871E-04
17.50	1.144E-05	1.735E-05	2.988E-05	4.231E-05	6.494E-05	1.132E-04	1.612E-04	2.485E-04	4.339E-04
20.00	6.728E-06	1.021E-05	1.759E-05	2.492E-05	3.828E-05	6.683E-05	9.527E-05	1.472E-04	2.579E-04
22.50	4.215E-06	6.398E-06	1.103E-05	1.563E-05	2.403E-05	4.198E-05	5.990E-05	9.266E-05	1.628E-04
25.00	2.777E-06	4.216E-06	7.274E-06	1.031E-05	1.585E-05	2.772E-05	3.957E-05	6.126E-05	1.078E-04
27.50	1.904E-06	2.893E-06	4.993E-06	7.081E-06	1.089E-05	1.906E-05	2.721E-05	4.215E-05	7.424E-05
30.00	1.350E-06	2.052E-06	3.545E-06	5.029E-06	7.739E-06	1.354E-05	1.935E-05	2.999E-05	5.285E-05
32.50	9.852E-07	1.498E-06	2.589E-06	3.675E-06	5.657E-06	9.905E-06	1.415E-05	2.194E-05	3.870E-05
35.00	7.363E-07	1.120E-06	1.938E-06	2.751E-06	4.236E-06	7.421E-06	1.061E-05	1.645E-05	2.902E-05
37.50	5.616E-07	8.552E-07	1.480E-06	2.102E-06	3.239E-06	5.677E-06	8.116E-06	1.259E-05	2.223E-05
40.00	4.365E-07	6.651E-07	1.152E-06	1.637E-06	2.522E-06	4.423E-06	6.325E-06	9.816E-06	1.734E-05
42.50	3.447E-07	5.257E-07	9.111E-07	1.295E-06	1.997E-06	3.503E-06	5.011E-06	7.778E-06	1.374E-05
45.00	2.760E-07	4.213E-07	7.308E-07	1.039E-06	1.603E-06	2.814E-06	4.027E-06	6.252E-06	1.105E-05
47.50	2.239E-07	3.420E-07	5.938E-07	8.448E-07	1.304E-06	2.290E-06	3.278E-06	5.091E-06	9.001E-06
50.00	1.838E-07	2.809E-07	4.882E-07	6.949E-07	1.073E-06	1.886E-06	2.700E-06	4.195E-06	7.418E-06
55.00	1.275E-07	1.953E-07	3.402E-07	4.851E-07	7.502E-07	1.317E-06	1.883E-06	2.924E-06	5.210E-06
60.00	9.173E-08	1.407E-07	2.456E-07	3.504E-07	5.423E-07	9.552E-07	1.369E-06	2.130E-06	3.773E-06
65.00	6.789E-08	1.044E-07	1.826E-07	2.609E-07	4.044E-07	7.132E-07	1.023E-06	1.593E-06	2.823E-06
70.00	5.160E-08	7.954E-08	1.395E-07	1.995E-07	3.096E-07	5.468E-07	7.849E-07	1.223E-06	2.169E-06
75.00	4.010E-08	6.195E-08	1.089E-07	1.560E-07	2.424E-07	4.288E-07	6.161E-07	9.607E-07	1.705E-06
80.00	3.178E-08	4.924E-08	8.682E-08	1.245E-07	1.938E-07	3.433E-07	4.936E-07	7.703E-07	1.369E-06
85.00	2.566E-08	3.986E-08	7.047E-08	1.012E-07	1.578E-07	2.799E-07	4.028E-07	6.291E-07	1.119E-06
90.00	2.105E-08	3.278E-08	5.814E-08	8.364E-08	1.306E-07	2.321E-07	3.342E-07	5.224E-07	9.297E-07
95.00	1.754E-08	2.739E-08	4.873E-08	7.020E-08	1.098E-07	1.954E-07	2.816E-07	4.405E-07	7.845E-07
100.00	1.480E-08	2.319E-08	4.137E-08	5.970E-08	9.352E-08	1.668E-07	2.405E-07	3.766E-07	6.714E-07
105.00	1.266E-08	1.990E-08	3.563E-08	5.149E-08	8.077E-08	1.442E-07	2.082E-07	3.263E-07	5.821E-07
110.00	1.097E-08	1.728E-08	3.102E-08	4.491E-08	7.058E-08	1.262E-07	1.824E-07	2.861E-07	5.108E-07
115.00	9.606E-09	1.519E-08	2.735E-08	3.966E-08	6.241E-08	1.118E-07	1.617E-07	2.537E-07	4.535E-07
120.00	8.510E-09	1.349E-08	2.437E-08	3.539E-08	5.578E-08	1.001E-07	1.448E-07	2.275E-07	4.069E-07
125.00	7.617E-09	1.211E-08	2.194E-08	3.191E-08	5.037E-08	9.053E-08	1.311E-07	2.061E-07	3.689E-07
130.00	6.892E-09	1.099E-08	1.997E-08	2.908E-08	4.597E-08	8.271E-08	1.199E-07	1.886E-07	3.377E-07
135.00	6.297E-09	1.007E-08	1.833E-08	2.674E-08	4.233E-08	7.628E-08	1.106E-07	1.741E-07	3.121E-07
140.00	5.812E-09	9.319E-09	1.702E-08	2.485E-08	3.937E-08	7.102E-08	1.030E-07	1.623E-07	2.911E-07
145.00	5.415E-09	8.700E-09	1.592E-08	2.327E-08	3.692E-08	6.670E-08	9.684E-08	1.526E-07	2.738E-07
150.00	5.096E-09	8.205E-09	1.505E-08	2.202E-08	3.496E-08	6.320E-08	9.181E-08	1.448E-07	2.599E-07
155.00	4.840E-09	7.807E-09	1.434E-08	2.100E-08	3.339E-08	6.041E-08	8.778E-08	1.385E-07	2.487E-07
160.00	4.641E-09	7.495E-09	1.379E-08	2.021E-08	3.215E-08	5.822E-08	8.464E-08	1.336E-07	2.399E-07
165.00	4.492E-09	7.269E-09	1.339E-08	1.963E-08	3.124E-08	5.659E-08	8.228E-08	1.299E-07	2.334E-07
170.00	4.388E-09	7.100E-09	1.308E-08	1.919E-08	3.057E-08	5.544E-08	8.064E-08	1.273E-07	2.288E-07
175.00	4.328E-09	7.015E-09	1.294E-08	1.899E-08	3.023E-08	5.478E-08	7.968E-08	1.258E-07	2.261E-07
180.00	4.308E-09	6.964E-09	1.282E-08	1.883E-08	3.003E-08	5.453E-08	7.935E-08	1.253E-07	2.253E-07
TOTAL	5.492E-04	6.540E-04	8.291E-04	9.693E-04	1.180E-03	1.531E-03	1.812E-03	2.233E-03	2.936E-03
TRANS	1.214E-06	1.795E-06	2.987E-06	4.137E-06	6.176E-06	1.038E-05	1.445E-05	2.166E-05	3.654E-05

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 2

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	1.816E-01	1.802E-01	1.788E-01	1.781E-01	1.775E-01	1.768E-01	1.764E-01	1.761E-01	1.755E-01
0.25	1.807E-01	1.795E-01	1.783E-01	1.777E-01	1.771E-01	1.765E-01	1.762E-01	1.760E-01	1.754E-01
0.50	1.783E-01	1.776E-01	1.769E-01	1.765E-01	1.762E-01	1.758E-01	1.756E-01	1.755E-01	1.752E-01
0.75	1.742E-01	1.743E-01	1.744E-01	1.745E-01	1.745E-01	1.746E-01	1.746E-01	1.747E-01	1.748E-01
1.00	1.688E-01	1.700E-01	1.711E-01	1.717E-01	1.723E-01	1.729E-01	1.732E-01	1.736E-01	1.742E-01
1.50	1.546E-01	1.583E-01	1.622E-01	1.642E-01	1.662E-01	1.683E-01	1.694E-01	1.704E-01	1.726E-01
2.00	1.374E-01	1.439E-01	1.508E-01	1.544E-01	1.582E-01	1.621E-01	1.641E-01	1.662E-01	1.705E-01
2.50	1.192E-01	1.280E-01	1.377E-01	1.430E-01	1.487E-01	1.546E-01	1.577E-01	1.610E-01	1.677E-01
3.00	1.013E-01	1.117E-01	1.239E-01	1.307E-01	1.381E-01	1.461E-01	1.504E-01	1.549E-01	1.644E-01
3.50	8.473E-02	9.616E-02	1.100E-01	1.180E-01	1.270E-01	1.369E-01	1.424E-01	1.481E-01	1.607E-01
4.00	7.012E-02	8.182E-02	9.661E-02	1.055E-01	1.157E-01	1.273E-01	1.338E-01	1.408E-01	1.565E-01
4.50	5.761E-02	6.904E-02	8.412E-02	9.353E-02	1.046E-01	1.176E-01	1.250E-01	1.332E-01	1.520E-01
5.00	4.715E-02	5.793E-02	7.276E-02	8.234E-02	9.388E-02	1.080E-01	1.162E-01	1.253E-01	1.471E-01
5.50	3.852E-02	4.845E-02	6.263E-02	7.210E-02	8.383E-02	9.857E-02	1.074E-01	1.174E-01	1.420E-01
6.00	3.149E-02	4.045E-02	5.373E-02	6.288E-02	7.452E-02	8.959E-02	9.884E-02	1.096E-01	1.368E-01
6.50	2.579E-02	3.378E-02	4.600E-02	5.469E-02	6.601E-02	8.112E-02	9.062E-02	1.018E-01	1.313E-01
7.00	2.118E-02	2.823E-02	3.936E-02	4.749E-02	5.833E-02	7.322E-02	8.282E-02	9.438E-02	1.258E-01
7.50	1.747E-02	2.365E-02	3.368E-02	4.119E-02	5.145E-02	6.593E-02	7.549E-02	8.722E-02	1.202E-01
8.00	1.447E-02	1.986E-02	2.884E-02	3.573E-02	4.533E-02	5.925E-02	6.865E-02	8.040E-02	1.147E-01
8.50	1.204E-02	1.673E-02	2.473E-02	3.101E-02	3.992E-02	5.317E-02	6.232E-02	7.397E-02	1.092E-01
9.00	1.006E-02	1.415E-02	2.125E-02	2.693E-02	3.516E-02	4.767E-02	5.650E-02	6.794E-02	1.037E-01
9.50	8.457E-03	1.201E-02	1.830E-02	2.343E-02	3.098E-02	4.272E-02	5.117E-02	6.232E-02	9.841E-02
10.00	7.142E-03	1.023E-02	1.580E-02	2.041E-02	2.732E-02	3.828E-02	4.632E-02	5.709E-02	9.322E-02
12.50	3.295E-03	4.875E-03	7.910E-03	1.059E-02	1.486E-02	2.224E-02	2.812E-02	3.658E-02	6.986E-02
15.00	1.690E-03	2.548E-03	4.262E-03	5.838E-03	8.458E-03	1.327E-02	1.733E-02	2.352E-02	5.142E-02
17.50	9.453E-04	1.441E-03	2.457E-03	3.417E-03	5.059E-03	8.205E-03	1.098E-02	1.538E-02	3.762E-02
20.00	5.669E-04	8.707E-04	1.503E-03	2.111E-03	3.171E-03	5.266E-03	7.171E-03	1.030E-02	2.758E-02
22.50	3.597E-04	5.550E-04	9.658E-04	1.366E-03	2.074E-03	3.502E-03	4.832E-03	7.068E-03	2.037E-02
25.00	2.390E-04	3.699E-04	6.473E-04	9.199E-04	1.407E-03	2.406E-03	3.353E-03	4.974E-03	1.521E-02
27.50	1.650E-04	2.560E-04	4.498E-04	6.413E-04	9.862E-04	1.702E-03	2.390E-03	3.584E-03	1.150E-02
30.00	1.177E-04	1.829E-04	3.222E-04	4.606E-04	7.111E-04	1.236E-03	1.745E-03	2.640E-03	8.803E-03
32.50	8.630E-05	1.342E-04	2.370E-04	3.394E-04	5.256E-04	9.186E-04	1.303E-03	1.984E-03	6.830E-03
35.00	6.479E-05	1.008E-04	1.783E-04	2.558E-04	3.970E-04	6.968E-04	9.916E-04	1.519E-03	5.367E-03
37.50	4.966E-05	7.735E-05	1.370E-04	1.966E-04	3.057E-04	5.384E-04	7.683E-04	1.182E-03	4.269E-03
40.00	3.876E-05	6.040E-05	1.070E-04	1.538E-04	2.395E-04	4.229E-04	6.049E-04	9.337E-04	3.435E-03
42.50	3.073E-05	4.792E-05	8.499E-05	1.222E-04	1.905E-04	3.371E-04	4.831E-04	7.479E-04	2.795E-03
45.00	2.473E-05	3.857E-05	6.845E-05	9.848E-05	1.537E-04	2.724E-04	3.909E-04	6.067E-04	2.297E-03
47.50	2.016E-05	3.145E-05	5.584E-05	8.037E-05	1.255E-04	2.228E-04	3.201E-04	4.978E-04	1.907E-03
50.00	1.662E-05	2.593E-05	4.607E-05	6.634E-05	1.037E-04	1.842E-04	2.650E-04	4.128E-04	1.597E-03
55.00	1.195E-05	1.881E-05	3.343E-05	4.817E-05	7.533E-05	1.341E-04	1.932E-04	3.017E-04	1.184E-03
60.00	8.465E-06	1.322E-05	2.352E-05	3.391E-05	5.307E-05	9.460E-05	1.365E-04	2.137E-04	8.501E-04
65.00	6.341E-06	9.909E-06	1.764E-05	2.543E-05	3.983E-05	7.106E-05	1.026E-04	1.609E-04	6.463E-04
70.00	4.875E-06	7.621E-06	1.357E-05	1.957E-05	3.067E-05	5.477E-05	7.914E-05	1.242E-04	5.029E-04
75.00	3.837E-06	6.000E-06	1.069E-05	1.542E-05	2.417E-05	4.319E-05	6.245E-05	9.811E-05	3.996E-04
80.00	3.081E-06	4.820E-06	8.591E-06	1.240E-05	1.944E-05	3.476E-05	5.028E-05	7.905E-05	3.236E-04
85.00	2.521E-06	3.945E-06	7.034E-06	1.015E-05	1.593E-05	2.849E-05	4.122E-05	6.485E-05	2.665E-04
90.00	2.097E-06	3.283E-06	5.856E-06	8.456E-06	1.327E-05	2.374E-05	3.436E-05	5.408E-05	2.230E-04
95.00	1.771E-06	2.773E-06	4.949E-06	7.148E-06	1.122E-05	2.008E-05	2.907E-05	4.578E-05	1.893E-04
100.00	1.517E-06	2.377E-06	4.243E-06	6.130E-06	9.621E-06	1.723E-05	2.495E-05	3.930E-05	1.629E-04
105.00	1.316E-06	2.063E-06	3.684E-06	5.323E-06	8.357E-06	1.497E-05	2.168E-05	3.416E-05	1.419E-04
110.00	1.156E-06	1.813E-06	3.239E-06	4.680E-06	7.349E-06	1.317E-05	1.907E-05	3.006E-05	1.251E-04
115.00	1.027E-06	1.611E-06	2.879E-06	4.161E-06	6.535E-06	1.171E-05	1.697E-05	2.676E-05	1.115E-04
120.00	9.224E-07	1.447E-06	2.587E-06	3.740E-06	5.875E-06	1.053E-05	1.526E-05	2.407E-05	1.004E-04
125.00	8.370E-07	1.314E-06	2.349E-06	3.396E-06	5.336E-06	9.567E-06	1.387E-05	2.187E-05	9.134E-05
130.00	7.666E-07	1.203E-06	2.153E-06	3.113E-06	4.892E-06	8.774E-06	1.272E-05	2.006E-05	8.387E-05
135.00	7.092E-07	1.114E-06	1.993E-06	2.882E-06	4.529E-06	8.123E-06	1.178E-05	1.858E-05	7.773E-05
140.00	6.616E-07	1.039E-06	1.860E-06	2.690E-06	4.229E-06	7.587E-06	1.100E-05	1.736E-05	7.267E-05
145.00	6.230E-07	9.787E-07	1.752E-06	2.535E-06	3.985E-06	7.149E-06	1.036E-05	1.636E-05	6.852E-05
150.00	5.914E-07	9.292E-07	1.664E-06	2.407E-06	3.785E-06	6.792E-06	9.848E-06	1.554E-05	6.515E-05
155.00	5.661E-07	8.897E-07	1.593E-06	2.306E-06	3.625E-06	6.506E-06	9.435E-06	1.489E-05	6.244E-05
160.00	5.466E-07	8.591E-07	1.539E-06	2.226E-06	3.501E-06	6.283E-06	9.112E-06	1.438E-05	6.032E-05
165.00	5.315E-07	8.355E-07	1.497E-06	2.166E-06	3.407E-06	6.115E-06	8.868E-06	1.400E-05	5.874E-05
170.00	5.216E-07	8.201E-07	1.469E-06	2.126E-06	3.343E-06	6.000E-06	8.701E-06	1.373E-05	5.763E-05
175.00	5.150E-07	8.096E-07	1.451E-06	2.100E-06	3.303E-06	5.929E-06	8.600E-06	1.358E-05	5.698E-05
180.00	5.140E-07	8.084E-07	1.448E-06	2.095E-06	3.294E-06	5.910E-06	8.571E-06	1.353E-05	5.677E-05
TOTAL	4.342E-03	5.397E-03	7.154E-03	8.560E-03	1.067E-02	1.418E-02	1.699E-02	2.121E-02	4.229E-02
TRANS	7.636E-05	1.145E-04	1.928E-04	2.680E-04	4.007E-04	6.718E-04	9.311E-04	1.386E-03	4.720E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 4

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	8.169E+01	6.204E+01	4.429E+01	3.648E+01	2.955E+01	2.346E+01	2.068E+01	1.806E+01	1.560E+01
0.25	6.004E+00	7.287E+00	9.044E+00	9.997E+00	1.076E+01	1.116E+01	1.119E+01	1.112E+01	1.093E+01
0.50	5.571E-01	7.435E-01	1.077E+00	1.360E+00	1.799E+00	2.522E+00	3.052E+00	3.735E+00	4.623E+00
0.75	1.467E-01	1.882E-01	2.631E-01	3.303E-01	4.446E-01	6.640E-01	8.573E-01	1.164E+00	1.685E+00
1.00	5.689E-02	7.310E-02	1.017E-01	1.263E-01	1.665E-01	2.430E-01	3.134E-01	4.340E-01	6.661E-01
1.50	1.375E-02	1.846E-02	2.680E-02	3.369E-02	4.419E-02	6.274E-02	7.910E-02	1.069E-01	1.618E-01
2.00	4.695E-03	6.516E-03	9.849E-03	1.267E-02	1.701E-02	2.459E-02	3.105E-02	4.154E-02	6.141E-02
2.50	1.985E-03	2.805E-03	4.348E-03	5.693E-03	7.826E-03	1.164E-02	1.489E-02	2.010E-02	2.971E-02
3.00	9.710E-04	1.386E-03	2.180E-03	2.888E-03	4.041E-03	6.156E-03	7.992E-03	1.095E-02	1.640E-02
3.50	5.280E-04	7.576E-04	1.202E-03	1.605E-03	2.272E-03	3.525E-03	4.635E-03	6.449E-03	9.817E-03
4.00	3.108E-04	4.473E-04	7.136E-04	9.570E-04	1.366E-03	2.147E-03	2.851E-03	4.018E-03	6.217E-03
4.50	1.945E-04	2.804E-04	4.489E-04	6.039E-04	8.665E-04	1.375E-03	1.839E-03	2.619E-03	4.110E-03
5.00	1.278E-04	1.845E-04	2.959E-04	3.990E-04	5.746E-04	9.180E-04	1.235E-03	1.772E-03	2.814E-03
5.50	8.739E-05	1.262E-04	2.028E-04	2.738E-04	3.953E-04	6.346E-04	8.569E-04	1.238E-03	1.984E-03
6.00	6.175E-05	8.925E-05	1.435E-04	1.939E-04	2.805E-04	4.519E-04	6.121E-04	8.883E-04	1.435E-03
6.50	4.486E-05	6.486E-05	1.044E-04	1.411E-04	2.044E-04	3.302E-04	4.482E-04	6.528E-04	1.061E-03
7.00	3.337E-05	4.826E-05	7.768E-05	1.051E-04	1.524E-04	2.466E-04	3.354E-04	4.899E-04	8.003E-04
7.50	2.533E-05	3.664E-05	5.901E-05	7.987E-05	1.159E-04	1.878E-04	2.557E-04	3.744E-04	6.141E-04
8.00	1.958E-05	2.832E-05	4.562E-05	6.176E-05	8.964E-05	1.455E-04	1.983E-04	2.908E-04	4.785E-04
8.50	1.537E-05	2.223E-05	3.581E-05	4.851E-05	7.043E-05	1.144E-04	1.561E-04	2.292E-04	3.781E-04
9.00	1.223E-05	1.769E-05	2.851E-05	3.862E-05	5.609E-05	9.116E-05	1.245E-04	1.830E-04	3.025E-04
9.50	9.852E-06	1.425E-05	2.297E-05	3.112E-05	4.522E-05	7.353E-05	1.004E-04	1.478E-04	2.448E-04
10.00	8.026E-06	1.161E-05	1.872E-05	2.536E-05	3.686E-05	5.996E-05	8.195E-05	1.207E-04	2.001E-04
12.50	3.289E-06	4.761E-06	7.678E-06	1.041E-05	1.513E-05	2.465E-05	3.374E-05	4.980E-05	8.295E-05
15.00	1.587E-06	2.298E-06	3.707E-06	5.026E-06	7.311E-06	1.192E-05	1.633E-05	2.412E-05	4.026E-05
17.50	8.569E-07	1.241E-06	2.002E-06	2.716E-06	3.952E-06	6.448E-06	8.835E-06	1.306E-05	2.183E-05
20.00	5.021E-07	7.273E-07	1.174E-06	1.593E-06	2.319E-06	3.786E-06	5.190E-06	7.679E-06	1.284E-05
22.50	3.133E-07	4.540E-07	7.332E-07	9.950E-07	1.449E-06	2.368E-06	3.247E-06	4.817E-06	8.047E-06
25.00	2.055E-07	2.978E-07	4.812E-07	6.533E-07	9.520E-07	1.556E-06	2.136E-06	3.163E-06	5.300E-06
27.50	1.402E-07	2.033E-07	3.286E-07	4.463E-07	6.507E-07	1.065E-06	1.462E-06	2.167E-06	3.633E-06
30.00	9.883E-08	1.434E-07	2.319E-07	3.151E-07	4.598E-07	7.530E-07	1.034E-06	1.534E-06	2.575E-06
32.50	7.166E-08	1.040E-07	1.684E-07	2.289E-07	3.341E-07	5.477E-07	7.528E-07	1.118E-06	1.877E-06
35.00	5.318E-08	7.722E-08	1.251E-07	1.702E-07	2.486E-07	4.080E-07	5.611E-07	8.336E-07	1.402E-06
37.50	4.025E-08	5.848E-08	9.483E-08	1.291E-07	1.887E-07	3.100E-07	4.267E-07	6.346E-07	1.068E-06
40.00	3.102E-08	4.509E-08	7.318E-08	9.966E-08	1.459E-07	2.400E-07	3.305E-07	4.920E-07	8.291E-07
42.50	2.428E-08	3.532E-08	5.738E-08	7.819E-08	1.146E-07	1.887E-07	2.601E-07	3.876E-07	6.540E-07
45.00	1.925E-08	2.803E-08	4.559E-08	6.217E-08	9.117E-08	1.504E-07	2.075E-07	3.095E-07	5.230E-07
47.50	1.545E-08	2.252E-08	3.666E-08	5.003E-08	7.345E-08	1.213E-07	1.676E-07	2.503E-07	4.236E-07
50.00	1.254E-08	1.829E-08	2.982E-08	4.073E-08	5.987E-08	9.907E-08	1.370E-07	2.048E-07	3.471E-07
55.00	8.491E-09	1.241E-08	2.028E-08	2.776E-08	4.091E-08	6.794E-08	9.416E-08	1.412E-07	2.400E-07
60.00	5.940E-09	8.698E-09	1.426E-08	1.956E-08	2.891E-08	4.821E-08	6.699E-08	1.007E-07	1.719E-07
65.00	4.261E-09	6.256E-09	1.029E-08	1.415E-08	2.099E-08	3.516E-08	4.900E-08	7.393E-08	1.267E-07
70.00	3.129E-09	4.607E-09	7.611E-09	1.049E-08	1.562E-08	2.630E-08	3.676E-08	5.568E-08	9.578E-08
75.00	2.339E-09	3.455E-09	5.734E-09	7.931E-09	1.186E-08	2.007E-08	2.816E-08	4.282E-08	7.401E-08
80.00	1.778E-09	2.636E-09	4.397E-09	6.104E-09	9.167E-09	1.562E-08	2.199E-08	3.359E-08	5.834E-08
85.00	1.370E-09	2.040E-09	3.423E-09	4.770E-09	7.202E-09	1.235E-08	1.747E-08	2.680E-08	4.679E-08
90.00	1.067E-09	1.598E-09	2.699E-09	3.778E-09	5.736E-09	9.913E-09	1.408E-08	2.171E-08	3.813E-08
95.00	8.415E-10	1.267E-09	2.155E-09	3.032E-09	4.633E-09	8.072E-09	1.152E-08	1.786E-08	3.154E-08
100.00	6.681E-10	1.012E-09	1.737E-09	2.457E-09	3.781E-09	6.646E-09	9.536E-09	1.487E-08	2.644E-08
105.00	5.357E-10	8.176E-10	1.417E-09	2.016E-09	3.126E-09	5.547E-09	8.002E-09	1.255E-08	2.245E-08
110.00	4.316E-10	6.643E-10	1.164E-09	1.668E-09	2.608E-09	4.674E-09	6.783E-09	1.071E-08	1.929E-08
115.00	3.502E-10	5.443E-10	9.653E-10	1.394E-09	2.200E-09	3.987E-09	5.820E-09	9.245E-09	1.677E-08
120.00	2.857E-10	4.488E-10	8.070E-10	1.176E-09	1.873E-09	3.435E-09	5.047E-09	8.071E-09	1.474E-08
125.00	2.339E-10	3.722E-10	6.798E-10	9.995E-10	1.610E-09	2.988E-09	4.420E-09	7.118E-09	1.310E-08
130.00	1.929E-10	3.114E-10	5.788E-10	8.598E-10	1.401E-09	2.632E-09	3.917E-09	6.350E-09	1.176E-08
135.00	1.593E-10	2.613E-10	4.953E-10	7.442E-10	1.227E-09	2.336E-09	3.502E-09	5.717E-09	1.066E-08
140.00	1.329E-10	2.219E-10	4.298E-10	6.553E-10	1.091E-09	2.103E-09	3.171E-09	5.210E-09	9.777E-09
145.00	1.112E-10	1.893E-10	3.753E-10	5.780E-10	9.773E-10	1.908E-09	2.897E-09	4.790E-09	9.052E-09
150.00	9.420E-11	1.638E-10	3.327E-10	5.190E-10	8.887E-10	1.756E-09	2.681E-09	4.457E-09	8.467E-09
155.00	8.067E-11	1.433E-10	2.986E-10	4.720E-10	8.180E-10	1.634E-09	2.506E-09	4.189E-09	7.998E-09
160.00	7.010E-11	1.272E-10	2.717E-10	4.349E-10	7.625E-10	1.538E-09	2.370E-09	3.979E-09	7.633E-09
165.00	6.262E-11	1.158E-10	2.527E-10	4.089E-10	7.237E-10	1.470E-09	2.273E-09	3.828E-09	7.367E-09
170.00	5.690E-11	1.070E-10	2.379E-10	3.886E-10	6.932E-10	1.418E-09	2.198E-09	3.715E-09	7.177E-09
175.00	5.426E-11	1.030E-10	2.314E-10	3.798E-10	6.804E-10	1.395E-09	2.165E-09	3.658E-09	7.062E-09
180.00	5.223E-11	9.967E-11	2.256E-10	3.718E-10	6.689E-10	1.377E-09	2.142E-09	3.626E-09	7.012E-09
TOTAL	1.927E-03	2.020E-03	2.167E-03	2.289E-03	2.485E-03	2.826E-03	3.105E-03	3.527E-03	4.237E-03
TRANS	1.170E-07	1.645E-07	2.557E-07	3.390E-07	4.803E-07	7.582E-07	1.018E-06	1.469E-06	2.379E-06

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 4

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	1.332E+01	1.246E+01	1.163E+01	1.123E+01	1.083E+01	1.044E+01	1.024E+01	1.004E+01	9.849E+00
0.25	1.058E+01	1.038E+01	1.016E+01	1.003E+01	9.900E+00	9.761E+00	9.687E+00	9.610E+00	9.528E+00
0.50	5.790E+00	6.355E+00	6.984E+00	7.324E+00	7.681E+00	8.054E+00	8.248E+00	8.445E+00	8.644E+00
0.75	2.648E+00	3.262E+00	4.095E+00	4.624E+00	5.250E+00	5.995E+00	6.422E+00	6.888E+00	7.399E+00
1.00	1.189E+00	1.592E+00	2.233E+00	2.699E+00	3.315E+00	4.147E+00	4.672E+00	5.291E+00	6.026E+00
1.50	3.031E-01	4.325E-01	6.792E-01	8.942E-01	1.230E+00	1.788E+00	2.209E+00	2.785E+00	3.594E+00
2.00	1.114E-01	1.579E-01	2.517E-01	3.400E-01	4.902E-01	7.729E-01	1.015E+00	1.387E+00	1.990E+00
2.50	5.276E-02	7.361E-02	1.155E-01	1.555E-01	2.255E-01	3.653E-01	4.940E-01	7.071E-01	1.091E+00
3.00	2.912E-02	4.030E-02	6.228E-02	8.301E-02	1.192E-01	1.929E-01	2.630E-01	3.838E-01	6.162E-01
3.50	1.765E-02	2.443E-02	3.749E-02	4.956E-02	7.042E-02	1.127E-01	1.531E-01	2.241E-01	3.659E-01
4.00	1.138E-02	1.583E-02	2.430E-02	3.201E-02	4.515E-02	7.140E-02	9.641E-02	1.404E-01	2.296E-01
4.50	7.665E-03	1.075E-02	1.658E-02	2.185E-02	3.072E-02	4.818E-02	6.463E-02	9.336E-02	1.519E-01
5.00	5.340E-03	7.553E-03	1.175E-02	1.552E-02	2.183E-02	3.410E-02	4.551E-02	6.527E-02	1.053E-01
5.50	3.824E-03	5.455E-03	8.565E-03	1.136E-02	1.603E-02	2.502E-02	3.329E-02	4.749E-02	7.603E-02
6.00	2.803E-03	4.030E-03	6.387E-03	8.515E-03	1.207E-02	1.888E-02	2.509E-02	3.567E-02	5.674E-02
6.50	2.097E-03	3.035E-03	4.855E-03	6.506E-03	9.271E-03	1.456E-02	1.937E-02	2.749E-02	4.351E-02
7.00	1.596E-03	2.325E-03	3.750E-03	5.052E-03	7.240E-03	1.143E-02	1.523E-02	2.163E-02	3.413E-02
7.50	1.234E-03	1.808E-03	2.938E-03	3.978E-03	5.734E-03	9.110E-03	1.217E-02	1.730E-02	2.728E-02
8.00	9.681E-04	1.424E-03	2.331E-03	3.171E-03	4.596E-03	7.349E-03	9.845E-03	1.403E-02	2.214E-02
8.50	7.691E-04	1.136E-03	1.871E-03	2.555E-03	3.723E-03	5.992E-03	8.055E-03	1.152E-02	1.820E-02
9.00	6.182E-04	9.164E-04	1.517E-03	2.080E-03	3.046E-03	4.932E-03	6.654E-03	9.549E-03	1.513E-02
9.50	5.022E-04	7.466E-04	1.241E-03	1.708E-03	2.513E-03	4.094E-03	5.543E-03	7.986E-03	1.269E-02
10.00	4.119E-04	6.139E-04	1.025E-03	1.415E-03	2.090E-03	3.424E-03	4.652E-03	6.729E-03	1.073E-02
12.50	1.725E-04	2.592E-04	4.388E-04	6.124E-04	9.187E-04	1.540E-03	2.125E-03	3.132E-03	5.105E-03
15.00	8.412E-05	1.269E-04	2.165E-04	3.040E-04	4.603E-04	7.831E-04	1.093E-03	1.634E-03	2.717E-03
17.50	4.574E-05	6.917E-05	1.185E-04	1.670E-04	2.542E-04	4.365E-04	6.137E-04	9.275E-04	1.566E-03
20.00	2.696E-05	4.083E-05	7.012E-05	9.903E-05	1.513E-04	2.614E-04	3.692E-04	5.622E-04	9.601E-04
22.50	1.692E-05	2.564E-05	4.412E-05	6.239E-05	9.553E-05	1.657E-04	2.349E-04	3.595E-04	6.192E-04
25.00	1.115E-05	1.692E-05	2.915E-05	4.126E-05	6.328E-05	1.101E-04	1.564E-04	2.402E-04	4.163E-04
27.50	7.655E-06	1.162E-05	2.004E-05	2.839E-05	4.358E-05	7.597E-05	1.081E-04	1.665E-04	2.899E-04
30.00	5.432E-06	8.252E-06	1.424E-05	2.019E-05	3.102E-05	5.415E-05	7.717E-05	1.191E-04	2.080E-04
32.50	3.965E-06	6.027E-06	1.041E-05	1.476E-05	2.271E-05	3.969E-05	5.661E-05	8.747E-05	1.533E-04
35.00	2.964E-06	4.509E-06	7.794E-06	1.106E-05	1.702E-05	2.978E-05	4.251E-05	6.576E-05	1.155E-04
37.50	2.262E-06	3.444E-06	5.957E-06	8.457E-06	1.302E-05	2.280E-05	3.257E-05	5.044E-05	8.871E-05
40.00	1.758E-06	2.679E-06	4.637E-06	6.587E-06	1.015E-05	1.778E-05	2.542E-05	3.939E-05	6.937E-05
42.50	1.389E-06	2.117E-06	3.669E-06	5.214E-06	8.038E-06	1.410E-05	2.015E-05	3.126E-05	5.511E-05
45.00	1.113E-06	1.698E-06	2.944E-06	4.186E-06	6.456E-06	1.133E-05	1.621E-05	2.515E-05	4.439E-05
47.50	9.028E-07	1.378E-06	2.393E-06	3.404E-06	5.253E-06	9.223E-06	1.320E-05	2.049E-05	3.620E-05
50.00	7.410E-07	1.132E-06	1.967E-06	2.800E-06	4.324E-06	7.598E-06	1.088E-05	1.690E-05	2.987E-05
55.00	5.144E-07	7.875E-07	1.372E-06	1.955E-06	3.024E-06	5.311E-06	7.592E-06	1.179E-05	2.101E-05
60.00	3.700E-07	5.676E-07	9.902E-07	1.413E-06	2.187E-06	3.852E-06	5.524E-06	8.597E-06	1.523E-05
65.00	2.740E-07	4.212E-07	7.366E-07	1.052E-06	1.631E-06	2.877E-06	4.128E-06	6.430E-06	1.141E-05
70.00	2.082E-07	3.209E-07	5.625E-07	8.044E-07	1.248E-06	2.206E-06	3.168E-06	4.939E-06	8.770E-06
75.00	1.618E-07	2.499E-07	4.392E-07	6.291E-07	9.778E-07	1.730E-06	2.487E-06	3.880E-06	6.896E-06
80.00	1.283E-07	1.987E-07	3.501E-07	5.021E-07	7.816E-07	1.385E-06	1.992E-06	3.112E-06	5.536E-06
85.00	1.035E-07	1.607E-07	2.841E-07	4.081E-07	6.363E-07	1.130E-06	1.626E-06	2.542E-06	4.526E-06
90.00	8.491E-08	1.322E-07	2.344E-07	3.372E-07	5.265E-07	9.362E-07	1.349E-06	2.110E-06	3.761E-06
95.00	7.070E-08	1.104E-07	1.963E-07	2.829E-07	4.425E-07	7.881E-07	1.137E-06	1.780E-06	3.175E-06
100.00	5.968E-08	9.348E-08	1.667E-07	2.406E-07	3.770E-07	6.726E-07	9.707E-07	1.521E-06	2.716E-06
105.00	5.104E-08	8.018E-08	1.435E-07	2.074E-07	3.254E-07	5.816E-07	8.402E-07	1.318E-06	2.356E-06
110.00	4.417E-08	6.961E-08	1.250E-07	1.809E-07	2.844E-07	5.090E-07	7.359E-07	1.155E-06	2.067E-06
115.00	3.868E-08	6.115E-08	1.101E-07	1.597E-07	2.514E-07	4.507E-07	6.521E-07	1.025E-06	1.835E-06
120.00	3.425E-08	5.430E-08	9.808E-08	1.425E-07	2.246E-07	4.034E-07	5.842E-07	9.187E-07	1.646E-06
125.00	3.065E-08	4.874E-08	8.830E-08	1.284E-07	2.028E-07	3.648E-07	5.286E-07	8.319E-07	1.492E-06
130.00	2.771E-08	4.420E-08	8.030E-08	1.170E-07	1.850E-07	3.332E-07	4.833E-07	7.612E-07	1.366E-06
135.00	2.531E-08	4.048E-08	7.375E-08	1.076E-07	1.704E-07	3.072E-07	4.459E-07	7.027E-07	1.262E-06
140.00	2.335E-08	3.744E-08	6.838E-08	9.987E-08	1.584E-07	2.860E-07	4.153E-07	6.551E-07	1.177E-06
145.00	2.175E-08	3.496E-08	6.399E-08	9.357E-08	1.485E-07	2.685E-07	3.902E-07	6.157E-07	1.107E-06
150.00	2.046E-08	3.295E-08	6.044E-08	8.846E-08	1.406E-07	2.544E-07	3.699E-07	5.840E-07	1.051E-06
155.00	1.942E-08	3.134E-08	5.760E-08	8.439E-08	1.342E-07	2.431E-07	3.536E-07	5.586E-07	1.005E-06
160.00	1.862E-08	3.009E-08	5.539E-08	8.121E-08	1.293E-07	2.343E-07	3.409E-07	5.386E-07	9.698E-07
165.00	1.802E-08	2.915E-08	5.372E-08	7.880E-08	1.255E-07	2.277E-07	3.314E-07	5.239E-07	9.438E-07
170.00	1.761E-08	2.851E-08	5.258E-08	7.716E-08	1.229E-07	2.231E-07	3.247E-07	5.132E-07	9.244E-07
175.00	1.735E-08	2.812E-08	5.190E-08	7.619E-08	1.214E-07	2.204E-07	3.209E-07	5.076E-07	9.148E-07
180.00	1.724E-08	2.795E-08	5.163E-08	7.584E-08	1.209E-07	2.195E-07	3.194E-07	5.046E-07	9.087E-07
TOTAL	5.669E-03	6.750E-03	8.555E-03	1.000E-02	1.217E-02	1.578E-02	1.867E-02	2.300E-02	3.021E-02
TRANS	4.773E-06	7.050E-06	1.172E-05	1.623E-05	2.422E-05	4.068E-05	5.658E-05	8.478E-05	1.429E-04

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 4

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	9.646E+00	9.561E+00	9.468E+00	9.416E+00	9.356E+00	9.282E+00	9.235E+00	9.173E+00	8.930E+00
0.25	9.436E+00	9.394E+00	9.343E+00	9.313E+00	9.274E+00	9.221E+00	9.184E+00	9.133E+00	8.910E+00
0.50	8.841E+00	8.916E+00	8.984E+00	9.012E+00	9.034E+00	9.041E+00	9.034E+00	9.013E+00	8.851E+00
0.75	7.955E+00	8.188E+00	8.424E+00	8.540E+00	8.652E+00	8.751E+00	8.791E+00	8.818E+00	8.753E+00
1.00	6.902E+00	7.296E+00	7.715E+00	7.932E+00	8.151E+00	8.366E+00	8.466E+00	8.555E+00	8.620E+00
1.50	4.759E+00	5.367E+00	6.082E+00	6.484E+00	6.918E+00	7.381E+00	7.619E+00	7.857E+00	8.252E+00
2.00	3.032E+00	3.665E+00	4.489E+00	4.994E+00	5.577E+00	6.245E+00	6.613E+00	7.001E+00	7.771E+00
2.50	1.863E+00	2.398E+00	3.169E+00	3.684E+00	4.318E+00	5.104E+00	5.564E+00	6.074E+00	7.206E+00
3.00	1.141E+00	1.545E+00	2.183E+00	2.644E+00	3.250E+00	4.059E+00	4.563E+00	5.150E+00	6.587E+00
3.50	7.116E-01	1.000E+00	1.491E+00	1.872E+00	2.403E+00	3.165E+00	3.670E+00	4.286E+00	5.943E+00
4.00	4.578E-01	6.592E-01	1.023E+00	1.323E+00	1.763E+00	2.437E+00	2.910E+00	3.516E+00	5.300E+00
4.50	3.054E-01	4.457E-01	7.115E-01	9.404E-01	1.292E+00	1.864E+00	2.287E+00	2.854E+00	4.679E+00
5.00	2.113E-01	3.102E-01	5.038E-01	6.767E-01	9.525E-01	1.424E+00	1.790E+00	2.300E+00	4.096E+00
5.50	1.513E-01	2.224E-01	3.645E-01	4.947E-01	7.088E-01	1.090E+00	1.400E+00	1.847E+00	3.560E+00
6.00	1.118E-01	1.639E-01	2.695E-01	3.681E-01	5.340E-01	8.402E-01	1.097E+00	1.482E+00	3.076E+00
6.50	8.493E-02	1.240E-01	2.037E-01	2.791E-01	4.079E-01	6.527E-01	8.643E-01	1.191E+00	2.647E+00
7.00	6.606E-02	9.603E-02	1.572E-01	2.155E-01	3.162E-01	5.120E-01	6.855E-01	9.601E-01	2.271E+00
7.50	5.245E-02	7.589E-02	1.237E-01	1.693E-01	2.488E-01	4.059E-01	5.479E-01	7.778E-01	1.944E+00
8.00	4.237E-02	6.106E-02	9.897E-02	1.352E-01	1.986E-01	3.254E-01	4.419E-01	6.338E-01	1.663E+00
8.50	3.474E-02	4.989E-02	8.046E-02	1.096E-01	1.608E-01	2.638E-01	3.596E-01	5.199E-01	1.423E+00
9.00	2.884E-02	4.132E-02	6.632E-02	9.008E-02	1.318E-01	2.162E-01	2.954E-01	4.295E-01	1.218E+00
9.50	2.421E-02	3.462E-02	5.535E-02	7.497E-02	1.093E-01	1.791E-01	2.449E-01	3.575E-01	1.045E+00
10.00	2.051E-02	2.931E-02	4.670E-02	6.308E-02	9.172E-02	1.499E-01	2.049E-01	2.998E-01	8.982E-01
12.50	9.952E-03	1.426E-02	2.261E-02	3.030E-02	4.350E-02	6.991E-02	9.491E-02	1.385E-01	4.415E-01
15.00	5.435E-03	7.874E-03	1.257E-02	1.686E-02	2.410E-02	3.831E-02	5.158E-02	7.455E-02	2.381E-01
17.50	3.208E-03	4.704E-03	7.609E-03	1.026E-02	1.471E-02	2.333E-02	3.127E-02	4.485E-02	1.407E-01
20.00	2.005E-03	2.974E-03	4.878E-03	6.625E-03	9.569E-03	1.524E-02	2.042E-02	2.918E-02	8.990E-02
22.50	1.313E-03	1.966E-03	3.267E-03	4.472E-03	6.514E-03	1.046E-02	1.404E-02	2.008E-02	6.107E-02
25.00	8.934E-04	1.349E-03	2.266E-03	3.125E-03	4.591E-03	7.440E-03	1.004E-02	1.439E-02	4.354E-02
27.50	6.279E-04	9.539E-04	1.618E-03	2.247E-03	3.328E-03	5.447E-03	7.386E-03	1.065E-02	3.223E-02
30.00	4.538E-04	6.931E-04	1.185E-03	1.655E-03	2.470E-03	4.082E-03	5.567E-03	8.070E-03	2.459E-02
32.50	3.362E-04	5.156E-04	8.878E-04	1.246E-03	1.871E-03	3.120E-03	4.278E-03	6.241E-03	1.921E-02
35.00	2.544E-04	3.915E-04	6.779E-04	9.551E-04	1.443E-03	2.426E-03	3.345E-03	4.910E-03	1.530E-02
37.50	1.962E-04	3.027E-04	5.267E-04	7.447E-04	1.131E-03	1.916E-03	2.654E-03	3.920E-03	1.239E-02
40.00	1.539E-04	2.380E-04	4.156E-04	5.895E-04	8.994E-04	1.533E-03	2.134E-03	3.170E-03	1.017E-02
42.50	1.225E-04	1.899E-04	3.327E-04	4.731E-04	7.245E-04	1.242E-03	1.736E-03	2.593E-03	8.454E-03
45.00	9.889E-05	1.535E-04	2.697E-04	3.844E-04	5.907E-04	1.018E-03	1.429E-03	2.144E-03	7.099E-03
47.50	8.079E-05	1.256E-04	2.212E-04	3.159E-04	4.868E-04	8.431E-04	1.187E-03	1.790E-03	6.017E-03
50.00	6.677E-05	1.039E-04	1.834E-04	2.623E-04	4.052E-04	7.048E-04	9.953E-04	1.507E-03	5.142E-03
55.00	4.816E-05	7.565E-05	1.339E-04	1.921E-04	2.979E-04	5.215E-04	7.402E-04	1.129E-03	3.948E-03
60.00	3.420E-05	5.339E-05	9.479E-05	1.363E-04	2.121E-04	3.737E-04	5.329E-04	8.186E-04	2.944E-03
65.00	2.565E-05	4.009E-05	7.132E-05	1.027E-04	1.603E-04	2.838E-04	4.062E-04	6.274E-04	2.309E-03
70.00	1.975E-05	3.090E-05	5.505E-05	7.939E-05	1.242E-04	2.206E-04	3.168E-04	4.916E-04	1.847E-03
75.00	1.555E-05	2.435E-05	4.345E-05	6.273E-05	9.830E-05	1.752E-04	2.523E-04	3.930E-04	1.504E-03
80.00	1.250E-05	1.959E-05	3.499E-05	5.056E-05	7.934E-05	1.418E-04	2.046E-04	3.199E-04	1.244E-03
85.00	1.023E-05	1.604E-05	2.868E-05	4.148E-05	6.518E-05	1.167E-04	1.688E-04	2.647E-04	1.045E-03
90.00	8.511E-06	1.336E-05	2.390E-05	3.459E-05	5.441E-05	9.763E-05	1.414E-04	2.223E-04	8.899E-04
95.00	7.192E-06	1.129E-05	2.022E-05	2.928E-05	4.610E-05	8.285E-05	1.202E-04	1.894E-04	7.674E-04
100.00	6.159E-06	9.676E-06	1.734E-05	2.513E-05	3.959E-05	7.126E-05	1.035E-04	1.634E-04	6.694E-04
105.00	5.347E-06	8.403E-06	1.507E-05	2.184E-05	3.444E-05	6.206E-05	9.022E-05	1.427E-04	5.906E-04
110.00	4.696E-06	7.383E-06	1.325E-05	1.921E-05	3.031E-05	5.468E-05	7.957E-05	1.261E-04	5.264E-04
115.00	4.172E-06	6.563E-06	1.178E-05	1.709E-05	2.698E-05	4.872E-05	7.095E-05	1.126E-04	4.738E-04
120.00	3.747E-06	5.896E-06	1.059E-05	1.537E-05	2.427E-05	4.386E-05	6.392E-05	1.015E-04	4.305E-04
125.00	3.399E-06	5.351E-06	9.617E-06	1.396E-05	2.206E-05	3.988E-05	5.816E-05	9.247E-05	3.947E-04
130.00	3.115E-06	4.905E-06	8.818E-06	1.280E-05	2.023E-05	3.661E-05	5.342E-05	8.502E-05	3.650E-04
135.00	2.879E-06	4.536E-06	8.159E-06	1.185E-05	1.874E-05	3.392E-05	4.952E-05	7.886E-05	3.402E-04
140.00	2.688E-06	4.235E-06	7.620E-06	1.107E-05	1.750E-05	3.171E-05	4.630E-05	7.380E-05	3.198E-04
145.00	2.529E-06	3.987E-06	7.176E-06	1.043E-05	1.649E-05	2.989E-05	4.366E-05	6.963E-05	3.029E-04
150.00	2.402E-06	3.787E-06	6.817E-06	9.905E-06	1.567E-05	2.841E-05	4.152E-05	6.624E-05	2.891E-04
155.00	2.299E-06	3.626E-06	6.529E-06	9.488E-06	1.501E-05	2.723E-05	3.979E-05	6.352E-05	2.780E-04
160.00	2.219E-06	3.499E-06	6.303E-06	9.161E-06	1.450E-05	2.630E-05	3.845E-05	6.138E-05	2.693E-04
165.00	2.160E-06	3.406E-06	6.135E-06	8.917E-06	1.411E-05	2.560E-05	3.744E-05	5.979E-05	2.628E-04
170.00	2.116E-06	3.339E-06	6.016E-06	8.746E-06	1.385E-05	2.512E-05	3.673E-05	5.867E-05	2.581E-04
175.00	2.094E-06	3.303E-06	5.948E-06	8.646E-06	1.369E-05	2.483E-05	3.632E-05	5.802E-05	2.555E-04
180.00	2.082E-06	3.285E-06	5.921E-06	8.611E-06	1.364E-05	2.474E-05	3.618E-05	5.778E-05	2.544E-04
TOTAL	4.459E-02	5.534E-02	7.318E-02	8.739E-02	1.086E-01	1.437E-01	1.715E-01	2.129E-01	4.128E-01
TRANS	2.983E-04	4.469E-04	7.518E-04	1.045E-03	1.560E-03	2.613E-03	3.617E-03	5.376E-03	1.813E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 6

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	5.373E+01	4.080E+01	2.913E+01	2.399E+01	1.944E+01	1.543E+01	1.360E+01	1.188E+01	1.026E+01
0.25	1.179E+01	1.213E+01	1.232E+01	1.215E+01	1.160E+01	1.061E+01	9.980E+00	9.309E+00	8.596E+00
0.50	1.482E+00	1.946E+00	2.685E+00	3.190E+00	3.772E+00	4.412E+00	4.748E+00	5.090E+00	5.423E+00
0.75	3.379E-01	4.662E-01	6.984E-01	8.915E-01	1.181E+00	1.636E+00	1.962E+00	2.382E+00	2.933E+00
1.00	1.193E-01	1.628E-01	2.440E-01	3.163E-01	4.360E-01	6.539E-01	8.341E-01	1.100E+00	1.514E+00
1.50	2.813E-02	3.783E-02	5.581E-02	7.195E-02	9.919E-02	1.522E-01	2.008E-01	2.827E-01	4.365E-01
2.00	9.876E-03	1.345E-02	2.004E-02	2.581E-02	3.524E-02	5.321E-02	6.982E-02	9.871E-02	1.564E-01
2.50	4.278E-03	5.927E-03	8.989E-03	1.165E-02	1.594E-02	2.393E-02	3.120E-02	4.374E-02	6.888E-02
3.00	2.127E-03	2.987E-03	4.603E-03	6.020E-03	8.301E-03	1.252E-02	1.631E-02	2.274E-02	3.547E-02
3.50	1.168E-03	1.656E-03	2.584E-03	3.405E-03	4.741E-03	7.222E-03	9.437E-03	1.315E-02	2.041E-02
4.00	6.917E-04	9.869E-04	1.554E-03	2.061E-03	2.895E-03	4.457E-03	5.852E-03	8.183E-03	1.270E-02
4.50	4.346E-04	6.227E-04	9.864E-04	1.315E-03	1.861E-03	2.893E-03	3.821E-03	5.370E-03	8.361E-03
5.00	2.864E-04	4.114E-04	6.547E-04	8.762E-04	1.247E-03	1.955E-03	2.596E-03	3.670E-03	5.745E-03
5.50	1.962E-04	2.824E-04	4.508E-04	6.050E-04	8.648E-04	1.366E-03	1.822E-03	2.591E-03	4.081E-03
6.00	1.388E-04	2.001E-04	3.201E-04	4.306E-04	6.177E-04	9.811E-04	1.314E-03	1.879E-03	2.978E-03
6.50	1.009E-04	1.456E-04	2.334E-04	3.144E-04	4.523E-04	7.218E-04	9.703E-04	1.394E-03	2.223E-03
7.00	7.514E-05	1.085E-04	1.741E-04	2.348E-04	3.385E-04	5.422E-04	7.310E-04	1.054E-03	1.691E-03
7.50	5.707E-05	8.244E-05	1.324E-04	1.788E-04	2.582E-04	4.148E-04	5.606E-04	8.114E-04	1.308E-03
8.00	4.412E-05	6.376E-05	1.025E-04	1.385E-04	2.002E-04	3.225E-04	4.367E-04	6.340E-04	1.027E-03
8.50	3.465E-05	5.008E-05	8.055E-05	1.089E-04	1.576E-04	2.543E-04	3.450E-04	5.022E-04	8.164E-04
9.00	2.758E-05	3.988E-05	6.417E-05	8.679E-05	1.257E-04	2.032E-04	2.761E-04	4.027E-04	6.569E-04
9.50	2.223E-05	3.214E-05	5.174E-05	7.001E-05	1.015E-04	1.642E-04	2.234E-04	3.265E-04	5.341E-04
10.00	1.811E-05	2.620E-05	4.218E-05	5.710E-05	8.280E-05	1.342E-04	1.827E-04	2.674E-04	4.386E-04
12.50	7.432E-06	1.075E-05	1.733E-05	2.348E-05	3.411E-05	5.546E-05	7.574E-05	1.114E-04	1.844E-04
15.00	3.590E-06	5.196E-06	8.378E-06	1.136E-05	1.651E-05	2.689E-05	3.678E-05	5.423E-05	9.015E-05
17.50	1.940E-06	2.808E-06	4.530E-06	6.142E-06	8.935E-06	1.457E-05	1.994E-05	2.945E-05	4.908E-05
20.00	1.137E-06	1.647E-06	2.658E-06	3.605E-06	5.247E-06	8.562E-06	1.173E-05	1.734E-05	2.895E-05
22.50	7.103E-07	1.029E-06	1.661E-06	2.254E-06	3.282E-06	5.359E-06	7.346E-06	1.087E-05	1.817E-05
25.00	4.661E-07	6.754E-07	1.091E-06	1.481E-06	2.157E-06	3.525E-06	4.835E-06	7.158E-06	1.198E-05
27.50	3.182E-07	4.613E-07	7.455E-07	1.012E-06	1.476E-06	2.413E-06	3.311E-06	4.906E-06	8.219E-06
30.00	2.245E-07	3.255E-07	5.265E-07	7.152E-07	1.043E-06	1.708E-06	2.345E-06	3.476E-06	5.830E-06
32.50	1.629E-07	2.363E-07	3.824E-07	5.197E-07	7.585E-07	1.243E-06	1.707E-06	2.534E-06	4.253E-06
35.00	1.209E-07	1.756E-07	2.843E-07	3.866E-07	5.646E-07	9.261E-07	1.273E-06	1.891E-06	3.177E-06
37.50	9.159E-08	1.330E-07	2.156E-07	2.934E-07	4.288E-07	7.041E-07	9.688E-07	1.440E-06	2.423E-06
40.00	7.061E-08	1.026E-07	1.665E-07	2.267E-07	3.316E-07	5.452E-07	7.507E-07	1.117E-06	1.881E-06
42.50	5.530E-08	8.043E-08	1.306E-07	1.779E-07	2.605E-07	4.288E-07	5.910E-07	8.801E-07	1.484E-06
45.00	4.387E-08	6.386E-08	1.038E-07	1.415E-07	2.074E-07	3.419E-07	4.716E-07	7.032E-07	1.188E-06
47.50	3.523E-08	5.131E-08	8.350E-08	1.139E-07	1.672E-07	2.760E-07	3.811E-07	5.689E-07	9.620E-07
50.00	2.861E-08	4.171E-08	6.794E-08	9.278E-08	1.363E-07	2.254E-07	3.115E-07	4.655E-07	7.882E-07
55.00	1.938E-08	2.831E-08	4.625E-08	6.327E-08	9.319E-08	1.546E-07	2.142E-07	3.210E-07	5.455E-07
60.00	1.357E-08	1.986E-08	3.254E-08	4.461E-08	6.590E-08	1.098E-07	1.525E-07	2.291E-07	3.906E-07
65.00	9.740E-09	1.429E-08	2.350E-08	3.230E-08	4.787E-08	8.011E-08	1.116E-07	1.682E-07	2.879E-07
70.00	7.156E-09	1.053E-08	1.738E-08	2.395E-08	3.563E-08	5.993E-08	8.372E-08	1.267E-07	2.178E-07
75.00	5.352E-09	7.902E-09	1.310E-08	1.811E-08	2.705E-08	4.575E-08	6.414E-08	9.744E-08	1.682E-07
80.00	4.069E-09	6.031E-09	1.005E-08	1.394E-08	2.092E-08	3.560E-08	5.009E-08	7.644E-08	1.327E-07
85.00	3.137E-09	4.668E-09	7.823E-09	1.090E-08	1.643E-08	2.815E-08	3.978E-08	6.097E-08	1.064E-07
90.00	2.445E-09	3.657E-09	6.169E-09	8.629E-09	1.309E-08	2.259E-08	3.206E-08	4.940E-08	8.668E-08
95.00	1.928E-09	2.899E-09	4.926E-09	6.925E-09	1.057E-08	1.839E-08	2.622E-08	4.061E-08	7.168E-08
100.00	1.531E-09	2.317E-09	3.970E-09	5.612E-09	8.626E-09	1.514E-08	2.170E-08	3.381E-08	6.006E-08
105.00	1.227E-09	1.871E-09	3.236E-09	4.602E-09	7.127E-09	1.263E-08	1.820E-08	2.852E-08	5.099E-08
110.00	9.886E-10	1.520E-09	2.658E-09	3.805E-09	5.943E-09	1.064E-08	1.542E-08	2.432E-08	4.379E-08
115.00	8.020E-10	1.245E-09	2.203E-09	3.179E-09	5.010E-09	9.067E-09	1.323E-08	2.100E-08	3.806E-08
120.00	6.538E-10	1.026E-09	1.841E-09	2.679E-09	4.264E-09	7.806E-09	1.146E-08	1.831E-08	3.343E-08
125.00	5.351E-10	8.502E-10	1.550E-09	2.277E-09	3.663E-09	6.788E-09	1.003E-08	1.614E-08	2.968E-08
130.00	4.409E-10	7.104E-10	1.318E-09	1.956E-09	3.182E-09	5.971E-09	8.884E-09	1.439E-08	2.664E-08
135.00	3.639E-10	5.959E-10	1.127E-09	1.692E-09	2.787E-09	5.299E-09	7.938E-09	1.295E-08	2.415E-08
140.00	3.032E-10	5.053E-10	9.766E-10	1.483E-09	2.473E-09	4.763E-09	7.181E-09	1.179E-08	2.213E-08
145.00	2.533E-10	4.306E-10	8.522E-10	1.311E-09	2.215E-09	4.321E-09	6.557E-09	1.084E-08	2.047E-08
150.00	2.142E-10	3.718E-10	7.542E-10	1.176E-09	2.012E-09	3.971E-09	6.062E-09	1.008E-08	1.914E-08
155.00	1.831E-10	3.249E-10	6.759E-10	1.068E-09	1.850E-09	3.692E-09	5.665E-09	9.467E-09	1.808E-08
160.00	1.589E-10	2.880E-10	6.145E-10	9.832E-10	1.723E-09	3.474E-09	5.354E-09	8.988E-09	1.724E-08
165.00	1.416E-10	2.617E-10	5.707E-10	9.232E-10	1.633E-09	3.318E-09	5.131E-09	8.641E-09	1.663E-08
170.00	1.285E-10	2.416E-10	5.371E-10	8.773E-10	1.565E-09	3.200E-09	4.962E-09	8.385E-09	1.620E-08
175.00	1.223E-10	2.321E-10	5.215E-10	8.562E-10	1.534E-09	3.145E-09	4.881E-09	8.253E-09	1.595E-08
180.00	1.180E-10	2.253E-10	5.097E-10	8.398E-10	1.509E-09	3.104E-09	4.826E-09	8.178E-09	1.584E-08
TOTAL	2.735E-03	2.867E-03	3.076E-03	3.250E-03	3.527E-03	4.011E-03	4.406E-03	5.005E-03	6.011E-03
TRANS	2.594E-07	3.644E-07	5.660E-07	7.499E-07	1.062E-06	1.675E-06	2.247E-06	3.240E-06	5.244E-06

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 6

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	8.756E+00	8.190E+00	7.641E+00	7.372E+00	7.106E+00	6.842E+00	6.709E+00	6.574E+00	6.435E+00
0.25	7.822E+00	7.491E+00	7.150E+00	6.977E+00	6.802E+00	6.623E+00	6.531E+00	6.435E+00	6.332E+00
0.50	5.726E+00	5.830E+00	5.920E+00	5.960E+00	5.995E+00	6.023E+00	6.033E+00	6.039E+00	6.038E+00
0.75	3.671E+00	4.036E+00	4.451E+00	4.680E+00	4.923E+00	5.181E+00	5.316E+00	5.452E+00	5.588E+00
1.00	2.202E+00	2.610E+00	3.136E+00	3.458E+00	3.829E+00	4.259E+00	4.499E+00	4.758E+00	5.034E+00
1.50	7.724E-01	1.026E+00	1.425E+00	1.715E+00	2.098E+00	2.619E+00	2.952E+00	3.347E+00	3.821E+00
2.00	2.995E-01	4.234E-01	6.454E-01	8.270E-01	1.095E+00	1.512E+00	1.809E+00	2.199E+00	2.720E+00
2.50	1.342E-01	1.946E-01	3.113E-01	4.147E-01	5.796E-01	8.628E-01	1.085E+00	1.400E+00	1.866E+00
3.00	6.872E-02	1.001E-01	1.633E-01	2.219E-01	3.204E-01	5.021E-01	6.553E-01	8.873E-01	1.259E+00
3.50	3.913E-02	5.684E-02	9.299E-02	1.274E-01	1.870E-01	3.026E-01	4.051E-01	5.687E-01	8.494E-01
4.00	2.417E-02	3.492E-02	5.694E-02	7.814E-02	1.154E-01	1.899E-01	2.585E-01	3.722E-01	5.781E-01
4.50	1.587E-02	2.283E-02	3.703E-02	5.072E-02	7.494E-02	1.243E-01	1.708E-01	2.500E-01	3.995E-01
5.00	1.091E-02	1.567E-02	2.529E-02	3.454E-02	5.091E-02	8.456E-02	1.168E-01	1.726E-01	2.814E-01
5.50	7.783E-03	1.117E-02	1.797E-02	2.447E-02	3.595E-02	5.961E-02	8.243E-02	1.225E-01	2.023E-01
6.00	5.712E-03	8.204E-03	1.318E-02	1.791E-02	2.623E-02	4.335E-02	5.993E-02	8.922E-02	1.485E-01
6.50	4.292E-03	6.176E-03	9.925E-03	1.347E-02	1.967E-02	3.240E-02	4.472E-02	6.656E-02	1.112E-01
7.00	3.288E-03	4.744E-03	7.634E-03	1.035E-02	1.510E-02	2.479E-02	3.414E-02	5.075E-02	8.487E-02
7.50	2.561E-03	3.706E-03	5.978E-03	8.108E-03	1.181E-02	1.935E-02	2.660E-02	3.945E-02	6.595E-02
8.00	2.024E-03	2.938E-03	4.752E-03	6.451E-03	9.398E-03	1.537E-02	2.109E-02	3.121E-02	5.209E-02
8.50	1.619E-03	2.359E-03	3.828E-03	5.202E-03	7.583E-03	1.239E-02	1.697E-02	2.507E-02	4.176E-02
9.00	1.310E-03	1.915E-03	3.118E-03	4.245E-03	6.194E-03	1.012E-02	1.385E-02	2.042E-02	3.393E-02
9.50	1.071E-03	1.570E-03	2.566E-03	3.499E-03	5.114E-03	8.355E-03	1.143E-02	1.683E-02	2.791E-02
10.00	8.838E-04	1.299E-03	2.131E-03	2.911E-03	4.262E-03	6.969E-03	9.531E-03	1.402E-02	2.320E-02
12.50	3.780E-04	5.621E-04	9.364E-04	1.292E-03	1.911E-03	3.156E-03	4.329E-03	6.369E-03	1.049E-02
15.00	1.866E-04	2.795E-04	4.709E-04	6.549E-04	9.788E-04	1.636E-03	2.258E-03	3.341E-03	5.522E-03
17.50	1.022E-04	1.538E-04	2.610E-04	3.651E-04	5.499E-04	9.289E-04	1.291E-03	1.925E-03	3.203E-03
20.00	6.052E-05	9.133E-05	1.558E-04	2.188E-04	3.314E-04	5.645E-04	7.892E-04	1.185E-03	1.990E-03
22.50	3.809E-05	5.759E-05	9.858E-05	1.388E-04	2.111E-04	3.621E-04	5.086E-04	7.687E-04	1.301E-03
25.00	2.516E-05	3.809E-05	6.538E-05	9.226E-05	1.408E-04	2.426E-04	3.421E-04	5.198E-04	8.860E-04
27.50	1.729E-05	2.621E-05	4.506E-05	6.369E-05	9.741E-05	1.685E-04	2.384E-04	3.637E-04	6.240E-04
30.00	1.228E-05	1.863E-05	3.209E-05	4.541E-05	6.956E-05	1.207E-04	1.712E-04	2.621E-04	4.520E-04
32.50	8.972E-06	1.363E-05	2.349E-05	3.328E-05	5.105E-05	8.882E-05	1.262E-04	1.937E-04	3.566E-04
35.00	6.713E-06	1.020E-05	1.761E-05	2.497E-05	3.835E-05	6.684E-05	9.510E-05	1.464E-04	2.545E-04
37.50	5.126E-06	7.798E-06	1.348E-05	1.911E-05	2.939E-05	5.130E-05	7.309E-05	1.127E-04	1.966E-04
40.00	3.985E-06	6.068E-06	1.050E-05	1.490E-05	2.293E-05	4.008E-05	5.717E-05	8.829E-05	1.544E-04
42.50	3.149E-06	4.798E-06	8.307E-06	1.180E-05	1.818E-05	3.182E-05	4.542E-05	7.024E-05	1.231E-04
45.00	2.524E-06	3.849E-06	6.670E-06	9.480E-06	1.461E-05	2.560E-05	3.658E-05	5.663E-05	9.947E-05
47.50	2.049E-06	3.127E-06	5.425E-06	7.714E-06	1.190E-05	2.086E-05	2.983E-05	4.623E-05	8.135E-05
50.00	1.682E-06	2.569E-06	4.462E-06	6.349E-06	9.799E-06	1.720E-05	2.461E-05	3.817E-05	6.277E-05
55.00	1.168E-06	1.788E-06	3.111E-06	4.431E-06	6.849E-06	1.205E-05	1.725E-05	2.681E-05	4.736E-05
60.00	8.404E-07	1.289E-06	2.248E-06	3.206E-06	4.962E-06	8.740E-06	1.253E-05	1.949E-05	3.451E-05
65.00	6.223E-07	9.564E-07	1.672E-06	2.388E-06	3.701E-06	6.530E-06	9.371E-06	1.460E-05	2.589E-05
70.00	4.731E-07	7.287E-07	1.277E-06	1.826E-06	2.835E-06	5.010E-06	7.197E-06	1.122E-05	1.993E-05
75.00	3.675E-07	5.676E-07	9.977E-07	1.429E-06	2.221E-06	3.930E-06	5.651E-06	8.822E-06	1.569E-05
80.00	2.914E-07	4.511E-07	7.948E-07	1.140E-06	1.775E-06	3.148E-06	4.530E-06	7.079E-06	1.260E-05
85.00	2.351E-07	3.651E-07	6.454E-07	9.270E-07	1.445E-06	2.567E-06	3.697E-06	5.783E-06	1.031E-05
90.00	1.928E-07	3.002E-07	5.321E-07	7.655E-07	1.196E-06	2.127E-06	3.067E-06	4.803E-06	8.574E-06
95.00	1.605E-07	2.506E-07	4.457E-07	6.423E-07	1.005E-06	1.791E-06	2.585E-06	4.051E-06	7.239E-06
100.00	1.355E-07	2.122E-07	3.785E-07	5.463E-07	8.559E-07	1.528E-06	2.207E-06	3.463E-06	6.196E-06
105.00	1.158E-07	1.819E-07	3.255E-07	4.706E-07	7.389E-07	1.322E-06	1.911E-06	3.000E-06	5.373E-06
110.00	1.002E-07	1.580E-07	2.836E-07	4.106E-07	6.455E-07	1.156E-06	1.673E-06	2.630E-06	4.715E-06
115.00	8.771E-08	1.386E-07	2.496E-07	3.621E-07	5.704E-07	1.024E-06	1.483E-06	2.333E-06	4.186E-06
120.00	7.764E-08	1.231E-07	2.224E-07	3.231E-07	5.097E-07	9.161E-07	1.328E-06	2.091E-06	3.756E-06
125.00	6.946E-08	1.105E-07	2.002E-07	2.912E-07	4.601E-07	8.281E-07	1.201E-06	1.893E-06	3.404E-06
130.00	6.276E-08	1.001E-07	1.819E-07	2.651E-07	4.196E-07	7.566E-07	1.098E-06	1.732E-06	3.117E-06
135.00	5.732E-08	9.170E-08	1.671E-07	2.438E-07	3.862E-07	6.972E-07	1.013E-06	1.599E-06	2.880E-06
140.00	5.283E-08	8.471E-08	1.548E-07	2.262E-07	3.590E-07	6.492E-07	9.438E-07	1.491E-06	2.686E-06
145.00	4.921E-08	7.912E-08	1.449E-07	2.120E-07	3.366E-07	6.092E-07	8.862E-07	1.401E-06	2.526E-06
150.00	4.626E-08	7.454E-08	1.368E-07	2.004E-07	3.186E-07	5.773E-07	8.402E-07	1.329E-06	2.397E-06
155.00	4.390E-08	7.085E-08	1.303E-07	1.910E-07	3.041E-07	5.516E-07	8.032E-07	1.271E-06	2.294E-06
160.00	4.210E-08	6.809E-08	1.254E-07	1.839E-07	2.928E-07	5.313E-07	7.739E-07	1.225E-06	2.213E-06
165.00	4.070E-08	6.586E-08	1.215E-07	1.783E-07	2.844E-07	5.167E-07	7.529E-07	1.192E-06	2.152E-06
170.00	3.979E-08	6.447E-08	1.190E-07	1.746E-07	2.784E-07	5.056E-07	7.369E-07	1.167E-06	2.110E-06
175.00	3.921E-08	6.356E-08	1.174E-07	1.725E-07	2.752E-07	5.002E-07	7.291E-07	1.154E-06	2.085E-06
180.00	3.896E-08	6.312E-08	1.165E-07	1.711E-07	2.731E-07	4.968E-07	7.245E-07	1.148E-06	2.076E-06
TOTAL	8.041E-03	9.571E-03	1.212E-02	1.417E-02	1.723E-02	2.232E-02	2.639E-02	3.247E-02	4.256E-02
TRANS	1.050E-05	1.550E-05	2.576E-05	3.563E-05	5.312E-05	8.912E-05	1.238E-04	1.854E-04	3.120E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 6

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	6.282E+00	6.211E+00	6.125E+00	6.072E+00	6.006E+00	5.913E+00	5.847E+00	5.758E+00	5.386E+00
0.25	6.215E+00	6.158E+00	6.086E+00	6.040E+00	5.980E+00	5.894E+00	5.831E+00	5.745E+00	5.380E+00
0.50	6.020E+00	6.003E+00	5.971E+00	5.944E+00	5.904E+00	5.837E+00	5.785E+00	5.708E+00	5.363E+00
0.75	5.714E+00	5.756E+00	5.785E+00	5.789E+00	5.780E+00	5.744E+00	5.708E+00	5.647E+00	5.333E+00
1.00	5.322E+00	5.434E+00	5.538E+00	5.581E+00	5.612E+00	5.618E+00	5.602E+00	5.563E+00	5.292E+00
1.50	4.390E+00	4.644E+00	4.910E+00	5.043E+00	5.169E+00	5.278E+00	5.316E+00	5.332E+00	5.178E+00
2.00	3.431E+00	3.786E+00	4.188E+00	4.405E+00	4.629E+00	4.849E+00	4.949E+00	5.031E+00	5.024E+00
2.50	2.583E+00	2.979E+00	3.462E+00	3.740E+00	4.044E+00	4.366E+00	4.527E+00	4.678E+00	4.835E+00
3.00	1.900E+00	2.288E+00	2.795E+00	3.105E+00	3.461E+00	3.863E+00	4.077E+00	4.293E+00	4.617E+00
3.50	1.381E+00	1.731E+00	2.218E+00	2.535E+00	2.914E+00	3.368E+00	3.623E+00	3.892E+00	4.378E+00
4.00	1.000E+00	1.300E+00	1.742E+00	2.045E+00	2.424E+00	2.901E+00	3.183E+00	3.493E+00	4.122E+00
4.50	7.274E-01	9.746E-01	1.360E+00	1.637E+00	1.998E+00	2.475E+00	2.770E+00	3.106E+00	3.857E+00
5.00	5.331E-01	7.330E-01	1.060E+00	1.305E+00	1.637E+00	2.097E+00	2.392E+00	2.742E+00	3.588E+00
5.50	3.949E-01	5.547E-01	8.269E-01	1.039E+00	1.336E+00	1.767E+00	2.054E+00	2.406E+00	3.320E+00
6.00	2.963E-01	4.233E-01	6.476E-01	8.284E-01	1.090E+00	1.484E+00	1.756E+00	2.100E+00	3.058E+00
6.50	2.254E-01	3.263E-01	5.100E-01	6.625E-01	8.896E-01	1.244E+00	1.498E+00	1.827E+00	2.805E+00
7.00	1.738E-01	2.542E-01	4.043E-01	5.322E-01	7.275E-01	1.042E+00	1.275E+00	1.585E+00	2.564E+00
7.50	1.359E-01	2.002E-01	3.229E-01	4.299E-01	5.968E-01	8.742E-01	1.085E+00	1.373E+00	2.336E+00
8.00	1.077E-01	1.594E-01	2.601E-01	3.494E-01	4.915E-01	7.342E-01	9.234E-01	1.188E+00	2.122E+00
8.50	8.638E-02	1.284E-01	2.112E-01	2.859E-01	4.067E-01	6.181E-01	7.868E-01	1.028E+00	1.924E+00
9.00	7.015E-02	1.045E-01	1.729E-01	2.355E-01	3.383E-01	5.219E-01	6.716E-01	8.900E-01	1.742E+00
9.50	5.760E-02	8.588E-02	1.428E-01	1.954E-01	2.829E-01	4.422E-01	5.745E-01	7.713E-01	1.574E+00
10.00	4.779E-02	7.128E-02	1.189E-01	1.633E-01	2.379E-01	3.761E-01	4.928E-01	6.693E-01	1.421E+00
12.50	2.137E-02	3.175E-02	5.307E-02	7.344E-02	1.088E-01	1.781E-01	2.403E-01	3.404E-01	8.485E-01
15.00	1.120E-02	1.656E-02	2.754E-02	3.807E-02	5.657E-02	9.372E-02	1.281E-01	1.856E-01	5.135E-01
17.50	6.519E-03	9.628E-03	1.594E-02	2.198E-02	3.260E-02	5.413E-02	7.436E-02	1.088E-01	3.207E-01
20.00	4.081E-03	6.037E-03	9.988E-03	1.375E-02	2.034E-02	3.372E-02	4.638E-02	6.817E-02	2.084E-01
22.50	2.694E-03	4.000E-03	6.629E-03	9.122E-03	1.348E-02	2.231E-02	3.067E-02	4.515E-02	1.410E-01
25.00	1.854E-03	2.764E-03	4.598E-03	6.333E-03	9.359E-03	1.547E-02	2.126E-02	3.131E-02	9.914E-02
27.50	1.318E-03	1.975E-03	3.301E-03	4.556E-03	6.742E-03	1.114E-02	1.531E-02	2.255E-02	7.206E-02
30.00	9.632E-04	1.450E-03	2.437E-03	3.373E-03	5.002E-03	8.279E-03	1.138E-02	1.676E-02	5.393E-02
32.50	7.205E-04	1.090E-03	1.842E-03	2.556E-03	3.802E-03	6.307E-03	8.672E-03	1.278E-02	4.137E-02
35.00	5.500E-04	8.352E-04	1.419E-03	1.976E-03	2.949E-03	4.907E-03	6.755E-03	9.964E-03	3.243E-02
37.50	4.274E-04	6.515E-04	1.113E-03	1.555E-03	2.328E-03	3.887E-03	5.359E-03	7.915E-03	2.589E-02
40.00	3.374E-04	5.161E-04	8.857E-04	1.241E-03	1.865E-03	3.127E-03	4.320E-03	6.391E-03	2.101E-02
42.50	2.702E-04	4.145E-04	7.145E-04	1.004E-03	1.515E-03	2.550E-03	3.530E-03	5.232E-03	1.729E-02
45.00	2.191E-04	3.371E-04	5.834E-04	8.222E-04	1.244E-03	2.104E-03	2.919E-03	4.338E-03	1.442E-02
47.50	1.798E-04	2.772E-04	4.816E-04	6.805E-04	1.033E-03	1.754E-03	2.440E-03	3.635E-03	1.215E-02
50.00	1.491E-04	2.304E-04	4.016E-04	5.688E-04	8.665E-04	1.477E-03	2.060E-03	3.077E-03	1.035E-02
55.00	1.055E-04	1.636E-04	2.868E-04	4.080E-04	6.252E-04	1.074E-03	1.506E-03	2.262E-03	7.715E-03
60.00	7.717E-05	1.200E-04	2.114E-04	3.019E-04	4.649E-04	8.048E-04	1.133E-03	1.713E-03	5.930E-03
65.00	5.809E-05	9.057E-05	1.602E-04	2.294E-04	3.549E-04	6.184E-04	8.749E-04	1.330E-03	4.680E-03
70.00	4.484E-05	7.004E-05	1.243E-04	1.785E-04	2.772E-04	4.860E-04	6.905E-04	1.055E-03	3.777E-03
75.00	3.539E-05	5.537E-05	9.855E-05	1.418E-04	2.210E-04	3.896E-04	5.558E-04	8.540E-04	3.109E-03
80.00	2.849E-05	4.464E-05	7.964E-05	1.149E-04	1.795E-04	3.180E-04	4.552E-04	7.030E-04	2.604E-03
85.00	2.335E-05	3.663E-05	6.549E-05	9.462E-05	1.483E-04	2.638E-04	3.789E-04	5.878E-04	2.215E-03
90.00	1.945E-05	3.055E-05	5.472E-05	7.917E-05	1.243E-04	2.221E-04	3.200E-04	4.986E-04	1.911E-03
95.00	1.644E-05	2.585E-05	4.639E-05	6.721E-05	1.058E-04	1.896E-04	2.739E-04	4.285E-04	1.669E-03
100.00	1.410E-05	2.218E-05	3.986E-05	5.781E-05	9.115E-05	1.639E-04	2.373E-04	3.727E-04	1.475E-03
105.00	1.224E-05	1.928E-05	3.468E-05	5.036E-05	7.953E-05	1.434E-04	2.082E-04	3.280E-04	1.317E-03
110.00	1.076E-05	1.695E-05	3.053E-05	4.437E-05	7.018E-05	1.268E-04	1.845E-04	2.917E-04	1.188E-03
115.00	9.558E-06	1.508E-05	2.718E-05	3.954E-05	6.261E-05	1.134E-04	1.653E-04	2.620E-04	1.081E-03
120.00	8.586E-06	1.355E-05	2.446E-05	3.560E-05	5.643E-05	1.024E-04	1.495E-04	2.377E-04	9.930E-04
125.00	7.791E-06	1.230E-05	2.222E-05	3.237E-05	5.136E-05	9.338E-05	1.365E-04	2.176E-04	9.194E-04
130.00	7.139E-06	1.128E-05	2.039E-05	2.971E-05	4.719E-05	8.594E-05	1.258E-04	2.009E-04	8.580E-04
135.00	6.603E-06	1.044E-05	1.888E-05	2.752E-05	4.375E-05	7.977E-05	1.169E-04	1.871E-04	8.066E-04
140.00	6.162E-06	9.745E-06	1.764E-05	2.573E-05	4.092E-05	7.471E-05	1.096E-04	1.757E-04	7.639E-04
145.00	5.801E-06	9.178E-06	1.662E-05	2.425E-05	3.859E-05	7.052E-05	1.036E-04	1.662E-04	7.284E-04
150.00	5.508E-06	8.717E-06	1.579E-05	2.305E-05	3.670E-05	6.713E-05	9.869E-05	1.586E-04	6.994E-04
155.00	5.273E-06	8.347E-06	1.512E-05	2.208E-05	3.518E-05	6.440E-05	9.473E-05	1.524E-04	6.758E-04
160.00	5.090E-06	8.058E-06	1.461E-05	2.133E-05	3.399E-05	6.225E-05	9.162E-05	1.475E-04	6.573E-04
165.00	4.952E-06	7.842E-06	1.422E-05	2.077E-05	3.310E-05	6.066E-05	8.932E-05	1.439E-04	6.433E-04
170.00	4.856E-06	7.691E-06	1.394E-05	2.037E-05	3.247E-05	5.951E-05	8.766E-05	1.413E-04	6.335E-04
175.00	4.799E-06	7.602E-06	1.379E-05	2.014E-05	3.212E-05	5.890E-05	8.676E-05	1.399E-04	6.278E-04
180.00	4.781E-06	7.572E-06	1.373E-05	2.005E-05	3.196E-05	5.859E-05	8.632E-05	1.392E-04	6.257E-04
TOTAL	6.257E-02	7.743E-02	1.019E-01	1.212E-01	1.498E-01	1.964E-01	2.328E-01	2.860E-01	5.288E-01
TRANS	6.495E-04	9.714E-04	1.630E-03	2.260E-03	3.366E-03	5.607E-03	7.733E-03	1.143E-02	3.751E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 7

ENERGY (keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	4.265E+01	3.239E+01	2.312E+01	1.904E+01	1.543E+01	1.224E+01	1.079E+01	9.426E+00	8.141E+00
0.25	1.281E+01	1.247E+01	1.186E+01	1.129E+01	1.042E+01	9.221E+00	8.538E+00	7.839E+00	7.124E+00
0.50	2.033E+00	2.544E+00	3.293E+00	3.749E+00	4.200E+00	4.591E+00	4.751E+00	4.889E+00	4.989E+00
0.75	4.774E-01	6.544E-01	9.624E-01	1.202E+00	1.528E+00	1.983E+00	2.277E+00	2.627E+00	3.045E+00
1.00	1.643E-01	2.280E-01	3.457E-01	4.470E-01	6.055E-01	8.719E-01	1.076E+00	1.355E+00	1.751E+00
1.50	3.741E-02	5.105E-02	7.672E-02	1.000E-01	1.395E-01	2.155E-01	2.830E-01	3.914E-01	5.817E-01
2.00	1.309E-02	1.786E-02	2.677E-02	3.477E-02	4.819E-02	7.429E-02	9.846E-02	1.399E-01	2.200E-01
2.50	5.699E-03	7.862E-03	1.190E-02	1.547E-02	2.135E-02	3.260E-02	4.302E-02	6.116E-02	9.749E-02
3.00	2.851E-03	3.980E-03	6.100E-03	7.969E-03	1.101E-02	1.677E-02	2.204E-02	3.117E-02	4.954E-02
3.50	1.573E-03	2.217E-03	3.438E-03	4.518E-03	6.279E-03	9.588E-03	1.259E-02	1.774E-02	2.801E-02
4.00	9.346E-04	1.327E-03	2.076E-03	2.745E-03	3.840E-03	5.900E-03	7.762E-03	1.092E-02	1.718E-02
4.50	5.886E-04	8.401E-04	1.324E-03	1.758E-03	2.476E-03	3.833E-03	5.058E-03	7.127E-03	1.119E-02
5.00	3.885E-04	5.565E-04	8.815E-04	1.176E-03	1.665E-03	2.596E-03	3.439E-03	4.860E-03	7.642E-03
5.50	2.664E-04	3.826E-04	6.085E-04	8.142E-04	1.159E-03	1.819E-03	2.419E-03	3.431E-03	5.410E-03
6.00	1.887E-04	2.715E-04	4.330E-04	5.808E-04	8.298E-04	1.310E-03	1.749E-03	2.491E-03	3.943E-03
6.50	1.373E-04	1.978E-04	3.162E-04	4.250E-04	6.091E-04	9.666E-04	1.295E-03	1.852E-03	2.943E-03
7.00	1.023E-04	1.475E-04	2.361E-04	3.179E-04	4.568E-04	7.279E-04	9.778E-04	1.404E-03	2.242E-03
7.50	7.770E-05	1.121E-04	1.798E-04	2.424E-04	3.490E-04	5.580E-04	7.516E-04	1.083E-03	1.737E-03
8.00	6.009E-05	8.676E-05	1.393E-04	1.879E-04	2.710E-04	4.347E-04	5.868E-04	8.481E-04	1.366E-03
8.50	4.720E-05	6.818E-05	1.095E-04	1.479E-04	2.136E-04	3.434E-04	4.645E-04	6.732E-04	1.088E-03
9.00	3.758E-05	5.430E-05	8.729E-05	1.180E-04	1.705E-04	2.747E-04	3.722E-04	5.408E-04	8.773E-04
9.50	3.029E-05	4.379E-05	7.042E-05	9.520E-05	1.378E-04	2.223E-04	3.017E-04	4.392E-04	7.147E-04
10.00	2.469E-05	3.569E-05	5.743E-05	7.767E-05	1.125E-04	1.818E-04	2.470E-04	3.602E-04	5.879E-04
12.50	1.014E-05	1.467E-05	2.363E-05	3.200E-05	4.645E-05	7.540E-05	1.028E-04	1.509E-04	2.489E-04
15.00	4.898E-06	7.089E-06	1.143E-05	1.549E-05	2.251E-05	3.662E-05	5.004E-05	7.370E-05	1.222E-04
17.50	2.648E-06	3.833E-06	6.182E-06	8.381E-06	1.219E-05	1.986E-05	2.717E-05	4.009E-05	6.671E-05
20.00	1.553E-06	2.249E-06	3.630E-06	4.922E-06	7.162E-06	1.168E-05	1.600E-05	2.363E-05	3.941E-05
22.50	9.704E-07	1.406E-06	2.269E-06	3.078E-06	4.482E-06	7.315E-06	1.002E-05	1.482E-05	2.476E-05
25.00	6.370E-07	9.230E-07	1.491E-06	2.023E-06	2.947E-06	4.814E-06	6.601E-06	9.769E-06	1.634E-05
27.50	4.350E-07	6.306E-07	1.019E-06	1.383E-06	2.016E-06	3.297E-06	4.523E-06	6.699E-06	1.122E-05
30.00	3.070E-07	4.452E-07	7.199E-07	9.778E-07	1.426E-06	2.333E-06	3.203E-06	4.748E-06	7.958E-06
32.50	2.228E-07	3.232E-07	5.230E-07	7.107E-07	1.037E-06	1.699E-06	2.333E-06	3.461E-06	5.808E-06
35.00	1.655E-07	2.402E-07	3.890E-07	5.288E-07	7.722E-07	1.266E-06	1.740E-06	2.584E-06	4.341E-06
37.50	1.254E-07	1.821E-07	2.951E-07	4.014E-07	5.867E-07	9.630E-07	1.325E-06	1.968E-06	3.310E-06
40.00	9.669E-08	1.405E-07	2.279E-07	3.102E-07	4.538E-07	7.458E-07	1.027E-06	1.527E-06	2.571E-06
42.50	7.574E-08	1.101E-07	1.788E-07	2.435E-07	3.566E-07	5.867E-07	8.084E-07	1.204E-06	2.029E-06
45.00	6.011E-08	8.747E-08	1.421E-07	1.937E-07	2.839E-07	4.679E-07	6.453E-07	9.618E-07	1.624E-06
47.50	4.827E-08	7.030E-08	1.144E-07	1.560E-07	2.289E-07	3.778E-07	5.215E-07	7.781E-07	1.315E-06
50.00	3.921E-08	5.715E-08	9.308E-08	1.271E-07	1.867E-07	3.085E-07	4.263E-07	6.369E-07	1.078E-06
55.00	2.658E-08	3.882E-08	6.339E-08	8.670E-08	1.277E-07	2.118E-07	2.933E-07	4.394E-07	7.462E-07
60.00	1.861E-08	2.724E-08	4.461E-08	6.115E-08	9.030E-08	1.504E-07	2.088E-07	3.137E-07	5.346E-07
65.00	1.337E-08	1.961E-08	3.223E-08	4.428E-08	6.561E-08	1.097E-07	1.528E-07	2.303E-07	3.941E-07
70.00	9.822E-09	1.445E-08	2.384E-08	3.285E-08	4.884E-08	8.211E-08	1.147E-07	1.735E-07	2.981E-07
75.00	7.348E-09	1.085E-08	1.797E-08	2.484E-08	3.709E-08	6.269E-08	8.785E-08	1.334E-07	2.303E-07
80.00	5.588E-09	8.279E-09	1.379E-08	1.912E-08	2.868E-08	4.878E-08	6.861E-08	1.047E-07	1.816E-07
85.00	4.308E-09	6.409E-09	1.074E-08	1.495E-08	2.253E-08	3.858E-08	5.448E-08	8.349E-08	1.456E-07
90.00	3.359E-09	5.021E-09	8.466E-09	1.184E-08	1.795E-08	3.095E-08	4.391E-08	6.763E-08	1.186E-07
95.00	2.648E-09	3.981E-09	6.760E-09	9.499E-09	1.449E-08	2.519E-08	3.591E-08	5.560E-08	9.809E-08
100.00	2.103E-09	3.182E-09	5.448E-09	7.698E-09	1.182E-08	2.074E-08	2.972E-08	4.628E-08	8.217E-08
105.00	1.686E-09	2.569E-09	4.440E-09	6.311E-09	9.768E-09	1.730E-08	2.492E-08	3.903E-08	6.975E-08
110.00	1.358E-09	2.087E-09	3.646E-09	5.218E-09	8.144E-09	1.457E-08	2.111E-08	3.328E-08	5.989E-08
115.00	1.102E-09	1.709E-09	3.022E-09	4.358E-09	6.863E-09	1.241E-08	1.810E-08	2.872E-08	5.203E-08
120.00	8.978E-10	1.408E-09	2.524E-09	3.671E-09	5.839E-09	1.068E-08	1.568E-08	2.504E-08	4.570E-08
125.00	7.347E-10	1.166E-09	2.124E-09	3.119E-09	5.014E-09	9.286E-09	1.372E-08	2.207E-08	4.057E-08
130.00	6.051E-10	9.742E-10	1.805E-09	2.677E-09	4.354E-09	8.165E-09	1.214E-08	1.967E-08	3.640E-08
135.00	4.992E-10	8.169E-10	1.544E-09	2.316E-09	3.812E-09	7.243E-09	1.085E-08	1.769E-08	3.299E-08
140.00	4.156E-10	6.921E-10	1.336E-09	2.029E-09	3.381E-09	6.508E-09	9.810E-09	1.611E-08	3.021E-08
145.00	3.471E-10	5.896E-10	1.166E-09	1.792E-09	3.026E-09	5.901E-09	8.954E-09	1.480E-08	2.795E-08
150.00	2.932E-10	5.086E-10	1.031E-09	1.606E-09	2.747E-09	5.422E-09	8.275E-09	1.375E-08	2.612E-08
155.00	2.504E-10	4.440E-10	9.232E-10	1.458E-09	2.525E-09	5.039E-09	7.731E-09	1.292E-08	2.467E-08
160.00	2.171E-10	3.934E-10	8.389E-10	1.342E-09	2.351E-09	4.740E-09	7.305E-09	1.226E-08	2.353E-08
165.00	1.932E-10	3.570E-10	7.784E-10	1.259E-09	2.228E-09	4.526E-09	6.998E-09	1.179E-08	2.269E-08
170.00	1.754E-10	3.296E-10	7.326E-10	1.197E-09	2.134E-09	4.364E-09	6.768E-09	1.144E-08	2.209E-08
175.00	1.667E-10	3.163E-10	7.108E-10	1.167E-09	2.091E-09	4.288E-09	6.656E-09	1.126E-08	2.176E-08
180.00	1.610E-10	3.073E-10	6.954E-10	1.146E-09	2.058E-09	4.233E-09	6.580E-09	1.115E-08	2.160E-08
TOTAL	2.948E-03	3.091E-03	3.316E-03	3.503E-03	3.802E-03	4.323E-03	4.750E-03	5.395E-03	6.479E-03
TRANS	3.495E-07	4.916E-07	7.642E-07	1.012E-06	1.431E-06	2.253E-06	3.020E-06	4.351E-06	7.039E-06

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, $Z = 7$

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	6.946E+00	6.496E+00	6.059E+00	5.845E+00	5.632E+00	5.419E+00	5.311E+00	5.201E+00	5.085E+00
0.25	6.383E+00	6.076E+00	5.765E+00	5.608E+00	5.450E+00	5.289E+00	5.205E+00	5.118E+00	5.024E+00
0.50	5.029E+00	5.021E+00	4.996E+00	4.978E+00	4.954E+00	4.924E+00	4.904E+00	4.880E+00	4.847E+00
0.75	3.544E+00	3.769E+00	4.008E+00	4.134E+00	4.262E+00	4.391E+00	4.455E+00	4.516E+00	4.572E+00
1.00	2.339E+00	2.656E+00	3.038E+00	3.260E+00	3.505E+00	3.774E+00	3.919E+00	4.070E+00	4.223E+00
1.50	9.564E-01	1.214E+00	1.589E+00	1.844E+00	2.163E+00	2.569E+00	2.815E+00	3.095E+00	3.413E+00
2.00	4.056E-01	5.544E-01	8.026E-01	9.925E-01	1.257E+00	1.638E+00	1.893E+00	2.211E+00	2.609E+00
2.50	1.888E-01	2.691E-01	4.158E-01	5.384E-01	7.231E-01	1.018E+00	1.234E+00	1.524E+00	1.923E+00
3.00	9.731E-02	1.415E-01	2.269E-01	3.027E-01	4.240E-01	6.334E-01	7.988E-01	1.035E+00	1.387E+00
3.50	5.497E-02	8.042E-02	1.313E-01	1.784E-01	2.569E-01	4.007E-01	5.212E-01	7.028E-01	9.924E-01
4.00	3.350E-02	4.901E-02	8.058E-02	1.105E-01	1.617E-01	2.599E-01	3.459E-01	4.813E-01	7.100E-01
4.50	2.171E-02	3.167E-02	5.209E-02	7.169E-02	1.059E-01	1.734E-01	2.346E-01	3.343E-01	5.110E-01
5.00	1.476E-02	2.147E-02	3.524E-02	4.853E-02	7.196E-02	1.192E-01	1.630E-01	2.364E-01	3.716E-01
5.50	1.044E-02	1.515E-02	2.478E-02	3.409E-02	5.058E-02	8.424E-02	1.161E-01	1.704E-01	2.736E-01
6.00	7.617E-03	1.104E-02	1.800E-02	2.472E-02	3.664E-02	6.115E-02	8.460E-02	1.252E-01	2.043E-01
6.50	5.701E-03	8.255E-03	1.344E-02	1.842E-02	2.725E-02	4.548E-02	6.304E-02	9.381E-02	1.548E-01
7.00	4.358E-03	6.313E-03	1.026E-02	1.405E-02	2.074E-02	3.457E-02	4.795E-02	7.155E-02	1.190E-01
7.50	3.391E-03	4.919E-03	7.995E-03	1.093E-02	1.611E-02	2.680E-02	3.716E-02	5.551E-02	9.277E-02
8.00	2.680E-03	3.893E-03	6.331E-03	8.648E-03	1.273E-02	2.113E-02	2.928E-02	4.374E-02	7.333E-02
8.50	2.146E-03	3.123E-03	5.085E-03	6.945E-03	1.021E-02	1.692E-02	2.342E-02	3.497E-02	5.871E-02
9.00	1.738E-03	2.536E-03	4.135E-03	5.648E-03	8.302E-03	1.374E-02	1.899E-02	2.832E-02	4.757E-02
9.50	1.423E-03	2.080E-03	3.399E-03	4.646E-03	6.827E-03	1.128E-02	1.558E-02	2.322E-02	3.898E-02
10.00	1.176E-03	1.723E-03	2.821E-03	3.859E-03	5.673E-03	9.370E-03	1.293E-02	1.924E-02	3.227E-02
12.50	5.067E-04	7.503E-04	1.244E-03	1.712E-03	2.530E-03	4.188E-03	5.768E-03	8.551E-03	1.427E-02
15.00	2.517E-04	3.756E-04	6.294E-04	8.724E-04	1.299E-03	2.166E-03	2.990E-03	4.437E-03	7.389E-03
17.50	1.384E-04	2.076E-04	3.508E-04	4.890E-04	7.335E-04	1.233E-03	1.710E-03	2.548E-03	4.252E-03
20.00	8.215E-05	1.237E-04	2.102E-04	2.943E-04	4.441E-04	7.526E-04	1.049E-03	1.571E-03	2.634E-03
22.50	5.178E-05	7.817E-05	1.334E-04	1.874E-04	2.841E-04	4.847E-04	6.786E-04	1.022E-03	1.723E-03
25.00	3.426E-05	5.181E-05	8.870E-05	1.249E-04	1.900E-04	3.260E-04	4.582E-04	6.932E-04	1.176E-03
27.50	2.356E-05	3.569E-05	6.124E-05	8.642E-05	1.318E-04	2.272E-04	3.204E-04	4.869E-04	8.309E-04
30.00	1.675E-05	2.540E-05	4.367E-05	6.171E-05	9.435E-05	1.632E-04	2.308E-04	3.520E-04	6.039E-04
32.50	1.224E-05	1.858E-05	3.201E-05	4.528E-05	6.936E-05	1.203E-04	1.705E-04	2.609E-04	4.496E-04
35.00	9.164E-06	1.392E-05	2.401E-05	3.400E-05	5.216E-05	9.070E-05	1.288E-04	1.976E-04	3.419E-04
37.50	6.999E-06	1.064E-05	1.838E-05	2.605E-05	4.001E-05	6.971E-05	9.915E-05	1.525E-04	2.648E-04
40.00	5.445E-06	8.286E-06	1.432E-05	2.032E-05	3.125E-05	5.453E-05	7.766E-05	1.197E-04	2.085E-04
42.50	4.304E-06	6.556E-06	1.135E-05	1.611E-05	2.479E-05	4.333E-05	6.177E-05	9.533E-05	1.665E-04
45.00	3.450E-06	5.258E-06	9.109E-06	1.294E-05	1.994E-05	3.489E-05	4.980E-05	7.697E-05	1.348E-04
47.50	2.800E-06	4.272E-06	7.408E-06	1.053E-05	1.624E-05	2.845E-05	4.065E-05	6.291E-05	1.104E-04
50.00	2.299E-06	3.512E-06	6.097E-06	8.672E-06	1.338E-05	2.347E-05	3.356E-05	5.199E-05	9.140E-05
55.00	1.597E-06	2.444E-06	4.252E-06	6.056E-06	9.359E-06	1.645E-05	2.355E-05	3.657E-05	6.449E-05
60.00	1.149E-06	1.762E-06	3.073E-06	4.383E-06	6.782E-06	1.194E-05	1.712E-05	2.662E-05	4.706E-05
65.00	8.513E-07	1.308E-06	2.287E-06	3.265E-06	5.061E-06	8.929E-06	1.281E-05	1.995E-05	3.536E-05
70.00	6.472E-07	9.967E-07	1.747E-06	2.498E-06	3.877E-06	6.852E-06	9.843E-06	1.535E-05	2.725E-05
75.00	5.028E-07	7.764E-07	1.364E-06	1.954E-06	3.037E-06	5.377E-06	7.732E-06	1.207E-05	2.147E-05
80.00	3.987E-07	6.170E-07	1.087E-06	1.559E-06	2.428E-06	4.307E-06	6.199E-06	9.689E-06	1.726E-05
85.00	3.217E-07	4.993E-07	8.825E-07	1.268E-06	1.977E-06	3.512E-06	5.060E-06	7.918E-06	1.412E-05
90.00	2.638E-07	4.106E-07	7.277E-07	1.047E-06	1.636E-06	2.912E-06	4.199E-06	6.578E-06	1.175E-05
95.00	2.196E-07	3.428E-07	6.096E-07	8.785E-07	1.375E-06	2.451E-06	3.538E-06	5.548E-06	9.922E-06
100.00	1.853E-07	2.901E-07	5.175E-07	7.469E-07	1.171E-06	2.091E-06	3.022E-06	4.744E-06	8.495E-06
105.00	1.584E-07	2.487E-07	4.451E-07	6.436E-07	1.011E-06	1.809E-06	2.616E-06	4.110E-06	7.367E-06
110.00	1.370E-07	2.159E-07	3.876E-07	5.613E-07	8.828E-07	1.582E-06	2.291E-06	3.603E-06	6.467E-06
115.00	1.199E-07	1.895E-07	3.413E-07	4.952E-07	7.802E-07	1.401E-06	2.030E-06	3.196E-06	5.741E-06
120.00	1.061E-07	1.682E-07	3.040E-07	4.416E-07	6.970E-07	1.254E-06	1.818E-06	2.865E-06	5.152E-06
125.00	9.489E-08	1.509E-07	2.735E-07	3.980E-07	6.290E-07	1.133E-06	1.645E-06	2.595E-06	4.670E-06
130.00	8.574E-08	1.368E-07	2.486E-07	3.624E-07	5.737E-07	1.035E-06	1.504E-06	2.373E-06	4.276E-06
135.00	7.827E-08	1.252E-07	2.282E-07	3.331E-07	5.280E-07	9.540E-07	1.387E-06	2.191E-06	3.951E-06
140.00	7.215E-08	1.157E-07	2.115E-07	3.092E-07	4.908E-07	8.880E-07	1.292E-06	2.042E-06	3.684E-06
145.00	6.718E-08	1.080E-07	1.979E-07	2.895E-07	4.601E-07	8.335E-07	1.213E-06	1.919E-06	3.466E-06
150.00	6.314E-08	1.017E-07	1.868E-07	2.737E-07	4.354E-07	7.897E-07	1.150E-06	1.820E-06	3.289E-06
155.00	5.993E-08	9.675E-08	1.780E-07	2.610E-07	4.156E-07	7.545E-07	1.099E-06	1.741E-06	3.147E-06
160.00	5.743E-08	9.286E-08	1.711E-07	2.510E-07	4.001E-07	7.268E-07	1.059E-06	1.679E-06	3.036E-06
165.00	5.555E-08	8.993E-08	1.659E-07	2.437E-07	3.887E-07	7.065E-07	1.030E-06	1.632E-06	2.953E-06
170.00	5.427E-08	8.794E-08	1.623E-07	2.384E-07	3.804E-07	6.917E-07	1.009E-06	1.600E-06	2.895E-06
175.00	5.349E-08	8.672E-08	1.602E-07	2.355E-07	3.759E-07	6.840E-07	9.975E-07	1.581E-06	2.861E-06
180.00	5.323E-08	8.636E-08	1.595E-07	2.343E-07	3.738E-07	6.799E-07	9.920E-07	1.574E-06	2.850E-06
TOTAL	8.664E-03	1.031E-02	1.306E-02	1.525E-02	1.854E-02	2.401E-02	2.836E-02	3.487E-02	4.565E-02
TRANS	1.409E-05	2.079E-05	3.451E-05	4.771E-05	7.109E-05	1.192E-04	1.655E-04	2.475E-04	4.161E-04

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 7

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	4.953E+00	4.888E+00	4.808E+00	4.756E+00	4.690E+00	4.594E+00	4.526E+00	4.433E+00	4.054E+00
0.25	4.913E+00	4.857E+00	4.785E+00	4.737E+00	4.675E+00	4.583E+00	4.517E+00	4.425E+00	4.051E+00
0.50	4.797E+00	4.765E+00	4.717E+00	4.681E+00	4.630E+00	4.550E+00	4.489E+00	4.404E+00	4.040E+00
0.75	4.612E+00	4.617E+00	4.606E+00	4.589E+00	4.556E+00	4.495E+00	4.444E+00	4.368E+00	4.023E+00
1.00	4.370E+00	4.421E+00	4.457E+00	4.464E+00	4.456E+00	4.420E+00	4.382E+00	4.319E+00	4.000E+00
1.50	3.771E+00	3.921E+00	4.067E+00	4.133E+00	4.187E+00	4.216E+00	4.212E+00	4.183E+00	3.934E+00
2.00	3.113E+00	3.348E+00	3.599E+00	3.726E+00	3.848E+00	3.952E+00	3.988E+00	4.002E+00	3.844E+00
2.50	2.485E+00	2.773E+00	3.103E+00	3.282E+00	3.467E+00	3.646E+00	3.725E+00	3.785E+00	3.733E+00
3.00	1.937E+00	2.244E+00	2.619E+00	2.836E+00	3.071E+00	3.317E+00	3.436E+00	3.543E+00	3.604E+00
3.50	1.488E+00	1.787E+00	2.176E+00	2.413E+00	2.681E+00	2.979E+00	3.134E+00	3.283E+00	3.458E+00
4.00	1.134E+00	1.409E+00	1.786E+00	2.028E+00	2.313E+00	2.648E+00	2.830E+00	3.017E+00	3.301E+00
4.50	8.623E-01	1.105E+00	1.455E+00	1.690E+00	1.978E+00	2.332E+00	2.535E+00	2.750E+00	3.134E+00
5.00	6.568E-01	8.647E-01	1.179E+00	1.399E+00	1.680E+00	2.039E+00	2.253E+00	2.491E+00	2.962E+00
5.50	5.027E-01	6.777E-01	9.540E-01	1.155E+00	1.419E+00	1.773E+00	1.992E+00	2.242E+00	2.787E+00
6.00	3.873E-01	5.330E-01	7.718E-01	9.514E-01	1.196E+00	1.535E+00	1.752E+00	2.009E+00	2.611E+00
6.50	3.009E-01	4.213E-01	6.255E-01	7.839E-01	1.005E+00	1.324E+00	1.536E+00	1.793E+00	2.437E+00
7.00	2.359E-01	3.351E-01	5.084E-01	6.468E-01	8.452E-01	1.141E+00	1.343E+00	1.594E+00	2.268E+00
7.50	1.867E-01	2.685E-01	4.150E-01	5.349E-01	7.110E-01	9.813E-01	1.172E+00	1.415E+00	2.103E+00
8.00	1.493E-01	2.167E-01	3.403E-01	4.438E-01	5.990E-01	8.441E-01	1.021E+00	1.253E+00	1.946E+00
8.50	1.205E-01	1.763E-01	2.806E-01	3.696E-01	5.058E-01	7.264E-01	8.898E-01	1.108E+00	1.796E+00
9.00	9.820E-02	1.446E-01	2.327E-01	3.092E-01	4.283E-01	6.258E-01	7.755E-01	9.797E-01	1.654E+00
9.50	8.076E-02	1.195E-01	1.941E-01	2.598E-01	3.638E-01	5.400E-01	6.763E-01	8.658E-01	1.521E+00
10.00	6.701E-02	9.948E-02	1.628E-01	2.194E-01	3.101E-01	4.668E-01	5.904E-01	7.653E-01	1.397E+00
12.50	2.961E-02	4.425E-02	7.389E-02	1.015E-01	1.480E-01	2.344E-01	3.076E-01	4.189E-01	9.008E-01
15.00	1.524E-02	2.276E-02	3.816E-02	5.279E-02	7.803E-02	1.269E-01	1.701E-01	2.391E-01	5.794E-01
17.50	8.752E-03	1.304E-02	2.184E-02	3.026E-02	4.495E-02	7.402E-02	1.005E-01	1.439E-01	3.785E-01
20.00	5.432E-03	8.086E-03	1.352E-02	1.873E-02	2.786E-02	4.616E-02	6.307E-02	9.132E-02	2.537E-01
22.50	3.571E-03	5.320E-03	8.890E-03	1.231E-02	1.831E-02	3.042E-02	4.173E-02	6.083E-02	1.754E-01
25.00	2.453E-03	3.662E-03	6.124E-03	8.478E-03	1.261E-02	2.098E-02	2.885E-02	4.226E-02	1.251E-01
27.50	1.745E-03	2.613E-03	4.379E-03	6.065E-03	9.026E-03	1.503E-02	2.069E-02	3.041E-02	9.185E-02
30.00	1.278E-03	1.920E-03	3.227E-03	4.474E-03	6.663E-03	1.110E-02	1.531E-02	2.255E-02	6.928E-02
32.50	9.581E-04	1.444E-03	2.437E-03	3.384E-03	5.047E-03	8.420E-03	1.162E-02	1.716E-02	5.350E-02
35.00	7.333E-04	1.109E-03	1.879E-03	2.615E-03	3.906E-03	6.528E-03	9.017E-03	1.334E-02	4.216E-02
37.50	5.714E-04	8.674E-04	1.475E-03	2.057E-03	3.080E-03	5.157E-03	7.131E-03	1.057E-02	3.381E-02
40.00	4.523E-04	6.887E-04	1.176E-03	1.644E-03	2.468E-03	4.142E-03	5.734E-03	8.509E-03	2.754E-02
42.50	3.630E-04	5.545E-04	9.507E-04	1.332E-03	2.005E-03	3.374E-03	4.677E-03	6.952E-03	2.274E-02
45.00	2.951E-04	4.520E-04	7.780E-04	1.093E-03	1.649E-03	2.783E-03	3.864E-03	5.754E-03	1.900E-02
47.50	2.426E-04	3.726E-04	6.437E-04	9.064E-04	1.371E-03	2.322E-03	3.229E-03	4.817E-03	1.605E-02
50.00	2.016E-04	3.103E-04	5.379E-04	7.592E-04	1.152E-03	1.956E-03	2.726E-03	4.074E-03	1.369E-02
55.00	1.431E-04	2.212E-04	3.859E-04	5.469E-04	8.343E-04	1.427E-03	1.995E-03	2.994E-03	1.022E-02
60.00	1.049E-04	1.628E-04	2.855E-04	4.063E-04	6.229E-04	1.072E-03	1.506E-03	2.270E-03	7.864E-03
65.00	7.917E-05	1.232E-04	2.170E-04	3.099E-04	4.774E-04	8.271E-04	1.166E-03	1.767E-03	6.212E-03
70.00	6.121E-05	9.548E-05	1.689E-04	2.420E-04	3.744E-04	6.526E-04	9.239E-04	1.407E-03	5.021E-03
75.00	4.838E-05	7.562E-05	1.343E-04	1.929E-04	2.995E-04	5.252E-04	7.465E-04	1.142E-03	4.140E-03
80.00	3.899E-05	6.107E-05	1.088E-04	1.566E-04	2.441E-04	4.303E-04	6.139E-04	9.440E-04	3.475E-03
85.00	3.199E-05	5.018E-05	8.962E-05	1.293E-04	2.022E-04	3.582E-04	5.129E-04	7.925E-04	2.964E-03
90.00	2.667E-05	4.189E-05	7.500E-05	1.084E-04	1.700E-04	3.026E-04	4.347E-04	6.749E-04	2.565E-03
95.00	2.256E-05	3.549E-05	6.368E-05	9.221E-05	1.450E-04	2.591E-04	3.735E-04	5.823E-04	2.248E-03
100.00	1.935E-05	3.048E-05	5.478E-05	7.945E-05	1.252E-04	2.246E-04	3.247E-04	5.085E-04	1.994E-03
105.00	1.681E-05	2.650E-05	4.772E-05	6.931E-05	1.095E-04	1.971E-04	2.857E-04	4.491E-04	1.788E-03
110.00	1.478E-05	2.332E-05	4.205E-05	6.115E-05	9.675E-05	1.748E-04	2.540E-04	4.007E-04	1.620E-03
115.00	1.314E-05	2.075E-05	3.747E-05	5.455E-05	8.645E-05	1.566E-04	2.282E-04	3.612E-04	1.481E-03
120.00	1.180E-05	1.866E-05	3.374E-05	4.916E-05	7.803E-05	1.417E-04	2.069E-04	3.286E-04	1.366E-03
125.00	1.071E-05	1.695E-05	3.067E-05	4.474E-05	7.110E-05	1.294E-04	1.894E-04	3.016E-04	1.269E-03
130.00	9.820E-06	1.554E-05	2.816E-05	4.110E-05	6.541E-05	1.193E-04	1.749E-04	2.793E-04	1.189E-03
135.00	9.083E-06	1.438E-05	2.608E-05	3.809E-05	6.068E-05	1.109E-04	1.628E-04	2.607E-04	1.122E-03
140.00	8.478E-06	1.343E-05	2.438E-05	3.563E-05	5.681E-05	1.040E-04	1.529E-04	2.453E-04	1.066E-03
145.00	7.982E-06	1.265E-05	2.297E-05	3.359E-05	5.361E-05	9.830E-05	1.447E-04	2.326E-04	1.020E-03
150.00	7.580E-06	1.202E-05	2.184E-05	3.195E-05	5.102E-05	9.367E-05	1.380E-04	2.222E-04	9.817E-04
155.00	7.257E-06	1.151E-05	2.093E-05	3.062E-05	4.893E-05	8.993E-05	1.326E-04	2.138E-04	9.509E-04
160.00	7.004E-06	1.111E-05	2.021E-05	2.958E-05	4.729E-05	8.698E-05	1.284E-04	2.072E-04	9.265E-04
165.00	6.815E-06	1.082E-05	1.968E-05	2.881E-05	4.608E-05	8.481E-05	1.252E-04	2.023E-04	9.082E-04
170.00	6.683E-06	1.061E-05	1.930E-05	2.826E-05	4.520E-05	8.323E-05	1.229E-04	1.988E-04	8.953E-04
175.00	6.606E-06	1.049E-05	1.909E-05	2.796E-05	4.473E-05	8.238E-05	1.217E-04	1.968E-04	8.878E-04
180.00	6.579E-06	1.044E-05	1.899E-05	2.781E-05	4.449E-05	8.197E-05	1.211E-04	1.960E-04	8.852E-04
TOTAL	6.693E-02	8.266E-02	1.084E-01	1.287E-01	1.585E-01	2.065E-01	2.437E-01	2.973E-01	5.349E-01
TRANS	8.644E-04	1.291E-03	2.162E-03	2.992E-03	4.446E-03	7.380E-03	1.015E-02	1.494E-02	4.814E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 8

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	3.452E+01	2.621E+01	1.871E+01	1.541E+01	1.248E+01	9.907E+00	8.733E+00	7.626E+00	6.585E+00
0.25	1.298E+01	1.211E+01	1.096E+01	1.018E+01	9.161E+00	7.929E+00	7.264E+00	6.598E+00	5.932E+00
0.50	2.545E+00	3.033E+00	3.690E+00	4.044E+00	4.333E+00	4.495E+00	4.519E+00	4.512E+00	4.464E+00
0.75	6.371E-01	8.537E-01	1.213E+00	1.473E+00	1.797E+00	2.197E+00	2.431E+00	2.691E+00	2.977E+00
1.00	2.188E-01	3.041E-01	4.581E-01	5.847E-01	7.706E-01	1.057E+00	1.260E+00	1.521E+00	1.864E+00
1.50	4.841E-02	6.701E-02	1.021E-01	1.338E-01	1.866E-01	2.846E-01	3.680E-01	4.955E-01	7.043E-01
2.00	1.676E-02	2.303E-02	3.487E-02	4.563E-02	6.390E-02	9.944E-02	1.318E-01	1.858E-01	2.856E-01
2.50	7.306E-03	1.008E-02	1.530E-02	1.999E-02	2.785E-02	4.314E-02	5.736E-02	8.189E-02	1.300E-01
3.00	3.668E-03	5.103E-03	7.808E-03	1.022E-02	1.421E-02	2.188E-02	2.901E-02	4.141E-02	6.632E-02
3.50	2.031E-03	2.851E-03	4.403E-03	5.784E-03	8.054E-03	1.238E-02	1.637E-02	2.330E-02	3.725E-02
4.00	1.211E-03	1.712E-03	2.666E-03	3.518E-03	4.917E-03	7.575E-03	1.001E-02	1.420E-02	2.262E-02
4.50	7.644E-04	1.087E-03	1.705E-03	2.259E-03	3.173E-03	4.909E-03	6.492E-03	9.200E-03	1.460E-02
5.00	5.053E-04	7.216E-04	1.138E-03	1.514E-03	2.137E-03	3.324E-03	4.405E-03	6.245E-03	9.897E-03
5.50	3.470E-04	4.971E-04	7.876E-04	1.051E-03	1.490E-03	2.331E-03	3.097E-03	4.398E-03	6.970E-03
6.00	2.460E-04	3.532E-04	5.616E-04	7.514E-04	1.070E-03	1.682E-03	2.241E-03	3.190E-03	5.063E-03
6.50	1.791E-04	2.576E-04	4.107E-04	5.508E-04	7.868E-04	1.243E-03	1.661E-03	2.371E-03	3.772E-03
7.00	1.335E-04	1.922E-04	3.071E-04	4.126E-04	5.911E-04	9.377E-04	1.256E-03	1.799E-03	2.870E-03
7.50	1.015E-04	1.463E-04	2.341E-04	3.150E-04	4.523E-04	7.202E-04	9.674E-04	1.390E-03	2.224E-03
8.00	7.851E-05	1.133E-04	1.815E-04	2.445E-04	3.518E-04	5.619E-04	7.565E-04	1.090E-03	1.750E-03
8.50	6.168E-05	8.903E-05	1.428E-04	1.926E-04	2.775E-04	4.446E-04	5.997E-04	8.663E-04	1.395E-03
9.00	4.913E-05	7.094E-05	1.139E-04	1.537E-04	2.218E-04	3.562E-04	4.813E-04	6.970E-04	1.126E-03
9.50	3.961E-05	5.722E-05	9.193E-05	1.242E-04	1.794E-04	2.886E-04	3.906E-04	5.668E-04	9.187E-04
10.00	3.229E-05	4.666E-05	7.500E-05	1.013E-04	1.466E-04	2.362E-04	3.201E-04	4.655E-04	7.566E-04
12.50	1.327E-05	1.919E-05	3.090E-05	4.182E-05	6.066E-05	9.831E-05	1.339E-04	1.961E-04	3.221E-04
15.00	6.414E-06	9.281E-06	1.496E-05	2.026E-05	2.943E-05	4.784E-05	6.531E-05	9.604E-05	1.588E-04
17.50	3.469E-06	5.021E-06	8.097E-06	1.097E-05	1.595E-05	2.597E-05	3.552E-05	5.235E-05	8.694E-05
20.00	2.036E-06	2.948E-06	4.756E-06	6.448E-06	9.380E-06	1.529E-05	2.093E-05	3.090E-05	5.145E-05
22.50	1.272E-06	1.843E-06	2.974E-06	4.034E-06	5.872E-06	9.581E-06	1.312E-05	1.940E-05	3.237E-05
25.00	8.355E-07	1.210E-06	1.955E-06	2.653E-06	3.863E-06	6.308E-06	8.647E-06	1.279E-05	2.138E-05
27.50	5.708E-07	8.273E-07	1.337E-06	1.814E-06	2.644E-06	4.321E-06	5.927E-06	8.776E-06	1.468E-05
30.00	4.029E-07	5.842E-07	9.446E-07	1.283E-06	1.870E-06	3.060E-06	4.199E-06	6.223E-06	1.042E-05
32.50	2.925E-07	4.243E-07	6.865E-07	9.327E-07	1.361E-06	2.228E-06	3.060E-06	4.538E-06	7.611E-06
35.00	2.173E-07	3.154E-07	5.107E-07	6.942E-07	1.014E-06	1.661E-06	2.283E-06	3.389E-06	5.690E-06
37.50	1.647E-07	2.392E-07	3.875E-07	5.271E-07	7.702E-07	1.264E-06	1.738E-06	2.582E-06	4.341E-06
40.00	1.271E-07	1.846E-07	2.994E-07	4.074E-07	5.959E-07	9.790E-07	1.347E-06	2.004E-06	3.372E-06
42.50	9.955E-08	1.447E-07	2.349E-07	3.199E-07	4.683E-07	7.704E-07	1.061E-06	1.580E-06	2.662E-06
45.00	7.902E-08	1.150E-07	1.868E-07	2.546E-07	3.730E-07	6.145E-07	8.472E-07	1.263E-06	2.130E-06
47.50	6.348E-08	9.244E-08	1.503E-07	2.051E-07	3.008E-07	4.962E-07	6.848E-07	1.022E-06	1.726E-06
50.00	5.158E-08	7.516E-08	1.224E-07	1.671E-07	2.453E-07	4.054E-07	5.600E-07	8.364E-07	1.415E-06
55.00	3.498E-08	5.107E-08	8.337E-08	1.140E-07	1.678E-07	2.783E-07	3.853E-07	5.771E-07	9.797E-07
60.00	2.450E-08	3.585E-08	5.869E-08	8.043E-08	1.187E-07	1.977E-07	2.744E-07	4.121E-07	7.020E-07
65.00	1.760E-08	2.582E-08	4.241E-08	5.826E-08	8.630E-08	1.443E-07	2.008E-07	3.026E-07	5.176E-07
70.00	1.294E-08	1.903E-08	3.139E-08	4.323E-08	6.426E-08	1.080E-07	1.507E-07	2.280E-07	3.916E-07
75.00	9.682E-09	1.429E-08	2.367E-08	3.270E-08	4.880E-08	8.245E-08	1.155E-07	1.754E-07	3.025E-07
80.00	7.365E-09	1.091E-08	1.816E-08	2.517E-08	3.774E-08	6.415E-08	9.021E-08	1.375E-07	2.385E-07
85.00	5.679E-09	8.446E-09	1.414E-08	1.968E-08	2.965E-08	5.074E-08	7.163E-08	1.097E-07	1.913E-07
90.00	4.428E-09	6.618E-09	1.115E-08	1.559E-08	2.362E-08	4.071E-08	5.773E-08	8.888E-08	1.558E-07
95.00	3.492E-09	5.246E-09	8.904E-09	1.251E-08	1.907E-08	3.313E-08	4.721E-08	7.305E-08	1.288E-07
100.00	2.773E-09	4.193E-09	7.176E-09	1.013E-08	1.556E-08	2.727E-08	3.906E-08	6.080E-08	1.079E-07
105.00	2.223E-09	3.385E-09	5.847E-09	8.307E-09	1.285E-08	2.274E-08	3.275E-08	5.127E-08	9.158E-08
110.00	1.791E-09	2.750E-09	4.800E-09	6.867E-09	1.071E-08	1.915E-08	2.774E-08	4.371E-08	7.862E-08
115.00	1.452E-09	2.251E-09	3.978E-09	5.733E-09	9.024E-09	1.631E-08	2.377E-08	3.770E-08	6.829E-08
120.00	1.183E-09	1.854E-09	3.322E-09	4.828E-09	7.675E-09	1.403E-08	2.059E-08	3.287E-08	5.996E-08
125.00	9.682E-10	1.536E-09	2.795E-09	4.100E-09	6.588E-09	1.219E-08	1.801E-08	2.896E-08	5.322E-08
130.00	7.970E-10	1.282E-09	2.374E-09	3.519E-09	5.718E-09	1.072E-08	1.594E-08	2.580E-08	4.773E-08
135.00	6.574E-10	1.075E-09	2.029E-09	3.042E-09	5.004E-09	9.503E-09	1.423E-08	2.321E-08	4.325E-08
140.00	5.468E-10	9.099E-10	1.755E-09	2.663E-09	4.436E-09	8.535E-09	1.286E-08	2.111E-08	3.960E-08
145.00	4.564E-10	7.747E-10	1.530E-09	2.352E-09	3.969E-09	7.736E-09	1.174E-08	1.939E-08	3.663E-08
150.00	3.853E-10	6.678E-10	1.352E-09	2.106E-09	3.601E-09	7.105E-09	1.084E-08	1.802E-08	3.423E-08
155.00	3.287E-10	5.825E-10	1.210E-09	1.911E-09	3.308E-09	6.601E-09	1.013E-08	1.692E-08	3.231E-08
160.00	2.847E-10	5.157E-10	1.099E-09	1.758E-09	3.079E-09	6.207E-09	9.565E-09	1.606E-08	3.082E-08
165.00	2.531E-10	4.676E-10	1.019E-09	1.649E-09	2.916E-09	5.925E-09	9.162E-09	1.543E-08	2.971E-08
170.00	2.296E-10	4.315E-10	9.591E-10	1.566E-09	2.794E-09	5.712E-09	8.858E-09	1.497E-08	2.893E-08
175.00	2.181E-10	4.138E-10	9.299E-10	1.527E-09	2.736E-09	5.611E-09	8.711E-09	1.473E-08	2.848E-08
180.00	2.107E-10	4.023E-10	9.104E-10	1.500E-09	2.694E-09	5.539E-09	8.612E-09	1.460E-08	2.830E-08
TOTAL	3.107E-03	3.257E-03	3.494E-03	3.691E-03	4.006E-03	4.555E-03	5.004E-03	5.683E-03	6.824E-03
TRANS	4.516E-07	6.340E-07	9.838E-07	1.303E-06	1.843E-06	2.903E-06	3.893E-06	5.609E-06	9.065E-06

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 8

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	5.618E+00	5.253E+00	4.898E+00	4.723E+00	4.549E+00	4.374E+00	4.285E+00	4.192E+00	4.093E+00
0.25	5.259E+00	4.986E+00	4.711E+00	4.573E+00	4.434E+00	4.292E+00	4.218E+00	4.140E+00	4.055E+00
0.50	4.356E+00	4.290E+00	4.209E+00	4.164E+00	4.115E+00	4.058E+00	4.026E+00	3.989E+00	3.943E+00
0.75	3.283E+00	3.408E+00	3.531E+00	3.593E+00	3.652E+00	3.708E+00	3.733E+00	3.753E+00	3.766E+00
1.00	2.326E+00	2.557E+00	2.821E+00	2.967E+00	3.122E+00	3.287E+00	3.372E+00	3.457E+00	3.538E+00
1.50	1.079E+00	1.317E+00	1.642E+00	1.851E+00	2.102E+00	2.406E+00	2.581E+00	2.775E+00	2.985E+00
2.00	4.997E-01	6.593E-01	9.090E-01	1.089E+00	1.328E+00	1.653E+00	1.860E+00	2.106E+00	2.401E+00
2.50	2.449E-01	3.402E-01	5.046E-01	6.347E-01	8.212E-01	1.101E+00	1.295E+00	1.543E+00	1.866E+00
3.00	1.293E-01	1.853E-01	2.886E-01	3.761E-01	5.096E-01	7.264E-01	8.884E-01	1.109E+00	1.418E+00
3.50	7.357E-02	1.071E-01	1.720E-01	2.297E-01	3.220E-01	4.819E-01	6.088E-01	7.909E-01	1.064E+00
4.00	4.474E-02	6.559E-02	1.071E-01	1.453E-01	2.087E-01	3.242E-01	4.204E-01	5.649E-01	7.944E-01
4.50	2.880E-02	4.229E-02	6.965E-02	9.540E-02	1.392E-01	2.222E-01	2.942E-01	4.063E-01	5.935E-01
5.00	1.944E-02	2.852E-02	4.711E-02	6.486E-02	9.561E-02	1.556E-01	2.092E-01	2.954E-01	4.455E-01
5.50	1.364E-02	1.998E-02	3.300E-02	4.554E-02	6.753E-02	1.113E-01	1.514E-01	2.175E-01	3.368E-01
6.00	9.893E-03	1.446E-02	2.385E-02	3.292E-02	4.895E-02	8.135E-02	1.116E-01	1.624E-01	2.569E-01
6.50	7.367E-03	1.075E-02	1.770E-02	2.442E-02	3.634E-02	6.068E-02	8.370E-02	1.231E-01	1.980E-01
7.00	5.611E-03	8.181E-03	1.344E-02	1.853E-02	2.756E-02	4.614E-02	6.388E-02	9.457E-02	1.542E-01
7.50	4.355E-03	6.348E-03	1.042E-02	1.434E-02	2.131E-02	3.570E-02	4.954E-02	7.371E-02	1.214E-01
8.00	3.436E-03	5.009E-03	8.211E-03	1.129E-02	1.676E-02	2.808E-02	3.901E-02	5.822E-02	9.660E-02
8.50	2.749E-03	4.010E-03	6.571E-03	9.030E-03	1.339E-02	2.241E-02	3.114E-02	4.657E-02	7.770E-02
9.00	2.226E-03	3.251E-03	5.328E-03	7.317E-03	1.084E-02	1.812E-02	2.518E-02	3.769E-02	6.313E-02
9.50	1.822E-03	2.665E-03	4.370E-03	5.999E-03	8.879E-03	1.483E-02	2.060E-02	3.085E-02	5.180E-02
10.00	1.506E-03	2.206E-03	3.621E-03	4.971E-03	7.353E-03	1.226E-02	1.703E-02	2.550E-02	4.289E-02
12.50	6.521E-04	9.629E-04	1.593E-03	2.193E-03	3.247E-03	5.404E-03	7.482E-03	1.117E-02	1.880E-02
15.00	3.255E-04	4.842E-04	8.084E-04	1.118E-03	1.664E-03	2.777E-03	3.844E-03	5.731E-03	9.621E-03
17.50	1.796E-04	2.687E-04	4.523E-04	6.289E-04	9.408E-04	1.579E-03	2.191E-03	3.270E-03	5.486E-03
20.00	1.069E-04	1.606E-04	2.720E-04	3.799E-04	5.714E-04	9.653E-04	1.344E-03	2.011E-03	3.381E-03
22.50	6.753E-05	1.017E-04	1.731E-04	2.427E-04	3.667E-04	6.233E-04	8.707E-04	1.309E-03	2.207E-03
25.00	4.474E-05	6.755E-05	1.154E-04	1.622E-04	2.460E-04	4.204E-04	5.893E-04	8.893E-04	1.506E-03
27.50	3.081E-05	4.660E-05	7.981E-05	1.124E-04	1.711E-04	2.938E-04	4.132E-04	6.260E-04	1.065E-03
30.00	2.191E-05	3.319E-05	5.698E-05	8.041E-05	1.227E-04	2.115E-04	2.983E-04	4.536E-04	7.754E-04
32.50	1.603E-05	2.431E-05	4.181E-05	5.908E-05	9.034E-05	1.562E-04	2.209E-04	3.370E-04	5.785E-04
35.00	1.200E-05	1.822E-05	3.139E-05	4.442E-05	6.803E-05	1.180E-04	1.672E-04	2.557E-04	4.408E-04
37.50	9.172E-06	1.394E-05	2.405E-05	3.406E-05	5.225E-05	9.083E-05	1.289E-04	1.978E-04	3.421E-04
40.00	7.137E-06	1.086E-05	1.875E-05	2.659E-05	4.084E-05	7.114E-05	1.011E-04	1.555E-04	2.699E-04
42.50	5.643E-06	8.592E-06	1.486E-05	2.108E-05	3.242E-05	5.657E-05	8.054E-05	1.240E-04	2.159E-04
45.00	4.524E-06	6.895E-06	1.194E-05	1.695E-05	2.609E-05	4.561E-05	6.501E-05	1.003E-04	1.751E-04
47.50	3.673E-06	5.602E-06	9.711E-06	1.380E-05	2.126E-05	3.722E-05	5.311E-05	8.207E-05	1.436E-04
50.00	3.017E-06	4.606E-06	7.993E-06	1.137E-05	1.753E-05	3.072E-05	4.388E-05	6.789E-05	1.190E-04
55.00	2.096E-06	3.207E-06	5.578E-06	7.943E-06	1.227E-05	2.156E-05	3.084E-05	4.784E-05	8.419E-05
60.00	1.509E-06	2.313E-06	4.032E-06	5.750E-06	8.896E-06	1.566E-05	2.244E-05	3.487E-05	6.155E-05
65.00	1.118E-06	1.717E-06	3.001E-06	4.285E-06	6.841E-06	1.171E-05	1.681E-05	2.616E-05	4.631E-05
70.00	8.499E-07	1.309E-06	2.293E-06	3.279E-06	5.089E-06	8.993E-06	1.292E-05	2.014E-05	3.573E-05
75.00	6.602E-07	1.019E-06	1.791E-06	2.565E-06	3.987E-06	7.060E-06	1.015E-05	1.585E-05	2.818E-05
80.00	5.235E-07	8.102E-07	1.428E-06	2.047E-06	3.188E-06	5.656E-06	8.141E-06	1.273E-05	2.267E-05
85.00	4.224E-07	6.555E-07	1.159E-06	1.664E-06	2.596E-06	4.613E-06	6.648E-06	1.041E-05	1.856E-05
90.00	3.464E-07	5.390E-07	9.554E-07	1.375E-06	2.148E-06	3.825E-06	5.518E-06	8.647E-06	1.545E-05
95.00	2.883E-07	4.501E-07	8.004E-07	1.153E-06	1.805E-06	3.220E-06	4.649E-06	7.294E-06	1.305E-05
100.00	2.432E-07	3.807E-07	6.792E-07	9.805E-07	1.537E-06	2.748E-06	3.972E-06	6.239E-06	1.118E-05
105.00	2.079E-07	3.265E-07	5.844E-07	8.451E-07	1.327E-06	2.376E-06	3.438E-06	5.405E-06	9.698E-06
110.00	1.798E-07	2.832E-07	5.086E-07	7.367E-07	1.159E-06	2.079E-06	3.011E-06	4.740E-06	8.515E-06
115.00	1.573E-07	2.487E-07	4.480E-07	6.499E-07	1.024E-06	1.840E-06	2.668E-06	4.204E-06	7.561E-06
120.00	1.392E-07	2.207E-07	3.989E-07	5.797E-07	9.151E-07	1.647E-06	2.389E-06	3.769E-06	6.786E-06
125.00	1.245E-07	1.979E-07	3.587E-07	5.222E-07	8.258E-07	1.489E-06	2.162E-06	3.413E-06	6.152E-06
130.00	1.125E-07	1.794E-07	3.262E-07	4.756E-07	7.531E-07	1.360E-06	1.976E-06	3.122E-06	5.633E-06
135.00	1.026E-07	1.641E-07	2.992E-07	4.369E-07	6.930E-07	1.253E-06	1.823E-06	2.883E-06	5.205E-06
140.00	9.459E-08	1.517E-07	2.775E-07	4.056E-07	6.442E-07	1.166E-06	1.697E-06	2.686E-06	4.854E-06
145.00	8.804E-08	1.415E-07	2.594E-07	3.797E-07	6.038E-07	1.095E-06	1.595E-06	2.525E-06	4.567E-06
150.00	8.275E-08	1.334E-07	2.450E-07	3.590E-07	5.714E-07	1.037E-06	1.511E-06	2.395E-06	4.334E-06
155.00	7.852E-08	1.268E-07	2.334E-07	3.423E-07	5.454E-07	9.908E-07	1.445E-06	2.290E-06	4.147E-06
160.00	7.523E-08	1.217E-07	2.242E-07	3.291E-07	5.249E-07	9.546E-07	1.392E-06	2.208E-06	4.001E-06
165.00	7.278E-08	1.179E-07	2.176E-07	3.196E-07	5.099E-07	9.277E-07	1.353E-06	2.147E-06	3.891E-06
170.00	7.106E-08	1.151E-07	2.126E-07	3.125E-07	4.990E-07	9.086E-07	1.326E-06	2.105E-06	3.815E-06
175.00	7.008E-08	1.137E-07	2.102E-07	3.089E-07	4.932E-07	8.978E-07	1.310E-06	2.079E-06	3.770E-06
180.00	6.968E-08	1.130E-07	2.087E-07	3.068E-07	4.903E-07	8.935E-07	1.305E-06	2.071E-06	3.755E-06
TOTAL	9.122E-03	1.085E-02	1.374E-02	1.604E-02	1.949E-02	2.522E-02	2.978E-02	3.657E-02	4.780E-02
TRANS	1.813E-05	2.673E-05	4.434E-05	6.127E-05	9.123E-05	1.528E-04	2.120E-04	3.168E-04	5.319E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 8

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	3.976E+00	3.917E+00	3.841E+00	3.790E+00	3.724E+00	3.628E+00	3.560E+00	3.467E+00	3.099E+00
0.25	3.951E+00	3.898E+00	3.826E+00	3.779E+00	3.715E+00	3.622E+00	3.554E+00	3.462E+00	3.097E+00
0.50	3.878E+00	3.840E+00	3.784E+00	3.743E+00	3.687E+00	3.601E+00	3.537E+00	3.449E+00	3.091E+00
0.75	3.761E+00	3.746E+00	3.714E+00	3.685E+00	3.641E+00	3.567E+00	3.509E+00	3.427E+00	3.081E+00
1.00	3.605E+00	3.620E+00	3.619E+00	3.606E+00	3.578E+00	3.520E+00	3.471E+00	3.396E+00	3.067E+00
1.50	3.208E+00	3.293E+00	3.367E+00	3.394E+00	3.407E+00	3.392E+00	3.364E+00	3.312E+00	3.027E+00
2.00	2.750E+00	2.902E+00	3.055E+00	3.126E+00	3.186E+00	3.222E+00	3.222E+00	3.198E+00	2.972E+00
2.50	2.289E+00	2.492E+00	2.712E+00	2.824E+00	2.932E+00	3.022E+00	3.052E+00	3.059E+00	2.903E+00
3.00	1.863E+00	2.095E+00	2.363E+00	2.510E+00	2.659E+00	2.801E+00	2.861E+00	2.902E+00	2.822E+00
3.50	1.493E+00	1.734E+00	2.029E+00	2.199E+00	2.382E+00	2.569E+00	2.657E+00	2.730E+00	2.731E+00
4.00	1.185E+00	1.419E+00	1.722E+00	1.905E+00	2.111E+00	2.334E+00	2.446E+00	2.550E+00	2.630E+00
4.50	9.351E-01	1.153E+00	1.449E+00	1.636E+00	1.854E+00	2.103E+00	2.236E+00	2.365E+00	2.523E+00
5.00	7.366E-01	9.332E-01	1.212E+00	1.395E+00	1.617E+00	1.882E+00	2.030E+00	2.181E+00	2.410E+00
5.50	5.809E-01	7.539E-01	1.010E+00	1.185E+00	1.403E+00	1.675E+00	1.833E+00	2.001E+00	2.293E+00
6.00	4.594E-01	6.094E-01	8.396E-01	1.003E+00	1.212E+00	1.484E+00	1.647E+00	1.827E+00	2.174E+00
6.50	3.651E-01	4.936E-01	6.979E-01	8.471E-01	1.045E+00	1.310E+00	1.474E+00	1.661E+00	2.055E+00
7.00	2.918E-01	4.011E-01	5.805E-01	7.154E-01	8.986E-01	1.153E+00	1.315E+00	1.505E+00	1.936E+00
7.50	2.347E-01	3.274E-01	4.837E-01	6.045E-01	7.724E-01	1.012E+00	1.171E+00	1.360E+00	1.820E+00
8.00	1.901E-01	2.685E-01	4.042E-01	5.114E-01	6.640E-01	8.883E-01	1.040E+00	1.227E+00	1.705E+00
8.50	1.551E-01	2.215E-01	3.388E-01	4.335E-01	5.711E-01	7.789E-01	9.230E-01	1.104E+00	1.595E+00
9.00	1.275E-01	1.837E-01	2.850E-01	3.685E-01	4.919E-01	6.829E-01	8.185E-01	9.927E-01	1.488E+00
9.50	1.055E-01	1.532E-01	2.407E-01	3.141E-01	4.244E-01	5.990E-01	7.257E-01	8.916E-01	1.387E+00
10.00	8.799E-02	1.286E-01	2.042E-01	2.686E-01	3.669E-01	5.259E-01	6.434E-01	8.003E-01	1.290E+00
12.50	3.918E-02	5.829E-02	9.583E-02	1.296E-01	1.843E-01	2.803E-01	3.571E-01	4.677E-01	8.833E-01
15.00	2.006E-02	3.001E-02	5.006E-02	6.868E-02	9.985E-02	1.574E-01	2.060E-01	2.797E-01	5.979E-01
17.50	1.142E-02	1.709E-02	2.866E-02	3.958E-02	5.824E-02	9.381E-02	1.249E-01	1.737E-01	4.067E-01
20.00	7.031E-03	1.052E-02	1.768E-02	2.448E-02	3.626E-02	5.916E-02	7.962E-02	1.125E-01	2.811E-01
22.50	4.597E-03	6.879E-03	1.156E-02	1.604E-02	2.383E-02	3.921E-02	5.316E-02	7.593E-02	1.986E-01
25.00	3.147E-03	4.713E-03	7.925E-03	1.100E-02	1.639E-02	2.711E-02	3.695E-02	5.321E-02	1.440E-01
27.50	2.236E-03	3.353E-03	5.643E-03	7.839E-03	1.169E-02	1.943E-02	2.658E-02	3.853E-02	1.070E-01
30.00	1.636E-03	2.459E-03	4.145E-03	5.763E-03	8.607E-03	1.434E-02	1.969E-02	2.870E-02	8.155E-02
32.50	1.228E-03	1.849E-03	3.124E-03	4.348E-03	6.501E-03	1.086E-02	1.495E-02	2.190E-02	6.353E-02
35.00	9.408E-04	1.421E-03	2.407E-03	3.353E-03	5.021E-03	8.409E-03	1.160E-02	1.706E-02	5.048E-02
37.50	7.342E-04	1.112E-03	1.889E-03	2.636E-03	3.952E-03	6.633E-03	9.172E-03	1.353E-02	4.080E-02
40.00	5.821E-04	8.841E-04	1.507E-03	2.106E-03	3.163E-03	5.320E-03	7.369E-03	1.091E-02	3.348E-02
42.50	4.681E-04	7.129E-04	1.219E-03	1.706E-03	2.568E-03	4.329E-03	6.006E-03	8.916E-03	2.784E-02
45.00	3.812E-04	5.821E-04	9.984E-04	1.401E-03	2.112E-03	3.569E-03	4.959E-03	7.380E-03	2.342E-02
47.50	3.140E-04	4.807E-04	8.272E-04	1.163E-03	1.757E-03	2.976E-03	4.142E-03	6.179E-03	1.990E-02
50.00	2.613E-04	4.010E-04	6.923E-04	9.750E-04	1.477E-03	2.507E-03	3.495E-03	5.226E-03	1.707E-02
55.00	1.860E-04	2.867E-04	4.981E-04	7.043E-04	1.072E-03	1.829E-03	2.558E-03	3.841E-03	1.287E-02
60.00	1.368E-04	2.117E-04	3.698E-04	5.248E-04	8.022E-04	1.377E-03	1.932E-03	2.914E-03	9.980E-03
65.00	1.034E-04	1.606E-04	2.819E-04	4.015E-04	6.166E-04	1.065E-03	1.499E-03	2.270E-03	7.932E-03
70.00	8.012E-05	1.248E-04	2.201E-04	3.144E-04	4.850E-04	8.423E-04	1.190E-03	1.810E-03	6.442E-03
75.00	6.342E-05	9.901E-05	1.753E-04	2.513E-04	3.892E-04	6.798E-04	9.643E-04	1.473E-03	5.333E-03
80.00	5.118E-05	8.009E-05	1.424E-04	2.046E-04	3.181E-04	5.587E-04	7.954E-04	1.221E-03	4.493E-03
85.00	4.204E-05	6.591E-05	1.175E-04	1.694E-04	2.642E-04	4.665E-04	6.666E-04	1.028E-03	3.845E-03
90.00	3.508E-05	5.509E-05	9.854E-05	1.423E-04	2.228E-04	3.953E-04	5.668E-04	8.779E-04	3.337E-03
95.00	2.970E-05	4.673E-05	8.381E-05	1.213E-04	1.904E-04	3.395E-04	4.884E-04	7.599E-04	2.935E-03
100.00	2.549E-05	4.016E-05	7.220E-05	1.047E-04	1.648E-04	2.951E-04	4.260E-04	6.658E-04	2.612E-03
105.00	2.216E-05	3.496E-05	6.298E-05	9.148E-05	1.444E-04	2.596E-04	3.759E-04	5.899E-04	2.350E-03
110.00	1.949E-05	3.078E-05	5.556E-05	8.082E-05	1.279E-04	2.308E-04	3.351E-04	5.281E-04	2.135E-03
115.00	1.734E-05	2.741E-05	4.956E-05	7.219E-05	1.145E-04	2.073E-04	3.019E-04	4.774E-04	1.959E-03
120.00	1.558E-05	2.466E-05	4.466E-05	6.514E-05	1.035E-04	1.880E-04	2.744E-04	4.356E-04	1.812E-03
125.00	1.415E-05	2.241E-05	4.064E-05	5.934E-05	9.442E-05	1.721E-04	2.518E-04	4.010E-04	1.690E-03
130.00	1.297E-05	2.056E-05	3.734E-05	5.457E-05	8.697E-05	1.589E-04	2.330E-04	3.722E-04	1.588E-03
135.00	1.200E-05	1.903E-05	3.460E-05	5.061E-05	8.078E-05	1.480E-04	2.174E-04	3.482E-04	1.503E-03
140.00	1.120E-05	1.778E-05	3.236E-05	4.738E-05	7.570E-05	1.389E-04	2.045E-04	3.284E-04	1.432E-03
145.00	1.055E-05	1.675E-05	3.051E-05	4.470E-05	7.149E-05	1.315E-04	1.938E-04	3.119E-04	1.373E-03
150.00	1.002E-05	1.592E-05	2.901E-05	4.253E-05	6.809E-05	1.254E-04	1.851E-04	2.985E-04	1.325E-03
155.00	9.592E-06	1.525E-05	2.781E-05	4.078E-05	6.534E-05	1.205E-04	1.780E-04	2.876E-04	1.286E-03
160.00	9.259E-06	1.472E-05	2.686E-05	3.941E-05	6.318E-05	1.167E-04	1.725E-04	2.791E-04	1.255E-03
165.00	9.011E-06	1.433E-05	2.616E-05	3.840E-05	6.159E-05	1.138E-04	1.684E-04	2.727E-04	1.232E-03
170.00	8.834E-06	1.405E-05	2.565E-05	3.766E-05	6.043E-05	1.117E-04	1.654E-04	2.682E-04	1.216E-03
175.00	8.735E-06	1.390E-05	2.538E-05	3.727E-05	5.981E-05	1.106E-04	1.638E-04	2.656E-04	1.206E-03
180.00	8.695E-06	1.383E-05	2.525E-05	3.707E-05	5.950E-05	1.101E-04	1.631E-04	2.646E-04	1.203E-03
TOTAL	6.987E-02	8.610E-02	1.125E-01	1.332E-01	1.633E-01	2.115E-01	2.483E-01	3.008E-01	5.262E-01
TRANS	1.102E-03	1.644E-03	2.745E-03	3.793E-03	5.620E-03	9.289E-03	1.273E-02	1.865E-02	5.896E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 10

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	2.385E+01	1.811E+01	1.293E+01	1.064E+01	8.623E+00	6.842E+00	6.030E+00	5.265E+00	4.545E+00
0.25	1.202E+01	1.059E+01	8.963E+00	8.037E+00	7.007E+00	5.897E+00	5.332E+00	4.779E+00	4.240E+00
0.50	3.312E+00	3.627E+00	3.975E+00	4.100E+00	4.110E+00	3.963E+00	3.833E+00	3.677E+00	3.492E+00
0.75	9.737E-01	1.226E+00	1.603E+00	1.839E+00	2.085E+00	2.320E+00	2.427E+00	2.530E+00	2.620E+00
1.00	3.499E-01	4.732E-01	6.813E-01	8.362E-01	1.036E+00	1.295E+00	1.454E+00	1.639E+00	1.852E+00
1.50	7.605E-02	1.067E-01	1.638E-01	2.130E-01	2.898E-01	4.191E-01	5.190E-01	6.581E-01	8.605E-01
2.00	2.571E-02	3.591E-02	5.534E-02	7.292E-02	1.023E-01	1.573E-01	2.046E-01	2.780E-01	4.010E-01
2.50	1.112E-02	1.547E-02	2.376E-02	3.133E-02	4.420E-02	6.917E-02	9.181E-02	1.292E-01	1.978E-01
3.00	5.589E-03	7.781E-03	1.196E-02	1.576E-02	2.219E-02	3.477E-02	4.643E-02	6.636E-02	1.048E-01
3.50	3.108E-03	4.346E-03	6.704E-03	8.835E-03	1.242E-02	1.940E-02	2.592E-02	3.722E-02	5.966E-02
4.00	1.860E-03	2.616E-03	4.057E-03	5.354E-03	7.521E-03	1.172E-02	1.564E-02	2.247E-02	3.620E-02
4.50	1.179E-03	1.666E-03	2.599E-03	3.438E-03	4.835E-03	7.532E-03	1.004E-02	1.440E-02	2.320E-02
5.00	7.820E-04	1.110E-03	1.741E-03	2.309E-03	3.254E-03	5.074E-03	6.758E-03	9.679E-03	1.558E-02
5.50	5.384E-04	7.673E-04	1.208E-03	1.607E-03	2.271E-03	3.549E-03	4.729E-03	6.766E-03	1.087E-02
6.00	3.825E-04	5.467E-04	8.642E-04	1.152E-03	1.633E-03	2.560E-03	3.413E-03	4.883E-03	7.834E-03
6.50	2.790E-04	3.997E-04	6.339E-04	8.470E-04	1.204E-03	1.893E-03	2.528E-03	3.618E-03	5.801E-03
7.00	2.081E-04	2.988E-04	4.751E-04	6.361E-04	9.067E-04	1.431E-03	1.913E-03	2.741E-03	4.395E-03
7.50	1.584E-04	2.277E-04	3.629E-04	4.867E-04	6.955E-04	1.101E-03	1.475E-03	2.116E-03	3.395E-03
8.00	1.227E-04	1.765E-04	2.819E-04	3.786E-04	5.421E-04	8.608E-04	1.155E-03	1.660E-03	2.667E-03
8.50	9.643E-05	1.389E-04	2.221E-04	2.987E-04	4.287E-04	6.825E-04	9.174E-04	1.321E-03	2.125E-03
9.00	7.685E-05	1.108E-04	1.774E-04	2.388E-04	3.432E-04	5.479E-04	7.377E-04	1.064E-03	1.715E-03
9.50	6.200E-05	8.943E-05	1.433E-04	1.931E-04	2.780E-04	4.448E-04	5.997E-04	8.666E-04	1.399E-03
10.00	5.056E-05	7.297E-05	1.171E-04	1.578E-04	2.275E-04	3.647E-04	4.925E-04	7.129E-04	1.153E-03
12.50	2.081E-05	3.008E-05	4.838E-05	6.540E-05	9.466E-05	1.529E-04	2.076E-04	3.027E-04	4.944E-04
15.00	1.007E-05	1.457E-05	2.346E-05	3.176E-05	4.607E-05	7.470E-05	1.018E-04	1.492E-04	2.454E-04
17.50	5.453E-06	7.890E-06	1.272E-05	1.723E-05	2.502E-05	4.067E-05	5.552E-05	8.164E-05	1.350E-04
20.00	3.203E-06	4.636E-06	7.477E-06	1.013E-05	1.473E-05	2.398E-05	3.279E-05	4.832E-05	8.021E-05
22.50	2.003E-06	2.901E-06	4.681E-06	6.347E-06	9.233E-06	1.505E-05	2.060E-05	3.040E-05	5.060E-05
25.00	1.317E-06	1.907E-06	3.079E-06	4.176E-06	6.079E-06	9.919E-06	1.359E-05	2.008E-05	3.349E-05
27.50	9.001E-07	1.304E-06	2.107E-06	2.859E-06	4.164E-06	6.801E-06	9.323E-06	1.379E-05	2.304E-05
30.00	6.359E-07	9.217E-07	1.490E-06	2.023E-06	2.948E-06	4.819E-06	6.611E-06	9.788E-06	1.638E-05
32.50	4.619E-07	6.699E-07	1.083E-06	1.471E-06	2.146E-06	3.512E-06	4.821E-06	7.144E-06	1.197E-05
35.00	3.434E-07	4.983E-07	8.064E-07	1.096E-06	1.599E-06	2.620E-06	3.599E-06	5.339E-06	8.955E-06
37.50	2.604E-07	3.780E-07	6.123E-07	8.325E-07	1.216E-06	1.994E-06	2.741E-06	4.070E-06	6.836E-06
40.00	2.010E-07	2.920E-07	4.733E-07	6.439E-07	9.413E-07	1.546E-06	2.126E-06	3.160E-06	5.314E-06
42.50	1.576E-07	2.290E-07	3.716E-07	5.059E-07	7.402E-07	1.217E-06	1.675E-06	2.493E-06	4.197E-06
45.00	1.251E-07	1.820E-07	2.956E-07	4.027E-07	5.898E-07	9.710E-07	1.338E-06	1.993E-06	3.360E-06
47.50	1.006E-07	1.464E-07	2.380E-07	3.245E-07	4.758E-07	7.844E-07	1.082E-06	1.613E-06	2.724E-06
50.00	8.176E-08	1.191E-07	1.938E-07	2.645E-07	3.882E-07	6.410E-07	8.851E-07	1.321E-06	2.234E-06
55.00	5.550E-08	8.100E-08	1.322E-07	1.807E-07	2.658E-07	4.404E-07	6.095E-07	9.122E-07	1.547E-06
60.00	3.891E-08	5.690E-08	9.310E-08	1.275E-07	1.882E-07	3.130E-07	4.342E-07	6.517E-07	1.109E-06
65.00	2.797E-08	4.101E-08	6.732E-08	9.244E-08	1.368E-07	2.285E-07	3.179E-07	4.788E-07	8.182E-07
70.00	2.058E-08	3.025E-08	4.984E-08	6.862E-08	1.019E-07	1.711E-07	2.387E-07	3.608E-07	6.192E-07
75.00	1.541E-08	2.272E-08	3.760E-08	5.192E-08	7.743E-08	1.307E-07	1.829E-07	2.775E-07	4.785E-07
80.00	1.172E-08	1.735E-08	2.886E-08	3.998E-08	5.989E-08	1.017E-07	1.429E-07	2.177E-07	3.773E-07
85.00	9.044E-09	1.344E-08	2.248E-08	3.126E-08	4.706E-08	8.043E-08	1.135E-07	1.737E-07	3.025E-07
90.00	7.055E-09	1.053E-08	1.773E-08	2.476E-08	3.748E-08	6.452E-08	9.144E-08	1.407E-07	2.464E-07
95.00	5.564E-09	8.351E-09	1.416E-08	1.987E-08	3.026E-08	5.251E-08	7.476E-08	1.156E-07	2.037E-07
100.00	4.420E-09	6.676E-09	1.141E-08	1.610E-08	2.469E-08	4.321E-08	6.184E-08	9.618E-08	1.706E-07
105.00	3.542E-09	5.388E-09	9.293E-09	1.319E-08	2.038E-08	3.601E-08	5.183E-08	8.108E-08	1.447E-07
110.00	2.853E-09	4.376E-09	7.628E-09	1.090E-08	1.698E-08	3.031E-08	4.388E-08	6.909E-08	1.242E-07
115.00	2.314E-09	3.581E-09	6.318E-09	9.096E-09	1.430E-08	2.581E-08	3.759E-08	5.958E-08	1.078E-07
120.00	1.885E-09	2.949E-09	5.273E-09	7.656E-09	1.216E-08	2.219E-08	3.253E-08	5.191E-08	9.464E-08
125.00	1.541E-09	2.441E-09	4.433E-09	6.497E-09	1.043E-08	1.927E-08	2.844E-08	4.571E-08	8.395E-08
130.00	1.267E-09	2.036E-09	3.762E-09	5.570E-09	9.041E-09	1.693E-08	2.515E-08	4.070E-08	7.526E-08
135.00	1.045E-09	1.705E-09	3.213E-09	4.811E-09	7.905E-09	1.500E-08	2.244E-08	3.658E-08	6.816E-08
140.00	8.678E-10	1.442E-09	2.776E-09	4.207E-09	7.001E-09	1.346E-08	2.027E-08	3.326E-08	6.238E-08
145.00	7.235E-10	1.226E-09	2.417E-09	3.712E-09	6.258E-09	1.219E-08	1.848E-08	3.053E-08	5.766E-08
150.00	6.096E-10	1.055E-09	2.133E-09	3.320E-09	5.672E-09	1.118E-08	1.706E-08	2.836E-08	5.386E-08
155.00	5.193E-10	9.190E-10	1.907E-09	3.008E-09	5.205E-09	1.038E-08	1.593E-08	2.661E-08	5.082E-08
160.00	4.489E-10	8.125E-10	1.730E-09	2.765E-09	4.841E-09	9.756E-09	1.504E-08	2.525E-08	4.846E-08
165.00	3.983E-10	7.353E-10	1.602E-09	2.590E-09	4.582E-09	9.308E-09	1.440E-08	2.425E-08	4.670E-08
170.00	3.609E-10	6.779E-10	1.506E-09	2.460E-09	4.387E-09	8.970E-09	1.391E-08	2.352E-08	4.546E-08
175.00	3.421E-10	6.491E-10	1.459E-09	2.396E-09	4.293E-09	8.810E-09	1.368E-08	2.314E-08	4.476E-08
180.00	3.309E-10	6.317E-10	1.429E-09	2.355E-09	4.229E-09	8.695E-09	1.352E-08	2.292E-08	4.447E-08
TOTAL	3.327E-03	3.487E-03	3.741E-03	3.952E-03	4.289E-03	4.876E-03	5.356E-03	6.082E-03	7.300E-03
TRANS	6.912E-07	9.696E-07	1.503E-06	1.989E-06	2.811E-06	4.424E-06	5.927E-06	8.531E-06	1.377E-05

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 10

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	3.874E+00	3.621E+00	3.373E+00	3.251E+00	3.128E+00	3.002E+00	2.937E+00	2.868E+00	2.791E+00
0.25	3.709E+00	3.498E+00	3.287E+00	3.182E+00	3.075E+00	2.965E+00	2.907E+00	2.844E+00	2.774E+00
0.50	3.267E+00	3.163E+00	3.049E+00	2.989E+00	2.926E+00	2.857E+00	2.818E+00	2.775E+00	2.723E+00
0.75	2.685E+00	2.700E+00	2.705E+00	2.704E+00	2.700E+00	2.689E+00	2.679E+00	2.664E+00	2.641E+00
1.00	2.097E+00	2.203E+00	2.313E+00	2.369E+00	2.424E+00	2.477E+00	2.501E+00	2.520E+00	2.532E+00
1.50	1.172E+00	1.346E+00	1.561E+00	1.689E+00	1.832E+00	1.992E+00	2.078E+00	2.167E+00	2.255E+00
2.00	6.300E-01	7.805E-01	9.927E-01	1.133E+00	1.304E+00	1.518E+00	1.643E+00	1.783E+00	1.937E+00
2.50	3.433E-01	4.510E-01	6.189E-01	7.400E-01	9.002E-01	1.118E+00	1.256E+00	1.421E+00	1.617E+00
3.00	1.941E-01	2.661E-01	3.875E-01	4.815E-01	6.140E-01	8.086E-01	9.413E-01	1.108E+00	1.321E+00
3.50	1.148E-01	1.622E-01	2.468E-01	3.163E-01	4.194E-01	5.811E-01	6.982E-01	8.532E-01	1.063E+00
4.00	7.116E-02	1.025E-01	1.611E-01	2.113E-01	2.892E-01	4.182E-01	5.166E-01	6.528E-01	8.481E-01
4.50	4.609E-02	6.720E-02	1.080E-01	1.442E-01	2.022E-01	3.030E-01	3.832E-01	4.989E-01	6.731E-01
5.00	3.107E-02	4.561E-02	7.436E-02	1.006E-01	1.438E-01	2.217E-01	2.861E-01	3.821E-01	5.333E-01
5.50	2.169E-02	3.195E-02	5.258E-02	7.178E-02	1.041E-01	1.642E-01	2.154E-01	2.941E-01	4.230E-01
6.00	1.562E-02	2.303E-02	3.811E-02	5.234E-02	7.668E-02	1.231E-01	1.638E-01	2.279E-01	3.364E-01
6.50	1.155E-02	1.703E-02	2.826E-02	3.896E-02	5.750E-02	9.363E-02	1.259E-01	1.779E-01	2.688E-01
7.00	8.735E-03	1.288E-02	2.139E-02	2.956E-02	4.385E-02	7.214E-02	9.789E-02	1.401E-01	2.158E-01
7.50	6.740E-03	9.927E-03	1.649E-02	2.283E-02	3.397E-02	5.632E-02	7.696E-02	1.113E-01	1.744E-01
8.00	5.291E-03	7.787E-03	1.293E-02	1.791E-02	2.671E-02	4.452E-02	6.117E-02	8.927E-02	1.418E-01
8.50	4.217E-03	6.202E-03	1.029E-02	1.426E-02	2.128E-02	3.561E-02	4.914E-02	7.221E-02	1.161E-01
9.00	3.405E-03	5.006E-03	8.303E-03	1.150E-02	1.717E-02	2.881E-02	3.987E-02	5.893E-02	9.567E-02
9.50	2.782E-03	4.089E-03	6.778E-03	9.382E-03	1.401E-02	2.355E-02	3.267E-02	4.850E-02	7.938E-02
10.00	2.296E-03	3.376E-03	5.593E-03	7.739E-03	1.156E-02	1.944E-02	2.702E-02	4.024E-02	6.631E-02
12.50	9.944E-04	1.466E-03	2.431E-03	3.361E-03	5.010E-03	8.429E-03	1.175E-02	1.763E-02	2.961E-02
15.00	4.990E-04	7.395E-04	1.231E-03	1.704E-03	2.541E-03	4.272E-03	5.951E-03	8.940E-03	1.510E-02
17.50	2.770E-04	4.126E-04	6.909E-04	9.587E-04	1.433E-03	2.412E-03	3.359E-03	5.045E-03	8.532E-03
20.00	1.656E-04	2.478E-04	4.174E-04	5.810E-04	8.715E-04	1.471E-03	2.050E-03	3.080E-03	5.213E-03
22.50	1.050E-04	1.577E-04	2.669E-04	3.727E-04	5.610E-04	9.504E-04	1.327E-03	1.996E-03	3.382E-03
25.00	6.978E-05	1.051E-04	1.785E-04	2.500E-04	3.777E-04	6.424E-04	8.988E-04	1.355E-03	2.299E-03
27.50	4.817E-05	7.267E-05	1.239E-04	1.740E-04	2.637E-04	4.504E-04	6.316E-04	9.544E-04	1.623E-03
30.00	3.432E-05	5.188E-05	8.874E-05	1.249E-04	1.898E-04	3.253E-04	4.573E-04	6.930E-04	1.182E-03
32.50	2.514E-05	3.806E-05	6.526E-05	9.199E-05	1.402E-04	2.411E-04	3.397E-04	5.161E-04	8.829E-04
35.00	1.885E-05	2.858E-05	4.909E-05	6.931E-05	1.058E-04	1.826E-04	2.578E-04	3.928E-04	6.740E-04
37.50	1.442E-05	2.189E-05	3.767E-05	5.326E-05	8.147E-05	1.410E-04	1.995E-04	3.046E-04	5.243E-04
40.00	1.123E-05	1.706E-05	2.942E-05	4.164E-05	6.380E-05	1.107E-04	1.569E-04	2.401E-04	4.146E-04
42.50	8.885E-06	1.352E-05	2.333E-05	3.306E-05	5.073E-05	8.821E-05	1.252E-04	1.921E-04	3.326E-04
45.00	7.128E-06	1.085E-05	1.876E-05	2.661E-05	4.089E-05	7.125E-05	1.013E-04	1.557E-04	2.703E-04
47.50	5.789E-06	8.824E-06	1.528E-05	2.169E-05	3.337E-05	5.824E-05	8.292E-05	1.277E-04	2.223E-04
50.00	4.757E-06	7.258E-06	1.258E-05	1.788E-05	2.753E-05	4.814E-05	6.862E-05	1.059E-04	1.847E-04
55.00	3.308E-06	5.058E-06	8.791E-06	1.251E-05	1.931E-05	3.386E-05	4.838E-05	7.485E-05	1.312E-04
60.00	2.382E-06	3.650E-06	6.360E-06	9.064E-06	1.402E-05	2.464E-05	3.527E-05	5.471E-05	9.627E-05
65.00	1.765E-06	2.711E-06	4.736E-06	6.762E-06	1.047E-05	1.846E-05	2.647E-05	4.115E-05	7.266E-05
70.00	1.343E-06	2.067E-06	3.620E-06	5.176E-06	8.032E-06	1.419E-05	2.037E-05	3.173E-05	5.620E-05
75.00	1.043E-06	1.610E-06	2.829E-06	4.051E-06	6.297E-06	1.115E-05	1.603E-05	2.502E-05	4.442E-05
80.00	8.273E-07	1.280E-06	2.255E-06	3.234E-06	5.037E-06	8.937E-06	1.287E-05	2.011E-05	3.580E-05
85.00	6.675E-07	1.036E-06	1.830E-06	2.629E-06	4.102E-06	7.293E-06	1.051E-05	1.646E-05	2.937E-05
90.00	5.473E-07	8.516E-07	1.510E-06	2.173E-06	3.396E-06	6.050E-06	8.731E-06	1.369E-05	2.447E-05
95.00	4.555E-07	7.109E-07	1.264E-06	1.822E-06	2.854E-06	5.094E-06	7.360E-06	1.156E-05	2.070E-05
100.00	3.842E-07	6.014E-07	1.073E-06	1.550E-06	2.431E-06	4.348E-06	6.290E-06	9.889E-06	1.774E-05
105.00	3.283E-07	5.156E-07	9.230E-07	1.335E-06	2.098E-06	3.760E-06	5.445E-06	8.572E-06	1.541E-05
110.00	2.839E-07	4.472E-07	8.033E-07	1.164E-06	1.833E-06	3.291E-06	4.770E-06	7.519E-06	1.353E-05
115.00	2.483E-07	3.925E-07	7.073E-07	1.027E-06	1.619E-06	2.913E-06	4.227E-06	6.671E-06	1.202E-05
120.00	2.196E-07	3.482E-07	6.296E-07	9.154E-07	1.446E-06	2.607E-06	3.786E-06	5.981E-06	1.080E-05
125.00	1.963E-07	3.122E-07	5.663E-07	8.247E-07	1.305E-06	2.357E-06	3.426E-06	5.418E-06	9.792E-06
130.00	1.773E-07	2.829E-07	5.147E-07	7.507E-07	1.190E-06	2.152E-06	3.131E-06	4.957E-06	8.970E-06
135.00	1.617E-07	2.588E-07	4.721E-07	6.897E-07	1.095E-06	1.984E-06	2.889E-06	4.577E-06	8.290E-06
140.00	1.490E-07	2.391E-07	4.376E-07	6.401E-07	1.017E-06	1.846E-06	2.690E-06	4.266E-06	7.734E-06
145.00	1.386E-07	2.230E-07	4.091E-07	5.992E-07	9.539E-07	1.733E-06	2.527E-06	4.010E-06	7.277E-06
150.00	1.303E-07	2.100E-07	3.862E-07	5.663E-07	9.024E-07	1.641E-06	2.395E-06	3.803E-06	6.907E-06
155.00	1.236E-07	1.997E-07	3.678E-07	5.399E-07	8.612E-07	1.568E-06	2.289E-06	3.673E-06	6.610E-06
160.00	1.184E-07	1.915E-07	3.534E-07	5.192E-07	8.290E-07	1.511E-06	2.207E-06	3.507E-06	6.377E-06
165.00	1.145E-07	1.855E-07	3.428E-07	5.039E-07	8.050E-07	1.468E-06	2.145E-06	3.411E-06	6.204E-06
170.00	1.118E-07	1.813E-07	3.351E-07	4.929E-07	7.881E-07	1.438E-06	2.102E-06	3.342E-06	6.080E-06
175.00	1.102E-07	1.789E-07	3.310E-07	4.870E-07	7.784E-07	1.420E-06	2.076E-06	3.303E-06	6.012E-06
180.00	1.096E-07	1.779E-07	3.290E-07	4.842E-07	7.747E-07	1.414E-06	2.068E-06	3.289E-06	5.982E-06
TOTAL	9.751E-03	1.159E-02	1.466E-02	1.711E-02	2.076E-02	2.681E-02	3.160E-02	3.873E-02	5.043E-02
TRANS	2.748E-05	4.047E-05	6.703E-05	9.253E-05	1.376E-04	2.299E-04	3.185E-04	4.750E-04	7.949E-04

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 10

ENERGY(keV) ANGLE (deg)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
0.00	2.695E+00	2.643E+00	2.573E+00	2.525E+00	2.462E+00	2.371E+00	2.306E+00	2.219E+00	1.904E+00
0.25	2.684E+00	2.634E+00	2.566E+00	2.520E+00	2.458E+00	2.368E+00	2.303E+00	2.218E+00	1.903E+00
0.50	2.650E+00	2.608E+00	2.547E+00	2.504E+00	2.445E+00	2.358E+00	2.296E+00	2.212E+00	1.900E+00
0.75	2.597E+00	2.565E+00	2.516E+00	2.478E+00	2.425E+00	2.344E+00	2.284E+00	2.202E+00	1.896E+00
1.00	2.524E+00	2.507E+00	2.473E+00	2.443E+00	2.397E+00	2.323E+00	2.267E+00	2.189E+00	1.890E+00
1.50	2.332E+00	2.352E+00	2.355E+00	2.345E+00	2.319E+00	2.265E+00	2.219E+00	2.152E+00	1.873E+00
2.00	2.098E+00	2.157E+00	2.204E+00	2.217E+00	2.216E+00	2.188E+00	2.155E+00	2.101E+00	1.849E+00
2.50	1.844E+00	1.940E+00	2.030E+00	2.068E+00	2.093E+00	2.094E+00	2.077E+00	2.039E+00	1.820E+00
3.00	1.591E+00	1.716E+00	1.844E+00	1.904E+00	1.956E+00	1.987E+00	1.986E+00	1.965E+00	1.785E+00
3.50	1.353E+00	1.496E+00	1.654E+00	1.734E+00	1.811E+00	1.871E+00	1.887E+00	1.884E+00	1.744E+00
4.00	1.138E+00	1.291E+00	1.469E+00	1.565E+00	1.662E+00	1.749E+00	1.781E+00	1.796E+00	1.699E+00
4.50	9.490E-01	1.104E+00	1.293E+00	1.400E+00	1.513E+00	1.624E+00	1.671E+00	1.704E+00	1.650E+00
5.00	7.878E-01	9.388E-01	1.131E+00	1.245E+00	1.370E+00	1.499E+00	1.559E+00	1.608E+00	1.598E+00
5.50	6.521E-01	7.949E-01	9.841E-01	1.101E+00	1.233E+00	1.377E+00	1.448E+00	1.512E+00	1.542E+00
6.00	5.392E-01	6.714E-01	8.531E-01	9.690E-01	1.105E+00	1.259E+00	1.339E+00	1.415E+00	1.485E+00
6.50	4.460E-01	5.664E-01	7.377E-01	8.504E-01	9.862E-01	1.146E+00	1.234E+00	1.320E+00	1.426E+00
7.00	3.696E-01	4.778E-01	6.368E-01	7.447E-01	8.780E-01	1.041E+00	1.133E+00	1.227E+00	1.366E+00
7.50	3.070E-01	4.035E-01	5.494E-01	6.511E-01	7.800E-01	9.426E-01	1.037E+00	1.138E+00	1.306E+00
8.00	2.558E-01	3.413E-01	4.740E-01	5.690E-01	6.919E-01	8.518E-01	9.476E-01	1.053E+00	1.245E+00
8.50	2.139E-01	2.893E-01	4.093E-01	4.971E-01	6.133E-01	7.685E-01	8.641E-01	9.715E-01	1.185E+00
9.00	1.797E-01	2.459E-01	3.538E-01	4.344E-01	5.433E-01	6.925E-01	7.867E-01	8.951E-01	1.126E+00
9.50	1.515E-01	2.097E-01	3.063E-01	3.800E-01	4.813E-01	6.235E-01	7.153E-01	8.234E-01	1.067E+00
10.00	1.284E-01	1.794E-01	2.657E-01	3.328E-01	4.265E-01	5.611E-01	6.499E-01	7.565E-01	1.011E+00
12.50	6.003E-02	8.678E-02	1.355E-01	1.760E-01	2.367E-01	3.321E-01	4.008E-01	4.905E-01	7.545E-01
15.00	3.125E-02	4.601E-02	7.409E-02	9.854E-02	1.368E-01	2.009E-01	2.501E-01	3.182E-01	5.520E-01
17.50	1.782E-02	2.649E-02	4.343E-02	5.862E-02	8.311E-02	1.260E-01	1.603E-01	2.098E-01	4.008E-01
20.00	1.093E-02	1.633E-02	2.708E-02	3.690E-02	5.306E-02	8.218E-02	1.062E-01	1.420E-01	2.919E-01
22.50	7.104E-03	1.065E-02	1.778E-02	2.439E-02	3.543E-02	5.576E-02	7.290E-02	9.891E-02	2.146E-01
25.00	4.839E-03	7.268E-03	1.220E-02	1.681E-02	2.461E-02	3.921E-02	5.172E-02	7.098E-02	1.602E-01
27.50	3.424E-03	5.150E-03	8.675E-03	1.200E-02	1.768E-02	2.845E-02	3.781E-02	5.238E-02	1.218E-01
30.00	2.499E-03	3.765E-03	6.360E-03	8.824E-03	1.306E-02	2.121E-02	2.837E-02	3.965E-02	9.443E-02
32.50	1.872E-03	2.825E-03	4.784E-03	6.654E-03	9.893E-03	1.619E-02	2.178E-02	3.068E-02	7.465E-02
35.00	1.434E-03	2.168E-03	3.679E-03	5.128E-03	7.651E-03	1.261E-02	1.706E-02	2.421E-02	6.013E-02
37.50	1.120E-03	1.695E-03	2.884E-03	4.027E-03	6.027E-03	9.993E-03	1.359E-02	1.943E-02	4.927E-02
40.00	8.891E-04	1.348E-03	2.299E-03	3.215E-03	4.825E-03	8.043E-03	1.099E-02	1.582E-02	4.101E-02
42.50	7.161E-04	1.088E-03	1.859E-03	2.604E-03	3.918E-03	6.563E-03	9.006E-03	1.305E-02	3.460E-02
45.00	5.844E-04	8.897E-04	1.524E-03	2.137E-03	3.223E-03	5.422E-03	7.469E-03	1.089E-02	2.955E-02
47.50	4.824E-04	7.359E-04	1.263E-03	1.775E-03	2.682E-03	4.529E-03	6.261E-03	9.180E-03	2.550E-02
50.00	4.024E-04	6.151E-04	1.059E-03	1.489E-03	2.255E-03	3.821E-03	5.300E-03	7.811E-03	2.222E-02
55.00	2.878E-04	4.418E-04	7.641E-04	1.078E-03	1.639E-03	2.795E-03	3.898E-03	5.799E-03	1.727E-02
60.00	2.126E-04	3.276E-04	5.694E-04	8.062E-04	1.230E-03	2.109E-03	2.956E-03	4.432E-03	1.378E-02
65.00	1.614E-04	2.496E-04	4.360E-04	6.192E-04	9.485E-04	1.635E-03	2.301E-03	3.474E-03	1.124E-02
70.00	1.255E-04	1.947E-04	3.418E-04	4.870E-04	7.489E-04	1.298E-03	1.833E-03	2.785E-03	9.348E-03
75.00	9.965E-05	1.551E-04	2.736E-04	3.910E-04	6.036E-04	1.052E-03	1.491E-03	2.277E-03	7.904E-03
80.00	8.066E-05	1.259E-04	2.230E-04	3.197E-04	4.955E-04	8.678E-04	1.235E-03	1.895E-03	6.783E-03
85.00	6.642E-05	1.040E-04	1.849E-04	2.658E-04	4.134E-04	7.279E-04	1.039E-03	1.603E-03	5.900E-03
90.00	5.555E-05	8.717E-05	1.556E-04	2.243E-04	3.501E-04	6.196E-04	8.878E-04	1.376E-03	5.196E-03
95.00	4.713E-05	7.413E-05	1.328E-04	1.919E-04	3.006E-04	5.347E-04	7.687E-04	1.197E-03	4.629E-03
100.00	4.052E-05	6.386E-05	1.147E-04	1.662E-04	2.613E-04	4.671E-04	6.739E-04	1.054E-03	4.167E-03
105.00	3.528E-05	5.570E-05	1.004E-04	1.458E-04	2.299E-04	4.128E-04	5.975E-04	9.385E-04	3.787E-03
110.00	3.107E-05	4.914E-05	8.879E-05	1.292E-04	2.044E-04	3.687E-04	5.354E-04	8.446E-04	3.474E-03
115.00	2.767E-05	4.382E-05	7.939E-05	1.157E-04	1.836E-04	3.326E-04	4.845E-04	7.675E-04	3.213E-03
120.00	2.489E-05	3.949E-05	7.170E-05	1.047E-04	1.665E-04	3.029E-04	4.426E-04	7.038E-04	2.995E-03
125.00	2.262E-05	3.593E-05	6.537E-05	9.562E-05	1.524E-04	2.784E-04	4.078E-04	6.510E-04	2.813E-03
130.00	2.076E-05	3.300E-05	6.016E-05	8.813E-05	1.408E-04	2.580E-04	3.790E-04	6.071E-04	2.660E-03
135.00	1.921E-05	3.058E-05	5.584E-05	8.191E-05	1.311E-04	2.411E-04	3.549E-04	5.704E-04	2.532E-03
140.00	1.795E-05	2.860E-05	5.229E-05	7.680E-05	1.232E-04	2.271E-04	3.350E-04	5.400E-04	2.424E-03
145.00	1.691E-05	2.696E-05	4.936E-05	7.257E-05	1.166E-04	2.155E-04	3.185E-04	5.148E-04	2.335E-03
150.00	1.607E-05	2.563E-05	4.699E-05	6.914E-05	1.112E-04	2.060E-04	3.051E-04	4.942E-04	2.262E-03
155.00	1.539E-05	2.457E-05	4.507E-05	6.638E-05	1.069E-04	1.984E-04	2.942E-04	4.776E-04	2.202E-03
160.00	1.486E-05	2.373E-05	4.357E-05	6.420E-05	1.035E-04	1.924E-04	2.856E-04	4.645E-04	2.155E-03
165.00	1.446E-05	2.311E-05	4.246E-05	6.259E-05	1.009E-04	1.879E-04	2.792E-04	4.546E-04	2.120E-03
170.00	1.418E-05	2.266E-05	4.165E-05	6.143E-05	9.914E-05	1.847E-04	2.747E-04	4.477E-04	2.095E-03
175.00	1.403E-05	2.242E-05	4.122E-05	6.080E-05	9.813E-05	1.829E-04	2.721E-04	4.436E-04	2.080E-03
180.00	1.395E-05	2.230E-05	4.100E-05	6.050E-05	9.770E-05	1.822E-04	2.711E-04	4.422E-04	2.075E-03
TOTAL	7.317E-02	8.968E-02	1.162E-01	1.366E-01	1.660E-01	2.119E-01	2.462E-01	2.941E-01	4.879E-01
TRANS	1.638E-03	2.434E-03	4.040E-03	5.557E-03	8.183E-03	1.339E-02	1.822E-02	2.642E-02	8.023E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 13

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	3.039E+02	2.307E+02	1.647E+02	1.356E+02	1.099E+02	8.717E+01	7.683E+01	6.708E+01	5.790E+01
0.25	2.615E+01	2.964E+01	3.144E+01	3.654E+01	3.856E+01	3.981E+01	4.003E+01	3.992E+01	3.939E+01
0.50	4.248E+00	4.898E+00	5.946E+00	6.799E+00	8.118E+00	1.028E+01	1.186E+01	1.395E+01	1.677E+01
0.75	1.402E+00	1.654E+00	2.051E+00	2.355E+00	2.802E+00	3.551E+00	4.176E+00	5.160E+00	6.830E+00
1.00	5.631E-01	7.097E-01	9.426E-01	1.111E+00	1.334E+00	1.674E+00	1.952E+00	2.402E+00	3.218E+00
1.50	1.303E-01	1.794E-01	2.658E-01	3.338E-01	4.289E-01	5.733E-01	6.818E-01	8.408E-01	1.108E+00
2.00	4.348E-02	6.136E-02	9.469E-02	1.233E-01	1.677E-01	2.425E-01	3.013E-01	3.868E-01	5.248E-01
2.50	1.851E-02	2.613E-02	4.068E-02	5.374E-02	7.524E-02	1.145E-01	1.475E-01	1.977E-01	2.818E-01
3.00	9.233E-03	1.299E-02	2.021E-02	2.681E-02	3.797E-02	5.926E-02	7.805E-02	1.082E-01	1.613E-01
3.50	5.127E-03	7.201E-03	1.120E-02	1.486E-02	2.110E-02	3.326E-02	4.433E-02	6.273E-02	9.682E-02
4.00	3.075E-03	4.322E-03	6.722E-03	8.920E-03	1.266E-02	2.001E-02	2.681E-02	3.839E-02	6.063E-02
4.50	1.955E-03	2.754E-03	4.291E-03	5.694E-03	8.074E-03	1.275E-02	1.711E-02	2.466E-02	3.949E-02
5.00	1.301E-03	1.838E-03	2.871E-03	3.812E-03	5.402E-03	8.519E-03	1.144E-02	1.652E-02	2.667E-02
5.50	8.986E-04	1.273E-03	1.995E-03	2.652E-03	3.757E-03	5.920E-03	7.945E-03	1.148E-02	1.860E-02
6.00	6.401E-04	9.097E-04	1.430E-03	1.903E-03	2.698E-03	4.249E-03	5.700E-03	8.233E-03	1.336E-02
6.50	4.680E-04	6.669E-04	1.051E-03	1.401E-03	1.988E-03	3.133E-03	4.202E-03	6.065E-03	9.842E-03
7.00	3.499E-04	4.998E-04	7.901E-04	1.054E-03	1.499E-03	2.364E-03	3.170E-03	4.572E-03	7.416E-03
7.50	2.668E-04	3.818E-04	6.050E-04	8.085E-04	1.151E-03	1.818E-03	2.438E-03	3.516E-03	5.699E-03
8.00	2.069E-04	2.965E-04	4.709E-04	6.302E-04	8.987E-04	1.422E-03	1.908E-03	2.751E-03	4.456E-03
8.50	1.629E-04	2.338E-04	3.719E-04	4.984E-04	7.119E-04	1.128E-03	1.515E-03	2.185E-03	3.538E-03
9.00	1.299E-04	1.867E-04	2.976E-04	3.992E-04	5.711E-04	9.068E-04	1.219E-03	1.758E-03	2.847E-03
9.50	1.049E-04	1.509E-04	2.409E-04	3.235E-04	4.635E-04	7.372E-04	9.917E-04	1.432E-03	2.318E-03
10.00	8.563E-05	1.233E-04	1.970E-04	2.648E-04	3.799E-04	6.055E-04	8.153E-04	1.178E-03	1.908E-03
12.50	3.535E-05	5.102E-05	8.187E-05	1.104E-04	1.593E-04	2.558E-04	3.461E-04	5.025E-04	8.176E-04
15.00	1.715E-05	2.478E-05	3.984E-05	5.385E-05	7.793E-05	1.258E-04	1.708E-04	2.493E-04	4.079E-04
17.50	9.297E-06	1.344E-05	2.165E-05	2.929E-05	4.247E-05	6.880E-05	9.369E-05	1.372E-04	2.257E-04
20.00	5.469E-06	7.913E-06	1.275E-05	1.727E-05	2.507E-05	4.071E-05	5.554E-05	8.158E-05	1.348E-04
22.50	3.425E-06	4.958E-06	7.994E-06	1.083E-05	1.574E-05	2.561E-05	3.499E-05	5.150E-05	8.536E-05
25.00	2.254E-06	3.263E-06	5.265E-06	7.138E-06	1.038E-05	1.691E-05	2.313E-05	3.411E-05	5.668E-05
27.50	1.543E-06	2.234E-06	3.607E-06	4.893E-06	7.121E-06	1.161E-05	1.590E-05	2.348E-05	3.911E-05
30.00	1.091E-06	1.581E-06	2.554E-06	3.465E-06	5.047E-06	8.241E-06	1.129E-05	1.669E-05	2.786E-05
32.50	7.933E-07	1.150E-06	1.859E-06	2.524E-06	3.678E-06	6.012E-06	8.246E-06	1.220E-05	2.040E-05
35.00	5.904E-07	8.563E-07	1.385E-06	1.881E-06	2.744E-06	4.490E-06	6.163E-06	9.130E-06	1.528E-05
37.50	4.482E-07	6.504E-07	1.053E-06	1.431E-06	2.088E-06	3.421E-06	4.699E-06	6.969E-06	1.168E-05
40.00	3.463E-07	5.027E-07	8.144E-07	1.108E-06	1.618E-06	2.654E-06	3.648E-06	5.416E-06	9.092E-06
42.50	2.717E-07	3.947E-07	6.399E-07	8.708E-07	1.273E-06	2.091E-06	2.877E-06	4.275E-06	7.188E-06
45.00	2.160E-07	3.140E-07	5.095E-07	6.938E-07	1.015E-06	1.670E-06	2.299E-06	3.421E-06	5.759E-06
47.50	1.737E-07	2.528E-07	4.106E-07	5.595E-07	8.197E-07	1.350E-06	1.861E-06	2.771E-06	4.673E-06
50.00	1.413E-07	2.058E-07	3.346E-07	4.563E-07	6.692E-07	1.104E-06	1.523E-06	2.271E-06	3.835E-06
55.00	9.607E-08	1.401E-07	2.284E-07	3.121E-07	4.587E-07	7.591E-07	1.050E-06	1.569E-06	2.659E-06
60.00	6.743E-08	9.855E-08	1.611E-07	2.205E-07	3.251E-07	5.400E-07	7.485E-07	1.122E-06	1.908E-06
65.00	4.854E-08	7.111E-08	1.166E-07	1.600E-07	2.366E-07	3.946E-07	5.485E-07	8.251E-07	1.408E-06
70.00	3.574E-08	5.250E-08	8.641E-08	1.189E-07	1.764E-07	2.956E-07	4.121E-07	6.220E-07	1.066E-06
75.00	2.679E-08	3.947E-08	6.523E-08	8.999E-08	1.340E-07	2.259E-07	3.159E-07	4.788E-07	8.244E-07
80.00	2.040E-08	3.016E-08	5.010E-08	6.934E-08	1.037E-07	1.758E-07	2.468E-07	3.756E-07	6.499E-07
85.00	1.575E-08	2.338E-08	3.903E-08	5.423E-08	8.152E-08	1.391E-07	1.960E-07	2.997E-07	5.213E-07
90.00	1.229E-08	1.833E-08	3.079E-08	4.296E-08	6.494E-08	1.116E-07	1.580E-07	2.427E-07	4.246E-07
95.00	9.696E-09	1.453E-08	2.459E-08	3.447E-08	5.242E-08	9.078E-08	1.291E-07	1.994E-07	3.509E-07
100.00	7.706E-09	1.162E-08	1.982E-08	2.793E-08	4.276E-08	7.469E-08	1.068E-07	1.659E-07	2.938E-07
105.00	6.176E-09	9.378E-09	1.614E-08	2.288E-08	3.529E-08	6.222E-08	8.943E-08	1.397E-07	2.491E-07
110.00	4.975E-09	7.615E-09	1.324E-08	1.890E-08	2.939E-08	5.234E-08	7.568E-08	1.190E-07	2.137E-07
115.00	4.032E-09	6.229E-09	1.096E-08	1.576E-08	2.473E-08	4.453E-08	6.478E-08	1.026E-07	1.854E-07
120.00	3.283E-09	5.125E-09	9.140E-09	1.325E-08	2.100E-08	3.826E-08	5.602E-08	8.930E-08	1.626E-07
125.00	2.683E-09	4.239E-09	7.677E-09	1.123E-08	1.799E-08	3.319E-08	4.893E-08	7.857E-08	1.442E-07
130.00	2.204E-09	3.531E-09	6.506E-09	9.617E-09	1.558E-08	2.911E-08	4.322E-08	6.989E-08	1.292E-07
135.00	1.814E-09	2.954E-09	5.550E-09	8.296E-09	1.361E-08	2.577E-08	3.853E-08	6.276E-08	1.169E-07
140.00	1.504E-09	2.493E-09	4.786E-09	7.242E-09	1.203E-08	2.309E-08	3.477E-08	5.701E-08	1.069E-07
145.00	1.252E-09	2.116E-09	4.161E-09	6.379E-09	1.074E-08	2.089E-08	3.167E-08	5.229E-08	9.873E-08
150.00	1.052E-09	1.817E-09	3.665E-09	5.696E-09	9.719E-09	1.915E-08	2.920E-08	4.852E-08	9.217E-08
155.00	8.937E-10	1.579E-09	3.269E-09	5.152E-09	8.906E-09	1.776E-08	2.723E-08	4.550E-08	8.694E-08
160.00	7.706E-10	1.393E-09	2.960E-09	4.728E-09	8.274E-09	1.667E-08	2.569E-08	4.314E-08	8.284E-08
165.00	6.813E-10	1.257E-09	2.735E-09	4.422E-09	7.820E-09	1.589E-08	2.457E-08	4.141E-08	7.977E-08
170.00	6.164E-10	1.157E-09	2.570E-09	4.196E-09	7.484E-09	1.531E-08	2.374E-08	4.014E-08	7.763E-08
175.00	5.825E-10	1.106E-09	2.485E-09	4.082E-09	7.316E-09	1.502E-08	2.333E-08	3.949E-08	7.646E-08
180.00	5.646E-10	1.077E-09	2.437E-09	4.014E-09	7.212E-09	1.483E-08	2.308E-08	3.916E-08	7.605E-08
TOTAL	8.746E-03	9.167E-03	9.834E-03	1.039E-02	1.127E-02	1.281E-02	1.407E-02	1.597E-02	1.916E-02
TRANS	1.159E-06	1.625E-06	2.517E-06	3.329E-06	4.702E-06	7.393E-06	9.900E-06	1.424E-05	2.296E-05

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 13

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	4.936E+01	4.613E+01	4.298E+01	4.142E+01	3.985E+01	3.826E+01	3.744E+01	3.657E+01	3.561E+01
0.25	3.833E+01	3.772E+01	3.698E+01	3.655E+01	3.607E+01	3.551E+01	3.518E+01	3.480E+01	3.430E+01
0.50	2.065E+01	2.261E+01	2.486E+01	2.610E+01	2.742E+01	2.879E+01	2.949E+01	3.017E+01	3.078E+01
0.75	9.907E+00	1.189E+01	1.463E+01	1.640E+01	1.853E+01	2.112E+01	2.261E+01	2.424E+01	2.598E+01
1.00	4.957E+00	6.268E+00	8.340E+00	9.847E+00	1.186E+01	1.460E+01	1.635E+01	1.844E+01	2.091E+01
1.50	1.694E+00	2.178E+00	3.043E+00	3.769E+00	4.875E+00	6.674E+00	8.019E+00	9.854E+00	1.243E+01
2.00	8.027E-01	1.021E+00	1.414E+00	1.754E+00	2.298E+00	3.261E+00	4.055E+00	5.244E+00	7.130E+00
2.50	4.485E-01	5.742E-01	7.916E-01	9.757E-01	1.268E+00	1.798E+00	2.253E+00	2.969E+00	4.195E+00
3.00	2.711E-01	3.541E-01	4.945E-01	6.096E-01	7.887E-01	1.108E+00	1.384E+00	1.824E+00	2.606E+00
3.50	1.713E-01	2.295E-01	3.281E-01	4.079E-01	5.299E-01	7.425E-01	9.227E-01	1.209E+00	1.722E+00
4.00	1.119E-01	1.536E-01	2.256E-01	2.843E-01	3.735E-01	5.263E-01	6.531E-01	8.514E-01	1.205E+00
4.50	7.521E-02	1.054E-01	1.591E-01	2.035E-01	2.715E-01	3.872E-01	4.817E-01	6.275E-01	8.839E-01
5.00	5.192E-02	7.398E-02	1.143E-01	1.485E-01	2.014E-01	2.920E-01	3.656E-01	4.779E-01	6.724E-01
5.50	3.676E-02	5.305E-02	8.363E-02	1.101E-01	1.518E-01	2.241E-01	2.830E-01	3.726E-01	5.257E-01
6.00	2.664E-02	3.881E-02	6.217E-02	8.281E-02	1.159E-01	1.743E-01	2.223E-01	2.954E-01	4.195E-01
6.50	1.974E-02	2.894E-02	4.693E-02	6.314E-02	8.958E-02	1.371E-01	1.766E-01	2.371E-01	3.399E-01
7.00	1.491E-02	2.197E-02	3.596E-02	4.877E-02	6.998E-02	1.088E-01	1.416E-01	1.923E-01	2.786E-01
7.50	1.148E-02	1.695E-02	2.794E-02	3.813E-02	5.525E-02	8.714E-02	1.145E-01	1.572E-01	2.305E-01
8.00	8.975E-03	1.328E-02	2.200E-02	3.018E-02	4.407E-02	7.037E-02	9.326E-02	1.295E-01	1.922E-01
8.50	7.124E-03	1.055E-02	1.754E-02	2.415E-02	3.549E-02	5.728E-02	7.652E-02	1.073E-01	1.612E-01
9.00	5.730E-03	8.489E-03	1.414E-02	1.953E-02	2.885E-02	4.699E-02	6.321E-02	8.945E-02	1.360E-01
9.50	4.664E-03	6.910E-03	1.153E-02	1.596E-02	2.367E-02	3.883E-02	5.256E-02	7.500E-02	1.153E-01
10.00	3.837E-03	5.685E-03	9.493E-03	1.316E-02	1.958E-02	3.233E-02	4.398E-02	6.324E-02	9.826E-02
12.50	1.646E-03	2.436E-03	4.071E-03	5.657E-03	8.476E-03	1.424E-02	1.971E-02	2.908E-02	4.703E-02
15.00	8.250E-04	1.222E-03	2.043E-03	2.838E-03	4.257E-03	7.194E-03	1.002E-02	1.497E-02	2.478E-02
17.50	4.594E-04	6.824E-04	1.142E-03	1.587E-03	2.381E-03	4.030E-03	5.631E-03	8.461E-03	1.418E-02
20.00	2.761E-04	4.113E-04	6.904E-04	9.606E-04	1.442E-03	2.443E-03	3.417E-03	5.148E-03	8.689E-03
22.50	1.758E-04	2.628E-04	4.426E-04	6.168E-04	9.273E-04	1.573E-03	2.202E-03	3.322E-03	5.630E-03
25.00	1.173E-04	1.758E-04	2.972E-04	4.149E-04	6.250E-04	1.062E-03	1.487E-03	2.247E-03	3.819E-03
27.50	8.126E-05	1.221E-04	2.071E-04	2.897E-04	4.373E-04	7.448E-04	1.044E-03	1.579E-03	2.690E-03
30.00	5.809E-05	8.748E-05	1.488E-04	2.086E-04	3.157E-04	5.389E-04	7.564E-04	1.145E-03	1.955E-03
32.50	4.266E-05	6.436E-05	1.098E-04	1.542E-04	2.338E-04	4.003E-04	5.626E-04	8.532E-04	1.459E-03
35.00	3.205E-05	4.844E-05	8.282E-05	1.165E-04	1.771E-04	3.040E-04	4.279E-04	6.500E-04	1.114E-03
37.50	2.456E-05	3.718E-05	6.372E-05	8.980E-05	1.368E-04	2.353E-04	3.318E-04	5.049E-04	8.669E-04
40.00	1.915E-05	2.904E-05	4.987E-05	7.039E-05	1.074E-04	1.853E-04	2.616E-04	3.989E-04	6.863E-04
42.50	1.517E-05	2.303E-05	3.963E-05	5.601E-05	8.562E-05	1.481E-04	2.094E-04	3.198E-04	5.514E-04
45.00	1.219E-05	1.852E-05	3.193E-05	4.518E-05	6.918E-05	1.199E-04	1.698E-04	2.598E-04	4.490E-04
47.50	9.908E-06	1.508E-05	2.604E-05	3.688E-05	5.657E-05	9.824E-05	1.394E-04	2.136E-04	3.700E-04
50.00	8.149E-06	1.241E-05	2.147E-05	3.045E-05	4.676E-05	8.138E-05	1.156E-04	1.775E-04	3.081E-04
55.00	5.675E-06	8.666E-06	1.503E-05	2.136E-05	3.290E-05	5.747E-05	8.185E-05	1.261E-04	2.198E-04
60.00	4.090E-06	6.260E-06	1.089E-05	1.551E-05	2.394E-05	4.196E-05	5.990E-05	9.258E-05	1.620E-04
65.00	3.034E-06	4.655E-06	8.123E-06	1.159E-05	1.792E-05	3.152E-05	4.509E-05	6.989E-05	1.228E-04
70.00	2.308E-06	3.550E-06	6.214E-06	8.878E-06	1.376E-05	2.427E-05	3.480E-05	5.407E-05	9.537E-05
75.00	1.795E-06	2.768E-06	4.859E-06	6.955E-06	1.081E-05	1.911E-05	2.744E-05	4.275E-05	7.565E-05
80.00	1.423E-06	2.201E-06	3.876E-06	5.557E-06	8.652E-06	1.534E-05	2.207E-05	3.445E-05	6.116E-05
85.00	1.149E-06	1.781E-06	3.147E-06	4.520E-06	7.051E-06	1.253E-05	1.806E-05	2.825E-05	5.030E-05
90.00	9.418E-07	1.465E-06	2.596E-06	3.736E-06	5.840E-06	1.041E-05	1.502E-05	2.354E-05	4.203E-05
95.00	7.837E-07	1.223E-06	2.174E-06	3.135E-06	4.910E-06	8.768E-06	1.267E-05	1.990E-05	3.562E-05
100.00	6.609E-07	1.035E-06	1.846E-06	2.666E-06	4.184E-06	7.489E-06	1.084E-05	1.705E-05	3.060E-05
105.00	5.646E-07	8.865E-07	1.587E-06	2.297E-06	3.612E-06	6.479E-06	9.390E-06	1.479E-05	2.661E-05
110.00	4.881E-07	7.689E-07	1.381E-06	2.003E-06	3.155E-06	5.673E-06	8.231E-06	1.299E-05	2.341E-05
115.00	4.267E-07	6.745E-07	1.216E-06	1.766E-06	2.788E-06	5.023E-06	7.298E-06	1.153E-05	2.083E-05
120.00	3.772E-07	5.982E-07	1.082E-06	1.574E-06	2.490E-06	4.496E-06	6.539E-06	1.035E-05	1.872E-05
125.00	3.370E-07	5.362E-07	9.732E-07	1.418E-06	2.247E-06	4.065E-06	5.919E-06	9.379E-06	1.700E-05
130.00	3.042E-07	4.855E-07	8.841E-07	1.291E-06	2.048E-06	3.712E-06	5.411E-06	8.585E-06	1.558E-05
135.00	2.774E-07	4.440E-07	8.110E-07	1.186E-06	1.885E-06	3.422E-06	4.993E-06	7.931E-06	1.442E-05
140.00	2.554E-07	4.100E-07	7.512E-07	1.100E-06	1.751E-06	3.184E-06	4.650E-06	7.393E-06	1.346E-05
145.00	2.375E-07	3.824E-07	7.023E-07	1.030E-06	1.642E-06	2.990E-06	4.369E-06	6.953E-06	1.267E-05
150.00	2.231E-07	3.600E-07	6.627E-07	9.728E-07	1.553E-06	2.832E-06	4.141E-06	6.596E-06	1.203E-05
155.00	2.116E-07	3.421E-07	6.310E-07	9.273E-07	1.482E-06	2.705E-06	3.958E-06	6.308E-06	1.152E-05
160.00	2.026E-07	3.281E-07	6.063E-07	8.918E-07	1.426E-06	2.606E-06	3.816E-06	6.085E-06	1.112E-05
165.00	1.958E-07	3.176E-07	5.878E-07	8.652E-07	1.385E-06	2.532E-06	3.709E-06	5.917E-06	1.082E-05
170.00	1.912E-07	3.104E-07	5.749E-07	8.467E-07	1.356E-06	2.481E-06	3.634E-06	5.799E-06	1.060E-05
175.00	1.885E-07	3.062E-07	5.674E-07	8.357E-07	1.339E-06	2.450E-06	3.591E-06	5.732E-06	1.048E-05
180.00	1.878E-07	3.050E-07	5.648E-07	8.320E-07	1.333E-06	2.440E-06	3.577E-06	5.710E-06	1.045E-05
TOTAL	2.558E-02	3.040E-02	3.840E-02	4.477E-02	5.427E-02	6.995E-02	8.234E-02	1.007E-01	1.307E-01
TRANS	4.574E-05	6.728E-05	1.112E-04	1.534E-04	2.276E-04	3.795E-04	5.248E-04	7.806E-04	1.301E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 13

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	3.442E+01	3.380E+01	3.298E+01	3.244E+01	3.175E+01	3.078E+01	3.013E+01	2.928E+01	2.638E+01
0.25	3.357E+01	3.313E+01	3.249E+01	3.203E+01	3.143E+01	3.055E+01	2.994E+01	2.913E+01	2.631E+01
0.50	3.120E+01	3.123E+01	3.107E+01	3.086E+01	3.049E+01	2.985E+01	2.936E+01	2.868E+01	2.609E+01
0.75	2.776E+01	2.839E+01	2.889E+01	2.902E+01	2.902E+01	2.875E+01	2.844E+01	2.795E+01	2.574E+01
1.00	2.379E+01	2.502E+01	2.620E+01	2.671E+01	2.712E+01	2.730E+01	2.723E+01	2.697E+01	2.527E+01
1.50	1.614E+01	1.805E+01	2.023E+01	2.141E+01	2.258E+01	2.368E+01	2.412E+01	2.443E+01	2.397E+01
2.00	1.034E+01	1.226E+01	1.474E+01	1.622E+01	1.788E+01	1.967E+01	2.057E+01	2.141E+01	2.230E+01
2.50	6.555E+00	8.148E+00	1.040E+01	1.189E+01	1.368E+01	1.581E+01	1.701E+01	1.825E+01	2.038E+01
3.00	4.241E+00	5.440E+00	7.278E+00	8.579E+00	1.025E+01	1.243E+01	1.375E+01	1.522E+01	1.834E+01
3.50	2.844E+00	3.713E+00	5.127E+00	6.188E+00	7.633E+00	9.648E+00	1.095E+01	1.248E+01	1.627E+01
4.00	1.988E+00	2.613E+00	3.675E+00	4.508E+00	5.694E+00	7.449E+00	8.648E+00	1.015E+01	1.427E+01
4.50	1.447E+00	1.902E+00	2.696E+00	3.339E+00	4.286E+00	5.758E+00	6.814E+00	8.193E+00	1.240E+01
5.00	1.092E+00	1.431E+00	2.029E+00	2.524E+00	3.271E+00	4.478E+00	5.380E+00	6.603E+00	1.070E+01
5.50	8.494E-01	1.108E+00	1.566E+00	1.949E+00	2.537E+00	3.516E+00	4.271E+00	5.329E+00	9.176E+00
6.00	6.769E-01	8.797E-01	1.237E+00	1.537E+00	2.003E+00	2.793E+00	3.419E+00	4.319E+00	7.841E+00
6.50	5.501E-01	7.132E-01	9.983E-01	1.237E+00	1.609E+00	2.248E+00	2.764E+00	3.522E+00	6.688E+00
7.00	4.539E-01	5.882E-01	8.202E-01	1.013E+00	1.314E+00	1.834E+00	2.259E+00	2.895E+00	5.700E+00
7.50	3.791E-01	4.918E-01	6.842E-01	8.430E-01	1.089E+00	1.516E+00	1.868E+00	2.400E+00	4.862E+00
8.00	3.196E-01	4.158E-01	5.782E-01	7.109E-01	9.154E-01	1.270E+00	1.562E+00	2.008E+00	4.154E+00
8.50	2.716E-01	3.548E-01	4.938E-01	6.064E-01	7.787E-01	1.075E+00	1.320E+00	1.696E+00	3.559E+00
9.00	2.323E-01	3.049E-01	4.255E-01	5.224E-01	6.694E-01	9.209E-01	1.128E+00	1.446E+00	3.060E+00
9.50	1.998E-01	2.637E-01	3.694E-01	4.537E-01	5.807E-01	7.961E-01	9.726E-01	1.244E+00	2.642E+00
10.00	1.726E-01	2.292E-01	3.226E-01	3.967E-01	5.077E-01	6.942E-01	8.461E-01	1.079E+00	2.292E+00
12.50	8.793E-02	1.205E-01	1.752E-01	2.184E-01	2.820E-01	3.852E-01	4.664E-01	5.877E-01	1.213E+00
15.00	4.841E-02	6.814E-02	1.024E-01	1.301E-01	1.710E-01	2.368E-01	2.875E-01	3.616E-01	7.241E-01
17.50	2.849E-02	4.089E-02	6.317E-02	8.163E-02	1.094E-01	1.545E-01	1.891E-01	2.391E-01	4.733E-01
20.00	1.777E-02	2.586E-02	4.079E-02	5.346E-02	7.287E-02	1.050E-01	1.298E-01	1.656E-01	3.290E-01
22.50	1.166E-02	1.713E-02	2.744E-02	3.637E-02	5.028E-02	7.372E-02	9.209E-02	1.186E-01	2.385E-01
25.00	7.973E-03	1.180E-02	1.915E-02	2.560E-02	3.581E-02	5.330E-02	6.717E-02	8.736E-02	1.782E-01
27.50	5.651E-03	8.413E-03	1.378E-02	1.857E-02	2.623E-02	3.955E-02	5.024E-02	6.588E-02	1.363E-01
30.00	4.128E-03	6.172E-03	1.020E-02	1.383E-02	1.971E-02	3.006E-02	3.844E-02	5.079E-02	1.065E-01
32.50	3.093E-03	4.642E-03	7.726E-03	1.054E-02	1.513E-02	2.333E-02	3.003E-02	3.996E-02	8.468E-02
35.00	2.369E-03	3.567E-03	5.974E-03	8.189E-03	1.185E-02	1.845E-02	2.390E-02	3.201E-02	6.851E-02
37.50	1.850E-03	2.793E-03	4.702E-03	6.476E-03	9.434E-03	1.484E-02	1.933E-02	2.607E-02	5.631E-02
40.00	1.469E-03	2.223E-03	3.760E-03	5.200E-03	7.623E-03	1.210E-02	1.587E-02	2.155E-02	4.699E-02
42.50	1.183E-03	1.795E-03	3.049E-03	4.232E-03	6.241E-03	1.000E-02	1.319E-02	1.804E-02	3.978E-02
45.00	9.665E-04	1.469E-03	2.504E-03	3.487E-03	5.170E-03	8.357E-03	1.109E-02	1.528E-02	3.411E-02
47.50	7.987E-04	1.216E-03	2.080E-03	2.905E-03	4.328E-03	7.054E-03	9.420E-03	1.308E-02	2.961E-02
50.00	6.671E-04	1.017E-03	1.745E-03	2.444E-03	3.658E-03	6.009E-03	8.073E-03	1.129E-02	2.599E-02
55.00	4.788E-04	7.328E-04	1.263E-03	1.778E-03	2.681E-03	4.466E-03	6.068E-03	8.618E-03	2.061E-02
60.00	3.550E-04	5.451E-04	9.444E-04	1.334E-03	2.025E-03	3.415E-03	4.687E-03	6.755E-03	1.689E-02
65.00	2.707E-04	4.170E-04	7.257E-04	1.029E-03	1.570E-03	2.675E-03	3.705E-03	5.414E-03	1.420E-02
70.00	2.114E-04	3.267E-04	5.711E-04	8.120E-04	1.245E-03	2.141E-03	2.990E-03	4.425E-03	1.220E-02
75.00	1.686E-04	2.615E-04	4.590E-04	6.546E-04	1.008E-03	1.748E-03	2.458E-03	3.679E-03	1.068E-02
80.00	1.370E-04	2.132E-04	3.758E-04	5.375E-04	8.313E-04	1.451E-03	2.054E-03	3.108E-03	9.483E-03
85.00	1.133E-04	1.767E-04	3.129E-04	4.488E-04	6.969E-04	1.225E-03	1.743E-03	2.662E-03	8.535E-03
90.00	9.507E-05	1.488E-04	2.645E-04	3.805E-04	5.930E-04	1.048E-03	1.500E-03	2.310E-03	7.771E-03
95.00	8.092E-05	1.270E-04	2.267E-04	3.270E-04	5.116E-04	9.095E-04	1.307E-03	2.030E-03	7.146E-03
100.00	6.980E-05	1.098E-04	1.969E-04	2.847E-04	4.469E-04	7.988E-04	1.153E-03	1.803E-03	6.631E-03
105.00	6.093E-05	9.612E-05	1.729E-04	2.507E-04	3.950E-04	7.097E-04	1.029E-03	1.619E-03	6.201E-03
110.00	5.381E-05	8.509E-05	1.536E-04	2.233E-04	3.529E-04	6.372E-04	9.271E-04	1.467E-03	5.842E-03
115.00	4.802E-05	7.610E-05	1.378E-04	2.009E-04	3.186E-04	5.778E-04	8.437E-04	1.343E-03	5.538E-03
120.00	4.330E-05	6.876E-05	1.249E-04	1.825E-04	2.903E-04	5.289E-04	7.748E-04	1.239E-03	5.280E-03
125.00	3.942E-05	6.272E-05	1.143E-04	1.673E-04	2.669E-04	4.884E-04	7.176E-04	1.153E-03	5.061E-03
130.00	3.622E-05	5.773E-05	1.055E-04	1.547E-04	2.475E-04	4.548E-04	6.701E-04	1.081E-03	4.875E-03
135.00	3.360E-05	5.362E-05	9.821E-05	1.443E-04	2.314E-04	4.268E-04	6.305E-04	1.021E-03	4.717E-03
140.00	3.141E-05	5.021E-05	9.217E-05	1.357E-04	2.181E-04	4.036E-04	5.976E-04	9.706E-04	4.582E-03
145.00	2.964E-05	4.743E-05	8.723E-05	1.286E-04	2.071E-04	3.844E-04	5.704E-04	9.291E-04	4.469E-03
150.00	2.818E-05	4.515E-05	8.317E-05	1.228E-04	1.981E-04	3.687E-04	5.481E-04	8.951E-04	4.374E-03
155.00	2.701E-05	4.332E-05	7.992E-05	1.181E-04	1.909E-04	3.560E-04	5.302E-04	8.676E-04	4.297E-03
160.00	2.611E-05	4.189E-05	7.738E-05	1.144E-04	1.852E-04	3.460E-04	5.160E-04	8.459E-04	4.236E-03
165.00	2.541E-05	4.080E-05	7.544E-05	1.116E-04	1.809E-04	3.385E-04	5.054E-04	8.296E-04	4.189E-03
170.00	2.495E-05	4.007E-05	7.413E-05	1.097E-04	1.779E-04	3.333E-04	4.979E-04	8.182E-04	4.157E-03
175.00	2.465E-05	3.960E-05	7.331E-05	1.086E-04	1.761E-04	3.302E-04	4.936E-04	8.114E-04	4.136E-03
180.00	2.459E-05	3.951E-05	7.311E-05	1.083E-04	1.756E-04	3.292E-04	4.920E-04	8.093E-04	4.132E-03
TOTAL	1.885E-01	2.301E-01	2.965E-01	3.472E-01	4.198E-01	5.329E-01	6.173E-01	7.357E-01	1.232E+00
TRANS	2.659E-03	3.929E-03	6.465E-03	8.833E-03	1.289E-02	2.080E-02	2.803E-02	4.013E-02	1.167E-01

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 14

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	2.911E+02	2.210E+02	1.578E+02	1.299E+02	1.053E+02	8.350E+01	7.359E+01	6.424E+01	5.544E+01
0.25	3.353E+01	3.743E+01	4.209E+01	4.417E+01	4.524E+01	4.479E+01	4.393E+01	4.272E+01	4.108E+01
0.50	4.792E+00	5.766E+00	7.338E+00	8.570E+00	1.038E+01	1.313E+01	1.502E+01	1.730E+01	2.008E+01
0.75	1.536E+00	1.826E+00	2.305E+00	2.699E+00	3.320E+00	4.403E+00	5.290E+00	6.620E+00	8.738E+00
1.00	6.309E-01	7.830E-01	1.029E+00	1.218E+00	1.488E+00	1.939E+00	2.322E+00	2.949E+00	4.075E+00
1.50	1.508E-01	2.048E-01	2.983E-01	3.708E-01	4.713E-01	6.264E-01	7.489E-01	9.399E-01	1.283E+00
2.00	5.056E-02	7.115E-02	1.091E-01	1.409E-01	1.890E-01	2.683E-01	3.305E-01	4.223E-01	5.788E-01
2.50	2.146E-02	3.038E-02	4.730E-02	6.228E-02	8.647E-02	1.295E-01	1.650E-01	2.184E-01	3.078E-01
3.00	1.067E-02	1.507E-02	2.352E-02	3.119E-02	4.403E-02	6.810E-02	8.893E-02	1.216E-01	1.783E-01
3.50	5.916E-03	8.333E-03	1.299E-02	1.727E-02	2.453E-02	3.855E-02	5.111E-02	7.159E-02	1.087E-01
4.00	3.547E-03	4.993E-03	7.783E-03	1.034E-02	1.472E-02	2.326E-02	3.110E-02	4.425E-02	6.898E-02
4.50	2.255E-03	3.178E-03	4.958E-03	6.589E-03	9.367E-03	1.483E-02	1.990E-02	2.857E-02	4.536E-02
5.00	1.502E-03	2.121E-03	3.314E-03	4.405E-03	6.257E-03	9.899E-03	1.330E-02	1.919E-02	3.082E-02
5.50	1.038E-03	1.469E-03	2.302E-03	3.061E-03	4.345E-03	6.868E-03	9.232E-03	1.335E-02	2.158E-02
6.00	7.398E-04	1.050E-03	1.649E-03	2.195E-03	3.116E-03	4.922E-03	6.614E-03	9.569E-03	1.552E-02
6.50	5.413E-04	7.702E-04	1.213E-03	1.616E-03	2.295E-03	3.624E-03	4.869E-03	7.043E-03	1.144E-02
7.00	4.050E-04	5.776E-04	9.118E-04	1.216E-03	1.729E-03	2.731E-03	3.668E-03	5.304E-03	8.619E-03
7.50	3.089E-04	4.415E-04	6.986E-04	9.330E-04	1.328E-03	2.099E-03	2.819E-03	4.074E-03	6.619E-03
8.00	2.397E-04	3.431E-04	5.441E-04	7.276E-04	1.037E-03	1.641E-03	2.204E-03	3.184E-03	5.171E-03
8.50	1.888E-04	2.706E-04	4.299E-04	5.757E-04	8.216E-04	1.302E-03	1.749E-03	2.527E-03	4.101E-03
9.00	1.507E-04	2.163E-04	3.442E-04	4.613E-04	6.593E-04	1.046E-03	1.407E-03	2.032E-03	3.297E-03
9.50	1.217E-04	1.749E-04	2.787E-04	3.740E-04	5.352E-04	8.507E-04	1.144E-03	1.654E-03	2.683E-03
10.00	9.935E-05	1.429E-04	2.281E-04	3.063E-04	4.390E-04	6.988E-04	9.407E-04	1.360E-03	2.207E-03
12.50	4.106E-05	5.924E-05	9.496E-05	1.280E-04	1.844E-04	2.957E-04	3.998E-04	5.801E-04	9.437E-04
15.00	1.993E-05	2.879E-05	4.627E-05	6.251E-05	9.037E-05	1.457E-04	1.977E-04	2.881E-04	4.709E-04
17.50	1.081E-05	1.563E-05	2.516E-05	3.403E-05	4.931E-05	7.980E-05	1.086E-04	1.588E-04	2.609E-04
20.00	6.365E-06	9.207E-06	1.483E-05	2.008E-05	2.913E-05	4.727E-05	6.444E-05	9.455E-05	1.560E-04
22.50	3.988E-06	5.771E-06	9.303E-06	1.260E-05	1.831E-05	2.976E-05	4.064E-05	5.976E-05	9.891E-05
25.00	2.625E-06	3.801E-06	6.130E-06	8.309E-06	1.208E-05	1.967E-05	2.689E-05	3.962E-05	6.575E-05
27.50	1.798E-06	2.603E-06	4.202E-06	5.698E-06	8.291E-06	1.351E-05	1.850E-05	2.729E-05	4.540E-05
30.00	1.272E-06	1.843E-06	2.976E-06	4.038E-06	5.879E-06	9.594E-06	1.314E-05	1.942E-05	3.237E-05
32.50	9.252E-07	1.341E-06	2.167E-06	2.942E-06	4.286E-06	7.003E-06	9.601E-06	1.420E-05	2.372E-05
35.00	6.888E-07	9.989E-07	1.615E-06	2.194E-06	3.199E-06	5.232E-06	7.179E-06	1.063E-05	1.778E-05
37.50	5.230E-07	7.588E-07	1.228E-06	1.669E-06	2.435E-06	3.988E-06	5.476E-06	8.117E-06	1.360E-05
40.00	4.042E-07	5.868E-07	9.503E-07	1.292E-06	1.887E-06	3.094E-06	4.252E-06	6.310E-06	1.059E-05
42.50	3.172E-07	4.608E-07	7.470E-07	1.016E-06	1.486E-06	2.439E-06	3.354E-06	4.983E-06	8.373E-06
45.00	2.523E-07	3.667E-07	5.949E-07	8.099E-07	1.185E-06	1.948E-06	2.682E-06	3.988E-06	6.711E-06
47.50	2.030E-07	2.953E-07	4.795E-07	6.533E-07	9.569E-07	1.575E-06	2.171E-06	3.232E-06	5.447E-06
50.00	1.652E-07	2.404E-07	3.909E-07	5.330E-07	7.814E-07	1.288E-06	1.777E-06	2.649E-06	4.472E-06
55.00	1.123E-07	1.638E-07	2.670E-07	3.646E-07	5.359E-07	8.865E-07	1.225E-06	1.832E-06	3.102E-06
60.00	7.888E-08	1.153E-07	1.884E-07	2.578E-07	3.799E-07	6.307E-07	8.740E-07	1.310E-06	2.226E-06
65.00	5.681E-08	8.320E-08	1.364E-07	1.871E-07	2.765E-07	4.611E-07	6.407E-07	9.635E-07	1.644E-06
70.00	4.185E-08	6.144E-08	1.011E-07	1.390E-07	2.062E-07	3.455E-07	4.814E-07	7.264E-07	1.244E-06
75.00	3.137E-08	4.621E-08	7.634E-08	1.053E-07	1.568E-07	2.640E-07	3.691E-07	5.592E-07	9.625E-07
80.00	2.390E-08	3.533E-08	5.864E-08	8.114E-08	1.213E-07	2.055E-07	2.884E-07	4.388E-07	7.589E-07
85.00	1.845E-08	2.738E-08	4.570E-08	6.346E-08	9.537E-08	1.626E-07	2.291E-07	3.501E-07	6.087E-07
90.00	1.441E-08	2.147E-08	3.606E-08	5.028E-08	7.597E-08	1.305E-07	1.846E-07	2.835E-07	4.958E-07
95.00	1.137E-08	1.703E-08	2.879E-08	4.034E-08	6.132E-08	1.061E-07	1.509E-07	2.329E-07	4.097E-07
100.00	9.034E-09	1.362E-08	2.321E-08	3.269E-08	5.002E-08	8.731E-08	1.248E-07	1.937E-07	3.430E-07
105.00	7.240E-09	1.099E-08	1.890E-08	2.677E-08	4.127E-08	7.272E-08	1.045E-07	1.632E-07	2.908E-07
110.00	5.832E-09	8.922E-09	1.550E-08	2.211E-08	3.437E-08	6.117E-08	8.841E-08	1.390E-07	2.495E-07
115.00	4.727E-09	7.297E-09	1.283E-08	1.843E-08	2.891E-08	5.202E-08	7.566E-08	1.197E-07	2.164E-07
120.00	3.848E-09	6.003E-09	1.070E-08	1.550E-08	2.454E-08	4.468E-08	6.541E-08	1.042E-07	1.898E-07
125.00	3.144E-09	4.964E-09	8.982E-09	1.313E-08	2.102E-08	3.875E-08	5.712E-08	9.168E-08	1.682E-07
130.00	2.581E-09	4.133E-09	7.608E-09	1.124E-08	1.820E-08	3.398E-08	5.044E-08	8.153E-08	1.507E-07
135.00	2.125E-09	3.456E-09	6.487E-09	9.692E-09	1.589E-08	3.007E-08	4.495E-08	7.320E-08	1.363E-07
140.00	1.760E-09	2.915E-09	5.590E-09	8.455E-09	1.404E-08	2.693E-08	4.054E-08	6.647E-08	1.246E-07
145.00	1.464E-09	2.473E-09	4.857E-09	7.444E-09	1.253E-08	2.436E-08	3.692E-08	6.095E-08	1.151E-07
150.00	1.229E-09	2.122E-09	4.275E-09	6.642E-09	1.133E-08	2.232E-08	3.403E-08	5.654E-08	1.074E-07
155.00	1.043E-09	1.842E-09	3.811E-09	6.005E-09	1.038E-08	2.068E-08	3.172E-08	5.301E-08	1.013E-07
160.00	8.989E-10	1.624E-09	3.449E-09	5.508E-09	9.637E-09	1.941E-08	2.992E-08	5.025E-08	9.649E-08
165.00	7.938E-10	1.464E-09	3.185E-09	5.148E-09	9.104E-09	1.850E-08	2.861E-08	4.821E-08	9.291E-08
170.00	7.177E-10	1.347E-09	2.992E-09	4.884E-09	8.711E-09	1.782E-08	2.764E-08	4.674E-08	9.041E-08
175.00	6.776E-10	1.286E-09	2.892E-09	4.750E-09	8.513E-09	1.748E-08	2.715E-08	4.597E-08	8.903E-08
180.00	6.573E-10	1.254E-09	2.837E-09	4.674E-09	8.397E-09	1.727E-08	2.687E-08	4.560E-08	8.855E-08
TOTAL	1.007E-02	1.055E-02	1.132E-02	1.196E-02	1.297E-02	1.475E-02	1.619E-02	1.838E-02	2.205E-02
TRANS	1.343E-06	1.882E-06	2.915E-06	3.855E-06	5.445E-06	8.559E-06	1.146E-05	1.648E-05	2.656E-05

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 14

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	4.725E+01	4.414E+01	4.110E+01	3.959E+01	3.808E+01	3.652E+01	3.571E+01	3.484E+01	3.386E+01
0.25	3.889E+01	3.782E+01	3.663E+01	3.598E+01	3.528E+01	3.450E+01	3.406E+01	3.355E+01	3.291E+01
0.50	2.349E+01	2.506E+01	2.673E+01	2.760E+01	2.847E+01	2.931E+01	2.971E+01	3.005E+01	3.029E+01
0.75	1.230E+01	1.441E+01	1.713E+01	1.879E+01	2.069E+01	2.286E+01	2.405E+01	2.528E+01	2.652E+01
1.00	6.360E+00	7.973E+00	1.037E+01	1.202E+01	1.411E+01	1.679E+01	1.841E+01	2.024E+01	2.229E+01
1.50	2.071E+00	2.730E+00	3.889E+00	4.830E+00	6.213E+00	8.347E+00	9.861E+00	1.183E+01	1.442E+01
2.00	9.147E-01	1.198E+00	1.722E+00	2.180E+00	2.909E+00	4.171E+00	5.174E+00	6.619E+00	8.788E+00
2.50	4.930E-01	6.412E-01	9.113E-01	1.150E+00	1.539E+00	2.248E+00	2.853E+00	3.785E+00	5.324E+00
3.00	2.958E-01	3.871E-01	5.488E-01	6.883E-01	9.140E-01	1.331E+00	1.697E+00	2.284E+00	3.312E+00
3.50	1.882E-01	2.503E-01	3.584E-01	4.492E-01	5.936E-01	8.576E-01	1.090E+00	1.467E+00	2.150E+00
4.00	1.244E-01	1.687E-01	2.459E-01	3.100E-01	4.102E-01	5.902E-01	7.466E-01	9.998E-01	1.464E+00
4.50	8.461E-02	1.170E-01	1.743E-01	2.218E-01	2.956E-01	4.261E-01	5.375E-01	7.160E-01	1.043E+00
5.00	5.901E-02	8.305E-02	1.263E-01	1.627E-01	2.192E-01	3.183E-01	4.016E-01	5.334E-01	7.723E-01
5.50	4.211E-02	6.012E-02	9.326E-02	1.215E-01	1.659E-01	2.436E-01	3.083E-01	4.096E-01	5.910E-01
6.00	3.070E-02	4.432E-02	6.995E-02	9.219E-02	1.275E-01	1.897E-01	2.414E-01	3.218E-01	4.640E-01
6.50	2.283E-02	3.324E-02	5.321E-02	7.087E-02	9.927E-02	1.498E-01	1.919E-01	2.573E-01	3.718E-01
7.00	1.729E-02	2.534E-02	4.103E-02	5.513E-02	7.813E-02	1.196E-01	1.544E-01	2.085E-01	3.028E-01
7.50	1.332E-02	1.961E-02	3.205E-02	4.338E-02	6.212E-02	9.639E-02	1.254E-01	1.708E-01	2.497E-01
8.00	1.043E-02	1.540E-02	2.533E-02	3.450E-02	4.985E-02	7.833E-02	1.028E-01	1.411E-01	2.079E-01
8.50	8.276E-03	1.225E-02	2.025E-02	2.772E-02	4.036E-02	6.415E-02	8.478E-02	1.175E-01	1.746E-01
9.00	6.655E-03	9.859E-03	1.637E-02	2.250E-02	3.296E-02	5.291E-02	7.043E-02	9.840E-02	1.477E-01
9.50	5.414E-03	8.026E-03	1.336E-02	1.842E-02	2.713E-02	4.394E-02	5.887E-02	8.292E-02	1.257E-01
10.00	4.451E-03	6.601E-03	1.101E-02	1.522E-02	2.251E-02	3.673E-02	4.950E-02	7.026E-02	1.075E-01
12.50	1.903E-03	2.822E-03	4.722E-03	6.562E-03	9.817E-03	1.640E-02	2.256E-02	3.296E-02	5.249E-02
15.00	9.525E-04	1.413E-03	2.364E-03	3.288E-03	4.934E-03	8.322E-03	1.156E-02	1.716E-02	2.807E-02
17.50	5.304E-04	7.878E-04	1.320E-03	1.836E-03	2.757E-03	4.666E-03	6.510E-03	9.749E-03	1.621E-02
20.00	3.189E-04	4.749E-04	7.971E-04	1.110E-03	1.667E-03	2.826E-03	3.952E-03	5.945E-03	9.978E-03
22.50	2.033E-04	3.036E-04	5.110E-04	7.121E-04	1.071E-03	1.818E-03	2.545E-03	3.838E-03	6.483E-03
25.00	1.358E-04	2.033E-04	3.432E-04	4.790E-04	7.215E-04	1.227E-03	1.719E-03	2.596E-03	4.403E-03
27.50	9.416E-05	1.413E-04	2.393E-04	3.346E-04	5.049E-04	8.599E-04	1.206E-03	1.824E-03	3.103E-03
30.00	6.738E-05	1.014E-04	1.721E-04	2.411E-04	3.646E-04	6.221E-04	8.734E-04	1.323E-03	2.256E-03
32.50	4.951E-05	7.463E-05	1.271E-04	1.783E-04	2.702E-04	4.622E-04	6.496E-04	9.852E-04	1.684E-03
35.00	3.723E-05	5.621E-05	9.597E-05	1.349E-04	2.048E-04	3.511E-04	4.941E-04	7.505E-04	1.285E-03
37.50	2.855E-05	4.317E-05	7.389E-05	1.040E-04	1.583E-04	2.720E-04	3.832E-04	5.830E-04	1.001E-03
40.00	2.228E-05	3.374E-05	5.788E-05	8.160E-05	1.244E-04	2.143E-04	3.023E-04	4.606E-04	7.922E-04
42.50	1.766E-05	2.678E-05	4.602E-05	6.498E-05	9.922E-05	1.713E-04	2.421E-04	3.695E-04	6.367E-04
45.00	1.418E-05	2.154E-05	3.710E-05	5.245E-05	8.022E-05	1.388E-04	1.964E-04	3.003E-04	5.186E-04
47.50	1.154E-05	1.755E-05	3.027E-05	4.285E-05	6.564E-05	1.138E-04	1.613E-04	2.470E-04	4.274E-04
50.00	9.492E-06	1.445E-05	2.497E-05	3.539E-05	5.430E-05	9.436E-05	1.339E-04	2.054E-04	3.561E-04
55.00	6.614E-06	1.010E-05	1.750E-05	2.485E-05	3.824E-05	6.671E-05	9.492E-05	1.461E-04	2.543E-04
60.00	4.769E-06	7.297E-06	1.269E-05	1.805E-05	2.785E-05	4.876E-05	6.954E-05	1.074E-04	1.877E-04
65.00	3.539E-06	5.428E-06	9.467E-06	1.350E-05	2.087E-05	3.666E-05	5.241E-05	8.115E-05	1.424E-04
70.00	2.693E-06	4.141E-06	7.244E-06	1.035E-05	1.604E-05	2.826E-05	4.048E-05	6.285E-05	1.107E-04
75.00	2.095E-06	3.229E-06	5.667E-06	8.110E-06	1.259E-05	2.226E-05	3.195E-05	4.973E-05	8.790E-05
80.00	1.661E-06	2.568E-06	4.521E-06	6.482E-06	1.009E-05	1.788E-05	2.571E-05	4.011E-05	7.114E-05
85.00	1.341E-06	2.079E-06	3.671E-06	5.273E-06	8.225E-06	1.461E-05	2.105E-05	3.292E-05	5.857E-05
90.00	1.099E-06	1.710E-06	3.030E-06	4.360E-06	6.814E-06	1.214E-05	1.751E-05	2.745E-05	4.898E-05
95.00	9.147E-07	1.427E-06	2.537E-06	3.658E-06	5.729E-06	1.023E-05	1.479E-05	2.322E-05	4.155E-05
100.00	7.714E-07	1.207E-06	2.154E-06	3.112E-06	4.884E-06	8.742E-06	1.265E-05	1.990E-05	3.571E-05
105.00	6.589E-07	1.035E-06	1.852E-06	2.681E-06	4.216E-06	7.565E-06	1.096E-05	1.728E-05	3.108E-05
110.00	5.696E-07	8.973E-07	1.612E-06	2.337E-06	3.683E-06	6.625E-06	9.615E-06	1.518E-05	2.736E-05
115.00	4.979E-07	7.870E-07	1.419E-06	2.061E-06	3.255E-06	5.867E-06	8.526E-06	1.348E-05	2.435E-05
120.00	4.401E-07	6.979E-07	1.263E-06	1.838E-06	2.907E-06	5.252E-06	7.642E-06	1.210E-05	2.190E-05
125.00	3.931E-07	6.255E-07	1.136E-06	1.655E-06	2.624E-06	4.749E-06	6.919E-06	1.097E-05	1.990E-05
130.00	3.548E-07	5.663E-07	1.032E-06	1.506E-06	2.392E-06	4.338E-06	6.326E-06	1.004E-05	1.824E-05
135.00	3.235E-07	5.179E-07	9.463E-07	1.384E-06	2.201E-06	3.999E-06	5.838E-06	9.279E-06	1.688E-05
140.00	2.978E-07	4.782E-07	8.764E-07	1.284E-06	2.045E-06	3.721E-06	5.437E-06	8.652E-06	1.576E-05
145.00	2.769E-07	4.459E-07	8.193E-07	1.202E-06	1.917E-06	3.494E-06	5.109E-06	8.138E-06	1.485E-05
150.00	2.600E-07	4.197E-07	7.730E-07	1.135E-06	1.813E-06	3.309E-06	4.843E-06	7.720E-06	1.410E-05
155.00	2.466E-07	3.988E-07	7.360E-07	1.082E-06	1.730E-06	3.162E-06	4.630E-06	7.386E-06	1.350E-05
160.00	2.361E-07	3.825E-07	7.072E-07	1.041E-06	1.665E-06	3.046E-06	4.463E-06	7.124E-06	1.303E-05
165.00	2.282E-07	3.702E-07	6.856E-07	1.010E-06	1.617E-06	2.960E-06	4.338E-06	6.928E-06	1.268E-05
170.00	2.227E-07	3.618E-07	6.705E-07	9.879E-07	1.583E-06	2.899E-06	4.251E-06	6.791E-06	1.244E-05
175.00	2.196E-07	3.569E-07	6.617E-07	9.751E-07	1.563E-06	2.864E-06	4.200E-06	6.711E-06	1.229E-05
180.00	2.187E-07	3.554E-07	6.587E-07	9.708E-07	1.557E-06	2.853E-06	4.184E-06	6.685E-06	1.225E-05
TOTAL	2.941E-02	3.494E-02	4.411E-02	5.141E-02	6.227E-02	8.016E-02	9.428E-02	1.151E-01	1.491E-01
TRANS	5.288E-05	7.775E-05	1.285E-04	1.771E-04	2.627E-04	4.375E-04	6.048E-04	8.985E-04	1.495E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 14

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	3.262E+01	3.196E+01	3.108E+01	3.050E+01	2.975E+01	2.871E+01	2.800E+01	2.710E+01	2.403E+01
0.25	3.201E+01	3.148E+01	3.073E+01	3.021E+01	2.952E+01	2.854E+01	2.787E+01	2.699E+01	2.398E+01
0.50	3.026E+01	3.009E+01	2.970E+01	2.935E+01	2.884E+01	2.804E+01	2.746E+01	2.667E+01	2.383E+01
0.75	2.764E+01	2.795E+01	2.808E+01	2.800E+01	2.777E+01	2.724E+01	2.679E+01	2.615E+01	2.358E+01
1.00	2.448E+01	2.531E+01	2.602E+01	2.626E+01	2.635E+01	2.617E+01	2.590E+01	2.544E+01	2.325E+01
1.50	1.783E+01	1.946E+01	2.118E+01	2.203E+01	2.281E+01	2.341E+01	2.357E+01	2.355E+01	2.231E+01
2.00	1.218E+01	1.406E+01	1.631E+01	1.757E+01	1.889E+01	2.019E+01	2.077E+01	2.122E+01	2.109E+01
2.50	8.081E+00	9.810E+00	1.210E+01	1.351E+01	1.512E+01	1.690E+01	1.781E+01	1.867E+01	1.965E+01
3.00	5.354E+00	6.767E+00	8.803E+00	1.016E+01	1.181E+01	1.381E+01	1.493E+01	1.609E+01	1.806E+01
3.50	3.607E+00	4.690E+00	6.365E+00	7.557E+00	9.097E+00	1.110E+01	1.230E+01	1.365E+01	1.640E+01
4.00	2.496E+00	3.304E+00	4.624E+00	5.615E+00	6.960E+00	8.824E+00	1.022E+01	1.142E+01	1.473E+01
4.50	1.783E+00	2.381E+00	3.399E+00	4.197E+00	5.326E+00	6.980E+00	8.097E+00	9.475E+00	1.311E+01
5.00	1.315E+00	1.760E+00	2.541E+00	3.172E+00	4.096E+00	5.516E+00	6.521E+00	7.812E+00	1.157E+01
5.50	9.987E-01	1.335E+00	1.935E+00	2.432E+00	3.179E+00	4.372E+00	5.250E+00	6.422E+00	1.015E+01
6.00	7.789E-01	1.038E+00	1.504E+00	1.896E+00	2.496E+00	3.486E+00	4.239E+00	5.276E+00	8.854E+00
6.50	6.212E-01	8.248E-01	1.192E+00	1.503E+00	1.986E+00	2.801E+00	3.438E+00	4.342E+00	7.692E+00
7.00	5.049E-01	6.682E-01	9.613E-01	1.211E+00	1.601E+00	2.272E+00	2.808E+00	3.585E+00	6.664E+00
7.50	4.168E-01	5.503E-01	7.883E-01	9.905E-01	1.309E+00	1.862E+00	2.311E+00	2.975E+00	5.763E+00
8.00	3.485E-01	4.595E-01	6.559E-01	8.221E-01	1.084E+00	1.542E+00	1.918E+00	2.484E+00	4.981E+00
8.50	2.944E-01	3.883E-01	5.527E-01	6.910E-01	9.083E-01	1.290E+00	1.606E+00	2.087E+00	4.306E+00
9.00	2.509E-01	3.313E-01	4.709E-01	5.875E-01	7.700E-01	1.091E+00	1.357E+00	1.767E+00	3.726E+00
9.50	2.154E-01	2.851E-01	4.049E-01	5.044E-01	6.594E-01	9.310E-01	1.157E+00	1.506E+00	3.230E+00
10.00	1.861E-01	2.470E-01	3.511E-01	4.369E-01	5.699E-01	8.019E-01	9.951E-01	1.294E+00	2.807E+00
12.50	9.583E-02	1.300E-01	1.877E-01	2.343E-01	3.047E-01	4.239E-01	5.214E-01	6.711E-01	1.465E+00
15.00	5.358E-02	7.442E-02	1.102E-01	1.391E-01	1.824E-01	2.541E-01	3.114E-01	3.980E-01	8.471E-01
17.50	3.193E-02	4.524E-02	6.868E-02	8.786E-02	1.167E-01	1.642E-01	2.017E-01	2.574E-01	5.376E-01
20.00	2.010E-02	2.890E-02	4.480E-02	5.806E-02	7.819E-02	1.115E-01	1.376E-01	1.763E-01	3.659E-01
22.50	1.326E-02	1.929E-02	3.040E-02	3.984E-02	5.434E-02	7.855E-02	9.760E-02	1.256E-01	2.614E-01
25.00	9.109E-03	1.337E-02	2.136E-02	2.824E-02	3.896E-02	5.705E-02	7.136E-02	9.236E-02	1.934E-01
27.50	6.475E-03	9.568E-03	1.546E-02	2.061E-02	2.872E-02	4.255E-02	5.354E-02	6.970E-02	1.469E-01
30.00	4.739E-03	7.044E-03	1.150E-02	1.543E-02	2.169E-02	3.248E-02	4.111E-02	5.381E-02	1.140E-01
32.50	3.557E-03	5.311E-03	8.743E-03	1.181E-02	1.674E-02	2.532E-02	3.223E-02	4.241E-02	9.024E-02
35.00	2.727E-03	4.090E-03	6.783E-03	9.217E-03	1.316E-02	2.011E-02	2.574E-02	3.405E-02	7.268E-02
37.50	2.131E-03	3.207E-03	5.355E-03	7.316E-03	1.052E-02	1.624E-02	2.090E-02	2.779E-02	5.950E-02
40.00	1.693E-03	2.556E-03	4.293E-03	5.894E-03	8.539E-03	1.330E-02	1.722E-02	2.303E-02	4.946E-02
42.50	1.365E-03	2.066E-03	3.489E-03	4.812E-03	7.018E-03	1.104E-02	1.437E-02	1.934E-02	4.172E-02
45.00	1.115E-03	1.692E-03	2.871E-03	3.975E-03	5.834E-03	9.261E-03	1.213E-02	1.643E-02	3.567E-02
47.50	9.220E-04	1.402E-03	2.388E-03	3.319E-03	4.900E-03	7.849E-03	1.034E-02	1.411E-02	3.088E-02
50.00	7.703E-04	1.174E-03	2.007E-03	2.799E-03	4.154E-03	6.713E-03	8.900E-03	1.223E-02	2.704E-02
55.00	5.533E-04	8.461E-04	1.456E-03	2.043E-03	3.061E-03	5.127E-03	6.745E-03	9.409E-03	2.140E-02
60.00	4.106E-04	6.300E-04	1.090E-03	1.537E-03	2.322E-03	3.870E-03	5.252E-03	7.438E-03	1.754E-02
65.00	3.133E-04	4.824E-04	8.388E-04	1.187E-03	1.806E-03	3.049E-03	4.182E-03	6.012E-03	1.479E-02
70.00	2.449E-04	3.783E-04	6.608E-04	9.388E-04	1.437E-03	2.453E-03	3.397E-03	4.954E-03	1.278E-02
75.00	1.956E-04	3.031E-04	5.317E-04	7.579E-04	1.166E-03	2.010E-03	2.808E-03	4.151E-03	1.126E-02
80.00	1.591E-04	2.474E-04	4.358E-04	6.232E-04	9.631E-04	1.675E-03	2.359E-03	3.531E-03	1.009E-02
85.00	1.317E-04	2.053E-04	3.633E-04	5.210E-04	8.087E-04	1.418E-03	2.011E-03	3.044E-03	9.168E-03
90.00	1.107E-04	1.731E-04	3.075E-04	4.423E-04	6.892E-04	1.217E-03	1.737E-03	2.658E-03	8.433E-03
95.00	9.429E-05	1.479E-04	2.639E-04	3.806E-04	5.955E-04	1.058E-03	1.519E-03	2.347E-03	7.840E-03
100.00	8.142E-05	1.281E-04	2.294E-04	3.317E-04	5.209E-04	9.315E-04	1.344E-03	2.095E-03	7.356E-03
105.00	7.113E-05	1.122E-04	2.017E-04	2.926E-04	4.611E-04	8.292E-04	1.202E-03	1.889E-03	6.957E-03
110.00	6.288E-05	9.941E-05	1.794E-04	2.609E-04	4.125E-04	7.458E-04	1.086E-03	1.718E-03	6.627E-03
115.00	5.616E-05	8.900E-05	1.612E-04	2.350E-04	3.728E-04	6.774E-04	9.904E-04	1.577E-03	6.351E-03
120.00	5.068E-05	8.049E-05	1.463E-04	2.137E-04	3.402E-04	6.210E-04	9.112E-04	1.460E-03	6.120E-03
125.00	4.618E-05	7.350E-05	1.340E-04	1.962E-04	3.132E-04	5.742E-04	8.454E-04	1.362E-03	5.926E-03
130.00	4.246E-05	6.770E-05	1.238E-04	1.816E-04	2.908E-04	5.354E-04	7.906E-04	1.279E-03	5.761E-03
135.00	3.940E-05	6.293E-05	1.153E-04	1.696E-04	2.722E-04	5.031E-04	7.450E-04	1.211E-03	5.624E-03
140.00	3.686E-05	5.897E-05	1.084E-04	1.596E-04	2.568E-04	4.762E-04	7.070E-04	1.153E-03	5.507E-03
145.00	3.479E-05	5.574E-05	1.026E-04	1.514E-04	2.441E-04	4.541E-04	6.756E-04	1.105E-03	5.410E-03
150.00	3.310E-05	5.308E-05	9.792E-05	1.446E-04	2.337E-04	4.359E-04	6.498E-04	1.066E-03	5.330E-03
155.00	3.174E-05	5.095E-05	9.414E-05	1.392E-04	2.253E-04	4.213E-04	6.290E-04	1.034E-03	5.264E-03
160.00	3.068E-05	4.929E-05	9.119E-05	1.350E-04	2.187E-04	4.097E-04	6.126E-04	1.010E-03	5.213E-03
165.00	2.987E-05	4.803E-05	8.895E-05	1.318E-04	2.138E-04	4.011E-04	6.003E-04	9.905E-04	5.173E-03
170.00	2.933E-05	4.718E-05	8.741E-05	1.295E-04	2.103E-04	3.950E-04	5.917E-04	9.775E-04	5.146E-03
175.00	2.898E-05	4.663E-05	8.647E-05	1.282E-04	2.083E-04	3.915E-04	5.866E-04	9.695E-04	5.129E-03
180.00	2.891E-05	4.652E-05	8.621E-05	1.278E-04	2.076E-04	3.902E-04	5.850E-04	9.674E-04	5.126E-03
TOTAL	2.142E-01	2.609E-01	3.349E-01	3.911E-01	4.712E-01	5.950E-01	6.870E-01	8.156E-01	1.349E+00
TRANS	3.048E-03	4.494E-03	7.374E-03	1.005E-02	1.462E-02	2.351E-02	3.159E-02	4.507E-02	1.297E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 18

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	1.827E+02	1.387E+02	9.901E+01	8.152E+01	6.601E+01	5.234E+01	4.611E+01	4.022E+01	3.467E+01
0.25	5.432E+01	5.309E+01	5.071E+01	4.839E+01	4.467E+01	3.950E+01	3.654E+01	3.350E+01	3.038E+01
0.50	8.568E+00	1.068E+01	1.379E+01	1.572E+01	1.768E+01	1.947E+01	2.023E+01	2.085E+01	2.127E+01
0.75	2.275E+00	2.952E+00	4.099E+00	5.007E+00	6.312E+00	8.248E+00	9.540E+00	1.107E+01	1.288E+01
1.00	9.071E-01	1.154E+00	1.587E+00	1.959E+00	2.563E+00	3.621E+00	4.455E+00	5.619E+00	7.302E+00
1.50	2.364E-01	3.062E-01	4.277E-01	5.289E-01	6.872E-01	9.728E-01	1.225E+00	1.641E+00	2.398E+00
2.00	8.316E-02	1.133E-01	1.667E-01	2.100E-01	2.741E-01	3.838E-01	4.790E-01	6.393E-01	9.466E-01
2.50	3.557E-02	4.993E-02	7.627E-02	9.828E-02	1.315E-01	1.881E-01	2.357E-01	3.123E-01	4.559E-01
3.00	1.760E-02	2.497E-02	3.886E-02	5.092E-02	6.993E-02	1.033E-01	1.312E-01	1.749E-01	2.541E-01
3.50	9.695E-03	1.378E-02	2.160E-02	2.859E-02	4.000E-02	6.081E-02	7.851E-02	1.062E-01	1.557E-01
4.00	5.789E-03	8.219E-03	1.291E-02	1.717E-02	2.430E-02	3.769E-02	4.936E-02	6.793E-02	1.013E-01
4.50	3.674E-03	5.209E-03	8.181E-03	1.091E-02	1.553E-02	2.439E-02	3.230E-02	4.514E-02	6.864E-02
5.00	2.446E-03	3.465E-03	5.442E-03	7.262E-03	1.036E-02	1.640E-02	2.187E-02	3.096E-02	4.793E-02
5.50	1.692E-03	2.398E-03	3.766E-03	5.026E-03	7.178E-03	1.140E-02	1.528E-02	2.183E-02	3.431E-02
6.00	1.208E-03	1.713E-03	2.692E-03	3.593E-03	5.132E-03	8.160E-03	1.097E-02	1.578E-02	2.509E-02
6.50	8.855E-04	1.257E-03	1.978E-03	2.640E-03	3.769E-03	5.994E-03	8.073E-03	1.166E-02	1.870E-02
7.00	6.637E-04	9.435E-04	1.486E-03	1.984E-03	2.832E-03	4.504E-03	6.071E-03	8.790E-03	1.419E-02
7.50	5.072E-04	7.221E-04	1.139E-03	1.522E-03	2.171E-03	3.452E-03	4.654E-03	6.749E-03	1.094E-02
8.00	3.942E-04	5.620E-04	8.880E-04	1.187E-03	1.694E-03	2.692E-03	3.630E-03	5.268E-03	8.564E-03
8.50	3.109E-04	4.440E-04	7.026E-04	9.395E-04	1.341E-03	2.132E-03	2.874E-03	4.172E-03	6.795E-03
9.00	2.485E-04	3.554E-04	5.632E-04	7.536E-04	1.076E-03	1.711E-03	2.307E-03	3.349E-03	5.459E-03
9.50	2.010E-04	2.878E-04	4.567E-04	6.116E-04	8.739E-04	1.390E-03	1.874E-03	2.720E-03	4.436E-03
10.00	1.643E-04	2.355E-04	3.743E-04	5.015E-04	7.172E-04	1.141E-03	1.539E-03	2.233E-03	3.643E-03
12.50	6.825E-05	9.820E-05	1.569E-04	2.109E-04	3.028E-04	4.838E-04	6.532E-04	9.482E-04	1.547E-03
15.00	3.324E-05	4.793E-05	7.682E-05	1.035E-04	1.492E-04	2.395E-04	3.241E-04	4.713E-04	7.698E-04
17.50	1.808E-05	2.611E-05	4.193E-05	5.662E-05	8.180E-05	1.318E-04	1.788E-04	2.607E-04	4.269E-04
20.00	1.067E-05	1.541E-05	2.479E-05	3.351E-05	4.852E-05	7.841E-05	1.066E-04	1.559E-04	2.560E-04
22.50	6.697E-06	9.683E-06	1.559E-05	2.109E-05	3.058E-05	4.955E-05	6.748E-05	9.890E-05	1.629E-04
25.00	4.416E-06	6.389E-06	1.029E-05	1.394E-05	2.023E-05	3.284E-05	4.480E-05	6.579E-05	1.087E-04
27.50	3.029E-06	4.384E-06	7.069E-06	9.578E-06	1.392E-05	2.263E-05	3.090E-05	4.547E-05	7.532E-05
30.00	2.147E-06	3.109E-06	5.015E-06	6.799E-06	9.887E-06	1.610E-05	2.201E-05	3.244E-05	5.386E-05
32.50	1.564E-06	2.266E-06	3.658E-06	4.962E-06	7.221E-06	1.177E-05	1.612E-05	2.378E-05	3.957E-05
35.00	1.166E-06	1.690E-06	2.731E-06	3.706E-06	5.397E-06	8.812E-06	1.207E-05	1.784E-05	2.973E-05
37.50	8.868E-07	1.286E-06	2.079E-06	2.823E-06	4.115E-06	6.727E-06	9.224E-06	1.365E-05	2.279E-05
40.00	6.863E-07	9.957E-07	1.611E-06	2.189E-06	3.194E-06	5.227E-06	7.174E-06	1.063E-05	1.778E-05
42.50	5.393E-07	7.829E-07	1.268E-06	1.724E-06	2.517E-06	4.125E-06	5.666E-06	8.403E-06	1.408E-05
45.00	4.294E-07	6.238E-07	1.011E-06	1.375E-06	2.010E-06	3.299E-06	4.536E-06	6.735E-06	1.130E-05
47.50	3.460E-07	5.029E-07	8.159E-07	1.111E-06	1.625E-06	2.671E-06	3.676E-06	5.465E-06	9.188E-06
50.00	2.818E-07	4.099E-07	6.658E-07	9.071E-07	1.328E-06	2.186E-06	3.012E-06	4.484E-06	7.551E-06
55.00	1.921E-07	2.799E-07	4.557E-07	6.218E-07	9.128E-07	1.507E-06	2.081E-06	3.106E-06	5.249E-06
60.00	1.352E-07	1.973E-07	3.220E-07	4.403E-07	6.480E-07	1.074E-06	1.486E-06	2.225E-06	3.773E-06
65.00	9.753E-08	1.427E-07	2.336E-07	3.201E-07	4.725E-07	7.863E-07	1.091E-06	1.639E-06	2.790E-06
70.00	7.195E-08	1.055E-07	1.734E-07	2.381E-07	3.527E-07	5.896E-07	8.206E-07	1.236E-06	2.114E-06
75.00	5.402E-08	7.947E-08	1.311E-07	1.806E-07	2.684E-07	4.511E-07	6.299E-07	9.527E-07	1.637E-06
80.00	4.121E-08	6.082E-08	1.008E-07	1.393E-07	2.079E-07	3.514E-07	4.924E-07	7.478E-07	1.291E-06
85.00	3.185E-08	4.719E-08	7.859E-08	1.090E-07	1.635E-07	2.781E-07	3.912E-07	5.968E-07	1.036E-06
90.00	2.489E-08	3.704E-08	6.205E-08	8.640E-08	1.303E-07	2.232E-07	3.153E-07	4.835E-07	8.439E-07
95.00	1.965E-08	2.938E-08	4.956E-08	6.933E-08	1.052E-07	1.815E-07	2.577E-07	3.971E-07	6.974E-07
100.00	1.563E-08	2.351E-08	3.996E-08	5.618E-08	8.578E-08	1.493E-07	2.131E-07	3.303E-07	5.838E-07
105.00	1.252E-08	1.897E-08	3.253E-08	4.600E-08	7.074E-08	1.243E-07	1.783E-07	2.781E-07	4.948E-07
110.00	1.009E-08	1.540E-08	2.668E-08	3.797E-08	5.888E-08	1.045E-07	1.508E-07	2.367E-07	4.242E-07
115.00	8.176E-09	1.259E-08	2.206E-08	3.163E-08	4.949E-08	8.880E-08	1.289E-07	2.038E-07	3.678E-07
120.00	6.652E-09	1.035E-08	1.837E-08	2.656E-08	4.197E-08	7.619E-08	1.114E-07	1.772E-07	3.223E-07
125.00	5.431E-09	8.550E-09	1.541E-08	2.249E-08	3.591E-08	6.601E-08	9.717E-08	1.558E-07	2.855E-07
130.00	4.453E-09	7.107E-09	1.303E-08	1.921E-08	3.103E-08	5.779E-08	8.567E-08	1.383E-07	2.554E-07
135.00	3.660E-09	5.934E-09	1.109E-08	1.654E-08	2.705E-08	5.108E-08	7.628E-08	1.241E-07	2.309E-07
140.00	3.025E-09	4.992E-09	9.537E-09	1.439E-08	2.385E-08	4.566E-08	6.867E-08	1.125E-07	2.109E-07
145.00	2.510E-09	4.226E-09	8.270E-09	1.265E-08	2.125E-08	4.125E-08	6.248E-08	1.031E-07	1.947E-07
150.00	2.100E-09	3.615E-09	7.259E-09	1.126E-08	1.917E-08	3.772E-08	5.750E-08	9.552E-08	1.815E-07
155.00	1.776E-09	3.128E-09	6.454E-09	1.015E-08	1.753E-08	3.491E-08	5.354E-08	8.947E-08	1.710E-07
160.00	1.525E-09	2.749E-09	5.827E-09	9.296E-09	1.625E-08	3.274E-08	5.045E-08	8.475E-08	1.629E-07
165.00	1.340E-09	2.469E-09	5.366E-09	8.667E-09	1.532E-08	3.113E-08	4.817E-08	8.123E-08	1.567E-07
170.00	1.209E-09	2.269E-09	5.035E-09	8.219E-09	1.466E-08	3.000E-08	4.656E-08	7.877E-08	1.525E-07
175.00	1.137E-09	2.158E-09	4.854E-09	7.744E-09	1.430E-08	2.937E-08	4.564E-08	7.734E-08	1.500E-07
180.00	1.106E-09	2.110E-09	4.773E-09	7.864E-09	1.414E-08	2.911E-08	4.530E-08	7.685E-08	1.492E-07
TOTAL	1.301E-02	1.363E-02	1.462E-02	1.544E-02	1.675E-02	1.902E-02	2.088E-02	2.368E-02	2.836E-02
TRANS	2.210E-06	3.096E-06	4.792E-06	6.334E-06	8.941E-06	1.404E-05	1.878E-05	2.698E-05	4.342E-05

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 18

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	2.948E+01	2.749E+01	2.553E+01	2.454E+01	2.352E+01	2.244E+01	2.185E+01	2.119E+01	2.041E+01
0.25	2.711E+01	2.573E+01	2.430E+01	2.355E+01	2.277E+01	2.190E+01	2.141E+01	2.085E+01	2.016E+01
0.50	2.136E+01	2.127E+01	2.107E+01	2.091E+01	2.070E+01	2.039E+01	2.017E+01	1.988E+01	1.945E+01
0.75	1.499E+01	1.593E+01	1.688E+01	1.735E+01	1.780E+01	1.818E+01	1.832E+01	1.839E+01	1.833E+01
1.00	9.813E+00	1.115E+01	1.274E+01	1.364E+01	1.460E+01	1.560E+01	1.609E+01	1.655E+01	1.691E+01
1.50	3.932E+00	4.998E+00	6.556E+00	7.606E+00	8.908E+00	1.053E+01	1.148E+01	1.251E+01	1.360E+01
2.00	1.667E+00	2.259E+00	3.257E+00	4.025E+00	5.091E+00	6.617E+00	7.623E+00	8.842E+00	1.031E+01
2.50	8.059E-01	1.115E+00	1.684E+00	2.163E+00	2.889E+00	4.049E+00	4.894E+00	6.009E+00	7.501E+00
3.00	4.436E-01	6.126E-01	9.364E-01	1.225E+00	1.688E+00	2.491E+00	3.123E+00	4.021E+00	5.334E+00
3.50	2.701E-01	3.703E-01	5.639E-01	7.408E-01	1.034E+00	1.572E+00	2.021E+00	2.696E+00	3.760E+00
4.00	1.767E-01	2.412E-01	3.646E-01	4.779E-01	6.684E-01	1.028E+00	1.342E+00	1.833E+00	2.657E+00
4.50	1.215E-01	1.659E-01	2.496E-01	3.259E-01	4.541E-01	6.999E-01	9.196E-01	1.275E+00	1.897E+00
5.00	8.648E-02	1.187E-01	1.786E-01	2.324E-01	3.224E-01	4.952E-01	6.518E-01	9.097E-01	1.376E+00
5.50	6.317E-02	8.736E-02	1.321E-01	1.717E-01	2.373E-01	3.628E-01	4.770E-01	6.667E-01	1.018E+00
6.00	4.709E-02	6.574E-02	1.001E-01	1.303E-01	1.799E-01	2.740E-01	3.593E-01	5.015E-01	7.678E-01
6.50	3.571E-02	5.034E-02	7.738E-02	1.010E-01	1.396E-01	2.121E-01	2.775E-01	3.863E-01	5.913E-01
7.00	2.749E-02	3.911E-02	6.072E-02	7.961E-02	1.103E-01	1.677E-01	2.189E-01	3.039E-01	4.641E-01
7.50	2.145E-02	3.077E-02	4.826E-02	6.360E-02	8.852E-02	1.348E-01	1.758E-01	2.435E-01	3.709E-01
8.00	1.695E-02	2.448E-02	3.878E-02	5.138E-02	7.191E-02	1.099E-01	1.434E-01	1.982E-01	3.011E-01
8.50	1.354E-02	1.969E-02	3.146E-02	4.192E-02	5.902E-02	9.063E-02	1.183E-01	1.635E-01	2.479E-01
9.00	1.094E-02	1.598E-02	2.575E-02	3.450E-02	4.887E-02	7.547E-02	9.871E-02	1.365E-01	2.066E-01
9.50	8.926E-03	1.310E-02	2.124E-02	2.861E-02	4.078E-02	6.337E-02	8.308E-02	1.150E-01	1.741E-01
10.00	7.352E-03	1.082E-02	1.766E-02	2.390E-02	3.426E-02	5.359E-02	7.047E-02	9.776E-02	1.480E-01
12.50	3.139E-03	4.658E-03	7.746E-03	1.066E-02	1.564E-02	2.523E-02	3.375E-02	4.763E-02	7.304E-02
15.00	1.563E-03	2.324E-03	3.892E-03	5.398E-03	8.027E-03	1.323E-02	1.798E-02	2.585E-02	4.045E-02
17.50	8.679E-04	1.291E-03	2.168E-03	3.017E-03	4.516E-03	7.544E-03	1.037E-02	1.514E-02	2.415E-02
20.00	5.218E-04	7.771E-04	1.306E-03	1.821E-03	2.734E-03	4.604E-03	6.374E-03	9.412E-03	1.526E-02
22.50	3.332E-04	4.969E-04	8.363E-04	1.167E-03	1.756E-03	2.970E-03	4.133E-03	6.152E-03	1.010E-02
25.00	2.231E-04	3.332E-04	5.617E-04	7.841E-04	1.182E-03	2.006E-03	2.800E-03	4.192E-03	6.951E-03
27.50	1.552E-04	2.321E-04	3.920E-04	5.478E-04	8.264E-04	1.406E-03	1.968E-03	2.959E-03	4.946E-03
30.00	1.114E-04	1.669E-04	2.825E-04	3.951E-04	5.968E-04	1.018E-03	1.427E-03	2.153E-03	3.621E-03
32.50	8.208E-05	1.232E-04	2.090E-04	2.927E-04	4.426E-04	7.561E-04	1.062E-03	1.606E-03	2.716E-03
35.00	6.188E-05	9.308E-05	1.582E-04	2.218E-04	3.359E-04	5.748E-04	8.085E-04	1.225E-03	2.082E-03
37.50	4.757E-05	7.169E-05	1.221E-04	1.714E-04	2.600E-04	4.457E-04	6.276E-04	9.530E-04	1.625E-03
40.00	3.721E-05	5.616E-05	9.587E-05	1.348E-04	2.047E-04	3.516E-04	4.956E-04	7.538E-04	1.290E-03
42.50	2.955E-05	4.467E-05	7.642E-05	1.076E-04	1.636E-04	2.816E-04	3.973E-04	6.052E-04	1.039E-03
45.00	2.378E-05	3.601E-05	6.173E-05	8.700E-05	1.326E-04	2.285E-04	3.228E-04	4.925E-04	8.474E-04
47.50	1.938E-05	2.939E-05	5.047E-05	7.123E-05	1.087E-04	1.878E-04	2.655E-04	4.057E-04	6.996E-04
50.00	1.596E-05	2.424E-05	4.172E-05	5.895E-05	9.012E-05	1.559E-04	2.207E-04	3.377E-04	5.838E-04
55.00	1.115E-05	1.698E-05	2.934E-05	4.156E-05	6.372E-05	1.107E-04	1.570E-04	2.410E-04	4.182E-04
60.00	8.058E-06	1.230E-05	2.133E-05	3.028E-05	4.657E-05	8.118E-05	1.155E-04	1.777E-04	3.096E-04
65.00	5.989E-06	9.171E-06	1.595E-05	2.270E-05	3.501E-05	6.126E-05	8.733E-05	1.348E-04	2.357E-04
70.00	4.563E-06	7.007E-06	1.223E-05	1.744E-05	2.697E-05	4.736E-05	6.767E-05	1.047E-04	1.838E-04
75.00	3.553E-06	5.471E-06	9.584E-06	1.370E-05	2.124E-05	3.742E-05	5.359E-05	8.317E-05	1.465E-04
80.00	2.820E-06	4.355E-06	7.656E-06	1.097E-05	1.704E-05	3.013E-05	4.324E-05	6.730E-05	1.190E-04
85.00	2.277E-06	3.527E-06	6.223E-06	8.932E-06	1.392E-05	2.468E-05	3.550E-05	5.540E-05	9.831E-05
90.00	1.868E-06	2.903E-06	5.140E-06	7.392E-06	1.155E-05	2.055E-05	2.961E-05	4.633E-05	8.248E-05
95.00	1.554E-06	2.423E-06	4.307E-06	6.207E-06	9.718E-06	1.734E-05	2.505E-05	3.928E-05	7.018E-05
100.00	1.311E-06	2.051E-06	3.658E-06	5.284E-06	8.294E-06	1.485E-05	2.148E-05	3.377E-05	6.052E-05
105.00	1.120E-06	1.757E-06	3.146E-06	4.554E-06	7.164E-06	1.286E-05	1.864E-05	2.937E-05	5.281E-05
110.00	9.675E-07	1.524E-06	2.739E-06	3.973E-06	6.264E-06	1.128E-05	1.638E-05	2.586E-05	4.662E-05
115.00	8.456E-07	1.337E-06	2.411E-06	3.504E-06	5.538E-06	9.995E-06	1.454E-05	2.301E-05	4.160E-05
120.00	7.471E-07	1.185E-06	2.146E-06	3.125E-06	4.949E-06	8.955E-06	1.304E-05	2.068E-05	3.750E-05
125.00	6.670E-07	1.062E-06	1.929E-06	2.815E-06	4.469E-06	8.106E-06	1.183E-05	1.878E-05	3.414E-05
130.00	6.017E-07	9.609E-07	1.752E-06	2.561E-06	4.073E-06	7.405E-06	1.082E-05	1.721E-05	3.136E-05
135.00	5.482E-07	8.783E-07	1.607E-06	2.354E-06	3.751E-06	6.835E-06	9.997E-06	1.593E-05	2.908E-05
140.00	5.045E-07	8.108E-07	1.488E-06	2.183E-06	3.484E-06	6.359E-06	9.312E-06	1.486E-05	2.719E-05
145.00	4.689E-07	7.557E-07	1.391E-06	2.044E-06	3.267E-06	5.976E-06	8.761E-06	1.400E-05	2.564E-05
150.00	4.400E-07	7.110E-07	1.312E-06	1.930E-06	3.090E-06	5.660E-06	8.306E-06	1.329E-05	2.438E-05
155.00	4.170E-07	6.754E-07	1.249E-06	1.840E-06	2.949E-06	5.409E-06	7.944E-06	1.272E-05	2.337E-05
160.00	3.991E-07	6.476E-07	1.200E-06	1.769E-06	2.840E-06	5.215E-06	7.663E-06	1.228E-05	2.258E-05
165.00	3.857E-07	6.268E-07	1.163E-06	1.716E-06	2.755E-06	5.064E-06	7.445E-06	1.194E-05	2.198E-05
170.00	3.764E-07	6.123E-07	1.138E-06	1.680E-06	2.700E-06	4.967E-06	7.305E-06	1.172E-05	2.157E-05
175.00	3.710E-07	6.039E-07	1.123E-06	1.657E-06	2.663E-06	4.899E-06	7.207E-06	1.157E-05	2.132E-05
180.00	3.691E-07	6.009E-07	1.118E-06	1.652E-06	2.658E-06	4.894E-06	7.200E-06	1.155E-05	2.126E-05
TOTAL	3.774E-02	4.474E-02	5.629E-02	6.543E-02	7.894E-02	1.010E-01	1.182E-01	1.433E-01	1.836E-01
TRANS	8.623E-05	1.266E-04	2.087E-04	2.871E-04	4.247E-04	7.045E-04	9.708E-04	1.436E-03	2.373E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 18

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	1.934E+01	1.873E+01	1.792E+01	1.738E+01	1.669E+01	1.576E+01	1.514E+01	1.437E+01	1.189E+01
0.25	1.918E+01	1.861E+01	1.783E+01	1.731E+01	1.663E+01	1.572E+01	1.511E+01	1.435E+01	1.188E+01
0.50	1.872E+01	1.825E+01	1.757E+01	1.709E+01	1.647E+01	1.559E+01	1.501E+01	1.427E+01	1.185E+01
0.75	1.798E+01	1.767E+01	1.714E+01	1.674E+01	1.619E+01	1.540E+01	1.485E+01	1.415E+01	1.179E+01
1.00	1.702E+01	1.689E+01	1.656E+01	1.627E+01	1.582E+01	1.512E+01	1.463E+01	1.397E+01	1.172E+01
1.50	1.463E+01	1.493E+01	1.506E+01	1.501E+01	1.481E+01	1.438E+01	1.401E+01	1.349E+01	1.150E+01
2.00	1.199E+01	1.267E+01	1.325E+01	1.345E+01	1.354E+01	1.341E+01	1.321E+01	1.286E+01	1.120E+01
2.50	9.474E+00	1.039E+01	1.133E+01	1.176E+01	1.212E+01	1.230E+01	1.227E+01	1.209E+01	1.084E+01
3.00	7.292E+00	8.315E+00	9.468E+00	1.007E+01	1.064E+01	1.110E+01	1.123E+01	1.124E+01	1.041E+01
3.50	5.520E+00	6.532E+00	7.767E+00	8.464E+00	9.187E+00	9.873E+00	1.015E+01	1.034E+01	9.931E+00
4.00	4.144E+00	5.072E+00	6.286E+00	7.019E+00	7.829E+00	8.676E+00	9.075E+00	9.408E+00	9.415E+00
4.50	3.107E+00	3.917E+00	5.042E+00	5.761E+00	6.600E+00	7.544E+00	8.030E+00	8.484E+00	8.871E+00
5.00	2.339E+00	3.023E+00	4.024E+00	4.697E+00	5.520E+00	6.504E+00	7.045E+00	7.590E+00	8.310E+00
5.50	1.775E+00	2.340E+00	3.206E+00	3.815E+00	4.590E+00	5.569E+00	6.137E+00	6.742E+00	7.743E+00
6.00	1.363E+00	1.834E+00	2.558E+00	3.066E+00	3.804E+00	4.744E+00	5.316E+00	5.953E+00	7.179E+00
6.50	1.060E+00	1.433E+00	2.049E+00	2.515E+00	3.149E+00	4.026E+00	4.584E+00	5.231E+00	6.624E+00
7.00	8.357E-01	1.138E+00	1.651E+00	2.049E+00	2.608E+00	3.411E+00	3.941E+00	4.578E+00	6.087E+00
7.50	6.683E-01	9.140E-01	1.339E+00	1.678E+00	2.164E+00	2.887E+00	3.382E+00	3.995E+00	5.571E+00
8.00	5.418E-01	7.425E-01	1.096E+00	1.382E+00	1.802E+00	2.445E+00	2.899E+00	3.478E+00	5.082E+00
8.50	4.450E-01	6.101E-01	9.040E-01	1.146E+00	1.507E+00	2.075E+00	2.486E+00	3.025E+00	4.622E+00
9.00	3.698E-01	5.069E-01	7.527E-01	9.573E-01	1.266E+00	1.765E+00	2.134E+00	2.630E+00	4.192E+00
9.50	3.108E-01	4.255E-01	6.324E-01	8.059E-01	1.071E+00	1.506E+00	1.835E+00	2.287E+00	3.794E+00
10.00	2.637E-01	3.607E-01	5.359E-01	6.837E-01	9.112E-01	1.290E+00	1.582E+00	1.991E+00	3.427E+00
12.50	1.302E-01	1.774E-01	2.624E-01	3.345E-01	4.469E-01	6.406E-01	7.973E-01	1.030E+00	2.032E+00
15.00	7.319E-02	1.000E-01	1.479E-01	1.884E-01	2.514E-01	3.600E-01	4.482E-01	5.813E-01	1.214E+00
17.50	4.462E-02	6.141E-02	9.125E-02	1.164E-01	1.557E-01	2.231E-01	2.778E-01	3.598E-01	7.568E-01
20.00	2.881E-02	4.001E-02	5.988E-02	7.663E-02	1.028E-01	1.480E-01	1.848E-01	2.398E-01	5.009E-01
22.50	1.945E-02	2.727E-02	4.116E-02	5.286E-02	7.114E-02	1.030E-01	1.291E-01	1.684E-01	3.521E-01
25.00	1.362E-02	1.927E-02	2.935E-02	3.784E-02	5.109E-02	7.425E-02	9.342E-02	1.226E-01	2.601E-01
27.50	9.839E-03	1.404E-02	2.158E-02	2.794E-02	3.785E-02	5.516E-02	6.957E-02	9.175E-02	1.991E-01
30.00	7.298E-03	1.049E-02	1.628E-02	2.117E-02	2.879E-02	4.204E-02	5.309E-02	7.024E-02	1.562E-01
32.50	5.538E-03	8.022E-03	1.257E-02	1.642E-02	2.241E-02	3.279E-02	4.143E-02	5.487E-02	1.247E-01
35.00	4.287E-03	6.253E-03	9.884E-03	1.298E-02	1.779E-02	2.611E-02	3.298E-02	4.368E-02	1.008E-01
37.50	3.377E-03	4.957E-03	7.905E-03	1.044E-02	1.438E-02	2.116E-02	2.674E-02	3.538E-02	8.245E-02
40.00	2.701E-03	3.989E-03	6.417E-03	8.517E-03	1.180E-02	1.744E-02	2.204E-02	2.913E-02	6.812E-02
42.50	2.191E-03	3.252E-03	5.278E-03	7.043E-03	9.817E-03	1.458E-02	1.844E-02	2.435E-02	5.684E-02
45.00	1.798E-03	2.683E-03	4.389E-03	5.890E-03	8.262E-03	1.234E-02	1.564E-02	2.064E-02	4.792E-02
47.50	1.493E-03	2.237E-03	3.688E-03	4.976E-03	7.026E-03	1.057E-02	1.342E-02	1.771E-02	4.080E-02
50.00	1.252E-03	1.884E-03	3.129E-03	4.244E-03	6.032E-03	9.139E-03	1.164E-02	1.538E-02	3.510E-02
55.00	9.043E-04	1.371E-03	2.306E-03	3.160E-03	4.553E-03	7.012E-03	9.005E-03	1.196E-02	2.677E-02
60.00	6.742E-04	1.028E-03	1.750E-03	2.420E-03	3.533E-03	5.537E-03	7.179E-03	9.612E-03	2.122E-02
65.00	5.165E-04	7.918E-04	1.360E-03	1.897E-03	2.804E-03	4.474E-03	5.866E-03	7.941E-03	1.745E-02
70.00	4.053E-04	6.242E-04	1.082E-03	1.520E-03	2.271E-03	3.688E-03	4.892E-03	6.710E-03	1.483E-02
75.00	3.248E-04	5.022E-04	8.764E-04	1.239E-03	1.872E-03	3.092E-03	4.150E-03	5.776E-03	1.299E-02
80.00	2.652E-04	4.116E-04	7.230E-04	1.028E-03	1.568E-03	2.631E-03	3.575E-03	5.052E-03	1.169E-02
85.00	2.203E-04	3.431E-04	6.061E-04	8.665E-04	1.332E-03	2.270E-03	3.120E-03	4.480E-03	1.077E-02
90.00	1.858E-04	2.903E-04	5.156E-04	7.405E-04	1.147E-03	1.982E-03	2.756E-03	4.020E-03	1.013E-02
95.00	1.589E-04	2.491E-04	4.447E-04	6.413E-04	1.000E-03	1.751E-03	2.461E-03	3.646E-03	9.700E-03
100.00	1.377E-04	2.165E-04	3.883E-04	5.621E-04	8.824E-04	1.563E-03	2.219E-03	3.339E-03	9.433E-03
105.00	1.208E-04	1.905E-04	3.431E-04	4.984E-04	7.867E-04	1.409E-03	2.019E-03	3.084E-03	9.291E-03
110.00	1.071E-04	1.694E-04	3.064E-04	4.466E-04	7.086E-04	1.281E-03	1.853E-03	2.871E-03	9.247E-03
115.00	9.601E-05	1.523E-04	2.765E-04	4.042E-04	6.443E-04	1.176E-03	1.714E-03	2.692E-03	9.280E-03
120.00	8.692E-05	1.382E-04	2.520E-04	3.693E-04	5.912E-04	1.087E-03	1.598E-03	2.541E-03	9.370E-03
125.00	7.943E-05	1.266E-04	2.317E-04	3.405E-04	5.471E-04	1.013E-03	1.499E-03	2.412E-03	9.503E-03
130.00	7.326E-05	1.171E-04	2.149E-04	3.165E-04	5.104E-04	9.514E-04	1.416E-03	2.303E-03	9.666E-03
135.00	6.814E-05	1.091E-04	2.009E-04	2.967E-04	4.799E-04	8.997E-04	1.346E-03	2.211E-03	9.848E-03
140.00	6.393E-05	1.026E-04	1.894E-04	2.802E-04	4.544E-04	8.561E-04	1.287E-03	2.133E-03	1.004E-02
145.00	6.045E-05	9.718E-05	1.799E-04	2.666E-04	4.335E-04	8.202E-04	1.238E-03	2.068E-03	1.023E-02
150.00	5.762E-05	9.278E-05	1.721E-04	2.555E-04	4.163E-04	7.905E-04	1.198E-03	2.013E-03	1.041E-02
155.00	5.535E-05	8.923E-05	1.659E-04	2.465E-04	4.024E-04	7.665E-04	1.165E-03	1.969E-03	1.057E-02
160.00	5.356E-05	8.645E-05	1.610E-04	2.395E-04	3.915E-04	7.476E-04	1.139E-03	1.934E-03	1.072E-02
165.00	5.223E-05	8.437E-05	1.573E-04	2.342E-04	3.832E-04	7.332E-04	1.119E-03	1.907E-03	1.083E-02
170.00	5.128E-05	8.289E-05	1.547E-04	2.305E-04	3.776E-04	7.234E-04	1.105E-03	1.888E-03	1.092E-02
175.00	5.074E-05	8.206E-05	1.532E-04	2.283E-04	3.741E-04	7.171E-04	1.097E-03	1.877E-03	1.097E-02
180.00	5.054E-05	8.172E-05	1.527E-04	2.277E-04	3.733E-04	7.160E-04	1.095E-03	1.874E-03	1.099E-02
TOTAL	2.586E-01	3.109E-01	3.915E-01	4.513E-01	5.343E-01	6.590E-01	7.492E-01	8.723E-01	1.353E+00
TRANS	4.779E-03	6.990E-03	1.133E-02	1.532E-02	2.205E-02	3.493E-02	4.650E-02	6.560E-02	1.825E-01

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 22

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	6.704E+02	5.089E+02	3.632E+02	2.990E+02	2.421E+02	1.919E+02	1.691E+02	1.475E+02	1.271E+02
0.25	6.979E+01	7.341E+01	7.788E+01	8.033E+01	8.266E+01	8.451E+01	8.499E+01	8.490E+01	8.400E+01
0.50	1.292E+01	1.503E+01	1.808E+01	2.009E+01	2.252E+01	2.579E+01	2.813E+01	3.144E+01	3.634E+01
0.75	3.512E+00	4.541E+00	6.188E+00	7.353E+00	8.807E+00	1.075E+01	1.211E+01	1.401E+01	1.697E+01
1.00	1.301E+00	1.736E+00	2.487E+00	3.082E+00	3.930E+00	5.219E+00	6.144E+00	7.392E+00	9.247E+00
1.50	3.276E-01	4.294E-01	6.130E-01	7.742E-01	1.039E+00	1.520E+00	1.917E+00	2.506E+00	3.447E+00
2.00	1.197E-01	1.587E-01	2.290E-01	2.897E-01	3.878E-01	5.694E-01	7.302E-01	9.942E-01	1.471E+00
2.50	5.256E-02	7.185E-02	1.068E-01	1.362E-01	1.818E-01	2.640E-01	3.375E-01	4.627E-01	7.028E-01
3.00	2.625E-02	3.673E-02	5.603E-02	7.236E-02	9.754E-02	1.421E-01	1.813E-01	2.474E-01	3.753E-01
3.50	1.447E-02	2.051E-02	3.182E-02	4.159E-02	5.691E-02	8.419E-02	1.078E-01	1.467E-01	2.207E-01
4.00	8.622E-03	1.228E-02	1.923E-02	2.536E-02	3.522E-02	5.309E-02	6.852E-02	9.345E-02	1.401E-01
4.50	5.459E-03	7.781E-03	1.224E-02	1.624E-02	2.282E-02	3.501E-02	4.559E-02	6.261E-02	9.411E-02
5.00	3.628E-03	5.168E-03	8.143E-03	1.085E-02	1.537E-02	2.390E-02	3.140E-02	4.351E-02	6.591E-02
5.50	2.508E-03	3.569E-03	5.627E-03	7.512E-03	1.070E-02	1.680E-02	2.224E-02	3.112E-02	4.762E-02
6.00	1.790E-03	2.546E-03	4.014E-03	5.365E-03	7.663E-03	1.211E-02	1.613E-02	2.278E-02	3.525E-02
6.50	1.312E-03	1.866E-03	2.943E-03	3.936E-03	5.630E-03	8.937E-03	1.196E-02	1.701E-02	2.661E-02
7.00	9.845E-04	1.400E-03	2.209E-03	2.955E-03	4.229E-03	6.729E-03	9.033E-03	1.293E-02	2.042E-02
7.50	7.530E-04	1.071E-03	1.691E-03	2.263E-03	3.239E-03	5.161E-03	6.944E-03	9.989E-03	1.590E-02
8.00	5.859E-04	8.342E-04	1.318E-03	1.763E-03	2.524E-03	4.024E-03	5.422E-03	7.828E-03	1.254E-02
8.50	4.627E-04	6.594E-04	1.042E-03	1.395E-03	1.996E-03	3.184E-03	4.295E-03	6.217E-03	1.001E-02
9.00	3.703E-04	5.282E-04	8.356E-04	1.119E-03	1.601E-03	2.553E-03	3.446E-03	4.997E-03	8.083E-03
9.50	2.998E-04	4.281E-04	6.779E-04	9.077E-04	1.299E-03	2.072E-03	2.798E-03	4.062E-03	6.591E-03
10.00	2.454E-04	3.507E-04	5.559E-04	7.446E-04	1.066E-03	1.700E-03	2.296E-03	3.335E-03	5.425E-03
12.50	1.024E-04	1.469E-04	2.340E-04	3.141E-04	4.504E-04	7.191E-04	9.717E-04	1.413E-03	2.310E-03
15.00	5.005E-05	7.202E-05	1.151E-04	1.549E-04	2.226E-04	3.564E-04	4.820E-04	7.013E-04	1.147E-03
17.50	2.730E-05	3.936E-05	6.307E-05	8.501E-05	1.225E-04	1.967E-04	2.665E-04	3.881E-04	6.354E-04
20.00	1.615E-05	2.331E-05	3.741E-05	5.049E-05	7.292E-05	1.175E-04	1.594E-04	2.325E-04	3.812E-04
22.50	1.016E-05	1.468E-05	2.359E-05	3.187E-05	4.611E-05	7.447E-05	1.012E-04	1.479E-04	2.430E-04
25.00	6.714E-06	9.705E-06	1.561E-05	2.112E-05	3.059E-05	4.951E-05	6.738E-05	9.867E-05	1.625E-04
27.50	4.614E-06	6.673E-06	1.075E-05	1.454E-05	2.109E-05	3.420E-05	4.662E-05	6.839E-05	1.129E-04
30.00	3.276E-06	4.740E-06	7.639E-06	1.035E-05	1.502E-05	2.440E-05	3.329E-05	4.893E-05	8.093E-05
32.50	2.391E-06	3.461E-06	5.581E-06	7.564E-06	1.099E-05	1.788E-05	2.443E-05	3.595E-05	5.959E-05
35.00	1.785E-06	2.586E-06	4.173E-06	5.659E-06	8.231E-06	1.341E-05	1.834E-05	2.703E-05	4.489E-05
37.50	1.360E-06	1.971E-06	3.183E-06	4.318E-06	6.287E-06	1.025E-05	1.404E-05	2.072E-05	3.449E-05
40.00	1.054E-06	1.528E-06	2.470E-06	3.353E-06	4.886E-06	7.981E-06	1.094E-05	1.616E-05	2.695E-05
42.50	8.295E-07	1.203E-06	1.947E-06	2.644E-06	3.856E-06	6.307E-06	8.652E-06	1.280E-05	2.139E-05
45.00	6.614E-07	9.601E-07	1.554E-06	2.113E-06	3.084E-06	5.052E-06	6.937E-06	1.028E-05	1.720E-05
47.50	5.336E-07	7.751E-07	1.256E-06	1.709E-06	2.497E-06	4.095E-06	5.629E-06	8.352E-06	1.400E-05
50.00	4.352E-07	6.326E-07	1.026E-06	1.397E-06	2.043E-06	3.357E-06	4.618E-06	6.861E-06	1.152E-05
55.00	2.974E-07	4.330E-07	7.039E-07	9.598E-07	1.407E-06	2.319E-06	3.198E-06	4.764E-06	8.031E-06
60.00	2.097E-07	3.058E-07	4.985E-07	6.810E-07	1.001E-06	1.655E-06	2.288E-06	3.419E-06	5.784E-06
65.00	1.516E-07	2.216E-07	3.623E-07	4.959E-07	7.310E-07	1.214E-06	1.683E-06	2.522E-06	4.285E-06
70.00	1.121E-07	1.642E-07	2.693E-07	3.695E-07	5.464E-07	9.115E-07	1.267E-06	1.906E-06	3.251E-06
75.00	8.428E-08	1.238E-07	2.039E-07	2.805E-07	4.164E-07	6.982E-07	9.735E-07	1.470E-06	2.520E-06
80.00	6.438E-08	9.489E-08	1.569E-07	2.166E-07	3.228E-07	5.443E-07	7.616E-07	1.155E-06	1.989E-06
85.00	4.982E-08	7.370E-08	1.225E-07	1.697E-07	2.540E-07	4.310E-07	6.054E-07	9.221E-07	1.597E-06
90.00	3.898E-08	5.791E-08	9.680E-08	1.346E-07	2.026E-07	3.461E-07	4.882E-07	7.473E-07	1.302E-06
95.00	3.079E-08	4.597E-08	7.735E-08	1.080E-07	1.635E-07	2.815E-07	3.989E-07	6.139E-07	1.076E-06
100.00	2.451E-08	3.680E-08	6.238E-08	8.756E-08	1.334E-07	2.316E-07	3.300E-07	5.106E-07	9.008E-07
105.00	1.965E-08	2.969E-08	5.077E-08	7.167E-08	1.100E-07	1.927E-07	2.760E-07	4.297E-07	7.634E-07
110.00	1.584E-08	2.411E-08	4.164E-08	5.916E-08	9.152E-08	1.620E-07	2.334E-07	3.657E-07	6.543E-07
115.00	1.283E-08	1.970E-08	3.441E-08	4.924E-08	7.685E-08	1.375E-07	1.994E-07	3.146E-07	5.671E-07
120.00	1.043E-08	1.619E-08	2.864E-08	4.132E-08	6.512E-08	1.179E-07	1.721E-07	2.735E-07	4.959E-07
125.00	8.514E-09	1.336E-08	2.400E-08	3.494E-08	5.566E-08	1.021E-07	1.500E-07	2.402E-07	4.397E-07
130.00	6.971E-09	1.109E-08	2.026E-08	2.979E-08	4.801E-08	8.921E-08	1.321E-07	2.131E-07	3.932E-07
135.00	5.723E-09	9.249E-09	1.722E-08	2.562E-08	4.181E-08	7.878E-08	1.175E-07	1.910E-07	3.552E-07
140.00	4.718E-09	7.762E-09	1.477E-08	2.225E-08	3.679E-08	7.029E-08	1.056E-07	1.730E-07	3.242E-07
145.00	3.907E-09	6.557E-09	1.278E-08	1.951E-08	3.272E-08	6.343E-08	9.600E-08	1.584E-07	2.990E-07
150.00	3.258E-09	5.591E-09	1.119E-08	1.732E-08	2.946E-08	5.789E-08	8.823E-08	1.466E-07	2.786E-07
155.00	2.745E-09	4.823E-09	9.923E-09	1.559E-08	2.688E-08	5.351E-08	8.205E-08	1.371E-07	2.623E-07
160.00	2.348E-09	4.226E-09	8.939E-09	1.425E-08	2.489E-08	5.012E-08	7.726E-08	1.298E-07	2.496E-07
165.00	2.054E-09	3.780E-09	8.205E-09	1.325E-08	2.341E-08	4.759E-08	7.366E-08	1.243E-07	2.401E-07
170.00	1.850E-09	3.469E-09	7.695E-09	1.256E-08	2.240E-08	4.586E-08	7.120E-08	1.205E-07	2.336E-07
175.00	1.731E-09	3.287E-09	7.395E-09	1.215E-08	2.180E-08	4.481E-08	6.970E-08	1.183E-07	2.297E-07
180.00	1.690E-09	3.224E-09	7.291E-09	1.201E-08	2.161E-08	4.451E-08	6.929E-08	1.176E-07	2.286E-07
TOTAL	2.152E-02	2.256E-02	2.418E-02	2.553E-02	2.769E-02	3.143E-02	3.448E-02	3.908E-02	4.676E-02
TRANS	3.303E-06	4.627E-06	7.158E-06	9.457E-06	1.334E-05	2.093E-05	2.798E-05	4.015E-05	6.452E-05

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 22

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	1.080E+02	1.007E+02	9.345E+01	8.979E+01	8.602E+01	8.202E+01	7.983E+01	7.740E+01	7.452E+01
0.25	8.202E+01	8.082E+01	7.925E+01	7.827E+01	7.707E+01	7.552E+01	7.451E+01	7.324E+01	7.147E+01
0.50	4.364E+01	4.750E+01	5.207E+01	5.463E+01	5.734E+01	6.011E+01	6.143E+01	6.259E+01	6.338E+01
0.75	2.232E+01	2.587E+01	3.092E+01	3.427E+01	3.837E+01	4.342E+01	4.632E+01	4.945E+01	5.268E+01
1.00	1.263E+01	1.501E+01	1.869E+01	2.139E+01	2.503E+01	3.008E+01	3.333E+01	3.722E+01	4.183E+01
1.50	5.166E+00	6.347E+00	8.202E+00	9.623E+00	1.166E+01	1.483E+01	1.717E+01	2.036E+01	2.483E+01
2.00	2.447E+00	3.153E+00	4.271E+00	5.120E+00	6.332E+00	8.243E+00	9.700E+00	1.177E+01	1.492E+01
2.50	1.249E+00	1.682E+00	2.405E+00	2.966E+00	3.775E+00	5.049E+00	6.013E+00	7.387E+00	9.528E+00
3.00	6.848E-01	9.492E-01	1.418E+00	1.798E+00	2.363E+00	3.270E+00	3.958E+00	4.935E+00	6.458E+00
3.50	4.040E-01	5.674E-01	8.706E-01	1.129E+00	1.527E+00	2.188E+00	2.699E+00	3.432E+00	4.572E+00
4.00	2.551E-01	3.591E-01	5.579E-01	7.335E-01	1.014E+00	1.499E+00	1.885E+00	2.447E+00	3.332E+00
4.50	1.706E-01	2.394E-01	3.730E-01	4.941E-01	6.927E-01	1.049E+00	1.341E+00	1.777E+00	2.477E+00
5.00	1.194E-01	1.669E-01	2.596E-01	3.448E-01	4.869E-01	7.491E-01	9.706E-01	1.310E+00	1.868E+00
5.50	8.656E-02	1.208E-01	1.872E-01	2.486E-01	3.521E-01	5.468E-01	7.154E-01	9.796E-01	1.425E+00
6.00	6.455E-02	9.004E-02	1.393E-01	1.847E-01	2.614E-01	4.078E-01	5.370E-01	7.434E-01	1.100E+00
6.50	4.921E-02	6.876E-02	1.063E-01	1.407E-01	1.988E-01	3.106E-01	4.105E-01	5.726E-01	8.589E-01
7.00	3.819E-02	5.354E-02	8.283E-02	1.095E-01	1.545E-01	2.412E-01	3.194E-01	4.476E-01	6.780E-01
7.50	3.007E-02	4.236E-02	6.570E-02	8.684E-02	1.223E-01	1.907E-01	2.527E-01	3.549E-01	5.415E-01
8.00	2.398E-02	3.396E-02	5.288E-02	6.992E-02	9.841E-02	1.532E-01	2.029E-01	2.854E-01	4.373E-01
8.50	1.934E-02	2.753E-02	4.308E-02	5.704E-02	8.028E-02	1.248E-01	1.653E-01	2.325E-01	3.572E-01
9.00	1.575E-02	2.254E-02	3.547E-02	4.704E-02	6.627E-02	1.030E-01	1.363E-01	1.917E-01	2.949E-01
9.50	1.294E-02	1.862E-02	2.946E-02	3.916E-02	5.526E-02	8.594E-02	1.137E-01	1.597E-01	2.459E-01
10.00	1.073E-02	1.550E-02	2.467E-02	3.288E-02	4.650E-02	7.239E-02	9.573E-02	1.345E-01	2.070E-01
12.50	4.659E-03	6.850E-03	1.117E-02	1.511E-02	2.170E-02	3.423E-02	4.542E-02	6.385E-02	9.832E-02
15.00	2.330E-03	3.453E-03	5.715E-03	7.827E-03	1.142E-02	1.833E-02	2.451E-02	3.470E-02	5.372E-02
17.50	1.294E-03	1.924E-03	3.211E-03	4.433E-03	6.545E-03	1.067E-02	1.440E-02	2.057E-02	3.214E-02
20.00	7.773E-04	1.158E-03	1.941E-03	2.693E-03	4.008E-03	6.614E-03	9.001E-03	1.299E-02	2.051E-02
22.50	4.964E-04	7.401E-04	1.244E-03	1.732E-03	2.590E-03	4.315E-03	5.915E-03	8.617E-03	1.374E-02
25.00	3.326E-04	4.964E-04	8.361E-04	1.166E-03	1.750E-03	2.936E-03	4.049E-03	5.947E-03	9.579E-03
27.50	2.316E-04	3.461E-04	5.839E-04	8.152E-04	1.227E-03	2.069E-03	2.868E-03	4.242E-03	6.895E-03
30.00	1.665E-04	2.491E-04	4.210E-04	5.884E-04	8.872E-04	1.503E-03	2.092E-03	3.111E-03	5.100E-03
32.50	1.230E-04	1.842E-04	3.118E-04	4.363E-04	6.588E-04	1.120E-03	1.564E-03	2.338E-03	3.862E-03
35.00	9.291E-05	1.394E-04	2.363E-04	3.309E-04	5.004E-04	8.531E-04	1.194E-03	1.793E-03	2.984E-03
37.50	7.158E-05	1.076E-04	1.827E-04	2.561E-04	3.877E-04	6.626E-04	9.297E-04	1.401E-03	2.346E-03
40.00	5.611E-05	8.444E-05	1.436E-04	2.016E-04	3.056E-04	5.234E-04	7.358E-04	1.112E-03	1.873E-03
42.50	4.465E-05	6.729E-05	1.147E-04	1.611E-04	2.446E-04	4.197E-04	5.910E-04	8.959E-04	1.517E-03
45.00	3.601E-05	5.435E-05	9.281E-05	1.305E-04	1.984E-04	3.412E-04	4.811E-04	7.309E-04	1.243E-03
47.50	2.939E-05	4.443E-05	7.602E-05	1.070E-04	1.629E-04	2.806E-04	3.962E-04	6.033E-04	1.030E-03
50.00	2.425E-05	3.672E-05	6.294E-05	8.871E-05	1.352E-04	2.334E-04	3.299E-04	5.033E-04	8.627E-04
55.00	1.699E-05	2.581E-05	4.440E-05	6.274E-05	9.592E-05	1.661E-04	2.353E-04	3.602E-04	6.214E-04
60.00	1.230E-05	1.874E-05	3.237E-05	4.585E-05	7.030E-05	1.222E-04	1.735E-04	2.664E-04	4.621E-04
65.00	9.166E-06	1.400E-05	2.428E-05	3.448E-05	5.302E-05	9.245E-05	1.316E-04	2.026E-04	3.531E-04
70.00	6.995E-06	1.072E-05	1.866E-05	2.655E-05	4.095E-05	7.167E-05	1.022E-04	1.579E-04	2.764E-04
75.00	5.454E-06	8.384E-06	1.465E-05	2.090E-05	3.232E-05	5.677E-05	8.115E-05	1.257E-04	2.209E-04
80.00	4.333E-06	6.681E-06	1.172E-05	1.676E-05	2.600E-05	4.584E-05	6.567E-05	1.020E-04	1.799E-04
85.00	3.502E-06	5.418E-06	9.542E-06	1.368E-05	2.127E-05	3.764E-05	5.405E-05	8.418E-05	1.491E-04
90.00	2.874E-06	4.462E-06	7.890E-06	1.134E-05	1.769E-05	3.140E-05	4.519E-05	7.057E-05	1.255E-04
95.00	2.393E-06	3.728E-06	6.618E-06	9.531E-06	1.491E-05	2.656E-05	3.832E-05	6.001E-05	1.071E-04
100.00	2.019E-06	3.156E-06	5.626E-06	8.122E-06	1.274E-05	2.278E-05	3.293E-05	5.171E-05	9.259E-05
105.00	1.725E-06	2.705E-06	4.842E-06	7.007E-06	1.102E-05	1.977E-05	2.864E-05	4.510E-05	8.103E-05
110.00	1.490E-06	2.347E-06	4.217E-06	6.117E-06	9.645E-06	1.736E-05	2.520E-05	3.979E-05	7.173E-05
115.00	1.302E-06	2.058E-06	3.714E-06	5.399E-06	8.536E-06	1.541E-05	2.242E-05	3.548E-05	6.417E-05
120.00	1.151E-06	1.825E-06	3.306E-06	4.817E-06	7.635E-06	1.383E-05	2.015E-05	3.196E-05	5.800E-05
125.00	1.027E-06	1.635E-06	2.974E-06	4.342E-06	6.898E-06	1.253E-05	1.829E-05	2.908E-05	5.292E-05
130.00	9.261E-07	1.480E-06	2.701E-06	3.952E-06	6.293E-06	1.146E-05	1.676E-05	2.671E-05	4.873E-05
135.00	8.436E-07	1.352E-06	2.478E-06	3.633E-06	5.797E-06	1.058E-05	1.550E-05	2.475E-05	4.527E-05
140.00	7.760E-07	1.248E-06	2.295E-06	3.370E-06	5.389E-06	9.861E-06	1.447E-05	2.313E-05	4.242E-05
145.00	7.209E-07	1.163E-06	2.145E-06	3.156E-06	5.055E-06	9.270E-06	1.362E-05	2.181E-05	4.007E-05
150.00	6.763E-07	1.094E-06	2.024E-06	2.981E-06	4.783E-06	8.789E-06	1.292E-05	2.073E-05	3.816E-05
155.00	6.408E-07	1.039E-06	1.927E-06	2.842E-06	4.566E-06	8.403E-06	1.237E-05	1.986E-05	3.662E-05
160.00	6.131E-07	9.963E-07	1.851E-06	2.734E-06	4.397E-06	8.103E-06	1.194E-05	1.918E-05	3.542E-05
165.00	5.923E-07	9.641E-07	1.794E-06	2.652E-06	4.269E-06	7.876E-06	1.161E-05	1.867E-05	3.452E-05
170.00	5.778E-07	9.415E-07	1.754E-06	2.594E-06	4.181E-06	7.719E-06	1.138E-05	1.832E-05	3.389E-05
175.00	5.697E-07	9.289E-07	1.732E-06	2.562E-06	4.129E-06	7.627E-06	1.125E-05	1.811E-05	3.352E-05
180.00	5.673E-07	9.255E-07	1.726E-06	2.552E-06	4.112E-06	7.591E-06	1.120E-05	1.803E-05	3.339E-05
TOTAL	6.207E-02	7.346E-02	9.218E-02	1.069E-01	1.286E-01	1.637E-01	1.910E-01	2.305E-01	2.931E-01
TRANS	1.278E-04	1.873E-04	3.078E-04	4.226E-04	6.234E-04	1.029E-03	1.413E-03	2.081E-03	3.413E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 22

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	7.065E+01	6.853E+01	6.573E+01	6.391E+01	6.162E+01	5.857E+01	5.658E+01	5.410E+01	4.618E+01
0.25	6.869E+01	6.699E+01	6.461E+01	6.299E+01	6.090E+01	5.805E+01	5.616E+01	5.377E+01	4.603E+01
0.50	6.328E+01	6.268E+01	6.141E+01	6.035E+01	5.882E+01	5.652E+01	5.491E+01	5.280E+01	4.559E+01
0.75	5.558E+01	5.635E+01	5.657E+01	5.629E+01	5.557E+01	5.411E+01	5.292E+01	5.123E+01	4.486E+01
1.00	4.698E+01	4.900E+01	5.070E+01	5.126E+01	5.145E+01	5.097E+01	5.029E+01	4.914E+01	4.386E+01
1.50	3.126E+01	3.455E+01	3.822E+01	4.011E+01	4.190E+01	4.335E+01	4.377E+01	4.380E+01	4.118E+01
2.00	2.020E+01	2.336E+01	2.740E+01	2.981E+01	3.246E+01	3.523E+01	3.655E+01	3.765E+01	3.780E+01
2.50	1.336E+01	1.586E+01	1.938E+01	2.169E+01	2.448E+01	2.779E+01	2.961E+01	3.145E+01	3.401E+01
3.00	9.219E+00	1.109E+01	1.387E+01	1.582E+01	1.832E+01	2.159E+01	2.356E+01	2.576E+01	3.007E+01
3.50	6.627E+00	8.028E+00	1.017E+01	1.172E+01	1.381E+01	1.672E+01	1.861E+01	2.085E+01	2.621E+01
4.00	4.922E+00	6.003E+00	7.661E+00	8.884E+00	1.057E+01	1.303E+01	1.470E+01	1.681E+01	2.259E+01
4.50	3.744E+00	4.603E+00	5.916E+00	6.887E+00	8.241E+00	1.027E+01	1.170E+01	1.357E+01	1.932E+01
5.00	2.897E+00	3.597E+00	4.662E+00	5.447E+00	6.543E+00	8.204E+00	9.405E+00	1.102E+01	1.645E+01
5.50	2.270E+00	2.850E+00	3.732E+00	4.380E+00	5.282E+00	6.652E+00	7.654E+00	9.025E+00	1.398E+01
6.00	1.796E+00	2.283E+00	3.025E+00	3.568E+00	4.323E+00	5.467E+00	6.306E+00	7.466E+00	1.188E+01
6.50	1.434E+00	1.845E+00	2.475E+00	2.938E+00	3.579E+00	4.546E+00	5.255E+00	6.239E+00	1.012E+01
7.00	1.154E+00	1.501E+00	2.041E+00	2.439E+00	2.990E+00	3.819E+00	4.425E+00	5.264E+00	8.651E+00
7.50	9.365E-01	1.231E+00	1.694E+00	2.039E+00	2.517E+00	3.235E+00	3.758E+00	4.481E+00	7.433E+00
8.00	7.660E-01	1.015E+00	1.414E+00	1.714E+00	2.132E+00	2.760E+00	3.216E+00	3.845E+00	6.420E+00
8.50	6.316E-01	8.435E-01	1.187E+00	1.449E+00	1.815E+00	2.369E+00	2.770E+00	3.322E+00	5.577E+00
9.00	5.251E-01	7.054E-01	1.002E+00	1.230E+00	1.553E+00	2.043E+00	2.399E+00	2.887E+00	4.873E+00
9.50	4.400E-01	5.939E-01	8.506E-01	1.050E+00	1.335E+00	1.770E+00	2.087E+00	2.522E+00	4.281E+00
10.00	3.716E-01	5.035E-01	7.257E-01	9.002E-01	1.152E+00	1.539E+00	1.823E+00	2.212E+00	3.780E+00
12.50	1.777E-01	2.427E-01	3.559E-01	4.479E-01	5.851E-01	8.061E-01	9.738E-01	1.209E+00	2.161E+00
15.00	9.758E-02	1.338E-01	1.975E-01	2.498E-01	3.288E-01	4.591E-01	5.606E-01	7.071E-01	1.327E+00
17.50	5.885E-02	8.104E-02	1.205E-01	1.530E-01	2.023E-01	2.838E-01	3.477E-01	4.410E-01	8.549E-01
20.00	3.789E-02	5.241E-02	7.852E-02	1.003E-01	1.335E-01	1.883E-01	2.310E-01	2.932E-01	5.741E-01
22.50	2.563E-02	3.561E-02	5.370E-02	6.900E-02	9.256E-02	1.318E-01	1.623E-01	2.063E-01	4.024E-01
25.00	1.804E-02	2.517E-02	3.814E-02	4.923E-02	6.654E-02	9.584E-02	1.188E-01	1.519E-01	2.946E-01
27.50	1.313E-02	1.838E-02	2.796E-02	3.620E-02	4.922E-02	7.167E-02	8.956E-02	1.155E-01	2.248E-01
30.00	9.820E-03	1.381E-02	2.107E-02	2.733E-02	3.729E-02	5.479E-02	6.899E-02	8.985E-02	1.775E-01
32.50	7.520E-03	1.063E-02	1.626E-02	2.112E-02	2.888E-02	4.268E-02	5.409E-02	7.114E-02	1.440E-01
35.00	5.876E-03	8.345E-03	1.282E-02	1.667E-02	2.281E-02	3.383E-02	4.307E-02	5.712E-02	1.192E-01
37.50	4.671E-03	6.671E-03	1.030E-02	1.340E-02	1.835E-02	2.725E-02	3.480E-02	4.645E-02	1.001E-01
40.00	3.770E-03	5.415E-03	8.403E-03	1.096E-02	1.501E-02	2.230E-02	2.851E-02	3.821E-02	8.483E-02
42.50	3.084E-03	4.455E-03	6.956E-03	9.092E-03	1.247E-02	1.851E-02	2.367E-02	3.180E-02	7.248E-02
45.00	2.552E-03	3.708E-03	5.830E-03	7.642E-03	1.050E-02	1.558E-02	1.991E-02	2.676E-02	6.232E-02
47.50	2.134E-03	3.119E-03	4.940E-03	6.498E-03	8.947E-03	1.327E-02	1.695E-02	2.277E-02	5.388E-02
50.00	1.802E-03	2.648E-03	4.226E-03	5.581E-03	7.708E-03	1.145E-02	1.460E-02	1.959E-02	4.684E-02
55.00	1.317E-03	1.957E-03	3.171E-03	4.225E-03	5.885E-03	8.774E-03	1.118E-02	1.495E-02	3.599E-02
60.00	9.917E-04	1.487E-03	2.447E-03	3.293E-03	4.634E-03	6.966E-03	8.883E-03	1.184E-02	2.828E-02
65.00	7.657E-04	1.158E-03	1.933E-03	2.628E-03	3.743E-03	5.691E-03	7.282E-03	9.705E-03	2.276E-02
70.00	6.048E-04	9.220E-04	1.559E-03	2.140E-03	3.087E-03	4.760E-03	6.127E-03	8.186E-03	1.879E-02
75.00	4.873E-04	7.478E-04	1.280E-03	1.774E-03	2.591E-03	4.061E-03	5.269E-03	7.079E-03	1.595E-02
80.00	3.998E-04	6.172E-04	1.068E-03	1.493E-03	2.209E-03	3.522E-03	4.615E-03	6.255E-03	1.392E-02
85.00	3.334E-04	5.174E-04	9.042E-04	1.275E-03	1.910E-03	3.099E-03	4.106E-03	5.628E-03	1.252E-02
90.00	2.823E-04	4.402E-04	7.760E-04	1.103E-03	1.671E-03	2.761E-03	3.702E-03	5.146E-03	1.161E-02
95.00	2.423E-04	3.795E-04	6.744E-04	9.652E-04	1.479E-03	2.488E-03	3.378E-03	4.768E-03	1.108E-02
100.00	2.107E-04	3.313E-04	5.931E-04	8.543E-04	1.323E-03	2.264E-03	3.115E-03	4.471E-03	1.087E-02
105.00	1.854E-04	2.927E-04	5.273E-04	7.639E-04	1.194E-03	2.079E-03	2.898E-03	4.234E-03	1.092E-02
110.00	1.650E-04	2.613E-04	4.736E-04	6.899E-04	1.088E-03	1.925E-03	2.718E-03	4.045E-03	1.118E-02
115.00	1.483E-04	2.357E-04	4.296E-04	6.287E-04	9.999E-04	1.796E-03	2.568E-03	3.893E-03	1.161E-02
120.00	1.347E-04	2.147E-04	3.932E-04	5.780E-04	9.260E-04	1.687E-03	2.442E-03	3.771E-03	1.218E-02
125.00	1.235E-04	1.974E-04	3.631E-04	5.358E-04	8.641E-04	1.595E-03	2.336E-03	3.672E-03	1.286E-02
130.00	1.142E-04	1.830E-04	3.380E-04	5.006E-04	8.122E-04	1.517E-03	2.246E-03	3.593E-03	1.361E-02
135.00	1.065E-04	1.711E-04	3.172E-04	4.712E-04	7.685E-04	1.452E-03	2.171E-03	3.530E-03	1.440E-02
140.00	1.001E-04	1.613E-04	3.000E-04	4.467E-04	7.320E-04	1.396E-03	2.107E-03	3.479E-03	1.520E-02
145.00	9.492E-05	1.532E-04	2.857E-04	4.265E-04	7.016E-04	1.350E-03	2.054E-03	3.438E-03	1.599E-02
150.00	9.065E-05	1.466E-04	2.740E-04	4.099E-04	6.766E-04	1.311E-03	2.010E-03	3.406E-03	1.673E-02
155.00	8.723E-05	1.412E-04	2.646E-04	3.965E-04	6.563E-04	1.280E-03	1.975E-03	3.381E-03	1.741E-02
160.00	8.454E-05	1.370E-04	2.573E-04	3.860E-04	6.403E-04	1.255E-03	1.946E-03	3.362E-03	1.799E-02
165.00	8.251E-05	1.339E-04	2.517E-04	3.780E-04	6.282E-04	1.236E-03	1.925E-03	3.348E-03	1.847E-02
170.00	8.111E-05	1.317E-04	2.478E-04	3.725E-04	6.197E-04	1.223E-03	1.910E-03	3.338E-03	1.882E-02
175.00	8.027E-05	1.304E-04	2.455E-04	3.691E-04	6.147E-04	1.215E-03	1.901E-03	3.333E-03	1.904E-02
180.00	8.002E-05	1.300E-04	2.448E-04	3.681E-04	6.130E-04	1.212E-03	1.898E-03	3.331E-03	1.910E-02
TOTAL	4.084E-01	4.877E-01	6.093E-01	6.989E-01	8.233E-01	1.010E+00	1.145E+00	1.329E+00	2.051E+00
TRANS	6.791E-03	9.855E-03	1.581E-02	2.123E-02	3.030E-02	4.750E-02	6.282E-02	8.794E-02	2.391E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 26

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	4.448E+02	3.376E+02	2.409E+02	1.983E+02	1.605E+02	1.271E+02	1.119E+02	9.755E+01	8.396E+01
0.25	7.354E+01	7.395E+01	7.398E+01	7.345E+01	7.210E+01	6.952E+01	6.764E+01	6.524E+01	6.221E+01
0.50	1.635E+01	1.816E+01	2.063E+01	2.218E+01	2.399E+01	2.629E+01	2.782E+01	2.987E+01	3.266E+01
0.75	4.943E+00	6.116E+00	7.883E+00	9.051E+00	1.041E+01	1.210E+01	1.324E+01	1.484E+01	1.724E+01
1.00	1.844E+00	2.440E+00	3.425E+00	4.149E+00	5.084E+00	6.355E+00	7.217E+00	8.371E+00	1.006E+01
1.50	4.394E-01	5.930E-01	8.696E-01	1.104E+00	1.469E+00	2.080E+00	2.549E+00	3.199E+00	4.169E+00
2.00	1.599E-01	2.135E-01	3.118E-01	3.988E-01	5.428E-01	8.081E-01	1.033E+00	1.376E+00	1.944E+00
2.50	7.147E-02	9.635E-02	1.419E-01	1.819E-01	2.472E-01	3.693E-01	4.778E-01	6.558E-01	9.779E-01
3.00	3.622E-02	4.977E-02	7.468E-02	9.616E-02	1.304E-01	1.936E-01	2.504E-01	3.468E-01	5.303E-01
3.50	2.012E-02	2.813E-02	4.298E-02	5.575E-02	7.589E-02	1.126E-01	1.545E-01	2.013E-01	3.096E-01
4.00	1.202E-02	1.699E-02	2.632E-02	3.442E-02	4.724E-02	7.052E-02	9.118E-02	1.259E-01	1.932E-01
4.50	7.613E-03	1.083E-02	1.693E-02	2.228E-02	3.089E-02	4.661E-02	6.046E-02	8.345E-02	1.276E-01
5.00	5.056E-03	7.210E-03	1.133E-02	1.500E-02	2.099E-02	3.205E-02	4.179E-02	5.778E-02	8.818E-02
5.50	3.491E-03	4.982E-03	7.854E-03	1.044E-02	1.472E-02	2.273E-02	2.980E-02	4.138E-02	6.324E-02
6.00	2.490E-03	3.553E-03	5.609E-03	7.479E-03	1.060E-02	1.653E-02	2.180E-02	3.043E-02	4.669E-02
6.50	1.825E-03	2.603E-03	4.113E-03	5.493E-03	7.822E-03	1.228E-02	1.628E-02	2.286E-02	3.528E-02
7.00	1.369E-03	1.952E-03	3.085E-03	4.125E-03	5.890E-03	9.301E-03	1.238E-02	1.749E-02	2.718E-02
7.50	1.047E-03	1.493E-03	2.360E-03	3.159E-03	4.518E-03	7.163E-03	9.571E-03	1.360E-02	2.127E-02
8.00	8.153E-04	1.162E-03	1.837E-03	2.460E-03	3.523E-03	5.601E-03	7.506E-03	1.071E-02	1.688E-02
8.50	6.442E-04	9.184E-04	1.453E-03	1.946E-03	2.788E-03	4.440E-03	5.964E-03	8.550E-03	1.355E-02
9.00	5.159E-04	7.357E-04	1.164E-03	1.560E-03	2.235E-03	3.565E-03	4.797E-03	6.900E-03	1.100E-02
9.50	4.181E-04	5.965E-04	9.443E-04	1.265E-03	1.814E-03	2.894E-03	3.900E-03	5.627E-03	9.013E-03
10.00	3.424E-04	4.888E-04	7.743E-04	1.038E-03	1.487E-03	2.375E-03	3.203E-03	4.632E-03	7.451E-03
12.50	1.435E-04	2.055E-04	3.266E-04	4.381E-04	6.283E-04	1.004E-03	1.357E-03	1.973E-03	3.213E-03
15.00	7.039E-05	1.011E-04	1.612E-04	2.166E-04	3.110E-04	4.976E-04	6.731E-04	9.798E-04	1.602E-03
17.50	3.852E-05	5.544E-05	8.862E-05	1.193E-04	1.716E-04	2.750E-04	3.723E-04	5.423E-04	8.879E-04
20.00	2.284E-05	3.292E-05	5.273E-05	7.107E-05	1.024E-04	1.646E-04	2.230E-04	3.251E-04	5.329E-04
22.50	1.441E-05	2.079E-05	3.335E-05	4.500E-05	6.497E-05	1.046E-04	1.420E-04	2.072E-04	3.400E-04
25.00	9.542E-06	1.378E-05	2.213E-05	2.989E-05	4.322E-05	6.974E-05	9.475E-05	1.385E-04	2.276E-04
27.50	6.572E-06	9.495E-06	1.527E-05	2.064E-05	2.988E-05	4.831E-05	6.572E-05	9.619E-05	1.584E-04
30.00	4.675E-06	6.759E-06	1.088E-05	1.471E-05	2.133E-05	3.455E-05	4.705E-05	6.898E-05	1.138E-04
32.50	3.418E-06	4.944E-06	7.963E-06	1.078E-05	1.564E-05	2.538E-05	3.460E-05	5.080E-05	8.395E-05
35.00	2.557E-06	3.701E-06	5.965E-06	8.081E-06	1.174E-05	1.907E-05	2.603E-05	3.827E-05	6.337E-05
37.50	1.951E-06	2.825E-06	4.558E-06	6.178E-06	8.981E-06	1.461E-05	1.997E-05	2.941E-05	4.878E-05
40.00	1.515E-06	2.195E-06	3.543E-06	4.806E-06	6.992E-06	1.140E-05	1.559E-05	2.299E-05	3.820E-05
42.50	1.194E-06	1.731E-06	2.797E-06	3.795E-06	5.527E-06	9.021E-06	1.235E-05	1.824E-05	3.037E-05
45.00	9.535E-07	1.383E-06	2.237E-06	3.037E-06	4.428E-06	7.237E-06	9.921E-06	1.467E-05	2.447E-05
47.50	7.705E-07	1.118E-06	1.810E-06	2.460E-06	3.590E-06	5.876E-06	8.063E-06	1.194E-05	1.995E-05
50.00	6.292E-07	9.138E-07	1.481E-06	2.014E-06	2.941E-06	4.822E-06	6.624E-06	9.821E-06	1.644E-05
55.00	4.312E-07	6.272E-07	1.018E-06	1.387E-06	2.031E-06	3.340E-06	4.599E-06	6.838E-06	1.149E-05
60.00	3.047E-07	4.440E-07	7.228E-07	9.863E-07	1.448E-06	2.389E-06	3.298E-06	4.918E-06	8.298E-06
65.00	2.209E-07	3.225E-07	5.264E-07	7.199E-07	1.060E-06	1.756E-06	2.430E-06	3.635E-06	6.160E-06
70.00	1.635E-07	2.393E-07	3.919E-07	5.372E-07	7.932E-07	1.320E-06	1.832E-06	2.751E-06	4.682E-06
75.00	1.233E-07	1.809E-07	2.973E-07	4.085E-07	6.054E-07	1.013E-06	1.410E-06	2.125E-06	3.634E-06
80.00	9.431E-08	1.388E-07	2.291E-07	3.158E-07	4.699E-07	7.904E-07	1.104E-06	1.671E-06	2.873E-06
85.00	7.309E-08	1.080E-07	1.791E-07	2.476E-07	3.701E-07	6.264E-07	8.786E-07	1.336E-06	2.308E-06
90.00	5.726E-08	8.492E-08	1.417E-07	1.967E-07	2.954E-07	5.034E-07	7.090E-07	1.083E-06	1.883E-06
95.00	4.527E-08	6.746E-08	1.132E-07	1.579E-07	2.385E-07	4.095E-07	5.795E-07	8.901E-07	1.557E-06
100.00	3.608E-08	5.405E-08	9.140E-08	1.281E-07	1.947E-07	3.371E-07	4.794E-07	7.406E-07	1.304E-06
105.00	2.893E-08	4.363E-08	7.439E-08	1.048E-07	1.605E-07	2.804E-07	4.010E-07	6.233E-07	1.105E-06
110.00	2.333E-08	3.544E-08	6.102E-08	8.652E-08	1.335E-07	2.357E-07	3.390E-07	5.304E-07	9.474E-07
115.00	1.890E-08	2.895E-08	5.040E-08	7.198E-08	1.121E-07	2.000E-07	2.895E-07	4.561E-07	8.210E-07
120.00	1.537E-08	2.378E-08	4.192E-08	6.035E-08	9.488E-08	1.713E-07	2.497E-07	3.963E-07	7.189E-07
125.00	1.253E-08	1.962E-08	3.510E-08	5.099E-08	8.103E-08	1.482E-07	2.175E-07	3.478E-07	6.361E-07
130.00	1.025E-08	1.626E-08	2.958E-08	4.341E-08	6.980E-08	1.294E-07	1.913E-07	3.083E-07	5.686E-07
135.00	8.407E-09	1.354E-08	2.512E-08	3.729E-08	6.072E-08	1.141E-07	1.701E-07	2.762E-07	5.134E-07
140.00	6.914E-09	1.134E-08	2.149E-08	3.230E-08	5.331E-08	1.017E-07	1.527E-07	2.499E-07	4.683E-07
145.00	5.714E-09	9.560E-09	1.857E-08	2.829E-08	4.735E-08	9.164E-08	1.386E-07	2.286E-07	4.316E-07
150.00	4.750E-09	8.127E-09	1.621E-08	2.506E-08	4.255E-08	8.352E-08	1.272E-07	2.114E-07	4.020E-07
155.00	3.988E-09	6.989E-09	1.434E-08	2.250E-08	3.875E-08	7.709E-08	1.182E-07	1.976E-07	3.783E-07
160.00	3.400E-09	6.105E-09	1.289E-08	2.052E-08	3.583E-08	7.213E-08	1.112E-07	1.869E-07	3.599E-07
165.00	2.959E-09	5.439E-09	1.179E-08	1.903E-08	3.363E-08	6.838E-08	1.059E-07	1.789E-07	3.460E-07
170.00	2.659E-09	4.984E-09	1.105E-08	1.803E-08	3.217E-08	6.589E-08	1.023E-07	1.734E-07	3.364E-07
175.00	2.478E-09	4.706E-09	1.059E-08	1.741E-08	3.125E-08	6.430E-08	1.001E-07	1.700E-07	3.310E-07
180.00	2.427E-09	4.630E-09	1.047E-08	1.726E-08	3.104E-08	6.396E-08	9.963E-08	1.693E-07	3.296E-07
TOTAL	2.221E-02	2.327E-02	2.494E-02	2.632E-02	2.853E-02	3.236E-02	3.547E-02	4.015E-02	4.794E-02
TRANS	4.596E-06	6.436E-06	9.949E-06	1.314E-05	1.852E-05	2.901E-05	3.875E-05	5.553E-05	8.907E-05

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 26

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	7.116E+01	6.622E+01	6.127E+01	5.872E+01	5.607E+01	5.318E+01	5.156E+01	4.973E+01	4.751E+01
0.25	5.838E+01	5.655E+01	5.443E+01	5.321E+01	5.182E+01	5.012E+01	4.907E+01	4.779E+01	4.610E+01
0.50	3.636E+01	3.809E+01	3.995E+01	4.088E+01	4.176E+01	4.246E+01	4.265E+01	4.264E+01	4.225E+01
0.75	2.120E+01	2.359E+01	2.673E+01	2.865E+01	3.085E+01	3.331E+01	3.459E+01	3.583E+01	3.688E+01
1.00	1.300E+01	1.493E+01	1.772E+01	1.963E+01	2.203E+01	2.509E+01	2.690E+01	2.891E+01	3.102E+01
1.50	5.845E+00	6.961E+00	8.653E+00	9.895E+00	1.160E+01	1.407E+01	1.577E+01	1.792E+01	2.068E+01
2.00	3.000E+00	3.720E+00	4.814E+00	5.621E+00	6.741E+00	8.427E+00	9.649E+00	1.130E+01	1.362E+01
2.50	1.642E+00	2.123E+00	2.880E+00	3.443E+00	4.231E+00	5.422E+00	6.293E+00	7.488E+00	9.243E+00
3.00	9.418E-01	1.264E+00	1.794E+00	2.201E+00	2.780E+00	3.665E+00	4.313E+00	5.204E+00	6.531E+00
3.50	5.668E-01	7.808E-01	1.152E+00	1.448E+00	1.879E+00	2.555E+00	3.054E+00	3.745E+00	4.775E+00
4.00	3.581E-01	5.014E-01	7.606E-01	9.752E-01	1.298E+00	1.819E+00	2.212E+00	2.760E+00	3.583E+00
4.50	2.370E-01	3.346E-01	5.167E-01	6.726E-01	9.142E-01	1.317E+00	1.628E+00	2.069E+00	2.738E+00
5.00	1.636E-01	2.316E-01	3.611E-01	4.751E-01	6.562E-01	9.679E-01	1.215E+00	1.571E+00	2.122E+00
5.50	1.171E-01	1.657E-01	2.596E-01	3.437E-01	4.802E-01	7.217E-01	9.177E-01	1.207E+00	1.662E+00
6.00	8.640E-02	1.221E-01	1.915E-01	2.545E-01	3.583E-01	5.461E-01	7.020E-01	9.366E-01	1.314E+00
6.50	6.539E-02	9.231E-02	1.447E-01	1.926E-01	2.724E-01	4.194E-01	5.438E-01	7.344E-01	1.048E+00
7.00	5.055E-02	7.131E-02	1.117E-01	1.488E-01	2.109E-01	3.268E-01	4.266E-01	5.819E-01	8.421E-01
7.50	3.976E-02	5.611E-02	8.783E-02	1.170E-01	1.660E-01	2.584E-01	3.388E-01	4.658E-01	6.824E-01
8.00	3.174E-02	4.484E-02	7.020E-02	9.348E-02	1.327E-01	2.070E-01	2.724E-01	3.767E-01	5.575E-01
8.50	2.566E-02	3.632E-02	5.690E-02	7.576E-02	1.075E-01	1.680E-01	2.216E-01	3.078E-01	4.591E-01
9.00	2.097E-02	2.976E-02	4.669E-02	6.218E-02	8.822E-02	1.379E-01	1.822E-01	2.540E-01	3.812E-01
9.50	1.730E-02	2.462E-02	3.873E-02	5.159E-02	7.319E-02	1.145E-01	1.514E-01	2.115E-01	3.191E-01
10.00	1.440E-02	2.056E-02	3.242E-02	4.321E-02	6.133E-02	9.597E-02	1.270E-01	1.777E-01	2.691E-01
12.50	6.375E-03	9.252E-03	1.484E-02	1.991E-02	2.840E-02	4.464E-02	5.926E-02	8.335E-02	1.275E-01
15.00	3.226E-03	4.736E-03	7.714E-03	1.044E-02	1.504E-02	2.386E-02	3.181E-02	4.494E-02	6.925E-02
17.50	1.801E-03	2.663E-03	4.389E-03	5.992E-03	8.716E-03	1.398E-02	1.873E-02	2.659E-02	4.128E-02
20.00	1.085E-03	1.611E-03	2.676E-03	3.678E-03	5.399E-03	8.748E-03	1.178E-02	1.682E-02	2.631E-02
22.50	6.937E-04	1.032E-03	1.725E-03	2.383E-03	3.523E-03	5.763E-03	7.801E-03	1.120E-02	1.764E-02
25.00	4.652E-04	6.934E-04	1.163E-03	1.613E-03	2.399E-03	3.956E-03	5.384E-03	7.779E-03	1.233E-02
27.50	3.243E-04	4.840E-04	8.140E-04	1.132E-03	1.692E-03	2.810E-03	3.844E-03	5.588E-03	8.913E-03
30.00	2.335E-04	3.488E-04	5.880E-04	8.197E-04	1.229E-03	2.054E-03	2.824E-03	4.130E-03	6.629E-03
32.50	1.726E-04	2.582E-04	4.361E-04	6.090E-04	9.156E-04	1.539E-03	2.125E-03	3.126E-03	5.052E-03
35.00	1.306E-04	1.956E-04	3.309E-04	4.628E-04	6.974E-04	1.178E-03	1.633E-03	2.415E-03	3.929E-03
37.50	1.008E-04	1.512E-04	2.562E-04	3.586E-04	5.415E-04	9.181E-04	1.277E-03	1.899E-03	3.110E-03
40.00	7.915E-05	1.188E-04	2.017E-04	2.827E-04	4.276E-04	7.275E-04	1.016E-03	1.517E-03	2.500E-03
42.50	6.308E-05	9.485E-05	1.612E-04	2.262E-04	3.427E-04	5.850E-04	8.189E-04	1.228E-03	2.038E-03
45.00	5.097E-05	7.674E-05	1.307E-04	1.835E-04	2.784E-04	4.765E-04	6.687E-04	1.007E-03	1.680E-03
47.50	4.167E-05	6.284E-05	1.072E-04	1.507E-04	2.289E-04	3.927E-04	5.523E-04	8.344E-04	1.401E-03
50.00	3.444E-05	5.200E-05	8.886E-05	1.251E-04	1.902E-04	3.272E-04	4.610E-04	6.987E-04	1.179E-03
55.00	2.420E-05	3.666E-05	6.289E-05	8.874E-05	1.354E-04	2.334E-04	3.294E-04	5.013E-04	8.590E-04
60.00	1.757E-05	2.670E-05	4.597E-05	6.497E-05	9.940E-05	1.723E-04	2.443E-04	3.738E-04	6.423E-04
65.00	1.312E-05	2.000E-05	3.457E-05	4.898E-05	7.514E-05	1.307E-04	1.858E-04	2.853E-04	4.938E-04
70.00	1.004E-05	1.534E-05	2.663E-05	3.782E-05	5.819E-05	1.016E-04	1.447E-04	2.231E-04	3.885E-04
75.00	7.838E-06	1.202E-05	2.095E-05	2.983E-05	4.604E-05	8.068E-05	1.152E-04	1.781E-04	3.119E-04
80.00	6.237E-06	9.601E-06	1.680E-05	2.398E-05	3.712E-05	6.529E-05	9.344E-05	1.449E-04	2.551E-04
85.00	5.047E-06	7.794E-06	1.370E-05	1.960E-05	3.044E-05	5.375E-05	7.710E-05	1.199E-04	2.121E-04
90.00	4.147E-06	6.429E-06	1.135E-05	1.628E-05	2.536E-05	4.493E-05	6.460E-05	1.008E-04	1.791E-04
95.00	3.455E-06	5.375E-06	9.527E-06	1.371E-05	2.142E-05	3.810E-05	5.491E-05	8.594E-05	1.533E-04
100.00	2.917E-06	4.555E-06	8.110E-06	1.170E-05	1.833E-05	3.274E-05	4.729E-05	7.422E-05	1.329E-04
105.00	2.493E-06	3.908E-06	6.988E-06	1.011E-05	1.589E-05	2.847E-05	4.123E-05	6.490E-05	1.167E-04
110.00	2.155E-06	3.391E-06	6.091E-06	8.833E-06	1.392E-05	2.505E-05	3.636E-05	5.739E-05	1.036E-04
115.00	1.883E-06	2.976E-06	5.369E-06	7.805E-06	1.234E-05	2.228E-05	3.241E-05	5.130E-05	9.293E-05
120.00	1.664E-06	2.639E-06	4.783E-06	6.970E-06	1.105E-05	2.002E-05	2.919E-05	4.633E-05	8.421E-05
125.00	1.485E-06	2.365E-06	4.304E-06	6.288E-06	9.997E-06	1.817E-05	2.655E-05	4.224E-05	7.703E-05
130.00	1.339E-06	2.141E-06	3.912E-06	5.728E-06	9.130E-06	1.665E-05	2.437E-05	3.887E-05	7.111E-05
135.00	1.220E-06	1.957E-06	3.590E-06	5.268E-06	8.418E-06	1.540E-05	2.258E-05	3.609E-05	6.621E-05
140.00	1.122E-06	1.806E-06	3.326E-06	4.891E-06	7.832E-06	1.436E-05	2.110E-05	3.380E-05	6.217E-05
145.00	1.042E-06	1.683E-06	3.110E-06	4.581E-06	7.352E-06	1.352E-05	1.988E-05	3.191E-05	5.884E-05
150.00	9.776E-07	1.584E-06	2.935E-06	4.330E-06	6.962E-06	1.283E-05	1.890E-05	3.038E-05	5.613E-05
155.00	9.261E-07	1.504E-06	2.795E-06	4.130E-06	6.650E-06	1.228E-05	1.810E-05	2.915E-05	5.395E-05
160.00	8.857E-07	1.442E-06	2.685E-06	3.972E-06	6.405E-06	1.184E-05	1.749E-05	2.818E-05	5.225E-05
165.00	8.555E-07	1.395E-06	2.603E-06	3.855E-06	6.222E-06	1.152E-05	1.702E-05	2.746E-05	5.096E-05
170.00	8.346E-07	1.363E-06	2.547E-06	3.774E-06	6.096E-06	1.129E-05	1.669E-05	2.695E-05	5.007E-05
175.00	8.229E-07	1.344E-06	2.512E-06	3.725E-06	6.020E-06	1.116E-05	1.651E-05	2.666E-05	4.954E-05
180.00	8.190E-07	1.337E-06	2.498E-06	3.705E-06	5.990E-06	1.111E-05	1.644E-05	2.656E-05	4.937E-05
TOTAL	6.337E-02	7.477E-02	9.338E-02	1.079E-01	1.291E-01	1.630E-01	1.890E-01	2.261E-01	2.841E-01
TRANS	1.758E-04	2.571E-04	4.211E-04	5.766E-04	8.474E-04	1.392E-03	1.903E-03	2.787E-03	4.535E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 26

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	4.448E+01	4.281E+01	4.064E+01	3.925E+01	3.752E+01	3.526E+01	3.383E+01	3.206E+01	2.671E+01
0.25	4.358E+01	4.211E+01	4.013E+01	3.883E+01	3.720E+01	3.503E+01	3.364E+01	3.192E+01	2.665E+01
0.50	4.105E+01	4.012E+01	3.867E+01	3.763E+01	3.626E+01	3.435E+01	3.308E+01	3.149E+01	2.645E+01
0.75	3.732E+01	3.711E+01	3.641E+01	3.576E+01	3.477E+01	3.326E+01	3.219E+01	3.079E+01	2.614E+01
1.00	3.294E+01	3.345E+01	3.357E+01	3.336E+01	3.285E+01	3.182E+01	3.100E+01	2.985E+01	2.570E+01
1.50	2.414E+01	2.568E+01	2.714E+01	2.775E+01	2.816E+01	2.819E+01	2.794E+01	2.739E+01	2.451E+01
2.00	1.706E+01	1.888E+01	2.098E+01	2.209E+01	2.317E+01	2.408E+01	2.437E+01	2.442E+01	2.297E+01
2.50	1.209E+01	1.376E+01	1.590E+01	1.717E+01	1.858E+01	2.004E+01	2.072E+01	2.128E+01	2.119E+01
3.00	8.758E+00	1.014E+01	1.204E+01	1.326E+01	1.471E+01	1.641E+01	1.732E+01	1.821E+01	1.928E+01
3.50	6.523E+00	7.636E+00	9.224E+00	1.030E+01	1.164E+01	1.333E+01	1.432E+01	1.540E+01	1.733E+01
4.00	4.980E+00	5.878E+00	7.181E+00	8.086E+00	9.259E+00	1.082E+01	1.180E+01	1.293E+01	1.542E+01
4.50	3.880E+00	4.615E+00	5.688E+00	6.443E+00	7.443E+00	8.827E+00	9.733E+00	1.083E+01	1.362E+01
5.00	3.070E+00	3.682E+00	4.576E+00	5.208E+00	6.053E+00	7.253E+00	8.063E+00	9.078E+00	1.196E+01
5.50	2.459E+00	2.976E+00	3.731E+00	4.265E+00	4.982E+00	6.013E+00	6.724E+00	7.638E+00	1.047E+01
6.00	1.988E+00	2.430E+00	3.076E+00	3.532E+00	4.145E+00	5.032E+00	5.650E+00	6.461E+00	9.139E+00
6.50	1.620E+00	2.001E+00	2.558E+00	2.953E+00	3.482E+00	4.249E+00	4.786E+00	5.499E+00	7.978E+00
7.00	1.329E+00	1.658E+00	2.144E+00	2.488E+00	2.949E+00	3.617E+00	4.086E+00	4.711E+00	6.970E+00
7.50	1.098E+00	1.383E+00	1.807E+00	2.110E+00	2.515E+00	3.101E+00	3.513E+00	4.063E+00	6.102E+00
8.00	9.119E-01	1.159E+00	1.532E+00	1.799E+00	2.158E+00	2.676E+00	3.039E+00	3.525E+00	5.356E+00
8.50	7.620E-01	9.772E-01	1.305E+00	1.541E+00	1.860E+00	2.322E+00	2.645E+00	3.076E+00	4.717E+00
9.00	6.406E-01	8.278E-01	1.116E+00	1.326E+00	1.611E+00	2.024E+00	2.313E+00	2.698E+00	4.169E+00
9.50	5.417E-01	7.047E-01	9.590E-01	1.146E+00	1.401E+00	1.772E+00	2.032E+00	2.378E+00	3.698E+00
10.00	4.608E-01	6.030E-01	8.273E-01	9.937E-01	1.222E+00	1.557E+00	1.792E+00	2.104E+00	3.293E+00
12.50	2.238E-01	2.981E-01	4.204E-01	5.148E-01	6.491E-01	8.530E-01	9.998E-01	1.197E+00	1.941E+00
15.00	1.233E-01	1.657E-01	2.365E-01	2.922E-01	3.730E-01	4.997E-01	5.937E-01	7.231E-01	1.223E+00
17.50	7.453E-02	1.010E-01	1.455E-01	1.806E-01	2.318E-01	3.128E-01	3.739E-01	4.598E-01	8.058E-01
20.00	4.812E-02	6.581E-02	9.592E-02	1.197E-01	1.543E-01	2.088E-01	2.499E-01	3.080E-01	5.499E-01
22.50	3.261E-02	4.496E-02	6.639E-02	8.352E-02	1.085E-01	1.475E-01	1.766E-01	2.173E-01	3.880E-01
25.00	2.297E-02	3.187E-02	4.763E-02	6.045E-02	7.932E-02	1.089E-01	1.307E-01	1.607E-01	2.836E-01
27.50	1.671E-02	2.329E-02	3.514E-02	4.497E-02	5.967E-02	8.296E-02	1.001E-01	1.236E-01	2.150E-01
30.00	1.250E-02	1.748E-02	2.656E-02	3.421E-02	4.586E-02	6.469E-02	7.871E-02	9.780E-02	1.688E-01
32.50	9.583E-03	1.344E-02	2.050E-02	2.654E-02	3.589E-02	5.133E-02	6.302E-02	7.907E-02	1.369E-01
35.00	7.507E-03	1.055E-02	1.614E-02	2.096E-02	2.853E-02	4.130E-02	5.117E-02	6.491E-02	1.139E-01
37.50	5.987E-03	8.436E-03	1.294E-02	1.683E-02	2.301E-02	3.365E-02	4.203E-02	5.390E-02	9.685E-02
40.00	4.854E-03	6.860E-03	1.054E-02	1.373E-02	1.883E-02	2.773E-02	3.488E-02	4.519E-02	8.363E-02
42.50	3.991E-03	5.661E-03	8.715E-03	1.136E-02	1.561E-02	2.311E-02	2.923E-02	3.821E-02	7.304E-02
45.00	3.323E-03	4.732E-03	7.305E-03	9.532E-03	1.310E-02	1.946E-02	2.472E-02	3.255E-02	6.432E-02
47.50	2.796E-03	4.000E-03	6.197E-03	8.094E-03	1.113E-02	1.657E-02	2.110E-02	2.795E-02	5.699E-02
50.00	2.376E-03	3.416E-03	5.314E-03	6.949E-03	9.563E-03	1.425E-02	1.818E-02	2.418E-02	5.074E-02
55.00	1.798E-03	2.626E-03	4.124E-03	5.412E-03	7.459E-03	1.112E-02	1.421E-02	1.898E-02	4.155E-02
60.00	1.341E-03	1.969E-03	3.135E-03	4.140E-03	5.730E-03	8.552E-03	1.093E-02	1.461E-02	3.301E-02
65.00	1.048E-03	1.554E-03	2.509E-03	3.338E-03	4.649E-03	6.959E-03	8.889E-03	1.187E-02	2.710E-02
70.00	8.356E-04	1.252E-03	2.051E-03	2.752E-03	3.866E-03	5.819E-03	7.439E-03	9.923E-03	2.249E-02
75.00	6.792E-04	1.027E-03	1.707E-03	2.313E-03	3.282E-03	4.984E-03	6.386E-03	8.515E-03	1.893E-02
80.00	5.615E-04	8.565E-04	1.444E-03	1.976E-03	2.836E-03	4.357E-03	5.607E-03	7.489E-03	1.620E-02
85.00	4.714E-04	7.249E-04	1.239E-03	1.712E-03	2.488E-03	3.877E-03	5.022E-03	6.738E-03	1.420E-02
90.00	4.015E-04	6.219E-04	1.077E-03	1.502E-03	2.213E-03	3.504E-03	4.578E-03	6.190E-03	1.284E-02
95.00	3.465E-04	5.402E-04	9.465E-04	1.334E-03	1.990E-03	3.210E-03	4.238E-03	5.793E-03	1.205E-02
100.00	3.027E-04	4.748E-04	8.412E-04	1.196E-03	1.809E-03	2.974E-03	3.975E-03	5.512E-03	1.177E-02
105.00	2.675E-04	4.219E-04	7.552E-04	1.083E-03	1.660E-03	2.784E-03	3.772E-03	5.320E-03	1.197E-02
110.00	2.390E-04	3.788E-04	6.845E-04	9.900E-04	1.537E-03	2.629E-03	3.615E-03	5.197E-03	1.259E-02
115.00	2.157E-04	3.434E-04	6.259E-04	9.122E-04	1.433E-03	2.503E-03	3.494E-03	5.127E-03	1.358E-02
120.00	1.965E-04	3.143E-04	5.771E-04	8.471E-04	1.346E-03	2.398E-03	3.400E-03	5.099E-03	1.487E-02
125.00	1.807E-04	2.901E-04	5.364E-04	7.924E-04	1.273E-03	2.312E-03	3.329E-03	5.103E-03	1.640E-02
130.00	1.676E-04	2.700E-04	5.024E-04	7.465E-04	1.211E-03	2.241E-03	3.274E-03	5.130E-03	1.812E-02
135.00	1.568E-04	2.533E-04	4.739E-04	7.078E-04	1.159E-03	2.181E-03	3.234E-03	5.173E-03	1.993E-02
140.00	1.478E-04	2.394E-04	4.501E-04	6.755E-04	1.115E-03	2.132E-03	3.204E-03	5.226E-03	2.179E-02
145.00	1.404E-04	2.280E-04	4.305E-04	6.485E-04	1.079E-03	2.092E-03	3.182E-03	5.285E-03	2.361E-02
150.00	1.343E-04	2.187E-04	4.143E-04	6.262E-04	1.048E-03	2.059E-03	3.167E-03	5.345E-03	2.535E-02
155.00	1.295E-04	2.111E-04	4.012E-04	6.082E-04	1.023E-03	2.033E-03	3.157E-03	5.401E-03	2.692E-02
160.00	1.257E-04	2.052E-04	3.909E-04	5.940E-04	1.004E-03	2.012E-03	3.150E-03	5.452E-03	2.829E-02
165.00	1.228E-04	2.007E-04	3.831E-04	5.831E-04	9.889E-04	1.997E-03	3.145E-03	5.494E-03	2.941E-02
170.00	1.208E-04	1.977E-04	3.777E-04	5.756E-04	9.785E-04	1.986E-03	3.142E-03	5.525E-03	3.023E-02
175.00	1.196E-04	1.958E-04	3.744E-04	5.711E-04	9.723E-04	1.980E-03	3.141E-03	5.545E-03	3.074E-02
180.00	1.193E-04	1.953E-04	3.734E-04	5.697E-04	9.703E-04	1.978E-03	3.140E-03	5.551E-03	3.091E-02
TOTAL	3.879E-01	4.577E-01	5.626E-01	6.385E-01	7.423E-01	8.949E-01	1.003E+00	1.149E+00	1.705E+00
TRANS	8.910E-03	1.283E-02	2.039E-02	2.721E-02	3.853E-02	5.980E-02	7.858E-02	1.091E-01	2.876E-01

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 32

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	4.677E+02	3.549E+02	2.531E+02	2.083E+02	1.685E+02	1.334E+02	1.174E+02	1.022E+02	8.781E+01
0.25	8.386E+01	8.501E+01	8.554E+01	8.484E+01	8.264E+01	7.845E+01	7.550E+01	7.197E+01	6.774E+01
0.50	1.917E+01	2.081E+01	2.316E+01	2.482E+01	2.702E+01	3.010E+01	3.210E+01	3.451E+01	3.744E+01
0.75	6.727E+00	7.783E+00	9.318E+00	1.035E+01	1.165E+01	1.347E+01	1.481E+01	1.674E+01	1.968E+01
1.00	2.745E+00	3.429E+00	4.480E+00	5.195E+00	6.062E+00	7.216E+00	8.044E+00	9.259E+00	1.120E+01
1.50	6.573E-01	8.918E-01	1.297E+00	1.612E+00	2.047E+00	2.683E+00	3.136E+00	3.753E+00	4.687E+00
2.00	2.318E-01	3.171E-01	4.726E-01	6.051E-01	8.114E-01	1.158E+00	1.426E+00	1.801E+00	2.371E+00
2.50	1.035E-01	1.407E-01	2.098E-01	2.709E-01	3.714E-01	5.538E-01	7.057E-01	9.335E-01	1.303E+00
3.00	5.308E-02	7.235E-02	1.082E-01	1.401E-01	1.928E-01	2.915E-01	3.777E-01	5.148E-01	7.533E-01
3.50	2.987E-02	4.108E-02	6.196E-02	8.040E-02	1.106E-01	1.673E-01	2.180E-01	3.019E-01	4.557E-01
4.00	1.801E-02	2.504E-02	3.817E-02	4.970E-02	6.838E-02	1.032E-01	1.347E-01	1.877E-01	2.882E-01
4.50	1.146E-02	1.609E-02	2.479E-02	3.241E-02	4.470E-02	6.750E-02	8.807E-02	1.230E-01	1.902E-01
5.00	7.631E-03	1.079E-02	1.677E-02	2.202E-02	3.049E-02	4.620E-02	6.032E-02	8.422E-02	1.305E-01
5.50	5.275E-03	7.495E-03	1.172E-02	1.546E-02	2.152E-02	3.277E-02	4.286E-02	5.984E-02	9.267E-02
6.00	3.763E-03	5.363E-03	8.423E-03	1.115E-02	1.561E-02	2.393E-02	3.137E-02	4.382E-02	6.782E-02
6.50	2.758E-03	3.936E-03	6.201E-03	8.235E-03	1.159E-02	1.788E-02	2.351E-02	3.289E-02	5.091E-02
7.00	2.068E-03	2.954E-03	4.663E-03	6.208E-03	8.773E-03	1.363E-02	1.798E-02	2.521E-02	3.906E-02
7.50	1.582E-03	2.260E-03	3.573E-03	4.766E-03	6.766E-03	1.056E-02	1.398E-02	1.965E-02	3.052E-02
8.00	1.232E-03	1.759E-03	2.783E-03	3.718E-03	5.291E-03	8.306E-03	1.103E-02	1.555E-02	2.422E-02
8.50	9.736E-04	1.391E-03	2.201E-03	2.944E-03	4.198E-03	6.618E-03	8.810E-03	1.247E-02	1.948E-02
9.00	7.800E-04	1.114E-03	1.764E-03	2.361E-03	3.373E-03	5.335E-03	7.120E-03	1.011E-02	1.586E-02
9.50	6.325E-04	9.032E-04	1.431E-03	1.916E-03	2.741E-03	4.347E-03	5.815E-03	8.283E-03	1.304E-02
10.00	5.184E-04	7.404E-04	1.173E-03	1.572E-03	2.251E-03	3.577E-03	4.793E-03	6.848E-03	1.082E-02
12.50	2.182E-04	3.120E-04	4.952E-04	6.643E-04	9.531E-04	1.522E-03	2.052E-03	2.964E-03	4.762E-03
15.00	1.076E-04	1.541E-04	2.452E-04	3.292E-04	4.725E-04	7.557E-04	1.021E-03	1.483E-03	2.405E-03
17.50	5.915E-05	8.491E-05	1.354E-04	1.819E-04	2.613E-04	4.184E-04	5.660E-04	8.236E-04	1.343E-03
20.00	3.523E-05	5.065E-05	8.090E-05	1.088E-04	1.565E-04	2.509E-04	3.397E-04	4.949E-04	8.090E-04
22.50	2.231E-05	3.212E-05	5.138E-05	6.919E-05	9.964E-05	1.600E-04	2.168E-04	3.160E-04	5.174E-04
25.00	1.483E-05	2.137E-05	3.423E-05	4.614E-05	6.654E-05	1.070E-04	1.451E-04	2.117E-04	3.471E-04
27.50	1.025E-05	1.478E-05	2.370E-05	3.198E-05	4.618E-05	7.438E-05	1.010E-04	1.474E-04	2.420E-04
30.00	7.314E-06	1.056E-05	1.695E-05	2.289E-05	3.308E-05	5.338E-05	7.252E-05	1.060E-04	1.743E-04
32.50	5.364E-06	7.747E-06	1.245E-05	1.682E-05	2.435E-05	3.934E-05	5.351E-05	7.831E-05	1.289E-04
35.00	4.025E-06	5.817E-06	9.356E-06	1.265E-05	1.833E-05	2.966E-05	4.038E-05	5.918E-05	9.757E-05
37.50	3.080E-06	4.454E-06	7.170E-06	9.703E-06	1.407E-05	2.281E-05	3.108E-05	4.561E-05	7.533E-05
40.00	2.398E-06	3.469E-06	5.590E-06	7.569E-06	1.099E-05	1.784E-05	2.434E-05	3.576E-05	5.915E-05
42.50	1.895E-06	2.743E-06	4.424E-06	5.994E-06	8.709E-06	1.416E-05	1.934E-05	2.845E-05	4.715E-05
45.00	1.517E-06	2.198E-06	3.547E-06	4.810E-06	6.995E-06	1.139E-05	1.557E-05	2.295E-05	3.809E-05
47.50	1.229E-06	1.782E-06	2.878E-06	3.905E-06	5.686E-06	9.273E-06	1.269E-05	1.873E-05	3.114E-05
50.00	1.006E-06	1.459E-06	2.360E-06	3.204E-06	4.670E-06	7.628E-06	1.045E-05	1.544E-05	2.573E-05
55.00	6.927E-07	1.006E-06	1.630E-06	2.217E-06	3.239E-06	5.308E-06	7.290E-06	1.080E-05	1.807E-05
60.00	4.915E-07	7.151E-07	1.162E-06	1.583E-06	2.317E-06	3.811E-06	5.247E-06	7.799E-06	1.310E-05
65.00	3.577E-07	5.214E-07	8.492E-07	1.159E-06	1.702E-06	2.811E-06	3.880E-06	5.787E-06	9.762E-06
70.00	2.658E-07	3.882E-07	6.343E-07	8.678E-07	1.278E-06	2.120E-06	2.935E-06	4.392E-06	7.444E-06
75.00	2.010E-07	2.943E-07	4.825E-07	6.619E-07	9.782E-07	1.630E-06	2.264E-06	3.402E-06	5.793E-06
80.00	1.542E-07	2.265E-07	3.729E-07	5.129E-07	7.610E-07	1.275E-06	1.777E-06	2.682E-06	4.591E-06
85.00	1.198E-07	1.766E-07	2.920E-07	4.030E-07	6.006E-07	1.013E-06	1.416E-06	2.147E-06	3.696E-06
90.00	9.410E-08	1.392E-07	2.315E-07	3.206E-07	4.801E-07	8.149E-07	1.145E-06	1.744E-06	3.021E-06
95.00	7.454E-08	1.108E-07	1.853E-07	2.577E-07	3.881E-07	6.636E-07	9.366E-07	1.435E-06	2.501E-06
100.00	5.951E-08	8.890E-08	1.497E-07	2.093E-07	3.171E-07	5.468E-07	7.757E-07	1.195E-06	2.097E-06
105.00	4.778E-08	7.181E-08	1.219E-07	1.713E-07	2.615E-07	4.549E-07	6.489E-07	1.006E-06	1.778E-06
110.00	3.857E-08	5.838E-08	1.001E-07	1.415E-07	2.176E-07	3.824E-07	5.488E-07	8.563E-07	1.525E-06
115.00	3.126E-08	4.770E-08	8.265E-08	1.177E-07	1.825E-07	3.243E-07	4.685E-07	7.363E-07	1.322E-06
120.00	2.541E-08	3.916E-08	6.870E-08	9.859E-08	1.544E-07	2.777E-07	4.038E-07	6.395E-07	1.158E-06
125.00	2.072E-08	3.229E-08	5.747E-08	8.322E-08	1.318E-07	2.400E-07	3.516E-07	5.611E-07	1.025E-06
130.00	1.692E-08	2.672E-08	4.834E-08	7.072E-08	1.133E-07	2.092E-07	3.089E-07	4.970E-07	9.154E-07
135.00	1.386E-08	2.222E-08	4.099E-08	6.064E-08	9.841E-08	1.844E-07	2.743E-07	4.450E-07	8.265E-07
140.00	1.136E-08	1.855E-08	3.496E-08	5.238E-08	8.618E-08	1.639E-07	2.458E-07	4.021E-07	7.536E-07
145.00	9.364E-09	1.559E-08	3.012E-08	4.576E-08	7.639E-08	1.475E-07	2.230E-07	3.676E-07	6.943E-07
150.00	7.749E-09	1.320E-08	2.620E-08	4.040E-08	6.845E-08	1.342E-07	2.043E-07	3.394E-07	6.461E-07
155.00	6.474E-09	1.130E-08	2.309E-08	3.616E-08	6.219E-08	1.236E-07	1.895E-07	3.170E-07	6.076E-07
160.00	5.490E-09	9.830E-09	2.068E-08	3.289E-08	5.738E-08	1.155E-07	1.781E-07	2.997E-07	5.779E-07
165.00	4.745E-09	8.708E-09	1.885E-08	3.040E-08	5.371E-08	1.093E-07	1.694E-07	2.865E-07	5.556E-07
170.00	4.249E-09	7.958E-09	1.763E-08	2.876E-08	5.133E-08	1.053E-07	1.637E-07	2.778E-07	5.403E-07
175.00	3.933E-09	7.474E-09	1.684E-08	2.769E-08	4.976E-08	1.025E-07	1.598E-07	2.718E-07	5.303E-07
180.00	3.870E-09	7.379E-09	1.669E-08	2.751E-08	4.954E-08	1.023E-07	1.594E-07	2.707E-07	5.269E-07
TOTAL	2.658E-02	2.784E-02	2.982E-02	3.146E-02	3.407E-02	3.858E-02	4.224E-02	4.773E-02	5.682E-02
TRANS	6.938E-06	9.706E-06	1.499E-05	1.978E-05	2.784E-05	4.353E-05	5.805E-05	8.301E-05	1.327E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 32

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	7.420E+01	6.889E+01	6.354E+01	6.075E+01	5.782E+01	5.458E+01	5.274E+01	5.065E+01	4.811E+01
0.25	6.258E+01	6.016E+01	5.740E+01	5.582E+01	5.403E+01	5.186E+01	5.054E+01	4.894E+01	4.688E+01
0.50	4.088E+01	4.233E+01	4.371E+01	4.430E+01	4.475E+01	4.488E+01	4.473E+01	4.432E+01	4.346E+01
0.75	2.431E+01	2.692E+01	3.014E+01	3.201E+01	3.404E+01	3.614E+01	3.714E+01	3.801E+01	3.855E+01
1.00	1.470E+01	1.698E+01	2.016E+01	2.225E+01	2.477E+01	2.781E+01	2.951E+01	3.128E+01	3.302E+01
1.50	6.414E+00	7.641E+00	9.565E+00	1.100E+01	1.296E+01	1.574E+01	1.759E+01	1.986E+01	2.262E+01
2.00	3.391E+00	4.099E+00	5.220E+00	6.081E+00	7.314E+00	9.208E+00	1.058E+01	1.243E+01	1.497E+01
2.50	1.984E+00	2.452E+00	3.182E+00	3.736E+00	4.532E+00	5.782E+00	6.726E+00	8.047E+00	1.000E+01
3.00	1.223E+00	1.555E+00	2.073E+00	2.462E+00	3.016E+00	3.882E+00	4.539E+00	5.473E+00	6.907E+00
3.50	7.801E-01	1.021E+00	1.404E+00	1.694E+00	2.105E+00	2.741E+00	3.220E+00	3.899E+00	4.953E+00
4.00	5.126E-01	6.878E-01	9.764E-01	1.198E+00	1.514E+00	2.004E+00	2.369E+00	2.883E+00	3.678E+00
4.50	3.468E-01	4.746E-01	6.926E-01	8.642E-01	1.113E+00	1.500E+00	1.788E+00	2.192E+00	2.813E+00
5.00	2.414E-01	3.352E-01	5.003E-01	6.337E-01	8.306E-01	1.143E+00	1.376E+00	1.702E+00	2.200E+00
5.50	1.728E-01	2.423E-01	3.677E-01	4.717E-01	6.285E-01	8.818E-01	1.073E+00	1.342E+00	1.751E+00
6.00	1.269E-01	1.790E-01	2.750E-01	3.565E-01	4.816E-01	6.882E-01	8.464E-01	1.071E+00	1.413E+00
6.50	9.544E-02	1.351E-01	2.093E-01	2.733E-01	3.735E-01	5.425E-01	6.740E-01	8.625E-01	1.152E+00
7.00	7.328E-02	1.039E-01	1.619E-01	2.127E-01	2.933E-01	4.318E-01	5.415E-01	7.005E-01	9.473E-01
7.50	5.731E-02	8.132E-02	1.271E-01	1.678E-01	2.330E-01	3.470E-01	4.386E-01	5.733E-01	7.874E-01
8.00	4.555E-02	6.467E-02	1.013E-01	1.341E-01	1.872E-01	2.814E-01	3.583E-01	4.725E-01	6.543E-01
8.50	3.672E-02	5.215E-02	8.184E-02	1.085E-01	1.521E-01	2.304E-01	2.950E-01	3.922E-01	5.488E-01
9.00	2.997E-02	4.258E-02	6.690E-02	8.866E-02	1.249E-01	1.903E-01	2.449E-01	3.278E-01	4.630E-01
9.50	2.472E-02	3.515E-02	5.528E-02	7.353E-02	1.036E-01	1.586E-01	2.049E-01	2.758E-01	3.928E-01
10.00	2.059E-02	2.930E-02	4.614E-02	6.142E-02	8.673E-02	1.332E-01	1.727E-01	2.336E-01	3.352E-01
12.50	9.230E-03	1.323E-02	2.100E-02	2.809E-02	3.992E-02	6.208E-02	8.133E-02	1.118E-01	1.642E-01
15.00	4.741E-03	6.860E-03	1.099E-02	1.478E-02	2.113E-02	3.316E-02	4.377E-02	6.080E-02	9.065E-02
17.50	2.680E-03	3.910E-03	6.328E-03	8.548E-03	1.229E-02	1.945E-02	2.586E-02	3.626E-02	5.479E-02
20.00	1.628E-03	2.392E-03	3.904E-03	5.299E-03	7.660E-03	1.222E-02	1.634E-02	2.309E-02	3.533E-02
22.50	1.048E-03	1.546E-03	2.542E-03	3.466E-03	5.040E-03	8.094E-03	1.087E-02	1.545E-02	2.390E-02
25.00	7.055E-04	1.045E-03	1.729E-03	2.368E-03	3.462E-03	5.595E-03	7.536E-03	1.076E-02	1.679E-02
27.50	4.934E-04	7.329E-04	1.218E-03	1.676E-03	2.464E-03	4.005E-03	5.410E-03	7.756E-03	1.218E-02
30.00	3.562E-04	5.301E-04	8.850E-04	1.222E-03	1.805E-03	2.952E-03	3.999E-03	5.752E-03	9.079E-03
32.50	2.640E-04	3.936E-04	6.595E-04	9.135E-04	1.356E-03	2.229E-03	3.030E-03	4.375E-03	6.936E-03
35.00	2.002E-04	2.989E-04	5.023E-04	6.978E-04	1.040E-03	1.720E-03	2.345E-03	3.399E-03	5.412E-03
37.50	1.549E-04	2.315E-04	3.901E-04	5.431E-04	8.121E-04	1.350E-03	1.849E-03	2.691E-03	4.303E-03
40.00	1.219E-04	1.824E-04	3.080E-04	4.298E-04	6.446E-04	1.077E-03	1.480E-03	2.164E-03	3.477E-03
42.50	9.735E-05	1.459E-04	2.469E-04	3.451E-04	5.191E-04	8.718E-04	1.202E-03	1.766E-03	2.851E-03
45.00	7.884E-05	1.183E-04	2.006E-04	2.808E-04	4.233E-04	7.141E-04	9.884E-04	1.459E-03	2.367E-03
47.50	6.461E-05	9.708E-05	1.649E-04	2.311E-04	3.492E-04	5.915E-04	8.216E-04	1.218E-03	1.987E-03
50.00	5.351E-05	8.052E-05	1.370E-04	1.923E-04	2.912E-04	4.951E-04	6.898E-04	1.027E-03	1.685E-03
55.00	3.779E-05	5.701E-05	9.735E-05	1.369E-04	2.081E-04	3.562E-04	4.992E-04	7.493E-04	1.244E-03
60.00	2.755E-05	4.169E-05	7.146E-05	1.008E-04	1.536E-04	2.644E-04	3.724E-04	5.632E-04	9.450E-04
65.00	2.065E-05	3.136E-05	5.395E-05	7.623E-05	1.166E-04	2.017E-04	2.853E-04	4.341E-04	7.361E-04
70.00	1.585E-05	2.414E-05	4.170E-05	5.908E-05	9.061E-05	1.575E-04	2.236E-04	3.422E-04	5.860E-04
75.00	1.242E-05	1.898E-05	3.293E-05	4.676E-05	7.194E-05	1.256E-04	1.789E-04	2.752E-04	4.754E-04
80.00	9.910E-06	1.520E-05	2.649E-05	3.772E-05	5.821E-05	1.021E-04	1.458E-04	2.253E-04	3.924E-04
85.00	8.037E-06	1.238E-05	2.167E-05	3.093E-05	4.790E-05	8.435E-05	1.208E-04	1.875E-04	3.289E-04
90.00	6.619E-06	1.023E-05	1.799E-05	2.576E-05	4.003E-05	7.078E-05	1.017E-04	1.583E-04	2.798E-04
95.00	5.525E-06	8.576E-06	1.515E-05	2.176E-05	3.392E-05	6.023E-05	8.675E-05	1.356E-04	2.411E-04
100.00	4.672E-06	7.281E-06	1.293E-05	1.862E-05	2.913E-05	5.193E-05	7.499E-05	1.176E-04	2.104E-04
105.00	3.997E-06	6.256E-06	1.117E-05	1.613E-05	2.532E-05	4.533E-05	6.562E-05	1.033E-04	1.857E-04
110.00	3.459E-06	5.438E-06	9.753E-06	1.413E-05	2.225E-05	4.001E-05	5.807E-05	9.172E-05	1.658E-04
115.00	3.027E-06	4.778E-06	8.613E-06	1.251E-05	1.978E-05	3.570E-05	5.195E-05	8.231E-05	1.495E-04
120.00	2.676E-06	4.243E-06	7.686E-06	1.120E-05	1.776E-05	3.218E-05	4.694E-05	7.461E-05	1.361E-04
125.00	2.390E-06	3.806E-06	6.928E-06	1.012E-05	1.610E-05	2.930E-05	4.283E-05	6.828E-05	1.250E-04
130.00	2.156E-06	3.448E-06	6.306E-06	9.239E-06	1.474E-05	2.692E-05	3.945E-05	6.305E-05	1.159E-04
135.00	1.964E-06	3.154E-06	5.794E-06	8.512E-06	1.362E-05	2.496E-05	3.665E-05	5.874E-05	1.084E-04
140.00	1.807E-06	2.913E-06	5.374E-06	7.913E-06	1.270E-05	2.334E-05	3.434E-05	5.518E-05	1.021E-04
145.00	1.679E-06	2.716E-06	5.030E-06	7.423E-06	1.194E-05	2.201E-05	3.245E-05	5.225E-05	9.697E-05
150.00	1.575E-06	2.556E-06	4.751E-06	7.025E-06	1.132E-05	2.093E-05	3.091E-05	4.987E-05	9.277E-05
155.00	1.492E-06	2.429E-06	4.528E-06	6.706E-06	1.083E-05	2.007E-05	2.967E-05	4.795E-05	8.939E-05
160.00	1.427E-06	2.329E-06	4.353E-06	6.457E-06	1.044E-05	1.939E-05	2.870E-05	4.645E-05	8.675E-05
165.00	1.379E-06	2.255E-06	4.222E-06	6.269E-06	1.015E-05	1.888E-05	2.798E-05	4.532E-05	8.475E-05
170.00	1.346E-06	2.203E-06	4.132E-06	6.139E-06	9.952E-06	1.853E-05	2.747E-05	4.454E-05	8.338E-05
175.00	1.325E-06	2.172E-06	4.078E-06	6.063E-06	9.834E-06	1.832E-05	2.717E-05	4.407E-05	8.254E-05
180.00	1.316E-06	2.158E-06	4.058E-06	6.036E-06	9.794E-06	1.825E-05	2.708E-05	4.393E-05	8.230E-05
TOTAL	7.466E-02	8.772E-02	1.088E-01	1.251E-01	1.487E-01	1.858E-01	2.138E-01	2.535E-01	3.144E-01
TRANS	2.605E-04	3.793E-04	6.177E-04	8.421E-04	1.230E-03	2.003E-03	2.722E-03	3.953E-03	6.360E-03

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 32

ENERGY (keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	4.470E+01	4.286E+01	4.050E+01	3.901E+01	3.720E+01	3.488E+01	3.343E+01	3.168E+01	2.651E+01
0.25	4.392E+01	4.225E+01	4.006E+01	3.866E+01	3.692E+01	3.468E+01	3.327E+01	3.155E+01	2.645E+01
0.50	4.169E+01	4.050E+01	3.879E+01	3.761E+01	3.611E+01	3.409E+01	3.279E+01	3.118E+01	2.629E+01
0.75	3.835E+01	3.782E+01	3.679E+01	3.597E+01	3.481E+01	3.314E+01	3.201E+01	3.058E+01	2.601E+01
1.00	3.433E+01	3.451E+01	3.425E+01	3.383E+01	3.311E+01	3.188E+01	3.097E+01	2.975E+01	2.563E+01
1.50	2.584E+01	2.715E+01	2.829E+01	2.869E+01	2.886E+01	2.862E+01	2.824E+01	2.758E+01	2.459E+01
2.00	1.854E+01	2.033E+01	2.229E+01	2.327E+01	2.417E+01	2.484E+01	2.498E+01	2.489E+01	2.322E+01
2.50	1.312E+01	1.489E+01	1.708E+01	1.833E+01	1.966E+01	2.097E+01	2.154E+01	2.197E+01	2.161E+01
3.00	9.367E+00	1.089E+01	1.294E+01	1.422E+01	1.570E+01	1.736E+01	1.822E+01	1.903E+01	1.986E+01
3.50	6.834E+00	8.065E+00	9.819E+00	1.099E+01	1.243E+01	1.419E+01	1.519E+01	1.625E+01	1.803E+01
4.00	5.117E+00	6.086E+00	7.525E+00	8.530E+00	9.825E+00	1.152E+01	1.256E+01	1.373E+01	1.620E+01
4.50	3.930E+00	4.692E+00	5.851E+00	6.686E+00	7.802E+00	9.343E+00	1.034E+01	1.153E+01	1.443E+01
5.00	3.088E+00	3.693E+00	4.624E+00	5.310E+00	6.248E+00	7.597E+00	8.508E+00	9.642E+00	1.276E+01
5.50	2.473E+00	2.962E+00	3.716E+00	4.276E+00	5.056E+00	6.212E+00	7.019E+00	8.063E+00	1.122E+01
6.00	2.012E+00	2.414E+00	3.032E+00	3.493E+00	4.140E+00	5.118E+00	5.820E+00	6.754E+00	9.822E+00
6.50	1.657E+00	1.994E+00	2.508E+00	2.891E+00	3.429E+00	4.254E+00	4.857E+00	5.679E+00	8.575E+00
7.00	1.379E+00	1.666E+00	2.100E+00	2.421E+00	2.873E+00	3.569E+00	4.084E+00	4.799E+00	7.475E+00
7.50	1.157E+00	1.404E+00	1.776E+00	2.049E+00	2.431E+00	3.021E+00	3.462E+00	4.079E+00	6.512E+00
8.00	9.779E-01	1.193E+00	1.514E+00	1.749E+00	2.077E+00	2.581E+00	2.957E+00	3.490E+00	5.677E+00
8.50	8.311E-01	1.019E+00	1.301E+00	1.505E+00	1.789E+00	2.222E+00	2.546E+00	3.006E+00	4.956E+00
9.00	7.102E-01	8.761E-01	1.124E+00	1.303E+00	1.551E+00	1.928E+00	2.208E+00	2.606E+00	4.336E+00
9.50	6.098E-01	7.566E-01	9.762E-01	1.135E+00	1.354E+00	1.684E+00	1.928E+00	2.274E+00	3.803E+00
10.00	5.260E-01	6.562E-01	8.519E-01	9.936E-01	1.188E+00	1.479E+00	1.694E+00	1.997E+00	3.347E+00
12.50	2.679E-01	3.417E-01	4.559E-01	5.400E-01	6.559E-01	8.281E-01	9.523E-01	1.123E+00	1.871E+00
15.00	1.509E-01	1.949E-01	2.643E-01	3.165E-01	3.898E-01	5.003E-01	5.804E-01	6.901E-01	1.148E+00
17.50	9.283E-02	1.207E-01	1.651E-01	1.987E-01	2.463E-01	3.195E-01	3.733E-01	4.478E-01	7.567E-01
20.00	6.106E-02	8.012E-02	1.102E-01	1.329E-01	1.651E-01	2.147E-01	2.515E-01	3.032E-01	5.225E-01
22.50	4.218E-02	5.595E-02	7.772E-02	9.400E-02	1.168E-01	1.516E-01	1.774E-01	2.138E-01	3.726E-01
25.00	3.020E-02	4.054E-02	5.707E-02	6.942E-02	8.653E-02	1.121E-01	1.308E-01	1.569E-01	2.726E-01
27.50	2.224E-02	3.019E-02	4.316E-02	5.292E-02	6.641E-02	8.624E-02	1.004E-01	1.197E-01	2.044E-01
30.00	1.678E-02	2.299E-02	3.336E-02	4.130E-02	5.231E-02	6.839E-02	7.960E-02	9.453E-02	1.572E-01
32.50	1.292E-02	1.784E-02	2.625E-02	3.280E-02	4.201E-02	5.550E-02	6.481E-02	7.691E-02	1.242E-01
35.00	1.014E-02	1.408E-02	2.096E-02	2.642E-02	3.423E-02	4.580E-02	5.379E-02	6.403E-02	1.008E-01
37.50	8.104E-03	1.130E-02	1.697E-02	2.156E-02	2.822E-02	3.828E-02	4.528E-02	5.423E-02	8.390E-02
40.00	6.578E-03	9.200E-03	1.391E-02	1.779E-02	2.351E-02	3.231E-02	3.854E-02	4.654E-02	7.152E-02
42.50	5.417E-03	7.596E-03	1.155E-02	1.484E-02	1.977E-02	2.751E-02	3.308E-02	4.033E-02	6.221E-02
45.00	4.520E-03	6.352E-03	9.694E-03	1.251E-02	1.677E-02	2.360E-02	2.860E-02	3.520E-02	5.504E-02
47.50	3.816E-03	5.375E-03	8.229E-03	1.065E-02	1.436E-02	2.039E-02	2.489E-02	3.092E-02	4.936E-02
50.00	3.256E-03	4.598E-03	7.057E-03	9.157E-03	1.240E-02	1.775E-02	2.179E-02	2.731E-02	4.474E-02
55.00	2.437E-03	3.461E-03	5.340E-03	6.954E-03	9.475E-03	1.372E-02	1.701E-02	2.162E-02	3.762E-02
60.00	1.883E-03	2.693E-03	4.179E-03	5.458E-03	7.469E-03	1.090E-02	1.359E-02	1.745E-02	3.224E-02
65.00	1.492E-03	2.152E-03	3.366E-03	4.411E-03	6.059E-03	8.885E-03	1.112E-02	1.435E-02	2.790E-02
70.00	1.209E-03	1.760E-03	2.779E-03	3.658E-03	5.045E-03	7.428E-03	9.316E-03	1.204E-02	2.420E-02
75.00	9.975E-04	1.467E-03	2.343E-03	3.102E-03	4.301E-03	6.362E-03	7.988E-03	1.031E-02	2.093E-02
80.00	8.369E-04	1.244E-03	2.012E-03	2.683E-03	3.744E-03	5.572E-03	7.009E-03	9.032E-03	1.801E-02
85.00	7.125E-04	1.070E-03	1.756E-03	2.360E-03	3.322E-03	4.985E-03	6.290E-03	8.099E-03	1.541E-02
90.00	6.148E-04	9.326E-04	1.554E-03	2.108E-03	2.998E-03	4.549E-03	5.770E-03	7.447E-03	1.322E-02
95.00	5.370E-04	8.228E-04	1.392E-03	1.907E-03	2.745E-03	4.225E-03	5.403E-03	7.022E-03	1.153E-02
100.00	4.744E-04	7.339E-04	1.261E-03	1.746E-03	2.547E-03	3.989E-03	5.157E-03	6.787E-03	1.046E-02
105.00	4.236E-04	6.612E-04	1.153E-03	1.615E-03	2.391E-03	3.819E-03	5.006E-03	6.708E-03	1.016E-02
110.00	3.820E-04	6.014E-04	1.064E-03	1.508E-03	2.267E-03	3.702E-03	4.931E-03	6.759E-03	1.071E-02
115.00	3.477E-04	5.518E-04	9.905E-04	1.419E-03	2.168E-03	3.626E-03	4.915E-03	6.916E-03	1.218E-02
120.00	3.193E-04	5.104E-04	9.287E-04	1.345E-03	2.089E-03	3.581E-03	4.947E-03	7.158E-03	1.461E-02
125.00	2.957E-04	4.759E-04	8.768E-04	1.284E-03	2.025E-03	3.561E-03	5.014E-03	7.463E-03	1.794E-02
130.00	2.761E-04	4.470E-04	8.331E-04	1.232E-03	1.974E-03	3.560E-03	5.107E-03	7.815E-03	2.210E-02
135.00	2.597E-04	4.228E-04	7.964E-04	1.189E-03	1.934E-03	3.572E-03	5.217E-03	8.194E-03	2.693E-02
140.00	2.461E-04	4.025E-04	7.655E-04	1.153E-03	1.902E-03	3.593E-03	5.337E-03	8.584E-03	3.225E-02
145.00	2.348E-04	3.857E-04	7.398E-04	1.123E-03	1.876E-03	3.619E-03	5.460E-03	8.969E-03	3.781E-02
150.00	2.256E-04	3.719E-04	7.186E-04	1.099E-03	1.856E-03	3.648E-03	5.579E-03	9.336E-03	4.337E-02
155.00	2.182E-04	3.607E-04	7.013E-04	1.079E-03	1.840E-03	3.677E-03	5.690E-03	9.669E-03	4.865E-02
160.00	2.123E-04	3.519E-04	6.877E-04	1.063E-03	1.828E-03	3.703E-03	5.787E-03	9.959E-03	5.340E-02
165.00	2.079E-04	3.453E-04	6.773E-04	1.051E-03	1.820E-03	3.726E-03	5.867E-03	1.020E-02	5.737E-02
170.00	2.048E-04	3.406E-04	6.701E-04	1.043E-03	1.814E-03	3.742E-03	5.925E-03	1.037E-02	6.036E-02
175.00	2.030E-04	3.379E-04	6.658E-04	1.038E-03	1.810E-03	3.753E-03	5.963E-03	1.048E-02	6.223E-02
180.00	2.024E-04	3.369E-04	6.644E-04	1.036E-03	1.809E-03	3.756E-03	5.973E-03	1.051E-02	6.285E-02
TOTAL	4.215E-01	4.924E-01	5.981E-01	6.741E-01	7.775E-01	9.289E-01	1.036E+00	1.181E+00	1.744E+00
TRANS	1.228E-02	1.751E-02	2.747E-02	3.636E-02	5.096E-02	7.801E-02	1.015E-01	1.392E-01	3.482E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 36

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	4.076E+02	3.092E+02	2.204E+02	1.813E+02	1.466E+02	1.160E+02	1.019E+02	8.866E+01	7.605E+01
0.25	1.145E+02	1.121E+02	1.074E+02	1.027E+02	9.533E+01	8.490E+01	7.879E+01	7.239E+01	6.563E+01
0.50	2.245E+01	2.586E+01	3.064E+01	3.363E+01	3.695E+01	4.045E+01	4.211E+01	4.354E+01	4.452E+01
0.75	7.575E+00	8.866E+00	1.088E+01	1.241E+01	1.460E+01	1.787E+01	2.012E+01	2.291E+01	2.640E+01
1.00	3.257E+00	3.934E+00	5.005E+00	5.815E+00	6.963E+00	8.763E+00	1.014E+01	1.214E+01	1.517E+01
1.50	8.256E-01	1.093E+00	1.540E+00	1.875E+00	2.323E+00	2.993E+00	3.512E+00	4.309E+00	5.663E+00
2.00	2.892E-01	3.975E-01	5.901E-01	7.461E-01	9.731E-01	1.332E+00	1.605E+00	2.002E+00	2.652E+00
2.50	1.278E-01	1.759E-01	2.642E-01	3.403E-01	4.604E-01	6.670E-01	8.308E-01	1.068E+00	1.448E+00
3.00	6.555E-02	8.984E-02	1.351E-01	1.753E-01	2.413E-01	3.612E-01	4.612E-01	6.118E-01	8.609E-01
3.50	3.706E-02	5.087E-02	7.671E-02	9.979E-02	1.381E-01	2.094E-01	2.712E-01	3.689E-01	5.379E-01
4.00	2.246E-02	3.102E-02	4.707E-02	6.135E-02	8.490E-02	1.291E-01	1.684E-01	2.327E-01	3.488E-01
4.50	1.437E-02	2.000E-02	3.058E-02	3.995E-02	5.528E-02	8.406E-02	1.099E-01	1.532E-01	2.338E-01
5.00	9.598E-03	1.346E-02	2.075E-02	2.718E-02	3.765E-02	5.725E-02	7.496E-02	1.049E-01	1.617E-01
5.50	6.649E-03	9.384E-03	1.456E-02	1.914E-02	2.657E-02	4.047E-02	5.302E-02	7.429E-02	1.151E-01
6.00	4.750E-03	6.735E-03	1.051E-02	1.386E-02	1.931E-02	2.949E-02	3.868E-02	5.422E-02	8.420E-02
6.50	3.484E-03	4.956E-03	7.768E-03	1.027E-02	1.437E-02	2.203E-02	2.894E-02	4.058E-02	6.307E-02
7.00	2.614E-03	3.726E-03	5.859E-03	7.769E-03	1.091E-02	1.681E-02	2.212E-02	3.104E-02	4.826E-02
7.50	2.000E-03	2.855E-03	4.500E-03	5.981E-03	8.429E-03	1.305E-02	1.721E-02	2.418E-02	3.762E-02
8.00	1.558E-03	2.225E-03	3.513E-03	4.677E-03	6.614E-03	1.029E-02	1.360E-02	1.914E-02	2.980E-02
8.50	1.231E-03	1.759E-03	2.781E-03	3.710E-03	5.261E-03	8.220E-03	1.089E-02	1.536E-02	2.395E-02
9.00	9.867E-04	1.410E-03	2.231E-03	2.980E-03	4.236E-03	6.645E-03	8.823E-03	1.247E-02	1.948E-02
9.50	8.003E-04	1.144E-03	1.811E-03	2.421E-03	3.448E-03	5.428E-03	7.223E-03	1.023E-02	1.602E-02
10.00	6.562E-04	9.378E-04	1.485E-03	1.987E-03	2.836E-03	4.476E-03	5.969E-03	8.474E-03	1.330E-02
12.50	2.768E-04	3.957E-04	6.278E-04	8.418E-04	1.207E-03	1.921E-03	2.580E-03	3.702E-03	5.892E-03
15.00	1.368E-04	1.959E-04	3.113E-04	4.177E-04	5.994E-04	9.575E-04	1.291E-03	1.865E-03	3.001E-03
17.50	7.546E-05	1.082E-04	1.722E-04	2.313E-04	3.321E-04	5.312E-04	7.176E-04	1.041E-03	1.687E-03
20.00	4.507E-05	6.471E-05	1.032E-04	1.387E-04	1.993E-04	3.191E-04	4.316E-04	6.276E-04	1.022E-03
22.50	2.862E-05	4.115E-05	6.570E-05	8.839E-05	1.271E-04	2.038E-04	2.759E-04	4.016E-04	6.556E-04
25.00	1.907E-05	2.745E-05	4.389E-05	5.910E-05	8.508E-05	1.366E-04	1.850E-04	2.696E-04	4.409E-04
27.50	1.321E-05	1.903E-05	3.047E-05	4.107E-05	5.919E-05	9.513E-05	1.290E-04	1.881E-04	3.081E-04
30.00	9.454E-06	1.363E-05	2.184E-05	2.946E-05	4.251E-05	6.842E-05	9.283E-05	1.355E-04	2.223E-04
32.50	6.949E-06	1.002E-05	1.608E-05	2.171E-05	3.135E-05	5.054E-05	6.863E-05	1.003E-04	1.647E-04
35.00	5.226E-06	7.544E-06	1.211E-05	1.636E-05	2.366E-05	3.819E-05	5.191E-05	7.591E-05	1.248E-04
37.50	4.008E-06	5.789E-06	9.305E-06	1.258E-05	1.820E-05	2.943E-05	4.004E-05	5.862E-05	9.655E-04
40.00	3.127E-06	4.519E-06	7.270E-06	9.832E-06	1.425E-05	2.307E-05	3.141E-05	4.605E-05	7.596E-05
42.50	2.476E-06	3.580E-06	5.764E-06	7.802E-06	1.132E-05	1.835E-05	2.501E-05	3.671E-05	6.065E-05
45.00	1.986E-06	2.874E-06	4.631E-06	6.273E-06	9.107E-06	1.479E-05	2.018E-05	2.966E-05	4.909E-05
47.50	1.612E-06	2.334E-06	3.765E-06	5.103E-06	7.416E-06	1.206E-05	1.648E-05	2.425E-05	4.021E-05
50.00	1.322E-06	1.915E-06	3.092E-06	4.194E-06	6.102E-06	9.941E-06	1.359E-05	2.004E-05	3.327E-05
55.00	9.131E-07	1.325E-06	2.144E-06	2.912E-06	4.246E-06	6.941E-06	9.514E-06	1.406E-05	2.344E-05
60.00	6.500E-07	9.446E-07	1.532E-06	2.085E-06	3.047E-06	4.999E-06	6.869E-06	1.018E-05	1.705E-05
65.00	4.744E-07	6.908E-07	1.123E-06	1.531E-06	2.245E-06	3.697E-06	5.094E-06	7.578E-06	1.274E-05
70.00	3.534E-07	5.157E-07	8.410E-07	1.149E-06	1.689E-06	2.795E-06	3.861E-06	5.765E-06	9.738E-06
75.00	2.679E-07	3.919E-07	6.413E-07	8.785E-07	1.296E-06	2.154E-06	2.986E-06	4.476E-06	7.599E-06
80.00	2.061E-07	3.023E-07	4.966E-07	6.821E-07	1.010E-06	1.688E-06	2.348E-06	3.534E-06	6.032E-06
85.00	1.604E-07	2.361E-07	3.896E-07	5.369E-07	7.985E-07	1.342E-06	1.874E-06	2.835E-06	4.866E-06
90.00	1.262E-07	1.865E-07	3.093E-07	4.278E-07	6.393E-07	1.082E-06	1.517E-06	2.306E-06	3.982E-06
95.00	1.001E-07	1.486E-07	2.479E-07	3.443E-07	5.173E-07	8.819E-07	1.242E-06	1.899E-06	3.301E-06
100.00	8.007E-08	1.194E-07	2.006E-07	2.798E-07	4.231E-07	7.274E-07	1.030E-06	1.583E-06	2.772E-06
105.00	6.435E-08	9.651E-08	1.634E-07	2.292E-07	3.490E-07	6.054E-07	8.620E-07	1.334E-06	2.352E-06
110.00	5.200E-08	7.853E-08	1.342E-07	1.894E-07	2.906E-07	5.092E-07	7.294E-07	1.136E-06	2.019E-06
115.00	4.216E-08	6.418E-08	1.109E-07	1.575E-07	2.438E-07	4.319E-07	6.227E-07	9.770E-07	1.751E-06
120.00	3.429E-08	5.269E-08	9.213E-08	1.319E-07	2.062E-07	3.697E-07	5.368E-07	8.488E-07	1.534E-06
125.00	2.796E-08	4.344E-08	7.704E-08	1.113E-07	1.759E-07	3.195E-07	4.673E-07	7.448E-07	1.358E-06
130.00	2.281E-08	3.591E-08	6.475E-08	9.452E-08	1.511E-07	2.783E-07	4.103E-07	6.595E-07	1.214E-06
135.00	1.867E-08	2.985E-08	5.484E-08	8.097E-08	1.311E-07	2.451E-07	3.643E-07	5.904E-07	1.096E-06
140.00	1.528E-08	2.487E-08	4.671E-08	6.984E-08	1.147E-07	2.177E-07	3.262E-07	5.332E-07	9.990E-07
145.00	1.257E-08	2.087E-08	4.018E-08	6.092E-08	1.015E-07	1.957E-07	2.957E-07	4.874E-07	9.205E-07
150.00	1.038E-08	1.763E-08	3.487E-08	5.367E-08	9.081E-08	1.778E-07	2.707E-07	4.498E-07	8.566E-07
155.00	8.640E-09	1.505E-08	3.066E-08	4.794E-08	8.238E-08	1.637E-07	2.510E-07	4.199E-07	8.056E-07
160.00	7.302E-09	1.305E-08	2.740E-08	4.353E-08	7.590E-08	1.528E-07	2.357E-07	3.969E-07	7.661E-07
165.00	6.283E-09	1.152E-08	2.491E-08	4.015E-08	7.093E-08	1.444E-07	2.239E-07	3.791E-07	7.361E-07
170.00	5.612E-09	1.050E-08	2.326E-08	3.795E-08	6.776E-08	1.391E-07	2.164E-07	3.675E-07	7.156E-07
175.00	5.175E-09	9.838E-09	2.217E-08	3.649E-08	6.559E-08	1.353E-07	2.111E-07	3.596E-07	7.031E-07
180.00	5.101E-09	9.726E-09	2.200E-08	3.628E-08	6.537E-08	1.351E-07	2.108E-07	3.589E-07	7.007E-07
TOTAL	3.180E-02	3.329E-02	3.565E-02	3.759E-02	4.068E-02	4.602E-02	5.034E-02	5.680E-02	6.747E-02
TRANS	8.803E-06	1.231E-05	1.900E-05	2.506E-05	3.525E-05	5.504E-05	7.332E-05	1.047E-04	1.670E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 36

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	6.403E+01	5.931E+01	5.448E+01	5.194E+01	4.924E+01	4.620E+01	4.446E+01	4.246E+01	4.002E+01
0.25	5.827E+01	5.503E+01	5.151E+01	4.958E+01	4.744E+01	4.493E+01	4.344E+01	4.167E+01	3.945E+01
0.50	4.476E+01	4.451E+01	4.389E+01	4.336E+01	4.258E+01	4.140E+01	4.055E+01	3.942E+01	3.782E+01
0.75	3.067E+01	3.253E+01	3.438E+01	3.523E+01	3.593E+01	3.633E+01	3.631E+01	3.603E+01	3.530E+01
1.00	1.985E+01	2.240E+01	2.543E+01	2.712E+01	2.889E+01	3.061E+01	3.137E+01	3.194E+01	3.215E+01
1.50	8.326E+00	1.019E+01	1.293E+01	1.479E+01	1.710E+01	1.996E+01	2.159E+01	2.333E+01	2.507E+01
2.00	3.989E+00	5.018E+00	6.705E+00	7.990E+00	9.772E+00	1.232E+01	1.399E+01	1.600E+01	1.840E+01
2.50	2.208E+00	2.790E+00	3.778E+00	4.576E+00	5.755E+00	7.600E+00	8.934E+00	1.069E+01	1.304E+01
3.00	1.349E+00	1.713E+00	2.328E+00	2.831E+00	3.592E+00	4.845E+00	5.811E+00	7.167E+00	9.140E+00
3.50	8.758E-01	1.125E+00	1.539E+00	1.874E+00	2.382E+00	3.234E+00	3.913E+00	4.906E+00	6.440E+00
4.00	5.903E-01	7.706E-01	1.069E+00	1.306E+00	1.663E+00	2.261E+00	2.743E+00	3.461E+00	4.616E+00
4.50	4.090E-01	5.436E-01	7.674E-01	9.444E-01	1.207E+00	1.644E+00	1.996E+00	2.522E+00	3.386E+00
5.00	2.901E-01	3.921E-01	5.643E-01	7.006E-01	9.024E-01	1.235E+00	1.499E+00	1.824E+00	2.547E+00
5.50	2.103E-01	2.883E-01	4.226E-01	5.299E-01	6.891E-01	9.498E-01	1.155E+00	1.460E+00	1.963E+00
6.00	1.557E-01	2.158E-01	3.213E-01	4.069E-01	5.348E-01	7.444E-01	9.085E-01	1.150E+00	1.546E+00
6.50	1.175E-01	1.642E-01	2.477E-01	3.166E-01	4.206E-01	5.920E-01	7.257E-01	9.217E-01	1.241E+00
7.00	9.032E-02	1.269E-01	1.935E-01	2.493E-01	3.346E-01	4.763E-01	5.870E-01	7.489E-01	1.011E+00
7.50	7.061E-02	9.962E-02	1.531E-01	1.986E-01	2.689E-01	3.870E-01	4.797E-01	6.154E-01	8.339E-01
8.00	5.606E-02	7.929E-02	1.226E-01	1.599E-01	2.182E-01	3.172E-01	3.956E-01	5.104E-01	6.952E-01
8.50	4.512E-02	6.394E-02	9.931E-02	1.301E-01	1.787E-01	2.622E-01	3.287E-01	4.268E-01	5.847E-01
9.00	3.677E-02	5.218E-02	8.132E-02	1.069E-01	1.476E-01	2.183E-01	2.752E-01	3.594E-01	4.955E-01
9.50	3.030E-02	4.304E-02	6.726E-02	8.866E-02	1.230E-01	1.831E-01	2.319E-01	3.046E-01	4.227E-01
10.00	2.522E-02	3.586E-02	5.615E-02	7.418E-02	1.033E-01	1.547E-01	1.967E-01	2.598E-01	3.626E-01
12.50	1.132E-02	1.617E-02	2.554E-02	3.400E-02	4.792E-02	7.323E-02	9.450E-02	1.272E-01	1.819E-01
15.00	5.843E-03	8.403E-03	1.338E-02	1.792E-02	2.547E-02	3.943E-02	5.138E-02	7.001E-02	1.017E-01
17.50	3.324E-03	4.811E-03	7.721E-03	1.039E-02	1.487E-02	2.328E-02	3.060E-02	4.218E-02	6.208E-02
20.00	2.032E-03	2.959E-03	4.783E-03	6.462E-03	9.292E-03	1.468E-02	1.946E-02	2.714E-02	4.050E-02
22.50	1.314E-03	1.924E-03	3.130E-03	4.243E-03	6.127E-03	9.754E-03	1.301E-02	1.832E-02	2.773E-02
25.00	8.888E-04	1.308E-03	2.140E-03	2.910E-03	4.219E-03	6.757E-03	9.057E-03	1.284E-02	1.968E-02
27.50	6.239E-04	9.213E-04	1.516E-03	2.069E-03	3.011E-03	4.847E-03	6.519E-03	9.288E-03	1.438E-02
30.00	4.517E-04	6.690E-04	1.106E-03	1.515E-03	2.215E-03	3.582E-03	4.829E-03	6.905E-03	1.077E-02
32.50	3.357E-04	4.984E-04	8.276E-04	1.137E-03	1.670E-03	2.714E-03	3.667E-03	5.258E-03	8.254E-03
35.00	2.551E-04	3.796E-04	6.328E-04	8.726E-04	1.287E-03	2.101E-03	2.845E-03	4.091E-03	6.451E-03
37.50	1.977E-04	2.947E-04	4.930E-04	6.819E-04	1.010E-03	1.657E-03	2.249E-03	3.243E-03	5.135E-03
40.00	1.559E-04	2.327E-04	3.905E-04	5.416E-04	8.050E-04	1.327E-03	1.807E-03	2.614E-03	4.154E-03
42.50	1.247E-04	1.865E-04	3.138E-04	4.363E-04	6.509E-04	1.078E-03	1.473E-03	2.137E-03	3.410E-03
45.00	1.012E-04	1.514E-04	2.555E-04	3.560E-04	5.329E-04	8.871E-04	1.215E-03	1.771E-03	2.836E-03
47.50	8.305E-05	1.245E-04	2.105E-04	2.939E-04	4.411E-04	7.379E-04	1.014E-03	1.484E-03	2.387E-03
50.00	6.890E-05	1.034E-04	1.753E-04	2.451E-04	3.689E-04	6.199E-04	8.550E-04	1.256E-03	2.030E-03
55.00	4.879E-05	7.342E-05	1.249E-04	1.753E-04	2.651E-04	4.491E-04	6.236E-04	9.240E-04	1.508E-03
60.00	3.568E-05	5.386E-05	9.201E-05	1.294E-04	1.965E-04	3.355E-04	4.687E-04	7.003E-04	1.155E-03
65.00	2.682E-05	4.061E-05	6.964E-05	9.822E-05	1.497E-04	2.573E-04	3.614E-04	5.442E-04	9.071E-04
70.00	2.063E-05	3.135E-05	5.399E-05	7.634E-05	1.168E-04	2.018E-04	2.850E-04	4.322E-04	7.282E-04
75.00	1.621E-05	2.471E-05	4.273E-05	6.058E-05	9.296E-05	1.616E-04	2.292E-04	3.499E-04	5.957E-04
80.00	1.296E-05	1.983E-05	3.446E-05	4.898E-05	7.542E-05	1.318E-04	1.876E-04	2.882E-04	4.955E-04
85.00	1.054E-05	1.619E-05	2.825E-05	4.026E-05	6.222E-05	1.092E-04	1.561E-04	2.411E-04	4.185E-04
90.00	8.691E-06	1.341E-05	2.351E-05	3.361E-05	5.212E-05	9.195E-05	1.318E-04	2.046E-04	3.583E-04
95.00	7.267E-06	1.126E-05	1.984E-05	2.845E-05	4.427E-05	7.847E-05	1.129E-04	1.761E-04	3.108E-04
100.00	6.153E-06	9.574E-06	1.696E-05	2.440E-05	3.810E-05	6.785E-05	9.790E-05	1.533E-04	2.728E-04
105.00	5.272E-06	8.239E-06	1.468E-05	2.117E-05	3.319E-05	5.937E-05	8.593E-05	1.352E-04	2.422E-04
110.00	4.568E-06	7.172E-06	1.284E-05	1.859E-05	2.924E-05	5.255E-05	7.626E-05	1.204E-04	2.172E-04
115.00	4.001E-06	6.310E-06	1.136E-05	1.649E-05	2.605E-05	4.701E-05	6.841E-05	1.084E-04	1.968E-04
120.00	3.540E-06	5.610E-06	1.015E-05	1.479E-05	2.344E-05	4.248E-05	6.199E-05	9.860E-05	1.799E-04
125.00	3.164E-06	5.037E-06	9.166E-06	1.339E-05	2.130E-05	3.876E-05	5.670E-05	9.049E-05	1.660E-04
130.00	2.857E-06	4.568E-06	8.354E-06	1.224E-05	1.953E-05	3.569E-05	5.235E-05	8.381E-05	1.545E-04
135.00	2.604E-06	4.182E-06	7.687E-06	1.129E-05	1.808E-05	3.316E-05	4.875E-05	7.826E-05	1.449E-04
140.00	2.397E-06	3.866E-06	7.138E-06	1.051E-05	1.688E-05	3.108E-05	4.578E-05	7.370E-05	1.369E-04
145.00	2.228E-06	3.607E-06	6.688E-06	9.877E-06	1.590E-05	2.936E-05	4.334E-05	6.993E-05	1.304E-04
150.00	2.091E-06	3.397E-06	6.323E-06	9.357E-06	1.510E-05	2.797E-05	4.135E-05	6.687E-05	1.250E-04
155.00	1.981E-06	3.229E-06	6.031E-06	8.942E-06	1.446E-05	2.685E-05	3.976E-05	6.441E-05	1.207E-04
160.00	1.896E-06	3.098E-06	5.802E-06	8.616E-06	1.396E-05	2.597E-05	3.850E-05	6.247E-05	1.173E-04
165.00	1.832E-06	3.000E-06	5.630E-06	8.371E-06	1.358E-05	2.531E-05	3.757E-05	6.104E-05	1.148E-04
170.00	1.787E-06	2.931E-06	5.511E-06	8.202E-06	1.332E-05	2.485E-05	3.691E-05	6.001E-05	1.130E-04
175.00	1.762E-06	2.892E-06	5.441E-06	8.101E-06	1.316E-05	2.458E-05	3.653E-05	5.944E-05	1.120E-04
180.00	1.753E-06	2.878E-06	5.416E-06	8.067E-06	1.311E-05	2.449E-05	3.639E-05	5.920E-05	1.116E-04
TOTAL	8.830E-02	1.034E-01	1.278E-01	1.464E-01	1.732E-01	2.152E-01	2.466E-01	2.908E-01	3.581E-01
TRANS	3.265E-04	4.743E-04	7.692E-04	1.046E-03	1.522E-03	2.463E-03	3.335E-03	4.819E-03	7.702E-03

TOTAL: Total Cross Section, 10^{-16} cm²
TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 36

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	3.672E+01	3.494E+01	3.267E+01	3.124E+01	2.952E+01	2.733E+01	2.596E+01	2.433E+01	1.954E+01
0.25	3.636E+01	3.466E+01	3.247E+01	3.109E+01	2.939E+01	2.724E+01	2.589E+01	2.428E+01	1.951E+01
0.50	3.532E+01	3.386E+01	3.189E+01	3.062E+01	2.903E+01	2.698E+01	2.568E+01	2.412E+01	1.944E+01
0.75	3.369E+01	3.257E+01	3.096E+01	2.985E+01	2.844E+01	2.655E+01	2.534E+01	2.385E+01	1.933E+01
1.00	3.157E+01	3.088E+01	2.971E+01	2.883E+01	2.764E+01	2.597E+01	2.487E+01	2.349E+01	1.916E+01
1.50	2.644E+01	2.668E+01	2.651E+01	2.615E+01	2.551E+01	2.440E+01	2.358E+01	2.248E+01	1.871E+01
2.00	2.103E+01	2.202E+01	2.276E+01	2.294E+01	2.288E+01	2.241E+01	2.192E+01	2.117E+01	1.810E+01
2.50	1.613E+01	1.754E+01	1.895E+01	1.956E+01	2.002E+01	2.016E+01	2.001E+01	1.963E+01	1.736E+01
3.00	1.209E+01	1.364E+01	1.539E+01	1.629E+01	1.714E+01	1.780E+01	1.796E+01	1.793E+01	1.650E+01
3.50	8.980E+00	1.046E+01	1.228E+01	1.333E+01	1.442E+01	1.546E+01	1.589E+01	1.617E+01	1.555E+01
4.00	6.677E+00	7.976E+00	9.704E+00	1.077E+01	1.197E+01	1.325E+01	1.387E+01	1.441E+01	1.454E+01
4.50	5.010E+00	6.095E+00	7.631E+00	8.636E+00	9.837E+00	1.123E+01	1.198E+01	1.271E+01	1.349E+01
5.00	3.813E+00	4.695E+00	6.006E+00	6.908E+00	8.040E+00	9.450E+00	1.026E+01	1.111E+01	1.243E+01
5.50	2.951E+00	3.658E+00	4.750E+00	5.533E+00	6.556E+00	7.904E+00	8.725E+00	9.638E+00	1.139E+01
6.00	2.325E+00	2.891E+00	3.788E+00	4.451E+00	5.349E+00	6.592E+00	7.387E+00	8.316E+00	1.036E+01
6.50	1.863E+00	2.319E+00	3.051E+00	3.607E+00	4.379E+00	5.493E+00	6.237E+00	7.144E+00	9.380E+00
7.00	1.517E+00	1.887E+00	2.487E+00	2.948E+00	3.604E+00	4.583E+00	5.262E+00	6.120E+00	8.451E+00
7.50	1.253E+00	1.556E+00	2.050E+00	2.434E+00	2.986E+00	3.835E+00	4.443E+00	5.236E+00	7.582E+00
8.00	1.047E+00	1.306E+00	1.710E+00	2.030E+00	2.495E+00	3.224E+00	3.760E+00	4.479E+00	6.778E+00
8.50	8.834E-01	1.097E+00	1.442E+00	1.711E+00	2.102E+00	2.725E+00	3.193E+00	3.837E+00	6.041E+00
9.00	7.522E-01	9.350E-01	1.228E+00	1.455E+00	1.787E+00	2.319E+00	2.724E+00	3.294E+00	5.372E+00
9.50	6.452E-01	8.031E-01	1.055E+00	1.249E+00	1.532E+00	1.986E+00	2.337E+00	2.837E+00	4.768E+00
10.00	5.570E-01	6.946E-01	9.133E-01	1.081E+00	1.324E+00	1.714E+00	2.016E+00	2.454E+00	4.228E+00
12.50	2.877E-01	3.634E-01	4.835E-01	5.746E-01	7.042E-01	9.058E-01	1.059E+00	1.281E+00	2.327E+00
15.00	1.639E-01	2.090E-01	2.817E-01	3.375E-01	4.174E-01	5.408E-01	6.321E-01	7.603E-01	1.350E+00
17.50	1.013E-01	1.299E-01	1.761E-01	2.120E-01	2.642E-01	3.465E-01	4.079E-01	4.932E-01	8.547E-01
20.00	6.708E-02	8.632E-02	1.171E-01	1.410E-01	1.761E-01	2.327E-01	2.760E-01	3.371E-01	5.874E-01
22.50	4.680E-02	6.060E-02	8.234E-02	9.901E-02	1.233E-01	1.628E-01	1.937E-01	2.384E-01	4.272E-01
25.00	3.393E-02	4.435E-02	6.059E-02	7.282E-02	9.038E-02	1.186E-01	1.408E-01	1.736E-01	3.209E-01
27.50	2.531E-02	3.346E-02	4.616E-02	5.560E-02	6.890E-02	8.981E-02	1.061E-01	1.302E-01	2.457E-01
30.00	1.932E-02	2.582E-02	3.608E-02	4.369E-02	5.423E-02	7.037E-02	8.262E-02	1.007E-01	1.906E-01
32.50	1.502E-02	2.029E-02	2.876E-02	3.507E-02	4.376E-02	5.675E-02	6.634E-02	8.015E-02	1.498E-01
35.00	1.187E-02	1.619E-02	2.327E-02	2.860E-02	3.597E-02	4.682E-02	5.463E-02	6.555E-02	1.195E-01
37.50	9.534E-03	1.309E-02	1.906E-02	2.362E-02	2.998E-02	3.931E-02	4.589E-02	5.486E-02	9.692E-02
40.00	7.764E-03	1.073E-02	1.579E-02	1.972E-02	2.526E-02	3.344E-02	3.916E-02	4.679E-02	8.009E-02
42.50	6.407E-03	8.894E-03	1.321E-02	1.662E-02	2.149E-02	2.874E-02	3.382E-02	4.051E-02	6.746E-02
45.00	5.352E-03	7.459E-03	1.116E-02	1.413E-02	1.842E-02	2.490E-02	2.948E-02	3.548E-02	5.792E-02
47.50	4.523E-03	6.322E-03	9.521E-03	1.212E-02	1.591E-02	2.173E-02	2.589E-02	3.135E-02	5.061E-02
50.00	3.863E-03	5.414E-03	8.195E-03	1.048E-02	1.384E-02	1.909E-02	2.287E-02	2.790E-02	4.496E-02
55.00	2.898E-03	4.081E-03	6.227E-03	8.017E-03	1.070E-02	1.498E-02	1.815E-02	2.247E-02	3.695E-02
60.00	2.246E-03	3.180E-03	4.883E-03	6.318E-03	8.497E-03	1.202E-02	1.469E-02	1.840E-02	3.164E-02
65.00	1.790E-03	2.550E-03	3.940E-03	5.120E-03	6.925E-03	9.871E-03	1.212E-02	1.530E-02	2.781E-02
70.00	1.459E-03	2.094E-03	3.260E-03	4.253E-03	5.781E-03	8.282E-03	1.019E-02	1.290E-02	2.474E-02
75.00	1.214E-03	1.757E-03	2.758E-03	3.616E-03	4.940E-03	7.107E-03	8.740E-03	1.104E-02	2.205E-02
80.00	1.028E-03	1.501E-03	2.381E-03	3.138E-03	4.313E-03	6.234E-03	7.661E-03	9.621E-03	1.949E-02
85.00	8.831E-04	1.303E-03	2.091E-03	2.775E-03	3.842E-03	5.591E-03	6.870E-03	8.560E-03	1.695E-02
90.00	7.693E-04	1.147E-03	1.866E-03	2.496E-03	3.487E-03	5.124E-03	6.311E-03	7.813E-03	1.446E-02
95.00	6.783E-04	1.023E-03	1.688E-03	2.279E-03	3.218E-03	4.794E-03	5.941E-03	7.346E-03	1.212E-02
100.00	6.049E-04	9.221E-04	1.547E-03	2.109E-03	3.017E-03	4.573E-03	5.727E-03	7.129E-03	1.014E-02
105.00	5.450E-04	8.398E-04	1.432E-03	1.974E-03	2.866E-03	4.439E-03	5.643E-03	7.140E-03	8.776E-03
110.00	4.957E-04	7.720E-04	1.339E-03	1.868E-03	2.755E-03	4.373E-03	5.665E-03	7.350E-03	8.321E-03
115.00	4.549E-04	7.157E-04	1.262E-03	1.783E-03	2.676E-03	4.363E-03	5.775E-03	7.734E-03	9.065E-03
120.00	4.210E-04	6.687E-04	1.199E-03	1.715E-03	2.621E-03	4.395E-03	5.953E-03	8.263E-03	1.125E-02
125.00	3.927E-04	6.294E-04	1.146E-03	1.661E-03	2.584E-03	4.460E-03	6.183E-03	8.905E-03	1.505E-02
130.00	3.689E-04	5.964E-04	1.103E-03	1.618E-03	2.562E-03	4.549E-03	6.450E-03	9.630E-03	2.051E-02
135.00	3.491E-04	5.687E-04	1.067E-03	1.584E-03	2.551E-03	4.652E-03	6.739E-03	1.040E-02	2.756E-02
140.00	3.325E-04	5.454E-04	1.037E-03	1.556E-03	2.548E-03	4.765E-03	7.037E-03	1.119E-02	3.596E-02
145.00	3.188E-04	5.261E-04	1.012E-03	1.535E-03	2.550E-03	4.880E-03	7.330E-03	1.197E-02	4.537E-02
150.00	3.075E-04	5.101E-04	9.917E-04	1.518E-03	2.556E-03	4.992E-03	7.610E-03	1.271E-02	5.529E-02
155.00	2.983E-04	4.972E-04	9.753E-04	1.504E-03	2.564E-03	5.095E-03	7.864E-03	1.338E-02	6.514E-02
160.00	2.911E-04	4.870E-04	9.624E-04	1.494E-03	2.572E-03	5.185E-03	8.084E-03	1.396E-02	7.432E-02
165.00	2.857E-04	4.793E-04	9.528E-04	1.487E-03	2.579E-03	5.259E-03	8.264E-03	1.443E-02	8.222E-02
170.00	2.819E-04	4.739E-04	9.460E-04	1.482E-03	2.584E-03	5.313E-03	8.395E-03	1.478E-02	8.830E-02
175.00	2.796E-04	4.706E-04	9.420E-04	1.479E-03	2.589E-03	5.349E-03	8.478E-03	1.499E-02	9.214E-02
180.00	2.789E-04	4.696E-04	9.405E-04	1.478E-03	2.588E-03	5.356E-03	8.501E-03	1.506E-02	9.344E-02
TOTAL	4.754E-01	5.526E-01	6.667E-01	7.483E-01	8.587E-01	1.019E+00	1.133E+00	1.285E+00	1.865E+00
TRANS	1.473E-02	2.091E-02	3.257E-02	4.293E-02	5.986E-02	9.096E-02	1.178E-01	1.605E-01	3.912E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 42

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	9.037E+02	6.855E+02	4.886E+02	4.019E+02	3.249E+02	2.568E+02	2.257E+02	1.962E+02	1.682E+02
0.25	1.575E+02	1.575E+02	1.563E+02	1.541E+02	1.496E+02	1.422E+02	1.373E+02	1.315E+02	1.245E+02
0.50	3.070E+01	3.551E+01	4.221E+01	4.634E+01	5.086E+01	5.592E+01	5.891E+01	6.259E+01	6.723E+01
0.75	9.360E+00	1.148E+01	1.479E+01	1.717E+01	2.031E+01	2.465E+01	2.755E+01	3.124E+01	3.623E+01
1.00	3.943E+00	4.861E+00	6.366E+00	7.554E+00	9.304E+00	1.207E+01	1.409E+01	1.680E+01	2.069E+01
1.50	1.075E+00	1.368E+00	1.859E+00	2.251E+00	2.832E+00	3.799E+00	4.583E+00	5.781E+00	7.765E+00
2.00	3.869E-01	5.196E-01	7.491E-01	9.296E-01	1.187E+00	1.603E+00	1.943E+00	2.485E+00	3.442E+00
2.50	1.700E-01	2.345E-01	3.499E-01	4.442E-01	5.832E-01	8.109E-01	9.944E-01	1.278E+00	1.773E+00
3.00	8.664E-02	1.200E-01	1.812E-01	2.335E-01	3.149E-01	4.543E-01	5.671E-01	7.367E-01	1.026E+00
3.50	4.896E-02	6.768E-02	1.026E-01	1.332E-01	1.828E-01	2.715E-01	3.447E-01	4.554E-01	6.427E-01
4.00	2.979E-02	4.115E-02	6.249E-02	8.151E-02	1.129E-01	1.704E-01	2.193E-01	2.949E-01	4.248E-01
4.50	1.915E-02	2.652E-02	4.041E-02	5.282E-02	7.339E-02	1.117E-01	1.451E-01	1.980E-01	2.914E-01
5.00	1.286E-02	1.788E-02	2.737E-02	3.585E-02	4.985E-02	7.614E-02	9.939E-02	1.372E-01	2.056E-01
5.50	8.943E-03	1.250E-02	1.924E-02	2.524E-02	3.512E-02	5.369E-02	7.031E-02	9.781E-02	1.486E-01
6.00	6.409E-03	9.006E-03	1.393E-02	1.831E-02	2.549E-02	3.901E-02	5.118E-02	7.154E-02	1.097E-01
6.50	4.712E-03	6.650E-03	1.033E-02	1.361E-02	1.898E-02	2.908E-02	3.820E-02	5.354E-02	8.264E-02
7.00	3.542E-03	5.016E-03	7.824E-03	1.033E-02	1.443E-02	2.216E-02	2.914E-02	4.091E-02	6.339E-02
7.50	2.714E-03	3.854E-03	6.032E-03	7.979E-03	1.117E-02	1.720E-02	2.264E-02	3.183E-02	4.944E-02
8.00	2.115E-03	3.010E-03	4.724E-03	6.260E-03	8.790E-03	1.357E-02	1.788E-02	2.516E-02	3.915E-02
8.50	1.673E-03	2.385E-03	3.752E-03	4.980E-03	7.010E-03	1.085E-02	1.433E-02	2.018E-02	3.144E-02
9.00	1.342E-03	1.914E-03	3.017E-03	4.011E-03	5.659E-03	8.788E-03	1.162E-02	1.638E-02	2.556E-02
9.50	1.089E-03	1.554E-03	2.453E-03	3.266E-03	4.619E-03	7.195E-03	9.526E-03	1.345E-02	2.100E-02
10.00	8.931E-04	1.276E-03	2.016E-03	2.687E-03	3.807E-03	5.948E-03	7.887E-03	1.115E-02	1.744E-02
12.50	3.778E-04	5.402E-04	8.561E-04	1.146E-03	1.635E-03	2.583E-03	3.448E-03	4.909E-03	7.741E-03
15.00	1.874E-04	2.681E-04	4.255E-04	5.704E-04	8.169E-04	1.298E-03	1.742E-03	2.496E-03	3.970E-03
17.50	1.038E-04	1.486E-04	2.361E-04	3.167E-04	4.542E-04	7.243E-04	9.748E-04	1.404E-03	2.250E-03
20.00	6.223E-05	8.920E-05	1.419E-04	1.906E-04	2.735E-04	4.368E-04	5.891E-04	8.518E-04	1.373E-03
22.50	3.968E-05	5.694E-05	9.070E-05	1.219E-04	1.750E-04	2.798E-04	3.779E-04	5.479E-04	8.873E-04
25.00	2.655E-05	3.813E-05	6.082E-05	8.176E-05	1.175E-04	1.881E-04	2.543E-04	3.693E-04	6.001E-04
27.50	1.847E-05	2.655E-05	4.240E-05	5.703E-05	8.202E-05	1.314E-04	1.778E-04	2.586E-04	4.212E-04
30.00	1.326E-05	1.909E-05	3.051E-05	4.107E-05	5.911E-05	9.483E-05	1.284E-04	1.869E-04	3.051E-04
32.50	9.786E-06	1.409E-05	2.255E-05	3.037E-05	4.376E-05	7.028E-05	9.522E-05	1.387E-04	2.268E-04
35.00	7.386E-06	1.064E-05	1.705E-05	2.298E-05	3.313E-05	5.328E-05	7.224E-05	1.054E-04	1.725E-04
37.50	5.685E-06	8.197E-06	1.314E-05	1.773E-05	2.559E-05	4.120E-05	5.591E-05	8.160E-05	1.338E-04
40.00	4.450E-06	6.420E-06	1.030E-05	1.391E-05	2.009E-05	3.240E-05	4.400E-05	6.428E-05	1.055E-04
42.50	3.535E-06	5.103E-06	8.195E-06	1.107E-05	1.601E-05	2.585E-05	3.514E-05	5.140E-05	8.452E-05
45.00	2.845E-06	4.110E-06	6.606E-06	8.930E-06	1.293E-05	2.091E-05	2.845E-05	4.165E-05	6.859E-05
47.50	2.316E-06	3.348E-06	5.387E-06	7.288E-06	1.056E-05	1.711E-05	2.330E-05	3.415E-05	5.633E-05
50.00	1.905E-06	2.755E-06	4.438E-06	6.007E-06	8.715E-06	1.414E-05	1.927E-05	2.829E-05	4.675E-05
55.00	1.324E-06	1.917E-06	3.094E-06	4.195E-06	6.100E-06	9.927E-06	1.357E-05	1.997E-05	3.311E-05
60.00	9.471E-07	1.374E-06	2.223E-06	3.019E-06	4.400E-06	7.186E-06	9.844E-06	1.454E-05	2.420E-05
65.00	6.949E-07	1.010E-06	1.638E-06	2.229E-06	3.257E-06	5.341E-06	7.335E-06	1.087E-05	1.817E-05
70.00	5.200E-07	7.573E-07	1.232E-06	1.679E-06	2.462E-06	4.054E-06	5.584E-06	8.304E-06	1.395E-05
75.00	3.960E-07	5.780E-07	9.431E-07	1.289E-06	1.896E-06	3.137E-06	4.335E-06	6.472E-06	1.093E-05
80.00	3.057E-07	4.474E-07	7.328E-07	1.004E-06	1.483E-06	2.466E-06	3.420E-06	5.129E-06	8.707E-06
85.00	2.389E-07	3.507E-07	5.769E-07	7.931E-07	1.176E-06	1.967E-06	2.739E-06	4.126E-06	7.047E-06
90.00	1.886E-07	2.778E-07	4.593E-07	6.337E-07	9.439E-07	1.590E-06	2.223E-06	3.365E-06	5.783E-06
95.00	1.500E-07	2.219E-07	3.690E-07	5.111E-07	7.653E-07	1.299E-06	1.824E-06	2.777E-06	4.806E-06
100.00	1.203E-07	1.788E-07	2.992E-07	4.163E-07	6.273E-07	1.073E-06	1.515E-06	2.321E-06	4.044E-06
105.00	9.683E-08	1.448E-07	2.442E-07	3.415E-07	5.180E-07	8.944E-07	1.270E-06	1.958E-06	3.440E-06
110.00	7.839E-08	1.180E-07	2.008E-07	2.825E-07	4.318E-07	7.531E-07	1.076E-06	1.670E-06	2.958E-06
115.00	6.363E-08	9.653E-08	1.659E-07	2.351E-07	3.625E-07	6.392E-07	9.192E-07	1.438E-06	2.569E-06
120.00	5.179E-08	7.929E-08	1.379E-07	1.970E-07	3.066E-07	5.474E-07	7.928E-07	1.250E-06	2.253E-06
125.00	4.224E-08	6.537E-08	1.153E-07	1.661E-07	2.615E-07	4.730E-07	6.904E-07	1.097E-06	1.996E-06
130.00	3.445E-08	5.401E-08	9.686E-08	1.409E-07	2.245E-07	4.118E-07	6.060E-07	9.721E-07	1.786E-06
135.00	2.818E-08	4.484E-08	8.194E-08	1.206E-07	1.946E-07	3.626E-07	5.380E-07	8.705E-07	1.614E-06
140.00	2.302E-08	3.729E-08	6.964E-08	1.038E-07	1.699E-07	3.216E-07	4.814E-07	7.863E-07	1.472E-06
145.00	1.889E-08	3.122E-08	5.978E-08	9.038E-08	1.502E-07	2.890E-07	4.362E-07	7.183E-07	1.357E-06
150.00	1.553E-08	2.627E-08	5.172E-08	7.942E-08	1.341E-07	2.622E-07	3.990E-07	6.627E-07	1.262E-06
155.00	1.288E-08	2.234E-08	4.534E-08	7.076E-08	1.214E-07	2.410E-07	3.696E-07	6.186E-07	1.188E-06
160.00	1.083E-08	1.930E-08	4.040E-08	6.408E-08	1.116E-07	2.247E-07	3.469E-07	5.845E-07	1.130E-06
165.00	9.263E-09	1.695E-08	3.659E-08	5.895E-08	1.041E-07	2.121E-07	3.292E-07	5.582E-07	1.086E-06
170.00	8.235E-09	1.541E-08	3.410E-08	5.563E-08	9.936E-08	2.042E-07	3.180E-07	5.410E-07	1.056E-06
175.00	7.558E-09	1.437E-08	3.242E-08	5.338E-08	9.608E-08	1.986E-07	3.101E-07	5.288E-07	1.036E-06
180.00	7.446E-09	1.421E-08	3.218E-08	5.312E-08	9.584E-08	1.984E-07	3.097E-07	5.272E-07	1.029E-06
TOTAL	4.589E-02	4.803E-02	5.139E-02	5.417E-02	5.857E-02	6.616E-02	7.229E-02	8.144E-02	9.649E-02
TRANS	1.208E-05	1.688E-05	2.604E-05	3.431E-05	4.821E-05	7.514E-05	9.994E-05	1.424E-04	2.264E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 42

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
0.00	1.415E+02	1.310E+02	1.202E+02	1.146E+02	1.086E+02	1.019E+02	9.809E+01	9.373E+01	8.846E+01
0.25	1.158E+02	1.116E+02	1.065E+02	1.036E+02	1.001E+02	9.582E+01	9.316E+01	8.991E+01	8.571E+01
0.50	7.305E+01	7.568E+01	7.833E+01	7.954E+01	8.050E+01	8.089E+01	8.066E+01	7.991E+01	7.825E+01
0.75	4.368E+01	4.789E+01	5.317E+01	5.631E+01	5.980E+01	6.353E+01	6.535E+01	6.697E+01	6.806E+01
1.00	2.692E+01	3.070E+01	3.584E+01	3.918E+01	4.324E+01	4.820E+01	5.105E+01	5.410E+01	5.717E+01
1.50	1.140E+01	1.380E+01	1.732E+01	1.978E+01	2.302E+01	2.746E+01	3.037E+01	3.393E+01	3.831E+01
2.00	5.402E+00	6.834E+00	9.081E+00	1.073E+01	1.299E+01	1.626E+01	1.853E+01	2.145E+01	2.539E+01
2.50	2.842E+00	3.685E+00	5.088E+00	6.171E+00	7.714E+00	1.005E+01	1.173E+01	1.397E+01	1.713E+01
3.00	1.652E+00	2.158E+00	3.034E+00	3.741E+00	4.788E+00	6.446E+00	7.676E+00	9.368E+00	1.184E+01
3.50	1.041E+00	1.361E+00	1.923E+00	2.390E+00	3.102E+00	4.273E+00	5.170E+00	6.440E+00	8.352E+00
4.00	6.971E-01	9.115E-01	1.288E+00	1.605E+00	2.096E+00	2.926E+00	3.581E+00	4.532E+00	6.008E+00
4.50	4.870E-01	6.390E-01	9.041E-01	1.127E+00	1.474E+00	2.070E+00	2.551E+00	3.264E+00	4.401E+00
5.00	3.509E-01	4.635E-01	6.584E-01	8.211E-01	1.074E+00	1.510E+00	1.867E+00	2.405E+00	3.282E+00
5.50	2.588E-01	3.449E-01	4.934E-01	6.162E-01	8.058E-01	1.133E+00	1.403E+00	1.813E+00	2.492E+00
6.00	1.945E-01	2.618E-01	3.779E-01	4.733E-01	6.198E-01	8.718E-01	1.079E+00	1.396E+00	1.927E+00
6.50	1.487E-01	2.020E-01	2.946E-01	3.704E-01	4.863E-01	6.848E-01	8.479E-01	1.097E+00	1.516E+00
7.00	1.154E-01	1.581E-01	2.329E-01	2.942E-01	3.878E-01	5.474E-01	6.780E-01	8.770E-01	1.213E+00
7.50	9.085E-02	1.254E-01	1.864E-01	2.366E-01	3.133E-01	4.440E-01	5.505E-01	7.122E-01	9.847E-01
8.00	7.245E-02	1.006E-01	1.508E-01	1.923E-01	2.560E-01	3.645E-01	4.526E-01	5.822E-01	8.106E-01
8.50	5.848E-02	8.159E-02	1.232E-01	1.579E-01	2.113E-01	3.023E-01	3.762E-01	4.880E-01	6.753E-01
9.00	4.774E-02	6.687E-02	1.016E-01	1.307E-01	1.758E-01	2.530E-01	3.156E-01	4.102E-01	5.684E-01
9.50	3.937E-02	5.532E-02	8.447E-02	1.091E-01	1.475E-01	2.134E-01	2.669E-01	3.477E-01	4.827E-01
10.00	3.278E-02	4.619E-02	7.083E-02	9.184E-02	1.247E-01	1.813E-01	2.273E-01	2.969E-01	4.132E-01
12.50	1.473E-02	2.094E-02	3.262E-02	4.283E-02	5.911E-02	8.771E-02	1.112E-01	1.470E-01	2.075E-01
15.00	7.637E-03	1.092E-02	1.720E-02	2.279E-02	3.183E-02	4.794E-02	6.126E-02	8.165E-02	1.164E-01
17.50	4.367E-03	6.275E-03	9.968E-03	1.331E-02	1.879E-02	2.869E-02	3.695E-02	4.962E-02	7.119E-02
20.00	2.686E-03	3.875E-03	6.198E-03	8.323E-03	1.185E-02	1.833E-02	2.382E-02	3.231E-02	4.671E-02
22.50	1.748E-03	2.532E-03	4.072E-03	5.488E-03	7.861E-03	1.230E-02	1.613E-02	2.213E-02	3.234E-02
25.00	1.190E-03	1.731E-03	2.796E-03	3.778E-03	5.433E-03	8.575E-03	1.134E-02	1.574E-02	2.330E-02
27.50	8.403E-04	1.227E-03	1.991E-03	2.696E-03	3.889E-03	6.179E-03	8.224E-03	1.152E-02	1.729E-02
30.00	6.118E-04	8.967E-04	1.461E-03	1.983E-03	2.868E-03	4.579E-03	6.124E-03	8.645E-03	1.313E-02
32.50	4.570E-04	6.720E-04	1.100E-03	1.496E-03	2.169E-03	3.478E-03	4.667E-03	6.625E-03	1.016E-02
35.00	3.489E-04	5.147E-04	8.456E-04	1.153E-03	1.678E-03	2.700E-03	3.631E-03	5.175E-03	8.006E-03
37.50	2.715E-04	4.016E-04	6.625E-04	9.060E-04	1.322E-03	2.136E-03	2.879E-03	4.114E-03	6.406E-03
40.00	2.148E-04	3.185E-04	5.274E-04	7.234E-04	1.060E-03	1.718E-03	2.319E-03	3.323E-03	5.201E-03
42.50	1.725E-04	2.563E-04	4.260E-04	5.859E-04	8.613E-04	1.402E-03	1.896E-03	2.723E-03	4.280E-03
45.00	1.403E-04	2.089E-04	3.484E-04	4.806E-04	7.091E-04	1.159E-03	1.571E-03	2.260E-03	3.567E-03
47.50	1.155E-04	1.722E-04	2.882E-04	3.987E-04	5.904E-04	9.689E-04	1.316E-03	1.899E-03	3.007E-03
50.00	9.611E-05	1.435E-04	2.409E-04	3.340E-04	4.964E-04	8.182E-04	1.114E-03	1.612E-03	2.561E-03
55.00	6.840E-05	1.025E-04	1.729E-04	2.409E-04	3.603E-04	5.993E-04	8.204E-04	1.194E-03	1.912E-03
60.00	5.026E-05	7.552E-05	1.281E-04	1.792E-04	2.695E-04	4.522E-04	6.229E-04	9.136E-04	1.475E-03
65.00	3.795E-05	5.720E-05	9.748E-05	1.368E-04	2.069E-04	3.501E-04	4.852E-04	7.173E-04	1.168E-03
70.00	2.932E-05	4.435E-05	7.593E-05	1.069E-04	1.625E-04	2.770E-04	3.864E-04	5.758E-04	9.474E-04
75.00	2.312E-05	3.510E-05	6.037E-05	8.528E-05	1.301E-04	2.236E-04	3.137E-04	4.713E-04	7.834E-04
80.00	1.856E-05	2.828E-05	4.888E-05	6.925E-05	1.061E-04	1.836E-04	2.591E-04	3.923E-04	6.592E-04
85.00	1.514E-05	2.317E-05	4.023E-05	5.718E-05	8.798E-05	1.532E-04	2.173E-04	3.315E-04	5.632E-04
90.00	1.253E-05	1.925E-05	3.361E-05	4.792E-05	7.403E-05	1.297E-04	1.849E-04	2.841E-04	4.879E-04
95.00	1.051E-05	1.622E-05	2.847E-05	4.072E-05	6.316E-05	1.114E-04	1.595E-04	2.466E-04	4.280E-04
100.00	8.922E-06	1.384E-05	2.442E-05	3.504E-05	5.458E-05	9.679E-05	1.392E-04	2.166E-04	3.798E-04
105.00	7.666E-06	1.195E-05	2.120E-05	3.052E-05	4.774E-05	8.513E-05	1.229E-04	1.924E-04	3.407E-04
110.00	6.658E-06	1.043E-05	1.861E-05	2.689E-05	4.222E-05	7.571E-05	1.097E-04	1.727E-04	3.086E-04
115.00	5.844E-06	9.197E-06	1.652E-05	2.394E-05	3.775E-05	6.804E-05	9.897E-05	1.566E-04	2.823E-04
120.00	5.181E-06	8.196E-06	1.481E-05	2.154E-05	3.409E-05	6.176E-05	9.013E-05	1.433E-04	2.604E-04
125.00	4.639E-06	7.377E-06	1.340E-05	1.956E-05	3.109E-05	5.659E-05	8.285E-05	1.323E-04	2.422E-04
130.00	4.196E-06	6.705E-06	1.225E-05	1.794E-05	2.862E-05	5.233E-05	7.683E-05	1.232E-04	2.271E-04
135.00	3.831E-06	6.151E-06	1.130E-05	1.660E-05	2.657E-05	4.880E-05	7.184E-05	1.156E-04	2.145E-04
140.00	3.532E-06	5.696E-06	1.052E-05	1.550E-05	2.489E-05	4.589E-05	6.773E-05	1.093E-04	2.040E-04
145.00	3.286E-06	5.323E-06	9.877E-06	1.459E-05	2.351E-05	4.350E-05	6.434E-05	1.042E-04	1.953E-04
150.00	3.086E-06	5.019E-06	9.355E-06	1.386E-05	2.239E-05	4.155E-05	6.157E-05	9.995E-05	1.882E-04
155.00	2.927E-06	4.777E-06	8.937E-06	1.327E-05	2.148E-05	3.999E-05	5.935E-05	9.655E-05	1.824E-04
160.00	2.804E-06	4.589E-06	8.610E-06	1.280E-05	2.078E-05	3.876E-05	5.761E-05	9.389E-05	1.779E-04
165.00	2.713E-06	4.448E-06	8.364E-06	1.245E-05	2.024E-05	3.784E-05	5.631E-05	9.189E-05	1.745E-04
170.00	2.646E-06	4.348E-06	8.194E-06	1.221E-05	1.988E-05	3.720E-05	5.540E-05	9.050E-05	1.722E-04
175.00	2.605E-06	4.288E-06	8.095E-06	1.207E-05	1.966E-05	3.682E-05	5.485E-05	8.967E-05	1.708E-04
180.00	2.587E-06	4.265E-06	8.065E-06	1.204E-05	1.960E-05	3.671E-05	5.468E-05	8.940E-05	1.703E-04
TOTAL	1.257E-01	1.468E-01	1.805E-01	2.062E-01	2.430E-01	3.004E-01	3.431E-01	4.032E-01	4.946E-01
TRANS	4.398E-04	6.362E-04	1.026E-03	1.388E-03	2.009E-03	3.225E-03	4.344E-03	6.236E-03	9.884E-03

TOTAL: Total Cross Section, 10^{-16} cm²
TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 42

ENERGY(keV) ANGLE (deg)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
0.00	8.142E+01	7.765E+01	7.286E+01	6.985E+01	6.621E+01	6.157E+01	5.867E+01	5.517E+01	4.467E+01
0.25	7.968E+01	7.630E+01	7.189E+01	6.907E+01	6.560E+01	6.114E+01	5.832E+01	5.490E+01	4.455E+01
0.50	7.482E+01	7.248E+01	6.910E+01	6.679E+01	6.383E+01	5.986E+01	5.729E+01	5.410E+01	4.420E+01
0.75	6.775E+01	6.678E+01	6.484E+01	6.326E+01	6.105E+01	5.782E+01	5.562E+01	5.281E+01	4.362E+01
1.00	5.960E+01	5.998E+01	5.955E+01	5.881E+01	5.746E+01	5.515E+01	5.342E+01	5.108E+01	4.283E+01
1.50	4.360E+01	4.583E+01	4.784E+01	4.857E+01	4.892E+01	4.853E+01	4.784E+01	4.659E+01	4.069E+01
2.00	3.092E+01	3.374E+01	3.688E+01	3.851E+01	4.004E+01	4.120E+01	4.146E+01	4.129E+01	3.498E+01
2.50	2.194E+01	2.463E+01	2.797E+01	2.991E+01	3.201E+01	3.413E+01	3.507E+01	3.577E+01	3.483E+01
3.00	1.578E+01	1.811E+01	2.118E+01	2.310E+01	2.533E+01	2.787E+01	2.920E+01	3.047E+01	3.152E+01
3.50	1.153E+01	1.348E+01	1.614E+01	1.788E+01	2.000E+01	2.261E+01	2.410E+01	2.568E+01	2.819E+01
4.00	8.548E+00	1.016E+01	1.242E+01	1.394E+01	1.585E+01	1.832E+01	1.982E+01	2.152E+01	2.498E+01
4.50	6.428E+00	7.751E+00	9.652E+00	1.096E+01	1.263E+01	1.488E+01	1.630E+01	1.799E+01	2.199E+01
5.00	4.898E+00	5.983E+00	7.572E+00	8.684E+00	1.014E+01	1.214E+01	1.344E+01	1.504E+01	1.925E+01
5.50	3.781E+00	4.668E+00	5.995E+00	6.939E+00	8.194E+00	9.952E+00	1.113E+01	1.260E+01	1.681E+01
6.00	2.957E+00	3.682E+00	4.788E+00	5.588E+00	6.666E+00	8.204E+00	9.251E+00	1.059E+01	1.465E+01
6.50	2.343E+00	2.936E+00	3.857E+00	4.534E+00	5.458E+00	6.799E+00	7.726E+00	8.926E+00	1.276E+01
7.00	1.881E+00	2.367E+00	3.134E+00	3.706E+00	4.498E+00	5.664E+00	6.483E+00	7.555E+00	1.112E+01
7.50	1.530E+00	1.930E+00	2.569E+00	3.053E+00	3.730E+00	4.743E+00	5.464E+00	6.419E+00	9.702E+00
8.00	1.260E+00	1.591E+00	2.125E+00	2.534E+00	3.113E+00	3.992E+00	4.625E+00	5.475E+00	8.477E+00
8.50	1.049E+00	1.325E+00	1.774E+00	2.120E+00	2.615E+00	3.377E+00	3.933E+00	4.687E+00	7.421E+00
9.00	8.833E-01	1.116E+00	1.494E+00	1.787E+00	2.211E+00	2.871E+00	3.359E+00	4.028E+00	6.510E+00
9.50	7.509E-01	9.484E-01	1.269E+00	1.519E+00	1.882E+00	2.454E+00	2.882E+00	3.475E+00	5.724E+00
10.00	6.439E-01	8.132E-01	1.088E+00	1.302E+00	1.613E+00	2.109E+00	2.484E+00	3.008E+00	5.043E+00
12.50	3.290E-01	4.181E-01	5.604E-01	6.690E-01	8.257E-01	1.077E+00	1.271E+00	1.555E+00	2.773E+00
15.00	1.874E-01	2.407E-01	3.271E-01	3.929E-01	4.856E-01	6.287E-01	7.373E-01	8.952E-01	1.618E+00
17.50	1.152E-01	1.488E-01	2.051E-01	2.490E-01	3.115E-01	4.061E-01	4.752E-01	5.722E-01	1.010E+00
20.00	7.561E-02	9.763E-02	1.353E-01	1.656E-01	2.100E-01	2.785E-01	3.282E-01	3.959E-01	6.788E-01
22.50	5.251E-02	6.765E-02	9.354E-02	1.147E-01	1.466E-01	1.979E-01	2.359E-01	2.788E-01	4.888E-01
25.00	3.817E-02	4.915E-02	6.757E-02	8.268E-02	1.058E-01	1.443E-01	1.738E-01	2.151E-01	3.719E-01
27.50	2.874E-02	3.710E-02	5.078E-02	6.186E-02	7.885E-02	1.078E-01	1.307E-01	1.637E-01	2.936E-01
30.00	2.222E-02	2.884E-02	3.946E-02	4.787E-02	6.076E-02	8.258E-02	1.003E-01	1.266E-01	2.368E-01
32.50	1.753E-02	2.293E-02	3.148E-02	3.813E-02	4.807E-02	6.495E-02	7.873E-02	9.949E-02	1.932E-01
35.00	1.405E-02	1.854E-02	2.564E-02	3.107E-02	3.904E-02	5.236E-02	6.319E-02	7.963E-02	1.587E-01
37.50	1.141E-02	1.520E-02	2.121E-02	2.577E-02	3.237E-02	4.316E-02	5.183E-02	6.496E-02	1.311E-01
40.00	9.384E-03	1.260E-02	1.777E-02	2.168E-02	2.728E-02	3.626E-02	4.336E-02	5.402E-02	1.089E-01
42.50	7.804E-03	1.056E-02	1.504E-02	1.844E-02	2.329E-02	3.096E-02	3.691E-02	4.572E-02	9.103E-02
45.00	6.560E-03	8.936E-03	1.284E-02	1.584E-02	2.010E-02	2.677E-02	3.188E-02	3.934E-02	7.677E-02
47.50	5.569E-03	7.629E-03	1.106E-02	1.371E-02	1.750E-02	2.339E-02	2.787E-02	3.432E-02	6.539E-02
50.00	4.773E-03	6.569E-03	9.598E-03	1.196E-02	1.534E-02	2.062E-02	2.460E-02	3.029E-02	5.634E-02
55.00	3.600E-03	4.992E-03	7.388E-03	9.284E-03	1.203E-02	1.635E-02	1.962E-02	2.428E-02	4.343E-02
60.00	2.802E-03	3.910E-03	5.845E-03	7.394E-03	9.657E-03	1.325E-02	1.601E-02	1.998E-02	3.533E-02
65.00	2.243E-03	3.147E-03	4.746E-03	6.036E-03	7.928E-03	1.095E-02	1.329E-02	1.674E-02	3.028E-02
70.00	1.839E-03	2.596E-03	3.946E-03	5.042E-03	6.650E-03	9.207E-03	1.120E-02	1.418E-02	2.711E-02
75.00	1.541E-03	2.190E-03	3.355E-03	4.308E-03	5.702E-03	7.887E-03	9.569E-03	1.212E-02	2.497E-02
80.00	1.316E-03	1.884E-03	2.913E-03	3.759E-03	4.995E-03	6.892E-03	8.309E-03	1.045E-02	2.320E-02
85.00	1.143E-03	1.650E-03	2.577E-03	3.347E-03	4.472E-03	6.158E-03	7.358E-03	9.105E-03	2.134E-02
90.00	1.008E-03	1.469E-03	2.321E-03	3.037E-03	4.090E-03	5.639E-03	6.677E-03	8.074E-03	1.907E-02
95.00	9.002E-04	1.326E-03	2.124E-03	2.804E-03	3.817E-03	5.301E-03	6.241E-03	7.360E-03	1.630E-02
100.00	8.139E-04	1.213E-03	1.972E-03	2.631E-03	3.632E-03	5.118E-03	6.030E-03	6.971E-03	1.315E-02
105.00	7.437E-04	1.122E-03	1.855E-03	2.505E-03	3.516E-03	5.068E-03	6.027E-03	6.923E-03	9.950E-03
110.00	6.863E-04	1.048E-03	1.764E-03	2.414E-03	3.454E-03	5.130E-03	6.213E-03	7.219E-03	7.245E-03
115.00	6.389E-04	9.876E-04	1.695E-03	2.352E-03	3.436E-03	5.284E-03	6.566E-03	7.857E-03	5.706E-03
120.00	5.995E-04	9.383E-04	1.642E-03	2.311E-03	3.452E-03	5.512E-03	7.063E-03	8.819E-03	6.057E-03
125.00	5.667E-04	8.977E-04	1.601E-03	2.288E-03	3.492E-03	5.797E-03	7.673E-03	1.007E-02	8.966E-03
130.00	5.393E-04	8.642E-04	1.571E-03	2.277E-03	3.551E-03	6.121E-03	8.370E-03	1.158E-02	1.494E-02
135.00	5.163E-04	8.365E-04	1.549E-03	2.276E-03	3.622E-03	6.467E-03	9.119E-03	1.327E-02	2.421E-02
140.00	4.971E-04	8.136E-04	1.533E-03	2.282E-03	3.701E-03	6.821E-03	9.891E-03	1.508E-02	3.667E-02
145.00	4.812E-04	7.948E-04	1.521E-03	2.292E-03	3.780E-03	7.167E-03	1.066E-02	1.693E-02	5.186E-02
150.00	4.681E-04	7.795E-04	1.513E-03	2.305E-03	3.858E-03	7.494E-03	1.138E-02	1.875E-02	6.892E-02
155.00	4.575E-04	7.672E-04	1.507E-03	2.318E-03	3.930E-03	7.790E-03	1.204E-02	2.045E-02	8.672E-02
160.00	4.491E-04	7.575E-04	1.504E-03	2.331E-03	3.993E-03	8.045E-03	1.262E-02	2.197E-02	1.039E-01
165.00	4.429E-04	7.503E-04	1.502E-03	2.342E-03	4.045E-03	8.252E-03	1.309E-02	2.322E-02	1.191E-01
170.00	4.384E-04	7.451E-04	1.500E-03	2.350E-03	4.083E-03	8.403E-03	1.343E-02	2.416E-02	1.311E-01
175.00	4.359E-04	7.424E-04	1.500E-03	2.356E-03	4.107E-03	8.497E-03	1.365E-02	2.474E-02	1.387E-01
180.00	4.348E-04	7.410E-04	1.499E-03	2.356E-03	4.114E-03	8.527E-03	1.372E-02	2.494E-02	1.414E-01
TOTAL	6.536E-01	7.583E-01	9.134E-01	1.024E+00	1.175E+00	1.395E+00	1.550E+00	1.759E+00	2.545E+00
TRANS	1.869E-02	2.636E-02	4.074E-02	5.342E-02	7.399E-02	1.114E-01	1.435E-01	1.939E-01	4.609E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, $Z = 47$

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	6.355E+02	4.819E+02	3.432E+02	2.821E+02	2.279E+02	1.799E+02	1.579E+02	1.370E+02	1.171E+02
0.25	1.689E+02	1.599E+02	1.482E+02	1.404E+02	1.303E+02	1.178E+02	1.106E+02	1.029E+02	9.450E+01
0.50	3.858E+01	4.340E+01	4.956E+01	5.280E+01	5.552E+01	5.744E+01	5.820E+01	5.905E+01	5.999E+01
0.75	1.155E+01	1.433E+01	1.855E+01	2.138E+01	2.471E+01	2.866E+01	3.098E+01	3.368E+01	3.694E+01
1.00	4.639E+00	5.893E+00	7.953E+00	9.525E+00	1.171E+01	1.488E+01	1.702E+01	1.968E+01	2.311E+01
1.50	1.266E+00	1.605E+00	2.187E+00	2.672E+00	3.430E+00	4.727E+00	5.757E+00	7.243E+00	9.517E+00
2.00	4.712E-01	6.173E-01	8.699E-01	1.075E+00	1.385E+00	1.915E+00	2.359E+00	3.065E+00	4.287E+00
2.50	2.093E-01	2.842E-01	4.162E-01	5.229E-01	6.797E-01	9.418E-01	1.162E+00	1.518E+00	2.261E+00
3.00	1.065E-01	1.472E-01	2.206E-01	2.814E-01	3.726E-01	5.262E-01	6.532E-01	8.540E-01	1.214E+00
3.50	6.007E-02	8.337E-02	1.262E-01	1.628E-01	2.197E-01	3.182E-01	3.994E-01	5.247E-01	7.448E-01
4.00	3.653E-02	5.069E-02	7.707E-02	1.001E-01	1.371E-01	2.030E-01	2.578E-01	3.419E-01	4.880E-01
4.50	2.352E-02	3.263E-02	4.974E-02	6.490E-02	8.969E-02	1.348E-01	1.730E-01	2.322E-01	3.351E-01
5.00	1.583E-02	2.199E-02	3.361E-02	4.399E-02	6.108E-02	9.268E-02	1.199E-01	1.627E-01	2.381E-01
5.50	1.104E-02	1.538E-02	2.359E-02	3.093E-02	4.305E-02	6.566E-02	8.541E-02	1.171E-01	1.737E-01
6.00	7.933E-03	1.109E-02	1.707E-02	2.242E-02	3.125E-02	4.779E-02	6.242E-02	8.622E-02	1.295E-01
6.50	5.846E-03	8.202E-03	1.267E-02	1.667E-02	2.326E-02	3.564E-02	4.666E-02	6.484E-02	9.834E-02
7.00	4.402E-03	6.198E-03	9.612E-03	1.266E-02	1.768E-02	2.714E-02	3.561E-02	4.968E-02	7.593E-02
7.50	3.378E-03	4.771E-03	7.424E-03	9.795E-03	1.370E-02	2.105E-02	2.767E-02	3.872E-02	5.951E-02
8.00	2.636E-03	3.733E-03	5.826E-03	7.699E-03	1.078E-02	1.660E-02	2.185E-02	3.064E-02	4.729E-02
8.50	2.088E-03	2.963E-03	4.636E-03	6.136E-03	8.608E-03	1.328E-02	1.750E-02	2.458E-02	3.806E-02
9.00	1.675E-03	2.382E-03	3.736E-03	4.951E-03	6.958E-03	1.076E-02	1.419E-02	1.997E-02	3.099E-02
9.50	1.361E-03	1.937E-03	3.044E-03	4.040E-03	5.687E-03	8.810E-03	1.164E-02	1.639E-02	2.550E-02
10.00	1.117E-03	1.592E-03	2.505E-03	3.329E-03	4.694E-03	7.289E-03	9.639E-03	1.360E-02	2.118E-02
12.50	4.737E-04	6.769E-04	1.071E-03	1.429E-03	2.029E-03	3.184E-03	4.234E-03	6.005E-03	9.426E-03
15.00	2.356E-04	3.369E-04	5.340E-04	7.145E-04	1.020E-03	1.611E-03	2.152E-03	3.068E-03	4.847E-03
17.50	1.308E-04	1.872E-04	2.970E-04	3.980E-04	5.695E-04	9.039E-04	1.212E-03	1.735E-03	2.757E-03
20.00	7.872E-05	1.127E-04	1.790E-04	2.401E-04	3.441E-04	5.477E-04	7.359E-04	1.058E-03	1.690E-03
22.50	5.036E-05	7.216E-05	1.147E-04	1.540E-04	2.208E-04	3.521E-04	4.741E-04	6.836E-04	1.098E-03
25.00	3.381E-05	4.848E-05	7.718E-05	1.036E-04	1.487E-04	2.374E-04	3.201E-04	4.628E-04	7.462E-04
27.50	2.360E-05	3.387E-05	5.397E-05	7.251E-05	1.041E-04	1.664E-04	2.245E-04	3.253E-04	5.263E-04
30.00	1.701E-05	2.443E-05	3.897E-05	5.238E-05	7.525E-05	1.204E-04	1.626E-04	2.360E-04	3.828E-04
32.50	1.259E-05	1.810E-05	2.889E-05	3.886E-05	5.586E-05	8.945E-05	1.209E-04	1.757E-04	2.857E-04
35.00	9.532E-06	1.371E-05	2.191E-05	2.949E-05	4.243E-05	6.801E-05	9.202E-05	1.338E-04	2.180E-04
37.50	7.361E-06	1.060E-05	1.695E-05	2.282E-05	3.286E-05	5.274E-05	7.141E-05	1.039E-04	1.696E-04
40.00	5.780E-06	8.326E-06	1.333E-05	1.796E-05	2.588E-05	4.159E-05	5.636E-05	8.210E-05	1.342E-04
42.50	4.605E-06	6.637E-06	1.063E-05	1.434E-05	2.069E-05	3.328E-05	4.514E-05	6.582E-05	1.077E-04
45.00	3.718E-06	5.362E-06	8.599E-06	1.160E-05	1.675E-05	2.699E-05	3.664E-05	5.348E-05	8.767E-05
47.50	3.036E-06	4.381E-06	7.033E-06	9.497E-06	1.373E-05	2.215E-05	3.009E-05	4.396E-05	7.218E-05
50.00	2.503E-06	3.615E-06	5.809E-06	7.850E-06	1.136E-05	1.835E-05	2.496E-05	3.651E-05	6.005E-05
55.00	1.749E-06	2.529E-06	4.072E-06	5.511E-06	7.992E-06	1.296E-05	1.765E-05	2.590E-05	4.273E-05
60.00	1.258E-06	1.822E-06	2.940E-06	3.985E-06	5.793E-06	9.424E-06	1.287E-05	1.894E-05	3.138E-05
65.00	9.273E-07	1.345E-06	2.177E-06	2.956E-06	4.309E-06	7.036E-06	9.636E-06	1.422E-05	2.366E-05
70.00	6.969E-07	1.013E-06	1.644E-06	2.237E-06	3.270E-06	5.363E-06	7.366E-06	1.091E-05	1.824E-05
75.00	5.329E-07	7.764E-07	1.264E-06	1.724E-06	2.288E-06	4.166E-06	5.740E-06	8.537E-06	1.434E-05
80.00	4.130E-07	6.033E-07	9.854E-07	1.348E-06	1.984E-06	3.287E-06	4.545E-06	6.789E-06	1.147E-05
85.00	3.238E-07	4.744E-07	7.782E-07	1.068E-06	1.578E-06	2.630E-06	3.651E-06	5.479E-06	9.311E-06
90.00	2.564E-07	3.770E-07	6.214E-07	8.555E-07	1.270E-06	2.131E-06	2.971E-06	4.481E-06	7.664E-06
95.00	2.046E-07	3.020E-07	5.005E-07	6.917E-07	1.033E-06	1.745E-06	2.444E-06	3.709E-06	6.389E-06
100.00	1.644E-07	2.439E-07	4.068E-07	5.647E-07	8.481E-07	1.445E-06	2.034E-06	3.105E-06	5.389E-06
105.00	1.327E-07	1.979E-07	3.325E-07	4.640E-07	7.016E-07	1.206E-06	1.708E-06	2.625E-06	4.594E-06
110.00	1.076E-07	1.615E-07	2.738E-07	3.843E-07	5.857E-07	1.017E-06	1.449E-06	2.243E-06	3.957E-06
115.00	8.748E-08	1.323E-07	2.266E-07	3.202E-07	4.921E-07	8.642E-07	1.240E-06	1.934E-06	3.443E-06
120.00	7.127E-08	1.088E-07	1.885E-07	2.684E-07	4.165E-07	7.406E-07	1.070E-06	1.683E-06	3.026E-06
125.00	5.817E-08	8.973E-08	1.576E-07	2.265E-07	3.553E-07	6.403E-07	9.325E-07	1.479E-06	2.685E-06
130.00	4.745E-08	7.412E-08	1.323E-07	1.920E-07	3.050E-07	5.577E-07	8.192E-07	1.312E-06	2.405E-06
135.00	3.879E-08	6.151E-08	1.119E-07	1.643E-07	2.643E-07	4.909E-07	7.272E-07	1.175E-06	2.175E-06
140.00	3.166E-08	5.108E-08	9.498E-08	1.412E-07	2.306E-07	4.354E-07	6.509E-07	1.062E-06	1.985E-06
145.00	2.593E-08	4.270E-08	8.140E-08	1.228E-07	2.036E-07	3.909E-07	5.895E-07	9.702E-07	1.831E-06
150.00	2.127E-08	3.585E-08	7.030E-08	1.077E-07	1.816E-07	3.545E-07	5.392E-07	8.955E-07	1.706E-06
155.00	1.757E-08	3.040E-08	6.148E-08	9.579E-08	1.641E-07	3.256E-07	4.993E-07	8.360E-07	1.606E-06
160.00	1.472E-08	2.617E-08	5.464E-08	8.658E-08	1.507E-07	3.034E-07	4.684E-07	7.896E-07	1.528E-06
165.00	1.254E-08	2.291E-08	4.937E-08	7.950E-08	1.405E-07	2.863E-07	4.446E-07	7.540E-07	1.468E-06
170.00	1.110E-08	2.075E-08	4.592E-08	7.492E-08	1.339E-07	2.753E-07	4.291E-07	7.304E-07	1.428E-06
175.00	1.016E-08	1.932E-08	4.359E-08	7.181E-08	1.294E-07	2.678E-07	4.187E-07	7.156E-07	1.405E-06
180.00	9.995E-09	1.909E-08	4.328E-08	7.145E-08	1.289E-07	2.669E-07	4.172E-07	7.129E-07	1.400E-06
TOTAL	4.840E-02	5.062E-02	5.412E-02	5.700E-02	6.156E-02	6.940E-02	7.571E-02	8.509E-02	1.004E-01
TRANS	1.522E-05	2.127E-05	3.278E-05	4.317E-05	6.059E-05	9.425E-05	1.252E-04	1.780E-04	2.821E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 47

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	9.793E+01	9.031E+01	8.243E+01	7.823E+01	7.371E+01	6.860E+01	6.565E+01	6.226E+01	5.812E+01
0.25	8.496E+01	8.059E+01	7.563E+01	7.279E+01	6.956E+01	6.566E+01	6.328E+01	6.043E+01	5.682E+01
0.50	6.078E+01	6.087E+01	6.060E+01	6.021E+01	5.948E+01	5.813E+01	5.705E+01	5.551E+01	5.321E+01
0.75	4.113E+01	4.320E+01	4.550E+01	4.670E+01	4.786E+01	4.876E+01	4.897E+01	4.884E+01	4.809E+01
1.00	2.789E+01	3.046E+01	3.361E+01	3.547E+01	3.753E+01	3.973E+01	4.081E+01	4.175E+01	4.233E+01
1.50	1.328E+01	1.553E+01	1.855E+01	2.049E+01	2.284E+01	2.575E+01	2.746E+01	2.936E+01	3.139E+01
2.00	6.632E+00	8.213E+00	1.051E+01	1.209E+01	1.411E+01	1.678E+01	1.846E+01	2.045E+01	2.283E+01
2.50	3.521E+00	4.536E+00	6.136E+00	7.304E+00	8.875E+00	1.108E+01	1.253E+01	1.434E+01	1.663E+01
3.00	2.011E+00	2.647E+00	3.712E+00	4.534E+00	5.694E+00	7.413E+00	8.606E+00	1.014E+01	1.218E+01
3.50	1.236E+00	1.640E+00	2.343E+00	2.909E+00	3.742E+00	5.042E+00	5.984E+00	7.241E+00	8.986E+00
4.00	8.102E-01	1.076E+00	1.546E+00	1.938E+00	2.531E+00	3.495E+00	4.222E+00	5.226E+00	6.677E+00
4.50	5.588E-01	7.410E-01	1.066E+00	1.340E+00	1.765E+00	2.477E+00	3.031E+00	3.819E+00	5.003E+00
5.00	4.007E-01	5.313E-01	7.637E-01	9.612E-01	1.270E+00	1.797E+00	2.218E+00	2.833E+00	3.785E+00
5.50	2.959E-01	3.932E-01	5.653E-01	7.114E-01	9.402E-01	1.336E+00	1.658E+00	2.135E+00	2.896E+00
6.00	2.235E-01	2.982E-01	4.297E-01	5.408E-01	7.147E-01	1.017E+00	1.265E+00	1.637E+00	2.243E+00
6.50	1.720E-01	2.306E-01	3.337E-01	4.203E-01	5.556E-01	7.907E-01	9.842E-01	1.278E+00	1.762E+00
7.00	1.344E-01	1.813E-01	2.637E-01	3.327E-01	4.402E-01	6.266E-01	7.802E-01	1.014E+00	1.403E+00
7.50	1.064E-01	1.445E-01	2.114E-01	2.674E-01	3.543E-01	5.047E-01	6.286E-01	8.173E-01	1.133E+00
8.00	8.535E-02	1.165E-01	1.716E-01	2.176E-01	2.890E-01	4.123E-01	5.138E-01	6.683E-01	9.274E-01
8.50	6.922E-02	9.497E-02	1.407E-01	1.790E-01	2.383E-01	3.409E-01	4.252E-01	5.536E-01	7.686E-01
9.00	5.672E-02	7.819E-02	1.165E-01	1.486E-01	1.985E-01	2.847E-01	3.556E-01	4.636E-01	6.443E-01
9.50	4.693E-02	6.496E-02	9.729E-02	1.245E-01	1.667E-01	2.399E-01	3.002E-01	3.921E-01	5.456E-01
10.00	3.918E-02	5.442E-02	8.188E-02	1.050E-01	1.411E-01	2.037E-01	2.555E-01	3.343E-01	4.661E-01
12.50	1.775E-02	2.498E-02	3.825E-02	4.958E-02	6.741E-02	9.881E-02	1.250E-01	1.655E-01	2.339E-01
15.00	9.241E-03	1.313E-02	2.037E-02	2.664E-02	3.660E-02	5.420E-02	6.888E-02	9.164E-02	1.311E-01
17.50	5.304E-03	7.581E-03	1.190E-02	1.571E-02	2.182E-02	3.263E-02	4.158E-02	5.541E-02	7.958E-02
20.00	3.273E-03	4.698E-03	7.441E-03	9.902E-03	1.391E-02	2.104E-02	2.694E-02	3.601E-02	5.176E-02
22.50	2.137E-03	3.077E-03	4.906E-03	6.569E-03	9.309E-03	1.427E-02	1.840E-02	2.476E-02	3.568E-02
25.00	1.460E-03	2.108E-03	3.377E-03	4.541E-03	6.478E-03	1.004E-02	1.306E-02	1.775E-02	2.575E-02
27.50	1.036E-03	1.500E-03	2.411E-03	3.250E-03	4.657E-03	7.289E-03	9.562E-03	1.313E-02	1.922E-02
30.00	7.571E-04	1.100E-03	1.775E-03	2.397E-03	3.444E-03	5.430E-03	7.175E-03	9.949E-03	1.472E-02
32.50	5.679E-04	8.276E-04	1.340E-03	1.812E-03	2.611E-03	4.139E-03	5.501E-03	7.692E-03	1.151E-02
35.00	4.355E-04	6.366E-04	1.034E-03	1.401E-03	2.023E-03	3.221E-03	4.299E-03	6.051E-03	9.150E-03
37.50	3.403E-04	4.990E-04	8.136E-04	1.104E-03	1.598E-03	2.553E-03	3.418E-03	4.836E-03	7.378E-03
40.00	2.703E-04	3.975E-04	6.504E-04	8.847E-04	1.283E-03	2.057E-03	2.761E-03	3.922E-03	6.028E-03
42.50	2.178E-04	3.211E-04	5.274E-04	7.191E-04	1.046E-03	1.682E-03	2.263E-03	3.224E-03	4.986E-03
45.00	1.778E-04	2.628E-04	4.332E-04	5.921E-04	8.638E-04	1.394E-03	1.878E-03	2.682E-03	4.170E-03
47.50	1.468E-04	2.175E-04	3.598E-04	4.931E-04	7.217E-04	1.169E-03	1.577E-03	2.258E-03	3.526E-03
50.00	1.225E-04	1.818E-04	3.019E-04	4.148E-04	6.091E-04	9.903E-04	1.339E-03	1.920E-03	3.011E-03
55.00	8.764E-05	1.306E-04	2.183E-04	3.015E-04	4.458E-04	7.304E-04	9.914E-04	1.429E-03	2.256E-03
60.00	6.470E-05	9.675E-05	1.627E-04	2.259E-04	3.362E-04	5.555E-04	7.577E-04	1.098E-03	1.746E-03
65.00	4.906E-05	7.363E-05	1.245E-04	1.737E-04	2.601E-04	4.335E-04	5.944E-04	8.671E-04	1.390E-03
70.00	3.807E-05	5.733E-05	9.748E-05	1.365E-04	2.057E-04	3.458E-04	4.770E-04	7.008E-04	1.133E-03
75.00	3.013E-05	4.555E-05	7.786E-05	1.095E-04	1.659E-04	2.812E-04	3.903E-04	5.779E-04	9.435E-04
80.00	2.428E-05	3.684E-05	6.332E-05	8.936E-05	1.361E-04	2.326E-04	3.249E-04	4.850E-04	8.001E-04
85.00	1.987E-05	3.028E-05	5.232E-05	7.411E-05	1.134E-04	1.955E-04	2.747E-04	4.134E-04	6.895E-04
90.00	1.649E-05	2.525E-05	4.388E-05	6.237E-05	9.592E-05	1.666E-04	2.355E-04	3.574E-04	6.029E-04
95.00	1.388E-05	2.134E-05	3.730E-05	5.321E-05	8.223E-05	1.439E-04	2.046E-04	3.130E-04	5.340E-04
100.00	1.182E-05	1.827E-05	3.211E-05	4.597E-05	7.137E-05	1.258E-04	1.798E-04	2.773E-04	4.787E-04
105.00	1.018E-05	1.581E-05	2.797E-05	4.019E-05	6.269E-05	1.112E-04	1.599E-04	2.484E-04	4.337E-04
110.00	8.863E-06	1.384E-05	2.464E-05	3.554E-05	5.568E-05	9.946E-05	1.437E-04	2.248E-04	3.969E-04
115.00	7.798E-06	1.225E-05	2.193E-05	3.175E-05	4.997E-05	8.983E-05	1.304E-04	2.053E-04	3.665E-04
120.00	6.930E-06	1.094E-05	1.972E-05	2.866E-05	4.530E-05	8.193E-05	1.194E-04	1.893E-04	3.414E-04
125.00	6.220E-06	9.874E-06	1.791E-05	2.611E-05	4.146E-05	7.541E-05	1.103E-04	1.759E-04	3.204E-04
130.00	5.636E-06	8.995E-06	1.641E-05	2.402E-05	3.829E-05	7.003E-05	1.028E-04	1.648E-04	3.029E-04
135.00	5.154E-06	8.269E-06	1.518E-05	2.229E-05	3.568E-05	6.557E-05	9.661E-05	1.566E-04	2.883E-04
140.00	4.759E-06	7.673E-06	1.416E-05	2.087E-05	3.352E-05	6.188E-05	9.144E-05	1.479E-04	2.761E-04
145.00	4.435E-06	7.184E-06	1.333E-05	1.970E-05	3.175E-05	5.885E-05	8.719E-05	1.415E-04	2.661E-04
150.00	4.173E-06	6.788E-06	1.265E-05	1.874E-05	3.031E-05	5.637E-05	8.372E-05	1.363E-04	2.578E-04
155.00	3.963E-06	6.470E-06	1.211E-05	1.798E-05	2.915E-05	5.439E-05	8.092E-05	1.321E-04	2.511E-04
160.00	3.797E-06	6.220E-06	1.168E-05	1.738E-05	2.824E-05	5.283E-05	7.873E-05	1.289E-04	2.459E-04
165.00	3.673E-06	6.033E-06	1.136E-05	1.694E-05	2.756E-05	5.166E-05	7.708E-05	1.264E-04	2.419E-04
170.00	3.587E-06	5.903E-06	1.114E-05	1.662E-05	2.709E-05	5.085E-05	7.593E-05	1.247E-04	2.391E-04
175.00	3.542E-06	5.830E-06	1.101E-05	1.643E-05	2.680E-05	5.036E-05	7.525E-05	1.236E-04	2.375E-04
180.00	3.527E-06	5.807E-06	1.097E-05	1.638E-05	2.672E-05	5.022E-05	7.505E-05	1.233E-04	2.369E-04
TOTAL	1.299E-01	1.510E-01	1.843E-01	2.095E-01	2.452E-01	3.001E-01	3.406E-01	3.969E-01	4.811E-01
TRANS	5.450E-04	7.854E-04	1.259E-03	1.698E-03	2.446E-03	3.903E-03	5.236E-03	7.480E-03	1.178E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 47

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	5.259E+01	4.965E+01	4.594E+01	4.365E+01	4.089E+01	3.743E+01	3.530E+01	3.277E+01	2.549E+01
0.25	5.178E+01	4.902E+01	4.550E+01	4.329E+01	4.061E+01	3.724E+01	3.515E+01	3.265E+01	2.544E+01
0.50	4.948E+01	4.723E+01	4.421E+01	4.224E+01	3.981E+01	3.666E+01	3.469E+01	3.229E+01	2.529E+01
0.75	4.604E+01	4.450E+01	4.220E+01	4.060E+01	3.853E+01	3.574E+01	3.394E+01	3.172E+01	2.504E+01
1.00	4.192E+01	4.114E+01	3.965E+01	3.848E+01	3.685E+01	3.451E+01	3.294E+01	3.094E+01	2.470E+01
1.50	3.325E+01	3.372E+01	3.373E+01	3.341E+01	3.272E+01	3.139E+01	3.035E+01	2.890E+01	2.376E+01
2.00	2.562E+01	2.677E+01	2.776E+01	2.809E+01	2.817E+01	2.778E+01	2.727E+01	2.640E+01	2.254E+01
2.50	1.959E+01	2.100E+01	2.248E+01	2.319E+01	2.379E+01	2.411E+01	2.405E+01	2.369E+01	2.112E+01
3.00	1.500E+01	1.644E+01	1.809E+01	1.898E+01	1.988E+01	2.066E+01	2.092E+01	2.099E+01	1.958E+01
3.50	1.153E+01	1.290E+01	1.455E+01	1.550E+01	1.653E+01	1.758E+01	1.806E+01	1.841E+01	1.798E+01
4.00	8.904E+00	1.016E+01	1.173E+01	1.267E+01	1.373E+01	1.491E+01	1.551E+01	1.606E+01	1.639E+01
4.50	6.909E+00	8.027E+00	9.475E+00	1.037E+01	1.141E+01	1.262E+01	1.329E+01	1.396E+01	1.485E+01
5.00	5.391E+00	6.370E+00	7.677E+00	8.507E+00	9.499E+00	1.070E+01	1.138E+01	1.211E+01	1.340E+01
5.50	4.232E+00	5.077E+00	6.239E+00	6.996E+00	7.921E+00	9.069E+00	9.747E+00	1.050E+01	1.204E+01
6.00	3.347E+00	4.068E+00	5.088E+00	5.769E+00	6.618E+00	7.701E+00	8.356E+00	9.103E+00	1.080E+01
6.50	2.669E+00	3.280E+00	4.165E+00	4.771E+00	5.542E+00	6.548E+00	7.172E+00	7.898E+00	9.679E+00
7.00	2.148E+00	2.662E+00	3.425E+00	3.959E+00	4.651E+00	5.577E+00	6.163E+00	6.859E+00	8.663E+00
7.50	1.746E+00	2.177E+00	2.831E+00	3.298E+00	3.915E+00	4.758E+00	5.306E+00	5.962E+00	7.751E+00
8.00	1.434E+00	1.795E+00	2.353E+00	2.759E+00	3.305E+00	4.068E+00	4.571E+00	5.189E+00	6.934E+00
8.50	1.190E+00	1.493E+00	1.969E+00	2.320E+00	2.800E+00	3.485E+00	3.946E+00	4.521E+00	6.205E+00
9.00	9.981E-01	1.254E+00	1.658E+00	1.962E+00	2.382E+00	2.994E+00	3.413E+00	3.944E+00	5.554E+00
9.50	8.453E-01	1.062E+00	1.407E+00	1.668E+00	2.035E+00	2.579E+00	2.958E+00	3.446E+00	4.974E+00
10.00	7.226E-01	9.076E-01	1.203E+00	1.428E+00	1.747E+00	2.229E+00	2.570E+00	3.016E+00	4.457E+00
12.50	3.687E-01	4.645E-01	6.130E-01	7.251E-01	8.860E-01	1.141E+00	1.333E+00	1.600E+00	2.601E+00
15.00	2.122E-01	2.712E-01	3.615E-01	4.273E-01	5.182E-01	6.581E-01	7.644E-01	9.171E-01	1.557E+00
17.50	1.310E-01	1.700E-01	2.318E-01	2.769E-01	3.376E-01	4.258E-01	4.895E-01	5.792E-01	9.711E-01
20.00	8.542E-02	1.117E-01	1.556E-01	1.888E-01	2.340E-01	2.983E-01	3.423E-01	4.010E-01	6.420E-01
22.50	5.858E-02	7.668E-02	1.080E-01	1.328E-01	1.677E-01	2.185E-01	2.528E-01	2.968E-01	4.546E-01
25.00	4.208E-02	5.489E-02	7.749E-02	9.593E-02	1.230E-01	1.639E-01	1.923E-01	2.285E-01	3.439E-01
27.50	3.143E-02	4.085E-02	5.743E-02	7.122E-02	9.201E-02	1.249E-01	1.486E-01	1.796E-01	2.742E-01
30.00	2.424E-02	3.144E-02	4.393E-02	5.437E-02	7.040E-02	9.665E-02	1.163E-01	1.428E-01	2.265E-01
32.50	1.916E-02	2.487E-02	3.458E-02	4.265E-02	5.512E-02	7.603E-02	9.215E-02	1.146E-01	1.909E-01
35.00	1.544E-02	2.011E-02	2.789E-02	3.428E-02	4.415E-02	6.089E-02	7.405E-02	9.281E-02	1.626E-01
37.50	1.263E-02	1.653E-02	2.295E-02	2.814E-02	3.611E-02	4.967E-02	6.043E-02	7.603E-02	1.392E-01
40.00	1.046E-02	1.378E-02	1.919E-02	2.351E-02	3.009E-02	4.124E-02	5.012E-02	6.309E-02	1.194E-01
42.50	8.765E-03	1.162E-02	1.626E-02	1.993E-02	2.547E-02	3.481E-02	4.224E-02	5.308E-02	1.026E-01
45.00	7.416E-03	9.896E-03	1.392E-02	1.709E-02	2.184E-02	2.981E-02	3.612E-02	4.530E-02	8.828E-02
47.50	6.333E-03	8.501E-03	1.204E-02	1.481E-02	1.895E-02	2.585E-02	3.130E-02	3.918E-02	7.610E-02
50.00	5.454E-03	7.361E-03	1.049E-02	1.294E-02	1.659E-02	2.265E-02	2.743E-02	3.432E-02	6.578E-02
55.00	4.146E-03	5.647E-03	8.139E-03	1.010E-02	1.301E-02	1.784E-02	2.168E-02	2.719E-02	4.980E-02
60.00	3.246E-03	4.454E-03	6.482E-03	8.082E-03	1.046E-02	1.443E-02	1.763E-02	2.229E-02	3.886E-02
65.00	2.612E-03	3.606E-03	5.291E-03	6.621E-03	8.589E-03	1.190E-02	1.462E-02	1.869E-02	3.189E-02
70.00	2.152E-03	2.989E-03	4.419E-03	5.544E-03	7.198E-03	9.972E-03	1.229E-02	1.590E-02	2.799E-02
75.00	1.813E-03	2.534E-03	3.773E-03	4.746E-03	6.154E-03	8.480E-03	1.044E-02	1.363E-02	2.630E-02
80.00	1.558E-03	2.192E-03	3.291E-03	4.151E-03	5.374E-03	7.326E-03	8.961E-03	1.171E-02	2.586E-02
85.00	1.362E-03	1.933E-03	2.930E-03	3.710E-03	4.799E-03	6.451E-03	7.782E-03	1.007E-02	2.571E-02
90.00	1.211E-03	1.733E-03	2.659E-03	3.388E-03	4.391E-03	5.818E-03	6.881E-03	8.684E-03	2.499E-02
95.00	1.092E-03	1.579E-03	2.458E-03	3.158E-03	4.119E-03	5.405E-03	6.252E-03	7.576E-03	2.310E-02
100.00	9.972E-04	1.460E-03	2.309E-03	3.001E-03	3.960E-03	5.197E-03	5.898E-03	6.791E-03	1.982E-02
105.00	9.217E-04	1.366E-03	2.202E-03	2.902E-03	3.897E-03	5.180E-03	5.826E-03	6.390E-03	1.537E-02
110.00	8.608E-04	1.293E-03	2.127E-03	2.848E-03	3.910E-03	5.338E-03	6.037E-03	6.440E-03	1.045E-02
115.00	8.114E-04	1.236E-03	2.077E-03	2.830E-03	3.986E-03	5.653E-03	6.528E-03	6.997E-03	6.094E-03
120.00	7.711E-04	1.191E-03	2.047E-03	2.839E-03	4.112E-03	6.105E-03	7.284E-03	8.102E-03	3.583E-03
125.00	7.381E-04	1.157E-03	2.032E-03	2.868E-03	4.275E-03	6.669E-03	8.282E-03	9.769E-03	4.216E-03
130.00	7.111E-04	1.130E-03	2.028E-03	2.913E-03	4.462E-03	7.318E-03	9.483E-03	1.198E-02	9.106E-03
135.00	6.888E-04	1.108E-03	2.032E-03	2.967E-03	4.664E-03	8.023E-03	1.084E-02	1.467E-02	1.897E-02
140.00	6.707E-04	1.093E-03	2.042E-03	3.027E-03	4.871E-03	8.754E-03	1.230E-02	1.774E-02	3.398E-02
145.00	6.557E-04	1.080E-03	2.055E-03	3.088E-03	5.074E-03	9.482E-03	1.381E-02	2.107E-02	5.364E-02
150.00	6.437E-04	1.071E-03	2.070E-03	3.148E-03	5.264E-03	1.018E-02	1.528E-02	2.449E-02	7.683E-02
155.00	6.340E-04	1.064E-03	2.086E-03	3.203E-03	5.437E-03	1.082E-02	1.667E-02	2.782E-02	1.019E-01
160.00	6.265E-04	1.059E-03	2.100E-03	3.251E-03	5.585E-03	1.137E-02	1.791E-02	3.087E-02	1.267E-01
165.00	6.210E-04	1.056E-03	2.112E-03	3.291E-03	5.706E-03	1.183E-02	1.893E-02	3.347E-02	1.490E-01
170.00	6.169E-04	1.053E-03	2.120E-03	3.320E-03	5.794E-03	1.216E-02	1.970E-02	3.545E-02	1.667E-01
175.00	6.148E-04	1.052E-03	2.127E-03	3.338E-03	5.848E-03	1.237E-02	2.018E-02	3.668E-02	1.781E-01
180.00	6.136E-04	1.051E-03	2.127E-03	3.343E-03	5.866E-03	1.244E-02	2.034E-02	3.711E-02	1.820E-01
TOTAL	6.247E-01	7.172E-01	8.517E-01	9.464E-01	1.073E+00	1.254E+00	1.379E+00	1.544E+00	2.141E+00
TRANS	2.208E-02	3.099E-02	4.759E-02	6.215E-02	8.562E-02	1.280E-01	1.640E-01	2.202E-01	5.103E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 54

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	9.777E+02	7.411E+02	5.276E+02	4.335E+02	3.499E+02	2.760E+02	2.420E+02	2.098E+02	1.790E+02
0.25	2.350E+02	2.344E+02	2.298E+02	2.231E+02	2.102E+02	1.903E+02	1.780E+02	1.647E+02	1.500E+02
0.50	4.639E+01	5.279E+01	6.184E+01	6.776E+01	7.480E+01	8.300E+01	8.738E+01	9.160E+01	9.523E+01
0.75	1.488E+01	1.777E+01	2.222E+01	2.542E+01	2.969E+01	3.580E+01	4.005E+01	4.567E+01	5.322E+01
1.00	5.948E+00	7.509E+00	1.000E+01	1.181E+01	1.421E+01	1.770E+01	2.028E+01	2.402E+01	2.977E+01
1.50	1.544E+00	2.011E+00	2.809E+00	3.449E+00	4.392E+00	5.900E+00	7.042E+00	8.658E+00	1.119E+01
2.00	5.853E-01	7.608E-01	1.069E+00	1.330E+00	1.742E+00	2.454E+00	3.024E+00	3.857E+00	5.193E+00
2.50	2.663E-01	3.528E-01	5.059E-01	6.343E-01	8.339E-01	1.183E+00	1.476E+00	1.933E+00	2.714E+00
3.00	1.368E-01	1.856E-01	2.726E-01	3.448E-01	4.546E-01	6.446E-01	8.065E-01	1.068E+00	1.537E+00
3.50	7.725E-02	1.064E-01	1.592E-01	2.031E-01	2.701E-01	3.856E-01	4.839E-01	6.429E-01	9.309E-01
4.00	4.696E-02	6.515E-02	9.848E-02	1.267E-01	1.705E-01	2.466E-01	3.110E-01	4.138E-01	5.991E-01
4.50	3.023E-02	4.205E-02	6.395E-02	8.284E-02	1.127E-01	1.654E-01	2.100E-01	2.802E-01	4.058E-01
5.00	2.037E-02	2.836E-02	4.329E-02	5.634E-02	7.732E-02	1.150E-01	1.470E-01	1.971E-01	2.864E-01
5.50	1.424E-02	1.984E-02	3.036E-02	3.966E-02	5.478E-02	8.231E-02	1.058E-01	1.428E-01	2.087E-01
6.00	1.025E-02	1.431E-02	2.196E-02	2.875E-02	3.989E-02	6.037E-02	7.802E-02	1.060E-01	1.560E-01
6.50	7.574E-03	1.059E-02	1.629E-02	2.138E-02	2.974E-02	4.524E-02	5.872E-02	8.028E-02	1.191E-01
7.00	5.718E-03	8.011E-03	1.236E-02	1.624E-02	2.264E-02	3.457E-02	4.502E-02	6.188E-02	9.250E-02
7.50	4.398E-03	6.175E-03	9.551E-03	1.257E-02	1.755E-02	2.687E-02	3.509E-02	4.846E-02	7.293E-02
8.00	3.439E-03	4.839E-03	7.504E-03	9.890E-03	1.383E-02	2.122E-02	2.777E-02	3.849E-02	5.827E-02
8.50	2.728E-03	3.847E-03	5.980E-03	7.891E-03	1.105E-02	1.698E-02	2.227E-02	3.097E-02	4.712E-02
9.00	2.193E-03	3.098E-03	4.826E-03	6.377E-03	8.939E-03	1.377E-02	1.808E-02	2.521E-02	3.852E-02
9.50	1.783E-03	2.524E-03	3.940E-03	5.211E-03	7.313E-03	1.128E-02	1.484E-02	2.074E-02	3.181E-02
10.00	1.466E-03	2.077E-03	3.249E-03	4.301E-03	6.043E-03	9.337E-03	1.230E-02	1.723E-02	2.651E-02
12.50	6.244E-04	8.897E-04	1.401E-03	1.862E-03	2.630E-03	4.093E-03	5.420E-03	7.654E-03	1.192E-02
15.00	3.117E-04	4.451E-04	7.033E-04	9.378E-04	1.330E-03	2.083E-03	2.770E-03	3.929E-03	6.164E-03
17.50	1.737E-04	2.483E-04	3.931E-04	5.252E-04	7.476E-04	1.177E-03	1.569E-03	2.233E-03	3.519E-03
20.00	1.050E-04	1.501E-04	2.379E-04	3.184E-04	4.543E-04	7.180E-04	9.594E-04	1.368E-03	2.165E-03
22.50	6.748E-05	9.652E-05	1.531E-04	2.051E-04	2.931E-04	4.645E-04	6.220E-04	8.894E-04	1.412E-03
25.00	4.551E-05	6.514E-05	1.034E-04	1.386E-04	1.983E-04	3.148E-04	4.223E-04	6.056E-04	9.648E-04
27.50	3.192E-05	4.572E-05	7.263E-05	9.738E-05	1.394E-04	2.217E-04	2.979E-04	4.282E-04	6.846E-04
30.00	2.312E-05	3.313E-05	5.268E-05	7.067E-05	1.012E-04	1.612E-04	2.168E-04	3.123E-04	5.010E-04
32.50	1.720E-05	2.466E-05	3.924E-05	5.266E-05	7.549E-05	1.203E-04	1.620E-04	2.338E-04	3.762E-04
35.00	1.309E-05	1.878E-05	2.990E-05	4.015E-05	5.758E-05	9.186E-05	1.238E-04	1.790E-04	2.887E-04
37.50	1.016E-05	1.458E-05	2.324E-05	3.122E-05	4.481E-05	7.154E-05	9.650E-05	1.397E-04	2.258E-04
40.00	8.013E-06	1.151E-05	1.836E-05	2.468E-05	3.545E-05	5.666E-05	7.649E-05	1.109E-04	1.796E-04
42.50	6.414E-06	9.221E-06	1.472E-05	1.980E-05	2.846E-05	4.554E-05	6.152E-05	8.926E-05	1.449E-04
45.00	5.202E-06	7.484E-06	1.196E-05	1.609E-05	2.315E-05	3.709E-05	5.014E-05	7.283E-05	1.184E-04
47.50	4.268E-06	6.143E-06	9.826E-06	1.323E-05	1.905E-05	3.056E-05	4.135E-05	6.012E-05	9.791E-05
50.00	3.535E-06	5.092E-06	8.152E-06	1.098E-05	1.583E-05	2.543E-05	3.444E-05	5.013E-05	8.179E-05
55.00	2.491E-06	3.593E-06	5.764E-06	7.778E-06	1.123E-05	1.810E-05	2.456E-05	3.583E-05	5.866E-05
60.00	1.806E-06	2.609E-06	4.194E-06	5.669E-06	8.207E-06	1.327E-05	1.804E-05	2.640E-05	4.338E-05
65.00	1.342E-06	1.941E-06	3.129E-06	4.237E-06	6.149E-06	9.976E-06	1.360E-05	1.996E-05	3.294E-05
70.00	1.015E-06	1.472E-06	2.379E-06	3.228E-06	4.699E-06	7.657E-06	1.047E-05	1.542E-05	2.556E-05
75.00	7.817E-07	1.136E-06	1.841E-06	2.504E-06	3.656E-06	5.985E-06	8.208E-06	1.214E-05	2.022E-05
80.00	6.095E-07	8.879E-07	1.444E-06	1.969E-06	2.886E-06	4.749E-06	6.537E-06	9.706E-06	1.626E-05
85.00	4.807E-07	7.021E-07	1.147E-06	1.568E-06	2.308E-06	3.820E-06	5.278E-06	7.876E-06	1.328E-05
90.00	3.827E-07	5.608E-07	9.202E-07	1.263E-06	1.867E-06	3.110E-06	4.316E-06	6.473E-06	1.099E-05
95.00	3.067E-07	4.512E-07	7.444E-07	1.025E-06	1.524E-06	2.558E-06	3.567E-06	5.381E-06	9.200E-06
100.00	2.476E-07	3.659E-07	6.073E-07	8.402E-07	1.256E-06	2.125E-06	2.979E-06	4.523E-06	7.793E-06
105.00	2.005E-07	2.979E-07	4.982E-07	6.927E-07	1.043E-06	1.781E-06	2.511E-06	3.839E-06	6.671E-06
110.00	1.632E-07	2.440E-07	4.114E-07	5.753E-07	8.724E-07	1.505E-06	2.136E-06	3.290E-06	5.769E-06
115.00	1.330E-07	2.003E-07	3.411E-07	4.803E-07	7.347E-07	1.282E-06	1.832E-06	2.845E-06	5.037E-06
120.00	1.086E-07	1.650E-07	2.843E-07	4.033E-07	6.230E-07	1.101E-06	1.585E-06	2.483E-06	4.440E-06
125.00	8.876E-08	1.363E-07	2.380E-07	3.406E-07	5.319E-07	9.530E-07	1.383E-06	2.186E-06	3.950E-06
130.00	7.247E-08	1.126E-07	1.999E-07	2.890E-07	4.569E-07	8.313E-07	1.217E-06	1.943E-06	3.547E-06
135.00	5.924E-08	9.345E-08	1.689E-07	2.471E-07	3.959E-07	7.318E-07	1.081E-06	1.742E-06	3.216E-06
140.00	4.831E-08	7.756E-08	1.433E-07	2.124E-07	3.455E-07	6.497E-07	9.692E-07	1.577E-06	2.943E-06
145.00	3.949E-08	6.471E-08	1.226E-07	1.844E-07	3.047E-07	5.830E-07	8.779E-07	1.443E-06	2.719E-06
150.00	3.230E-08	5.419E-08	1.057E-07	1.615E-07	2.714E-07	5.287E-07	8.035E-07	1.333E-06	2.538E-06
155.00	2.658E-08	4.580E-08	9.218E-08	1.433E-07	2.451E-07	4.855E-07	7.441E-07	1.245E-06	2.392E-06
160.00	2.214E-08	3.925E-08	8.167E-08	1.292E-07	2.246E-07	4.519E-07	6.978E-07	1.177E-06	2.278E-06
165.00	1.877E-08	3.423E-08	7.361E-08	1.184E-07	2.092E-07	4.266E-07	6.628E-07	1.125E-06	2.192E-06
170.00	1.651E-08	3.085E-08	6.823E-08	1.113E-07	1.990E-07	4.095E-07	6.389E-07	1.089E-06	2.133E-06
175.00	1.507E-08	2.867E-08	6.473E-08	1.067E-07	1.924E-07	3.989E-07	6.243E-07	1.068E-06	2.098E-06
180.00	1.476E-08	2.823E-08	6.408E-08	1.059E-07	1.912E-07	3.964E-07	6.202E-07	1.061E-06	2.086E-06
TOTAL	6.624E-02	6.924E-02	7.396E-02	7.785E-02	8.398E-02	9.451E-02	1.029E-01	1.155E-01	1.359E-01
TRANS	2.036E-05	2.843E-05	4.377E-05	5.759E-05	8.070E-05	1.252E-04	1.660E-04	2.353E-04	3.711E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 54

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	1.493E+02	1.375E+02	1.252E+02	1.186E+02	1.115E+02	1.035E+02	9.888E+01	9.356E+01	8.711E+01
0.25	1.332E+02	1.255E+02	1.169E+02	1.120E+02	1.065E+02	9.999E+01	9.606E+01	9.144E+01	8.558E+01
0.50	9.739E+01	9.737E+01	9.634E+01	9.520E+01	9.338E+01	9.043E+01	8.826E+01	8.533E+01	8.119E+01
0.75	6.310E+01	6.760E+01	7.219E+01	7.433E+01	7.614E+01	7.717E+01	7.712E+01	7.640E+01	7.454E+01
1.00	3.910E+01	4.445E+01	5.106E+01	5.485E+01	5.887E+01	6.287E+01	6.464E+01	6.598E+01	6.645E+01
1.50	1.598E+01	1.936E+01	2.444E+01	2.798E+01	3.250E+01	3.827E+01	4.168E+01	4.539E+01	4.919E+01
2.00	7.733E+00	9.558E+00	1.248E+01	1.471E+01	1.785E+01	2.244E+01	2.555E+01	2.942E+01	3.418E+01
2.50	4.233E+00	5.315E+00	7.060E+00	8.422E+00	1.040E+01	1.350E+01	1.578E+01	1.886E+01	2.311E+01
3.00	2.494E+00	3.196E+00	4.332E+00	5.213E+00	6.495E+00	8.546E+00	1.012E+01	1.234E+01	1.564E+01
3.50	1.550E+00	2.025E+00	2.806E+00	3.412E+00	4.292E+00	5.702E+00	6.793E+00	8.364E+00	1.080E+01
4.00	1.010E+00	1.337E+00	1.889E+00	2.323E+00	2.956E+00	3.970E+00	4.753E+00	5.882E+00	7.666E+00
4.50	6.872E-01	9.168E-01	1.313E+00	1.630E+00	2.099E+00	2.855E+00	3.437E+00	4.275E+00	5.604E+00
5.00	4.862E-01	6.506E-01	9.387E-01	1.174E+00	1.528E+00	2.105E+00	2.550E+00	3.191E+00	4.206E+00
5.50	3.555E-01	4.762E-01	6.897E-01	8.669E-01	1.137E+00	1.583E+00	1.930E+00	2.432E+00	3.227E+00
6.00	2.671E-01	3.581E-01	5.196E-01	6.550E-01	8.633E-01	1.212E+00	1.487E+00	1.886E+00	2.521E+00
6.50	2.052E-01	2.754E-01	4.003E-01	5.055E-01	6.683E-01	9.439E-01	1.163E+00	1.485E+00	1.998E+00
7.00	1.605E-01	2.159E-01	3.144E-01	3.975E-01	5.265E-01	7.467E-01	9.231E-01	1.184E+00	1.605E+00
7.50	1.275E-01	1.720E-01	2.510E-01	3.178E-01	4.216E-01	5.996E-01	7.430E-01	9.566E-01	1.303E+00
8.00	1.026E-01	1.388E-01	2.033E-01	2.577E-01	3.425E-01	4.881E-01	6.059E-01	7.820E-01	1.069E+00
8.50	8.354E-02	1.133E-01	1.665E-01	2.116E-01	2.818E-01	4.025E-01	5.002E-01	6.465E-01	8.867E-01
9.00	6.870E-02	9.350E-02	1.379E-01	1.755E-01	2.343E-01	3.355E-01	4.175E-01	5.403E-01	7.424E-01
9.50	5.704E-02	7.784E-02	1.152E-01	1.470E-01	1.968E-01	2.825E-01	3.519E-01	4.560E-01	6.275E-01
10.00	4.776E-02	6.535E-02	9.706E-02	1.241E-01	1.666E-01	2.399E-01	2.993E-01	3.884E-01	5.352E-01
12.50	2.191E-02	3.032E-02	4.564E-02	5.881E-02	7.968E-02	1.166E-01	1.472E-01	1.938E-01	2.702E-01
15.00	1.153E-02	1.612E-02	2.452E-02	3.170E-02	4.310E-02	6.363E-02	8.121E-02	1.086E-01	1.546E-01
17.50	6.670E-03	9.423E-03	1.448E-02	1.881E-02	2.567E-02	3.804E-02	4.869E-02	6.554E-02	9.481E-02
20.00	4.141E-03	5.892E-03	9.156E-03	1.197E-02	1.646E-02	2.448E-02	3.131E-02	4.209E-02	6.131E-02
22.50	2.715E-03	3.881E-03	6.088E-03	8.028E-03	1.114E-02	1.668E-02	2.132E-02	2.859E-02	4.165E-02
25.00	1.862E-03	2.668E-03	4.216E-03	5.600E-03	7.849E-03	1.186E-02	1.519E-02	2.037E-02	2.962E-02
27.50	1.325E-03	1.903E-03	3.022E-03	4.037E-03	5.702E-03	8.701E-03	1.120E-02	1.507E-02	2.192E-02
30.00	9.733E-04	1.400E-03	2.231E-03	2.991E-03	4.250E-03	6.546E-03	8.478E-03	1.149E-02	1.675E-02
32.50	7.335E-04	1.057E-03	1.690E-03	2.271E-03	3.240E-03	5.031E-03	6.560E-03	8.955E-03	1.312E-02
35.00	5.653E-04	8.165E-04	1.309E-03	1.762E-03	2.520E-03	3.940E-03	5.168E-03	7.111E-03	1.049E-02
37.50	4.442E-04	6.432E-04	1.034E-03	1.393E-03	1.996E-03	3.137E-03	4.138E-03	5.734E-03	8.523E-03
40.00	3.548E-04	5.150E-04	8.299E-04	1.120E-03	1.608E-03	2.537E-03	3.361E-03	4.687E-03	7.018E-03
42.50	2.874E-04	4.184E-04	6.762E-04	9.134E-04	1.314E-03	2.081E-03	2.767E-03	3.878E-03	5.847E-03
45.00	2.359E-04	3.444E-04	5.583E-04	7.552E-04	1.088E-03	1.729E-03	2.305E-03	3.245E-03	4.923E-03
47.50	1.958E-04	2.867E-04	4.662E-04	6.317E-04	9.119E-04	1.453E-03	1.942E-03	2.744E-03	4.186E-03
50.00	1.642E-04	2.410E-04	3.932E-04	5.338E-04	7.725E-04	1.235E-03	1.654E-03	2.343E-03	3.592E-03
55.00	1.186E-04	1.749E-04	2.873E-04	3.919E-04	5.701E-04	9.170E-04	1.233E-03	1.755E-03	2.713E-03
60.00	8.829E-05	1.308E-04	2.164E-04	2.966E-04	4.341E-04	7.032E-04	9.487E-04	1.357E-03	2.112E-03
65.00	6.747E-05	1.004E-04	1.672E-04	2.304E-04	3.394E-04	5.540E-04	7.505E-04	1.078E-03	1.691E-03
70.00	5.271E-05	7.875E-05	1.321E-04	1.829E-04	2.713E-04	4.464E-04	6.076E-04	8.778E-04	1.387E-03
75.00	4.199E-05	6.300E-05	1.064E-04	1.480E-04	2.210E-04	3.670E-04	5.021E-04	7.299E-04	1.163E-03
80.00	3.403E-05	5.128E-05	8.715E-05	1.219E-04	1.832E-04	3.069E-04	4.223E-04	6.183E-04	9.942E-04
85.00	2.801E-05	4.241E-05	7.254E-05	1.019E-04	1.542E-04	2.607E-04	3.609E-04	5.326E-04	8.654E-04
90.00	2.338E-05	3.557E-05	6.124E-05	8.647E-05	1.316E-04	2.246E-04	3.129E-04	4.657E-04	7.653E-04
95.00	1.977E-05	3.023E-05	5.240E-05	7.432E-05	1.138E-04	1.959E-04	2.749E-04	4.128E-04	6.866E-04
100.00	1.692E-05	2.600E-05	4.538E-05	6.466E-05	9.962E-05	1.731E-04	2.444E-04	3.704E-04	6.241E-04
105.00	1.464E-05	2.263E-05	3.977E-05	5.691E-05	8.819E-05	1.546E-04	2.198E-04	3.361E-04	5.738E-04
110.00	1.281E-05	1.991E-05	3.523E-05	5.063E-05	7.891E-05	1.395E-04	1.997E-04	3.081E-04	5.331E-04
115.00	1.132E-05	1.769E-05	3.153E-05	4.552E-05	7.133E-05	1.272E-04	1.832E-04	2.852E-04	4.999E-04
120.00	1.010E-05	1.588E-05	2.851E-05	4.132E-05	6.511E-05	1.170E-04	1.695E-04	2.662E-04	4.726E-04
125.00	9.097E-06	1.440E-05	2.602E-05	3.787E-05	5.997E-05	1.086E-04	1.582E-04	2.504E-04	4.502E-04
130.00	8.273E-06	1.317E-05	2.396E-05	3.502E-05	5.572E-05	1.016E-04	1.488E-04	2.373E-04	4.318E-04
135.00	7.593E-06	1.216E-05	2.227E-05	3.266E-05	5.221E-05	9.580E-05	1.410E-04	2.263E-04	4.165E-04
140.00	7.033E-06	1.132E-05	2.086E-05	3.071E-05	4.931E-05	9.100E-05	1.345E-04	2.172E-04	4.039E-04
145.00	6.573E-06	1.064E-05	1.971E-05	2.911E-05	4.692E-05	8.705E-05	1.291E-04	2.097E-04	3.935E-04
150.00	6.199E-06	1.008E-05	1.878E-05	2.781E-05	4.498E-05	8.382E-05	1.247E-04	2.036E-04	3.851E-04
155.00	5.899E-06	9.631E-06	1.803E-05	2.677E-05	4.341E-05	8.122E-05	1.212E-04	1.986E-04	3.783E-04
160.00	5.665E-06	9.281E-06	1.744E-05	2.595E-05	4.219E-05	7.919E-05	1.184E-04	1.947E-04	3.730E-04
165.00	5.489E-06	9.018E-06	1.699E-05	2.533E-05	4.127E-05	7.765E-05	1.163E-04	1.917E-04	3.691E-04
170.00	5.367E-06	8.835E-06	1.669E-05	2.490E-05	4.063E-05	7.659E-05	1.149E-04	1.896E-04	3.663E-04
175.00	5.296E-06	8.728E-06	1.650E-05	2.465E-05	4.025E-05	7.595E-05	1.140E-04	1.884E-04	3.647E-04
180.00	5.272E-06	8.695E-06	1.645E-05	2.458E-05	4.014E-05	7.576E-05	1.137E-04	1.880E-04	3.641E-04
TOTAL	1.748E-01	2.025E-01	2.461E-01	2.789E-01	3.253E-01	3.964E-01	4.488E-01	5.213E-01	6.297E-01
TRANS	7.112E-04	1.020E-03	1.624E-03	2.179E-03	3.119E-03	4.939E-03	6.593E-03	9.361E-03	1.463E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 54

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	7.852E+01	7.399E+01	6.830E+01	6.478E+01	6.058E+01	5.532E+01	5.209E+01	4.825E+01	3.741E+01
0.25	7.757E+01	7.325E+01	6.778E+01	6.437E+01	6.026E+01	5.509E+01	5.190E+01	4.812E+01	3.735E+01
0.50	7.481E+01	7.112E+01	6.625E+01	6.313E+01	5.931E+01	5.442E+01	5.137E+01	4.770E+01	3.717E+01
0.75	7.050E+01	6.775E+01	6.381E+01	6.115E+01	5.778E+01	5.333E+01	5.048E+01	4.703E+01	3.689E+01
1.00	6.502E+01	6.338E+01	6.059E+01	5.851E+01	5.572E+01	5.184E+01	4.928E+01	4.611E+01	3.648E+01
1.50	5.228E+01	5.286E+01	5.252E+01	5.176E+01	5.035E+01	4.789E+01	4.605E+01	4.359E+01	3.537E+01
2.00	3.966E+01	4.180E+01	4.351E+01	4.397E+01	4.393E+01	4.299E+01	4.197E+01	4.036E+01	3.388E+01
2.50	2.899E+01	3.184E+01	3.478E+01	3.613E+01	3.719E+01	3.763E+01	3.739E+01	3.664E+01	3.208E+01
3.00	2.084E+01	2.372E+01	2.710E+01	2.894E+01	3.073E+01	3.221E+01	3.265E+01	3.268E+01	3.003E+01
3.50	1.497E+01	1.752E+01	2.081E+01	2.278E+01	2.492E+01	2.708E+01	2.802E+01	2.869E+01	2.782E+01
4.00	1.088E+01	1.297E+01	1.589E+01	1.776E+01	1.996E+01	2.244E+01	2.370E+01	2.484E+01	2.551E+01
4.50	8.056E+00	9.716E+00	1.215E+01	1.381E+01	1.588E+01	1.841E+01	1.982E+01	2.126E+01	2.318E+01
5.00	6.089E+00	7.390E+00	9.368E+00	1.078E+01	1.261E+01	1.501E+01	1.645E+01	1.803E+01	2.089E+01
5.50	4.697E+00	5.720E+00	7.307E+00	8.470E+00	1.004E+01	1.221E+01	1.359E+01	1.519E+01	1.867E+01
6.00	3.691E+00	4.506E+00	5.779E+00	6.729E+00	8.042E+00	9.935E+00	1.120E+01	1.274E+01	1.658E+01
6.50	2.947E+00	3.606E+00	4.636E+00	5.411E+00	6.498E+00	8.116E+00	9.240E+00	1.067E+01	1.464E+01
7.00	2.384E+00	2.926E+00	3.770E+00	4.406E+00	5.305E+00	6.671E+00	7.647E+00	8.929E+00	1.286E+01
7.50	1.951E+00	2.403E+00	3.104E+00	3.631E+00	4.377E+00	5.524E+00	6.361E+00	7.489E+00	1.125E+01
8.00	1.613E+00	1.993E+00	2.583E+00	3.025E+00	3.650E+00	4.614E+00	5.326E+00	6.305E+00	9.813E+00
8.50	1.345E+00	1.668E+00	2.170E+00	2.545E+00	3.074E+00	3.889E+00	4.493E+00	5.335E+00	8.544E+00
9.00	1.131E+00	1.407E+00	1.838E+00	2.160E+00	2.613E+00	3.306E+00	3.821E+00	4.542E+00	7.433E+00
9.50	9.585E-01	1.195E+00	1.567E+00	1.846E+00	2.238E+00	2.835E+00	3.275E+00	3.893E+00	6.467E+00
10.00	8.185E-01	1.022E+00	1.345E+00	1.588E+00	1.930E+00	2.449E+00	2.829E+00	3.361E+00	5.633E+00
12.50	4.136E-01	5.158E-01	6.813E-01	8.104E-01	9.973E-01	1.286E+00	1.495E+00	1.777E+00	2.954E+00
15.00	2.409E-01	3.006E-01	3.933E-01	4.652E-01	5.718E-01	7.450E-01	8.759E-01	1.055E+00	1.737E+00
17.50	1.530E-01	1.934E-01	2.532E-01	2.974E-01	3.613E-01	4.668E-01	5.502E-01	6.699E-01	1.133E+00
20.00	1.020E-01	1.314E-01	1.750E-01	2.060E-01	2.486E-01	3.161E-01	3.695E-01	4.489E-01	7.855E-01
22.50	7.038E-02	9.217E-02	1.258E-01	1.498E-01	1.816E-01	2.290E-01	2.650E-01	3.184E-01	5.624E-01
25.00	5.020E-02	6.637E-02	9.263E-02	1.119E-01	1.375E-01	1.741E-01	2.005E-01	2.383E-01	4.130E-01
27.50	3.699E-02	4.906E-02	6.951E-02	8.503E-02	1.062E-01	1.364E-01	1.574E-01	1.862E-01	3.120E-01
30.00	2.811E-02	3.726E-02	5.319E-02	6.570E-02	8.321E-02	1.086E-01	1.263E-01	1.499E-01	2.438E-01
32.50	2.195E-02	2.903E-02	4.156E-02	5.162E-02	6.606E-02	8.760E-02	1.027E-01	1.229E-01	1.973E-01
35.00	1.755E-02	2.316E-02	3.314E-02	4.128E-02	5.319E-02	7.137E-02	8.438E-02	1.019E-01	1.646E-01
37.50	1.430E-02	1.885E-02	2.693E-02	3.360E-02	4.347E-02	5.880E-02	6.995E-02	8.518E-02	1.408E-01
40.00	1.184E-02	1.561E-02	2.227E-02	2.780E-02	3.606E-02	4.904E-02	5.856E-02	7.174E-02	1.226E-01
42.50	9.934E-03	1.312E-02	1.870E-02	2.335E-02	3.034E-02	4.141E-02	4.956E-02	6.090E-02	1.078E-01
45.00	8.431E-03	1.116E-02	1.590E-02	1.986E-02	2.587E-02	3.543E-02	4.244E-02	5.218E-02	9.544E-02
47.50	7.227E-03	9.587E-03	1.368E-02	1.709E-02	2.231E-02	3.067E-02	3.678E-02	4.517E-02	8.465E-02
50.00	6.250E-03	8.315E-03	1.187E-02	1.485E-02	1.943E-02	2.684E-02	3.224E-02	3.952E-02	7.500E-02
55.00	4.789E-03	6.407E-03	9.174E-03	1.149E-02	1.512E-02	2.113E-02	2.554E-02	3.127E-02	5.834E-02
60.00	3.776E-03	5.078E-03	7.289E-03	9.140E-03	1.207E-02	1.710E-02	2.090E-02	2.576E-02	4.467E-02
65.00	3.056E-03	4.128E-03	5.935E-03	7.437E-03	9.833E-03	1.111E-02	1.750E-02	2.192E-02	3.410E-02
70.00	2.534E-03	3.437E-03	4.944E-03	6.179E-03	8.151E-03	1.179E-02	1.485E-02	1.907E-02	2.702E-02
75.00	2.149E-03	2.927E-03	4.211E-03	5.241E-03	6.867E-03	9.944E-03	1.268E-02	1.678E-02	2.360E-02
80.00	1.861E-03	2.547E-03	3.668E-03	4.543E-03	5.886E-03	8.444E-03	1.085E-02	1.479E-02	2.351E-02
85.00	1.643E-03	2.262E-03	3.269E-03	4.030E-03	5.149E-03	7.231E-03	9.267E-03	1.292E-02	2.576E-02
90.00	1.476E-03	2.050E-03	2.983E-03	3.668E-03	4.619E-03	6.276E-03	7.919E-03	1.112E-02	2.887E-02
95.00	1.348E-03	1.892E-03	2.785E-03	3.429E-03	4.272E-03	5.575E-03	6.815E-03	9.402E-03	3.116E-02
100.00	1.250E-03	1.776E-03	2.657E-03	3.294E-03	4.089E-03	5.131E-03	5.991E-03	7.835E-03	3.119E-02
105.00	1.174E-03	1.692E-03	2.587E-03	3.247E-03	4.057E-03	4.959E-03	5.502E-03	6.564E-03	2.818E-02
110.00	1.116E-03	1.633E-03	2.560E-03	3.271E-03	4.161E-03	5.067E-03	5.406E-03	5.765E-03	2.226E-02
115.00	1.071E-03	1.594E-03	2.570E-03	3.353E-03	4.384E-03	5.462E-03	5.759E-03	5.635E-03	1.456E-02
120.00	1.037E-03	1.570E-03	2.606E-03	3.482E-03	4.709E-03	6.139E-03	6.604E-03	6.363E-03	7.054E-03
125.00	1.011E-03	1.558E-03	2.661E-03	3.645E-03	5.117E-03	7.084E-03	7.961E-03	8.103E-03	2.234E-03
130.00	9.920E-04	1.554E-03	2.730E-03	3.830E-03	5.586E-03	8.265E-03	9.822E-03	1.094E-02	2.612E-03
135.00	9.780E-04	1.557E-03	2.807E-03	4.028E-03	6.096E-03	9.644E-03	1.214E-02	1.488E-02	1.024E-02
140.00	9.679E-04	1.563E-03	2.887E-03	4.230E-03	6.623E-03	1.116E-02	1.484E-02	1.982E-02	2.626E-02
145.00	9.608E-04	1.572E-03	2.967E-03	4.427E-03	7.147E-03	1.276E-02	1.780E-02	2.556E-02	5.061E-02
150.00	9.561E-04	1.583E-03	3.042E-03	4.611E-03	7.646E-03	1.435E-02	2.087E-02	3.178E-02	8.195E-02
155.00	9.529E-04	1.594E-03	3.111E-03	4.777E-03	8.103E-03	1.588E-02	2.388E-02	3.810E-02	1.177E-01
160.00	9.510E-04	1.604E-03	3.170E-03	4.920E-03	8.502E-03	1.725E-02	2.666E-02	4.409E-02	1.546E-01
165.00	9.498E-04	1.612E-03	3.217E-03	5.035E-03	8.825E-03	1.840E-02	2.904E-02	4.932E-02	1.886E-01
170.00	9.492E-04	1.618E-03	3.253E-03	5.119E-03	9.066E-03	1.927E-02	3.087E-02	5.338E-02	2.162E-01
175.00	9.489E-04	1.622E-03	3.274E-03	5.170E-03	9.212E-03	1.981E-02	3.200E-02	5.595E-02	2.341E-01
180.00	9.488E-04	1.624E-03	3.281E-03	5.188E-03	9.265E-03	2.000E-02	3.241E-02	5.684E-02	2.403E-01
TOTAL	8.141E-01	9.329E-01	1.106E+00	1.228E+00	1.391E+00	1.625E+00	1.788E+00	2.002E+00	2.789E+00
TRANS	2.715E-02	3.790E-02	5.778E-02	7.509E-02	1.028E-01	1.525E-01	1.944E-01	2.593E-01	5.889E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 73

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	1.365E+03	1.034E+03	7.354E+02	6.037E+02	4.865E+02	3.827E+02	3.351E+02	2.897E+02	2.463E+02
0.25	2.513E+02	2.474E+02	2.411E+02	2.358E+02	2.275E+02	2.215E+02	2.068E+02	1.967E+02	1.842E+02
0.50	6.164E+01	6.635E+01	7.254E+01	7.630E+01	8.054E+01	8.571E+01	8.909E+01	9.350E+01	9.928E+01
0.75	2.178E+01	2.508E+01	2.977E+01	3.280E+01	3.639E+01	4.094E+01	4.398E+01	4.805E+01	5.388E+01
1.00	9.480E+00	1.139E+01	1.427E+01	1.627E+01	1.883E+01	2.229E+01	2.463E+01	2.769E+01	3.207E+01
1.50	2.541E+00	3.260E+00	4.433E+00	5.308E+00	6.488E+00	8.206E+00	9.443E+00	1.116E+01	1.373E+01
2.00	9.367E-01	1.241E+00	1.762E+00	2.172E+00	2.757E+00	3.664E+00	4.344E+00	5.313E+00	6.809E+00
2.50	4.283E-01	5.708E-01	8.218E-01	1.029E+00	1.342E+00	1.859E+00	2.260E+00	2.836E+00	3.740E+00
3.00	2.243E-01	2.997E-01	4.344E-01	5.485E-01	7.266E-01	1.032E+00	1.277E+00	1.638E+00	2.217E+00
3.50	1.287E-01	1.731E-01	2.529E-01	3.210E-01	4.281E-01	6.155E-01	7.698E-01	1.004E+00	1.392E+00
4.00	7.912E-02	1.072E-01	1.580E-01	2.014E-01	2.695E-01	3.897E-01	4.904E-01	6.471E-01	9.148E-01
4.50	5.129E-02	6.998E-02	1.040E-01	1.330E-01	1.787E-01	2.595E-01	3.279E-01	4.359E-01	6.241E-01
5.00	3.472E-02	4.763E-02	7.127E-02	9.153E-02	1.234E-01	1.801E-01	2.284E-01	3.050E-01	4.402E-01
5.50	2.434E-02	3.355E-02	5.049E-02	6.507E-02	8.814E-02	1.293E-01	1.644E-01	2.204E-01	3.197E-01
6.00	1.758E-02	2.432E-02	3.678E-02	4.755E-02	6.467E-02	9.536E-02	1.216E-01	1.636E-01	2.384E-01
6.50	1.301E-02	1.806E-02	2.744E-02	3.558E-02	4.856E-02	7.193E-02	9.201E-02	1.242E-01	1.817E-01
7.00	9.848E-03	1.371E-02	2.090E-02	2.716E-02	3.719E-02	5.531E-02	7.094E-02	9.606E-02	1.413E-01
7.50	7.593E-03	1.060E-02	1.621E-02	2.111E-02	2.898E-02	4.325E-02	5.568E-02	7.556E-02	1.116E-01
8.00	5.953E-03	8.325E-03	1.277E-02	1.666E-02	2.292E-02	3.432E-02	4.424E-02	6.029E-02	8.945E-02
8.50	4.735E-03	6.634E-03	1.020E-02	1.333E-02	1.838E-02	2.761E-02	3.565E-02	4.872E-02	7.255E-02
9.00	3.816E-03	5.354E-03	8.250E-03	1.080E-02	1.492E-02	2.248E-02	2.908E-02	3.982E-02	5.948E-02
9.50	3.111E-03	4.371E-03	6.746E-03	8.843E-03	1.224E-02	1.850E-02	2.397E-02	3.288E-02	4.923E-02
10.00	2.564E-03	3.604E-03	5.571E-03	7.313E-03	1.015E-02	1.537E-02	1.995E-02	2.740E-02	4.111E-02
12.50	1.105E-03	1.557E-03	2.420E-03	3.193E-03	4.469E-03	6.853E-03	8.950E-03	1.236E-02	1.867E-02
15.00	5.569E-04	7.870E-04	1.227E-03	1.624E-03	2.282E-03	3.523E-03	4.625E-03	6.433E-03	9.801E-03
17.50	3.132E-04	4.438E-04	6.943E-04	9.199E-04	1.294E-03	2.003E-03	2.640E-03	3.699E-03	5.691E-03
20.00	1.911E-04	2.714E-04	4.256E-04	5.644E-04	7.944E-04	1.231E-03	1.626E-03	2.289E-03	3.548E-03
22.50	1.241E-04	1.765E-04	2.772E-04	3.680E-04	5.184E-04	8.043E-04	1.064E-03	1.500E-03	2.335E-03
25.00	8.464E-05	1.205E-04	1.895E-04	2.517E-04	3.551E-04	5.518E-04	7.300E-04	1.030E-03	1.605E-03
27.50	6.012E-05	8.562E-05	1.348E-04	1.792E-04	2.531E-04	3.940E-04	5.214E-04	7.354E-04	1.146E-03
30.00	4.414E-05	6.287E-05	9.900E-05	1.317E-04	1.863E-04	2.905E-04	3.847E-04	5.424E-04	8.457E-04
32.50	3.330E-05	4.744E-05	7.473E-05	9.950E-05	1.409E-04	2.200E-04	2.915E-04	4.112E-04	6.412E-04
35.00	2.572E-05	3.664E-05	5.775E-05	7.692E-05	1.090E-04	1.705E-04	2.260E-04	3.191E-04	4.979E-04
37.50	2.027E-05	2.888E-05	4.553E-05	6.067E-05	8.605E-05	1.347E-04	1.788E-04	2.526E-04	3.946E-04
40.00	1.624E-05	2.315E-05	3.651E-05	4.867E-05	6.907E-05	1.082E-04	1.438E-04	2.034E-04	3.183E-04
42.50	1.320E-05	1.882E-05	2.971E-05	3.962E-05	5.626E-05	8.826E-05	1.174E-04	1.663E-04	2.606E-04
45.00	1.088E-05	1.551E-05	2.450E-05	3.268E-05	4.644E-05	7.292E-05	9.705E-05	1.377E-04	2.163E-04
47.50	9.061E-06	1.293E-05	2.043E-05	2.727E-05	3.877E-05	6.094E-05	8.119E-05	1.154E-04	1.816E-04
50.00	7.622E-06	1.088E-05	1.721E-05	2.298E-05	3.269E-05	5.144E-05	6.860E-05	9.767E-05	1.540E-04
55.00	5.534E-06	7.912E-06	1.253E-05	1.675E-05	2.386E-05	3.764E-05	5.030E-05	7.183E-05	1.138E-04
60.00	4.130E-06	5.914E-06	9.384E-06	1.256E-05	1.793E-05	2.836E-05	3.797E-05	5.440E-05	8.657E-05
65.00	3.154E-06	4.522E-06	7.191E-06	9.640E-06	1.379E-05	2.188E-05	2.937E-05	4.221E-05	6.749E-05
70.00	2.451E-06	3.520E-06	5.612E-06	7.538E-06	1.081E-05	1.722E-05	2.317E-05	3.342E-05	5.372E-05
75.00	1.933E-06	2.782E-06	4.448E-06	5.986E-06	8.609E-06	1.378E-05	1.859E-05	2.692E-05	4.351E-05
80.00	1.542E-06	2.225E-06	3.569E-06	4.815E-06	6.949E-06	1.117E-05	1.514E-05	2.201E-05	3.578E-05
85.00	1.242E-06	1.797E-06	2.894E-06	3.915E-06	5.672E-06	9.174E-06	1.247E-05	1.822E-05	2.983E-05
90.00	1.009E-06	1.463E-06	2.366E-06	3.212E-06	4.674E-06	7.610E-06	1.039E-05	1.527E-05	2.517E-05
95.00	8.234E-07	1.199E-06	1.949E-06	2.655E-06	3.884E-06	6.371E-06	8.743E-06	1.292E-05	2.148E-05
100.00	6.754E-07	9.874E-07	1.614E-06	2.208E-06	3.250E-06	5.376E-06	7.418E-06	1.104E-05	1.852E-05
105.00	5.555E-07	8.163E-07	1.344E-06	1.847E-06	2.737E-06	4.571E-06	6.348E-06	9.519E-06	1.612E-05
110.00	4.579E-07	6.767E-07	1.123E-06	1.553E-06	2.318E-06	3.913E-06	5.472E-06	8.274E-06	1.416E-05
115.00	3.776E-07	5.620E-07	9.416E-07	1.311E-06	1.974E-06	3.373E-06	4.752E-06	7.252E-06	1.255E-05
120.00	3.114E-07	4.673E-07	7.917E-07	1.110E-06	1.690E-06	2.926E-06	4.157E-06	6.406E-06	1.122E-05
125.00	2.565E-07	3.887E-07	6.674E-07	9.444E-07	1.454E-06	2.554E-06	3.663E-06	5.703E-06	1.011E-05
130.00	2.108E-07	3.234E-07	5.641E-07	8.066E-07	1.258E-06	2.247E-06	3.253E-06	5.121E-06	9.194E-06
135.00	1.729E-07	2.690E-07	4.780E-07	6.916E-07	1.094E-06	1.989E-06	2.910E-06	4.634E-06	8.430E-06
140.00	1.414E-07	2.239E-07	4.068E-07	5.965E-07	9.587E-07	1.777E-06	2.627E-06	4.233E-06	7.797E-06
145.00	1.153E-07	1.865E-07	3.476E-07	5.177E-07	8.465E-07	1.600E-06	2.392E-06	3.898E-06	7.273E-06
150.00	9.406E-08	1.558E-07	2.993E-07	4.535E-07	7.554E-07	1.457E-06	2.201E-06	3.626E-06	6.844E-06
155.00	7.689E-08	1.310E-07	2.602E-07	4.016E-07	6.819E-07	1.341E-06	2.046E-06	3.406E-06	6.498E-06
160.00	6.337E-08	1.113E-07	2.293E-07	3.608E-07	6.243E-07	1.250E-06	1.924E-06	3.233E-06	6.227E-06
165.00	5.325E-08	9.651E-08	2.061E-07	3.305E-07	5.817E-07	1.183E-06	1.834E-06	3.104E-06	6.025E-06
170.00	4.607E-08	8.590E-08	1.895E-07	3.088E-07	5.513E-07	1.134E-06	1.768E-06	3.010E-06	5.881E-06
175.00	4.197E-08	7.981E-08	1.800E-07	2.967E-07	5.349E-07	1.108E-06	1.733E-06	2.958E-06	5.792E-06
180.00	4.039E-08	7.742E-08	1.762E-07	2.917E-07	5.275E-07	1.095E-06	1.715E-06	2.932E-06	5.754E-06
TOTAL	8.347E-02	8.708E-02	9.272E-02	9.734E-02	1.046E-01	1.169E-01	1.267E-01	1.411E-01	1.642E-01
TRANS	3.851E-05	5.365E-05	8.228E-05	1.079E-04	1.504E-04	2.313E-04	3.044E-04	4.274E-04	6.644E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 73

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	2.043E+02	1.874E+02	1.699E+02	1.605E+02	1.505E+02	1.392E+02	1.328E+02	1.256E+02	1.170E+02
0.25	1.683E+02	1.604E+02	1.510E+02	1.455E+02	1.390E+02	1.311E+02	1.263E+02	1.205E+02	1.134E+02
0.50	1.062E+02	1.089E+02	1.112E+02	1.119E+02	1.119E+02	1.107E+02	1.094E+02	1.071E+02	1.035E+02
0.75	6.304E+01	6.831E+01	7.484E+01	7.860E+01	8.261E+01	8.657E+01	8.828E+01	8.951E+01	8.978E+01
1.00	3.927E+01	4.376E+01	4.997E+01	5.405E+01	5.900E+01	6.497E+01	6.829E+01	7.172E+01	7.495E+01
1.50	1.800E+01	2.69E+01	2.460E+01	2.736E+01	3.102E+01	3.615E+01	3.956E+01	4.379E+01	4.905E+01
2.00	9.442E+00	1.117E+01	1.372E+01	1.551E+01	1.793E+01	2.142E+01	2.388E+01	2.714E+01	3.164E+01
2.50	5.400E+00	6.541E+00	8.261E+00	9.496E+00	1.117E+01	1.361E+01	1.534E+01	1.766E+01	2.102E+01
3.00	3.308E+00	4.072E+00	5.253E+00	6.122E+00	7.320E+00	9.091E+00	1.035E+01	1.204E+01	1.453E+01
3.50	2.139E+00	2.666E+00	3.494E+00	4.116E+00	4.987E+00	6.296E+00	7.236E+00	8.513E+00	1.039E+01
4.00	1.441E+00	1.818E+00	2.415E+00	2.869E+00	3.511E+00	4.491E+00	5.204E+00	6.184E+00	7.636E+00
4.50	1.004E+00	1.281E+00	1.725E+00	2.063E+00	2.544E+00	3.287E+00	3.835E+00	4.596E+00	5.734E+00
5.00	7.195E-01	9.277E-01	1.264E+00	1.522E+00	1.891E+00	2.463E+00	2.889E+00	3.484E+00	4.385E+00
5.50	5.289E-01	6.878E-01	9.476E-01	1.148E+00	1.435E+00	1.884E+00	2.219E+00	2.690E+00	3.408E+00
6.00	3.979E-01	5.208E-01	7.239E-01	8.819E-01	1.110E+00	1.467E+00	1.735E+00	2.112E+00	2.690E+00
6.50	3.056E-01	4.019E-01	5.626E-01	6.888E-01	8.724E-01	1.161E+00	1.378E+00	1.683E+00	2.153E+00
7.00	2.391E-01	3.156E-01	4.443E-01	5.462E-01	6.955E-01	9.317E-01	1.109E+00	1.360E+00	1.746E+00
7.50	1.901E-01	2.517E-01	3.561E-01	4.392E-01	5.617E-01	7.567E-01	9.039E-01	1.112E+00	1.433E+00
8.00	1.532E-01	2.036E-01	2.893E-01	3.578E-01	4.591E-01	6.214E-01	7.446E-01	9.195E-01	1.189E+00
8.50	1.251E-01	1.668E-01	2.379E-01	2.950E-01	3.795E-01	5.156E-01	6.195E-01	7.675E-01	9.965E-01
9.00	1.032E-01	1.381E-01	1.979E-01	2.459E-01	3.170E-01	4.320E-01	5.202E-01	6.464E-01	8.421E-01
9.50	8.591E-02	1.155E-01	1.663E-01	2.070E-01	2.674E-01	3.652E-01	4.406E-01	5.489E-01	7.172E-01
10.00	7.214E-02	9.739E-02	1.409E-01	1.758E-01	2.275E-01	3.115E-01	3.763E-01	4.696E-01	6.152E-01
12.50	3.337E-02	4.576E-02	6.777E-02	8.587E-02	1.131E-01	1.571E-01	1.906E-01	2.385E-01	3.138E-01
15.00	1.764E-02	2.428E-02	3.650E-02	4.701E-02	6.333E-02	9.022E-02	1.105E-01	1.390E-01	1.830E-01
17.50	1.029E-02	1.418E-02	2.143E-02	2.785E-02	3.812E-02	5.569E-02	6.937E-02	8.881E-02	1.182E-01
20.00	6.467E-03	8.930E-03	1.353E-02	1.762E-02	2.426E-02	3.607E-02	4.571E-02	5.986E-02	8.136E-02
22.50	4.295E-03	5.962E-03	9.060E-03	1.179E-02	1.624E-02	2.436E-02	3.127E-02	4.176E-02	5.818E-02
25.00	2.979E-03	4.161E-03	6.349E-03	8.260E-03	1.136E-02	1.711E-02	2.212E-02	2.995E-02	4.264E-02
27.50	2.141E-03	3.005E-03	4.608E-03	6.000E-03	8.255E-03	1.245E-02	1.616E-02	2.205E-02	3.191E-02
30.00	1.585E-03	2.234E-03	3.440E-03	4.489E-03	6.187E-03	9.350E-03	1.215E-02	1.665E-02	2.437E-02
32.50	1.204E-03	1.701E-03	2.630E-03	3.441E-03	4.758E-03	7.207E-03	9.374E-03	1.286E-02	1.897E-02
35.00	9.359E-04	1.323E-03	2.052E-03	2.693E-03	3.737E-03	5.677E-03	7.387E-03	1.014E-02	1.505E-02
37.50	7.420E-04	1.050E-03	1.631E-03	2.146E-03	2.989E-03	4.554E-03	5.928E-03	8.146E-03	1.214E-02
40.00	5.987E-04	8.469E-04	1.318E-03	1.739E-03	2.429E-03	3.711E-03	4.833E-03	6.645E-03	9.939E-03
42.50	4.906E-04	6.940E-04	1.082E-03	1.429E-03	2.002E-03	3.066E-03	3.994E-03	5.496E-03	8.250E-03
45.00	4.076E-04	5.767E-04	8.999E-04	1.191E-03	1.671E-03	2.564E-03	3.342E-03	4.602E-03	6.930E-03
47.50	3.428E-04	4.852E-04	7.579E-04	1.004E-03	1.411E-03	2.168E-03	2.828E-03	3.897E-03	5.884E-03
50.00	2.914E-04	4.128E-04	6.455E-04	8.560E-04	1.205E-03	1.853E-03	2.417E-03	3.333E-03	5.044E-03
55.00	2.165E-04	3.075E-04	4.823E-04	6.406E-04	9.031E-04	1.391E-03	1.816E-03	2.508E-03	3.804E-03
60.00	1.659E-04	2.366E-04	3.726E-04	4.957E-04	7.000E-04	1.080E-03	1.412E-03	1.951E-03	2.959E-03
65.00	1.304E-04	1.869E-04	2.958E-04	3.945E-04	5.584E-04	8.639E-04	1.131E-03	1.564E-03	2.367E-03
70.00	1.048E-04	1.509E-04	2.403E-04	3.215E-04	4.565E-04	7.091E-04	9.304E-04	1.288E-03	1.943E-03
75.00	8.569E-05	1.242E-04	1.991E-04	2.674E-04	3.813E-04	5.957E-04	7.843E-04	1.089E-03	1.635E-03
80.00	7.121E-05	1.038E-04	1.678E-04	2.264E-04	3.247E-04	5.109E-04	6.758E-04	9.412E-04	1.410E-03
85.00	6.002E-05	8.808E-05	1.436E-04	1.948E-04	2.812E-04	4.465E-04	5.939E-04	8.314E-04	1.246E-03
90.00	5.123E-05	7.572E-05	1.246E-04	1.700E-04	2.473E-04	3.967E-04	5.312E-04	7.487E-04	1.127E-03
95.00	4.425E-05	6.587E-05	1.095E-04	1.504E-04	2.205E-04	3.579E-04	4.827E-04	6.862E-04	1.043E-03
100.00	3.864E-05	5.794E-05	9.729E-05	1.346E-04	1.992E-04	3.272E-04	4.448E-04	6.387E-04	9.844E-04
105.00	3.409E-05	5.151E-05	8.742E-05	1.218E-04	1.821E-04	3.029E-04	4.151E-04	6.029E-04	9.462E-04
110.00	3.037E-05	4.625E-05	7.935E-05	1.114E-04	1.681E-04	2.834E-04	3.919E-04	5.761E-04	9.232E-04
115.00	2.731E-05	4.192E-05	7.271E-05	1.029E-04	1.568E-04	2.677E-04	3.736E-04	5.565E-04	9.116E-04
120.00	2.479E-05	3.835E-05	6.723E-05	9.582E-05	1.474E-04	2.552E-04	3.593E-04	5.424E-04	9.086E-04
125.00	2.269E-05	3.539E-05	6.270E-05	8.999E-05	1.397E-04	2.450E-04	3.482E-04	5.325E-04	9.117E-04
130.00	2.095E-05	3.293E-05	5.893E-05	8.515E-05	1.334E-04	2.367E-04	3.395E-04	5.260E-04	9.193E-04
135.00	1.951E-05	3.089E-05	5.581E-05	8.113E-05	1.281E-04	2.301E-04	3.328E-04	5.218E-04	9.297E-04
140.00	1.831E-05	2.920E-05	5.322E-05	7.781E-05	1.238E-04	2.247E-04	3.276E-04	5.194E-04	9.417E-04
145.00	1.732E-05	2.781E-05	5.109E-05	7.508E-05	1.202E-04	2.204E-04	3.236E-04	5.183E-04	9.543E-04
150.00	1.651E-05	2.677E-05	4.935E-05	7.285E-05	1.173E-04	2.170E-04	3.206E-04	5.181E-04	9.667E-04
155.00	1.586E-05	2.576E-05	4.796E-05	7.106E-05	1.150E-04	2.143E-04	3.184E-04	5.184E-04	9.782E-04
160.00	1.535E-05	2.504E-05	4.686E-05	6.966E-05	1.132E-04	2.122E-04	3.167E-04	5.190E-04	9.883E-04
165.00	1.498E-05	2.451E-05	4.604E-05	6.860E-05	1.118E-04	2.106E-04	3.156E-04	5.196E-04	9.965E-04
170.00	1.471E-05	2.414E-05	4.546E-05	6.786E-05	1.109E-04	2.096E-04	3.148E-04	5.202E-04	1.003E-03
175.00	1.454E-05	2.390E-05	4.513E-05	6.745E-05	1.103E-04	2.090E-04	3.144E-04	5.206E-04	1.006E-03
180.00	1.448E-05	2.383E-05	4.503E-05	6.731E-05	1.101E-04	2.087E-04	3.141E-04	5.206E-04	1.008E-03
TOTAL	2.073E-01	2.374E-01	2.840E-01	3.185E-01	3.666E-01	4.390E-01	4.915E-01	5.636E-01	6.703E-01
TRANS	1.243E-03	1.757E-03	2.745E-03	3.638E-03	5.130E-03	7.966E-03	1.051E-02	1.470E-02	2.255E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 73

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	1.059E+02	1.002E+02	9.320E+01	8.893E+01	8.388E+01	7.766E+01	7.387E+01	6.938E+01	5.635E+01
0.25	1.036E+02	9.847E+01	9.195E+01	8.792E+01	8.310E+01	7.710E+01	7.342E+01	6.904E+01	5.620E+01
0.50	9.728E+01	9.349E+01	8.834E+01	8.498E+01	8.082E+01	7.546E+01	7.209E+01	6.801E+01	5.575E+01
0.75	8.794E+01	8.600E+01	8.277E+01	8.039E+01	7.721E+01	7.283E+01	6.994E+01	6.634E+01	5.500E+01
1.00	7.702E+01	7.698E+01	7.583E+01	7.456E+01	7.255E+01	6.936E+01	6.709E+01	6.410E+01	5.397E+01
1.50	5.535E+01	5.797E+01	6.024E+01	6.102E+01	6.131E+01	6.069E+01	5.980E+01	5.826E+01	5.118E+01
2.00	3.821E+01	4.166E+01	4.555E+01	4.757E+01	4.949E+01	5.101E+01	5.140E+01	5.130E+01	4.760E+01
2.50	2.642E+01	2.959E+01	3.367E+01	3.610E+01	3.879E+01	4.161E+01	4.292E+01	4.399E+01	4.349E+01
3.00	1.867E+01	2.125E+01	2.483E+01	2.716E+01	2.996E+01	3.329E+01	3.513E+01	3.695E+01	3.909E+01
3.50	1.355E+01	1.558E+01	1.851E+01	2.052E+01	2.307E+01	2.639E+01	2.839E+01	3.060E+01	3.466E+01
4.00	1.009E+01	1.168E+01	1.402E+01	1.568E+01	1.786E+01	2.087E+01	2.282E+01	2.512E+01	3.038E+01
4.50	7.675E+00	8.939E+00	1.081E+01	1.215E+01	1.397E+01	1.657E+01	1.834E+01	2.054E+01	2.638E+01
5.00	5.939E+00	6.958E+00	8.471E+00	9.563E+00	1.106E+01	1.326E+01	1.480E+01	1.680E+01	2.275E+01
5.50	4.665E+00	5.496E+00	6.733E+00	7.628E+00	8.860E+00	1.070E+01	1.202E+01	1.378E+01	1.952E+01
6.00	3.713E+00	4.396E+00	5.418E+00	6.159E+00	7.181E+00	8.720E+00	9.841E+00	1.137E+01	1.671E+01
6.50	2.992E+00	3.556E+00	4.407E+00	5.026E+00	5.881E+00	7.174E+00	8.123E+00	9.433E+00	1.428E+01
7.00	2.439E+00	2.908E+00	3.620E+00	4.141E+00	4.862E+00	5.955E+00	6.761E+00	7.883E+00	1.221E+01
7.50	2.009E+00	2.401E+00	3.000E+00	3.441E+00	4.052E+00	4.982E+00	5.671E+00	6.633E+00	1.046E+01
8.00	1.673E+00	2.002E+00	2.508E+00	2.882E+00	3.404E+00	4.200E+00	4.790E+00	5.619E+00	8.989E+00
8.50	1.406E+00	1.684E+00	2.114E+00	2.433E+00	2.879E+00	3.564E+00	4.073E+00	4.791E+00	7.747E+00
9.00	1.192E+00	1.430E+00	1.796E+00	2.069E+00	2.452E+00	3.043E+00	3.484E+00	4.108E+00	6.702E+00
9.50	1.018E+00	1.223E+00	1.538E+00	1.772E+00	2.102E+00	2.613E+00	2.998E+00	3.542E+00	5.822E+00
10.00	8.768E-01	1.054E+00	1.327E+00	1.529E+00	1.814E+00	2.257E+00	2.592E+00	3.070E+00	5.079E+00
12.50	4.533E-01	5.494E-01	6.957E-01	8.022E-01	9.498E-01	1.177E+00	1.352E+00	1.606E+00	2.723E+00
15.00	2.636E-01	3.202E-01	4.093E-01	4.746E-01	5.635E-01	6.946E-01	7.920E-01	9.344E-01	1.590E+00
17.50	1.687E-01	2.037E-01	2.606E-01	3.037E-01	3.634E-01	4.500E-01	5.115E-01	5.983E-01	9.996E-01
20.00	1.166E-01	1.399E-01	1.773E-01	2.064E-01	2.480E-01	3.099E-01	3.534E-01	4.127E-01	6.753E-01
22.50	8.506E-02	1.020E-01	1.280E-01	1.481E-01	1.775E-01	2.228E-01	2.552E-01	2.992E-01	4.873E-01
25.00	6.417E-02	7.754E-02	9.689E-02	1.114E-01	1.327E-01	1.661E-01	1.906E-01	2.241E-01	3.703E-01
27.50	4.948E-02	6.050E-02	7.590E-02	8.704E-02	1.030E-01	1.281E-01	1.466E-01	1.723E-01	2.907E-01
30.00	3.880E-02	4.806E-02	6.084E-02	6.983E-02	8.241E-02	1.019E-01	1.162E-01	1.358E-01	2.321E-01
32.50	3.088E-02	3.873E-02	4.956E-02	5.707E-02	6.740E-02	8.316E-02	9.453E-02	1.097E-01	1.866E-01
35.00	2.494E-02	3.162E-02	4.090E-02	4.728E-02	5.599E-02	6.921E-02	7.863E-02	9.084E-02	1.502E-01
37.50	2.042E-02	2.615E-02	3.415E-02	3.963E-02	4.706E-02	5.840E-02	6.653E-02	7.682E-02	1.211E-01
40.00	1.695E-02	2.190E-02	2.885E-02	3.357E-02	3.994E-02	4.977E-02	5.698E-02	6.609E-02	9.810E-02
42.50	1.424E-02	1.855E-02	2.466E-02	2.876E-02	3.422E-02	4.275E-02	4.921E-02	5.759E-02	8.032E-02
45.00	1.209E-02	1.588E-02	2.132E-02	2.492E-02	2.962E-02	3.696E-02	4.275E-02	5.063E-02	6.709E-02
47.50	1.037E-02	1.372E-02	1.862E-02	2.183E-02	2.590E-02	3.218E-02	3.733E-02	4.475E-02	5.773E-02
50.00	8.957E-03	1.195E-02	1.642E-02	1.933E-02	2.290E-02	2.824E-02	3.273E-02	3.966E-02	5.158E-02
55.00	6.829E-03	9.250E-03	1.307E-02	1.559E-02	1.851E-02	2.233E-02	2.554E-02	3.122E-02	4.630E-02
60.00	5.329E-03	7.306E-03	1.063E-02	1.294E-02	1.557E-02	1.842E-02	2.048E-02	2.454E-02	4.595E-02
65.00	4.245E-03	5.863E-03	8.771E-03	1.093E-02	1.349E-02	1.592E-02	1.711E-02	1.941E-02	4.572E-02
70.00	3.449E-03	4.771E-03	7.289E-03	9.315E-03	1.190E-02	1.437E-02	1.511E-02	1.585E-02	4.211E-02
75.00	2.858E-03	3.936E-03	6.079E-03	7.944E-03	1.056E-02	1.340E-02	1.415E-02	1.391E-02	3.390E-02
80.00	2.423E-03	3.301E-03	5.084E-03	6.750E-03	9.332E-03	1.269E-02	1.389E-02	1.353E-02	2.244E-02
85.00	2.107E-03	2.825E-03	4.275E-03	5.705E-03	8.147E-03	1.199E-02	1.393E-02	1.437E-02	1.113E-02
90.00	1.887E-03	2.485E-03	3.638E-03	4.811E-03	6.990E-03	1.110E-02	1.387E-02	1.584E-02	4.152E-03
95.00	1.746E-03	2.261E-03	3.170E-03	4.081E-03	5.892E-03	9.917E-03	1.334E-02	1.719E-02	4.772E-03
100.00	1.668E-03	2.138E-03	2.867E-03	3.540E-03	4.911E-03	8.454E-03	1.214E-02	1.765E-02	1.390E-02
105.00	1.642E-03	2.103E-03	2.731E-03	3.211E-03	4.131E-03	6.832E-03	1.024E-02	1.667E-02	2.938E-02
110.00	1.657E-03	2.146E-03	2.757E-03	3.117E-03	3.643E-03	5.278E-03	7.880E-03	1.410E-02	4.645E-02
115.00	1.703E-03	2.254E-03	2.939E-03	3.272E-03	3.538E-03	4.098E-03	5.510E-03	1.030E-02	5.915E-02
120.00	1.773E-03	2.415E-03	3.267E-03	3.684E-03	3.893E-03	3.634E-03	3.746E-03	6.163E-03	6.249E-02
125.00	1.859E-03	2.616E-03	3.725E-03	4.348E-03	4.578E-03	4.214E-03	3.276E-03	2.982E-03	5.451E-02
130.00	1.956E-03	2.846E-03	4.291E-03	5.244E-03	6.153E-03	6.061E-03	4.765E-03	2.247E-03	3.752E-02
135.00	2.058E-03	3.093E-03	4.942E-03	6.342E-03	8.056E-03	9.299E-03	8.668E-03	5.344E-03	1.807E-02
140.00	2.159E-03	3.345E-03	5.648E-03	7.595E-03	1.040E-02	1.394E-02	1.500E-02	1.324E-02	5.438E-03
145.00	2.258E-03	3.593E-03	6.378E-03	8.947E-03	1.308E-02	1.973E-02	2.378E-02	2.625E-02	8.984E-03
150.00	2.348E-03	3.826E-03	7.099E-03	1.033E-02	1.594E-02	2.635E-02	3.443E-02	4.384E-02	3.519E-02
155.00	2.429E-03	4.037E-03	7.778E-03	1.167E-02	1.881E-02	3.331E-02	4.612E-02	6.466E-02	8.520E-02
160.00	2.499E-03	4.219E-03	8.383E-03	1.290E-02	2.151E-02	4.008E-02	5.784E-02	8.668E-02	1.537E-01
165.00	2.554E-03	4.366E-03	8.887E-03	1.394E-02	2.384E-02	4.607E-02	6.847E-02	1.075E-01	2.298E-01
170.00	2.594E-03	4.474E-03	9.265E-03	1.473E-02	2.564E-02	5.079E-02	7.695E-02	1.245E-01	2.991E-01
175.00	2.618E-03	4.540E-03	9.498E-03	1.522E-02	2.678E-02	5.380E-02	8.243E-02	1.357E-01	3.476E-01
180.00	2.627E-03	4.564E-03	9.579E-03	1.539E-02	2.717E-02	5.483E-02	8.431E-02	1.396E-01	3.650E-01
TOTAL	8.505E-01	9.665E-01	1.136E+00	1.256E+00	1.418E+00	1.652E+00	1.818E+00	2.041E+00	2.888E+00
TRANS	4.071E-02	5.592E-02	8.340E-02	1.068E-01	1.433E-01	2.064E-01	2.575E-01	3.333E-01	6.564E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 74

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	1.296E+03	9.818E+02	6.980E+02	5.729E+02	4.616E+02	3.630E+02	3.177E+02	2.746E+02	2.333E+02
0.25	2.589E+02	2.541E+02	2.463E+02	2.396E+02	2.293E+02	2.142E+02	2.044E+02	1.929E+02	1.792E+02
0.50	6.255E+01	6.761E+01	7.429E+01	7.833E+01	8.287E+01	8.821E+01	9.150E+01	9.557E+01	1.006E+02
0.75	2.204E+01	2.539E+01	3.018E+01	3.332E+01	3.709E+01	4.194E+01	4.516E+01	4.944E+01	5.543E+01
1.00	9.616E+00	1.153E+01	1.443E+01	1.646E+01	1.907E+01	2.265E+01	2.509E+01	2.832E+01	3.292E+01
1.50	2.595E+00	3.318E+00	4.496E+00	5.374E+00	6.560E+00	8.293E+00	9.548E+00	1.130E+01	1.394E+01
2.00	9.572E-01	1.267E+00	1.796E+00	2.210E+00	2.798E+00	3.707E+00	4.389E+00	5.364E+00	6.877E+00
2.50	4.375E-01	5.832E-01	8.395E-01	1.050E+00	1.367E+00	1.886E+00	2.289E+00	2.866E+00	3.774E+00
3.00	2.291E-01	3.062E-01	4.439E-01	5.601E-01	7.411E-01	1.050E+00	1.297E+00	1.659E+00	2.240E+00
3.50	1.316E-01	1.768E-01	2.583E-01	3.278E-01	4.370E-01	6.274E-01	7.835E-01	1.019E+00	1.409E+00
4.00	8.088E-02	1.095E-01	1.614E-01	2.056E-01	2.751E-01	3.975E-01	4.998E-01	6.582E-01	9.275E-01
4.50	5.246E-02	7.153E-02	1.062E-01	1.358E-01	1.824E-01	2.648E-01	3.344E-01	4.439E-01	6.338E-01
5.00	3.552E-02	4.870E-02	7.280E-02	9.345E-02	1.260E-01	1.838E-01	2.329E-01	3.108E-01	4.475E-01
5.50	2.491E-02	3.431E-02	5.158E-02	6.644E-02	8.997E-02	1.319E-01	1.677E-01	2.246E-01	3.253E-01
6.00	1.800E-02	2.487E-02	3.758E-02	4.856E-02	6.602E-02	9.730E-02	1.241E-01	1.667E-01	2.426E-01
6.50	1.333E-02	1.848E-02	2.804E-02	3.634E-02	4.958E-02	7.341E-02	9.386E-02	1.266E-01	1.850E-01
7.00	1.009E-02	1.403E-02	2.137E-02	2.776E-02	3.798E-02	5.645E-02	7.237E-02	9.794E-02	1.439E-01
7.50	7.777E-03	1.085E-02	1.658E-02	2.158E-02	2.960E-02	4.414E-02	5.674E-02	7.704E-02	1.137E-01
8.00	6.097E-03	8.522E-03	1.306E-02	1.704E-02	2.342E-02	3.504E-02	4.513E-02	6.148E-02	9.114E-02
8.50	4.850E-03	6.792E-03	1.044E-02	1.363E-02	1.878E-02	2.818E-02	3.638E-02	4.968E-02	7.394E-02
9.00	3.909E-03	5.483E-03	8.443E-03	1.105E-02	1.525E-02	2.294E-02	2.967E-02	4.061E-02	6.063E-02
9.50	3.187E-03	4.476E-03	6.905E-03	9.046E-03	1.251E-02	1.888E-02	2.446E-02	3.353E-02	5.020E-02
10.00	2.626E-03	3.691E-03	5.703E-03	7.482E-03	1.037E-02	1.569E-02	2.036E-02	2.795E-02	4.192E-02
12.50	1.132E-03	1.595E-03	2.478E-03	3.268E-03	4.570E-03	7.001E-03	9.137E-03	1.261E-02	1.903E-02
15.00	5.707E-04	8.061E-04	1.256E-03	1.662E-03	2.335E-03	3.601E-03	4.725E-03	6.564E-03	9.987E-03
17.50	3.210E-04	4.547E-04	7.109E-04	9.416E-04	1.324E-03	2.049E-03	2.698E-03	3.776E-03	5.800E-03
20.00	1.959E-04	2.782E-04	4.359E-04	5.778E-04	8.130E-04	1.259E-03	1.662E-03	2.338E-03	3.619E-03
22.50	1.273E-04	1.810E-04	2.841E-04	3.769E-04	5.307E-04	8.227E-04	1.087E-03	1.532E-03	2.383E-03
25.00	8.688E-05	1.236E-04	1.943E-04	2.580E-04	3.637E-04	5.645E-04	7.464E-04	1.052E-03	1.639E-03
27.50	6.175E-05	8.791E-05	1.383E-04	1.837E-04	2.593E-04	4.032E-04	5.332E-04	7.516E-04	1.171E-03
30.00	4.537E-05	6.460E-05	1.017E-04	1.352E-04	1.910E-04	2.975E-04	3.936E-04	5.546E-04	8.637E-04
32.50	3.426E-05	4.878E-05	7.679E-05	1.022E-04	1.446E-04	2.254E-04	2.984E-04	4.205E-04	6.550E-04
35.00	2.648E-05	3.770E-05	5.938E-05	7.906E-05	1.120E-04	1.748E-04	2.316E-04	3.265E-04	5.087E-04
37.50	2.088E-05	2.974E-05	4.685E-05	6.240E-05	8.844E-05	1.383E-04	1.833E-04	2.587E-04	4.034E-04
40.00	1.674E-05	2.386E-05	3.760E-05	5.010E-05	7.105E-05	1.112E-04	1.475E-04	2.085E-04	3.255E-04
42.50	1.363E-05	1.942E-05	3.063E-05	4.082E-05	5.792E-05	9.075E-05	1.205E-04	1.705E-04	2.667E-04
45.00	1.124E-05	1.602E-05	2.528E-05	3.371E-05	4.785E-05	7.504E-05	9.976E-05	1.414E-04	2.215E-04
47.50	9.370E-06	1.337E-05	2.110E-05	2.815E-05	3.998E-05	6.277E-05	8.353E-05	1.186E-04	1.861E-04
50.00	7.889E-06	1.126E-05	1.779E-05	2.374E-05	3.375E-05	5.303E-05	7.064E-05	1.004E-04	1.580E-04
55.00	5.739E-06	8.201E-06	1.298E-05	1.734E-05	2.468E-05	3.887E-05	5.189E-05	7.399E-05	1.169E-04
60.00	4.291E-06	6.141E-06	9.736E-06	1.302E-05	1.857E-05	2.934E-05	3.924E-05	5.614E-05	8.913E-05
65.00	3.282E-06	4.704E-06	7.474E-06	1.001E-05	1.431E-05	2.267E-05	3.040E-05	4.363E-05	6.961E-05
70.00	2.555E-06	3.668E-06	5.843E-06	7.842E-06	1.123E-05	1.787E-05	2.403E-05	3.460E-05	5.550E-05
75.00	2.018E-06	2.904E-06	4.638E-06	6.238E-06	8.963E-06	1.432E-05	1.931E-05	2.792E-05	4.502E-05
80.00	1.613E-06	2.326E-06	3.727E-06	5.025E-06	7.245E-06	1.163E-05	1.574E-05	2.285E-05	3.709E-05
85.00	1.301E-06	1.881E-06	3.026E-06	4.091E-06	5.922E-06	9.564E-06	1.299E-05	1.895E-05	3.096E-05
90.00	1.058E-06	1.533E-06	2.477E-06	3.360E-06	4.886E-06	7.943E-06	1.084E-05	1.590E-05	2.616E-05
95.00	8.645E-07	1.258E-06	2.043E-06	2.781E-06	4.065E-06	6.657E-06	9.127E-06	1.347E-05	2.236E-05
100.00	7.098E-07	1.037E-06	1.694E-06	2.316E-06	3.405E-06	5.624E-06	7.753E-06	1.152E-05	1.929E-05
105.00	5.845E-07	8.582E-07	1.411E-06	1.939E-06	2.871E-06	4.787E-06	6.641E-06	9.945E-06	1.681E-05
110.00	4.821E-07	7.121E-07	1.181E-06	1.631E-06	2.433E-06	4.101E-06	5.729E-06	8.653E-06	1.479E-05
115.00	3.980E-07	5.919E-07	9.906E-07	1.378E-06	2.074E-06	3.538E-06	4.981E-06	7.591E-06	1.312E-05
120.00	3.284E-07	4.925E-07	8.335E-07	1.168E-06	1.776E-06	3.071E-06	4.360E-06	6.712E-06	1.174E-05
125.00	2.706E-07	4.099E-07	7.030E-07	9.942E-07	1.529E-06	2.683E-06	3.844E-06	5.980E-06	1.059E-05
130.00	2.226E-07	3.412E-07	5.945E-07	8.495E-07	1.323E-06	2.361E-06	3.417E-06	5.374E-06	9.636E-06
135.00	1.825E-07	2.839E-07	5.040E-07	7.287E-07	1.152E-06	2.092E-06	3.058E-06	4.866E-06	8.842E-06
140.00	1.494E-07	2.364E-07	4.290E-07	6.287E-07	1.010E-06	1.869E-06	2.763E-06	4.447E-06	8.185E-06
145.00	1.218E-07	1.969E-07	3.667E-07	5.457E-07	8.917E-07	1.684E-06	2.516E-06	4.098E-06	7.639E-06
150.00	9.937E-08	1.645E-07	3.157E-07	4.781E-07	7.959E-07	1.534E-06	2.316E-06	3.814E-06	7.193E-06
155.00	8.122E-08	1.383E-07	2.745E-07	4.235E-07	7.186E-07	1.412E-06	2.154E-06	3.584E-06	6.833E-06
160.00	6.691E-08	1.175E-07	2.419E-07	3.804E-07	6.579E-07	1.316E-06	2.026E-06	3.403E-06	6.551E-06
165.00	5.620E-08	1.018E-07	2.174E-07	3.484E-07	6.131E-07	1.246E-06	1.932E-06	3.269E-06	6.341E-06
170.00	4.859E-08	9.059E-08	1.998E-07	3.255E-07	5.811E-07	1.195E-06	1.862E-06	3.170E-06	6.191E-06
175.00	4.427E-08	8.416E-08	1.898E-07	3.128E-07	5.639E-07	1.168E-06	1.826E-06	3.116E-06	6.098E-06
180.00	4.256E-08	8.157E-08	1.857E-07	3.073E-07	5.559E-07	1.154E-06	1.806E-06	3.088E-06	6.058E-06
TOTAL	8.452E-02	8.816E-02	9.386E-02	9.851E-02	1.058E-01	1.182E-01	1.281E-01	1.426E-01	1.658E-01
TRANS	3.966E-05	5.524E-05	8.470E-05	1.110E-04	1.547E-04	2.378E-04	3.129E-04	4.391E-04	6.820E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 74

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	1.933E+02	1.772E+02	1.604E+02	1.515E+02	1.419E+02	1.311E+02	1.249E+02	1.180E+02	1.097E+02
0.25	1.622E+02	1.539E+02	1.443E+02	1.386E+02	1.320E+02	1.241E+02	1.193E+02	1.136E+02	1.066E+02
0.50	1.060E+02	1.078E+02	1.090E+02	1.090E+02	1.084E+02	1.065E+02	1.047E+02	1.021E+02	9.814E+01
0.75	6.443E+01	6.937E+01	7.527E+01	7.852E+01	8.185E+01	8.490E+01	8.605E+01	8.665E+01	8.621E+01
1.00	4.039E+01	4.495E+01	5.107E+01	5.497E+01	5.958E+01	6.493E+01	6.778E+01	7.060E+01	7.303E+01
1.50	1.837E+01	2.119E+01	2.526E+01	2.812E+01	3.186E+01	3.698E+01	4.030E+01	4.432E+01	4.913E+01
2.00	9.563E+00	1.135E+01	1.398E+01	1.585E+01	1.837E+01	2.200E+01	2.453E+01	2.782E+01	3.226E+01
2.50	5.450E+00	6.608E+00	8.366E+00	9.638E+00	1.137E+01	1.391E+01	1.572E+01	1.813E+01	2.158E+01
3.00	3.335E+00	4.105E+00	5.300E+00	6.185E+00	7.412E+00	9.238E+00	1.055E+01	1.231E+01	1.490E+01
3.50	2.157E+00	2.687E+00	3.520E+00	4.148E+00	5.032E+00	6.369E+00	7.337E+00	8.661E+00	1.062E+01
4.00	1.455E+00	1.833E+00	2.432E+00	2.888E+00	3.536E+00	4.529E+00	5.258E+00	6.265E+00	7.768E+00
4.50	1.015E+00	1.293E+00	1.737E+00	2.076E+00	2.560E+00	3.309E+00	3.865E+00	4.640E+00	5.810E+00
5.00	7.286E-01	9.374E-01	1.274E+00	1.532E+00	1.902E+00	2.477E+00	2.907E+00	3.510E+00	4.430E+00
5.50	5.362E-01	6.957E-01	9.559E-01	1.156E+00	1.444E+00	1.894E+00	2.231E+00	2.706E+00	3.436E+00
6.00	4.037E-01	5.273E-01	7.310E-01	8.891E-01	1.117E+00	1.475E+00	1.744E+00	2.123E+00	2.708E+00
6.50	3.103E-01	4.072E-01	5.686E-01	6.951E-01	8.787E-01	1.168E+00	1.385E+00	1.691E+00	2.165E+00
7.00	2.428E-01	3.199E-01	4.493E-01	5.516E-01	7.010E-01	9.373E-01	1.115E+00	1.366E+00	1.755E+00
7.50	1.931E-01	2.553E-01	3.603E-01	4.438E-01	5.665E-01	7.617E-01	9.090E-01	1.118E+00	1.440E+00
8.00	1.558E-01	2.066E-01	2.928E-01	3.616E-01	4.633E-01	6.258E-01	7.491E-01	9.242E-01	1.195E+00
8.50	1.272E-01	1.693E-01	2.409E-01	2.983E-01	3.831E-01	5.194E-01	6.234E-01	7.717E-01	1.001E+00
9.00	1.050E-01	1.403E-01	2.005E-01	2.487E-01	3.201E-01	4.353E-01	5.237E-01	6.501E-01	8.463E-01
9.50	8.743E-02	1.173E-01	1.685E-01	2.094E-01	2.700E-01	3.681E-01	4.437E-01	5.521E-01	7.210E-01
10.00	7.344E-02	9.898E-02	1.428E-01	1.779E-01	2.298E-01	3.140E-01	3.790E-01	4.725E-01	6.187E-01
12.50	3.401E-02	4.661E-02	6.889E-02	8.712E-02	1.144E-01	1.584E-01	1.919E-01	2.398E-01	3.155E-01
15.00	1.797E-02	2.475E-02	3.718E-02	4.782E-02	6.425E-02	9.115E-02	1.114E-01	1.397E-01	1.837E-01
17.50	1.048E-02	1.444E-02	2.183E-02	2.837E-02	3.878E-02	5.647E-02	7.011E-02	8.938E-02	1.185E-01
20.00	6.585E-03	9.089E-03	1.378E-02	1.795E-02	2.473E-02	3.669E-02	4.636E-02	6.043E-02	8.169E-02
22.50	4.374E-03	6.065E-03	9.217E-03	1.201E-02	1.655E-02	2.481E-02	3.179E-02	4.229E-02	5.858E-02
25.00	3.035E-03	4.233E-03	6.456E-03	8.405E-03	1.157E-02	1.743E-02	2.252E-02	3.041E-02	4.308E-02
27.50	2.181E-03	3.058E-03	4.685E-03	6.102E-03	8.402E-03	1.268E-02	1.646E-02	2.243E-02	3.233E-02
30.00	1.616E-03	2.274E-03	3.498E-03	4.564E-03	6.292E-03	9.517E-03	1.238E-02	1.695E-02	2.474E-02
32.50	1.228E-03	1.732E-03	2.675E-03	3.498E-03	4.836E-03	7.330E-03	9.543E-03	1.310E-02	1.929E-02
35.00	9.545E-04	1.348E-03	2.088E-03	2.738E-03	3.797E-03	5.770E-03	7.517E-03	1.033E-02	1.531E-02
37.50	7.570E-04	1.070E-03	1.660E-03	2.182E-03	3.036E-03	4.627E-03	6.030E-03	8.298E-03	1.236E-02
40.00	6.110E-04	8.634E-04	1.342E-03	1.768E-03	2.467E-03	3.769E-03	4.914E-03	6.767E-03	1.012E-02
42.50	5.009E-04	7.078E-04	1.101E-03	1.454E-03	2.034E-03	3.113E-03	4.060E-03	5.595E-03	8.402E-03
45.00	4.164E-04	5.884E-04	9.164E-04	1.211E-03	1.698E-03	2.603E-03	3.396E-03	4.682E-03	7.057E-03
47.50	3.504E-04	4.952E-04	7.720E-04	1.021E-03	1.434E-03	2.202E-03	2.872E-03	3.963E-03	5.990E-03
50.00	2.980E-04	4.215E-04	6.577E-04	8.710E-04	1.224E-03	1.881E-03	2.455E-03	3.388E-03	5.133E-03
55.00	2.217E-04	3.142E-04	4.919E-04	6.528E-04	9.191E-04	1.412E-03	1.839E-03	2.538E-03	3.876E-03
60.00	1.702E-04	2.421E-04	3.803E-04	5.053E-04	7.123E-04	1.097E-03	1.432E-03	1.978E-03	3.005E-03
65.00	1.340E-04	1.915E-04	3.024E-04	4.026E-04	5.687E-04	8.776E-04	1.147E-03	1.584E-03	2.400E-03
70.00	1.078E-04	1.549E-04	2.460E-04	3.285E-04	4.654E-04	7.208E-04	9.437E-04	1.304E-03	1.967E-03
75.00	8.833E-05	1.277E-04	2.041E-04	2.736E-04	3.893E-04	6.060E-04	7.959E-04	1.102E-03	1.654E-03
80.00	7.353E-05	1.069E-04	1.723E-04	2.321E-04	3.319E-04	5.203E-04	6.863E-04	9.530E-04	1.425E-03
85.00	6.207E-05	9.089E-05	1.477E-04	1.999E-04	2.878E-04	4.553E-04	6.039E-04	8.426E-04	1.258E-03
90.00	5.307E-05	7.826E-05	1.284E-04	1.748E-04	2.535E-04	4.052E-04	5.411E-04	7.599E-04	1.138E-03
95.00	4.591E-05	6.819E-05	1.130E-04	1.549E-04	2.265E-04	3.662E-04	4.926E-04	6.978E-04	1.054E-03
100.00	4.014E-05	6.008E-05	1.006E-04	1.389E-04	2.050E-04	3.355E-04	4.550E-04	6.510E-04	9.970E-04
105.00	3.546E-05	5.349E-05	9.054E-05	1.259E-04	1.877E-04	3.112E-04	4.256E-04	6.160E-04	9.608E-04
110.00	3.164E-05	4.810E-05	8.232E-05	1.154E-04	1.737E-04	2.918E-04	4.027E-04	5.902E-04	9.403E-04
115.00	2.849E-05	4.366E-05	7.556E-05	1.067E-04	1.623E-04	2.764E-04	3.849E-04	5.717E-04	9.317E-04
120.00	2.588E-05	3.999E-05	6.997E-05	9.958E-05	1.529E-04	2.640E-04	3.711E-04	5.588E-04	9.319E-04
125.00	2.372E-05	3.695E-05	6.535E-05	9.367E-05	1.452E-04	2.540E-04	3.605E-04	5.501E-04	9.383E-04
130.00	2.192E-05	3.442E-05	6.151E-05	8.878E-05	1.388E-04	2.460E-04	3.523E-04	5.448E-04	9.492E-04
135.00	2.043E-05	3.233E-05	5.833E-05	8.472E-05	1.336E-04	2.396E-04	3.461E-04	5.417E-04	9.629E-04
140.00	1.919E-05	3.059E-05	5.569E-05	8.136E-05	1.293E-04	2.344E-04	3.414E-04	5.405E-04	9.780E-04
145.00	1.817E-05	2.916E-05	5.352E-05	7.860E-05	1.258E-04	2.303E-04	3.378E-04	5.404E-04	9.935E-04
150.00	1.734E-05	2.799E-05	5.175E-05	7.636E-05	1.229E-04	2.270E-04	3.352E-04	5.411E-04	1.008E-03
155.00	1.666E-05	2.705E-05	5.033E-05	7.455E-05	1.206E-04	2.245E-04	3.333E-04	5.422E-04	1.022E-03
160.00	1.614E-05	2.631E-05	4.921E-05	7.314E-05	1.188E-04	2.225E-04	3.319E-04	5.434E-04	1.034E-03
165.00	1.575E-05	2.576E-05	4.838E-05	7.207E-05	1.175E-04	2.211E-04	3.310E-04	5.446E-04	1.044E-03
170.00	1.548E-05	2.538E-05	4.779E-05	7.132E-05	1.165E-04	2.201E-04	3.304E-04	5.456E-04	1.051E-03
175.00	1.530E-05	2.514E-05	4.745E-05	7.091E-05	1.160E-04	2.195E-04	3.300E-04	5.462E-04	1.056E-03
180.00	1.524E-05	2.506E-05	4.734E-05	7.076E-05	1.158E-04	2.193E-04	3.298E-04	5.463E-04	1.057E-03
TOTAL	2.093E-01	2.395E-01	2.863E-01	3.209E-01	3.691E-01	4.416E-01	4.941E-01	5.661E-01	6.727E-01
TRANS	1.275E-03	1.800E-03	2.809E-03	3.721E-03	5.244E-03	8.135E-03	1.072E-02	1.500E-02	2.298E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 74

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	9.902E+01	9.353E+01	8.678E+01	8.266E+01	7.781E+01	7.182E+01	6.818E+01	6.387E+01	5.140E+01
0.25	9.710E+01	9.205E+01	8.572E+01	8.181E+01	7.715E+01	7.135E+01	6.780E+01	6.358E+01	5.128E+01
0.50	9.168E+01	8.782E+01	8.266E+01	7.932E+01	7.522E+01	6.997E+01	6.668E+01	6.271E+01	5.090E+01
0.75	8.363E+01	8.141E+01	7.791E+01	7.542E+01	7.216E+01	6.775E+01	6.488E+01	6.131E+01	5.028E+01
1.00	7.408E+01	7.357E+01	7.193E+01	7.043E+01	6.818E+01	6.481E+01	6.246E+01	5.943E+01	4.942E+01
1.50	5.456E+01	5.665E+01	5.824E+01	5.861E+01	5.846E+01	5.737E+01	5.624E+01	5.447E+01	4.709E+01
2.00	3.847E+01	4.157E+01	4.491E+01	4.655E+01	4.799E+01	4.890E+01	4.895E+01	4.848E+01	4.407E+01
2.50	2.695E+01	3.000E+01	3.377E+01	3.594E+01	3.825E+01	4.050E+01	4.145E+01	4.208E+01	4.056E+01
3.00	1.915E+01	2.174E+01	2.522E+01	2.742E+01	2.998E+01	3.289E+01	3.440E+01	3.581E+01	3.678E+01
3.50	1.391E+01	1.599E+01	1.894E+01	2.091E+01	2.335E+01	2.640E+01	2.816E+01	3.003E+01	3.292E+01
4.00	1.033E+01	1.199E+01	1.439E+01	1.606E+01	1.822E+01	2.110E+01	2.289E+01	2.494E+01	2.914E+01
4.50	7.828E+00	9.177E+00	1.109E+01	1.247E+01	1.431E+01	1.688E+01	1.856E+01	2.060E+01	2.555E+01
5.00	6.036E+00	7.097E+00	8.674E+00	9.807E+00	1.134E+01	1.356E+01	1.507E+01	1.698E+01	2.224E+01
5.50	4.727E+00	5.587E+00	6.875E+00	7.808E+00	9.085E+00	1.097E+01	1.229E+01	1.402E+01	1.926E+01
6.00	3.753E+00	4.456E+00	5.516E+00	6.288E+00	7.352E+00	8.943E+00	1.008E+01	1.161E+01	1.661E+01
6.50	3.018E+00	3.597E+00	4.475E+00	5.118E+00	6.008E+00	7.351E+00	8.328E+00	9.654E+00	1.430E+01
7.00	2.457E+00	2.935E+00	3.667E+00	4.206E+00	4.955E+00	6.092E+00	6.927E+00	8.075E+00	1.230E+01
7.50	2.022E+00	2.421E+00	3.034E+00	3.487E+00	4.121E+00	5.087E+00	5.802E+00	6.794E+00	1.059E+01
8.00	1.683E+00	2.017E+00	2.533E+00	2.916E+00	3.454E+00	4.279E+00	4.893E+00	5.751E+00	9.131E+00
8.50	1.414E+00	1.696E+00	2.133E+00	2.458E+00	2.917E+00	3.624E+00	4.153E+00	4.896E+00	7.889E+00
9.00	1.198E+00	1.439E+00	1.811E+00	2.089E+00	2.481E+00	3.089E+00	3.547E+00	4.192E+00	6.836E+00
9.50	1.024E+00	1.231E+00	1.550E+00	1.788E+00	2.125E+00	2.650E+00	3.046E+00	3.609E+00	5.942E+00
10.00	8.817E-01	1.061E+00	1.336E+00	1.541E+00	1.832E+00	2.286E+00	2.631E+00	3.123E+00	5.183E+00
12.50	4.562E-01	5.533E-01	7.010E-01	8.086E-01	9.581E-01	1.189E+00	1.367E+00	1.627E+00	2.765E+00
15.00	2.650E-01	3.225E-01	4.129E-01	4.790E-01	5.689E-01	7.020E-01	8.013E-01	9.466E-01	1.607E+00
17.50	1.693E-01	2.048E-01	2.628E-01	3.068E-01	3.674E-01	4.553E-01	5.180E-01	6.069E-01	1.010E+00
20.00	1.167E-01	1.402E-01	1.784E-01	2.082E-01	2.508E-01	3.139E-01	3.583E-01	4.191E-01	6.839E-01
22.50	8.509E-02	1.020E-01	1.283E-01	1.490E-01	1.792E-01	2.256E-01	2.588E-01	3.040E-01	4.951E-01
25.00	6.427E-02	7.745E-02	9.689E-02	1.117E-01	1.335E-01	1.679E-01	1.931E-01	2.278E-01	3.775E-01
27.50	4.966E-02	6.048E-02	7.578E-02	8.705E-02	1.034E-01	1.292E-01	1.483E-01	1.749E-01	2.975E-01
30.00	3.903E-02	4.812E-02	6.073E-02	6.974E-02	8.252E-02	1.025E-01	1.172E-01	1.375E-01	2.385E-01
32.50	3.113E-02	3.885E-02	4.950E-02	5.697E-02	6.739E-02	8.347E-02	9.512E-02	1.108E-01	1.924E-01
35.00	2.519E-02	3.177E-02	4.088E-02	4.721E-02	5.595E-02	6.936E-02	7.897E-02	9.149E-02	1.553E-01
37.50	2.066E-02	2.632E-02	3.417E-02	3.957E-02	4.701E-02	5.848E-02	6.673E-02	7.719E-02	1.253E-01
40.00	1.717E-02	2.207E-02	2.889E-02	3.354E-02	3.989E-02	4.983E-02	5.712E-02	6.632E-02	1.012E-01
42.50	1.445E-02	1.873E-02	2.471E-02	2.874E-02	3.417E-02	4.279E-02	4.934E-02	5.776E-02	8.237E-02
45.00	1.228E-02	1.606E-02	2.138E-02	2.490E-02	2.956E-02	3.699E-02	4.288E-02	5.080E-02	6.811E-02
47.50	1.054E-02	1.390E-02	1.870E-02	2.183E-02	2.583E-02	3.219E-02	3.745E-02	4.495E-02	5.788E-02
50.00	9.114E-03	1.212E-02	1.651E-02	1.934E-02	2.283E-02	2.822E-02	3.283E-02	3.990E-02	5.107E-02
55.00	7.096E-03	9.638E-03	1.346E-02	1.593E-02	1.879E-02	2.272E-02	2.618E-02	3.224E-02	4.540E-02
60.00	5.436E-03	7.450E-03	1.077E-02	1.301E-02	1.551E-02	1.827E-02	2.040E-02	2.473E-02	4.529E-02
65.00	4.329E-03	5.988E-03	8.923E-03	1.105E-02	1.348E-02	1.574E-02	1.691E-02	1.945E-02	4.610E-02
70.00	3.512E-03	4.874E-03	7.443E-03	9.464E-03	1.196E-02	1.420E-02	1.483E-02	1.568E-02	4.362E-02
75.00	2.904E-03	4.016E-03	6.224E-03	8.112E-03	1.068E-02	1.329E-02	1.385E-02	1.355E-02	3.609E-02
80.00	2.454E-03	3.359E-03	5.210E-03	6.921E-03	9.509E-03	1.269E-02	1.366E-02	1.305E-02	2.457E-02
85.00	2.127E-03	2.863E-03	4.375E-03	5.862E-03	8.358E-03	1.211E-02	1.384E-02	1.389E-02	1.246E-02
90.00	1.898E-03	2.506E-03	3.708E-03	4.940E-03	7.208E-03	1.134E-02	1.396E-02	1.552E-02	4.246E-03
95.00	1.752E-03	2.268E-03	3.209E-03	4.172E-03	6.086E-03	1.024E-02	1.363E-02	1.715E-02	3.677E-03
100.00	1.672E-03	2.137E-03	2.878E-03	3.587E-03	5.057E-03	8.805E-03	1.258E-02	1.796E-02	1.214E-02
105.00	1.648E-03	2.099E-03	2.720E-03	3.216E-03	4.209E-03	7.141E-03	1.075E-02	1.730E-02	2.778E-02
110.00	1.668E-03	2.144E-03	2.732E-03	3.087E-03	3.648E-03	5.483E-03	8.343E-03	1.493E-02	4.583E-02
115.00	1.721E-03	2.258E-03	2.910E-03	3.219E-03	3.475E-03	4.157E-03	5.817E-03	1.114E-02	6.004E-02
120.00	1.800E-03	2.431E-03	3.246E-03	3.625E-03	3.782E-03	3.531E-03	3.818E-03	6.772E-03	6.493E-02
125.00	1.897E-03	2.649E-03	3.723E-03	4.303E-03	4.633E-03	3.983E-03	3.073E-03	3.179E-03	5.801E-02
130.00	2.005E-03	2.899E-03	4.322E-03	5.235E-03	6.055E-03	5.751E-03	4.373E-03	1.947E-03	4.121E-02
135.00	2.119E-03	3.169E-03	5.016E-03	6.391E-03	8.030E-03	9.055E-03	8.061E-03	4.606E-03	2.096E-02
140.00	2.233E-03	3.446E-03	5.775E-03	7.722E-03	1.049E-02	1.381E-02	1.456E-02	1.229E-02	6.698E-03
145.00	2.344E-03	3.719E-03	6.564E-03	9.168E-03	1.332E-02	1.986E-02	2.362E-02	2.542E-02	8.213E-03
150.00	2.446E-03	3.977E-03	7.348E-03	1.066E-02	1.637E-02	2.683E-02	3.475E-02	4.356E-02	3.247E-02
155.00	2.537E-03	4.211E-03	8.089E-03	1.210E-02	1.943E-02	3.421E-02	4.709E-02	6.533E-02	8.102E-02
160.00	2.615E-03	4.413E-03	8.753E-03	1.343E-02	2.232E-02	4.140E-02	5.954E-02	8.857E-02	1.488E-01
165.00	2.677E-03	4.577E-03	9.306E-03	1.456E-02	2.482E-02	4.780E-02	7.089E-02	1.107E-01	2.248E-01
170.00	2.722E-03	4.698E-03	9.723E-03	1.542E-02	2.676E-02	5.284E-02	7.998E-02	1.289E-01	2.944E-01
175.00	2.750E-03	4.772E-03	9.981E-03	1.596E-02	2.799E-02	5.607E-02	8.586E-02	1.409E-01	3.433E-01
180.00	2.760E-03	4.798E-03	1.007E-02	1.615E-02	2.840E-02	5.717E-02	8.788E-02	1.450E-01	3.608E-01
TOTAL	8.525E-01	9.681E-01	1.137E+00	1.256E+00	1.416E+00	1.648E+00	1.812E+00	2.032E+00	2.860E+00
TRANS	4.143E-02	5.687E-02	8.472E-02	1.084E-01	1.453E-01	2.091E-01	2.605E-01	3.367E-01	6.590E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 79

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	8.976E+02	6.793E+02	4.824E+02	3.956E+02	3.183E+02	2.498E+02	2.182E+02	1.881E+02	1.592E+02
0.25	2.794E+02	2.617E+02	2.387E+02	2.232E+02	2.035E+02	1.792E+02	1.654E+02	1.508E+02	1.351E+02
0.50	6.891E+01	7.527E+01	8.312E+01	8.713E+01	9.038E+01	9.228E+01	9.262E+01	9.253E+01	9.167E+01
0.75	2.350E+01	2.744E+01	3.314E+01	3.689E+01	4.136E+01	4.675E+01	4.994E+01	5.357E+01	5.773E+01
1.00	1.025E+01	1.230E+01	1.547E+01	1.775E+01	2.080E+01	2.508E+01	2.794E+01	3.155E+01	3.625E+01
1.50	2.848E+00	3.587E+00	4.788E+00	5.695E+00	6.953E+00	8.860E+00	1.028E+01	1.230E+01	1.536E+01
2.00	1.060E+00	1.391E+00	1.950E+00	2.381E+00	2.987E+00	3.920E+00	4.635E+00	5.686E+00	7.372E+00
2.50	4.844E-01	6.454E-01	9.253E-01	1.150E+00	1.480E+00	2.010E+00	2.420E+00	3.017E+00	3.980E+00
3.00	2.536E-01	3.394E-01	4.914E-01	6.178E-01	8.107E-01	1.133E+00	1.387E+00	1.757E+00	2.353E+00
3.50	1.458E-01	1.959E-01	2.859E-01	3.619E-01	4.803E-01	6.835E-01	8.471E-01	1.090E+00	1.487E+00
4.00	8.981E-02	1.214E-01	1.784E-01	2.270E-01	3.031E-01	4.355E-01	5.444E-01	7.098E-01	9.857E-01
4.50	5.837E-02	7.936E-02	1.175E-01	1.500E-01	2.011E-01	2.908E-01	3.656E-01	4.814E-01	6.784E-01
5.00	3.960E-02	5.411E-02	8.057E-02	1.032E-01	1.389E-01	2.020E-01	2.552E-01	3.383E-01	4.818E-01
5.50	2.783E-02	3.817E-02	5.712E-02	7.343E-02	9.924E-02	1.451E-01	1.840E-01	2.451E-01	3.516E-01
6.00	2.013E-02	2.770E-02	4.165E-02	5.370E-02	7.287E-02	1.071E-01	1.363E-01	1.822E-01	2.630E-01
6.50	1.492E-02	2.060E-02	3.110E-02	4.021E-02	5.476E-02	8.089E-02	1.032E-01	1.385E-01	2.009E-01
7.00	1.130E-02	1.565E-02	2.372E-02	3.074E-02	4.198E-02	6.225E-02	7.963E-02	1.073E-01	1.565E-01
7.50	8.716E-03	1.211E-02	1.842E-02	2.392E-02	3.274E-02	4.870E-02	6.246E-02	8.450E-02	1.239E-01
8.00	6.834E-03	9.520E-03	1.453E-02	1.890E-02	2.592E-02	3.866E-02	4.969E-02	6.748E-02	9.948E-02
8.50	5.437E-03	7.592E-03	1.162E-02	1.515E-02	2.080E-02	3.109E-02	4.005E-02	5.457E-02	8.085E-02
9.00	4.382E-03	6.132E-03	9.412E-03	1.228E-02	1.690E-02	2.531E-02	3.266E-02	4.463E-02	6.642E-02
9.50	3.573E-03	5.009E-03	7.705E-03	1.007E-02	1.387E-02	2.083E-02	2.692E-02	3.686E-02	5.507E-02
10.00	2.944E-03	4.133E-03	6.369E-03	8.334E-03	1.150E-02	1.731E-02	2.240E-02	3.073E-02	4.604E-02
12.50	1.270E-03	1.788E-03	2.771E-03	3.646E-03	5.078E-03	7.734E-03	1.007E-02	1.386E-02	2.090E-02
15.00	6.406E-04	9.031E-04	1.404E-03	1.854E-03	2.598E-03	3.993E-03	5.221E-03	7.220E-03	1.093E-02
17.50	3.607E-04	5.095E-04	7.941E-04	1.050E-03	1.475E-03	2.276E-03	2.988E-03	4.157E-03	6.342E-03
20.00	2.205E-04	3.121E-04	4.874E-04	6.449E-04	9.059E-04	1.399E-03	1.842E-03	2.578E-03	3.964E-03
22.50	1.435E-04	2.034E-04	3.183E-04	4.213E-04	5.917E-04	9.140E-04	1.205E-03	1.692E-03	2.616E-03
25.00	9.813E-05	1.393E-04	2.183E-04	2.891E-04	4.060E-04	6.273E-04	8.272E-04	1.163E-03	1.804E-03
27.50	6.994E-05	9.936E-05	1.558E-04	2.064E-04	2.901E-04	4.485E-04	5.914E-04	8.313E-04	1.290E-03
30.00	5.155E-05	7.325E-05	1.149E-04	1.523E-04	2.143E-04	3.316E-04	4.372E-04	6.140E-04	9.521E-04
32.50	3.906E-05	5.551E-05	8.710E-05	1.156E-04	1.627E-04	2.521E-04	3.323E-04	4.663E-04	7.225E-04
35.00	3.031E-05	4.308E-05	6.762E-05	8.975E-05	1.265E-04	1.962E-04	2.587E-04	3.628E-04	5.616E-04
37.50	2.400E-05	3.412E-05	5.357E-05	7.114E-05	1.004E-04	1.558E-04	2.055E-04	2.882E-04	4.460E-04
40.00	1.934E-05	2.749E-05	4.318E-05	5.736E-05	8.097E-05	1.258E-04	1.661E-04	2.330E-04	3.606E-04
42.50	1.581E-05	2.248E-05	3.533E-05	4.695E-05	6.632E-05	1.031E-04	1.362E-04	1.913E-04	2.963E-04
45.00	1.310E-05	1.863E-05	2.929E-05	3.894E-05	5.504E-05	8.569E-05	1.133E-04	1.592E-04	2.469E-04
47.50	1.098E-05	1.562E-05	2.457E-05	3.267E-05	4.621E-05	7.201E-05	9.528E-05	1.341E-04	2.082E-04
50.00	9.292E-06	1.323E-05	2.081E-05	2.769E-05	3.919E-05	6.113E-05	8.096E-05	1.141E-04	1.775E-04
55.00	6.828E-06	9.728E-06	1.533E-05	2.042E-05	2.893E-05	4.523E-05	6.002E-05	8.487E-05	1.325E-04
60.00	5.156E-06	7.365E-06	1.161E-05	1.548E-05	2.198E-05	3.446E-05	4.582E-05	6.501E-05	1.020E-04
65.00	3.981E-06	5.688E-06	8.997E-06	1.201E-05	1.708E-05	2.687E-05	3.582E-05	5.100E-05	8.039E-05
70.00	3.127E-06	4.476E-06	7.097E-06	9.493E-06	1.353E-05	2.136E-05	2.856E-05	4.081E-05	6.468E-05
75.00	2.491E-06	3.573E-06	5.681E-06	7.614E-06	1.088E-05	1.726E-05	2.314E-05	3.320E-05	5.293E-05
80.00	2.007E-06	2.884E-06	4.601E-06	6.182E-06	8.868E-06	1.413E-05	1.901E-05	2.740E-05	4.397E-05
85.00	1.631E-06	2.350E-06	3.763E-06	5.070E-06	7.301E-06	1.170E-05	1.580E-05	2.289E-05	3.699E-05
90.00	1.335E-06	1.929E-06	3.102E-06	4.193E-06	6.065E-06	9.783E-06	1.327E-05	1.933E-05	3.149E-05
95.00	1.098E-06	1.593E-06	2.574E-06	3.492E-06	5.078E-06	8.252E-06	1.125E-05	1.649E-05	2.709E-05
100.00	9.069E-07	1.321E-06	2.147E-06	2.924E-06	4.277E-06	7.011E-06	9.614E-06	1.419E-05	2.353E-05
105.00	7.508E-07	1.099E-06	1.798E-06	2.462E-06	3.626E-06	6.001E-06	8.281E-06	1.232E-05	2.064E-05
110.00	6.223E-07	9.159E-07	1.511E-06	2.080E-06	3.088E-06	5.166E-06	7.180E-06	1.078E-05	1.825E-05
115.00	5.159E-07	7.645E-07	1.273E-06	1.765E-06	2.643E-06	4.477E-06	6.271E-06	9.500E-06	1.628E-05
120.00	4.273E-07	6.385E-07	1.075E-06	1.502E-06	2.272E-06	3.902E-06	5.514E-06	8.438E-06	1.464E-05
125.00	3.532E-07	5.330E-07	9.096E-07	1.282E-06	1.962E-06	3.421E-06	4.880E-06	7.551E-06	1.328E-05
130.00	2.914E-07	4.449E-07	7.714E-07	1.098E-06	1.703E-06	3.021E-06	4.353E-06	6.813E-06	1.214E-05
135.00	2.394E-07	3.709E-07	6.552E-07	9.441E-07	1.486E-06	2.683E-06	3.908E-06	6.191E-06	1.118E-05
140.00	1.962E-07	3.093E-07	5.586E-07	8.161E-07	1.305E-06	2.405E-06	3.542E-06	5.678E-06	1.039E-05
145.00	1.601E-07	2.578E-07	4.779E-07	7.092E-07	1.155E-06	2.171E-06	3.234E-06	5.248E-06	9.736E-06
150.00	1.306E-07	2.155E-07	4.118E-07	6.218E-07	1.032E-06	1.980E-06	2.983E-06	4.898E-06	9.199E-06
155.00	1.067E-07	1.811E-07	3.580E-07	5.510E-07	9.326E-07	1.826E-06	2.780E-06	4.613E-06	8.763E-06
160.00	8.775E-08	1.537E-07	3.154E-07	4.951E-07	8.543E-07	1.705E-06	2.619E-06	4.388E-06	8.418E-06
165.00	7.358E-08	1.331E-07	2.833E-07	4.535E-07	7.966E-07	1.615E-06	2.500E-06	4.221E-06	8.163E-06
170.00	6.343E-08	1.181E-07	2.602E-07	4.235E-07	7.551E-07	1.550E-06	2.412E-06	4.098E-06	7.981E-06
175.00	5.774E-08	1.097E-07	2.472E-07	4.070E-07	7.329E-07	1.516E-06	2.367E-06	4.032E-06	7.873E-06
180.00	5.534E-08	1.061E-07	2.416E-07	3.997E-07	7.223E-07	1.497E-06	2.341E-06	3.997E-06	7.825E-06
TOTAL	8.617E-02	8.983E-02	9.553E-02	1.002E-01	1.075E-01	1.198E-01	1.296E-01	1.439E-01	1.668E-01
TRANS	4.568E-05	6.358E-05	9.737E-05	1.275E-04	1.774E-04	2.720E-04	3.571E-04	4.997E-04	7.730E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 79

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	1.309E+02	1.194E+02	1.074E+02	1.009E+02	9.389E+01	8.594E+01	8.139E+01	7.621E+01	7.005E+01
0.25	1.176E+02	1.096E+02	1.006E+02	9.554E+01	8.984E+01	8.311E+01	7.912E+01	7.449E+01	6.883E+01
0.50	8.917E+01	8.723E+01	8.426E+01	8.216E+01	7.938E+01	7.552E+01	7.295E+01	6.969E+01	6.538E+01
0.75	6.234E+01	6.416E+01	6.565E+01	6.609E+01	6.609E+01	6.529E+01	6.435E+01	6.279E+01	6.025E+01
1.00	4.262E+01	4.580E+01	4.937E+01	5.123E+01	5.303E+01	5.451E+01	5.493E+01	5.492E+01	5.413E+01
1.50	2.036E+01	2.333E+01	2.726E+01	2.972E+01	3.262E+01	3.599E+01	3.783E+01	3.969E+01	4.138E+01
2.00	1.044E+01	1.247E+01	1.541E+01	1.741E+01	1.995E+01	2.327E+01	2.531E+01	2.768E+01	3.036E+01
2.50	5.818E+00	7.118E+00	9.110E+00	1.055E+01	1.247E+01	1.516E+01	1.695E+01	1.916E+01	2.193E+01
3.00	3.507E+00	4.344E+00	5.668E+00	6.662E+00	8.045E+00	1.008E+01	1.150E+01	1.335E+01	1.582E+01
3.50	2.256E+00	2.813E+00	3.709E+00	4.397E+00	5.378E+00	6.878E+00	7.963E+00	9.424E+00	1.148E+01
4.00	1.524E+00	1.913E+00	2.540E+00	3.026E+00	3.728E+00	4.826E+00	5.642E+00	6.771E+00	8.425E+00
4.50	1.068E+00	1.351E+00	1.807E+00	2.161E+00	2.673E+00	3.483E+00	4.097E+00	4.961E+00	6.266E+00
5.00	7.708E-01	9.830E-01	1.326E+00	1.591E+00	1.975E+00	2.584E+00	3.049E+00	3.711E+00	4.734E+00
5.50	5.701E-01	7.328E-01	9.971E-01	1.201E+00	1.496E+00	1.964E+00	2.322E+00	2.834E+00	3.636E+00
6.00	4.309E-01	5.577E-01	7.650E-01	9.256E-01	1.158E+00	1.526E+00	1.806E+00	2.208E+00	2.840E+00
6.50	3.321E-01	4.322E-01	5.971E-01	7.256E-01	9.122E-01	1.207E+00	1.431E+00	1.751E+00	2.255E+00
7.00	2.606E-01	3.404E-01	4.731E-01	5.774E-01	7.293E-01	9.698E-01	1.152E+00	1.411E+00	1.819E+00
7.50	2.077E-01	2.722E-01	3.802E-01	4.655E-01	5.906E-01	7.893E-01	9.395E-01	1.153E+00	1.489E+00
8.00	1.679E-01	2.207E-01	3.094E-01	3.800E-01	4.838E-01	6.496E-01	7.753E-01	9.544E-01	1.234E+00
8.50	1.373E-01	1.811E-01	2.549E-01	3.137E-01	4.006E-01	5.400E-01	6.463E-01	7.979E-01	1.034E+00
9.00	1.136E-01	1.503E-01	2.123E-01	2.618E-01	3.350E-01	4.530E-01	5.435E-01	6.732E-01	8.749E+00
9.50	9.483E-02	1.260E-01	1.786E-01	2.206E-01	2.827E-01	3.832E-01	4.609E-01	5.725E-01	7.465E-01
10.00	7.982E-02	1.065E-01	1.517E-01	1.876E-01	2.407E-01	3.269E-01	3.938E-01	4.904E-01	6.415E-01
12.50	3.723E-02	5.078E-02	7.418E-02	9.280E-02	1.202E-01	1.644E-01	1.985E-01	2.482E-01	3.278E-01
15.00	1.968E-02	2.715E-02	4.057E-02	5.168E-02	6.839E-02	9.513E-02	1.151E-01	1.434E-01	1.887E-01
17.50	1.145E-02	1.583E-02	2.393E-02	3.097E-02	4.193E-02	5.985E-02	7.316E-02	9.171E-02	1.204E-01
20.00	7.181E-03	9.917E-03	1.507E-02	1.966E-02	2.701E-02	3.952E-02	4.913E-02	6.264E-02	8.295E-02
22.50	4.766E-03	6.592E-03	1.004E-02	1.313E-02	1.816E-02	2.703E-02	3.417E-02	4.450E-02	6.000E-02
25.00	3.307E-03	4.591E-03	7.004E-03	9.160E-03	1.269E-02	1.909E-02	2.445E-02	3.245E-02	4.472E-02
27.50	2.379E-03	3.316E-03	5.073E-03	6.631E-03	9.182E-03	1.390E-02	1.796E-02	2.419E-02	3.403E-02
30.00	1.763E-03	2.468E-03	3.786E-03	4.949E-03	6.851E-03	1.040E-02	1.353E-02	1.841E-02	2.635E-02
32.50	1.341E-03	1.883E-03	2.896E-03	3.787E-03	5.246E-03	7.987E-03	1.042E-02	1.429E-02	2.073E-02
35.00	1.044E-03	1.468E-03	2.262E-03	2.961E-03	4.106E-03	6.267E-03	8.200E-03	1.130E-02	1.657E-02
37.50	8.290E-04	1.166E-03	1.800E-03	2.358E-03	3.276E-03	5.011E-03	6.567E-03	9.082E-03	1.344E-02
40.00	6.701E-04	9.425E-04	1.456E-03	1.910E-03	2.657E-03	4.072E-03	5.343E-03	7.407E-03	1.104E-02
42.50	5.504E-04	7.737E-04	1.195E-03	1.570E-03	2.188E-03	3.357E-03	4.407E-03	6.120E-03	9.187E-03
45.00	4.584E-04	6.441E-04	9.953E-04	1.308E-03	1.825E-03	2.803E-03	3.679E-03	5.115E-03	7.725E-03
47.50	3.867E-04	5.431E-04	8.392E-04	1.104E-03	1.541E-03	2.367E-03	3.106E-03	4.319E-03	6.558E-03
50.00	3.299E-04	4.632E-04	7.158E-04	9.418E-04	1.316E-03	2.021E-03	2.649E-03	3.683E-03	5.616E-03
55.00	2.471E-04	3.471E-04	5.369E-04	7.071E-04	9.885E-04	1.515E-03	1.981E-03	2.750E-03	4.218E-03
60.00	1.911E-04	2.690E-04	4.170E-04	5.498E-04	7.688E-04	1.176E-03	1.533E-03	2.122E-03	3.258E-03
65.00	1.517E-04	2.143E-04	3.334E-04	4.403E-04	6.162E-04	9.410E-04	1.224E-03	1.687E-03	2.582E-03
70.00	1.231E-04	1.747E-04	2.732E-04	3.616E-04	5.069E-04	7.739E-04	1.005E-03	1.380E-03	2.097E-03
75.00	1.017E-04	1.452E-04	2.285E-04	3.033E-04	4.265E-04	6.525E-04	8.469E-04	1.161E-03	1.747E-03
80.00	8.542E-05	1.227E-04	1.945E-04	2.593E-04	3.661E-04	5.627E-04	7.319E-04	1.002E-03	1.492E-03
85.00	7.272E-05	1.052E-04	1.682E-04	2.253E-04	3.199E-04	4.954E-04	6.472E-04	8.878E-04	1.310E-03
90.00	6.270E-05	9.136E-05	1.475E-04	1.986E-04	2.840E-04	4.444E-04	5.843E-04	8.053E-04	1.181E-03
95.00	5.467E-05	8.030E-05	1.310E-04	1.775E-04	2.560E-04	4.053E-04	5.373E-04	7.463E-04	1.096E-03
100.00	4.817E-05	7.135E-05	1.177E-04	1.607E-04	2.339E-04	3.753E-04	5.020E-04	7.044E-04	1.044E-03
105.00	4.287E-05	6.405E-05	1.069E-04	1.471E-04	2.163E-04	3.520E-04	4.755E-04	6.755E-04	1.018E-03
110.00	3.852E-05	5.805E-05	9.804E-05	1.361E-04	2.023E-04	3.341E-04	4.558E-04	6.566E-04	1.013E-03
115.00	3.491E-05	5.310E-05	9.079E-05	1.271E-04	1.910E-04	3.202E-04	4.414E-04	6.456E-04	1.022E-03
120.00	3.192E-05	4.899E-05	8.479E-05	1.197E-04	1.818E-04	3.096E-04	4.313E-04	6.407E-04	1.042E-03
125.00	2.944E-05	4.557E-05	7.983E-05	1.136E-04	1.744E-04	3.015E-04	4.245E-04	6.403E-04	1.069E-03
130.00	2.736E-05	4.273E-05	7.572E-05	1.086E-04	1.685E-04	2.953E-04	4.201E-04	6.432E-04	1.101E-03
135.00	2.564E-05	4.037E-05	7.231E-05	1.045E-04	1.636E-04	2.907E-04	4.174E-04	6.480E-04	1.135E-03
140.00	2.420E-05	3.840E-05	6.950E-05	1.011E-04	1.597E-04	2.872E-04	4.161E-04	6.542E-04	1.170E-03
145.00	2.301E-05	3.679E-05	6.718E-05	9.831E-05	1.565E-04	2.847E-04	4.157E-04	6.609E-04	1.204E-03
150.00	2.204E-05	3.547E-05	6.530E-05	9.606E-05	1.540E-04	2.828E-04	4.158E-04	6.676E-04	1.236E-03
155.00	2.126E-05	3.440E-05	6.379E-05	9.427E-05	1.520E-04	2.815E-04	4.163E-04	6.740E-04	1.265E-03
160.00	2.064E-05	3.357E-05	6.261E-05	9.287E-05	1.505E-04	2.806E-04	4.169E-04	6.796E-04	1.289E-03
165.00	2.018E-05	3.295E-05	6.172E-05	9.183E-05	1.494E-04	2.799E-04	4.176E-04	6.842E-04	1.309E-03
170.00	1.987E-05	3.252E-05	6.110E-05	9.109E-05	1.486E-04	2.795E-04	4.181E-04	6.877E-04	1.323E-03
175.00	1.967E-05	3.225E-05	6.074E-05	9.068E-05	1.481E-04	2.793E-04	4.184E-04	6.898E-04	1.332E-03
180.00	1.960E-05	3.216E-05	6.061E-05	9.053E-05	1.480E-04	2.793E-04	4.186E-04	6.905E-04	1.335E-03
TOTAL	2.092E-01	2.385E-01	2.835E-01	3.166E-01	3.623E-01	4.306E-01	4.797E-01	5.465E-01	6.444E-01
TRANS	1.436E-03	2.020E-03	3.138E-03	4.144E-03	5.819E-03	8.988E-03	1.182E-02	1.647E-02	2.513E-02

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 79

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	6.211E+01	5.803E+01	5.303E+01	5.001E+01	4.647E+01	4.215E+01	3.955E+01	3.648E+01	2.798E+01
0.25	6.136E+01	5.746E+01	5.263E+01	4.969E+01	4.623E+01	4.198E+01	3.941E+01	3.637E+01	2.794E+01
0.50	5.920E+01	5.580E+01	5.145E+01	4.874E+01	4.550E+01	4.146E+01	3.899E+01	3.606E+01	2.780E+01
0.75	5.588E+01	5.320E+01	4.957E+01	4.721E+01	4.432E+01	4.062E+01	3.832E+01	3.554E+01	2.758E+01
1.00	5.172E+01	4.988E+01	4.712E+01	4.520E+01	4.275E+01	3.950E+01	3.741E+01	3.484E+01	2.728E+01
1.50	4.229E+01	4.207E+01	4.111E+01	4.017E+01	3.873E+01	3.653E+01	3.497E+01	3.295E+01	2.644E+01
2.00	3.314E+01	3.406E+01	3.456E+01	3.448E+01	3.403E+01	3.292E+01	3.196E+01	3.055E+01	2.533E+01
2.50	2.538E+01	2.689E+01	2.831E+01	2.887E+01	2.919E+01	2.904E+01	2.863E+01	2.784E+01	2.399E+01
3.00	1.924E+01	2.095E+01	2.282E+01	2.376E+01	2.461E+01	2.519E+01	2.525E+01	2.499E+01	2.249E+01
3.50	1.456E+01	1.623E+01	1.823E+01	1.934E+01	2.049E+01	2.156E+01	2.197E+01	2.216E+01	2.090E+01
4.00	1.105E+01	1.257E+01	1.450E+01	1.565E+01	1.693E+01	1.829E+01	1.894E+01	1.946E+01	1.925E+01
4.50	8.445E+00	9.769E+00	1.153E+01	1.263E+01	1.393E+01	1.542E+01	1.620E+01	1.695E+01	1.760E+01
5.00	6.509E+00	7.633E+00	9.184E+00	1.020E+01	1.143E+01	1.294E+01	1.380E+01	1.468E+01	1.599E+01
5.50	5.069E+00	6.007E+00	7.345E+00	8.248E+00	9.384E+00	1.084E+01	1.171E+01	1.266E+01	1.445E+01
6.00	3.994E+00	4.769E+00	5.905E+00	6.694E+00	7.714E+00	9.070E+00	9.915E+00	1.088E+01	1.299E+01
6.50	3.186E+00	3.823E+00	4.779E+00	5.459E+00	6.358E+00	7.594E+00	8.393E+00	9.339E+00	1.163E+01
7.00	2.575E+00	3.098E+00	3.897E+00	4.477E+00	5.259E+00	6.368E+00	7.106E+00	8.008E+00	1.039E+01
7.50	2.107E+00	2.537E+00	3.204E+00	3.695E+00	4.371E+00	5.352E+00	6.024E+00	6.865E+00	9.248E+00
8.00	1.746E+00	2.102E+00	2.658E+00	3.073E+00	3.651E+00	4.512E+00	5.116E+00	5.890E+00	8.218E+00
8.50	1.463E+00	1.760E+00	2.225E+00	2.575E+00	3.069E+00	3.819E+00	4.355E+00	5.059E+00	7.292E+00
9.00	1.239E+00	1.489E+00	1.880E+00	2.176E+00	2.596E+00	3.246E+00	3.720E+00	4.354E+00	6.463E+00
9.50	1.059E+00	1.272E+00	1.604E+00	1.854E+00	2.212E+00	2.772E+00	3.189E+00	3.755E+00	5.724E+00
10.00	9.127E-01	1.097E+00	1.380E+00	1.593E+00	1.898E+00	2.380E+00	2.745E+00	3.248E+00	5.069E+00
12.50	4.769E-01	5.782E-01	7.282E-01	8.354E-01	9.836E-01	1.216E+00	1.398E+00	1.664E+00	2.780E+00
15.00	2.771E-01	3.400E-01	4.358E-01	5.032E-01	5.919E-01	7.206E-01	8.169E-01	9.579E-01	1.586E+00
17.50	1.748E-01	2.146E-01	2.794E-01	3.268E-01	3.893E-01	4.759E-01	5.361E-01	6.200E-01	9.706E-01
20.00	1.187E-01	1.445E-01	1.884E-01	2.222E-01	2.688E-01	3.341E-01	3.783E-01	4.369E-01	6.500E-01
22.50	8.566E-02	1.034E-01	1.334E-01	1.575E-01	1.920E-01	2.427E-01	2.776E-01	3.235E-01	4.755E-01
25.00	6.461E-02	7.768E-02	9.904E-02	1.163E-01	1.418E-01	1.808E-01	2.085E-01	2.458E-01	3.725E-01
27.50	5.019E-02	6.047E-02	7.647E-02	8.922E-02	1.082E-01	1.381E-01	1.599E-01	1.898E-01	3.045E-01
30.00	3.978E-02	4.822E-02	6.084E-02	7.066E-02	8.527E-02	1.084E-01	1.253E-01	1.488E-01	2.539E-01
32.50	3.202E-02	3.913E-02	4.946E-02	5.732E-02	6.894E-02	8.728E-02	1.006E-01	1.188E-01	2.128E-01
35.00	2.613E-02	3.221E-02	4.085E-02	4.732E-02	5.685E-02	7.190E-02	8.265E-02	9.691E-02	1.776E-01
37.50	2.160E-02	2.685E-02	3.418E-02	3.959E-02	4.757E-02	6.031E-02	6.935E-02	8.082E-02	1.468E-01
40.00	1.809E-02	2.266E-02	2.894E-02	3.350E-02	4.024E-02	5.126E-02	5.917E-02	6.885E-02	1.199E-01
42.50	1.531E-02	1.935E-02	2.480E-02	2.865E-02	3.435E-02	4.397E-02	5.110E-02	5.974E-02	9.670E-02
45.00	1.311E-02	1.671E-02	2.150E-02	2.478E-02	2.959E-02	3.798E-02	4.451E-02	5.259E-02	7.744E-02
47.50	1.132E-02	1.457E-02	1.886E-02	2.169E-02	2.572E-02	3.297E-02	3.897E-02	4.677E-02	6.214E-02
50.00	9.853E-03	1.281E-02	1.672E-02	1.920E-02	2.258E-02	2.877E-02	3.423E-02	4.184E-02	5.081E-02
55.00	7.609E-03	1.011E-02	1.353E-02	1.556E-02	1.801E-02	2.227E-02	2.654E-02	3.362E-02	3.932E-02
60.00	5.991E-03	8.138E-03	1.127E-02	1.312E-02	1.506E-02	1.777E-02	2.070E-02	2.699E-02	3.950E-02
65.00	4.788E-03	6.627E-03	9.555E-03	1.138E-02	1.317E-02	1.485E-02	1.645E-02	2.070E-02	4.531E-02
70.00	3.875E-03	5.436E-03	8.160E-03	1.002E-02	1.192E-02	1.316E-02	1.368E-02	1.583E-02	4.994E-02
75.00	3.177E-03	4.480E-03	6.961E-03	8.851E-03	1.100E-02	1.239E-02	1.231E-02	1.244E-02	4.823E-02
80.00	2.644E-03	3.714E-03	5.903E-03	7.763E-03	1.019E-02	1.221E-02	1.212E-02	1.089E-02	3.863E-02
85.00	2.246E-03	3.109E-03	4.968E-03	6.715E-03	9.325E-03	1.227E-02	1.278E-02	1.124E-02	2.374E-02
90.00	1.960E-03	2.650E-03	4.160E-03	5.707E-03	8.337E-03	1.221E-02	1.379E-02	1.319E-02	9.198E-03
95.00	1.773E-03	2.326E-03	3.497E-03	4.772E-03	7.212E-03	1.173E-02	1.454E-02	1.598E-02	1.333E-03
100.00	1.672E-03	2.130E-03	3.001E-03	3.964E-03	6.006E-03	1.066E-02	1.454E-02	1.859E-02	4.439E-03
105.00	1.647E-03	2.055E-03	2.695E-03	3.346E-03	4.836E-03	9.011E-03	1.341E-02	1.993E-02	1.881E-02
110.00	1.684E-03	2.091E-03	2.597E-03	2.986E-03	3.861E-03	6.968E-03	1.115E-02	1.916E-02	4.029E-02
115.00	1.772E-03	2.228E-03	2.718E-03	2.941E-03	3.265E-03	4.922E-03	8.085E-03	1.603E-02	6.152E-02
120.00	1.898E-03	2.454E-03	3.061E-03	3.257E-03	3.225E-03	3.389E-03	4.952E-03	1.105E-02	7.459E-02
125.00	2.054E-03	2.754E-03	3.619E-03	3.960E-03	3.891E-03	2.935E-03	2.722E-03	5.597E-03	7.415E-02
130.00	2.229E-03	3.112E-03	4.372E-03	5.047E-03	5.356E-03	4.133E-03	2.449E-03	1.668E-03	5.978E-02
135.00	2.416E-03	3.511E-03	5.293E-03	6.493E-03	7.641E-03	7.291E-03	5.168E-03	1.564E-03	3.686E-02
140.00	2.606E-03	3.931E-03	6.338E-03	8.238E-03	1.068E-02	1.255E-02	1.161E-02	7.353E-03	1.528E-02
145.00	2.791E-03	4.356E-03	7.462E-03	1.020E-02	1.434E-02	1.982E-02	2.173E-02	2.033E-02	6.607E-03
150.00	2.965E-03	4.765E-03	8.606E-03	1.227E-02	1.839E-02	2.865E-02	3.523E-02	4.058E-02	2.018E-02
155.00	3.121E-03	5.144E-03	9.712E-03	1.432E-02	2.255E-02	3.836E-02	5.104E-02	6.674E-02	5.976E-02
160.00	3.256E-03	5.477E-03	1.072E-02	1.624E-02	2.653E-02	4.809E-02	6.762E-02	9.611E-02	1.216E-01
165.00	3.365E-03	5.749E-03	1.157E-02	1.788E-02	3.002E-02	5.692E-02	8.319E-02	1.250E-01	1.948E-01
170.00	3.445E-03	5.952E-03	1.222E-02	1.915E-02	3.273E-02	6.398E-02	9.592E-02	1.494E-01	2.640E-01
175.00	3.493E-03	6.076E-03	1.262E-02	1.994E-02	3.445E-02	6.853E-02	1.043E-01	1.658E-01	3.135E-01
180.00	3.511E-03	6.120E-03	1.276E-02	2.021E-02	3.504E-02	7.009E-02	1.072E-01	1.715E-01	3.314E-01
TOTAL	8.075E-01	9.107E-01	1.059E+00	1.163E+00	1.300E+00	1.496E+00	1.632E+00	1.812E+00	2.461E+00
TRANS	4.500E-02	6.154E-02	9.121E-02	1.163E-01	1.552E-01	2.217E-01	2.748E-01	3.526E-01	6.686E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 82

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	1.405E+03	1.064E+03	7.559E+02	6.201E+02	4.993E+02	3.921E+02	3.429E+02	2.959E+02	2.509E+02
0.25	3.032E+02	2.941E+02	2.808E+02	2.706E+02	2.563E+02	2.365E+02	2.243E+02	2.104E+02	1.942E+02
0.50	7.240E+01	7.890E+01	8.729E+01	9.212E+01	9.705E+01	1.022E+02	1.050E+02	1.084E+02	1.124E+02
0.75	2.460E+01	2.876E+01	3.476E+01	3.868E+01	4.334E+01	4.915E+01	5.285E+01	5.754E+01	6.382E+01
1.00	1.065E+01	1.285E+01	1.623E+01	1.864E+01	2.182E+01	2.623E+01	2.921E+01	3.306E+01	3.834E+01
1.50	2.989E+00	3.744E+00	4.975E+00	5.915E+00	7.241E+00	9.271E+00	1.077E+01	1.288E+01	1.602E+01
2.00	1.122E+00	1.462E+00	2.033E+00	2.476E+00	3.100E+00	4.074E+00	4.824E+00	5.930E+00	7.701E+00
2.50	5.131E-01	6.818E-01	9.735E-01	1.206E+00	1.544E+00	2.084E+00	2.504E+00	3.126E+00	4.139E+00
3.00	2.688E-01	3.595E-01	5.196E-01	6.513E-01	8.498E-01	1.178E+00	1.437E+00	1.817E+00	2.436E+00
3.50	1.546E-01	2.077E-01	3.026E-01	3.823E-01	5.054E-01	7.145E-01	8.819E-01	1.130E+00	1.536E+00
4.00	9.527E-02	1.287E-01	1.889E-01	2.400E-01	3.196E-01	4.572E-01	5.693E-01	7.383E-01	1.019E+00
4.50	6.197E-02	8.417E-02	1.244E-01	1.587E-01	2.123E-01	3.060E-01	3.835E-01	5.024E-01	7.033E-01
5.00	4.209E-02	5.743E-02	8.537E-02	1.092E-01	1.468E-01	2.129E-01	2.682E-01	3.539E-01	5.009E-01
5.50	2.960E-02	4.053E-02	6.055E-02	7.774E-02	1.049E-01	1.530E-01	1.936E-01	2.569E-01	3.665E-01
6.00	2.143E-02	2.944E-02	4.415E-02	5.686E-02	7.706E-02	1.131E-01	1.435E-01	1.913E-01	2.745E-01
6.50	1.590E-02	2.190E-02	3.298E-02	4.258E-02	5.793E-02	8.544E-02	1.088E-01	1.456E-01	2.101E-01
7.00	1.205E-02	1.664E-02	2.515E-02	3.256E-02	4.442E-02	6.580E-02	8.405E-02	1.129E-01	1.638E-01
7.50	9.295E-03	1.288E-02	1.953E-02	2.534E-02	3.466E-02	5.151E-02	6.597E-02	8.898E-02	1.298E-01
8.00	7.289E-03	1.013E-02	1.542E-02	2.003E-02	2.745E-02	4.090E-02	5.251E-02	7.111E-02	1.043E-01
8.50	5.799E-03	8.080E-03	1.234E-02	1.606E-02	2.203E-02	3.290E-02	4.233E-02	5.754E-02	8.491E-02
9.00	4.674E-03	6.528E-03	9.996E-03	1.303E-02	1.790E-02	2.677E-02	3.451E-02	4.708E-02	6.984E-02
9.50	3.810E-03	5.334E-03	8.188E-03	1.069E-02	1.470E-02	2.203E-02	2.844E-02	3.890E-02	5.798E-02
10.00	3.139E-03	4.402E-03	6.773E-03	8.849E-03	1.219E-02	1.830E-02	2.366E-02	3.244E-02	4.853E-02
12.50	1.354E-03	1.905E-03	2.950E-03	3.876E-03	5.384E-03	8.173E-03	1.063E-02	1.463E-02	2.207E-02
15.00	6.828E-04	9.619E-04	1.494E-03	1.970E-03	2.756E-03	4.225E-03	5.516E-03	7.615E-03	1.152E-02
17.50	3.846E-04	5.424E-04	8.440E-04	1.115E-03	1.565E-03	2.411E-03	3.160E-03	4.384E-03	6.668E-03
20.00	2.351E-04	3.322E-04	5.179E-04	6.847E-04	9.611E-04	1.483E-03	1.949E-03	2.719E-03	4.166E-03
22.50	1.531E-04	2.167E-04	3.384E-04	4.475E-04	6.277E-04	9.681E-04	1.274E-03	1.785E-03	2.752E-03
25.00	1.048E-04	1.486E-04	2.323E-04	3.072E-04	4.308E-04	6.642E-04	8.745E-04	1.227E-03	1.899E-03
27.50	7.480E-05	1.061E-04	1.660E-04	2.197E-04	3.081E-04	4.749E-04	6.252E-04	8.774E-04	1.359E-03
30.00	5.522E-05	7.837E-05	1.227E-04	1.624E-04	2.279E-04	3.513E-04	4.624E-04	6.483E-04	1.003E-03
32.50	4.193E-05	5.952E-05	9.319E-05	1.234E-04	1.733E-04	2.674E-04	3.518E-04	4.926E-04	7.612E-04
35.00	3.261E-05	4.629E-05	7.251E-05	9.606E-05	1.350E-04	2.084E-04	2.742E-04	3.836E-04	5.919E-04
37.50	2.590E-05	3.676E-05	5.758E-05	7.632E-05	1.073E-04	1.659E-04	2.182E-04	3.050E-04	4.702E-04
40.00	2.092E-05	2.970E-05	4.653E-05	6.170E-05	8.684E-05	1.343E-04	1.767E-04	2.470E-04	3.805E-04
42.50	1.716E-05	2.436E-05	3.818E-05	5.064E-05	7.132E-05	1.104E-04	1.453E-04	2.032E-04	3.130E-04
45.00	1.426E-05	2.025E-05	3.175E-05	4.213E-05	5.937E-05	9.198E-05	1.212E-04	1.695E-04	2.612E-04
47.50	1.199E-05	1.703E-05	2.671E-05	3.545E-05	4.999E-05	7.753E-05	1.022E-04	1.431E-04	2.207E-04
50.00	1.018E-05	1.446E-05	2.270E-05	3.014E-05	4.252E-05	6.602E-05	8.710E-05	1.221E-04	1.886E-04
55.00	7.527E-06	1.070E-05	1.682E-05	2.236E-05	3.158E-05	4.914E-05	6.496E-05	9.135E-05	1.416E-04
60.00	5.721E-06	8.145E-06	1.282E-05	1.706E-05	2.414E-05	3.767E-05	4.990E-05	7.040E-05	1.096E-04
65.00	4.444E-06	6.337E-06	9.995E-06	1.332E-05	1.888E-05	2.954E-05	3.924E-05	5.555E-05	8.688E-05
70.00	3.512E-06	5.016E-06	7.930E-06	1.059E-05	1.504E-05	2.363E-05	3.146E-05	4.472E-05	7.032E-05
75.00	2.813E-06	4.026E-06	6.383E-06	8.536E-06	1.216E-05	1.919E-05	2.563E-05	3.659E-05	5.788E-05
80.00	2.278E-06	3.268E-06	5.197E-06	6.967E-06	9.960E-06	1.579E-05	2.117E-05	3.035E-05	4.834E-05
85.00	1.861E-06	2.676E-06	4.271E-06	5.741E-06	8.240E-06	1.314E-05	1.768E-05	2.549E-05	4.088E-05
90.00	1.530E-06	2.206E-06	3.537E-06	4.769E-06	6.875E-06	1.103E-05	1.492E-05	2.163E-05	3.497E-05
95.00	1.264E-06	1.829E-06	2.947E-06	3.988E-06	5.780E-06	9.347E-06	1.270E-05	1.853E-05	3.023E-05
100.00	1.048E-06	1.522E-06	2.467E-06	3.352E-06	4.887E-06	7.971E-06	1.089E-05	1.601E-05	2.637E-05
105.00	8.703E-07	1.271E-06	2.073E-06	2.832E-06	4.157E-06	6.847E-06	9.417E-06	1.395E-05	2.322E-05
110.00	7.236E-07	1.063E-06	1.747E-06	2.400E-06	3.551E-06	5.913E-06	8.192E-06	1.224E-05	2.061E-05
115.00	6.016E-07	8.895E-07	1.477E-06	2.042E-06	3.048E-06	5.140E-06	7.178E-06	1.083E-05	1.846E-05
120.00	4.995E-07	7.446E-07	1.250E-06	1.742E-06	2.627E-06	4.492E-06	6.329E-06	9.649E-06	1.666E-05
125.00	4.138E-07	6.230E-07	1.060E-06	1.490E-06	2.274E-06	3.948E-06	5.616E-06	8.659E-06	1.515E-05
130.00	3.419E-07	5.210E-07	9.003E-07	1.279E-06	1.978E-06	3.494E-06	5.021E-06	7.832E-06	1.389E-05
135.00	2.813E-07	4.349E-07	7.657E-07	1.101E-06	1.728E-06	3.109E-06	4.518E-06	7.134E-06	1.284E-05
140.00	2.308E-07	3.631E-07	6.536E-07	9.530E-07	1.521E-06	2.791E-06	4.102E-06	6.557E-06	1.196E-05
145.00	1.885E-07	3.028E-07	5.597E-07	8.289E-07	1.347E-06	2.523E-06	3.752E-06	6.073E-06	1.123E-05
150.00	1.538E-07	2.532E-07	4.825E-07	7.273E-07	1.204E-06	2.305E-06	3.467E-06	5.679E-06	1.063E-05
155.00	1.256E-07	2.128E-07	4.196E-07	6.448E-07	1.089E-06	2.128E-06	3.234E-06	5.357E-06	1.015E-05
160.00	1.032E-07	1.805E-07	3.695E-07	5.794E-07	9.983E-07	1.988E-06	3.050E-06	5.101E-06	9.765E-06
165.00	8.647E-08	1.562E-07	3.319E-07	5.308E-07	9.313E-07	1.885E-06	2.914E-06	4.911E-06	9.474E-06
170.00	7.442E-08	1.385E-07	3.047E-07	4.957E-07	8.830E-07	1.810E-06	2.814E-06	4.772E-06	9.272E-06
175.00	6.770E-08	1.286E-07	2.895E-07	4.764E-07	8.569E-07	1.770E-06	2.761E-06	4.701E-06	9.167E-06
180.00	6.482E-08	1.243E-07	2.828E-07	4.677E-07	8.444E-07	1.749E-06	2.733E-06	4.664E-06	9.129E-06
TOTAL	9.653E-02	1.006E-01	1.070E-01	1.122E-01	1.203E-01	1.342E-01	1.451E-01	1.611E-01	1.868E-01
TRANS	4.955E-05	6.894E-05	1.055E-04	1.381E-04	1.919E-04	2.937E-04	3.852E-04	5.380E-04	8.304E-04

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 82

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	2.071E+02	1.895E+02	1.711E+02	1.612E+02	1.506E+02	1.387E+02	1.319E+02	1.242E+02	1.151E+02
0.25	1.746E+02	1.652E+02	1.542E+02	1.477E+02	1.404E+02	1.315E+02	1.261E+02	1.198E+02	1.119E+02
0.50	1.163E+02	1.174E+02	1.177E+02	1.171E+02	1.158E+02	1.132E+02	1.110E+02	1.078E+02	1.032E+02
0.75	7.273E+01	7.740E+01	8.280E+01	8.570E+01	8.857E+01	9.102E+01	9.180E+01	9.195E+01	9.094E+01
1.00	4.647E+01	5.121E+01	5.737E+01	6.118E+01	6.557E+01	7.052E+01	7.310E+01	7.555E+01	7.747E+01
1.50	2.124E+01	2.448E+01	2.903E+01	3.213E+01	3.608E+01	4.133E+01	4.465E+01	4.855E+01	5.309E+01
2.00	1.088E+01	1.297E+01	1.602E+01	1.817E+01	2.101E+01	2.500E+01	2.770E+01	3.113E+01	3.561E+01
2.50	6.063E+00	7.409E+00	9.458E+00	1.094E+01	1.294E+01	1.584E+01	1.786E+01	2.052E+01	2.419E+01
3.00	3.641E+00	4.515E+00	5.889E+00	6.912E+00	8.331E+00	1.044E+01	1.194E+01	1.395E+01	1.683E+01
3.50	2.331E+00	2.913E+00	3.847E+00	4.560E+00	5.572E+00	7.114E+00	8.235E+00	9.762E+00	1.199E+01
4.00	1.570E+00	1.973E+00	2.625E+00	3.130E+00	3.858E+00	4.992E+00	5.832E+00	6.996E+00	8.728E+00
4.50	1.101E+00	1.391E+00	1.862E+00	2.228E+00	2.759E+00	3.600E+00	4.233E+00	5.125E+00	6.476E+00
5.00	7.955E-01	1.012E+00	1.363E+00	1.636E+00	2.033E+00	2.664E+00	3.146E+00	3.833E+00	4.890E+00
5.50	5.895E-01	7.551E-01	1.025E+00	1.233E+00	1.537E+00	2.020E+00	2.391E+00	2.924E+00	3.755E+00
6.00	4.464E-01	5.755E-01	7.866E-01	9.502E-01	1.188E+00	1.566E+00	1.856E+00	2.273E+00	2.930E+00
6.50	3.446E-01	4.467E-01	6.146E-01	7.453E-01	9.352E-01	1.237E+00	1.467E+00	1.799E+00	2.323E+00
7.00	2.706E-01	3.523E-01	4.876E-01	5.936E-01	7.480E-01	9.933E-01	1.180E+00	1.447E+00	1.870E+00
7.50	2.159E-01	2.820E-01	3.921E-01	4.791E-01	6.064E-01	8.086E-01	9.619E-01	1.181E+00	1.527E+00
8.00	1.747E-01	2.288E-01	3.194E-01	3.913E-01	4.972E-01	6.661E-01	7.940E-01	9.765E-01	1.263E+00
8.50	1.431E-01	1.879E-01	2.632E-01	3.233E-01	4.120E-01	5.542E-01	6.623E-01	8.164E-01	1.058E+00
9.00	1.185E-01	1.560E-01	2.192E-01	2.698E-01	3.447E-01	4.653E-01	5.575E-01	6.892E-01	8.949E-01
9.50	9.905E-02	1.309E-01	1.845E-01	2.274E-01	2.910E-01	3.939E-01	4.731E-01	5.867E-01	7.639E-01
10.00	8.349E-02	1.107E-01	1.567E-01	1.933E-01	2.477E-01	3.360E-01	4.044E-01	5.031E-01	6.572E-01
12.50	3.917E-02	5.317E-02	7.706E-02	9.589E-02	1.235E-01	1.684E-01	2.036E-01	2.551E-01	3.378E-01
15.00	2.075E-02	2.861E-02	4.252E-02	5.380E-02	7.053E-02	9.725E-02	1.175E-01	1.466E-01	1.940E-01
17.50	1.206E-02	1.670E-02	2.522E-02	3.249E-02	4.361E-02	6.152E-02	7.472E-02	9.322E-02	1.226E-01
20.00	7.549E-03	1.045E-02	1.589E-02	2.071E-02	2.833E-02	4.100E-02	5.048E-02	6.368E-02	8.392E-02
22.50	5.003E-03	6.925E-03	1.056E-02	1.384E-02	1.913E-02	2.827E-02	3.539E-02	4.550E-02	6.068E-02
25.00	3.469E-03	4.811E-03	7.353E-03	9.644E-03	1.339E-02	2.007E-02	2.551E-02	3.344E-02	4.542E-02
27.50	2.494E-03	3.470E-03	5.315E-03	6.969E-03	9.687E-03	1.465E-02	1.883E-02	2.511E-02	3.478E-02
30.00	1.848E-03	2.581E-03	3.961E-03	5.192E-03	7.216E-03	1.097E-02	1.422E-02	1.922E-02	2.711E-02
32.50	1.406E-03	1.968E-03	3.027E-03	3.967E-03	5.514E-03	8.418E-03	1.097E-02	1.498E-02	2.145E-02
35.00	1.094E-03	1.535E-03	2.363E-03	3.098E-03	4.307E-03	6.595E-03	8.635E-03	1.187E-02	1.723E-02
37.50	8.692E-04	1.220E-03	1.880E-03	2.464E-03	3.429E-03	5.263E-03	6.913E-03	9.563E-03	1.403E-02
40.00	7.030E-04	9.863E-04	1.520E-03	1.994E-03	2.776E-03	4.270E-03	5.620E-03	7.809E-03	1.157E-02
42.50	5.778E-04	8.101E-04	1.248E-03	1.637E-03	2.281E-03	3.514E-03	4.631E-03	6.456E-03	9.653E-03
45.00	4.817E-04	6.749E-04	1.039E-03	1.363E-03	1.900E-03	2.929E-03	3.863E-03	5.396E-03	8.135E-03
47.50	4.069E-04	5.695E-04	8.763E-04	1.150E-03	1.603E-03	2.470E-03	3.257E-03	4.556E-03	6.918E-03
50.00	3.476E-04	4.862E-04	7.476E-04	9.808E-04	1.367E-03	2.105E-03	2.774E-03	3.881E-03	5.930E-03
55.00	2.613E-04	3.653E-04	5.614E-04	7.364E-04	1.026E-03	1.575E-03	2.068E-03	2.889E-03	4.454E-03
60.00	2.030E-04	2.841E-04	4.370E-04	5.734E-04	7.984E-04	1.220E-03	1.594E-03	2.218E-03	3.432E-03
65.00	1.620E-04	2.272E-04	3.504E-04	4.603E-04	6.407E-04	9.748E-04	1.268E-03	1.754E-03	2.708E-03
70.00	1.321E-04	1.861E-04	2.882E-04	3.792E-04	5.283E-04	8.013E-04	1.038E-03	1.426E-03	2.186E-03
75.00	1.098E-04	1.554E-04	2.421E-04	3.195E-04	4.460E-04	6.760E-04	8.728E-04	1.192E-03	1.807E-03
80.00	9.267E-05	1.320E-04	2.071E-04	2.744E-04	3.844E-04	5.839E-04	7.536E-04	1.025E-03	1.532E-03
85.00	7.933E-05	1.138E-04	1.801E-04	2.397E-04	3.374E-04	5.156E-04	6.671E-04	9.064E-04	1.335E-03
90.00	6.876E-05	9.940E-05	1.588E-04	2.125E-04	3.012E-04	4.645E-04	6.044E-04	8.232E-04	1.198E-03
95.00	6.028E-05	8.786E-05	1.418E-04	1.910E-04	2.729E-04	4.260E-04	5.589E-04	7.661E-04	1.109E-03
100.00	5.339E-05	7.851E-05	1.282E-04	1.739E-04	2.508E-04	3.970E-04	5.259E-04	7.281E-04	1.058E-03
105.00	4.774E-05	7.086E-05	1.171E-04	1.601E-04	2.334E-04	3.751E-04	5.022E-04	7.042E-04	1.038E-03
110.00	4.309E-05	6.456E-05	1.081E-04	1.491E-04	2.197E-04	3.587E-04	4.854E-04	6.909E-04	1.042E-03
115.00	3.924E-05	5.934E-05	1.006E-04	1.401E-04	2.089E-04	3.465E-04	4.743E-04	6.861E-04	1.064E-03
120.00	3.603E-05	5.502E-05	9.453E-05	1.327E-04	2.002E-04	3.377E-04	4.675E-04	6.878E-04	1.098E-03
125.00	3.336E-05	5.142E-05	8.947E-05	1.267E-04	1.933E-04	3.314E-04	4.641E-04	6.944E-04	1.141E-03
130.00	3.112E-05	4.842E-05	8.529E-05	1.218E-04	1.879E-04	3.270E-04	4.630E-04	7.040E-04	1.189E-03
135.00	2.926E-05	4.592E-05	8.184E-05	1.178E-04	1.835E-04	3.241E-04	4.636E-04	7.156E-04	1.240E-03
140.00	2.771E-05	4.385E-05	7.899E-05	1.145E-04	1.801E-04	3.222E-04	4.653E-04	7.280E-04	1.291E-03
145.00	2.643E-05	4.214E-05	7.666E-05	1.119E-04	1.774E-04	3.212E-04	4.676E-04	7.404E-04	1.340E-03
150.00	2.538E-05	4.074E-05	7.476E-05	1.097E-04	1.753E-04	3.207E-04	4.702E-04	7.523E-04	1.386E-03
155.00	2.453E-05	3.962E-05	7.325E-05	1.080E-04	1.737E-04	3.205E-04	4.728E-04	7.630E-04	1.427E-03
160.00	2.387E-05	3.874E-05	7.206E-05	1.067E-04	1.725E-04	3.206E-04	4.752E-04	7.723E-04	1.461E-03
165.00	2.336E-05	3.807E-05	7.118E-05	1.058E-04	1.717E-04	3.207E-04	4.771E-04	7.797E-04	1.489E-03
170.00	2.302E-05	3.762E-05	7.056E-05	1.051E-04	1.711E-04	3.208E-04	4.787E-04	7.852E-04	1.509E-03
175.00	2.283E-05	3.736E-05	7.020E-05	1.047E-04	1.707E-04	3.210E-04	4.796E-04	7.885E-04	1.521E-03
180.00	2.280E-05	3.731E-05	7.009E-05	1.045E-04	1.706E-04	3.210E-04	4.799E-04	7.898E-04	1.526E-03
TOTAL	2.344E-01	2.674E-01	3.181E-01	3.555E-01	4.075E-01	4.854E-01	5.418E-01	6.189E-01	7.329E-01
TRANS	1.537E-03	2.158E-03	3.342E-03	4.407E-03	6.176E-03	9.515E-03	1.249E-02	1.737E-02	2.644E-02

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 82

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	1.033E+02	9.726E+01	8.978E+01	8.524E+01	7.988E+01	7.328E+01	6.924E+01	6.445E+01	5.106E+01
0.25	1.013E+02	9.573E+01	8.870E+01	8.437E+01	7.921E+01	7.280E+01	6.886E+01	6.416E+01	5.093E+01
0.50	9.576E+01	9.138E+01	8.556E+01	8.182E+01	7.725E+01	7.139E+01	6.773E+01	6.329E+01	5.056E+01
0.75	8.751E+01	8.481E+01	8.071E+01	7.784E+01	7.413E+01	6.914E+01	6.590E+01	6.188E+01	4.993E+01
1.00	7.777E+01	7.682E+01	7.462E+01	7.276E+01	7.009E+01	6.617E+01	6.346E+01	5.998E+01	4.908E+01
1.50	5.797E+01	5.968E+01	6.077E+01	6.083E+01	6.028E+01	5.868E+01	5.722E+01	5.502E+01	4.676E+01
2.00	4.158E+01	4.442E+01	4.736E+01	4.871E+01	4.979E+01	5.021E+01	4.993E+01	4.905E+01	4.377E+01
2.50	2.964E+01	3.259E+01	3.610E+01	3.805E+01	4.004E+01	4.185E+01	4.249E+01	4.271E+01	4.032E+01
3.00	2.134E+01	2.396E+01	2.735E+01	2.941E+01	3.174E+01	3.427E+01	3.550E+01	3.653E+01	3.661E+01
3.50	1.561E+01	1.781E+01	2.079E+01	2.271E+01	2.503E+01	2.779E+01	2.932E+01	3.083E+01	3.283E+01
4.00	1.162E+01	1.342E+01	1.594E+01	1.763E+01	1.975E+01	2.245E+01	2.406E+01	2.581E+01	2.915E+01
4.50	8.785E+00	1.026E+01	1.236E+01	1.380E+01	1.566E+01	1.815E+01	1.971E+01	2.150E+01	2.566E+01
5.00	6.739E+00	7.942E+00	9.684E+00	1.090E+01	1.250E+01	1.472E+01	1.616E+01	1.789E+01	2.245E+01
5.50	5.240E+00	6.225E+00	7.670E+00	8.693E+00	1.006E+01	1.199E+01	1.329E+01	1.489E+01	1.955E+01
6.00	4.128E+00	4.935E+00	6.135E+00	6.995E+00	8.157E+00	9.829E+00	1.097E+01	1.243E+01	1.697E+01
6.50	3.292E+00	3.955E+00	4.955E+00	5.678E+00	6.666E+00	8.107E+00	9.110E+00	1.041E+01	1.471E+01
7.00	2.659E+00	3.204E+00	4.038E+00	4.648E+00	5.487E+00	6.729E+00	7.604E+00	8.754E+00	1.274E+01
7.50	2.173E+00	2.624E+00	3.320E+00	3.835E+00	4.550E+00	5.620E+00	6.382E+00	7.395E+00	1.104E+01
8.00	1.797E+00	2.171E+00	2.754E+00	3.189E+00	3.799E+00	4.721E+00	5.386E+00	6.276E+00	9.575E+00
8.50	1.503E+00	1.815E+00	2.304E+00	2.672E+00	3.193E+00	3.990E+00	4.569E+00	5.352E+00	8.321E+00
9.00	1.271E+00	1.533E+00	1.945E+00	2.257E+00	2.702E+00	3.391E+00	3.897E+00	4.585E+00	7.246E+00
9.50	1.085E+00	1.307E+00	1.656E+00	1.922E+00	2.302E+00	2.898E+00	3.340E+00	3.947E+00	6.326E+00
10.00	9.343E-01	1.125E+00	1.422E+00	1.649E+00	1.975E+00	2.490E+00	2.877E+00	3.412E+00	5.537E+00
12.50	4.902E-01	5.929E-01	7.452E-01	8.565E-01	1.015E+00	1.270E+00	1.470E+00	1.759E+00	2.969E+00
15.00	2.868E-01	3.519E-01	4.483E-01	5.156E-01	6.058E-01	7.438E-01	8.515E-01	1.011E+00	1.709E+00
17.50	1.807E-01	2.233E-01	2.904E-01	3.380E-01	4.000E-01	4.879E-01	5.526E-01	6.467E-01	1.054E+00
20.00	1.217E-01	1.498E-01	1.969E-01	2.321E-01	2.789E-01	3.438E-01	3.889E-01	4.515E-01	6.997E-01
22.50	8.703E-02	1.061E-01	1.391E-01	1.649E-01	2.009E-01	2.519E-01	2.869E-01	3.341E-01	5.013E-01
25.00	6.524E-02	7.897E-02	1.024E-01	1.214E-01	1.487E-01	1.890E-01	2.172E-01	2.552E-01	3.852E-01
27.50	5.057E-02	6.106E-02	7.840E-02	9.247E-02	1.132E-01	1.449E-01	1.674E-01	1.984E-01	3.122E-01
30.00	4.012E-02	4.854E-02	6.192E-02	7.269E-02	8.872E-02	1.135E-01	1.314E-01	1.562E-01	2.616E-01
32.50	3.239E-02	3.936E-02	5.008E-02	5.861E-02	7.133E-02	9.111E-02	1.052E-01	1.248E-01	2.224E-01
35.00	2.652E-02	3.241E-02	4.122E-02	4.816E-02	5.856E-02	7.477E-02	8.615E-02	1.014E-01	1.893E-01
37.50	2.200E-02	2.706E-02	3.442E-02	4.016E-02	4.883E-02	6.255E-02	7.204E-02	8.415E-02	1.598E-01
40.00	1.849E-02	2.288E-02	2.909E-02	3.388E-02	4.120E-02	5.310E-02	6.135E-02	7.132E-02	1.329E-01
42.50	1.571E-02	1.957E-02	2.488E-02	2.889E-02	3.508E-02	4.555E-02	5.299E-02	6.167E-02	1.086E-01
45.00	1.350E-02	1.694E-02	2.154E-02	2.490E-02	3.012E-02	3.936E-02	4.625E-02	5.426E-02	8.710E-02
47.50	1.171E-02	1.482E-02	1.888E-02	2.171E-02	2.607E-02	3.418E-02	4.062E-02	4.836E-02	6.894E-02
50.00	1.023E-02	1.309E-02	1.674E-02	1.915E-02	2.277E-02	2.979E-02	3.579E-02	4.347E-02	5.451E-02
55.00	7.972E-03	1.044E-02	1.359E-02	1.545E-02	1.792E-02	2.288E-02	2.785E-02	3.545E-02	3.765E-02
60.00	6.326E-03	8.496E-03	1.142E-02	1.304E-02	1.481E-02	1.794E-02	2.160E-02	2.857E-02	3.546E-02
65.00	5.084E-03	6.998E-03	9.809E-03	1.141E-02	1.288E-02	1.461E-02	1.682E-02	2.233E-02	4.265E-02
70.00	4.125E-03	5.793E-03	8.509E-03	1.019E-02	1.171E-02	1.264E-02	1.349E-02	1.686E-02	5.134E-02
75.00	3.375E-03	4.800E-03	7.375E-03	9.175E-03	1.097E-02	1.177E-02	1.165E-02	1.264E-02	5.425E-02
80.00	2.790E-03	3.978E-03	6.341E-03	8.212E-03	1.040E-02	1.170E-02	1.122E-02	1.022E-02	4.762E-02
85.00	2.342E-03	3.308E-03	5.383E-03	7.237E-03	9.775E-03	1.206E-02	1.193E-02	9.919E-03	3.275E-02
90.00	2.013E-03	2.779E-03	4.511E-03	6.235E-03	8.978E-03	1.243E-02	1.330E-02	1.166E-02	1.533E-02
95.00	1.789E-03	2.390E-03	3.753E-03	5.238E-03	7.948E-03	1.242E-02	1.466E-02	1.483E-02	2.940E-03
100.00	1.664E-03	2.138E-03	3.145E-03	4.309E-03	6.717E-03	1.173E-02	1.538E-02	1.836E-02	1.782E-03
105.00	1.627E-03	2.022E-03	2.726E-03	3.530E-03	5.398E-03	1.027E-02	1.490E-02	2.095E-02	1.386E-02
110.00	1.667E-03	2.036E-03	2.530E-03	2.997E-03	4.178E-03	8.153E-03	1.300E-02	2.142E-02	3.588E-02
115.00	1.771E-03	2.173E-03	2.584E-03	2.798E-03	3.284E-03	5.768E-03	9.888E-03	1.911E-02	6.020E-02
120.00	1.925E-03	2.421E-03	2.903E-03	3.010E-03	2.960E-03	3.693E-03	6.238E-03	1.423E-02	7.769E-02
125.00	2.117E-03	2.766E-03	3.486E-03	3.681E-03	3.419E-03	2.592E-03	3.142E-03	8.001E-03	8.130E-02
130.00	2.338E-03	3.190E-03	4.319E-03	4.827E-03	4.814E-03	3.237E-03	1.779E-03	2.588E-03	6.906E-02
135.00	2.576E-03	3.673E-03	5.372E-03	6.431E-03	7.209E-03	5.939E-03	3.896E-03	6.848E-04	4.552E-02
140.00	2.820E-03	4.192E-03	6.600E-03	8.422E-03	1.056E-02	1.143E-02	9.505E-03	4.929E-03	2.066E-02
145.00	3.062E-03	4.724E-03	7.942E-03	1.071E-02	1.470E-02	1.924E-02	2.001E-02	1.720E-02	6.943E-03
150.00	3.291E-03	5.244E-03	9.330E-03	1.316E-02	1.939E-02	2.913E-02	3.465E-02	3.801E-02	1.508E-02
155.00	3.499E-03	5.731E-03	1.069E-02	1.562E-02	2.428E-02	4.030E-02	5.240E-02	6.612E-02	5.010E-02
160.00	3.680E-03	6.162E-03	1.193E-02	1.792E-02	2.900E-02	5.172E-02	7.150E-02	9.859E-02	1.091E-01
165.00	3.827E-03	6.519E-03	1.299E-02	1.992E-02	3.317E-02	6.225E-02	8.976E-02	1.312E-01	1.812E-01
170.00	3.936E-03	6.786E-03	1.380E-02	2.146E-02	3.642E-02	7.073E-02	1.049E-01	1.590E-01	2.505E-01
175.00	4.001E-03	6.950E-03	1.431E-02	2.243E-02	3.850E-02	7.625E-02	1.149E-01	1.778E-01	3.005E-01
180.00	4.025E-03	7.007E-03	1.448E-02	2.276E-02	3.921E-02	7.816E-02	1.183E-01	1.844E-01	3.187E-01
TOTAL	9.245E-01	1.047E+00	1.225E+00	1.350E+00	1.518E+00	1.759E+00	1.928E+00	2.151E+00	2.984E+00
TRANS	4.720E-02	6.441E-02	9.521E-02	1.211E-01	1.613E-01	2.297E-01	2.841E-01	3.635E-01	6.840E-01

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 92

ENERGY(keV)	1000.0	800.0	600.0	500.0	400.0	300.0	250.0	200.0	150.0
ANGLE (deg)									
0.00	3.005E+03	2.275E+03	1.617E+03	1.327E+03	1.069E+03	8.398E+02	7.347E+02	6.347E+02	5.389E+02
0.25	4.088E+02	4.098E+02	4.095E+02	4.075E+02	4.028E+02	3.936E+02	3.863E+02	3.762E+02	3.621E+02
0.50	8.618E+01	9.656E+01	1.107E+02	1.193E+02	1.288E+02	1.402E+02	1.475E+02	1.572E+02	1.706E+02
0.75	2.854E+01	3.359E+01	4.112E+01	4.638E+01	5.316E+01	6.238E+01	6.851E+01	7.637E+01	8.723E+01
1.00	1.219E+01	1.475E+01	1.876E+01	2.170E+01	2.571E+01	3.158E+01	3.575E+01	4.138E+01	4.948E+01
1.50	3.423E+00	4.286E+00	5.694E+00	6.772E+00	8.299E+00	1.067E+01	1.248E+01	1.507E+01	1.912E+01
2.00	1.316E+00	1.688E+00	2.311E+00	2.800E+00	3.510E+00	4.643E+00	5.519E+00	6.799E+00	8.858E+00
2.50	6.086E-01	7.973E-01	1.120E+00	1.377E+00	1.752E+00	2.357E+00	2.832E+00	3.540E+00	4.701E+00
3.00	3.206E-01	4.254E-01	6.077E-01	7.550E-01	9.731E-01	1.331E+00	1.615E+00	2.041E+00	2.746E+00
3.50	1.851E-01	2.474E-01	3.574E-01	4.478E-01	5.842E-01	8.117E-01	9.938E-01	1.267E+00	1.721E+00
4.00	1.143E-01	1.538E-01	2.241E-01	2.828E-01	3.724E-01	5.243E-01	6.468E-01	8.313E-01	1.139E+00
4.50	7.443E-02	1.008E-01	1.481E-01	1.878E-01	2.491E-01	3.539E-01	4.393E-01	5.690E-01	7.870E-01
5.00	5.062E-02	6.890E-02	1.019E-01	1.298E-01	1.731E-01	2.477E-01	3.090E-01	4.032E-01	5.628E-01
5.50	3.567E-02	4.875E-02	7.250E-02	9.267E-02	1.241E-01	1.788E-01	2.241E-01	2.942E-01	4.139E-01
6.00	2.589E-02	3.547E-02	5.296E-02	6.791E-02	9.138E-02	1.325E-01	1.668E-01	2.201E-01	3.116E-01
6.50	1.926E-02	2.643E-02	3.958E-02	5.090E-02	6.882E-02	1.005E-01	1.270E-01	1.682E-01	2.393E-01
7.00	1.462E-02	2.009E-02	3.018E-02	3.891E-02	5.285E-02	7.770E-02	9.857E-02	1.310E-01	1.871E-01
7.50	1.130E-02	1.556E-02	2.342E-02	3.028E-02	4.129E-02	6.104E-02	7.771E-02	1.036E-01	1.486E-01
8.00	8.875E-03	1.224E-02	1.848E-02	2.393E-02	3.274E-02	4.863E-02	6.209E-02	8.313E-02	1.198E-01
8.50	7.065E-03	9.763E-03	1.478E-02	1.919E-02	2.630E-02	3.920E-02	5.020E-02	6.748E-02	9.776E-02
9.00	5.694E-03	7.890E-03	1.198E-02	1.557E-02	2.138E-02	3.195E-02	4.101E-02	5.537E-02	8.070E-02
9.50	4.642E-03	6.448E-03	9.823E-03	1.278E-02	1.757E-02	2.629E-02	3.382E-02	4.587E-02	6.728E-02
10.00	3.822E-03	5.324E-03	8.133E-03	1.060E-02	1.457E-02	2.183E-02	2.814E-02	3.833E-02	5.658E-02
12.50	1.641E-03	2.307E-03	3.560E-03	4.660E-03	6.430E-03	9.687E-03	1.257E-02	1.735E-02	2.620E-02
15.00	8.248E-04	1.162E-03	1.800E-03	2.365E-03	3.287E-03	4.996E-03	6.508E-03	9.001E-03	1.367E-02
17.50	4.630E-04	6.518E-04	1.011E-03	1.333E-03	1.863E-03	2.854E-03	3.729E-03	5.159E-03	7.841E-03
20.00	2.824E-04	3.975E-04	6.169E-04	8.140E-04	1.141E-03	1.755E-03	2.298E-03	3.187E-03	4.588E-03
22.50	1.836E-04	2.586E-04	4.017E-04	5.300E-04	7.425E-04	1.143E-03	1.499E-03	2.086E-03	3.195E-03
25.00	1.258E-04	1.773E-04	2.755E-04	3.633E-04	5.082E-04	7.809E-04	1.025E-03	1.430E-03	2.200E-03
27.50	8.990E-05	1.269E-04	1.972E-04	2.599E-04	3.629E-04	5.563E-04	7.298E-04	1.020E-03	1.572E-03
30.00	6.660E-05	9.404E-05	1.462E-04	1.925E-04	2.685E-04	4.107E-04	5.382E-04	7.516E-04	1.159E-03
32.50	5.083E-05	7.179E-05	1.116E-04	1.469E-04	2.047E-04	3.126E-04	4.091E-04	5.703E-04	8.778E-04
35.00	3.980E-05	5.621E-05	8.737E-05	1.150E-04	1.602E-04	2.442E-04	3.192E-04	4.440E-04	6.814E-04
37.50	3.186E-05	4.499E-05	6.991E-05	9.204E-05	1.281E-04	1.952E-04	2.548E-04	3.535E-04	5.407E-04
40.00	2.597E-05	3.667E-05	5.699E-05	7.502E-05	1.044E-04	1.591E-04	2.074E-04	2.871E-04	4.376E-04
42.50	2.152E-05	3.038E-05	4.721E-05	6.216E-05	8.656E-05	1.318E-04	1.717E-04	2.372E-04	3.605E-04
45.00	1.808E-05	2.552E-05	3.966E-05	5.223E-05	7.275E-05	1.108E-04	1.443E-04	1.991E-04	3.017E-04
47.50	1.537E-05	2.170E-05	3.373E-05	4.443E-05	6.191E-05	9.430E-05	1.228E-04	1.693E-04	2.561E-04
50.00	1.321E-05	1.865E-05	2.899E-05	3.820E-05	5.326E-05	8.117E-05	1.057E-04	1.456E-04	2.200E-04
55.00	1.001E-05	1.413E-05	2.199E-05	2.900E-05	4.048E-05	6.179E-05	8.052E-05	1.111E-04	1.677E-04
60.00	7.794E-06	1.102E-05	1.717E-05	2.266E-05	3.168E-05	4.847E-05	6.327E-05	8.743E-05	1.322E-04
65.00	6.200E-06	8.776E-06	1.369E-05	1.810E-05	2.535E-05	3.890E-05	5.089E-05	7.054E-05	1.071E-04
70.00	5.014E-06	7.107E-06	1.111E-05	1.471E-05	2.065E-05	3.181E-05	4.173E-05	5.807E-05	8.856E-05
75.00	4.104E-06	5.828E-06	9.139E-06	1.212E-05	1.706E-05	2.639E-05	3.473E-05	4.855E-05	7.450E-05
80.00	3.392E-06	4.828E-06	7.592E-06	1.009E-05	1.425E-05	2.215E-05	2.927E-05	4.112E-05	6.356E-05
85.00	2.823E-06	4.028E-06	6.358E-06	8.474E-06	1.201E-05	1.878E-05	2.492E-05	3.522E-05	5.486E-05
90.00	2.362E-06	3.380E-06	5.357E-06	7.161E-06	1.020E-05	1.605E-05	2.140E-05	3.044E-05	4.785E-05
95.00	1.983E-06	2.848E-06	4.536E-06	6.086E-06	8.710E-06	1.382E-05	1.852E-05	2.653E-05	4.212E-05
100.00	1.668E-06	2.405E-06	3.852E-06	5.191E-06	7.473E-06	1.196E-05	1.613E-05	2.329E-05	3.739E-05
105.00	1.405E-06	2.035E-06	3.282E-06	4.444E-06	6.443E-06	1.042E-05	1.414E-05	2.060E-05	3.346E-05
110.00	1.182E-06	1.722E-06	2.799E-06	3.812E-06	5.571E-06	9.112E-06	1.247E-05	1.833E-05	3.016E-05
115.00	9.934E-07	1.457E-06	2.391E-06	3.278E-06	4.835E-06	8.011E-06	1.105E-05	1.642E-05	2.738E-05
120.00	8.328E-07	1.231E-06	2.043E-06	2.823E-06	4.209E-06	7.075E-06	9.854E-06	1.480E-05	2.504E-05
125.00	6.956E-07	1.039E-06	1.746E-06	2.435E-06	3.674E-06	6.278E-06	8.834E-06	1.343E-05	2.307E-05
130.00	5.790E-07	8.747E-07	1.494E-06	2.106E-06	3.221E-06	5.602E-06	7.970E-06	1.227E-05	2.140E-05
135.00	4.791E-07	7.343E-07	1.278E-06	1.824E-06	2.833E-06	5.025E-06	7.233E-06	1.129E-05	2.000E-05
140.00	3.949E-07	6.159E-07	1.096E-06	1.587E-06	2.506E-06	4.540E-06	6.614E-06	1.046E-05	1.881E-05
145.00	3.235E-07	5.153E-07	9.421E-07	1.386E-06	2.230E-06	4.130E-06	6.091E-06	9.763E-06	1.782E-05
150.00	2.643E-07	4.317E-07	8.142E-07	1.219E-06	2.003E-06	3.791E-06	5.660E-06	9.187E-06	1.700E-05
155.00	2.158E-07	3.629E-07	7.091E-07	1.083E-06	1.817E-06	3.515E-06	5.308E-06	8.719E-06	1.634E-05
160.00	1.770E-07	3.077E-07	6.249E-07	9.748E-07	1.669E-06	3.295E-06	5.027E-06	8.347E-06	1.582E-05
165.00	1.478E-07	2.657E-07	5.611E-07	8.934E-07	1.559E-06	3.131E-06	4.816E-06	8.066E-06	1.543E-05
170.00	1.268E-07	2.352E-07	5.149E-07	8.349E-07	1.481E-06	3.015E-06	4.665E-06	7.862E-06	1.514E-05
175.00	1.149E-07	2.177E-07	4.887E-07	8.020E-07	1.437E-06	2.949E-06	4.579E-06	7.742E-06	1.496E-05
180.00	1.101E-07	2.105E-07	4.777E-07	7.883E-07	1.419E-06	2.923E-06	4.546E-06	7.698E-06	1.490E-05
TOTAL	1.313E-01	1.368E-01	1.454E-01	1.524E-01	1.633E-01	1.819E-01	1.967E-01	2.182E-01	2.528E-01
TRANS	6.383E-05	8.866E-05	1.353E-04	1.767E-04	2.447E-04	3.724E-04	4.863E-04	6.754E-04	1.034E-03

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 92

ENERGY(keV)	100.0	80.0	60.0	50.0	40.0	30.0	25.0	20.0	15.0
ANGLE (deg)									
0.00	4.462E+02	4.090E+02	3.704E+02	3.500E+02	3.281E+02	3.036E+02	2.897E+02	2.740E+02	2.553E+02
0.25	3.409E+02	3.291E+02	3.140E+02	3.046E+02	2.932E+02	2.787E+02	2.696E+02	2.585E+02	2.442E+02
0.50	1.895E+02	1.989E+02	2.090E+02	2.140E+02	2.183E+02	2.209E+02	2.210E+02	2.194E+02	2.149E+02
0.75	1.045E+02	1.150E+02	1.290E+02	1.378E+02	1.482E+02	1.601E+02	1.664E+02	1.723E+02	1.771E+02
1.00	6.249E+01	7.049E+01	8.180E+01	8.957E+01	9.953E+01	1.126E+02	1.206E+02	1.298E+02	1.398E+02
1.50	2.627E+01	3.095E+01	3.776E+01	4.254E+01	4.888E+01	5.794E+01	6.421E+01	7.232E+01	8.311E+01
2.00	1.274E+01	1.546E+01	1.961E+01	2.263E+01	2.675E+01	3.276E+01	3.698E+01	4.260E+01	5.057E+01
2.50	6.934E+00	8.532E+00	1.107E+01	1.299E+01	1.570E+01	1.978E+01	2.270E+01	2.665E+01	3.237E+01
3.00	4.118E+00	5.113E+00	6.718E+00	7.958E+00	9.744E+00	1.252E+01	1.458E+01	1.742E+01	2.161E+01
3.50	2.615E+00	3.271E+00	4.335E+00	5.162E+00	6.364E+00	8.276E+00	9.730E+00	1.179E+01	1.489E+01
4.00	1.750E+00	2.201E+00	2.937E+00	3.509E+00	4.346E+00	5.692E+00	6.731E+00	8.223E+00	1.053E+01
4.50	1.222E+00	1.544E+00	2.069E+00	2.480E+00	3.082E+00	4.055E+00	4.811E+00	5.907E+00	7.629E+00
5.00	8.827E-01	1.119E+00	1.507E+00	1.810E+00	2.256E+00	2.978E+00	3.541E+00	4.359E+00	5.661E+00
5.50	6.555E-01	8.347E-01	1.128E+00	1.358E+00	1.696E+00	2.244E+00	2.672E+00	3.297E+00	4.296E+00
6.00	4.979E-01	6.371E-01	8.652E-01	1.043E+00	1.305E+00	1.729E+00	2.061E+00	2.548E+00	3.328E+00
6.50	3.856E-01	4.959E-01	6.768E-01	8.177E-01	1.024E+00	1.359E+00	1.621E+00	2.006E+00	2.625E+00
7.00	3.037E-01	3.924E-01	5.383E-01	6.518E-01	8.175E-01	1.086E+00	1.297E+00	1.607E+00	2.104E+00
7.50	2.428E-01	3.150E-01	4.342E-01	5.270E-01	6.626E-01	8.821E-01	1.054E+00	1.306E+00	1.711E+00
8.00	1.968E-01	2.561E-01	3.545E-01	4.314E-01	5.441E-01	7.261E-01	8.678E-01	1.075E+00	1.409E+00
8.50	1.615E-01	2.107E-01	2.925E-01	3.571E-01	4.519E-01	6.049E-01	7.232E-01	8.957E-01	1.174E+00
9.00	1.341E-01	1.751E-01	2.438E-01	2.984E-01	3.791E-01	5.091E-01	6.091E-01	7.543E-01	9.886E-01
9.50	1.124E-01	1.469E-01	2.051E-01	2.516E-01	3.207E-01	4.322E-01	5.177E-01	6.414E-01	8.408E-01
10.00	9.502E-02	1.244E-01	1.740E-01	2.140E-01	2.735E-01	3.698E-01	4.435E-01	5.501E-01	7.215E-01
12.50	4.548E-02	6.046E-02	8.571E-02	1.059E-01	1.360E-01	1.855E-01	2.245E-01	2.818E-01	3.734E-01
15.00	2.446E-02	3.331E-02	4.831E-02	6.004E-02	7.721E-02	1.054E-01	1.280E-01	1.618E-01	2.169E-01
17.50	1.428E-02	1.978E-02	2.940E-02	3.706E-02	4.829E-02	6.636E-02	8.040E-02	1.011E-01	1.356E-01
20.00	8.900E-03	1.242E-02	1.881E-02	2.412E-02	3.210E-02	4.483E-02	5.433E-02	6.794E-02	9.057E-02
22.50	5.861E-03	8.191E-03	1.255E-02	1.632E-02	2.218E-02	3.164E-02	3.860E-02	4.837E-02	6.417E-02
25.00	4.037E-03	5.641E-03	8.697E-03	1.143E-02	1.577E-02	2.299E-02	2.836E-02	3.588E-02	4.767E-02
27.50	2.886E-03	4.033E-03	6.241E-03	8.247E-03	1.150E-02	1.707E-02	2.134E-02	2.737E-02	3.664E-02
30.00	2.128E-03	2.975E-03	4.615E-03	6.118E-03	8.588E-03	1.293E-02	1.637E-02	2.132E-02	2.886E-02
32.50	1.611E-03	2.255E-03	3.503E-03	4.650E-03	6.553E-03	9.983E-03	1.278E-02	1.688E-02	2.315E-02
35.00	1.249E-03	1.749E-03	2.718E-03	3.609E-03	5.097E-03	7.837E-03	1.014E-02	1.357E-02	1.886E-02
37.50	9.888E-04	1.384E-03	2.150E-03	2.854E-03	4.035E-03	6.250E-03	8.156E-03	1.106E-02	1.558E-02
40.00	7.978E-04	1.116E-03	1.730E-03	2.294E-03	3.244E-03	5.055E-03	6.650E-03	9.125E-03	1.302E-02
42.50	6.548E-04	9.142E-04	1.414E-03	1.872E-03	2.645E-03	4.141E-03	5.486E-03	7.609E-03	1.101E-02
45.00	5.460E-04	7.606E-04	1.173E-03	1.549E-03	2.186E-03	3.433E-03	4.574E-03	6.406E-03	9.391E-03
47.50	4.617E-04	6.416E-04	9.856E-04	1.298E-03	1.828E-03	2.877E-03	3.850E-03	5.436E-03	8.081E-03
50.00	3.955E-04	5.482E-04	8.387E-04	1.102E-03	1.547E-03	2.435E-03	3.269E-03	4.647E-03	7.002E-03
55.00	2.999E-04	4.138E-04	6.280E-04	8.204E-04	1.146E-03	1.794E-03	2.409E-03	3.451E-03	5.355E-03
60.00	2.361E-04	3.247E-04	4.894E-04	6.357E-04	8.811E-04	1.369E-03	1.834E-03	2.634E-03	4.155E-03
65.00	1.915E-04	2.629E-04	3.946E-04	5.104E-04	7.026E-04	1.079E-03	1.433E-03	2.048E-03	3.271E-03
70.00	1.591E-04	2.185E-04	3.276E-04	4.227E-04	5.786E-04	8.762E-04	1.151E-03	1.627E-03	2.606E-03
75.00	1.348E-04	1.856E-04	2.787E-04	3.596E-04	4.905E-04	7.329E-04	9.496E-04	1.322E-03	2.101E-03
80.00	1.161E-04	1.606E-04	2.423E-04	3.132E-04	4.268E-04	6.307E-04	8.063E-04	1.102E-03	1.722E-03
85.00	1.013E-04	1.411E-04	2.145E-04	2.784E-04	3.802E-04	5.579E-04	7.056E-04	9.471E-04	1.442E-03
90.00	8.959E-05	1.257E-04	1.930E-04	2.519E-04	3.455E-04	5.069E-04	6.373E-04	8.434E-04	1.245E-03
95.00	8.009E-05	1.134E-04	1.761E-04	2.313E-04	3.196E-04	4.721E-04	5.943E-04	7.811E-04	1.116E-03
100.00	7.235E-05	1.034E-04	1.626E-04	2.152E-04	3.002E-04	4.496E-04	5.709E-04	7.517E-04	1.046E-03
105.00	6.595E-05	9.529E-05	1.519E-04	2.027E-04	2.858E-04	4.362E-04	5.614E-04	7.468E-04	1.027E-03
110.00	6.062E-05	8.860E-05	1.433E-04	1.931E-04	2.757E-04	4.294E-04	5.610E-04	7.585E-04	1.053E-03
115.00	5.616E-05	8.304E-05	1.364E-04	1.857E-04	2.690E-04	4.275E-04	5.668E-04	7.816E-04	1.116E-03
120.00	5.242E-05	7.842E-05	1.309E-04	1.802E-04	2.646E-04	4.294E-04	5.777E-04	8.145E-04	1.207E-03
125.00	4.930E-05	7.461E-05	1.265E-04	1.759E-04	2.620E-04	4.340E-04	5.930E-04	8.553E-04	1.318E-03
130.00	4.669E-05	7.144E-05	1.229E-04	1.727E-04	2.607E-04	4.404E-04	6.109E-04	9.010E-04	1.441E-03
135.00	4.450E-05	6.882E-05	1.201E-04	1.703E-04	2.603E-04	4.480E-04	6.301E-04	9.486E-04	1.571E-03
140.00	4.266E-05	6.665E-05	1.178E-04	1.686E-04	2.606E-04	4.561E-04	6.494E-04	9.956E-04	1.702E-03
145.00	4.114E-05	6.487E-05	1.161E-04	1.674E-04	2.614E-04	4.642E-04	6.679E-04	1.040E-03	1.829E-03
150.00	3.989E-05	6.342E-05	1.147E-04	1.665E-04	2.625E-04	4.720E-04	6.850E-04	1.081E-03	1.947E-03
155.00	3.890E-05	6.226E-05	1.136E-04	1.660E-04	2.636E-04	4.790E-04	7.001E-04	1.117E-03	2.053E-03
160.00	3.812E-05	6.136E-05	1.128E-04	1.656E-04	2.648E-04	4.850E-04	7.130E-04	1.148E-03	2.144E-03
165.00	3.754E-05	6.070E-05	1.122E-04	1.654E-04	2.657E-04	4.899E-04	7.233E-04	1.172E-03	2.217E-03
170.00	3.711E-05	6.023E-05	1.118E-04	1.653E-04	2.665E-04	4.935E-04	7.308E-04	1.189E-03	2.271E-03
175.00	3.684E-05	5.992E-05	1.116E-04	1.652E-04	2.670E-04	4.957E-04	7.353E-04	1.200E-03	2.304E-03
180.00	3.674E-05	5.978E-05	1.114E-04	1.651E-04	2.671E-04	4.965E-04	7.369E-04	1.204E-03	2.314E-03
TOTAL	3.170E-01	3.616E-01	4.305E-01	4.815E-01	5.528E-01	6.605E-01	7.391E-01	8.474E-01	1.009E+00
TRANS	1.890E-03	2.637E-03	4.049E-03	5.312E-03	7.398E-03	1.131E-02	1.477E-02	2.043E-02	3.088E-02

TOTAL: Total Cross Section, 10^{-16} cm²
 TRANS: Transport Cross Section, 10^{-16} cm²

Table 9 (Continued)

ELECTRONS, Elastic Scattering Cross Section, 10^{-16} cm²/sr, Z = 92

ENERGY(keV)	10.0	8.0	6.0	5.0	4.0	3.0	2.5	2.0	1.0
ANGLE (deg)									
0.00	2.311E+02	2.185E+02	2.029E+02	1.934E+02	1.820E+02	1.678E+02	1.591E+02	1.487E+02	1.191E+02
0.25	2.241E+02	2.131E+02	1.991E+02	1.903E+02	1.796E+02	1.661E+02	1.577E+02	1.477E+02	1.186E+02
0.50	2.049E+02	1.980E+02	1.881E+02	1.813E+02	1.727E+02	1.611E+02	1.537E+02	1.445E+02	1.172E+02
0.75	1.782E+02	1.763E+02	1.717E+02	1.677E+02	1.619E+02	1.532E+02	1.472E+02	1.395E+02	1.150E+02
1.00	1.491E+02	1.516E+02	1.522E+02	1.511E+02	1.485E+02	1.431E+02	1.388E+02	1.329E+02	1.119E+02
1.50	9.775E+01	1.048E+02	1.121E+02	1.154E+02	1.181E+02	1.191E+02	1.184E+02	1.163E+02	1.038E+02
2.00	6.296E+01	7.002E+01	7.880E+01	8.388E+01	8.925E+01	9.438E+01	9.644E+01	9.770E+01	9.373E+01
2.50	4.163E+01	4.729E+01	5.502E+01	5.998E+01	6.586E+01	7.263E+01	7.619E+01	7.959E+01	8.268E+01
3.00	2.851E+01	3.284E+01	3.899E+01	4.316E+01	4.845E+01	5.518E+01	5.918E+01	6.355E+01	7.151E+01
3.50	2.012E+01	2.345E+01	2.825E+01	3.160E+01	3.598E+01	4.193E+01	4.573E+01	5.022E+01	6.088E+01
4.00	1.454E+01	1.714E+01	2.092E+01	2.359E+01	2.713E+01	3.212E+01	3.545E+01	3.960E+01	5.125E+01
4.50	1.072E+01	1.276E+01	1.578E+01	1.792E+01	2.079E+01	2.490E+01	2.771E+01	3.134E+01	4.281E+01
5.00	8.047E+00	9.664E+00	1.208E+01	1.382E+01	1.617E+01	1.955E+01	2.189E+01	2.499E+01	3.563E+01
5.50	6.152E+00	7.430E+00	9.378E+00	1.080E+01	1.273E+01	1.553E+01	1.749E+01	2.010E+01	2.963E+01
6.00	4.785E+00	5.801E+00	7.372E+00	8.533E+00	1.013E+01	1.247E+01	1.412E+01	1.631E+01	2.468E+01
6.50	3.785E+00	4.598E+00	5.869E+00	6.820E+00	8.146E+00	1.011E+01	1.150E+01	1.336E+01	2.064E+01
7.00	3.040E+00	3.698E+00	4.731E+00	5.512E+00	6.614E+00	8.268E+00	9.446E+00	1.103E+01	1.734E+01
7.50	2.476E+00	3.015E+00	3.861E+00	4.505E+00	5.421E+00	6.816E+00	7.819E+00	9.175E+00	1.465E+01
8.00	2.043E+00	2.490E+00	3.189E+00	3.722E+00	4.487E+00	5.665E+00	6.520E+00	7.685E+00	1.244E+01
8.50	1.705E+00	2.079E+00	2.663E+00	3.109E+00	3.750E+00	4.746E+00	5.476E+00	6.478E+00	1.063E+01
9.00	1.437E+00	1.754E+00	2.247E+00	2.623E+00	3.163E+00	4.008E+00	4.633E+00	5.495E+00	9.135E+00
9.50	1.223E+00	1.494E+00	1.915E+00	2.234E+00	2.693E+00	3.413E+00	3.948E+00	4.691E+00	7.889E+00
10.00	1.050E+00	1.282E+00	1.645E+00	1.919E+00	2.312E+00	2.929E+00	3.389E+00	4.030E+00	6.845E+00
12.50	5.435E-01	6.630E-01	8.517E-01	9.952E-01	1.201E+00	1.520E+00	1.754E+00	2.076E+00	3.586E+00
15.00	3.207E-01	3.924E-01	5.025E-01	5.859E-01	7.074E-01	9.005E-01	1.043E+00	1.233E+00	2.074E+00
17.50	2.047E-01	2.533E-01	3.260E-01	3.792E-01	4.555E-01	5.802E-01	6.760E-01	8.061E-01	1.317E+00
20.00	1.376E-01	1.722E-01	2.248E-01	2.624E-01	3.145E-01	3.983E-01	4.647E-01	5.587E-01	8.991E-01
22.50	9.672E-02	1.214E-01	1.611E-01	1.896E-01	2.282E-01	2.879E-01	3.353E-01	4.045E-01	6.444E-01
25.00	7.088E-02	8.871E-02	1.187E-01	1.410E-01	1.711E-01	2.162E-01	2.514E-01	3.037E-01	4.788E-01
27.50	5.392E-02	6.706E-02	8.990E-02	1.074E-01	1.313E-01	1.667E-01	1.938E-01	2.347E-01	3.694E-01
30.00	4.227E-02	5.228E-02	6.991E-02	8.376E-02	1.029E-01	1.311E-01	1.524E-01	1.851E-01	2.979E-01
32.50	3.392E-02	4.178E-02	5.568E-02	6.681E-02	8.239E-02	1.050E-01	1.218E-01	1.481E-01	2.151E-01
35.00	2.773E-02	3.406E-02	4.523E-02	5.436E-02	6.729E-02	8.573E-02	9.899E-02	1.198E-01	2.204E-01
37.50	2.303E-02	2.821E-02	3.733E-02	4.495E-02	5.594E-02	7.141E-02	8.193E-02	9.805E-02	1.972E-01
40.00	1.939E-02	2.370E-02	3.120E-02	3.762E-02	4.715E-02	6.060E-02	6.918E-02	8.147E-02	1.769E-01
42.50	1.655E-02	2.018E-02	2.636E-02	3.178E-02	4.014E-02	5.225E-02	5.959E-02	6.894E-02	1.566E-01
45.00	1.430E-02	1.741E-02	2.251E-02	2.707E-02	3.442E-02	4.560E-02	5.226E-02	5.958E-02	1.353E-01
47.50	1.251E-02	1.523E-02	1.943E-02	2.323E-02	2.964E-02	4.011E-02	4.649E-02	5.263E-02	1.130E-01
50.00	1.106E-02	1.348E-02	1.698E-02	2.010E-02	2.562E-02	3.542E-02	4.175E-02	4.746E-02	9.065E-02
55.00	9.005E-03	1.115E-02	1.376E-02	1.589E-02	1.989E-02	2.830E-02	3.474E-02	4.099E-02	5.482E-02
60.00	7.298E-03	9.218E-03	1.132E-02	1.264E-02	1.502E-02	2.124E-02	2.741E-02	3.332E-02	2.810E-02
65.00	6.073E-03	7.934E-03	9.960E-03	1.092E-02	1.221E-02	1.618E-02	2.135E-02	3.026E-02	2.549E-02
70.00	5.069E-03	6.887E-03	9.051E-03	9.974E-03	1.066E-02	1.249E-02	1.601E-02	2.445E-02	3.940E-02
75.00	4.219E-03	5.957E-03	8.339E-03	9.461E-03	1.005E-02	1.029E-02	1.184E-02	1.811E-02	5.881E-02
80.00	3.492E-03	5.095E-03	7.657E-03	9.110E-03	1.006E-02	9.591E-03	9.334E-03	1.220E-02	7.123E-02
85.00	2.876E-03	4.285E-03	6.908E-03	8.709E-03	1.033E-02	1.017E-02	8.811E-03	8.076E-03	6.863E-02
90.00	2.368E-03	3.544E-03	6.057E-03	8.112E-03	1.051E-02	1.160E-02	1.020E-02	6.948E-03	5.104E-02
95.00	1.972E-03	2.896E-03	5.125E-03	7.257E-03	1.033E-02	1.325E-02	1.296E-02	9.320E-03	2.636E-02
100.00	1.690E-03	2.377E-03	4.177E-03	6.165E-03	9.585E-03	1.444E-02	1.614E-02	1.465E-02	6.477E-03
105.00	1.533E-03	2.016E-03	3.306E-03	4.937E-03	8.259E-03	1.457E-02	1.867E-02	2.130E-02	1.618E-03
110.00	1.509E-03	1.841E-03	2.624E-03	3.747E-03	6.497E-03	1.331E-02	1.940E-02	2.698E-02	1.550E-02
115.00	1.614E-03	1.866E-03	2.240E-03	2.805E-03	4.608E-03	1.069E-02	1.770E-02	2.940E-02	4.340E-02
120.00	1.831E-03	2.099E-03	2.249E-03	2.334E-03	3.027E-03	7.207E-03	1.366E-02	2.712E-02	7.396E-02
125.00	2.139E-03	2.535E-03	2.719E-03	2.538E-03	2.246E-03	3.802E-03	8.215E-03	2.032E-02	9.404E-02
130.00	2.521E-03	3.155E-03	3.679E-03	3.551E-03	2.726E-03	1.705E-03	3.154E-03	1.103E-02	9.447E-02
135.00	2.959E-03	3.932E-03	5.112E-03	5.441E-03	4.817E-03	2.201E-03	7.713E-04	2.945E-03	7.440E-02
140.00	3.434E-03	4.829E-03	6.961E-03	8.171E-03	8.678E-03	6.226E-03	3.622E-03	5.317E-04	4.240E-02
145.00	3.926E-03	5.801E-03	9.126E-03	1.159E-02	1.423E-02	1.483E-02	1.263E-02	7.849E-03	1.362E-02
150.00	4.411E-03	6.795E-03	1.147E-02	1.550E-02	2.116E-02	2.748E-02	2.914E-02	2.724E-02	4.225E-03
155.00	4.868E-03	7.758E-03	1.385E-02	1.960E-02	2.892E-02	4.341E-02	5.198E-02	5.839E-02	2.505E-02
160.00	5.274E-03	8.636E-03	1.608E-02	2.356E-02	3.679E-02	6.099E-02	7.872E-02	9.794E-02	7.694E-02
165.00	5.612E-03	9.379E-03	1.802E-02	2.707E-02	4.401E-02	7.809E-02	1.058E-01	1.400E-01	1.495E-01
170.00	5.865E-03	9.943E-03	1.951E-02	2.981E-02	4.981E-02	9.241E-02	1.291E-01	1.774E-01	2.242E-01
175.00	6.022E-03	1.030E-02	2.046E-02	3.156E-02	5.356E-02	1.019E-01	1.448E-01	2.032E-01	2.800E-01
180.00	6.075E-03	1.041E-02	2.077E-02	3.215E-02	5.486E-02	1.053E-01	1.504E-01	2.124E-01	3.007E-01
TOTAL	1.282E+00	1.458E+00	1.716E+00	1.899E+00	2.144E+00	2.498E+00	2.745E+00	3.073E+00	4.315E+00
TRANS	5.457E-02	7.405E-02	1.087E-01	1.376E-01	1.821E-01	2.571E-01	3.165E-01	4.025E-01	7.524E-01

TOTAL: Total Cross Section, 10^{-16} cm²TRANS: Transport Cross Section, 10^{-16} cm²

Figure Captions

- Fig. 1. Elastic scattering cross sections for electrons, as function of the deflection angle.
- Hydrogen: 1, 2, 4, 8, and 16 keV
 - Hydrogen: 32, 64, 128, 256, 512, and 1024 keV
 - Uranium: 1, 2, 4, 8, and 16 keV
 - Uranium: 32, 64, 128, 256, 512. and 1024 keV
- Fig. 2. Elastic scattering cross sections for electrons, as functions of the deflection angle, at energies of 1, 2, 4, 8, and 16 keV.
- Aluminum
 - Copper
 - Silver
 - Tungsten
- Fig. 3. Ratio of the elastic scattering cross section for positrons to that for electrons, as a function of the deflection angle. The solid lines represent cross-section ratios obtained from ELAST, calculated for the case of a screened Coulomb field. The dashed curves represent the ratios which one obtains with the Mott cross section for an unscreened Coulomb field.
- Cross section ratios in carbon
 - Cross section ratios in tungsten
- Fig. 4. Comparison of the elastic scattering cross sections for electrons and positrons at 1 keV.
- Aluminum
 - Silver
 - Gold
- Fig. 5. Elastic scattering cross section for electrons in gold, at various angles, as a function of the electron energy. The triangles, squares and circles represent cross sections in the database ELAST. The curves were obtained with the interpolation program ELINT.

HYDROGEN, $Z = 1$

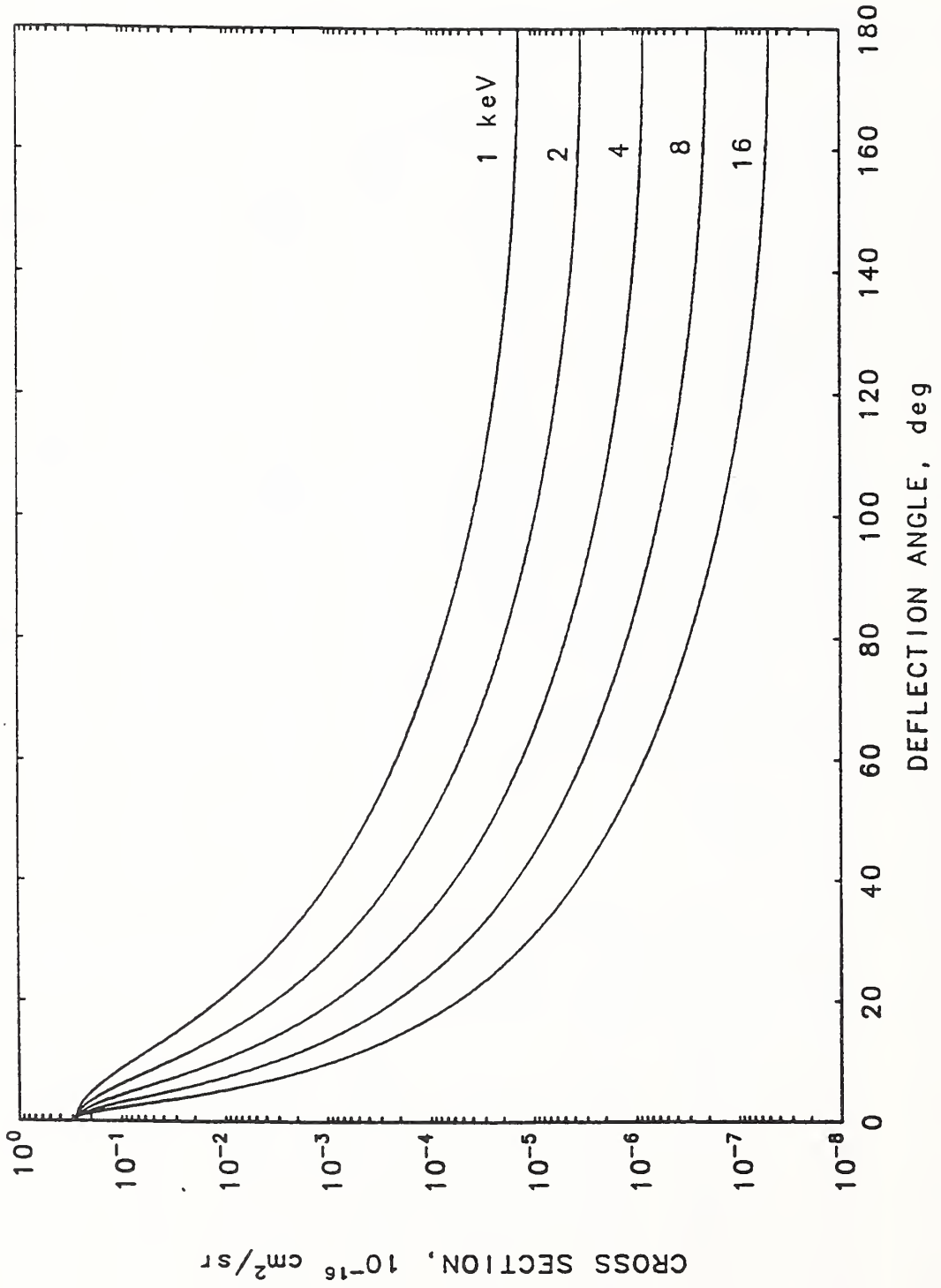


Fig. 1a

HYDROGEN, $Z = 1$

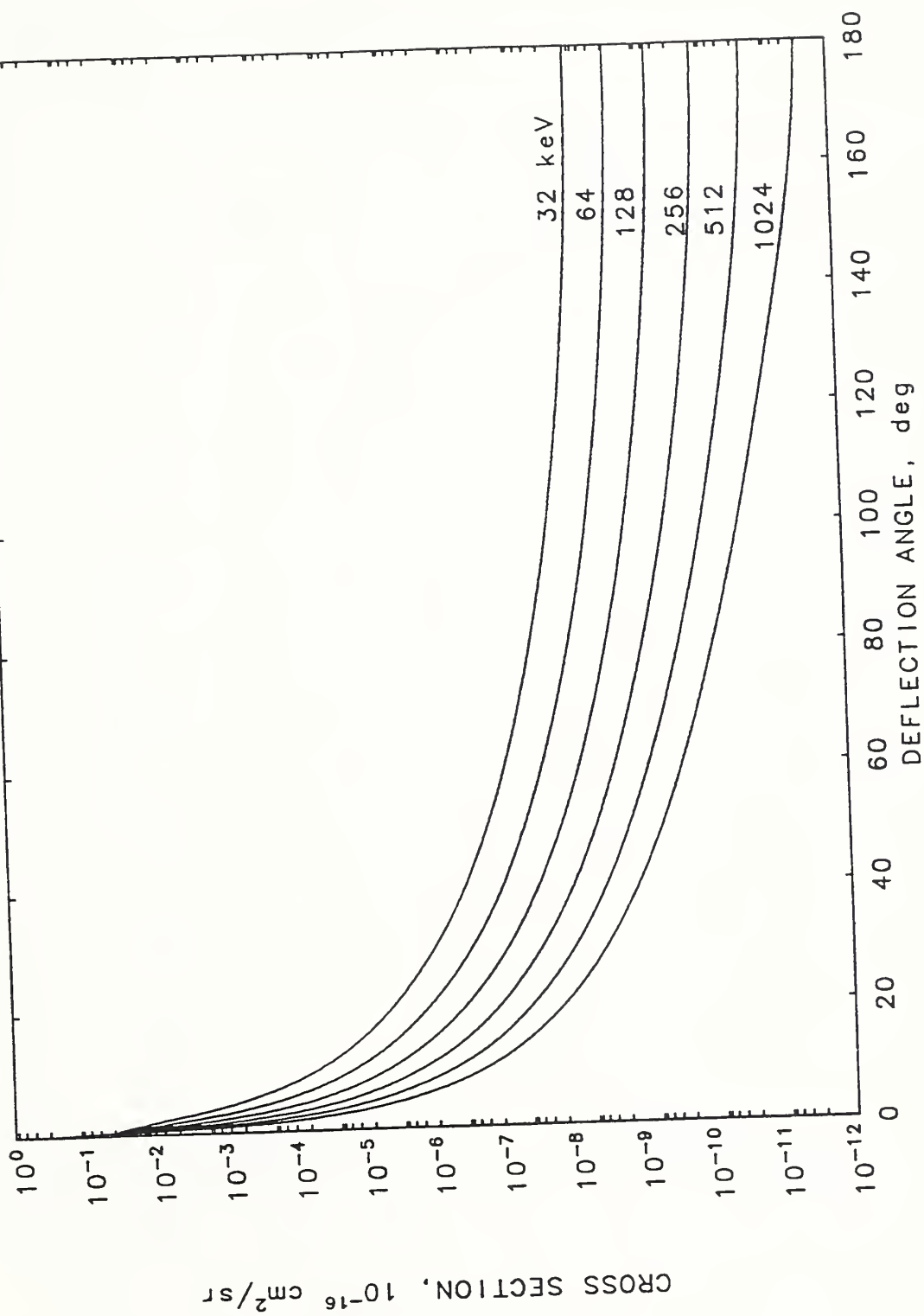


Fig. 1b

URANIUM, Z = 92

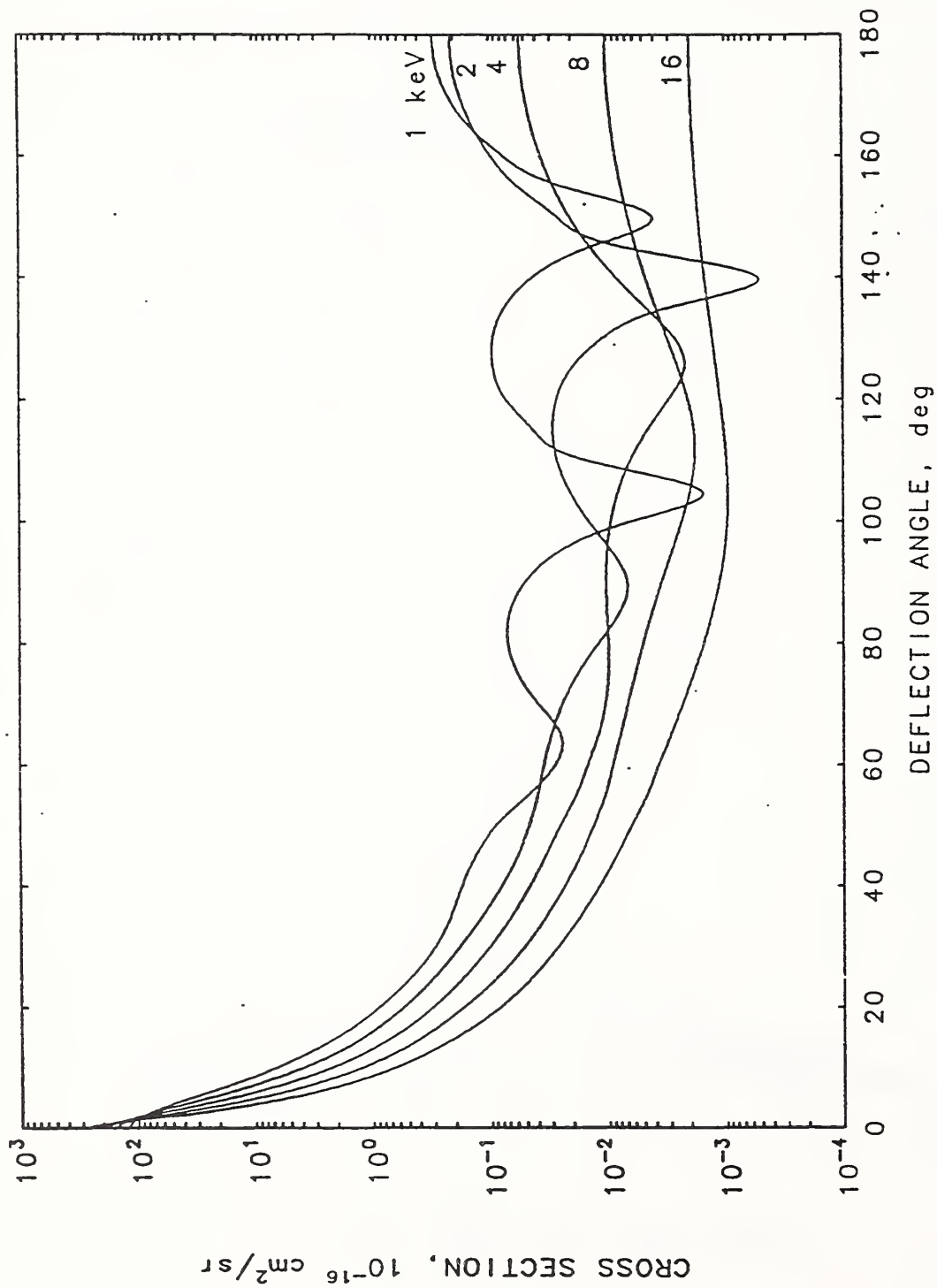


Fig. 1c

URANIUM, $Z = 92$

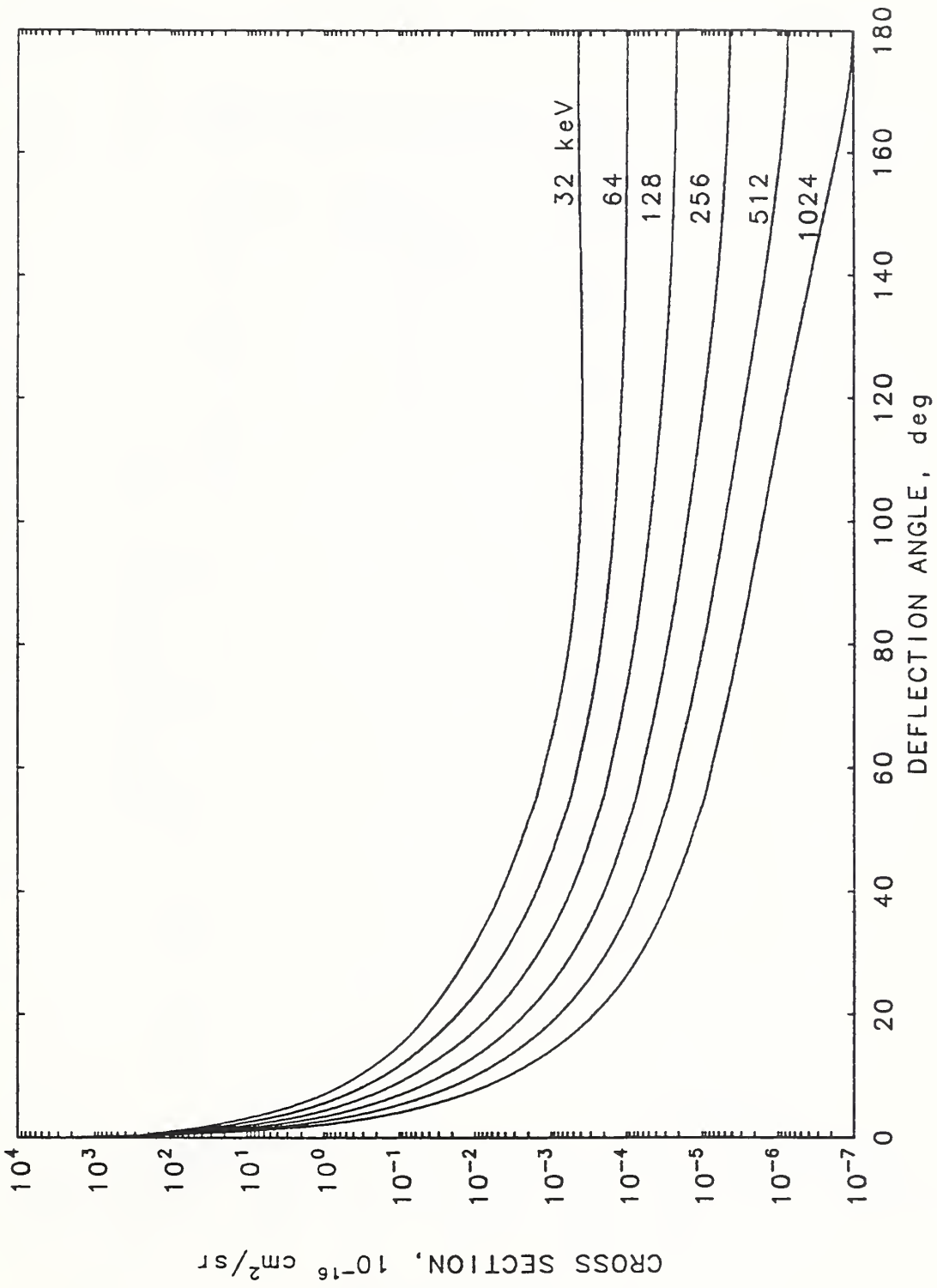


Fig. 1d

ALUMINUM, $Z = 13$

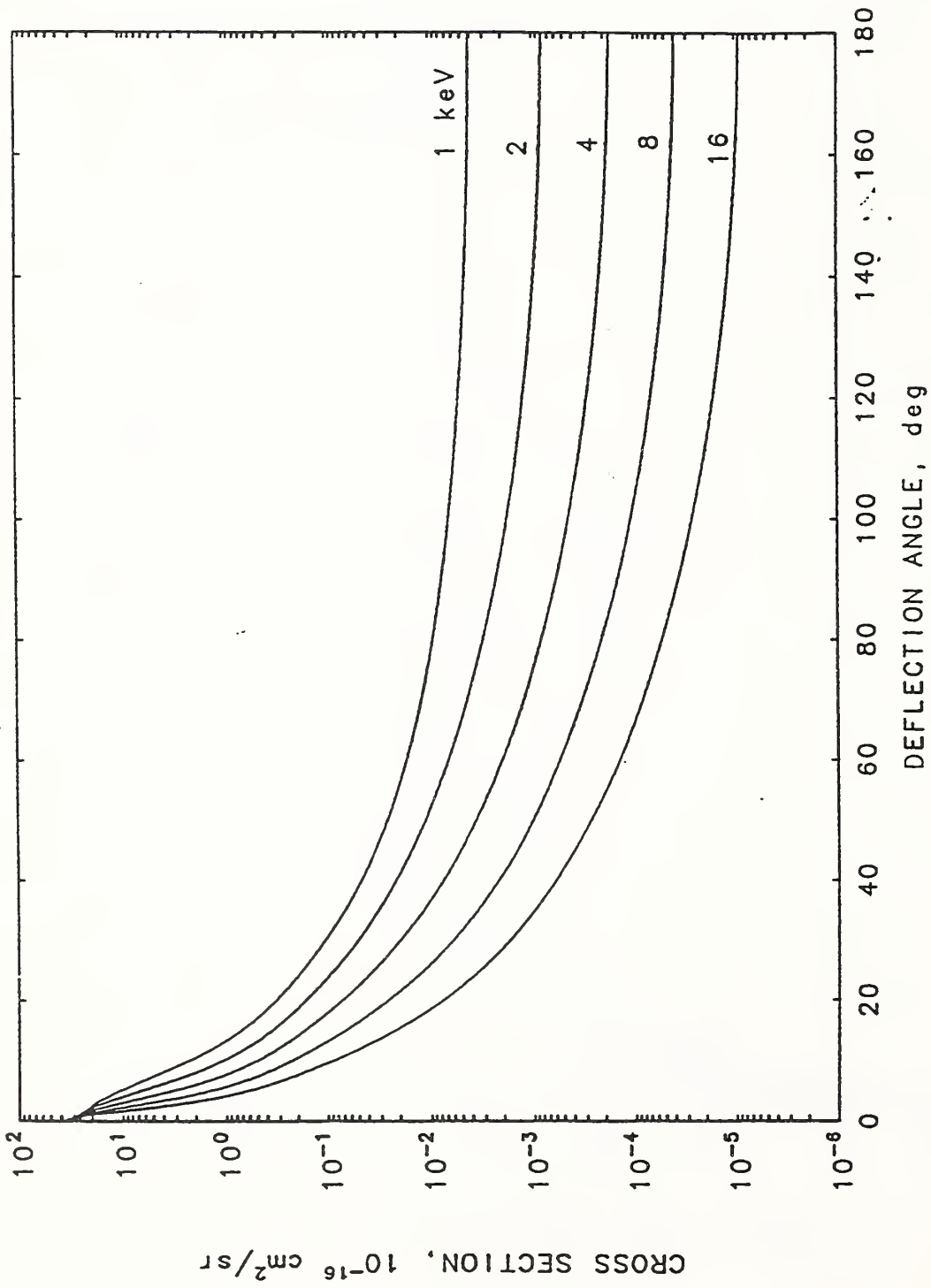


Fig. 2a

COPPER, $Z = 29$

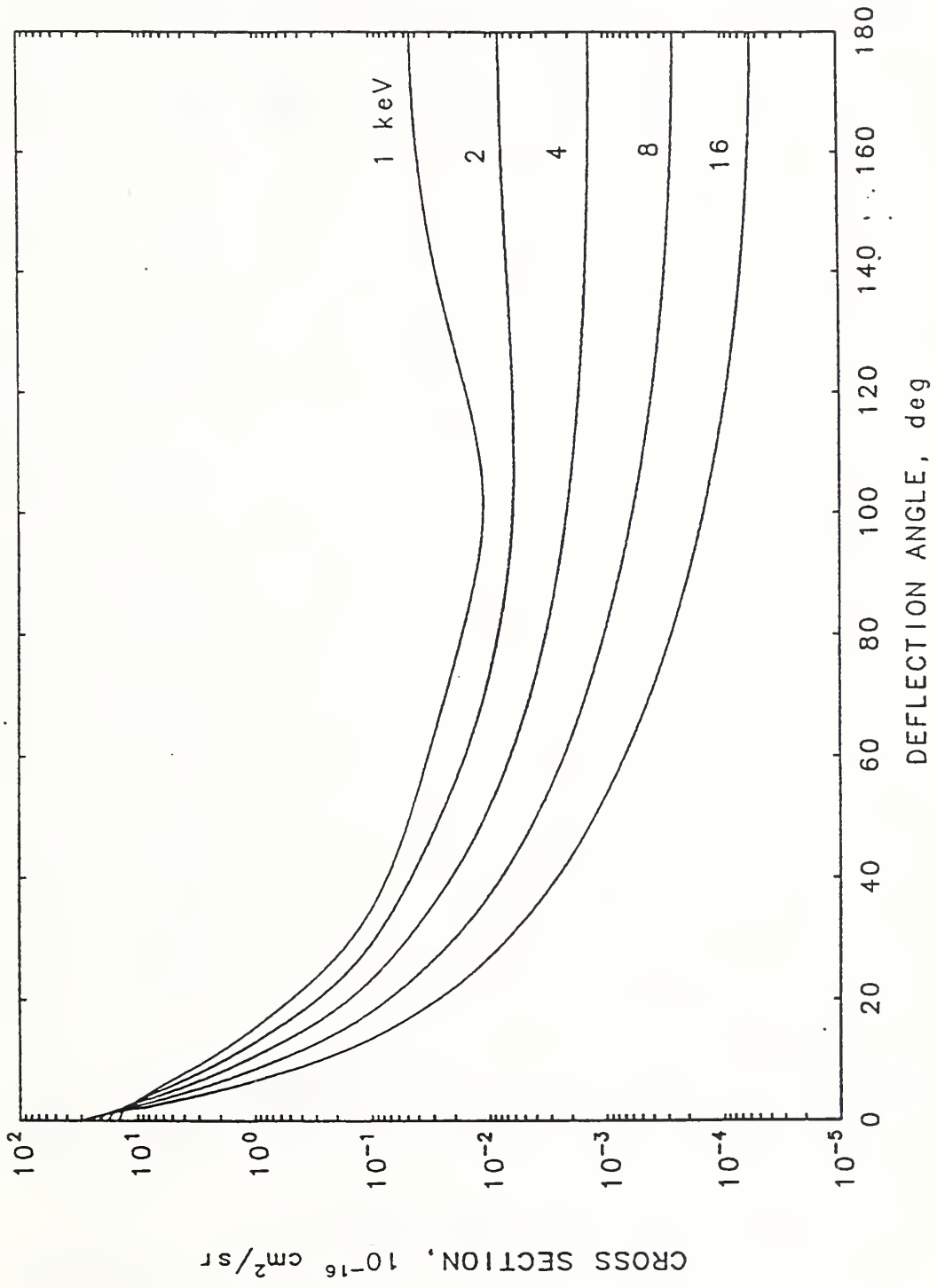


Fig. 2b

SILVER, Z = 47

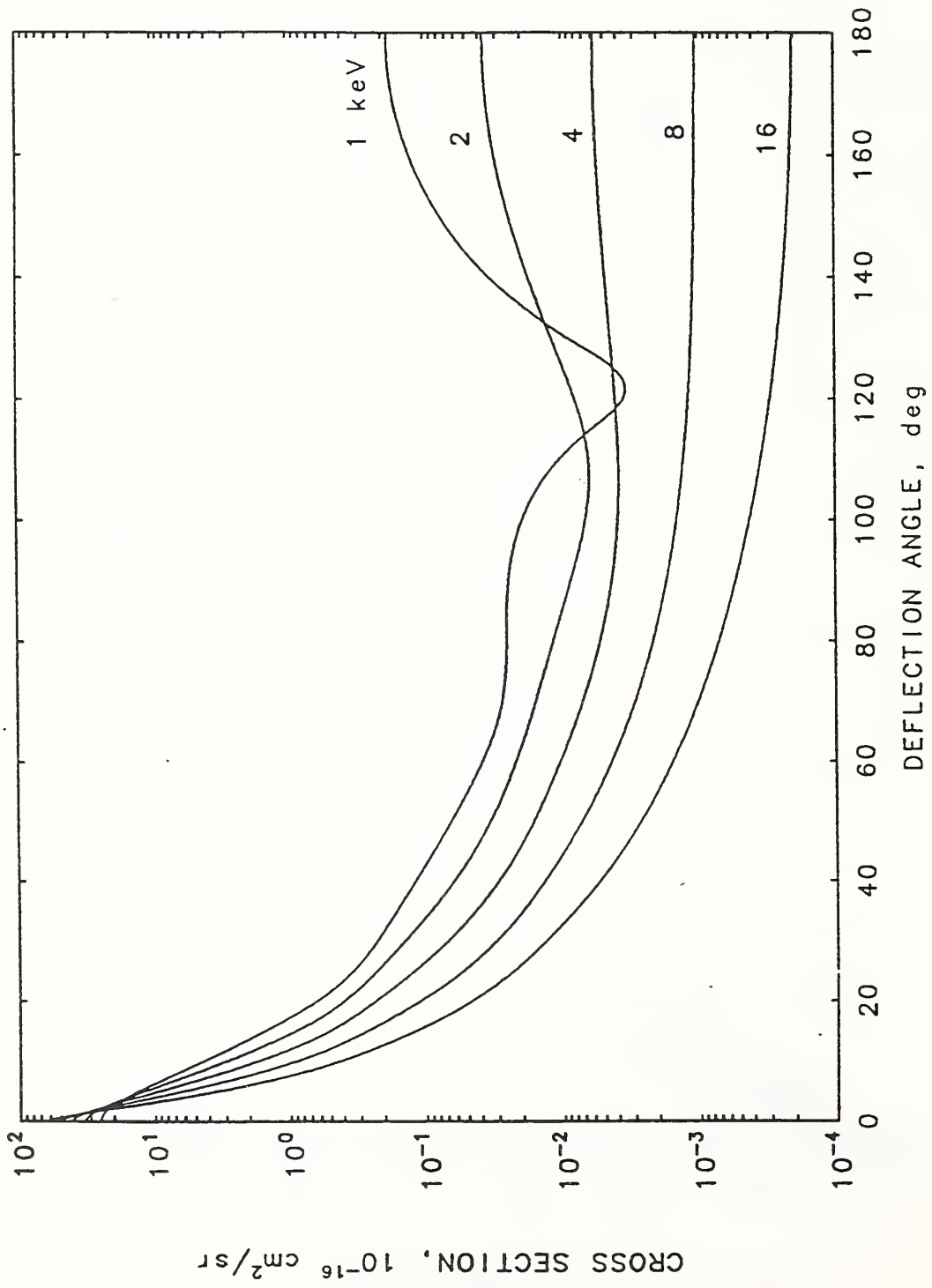


Fig. 2c

TUNGSTEN, Z = 74

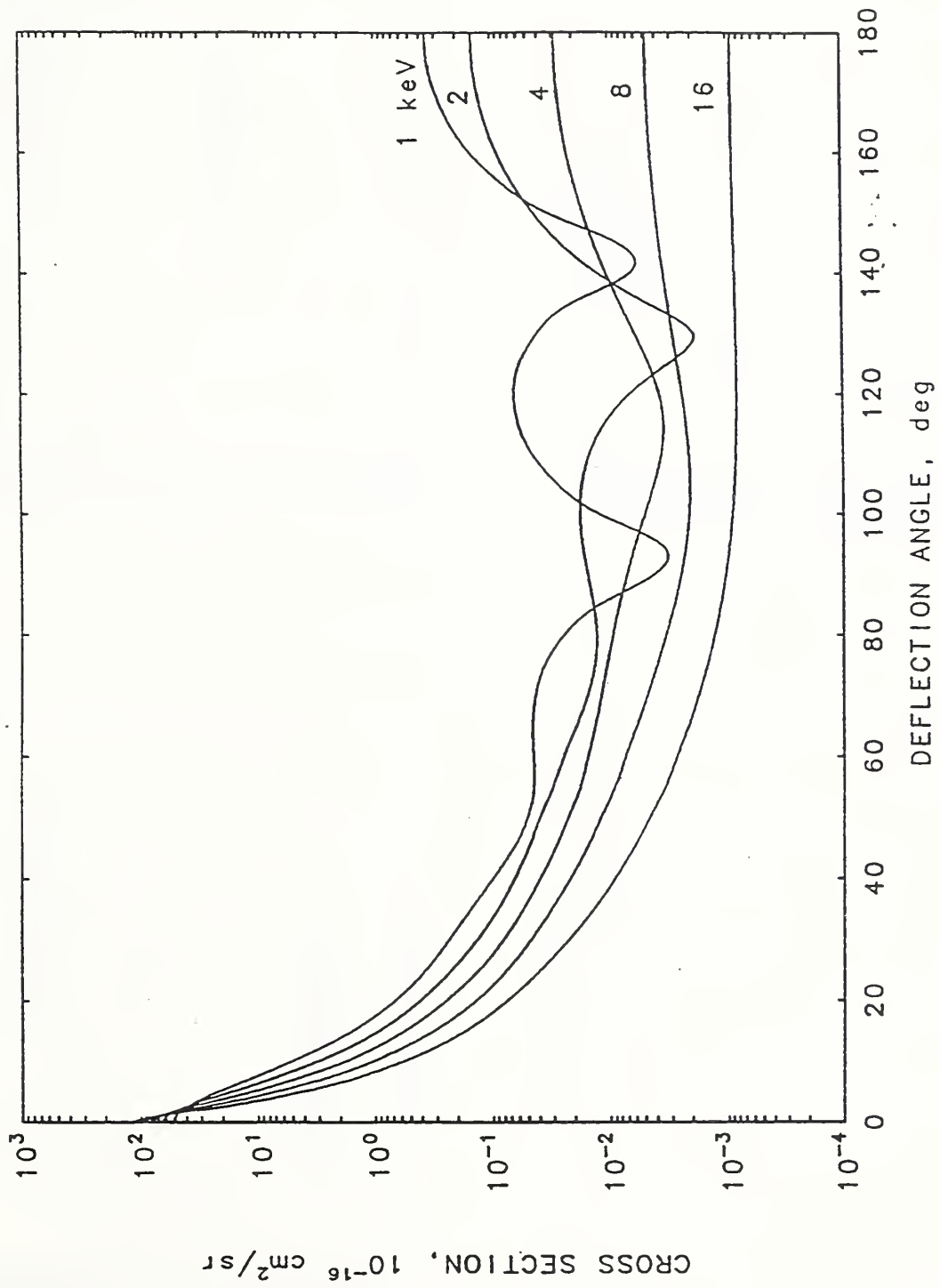


Fig. 2d

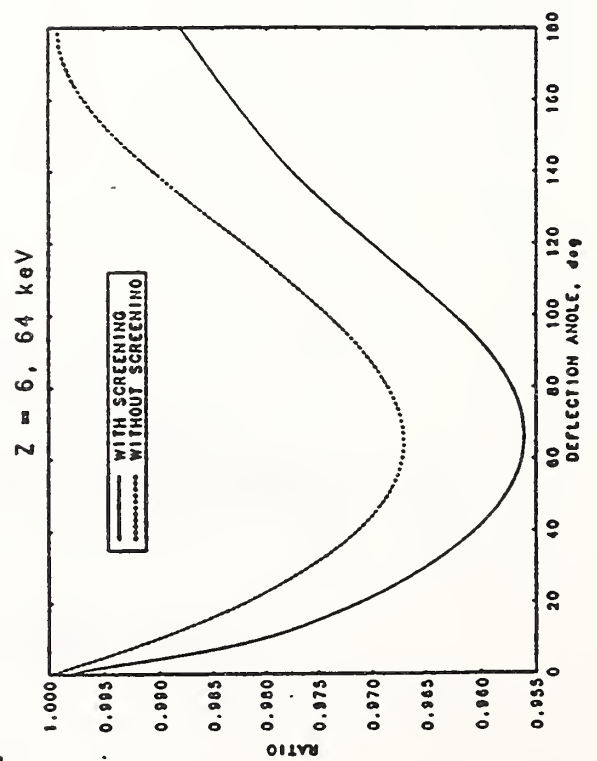
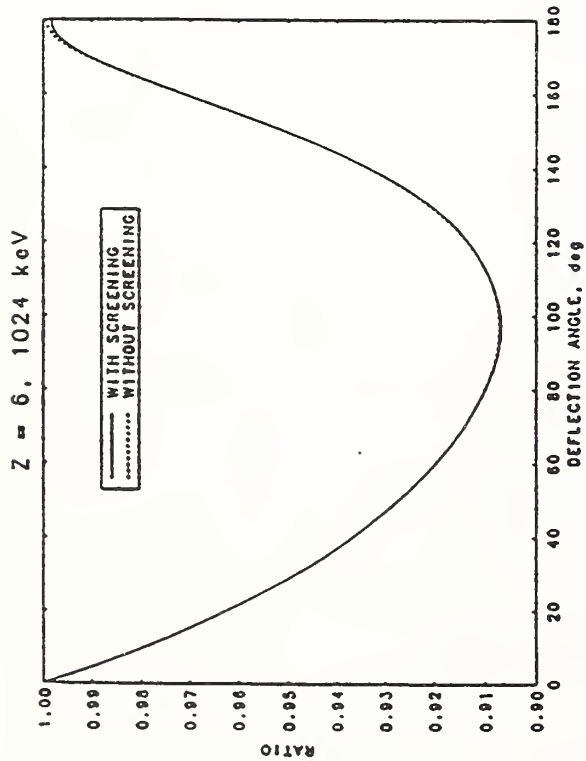
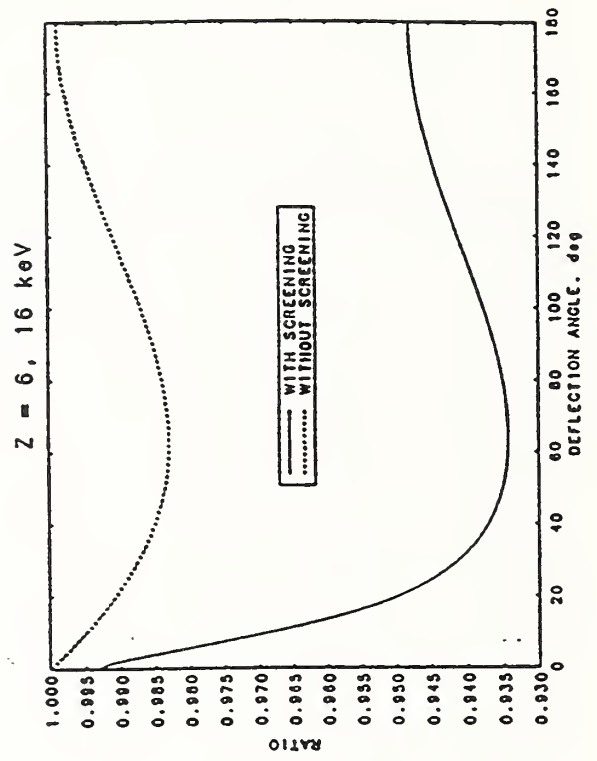
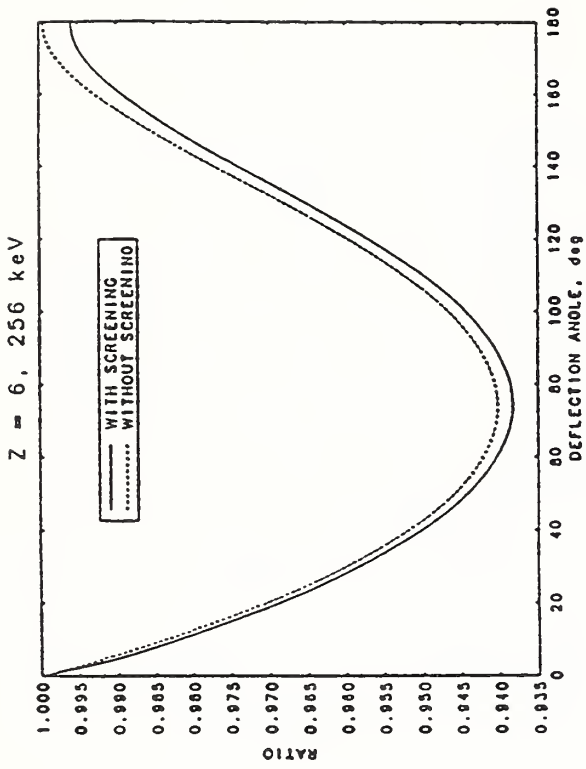


Fig. 3a

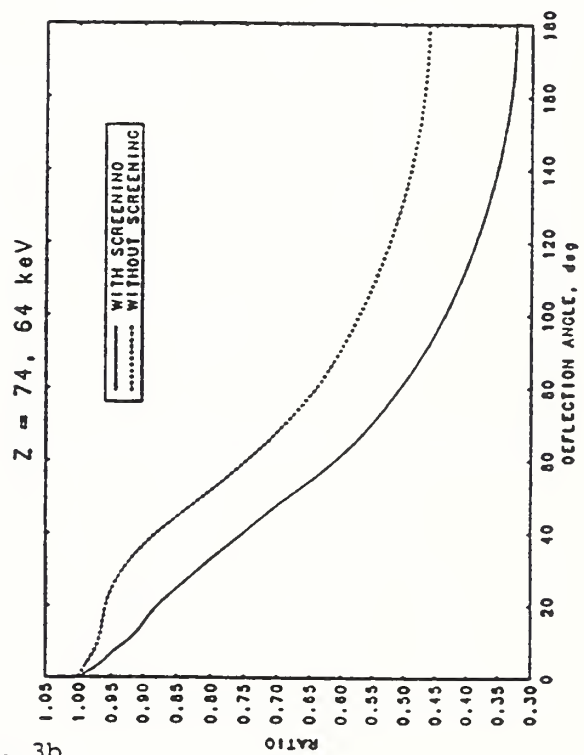
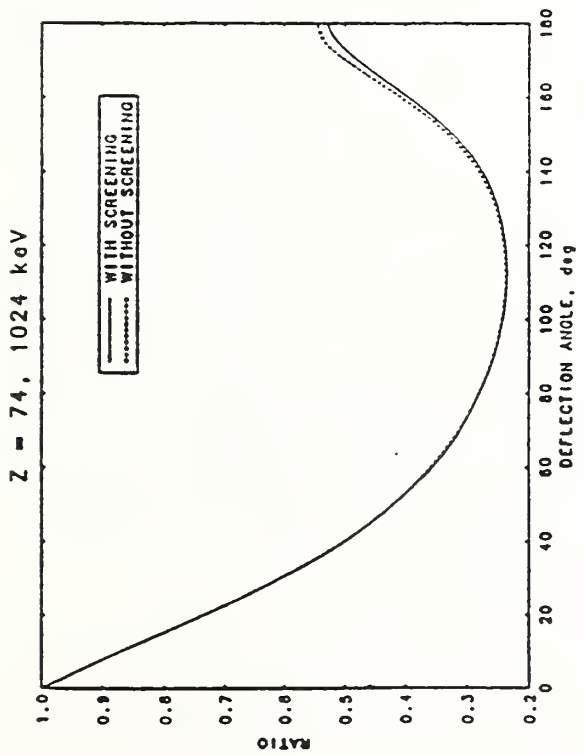
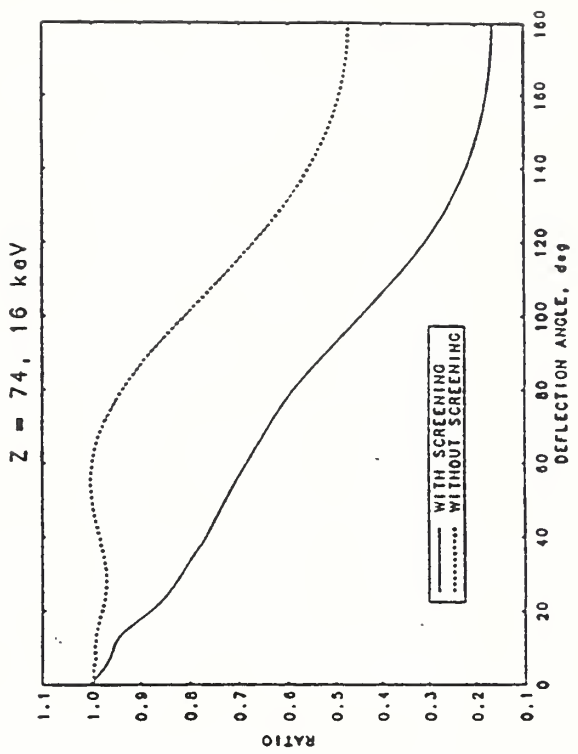
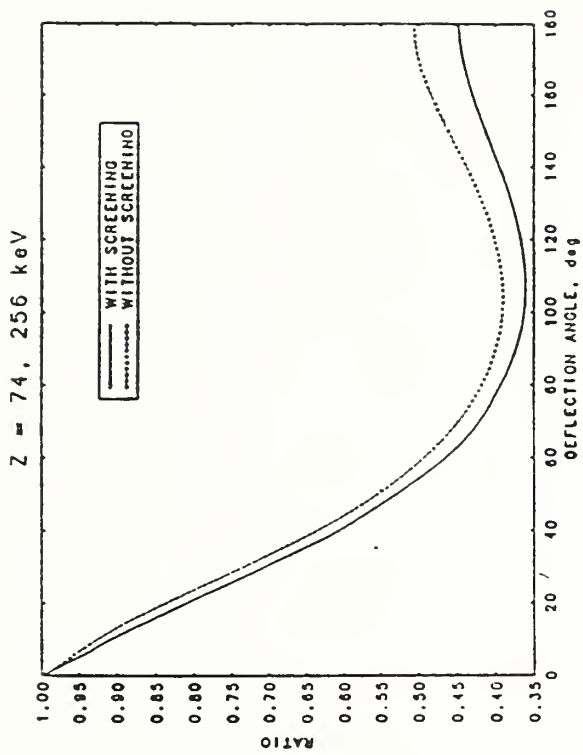


Fig. 3b

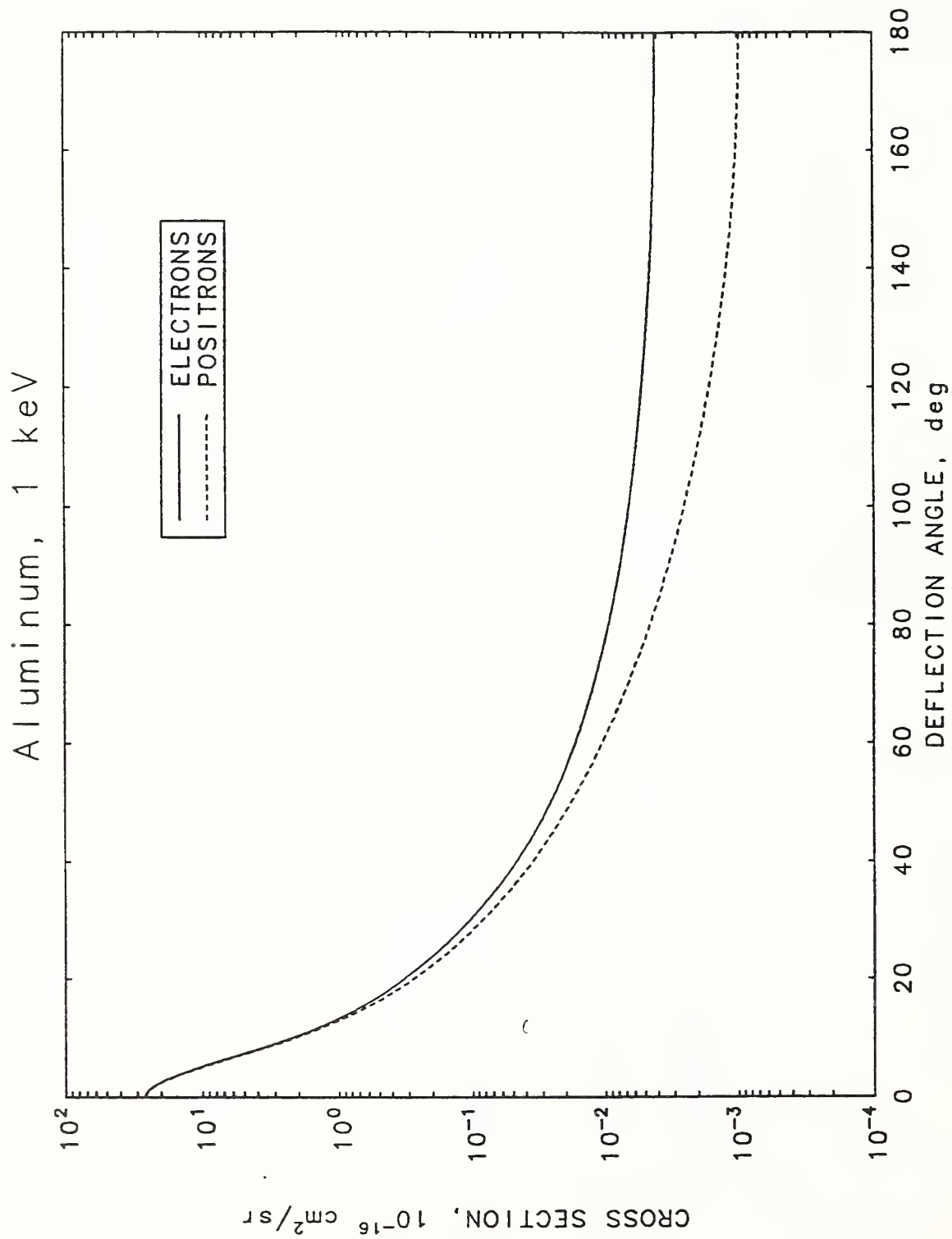


Fig. 4a

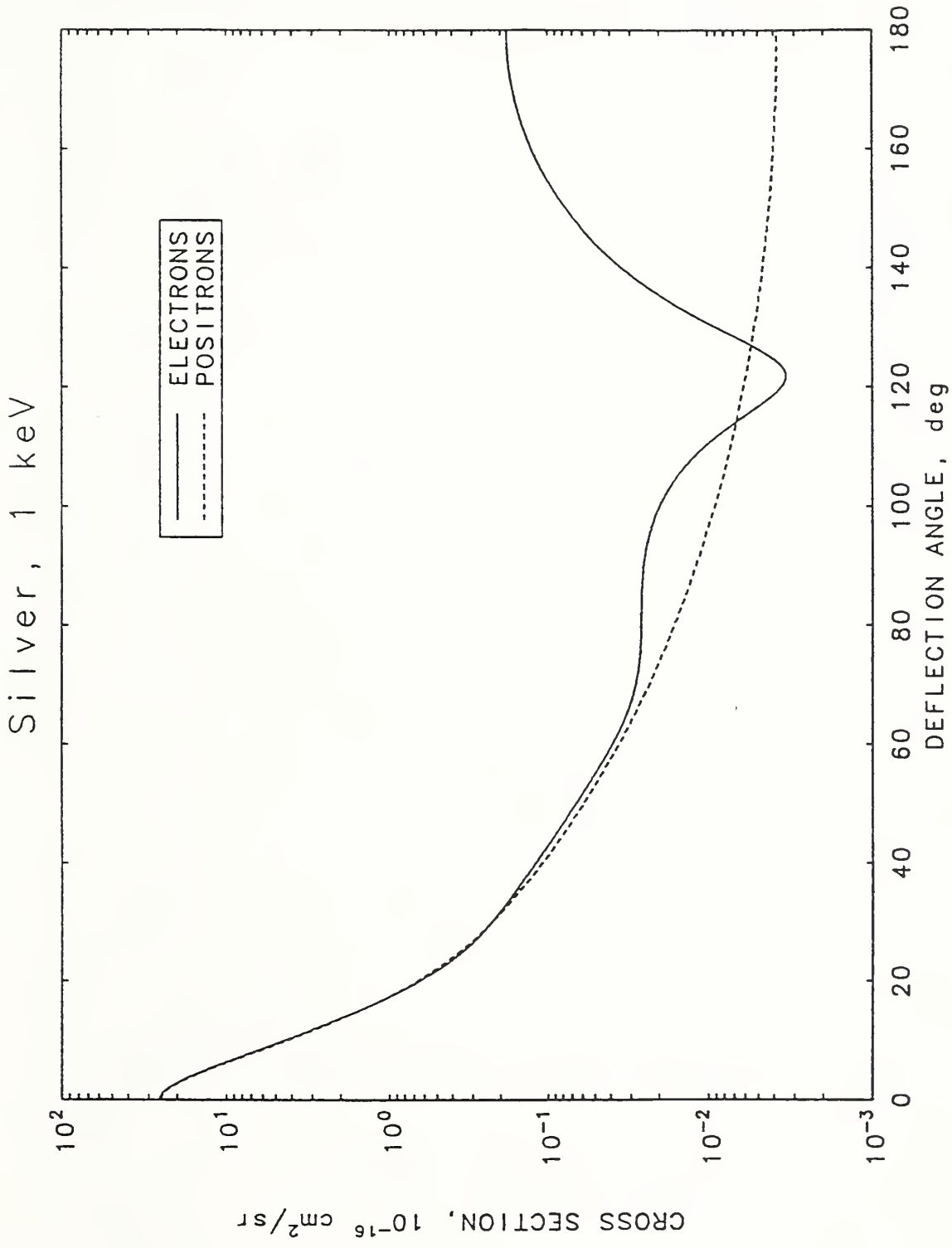


Fig. 4b

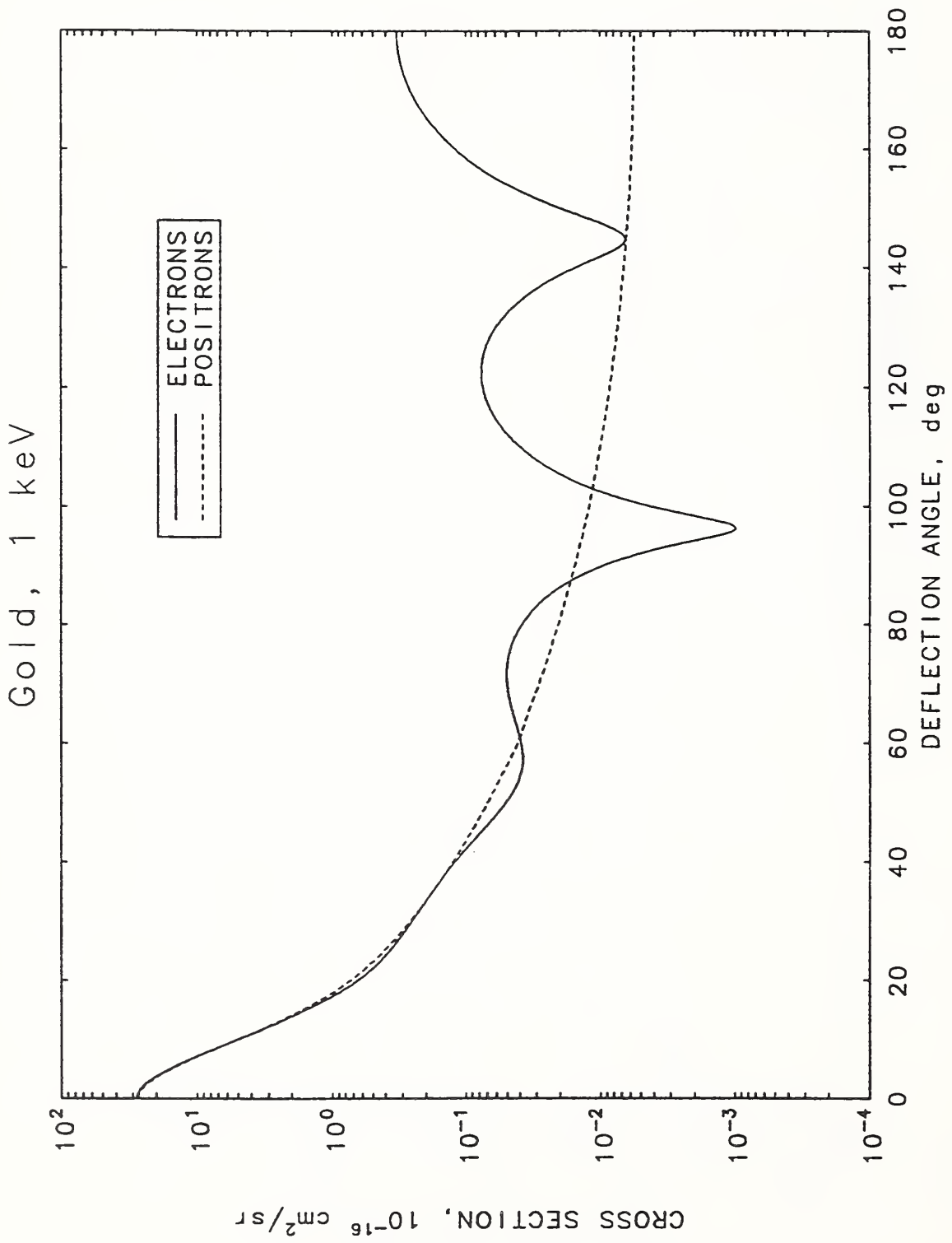


Fig. 4c

GOLD, Z=79

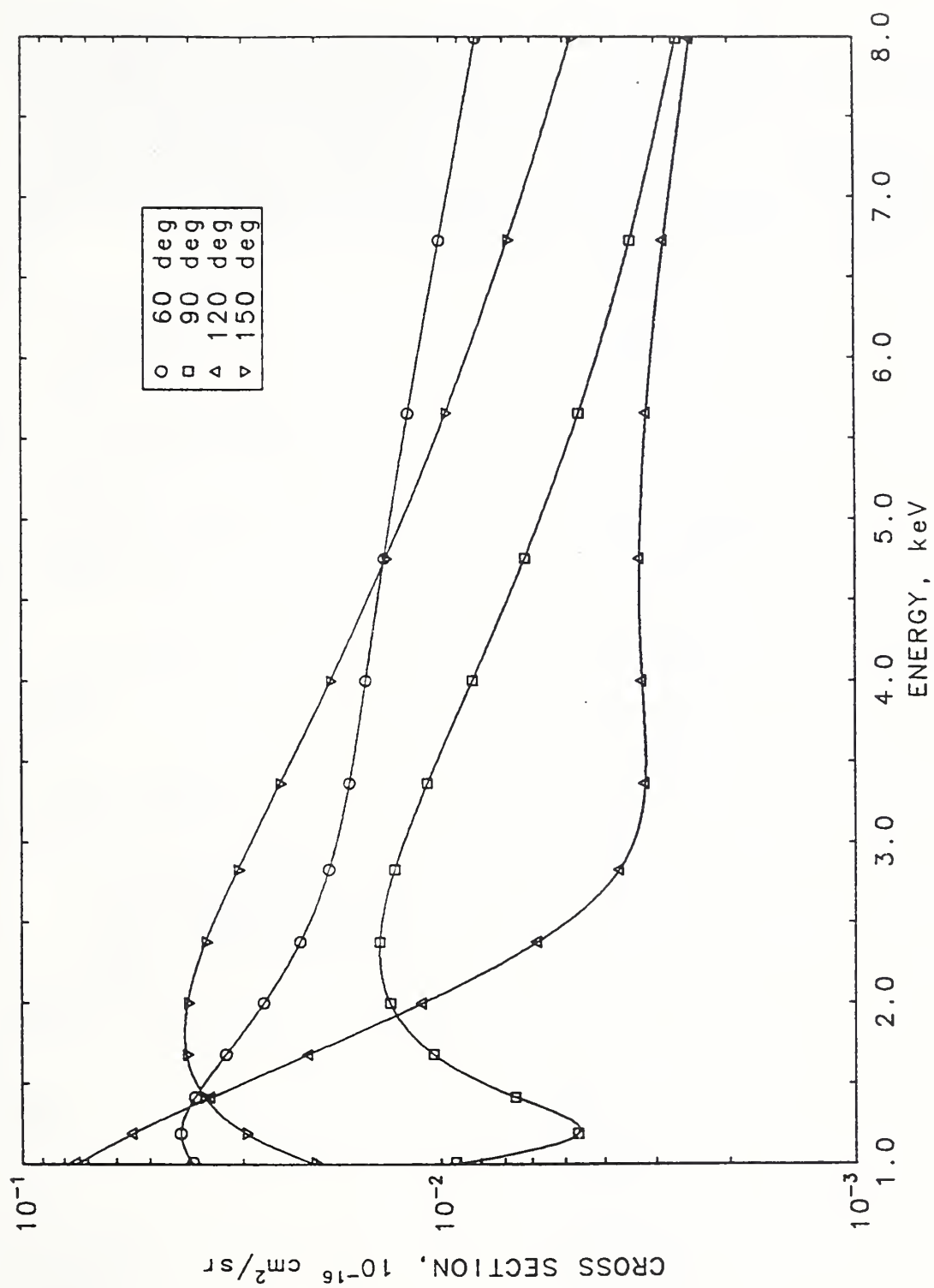


Fig. 5

Appendix: Source Code for Program ELINT

ELINT calls for three subroutines. Subroutine SCOFD generates coefficients for cubic-spline interpolation. Subroutine BSPOLD carries out the interpolation with these coefficients. Subroutine INDEX converts a integer with no more than three digits to three-character variable which is used as an extension for a file name. For an example, if the file ELAST1.013 for aluminum is required, the user specifies the atomic number, 13, as an integer, and ELINT generates the file name ELINT1.013 by concatenating the root name ELINT1 with the extension 013 produced by INDEX.

```

PROGRAM ELINT
15 Jan 92. Written by H.J.Berger, NIST, Gaithersburg, MD 20899.

By interpolation, calculates elastic scattering cross sections
at a specified set of energies (keV).

Calls subroutines SCOFD, BSPOLD and INDEX.

IMPLICIT DOUBLE PRECISION (A-H,O-Z)
DIMENSION ANG(193),S(193,20),SL(193),AF(20),BF(20),CF(20),DF(20),
1 ANG65(65),ENG(128),ENGL(128),SINT(193,128),T(20),TL(20),CRIL(20),
2 CRILL(20),CIRIL(20),CIRILL(20),CROSS(128),CROSS1(128)
CHARACTER EXT*3,ROOT*7,INPUT*20,OUTPUT*20,LINE*72,ENERG*30,FF*1
DATA ANG65/0.000,0.2500,0.500,0.7500,1.000,1.500,2.000,2.500,
1 3.000,3.500,4.000,4.500,5.000,5.500,6.000,6.500,7.000,7.500,
2 8.000,8.500,9.000,9.500,10.000,12.500,15.000,17.500,20.000,
3 22.500,25.000,27.500,30.000,32.500,35.000,37.500,40.000,
4 42.500,45.000,47.500,50.000,55.000,60.000,65.000,70.000,75.000,
5 80.000,85.000,90.000,95.000,100.000,105.000,110.000,115.000,
6 120.000,125.000,130.000,135.000,140.000,145.000,150.000,155.000,
7 160.000,165.000,170.000,175.000,180.000/
FF=CHAR(12)
1 FORMAT(1H )
5 FORMAT(A)
PRINT *, ' Enter atomic number IZ: '
READ *, IZ
CALL INDEX(IZ,EXT)
PRINT *, ' Options for particle: '
PRINT *, ' 1) Electrons '
PRINT *, ' 2) Positrons '
PRINT *, ' Choose: '
READ *, KPART
PRINT *, ' Options for energy input: '
PRINT *, ' 1) Input from file (energies in keV) '
PRINT *, ' 2) Single energy, from keyboard '
PRINT *, ' Choose option: '
READ *, INENG
GO TO (9,10),INENG
9 PRINT *, ' Enter name of energy-list file: '
READ 5, ENERG
OPEN (UNIT=7,FILE=ENERG)
READ (7,*) MENG
READ (7,*) (ENG(M),M=1,MENG)
CLOSE (7)
GO TO 11
10 MENG=1
PRINT *, ' Enter energy (keV): '
READ *, ENG(1)
11 DO 12 M=1,MENG
12 ENGL(M)=LOG(ENG(M))
EMIN=1.0E12
EMAX=0.0
DO 13 M=1,MENG
IF(ENG(M).LT.EMIN) EMIN=ENG(M)
IF(ENG(M).GT.EMAX) EMAX=ENG(M)
13 CONTINUE
IF(KPART.EQ.2) GO TO 75
PRINT *, ' Options for output (for electrons): '
PRINT *, ' 1) Table, 1 energy, 65 angles '
PRINT *, ' 2) Table, 1 energy (below 8 keV), 193 angles '
PRINT *, ' 3) Table, many energies, 65 angles '
PRINT *, ' 4) Arrays, 1 or many energies, 65 angles '
PRINT *, ' 5) Arrays, 1 or many energies (below 8 keV), '
PRINT *, ' 193 angles '
PRINT *, ' Chose option: '
READ *, MODE
PRINT *, ' Enter name of output file: '
READ 5, OUTPUT
GO TO (20,40,20,20,40), MODE
20 IHAX=65
JHAX=20
ROOT='ELAST1.'
DO 30 I=1,IHAX
30 ANG(I)=ANG65(I)
GO TO 80
40 IHAX=193
JHAX=13
ROOT='ELAST2.'
DO 50 N=1,5
50 ANG(N)=0.2500*DBLE(N-1)
DO 60 N=6,23
60 ANG(N)=1.000+0.500*DBLE(N-5)
DO 70 N=24,193
70 ANG(N)=10.000+DBLE(N-23)
GO TO 80
75 PRINT *, ' Options for output (for positrons): '
PRINT *, ' 1) Table, 1 energy, 65 angles '
PRINT *, ' 2) Table, many energies, 65 angles '
PRINT *, ' 3) Arrays, many energies, 65 angles '
PRINT *, ' Choose option: '
READ *, MOD
IF(MOD.EQ.1) MODE=1
IF(MOD.EQ.2) MODE=3
IF(MOD.EQ.3) MODE=4
80 GO TO (81,82,81,81,82), MODE
81 IF(EMAX.GT.1024.1) GO TO 83
IF(EMIN.LT.0.99) GO TO 83
GO TO 85
82 IF(EMAX.GT.8.0) GO TO 83
IF(EMAX.LT.0.99) GO TO 83
GO TO 85
83 print 84, emin,emax
84 format (' An energy is out of range. EMIN = ',F8.1,' EMAX = ',
1 F8.1)
STOP
85 IF(MODE.NE.3) GO TO 87
PRINT *, ' Enter number of energies for which cross sections '
PRINT *, ' are to be printed on single page (no greater than 9): '
READ *, MAD
MADD=MAD-1
IF(MAD.LE.9) GO TO 87
print 86, mad
86 format(16,' energies per page is not possible. ')
STOP
87 IF(KPART.EQ.1) GO TO 97
PRINT *, ' Enter name of output file: '
READ 5, OUTPUT
ROOT='ELAST3.'
IHAX=65
JHAX=11
DO 96 I=1,IHAX
96 ANG(I)=ANG65(I)
97 INPUT=ROOT//EXT
print 98, input
98 format(3X,a)
OPEN (UNIT=7,FILE=INPUT)
DO 100 J=1,JHAX
READ (7,*) IZ,T(J)
READ (7,*) CRIL(J),CIRIL(J)
READ (7,*) (S(I,J),I=1,IHAX)
100 CONTINUE
DO 110 J=1,JHAX
TL(J)=LOG(T(J))
CRILL(J)=LOG(CRIL(J))
110 CIRILL(J)=LOG(CIRIL(J))
CALL SCOFD(TL,CRILL,JHAX,AF,BF,CF,DF)
DO 120 M=1,MENG
CALL BSPOLD (ENGL(M),TL,AF,BF,CF,DF,JHAX,RES)
120 CROSS(M)=EXP(RES)
CALL SCOFD(TL,CIRILL,JHAX,AF,BF,CF,DF)
DO 130 M=1,MENG
CALL BSPOLD (ENGL(M),TL,AF,BF,CF,DF,JHAX,RES)
130 CROSS1(M)=EXP(RES)
DO 140 I=1,IHAX
DO 140 J=1,JHAX
140 SL(J)=LOG(S(I,J))
CALL SCOFD (TL,SL,JHAX,AF,BF,CF,DF)
DO 150 M=1,MENG
CALL BSPOLD (ENGL(M),TL,AF,BF,CF,DF,JHAX,RES)
150 SINT(I,M)=EXP(RES)
160 CONTINUE
OPEN (UNIT=8,FILE=OUTPUT)
IF(MODE.LT.4) GO TO 180
WRITE (8,165) IZ,KPART,MENG,IHAX
165 FORMAT(4I6)
DO 175 M=1,MENG
WRITE (8,170) IHAX,ENG(M),CROSS(M),CROSS1(M)
170 FORMAT(I6,OPF12.3,IP2E12.5)
WRITE (8,172) (SINT(I,M),I=1,IHAX)
172 FORMAT(IP6E12.5)
175 CONTINUE
STOP
180 IF(MODE.NE.3) GO TO 300
M1=1
M2=M1+MADD
188 IF(M2.GT.MENG) M2=MENG
GO TO (191,193), KPART
191 WRITE (8,192) IZ
192 FORMAT(' ELECTRONS, Elastic Scattering Cross Section, 10**(-16) cm
12/sr, Z = ',I2)
GO TO 195
193 WRITE (8,194) IZ
194 FORMAT(' POSITRONS, Elastic Scattering Cross Section, 10**(-16) cm
1 2/sr, Z = ',I2)
195 WRITE (8,1)
WRITE (8,200) (ENG(M),M=M1,M2)
200 FORMAT(' ENERGY(keV)',F7.1,9F11.1)
WRITE (8,210)
210 FORMAT(3X,'ANGLE')
WRITE (8,220)
220 FORMAT(3X,'(deg)')
ITAL=0
DO 240 I=1,IHAX
WRITE (8,230) ANG(I),(SINT(I,M),M=M1,M2)
230 FORMAT(OPF8.2,IP9E11.3)
ITAL=ITAL+1
IF(ITAL-21)240,240,235
235 WRITE (8,1)
ITAL=0
240 CONTINUE
WRITE (8,1)

```

```

WRITE (8,242) (CROSS(M),M=M1,M2)
242 FORMAT(' TOTAL',1P9E11.3)
WRITE (8,245) (CROSS1(M),M=M1,M2)
245 FORMAT(' TRANS',1P9E11.3)
WRITE (8,1)
WRITE (8,246)
246 FORMAT(' TOTAL: Total Cross Section, 10**(-16) cm2')
WRITE (8,247)
247 FORMAT(' TRANS: Transport Cross Section, 10**(-16) cm2')
IF(M2.EQ.MENG) STOP
WRITE (8,5) FF
M1=M2+1
M2=M1+MADD
GO TO 188
300 IF(KPART.EQ.1) WRITE (8,302) IZ
302 FORMAT(' ELECTRONS, Z = ',I2)
IF(KPART.EQ.2) WRITE (8,305) IZ
305 FORMAT(' POSITRONS, Z = ',I2)
WRITE (8,1)
WRITE (8,308) ENG(1)
308 FORMAT(' ENERGY (keV) = ',F6.1)
WRITE (8,1)
WRITE (8,310)
310 FORMAT(' ANG = angle, degrees')
WRITE (8,320)
320 FORMAT(' SIG = elastic scattering cross section, 10**(-16) cm2/sr'
1)
WRITE (8,1)
IF(IMAX.EQ.65) GO TO 360
WRITE (8,330)
330 FORMAT(4(9X,'ANG',8X,'SIG'))
WRITE (8,1)
ITAL=0
DO 350 I=1,48
I1=I
I2=I1+48
I3=I2+48
I4=I3+48
WRITE (8,340) ANG(I1),SINT(I1,1),ANG(I2),SINT(I2,1),
1 ANG(I3),SINT(I3,1),ANG(I4),SINT(I4,1)
340 FORMAT(4(OPF12.2,1PE11.3))
IF(I.EQ.12) WRITE (8,1)
IF(I.EQ.24) WRITE (8,1)
IF(I.EQ.36) WRITE (8,1)
350 CONTINUE
WRITE (8,355) ANG(193),SINT(193,1)
355 FORMAT(69X,OPF12.2,1PE11.3)
GO TO 390
360 WRITE (8,365)
365 FORMAT(3(9X,'ANG',8X,'SIG'))
WRITE (8,1)
DO 380 I=1,22
I1=I
I2=I1+22
I3=I2+22
IF(I.EQ.22) GO TO 375
WRITE (8,370) ANG(I1),SINT(I1,1),ANG(I2),SINT(I2,1),
1 ANG(I3),SINT(I3,1)
370 FORMAT(3(OPF12.2,1PE11.3))
IF(I.EQ.7) WRITE (8,1)
IF(I.EQ.14) WRITE (8,1)
GO TO 380
375 WRITE (8,376) ANG(I1),SINT(I1,1),ANG(I2),SINT(I2,1)
376 FORMAT(2(OPF12.2,1PE11.3))
380 CONTINUE
390 WRITE (8,1)
WRITE (8,400) CROSS(1)
400 FORMAT(' TOTAL CROSS SECTION = ',1PE11.3,' 10**(-16) cm2')
WRITE (8,410) CROSS1(1)
410 FORMAT(' TRANSPORT CROSS SECTION = ',1PE11.3,' 10**(-16) cm2')
STOP
END

SUBROUTINE SCOFD(X,F,NMAX,A,B,C,D)
1 JAN 87. Generates coefficients for cubic-spline interpolation.
C
C If S lies between X(M) and X(M+1), then
C  $F(S) = ((D(M)*S+C(M))*S+B(M))*S+A(M)$ 
C
C IMPLICIT DOUBLE PRECISION (A-H,O-Z)
DIMENSION X(1000),F(1000),A(1000),B(1000),C(1000),D(1000)
M1=2
M2=NMAX-1
S=0.0
DO 10 M=1,M2
D(M)=X(M+1)-X(M)
R=(F(M+1)-F(M))/D(M)
C(M)=R-S
10 S=R
S=0.0
R=0.0
C(1)=0.0
C(NMAX)=0.0
DO 20 M=1,M2
C(M)=C(M)+R*C(M-1)
B(M)=(X(M-1)-X(M+1))*2.0D0-R*S
S=D(M)
20 R=S/B(M)
MR=M2
DO 30 M=M1,M2
C(MR)=(D(MR)*C(MR+1)-C(MR))/B(MR)
30 MR=MR-1
DO 40 M=1,M2
S=D(M)
R=C(M+1)-C(M)
D(M)=R/S
C(M)=C(M)*3.0D0
B(M)=(F(M+1)-F(M))/S-(C(M)+R)*S
40 A(M)=F(M)
RETURN
END

SUBROUTINE BSPOLD(S,X,A,B,C,D,M,G)
1 JAN 87. Evaluates cubic-spline.
C
C IMPLICIT DOUBLE PRECISION (A-H,O-Z)
DIMENSION X(1000),A(1000),B(1000),C(1000),D(1000)
IF (X(1).GT.X(N)) GO TO 10
IDIR=0
MLB=0
HUB=N
GO TO 20
10 IDIR=1
MLB=N
HUB=0
20 IF (S.LE.X(HUB+IDIR)) GO TO 60
IF (S.LE.X(MLB+1-IDIR)) GO TO 70
ML=MLB
MU=HUB
GO TO 40
30 IF (IABS(MU-ML).LE.1) GO TO 80
40 MAV=(ML+MU)/2
IF (S.LT.X(MAV)) GO TO 50
ML=MAV
GO TO 30
50 MU=MAV
GO TO 30
60 MU=HUB+2*IDIR-1
GO TO 90
70 MU=MLB-2*IDIR+1
GO TO 90
80 MU=MU+IDIR-1
90 Q=S-X(MU)
G=(D(MU)*Q+C(MU))*Q+B(MU))*Q+A(MU)
RETURN
END

SUBROUTINE INDEX (L,TAG)
CHARACTER TAG*3,IND(0:9)*1
DATA IND/'0','1','2','3','4','5','6','7','8','9'/
I1=L/100
M=L-100*I1
I2=M/10
I3=M-10*I2
TAG=IND(I1)//IND(I2)//IND(I3)
RETURN
END

```