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Tables of X-Ray Mass Attenuation Coefficients and Mass Energy-Absorption Coefficients 1 keV to 20 MeV for Elements Z = 1 to 92 and 48 Additional Substances of Dosimetric Interest

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TABLES OF X-RAY MASS ATTENUATION COEFFICIENTS AND MASS ENERGY-ABSORPTION COEFFICIENTS 1 keV TO 20 MeV FOR ELEMENTS $Z = 1$ TO 92 AND 48 ADDITIONAL SUBSTANCES OF DOSIMETRIC INTEREST*

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Abstract

Tables and graphs of the photon mass attenuation coefficient μ/ρ and the mass energy-absorption coefficient μ_{en}/ρ are presented for all of the elements $Z = 1$ to 92, and for 48 compounds and mixtures of radiological interest. The tables cover energies of the photon (x ray, gamma ray, bremsstrahlung) from 1 keV to 20 MeV. The μ/ρ values are taken from the current photon interaction database at the National Institute of Standards and Technology, and the μ_{en}/ρ values are based on the new calculations by Seltzer described in Radiation Research **136**, 147 (1993). These tables of μ/ρ and μ_{en}/ρ replace and extend the tables given by Hubbell in the International Journal of Applied Radiation and Isotopes **33**, 1269 (1982).

KEYWORDS cross section, gamma-ray, mass attenuation coefficient, mass energy-absorption coefficient, photon, x-ray

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1. Introduction

The mass attenuation coefficient, μ/ρ, and the mass energy-absorption coefficient, μ_{en}/ρ, are basic quantities used in calculations of the penetration and the energy deposition by photons (x-ray, γ-ray, bremsstrahlung) in biological, shielding and other materials. These coefficients are defined in ICRU Report 33 (1980) and are discussed in Sections 2 and 3 of this work. They have been treated in some detail elsewhere, for example by Berger (1961), Allison (1961), Evans (1968), Hubbell and Berger (1968), Hubbell (1969, 1977, 1982), Storm and Israel (1970), Carlsson (1971), Ribberfors and Carlsson (1985), Cunningham and Johns (1980), Johns and Cunningham (1983), Higgins *et al.* (1992) and by Seltzer (1993). Compilations of both μ_{en}/ρ and μ/ρ include those by Plechaty *et al.* (1978) and by Cullen *et al.* (1989).

The present compilation is an extension of the recent calculations of Seltzer (1993), and is intended to replace the values of μ/ρ and μ_{en}/ρ given in Hubbell (1982) which have been widely used as reference data in radiation shielding and dosimetry computations. The present tables differ from those in Hubbell (1982) in the following respects:

1) Instead of providing results for only 40 selected elements with atomic numbers spanning $Z = 1$ to 92, now all 92 elements are included.

2) Instead of using a common energy grid from 1 keV to 20 MeV, without photoelectric absorption edges (K, L_1, etc.), now all edge energies are included and identified, and values of μ/ρ and μ_{en}/ρ are given just above and below each edge to facilitate accurate interpolation.

3) Somewhat different values for the atomic photoeffect cross section have been used for $Z = 2$ to 54. The 1982 compilation was based on the application of renormalization factors given by Scofield (1973) to his calculated values of the cross section[1]. An evaluation by Saloman *et al.* (1988) compared the Scofield theoretical values with the measured-value database, and concluded that overall agreement was better without this renormalization. The present work therefore uses the "un-renormalized" Scofield (1973) theoretical values of the photoeffect cross section for all elements $Z \geq 2$. The analytical results used for $Z = 1$ are the same as those used in the 1982 compilation.

4) For compounds and mixtures, values for μ/ρ can be obtained by simple additivity, i.e., combining values for the elements according to their proportions by weight. To the extent that values for μ_{en}/ρ are affected by the radiative losses (bremsstrahlung production, annihilation in flight, etc.) suffered during the course of slowing down in the medium by the electrons and positrons that have been set in motion, simple additivity is no longer adequate. The 1982 compilation ignored such matrix effects (they tend to be small at photon energies below 20 MeV); in the present tables they have been taken into account.

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[1]Although Scofield (1973) calculated the cross sections for all $Z \geq 2$, he gave renormalization factors only for $2 \leq Z \leq 54$.

These and other refinements, such as a more complete treatment of the atomic shell vacancy and fluorescence cascades, are discussed briefly in the sections that follow. More details can be found in Seltzer (1993). A similar version of these tables, with text in Japanese, is given in Seltzer and Hubbell (1995).

2. The Mass Attenuation Coefficient, μ/ρ

A narrow beam of monoenergetic photons with an incident intensity I_0, penetrating a layer of material with mass thickness[2] x and density ρ, emerges with intensity I given by the exponential attenuation law

$$I/I_0 = \exp\left[-(\mu/\rho)x\right] \quad . \tag{1}$$

Equation (1) can be rewritten as

$$\mu/\rho = x^{-1} \ln(I_0/I) \tag{2}$$

from which μ/ρ can be obtained from measured values of I_0, I and x. The various experimental arrangements and techniques from which μ/ρ can be obtained, particularly in the crystallographic photon energy/wavelength regime, have recently been examined and assessed by Creagh and Hubbell (1987, 1990) as part of the International Union of Crystallography (IUCr) X-Ray Attenuation Project. This has led to new tables of μ/ρ in the 1992 *International Tables for Crystallography* (Creagh and Hubbell, 1992). The current status of μ/ρ measurements has also been reviewed recently by Gerward (1993), and an updated bibliography of measured data is available in Hubbell (1994).

Present tabulations of μ/ρ rely heavily on theoretical values for the total cross section per atom, σ_{tot}, which is related to μ/ρ according to

$$\mu/\rho = \sigma_{tot} N_A/(uA) \quad . \tag{3}$$

In Eq. (3), N_A is Avogadro's number (6.022045×10^{23} mol^{-1}), u is the atomic mass unit (1/12 of the mass of an atom of nuclide ^{12}C), A is the relative atomic mass of the target element, and σ_{tot} is the total cross section for an interaction by the photon.[3] The total cross section can be written as the sum over contributions from the principal photon interactions,

$$\sigma_{tot} = \sigma_{pe} + \sigma_{coh} + \sigma_{incoh} + \sigma_{pair} + \sigma_{trip} + \sigma_{ph.n.} \tag{4}$$

where σ_{pe} is the atomic photoeffect cross section, σ_{coh} and σ_{incoh} are the coherent (Rayleigh) and the incoherent (Compton) scattering cross sections, respectively, σ_{pair} and σ_{trip} are the cross

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[2]Mass thickness is defined as the mass per unit area, and is obtained by multiplying the thickness t by the density ρ, i.e., $x = \rho t$.

[3]The attenuation coefficient, photon interaction cross sections and related quantities are functions of the photon energy. Explicit indication of this functional dependence has been omitted to improve readability.

sections for electron-positron production in the fields of the nucleus and of the atomic electrons, respectively, and $\sigma_{ph.n.}$ is the photonuclear cross section.

Photonuclear absorption of the photon by the atomic nucleus results most usually in the ejection of one or more neutrons and/or protons. This interaction can contribute as much as 5−10% to the total photon interaction cross section in a fairly narrow energy region usually occurring somewhere between 5 and 40 MeV, depending on where the giant resonance of the target nuclide falls (see, e.g., Hayward, 1970; Fuller and Hayward, 1976; and Dietrich and Berman, 1988; also the illustrative tables in Hubbell, 1969, 1982). The effects of this interaction can be observed in measurements of the total attenuation coefficient (see, e.g., Gimm and Hubbell, 1978). However, this cross section has not been included in previous tabulations because of the difficulties due to (a) the irregular dependence of both the magnitude and resonance-shape of the cross section as a function of both Z and A; (b) the gaps in the available information, much of which is for separated isotopes or targets otherwise differing from natural isotopic mixtures; and (c) the lack of theoretical models for $\sigma_{ph.n.}$ comparable to those available for calculations of the other cross sections of interest. The practice of omitting the contribution of the photonuclear cross section in tables of the mass attenuation coefficient has been continued in this work, along with the neglect of other less-probable photon-atom interactions, such as nuclear-resonance scattering and Delbrück scattering.

Our results for the elements are given in Table 3 for elements $Z = 1$ to 92 and photon energies 1 keV to 20 MeV, and have been calculated according to

$$\mu/\rho = \frac{N_A}{uA}\left(\sigma_{pe} + \sigma_{coh} + \sigma_{incoh} + \sigma_{pair} + \sigma_{trip}\right) \quad . \tag{5}$$

Values for the relative atomic mass A of the target elements were taken from Martin (1988) and can be extracted from the values of Z/A given in Table 1; values for the individual contributing cross sections are those found in the current NIST database (see Berger and Hubbell, 1987), as outlined below.

Atomic photoeffect. For photon energies from 1 keV to 1.5 MeV, values of the photoelectric cross section, σ_{pe}, are those calculated by Scofield (1973), based on his solution of the Dirac equation for the orbital electrons moving in a static Hartree-Slater central potential. No renormalization was performed using those factors given by Scofield for the elements with $Z = 2$ to 54 to convert to values expected from a relativistic Hartree-Fock model. This represents a break with the practice by Hubbell (1977, 1982) and Hubbell *et al.* (1980) in which this renormalization had been done.

Absorption-edge fine structure can be experimentally observed using continuum-energy photon sources and high-resolution detectors (see, e.g., Faessler, 1955; Deslattes, 1969; Hubbell *et al.*, 1974; Lytle *et al.*, 1984; and Del Grande, 1986, 1990), and the observed variations are subject to chemical, phase and other environmental effects, such as temperature (Lytle, 1963). As has been done in the past, this fine structure is ignored in the present compilation. The cross sections in the vicinity of absorption edges are instead assumed to have simple sawtooth shapes. Values at the edge have been obtained by extrapolation of the near-edge subshell cross sections of Scofield (1973) to the threshold edge energies given by Bearden and Burr (1967), according to

the same procedure used by Berger and Hubbell (1987) to prepare the NIST database. The interpolation procedures used for the present tables are slightly different from those used by Berger and Hubbell; here we use a cubic Hermite interpolant for the individual subshell cross sections rather than a cubic spline for the total photoeffect cross section, which results in occasional small differences in the vicinity of M- and N-shell edges of high-Z elements.

Scofield's (1973) photoeffect calculations were limited to photon energies of 1.5 MeV and below. His data were extended to higher energies (where the photoelectric cross section is quite small) by connecting them to the high-energy asymptotic values of Pratt (1960) through use of a semi-empirical formula (Hubbell, 1969).

Coherent and incoherent scattering. Values for the coherent (Rayleigh) scattering cross section, σ_{coh}, are taken from Hubbell and Øverbø (1979). These were calculated by numerical integration of the Thomson (1906) formula weighted by $F^2(q,Z)$, where $F(q,Z)$ is the relativistic Hartree-Fock atomic form factor and q is the momentum transfer. The compilation of $F(q,Z)$ by Hubbell and Øverbø was based on piecing together, over the different ranges of q and Z, values given by Pirenne (1946) for $Z = 1$, and those of Doyle and Turner (1968), Cromer and Waber (1974) and Øverbø (1977, 1978) for the other elements.

Values for the incoherent (Compton) scattering cross section, σ_{incoh}, are from Hubbell *et al.* (1975), obtained from numerical integration of the Klein-Nishina (1929) differential formula weighted by the incoherent scattering function $S(q,Z)$. For their compilation of $S(q,Z)$, Hubbell *et al.* (1975) pieced together results given by Pirenne (1946) ($Z = 1$), Brown (1970a, 1970b, 1971, 1972, 1974) ($Z = 2$ to 6, with configuration interaction) and by Cromer and Mann (1967) and Cromer (1969) ($Z = 7$ to 100, from a non-relativistic Hartree-Fock model). Radiative and double-Compton corrections from Mork (1971) were applied to the integrated values for σ_{incoh}.

Electron-positron pair and triplet production cross sections. Cross sections for the production of electron-positron pairs (e^-, e^+) in the field of the atomic nucleus, σ_{pair}, and for the production of triplets ($2e^-$, e^+) in the field of the atomic electrons, σ_{trip}, are taken from the compilation of Hubbell *et al.* (1980). Their synthesis combined the use of formulas from Bethe-Heitler theory with various other theoretical models to take into account screening, Coulomb, and radiative corrections. Different combinations were used in the near-threshold, intermediate and high-energy regions to obtain the best possible agreement with experimental cross sections (Gimm and Hubbell, 1978).

Mixtures and compounds. Values of the mass attenuation coefficient, μ/ρ, for the 48 mixtures and compounds (assumed homogeneous) are given in Table 4, and were obtained according to simple additivity:

$$\mu/\rho = \sum_i w_i \, (\mu/\rho)_i \qquad (6)$$

where w_i is the fraction by weight of the ith atomic constituent, and the $(\mu/\rho)_i$ values are from Table 3. The assumed fractions by weight are given in Table 2. To obtain $(\mu/\rho)_i$ values at all the absorption edges of all constituent elements, interpolation has been performed separately for the cross sections indicated in Eq. (5), including the photoeffect cross sections for the individual atomic subshells.

3. The Mass Energy-Absorption Coefficient, μ_{en}/ρ

The methods used to calculate the mass energy-absorption coefficient, μ_{en}/ρ, are described perhaps more clearly through the use of an intermediate quantity, the mass energy-transfer coefficient, μ_{tr}/ρ.

The *mass energy-transfer coefficient*, μ_{tr}/ρ, when multiplied by the photon energy fluence ψ ($\psi=\Phi E$, where Φ is the photon fluence and E the photon energy), gives the dosimetric quantity *kerma*. As discussed in depth by Carlsson (1985), kerma has been defined (ICRU 1980) as (and is an acronym for) the sum of the *k*inetic *e*nergies of all those primary charged particles *r*eleased by uncharged particles (here photons) per unit *ma*ss. Thus μ_{tr}/ρ takes into account the escape only of secondary photon radiations produced at the initial photon-atom interaction site, plus, by convention, the quanta of radiation from the annihilation of positrons (assumed to have come to rest) originating in the initial pair- and triplet-production interactions.

Hence μ_{tr}/ρ is defined as

$$\mu_{tr}/\rho = \frac{N_A}{uA}\left(f_{pe}\sigma_{pe} + f_{incoh}\sigma_{incoh} + f_{pair}\sigma_{pair} + f_{trip}\sigma_{trip}\right) \quad . \tag{7}$$

In Eq. (7), coherent scattering has been omitted because of the negligible energy transfer associated with it, and the factors f represent the average fractions of the photon energy E that is transferred to kinetic energy of charged particles in the remaining types of interactions. These energy-transfer fractions are given by

$$f_{pe} = 1 - (X/E) \quad , \tag{8}$$

where X is the average energy of fluorescence radiation (characteristic x rays) emitted per absorbed photon;

$$f_{incoh} = 1 - \left(\langle E' \rangle + X\right)/E \quad , \tag{9}$$

where $\langle E' \rangle$ is the average energy of the Compton-scattered photon;

$$f_{pair} = 1 - 2mc^2/E \quad , \tag{10}$$

where mc^2 is the rest energy of the electron; and

$$f_{trip} = 1 - \left(2mc^2 + X\right)/E \quad . \tag{11}$$

The fluorescence energy X in Eqs. (8), (9), and (11) depends on the distribution of atomic-electron vacancies produced in the process under consideration and is in general evaluated differently for photoelectric absorption, incoherent scattering, and triplet production. Moreover, X is assumed to include the emission of "cascade" fluorescence x rays associated with the complete atomic relaxation process initiated by the primary vacancy, the significance of which has been pointed out by Carlsson (1971).

As only the characteristics of the target atom are involved in calculating μ_{tr}/ρ, the mass energy-transfer coefficient for homogeneous mixtures and compounds can be obtained in a manner analogous to that for μ/ρ:

$$\mu_{tr}/\rho = \sum_i w_i \left(\mu_{tr}/\rho\right)_i \quad . \tag{12}$$

The *mass energy-absorption coefficient* involves the further emission of radiation produced by the charged particles in traveling through the medium, and is defined as

$$\mu_{en}/\rho = (1 - g)\ \mu_{tr}/\rho \quad . \tag{13}$$

The factor g in Eq. (13) represents the average fraction of the kinetic energy of secondary charged particles (produced in all the types of interactions) that is subsequently lost in radiative (photon-emitting) energy-loss processes as the particles slow to rest in the medium. The evaluation of g is accomplished by integrating the cross section for the radiative process of interest over the differential tracklength distribution established by the particles in the course of slowing down. In the continuous-slowing-down approximation, the tracklength distribution is replaced by the reciprocal of the electron or positron total stopping power of the medium. Even assuming Bragg additivity for the stopping power (that now appears in the denominator of the integral), simple additivity for μ_{en}/ρ or − as suggested by Attix (1984) − for g is formally incorrect. When the numerical values of g are relatively small, the errors in μ_{en}/ρ incurred by using simple additivity schemes are usually small, a consequence partially mitigating the use additivity, particularly for photon energies below 20 MeV. However, additivity has not been used in the present work.

For the values of μ_{en}/ρ given in Tables 3 and 4, the evaluation of g takes into explicit account (a) the emission of bremsstrahlung, (b) positron annihilation in flight, (c) fluorescence emission as a result of electron- and positron-impact ionization; and (d) the effects on these processes of energy-loss straggling and knock-on electron production as the secondary particles slow down (i.e., of going beyond the continuous-slowing-down approximation). This scheme thus goes beyond that of ICRU (1980) which, perhaps by oversight, formally includes only (a) above, and of previous work, which usually includes (a) and (b).

For the calculation of g, the radiative (bremsstrahlung) stopping powers used are based on the results by Seltzer and Berger (1985, 1986) and Kim *et al.* (1986), and are very slightly different from the values used in ICRU 37 (1984). The collision stopping powers, evaluated according to the prescriptions in ICRU 37 (1984), include departures[4] from simple Bragg additivity due to chemical-binding, phase, and density effects, as reflected in the choice of the mean excitation energy I and density ρ for the medium.

Further details of the calculations are given in Seltzer (1993) and will not be repeated here. Instead, a summary of expressions used for the calculation of g is given below. The formulas include the integration over the initial particle spectra, and have been generalized to include mixtures and compounds.

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[4]These departures from Bragg additivity for the stopping power of the matrix can result in discernable differences in the mass energy-absorption coefficient, such as between those for water vapor and liquid.

Photoelectric Absorption. The radiative losses for the photoelectrons have been evaluated according to

$$g_{pe} = \left[f_{pe} E \frac{\mu_{pe}}{\rho} \right]^{-1} \sum_i w_i \sum_n \left[\frac{\mu_{pe}}{\rho} \right]_{n,i} \cdot (E - B_{n,i})\ Y(E - B_{n,i}) \quad , \tag{14}$$

where μ_{pe}/ρ is the total photoeffect mass attenuation coefficient for an incident photon of energy E in the medium, $(\mu_{pe}/\rho)_{n,i}$ is the corresponding coefficient for the nth atomic electron subshell of the ith elemental constituent, $B_{n,i}$ is the binding energy of that subshell, and

$$Y(T) = Y_b(T) + Y_x(T) \tag{15}$$

is the total radiative yield. The total radiative yield has been evaluated as the sum of two components. The *bremsstrahlung yield,* $Y_b(T)$, is the mean fraction of the initial kinetic energy T of an electron (or positron) that is converted to bremsstrahlung energy as the particle slows down to rest; and the *x-ray energy yield,* $Y_x(T)$, usually very much smaller than $Y_b(T)$, is the mean fraction of the initial kinetic energy converted to fluorescence emission due to ionization by the electron (or positron) in the course of slowing down. The very small radiative losses for the associated Auger electrons have been neglected.

Incoherent (Compton) Scattering. For incoherent scattering

$$g_{incoh} = \left[f_{incoh} E \frac{\mu_{incoh}}{\rho} \right]^{-1} \int_{E_{min}}^{E} \left[\sum_i w_i \frac{N_A}{uA_i} S(q, Z_i) \right] \times \frac{d\sigma_{KN}}{dE'} \cdot (E - E')\ Y(E - E')\, dE' \quad , \tag{16}$$

where $S(q,Z_i)$ is the incoherent scattering factor, taken from the compilation of Hubbell *et al.* (1975), $d\sigma_{KN}/dE'$ is the Klein-Nishina cross section differential in the Compton-scattered photon energy E', $E_{min} = E/(1+2E/mc^2)$ is the minimum energy of the scattered photon (corresponding to 180° scattering), and $Y(T)$ is the total radiative yield.

Pair and Triplet production. The radiative losses from electrons and positrons created in the pair and triplet processes, including the effects of positron annihilation in flight, have been evaluated according to:

$$g_{pair} = \left[f_{pair} E \frac{\mu_{pair}(E)}{\rho} \right]^{-1} \int_0^{E-2mc^2} \left\{ \sum_i w_i \left[\frac{\mu_{pair}}{\rho} \right]_i P_{pair,i}(T_+) \right\} \times \left\{ \left(E - 2mc^2 - T_+\right) Y_- \left(E - 2mc^2 - T_+\right) + T_+ \left[Y_+(T_+) + \eta(T_+) \right] \right\} dT_+ \quad , \tag{17}$$

where $P_{pair,i}(T_+)dT_+$ is the probability that the positron from a pair-production interaction with the ith constituent atom will have a kinetic energy between T_+ and $T_+ + dT_+$, $Y_-(T_-)$ and $Y_+(T_+)$ are the total radiation yields for the electrons and positrons, respectively, and $\eta(T_+)$ is

the correction for positron annihilation in flight. Pair spectra have been evaluated using Bethe-Heitler theory in conjunction with screening and Coulomb corrections. The annihilation-in-flight correction has been derived on the basis outlined in Berger (1961), and has been evaluated using the two-quanta annihilation-in-flight cross section of Bethe (1935) plus estimates for the one-quantum annihilation-in-flight cross section.

Computation of g_{trip} proceeds similarly, but using the threshold for triplet production of $4mc^2$ instead of $2mc^2$ in Eq. (17), and using the Wheeler-Lamb (1939) expressions for the screening corrections to the triplet spectra.

4. Summary

Values of the *mass attenuation coefficient*, μ/ρ, and the *mass energy-absorption coefficient*, μ_{en}/ρ, for photon energies 1 keV to 20 MeV, including all absorption edges, are given for all elements $Z = 1$ to 92 in Table 3 and for 48 compounds and mixtures of radiological interest in Table 4. Graphs of μ/ρ and μ_{en}/ρ are presented for all materials included in Tables 3 and 4. Table 1 lists the values of Z/A, the mean excitation energy I, and the density ρ used in the calculations of μ_{en}/ρ for Table 3; Table 2 gives similar information used to obtain results for Table 4, including the fractions by weight w_i of the constituent elements assumed for each material.

A journal publication of this material is planned by the authors, adding tables also of the mass energy-transfer coefficient μ_{tr}/ρ as defined in Eqs. (7) to (12), and with the photon energy range extended up to 100 MeV. Corrections, criticisms and suggestions on the presentation in this interim work will be welcomed by the authors.

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Table 1. Material constants assumed in the present evaluations for elemental media. Values are given for the ratio of atomic number-to-mass Z/A, the mean excitation energy I, and the density ρ. Some density values are only nominal; those for $Z = 85$ and 87 were arbitrarily set to 10 in order to complete the calculations.

Z	Element	Z/A	I (eV)	Density (g/cm^3)
1	HYDROGEN	0.99212	19.2	8.375E-05
2	HELIUM	0.49968	41.8	1.663E-04
3	LITHIUM	0.43221	40.0	5.340E-01
4	BERYLLIUM	0.44384	63.7	1.848E+00
5	BORON	0.46245	76.0	2.370E+00
6	CARBON, GRAPHITE	0.49954	78.0	1.700E+00
7	NITROGEN	0.49976	82.0	1.165E-03
8	OXYGEN	0.50002	95.0	1.332E-03
9	FLUORINE	0.47372	115.0	1.580E-03
10	NEON	0.49555	137.0	8.385E-04
11	SODIUM	0.47847	149.0	9.710E-01
12	MAGNESIUM	0.49373	156.0	1.740E+00
13	ALUMINUM	0.48181	166.0	2.699E+00
14	SILICON	0.49848	173.0	2.330E+00
15	PHOSPHORUS	0.48428	173.0	2.200E+00
16	SULFUR	0.49897	180.0	2.000E+00
17	CHLORINE	0.47951	174.0	2.995E-03
18	ARGON	0.45059	188.0	1.662E-03
19	POTASSIUM	0.48595	190.0	8.620E-01
20	CALCIUM	0.49903	191.0	1.550E+00
21	SCANDIUM	0.46712	216.0	2.989E+00
22	TITANIUM	0.45948	233.0	4.540E+00
23	VANADIUM	0.45150	245.0	6.110E+00
24	CHROMIUM	0.46157	257.0	7.180E+00
25	MANGANESE	0.45506	272.0	7.440E+00
26	IRON	0.46556	286.0	7.874E+00
27	COBALT	0.45815	297.0	8.900E+00
28	NICKEL	0.47708	311.0	8.902E+00
29	COPPER	0.45636	322.0	8.960E+00
30	ZINC	0.45879	330.0	7.133E+00
31	GALLIUM	0.44462	334.0	5.904E+00
32	GERMANIUM	0.44071	350.0	5.323E+00
33	ARSENIC	0.44046	347.0	5.730E+00
34	SELENIUM	0.43060	348.0	4.500E+00
35	BROMINE	0.43803	343.0	7.072E-03
36	KRYPTON	0.42959	352.0	3.478E-03
37	RUBIDIUM	0.43291	363.0	1.532E+00
38	STRONTIUM	0.43369	366.0	2.540E+00
39	YTTRIUM	0.43867	379.0	4.469E+00
40	ZIRCONIUM	0.43848	393.0	6.506E+00
41	NIOBIUM	0.44130	417.0	8.570E+00
42	MOLYBDENUM	0.43777	424.0	1.022E+01
43	TECHNETIUM	0.43919	428.0	1.150E+01
44	RUTHENIUM	0.43534	441.0	1.241E+01
45	RHODIUM	0.43729	449.0	1.241E+01
46	PALLADIUM	0.43225	470.0	1.202E+01
47	SILVER	0.43572	470.0	1.050E+01
48	CADMIUM	0.42700	469.0	8.650E+00
49	INDIUM	0.42676	488.0	7.310E+00
50	TIN	0.42120	488.0	7.310E+00
51	ANTIMONY	0.41889	487.0	6.691E+00
52	TELLURIUM	0.40752	485.0	6.240E+00
53	IODINE	0.41764	491.0	4.930E+00
54	XENON	0.41130	482.0	5.485E-03
55	CESIUM	0.41383	488.0	1.873E+00
56	BARIUM	0.40779	491.0	3.500E+00
57	LANTHANUM	0.41035	501.0	6.154E+00
58	CERIUM	0.41395	523.0	6.657E+00
59	PRASEODYMIUM	0.41871	535.0	6.710E+00
60	NEODYMIUM	0.41597	546.0	6.900E+00
61	PROMETHIUM	0.42094	560.0	7.220E+00
62	SAMARIUM	0.41234	574.0	7.460E+00
63	EUROPIUM	0.41457	580.0	5.243E+00
64	GADOLINIUM	0.40699	591.0	7.900E+00
65	TERBIUM	0.40900	614.0	8.229E+00
66	DYSPROSIUM	0.40615	628.0	8.550E+00
67	HOLMIUM	0.40623	650.0	8.795E+00
68	ERBIUM	0.40655	658.0	9.066E+00
69	THULIUM	0.40844	674.0	9.321E+00
70	YTTERBIUM	0.40453	684.0	6.730E+00
71	LUTETIUM	0.40579	694.0	9.840E+00
72	HAFNIUM	0.40338	705.0	1.331E+01
73	TANTALUM	0.40343	718.0	1.665E+01
74	TUNGSTEN	0.40250	727.0	1.930E+01
75	RHENIUM	0.40278	736.0	2.102E+01
76	OSMIUM	0.39958	746.0	2.257E+01
77	IRIDIUM	0.40058	757.0	2.242E+01
78	PLATINUM	0.39984	790.0	2.145E+01
79	GOLD	0.40108	790.0	1.932E+01
80	MERCURY	0.39882	800.0	1.355E+01
81	THALLIUM	0.39631	810.0	1.172E+01
82	LEAD	0.39575	823.0	1.135E+01
83	BISMUTH	0.39717	823.0	9.747E+00
84	POLONIUM	0.40195	830.0	9.320E+00
85	ASTATINE	0.40479	825.0	1.000E+01
86	RADON	0.38736	794.0	9.066E-03
87	FRANCIUM	0.39010	827.0	1.000E+01
88	RADIUM	0.38934	826.0	5.000E+00
89	ACTINIUM	0.39202	841.0	1.007E+01
90	THORIUM	0.38787	847.0	1.172E+01
91	PROTACTINIUM	0.39388	878.0	1.537E+01
92	URANIUM	0.38651	890.0	1.895E+01

Table 2. Material constants and composition assumed in the present evaluations for compounds and mixtures. Values are given for the mean ratio of atomic number-to-mass $<Z/A>$, the mean excitation energy I, and the density ρ. Some density values are only nominal.

Material	<Z/A>	I (eV)	Density (g/cm^3)	Composition (Z : fraction by weight)
A-150 TISSUE-EQUIVALENT PLASTIC	0.54903	65.1	1.127E+00	1: 0.101330 6: 0.775498 7: 0.035057 8: 0.052315 9: 0.017423 20: 0.018377
ADIPOSE TISSUE (ICRU-44)	0.55579	64.8	9.500E-01	1: 0.114000 6: 0.598000 7: 0.007000 8: 0.278000 11: 0.001000 16: 0.001000 17: 0.001000
AIR, DRY (NEAR SEA LEVEL)	0.49919	85.7	1.205E-03	6: 0.000124 7: 0.755268 8: 0.231781 18: 0.012827
ALANINE	0.53876	71.9	1.424E+00	1: 0.079192 6: 0.404437 7: 0.157213 8: 0.359157
B-100 BONE-EQUIVALENT PLASTIC	0.52740	85.9	1.450E+00	1: 0.065473 6: 0.536942 7: 0.021500 8: 0.032084 9: 0.167415 20: 0.176585
BAKELITE	0.52792	72.4	1.250E+00	1: 0.057444 6: 0.774589 8: 0.167968
BLOOD, WHOLE (ICRU-44)	0.54999	75.2	1.060E+00	1: 0.102000 6: 0.110000 7: 0.033000 8: 0.745000 11: 0.001000 15: 0.001000 16: 0.002000 17: 0.003000 19: 0.002000 26: 0.001000
BONE, CORTICAL (ICRU-44)	0.51478	112.0	1.920E+00	1: 0.034000 6: 0.155000 7: 0.042000 8: 0.435000 11: 0.001000 12: 0.002000 15: 0.103000 16: 0.003000 20: 0.225000
BRAIN, GREY/WHITE MATTER (ICRU-44)	0.55239	73.9	1.040E+00	1: 0.107000 6: 0.145000 7: 0.022000 8: 0.712000 11: 0.002000 15: 0.004000 16: 0.002000 17: 0.003000 19: 0.003000
BREAST TISSUE (ICRU-44)	0.55196	70.3	1.020E+00	1: 0.106000 6: 0.332000 7: 0.030000 8: 0.527000 11: 0.001000 15: 0.001000 16: 0.002000 17: 0.001000
C-552 AIR-EQUIVALENT PLASTIC	0.49969	86.8	1.760E+00	1: 0.024681 6: 0.501610 8: 0.004527 9: 0.465209 14: 0.003973
CADMIUM TELLURIDE	0.41665	539.3	6.200E+00	48: 0.468358 52: 0.531642
CALCIUM FLUORIDE	0.48671	166.0	3.180E+00	9: 0.486672 20: 0.513328
CALCIUM SULFATE	0.49948	152.3	2.960E+00	8: 0.470081 16: 0.235534 20: 0.294385
0.015 M CERIC AMMONIUM SULFATE SOLUTION	0.55282	76.7	1.030E+00	1: 0.107694 7: 0.000816 8: 0.875172 16: 0.014279 58: 0.002040
CESIUM IODIDE	0.41569	553.1	4.510E+00	53: 0.488451 55: 0.511549

Table 2. (Continued)

Material	<Z/A>	I (eV)	Density (g/cm^3)	Composition (Z : fraction by weight)
CONCRETE, ORDINARY	0.50932	124.5	2.300E+00	1: 0.022100 6: 0.002484 8: 0.574930 11: 0.015208 12: 0.001266 13: 0.019953 14: 0.304627 19: 0.010045 20: 0.042951 26: 0.006435
CONCRETE, BARITE (TYPE BA)	0.45714	248.2	3.350E+00	1: 0.003585 8: 0.311622 12: 0.001195 13: 0.004183 14: 0.010457 16: 0.107858 20: 0.050194 26: 0.047505 56: 0.463400
EYE LENS (ICRU-44)	0.54709	74.3	1.070E+00	1: 0.096000 6: 0.195000 7: 0.057000 8: 0.646000 11: 0.001000 15: 0.001000 16: 0.003000 17: 0.001000
FERROUS SULFATE (STANDARD FRICKE)	0.55334	76.3	1.024E+00	1: 0.108376 8: 0.878959 11: 0.000022 16: 0.012553 17: 0.000035 26: 0.000055
GADOLINIUM OXYSULFIDE	0.42265	493.3	7.440E+00	8: 0.084527 16: 0.084704 64: 0.830769
GAFCHROMIC SENSOR	0.54384	67.2	1.300E+00	1: 0.089700 6: 0.605800 7: 0.112200 8: 0.192300
GALLIUM ARSENIDE	0.44246	384.9	5.310E+00	31: 0.482030 33: 0.517970
GLASS, BOROSILICATE ("PYREX")	0.49707	134.0	2.230E+00	5: 0.040066 8: 0.539559 11: 0.028191 13: 0.011644 14: 0.377220 19: 0.003321
GLASS, LEAD	0.42101	526.4	6.220E+00	8: 0.156453 14: 0.080866 22: 0.008092 33: 0.002651 82: 0.751938
LITHIUM FLUORIDE	0.46262	94.0	2.635E+00	3: 0.267585 9: 0.732415
LITHIUM TETRABORATE	0.48485	94.6	2.440E+00	3: 0.082081 5: 0.255715 8: 0.662204
LUNG TISSUE (ICRU-44)	0.55048	75.2	1.050E+00	1: 0.103000 6: 0.105000 7: 0.031000 8: 0.749000 11: 0.002000 15: 0.002000 16: 0.003000 17: 0.003000 19: 0.002000
MAGNESIUM TETRABORATE	0.49012	108.3	2.530E+00	5: 0.240870 8: 0.623762 12: 0.135367
MERCURIC IODIDE	0.40933	684.5	6.360E+00	53: 0.558560 80: 0.441440
MUSCLE, SKELETAL (ICRU-44)	0.55000	74.6	1.050E+00	1: 0.102000 6: 0.143000 7: 0.034000 8: 0.710000 11: 0.001000 15: 0.002000 16: 0.003000 17: 0.001000 19: 0.004000

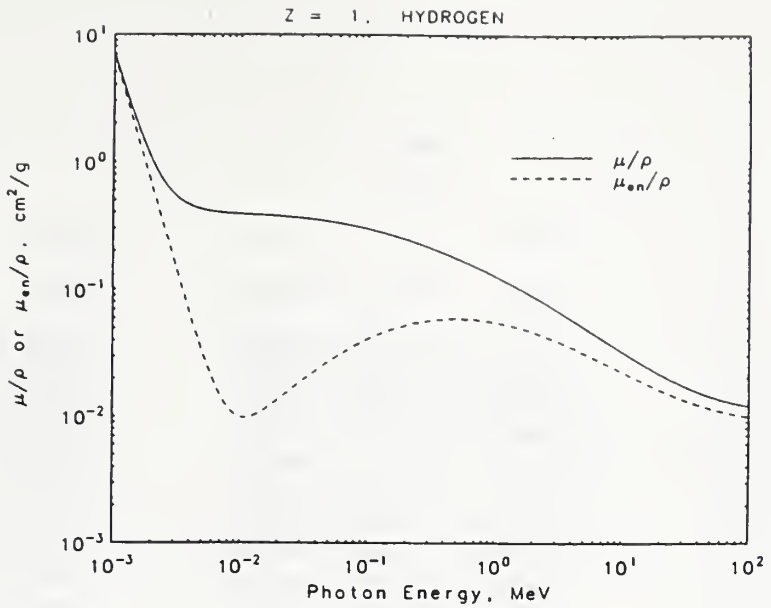
Table 2. (Continued)

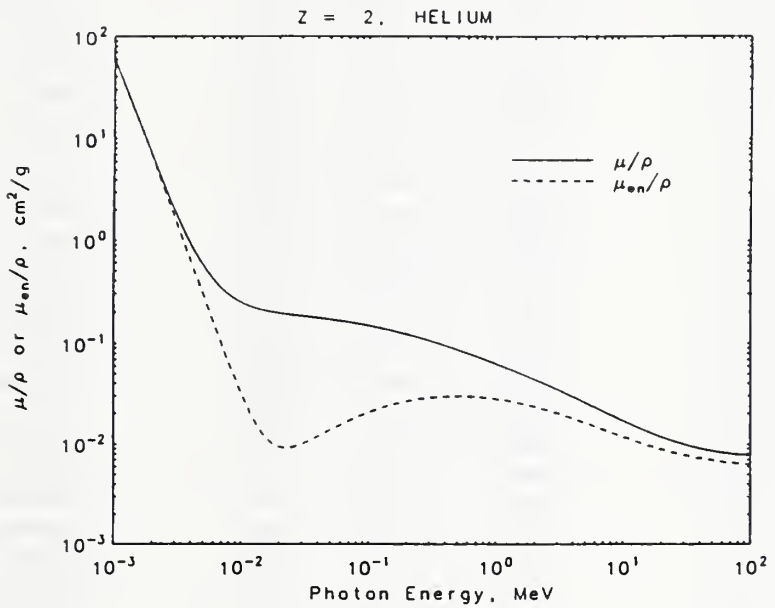
Material	<Z/A>	I (eV)	Density (g/cm^3)	Composition (Z : fraction by weight)
OVARY (ICRU-44)	0.55149	75.0	1.050E+00	1: 0.105000 6: 0.093000 7: 0.024000 8: 0.768000 11: 0.002000 15: 0.002000 16: 0.002000 17: 0.002000 19: 0.002000
PHOTOGRAPHIC EMULSION (KODAK TYPE AA)	0.48176	179.0	2.200E+00	1: 0.030500 6: 0.210700 7: 0.072100 8: 0.163200 35: 0.222800 47: 0.300700
PHOTOGRAPHIC EMULSION (STANDARD NUCLEAR)	0.45453	331.0	3.815E+00	1: 0.014100 6: 0.072261 7: 0.019320 8: 0.066101 16: 0.001890 35: 0.349104 47: 0.474105 53: 0.003120
PLASTIC SCINTILLATOR (VINYLTOLUENE)	0.54141	64.7	1.032E+00	1: 0.085000 6: 0.915000
POLYETHYLENE	0.57033	57.4	9.300E-01	1: 0.143716 6: 0.856284
POLYETHYLENE TEREPHTHALATE, "MYLAR"	0.52037	78.7	1.380E+00	1: 0.041960 6: 0.625016 8: 0.333024
POLYMETHYL METHACRYLATE	0.53937	74.0	1.190E+00	1: 0.080541 6: 0.599846 8: 0.319613
POLYSTYRENE	0.53768	68.7	1.060E+00	1: 0.077421 6: 0.922579
POLYTETRAFLUOROETHYLENE, "TEFLON"	0.47993	99.1	2.250E+00	6: 0.240183 9: 0.759818
POLYVINYL CHLORIDE	0.51201	108.2	1.406E+00	1: 0.048382 6: 0.384361 17: 0.567257
RADIOCHROMIC DYE FILM (NYLON BASE)	0.54987	64.5	1.080E+00	1: 0.101996 6: 0.654396 7: 0.098915 8: 0.144693
TESTIS (ICRU-44)	0.55200	74.7	1.040E+00	1: 0.106000 6: 0.099000 7: 0.020000 8: 0.766000 11: 0.002000 15: 0.001000 16: 0.002000 17: 0.002000 19: 0.002000
TISSUE, SOFT (ICRU-44)	0.54996	74.7	1.060E+00	1: 0.102000 6: 0.143000 7: 0.034000 8: 0.708000 11: 0.002000 15: 0.003000 16: 0.003000 17: 0.002000 19: 0.003000
TISSUE, SOFT (ICRU FOUR-COMPONENT)	0.54975	74.9	1.000E+00	1: 0.101174 6: 0.111000 7: 0.026000 8: 0.761826
TISSUE-EQUIVALENT GAS (METHANE BASED)	0.54992	61.2	1.064E-03	1: 0.101873 6: 0.456177 7: 0.035172 8: 0.406778
TISSUE-EQUIVALENT GAS (PROPANE BASED)	0.55027	59.5	1.826E-03	1: 0.102676 6: 0.568937 7: 0.035022 8: 0.293365
WATER, LIQUID	0.55508	75.0	1.000E+00	1: 0.111898 8: 0.888102

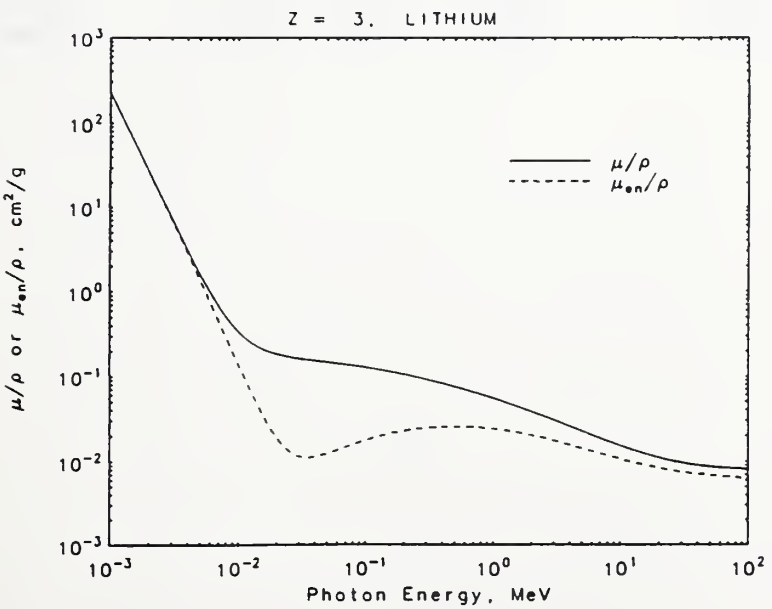
Tables and graphs of the mass attenuation coefficient, μ/ρ, and the mass energy-absorption coefficient, μ_{en}/ρ, as a function of photon energy, for elemental media, and for compounds and mixtures.

Table 3. Values of the mass attenuation coefficient, μ/ρ, and the mass energy-absorption coefficient, μ_{en}/ρ, as a function of photon energy, for elemental media. Atomic absorption edges are indicated by the shell designation.

HYDROGEN $Z = 1$			HELIUM $Z = 2$			LITHIUM $Z = 3$		
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	7.217E+00	6.820E+00	1.00000E-03	6.084E+01	6.045E+01	1.00000E-03	2.339E+02	2.335E+02
1.50000E-03	2.148E+00	1.752E+00	1.50000E-03	1.676E+01	1.638E+01	1.50000E-03	6.668E+01	6.629E+01
2.00000E-03	1.059E+00	6.643E-01	2.00000E-03	6.863E+00	6.503E+00	2.00000E-03	2.707E+01	2.672E+01
3.00000E-03	5.612E-01	1.693E-01	3.00000E-03	2.007E+00	1.681E+00	3.00000E-03	7.549E+00	7.249E+00
4.00000E-03	4.546E-01	6.549E-02	4.00000E-03	9.329E-01	6.379E-01	4.00000E-03	3.114E+00	2.840E+00
5.00000E-03	4.193E-01	3.278E-02	5.00000E-03	5.766E-01	3.061E-01	5.00000E-03	1.619E+00	1.364E+00
6.00000E-03	4.042E-01	1.996E-02	6.00000E-03	4.195E-01	1.671E-01	6.00000E-03	9.875E-01	7.477E-01
8.00000E-03	3.914E-01	1.160E-02	8.00000E-03	2.933E-01	6.446E-02	8.00000E-03	5.054E-01	2.888E-01
1.00000E-02	3.854E-01	9.849E-03	1.00000E-02	2.476E-01	3.260E-02	1.00000E-02	3.395E-01	1.387E-01
1.50000E-02	3.764E-01	1.102E-02	1.50000E-02	2.092E-01	1.246E-02	1.50000E-02	2.176E-01	3.910E-02
2.00000E-02	3.695E-01	1.355E-02	2.00000E-02	1.960E-01	9.410E-03	2.00000E-02	1.856E-01	1.885E-02
3.00000E-02	3.570E-01	1.863E-02	3.00000E-02	1.838E-01	1.003E-02	3.00000E-02	1.644E-01	1.138E-02
4.00000E-02	3.458E-01	2.315E-02	4.00000E-02	1.763E-01	1.190E-02	4.00000E-02	1.551E-01	1.131E-02
5.00000E-02	3.355E-01	2.709E-02	5.00000E-02	1.703E-01	1.375E-02	5.00000E-02	1.488E-01	1.237E-02
6.00000E-02	3.260E-01	3.053E-02	6.00000E-02	1.651E-01	1.544E-02	6.00000E-02	1.438E-01	1.361E-02
8.00000E-02	3.091E-01	3.620E-02	8.00000E-02	1.562E-01	1.826E-02	8.00000E-02	1.356E-01	1.588E-02
1.00000E-01	2.944E-01	4.063E-02	1.00000E-01	1.486E-01	2.047E-02	1.00000E-01	1.289E-01	1.776E-02
1.50000E-01	2.651E-01	4.813E-02	1.50000E-01	1.336E-01	2.424E-02	1.50000E-01	1.158E-01	2.098E-02
2.00000E-01	2.429E-01	5.254E-02	2.00000E-01	1.224E-01	2.647E-02	2.00000E-01	1.060E-01	2.290E-02
3.00000E-01	2.112E-01	5.695E-02	3.00000E-01	1.064E-01	2.868E-02	3.00000E-01	9.210E-02	2.481E-02
4.00000E-01	1.893E-01	5.860E-02	4.00000E-01	9.535E-02	2.951E-02	4.00000E-01	8.249E-02	2.552E-02
5.00000E-01	1.729E-01	5.900E-02	5.00000E-01	8.707E-02	2.971E-02	5.00000E-01	7.532E-02	2.569E-02
6.00000E-01	1.599E-01	5.875E-02	6.00000E-01	8.054E-02	2.959E-02	6.00000E-01	6.968E-02	2.559E-02
8.00000E-01	1.405E-01	5.739E-02	8.00000E-01	7.076E-02	2.890E-02	8.00000E-01	6.121E-02	2.499E-02
1.00000E+00	1.263E-01	5.556E-02	1.00000E+00	6.362E-02	2.797E-02	1.00000E+00	5.503E-02	2.419E-02
1.25000E+00	1.129E-01	5.311E-02	1.25000E+00	5.688E-02	2.674E-02	1.25000E+00	4.921E-02	2.312E-02
1.50000E+00	1.027E-01	5.075E-02	1.50000E+00	5.173E-02	2.555E-02	1.50000E+00	4.476E-02	2.210E-02
2.00000E+00	8.769E-02	4.650E-02	2.00000E+00	4.422E-02	2.343E-02	2.00000E+00	3.830E-02	2.028E-02
3.00000E+00	6.921E-02	3.992E-02	3.00000E+00	3.503E-02	2.019E-02	3.00000E+00	3.043E-02	1.753E-02
4.00000E+00	5.806E-02	3.523E-02	4.00000E+00	2.949E-02	1.790E-02	4.00000E+00	2.572E-02	1.561E-02
5.00000E+00	5.049E-02	3.174E-02	5.00000E+00	2.577E-02	1.622E-02	5.00000E+00	2.257E-02	1.422E-02
6.00000E+00	4.498E-02	2.905E-02	6.00000E+00	2.307E-02	1.493E-02	6.00000E+00	2.030E-02	1.316E-02
8.00000E+00	3.746E-02	2.515E-02	8.00000E+00	1.940E-02	1.308E-02	8.00000E+00	1.725E-02	1.167E-02
1.00000E+01	3.254E-02	2.247E-02	1.00000E+01	1.703E-02	1.183E-02	1.00000E+01	1.529E-02	1.066E-02
1.50000E+01	2.539E-02	1.837E-02	1.50000E+01	1.363E-02	9.948E-03	1.50000E+01	1.252E-02	9.182E-03
2.00000E+01	2.153E-02	1.606E-02	2.00000E+01	1.183E-02	8.914E-03	2.00000E+01	1.109E-02	8.385E-03


Z = 1. HYDROGEN
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

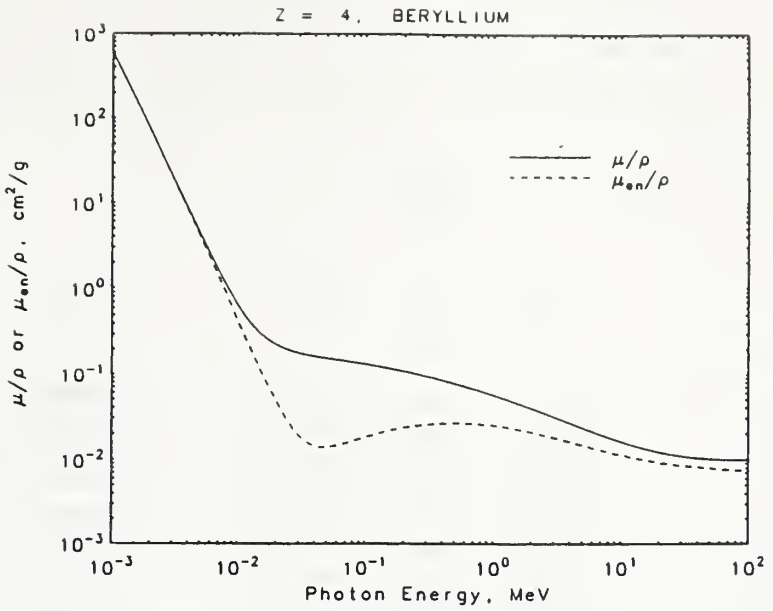

Z = 2. HELIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

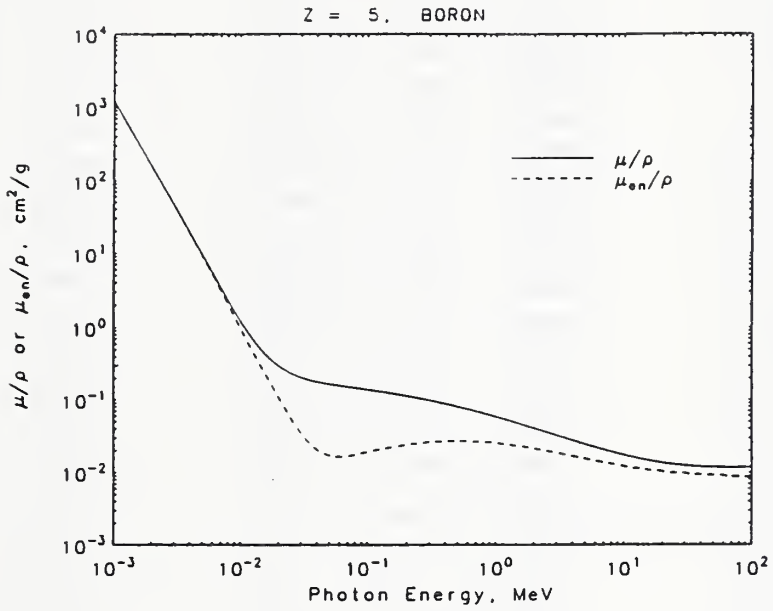

Z = 3. LITHIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

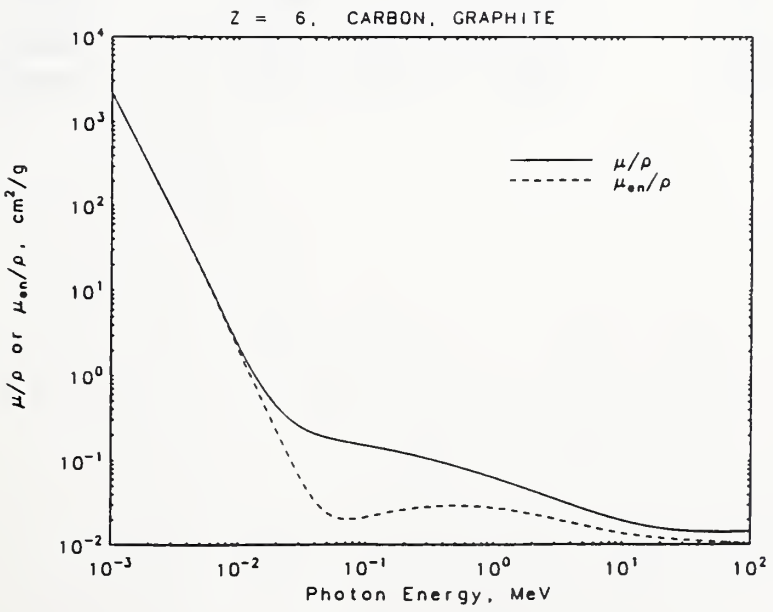
BERYLLIUM $Z = 4$		
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	6.041E+02	6.035E+02
1.50000E-03	1.797E+02	1.791E+02
2.00000E-03	7.469E+01	7.422E+01
3.00000E-03	2.127E+01	2.090E+01
4.00000E-03	8.685E+00	8.367E+00
5.00000E-03	4.369E+00	4.081E+00
6.00000E-03	2.527E+00	2.260E+00
8.00000E-03	1.124E+00	8.839E-01
1.00000E-02	6.466E-01	4.255E-01
1.50000E-02	3.070E-01	1.143E-01
2.00000E-02	2.251E-01	4.780E-02
3.00000E-02	1.792E-01	1.898E-02
4.00000E-02	1.640E-01	1.438E-02
5.00000E-02	1.554E-01	1.401E-02
6.00000E-02	1.493E-01	1.468E-02
8.00000E-02	1.401E-01	1.658E-02
1.00000E-01	1.328E-01	1.836E-02
1.50000E-01	1.190E-01	2.157E-02
2.00000E-01	1.089E-01	2.353E-02
3.00000E-01	9.463E-02	2.548E-02
4.00000E-01	8.471E-02	2.620E-02
5.00000E-01	7.739E-02	2.639E-02
6.00000E-01	7.155E-02	2.627E-02
8.00000E-01	6.286E-02	2.565E-02
1.00000E+00	5.652E-02	2.483E-02
1.25000E+00	5.054E-02	2.373E-02
1.50000E+00	4.597E-02	2.268E-02
2.00000E+00	3.938E-02	2.083E-02
3.00000E+00	3.138E-02	1.806E-02
4.00000E+00	2.664E-02	1.617E-02
5.00000E+00	2.347E-02	1.479E-02
6.00000E+00	2.121E-02	1.377E-02
8.00000E+00	1.819E-02	1.233E-02
1.00000E+01	1.627E-02	1.138E-02
1.50000E+01	1.361E-02	1.001E-02
2.00000E+01	1.227E-02	9.294E-03

BORON $Z = 5$		
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	1.229E+03	1.228E+03
1.50000E-03	3.766E+02	3.759E+02
2.00000E-03	1.597E+02	1.591E+02
3.00000E-03	4.667E+01	4.617E+01
4.00000E-03	1.927E+01	1.886E+01
5.00000E-03	9.683E+00	9.332E+00
6.00000E-03	5.538E+00	5.223E+00
8.00000E-03	2.346E+00	2.072E+00
1.00000E-02	1.255E+00	1.006E+00
1.50000E-02	4.827E-01	2.698E-01
2.00000E-02	3.014E-01	1.084E-01
3.00000E-02	2.063E-01	3.506E-02
4.00000E-02	1.793E-01	2.084E-02
5.00000E-02	1.665E-01	1.737E-02
6.00000E-02	1.583E-01	1.680E-02
8.00000E-02	1.472E-01	1.785E-02
1.00000E-01	1.391E-01	1.940E-02
1.50000E-01	1.243E-01	2.255E-02
2.00000E-01	1.136E-01	2.453E-02
3.00000E-01	9.862E-02	2.654E-02
4.00000E-01	8.834E-02	2.731E-02
5.00000E-01	8.065E-02	2.749E-02
6.00000E-01	7.460E-02	2.737E-02
8.00000E-01	6.549E-02	2.671E-02
1.00000E+00	5.890E-02	2.586E-02
1.25000E+00	5.266E-02	2.472E-02
1.50000E+00	4.791E-02	2.362E-02
2.00000E+00	4.108E-02	2.171E-02
3.00000E+00	3.284E-02	1.889E-02
4.00000E+00	2.798E-02	1.698E-02
5.00000E+00	2.476E-02	1.562E-02
6.00000E+00	2.248E-02	1.461E-02
8.00000E+00	1.945E-02	1.322E-02
1.00000E+01	1.755E-02	1.232E-02
1.50000E+01	1.495E-02	1.104E-02
2.00000E+01	1.368E-02	1.039E-02

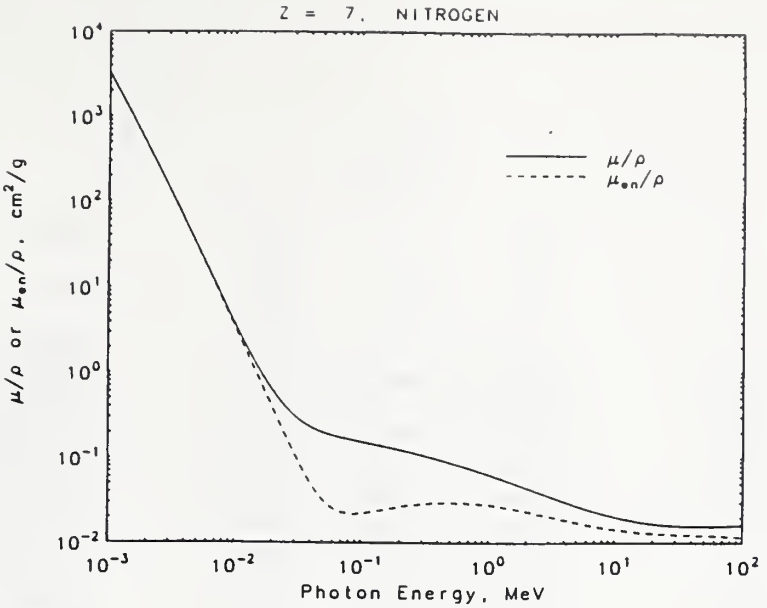
CARBON, GRAPHITE $Z = 6$		
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.211E+03	2.209E+03
1.50000E-03	7.002E+02	6.990E+02
2.00000E-03	3.026E+02	3.016E+02
3.00000E-03	9.033E+01	8.963E+01
4.00000E-03	3.778E+01	3.723E+01
5.00000E-03	1.912E+01	1.866E+01
6.00000E-03	1.095E+01	1.054E+01
8.00000E-03	4.576E+00	4.242E+00
1.00000E-02	2.373E+00	2.078E+00
1.50000E-02	8.071E-01	5.627E-01
2.00000E-02	4.420E-01	2.238E-01
3.00000E-02	2.562E-01	6.614E-02
4.00000E-02	2.076E-01	3.343E-02
5.00000E-02	1.871E-01	2.397E-02
6.00000E-02	1.753E-01	2.098E-02
8.00000E-02	1.610E-01	2.037E-02
1.00000E-01	1.514E-01	2.147E-02
1.50000E-01	1.347E-01	2.449E-02
2.00000E-01	1.229E-01	2.655E-02
3.00000E-01	1.066E-01	2.870E-02
4.00000E-01	9.546E-02	2.950E-02
5.00000E-01	8.715E-02	2.969E-02
6.00000E-01	8.058E-02	2.956E-02
8.00000E-01	7.076E-02	2.885E-02
1.00000E+00	6.361E-02	2.792E-02
1.25000E+00	5.690E-02	2.669E-02
1.50000E+00	5.179E-02	2.551E-02
2.00000E+00	4.442E-02	2.345E-02
3.00000E+00	3.562E-02	2.048E-02
4.00000E+00	3.047E-02	1.849E-02
5.00000E+00	2.708E-02	1.710E-02
6.00000E+00	2.469E-02	1.607E-02
8.00000E+00	2.154E-02	1.468E-02
1.00000E+01	1.959E-02	1.380E-02
1.50000E+01	1.698E-02	1.258E-02
2.00000E+01	1.575E-02	1.198E-02

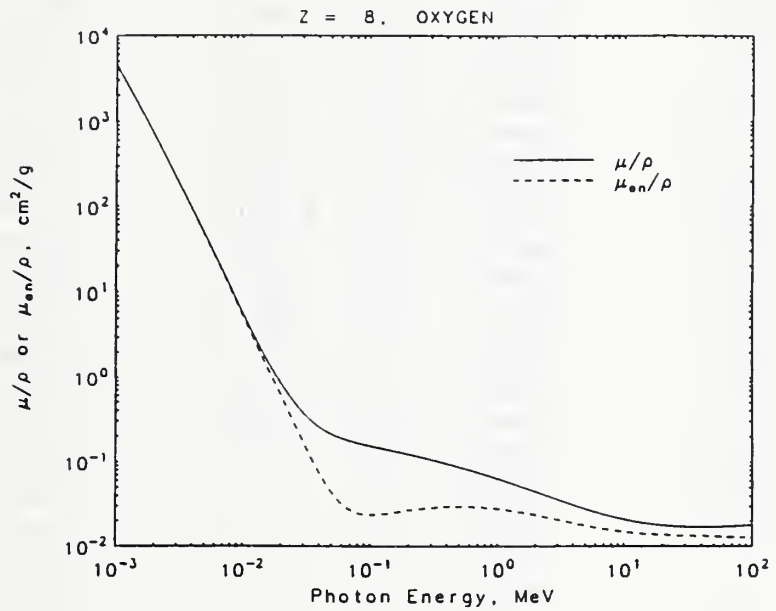

Z = 4, BERYLLIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

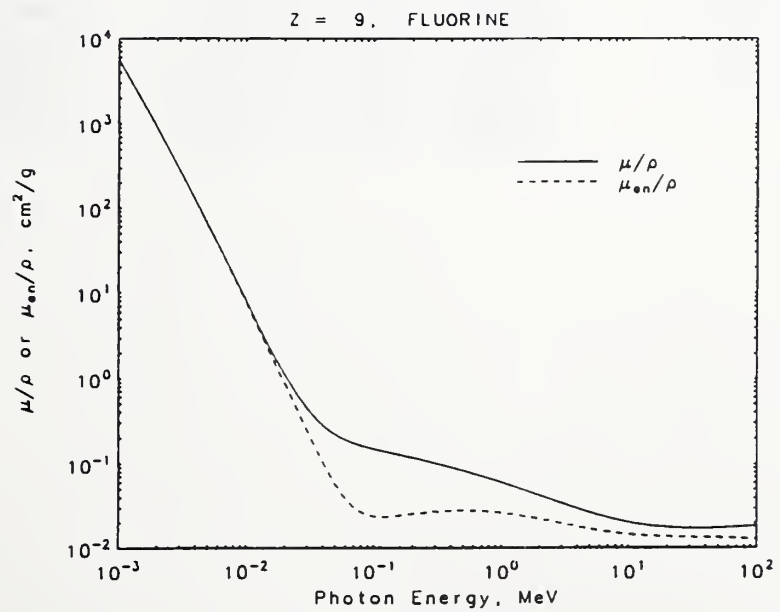

Z = 5, BORON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 6, CARBON, GRAPHITE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

NITROGEN $Z = 7$			OXYGEN $Z = 8$			FLUORINE $Z = 9$		
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	3.311E+03	3.306E+03	1.00000E-03	4.590E+03	4.576E+03	1.00000E-03	5.649E+03	5.615E+03
1.50000E-03	1.083E+03	1.080E+03	1.50000E-03	1.549E+03	1.545E+03	1.50000E-03	1.979E+03	1.969E+03
2.00000E-03	4.769E+02	4.755E+02	2.00000E-03	6.949E+02	6.926E+02	2.00000E-03	9.047E+02	9.005E+02
3.00000E-03	1.456E+02	1.447E+02	3.00000E-03	2.171E+02	2.158E+02	3.00000E-03	2.888E+02	2.870E+02
4.00000E-03	6.166E+01	6.094E+01	4.00000E-03	9.315E+01	9.221E+01	4.00000E-03	1.256E+02	1.244E+02
5.00000E-03	3.144E+01	3.086E+01	5.00000E-03	4.790E+01	4.715E+01	5.00000E-03	6.514E+01	6.424E+01
6.00000E-03	1.809E+01	1.759E+01	6.00000E-03	2.770E+01	2.708E+01	6.00000E-03	3.789E+01	3.716E+01
8.00000E-03	7.562E+00	7.170E+00	8.00000E-03	1.163E+01	1.116E+01	8.00000E-03	1.602E+01	1.548E+01
1.00000E-02	3.879E+00	3.545E+00	1.00000E-02	5.952E+00	5.565E+00	1.00000E-02	8.205E+00	7.776E+00
1.50000E-02	1.236E+00	9.715E-01	1.50000E-02	1.836E+00	1.545E+00	1.50000E-02	2.492E+00	2.186E+00
2.00000E-02	6.178E-01	3.867E-01	2.00000E-02	8.651E-01	6.179E-01	2.00000E-02	1.133E+00	8.796E-01
3.00000E-02	3.066E-01	1.099E-01	3.00000E-02	3.779E-01	1.729E-01	3.00000E-02	4.487E-01	2.451E-01
4.00000E-02	2.288E-01	5.051E-02	4.00000E-02	2.585E-01	7.530E-02	4.00000E-02	2.828E-01	1.036E-01
5.00000E-02	1.980E-01	3.217E-02	5.00000E-02	2.132E-01	4.414E-02	5.00000E-02	2.214E-01	5.747E-02
6.00000E-02	1.817E-01	2.548E-02	6.00000E-02	1.907E-01	3.207E-02	6.00000E-02	1.920E-01	3.903E-02
8.00000E-02	1.639E-01	2.211E-02	8.00000E-02	1.678E-01	2.468E-02	8.00000E-02	1.639E-01	2.676E-02
1.00000E-01	1.529E-01	2.231E-02	1.00000E-01	1.551E-01	2.355E-02	1.00000E-01	1.496E-01	2.394E-02
1.50000E-01	1.353E-01	2.472E-02	1.50000E-01	1.361E-01	2.506E-02	1.50000E-01	1.298E-01	2.417E-02
2.00000E-01	1.233E-01	2.665E-02	2.00000E-01	1.237E-01	2.679E-02	2.00000E-01	1.176E-01	2.554E-02
3.00000E-01	1.068E-01	2.873E-02	3.00000E-01	1.070E-01	2.877E-02	3.00000E-01	1.015E-01	2.729E-02
4.00000E-01	9.557E-02	2.952E-02	4.00000E-01	9.566E-02	2.953E-02	4.00000E-01	9.073E-02	2.800E-02
5.00000E-01	8.719E-02	2.969E-02	5.00000E-01	8.729E-02	2.971E-02	5.00000E-01	8.274E-02	2.815E-02
6.00000E-01	8.063E-02	2.956E-02	6.00000E-01	8.070E-02	2.957E-02	6.00000E-01	7.649E-02	2.801E-02
8.00000E-01	7.081E-02	2.886E-02	8.00000E-01	7.087E-02	2.887E-02	8.00000E-01	6.717E-02	2.734E-02
1.00000E+00	6.364E-02	2.792E-02	1.00000E+00	6.372E-02	2.794E-02	1.00000E+00	6.037E-02	2.645E-02
1.25000E+00	5.693E-02	2.669E-02	1.25000E+00	5.697E-02	2.669E-02	1.25000E+00	5.399E-02	2.527E-02
1.50000E+00	5.180E-02	2.550E-02	1.50000E+00	5.185E-02	2.551E-02	1.50000E+00	4.915E-02	2.416E-02
2.00000E+00	4.450E-02	2.347E-02	2.00000E+00	4.459E-02	2.350E-02	2.00000E+00	4.228E-02	2.226E-02
3.00000E+00	3.579E-02	2.057E-02	3.00000E+00	3.597E-02	2.066E-02	3.00000E+00	3.422E-02	1.964E-02
4.00000E+00	3.073E-02	1.867E-02	4.00000E+00	3.100E-02	1.882E-02	4.00000E+00	2.960E-02	1.797E-02
5.00000E+00	2.742E-02	1.734E-02	5.00000E+00	2.777E-02	1.757E-02	5.00000E+00	2.663E-02	1.685E-02
6.00000E+00	2.511E-02	1.639E-02	6.00000E+00	2.552E-02	1.668E-02	6.00000E+00	2.457E-02	1.607E-02
8.00000E+00	2.209E-02	1.512E-02	8.00000E+00	2.263E-02	1.553E-02	8.00000E+00	2.195E-02	1.508E-02
1.00000E+01	2.024E-02	1.434E-02	1.00000E+01	2.089E-02	1.483E-02	1.00000E+01	2.039E-02	1.451E-02
1.50000E+01	1.782E-02	1.332E-02	1.50000E+01	1.866E-02	1.396E-02	1.50000E+01	1.846E-02	1.382E-02
2.00000E+01	1.673E-02	1.285E-02	2.00000E+01	1.770E-02	1.360E-02	2.00000E+01	1.769E-02	1.357E-02


Z = 7, NITROGEN
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 8, OXYGEN
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 9, FLUORINE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

NEON

Z = 10

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	7.409E+03	7.326E+03
1.50000E-03	2.666E+03	2.645E+03
2.00000E-03	1.243E+03	1.234E+03
3.00000E-03	4.051E+02	4.021E+02
4.00000E-03	1.785E+02	1.767E+02
5.00000E-03	9.339E+01	9.214E+01
6.00000E-03	5.467E+01	5.369E+01
8.00000E-03	2.328E+01	2.260E+01
1.00000E-02	1.197E+01	1.143E+01
1.50000E-02	3.613E+00	3.253E+00
2.00000E-02	1.606E+00	1.317E+00
3.00000E-02	5.923E-01	3.676E-01
4.00000E-02	3.473E-01	1.528E-01
5.00000E-02	2.579E-01	8.182E-02
6.00000E-02	2.161E-01	5.287E-02
8.00000E-02	1.781E-01	3.273E-02
1.00000E-01	1.600E-01	2.733E-02
1.50000E-01	1.370E-01	2.590E-02
2.00000E-01	1.236E-01	2.697E-02
3.00000E-01	1.064E-01	2.862E-02
4.00000E-01	9.502E-02	2.931E-02
5.00000E-01	8.664E-02	2.946E-02
6.00000E-01	8.006E-02	2.930E-02
8.00000E-01	7.029E-02	2.860E-02
1.00000E+00	6.316E-02	2.766E-02
1.25000E+00	5.646E-02	2.641E-02
1.50000E+00	5.145E-02	2.526E-02
2.00000E+00	4.430E-02	2.330E-02
3.00000E+00	3.594E-02	2.061E-02
4.00000E+00	3.122E-02	1.894E-02
5.00000E+00	2.818E-02	1.784E-02
6.00000E+00	2.610E-02	1.709E-02
8.00000E+00	2.348E-02	1.616E-02
1.00000E+01	2.197E-02	1.564E-02
1.50000E+01	2.013E-02	1.508E-02
2.00000E+01	1.946E-02	1.491E-02

SODIUM

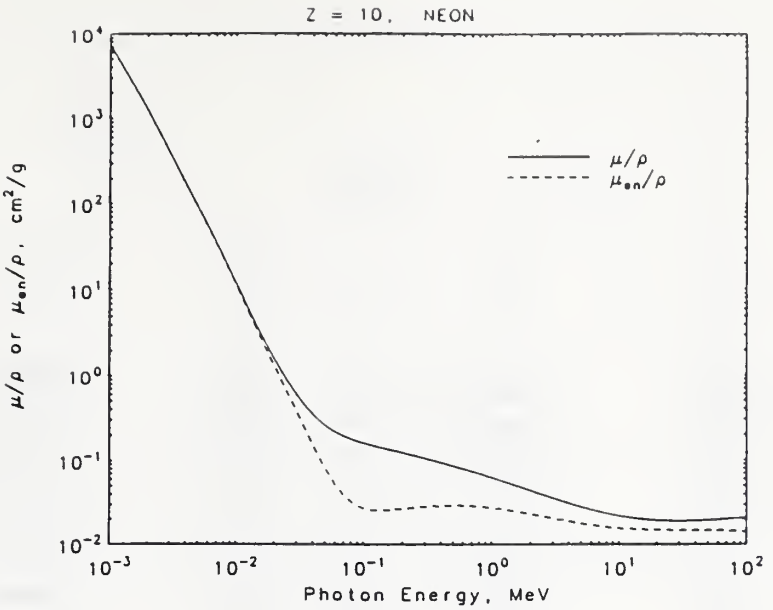
Z = 11

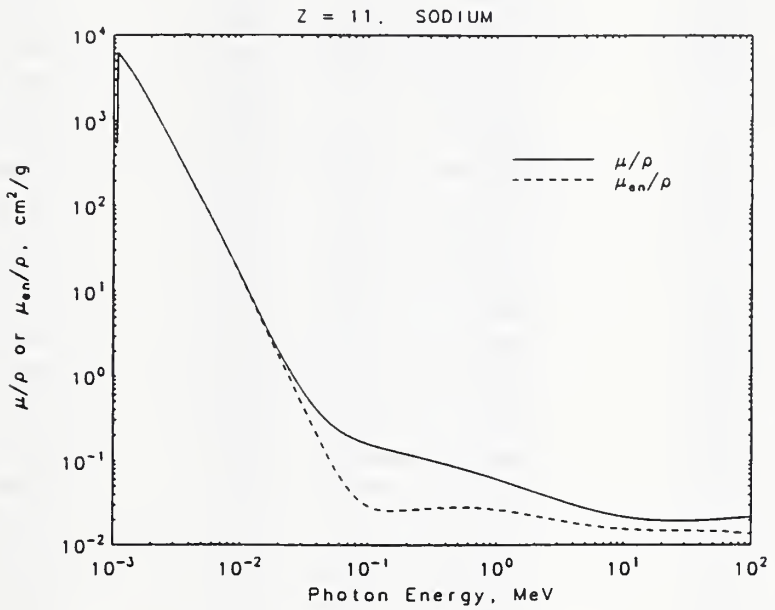
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.542E+02	6.522E+02
	1.03542E-03	5.960E+02	5.941E+02
	1.07210E-03	5.429E+02	5.410E+02
K	1.07210E-03	6.435E+03	6.320E+03
	1.50000E-03	3.194E+03	3.151E+03
	2.00000E-03	1.521E+03	1.504E+03
	3.00000E-03	5.070E+02	5.023E+02
	4.00000E-03	2.261E+02	2.238E+02
	5.00000E-03	1.194E+02	1.178E+02
	6.00000E-03	7.030E+01	6.915E+01
	8.00000E-03	3.018E+01	2.941E+01
	1.00000E-02	1.557E+01	1.499E+01
	1.50000E-02	4.694E+00	4.313E+00
	2.00000E-02	2.057E+00	1.759E+00
	3.00000E-02	7.197E-01	4.928E-01
	4.00000E-02	3.969E-01	2.031E-01
	5.00000E-02	2.804E-01	1.063E-01
	6.00000E-02	2.268E-01	6.625E-02
	8.00000E-02	1.796E-01	3.761E-02
	1.00000E-01	1.585E-01	2.931E-02
	1.50000E-01	1.335E-01	2.579E-02
	2.00000E-01	1.199E-01	2.635E-02
	3.00000E-01	1.029E-01	2.771E-02
	4.00000E-01	9.185E-02	2.833E-02
	5.00000E-01	8.372E-02	2.845E-02
	6.00000E-01	7.736E-02	2.830E-02
	8.00000E-01	6.788E-02	2.760E-02
	1.00000E+00	6.100E-02	2.669E-02
	1.25000E+00	5.454E-02	2.549E-02
	1.50000E+00	4.968E-02	2.437E-02
	2.00000E+00	4.282E-02	2.249E-02
	3.00000E+00	3.487E-02	1.997E-02
	4.00000E+00	3.037E-02	1.842E-02
	5.00000E+00	2.753E-02	1.743E-02
	6.00000E+00	2.559E-02	1.675E-02
	8.00000E+00	2.319E-02	1.595E-02
	1.00000E+01	2.181E-02	1.552E-02
	1.50000E+01	2.023E-02	1.508E-02
	2.00000E+01	1.970E-02	1.496E-02

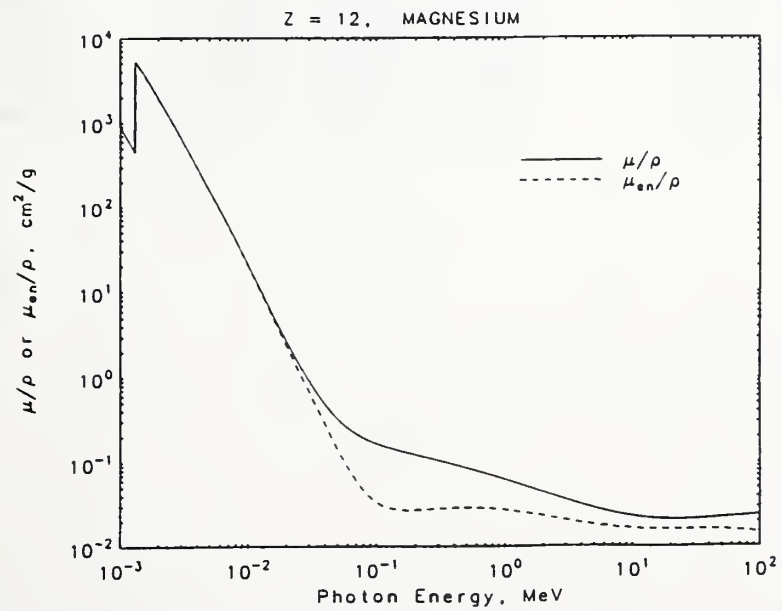
MAGNESIUM

Z = 12

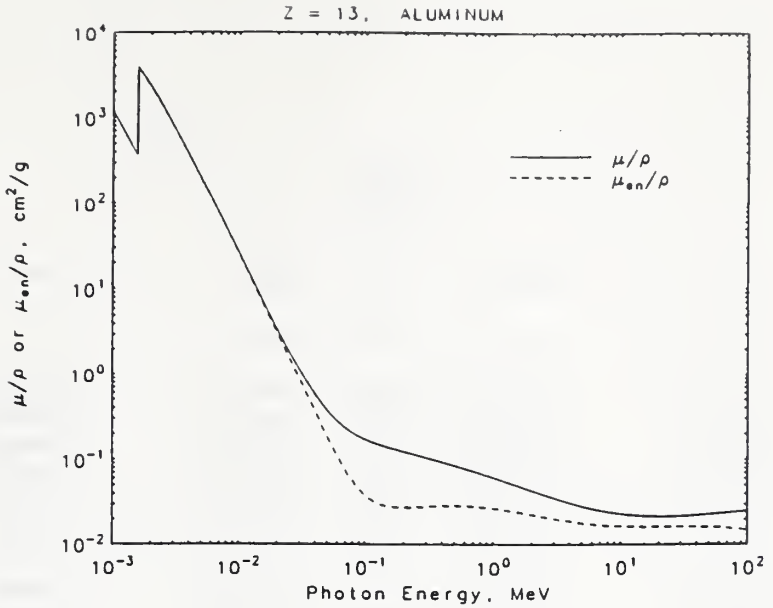
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.225E+02	9.203E+02
	1.14237E-03	6.474E+02	6.452E+02
	1.30500E-03	4.530E+02	4.509E+02
K	1.30500E-03	5.444E+03	5.310E+03
	1.50000E-03	4.004E+03	3.918E+03
	2.00000E-03	1.932E+03	1.899E+03
	3.00000E-03	6.585E+02	6.499E+02
	4.00000E-03	2.974E+02	2.937E+02
	5.00000E-03	1.583E+02	1.561E+02
	6.00000E-03	9.381E+01	9.227E+01
	8.00000E-03	4.061E+01	3.965E+01
	1.00000E-02	2.105E+01	2.036E+01
	1.50000E-02	6.358E+00	5.925E+00
	2.00000E-02	2.763E+00	2.432E+00
	3.00000E-02	9.306E-01	6.855E-01
	4.00000E-02	4.881E-01	2.815E-01
	5.00000E-02	3.292E-01	1.451E-01
	6.00000E-02	2.570E-01	8.820E-02
	8.00000E-02	1.951E-01	4.671E-02
	1.00000E-01	1.686E-01	3.410E-02
	1.50000E-01	1.394E-01	2.766E-02
	2.00000E-01	1.245E-01	2.761E-02
	3.00000E-01	1.065E-01	2.871E-02
	4.00000E-01	9.492E-02	2.928E-02
	5.00000E-01	8.647E-02	2.938E-02
	6.00000E-01	7.988E-02	2.921E-02
	8.00000E-01	7.008E-02	2.848E-02
	1.00000E+00	6.296E-02	2.753E-02
	1.25000E+00	5.629E-02	2.629E-02
	1.50000E+00	5.129E-02	2.514E-02
	2.00000E+00	4.426E-02	2.322E-02
	3.00000E+00	3.613E-02	2.067E-02
	4.00000E+00	3.159E-02	1.915E-02
	5.00000E+00	2.873E-02	1.819E-02
	6.00000E+00	2.681E-02	1.756E-02
	8.00000E+00	2.445E-02	1.683E-02
	1.00000E+01	2.313E-02	1.646E-02
	1.50000E+01	2.168E-02	1.614E-02
	2.00000E+01	2.127E-02	1.609E-02

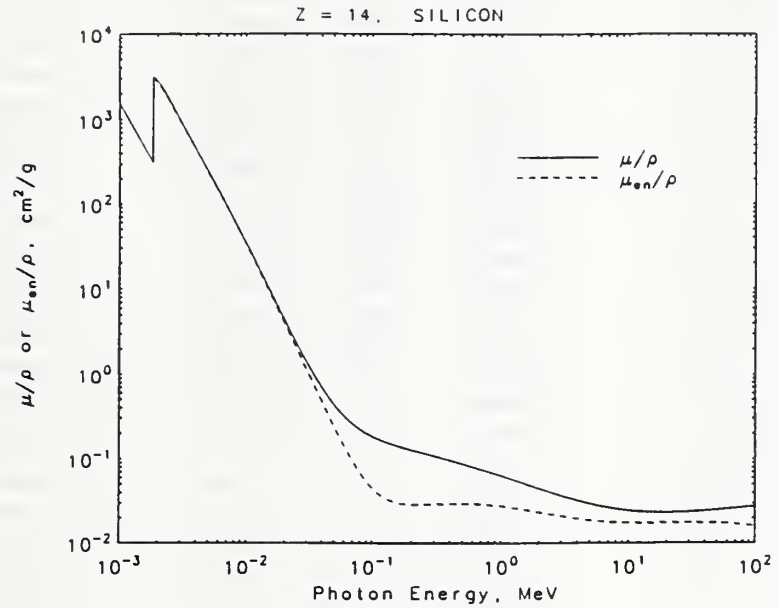

Z = 10, NEON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

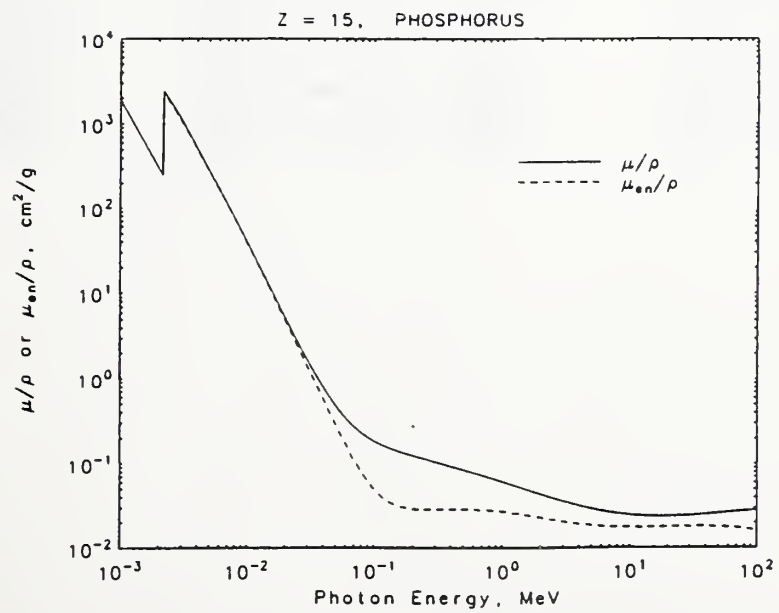

Z = 11, SODIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 12, MAGNESIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

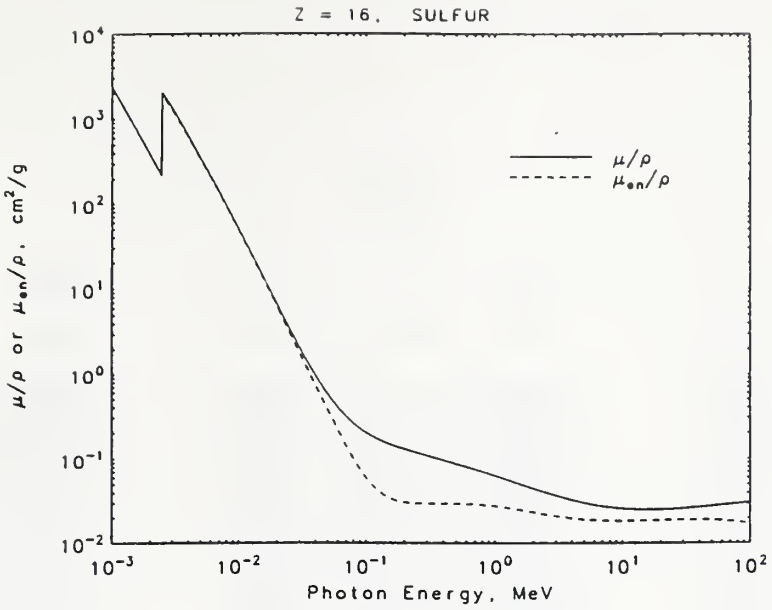
	ALUMINUM Z = 13			SILICON Z = 14			PHOSPHORUS Z = 15		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.185E+03	1.183E+03	1.00000E-03	1.570E+03	1.567E+03	1.00000E-03	1.913E+03	1.910E+03
	1.50000E-03	4.022E+02	4.001E+02	1.50000E-03	5.355E+02	5.331E+02	1.50000E-03	6.547E+02	6.522E+02
	1.55960E-03	3.621E+02	3.600E+02	1.83890E-03	3.092E+02	3.070E+02	2.00000E-03	3.018E+02	2.996E+02
K	1.55960E-03	3.957E+03	3.829E+03	K 1.83890E-03	3.192E+03	3.059E+03	2.14550E-03	2.494E+02	2.473E+02
	2.00000E-03	2.263E+03	2.204E+03	2.00000E-03	2.777E+03	2.669E+03	K 2.14550E-03	2.473E+03	2.343E+03
	3.00000E-03	7.880E+02	7.732E+02	3.00000E-03	9.784E+02	9.516E+02	3.00000E-03	1.118E+03	1.074E+03
	4.00000E-03	3.605E+02	3.545E+02	4.00000E-03	4.529E+02	4.427E+02	4.00000E-03	5.242E+02	5.079E+02
	5.00000E-03	1.934E+02	1.902E+02	5.00000E-03	2.450E+02	2.400E+02	5.00000E-03	2.860E+02	2.782E+02
	6.00000E-03	1.153E+02	1.133E+02	6.00000E-03	1.470E+02	1.439E+02	6.00000E-03	1.726E+02	1.682E+02
	8.00000E-03	5.033E+01	4.918E+01	8.00000E-03	6.468E+01	6.313E+01	8.00000E-03	7.660E+01	7.457E+01
	1.00000E-02	2.623E+01	2.543E+01	1.00000E-02	3.389E+01	3.289E+01	1.00000E-02	4.035E+01	3.912E+01
	1.50000E-02	7.955E+00	7.487E+00	1.50000E-02	1.034E+01	9.794E+00	1.50000E-02	1.239E+01	1.179E+01
	2.00000E-02	3.441E+00	3.094E+00	2.00000E-02	4.464E+00	4.076E+00	2.00000E-02	5.352E+00	4.939E+00
	3.00000E-02	1.128E+00	8.778E-01	3.00000E-02	1.436E+00	1.164E+00	3.00000E-02	1.700E+00	1.422E+00
	4.00000E-02	5.685E-01	3.601E-01	4.00000E-02	7.012E-01	4.782E-01	4.00000E-02	8.096E-01	5.850E-01
	5.00000E-02	3.681E-01	1.840E-01	5.00000E-02	4.385E-01	2.430E-01	5.00000E-02	4.916E-01	2.965E-01
	6.00000E-02	2.778E-01	1.099E-01	6.00000E-02	3.207E-01	1.434E-01	6.00000E-02	3.494E-01	1.735E-01
	8.00000E-02	2.018E-01	5.511E-02	8.00000E-02	2.228E-01	6.896E-02	8.00000E-02	2.324E-01	8.083E-02
	1.00000E-01	1.704E-01	3.794E-02	1.00000E-01	1.835E-01	4.513E-02	1.00000E-01	1.865E-01	5.068E-02
	1.50000E-01	1.378E-01	2.827E-02	1.50000E-01	1.448E-01	3.086E-02	1.50000E-01	1.432E-01	3.188E-02
	2.00000E-01	1.223E-01	2.745E-02	2.00000E-01	1.275E-01	2.905E-02	2.00000E-01	1.250E-01	2.899E-02
	3.00000E-01	1.042E-01	2.816E-02	3.00000E-01	1.082E-01	2.932E-02	3.00000E-01	1.055E-01	2.870E-02
	4.00000E-01	9.276E-02	2.862E-02	4.00000E-01	9.614E-02	2.968E-02	4.00000E-01	9.359E-02	2.892E-02
	5.00000E-01	8.445E-02	2.868E-02	5.00000E-01	8.748E-02	2.971E-02	5.00000E-01	8.511E-02	2.891E-02
	6.00000E-01	7.802E-02	2.851E-02	6.00000E-01	8.077E-02	2.951E-02	6.00000E-01	7.854E-02	2.869E-02
	8.00000E-01	6.841E-02	2.778E-02	8.00000E-01	7.082E-02	2.875E-02	8.00000E-01	6.884E-02	2.793E-02
	1.00000E+00	6.146E-02	2.686E-02	1.00000E+00	6.361E-02	2.778E-02	1.00000E+00	6.182E-02	2.698E-02
	1.25000E+00	5.496E-02	2.565E-02	1.25000E+00	5.688E-02	2.652E-02	1.25000E+00	5.526E-02	2.575E-02
	1.50000E+00	5.006E-02	2.451E-02	1.50000E+00	5.183E-02	2.535E-02	1.50000E+00	5.039E-02	2.462E-02
	2.00000E+00	4.324E-02	2.266E-02	2.00000E+00	4.480E-02	2.345E-02	2.00000E+00	4.358E-02	2.279E-02
	3.00000E+00	3.541E-02	2.024E-02	3.00000E+00	3.678E-02	2.101E-02	3.00000E+00	3.590E-02	2.049E-02
	4.00000E+00	3.106E-02	1.882E-02	4.00000E+00	3.240E-02	1.963E-02	4.00000E+00	3.172E-02	1.921E-02
	5.00000E+00	2.836E-02	1.795E-02	5.00000E+00	2.967E-02	1.878E-02	5.00000E+00	2.915E-02	1.846E-02
	6.00000E+00	2.655E-02	1.739E-02	6.00000E+00	2.788E-02	1.827E-02	6.00000E+00	2.747E-02	1.801E-02
	8.00000E+00	2.437E-02	1.678E-02	8.00000E+00	2.574E-02	1.773E-02	8.00000E+00	2.552E-02	1.760E-02
	1.00000E+01	2.318E-02	1.650E-02	1.00000E+01	2.462E-02	1.753E-02	1.00000E+01	2.452E-02	1.747E-02
	1.50000E+01	2.195E-02	1.631E-02	1.50000E+01	2.352E-02	1.746E-02	1.50000E+01	2.364E-02	1.754E-02
	2.00000E+01	2.168E-02	1.633E-02	2.00000E+01	2.338E-02	1.757E-02	2.00000E+01	2.363E-02	1.771E-02

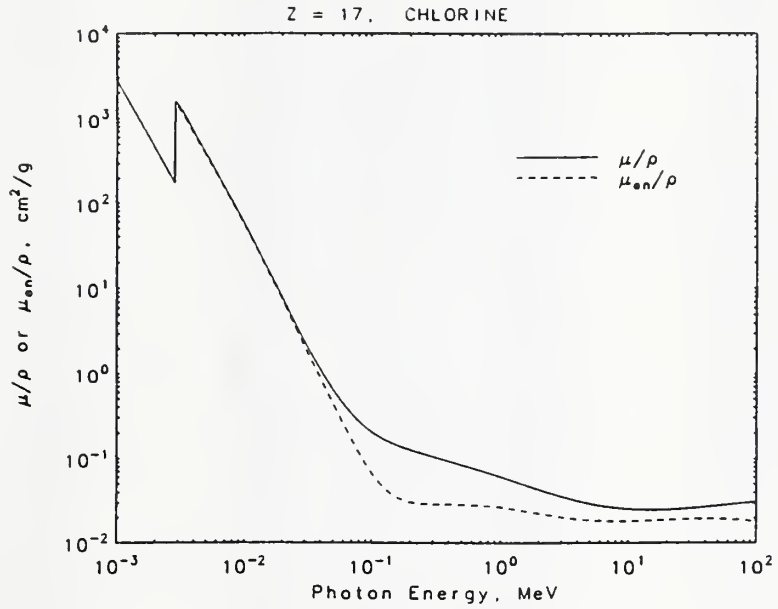

Z = 13, ALUMINUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

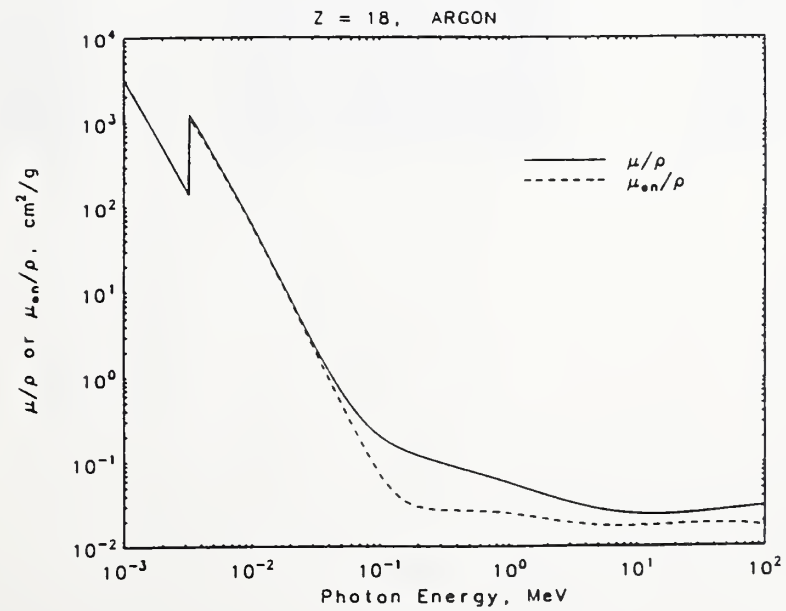

Z = 14, SILICON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 15, PHOSPHORUS
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

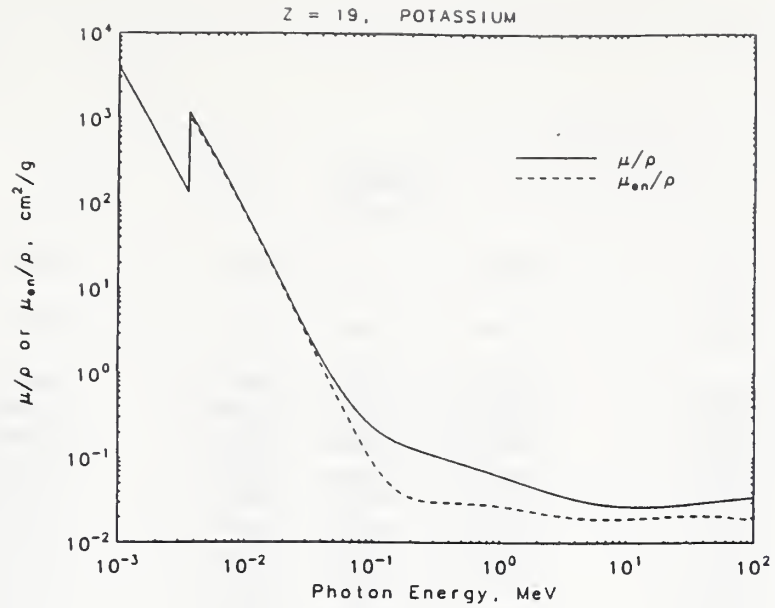
	SULFUR Z = 16			CHLORINE Z = 17			ARGON Z = 18		
	Energy	μ/ρ	μ_{en}/ρ	Energy	μ/ρ	μ_{en}/ρ	Energy	μ/ρ	μ_{en}/ρ
	(MeV)	(cm^2/g)	(cm^2/g)	(MeV)	(cm^2/g)	(cm^2/g)	(MeV)	(cm^2/g)	(cm^2/g)
	1.00000E-03	2.429E+03	2.426E+03	1.00000E-03	2.832E+03	2.829E+03	1.00000E-03	3.184E+03	3.180E+03
	1.50000E-03	8.342E+02	8.314E+02	1.50000E-03	9.771E+02	9.742E+02	1.50000E-03	1.105E+03	1.102E+03
	2.00000E-03	3.853E+02	3.828E+02	2.00000E-03	4.520E+02	4.494E+02	2.00000E-03	5.120E+02	5.093E+02
	2.47200E-03	2.168E+02	2.145E+02	2.82240E-03	1.774E+02	1.752E+02	3.00000E-03	1.703E+02	1.682E+02
K	2.47200E-03	2.070E+03	1.935E+03	K 2.82240E-03	1.637E+03	1.506E+03	3.20290E-03	1.424E+02	1.403E+02
	3.00000E-03	1.339E+03	1.265E+03	3.00000E-03	1.473E+03	1.361E+03	K 3.20290E-03	1.275E+03	1.153E+03
	4.00000E-03	6.338E+02	6.066E+02	4.00000E-03	7.037E+02	6.626E+02	4.00000E-03	7.572E+02	6.979E+02
	5.00000E-03	3.487E+02	3.360E+02	5.00000E-03	3.901E+02	3.711E+02	5.00000E-03	4.225E+02	3.953E+02
	6.00000E-03	2.116E+02	2.046E+02	6.00000E-03	2.384E+02	2.282E+02	6.00000E-03	2.593E+02	2.449E+02
	8.00000E-03	9.465E+01	9.171E+01	8.00000E-03	1.075E+02	1.034E+02	8.00000E-03	1.180E+02	1.125E+02
	1.00000E-02	5.012E+01	4.847E+01	1.00000E-02	5.725E+01	5.510E+01	1.00000E-02	6.316E+01	6.038E+01
	1.50000E-02	1.550E+01	1.477E+01	1.50000E-02	1.784E+01	1.700E+01	1.50000E-02	1.983E+01	1.886E+01
	2.00000E-02	6.708E+00	6.235E+00	2.00000E-02	7.739E+00	7.227E+00	2.00000E-02	8.629E+00	8.074E+00
	3.00000E-02	2.113E+00	1.809E+00	3.00000E-02	2.425E+00	2.114E+00	3.00000E-02	2.697E+00	2.382E+00
	4.00000E-02	9.872E-01	7.466E-01	4.00000E-02	1.117E+00	8.756E-01	4.00000E-02	1.228E+00	9.907E-01
	5.00000E-02	5.849E-01	3.779E-01	5.00000E-02	6.483E-01	4.433E-01	5.00000E-02	7.012E-01	5.020E-01
	6.00000E-02	4.053E-01	2.199E-01	6.00000E-02	4.395E-01	2.570E-01	6.00000E-02	4.664E-01	2.904E-01
	8.00000E-02	2.585E-01	1.000E-01	8.00000E-02	2.696E-01	1.148E-01	8.00000E-02	2.760E-01	1.280E-01
	1.00000E-01	2.020E-01	6.052E-02	1.00000E-01	2.050E-01	6.745E-02	1.00000E-01	2.043E-01	7.344E-02
	1.50000E-01	1.506E-01	3.516E-02	1.50000E-01	1.480E-01	3.639E-02	1.50000E-01	1.427E-01	3.703E-02
	2.00000E-01	1.302E-01	3.080E-02	2.00000E-01	1.266E-01	3.067E-02	2.00000E-01	1.205E-01	2.998E-02
	3.00000E-01	1.091E-01	2.983E-02	3.00000E-01	1.054E-01	2.898E-02	3.00000E-01	9.953E-02	2.757E-02
	4.00000E-01	9.665E-02	2.991E-02	4.00000E-01	9.311E-02	2.887E-02	4.00000E-01	8.776E-02	2.727E-02
	5.00000E-01	8.781E-02	2.984E-02	5.00000E-01	8.453E-02	2.874E-02	5.00000E-01	7.958E-02	2.708E-02
	6.00000E-01	8.102E-02	2.959E-02	6.00000E-01	7.795E-02	2.847E-02	6.00000E-01	7.335E-02	2.679E-02
	8.00000E-01	7.098E-02	2.878E-02	8.00000E-01	6.826E-02	2.767E-02	8.00000E-01	6.419E-02	2.601E-02
	1.00000E+00	6.373E-02	2.780E-02	1.00000E+00	6.128E-02	2.671E-02	1.00000E+00	5.762E-02	2.510E-02
	1.25000E+00	5.697E-02	2.652E-02	1.25000E+00	5.478E-02	2.549E-02	1.25000E+00	5.150E-02	2.394E-02
	1.50000E+00	5.193E-02	2.535E-02	1.50000E+00	4.994E-02	2.436E-02	1.50000E+00	4.695E-02	2.288E-02
	2.00000E+00	4.498E-02	2.349E-02	2.00000E+00	4.328E-02	2.258E-02	2.00000E+00	4.074E-02	2.123E-02
	3.00000E+00	3.715E-02	2.118E-02	3.00000E+00	3.585E-02	2.043E-02	3.00000E+00	3.384E-02	1.927E-02
	4.00000E+00	3.293E-02	1.993E-02	4.00000E+00	3.188E-02	1.931E-02	4.00000E+00	3.019E-02	1.827E-02
	5.00000E+00	3.036E-02	1.923E-02	5.00000E+00	2.950E-02	1.871E-02	5.00000E+00	2.802E-02	1.777E-02
	6.00000E+00	2.872E-02	1.884E-02	6.00000E+00	2.798E-02	1.839E-02	6.00000E+00	2.667E-02	1.753E-02
	8.00000E+00	2.682E-02	1.850E-02	8.00000E+00	2.628E-02	1.819E-02	8.00000E+00	2.517E-02	1.742E-02
	1.00000E+01	2.589E-02	1.845E-02	1.00000E+01	2.549E-02	1.824E-02	1.00000E+01	2.451E-02	1.754E-02
	1.50000E+01	2.517E-02	1.864E-02	1.50000E+01	2.496E-02	1.861E-02	1.50000E+01	2.418E-02	1.800E-02
	2.00000E+01	2.529E-02	1.889E-02	2.00000E+01	2.520E-02	1.899E-02	2.00000E+01	2.453E-02	1.842E-02

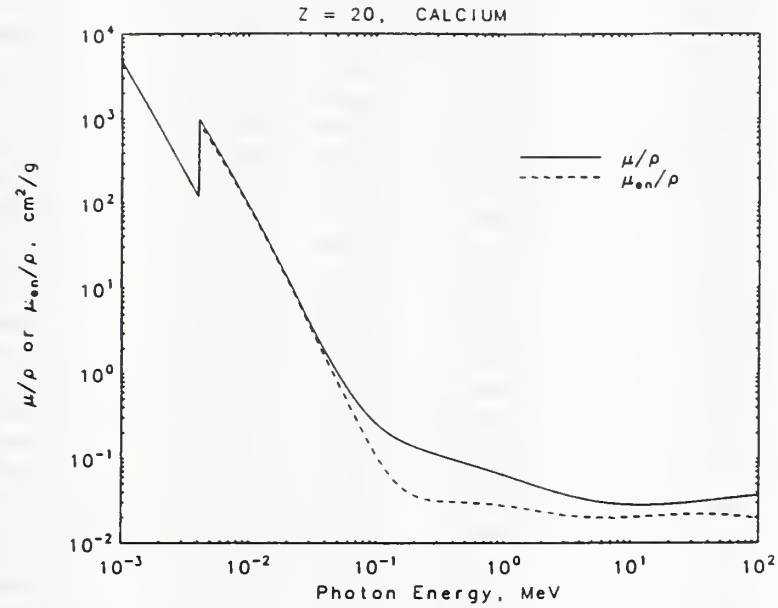

Z = 16, SULFUR
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

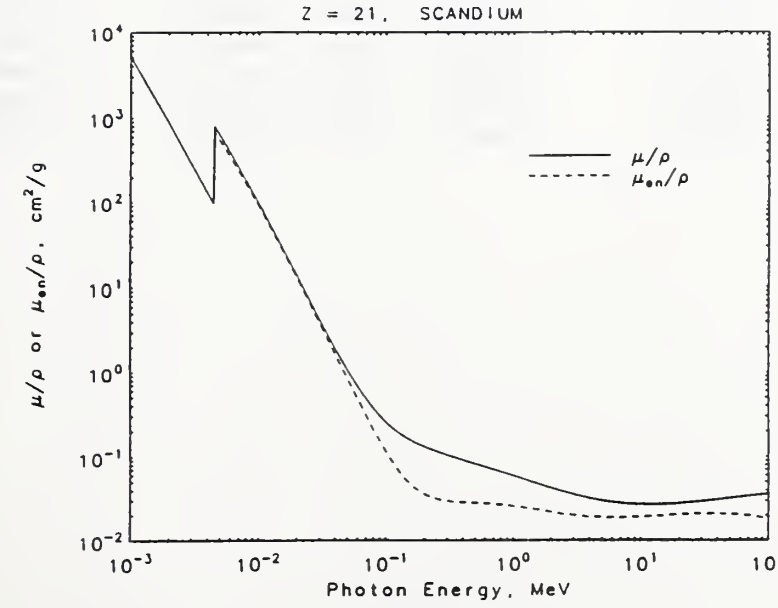

Z = 17, CHLORINE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 18, ARGON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

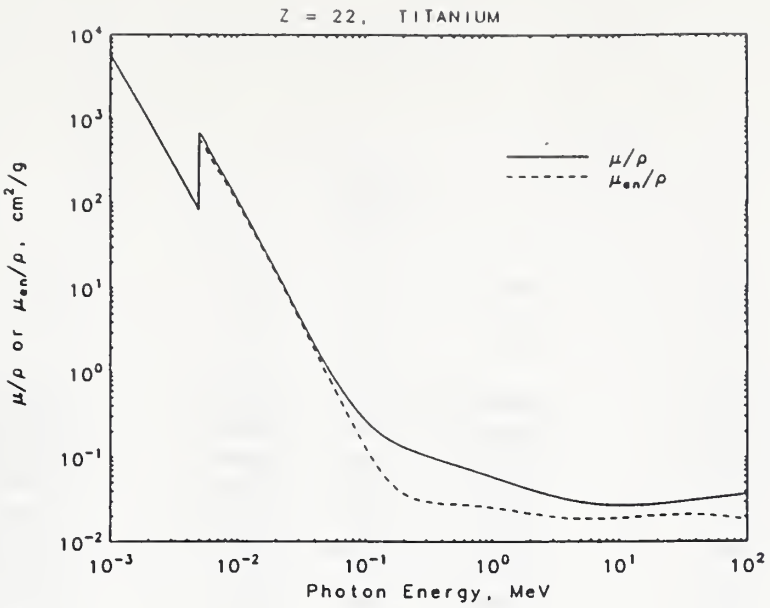
	POTASSIUM Z = 19			CALCIUM Z = 20			SCANDIUM Z = 21		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.058E+03	4.053E+03	1.00000E-03	4.867E+03	4.861E+03	1.00000E-03	5.238E+03	5.231E+03
	1.50000E-03	1.418E+03	1.415E+03	1.50000E-03	1.714E+03	1.710E+03	1.50000E-03	1.858E+03	1.853E+03
	2.00000E-03	6.592E+02	6.563E+02	2.00000E-03	7.999E+02	7.966E+02	2.00000E-03	8.706E+02	8.672E+02
	3.00000E-03	2.198E+02	2.174E+02	3.00000E-03	2.676E+02	2.650E+02	3.00000E-03	2.922E+02	2.896E+02
	3.60740E-03	1.327E+02	1.306E+02	4.00000E-03	1.218E+02	1.197E+02	4.00000E-03	1.332E+02	1.311E+02
K	3.60740E-03	1.201E+03	1.065E+03	4.03810E-03	1.187E+02	1.166E+02	4.49280E-03	9.687E+01	9.490E+01
	4.00000E-03	9.256E+02	8.304E+02	K 4.03810E-03	1.023E+03	8.887E+02	K 4.49280E-03	8.148E+02	6.911E+02
	5.00000E-03	5.189E+02	4.752E+02	5.00000E-03	6.026E+02	5.373E+02	5.00000E-03	6.305E+02	5.436E+02
	6.00000E-03	3.205E+02	2.974E+02	6.00000E-03	3.731E+02	3.387E+02	6.00000E-03	3.933E+02	3.474E+02
	8.00000E-03	1.469E+02	1.383E+02	8.00000E-03	1.726E+02	1.600E+02	8.00000E-03	1.828E+02	1.661E+02
	1.00000E-02	7.907E+01	7.490E+01	1.00000E-02	9.341E+01	8.744E+01	1.00000E-02	9.952E+01	9.175E+01
	1.50000E-02	2.503E+01	2.370E+01	1.50000E-02	2.979E+01	2.804E+01	1.50000E-02	3.202E+01	2.988E+01
	2.00000E-02	1.093E+01	1.023E+01	2.00000E-02	1.306E+01	1.220E+01	2.00000E-02	1.409E+01	1.311E+01
	3.00000E-02	3.413E+00	3.045E+00	3.00000E-02	4.080E+00	3.665E+00	3.00000E-02	4.409E+00	3.975E+00
	4.00000E-02	1.541E+00	1.272E+00	4.00000E-02	1.830E+00	1.538E+00	4.00000E-02	1.969E+00	1.677E+00
	5.00000E-02	8.679E-01	6.454E-01	5.00000E-02	1.019E+00	7.822E-01	5.00000E-02	1.087E+00	8.552E-01
	6.00000E-02	5.678E-01	3.730E-01	6.00000E-02	6.578E-01	4.520E-01	6.00000E-02	6.932E-01	4.944E-01
	8.00000E-02	3.251E-01	1.628E-01	8.00000E-02	3.656E-01	1.958E-01	8.00000E-02	3.753E-01	2.132E-01
	1.00000E-01	2.345E-01	9.161E-02	1.00000E-01	2.571E-01	1.085E-01	1.00000E-01	2.577E-01	1.167E-01
	1.50000E-01	1.582E-01	4.346E-02	1.50000E-01	1.674E-01	4.876E-02	1.50000E-01	1.619E-01	4.998E-02
	2.00000E-01	1.319E-01	3.378E-02	2.00000E-01	1.376E-01	3.639E-02	2.00000E-01	1.310E-01	3.586E-02
	3.00000E-01	1.080E-01	3.015E-02	3.00000E-01	1.116E-01	3.146E-02	3.00000E-01	1.052E-01	2.997E-02
	4.00000E-01	9.495E-02	2.959E-02	4.00000E-01	9.783E-02	3.060E-02	4.00000E-01	9.193E-02	2.887E-02
	5.00000E-01	8.600E-02	2.929E-02	5.00000E-01	8.851E-02	3.019E-02	5.00000E-01	8.305E-02	2.837E-02
	6.00000E-01	7.922E-02	2.895E-02	6.00000E-01	8.148E-02	2.979E-02	6.00000E-01	7.639E-02	2.795E-02
	8.00000E-01	6.929E-02	2.807E-02	8.00000E-01	7.122E-02	2.884E-02	8.00000E-01	6.675E-02	2.703E-02
	1.00000E+00	6.216E-02	2.707E-02	1.00000E+00	6.388E-02	2.780E-02	1.00000E+00	5.985E-02	2.603E-02
	1.25000E+00	5.556E-02	2.581E-02	1.25000E+00	5.709E-02	2.650E-02	1.25000E+00	5.347E-02	2.480E-02
	1.50000E+00	5.068E-02	2.467E-02	1.50000E+00	5.207E-02	2.532E-02	1.50000E+00	4.878E-02	2.370E-02
	2.00000E+00	4.399E-02	2.290E-02	2.00000E+00	4.524E-02	2.352E-02	2.00000E+00	4.243E-02	2.202E-02
	3.00000E+00	3.666E-02	2.084E-02	3.00000E+00	3.780E-02	2.147E-02	3.00000E+00	3.554E-02	2.016E-02
	4.00000E+00	3.282E-02	1.985E-02	4.00000E+00	3.395E-02	2.052E-02	4.00000E+00	3.202E-02	1.933E-02
	5.00000E+00	3.054E-02	1.935E-02	5.00000E+00	3.170E-02	2.007E-02	5.00000E+00	2.999E-02	1.897E-02
	6.00000E+00	2.915E-02	1.914E-02	6.00000E+00	3.035E-02	1.992E-02	6.00000E+00	2.878E-02	1.887E-02
	8.00000E+00	2.766E-02	1.910E-02	8.00000E+00	2.892E-02	1.997E-02	8.00000E+00	2.756E-02	1.900E-02
	1.00000E+01	2.704E-02	1.928E-02	1.00000E+01	2.839E-02	2.022E-02	1.00000E+01	2.715E-02	1.929E-02
	1.50000E+01	2.687E-02	1.983E-02	1.50000E+01	2.838E-02	2.088E-02	1.50000E+01	2.732E-02	2.000E-02
	2.00000E+01	2.737E-02	2.029E-02	2.00000E+01	2.903E-02	2.140E-02	2.00000E+01	2.804E-02	2.052E-02

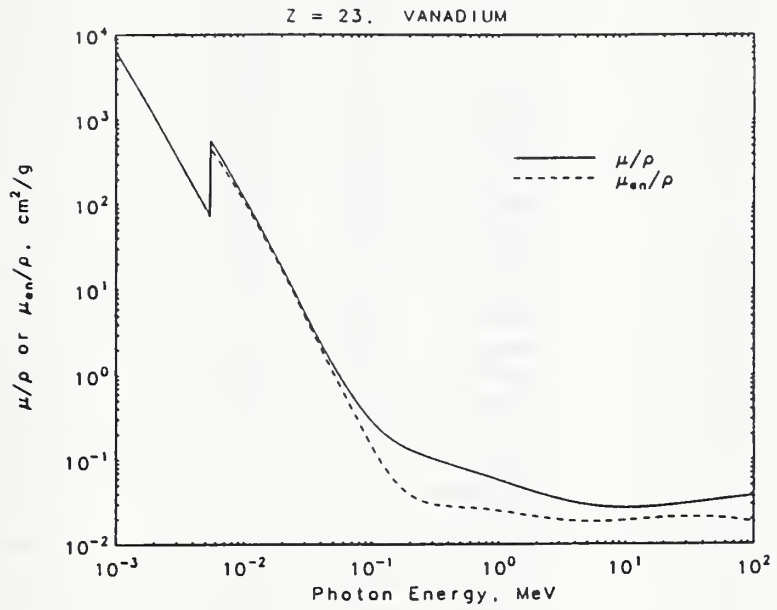

Z = 19, POTASSIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

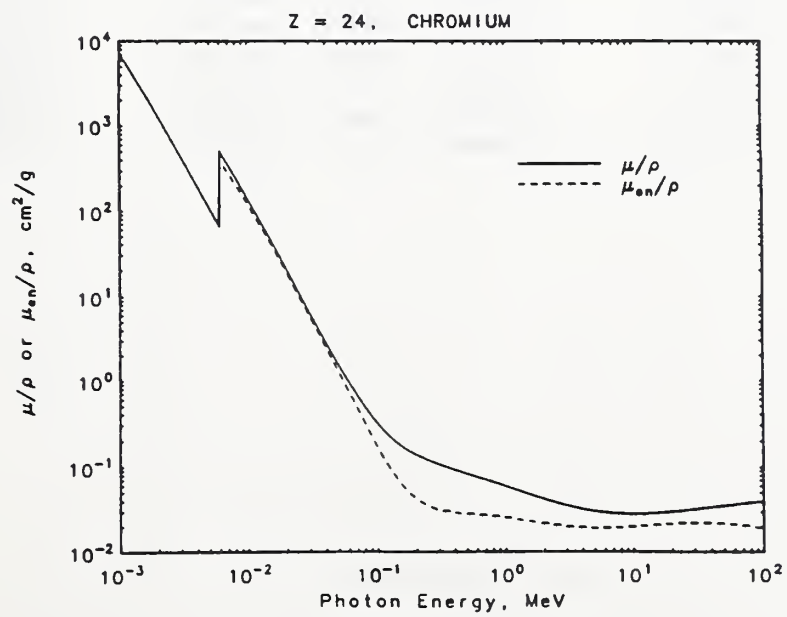

Z = 20, CALCIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 21, SCANDIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

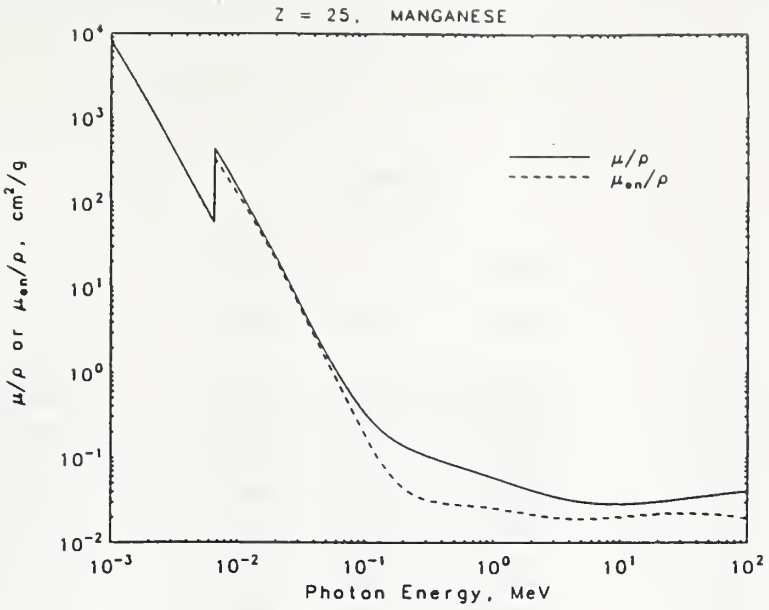
	TITANIUM Z = 22			VANADIUM Z = 23			CHROMIUM Z = 24		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.869E+03	5.860E+03	1.00000E-03	6.495E+03	6.483E+03	1.00000E-03	7.405E+03	7.388E+03
	1.50000E-03	2.096E+03	2.091E+03	1.50000E-03	2.342E+03	2.336E+03	1.50000E-03	2.694E+03	2.687E+03
	2.00000E-03	9.860E+02	9.824E+02	2.00000E-03	1.106E+03	1.102E+03	2.00000E-03	1.277E+03	1.272E+03
	3.00000E-03	3.323E+02	3.295E+02	3.00000E-03	3.743E+02	3.713E+02	3.00000E-03	4.339E+02	4.305E+02
	4.00000E-03	1.517E+02	1.494E+02	4.00000E-03	1.712E+02	1.688E+02	4.00000E-03	1.988E+02	1.961E+02
	4.96640E-03	8.380E+01	8.188E+01	5.00000E-03	9.291E+01	9.089E+01	5.00000E-03	1.080E+02	1.057E+02
K	4.96640E-03	6.878E+02	5.684E+02	5.46510E-03	7.277E+01	7.090E+01	5.98920E-03	6.574E+01	6.383E+01
	5.00000E-03	6.838E+02	5.657E+02	K 5.46510E-03	5.870E+02	4.717E+02	K 5.98920E-03	5.160E+02	4.027E+02
	6.00000E-03	4.323E+02	3.691E+02	6.00000E-03	4.687E+02	3.841E+02	6.00000E-03	5.160E+02	4.027E+02
	8.00000E-03	2.023E+02	1.793E+02	8.00000E-03	2.217E+02	1.908E+02	8.00000E-03	2.513E+02	2.087E+02
	1.00000E-02	1.107E+02	1.001E+02	1.00000E-02	1.218E+02	1.077E+02	1.00000E-02	1.386E+02	1.193E+02
	1.50000E-02	3.587E+01	3.311E+01	1.50000E-02	3.983E+01	3.627E+01	1.50000E-02	4.571E+01	4.093E+01
	2.00000E-02	1.585E+01	1.465E+01	2.00000E-02	1.768E+01	1.620E+01	2.00000E-02	2.038E+01	1.846E+01
	3.00000E-02	4.972E+00	4.488E+00	3.00000E-02	5.564E+00	5.015E+00	3.00000E-02	6.434E+00	5.780E+00
	4.00000E-02	2.214E+00	1.904E+00	4.00000E-02	2.472E+00	2.140E+00	4.00000E-02	2.856E+00	2.482E+00
	5.00000E-02	1.213E+00	9.737E-01	5.00000E-02	1.347E+00	1.098E+00	5.00000E-02	1.550E+00	1.278E+00
	6.00000E-02	7.661E-01	5.634E-01	6.00000E-02	8.438E-01	6.364E-01	6.00000E-02	9.639E-01	7.420E-01
	8.00000E-02	4.052E-01	2.422E-01	8.00000E-02	4.371E-01	2.731E-01	8.00000E-02	4.905E-01	3.182E-01
	1.00000E-01	2.721E-01	1.312E-01	1.00000E-01	2.877E-01	1.469E-01	1.00000E-01	3.166E-01	1.701E-01
	1.50000E-01	1.649E-01	5.393E-02	1.50000E-01	1.682E-01	5.821E-02	1.50000E-01	1.788E-01	6.536E-02
	2.00000E-01	1.314E-01	3.726E-02	2.00000E-01	1.318E-01	3.879E-02	2.00000E-01	1.378E-01	4.211E-02
	3.00000E-01	1.043E-01	3.007E-02	3.00000E-01	1.034E-01	3.019E-02	3.00000E-01	1.067E-01	3.160E-02
	4.00000E-01	9.081E-02	2.864E-02	4.00000E-01	8.965E-02	2.843E-02	4.00000E-01	9.213E-02	2.938E-02
	5.00000E-01	8.191E-02	2.804E-02	5.00000E-01	8.074E-02	2.770E-02	5.00000E-01	8.281E-02	2.849E-02
	6.00000E-01	7.529E-02	2.756E-02	6.00000E-01	7.414E-02	2.717E-02	6.00000E-01	7.598E-02	2.788E-02
	8.00000E-01	6.572E-02	2.661E-02	8.00000E-01	6.466E-02	2.618E-02	8.00000E-01	6.620E-02	2.680E-02
	1.00000E+00	5.891E-02	2.561E-02	1.00000E+00	5.794E-02	2.518E-02	1.00000E+00	5.930E-02	2.576E-02
	1.25000E+00	5.263E-02	2.439E-02	1.25000E+00	5.175E-02	2.396E-02	1.25000E+00	5.295E-02	2.450E-02
	1.50000E+00	4.801E-02	2.330E-02	1.50000E+00	4.722E-02	2.289E-02	1.50000E+00	4.832E-02	2.340E-02
	2.00000E+00	4.180E-02	2.166E-02	2.00000E+00	4.115E-02	2.130E-02	2.00000E+00	4.213E-02	2.178E-02
	3.00000E+00	3.512E-02	1.989E-02	3.00000E+00	3.466E-02	1.961E-02	3.00000E+00	3.559E-02	2.011E-02
	4.00000E+00	3.173E-02	1.913E-02	4.00000E+00	3.141E-02	1.892E-02	4.00000E+00	3.235E-02	1.947E-02
	5.00000E+00	2.982E-02	1.884E-02	5.00000E+00	2.960E-02	1.869E-02	5.00000E+00	3.057E-02	1.929E-02
	6.00000E+00	2.868E-02	1.879E-02	6.00000E+00	2.855E-02	1.869E-02	6.00000E+00	2.956E-02	1.933E-02
	8.00000E+00	2.759E-02	1.899E-02	8.00000E+00	2.759E-02	1.896E-02	8.00000E+00	2.869E-02	1.970E-02
	1.00000E+01	2.727E-02	1.933E-02	1.00000E+01	2.738E-02	1.937E-02	1.00000E+01	2.855E-02	2.016E-02
	1.50000E+01	2.762E-02	2.013E-02	1.50000E+01	2.786E-02	2.022E-02	1.50000E+01	2.920E-02	2.112E-02
	2.00000E+01	2.844E-02	2.067E-02	2.00000E+01	2.877E-02	2.079E-02	2.00000E+01	3.026E-02	2.174E-02

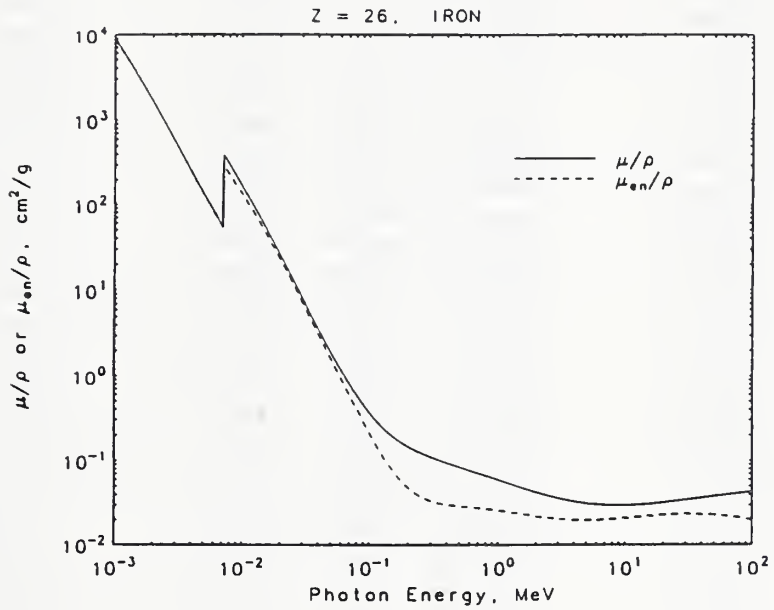

Z = 22, TITANIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

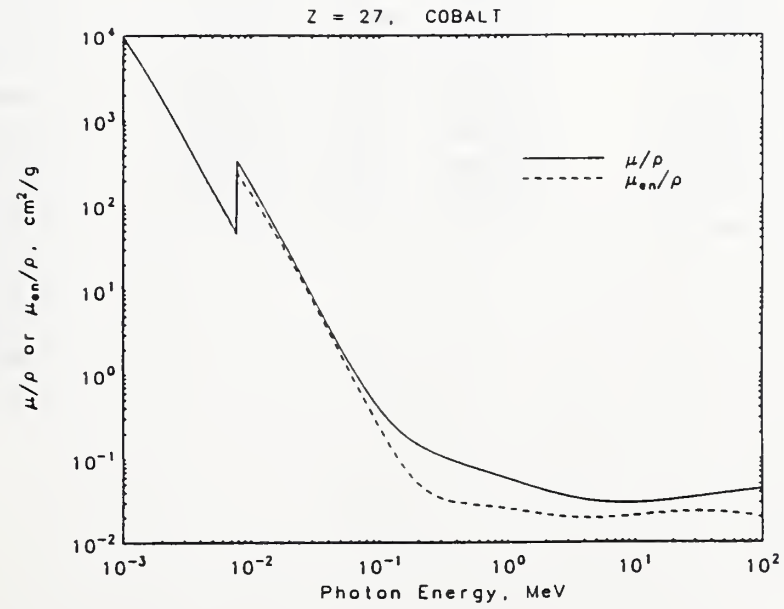

Z = 23, VANADIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 24, CHROMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	MANGANESE Z = 25			IRON Z = 26			COBALT Z = 27		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	8.093E+03	8.069E+03	1.00000E-03	9.085E+03	9.052E+03	1.00000E-03	9.796E+03	9.750E+03
	1.50000E-03	2.984E+03	2.975E+03	1.50000E-03	3.399E+03	3.388E+03	1.50000E-03	3.697E+03	3.682E+03
	2.00000E-03	1.421E+03	1.415E+03	2.00000E-03	1.626E+03	1.620E+03	2.00000E-03	1.779E+03	1.771E+03
	3.00000E-03	4.851E+02	4.815E+02	3.00000E-03	5.576E+02	5.535E+02	3.00000E-03	6.129E+02	6.084E+02
	4.00000E-03	2.229E+02	2.201E+02	4.00000E-03	2.567E+02	2.536E+02	4.00000E-03	2.830E+02	2.796E+02
	5.00000E-03	1.212E+02	1.188E+02	5.00000E-03	1.398E+02	1.372E+02	5.00000E-03	1.543E+02	1.515E+02
	6.00000E-03	7.350E+01	7.150E+01	6.00000E-03	8.484E+01	8.265E+01	6.00000E-03	9.370E+01	9.138E+01
	6.53900E-03	5.803E+01	5.619E+01	7.11200E-03	5.319E+01	5.133E+01	7.70890E-03	4.710E+01	4.530E+01
K	6.53900E-03	4.520E+02	3.415E+02	K 7.11200E-03	4.076E+02	2.978E+02	K 7.70890E-03	3.555E+02	2.507E+02
	8.00000E-03	2.734E+02	2.177E+02	8.00000E-03	3.056E+02	2.316E+02	8.00000E-03	3.248E+02	2.322E+02
	1.00000E-02	1.514E+02	1.262E+02	1.00000E-02	1.706E+02	1.369E+02	1.00000E-02	1.841E+02	1.413E+02
	1.50000E-02	5.027E+01	4.414E+01	1.50000E-02	5.708E+01	4.896E+01	1.50000E-02	6.201E+01	5.178E+01
	2.00000E-02	2.253E+01	2.015E+01	2.00000E-02	2.568E+01	2.260E+01	2.00000E-02	2.803E+01	2.421E+01
	3.00000E-02	7.141E+00	6.382E+00	3.00000E-02	8.176E+00	7.251E+00	3.00000E-02	8.962E+00	7.873E+00
	4.00000E-02	3.169E+00	2.757E+00	4.00000E-02	3.629E+00	3.155E+00	4.00000E-02	3.981E+00	3.450E+00
	5.00000E-02	1.714E+00	1.425E+00	5.00000E-02	1.958E+00	1.638E+00	5.00000E-02	2.144E+00	1.799E+00
	6.00000E-02	1.060E+00	8.294E-01	6.00000E-02	1.205E+00	9.555E-01	6.00000E-02	1.314E+00	1.052E+00
	8.00000E-02	5.306E-01	3.558E-01	8.00000E-02	5.952E-01	4.104E-01	8.00000E-02	6.414E-01	4.528E-01
	1.00000E-01	3.367E-01	1.894E-01	1.00000E-01	3.717E-01	2.177E-01	1.00000E-01	3.949E-01	2.397E-01
	1.50000E-01	1.838E-01	7.085E-02	1.50000E-01	1.964E-01	7.961E-02	1.50000E-01	2.023E-01	8.597E-02
	2.00000E-01	1.391E-01	4.421E-02	2.00000E-01	1.460E-01	4.825E-02	2.00000E-01	1.476E-01	5.071E-02
	3.00000E-01	1.062E-01	3.196E-02	3.00000E-01	1.099E-01	3.361E-02	3.00000E-01	1.094E-01	3.406E-02
	4.00000E-01	9.133E-02	2.932E-02	4.00000E-01	9.400E-02	3.039E-02	4.00000E-01	9.311E-02	3.034E-02
	5.00000E-01	8.192E-02	2.827E-02	5.00000E-01	8.414E-02	2.914E-02	5.00000E-01	8.315E-02	2.890E-02
	6.00000E-01	7.509E-02	2.760E-02	6.00000E-01	7.704E-02	2.836E-02	6.00000E-01	7.604E-02	2.805E-02
	8.00000E-01	6.537E-02	2.647E-02	8.00000E-01	6.699E-02	2.714E-02	8.00000E-01	6.604E-02	2.677E-02
	1.00000E+00	5.852E-02	2.541E-02	1.00000E+00	5.995E-02	2.603E-02	1.00000E+00	5.906E-02	2.564E-02
	1.25000E+00	5.224E-02	2.416E-02	1.25000E+00	5.350E-02	2.472E-02	1.25000E+00	5.270E-02	2.434E-02
	1.50000E+00	4.769E-02	2.307E-02	1.50000E+00	4.883E-02	2.360E-02	1.50000E+00	4.810E-02	2.323E-02
	2.00000E+00	4.162E-02	2.149E-02	2.00000E+00	4.265E-02	2.199E-02	2.00000E+00	4.204E-02	2.165E-02
	3.00000E+00	3.524E-02	1.989E-02	3.00000E+00	3.621E-02	2.042E-02	3.00000E+00	3.580E-02	2.016E-02
	4.00000E+00	3.213E-02	1.933E-02	4.00000E+00	3.312E-02	1.990E-02	4.00000E+00	3.283E-02	1.971E-02
	5.00000E+00	3.045E-02	1.920E-02	5.00000E+00	3.146E-02	1.983E-02	5.00000E+00	3.127E-02	1.969E-02
	6.00000E+00	2.952E-02	1.930E-02	6.00000E+00	3.057E-02	1.997E-02	6.00000E+00	3.045E-02	1.988E-02
	8.00000E+00	2.875E-02	1.973E-02	8.00000E+00	2.991E-02	2.050E-02	8.00000E+00	2.991E-02	2.048E-02
	1.00000E+01	2.871E-02	2.025E-02	1.00000E+01	2.994E-02	2.108E-02	1.00000E+01	3.002E-02	2.110E-02
	1.50000E+01	2.951E-02	2.127E-02	1.50000E+01	3.092E-02	2.221E-02	1.50000E+01	3.115E-02	2.230E-02
	2.00000E+01	3.068E-02	2.193E-02	2.00000E+01	3.224E-02	2.292E-02	2.00000E+01	3.256E-02	2.303E-02


Z = 25, MANGANESE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

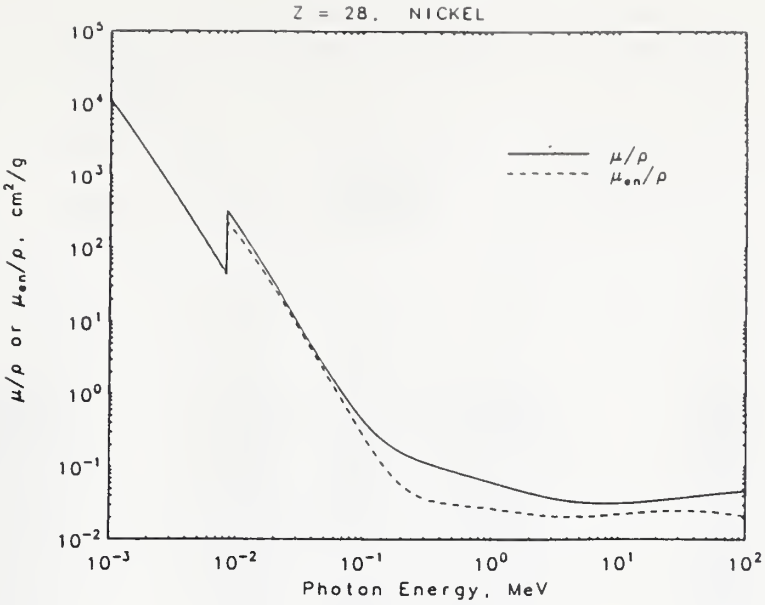

Z = 26, IRON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

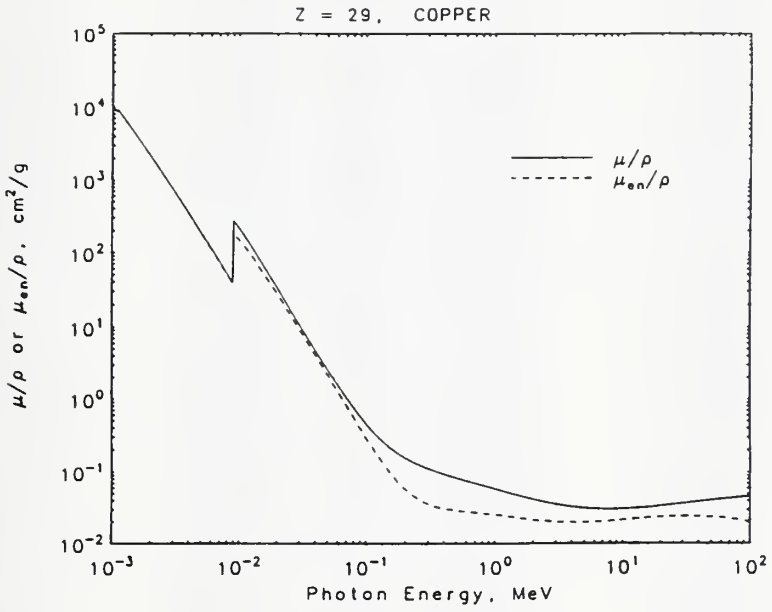

Z = 27, COBALT
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

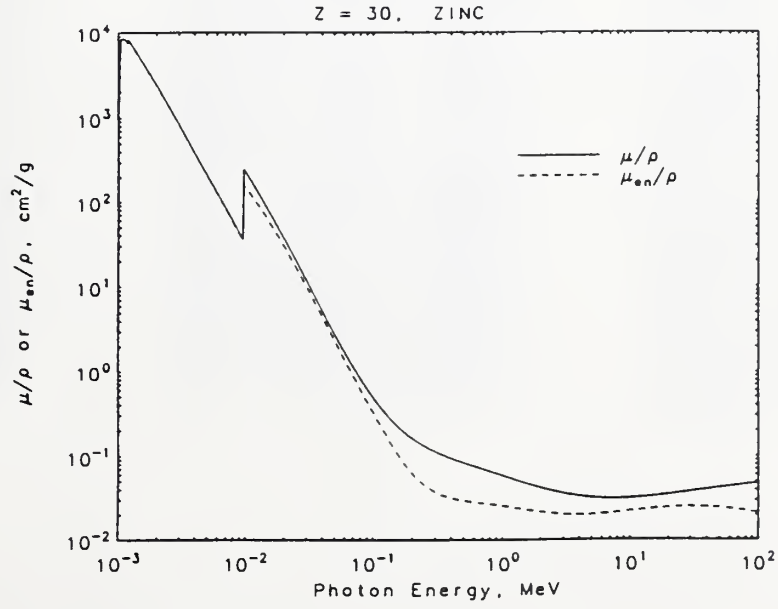
	NICKEL $Z = 28$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.855E+03	9.797E+03
	1.00404E-03	9.753E+03	9.697E+03
	1.00810E-03	9.654E+03	9.598E+03
L1	1.00810E-03	1.099E+04	1.093E+04
	1.50000E-03	4.234E+03	4.214E+03
	2.00000E-03	2.049E+03	2.039E+03
	3.00000E-03	7.094E+02	7.042E+02
	4.00000E-03	3.282E+02	3.244E+02
	5.00000E-03	1.793E+02	1.761E+02
	6.00000E-03	1.090E+02	1.064E+02
	8.00000E-03	4.952E+01	4.758E+01
	8.33280E-03	4.428E+01	4.242E+01
K	8.33280E-03	3.294E+02	2.240E+02
	1.00000E-02	2.090E+02	1.524E+02
	1.50000E-02	7.081E+01	5.734E+01
	2.00000E-02	3.220E+01	2.722E+01
	3.00000E-02	1.034E+01	8.982E+00
	4.00000E-02	4.600E+00	3.967E+00
	5.00000E-02	2.474E+00	2.078E+00
	6.00000E-02	1.512E+00	1.219E+00
	8.00000E-02	7.306E-01	5.259E-01
	1.00000E-01	4.440E-01	2.781E-01
	1.50000E-01	2.208E-01	9.812E-02
	2.00000E-01	1.582E-01	5.649E-02
	3.00000E-01	1.154E-01	3.659E-02
	4.00000E-01	9.765E-02	3.209E-02
	5.00000E-01	8.698E-02	3.036E-02
	6.00000E-01	7.944E-02	2.937E-02
	8.00000E-01	6.891E-02	2.795E-02
	1.00000E+00	6.160E-02	2.674E-02
	1.25000E+00	5.494E-02	2.536E-02
	1.50000E+00	5.015E-02	2.420E-02
	2.00000E+00	4.387E-02	2.257E-02
	3.00000E+00	3.745E-02	2.107E-02
	4.00000E+00	3.444E-02	2.066E-02
	5.00000E+00	3.289E-02	2.070E-02
	6.00000E+00	3.210E-02	2.094E-02
	8.00000E+00	3.164E-02	2.163E-02
	1.00000E+01	3.185E-02	2.234E-02
	1.50000E+01	3.320E-02	2.368E-02
	2.00000E+01	3.476E-02	2.446E-02

	COPPER $Z = 29$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.057E+04	1.049E+04
	1.04695E-03	9.307E+03	9.241E+03
	1.09610E-03	8.242E+03	8.186E+03
L1	1.09610E-03	9.347E+03	9.282E+03
	1.50000E-03	4.418E+03	4.393E+03
	2.00000E-03	2.154E+03	2.142E+03
	3.00000E-03	7.488E+02	7.430E+02
	4.00000E-03	3.473E+02	3.432E+02
	5.00000E-03	1.899E+02	1.866E+02
	6.00000E-03	1.156E+02	1.128E+02
	8.00000E-03	5.255E+01	5.054E+01
	8.97890E-03	3.829E+01	3.652E+01
K	8.97890E-03	2.784E+02	1.824E+02
	1.00000E-02	2.159E+02	1.484E+02
	1.50000E-02	7.405E+01	5.788E+01
	2.00000E-02	3.379E+01	2.788E+01
	3.00000E-02	1.092E+01	9.349E+00
	4.00000E-02	4.862E+00	4.163E+00
	5.00000E-02	2.613E+00	2.192E+00
	6.00000E-02	1.593E+00	1.290E+00
	8.00000E-02	7.630E-01	5.581E-01
	1.00000E-01	4.584E-01	2.949E-01
	1.50000E-01	2.217E-01	1.027E-01
	2.00000E-01	1.559E-01	5.781E-02
	3.00000E-01	1.119E-01	3.617E-02
	4.00000E-01	9.413E-02	3.121E-02
	5.00000E-01	8.362E-02	2.933E-02
	6.00000E-01	7.625E-02	2.826E-02
	8.00000E-01	6.605E-02	2.681E-02
	1.00000E+00	5.901E-02	2.562E-02
	1.25000E+00	5.261E-02	2.428E-02
	1.50000E+00	4.803E-02	2.316E-02
	2.00000E+00	4.205E-02	2.160E-02
	3.00000E+00	3.599E-02	2.023E-02
	4.00000E+00	3.318E-02	1.989E-02
	5.00000E+00	3.177E-02	1.998E-02
	6.00000E+00	3.108E-02	2.027E-02
	8.00000E+00	3.074E-02	2.100E-02
	1.00000E+01	3.103E-02	2.174E-02
	1.50000E+01	3.247E-02	2.309E-02
	2.00000E+01	3.408E-02	2.387E-02

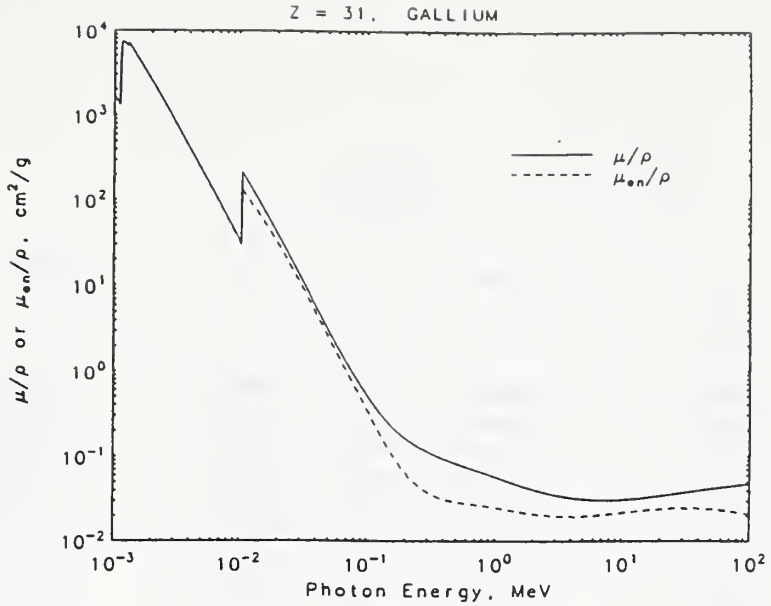
	ZINC $Z = 30$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.553E+03	1.548E+03
	1.00980E-03	1.518E+03	1.513E+03
	1.01970E-03	1.484E+03	1.478E+03
L3	1.01970E-03	3.804E+03	3.777E+03
	1.03119E-03	5.097E+03	5.057E+03
	1.04280E-03	6.518E+03	6.464E+03
L2	1.04280E-03	8.274E+03	8.202E+03
	1.11565E-03	8.452E+03	8.382E+03
	1.19360E-03	7.371E+03	7.312E+03
L1	1.19360E-03	8.396E+03	8.328E+03
	1.50000E-03	4.825E+03	4.791E+03
	2.00000E-03	2.375E+03	2.359E+03
	3.00000E-03	8.311E+02	8.244E+02
	4.00000E-03	3.865E+02	3.820E+02
	5.00000E-03	2.118E+02	2.082E+02
	6.00000E-03	1.290E+02	1.261E+02
	8.00000E-03	5.875E+01	5.660E+01
	9.65860E-03	3.505E+01	3.332E+01
K	9.65860E-03	2.536E+02	1.599E+02
	1.00000E-02	2.331E+02	1.497E+02
	1.50000E-02	8.117E+01	6.099E+01
	2.00000E-02	3.719E+01	2.986E+01
	3.00000E-02	1.207E+01	1.018E+01
	4.00000E-02	5.384E+00	4.570E+00
	5.00000E-02	2.892E+00	2.419E+00
	6.00000E-02	1.760E+00	1.429E+00
	8.00000E-02	8.364E-01	6.203E-01
	1.00000E-01	4.973E-01	3.278E-01
	1.50000E-01	2.341E-01	1.128E-01
	2.00000E-01	1.617E-01	6.225E-02
	3.00000E-01	1.141E-01	3.764E-02
	4.00000E-01	9.539E-02	3.195E-02
	5.00000E-01	8.450E-02	2.979E-02
	6.00000E-01	7.695E-02	2.861E-02
	8.00000E-01	6.656E-02	2.704E-02
	1.00000E+00	5.941E-02	2.580E-02
	1.25000E+00	5.296E-02	2.443E-02
	1.50000E+00	4.834E-02	2.329E-02
	2.00000E+00	4.235E-02	2.174E-02
	3.00000E+00	3.634E-02	2.041E-02
	4.00000E+00	3.360E-02	2.014E-02
	5.00000E+00	3.225E-02	2.028E-02
	6.00000E+00	3.160E-02	2.061E-02
	8.00000E+00	3.138E-02	2.143E-02
	1.00000E+01	3.175E-02	2.223E-02
	1.50000E+01	3.335E-02	2.367E-02
	2.00000E+01	3.509E-02	2.451E-02

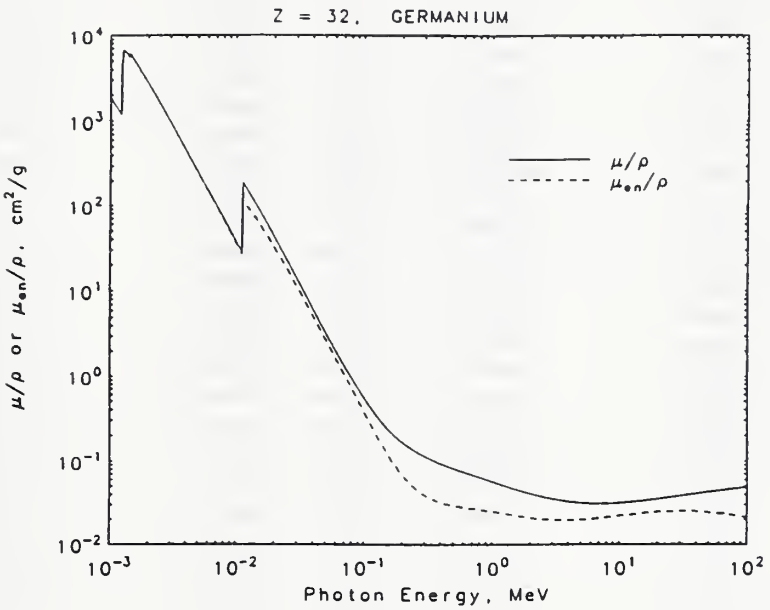

Z = 28, NICKEL
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

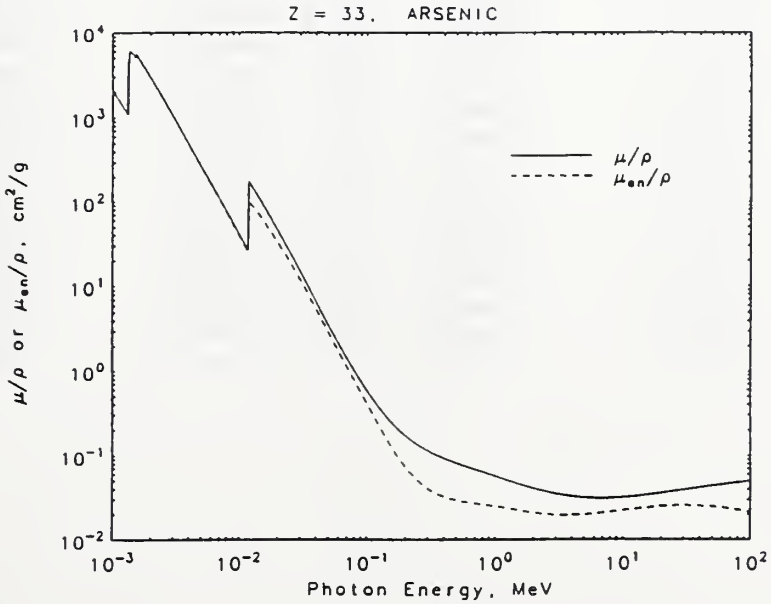

Z = 29, COPPER
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 30, ZINC
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

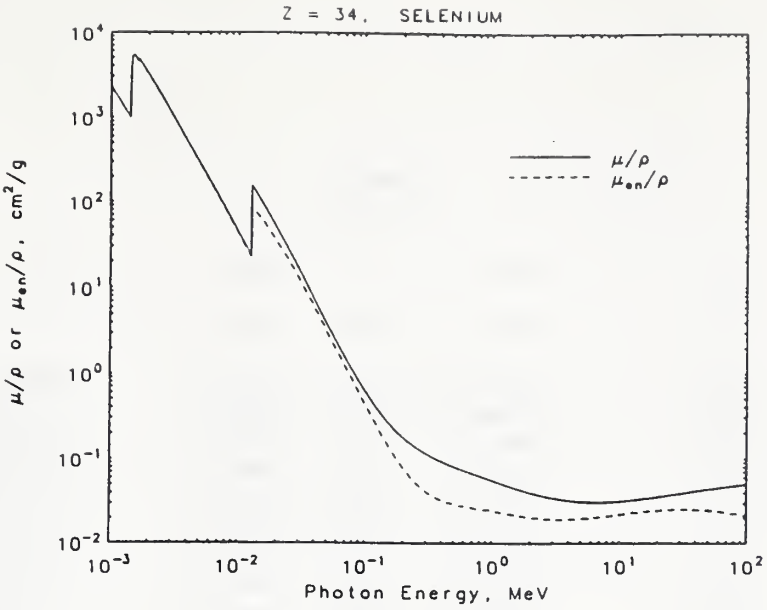
	GALLIUM $Z = 31$			GERMANIUM $Z = 32$			ARSENIC $Z = 33$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.697E+03	1.692E+03	1.00000E-03	1.893E+03	1.887E+03			
	1.05613E-03	1.492E+03	1.487E+03	1.10304E-03	1.502E+03	1.496E+03	1.00000E-03	2.121E+03	2.116E+03
	1.11540E-03	1.312E+03	1.307E+03	1.21670E-03	1.190E+03	1.185E+03	1.15026E-03	1.523E+03	1.517E+03
L3	1.11540E-03	3.990E+03	3.955E+03	L3 1.21670E-03	4.389E+03	4.343E+03	1.32310E-03	1.092E+03	1.087E+03
	1.12877E-03	4.887E+03	4.842E+03	1.23215E-03	4.734E+03	4.684E+03	L3 1.32310E-03	4.513E+03	4.459E+03
	1.14230E-03	5.664E+03	5.611E+03	1.24780E-03	4.974E+03	4.922E+03	1.34073E-03	4.469E+03	4.416E+03
L2	1.14230E-03	7.405E+03	7.332E+03	L2 1.24780E-03	6.698E+03	6.622E+03	1.35860E-03	4.452E+03	4.398E+03
	1.21752E-03	7.138E+03	7.070E+03	1.32844E-03	6.348E+03	6.279E+03	L2 1.35860E-03	6.093E+03	6.015E+03
	1.29770E-03	6.358E+03	6.299E+03	1.41430E-03	5.554E+03	5.495E+03	1.50000E-03	5.227E+03	5.164E+03
L1	1.29770E-03	7.206E+03	7.139E+03	L1 1.41430E-03	6.287E+03	6.221E+03	1.52650E-03	4.997E+03	4.938E+03
	1.50000E-03	5.087E+03	5.044E+03	1.50000E-03	5.475E+03	5.420E+03	L1 1.52650E-03	5.653E+03	5.585E+03
	2.00000E-03	2.515E+03	2.496E+03	2.00000E-03	2.711E+03	2.688E+03	2.00000E-03	2.931E+03	2.902E+03
	3.00000E-03	8.857E+02	8.782E+02	3.00000E-03	9.613E+02	9.527E+02	3.00000E-03	1.049E+03	1.039E+03
	4.00000E-03	4.130E+02	4.082E+02	4.00000E-03	4.497E+02	4.445E+02	4.00000E-03	4.920E+02	4.862E+02
	5.00000E-03	2.266E+02	2.229E+02	5.00000E-03	2.472E+02	2.433E+02	5.00000E-03	2.709E+02	2.667E+02
	6.00000E-03	1.382E+02	1.352E+02	6.00000E-03	1.509E+02	1.477E+02	6.00000E-03	1.656E+02	1.622E+02
	8.00000E-03	6.302E+01	6.082E+01	8.00000E-03	6.890E+01	6.660E+01	8.00000E-03	7.573E+01	7.330E+01
	1.00000E-02	3.421E+01	3.250E+01	1.00000E-02	3.742E+01	3.564E+01	1.00000E-02	4.115E+01	3.928E+01
	1.03671E-02	3.099E+01	2.936E+01	1.11031E-02	2.811E+01	2.653E+01	1.18667E-02	2.577E+01	2.425E+01
K	1.03671E-02	2.214E+02	1.344E+02	K 1.11031E-02	1.981E+02	1.157E+02	K 1.18667E-02	1.792E+02	1.008E+02
	1.50000E-02	8.537E+01	6.135E+01	1.50000E-02	9.152E+01	6.256E+01	1.50000E-02	9.856E+01	6.371E+01
	2.00000E-02	3.928E+01	3.059E+01	2.00000E-02	4.222E+01	3.178E+01	2.00000E-02	4.564E+01	3.310E+01
	3.00000E-02	1.281E+01	1.061E+01	3.00000E-02	1.385E+01	1.126E+01	3.00000E-02	1.506E+01	1.198E+01
	4.00000E-02	5.726E+00	4.810E+00	4.00000E-02	6.207E+00	5.152E+00	4.00000E-02	6.760E+00	5.537E+00
	5.00000E-02	3.076E+00	2.560E+00	5.00000E-02	3.335E+00	2.759E+00	5.00000E-02	3.635E+00	2.983E+00
	6.00000E-02	1.868E+00	1.518E+00	6.00000E-02	2.023E+00	1.642E+00	6.00000E-02	2.203E+00	1.783E+00
	8.00000E-02	8.823E-01	6.613E-01	8.00000E-02	9.501E-01	7.184E-01	8.00000E-02	1.030E+00	7.837E-01
	1.00000E-01	5.197E-01	3.497E-01	1.00000E-01	5.550E-01	3.803E-01	1.00000E-01	5.971E-01	4.155E-01
	1.50000E-01	2.387E-01	1.193E-01	1.50000E-01	2.491E-01	1.288E-01	1.50000E-01	2.622E-01	1.399E-01
	2.00000E-01	1.619E-01	6.463E-02	2.00000E-01	1.661E-01	6.865E-02	2.00000E-01	1.719E-01	7.350E-02
	3.00000E-01	1.123E-01	3.782E-02	3.00000E-01	1.131E-01	3.891E-02	3.00000E-01	1.150E-01	4.043E-02
	4.00000E-01	9.325E-02	3.156E-02	4.00000E-01	9.327E-02	3.193E-02	4.00000E-01	9.414E-02	3.261E-02
	5.00000E-01	8.236E-02	2.920E-02	5.00000E-01	8.212E-02	2.930E-02	5.00000E-01	8.259E-02	2.966E-02
	6.00000E-01	7.487E-02	2.793E-02	6.00000E-01	7.452E-02	2.790E-02	6.00000E-01	7.483E-02	2.813E-02
	8.00000E-01	6.466E-02	2.631E-02	8.00000E-01	6.426E-02	2.618E-02	8.00000E-01	6.440E-02	2.628E-02
	1.00000E+00	5.767E-02	2.506E-02	1.00000E+00	5.727E-02	2.489E-02	1.00000E+00	5.735E-02	2.494E-02
	1.25000E+00	5.139E-02	2.371E-02	1.25000E+00	5.101E-02	2.353E-02	1.25000E+00	5.106E-02	2.355E-02
	1.50000E+00	4.692E-02	2.260E-02	1.50000E+00	4.657E-02	2.242E-02	1.50000E+00	4.661E-02	2.243E-02
	2.00000E+00	4.113E-02	2.110E-02	2.00000E+00	4.086E-02	2.094E-02	2.00000E+00	4.093E-02	2.096E-02
	3.00000E+00	3.538E-02	1.986E-02	3.00000E+00	3.524E-02	1.977E-02	3.00000E+00	3.539E-02	1.984E-02
	4.00000E+00	3.280E-02	1.966E-02	4.00000E+00	3.275E-02	1.962E-02	4.00000E+00	3.296E-02	1.974E-02
	5.00000E+00	3.156E-02	1.985E-02	5.00000E+00	3.158E-02	1.987E-02	5.00000E+00	3.187E-02	2.005E-02
	6.00000E+00	3.099E-02	2.021E-02	6.00000E+00	3.107E-02	2.027E-02	6.00000E+00	3.141E-02	2.049E-02
	8.00000E+00	3.086E-02	2.108E-02	8.00000E+00	3.103E-02	2.120E-02	8.00000E+00	3.146E-02	2.148E-02
	1.00000E+01	3.130E-02	2.191E-02	1.00000E+01	3.156E-02	2.208E-02	1.00000E+01	3.207E-02	2.241E-02
	1.50000E+01	3.300E-02	2.339E-02	1.50000E+01	3.340E-02	2.364E-02	1.50000E+01	3.405E-02	2.404E-02
	2.00000E+01	3.479E-02	2.425E-02	2.00000E+01	3.528E-02	2.452E-02	2.00000E+01	3.603E-02	2.495E-02

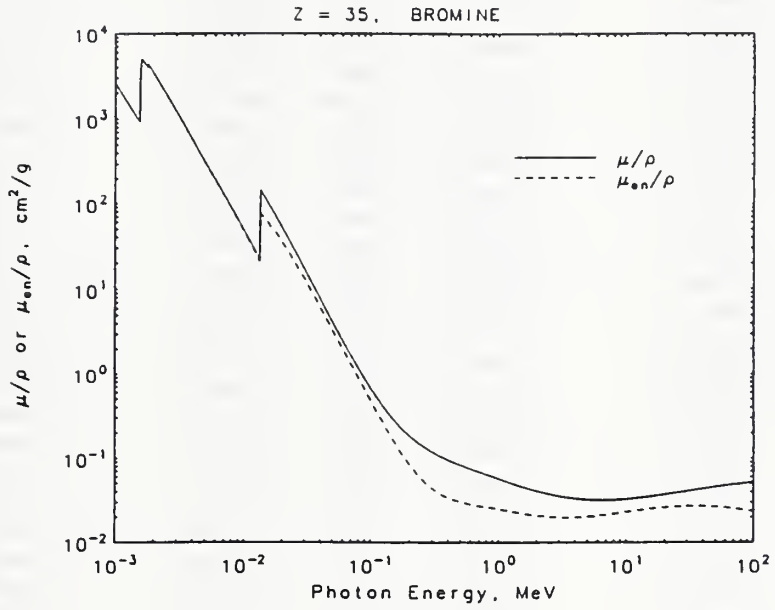

Z = 31, GALLIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

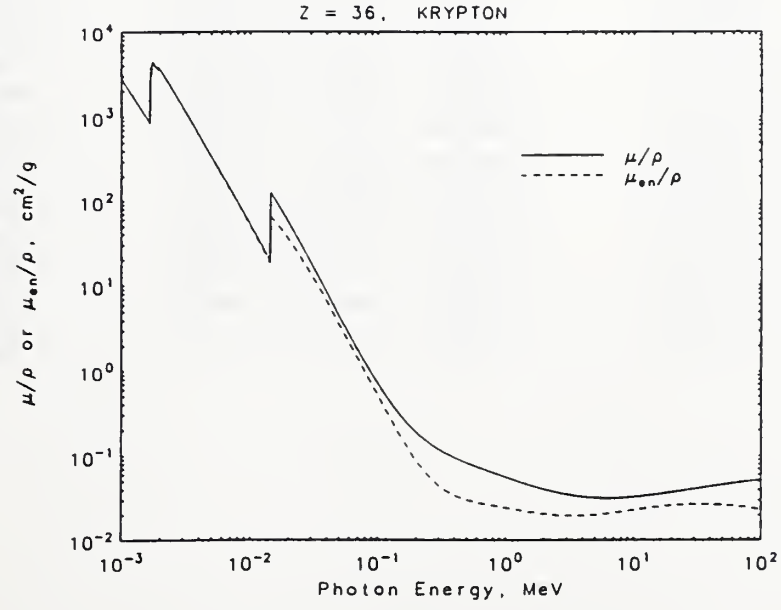

Z = 32, GERMANIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 33, ARSENIC
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	SELENIUM Z = 34			BROMINE Z = 35			KRYPTON Z = 36		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.317E+03	2.312E+03	1.00000E-03	2.624E+03	2.618E+03	1.00000E-03	2.854E+03	2.848E+03
	1.19825E-03	1.512E+03	1.506E+03	1.50000E-03	1.002E+03	9.964E+02	1.50000E-03	1.093E+03	1.087E+03
	1.43580E-03	9.814E+02	9.760E+02	1.54990E-03	9.255E+02	9.200E+02	1.67490E-03	8.361E+02	8.305E+02
L3	1.43580E-03	4.347E+03	4.287E+03	L3 1.54990E-03	4.289E+03	4.223E+03	L3 1.67490E-03	3.909E+03	3.842E+03
	1.45586E-03	4.057E+03	4.002E+03	1.57278E-03	3.838E+03	3.780E+03	1.70085E-03	3.409E+03	3.352E+03
	1.47620E-03	3.907E+03	3.855E+03	1.59600E-03	3.587E+03	3.534E+03	1.72720E-03	3.166E+03	3.114E+03
L2	1.47620E-03	5.186E+03	5.112E+03	L2 1.59600E-03	5.097E+03	5.014E+03	L2 1.72720E-03	4.566E+03	4.484E+03
	1.50000E-03	5.336E+03	5.260E+03	1.68644E-03	4.595E+03	4.523E+03	1.82152E-03	4.014E+03	3.945E+03
	1.65390E-03	4.342E+03	4.284E+03	1.78200E-03	3.969E+03	3.910E+03	1.92100E-03	3.482E+03	3.425E+03
L1	1.65390E-03	4.915E+03	4.849E+03	L1 1.78200E-03	4.495E+03	4.427E+03	L1 1.92100E-03	3.948E+03	3.882E+03
	2.00000E-03	3.098E+03	3.062E+03	2.00000E-03	3.407E+03	3.360E+03	2.00000E-03	3.599E+03	3.541E+03
	3.00000E-03	1.116E+03	1.104E+03	3.00000E-03	1.231E+03	1.216E+03	3.00000E-03	1.305E+03	1.288E+03
	4.00000E-03	5.252E+02	5.187E+02	4.00000E-03	5.815E+02	5.740E+02	4.00000E-03	6.186E+02	6.101E+02
	5.00000E-03	2.896E+02	2.851E+02	5.00000E-03	3.213E+02	3.163E+02	5.00000E-03	3.425E+02	3.371E+02
	6.00000E-03	1.773E+02	1.737E+02	6.00000E-03	1.968E+02	1.930E+02	6.00000E-03	2.101E+02	2.060E+02
	8.00000E-03	8.116E+01	7.865E+01	8.00000E-03	9.026E+01	8.756E+01	8.00000E-03	9.651E+01	9.371E+01
	1.00000E-02	4.414E+01	4.221E+01	1.00000E-02	4.912E+01	4.706E+01	1.00000E-02	5.257E+01	5.044E+01
	1.26578E-02	2.318E+01	2.173E+01	1.34737E-02	2.176E+01	2.033E+01	1.43256E-02	1.971E+01	1.836E+01
K	1.26578E-02	1.589E+02	8.599E+01	K 1.34737E-02	1.471E+02	7.668E+01	K 1.43256E-02	1.313E+02	6.604E+01
	1.50000E-02	1.033E+02	6.270E+01	1.50000E-02	1.119E+02	6.336E+01	1.50000E-02	1.168E+02	6.112E+01
	2.00000E-02	4.818E+01	3.352E+01	2.00000E-02	5.266E+01	3.502E+01	2.00000E-02	5.548E+01	3.509E+01
	3.00000E-02	1.596E+01	1.240E+01	3.00000E-02	1.753E+01	1.328E+01	3.00000E-02	1.854E+01	1.365E+01
	4.00000E-02	7.184E+00	5.796E+00	4.00000E-02	7.900E+00	6.267E+00	4.00000E-02	8.389E+00	6.538E+00
	5.00000E-02	3.864E+00	3.143E+00	5.00000E-02	4.264E+00	3.431E+00	5.00000E-02	4.523E+00	3.596E+00
	6.00000E-02	2.341E+00	1.886E+00	6.00000E-02	2.582E+00	2.068E+00	6.00000E-02	2.739E+00	2.178E+00
	8.00000E-02	1.090E+00	8.332E-01	8.00000E-02	1.198E+00	9.185E-01	8.00000E-02	1.267E+00	9.729E-01
	1.00000E-01	6.278E-01	4.426E-01	1.00000E-01	6.861E-01	4.890E-01	1.00000E-01	7.221E-01	5.192E-01
	1.50000E-01	2.703E-01	1.483E-01	1.50000E-01	2.899E-01	1.634E-01	1.50000E-01	2.998E-01	1.731E-01
	2.00000E-01	1.742E-01	7.695E-02	2.00000E-01	1.838E-01	8.378E-02	2.00000E-01	1.872E-01	8.787E-02
	3.00000E-01	1.144E-01	4.113E-02	3.00000E-01	1.186E-01	4.360E-02	3.00000E-01	1.186E-01	4.459E-02
	4.00000E-01	9.299E-02	3.261E-02	4.00000E-01	9.563E-02	3.398E-02	4.00000E-01	9.480E-02	3.414E-02
	5.00000E-01	8.129E-02	2.941E-02	5.00000E-01	8.328E-02	3.036E-02	5.00000E-01	8.226E-02	3.023E-02
	6.00000E-01	7.350E-02	2.775E-02	6.00000E-01	7.515E-02	2.851E-02	6.00000E-01	7.410E-02	2.825E-02
	8.00000E-01	6.314E-02	2.581E-02	8.00000E-01	6.443E-02	2.640E-02	8.00000E-01	6.340E-02	2.603E-02
	1.00000E+00	5.619E-02	2.446E-02	1.00000E+00	5.728E-02	2.496E-02	1.00000E+00	5.631E-02	2.456E-02
	1.25000E+00	4.999E-02	2.306E-02	1.25000E+00	5.094E-02	2.350E-02	1.25000E+00	5.005E-02	2.310E-02
	1.50000E+00	4.564E-02	2.195E-02	1.50000E+00	4.650E-02	2.237E-02	1.50000E+00	4.569E-02	2.197E-02
	2.00000E+00	4.010E-02	2.052E-02	2.00000E+00	4.089E-02	2.092E-02	2.00000E+00	4.020E-02	2.055E-02
	3.00000E+00	3.476E-02	1.947E-02	3.00000E+00	3.552E-02	1.991E-02	3.00000E+00	3.501E-02	1.961E-02
	4.00000E+00	3.247E-02	1.944E-02	4.00000E+00	3.327E-02	1.995E-02	4.00000E+00	3.286E-02	1.969E-02
	5.00000E+00	3.145E-02	1.978E-02	5.00000E+00	3.229E-02	2.036E-02	5.00000E+00	3.196E-02	2.014E-02
	6.00000E+00	3.105E-02	2.025E-02	6.00000E+00	3.194E-02	2.090E-02	6.00000E+00	3.168E-02	2.071E-02
	8.00000E+00	3.119E-02	2.130E-02	8.00000E+00	3.218E-02	2.207E-02	8.00000E+00	3.199E-02	2.192E-02
	1.00000E+01	3.186E-02	2.226E-02	1.00000E+01	3.293E-02	2.314E-02	1.00000E+01	3.280E-02	2.302E-02
	1.50000E+01	3.395E-02	2.394E-02	1.50000E+01	3.521E-02	2.507E-02	1.50000E+01	3.518E-02	2.497E-02
	2.00000E+01	3.599E-02	2.487E-02	2.00000E+01	3.738E-02	2.618E-02	2.00000E+01	3.741E-02	2.610E-02


Z = 34, SELENIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 35, BROMINE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 36, KRYPTON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

RUBIDIUM
Z = 37

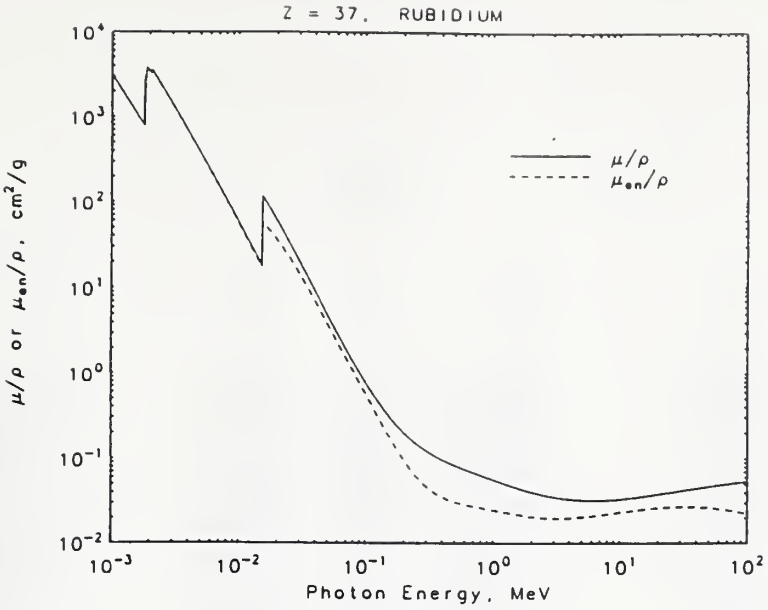
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.174E+03	3.168E+03
	1.50000E-03	1.219E+03	1.213E+03
	1.80440E-03	7.782E+02	7.726E+02
L3	1.80440E-03	3.096E+03	3.040E+03
	1.83391E-03	2.969E+03	2.915E+03
	1.86390E-03	2.861E+03	2.810E+03
L2	1.86390E-03	3.957E+03	3.880E+03
	2.00000E-03	3.410E+03	3.347E+03
	2.06510E-03	3.153E+03	3.096E+03
L1	2.06510E-03	3.606E+03	3.540E+03
	3.00000E-03	1.418E+03	1.397E+03
	4.00000E-03	6.748E+02	6.648E+02
	5.00000E-03	3.744E+02	3.682E+02
	6.00000E-03	2.300E+02	2.255E+02
	8.00000E-03	1.058E+02	1.028E+02
	1.00000E-02	5.766E+01	5.541E+01
	1.50000E-02	1.909E+01	1.775E+01
	1.51997E-02	1.842E+01	1.709E+01
K	1.51997E-02	1.208E+02	5.864E+01
	2.00000E-02	5.980E+01	3.581E+01
	3.00000E-02	2.009E+01	1.436E+01
	4.00000E-02	9.112E+00	6.963E+00
	5.00000E-02	4.918E+00	3.858E+00
	6.00000E-02	2.979E+00	2.349E+00
	8.00000E-02	1.375E+00	1.056E+00
	1.00000E-01	7.799E-01	5.649E-01
	1.50000E-01	3.187E-01	1.881E-01
	2.00000E-01	1.960E-01	9.465E-02
	3.00000E-01	1.219E-01	4.690E-02
	4.00000E-01	9.670E-02	3.531E-02
	5.00000E-01	8.360E-02	3.098E-02
	6.00000E-01	7.510E-02	2.878E-02
	8.00000E-01	6.412E-02	2.638E-02
	1.00000E+00	5.689E-02	2.484E-02
	1.25000E+00	5.053E-02	2.332E-02
	1.50000E+00	4.613E-02	2.217E-02
	2.00000E+00	4.061E-02	2.074E-02
	3.00000E+00	3.545E-02	1.983E-02
	4.00000E+00	3.335E-02	1.996E-02
	5.00000E+00	3.250E-02	2.045E-02
	6.00000E+00	3.227E-02	2.105E-02
	8.00000E+00	3.267E-02	2.231E-02
	1.00000E+01	3.357E-02	2.343E-02
	1.50000E+01	3.610E-02	2.538E-02
	2.00000E+01	3.845E-02	2.645E-02

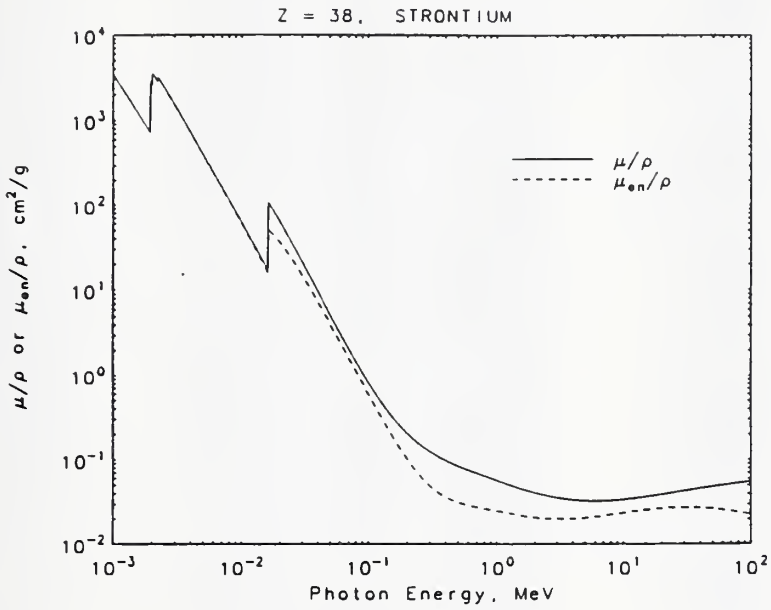
STRONTIUM
Z = 38

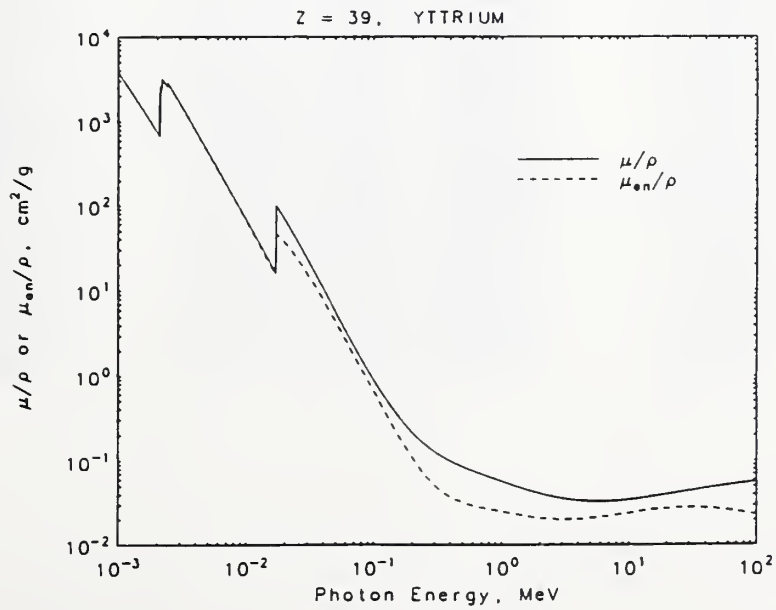
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.494E+03	3.487E+03
	1.50000E-03	1.347E+03	1.341E+03
	1.93960E-03	7.207E+02	7.152E+02
L3	1.93960E-03	2.864E+03	2.807E+03
	2.00000E-03	2.589E+03	2.539E+03
	2.00680E-03	2.571E+03	2.521E+03
L2	2.00680E-03	3.577E+03	3.501E+03
	2.10895E-03	3.201E+03	3.134E+03
	2.21630E-03	2.842E+03	2.786E+03
L1	2.21630E-03	3.241E+03	3.176E+03
	3.00000E-03	1.525E+03	1.500E+03
	4.00000E-03	7.297E+02	7.181E+02
	5.00000E-03	4.058E+02	3.988E+02
	6.00000E-03	2.496E+02	2.446E+02
	8.00000E-03	1.150E+02	1.118E+02
	1.00000E-02	6.274E+01	6.037E+01
	1.50000E-02	2.079E+01	1.938E+01
	1.61046E-02	1.714E+01	1.585E+01
K	1.61046E-02	1.108E+02	5.200E+01
	2.00000E-02	6.386E+01	3.602E+01
	3.00000E-02	2.157E+01	1.493E+01
	4.00000E-02	9.818E+00	7.346E+00
	5.00000E-02	5.306E+00	4.103E+00
	6.00000E-02	3.214E+00	2.511E+00
	8.00000E-02	1.481E+00	1.135E+00
	1.00000E-01	8.365E-01	6.093E-01
	1.50000E-01	3.369E-01	2.028E-01
	2.00000E-01	2.042E-01	1.013E-01
	3.00000E-01	1.247E-01	4.906E-02
	4.00000E-01	9.811E-02	3.634E-02
	5.00000E-01	8.443E-02	3.156E-02
	6.00000E-01	7.570E-02	2.917E-02
	8.00000E-01	6.447E-02	2.660E-02
	1.00000E+00	5.714E-02	2.498E-02
	1.25000E+00	5.072E-02	2.342E-02
	1.50000E+00	4.630E-02	2.225E-02
	2.00000E+00	4.079E-02	2.082E-02
	3.00000E+00	3.569E-02	1.995E-02
	4.00000E+00	3.365E-02	2.013E-02
	5.00000E+00	3.286E-02	2.066E-02
	6.00000E+00	3.268E-02	2.130E-02
	8.00000E+00	3.317E-02	2.260E-02
	1.00000E+01	3.414E-02	2.377E-02
	1.50000E+01	3.683E-02	2.578E-02
	2.00000E+01	3.927E-02	2.684E-02

YTTRIUM
Z = 39

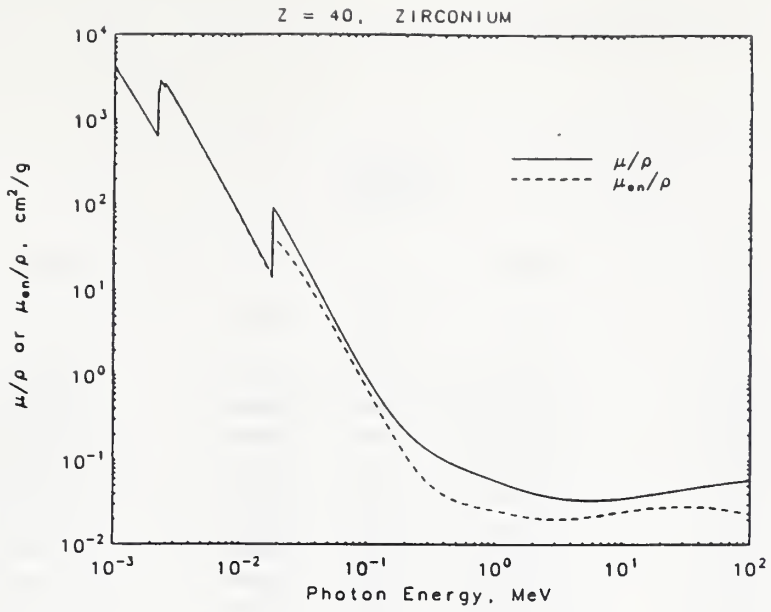
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.864E+03	3.857E+03
	1.50000E-03	1.493E+03	1.487E+03
	2.00000E-03	7.422E+02	7.365E+02
	2.08000E-03	6.738E+02	6.682E+02
L3	2.08000E-03	2.627E+03	2.569E+03
	2.11741E-03	2.466E+03	2.412E+03
	2.15550E-03	2.342E+03	2.292E+03
L2	2.15550E-03	3.264E+03	3.187E+03
	2.26140E-03	2.916E+03	2.849E+03
	2.37250E-03	2.597E+03	2.540E+03
L1	2.37250E-03	2.962E+03	2.897E+03
	3.00000E-03	1.654E+03	1.623E+03
	4.00000E-03	7.936E+02	7.798E+02
	5.00000E-03	4.424E+02	4.344E+02
	6.00000E-03	2.725E+02	2.670E+02
	8.00000E-03	1.258E+02	1.224E+02
	1.00000E-02	6.871E+01	6.619E+01
	1.50000E-02	2.279E+01	2.130E+01
	1.70384E-02	1.612E+01	1.486E+01
K	1.70384E-02	1.029E+02	4.672E+01
	2.00000E-02	6.855E+01	3.620E+01
	3.00000E-02	2.330E+01	1.558E+01
	4.00000E-02	1.065E+01	7.790E+00
	5.00000E-02	5.764E+00	4.388E+00
	6.00000E-02	3.493E+00	2.699E+00
	8.00000E-02	1.607E+00	1.228E+00
	1.00000E-01	9.047E-01	6.616E-01
	1.50000E-01	3.595E-01	2.203E-01
	2.00000E-01	2.149E-01	1.093E-01
	3.00000E-01	1.289E-01	5.186E-02
	4.00000E-01	1.006E-01	3.779E-02
	5.00000E-01	8.613E-02	3.249E-02
	6.00000E-01	7.703E-02	2.986E-02
	8.00000E-01	6.546E-02	2.708E-02
	1.00000E+00	5.795E-02	2.537E-02
	1.25000E+00	5.141E-02	2.375E-02
	1.50000E+00	4.692E-02	2.254E-02
	2.00000E+00	4.137E-02	2.109E-02
	3.00000E+00	3.628E-02	2.026E-02
	4.00000E+00	3.428E-02	2.048E-02
	5.00000E+00	3.355E-02	2.107E-02
	6.00000E+00	3.341E-02	2.174E-02
	8.00000E+00	3.399E-02	2.311E-02
	1.00000E+01	3.504E-02	2.432E-02
	1.50000E+01	3.790E-02	2.638E-02
	2.00000E+01	4.048E-02	2.746E-02

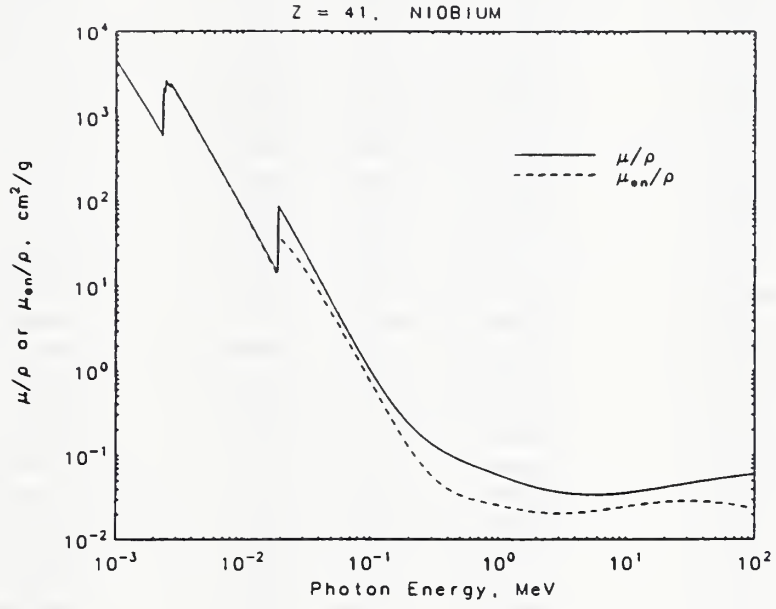

Z = 37, RUBIDIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

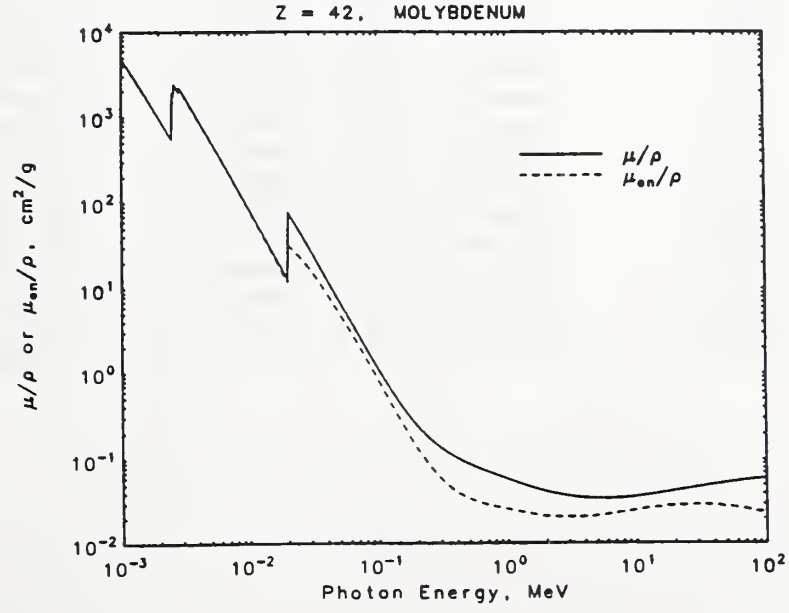

Z = 38, STRONTIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 39, YTTRIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	ZIRCONIUM Z = 40			NIOBIUM Z = 41			MOLYBDENUM Z = 42		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.210E+03	4.203E+03	1.00000E-03	4.600E+03	4.592E+03	1.00000E-03	4.942E+03	4.935E+03
	1.50000E-03	1.631E+03	1.625E+03	1.50000E-03	1.786E+03	1.780E+03	1.50000E-03	1.925E+03	1.918E+03
	2.00000E-03	8.115E+02	8.057E+02	2.00000E-03	8.893E+02	8.832E+02	2.00000E-03	9.593E+02	9.531E+02
	2.22230E-03	6.258E+02	6.201E+02	2.37050E-03	5.844E+02	5.786E+02	2.52020E-03	5.415E+02	5.358E+02
L3	2.22230E-03	2.392E+03	2.335E+03	L3 2.37050E-03	2.181E+03	2.125E+03	L3 2.52020E-03	1.979E+03	1.924E+03
	2.26411E-03	2.239E+03	2.186E+03	2.41714E-03	2.045E+03	1.992E+03	2.57212E-03	1.854E+03	1.802E+03
	2.30670E-03	2.120E+03	2.071E+03	2.46470E-03	1.935E+03	1.886E+03	2.62510E-03	1.750E+03	1.703E+03
L2	2.30670E-03	2.953E+03	2.878E+03	L2 2.46470E-03	2.694E+03	2.619E+03	L2 2.62510E-03	2.433E+03	2.360E+03
	2.41654E-03	2.641E+03	2.575E+03	2.57857E-03	2.412E+03	2.347E+03	2.74267E-03	2.183E+03	2.119E+03
	2.53160E-03	2.359E+03	2.303E+03	2.69770E-03	2.161E+03	2.104E+03	2.86550E-03	1.961E+03	1.906E+03
L1	2.53160E-03	2.691E+03	2.627E+03	L1 2.69770E-03	2.470E+03	2.405E+03	L1 2.86550E-03	2.243E+03	2.179E+03
	3.00000E-03	1.772E+03	1.734E+03	3.00000E-03	1.906E+03	1.859E+03	3.00000E-03	2.011E+03	1.956E+03
	4.00000E-03	8.507E+02	8.344E+02	4.00000E-03	9.164E+02	8.970E+02	4.00000E-03	9.703E+02	9.475E+02
	5.00000E-03	4.755E+02	4.664E+02	5.00000E-03	5.134E+02	5.027E+02	5.00000E-03	5.450E+02	5.328E+02
	6.00000E-03	2.935E+02	2.873E+02	6.00000E-03	3.172E+02	3.103E+02	6.00000E-03	3.373E+02	3.295E+02
	8.00000E-03	1.356E+02	1.320E+02	8.00000E-03	1.469E+02	1.429E+02	8.00000E-03	1.565E+02	1.522E+02
	1.00000E-02	7.417E+01	7.150E+01	1.00000E-02	8.038E+01	7.754E+01	1.00000E-02	8.576E+01	8.275E+01
	1.50000E-02	2.463E+01	2.308E+01	1.50000E-02	2.672E+01	2.508E+01	1.50000E-02	2.854E+01	2.684E+01
	1.79976E-02	1.501E+01	1.380E+01	1.89856E-02	1.409E+01	1.291E+01	1.99995E-02	1.308E+01	1.193E+01
K	1.79976E-02	9.470E+01	4.164E+01	K 1.89856E-02	8.784E+01	3.746E+01	K 1.99995E-02	7.950E+01	3.293E+01
	2.00000E-02	7.237E+01	3.555E+01	2.00000E-02	7.712E+01	3.493E+01	2.00000E-02	7.950E+01	3.293E+01
	3.00000E-02	2.485E+01	1.600E+01	3.00000E-02	2.666E+01	1.648E+01	3.00000E-02	2.810E+01	1.664E+01
	4.00000E-02	1.139E+01	8.129E+00	4.00000E-02	1.223E+01	8.511E+00	4.00000E-02	1.294E+01	8.757E+00
	5.00000E-02	6.173E+00	4.621E+00	5.00000E-02	6.644E+00	4.884E+00	5.00000E-02	7.037E+00	5.074E+00
	6.00000E-02	3.744E+00	2.859E+00	6.00000E-02	4.032E+00	3.040E+00	6.00000E-02	4.274E+00	3.178E+00
	8.00000E-02	1.721E+00	1.310E+00	8.00000E-02	1.852E+00	1.403E+00	8.00000E-02	1.962E+00	1.477E+00
	1.00000E-01	9.658E-01	7.080E-01	1.00000E-01	1.037E+00	7.608E-01	1.00000E-01	1.096E+00	8.042E-01
	1.50000E-01	3.790E-01	2.361E-01	1.50000E-01	4.023E-01	2.542E-01	1.50000E-01	4.208E-01	2.693E-01
	2.00000E-01	2.237E-01	1.164E-01	2.00000E-01	2.344E-01	1.247E-01	2.00000E-01	2.423E-01	1.316E-01
	3.00000E-01	1.318E-01	5.420E-02	3.00000E-01	1.357E-01	5.705E-02	3.00000E-01	1.379E-01	5.919E-02
	4.00000E-01	1.018E-01	3.885E-02	4.00000E-01	1.040E-01	4.026E-02	4.00000E-01	1.047E-01	4.117E-02
	5.00000E-01	8.693E-02	3.311E-02	5.00000E-01	8.831E-02	3.396E-02	5.00000E-01	8.848E-02	3.437E-02
	6.00000E-01	7.756E-02	3.025E-02	6.00000E-01	7.858E-02	3.085E-02	6.00000E-01	7.851E-02	3.104E-02
	8.00000E-01	6.571E-02	2.726E-02	8.00000E-01	6.642E-02	2.764E-02	8.00000E-01	6.619E-02	2.764E-02
	1.00000E+00	5.810E-02	2.547E-02	1.00000E+00	5.866E-02	2.575E-02	1.00000E+00	5.837E-02	2.567E-02
	1.25000E+00	5.150E-02	2.380E-02	1.25000E+00	5.196E-02	2.402E-02	1.25000E+00	5.167E-02	2.390E-02
	1.50000E+00	4.700E-02	2.257E-02	1.50000E+00	4.741E-02	2.276E-02	1.50000E+00	4.713E-02	2.263E-02
	2.00000E+00	4.146E-02	2.112E-02	2.00000E+00	4.185E-02	2.130E-02	2.00000E+00	4.163E-02	2.118E-02
	3.00000E+00	3.644E-02	2.033E-02	3.00000E+00	3.686E-02	2.054E-02	3.00000E+00	3.675E-02	2.046E-02
	4.00000E+00	3.451E-02	2.061E-02	4.00000E+00	3.498E-02	2.086E-02	4.00000E+00	3.496E-02	2.084E-02
	5.00000E+00	3.384E-02	2.123E-02	5.00000E+00	3.436E-02	2.153E-02	5.00000E+00	3.439E-02	2.153E-02
	6.00000E+00	3.374E-02	2.193E-02	6.00000E+00	3.432E-02	2.227E-02	6.00000E+00	3.440E-02	2.231E-02
	8.00000E+00	3.441E-02	2.335E-02	8.00000E+00	3.508E-02	2.375E-02	8.00000E+00	3.523E-02	2.382E-02
	1.00000E+01	3.554E-02	2.460E-02	1.00000E+01	3.628E-02	2.503E-02	1.00000E+01	3.650E-02	2.513E-02
	1.50000E+01	3.855E-02	2.670E-02	1.50000E+01	3.944E-02	2.718E-02	1.50000E+01	3.978E-02	2.731E-02
	2.00000E+01	4.122E-02	2.778E-02	2.00000E+01	4.224E-02	2.828E-02	2.00000E+01	4.264E-02	2.840E-02


Z = 40, ZIRCONIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

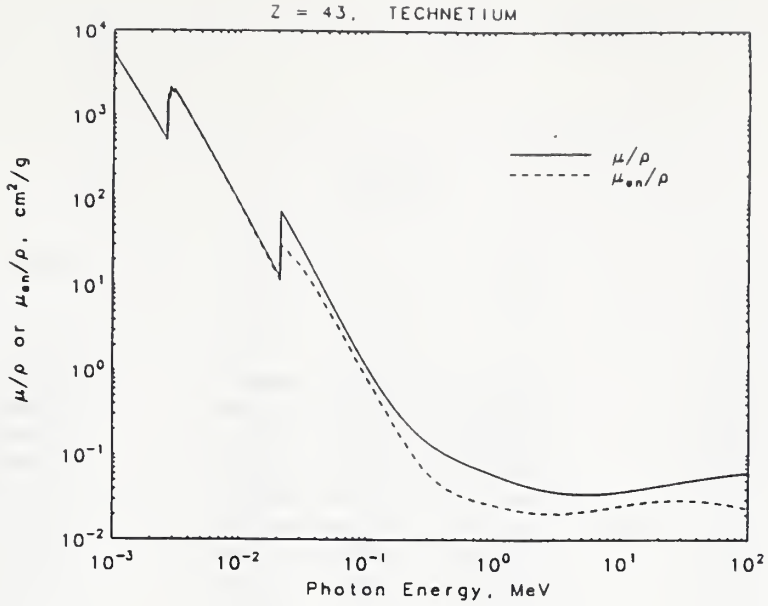

Z = 41, NIOBIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

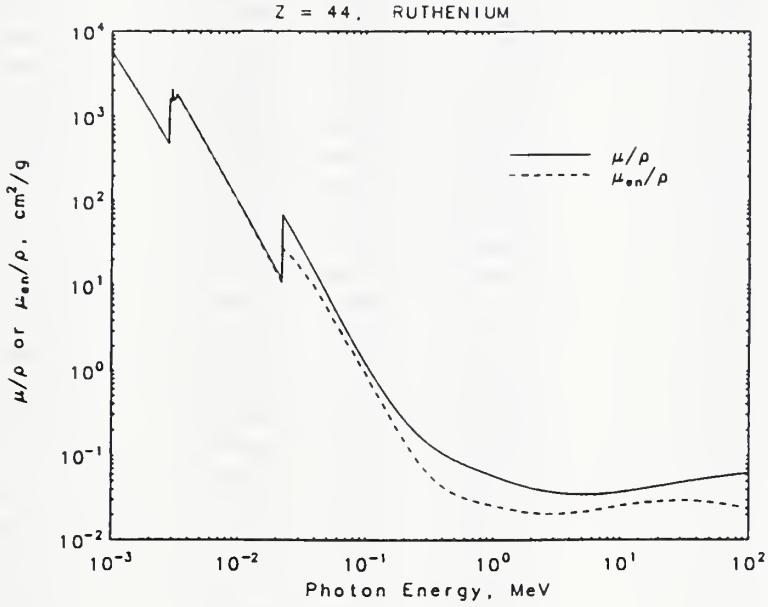

Z = 42, MOLYBDENUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

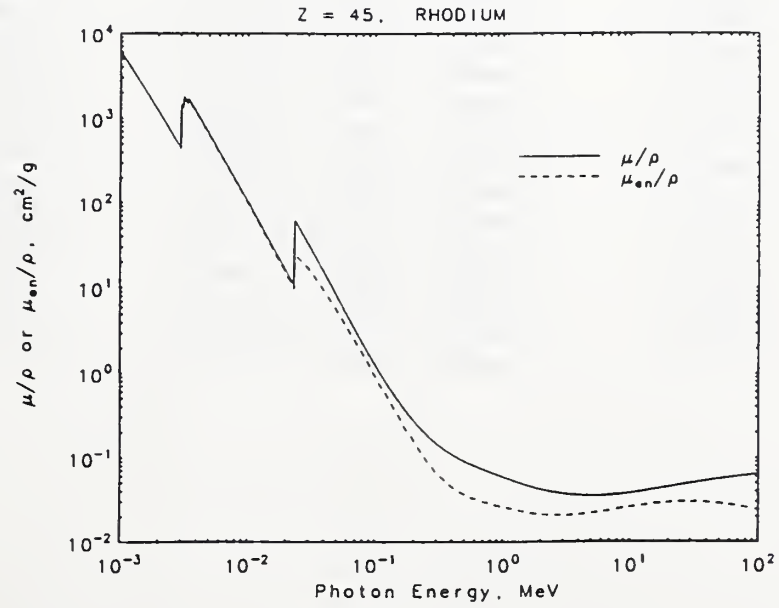
	TECHNETIUM $Z = 43$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.356E+03	5.348E+03
	1.50000E-03	2.092E+03	2.085E+03
	2.00000E-03	1.044E+03	1.037E+03
	2.67690E-03	5.072E+02	5.014E+02
L3	2.67690E-03	1.812E+03	1.758E+03
	2.73443E-03	1.699E+03	1.648E+03
	2.79320E-03	1.602E+03	1.555E+03
L2	2.79320E-03	2.223E+03	2.151E+03
	3.00000E-03	1.862E+03	1.805E+03
	3.04250E-03	1.800E+03	1.745E+03
L1	3.04250E-03	2.059E+03	1.995E+03
	4.00000E-03	1.036E+03	1.009E+03
	5.00000E-03	5.836E+02	5.694E+02
	6.00000E-03	3.619E+02	3.530E+02
	8.00000E-03	1.683E+02	1.635E+02
	1.00000E-02	9.231E+01	8.908E+01
	1.50000E-02	3.076E+01	2.898E+01
	2.00000E-02	1.410E+01	1.290E+01
	2.10440E-02	1.229E+01	1.117E+01
K	2.10440E-02	7.481E+01	3.014E+01
	3.00000E-02	2.993E+01	1.693E+01
	4.00000E-02	1.381E+01	9.075E+00
	5.00000E-02	7.521E+00	5.312E+00
	6.00000E-02	4.571E+00	3.348E+00
	8.00000E-02	2.099E+00	1.568E+00
	1.00000E-01	1.169E+00	8.572E-01
	1.50000E-01	4.449E-01	2.880E-01
	2.00000E-01	2.534E-01	1.403E-01
	3.00000E-01	1.418E-01	6.214E-02
	4.00000E-01	1.066E-01	4.257E-02
	5.00000E-01	8.968E-02	3.521E-02
	6.00000E-01	7.935E-02	3.159E-02
	8.00000E-01	6.674E-02	2.797E-02
	1.00000E+00	5.876E-02	2.589E-02
	1.25000E+00	5.197E-02	2.406E-02
	1.50000E+00	4.740E-02	2.276E-02
	2.00000E+00	4.189E-02	2.129E-02
	3.00000E+00	3.705E-02	2.061E-02
	4.00000E+00	3.532E-02	2.103E-02
	5.00000E+00	3.482E-02	2.178E-02
	6.00000E+00	3.487E-02	2.258E-02
	8.00000E+00	3.578E-02	2.415E-02
	1.00000E+01	3.712E-02	2.549E-02
	1.50000E+01	4.055E-02	2.774E-02
	2.00000E+01	4.353E-02	2.884E-02

	RUTHENIUM $Z = 44$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.718E+03	5.709E+03
	1.50000E-03	2.240E+03	2.233E+03
	2.00000E-03	1.120E+03	1.113E+03
	2.83790E-03	4.704E+02	4.646E+02
L3	2.83790E-03	1.644E+03	1.591E+03
	2.90168E-03	1.542E+03	1.492E+03
	2.96690E-03	1.452E+03	1.407E+03
L2	2.96690E-03	2.317E+03	2.233E+03
	3.00000E-03	1.963E+03	1.894E+03
	3.22400E-03	1.638E+03	1.584E+03
L1	3.22400E-03	1.874E+03	1.811E+03
	4.00000E-03	1.095E+03	1.063E+03
	5.00000E-03	6.165E+02	6.000E+02
	6.00000E-03	3.832E+02	3.731E+02
	8.00000E-03	1.785E+02	1.733E+02
	1.00000E-02	9.800E+01	9.456E+01
	1.50000E-02	3.270E+01	3.085E+01
	2.00000E-02	1.499E+01	1.376E+01
	2.21172E-02	1.143E+01	1.035E+01
K	2.21172E-02	6.876E+01	2.700E+01
	3.00000E-02	3.139E+01	1.689E+01
	4.00000E-02	1.452E+01	9.251E+00
	5.00000E-02	7.926E+00	5.477E+00
	6.00000E-02	4.822E+00	3.476E+00
	8.00000E-02	2.215E+00	1.641E+00
	1.00000E-01	1.232E+00	9.012E-01
	1.50000E-01	4.647E-01	3.037E-01
	2.00000E-01	2.618E-01	1.475E-01
	3.00000E-01	1.440E-01	6.445E-02
	4.00000E-01	1.074E-01	4.355E-02
	5.00000E-01	8.992E-02	3.567E-02
	6.00000E-01	7.933E-02	3.182E-02
	8.00000E-01	6.647E-02	2.796E-02
	1.00000E+00	5.846E-02	2.581E-02
	1.25000E+00	5.166E-02	2.393E-02
	1.50000E+00	4.710E-02	2.262E-02
	2.00000E+00	4.164E-02	2.115E-02
	3.00000E+00	3.692E-02	2.052E-02
	4.00000E+00	3.527E-02	2.098E-02
	5.00000E+00	3.482E-02	2.176E-02
	6.00000E+00	3.491E-02	2.259E-02
	8.00000E+00	3.591E-02	2.419E-02
	1.00000E+01	3.730E-02	2.556E-02
	1.50000E+01	4.084E-02	2.783E-02
	2.00000E+01	4.387E-02	2.893E-02

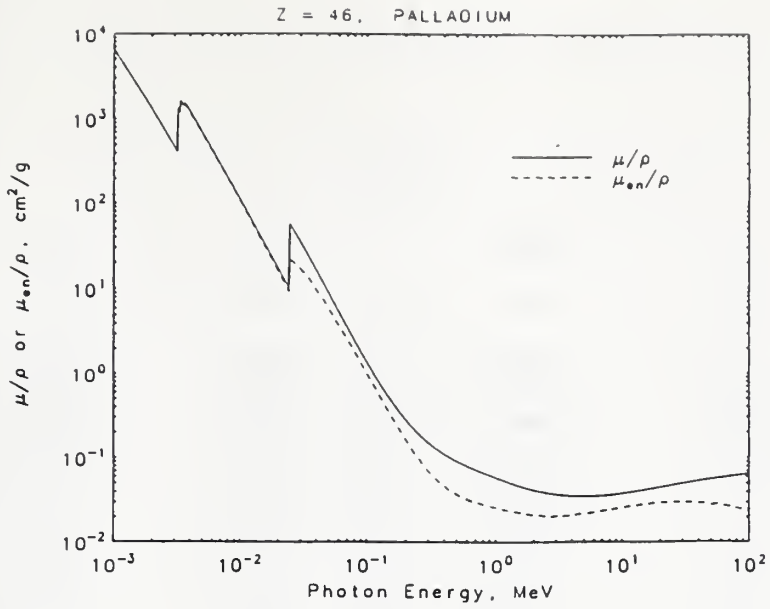
	RHODIUM $Z = 45$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.169E+03	6.160E+03
	1.50000E-03	2.426E+03	2.419E+03
	2.00000E-03	1.214E+03	1.207E+03
	3.00000E-03	4.441E+02	4.382E+02
	3.00380E-03	4.427E+02	4.368E+02
L3	3.00380E-03	1.513E+03	1.461E+03
	3.07413E-03	1.422E+03	1.372E+03
	3.14610E-03	1.337E+03	1.292E+03
L2	3.14610E-03	1.847E+03	1.777E+03
	3.27631E-03	1.671E+03	1.608E+03
	3.41190E-03	1.512E+03	1.458E+03
L1	3.41190E-03	1.731E+03	1.669E+03
	4.00000E-03	1.170E+03	1.132E+03
	5.00000E-03	6.589E+02	6.396E+02
	6.00000E-03	4.101E+02	3.985E+02
	8.00000E-03	1.915E+02	1.857E+02
	1.00000E-02	1.053E+02	1.015E+02
	1.50000E-02	3.518E+01	3.322E+01
	2.00000E-02	1.613E+01	1.484E+01
	2.32199E-02	1.079E+01	9.736E+00
K	2.32199E-02	6.414E+01	2.458E+01
	3.00000E-02	3.330E+01	1.699E+01
	4.00000E-02	1.544E+01	9.520E+00
	5.00000E-02	8.448E+00	5.706E+00
	6.00000E-02	5.147E+00	3.649E+00
	8.00000E-02	2.365E+00	1.737E+00
	1.00000E-01	1.314E+00	9.581E-01
	1.50000E-01	4.916E-01	3.241E-01
	2.00000E-01	2.742E-01	1.571E-01
	3.00000E-01	1.485E-01	6.776E-02
	4.00000E-01	1.097E-01	4.517E-02
	5.00000E-01	9.134E-02	3.663E-02
	6.00000E-01	8.035E-02	3.247E-02
	8.00000E-01	6.711E-02	2.834E-02
	1.00000E+00	5.894E-02	2.608E-02
	1.25000E+00	5.204E-02	2.413E-02
	1.50000E+00	4.744E-02	2.278E-02
	2.00000E+00	4.197E-02	2.131E-02
	3.00000E+00	3.728E-02	2.071E-02
	4.00000E+00	3.568E-02	2.122E-02
	5.00000E+00	3.529E-02	2.204E-02
	6.00000E+00	3.542E-02	2.290E-02
	8.00000E+00	3.650E-02	2.456E-02
	1.00000E+01	3.797E-02	2.597E-02
	1.50000E+01	4.166E-02	2.831E-02
	2.00000E+01	4.481E-02	2.943E-02

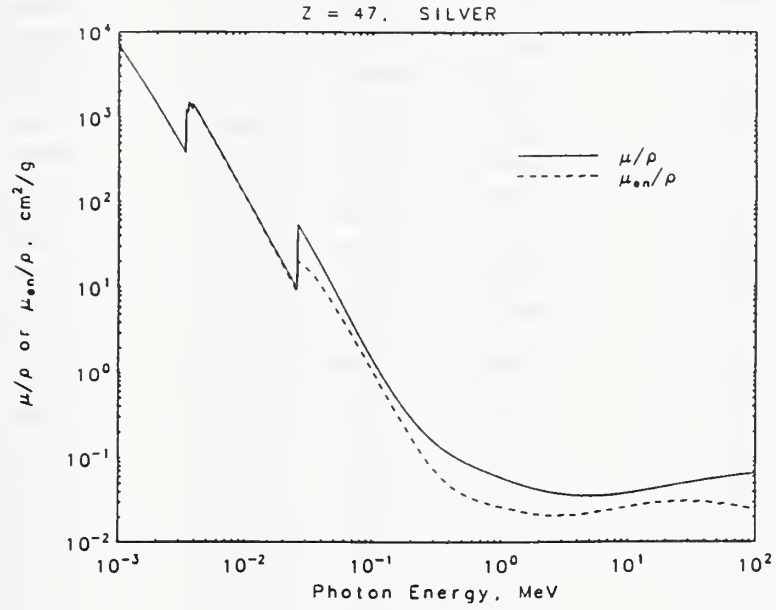

Z = 43, TECHNETIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

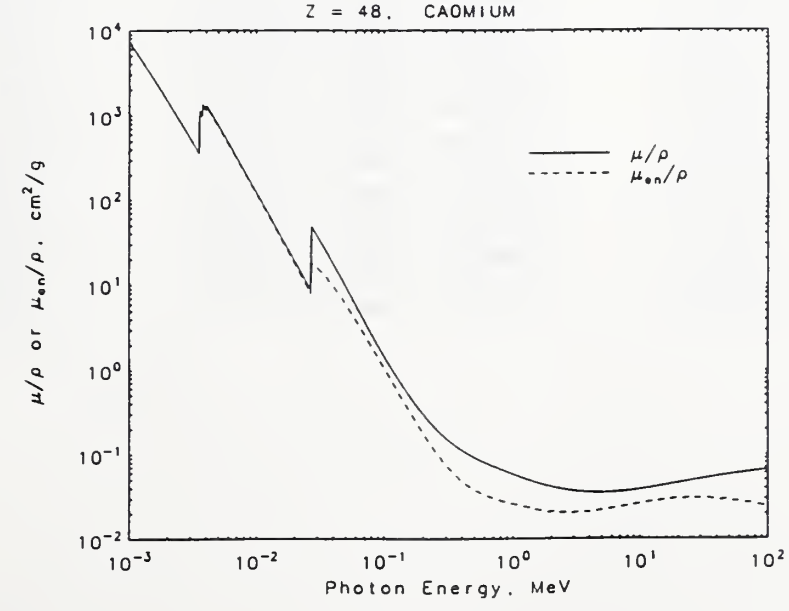

Z = 44, RUTHENIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 45, RHODIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

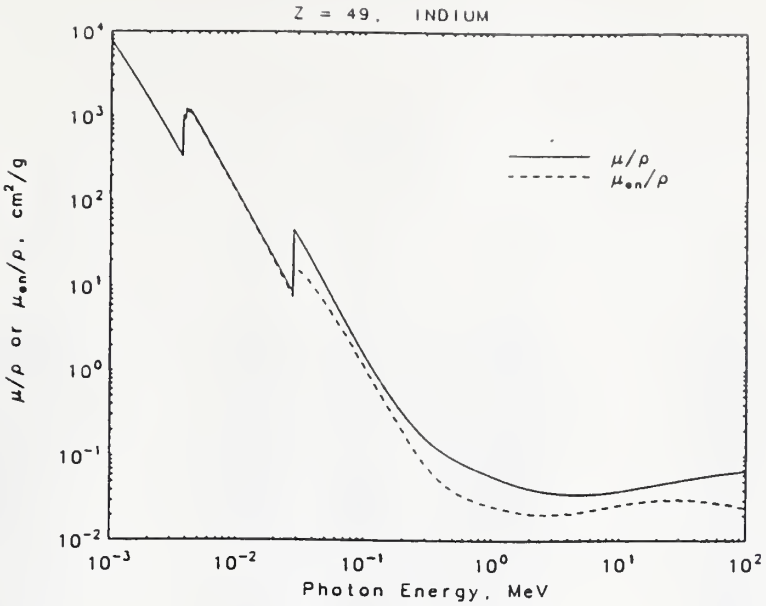
	PALLADIUM $Z = 46$			SILVER $Z = 47$			CADMIUM $Z = 48$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.538E+03	6.529E+03	1.00000E-03	7.039E+03	7.029E+03	1.00000E-03	7.350E+03	7.340E+03
	1.50000E-03	2.579E+03	2.571E+03	1.50000E-03	2.790E+03	2.782E+03	1.50000E-03	2.931E+03	2.922E+03
	2.00000E-03	1.292E+03	1.285E+03	2.00000E-03	1.401E+03	1.393E+03	2.00000E-03	1.473E+03	1.466E+03
	3.00000E-03	4.730E+02	4.668E+02	3.00000E-03	5.136E+02	5.073E+02	3.00000E-03	5.414E+02	5.350E+02
	3.17330E-03	4.106E+02	4.047E+02	3.35110E-03	3.887E+02	3.827E+02	3.53750E-03	3.575E+02	3.517E+02
L3	3.17330E-03	1.355E+03	1.305E+03	L3 3.35110E-03	1.274E+03	1.223E+03	L3 3.53750E-03	1.152E+03	1.103E+03
	3.25085E-03	1.287E+03	1.238E+03	3.43632E-03	1.200E+03	1.151E+03	3.63101E-03	1.083E+03	1.036E+03
	3.33030E-03	1.215E+03	1.171E+03	3.52370E-03	1.126E+03	1.082E+03	3.72700E-03	1.013E+03	9.715E+02
L2	3.33030E-03	1.664E+03	1.597E+03	L2 3.52370E-03	1.547E+03	1.479E+03	L2 3.72700E-03	1.389E+03	1.324E+03
	3.46459E-03	1.518E+03	1.456E+03	3.66203E-03	1.409E+03	1.348E+03	4.00000E-03	1.170E+03	1.118E+03
	3.60430E-03	1.379E+03	1.326E+03	3.80580E-03	1.282E+03	1.229E+03	4.01800E-03	1.157E+03	1.106E+03
L1	3.60430E-03	1.582E+03	1.520E+03	L1 3.80580E-03	1.468E+03	1.406E+03	L1 4.01800E-03	1.324E+03	1.264E+03
	4.00000E-03	1.227E+03	1.182E+03	4.00000E-03	1.305E+03	1.252E+03	5.00000E-03	7.685E+02	7.383E+02
	5.00000E-03	6.912E+02	6.688E+02	5.00000E-03	7.385E+02	7.122E+02	6.00000E-03	4.793E+02	4.619E+02
	6.00000E-03	4.308E+02	4.175E+02	6.00000E-03	4.610E+02	4.457E+02	8.00000E-03	2.254E+02	2.174E+02
	8.00000E-03	2.017E+02	1.953E+02	8.00000E-03	2.164E+02	2.092E+02	1.00000E-02	1.244E+02	1.197E+02
	1.00000E-02	1.110E+02	1.070E+02	1.00000E-02	1.193E+02	1.149E+02	1.50000E-02	4.178E+01	3.952E+01
	1.50000E-02	3.715E+01	3.511E+01	1.50000E-02	3.998E+01	3.780E+01	2.00000E-02	1.920E+01	1.776E+01
	2.00000E-02	1.704E+01	1.571E+01	2.00000E-02	1.836E+01	1.695E+01	2.67112E-02	8.809E+00	7.863E+00
	2.43503E-02	1.003E+01	9.016E+00	2.55140E-02	9.527E+00	8.534E+00	K 2.67112E-02	5.065E+01	1.821E+01
K	2.43503E-02	5.898E+01	2.208E+01	K 2.55140E-02	5.539E+01	2.031E+01	3.00000E-02	3.765E+01	1.594E+01
	3.00000E-02	3.465E+01	1.669E+01	3.00000E-02	3.668E+01	1.660E+01	4.00000E-02	1.778E+01	9.812E+00
	4.00000E-02	1.614E+01	9.611E+00	4.00000E-02	1.720E+01	9.869E+00	5.00000E-02	9.779E+00	6.115E+00
	5.00000E-02	8.850E+00	5.833E+00	5.00000E-02	9.444E+00	6.066E+00	6.00000E-02	5.975E+00	4.001E+00
	6.00000E-02	5.399E+00	3.759E+00	6.00000E-02	5.766E+00	3.938E+00	8.00000E-02	2.751E+00	1.957E+00
	8.00000E-02	2.481E+00	1.804E+00	8.00000E-02	2.651E+00	1.907E+00	1.00000E-01	1.524E+00	1.096E+00
	1.00000E-01	1.377E+00	1.000E+00	1.00000E-01	1.470E+00	1.062E+00	1.50000E-01	5.593E-01	3.753E-01
	1.50000E-01	5.115E-01	3.397E-01	1.50000E-01	5.426E-01	3.622E-01	2.00000E-01	3.038E-01	1.813E-01
	2.00000E-01	2.827E-01	1.644E-01	2.00000E-01	2.972E-01	1.751E-01	3.00000E-01	1.571E-01	7.580E-02
	3.00000E-01	1.506E-01	7.007E-02	3.00000E-01	1.560E-01	7.392E-02	4.00000E-01	1.129E-01	4.868E-02
	4.00000E-01	1.103E-01	4.611E-02	4.00000E-01	1.131E-01	4.803E-02	5.00000E-01	9.250E-02	3.838E-02
	5.00000E-01	9.134E-02	3.704E-02	5.00000E-01	9.321E-02	3.822E-02	6.00000E-01	8.064E-02	3.339E-02
	6.00000E-01	8.010E-02	3.262E-02	6.00000E-01	8.153E-02	3.347E-02	8.00000E-01	6.670E-02	2.854E-02
	8.00000E-01	6.669E-02	2.828E-02	8.00000E-01	6.766E-02	2.881E-02	1.00000E+00	5.826E-02	2.597E-02
	1.00000E+00	5.849E-02	2.594E-02	1.00000E+00	5.921E-02	2.632E-02	1.25000E+00	5.129E-02	2.387E-02
	1.25000E+00	5.159E-02	2.395E-02	1.25000E+00	5.217E-02	2.425E-02	1.50000E+00	4.673E-02	2.247E-02
	1.50000E+00	4.702E-02	2.259E-02	1.50000E+00	4.754E-02	2.284E-02	2.00000E+00	4.139E-02	2.099E-02
	2.00000E+00	4.162E-02	2.112E-02	2.00000E+00	4.209E-02	2.135E-02	3.00000E+00	3.698E-02	2.051E-02
	3.00000E+00	3.704E-02	2.056E-02	3.00000E+00	3.754E-02	2.082E-02	4.00000E+00	3.559E-02	2.114E-02
	4.00000E+00	3.552E-02	2.111E-02	4.00000E+00	3.606E-02	2.142E-02	5.00000E+00	3.536E-02	2.206E-02
	5.00000E+00	3.518E-02	2.196E-02	5.00000E+00	3.577E-02	2.232E-02	6.00000E+00	3.563E-02	2.300E-02
	6.00000E+00	3.537E-02	2.284E-02	6.00000E+00	3.601E-02	2.324E-02	8.00000E+00	3.691E-02	2.477E-02
	8.00000E+00	3.651E-02	2.453E-02	8.00000E+00	3.723E-02	2.499E-02	1.00000E+01	3.853E-02	2.625E-02
	1.00000E+01	3.802E-02	2.595E-02	1.00000E+01	3.882E-02	2.647E-02	1.50000E+01	4.253E-02	2.869E-02
	1.50000E+01	4.181E-02	2.832E-02	1.50000E+01	4.276E-02	2.889E-02	2.00000E+01	4.587E-02	2.985E-02
	2.00000E+01	4.501E-02	2.944E-02	2.00000E+01	4.609E-02	3.005E-02			

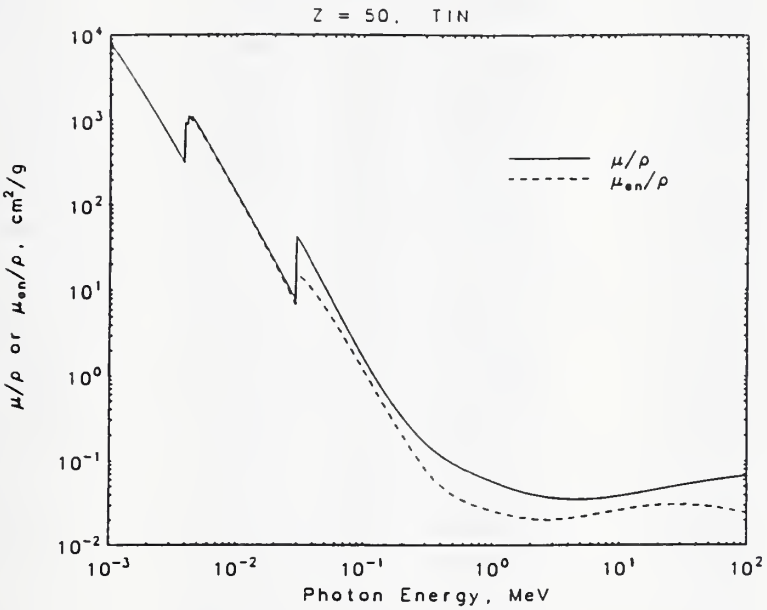

Z = 46, PALLADIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

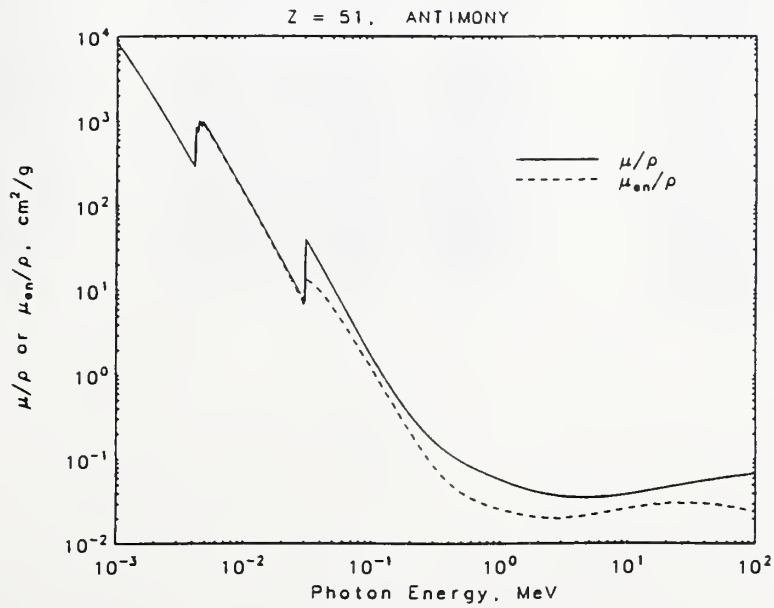

Z = 47, SILVER
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 48, CADMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	INDIUM $Z = 49$			TIN $Z = 50$			ANTIMONY $Z = 51$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	7.809E+03	7.797E+03	1.00000E-03	8.157E+03	8.144E+03	1.00000E-03	8.582E+03	8.568E+03
	1.50000E-03	3.131E+03	3.122E+03	1.50000E-03	3.296E+03	3.287E+03	1.50000E-03	3.491E+03	3.481E+03
	2.00000E-03	1.578E+03	1.570E+03	2.00000E-03	1.665E+03	1.657E+03	2.00000E-03	1.767E+03	1.759E+03
	3.00000E-03	5.808E+02	5.743E+02	3.00000E-03	6.143E+02	6.077E+02	3.00000E-03	6.536E+02	6.469E+02
	3.73010E-03	3.356E+02	3.298E+02	3.92880E-03	3.114E+02	3.058E+02	4.00000E-03	3.169E+02	3.113E+02
L3	3.73010E-03	1.046E+03	9.989E+02	L3 3.92880E-03	9.285E+02	8.845E+02	4.13220E-03	2.918E+02	2.863E+02
	3.83264E-03	9.930E+02	9.465E+02	4.00000E-03	9.393E+02	8.945E+02	L3 4.13220E-03	8.691E+02	8.252E+02
	3.93800E-03	9.313E+02	8.905E+02	4.15610E-03	8.469E+02	8.074E+02	4.25449E-03	8.308E+02	7.865E+02
L2	3.93800E-03	1.261E+03	1.199E+03	L2 4.15610E-03	1.145E+03	1.084E+03	4.38040E-03	7.776E+02	7.392E+02
	4.00000E-03	1.231E+03	1.170E+03	4.30764E-03	1.060E+03	1.002E+03	L2 4.38040E-03	1.050E+03	9.906E+02
	4.23750E-03	1.066E+03	1.016E+03	4.46470E-03	9.712E+02	9.221E+02	4.53657E-03	9.743E+02	9.178E+02
L1	4.23750E-03	1.223E+03	1.164E+03	L1 4.46470E-03	1.117E+03	1.059E+03	4.69830E-03	8.939E+02	8.457E+02
	5.00000E-03	8.134E+02	7.780E+02	5.00000E-03	8.471E+02	8.064E+02	L1 4.69830E-03	1.029E+03	9.725E+02
	6.00000E-03	5.072E+02	4.871E+02	6.00000E-03	5.294E+02	5.065E+02	5.00000E-03	8.846E+02	8.377E+02
	8.00000E-03	2.391E+02	2.301E+02	8.00000E-03	2.500E+02	2.400E+02	6.00000E-03	5.569E+02	5.305E+02
	1.00000E-02	1.321E+02	1.269E+02	1.00000E-02	1.384E+02	1.327E+02	8.00000E-03	2.631E+02	2.518E+02
	1.50000E-02	4.445E+01	4.206E+01	1.50000E-02	4.664E+01	4.413E+01	1.00000E-02	1.459E+02	1.396E+02
	2.00000E-02	2.044E+01	1.893E+01	2.00000E-02	2.146E+01	1.990E+01	1.50000E-02	4.923E+01	4.657E+01
	2.79399E-02	8.316E+00	7.395E+00	2.92001E-02	7.760E+00	6.876E+00	2.00000E-02	2.268E+01	2.105E+01
K	2.79399E-02	4.733E+01	1.670E+01	K 2.92001E-02	4.360E+01	1.514E+01	3.00000E-02	7.631E+00	6.755E+00
	3.00000E-02	3.949E+01	1.553E+01	3.00000E-02	4.121E+01	1.490E+01	3.04912E-02	7.307E+00	6.452E+00
	4.00000E-02	1.873E+01	9.911E+00	4.00000E-02	1.942E+01	9.835E+00	K 3.04912E-02	4.073E+01	1.391E+01
	5.00000E-02	1.030E+01	6.262E+00	5.00000E-02	1.070E+01	6.314E+00	4.00000E-02	2.027E+01	9.789E+00
	6.00000E-02	6.306E+00	4.135E+00	6.00000E-02	6.564E+00	4.211E+00	5.00000E-02	1.120E+01	6.400E+00
	8.00000E-02	2.907E+00	2.043E+00	8.00000E-02	3.029E+00	2.101E+00	6.00000E-02	6.879E+00	4.311E+00
	1.00000E-01	1.609E+00	1.150E+00	1.00000E-01	1.676E+00	1.189E+00	8.00000E-02	3.176E+00	2.173E+00
	1.50000E-01	5.876E-01	3.960E-01	1.50000E-01	6.091E-01	4.119E-01	1.00000E-01	1.758E+00	1.237E+00
	2.00000E-01	3.167E-01	1.913E-01	2.00000E-01	3.260E-01	1.990E-01	1.50000E-01	6.361E-01	4.312E-01
	3.00000E-01	1.614E-01	7.923E-02	3.00000E-01	1.639E-01	8.179E-02	2.00000E-01	3.381E-01	2.084E-01
	4.00000E-01	1.149E-01	5.031E-02	4.00000E-01	1.156E-01	5.138E-02	3.00000E-01	1.677E-01	8.504E-02
	5.00000E-01	9.371E-02	3.932E-02	5.00000E-01	9.374E-02	3.980E-02	4.00000E-01	1.172E-01	5.288E-02
	6.00000E-01	8.138E-02	3.398E-02	6.00000E-01	8.113E-02	3.417E-02	5.00000E-01	9.453E-02	4.061E-02
	8.00000E-01	6.707E-02	2.883E-02	8.00000E-01	6.662E-02	2.878E-02	6.00000E-01	8.153E-02	3.465E-02
	1.00000E+00	5.849E-02	2.615E-02	1.00000E+00	5.800E-02	2.601E-02	8.00000E-01	6.670E-02	2.896E-02
	1.25000E+00	5.144E-02	2.398E-02	1.25000E+00	5.095E-02	2.379E-02	1.00000E+00	5.797E-02	2.608E-02
	1.50000E+00	4.684E-02	2.254E-02	1.50000E+00	4.638E-02	2.233E-02	1.25000E+00	5.086E-02	2.378E-02
	2.00000E+00	4.151E-02	2.105E-02	2.00000E+00	4.112E-02	2.085E-02	1.50000E+00	4.628E-02	2.230E-02
	3.00000E+00	3.715E-02	2.060E-02	3.00000E+00	3.686E-02	2.044E-02	2.00000E+00	4.105E-02	2.081E-02
	4.00000E+00	3.582E-02	2.127E-02	4.00000E+00	3.561E-02	2.115E-02	3.00000E+00	3.686E-02	2.043E-02
	5.00000E+00	3.564E-02	2.223E-02	5.00000E+00	3.548E-02	2.213E-02	4.00000E+00	3.567E-02	2.118E-02
	6.00000E+00	3.596E-02	2.321E-02	6.00000E+00	3.583E-02	2.312E-02	5.00000E+00	3.559E-02	2.219E-02
	8.00000E+00	3.730E-02	2.502E-02	8.00000E+00	3.724E-02	2.496E-02	6.00000E+00	3.598E-02	2.321E-02
	1.00000E+01	3.898E-02	2.653E-02	1.00000E+01	3.895E-02	2.649E-02	8.00000E+00	3.745E-02	2.509E-02
	1.50000E+01	4.311E-02	2.903E-02	1.50000E+01	4.315E-02	2.901E-02	1.00000E+01	3.921E-02	2.664E-02
	2.00000E+01	4.654E-02	3.020E-02	2.00000E+01	4.662E-02	3.018E-02	1.50000E+01	4.351E-02	2.920E-02
							2.00000E+01	4.704E-02	3.038E-02


Z = 49, INDIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 50, TIN
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 51, ANTIMONY
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

TELLURIUM
Z = 52

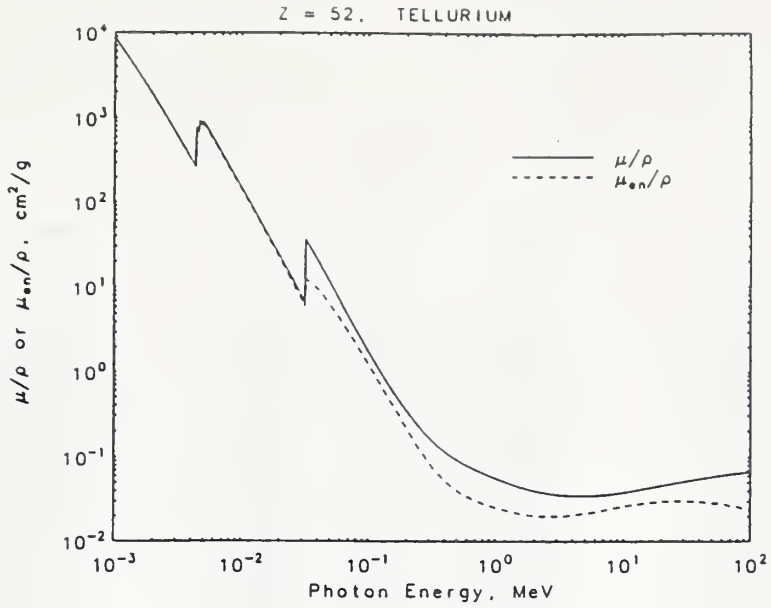
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	8.434E+03	8.419E+03
	1.00300E-03	8.380E+03	8.365E+03
	1.00600E-03	8.326E+03	8.311E+03
M1	1.00600E-03	8.684E+03	8.668E+03
	1.50000E-03	3.608E+03	3.598E+03
	2.00000E-03	1.832E+03	1.824E+03
	3.00000E-03	6.792E+02	6.726E+02
	4.00000E-03	3.297E+02	3.240E+02
	4.34140E-03	2.678E+02	2.625E+02
L3	4.34140E-03	7.882E+02	7.460E+02
	4.47465E-03	7.504E+02	7.078E+02
	4.61200E-03	6.995E+02	6.629E+02
L2	4.61200E-03	9.445E+02	8.880E+02
	4.77280E-03	8.782E+02	8.237E+02
	4.93920E-03	8.062E+02	7.600E+02
L1	4.93920E-03	9.292E+02	8.744E+02
	5.00000E-03	9.014E+02	8.487E+02
	6.00000E-03	5.721E+02	5.423E+02
	8.00000E-03	2.702E+02	2.578E+02
	1.00000E-02	1.501E+02	1.433E+02
	1.50000E-02	5.078E+01	4.802E+01
	2.00000E-02	2.341E+01	2.175E+01
	3.00000E-02	7.878E+00	6.997E+00
	3.18138E-02	6.738E+00	5.929E+00
K	3.18138E-02	3.719E+01	1.251E+01
	4.00000E-02	2.064E+01	9.480E+00
	5.00000E-02	1.145E+01	6.330E+00
	6.00000E-02	7.041E+00	4.306E+00
	8.00000E-02	3.255E+00	2.195E+00
	1.00000E-01	1.801E+00	1.256E+00
	1.50000E-01	6.492E-01	4.409E-01
	2.00000E-01	3.429E-01	2.132E-01
	3.00000E-01	1.679E-01	8.646E-02
	4.00000E-01	1.163E-01	5.326E-02
	5.00000E-01	9.328E-02	4.055E-02
	6.00000E-01	8.022E-02	3.440E-02
	8.00000E-01	6.538E-02	2.854E-02
	1.00000E+00	5.669E-02	2.559E-02
	1.25000E+00	4.967E-02	2.327E-02
	1.50000E+00	4.518E-02	2.179E-02
	2.00000E+00	4.009E-02	2.033E-02
	3.00000E+00	3.606E-02	1.998E-02
	4.00000E+00	3.494E-02	2.075E-02
	5.00000E+00	3.492E-02	2.177E-02
	6.00000E+00	3.534E-02	2.279E-02
	8.00000E+00	3.683E-02	2.466E-02
	1.00000E+01	3.860E-02	2.620E-02
	1.50000E+01	4.290E-02	2.873E-02
	2.00000E+01	4.642E-02	2.989E-02

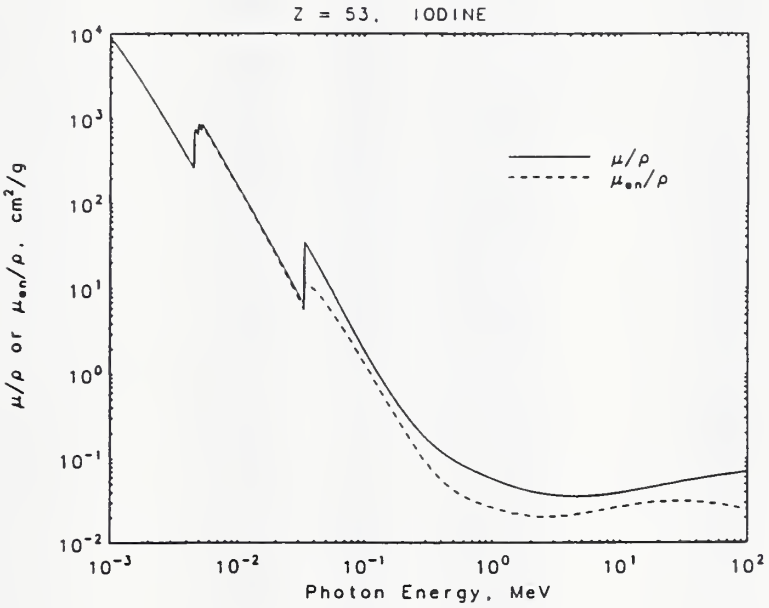
IODINE
Z = 53

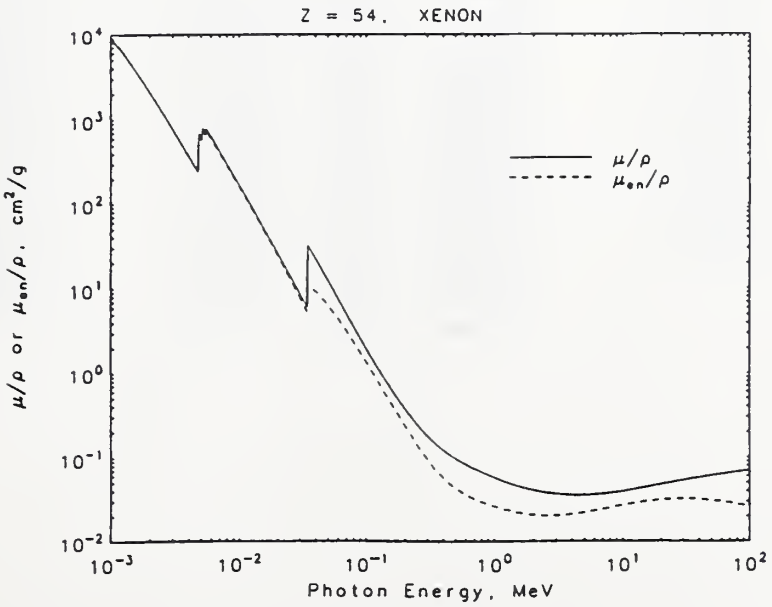
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.096E+03	9.078E+03
	1.03542E-03	8.465E+03	8.448E+03
	1.07210E-03	7.863E+03	7.847E+03
M1	1.07210E-03	8.198E+03	8.181E+03
	1.50000E-03	3.919E+03	3.908E+03
	2.00000E-03	1.997E+03	1.988E+03
	3.00000E-03	7.420E+02	7.351E+02
	4.00000E-03	3.607E+02	3.548E+02
	4.55710E-03	2.592E+02	2.537E+02
L3	4.55710E-03	7.550E+02	7.121E+02
	4.70229E-03	7.123E+02	6.724E+02
	4.85210E-03	6.636E+02	6.270E+02
L2	4.85210E-03	8.943E+02	8.375E+02
	5.00000E-03	8.430E+02	7.903E+02
	5.18810E-03	7.665E+02	7.198E+02
L1	5.18810E-03	8.837E+02	8.283E+02
	6.00000E-03	6.173E+02	5.822E+02
	8.00000E-03	2.922E+02	2.777E+02
	1.00000E-02	1.626E+02	1.548E+02
	1.50000E-02	5.512E+01	5.208E+01
	2.00000E-02	2.543E+01	2.363E+01
	3.00000E-02	8.561E+00	7.622E+00
	3.31694E-02	6.553E+00	5.744E+00
K	3.31694E-02	3.582E+01	1.188E+01
	4.00000E-02	2.210E+01	9.616E+00
	5.00000E-02	1.232E+01	6.573E+00
	6.00000E-02	7.579E+00	4.518E+00
	8.00000E-02	3.510E+00	2.331E+00
	1.00000E-01	1.942E+00	1.342E+00
	1.50000E-01	6.978E-01	4.742E-01
	2.00000E-01	3.663E-01	2.295E-01
	3.00000E-01	1.771E-01	9.257E-02
	4.00000E-01	1.217E-01	5.650E-02
	5.00000E-01	9.701E-02	4.267E-02
	6.00000E-01	8.313E-02	3.598E-02
	8.00000E-01	6.749E-02	2.962E-02
	1.00000E+00	5.841E-02	2.646E-02
	1.25000E+00	5.111E-02	2.399E-02
	1.50000E+00	4.647E-02	2.243E-02
	2.00000E+00	4.124E-02	2.092E-02
	3.00000E+00	3.716E-02	2.059E-02
	4.00000E+00	3.607E-02	2.142E-02
	5.00000E+00	3.608E-02	2.250E-02
	6.00000E+00	3.655E-02	2.357E-02
	8.00000E+00	3.815E-02	2.553E-02
	1.00000E+01	4.002E-02	2.714E-02
	1.50000E+01	4.455E-02	2.980E-02
	2.00000E+01	4.823E-02	3.101E-02

XENON
Z = 54

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.413E+03	9.393E+03
	1.07191E-03	8.151E+03	8.132E+03
	1.14900E-03	7.035E+03	7.019E+03
M1	1.14900E-03	7.338E+03	7.321E+03
	1.50000E-03	4.085E+03	4.073E+03
	2.00000E-03	2.088E+03	2.078E+03
	3.00000E-03	7.780E+02	7.709E+02
	4.00000E-03	3.787E+02	3.728E+02
	4.78220E-03	2.408E+02	2.355E+02
L3	4.78220E-03	6.941E+02	6.524E+02
	5.00000E-03	6.392E+02	6.015E+02
	5.10370E-03	6.044E+02	5.693E+02
L2	5.10370E-03	8.181E+02	7.630E+02
	5.27536E-03	7.579E+02	7.079E+02
	5.45280E-03	6.991E+02	6.539E+02
L1	5.45280E-03	8.064E+02	7.527E+02
	6.00000E-03	6.376E+02	5.979E+02
	8.00000E-03	3.032E+02	2.871E+02
	1.00000E-02	1.690E+02	1.605E+02
	1.50000E-02	5.743E+01	5.420E+01
	2.00000E-02	2.652E+01	2.465E+01
	3.00000E-02	8.930E+00	7.969E+00
	3.45614E-02	6.129E+00	5.352E+00
K	3.45614E-02	3.316E+01	1.086E+01
	4.00000E-02	2.270E+01	9.323E+00
	5.00000E-02	1.272E+01	6.540E+00
	6.00000E-02	7.825E+00	4.541E+00
	8.00000E-02	3.633E+00	2.374E+00
	1.00000E-01	2.011E+00	1.376E+00
	1.50000E-01	7.202E-01	4.894E-01
	2.00000E-01	3.760E-01	2.373E-01
	3.00000E-01	1.797E-01	9.522E-02
	4.00000E-01	1.223E-01	5.761E-02
	5.00000E-01	9.699E-02	4.317E-02
	6.00000E-01	8.281E-02	3.617E-02
	8.00000E-01	6.696E-02	2.956E-02
	1.00000E+00	5.785E-02	2.630E-02
	1.25000E+00	5.054E-02	2.378E-02
	1.50000E+00	4.594E-02	2.221E-02
	2.00000E+00	4.078E-02	2.070E-02
	3.00000E+00	3.681E-02	2.042E-02
	4.00000E+00	3.577E-02	2.128E-02
	5.00000E+00	3.583E-02	2.240E-02
	6.00000E+00	3.634E-02	2.350E-02
	8.00000E+00	3.797E-02	2.553E-02
	1.00000E+01	3.987E-02	2.720E-02
	1.50000E+01	4.445E-02	3.002E-02
	2.00000E+01	4.815E-02	3.139E-02


Z = 52, TELLURIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 53, IODINE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 54, XENON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

CESIUM
Z = 55

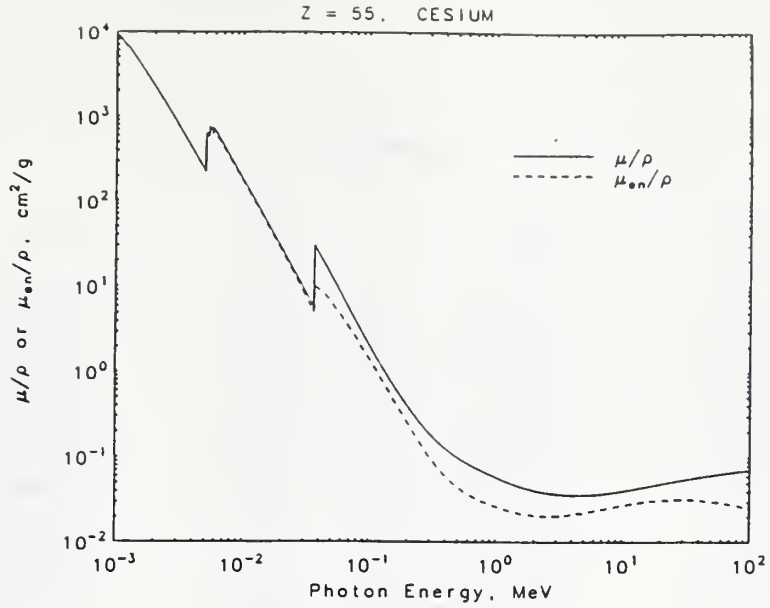
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.365E+03	9.343E+03
	1.03199E-03	8.775E+03	8.754E+03
	1.06500E-03	8.214E+03	8.194E+03
M2	1.06500E-03	8.685E+03	8.663E+03
	1.13851E-03	7.576E+03	7.557E+03
	1.21710E-03	6.584E+03	6.567E+03
M1	1.21710E-03	6.888E+03	6.870E+03
	1.50000E-03	4.335E+03	4.322E+03
	2.00000E-03	2.226E+03	2.216E+03
	3.00000E-03	8.319E+02	8.246E+02
	4.00000E-03	4.055E+02	3.994E+02
	5.00000E-03	2.303E+02	2.251E+02
	5.01190E-03	2.290E+02	2.237E+02
L3	5.01190E-03	6.674E+02	6.248E+02
	5.18274E-03	6.184E+02	5.763E+02
	5.35940E-03	5.645E+02	5.299E+02
L2	5.35940E-03	7.692E+02	7.142E+02
	5.53401E-03	7.146E+02	6.610E+02
	5.71430E-03	6.556E+02	6.108E+02
L1	5.71430E-03	7.547E+02	7.015E+02
	6.00000E-03	6.711E+02	6.253E+02
	8.00000E-03	3.214E+02	3.029E+02
	1.00000E-02	1.793E+02	1.697E+02
	1.50000E-02	6.104E+01	5.753E+01
	2.00000E-02	2.822E+01	2.623E+01
	3.00000E-02	9.507E+00	8.502E+00
	3.59846E-02	5.863E+00	5.102E+00
K	3.59846E-02	3.143E+01	1.017E+01
	4.00000E-02	2.381E+01	9.185E+00
	5.00000E-02	1.340E+01	6.618E+00
	6.00000E-02	8.248E+00	4.653E+00
	8.00000E-02	3.836E+00	2.464E+00
	1.00000E-01	2.124E+00	1.438E+00
	1.50000E-01	7.589E-01	5.154E-01
	2.00000E-01	3.941E-01	2.502E-01
	3.00000E-01	1.863E-01	1.000E-01
	4.00000E-01	1.257E-01	6.003E-02
	5.00000E-01	9.912E-02	4.463E-02
	6.00000E-01	8.431E-02	3.717E-02
	8.00000E-01	6.789E-02	3.014E-02
	1.00000E+00	5.854E-02	2.671E-02
	1.25000E+00	5.108E-02	2.408E-02
	1.50000E+00	4.641E-02	2.246E-02
	2.00000E+00	4.121E-02	2.091E-02
	3.00000E+00	3.725E-02	2.064E-02
	4.00000E+00	3.625E-02	2.153E-02
	5.00000E+00	3.635E-02	2.268E-02
	6.00000E+00	3.689E-02	2.380E-02
	8.00000E+00	3.860E-02	2.583E-02
	1.00000E+01	4.057E-02	2.750E-02
	1.50000E+01	4.529E-02	3.026E-02
	2.00000E+01	4.910E-02	3.152E-02

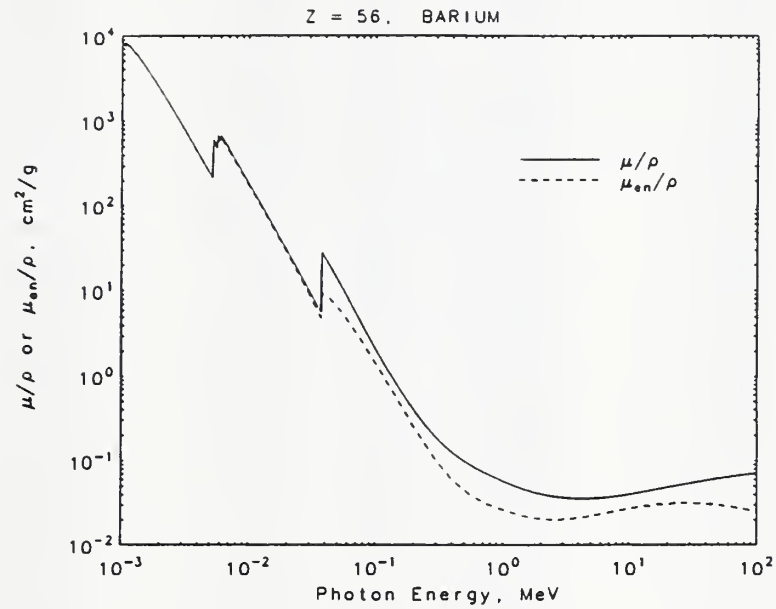
BARIUM
Z = 56

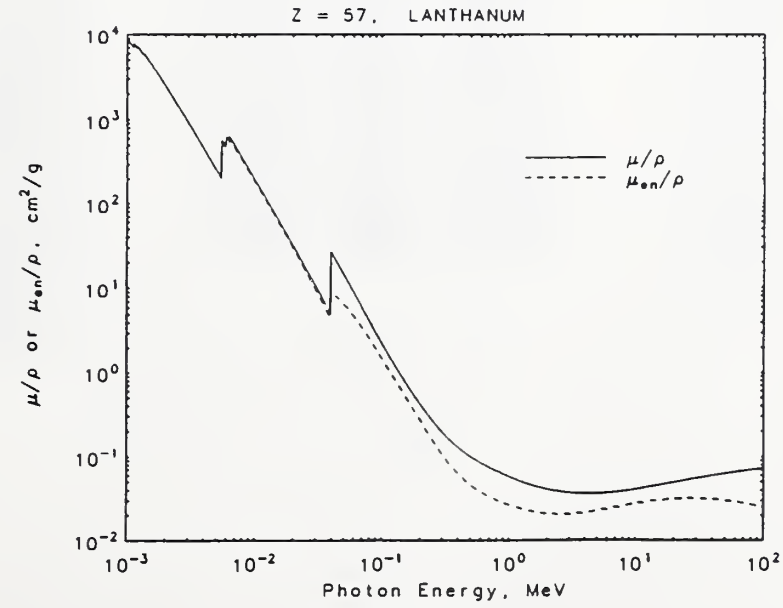
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	8.543E+03	8.521E+03
	1.03063E-03	7.990E+03	7.969E+03
	1.06220E-03	7.465E+03	7.445E+03
M3	1.06220E-03	8.547E+03	8.524E+03
	1.09882E-03	7.957E+03	7.935E+03
	1.13670E-03	7.404E+03	7.384E+03
M2	1.13670E-03	7.837E+03	7.815E+03
	1.21224E-03	6.861E+03	6.841E+03
	1.29280E-03	5.985E+03	5.968E+03
M1	1.29280E-03	6.255E+03	6.237E+03
	1.50000E-03	4.499E+03	4.485E+03
	2.00000E-03	2.319E+03	2.308E+03
	3.00000E-03	8.696E+02	8.622E+02
	4.00000E-03	4.246E+02	4.184E+02
	5.00000E-03	2.414E+02	2.361E+02
	5.24700E-03	2.135E+02	2.084E+02
L3	5.24700E-03	6.098E+02	5.689E+02
	5.43204E-03	5.634E+02	5.263E+02
	5.62360E-03	5.169E+02	4.835E+02
L2	5.62360E-03	7.016E+02	6.486E+02
	5.80333E-03	6.507E+02	6.025E+02
	5.98880E-03	6.013E+02	5.577E+02
L1	5.98880E-03	6.930E+02	6.412E+02
	6.00000E-03	6.898E+02	6.383E+02
	8.00000E-03	3.334E+02	3.127E+02
	1.00000E-02	1.860E+02	1.754E+02
	1.50000E-02	6.347E+01	5.972E+01
	2.00000E-02	2.938E+01	2.730E+01
	3.00000E-02	9.904E+00	8.875E+00
	3.74406E-02	5.498E+00	4.768E+00
K	3.74406E-02	2.919E+01	9.346E+00
	4.00000E-02	2.457E+01	8.842E+00
	5.00000E-02	1.379E+01	6.534E+00
	6.00000E-02	8.511E+00	4.660E+00
	8.00000E-02	3.963E+00	2.501E+00
	1.00000E-01	2.196E+00	1.470E+00
	1.50000E-01	7.828E-01	5.309E-01
	2.00000E-01	4.046E-01	2.583E-01
	3.00000E-01	1.891E-01	1.028E-01
	4.00000E-01	1.265E-01	6.125E-02
	5.00000E-01	9.923E-02	4.521E-02
	6.00000E-01	8.410E-02	3.743E-02
	8.00000E-01	6.744E-02	3.011E-02
	1.00000E+00	5.803E-02	2.657E-02
	1.25000E+00	5.058E-02	2.388E-02
	1.50000E+00	4.592E-02	2.224E-02
	2.00000E+00	4.078E-02	2.069E-02
	3.00000E+00	3.692E-02	2.044E-02
	4.00000E+00	3.598E-02	2.135E-02
	5.00000E+00	3.612E-02	2.250E-02
	6.00000E+00	3.669E-02	2.363E-02
	8.00000E+00	3.844E-02	2.566E-02
	1.00000E+01	4.042E-02	2.731E-02
	1.50000E+01	4.518E-02	3.003E-02
	2.00000E+01	4.902E-02	3.126E-02

LANTHANUM
Z = 57

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.087E+03	9.061E+03
	1.05991E-03	7.988E+03	7.965E+03
	1.12340E-03	7.000E+03	6.979E+03
M3	1.12340E-03	8.025E+03	8.001E+03
	1.16320E-03	7.447E+03	7.425E+03
	1.20440E-03	6.911E+03	6.890E+03
M2	1.20440E-03	7.321E+03	7.298E+03
	1.28045E-03	6.440E+03	6.419E+03
	1.36130E-03	5.652E+03	5.634E+03
M1	1.36130E-03	5.905E+03	5.886E+03
	1.50000E-03	4.772E+03	4.755E+03
	2.00000E-03	2.464E+03	2.453E+03
	3.00000E-03	9.267E+02	9.190E+02
	4.00000E-03	4.531E+02	4.468E+02
	5.00000E-03	2.578E+02	2.524E+02
	5.48270E-03	2.039E+02	1.988E+02
L3	5.48270E-03	5.764E+02	5.356E+02
	5.68299E-03	5.302E+02	4.935E+02
	5.89060E-03	4.846E+02	4.517E+02
L2	5.89060E-03	6.545E+02	6.023E+02
	6.00000E-03	6.319E+02	5.819E+02
	6.26630E-03	5.654E+02	5.221E+02
L1	6.26630E-03	6.518E+02	6.003E+02
	8.00000E-03	3.529E+02	3.290E+02
	1.00000E-02	1.967E+02	1.847E+02
	1.50000E-02	6.731E+01	6.321E+01
	2.00000E-02	3.119E+01	2.897E+01
	3.00000E-02	1.052E+01	9.444E+00
	3.89246E-02	5.271E+00	4.554E+00
K	3.89246E-02	2.772E+01	8.785E+00
	4.00000E-02	2.579E+01	8.608E+00
	5.00000E-02	1.447E+01	6.560E+00
	6.00000E-02	8.962E+00	4.756E+00
	8.00000E-02	4.177E+00	2.587E+00
	1.00000E-01	2.315E+00	1.532E+00
	1.50000E-01	8.239E-01	5.576E-01
	2.00000E-01	4.239E-01	2.718E-01
	3.00000E-01	1.961E-01	1.079E-01
	4.00000E-01	1.301E-01	6.382E-02
	5.00000E-01	1.015E-01	4.677E-02
	6.00000E-01	8.570E-02	3.849E-02
	8.00000E-01	6.843E-02	3.073E-02
	1.00000E+00	5.876E-02	2.700E-02
	1.25000E+00	5.110E-02	2.418E-02
	1.50000E+00	4.640E-02	2.249E-02
	2.00000E+00	4.122E-02	2.090E-02
	3.00000E+00	3.737E-02	2.068E-02
	4.00000E+00	3.646E-02	2.161E-02
	5.00000E+00	3.664E-02	2.280E-02
	6.00000E+00	3.726E-02	2.395E-02
	8.00000E+00	3.907E-02	2.602E-02
	1.00000E+01	4.113E-02	2.769E-02
	1.50000E+01	4.603E-02	3.043E-02
	2.00000E+01	4.996E-02	3.163E-02


Z = 55, CESIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 56, BARIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 57, LANTHANUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

CERIUM
Z = 58

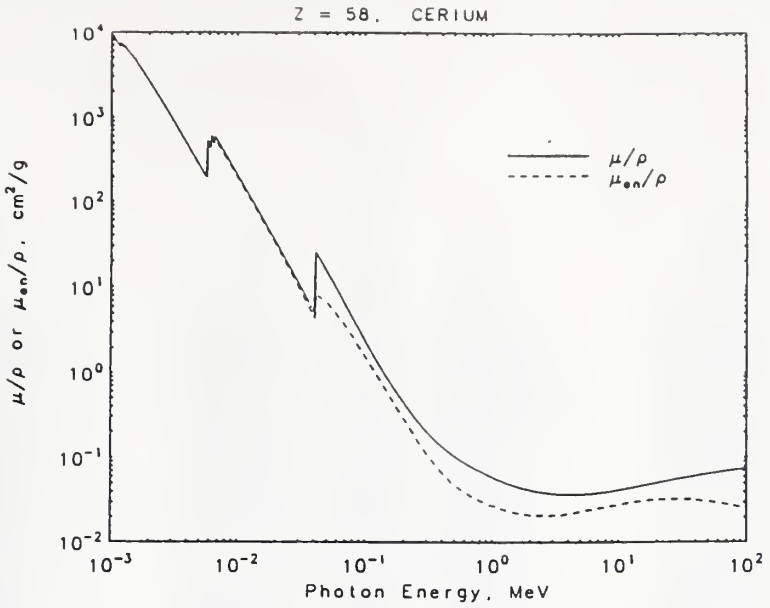
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.711E+03	9.679E+03
	1.08876E-03	7.991E+03	7.964E+03
	1.18540E-03	6.563E+03	6.541E+03
M3	1.18540E-03	7.545E+03	7.519E+03
	1.22832E-03	6.984E+03	6.960E+03
	1.27280E-03	6.465E+03	6.442E+03
M2	1.27280E-03	6.853E+03	6.829E+03
	1.35222E-03	6.031E+03	6.010E+03
	1.43660E-03	5.293E+03	5.273E+03
M1	1.43660E-03	5.532E+03	5.512E+03
	1.50000E-03	5.033E+03	5.015E+03
	2.00000E-03	2.607E+03	2.595E+03
	3.00000E-03	9.857E+02	9.776E+02
	4.00000E-03	4.811E+02	4.745E+02
	5.00000E-03	2.740E+02	2.684E+02
	5.72340E-03	1.943E+02	1.892E+02
L3	5.72340E-03	5.454E+02	5.046E+02
	6.00000E-03	4.908E+02	4.550E+02
	6.16420E-03	4.554E+02	4.228E+02
L2	6.16420E-03	6.188E+02	5.665E+02
	6.35359E-03	5.756E+02	5.278E+02
	6.54880E-03	5.332E+02	4.899E+02
L1	6.54880E-03	6.149E+02	5.633E+02
	8.00000E-03	3.732E+02	3.458E+02
	1.00000E-02	2.082E+02	1.945E+02
	1.50000E-02	7.143E+01	6.690E+01
	2.00000E-02	3.312E+01	3.073E+01
	3.00000E-02	1.119E+01	1.005E+01
	4.00000E-02	5.215E+00	4.496E+00
	4.04430E-02	5.066E+00	4.359E+00
K	4.04430E-02	2.635E+01	8.272E+00
	5.00000E-02	1.520E+01	6.569E+00
	6.00000E-02	9.447E+00	4.847E+00
	8.00000E-02	4.409E+00	2.677E+00
	1.00000E-01	2.445E+00	1.597E+00
	1.50000E-01	8.687E-01	5.862E-01
	2.00000E-01	4.452E-01	2.865E-01
	3.00000E-01	2.039E-01	1.134E-01
	4.00000E-01	1.342E-01	6.664E-02
	5.00000E-01	1.041E-01	4.851E-02
	6.00000E-01	8.757E-02	3.970E-02
	8.00000E-01	6.962E-02	3.145E-02
	1.00000E+00	5.961E-02	2.750E-02
	1.25000E+00	5.181E-02	2.456E-02
	1.50000E+00	4.701E-02	2.281E-02
	2.00000E+00	4.177E-02	2.118E-02
	3.00000E+00	3.792E-02	2.096E-02
	4.00000E+00	3.705E-02	2.194E-02
	5.00000E+00	3.727E-02	2.316E-02
	6.00000E+00	3.792E-02	2.434E-02
	8.00000E+00	3.981E-02	2.645E-02
	1.00000E+01	4.194E-02	2.816E-02
	1.50000E+01	4.699E-02	3.094E-02
	2.00000E+01	5.103E-02	3.216E-02

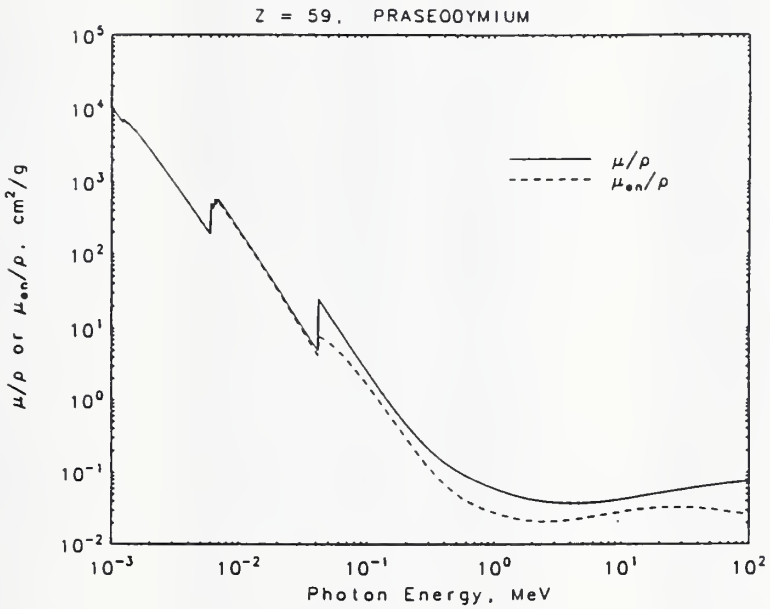
PRASEODYMIUM
Z = 59

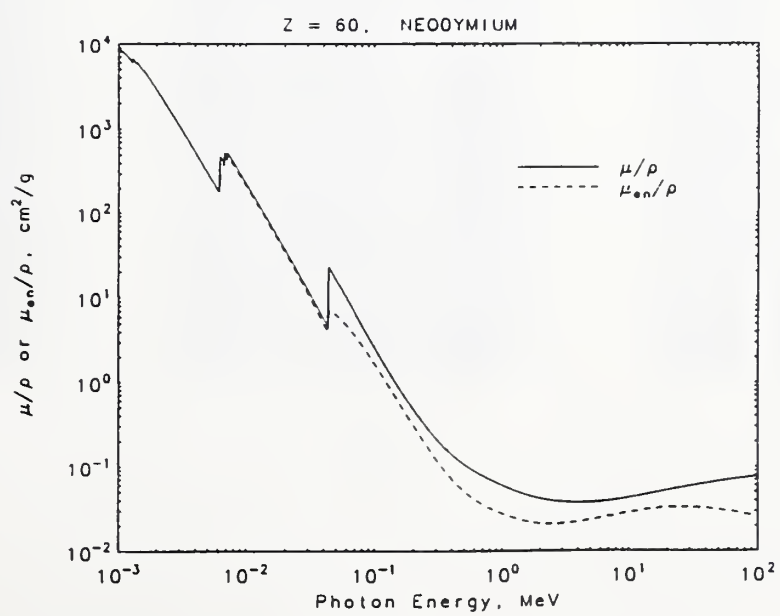
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.058E+04	1.054E+04
	1.11454E-03	8.122E+03	8.091E+03
	1.24220E-03	6.278E+03	6.254E+03
M3	1.24220E-03	7.224E+03	7.196E+03
	1.28892E-03	6.661E+03	6.635E+03
	1.33740E-03	6.142E+03	6.118E+03
M2	1.33740E-03	6.513E+03	6.487E+03
	1.50000E-03	5.090E+03	5.069E+03
	1.51100E-03	5.006E+03	4.986E+03
M1	1.51100E-03	5.235E+03	5.214E+03
	2.00000E-03	2.768E+03	2.755E+03
	3.00000E-03	1.047E+03	1.038E+03
	4.00000E-03	5.131E+02	5.061E+02
	5.00000E-03	2.924E+02	2.865E+02
	5.96430E-03	1.868E+02	1.816E+02
L3	5.96430E-03	5.214E+02	4.802E+02
	6.00000E-03	5.145E+02	4.739E+02
	6.44040E-03	4.310E+02	3.984E+02
L2	6.44040E-03	5.857E+02	5.333E+02
	6.63467E-03	5.455E+02	4.976E+02
	6.83480E-03	5.060E+02	4.625E+02
L1	6.83480E-03	5.836E+02	5.317E+02
	8.00000E-03	3.950E+02	3.634E+02
	1.00000E-02	2.209E+02	2.052E+02
	1.50000E-02	7.597E+01	7.094E+01
	2.00000E-02	3.526E+01	3.267E+01
	3.00000E-02	1.192E+01	1.072E+01
	4.00000E-02	5.557E+00	4.803E+00
	4.19906E-02	4.892E+00	4.192E+00
K	4.19906E-02	2.518E+01	7.833E+00
	5.00000E-02	1.599E+01	6.567E+00
	6.00000E-02	9.977E+00	4.942E+00
	8.00000E-02	4.664E+00	2.773E+00
	1.00000E-01	2.588E+00	1.667E+00
	1.50000E-01	9.180E-01	6.172E-01
	2.00000E-01	4.687E-01	3.025E-01
	3.00000E-01	2.126E-01	1.195E-01
	4.00000E-01	1.389E-01	6.980E-02
	5.00000E-01	1.071E-01	5.047E-02
	6.00000E-01	8.976E-02	4.107E-02
	8.00000E-01	7.105E-02	3.229E-02
	1.00000E+00	6.070E-02	2.811E-02
	1.25000E+00	5.268E-02	2.503E-02
	1.50000E+00	4.779E-02	2.320E-02
	2.00000E+00	4.244E-02	2.152E-02
	3.00000E+00	3.858E-02	2.131E-02
	4.00000E+00	3.774E-02	2.233E-02
	5.00000E+00	3.800E-02	2.359E-02
	6.00000E+00	3.870E-02	2.481E-02
	8.00000E+00	4.067E-02	2.697E-02
	1.00000E+01	4.288E-02	2.872E-02
	1.50000E+01	4.809E-02	3.155E-02
	2.00000E+01	5.226E-02	3.277E-02

NEODYMIUM
Z = 60

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.627E+03	6.598E+03
	1.00250E-03	6.806E+03	6.776E+03
	1.00500E-03	6.949E+03	6.918E+03
M4	1.00500E-03	8.554E+03	8.516E+03
	1.14188E-03	7.579E+03	7.547E+03
	1.29740E-03	5.933E+03	5.908E+03
M3	1.29740E-03	6.833E+03	6.803E+03
	1.34907E-03	6.264E+03	6.236E+03
	1.40280E-03	5.744E+03	5.719E+03
M2	1.40280E-03	6.093E+03	6.066E+03
	1.50000E-03	5.273E+03	5.250E+03
	1.57530E-03	4.738E+03	4.717E+03
M1	1.57530E-03	4.951E+03	4.929E+03
	2.00000E-03	2.878E+03	2.864E+03
	3.00000E-03	1.093E+03	1.084E+03
	4.00000E-03	5.366E+02	5.294E+02
	5.00000E-03	3.061E+02	3.000E+02
	6.00000E-03	1.927E+02	1.874E+02
	6.20790E-03	1.767E+02	1.715E+02
L3	6.20790E-03	4.892E+02	4.484E+02
	6.45960E-03	4.487E+02	4.079E+02
	6.72150E-03	4.013E+02	3.694E+02
L2	6.72150E-03	5.456E+02	4.939E+02
	6.92080E-03	5.135E+02	4.614E+02
	7.12600E-03	4.723E+02	4.293E+02
L1	7.12600E-03	5.448E+02	4.936E+02
	8.00000E-03	4.094E+02	3.739E+02
	1.00000E-02	2.300E+02	2.125E+02
	1.50000E-02	7.925E+01	7.376E+01
	2.00000E-02	3.684E+01	3.407E+01
	3.00000E-02	1.247E+01	1.121E+01
	4.00000E-02	5.809E+00	5.033E+00
	4.35689E-02	4.642E+00	3.962E+00
K	4.35689E-02	2.366E+01	7.296E+00
	5.00000E-02	1.650E+01	6.418E+00
	6.00000E-02	1.033E+01	4.928E+00
	8.00000E-02	4.839E+00	2.815E+00
	1.00000E-01	2.687E+00	1.706E+00
	1.50000E-01	9.522E-01	6.376E-01
	2.00000E-01	4.844E-01	3.133E-01
	3.00000E-01	2.178E-01	1.236E-01
	4.00000E-01	1.412E-01	7.177E-02
	5.00000E-01	1.083E-01	5.157E-02
	6.00000E-01	9.040E-02	4.174E-02
	8.00000E-01	7.127E-02	3.258E-02
	1.00000E+00	6.072E-02	2.823E-02
	1.25000E+00	5.262E-02	2.505E-02
	1.50000E+00	4.769E-02	2.318E-02
	2.00000E+00	4.236E-02	2.148E-02
	3.00000E+00	3.856E-02	2.129E-02
	4.00000E+00	3.776E-02	2.233E-02
	5.00000E+00	3.806E-02	2.360E-02
	6.00000E+00	3.879E-02	2.483E-02
	8.00000E+00	4.081E-02	2.701E-02
	1.00000E+01	4.304E-02	2.876E-02
	1.50000E+01	4.832E-02	3.159E-02
	2.00000E+01	5.257E-02	3.283E-02


Z = 58. CERIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

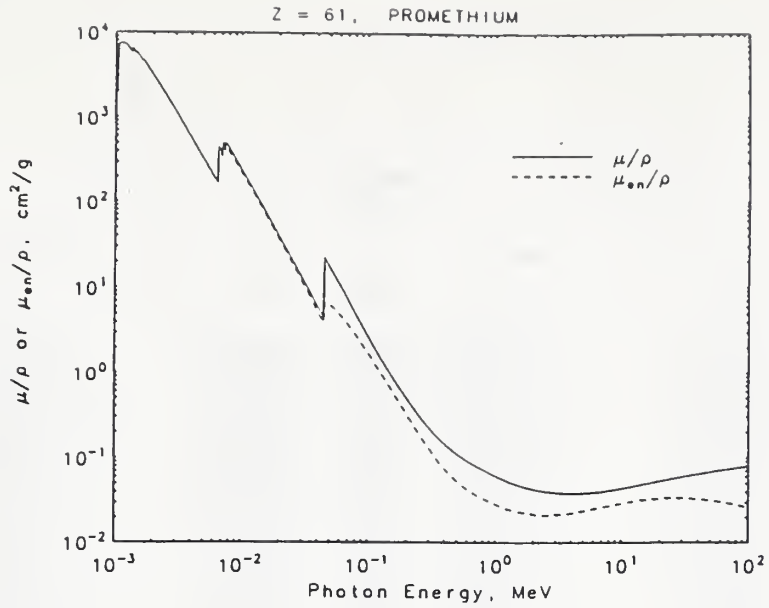

Z = 59. PRASEODYMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 60. NEODYMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	PROMETHIUM $Z = 61$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.056E+03	2.046E+03
	1.01336E-03	2.007E+03	1.997E+03
	1.02690E-03	1.959E+03	1.949E+03
M5	1.02690E-03	2.729E+03	2.715E+03
	1.03913E-03	3.894E+03	3.874E+03
	1.05150E-03	5.830E+03	5.801E+03
M4	1.05150E-03	7.242E+03	7.205E+03
	1.19448E-03	7.232E+03	7.196E+03
	1.35690E-03	5.687E+03	5.660E+03
M3	1.35690E-03	6.555E+03	6.524E+03
	1.41299E-03	5.985E+03	5.956E+03
	1.47140E-03	5.466E+03	5.439E+03
M2	1.47140E-03	5.799E+03	5.770E+03
	1.50000E-03	5.553E+03	5.526E+03
	1.65300E-03	4.497E+03	4.474E+03
M1	1.65300E-03	4.699E+03	4.676E+03
	2.00000E-03	3.048E+03	3.031E+03
	3.00000E-03	1.162E+03	1.152E+03
	4.00000E-03	5.709E+02	5.633E+02
	5.00000E-03	3.260E+02	3.196E+02
	6.00000E-03	2.053E+02	1.998E+02
	6.45930E-03	1.702E+02	1.649E+02
L3	6.45930E-03	4.678E+02	4.267E+02
	6.73036E-03	4.226E+02	3.864E+02
	7.01280E-03	3.805E+02	3.487E+02
L2	7.01280E-03	5.174E+02	4.657E+02
	7.21737E-03	4.884E+02	4.359E+02
	7.42790E-03	4.494E+02	4.062E+02
L1	7.42790E-03	5.184E+02	4.669E+02
	8.00000E-03	4.314E+02	3.908E+02
	1.00000E-02	2.440E+02	2.240E+02
	1.50000E-02	8.411E+01	7.799E+01
	2.00000E-02	3.916E+01	3.614E+01
	3.00000E-02	1.327E+01	1.193E+01
	4.00000E-02	6.181E+00	5.366E+00
	4.51840E-02	4.491E+00	3.816E+00
K	4.51840E-02	2.265E+01	6.930E+00
	5.00000E-02	1.735E+01	6.363E+00
	6.00000E-02	1.087E+01	4.989E+00
	8.00000E-02	5.107E+00	2.904E+00
	1.00000E-01	2.840E+00	1.776E+00
	1.50000E-01	1.005E+00	6.699E-01
	2.00000E-01	5.098E-01	3.302E-01
	3.00000E-01	2.273E-01	1.301E-01
	4.00000E-01	1.462E-01	7.517E-02
	5.00000E-01	1.115E-01	5.369E-02
	6.00000E-01	9.276E-02	4.323E-02
	8.00000E-01	7.280E-02	3.349E-02
	1.00000E+00	6.188E-02	2.889E-02
	1.25000E+00	5.350E-02	2.553E-02
	1.50000E+00	4.849E-02	2.360E-02
	2.00000E+00	4.308E-02	2.184E-02
	3.00000E+00	3.925E-02	2.166E-02
	4.00000E+00	3.849E-02	2.273E-02
	5.00000E+00	3.882E-02	2.405E-02
	6.00000E+00	3.959E-02	2.532E-02
	8.00000E+00	4.169E-02	2.754E-02
	1.00000E+01	4.401E-02	2.933E-02
	1.50000E+01	4.946E-02	3.222E-02
	2.00000E+01	5.380E-02	3.344E-02

	SAMARIUM $Z = 62$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.107E+03	2.097E+03
	1.03933E-03	1.963E+03	1.953E+03
	1.08020E-03	1.827E+03	1.817E+03
M5	1.08020E-03	2.635E+03	2.620E+03
	1.09302E-03	3.837E+03	3.816E+03
	1.10600E-03	5.613E+03	5.582E+03
M4	1.10600E-03	6.852E+03	6.814E+03
	1.25312E-03	6.641E+03	6.605E+03
	1.41980E-03	5.262E+03	5.234E+03
M3	1.41980E-03	6.072E+03	6.039E+03
	1.50000E-03	5.358E+03	5.329E+03
	1.54070E-03	5.046E+03	5.018E+03
M2	1.54070E-03	5.355E+03	5.325E+03
	1.62921E-03	4.740E+03	4.714E+03
	1.72280E-03	4.189E+03	4.165E+03
M1	1.72280E-03	4.376E+03	4.352E+03
	2.00000E-03	3.120E+03	3.102E+03
	3.00000E-03	1.193E+03	1.183E+03
	4.00000E-03	5.873E+02	5.795E+02
	5.00000E-03	3.356E+02	3.291E+02
	6.00000E-03	2.115E+02	2.059E+02
	6.71620E-03	1.587E+02	1.536E+02
L3	6.71620E-03	4.334E+02	3.933E+02
	7.00767E-03	3.898E+02	3.547E+02
	7.31180E-03	3.496E+02	3.189E+02
L2	7.31180E-03	4.756E+02	4.255E+02
	7.52130E-03	4.501E+02	3.988E+02
	7.73680E-03	4.141E+02	3.721E+02
L1	7.73680E-03	4.777E+02	4.276E+02
	8.00000E-03	4.401E+02	3.951E+02
	1.00000E-02	2.499E+02	2.278E+02
	1.50000E-02	8.633E+01	7.972E+01
	2.00000E-02	4.025E+01	3.706E+01
	3.00000E-02	1.365E+01	1.227E+01
	4.00000E-02	6.362E+00	5.532E+00
	4.68342E-02	4.208E+00	3.562E+00
K	4.68342E-02	2.100E+01	6.378E+00
	5.00000E-02	1.774E+01	6.094E+00
	6.00000E-02	1.107E+01	4.872E+00
	8.00000E-02	5.212E+00	2.893E+00
	1.00000E-01	2.901E+00	1.786E+00
	1.50000E-01	1.027E+00	6.806E-01
	2.00000E-01	5.192E-01	3.366E-01
	3.00000E-01	2.296E-01	1.326E-01
	4.00000E-01	1.466E-01	7.620E-02
	5.00000E-01	1.112E-01	5.411E-02
	6.00000E-01	9.218E-02	4.334E-02
	8.00000E-01	7.201E-02	3.333E-02
	1.00000E+00	6.106E-02	2.862E-02
	1.25000E+00	5.271E-02	2.522E-02
	1.50000E+00	4.773E-02	2.325E-02
	2.00000E+00	4.240E-02	2.150E-02
	3.00000E+00	3.868E-02	2.133E-02
	4.00000E+00	3.797E-02	2.241E-02
	5.00000E+00	3.833E-02	2.372E-02
	6.00000E+00	3.912E-02	2.498E-02
	8.00000E+00	4.124E-02	2.719E-02
	1.00000E+01	4.355E-02	2.896E-02
	1.50000E+01	4.899E-02	3.180E-02
	2.00000E+01	5.335E-02	3.302E-02

	EUROPIUM $Z = 63$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.216E+03	2.206E+03
	1.06344E-03	1.978E+03	1.968E+03
	1.13090E-03	1.763E+03	1.753E+03
M5	1.13090E-03	2.443E+03	2.428E+03
	1.14565E-03	3.617E+03	3.595E+03
	1.16060E-03	5.416E+03	5.382E+03
M4	1.16060E-03	6.540E+03	6.498E+03
	1.31087E-03	6.291E+03	6.253E+03
	1.48060E-03	5.031E+03	5.001E+03
M3	1.48060E-03	5.810E+03	5.774E+03
	1.50000E-03	5.624E+03	5.590E+03
	1.61390E-03	4.771E+03	4.742E+03
M2	1.61390E-03	5.064E+03	5.034E+03
	1.70441E-03	4.492E+03	4.465E+03
	1.80000E-03	3.980E+03	3.955E+03
M1	1.80000E-03	4.158E+03	4.132E+03
	2.00000E-03	3.278E+03	3.258E+03
	3.00000E-03	1.256E+03	1.245E+03
	4.00000E-03	6.193E+02	6.111E+02
	5.00000E-03	3.542E+02	3.474E+02
	6.00000E-03	2.234E+02	2.175E+02
	6.97690E-03	1.522E+02	1.471E+02
L3	6.97690E-03	4.127E+02	3.725E+02
	7.28997E-03	3.696E+02	3.346E+02
	7.61710E-03	3.302E+02	2.998E+02
L2	7.61710E-03	4.492E+02	3.993E+02
	8.00000E-03	3.989E+02	3.560E+02
	8.05200E-03	3.921E+02	3.502E+02
L1	8.05200E-03	4.524E+02	4.024E+02
	1.00000E-02	2.629E+02	2.378E+02
	1.50000E-02	9.087E+01	8.352E+01
	2.00000E-02	4.242E+01	3.895E+01
	3.00000E-02	1.441E+01	1.295E+01
	4.00000E-02	6.716E+00	5.848E+00
	4.85190E-02	4.051E+00	3.414E+00
K	4.85190E-02	2.001E+01	6.036E+00
	5.00000E-02	1.850E+01	5.927E+00
	6.00000E-02	1.155E+01	4.863E+00
	8.00000E-02	5.455E+00	2.953E+00
	1.00000E-01	3.040E+00	1.841E+00
	1.50000E-01	1.076E+00	7.088E-01
	2.00000E-01	5.425E-01	3.518E-01
	3.00000E-01	2.380E-01	1.385E-01
	4.00000E-01	1.509E-01	7.927E-02
	5.00000E-01	1.139E-01	5.598E-02
	6.00000E-01	9.404E-02	4.462E-02
	8.00000E-01	7.312E-02	3.406E-02
	1.00000E+00	6.186E-02	2.912E-02
	1.25000E+00	5.331E-02	2.557E-02
	1.50000E+00	4.822E-02	2.353E-02
	2.00000E+00	4.285E-02	2.173E-02
	3.00000E+00	3.913E-02	2.158E-02
	4.00000E+00	3.845E-02	2.269E-02
	5.00000E+00	3.885E-02	2.404E-02
	6.00000E+00	3.967E-02	2.532E-02
	8.00000E+00	4.185E-02	2.758E-02
	1.00000E+01	4.422E-02	2.938E-02
	1.50000E+01	4.980E-02	3.228E-02
	2.00000E+01	5.423E-02	3.351E-02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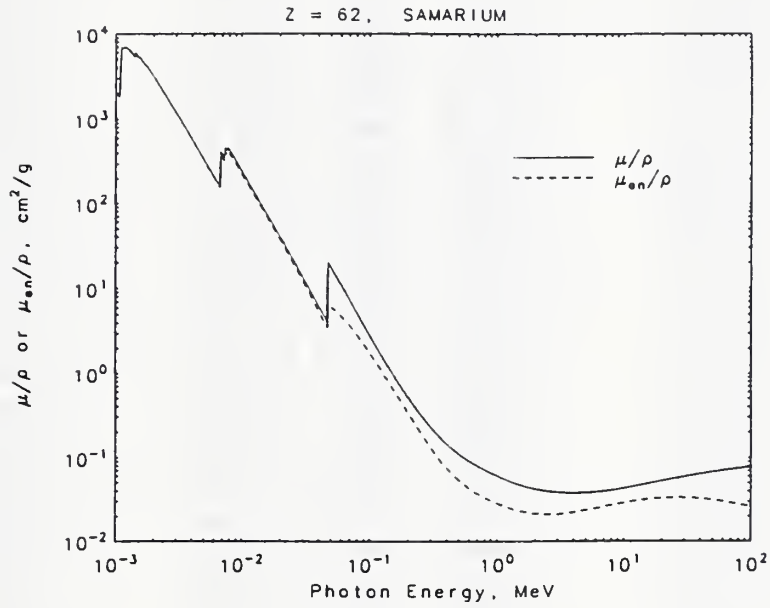
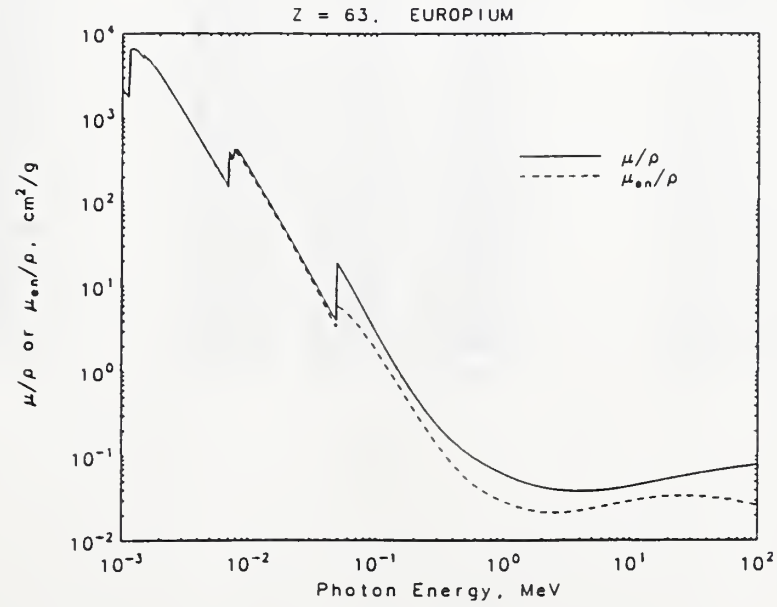
μ/ρ
μ_en/ρ
μ/ρ or μ_en/ρ, cm²/g
Photon Energy, MeV

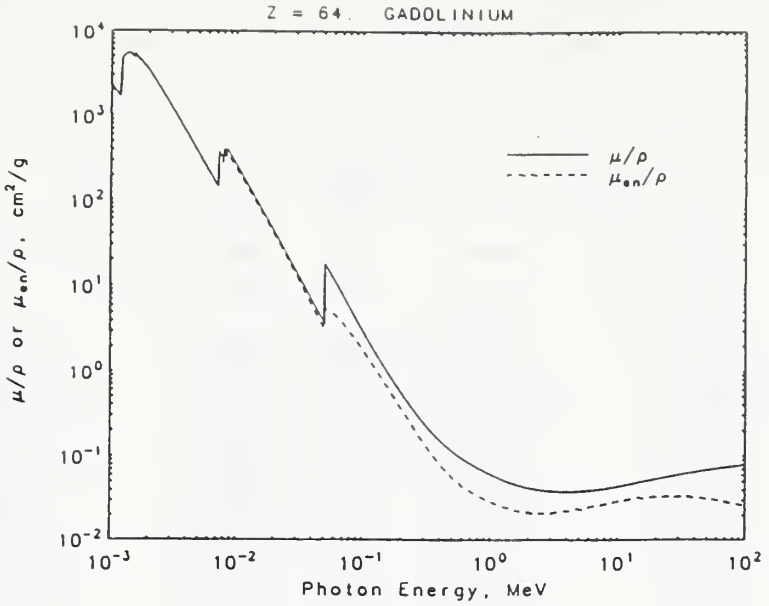

Z = 62, SAMARIUM
μ/ρ
μ_en/ρ
μ/ρ or μ_en/ρ, cm²/g
Photon Energy, MeV

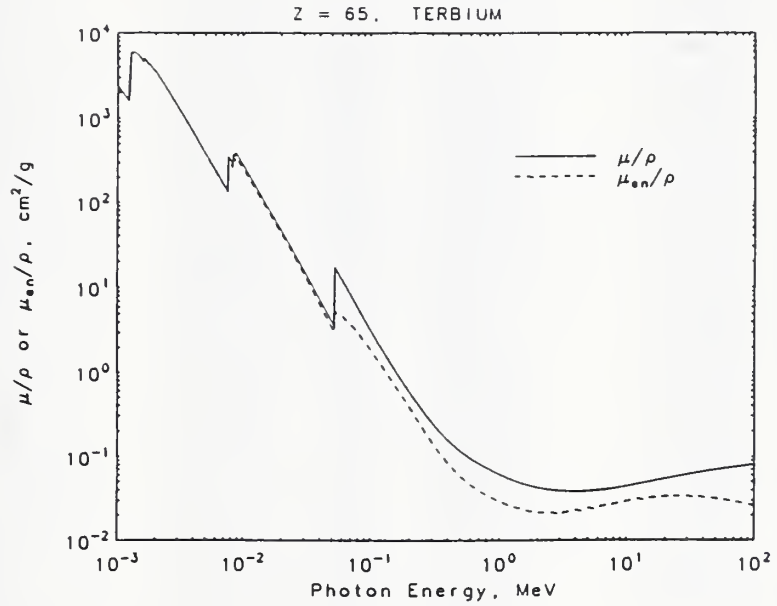

Z = 63, EUROPIUM
μ/ρ
μ_en/ρ
μ/ρ or μ_en/ρ, cm²/g
Photon Energy, MeV

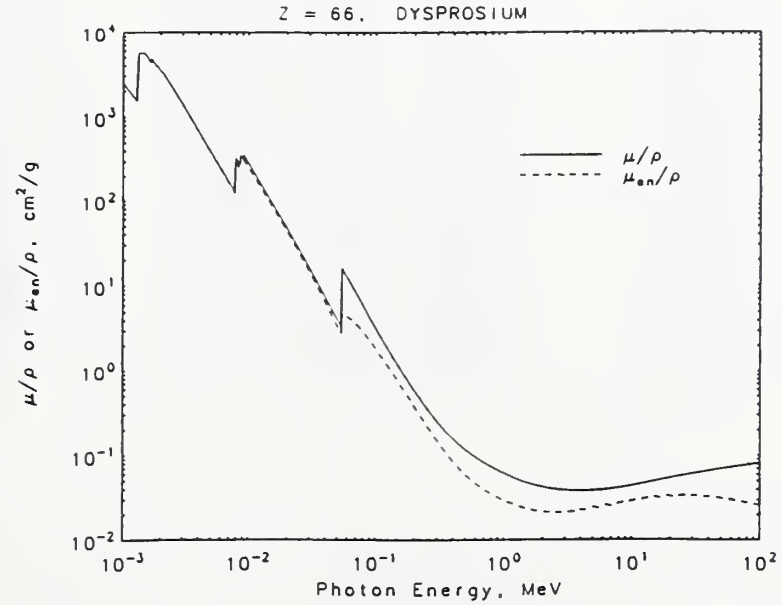
	GADOLINIUM $Z = 64$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.291E+03	2.281E+03
	1.08867E-03	1.960E+03	1.949E+03
	1.18520E-03	1.668E+03	1.658E+03
M5	1.18520E-03	1.931E+03	1.919E+03
	1.20109E-03	2.527E+03	2.510E+03
	1.21720E-03	3.961E+03	3.934E+03
M4	1.21720E-03	4.764E+03	4.731E+03
	1.50000E-03	5.041E+03	5.008E+03
	1.54400E-03	4.701E+03	4.670E+03
M3	1.54400E-03	5.432E+03	5.395E+03
	1.61454E-03	4.900E+03	4.867E+03
	1.68830E-03	4.421E+03	4.391E+03
M2	1.68830E-03	4.694E+03	4.662E+03
	1.78195E-03	4.164E+03	4.136E+03
	1.88080E-03	3.691E+03	3.666E+03
M1	1.88080E-03	3.854E+03	3.829E+03
	2.00000E-03	3.360E+03	3.337E+03
	3.00000E-03	1.292E+03	1.280E+03
	4.00000E-03	6.380E+02	6.296E+02
	5.00000E-03	3.653E+02	3.584E+02
	6.00000E-03	2.305E+02	2.246E+02
	7.24280E-03	1.429E+02	1.379E+02
L3	7.24280E-03	3.844E+02	3.452E+02
	7.57876E-03	3.427E+02	3.088E+02
	7.93030E-03	3.049E+02	2.755E+02
L2	7.93030E-03	4.149E+02	3.665E+02
	8.00000E-03	4.068E+02	3.595E+02
	8.37560E-03	3.631E+02	3.223E+02
L1	8.37560E-03	4.190E+02	3.702E+02
	1.00000E-02	2.693E+02	2.416E+02
	1.50000E-02	9.335E+01	8.538E+01
	2.00000E-02	4.363E+01	3.994E+01
	3.00000E-02	1.484E+01	1.333E+01
	4.00000E-02	6.920E+00	6.033E+00
	5.00000E-02	3.859E+00	3.242E+00
	5.02391E-02	3.812E+00	3.199E+00
K	5.02391E-02	1.864E+01	5.585E+00
	6.00000E-02	1.175E+01	4.722E+00
	8.00000E-02	5.573E+00	2.937E+00
	1.00000E-01	3.109E+00	1.849E+00
	1.50000E-01	1.100E+00	7.197E-01
	2.00000E-01	5.534E-01	3.584E-01
	3.00000E-01	2.410E-01	1.409E-01
	4.00000E-01	1.517E-01	8.039E-02
	5.00000E-01	1.139E-01	5.650E-02
	6.00000E-01	9.371E-02	4.483E-02
	8.00000E-01	7.252E-02	3.399E-02
	1.00000E+00	6.120E-02	2.893E-02
	1.25000E+00	5.262E-02	2.530E-02
	1.50000E+00	4.759E-02	2.325E-02
	2.00000E+00	4.228E-02	2.144E-02
	3.00000E+00	3.865E-02	2.129E-02
	4.00000E+00	3.802E-02	2.241E-02
	5.00000E+00	3.844E-02	2.374E-02
	6.00000E+00	3.928E-02	2.502E-02
	8.00000E+00	4.147E-02	2.725E-02
	1.00000E+01	4.384E-02	2.902E-02
	1.50000E+01	4.943E-02	3.188E-02
	2.00000E+01	5.385E-02	3.306E-02

	TERBIUM $Z = 65$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.396E+03	2.386E+03
	1.11409E-03	1.956E+03	1.946E+03
	1.24120E-03	1.591E+03	1.581E+03
M5	1.24120E-03	2.337E+03	2.321E+03
	1.25799E-03	3.515E+03	3.488E+03
	1.27500E-03	5.023E+03	4.984E+03
M4	1.27500E-03	5.928E+03	5.881E+03
	1.50000E-03	5.314E+03	5.274E+03
	1.61130E-03	4.464E+03	4.431E+03
M3	1.61130E-03	5.164E+03	5.125E+03
	1.68769E-03	4.635E+03	4.601E+03
	1.76770E-03	4.166E+03	4.135E+03
M2	1.76770E-03	4.424E+03	4.391E+03
	1.86493E-03	3.929E+03	3.899E+03
	1.96750E-03	3.482E+03	3.456E+03
M1	1.96750E-03	3.638E+03	3.611E+03
	2.00000E-03	3.507E+03	3.481E+03
	3.00000E-03	1.354E+03	1.342E+03
	4.00000E-03	6.697E+02	6.607E+02
	5.00000E-03	3.838E+02	3.765E+02
	6.00000E-03	2.423E+02	2.362E+02
	7.51400E-03	1.368E+02	1.318E+02
L3	7.51400E-03	3.658E+02	3.266E+02
	8.00000E-03	3.133E+02	2.810E+02
	8.25160E-03	2.881E+02	2.590E+02
L2	8.25160E-03	3.925E+02	3.443E+02
	8.47673E-03	3.684E+02	3.239E+02
	8.70800E-03	3.441E+02	3.033E+02
L1	8.70800E-03	3.970E+02	3.483E+02
	1.00000E-02	2.815E+02	2.502E+02
	1.50000E-02	9.802E+01	8.914E+01
	2.00000E-02	4.588E+01	4.184E+01
	3.00000E-02	1.563E+01	1.402E+01
	4.00000E-02	7.288E+00	6.357E+00
	5.00000E-02	4.064E+00	3.422E+00
	5.19957E-02	3.672E+00	3.068E+00
K	5.19957E-02	1.777E+01	5.291E+00
	6.00000E-02	1.223E+01	4.673E+00
	8.00000E-02	5.826E+00	2.986E+00
	1.00000E-01	3.253E+00	1.899E+00
	1.50000E-01	1.151E+00	7.474E-01
	2.00000E-01	5.775E-01	3.736E-01
	3.00000E-01	2.498E-01	1.470E-01
	4.00000E-01	1.562E-01	8.354E-02
	5.00000E-01	1.167E-01	5.842E-02
	6.00000E-01	9.562E-02	4.614E-02
	8.00000E-01	7.365E-02	3.474E-02
	1.00000E+00	6.196E-02	2.942E-02
	1.25000E+00	5.321E-02	2.565E-02
	1.50000E+00	4.808E-02	2.352E-02
	2.00000E+00	4.272E-02	2.166E-02
	3.00000E+00	3.908E-02	2.151E-02
	4.00000E+00	3.848E-02	2.266E-02
	5.00000E+00	3.894E-02	2.402E-02
	6.00000E+00	3.981E-02	2.532E-02
	8.00000E+00	4.206E-02	2.758E-02
	1.00000E+01	4.449E-02	2.937E-02
	1.50000E+01	5.017E-02	3.224E-02
	2.00000E+01	5.470E-02	3.343E-02

	DYSPROSIUM $Z = 66$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.494E+03	2.483E+03
	1.13794E-03	1.953E+03	1.943E+03
	1.29490E-03	1.521E+03	1.511E+03
M5	1.29490E-03	2.173E+03	2.156E+03
	1.31356E-03	3.293E+03	3.265E+03
	1.33250E-03	4.745E+03	4.704E+03
M4	1.33250E-03	5.551E+03	5.502E+03
	1.50000E-03	5.550E+03	5.503E+03
	1.67560E-03	4.229E+03	4.194E+03
M3	1.67560E-03	4.896E+03	4.855E+03
	1.75674E-03	4.382E+03	4.345E+03
	1.84180E-03	3.924E+03	3.892E+03
M2	1.84180E-03	4.168E+03	4.133E+03
	2.00000E-03	3.467E+03	3.438E+03
	2.04680E-03	3.286E+03	3.259E+03
M1	2.04680E-03	3.433E+03	3.404E+03
	3.00000E-03	1.405E+03	1.391E+03
	4.00000E-03	6.953E+02	6.858E+02
	5.00000E-03	3.988E+02	3.913E+02
	6.00000E-03	2.520E+02	2.456E+02
	7.79010E-03	1.299E+02	1.249E+02
L3	7.79010E-03	3.437E+02	3.051E+02
	8.00000E-03	3.269E+02	2.906E+02
	8.58060E-03	2.695E+02	2.410E+02
L2	8.58060E-03	3.672E+02	3.198E+02
	8.81013E-03	3.452E+02	3.013E+02
	9.04580E-03	3.228E+02	2.826E+02
L1	9.04580E-03	3.725E+02	3.245E+02
	1.00000E-02	2.902E+02	2.554E+02
	1.50000E-02	1.016E+02	9.187E+01
	2.00000E-02	4.765E+01	4.328E+01
	3.00000E-02	1.625E+01	1.456E+01
	4.00000E-02	7.582E+00	6.616E+00
	5.00000E-02	4.227E+00	3.566E+00
	5.37885E-02	3.500E+00	2.911E+00
K	5.37885E-02	1.676E+01	4.961E+00
	6.00000E-02	1.259E+01	4.554E+00
	8.00000E-02	6.012E+00	2.993E+00
	1.00000E-01	3.360E+00	1.925E+00
	1.50000E-01	1.189E+00	7.660E-01
	2.00000E-01	5.953E-01	3.846E-01
	3.00000E-01	2.558E-01	1.514E-01
	4.00000E-01	1.590E-01	8.578E-02
	5.00000E-01	1.181E-01	5.971E-02
	6.00000E-01	9.644E-02	4.694E-02
	8.00000E-01	7.393E-02	3.509E-02
	1.00000E+00	6.204E-02	2.958E-02
	1.25000E+00	5.318E-02	2.570E-02
	1.50000E+00	4.801E-02	2.352E-02
	2.00000E+00	4.265E-02	2.163E-02
	3.00000E+00	3.905E-02	2.149E-02
	4.00000E+00	3.848E-02	2.264E-02
	5.00000E+00	3.896E-02	2.401E-02
	6.00000E+00	3.986E-02	2.532E-02
	8.00000E+00	4.214E-02	2.758E-02
	1.00000E+01	4.460E-02	2.938E-02
	1.50000E+01	5.033E-02	3.223E-02
	2.00000E+01	5.492E-02	3.342E-02


Z = 64. GADOLINIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 65. TERBIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 66. DYSPROSIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

HOLMIUM
Z = 67

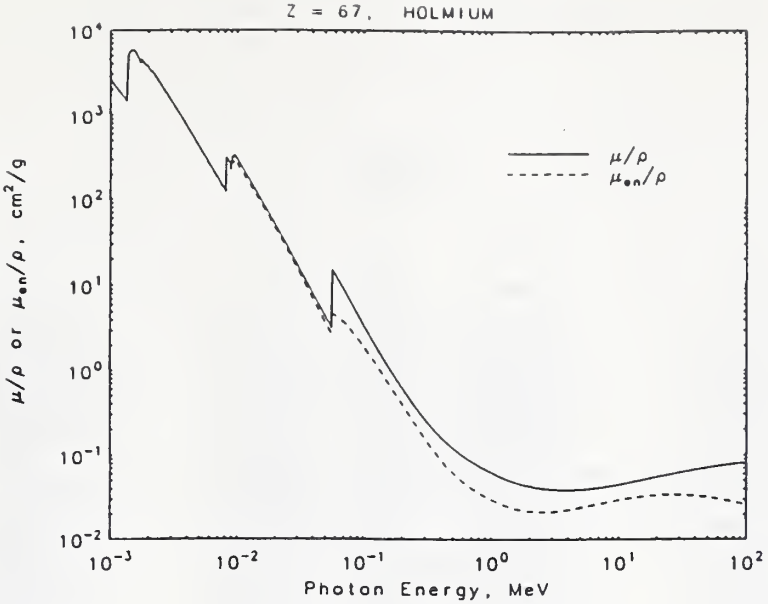
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.616E+03	2.605E+03
	1.16250E-03	1.961E+03	1.951E+03
	1.35140E-03	1.462E+03	1.452E+03
M5	1.35140E-03	2.108E+03	2.091E+03
	1.37130E-03	3.193E+03	3.164E+03
	1.39150E-03	4.528E+03	4.485E+03
M4	1.39150E-03	5.239E+03	5.187E+03
	1.50000E-03	5.847E+03	5.790E+03
	1.74120E-03	4.038E+03	4.001E+03
M3	1.74120E-03	4.677E+03	4.633E+03
	1.82975E-03	4.161E+03	4.122E+03
	1.92280E-03	3.703E+03	3.669E+03
M2	1.92280E-03	3.934E+03	3.898E+03
	2.00000E-03	3.590E+03	3.558E+03
	2.12830E-03	3.127E+03	3.099E+03
M1	2.12830E-03	3.266E+03	3.236E+03
	3.00000E-03	1.465E+03	1.450E+03
	4.00000E-03	7.264E+02	7.164E+02
	5.00000E-03	4.170E+02	4.091E+02
	6.00000E-03	2.636E+02	2.570E+02
	8.00000E-03	1.271E+02	1.220E+02
	8.07110E-03	1.242E+02	1.192E+02
L3	8.07110E-03	3.283E+02	2.897E+02
	8.48389E-03	2.889E+02	2.560E+02
	8.91780E-03	2.540E+02	2.260E+02
L2	8.91780E-03	3.463E+02	2.994E+02
	9.15290E-03	3.259E+02	2.825E+02
	9.39420E-03	3.051E+02	2.652E+02
L1	9.39420E-03	3.520E+02	3.044E+02
	1.00000E-02	3.012E+02	2.623E+02
	1.50000E-02	1.060E+02	9.521E+01
	2.00000E-02	4.980E+01	4.504E+01
	3.00000E-02	1.701E+01	1.521E+01
	4.00000E-02	7.940E+00	6.928E+00
	5.00000E-02	4.425E+00	3.740E+00
	5.56177E-02	3.361E+00	2.783E+00
K	5.56177E-02	1.592E+01	4.697E+00
	6.00000E-02	1.309E+01	4.466E+00
	8.00000E-02	6.244E+00	3.015E+00
	1.00000E-01	3.492E+00	1.961E+00
	1.50000E-01	1.236E+00	7.901E-01
	2.00000E-01	6.178E-01	3.984E-01
	3.00000E-01	2.639E-01	1.570E-01
	4.00000E-01	1.629E-01	8.869E-02
	5.00000E-01	1.205E-01	6.145E-02
	6.00000E-01	9.800E-02	4.811E-02
	8.00000E-01	7.477E-02	3.571E-02
	1.00000E+00	6.257E-02	2.997E-02
	1.25000E+00	5.351E-02	2.593E-02
	1.50000E+00	4.828E-02	2.369E-02
	2.00000E+00	4.289E-02	2.175E-02
	3.00000E+00	3.930E-02	2.161E-02
	4.00000E+00	3.877E-02	2.279E-02
	5.00000E+00	3.927E-02	2.417E-02
	6.00000E+00	4.020E-02	2.549E-02
	8.00000E+00	4.253E-02	2.777E-02
	1.00000E+01	4.504E-02	2.958E-02
	1.50000E+01	5.088E-02	3.245E-02
	2.00000E+01	5.551E-02	3.363E-02

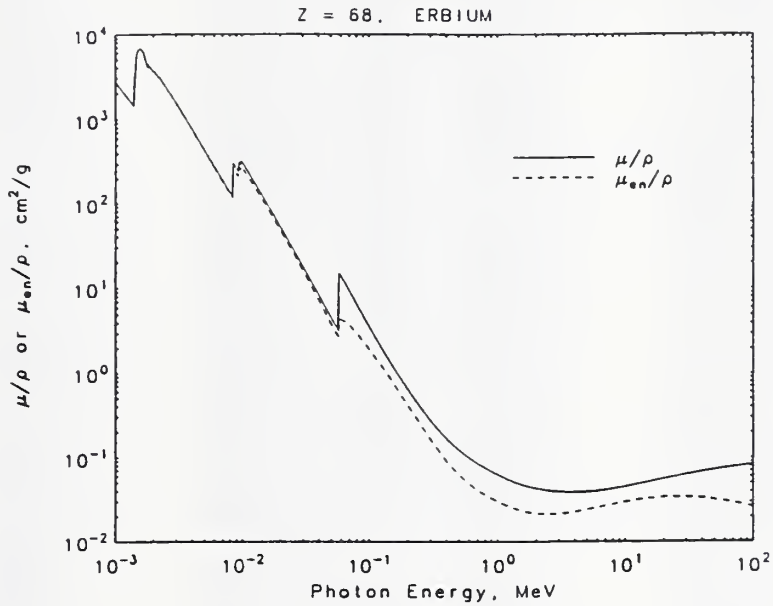
ERBIUM
Z = 68

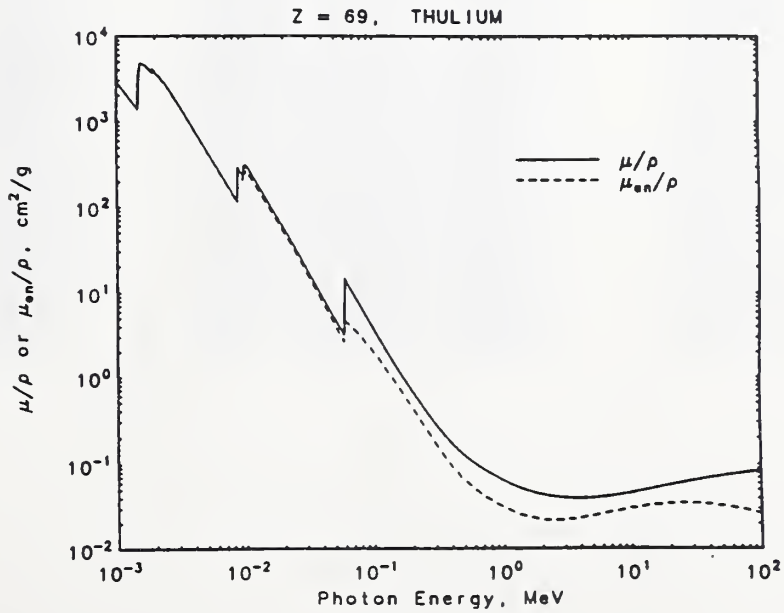
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.748E+03	2.737E+03
	1.18714E-03	1.978E+03	1.967E+03
	1.40930E-03	1.408E+03	1.397E+03
M5	1.40930E-03	2.069E+03	2.051E+03
	1.43113E-03	3.170E+03	3.138E+03
	1.45330E-03	4.339E+03	4.293E+03
M4	1.45330E-03	4.952E+03	4.898E+03
	1.50000E-03	6.069E+03	6.003E+03
	1.81180E-03	3.841E+03	3.802E+03
M3	1.81180E-03	4.452E+03	4.406E+03
	2.00000E-03	3.523E+03	3.488E+03
	2.00580E-03	3.499E+03	3.464E+03
M2	2.00580E-03	3.717E+03	3.680E+03
	2.10376E-03	3.337E+03	3.304E+03
	2.20650E-03	2.995E+03	2.965E+03
M1	2.20650E-03	3.127E+03	3.096E+03
	3.00000E-03	1.526E+03	1.510E+03
	4.00000E-03	7.587E+02	7.480E+02
	5.00000E-03	4.359E+02	4.276E+02
	6.00000E-03	2.757E+02	2.688E+02
	8.00000E-03	1.330E+02	1.278E+02
	8.35790E-03	1.190E+02	1.140E+02
L3	8.35790E-03	3.126E+02	2.741E+02
	8.79944E-03	2.799E+02	2.412E+02
	9.26430E-03	2.397E+02	2.121E+02
L2	9.26430E-03	3.271E+02	2.806E+02
	9.50468E-03	3.080E+02	2.650E+02
	9.75130E-03	2.886E+02	2.491E+02
L1	9.75130E-03	3.330E+02	2.858E+02
	1.00000E-02	3.129E+02	2.694E+02
	1.50000E-02	1.106E+02	9.860E+01
	2.00000E-02	5.204E+01	4.683E+01
	3.00000E-02	1.780E+01	1.588E+01
	4.00000E-02	8.315E+00	7.253E+00
	5.00000E-02	4.634E+00	3.922E+00
	5.74855E-02	3.232E+00	2.664E+00
K	5.74855E-02	1.514E+01	4.442E+00
	6.00000E-02	1.362E+01	4.349E+00
	8.00000E-02	6.478E+00	3.028E+00
	1.00000E-01	3.628E+00	1.995E+00
	1.50000E-01	1.285E+00	8.141E-01
	2.00000E-01	6.415E-01	4.125E-01
	3.00000E-01	2.724E-01	1.629E-01
	4.00000E-01	1.672E-01	9.173E-02
	5.00000E-01	1.230E-01	6.329E-02
	6.00000E-01	9.968E-02	4.934E-02
	8.00000E-01	7.569E-02	3.638E-02
	1.00000E+00	6.317E-02	3.040E-02
	1.25000E+00	5.392E-02	2.620E-02
	1.50000E+00	4.860E-02	2.388E-02
	2.00000E+00	4.317E-02	2.190E-02
	3.00000E+00	3.958E-02	2.176E-02
	4.00000E+00	3.907E-02	2.295E-02
	5.00000E+00	3.961E-02	2.435E-02
	6.00000E+00	4.056E-02	2.569E-02
	8.00000E+00	4.294E-02	2.799E-02
	1.00000E+01	4.549E-02	2.981E-02
	1.50000E+01	5.141E-02	3.268E-02
	2.00000E+01	5.613E-02	3.387E-02

THULIUM
Z = 69

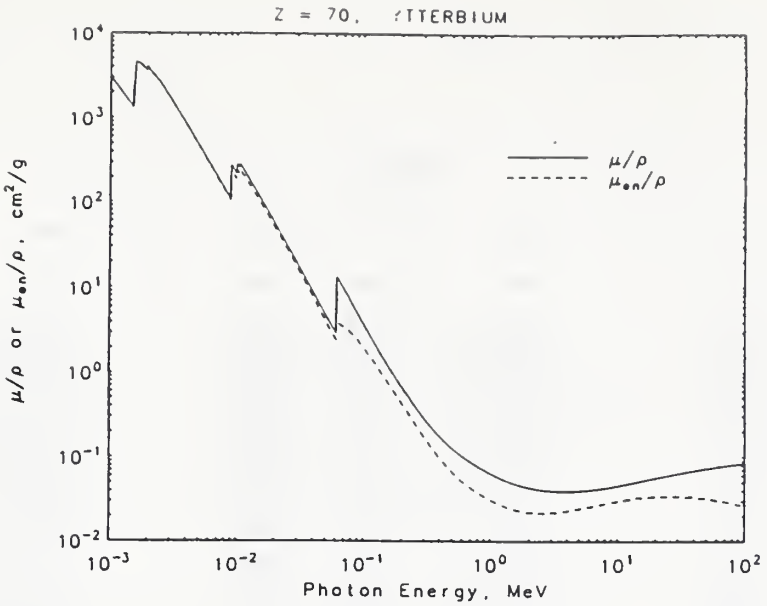
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.899E+03	2.888E+03
	1.21149E-03	1.995E+03	1.984E+03
	1.46770E-03	1.362E+03	1.352E+03
M5	1.46770E-03	1.919E+03	1.901E+03
	1.50000E-03	3.937E+03	3.892E+03
	1.51460E-03	4.145E+03	4.098E+03
M4	1.51460E-03	4.830E+03	4.773E+03
	1.68946E-03	4.446E+03	4.395E+03
	1.88450E-03	3.668E+03	3.627E+03
M3	1.88450E-03	4.254E+03	4.206E+03
	2.00000E-03	3.686E+03	3.646E+03
	2.08980E-03	3.326E+03	3.290E+03
M2	2.08980E-03	3.534E+03	3.495E+03
	2.19562E-03	3.160E+03	3.125E+03
	2.30680E-03	2.821E+03	2.791E+03
M1	2.30680E-03	2.945E+03	2.914E+03
	3.00000E-03	1.594E+03	1.576E+03
	4.00000E-03	7.946E+02	7.831E+02
	5.00000E-03	4.569E+02	4.482E+02
	6.00000E-03	2.892E+02	2.820E+02
	8.00000E-03	1.397E+02	1.342E+02
	8.64800E-03	1.146E+02	1.096E+02
L3	8.64800E-03	2.991E+02	2.606E+02
	9.11959E-03	2.609E+02	2.284E+02
	9.61690E-03	2.274E+02	2.001E+02
L2	9.61690E-03	3.101E+02	2.640E+02
	1.00000E-02	2.830E+02	2.420E+02
	1.01157E-02	2.745E+02	2.351E+02
L1	1.01157E-02	3.167E+02	2.697E+02
	1.50000E-02	1.157E+02	1.023E+02
	2.00000E-02	5.453E+01	4.882E+01
	3.00000E-02	1.868E+01	1.663E+01
	4.00000E-02	8.735E+00	7.615E+00
	5.00000E-02	4.867E+00	4.124E+00
	5.93896E-02	3.122E+00	2.562E+00
K	5.93896E-02	1.460E+01	4.721E+00
	6.00000E-02	1.409E+01	4.203E+00
	8.00000E-02	6.741E+00	3.044E+00
	1.00000E-01	3.780E+00	2.033E+00
	1.50000E-01	1.340E+00	8.410E-01
	2.00000E-01	6.682E-01	4.283E-01
	3.00000E-01	2.822E-01	1.695E-01
	4.00000E-01	1.722E-01	9.522E-02
	5.00000E-01	1.261E-01	6.544E-02
	6.00000E-01	1.018E-01	5.081E-02
	8.00000E-01	7.693E-02	3.721E-02
	1.00000E+00	6.404E-02	3.095E-02
	1.25000E+00	5.455E-02	2.658E-02
	1.50000E+00	4.912E-02	2.417E-02
	2.00000E+00	4.362E-02	2.214E-02
	3.00000E+00	4.002E-02	2.199E-02
	4.00000E+00	3.954E-02	2.321E-02
	5.00000E+00	4.010E-02	2.463E-02
	6.00000E+00	4.108E-02	2.598E-02
	8.00000E+00	4.352E-02	2.832E-02
	1.00000E+01	4.612E-02	3.016E-02
	1.50000E+01	5.216E-02	3.305E-02
	2.00000E+01	5.698E-02	3.424E-02

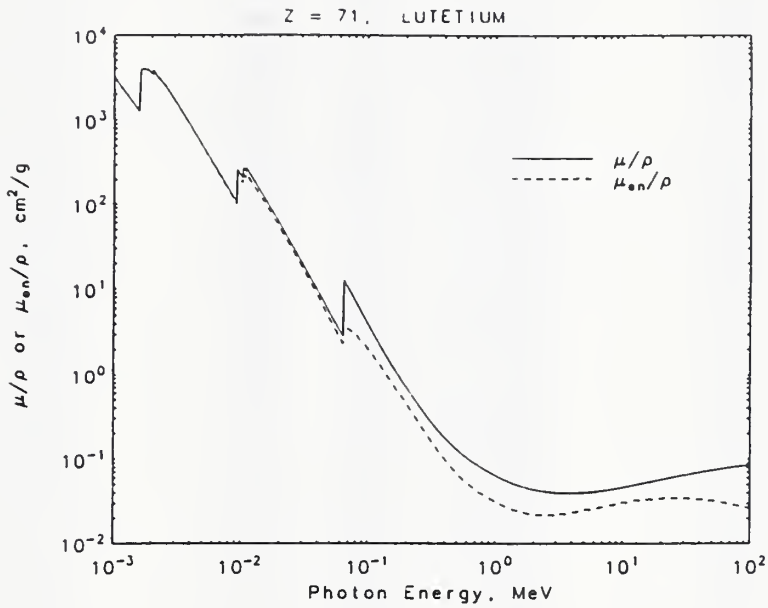

Z = 67, HOLMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

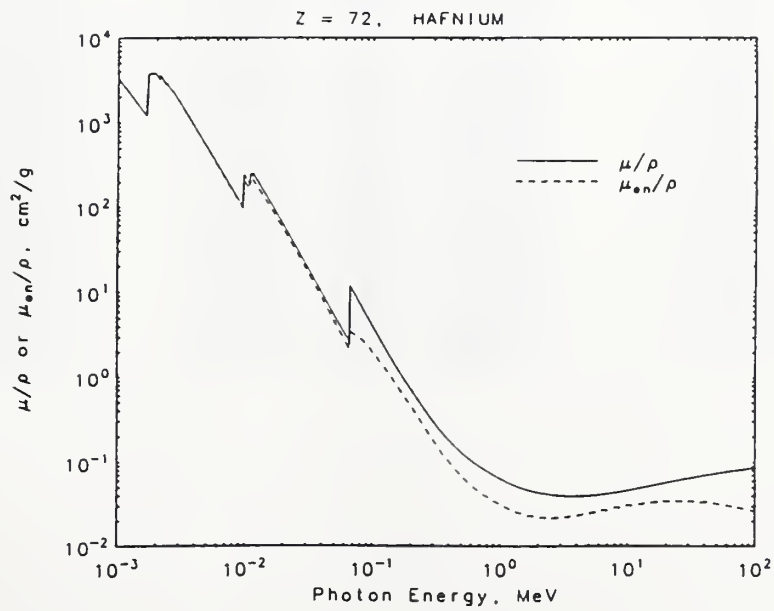

Z = 68, ERBIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 69, THULIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

	YTTERBIUM Z = 70			LUTETIUM Z = 71			HAFNIUM Z = 72		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.017E+03	3.006E+03	1.00000E-03	3.187E+03	3.175E+03	1.00000E-03	3.335E+03	3.324E+03
	1.50000E-03	1.350E+03	1.340E+03	1.50000E-03	1.424E+03	1.413E+03	1.50000E-03	1.489E+03	1.478E+03
	1.52780E-03	1.300E+03	1.289E+03	1.58850E-03	1.264E+03	1.253E+03	1.66170E-03	1.203E+03	1.192E+03
M5	1.52780E-03	1.965E+03	1.944E+03	M5 1.58850E-03	1.597E+03	1.581E+03	M5 1.66170E-03	1.505E+03	1.489E+03
	1.55186E-03	2.949E+03	2.914E+03	1.61375E-03	2.302E+03	2.273E+03	1.68883E-03	2.189E+03	2.160E+03
	1.57630E-03	3.908E+03	3.859E+03	1.63940E-03	3.442E+03	3.396E+03	1.71640E-03	3.273E+03	3.225E+03
M4	1.57630E-03	4.540E+03	4.482E+03	M4 1.63940E-03	3.935E+03	3.881E+03	M4 1.71640E-03	3.682E+03	3.628E+03
	1.75313E-03	4.200E+03	4.146E+03	2.00000E-03	3.452E+03	3.406E+03	2.00000E-03	3.598E+03	3.546E+03
	1.94980E-03	3.495E+03	3.453E+03	2.02360E-03	3.352E+03	3.307E+03	2.10760E-03	3.152E+03	3.108E+03
M3	1.94980E-03	4.054E+03	4.004E+03	M3 2.02360E-03	3.890E+03	3.838E+03	M3 2.10760E-03	3.659E+03	3.607E+03
	2.00000E-03	3.797E+03	3.751E+03	2.14019E-03	3.397E+03	3.352E+03	2.23278E-03	3.182E+03	3.137E+03
	2.17300E-03	3.128E+03	3.091E+03	2.26350E-03	2.969E+03	2.931E+03	2.36540E-03	2.769E+03	2.731E+03
M2	2.17300E-03	3.323E+03	3.284E+03	M2 2.26350E-03	3.155E+03	3.115E+03	M2 2.36540E-03	2.943E+03	2.903E+03
	2.28278E-03	2.970E+03	2.935E+03	2.37462E-03	2.826E+03	2.790E+03	2.48036E-03	2.637E+03	2.601E+03
	2.39810E-03	2.652E+03	2.621E+03	2.49120E-03	2.531E+03	2.499E+03	2.60090E-03	2.363E+03	2.331E+03
M1	2.39810E-03	2.769E+03	2.737E+03	M1 2.49120E-03	2.640E+03	2.607E+03	M1 2.60090E-03	2.465E+03	2.432E+03
	3.00000E-03	1.640E+03	1.620E+03	3.00000E-03	1.710E+03	1.688E+03	3.00000E-03	1.768E+03	1.745E+03
	4.00000E-03	8.193E+02	8.072E+02	4.00000E-03	8.560E+02	8.430E+02	4.00000E-03	8.859E+02	8.720E+02
	5.00000E-03	4.717E+02	4.626E+02	5.00000E-03	4.934E+02	4.839E+02	5.00000E-03	5.113E+02	5.013E+02
	6.00000E-03	2.988E+02	2.913E+02	6.00000E-03	3.129E+02	3.051E+02	6.00000E-03	3.244E+02	3.164E+02
	8.00000E-03	1.444E+02	1.389E+02	8.00000E-03	1.513E+02	1.456E+02	8.00000E-03	1.571E+02	1.512E+02
	8.94360E-03	1.088E+02	1.039E+02	9.24410E-03	1.049E+02	9.994E+01	9.56070E-03	9.997E+01	9.510E+01
L3	8.94360E-03	2.824E+02	2.444E+02	L3 9.24410E-03	2.703E+02	2.324E+02	L3 9.56070E-03	2.557E+02	2.184E+02
	9.44675E-03	2.511E+02	2.134E+02	1.00000E-02	2.211E+02	1.916E+02	1.00000E-02	2.301E+02	1.975E+02
	9.97820E-03	2.128E+02	1.862E+02	1.03486E-02	2.019E+02	1.756E+02	1.07394E-02	1.894E+02	1.639E+02
L2	9.97820E-03	2.906E+02	2.455E+02	L2 1.03486E-02	2.757E+02	2.310E+02	L2 1.07394E-02	2.589E+02	2.151E+02
	1.00000E-02	2.893E+02	2.444E+02	1.06063E-02	2.676E+02	2.190E+02	1.10018E-02	2.522E+02	2.042E+02
	1.04864E-02	2.577E+02	2.189E+02	1.08704E-02	2.450E+02	2.065E+02	1.12707E-02	2.306E+02	1.928E+02
L1	1.04864E-02	2.973E+02	2.512E+02	L1 1.08704E-02	2.826E+02	2.369E+02	L1 1.12707E-02	2.659E+02	2.212E+02
	1.50000E-02	1.193E+02	1.047E+02	1.50000E-02	1.247E+02	1.084E+02	1.50000E-02	1.290E+02	1.111E+02
	2.00000E-02	5.628E+01	5.012E+01	2.00000E-02	5.881E+01	5.206E+01	2.00000E-02	6.087E+01	5.353E+01
	3.00000E-02	1.932E+01	1.716E+01	3.00000E-02	2.023E+01	1.791E+01	3.00000E-02	2.098E+01	1.851E+01
	4.00000E-02	9.040E+00	7.875E+00	4.00000E-02	9.472E+00	8.242E+00	4.00000E-02	9.828E+00	8.542E+00
	5.00000E-02	5.038E+00	4.273E+00	5.00000E-02	5.279E+00	4.480E+00	5.00000E-02	5.478E+00	4.651E+00
	6.00000E-02	3.147E+00	2.584E+00	6.00000E-02	3.297E+00	2.712E+00	6.00000E-02	3.420E+00	2.820E+00
	6.13323E-02	2.975E+00	2.432E+00	6.33138E-02	2.874E+00	2.339E+00	6.53508E-02	2.751E+00	2.228E+00
K	6.13323E-02	1.365E+01	3.964E+00	K 6.33138E-02	1.305E+01	3.770E+00	K 6.53508E-02	1.237E+01	3.557E+00
	8.00000E-02	6.909E+00	3.008E+00	8.00000E-02	7.161E+00	3.000E+00	8.00000E-02	7.352E+00	2.958E+00
	1.00000E-01	3.881E+00	2.038E+00	1.00000E-01	4.033E+00	2.067E+00	1.00000E-01	4.154E+00	2.075E+00
	1.50000E-01	1.378E+00	8.554E-01	1.50000E-01	1.433E+00	8.805E-01	1.50000E-01	1.477E+00	8.973E-01
	2.00000E-01	6.860E-01	4.381E-01	2.00000E-01	7.130E-01	4.534E-01	2.00000E-01	7.339E-01	4.645E-01
	3.00000E-01	2.882E-01	1.737E-01	3.00000E-01	2.981E-01	1.803E-01	3.00000E-01	3.054E-01	1.853E-01
	4.00000E-01	1.749E-01	9.741E-02	4.00000E-01	1.799E-01	1.009E-01	4.00000E-01	1.834E-01	1.035E-01
	5.00000E-01	1.274E-01	6.671E-02	5.00000E-01	1.305E-01	6.886E-02	5.00000E-01	1.324E-01	7.044E-02
	6.00000E-01	1.025E-01	5.159E-02	6.00000E-01	1.046E-01	5.306E-02	6.00000E-01	1.058E-01	5.409E-02
	8.00000E-01	7.710E-02	3.754E-02	8.00000E-01	7.829E-02	3.836E-02	8.00000E-01	7.880E-02	3.886E-02
	1.00000E+00	6.397E-02	3.107E-02	1.00000E+00	6.478E-02	3.161E-02	1.00000E+00	6.502E-02	3.188E-02
	1.25000E+00	5.439E-02	2.658E-02	1.25000E+00	5.496E-02	2.695E-02	1.25000E+00	5.505E-02	2.708E-02
	1.50000E+00	4.895E-02	2.413E-02	1.50000E+00	4.941E-02	2.441E-02	1.50000E+00	4.944E-02	2.447E-02
	2.00000E+00	4.347E-02	2.208E-02	2.00000E+00	4.385E-02	2.228E-02	2.00000E+00	4.387E-02	2.230E-02
	3.00000E+00	3.989E-02	2.191E-02	3.00000E+00	4.028E-02	2.212E-02	3.00000E+00	4.030E-02	2.212E-02
	4.00000E+00	3.944E-02	2.314E-02	4.00000E+00	3.985E-02	2.337E-02	4.00000E+00	3.989E-02	2.338E-02
	5.00000E+00	4.002E-02	2.457E-02	5.00000E+00	4.045E-02	2.481E-02	5.00000E+00	4.052E-02	2.483E-02
	6.00000E+00	4.101E-02	2.593E-02	6.00000E+00	4.147E-02	2.618E-02	6.00000E+00	4.155E-02	2.620E-02
	8.00000E+00	4.347E-02	2.826E-02	8.00000E+00	4.398E-02	2.853E-02	8.00000E+00	4.409E-02	2.855E-02
	1.00000E+01	4.609E-02	3.010E-02	1.00000E+01	4.664E-02	3.038E-02	1.00000E+01	4.677E-02	3.040E-02
	1.50000E+01	5.218E-02	3.302E-02	1.50000E+01	5.282E-02	3.329E-02	1.50000E+01	5.301E-02	3.330E-02
	2.00000E+01	5.700E-02	3.419E-02	2.00000E+01	5.773E-02	3.446E-02	2.00000E+01	5.796E-02	3.445E-02


Z = 70, YTTERBIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 71, LUTETIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 72, HAFNIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

TANTALUM
$Z = 73$

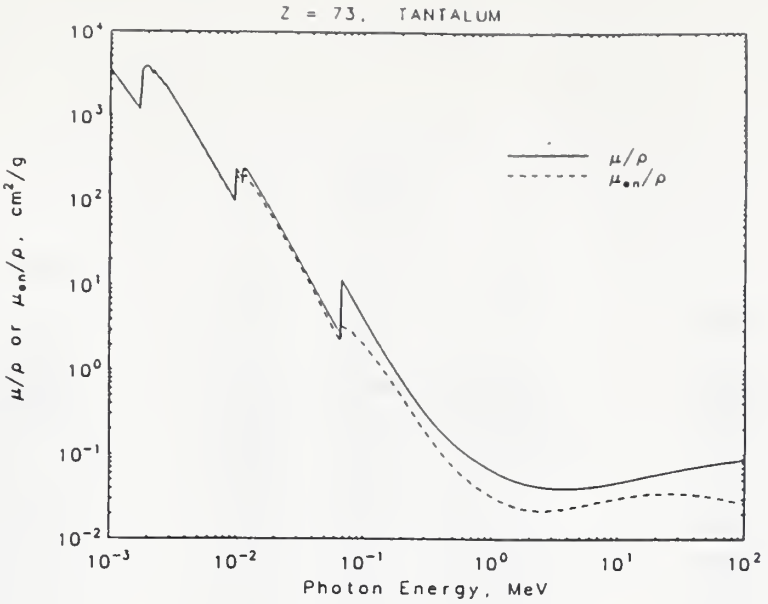
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.510E+03	3.498E+03
	1.50000E-03	1.566E+03	1.555E+03
	1.73510E-03	1.154E+03	1.144E+03
M5	1.73510E-03	1.417E+03	1.401E+03
	1.76391E-03	2.053E+03	2.024E+03
	1.79320E-03	3.082E+03	3.034E+03
M4	1.79320E-03	3.421E+03	3.367E+03
	2.00000E-03	3.771E+03	3.711E+03
	2.19400E-03	2.985E+03	2.939E+03
M3	2.19400E-03	3.464E+03	3.411E+03
	2.32730E-03	3.003E+03	2.957E+03
	2.46870E-03	2.604E+03	2.566E+03
M2	2.46870E-03	2.768E+03	2.727E+03
	2.58558E-03	2.486E+03	2.449E+03
	2.70800E-03	2.233E+03	2.201E+03
M1	2.70800E-03	2.329E+03	2.296E+03
	3.00000E-03	1.838E+03	1.812E+03
	4.00000E-03	9.222E+02	9.073E+02
	5.00000E-03	5.328E+02	5.223E+02
	6.00000E-03	3.382E+02	3.299E+02
	8.00000E-03	1.639E+02	1.579E+02
	9.88110E-03	9.599E+01	9.117E+01
L3	9.88110E-03	2.443E+02	2.073E+02
	1.00000E-02	2.379E+02	2.021E+02
	1.11361E-02	1.791E+02	1.540E+02
L2	1.11361E-02	2.449E+02	2.018E+02
	1.14055E-02	2.393E+02	1.917E+02
	1.16815E-02	2.182E+02	1.811E+02
L1	1.16815E-02	2.518E+02	2.077E+02
	1.50000E-02	1.340E+02	1.143E+02
	2.00000E-02	6.334E+01	5.532E+01
	3.00000E-02	2.187E+01	1.923E+01
	4.00000E-02	1.025E+01	8.899E+00
	5.00000E-02	5.717E+00	4.854E+00
	6.00000E-02	3.569E+00	2.947E+00
	6.74164E-02	2.652E+00	2.139E+00
K	6.74164E-02	1.180E+01	3.379E+00
	8.00000E-02	7.587E+00	2.924E+00
	1.00000E-01	4.302E+00	2.092E+00
	1.50000E-01	1.531E+00	9.188E-01
	2.00000E-01	7.598E-01	4.784E-01
	3.00000E-01	3.149E-01	1.915E-01
	4.00000E-01	1.881E-01	1.069E-01
	5.00000E-01	1.352E-01	7.248E-02
	6.00000E-01	1.076E-01	5.545E-02
	8.00000E-01	7.981E-02	3.960E-02
	1.00000E+00	6.567E-02	3.235E-02
	1.25000E+00	5.545E-02	2.736E-02
	1.50000E+00	4.977E-02	2.468E-02
	2.00000E+00	4.413E-02	2.245E-02
	3.00000E+00	4.057E-02	2.227E-02
	4.00000E+00	4.018E-02	2.354E-02
	5.00000E+00	4.082E-02	2.499E-02
	6.00000E+00	4.188E-02	2.638E-02
	8.00000E+00	4.446E-02	2.874E-02
	1.00000E+01	4.717E-02	3.058E-02
	1.50000E+01	5.350E-02	3.349E-02
	2.00000E+01	5.852E-02	3.464E-02

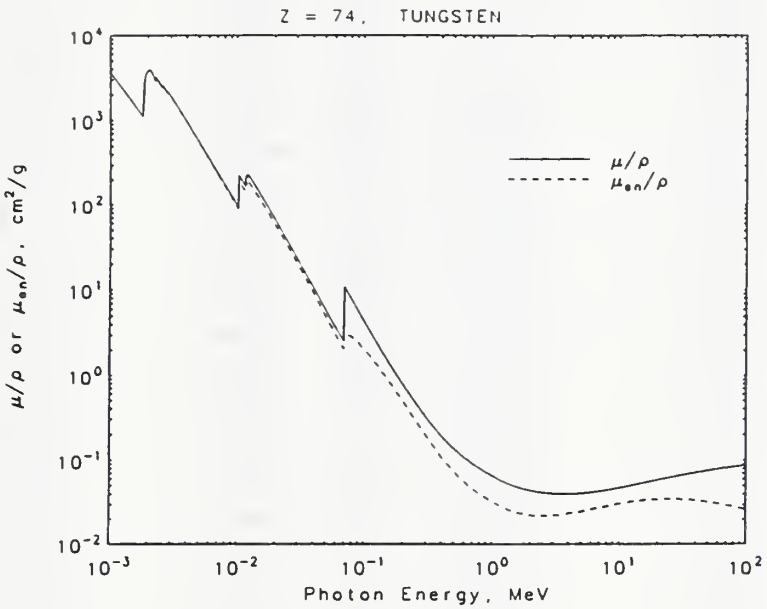
TUNGSTEN
$Z = 74$

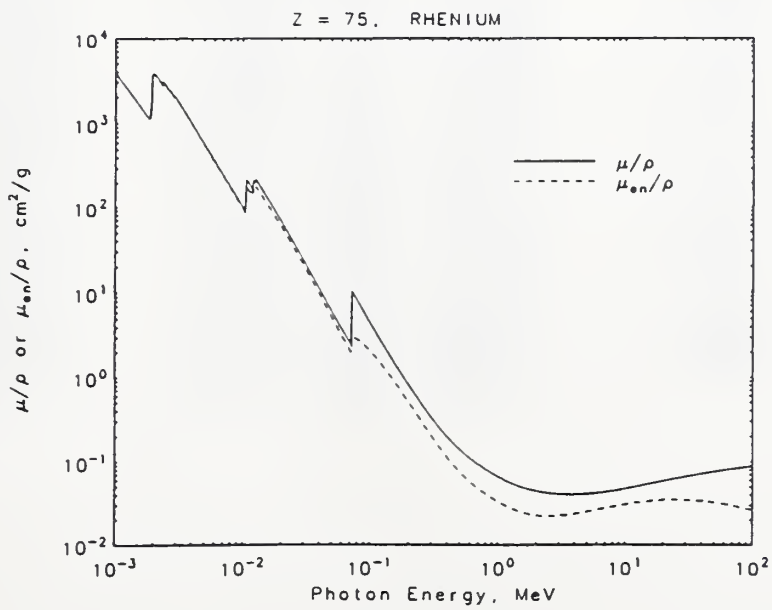
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.683E+03	3.671E+03
	1.50000E-03	1.643E+03	1.632E+03
	1.80920E-03	1.108E+03	1.097E+03
M5	1.80920E-03	1.327E+03	1.311E+03
	1.84014E-03	1.911E+03	1.883E+03
	1.87160E-03	2.901E+03	2.853E+03
M4	1.87160E-03	3.170E+03	3.116E+03
	2.00000E-03	3.922E+03	3.853E+03
	2.28100E-03	2.828E+03	2.781E+03
M3	2.28100E-03	3.279E+03	3.226E+03
	2.42350E-03	2.833E+03	2.786E+03
	2.57490E-03	2.445E+03	2.407E+03
M2	2.57490E-03	2.599E+03	2.558E+03
	2.69447E-03	2.339E+03	2.301E+03
	2.81960E-03	2.104E+03	2.071E+03
M1	2.81960E-03	2.194E+03	2.160E+03
	3.00000E-03	1.902E+03	1.873E+03
	4.00000E-03	9.564E+02	9.405E+02
	5.00000E-03	5.534E+02	5.423E+02
	6.00000E-03	3.514E+02	3.428E+02
	8.00000E-03	1.705E+02	1.643E+02
	1.00000E-02	9.691E+01	9.204E+01
	1.02068E-02	9.201E+01	8.724E+01
L3	1.02068E-02	2.334E+02	1.966E+02
	1.08548E-02	1.983E+02	1.684E+02
	1.15440E-02	1.689E+02	1.444E+02
L2	1.15440E-02	2.312E+02	1.889E+02
	1.18186E-02	2.268E+02	1.797E+02
	1.20998E-02	2.065E+02	1.699E+02
L1	1.20998E-02	2.382E+02	1.948E+02
	1.50000E-02	1.389E+02	1.172E+02
	2.00000E-02	6.573E+01	5.697E+01
	3.00000E-02	2.273E+01	1.991E+01
	4.00000E-02	1.067E+01	9.240E+00
	5.00000E-02	5.949E+00	5.050E+00
	6.00000E-02	3.713E+00	3.070E+00
	6.95250E-02	2.552E+00	2.049E+00
K	6.95250E-02	1.123E+01	3.212E+00
	8.00000E-02	7.810E+00	2.879E+00
	1.00000E-01	4.438E+00	2.100E+00
	1.50000E-01	1.581E+00	9.378E-01
	2.00000E-01	7.844E-01	4.913E-01
	3.00000E-01	3.238E-01	1.973E-01
	4.00000E-01	1.925E-01	1.100E-01
	5.00000E-01	1.378E-01	7.440E-02
	6.00000E-01	1.093E-01	5.673E-02
	8.00000E-01	8.066E-02	4.028E-02
	1.00000E+00	6.618E-02	3.276E-02
	1.25000E+00	5.577E-02	2.761E-02
	1.50000E+00	5.000E-02	2.484E-02
	2.00000E+00	4.433E-02	2.256E-02
	3.00000E+00	4.075E-02	2.236E-02
	4.00000E+00	4.038E-02	2.363E-02
	5.00000E+00	4.103E-02	2.510E-02
	6.00000E+00	4.210E-02	2.649E-02
	8.00000E+00	4.472E-02	2.886E-02
	1.00000E+01	4.747E-02	3.072E-02
	1.50000E+01	5.384E-02	3.360E-02
	2.00000E+01	5.893E-02	3.475E-02

RHENIUM
$Z = 75$

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.872E+03	3.860E+03
	1.50000E-03	1.729E+03	1.717E+03
	1.82240E-03	1.147E+03	1.135E+03
M5	1.82240E-03	1.152E+03	1.141E+03
	1.88459E-03	1.251E+03	1.235E+03
	1.94890E-03	2.689E+03	2.642E+03
M4	1.94890E-03	3.802E+03	3.730E+03
	2.00000E-03	3.773E+03	3.702E+03
	2.36730E-03	2.696E+03	2.648E+03
M3	2.36730E-03	3.124E+03	3.069E+03
	2.51955E-03	2.686E+03	2.639E+03
	2.68160E-03	2.309E+03	2.270E+03
M2	2.68160E-03	2.454E+03	2.412E+03
	2.80386E-03	2.210E+03	2.174E+03
	2.93170E-03	1.992E+03	1.959E+03
M1	2.93170E-03	2.078E+03	2.043E+03
	3.00000E-03	1.972E+03	1.939E+03
	4.00000E-03	9.943E+02	9.771E+02
	5.00000E-03	5.759E+02	5.642E+02
	6.00000E-03	3.660E+02	3.569E+02
	8.00000E-03	1.778E+02	1.714E+02
	1.00000E-02	1.011E+02	9.610E+01
	1.05353E-02	8.858E+01	8.386E+01
L3	1.05353E-02	2.234E+02	1.869E+02
	1.12245E-02	1.964E+02	1.594E+02
	1.19587E-02	1.600E+02	1.360E+02
L2	1.19587E-02	2.191E+02	1.776E+02
	1.22394E-02	2.079E+02	1.690E+02
	1.25267E-02	1.961E+02	1.600E+02
L1	1.25267E-02	2.262E+02	1.834E+02
	1.50000E-02	1.440E+02	1.201E+02
	2.00000E-02	6.835E+01	5.876E+01
	3.00000E-02	2.367E+01	2.064E+01
	4.00000E-02	1.112E+01	9.614E+00
	5.00000E-02	6.206E+00	5.265E+00
	6.00000E-02	3.872E+00	3.205E+00
	7.16764E-02	2.464E+00	1.970E+00
K	7.16764E-02	1.073E+01	3.058E+00
	8.00000E-02	8.069E+00	2.832E+00
	1.00000E-01	4.587E+00	2.107E+00
	1.50000E-01	1.637E+00	9.580E-01
	2.00000E-01	8.119E-01	5.054E-01
	3.00000E-01	3.339E-01	2.038E-01
	4.00000E-01	1.976E-01	1.135E-01
	5.00000E-01	1.409E-01	7.658E-02
	6.00000E-01	1.114E-01	5.822E-02
	8.00000E-01	8.179E-02	4.109E-02
	1.00000E+00	6.688E-02	3.327E-02
	1.25000E+00	5.627E-02	2.794E-02
	1.50000E+00	5.038E-02	2.508E-02
	2.00000E+00	4.463E-02	2.273E-02
	3.00000E+00	4.105E-02	2.251E-02
	4.00000E+00	4.068E-02	2.380E-02
	5.00000E+00	4.137E-02	2.527E-02
	6.00000E+00	4.246E-02	2.667E-02
	8.00000E+00	4.511E-02	2.906E-02
	1.00000E+01	4.790E-02	3.092E-02
	1.50000E+01	5.437E-02	3.382E-02
	2.00000E+01	5.953E-02	3.496E-02


Z = 73, TANTALUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

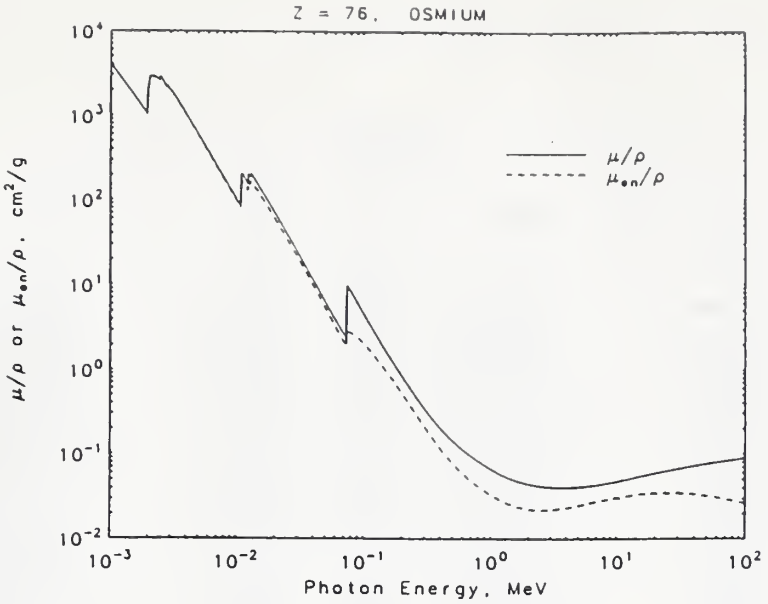

Z = 74, TUNGSTEN
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

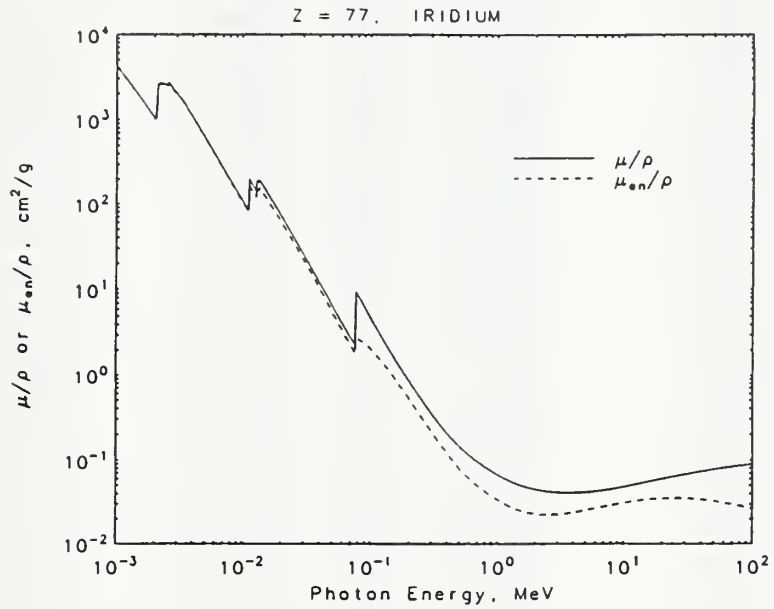

Z = 75, RHENIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

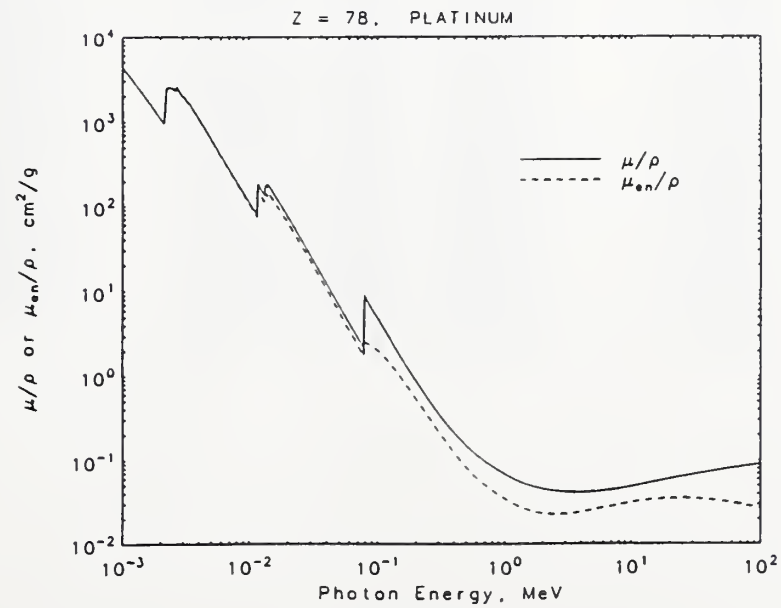
	OSMIUM $Z = 76$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.032E+03	4.019E+03
	1.50000E-03	1.801E+03	1.790E+03
	1.96010E-03	1.023E+03	1.012E+03
M5	1.96010E-03	2.003E+03	1.969E+03
	2.00000E-03	2.218E+03	2.179E+03
	2.03080E-03	2.622E+03	2.573E+03
M4	2.03080E-03	2.864E+03	2.810E+03
	2.23385E-03	2.852E+03	2.797E+03
	2.45720E-03	2.546E+03	2.498E+03
M3	2.45720E-03	2.948E+03	2.893E+03
	2.61935E-03	2.524E+03	2.478E+03
	2.79220E-03	2.161E+03	2.123E+03
M2	2.79220E-03	2.296E+03	2.255E+03
	3.00000E-03	1.938E+03	1.904E+03
	3.04850E-03	1.869E+03	1.836E+03
M1	3.04850E-03	1.949E+03	1.915E+03
	4.00000E-03	1.023E+03	1.004E+03
	5.00000E-03	5.936E+02	5.813E+02
	6.00000E-03	3.776E+02	3.682E+02
	8.00000E-03	1.836E+02	1.770E+02
	1.00000E-02	1.045E+02	9.940E+01
	1.08709E-02	8.458E+01	7.994E+01
L3	1.08709E-02	2.121E+02	1.762E+02
	1.16033E-02	1.860E+02	1.495E+02
	1.23850E-02	1.503E+02	1.271E+02
L2	1.23850E-02	2.060E+02	1.654E+02
	1.26731E-02	1.956E+02	1.576E+02
	1.29680E-02	1.846E+02	1.494E+02
L1	1.29680E-02	2.129E+02	1.711E+02
	1.50000E-02	1.478E+02	1.218E+02
	2.00000E-02	7.039E+01	5.999E+01
	3.00000E-02	2.443E+01	2.120E+01
	4.00000E-02	1.149E+01	9.907E+00
	5.00000E-02	6.414E+00	5.437E+00
	6.00000E-02	4.002E+00	3.314E+00
	7.38708E-02	2.360E+00	1.879E+00
K	7.38708E-02	1.016E+01	2.888E+00
	8.00000E-02	8.290E+00	2.756E+00
	1.00000E-01	4.696E+00	2.092E+00
	1.50000E-01	1.680E+00	9.696E-01
	2.00000E-01	8.327E-01	5.150E-01
	3.00000E-01	3.414E-01	2.085E-01
	4.00000E-01	2.011E-01	1.161E-01
	5.00000E-01	1.428E-01	7.813E-02
	6.00000E-01	1.125E-01	5.923E-02
	8.00000E-01	8.224E-02	4.157E-02
	1.00000E+00	6.705E-02	3.351E-02
	1.25000E+00	5.625E-02	2.802E-02
	1.50000E+00	5.034E-02	2.511E-02
	2.00000E+00	4.458E-02	2.272E-02
	3.00000E+00	4.100E-02	2.248E-02
	4.00000E+00	4.065E-02	2.376E-02
	5.00000E+00	4.134E-02	2.523E-02
	6.00000E+00	4.244E-02	2.663E-02
	8.00000E+00	4.511E-02	2.901E-02
	1.00000E+01	4.791E-02	3.086E-02
	1.50000E+01	5.442E-02	3.375E-02
	2.00000E+01	5.956E-02	3.486E-02

	IRIDIUM $Z = 77$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.243E+03	4.230E+03
	1.50000E-03	1.898E+03	1.886E+03
	2.00000E-03	1.032E+03	1.021E+03
	2.04040E-03	9.882E+02	9.771E+02
M5	2.04040E-03	1.066E+03	1.053E+03
	2.07790E-03	1.492E+03	1.466E+03
	2.11610E-03	2.478E+03	2.429E+03
M4	2.11610E-03	2.608E+03	2.556E+03
	2.32326E-03	2.621E+03	2.566E+03
	2.55070E-03	2.424E+03	2.376E+03
M3	2.55070E-03	2.800E+03	2.744E+03
	2.72382E-03	2.393E+03	2.345E+03
	2.90870E-03	2.041E+03	2.002E+03
M2	2.90870E-03	2.166E+03	2.125E+03
	3.00000E-03	2.011E+03	1.973E+03
	3.17370E-03	1.767E+03	1.734E+03
M1	3.17370E-03	1.843E+03	1.809E+03
	4.00000E-03	1.063E+03	1.043E+03
	5.00000E-03	6.178E+02	6.047E+02
	6.00000E-03	3.935E+02	3.837E+02
	8.00000E-03	1.914E+02	1.846E+02
	1.00000E-02	1.090E+02	1.038E+02
	1.12154E-02	8.155E+01	7.695E+01
L3	1.12154E-02	2.038E+02	1.681E+02
	1.19928E-02	1.702E+02	1.418E+02
	1.28241E-02	1.426E+02	1.199E+02
L2	1.28241E-02	1.959E+02	1.559E+02
	1.31179E-02	1.933E+02	1.486E+02
	1.34185E-02	1.756E+02	1.409E+02
L1	1.34185E-02	2.025E+02	1.613E+02
	1.50000E-02	1.530E+02	1.244E+02
	2.00000E-02	7.317E+01	6.179E+01
	3.00000E-02	2.546E+01	2.198E+01
	4.00000E-02	1.199E+01	1.030E+01
	5.00000E-02	6.693E+00	5.667E+00
	6.00000E-02	4.176E+00	3.460E+00
	7.61110E-02	2.284E+00	1.810E+00
K	7.61110E-02	9.728E+00	2.758E+00
	8.00000E-02	8.585E+00	2.694E+00
	1.00000E-01	4.855E+00	2.093E+00
	1.50000E-01	1.740E+00	9.903E-01
	2.00000E-01	8.628E-01	5.290E-01
	3.00000E-01	3.525E-01	2.155E-01
	4.00000E-01	2.068E-01	1.199E-01
	5.00000E-01	1.463E-01	8.054E-02
	6.00000E-01	1.149E-01	6.088E-02
	8.00000E-01	8.357E-02	4.250E-02
	1.00000E+00	6.794E-02	3.412E-02
	1.25000E+00	5.688E-02	2.843E-02
	1.50000E+00	5.083E-02	2.541E-02
	2.00000E+00	4.501E-02	2.295E-02
	3.00000E+00	4.139E-02	2.269E-02
	4.00000E+00	4.104E-02	2.398E-02
	5.00000E+00	4.174E-02	2.546E-02
	6.00000E+00	4.286E-02	2.687E-02
	8.00000E+00	4.558E-02	2.927E-02
	1.00000E+01	4.844E-02	3.115E-02
	1.50000E+01	5.502E-02	3.405E-02
	2.00000E+01	6.024E-02	3.516E-02

	PLATINUM $Z = 78$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.433E+03	4.421E+03
	1.50000E-03	1.986E+03	1.974E+03
	2.00000E-03	1.081E+03	1.069E+03
	2.12160E-03	9.506E+02	9.393E+02
M5	2.12160E-03	1.034E+03	1.021E+03
	2.16138E-03	1.431E+03	1.405E+03
	2.20190E-03	2.341E+03	2.292E+03
M4	2.20190E-03	2.487E+03	2.434E+03
	2.41348E-03	2.512E+03	2.457E+03
	2.64540E-03	2.307E+03	2.258E+03
M3	2.64540E-03	2.663E+03	2.606E+03
	3.00000E-03	1.965E+03	1.925E+03
	3.02650E-03	1.923E+03	1.884E+03
M2	3.02650E-03	2.041E+03	2.000E+03
	3.15838E-03	1.844E+03	1.806E+03
	3.29600E-03	1.671E+03	1.637E+03
M1	3.29600E-03	1.742E+03	1.707E+03
	4.00000E-03	1.100E+03	1.078E+03
	5.00000E-03	6.402E+02	6.262E+02
	6.00000E-03	4.083E+02	3.979E+02
	8.00000E-03	1.987E+02	1.917E+02
	1.00000E-02	1.132E+02	1.078E+02
	1.15637E-02	7.844E+01	7.388E+01
L3	1.15637E-02	1.946E+02	1.594E+02
	1.23887E-02	1.618E+02	1.339E+02
	1.32726E-02	1.349E+02	1.127E+02
L2	1.32726E-02	1.853E+02	1.463E+02
	1.35729E-02	1.848E+02	1.395E+02
	1.38799E-02	1.666E+02	1.325E+02
L1	1.38799E-02	1.921E+02	1.517E+02
	1.50000E-02	1.578E+02	1.265E+02
	2.00000E-02	7.574E+01	6.333E+01
	3.00000E-02	2.641E+01	2.268E+01
	4.00000E-02	1.245E+01	1.067E+01
	5.00000E-02	6.954E+00	5.879E+00
	6.00000E-02	4.339E+00	3.595E+00
	7.83948E-02	2.203E+00	1.738E+00
K	7.83948E-02	9.301E+00	2.627E+00
	8.00000E-02	8.731E+00	2.592E+00
	1.00000E-01	4.993E+00	2.081E+00
	1.50000E-01	1.795E+00	1.006E+00
	2.00000E-01	8.896E-01	5.413E-01
	3.00000E-01	3.625E-01	2.216E-01
	4.00000E-01	2.118E-01	1.233E-01
	5.00000E-01	1.492E-01	8.265E-02
	6.00000E-01	1.168E-01	6.230E-02
	8.00000E-01	8.456E-02	4.325E-02
	1.00000E+00	6.857E-02	3.459E-02
	1.25000E+00	5.727E-02	2.871E-02
	1.50000E+00	5.112E-02	2.560E-02
	2.00000E+00	4.522E-02	2.307E-02
	3.00000E+00	4.160E-02	2.279E-02
	4.00000E+00	4.124E-02	2.408E-02
	5.00000E+00	4.196E-02	2.557E-02
	6.00000E+00	4.310E-02	2.699E-02
	8.00000E+00	4.584E-02	2.939E-02
	1.00000E+01	4.872E-02	3.127E-02
	1.50000E+01	5.537E-02	3.418E-02
	2.00000E+01	6.064E-02	3.529E-02


Z = 76. OSMIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

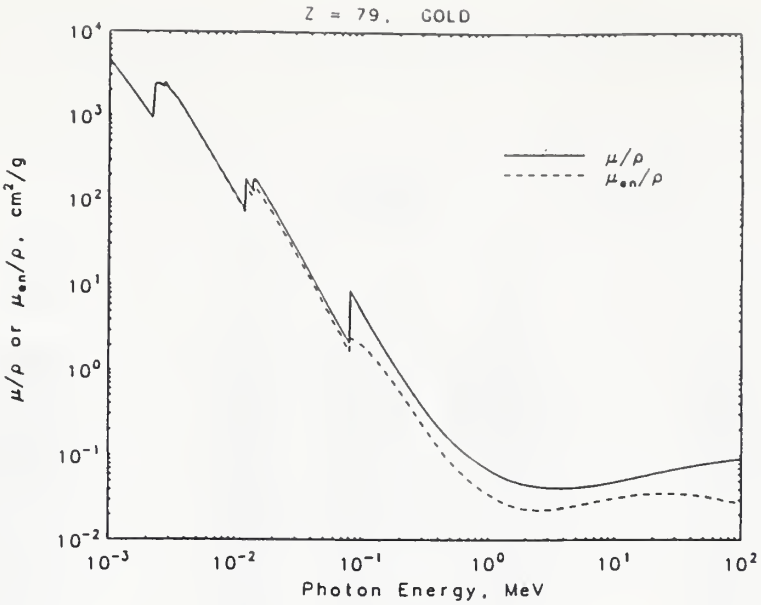

Z = 77. IRIDIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

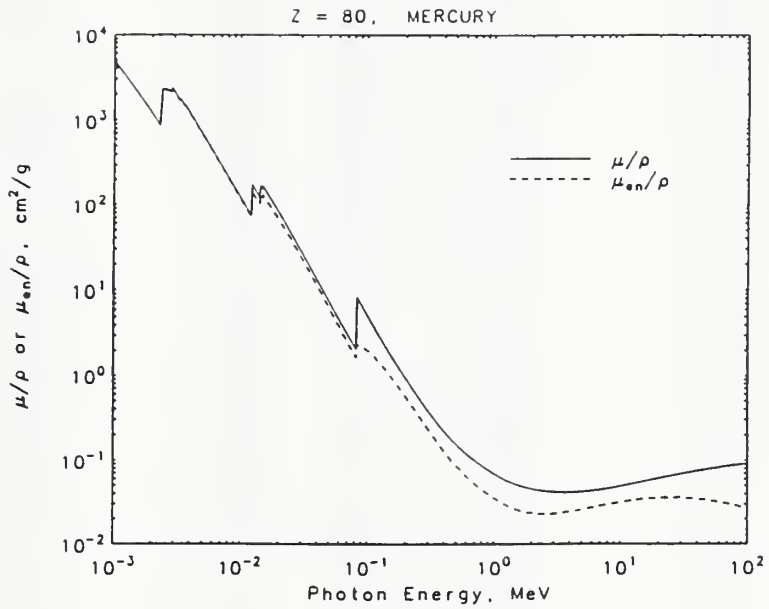

Z = 78. PLATINUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

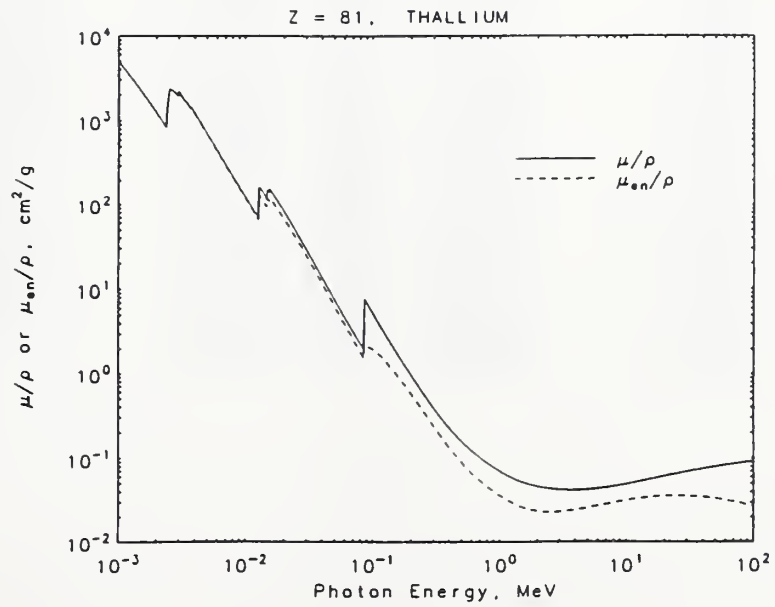
	GOLD $Z = 79$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.652E+03	4.639E+03
	1.50000E-03	2.089E+03	2.076E+03
	2.00000E-03	1.137E+03	1.125E+03
	2.20570E-03	9.187E+02	9.074E+02
M5	2.20570E-03	9.971E+02	9.836E+02
	2.24799E-03	1.386E+03	1.360E+03
	2.29110E-03	2.258E+03	2.208E+03
M4	2.29110E-03	2.389E+03	2.336E+03
	2.50689E-03	2.380E+03	2.325E+03
	2.74300E-03	2.203E+03	2.154E+03
M3	2.74300E-03	2.541E+03	2.484E+03
	3.00000E-03	2.049E+03	2.005E+03
	3.14780E-03	1.822E+03	1.783E+03
M2	3.14780E-03	1.933E+03	1.892E+03
	3.28343E-03	1.748E+03	1.710E+03
	3.42490E-03	1.585E+03	1.552E+03
M1	3.42490E-03	1.652E+03	1.618E+03
	4.00000E-03	1.144E+03	1.120E+03
	5.00000E-03	6.661E+02	6.512E+02
	6.00000E-03	4.253E+02	4.143E+02
	8.00000E-03	2.072E+02	1.999E+02
	1.00000E-02	1.181E+02	1.126E+02
	1.19187E-02	7.582E+01	7.129E+01
L3	1.19187E-02	1.870E+02	1.521E+02
	1.27940E-02	1.546E+02	1.272E+02
	1.37336E-02	1.283E+02	1.066E+02
L2	1.37336E-02	1.764E+02	1.379E+02
	1.40398E-02	1.766E+02	1.317E+02
	1.43528E-02	1.588E+02	1.252E+02
L1	1.43528E-02	1.830E+02	1.432E+02
	1.50000E-02	1.637E+02	1.294E+02
	2.00000E-02	7.883E+01	6.522E+01
	3.00000E-02	2.752E+01	2.349E+01
	4.00000E-02	1.298E+01	1.109E+01
	5.00000E-02	7.256E+00	6.124E+00
	6.00000E-02	4.528E+00	3.751E+00
	8.00000E-02	2.185E+00	1.720E+00
	8.07249E-02	2.137E+00	1.678E+00
K	8.07249E-02	8.904E+00	2.512E+00
	1.00000E-01	5.158E+00	2.074E+00
	1.50000E-01	1.860E+00	1.026E+00
	2.00000E-01	9.214E-01	5.563E-01
	3.00000E-01	3.744E-01	2.289E-01
	4.00000E-01	2.180E-01	1.274E-01
	5.00000E-01	1.530E-01	8.523E-02
	6.00000E-01	1.194E-01	6.409E-02
	8.00000E-01	8.603E-02	4.427E-02
	1.00000E+00	6.953E-02	3.525E-02
	1.25000E+00	5.794E-02	2.915E-02
	1.50000E+00	5.167E-02	2.593E-02
	2.00000E+00	4.570E-02	2.333E-02
	3.00000E+00	4.201E-02	2.302E-02
	4.00000E+00	4.166E-02	2.432E-02
	5.00000E+00	4.239E-02	2.582E-02
	6.00000E+00	4.355E-02	2.725E-02
	8.00000E+00	4.633E-02	2.968E-02
	1.00000E+01	4.926E-02	3.159E-02
	1.50000E+01	5.598E-02	3.450E-02
	2.00000E+01	6.136E-02	3.565E-02

	MERCURY $Z = 80$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.830E+03	4.817E+03
	1.50000E-03	2.174E+03	2.161E+03
	2.00000E-03	1.184E+03	1.172E+03
	2.29490E-03	8.773E+02	8.660E+02
M5	2.29490E-03	9.925E+02	9.778E+02
	2.33947E-03	1.407E+03	1.378E+03
	2.38490E-03	2.151E+03	2.101E+03
M4	2.38490E-03	2.316E+03	2.261E+03
	2.60577E-03	2.257E+03	2.202E+03
	2.84710E-03	2.080E+03	2.030E+03
M3	2.84710E-03	2.400E+03	2.343E+03
	3.00000E-03	2.117E+03	2.069E+03
	3.27850E-03	1.704E+03	1.666E+03
M2	3.27850E-03	1.808E+03	1.767E+03
	3.41712E-03	1.638E+03	1.600E+03
	3.56160E-03	1.486E+03	1.454E+03
M1	3.56160E-03	1.549E+03	1.515E+03
	4.00000E-03	1.179E+03	1.153E+03
	5.00000E-03	6.869E+02	6.710E+02
	6.00000E-03	4.387E+02	4.272E+02
	8.00000E-03	2.140E+02	2.065E+02
	1.00000E-02	1.221E+02	1.164E+02
	1.22839E-02	7.266E+01	6.821E+01
L3	1.22839E-02	1.780E+02	1.437E+02
	1.32113E-02	1.464E+02	1.197E+02
	1.42087E-02	1.209E+02	9.988E+01
L2	1.42087E-02	1.663E+02	1.289E+02
	1.45206E-02	1.674E+02	1.233E+02
	1.48393E-02	1.501E+02	1.173E+02
L1	1.48393E-02	1.728E+02	1.340E+02
	1.50000E-02	1.681E+02	1.307E+02
	2.00000E-02	8.123E+01	6.647E+01
	3.00000E-02	2.841E+01	2.410E+01
	4.00000E-02	1.342E+01	1.141E+01
	5.00000E-02	7.504E+00	6.321E+00
	6.00000E-02	4.683E+00	3.878E+00
	8.00000E-02	2.259E+00	1.782E+00
	8.31023E-02	2.055E+00	1.607E+00
K	8.31023E-02	8.464E+00	2.384E+00
	1.00000E-01	5.279E+00	2.043E+00
	1.50000E-01	1.909E+00	1.036E+00
	2.00000E-01	9.456E-01	5.661E-01
	3.00000E-01	3.834E-01	2.342E-01
	4.00000E-01	2.224E-01	1.304E-01
	5.00000E-01	1.555E-01	8.711E-02
	6.00000E-01	1.210E-01	6.536E-02
	8.00000E-01	8.679E-02	4.493E-02
	1.00000E+00	6.993E-02	3.563E-02
	1.25000E+00	5.814E-02	2.936E-02
	1.50000E+00	5.179E-02	2.605E-02
	2.00000E+00	4.575E-02	2.339E-02
	3.00000E+00	4.207E-02	2.307E-02
	4.00000E+00	4.172E-02	2.436E-02
	5.00000E+00	4.246E-02	2.586E-02
	6.00000E+00	4.362E-02	2.730E-02
	8.00000E+00	4.643E-02	2.975E-02
	1.00000E+01	4.937E-02	3.165E-02
	1.50000E+01	5.613E-02	3.460E-02
	2.00000E+01	6.154E-02	3.576E-02

	THALLIUM $Z = 81$		
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.008E+03	4.995E+03
	1.50000E-03	2.259E+03	2.247E+03
	2.00000E-03	1.231E+03	1.219E+03
	2.38930E-03	8.352E+02	8.240E+02
M5	2.38930E-03	1.136E+03	1.115E+03
	2.43673E-03	1.582E+03	1.546E+03
	2.48510E-03	2.049E+03	1.999E+03
M4	2.48510E-03	2.364E+03	2.303E+03
	2.71062E-03	2.207E+03	2.150E+03
	2.95660E-03	1.958E+03	1.910E+03
M3	2.95660E-03	2.267E+03	2.210E+03
	3.00000E-03	2.188E+03	2.135E+03
	3.41570E-03	1.591E+03	1.553E+03
M2	3.41570E-03	1.687E+03	1.647E+03
	3.55698E-03	1.530E+03	1.495E+03
	3.70410E-03	1.392E+03	1.360E+03
M1	3.70410E-03	1.452E+03	1.419E+03
	4.00000E-03	1.212E+03	1.185E+03
	5.00000E-03	7.068E+02	6.900E+02
	6.00000E-03	4.518E+02	4.398E+02
	8.00000E-03	2.208E+02	2.131E+02
	1.00000E-02	1.260E+02	1.202E+02
	1.26575E-02	6.957E+01	6.521E+01
L3	1.26575E-02	1.693E+02	1.357E+02
	1.36396E-02	1.473E+02	1.126E+02
	1.46979E-02	1.139E+02	9.356E+01
L2	1.46979E-02	1.572E+02	1.207E+02
	1.50000E-02	1.497E+02	1.154E+02
	1.53467E-02	1.416E+02	1.097E+02
L1	1.53467E-02	1.632E+02	1.254E+02
	2.00000E-02	8.361E+01	6.761E+01
	3.00000E-02	2.929E+01	2.467E+01
	4.00000E-02	1.385E+01	1.173E+01
	5.00000E-02	7.751E+00	6.513E+00
	6.00000E-02	4.838E+00	4.003E+00
	8.00000E-02	2.332E+00	1.844E+00
	8.55304E-02	1.976E+00	1.539E+00
K	8.55304E-02	8.046E+00	2.264E+00
	1.00000E-01	5.398E+00	2.007E+00
	1.50000E-01	1.957E+00	1.044E+00
	2.00000E-01	9.696E-01	5.753E-01
	3.00000E-01	3.923E-01	2.393E-01
	4.00000E-01	2.267E-01	1.334E-01
	5.00000E-01	1.580E-01	8.897E-02
	6.00000E-01	1.226E-01	6.661E-02
	8.00000E-01	8.751E-02	4.557E-02
	1.00000E+00	7.031E-02	3.600E-02
	1.25000E+00	5.832E-02	2.955E-02
	1.50000E+00	5.187E-02	2.616E-02
	2.00000E+00	4.581E-02	2.345E-02
	3.00000E+00	4.210E-02	2.309E-02
	4.00000E+00	4.175E-02	2.437E-02
	5.00000E+00	4.248E-02	2.587E-02
	6.00000E+00	4.366E-02	2.731E-02
	8.00000E+00	4.647E-02	2.975E-02
	1.00000E+01	4.943E-02	3.167E-02
	1.50000E+01	5.622E-02	3.463E-02
	2.00000E+01	6.162E-02	3.578E-02


Z = 79, GOLD
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 80, MERCURY
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 81, THALLIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

LEAD
Z = 82

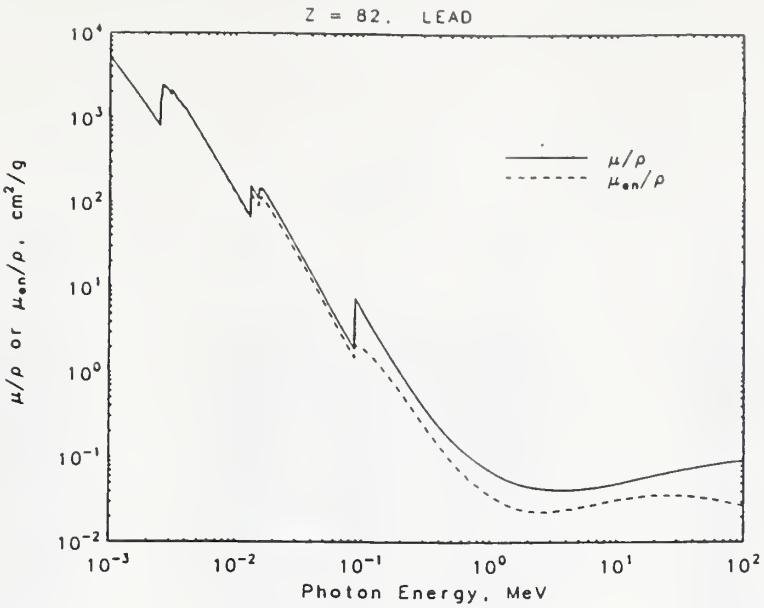
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.210E+03	5.197E+03
	1.50000E-03	2.356E+03	2.344E+03
	2.00000E-03	1.285E+03	1.274E+03
	2.48400E-03	8.006E+02	7.895E+02
M5	2.48400E-03	1.397E+03	1.366E+03
	2.53429E-03	1.726E+03	1.682E+03
	2.58560E-03	1.944E+03	1.895E+03
M4	2.58560E-03	2.458E+03	2.390E+03
	3.00000E-03	1.965E+03	1.913E+03
	3.06640E-03	1.857E+03	1.808E+03
M3	3.06640E-03	2.146E+03	2.090E+03
	3.30130E-03	1.796E+03	1.748E+03
	3.55420E-03	1.496E+03	1.459E+03
M2	3.55420E-03	1.585E+03	1.546E+03
	3.69948E-03	1.442E+03	1.405E+03
	3.85070E-03	1.311E+03	1.279E+03
M1	3.85070E-03	1.368E+03	1.335E+03
	4.00000E-03	1.251E+03	1.221E+03
	5.00000E-03	7.304E+02	7.124E+02
	6.00000E-03	4.672E+02	4.546E+02
	8.00000E-03	2.287E+02	2.207E+02
	1.00000E-02	1.306E+02	1.247E+02
	1.30352E-02	6.701E+01	6.270E+01
L3	1.30352E-02	1.621E+02	1.291E+02
	1.50000E-02	1.116E+02	9.100E+01
	1.52000E-02	1.078E+02	8.807E+01
L2	1.52000E-02	1.485E+02	1.131E+02
	1.55269E-02	1.416E+02	1.083E+02
	1.58608E-02	1.344E+02	1.032E+02
L1	1.58608E-02	1.548E+02	1.180E+02
	2.00000E-02	8.636E+01	6.899E+01
	3.00000E-02	3.032E+01	2.536E+01
	4.00000E-02	1.436E+01	1.211E+01
	5.00000E-02	8.041E+00	6.740E+00
	6.00000E-02	5.021E+00	4.149E+00
	8.00000E-02	2.419E+00	1.916E+00
	8.80045E-02	1.910E+00	1.482E+00
K	8.80045E-02	7.683E+00	2.160E+00
	1.00000E-01	5.549E+00	1.976E+00
	1.50000E-01	2.014E+00	1.056E+00
	2.00000E-01	9.985E-01	5.870E-01
	3.00000E-01	4.031E-01	2.455E-01
	4.00000E-01	2.323E-01	1.370E-01
	5.00000E-01	1.614E-01	9.128E-02
	6.00000E-01	1.248E-01	6.819E-02
	8.00000E-01	8.870E-02	4.644E-02
	1.00000E+00	7.102E-02	3.654E-02
	1.25000E+00	5.876E-02	2.988E-02
	1.50000E+00	5.222E-02	2.640E-02
	2.00000E+00	4.606E-02	2.360E-02
	3.00000E+00	4.234E-02	2.322E-02
	4.00000E+00	4.197E-02	2.449E-02
	5.00000E+00	4.272E-02	2.600E-02
	6.00000E+00	4.391E-02	2.744E-02
	8.00000E+00	4.675E-02	2.989E-02
	1.00000E+01	4.972E-02	3.181E-02
	1.50000E+01	5.658E-02	3.478E-02
	2.00000E+01	6.206E-02	3.595E-02

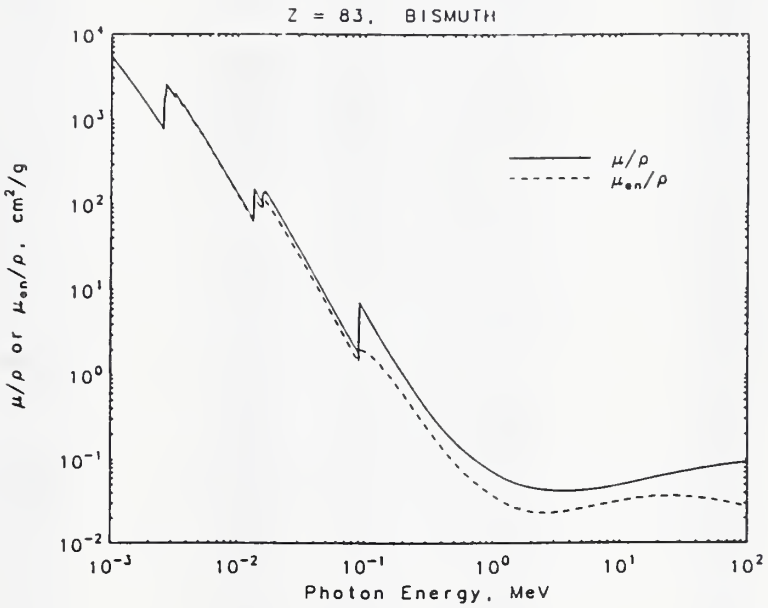
BISMUTH
Z = 83

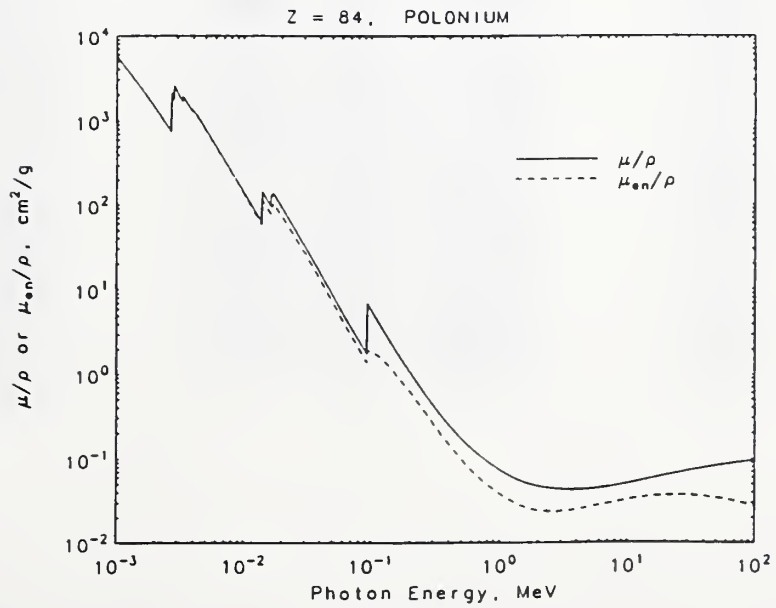
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.441E+03	5.427E+03
	1.50000E-03	2.468E+03	2.455E+03
	2.00000E-03	1.348E+03	1.336E+03
	2.57960E-03	7.724E+02	7.612E+02
M5	2.57960E-03	1.777E+03	1.731E+03
	2.63305E-03	1.850E+03	1.799E+03
	2.68760E-03	1.852E+03	1.802E+03
M4	2.68760E-03	2.576E+03	2.500E+03
	3.00000E-03	2.053E+03	1.996E+03
	3.17690E-03	1.774E+03	1.725E+03
M3	3.17690E-03	2.048E+03	1.992E+03
	3.42677E-03	1.707E+03	1.659E+03
	3.69630E-03	1.415E+03	1.378E+03
M2	3.69630E-03	1.498E+03	1.460E+03
	3.84472E-03	1.366E+03	1.329E+03
	3.99910E-03	1.243E+03	1.211E+03
M1	3.99910E-03	1.297E+03	1.264E+03
	4.00000E-03	1.296E+03	1.263E+03
	5.00000E-03	7.580E+02	7.386E+02
	6.00000E-03	4.855E+02	4.721E+02
	8.00000E-03	2.378E+02	2.295E+02
	1.00000E-02	1.360E+02	1.298E+02
	1.34186E-02	6.491E+01	6.064E+01
L3	1.34186E-02	1.560E+02	1.234E+02
	1.50000E-02	1.160E+02	9.358E+01
	1.57111E-02	1.027E+02	8.346E+01
L2	1.57111E-02	1.416E+02	1.069E+02
	1.60457E-02	1.351E+02	1.024E+02
	1.63875E-02	1.282E+02	9.769E+01
L1	1.63875E-02	1.478E+02	1.116E+02
	2.00000E-02	8.952E+01	7.060E+01
	3.00000E-02	3.152E+01	2.617E+01
	4.00000E-02	1.495E+01	1.255E+01
	5.00000E-02	8.379E+00	7.004E+00
	6.00000E-02	5.233E+00	4.320E+00
	8.00000E-02	2.522E+00	1.999E+00
	9.05259E-02	1.856E+00	1.434E+00
K	9.05259E-02	7.380E+00	2.073E+00
	1.00000E-01	5.739E+00	1.951E+00
	1.50000E-01	2.082E+00	1.071E+00
	2.00000E-01	1.033E+00	6.014E-01
	3.00000E-01	4.163E-01	2.532E-01
	4.00000E-01	2.391E-01	1.414E-01
	5.00000E-01	1.656E-01	9.411E-02
	6.00000E-01	1.277E-01	7.017E-02
	8.00000E-01	9.036E-02	4.758E-02
	1.00000E+00	7.214E-02	3.730E-02
	1.25000E+00	5.955E-02	3.039E-02
	1.50000E+00	5.285E-02	2.678E-02
	2.00000E+00	4.659E-02	2.389E-02
	3.00000E+00	4.279E-02	2.347E-02
	4.00000E+00	4.242E-02	2.475E-02
	5.00000E+00	4.317E-02	2.626E-02
	6.00000E+00	4.437E-02	2.772E-02
	8.00000E+00	4.725E-02	3.020E-02
	1.00000E+01	5.025E-02	3.213E-02
	1.50000E+01	5.721E-02	3.514E-02
	2.00000E+01	6.276E-02	3.632E-02

POLONIUM
Z = 84

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.724E+03	5.710E+03
	1.50000E-03	2.604E+03	2.591E+03
	2.00000E-03	1.423E+03	1.411E+03
	2.68300E-03	7.482E+02	7.369E+02
M5	2.68300E-03	2.206E+03	2.142E+03
	2.73990E-03	1.941E+03	1.884E+03
	2.79800E-03	1.775E+03	1.726E+03
M4	2.79800E-03	2.711E+03	2.625E+03
	3.00000E-03	2.155E+03	2.090E+03
	3.30190E-03	1.693E+03	1.645E+03
M3	3.30190E-03	1.956E+03	1.900E+03
	3.56733E-03	1.622E+03	1.576E+03
	3.85410E-03	1.339E+03	1.303E+03
M2	3.85410E-03	1.419E+03	1.381E+03
	4.00000E-03	1.299E+03	1.264E+03
	4.14940E-03	1.190E+03	1.158E+03
M1	4.14940E-03	1.242E+03	1.209E+03
	5.00000E-03	7.931E+02	7.721E+02
	6.00000E-03	5.085E+02	4.942E+02
	8.00000E-03	2.494E+02	2.406E+02
	1.00000E-02	1.427E+02	1.363E+02
	1.38138E-02	6.337E+01	5.910E+01
L3	1.38138E-02	1.513E+02	1.189E+02
	1.50000E-02	1.219E+02	9.728E+01
	1.62443E-02	9.849E+01	7.965E+01
L2	1.62443E-02	1.361E+02	1.019E+02
	1.65882E-02	1.297E+02	9.755E+01
	1.69393E-02	1.232E+02	9.308E+01
L1	1.69393E-02	1.420E+02	1.063E+02
	2.00000E-02	9.352E+01	7.278E+01
	3.00000E-02	3.303E+01	2.721E+01
	4.00000E-02	1.569E+01	1.311E+01
	5.00000E-02	8.802E+00	7.334E+00
	6.00000E-02	5.499E+00	4.532E+00
	8.00000E-02	2.649E+00	2.103E+00
	9.31050E-02	1.820E+00	1.400E+00
K	9.31050E-02	7.140E+00	2.005E+00
	1.00000E-01	5.991E+00	1.936E+00
	1.50000E-01	2.170E+00	1.095E+00
	2.00000E-01	1.078E+00	6.207E-01
	3.00000E-01	4.335E-01	2.630E-01
	4.00000E-01	2.483E-01	1.471E-01
	5.00000E-01	1.714E-01	9.781E-02
	6.00000E-01	1.318E-01	7.281E-02
	8.00000E-01	9.286E-02	4.916E-02
	1.00000E+00	7.391E-02	3.839E-02
	1.25000E+00	6.087E-02	3.117E-02
	1.50000E+00	5.394E-02	2.740E-02
	2.00000E+00	4.749E-02	2.438E-02
	3.00000E+00	4.362E-02	2.392E-02
	4.00000E+00	4.323E-02	2.521E-02
	5.00000E+00	4.399E-02	2.674E-02
	6.00000E+00	4.522E-02	2.822E-02
	8.00000E+00	4.816E-02	3.074E-02
	1.00000E+01	5.124E-02	3.271E-02
	1.50000E+01	5.835E-02	3.577E-02
	2.00000E+01	6.398E-02	3.694E-02


Z = 82. LEAD
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 83. BISMUTH
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 84. POLONIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

ASTATINE
Z = 85

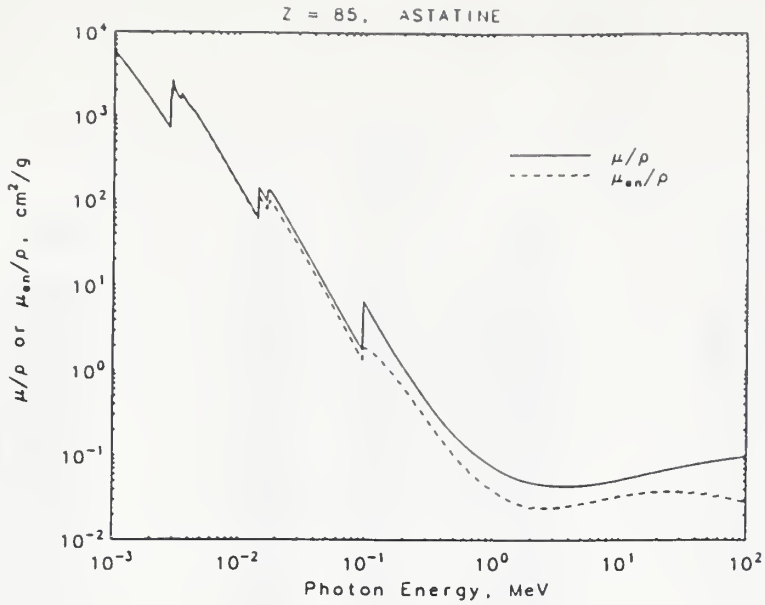
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.868E+03	5.854E+03
	1.02078E-03	5.651E+03	5.637E+03
	1.04200E-03	5.435E+03	5.420E+03
N1	1.04200E-03	5.551E+03	5.537E+03
	1.50000E-03	2.731E+03	2.717E+03
	2.00000E-03	1.495E+03	1.482E+03
	2.78670E-03	7.225E+02	7.112E+02
M5	2.78670E-03	2.431E+03	2.355E+03
	2.84705E-03	1.928E+03	1.869E+03
	2.90870E-03	1.686E+03	1.638E+03
M4	2.90870E-03	2.763E+03	2.671E+03
	3.00000E-03	2.250E+03	2.178E+03
	3.42600E-03	1.614E+03	1.566E+03
M3	3.42600E-03	1.866E+03	1.811E+03
	4.00000E-03	1.275E+03	1.240E+03
	4.00800E-03	1.269E+03	1.233E+03
M2	4.00800E-03	1.345E+03	1.308E+03
	4.15963E-03	1.234E+03	1.196E+03
	4.31700E-03	1.126E+03	1.095E+03
M1	4.31700E-03	1.175E+03	1.142E+03
	5.00000E-03	8.251E+02	8.025E+02
	6.00000E-03	5.299E+02	5.146E+02
	8.00000E-03	2.601E+02	2.509E+02
	1.00000E-02	1.490E+02	1.423E+02
	1.42135E-02	6.162E+01	5.738E+01
L3	1.42135E-02	1.461E+02	1.140E+02
	1.50000E-02	1.279E+02	1.008E+02
	1.67847E-02	9.417E+01	7.576E+01
L2	1.67847E-02	1.302E+02	9.670E+01
	1.71352E-02	1.338E+02	9.264E+01
	1.74930E-02	1.181E+02	8.847E+01
L1	1.74930E-02	1.360E+02	1.010E+02
	2.00000E-02	9.704E+01	7.446E+01
	3.00000E-02	3.442E+01	2.812E+01
	4.00000E-02	1.638E+01	1.361E+01
	5.00000E-02	9.196E+00	7.637E+00
	6.00000E-02	5.748E+00	4.729E+00
	8.00000E-02	2.769E+00	2.200E+00
	9.57299E-02	1.777E+00	1.361E+00
K	9.57299E-02	6.895E+00	1.935E+00
	1.00000E-01	6.174E+00	1.897E+00
	1.50000E-01	2.249E+00	1.112E+00
	2.00000E-01	1.118E+00	6.369E-01
	3.00000E-01	4.491E-01	2.718E-01
	4.00000E-01	2.565E-01	1.522E-01
	5.00000E-01	1.765E-01	1.012E-01
	6.00000E-01	1.354E-01	7.517E-02
	8.00000E-01	9.495E-02	5.055E-02
	1.00000E+00	7.538E-02	3.934E-02
	1.25000E+00	6.189E-02	3.181E-02
	1.50000E+00	5.479E-02	2.791E-02
	2.00000E+00	4.821E-02	2.478E-02
	3.00000E+00	4.424E-02	2.427E-02
	4.00000E+00	4.383E-02	2.556E-02
	5.00000E+00	4.461E-02	2.710E-02
	6.00000E+00	4.585E-02	2.859E-02
	8.00000E+00	4.883E-02	3.113E-02
	1.00000E+01	5.195E-02	3.311E-02
	1.50000E+01	5.918E-02	3.619E-02
	2.00000E+01	6.493E-02	3.739E-02

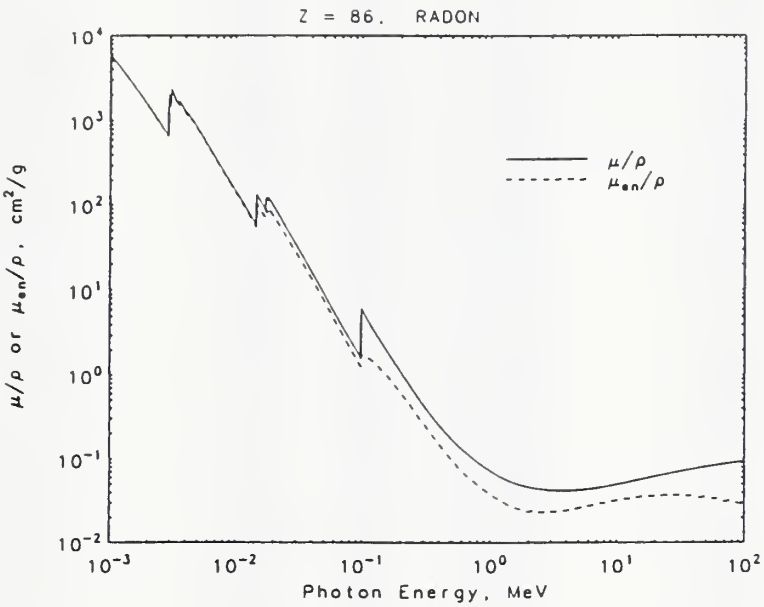
RADON
Z = 86

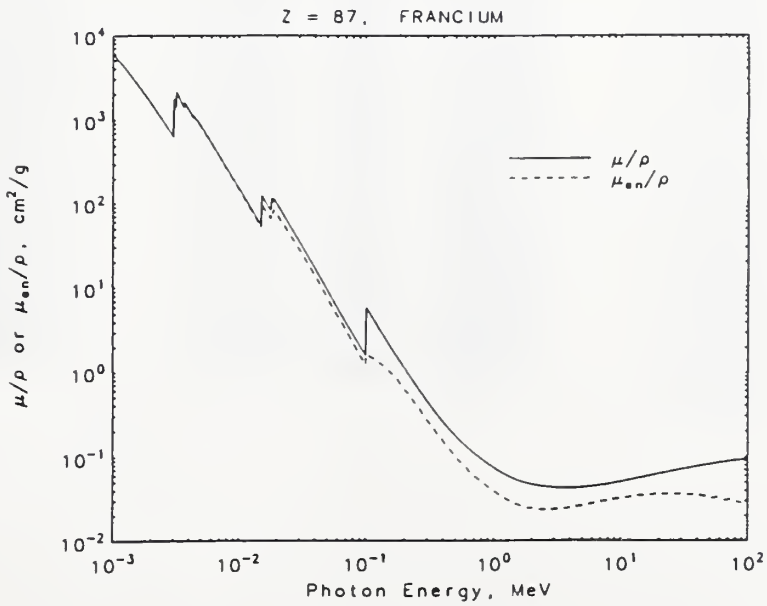
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.826E+03	5.812E+03
	1.04738E-03	5.354E+03	5.340E+03
	1.09700E-03	4.909E+03	4.895E+03
N1	1.09700E-03	5.013E+03	5.000E+03
	1.50000E-03	2.719E+03	2.706E+03
	2.00000E-03	1.490E+03	1.478E+03
	2.89240E-03	6.634E+02	6.526E+02
M5	2.89240E-03	2.319E+03	2.243E+03
	3.00000E-03	1.554E+03	1.507E+03
	3.02150E-03	1.524E+03	1.479E+03
M4	3.02150E-03	2.470E+03	2.384E+03
	3.26957E-03	1.867E+03	1.804E+03
	3.53800E-03	1.479E+03	1.433E+03
M3	3.53800E-03	1.710E+03	1.657E+03
	4.00000E-03	1.266E+03	1.229E+03
	4.15900E-03	1.148E+03	1.115E+03
M2	4.15900E-03	1.217E+03	1.182E+03
	4.31748E-03	1.112E+03	1.080E+03
	4.48200E-03	1.017E+03	9.877E+02
M1	4.48200E-03	1.061E+03	1.031E+03
	5.00000E-03	8.163E+02	7.931E+02
	6.00000E-03	5.240E+02	5.085E+02
	8.00000E-03	2.577E+02	2.485E+02
	1.00000E-02	1.477E+02	1.411E+02
	1.46194E-02	5.697E+01	5.296E+01
L3	1.46194E-02	1.344E+02	1.042E+02
	1.50000E-02	1.259E+02	9.807E+01
	1.73371E-02	8.557E+01	6.851E+01
L2	1.73371E-02	1.185E+02	8.724E+01
	1.76895E-02	1.225E+02	8.366E+01
	1.80490E-02	1.077E+02	8.002E+01
L1	1.80490E-02	1.241E+02	9.130E+01
	2.00000E-02	9.563E+01	7.231E+01
	3.00000E-02	3.408E+01	2.760E+01
	4.00000E-02	1.624E+01	1.342E+01
	5.00000E-02	9.125E+00	7.552E+00
	6.00000E-02	5.706E+00	4.686E+00
	8.00000E-02	2.749E+00	2.185E+00
	9.84040E-02	1.649E+00	1.258E+00
K	9.84040E-02	6.371E+00	1.779E+00
	1.00000E-01	6.086E+00	1.766E+00
	1.50000E-01	2.215E+00	1.073E+00
	2.00000E-01	1.101E+00	6.204E-01
	3.00000E-01	4.420E-01	2.668E-01
	4.00000E-01	2.518E-01	1.496E-01
	5.00000E-01	1.728E-01	9.941E-02
	6.00000E-01	1.322E-01	7.377E-02
	8.00000E-01	9.230E-02	4.942E-02
	1.00000E+00	7.303E-02	3.832E-02
	1.25000E+00	5.984E-02	3.089E-02
	1.50000E+00	5.290E-02	2.704E-02
	2.00000E+00	4.649E-02	2.396E-02
	3.00000E+00	4.264E-02	2.344E-02
	4.00000E+00	4.224E-02	2.469E-02
	5.00000E+00	4.298E-02	2.620E-02
	6.00000E+00	4.418E-02	2.766E-02
	8.00000E+00	4.705E-02	3.016E-02
	1.00000E+01	5.007E-02	3.216E-02
	1.50000E+01	5.704E-02	3.534E-02
	2.00000E+01	6.260E-02	3.670E-02

FRANCIUM
Z = 87

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.238E+03	6.224E+03
	1.07378E-03	5.356E+03	5.342E+03
	1.15300E-03	4.673E+03	4.659E+03
N1	1.15300E-03	4.772E+03	4.758E+03
	1.50000E-03	2.846E+03	2.833E+03
	2.00000E-03	1.562E+03	1.549E+03
	2.99990E-03	6.414E+02	6.306E+02
M5	2.99990E-03	1.995E+03	1.929E+03
	3.00000E-03	1.994E+03	1.928E+03
	3.13620E-03	1.449E+03	1.405E+03
M4	3.13620E-03	2.255E+03	2.175E+03
	3.38938E-03	1.761E+03	1.700E+03
	3.66300E-03	1.415E+03	1.370E+03
M3	3.66300E-03	1.641E+03	1.588E+03
	4.00000E-03	1.322E+03	1.281E+03
	4.32700E-03	1.086E+03	1.053E+03
M2	4.32700E-03	1.153E+03	1.118E+03
	4.48656E-03	1.059E+03	1.023E+03
	4.65200E-03	9.666E+02	9.377E+02
M1	4.65200E-03	1.008E+03	9.780E+02
	5.00000E-03	8.489E+02	8.238E+02
	6.00000E-03	5.451E+02	5.285E+02
	8.00000E-03	2.684E+02	2.588E+02
	1.00000E-02	1.539E+02	1.471E+02
	1.50000E-02	5.573E+01	5.174E+01
	1.50312E-02	5.544E+01	5.146E+01
L3	1.50312E-02	1.304E+02	1.003E+02
	1.64060E-02	1.031E+02	8.086E+01
	1.79065E-02	8.184E+01	6.521E+01
L2	1.79065E-02	1.137E+02	8.299E+01
	1.82691E-02	1.179E+02	7.947E+01
	1.86390E-02	1.031E+02	7.602E+01
L1	1.86390E-02	1.187E+02	8.666E+01
	2.00000E-02	9.933E+01	7.395E+01
	3.00000E-02	3.550E+01	2.849E+01
	4.00000E-02	1.694E+01	1.391E+01
	5.00000E-02	9.525E+00	7.851E+00
	6.00000E-02	5.959E+00	4.881E+00
	8.00000E-02	2.871E+00	2.283E+00
	1.00000E-01	1.655E+00	1.261E+00
	1.01137E-01	1.610E+00	1.224E+00
K	1.01137E-01	6.089E+00	1.710E+00
	1.50000E-01	2.295E+00	1.087E+00
	2.00000E-01	1.141E+00	6.351E-01
	3.00000E-01	4.577E-01	2.750E-01
	4.00000E-01	2.601E-01	1.542E-01
	5.00000E-01	1.780E-01	1.025E-01
	6.00000E-01	1.358E-01	7.597E-02
	8.00000E-01	9.444E-02	5.067E-02
	1.00000E+00	7.450E-02	3.920E-02
	1.25000E+00	6.087E-02	3.151E-02
	1.50000E+00	5.376E-02	2.752E-02
	2.00000E+00	4.721E-02	2.432E-02
	3.00000E+00	4.324E-02	2.372E-02
	4.00000E+00	4.283E-02	2.495E-02
	5.00000E+00	4.358E-02	2.644E-02
	6.00000E+00	4.479E-02	2.788E-02
	8.00000E+00	4.769E-02	3.033E-02
	1.00000E+01	5.077E-02	3.227E-02
	1.50000E+01	5.786E-02	3.525E-02
	2.00000E+01	6.350E-02	3.641E-02


Z = 85. ASTATINE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 86. RADON
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 87. FRANCIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

RADIUM
Z = 88

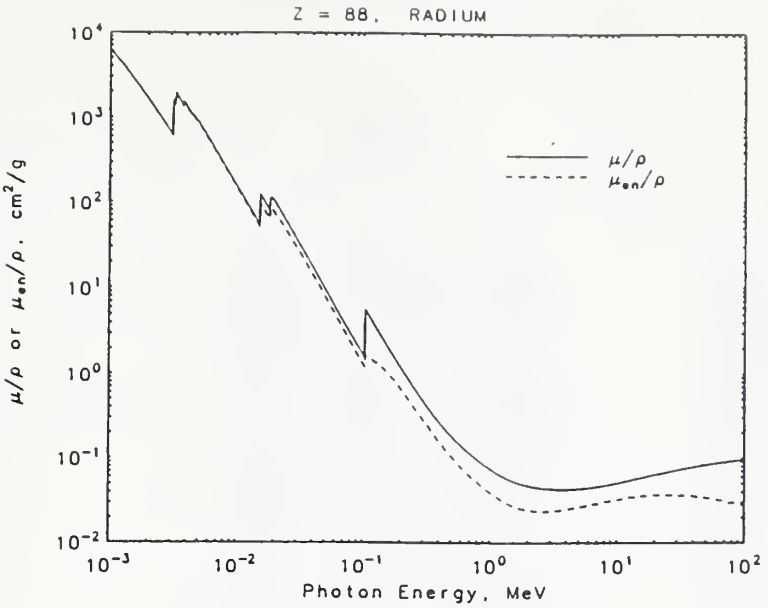
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.201E+03	6.187E+03
	1.02840E-03	5.895E+03	5.881E+03
	1.05760E-03	5.602E+03	5.588E+03
N2	1.05760E-03	5.683E+03	5.669E+03
	1.13049E-03	5.019E+03	5.005E+03
	1.20840E-03	4.424E+03	4.411E+03
N1	1.20840E-03	4.516E+03	4.502E+03
	1.50000E-03	2.950E+03	2.937E+03
	2.00000E-03	1.620E+03	1.608E+03
	3.00000E-03	6.664E+02	6.555E+02
	3.10490E-03	6.169E+02	6.061E+02
M5	3.10490E-03	1.715E+03	1.657E+03
	3.17584E-03	1.506E+03	1.457E+03
	3.24840E-03	1.374E+03	1.331E+03
M4	3.24840E-03	2.039E+03	1.965E+03
	3.50960E-03	1.647E+03	1.587E+03
	3.79180E-03	1.342E+03	1.297E+03
M3	3.79180E-03	1.558E+03	1.506E+03
	4.00000E-03	1.367E+03	1.322E+03
	4.48950E-03	1.024E+03	9.917E+02
M2	4.48950E-03	1.086E+03	1.052E+03
	4.65278E-03	9.995E+02	9.643E+02
	4.82200E-03	9.129E+02	8.846E+02
M1	4.82200E-03	9.522E+02	9.228E+02
	5.00000E-03	8.741E+02	8.472E+02
	6.00000E-03	5.613E+02	5.438E+02
	8.00000E-03	2.769E+02	2.669E+02
	1.00000E-02	1.589E+02	1.519E+02
	1.50000E-02	5.760E+01	5.353E+01
	1.54444E-02	5.355E+01	4.962E+01
L3	1.54444E-02	1.253E+02	9.581E+01
	1.68961E-02	9.839E+01	7.677E+01
	1.84843E-02	7.766E+01	6.160E+01
L2	1.84843E-02	1.081E+02	7.835E+01
	1.88568E-02	1.126E+02	7.500E+01
	1.92367E-02	9.799E+01	7.175E+01
L1	1.92367E-02	1.128E+02	8.172E+01
	2.00000E-02	1.023E+02	7.496E+01
	3.00000E-02	3.664E+01	2.913E+01
	4.00000E-02	1.750E+01	1.429E+01
	5.00000E-02	9.850E+00	8.088E+00
	6.00000E-02	6.166E+00	5.039E+00
	8.00000E-02	2.971E+00	2.363E+00
	1.00000E-01	1.712E+00	1.308E+00
	1.03922E-01	1.560E+00	1.181E+00
K	1.03922E-01	5.826E+00	1.638E+00
	1.50000E-01	2.355E+00	1.091E+00
	2.00000E-01	1.172E+00	6.440E-01
	3.00000E-01	4.696E-01	2.811E-01
	4.00000E-01	2.662E-01	1.580E-01
	5.00000E-01	1.817E-01	1.050E-01
	6.00000E-01	1.383E-01	7.772E-02
	8.00000E-01	9.579E-02	5.165E-02
	1.00000E+00	7.535E-02	3.983E-02
	1.25000E+00	6.141E-02	3.191E-02
	1.50000E+00	5.415E-02	2.779E-02
	2.00000E+00	4.751E-02	2.452E-02
	3.00000E+00	4.348E-02	2.387E-02
	4.00000E+00	4.304E-02	2.509E-02
	5.00000E+00	4.379E-02	2.658E-02
	6.00000E+00	4.500E-02	2.802E-02
	8.00000E+00	4.793E-02	3.050E-02
	1.00000E+01	5.102E-02	3.245E-02
	1.50000E+01	5.815E-02	3.549E-02
	2.00000E+01	6.383E-02	3.668E-02

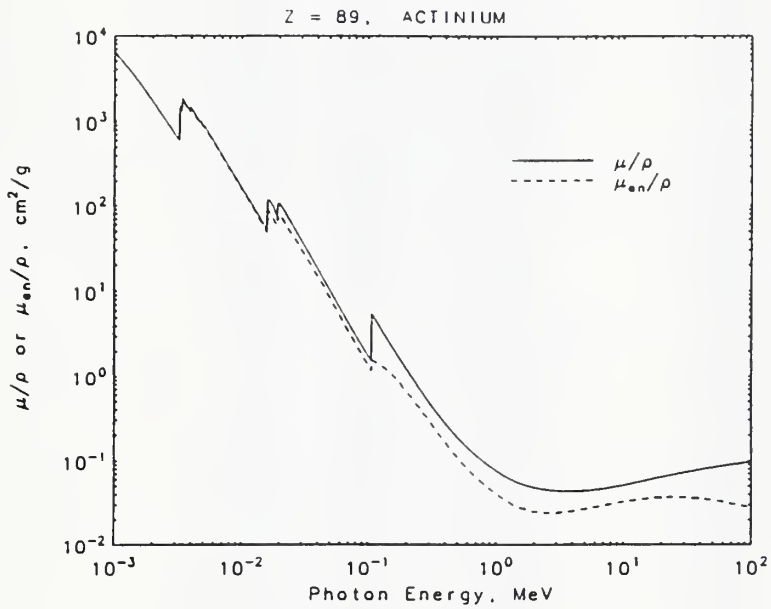
ACTINIUM
Z = 89

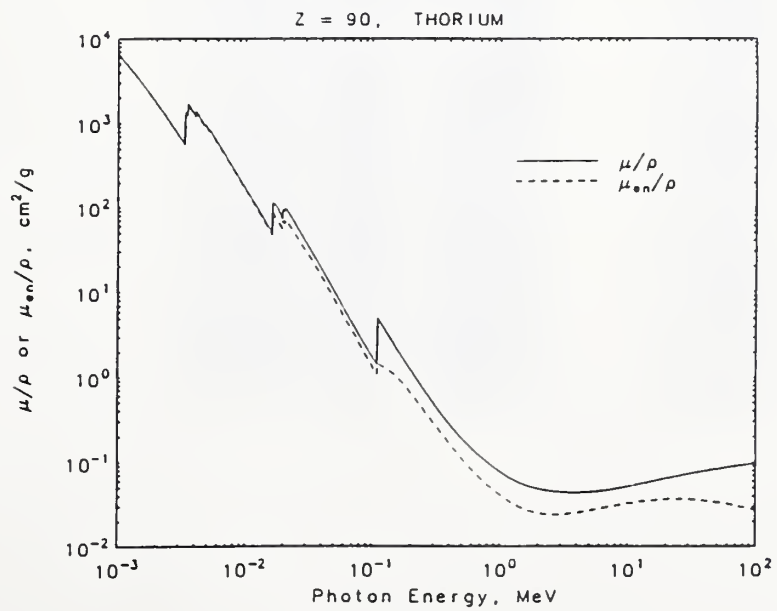
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.469E+03	6.455E+03
	1.03923E-03	6.034E+03	6.020E+03
	1.08000E-03	5.622E+03	5.608E+03
N2	1.08000E-03	5.702E+03	5.688E+03
	1.17069E-03	4.905E+03	4.891E+03
	1.26900E-03	4.203E+03	4.190E+03
N1	1.26900E-03	4.289E+03	4.275E+03
	1.50000E-03	3.082E+03	3.069E+03
	2.00000E-03	1.696E+03	1.683E+03
	3.00000E-03	6.981E+02	6.870E+02
	3.21900E-03	5.959E+02	5.851E+02
M5	3.21900E-03	1.537E+03	1.485E+03
	3.29373E-03	1.404E+03	1.358E+03
	3.37020E-03	1.307E+03	1.264E+03
M4	3.37020E-03	1.892E+03	1.822E+03
	3.62962E-03	1.564E+03	1.508E+03
	3.90900E-03	1.296E+03	1.252E+03
M3	3.90900E-03	1.504E+03	1.453E+03
	4.00000E-03	1.426E+03	1.377E+03
	4.65600E-03	9.745E+02	9.428E+02
M2	4.65600E-03	1.034E+03	1.000E+03
	5.00000E-03	8.687E+02	8.408E+02
	5.00200E-03	8.678E+02	8.399E+02
M1	5.00200E-03	9.051E+02	8.761E+02
	6.00000E-03	5.829E+02	5.641E+02
	8.00000E-03	2.878E+02	2.773E+02
	1.00000E-02	1.653E+02	1.580E+02
	1.50000E-02	6.002E+01	5.583E+01
	1.58710E-02	5.213E+01	4.823E+01
L3	1.58710E-02	1.214E+02	9.224E+01
	1.74031E-02	1.042E+02	7.350E+01
	1.90832E-02	7.426E+01	5.865E+01
L2	1.90832E-02	1.036E+02	7.448E+01
	1.94579E-02	1.079E+02	7.133E+01
	1.98400E-02	9.403E+01	6.831E+01
L1	1.98400E-02	1.082E+02	7.774E+01
	2.00000E-02	1.062E+02	7.645E+01
	3.00000E-02	3.811E+01	3.000E+01
	4.00000E-02	1.823E+01	1.479E+01
	5.00000E-02	1.027E+01	8.396E+00
	6.00000E-02	6.433E+00	5.242E+00
	8.00000E-02	3.100E+00	2.465E+00
	1.00000E-01	1.786E+00	1.367E+00
	1.06756E-01	1.525E+00	1.150E+00
K	1.06756E-01	5.622E+00	1.582E+00
	1.50000E-01	2.434E+00	1.100E+00
	2.00000E-01	1.213E+00	6.581E-01
	3.00000E-01	4.859E-01	2.896E-01
	4.00000E-01	2.749E-01	1.632E-01
	5.00000E-01	1.872E-01	1.085E-01
	6.00000E-01	1.421E-01	8.018E-02
	8.00000E-01	9.804E-02	5.311E-02
	1.00000E+00	7.686E-02	4.080E-02
	1.25000E+00	6.251E-02	3.258E-02
	1.50000E+00	5.504E-02	2.831E-02
	2.00000E+00	4.822E-02	2.490E-02
	3.00000E+00	4.409E-02	2.419E-02
	4.00000E+00	4.363E-02	2.539E-02
	5.00000E+00	4.438E-02	2.688E-02
	6.00000E+00	4.560E-02	2.832E-02
	8.00000E+00	4.856E-02	3.079E-02
	1.00000E+01	5.171E-02	3.275E-02
	1.50000E+01	5.895E-02	3.575E-02
	2.00000E+01	6.473E-02	3.692E-02

THORIUM
Z = 90

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.614E+03	6.600E+03
	1.08088E-03	5.747E+03	5.733E+03
	1.16830E-03	4.976E+03	4.962E+03
N2	1.16830E-03	5.048E+03	5.034E+03
	1.24630E-03	4.463E+03	4.449E+03
	1.32950E-03	3.937E+03	3.924E+03
N1	1.32950E-03	4.017E+03	4.003E+03
	1.50000E-03	3.161E+03	3.148E+03
	2.00000E-03	1.742E+03	1.729E+03
	3.00000E-03	7.180E+02	7.070E+02
	3.33200E-03	5.671E+02	5.565E+02
M5	3.33200E-03	1.394E+03	1.346E+03
	3.41048E-03	1.304E+03	1.260E+03
	3.49080E-03	1.226E+03	1.185E+03
M4	3.49080E-03	1.749E+03	1.683E+03
	4.00000E-03	1.253E+03	1.208E+03
	4.04610E-03	1.217E+03	1.174E+03
M3	4.04610E-03	1.415E+03	1.364E+03
	4.42089E-03	1.137E+03	1.098E+03
	4.83040E-03	9.103E+02	8.797E+02
M2	4.83040E-03	9.655E+02	9.330E+02
	5.00000E-03	8.878E+02	8.581E+02
	5.18230E-03	8.129E+02	7.859E+02
M1	5.18230E-03	8.477E+02	8.196E+02
	6.00000E-03	5.945E+02	5.749E+02
	8.00000E-03	2.939E+02	2.830E+02
	1.00000E-02	1.689E+02	1.615E+02
	1.50000E-02	6.141E+01	5.718E+01
	1.63003E-02	4.991E+01	4.611E+01
L3	1.63003E-02	1.156E+02	8.732E+01
	1.79166E-02	9.924E+01	6.924E+01
	1.96932E-02	6.984E+01	5.492E+01
L2	1.96932E-02	9.527E+01	6.836E+01
	2.00000E-02	9.368E+01	6.714E+01
	2.04721E-02	8.851E+01	6.383E+01
L1	2.04721E-02	1.018E+02	7.259E+01
	3.00000E-02	3.892E+01	3.032E+01
	4.00000E-02	1.865E+01	1.503E+01
	5.00000E-02	1.052E+01	8.558E+00
	6.00000E-02	6.592E+00	5.355E+00
	8.00000E-02	3.178E+00	2.526E+00
	1.00000E-01	1.830E+00	1.403E+00
	1.09651E-01	1.465E+00	1.100E+00
K	1.09651E-01	5.336E+00	1.502E+00
	1.50000E-01	2.472E+00	1.090E+00
	2.00000E-01	1.234E+00	6.603E-01
	3.00000E-01	4.939E-01	2.931E-01
	4.00000E-01	2.789E-01	1.656E-01
	5.00000E-01	1.895E-01	1.101E-01
	6.00000E-01	1.435E-01	8.128E-02
	8.00000E-01	9.861E-02	5.366E-02
	1.00000E+00	7.709E-02	4.109E-02
	1.25000E+00	6.251E-02	3.269E-02
	1.50000E+00	5.498E-02	2.834E-02
	2.00000E+00	4.812E-02	2.487E-02
	3.00000E+00	4.396E-02	2.411E-02
	4.00000E+00	4.347E-02	2.528E-02
	5.00000E+00	4.421E-02	2.674E-02
	6.00000E+00	4.542E-02	2.817E-02
	8.00000E+00	4.836E-02	3.060E-02
	1.00000E+01	5.149E-02	3.253E-02
	1.50000E+01	5.871E-02	3.550E-02
	2.00000E+01	6.447E-02	3.664E-02


Z = 88, RADIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


Z = 89, ACTINIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

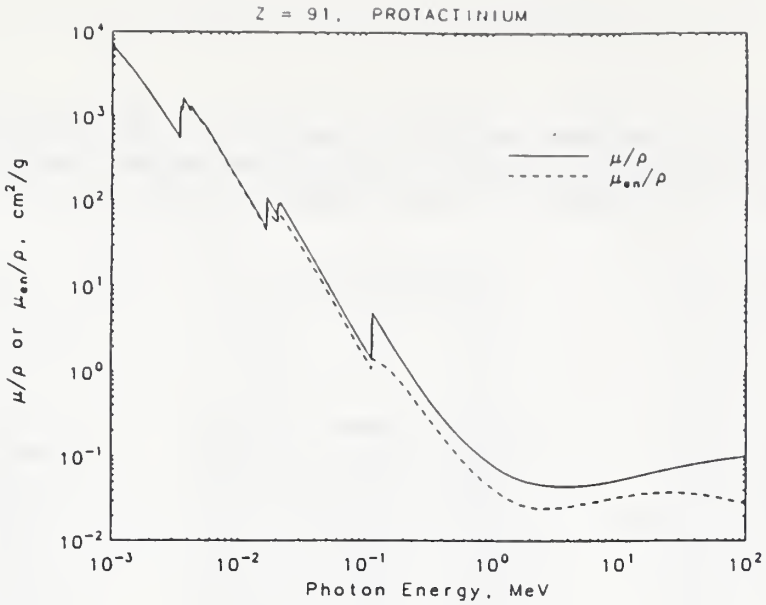

Z = 90, THORIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

PROTACTINIUM
Z = 91

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{ep}/ρ (cm^2/g)
	1.00000E-03	6.530E+03	6.515E+03
	1.00334E-03	6.490E+03	6.476E+03
	1.00670E-03	6.451E+03	6.437E+03
N3	1.00670E-03	6.868E+03	6.853E+03
	1.11018E-03	5.755E+03	5.740E+03
	1.22430E-03	4.794E+03	4.780E+03
N2	1.22430E-03	4.863E+03	4.848E+03
	1.30316E-03	4.311E+03	4.296E+03
	1.38710E-03	3.815E+03	3.801E+03
N1	1.38710E-03	3.891E+03	3.877E+03
	1.50000E-03	3.327E+03	3.313E+03
	2.00000E-03	1.834E+03	1.821E+03
	3.00000E-03	7.558E+02	7.444E+02
	3.44180E-03	5.548E+02	5.440E+02
M5	3.44180E-03	1.363E+03	1.314E+03
	3.52548E-03	1.266E+03	1.222E+03
	3.61120E-03	1.185E+03	1.144E+03
M4	3.61120E-03	1.695E+03	1.628E+03
	4.00000E-03	1.315E+03	1.265E+03
	4.17380E-03	1.182E+03	1.139E+03
M3	4.17380E-03	1.374E+03	1.324E+03
	5.00000E-03	8.759E+02	8.454E+02
	5.00090E-03	8.755E+02	8.450E+02
M2	5.00090E-03	9.288E+02	8.964E+02
	5.18067E-03	8.514E+02	8.219E+02
	5.36690E-03	7.810E+02	7.541E+02
M1	5.36690E-03	8.144E+02	7.864E+02
	6.00000E-03	6.217E+02	6.004E+02
	8.00000E-03	3.074E+02	2.958E+02
	1.00000E-02	1.769E+02	1.690E+02
	1.50000E-02	6.442E+01	6.000E+01
	1.67331E-02	4.903E+01	4.522E+01
L3	1.67331E-02	1.130E+02	8.483E+01
	2.00000E-02	7.025E+01	5.486E+01
	2.03137E-02	6.747E+01	5.284E+01
L2	2.03137E-02	9.452E+01	6.704E+01
	2.07054E-02	8.995E+01	6.418E+01
	2.11046E-02	8.576E+01	6.153E+01
L1	2.11046E-02	9.861E+01	6.990E+01
	3.00000E-02	4.077E+01	3.146E+01
	4.00000E-02	1.957E+01	1.567E+01
	5.00000E-02	1.105E+01	8.950E+00
	6.00000E-02	6.929E+00	5.612E+00
	8.00000E-02	3.342E+00	2.655E+00
	1.00000E-01	1.924E+00	1.477E+00
	1.12601E-01	1.445E+00	1.081E+00
K	1.12601E-01	5.198E+00	1.466E+00
	1.50000E-01	2.575E+00	1.106E+00
	2.00000E-01	1.288E+00	6.792E-01
	3.00000E-01	5.152E-01	3.042E-01
	4.00000E-01	2.904E-01	1.723E-01
	5.00000E-01	1.969E-01	1.146E-01
	6.00000E-01	1.487E-01	8.453E-02
	8.00000E-01	1.018E-01	5.563E-02
	1.00000E+00	7.937E-02	4.247E-02
	1.25000E+00	6.420E-02	3.367E-02
	1.50000E+00	5.637E-02	2.911E-02
	2.00000E+00	4.927E-02	2.547E-02
	3.00000E+00	4.496E-02	2.463E-02
	4.00000E+00	4.445E-02	2.580E-02
	5.00000E+00	4.519E-02	2.727E-02
	6.00000E+00	4.641E-02	2.870E-02
	8.00000E+00	4.943E-02	3.117E-02
	1.00000E+01	5.261E-02	3.311E-02
	1.50000E+01	6.000E-02	3.609E-02
	2.00000E+01	6.592E-02	3.724E-02

URANIUM
Z = 92

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{ep}/ρ (cm^2/g)
	1.00000E-03	6.626E+03	6.612E+03
	1.02220E-03	6.375E+03	6.360E+03
	1.04490E-03	6.127E+03	6.112E+03
N3	1.04490E-03	6.519E+03	6.504E+03
	1.15314E-03	5.446E+03	5.431E+03
	1.27260E-03	4.526E+03	4.511E+03
N2	1.27260E-03	4.589E+03	4.575E+03
	1.35409E-03	4.065E+03	4.051E+03
	1.44080E-03	3.598E+03	3.584E+03
N1	1.44080E-03	3.668E+03	3.654E+03
	1.50000E-03	3.382E+03	3.368E+03
	2.00000E-03	1.865E+03	1.852E+03
	3.00000E-03	7.692E+02	7.578E+02
	3.55170E-03	5.257E+02	5.151E+02
M5	3.55170E-03	1.266E+03	1.220E+03
	3.63859E-03	1.188E+03	1.142E+03
	3.72760E-03	1.112E+03	1.072E+03
M4	3.72760E-03	1.582E+03	1.517E+03
	4.00000E-03	1.329E+03	1.277E+03
	4.30340E-03	1.110E+03	1.068E+03
M3	4.30340E-03	1.292E+03	1.242E+03
	5.00000E-03	8.891E+02	8.569E+02
	5.18220E-03	8.118E+02	7.825E+02
M2	5.18220E-03	8.611E+02	8.301E+02
	5.36198E-03	7.915E+02	7.632E+02
	5.54800E-03	7.282E+02	7.022E+02
M1	5.54800E-03	7.592E+02	7.322E+02
	6.00000E-03	6.284E+02	6.062E+02
	8.00000E-03	3.108E+02	2.989E+02
	1.00000E-02	1.791E+02	1.711E+02
	1.50000E-02	6.528E+01	6.084E+01
	1.71663E-02	4.663E+01	4.293E+01
L3	1.71663E-02	1.070E+02	7.980E+01
	2.00000E-02	7.106E+01	5.496E+01
	2.09476E-02	6.300E+01	4.914E+01
L2	2.09476E-02	8.838E+01	6.222E+01
	2.13487E-02	9.515E+01	5.959E+01
	2.17574E-02	8.023E+01	5.715E+01
L1	2.17574E-02	9.222E+01	6.487E+01
	3.00000E-02	4.128E+01	3.149E+01
	4.00000E-02	1.983E+01	1.576E+01
	5.00000E-02	1.121E+01	9.034E+00
	6.00000E-02	7.035E+00	5.678E+00
	8.00000E-02	3.395E+00	2.695E+00
	1.00000E-01	1.954E+00	1.502E+00
	1.15606E-01	1.378E+00	1.027E+00
K	1.15606E-01	4.893E+00	1.382E+00
	1.50000E-01	2.591E+00	1.083E+00
	2.00000E-01	1.298E+00	6.746E-01
	3.00000E-01	5.192E-01	3.050E-01
	4.00000E-01	2.922E-01	1.732E-01
	5.00000E-01	1.976E-01	1.152E-01
	6.00000E-01	1.490E-01	8.494E-02
	8.00000E-01	1.016E-01	5.574E-02
	1.00000E+00	7.896E-02	4.241E-02
	1.25000E+00	6.370E-02	3.351E-02
	1.50000E+00	5.587E-02	2.891E-02
	2.00000E+00	4.878E-02	2.523E-02
	3.00000E+00	4.447E-02	2.434E-02
	4.00000E+00	4.392E-02	2.546E-02
	5.00000E+00	4.463E-02	2.689E-02
	6.00000E+00	4.583E-02	2.829E-02
	8.00000E+00	4.879E-02	3.068E-02
	1.00000E+01	5.195E-02	3.259E-02
	1.50000E+01	5.927E-02	3.552E-02
	2.00000E+01	6.512E-02	3.662E-02


Z = 91, PROTACTINIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

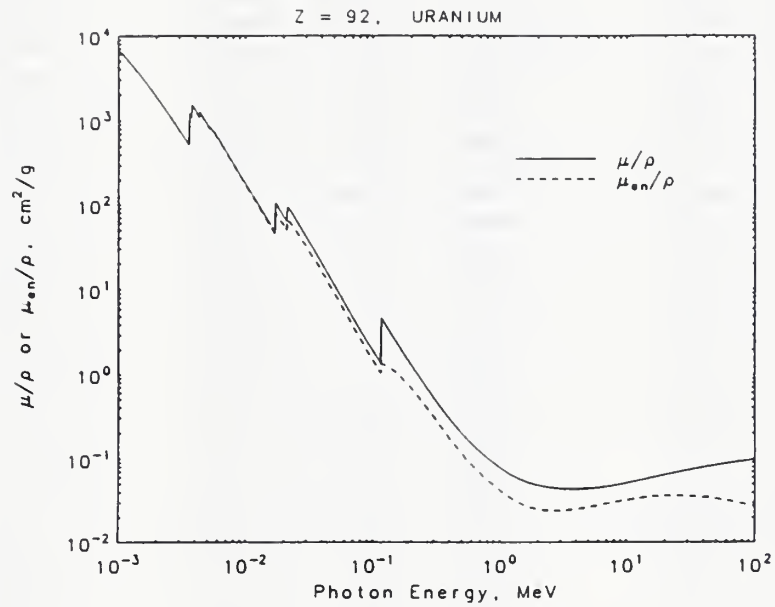

Z = 92, URANIUM
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

Table 4. Values of the mass attenuation coefficient, μ/ρ, and the mass energy-absorption coefficient, μ_{en}/ρ, as a function of photon energy, for compounds and mixtures. Absorption edges for the constituent atoms are indicated by the atomic number and shell designation.

A-150 TISSUE-EQUIVALENT PLASTIC

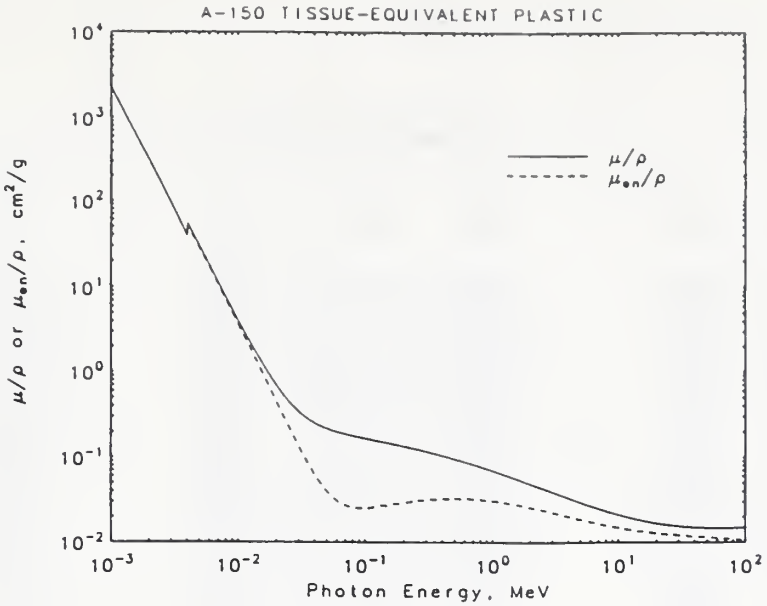
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.259E+03	2.256E+03
	1.50000E-03	7.282E+02	7.267E+02
	2.00000E-03	3.183E+02	3.172E+02
	3.00000E-03	9.652E+01	9.576E+01
	4.00000E-03	4.081E+01	4.021E+01
	4.03810E-03	3.966E+01	3.907E+01
20 K	4.03810E-03	5.629E+01	5.326E+01
	5.00000E-03	3.069E+01	2.901E+01
	6.00000E-03	1.813E+01	1.708E+01
	8.00000E-03	7.914E+00	7.337E+00
	1.00000E-02	4.186E+00	3.771E+00
	1.50000E-02	1.394E+00	1.106E+00
	2.00000E-02	7.068E-01	4.605E-01
	3.00000E-02	3.481E-01	1.378E-01
	4.00000E-02	2.562E-01	6.411E-02
	5.00000E-02	2.198E-01	4.018E-02
	6.00000E-02	2.008E-01	3.095E-02
	8.00000E-02	1.803E-01	2.561E-02
	1.00000E-01	1.680E-01	2.520E-02
	1.50000E-01	1.485E-01	2.736E-02
	2.00000E-01	1.353E-01	2.937E-02
	3.00000E-01	1.173E-01	3.159E-02
	4.00000E-01	1.049E-01	3.245E-02
	5.00000E-01	9.579E-02	3.265E-02
	6.00000E-01	8.857E-02	3.249E-02
	8.00000E-01	7.777E-02	3.172E-02
	1.00000E+00	6.992E-02	3.070E-02
	1.25000E+00	6.253E-02	2.934E-02
	1.50000E+00	5.691E-02	2.805E-02
	2.00000E+00	4.880E-02	2.578E-02
	3.00000E+00	3.907E-02	2.247E-02
	4.00000E+00	3.335E-02	2.025E-02
	5.00000E+00	2.958E-02	1.867E-02
	6.00000E+00	2.690E-02	1.751E-02
	8.00000E+00	2.338E-02	1.592E-02
	1.00000E+01	2.117E-02	1.489E-02
	1.50000E+01	1.819E-02	1.346E-02
	2.00000E+01	1.675E-02	1.275E-02

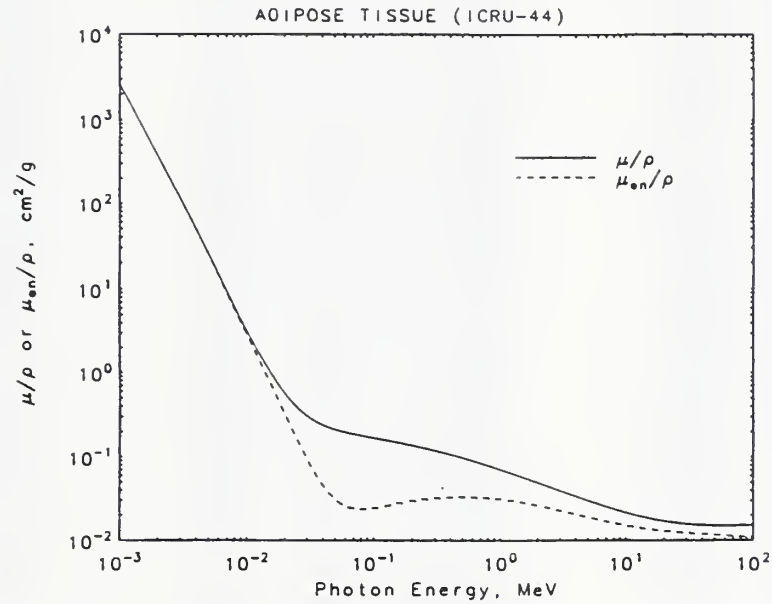
ADIPOSE TISSUE (ICRU-44)

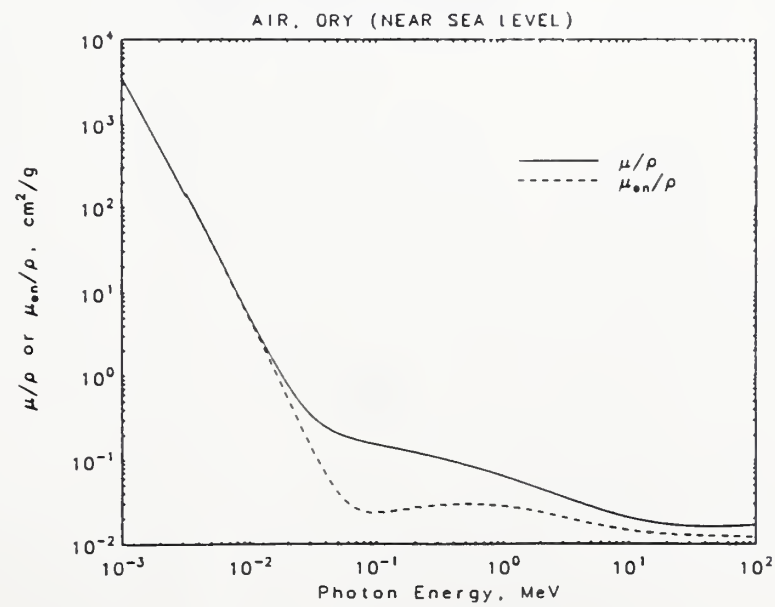
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.628E+03	2.623E+03
	1.03542E-03	2.392E+03	2.387E+03
	1.07210E-03	2.176E+03	2.171E+03
11 K	1.07210E-03	2.182E+03	2.177E+03
	1.50000E-03	8.622E+02	8.601E+02
	2.00000E-03	3.800E+02	3.787E+02
	2.47200E-03	2.053E+02	2.043E+02
16 K	2.47200E-03	2.072E+02	2.060E+02
	2.64140E-03	1.707E+02	1.696E+02
	2.82240E-03	1.405E+02	1.396E+02
17 K	2.82240E-03	1.420E+02	1.409E+02
	3.00000E-03	1.188E+02	1.178E+02
	4.00000E-03	5.054E+01	4.983E+01
	5.00000E-03	2.587E+01	2.531E+01
	6.00000E-03	1.494E+01	1.446E+01
	8.00000E-03	6.300E+00	5.917E+00
	1.00000E-02	3.268E+00	2.935E+00
	1.50000E-02	1.083E+00	8.103E-01
	2.00000E-02	5.677E-01	3.251E-01
	3.00000E-02	3.063E-01	9.495E-02
	4.00000E-02	2.396E-01	4.575E-02
	5.00000E-02	2.123E-01	3.085E-02
	6.00000E-02	1.974E-01	2.567E-02
	8.00000E-02	1.800E-01	2.358E-02
	1.00000E-01	1.688E-01	2.433E-02
	1.50000E-01	1.500E-01	2.737E-02
	2.00000E-01	1.368E-01	2.959E-02
	3.00000E-01	1.187E-01	3.194E-02
	4.00000E-01	1.062E-01	3.283E-02
	5.00000E-01	9.696E-02	3.304E-02
	6.00000E-01	8.965E-02	3.289E-02
	8.00000E-01	7.873E-02	3.211E-02
	1.00000E+00	7.078E-02	3.108E-02
	1.25000E+00	6.330E-02	2.970E-02
	1.50000E+00	5.760E-02	2.839E-02
	2.00000E+00	4.940E-02	2.610E-02
	3.00000E+00	3.955E-02	2.275E-02
	4.00000E+00	3.377E-02	2.050E-02
	5.00000E+00	2.995E-02	1.891E-02
	6.00000E+00	2.725E-02	1.773E-02
	8.00000E+00	2.368E-02	1.612E-02
	1.00000E+01	2.145E-02	1.509E-02
	1.50000E+01	1.843E-02	1.365E-02
	2.00000E+01	1.698E-02	1.293E-02

AIR, DRY (NEAR SEA LEVEL)

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.606E+03	3.599E+03
	1.50000E-03	1.191E+03	1.188E+03
	2.00000E-03	5.279E+02	5.262E+02
	3.00000E-03	1.625E+02	1.614E+02
	3.20290E-03	1.340E+02	1.330E+02
18 K	3.20290E-03	1.485E+02	1.460E+02
	4.00000E-03	7.788E+01	7.636E+01
	5.00000E-03	4.027E+01	3.931E+01
	6.00000E-03	2.341E+01	2.270E+01
	8.00000E-03	9.921E+00	9.446E+00
	1.00000E-02	5.120E+00	4.742E+00
	1.50000E-02	1.614E+00	1.334E+00
	2.00000E-02	7.779E-01	5.389E-01
	3.00000E-02	3.538E-01	1.537E-01
	4.00000E-02	2.485E-01	6.833E-02
	5.00000E-02	2.080E-01	4.098E-02
	6.00000E-02	1.875E-01	3.041E-02
	8.00000E-02	1.662E-01	2.407E-02
	1.00000E-01	1.541E-01	2.325E-02
	1.50000E-01	1.356E-01	2.496E-02
	2.00000E-01	1.233E-01	2.672E-02
	3.00000E-01	1.067E-01	2.872E-02
	4.00000E-01	9.549E-02	2.949E-02
	5.00000E-01	8.712E-02	2.966E-02
	6.00000E-01	8.055E-02	2.953E-02
	8.00000E-01	7.074E-02	2.882E-02
	1.00000E+00	6.358E-02	2.789E-02
	1.25000E+00	5.687E-02	2.666E-02
	1.50000E+00	5.175E-02	2.547E-02
	2.00000E+00	4.447E-02	2.345E-02
	3.00000E+00	3.581E-02	2.057E-02
	4.00000E+00	3.079E-02	1.870E-02
	5.00000E+00	2.751E-02	1.740E-02
	6.00000E+00	2.522E-02	1.647E-02
	8.00000E+00	2.225E-02	1.525E-02
	1.00000E+01	2.045E-02	1.450E-02
	1.50000E+01	1.810E-02	1.353E-02
	2.00000E+01	1.705E-02	1.311E-02


A-150 TISSUE-EQUIVALENT PLASTIC
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


ADIPOSE TISSUE (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


AIR, DRY (NEAR SEA LEVEL)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

ALANINE

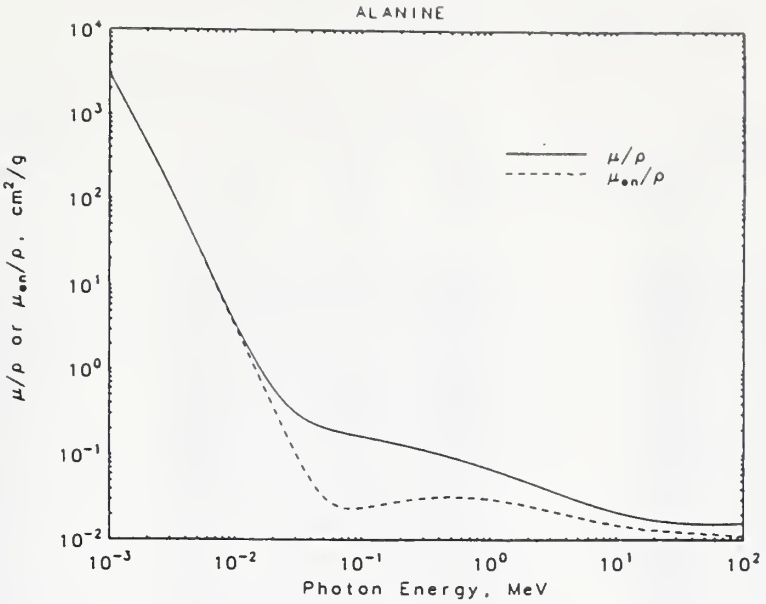
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	3.064E+03	3.057E+03
1.50000E-03	1.010E+03	1.007E+03
2.00000E-03	4.470E+02	4.456E+02
3.00000E-03	1.374E+02	1.365E+02
4.00000E-03	5.847E+01	5.777E+01
5.00000E-03	2.991E+01	2.934E+01
6.00000E-03	1.725E+01	1.676E+01
8.00000E-03	7.248E+00	6.853E+00
1.00000E-02	3.738E+00	3.398E+00
1.50000E-02	1.210E+00	9.362E-01
2.00000E-02	6.158E-01	3.743E-01
3.00000E-02	3.158E-01	1.076E-01
4.00000E-02	2.402E-01	5.034E-02
5.00000E-02	2.099E-01	3.275E-02
6.00000E-02	1.938E-01	2.643E-02
8.00000E-02	1.756E-01	2.345E-02
1.00000E-01	1.643E-01	2.387E-02
1.50000E-01	1.456E-01	2.660E-02
2.00000E-01	1.328E-01	2.871E-02
3.00000E-01	1.151E-01	3.096E-02
4.00000E-01	1.030E-01	3.182E-02
5.00000E-01	9.400E-02	3.202E-02
6.00000E-01	8.691E-02	3.187E-02
8.00000E-01	7.632E-02	3.112E-02
1.00000E+00	6.862E-02	3.012E-02
1.25000E+00	6.137E-02	2.878E-02
1.50000E+00	5.584E-02	2.751E-02
2.00000E+00	4.792E-02	2.530E-02
3.00000E+00	3.843E-02	2.210E-02
4.00000E+00	3.289E-02	1.996E-02
5.00000E+00	2.924E-02	1.846E-02
6.00000E+00	2.666E-02	1.736E-02
8.00000E+00	2.328E-02	1.587E-02
1.00000E+01	2.119E-02	1.493E-02
1.50000E+01	1.838E-02	1.362E-02
2.00000E+01	1.706E-02	1.299E-02

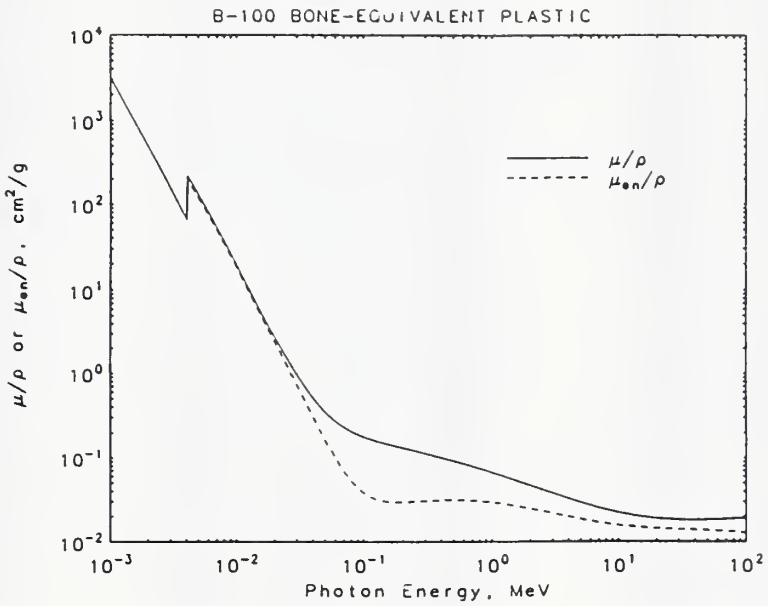
B-100 BONE-EQUIVALENT PLASTIC

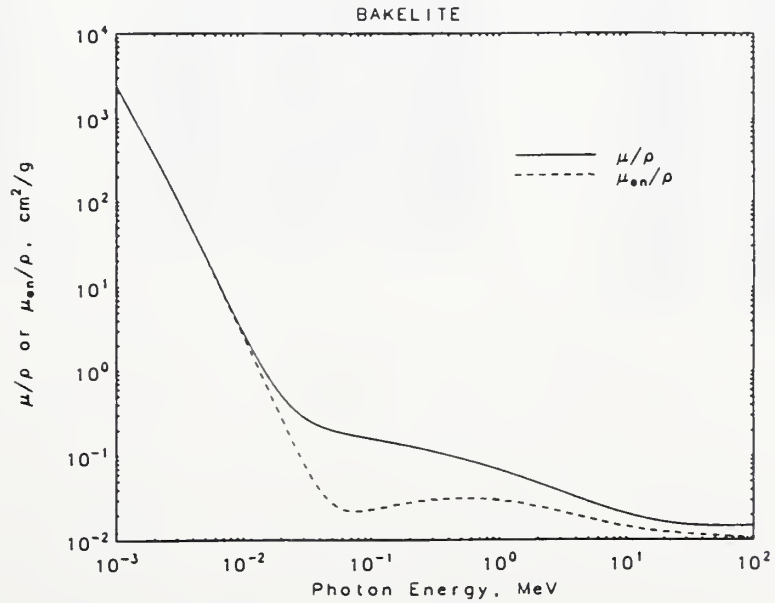
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.211E+03	3.203E+03
	1.50000E-03	1.083E+03	1.080E+03
	2.00000E-03	4.878E+02	4.859E+02
	3.00000E-03	1.542E+02	1.530E+02
	4.00000E-03	6.717E+01	6.623E+01
	4.03810E-03	6.535E+01	6.442E+01
20 K	4.03810E-03	2.251E+02	2.008E+02
	5.00000E-03	1.298E+02	1.178E+02
	6.00000E-03	7.942E+01	7.294E+01
	8.00000E-03	3.619E+01	3.363E+01
	1.00000E-02	1.944E+01	1.812E+01
	1.50000E-02	6.222E+00	5.694E+00
	2.00000E-02	2.798E+00	2.452E+00
	3.00000E-02	9.752E-01	7.337E-01
	4.00000E-02	5.179E-01	3.124E-01
	5.00000E-02	3.506E-01	1.648E-01
	6.00000E-02	2.738E-01	1.014E-01
	8.00000E-02	2.076E-01	5.372E-02
	1.00000E-01	1.793E-01	3.864E-02
	1.50000E-01	1.482E-01	3.031E-02
	2.00000E-01	1.325E-01	2.984E-02
	3.00000E-01	1.135E-01	3.081E-02
	4.00000E-01	1.012E-01	3.135E-02
	5.00000E-01	9.227E-02	3.145E-02
	6.00000E-01	8.525E-02	3.126E-02
	8.00000E-01	7.481E-02	3.047E-02
	1.00000E+00	6.723E-02	2.947E-02
	1.25000E+00	6.012E-02	2.815E-02
	1.50000E+00	5.473E-02	2.691E-02
	2.00000E+00	4.705E-02	2.478E-02
	3.00000E+00	3.799E-02	2.180E-02
	4.00000E+00	3.277E-02	1.989E-02
	5.00000E+00	2.938E-02	1.858E-02
	6.00000E+00	2.703E-02	1.765E-02
	8.00000E+00	2.400E-02	1.644E-02
	1.00000E+01	2.218E-02	1.571E-02
	1.50000E+01	1.987E-02	1.478E-02
	2.00000E+01	1.888E-02	1.438E-02

BAKELITE

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.484E+03	2.480E+03
1.50000E-03	8.027E+02	8.010E+02
2.00000E-03	3.512E+02	3.500E+02
3.00000E-03	1.065E+02	1.057E+02
4.00000E-03	4.494E+01	4.433E+01
5.00000E-03	2.288E+01	2.237E+01
6.00000E-03	1.315E+01	1.272E+01
8.00000E-03	5.521E+00	5.162E+00
1.00000E-02	2.860E+00	2.545E+00
1.50000E-02	9.552E-01	6.961E-01
2.00000E-02	5.089E-01	2.779E-01
3.00000E-02	2.824E-01	8.135E-02
4.00000E-02	2.241E-01	3.988E-02
5.00000E-02	2.000E-01	2.754E-02
6.00000E-02	1.866E-01	2.340E-02
8.00000E-02	1.707E-01	2.200E-02
1.00000E-01	1.602E-01	2.292E-02
1.50000E-01	1.424E-01	2.594E-02
2.00000E-01	1.300E-01	2.809E-02
3.00000E-01	1.127E-01	3.033E-02
4.00000E-01	1.009E-01	3.118E-02
5.00000E-01	9.210E-02	3.138E-02
6.00000E-01	8.516E-02	3.124E-02
8.00000E-01	7.478E-02	3.049E-02
1.00000E+00	6.723E-02	2.951E-02
1.25000E+00	6.013E-02	2.821E-02
1.50000E+00	5.472E-02	2.696E-02
2.00000E+00	4.694E-02	2.479E-02
3.00000E+00	3.761E-02	2.163E-02
4.00000E+00	3.215E-02	1.951E-02
5.00000E+00	2.854E-02	1.802E-02
6.00000E+00	2.599E-02	1.692E-02
8.00000E+00	2.264E-02	1.543E-02
1.00000E+01	2.055E-02	1.447E-02
1.50000E+01	1.775E-02	1.315E-02
2.00000E+01	1.641E-02	1.249E-02


ALANINE
μ/ρ
μ_{en}/ρ
μ/ρ or μ_{en}/ρ, cm^2/g
Photon Energy, MeV


B-100 BONE-EQUIVALENT PLASTIC
μ/ρ
μ_{en}/ρ
μ/ρ or μ_{en}/ρ, cm^2/g
Photon Energy, MeV


BAKELITE
μ/ρ
μ_{en}/ρ
μ/ρ or μ_{en}/ρ, cm^2/g
Photon Energy, MeV

BLOOD, WHOLE (ICRU-44)

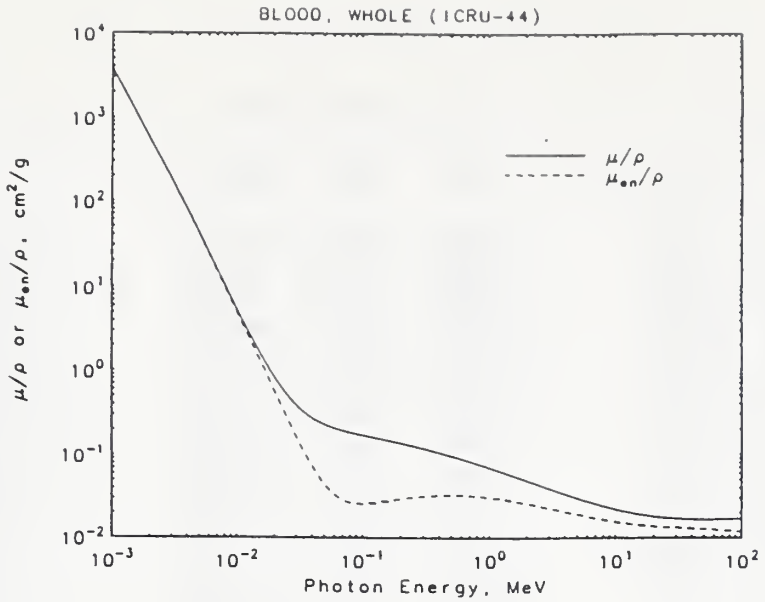
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.806E+03	3.795E+03
	1.03542E-03	3.473E+03	3.462E+03
	1.07210E-03	3.167E+03	3.158E+03
11 K	1.07210E-03	3.173E+03	3.164E+03
	1.50000E-03	1.282E+03	1.278E+03
	2.00000E-03	5.737E+02	5.718E+02
	2.14550E-03	4.700E+02	4.682E+02
15 K	2.14550E-03	4.722E+02	4.703E+02
	2.30297E-03	3.858E+02	3.841E+02
	2.47200E-03	3.149E+02	3.134E+02
16 K	2.47200E-03	3.186E+02	3.168E+02
	2.64140E-03	2.633E+02	2.618E+02
	2.82240E-03	2.175E+02	2.161E+02
17 K	2.82240E-03	2.219E+02	2.201E+02
	3.00000E-03	1.862E+02	1.846E+02
	3.60740E-03	1.088E+02	1.076E+02
19 K	3.60740E-03	1.109E+02	1.094E+02
	4.00000E-03	8.187E+01	8.066E+01
	5.00000E-03	4.232E+01	4.147E+01
	6.00000E-03	2.458E+01	2.393E+01
	7.11200E-03	1.479E+01	1.425E+01
26 K	7.11200E-03	1.514E+01	1.450E+01
	8.00000E-03	1.068E+01	1.013E+01
	1.00000E-02	5.519E+00	5.096E+00
	1.50000E-02	1.744E+00	1.440E+00
	2.00000E-02	8.428E-01	5.831E-01
	3.00000E-02	3.852E-01	1.669E-01
	4.00000E-02	2.715E-01	7.443E-02
	5.00000E-02	2.278E-01	4.477E-02
	6.00000E-02	2.057E-01	3.332E-02
	8.00000E-02	1.827E-01	2.645E-02
	1.00000E-01	1.695E-01	2.559E-02
	1.50000E-01	1.492E-01	2.749E-02
	2.00000E-01	1.358E-01	2.944E-02
	3.00000E-01	1.176E-01	3.164E-02
	4.00000E-01	1.052E-01	3.249E-02
	5.00000E-01	9.598E-02	3.269E-02
	6.00000E-01	8.874E-02	3.254E-02
	8.00000E-01	7.793E-02	3.177E-02
	1.00000E+00	7.007E-02	3.074E-02
	1.25000E+00	6.265E-02	2.938E-02
	1.50000E+00	5.701E-02	2.807E-02
	2.00000E+00	4.896E-02	2.584E-02
	3.00000E+00	3.932E-02	2.260E-02
	4.00000E+00	3.371E-02	2.046E-02
	5.00000E+00	3.002E-02	1.897E-02
	6.00000E+00	2.743E-02	1.788E-02
	8.00000E+00	2.405E-02	1.642E-02
	1.00000E+01	2.196E-02	1.550E-02
	1.50000E+01	1.920E-02	1.425E-02
	2.00000E+01	1.793E-02	1.366E-02

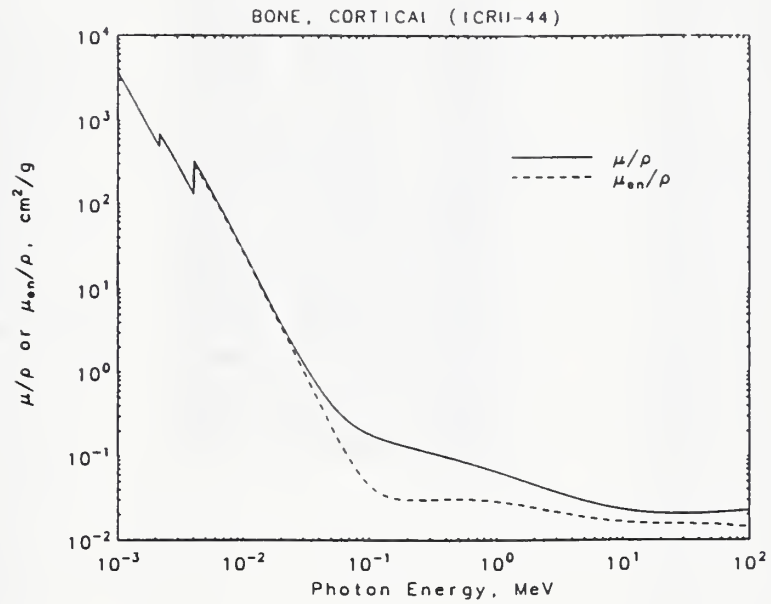
BONE, CORTICAL (ICRU-44)

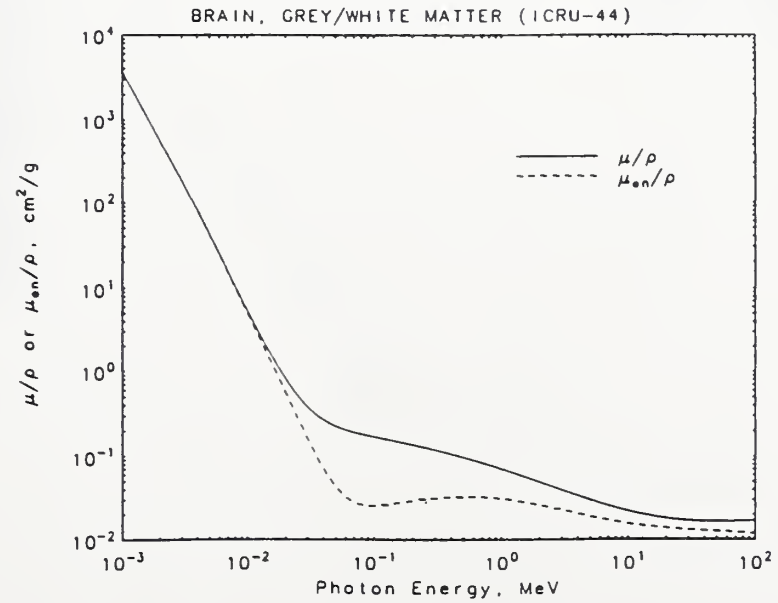
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.781E+03	3.772E+03
	1.03542E-03	3.452E+03	3.444E+03
	1.07210E-03	3.150E+03	3.143E+03
11 K	1.07210E-03	3.156E+03	3.149E+03
	1.18283E-03	2.434E+03	2.429E+03
	1.30500E-03	1.873E+03	1.869E+03
12 K	1.30500E-03	1.883E+03	1.878E+03
	1.50000E-03	1.295E+03	1.291E+03
	2.00000E-03	5.869E+02	5.846E+02
	2.14550E-03	4.824E+02	4.803E+02
15 K	2.14550E-03	7.114E+02	6.961E+02
	2.30297E-03	5.916E+02	5.789E+02
	2.47200E-03	4.907E+02	4.805E+02
16 K	2.47200E-03	4.962E+02	4.857E+02
	3.00000E-03	2.958E+02	2.897E+02
	4.00000E-03	1.331E+02	1.303E+02
	4.03810E-03	1.296E+02	1.269E+02
20 K	4.03810E-03	3.332E+02	3.006E+02
	5.00000E-03	1.917E+02	1.757E+02
	6.00000E-03	1.171E+02	1.085E+02
	8.00000E-03	5.323E+01	4.987E+01
	1.00000E-02	2.851E+01	2.680E+01
	1.50000E-02	9.032E+00	8.388E+00
	2.00000E-02	4.001E+00	3.601E+00
	3.00000E-02	1.331E+00	1.070E+00
	4.00000E-02	6.655E-01	4.507E-01
	5.00000E-02	4.242E-01	2.336E-01
	6.00000E-02	3.148E-01	1.400E-01
	8.00000E-02	2.229E-01	6.896E-02
	1.00000E-01	1.855E-01	4.585E-02
	1.50000E-01	1.480E-01	3.183E-02
	2.00000E-01	1.309E-01	3.003E-02
	3.00000E-01	1.113E-01	3.032E-02
	4.00000E-01	9.908E-02	3.069E-02
	5.00000E-01	9.022E-02	3.073E-02
	6.00000E-01	8.332E-02	3.052E-02
	8.00000E-01	7.308E-02	2.973E-02
	1.00000E+00	6.566E-02	2.875E-02
	1.25000E+00	5.871E-02	2.745E-02
	1.50000E+00	5.346E-02	2.623E-02
	2.00000E+00	4.607E-02	2.421E-02
	3.00000E+00	3.745E-02	2.145E-02
	4.00000E+00	3.257E-02	1.975E-02
	5.00000E+00	2.946E-02	1.864E-02
	6.00000E+00	2.734E-02	1.788E-02
	8.00000E+00	2.467E-02	1.695E-02
	1.00000E+01	2.314E-02	1.644E-02
	1.50000E+01	2.132E-02	1.587E-02
	2.00000E+01	2.068E-02	1.568E-02

BRAIN, GREY/WHITE MATTER (ICRU-44)

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.697E+03	3.686E+03
	1.03542E-03	3.373E+03	3.363E+03
	1.07210E-03	3.075E+03	3.067E+03
11 K	1.07210E-03	3.087E+03	3.078E+03
	1.50000E-03	1.246E+03	1.243E+03
	2.00000E-03	5.576E+02	5.557E+02
	2.14550E-03	4.567E+02	4.550E+02
15 K	2.14550E-03	4.656E+02	4.634E+02
	2.30297E-03	3.806E+02	3.787E+02
	2.47200E-03	3.108E+02	3.091E+02
16 K	2.47200E-03	3.145E+02	3.125E+02
	2.64140E-03	2.601E+02	2.584E+02
	2.82240E-03	2.149E+02	2.134E+02
17 K	2.82240E-03	2.193E+02	2.174E+02
	3.00000E-03	1.842E+02	1.824E+02
	3.60740E-03	1.077E+02	1.064E+02
19 K	3.60740E-03	1.109E+02	1.092E+02
	4.00000E-03	8.191E+01	8.058E+01
	5.00000E-03	4.242E+01	4.152E+01
	6.00000E-03	2.468E+01	2.400E+01
	8.00000E-03	1.047E+01	9.988E+00
	1.00000E-02	5.410E+00	5.017E+00
	1.50000E-02	1.710E+00	1.412E+00
	2.00000E-02	8.281E-01	5.706E-01
	3.00000E-02	3.811E-01	1.629E-01
	4.00000E-02	2.702E-01	7.275E-02
	5.00000E-02	2.275E-01	4.394E-02
	6.00000E-02	2.058E-01	3.287E-02
	8.00000E-02	1.831E-01	2.632E-02
	1.00000E-01	1.701E-01	2.558E-02
	1.50000E-01	1.498E-01	2.757E-02
	2.00000E-01	1.364E-01	2.955E-02
	3.00000E-01	1.181E-01	3.178E-02
	4.00000E-01	1.056E-01	3.263E-02
	5.00000E-01	9.640E-02	3.283E-02
	6.00000E-01	8.913E-02	3.268E-02
	8.00000E-01	7.827E-02	3.191E-02
	1.00000E+00	7.037E-02	3.088E-02
	1.25000E+00	6.293E-02	2.951E-02
	1.50000E+00	5.726E-02	2.820E-02
	2.00000E+00	4.917E-02	2.595E-02
	3.00000E+00	3.947E-02	2.269E-02
	4.00000E+00	3.383E-02	2.053E-02
	5.00000E+00	3.012E-02	1.903E-02
	6.00000E+00	2.751E-02	1.793E-02
	8.00000E+00	2.409E-02	1.645E-02
	1.00000E+01	2.199E-02	1.552E-02
	1.50000E+01	1.920E-02	1.425E-02
	2.00000E+01	1.790E-02	1.364E-02


BLOOD, WHOLE (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


BONE, CORTICAL (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


BRAIN, GREY/WHITE MATTER (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

BREAST TISSUE (ICRU-44)

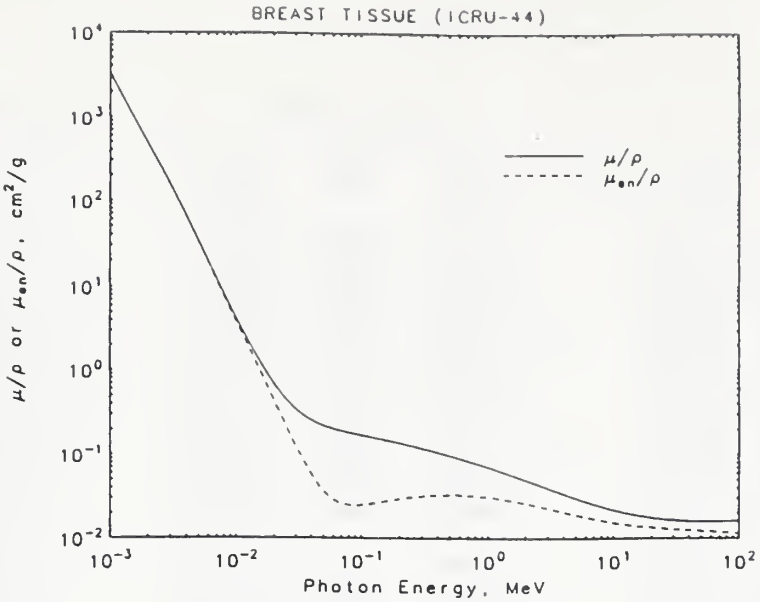
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.263E+03	3.255E+03
	1.03542E-03	2.975E+03	2.967E+03
	1.07210E-03	2.710E+03	2.703E+03
11 K	1.07210E-03	2.716E+03	2.709E+03
	1.50000E-03	1.088E+03	1.085E+03
	2.00000E-03	4.842E+02	4.825E+02
	2.14550E-03	3.961E+02	3.946E+02
15 K	2.14550E-03	3.983E+02	3.967E+02
	2.30297E-03	3.250E+02	3.235E+02
	2.47200E-03	2.649E+02	2.636E+02
16 K	2.47200E-03	2.686E+02	2.670E+02
	2.64140E-03	2.221E+02	2.204E+02
	2.82240E-03	1.831E+02	1.818E+02
17 K	2.82240E-03	1.845E+02	1.831E+02
	3.00000E-03	1.546E+02	1.533E+02
	4.00000E-03	6.625E+01	6.540E+01
	5.00000E-03	3.407E+01	3.341E+01
	6.00000E-03	1.972E+01	1.918E+01
	8.00000E-03	8.320E+00	7.899E+00
	1.00000E-02	4.295E+00	3.937E+00
	1.50000E-02	1.378E+00	1.094E+00
	2.00000E-02	6.889E-01	4.394E-01
	3.00000E-02	3.403E-01	1.260E-01
	4.00000E-02	2.530E-01	5.792E-02
	5.00000E-02	2.186E-01	3.666E-02
	6.00000E-02	2.006E-01	2.881E-02
	8.00000E-02	1.808E-01	2.470E-02
	1.00000E-01	1.688E-01	2.478E-02
	1.50000E-01	1.493E-01	2.734E-02
	2.00000E-01	1.361E-01	2.945E-02
	3.00000E-01	1.179E-01	3.173E-02
	4.00000E-01	1.055E-01	3.260E-02
	5.00000E-01	9.631E-02	3.281E-02
	6.00000E-01	8.904E-02	3.266E-02
	8.00000E-01	7.820E-02	3.188E-02
	1.00000E+00	7.031E-02	3.086E-02
	1.25000E+00	6.287E-02	2.949E-02
	1.50000E+00	5.721E-02	2.818E-02
	2.00000E+00	4.910E-02	2.592E-02
	3.00000E+00	3.937E-02	2.264E-02
	4.00000E+00	3.369E-02	2.045E-02
	5.00000E+00	2.995E-02	1.891E-02
	6.00000E+00	2.731E-02	1.779E-02
	8.00000E+00	2.384E-02	1.626E-02
	1.00000E+01	2.169E-02	1.529E-02
	1.50000E+01	1.882E-02	1.395E-02
	2.00000E+01	1.746E-02	1.330E-02

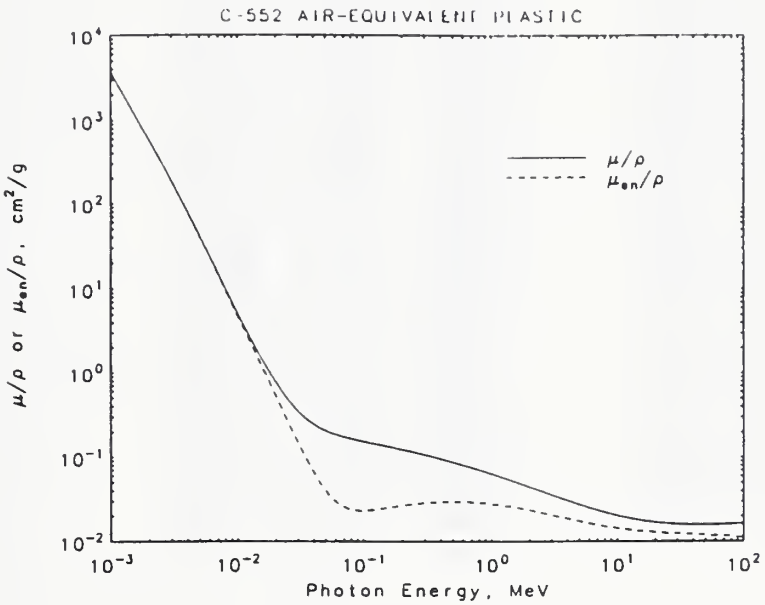
C-552 AIR-EQUIVALENT PLASTIC

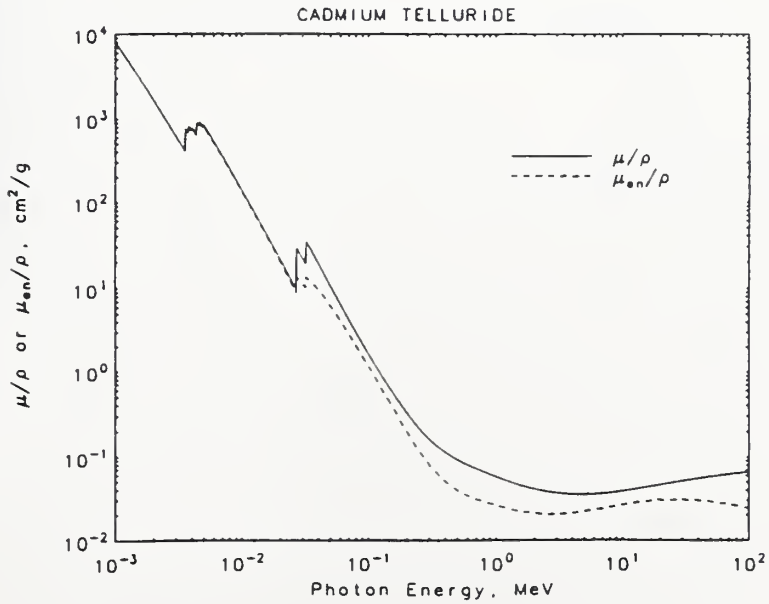
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.764E+03	3.747E+03
	1.50000E-03	1.281E+03	1.276E+03
	1.83890E-03	7.300E+02	7.271E+02
14 K	1.83890E-03	7.415E+02	7.380E+02
	2.00000E-03	5.868E+02	5.840E+02
	3.00000E-03	1.845E+02	1.832E+02
	4.00000E-03	7.961E+01	7.873E+01
	5.00000E-03	4.110E+01	4.041E+01
	6.00000E-03	2.384E+01	2.327E+01
	8.00000E-03	1.007E+01	9.632E+00
	1.00000E-02	5.179E+00	4.817E+00
	1.50000E-02	1.623E+00	1.346E+00
	2.00000E-02	7.794E-01	5.409E-01
	3.00000E-02	3.535E-01	1.531E-01
	4.00000E-02	2.482E-01	6.778E-02
	5.00000E-02	2.078E-01	4.060E-02
	6.00000E-02	1.874E-01	3.015E-02
	8.00000E-02	1.663E-01	2.395E-02
	1.00000E-01	1.542E-01	2.320E-02
	1.50000E-01	1.357E-01	2.495E-02
	2.00000E-01	1.234E-01	2.674E-02
	3.00000E-01	1.068E-01	2.874E-02
	4.00000E-01	9.558E-02	2.952E-02
	5.00000E-01	8.722E-02	2.970E-02
	6.00000E-01	8.064E-02	2.956E-02
	8.00000E-01	7.081E-02	2.885E-02
	1.00000E+00	6.365E-02	2.792E-02
	1.25000E+00	5.693E-02	2.668E-02
	1.50000E+00	5.182E-02	2.551E-02
	2.00000E+00	4.450E-02	2.347E-02
	3.00000E+00	3.581E-02	2.057E-02
	4.00000E+00	3.076E-02	1.867E-02
	5.00000E+00	2.746E-02	1.735E-02
	6.00000E+00	2.515E-02	1.640E-02
	8.00000E+00	2.215E-02	1.513E-02
	1.00000E+01	2.031E-02	1.435E-02
	1.50000E+01	1.791E-02	1.330E-02
	2.00000E+01	1.683E-02	1.281E-02

CADMIUM TELLURIDE

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	7.927E+03	7.913E+03
	1.00300E-03	7.875E+03	7.862E+03
	1.00600E-03	7.824E+03	7.811E+03
52 M1	1.00600E-03	8.014E+03	8.001E+03
	1.50000E-03	3.291E+03	3.281E+03
	2.00000E-03	1.664E+03	1.656E+03
	3.00000E-03	6.146E+02	6.082E+02
	3.53750E-03	4.064E+02	4.004E+02
48 L3	3.53750E-03	7.787E+02	7.525E+02
	3.63101E-03	7.300E+02	7.056E+02
	3.72700E-03	6.840E+02	6.613E+02
48 L2	3.72700E-03	8.601E+02	8.266E+02
	4.00000E-03	7.230E+02	6.957E+02
	4.01800E-03	7.151E+02	6.881E+02
48 L1	4.01800E-03	7.934E+02	7.624E+02
	4.17657E-03	7.221E+02	6.944E+02
	4.34140E-03	6.562E+02	6.313E+02
52 L3	4.34140E-03	9.328E+02	8.883E+02
	4.47465E-03	8.739E+02	8.328E+02
	4.61200E-03	8.135E+02	7.759E+02
52 L2	4.61200E-03	9.438E+02	8.955E+02
	4.77280E-03	8.702E+02	8.265E+02
	4.93920E-03	7.999E+02	7.606E+02
52 L1	4.93920E-03	8.653E+02	8.214E+02
	5.00000E-03	8.392E+02	7.970E+02
	6.00000E-03	5.286E+02	5.046E+02
	8.00000E-03	2.492E+02	2.389E+02
	1.00000E-02	1.381E+02	1.322E+02
	1.50000E-02	4.657E+01	4.404E+01
	2.00000E-02	2.144E+01	1.988E+01
	2.67112E-02	9.834E+00	8.833E+00
48 K	2.67112E-02	2.943E+01	1.368E+01
	3.00000E-02	2.182E+01	1.119E+01
	3.18138E-02	1.873E+01	1.001E+01
52 K	3.18138E-02	3.492E+01	1.351E+01
	4.00000E-02	1.930E+01	9.635E+00
	5.00000E-02	1.067E+01	6.229E+00
	6.00000E-02	6.542E+00	4.163E+00
	8.00000E-02	3.019E+00	2.083E+00
	1.00000E-01	1.671E+00	1.181E+00
	1.50000E-01	6.071E-01	4.101E-01
	2.00000E-01	3.246E-01	1.982E-01
	3.00000E-01	1.628E-01	8.144E-02
	4.00000E-01	1.147E-01	5.109E-02
	5.00000E-01	9.291E-02	3.952E-02
	6.00000E-01	8.042E-02	3.391E-02
	8.00000E-01	6.600E-02	2.852E-02
	1.00000E+00	5.742E-02	2.575E-02
	1.25000E+00	5.043E-02	2.354E-02
	1.50000E+00	4.591E-02	2.209E-02
	2.00000E+00	4.070E-02	2.062E-02
	3.00000E+00	3.649E-02	2.021E-02
	4.00000E+00	3.525E-02	2.091E-02
	5.00000E+00	3.513E-02	2.188E-02
	6.00000E+00	3.548E-02	2.286E-02
	8.00000E+00	3.687E-02	2.468E-02
	1.00000E+01	3.857E-02	2.618E-02
	1.50000E+01	4.273E-02	2.867E-02
	2.00000E+01	4.616E-02	2.983E-02


BREAST TISSUE (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


C-552 AIR-EQUIVALENT PLASTIC
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


CADMIUM TELLURIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

CALCIUM FLUORIDE

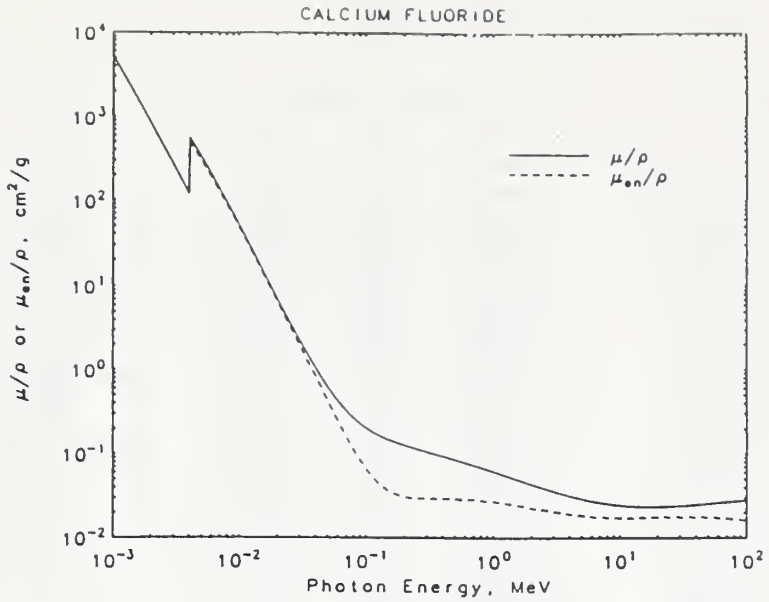
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	5.248E+03	5.228E+03
	1.50000E-03	1.843E+03	1.836E+03
	2.00000E-03	8.509E+02	8.472E+02
	3.00000E-03	2.779E+02	2.757E+02
	4.00000E-03	1.237E+02	1.220E+02
	4.03810E-03	1.204E+02	1.187E+02
20 K	4.03810E-03	5.848E+02	5.151E+02
	5.00000E-03	3.410E+02	3.070E+02
	6.00000E-03	2.100E+02	1.919E+02
	8.00000E-03	9.642E+01	8.965E+01
	1.00000E-02	5.194E+01	4.867E+01
	1.50000E-02	1.651E+01	1.546E+01
	2.00000E-02	7.255E+00	6.692E+00
	3.00000E-02	2.313E+00	2.002E+00
	4.00000E-02	1.077E+00	8.405E-01
	5.00000E-02	6.311E-01	4.298E-01
	6.00000E-02	4.311E-01	2.512E-01
	8.00000E-02	2.674E-01	1.137E-01
	1.00000E-01	2.048E-01	6.741E-02
	1.50000E-01	1.491E-01	3.681E-02
	2.00000E-01	1.278E-01	3.112E-02
	3.00000E-01	1.067E-01	2.944E-02
	4.00000E-01	9.437E-02	2.933E-02
	5.00000E-01	8.570E-02	2.920E-02
	6.00000E-01	7.905E-02	2.892E-02
	8.00000E-01	6.924E-02	2.811E-02
	1.00000E+00	6.217E-02	2.715E-02
	1.25000E+00	5.558E-02	2.591E-02
	1.50000E+00	5.065E-02	2.476E-02
	2.00000E+00	4.380E-02	2.290E-02
	3.00000E+00	3.606E-02	2.058E-02
	4.00000E+00	3.184E-02	1.927E-02
	5.00000E+00	2.923E-02	1.850E-02
	6.00000E+00	2.753E-02	1.804E-02
	8.00000E+00	2.553E-02	1.758E-02
	1.00000E+01	2.450E-02	1.743E-02
	1.50000E+01	2.356E-02	1.745E-02
	2.00000E+01	2.351E-02	1.759E-02

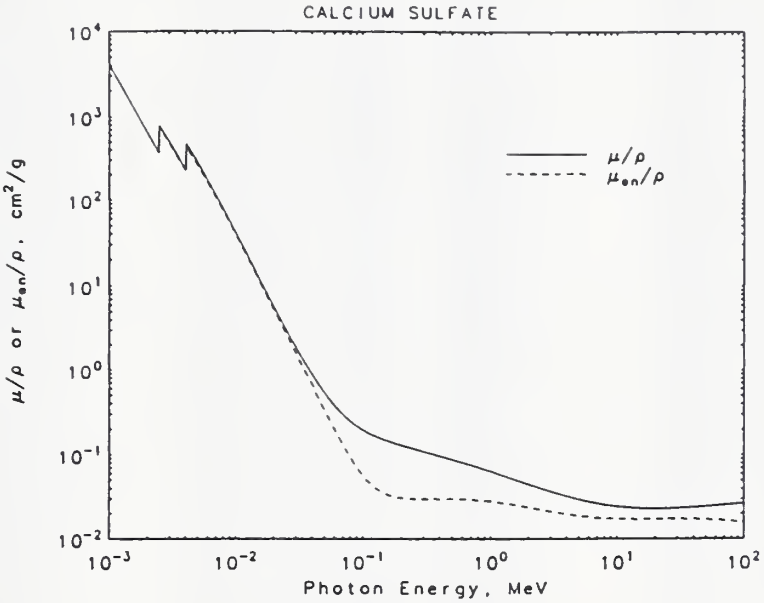
CALCIUM SULFATE

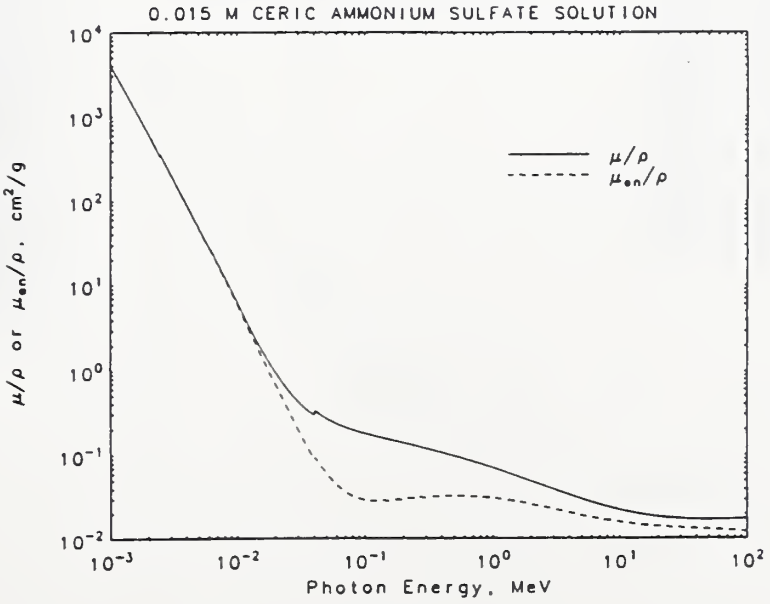
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.163E+03	4.153E+03
	1.50000E-03	1.429E+03	1.425E+03
	2.00000E-03	6.529E+02	6.503E+02
	2.47200E-03	3.627E+02	3.606E+02
16 K	2.47200E-03	7.993E+02	7.659E+02
	3.00000E-03	4.961E+02	4.774E+02
	4.00000E-03	2.289E+02	2.215E+02
	4.03810E-03	2.231E+02	2.159E+02
20 K	4.03810E-03	4.895E+02	4.431E+02
	5.00000E-03	2.820E+02	2.595E+02
	6.00000E-03	1.727E+02	1.606E+02
	8.00000E-03	7.858E+01	7.394E+01
	1.00000E-02	4.210E+01	3.977E+01
	1.50000E-02	1.329E+01	1.247E+01
	2.00000E-02	5.831E+00	5.352E+00
	3.00000E-02	1.876E+00	1.587E+00
	4.00000E-02	8.928E-01	6.645E-01
	5.00000E-02	5.381E-01	3.403E-01
	6.00000E-02	3.788E-01	2.001E-01
	8.00000E-02	2.474E-01	9.290E-02
	1.00000E-01	1.962E-01	5.732E-02
	1.50000E-01	1.487E-01	3.443E-02
	2.00000E-01	1.293E-01	3.057E-02
	3.00000E-01	1.088E-01	2.981E-02
	4.00000E-01	9.653E-02	2.994E-02
	5.00000E-01	8.777E-02	2.989E-02
	6.00000E-01	8.100E-02	2.964E-02
	8.00000E-01	7.100E-02	2.884E-02
	1.00000E+00	6.377E-02	2.787E-02
	1.25000E+00	5.701E-02	2.660E-02
	1.50000E+00	5.193E-02	2.542E-02
	2.00000E+00	4.488E-02	2.350E-02
	3.00000E+00	3.679E-02	2.102E-02
	4.00000E+00	3.232E-02	1.958E-02
	5.00000E+00	2.954E-02	1.869E-02
	6.00000E+00	2.770E-02	1.814E-02
	8.00000E+00	2.547E-02	1.753E-02
	1.00000E+01	2.428E-02	1.727E-02
	1.50000E+01	2.305E-02	1.711E-02
	2.00000E+01	2.282E-02	1.716E-02

0.015 M CERIC AMMONIUM SULFATE SOLUTION

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.075E+03	4.062E+03
	1.08876E-03	3.259E+03	3.249E+03
	1.18540E-03	2.600E+03	2.592E+03
58 M3	1.18540E-03	2.602E+03	2.594E+03
	1.22832E-03	2.366E+03	2.359E+03
	1.27280E-03	2.150E+03	2.144E+03
58 M2	1.27280E-03	2.151E+03	2.145E+03
	1.35222E-03	1.827E+03	1.822E+03
	1.43660E-03	1.551E+03	1.546E+03
58 M1	1.43660E-03	1.551E+03	1.547E+03
	1.50000E-03	1.379E+03	1.375E+03
	2.00000E-03	6.195E+02	6.174E+02
	2.47200E-03	3.391E+02	3.375E+02
16 K	2.47200E-03	3.655E+02	3.621E+02
	3.00000E-03	2.113E+02	2.091E+02
	4.00000E-03	9.165E+01	9.039E+01
	5.00000E-03	4.753E+01	4.664E+01
	5.72340E-03	3.184E+01	3.111E+01
58 L3	5.72340E-03	3.256E+01	3.175E+01
	6.00000E-03	2.832E+01	2.757E+01
	6.16420E-03	2.613E+01	2.541E+01
58 L2	6.16420E-03	2.647E+01	2.570E+01
	6.35359E-03	2.464E+01	2.347E+01
	6.54880E-03	2.213E+01	2.143E+01
58 L1	6.54880E-03	2.229E+01	2.158E+01
	8.00000E-03	1.234E+01	1.179E+01
	1.00000E-02	6.394E+00	5.964E+00
	1.50000E-02	2.015E+00	1.702E+00
	2.00000E-02	9.608E-01	6.944E-01
	3.00000E-02	4.224E-01	1.999E-01
	4.00000E-02	2.884E-01	8.832E-02
	4.04430E-02	2.851E-01	8.580E-02
58 K	4.04430E-02	3.285E-01	9.378E-02
	5.00000E-02	2.623E-01	6.041E-02
	6.00000E-02	2.272E-01	4.444E-02
	8.00000E-02	1.930E-01	3.243E-02
	1.00000E-01	1.755E-01	2.914E-02
	1.50000E-01	1.517E-01	2.884E-02
	2.00000E-01	1.373E-01	3.015E-02
	3.00000E-01	1.184E-01	3.199E-02
	4.00000E-01	1.058E-01	3.275E-02
	5.00000E-01	9.655E-02	3.291E-02
	6.00000E-01	8.925E-02	3.274E-02
	8.00000E-01	7.836E-02	3.195E-02
	1.00000E+00	7.045E-02	3.091E-02
	1.25000E+00	6.299E-02	2.953E-02
	1.50000E+00	5.732E-02	2.822E-02
	2.00000E+00	4.924E-02	2.598E-02
	3.00000E+00	3.957E-02	2.274E-02
	4.00000E+00	3.395E-02	2.061E-02
	5.00000E+00	3.027E-02	1.913E-02
	6.00000E+00	2.769E-02	1.805E-02
	8.00000E+00	2.432E-02	1.661E-02
	1.00000E+01	2.226E-02	1.572E-02
	1.50000E+01	1.953E-02	1.451E-02
	2.00000E+01	1.829E-02	1.394E-02


CALCIUM FLUORIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


CALCIUM SULFATE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


0.015 M CERIC AMMONIUM SULFATE SOLUTION
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

CESIUM IODIDE

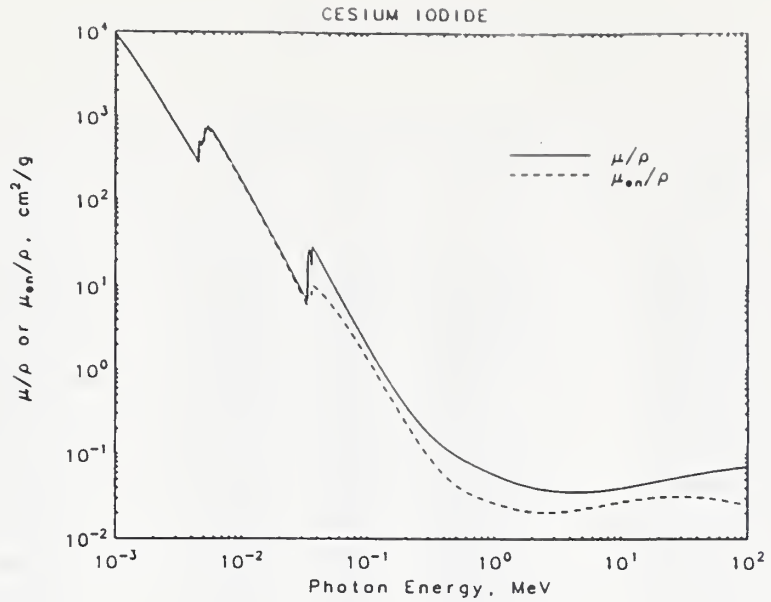
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	9.234E+03	9.213E+03
	1.03199E-03	8.653E+03	8.633E+03
	1.06500E-03	8.098E+03	8.080E+03
55 M2	1.06500E-03	8.339E+03	8.320E+03
	1.06854E-03	8.281E+03	8.262E+03
	1.07210E-03	8.224E+03	8.205E+03
53 M1	1.07210E-03	8.387E+03	8.368E+03
	1.14230E-03	7.344E+03	7.327E+03
	1.21710E-03	6.413E+03	6.398E+03
55 M1	1.21710E-03	6.569E+03	6.553E+03
	1.50000E-03	4.132E+03	4.120E+03
	2.00000E-03	2.114E+03	2.104E+03
	3.00000E-03	7.880E+02	7.809E+02
	4.00000E-03	3.836E+02	3.776E+02
	4.55710E-03	2.752E+02	2.696E+02
53 L3	4.55710E-03	5.174E+02	4.936E+02
	4.70229E-03	4.851E+02	4.628E+02
	4.85210E-03	4.510E+02	4.303E+02
53 L2	4.85210E-03	5.637E+02	5.332E+02
	5.00000E-03	5.296E+02	5.012E+02
	5.01190E-03	5.268E+02	4.985E+02
55 L3	5.01190E-03	7.511E+02	7.037E+02
	5.09924E-03	7.193E+02	6.744E+02
	5.18810E-03	6.881E+02	6.457E+02
53 L1	5.18810E-03	7.453E+02	6.987E+02
	5.27305E-03	7.196E+02	6.716E+02
	5.35940E-03	6.875E+02	6.454E+02
55 L2	5.35940E-03	7.923E+02	7.397E+02
	5.53401E-03	7.323E+02	6.847E+02
	5.71430E-03	6.761E+02	6.331E+02
55 L1	5.71430E-03	7.268E+02	6.795E+02
	6.00000E-03	6.448E+02	6.043E+02
	8.00000E-03	3.071E+02	2.906E+02
	1.00000E-02	1.711E+02	1.624E+02
	1.50000E-02	5.815E+01	5.486E+01
	2.00000E-02	2.686E+01	2.496E+01
	3.00000E-02	9.045E+00	8.071E+00
	3.31694E-02	6.923E+00	6.088E+00
53 K	3.31694E-02	2.122E+01	9.086E+00
	3.45483E-02	2.687E+01	8.529E+00
	3.59846E-02	1.719E+01	7.990E+00
55 K	3.59846E-02	3.027E+01	1.059E+01
	4.00000E-02	2.297E+01	9.395E+00
	5.00000E-02	1.287E+01	6.596E+00
	6.00000E-02	7.921E+00	4.586E+00
	8.00000E-02	3.677E+00	2.399E+00
	1.00000E-01	2.035E+00	1.391E+00
	1.50000E-01	7.290E-01	4.951E-01
	2.00000E-01	3.805E-01	2.401E-01
	3.00000E-01	1.818E-01	9.634E-02
	4.00000E-01	1.237E-01	5.828E-02
	5.00000E-01	9.809E-02	4.366E-02
	6.00000E-01	8.373E-02	3.657E-02
	8.00000E-01	6.769E-02	2.987E-02
	1.00000E+00	5.848E-02	2.657E-02
	1.25000E+00	5.110E-02	2.402E-02
	1.50000E+00	4.644E-02	2.243E-02
	2.00000E+00	4.123E-02	2.089E-02
	3.00000E+00	3.721E-02	2.059E-02
	4.00000E+00	3.616E-02	2.144E-02
	5.00000E+00	3.622E-02	2.255E-02
	6.00000E+00	3.673E-02	2.364E-02
	8.00000E+00	3.838E-02	2.563E-02
	1.00000E+01	4.030E-02	2.725E-02
	1.50000E+01	4.492E-02	2.992E-02
	2.00000E+01	4.867E-02	3.114E-02

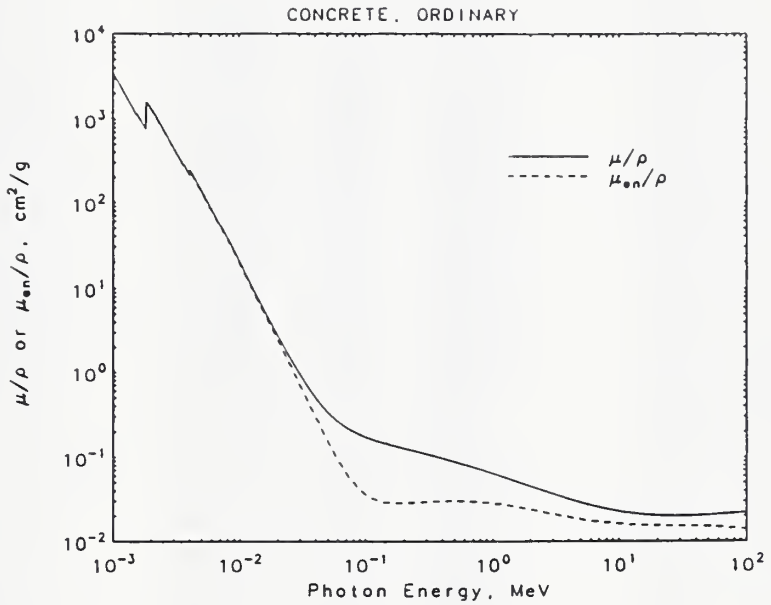
CONCRETE, ORDINARY

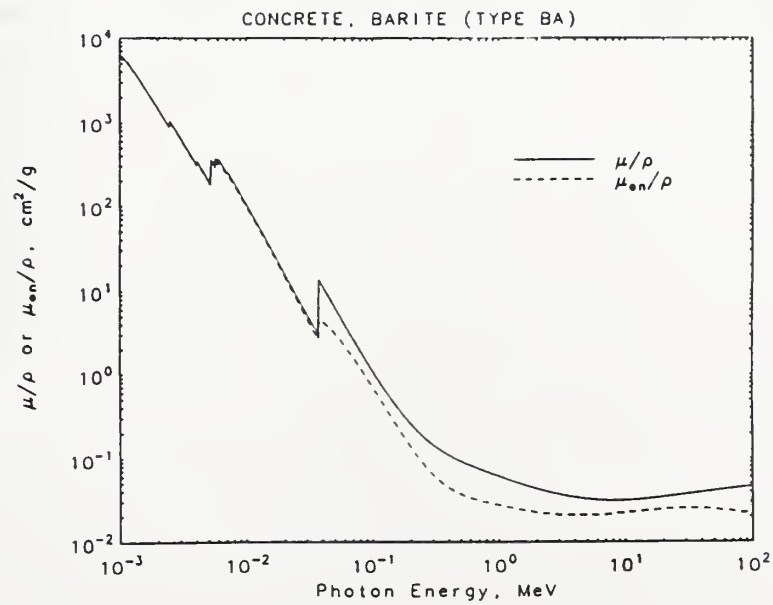
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.466E+03	3.456E+03
	1.03542E-03	3.164E+03	3.156E+03
	1.07210E-03	2.889E+03	2.880E+03
11 K	1.07210E-03	2.978E+03	2.968E+03
	1.18283E-03	2.302E+03	2.295E+03
	1.30500E-03	1.775E+03	1.769E+03
12 K	1.30500E-03	1.781E+03	1.775E+03
	1.50000E-03	1.227E+03	1.223E+03
	1.55960E-03	1.104E+03	1.100E+03
13 K	1.55960E-03	1.176E+03	1.169E+03
	1.69350E-03	9.419E+02	9.365E+02
	1.83890E-03	7.525E+02	7.482E+02
14 K	1.83890E-03	1.631E+03	1.587E+03
	2.00000E-03	1.368E+03	1.333E+03
	3.00000E-03	4.646E+02	4.552E+02
	3.60740E-03	2.804E+02	2.751E+02
19 K	3.60740E-03	2.911E+02	2.844E+02
	4.00000E-03	2.188E+02	2.139E+02
	4.03810E-03	2.131E+02	2.084E+02
20 K	4.03810E-03	2.520E+02	2.415E+02
	5.00000E-03	1.401E+02	1.348E+02
	6.00000E-03	8.401E+01	8.094E+01
	7.11200E-03	5.187E+01	4.995E+01
26 K	7.11200E-03	5.415E+01	5.153E+01
	8.00000E-03	3.878E+01	3.689E+01
	1.00000E-02	2.045E+01	1.937E+01
	1.50000E-02	6.351E+00	5.855E+00
	2.00000E-02	2.806E+00	2.462E+00
	3.00000E-02	9.601E-01	7.157E-01
	4.00000E-02	5.058E-01	2.995E-01
	5.00000E-02	3.412E-01	1.563E-01
	6.00000E-02	2.660E-01	9.554E-02
	8.00000E-02	2.014E-01	5.050E-02
	1.00000E-01	1.738E-01	3.649E-02
	1.50000E-01	1.436E-01	2.897E-02
	2.00000E-01	1.282E-01	2.868E-02
	3.00000E-01	1.097E-01	2.969E-02
	4.00000E-01	9.783E-02	3.024E-02
	5.00000E-01	8.915E-02	3.033E-02
	6.00000E-01	8.236E-02	3.015E-02
	8.00000E-01	7.227E-02	2.940E-02
	1.00000E+00	6.495E-02	2.843E-02
	1.25000E+00	5.807E-02	2.716E-02
	1.50000E+00	5.288E-02	2.595E-02
	2.00000E+00	4.557E-02	2.395E-02
	3.00000E+00	3.701E-02	2.120E-02
	4.00000E+00	3.217E-02	1.951E-02
	5.00000E+00	2.908E-02	1.840E-02
	6.00000E+00	2.697E-02	1.763E-02
	8.00000E+00	2.432E-02	1.669E-02
	1.00000E+01	2.278E-02	1.617E-02
	1.50000E+01	2.096E-02	1.559E-02
	2.00000E+01	2.030E-02	1.539E-02

CONCRETE, BARITE (TYPE BA)

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	6.349E+03	6.332E+03
	1.03063E-03	5.916E+03	5.900E+03
	1.06220E-03	5.507E+03	5.492E+03
56 M3	1.06220E-03	6.009E+03	5.992E+03
	1.09882E-03	5.563E+03	5.548E+03
	1.13670E-03	5.150E+03	5.135E+03
56 M2	1.13670E-03	5.350E+03	5.335E+03
	1.21224E-03	4.632E+03	4.619E+03
	1.29280E-03	4.001E+03	3.990E+03
56 M1	1.29280E-03	4.126E+03	4.114E+03
	1.29889E-03	4.082E+03	4.070E+03
	1.30500E-03	4.038E+03	4.026E+03
12 K	1.30500E-03	4.044E+03	4.032E+03
	1.50000E-03	2.917E+03	2.908E+03
	1.55960E-03	2.659E+03	2.650E+03
13 K	1.55960E-03	2.674E+03	2.665E+03
	1.69350E-03	2.195E+03	2.187E+03
	1.83890E-03	1.798E+03	1.791E+03
14 K	1.83890E-03	1.828E+03	1.820E+03
	2.00000E-03	1.491E+03	1.483E+03
	2.47200E-03	8.795E+02	8.738E+02
16 K	2.47200E-03	1.079E+03	1.059E+03
	3.00000E-03	6.692E+02	6.568E+02
	4.00000E-03	3.190E+02	3.126E+02
	4.03810E-03	3.113E+02	3.050E+02
20 K	4.03810E-03	3.567E+02	3.437E+02
	5.00000E-03	2.048E+02	1.973E+02
	5.24700E-03	1.805E+02	1.738E+02
56 L3	5.24700E-03	3.641E+02	3.408E+02
	5.43204E-03	3.352E+02	3.141E+02
	5.62360E-03	3.069E+02	2.880E+02
56 L2	5.62360E-03	3.925E+02	3.645E+02
	5.80333E-03	3.633E+02	3.379E+02
	5.98880E-03	3.353E+02	3.123E+02
56 L1	5.98880E-03	3.778E+02	3.510E+02
	6.00000E-03	3.760E+02	3.493E+02
	7.11200E-03	2.437E+02	2.281E+02
26 K	7.11200E-03	2.605E+02	2.398E+02
	8.00000E-03	1.925E+02	1.782E+02
	1.00000E-02	1.067E+02	9.960E+01
	1.50000E-02	3.601E+01	3.363E+01
	2.00000E-02	1.655E+01	1.527E+01
	3.00000E-02	5.551E+00	4.912E+00
	3.74406E-02	3.091E+00	2.624E+00
56 K	3.74406E-02	1.407E+01	4.746E+00
	4.00000E-02	1.185E+01	4.439E+00
	5.00000E-02	6.671E+00	3.206E+00
	6.00000E-02	4.143E+00	2.266E+00
	8.00000E-02	1.968E+00	1.211E+00
	1.00000E-01	1.122E+00	7.138E-01
	1.50000E-01	4.423E-01	2.659E-01
	2.00000E-01	2.568E-01	1.369E-01
	3.00000E-01	1.460E-01	6.408E-02
	4.00000E-01	1.104E-01	4.471E-02
	5.00000E-01	9.309E-02	3.718E-02
	6.00000E-01	8.245E-02	3.340E-02
	8.00000E-01	6.936E-02	2.954E-02
	1.00000E+00	6.112E-02	2.736E-02
	1.25000E+00	5.404E-02	2.542E-02
	1.50000E+00	4.915E-02	2.402E-02
	2.00000E+00	4.296E-02	2.226E-02
	3.00000E+00	3.676E-02	2.079E-02
	4.00000E+00	3.388E-02	2.043E-02
	5.00000E+00	3.240E-02	2.049E-02
	6.00000E+00	3.162E-02	2.074E-02
	8.00000E+00	3.116E-02	2.142E-02
	1.00000E+01	3.138E-02	2.213E-02
	1.50000E+01	3.282E-02	2.356E-02
	2.00000E+01	3.439E-02	2.438E-02


CESIUM IODIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


CONCRETE, ORDINARY
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


CONCRETE, BARITE (TYPE BA)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

EYE LENS (ICRU-44)

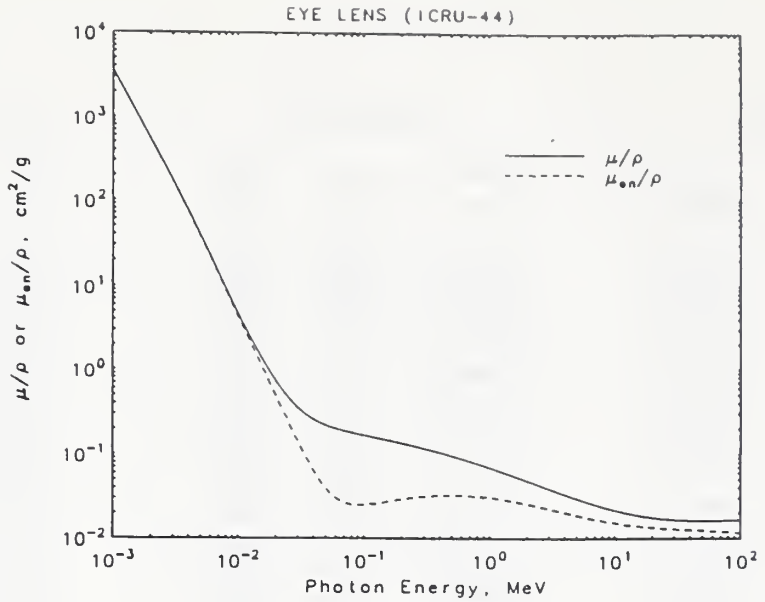
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.599E+03	3.588E+03
	1.03542E-03	3.282E+03	3.273E+03
	1.07210E-03	2.992E+03	2.984E+03
11 K	1.07210E-03	2.998E+03	2.989E+03
	1.50000E-03	1.206E+03	1.203E+03
	2.00000E-03	5.386E+02	5.368E+02
	2.14550E-03	4.410E+02	4.393E+02
15 K	2.14550E-03	4.432E+02	4.414E+02
	2.30297E-03	3.619E+02	3.603E+02
	2.47200E-03	2.952E+02	2.938E+02
16 K	2.47200E-03	3.007E+02	2.989E+02
	2.64140E-03	2.485E+02	2.469E+02
	2.82240E-03	2.053E+02	2.038E+02
17 K	2.82240E-03	2.067E+02	2.051E+02
	3.00000E-03	1.733E+02	1.719E+02
	4.00000E-03	7.446E+01	7.353E+01
	5.00000E-03	3.834E+01	3.764E+01
	6.00000E-03	2.221E+01	2.163E+01
	8.00000E-03	9.372E+00	8.931E+00
	1.00000E-02	4.829E+00	4.458E+00
	1.50000E-02	1.531E+00	1.242E+00
	2.00000E-02	7.510E-01	4.988E-01
	3.00000E-02	3.570E-01	1.421E-01
	4.00000E-02	2.590E-01	6.418E-02
	5.00000E-02	2.209E-01	3.961E-02
	6.00000E-02	2.013E-01	3.035E-02
	8.00000E-02	1.803E-01	2.518E-02
	1.00000E-01	1.679E-01	2.490E-02
	1.50000E-01	1.482E-01	2.719E-02
	2.00000E-01	1.350E-01	2.922E-02
	3.00000E-01	1.169E-01	3.146E-02
	4.00000E-01	1.046E-01	3.231E-02
	5.00000E-01	9.547E-02	3.252E-02
	6.00000E-01	8.827E-02	3.237E-02
	8.00000E-01	7.752E-02	3.160E-02
	1.00000E+00	6.969E-02	3.058E-02
	1.25000E+00	6.232E-02	2.922E-02
	1.50000E+00	5.671E-02	2.793E-02
	2.00000E+00	4.869E-02	2.570E-02
	3.00000E+00	3.908E-02	2.247E-02
	4.00000E+00	3.349E-02	2.033E-02
	5.00000E+00	2.981E-02	1.883E-02
	6.00000E+00	2.722E-02	1.774E-02
	8.00000E+00	2.383E-02	1.626E-02
	1.00000E+01	2.174E-02	1.534E-02
	1.50000E+01	1.896E-02	1.407E-02
	2.00000E+01	1.767E-02	1.346E-02

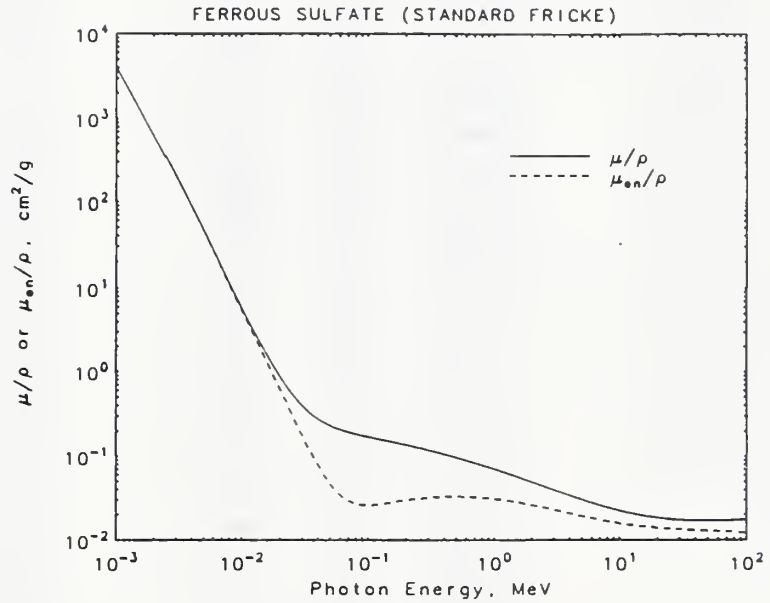
FERROUS SULFATE (STANDARD FRICKE)

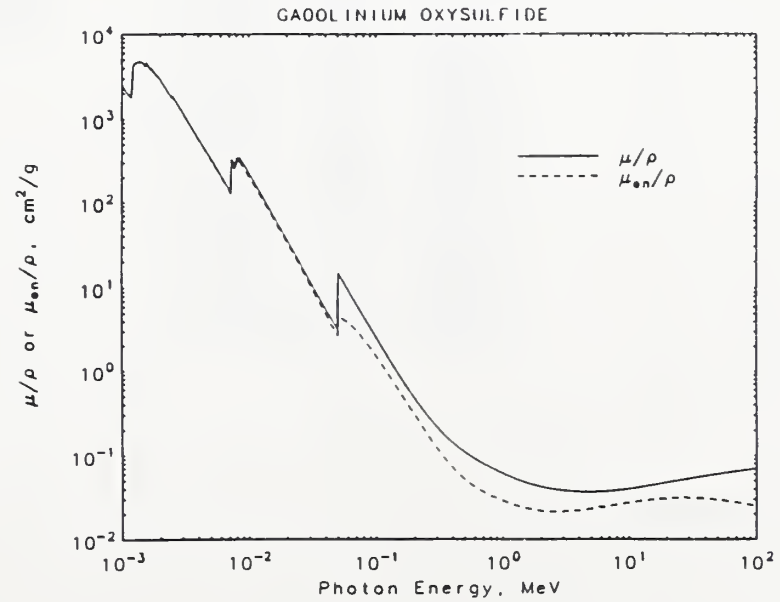
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.067E+03	4.054E+03
	1.03542E-03	3.712E+03	3.700E+03
	1.07210E-03	3.387E+03	3.376E+03
11 K	1.07210E-03	3.387E+03	3.376E+03
	1.50000E-03	1.372E+03	1.369E+03
	2.00000E-03	6.159E+02	6.138E+02
	2.47200E-03	3.368E+02	3.353E+02
16 K	2.47200E-03	3.601E+02	3.569E+02
	2.64140E-03	2.985E+02	2.958E+02
	2.82240E-03	2.473E+02	2.449E+02
17 K	2.82240E-03	2.473E+02	2.449E+02
	3.00000E-03	2.078E+02	2.057E+02
	4.00000E-03	8.993E+01	8.872E+01
	5.00000E-03	4.654E+01	4.569E+01
	6.00000E-03	2.706E+01	2.639E+01
	7.11200E-03	1.628E+01	1.573E+01
26 K	7.11200E-03	1.630E+01	1.574E+01
	8.00000E-03	1.147E+01	1.098E+01
	1.00000E-02	5.914E+00	5.511E+00
	1.50000E-02	1.853E+00	1.548E+00
	2.00000E-02	8.864E-01	6.245E-01
	3.00000E-02	3.979E-01	1.772E-01
	4.00000E-02	2.773E-01	7.829E-02
	5.00000E-02	2.313E-01	4.659E-02
	6.00000E-02	2.082E-01	3.433E-02
	8.00000E-02	1.843E-01	2.690E-02
	1.00000E-01	1.708E-01	2.588E-02
	1.50000E-01	1.503E-01	2.769E-02
	2.00000E-01	1.367E-01	2.963E-02
	3.00000E-01	1.183E-01	3.184E-02
	4.00000E-01	1.058E-01	3.269E-02
	5.00000E-01	9.657E-02	3.289E-02
	6.00000E-01	8.928E-02	3.273E-02
	8.00000E-01	7.841E-02	3.196E-02
	1.00000E+00	7.050E-02	3.093E-02
	1.25000E+00	6.304E-02	2.955E-02
	1.50000E+00	5.736E-02	2.824E-02
	2.00000E+00	4.927E-02	2.600E-02
	3.00000E+00	3.958E-02	2.275E-02
	4.00000E+00	3.396E-02	2.061E-02
	5.00000E+00	3.027E-02	1.912E-02
	6.00000E+00	2.767E-02	1.804E-02
	8.00000E+00	2.429E-02	1.659E-02
	1.00000E+01	2.222E-02	1.568E-02
	1.50000E+01	1.947E-02	1.446E-02
	2.00000E+01	1.822E-02	1.388E-02

GADOLINIUM OXYSULFIDE

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.497E+03	2.487E+03
	1.08867E-03	2.103E+03	2.093E+03
	1.18520E-03	1.765E+03	1.756E+03
64 M5	1.18520E-03	1.984E+03	1.973E+03
	1.20109E-03	2.465E+03	2.450E+03
	1.21720E-03	3.644E+03	3.621E+03
64 M4	1.21720E-03	4.311E+03	4.282E+03
	1.50000E-03	4.390E+03	4.361E+03
	1.54400E-03	4.092E+03	4.065E+03
64 M3	1.54400E-03	4.699E+03	4.668E+03
	1.61454E-03	4.235E+03	4.207E+03
	1.68830E-03	3.819E+03	3.793E+03
64 M2	1.68830E-03	4.046E+03	4.019E+03
	1.78195E-03	3.585E+03	3.562E+03
	1.88080E-03	3.175E+03	3.154E+03
64 M1	1.88080E-03	3.311E+03	3.289E+03
	2.00000E-03	2.883E+03	2.863E+03
	2.47200E-03	1.752E+03	1.739E+03
16 K	2.47200E-03	1.909E+03	1.885E+03
	3.00000E-03	1.205E+03	1.189E+03
	4.00000E-03	5.916E+02	5.822E+02
	5.00000E-03	3.371E+02	3.302E+02
	6.00000E-03	2.118E+02	2.062E+02
	7.24280E-03	1.306E+02	1.261E+02
64 L3	7.24280E-03	3.312E+02	2.983E+02
	7.57876E-03	2.994E+02	2.667E+02
	7.93030E-03	2.625E+02	2.378E+02
64 L2	7.93030E-03	3.539E+02	3.134E+02
	8.00000E-03	3.470E+02	3.074E+02
	8.37560E-03	3.096E+02	2.754E+02
64 L1	8.37560E-03	3.560E+02	3.152E+02
	1.00000E-02	2.285E+02	2.053E+02
	1.50000E-02	7.902E+01	7.232E+01
	2.00000E-02	3.689E+01	3.376E+01
	3.00000E-02	1.254E+01	1.125E+01
	4.00000E-02	5.854E+00	5.084E+00
	5.00000E-02	3.274E+00	2.732E+00
	5.02391E-02	3.234E+00	2.695E+00
64 K	5.02391E-02	1.555E+01	4.677E+00
	6.00000E-02	9.815E+00	3.946E+00
	8.00000E-02	4.666E+00	2.453E+00
	1.00000E-01	2.613E+00	1.545E+00
	1.50000E-01	9.381E-01	6.043E-01
	2.00000E-01	4.812E-01	3.035E-01
	3.00000E-01	2.185E-01	1.225E-01
	4.00000E-01	1.423E-01	7.211E-02
	5.00000E-01	1.095E-01	5.218E-02
	6.00000E-01	9.153E-02	4.240E-02
	8.00000E-01	7.225E-02	3.322E-02
	1.00000E+00	6.163E-02	2.883E-02
	1.25000E+00	5.335E-02	2.558E-02
	1.50000E+00	4.832E-02	2.367E-02
	2.00000E+00	4.271E-02	2.183E-02
	3.00000E+00	3.829E-02	2.129E-02
	4.00000E+00	3.699E-02	2.198E-02
	5.00000E+00	3.685E-02	2.297E-02
	6.00000E+00	3.722E-02	2.397E-02
	8.00000E+00	3.864E-02	2.579E-02
	1.00000E+01	4.038E-02	2.730E-02
	1.50000E+01	4.478E-02	2.985E-02
	2.00000E+01	4.837E-02	3.099E-02


EYE LENS (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


FERROUS SULFATE (STANDARD FRICKE)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


GADOLINIUM OXYSULFIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

GAFCHROMIC SENSOR

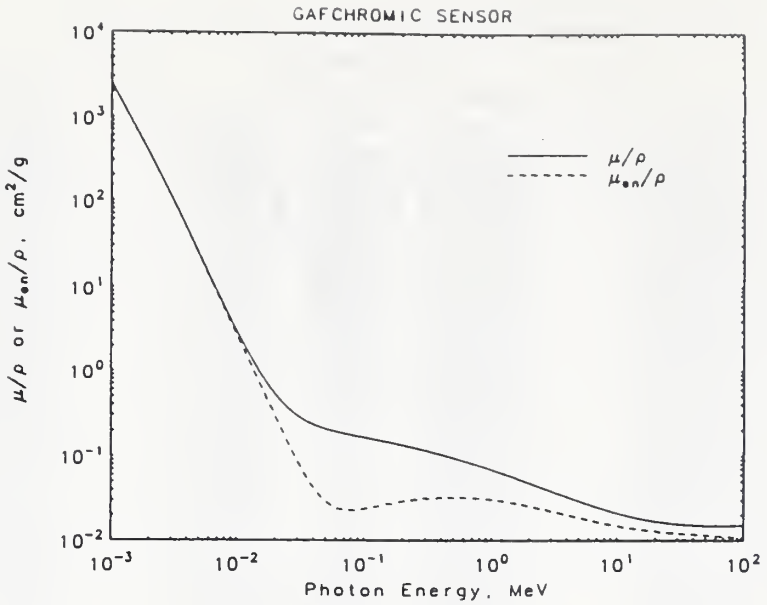
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.594E+03	2.589E+03
1.50000E-03	8.437E+02	8.419E+02
2.00000E-03	3.705E+02	3.693E+02
3.00000E-03	1.129E+02	1.120E+02
4.00000E-03	4.776E+01	4.713E+01
5.00000E-03	2.436E+01	2.384E+01
6.00000E-03	1.402E+01	1.357E+01
8.00000E-03	5.892E+00	5.523E+00
1.00000E-02	3.052E+00	2.728E+00
1.50000E-02	1.014E+00	7.481E-01
2.00000E-02	5.366E-01	2.990E-01
3.00000E-02	2.943E-01	8.733E-02
4.00000E-02	2.322E-01	4.248E-02
5.00000E-02	2.066E-01	2.905E-02
6.00000E-02	1.925E-01	2.448E-02
8.00000E-02	1.759E-01	2.281E-02
1.00000E-01	1.651E-01	2.368E-02
1.50000E-01	1.467E-01	2.674E-02
2.00000E-01	1.339E-01	2.894E-02
3.00000E-01	1.161E-01	3.125E-02
4.00000E-01	1.039E-01	3.212E-02
5.00000E-01	9.487E-02	3.233E-02
6.00000E-01	8.772E-02	3.218E-02
8.00000E-01	7.704E-02	3.142E-02
1.00000E+00	6.926E-02	3.040E-02
1.25000E+00	6.194E-02	2.906E-02
1.50000E+00	5.637E-02	2.778E-02
2.00000E+00	4.835E-02	2.553E-02
3.00000E+00	3.872E-02	2.227E-02
4.00000E+00	3.308E-02	2.008E-02
5.00000E+00	2.935E-02	1.853E-02
6.00000E+00	2.672E-02	1.739E-02
8.00000E+00	2.324E-02	1.583E-02
1.00000E+01	2.108E-02	1.483E-02
1.50000E+01	1.815E-02	1.344E-02
2.00000E+01	1.675E-02	1.275E-02

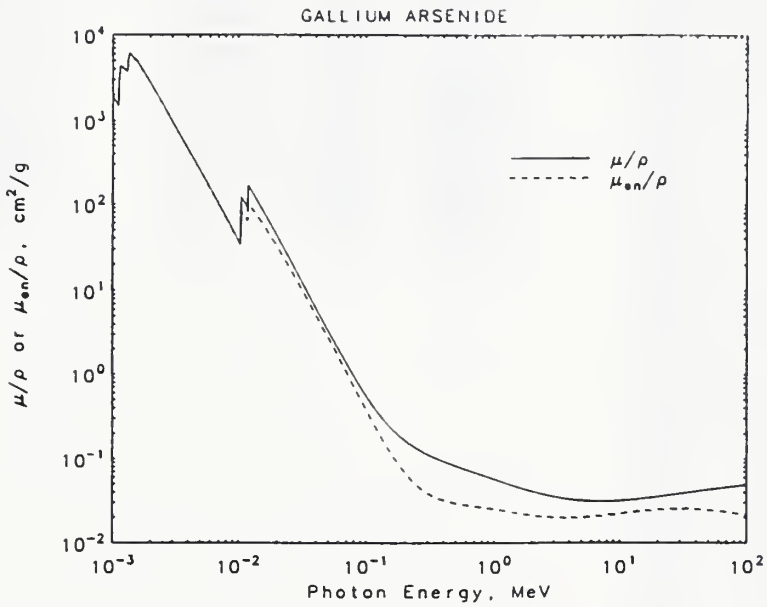
GALLIUM ARSENIDE

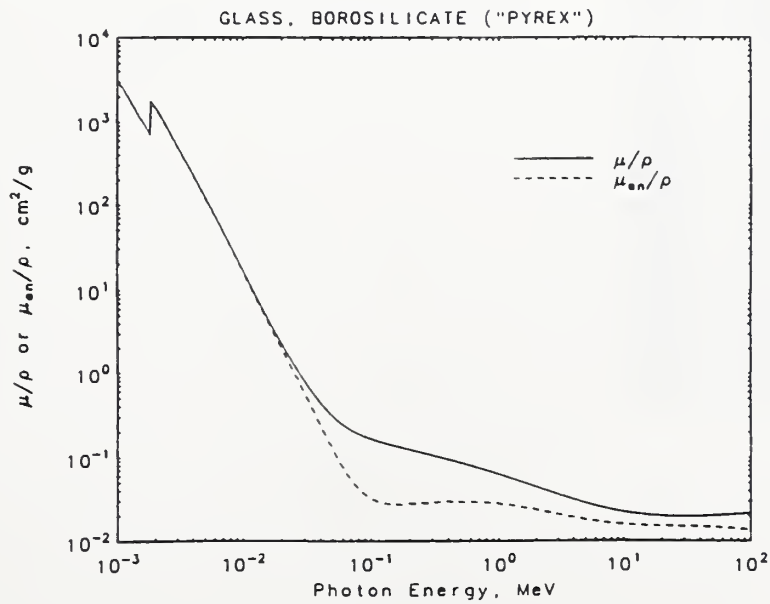
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	1.917E+03	1.911E+03
	1.05613E-03	1.685E+03	1.680E+03
	1.11540E-03	1.481E+03	1.476E+03
31 L3	1.11540E-03	2.772E+03	2.752E+03
	1.12877E-03	3.180E+03	3.156E+03
	1.14230E-03	3.532E+03	3.504E+03
31 L2	1.14230E-03	4.372E+03	4.333E+03
	1.21752E-03	4.130E+03	4.094E+03
	1.29770E-03	3.657E+03	3.626E+03
31 L1	1.29770E-03	4.066E+03	4.031E+03
	1.31034E-03	3.971E+03	3.937E+03
	1.32310E-03	3.879E+03	3.846E+03
33 L3	1.32310E-03	5.652E+03	5.593E+03
	1.34073E-03	5.525E+03	5.468E+03
	1.35860E-03	5.415E+03	5.360E+03
33 L2	1.35860E-03	6.266E+03	6.197E+03
	1.50000E-03	5.159E+03	5.106E+03
	1.52650E-03	4.939E+03	4.888E+03
33 L1	1.52650E-03	5.278E+03	5.224E+03
	2.00000E-03	2.731E+03	2.706E+03
	3.00000E-03	9.702E+02	9.614E+02
	4.00000E-03	4.539E+02	4.486E+02
	5.00000E-03	2.495E+02	2.456E+02
	6.00000E-03	1.524E+02	1.492E+02
	8.00000E-03	6.960E+01	6.728E+01
	1.00000E-02	3.780E+01	3.601E+01
	1.03671E-02	3.425E+01	3.254E+01
31 K	1.03671E-02	1.260E+02	8.315E+01
	1.10916E-02	1.059E+02	7.188E+01
	1.18667E-02	8.899E+01	6.193E+01
33 K	1.18667E-02	1.685E+02	1.016E+02
	1.50000E-02	9.220E+01	6.257E+01
	2.00000E-02	4.258E+01	3.189E+01
	3.00000E-02	1.397E+01	1.132E+01
	4.00000E-02	6.262E+00	5.187E+00
	5.00000E-02	3.365E+00	2.779E+00
	6.00000E-02	2.042E+00	1.655E+00
	8.00000E-02	9.587E-01	7.246E-01
	1.00000E-01	5.598E-01	3.838E-01
	1.50000E-01	2.509E-01	1.299E-01
	2.00000E-01	1.671E-01	6.921E-02
	3.00000E-01	1.137E-01	3.916E-02
	4.00000E-01	9.371E-02	3.210E-02
	5.00000E-01	8.248E-02	2.943E-02
	6.00000E-01	7.484E-02	2.802E-02
	8.00000E-01	6.452E-02	2.628E-02
	1.00000E+00	5.751E-02	2.499E-02
	1.25000E+00	5.122E-02	2.361E-02
	1.50000E+00	4.676E-02	2.250E-02
	2.00000E+00	4.102E-02	2.101E-02
	3.00000E+00	3.538E-02	1.984E-02
	4.00000E+00	3.288E-02	1.969E-02
	5.00000E+00	3.172E-02	1.994E-02
	6.00000E+00	3.121E-02	2.034E-02
	8.00000E+00	3.117E-02	2.127E-02
	1.00000E+01	3.170E-02	2.215E-02
	1.50000E+01	3.354E-02	2.370E-02
	2.00000E+01	3.543E-02	2.459E-02

GLASS, BOROSILICATE ("PYREX")

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.164E+03	3.155E+03
	1.03542E-03	2.887E+03	2.879E+03
	1.07210E-03	2.634E+03	2.627E+03
11 K	1.07210E-03	2.800E+03	2.790E+03
	1.50000E-03	1.152E+03	1.148E+03
	1.55960E-03	1.037E+03	1.033E+03
13 K	1.55960E-03	1.079E+03	1.073E+03
	1.69350E-03	8.629E+02	8.583E+02
	1.83890E-03	6.883E+02	6.845E+02
14 K	1.83890E-03	1.776E+03	1.723E+03
	2.00000E-03	1.500E+03	1.457E+03
	3.00000E-03	5.123E+02	5.011E+02
	3.60740E-03	3.098E+02	3.036E+02
19 K	3.60740E-03	3.133E+02	3.067E+02
	4.00000E-03	2.355E+02	2.307E+02
	5.00000E-03	1.260E+02	1.235E+02
	6.00000E-03	7.500E+01	7.337E+01
	8.00000E-03	3.269E+01	3.178E+01
	1.00000E-02	1.705E+01	1.642E+01
	1.50000E-02	5.217E+00	4.828E+00
	2.00000E-02	2.297E+00	1.995E+00
	3.00000E-02	7.987E-01	5.684E-01
	4.00000E-02	4.341E-01	2.361E-01
	5.00000E-02	3.022E-01	1.235E-01
	6.00000E-02	2.417E-01	7.648E-02
	8.00000E-02	1.890E-01	4.230E-02
	1.00000E-01	1.657E-01	3.209E-02
	1.50000E-01	1.389E-01	2.727E-02
	2.00000E-01	1.246E-01	2.757E-02
	3.00000E-01	1.069E-01	2.885E-02
	4.00000E-01	9.540E-02	2.946E-02
	5.00000E-01	8.696E-02	2.957E-02
	6.00000E-01	8.035E-02	2.941E-02
	8.00000E-01	7.052E-02	2.868E-02
	1.00000E+00	6.337E-02	2.774E-02
	1.25000E+00	5.667E-02	2.650E-02
	1.50000E+00	5.160E-02	2.533E-02
	2.00000E+00	4.447E-02	2.337E-02
	3.00000E+00	3.611E-02	2.069E-02
	4.00000E+00	3.140E-02	1.904E-02
	5.00000E+00	2.838E-02	1.795E-02
	6.00000E+00	2.632E-02	1.721E-02
	8.00000E+00	2.373E-02	1.629E-02
	1.00000E+01	2.223E-02	1.579E-02
	1.50000E+01	2.045E-02	1.522E-02
	2.00000E+01	1.982E-02	1.503E-02


GAFCHROMIC SENSOR
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


GALLIUM ARSENIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


GLASS, BOROSILICATE ("PYREX")
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

GLASS, LEAD

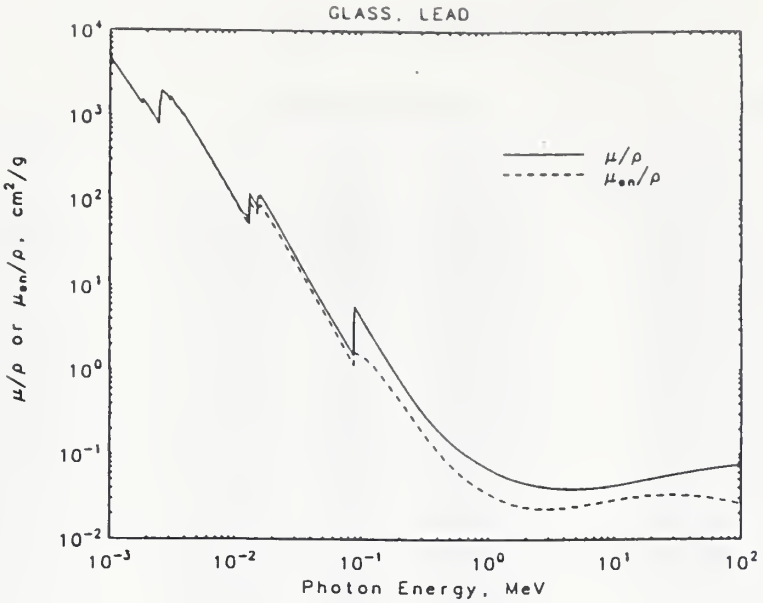
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{ep}/ρ (cm^2/g)
	1.00000E-03	4.816E+03	4.804E+03
	1.15026E-03	3.619E+03	3.607E+03
	1.32310E-03	2.704E+03	2.693E+03
33 L3	1.32310E-03	2.713E+03	2.702E+03
	1.34073E-03	2.639E+03	2.628E+03
	1.35860E-03	2.567E+03	2.556E+03
33 L2	1.35860E-03	2.571E+03	2.560E+03
	1.50000E-03	2.088E+03	2.078E+03
	1.52650E-03	2.012E+03	2.002E+03
33 L1	1.52650E-03	2.014E+03	2.004E+03
	1.67543E-03	1.646E+03	1.636E+03
	1.83890E-03	1.339E+03	1.330E+03
14 K	1.83890E-03	1.573E+03	1.552E+03
	2.00000E-03	1.316E+03	1.298E+03
	2.48400E-03	8.026E+02	7.897E+02
82 M5	2.48400E-03	1.251E+03	1.223E+03
	2.53429E-03	1.488E+03	1.451E+03
	2.58560E-03	1.641E+03	1.600E+03
82 M4	2.58560E-03	2.027E+03	1.973E+03
	3.00000E-03	1.596E+03	1.555E+03
	3.06640E-03	1.508E+03	1.469E+03
82 M3	3.06640E-03	1.726E+03	1.681E+03
	3.30130E-03	1.440E+03	1.404E+03
	3.55420E-03	1.199E+03	1.170E+03
82 M2	3.55420E-03	1.266E+03	1.235E+03
	3.69948E-03	1.150E+03	1.122E+03
	3.85070E-03	1.045E+03	1.020E+03
82 M1	3.85070E-03	1.088E+03	1.062E+03
	4.00000E-03	9.945E+02	9.709E+02
	4.96640E-03	5.875E+02	5.733E+02
22 K	4.96640E-03	5.924E+02	5.772E+02
	5.00000E-03	5.828E+02	5.678E+02
	6.00000E-03	3.715E+02	3.612E+02
	8.00000E-03	1.808E+02	1.744E+02
	1.00000E-02	1.029E+02	9.821E+01
	1.18667E-02	6.666E+01	6.288E+01
33 K	1.18667E-02	6.707E+01	6.308E+01
	1.24372E-02	6.625E+01	5.580E+01
	1.30352E-02	5.288E+01	4.937E+01
82 L3	1.30352E-02	1.244E+02	9.927E+01
	1.50000E-02	8.557E+01	6.991E+01
	1.52000E-02	8.266E+01	6.766E+01
82 L2	1.52000E-02	1.132E+02	8.649E+01
	1.55269E-02	1.080E+02	8.279E+01
	1.58608E-02	1.025E+02	7.888E+01
82 L1	1.58608E-02	1.178E+02	8.998E+01
	2.00000E-02	6.568E+01	5.252E+01
	3.00000E-02	2.305E+01	1.927E+01
	4.00000E-02	1.093E+01	9.198E+00
	5.00000E-02	6.134E+00	5.118E+00
	6.00000E-02	3.843E+00	3.152E+00
	8.00000E-02	1.869E+00	1.458E+00
	8.80045E-02	1.483E+00	1.129E+00
8 82	8.80045E-02	5.824E+00	1.639E+00
	1.00000E-01	4.216E+00	1.498E+00
	1.50000E-01	1.550E+00	8.042E-01
	2.00000E-01	7.820E-01	4.508E-01
	3.00000E-01	3.297E-01	1.934E-01
	4.00000E-01	1.984E-01	1.114E-01
	5.00000E-01	1.429E-01	7.676E-02
	6.00000E-01	1.138E-01	5.918E-02
	8.00000E-01	8.421E-02	4.246E-02
	1.00000E+00	6.914E-02	3.468E-02
	1.25000E+00	5.826E-02	2.931E-02
	1.50000E+00	5.208E-02	2.636E-02
	2.00000E+00	4.568E-02	2.373E-02
	3.00000E+00	4.082E-02	2.281E-02
	4.00000E+00	3.938E-02	2.343E-02
	5.00000E+00	3.919E-02	2.439E-02
	6.00000E+00	3.958E-02	2.540E-02
	8.00000E+00	4.108E-02	2.724E-02
	1.00000E+01	4.295E-02	2.878E-02
	1.50000E+01	4.768E-02	3.137E-02
	2.00000E+01	5.165E-02	3.257E-02

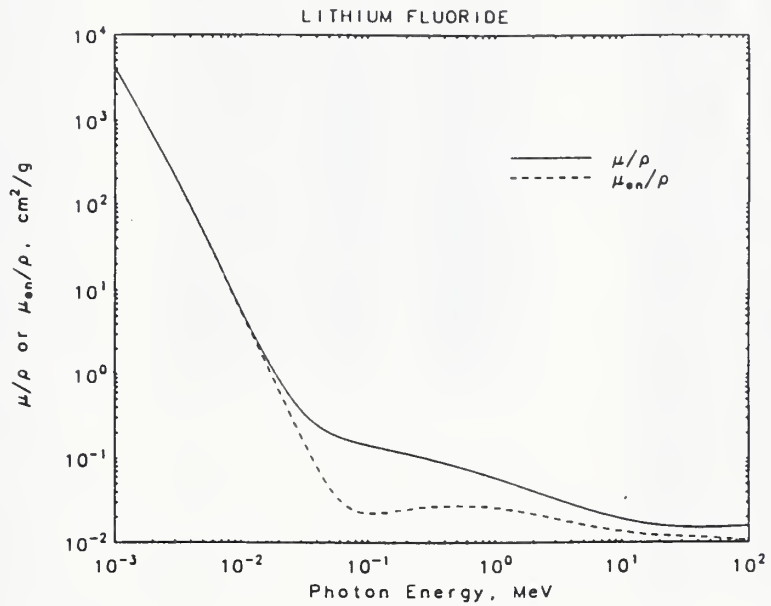
LITHIUM FLUORIDE

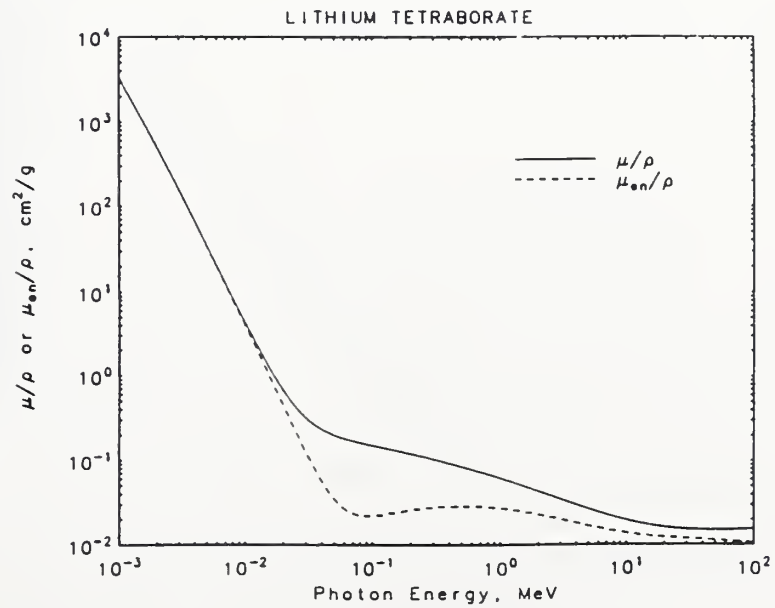
Energy (MeV)	μ/ρ (cm^2/g)	μ_{ep}/ρ (cm^2/g)
1.00000E-03	4.200E+03	4.175E+03
1.50000E-03	1.467E+03	1.460E+03
2.00000E-03	6.698E+02	6.667E+02
3.00000E-03	2.135E+02	2.121E+02
4.00000E-03	9.282E+01	9.188E+01
5.00000E-03	4.815E+01	4.742E+01
6.00000E-03	2.802E+01	2.742E+01
8.00000E-03	1.187E+01	1.142E+01
1.00000E-02	6.101E+00	5.733E+00
1.50000E-02	1.884E+00	1.612E+00
2.00000E-02	8.792E-01	6.494E-01
3.00000E-02	3.727E-01	1.826E-01
4.00000E-02	2.486E-01	7.890E-02
5.00000E-02	2.020E-01	4.541E-02
6.00000E-02	1.791E-01	3.223E-02
8.00000E-02	1.563E-01	2.385E-02
1.00000E-01	1.44[illegible]	2.229E-02
1.50000E-01	1.260E[illegible]	2.332E-02
2.00000E-01	1.145E[illegible]	2.484E-02
3.00000E-01	9.899E-02	2.663E-02
4.00000E-01	8.853E-02	2.734E-02
5.00000E-01	8.076E-02	2.749E-02
6.00000E-01	7.467E-02	2.736E-02
8.00000E-01	6.557E-02	2.671E-02
1.00000E+00	5.894E-02	2.585E-02
1.25000E+00	5.271E-02	2.470E-02
1.50000E+00	4.798E-02	2.361E-02
2.00000E+00	4.122E-02	2.173E-02
3.00000E+00	3.321E-02	1.907E-02
4.00000E+00	2.857E-02	1.733E-02
5.00000E+00	2.554E-02	1.614E-02
6.00000E+00	2.343E-02	1.528E-02
8.00000E+00	2.069E-02	1.414E-02
1.00000E+01	1.903E-02	1.345E-02
1.50000E+01	1.687E-02	1.253E-02
2.00000E+01	1.592E-02	1.211E-02

LITHIUM TETRABORATE

Energy (MeV)	μ/ρ (cm^2/g)	μ_{ep}/ρ (cm^2/g)
1.00000E-03	3.373E+03	3.363E+03
1.50000E-03	1.128E+03	1.124E+03
2.00000E-03	5.033E+02	5.015E+02
3.00000E-03	1.563E+02	1.553E+02
4.00000E-03	6.687E+01	6.612E+01
5.00000E-03	3.433E+01	3.373E+01
6.00000E-03	1.984E+01	1.933E+01
8.00000E-03	8.343E+00	7.946E+00
1.00000E-02	4.290E+00	3.954E+00
1.50000E-02	1.357E+00	1.096E+00
2.00000E-02	6.652E-01	4.384E-01
3.00000E-02	3.165E-01	1.244E-01
4.00000E-02	2.298E-01	5.612E-02
5.00000E-02	1.960E-01	3.469E-02
6.00000E-02	1.786E-01	2.665E-02
8.00000E-02	1.599E-01	2.221E-02
1.00000E-01	1.489E-01	2.201E-02
1.50000E-01	1.314E-01	2.408E-02
2.00000E-01	1.197E-01	2.589E-02
3.00000E-01	1.036E-01	2.787E-02
4.00000E-01	9.271E-02	2.863E-02
5.00000E-01	8.461E-02	2.881E-02
6.00000E-01	7.823E-02	2.868E-02
8.00000E-01	6.870E-02	2.800E-02
1.00000E+00	6.177E-02	2.710E-02
1.25000E+00	5.523E-02	2.589E-02
1.50000E+00	5.026E-02	2.474E-02
2.00000E+00	4.318E-02	2.278E-02
3.00000E+00	3.471E-02	1.994E-02
4.00000E+00	2.979E-02	1.808E-02
5.00000E+00	2.657E-02	1.678E-02
6.00000E+00	2.432E-02	1.585E-02
8.00000E+00	2.137E-02	1.459E-02
1.00000E+01	1.958E-02	1.381E-02
1.50000E+01	1.721E-02	1.276E-02
2.00000E+01	1.613E-02	1.227E-02


GLASS, LEAD
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


LITHIUM FLUORIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


LITHIUM TETRABORATE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

LUNG TISSUE (ICRU-44)

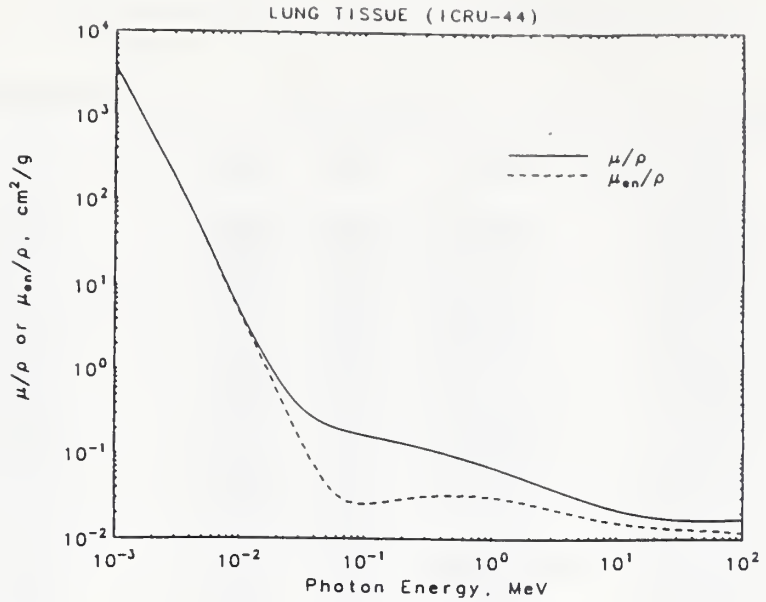
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.803E+03	3.791E+03
	1.03542E-03	3.469E+03	3.459E+03
	1.07210E-03	3.164E+03	3.155E+03
11 K	1.07210E-03	3.176E+03	3.167E+03
	1.50000E-03	1.283E+03	1.280E+03
	2.00000E-03	5.746E+02	5.727E+02
	2.14550E-03	4.707E+02	4.690E+02
15 K	2.14550E-03	4.752E+02	4.732E+02
	2.30297E-03	3.883E+02	3.865E+02
	2.47200E-03	3.170E+02	3.154E+02
16 K	2.47200E-03	3.226E+02	3.206E+02
	2.64140E-03	2.668E+02	2.650E+02
	2.82240E-03	2.204E+02	2.189E+02
17 K	2.82240E-03	2.248E+02	2.229E+02
	3.00000E-03	1.888E+02	1.870E+02
	3.60740E-03	1.103E+02	1.091E+02
19 K	3.60740E-03	1.125E+02	1.110E+02
	4.00000E-03	8.306E+01	8.181E+01
	5.00000E-03	4.296E+01	4.210E+01
	6.00000E-03	2.497E+01	2.431E+01
	8.00000E-03	1.058E+01	1.010E+01
	1.00000E-02	5.459E+00	5.067E+00
	1.50000E-02	1.721E+00	1.423E+00
	2.00000E-02	8.316E-01	5.740E-01
	3.00000E-02	3.815E-01	1.635E-01
	4.00000E-02	2.699E-01	7.286E-02
	5.00000E-02	2.270E-01	4.393E-02
	6.00000E-02	2.053E-01	3.282E-02
	8.00000E-02	1.826E-01	2.625E-02
	1.00000E-01	1.695E-01	2.550E-02
	1.50000E-01	1.493E-01	2.748E-02
	2.00000E-01	1.359E-01	2.945E-02
	3.00000E-01	1.177E-01	3.167E-02
	4.00000E-01	1.053E-01	3.252E-02
	5.00000E-01	9.607E-02	3.272E-02
	6.00000E-01	8.882E-02	3.257E-02
	8.00000E-01	7.800E-02	3.179E-02
	1.00000E+00	7.013E-02	3.077E-02
	1.25000E+00	6.271E-02	2.940E-02
	1.50000E+00	5.706E-02	2.810E-02
	2.00000E+00	4.900E-02	2.586E-02
	3.00000E+00	3.935E-02	2.262E-02
	4.00000E+00	3.374E-02	2.048E-02
	5.00000E+00	3.005E-02	1.898E-02
	6.00000E+00	2.746E-02	1.789E-02
	8.00000E+00	2.407E-02	1.643E-02
	1.00000E+01	2.198E-02	1.551E-02
	1.50000E+01	1.922E-02	1.427E-02
	2.00000E+01	1.794E-02	1.367E-02

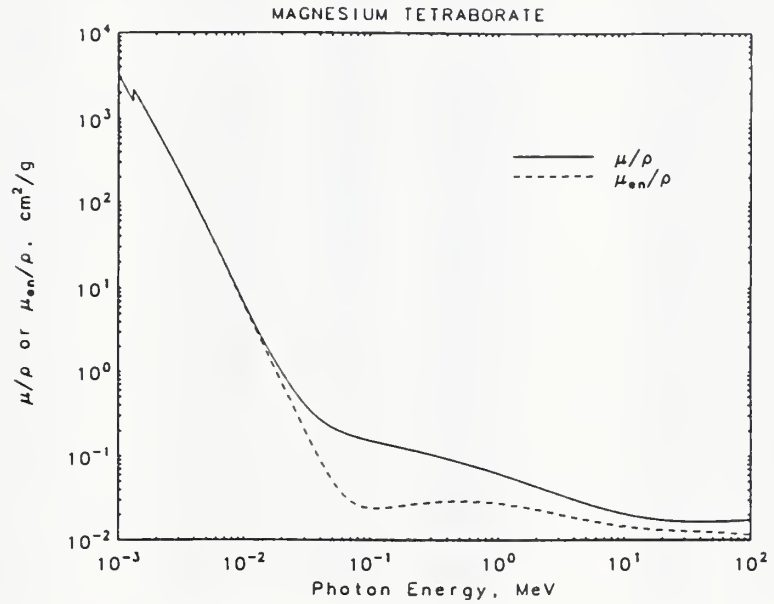
MAGNESIUM TETRABORATE

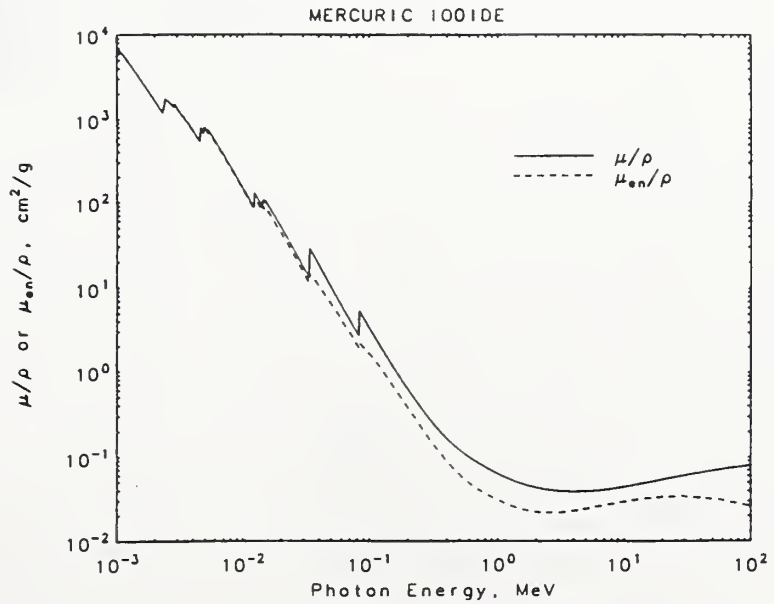
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.284E+03	3.275E+03
	1.14237E-03	2.304E+03	2.298E+03
	1.30500E-03	1.609E+03	1.604E+03
12 K	1.30500E-03	2.284E+03	2.262E+03
	1.50000E-03	1.599E+03	1.584E+03
	2.00000E-03	7.334E+02	7.274E+02
	3.00000E-03	2.358E+02	2.337E+02
	4.00000E-03	1.030E+02	1.018E+02
	5.00000E-03	5.363E+01	5.279E+01
	6.00000E-03	3.131E+01	3.064E+01
	8.00000E-03	1.332E+01	1.283E+01
	1.00000E-02	6.865E+00	6.470E+00
	1.50000E-02	2.122E+00	1.831E+00
	2.00000E-02	9.862E-01	7.409E-01
	3.00000E-02	4.114E-01	2.092E-01
	4.00000E-02	2.705E-01	9.011E-02
	5.00000E-02	2.177E-01	5.137E-02
	6.00000E-02	1.919E-01	3.600E-02
	8.00000E-02	1.666E-01	2.602E-02
	1.00000E-01	1.531E-01	2.398E-02
	1.50000E-01	1.337E-01	2.480E-02
	2.00000E-01	1.214E-01	2.635E-02
	3.00000E-01	1.049E-01	2.822E-02
	4.00000E-01	9.380E-02	2.896E-02
	5.00000E-01	8.558E-02	2.913E-02
	6.00000E-01	7.912E-02	2.899E-02
	8.00000E-01	6.946E-02	2.830E-02
	1.00000E+00	6.245E-02	2.738E-02
	1.25000E+00	5.584E-02	2.616E-02
	1.50000E+00	5.083E-02	2.500E-02
	2.00000E+00	4.370E-02	2.303E-02
	3.00000E+00	3.524E-02	2.023E-02
	4.00000E+00	3.035E-02	1.842E-02
	5.00000E+00	2.718E-02	1.717E-02
	6.00000E+00	2.496E-02	1.629E-02
	8.00000E+00	2.211E-02	1.512E-02
	1.00000E+01	2.039E-02	1.441E-02
	1.50000E+01	1.817E-02	1.350E-02
	2.00000E+01	1.722E-02	1.309E-02

MERCURIC IODIDE

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	7.213E+03	7.197E+03
	1.03542E-03	6.724E+03	6.709E+03
	1.07210E-03	6.258E+03	6.244E+03
53 M1	1.07210E-03	6.446E+03	6.431E+03
	1.50000E-03	3.149E+03	3.137E+03
	2.00000E-03	1.638E+03	1.628E+03
	2.29490E-03	1.188E+03	1.178E+03
80 M5	2.29490E-03	1.238E+03	1.227E+03
	2.33947E-03	1.384E+03	1.367E+03
	2.38490E-03	1.678E+03	1.652E+03
80 M4	2.38490E-03	1.751E+03	1.722E+03
	2.60577E-03	1.582E+03	1.554E+03
	2.84710E-03	1.390E+03	1.364E+03
80 M3	2.84710E-03	1.531E+03	1.502E+03
	3.00000E-03	1.349E+03	1.324E+03
	3.27850E-03	1.085E+03	1.064E+03
80 M2	3.27850E-03	1.130E+03	1.109E+03
	3.41712E-03	1.024E+03	1.002E+03
	3.56160E-03	9.261E+02	9.081E+02
80 M1	3.56160E-03	9.539E+02	9.354E+02
	4.00000E-03	7.218E+02	7.072E+02
	4.55710E-03	5.247E+02	5.132E+02
53 L3	4.55710E-03	8.017E+02	7.693E+02
	4.70229E-03	7.500E+02	7.197E+02
	4.85210E-03	6.969E+02	6.690E+02
53 L2	4.85210E-03	8.258E+02	7.866E+02
	5.00000E-03	7.741E+02	7.376E+02
	5.18810E-03	7.052E+02	6.726E+02
53 L1	5.18810E-03	7.707E+02	7.332E+02
	6.00000E-03	5.385E+02	5.138E+02
	8.00000E-03	2.577E+02	2.463E+02
	1.00000E-02	1.447E+02	1.379E+02
	1.22839E-02	8.459E+01	8.001E+01
80 L3	1.22839E-02	1.311E+02	1.133E+02
	1.32113E-02	1.079E+02	9.385E+01
	1.42087E-02	8.896E+01	7.778E+01
80 L2	1.42087E-02	1.090E+02	9.059E+01
	1.45206E-02	1.035E+02	8.618E+01
	1.48393E-02	9.793E+01	8.172E+01
80 L1	1.48393E-02	1.080E+02	8.910E+01
	1.50000E-02	1.050E+02	8.678E+01
	2.00000E-02	5.006E+01	4.254E+01
	3.00000E-02	1.732E+01	1.490E+01
	3.31694E-02	1.332E+01	1.143E+01
53 K	3.31694E-02	2.967E+01	1.485E+01
	4.00000E-02	1.827E+01	1.041E+01
	5.00000E-02	1.019E+01	6.462E+00
	6.00000E-02	6.301E+00	4.236E+00
	8.00000E-02	2.958E+00	2.088E+00
	8.31023E-02	2.679E+00	1.897E+00
80 K	8.31023E-02	5.508E+00	2.240E+00
	1.00000E-01	3.415E+00	1.651E+00
	1.50000E-01	1.232E+00	7.225E-01
	2.00000E-01	6.220E-01	3.785E-01
	3.00000E-01	2.682E-01	1.554E-01
	4.00000E-01	1.661E-01	8.937E-02
	5.00000E-01	1.228E-01	6.248E-02
	6.00000E-01	9.985E-02	4.909E-02
	8.00000E-01	7.601E-02	3.648E-02
	1.00000E+00	6.350E-02	3.058E-02
	1.25000E+00	5.421E-02	2.641E-02
	1.50000E+00	4.882E-02	2.407E-02
	2.00000E+00	4.323E-02	2.204E-02
	3.00000E+00	3.933E-02	2.171E-02
	4.00000E+00	3.856E-02	2.275E-02
	5.00000E+00	3.889E-02	2.402E-02
	6.00000E+00	3.967E-02	2.527E-02
	8.00000E+00	4.181E-02	2.747E-02
	1.00000E+01	4.415E-02	2.923E-02
	1.50000E+01	4.966E-02	3.206E-02
	2.00000E+01	5.410E-02	3.328E-02


LUNG TISSUE (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


MAGNESIUM TETRABORATE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


MERCURIC IODIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

MUSCLE, SKELETAL (ICRU-44)

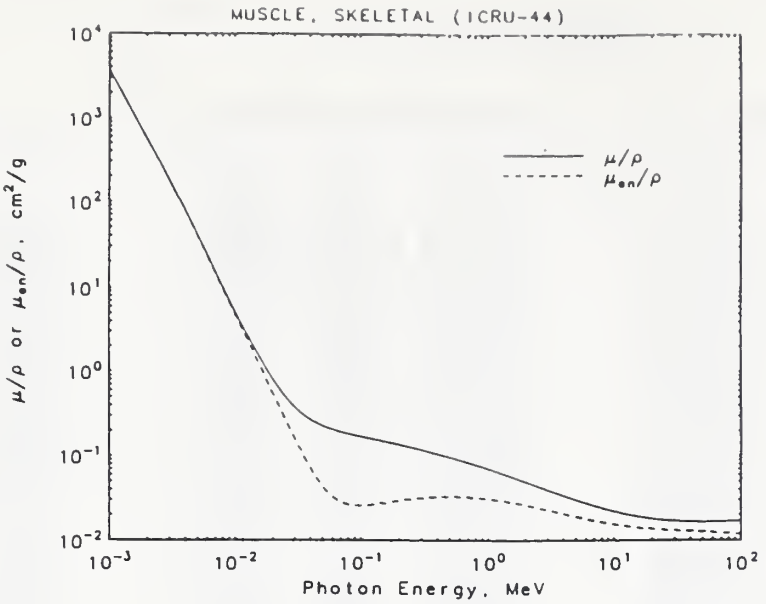
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.719E+03	3.709E+03
	1.03542E-03	3.393E+03	3.383E+03
	1.07210E-03	3.094E+03	3.085E+03
11 K	1.07210E-03	3.100E+03	3.091E+03
	1.50000E-03	1.251E+03	1.247E+03
	2.00000E-03	5.594E+02	5.574E+02
	2.14550E-03	4.581E+02	4.564E+02
15 K	2.14550E-03	4.626E+02	4.606E+02
	2.30297E-03	3.776E+02	3.762E+02
	2.47200E-03	3.085E+02	3.069E+02
16 K	2.47200E-03	3.140E+02	3.121E+02
	2.64140E-03	2.597E+02	2.579E+02
	2.82240E-03	2.145E+02	2.130E+02
17 K	2.82240E-03	2.160E+02	2.143E+02
	3.00000E-03	1.812E+02	1.796E+02
	3.60740E-03	1.057E+02	1.046E+02
19 K	3.60740E-03	1.100E+02	1.083E+02
	4.00000E-03	8.127E+01	7.992E+01
	5.00000E-03	4.206E+01	4.116E+01
	6.00000E-03	2.446E+01	2.377E+01
	8.00000E-03	1.037E+01	9.888E+00
	1.00000E-02	5.356E+00	4.964E+00
	1.50000E-02	1.693E+00	1.396E+00
	2.00000E-02	8.205E-01	5.638E-01
	3.00000E-02	3.783E-01	1.610E-01
	4.00000E-02	2.685E-01	7.192E-02
	5.00000E-02	2.262E-01	4.349E-02
	6.00000E-02	2.048E-01	3.258E-02
	8.00000E-02	1.823E-01	2.615E-02
	1.00000E-01	1.693E-01	2.544E-02
	1.50000E-01	1.492E-01	2.745E-02
	2.00000E-01	1.358E-01	2.942E-02
	3.00000E-01	1.176E-01	3.164E-02
	4.00000E-01	1.052E-01	3.249E-02
	5.00000E-01	9.598E-02	3.269E-02
	6.00000E-01	8.874E-02	3.254E-02
	8.00000E-01	7.793E-02	3.177E-02
	1.00000E+00	7.007E-02	3.074E-02
	1.25000E+00	6.265E-02	2.938E-02
	1.50000E+00	5.701E-02	2.808E-02
	2.00000E+00	4.896E-02	2.584E-02
	3.00000E+00	3.931E-02	2.259E-02
	4.00000E+00	3.369E-02	2.045E-02
	5.00000E+00	3.000E-02	1.895E-02
	6.00000E+00	2.741E-02	1.786E-02
	8.00000E+00	2.401E-02	1.639E-02
	1.00000E+01	2.192E-02	1.547E-02
	1.50000E+01	1.915E-02	1.421E-02
	2.00000E+01	1.786E-02	1.361E-02

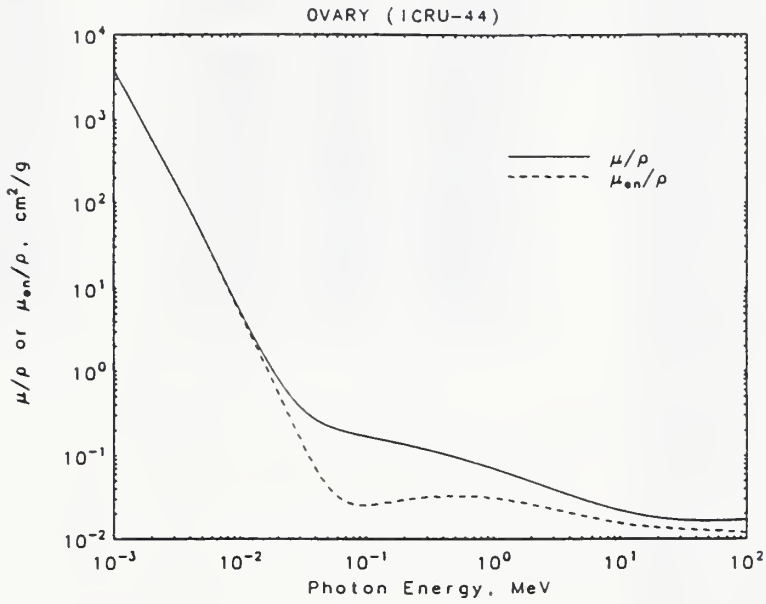
OVARY (ICRU-44)

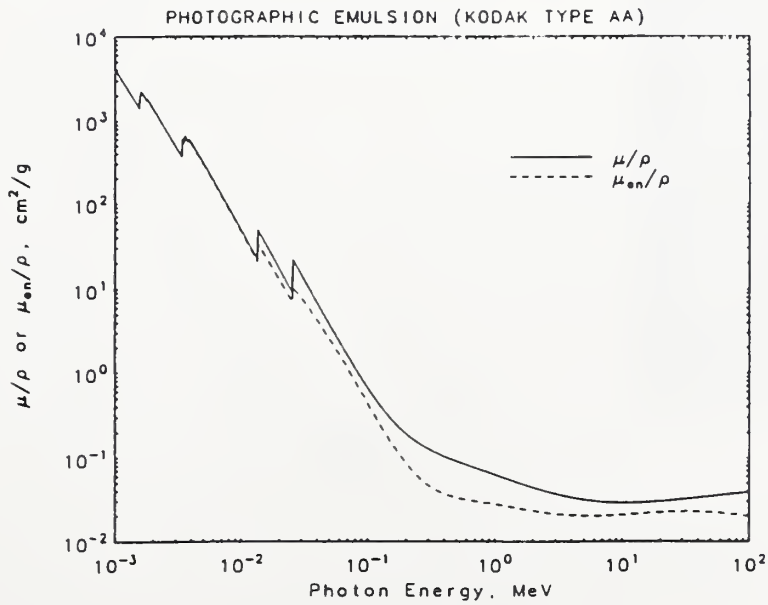
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.835E+03	3.823E+03
	1.03542E-03	3.499E+03	3.489E+03
	1.07210E-03	3.191E+03	3.182E+03
11 K	1.07210E-03	3.203E+03	3.194E+03
	1.50000E-03	1.295E+03	1.291E+03
	2.00000E-03	5.800E+02	5.780E+02
	2.14550E-03	4.752E+02	4.734E+02
15 K	2.14550E-03	4.796E+02	4.776E+02
	2.30297E-03	3.920E+02	3.902E+02
	2.47200E-03	3.200E+02	3.184E+02
16 K	2.47200E-03	3.237E+02	3.218E+02
	2.64140E-03	2.677E+02	2.660E+02
	2.82240E-03	2.211E+02	2.196E+02
17 K	2.82240E-03	2.240E+02	2.223E+02
	3.00000E-03	1.880E+02	1.864E+02
	3.60740E-03	1.098E+02	1.086E+02
19 K	3.60740E-03	1.119E+02	1.105E+02
	4.00000E-03	8.261E+01	8.142E+01
	5.00000E-03	4.269E+01	4.185E+01
	6.00000E-03	2.479E+01	2.414E+01
	8.00000E-03	1.049E+01	1.002E+01
	1.00000E-02	5.410E+00	5.019E+00
	1.50000E-02	1.705E+00	1.407E+00
	2.00000E-02	8.247E-01	5.669E-01
	3.00000E-02	3.796E-01	1.614E-01
	4.00000E-02	2.693E-01	7.196E-02
	5.00000E-02	2.269E-01	4.349E-02
	6.00000E-02	2.054E-01	3.258E-02
	8.00000E-02	1.828E-01	2.617E-02
	1.00000E-01	1.698E-01	2.548E-02
	1.50000E-01	1.496E-01	2.751E-02
	2.00000E-01	1.361E-01	2.950E-02
	3.00000E-01	1.179E-01	3.172E-02
	4.00000E-01	1.055E-01	3.258E-02
	5.00000E-01	9.624E-02	3.278E-02
	6.00000E-01	8.898E-02	3.263E-02
	8.00000E-01	7.814E-02	3.185E-02
	1.00000E+00	7.026E-02	3.083E-02
	1.25000E+00	6.282E-02	2.946E-02
	1.50000E+00	5.717E-02	2.815E-02
	2.00000E+00	4.909E-02	2.591E-02
	3.00000E+00	3.942E-02	2.266E-02
	4.00000E+00	3.380E-02	2.052E-02
	5.00000E+00	3.010E-02	1.902E-02
	6.00000E+00	2.750E-02	1.792E-02
	8.00000E+00	2.411E-02	1.646E-02
	1.00000E+01	2.202E-02	1.554E-02
	1.50000E+01	1.924E-02	1.429E-02
	2.00000E+01	1.797E-02	1.369E-02

PHOTOGRAPHIC EMULSION (KODAK TYPE AA)

	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.155E+03	4.148E+03
	1.50000E-03	1.541E+03	1.536E+03
	1.54990E-03	1.420E+03	1.415E+03
35 L3	1.54990E-03	2.169E+03	2.151E+03
	1.57278E-03	2.025E+03	2.008E+03
	1.59600E-03	1.927E+03	1.911E+03
35 L2	1.59600E-03	2.263E+03	2.241E+03
	1.68644E-03	2.003E+03	1.985E+03
	1.78200E-03	1.736E+03	1.720E+03
35 L1	1.78200E-03	1.853E+03	1.835E+03
	2.00000E-03	1.392E+03	1.378E+03
	3.00000E-03	4.936E+02	4.880E+02
	3.35110E-03	3.698E+02	3.651E+02
47 L3	3.35110E-03	6.361E+02	6.179E+02
	3.43632E-03	5.966E+02	5.798E+02
	3.52370E-03	5.596E+02	5.439E+02
47 L2	3.52370E-03	6.862E+02	6.633E+02
	3.66203E-03	6.236E+02	6.022E+02
	3.80580E-03	5.651E+02	5.470E+02
47 L1	3.80580E-03	6.211E+02	6.003E+02
	4.00000E-03	5.496E+02	5.317E+02
	5.00000E-03	3.078E+02	2.985E+02
	6.00000E-03	1.906E+02	1.849E+02
	8.00000E-03	8.859E+01	8.565E+01
	1.00000E-02	4.857E+01	4.663E+01
	1.34737E-02	2.166E+01	2.044E+01
35 K	1.34737E-02	4.958E+01	3.300E+01
	1.50000E-02	3.752E+01	2.593E+01
	2.00000E-02	1.754E+01	1.308E+01
	2.55140E-02	9.135E+00	7.074E+00
47 K	2.55140E-02	2.293E+01	1.061E+01
	3.00000E-02	1.508E+01	8.007E+00
	4.00000E-02	7.044E+00	4.392E+00
	5.00000E-02	3.889E+00	2.608E+00
	6.00000E-02	2.400E+00	1.661E+00
	8.00000E-02	1.147E+00	7.915E-01
	1.00000E-01	6.720E-01	4.412E-01
	1.50000E-01	2.962E-01	1.586E-01
	2.00000E-01	1.927E-01	8.527E-02
	3.00000E-01	1.274E-01	4.670E-02
	4.00000E-01	1.037E-01	3.709E-02
	5.00000E-01	9.075E-02	3.339E-02
	6.00000E-01	8.210E-02	3.147E-02
	8.00000E-01	7.057E-02	2.923E-02
	1.00000E+00	6.281E-02	2.768E-02
	1.25000E+00	5.587E-02	2.610E-02
	1.50000E+00	5.090E-02	2.483E-02
	2.00000E+00	4.429E-02	2.302E-02
	3.00000E+00	3.727E-02	2.116E-02
	4.00000E+00	3.372E-02	2.038E-02
	5.00000E+00	3.171E-02	2.009E-02
	6.00000E+00	3.049E-02	2.003E-02
	8.00000E+00	2.933E-02	2.024E-02
	1.00000E+01	2.900E-02	2.062E-02
	1.50000E+01	2.939E-02	2.150E-02
	2.00000E+01	3.026E-02	2.210E-02


MUSCLE, SKELETAL (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


OVARY (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


PHOTOGRAPHIC EMULSION (KODAK TYPE AA)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

PHOTOGRAPHIC EMULSION (STANDARD NUCLEAR)

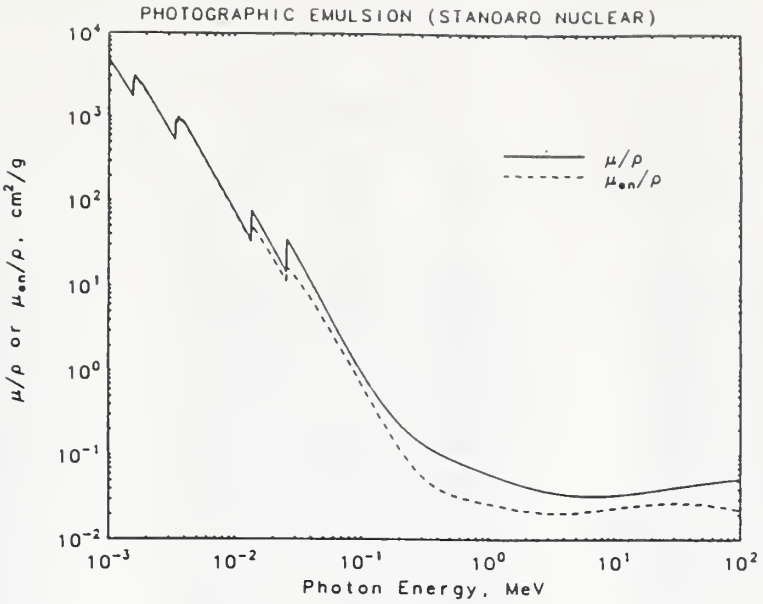
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	4.813E+03	4.805E+03
	1.03542E-03	4.444E+03	4.436E+03
	1.07210E-03	4.101E+03	4.093E+03
53 M1	1.07210E-03	4.102E+03	4.094E+03
	1.50000E-03	1.860E+03	1.854E+03
	1.54990E-03	1.720E+03	1.714E+03
35 L3	1.54990E-03	2.894E+03	2.867E+03
	1.57278E-03	2.688E+03	2.664E+03
	1.59600E-03	2.554E+03	2.531E+03
35 L2	1.59600E-03	3.081E+03	3.048E+03
	1.68644E-03	2.743E+03	2.714E+03
	1.78200E-03	2.381E+03	2.356E+03
35 L1	1.78200E-03	2.564E+03	2.536E+03
	2.00000E-03	1.937E+03	1.917E+03
	2.47200E-03	1.143E+03	1.131E+03
16 K	2.47200E-03	1.147E+03	1.134E+03
	3.00000E-03	7.017E+02	6.933E+02
	3.35110E-03	5.279E+02	5.210E+02
47 L3	3.35110E-03	9.478E+02	9.196E+02
	3.43632E-03	8.905E+02	8.633E+02
	3.52370E-03	8.348E+02	8.105E+02
47 L2	3.52370E-03	1.034E+03	9.987E+02
	3.66203E-03	9.393E+02	9.076E+02
	3.80580E-03	8.534E+02	8.252E+02
47 L1	3.80580E-03	9.416E+02	9.092E+02
	4.00000E-03	8.342E+02	8.062E+02
	4.55710E-03	5.971E+02	5.783E+02
53 L3	4.55710E-03	5.987E+02	5.797E+02
	4.70229E-03	5.516E+02	5.343E+02
	4.85210E-03	5.083E+02	4.925E+02
53 L2	4.85210E-03	5.090E+02	4.931E+02
	5.00000E-03	4.708E+02	4.562E+02
	5.18810E-03	4.277E+02	4.146E+02
53 L1	5.18810E-03	4.280E+02	4.149E+02
	6.00000E-03	2.926E+02	2.838E+02
	8.00000E-03	1.364E+02	1.320E+02
	1.00000E-02	7.494E+01	7.205E+01
	1.34737E-02	3.346E+01	3.168E+01
35 K	1.34737E-02	7.721E+01	5.135E+01
	1.50000E-02	5.843E+01	4.040E+01
	2.00000E-02	2.729E+01	2.042E+01
	2.55140E-02	1.417E+01	1.105E+01
47 K	2.55140E-02	3.591E+01	1.663E+01
	3.00000E-02	2.360E+01	1.256E+01
	3.31694E-02	1.809E+01	1.030E+01
53 K	3.31694E-02	1.819E+01	1.032E+01
	4.00000E-02	1.102E+01	6.910E+00
	5.00000E-02	6.042E+00	4.103E+00
	6.00000E-02	3.693E+00	2.610E+00
	8.00000E-02	1.717E+00	1.238E+00
	1.00000E-01	9.710E-01	6.839E-01
	1.50000E-01	3.860E-01	2.355E-01
	2.00000E-01	2.294E-01	1.183E-01
	3.00000E-01	1.359E-01	5.609E-02
	4.00000E-01	1.053E-01	4.043E-02
	5.00000E-01	8.992E-02	3.449E-02
	6.00000E-01	8.027E-02	3.153E-02
	8.00000E-01	6.806E-02	2.842E-02
	1.00000E+00	6.019E-02	2.655E-02
	1.25000E+00	5.335E-02	2.481E-02
	1.50000E+00	4.863E-02	2.352E-02
	2.00000E+00	4.270E-02	2.192E-02
	3.00000E+00	3.700E-02	2.077E-02
	4.00000E+00	3.455E-02	2.072E-02
	5.00000E+00	3.344E-02	2.106E-02
	6.00000E+00	3.298E-02	2.153E-02
	8.00000E+00	3.306E-02	2.259E-02
	1.00000E+01	3.372E-02	2.358E-02
	1.50000E+01	3.592E-02	2.536E-02
	2.00000E+01	3.804E-02	2.634E-02

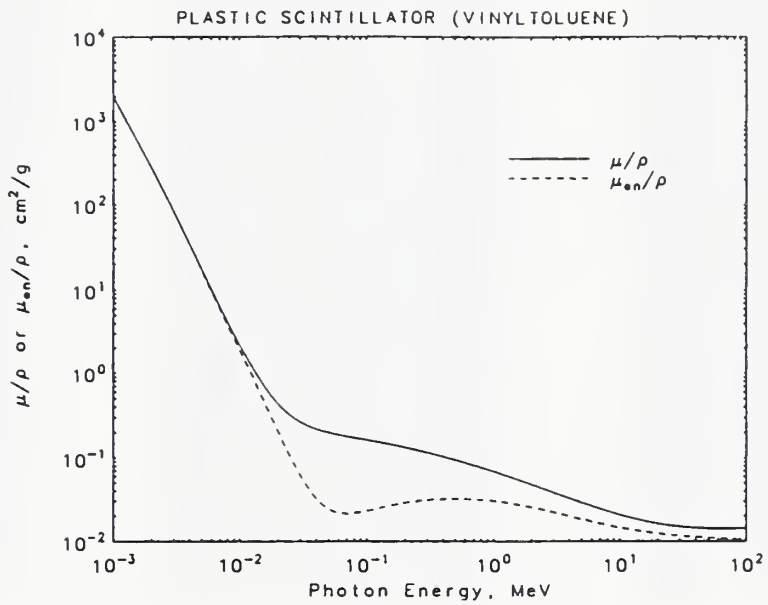
PLASTIC SCINTILLATOR (VINYLTOLUENE)

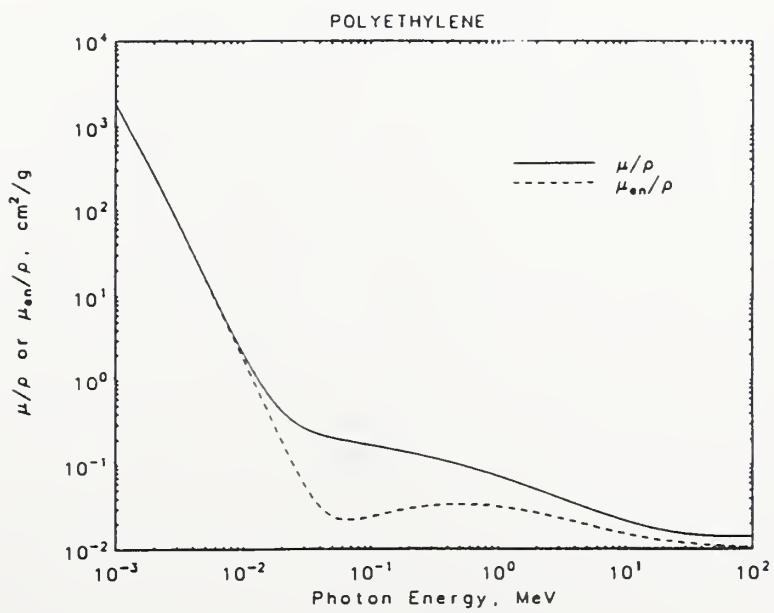
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.024E+03	2.022E+03
1.50000E-03	6.409E+02	6.397E+02
2.00000E-03	2.770E+02	2.760E+02
3.00000E-03	8.270E+01	8.203E+01
4.00000E-03	3.461E+01	3.407E+01
5.00000E-03	1.753E+01	1.707E+01
6.00000E-03	1.005E+01	9.650E+00
8.00000E-03	4.220E+00	3.883E+00
1.00000E-02	2.204E+00	1.903E+00
1.50000E-02	7.705E-01	5.158E-01
2.00000E-02	4.358E-01	2.059E-01
3.00000E-02	2.647E-01	6.210E-02
4.00000E-02	2.194E-01	3.256E-02
5.00000E-02	1.997E-01	2.424E-02
6.00000E-02	1.881E-01	2.180E-02
8.00000E-02	1.736E-01	2.172E-02
1.00000E-01	1.635E-01	2.310E-02
1.50000E-01	1.458E-01	2.650E-02
2.00000E-01	1.331E-01	2.876E-02
3.00000E-01	1.155E-01	3.110E-02
4.00000E-01	1.034E-01	3.197E-02
5.00000E-01	9.443E-02	3.218E-02
6.00000E-01	8.732E-02	3.204E-02
8.00000E-01	7.668E-02	3.128E-02
1.00000E+00	6.894E-02	3.027E-02
1.25000E+00	6.166E-02	2.894E-02
1.50000E+00	5.611E-02	2.766E-02
2.00000E+00	4.810E-02	2.542E-02
3.00000E+00	3.848E-02	2.214E-02
4.00000E+00	3.282E-02	1.992E-02
5.00000E+00	2.907E-02	1.835E-02
6.00000E+00	2.641E-02	1.718E-02
8.00000E+00	2.290E-02	1.558E-02
1.00000E+01	2.069E-02	1.455E-02
1.50000E+01	1.770E-02	1.309E-02
2.00000E+01	1.624E-02	1.236E-02

POLYETHYLENE

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	1.894E+03	1.892E+03
1.50000E-03	5.999E+02	5.988E+02
2.00000E-03	2.593E+02	2.584E+02
3.00000E-03	7.743E+01	7.678E+01
4.00000E-03	3.242E+01	3.189E+01
5.00000E-03	1.643E+01	1.598E+01
6.00000E-03	9.432E+00	9.032E+00
8.00000E-03	3.975E+00	3.635E+00
1.00000E-02	2.088E+00	1.781E+00
1.50000E-02	7.452E-01	4.834E-01
2.00000E-02	4.315E-01	1.936E-01
3.00000E-02	2.706E-01	5.932E-02
4.00000E-02	2.275E-01	3.196E-02
5.00000E-02	2.084E-01	2.442E-02
6.00000E-02	1.970E-01	2.236E-02
8.00000E-02	1.823E-01	2.265E-02
1.00000E-01	1.719E-01	2.423E-02
1.50000E-01	1.534E-01	2.789E-02
2.00000E-01	1.402E-01	3.029E-02
3.00000E-01	1.217E-01	3.276E-02
4.00000E-01	1.089E-01	3.368E-02
5.00000E-01	9.947E-02	3.390E-02
6.00000E-01	9.198E-02	3.375E-02
8.00000E-01	8.078E-02	3.295E-02
1.00000E+00	7.262E-02	3.190E-02
1.25000E+00	6.495E-02	3.049E-02
1.50000E+00	5.910E-02	2.914E-02
2.00000E+00	5.064E-02	2.677E-02
3.00000E+00	4.045E-02	2.328E-02
4.00000E+00	3.444E-02	2.091E-02
5.00000E+00	3.045E-02	1.921E-02
6.00000E+00	2.760E-02	1.794E-02
8.00000E+00	2.383E-02	1.620E-02
1.00000E+01	2.145E-02	1.506E-02
1.50000E+01	1.819E-02	1.344E-02
2.00000E+01	1.658E-02	1.260E-02


PHOTOGRAPHIC EMULSION (STANDARD NUCLEAR)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


PLASTIC SCINTILLATOR (VINYLTOLUENE)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


POLYETHYLENE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

POLYETHYLENE TEREPHTHALATE, "MYLAR"

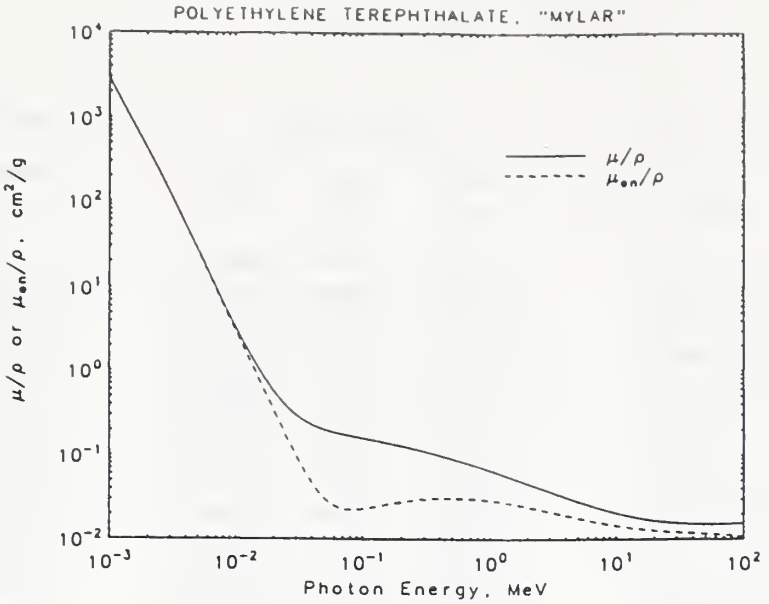
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.911E+03	2.905E+03
1.50000E-03	9.536E+02	9.513E+02
2.00000E-03	4.206E+02	4.192E+02
3.00000E-03	1.288E+02	1.279E+02
4.00000E-03	5.466E+01	5.398E+01
5.00000E-03	2.792E+01	2.737E+01
6.00000E-03	1.608E+01	1.561E+01
8.00000E-03	6.750E+00	6.370E+00
1.00000E-02	3.481E+00	3.153E+00
1.50000E-02	1.132E+00	8.668E-01
2.00000E-02	5.798E-01	3.462E-01
3.00000E-02	3.009E-01	9.972E-02
4.00000E-02	2.304E-01	4.695E-02
5.00000E-02	2.020E-01	3.082E-02
6.00000E-02	1.868E-01	2.508E-02
8.00000E-02	1.695E-01	2.247E-02
1.00000E-01	1.586E-01	2.297E-02
1.50000E-01	1.406E-01	2.567E-02
2.00000E-01	1.282E-01	2.772E-02
3.00000E-01	1.111E-01	2.990E-02
4.00000E-01	9.947E-02	3.073E-02
5.00000E-01	9.079E-02	3.093E-02
6.00000E-01	8.395E-02	3.079E-02
8.00000E-01	7.372E-02	3.005E-02
1.00000E+00	6.628E-02	2.909E-02
1.25000E+00	5.927E-02	2.780E-02
1.50000E+00	5.395E-02	2.657E-02
2.00000E+00	4.630E-02	2.444E-02
3.00000E+00	3.715E-02	2.135E-02
4.00000E+00	3.181E-02	1.931E-02
5.00000E+00	2.829E-02	1.787E-02
6.00000E+00	2.582E-02	1.682E-02
8.00000E+00	2.257E-02	1.540E-02
1.00000E+01	2.057E-02	1.450E-02
1.50000E+01	1.789E-02	1.327E-02
2.00000E+01	1.664E-02	1.267E-02

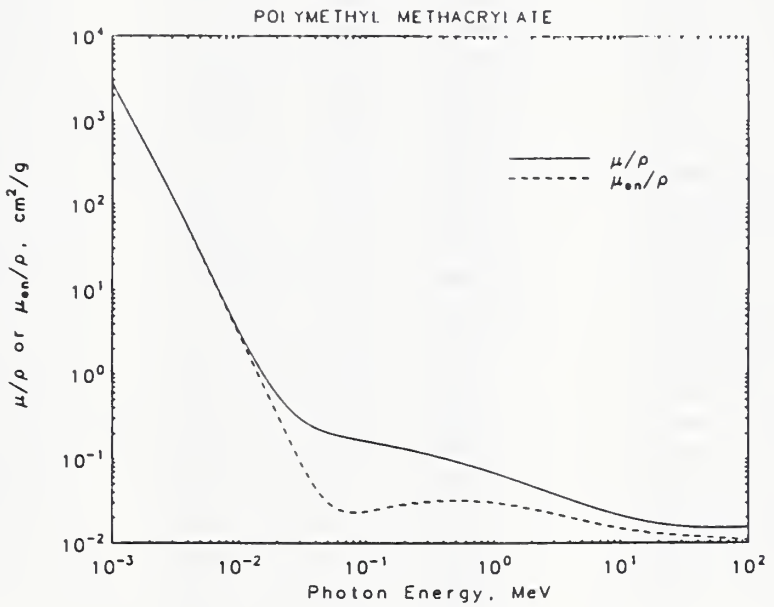
POLYMETHYL METHACRYLATE

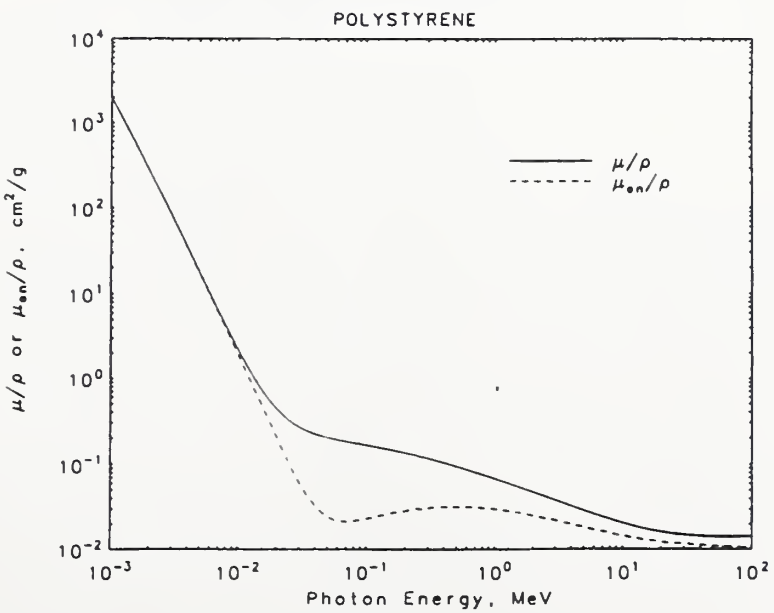
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.794E+03	2.788E+03
1.50000E-03	9.153E+02	9.131E+02
2.00000E-03	4.037E+02	4.024E+02
3.00000E-03	1.236E+02	1.228E+02
4.00000E-03	5.247E+01	5.181E+01
5.00000E-03	2.681E+01	2.627E+01
6.00000E-03	1.545E+01	1.498E+01
8.00000E-03	6.494E+00	6.114E+00
1.00000E-02	3.357E+00	3.026E+00
1.50000E-02	1.101E+00	8.324E-01
2.00000E-02	5.714E-01	3.328E-01
3.00000E-02	3.032E-01	9.645E-02
4.00000E-02	2.350E-01	4.599E-02
5.00000E-02	2.074E-01	3.067E-02
6.00000E-02	1.924E-01	2.530E-02
8.00000E-02	1.751E-01	2.302E-02
1.00000E-01	1.641E-01	2.368E-02
1.50000E-01	1.456E-01	2.657E-02
2.00000E-01	1.328E-01	2.872E-02
3.00000E-01	1.152E-01	3.099E-02
4.00000E-01	1.031E-01	3.185E-02
5.00000E-01	9.410E-02	3.206E-02
6.00000E-01	8.701E-02	3.191E-02
8.00000E-01	7.641E-02	3.116E-02
1.00000E+00	6.870E-02	3.015E-02
1.25000E+00	6.143E-02	2.882E-02
1.50000E+00	5.591E-02	2.755E-02
2.00000E+00	4.796E-02	2.533E-02
3.00000E+00	3.844E-02	2.210E-02
4.00000E+00	3.286E-02	1.995E-02
5.00000E+00	2.919E-02	1.843E-02
6.00000E+00	2.659E-02	1.731E-02
8.00000E+00	2.317E-02	1.579E-02
1.00000E+01	2.105E-02	1.482E-02
1.50000E+01	1.820E-02	1.348E-02
2.00000E+01	1.684E-02	1.282E-02

POLYSTYRENE

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.040E+03	2.038E+03
1.50000E-03	6.462E+02	6.450E+02
2.00000E-03	2.792E+02	2.783E+02
3.00000E-03	8.338E+01	8.271E+01
4.00000E-03	3.489E+01	3.435E+01
5.00000E-03	1.767E+01	1.721E+01
6.00000E-03	1.013E+01	9.730E+00
8.00000E-03	4.252E+00	3.915E+00
1.00000E-02	2.219E+00	1.918E+00
1.50000E-02	7.738E-01	5.200E-01
2.00000E-02	4.363E-01	2.075E-01
3.00000E-02	2.640E-01	6.246E-02
4.00000E-02	2.183E-01	3.264E-02
5.00000E-02	1.986E-01	2.421E-02
6.00000E-02	1.870E-01	2.172E-02
8.00000E-02	1.725E-01	2.160E-02
1.00000E-01	1.624E-01	2.296E-02
1.50000E-01	1.448E-01	2.632E-02
2.00000E-01	1.322E-01	2.857E-02
3.00000E-01	1.147E-01	3.088E-02
4.00000E-01	1.027E-01	3.175E-02
5.00000E-01	9.379E-02	3.196E-02
6.00000E-01	8.672E-02	3.182E-02
8.00000E-01	7.615E-02	3.106E-02
1.00000E+00	6.847E-02	3.006E-02
1.25000E+00	6.123E-02	2.874E-02
1.50000E+00	5.573E-02	2.747E-02
2.00000E+00	4.777E-02	2.524E-02
3.00000E+00	3.822E-02	2.199E-02
4.00000E+00	3.261E-02	1.979E-02
5.00000E+00	2.889E-02	1.824E-02
6.00000E+00	2.626E-02	1.708E-02
8.00000E+00	2.278E-02	1.550E-02
1.00000E+01	2.060E-02	1.448E-02
1.50000E+01	1.763E-02	1.305E-02
2.00000E+01	1.620E-02	1.232E-02


POLYETHYLENE TEREPHTHALATE, "MYLAR"
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


POLYMETHYL METHACRYLATE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


POLYSTYRENE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

POLYTETRAFLUOROETHYLENE, "TEFLON"

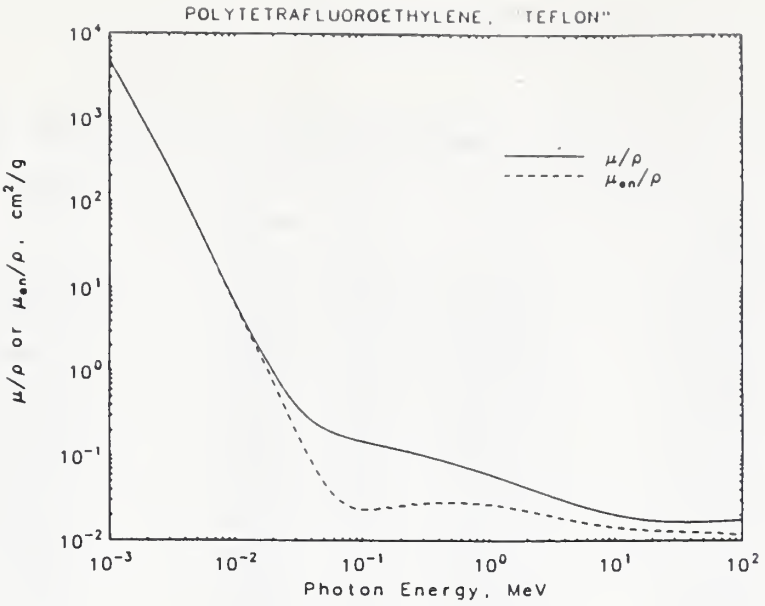
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	4.823E+03	4.797E+03
1.50000E-03	1.672E+03	1.664E+03
2.00000E-03	7.601E+02	7.567E+02
3.00000E-03	2.411E+02	2.396E+02
4.00000E-03	1.045E+02	1.035E+02
5.00000E-03	5.409E+01	5.329E+01
6.00000E-03	3.142E+01	3.077E+01
8.00000E-03	1.327E+01	1.278E+01
1.00000E-02	6.805E+00	6.408E+00
1.50000E-02	2.088E+00	1.796E+00
2.00000E-02	9.667E-01	7.221E-01
3.00000E-02	4.025E-01	2.022E-01
4.00000E-02	2.647E-01	8.674E-02
5.00000E-02	2.132E-01	4.943E-02
6.00000E-02	1.880E-01	3.470E-02
8.00000E-02	1.632E-01	2.523E-02
1.00000E-01	1.500E-01	2.335E-02
1.50000E-01	1.310E-01	2.424E-02
2.00000E-01	1.189E-01	2.579E-02
3.00000E-01	1.027E-01	2.763E-02
4.00000E-01	9.187E-02	2.836E-02
5.00000E-01	8.380E-02	2.852E-02
6.00000E-01	7.747E-02	2.838E-02
8.00000E-01	6.803E-02	2.771E-02
1.00000E+00	6.115E-02	2.681E-02
1.25000E+00	5.469E-02	2.562E-02
1.50000E+00	4.979E-02	2.448E-02
2.00000E+00	4.280E-02	2.255E-02
3.00000E+00	3.456E-02	1.984E-02
4.00000E+00	2.981E-02	1.809E-02
5.00000E+00	2.674E-02	1.690E-02
6.00000E+00	2.460E-02	1.606E-02
8.00000E+00	2.185E-02	1.496E-02
1.00000E+01	2.020E-02	1.430E-02
1.50000E+01	1.811E-02	1.346E-02
2.00000E+01	1.722E-02	1.310E-02

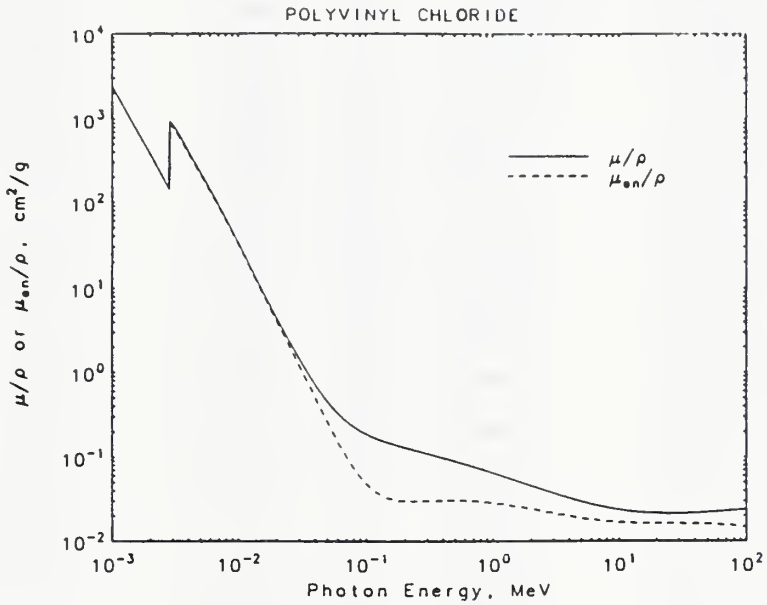
POLYVINYL CHLORIDE

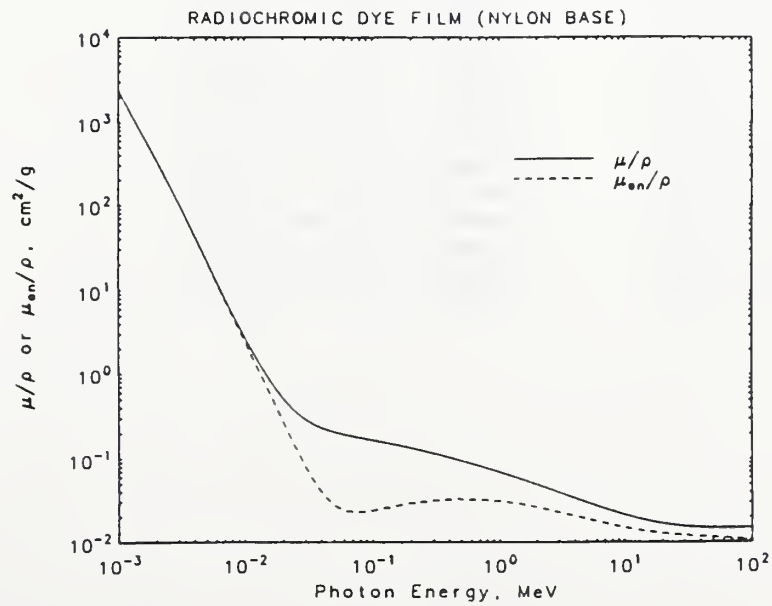
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	2.457E+03	2.454E+03
	1.50000E-03	8.235E+02	8.214E+02
	2.00000E-03	3.727E+02	3.709E+02
	2.82240E-03	1.424E+02	1.408E+02
17 K	2.82240E-03	9.701E+02	8.960E+02
	3.00000E-03	8.702E+02	8.068E+02
	4.00000E-03	4.137E+02	3.902E+02
	5.00000E-03	2.287E+02	2.177E+02
	6.00000E-03	1.395E+02	1.335E+02
	8.00000E-03	6.276E+01	6.032E+01
	1.00000E-02	3.340E+01	3.206E+01
	1.50000E-02	1.045E+01	9.864E+00
	2.00000E-02	4.578E+00	4.188E+00
	3.00000E-02	1.491E+00	1.226E+00
	4.00000E-02	7.300E-01	5.111E-01
	5.00000E-02	4.559E-01	2.622E-01
	6.00000E-02	3.325E-01	1.555E-01
	8.00000E-02	2.298E-01	7.477E-02
	1.00000E-01	1.887E-01	4.852E-02
	1.50000E-01	1.486E-01	3.240E-02
	2.00000E-01	1.308E-01	3.015E-02
	3.00000E-01	1.110E-01	3.023E-02
	4.00000E-01	9.867E-02	3.056E-02
	5.00000E-01	8.981E-02	3.057E-02
	6.00000E-01	8.293E-02	3.036E-02
	8.00000E-01	7.271E-02	2.957E-02
	1.00000E+00	6.532E-02	2.858E-02
	1.25000E+00	5.840E-02	2.729E-02
	1.50000E+00	5.320E-02	2.609E-02
	2.00000E+00	4.587E-02	2.408E-02
	3.00000E+00	3.738E-02	2.140E-02
	4.00000E+00	3.261E-02	1.977E-02
	5.00000E+00	2.959E-02	1.873E-02
	6.00000E+00	2.754E-02	1.803E-02
	8.00000E+00	2.500E-02	1.720E-02
	1.00000E+01	2.356E-02	1.676E-02
	1.50000E+01	2.192E-02	1.633E-02
	2.00000E+01	2.139E-02	1.622E-02

RADIOCHROMIC DYE FILM (NYLON BASE)

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.439E+03	2.435E+03
1.50000E-03	7.897E+02	7.880E+02
2.00000E-03	3.458E+02	3.447E+02
3.00000E-03	1.050E+02	1.042E+02
4.00000E-03	4.435E+01	4.374E+01
5.00000E-03	2.259E+01	2.209E+01
6.00000E-03	1.300E+01	1.256E+01
8.00000E-03	5.465E+00	5.102E+00
1.00000E-02	2.837E+00	2.517E+00
1.50000E-02	9.545E-01	6.891E-01
2.00000E-02	5.132E-01	2.755E-01
3.00000E-02	2.890E-01	8.108E-02
4.00000E-02	2.312E-01	4.013E-02
5.00000E-02	2.071E-01	2.802E-02
6.00000E-02	1.936E-01	2.401E-02
8.00000E-02	1.774E-01	2.278E-02
1.00000E-01	1.666E-01	2.381E-02
1.50000E-01	1.482E-01	2.701E-02
2.00000E-01	1.353E-01	2.925E-02
3.00000E-01	1.174E-01	3.159E-02
4.00000E-01	1.051E-01	3.247E-02
5.00000E-01	9.592E-02	3.268E-02
6.00000E-01	8.869E-02	3.254E-02
8.00000E-01	7.789E-02	3.177E-02
1.00000E+00	7.003E-02	3.074E-02
1.25000E+00	6.263E-02	2.939E-02
1.50000E+00	5.699E-02	2.809E-02
2.00000E+00	4.887E-02	2.582E-02
3.00000E+00	3.912E-02	2.250E-02
4.00000E+00	3.339E-02	2.027E-02
5.00000E+00	2.960E-02	1.869E-02
6.00000E+00	2.692E-02	1.752E-02
8.00000E+00	2.338E-02	1.592E-02
1.00000E+01	2.117E-02	1.489E-02
1.50000E+01	1.817E-02	1.345E-02
2.00000E+01	1.672E-02	1.272E-02


POLYTETRAFLUOROETHYLENE, "TEFLON"
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


POLYVINYL CHLORIDE
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


RADIOCHROMIC DYE FILM (NYLON BASE)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

TESTIS (ICRU-44)

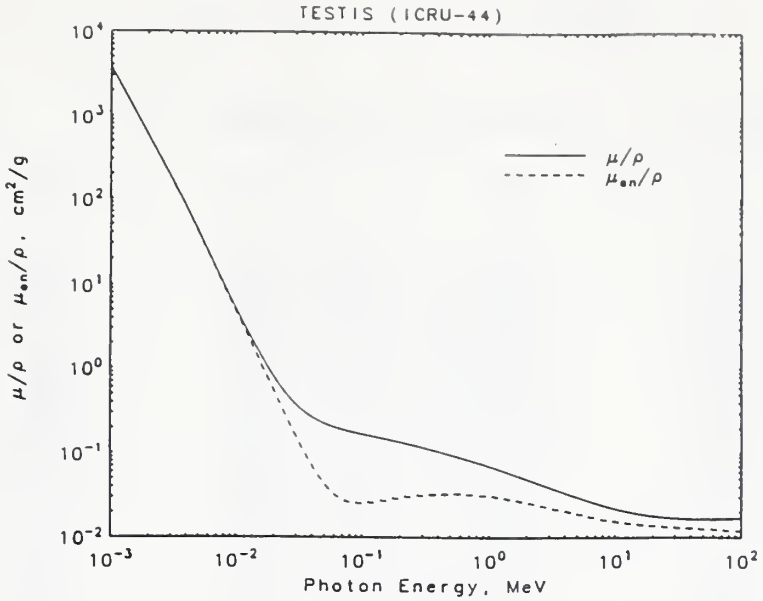
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.824E+03	3.812E+03
	1.03542E-03	3.489E+03	3.479E+03
	1.07210E-03	3.182E+03	3.173E+03
11 K	1.07210E-03	3.194E+03	3.184E+03
	1.50000E-03	1.291E+03	1.288E+03
	2.00000E-03	5.783E+02	5.763E+02
	2.14550E-03	4.737E+02	4.719E+02
15 K	2.14550E-03	4.759E+02	4.740E+02
	2.30297E-03	3.889E+02	3.872E+02
	2.47200E-03	3.174E+02	3.159E+02
16 K	2.47200E-03	3.211E+02	3.193E+02
	2.64140E-03	2.654E+02	2.638E+02
	2.82240E-03	2.193E+02	2.178E+02
17 K	2.82240E-03	2.222E+02	2.205E+02
	3.00000E-03	1.864E+02	1.849E+02
	3.60740E-03	1.088E+02	1.077E+02
19 K	3.60740E-03	1.109E+02	1.095E+02
	4.00000E-03	8.188E+01	8.071E+01
	5.00000E-03	4.229E+01	4.147E+01
	6.00000E-03	2.456E+01	2.391E+01
	8.00000E-03	1.039E+01	9.916E+00
	1.00000E-02	5.357E+00	4.967E+00
	1.50000E-02	1.689E+00	1.392E+00
	2.00000E-02	8.182E-01	5.606E-01
	3.00000E-02	3.778E-01	1.596E-01
	4.00000E-02	2.687E-01	7.125E-02
	5.00000E-02	2.266E-01	4.315E-02
	6.00000E-02	2.053E-01	3.240E-02
	8.00000E-02	1.828E-01	2.611E-02
	1.00000E-01	1.699E-01	2.547E-02
	1.50000E-01	1.497E-01	2.753E-02
	2.00000E-01	1.363E-01	2.952E-02
	3.00000E-01	1.180E-01	3.175E-02
	4.00000E-01	1.055E-01	3.261E-02
	5.00000E-01	9.633E-02	3.281E-02
	6.00000E-01	8.906E-02	3.266E-02
	8.00000E-01	7.822E-02	3.188E-02
	1.00000E+00	7.032E-02	3.086E-02
	1.25000E+00	6.288E-02	2.949E-02
	1.50000E+00	5.722E-02	2.818E-02
	2.00000E+00	4.914E-02	2.593E-02
	3.00000E+00	3.945E-02	2.268E-02
	4.00000E+00	3.382E-02	2.053E-02
	5.00000E+00	3.012E-02	1.903E-02
	6.00000E+00	2.752E-02	1.793E-02
	8.00000E+00	2.411E-02	1.646E-02
	1.00000E+01	2.202E-02	1.554E-02
	1.50000E+01	1.924E-02	1.428E-02
	2.00000E+01	1.796E-02	1.368E-02

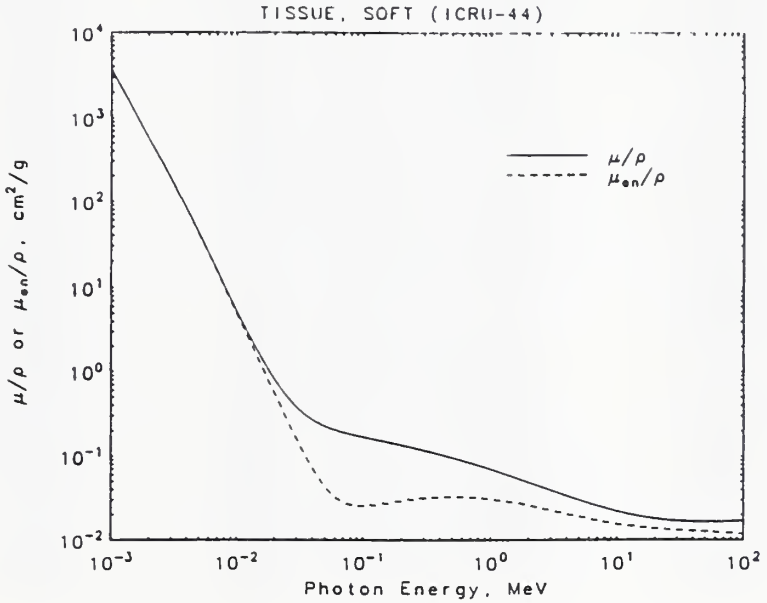
TISSUE, SOFT (ICRU-44)

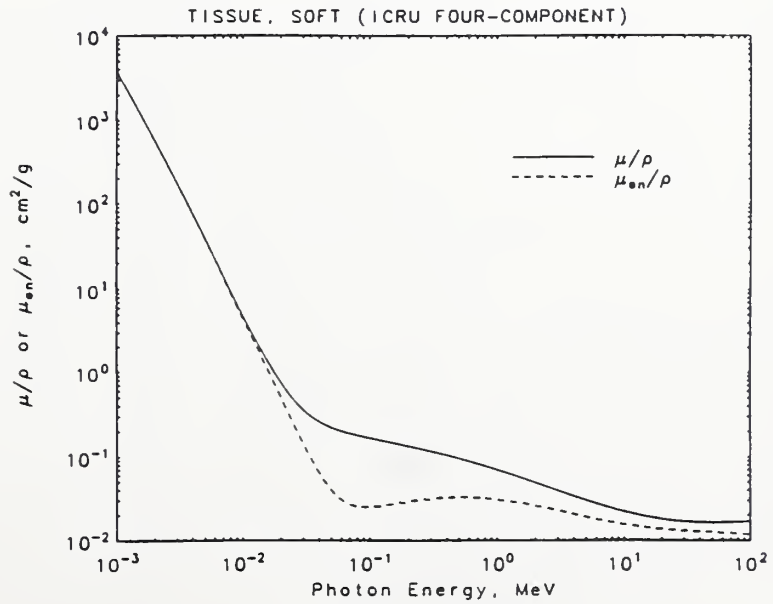
	Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
	1.00000E-03	3.712E+03	3.701E+03
	1.03542E-03	3.386E+03	3.376E+03
	1.07210E-03	3.087E+03	3.079E+03
11 K	1.07210E-03	3.099E+03	3.090E+03
	1.50000E-03	1.251E+03	1.247E+03
	2.00000E-03	5.596E+02	5.577E+02
	2.14550E-03	4.583E+02	4.566E+02
15 K	2.14550E-03	4.650E+02	4.629E+02
	2.30297E-03	3.800E+02	3.782E+02
	2.47200E-03	3.102E+02	3.086E+02
16 K	2.47200E-03	3.158E+02	3.137E+02
	2.64140E-03	2.612E+02	2.594E+02
	2.82240E-03	2.158E+02	2.142E+02
17 K	2.82240E-03	2.188E+02	2.169E+02
	3.00000E-03	1.836E+02	1.819E+02
	3.60740E-03	1.073E+02	1.061E+02
19 K	3.60740E-03	1.105E+02	1.089E+02
	4.00000E-03	8.161E+01	8.030E+01
	5.00000E-03	4.224E+01	4.135E+01
	6.00000E-03	2.456E+01	2.389E+01
	8.00000E-03	1.042E+01	9.935E+00
	1.00000E-02	5.379E+00	4.987E+00
	1.50000E-02	1.699E+00	1.402E+00
	2.00000E-02	8.230E-01	5.663E-01
	3.00000E-02	3.790E-01	1.616E-01
	4.00000E-02	2.688E-01	7.216E-02
	5.00000E-02	2.264E-01	4.360E-02
	6.00000E-02	2.048E-01	3.264E-02
	8.00000E-02	1.823E-01	2.617E-02
	1.00000E-01	1.693E-01	2.545E-02
	1.50000E-01	1.492E-01	2.745E-02
	2.00000E-01	1.358E-01	2.942E-02
	3.00000E-01	1.175E-01	3.164E-02
	4.00000E-01	1.052E-01	3.249E-02
	5.00000E-01	9.598E-02	3.269E-02
	6.00000E-01	8.873E-02	3.254E-02
	8.00000E-01	7.793E-02	3.176E-02
	1.00000E+00	7.006E-02	3.074E-02
	1.25000E+00	6.265E-02	2.938E-02
	1.50000E+00	5.701E-02	2.807E-02
	2.00000E+00	4.895E-02	2.583E-02
	3.00000E+00	3.931E-02	2.259E-02
	4.00000E+00	3.369E-02	2.045E-02
	5.00000E+00	3.000E-02	1.895E-02
	6.00000E+00	2.741E-02	1.786E-02
	8.00000E+00	2.401E-02	1.639E-02
	1.00000E+01	2.193E-02	1.547E-02
	1.50000E+01	1.915E-02	1.422E-02
	2.00000E+01	1.787E-02	1.362E-02

TISSUE, SOFT (ICRU FOUR-COMPONENT)

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	3.829E+03	3.818E+03
1.50000E-03	1.286E+03	1.283E+03
2.00000E-03	5.755E+02	5.736E+02
3.00000E-03	1.792E+02	1.781E+02
4.00000E-03	7.681E+01	7.598E+01
5.00000E-03	3.947E+01	3.880E+01
6.00000E-03	2.283E+01	2.226E+01
8.00000E-03	9.604E+00	9.163E+00
1.00000E-02	4.937E+00	4.564E+00
1.50000E-02	1.558E+00	1.266E+00
2.00000E-02	7.616E-01	5.070E-01
3.00000E-02	3.604E-01	1.438E-01
4.00000E-02	2.609E-01	6.474E-02
5.00000E-02	2.223E-01	3.987E-02
6.00000E-02	2.025E-01	3.051E-02
8.00000E-02	1.813E-01	2.530E-02
1.00000E-01	1.688E-01	2.501E-02
1.50000E-01	1.490E-01	2.732E-02
2.00000E-01	1.356E-01	2.936E-02
3.00000E-01	1.175E-01	3.161E-02
4.00000E-01	1.051E-01	3.247E-02
5.00000E-01	9.593E-02	3.267E-02
6.00000E-01	8.870E-02	3.252E-02
8.00000E-01	7.789E-02	3.175E-02
1.00000E+00	7.003E-02	3.073E-02
1.25000E+00	6.262E-02	2.937E-02
1.50000E+00	5.699E-02	2.806E-02
2.00000E+00	4.893E-02	2.582E-02
3.00000E+00	3.929E-02	2.258E-02
4.00000E+00	3.367E-02	2.044E-02
5.00000E+00	2.998E-02	1.894E-02
6.00000E+00	2.739E-02	1.785E-02
8.00000E+00	2.400E-02	1.638E-02
1.00000E+01	2.191E-02	1.546E-02
1.50000E+01	1.913E-02	1.420E-02
2.00000E+01	1.785E-02	1.360E-02


TESTIS (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


TISSUE, SOFT (ICRU-44)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


TISSUE, SOFT (ICRU FOUR-COMPONENT)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV

TISSUE-EQUIVALENT GAS (METHANE BASED)

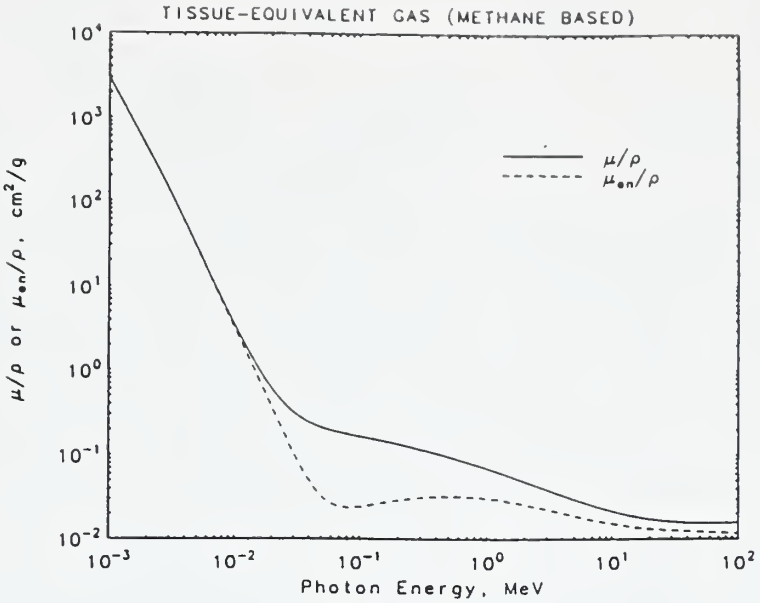
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.993E+03	2.986E+03
1.50000E-03	9.878E+02	9.854E+02
2.00000E-03	4.376E+02	4.361E+02
3.00000E-03	1.347E+02	1.338E+02
4.00000E-03	5.734E+01	5.665E+01
5.00000E-03	2.935E+01	2.878E+01
6.00000E-03	1.694E+01	1.645E+01
8.00000E-03	7.124E+00	6.730E+00
1.00000E-02	3.679E+00	3.338E+00
1.50000E-02	1.197E+00	9.207E-01
2.00000E-02	6.129E-01	3.685E-01
3.00000E-02	3.177E-01	1.063E-01
4.00000E-02	2.431E-01	5.002E-02
5.00000E-02	2.132E-01	3.278E-02
6.00000E-02	1.972E-01	2.663E-02
8.00000E-02	1.790E-01	2.380E-02
1.00000E-01	1.675E-01	2.430E-02
1.50000E-01	1.486E-01	2.714E-02
2.00000E-01	1.355E-01	2.930E-02
3.00000E-01	1.174E-01	3.161E-02
4.00000E-01	1.051E-01	3.248E-02
5.00000E-01	9.594E-02	3.269E-02
6.00000E-01	8.871E-02	3.254E-02
8.00000E-01	7.790E-02	3.177E-02
1.00000E+00	7.004E-02	3.075E-02
1.25000E+00	6.264E-02	2.938E-02
1.50000E+00	5.700E-02	2.809E-02
2.00000E+00	4.890E-02	2.583E-02
3.00000E+00	3.919E-02	2.254E-02
4.00000E+00	3.351E-02	2.035E-02
5.00000E+00	2.976E-02	1.881E-02
6.00000E+00	2.711E-02	1.767E-02
8.00000E+00	2.363E-02	1.614E-02
1.00000E+01	2.146E-02	1.516E-02
1.50000E+01	1.855E-02	1.383E-02
2.00000E+01	1.717E-02	1.318E-02

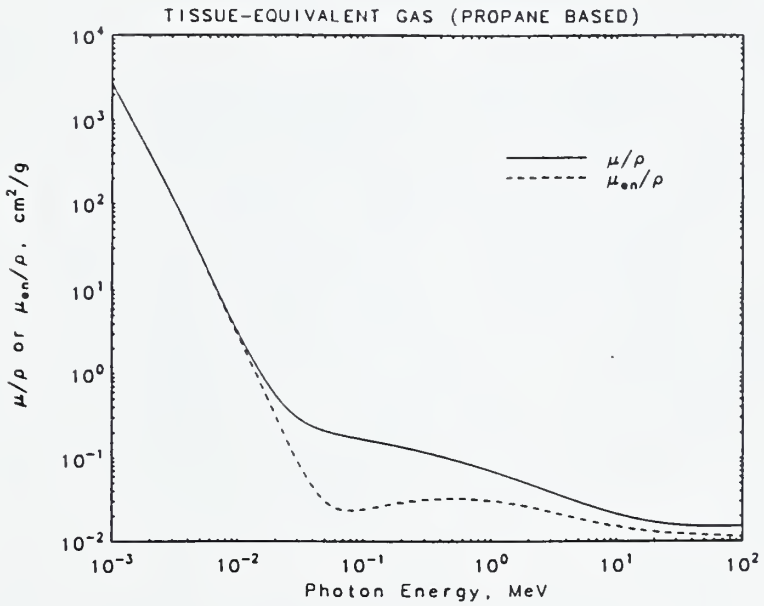
TISSUE-EQUIVALENT GAS (PROPANE BASED)

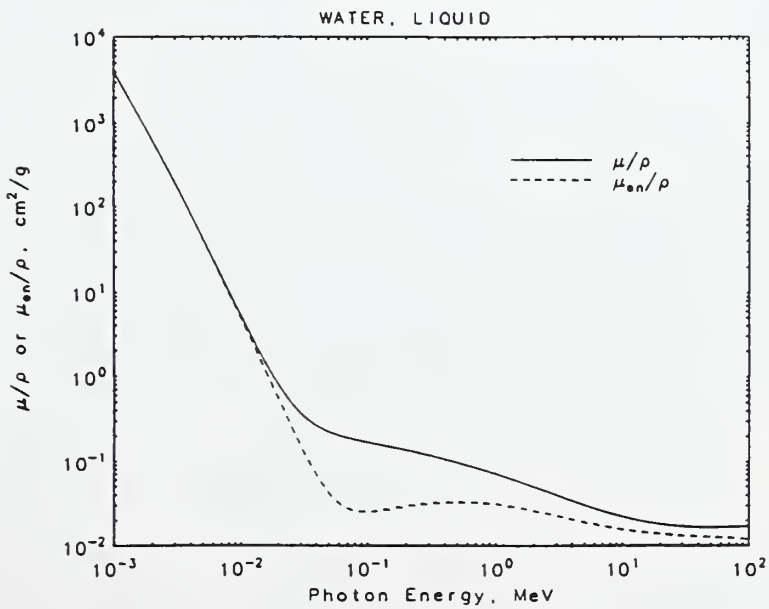
Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	2.721E+03	2.715E+03
1.50000E-03	8.909E+02	8.888E+02
2.00000E-03	3.928E+02	3.915E+02
3.00000E-03	1.202E+02	1.194E+02
4.00000E-03	5.103E+01	5.038E+01
5.00000E-03	2.607E+01	2.553E+01
6.00000E-03	1.503E+01	1.456E+01
8.00000E-03	6.320E+00	5.941E+00
1.00000E-02	3.272E+00	2.940E+00
1.50000E-02	1.080E+00	8.087E-01
2.00000E-02	5.648E-01	3.236E-01
3.00000E-02	3.040E-01	9.413E-02
4.00000E-02	2.375E-01	4.526E-02
5.00000E-02	2.104E-01	3.050E-02
6.00000E-02	1.955E-01	2.538E-02
8.00000E-02	1.783E-01	2.332E-02
1.00000E-01	1.672E-01	2.408E-02
1.50000E-01	1.485E-01	2.709E-02
2.00000E-01	1.355E-01	2.929E-02
3.00000E-01	1.175E-01	3.162E-02
4.00000E-01	1.052E-01	3.250E-02
5.00000E-01	9.599E-02	3.271E-02
6.00000E-01	8.876E-02	3.256E-02
8.00000E-01	7.795E-02	3.179E-02
1.00000E+00	7.008E-02	3.077E-02
1.25000E+00	6.267E-02	2.941E-02
1.50000E+00	5.703E-02	2.811E-02
2.00000E+00	4.892E-02	2.584E-02
3.00000E+00	3.918E-02	2.254E-02
4.00000E+00	3.347E-02	2.033E-02
5.00000E+00	2.970E-02	1.877E-02
6.00000E+00	2.703E-02	1.762E-02
8.00000E+00	2.352E-02	1.605E-02
1.00000E+01	2.133E-02	1.505E-02
1.50000E+01	1.837E-02	1.368E-02
2.00000E+01	1.695E-02	1.301E-02

WATER, LIQUID

Energy (MeV)	μ/ρ (cm^2/g)	μ_{en}/ρ (cm^2/g)
1.00000E-03	4.078E+03	4.065E+03
1.50000E-03	1.376E+03	1.372E+03
2.00000E-03	6.173E+02	6.152E+02
3.00000E-03	1.929E+02	1.917E+02
4.00000E-03	8.278E+01	8.191E+01
5.00000E-03	4.258E+01	4.188E+01
6.00000E-03	2.464E+01	2.405E+01
8.00000E-03	1.037E+01	9.915E+00
1.00000E-02	5.329E+00	4.944E+00
1.50000E-02	1.673E+00	1.374E+00
2.00000E-02	8.096E-01	5.503E-01
3.00000E-02	3.756E-01	1.557E-01
4.00000E-02	2.683E-01	6.947E-02
5.00000E-02	2.269E-01	4.223E-02
6.00000E-02	2.059E-01	3.190E-02
8.00000E-02	1.837E-01	2.597E-02
1.00000E-01	1.707E-01	2.546E-02
1.50000E-01	1.505E-01	2.764E-02
2.00000E-01	1.370E-01	2.967E-02
3.00000E-01	1.186E-01	3.192E-02
4.00000E-01	1.061E-01	3.279E-02
5.00000E-01	9.687E-02	3.299E-02
6.00000E-01	8.956E-02	3.284E-02
8.00000E-01	7.865E-02	3.206E-02
1.00000E+00	7.072E-02	3.103E-02
1.25000E+00	6.323E-02	2.965E-02
1.50000E+00	5.754E-02	2.833E-02
2.00000E+00	4.942E-02	2.608E-02
3.00000E+00	3.969E-02	2.281E-02
4.00000E+00	3.403E-02	2.066E-02
5.00000E+00	3.031E-02	1.915E-02
6.00000E+00	2.770E-02	1.806E-02
8.00000E+00	2.429E-02	1.658E-02
1.00000E+01	2.219E-02	1.566E-02
1.50000E+01	1.941E-02	1.441E-02
2.00000E+01	1.813E-02	1.382E-02


TISSUE-EQUIVALENT GAS (METHANE BASED)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


TISSUE-EQUIVALENT GAS (PROPANE BASED)
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV


WATER, LIQUID
μ/ρ
μen/ρ
μ/ρ or μen/ρ, cm²/g
Photon Energy, MeV