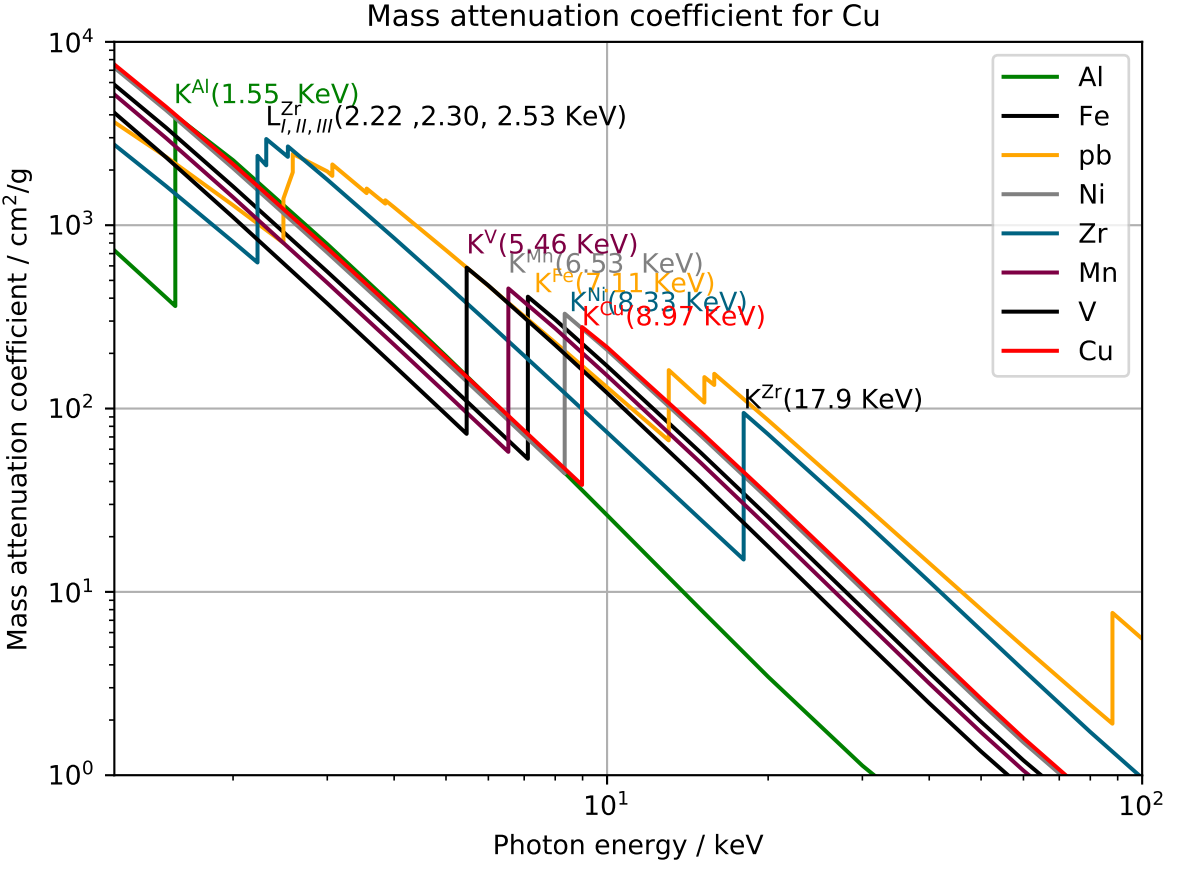
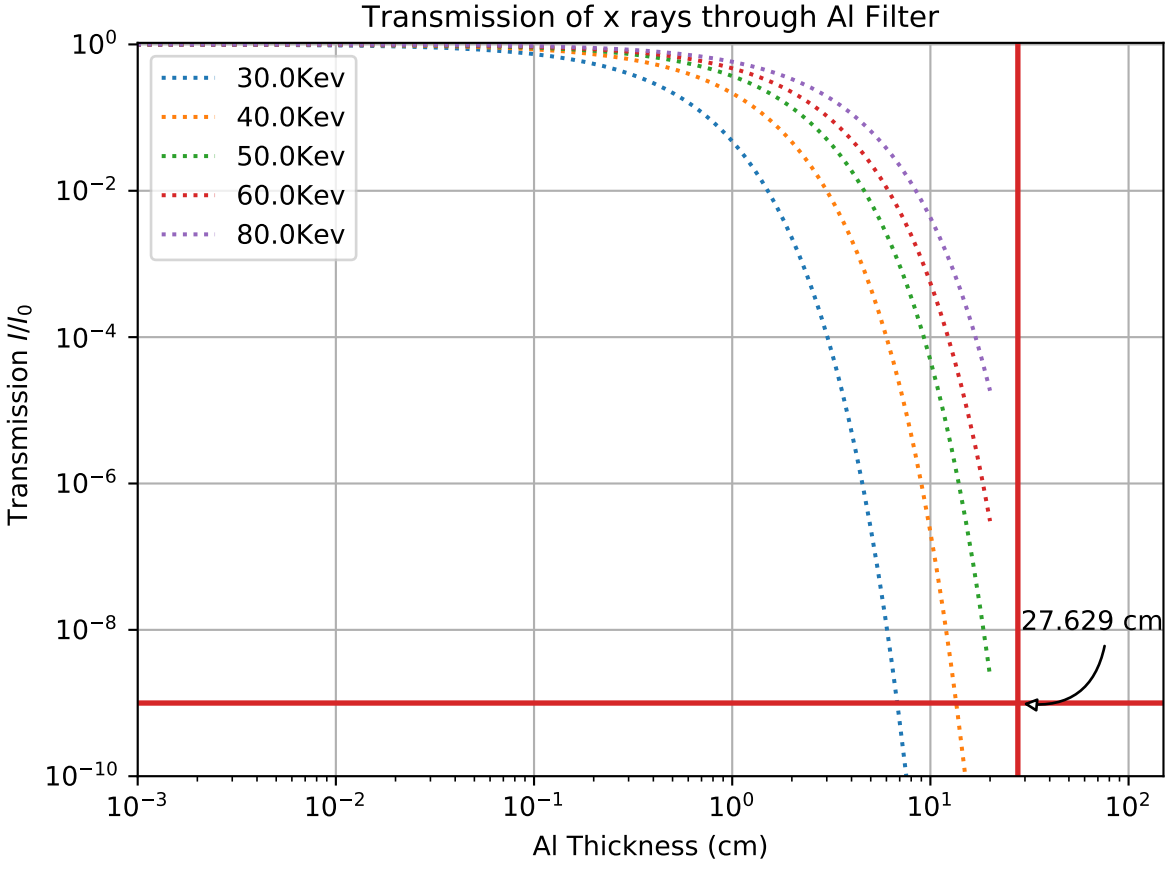
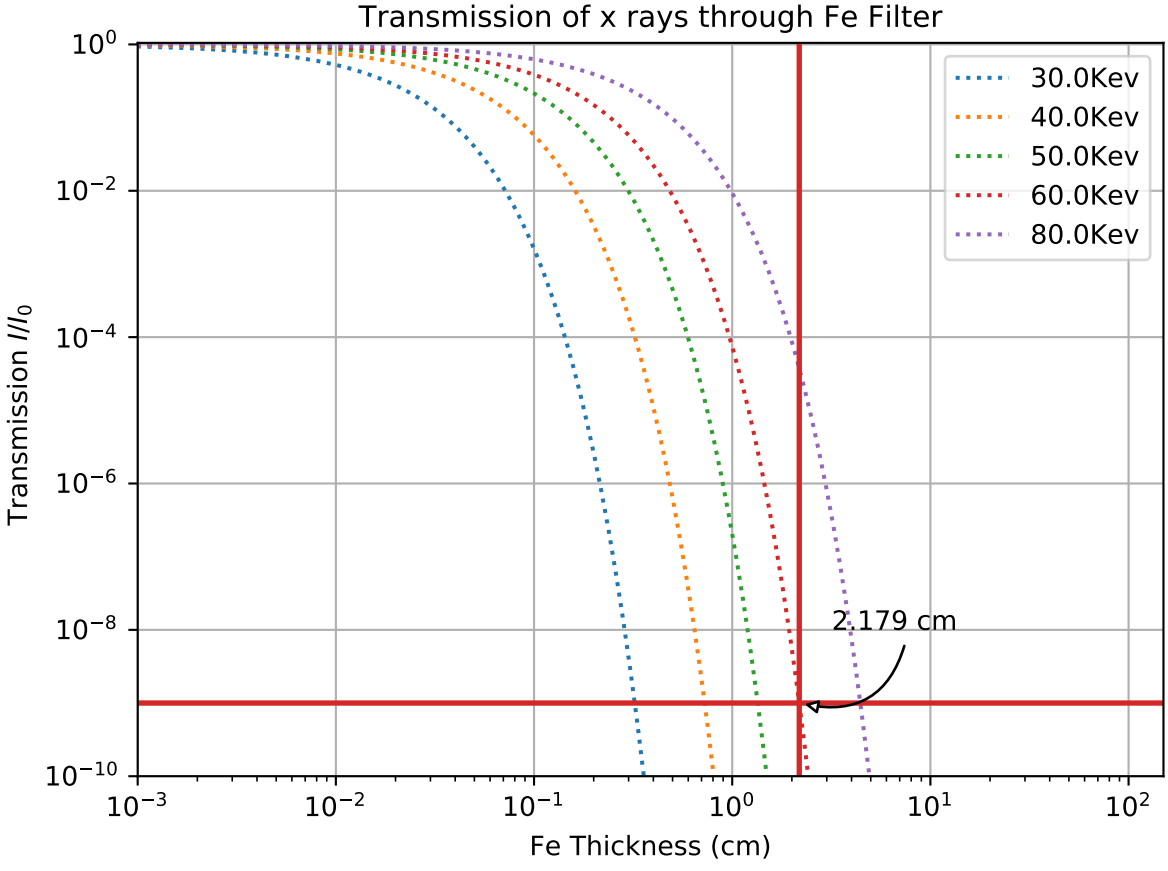
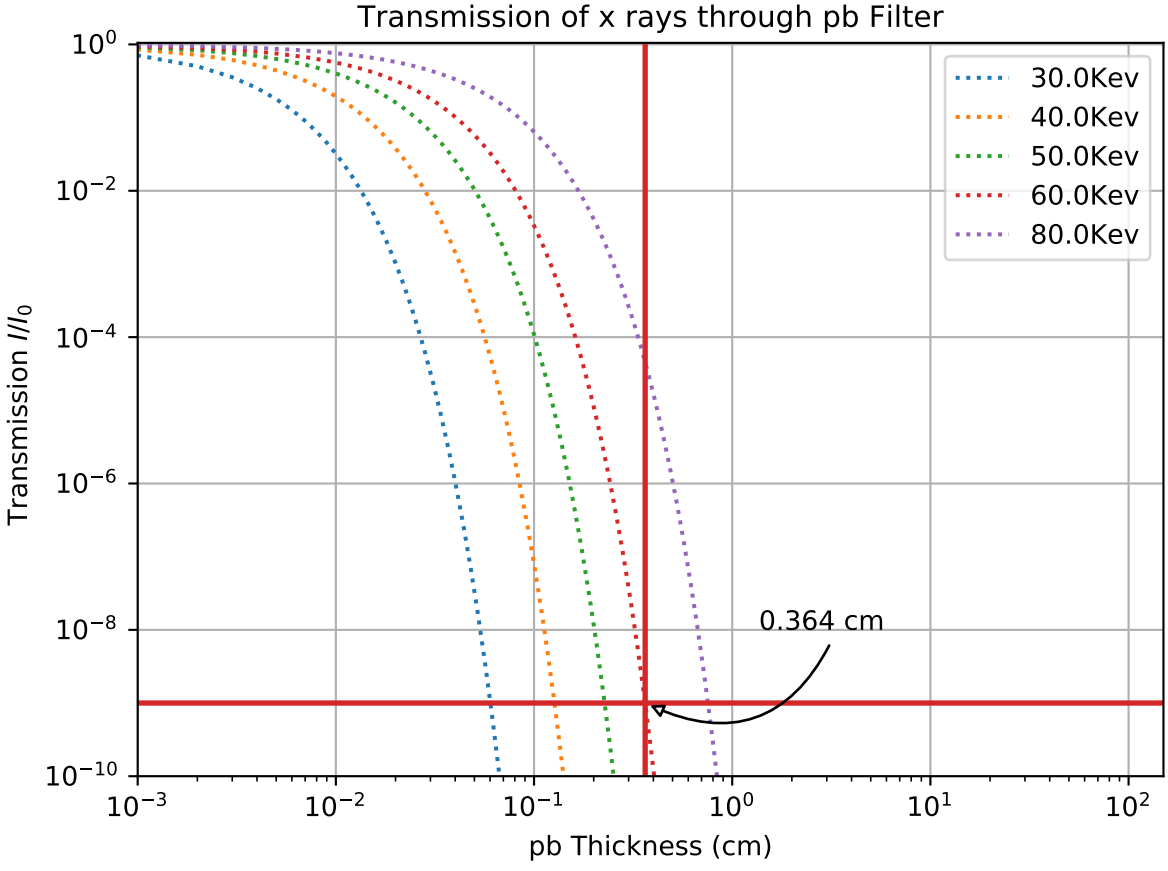
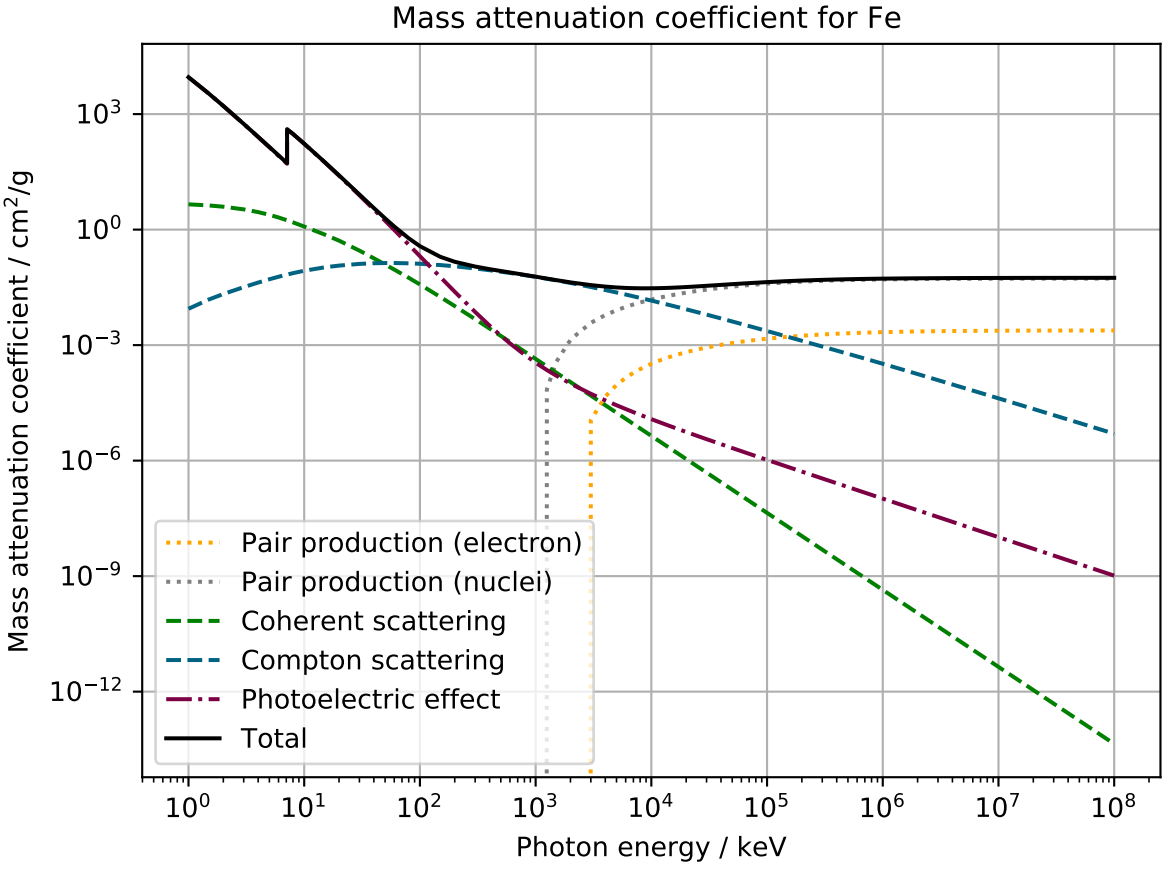
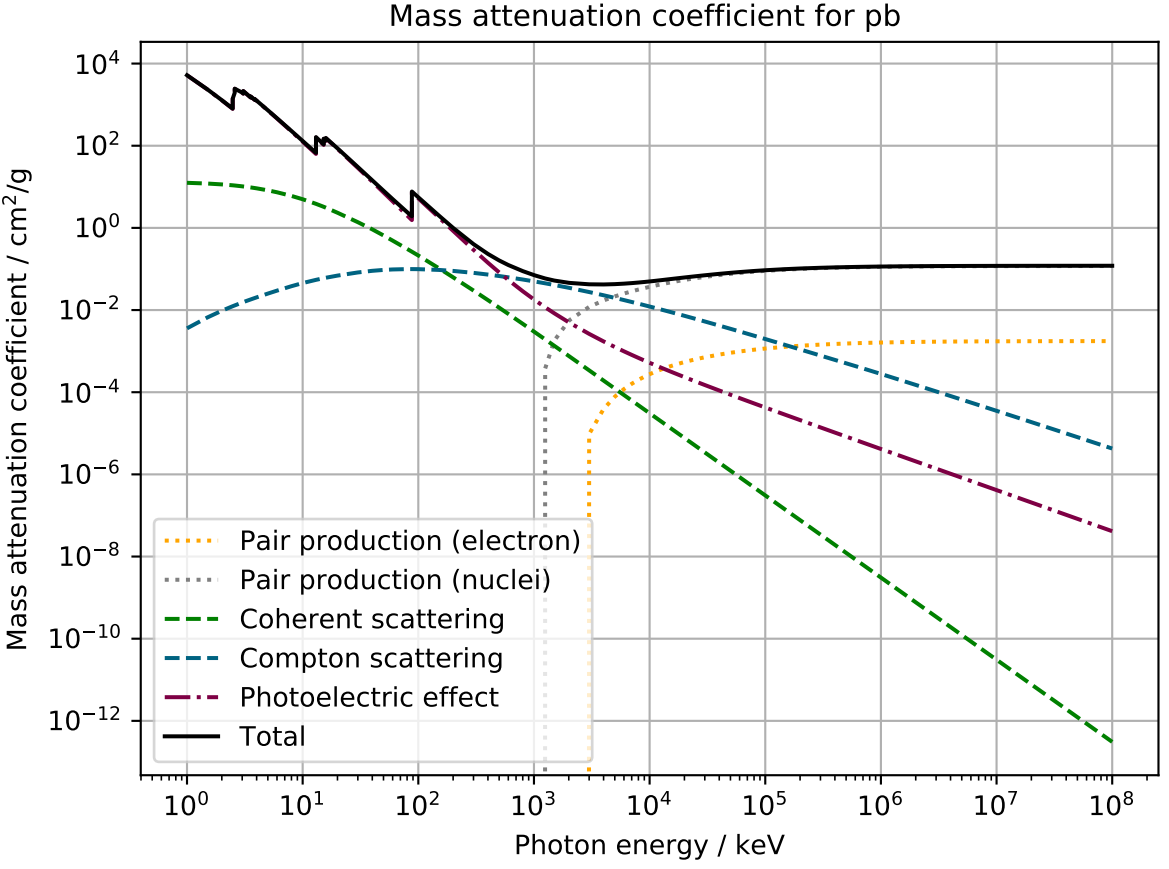

Mass attenuation coefficient for Cu
Mass attenuation coefficient / cm²/g
Photon energy / keV
Al
Fe
pb
Ni
Zr
Mn
V
Cu
K^Al(1.55 KeV)
L^Zr_I,II,III(2.22 ,2.30, 2.53 KeV)
K^V(5.46 KeV)
K^Mn(6.53 KeV)
K^Fe(7.11 KeV)
K^Ni(8.33 KeV)
K^Cu(8.97 KeV)
K^Zr(17.9 KeV)

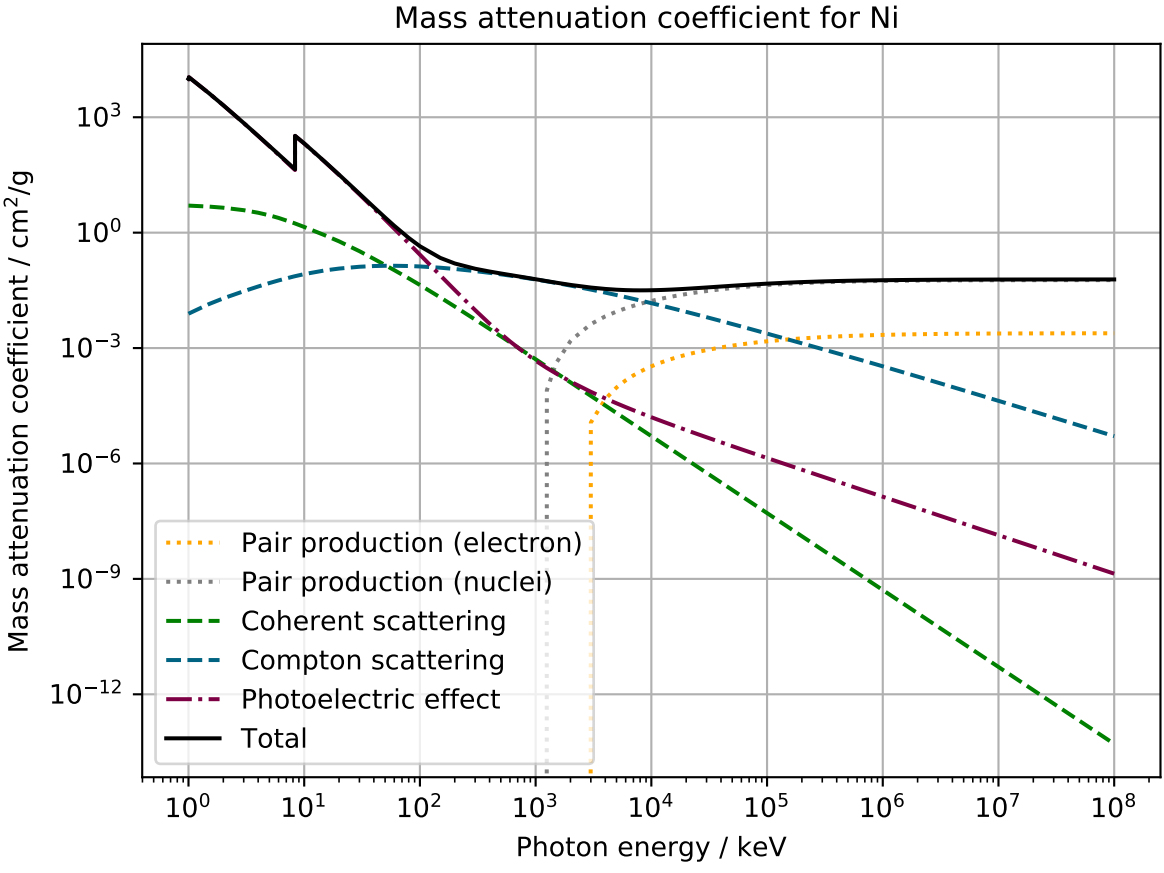

Transmission of x rays through Al Filter
30.0Kev
40.0Kev
50.0Kev
60.0Kev
80.0Kev
27.629 cm
Transmission I/I_0
Al Thickness (cm)
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}
10^{2}

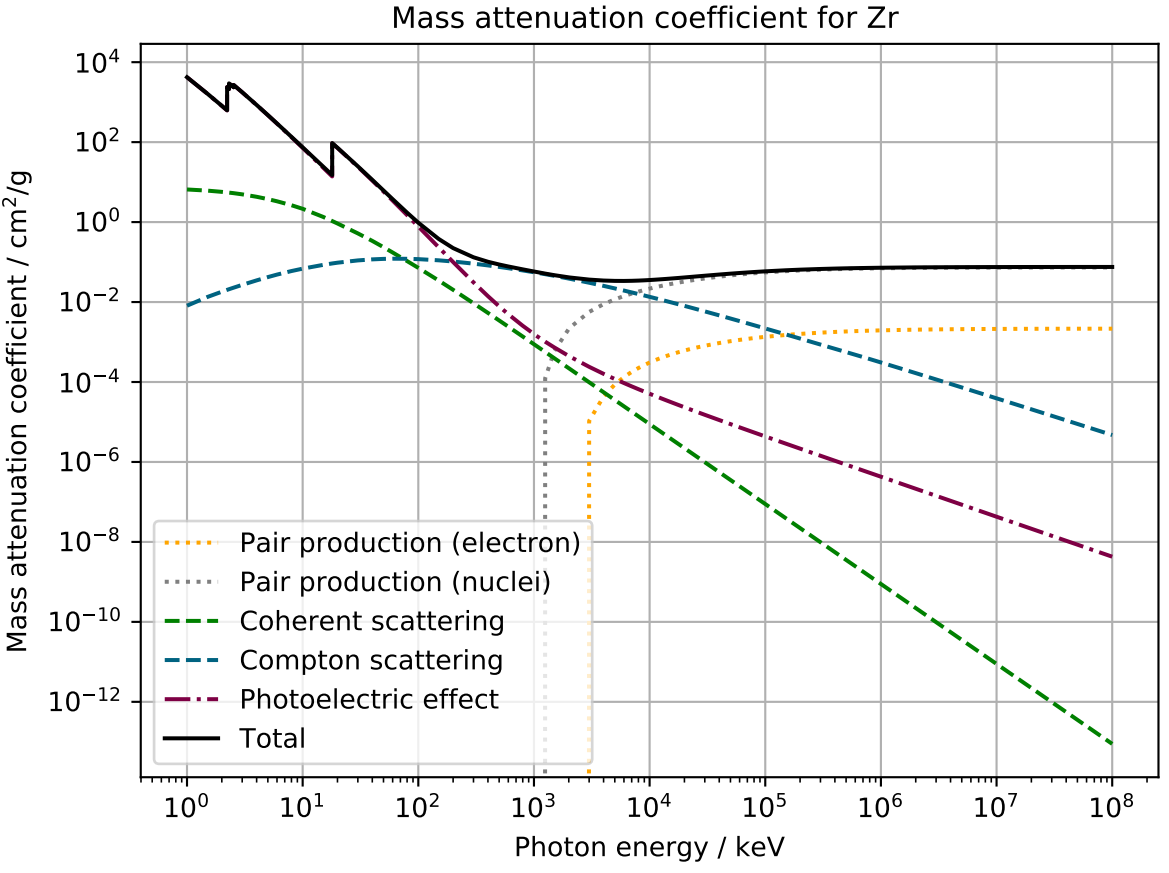

Transmission of x rays through Fe Filter
30.0Kev
40.0Kev
50.0Kev
60.0Kev
80.0Kev
2.179 cm
Transmission I/I_0
Fe Thickness (cm)
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}
10^{2}

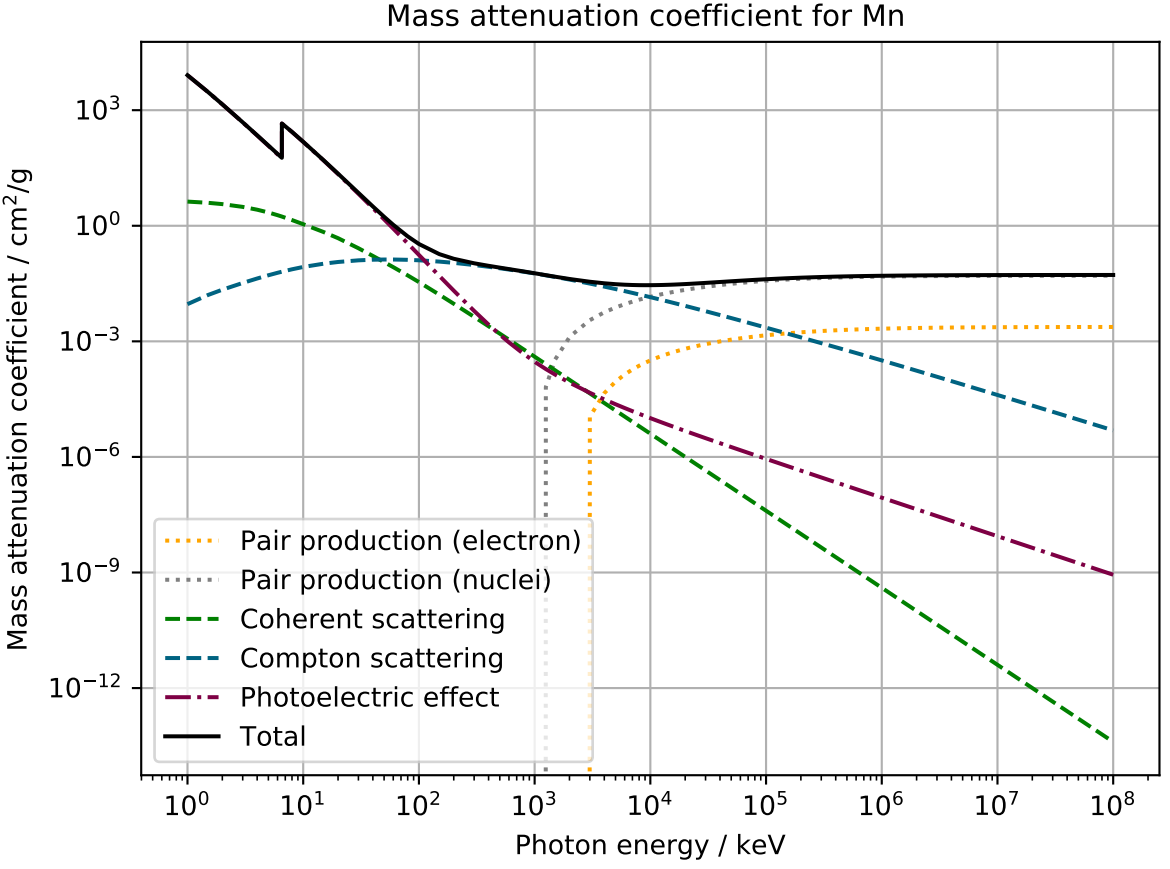

Transmission of x rays through pb Filter
30.0Kev
40.0Kev
50.0Kev
60.0Kev
80.0Kev
0.364 cm
Transmission I/I0
pb Thickness (cm)
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
10^-3
10^-2
10^-1
10^0
10^1
10^2

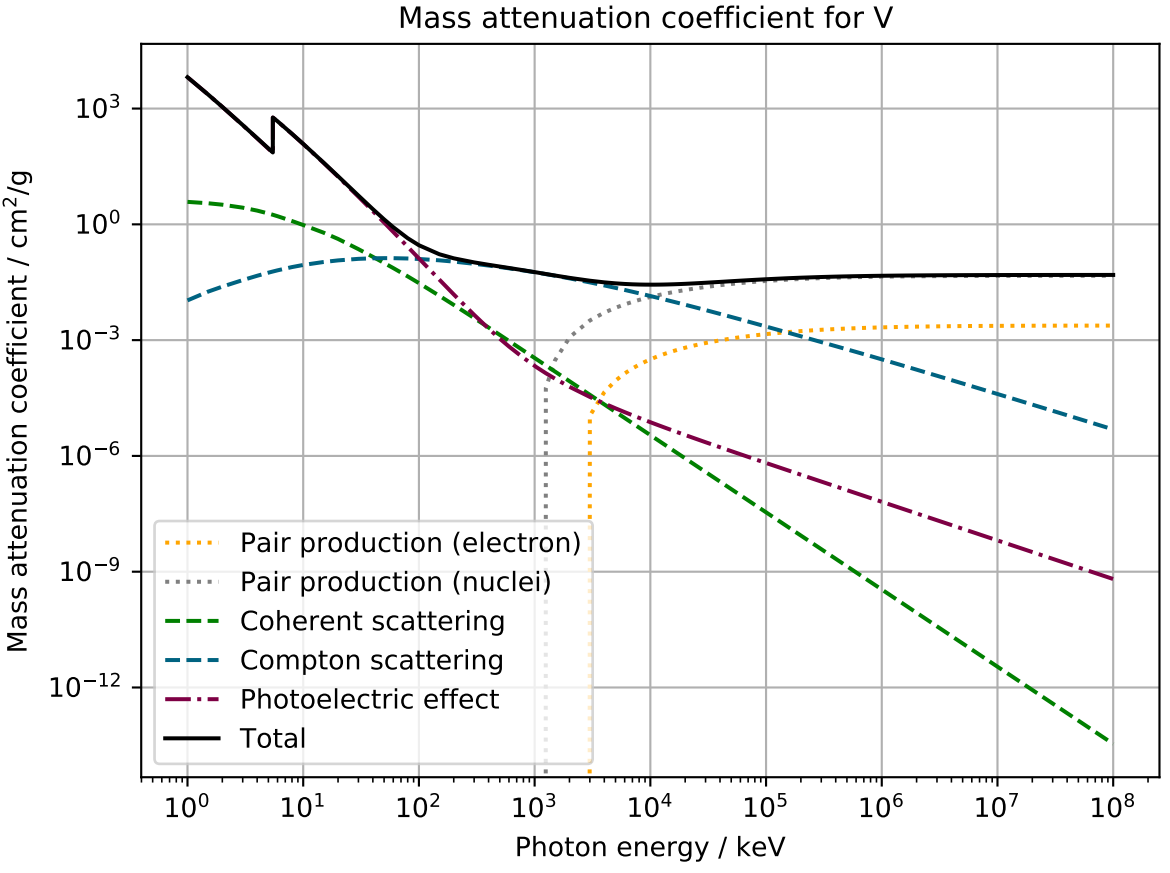

Mass attenuation coefficient for Fe
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total

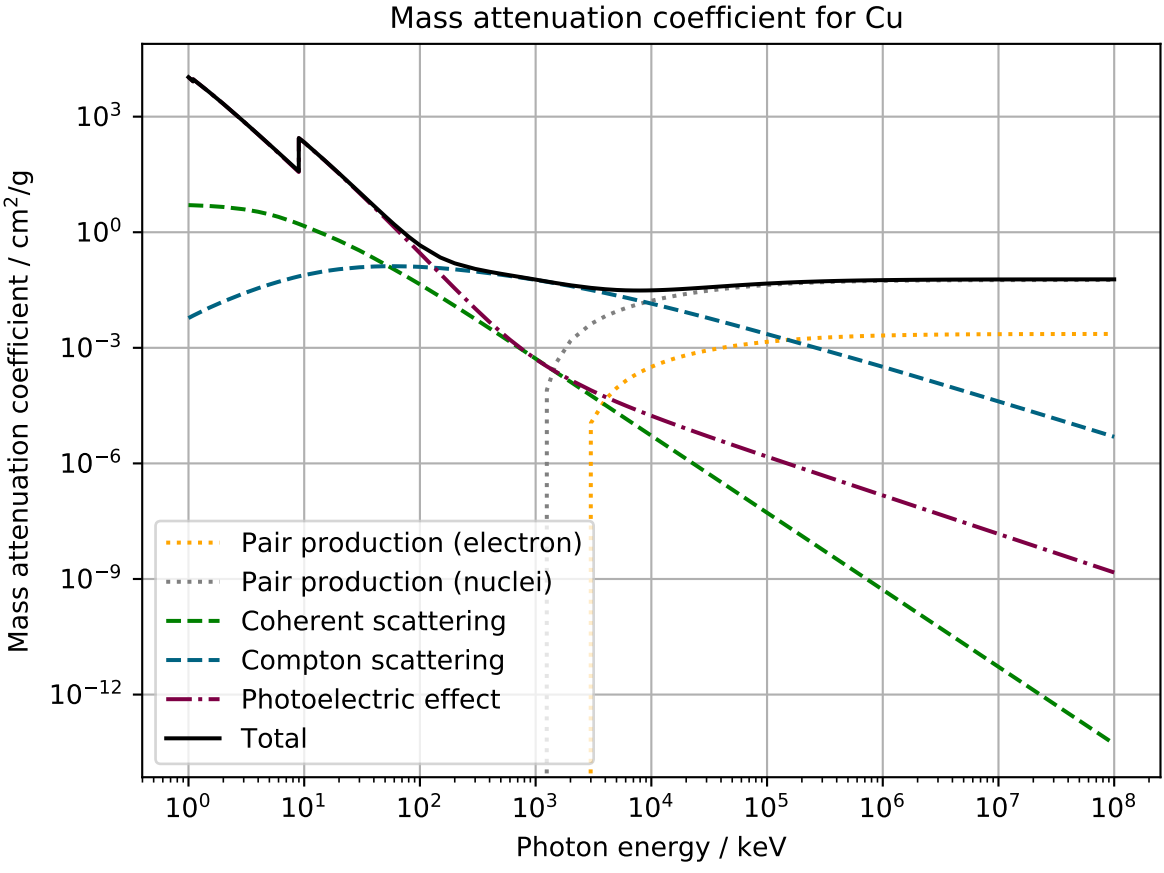

Mass attenuation coefficient for pb
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total

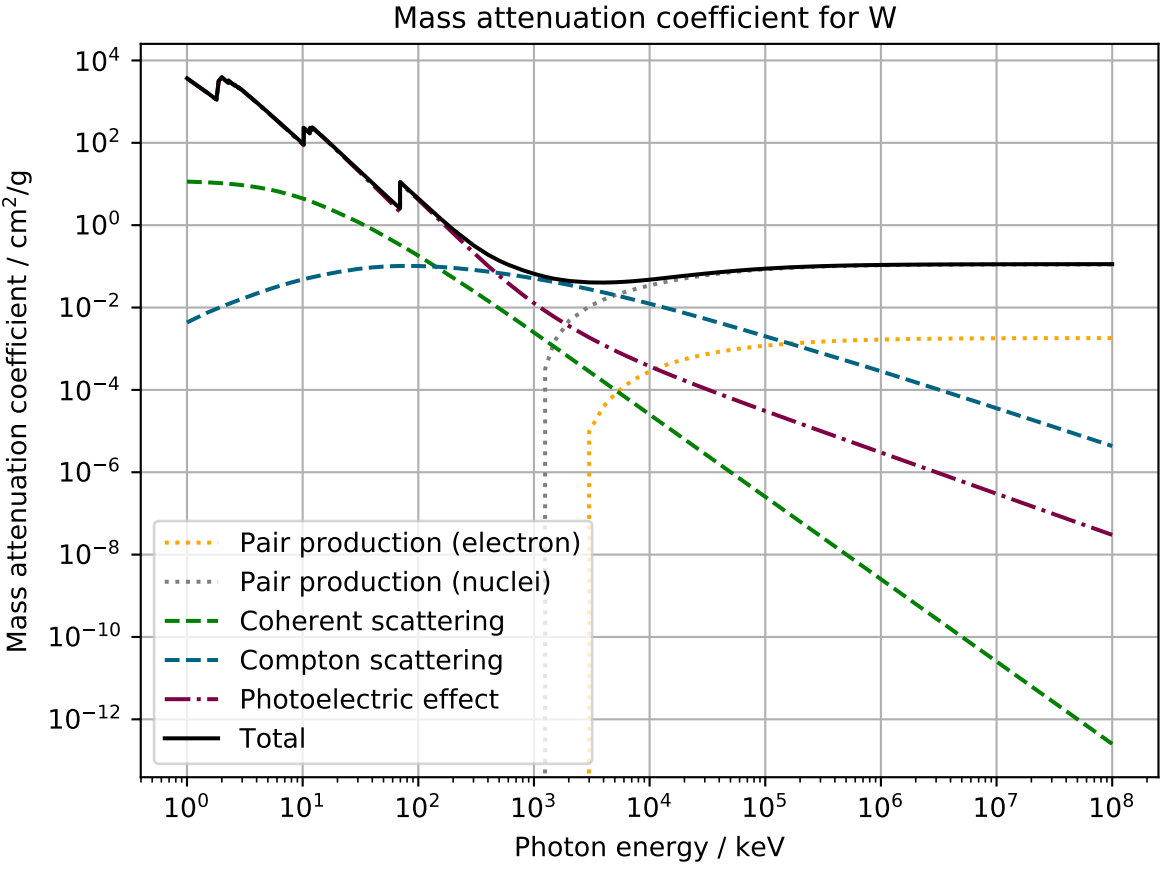

Mass attenuation coefficient for Ni
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total

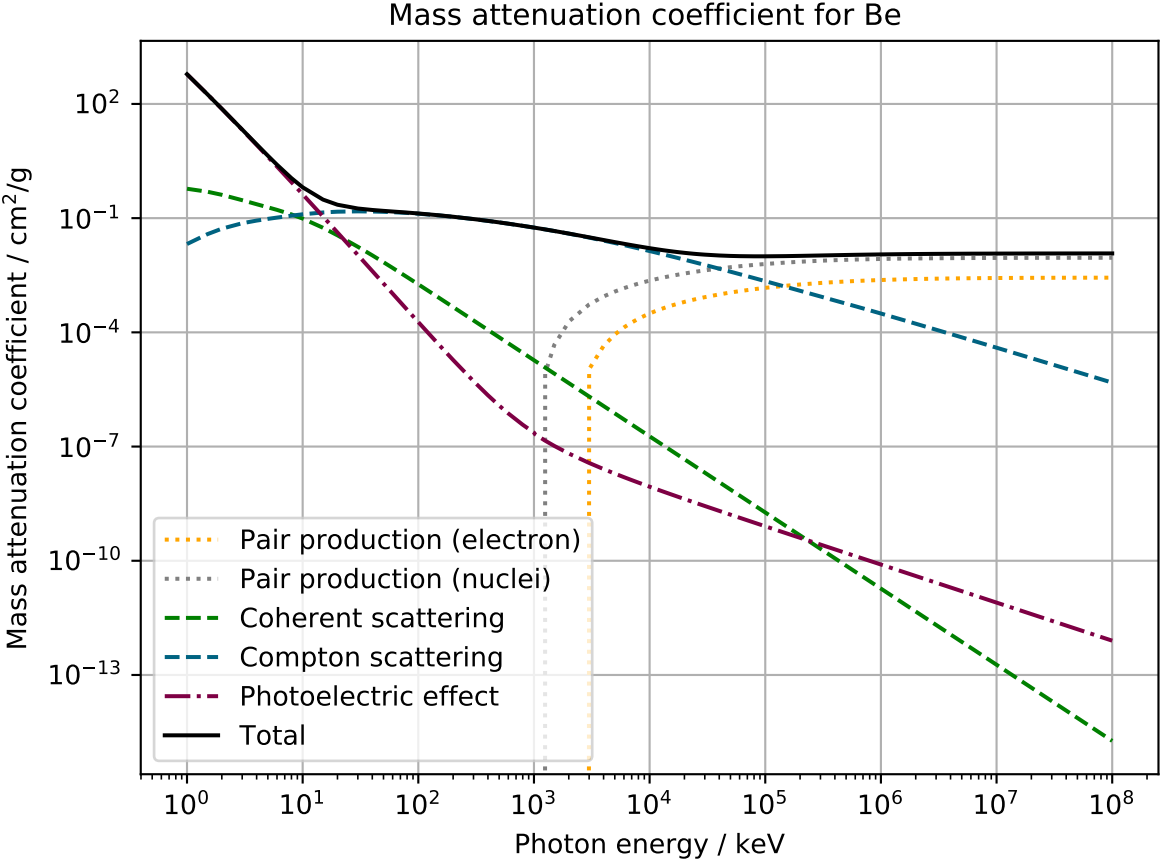

Mass attenuation coefficient for Zr
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total

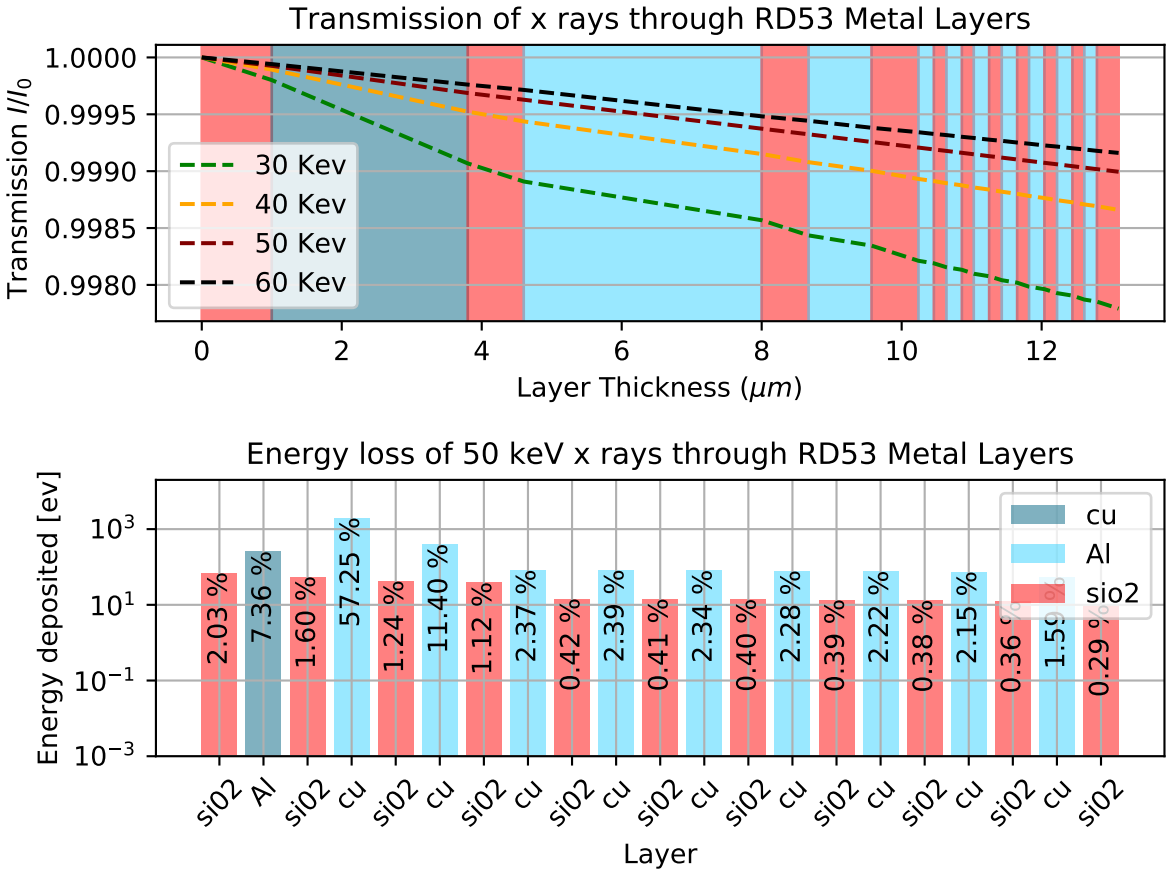

Mass attenuation coefficient for Mn
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total


Mass attenuation coefficient for V
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total


Mass attenuation coefficient for Cu
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total


Mass attenuation coefficient for W
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total


Mass attenuation coefficient for Be
Mass attenuation coefficient / cm²/g
Photon energy / keV
Pair production (electron)
Pair production (nuclei)
Coherent scattering
Compton scattering
Photoelectric effect
Total


Transmission of x rays through RD53 Metal Layers
Transmission I/I_0
1.0000
0.9995
0.9990
0.9985
0.9980
30 Kev
40 Kev
50 Kev
60 Kev
0
2
4
6
8
10
12
Layer Thickness (μm)
Energy loss of 50 keV x rays through RD53 Metal Layers
Energy deposited [ev]
10^3
10^1
10^{-1}
10^{-3}
cu
Al
sio2
2.03 %
7.36 %
1.60 %
57.25 %
1.24 %
11.40 %
1.12 %
2.37 %
0.42 %
2.39 %
0.41 %
2.34 %
0.40 %
2.28 %
0.39 %
2.22 %
0.38 %
2.15 %
0.36 %
1.59 %
0.29 %
si02
Al
si02
cu
si02
cu
si02
cu
si02
cu
si02
cu
si02
cu
si02
cu
si02
cu
si02
cu
si02
Layer