ENDF/B-VII S-34
Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
ENDF/B-VII S-34
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII S-34
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

10^{-1} 10^{-2} 10^{-3} 10^{-4} 10^{-5}

capture

10^{-1} 10^{0}
ENDF/B-VII S-34

Heating

Heating (MeV/reaction)

Energy (MeV)
ENDF/B-VII S-34
Damage

Energy (MeV)

Damage (MeV-barns)
ENDF/B-VII S-34
Non-threshold reactions

Energy (MeV) vs. Cross section (barns) graph showing the behavior of the cross section as a function of neutron energy. The curve illustrates the sharp increase in cross section at low energies, typical of resonant reactions.
ENDF/B-VII S-34
Non-threshold reactions

Cross section (barns) vs. Energy (MeV)

- Energy scale: 0 to 20 MeV
- Cross section scale: $10^{-7}$ to $10^{-4}$ barns

(n,gma) reaction

Graph shows the cross section of the (n,gma) reaction as a function of energy.
ENDF/B-VII S-34
Threshold reactions

Cross section (barns)

Energy (MeV)
angular distribution for elastic
ENDF/B-VII S-34
angular distribution for \((n,n^*1)\)
ENDF/B-VII S-34
angular distribution for (n,n*2)
ENDF/B-VII S-34
angular distribution for (n,n*3)
angular distribution for \((n,n^4)\)
ENDF/B-VII S-34
angular distribution for (n,n*5)
ENDF/B-VII S-34
Neutron emission for (n,2n)
ENDF/B-VII S-34
Neutron emission for (n,n*)a
ENDF/B-VII S-34
Neutron emission for \((n,n^*)p\)
ENDF/B-VII S-34
Neutron emission for (n,n*c)
ENDF/B-VII S-34
Photon emission for (n,2n)
ENDF/B-VII S-34
Photon emission for $(n, n^*) a$
ENDF/B-VII S-34
Photon emission for \((n,n^*)p\)
ENDF/B-VII S-34
Photon emission for \((n,n^*c)\)
ENDF/B-VII S-34
Photon emission for (n,gma)
ENDF/B-VII S-34
Photon emission for (n,p)

E_{\gamma} (MeV)

E_{n} (MeV)

Prob/MeV

10^{-1}

10^{-3}

10
ENDF/B-VII S-34
Photon emission for (n,a)
ENDF/B-VII S-34
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII S-34
14 MeV photon spectrum

Gamma Prod (barns/MeV) vs. Gamma Energy (MeV)