ENDF/B-VII.1 ND-150
resonance total cross section

Energy (MeV)

Cross section (barns)

- Total
ENDF/B-VII.1 ND-150

resonance total cross section

Energy (MeV)

Cross section (barns)
ENDF/B-VII.1 ND-150
resonance total cross section

Energy (MeV)

Cross section (barns)
ENDF/B-VII.1 ND-150
resonance total cross section

![Graph showing the resonance total cross section. The x-axis represents energy in MeV, and the y-axis represents cross section in barns. The graph shows a logarithmic scale for both axes.]
ENDF/B-VII.1 ND-150
resonance absorption cross sections

Cross section (barns) vs. Energy (MeV)
ENDF/B-VII.1 ND-150
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 ND-150
resonance absorption cross sections

Energy (MeV) vs. Cross section (barns)

- Capture line

Energy range: $10^{-3}$ to $10^{-2}$ MeV
Cross section range: $10^{-2}$ to $10^2$ barns
ENDF/B-VII.1 ND-150
resonance absorption cross sections
ENDF/B-VII.1 ND-150
UR total cross section

Energy (MeV) vs. Cross section (barns)
ENDF/B-VII.1 ND-150
UR elastic cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
1 b
ENDF/B-VII.1 ND-150
UR capture cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 ND-150
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(\text{n,gma})
ENDF/B-VII.1 ND-150
Principal cross sections

Energy (MeV) vs. Cross section (barns)

- Total cross section (black line)
- Absorption cross section (blue line)
- Elastic cross section (green line)
- Gamma production cross section (red line)
ENDF/B-VII.1 ND-150 Damage

Energy (MeV) vs. Damage (MeV-barns)
ENDF/B-VII.1 ND-150
Non-threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 ND-150
Inelastic levels

Cross section (barns) vs. Energy (MeV)

- (n,n*6)
- (n,n*7)
ENDF/B-VII.1 ND-150
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,2n)

(n,3n)

(n,n*)a

(n,2n)a

(n,n*)p
ENDF/B-VII.1 ND-150
Threshold reactions

- (n,2np)
- (n,n*c)
- (n,p)
- (n,a)
ENDF/B-VII.1 ND-150
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,xp)
- (n,xa)
- (n,p*0)
- (n,p*1)
- (n,p*c)
ENDF/B-VII.1 ND-150
Threshold reactions

![Graph showing threshold reactions and cross-sections for different reactions with varying energy levels. The y-axis represents cross-sections in barns, and the x-axis represents energy in MeV. Different reactions are indicated by distinct lines, each labeled with its respective reaction type. The graph highlights the energy thresholds and cross-section behaviors for each reaction.]
ENDF/B-VII.1 ND-150
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,a*20)
- (n,a*c)
ENDF/B-VII.1 ND-150
angular distribution for elastic
ENDF/B-VII.1 ND-150
angular distribution for (n,n\*1)
ENDF/B-VII.1 ND-150
angular distribution for (n,n*2)
ENDF/B-VII.1 ND-150
angular distribution for (n,n*3)
ENDF/B-VII.1 ND-150 angular distribution for (n,\(n^*4\))
ENDF/B-VII.1 ND-150
angular distribution for (n,n*5)
ENDF/B-VII.1 ND-150
angular distribution for (n,n*6)
ENDF/B-VII.1 ND-150
angular distribution for (n,n*7)
ENDF/B-VII.1 ND-150
Neutron emission for \((n,3n)\)
Endf/B-VII.1 ND-150
Neutron emission for (n,n*)a
ENDF/B-VII.1 ND-150
Neutron emission for (n,2n)a
ENDF/B-VII.1 ND-150
Neutron emission for (n,n*)p
ENDF/B-VII.1 ND-150
Neutron emission for (n,2np)
ENDF/B-VII.1 ND-150
Neutron emission for (n,n*c)
ENDF/B-VII.1 ND-150
Photon emission for (n,2n)
ENDF/B-VII.1 ND-150
Photon emission for (n,3n)
ENDF/B-VII.1 ND-150
Photon emission for \((n,n^*)a\)
ENDF/B-VII.1 ND-150
Photon emission for (n,2n)a
ENDF/B-VII.1 ND-150
Photon emission for (n,n*)p
ENDF/B-VII.1 ND-150
Photon emission for (n,2np)
ENDF/B-VII.1 ND-150
Photon emission for (n,n*c)
ENDF/B-VII.1 ND-150
Photon emission for (n,p*c)
ENDF/B-VII.1 ND-150 thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII.1 ND-150
14 MeV photon spectrum
ENDF/B-VII.1 ND-150
protons from (n,n*)p
ENDF/B-VII.1 ND-150 protons from (n,2np)
ENDF/B-VII.1 ND-150
angular distribution for (n,p*0) proton
ENDF/B-VII.1 ND-150
angular distribution for (n,p*1) proton
ENDF/B-VII.1 ND-150
protons from \((n,p^*c)\)
ENDF/B-VII.1 ND-150
alphas from \( (n,n^*)a \)
ENDF/B-VII.1 ND-150
alphas from (n,2n)a
ENDF/B-VII.1 ND-150
angular distribution for (n,a^0) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*1) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*2) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a^3) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*4) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a^5) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*6) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*7) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*10) alpha
ENDF/B-VII.1 ND-150
angular distribution for \((n,a^{\ast}11)\) alpha
ENDF/B-VII.1 ND-150
angular distribution for \((n,a^*12)\) alpha

\[ P = \cos^{-1} \theta \]

Energy (MeV)

Probd/Cos

Cosine

-1.0 -0.5 0.0 0.5 1.0

10^{-1} 10^{0} 10^{1} 10^{2} 10^{3}
ENDF/B-VII.1 ND-150
angular distribution for (n,a*13) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*14) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a^16) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*17) alpha
ENDF/B-VII.1 ND-150
angular distribution for (n,a*18) alpha
ENDF/B-VII.1 ND-150
angular distribution for \( (n,a^*19) \) alpha
ENDF/B-VII.1 ND-150
angular distribution for \((n,a^*20)\) alpha
ENDF/B-VII.1 ND-150 alphas from (n,a*c)