ENDF/B-IV V-NAT
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
ENDF/B-IV V-NAT
resonance total cross section

Energy (MeV)

Cross section (barns)

10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2}

total
ENDF/B-IV V-NAT
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-IV V-NAT resonance absorption cross sections

\[ \text{Cross section (barns)} \]
\[ \text{Energy (MeV)} \]

\[ 10^0 \]
\[ 10^{-1} \]
\[ 10^{-2} \]
\[ 10^{-3} \]
ENDF/B-IV V-NAT resonance absorption cross sections

Cross section (barns)

Energy (MeV)

The graph shows the resonance absorption cross sections for capture as a function of energy in MeV.
ENDF/B-IV V-NAT
Damage

Energy (MeV)

Damage (MeV-barns)
ENDF/B-IV V-NAT
Non-threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-IV V-NAT
Non-threshold reactions

Cross section (barns)

Energy (MeV)

(n,gma)
ENDF/B-IV V-NAT
Principal cross sections

Energy (MeV)

Cross section (barns)

total
absorption
elastic
gamma production

Energy (MeV)
ENDF/B-IV V-NAT
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(h, g)ma

nonelastic

Energy (MeV)
ENDF/B-IV V-NAT
Non-threshold reactions

Energy (MeV) vs. Cross section (barns)

(n, gma)
ENDF/B-IV V-NAT Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,2n)
- (n,n^a)
- (n,n^p)
- (n,n^c)
- (n,p)
ENDF/B-IV V-NAT
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,xp)  (n,xd)  (n,xt)  (n,xa)

Data points for various reactions as a function of energy.

*10^-3
ENDF/B-IV V-NAT
angular distribution for elastic
ENDF/B-IV V-NAT
angular distribution for (n,n*)a

Prob/Cos

Cosine: -1.0 -0.5 0.0 0.5 1.0

Energy (MeV): 12 14 16 18 20

10^-1 10^-0
ENDF/B-IV V-NAT angular distribution for (n,n*)p
ENDF/B-IV V-NAT
angular distribution for (n,n*1)
ENDF/B-IV V-NAT
angular distribution for (n,n*2)
ENDF/B-IV V-NAT
angular distribution for (n,n*3)
ENDF/B-IV V-NAT
angular distribution for (n,n*4)
ENDF/B-IV V-NAT
angular distribution for (n,n*c)
ENDF/B-IV V-NAT
Photon emission for nonelastic
ENDF/B-IV V-NAT
Photon emission for (n,2n)
ENDF/B-IV V-NAT
Photon emission for (n,n*)a
ENDF/B-IV V-NAT
Photon emission for (n,n*)p
ENDF/B-IV V-NAT
Photon emission for \( (n,gma) \)
ENDF/B-IV V-NAT
thermal capture photon spectrum
ENDF/B-IV V-NAT
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)