ENDF/B-VII PM-149
resonance total cross section

Energy (MeV)
Cross section (barns)
ENDF/B-VII PM-149
resonance total cross section
ENDF/B-VII PM-149
UR total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII PM-149
UR elastic cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
ENDF/B-VII PM-149
UR capture cross section
ENDF/B-VII PM-149
Heating

Heating (MeV/reaction) vs. Energy (MeV)
ENDF/B-VII PM-149
Damage

Energy (MeV) vs. Damage (MeV-barns)

- Damage decreases as energy increases in the range of $10^{-11}$ to $10^{-6}$ MeV.
- There is a sharp decrease in damage around $10^{-6}$ MeV, followed by a recovery.
- Damage continues to increase as energy increases beyond $10^{-3}$ MeV.
ENDF/B-VII PM-149
Non-threshold reactions

Cross section (barns) vs. Energy (MeV)

- Energy (MeV) range: $10^{-11}$ to $10^{1}$
- Cross section (barns) range: $10^{-1}$ to $10^{5}$

Line: (n, gma)
ENDF/B-VII PM-149

Inelastic levels

Energy (MeV)

Cross section (barns)

*10^{-3}

(n,n*6)

(n,n*7)

(n,n*8)

(n,n*9)

(n,n*10)
ENDF/B-VII PM-149
Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*11)
- (n,n*12)
- (n,n*13)
- (n,n*14)
ENDF/B-VII PM-149
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,n*)t
- (n,n*c)
- (n,p)
- (n,d)
- (n,t)
ENDF/B-VII PM-149
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a)
angular distribution for elastic
ENDF/B-VII PM-149
angular distribution for (n,2n)
ENFD/B- VII PM-149
angular distribution for (n,3n)
ENDF/B-VII PM-149
angular distribution for (n,n*)a
ENDF/B-VII PM-149
angular distribution for (n,n*)p
ENDF/B-VII PM-149
angular distribution for (n,n*)d
ENDF/B-VII PM-149
angular distribution for (n,n*)t

Probability (Cosine)
ENDF/B-VII PM-149
angular distribution for (n,n*1)
ENDF/B-VII PM-149
angular distribution for (n,n*2)
ENDF/B-VII PM-149
angular distribution for \((n,n^*3)\)
ENDF/B-VII PM-149
angular distribution for (n,n'4)

Energy (MeV)

Cosine

Prob/Cos
angular distribution for \((n,n^*)\)
ENDF/B-VII PM-149
angular distribution for (n,n*6)
ENDF/B-VII PM-149
angular distribution for (n,n*7)
ENDF/B-VII PM-149
angular distribution for (n,n*8)
ENDF/B-VII PM-149
angular distribution for (n,n*9)
ENDF/B-VII PM-149 angular distribution for (n,n*10)
ENDF/B-VII PM-149
angular distribution for (n,n*12)
ENDF/B-VII PM-149
angular distribution for (n,n*13)
ENDF/B-VII PM-149
angular distribution for (n,n*14)
ENDF/B-VII PM-149
Neutron emission for (n,2n)
ENDF/B-VII PM-149
Neutron emission for (n,3n)
ENDF/B-VII PM-149
Neutron emission for (n,n*)a

Energy (MeV)
Sec. Energy

Prob./MeV

-1
0
10
10^3
10^5
10^7
10^9
10^11
ENDF/B-VII PM-149
Neutron emission for \((n,n^*)p\)
ENDF/B-VII PM-149
Neutron emission for \((n,n^*)d\)
ENDF/B-VII PM-149
Neutron emission for \((n,n^*)t\)
ENDF/B-VII PM-149
Neutron emission for \((n,n^*c)\)