Principle cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99

Principal cross sections
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance total cross section

Energy (MeV)

Cross section (barns)

Total
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance total cross section
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
cross section total resonance cross section

Cross section (barns)

Energy (MeV)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance total cross section

![Graph showing the energy and cross section relationship.](image)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance absorption cross sections

Energy (MeV)

Cross section (barns)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99 Damage

Energy (MeV) vs. Damage (MeV-barns) graph.
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*1)  (n,n*2)  (n,n*3)  (n,n*4)  (n,n*5)

Energy (MeV)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
Inelastic levels

Cross section (barns) vs. Energy (MeV)

- (n,n*11)
- (n,n*12)
- (n,n*13)
- (n,n*14)
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,p)
(n,a)
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,xp)
- (n,xd)
- (n,xt)
- (n,xa)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for elastic
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for elastic
angular distribution for (n,2n)
angular distribution for (n,n*)p
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*1)

![Graph showing angular distribution with energy on the x-axis, cosine on the y-axis, and probability on the z-axis. Peaks are visible at various energy levels.]}
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*2)
angular distribution for (n,n*3)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*4)
angular distribution for (n,n*)

\[ \text{ProblCos} \]

\[ 10^0 \]

\[ \text{Energy (MeV)} \]

\[ 1.0 \quad 0.5 \quad 0.0 \quad -0.5 \quad -1.0 \quad 0 \]

\[ \text{Cosine} \]
angular distribution for (n,n*6)
angular distribution for (n,n*7)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*8)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*9)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*10)
angular distribution for (n,n*11)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*12)
angular distribution for (n,n*13)
angular distribution for (n,n*14)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
angular distribution for (n,n*\text{c})
Neutron emission for (n,x)
Neutron emission for (n,2n)
Neutron emission for \((n,3n)\)
Neutron emission for \((n,n^*c)\)
Photon emission for (n,gma)
Photon emission for inelastic scattering.

The graph shows the probability of photon emission as a function of energy in MeV. The x-axis represents the energy of the incoming neutron ($E_n$) in MeV, ranging from 0 to 22 MeV. The y-axis represents the energy of the emitted photon ($E_\gamma$) in MeV, ranging from 0 to 20 MeV. The z-axis represents the probability of emission, with a logarithmic scale from $10^{-3}$ to $10^{-1}$. The peaks in the graph indicate regions of high probability for photon emission under inelastic scattering conditions.
Photon emission for (n,2n)
Photon emission for (n,3n)
Photon emission for (n,x)
Gamma Energy (MeV)

Gamma Prod (barns/MeV)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
14 MeV photon spectrum
Particle heating contributions

- Protons
- Deuterons (red)
- Tritons (green)
- Alphas (blue)

Energy (MeV) vs. MeV/collision for different particles.
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99 protons from (n,x)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99 deuterons from (n,x)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
tritons from (n,x)
N + 74-W-183 ENDF/B-VI.6 APT LA150 NJOY 99
alphas from (n,x)