ENDF/B-V CA-NATA
Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
ENDF/B-V CA-NATA resonance total cross section
ENDF/B-V CA-NATA
resonance total cross section

Energy (MeV)

Cross section (barns)

10^0

10^0

10^1

10^1

10^0

10^0

10^0
ENDF/B-V CA-NATA
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-V CA-NATA
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-V CA-NATA
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-V CA-NATA
Damage

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

- Damage decreases significantly as energy decreases from $10^{-11}$ to $10^{-8}$ MeV.
- There is a sharp increase in damage starting from $10^{-6}$ MeV and rising sharply towards $10^1$ MeV.
ENDF/B-V CA-NATA
Non-threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-V CA-NATA
Non-threshold reactions

![Graph showing cross sections for (n,gma), (n,a), and (n,xa) reactions versus energy.](image)
ENDF/B-V CA-NATA
Threshold reactions

Energy (MeV)

Cross section (barns)

*(n,pa)*
ENDF/B-V CA-NATA
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,xp)
(n,xd)
(n,xt)
(n,xhe3)
ENDF/B-V CA-NATA
angular distribution for elastic

![Graph showing the angular distribution for elastic scattering. The graph plots probability against cosine and energy in MeV, with a logarithmic scale for the probability axis.]
ENDF/B-V CA-NATA
angular distribution for \((n,n^*2)\)
ENDF/B-V CA-NATA
angular distribution for (n,n*3)
ENDF/B-V CA-NATA
angular distribution for (n,n*4)
ENDF/B-V CA-NATA
angular distribution for (n,n*5)
ENDF/B-V CA-NATA
angular distribution for (n,n*6)
ENDF/B-V CA-NATA
angular distribution for \((n,n^*7)\)
ENDF/B-V CA-NATA
angular distribution for (n,n*8)
ENDF/B-V CA-NATA
angular distribution for (n,n*9)
ENDF/B-V CA-NATA
angular distribution for (n,n*10)
ENDF/B-V CA-NATA
angular distribution for (n,n*11)
ENDF/B-V CA-NATA
angular distribution for \( (n,n^*12) \)
ENDF/B-V CA-NATA
angular distribution for (n,n*13)
ENDF/B-V CA-NATA
angular distribution for (n,n*14)
ENDF/B-V CA-NATA
Neutron emission for \((n,n^*)\)a
ENDF/B-V CA-NATA
Neutron emission for \((n,n^*)p\)
ENDF/B-V CA-NATA
Neutron emission for \((n,n^*c)\)
ENDF/B-V CA-NATA
Photon emission for inelastic
ENDF/B-V CA-NATA
Photon emission for (n,n*)a
ENDF/B-V CA-NATA
Photon emission for \((n,n^*)p\)
ENDF/B-V CA-NATA
Photon emission for (n,gma)
ENDF/B-V CA-NATA
Photon emission for (n,p)
ENDF/B-V CA-NATA
Photon emission for (n,a)
ENDF/B-V CA-NATA thermal capture photon spectrum
ENDF/B-V CA-NATA
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)