ENDF/B-VII.1 CE-139
resonance total cross section

Energy (MeV)

Cross section (barns)
ENDF/B-VII.1 CE-139
resonance absorption cross sections

Capture cross-sections as a function of energy.
ENDF/B-VII.1 CE-139
resonance absorption cross sections

![Graph showing resonance absorption cross sections with energy on the x-axis and cross section on the y-axis, with peaks at certain energy levels.](image-url)
ENDF/B-VII.1 CE-139
UR elastic cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
1 b
ENDF/B-VII.1 CE-139
UR capture cross section

Energy (MeV)

Cross section (barns)

Inf. Dil. 100 b 1 b
ENDF/B-VII.1 CE-139
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
ENDF/B-VII.1 CE-139
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
ENDF/B-VII.1 CE-139
Non-threshold reactions

Energy (MeV)

Cross section (barns)

\((n,\text{gma})\)
ENDF/B-VII.1 CE-139
Threshold reactions

- $(n,2n)$
- $(n,3n)$
- $(n,n^*)a$
- $(n,2n)a$
- $(n,n^*)p$
 ENDF/B-VII.1 CE-139
Threshold reactions

Cross section (barns) vs. Energy (MeV)

Plot showing the threshold reactions for different cross sections (n,p*3, n,p*4, n,p*5, n,p*6, n,p*7) across various energy levels (MeV). The y-axis represents the cross section in barns, while the x-axis represents the energy in MeV.
ENDF/B-VII.1 CE-139
Threshold reactions

Cross section (barns) vs Energy (MeV)

- (n,p*18)
- (n,p*c)
- (n,a*0)
- (n,a*1)
- (n,a*2)
ENDF/B-VII.1 CE-139
Threshold reactions

![Graph showing the cross section (barns) vs. energy (MeV) for different reactions. The graph includes lines for (n,a*8), (n,a*9), (n,a*10), and (n,a*c).]
ENDF/B-VII.1 CE-139
angular distribution for elastic
ENDF/B-VII.1 CE-139
angular distribution for (n,n*1)
ENDF/B-VII.1 CE-139
angular distribution for (n,n*2)
Fig. 2.

Endf/B-VII.1 CE-139
angular distribution for (n, n*3)
ENDF/B-VII.1 CE-139
angular distribution for (n,n*4)
ENDF/B-VII.1 CE-139
angular distribution for (n,n*6)
ENDF/B-VII.1 CE-139
angular distribution for (n,n*7)
ENDF/B-VII.1 CE-139
angular distribution for \((n,n^*8)\)
ENDF/B-VII.1 CE-139
angular distribution for \((n,n^9)\)
ENDF/B-VII.1 CE-139
angular distribution for \((n,n^*10)\)
ENDF/B-VII.1 CE-139
angular distribution for (n,n*11)
ENDF/B-VII.1 CE-139
Neutron emission for \((n,2n)\)
ENDF/B-VII.1 CE-139
Neutron emission for (n,3n)
ENDF/B-VII.1 CE-139
Neutron emission for (n,n*)a
ENDF/B-VII.1 CE-139
Neutron emission for (n,2n)a
ENDF/B-VII.1 CE-139
Neutron emission for (n,n*)p
ENDF/B-VII.1 CE-139
Neutron emission for \((n,2np)\)
ENDF/B-VII.1 CE-139
Neutron emission for (n,n*c)
ENDF/B-VII.1 CE-139
Photon emission for (n,2n)
ENDF/B-VII.1 CE-139
Photon emission for (n,3n)
ENDF/B-VII.1 CE-139
Photon emission for \((n,n^*)a\)
ENDF/B-VII.1 CE-139
Photon emission for \((n,2n)\alpha\)
ENDF/B-VII.1 CE-139
Photon emission for (n,n*)p
ENDF/B-VII.1 CE-139
Photon emission for (n,2np)
Photon emission for (n,n*c)
ENDF/B-VII.1 CE-139
Photon emission for (n, gma)
ENDF/B-VII.1 CE-139
Photon emission for (n, p*c)
ENDF/B-VII.1 CE-139
Photon emission for (n,a*c)
ENDF/B-VII.1 CE-139
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
Particle heating contributions

ENDF/B-VII.1 CE-139

![Graph showing particle heating contributions vs energy (MeV).]
ENDF/B-VII.1 CE-139
protons from \((n,n^*)p\)
ENDF/B-VII.1 CE-139
protons from (n,2np)
ENDF/B-VII.1 CE-139
angular distribution for (n,p*0) proton
ENDF/B-VII.1 CE-139
angular distribution for \( (n,p^*1) \) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*2) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*3) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*4) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*5) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*6) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*7) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*8) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*9) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*10) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*11) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*12) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p\*13) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*14) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*15) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*16) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*17) proton
ENDF/B-VII.1 CE-139
angular distribution for (n,p*18) proton
ENDF/B-VII.1 CE-139
protons from (n,p*c)
ENDF/B-VII.1 CE-139
alphas from \((n,n^*)a\)
ENDF/B-VII.1 CE-139
alphas from (n,2n)a
ENDF/B-VII.1 CE-139
angular distribution for \((n,a^0)\) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*1) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*2) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*3) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n, a*4) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a^5) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*6) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*7) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*8) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a^9) alpha
ENDF/B-VII.1 CE-139
angular distribution for (n,a*10) alpha
ENDF/B-VII.1 CE-139
alphas from (n,a*c)