62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
resonance total cross section

![Graph showing the energy vs. cross section for 62-SM-150. Peaks at specific energies indicate resonant behavior. The y-axis represents cross section in barns on a logarithmic scale, and the x-axis represents energy in MeV on a logarithmic scale.]
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
resonance total cross section

![Graph showing the total cross section for 62-SM-150 as a function of energy in MeV, with cross section values on a logarithmic scale (barns) ranging from $10^{-4}$ to $10^4$. The energy range is from $10^{-4}$ to $10^{-3}$ MeV.]
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

resonance total cross section

Cross section (barns)

Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

resonance total cross section

Energy (MeV)

Cross section (barns)

10^0

10^1

10^1

10^0

total
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
resonance absorption cross sections

Capture cross section as a function of energy (MeV). The graph shows two sharp peaks indicating resonance absorption effects.
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

resonance absorption cross sections

capture
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
resonance absorption cross sections

capture
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

10^{-1} capture
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+UR total cross section

![Graph showing total cross section vs. energy for different models: Inf. Dil., 100 b, and 1 b. The energy is plotted on a linear scale from 10^{-3} to 10^{2} MeV, and the cross section is plotted on a logarithmic scale from 10^{-3} to 10^{2} barns.](image-url)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+UR elastic cross section

![Graph showing elastic cross section vs. energy](image-url)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+UR capture cross section

![Graph of cross section vs energy](image-url)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Heating

Heating (MeV/reaction) vs. Energy (MeV)

- Heating graph with a logarithmic scale on the y-axis and a linear scale on the x-axis.
- The graph shows a curve that increases rapidly as the energy increases.
Energy (MeV) vs. Damage (MeV-barns) graph.
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Heating

![Graph showing the relationship between energy and heating](image-url)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Damage

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

- Energy (MeV) range: 0 to 200
- Damage (MeV-barns) range: 0 to 0.5

The graph shows the relationship between energy and damage, with a peak damage value around 0.4 MeV-barns for an energy range of 150 to 170 MeV.
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Non-threshold reactions

Energy (MeV)

Cross section (barns)

- (n,gma)
- (n,a)
- (n,xa)
Inelastic levels

Cross section (barns) vs. Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)
Inelastic levels

Cross section (barns) vs Energy (MeV) for different inelastic reactions:
- (n,n*11)
- (n,n*12)
- (n,n*13)
- (n,n*14)
- (n,n*15)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Inelastic levels

Cross section (barns)

Energy (MeV)

*(n,n*16)
*(n,n*17)
*(n,n*18)
*(n,n*19)
*(n,n*20)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Inelastic levels

![Graph showing cross-sections for various inelastic reactions.]

- (n,n*26)
- (n,n*27)
- (n,n*28)
- (n,n*29)
- (n,n*30)
Threshold reactions

Cross section (barns) vs. Energy (MeV) for the following reactions:

- (n,2n)a
- (n,3n)a
- (n,n*)p
- (n,n*)2a
- (n,n*)d
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Threshold reactions

Cross section (barns)

Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Threshold reactions

Cross section (barns)

Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Threshold reactions

Cross section (barns)

Energy (MeV)

*(n,t)*
*(n,he3)*
*(n,2a)*
*(n,2p)*
*(n,pa)*
Threshold reactions

Cross section (barns) vs Energy (MeV)

- (n,pd)
- (n,pt)
- (n,da)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Threshold reactions

Cross section (barns)

Energy (MeV)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60- angular distribution for elastic
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for elastic
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*1)
angular distribution for (n,n*2)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*3)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for (n,n^4)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*5)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*6)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for \( (n,n^*7) \)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*8)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*9)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*10)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for (n,n*11)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for (n,n*12)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for \( (n,n^{*13}) \)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*14)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.6
angular distribution for \((n,n^*15)\)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*16)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*17)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for (n,n*18)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*19)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
angular distribution for (n,n*20)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for \( (n,n^*21) \)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*22)
angular distribution for (n,n*23)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*24)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
- angular distribution for (n,n*25)
Angular distribution for \((n,n^{*26})\)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for \((n,n^\ast27)\)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*28)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*29)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
angular distribution for (n,n*30)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,2n)
Neutron emission for (n,3n)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,2n)a

![3D graph of neutron emission for (n,2n)a](image-url)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Neutron emission for (n,3n)a

Energy (MeV)

Sec. Energy

Prob/MeV

10.0

10.3

10.6

10.9
Neutron emission for \((n,n^*)p\)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,n*)2a
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+Neutron emission for (n,n*)d
Neutron emission for (n,n*)t
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,n*)he3
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
Neutron emission for (n,4n)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,2np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Neutron emission for (n,3np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

Neutron emission for (n,2np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
Neutron emission for (n,n*c)
Photon emission for (n,2nd)
Photon emission for \((n,2n)\)
Photon emission for (n,3n)
Photon emission for \((n,n^*)a\)
Photon emission for (n,2n)a
Photon emission for (n,3n)a
Photon emission for (n,n*)p
Photon emission for \((n,n^*)2a\)
Photon emission for \((n,n^*)d\)
Photon emission for (n,n*)t
Photon emission for \((n,n^*)\text{he3}\)
Photon emission for (n,4n)
Photon emission for $(n,2np)$
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Photon emission for (n,3np)
Photon emission for (n,2np)
Photon emission for (n,npa)
Photons emission for (n,n*c)
Photon emission for (n,gma)
Photon emission for (n,p)
Photon emission for \((n,d)\)
Photon emission for (n,t)
Photon emission for (n,he3)
Photon emission for (n,2a)
Photon emission for \((n,2p)\)
Photon emission for (n,pa)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Photon emission for (n,pd)
Photon emission for (n,pt)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
Photon emission for (n,da)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
thermal capture photon spectrum
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
Particle heating contributions

- protons
- deuterons
- tritons
- he-3
- alphas
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+Recoil Heating

Heating (MeV/reaction) vs Energy (MeV)

- Curve labeled "recoil heating"
Particle production cross sections

![Graph showing energy (MeV) vs. cross section (barns) for different particles: protons, deuterons, tritons, he-3, and alphas. The graph reveals the trend of increasing cross sections with increasing energy.]
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60 protons from (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,n*)p
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,2np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60 protons from (n,3np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,2np)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,npa)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+protons from (n,p)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,2p)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,pa)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,pd)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
protons from (n,pt)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
deuterons from (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+deuterons from (n,2nd)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+deuterons from (n,n*)d
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+deuterons from (n,d)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-deuterons from (n,pd)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+deuterons from (n,da)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

tritons from (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60

tritons from (n,t)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+tritons from (n,pt)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-he3s from (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+he3s from (n,n*)he3
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
he3s from (n,he3)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+alphas from (n,x)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-
alphas from (n,n*)a
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
alphas from (n,2n)a
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60
alphas from (n,3n)a
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+alphas from (n,n*)2a
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+alphas from (n,npa)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+alphas from (n,a)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60-alphas from (n,2a)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60- alphas from (n,pa)
62-SM-150 FOR FENDL-3.2 FROM TENDL-2019 BY NJOY2016.60+alphas from (n,da)