50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Energy (MeV) vs. Cross section (barns)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Energy (MeV)

Cross section (barns)

total
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

![Graph showing total cross section as a function of energy (MeV). The y-axis represents the cross section in barns on a log scale, ranging from $10^{-2}$ to $10^2$. The x-axis represents energy in MeV, ranging from $10^{-2}$ to $10^{-1}$. The graph features a line labeled "total" with spikes corresponding to resonance effects.]
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Cross section (barns) vs Energy (MeV)

capture
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

capture

Cross section (barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

capture
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

capture
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR total cross section

Energy (MeV) vs. Cross section (barns)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR elastic cross section

Cross section (barns)

Energy (MeV)

Inf. Dil.
100 b
1 b
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
UR capture cross section

Energy (MeV)

Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

Heating

Energy (MeV) vs. Heating (MeV/reaction)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

![Graph showing the relationship between energy (MeV) and damage (MeV-barns). The x-axis represents energy in MeV, ranging from 10^{-11} to 10^1. The y-axis represents damage in MeV-barns, ranging from 10^{-6} to 10^0. The graph includes a logarithmic scale for both axes.](image)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

![Graph showing cross section vs energy for (n,gma) reactions]
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

Heating

Heating (MeV/reaction)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

Damage (MeV-barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

Cross section (barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Energy (MeV)

Cross section (barns)

*(n,n*16) *(n,n*17) *(n,n*18) *(n,n*19) *(n,n*20)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns) vs. Energy (MeV)
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,x)
- (n,2n)
- (n,3n)
- (n,n^*)a
- (n,n^*)p
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for elastic
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for elastic
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*1)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*2)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*3)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*4)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*5)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*6)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*7)
angular distribution for \((n,n'8)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*9)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*10)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*11)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*12)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*13)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^\ast14)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*15)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*16)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n, n^{*17})\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*18)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*19)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*20)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n²)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*22)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*23)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*24)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*25)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*26)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*27)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*28)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \( (n,n^{*29}) \)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+

angular distribution for (n,n*30)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,2n)
Neutron emission for (n,3n)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,n*)a

Probability (MeV)

Energy (MeV)

Secondary Energy

10^{-1}

10^1
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for \((n,n^*)p\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,n*c)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,2n)
Photon emission for (n,3n)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*)a
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for \((n,n^*)p\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*1)
Photon emission for (n,n*2)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for \((n,n^*3)\)
Photon emission for (n,n*4)
Photon emission for (n,n*5)

\[ \text{Prob}/\text{MeV} \]

\[ 10^0 \quad 10^2 \]

\[ E_\gamma (\text{MeV}) \]

\[ 1.8 \quad 2.0 \quad 2.2 \quad 2.4 \quad 2.6 \]

\[ E_\pi (\text{MeV}) \]

\[ 0 \quad 20 \quad 40 \quad 60 \quad 80 \quad 100 \quad 120 \quad 140 \quad 160 \quad 180 \quad 200 \]
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*6)
Photon emission for (n,n*7)
Photon emission for \((n,n^*8)\)
Photon emission for (n,n*9)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for \((n,n^*10)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*11)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*12)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*13)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*14)
Photon emission for \((n,n^{*15})\)
Photon emission for (n,n*16)
Photon emission for (n,n*18)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*19)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*20)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*21)
Photon emission for \((n,n'22)\)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*23)
Photon emission for (n,n*24)
Photon emission for \((n,n'25)\)
Photon emission for (n,n*26)
Photon emission for (n,n*27)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*28)
Photon emission for (n,n*29)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n*30)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Photon emission for (n,n\*c)
Photon emission for (n,gma)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
thermal capture photon spectrum

![Gamma Energy vs Gamma Prod (barns/MeV) graph]

- Gamma Energy (MeV) on the x-axis.
- Gamma Prod (barns/MeV) on the y-axis on a log scale.
- The graph shows a distribution of gamma energy with corresponding gamma production.
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)

0 10 20

10^{-18} 10^{-15} 10^{-12} 10^{-9} 10^{-6} 10^{-3} 10^0 10^3

0 10 20 30
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Particle heating contributions

energy (MeV) vs. protons, deuterons, tritons, he-3, alphas

MeV/collision vs. Energy (MeV)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Recoil Heating

![Graph showing heating (MeV/reaction) vs energy (MeV). The graph has a line labeled recoil heating, showing an increase in heating with energy.](image-url)
Particle production cross sections

Energy (MeV)

Cross section (barns)

- protons
- deuterons
- tritons
- he-3
- alphas
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,x)

![Graph showing probability versus energy](image-url)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,n*)p
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
deuterons from (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
tritons from (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
he3s from (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,x)
50-SN-120 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,n*)a