Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance total cross section

![Graph showing the total cross section as a function of energy. The x-axis represents energy in MeV, ranging from $10^{-4}$ to $10^{-3}$. The y-axis represents cross section in barns, ranging from $10^{-2}$ to $10^1$. There are peaks at specific energies indicating resonance effects.]
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance total cross section

Energy (MeV)

Cross section (barns)

total

10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}

10^{-3} 10^{-2}
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance total cross section

Energy (MeV) vs. Cross section (barns) graph.
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance total cross section
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance absorption cross sections

![Graph showing resonance absorption cross sections against energy in MeV.]
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
resonance absorption cross sections

capture

Energy (MeV)

Cross section (barns)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+UR total cross section
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
UR elastic cross section

Energy (MeV) vs. Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b
UR capture cross section

26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60

Heating

Energy (MeV)

Heating (MeV/reaction)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60
Non-threshold reactions

Cross section (barns)

Energy (MeV)

(n,gma)
Damage

Energy (MeV)

Damage (MeV-barns)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60

Inelastic levels

Cross section (barns)

Energy (MeV)
Inelastic levels

Cross section (barns) vs. Energy (MeV)

- (n,n*16)
- (n,n*17)
- (n,n*18)
- (n,n*19)
- (n,n*20)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Inelastic levels
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

Inelastic levels

Energy (MeV)

Cross section (barns)

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n,n*26)</td>
<td>Black</td>
</tr>
<tr>
<td>(n,n*27)</td>
<td>Red</td>
</tr>
<tr>
<td>(n,n*28)</td>
<td>Green</td>
</tr>
<tr>
<td>(n,n*29)</td>
<td>Blue</td>
</tr>
<tr>
<td>(n,n*30)</td>
<td>Pink</td>
</tr>
</tbody>
</table>
Inelastic levels

Cross section (barns)

Energy (MeV)
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n^36)
(n,n^37)
(n,n^38)
(n,n^39)
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,x)
- (n,2n)
- (n,n*c)
- (n,p)
- (n,a)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+ Threshold reactions

![Graph showing the cross section in barns as a function of energy (MeV). The reaction (n,2p) is indicated with a peak at around 10 MeV.]
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,xp)
- (n,xd)
- (n,xt)
- (n,xhe3)
- (n,xa)
Threshold reactions

Cross section (barns)

Energy (MeV)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60

Threshold reactions

Cross section (barns) vs Energy (MeV) graph with various (n,p) reactions labeled.
Threshold reactions

Cross section (barns) vs. Energy (MeV) graph for different reactions:
- (n,a*2)
- (n,a*3)
- (n,a*4)
- (n,a*5)
- (n,a*6)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,a*7)
- (n,a*8)
- (n,a*9)
angural distribution for elastic
angular distribution for elastic
angular distribution for \((n,n*1)\)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60

angular distribution for (n,n*1)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*2)
angular distribution for (n,n*2)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*3)
angular distribution for (n,n*3)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*4)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*4)
angular distribution for (n,n*5)
angular distribution for (n,n*5)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*6)
angular distribution for (n,n*6)
angular distribution for (n,n*7)
angular distribution for (n,n*7)
angular distribution for (n,n*8)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

angular distribution for (n,n*8)
angular distribution for (n,n*9)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*9)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*10)
angular distribution for (n,n*11)
angular distribution for (n,n*11)
angular distribution for (n,n*12)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*13)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*13)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*14)
angular distribution for \( (n,n*14) \)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*15)
angular distribution for \((n,n^{*15})\)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*16)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*16)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60
angular distribution for (n,n*17)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for \( (n,n^*17) \)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*18)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*18)
angular distribution for (n,n*19)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*20)

Energy (MeV)

Cosine

Prob|Cos

10.0 10.1 10.2 10.3 10.4 10.5 10.6 10.7 10.8 10.9 10.10

4 6 8 10 12 14 16 18 20

1.0 0.5 0.0 -0.5 -1.0
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*20)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*21)
angular distribution for \((n,n'21)\)
angular distribution for (n,n*22)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

angular distribution for (n,n*22)
angular distribution for (n,n*23)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*23)
angular distribution for (n,n*24)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*24)
angular distribution for (n,n*25)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*25)
angular distribution for (n,n*26)
angular distribution for (n,n*27)
angular distribution for (n,n*27)
angular distribution for (n,n*28)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60
angular distribution for (n,n*28)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*29)
angular distribution for (n,n*29)
angular distribution for (n,n*30)
angular distribution for (n,n*30)
angular distribution for (n,n*31)
angular distribution for \((n, n*31)\)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for \( (n,n*32) \)
angular distribution for (n,n*32)
angular distribution for (n,n*33)
angular distribution for (n,n*33)
angular distribution for \((n,n^*34)\)
angular distribution for (n,n*34)
angular distribution for (n,n*35)
angular distribution for (n,n*35)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*36)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for \((n,n*36)\)
angular distribution for (n,n*37)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n\*37)
angular distribution for (n,n*38)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*38)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*39)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,n*39)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Neutron emission for (n,x)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Neutron emission for (n,2n)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Neutron emission for (n,n*c)
Phon emission for (n,x)
Photon emission for (n,2n)
Photon emission for (n,n*c)
Photon emission for (n,gma)
Photon emission for (n,2p)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Photon emission for (n,p*\textit{c})
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
thermal capture photon spectrum
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
Particle heating contributions

- protons
- deuterons
- tritons
- he-3
- alphas
Recoil Heating

Energy (MeV)

Heating (MeV/reaction)

26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
Particle production cross sections

Cross section (barns) vs. Energy (MeV)

- Protons
- Deuterons
- Tritons
- He-3
- Alphas
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
protons from (n,x)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+ protons from (n,2p)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*0) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*0) proton
angular distribution for (n,p*1) proton
angular distribution for (n,p*) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+ angular distribution for (n,p*2) proton
angular distribution for (n,p*2) proton
angular distribution for (n,p*3) proton
angular distribution for (n,p*3) proton
angular distribution for (n,p*4) proton

Energy (MeV)
angular distribution for (n,p*4) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for \((n,p^*5)\) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*5) proton

![Graph showing angular distribution for (n,p*5) proton]
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*6) proton

![Graph showing angular distribution for (n,p*6) proton.](image-url)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60

angular distribution for (n,p*6) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*7) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for \((n,p^*7)\) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*8) proton
angular distribution for (n,p*8) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*9) proton
angular distribution for (n,p*9) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+ angular distribution for (n,p*10) proton.
angular distribution for (n,p*11) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*11) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*12) proton

![Graph showing angular distribution for (n,p*12) proton](image)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*13) proton
angular distribution for (n,p*13) proton
angular distribution for (n,p*14) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*14) proton
angular distribution for (n,p*15) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*15) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

angular distribution for (n,p*16) proton

![Graph showing angular distribution](image-url)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
angular distribution for (n,p*16) proton
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60
protons from (n,p*c)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
deuterons from (n,x)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+

tritons from (n,x)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
he3s from (n,x)
26-FE-58 FOR FENDL-3.2 FROM ENDF/B-VIII.0 BY NJOY2016.60+
alphas from (n,x)