14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+

Principal cross sections

Cross section (barns)

Energy (MeV)

gamma production

total

absorption

elastic
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section

Energy (MeV)

Cross section (barns)

Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section

Cross section (barns)

Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance total cross section
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections

capture

Cross section (barns)

Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Non-threshold reactions

Energy (MeV) vs. Cross section (barns)

(n,gma)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Principal cross sections

Energy (MeV) vs. Cross section (barns)

- Total cross section
- Absorption cross section
- Elastic cross section
- Gamma production cross section
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+

Damage

Energy (MeV)

Damage (MeV-barns)

*10^{-3}

0

20

40

60

80

100

120

140

160

0

50

100

150

200

250

300
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

![Graph of neutron reactions](image_url)

- $(n,x)$
- $(n,2n)$
- $(n,n^*)a$
- $(n,n^*)p$
- $(n,n^*c)$

**Axes:**
- **Y-axis:** Cross section (barns)
- **X-axis:** Energy (MeV)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)

(n,p)
(n,a)
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,xp)
- (n,xd)
- (n,xt)
- (n,xa)
- (n,p^0)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

![Graph showing cross sections for various reactions as a function of energy.]

**Axes:**
- Energy (MeV) on the x-axis ranging from 4 to 20 MeV.
- Cross section (barns) on the y-axis ranging from 0 to 3.5 x 10^-3 barns.

**Legend:**
- (n,p*c)
- (n,a*0)
- (n,a*1)
- (n,a*2)
- (n,a*3)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Threshold reactions

Cross section (barns)

Energy (MeV)

- (n,a*9)
- (n,a*10)
- (n,a*11)
- (n,a*c)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for elastic
angular distribution for elastic
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,n*1)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,n*2)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,n*3)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for \((n,n^*4)\)
angular distribution for (n,n*5)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,n*6)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Neutron emission for (n,x)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Neutron emission for (n,n*)a
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Neutron emission for (n,n*)p
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+

Neutron emission for (n,n*c)
Photon emission for (n,x)
Photon emission for (n,2n)

![Graph showing photon emission for (n,2n)]
Photon emission for \((n,n^*)a\)
Photon emission for \((n,n^*c)\)
Photon emission for (n,p^c)
Photon emission for \( (n, a^\ast c) \)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
thermal capture photon spectrum
Particle heating contributions

- Protons
- Deuterons
- Tritons
- Alphas

Energy (MeV) vs. MeV/collision
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
Recoil Heating

![Graph showing recoil heating as a function of energy (MeV)].

- Heating (MeV/reaction) on the y-axis.
- Energy (MeV) on the x-axis.
- The graph shows a plot of recoil heating with energy up to 160 MeV.
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
protons from (n,x)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B VII BY NJOY2016.60+
protons from (n,n*)p
angular distribution for (n,p*0) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,p*1) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,p*2) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,p*3) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,p*4) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for \( (n,p^*5) \) proton
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
protons from (n,p*c)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
deuterons from (n,x)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+ tritons from (n,x)
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+ alphas from (n,n*)a
angular distribution for (n,a*0) alpha
angular distribution for (n,a*1) alpha
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,a^2) alpha

Energy (MeV)

Cosine

10^0

Prob/Cos

1.0 0.5 0.0 -0.5 -1.0
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for \( (n, a^3) \) alpha
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,a*4) alpha
angular distribution for (n,a*5) alpha
angular distribution for (n,a*6) alpha
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,a*7) alpha
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
angular distribution for (n,a*8) alpha
angular distribution for (n,a*9) alpha

14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
energy (MeV)

10^0

1.0 0.5 0.0 -0.5 -1.0 1.0

cosine

10 12 14 16 18 20

energy (MeV)

1.0 0.5 0.0 -0.5 -1.0 1.0

cosine

10^0
angular distribution for (n,a*11) alpha
14-SI-30 FOR FENDL-3.2 FROM ENDF/B-VII BY NJOY2016.60+
alphas from (n,a*c)