ENDF/B-VI SI-29H
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
ENDF/B-VI SI-29H
resonance total cross section
ENDF/B-VI SI-29H
resonance total cross section

Energy (MeV)

Cross section (barns)

10^{-1}  10^{0}  10^{1}

total
ENDF/B-VI SI-29H
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

Capture
ENDF/B-VI SI-29H
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VI SI-29H
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VI SI-29H

Heating

Energy (MeV)
ENDF/B-VI SI-29H
Non-threshold reactions
ENDF/B-VI SI-29H
Non-threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VI SI-29H
Inelastic levels

Cross section (barns) vs. Energy (MeV)

Lines represent different inelastic levels:
- (n,n*1)
- (n,n*2)
- (n,n*3)
- (n,n*4)
- (n,n*5)
ENDF/B-VI SI-29H
Inelastic levels

Cross section (barns)

Energy (MeV)
ENDF/B-VI SI-29H
Threshold reactions

Cross section (barns) vs. Energy (MeV)

Reactions:
- $(n,x)$
- $(n,2n)$
- $(n,n^*)_g$
- $(n,n^*)_p$
- $(n,n^*)_c$
Threshold reactions for ENDF/B-VI SI-29H

- (n,p*1)
- (n,p*2)
- (n,p*3)
- (n,p*4)
- (n,p*5)
ENDF/B-VI SI-29H
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,p*6)
- (n,p*7)
- (n,p*8)
- (n,p*9)
- (n,p*10)
ENDF/B-VI SI-29H
Threshold reactions

Cross section (barns)

Energy (MeV)

*10^{-3}
ENDF/B-VI SI-29H Threshold reactions

Energy (MeV) vs Cross section (barns)

- (n,a*14)
- (n,a*15)
- (n,a*16)
- (n,a*17)
- (n,a*18)
ENDF/B-VI SI-29H
angular distribution for elastic
ENDF/B-VI SI-29H
angular distribution for elastic
ENDF/B-VI SI-29H
angular distribution for (n,n*1)
ENDF/B-VI SI-29H
angular distribution for \((n,n^*2)\)
ENDF/B-VI SI-29H
angular distribution for (n,n*3)
ENDF/B-VI SI-29H
angular distribution for (n,n*4)
ENDF/B-VI SI-29H
angular distribution for (n,n*5)
ENDF/B-VI SI-29H
angular distribution for (n,n*6)
ENDF/B-VI SI-29H
angular distribution for (n,n*7)
ENDF/B-VI SI-29H
angular distribution for (n,n*8)
ENDF/B-VI SI-29H
angular distribution for (n,n*9)
ENDF/B-VI SI-29H
angular distribution for (n,n*10)
ENDF/B-VI SI-29H
angular distribution for (n,n*11)
ENDF/B-VI SI-29H
angular distribution for \((n,n^*13)\)
ENDF/B-VI SI-29H
angular distribution for (n,n*14)
ENDF/B-VI SI-29H
Neutron emission for \((n,x)\)
ENDF/B-VI SI-29H
Neutron emission for (n,2n)
ENDF/B-VI SI-29H
Neutron emission for \((n,n^{*})a\)
ENDF/B-VI SI-29H
Neutron emission for \((n,n^*)p\)
ENDF/B-VI SI-29H
Photon emission for (n,x)
ENDF/B-VI SI-29H
Photon emission for (n,2n)
ENDF/B-VI SI-29H
Photon emission for (n,n*)a

![Graph of photon emission for (n,n*)a](image-url)
ENDF/B-VI SI-29H
Photon emission for \((n,n^*)p\)
ENDF/B-VI SI-29H
Photon emission for (n,n*\text{c})
ENDF/B-VI SI-29H
Photon emission for (n,p*c)
ENDF/B-VI SI-29H
Photon emission for \((n,a^*c)\)
ENDF/B-VI SI-29H
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VI SI-29H
14 MeV photon spectrum
ENDF/B-VI SI-29H
Particle heating contributions

- protons
- deuterons
- tritons
- alphas

Energy (MeV)

MeV/collision

Energy (MeV)
ENDF/B-VI SI-29H
Recoil Heating
Particle production cross sections

ENDF/B-VI SI-29H

Cross section (barns) vs. Energy (MeV)

- Protons
- Deuterons
- Tritons
- Alphas
ENDF/B-VI SI-29H
protons from \((n,n^*)p\)
ENDF/B-VI SI-29H
angular distribution for (n,p*0) proton

Energy (MeV)

Cosine

Prob/Cos

10^0

1.0 0.5 0.0 -0.5 -1.0

4 6 8 10 12 14 16 18 20
ENDF/B-VI SI-29H
angular distribution for (n,p*1) proton

Energy (MeV)

Cosine

Prob/Cos

1.0  0.5  0.0  -0.5  -1.0

1.0  0.5  0.0  -0.5  -1.0  -1.5  -2.0

10.0  12.0  14.0  16.0  18.0  20.0
ENDF/B-VI SI-29H
angular distribution for (n,p*2) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*3) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*4) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*5) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*6) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*7) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*8) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*9) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*10) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*11) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*12) proton

Probl/Cos

1.0 0.5 0.0 -0.5 -1.0

Cosine

Energy (MeV)

10 12 14 16 18 20

10^0

1.0 0.5 0.0 -0.5 -1.0

Cosine

10 12 14 16 18 20

10^0
ENDF/B-VI SI-29H
angular distribution for (n,p*13) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*14) proton
ENDF/B-VI SI-29H
angular distribution for (n,p*15) proton

Probl/Cos

Energy (MeV)

Cosine

10^0

10

8

12

14

16

18

20

1.0

0.5

0.0

-0.5

-1.0

1.0
ENDF/B-VI SI-29H
protons from (n,p\textsuperscript{c})

The diagram shows a 3D plot of the secondary energy distribution for protons produced from the (n,p\textsuperscript{c}) reaction. The x-axis represents energy in MeV, the y-axis represents secondary energy, and the z-axis represents probability. The plot exhibits multiple peaks, indicating the distribution of secondary energy at different energies.
ENDF/B-VI SI-29H deuterons from (n,x)
ENDF/B-VI SI-29H
tritons from (n,x)
ENDF/B-VI SI-29H
alphas from (n,x)
ENDF/B-VI SI-29H
alphas from (n,n*)a
ENDF/B-VI SI-29H
angular distribution for (n,a*0) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*) alpha

\[
\text{Problem/Cosine} \times 10^0
\]

Energy (MeV)

Cosine

1.0  0.5  0.0  -0.5  -1.0  0

4  6  8  10  12  14  16  18  20
ENDF/B-VI SI-29H
angular distribution for (n,a*2) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*3) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*4) alpha

Prob|Cos

1.0 0.5 0.0 -0.5 -1.0

Energy (MeV)

10^0

Cosine 4 6 8 10 12 14 16 18 20
ENDF/B-VI SI-29H
angular distribution for (n,a*5) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*6) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*7) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*8) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a^9) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*10) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*11) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*12) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*13) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*14) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*15) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*16) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*17) alpha
ENDF/B-VI SI-29H
angular distribution for (n,a*18) alpha

Probl|Cos

1.0 0.5 0.0 -0.5 -1.0 0

Energy (MeV)

1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0
ENDF/B-VI SI-29H
angular distribution for (n,a*19) alpha

\[
\text{Probl/Cos} = 10^0
\]

\[
\text{Energy (MeV)}
\]

\[
\text{Cosine}
\]

\[
1.0 \quad 0.5 \quad 0.0 \quad -0.5 \quad -1.0
\]
ENDF/B-VI SI-29H
alphas from (n,a*c)