ENDF/B-VI AL-27H
resonance total cross section

Energy (MeV)

Cross section (barns)

10^2

10^1

10^0

10^{-3}

10^{-2}

total
ENDF/B-VI AL-27H
resonance total cross section

Energy (MeV) vs. Cross section (barns)
ENDF/B-VI AL-27H

resonance total cross section

Energy (MeV)

Cross section (barns)

total
ENDF/B-VI AL-27H
resonance total cross section

Energy (MeV)

Cross section (barns)

total
ENDF/B-VI AL-27H
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VI AL-27H resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VI AL-27H
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

- Capture
ENDF/B-VI AL-27H
Heating

Heating (MeV/reaction)

Energy (MeV)
ENDF/B-VI AL-27H Damage

Energy (MeV) vs. Damage (MeV-barns)
ENDF/B-VI AL-27H
Non-threshold reactions

Energy (MeV) vs. Cross section (barns)

Data points for (n,gma) reaction.
ENDF/B-VI AL-27H
Heating

Heating (MeV/reaction) vs. Energy (MeV)
ENDF/B-VI AL-27H
Non-threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VI AL-27H
Inelastic levels

Energy (MeV)

Cross section (barns)

- (n,n*1)
- (n,n*2)
- (n,n*3)
- (n,n*4)
- (n,n*5)
ENDF/B-VI AL-27H
Inelastic levels

Energy (MeV)

Cross section (barns)

*(n,n*31)
*(n,n*32)
*(n,n*33)
*(n,n*34)
*(n,n*35)
ENDF/B-VI AL-27H
Inelastic levels

Energy (MeV)

Cross section (barns)

*(n,n*36)*
*(n,n*37)*
*(n,n*38)*
*(n,n*39)*

Energy (MeV)
ENDF/B-VI AL-27H
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,x)
- (n,2n)
- (n,n*)a
- (n,n*)p
- (n,n*)d
ENDF/B-VI AL-27H
Threshold reactions

Cross section (barns)

Energy (MeV)
ENDF/B-VI AL-27H
Threshold reactions

Energy (MeV)

Cross section (barns)

*(n,p*)

(n,p*1)
(n,p*2)
(n,p*3)
(n,p*4)
(n,p*5)
ENDF/B-VI AL-27H
Threshold reactions

Cross section (barns)

Energy (MeV)

*10^{-6}
ENDF/B-VI AL-27H
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,t^9)
- (n,t^10)
- (n,t^c)
- (n,a^0)
- (n,a^1)
ENDF/B-VI AL-27H
Threshold reactions

Energy (MeV)

Cross section (barns)

*(n,a*2)
*(n,a*3)
*(n,a*4)
*(n,a*5)
*(n,a*6)
ENDF/B-VI AL-27H
Threshold reactions

![Graph showing cross sections for different reactions as a function of energy.](image-url)
ENDF/B-VI AL-27H
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,a*17)
- (n,a*18)
- (n,a*19)
- (n,a*c)
ENDF/B-VI AL-27H
angular distribution for elastic
ENDF/B-VI AL-27H
angular distribution for elastic
ENDF/B-VI AL-27H
angular distribution for (n,n*1)
ENDF/B-VI AL-27H

angular distribution for (n,n*2)
ENDF/B-VI AL-27H
angular distribution for (n, n*3)
ENDF/B-VI AL-27H
angular distribution for (n,n*4)
ENDF/B-VI AL-27H
angular distribution for (n,n*5)
ENDF/B-VI AL-27H
angular distribution for (n,n*6)
ENDF/B-VI AL-27H
angular distribution for (n,n*7)
ENDF/B-VI AL-27H
angular distribution for (n,n*8)
ENDF/B-VI AL-27H
angular distribution for (n,n*9)
ENDF/B-VI AL-27H
angular distribution for (n,n*10)
ENDF/B-VI AL-27H
angular distribution for (n,n*11)
ENDF/B-VI AL-27H
angular distribution for (n,n*12)
ENDF/B-VI AL-27H
angular distribution for \((n,n^*13)\)
ENDF/B-VI AL-27H
angular distribution for (n,n*15)
ENDF/B-VI AL-27H
angular distribution for (n,n*16)
ENDF/B-VI AL-27H
angular distribution for \( (n,n^*18) \)
ENDF/B-VI AL-27H
angular distribution for (n,n*19)
ENDF/B-VI AL-27H
angular distribution for (n,n*20)
ENDF/B-VI AL-27H
angular distribution for (n,n*21)
ENDF/B-VI AL-27H
angular distribution for (n,n*22)
ENDF/B-VI AL-27H
angular distribution for \((n,n^*23)\)
ENDF/B-VI AL-27H
angular distribution for (n,n*24)
ENDF/B-VI AL-27H
angular distribution for \( (n,n^*25) \)
ENDF/B-VI AL-27H
angular distribution for (n,n*26)
ENDF/B-VI AL-27H
angular distribution for (n,n*27)
ENDF/B-VI AL-27H
angular distribution for (n,n*28)
ENDF/B-VI AL-27H
angular distribution for (n,n*30)
ENDF/B-VI AL-27H
angular distribution for (n,n*31)
ENDF/B-VI AL-27H
angular distribution for (n,n*32)
ENDF/B-VI AL-27H
angular distribution for (n,n*33)
ENDF/B-VI AL-27H
angular distribution for (n,n\*34)
ENDF/B-VI AL-27H
angular distribution for (n,n*35)
ENDF/B-VI AL-27H
angular distribution for (n,n*36)
ENDF/B-VI AL-27H

angular distribution for (n,n*37)
ENDF/B-VI AL-27H
angular distribution for (n,n*38)
ENDF/B-VI AL-27H
angular distribution for (n,n^39)
ENDF/B-VI AL-27H
Neutron emission for (n,x)
ENDF/B-VI AL-27H
Neutron emission for (n,2n)
ENDF/B-VI AL-27H
Neutron emission for (n,n*)a
ENDF/B-VI AL-27H
Neutron emission for (n,n*)p
ENDF/B-VI AL-27H
Neutron emission for \((n,n^*c)\)
ENDF/B-VI AL-27H
Photon emission for (n,gma)
ENDF/B-VI AL-27H
Photon emission for (n,x)
ENDF/B-VI AL-27H
Photon emission for (n,2n)
ENDF/B-VI AL-27H
Photon emission for \((n,n^*)a\)
ENDF/B-VI AL-27H
Photon emission for \((n,n^*)p\)
ENDF/B-VI AL-27H
Photon emission for \((n,n^*)d\)
ENDF/B-VI AL-27H
Photon emission for \((n,n^*)t\)
ENDF/B-VI AL-27H
Photon emission for (n,n*1)
ENDF/B-VI AL-27H
Photon emission for (n,n*2)
ENDF/B-VI AL-27H
Photon emission for (n,n*3)
ENDF/B-VI AL-27H
Photon emission for (n,n*4)
ENDF/B-VI AL-27H
Photon emission for (n,n*5)
ENDF/B-VI AL-27H
Photon emission for (n,n*6)
ENDF/B-VI AL-27H
Photon emission for (n,n*8)
ENDF/B-VI AL-27H
Photon emission for (n, n*9)
ENDF/B-VI AL-27H
Photon emission for (n,n*10)
ENDF/B-VI AL-27H
Photon emission for (n,n*12)
ENDF/B-VI AL-27H
Photon emission for (n,n*13)
ENDF/B-VI AL-27H
Photon emission for (n,n*14)
ENDF/B-VI AL-27H
Photon emission for (n,n*15)
ENDF/B-VI AL-27H
Photon emission for (n,n*16)
ENDF/B-VI AL-27H
Photon emission for (n,n*17)
ENDF/B-VI AL-27H
Photon emission for \( (n,n^*19) \)
ENDF/B-VI AL-27H
Photon emission for (n,n*20)
ENDF/B-VI AL-27H
Photon emission for \( (n,n^*21) \)
ENDF/B-VI AL-27H
Photon emission for (n,n*22)
ENDF/B-VI AL-27H
Photon emission for (n,n*23)
ENDF/B-VI AL-27H
Photon emission for (n,n*24)
ENDF/B-VI AL-27H
Photon emission for (n,n\*25)
ENDF/B-VI AL-27H
Photon emission for \((n,n^{*26})\)
ENDF/B-VI AL-27H
Photon emission for (n,n\*27)
ENDF/B-VI AL-27H
Photon emission for (n,n*28)
ENDF/B-VI AL-27H
Photon emission for (n,n*29)
ENDF/B-VI AL-27H
Photon emission for (n,n*30)
ENDF/B-VI AL-27H
Photon emission for (n,n^*31)
ENDF/B-VI AL-27H
Photon emission for (n,n*32)
ENDF/B-VI AL-27H
Photon emission for (n,n*33)
ENDF/B-VI AL-27H
Photon emission for (n,n*34)
ENDF/B-VI AL-27H
Photon emission for (n,n*35)
ENDF/B-VI AL-27H
Photon emission for (n,n*36)
ENDF/B-VI AL-27H
Photon emission for \( (n,n'37) \)
ENDF/B-VI AL-27H
Photon emission for (n,n*38)
ENDF/B-VI AL-27H
Photon emission for (n,n*39)
ENDF/B-VI AL-27H
Photon emission for (n,n*c)
ENDF/B-VI AL-27H
Photon emission for (n,2a)
ENDF/B-VI AL-27H
Photon emission for (n,2p)
ENDF/B-VI AL-27H
Photon emission for (n,pa)
ENDF/B-VI AL-27H
Photon emission for (n,da)
ENDF/B-VI AL-27H
Photon emission for \((n,p^*1)\)
ENDF/B-VI AL-27H
Photon emission for (n,p*3)
ENDF/B-VI AL-27H
Photon emission for (n,p*4)
ENDF/B-VI AL-27H
Photon emission for (n,p*5)
ENDF/B-VI AL-27H
Photon emission for (n,\(p^*6\))
ENDF/B-VI AL-27H
Photon emission for \( n, p^*7 \)
ENDF/B-VI AL-27H
Photon emission for (n,p*8)
ENDF/B-VI AL-27H
Photon emission for \(\text{(n,p}^*9)\)
ENDF/B-VI AL-27H
Photon emission for \( (n,p^*10) \)
ENDF/B-VI AL-27H
Photon emission for (n,p*11)
ENDF/B-VI AL-27H
Photon emission for (n,p*12)
ENDF/B-VI AL-27H
Photon emission for (n,p*13)
ENDF/B-VI AL-27H
Photon emission for \((n,p^*14)\)
ENDF/B-VI AL-27H
Photon emission for (n,p*15)
ENDF/B-VI AL-27H
Photon emission for (n,p*16)
ENDF/B-VI AL-27H
Photon emission for (n,p*17)
ENDF/B-VI AL-27H
Photon emission for (n,p*18)
ENDF/B-VI AL-27H
Photon emission for (n,p*19)
ENDF/B-VI AL-27H
Photon emission for (n,p*c)
ENDF/B-VI AL-27H
Photon emission for (n,d*1)
ENDF/B-VI AL-27H
Photon emission for (n,d*2)
ENDF/B-VI AL-27H
Photon emission for (n,d*3)
ENDF/B-VI AL-27H
Photon emission for (n,d*4)
ENDF/B-VI AL-27H
Photon emission for (n,d*6)
ENDF/B-VI AL-27H
Photon emission for (n,d*7)
ENDF/B-VI AL-27H
Photon emission for (n,d*8)
ENDF/B-VI AL-27H
Photon emission for (n,d*9)
ENDF/B-VI AL-27H
Photon emission for (n,d*10)
ENDF/B-VI AL-27H
Photon emission for (n,d*11)
ENDF/B-VI AL-27H
Photon emission for (n,d*12)
ENDF/B-VI AL-27H
Photon emission for (n,d*13)
ENDF/B-VI AL-27H
Photon emission for (n,d*14)
ENDF/B-VI AL-27H
Photon emission for (n,d*15)
ENDF/B-VI AL-27H
Photon emission for (n,d*16)
ENDF/B-VI AL-27H
Photon emission for (n,d*17)
ENDF/B-VI AL-27H
Photon emission for \((n, d^{*18})\)
ENDF/B-VI AL-27H
Photon emission for (n,d*19)
ENDF/B-VI AL-27H
Photon emission for (n,d*c)
ENDF/B-VI AL-27H
Photon emission for (n,t*1)
ENDF/B-VI AL-27H
Photon emission for \((n,t^2)\)
ENDF/B-VI AL-27H
Photon emission for (n,t*3)
ENDF/B-VI AL-27H
Photon emission for (n,t*4)
ENDF/B-VI AL-27H
Photon emission for (n,t*5)
ENDF/B-VI AL-27H
Photon emission for (n,t*6)
ENDF/B-VI AL-27H
Photon emission for (n,t*7)
ENDF/B-VI AL-27H
Photon emission for (n,t*8)
ENDF/B-VI AL-27H
Photon emission for (n,t*9)
ENDF/B-VI AL-27H
Photon emission for (n,t*10)
ENDF/B-VI AL-27H
Photon emission for (n,t*c)
ENDF/B-VI AL-27H
Photon emission for (n,a*1)
ENDF/B-VI AL-27H
Photon emission for (n,a*2)
ENDF/B-VI AL-27H
Photon emission for (n,a*3)
ENDF/B-VI AL-27H
Photon emission for (n,a*4)
ENDF/B-VI AL-27H
Photon emission for (n,a*6)
ENDF/B-VI AL-27H
Photon emission for (n,a*7)
ENDF/B-VI AL-27H
Photon emission for (n,a*8)
ENDF/B-VI AL-27H
Photon emission for (n,a*9)
ENDF/B-VI AL-27H
Photon emission for (n,a*10)
ENDF/B-VI AL-27H
Photon emission for (n,a*11)
ENDF/B-VI AL-27H
Photon emission for (n, a*12)
ENDF/B-VI AL-27H
Photon emission for (n,a*13)
ENDF/B-VI AL-27H
Photon emission for (n,a*14)
ENDF/B-VI AL-27H
Photon emission for (n,a^15)
ENDF/B-VI AL-27H
Photon emission for (n,a*16)
ENDF/B-VI AL-27H
Photon emission for (n,a*17)
ENDF/B-VI AL-27H
Photon emission for (n,a*18)
ENDF/B-VI AL-27H
Photon emission for (n,a*19)
ENDF/B-VI AL-27H
Photon emission for (n,a*c)
ENDF/B-VI AL-27H
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VI AL-27H
14 MeV photon spectrum
ENDF/B-VI AL-27H

Particle heating contributions

- Protons
- Deuterons
- Tritons
- Alphas
ENDF/B-VI AL-27H
Recoil Heating

![Graph showing recoil heating as a function of energy. The x-axis represents energy in MeV, ranging from 0 to 160. The y-axis represents heating in MeV/reaction, ranging from 0 to 4. The graph shows a line representing recoil heating.]
ENDF/B-VI AL-27H
Particle production cross sections

Cross section (barns) vs. Energy (MeV)

- Protons
- Deuterons
- Tritons
- Alphas
ENDF/B-VI AL-27H
protons from (n,x)
ENDF/B-VI AL-27H
protons from (n,n*)p
ENDF/B-VI AL-27H protons from (n,2p)
ENDF/B-VI AL-27H
protons from (n,pa)
ENDF/B-VI AL-27H
angular distribution for (n,p*0) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*1) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*2) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*3) proton

Prob/Cos

Energy (MeV)

Cosine
ENDF/B-VI AL-27H
angular distribution for (n,p*4) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*5) proton
ENDF/B-VI AL-27H

angular distribution for (n,p*) proton

Prob/Cos

Energy (MeV)

Cosine

0 0.5 1.0

0.0 0.5 1.0

20 40 60 80 100 120 140 160

0 100 1000
ENDF/B-VI AL-27H
angular distribution for (n,p*7) proton

Prob/Cos

10.0
10.1
1.0
0.5
0.0
-0.5
-1.0

Cosine

Energy (MeV)

20
40
60
80
100
120
140
160
ENDF/B-VI AL-27H
angular distribution for (n,p*8) proton

Energy (MeV)

Cosine

Prob/Cos

10^-1

10^0

10^1

10^2
ENDF/B-VI AL-27H
angular distribution for (n,p*9) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*10) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*11) proton
ENDF/B-VI AL-27H
angular distribution for (n,p^12) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*13) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*14) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*15) proton

Energy (MeV)

Cosine

Probl/Cos
ENDF/B-VI AL-27H
angular distribution for (n,p*16) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*17) proton

Prob/Cos

Cosine

Energy (MeV)

1.0 0.5 0.0 -0.5 -1.0 0 20 40 60 80 100 120 140 160

1.0 10.0 10.1 10.2 10.3 10.4 10.5 10.6
ENDF/B-VI AL-27H
angular distribution for (n,p*18) proton
ENDF/B-VI AL-27H
angular distribution for (n,p*19) proton
ENDF/B-VI AL-27H
protons from (n,p*c)
ENDF/B-VI AL-27H deuterons from (n,x)
ENDF/B-VI AL-27H
deuterons from (n,n*)d
ENDF/B-VI AL-27H deuterons from (n,da)
ENDF/B-VI AL-27H
angular distribution for (n,d*0) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*2) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*3) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*5) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*6) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*7) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*8) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*9) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*10) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*11) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*12) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*13) deuteron

Prob/Cos

10.0

10.0

Cosine

-1.0 -0.5 0.0 0.5 1.0

Energy (MeV)

20 40 60 80 100 120 140 160

10.0

10.0

10.0
ENDF/B-VI AL-27H
angular distribution for (n,d*14) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*15) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*16) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*17) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*18) deuteron
ENDF/B-VI AL-27H
angular distribution for (n,d*19) deuteron
ENDF/B-VI AL-27H
deuterons from (n,d*c)
ENDF/B-VI AL-27H
tritons from (n,x)
ENDF/B-VI AL-27H
angular distribution for (n,t*0) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*1) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*2) triton
ENDF/B-VI AL-27H
angular distribution for \((n,t^*3)\) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*4) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*5) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*6) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*7) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*8) triton
ENDF/B-VI AL-27H
angular distribution for (n,t*10) triton
ENDF/B-VI AL-27H
tritons from (n,t*\text{c})
ENDF/B-VI AL-27H
alphas from (n,x)
ENDF/B-VI AL-27H
alphas from (n,n*)a
ENDF/B-VI AL-27H
alphas from (n,npa)
ENDF/B-VI AL-27H
alphas from (n,2a)
ENDF/B-VI AL-27H
alphas from (n,da)
ENDF/B-VI AL-27H
angular distribution for (n,a*0) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a\^1) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*2) alpha

Probcos

10
10
10
Cosine
0  0.5  1.0
Energy (MeV)
20  40  60  80  100  120  140  160
ENDF/B-VI AL-27H
angular distribution for (n,a*4) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*5) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*6) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*7) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*8) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*9) alpha
ENDF/B-VI AL-27H
angular distribution for \( (n,a^{10}) \) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*11) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*12) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*13) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*14) alpha
ENDF/B-VI AL-27H
angular distribution for (n,α*15) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*16) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*17) alpha
ENDF/B-VI AL-27H
angular distribution for \((n, a^*18)\) alpha
ENDF/B-VI AL-27H
angular distribution for (n,a*19) alpha
ENDF/B-VI AL-27H
alphas from (n,a*c)