ENDF/B-VII.1 ZR-92
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
ENDF/B-VII.1 ZR-92
resonance total cross section

Energy (MeV)

Cross section (barns)

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

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

total
ENDF/B-VII.1 ZR-92
resonance total cross section
ENDF/B-VII.1 ZR-92 resonance absorption cross sections

Cross section (barns) vs Energy (MeV)
ENDF/B-VII.1 ZR-92
UR total cross section

Energy (MeV) vs. Cross section (barns) graph

Legend:
- Inf. Dil.
- 100 b
- 1 b
ENDF/B-VII.1 ZR-92
UR elastic cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
1 b

Energy (MeV)
ENDF/B-VII.1 ZR-92
UR capture cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.
100 b
1 b

10^{-2}

10^{-1}

Energy (MeV)
ENDF/B-VII.1 ZR-92

Heating

Heating (MeV/reaction) vs. Energy (MeV)
ENDF/B-VII.1 ZR-92
Non-threshold reactions

Energy (MeV)

Cross section (barns)

\((n,g\alpha)\)
ENDF/B-VII.1 ZR-92
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
ENDF/B-VII.1 ZR-92
Non-threshold reactions

![Graph showing energy vs. cross section for (n,gma) reaction.]
ENDF/B-VII.1 ZR-92
Inelastic levels

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 ZR-92
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,xp)
(n,xd)
(n,xt)
(n,xhe3)
(n,xa)
ENDF/B-VII.1 ZR-92
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a*3)
(n,a*4)
(n,a*5)
(n,a*6)
(n,a*7)
ENDF/B-VII.1 ZR-92
angular distribution for elastic
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*1)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*2)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*3)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*4)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*5)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*6)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*7)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*8)
ENDF/B-VII.1 ZR-92
angular distribution for (n,n*9)
ENDF/B-VII.1 ZR-92
Neutron emission for (n,x)
ENDF/B-VII.1 ZR-92
Neutron emission for (n,2n)
ENDF/B-VII.1 ZR-92
Neutron emission for (n,3n)
ENDF/B-VII.1 ZR-92
Neutron emission for (n,n*)a
ENDF/B-VII.1 ZR-92
Neutron emission for (n,n*)p
ENDF/B-VII.1 ZR-92
Neutron emission for (n,n*)d
ENDF/B-VII.1 ZR-92
Neutron emission for (n,n*c)
ENDF/B-VII.1 ZR-92
Photon emission for (n,2n)
ENDF/B-VII.1 ZR-92
Photon emission for (n,3n)
ENDF/B-VII.1 ZR-92
Photon emission for (n,n*)a
ENDF/B-VII.1 ZR-92
Photon emission for (n,2n)a
ENDF/B-VII.1 ZR-92
Photon emission for (n,n*)p
ENDF/B-VII.1 ZR-92
Photon emission for \((n,n^*)d\)
ENDF/B-VII.1 ZR-92
Photon emission for $(n,n^*c)$
ENDF/B-VII.1 ZR-92
Photon emission for (n,gma)
ENDF/B-VII.1 ZR-92
Photon emission for (n,d)
ENDF/B-VII.1 ZR-92
Photon emission for (n,t)
ENDF/B-VII.1 ZR-92
Photon emission for (n,pa)
ENDF/B-VII.1 ZR-92
Photon emission for (n,p*{c})
ENDF/B-VII.1 ZR-92
Photon emission for (n,a*c)
ENDF/B-VII.1 ZR-92
thermal capture photon spectrum

Gamma Energy (MeV) vs. Gamma Prod (barns/MeV)
ENDF/B-VII.1 ZR-92
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII.1 ZR-92
Recoil Heating

Heating (MeV/reaction) vs Energy (MeV)

The graph shows the recoil heating as a function of energy. The heating increases significantly at higher energies, indicating a peak in the heating rate around 15 MeV.
ENDF/B-VII.1 ZR-92
Particle production cross sections

Cross section (barns)

Energy (MeV)

protons
deuteronstritonshe-3alphas
ENDF/B-VII.1 ZR-92
protons from $(n,n^*)p$
ENDF/B-VII.1 ZR-92
protons from (n,pa)
ENDF/B-VII.1 ZR-92
angular distribution for (n,p*0) proton
ENDF/B-VII.1 ZR-92
protons from (n,p*c)
ENDF/B-VII.1 ZR-92 deuterons from (n,x)
ENDF/B-VII.1 ZR-92
deuterons from (n,n\ast)d
ENDF/B-VII.1 ZR-92 deuterons from (n,d)
ENDF/B-VII.1 ZR-92
tritons from (n,x)
ENDF/B-VII.1 ZR-92
he3s from (n,x)
ENDF/B-VII.1 ZR-92
alphas from (n,x)
ENDF/B-VII.1 ZR-92
alphas from (n,n*)a
ENDF/B-VII.1 ZR-92
alphas from (n,2n)a
ENDF/B-VII.1 ZR-92
alphas from (n,pa)
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*0) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*1) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*2) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*3) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*4) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*5) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*6) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a\*7) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*8) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*9) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*10) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*11) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*12) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*13) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*14) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*15) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*16) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*17) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*18) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*19) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*20) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*21) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*22) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*23) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*24) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*25) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*26) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n, α^27) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*28) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*29) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*30) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*31) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*32) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*33) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*34) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*35) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*36) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*37) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*38) alpha
ENDF/B-VII.1 ZR-92
angular distribution for (n,a*39) alpha
ENDF/B-VII.1 ZR-92
alphas from (n,a*c)