JEFF-3.1 CA-48
Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
JEFF-3.1 CA-48
resonance total cross section

Energy (MeV)

Cross section (barns)
JEFF-3.1 CA-48
resonance total cross section

Energy (MeV) vs. Cross section (barns)
JEFF-3.1 CA-48
resonance absorption cross sections

![Graph showing resonance absorption cross sections with energy on the x-axis and cross section on the y-axis. The graph has logarithmic scales with energy ranging from $10^{-1}$ to $10^0$ MeV and cross section ranging from $10^{-6}$ to $10^{-2}$ barns. There are several sharp peaks indicating resonance peaks.]
JEFF-3.1 CA-48
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,γma)
JEFF-3.1 CA-48
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
JEFF-3.1 CA-48

Heating

Heating (MeV/reaction) vs. Energy (MeV)

- Heating
JEFF-3.1 CA-48
Damage

Energy (MeV)

Damage (MeV-barns)

damage
JEFF-3.1 CA-48
Non-threshold reactions

Cross section (barns)

Energy (MeV)
JEFF-3.1 CA-48
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)
JEFF-3.1 CA-48
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,p*c)
(n,d*0)
(n,d*1)
(n,d*2)
(n,d*3)

Energy (MeV)

Cross section (barns)
JEFF-3.1 CA-48
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,t^2)
- (n,t^3)
- (n,t^4)
- (n,t^5)
- (n,t^c)
JEFF-3.1 CA-48
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a*0) (n,a*1) (n,a*2) (n,a*3) (n,a*c)

Energy (MeV)

0  10  20  30  40  50  60  70  80  90  100

Cross section (barns)

0  50  100  150  200  250  300  350  400  450  500

*10^-6

(n,a*0) (n,a*1) (n,a*2) (n,a*3) (n,a*c)
JEFF-3.1 CA-48
angular distribution for elastic
JEFF-3.1 CA-48
angular distribution for elastic
JEFF-3.1 CA-48
angular distribution for (n,n*1)
JEFF-3.1 CA-48
angular distribution for (n,n∗2)
JEFF-3.1 CA-48
angular distribution for (n,n*3)
JEFF-3.1 CA-48
angular distribution for (n,n*4)
JEFF-3.1 CA-48
angular distribution for (n,n*5)
JEFF-3.1 CA-48
angular distribution for (n,n*6)
JEFF-3.1 CA-48
angular distribution for (n,n*7)
JEFF-3.1 CA-48
angular distribution for \((n,n^*8)\)
JEFF-3.1 CA-48
angular distribution for (n,n*9)
JEFF-3.1 CA-48
angular distribution for (n,n*10)
JEFF-3.1 CA-48
angular distribution for (n,n*11)
JEFF-3.1 CA-48
angular distribution for (n,n*12)
JEFF-3.1 CA-48
angular distribution for (n,n*13)
JEFF-3.1 CA-48
angular distribution for (n,n\*14)
JEFF-3.1 CA-48  
angular distribution for \( (n,n^*15) \)
JEFF-3.1 CA-48
angular distribution for (n,n*16)
JEFF-3.1 CA-48
angular distribution for (n,n*17)
JEFF-3.1 CA-48
angular distribution for (n,n*18)
JEFF-3.1 CA-48
angular distribution for \((n,n^*19)\)
JEFF-3.1 CA-48
angular distribution for \((n,n*20)\)
JEFF-3.1 CA-48
Neutron emission for (n,x)
JEFF-3.1 CA-48
Neutron emission for (n,2n)
JEFF-3.1 CA-48
Neutron emission for $(n,3n)$
JEFF-3.1 CA-48
Neutron emission for (n,n*)a
JEFF-3.1 CA-48
Neutron emission for \((n,n^*)p\)
JEFF-3.1 CA-48
Neutron emission for (n,n*c)
JEFF-3.1 CA-48
Photon emission for (n,x)
JEFF-3.1 CA-48
Photon emission for \( (n,2n) \)
JEFF-3.1 CA-48
Photon emission for \((n,3n)\)
JEFF-3.1 CA-48
Photon emission for \((n,n^*)a\)
JEFF-3.1 CA-48
Photon emission for \((n,n^*)p\)
JEFF-3.1 CA-48
Photon emission for (n,n*1)
JEFF-3.1 CA-48
Photon emission for (n,n*2)
JEFF-3.1 CA-48
Photon emission for (n,n*3)
JEFF-3.1 CA-48
Photon emission for (n,n*4)
JEFF-3.1 CA-48
Photon emission for (n,n*5)
JEFF-3.1 CA-48
Photon emission for (n,n*6)
JEFF-3.1 CA-48
Photon emission for \((n,n^*7)\)
JEFF-3.1 CA-48
Photon emission for (n,n*8)
JEFF-3.1 CA-48
Photon emission for (n,n*9)
JEFF-3.1 CA-48
Photon emission for (n,n\*10)
Photon emission for (n,n*11)
JEFF-3.1 CA-48
Photon emission for \((n,n^{*12})\)
JEFF-3.1 CA-48
Photon emission for \((n,n^*13)\)
JEFF-3.1 CA-48
Photon emission for \((n,n^*14)\)
JEFF-3.1 CA-48
Photon emission for (n,n*15)
JEFF-3.1 CA-48
Photon emission for (n,n*16)
JEFF-3.1 CA-48
Photon emission for (n,n*17)
JEFF-3.1 CA-48
Photon emission for (n,n*18)
JEFF-3.1 CA-48
Photon emission for (n,n*19)
JEFF-3.1 CA-48
Photon emission for \((n,n^*20)\)
JEFF-3.1 CA-48
Photon emission for (n,n*c)
JEFF-3.1 CA-48
Photon emission for (n,gma)
JEFF-3.1 CA-48
Photon emission for (n,p*1)
JEFF-3.1 CA-48
Photon emission for (n,p*2)
JEFF-3.1 CA-48
Photon emission for (n,p*3)
JEFF-3.1 CA-48
Photon emission for (n,p*4)
JEFF-3.1 CA-48
Photon emission for (n,p*\text{c})
JEFF-3.1 CA-48
Photon emission for (n,d*1)
JEFF-3.1 CA-48
Photon emission for (n,d*2)
JEFF-3.1 CA-48
Photon emission for \((n,d^*3)\)
JEFF-3.1 CA-48
Photon emission for \((n,d^*4)\)
JEFF-3.1 CA-48
Photon emission for (n,d*5)
JEFF-3.1 CA-48
Photon emission for (n,d*c)
JEFF-3.1 CA-48
Photon emission for (n,t*1)
JEFF-3.1 CA-48
Photon emission for (n,t*2)
JEFF-3.1 CA-48
Photon emission for (n,t*3)
JEFF-3.1 CA-48
Photon emission for (n,t^4)
JEFF-3.1 CA-48
Photon emission for (n,t*5)
JEFF-3.1 CA-48
Photon emission for \((n,t^*c)\)
JEFF-3.1 CA-48
Photon emission for (n,a*1)
JEFF-3.1 CA-48
Photon emission for (n,a*2)
JEFF-3.1 CA-48
Photon emission for (n,a*3)
JEFF-3.1 CA-48
Photon emission for (n,a*c)
JEFF-3.1 CA-48
thermal capture photon spectrum
JEFF-3.1 CA-48
14 MeV photon spectrum
JEFF-3.1 CA-48
Recoil Heating

Energy (MeV) vs. Heating (MeV/reaction)
JEFF-3.1 CA-48
Particle production cross sections

Energy (MeV)

Cross section (barns)

protons
deuterons
tritons
he-3
alphas

Energy (MeV)
JEFF-3.1 CA-48
protons from (n,x)
JEFF-3.1 CA-48
protons from \((n,n^*)p\)
JEFF-3.1 CA-48
angular distribution for (n, p*0) proton

![Diagram of angular distribution for (n, p*0) proton](image)
JEFF-3.1 CA-48
angular distribution for \((n,p^1)\) proton
JEFF-3.1 CA-48
angular distribution for (n,p*2) proton
JEFF-3.1 CA-48
angular distribution for (n,p*3) proton
JEFF-3.1 CA-48
angular distribution for (n,p*4) proton
JEFF-3.1 CA-48
protons from (n,p*c)
JEFF-3.1 CA-48
deuterons from (n,x)
JEFF-3.1 CA-48
angular distribution for (n,d*0) deuteron
JEFF-3.1 CA-48
angular distribution for (n,d*1) deuteron
JEFF-3.1 CA-48
angular distribution for (n,d^*2) deuteron
JEFF-3.1 CA-48
angular distribution for (n,d*)3 deuteron
JEFF-3.1 CA-48
angular distribution for (n,d*4) deuteron
JEFF-3.1 CA-48
angular distribution for (n,d*5) deuteron
JEFF-3.1 CA-48
deuterons from (n,d*c)
JEFF-3.1 CA-48
tritons from \((n,x)\)
JEFF-3.1 CA-48
angular distribution for (n,t*0) triton
JEFF-3.1 CA-48
angular distribution for (n,t*1) triton
JEFF-3.1 CA-48
angular distribution for (n,t*2) triton
JEFF-3.1 CA-48
angular distribution for (n,t*3) triton
JEFF-3.1 CA-48
angular distribution for (n,t*4) triton
JEFF-3.1 CA-48
angular distribution for (n,t*5) triton
JEFF-3.1 CA-48
tritons from (n,t*c)
JEFF-3.1 CA-48
he3s from (n,x)
JEFF-3.1 CA-48
alphas from (n,x)
JEFF-3.1 CA-48
alphas from (n,n*)a
JEFF-3.1 CA-48
angular distribution for (n,a*0) alpha
JEFF-3.1 CA-48
angular distribution for (n,a*1) alpha
JEFF-3.1 CA-48
angular distribution for (n,a^2) alpha
JEFF-3.1 CA-48
angular distribution for (n,α^3) alpha
JEFF-3.1 CA-48
alphas from (n,a*c)