JEFF-3.1 TI-47
resonance total cross section

Energy (MeV) vs. Cross section (barns)

- Energy ranges from $10^{-3}$ to $10^{-2}$ MeV.
- Cross section ranges from $10^1$ to $10^2$ barns.

The graph shows the total cross section for TI-47 with resonance effects.
JEFF-3.1 TI-47
resonance total cross section

Energy (MeV)

Cross section (barns)

$10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$
JEFF-3.1 TI-47
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 TI-47
resonance total cross section

Energy (MeV) vs. Cross section (barns)
JEFF-3.1 TI-47
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

Capture
JEFF-3.1 TI-47
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
JEFF-3.1 TI-47
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
JEFF-3.1 TI-47
Damage

Energy (MeV) vs. Damage (MeV-barns)
JEFF-3.1 TI-47
Heating

Energy (MeV) vs. Heating (MeV/reaction)
JEFF-3.1 TI-47
Non-threshold reactions

Energy (MeV)

Cross section (barns)

- (n,gma)
- (n,a)
- (n,xa)
JEFF-3.1 TI-47
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

Energy (MeV)
JEFF-3.1 TI-47
Threshold reactions

Energy (MeV)
Cross section (barns)

- (n,xp)
- (n,xd)
- (n,xt)
- (n,xhe3)
- (n,p^0)
JEFF-3.1 TI-47
Threshold reactions

Cross section (barns) vs Energy (MeV)

- $(n,p^1)$
- $(n,p^2)$
- $(n,p^3)$
- $(n,p^4)$
- $(n,p^5)$
JEFF-3.1 TI-47
Threshold reactions

Cross section (barns) vs Energy (MeV)

- (n,p*c)
- (n,d*0)
- (n,d*1)
- (n,d*2)
- (n,d*3)
JEFF-3.1 TI-47
angular distribution for elastic
JEFF-3.1 TI-47
angular distribution for (n,n*1)
JEFF-3.1 TI-47
angular distribution for (n,n*2)
JEFF-3.1 TI-47
angular distribution for (n,n*3)
JEFF-3.1 TI-47
angular distribution for (n,n*4)
JEFF-3.1 TI-47
angular distribution for (n,n*5)
JEFF-3.1 TI-47
angular distribution for (n,n*6)
JEFF-3.1 TI-47
angular distribution for (n,n*7)
JEFF-3.1 TI-47
angular distribution for \( (n,n^*8) \)
JEFF-3.1 TI-47
angular distribution for (n,n*9)
JEFF-3.1 TI-47
angular distribution for \((n,n*10)\)
JEFF-3.1 TI-47
angular distribution for (n,n*11)
JEFF-3.1 TI-47
angular distribution for (n,n*13)
JEFF-3.1 TI-47
angular distribution for (n,n*14)
JEFF-3.1 TI-47
angular distribution for (n,n*15)
JEFF-3.1 TI-47
angular distribution for (n,n*16)
JEFF-3.1 TI-47
angular distribution for (n,n\*17)
JEFF-3.1 TI-47
angular distribution for (n,n*18)
JEFF-3.1 TI-47
angular distribution for \( (n,n^*19) \)
JEFF-3.1 TI-47
angular distribution for (n,n*20)
JEFF-3.1 TI-47
Neutron emission for \((n,2n)\)
JEFF-3.1 TI-47
Neutron emission for \((n,n^*)a\)
JEFF-3.1 TI-47
Neutron emission for (n,n*)p
JEFF-3.1 TI-47
Neutron emission for (n,n*c)
JEFF-3.1 TI-47
Photon emission for (n,2n)
JEFF-3.1 TI-47
Photon emission for (n,n*)a
JEFF-3.1 TI-47
Photon emission for (n,n*1)
JEFF-3.1 TI-47
Photon emission for (n,n^*2)
JEFF-3.1 TI-47
Photon emission for (n,n*3)
JEFF-3.1 TI-47
Photon emission for (n,n*4)
JEFF-3.1 TI-47
Photon emission for \((n,n^*5)\)
JEFF-3.1 TI-47
Photon emission for (n,n*6)
JEFF-3.1 TI-47
Photon emission for (n,n*7)
JEFF-3.1 TI-47
Photon emission for (n,n*8)
JEFF-3.1 TI-47
Photon emission for (n,n*9)
JEFF-3.1 TI-47
Photon emission for (n,n*10)
JEFF-3.1 TI-47
Photon emission for (n,n^*)

\[ P(E_\gamma) = \frac{\text{Prob}(\text{MeV})}{\text{MeV}} \]

\[ E_\gamma (\text{MeV}) \]

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

\[ 10^0 \quad 10^1 \quad 10^2 \]

\[ 4 \quad 6 \quad 8 \quad 10 \quad 12 \quad 14 \quad 16 \quad 18 \quad 20 \]
JEFF-3.1 TI-47
Photon emission for \((n,n^*12)\)
JEFF-3.1 TI-47
Photon emission for (n,n*13)
JEFF-3.1 TI-47
Photon emission for (n,n'14)
JEFF-3.1 TI-47
Photon emission for (n,n*15)
JEFF-3.1 TI-47
Photon emission for (n,n*16)
JEFF-3.1 TI-47
Photon emission for \((n,n^\ast 17)\)
JEFF-3.1 TI-47
Photon emission for (n,n*18)
JEFF-3.1 TI-47
Photon emission for \((n,n^*19)\)
JEFF-3.1 TI-47
Photon emission for (n,n'*20)
JEFF-3.1 TI-47
Photon emission for (n,n*c)
JEFF-3.1 TI-47
Photon emission for (n,gma)
JEFF-3.1 TI-47
Photon emission for (n,2p)
JEFF-3.1 TI-47
Photon emission for (n,p*1)
JEFF-3.1 TI-47
Photon emission for \((n,p^*2)\)
JEFF-3.1 TI-47
Photon emission for (n,p*3)
JEFF-3.1 TI-47
Photon emission for \( (n,p^*4) \)
JEFF-3.1 TI-47
Photon emission for (n,p*5)
JEFF-3.1 TI-47
Photon emission for (n,p*6)
JEFF-3.1 TI-47
Photon emission for \((n,p^*7)\)
JEFF-3.1 TI-47
Photon emission for \((n,p^*8)\)
JEFF-3.1 TI-47
Photon emission for (n,p*9)
JEFF-3.1 TI-47
Photon emission for (n,p*10)
JEFF-3.1 TI-47
Photon emission for (n,p*c)
JEFF-3.1 TI-47
Photon emission for (n,d*1)
JEFF-3.1 TI-47
Photon emission for (n,d*3)
JEFF-3.1 TI-47
Photon emission for (n,d*4)
JEFF-3.1 TI-47
Photon emission for (n,d*5)
JEFF-3.1 TI-47
Photon emission for (n,d*c)
JEFF-3.1 TI-47
Photon emission for (n,t*1)
JEFF-3.1 TI-47
Photon emission for \((n, t^2)\)
JEFF-3.1 TI-47
Photon emission for (n,t*3)
JEFF-3.1 TI-47
Photon emission for (n,t^4)
JEFF-3.1 TI-47
Photon emission for (n,t\*5)
JEFF-3.1 TI-47
Photon emission for (n,t*c)
JEFF-3.1 TI-47
Photon emission for \((n,he3*1)\)
JEFF-3.1 TI-47
Photon emission for (n,he3*2)
JEFF-3.1 TI-47
Photon emission for (n,he3*3)
JEFF-3.1 TI-47
Photon emission for (n,he3*4)
JEFF-3.1 TI-47
Photon emission for (n,he3*5)
JEFF-3.1 TI-47
Photon emission for (n,he3*c)
JEFF-3.1 TI-47
Photon emission for (n,a*1)
JEFF-3.1 TI-47
Photon emission for \((n,a^*3)\)
JEFF-3.1 TI-47
Photon emission for (n,a*4)
JEFF-3.1 TI-47
Photon emission for (n,α*5)
JEFF-3.1 TI-47
Photon emission for (n,a*6)
JEFF-3.1 TI-47
Photon emission for (n,a*7)
JEFF-3.1 TI-47
Photon emission for (n,a*8)
JEFF-3.1 TI-47
Photon emission for \((n,a^*9)\)
JEFF-3.1 TI-47
Photon emission for (n,a*10)
JEFF-3.1 TI-47
Photon emission for (n,a*c)
JEFF-3.1 TI-47
thermal capture photon spectrum
JEFF-3.1 TI-47
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
JEFF-3.1 TI-47
Particle production cross sections

Energy (MeV)

Cross section (barns)

- protons
- deuterons
- tritons
- he-3
- alphas
JEFF-3.1 TI-47
protons from $(n,n^*)p$
JEFF-3.1 TI-47
protons from (n,2p)
JEFF-3.1 TI-47
angular distribution for (n,p*0) proton
JEFF-3.1 TI-47
angular distribution for (n,p*1) proton
JEFF-3.1 TI-47
angular distribution for (n,p*2) proton
JEFF-3.1 TI-47
angular distribution for \((n,p^*3)\) proton
JEFF-3.1 TI-47
angular distribution for (n,p*4) proton
JEFF-3.1 TI-47
angular distribution for (n,p*5) proton
JEFF-3.1 TI-47
angular distribution for (n,p*6) proton
JEFF-3.1 TI-47
angular distribution for (n,p*7) proton
JEFF-3.1 TI-47
angular distribution for (n,p*8) proton
JEFF-3.1 TI-47
angular distribution for (n,p*9) proton
JEFF-3.1 TI-47
angular distribution for (n,p*10) proton
JEFF-3.1 TI-47
protons from (n,p*c)
JEFF-3.1 TI-47
angular distribution for (n,d*0) deuteron
JEFF-3.1 TI-47
angular distribution for (n,d*1) deuteron
JEFF-3.1 TI-47
angular distribution for (n,d*2) deuteron
JEFF-3.1 TI-47
angular distribution for (n,d*3) deuteron
JEFF-3.1 TI-47
angular distribution for \((n,d^*4)\) deuteron
JEFF-3.1 TI-47
angular distribution for (n,d*5) deuteron
JEFF-3.1 TI-47
deuterons from (n, d*c)
JEFF-3.1 TI-47
angular distribution for (n,t\*0) triton
JEFF-3.1 TI-47
angular distribution for (n,t*1) triton
JEFF-3.1 TI-47
angular distribution for (n,t*2) triton
JEFF-3.1 TI-47
angular distribution for (n,t*3) triton
JEFF-3.1 TI-47
angular distribution for (n,t*4) triton
JEFF-3.1 TI-47
angular distribution for (n,t*5) triton
JEFF-3.1 TI-47
tritons from (n,t*c)
JEFF-3.1 TI-47
angular distribution for (n,he3*0) 3he
JEFF-3.1 TI-47
angular distribution for (n,he3*1) 3he
JEFF-3.1 TI-47
angular distribution for \((n,he3^*2)\) 3he
JEFF-3.1 TI-47
angular distribution for (n,he3*3) 3he
JEFF-3.1 TI-47
angular distribution for \((n,he^{3*4})\) 3he
JEFF-3.1 TI-47
angular distribution for (n,he3*5) 3he
JEFF-3.1 TI-47
he3s from (n,he3*c)
JEFF-3.1 TI-47
alphas from \((n,n^*)a\)
JEFF-3.1 TI-47
angular distribution for (n,a*0) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*1) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*2) alpha
JEFF-3.1 TI-47
angular distribution for (n, a*3) alpha
JEFF-3.1 TI-47
angular distribution for (n,α*4) alpha
JEFF-3.1 TI-47
angular distribution for (n,a^5) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*6) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*7) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*8) alpha
JEFF-3.1 TI-47
general distribution for (n,a*9) alpha
JEFF-3.1 TI-47
angular distribution for (n,a*10) alpha
JEFF-3.1 TI-47
alphas from (n,a*c)