JEFF-3.1 CR-50
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 CR-50
resonance total cross section

Energy (MeV)

Cross section (barns)

total
JEFF-3.1 CR-50
resonance total cross section

Cross section (barns) vs. Energy (MeV)
JEFF-3.1 CR-50
resonance total cross section

Cross section (barns) vs. Energy (MeV)

total
JEFF-3.1 CR-50
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
JEFF-3.1 CR-50
resonance absorption cross sections

capture
JEFF-3.1 CR-50 resonance absorption cross sections

Cross section (barns)

Energy (MeV)
JEFF-3.1 CR-50
resonance absorption cross sections

capture
JEFF-3.1 CR-50
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
JEFF-3.1 CR-50
Principal cross sections
JEFF-3.1 CR-50
Damage

Energy (MeV)

Damage (MeV-barns)

$10^{-3}$
JEFF-3.1 CR-50
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
JEFF-3.1 CR-50
Inelastic levels

Cross section (barns) vs. Energy (MeV)

- (n,n*1)
- (n,n*2)
- (n,n*3)
- (n,n*4)
- (n,n*5)
JEFF-3.1 CR-50
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*6)
JEFF-3.1 CR-50
Threshold reactions

Energy (MeV)

Cross section (barns)

0

100

*10^{-3}

(n,d)

(n,a)
Threshold reactions

JEFF-3.1 CR-50

Cross section (barns) vs. Energy (MeV)

- (n,xp)
- (n,xd)
- (n,xa)
JEFF-3.1 CR-50
angular distribution for elastic
JEFF-3.1 CR-50
Neutron emission for (n,2n)
JEFF-3.1 CR-50
Neutron emission for \((n,n^*)a\)
JEFF-3.1 CR-50
Neutron emission for \((n,n^*)p\)
JEFF-3.1 CR-50
Neutron emission for (n,n*c)
JEFF-3.1 CR-50
Photon emission for (n,gma)
JEFF-3.1 CR-50
Photon emission for \( (n,2n) \)
JEFF-3.1 CR-50
Photon emission for \((n,n^*)p\)
JEFF-3.1 CR-50
Photon emission for \((n,n^*c)\)
JEFF-3.1 CR-50
Photon emission for (n,p)
JEFF-3.1 CR-50
Photon emission for (n,a)
JEFF-3.1 CR-50
thermal capture photon spectrum
JEFF-3.1 CR-50
14 MeV photon spectrum
JEFF-3.1 CR-50
Particle heating contributions

Energy (MeV)

MeV/collision

Energy (MeV)

protons

alphas

- Energy range: 0 to 20 MeV
- MeV/collision range: 0 to 2.0

Graph shows the heating contributions of protons and alphas against energy.
JEFF-3.1 CR-50
protons from \((n,n^*)p\)
JEFF-3.1 CR-50
protons from (n,p)
JEFF-3.1 CR-50
alphas from (n,n*)a
JEFF-3.1 CR-50
alphas from (n,a)