JEFF-3.1 CR-53
resonance total cross section
JEFF-3.1 CR-53
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 CR-53
resonance total cross section
JEFF-3.1 CR-53
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 CR-53
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

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

10^{1} 10^{2} 10^{3} 10^{4}

capture
JEFF-3.1 CR-53
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

10^{-3}

capture
JEFF-3.1 CR-53
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production

Energy (MeV)
JEFF-3.1 CR-53
Non-threshold reactions

Energy (MeV) vs. Cross section (barns)

(n,gma)
JEFF-3.1 CR-53
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,xp)

(n,xa)
JEFF-3.1 CR-53
angular distribution for elastic
JEFF-3.1 CR-53
Neutron emission for (n,2n)
JEFF-3.1 CR-53
Neutron emission for \((n,n^*)a\)
JEFF-3.1 CR-53
Neutron emission for \((n,n^*)p\)
JEFF-3.1 CR-53
Neutron emission for \((n,n^*c)\)
JEFF-3.1 CR-53
Photon emission for (n,gma)
JEFF-3.1 CR-53
Photon emission for (n,2n)
JEFF-3.1 CR-53
Photon emission for (n,n*)a
JEFF-3.1 CR-53
Photon emission for (n,n*)p
JEFF-3.1 CR-53
Photon emission for (n,n*c)
Photon emission for (n,p)
JEFF-3.1 CR-53
Photon emission for \((n,a)\)
JEFF-3.1 CR-53
thermal capture photon spectrum
JEFF-3.1 CR-53
14 MeV photon spectrum
JEFF-3.1 CR-53
Particle heating contributions

![Graph showing the particle heating contributions for protons and alphas.](image)
JEFF-3.1 CR-53
Recoil Heating

![Graph showing the relationship between Energy (MeV) and Heating (MeV/reaction). The Heating increases nonlinearly with Energy. The graph is labeled with 'recoil heating'.]
JEFF-3.1 CR-53
protons from \((n,n^*)p\)
JEFF-3.1 CR-53
protons from (n,p)
JEFF-3.1 CR-53
alphas from (n,n*)a
JEFF-3.1 CR-53
alphas from (n,a)