JEFF-3.1 NI-58
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 NI-58
resonance total cross section

Cross section (barns)

Energy (MeV)
JEFF-3.1 NI-58
resonance absorption cross sections

capture
JEFF-3.1 Ni-58
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

capture
JEFF-3.1 NI-58
resonance absorption cross sections

capture
JEFF-3.1 NI-58
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
JEFF-3.1 NI-58
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
JEFF-3.1 NI-58
Heating

![Graph showing Heating (MeV/reaction) vs. Energy (MeV). The graph has a logarithmic scale on both axes. The Heating value increases significantly as the Energy increases.]
JEFF-3.1 NI-58
Inelastic levels

Energy (MeV)

Cross section (barns)

Energy (MeV)
JEFF-3.1 NI-58
Threshold reactions

Energy (MeV)

Cross section (barns)

- (n,2n)
- (n,n*)a
- (n,n*)p
- (n,n*c)
- (n,p)
JEFF-3.1 NI-58
angular distribution for elastic
JEFF-3.1 NI-58
angular distribution for (n,n*1)
JEFF-3.1 NI-58
angular distribution for (n,n*2)
JEFF-3.1 NI-58
angular distribution for (n,n*3)
JEFF-3.1 NI-58
angular distribution for (n,n*6)
JEFF-3.1 Ni-58
angular distribution for (n,n*7)
JEFF-3.1 NI-58
Neutron emission for (n,2n)
JEFF-3.1 Ni-58
Neutron emission for (n,n*)a
JEFF-3.1 NI-58
Neutron emission for \((n,n^*)p\)
JEFF-3.1 NI-58
Neutron emission for (n,n*c)
JEFF-3.1 NI-58
Photon emission for (n,gma)
JEFF-3.1 Ni-58
Photon emission for (n,2n)
JEFF-3.1 NI-58
Photon emission for \((n,n^*)a\)
JEFF-3.1 NI-58
Photon emission for \((n,n^*)p\)
JEFF-3.1 NI-58
Photon emission for (n,p)
JEFF-3.1 NI-58
Photon emission for (n,a)
JEFF-3.1 NI-58
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
JEFF-3.1 NI-58
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
JEFF-3.1 NI-58
Particle heating contributions

Energy (MeV)

MeV/collision

protons

alphas

Energy (MeV)
JEFF-3.1 NI-58
Recoil Heating

Energy (MeV)

Heating (MeV/reaction)

-0.2
0.0
0.2
0.4
0.6
0.8
1.0
0
5
10
15
20

0
Energy (MeV)

recoil heating
JEFF-3.1 NI-58
Particle production cross sections

Energy (MeV)

Cross section (barns)

0.0 0.2 0.4 0.6 0.8 1.0

protons
alphas
JEFF-3.1 Ni-58
protons from (n,n*)p
JEFF-3.1 NI-58
protons from (n,p)
JEFF-3.1 NI-58
alphas from \((n,n^*)a\)
JEFF-3.1 NI-58
alphas from (n,a)