ENDF/B-VII.1 NI-61
Principal cross sections

Energy (MeV)

Cross section (barns)

- total
- absorption
- elastic
- gamma production
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Resonance total cross section
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resonance total cross section
ENDF/B-VII.1 NI-61
resonance total cross section

Energy (MeV)

Cross section (barns)

10^{-1} 10^{0} 10^{1}

10^{-1} 10^{0} 10^{1}

10^{-1} 10^{0} 10^{1}

10^{-1} 10^{0} 10^{1}
ENDF/B-VII.1 NI-61
resonance total cross section

Energy (MeV)

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 NI-61
resonance absorption cross sections
ENDF/B-VII.1 NI-61
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 NI-61
resonance absorption cross sections

capture
ENDF/B-VII.1 NI-61
resonance absorption cross sections

[Graph showing the cross section (in barns) as a function of energy (in MeV). The cross section decreases with increasing energy.]
ENDF/B-VII.1 NI-61
Non-threshold reactions

Cross section (barns)

Energy (MeV)

(n,gma)
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Inelastic levels

Cross section (barns)

Energy (MeV)

(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)
ENDF/B-VII.1 NI-61
Inelastic levels

Energy (MeV)

Cross section (barns)

\((n,n*6)\)
\((n,n*7)\)
\((n,n*8)\)
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Threshold reactions

Energy (MeV)

Cross section (barns)

(n,a)
(n,2p)
ENDF/B-VII.1 NI-61 angular distribution for elastic
ENDF/B-VII.1 NI-61
angular distribution for elastic
ENDF/B-VII.1 NI-61
Neutron emission for (n,2n)
ENDF/B-VII.1 NI-61
Neutron emission for \((n,n^*)p\)
ENDF/B-VII.1 NI-61
Neutron emission for \((n,n^c)\)
ENDF/B-VII.1 NI-61
Photon emission for (n,gma)
ENDF/B-VII.1 NI-61
Photon emission for (n,x)
ENDF/B-VII.1 NI-61
Photon emission for (n,2n)
ENDF/B-VII.1 NI-61
Photon emission for \((n,n^*)p\)
ENDF/B-VII.1 NI-61
Photon emission for \((n,a)\)
ENDF/B-VII.1 NI-61
thermal capture photon spectrum
ENDF/B-VII.1 NI-61
Particle heating contributions

Energy (MeV)

MeV/collision

Energy (MeV)

protons
deuterons
tritons
alphas
ENDF/B-VII.1 NI-61
Recoil Heating

Graph showing the recoil heating as a function of energy (MeV). The graph plots energy (MeV) on the x-axis and heating (MeV/reaction) on the y-axis. The line represents the recoil heating with a peak around 140 MeV.
ENDF/B-VII.1 NI-61
Particle production cross sections
ENDF/B-VII.1 NI-61
protons from (n,x)
ENDF/B-VII.1 NI-61
protons from \((n,n^*)p\)
ENDF/B-VII.1 NI-61
protons from (n,p)
ENDF/B-VII.1 NI-61 deuterons from (n,x)
ENDF/B-VII.1 NI-61
tritons from (n,x)
ENDF/B-VII.1 NI-61
alphas from (n,x)
ENDF/B-VII.1 NI-61
alphas from (n,a)