ENDF/B-VII NI-64
Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production
ENDF/B-VII NI-64
resonance total cross section

Energy (MeV)

Cross section (barns)
ENDF/B-VII NI-64
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII NI-64
resonance total cross section

Energy (MeV)

Cross section (barns)

total
ENDF/B-VII NI-64
resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII NI-64
resonance absorption cross sections

Cross section (barns) vs. Energy (MeV)

- Capture line

Cross section ranges from $10^{-1}$ to $10^0$ barns.

Energy ranges from $10^{-1}$ MeV to $10^0$ MeV.
ENDF/B-VII NI-64

Heating

Heating (MeV/reaction)

Energy (MeV)
ENDF/B-VII NI-64
Damage

Energy (MeV)

Damage (MeV-barns)

10^{-11} 10^{-9} 10^{-7} 10^{-5} 10^{-3} 10^{-1} 10^{1}

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1}
ENDF/B-VII NI-64
Non-threshold reactions

Energy (MeV)

Cross section (barns)

(n,gma)
ENDF/B-VII NI-64
Principal cross sections

Energy (MeV)

Cross section (barns)

total
absorption
elastic
gamma production

0 20 40 60 80 100 120 140 160

0 1 2 3 4 5 6
ENDF/B-VII NI-64
Damage

Damage (MeV-barns) vs. Energy (MeV)

- Damage vs. Energy (MeV)

*10^-3

Damage (MeV-barns)

Energy (MeV)
ENDF/B-VII NI-64
Threshold reactions

Cross section (barns) vs. Energy (MeV)

- (n,x)
- (n,2n)
- (n,n*)a
- (n,n*)p
- (n,n*c)
ENDF/B-VII NI-64
angular distribution for elastic
ENDF/B-VII NI-64
Neutron emission for (n,x)
ENDF/B-VII NI-64
Neutron emission for (n,2n)
ENDF/B-VII NI-64
Neutron emission for (n,n*)a
ENDF/B-VII NI-64
Neutron emission for \((n,n^*)p\)
ENDF/B-VII NI-64
Neutron emission for (n,n*c)
ENDF/B-VII NI-64
Photon emission for (n,gma)
ENDF/B-VII NI-64
Photon emission for (n,x)
ENDF/B-VI1 NI-64

Photon Emission for (n, 2n)
ENDF/B-VII NI-64
Photon emission for (n,n\(^*)p
ENDF/B-VII NI-64
Photon emission for \((n,n^*c)\)
ENDF/B-VII NI-64
Photon emission for (n,a)
ENDF/B-VII NI-64
thermal capture photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)
ENDF/B-VII NI-64
14 MeV photon spectrum
ENDF/B-VII NI-64
Particle heating contributions

MeV/collision vs. Energy (MeV)

- protons
- deuterons
- tritons
- alphas
ENDF/B-VII NI-64
Recoil Heating

Energy (MeV)

Heating (MeV/reaction)

- recoil heating
ENDF/B-VII N-64
protons from (n,x)
ENDF/B-VII Ni-64
protons from (n,n*)p

Energy (MeV)

Prob/MeV

Sec. Energy

Prom/MeV

[Diagram showing energy distribution and probabilities for protons from (n,n*) reactions in Ni-64]
ENDF/B-VII NI-64 protons from (n,p)
ENDF/B-VII NI-64
deuterons from (n,x)
ENDF/B-VII NI-64
tritons from (n,x)
ENDF/B-VII NI-64
alphas from (n,x)
ENDF/B-VII NI-64
alphas from \((n,n^*)a\)
ENDF/B-VII NI-64
alphas from (n,a)