ENDF/B-VII EU-152
Principal cross sections

Cross section (barns)

Energy (MeV)

Graph showing the principal cross sections for different types of reactions as a function of energy (in MeV). The graph includes lines for total, absorption, and elastic cross sections.
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resonance total cross section

dashed line: total

Cross section (barns)

Energy (MeV)
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resonance total cross section

Cross section (barns)

Energy (MeV)
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resonance total cross section

Energy (MeV)

Cross section (barns)

total
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resonance total cross section

Energy (MeV)

Cross section (barns)

10^0

10^1

total
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resonance absorption cross sections

Energy (MeV) vs. Cross section (barns)

- Capture curve

Log-log scale: 10^{-7} to 10^{-6} for Energy (MeV) and 10^{3} for Cross section (barns)
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resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII EU-152 resonance absorption cross sections

Cross section (barns)

Energy (MeV)
ENDF/B-VII EU-152
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
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UR total cross section

Cross section (barns)

Energy (MeV)

Inf. Dil.
100 b
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UR elastic cross section

Cross section (barns)

Energy (MeV)
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UR capture cross section

Energy (MeV) vs. Cross section (barns) plot.
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Heating

Energy (MeV)

Heating (MeV/reaction)

$10^{-11}$ $10^{-10}$ $10^{-9}$ $10^{-8}$ $10^{-7}$ $10^{-6}$ $10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^0$ $10^1$

$10^0$ $10^1$
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Inelastic levels
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Threshold reactions

Energy (MeV)

Cross section (barns)

(n,2n)
(n,3n)
(n,n*)a
(n,n*)p
(n,n*)d

Energy (MeV)
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Threshold reactions

Cross section (barns) vs Energy (MeV)

- (n,n*)t
- (n,n*c)
- (n,p)
- (n,d)
- (n,t)
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Threshold reactions

Cross section (barns) vs. Energy (MeV) for the reactions:
- (n,xp)
- (n,xd)
- (n,xt)
- (n,xhe3)
- (n,xa)
angular distribution for elastic

ENDF/B-VII EU-152
angular distribution for (n,2n)
ENDF/B-VII EU-152
angular distribution for (n,3n)
ENDF/B-VII EU-152
angular distribution for \((n,n^*)a\)
ENDF/B-VII EU-152
angular distribution for \((n,n^*)p\)
ENDF/B-VII EU-152
angular distribution for (n,n^*)t
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angular distribution for (n,n*1)
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angular distribution for \((n,n^*2)\)
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angular distribution for (n,n'3)

Energy (MeV)

Cosine

Product/Cos

1.0 0.5 0.0 -0.5 -1.0

0

2 4 6 8 10 12 14 16 18 20
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angular distribution for (n,n*4)
ENDF/B-VII EU-152 angular distribution for (n,n*5)
ENDF/B-VII EU-152
angular distribution for (n,n*6)
ENDF/B-VII EU-152
angular distribution for (n,n*7)
ENDF/B-VII EU-152
angular distribution for (n,n*8)
ENDF/B-VII EU-152
angular distribution for (n,n*9)
ENDF/B-VII EU-152
angular distribution for (n,n*10)
ENDF/B-VII EU-152
angular distribution for (n,n*11)
ENDF/B-VII EU-152
angular distribution for (n,n*c)
ENDF/B-VII EU-152
Neutron emission for (n,2n)
ENDF/B-VII EU-152
Neutron emission for (n,3n)
ENDF/B-VII EU-152
Neutron emission for (n,n*)a
ENDF/B-VII EU-152
Neutron emission for \((n,n^*)d\)
ENDF/B-VII EU-152
Neutron emission for \((n,n^*c)\)