ENDF/B-VII.1 PU-242

Principal cross sections

Cross section (barns) vs. Energy (MeV)

- Total
- Absorption
- Elastic
- Gamma production
ENDF/B-VII.1 PU-242
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 PU-242
resonance total cross section
ENDF/B-VII.1 PU-242
resonance total cross section
ENDF/B-VII.1 PU-242
resonance total cross section

Energy (MeV)

Cross section (barns)

10^0 10^1

10^0 10^1

total
ENDF/B-VII.1 PU-242 resonance absorption cross sections

Energy (MeV)

Cross section (barns)

- capture
- fission
ENDF/B-VII.1 PU-242
resonance absorption cross sections

Capture and fission cross sections as a function of energy (MeV).
ENDF/B-VII.1 PU-242
resonance absorption cross sections

Energy (MeV)

Cross section (barns)
ENDF/B-VII.1 PU-242
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
fission
ENDF/B-VII.1 PU-242
UR total cross section

Energy (MeV)

Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b
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UR elastic cross section

Cross section (barns) vs. Energy (MeV)

Lines represent:
- Inf. Dil.
- 100 b
- 1 b

The graph shows the variation of cross section (in barns) with energy (in MeV), indicating a decrease in cross section as energy increases.

Cross section values are given at specific energy intervals, with the graph plotting these intervals on a logarithmic scale.
ENDF/B-VII.1 PU-242
UR fission cross section

Cross section (barns) vs. Energy (MeV)

- Inf. Dil.
- 100 b
- 1 b

Cross section values range from $10^{-2}$ to $10^{-3}$.
ENDF/B-VII.1 PU-242
UR capture cross section

Energy (MeV)

Cross section (barns)

Inf. Dil.

100 b

1 b

10^{-3}

10^{-2}

10^{0}

10^{1}

10^{2}

10^{3}

10^{4}

10^{5}
ENDF/B-VII.1 PU-242 Heating

Energy (MeV) vs. Heating (MeV/reaction)
ENDF/B-VII.1 PU-242
Non-threshold reactions

Cross section (barns)

Energy (MeV)

fission (n,gma)
ENDF/B-VII.1 PU-242
Non-threshold reactions

Energy (MeV)

Cross section (barns)

- fission
- (n,gma)
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Inelastic levels

Cross section (barns)

Energy (MeV)
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angular distribution for elastic
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Total fission nubar

![Graph showing the relationship between energy (MeV) and fission nubar](image_url)
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Delayed neutron spectra

Energy (MeV)

Probability

-0.5 -0.4 -0.3 -0.2 -0.1 0 1 2 3 4 5 6

-2 -1 0

-0.1

-0.2

10^-2

10^-1

10^0

group 1 frac 0.0196 decay/shake 1.360E-10

group 2 frac 0.2314 decay/shake 3.020E-10

group 3 frac 0.1256 decay/shake 1.154E-09

group 4 frac 0.3262 decay/shake 3.042E-09

group 5 frac 0.2255 decay/shake 8.272E-09

group 6 frac 0.0716 decay/shake 3.137E-08
ENDF/B-VII.1 PU-242
Photon emission for fission
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Photon emission for (n,3n)
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Photon emission for (n,4n)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*1)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*3)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*4)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*5)
ENDF/B-VII.1 PU-242
Photon emission for (n,n^*6)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*9)
ENDF/B-VII.1 PU-242
Photon emission for \((n,n'10)\)
ENDF/B-VII.1 PU-242
Photon emission for (n,n\*11)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*12)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*13)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*14)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*15)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*16)
ENDF/B-VII.1 PU-242
Photon emission for \((n,n'^{17})\)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*18)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*19)
ENDF/B-VII.1 PU-242
Photon emission for (n,n*20)
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Photon emission for (n,n*c)
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Photon emission for (n,gma)
ENDF/B-VII.1 PU-242
thermal capture photon spectrum
ENDF/B-VII.1 PU-242
14 MeV photon spectrum

Gamma Energy (MeV)

Gamma Prod (barns/MeV)