Principal cross sections

Energy (MeV)

Cross section (barns)

- Total
- Absorption
- Elastic
- Gamma production

22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Cross section (barns)

Energy (MeV)

total
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance total cross section

Energy (MeV)

Cross section (barns)

total
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

capture
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

capture
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

Energy (MeV)

Cross section (barns)
capture
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
resonance absorption cross sections

capture

Cross section (barns)

Energy (MeV)
Heating

Energy (MeV)

Heating (MeV/reaction)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions

![Graph showing cross-section (barns) vs. energy (MeV) with logarithmic scales. The graph includes sharp peaks and a trend line labeled (n,gma).]
Principal cross sections

Cross section (barns)

Energy (MeV)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Heating

![Energy vs Heating Graph](image-url)

- **Energy (MeV)**: 0, 20, 40, 60, 80, 100, 120, 140, 160
- **Heating (MeV/reaction)**: 0, 5, 10, 15, 20, 25, 30

The graph shows a positive correlation between energy and heating, indicating that as energy increases, the heating also increases.
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Damage

Damage (MeV-barns)

Energy (MeV)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Non-threshold reactions
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Inelastic levels

Cross section (barns)

Energy (MeV)
Cross section vs. Energy for 22-TI-48 from FENDL-3.2 using NJOY2016.60. The plot shows the cross section for inelastic scattering at energies ranging from 2 to 20 MeV for different reaction pathways: (n,n*16), (n,n*17), and (n,n*18).
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Threshold reactions

Energy (MeV)

Cross section (barns)

(n,x)
(n,2n)
(n,n^*)a
(n,n^*)p
(n,n^*)c

Energy (MeV)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for elastic
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for elastic

Diagram showing the angular distribution for elastic scattering with energy (MeV) on the x-axis, cosine on the y-axis, and probability on the z-axis.
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*1)
angular distribution for (n,n*2)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*3)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*4)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*5)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*6)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*7)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*8)
angular distribution for (n,n*9)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*10)
 angular distribution for (n,n*11)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*12)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n^13)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*14)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for (n,n*15)
angular distribution for \((n,n^*16)\)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n^*17)\)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
angular distribution for \((n,n*18)\)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,x)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,2n)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for \((n,n^*)a\)
Neutron emission for \((n,n^*)p\)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Neutron emission for (n,n*c)
Photon emission for (n,x)
Photon emission for (n,2n)
Photon emission for \((n,n^*)a\)
Photon emission for $(n,n^*)p$
Photon emission for \((n,n^*c)\)
22-TI-48 FOR FENDL-3.2 FROM FENDL 3.2 BY NJOY2016.60+
Photon emission for (n,gma)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
thermal capture photon spectrum
Particle heating contributions

- Protons
- Deuterons
- Tritons
- Alphas
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Recoil Heating

Recoil Heating (MeV/reaction) vs. Energy (MeV)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
Particle production cross sections

[Graph showing particle production cross sections as a function of energy (MeV). The graph includes lines for protons, deuterons, tritons, and alphas.]
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,x)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
protons from (n,n*)p

![Graph showing energy levels and probabilities]
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
deuterons from (n,x)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
tritons from (n,x)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,x)
22-TI-48 FOR FENDL-3.2 FROM FENDL-3.2 BY NJOY2016.60+
alphas from (n,n*)a