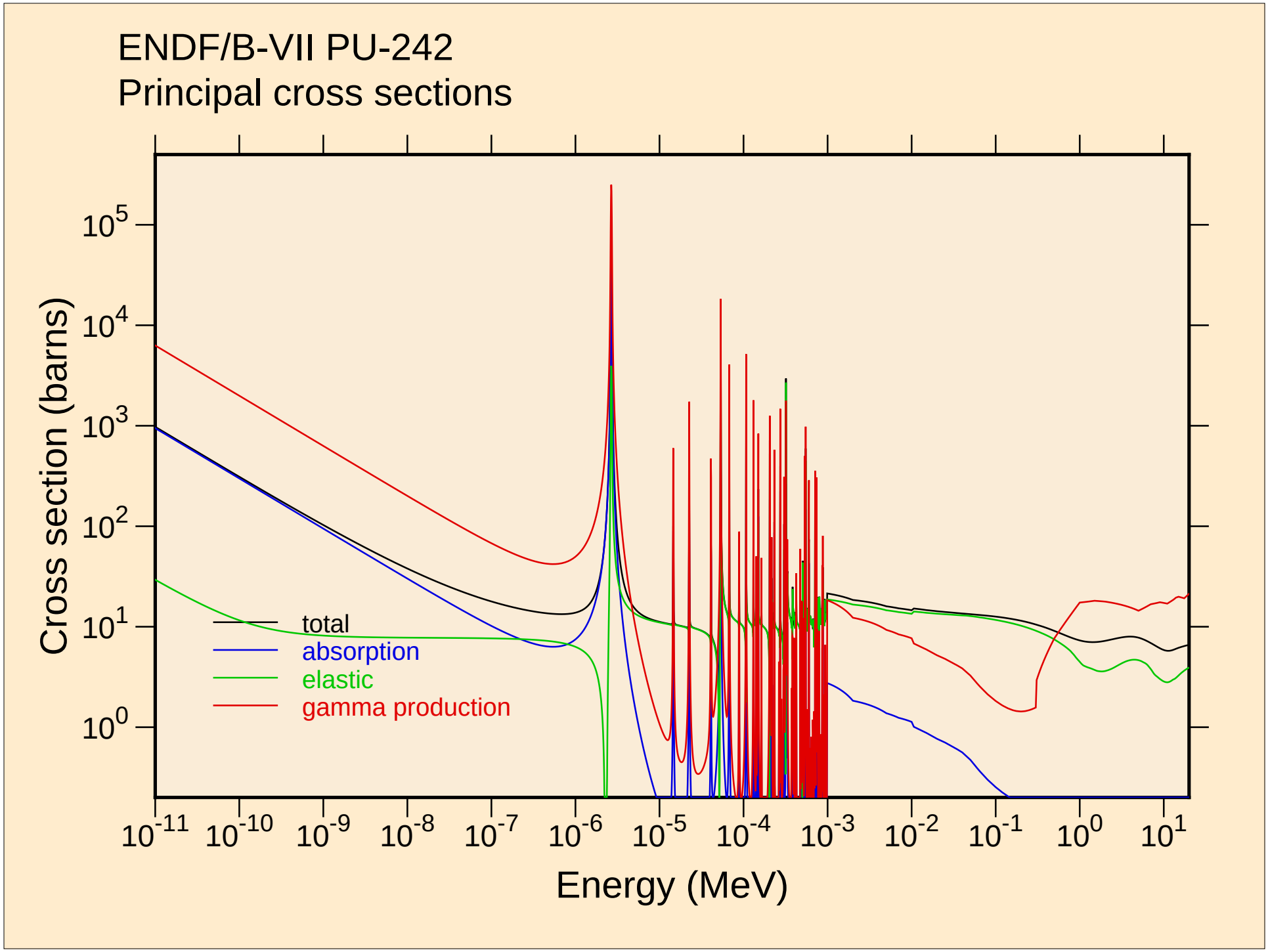
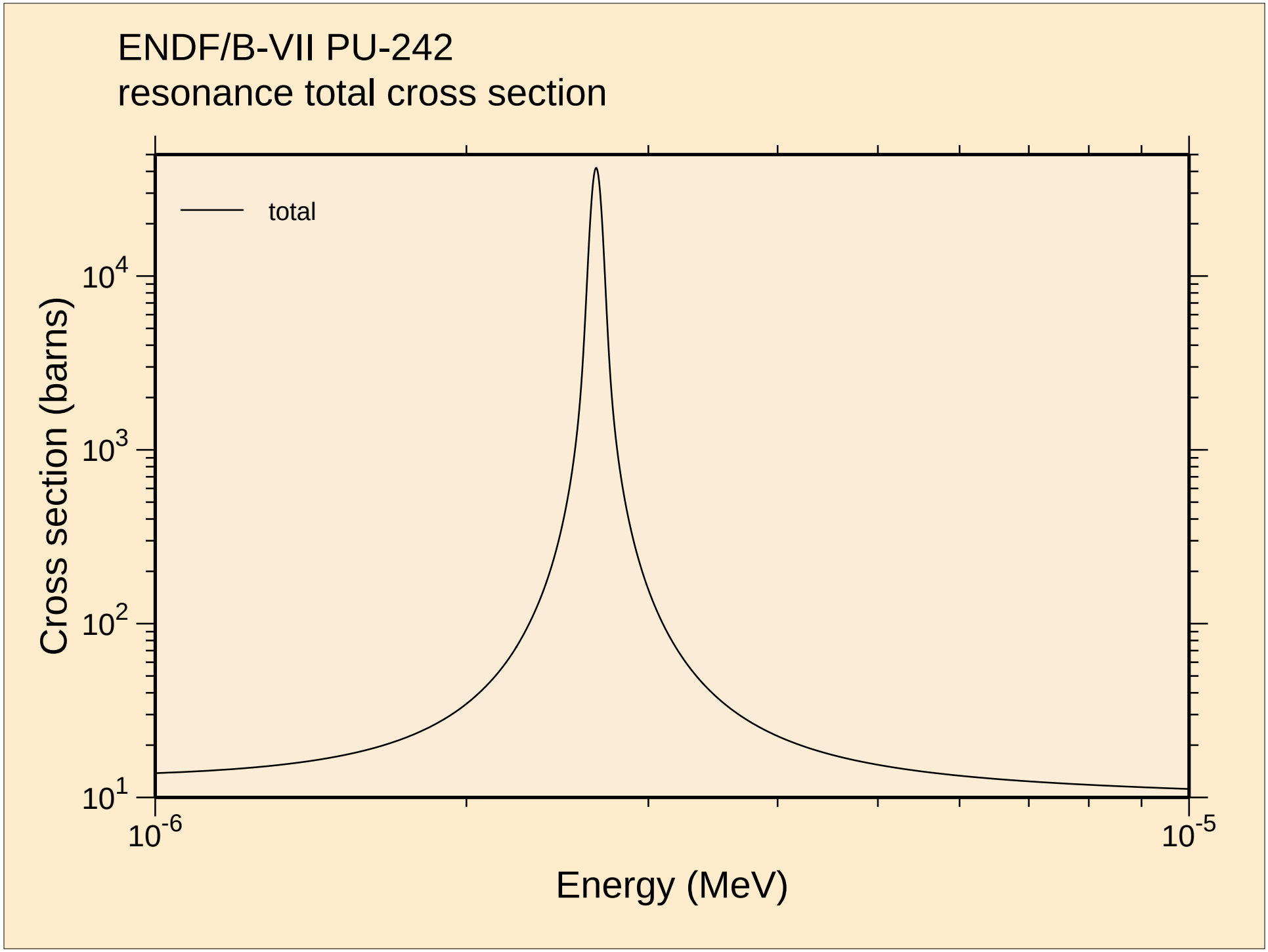
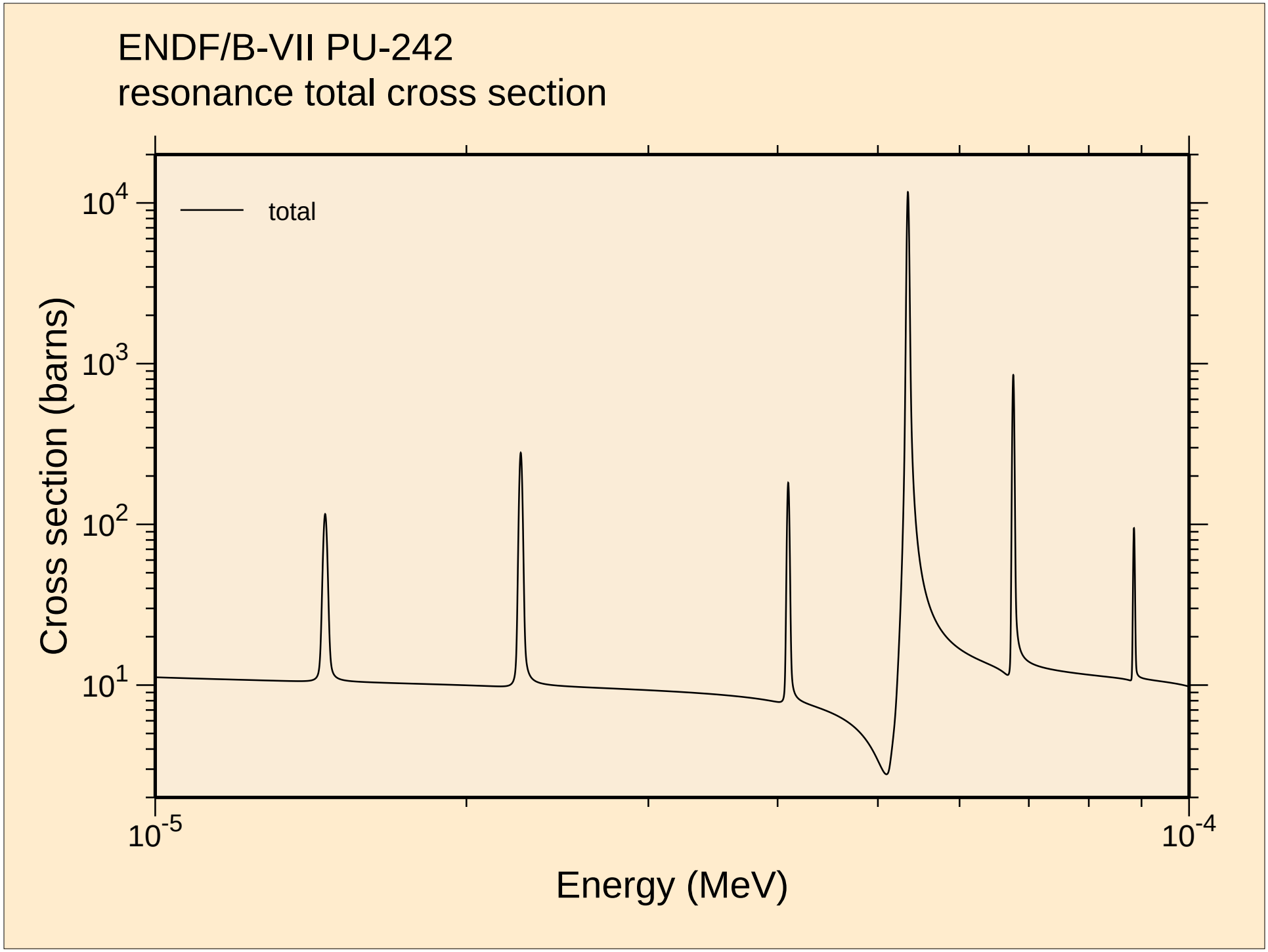
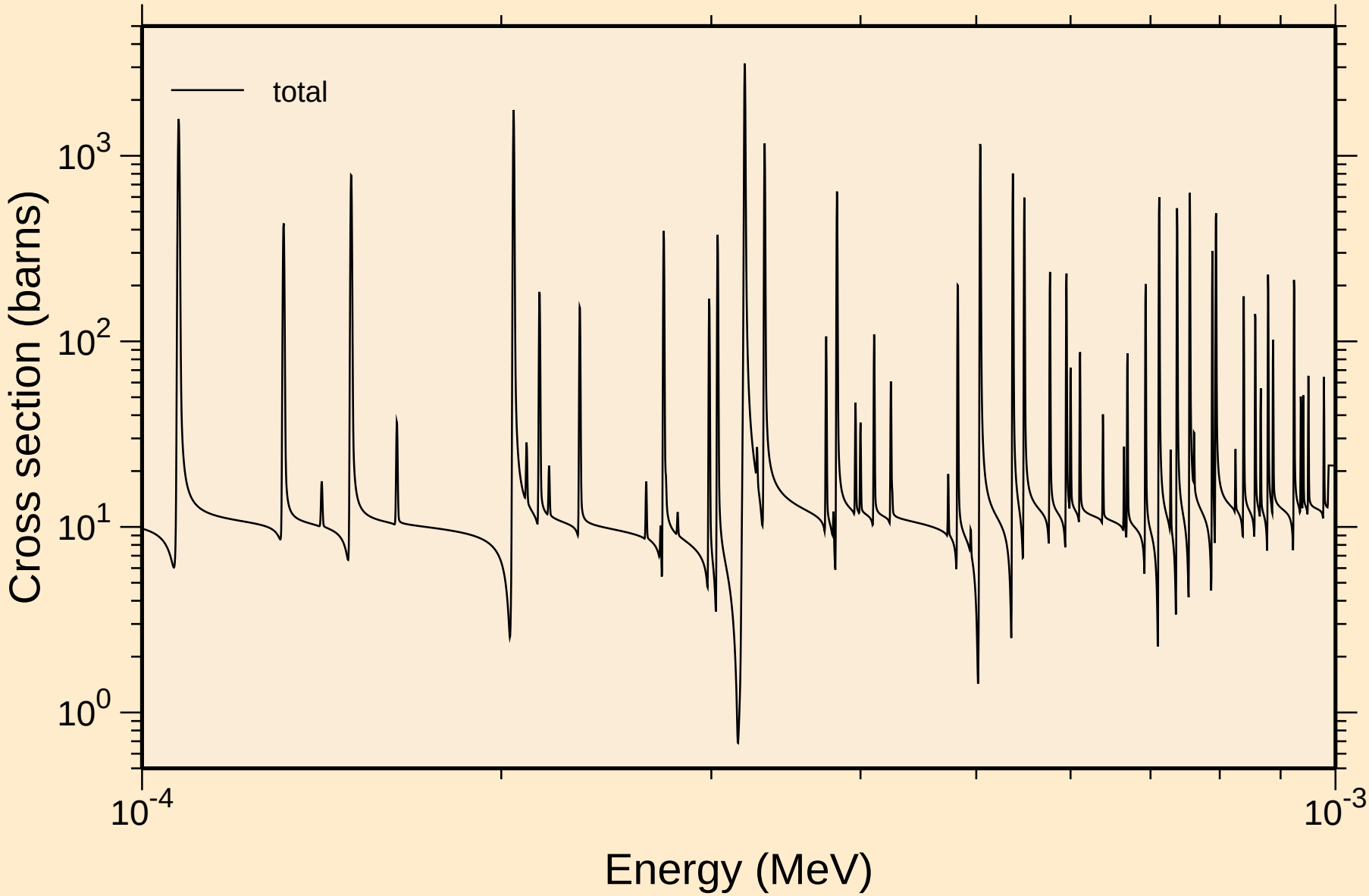
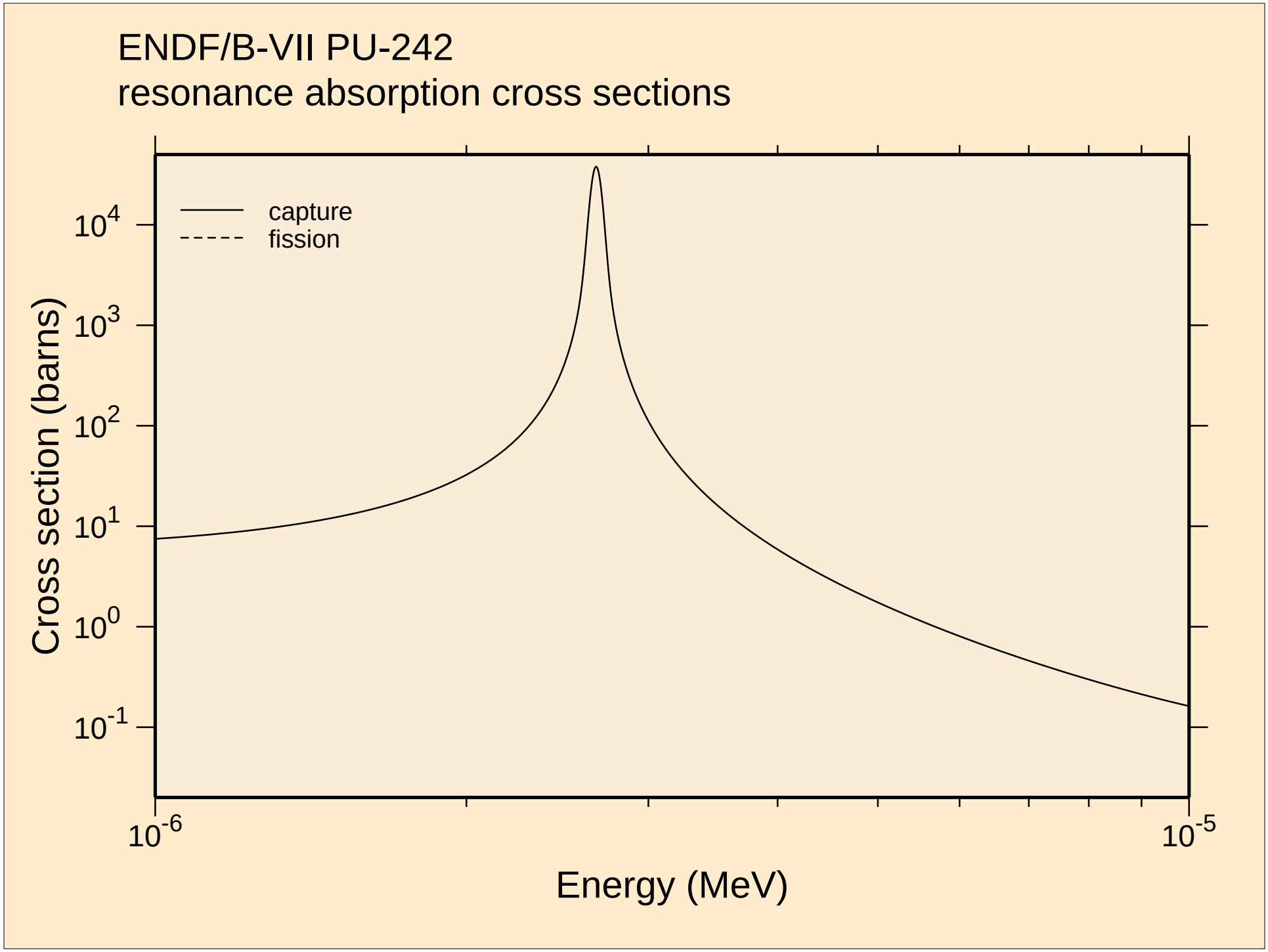

ENDF/B-VII PU-242
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production


ENDF/B-VII PU-242
resonance total cross section
total
Cross section (barns)
10^4
10^3
10^2
10^1
10^{-6}
10^{-5}
Energy (MeV)

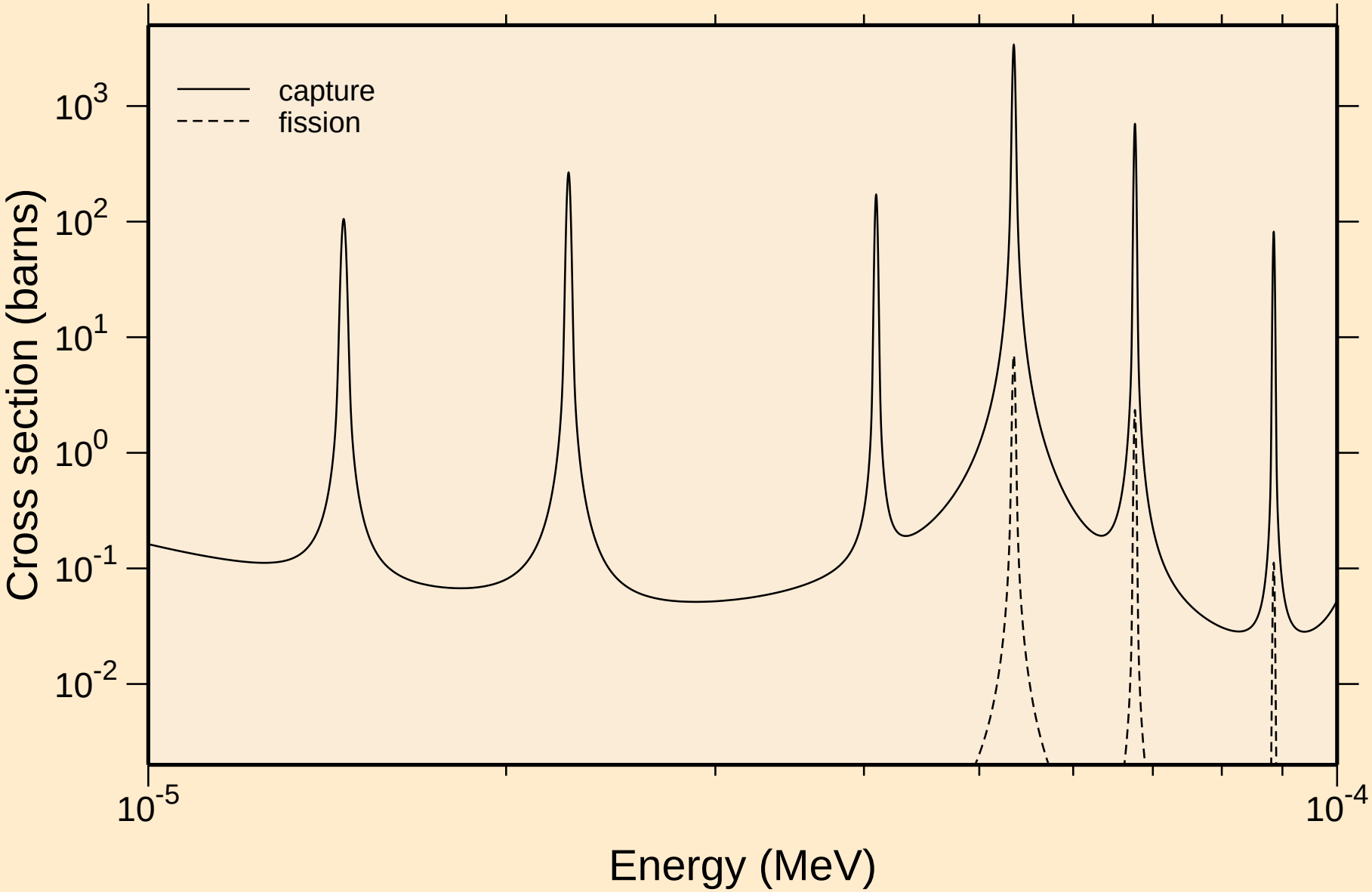

ENDF/B-VII PU-242
resonance total cross section
total
Cross section (barns)
10^4
10^3
10^2
10^1
10^{-5}
10^{-4}
Energy (MeV)

ENDF/B-VII PU-242
resonance total cross section

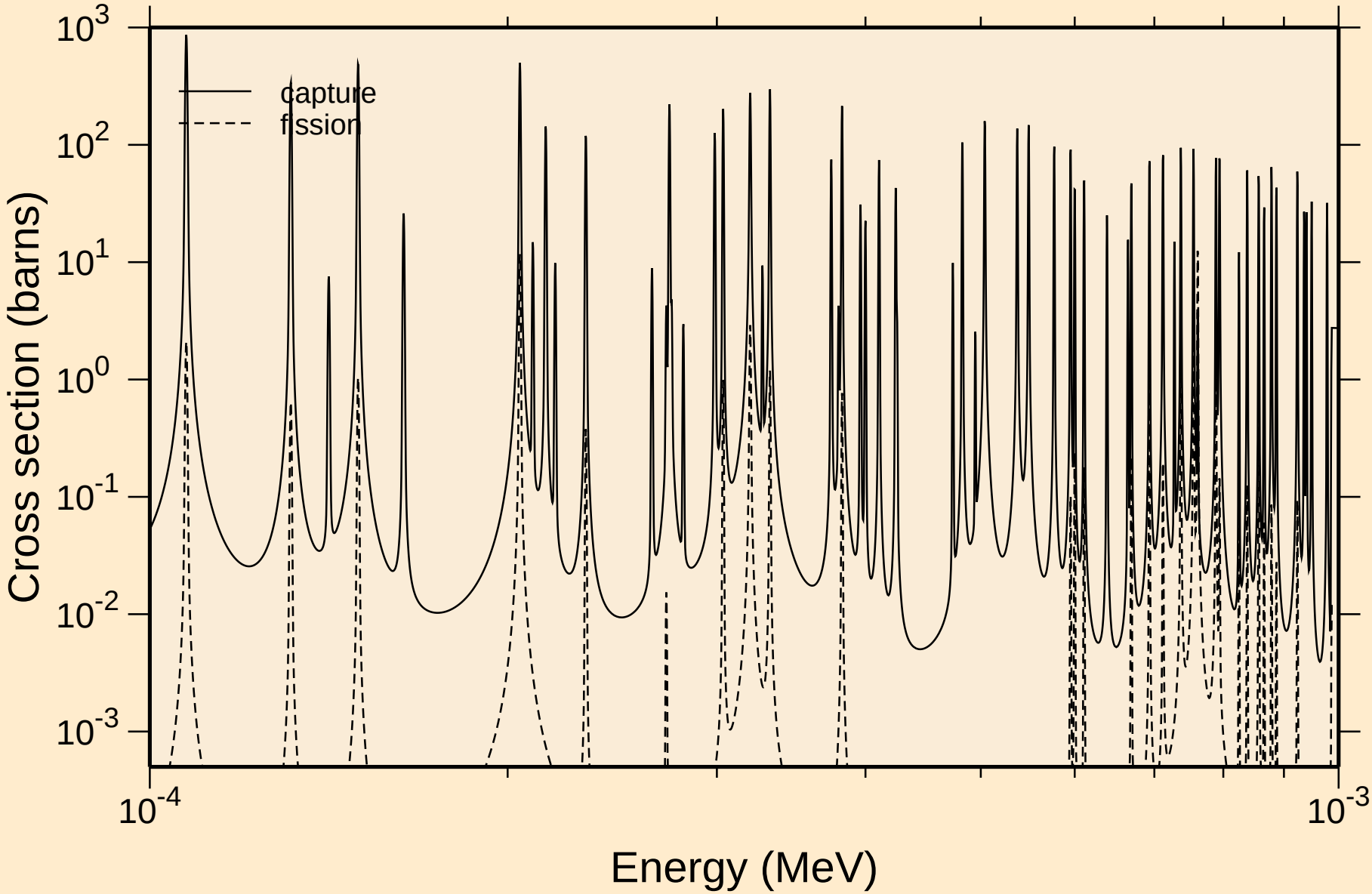


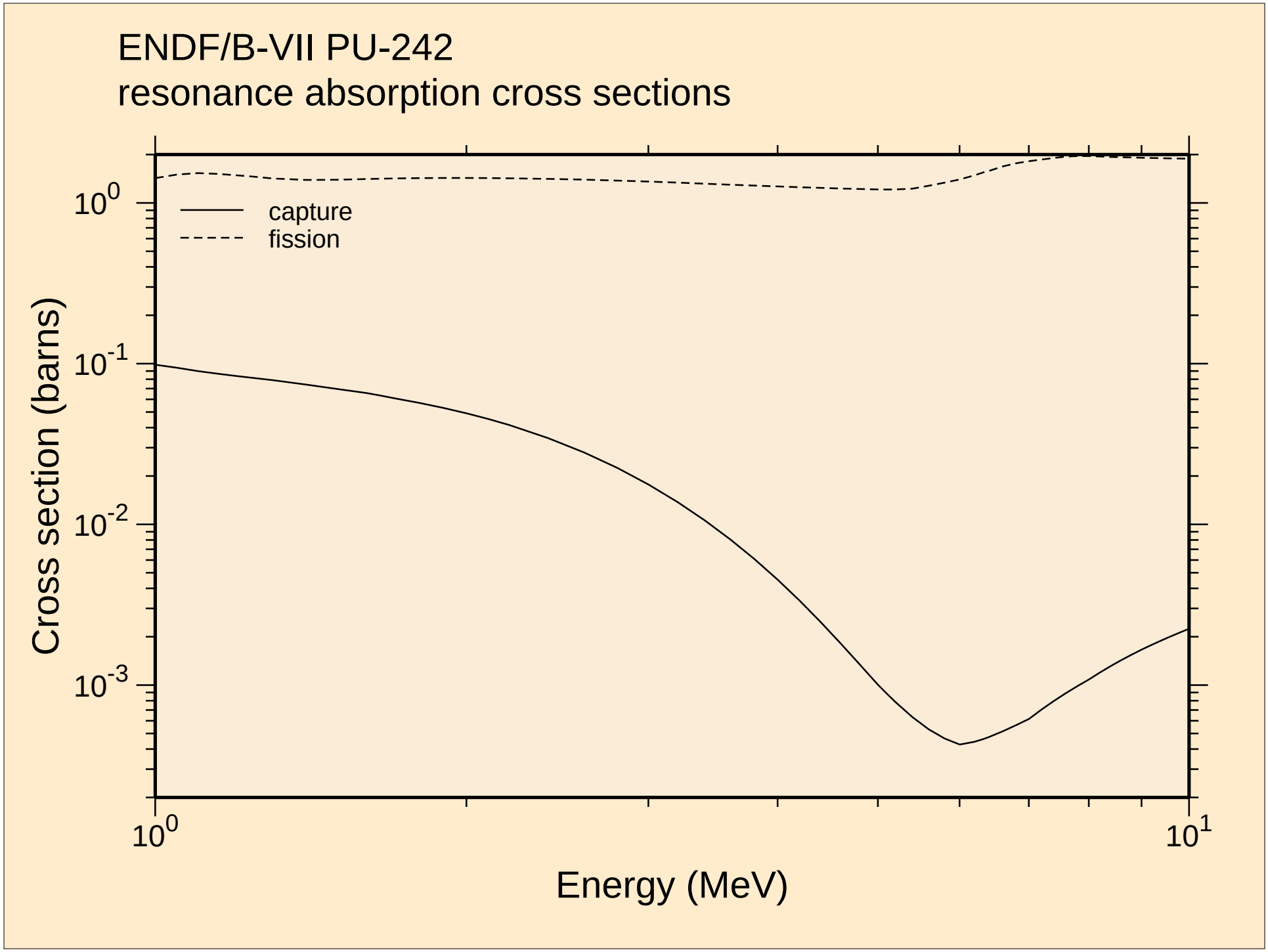

ENDF/B-VII PU-242
resonance absorption cross sections
capture
fission
Cross section (barns)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-6}
10^{-5}
Energy (MeV)

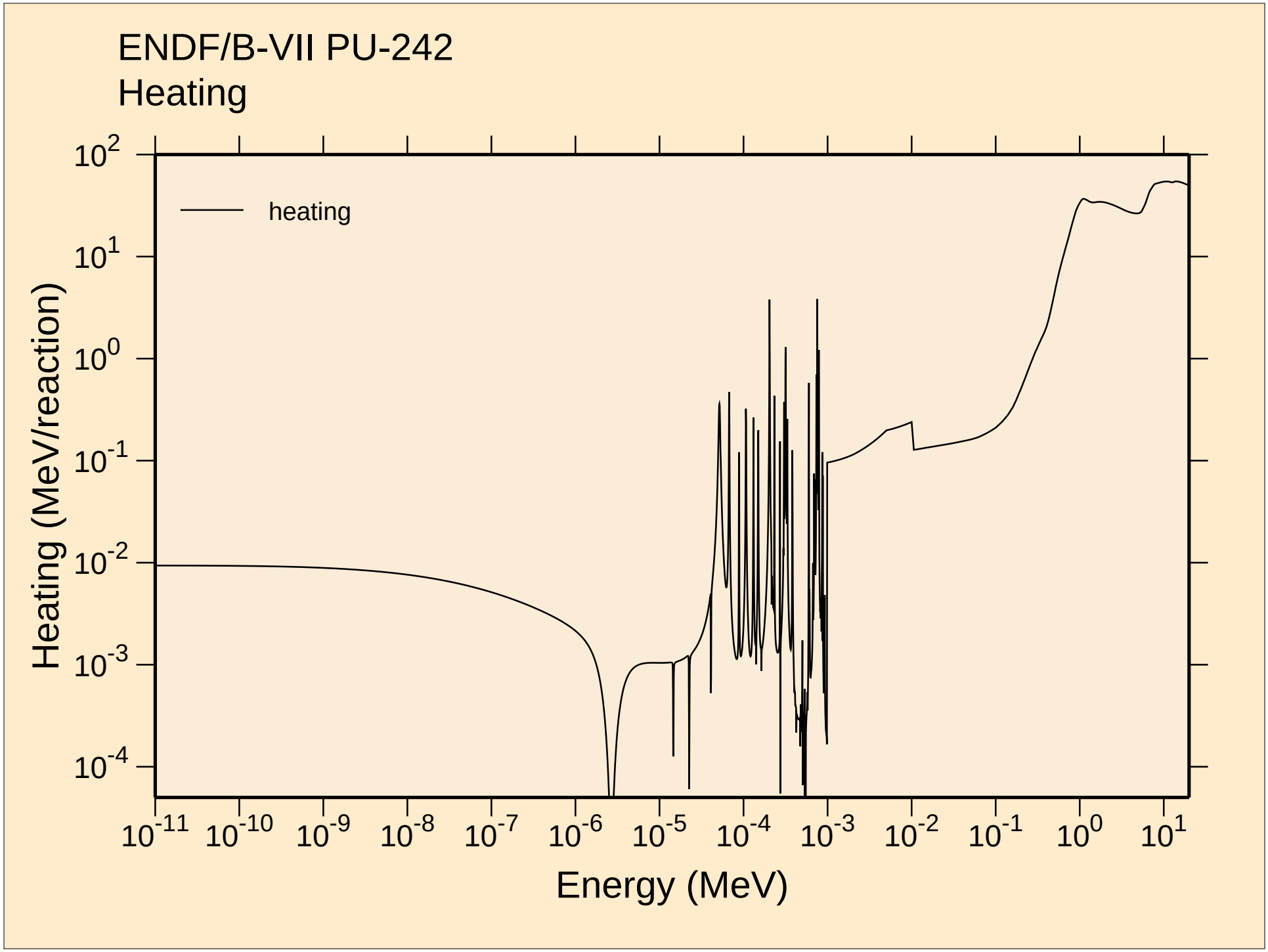
ENDF/B-VII PU-242
resonance absorption cross sections

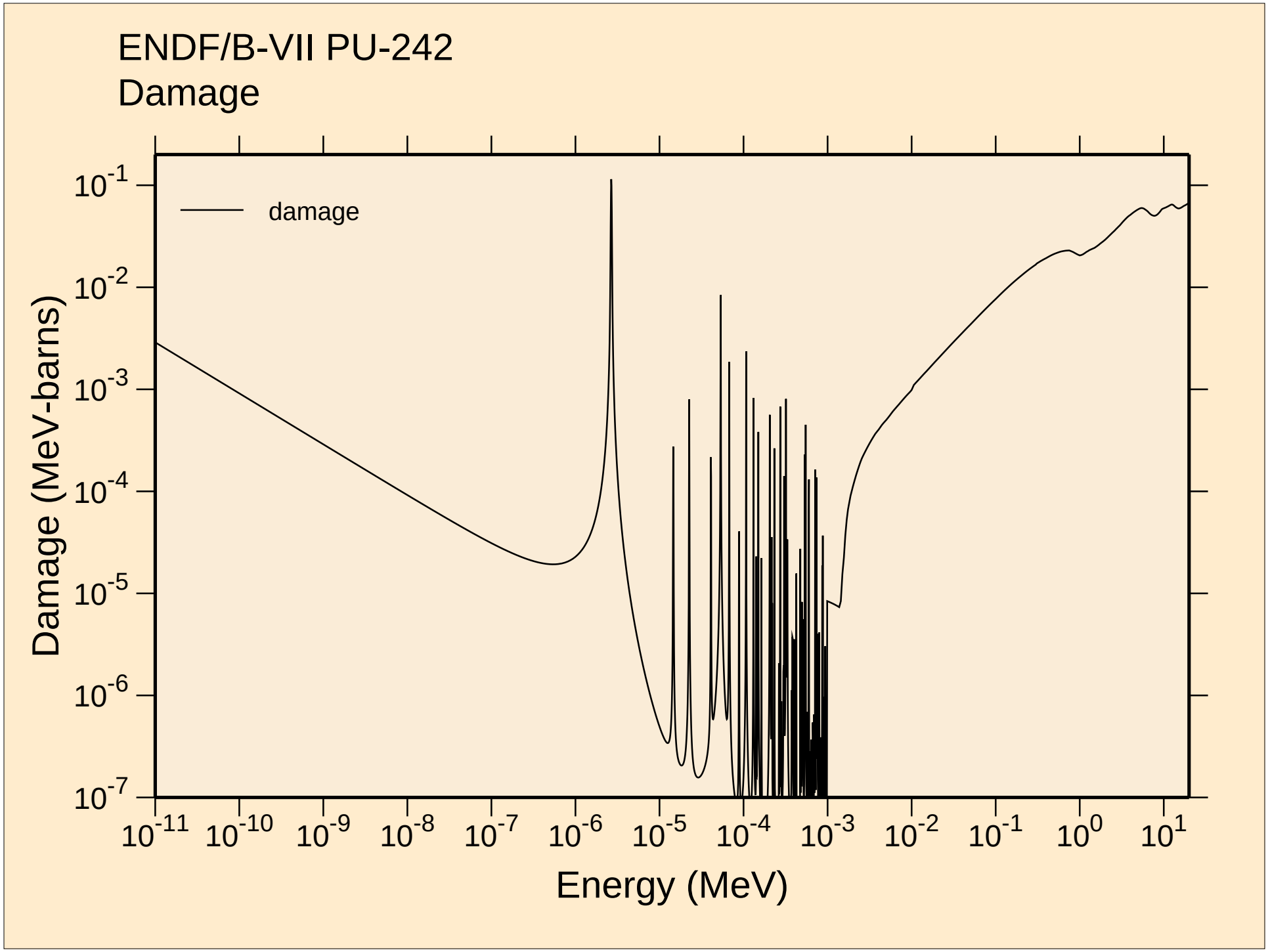


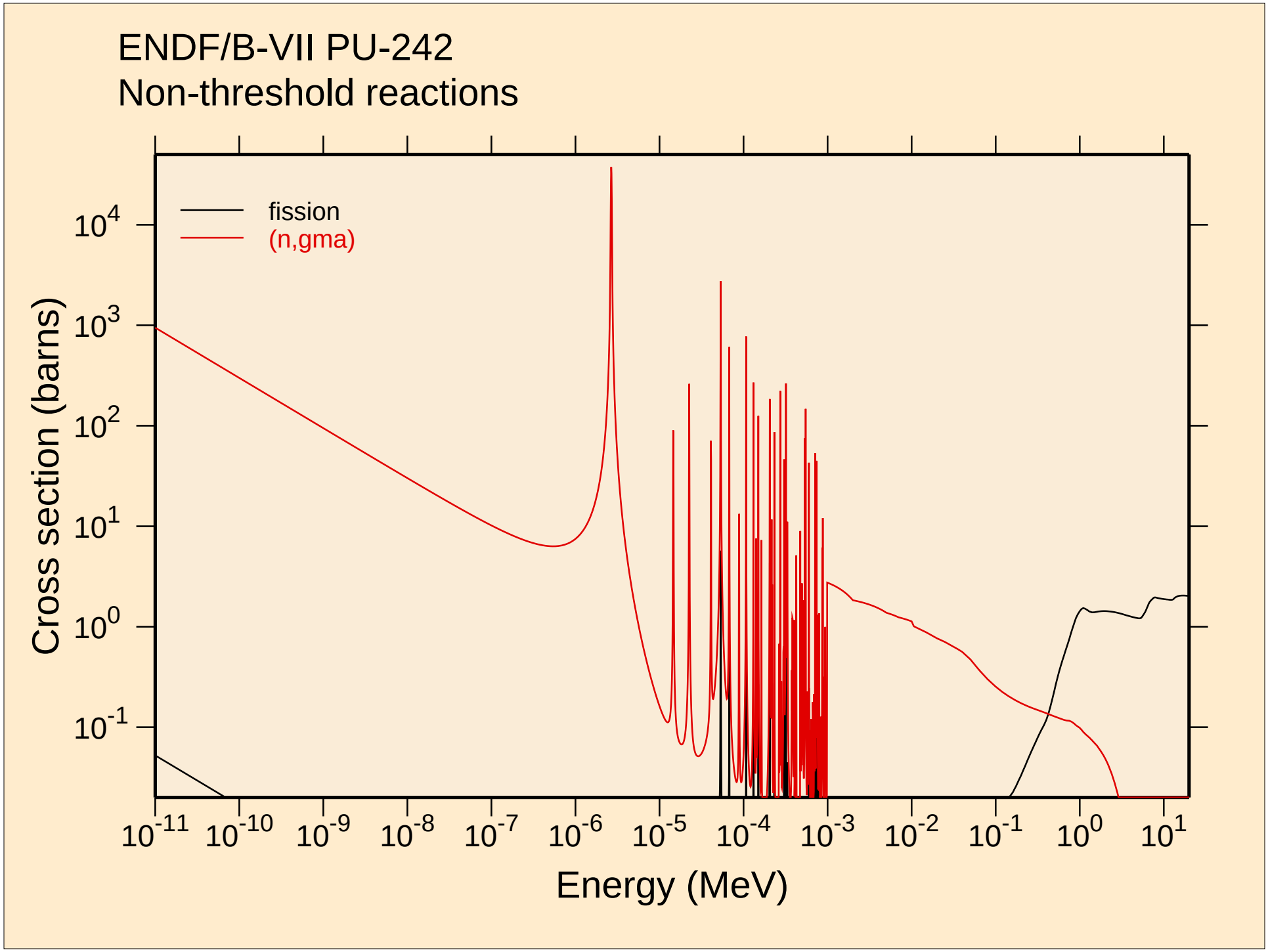
ENDF/B-VII PU-242
resonance absorption cross sections

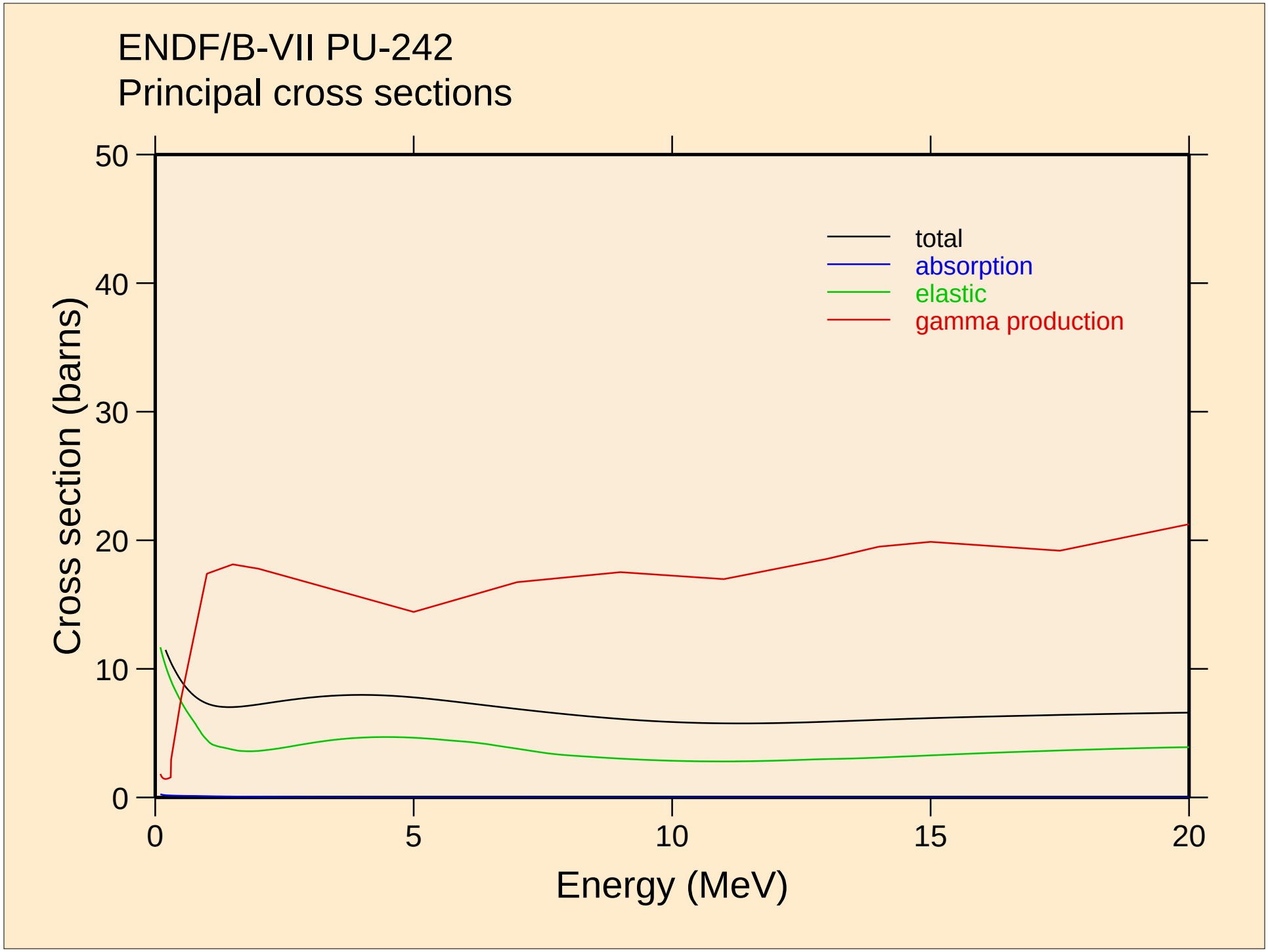


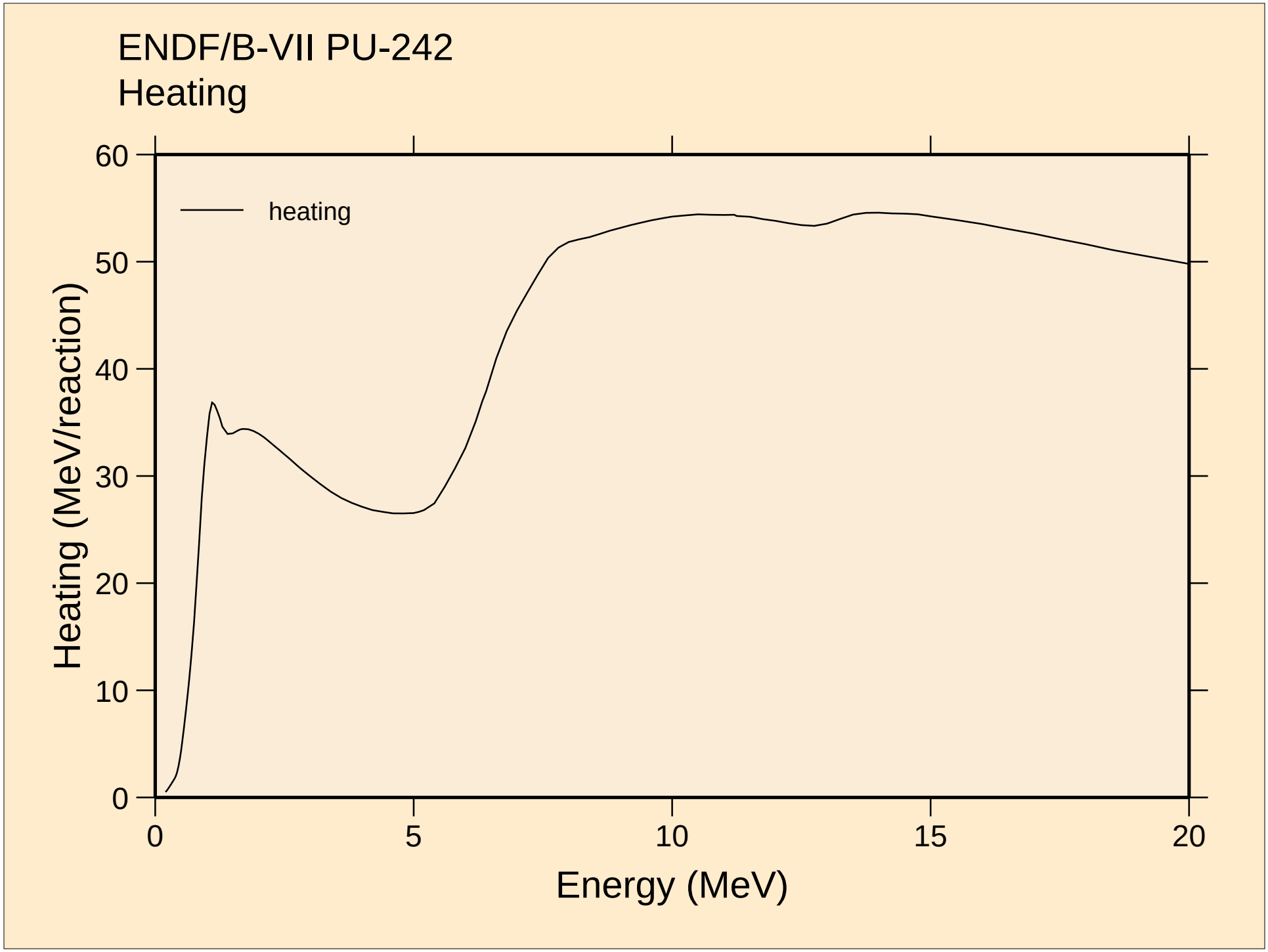

ENDF/B-VII PU-242
resonance absorption cross sections
capture
fission
Cross section (barns)
10^0
10^{-1}
10^{-2}
10^{-3}
10^0
10^1
Energy (MeV)

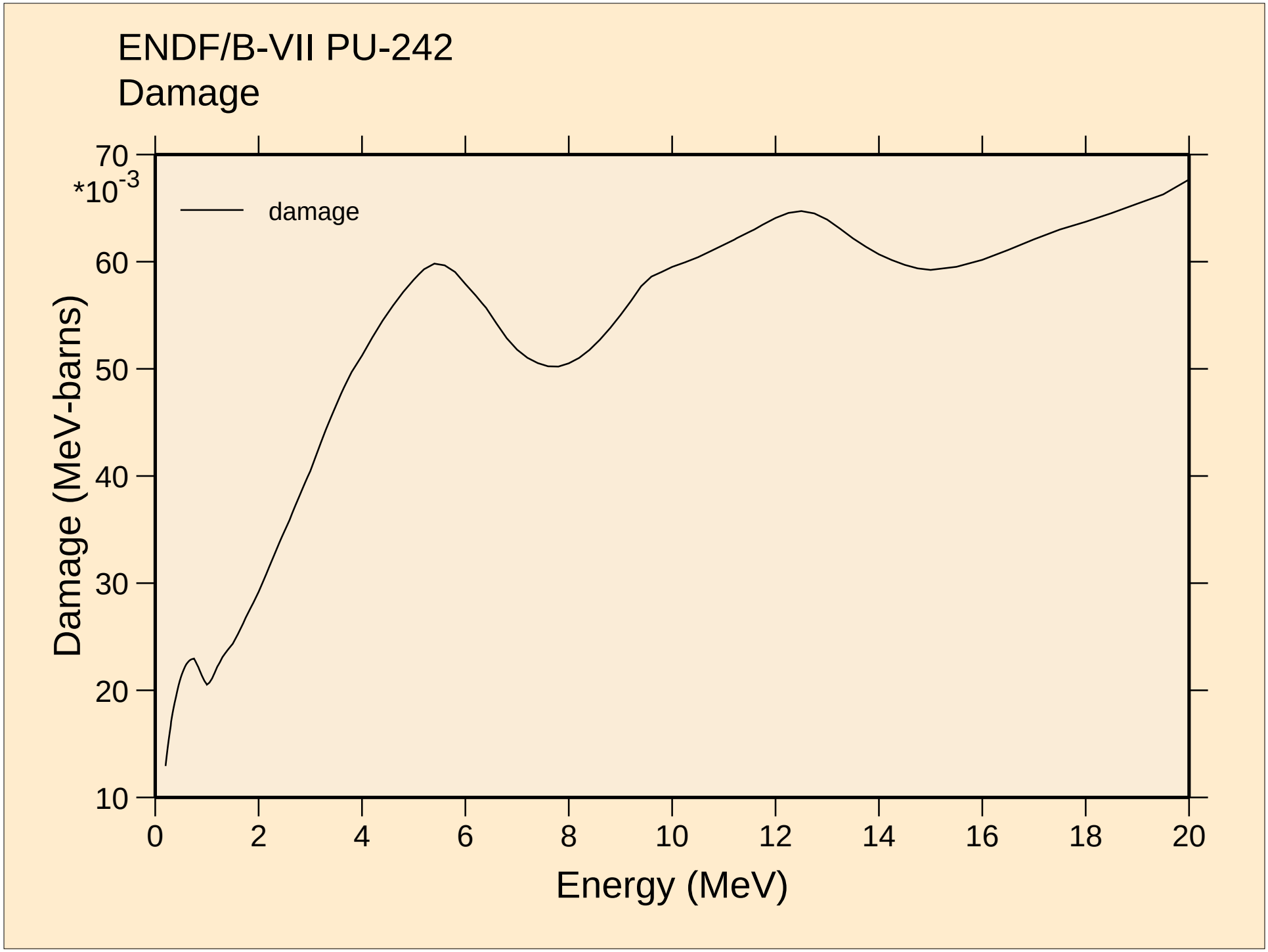

ENDF/B-VII PU-242
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^2
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

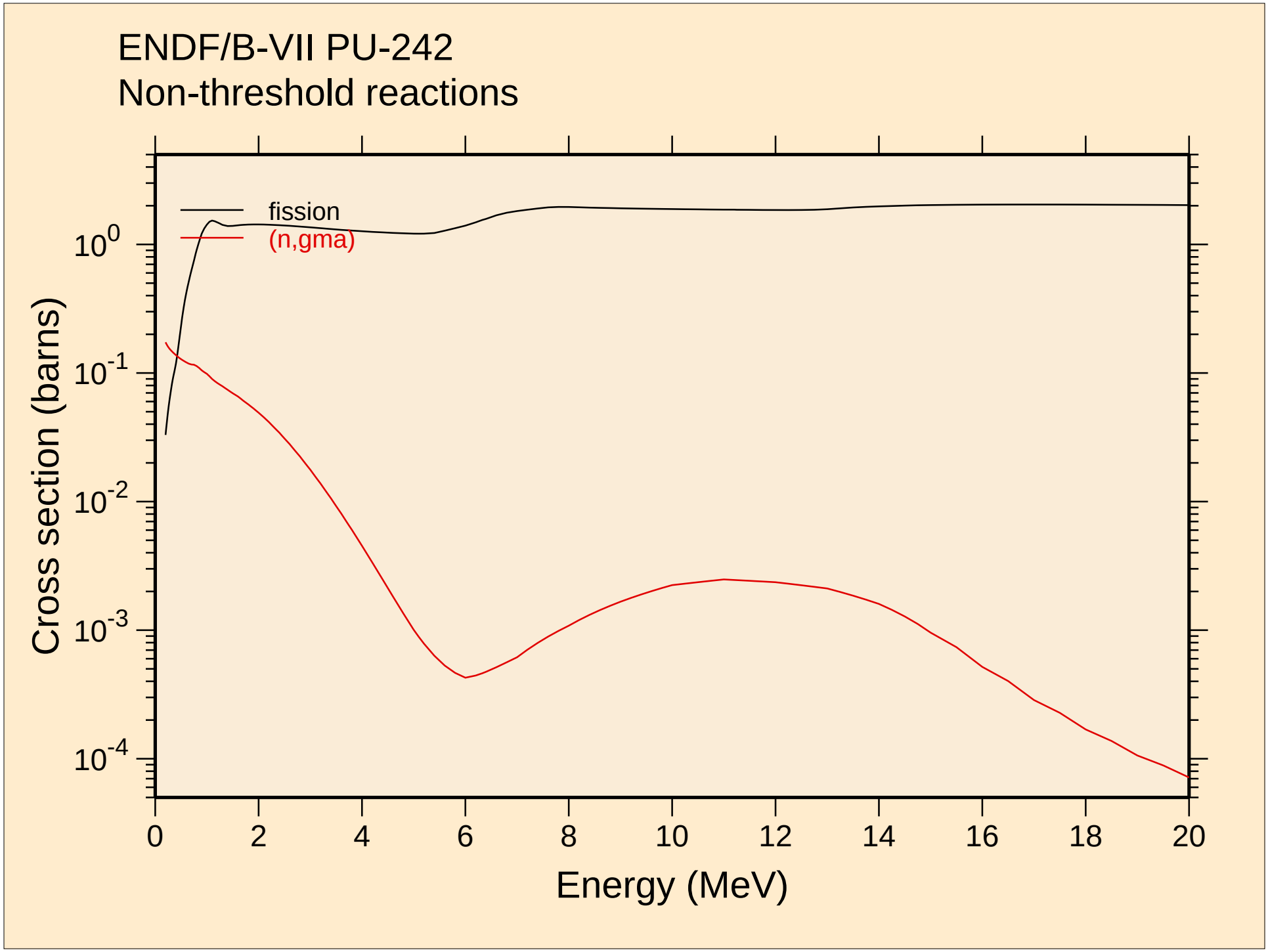

ENDF/B-VII PU-242
Damage
damage
Damage (MeV-barns)
Energy (MeV)
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
10^-11
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1

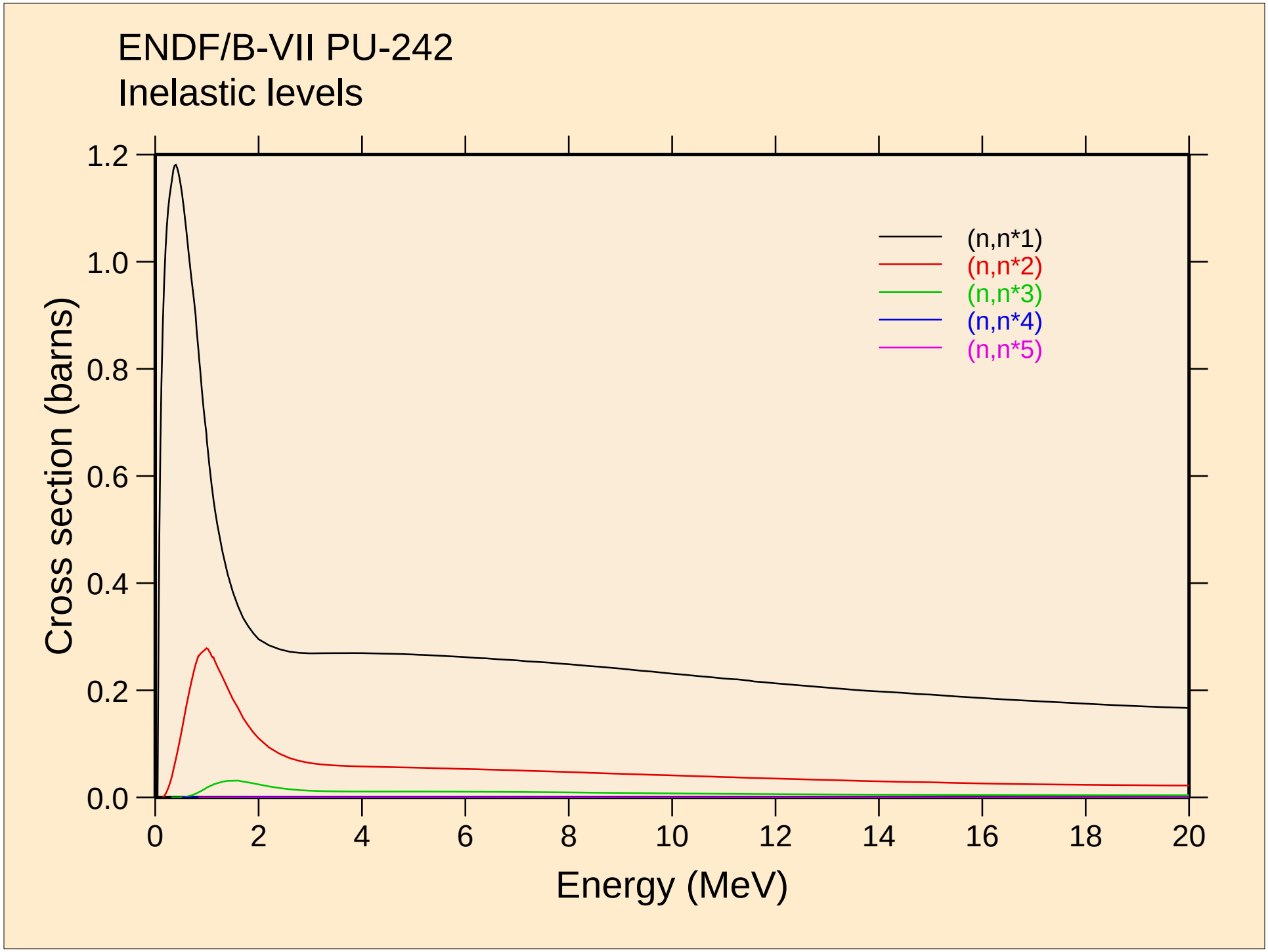

ENDF/B-VII PU-242
Non-threshold reactions
fission
(n,gma)
Cross section (barns)
Energy (MeV)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1}

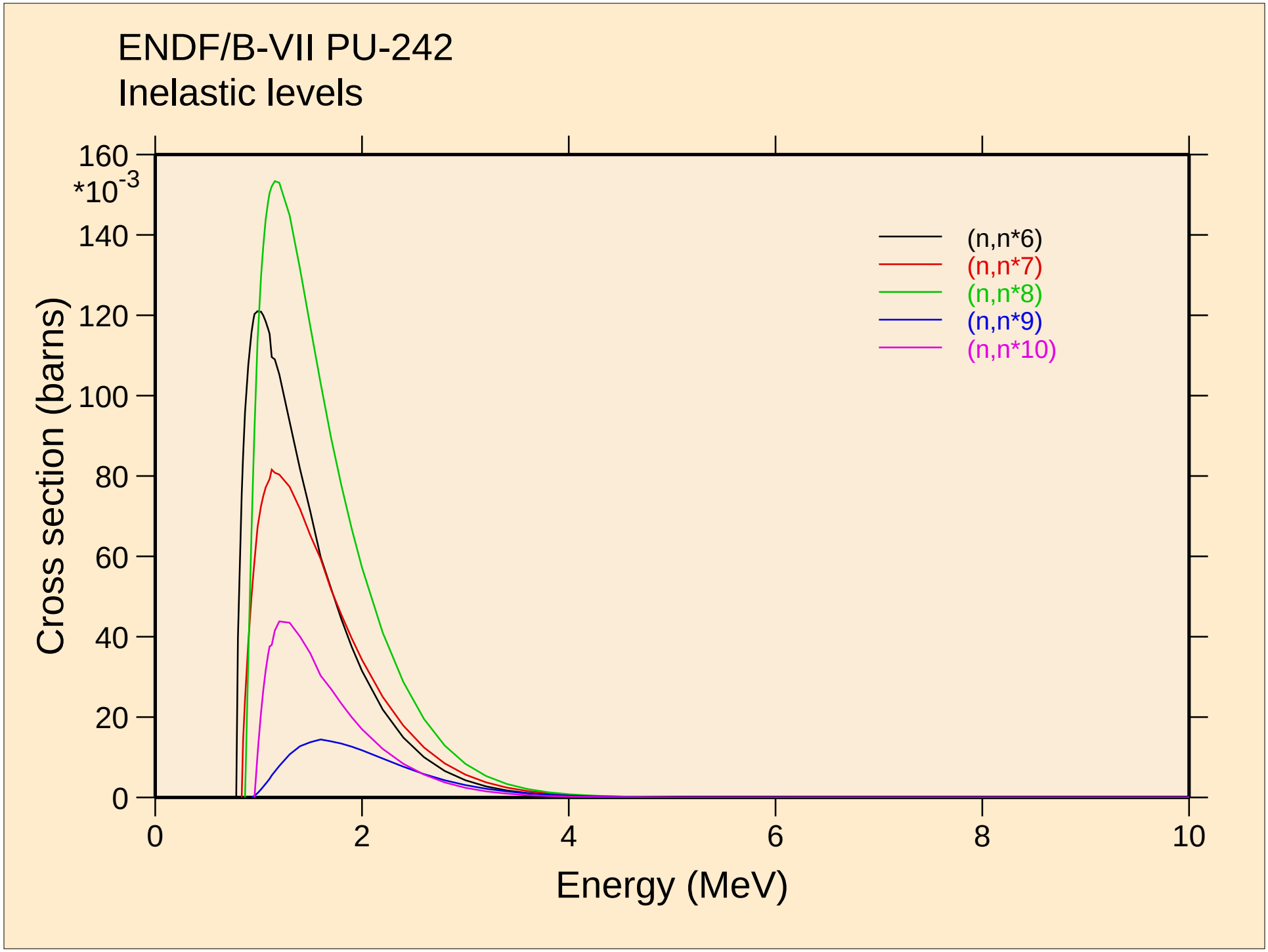

ENDF/B-VII PU-242
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production
0
10
20
30
40
50
0
5
10
15
20

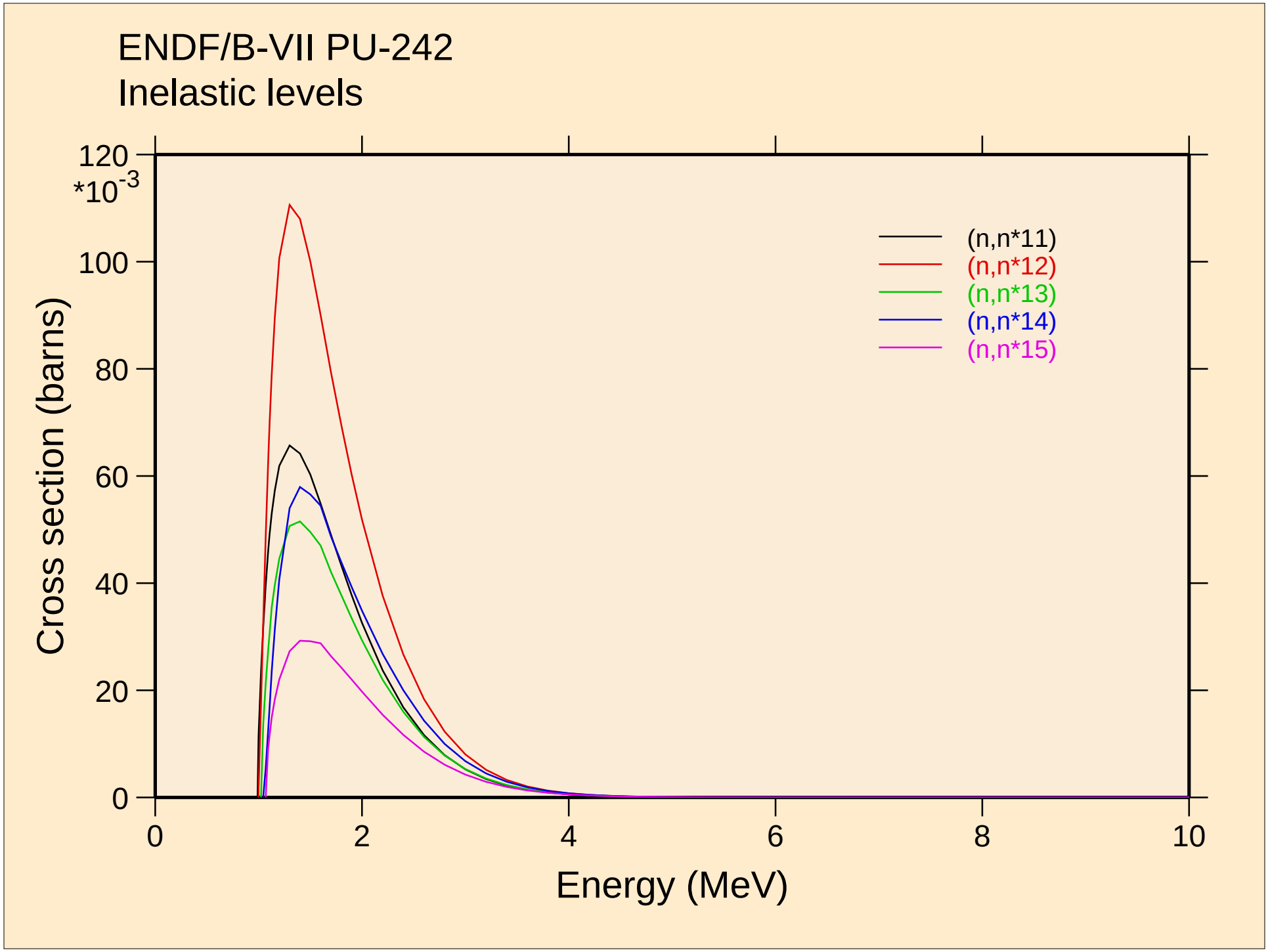

ENDF/B-VII PU-242
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
10
20
30
40
50
60
0
5
10
15
20

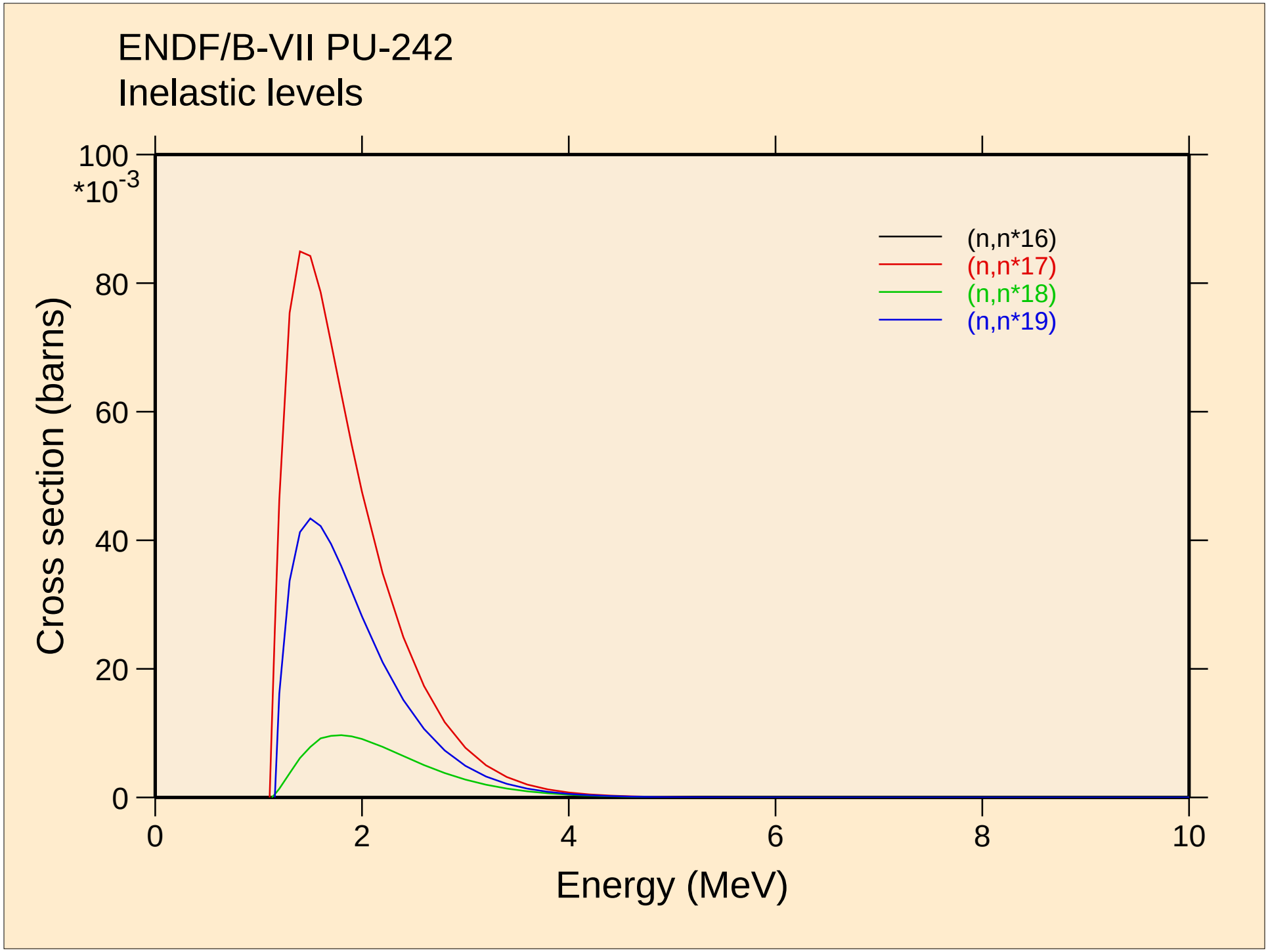

ENDF/B-VII PU-242
Damage
*10-3
damage
Damage (MeV-barns)
70
60
50
40
30
20
10
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

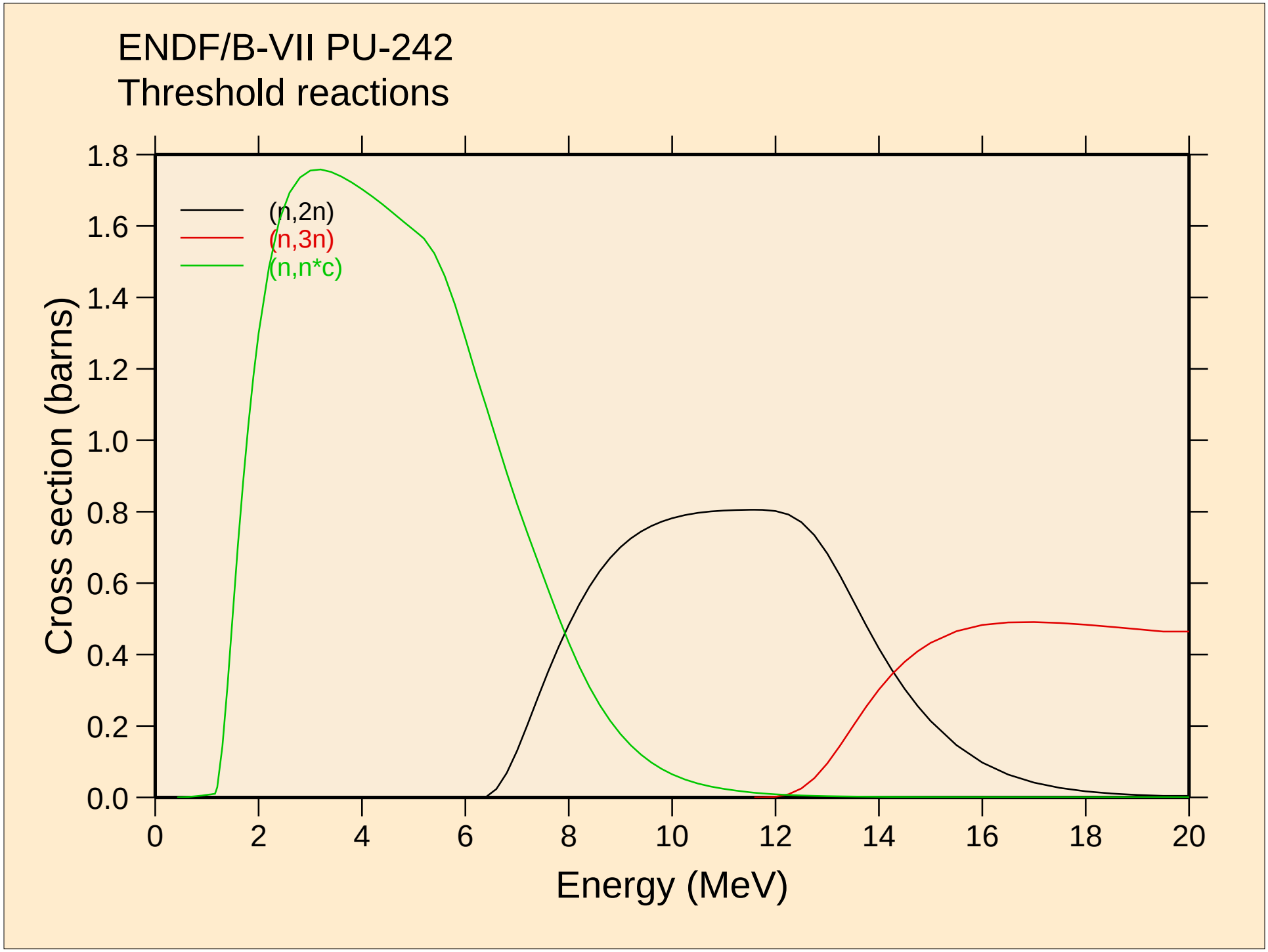

ENDF/B-VII PU-242
Non-threshold reactions
fission
(n,gma)
Cross section (barns)
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
0
2
4
6
8
10
12
14
16
18
20
Energy (MeV)

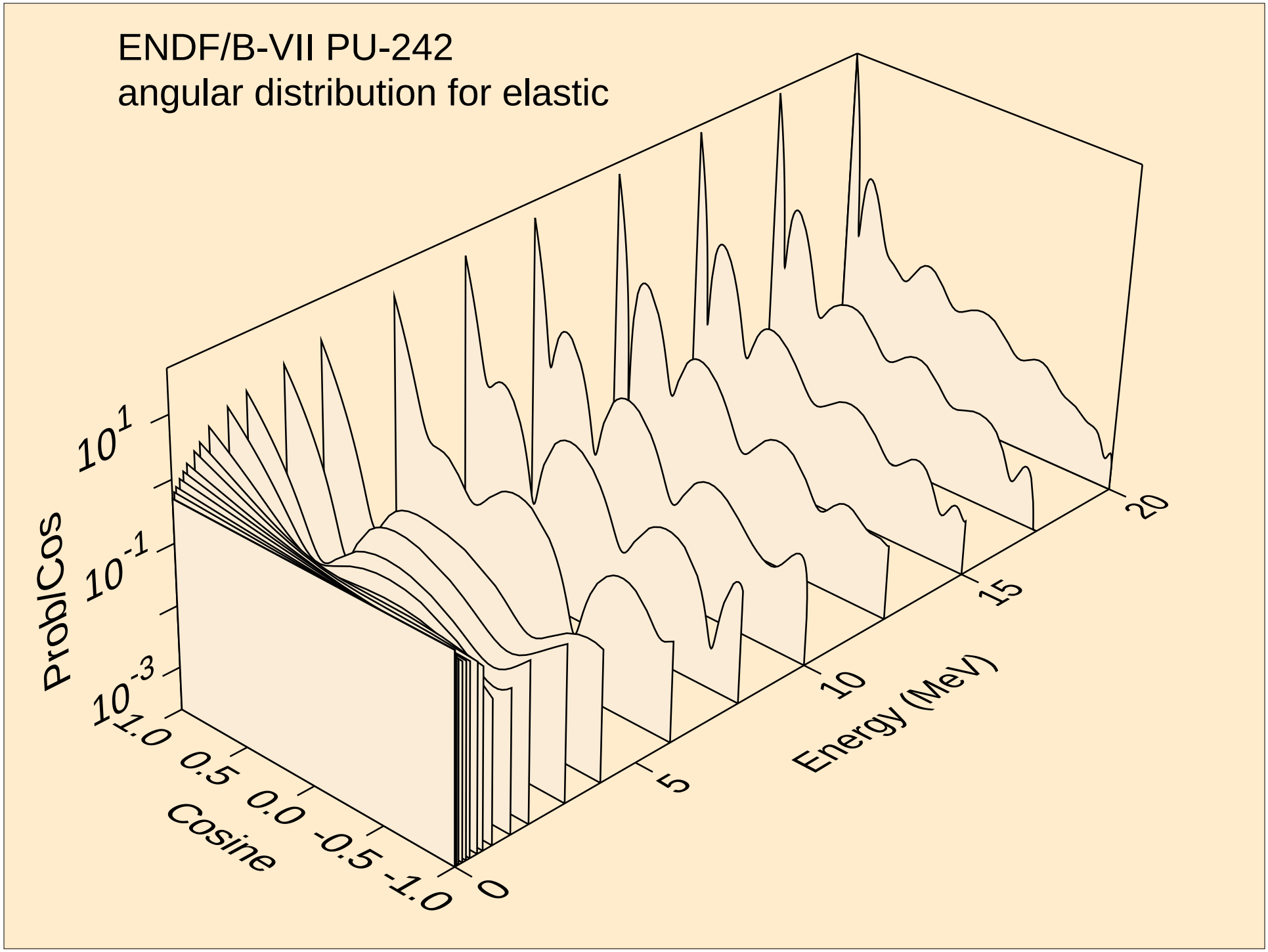

ENDF/B-VII PU-242
Inelastic levels
Cross section (barns)
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
2
4
6
8
10
12
14
16
18
20

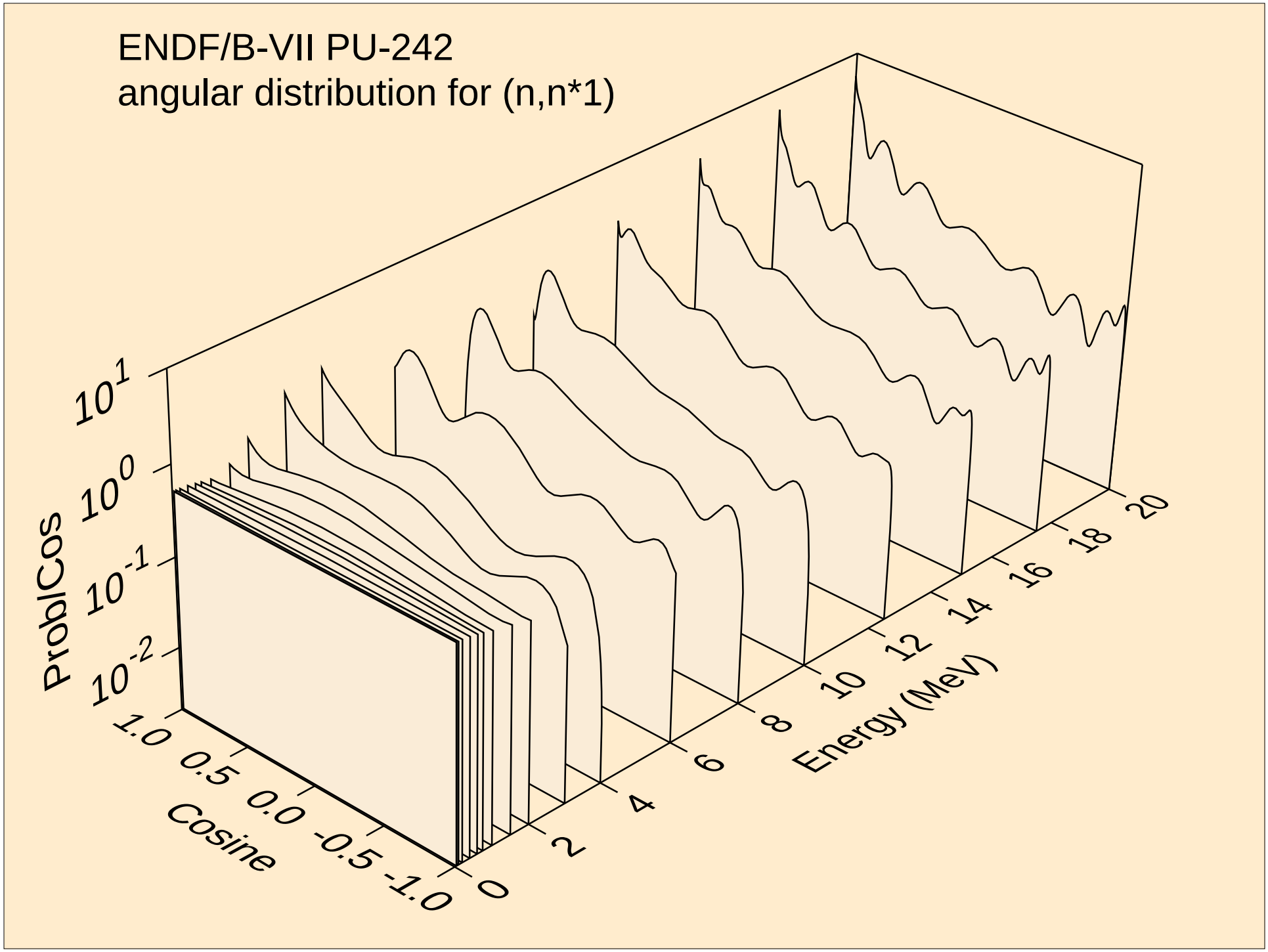

ENDF/B-VII PU-242
Inelastic levels
Cross section (barns)
*10^-3
160
140
120
100
80
60
40
20
0
0
2
4
6
8
10
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

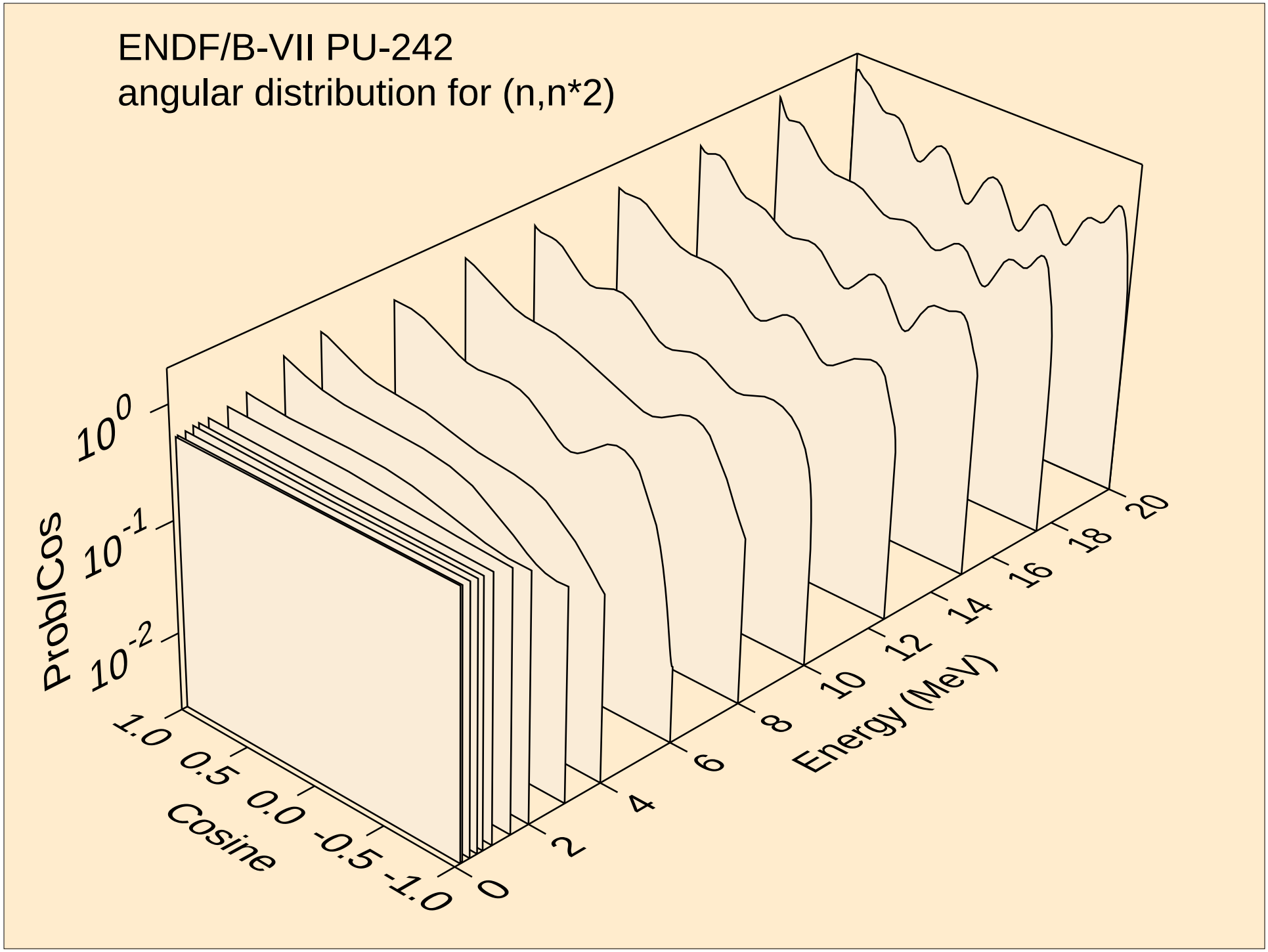

ENDF/B-VII PU-242
Inelastic levels
120
*10-3
100
80
60
40
20
0
Cross section (barns)
0
2
4
6
8
10
Energy (MeV)
(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)

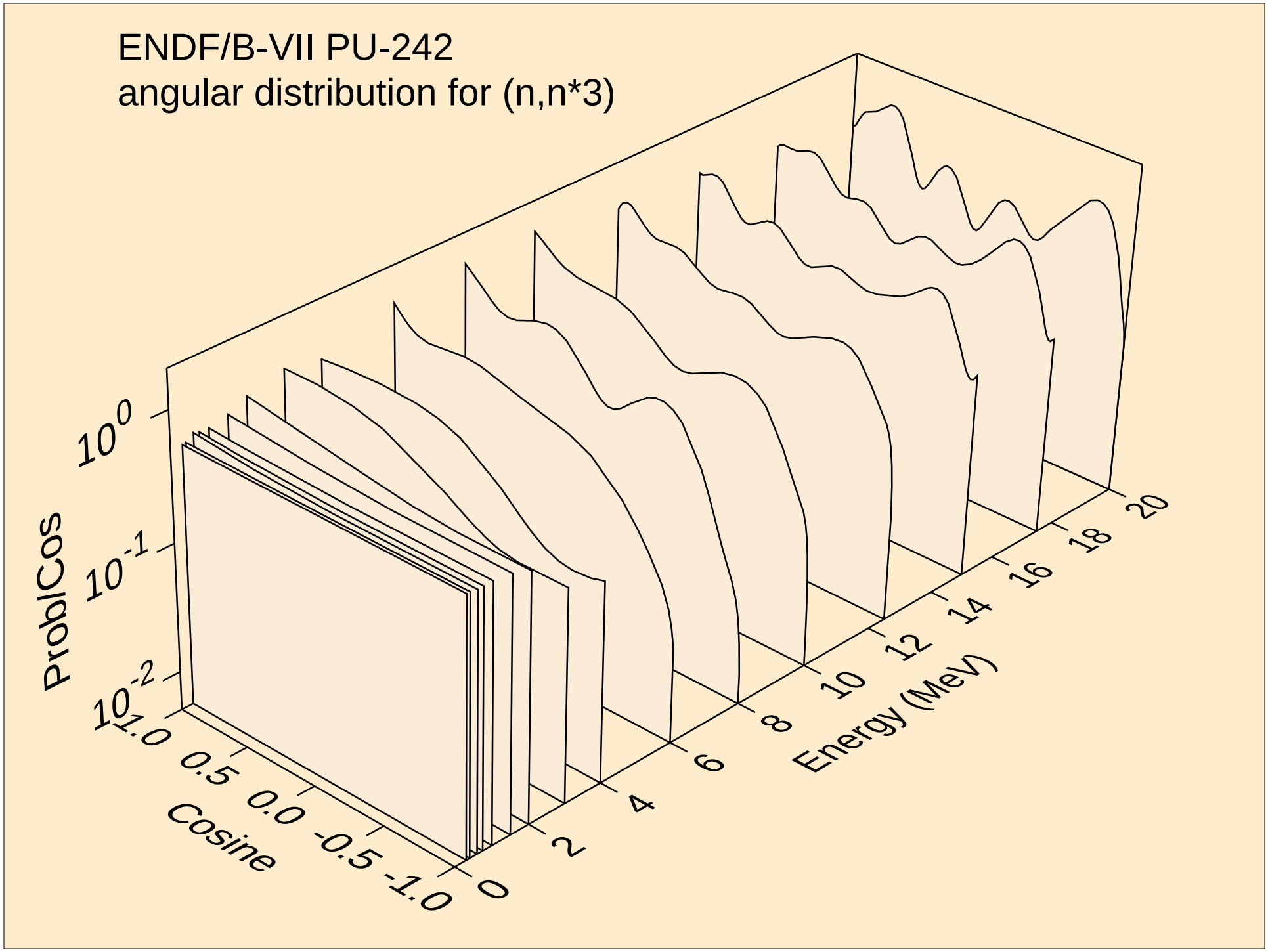

ENDF/B-VII PU-242
Inelastic levels
100
*10-3
80
60
40
20
0
Cross section (barns)
0
2
4
6
8
10
Energy (MeV)
(n,n*16)
(n,n*17)
(n,n*18)
(n,n*19)

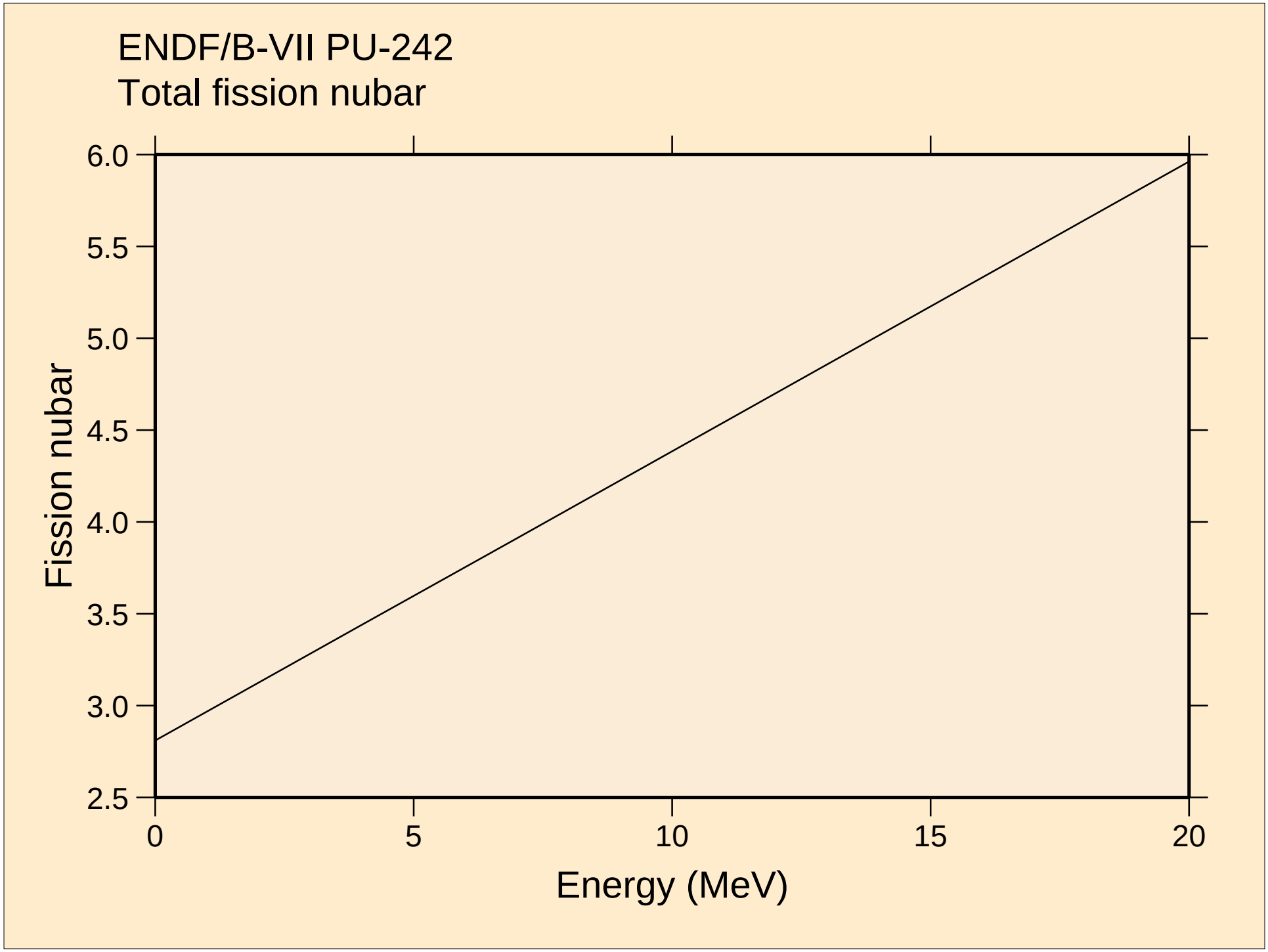

ENDF/B-VII PU-242
Threshold reactions
(n,2n)
(n,3n)
(n,n*c)
Cross section (barns)
Energy (MeV)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
0
2
4
6
8
10
12
14
16
18
20

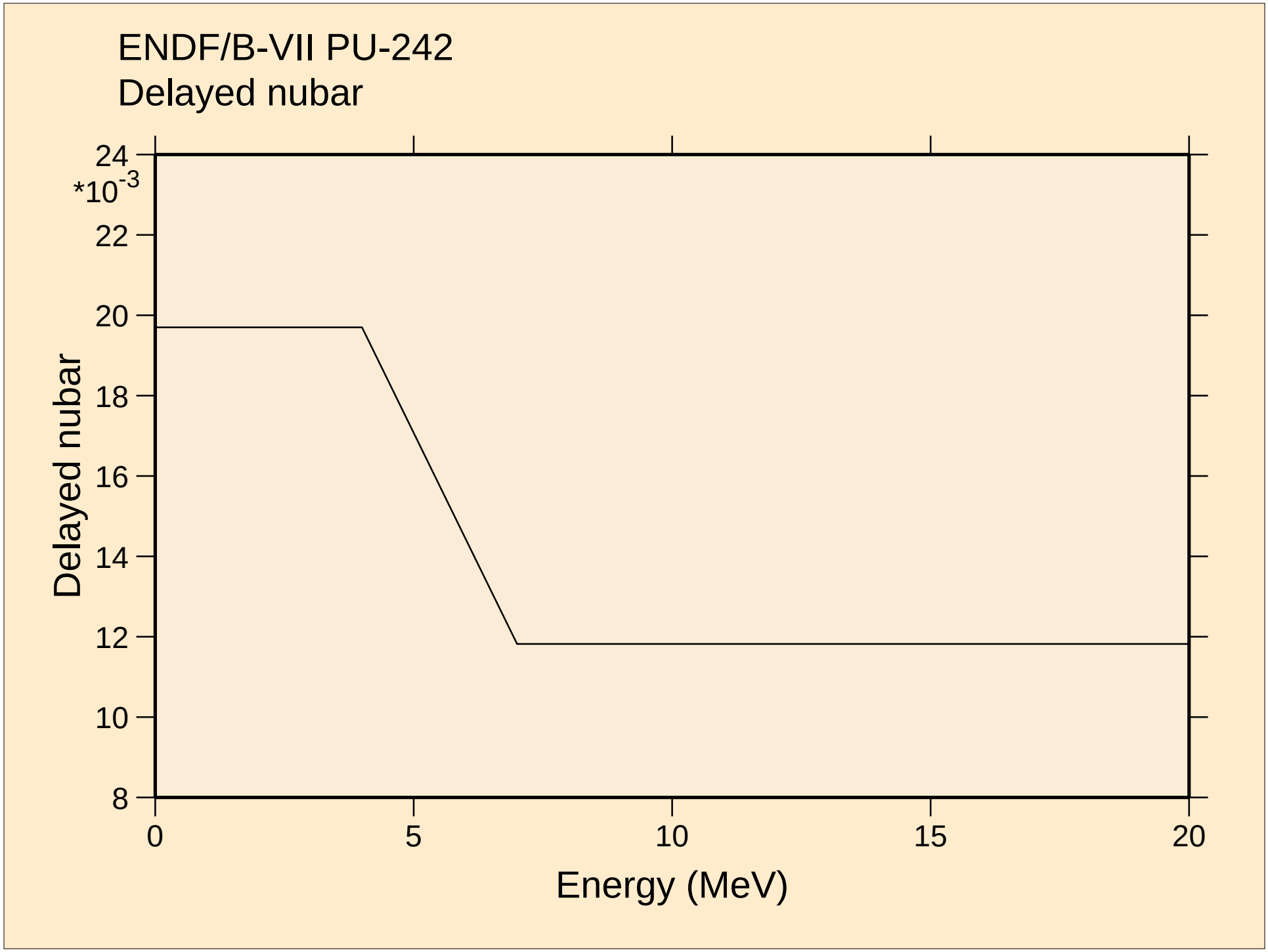

ENDF/B-VII PU-242
angular distribution for elastic
ProbCos
10^{1}
10^{-1}
10^{-3}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20

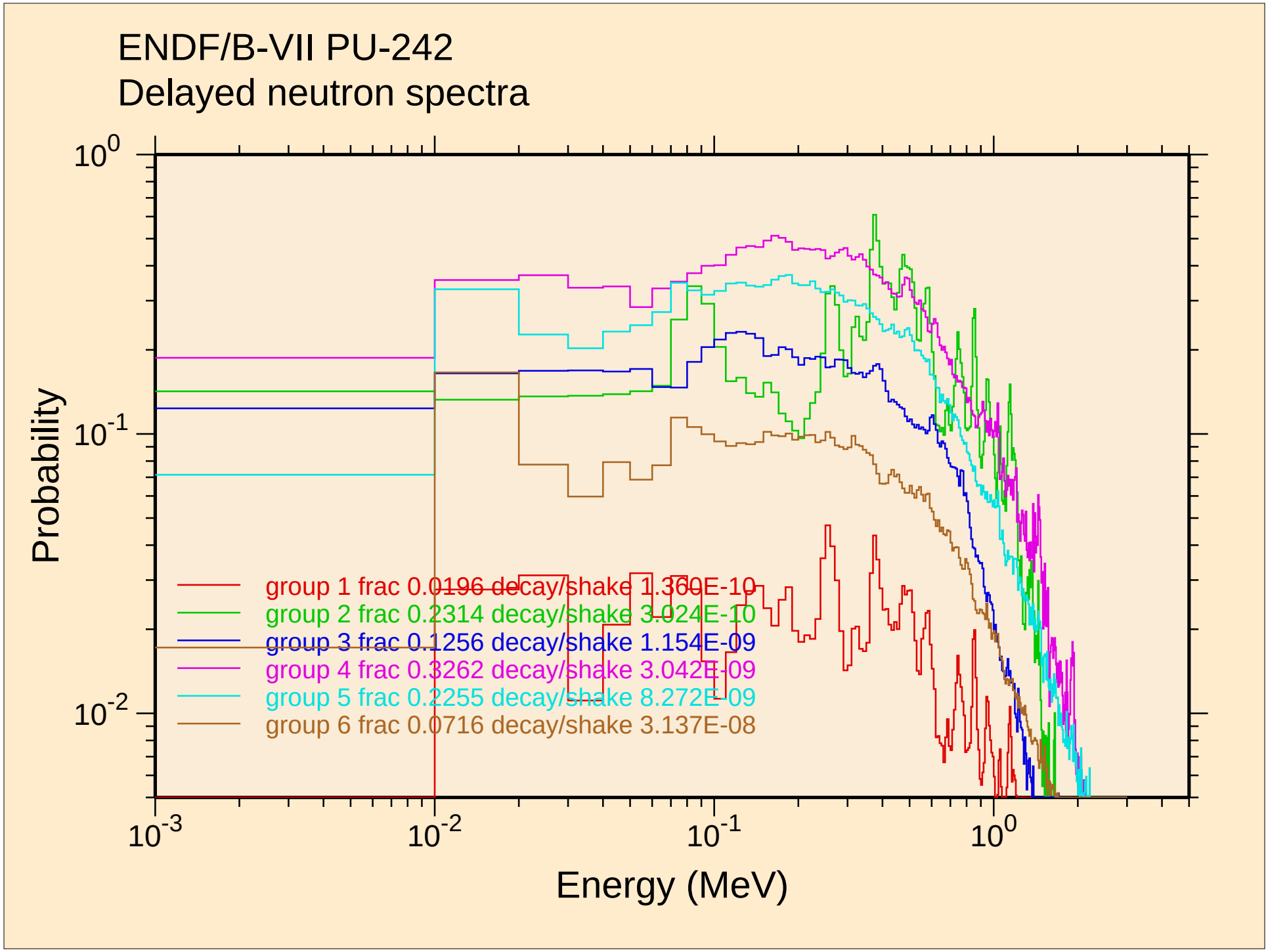

ENDF/B-VII PU-242
angular distribution for (n,n*1)
Prob/Cos
10^{1}
10^{0}
10^{-1}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20


ENDF/B-VII PU-242
angular distribution for (n,n*2)
ProbCos
10^{0}
10^{-1}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20

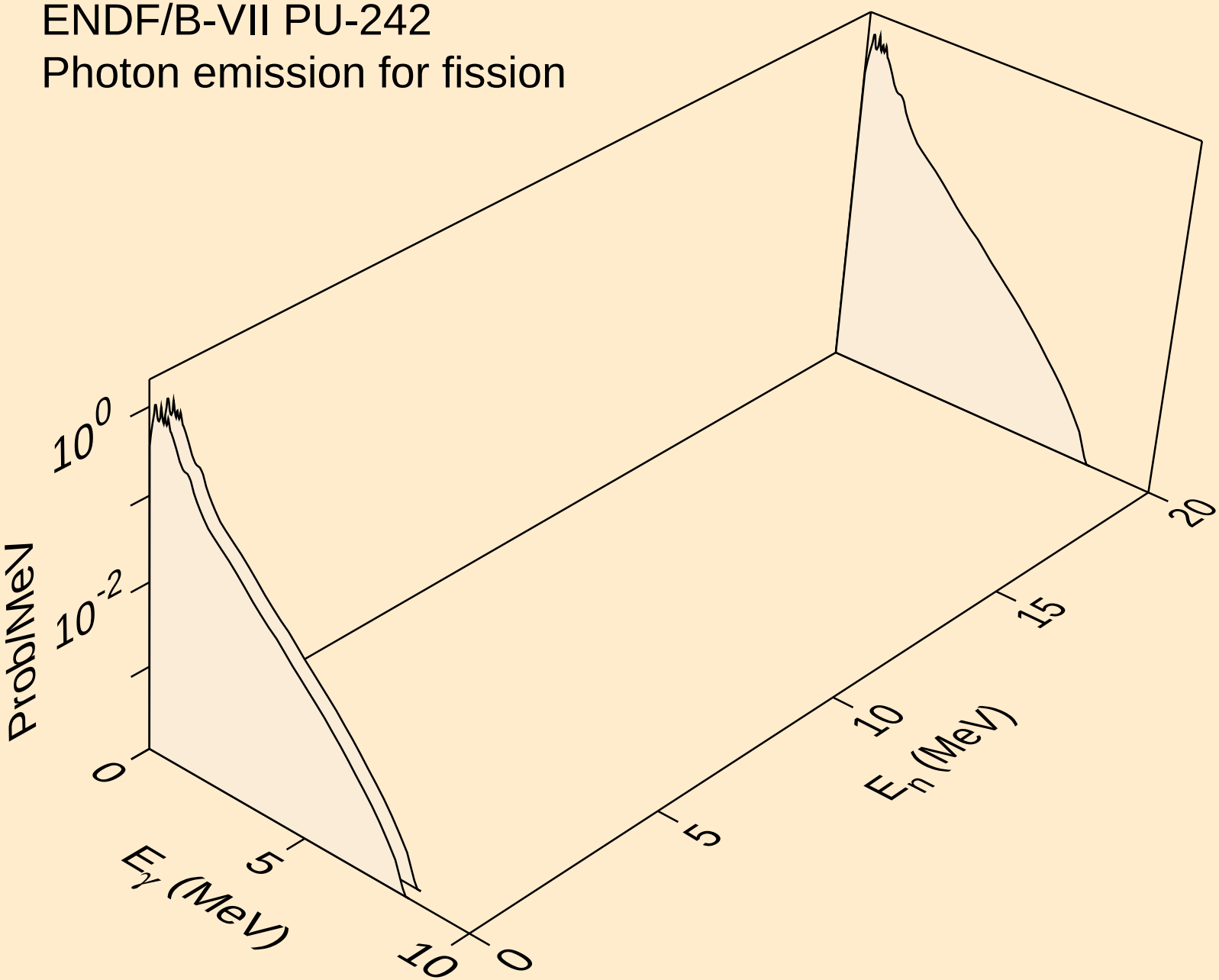

ENDF/B-VII PU-242
angular distribution for (n,n*3)
ProbCos
10^{0}
10^{-1}
10^{-2}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
2
4
6
8
10
12
14
16
18
20


ENDF/B-VII PU-242
Total fission nubar
Fission nubar
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
0
5
10
15
20
Energy (MeV)

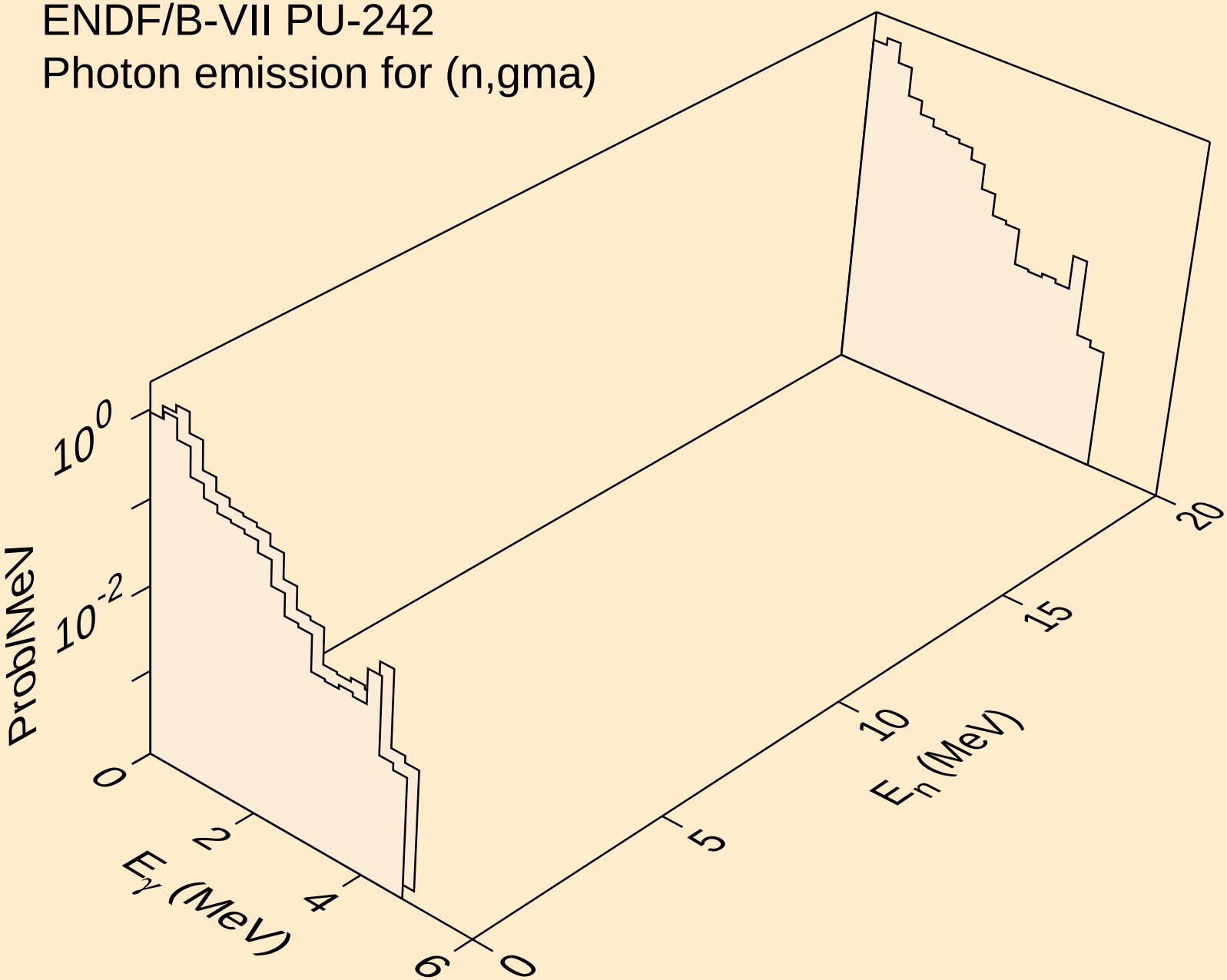

ENDF/B-VII PU-242
Delayed nubar
*10-3
24
22
20
18
16
14
12
10
8
Delayed nubar
0
5
10
15
20
Energy (MeV)


ENDF/B-VII PU-242
Delayed neutron spectra
Probability
Energy (MeV)
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-2}
10^{-1}
10^{0}
group 1 frac 0.0196 decay/shake 1.360E-10
group 2 frac 0.2314 decay/shake 3.024E-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

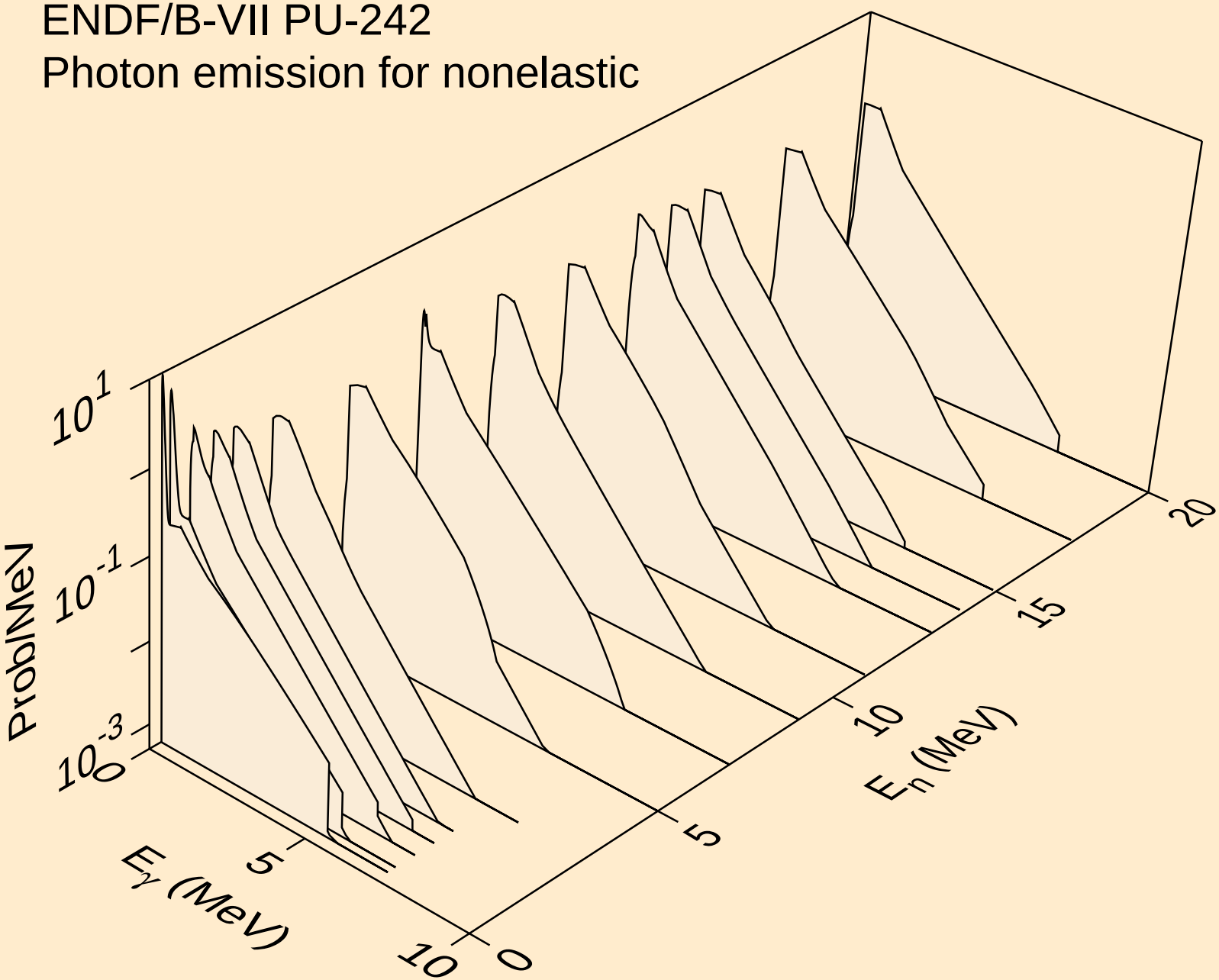
ENDF/B-VII PU-242
Photon emission for fission

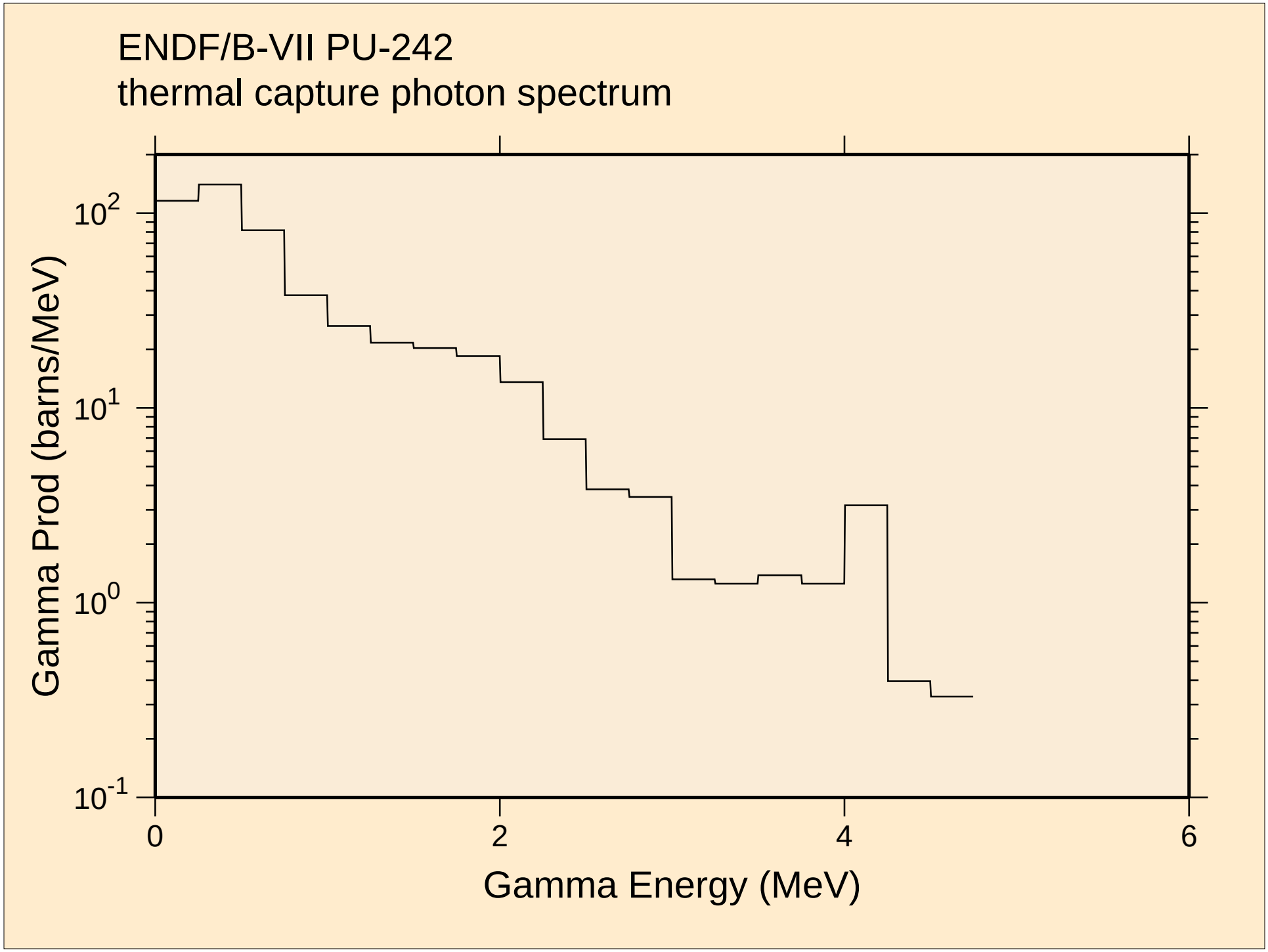


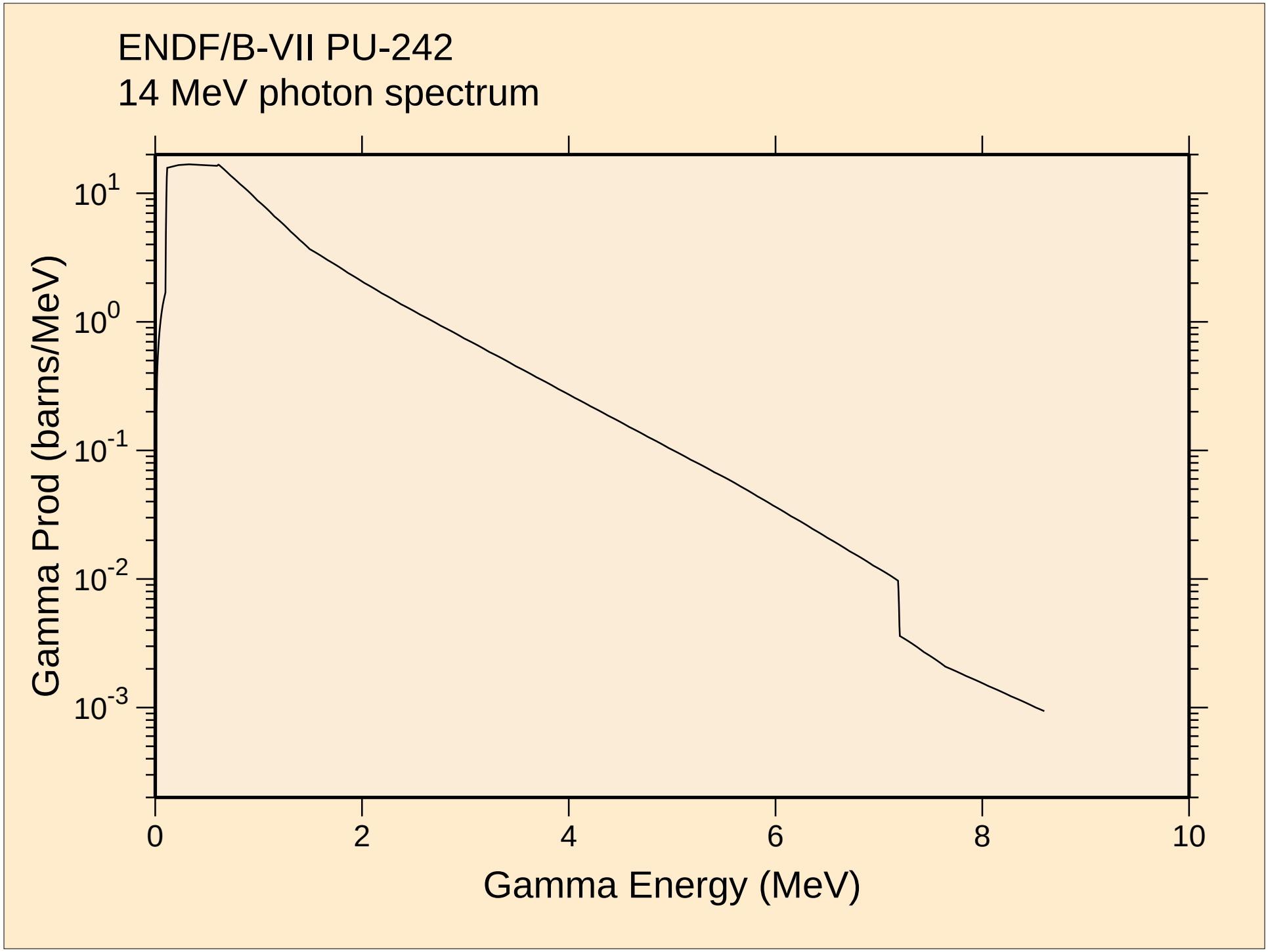
ENDF/B-VII PU-242
Photon emission for (n,gma)



ENDF/B-VII PU-242
Photon emission for nonelastic




ENDF/B-VII PU-242
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^2
10^1
10^0
10^{-1}
0
2
4
6
Gamma Energy (MeV)


ENDF/B-VII PU-242
14 MeV photon spectrum
Gamma Prod (barns/MeV)
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
0
2
4
6
8
10
Gamma Energy (MeV)