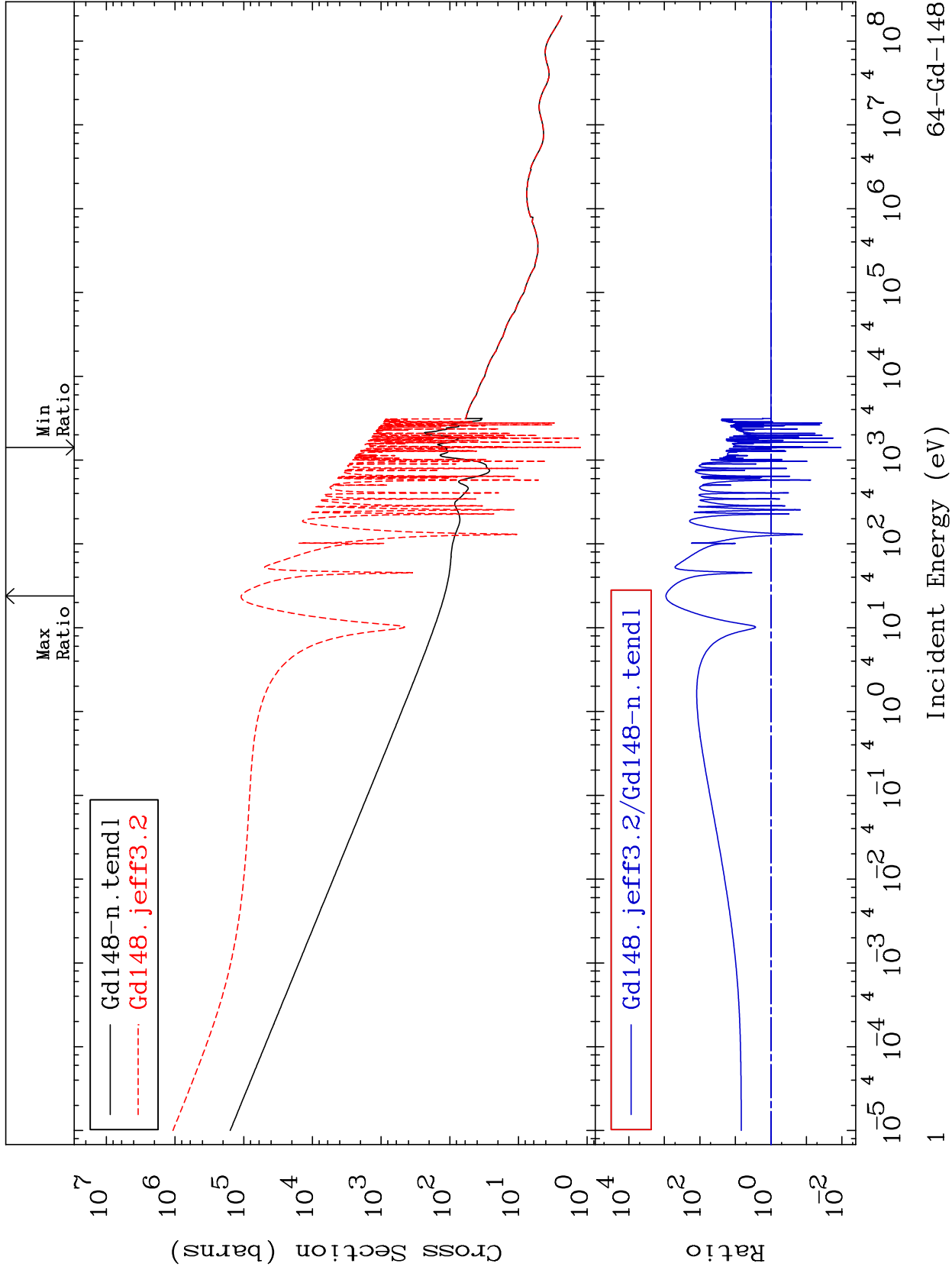


MAT 6413

64-Gd-148
-98.93 To 9999. %

Total
Cross Section



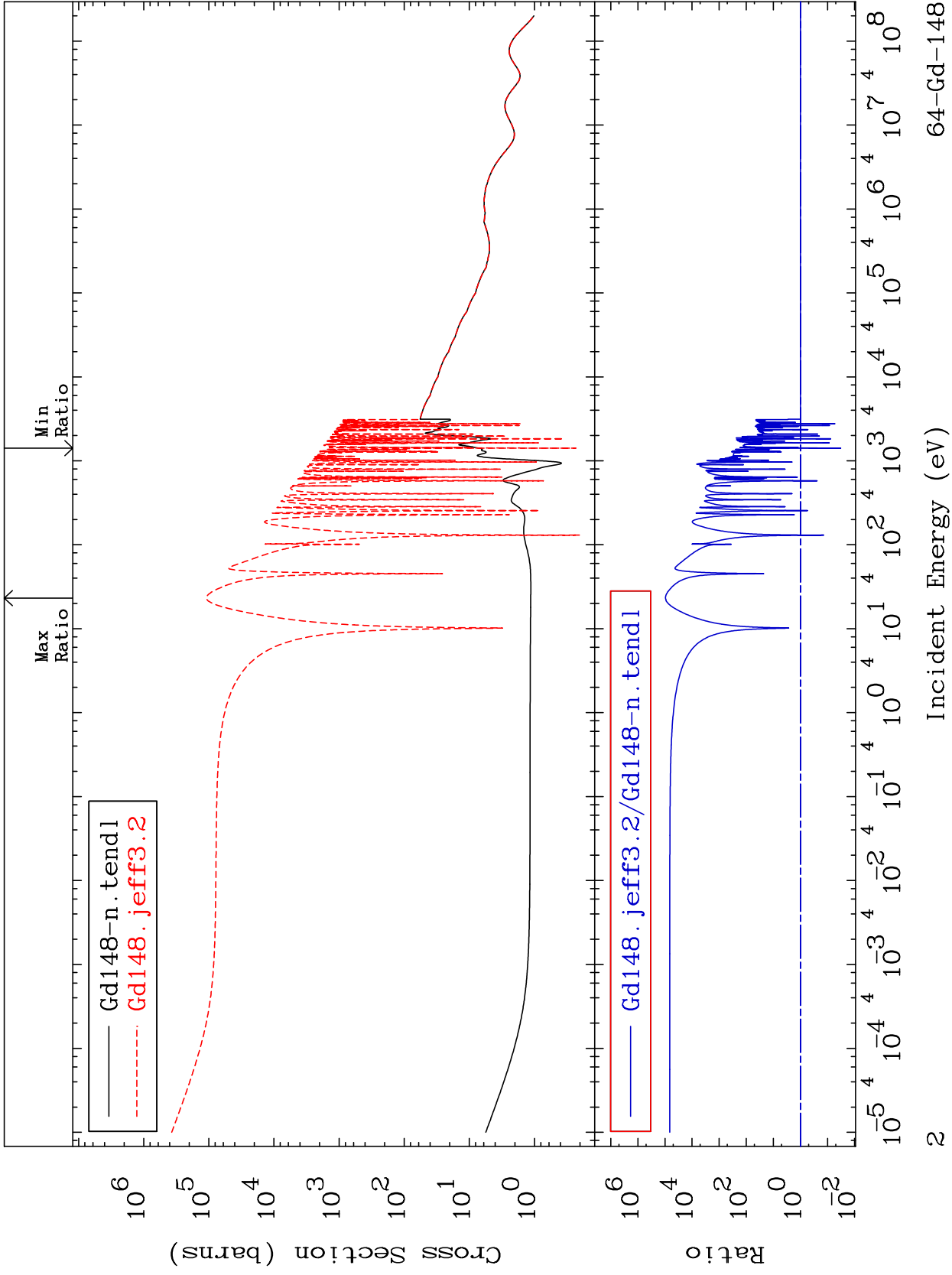
64-Gd-148

Incident Energy (eV)

MAT 6413

64-Gd-148
-96.73 To 9999. %

Elastic
Cross Section



64-Gd-148

Incident Energy (eV)

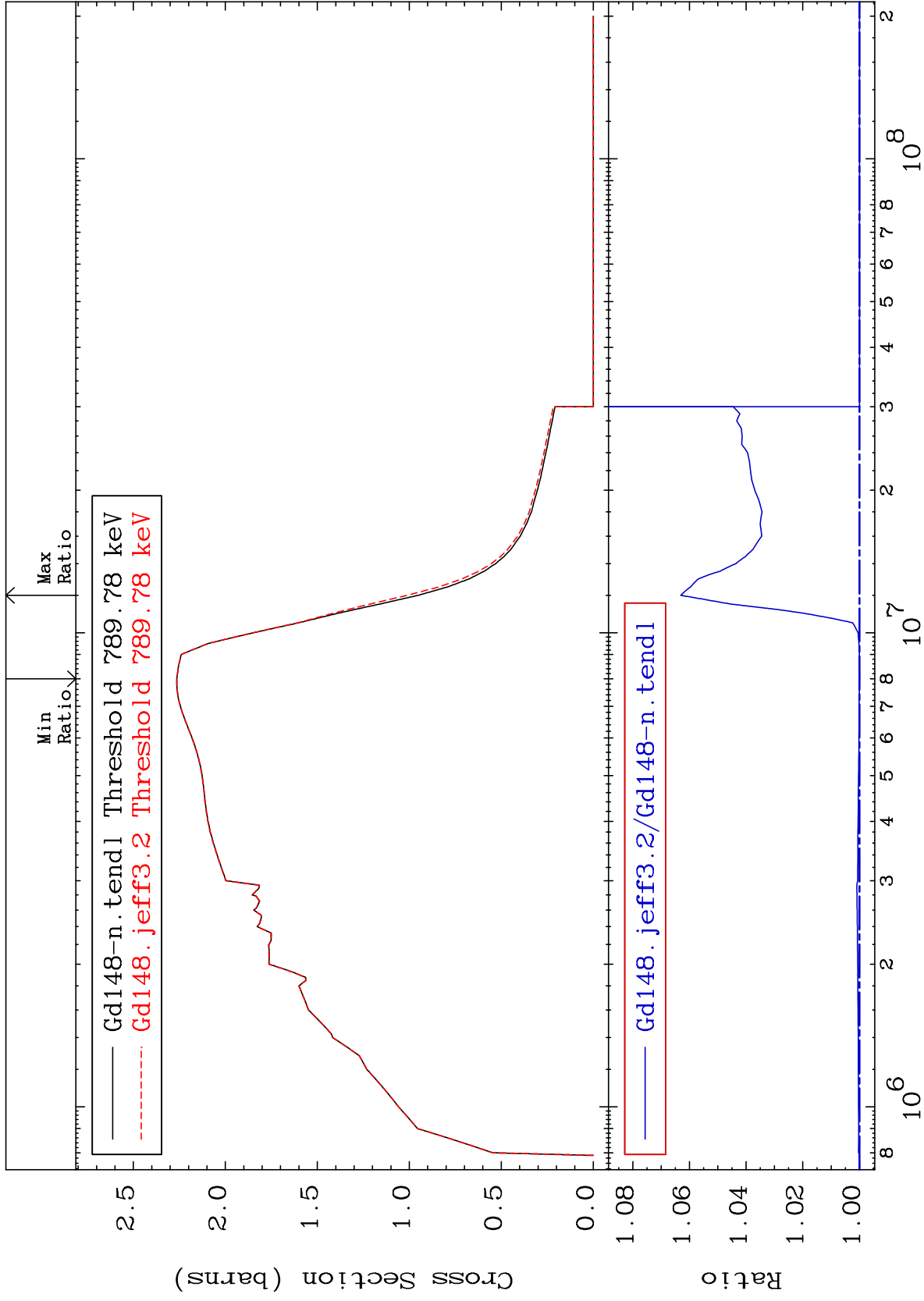
2

MAT 6413

64-Gd-148

-0.002 To 6.306 %

Inelastic
Cross Section



3

Incident Energy (eV)

64-Gd-148

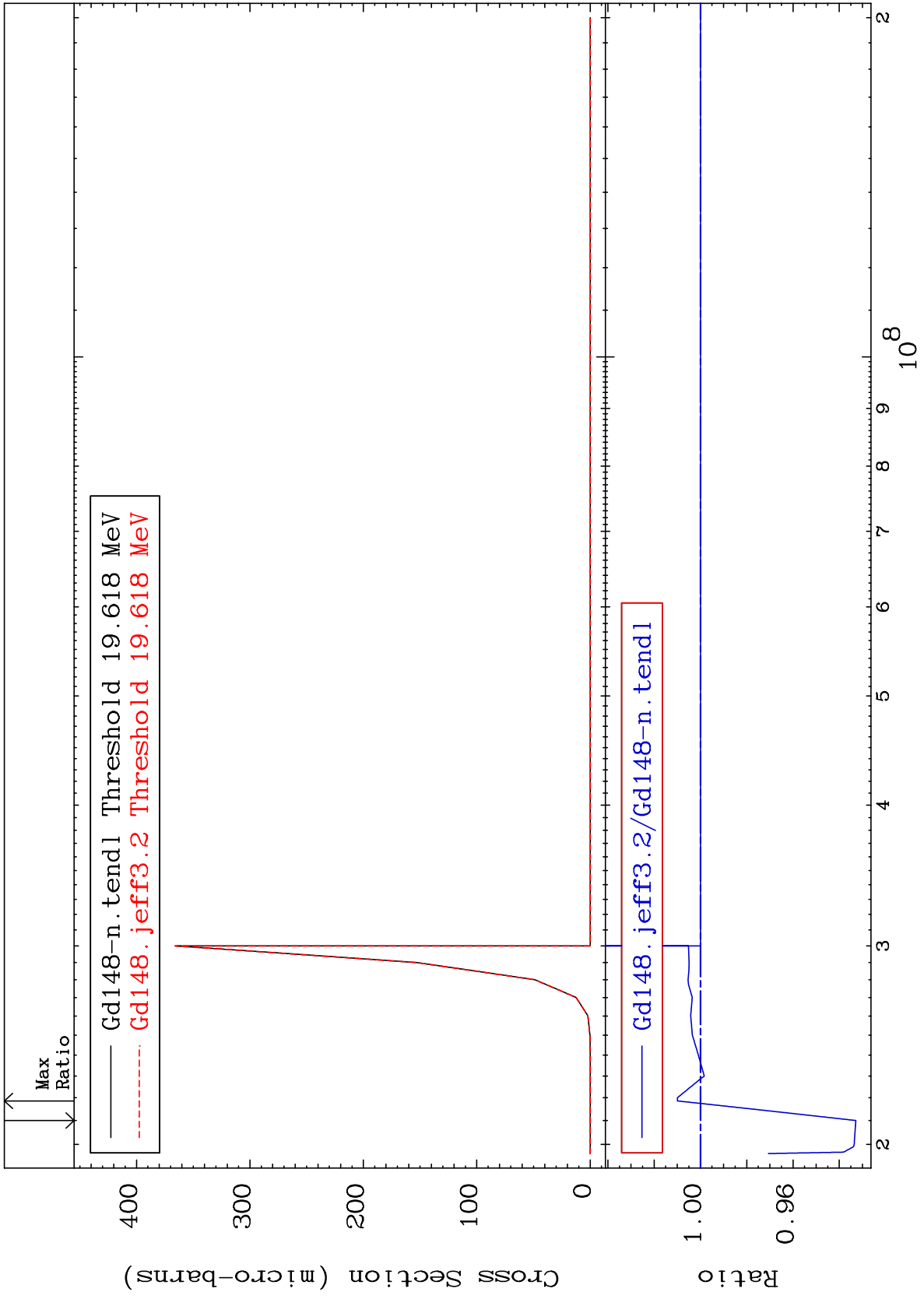
MAT 6413

(n,2n) d

64-Gd-148

Cross Section

-6.714 To 0.991 %



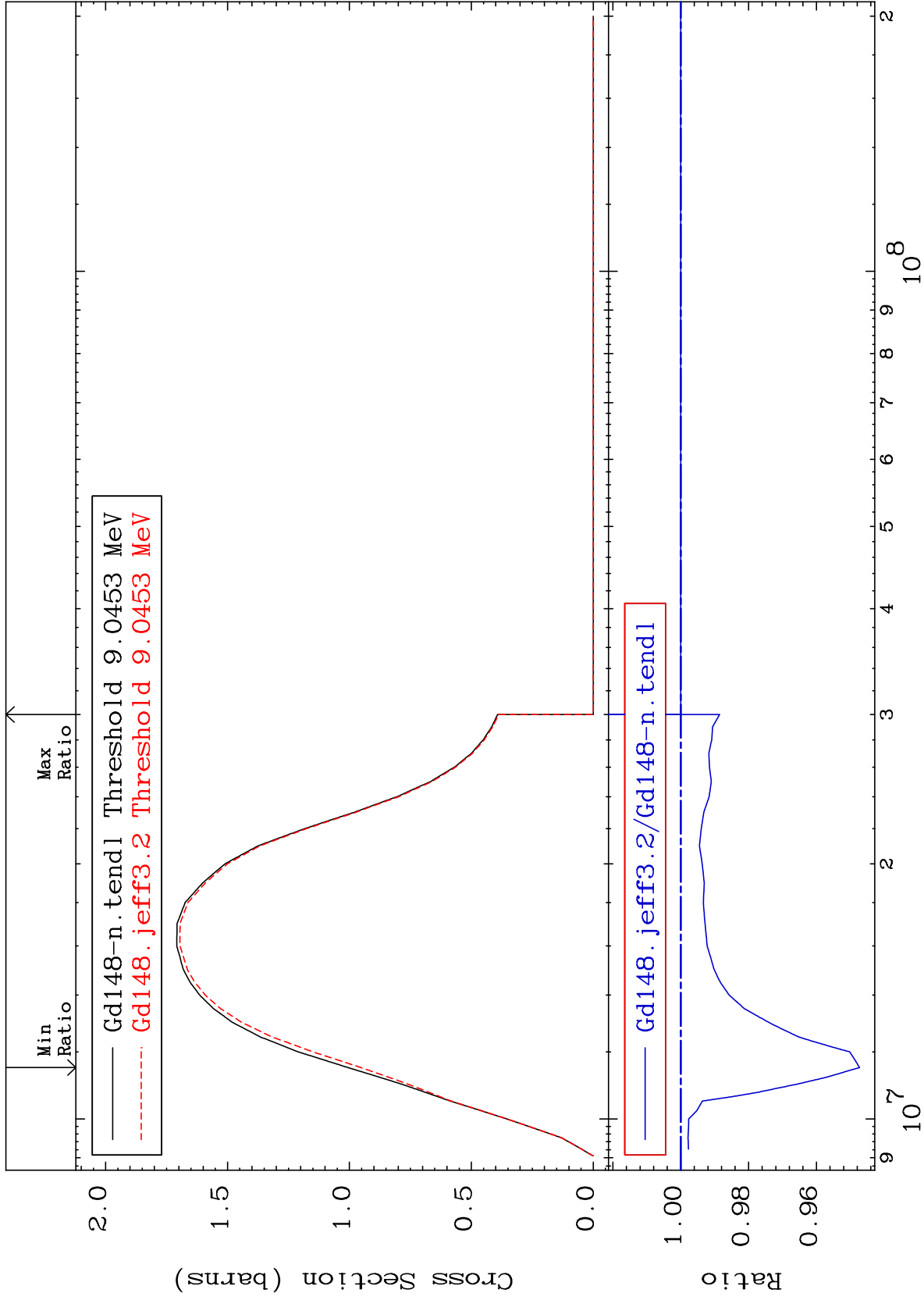
MAT 6413

(n,2n)

64-Gd-148

Cross Section

-5.269 To 0.000 %



64-Gd-148

64-Gd-148

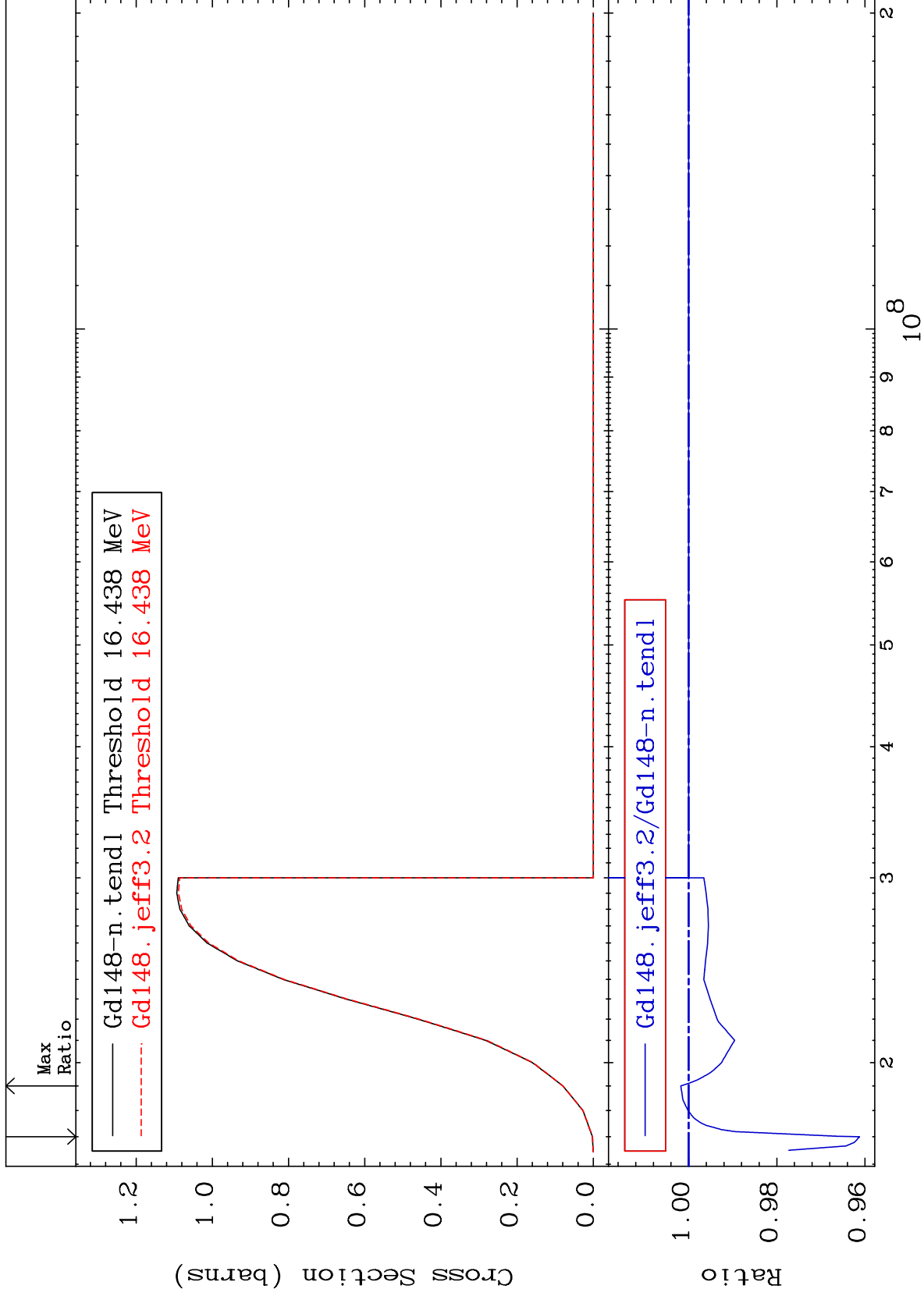
MAT 6413

(n,3n)

64-Gd-148

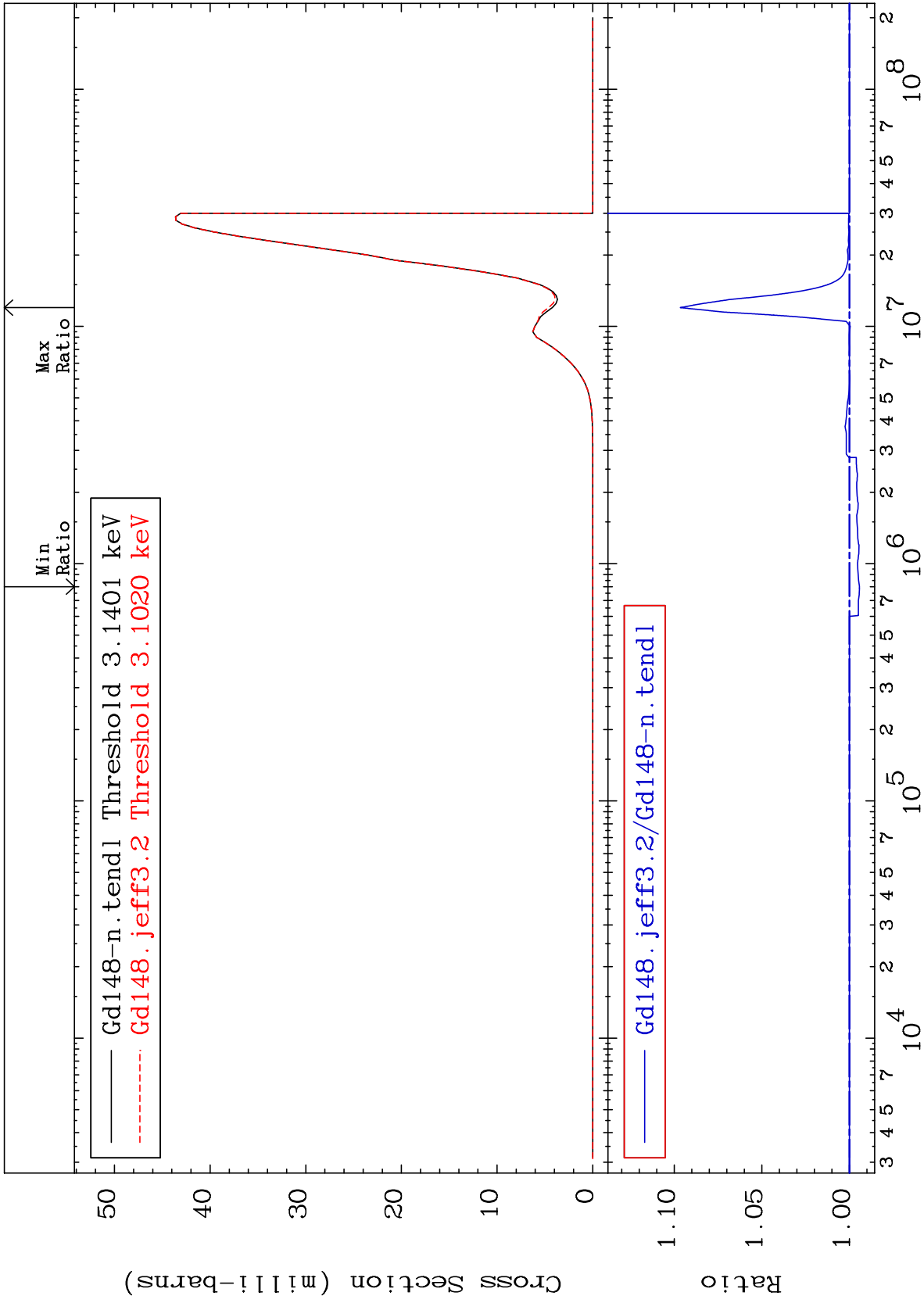
Cross Section

-3.876 To 0.179 %



MAT 6413

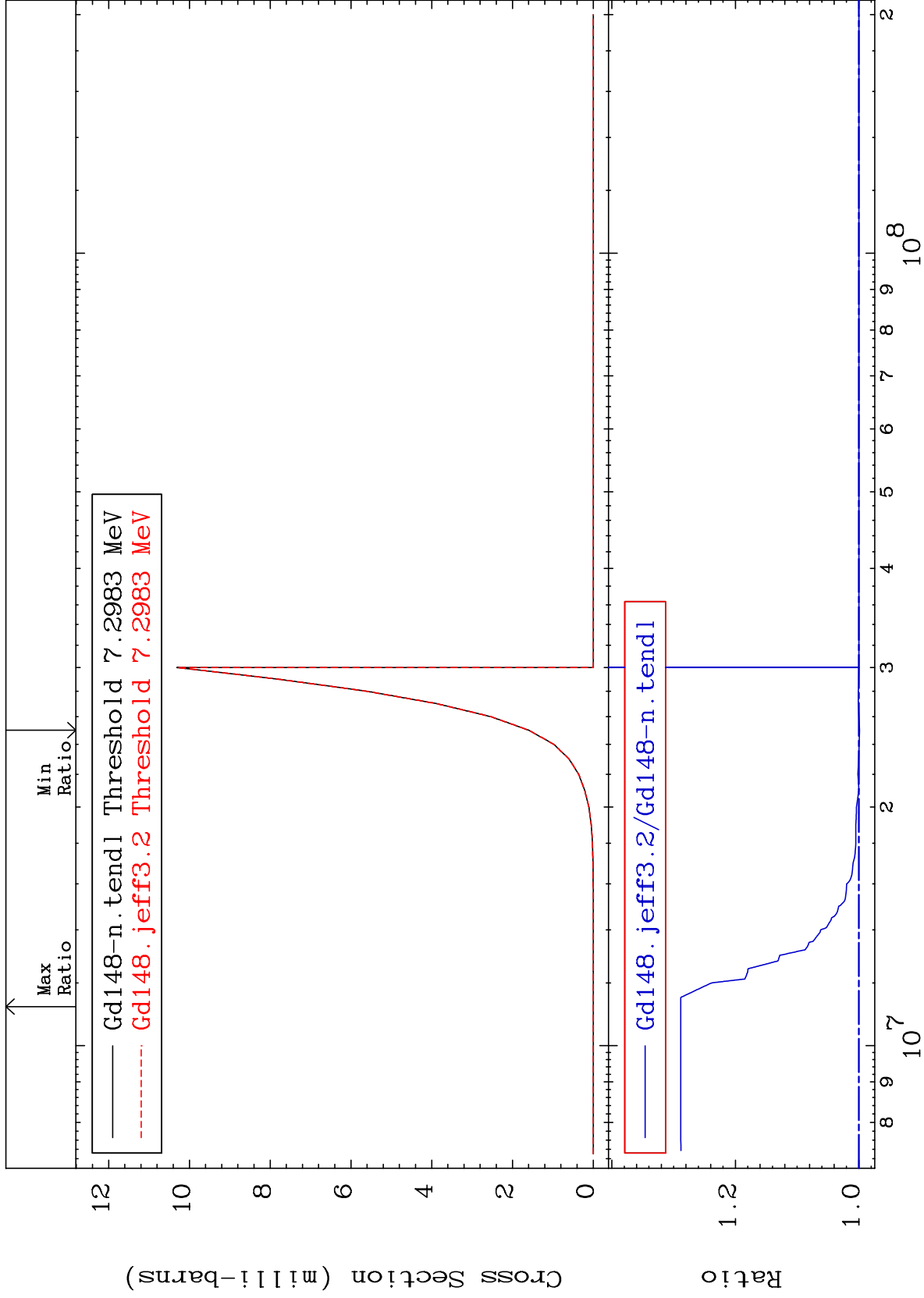
$(n, n') \alpha$
Cross Section
64-Gd-148
-0.575 To 9.655 %



MAT 6413

(n,2n) α
Cross Section

64-Gd-148
-0.109 To 28.85 %



8

Incident Energy (eV)

64-Gd-148

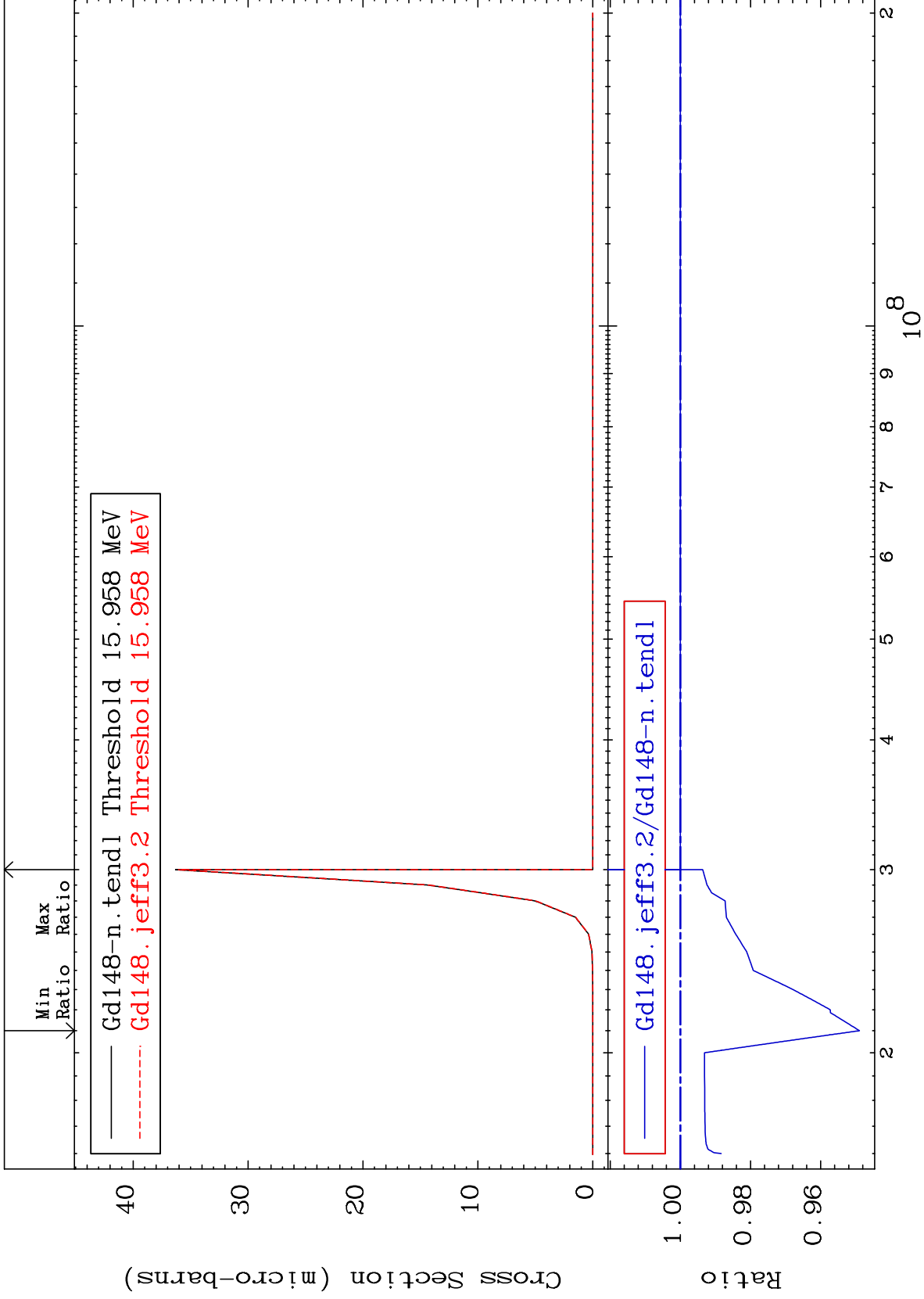
MAT 6413

(n,3n) α

64-Gd-148

Cross Section

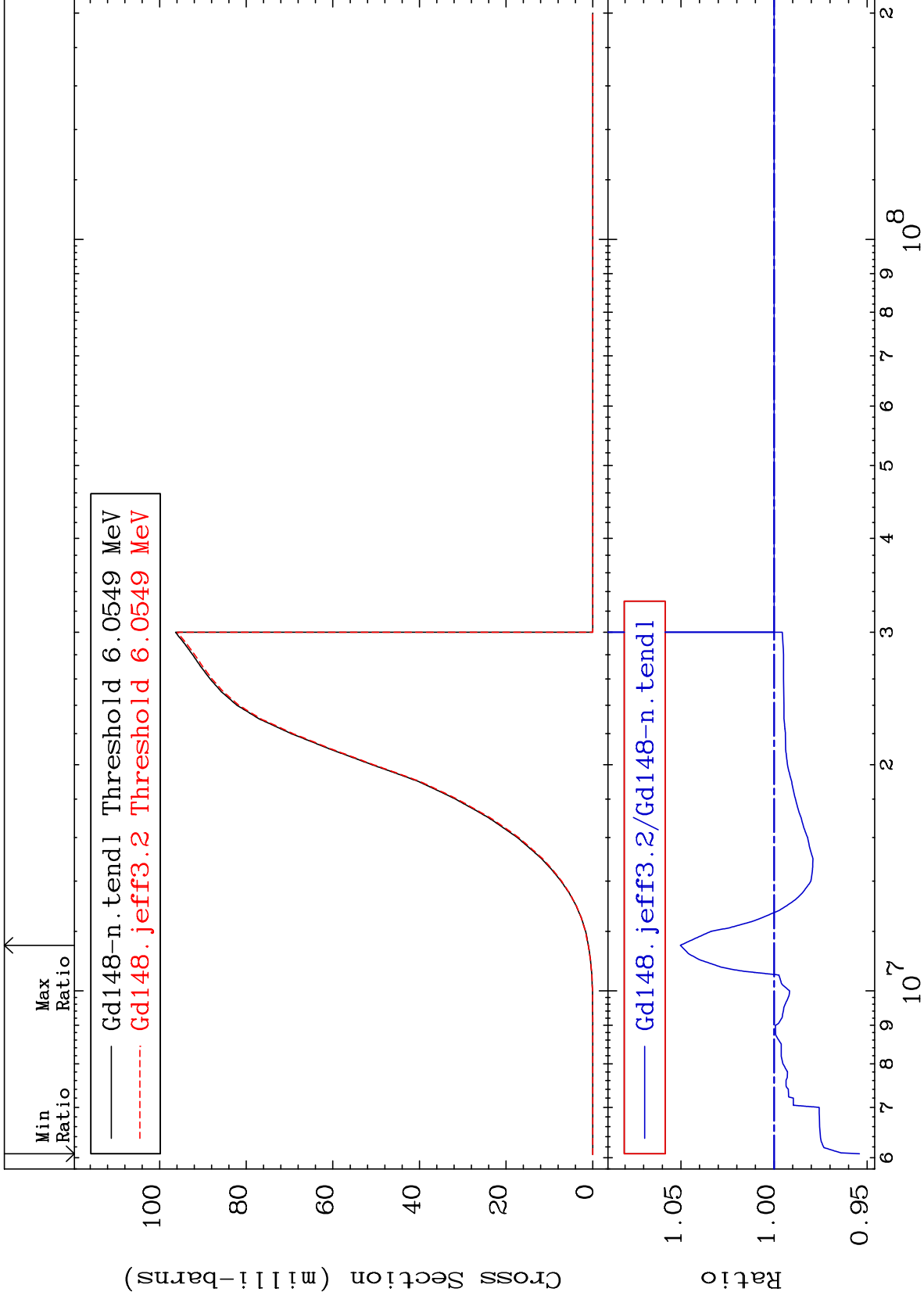
-5.105 To 0.000 %



MAT 6413

(n,n') p
Cross Section

64-Gd-148
-4.584 To 5.032 %



10

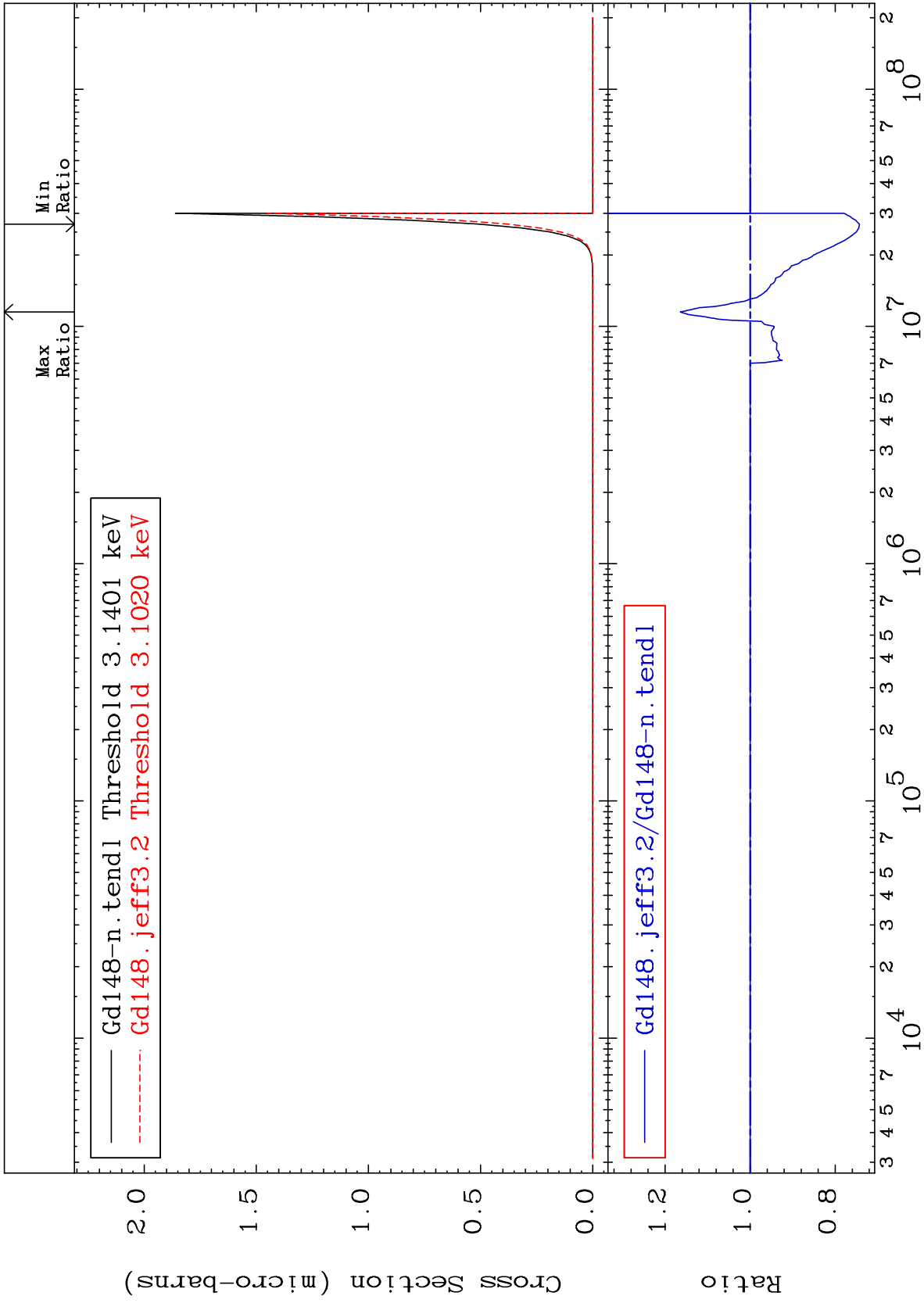
Incident Energy (eV)

64-Gd-148

MAT 6413

(n, n') 2α
Cross Section

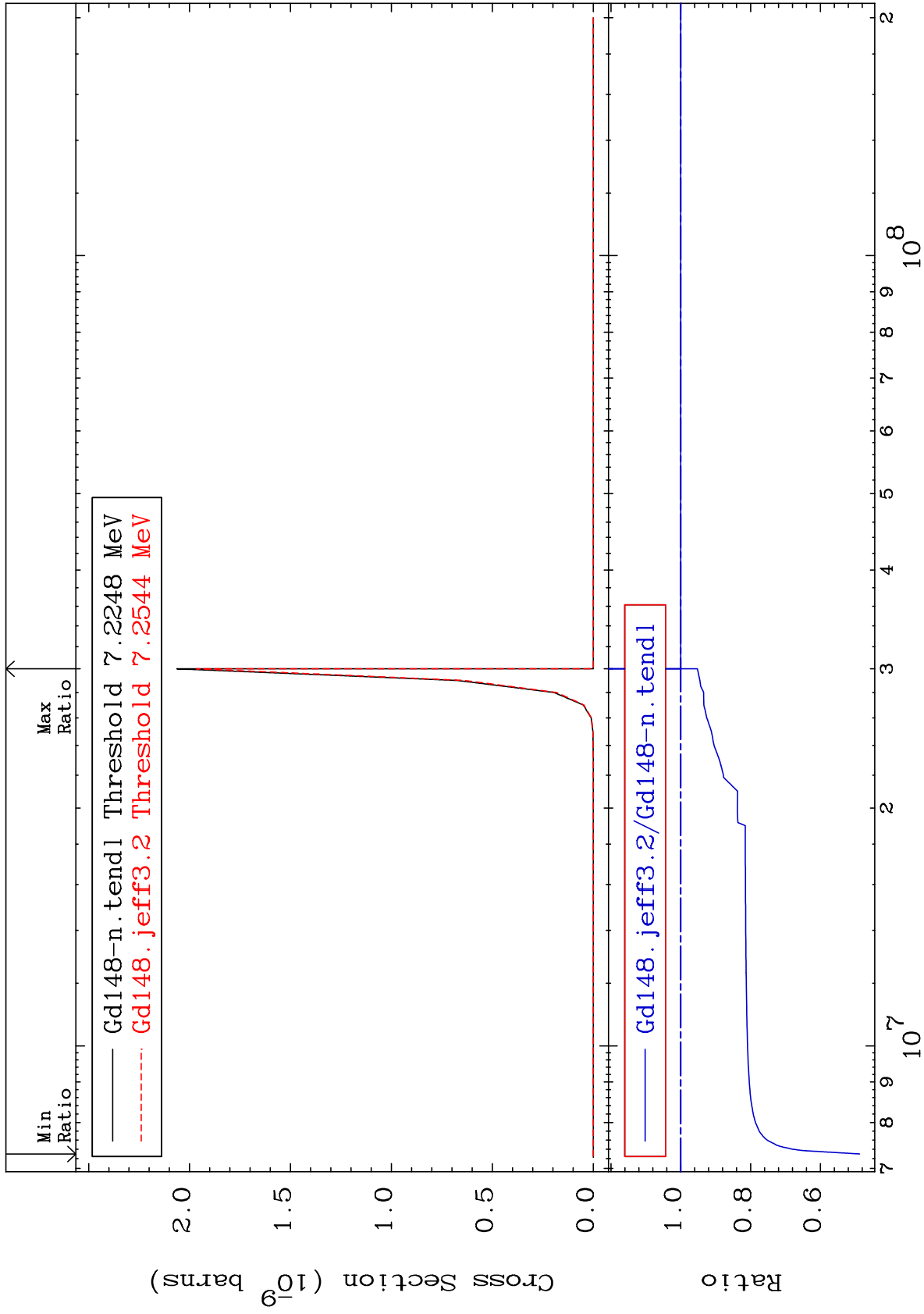
64-Gd-148
-25.68 To 16.41 %



MAT 6413

(n,2n) 2α
Cross Section

64-Gd-148
-51.22 To 0.000 %



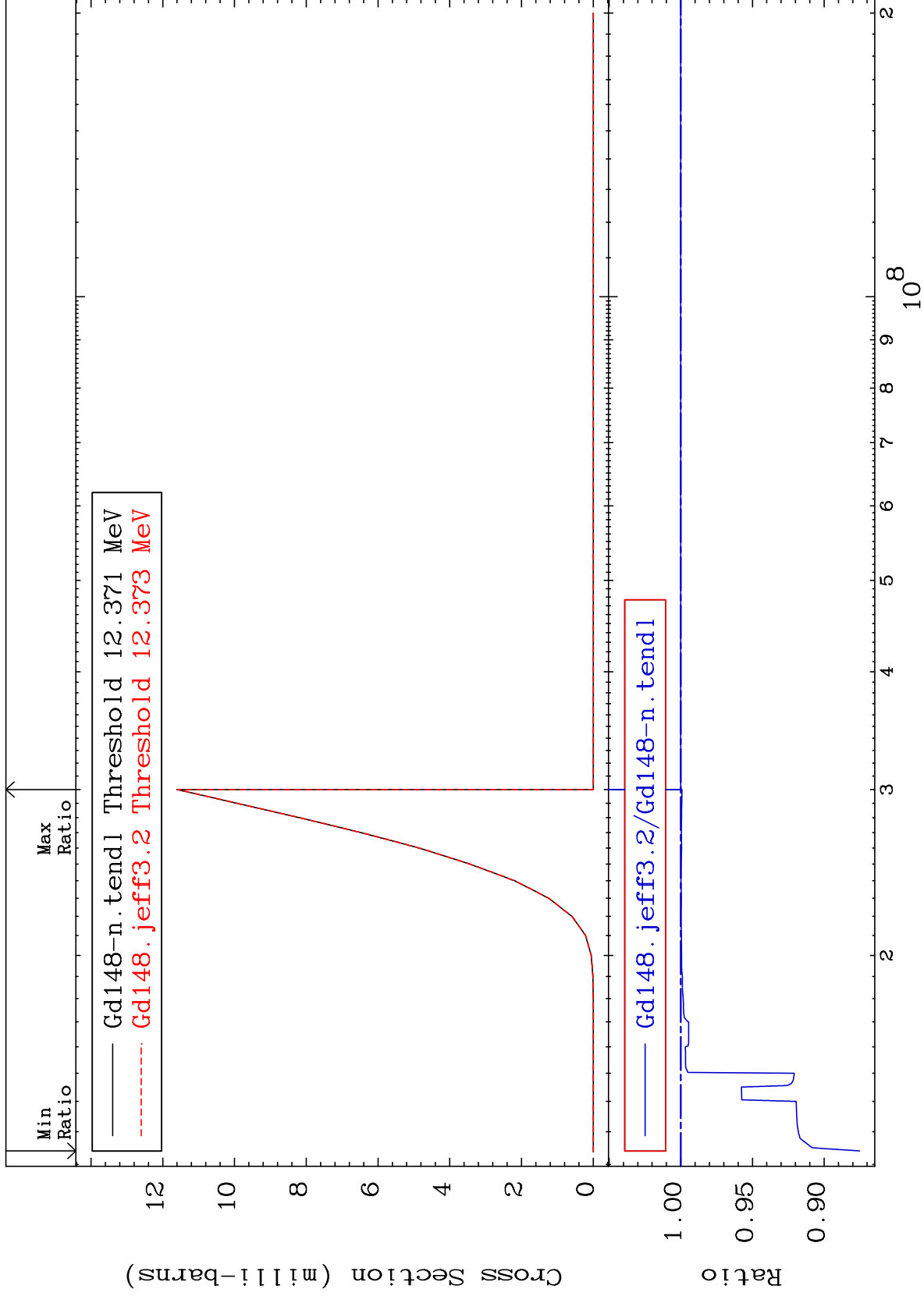
12

64-Gd-148

64-Gd-148

Cross Section

-12.47 To 0.000 %



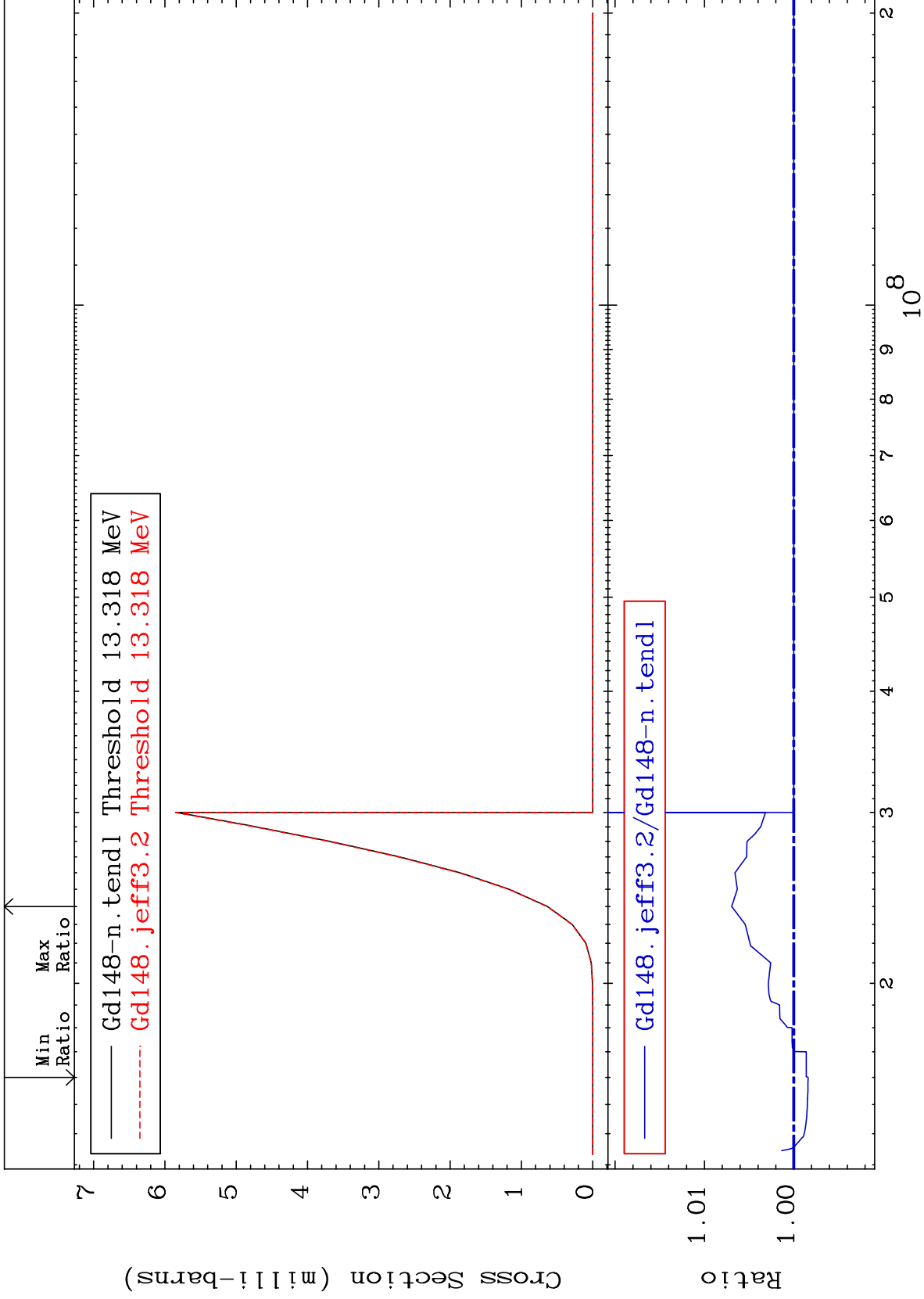
MAT 6413

(n,n') t

64-Gd-148

Cross Section

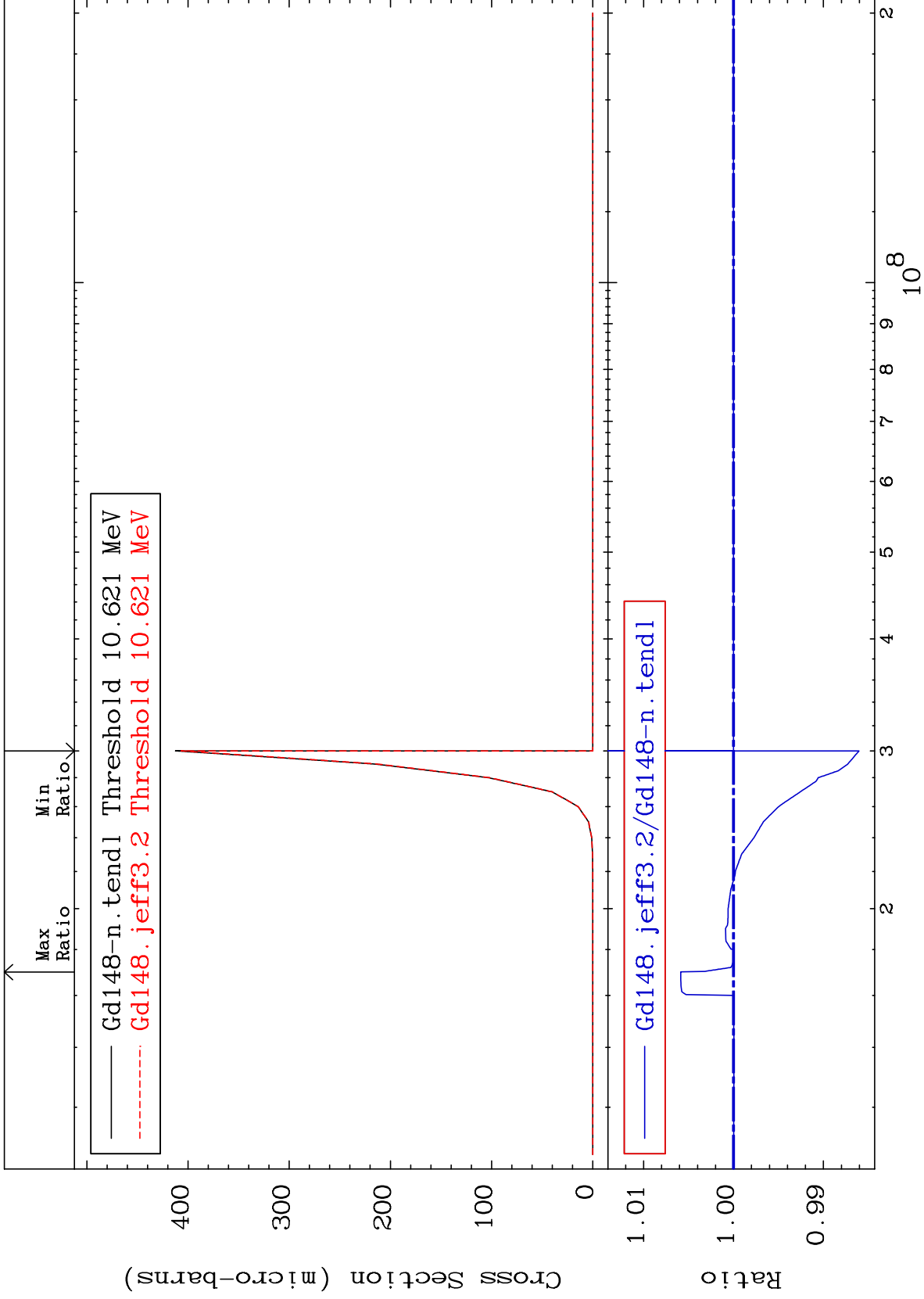
-0.162 To 0.695 %



14

Incident Energy (eV)

64-Gd-148



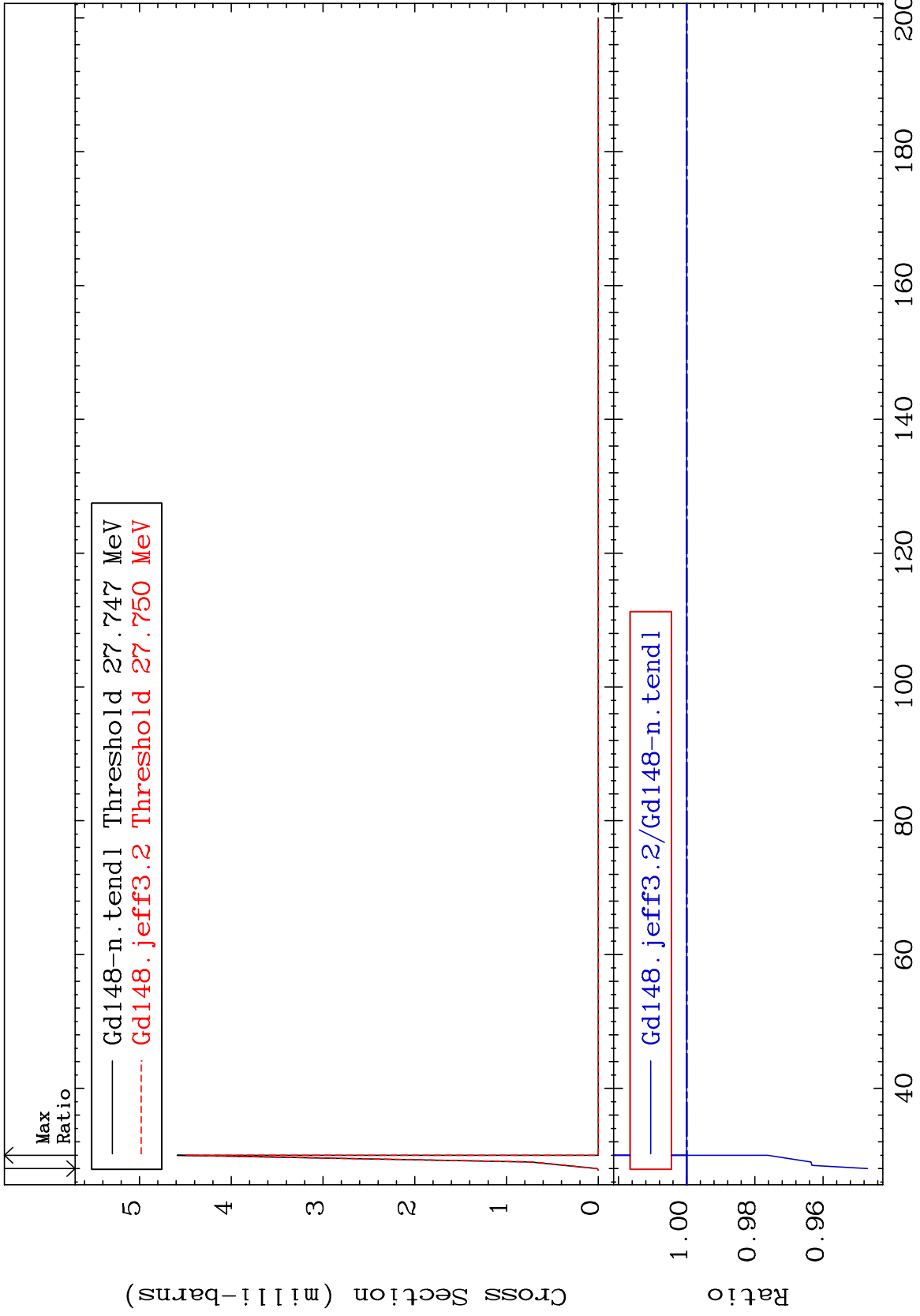
MAT 6413

(n,4n)

64-Gd-148

Cross Section

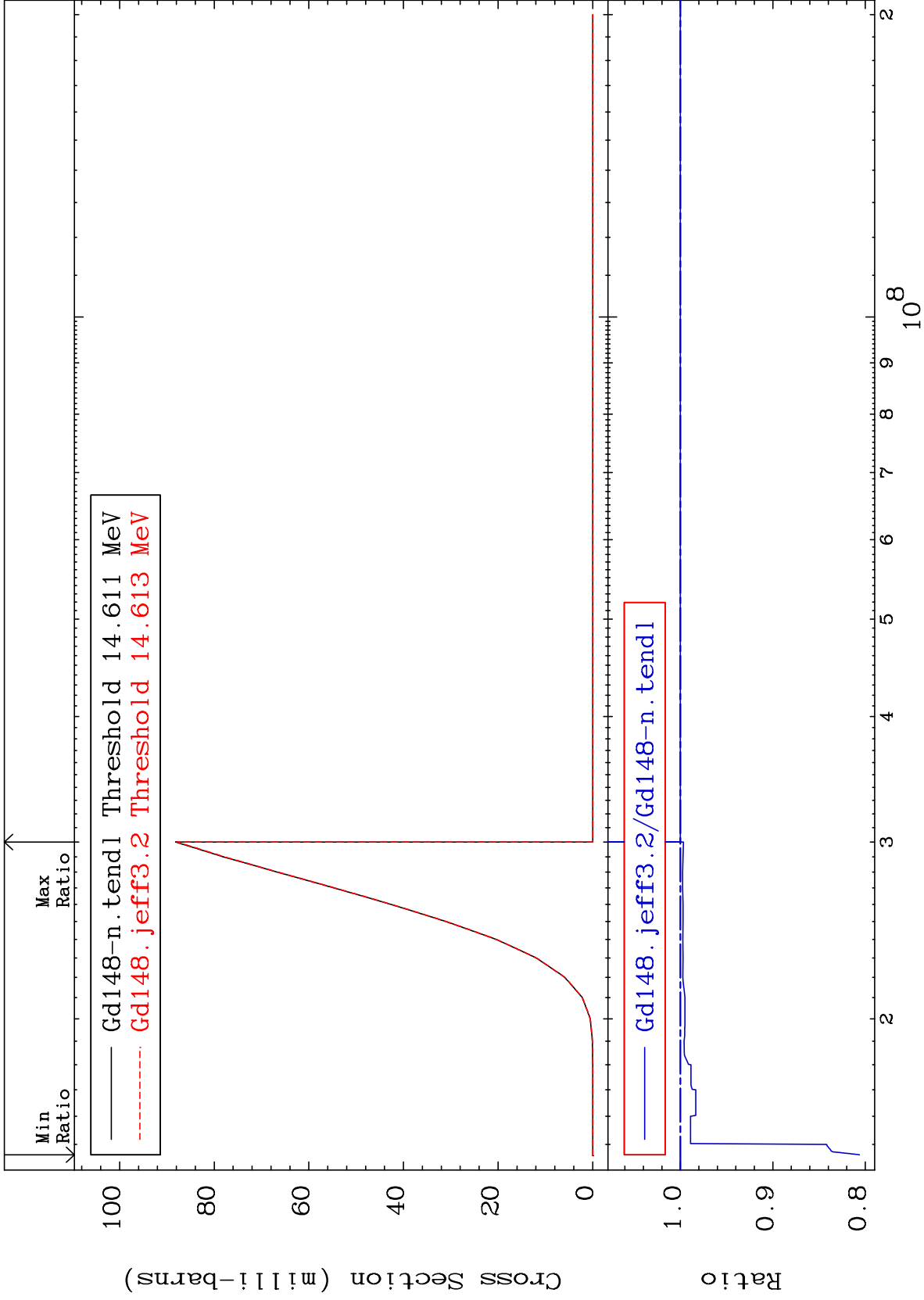
-5.300 To 0.000 %



MAT 6413

(n,2n) p
Cross Section

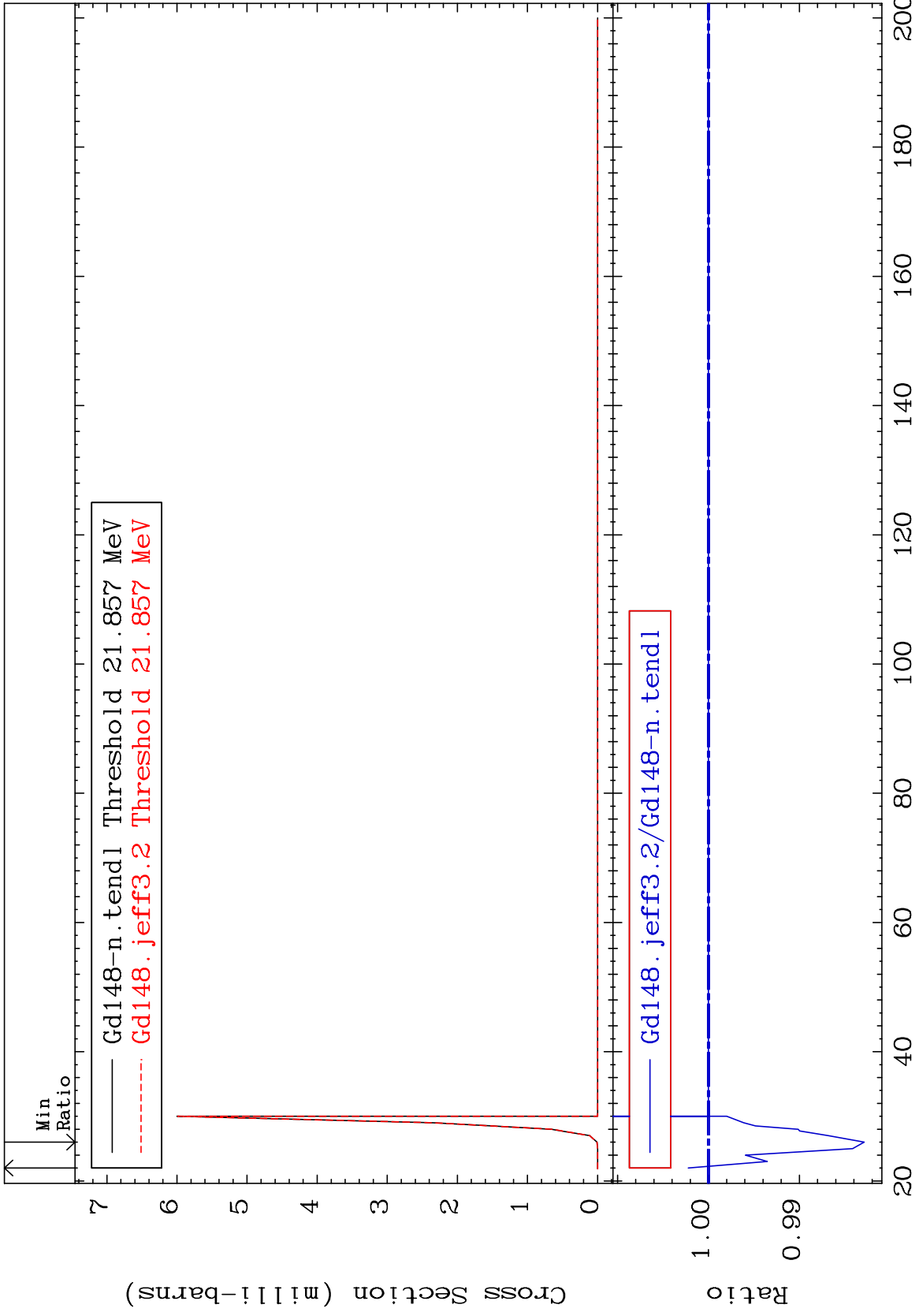
64-Gd-148
-19.37 To 0.000 %



MAT 6413

(n,3n) p
Cross Section

64-Gd-148
-1.713 To 0.223 %



18

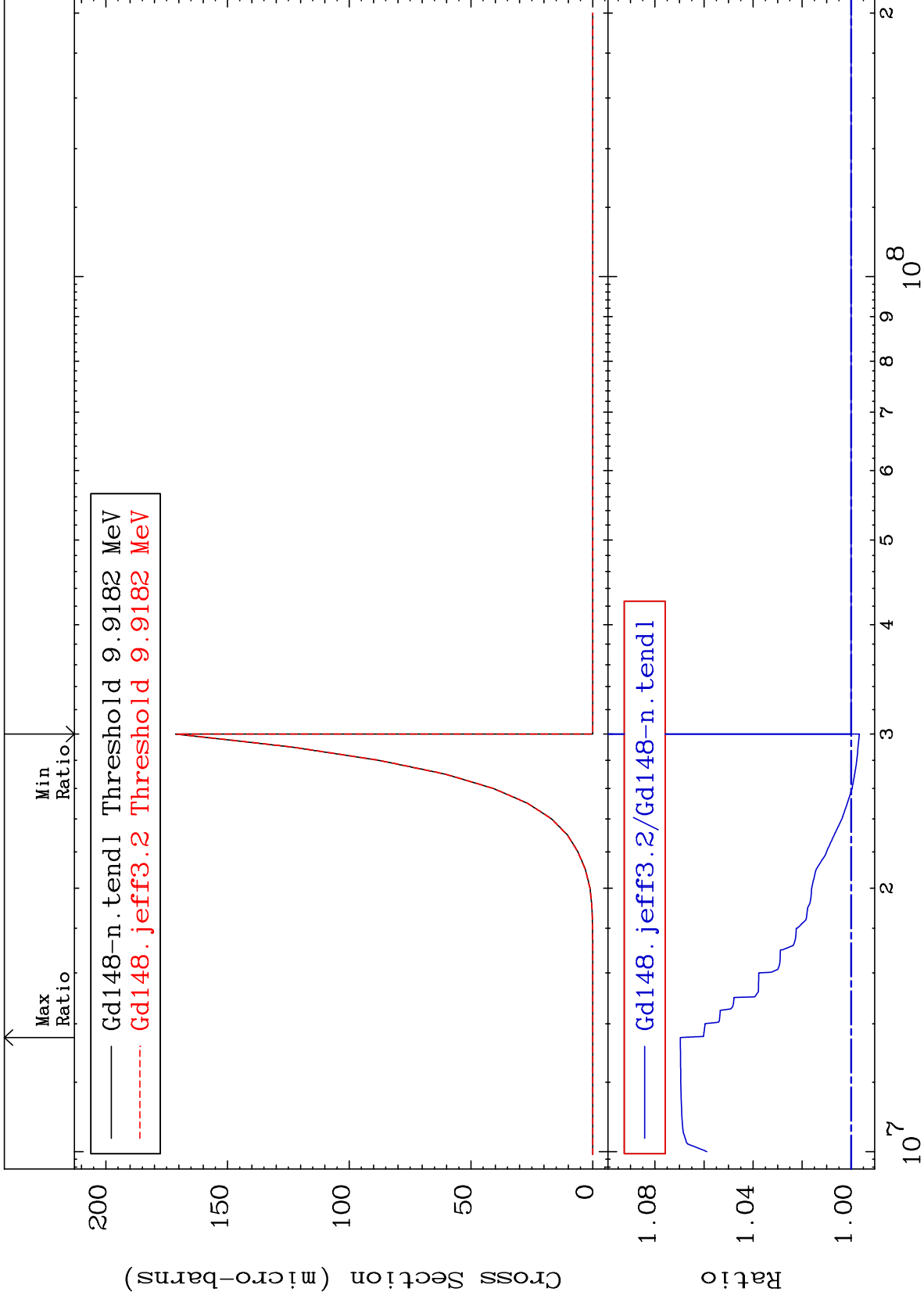
Incident Energy (MeV)

64-Gd-148

MAT 6413

(n,2n) p
Cross Section

64-Gd-148
-0.337 To 6.965 %



19

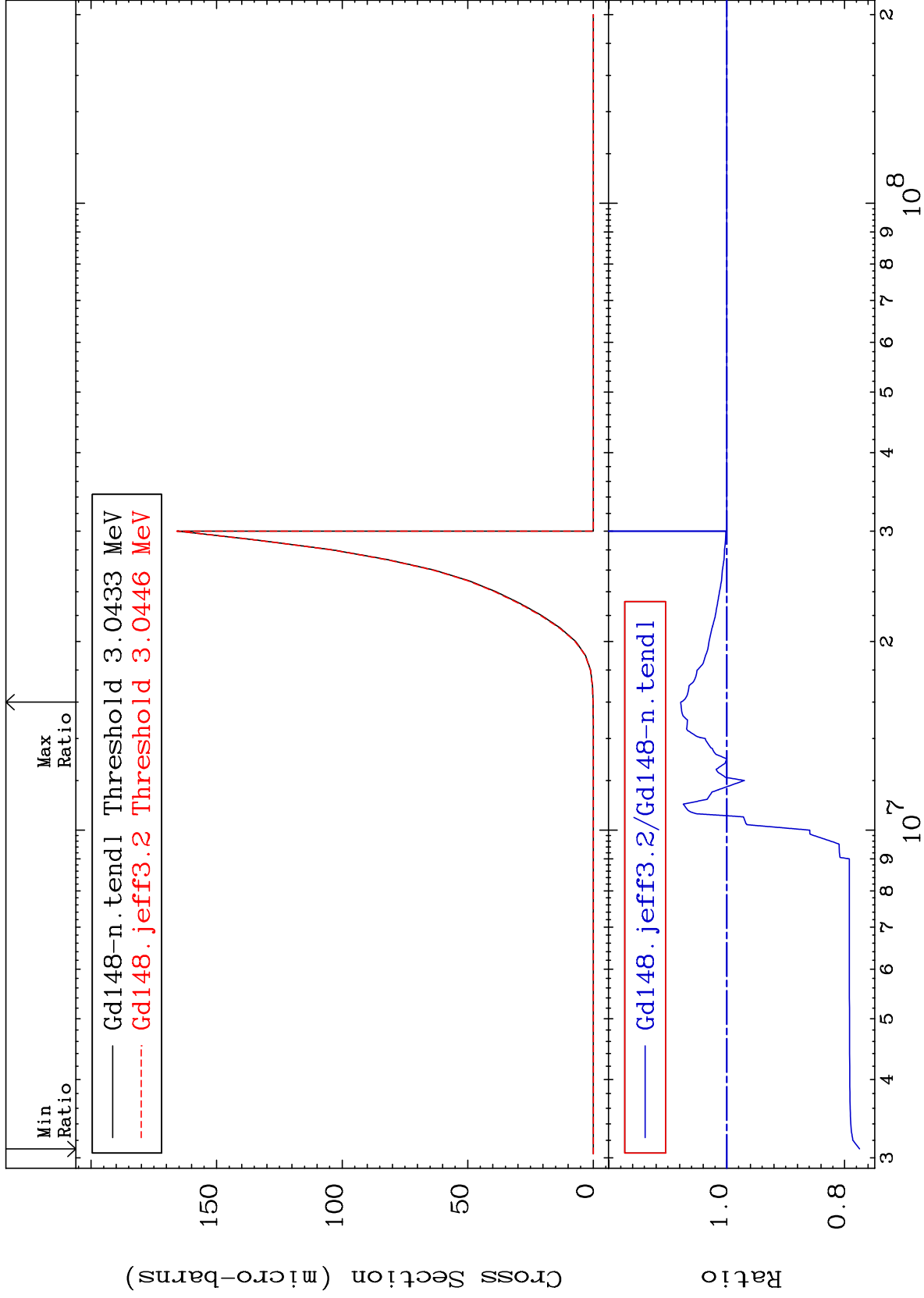
Incident Energy (eV)

64-Gd-148

MAT 6413

(n,n') p α
Cross Section

64-Gd-148
-22.54 To 7.816 %



20

Incident Energy (eV)

64-Gd-148

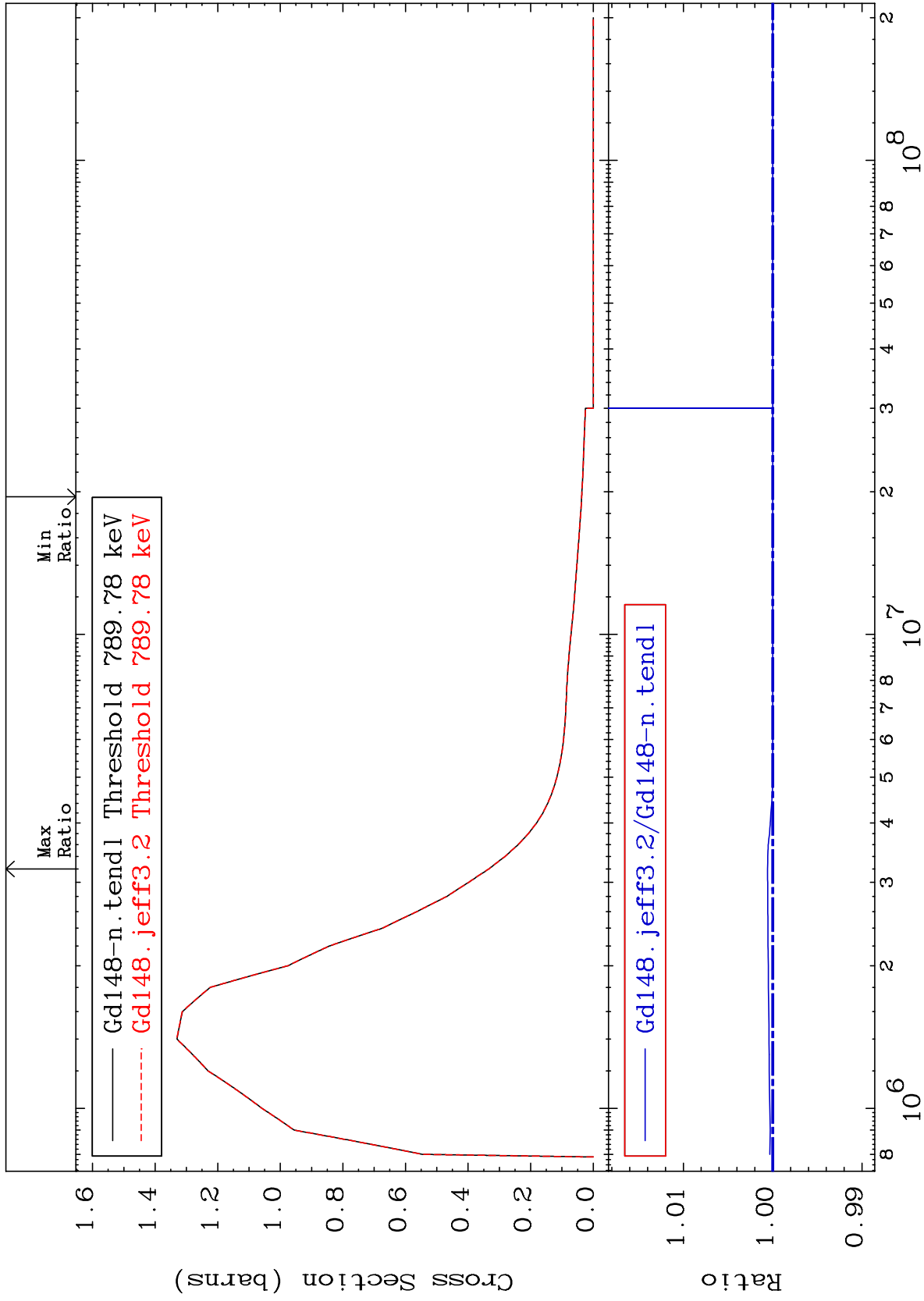
MAT 6413

784.4 keV (n,n') Level

64-Gd-148

0.000 To 0.057 %

Cross Section



Max Ratio

Min Ratio

Gd148-n.tendl Threshold 789.78 keV
Gd148.jeff3.2 Threshold 789.78 keV

Gd148.jeff3.2/Gd148-n.tendl

21

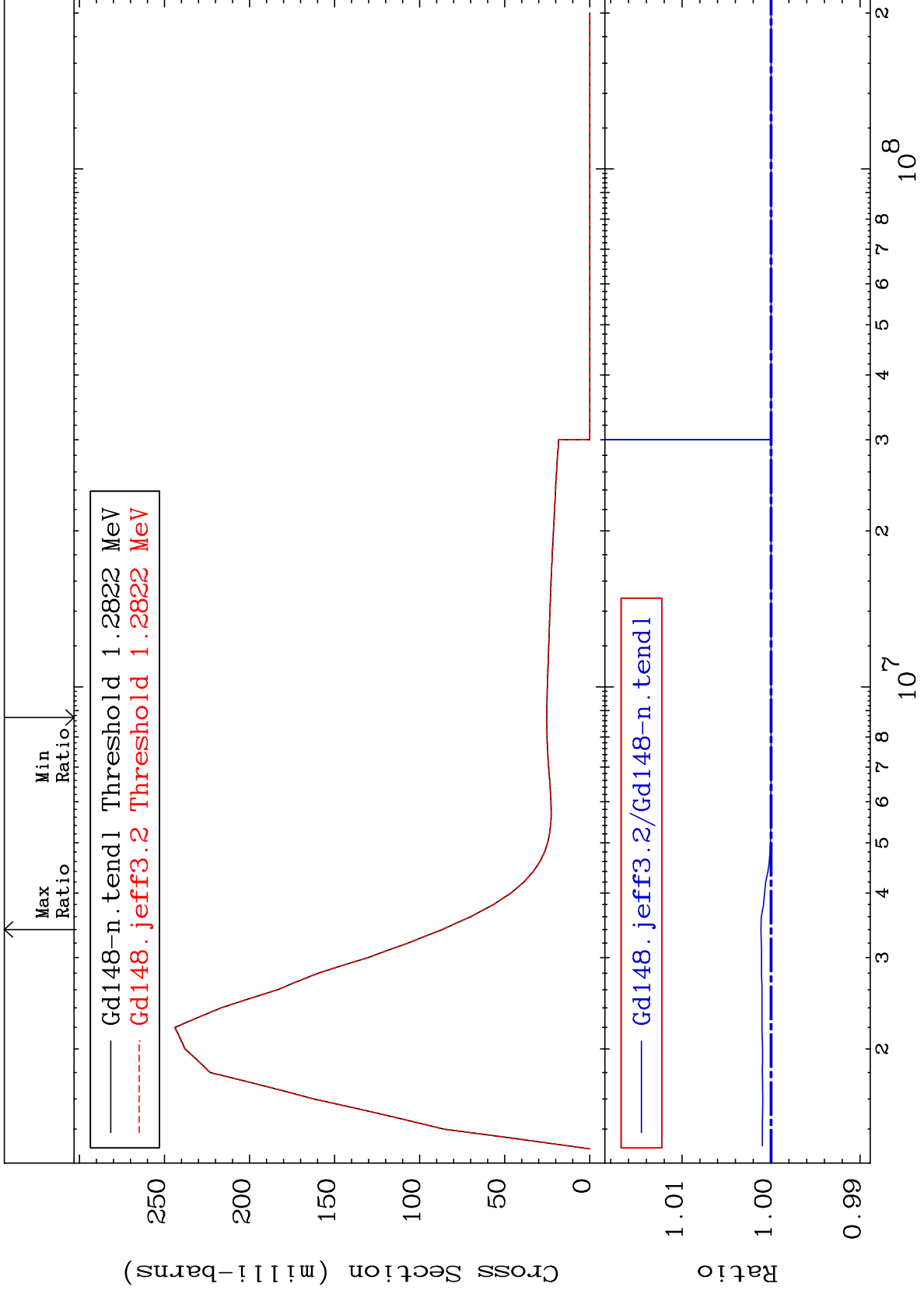
Incident Energy (eV)

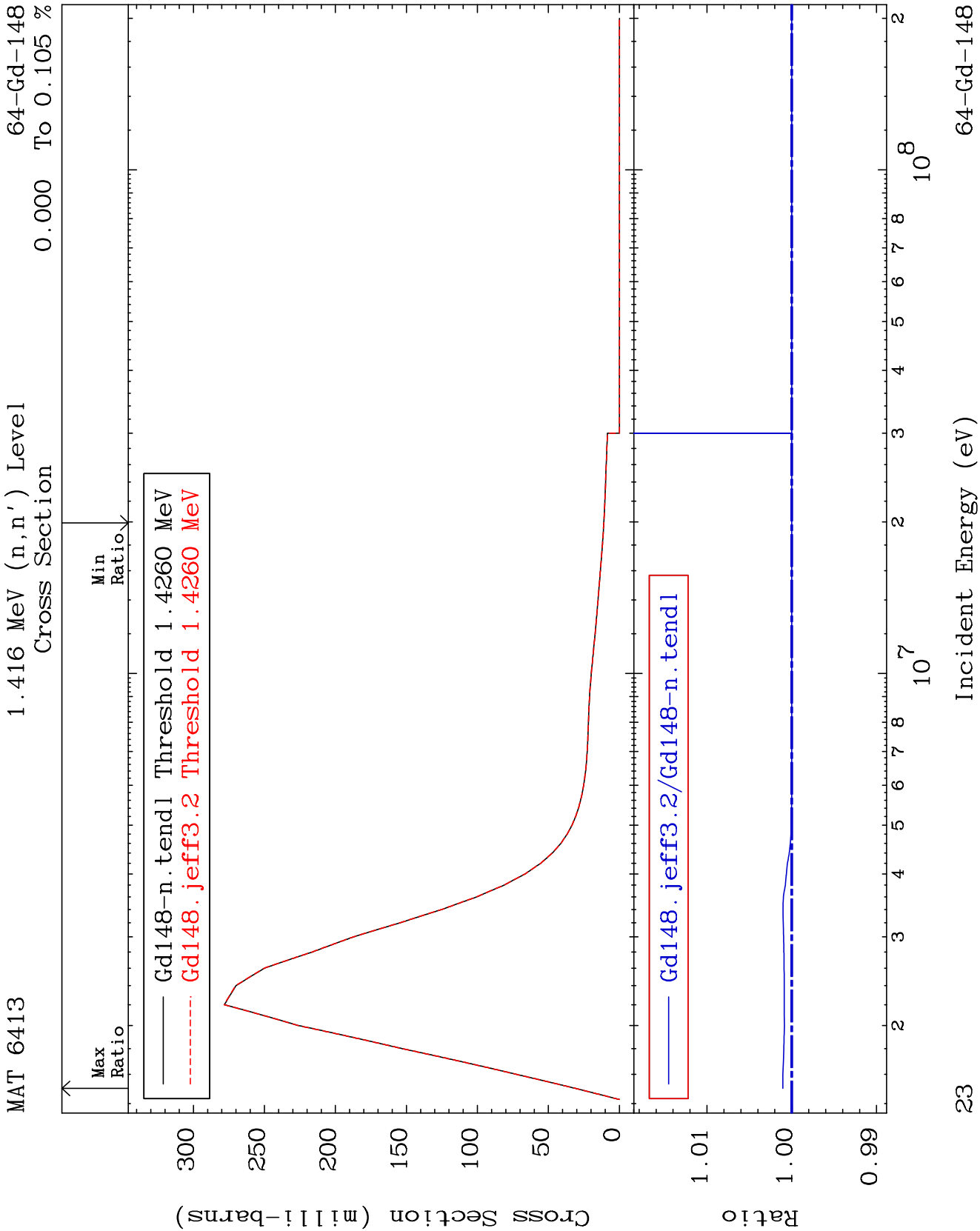
64-Gd-148

MAT 6413

1.273 MeV (n,n') Level
Cross Section

64-Gd-148
0.000 To 0.113 %

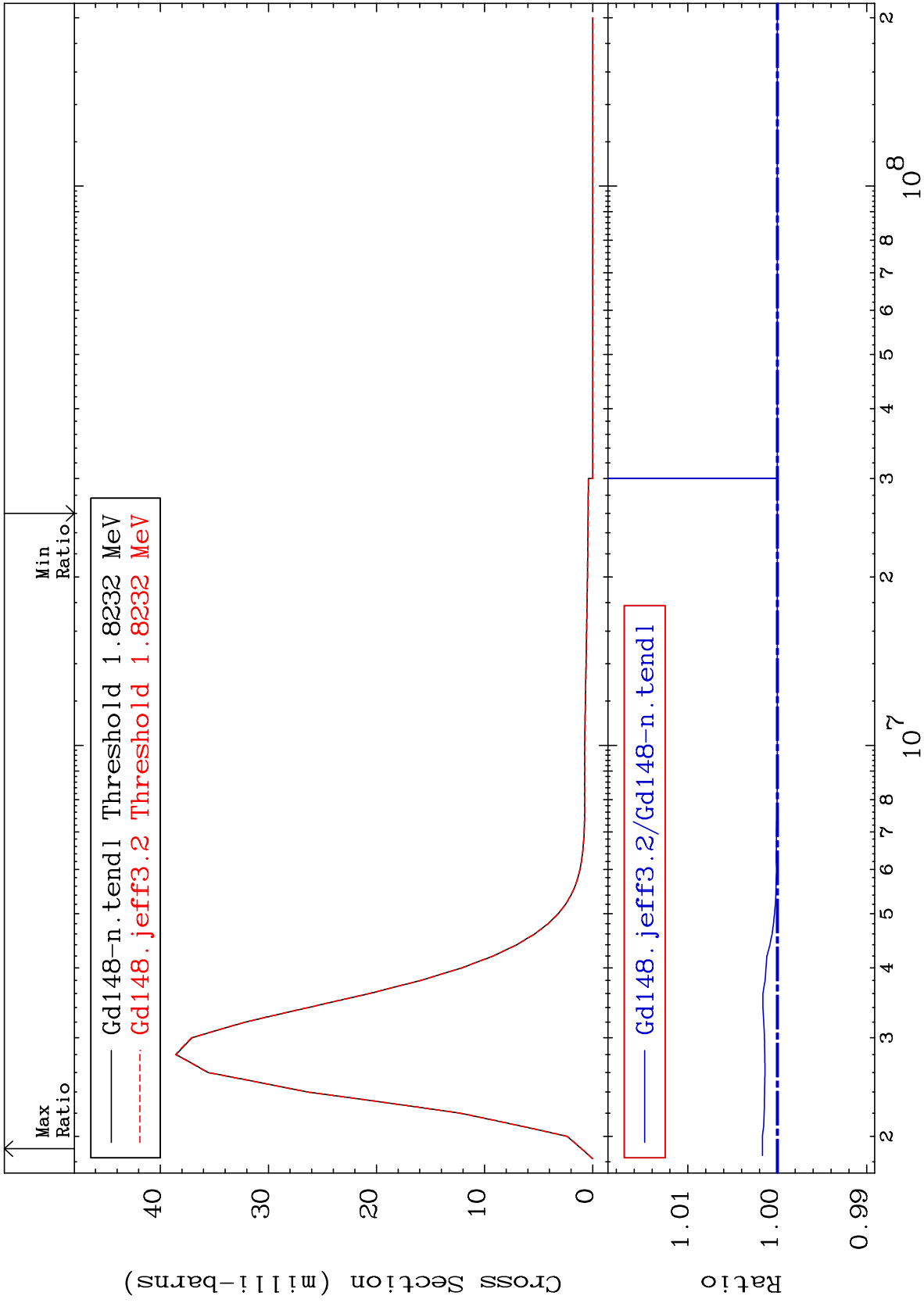




MAT 6413

1.811 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.167 %



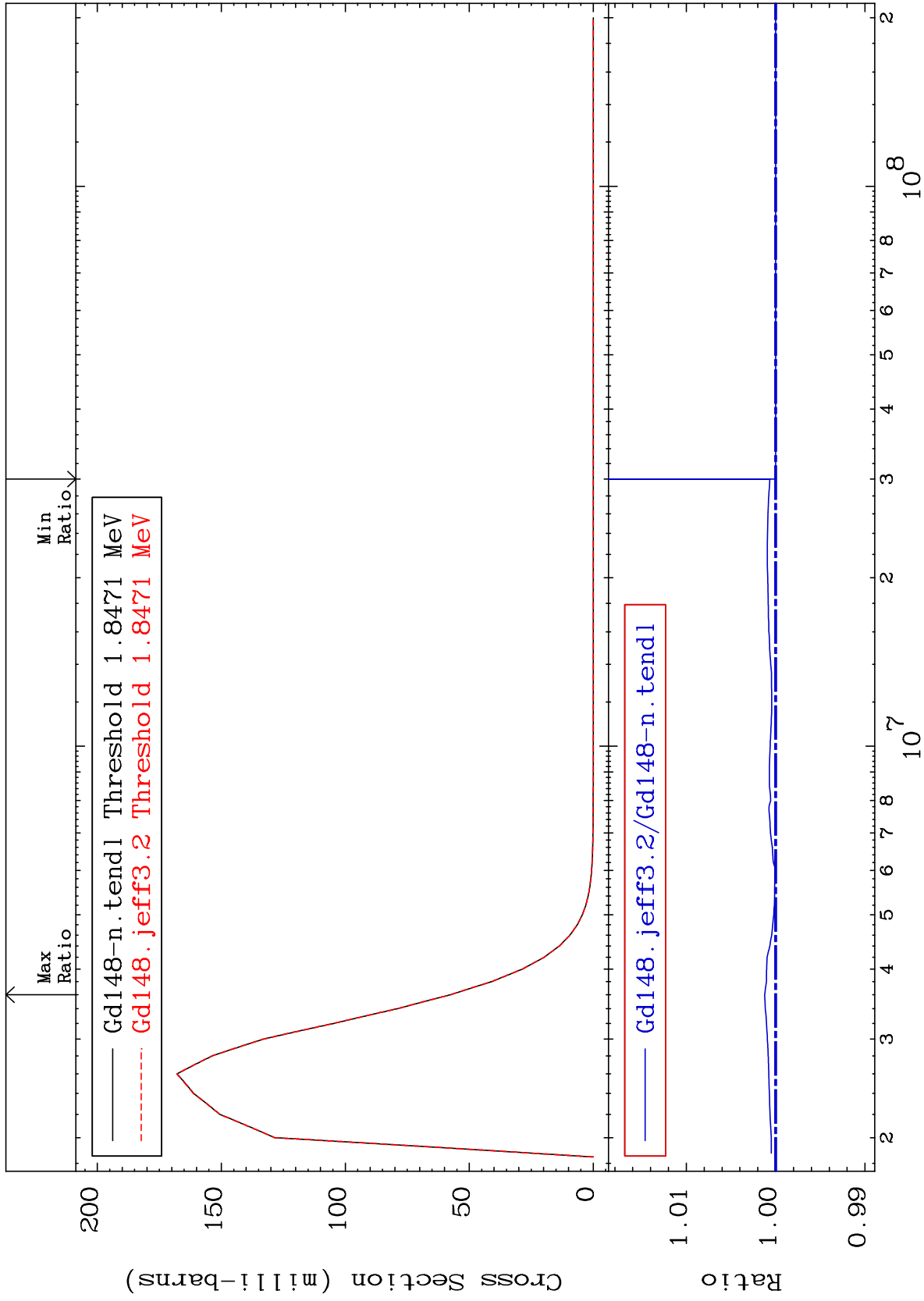
MAT 6413

1.835 MeV (n,n') Level

64-Gd-148

0.000 To 0.123 %

Cross Section



25

Incident Energy (eV)

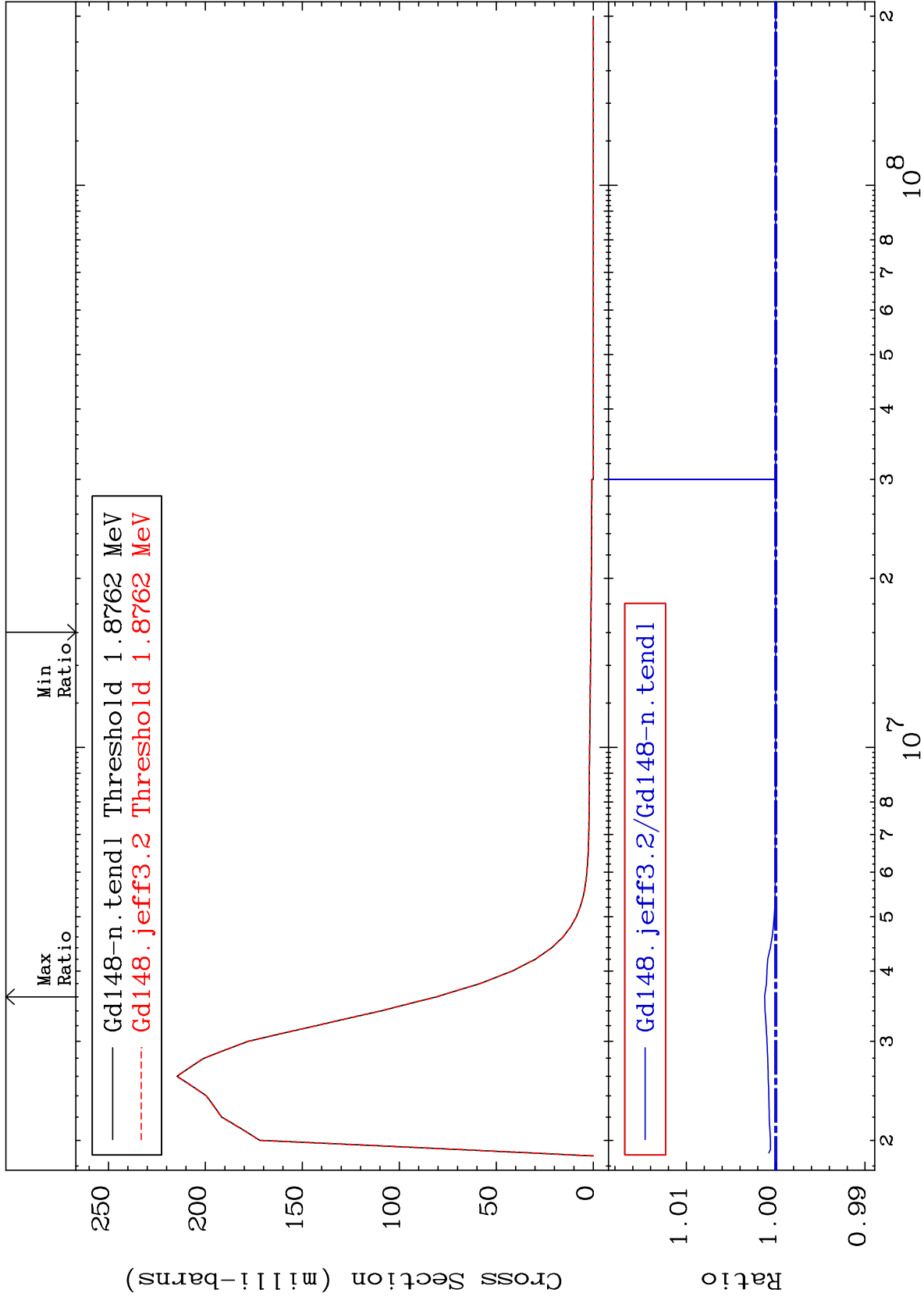
64-Gd-148

MAT 6413

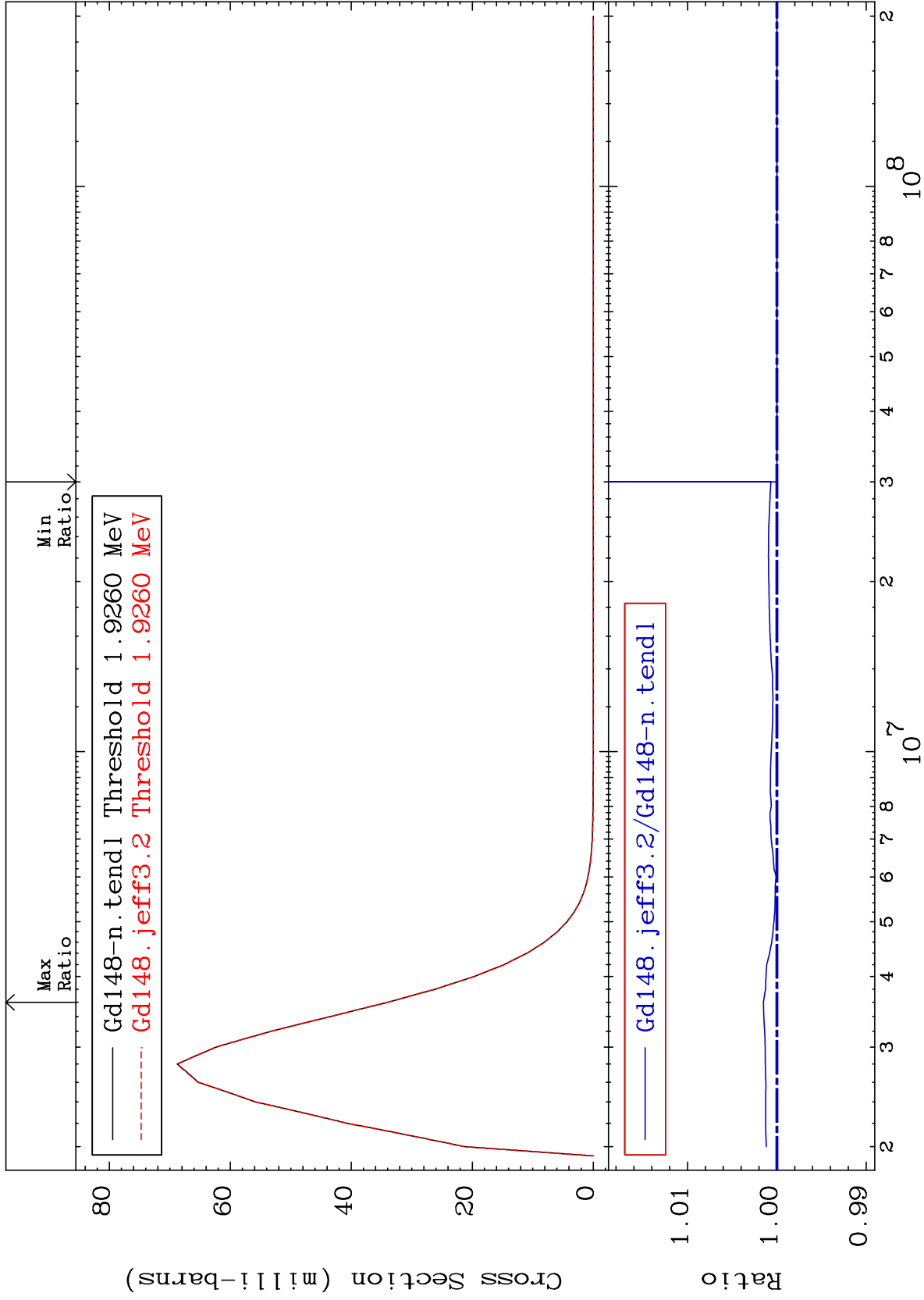
1.863 MeV (n,n') Level

64-Gd-148

Cross Section To 0.124 %



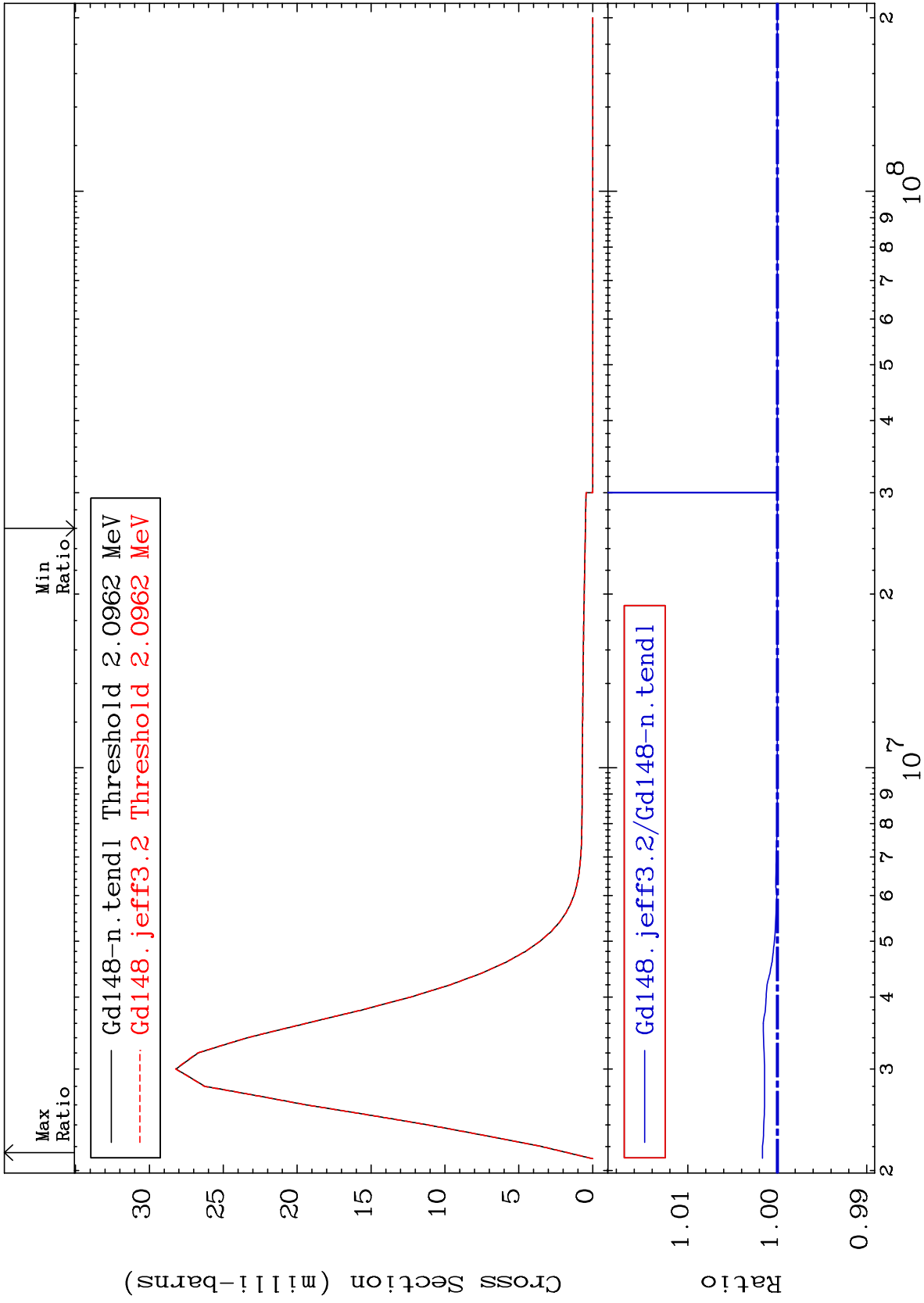
MAT 6413 1.913 MeV (n,n') Level Cross Section 64-Gd-148 To 0.150 %



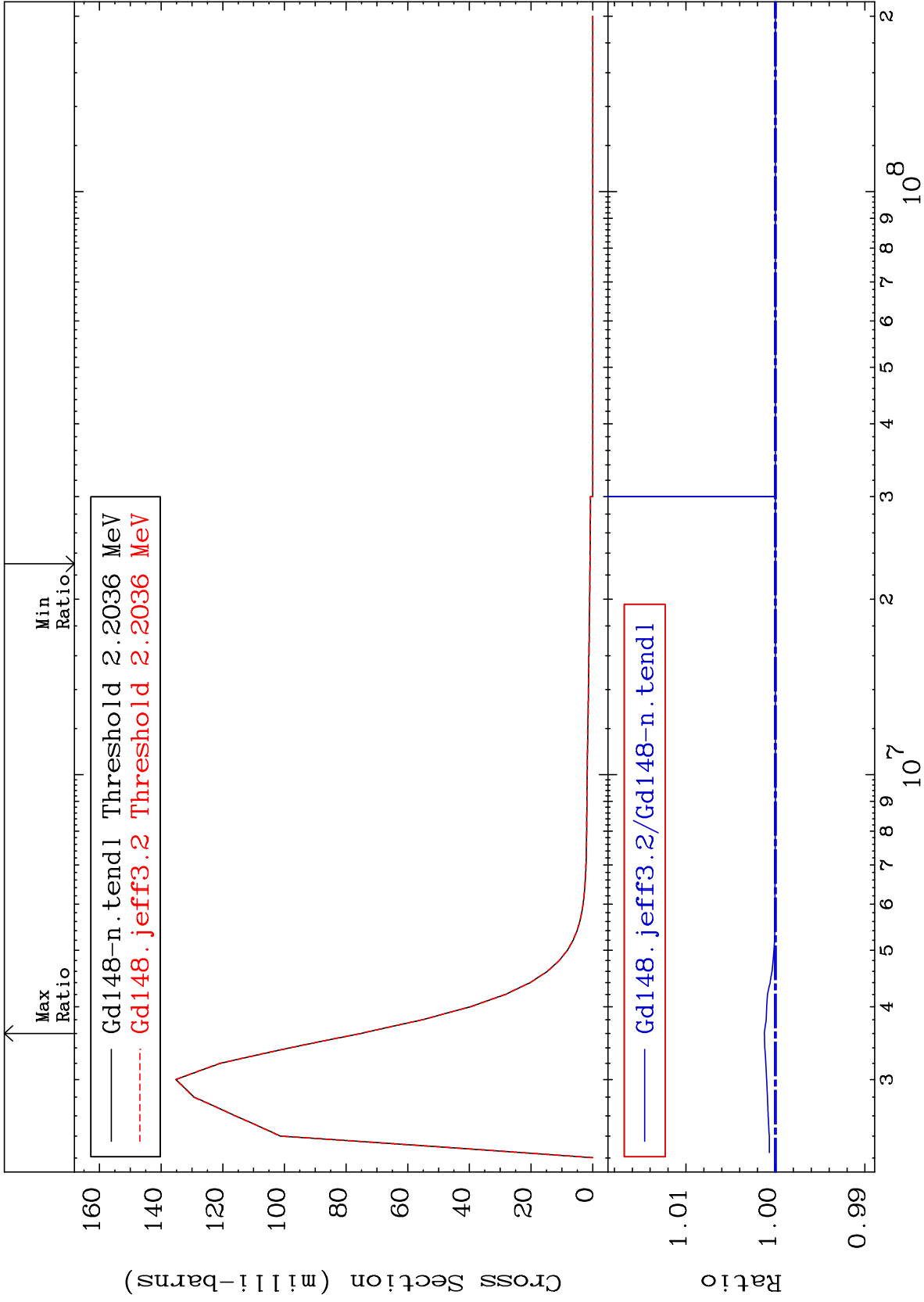
MAT 6413

2.082 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.166 %



MAT 6413 2.189 MeV (n,n') Level 64-Gd-148
 Cross Section 0.000 To 0.124 %

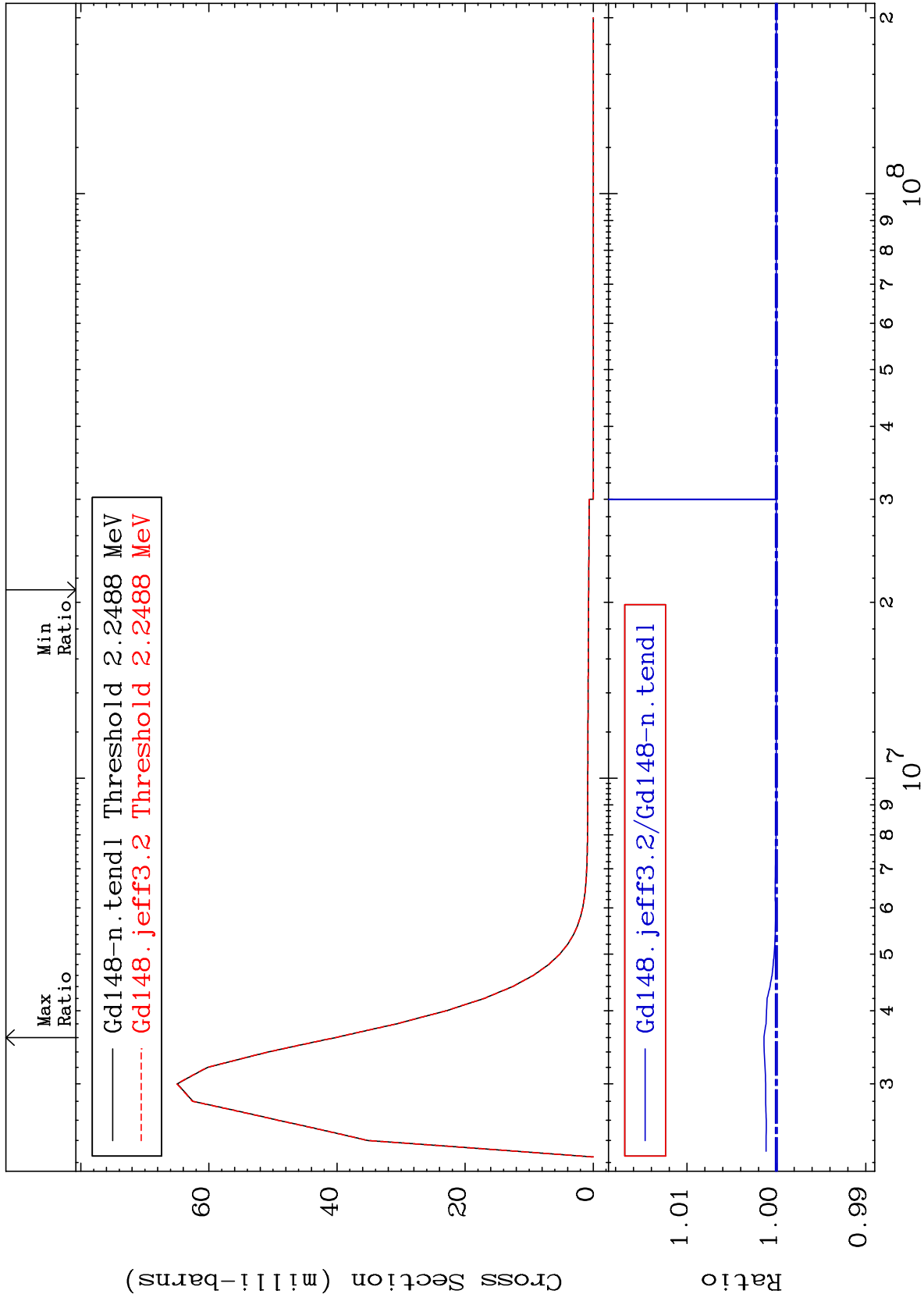


MAT 6413

2.234 MeV (n,n') Level

64-Gd-148

Cross Section
0.000 To 0.139 %



30

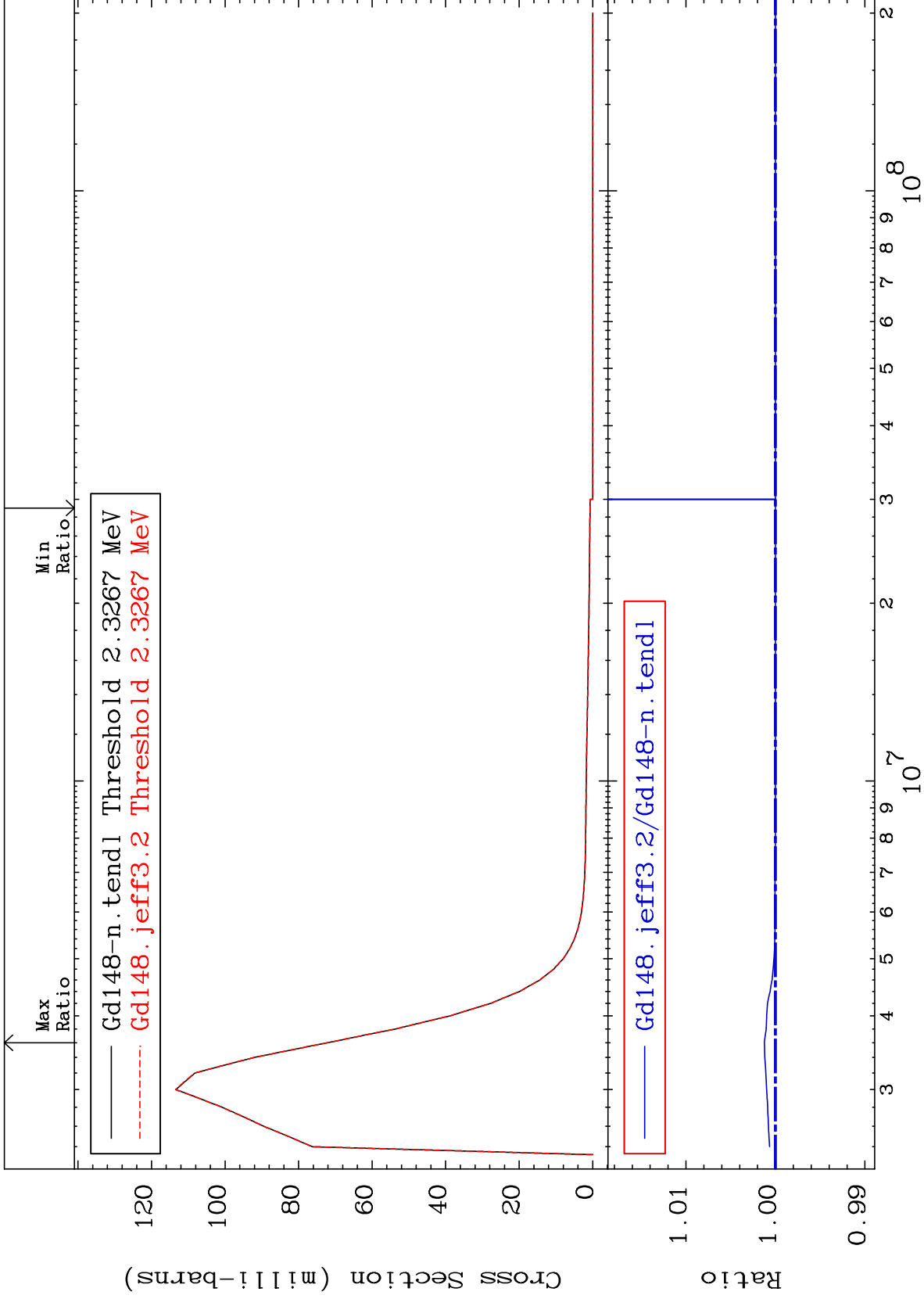
Incident Energy (eV)

64-Gd-148

MAT 6413

2.311 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.124 %

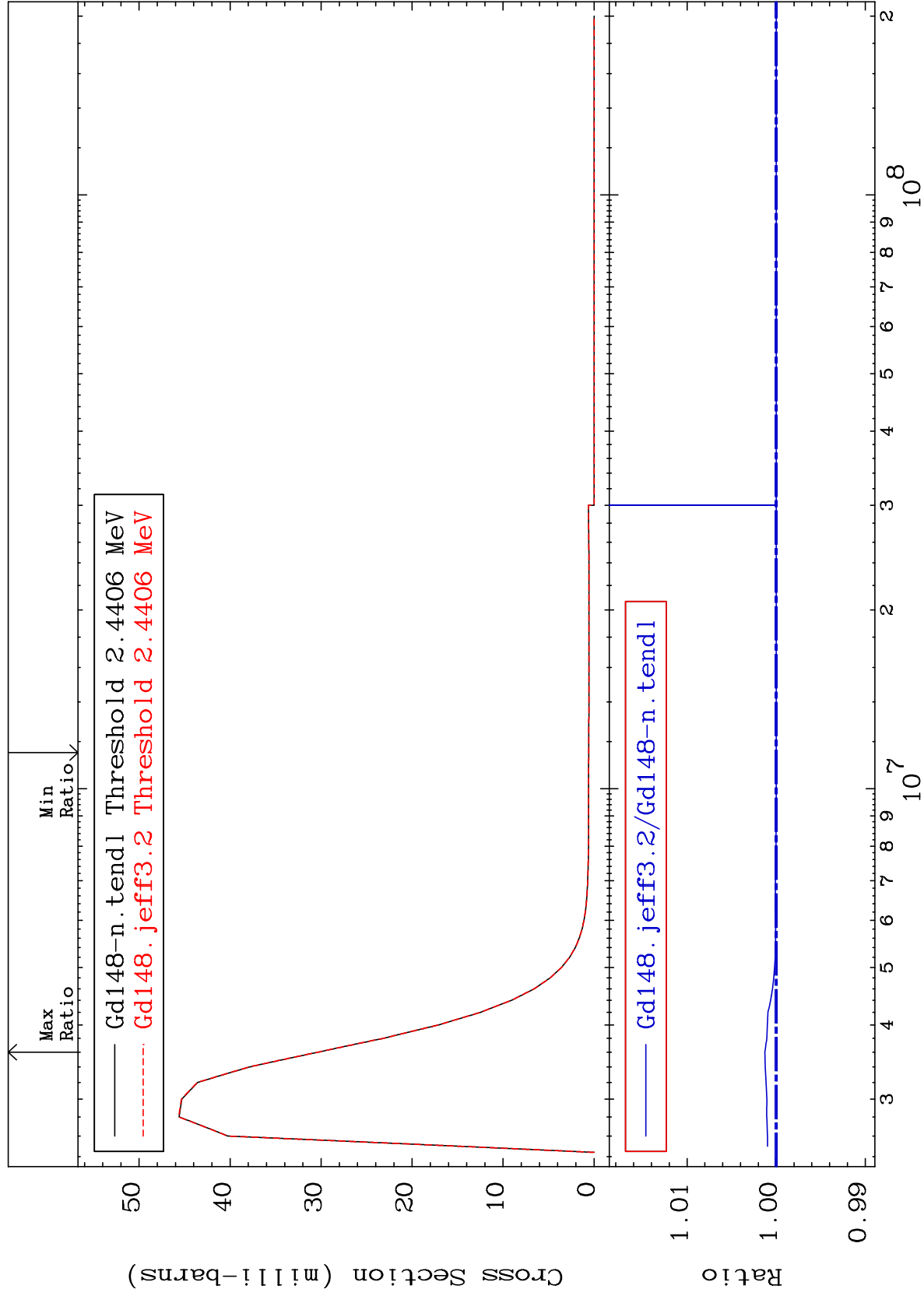


MAT 6413

2.424 MeV (n,n') Level

64-Gd-148

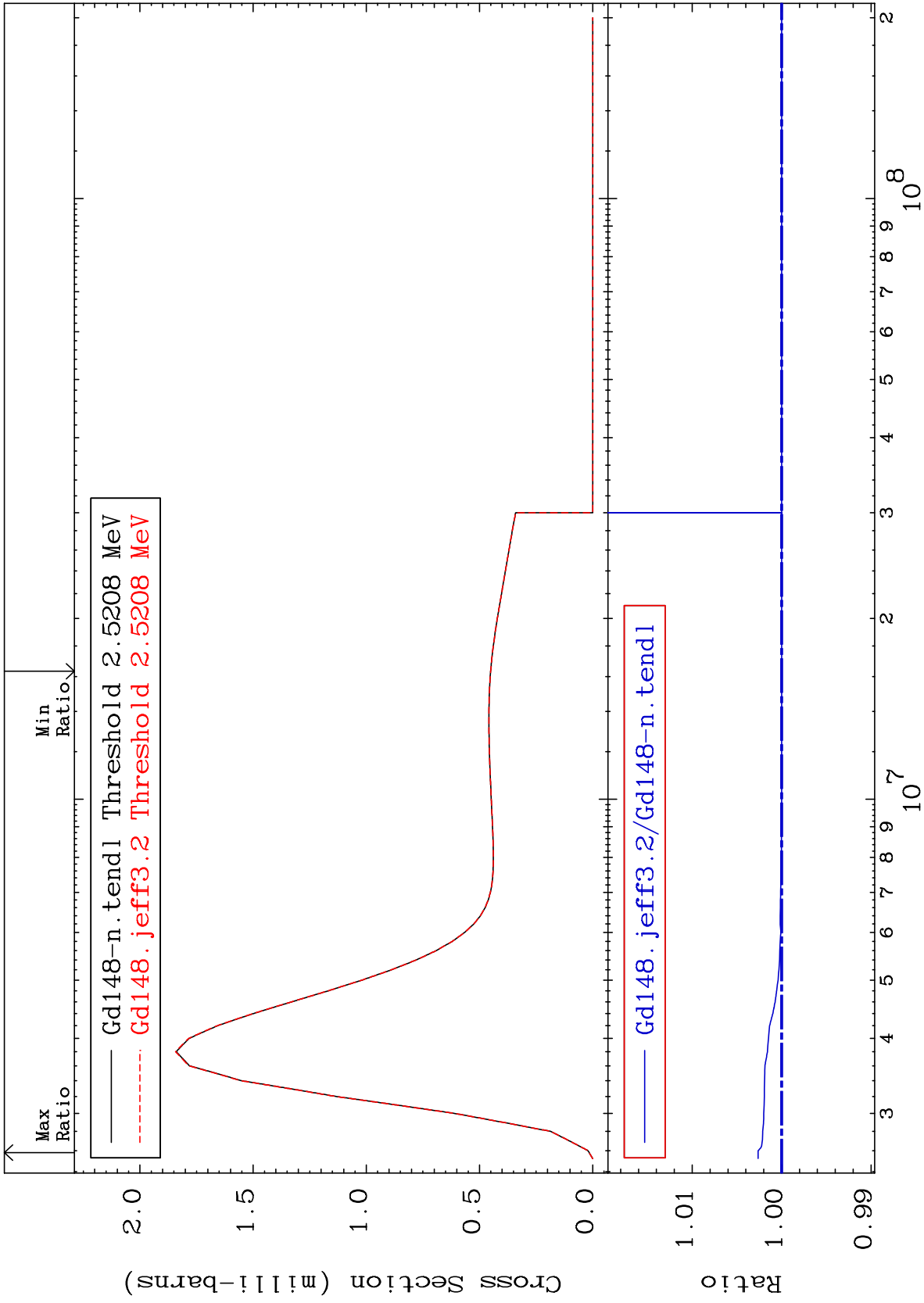
0.000 To 0.126 %



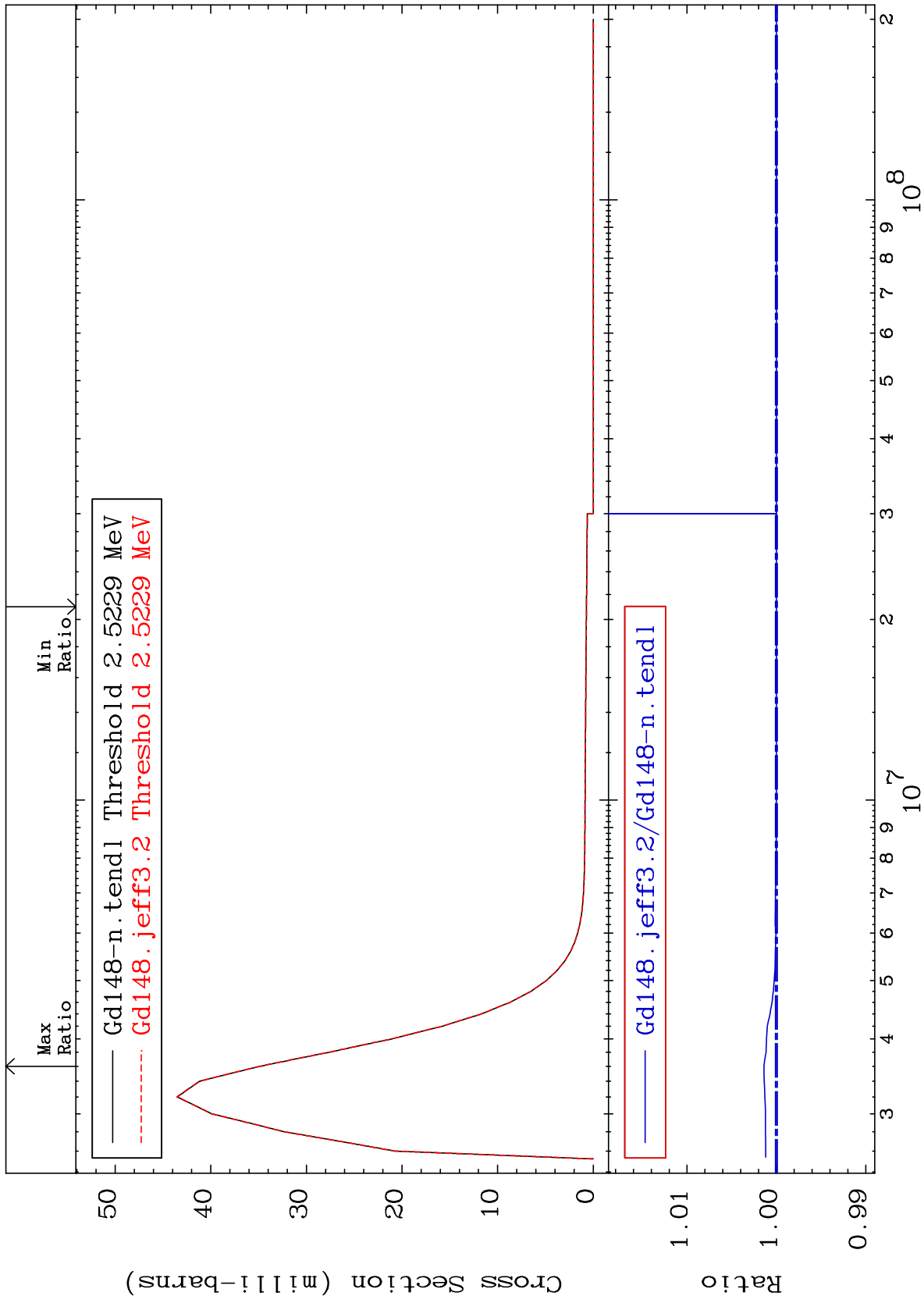
MAT 6413

2.504 MeV (n,n') Level
Cross Section

64-Gd-148
0.000 To 0.262 %



MAT 6413 2.506 MeV (n,n') Level 64-Gd-148
 Cross Section 0.000 To 0.139 %

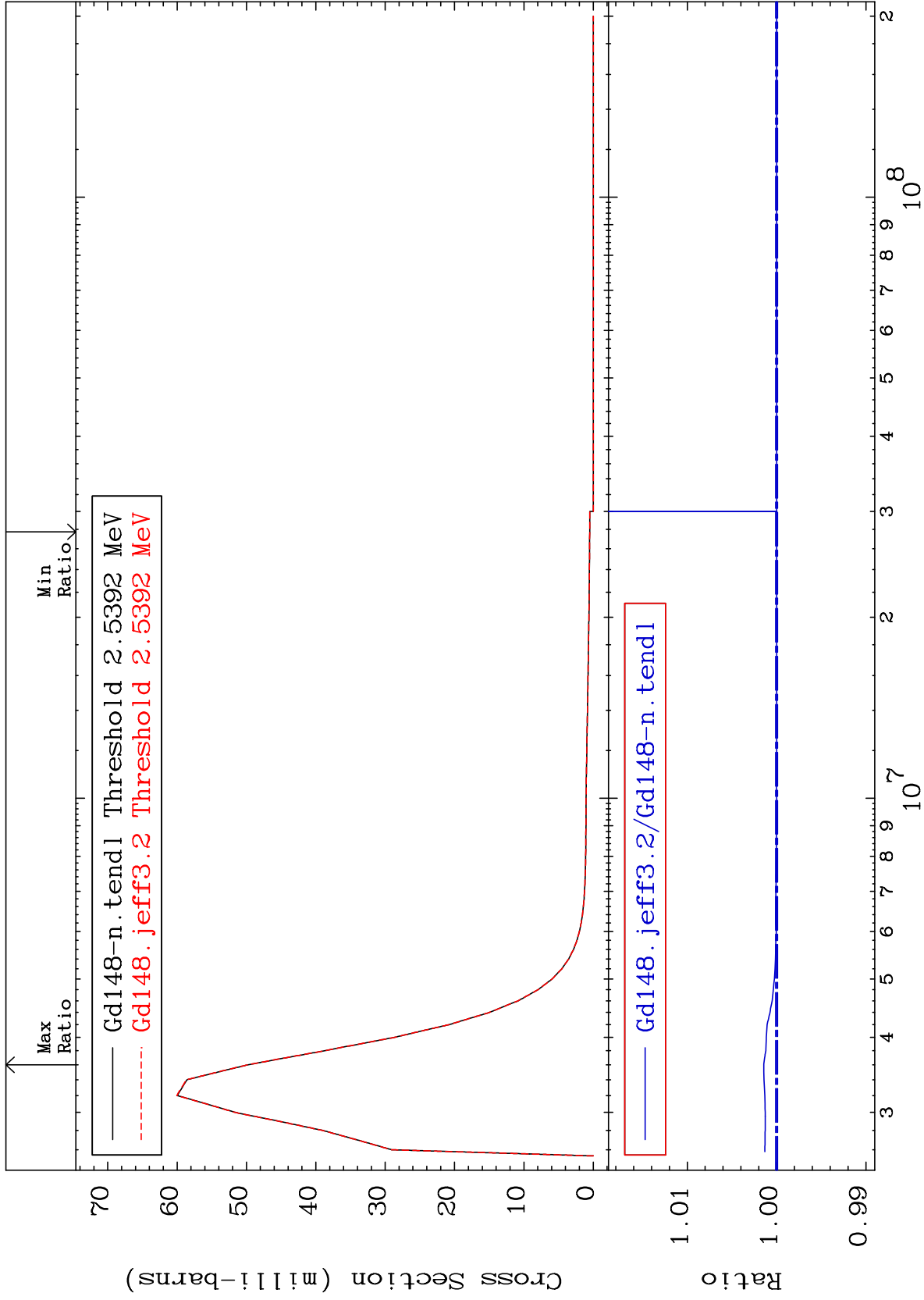


MAT 6413

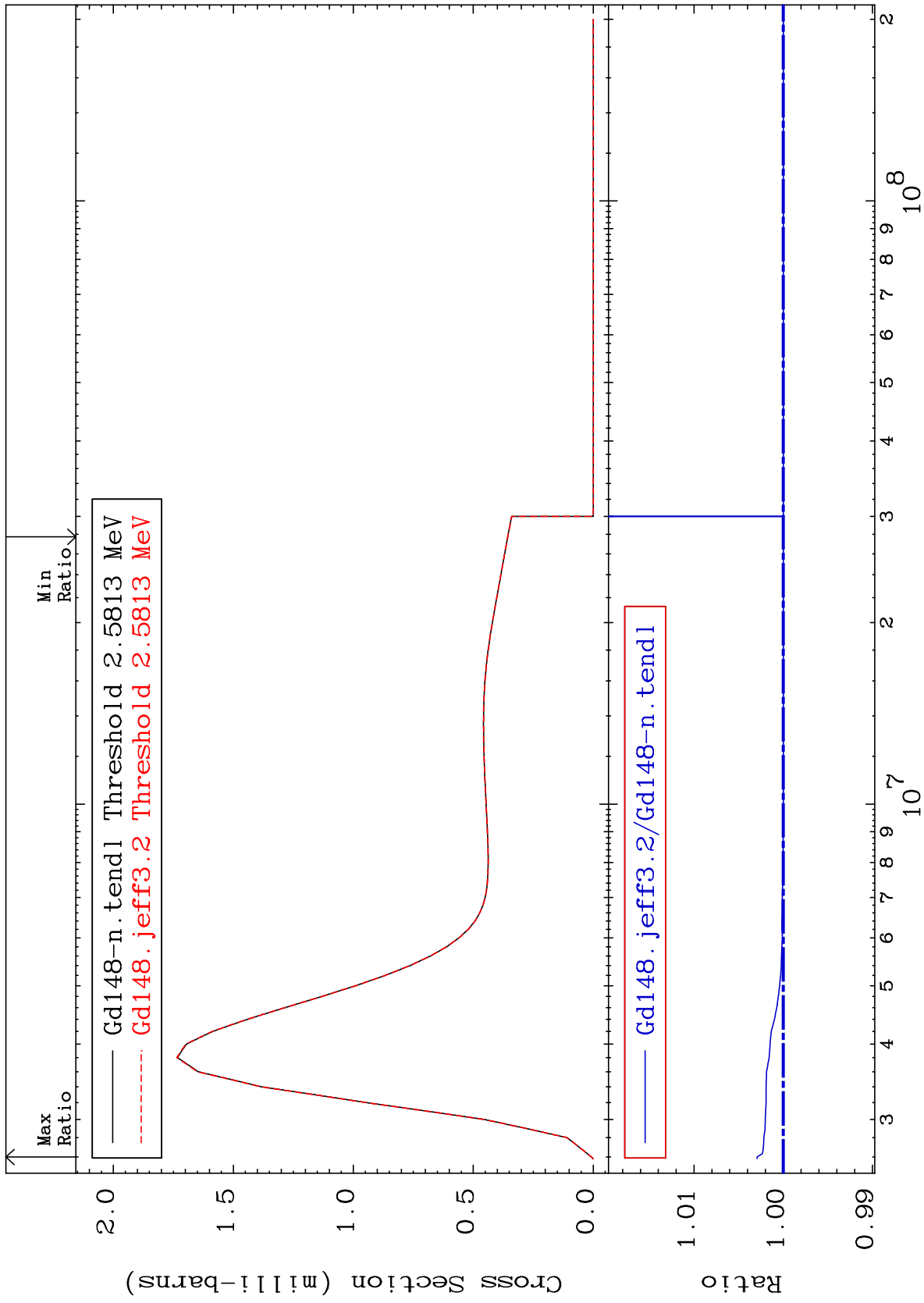
2.522 MeV (n,n') Level

64-Gd-148

Cross Section To 0.144 %



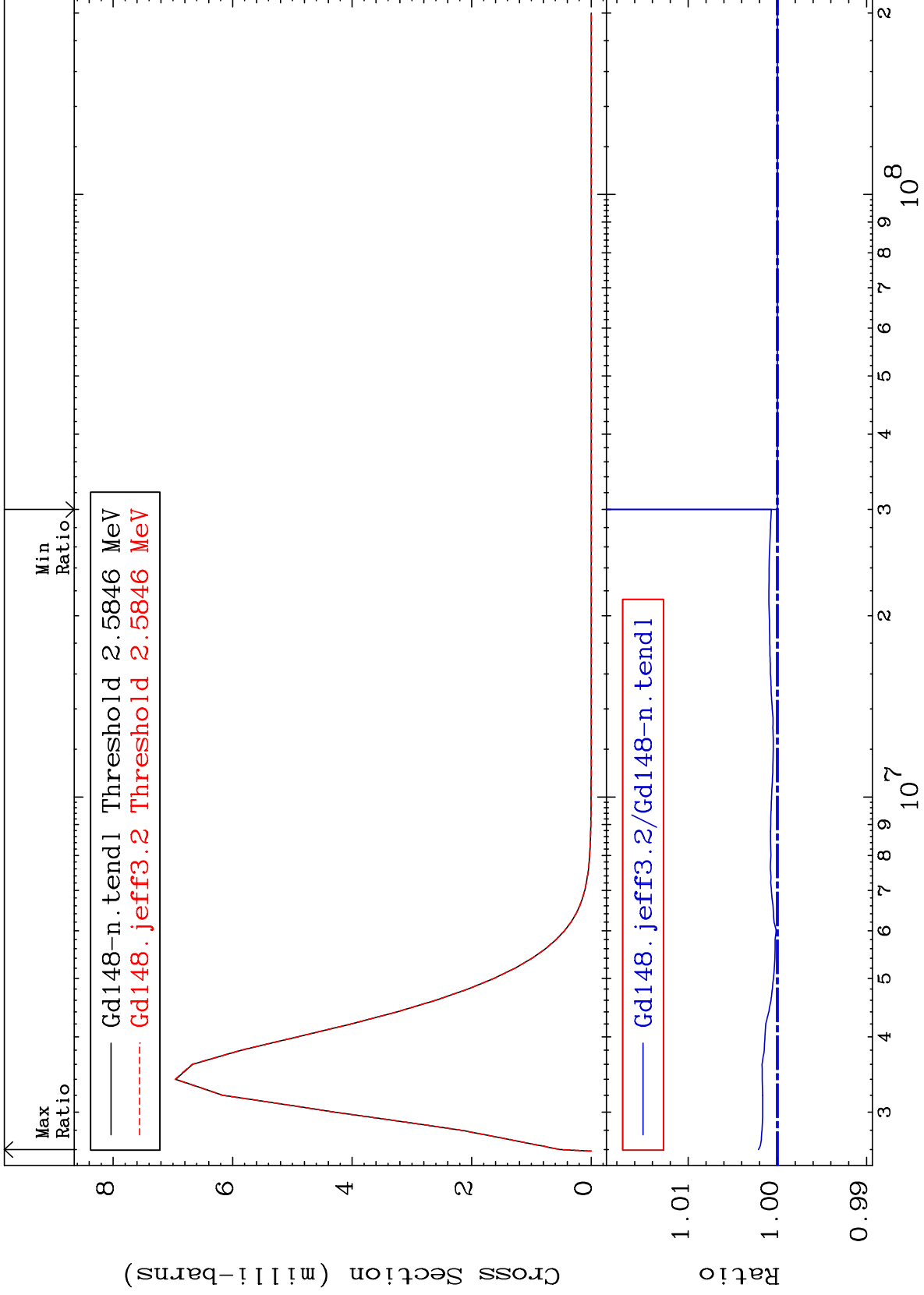
MAT 6413 2.564 MeV (n,n') Level 64-Gd-148
 Cross Section 0.000 To 0.294 %



MAT 6413

2.567 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.211 %

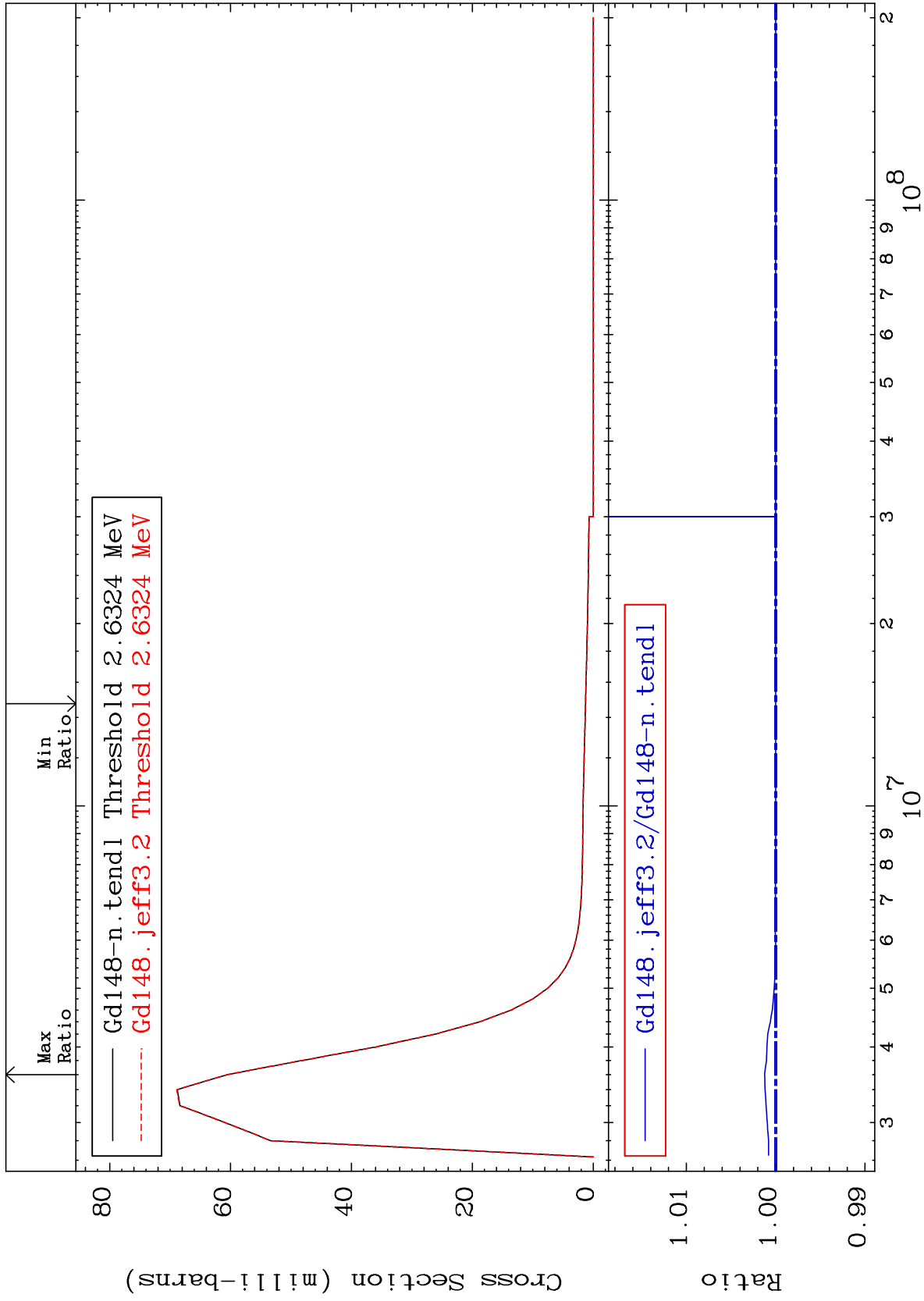


MAT 6413

2.615 MeV (n,n') Level

64-Gd-148

Cross Section
0.000 To 0.124 %

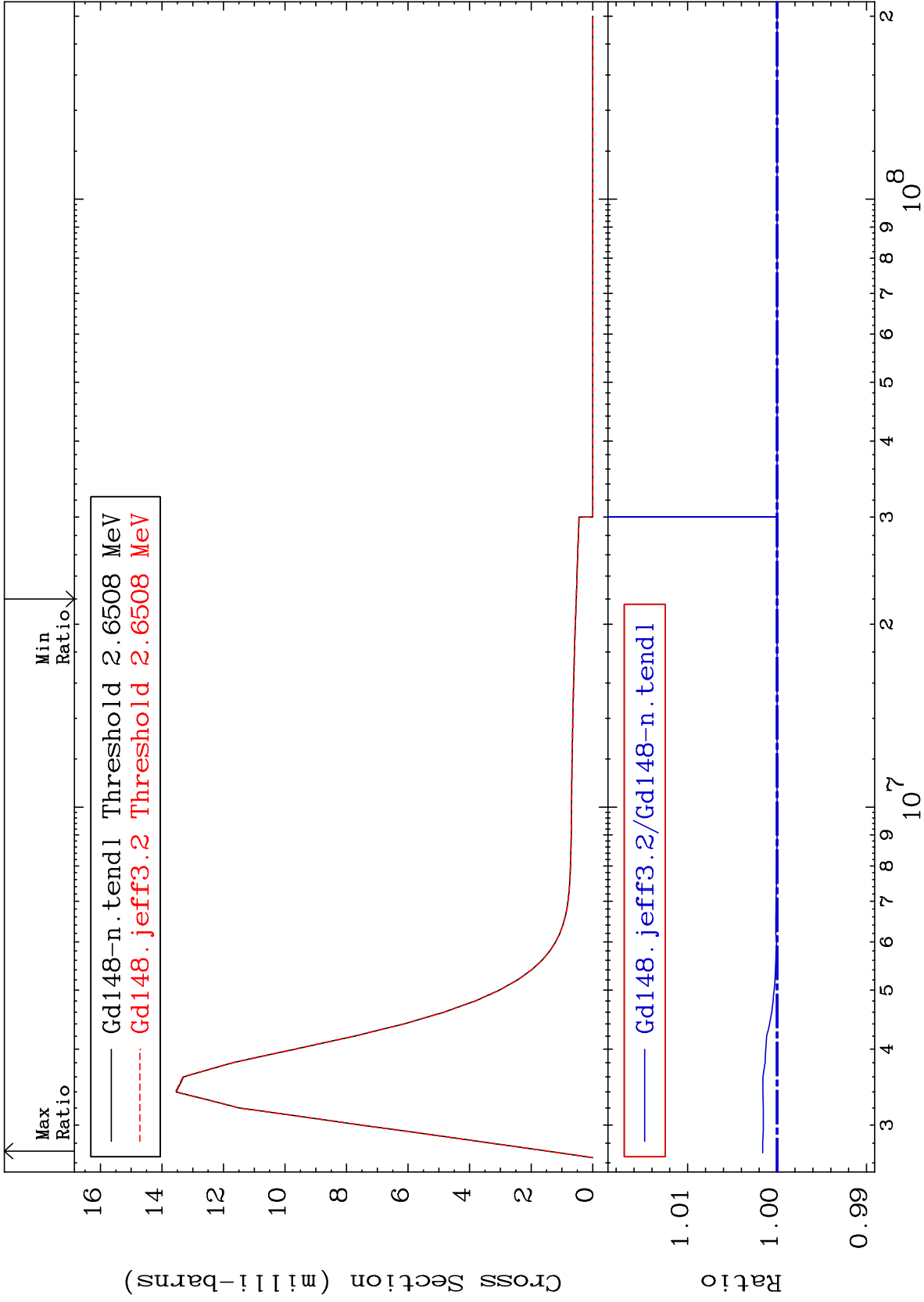


MAT 6413

2.633 MeV (n,n') Level

64-Gd-148

Cross Section To 0.161 %

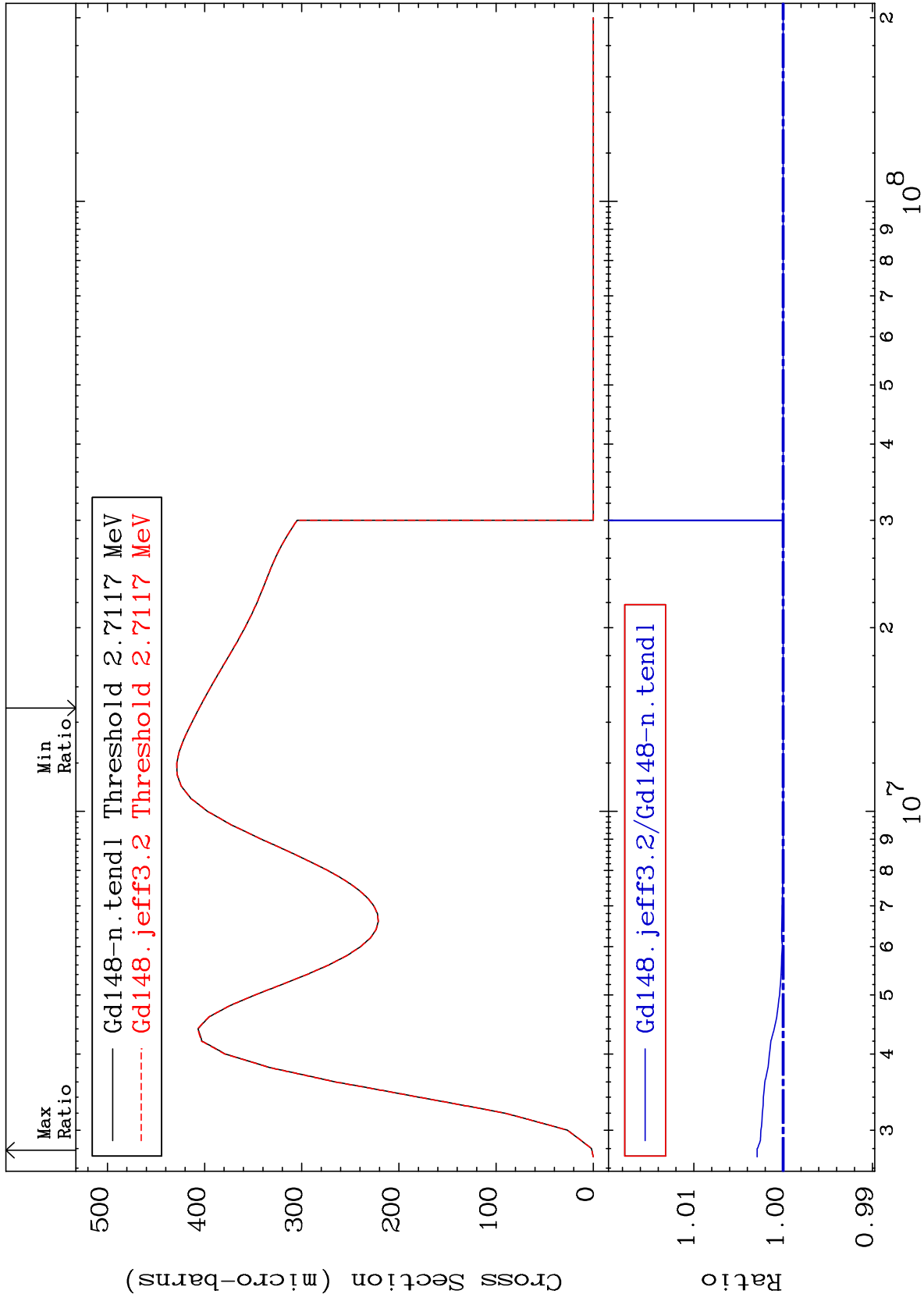


MAT 6413

2.693 MeV (n,n') Level

64-Gd-148

Cross Section To 0.290 %



40

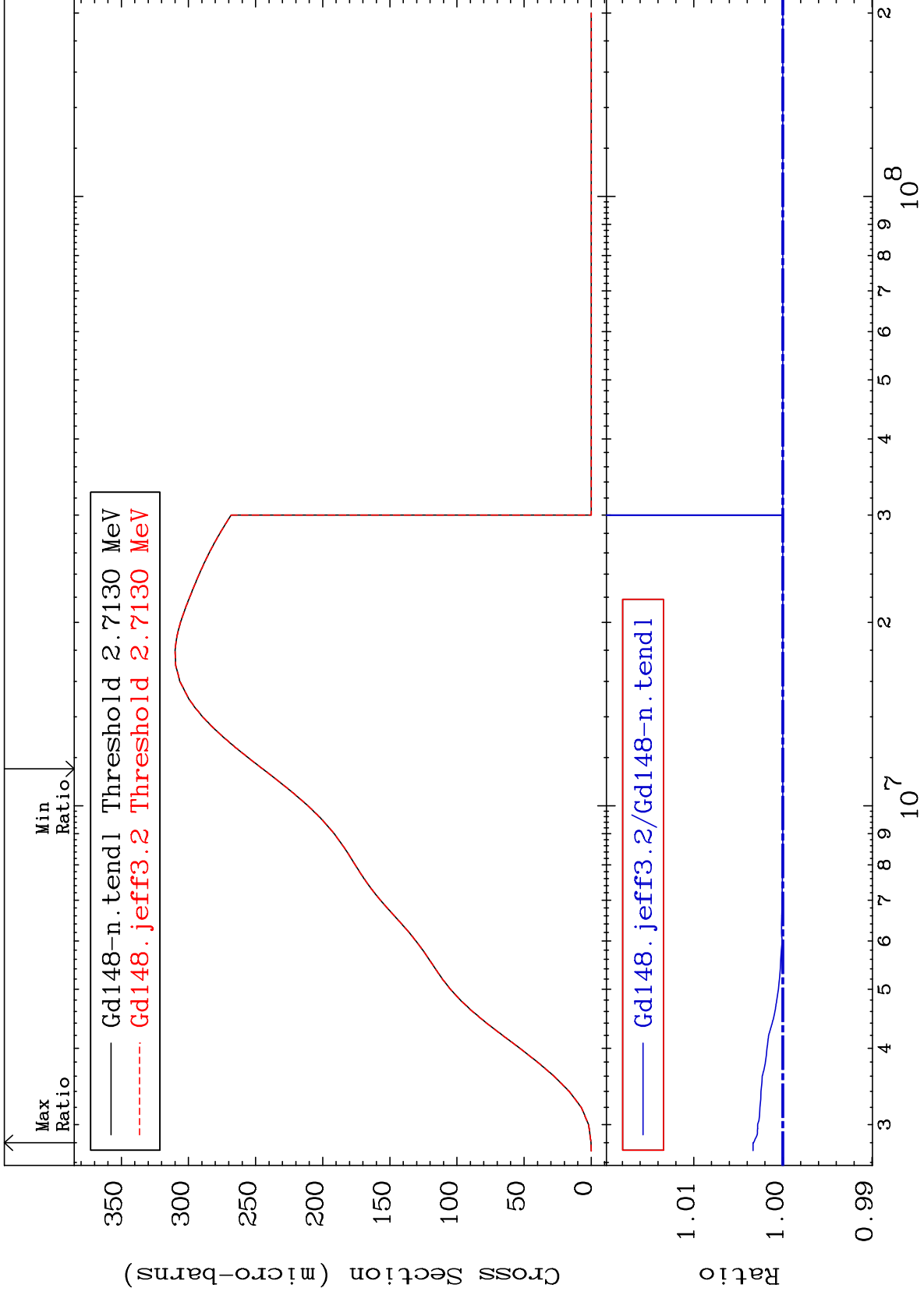
Incident Energy (eV)

64-Gd-148

MAT 6413

2.695 MeV (n,n') Level
Cross Section

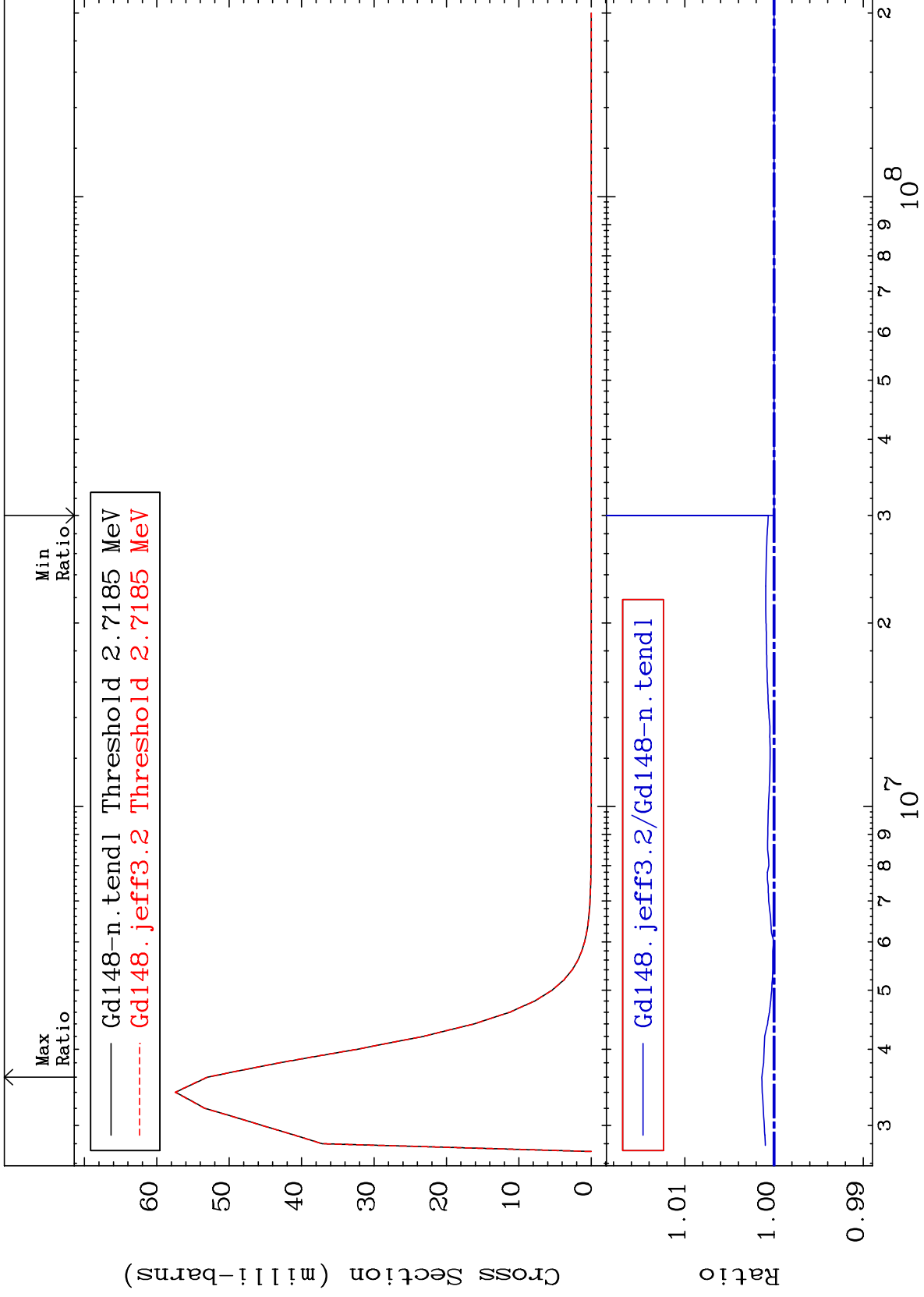
64-Gd-148
To 0.334 %



MAT 6413

2.700 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.138 %

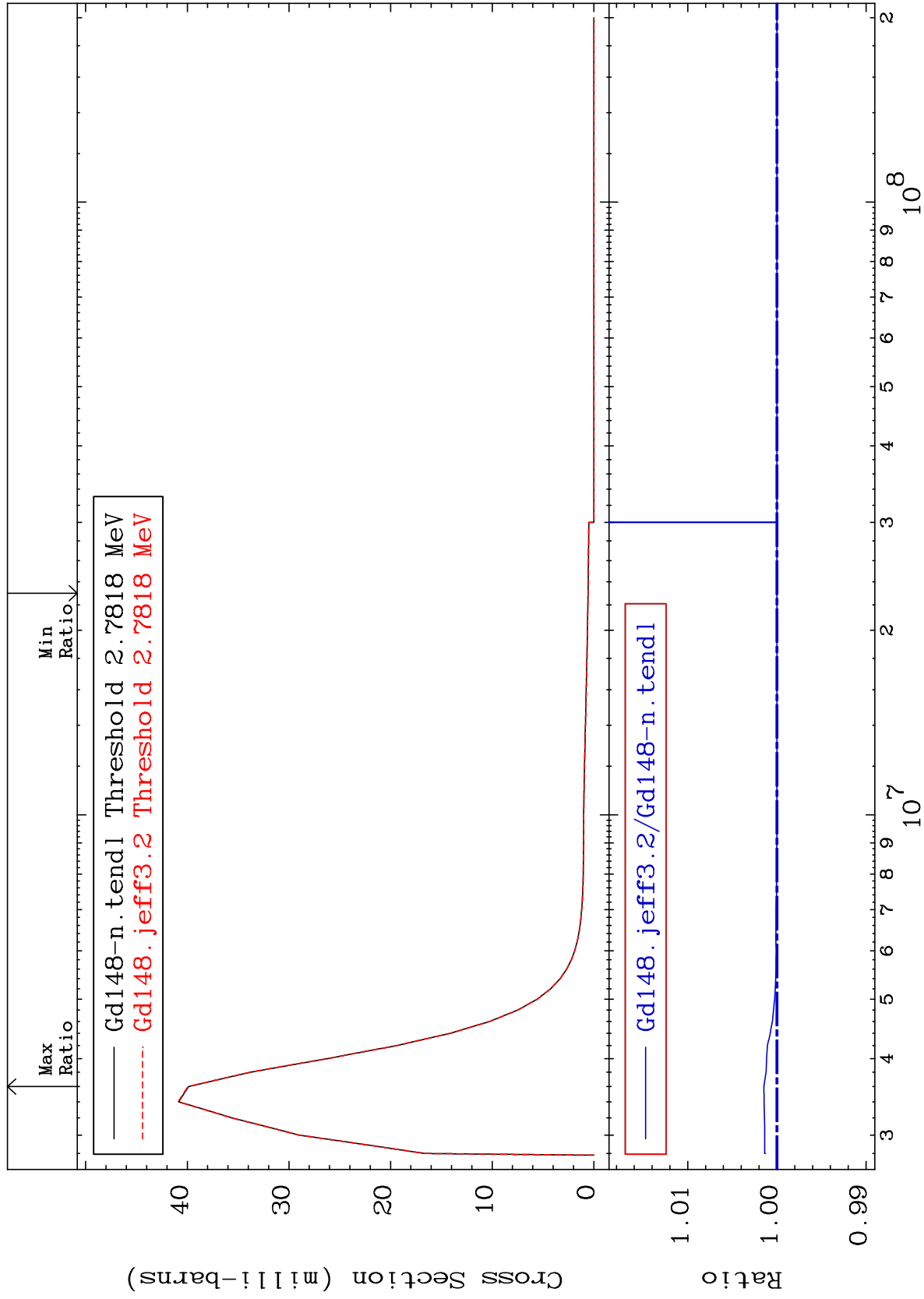


MAT 6413

2.763 MeV (n,n') Level

64-Gd-148

Cross Section To 0.146 %



43

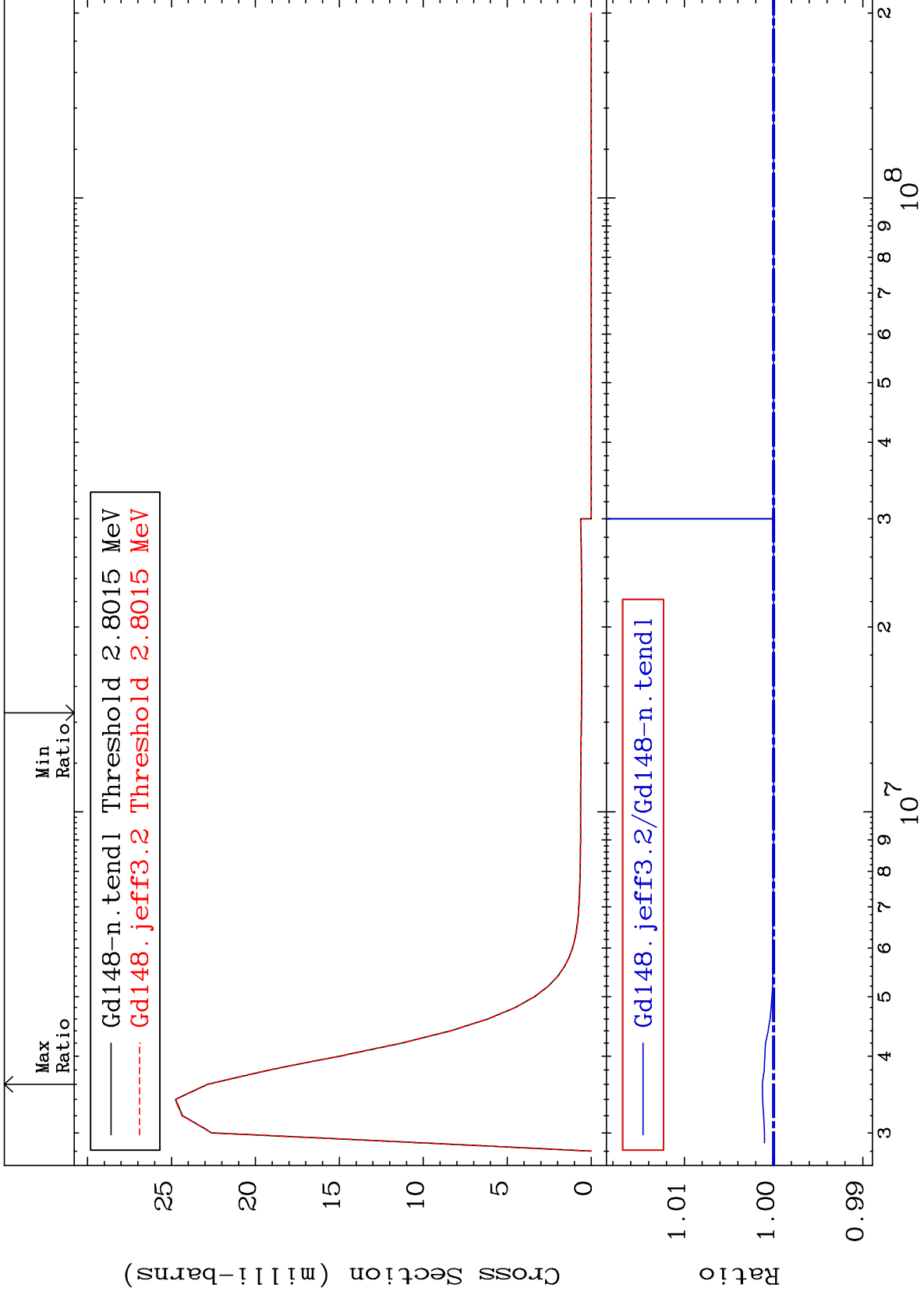
Incident Energy (eV)

64-Gd-148

MAT 6413

2.783 MeV (n,n') Level
Cross Section

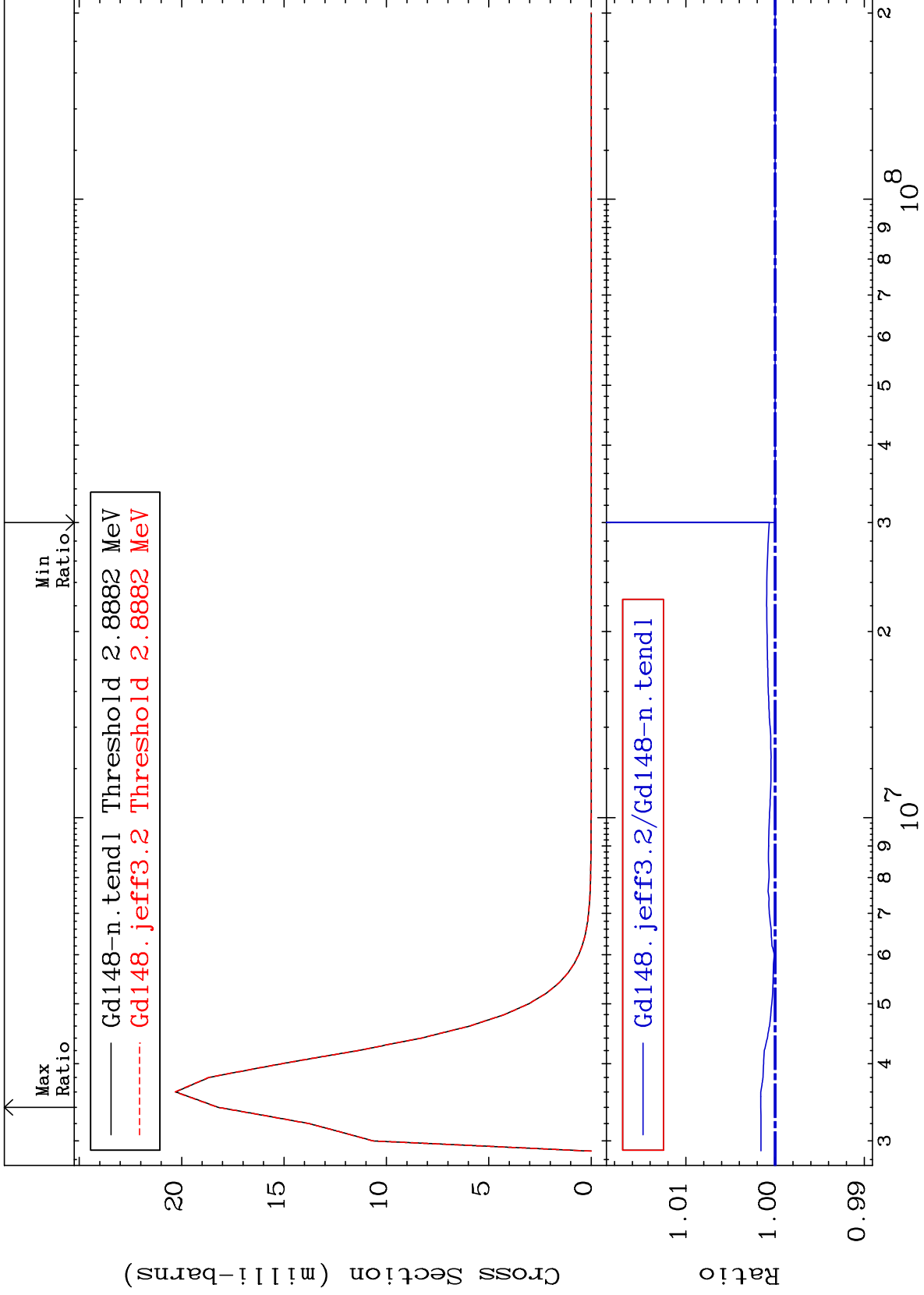
64-Gd-148
0.000 To 0.126 %



MAT 6413

2.869 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.160 %



45

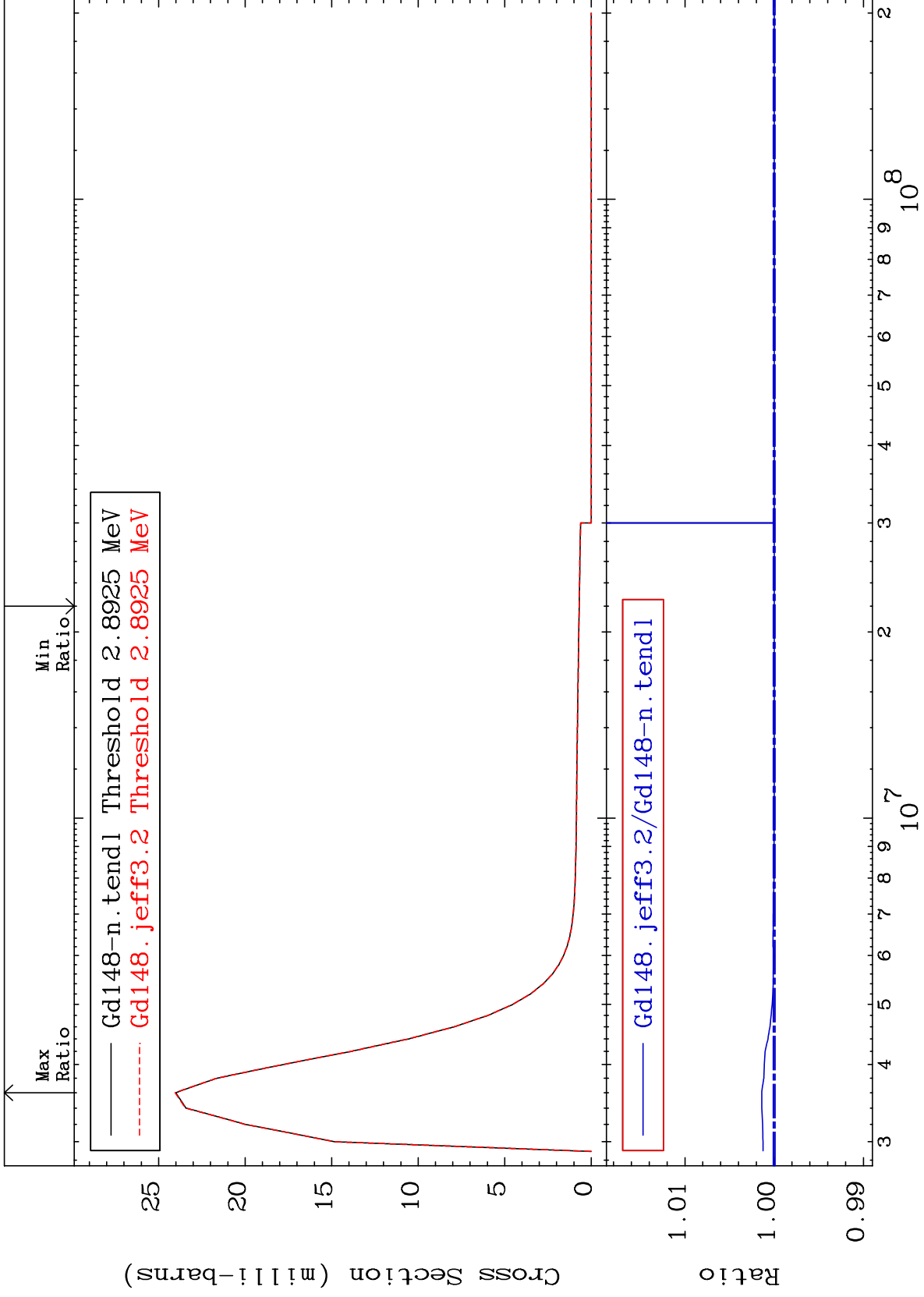
Incident Energy (eV)

64-Gd-148

MAT 6413

2.873 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.140 %

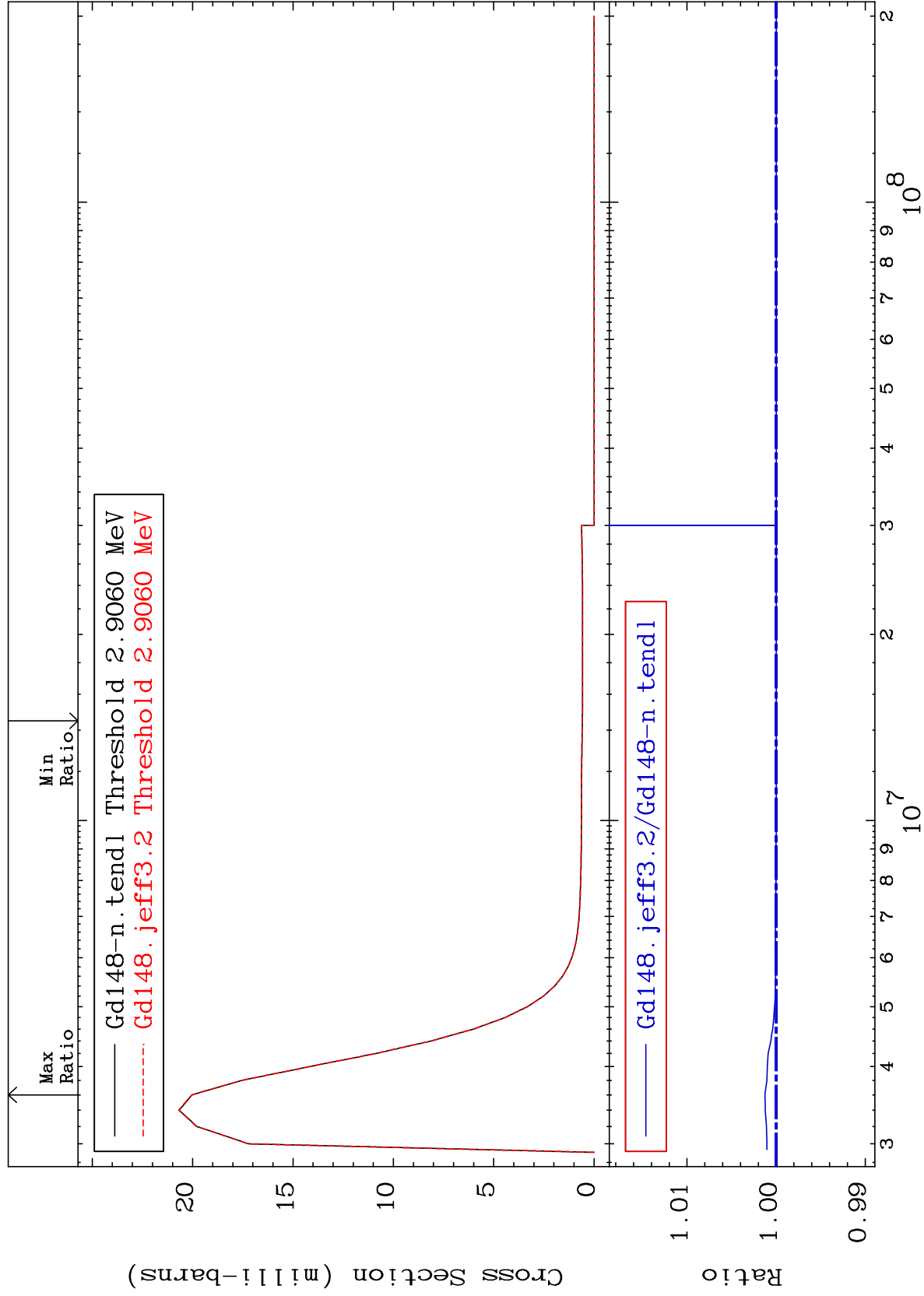


MAT 6413

2.886 MeV (n,n') Level

64-Gd-148

0.000 To 0.126 %



47

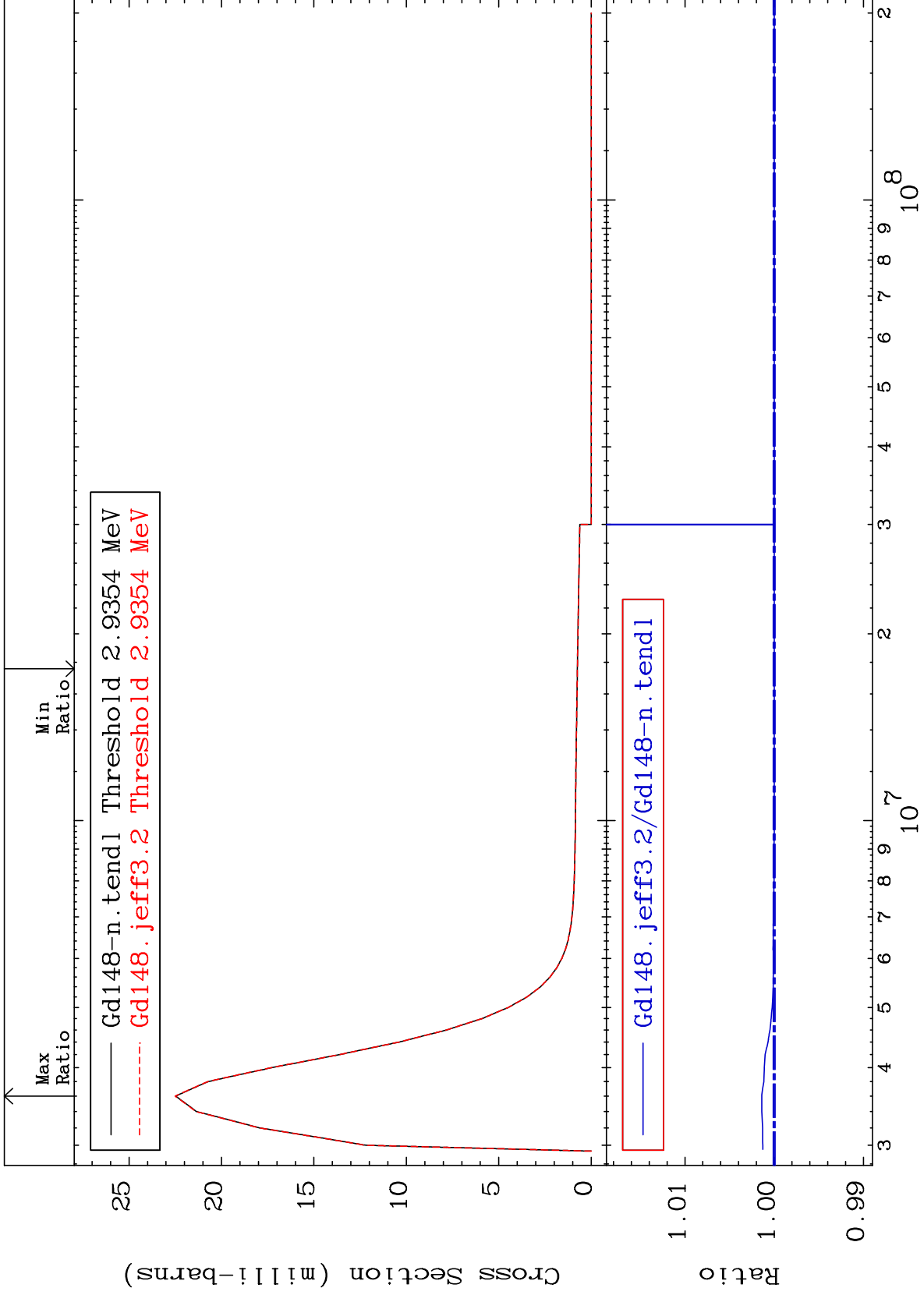
Incident Energy (eV)

64-Gd-148

MAT 6413

2.916 MeV (n,n') Level
Cross Section

64-Gd-148
To 0.140 %



48

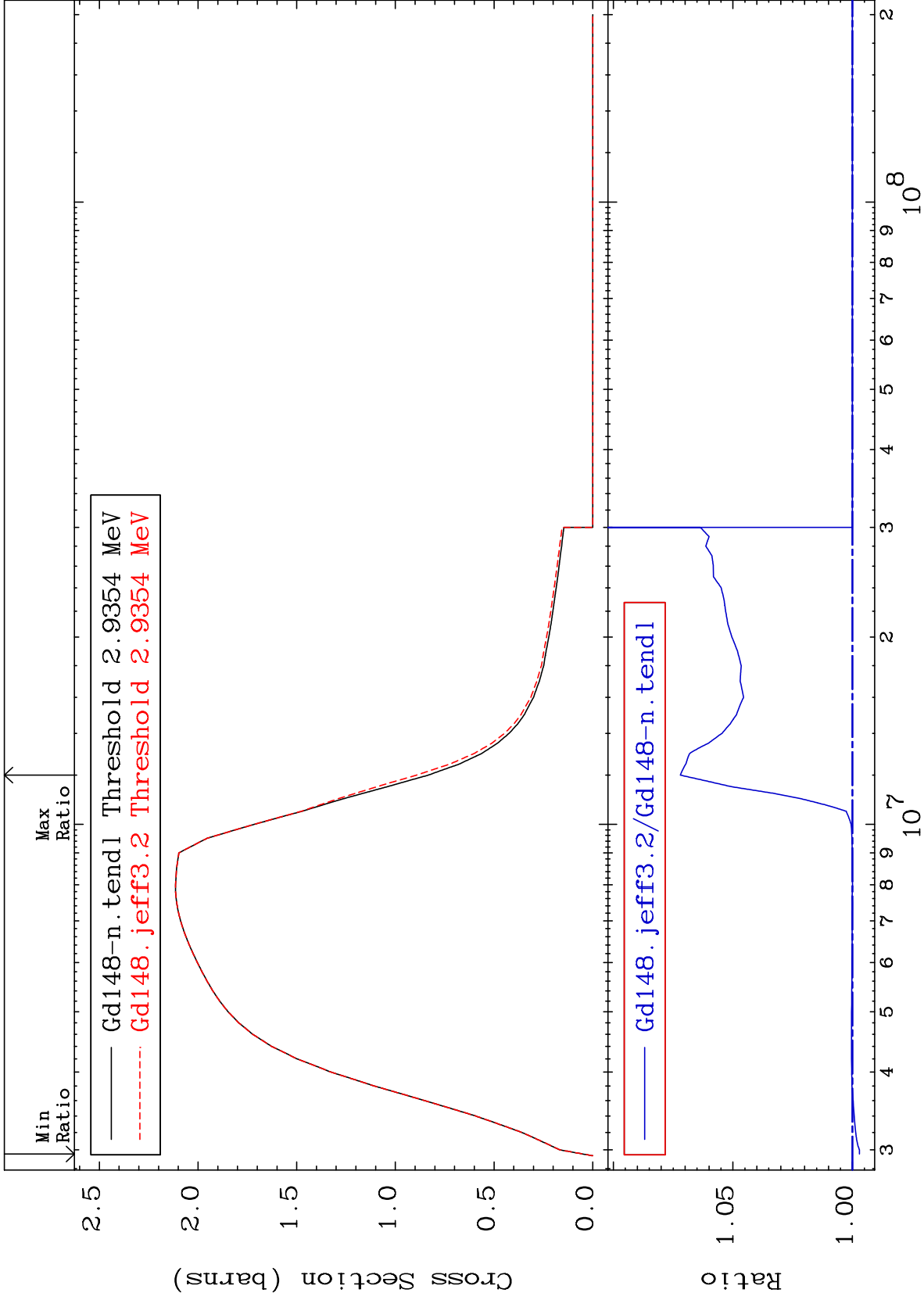
Incident Energy (eV)

64-Gd-148

MAT 6413

(n, n') Continuum
Cross Section

64-Gd-148
-0.292 To 7.199 %



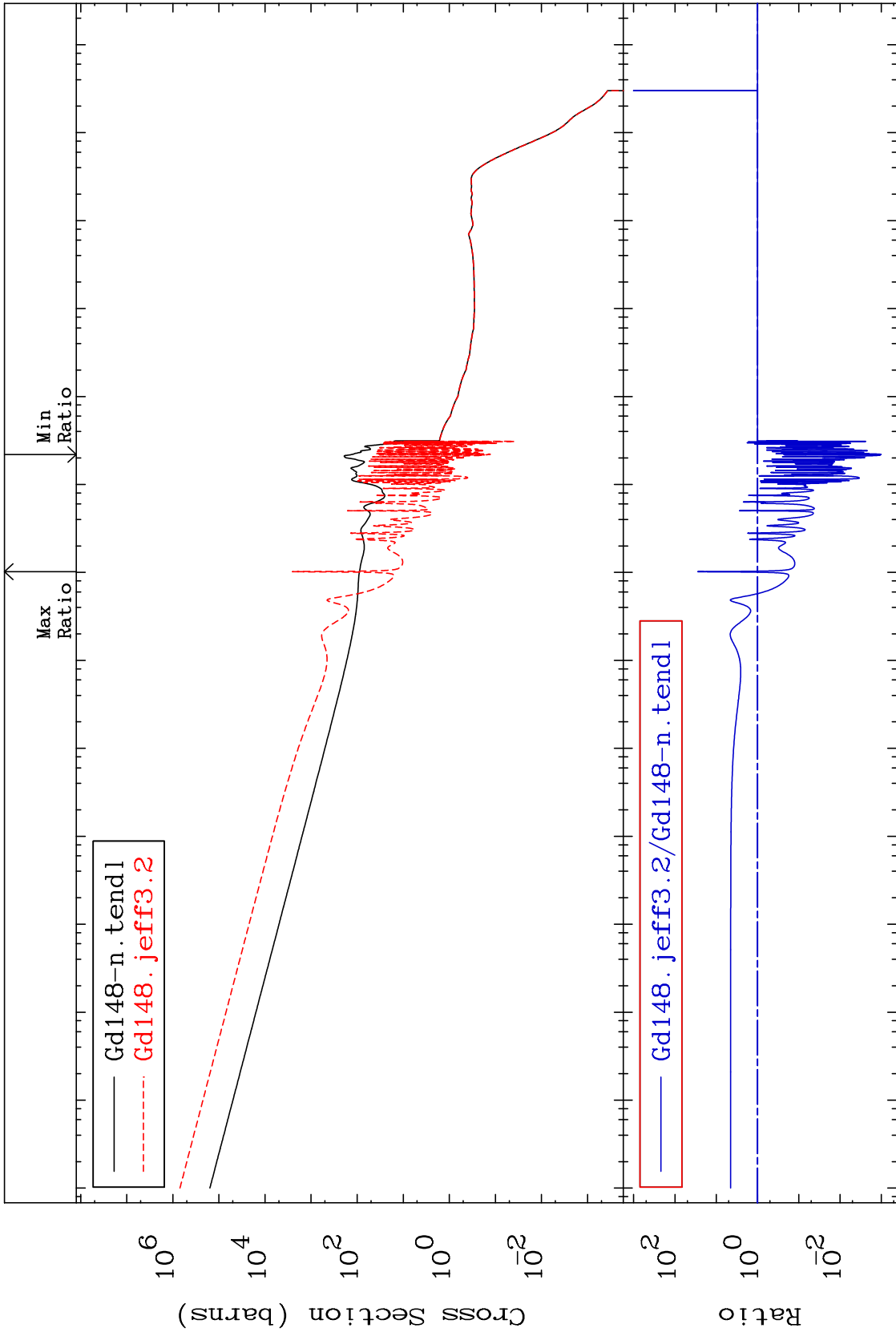
49

Incident Energy (eV)

64-Gd-148

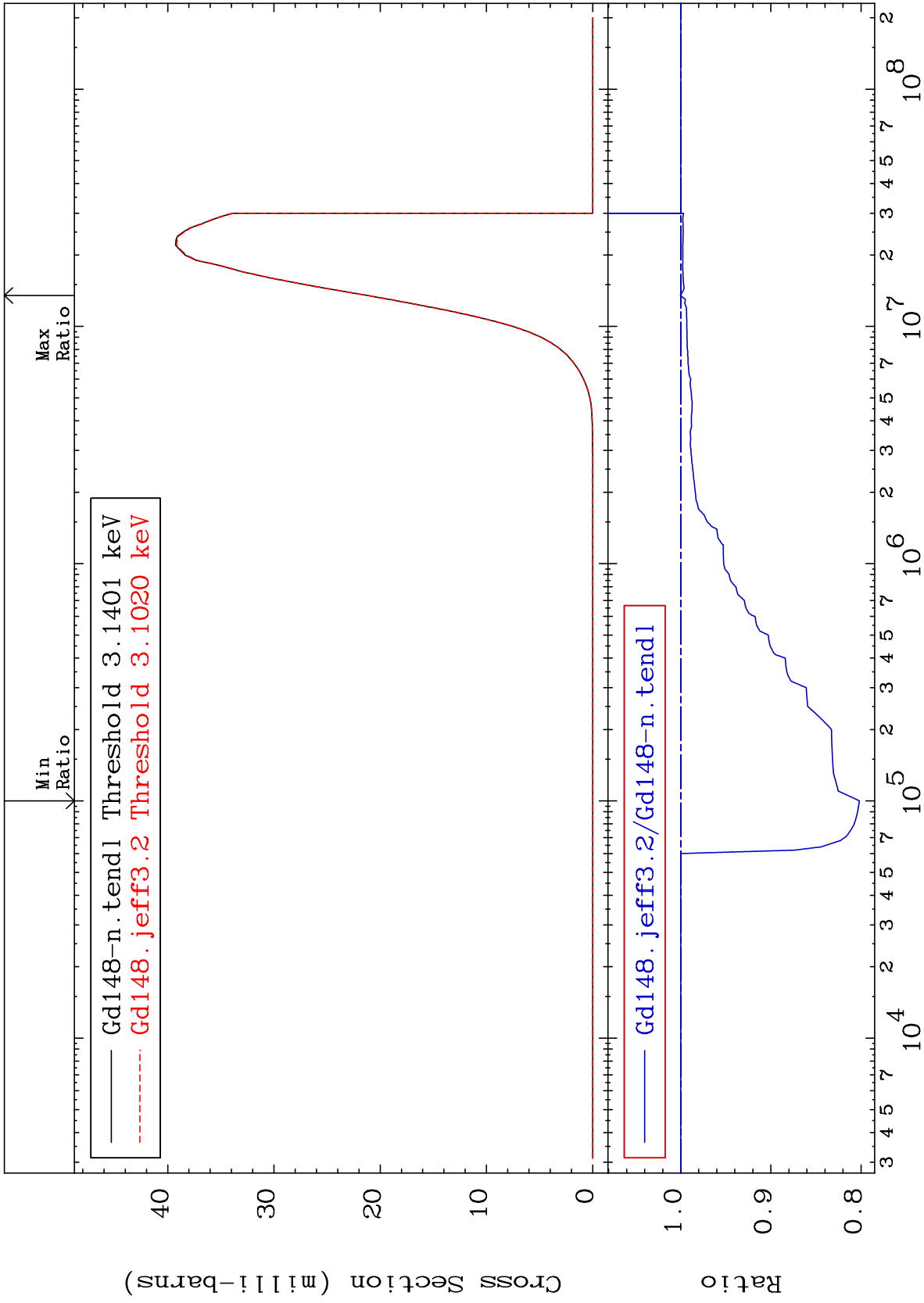
MAT 6413

(n, γ)
Cross Section
64-Gd-148
-99.90 To 2738. %



MAT 6413

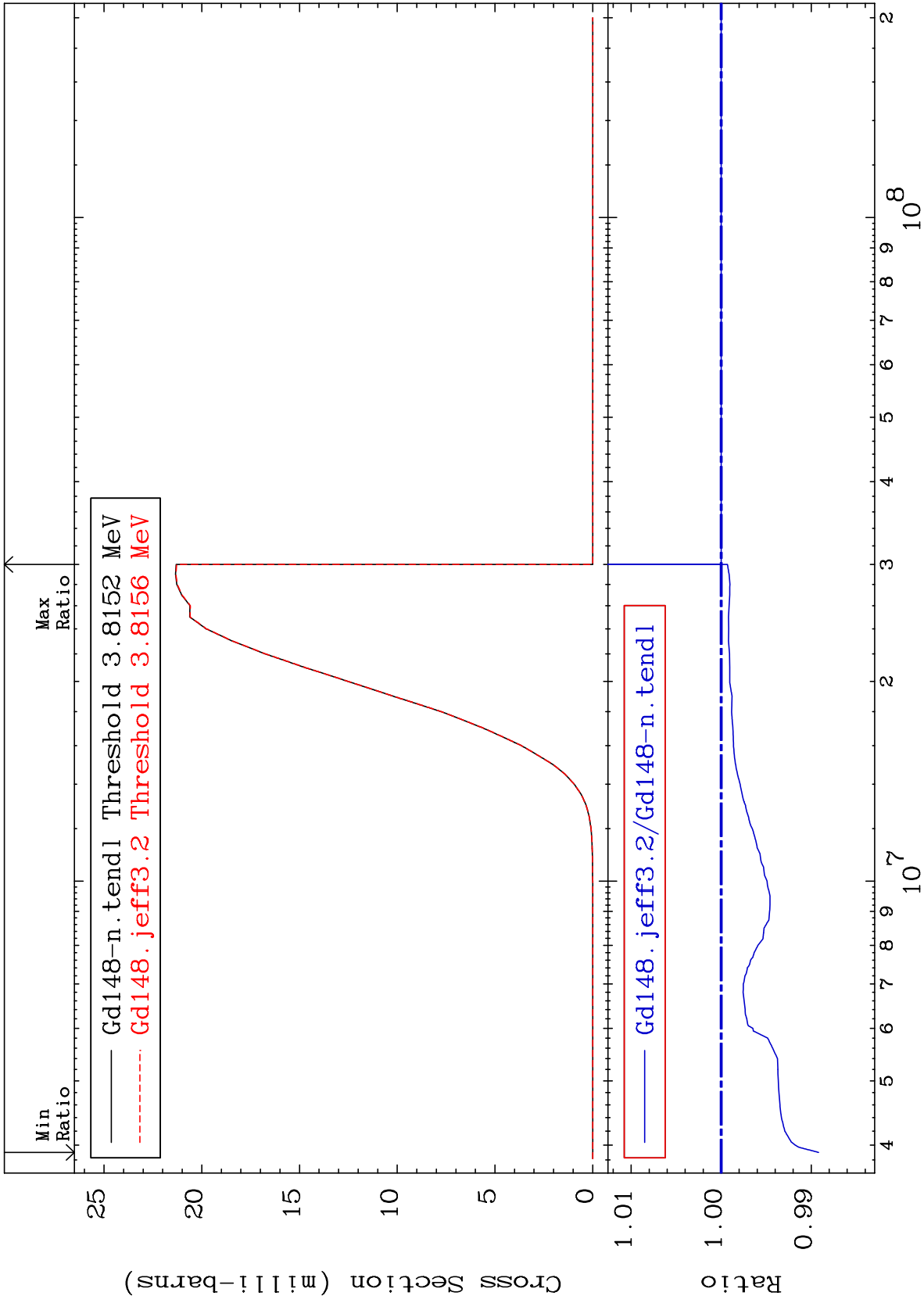
(n,p)
Cross Section
64-Gd-148
-19.82 To 0.041 %



MAT 6413

64-Gd-148

(n, d)
Cross Section
-1.083 To 0.000 %

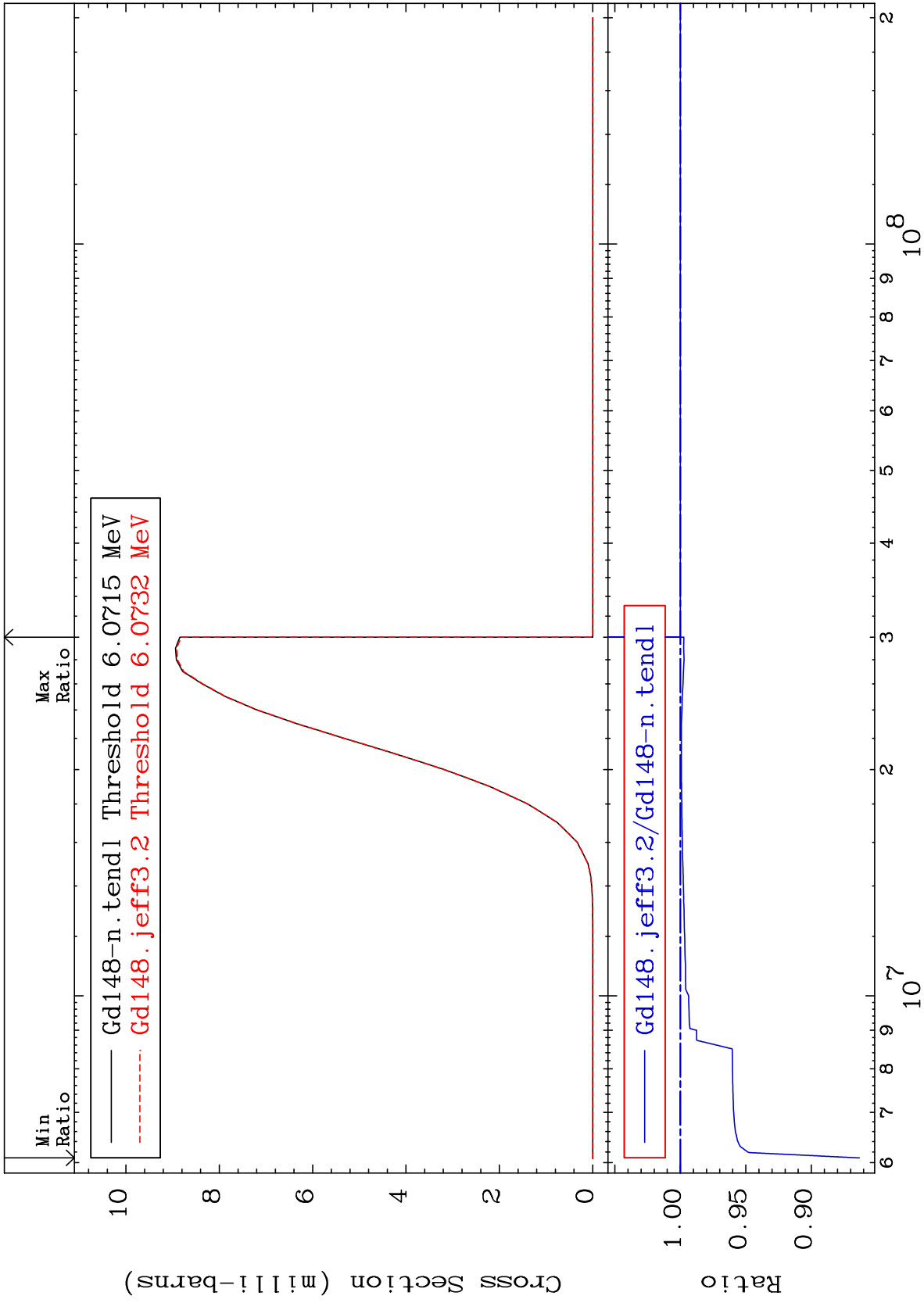


52

64-Gd-148

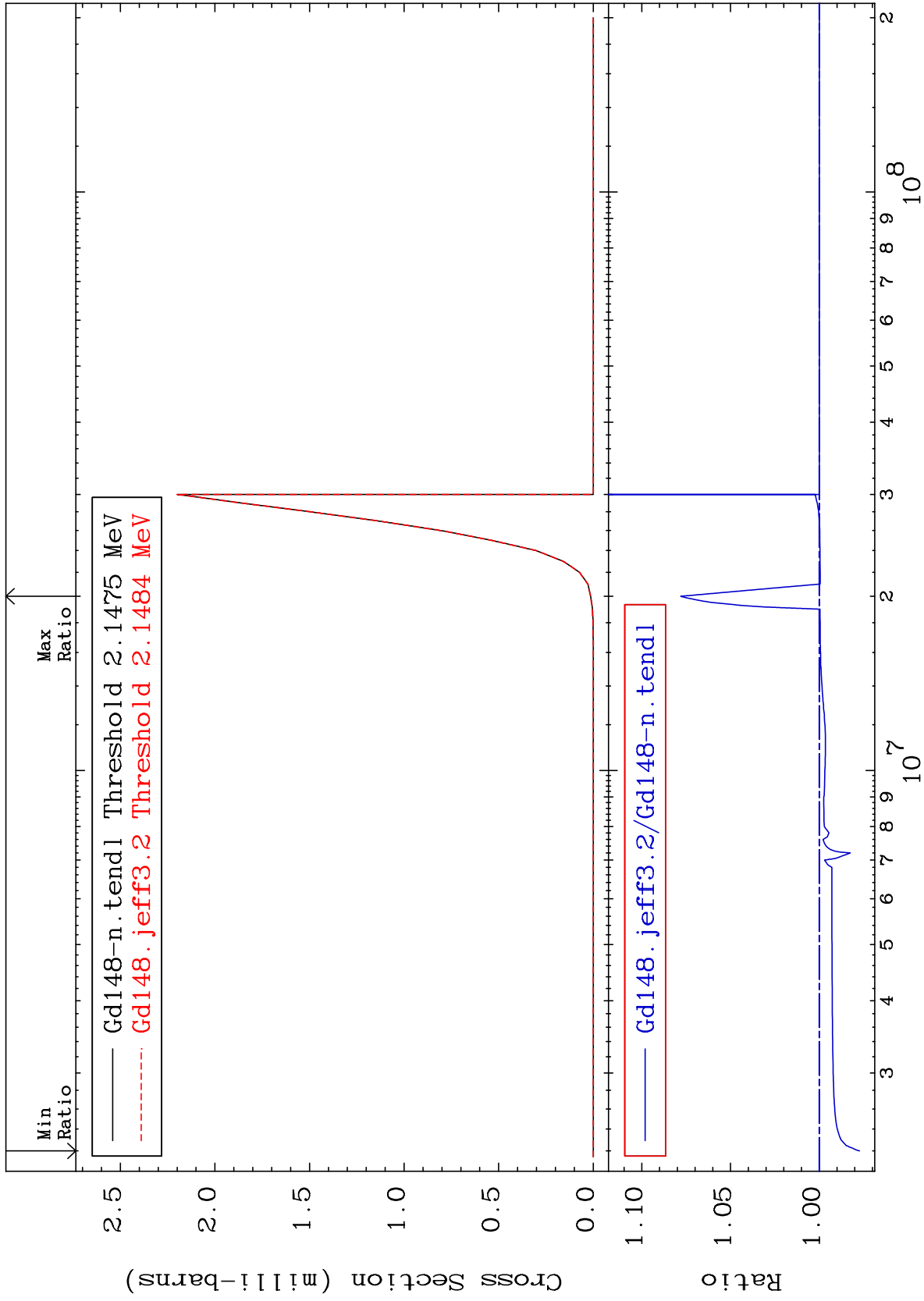
MAT 6413

(n, t) Cross Section
64-Gd-148
-13.68 To 0.000 %



Cross Section

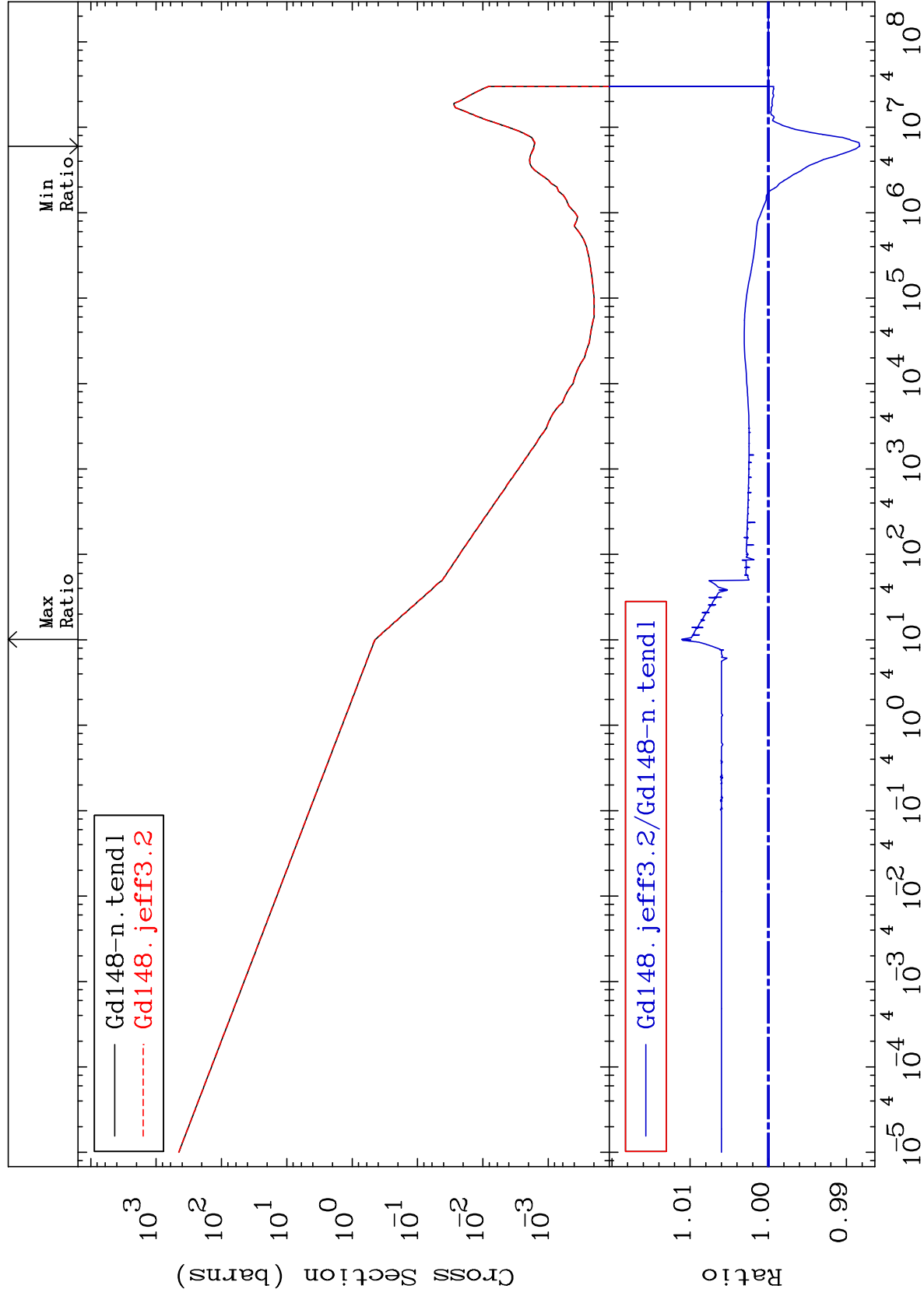
-2.268 To 7.806 %



MAT 6413

64-Gd-148

(n, α)
Cross Section
-1.169 To 1.112 %



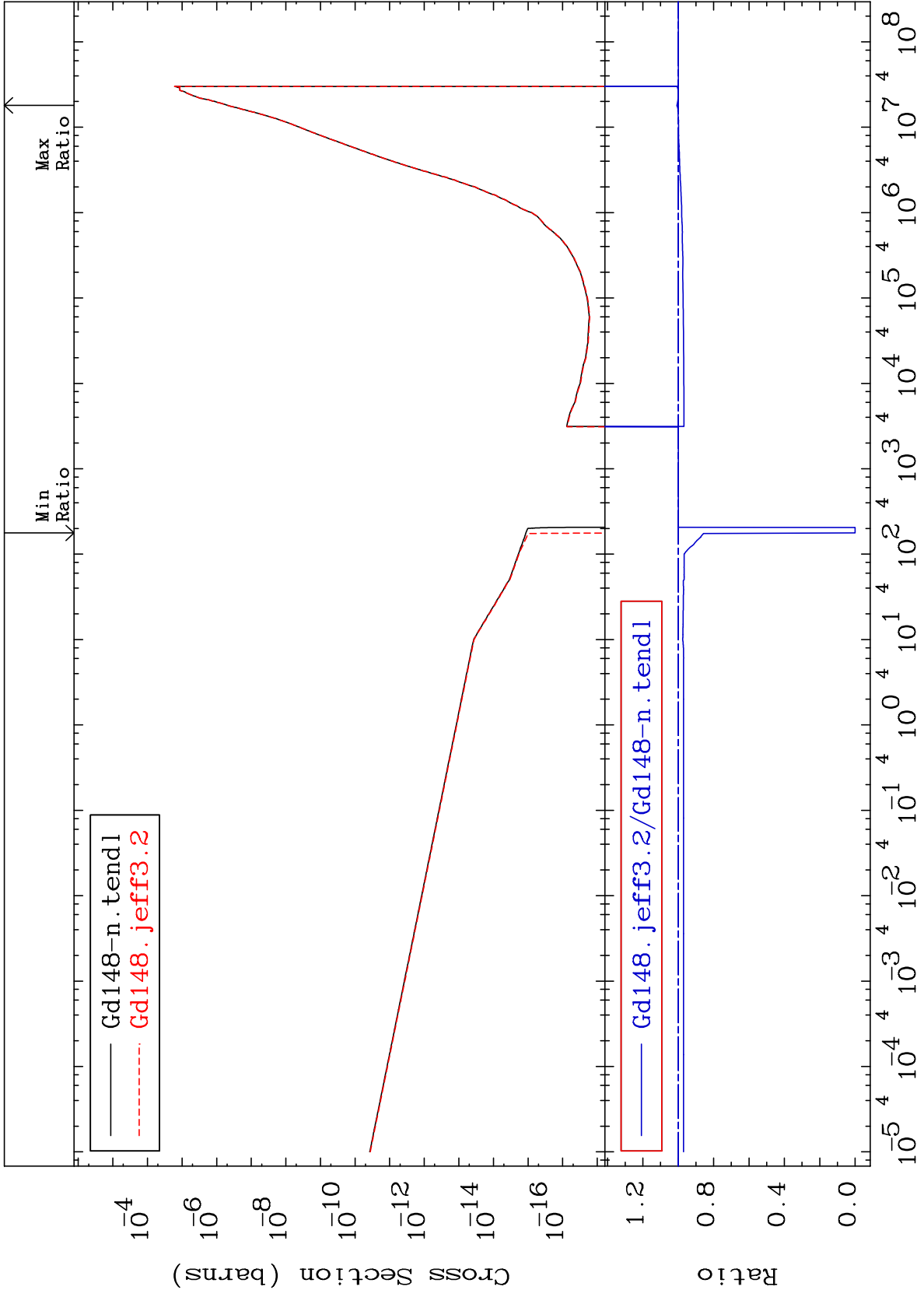
55

Incident Energy (eV)

64-Gd-148

MAT 6413

(n,2α) Cross Section
64-Gd-148
-100.0 To 0.752 %



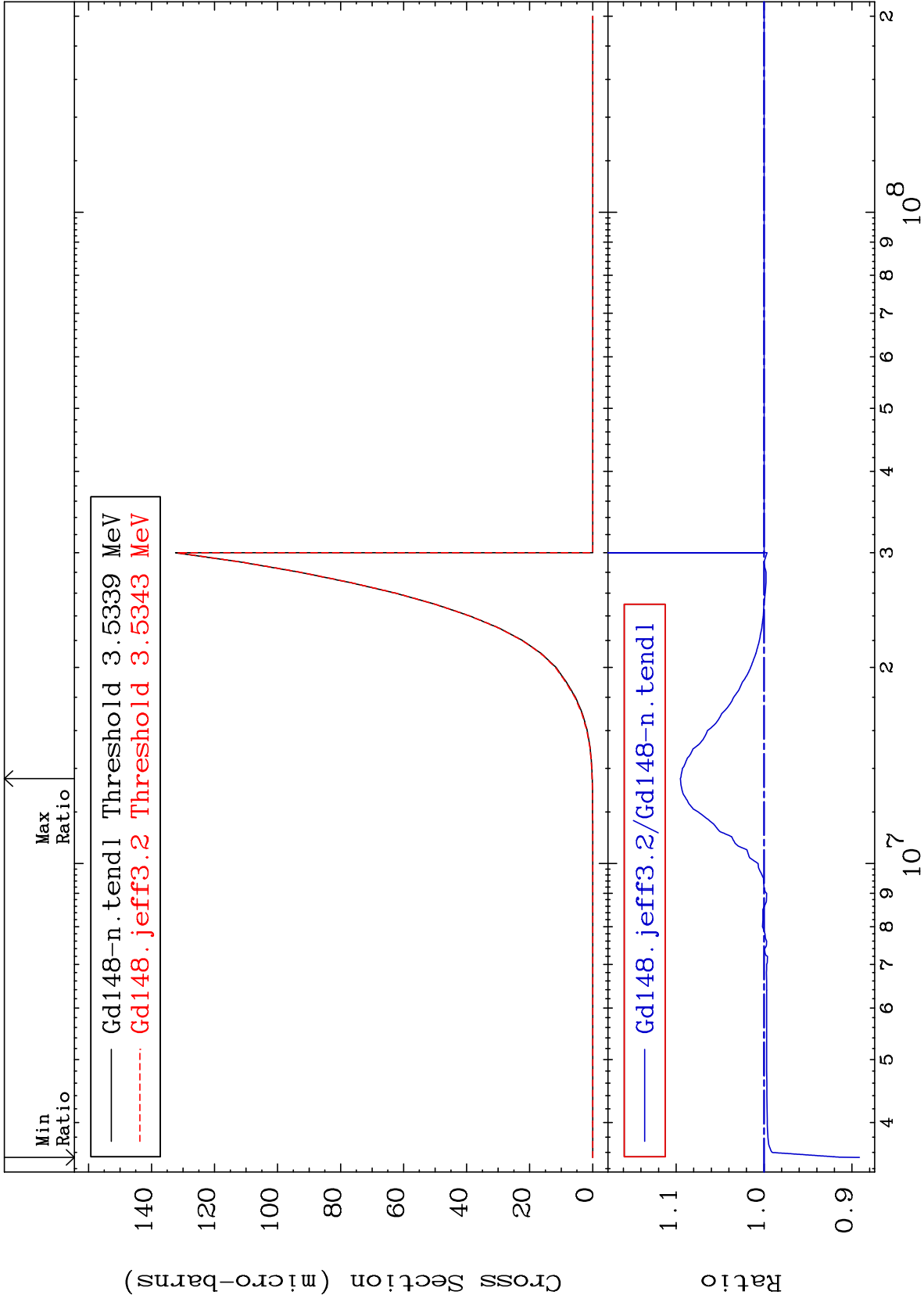
56

Incident Energy (eV)

64-Gd-148

Cross Section

-10.85 To 9.519 %



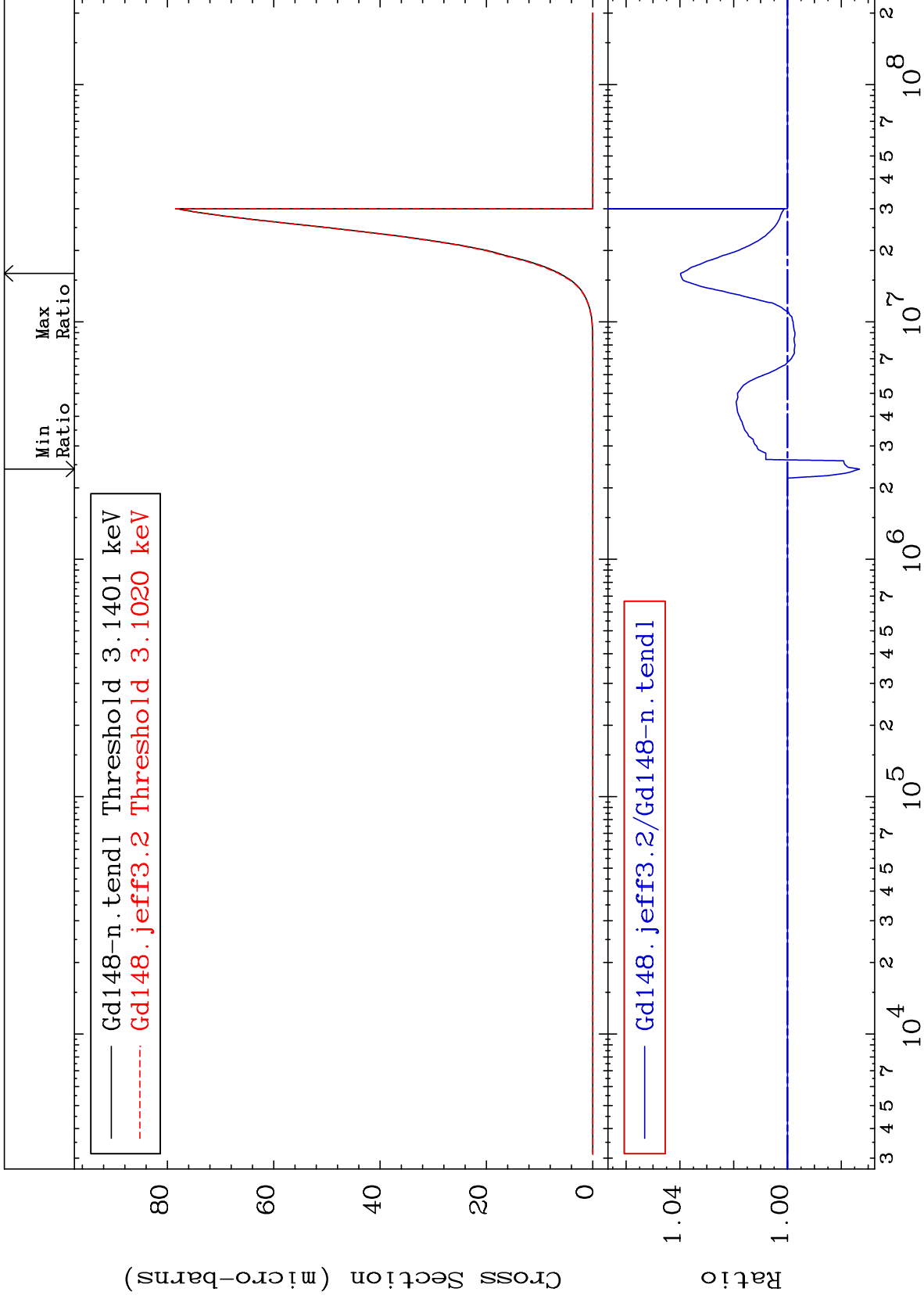
MAT 6413

(n, p) α

64-Gd-148

Cross Section

-2.675 To 3.985 %



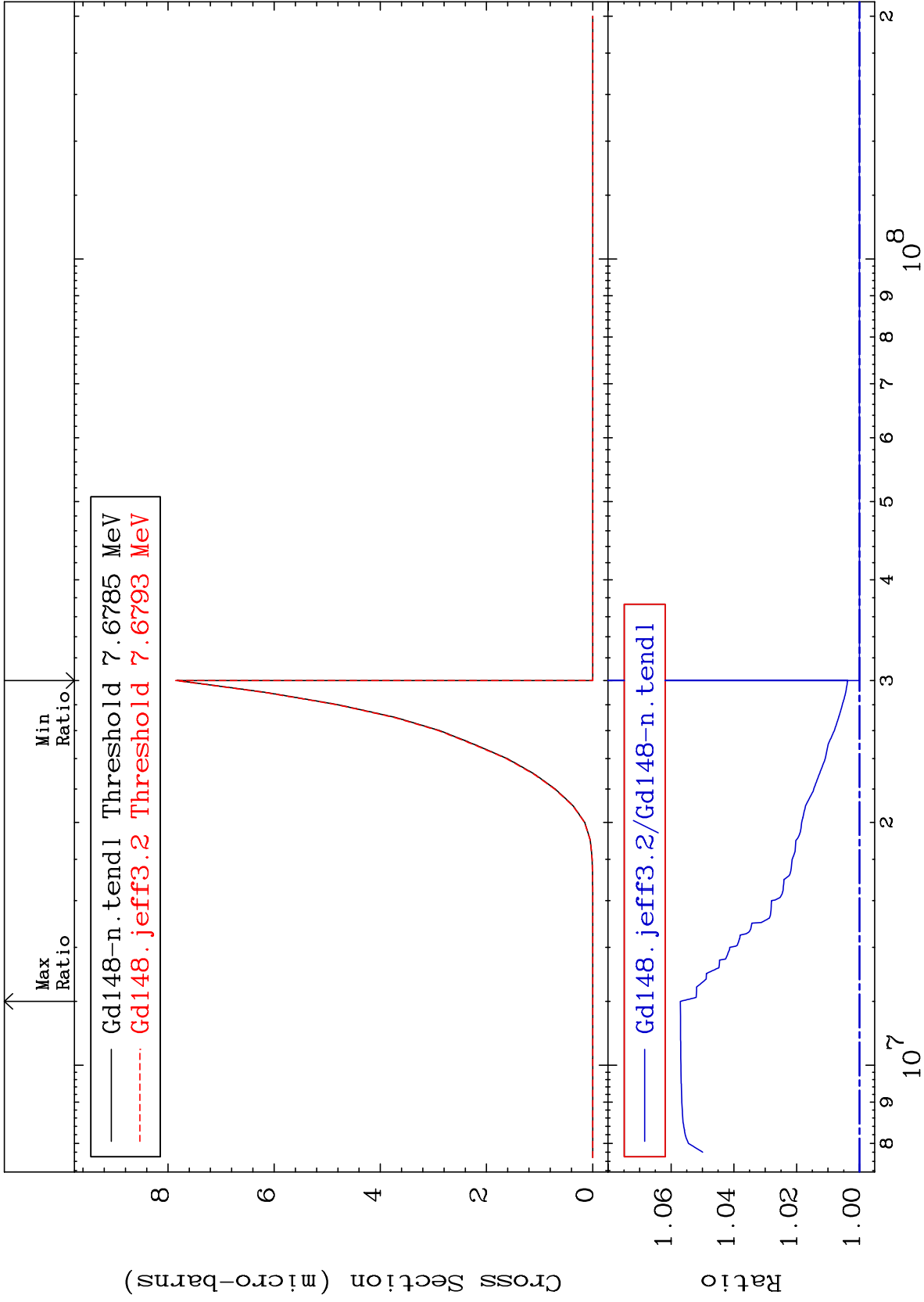
MAT 6413

(n,p) d

64-Gd-148

Cross Section

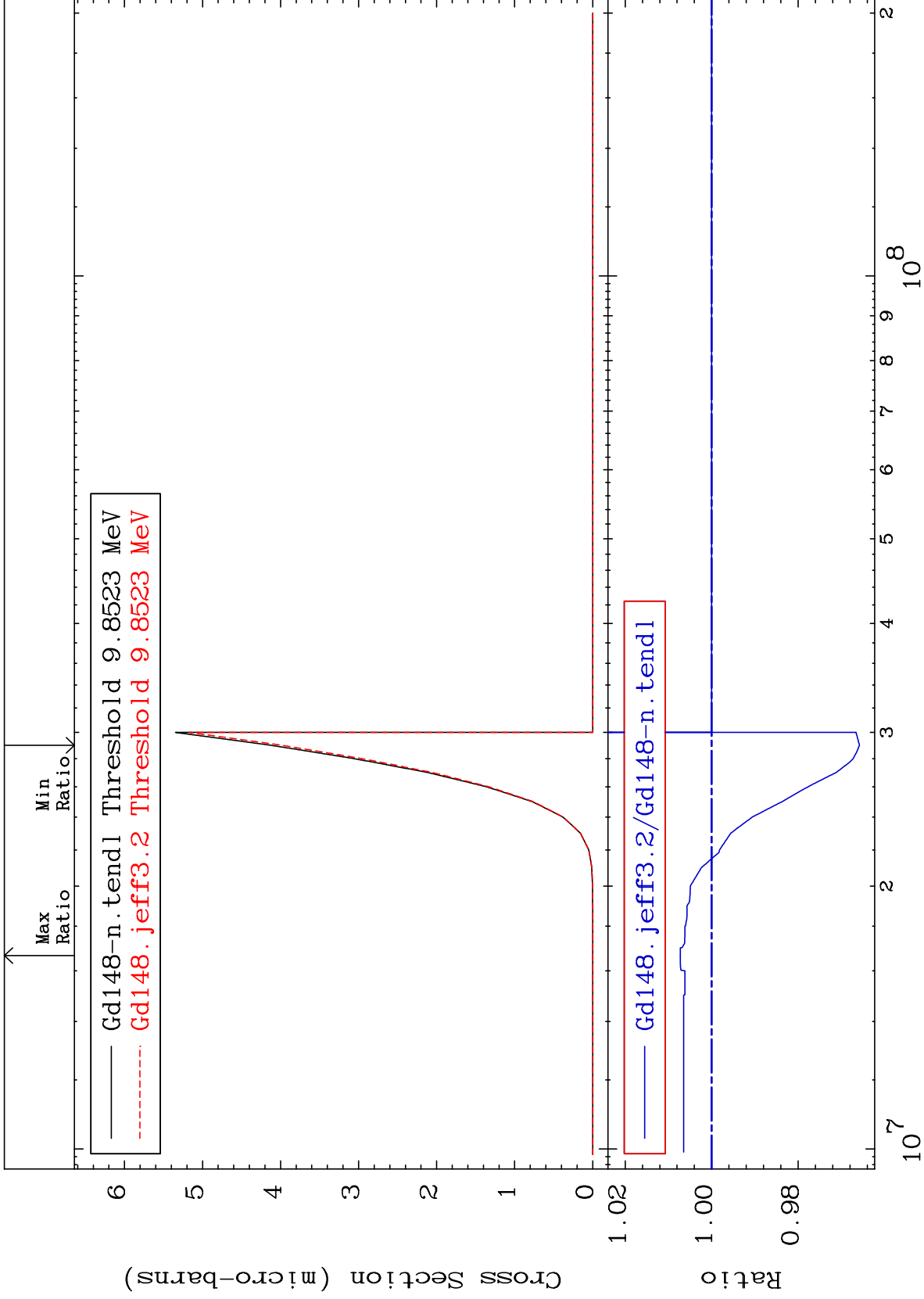
To 5.704 %



MAT 6413

(n,p) t
Cross Section

64-Gd-148
-3.417 To 0.724 %



60

64-Gd-148

64-Gd-148

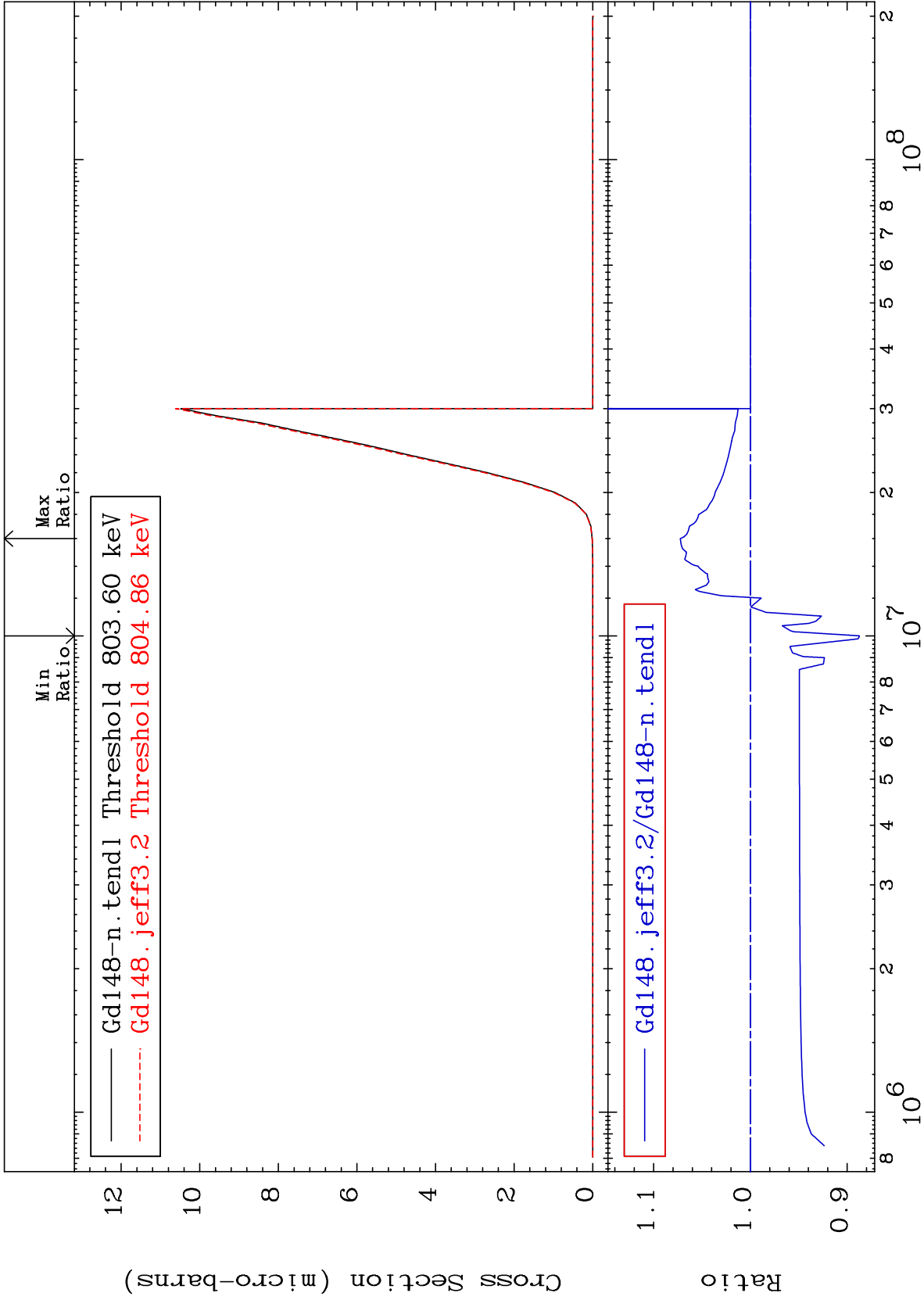
MAT 6413

64-Gd-148

(n, d) α

Cross Section

-11.27 To 7.236 %



61

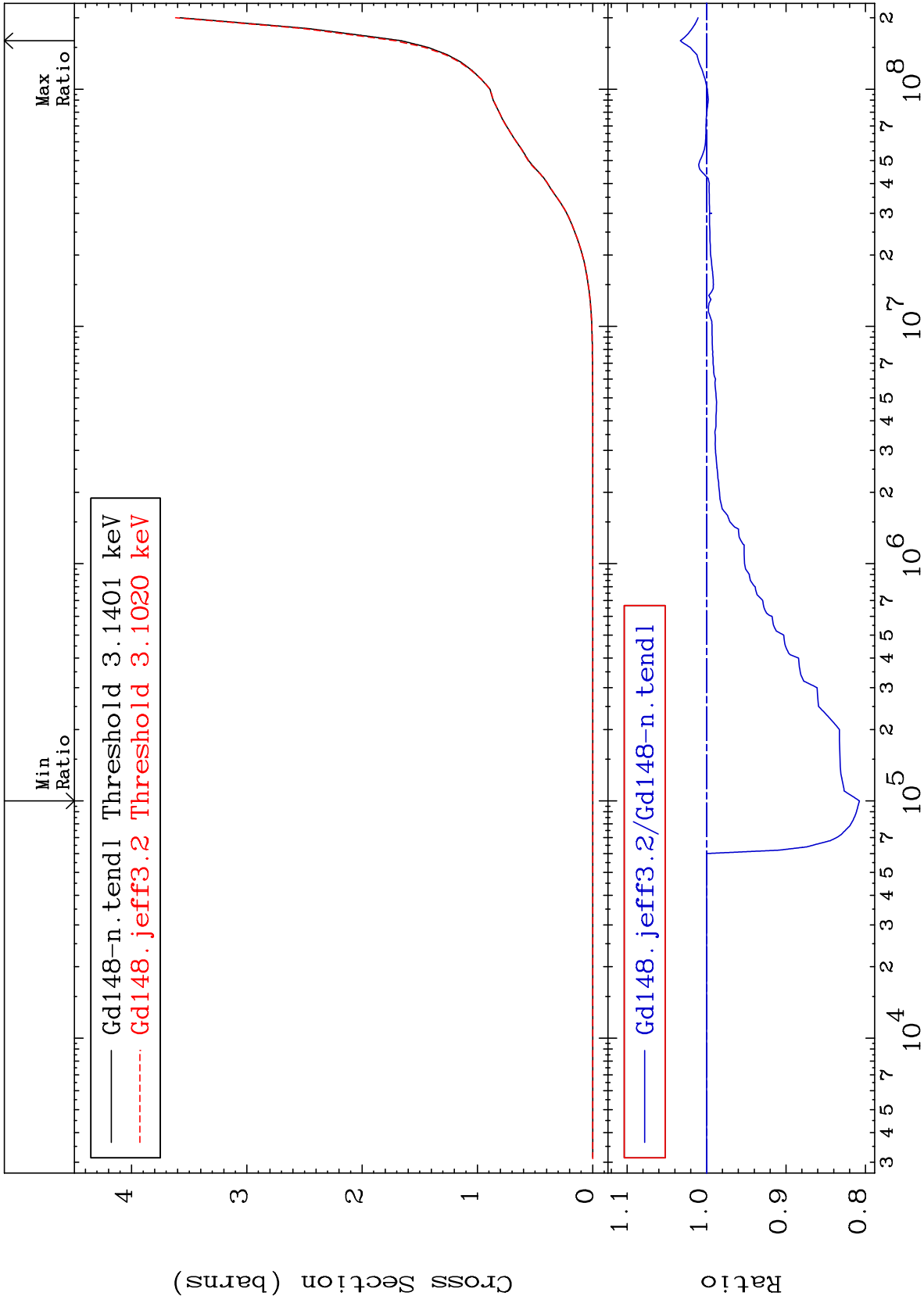
Incident Energy (eV)

64-Gd-148

MAT 6413

Hydrogen Production
Cross Section

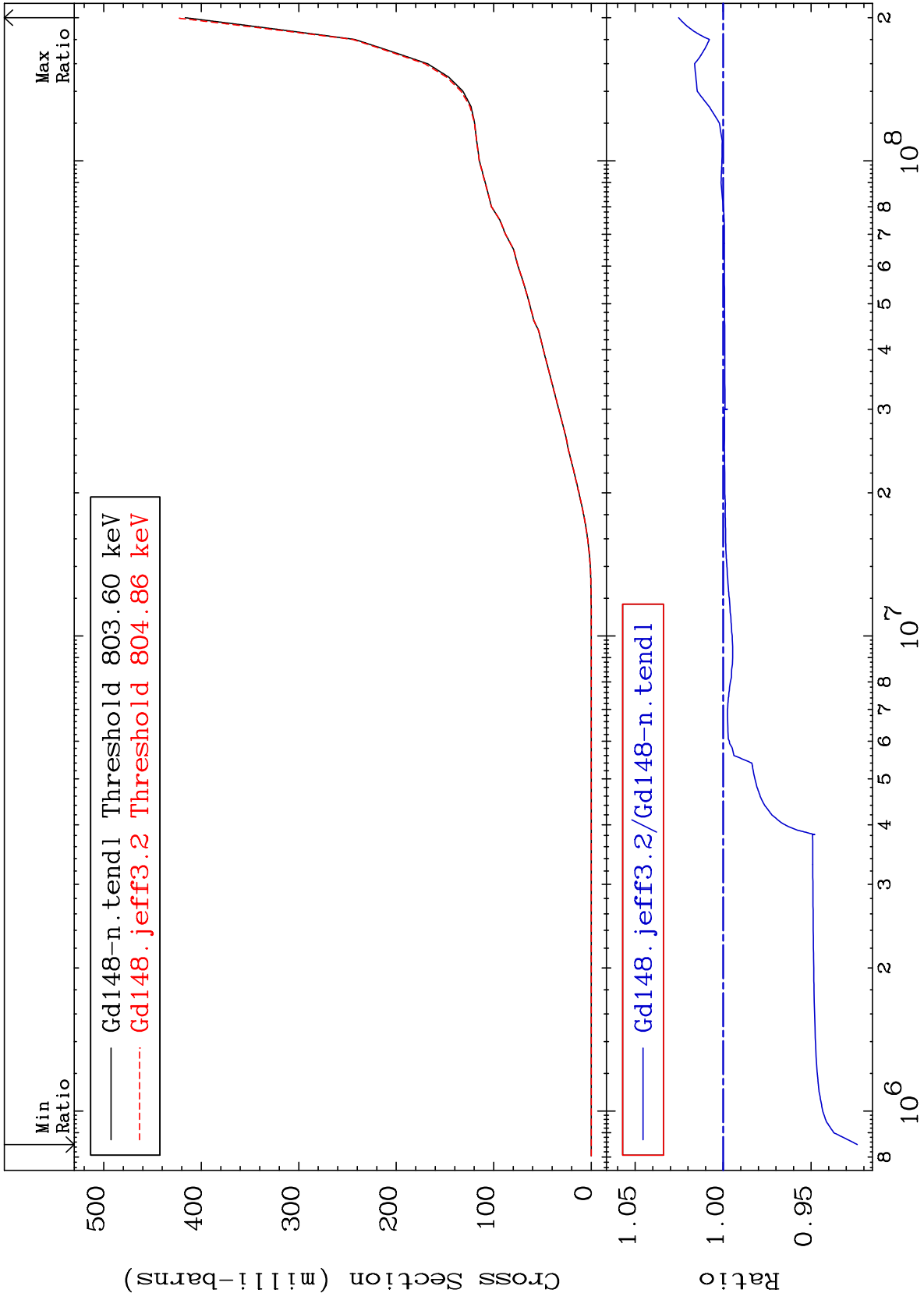
64-Gd-148
-19.24 To 3.300 %



MAT 6413

Deuterium Production
Cross Section

64-Gd-148
-7.622 To 2.532 %



63

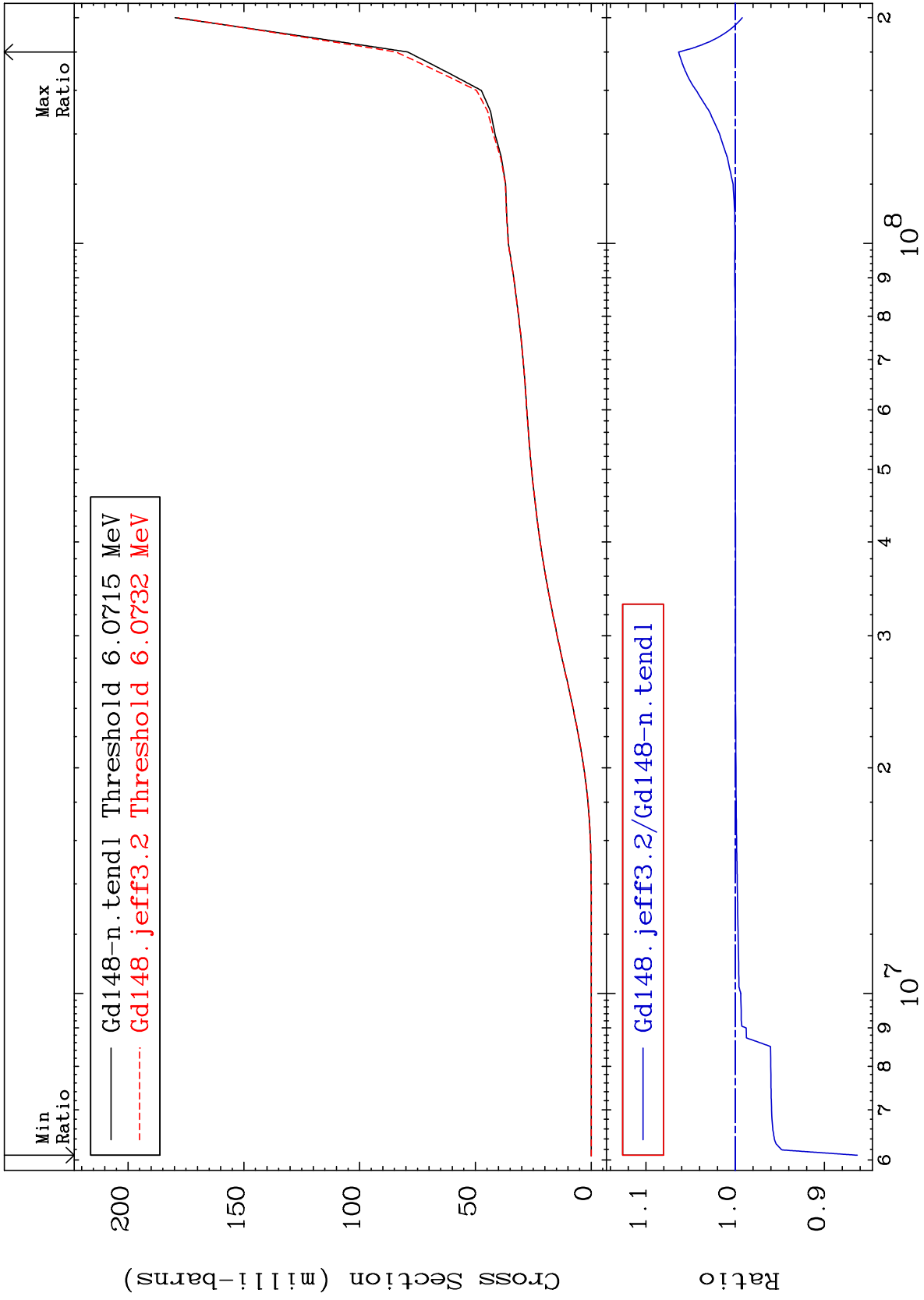
Incident Energy (eV)

64-Gd-148

MAT 6413

Tritium Production
Cross Section

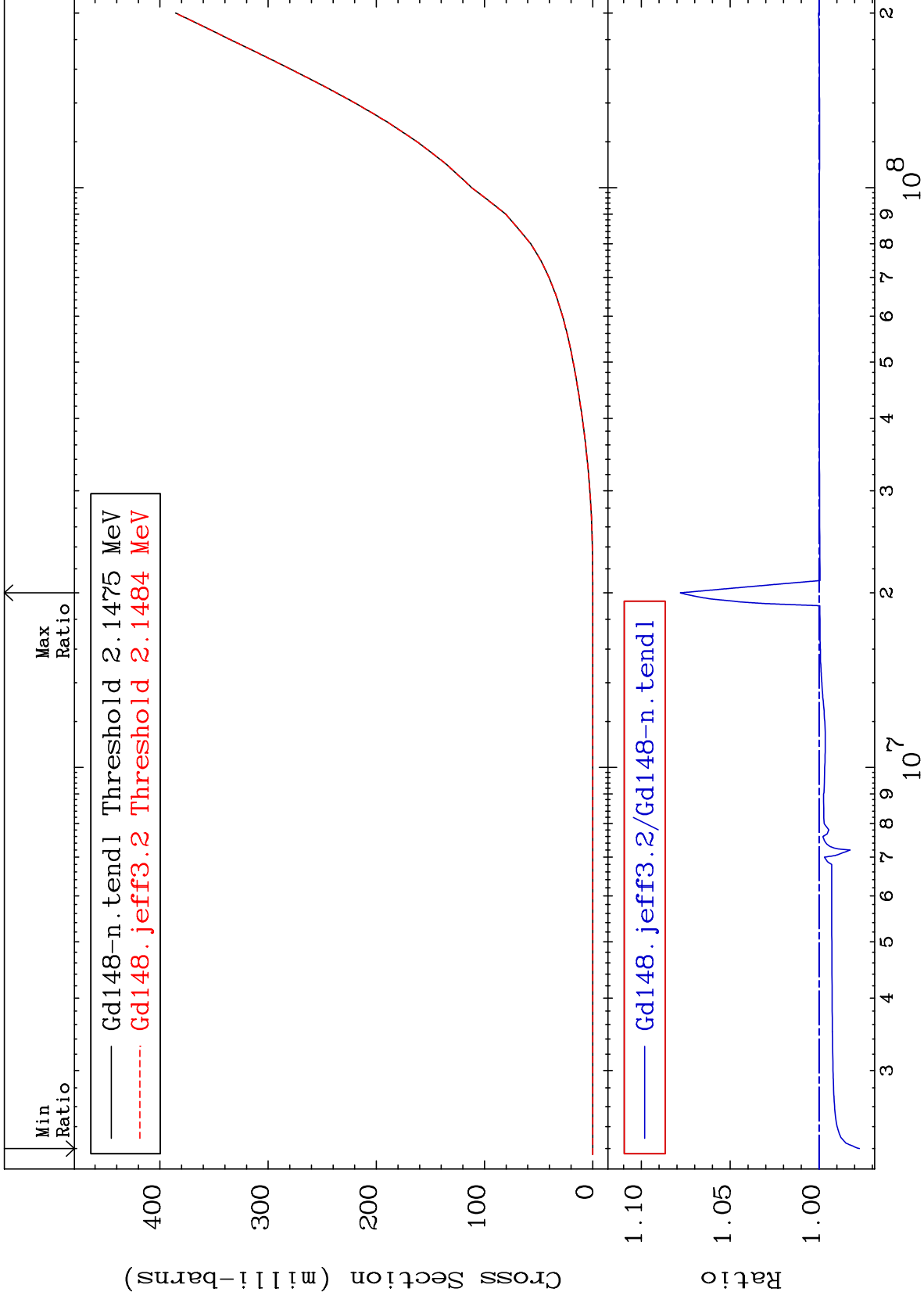
64-Gd-148
-13.68 To 6.344 %



64

Incident Energy (eV)

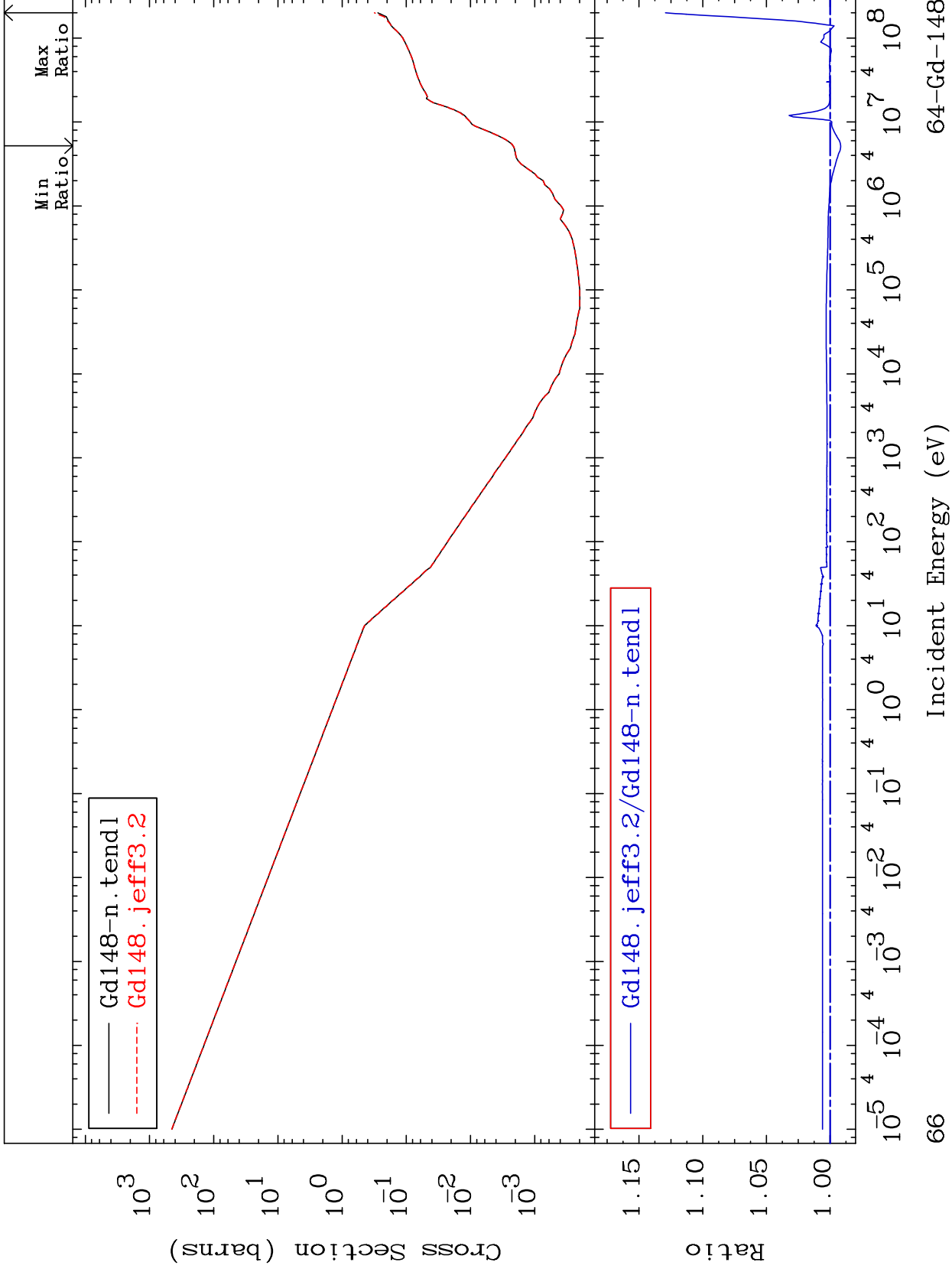
64-Gd-148

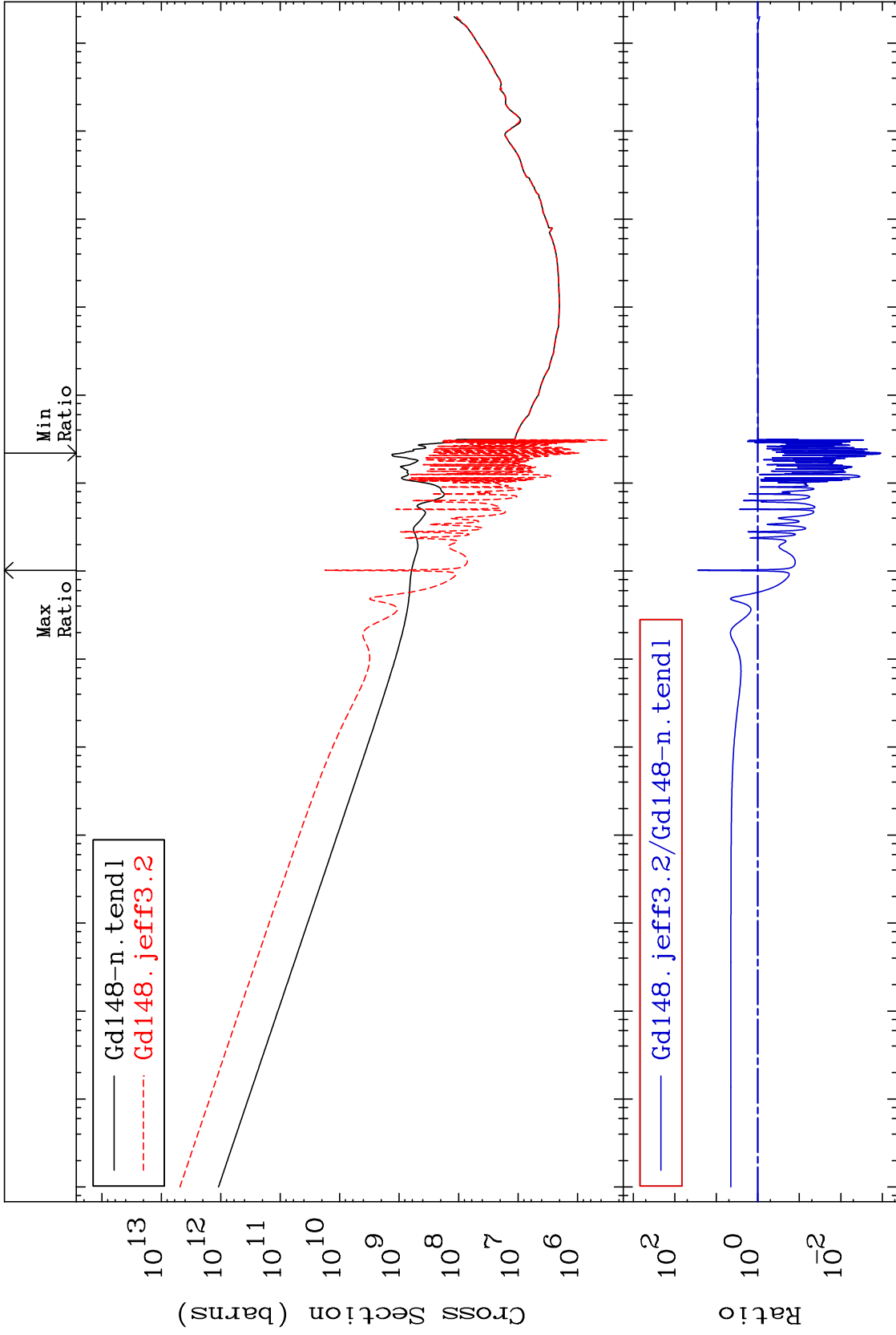


MAT 6413

He-4 Production
Cross Section

64-Gd-148
-0.830 To 12.92 %

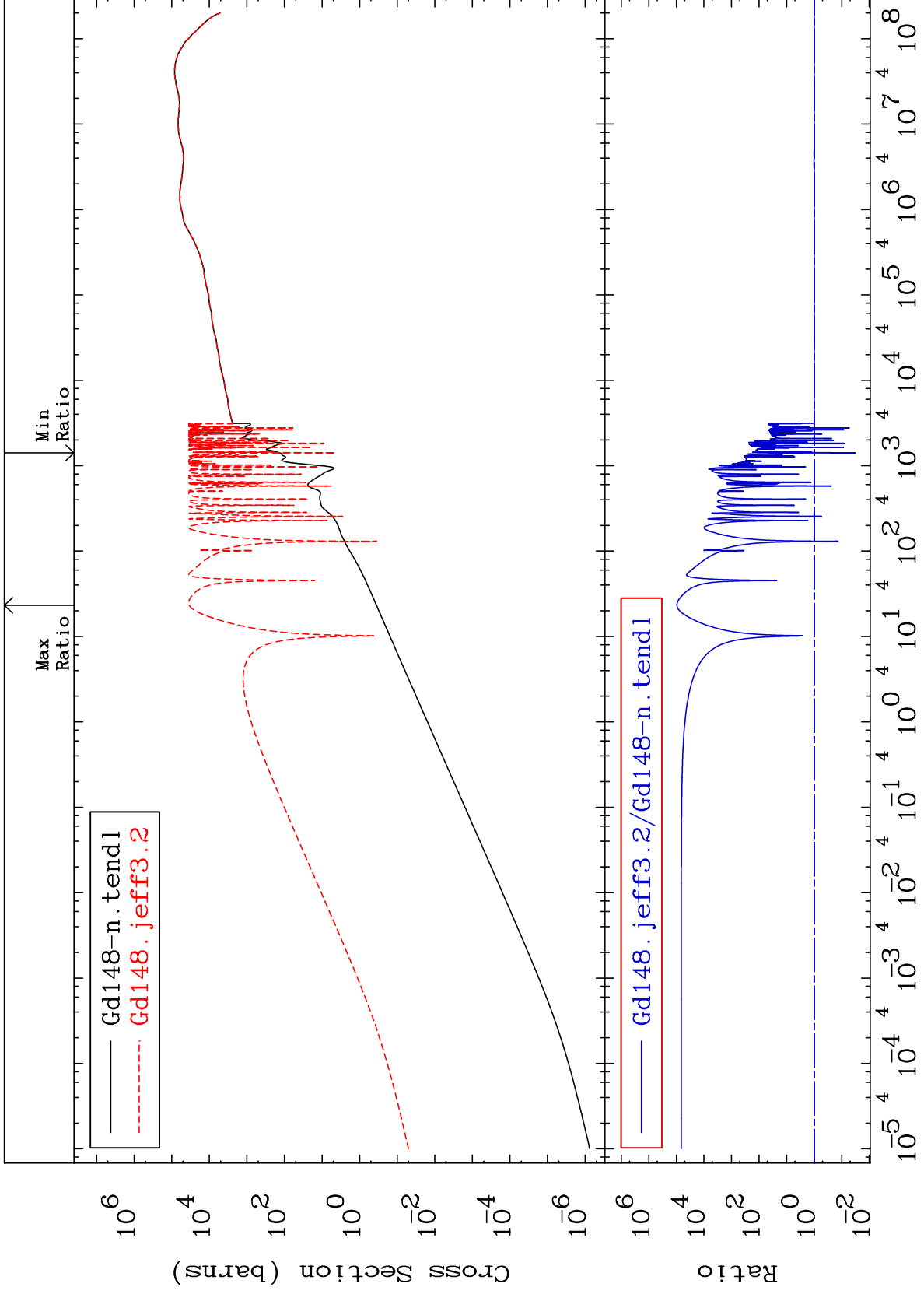


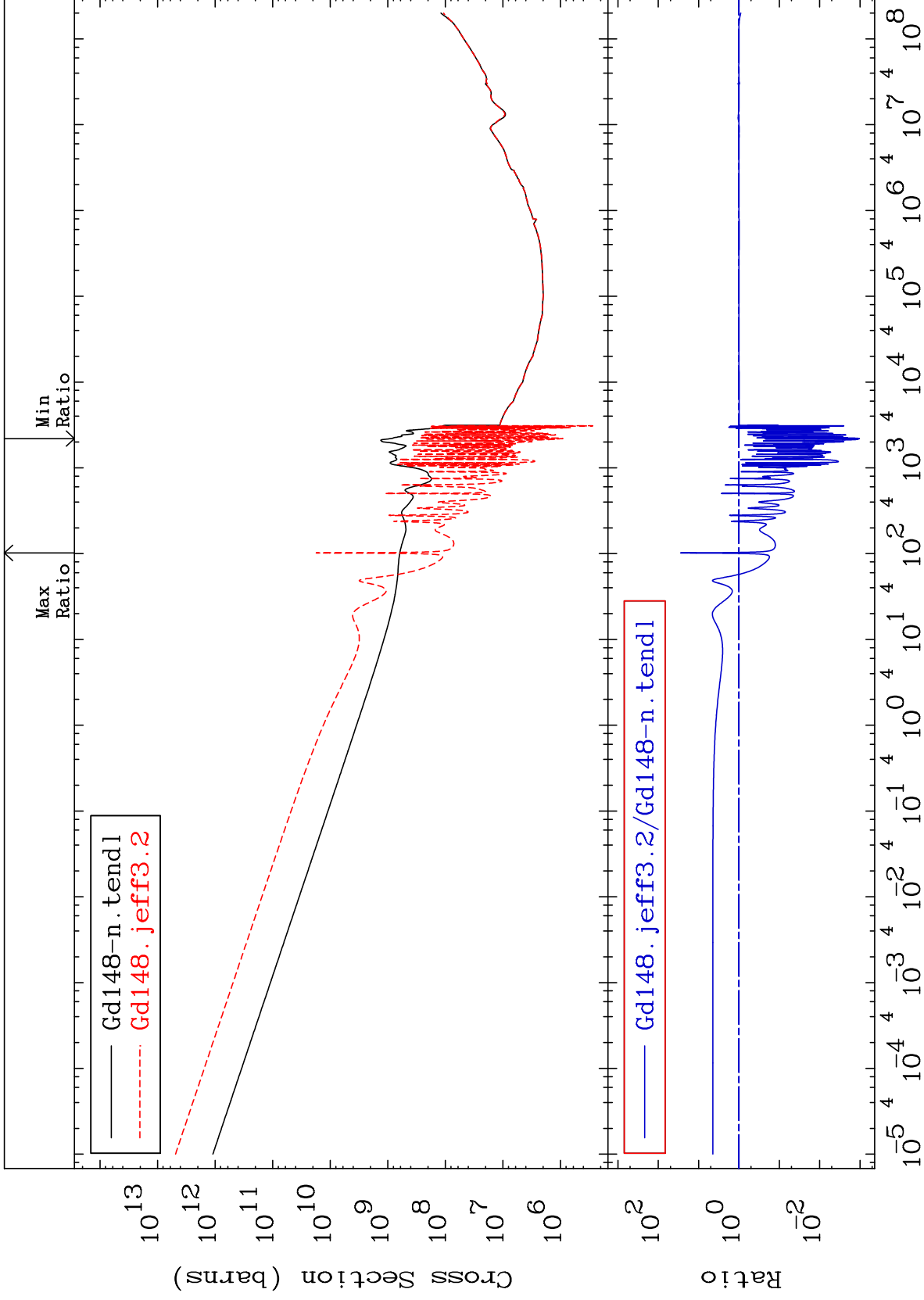


MAT 6413

Kerma elastic
Cross Section

64-Gd-148
-96.73 To 9999. %

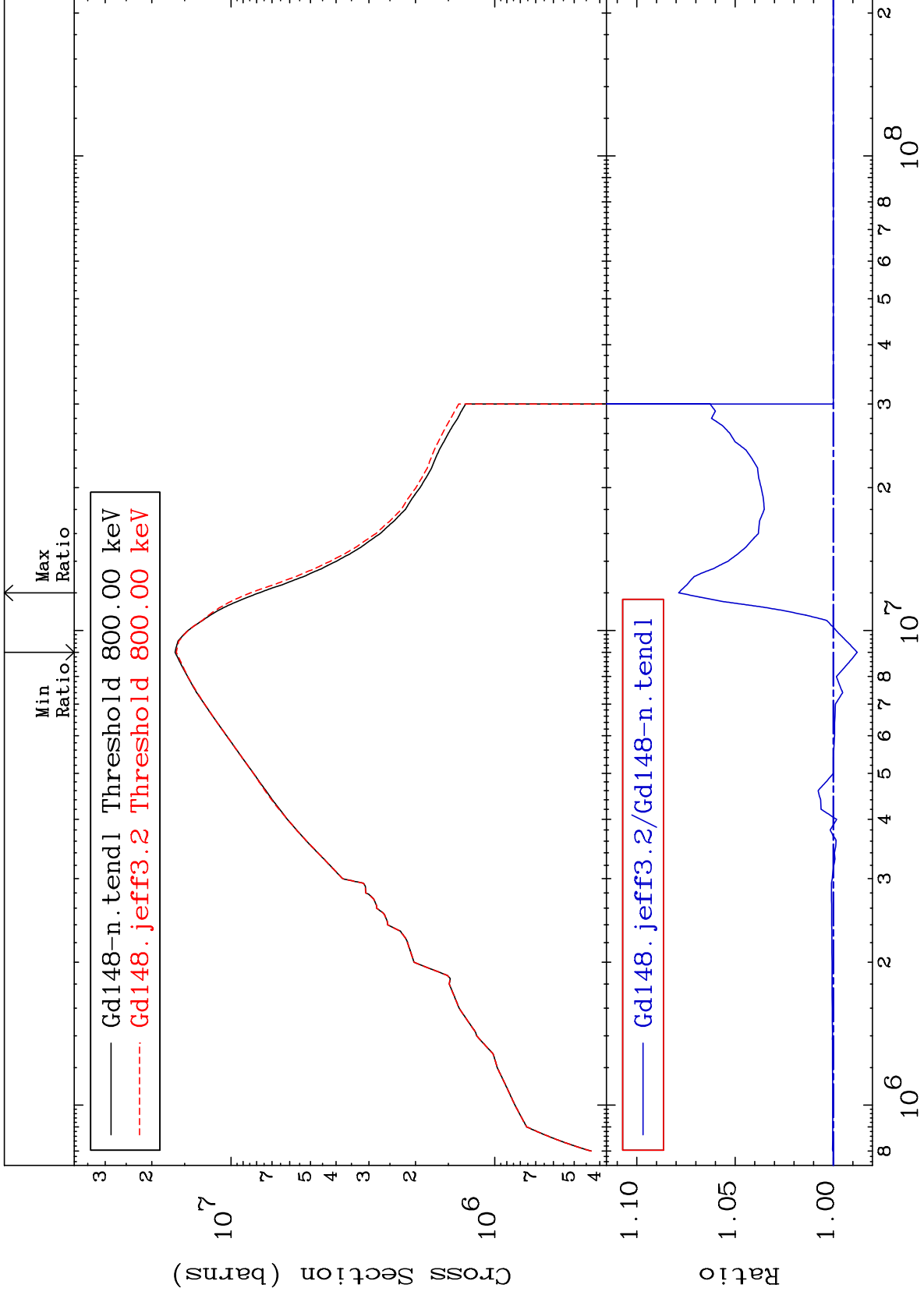




MAT 6413

Kerma inelastic (mt51-91)
Cross Section

64-Gd-148
-1.218 To 7.872 %



70

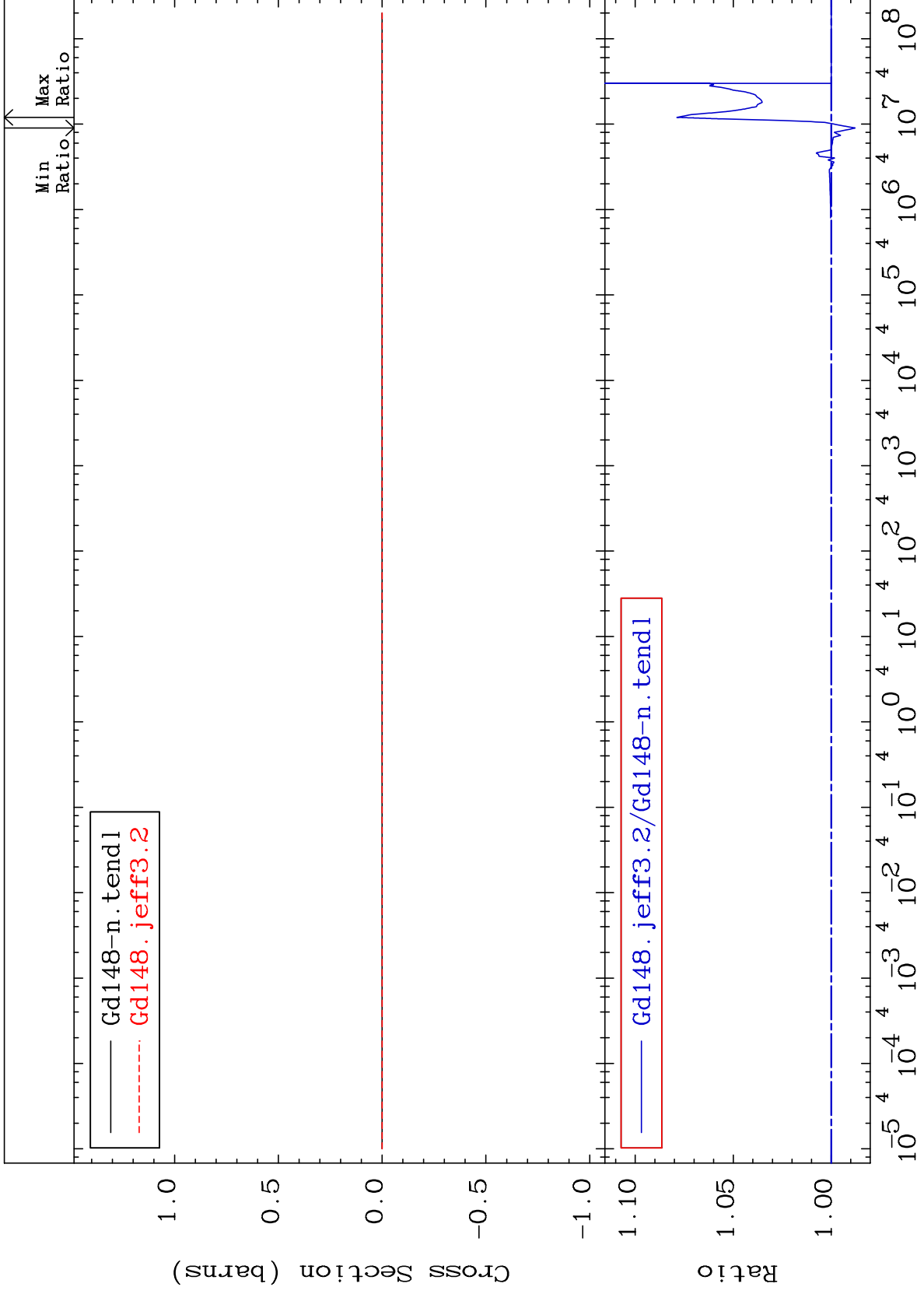
Incident Energy (eV)

64-Gd-148

MAT 6413

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

64-Gd-148
-1.218 To 7.872 %



71

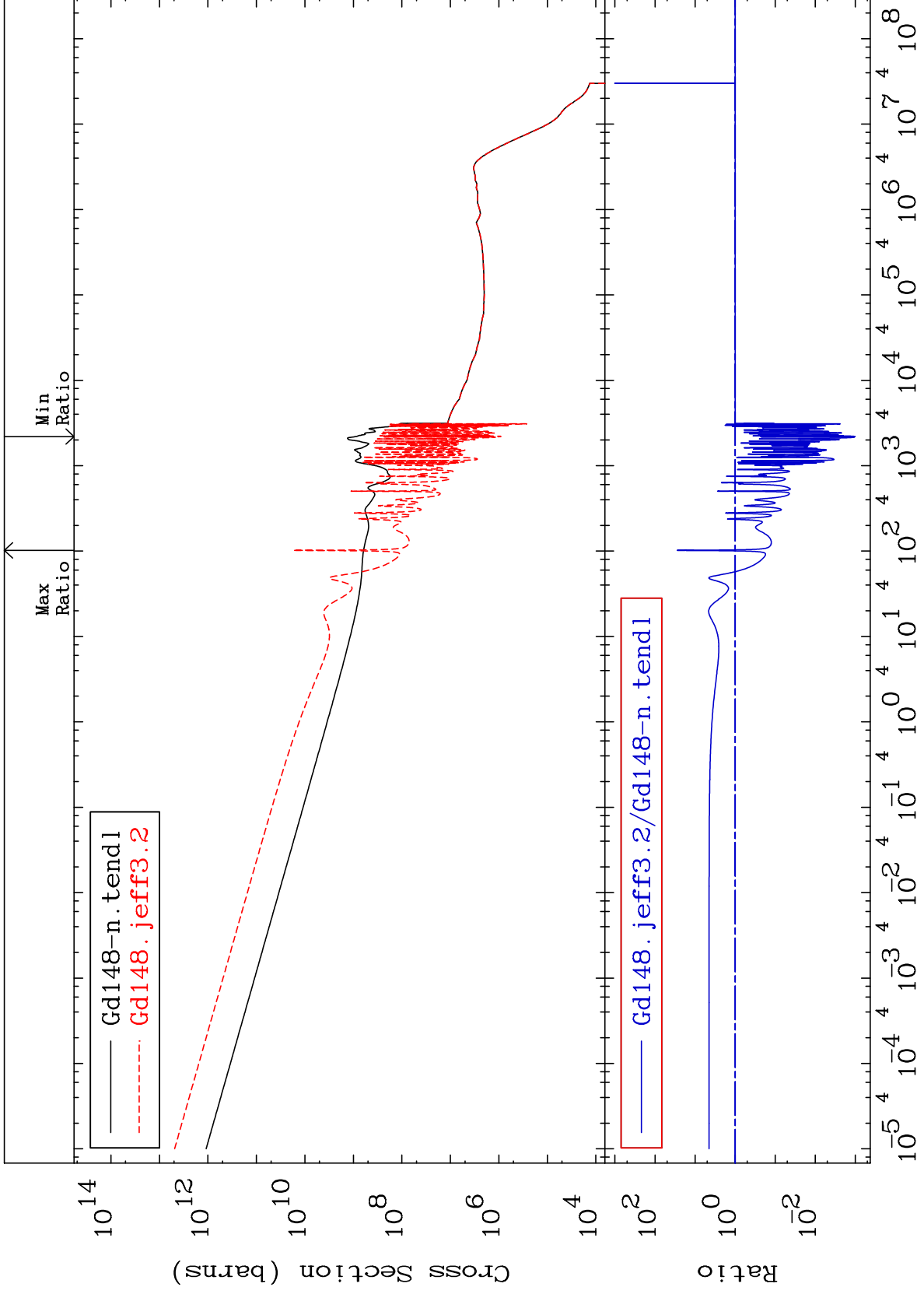
Incident Energy (eV)

64-Gd-148

MAT 6413

Kerma capture (mt102)
Cross Section

64-Gd-148
-99.90 To 2738. %



72

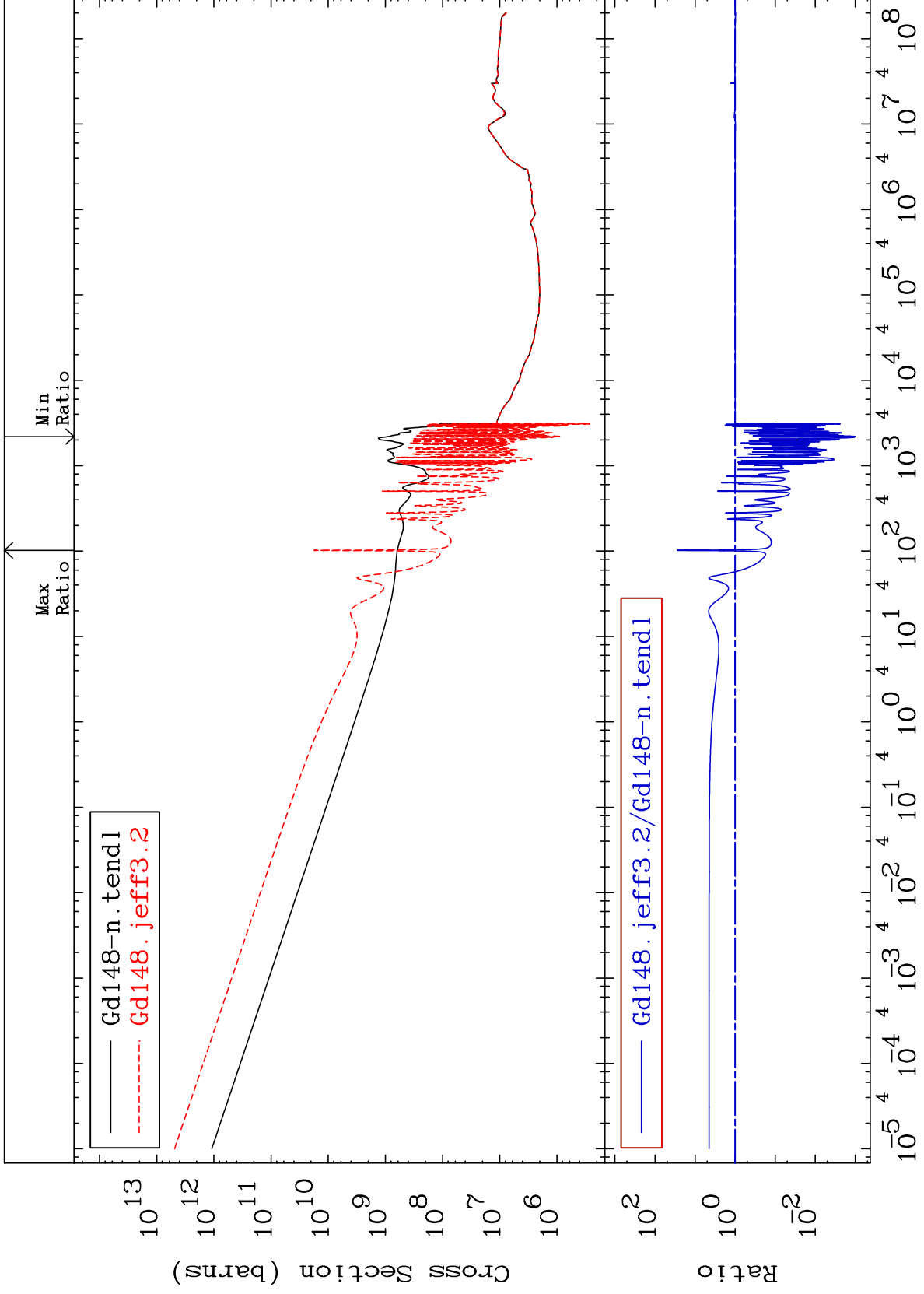
Incident Energy (eV)

64-Gd-148

MAT 6413

Total photon (eV-barns)
Cross Section

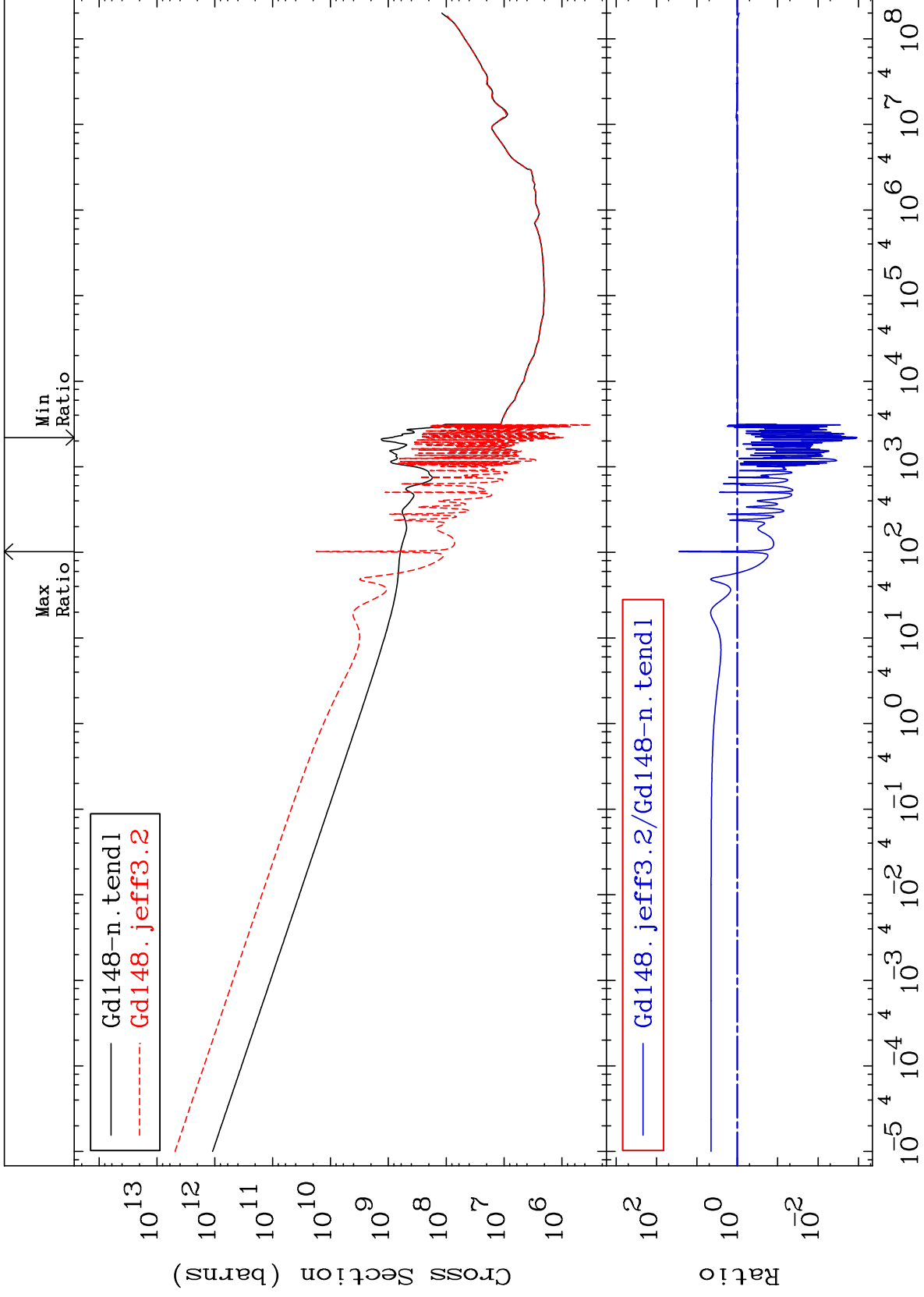
64-Gd-148
-99.90 To 2737. %



73

Incident Energy (eV)

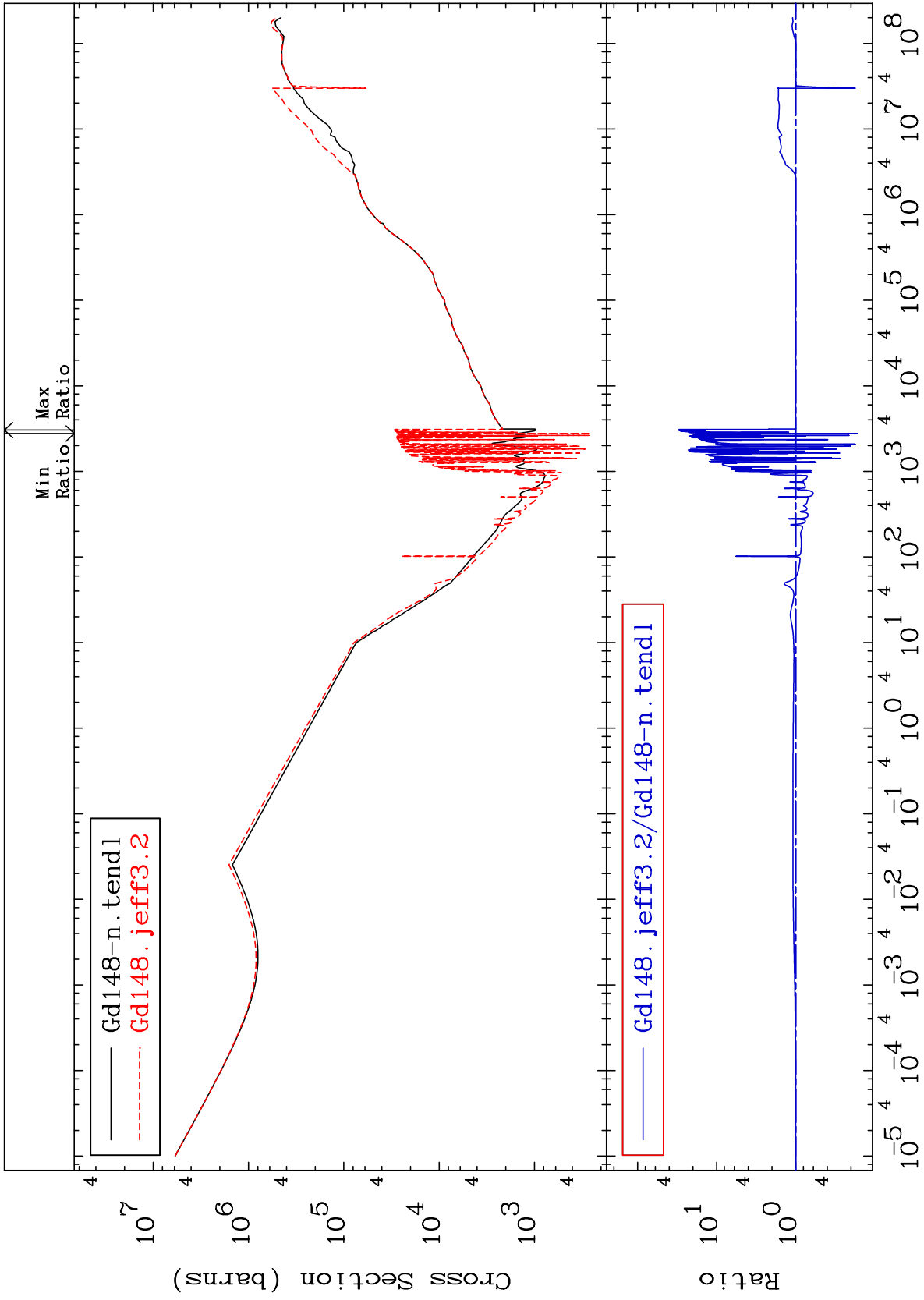
64-Gd-148



MAT 6413

Dpa total (eV-barns)
Cross Section

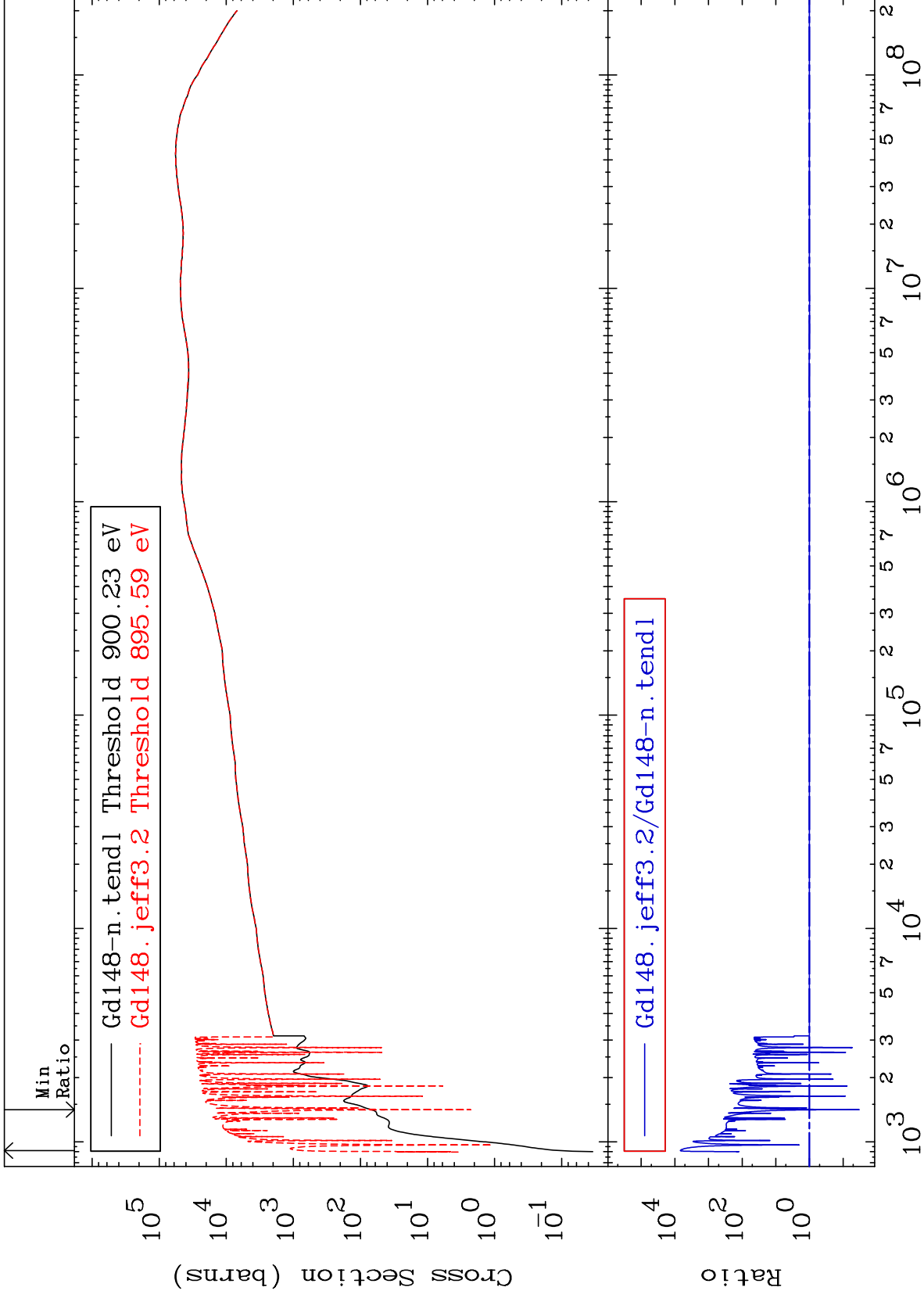
64-Gd-148
-83.32 To 2932. %



MAT 6413

Dpa elastic (mt2)
Cross Section

64-Gd-148
-96.73 To 9999. %



76

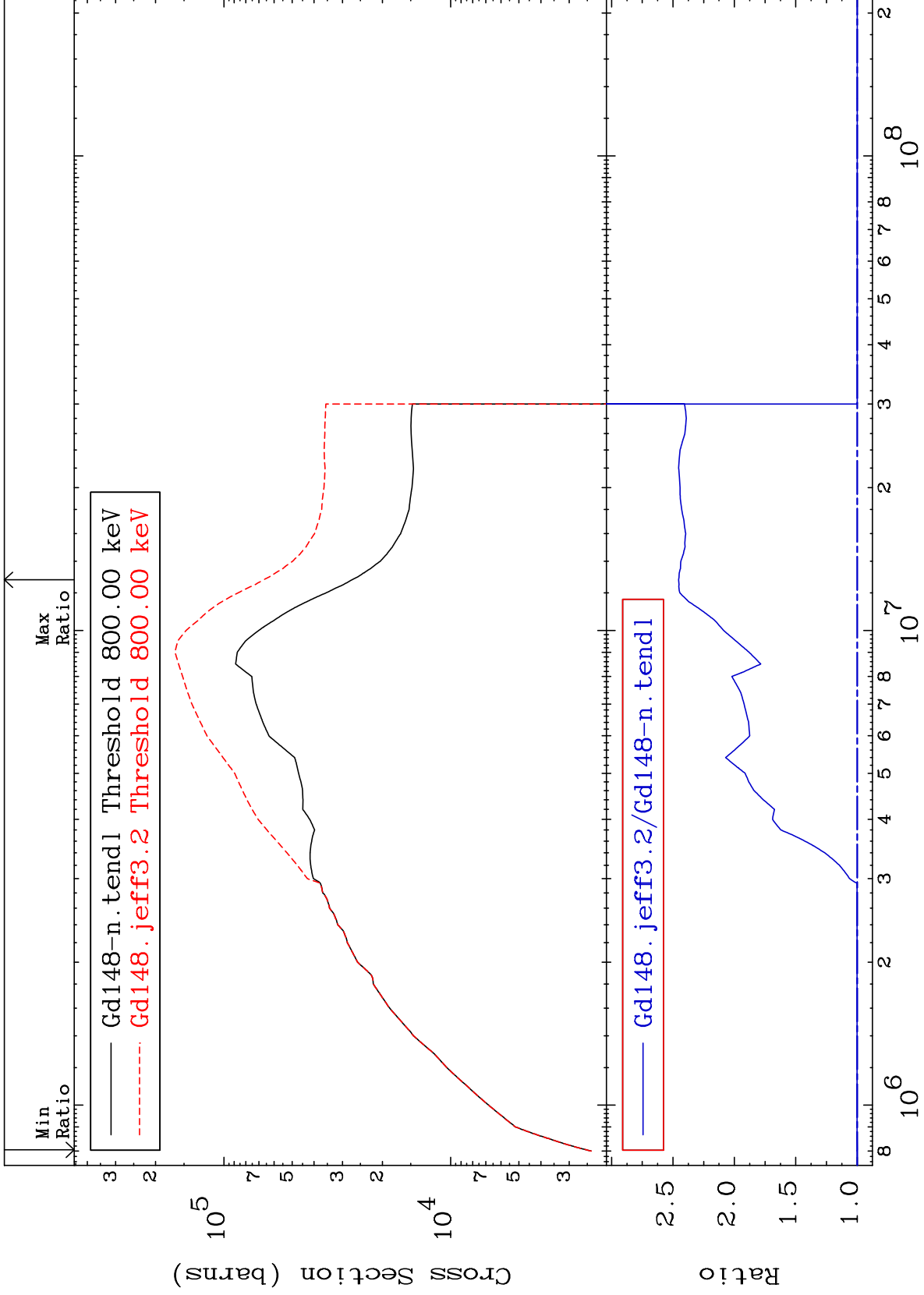
Incident Energy (eV)

64-Gd-148

MAT 6413

Dpa inelastic (mt51-91)
Cross Section

64-Gd-148
-0.062 To 145.4 %



77

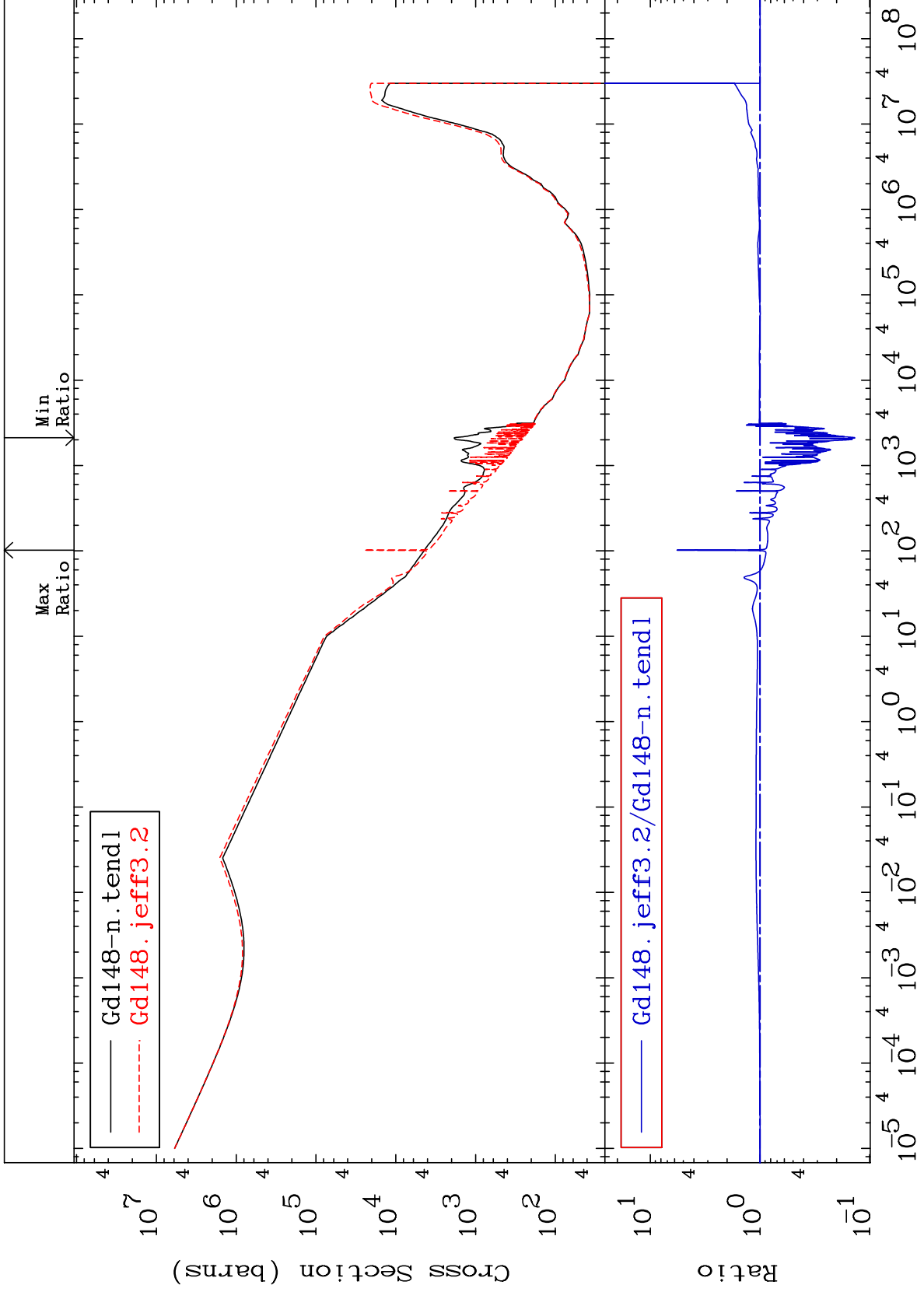
Incident Energy (eV)

64-Gd-148

MAT 6413

Dpa disappearance (mt102 -120)
Cross Section

64-Gd-148
-86.42 To 472.3 %



78

Incident Energy (eV)

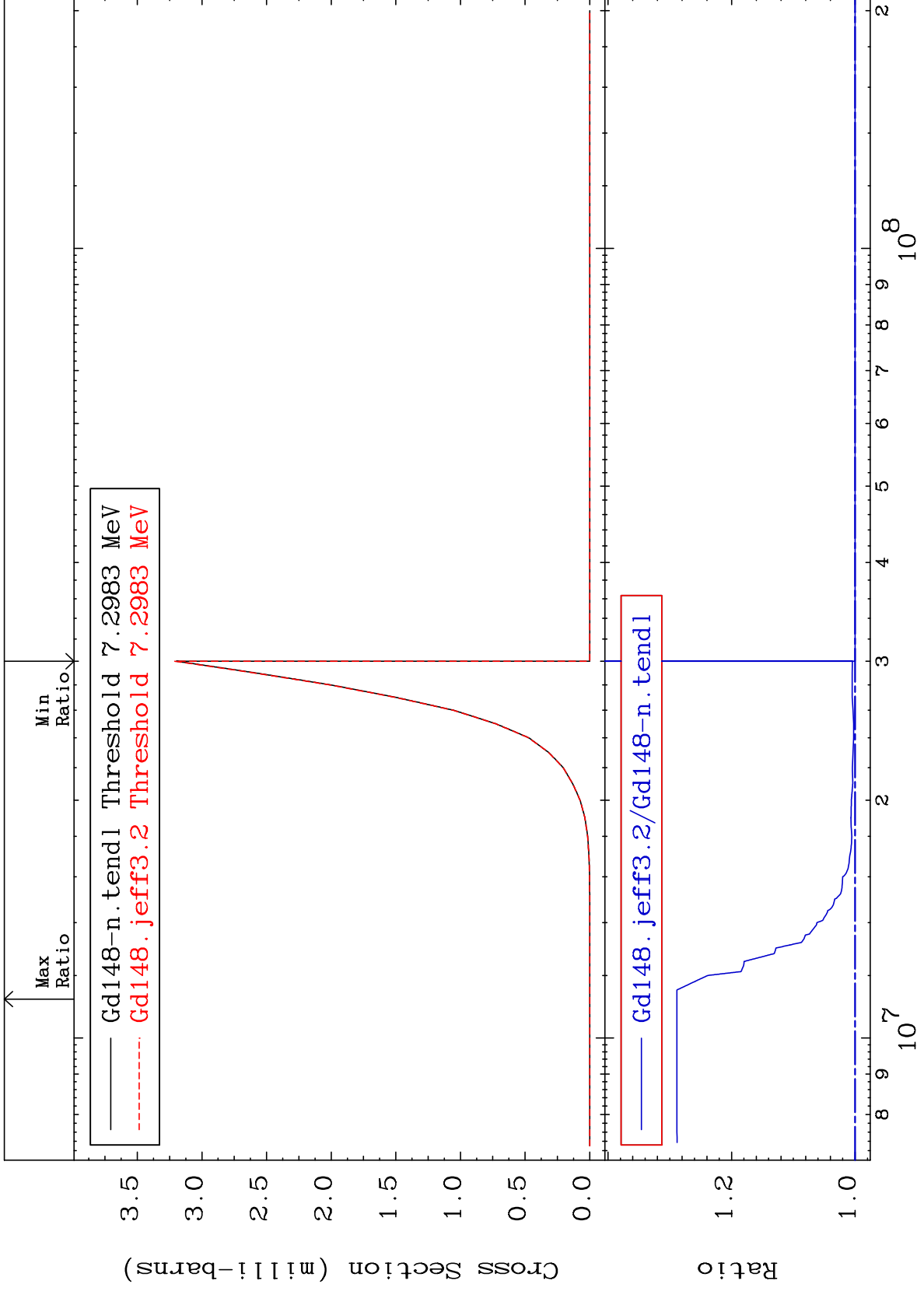
64-Gd-148

MAT 6413

(n,2n) α : 62-Sm-143g

64-Gd-148

Radionuclide Production Cross Section 0.000 To 28.85 %

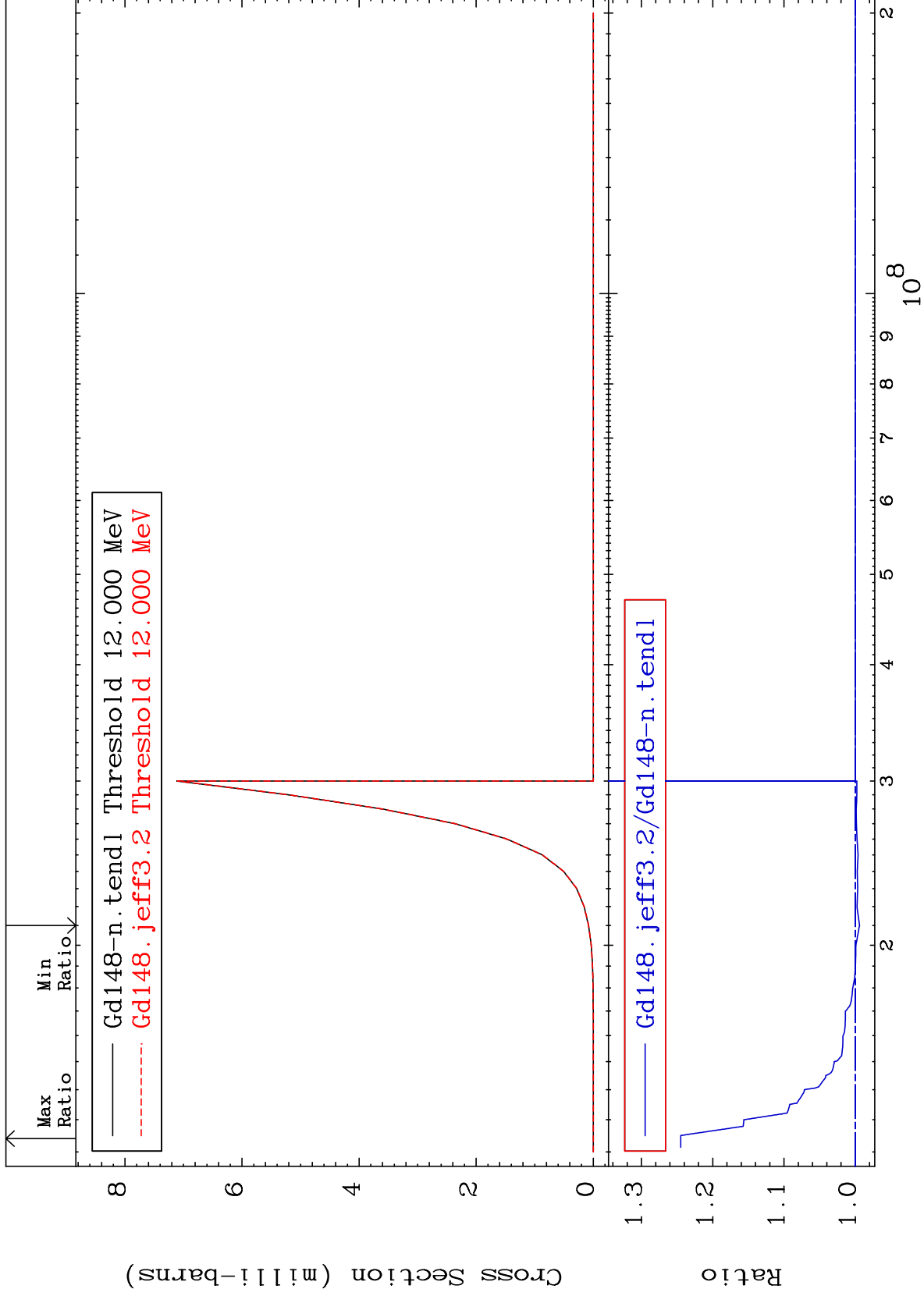


MAT 6413

(n,2n) α : 62-Sm-143m2

64-Gd-148

Radionuclide Production Cross Section -0.598 To 24.48 %



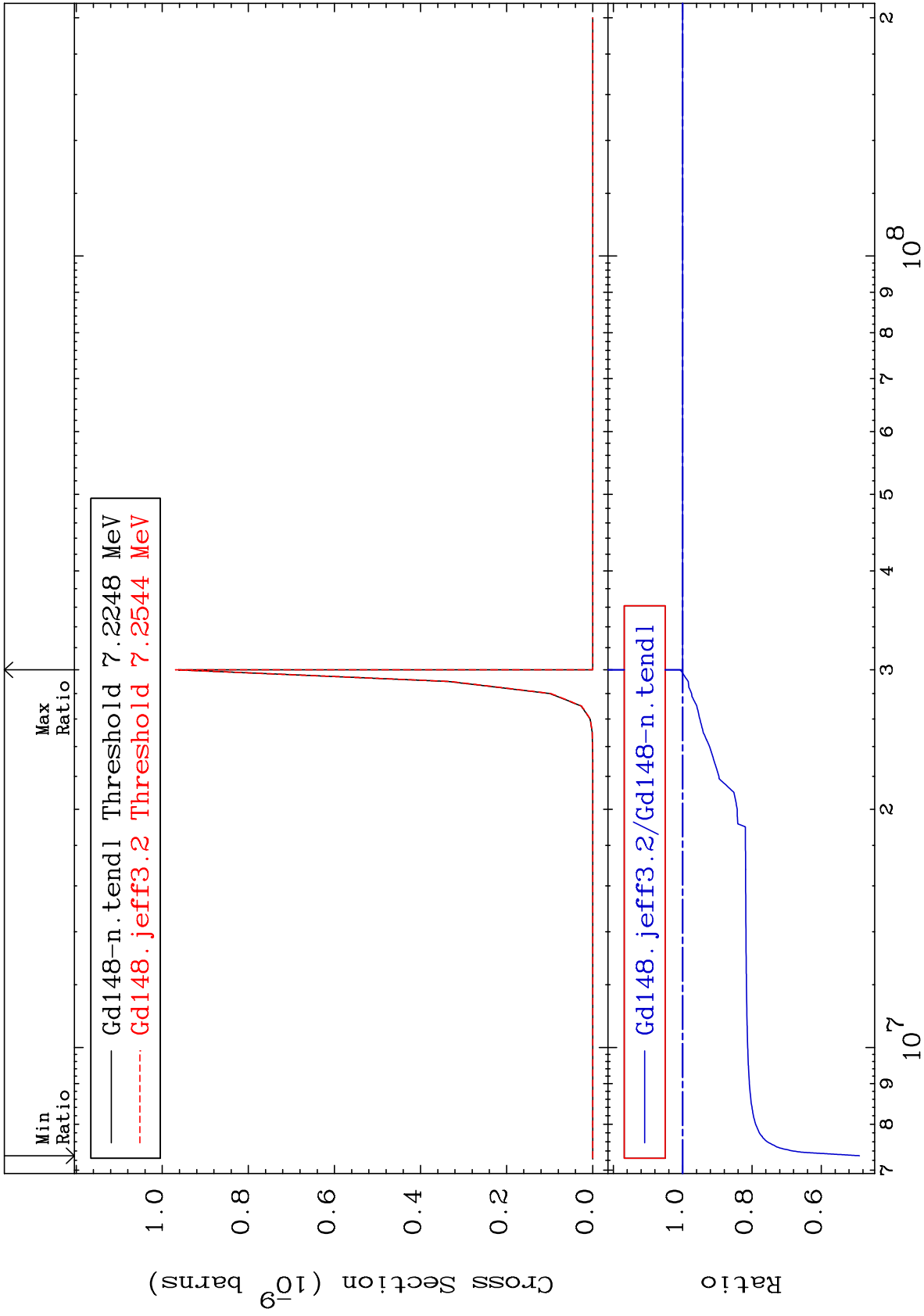
80

Incident Energy (eV)

64-Gd-148

MAT 6413

(n,2n) 2α:60-Nd-139g 64-Gd-148
Radionuclide Production Cross Section -51.00 To 0.671 %



81

Incident Energy (eV)

64-Gd-148

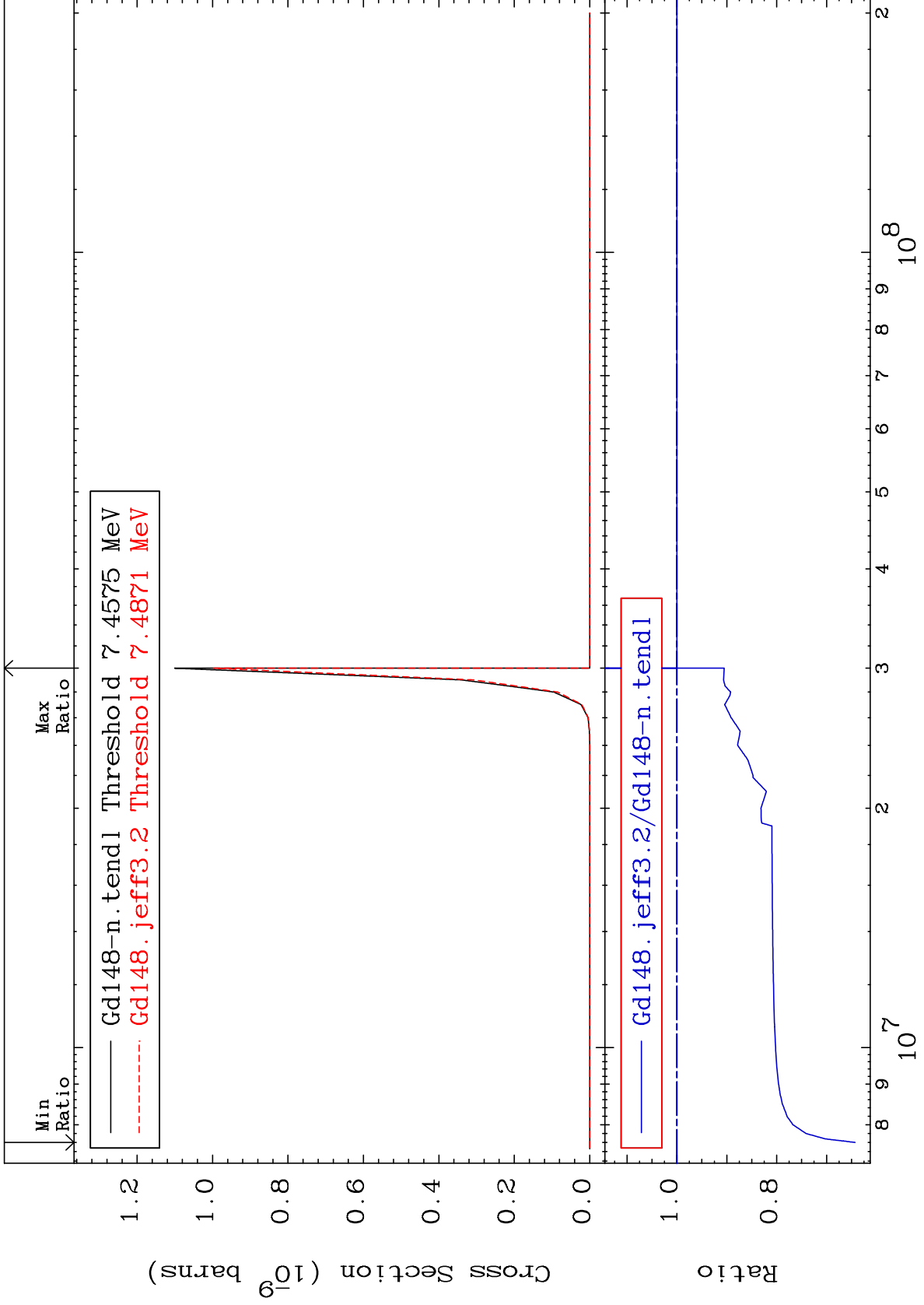
MAT 6413

(n,2n) 2α:60-Nd-139m2

64-Gd-148

Radionuclide Production Cross Section

-35.72 To 0.000 %



82

Incident Energy (eV)

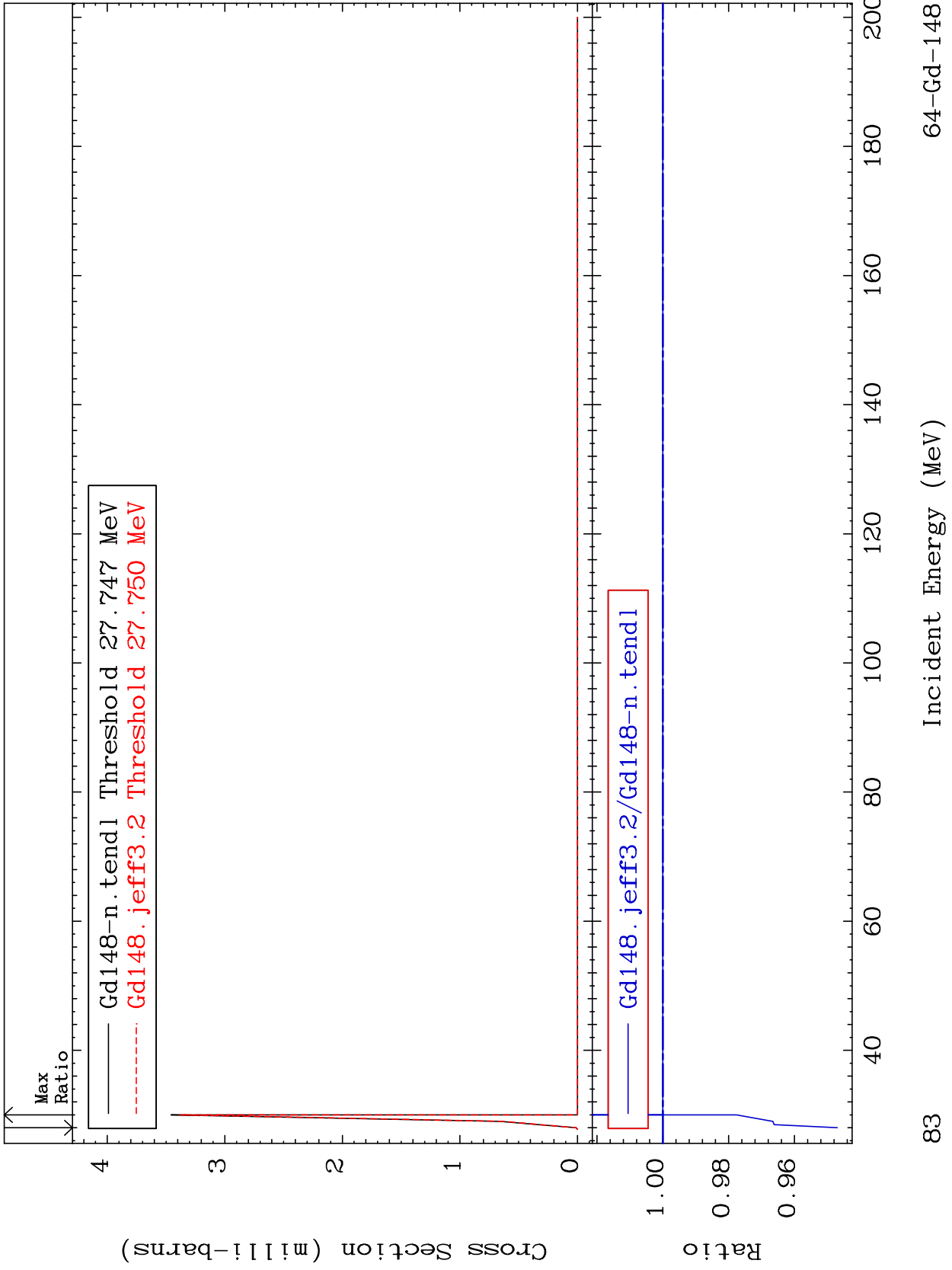
64-Gd-148

MAT 6413

(n, 4n):64-Gd-145g

64-Gd-148

Radionuclide Production Cross Section -5.300 To 0.000 %



MAT 6413

(n, 4n) : 64-Gd-145m2

64-Gd-148

Radionuclide Production Cross Section -6.092 To 0.000 %

