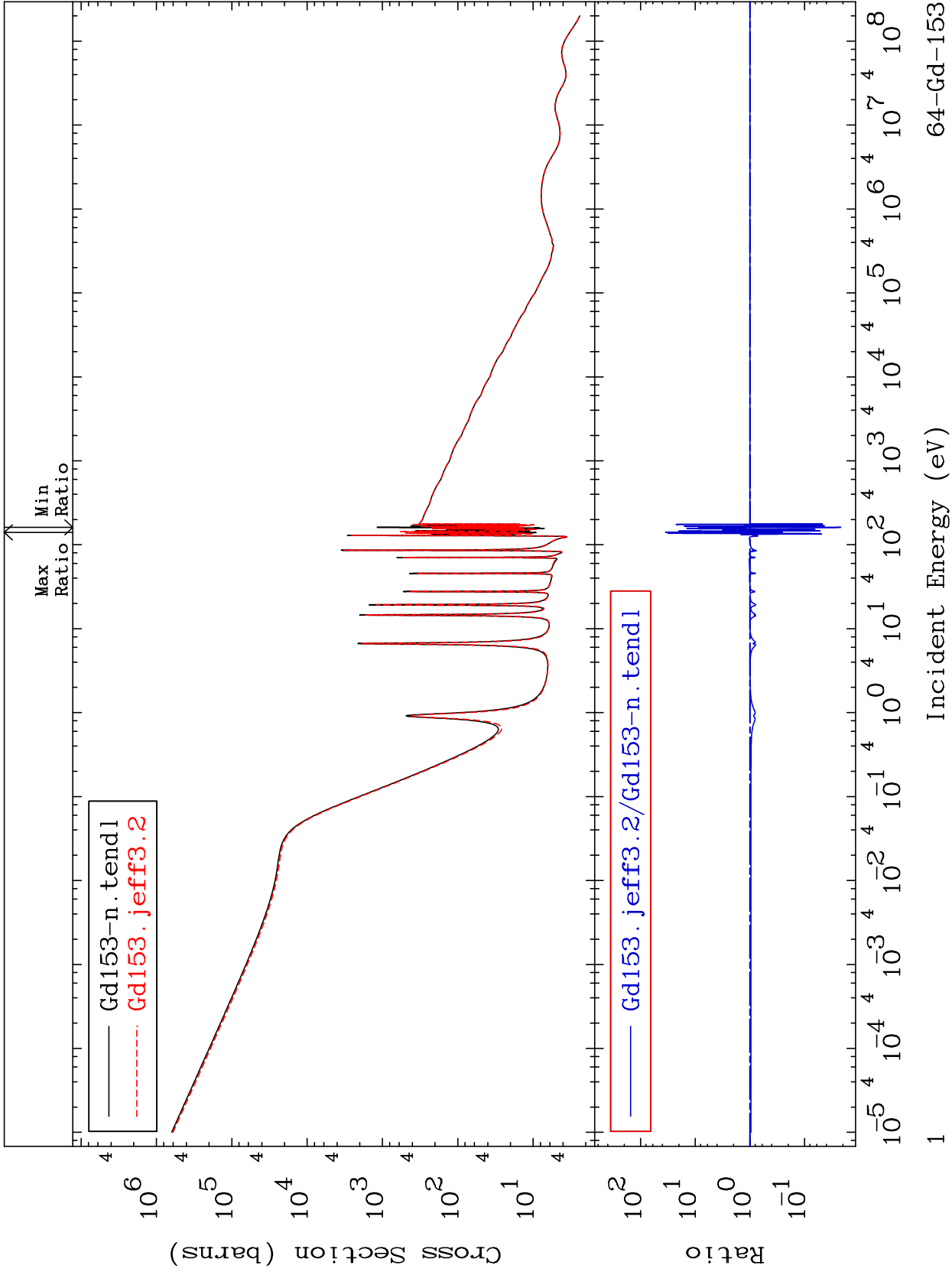


MAT 6428

Total Cross Section
64-Gd-153
-97.81 To 3408. %



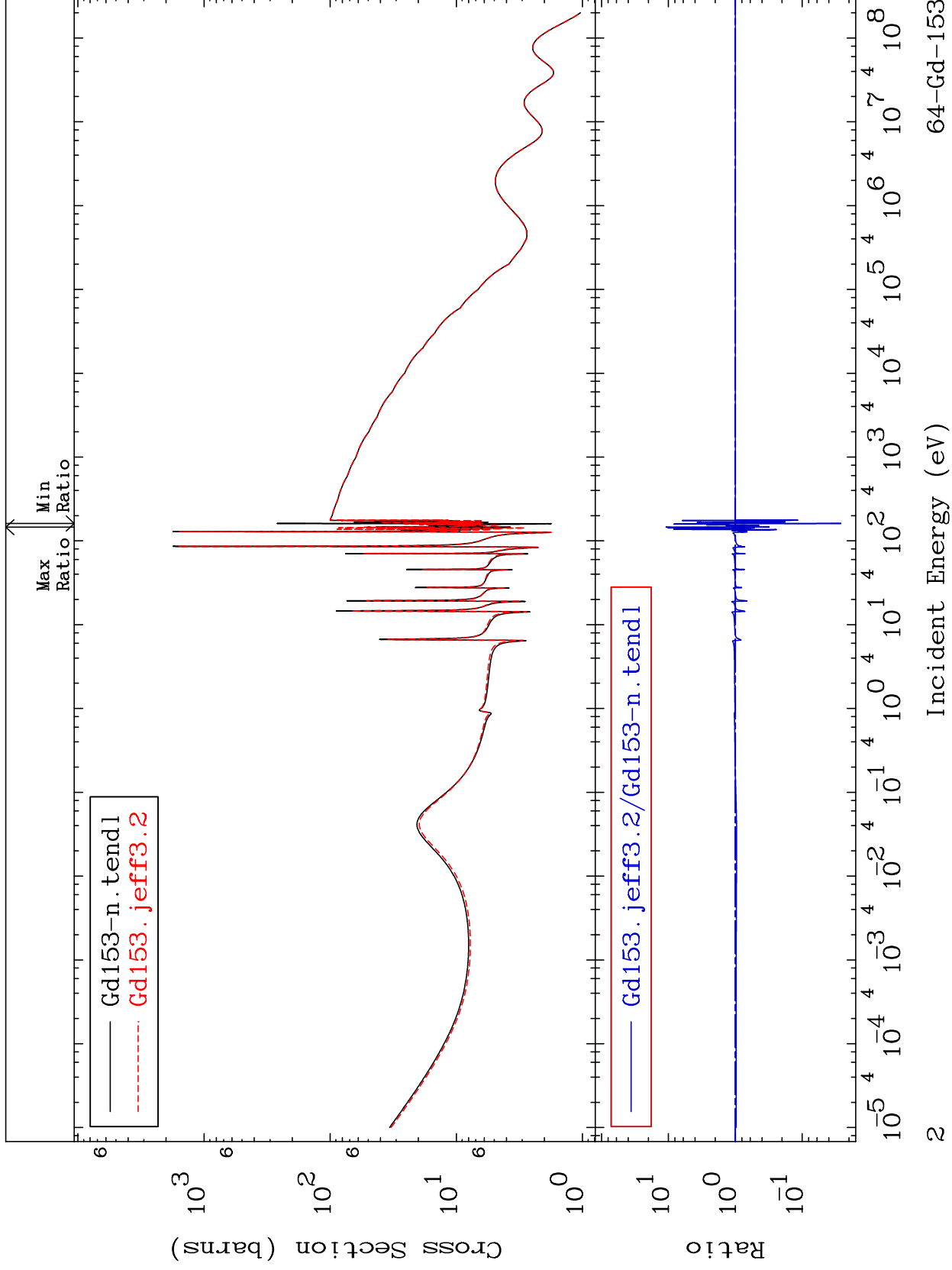
64-Gd-153

Incident Energy (eV)

MAT 6428

Elastic
Cross Section

64-Gd-153
-97.35 To 989.1 %



Incident Energy (eV)

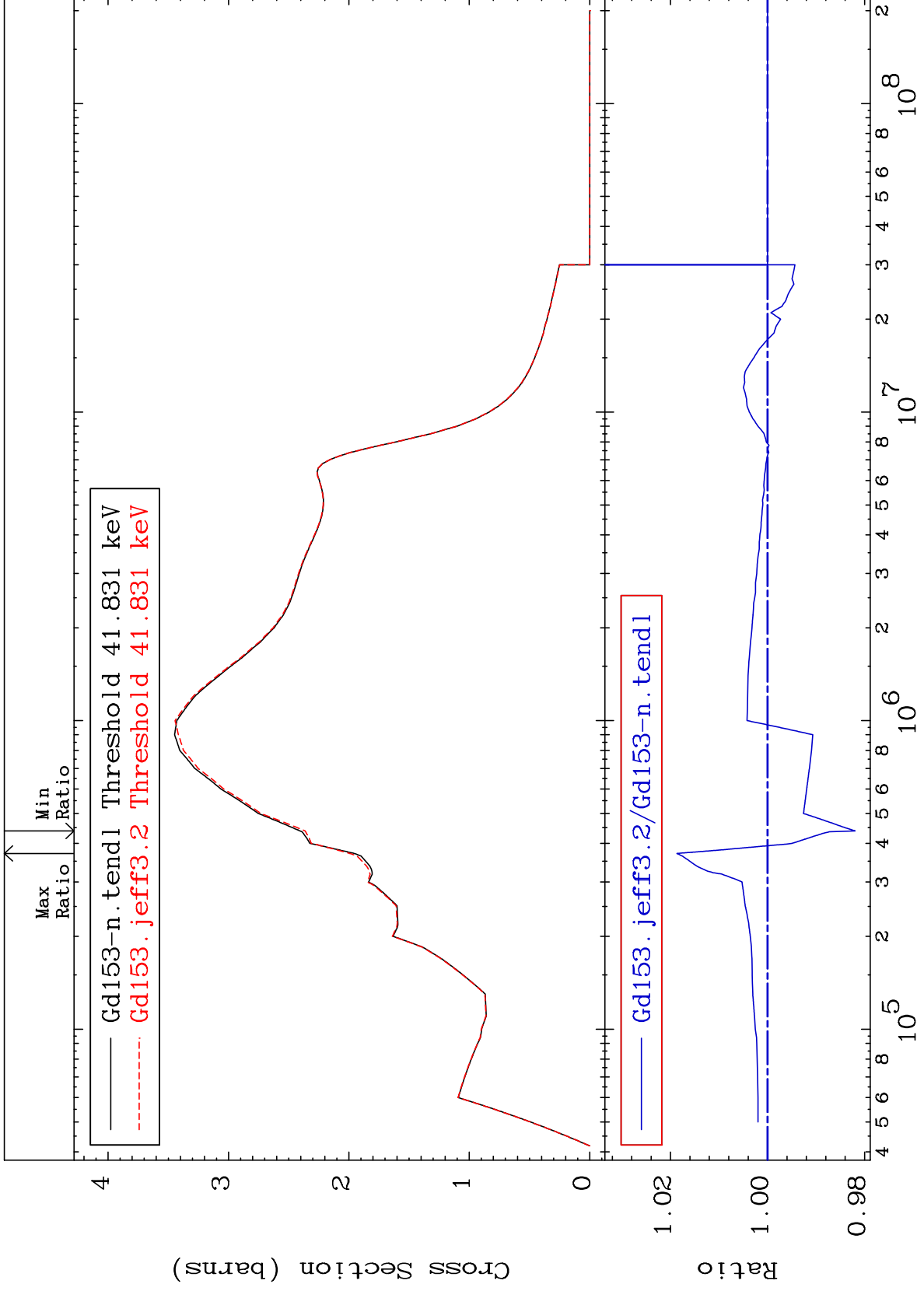
64-Gd-153

2

MAT 6428

Inelastic
Cross Section

64-Gd-153
-1.805 To 1.868 %



3

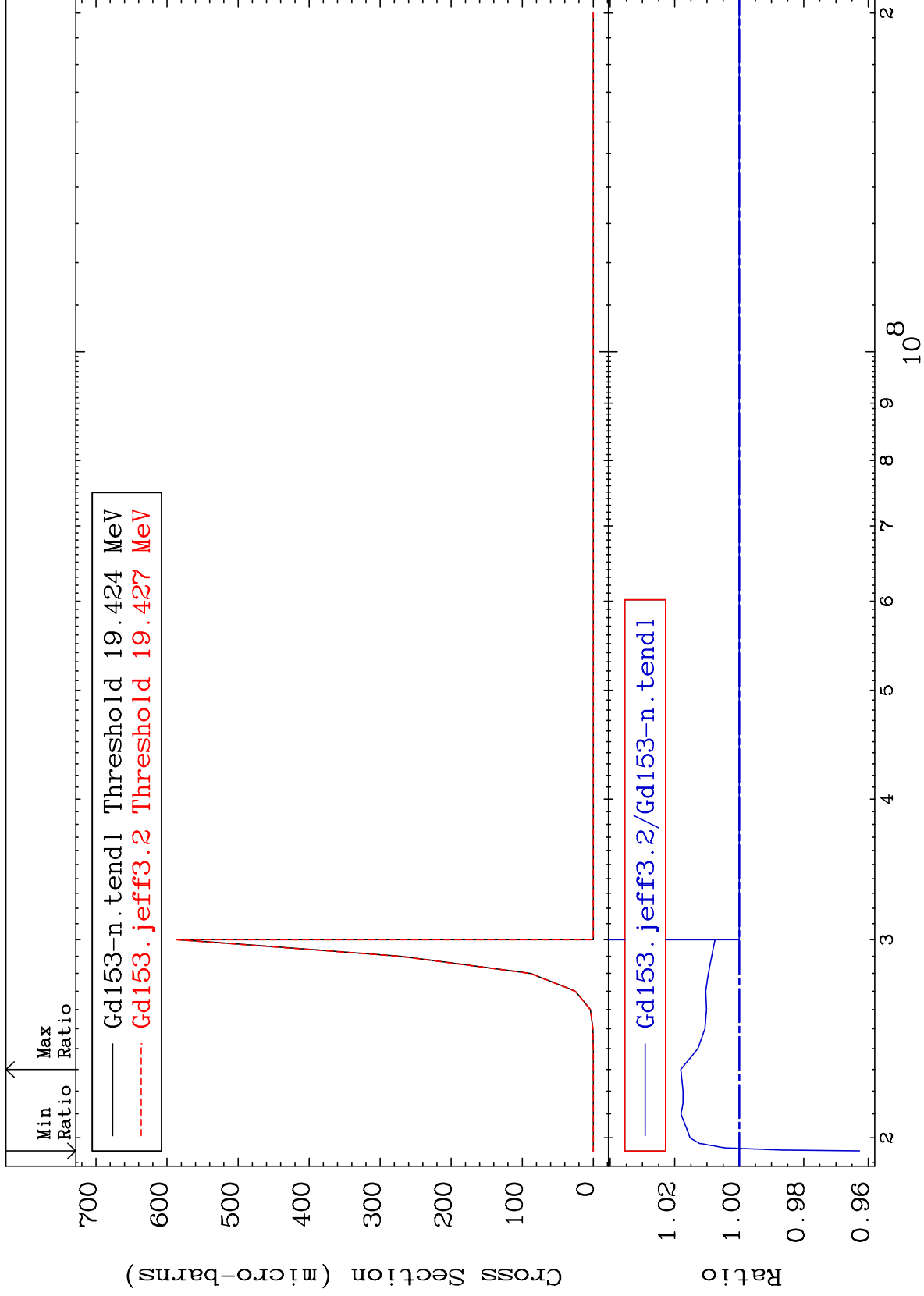
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,2n) d
Cross Section

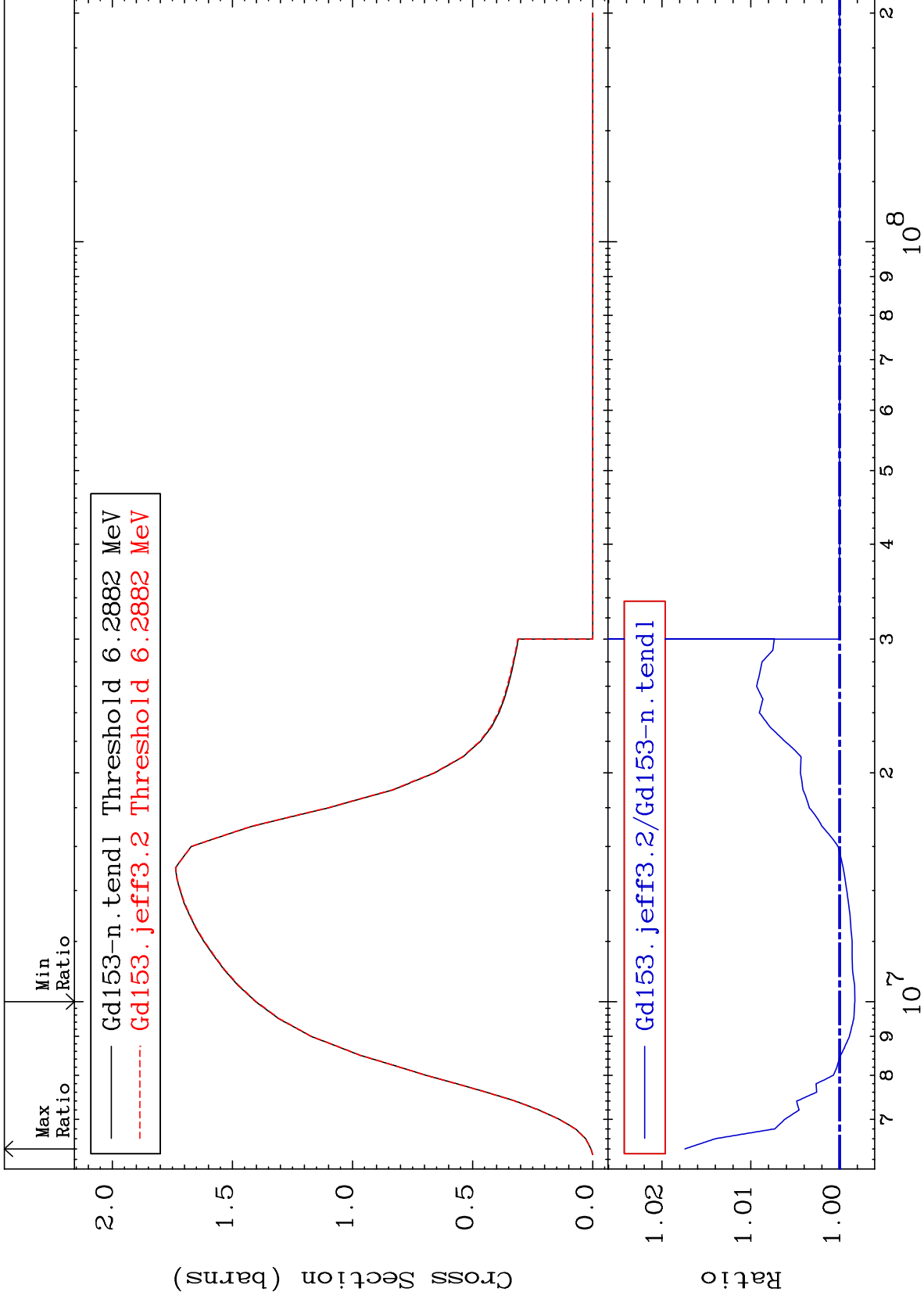
64-Gd-153
-3.730 To 1.813 %



MAT 6428

(n,2n)
Cross Section

64-Gd-153
-0.171 To 1.742 %



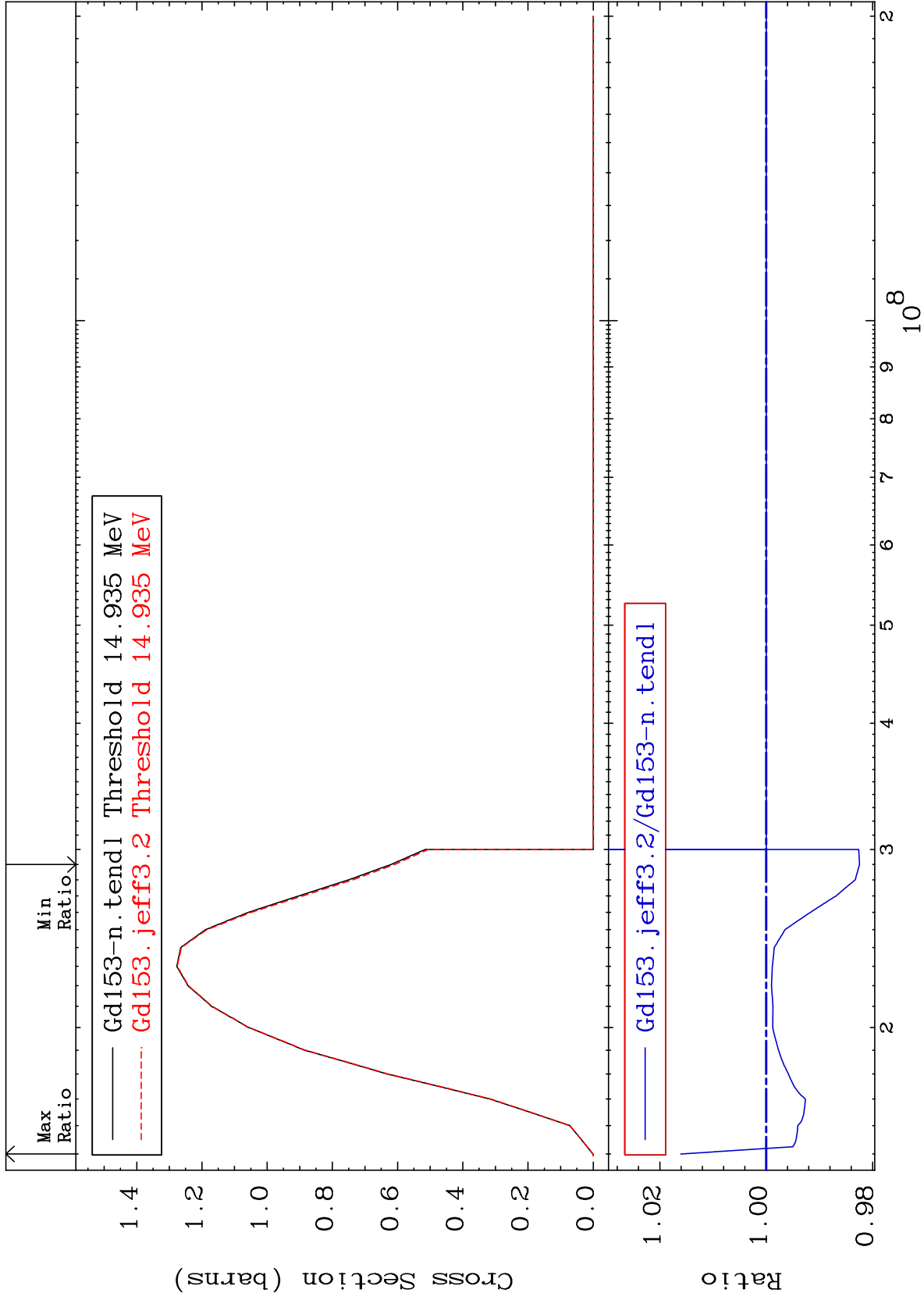
5

Incident Energy (eV)

64-Gd-153

Cross Section

-1.755 To 1.606 %



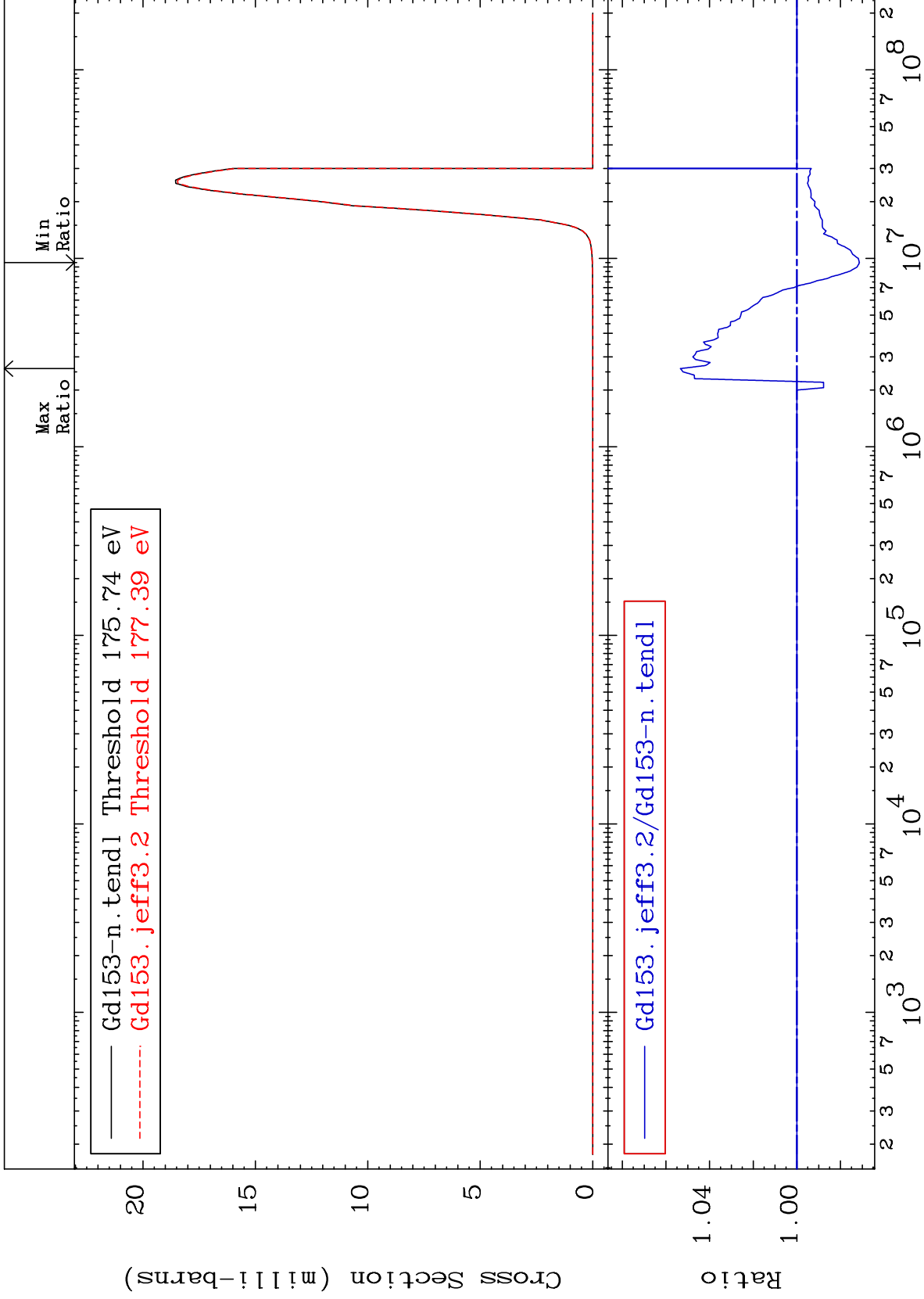
MAT 6428

(n, n') α

Cross Section

64-Gd-153

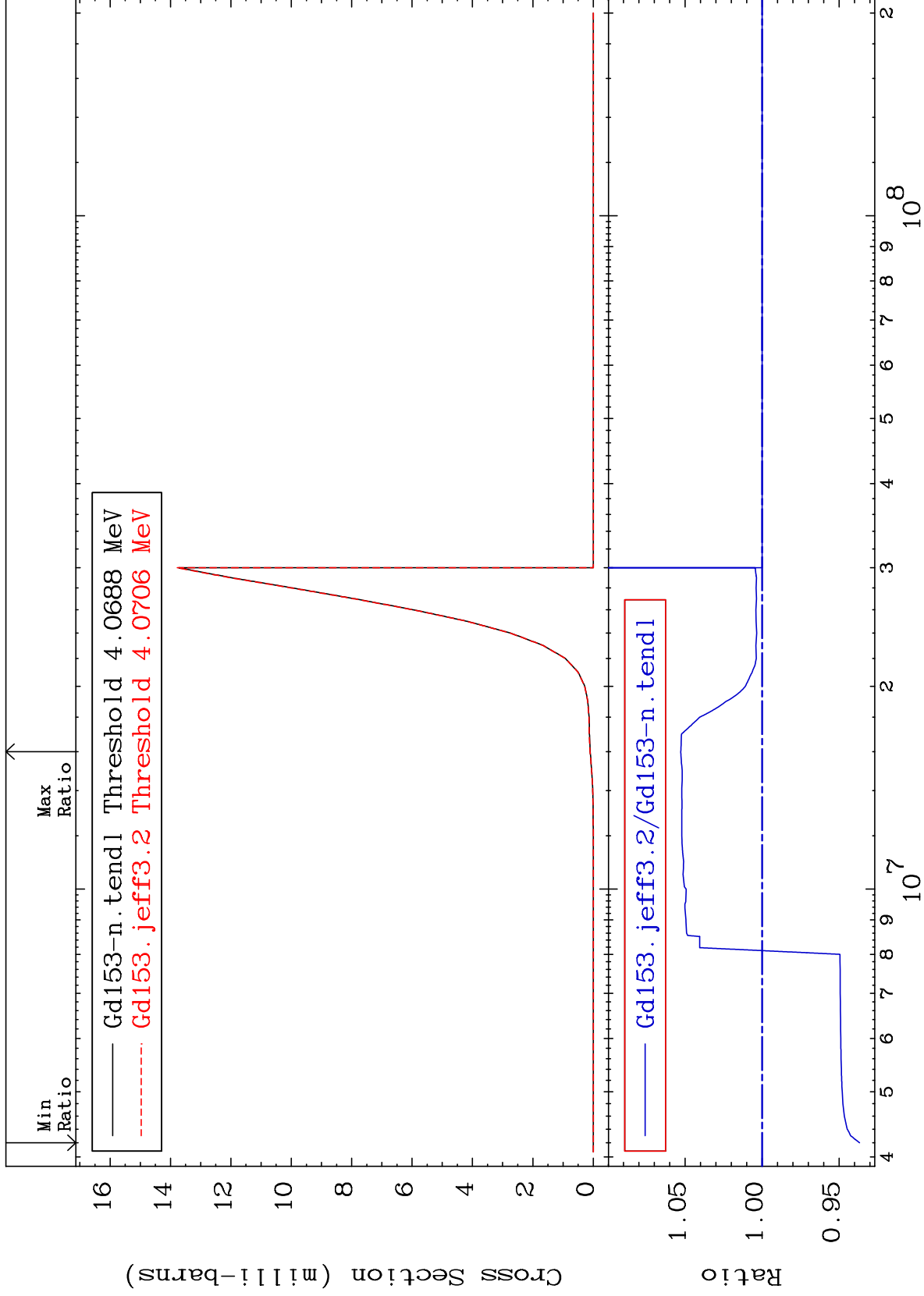
-2.868 To 5.340 %



MAT 6428

(n,2n) α
Cross Section

64-Gd-153
-6.326 To 5.282 %



8

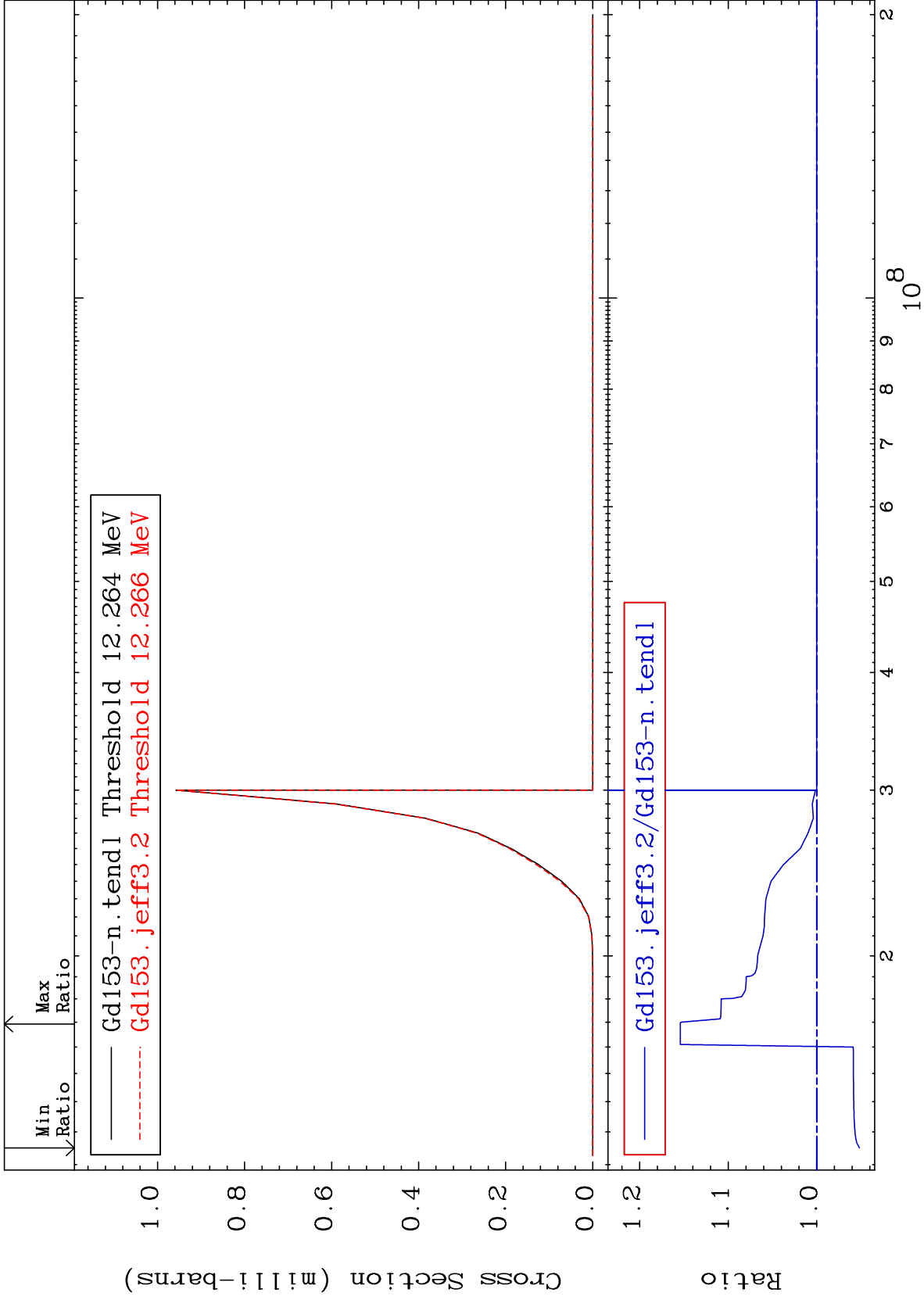
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,3n) α
Cross Section

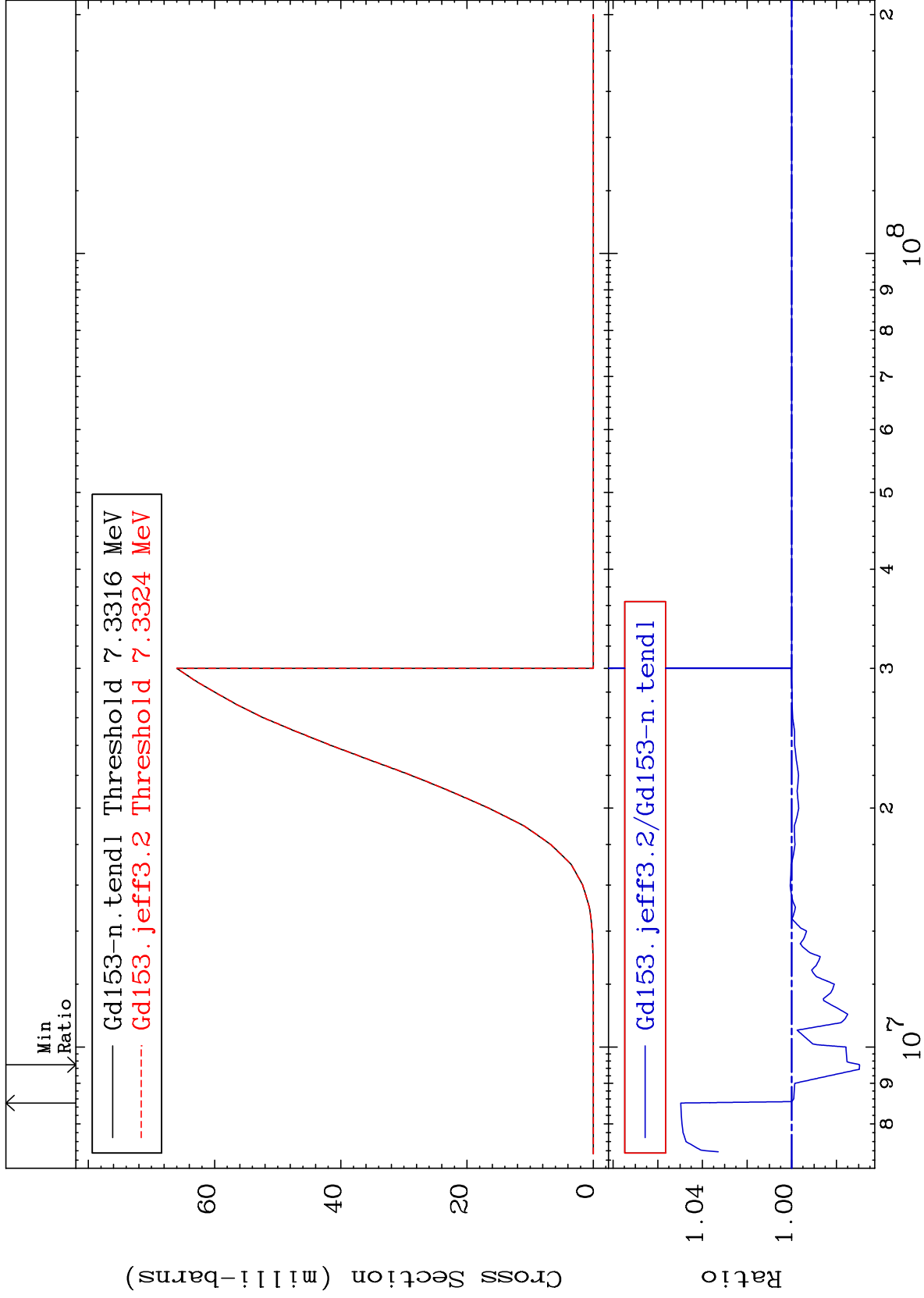
64-Gd-153
-4.819 To 15.41 %



MAT 6428

(n,n') p
Cross Section

64-Gd-153
-3.035 To 4.968 %



10

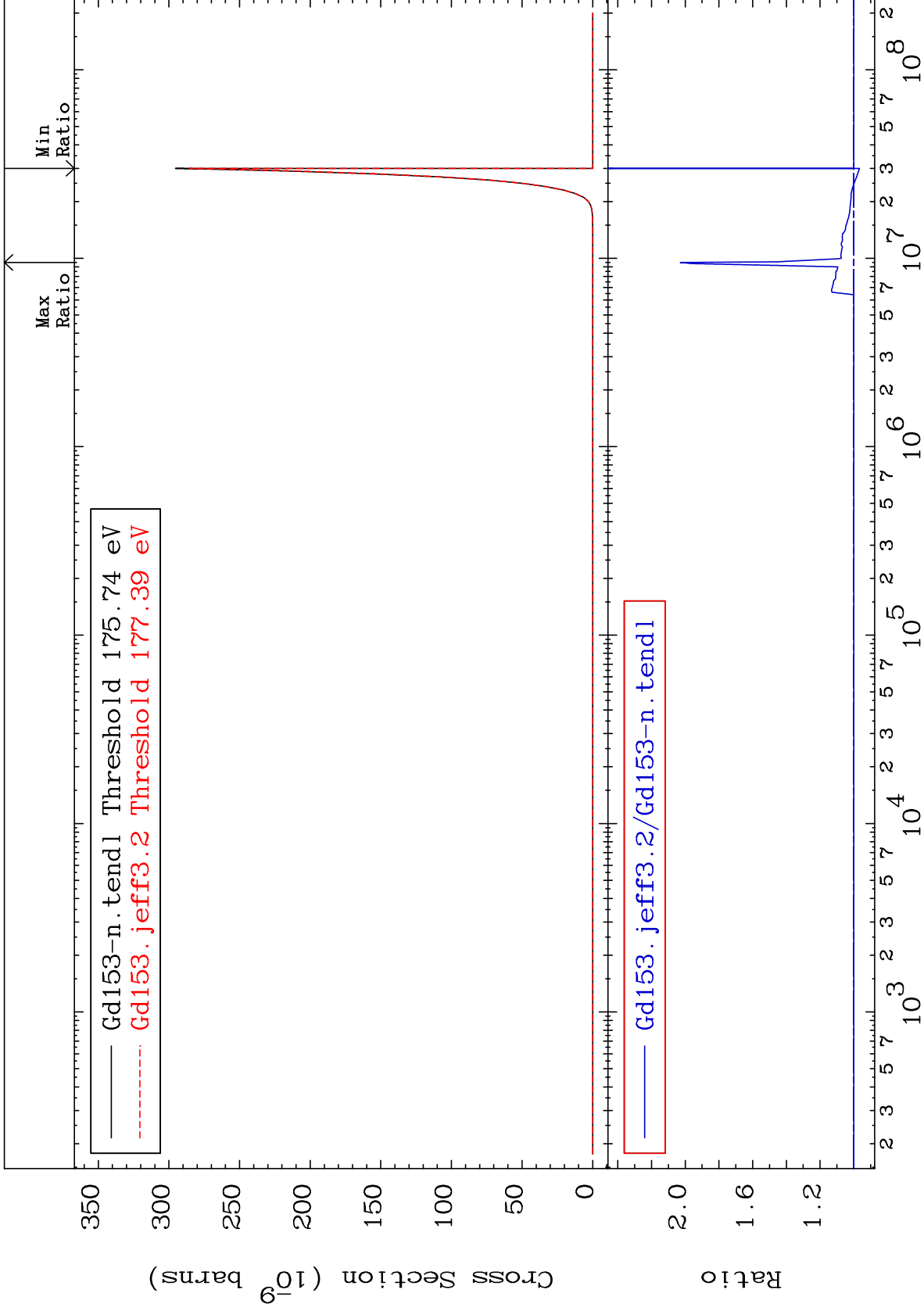
Incident Energy (eV)

64-Gd-153

MAT 6428

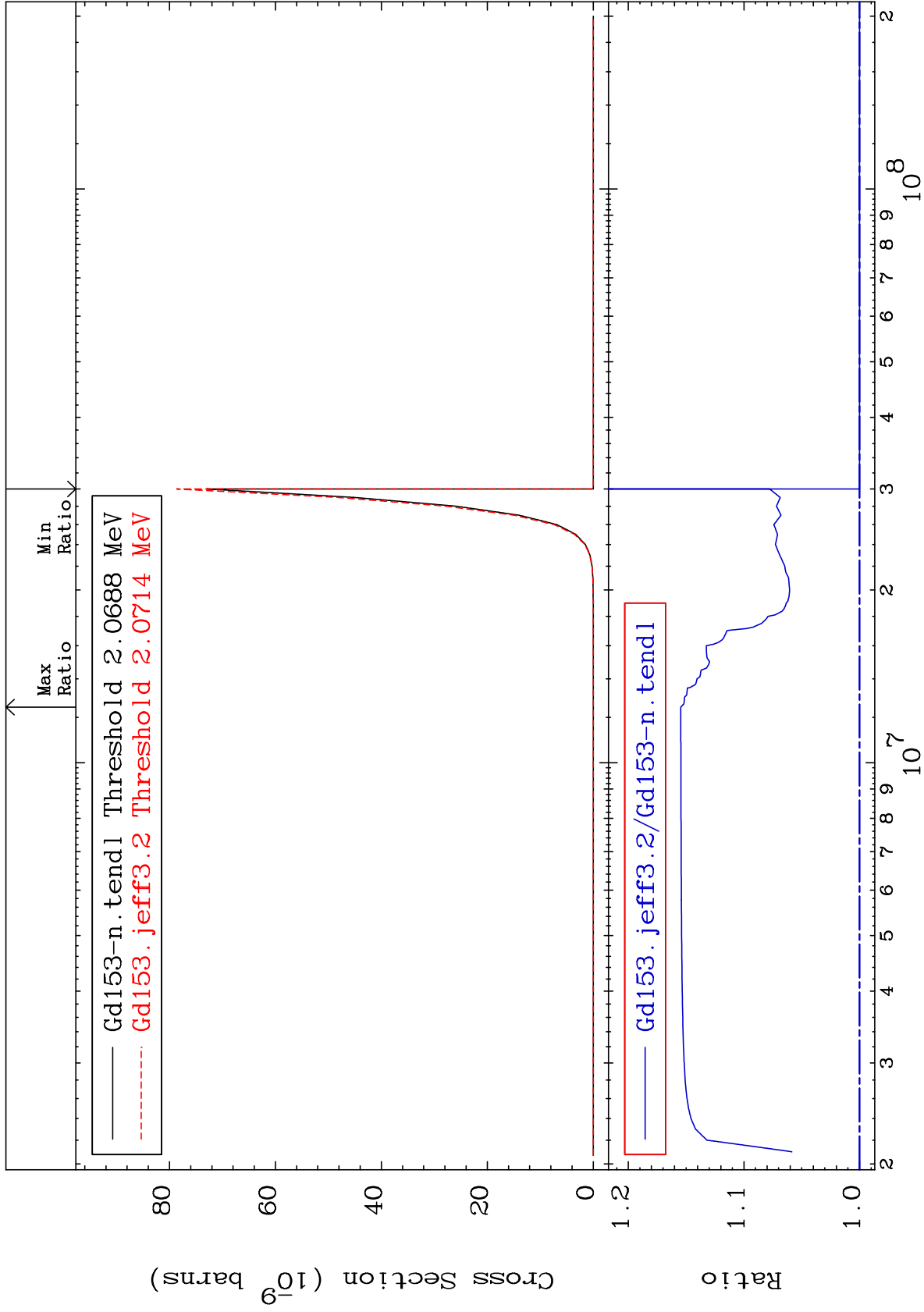
(n, n') 2α
Cross Section

64-Gd-153
-3.341 To 102.9 %



MAT 6428

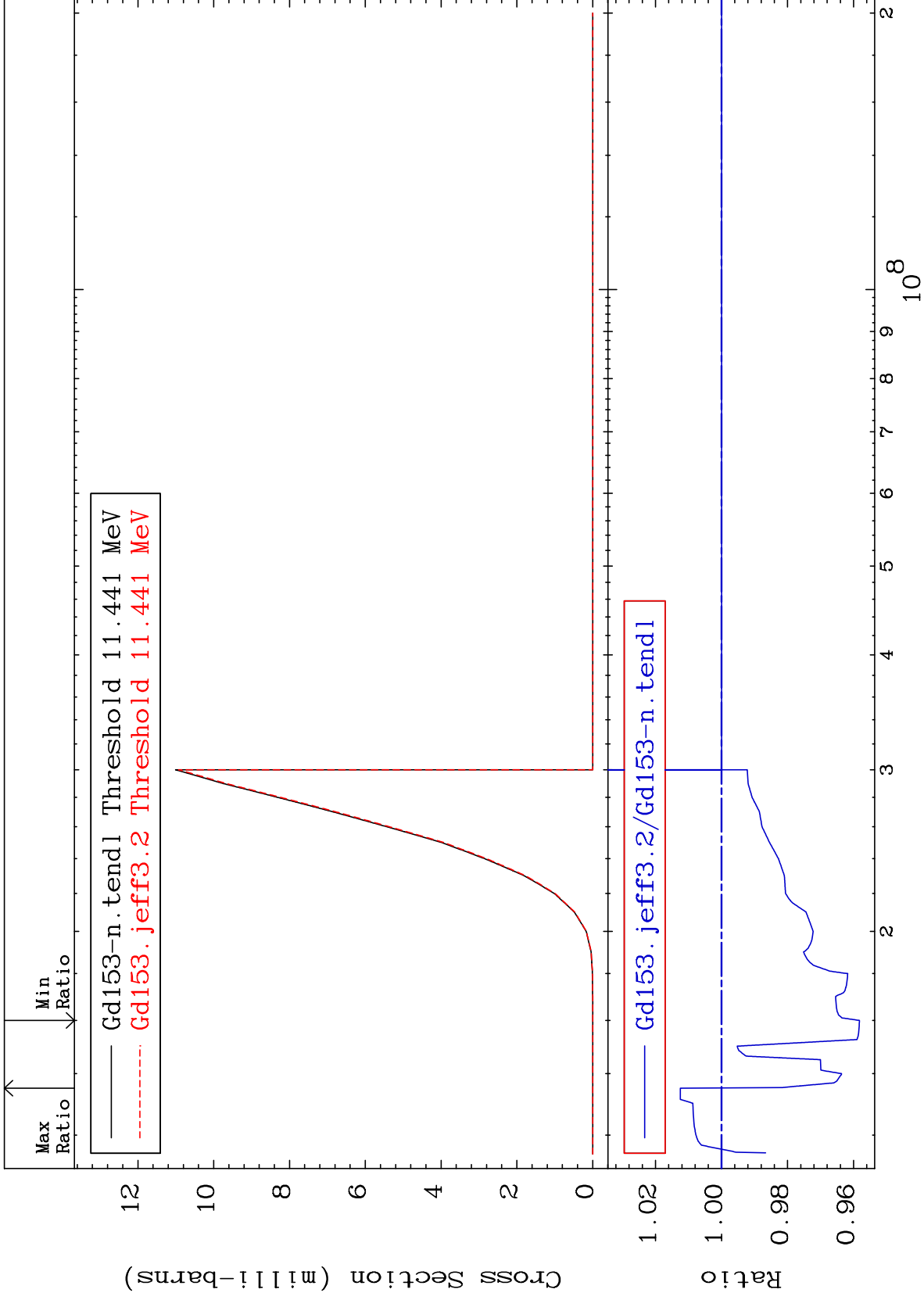
(n,2n) 2α
Cross Section
64-Gd-153
0.000 To 15.46 %



12

Incident Energy (eV)

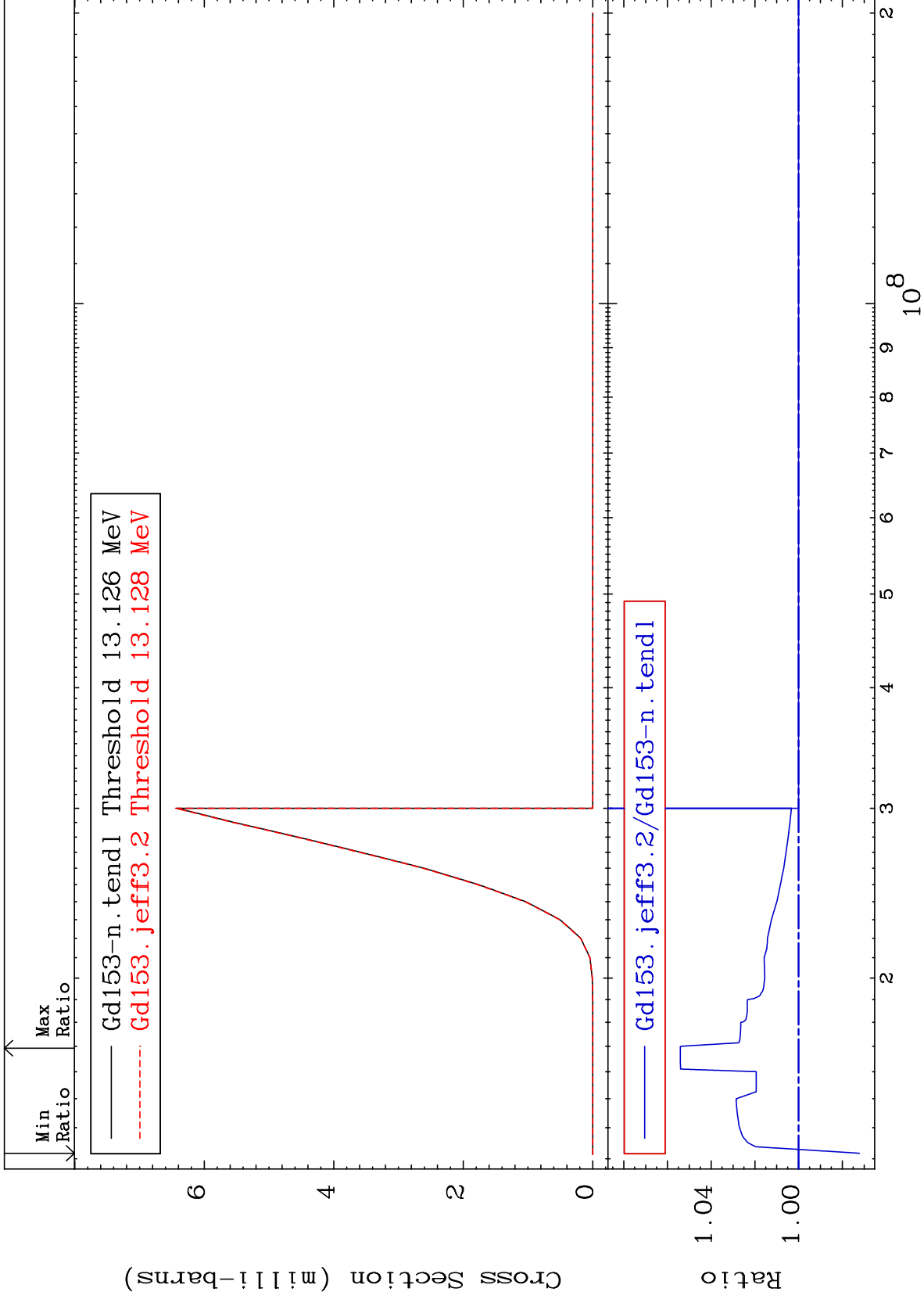
64-Gd-153



MAT 6428

(n,n') t
Cross Section

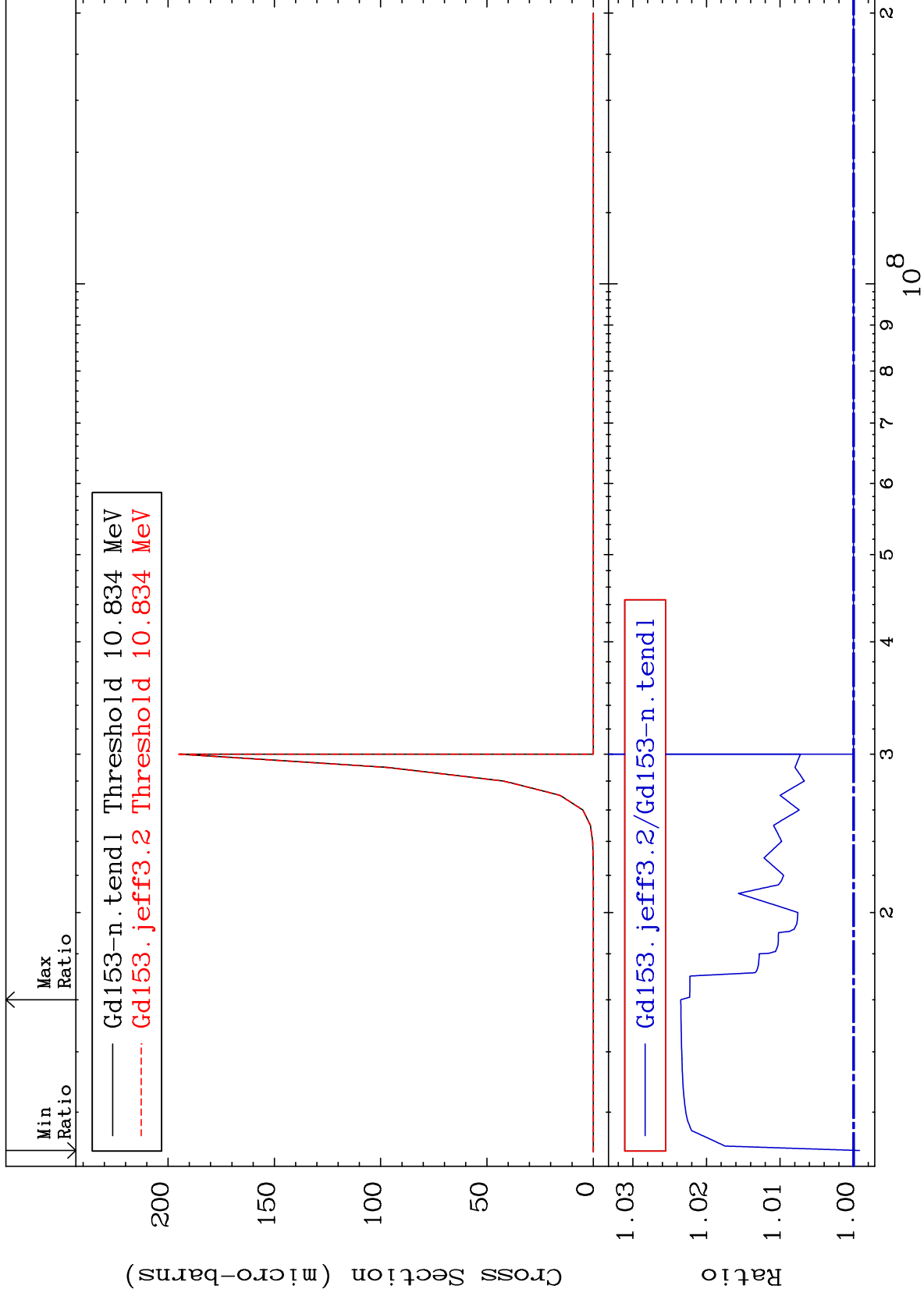
64-Gd-153
-2.784 To 5.409 %



MAT 6428

(n, n') He-3
Cross Section

64-Gd-153
-0.081 To 2.349 %



15

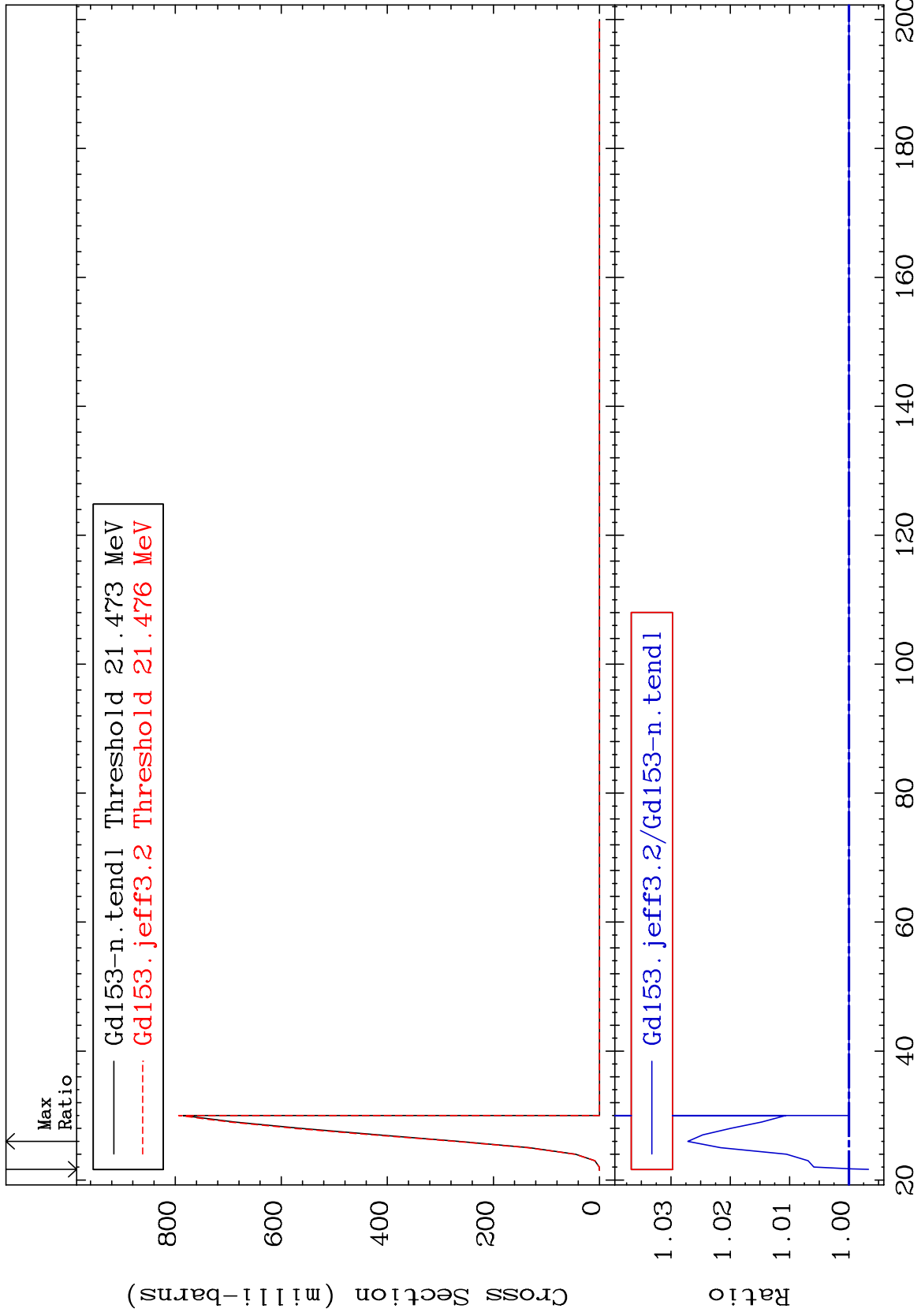
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,4n)
Cross Section

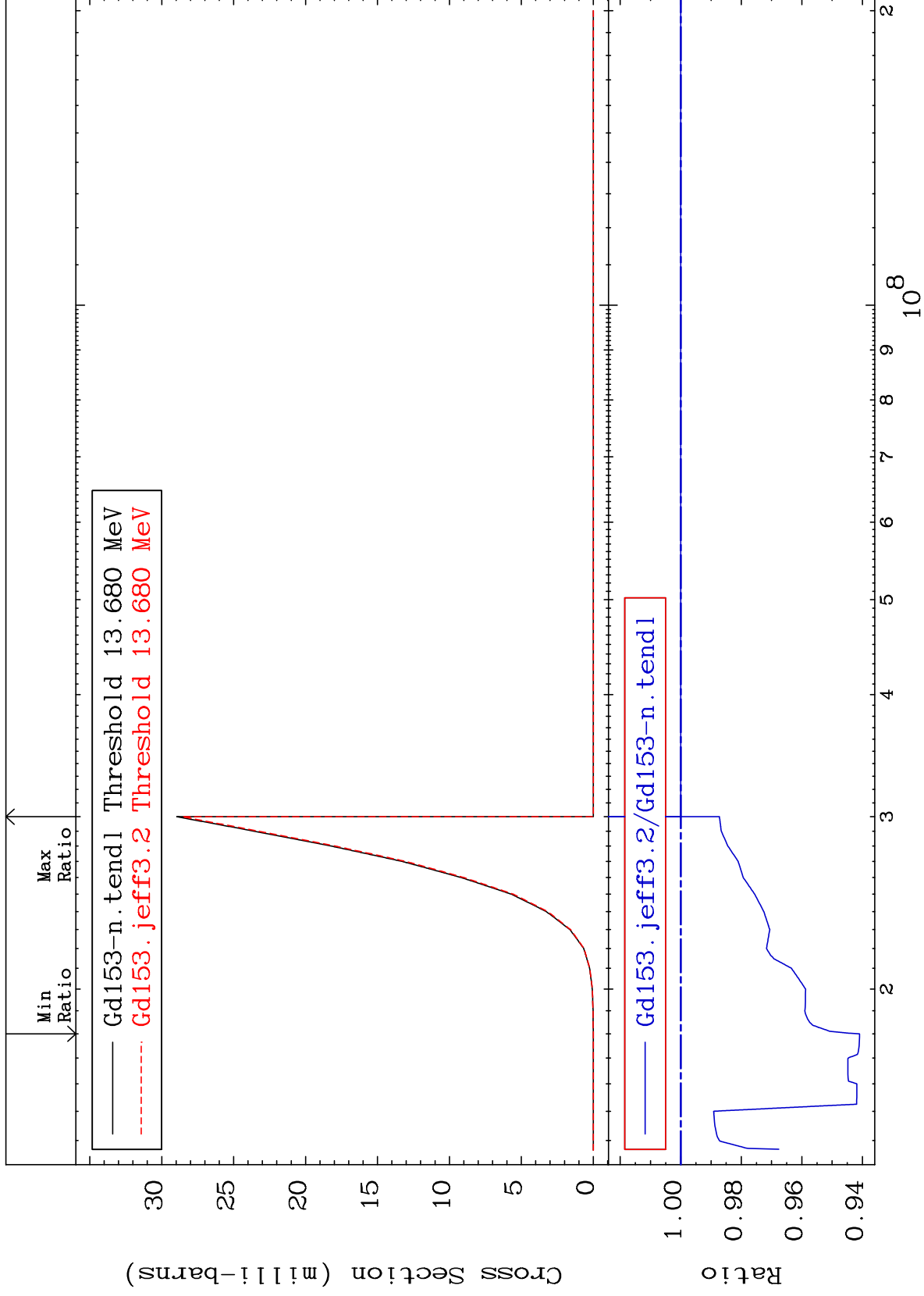
64-Gd-153
-0.331 To 2.716 %



MAT 6428

(n,2n) p
Cross Section

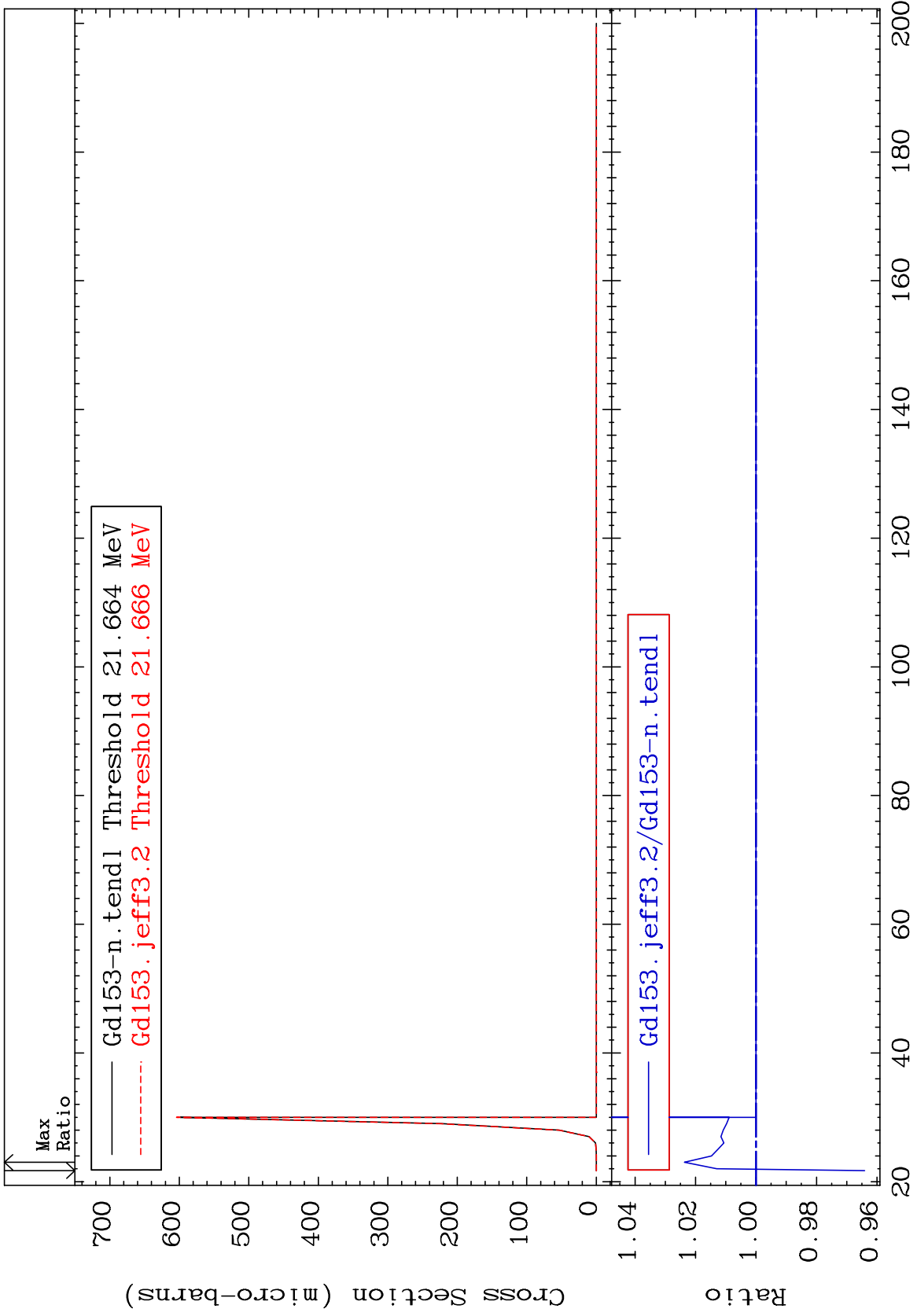
64-Gd-153
-5.906 To 0.000 %



MAT 6428

(n,3n) p
Cross Section

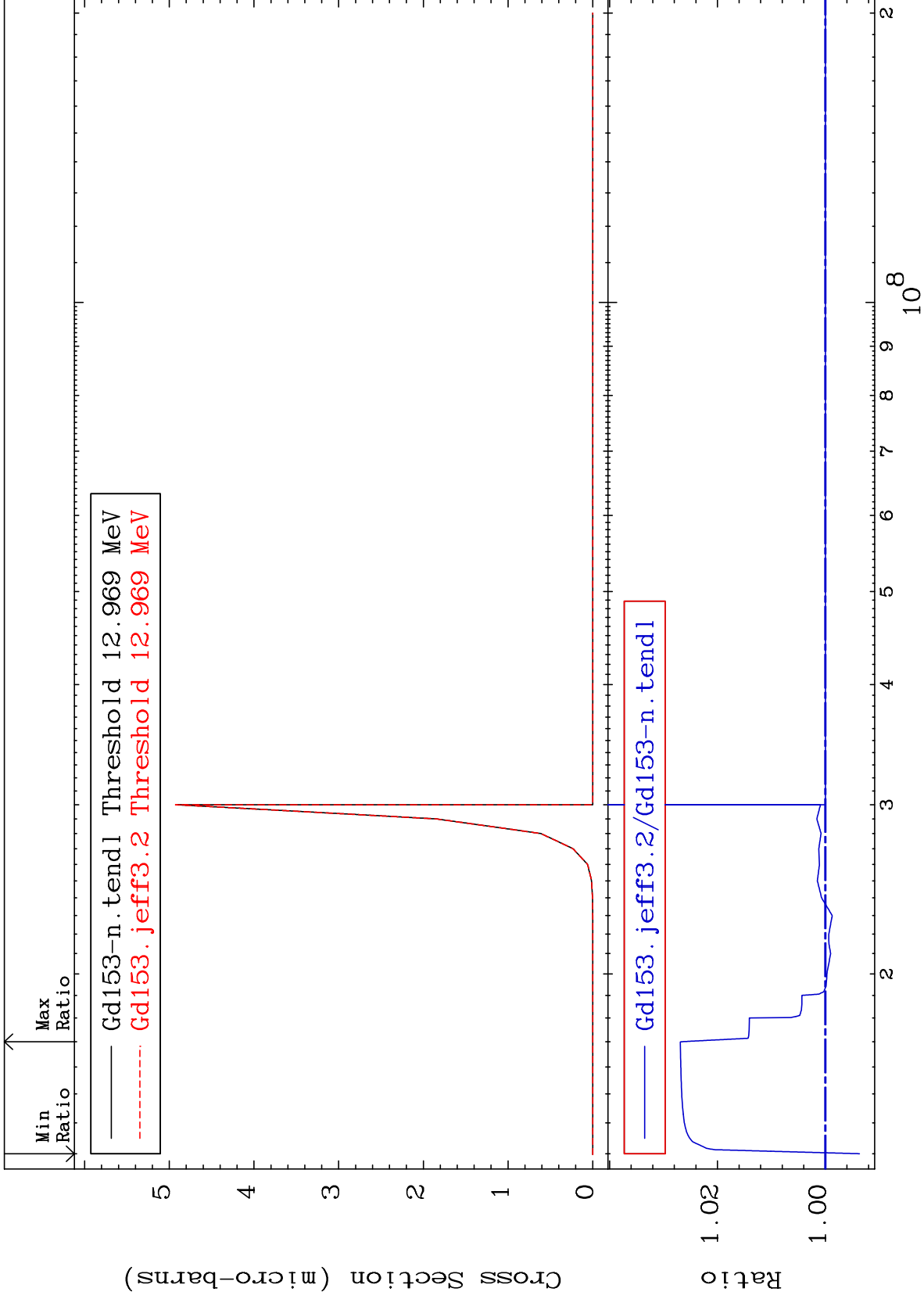
64-Gd-153
-3.592 To 2.365 %



MAT 6428

(n,2n) p
Cross Section

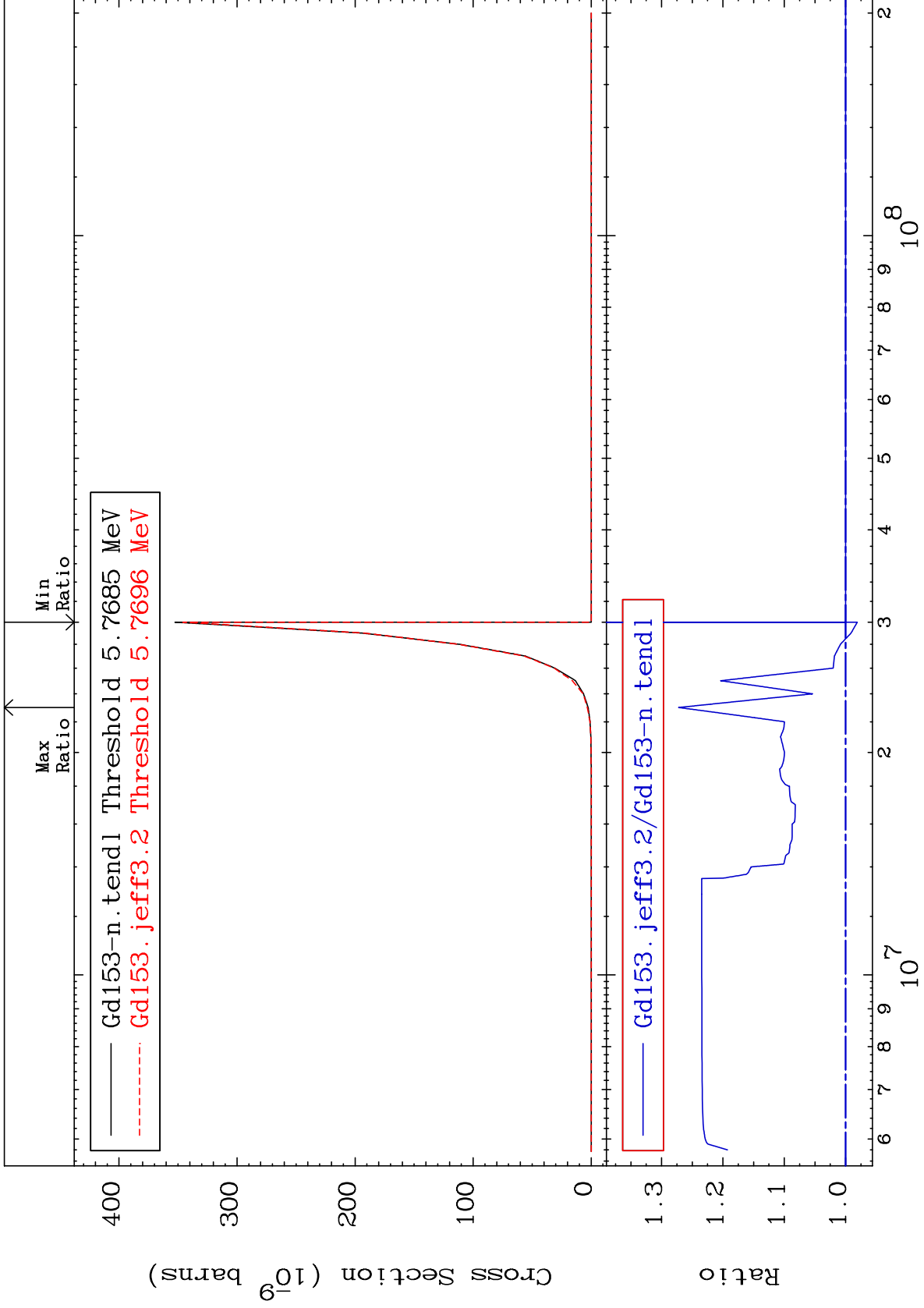
64-Gd-153
-0.632 To 2.689 %



MAT 6428

(n,n') p α
Cross Section

64-Gd-153
-1.898 To 27.22 %



20

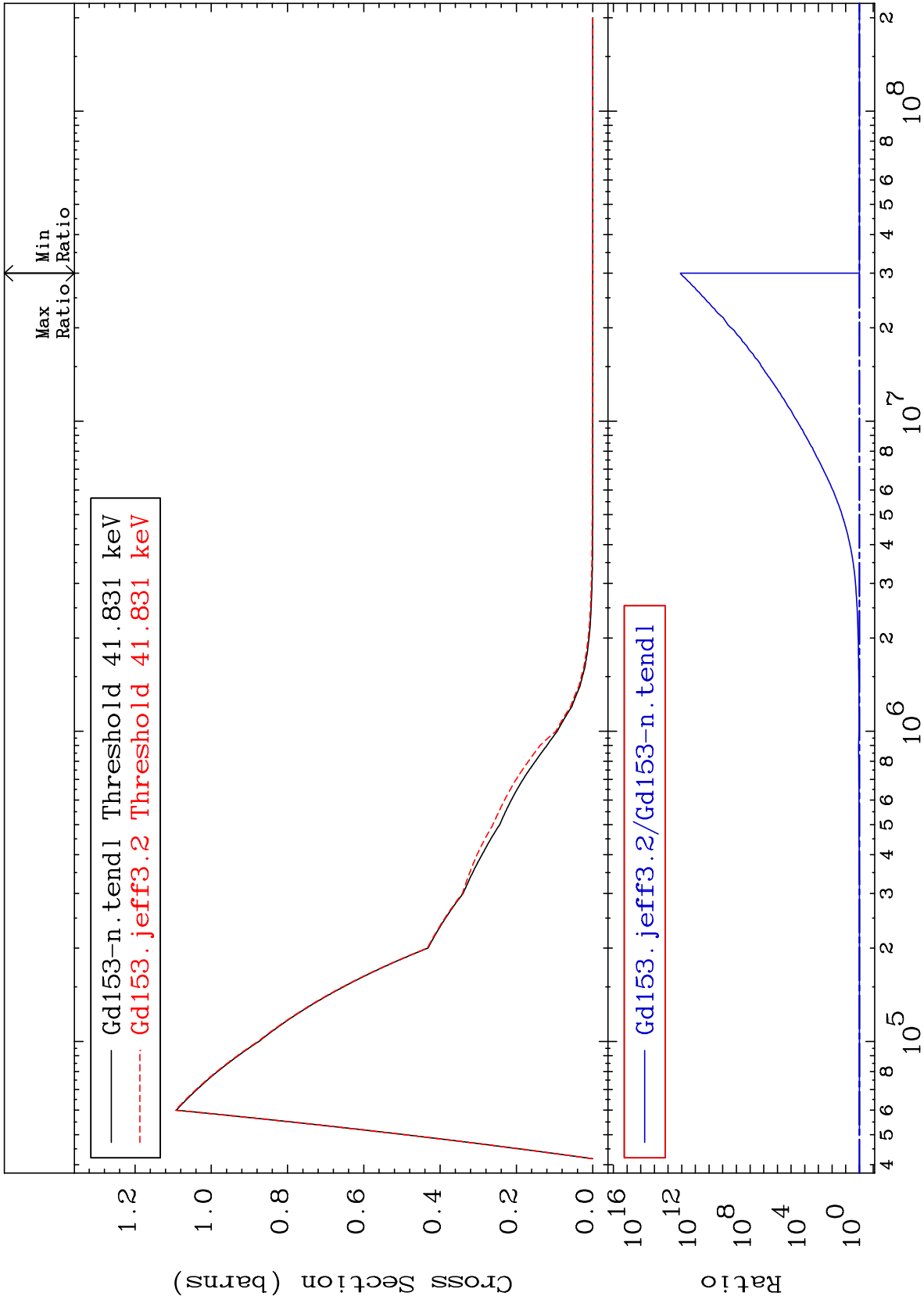
Incident Energy (eV)

64-Gd-153

MAT 6428

41.56 keV (n,n') Level
Cross Section

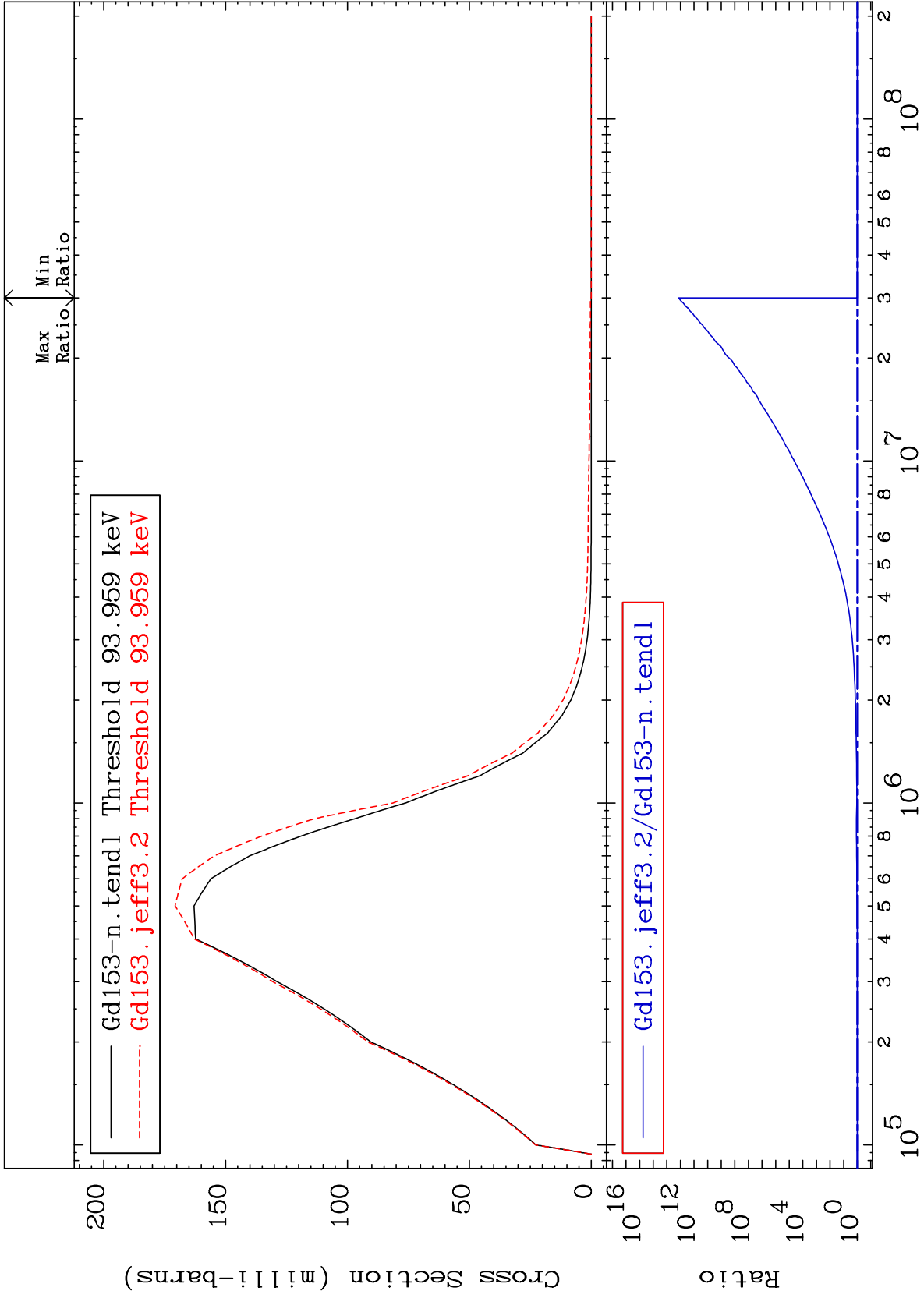
64-Gd-153
To 9999. %



MAT 6428

93.34 keV (n,n') Level
Cross Section

64-Gd-153
To 9999. %



22

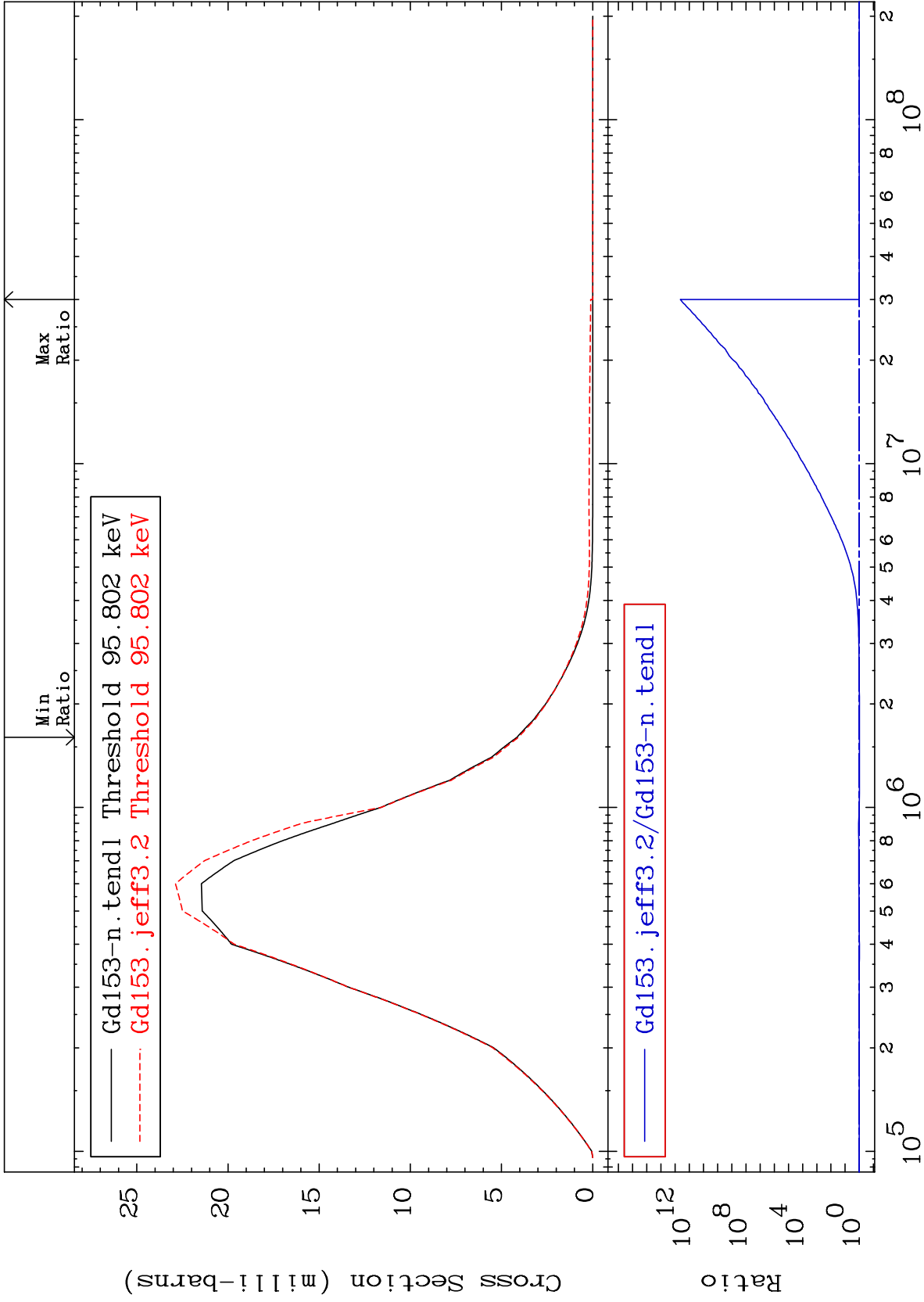
Incident Energy (eV)

64-Gd-153

MAT 6428

95.17 keV (n,n') Level
Cross Section

64-Gd-153
-2.160 To 9999. %



23

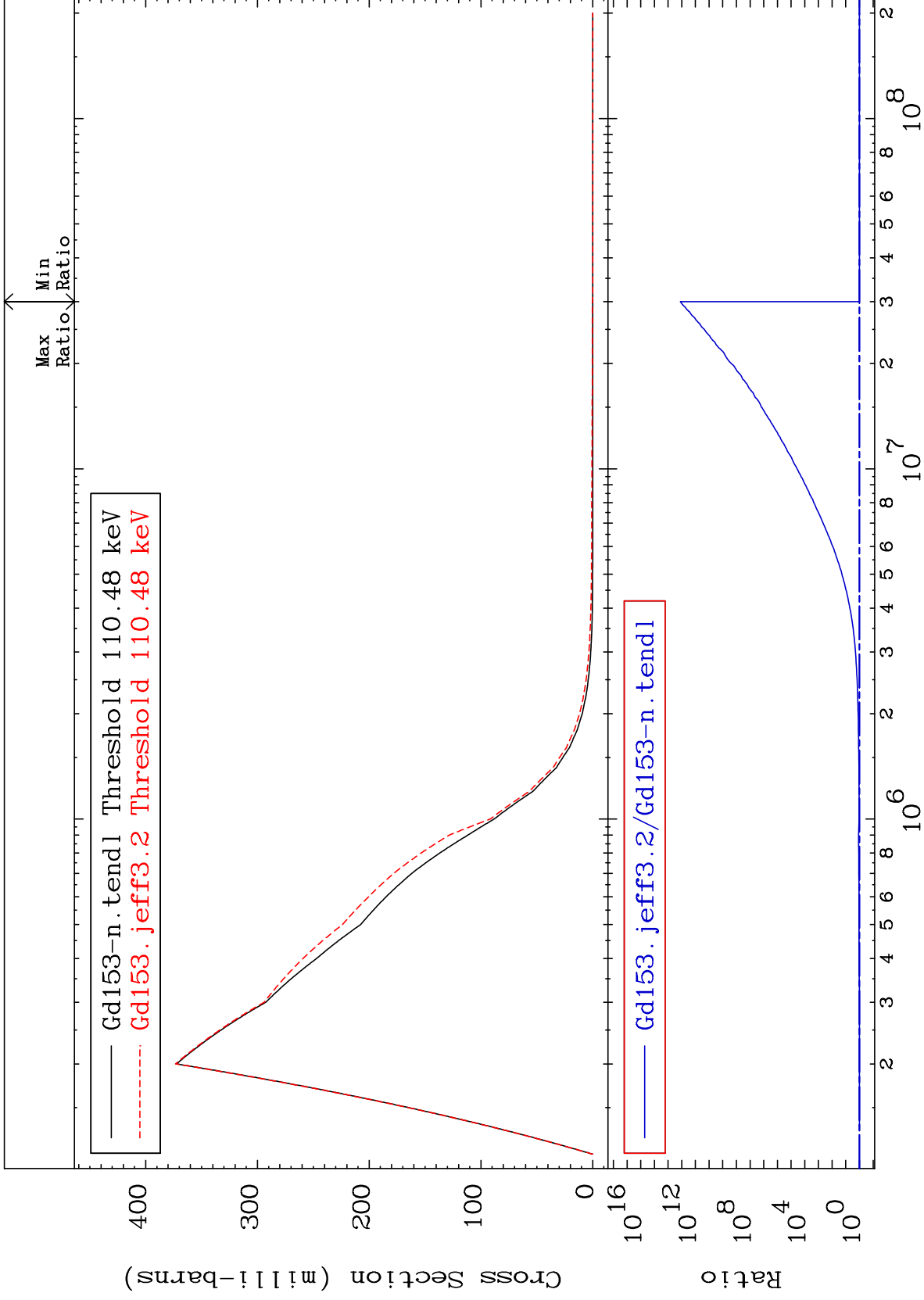
Incident Energy (eV)

64-Gd-153

MAT 6428

109.8 keV (n,n') Level
Cross Section

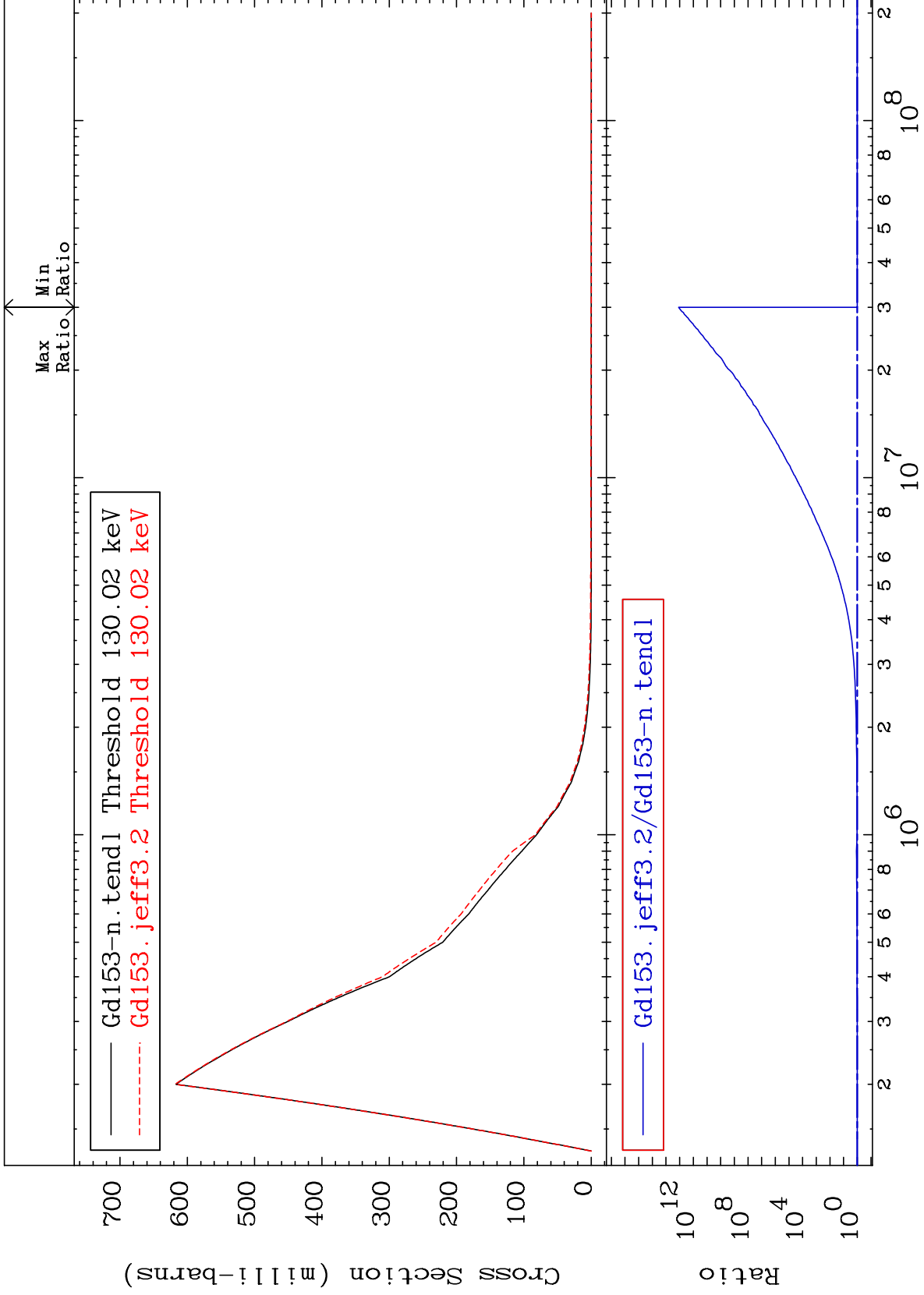
64-Gd-153
To 9999. %



MAT 6428

129.2 keV (n,n') Level
Cross Section

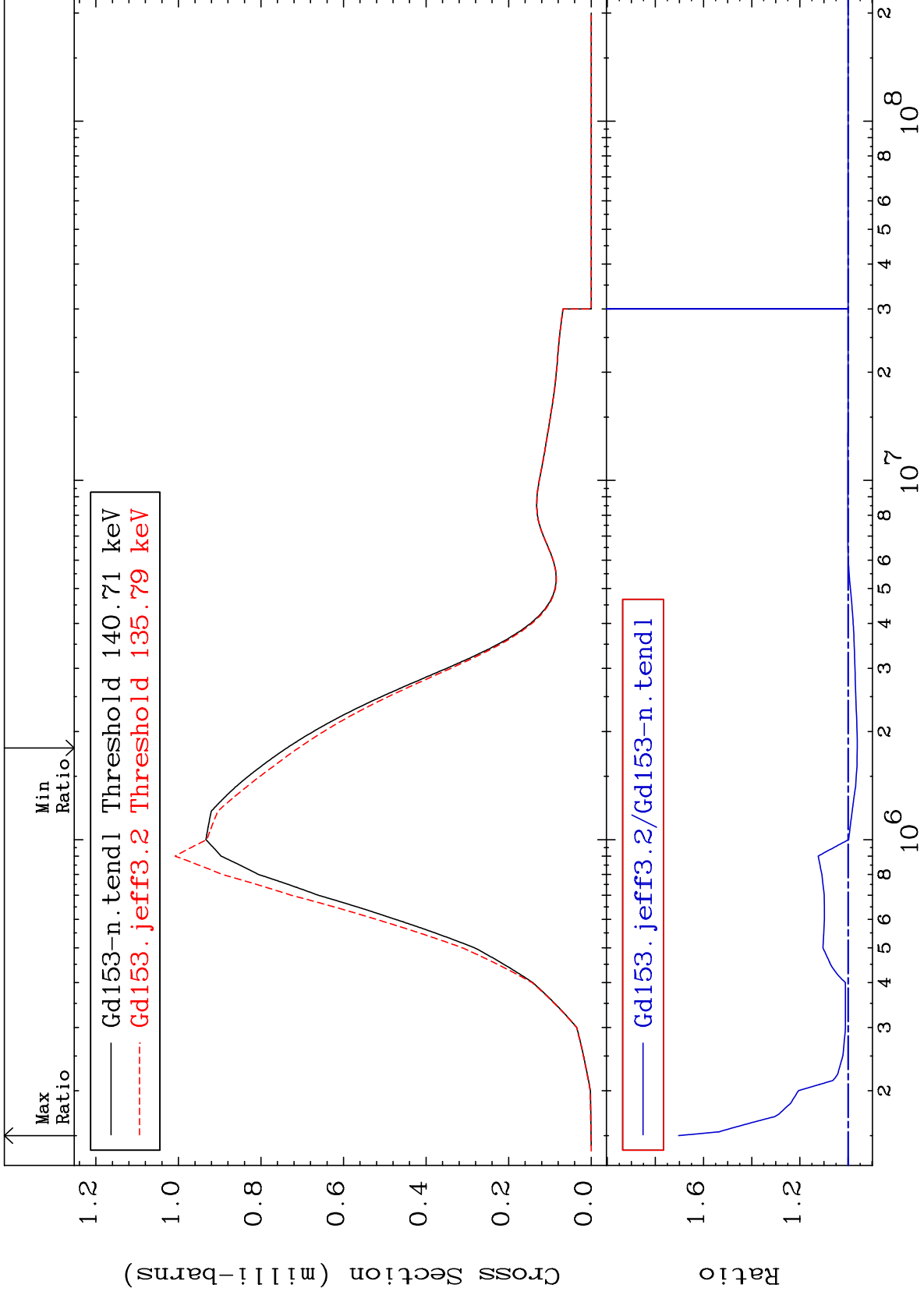
64-Gd-153
To 9999. %



MAT 6428

139.8 keV (n,n') Level
Cross Section

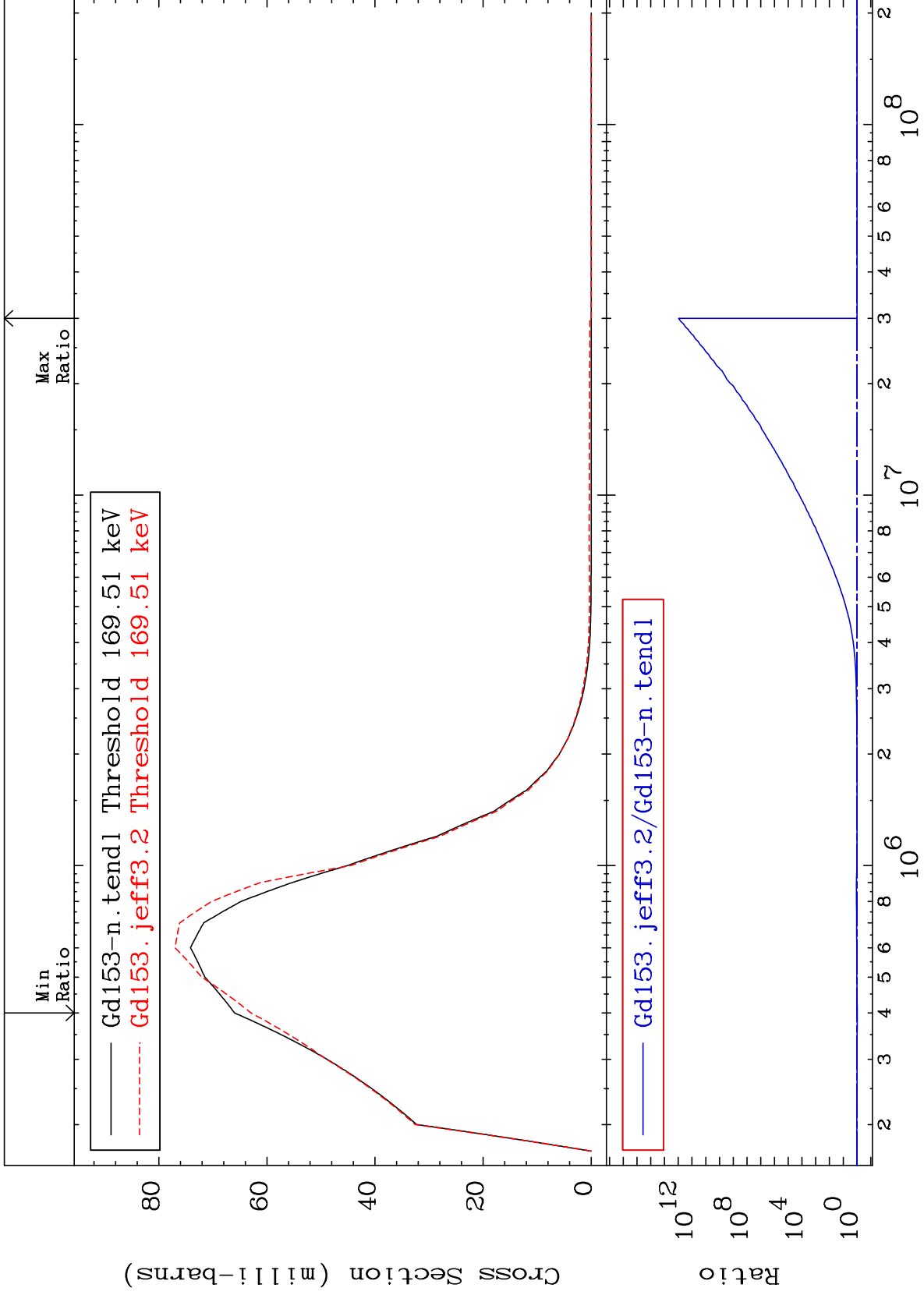
64-Gd-153
-3.826 To 70.35 %



MAT 6428

168.4 keV (n,n') Level
Cross Section

64-Gd-153
-4.630 To 9999. %



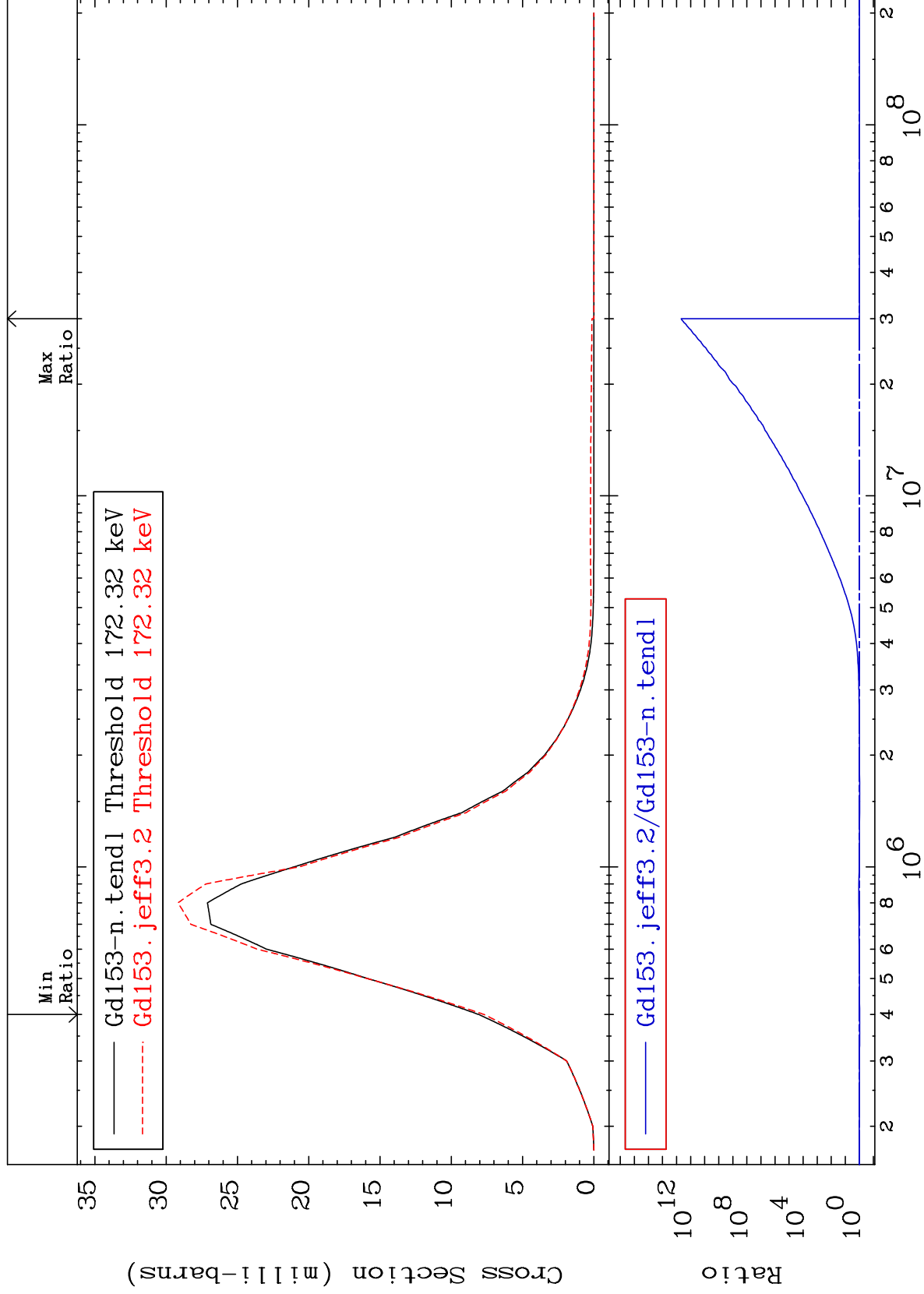
MAT 6428

171.2 keV (n,n') Level

64-Gd-153

Cross Section

-4.560 To 9999. %



28

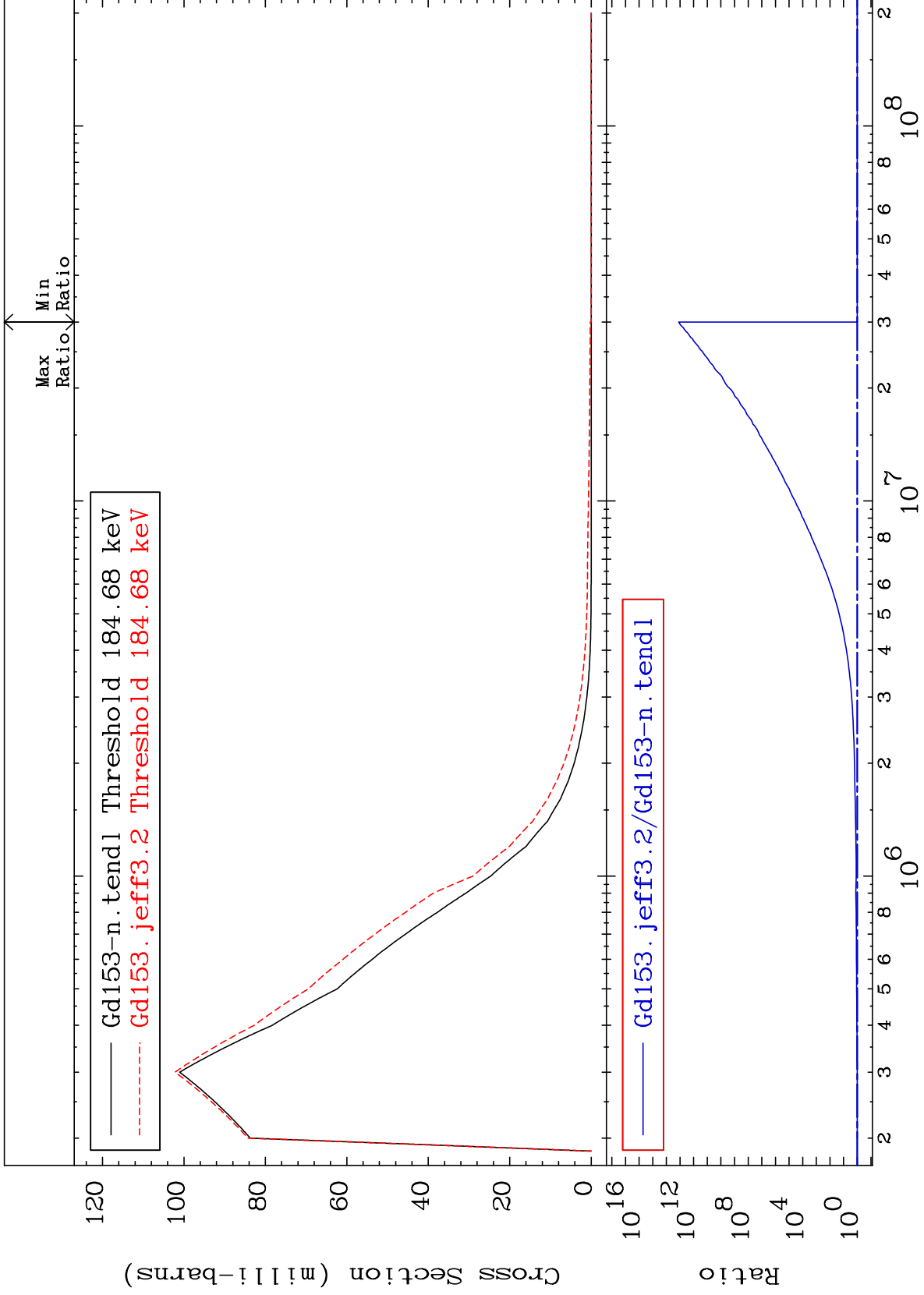
Incident Energy (eV)

64-Gd-153

MAT 6428

183.5 keV (n,n') Level
Cross Section

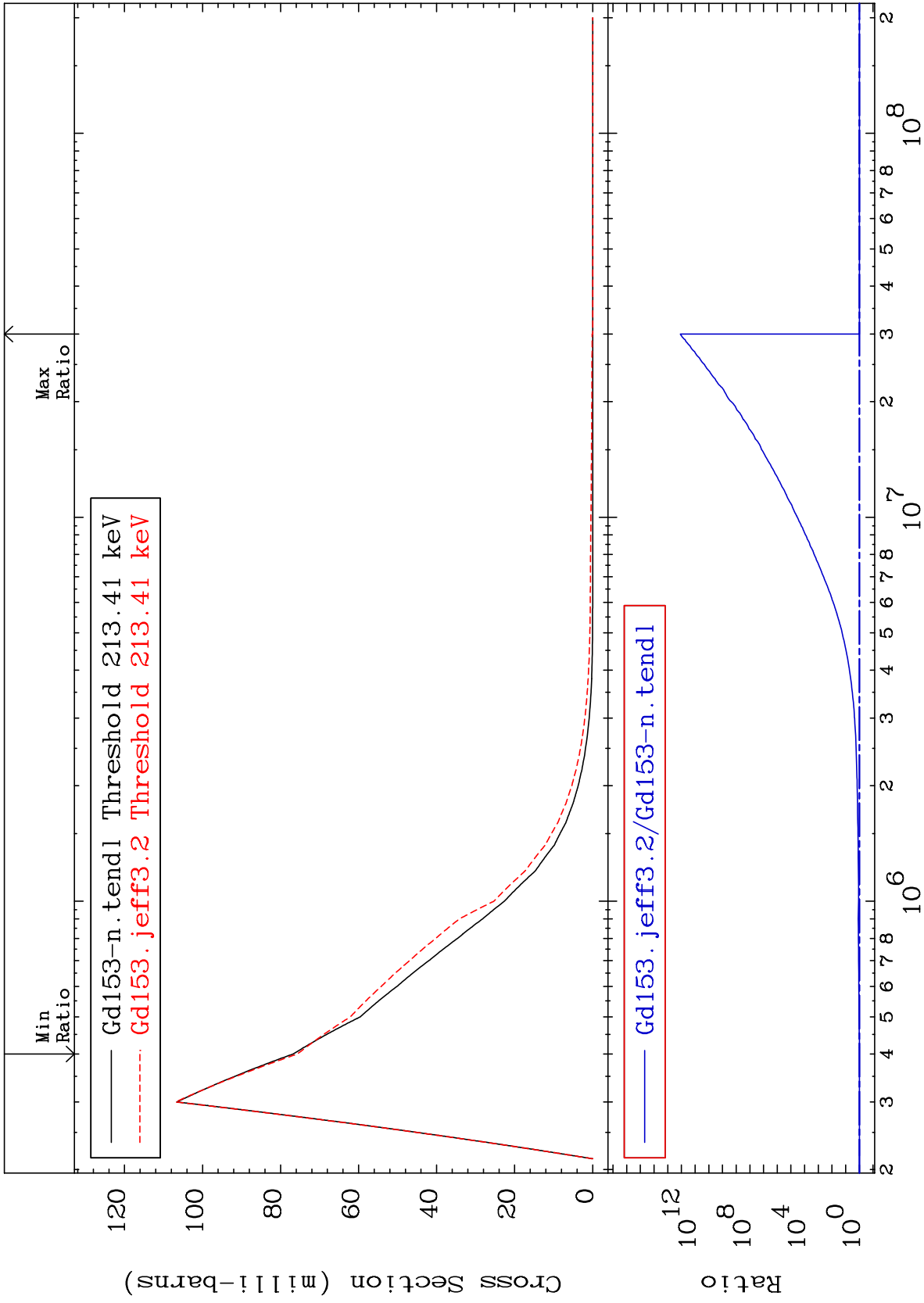
64-Gd-153
To 9999. %



MAT 6428

212.0 keV (n,n') Level
Cross Section

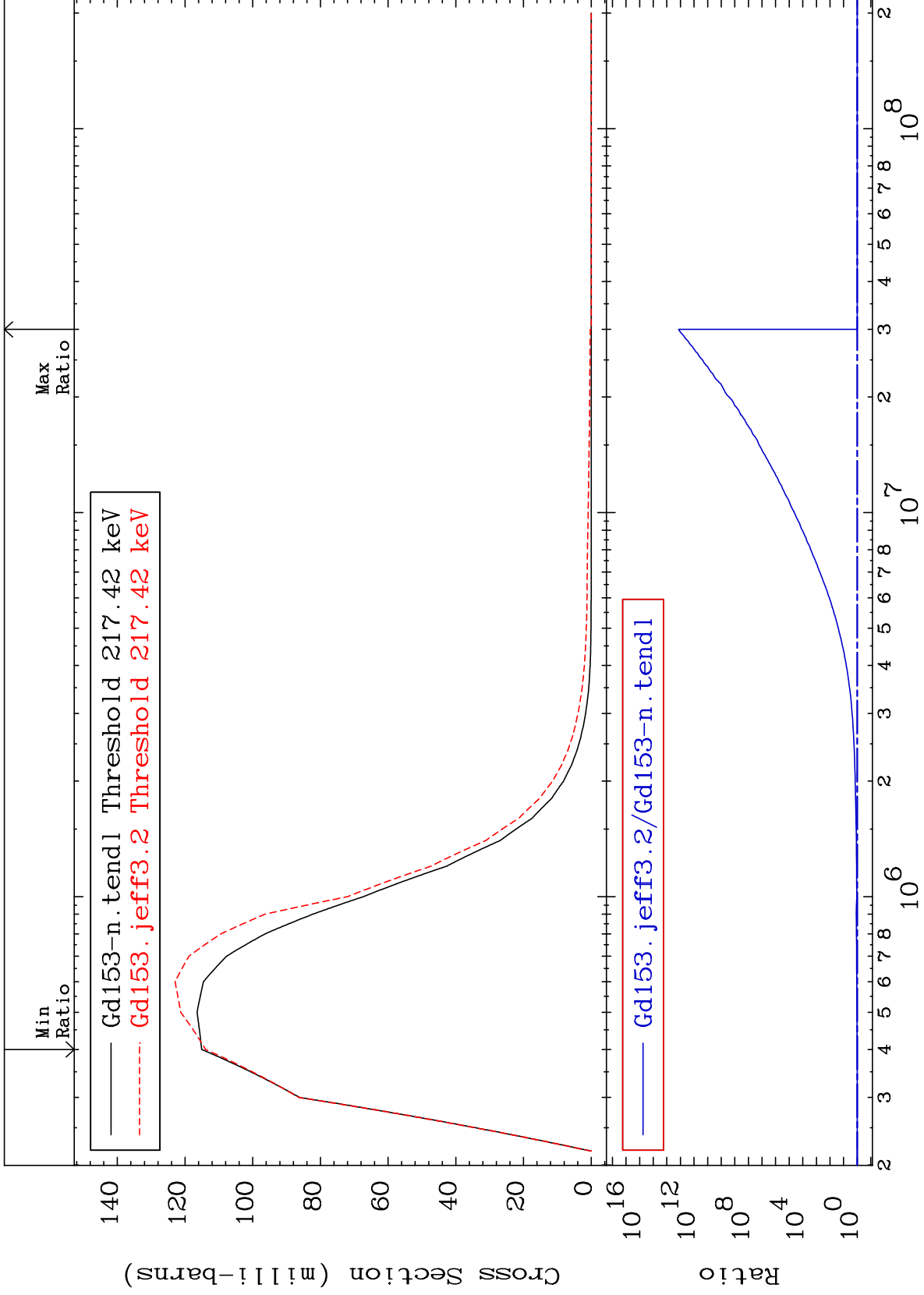
64-Gd-153
-1.411 To 9999. %



MAT 6428

216.0 keV (n,n') Level
Cross Section

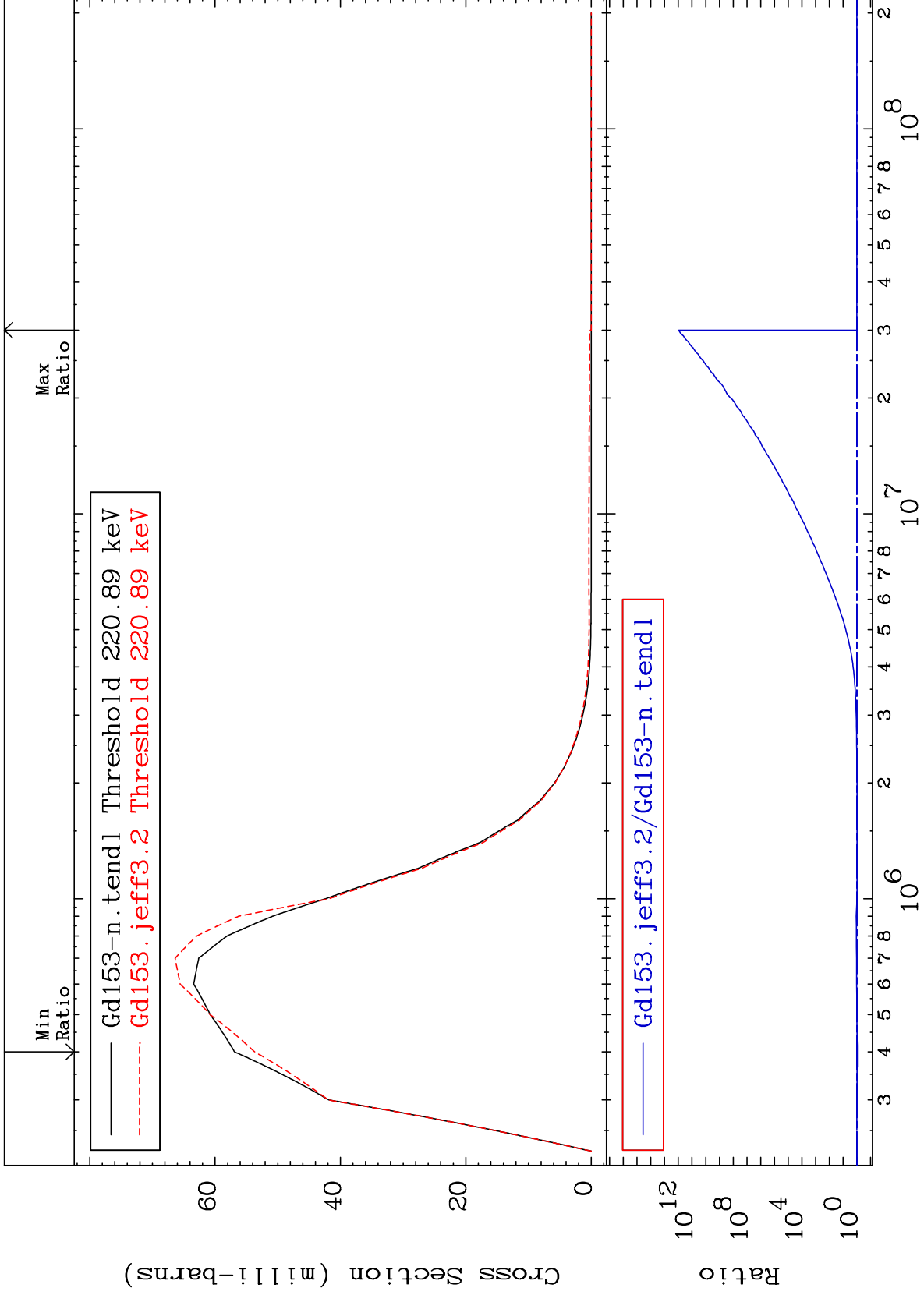
64-Gd-153
-1.005 To 9999. %



MAT 6428

219.4 keV (n,n') Level
Cross Section

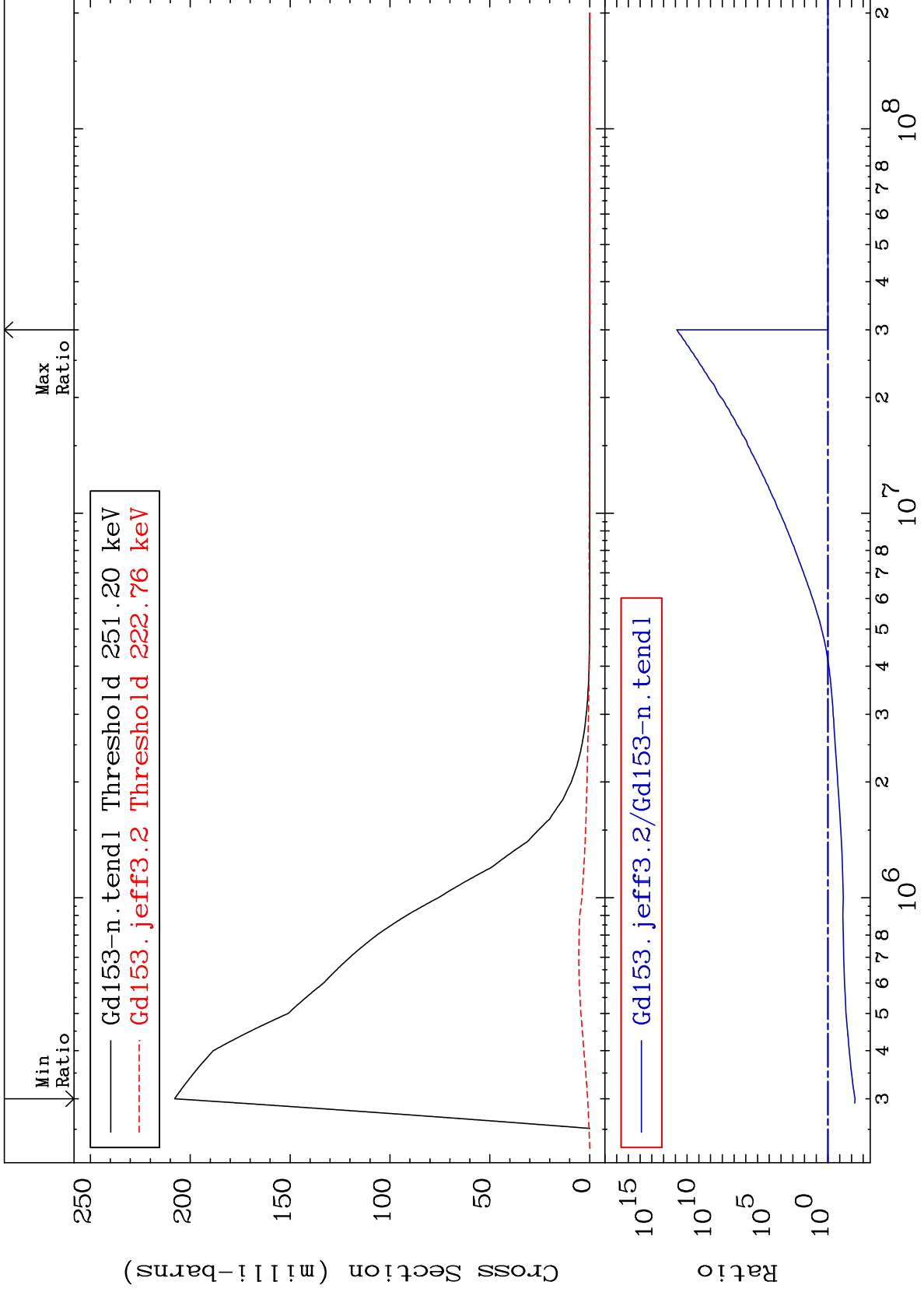
64-Gd-153
-5.635 To 9999. %



MAT 6428

249.6 keV (n,n') Level
Cross Section

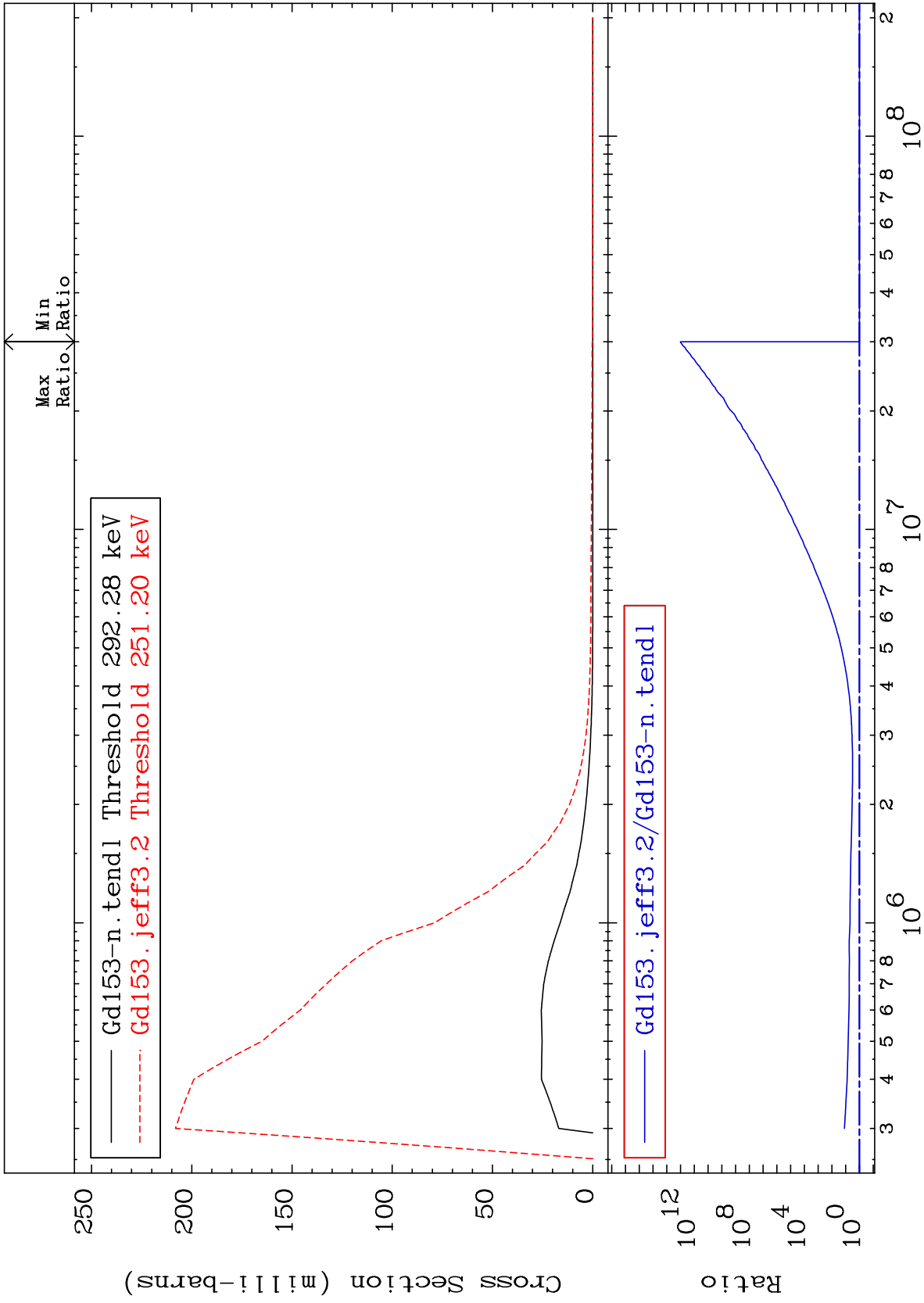
64-Gd-153
-99.51 To 9999. %



MAT 6428

290.4 keV (n,n') Level
Cross Section

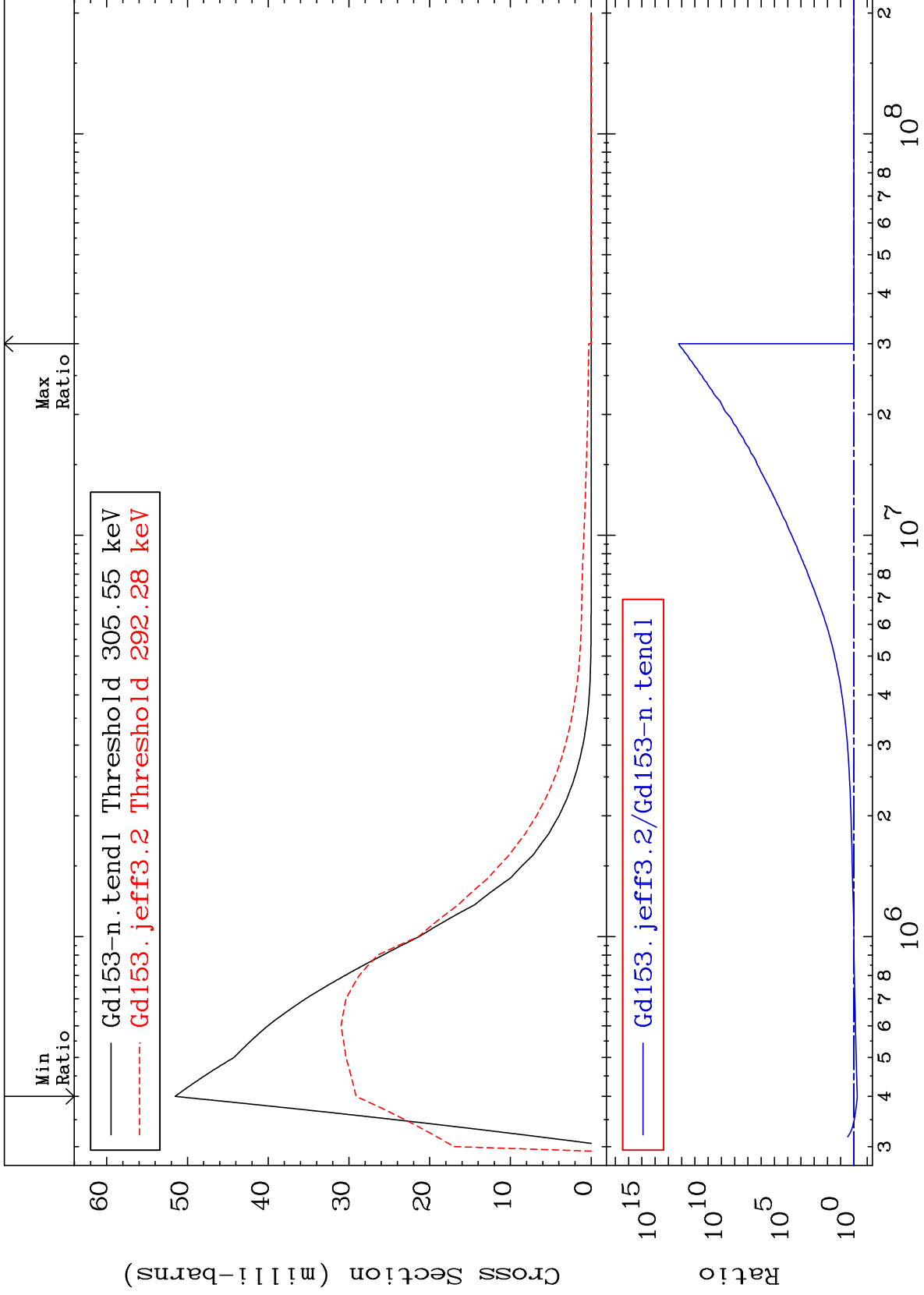
64-Gd-153
To 9999. %



MAT 6428

303.5 keV (n,n') Level
Cross Section

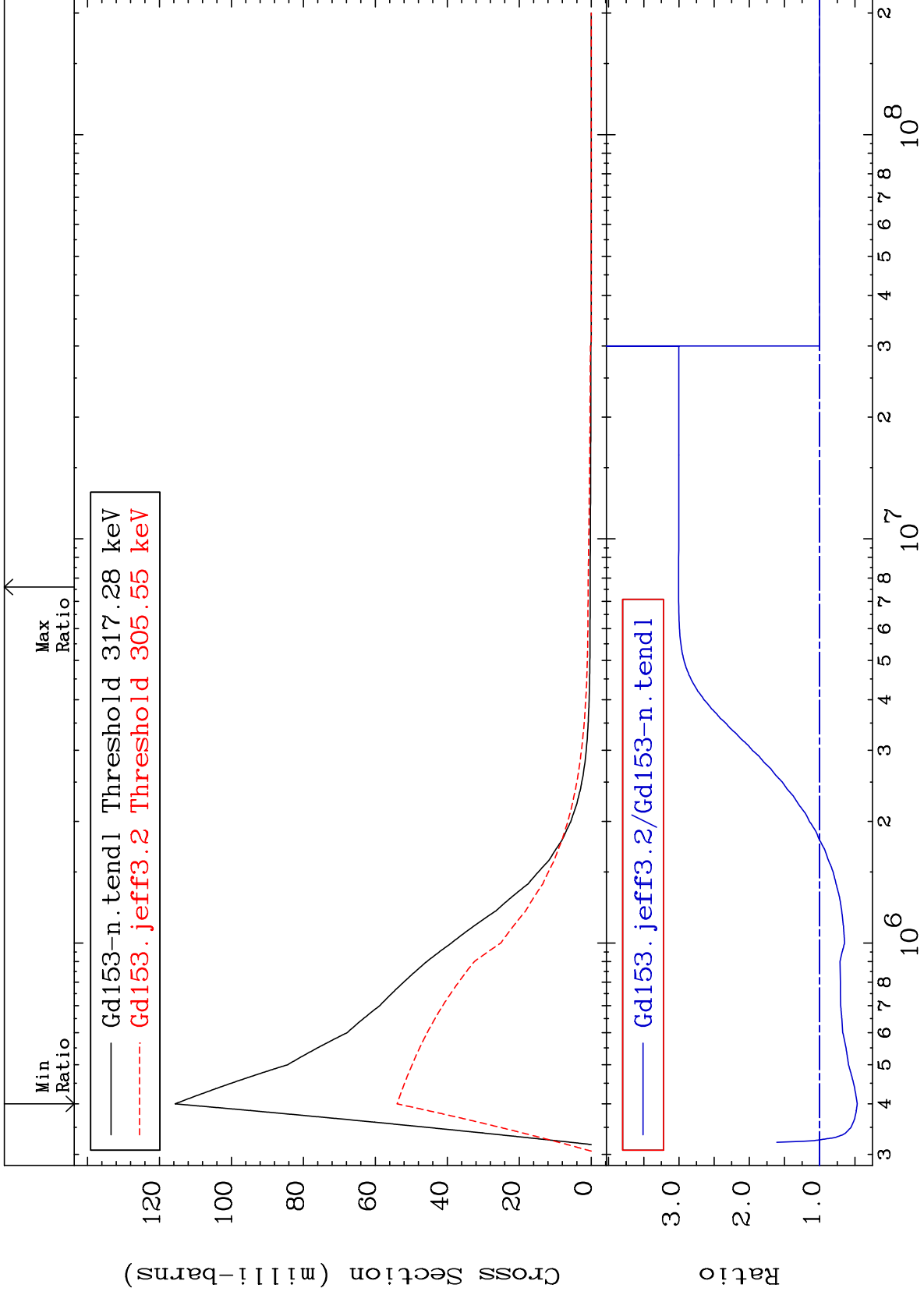
64-Gd-153
-43.50 To 9999. %



MAT 6428

315.2 keV (n,n') Level
Cross Section

64-Gd-153
-53.36 To 200.4 %



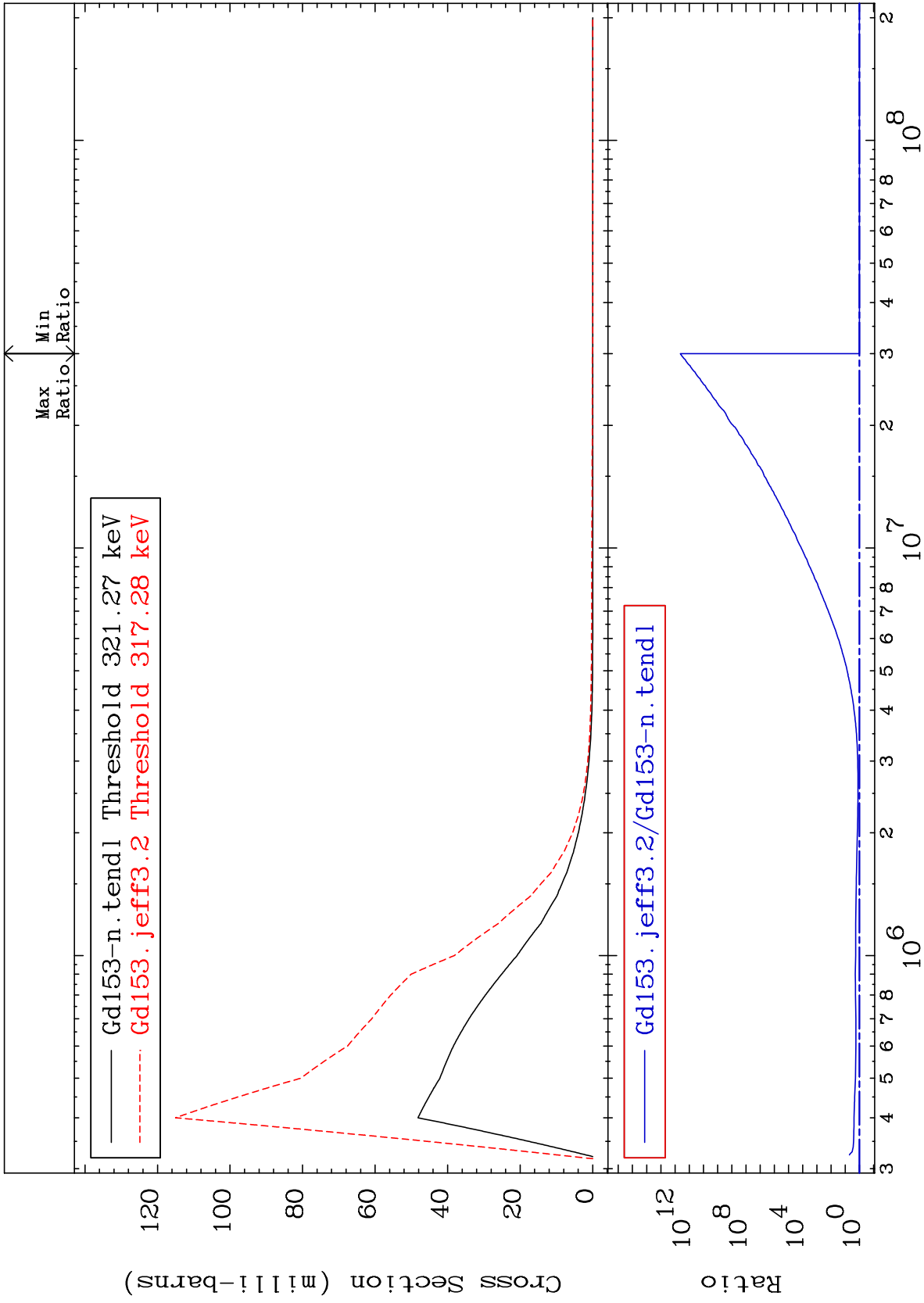
36

64-Gd-153

MAT 6428

319.2 keV (n,n') Level
Cross Section

64-Gd-153
To 9999. %



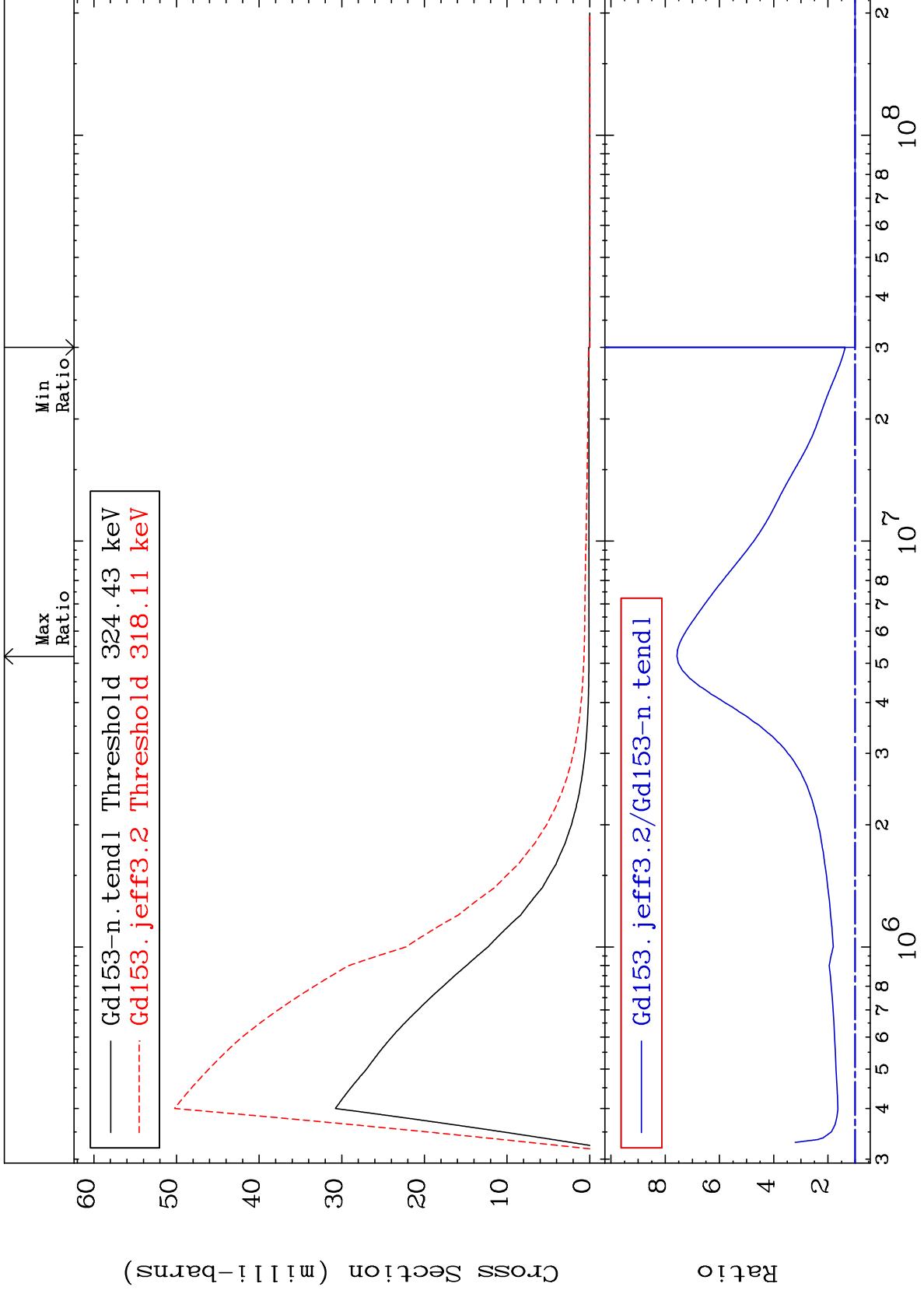
37

64-Gd-153

MAT 6428

322.3 keV (n,n') Level
Cross Section

64-Gd-153
0.000 To 656.9 %



38

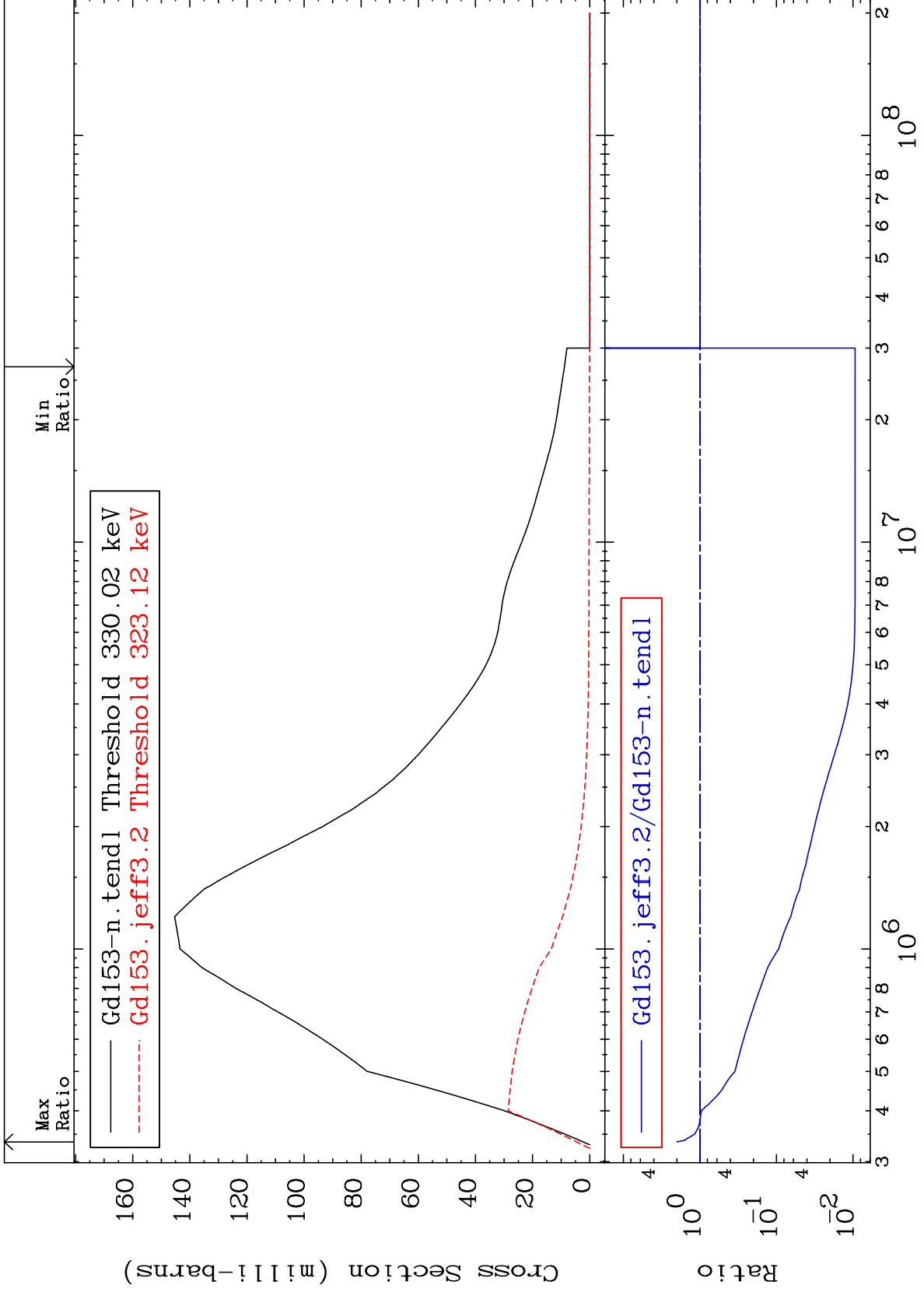
Incident Energy (eV)

64-Gd-153

MAT 6428

327.9 keV (n,n') Level
Cross Section

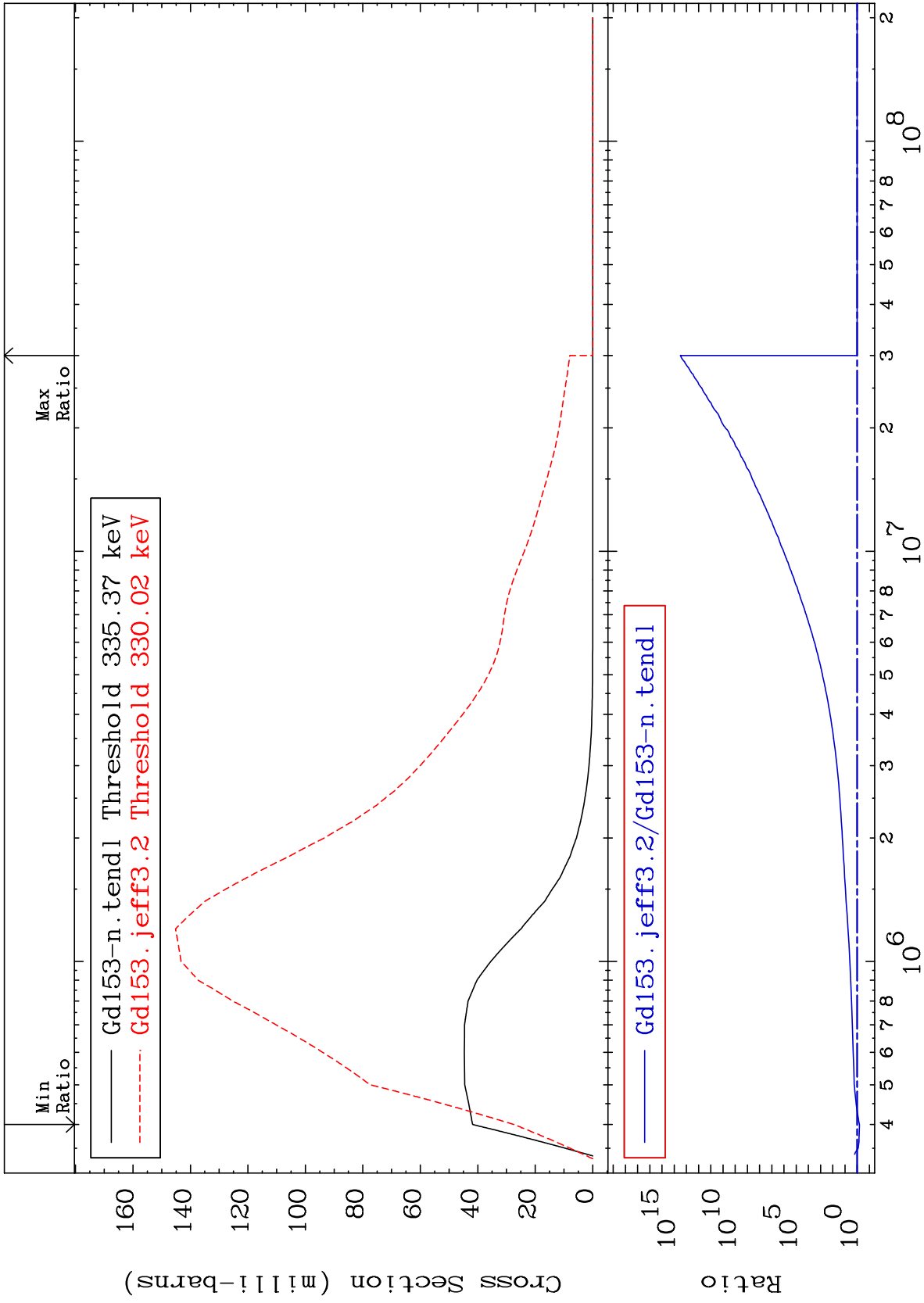
64-Gd-153
-99.06 To 99.46 %



MAT 6428

333.2 keV (n,n') Level
Cross Section

64-Gd-153
-34.42 To 9999. %



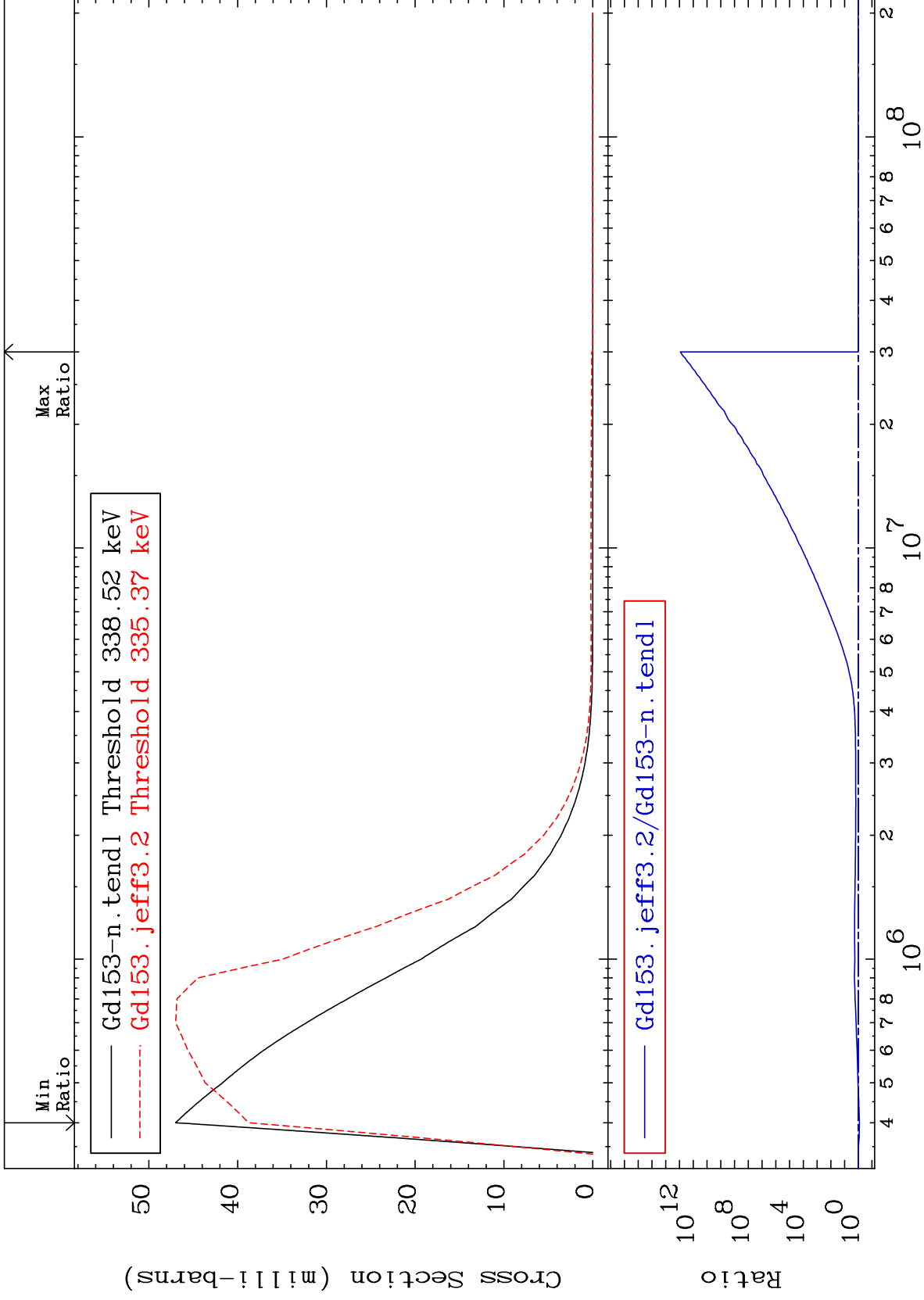
40

64-Gd-153

MAT 6428

336.3 keV (n,n') Level
Cross Section

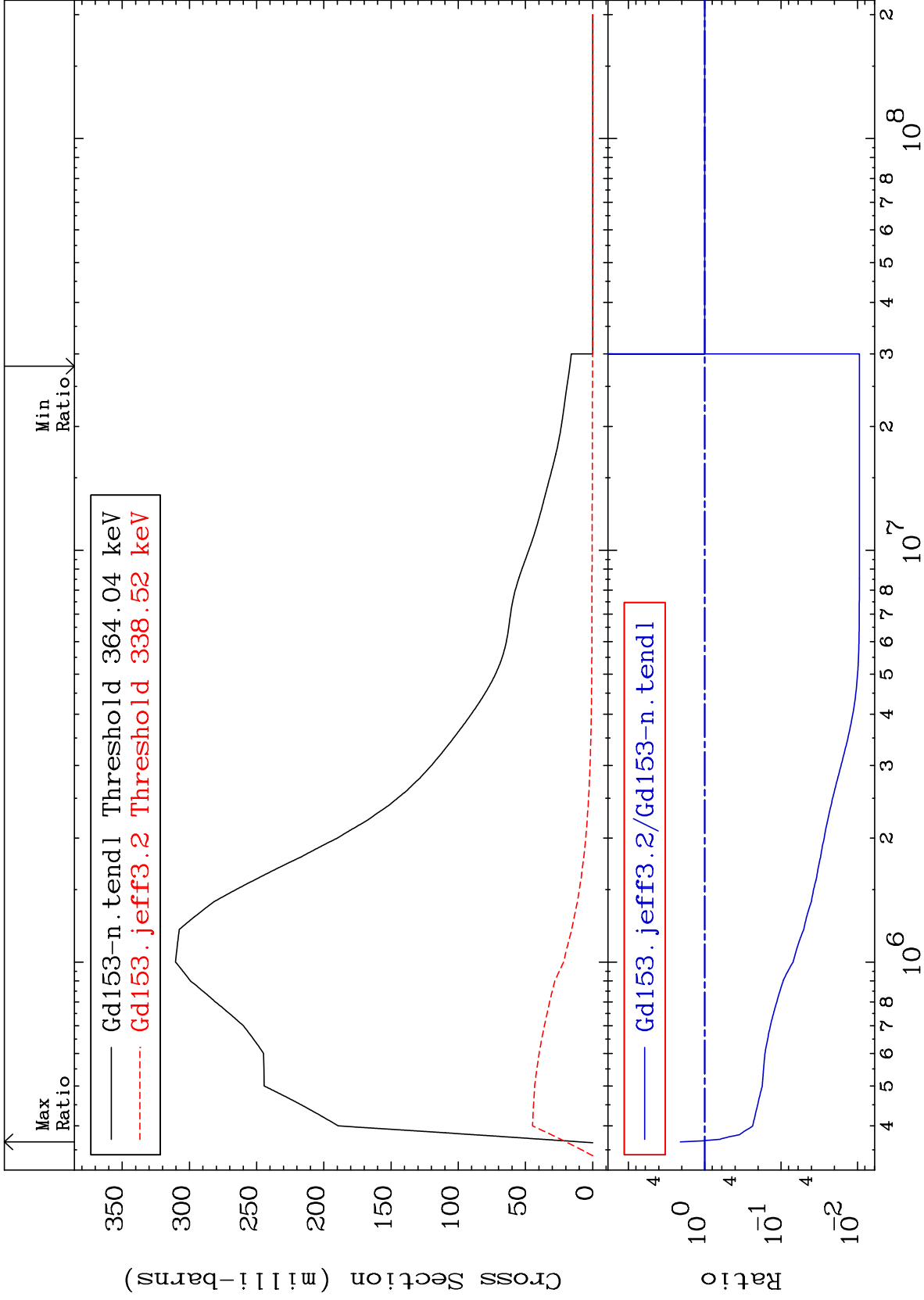
64-Gd-153
-17.53 To 9999. %



MAT 6428

361.7 keV (n,n') Level
Cross Section

64-Gd-153
-99.06 To 108.9 %



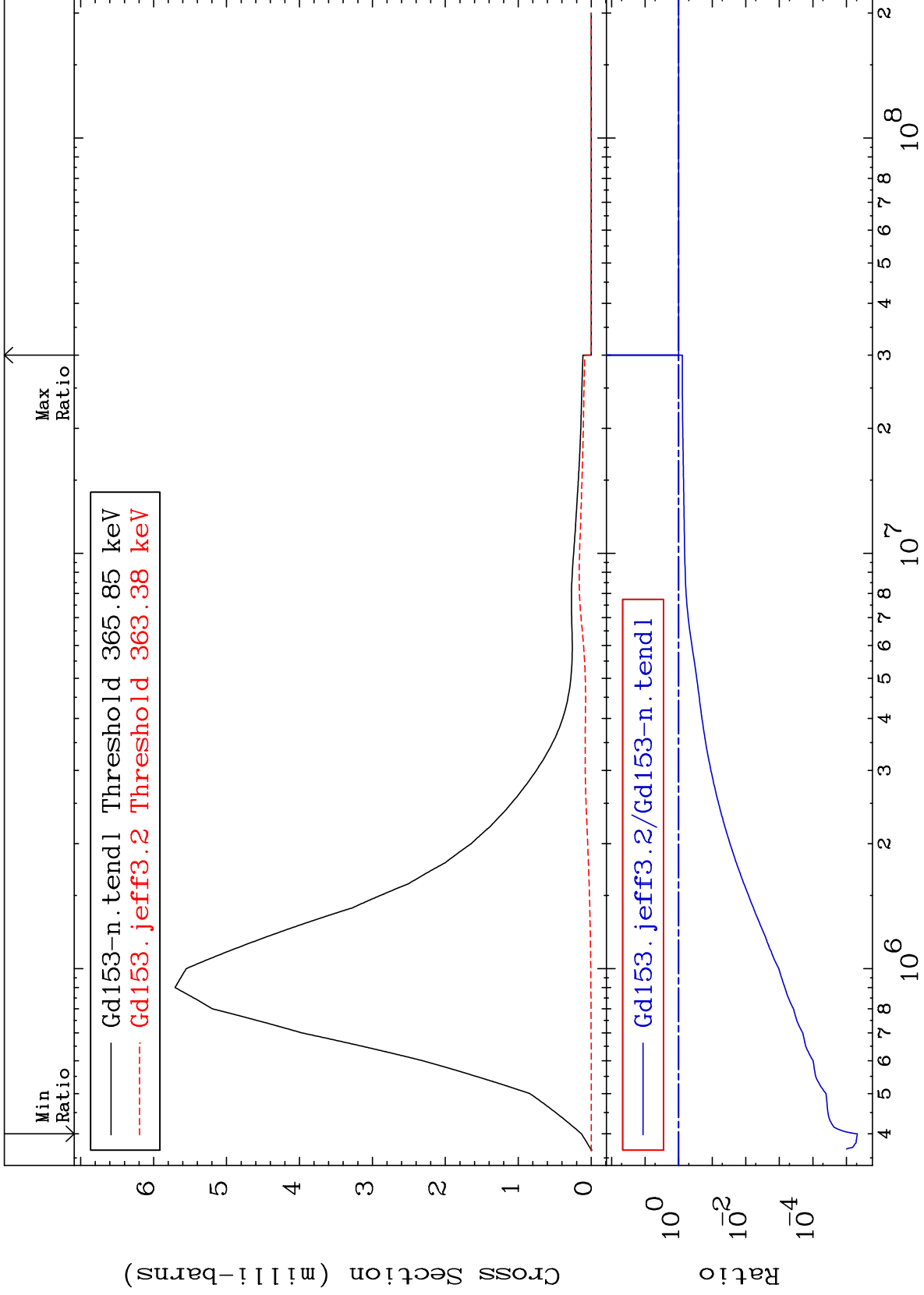
42

64-Gd-153

MAT 6428

363.4 keV (n,n') Level
Cross Section

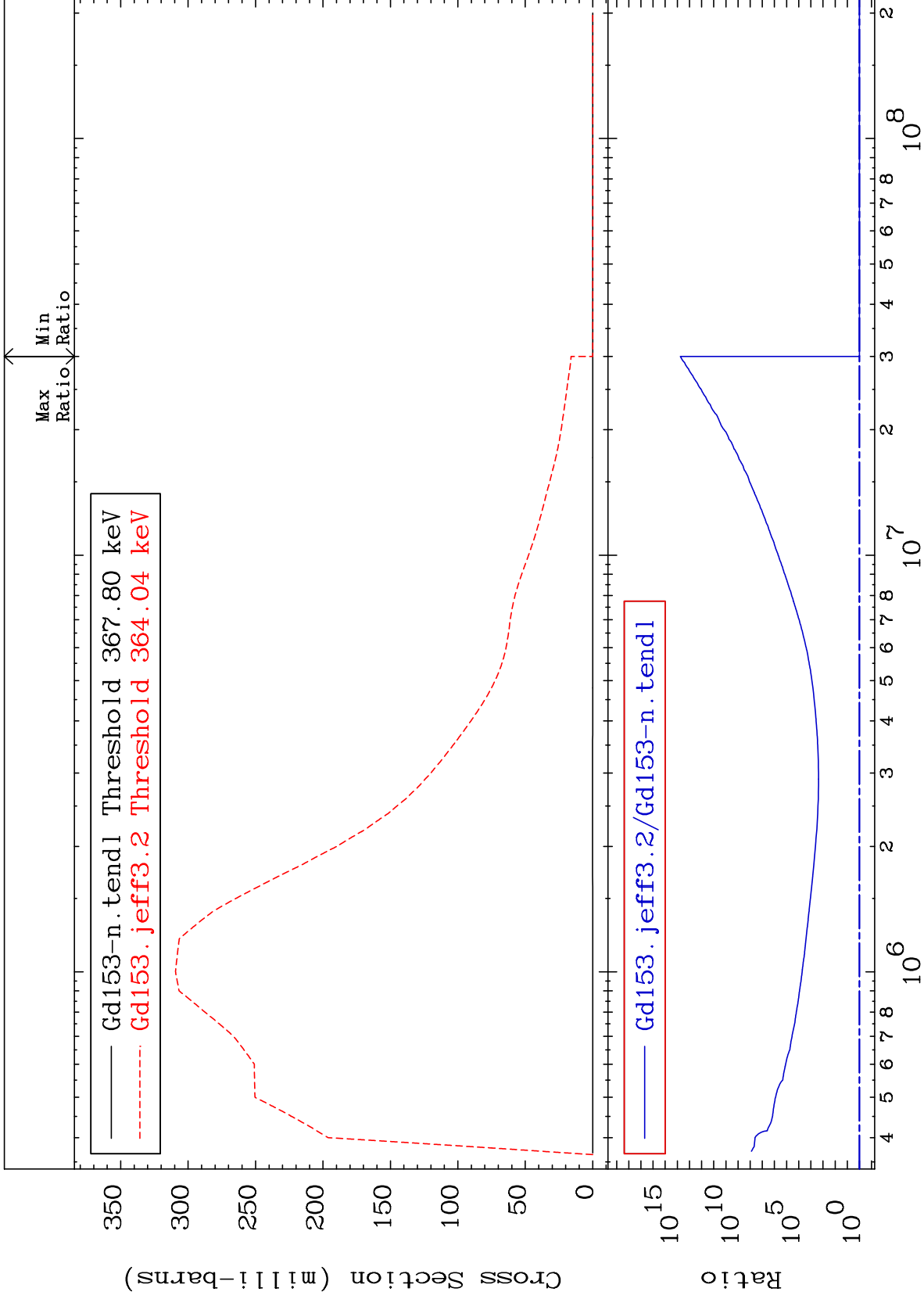
64-Gd-153
-100.0 To 0.000 %



MAT 6428

365.4 keV (n,n') Level
Cross Section

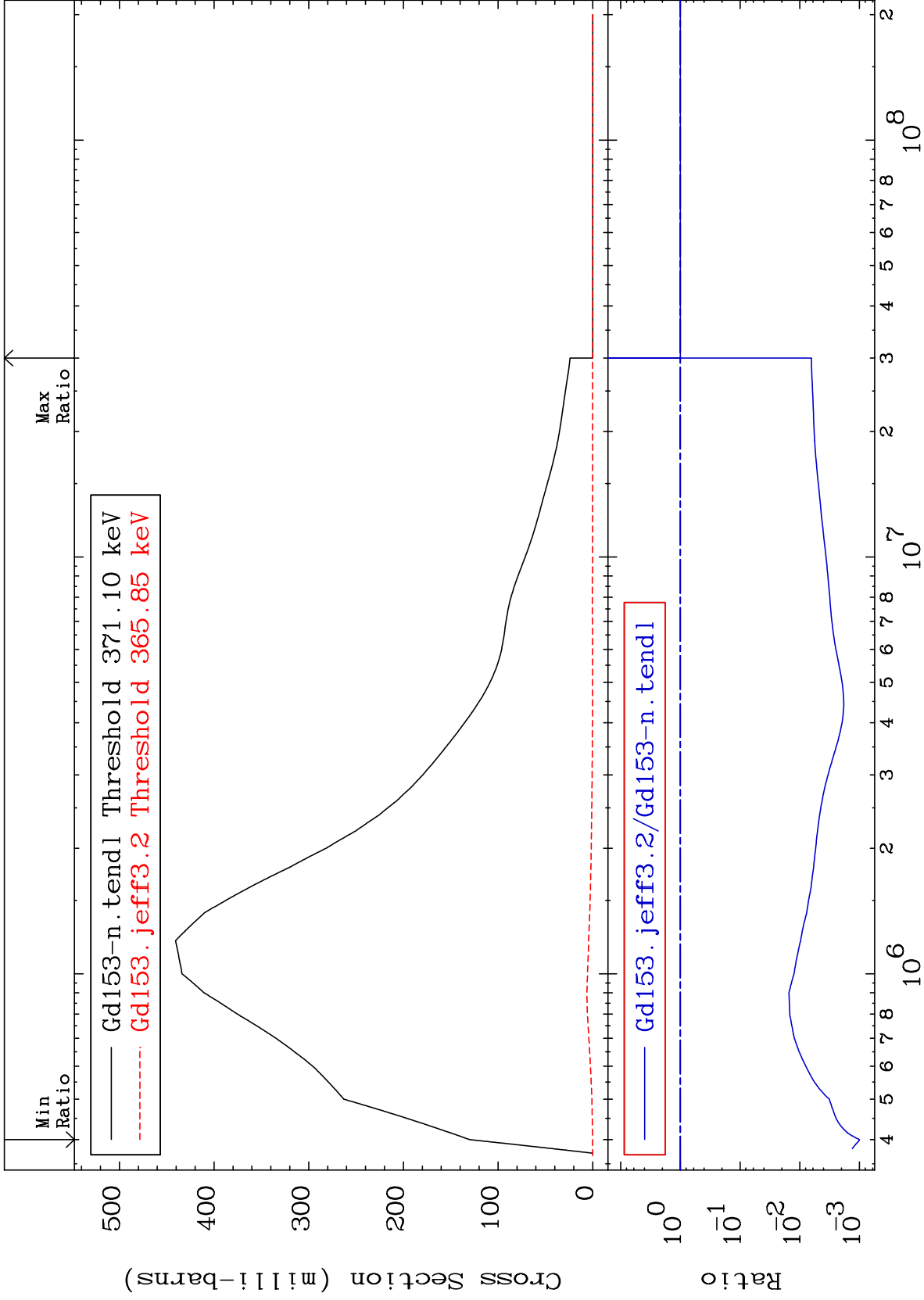
64-Gd-153
To 9999. %



MAT 6428

368.7 keV (n,n') Level
Cross Section

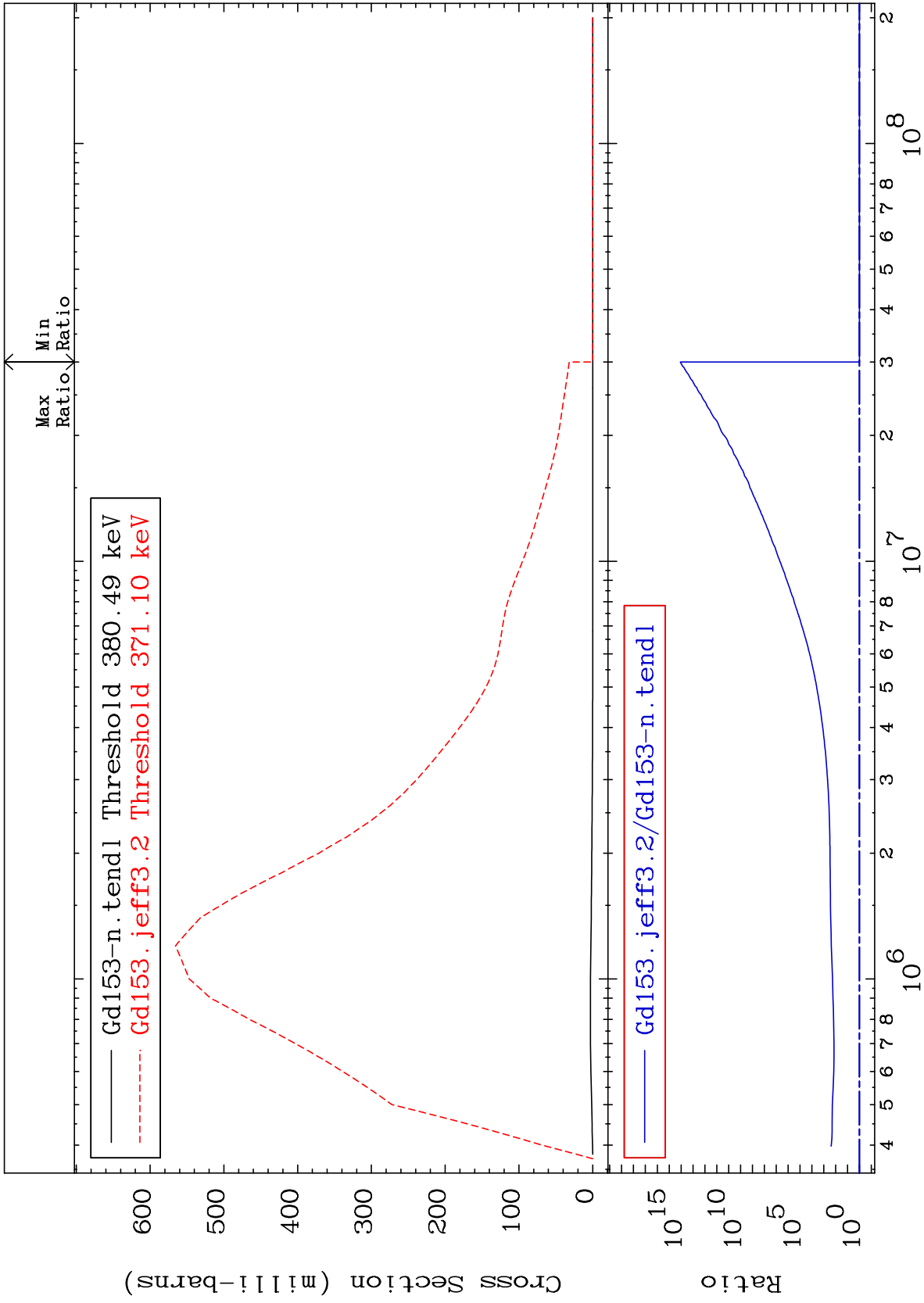
64-Gd-153
-99.90 To 0.000 %



MAT 6428

378.0 keV (n,n') Level
Cross Section

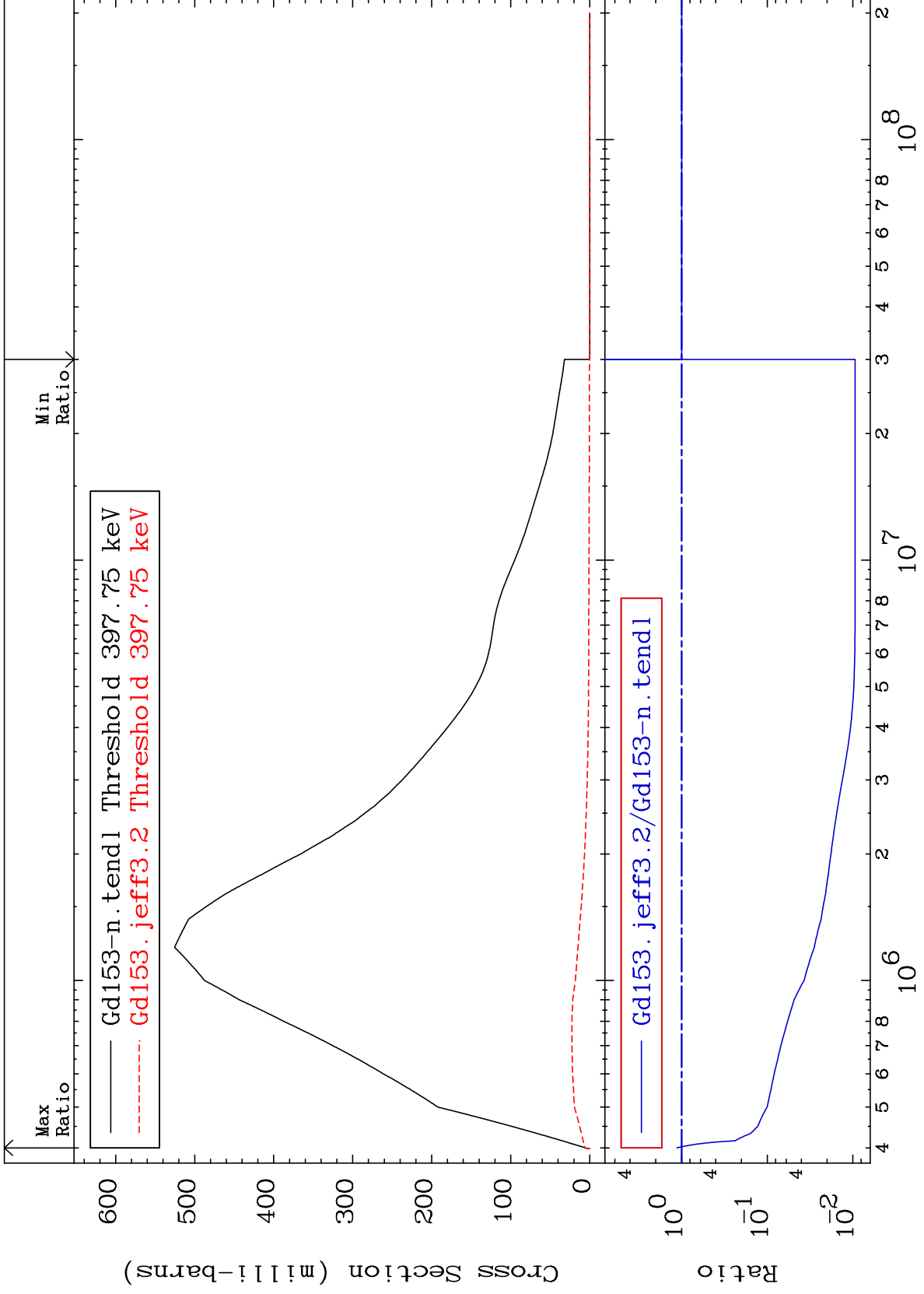
64-Gd-153
To 9999. %



MAT 6428

395.1 keV (n,n') Level
Cross Section

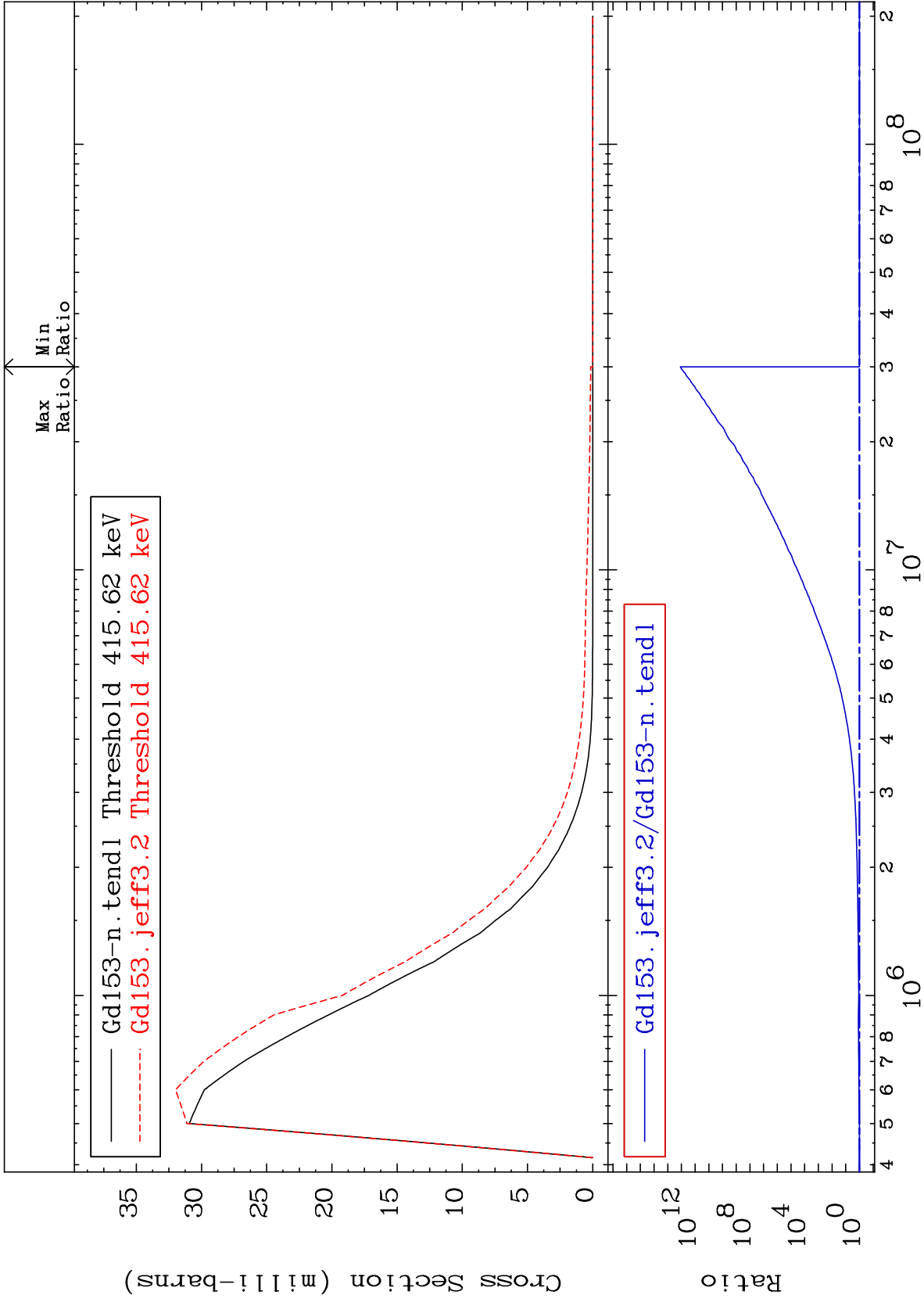
64-Gd-153
-99.06 To 13.37 %



MAT 6428

412.9 keV (n,n') Level
Cross Section

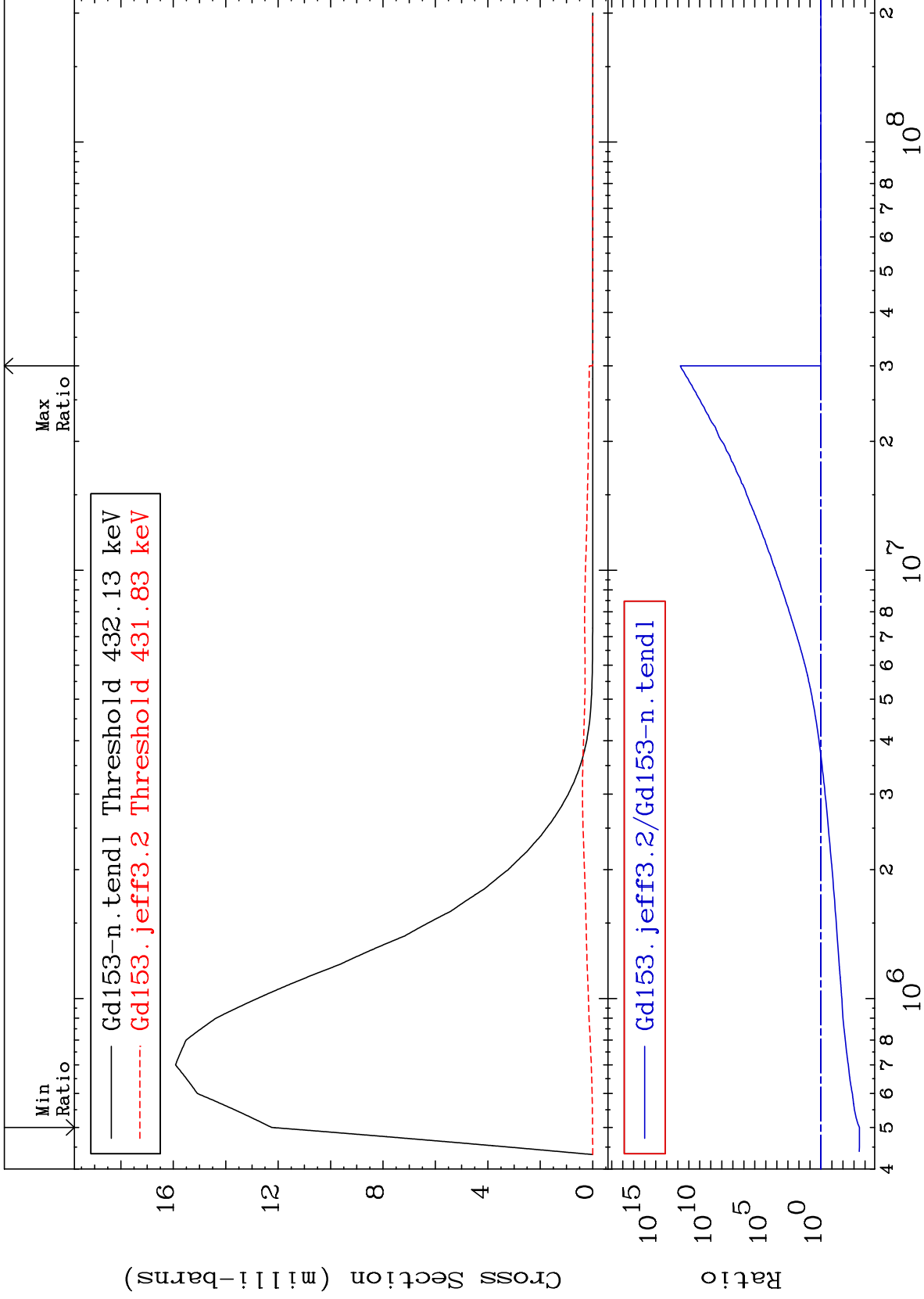
64-Gd-153
To 9999. %



MAT 6428

429.3 keV (n,n') Level
Cross Section

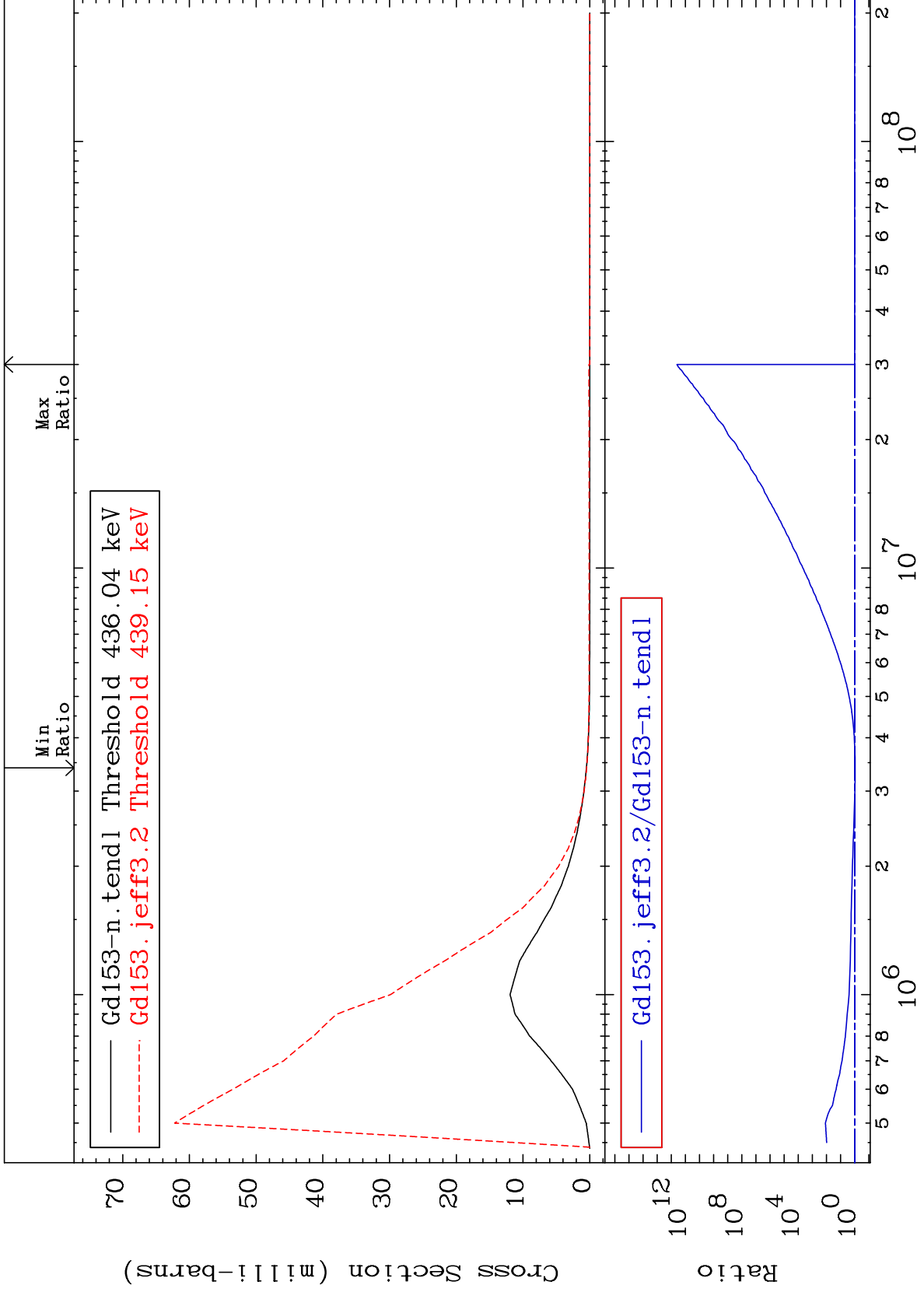
64-Gd-153
-99.97 To 9999. %

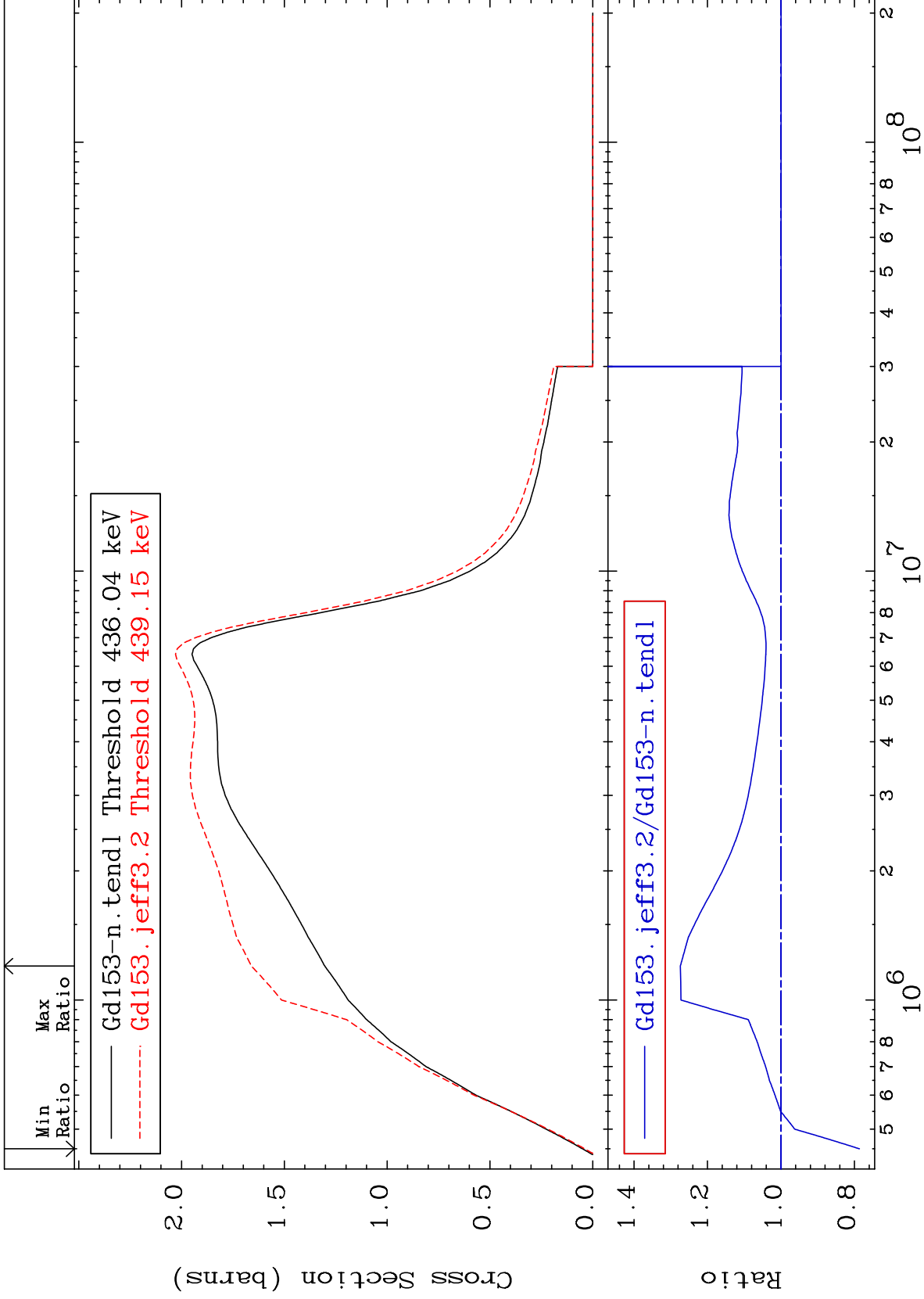


MAT 6428

433.2 keV (n,n') Level
Cross Section

64-Gd-153
-5.661 To 9999. %

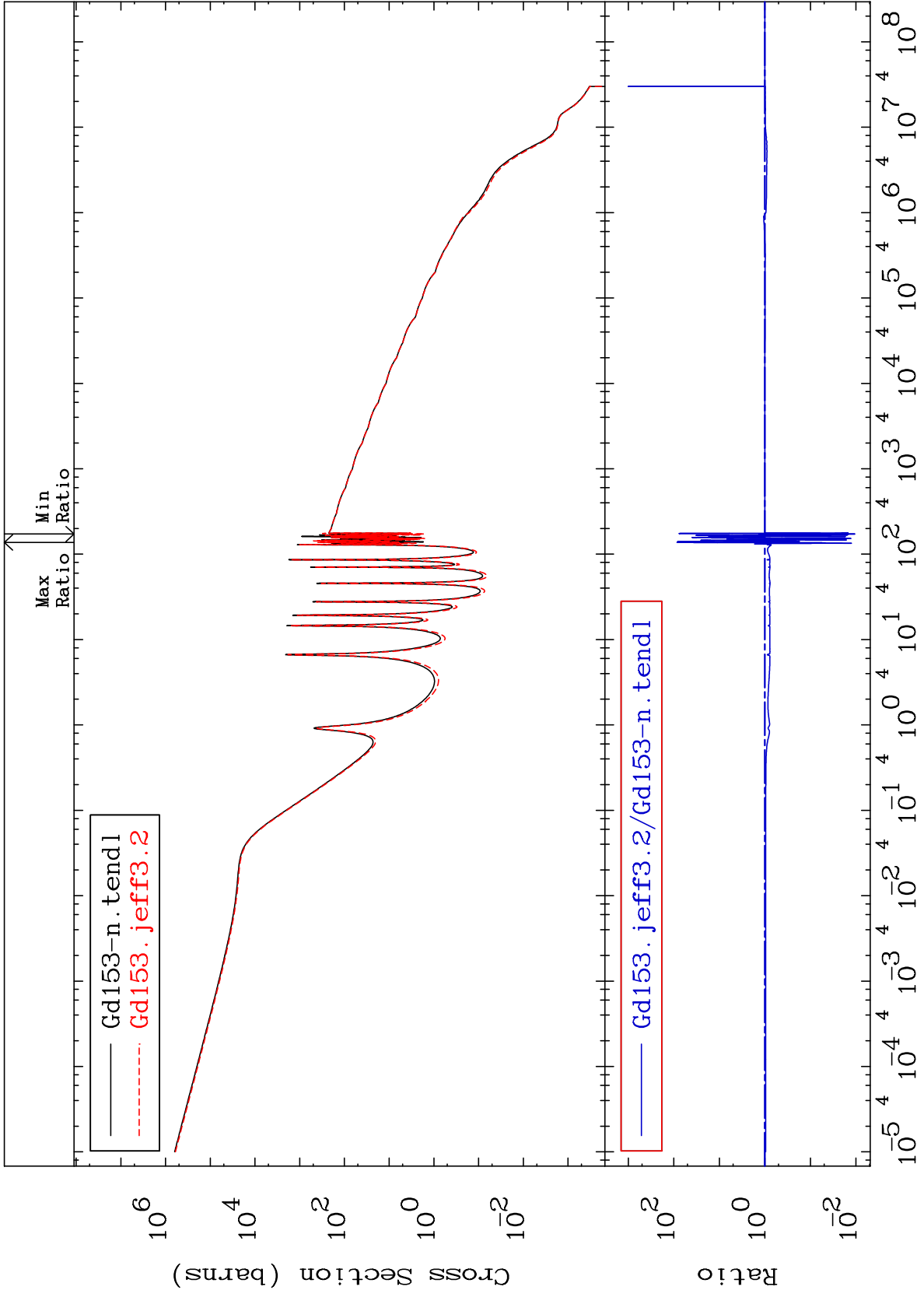




MAT 6428

(n, γ)
Cross Section

64-Gd-153
-98.96 To 8448. %



52

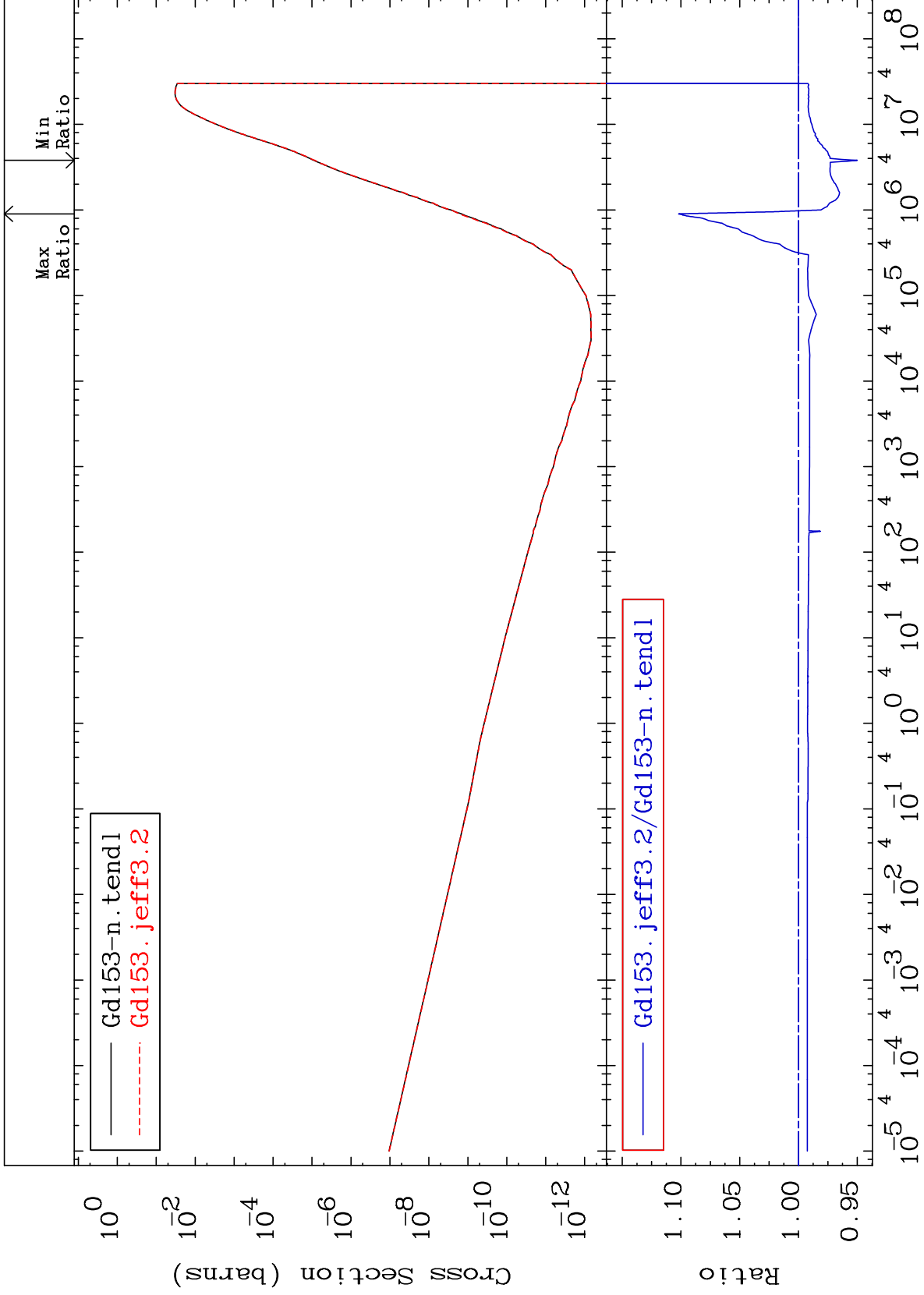
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,p)
Cross Section

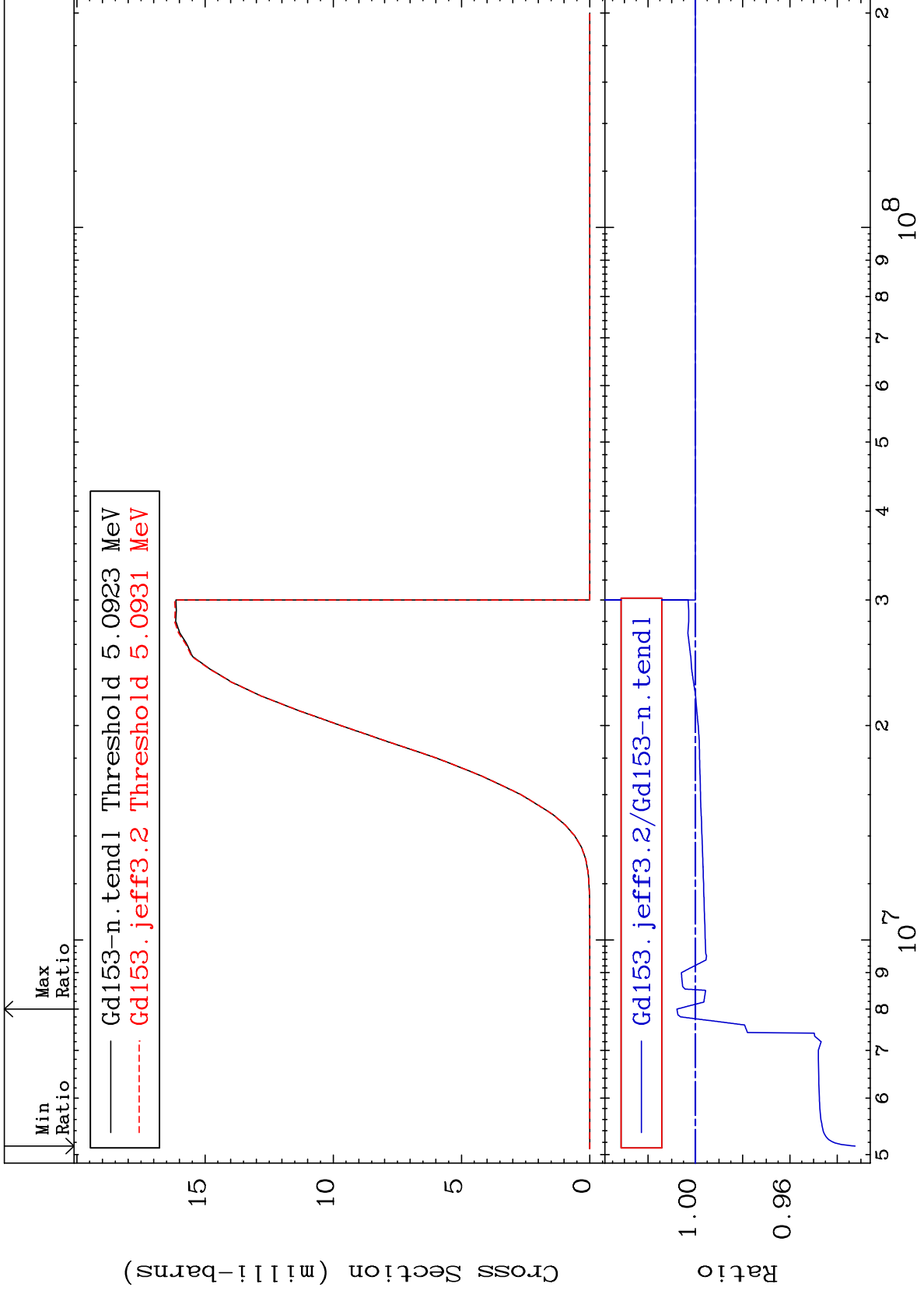
64-Gd-153
-5.002 To 10.20 %



MAT 6428

(n, d)
Cross Section

64-Gd-153
-6.758 To 0.776 %



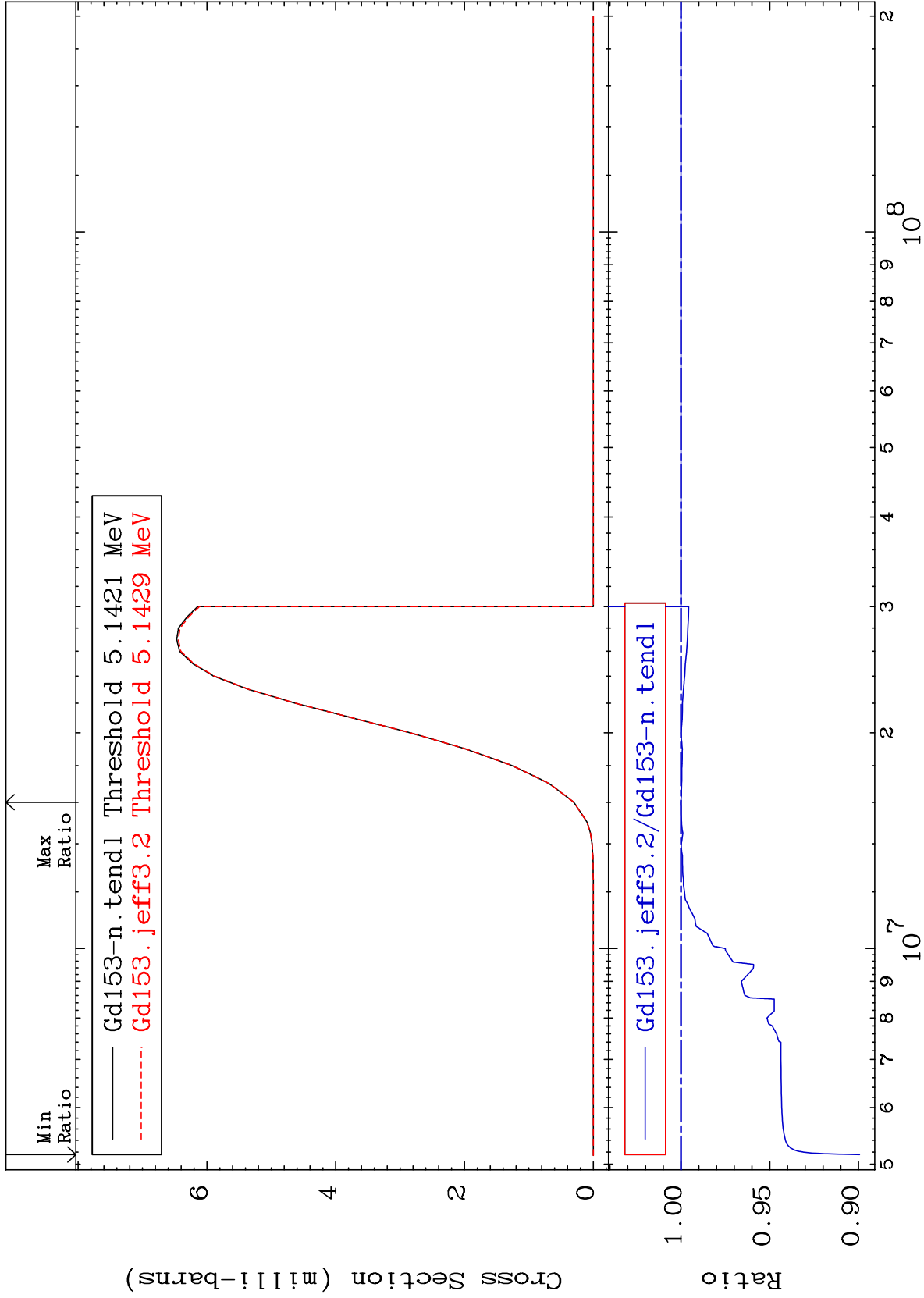
MAT 6428

(n, t)

64-Gd-153

Cross Section

-10.06 To 0.013 %



55

Incident Energy (eV)

64-Gd-153

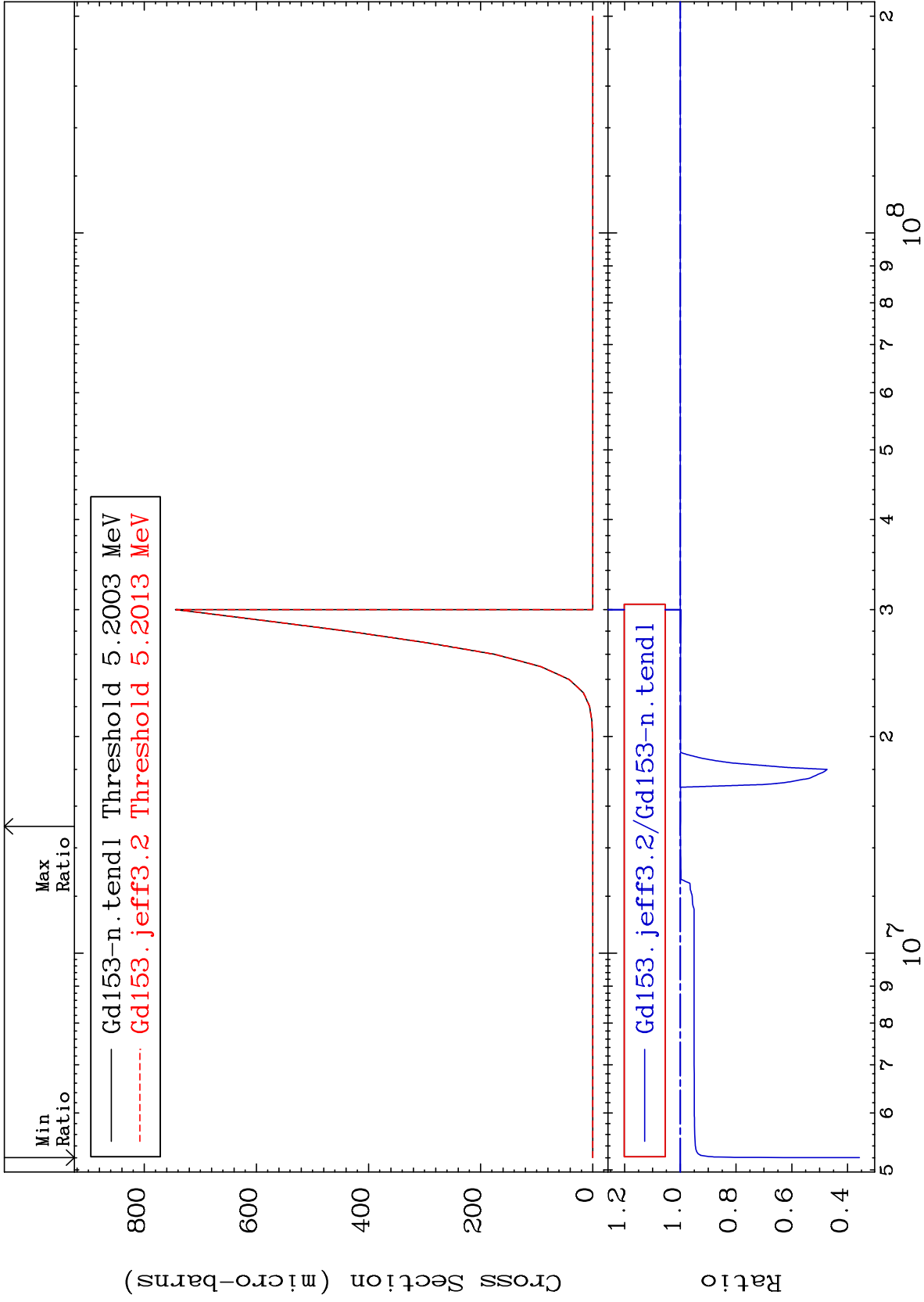
MAT 6428

(n, He-3)

64-Gd-153

Cross Section

-64.28 To 0.005 %



56

Incident Energy (eV)

64-Gd-153

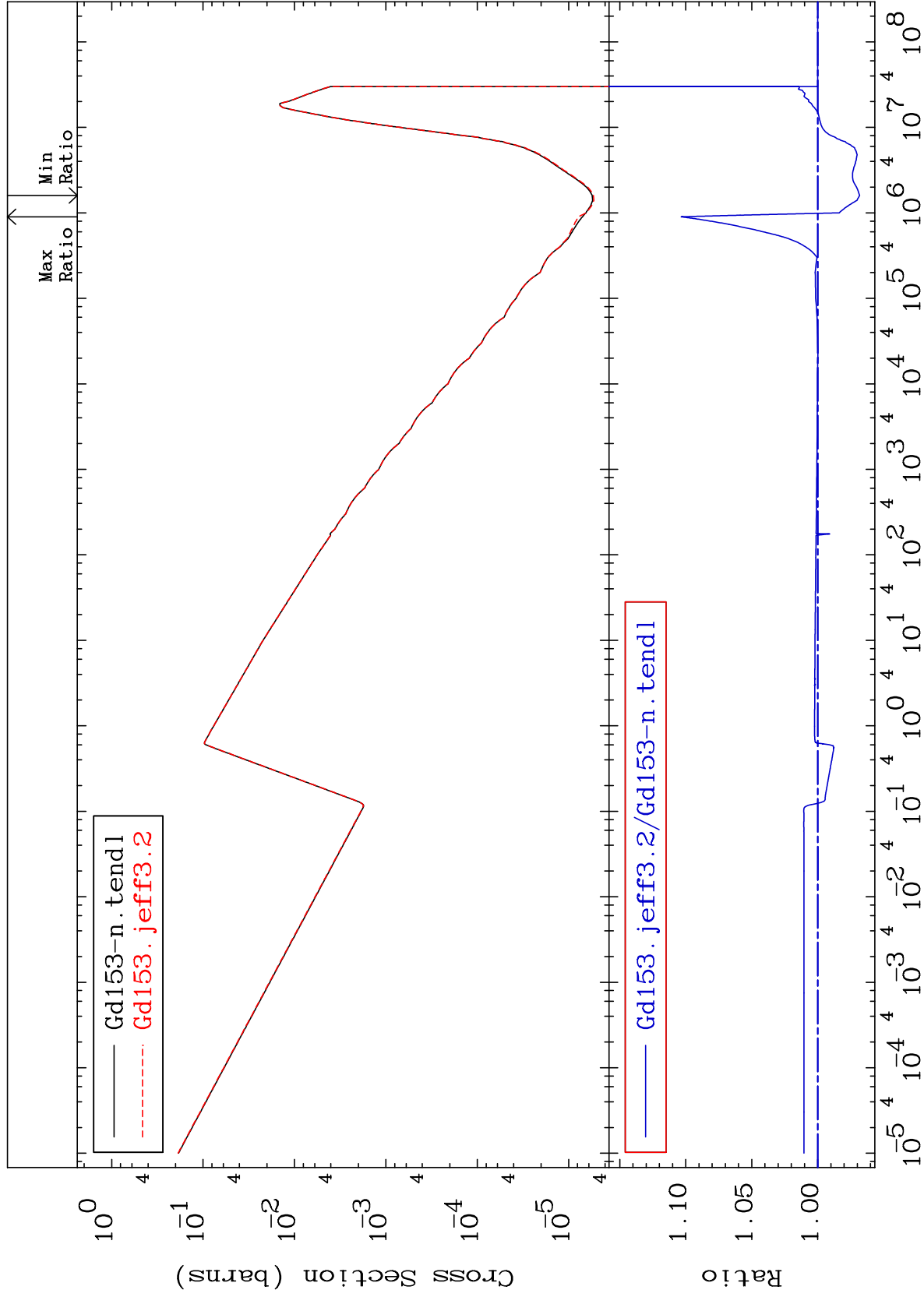
MAT 6428

(n, α)

64-Gd-153

Cross Section

-3.178 To 10.35 %



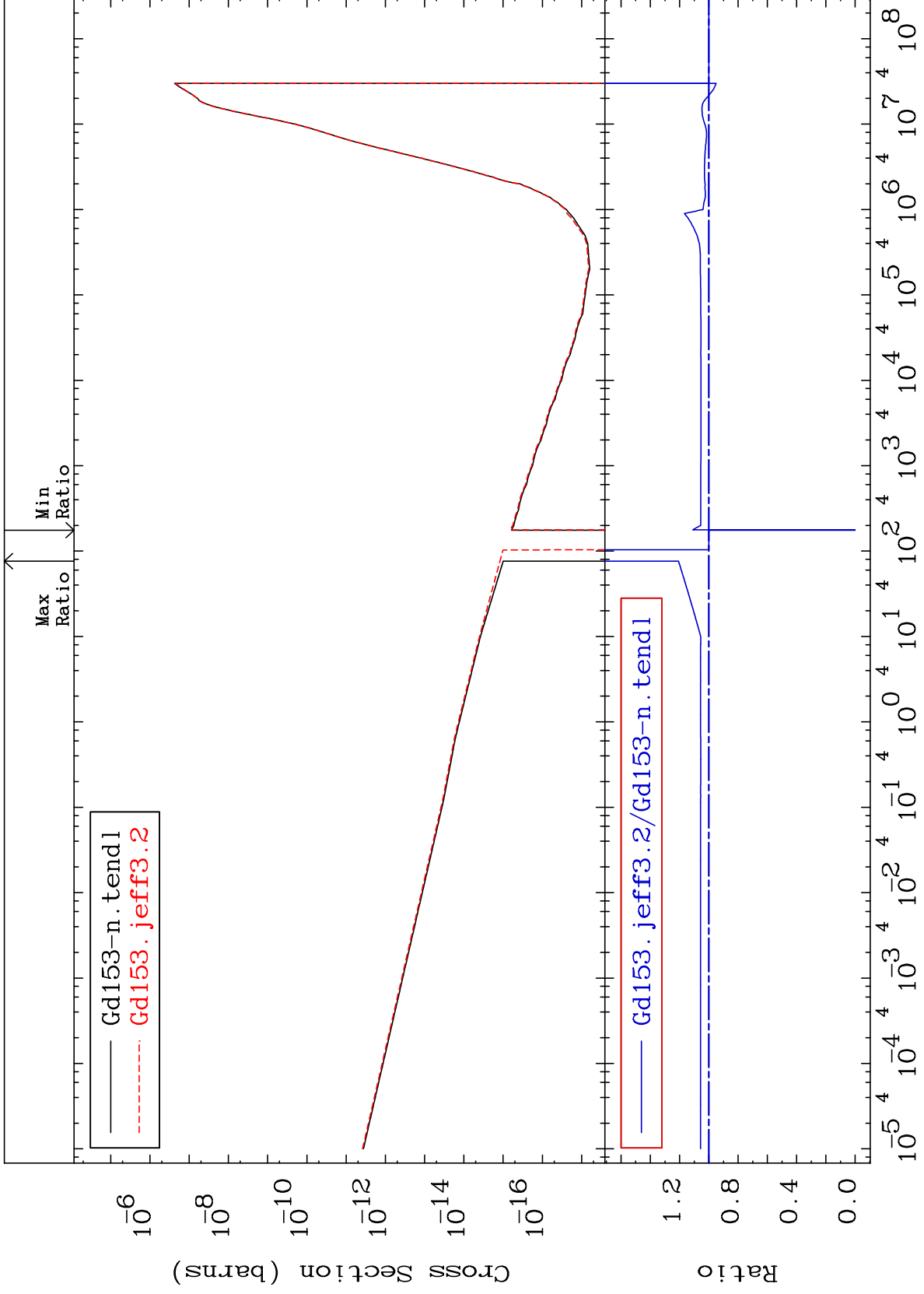
57

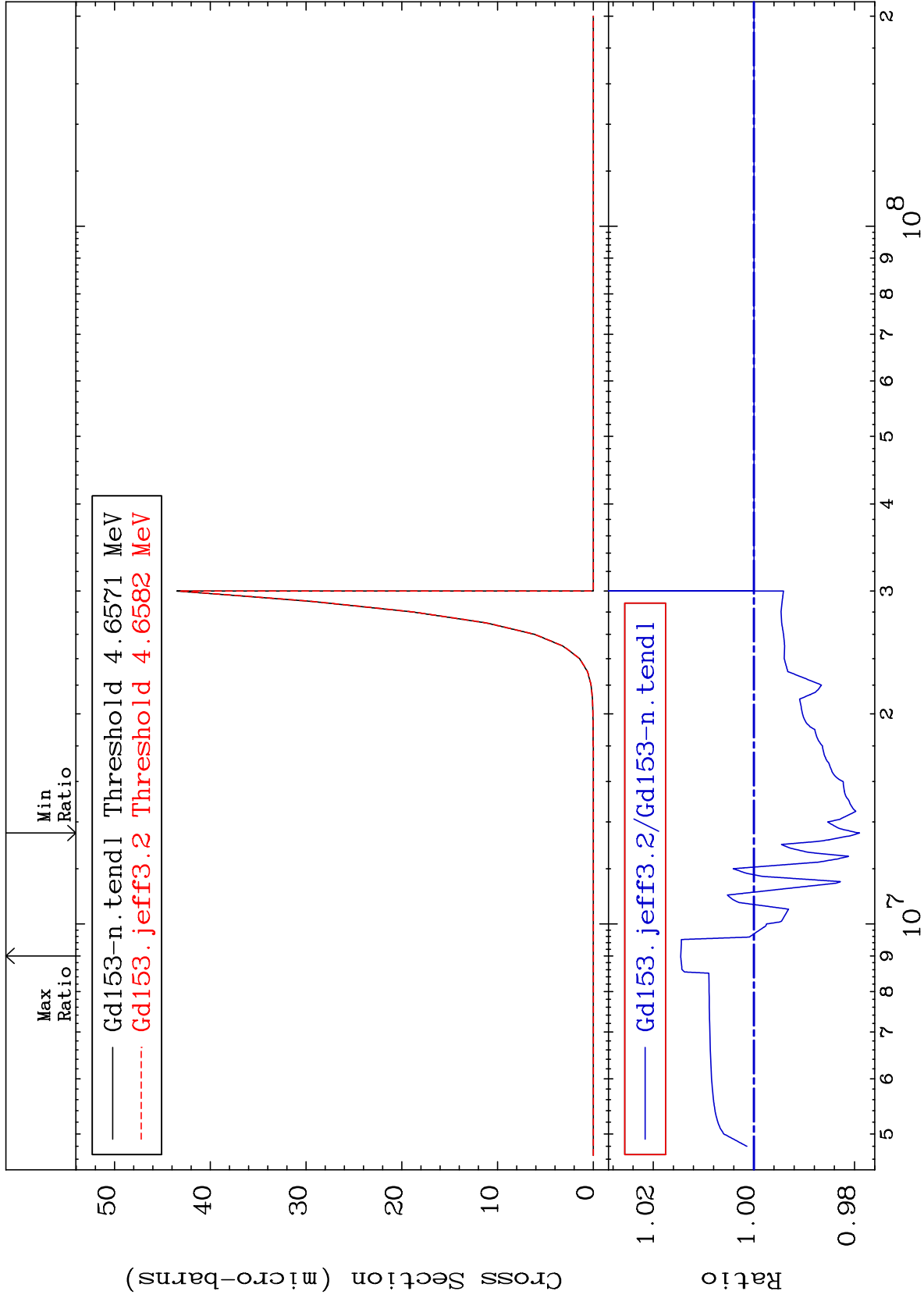
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,2α) Cross Section
64-Gd-153
-100.0 To 21.81 %





MAT 6428

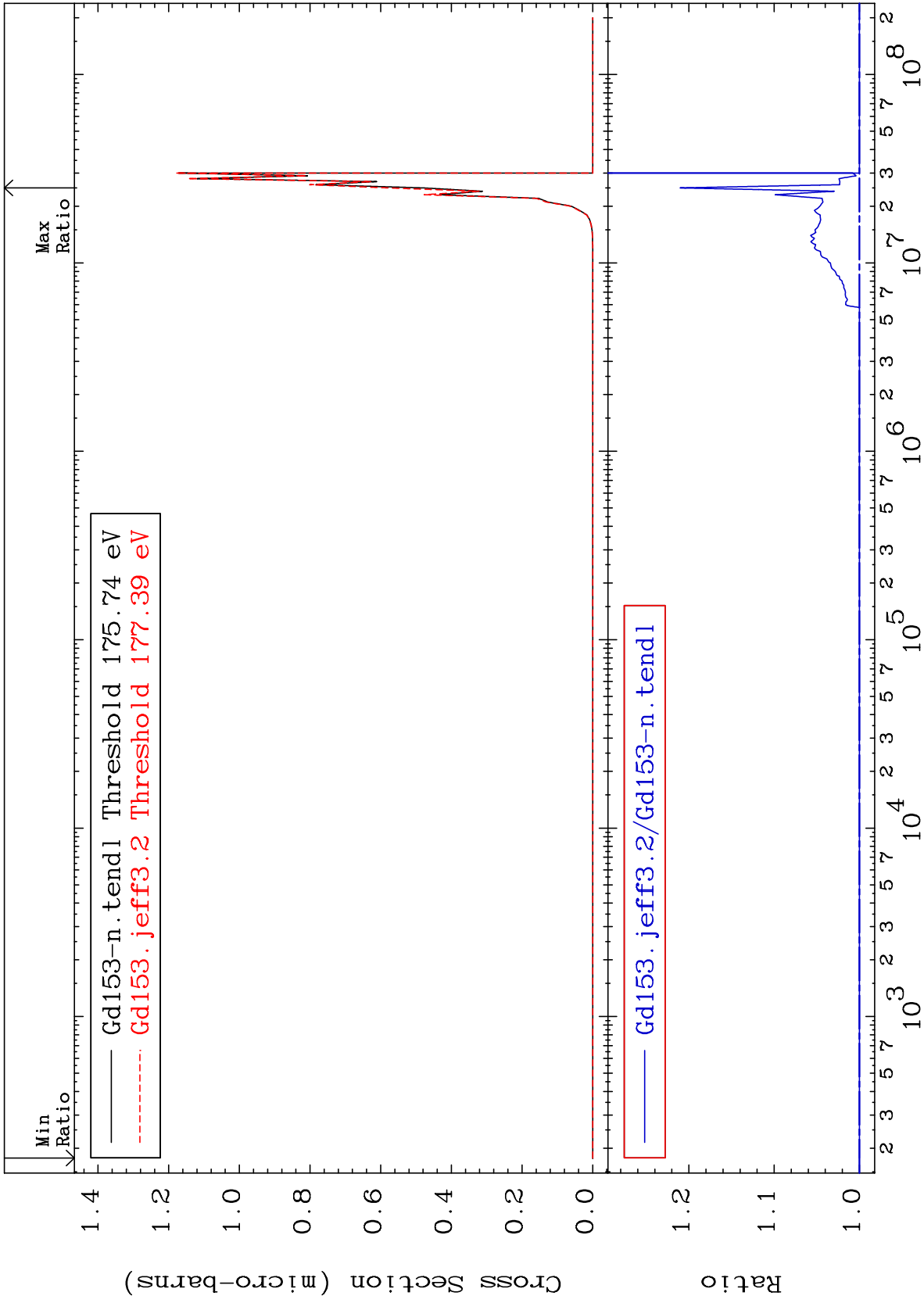
(n,p) α

64-Gd-153

Cross Section

0.000

To 21.00 %



60

Incident Energy (eV)

64-Gd-153

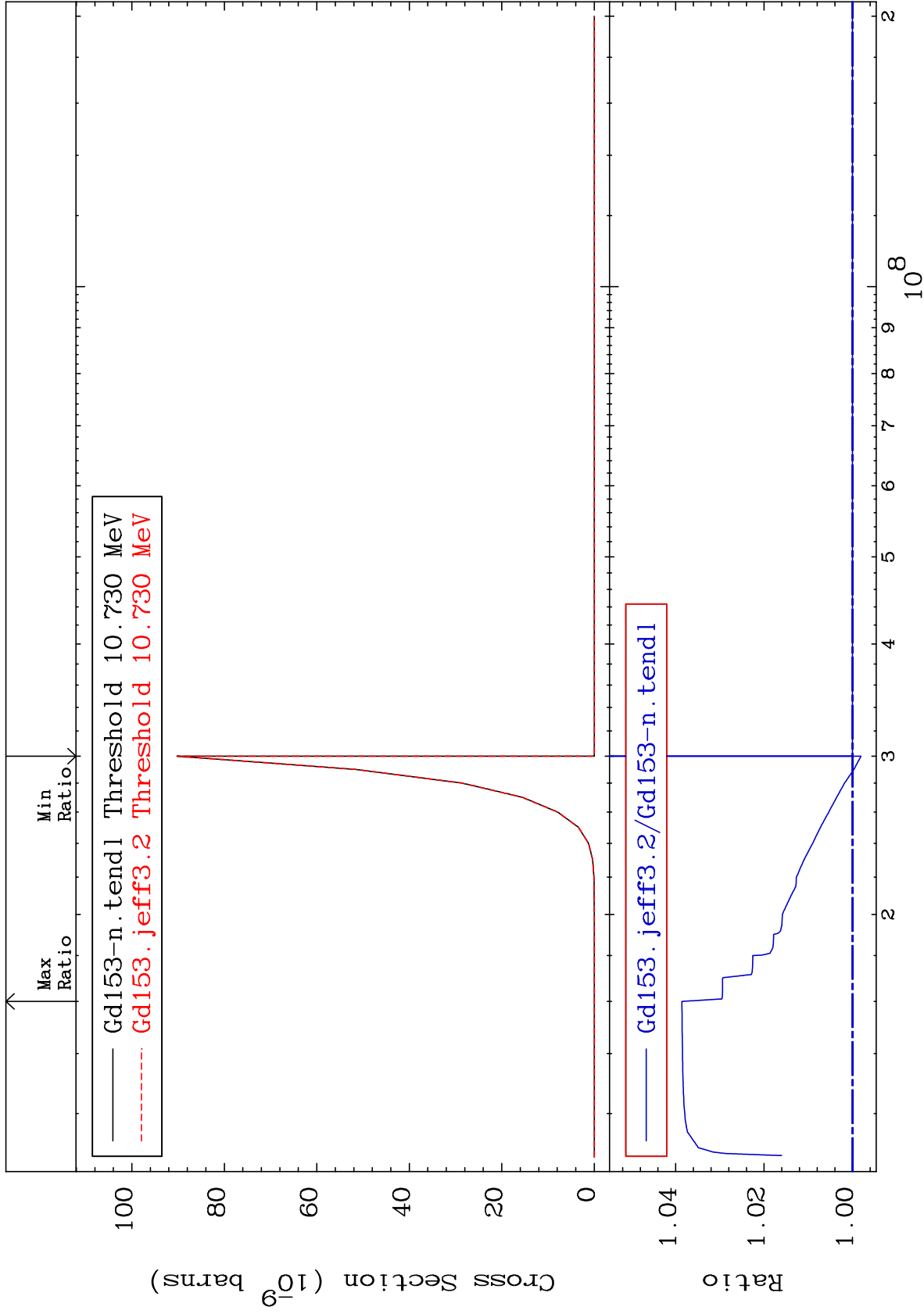
MAT 6428

(n,p) d

64-Gd-153

Cross Section

-0.191 To 3.859 %



61

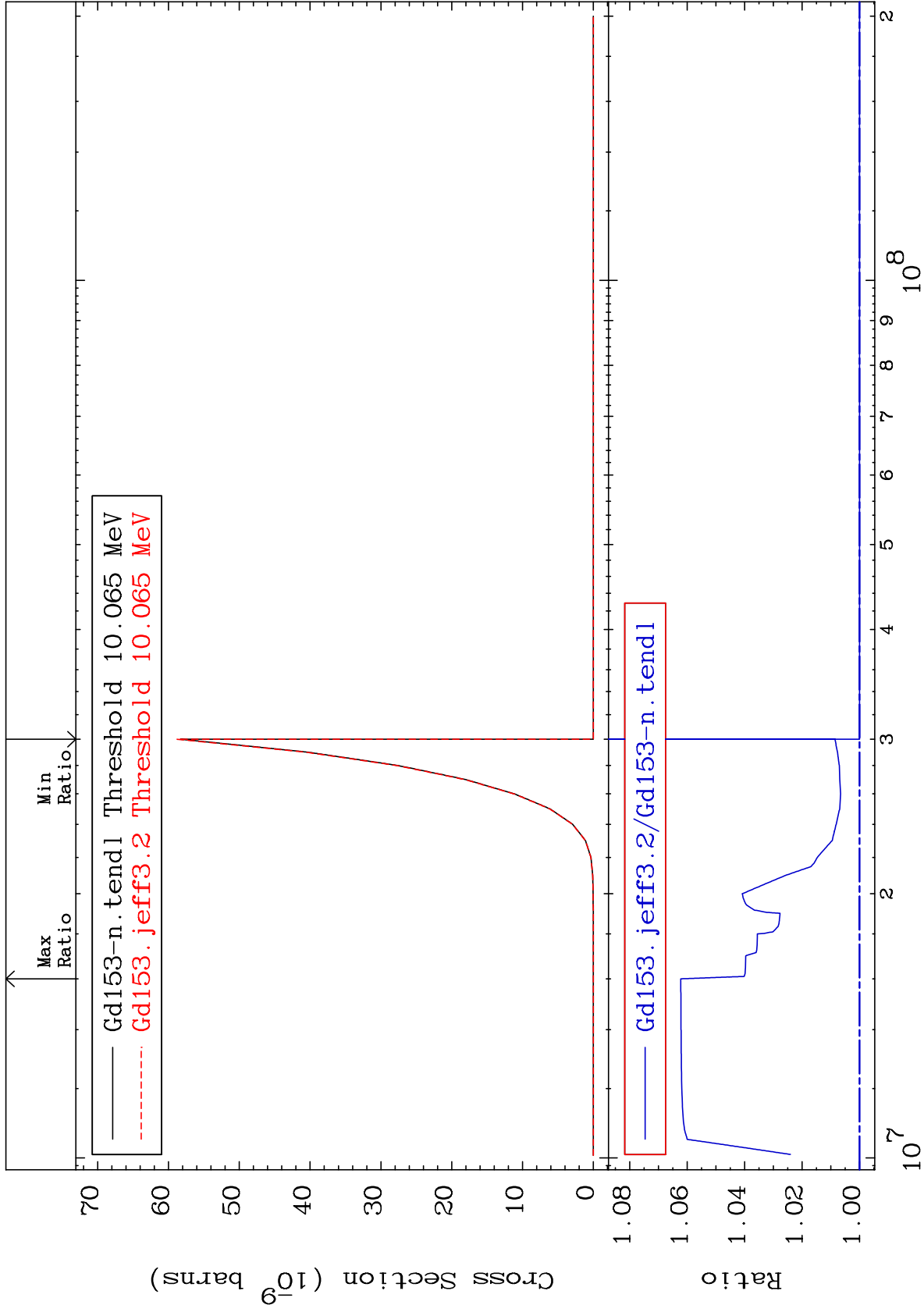
Incident Energy (eV)

64-Gd-153

MAT 6428

(n,p) t
Cross Section

64-Gd-153
0.000 To 6.224 %



62

Incident Energy (eV)

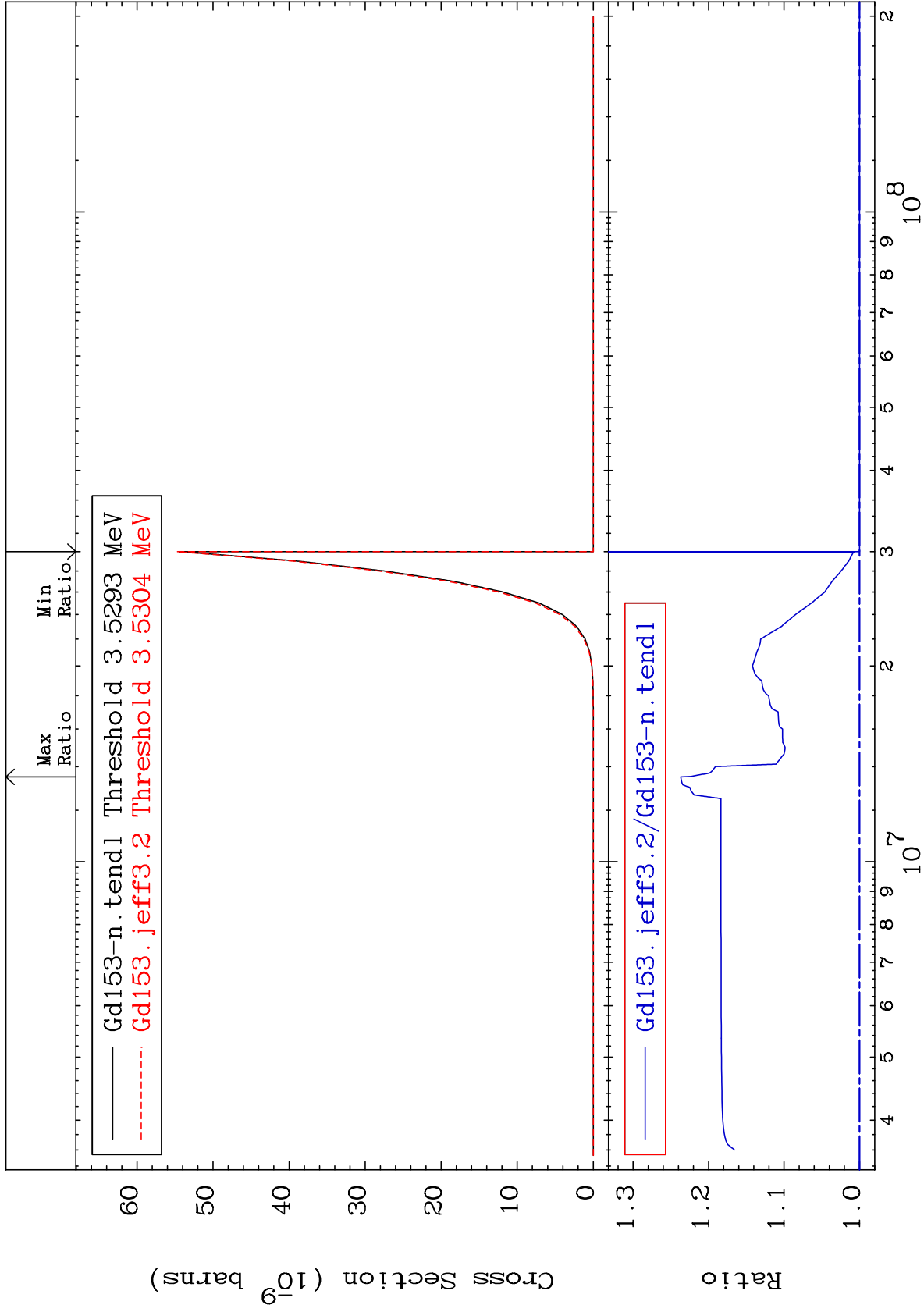
64-Gd-153

MAT 6428

64-Gd-153

(n,d) α
Cross Section

0.000 To 23.68 %



63

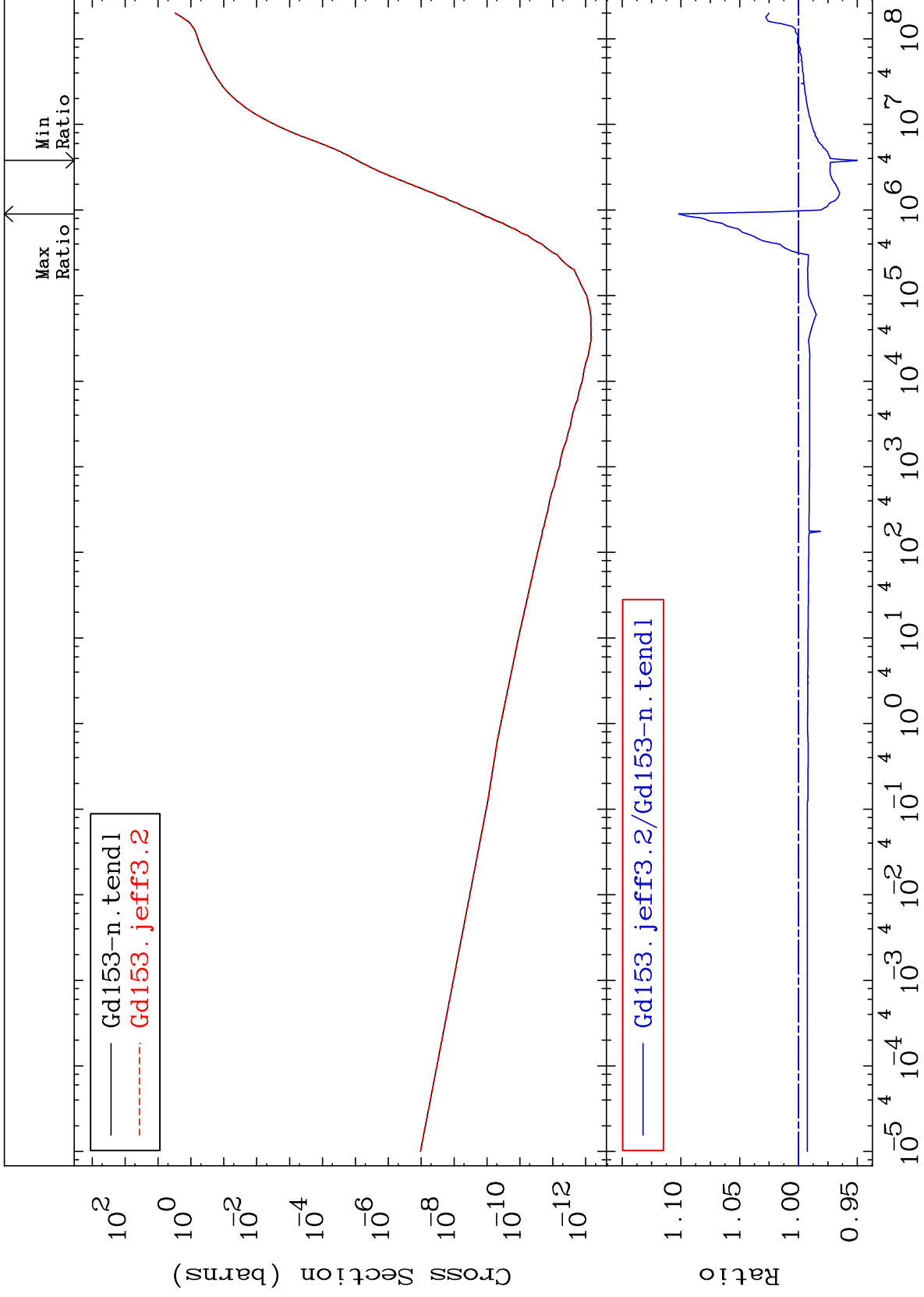
Incident Energy (eV)

64-Gd-153

MAT 6428

Hydrogen Production Cross Section

64-Gd-153
-5.002 To 10.20 %



64

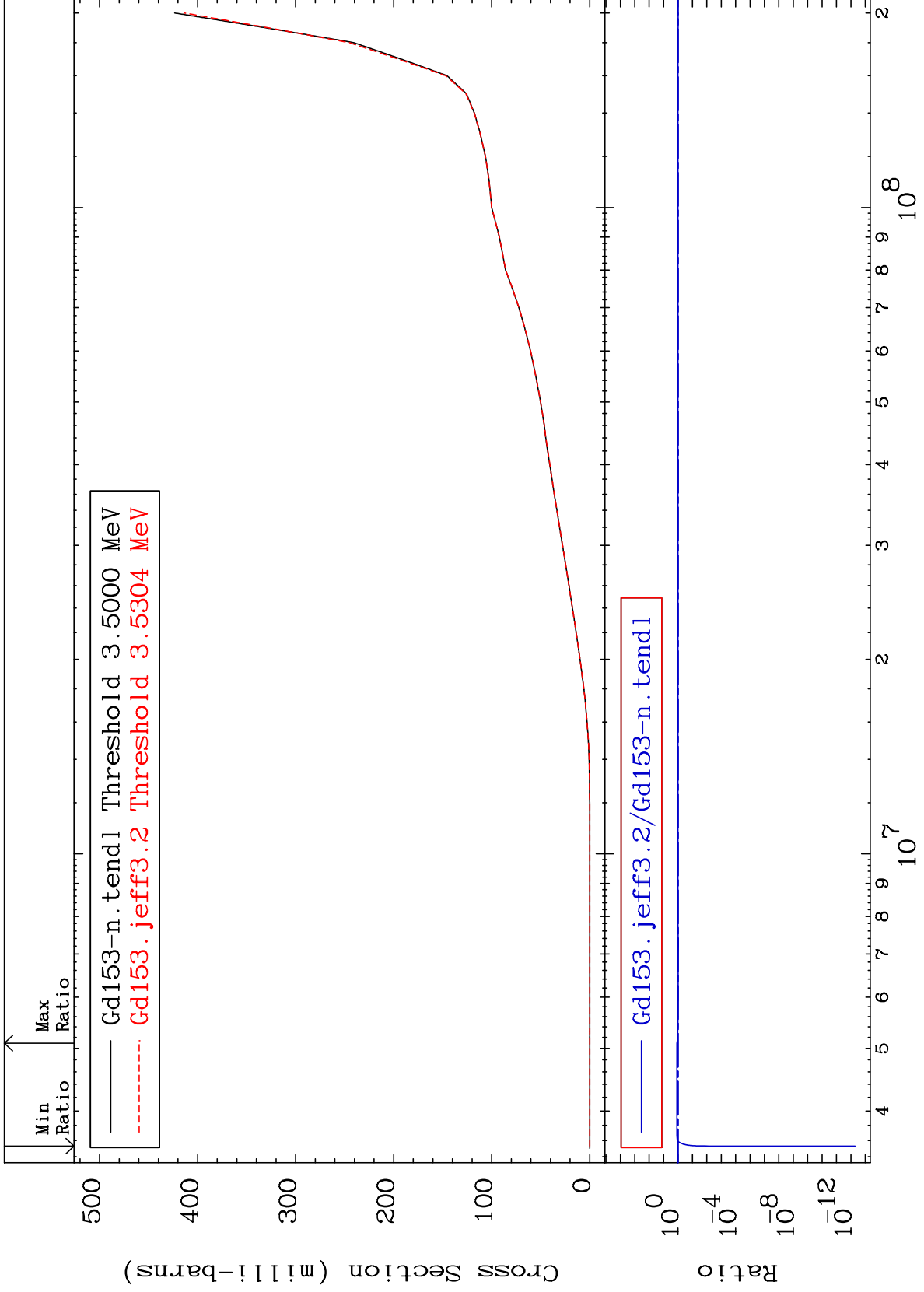
Incident Energy (eV)

64-Gd-153

MAT 6428

Deuterium Production
Cross Section

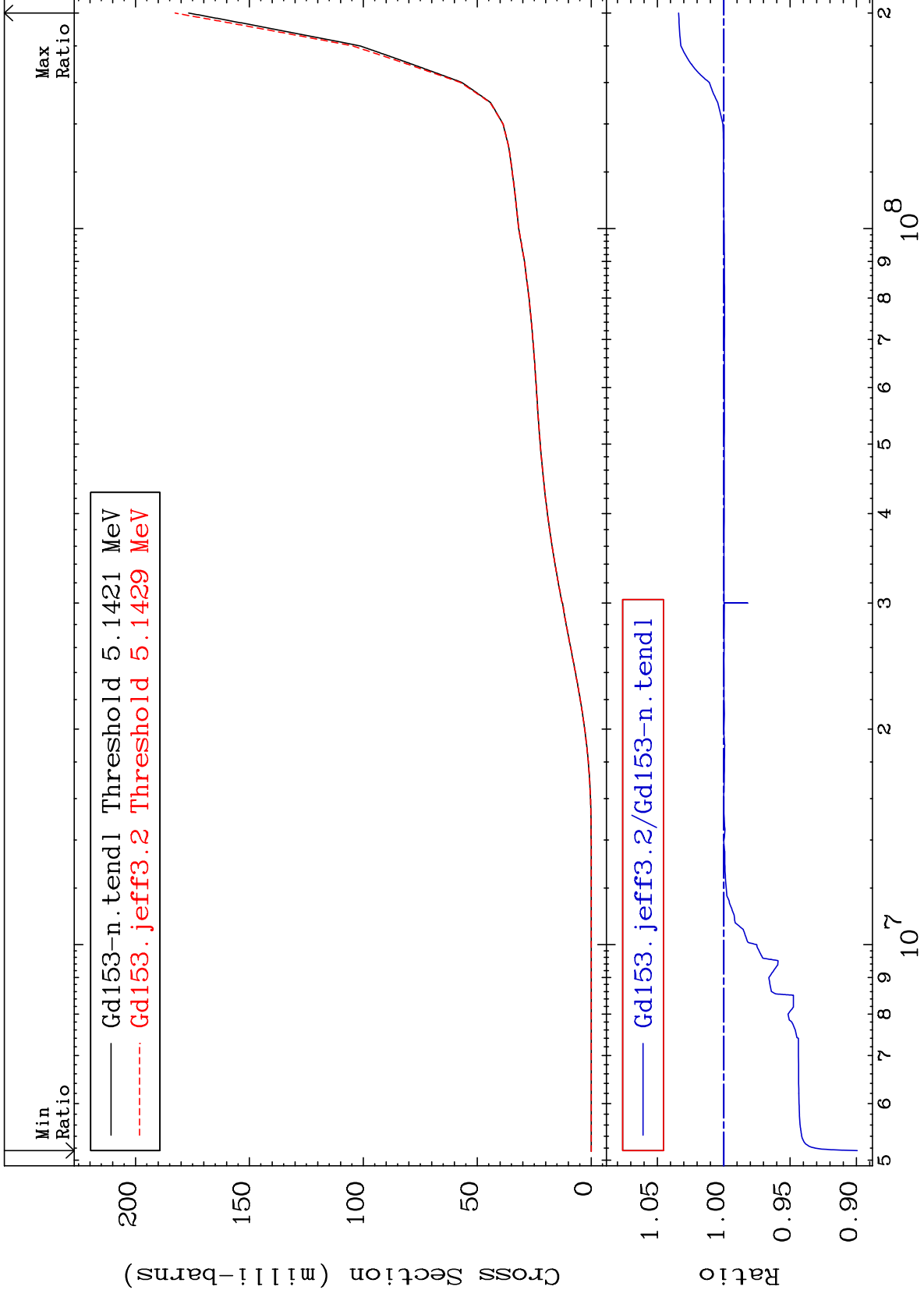
64-Gd-153
-100.0 To 18.30 %



MAT 6428

Tritium Production
Cross Section

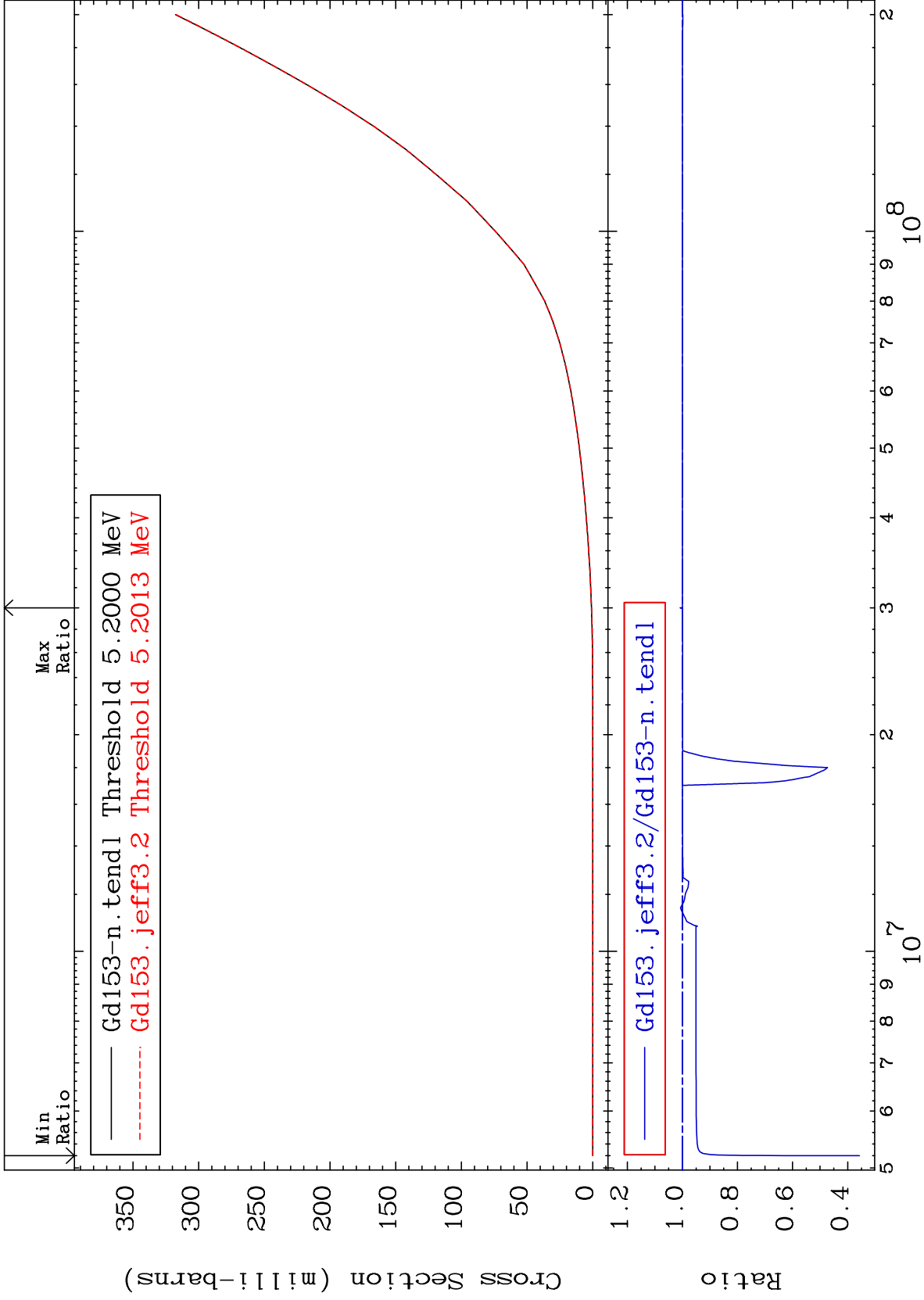
64-Gd-153
-10.06 To 3.393 %



66

Incident Energy (eV)

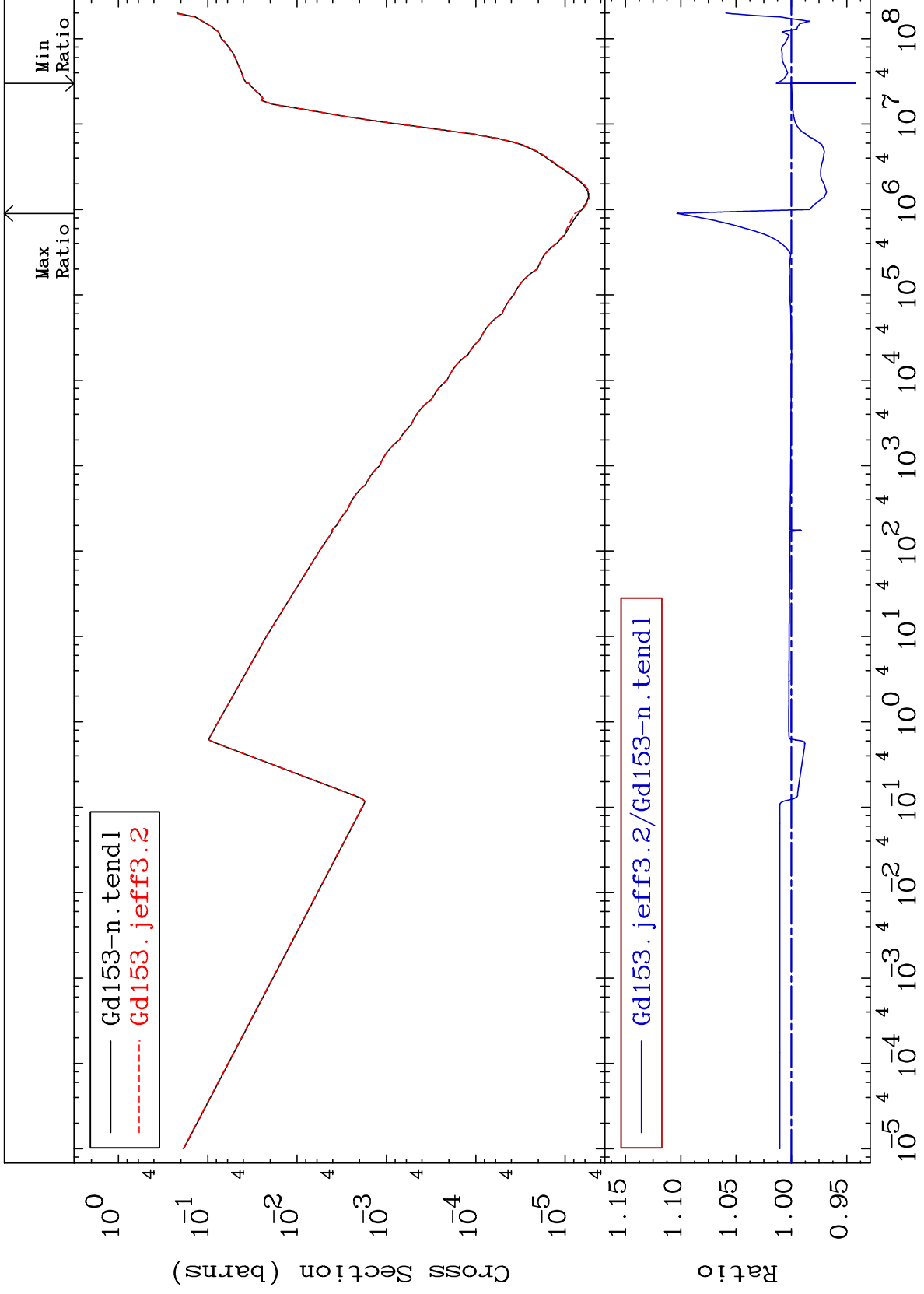
64-Gd-153



MAT 6428

He-4 Production
Cross Section

64-Gd-153
-5.759 To 10.35 %



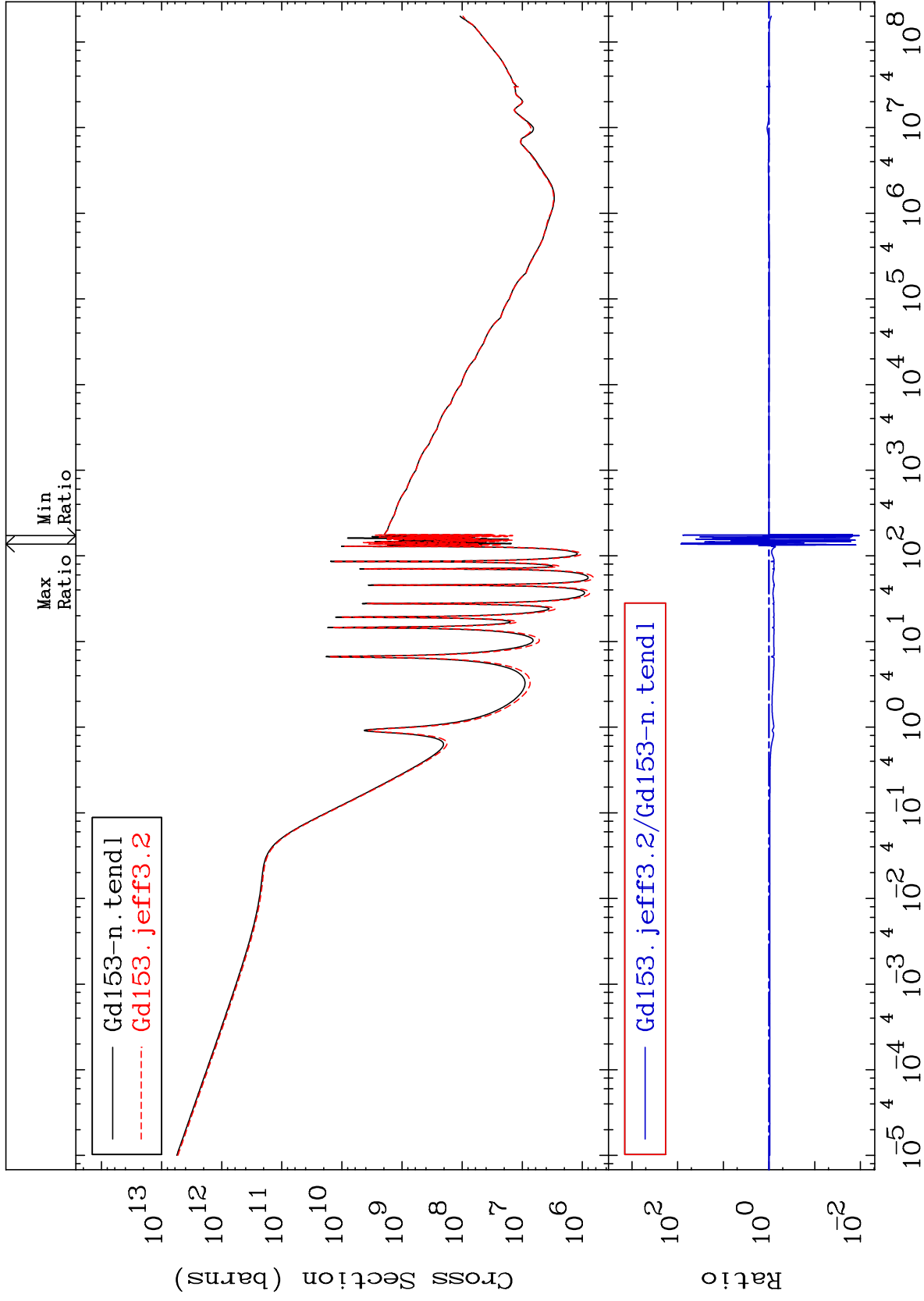
68

Incident Energy (eV)

64-Gd-153

Cross Section

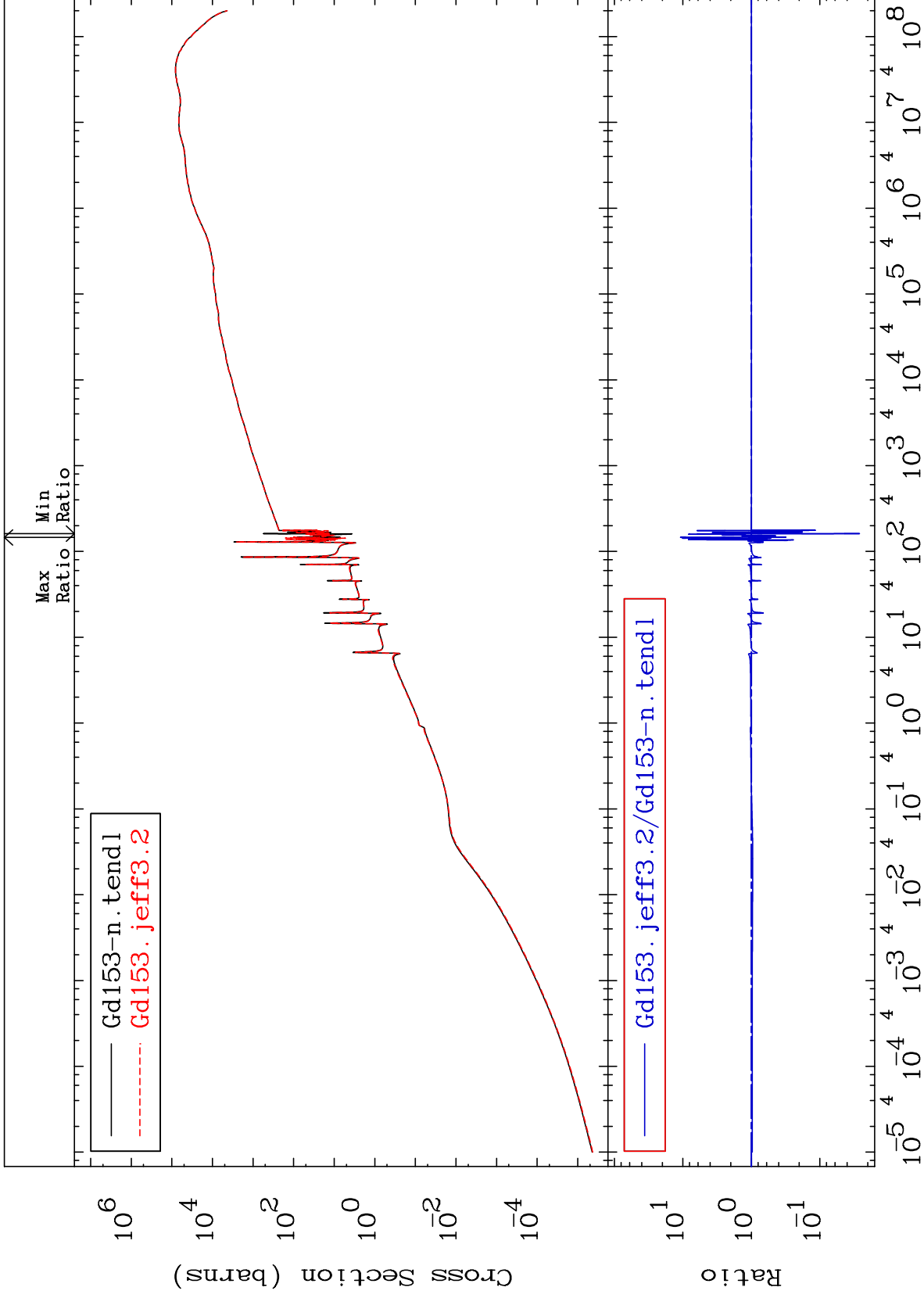
-98.95 To 8439. %



MAT 6428

Kerma elastic
Cross Section

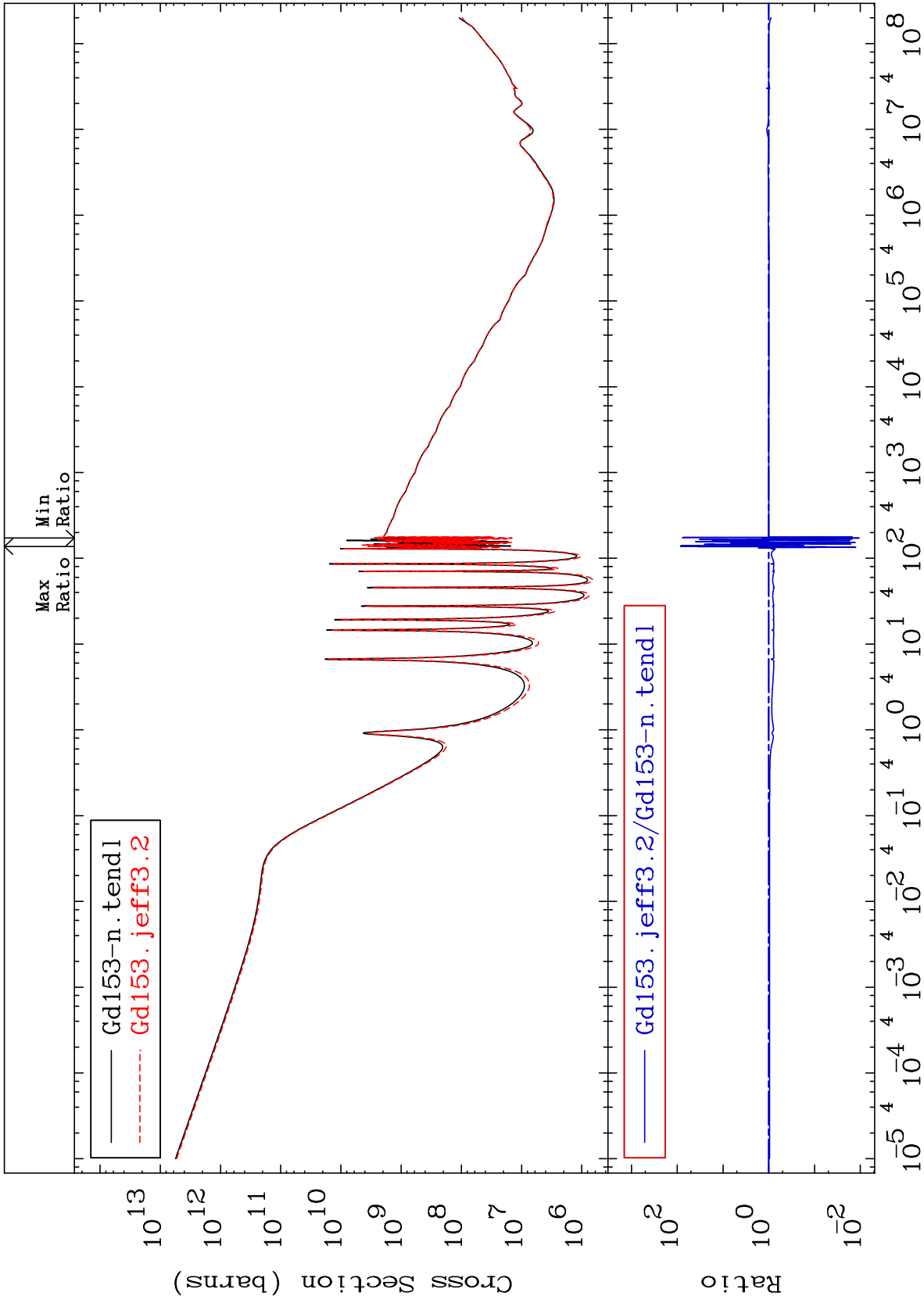
64-Gd-153
-97.35 To 989.1 %



70

Incident Energy (eV)

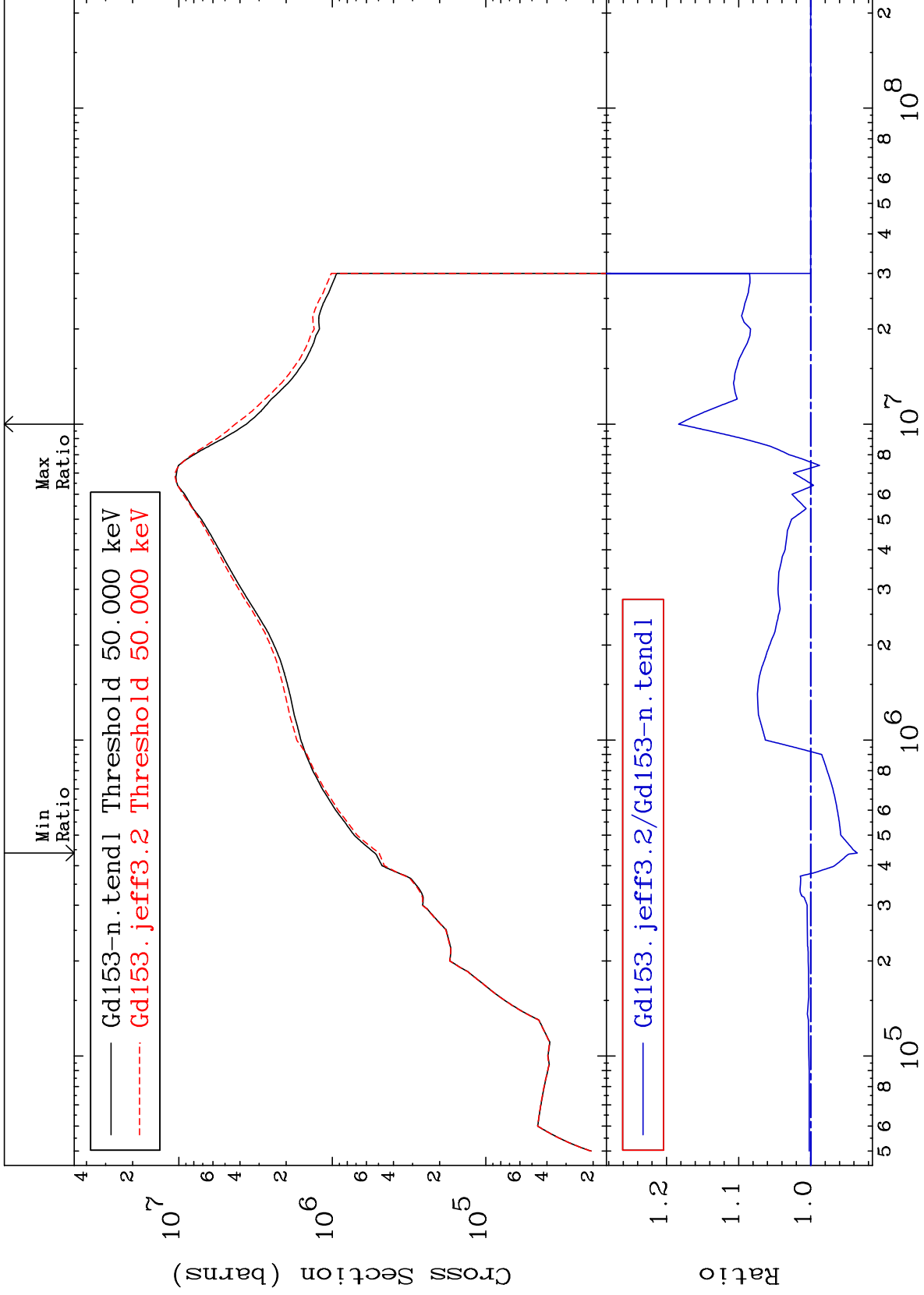
64-Gd-153



MAT 6428

Kerma inelastic (mt51-91)
Cross Section

64-Gd-153
-6.451 To 18.31 %



72

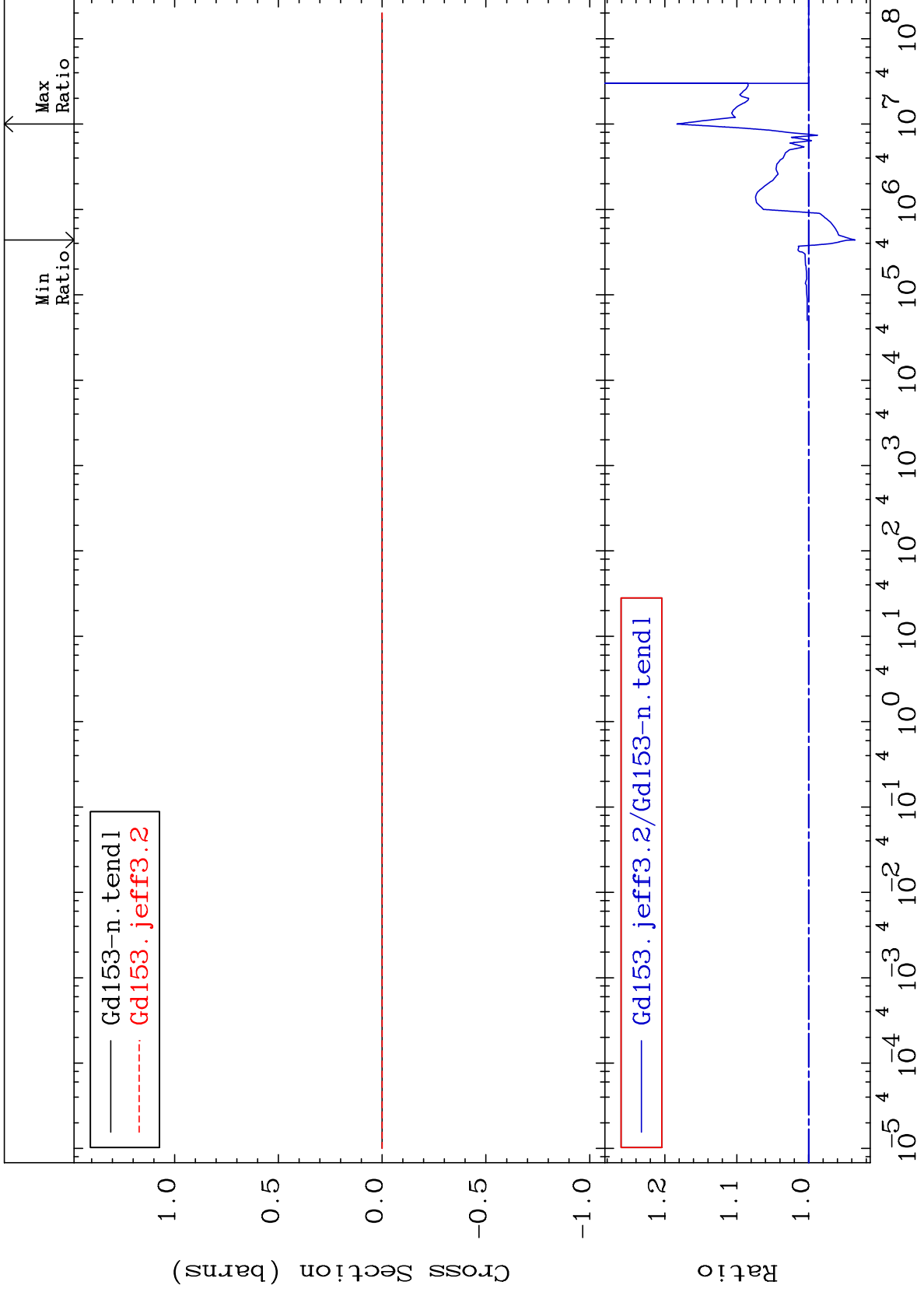
Incident Energy (eV)

64-Gd-153

MAT 6428

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

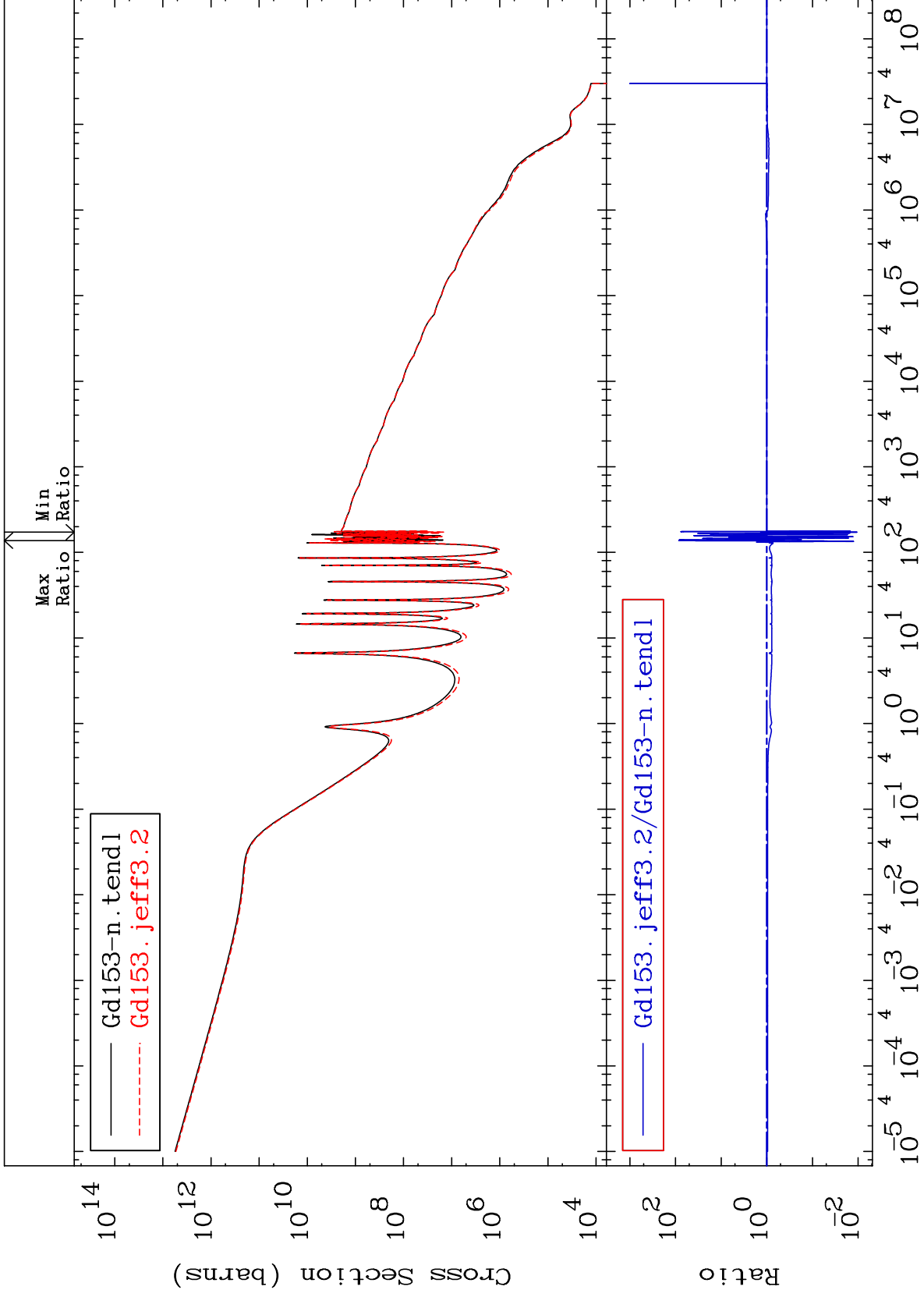
64-Gd-153
-6.451 To 18.31 %



73

Incident Energy (eV)

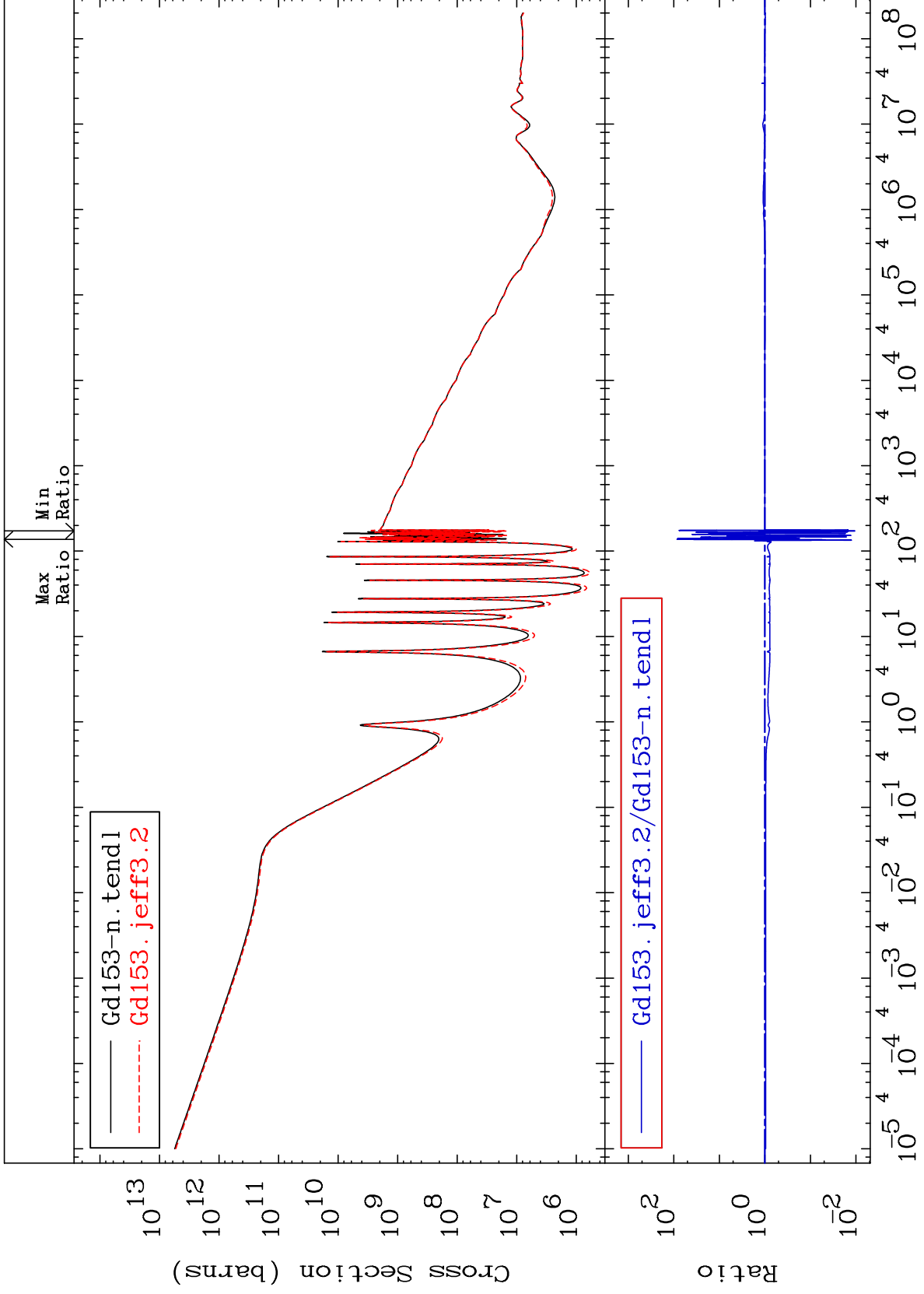
64-Gd-153



MAT 6428

Total photon (eV-barns)
Cross Section

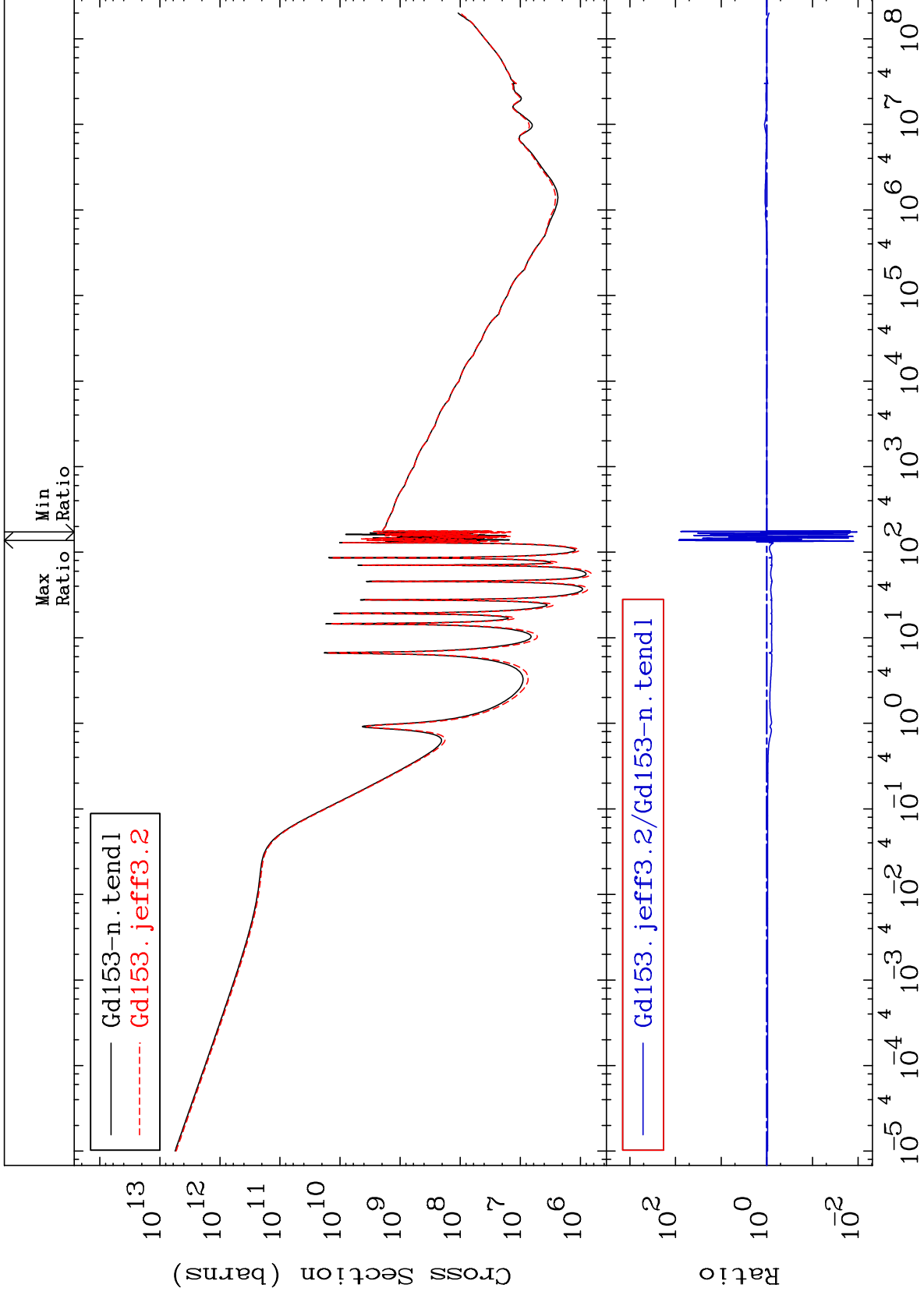
64-Gd-153
-98.96 To 8446. %



75

Incident Energy (eV)

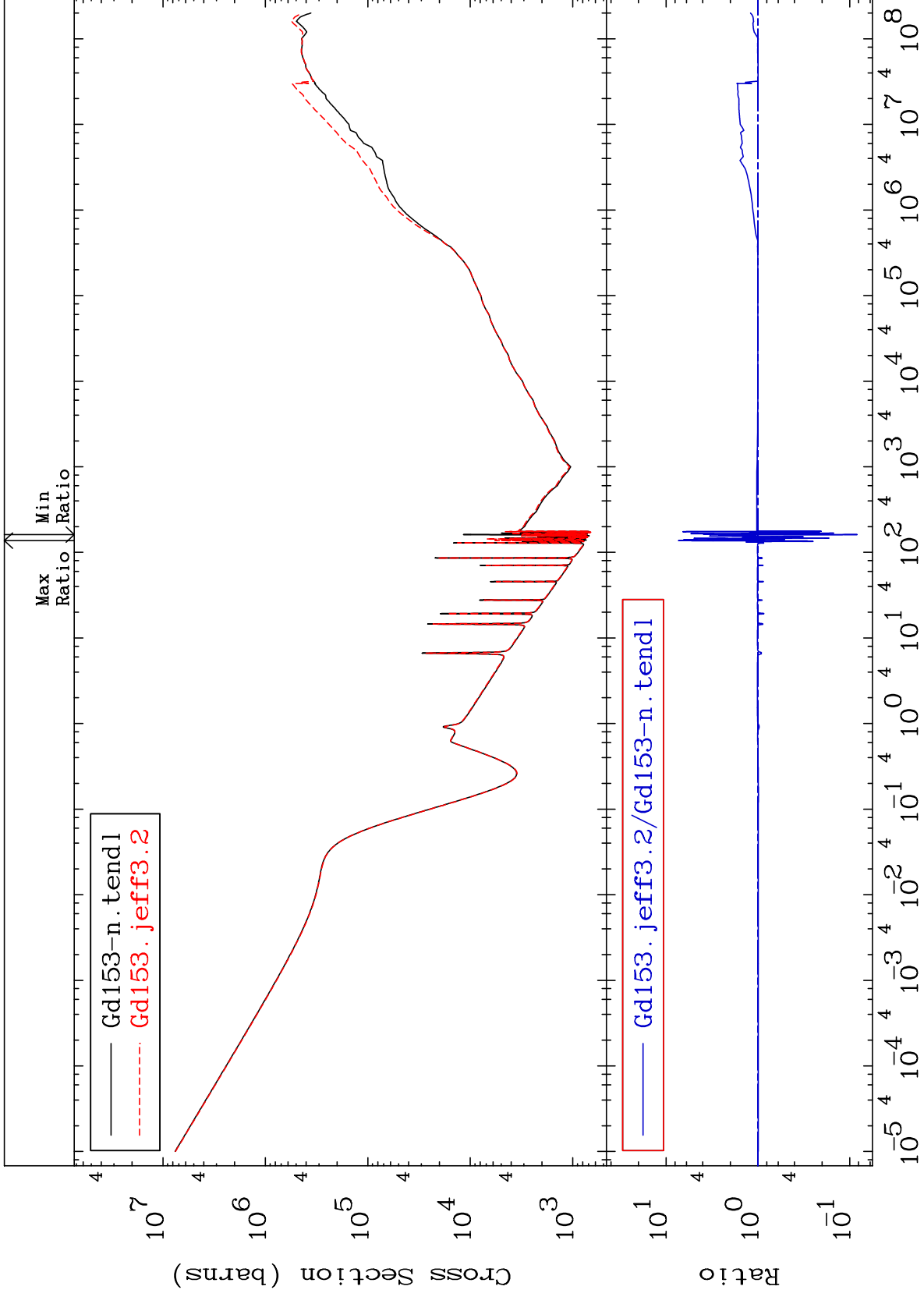
64-Gd-153



MAT 6428

Dpa total (eV-barns)
Cross Section

64-Gd-153
-91.73 To 631.5 %



77

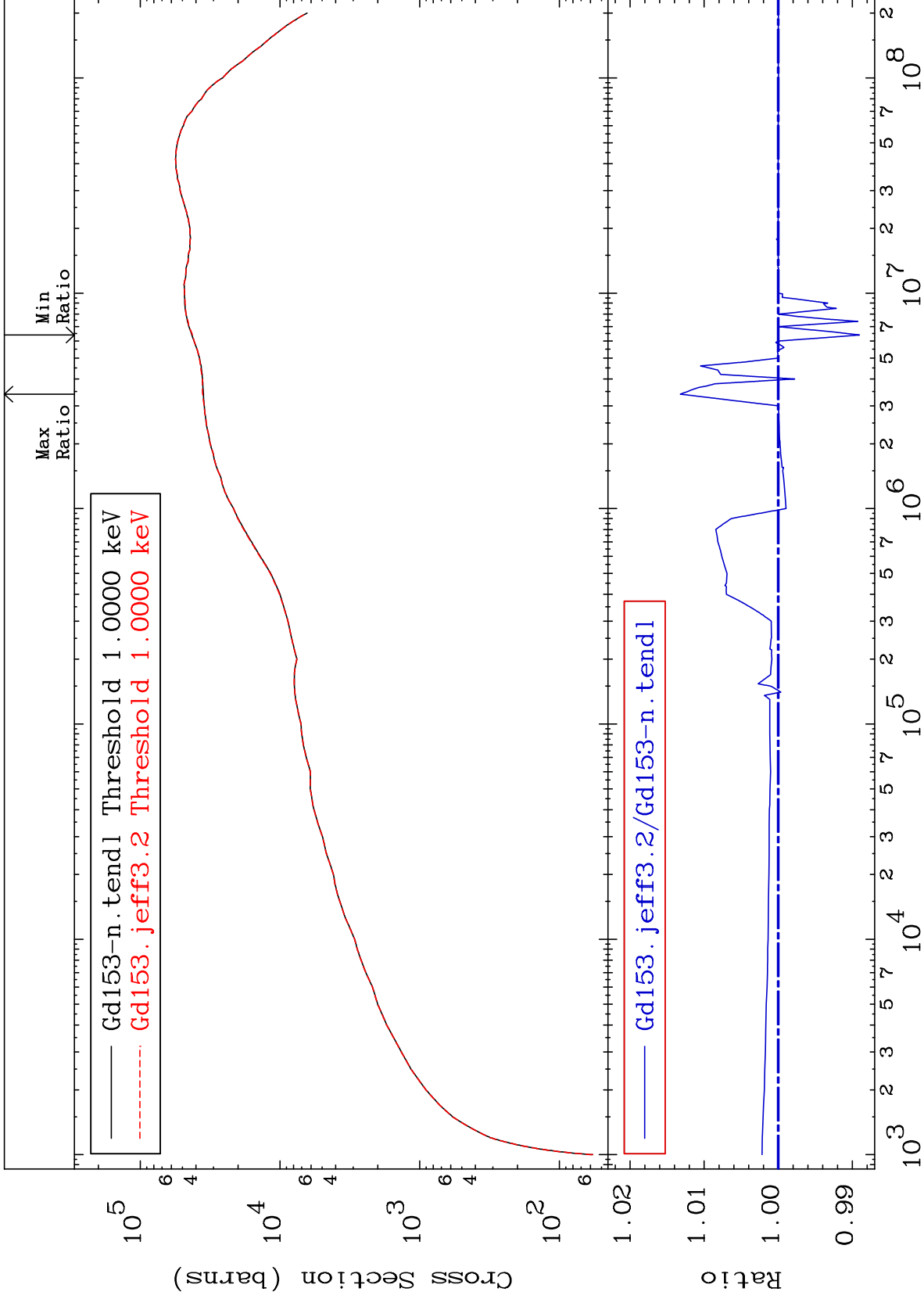
Incident Energy (eV)

64-Gd-153

MAT 6428

Dpa elastic (mt2)
Cross Section

64-Gd-153
-1.095 To 1.321 %



78

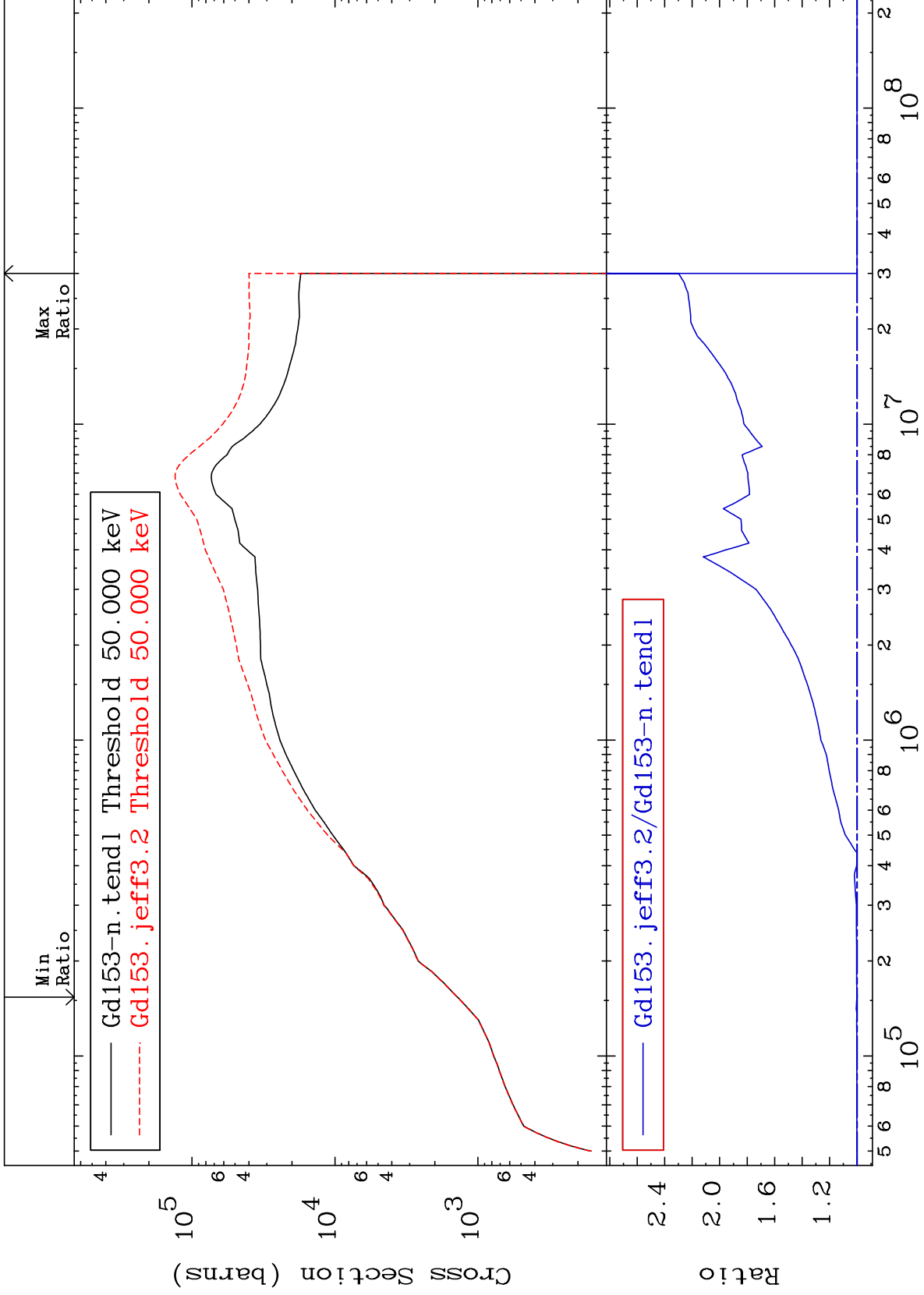
Incident Energy (eV)

64-Gd-153

MAT 6428

Dpa inelastic (mt51-91)
Cross Section

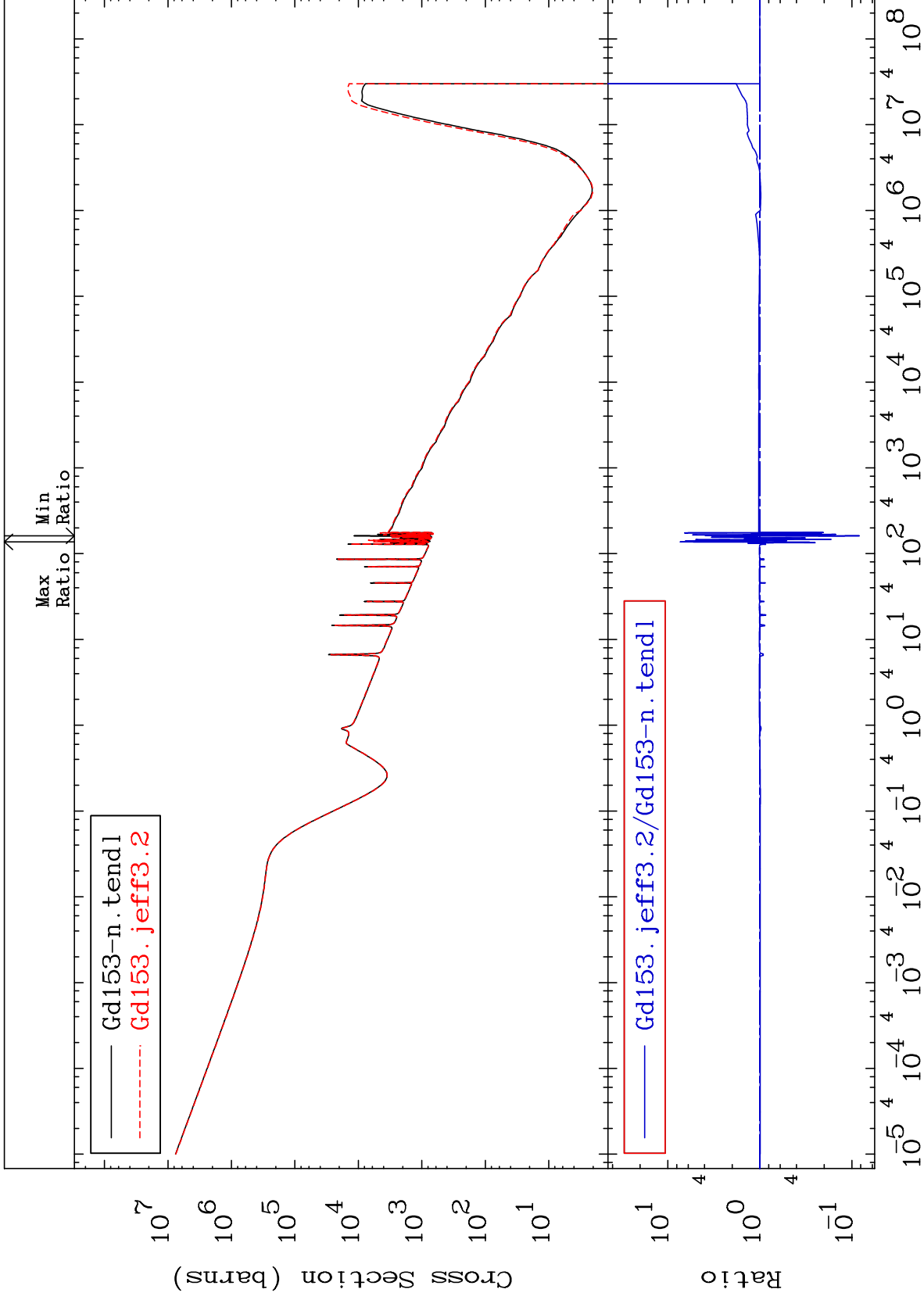
64-Gd-153
-0.084 To 129.8 %



MAT 6428

Dpa disappearance (mt102 -120)
Cross Section

64-Gd-153
-91.73 To 631.5 %



80

Incident Energy (eV)

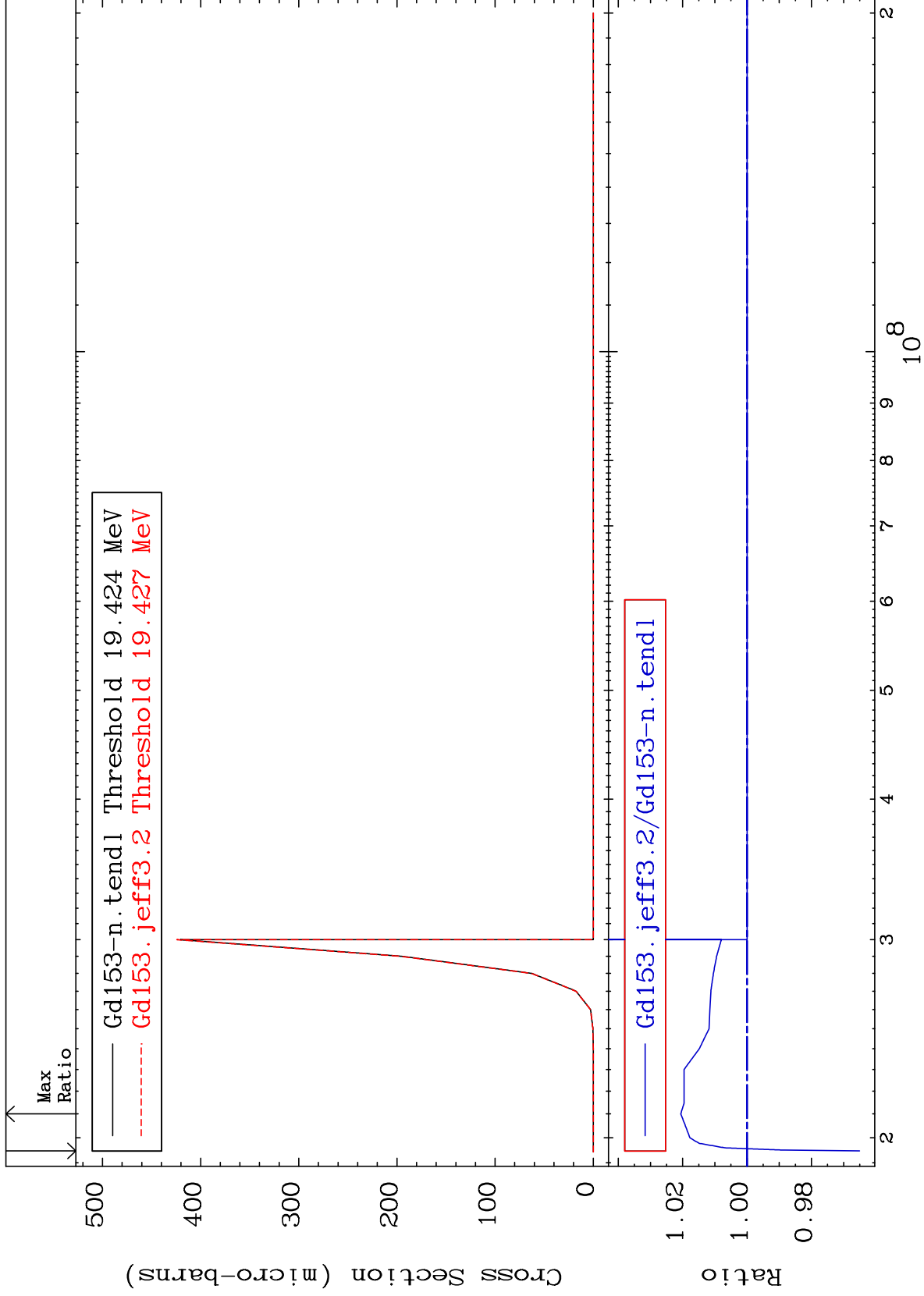
64-Gd-153

MAT 6428

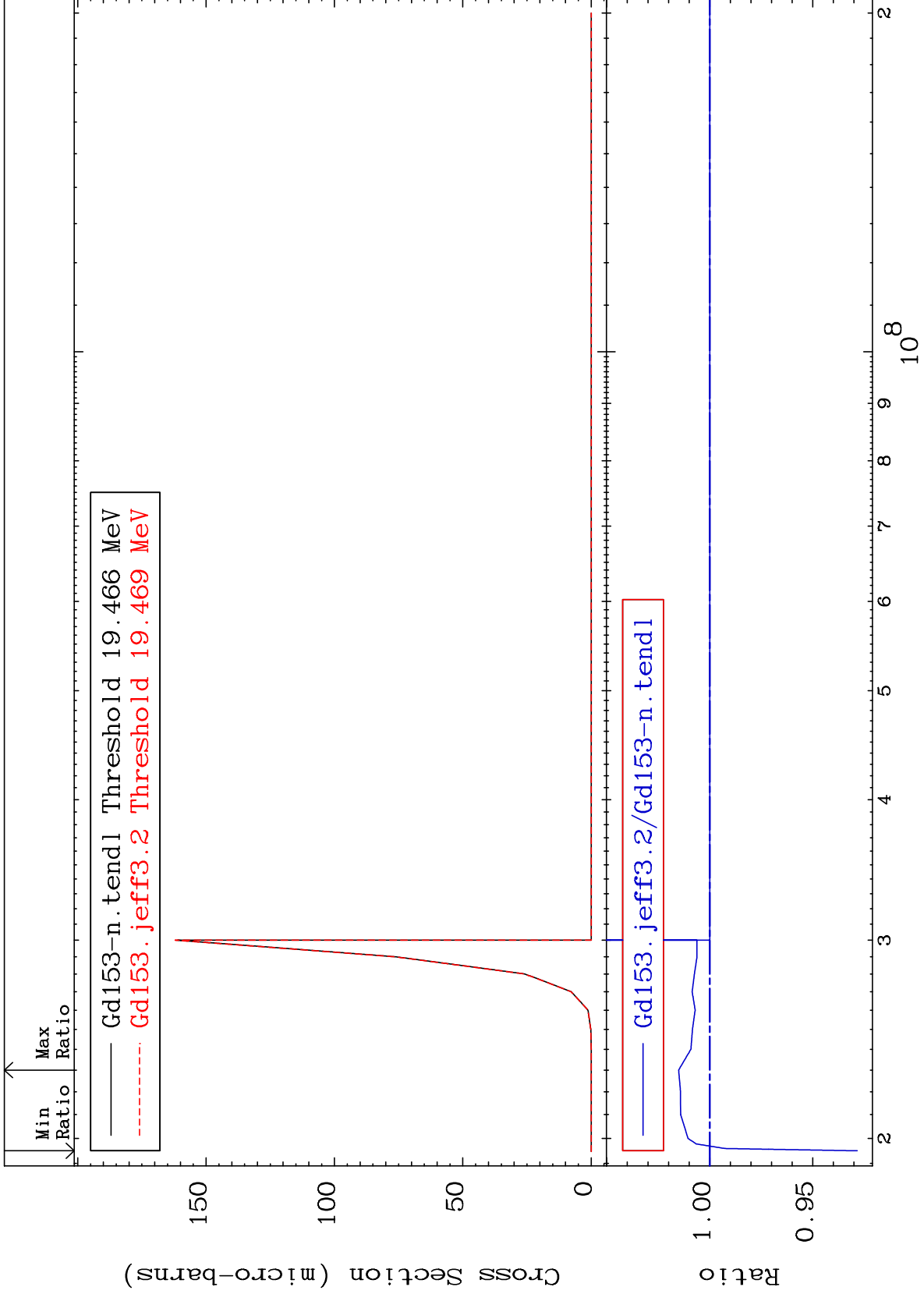
(n,2n) d:63-Eu-150g

64-Gd-153

Radionuclide Production Cross Section -3.493 To 2.059 %



Radionuclide Production Cross Section -7.163 To 1.509 %

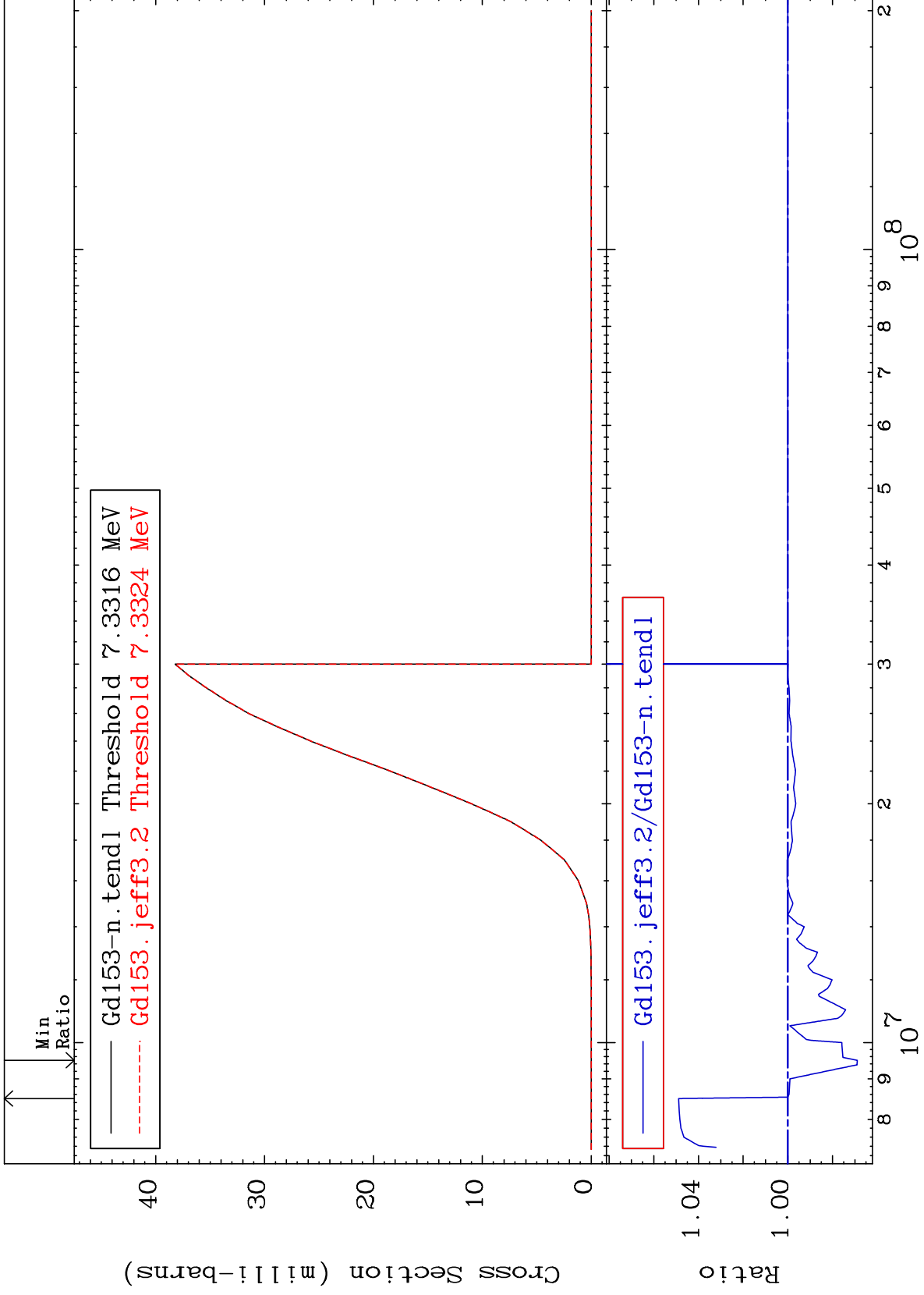


MAT 6428

(n, n') p: 63-Eu-152g

64-Gd-153

Radionuclide Production Cross Section -3.107 To 4.888 %



83

Incident Energy (eV)

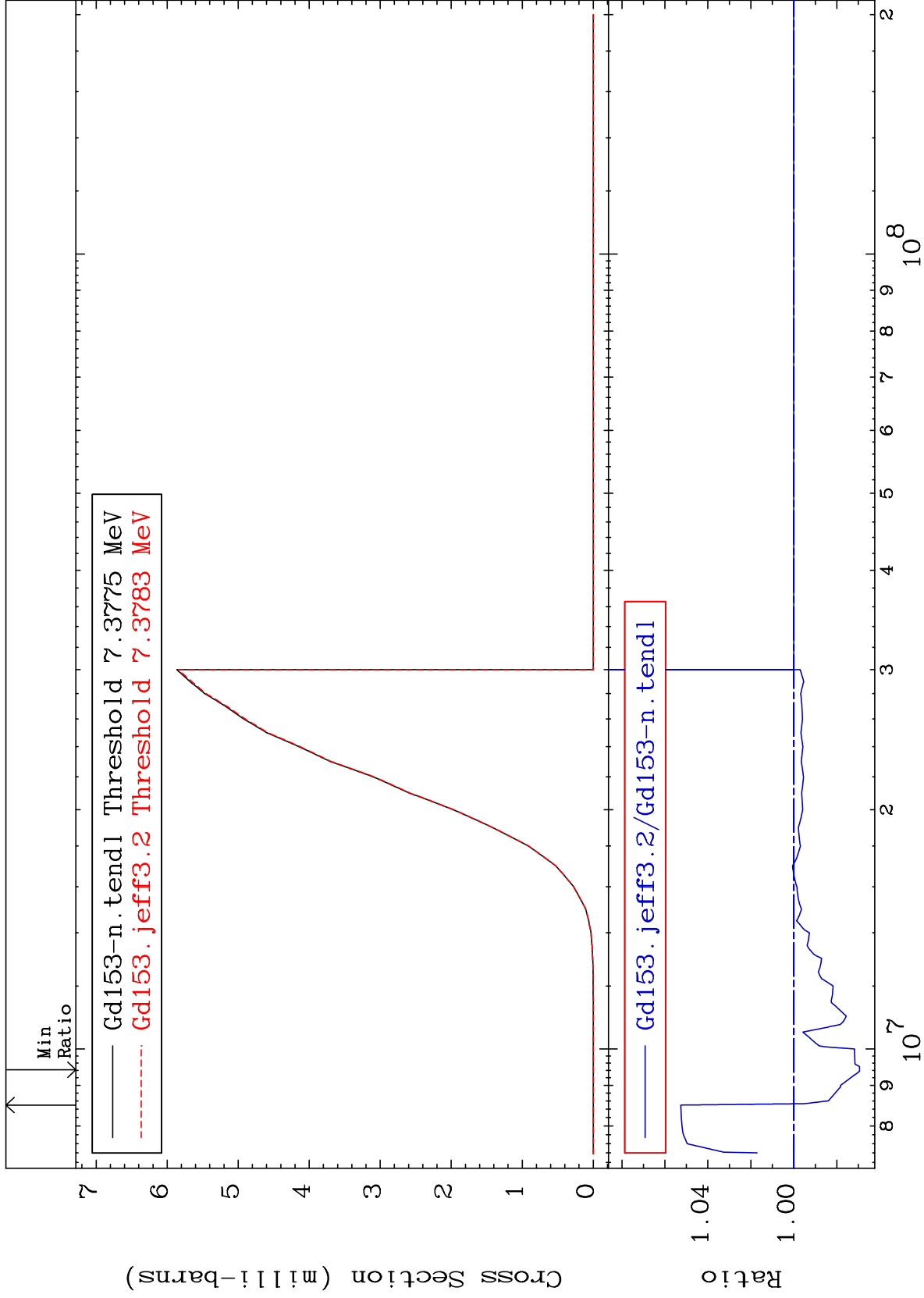
64-Gd-153

MAT 6428

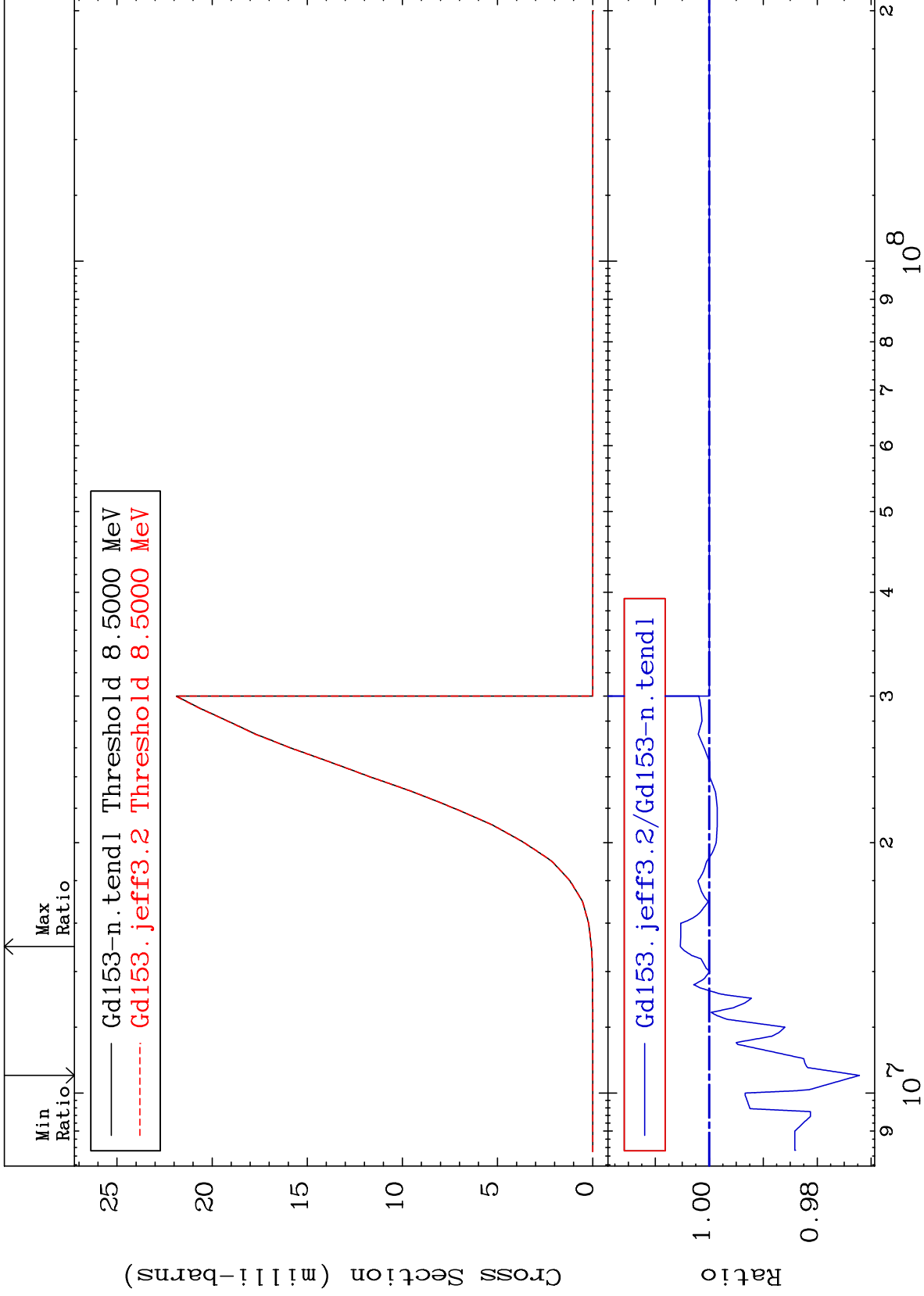
(n, n') p: 63-Eu-152m1

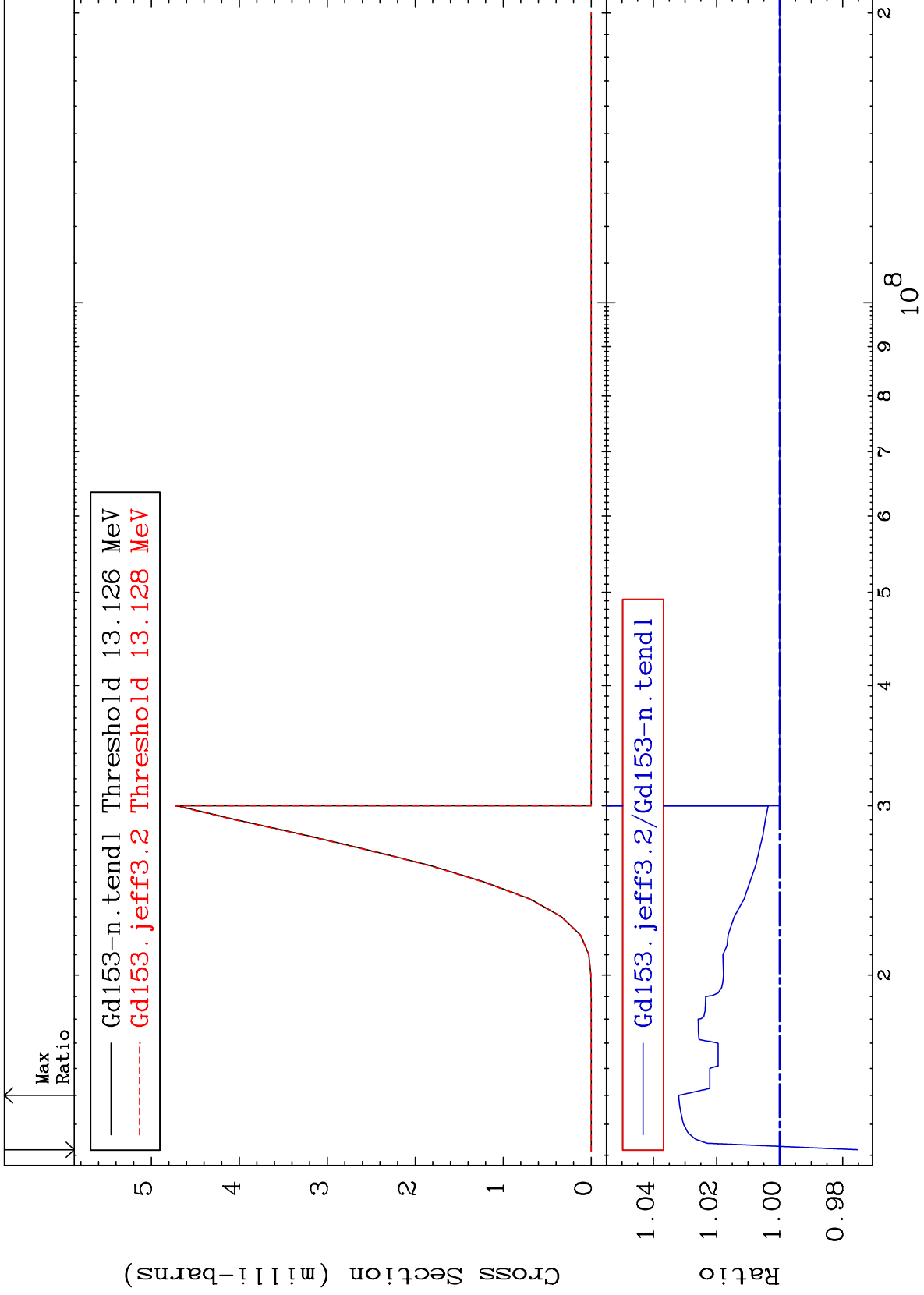
64-Gd-153

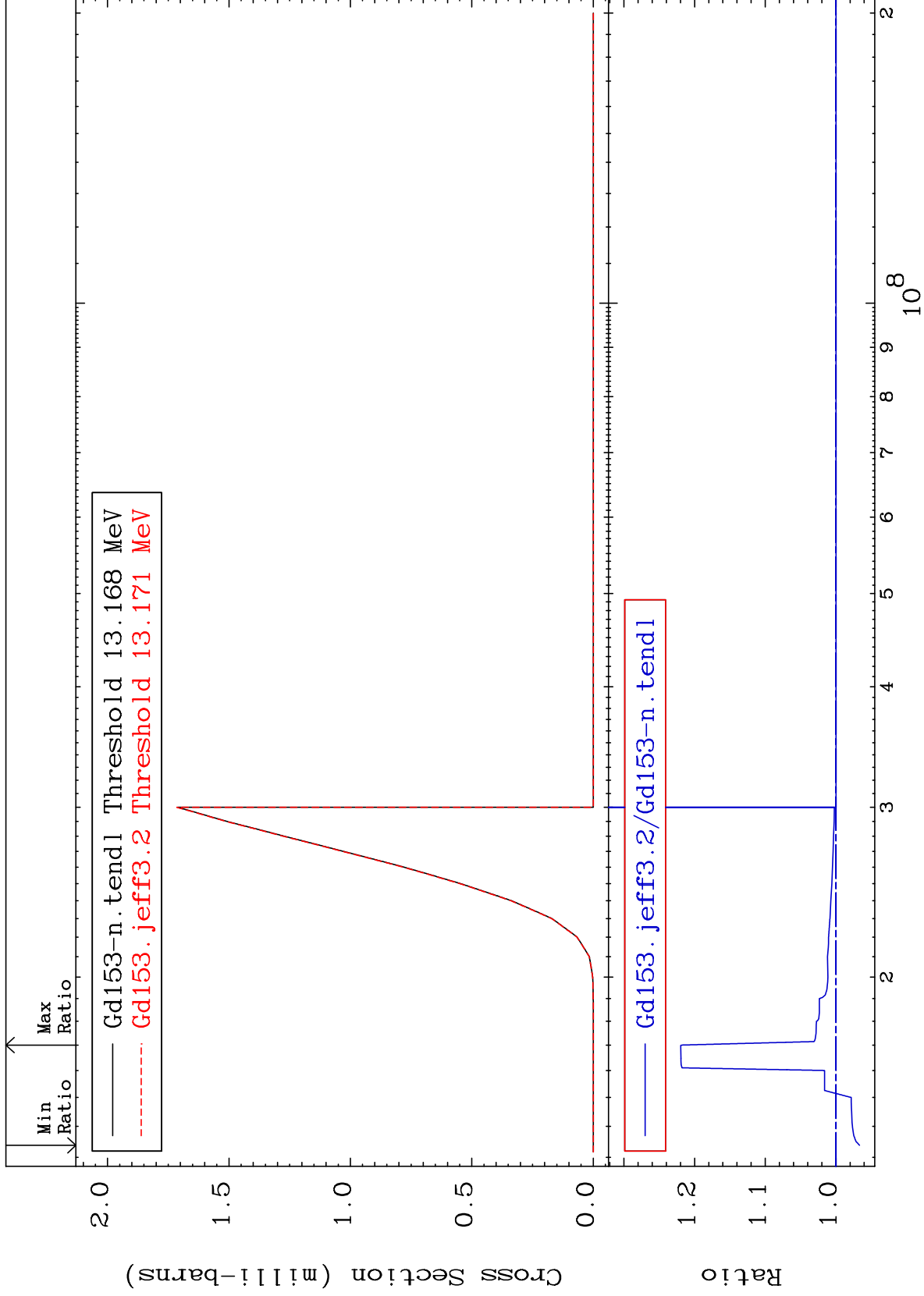
Radionuclide Production Cross Section -3.058 To 5.261 %

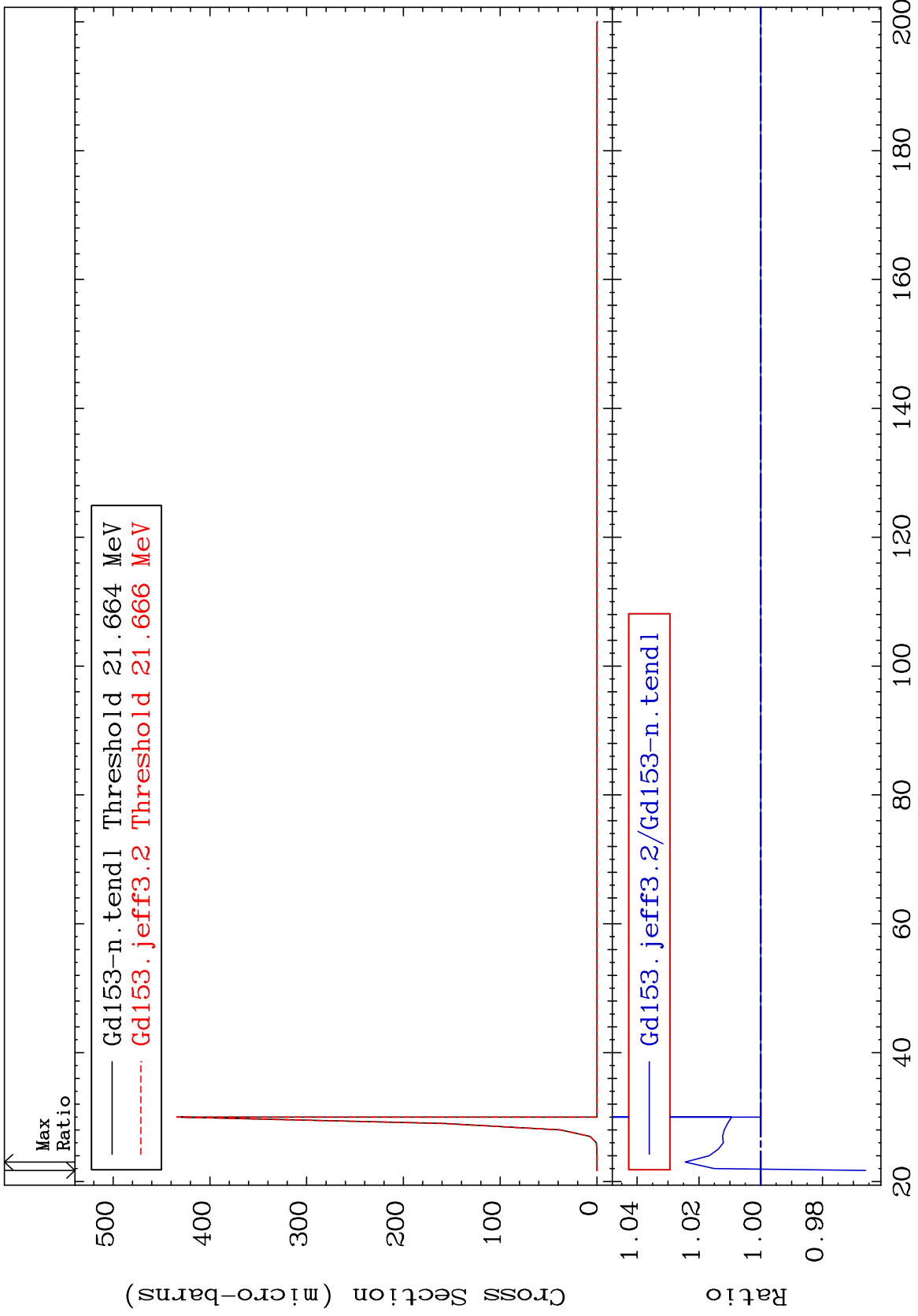


Radionuclide Production Cross Section -2.782 To 0.536 %







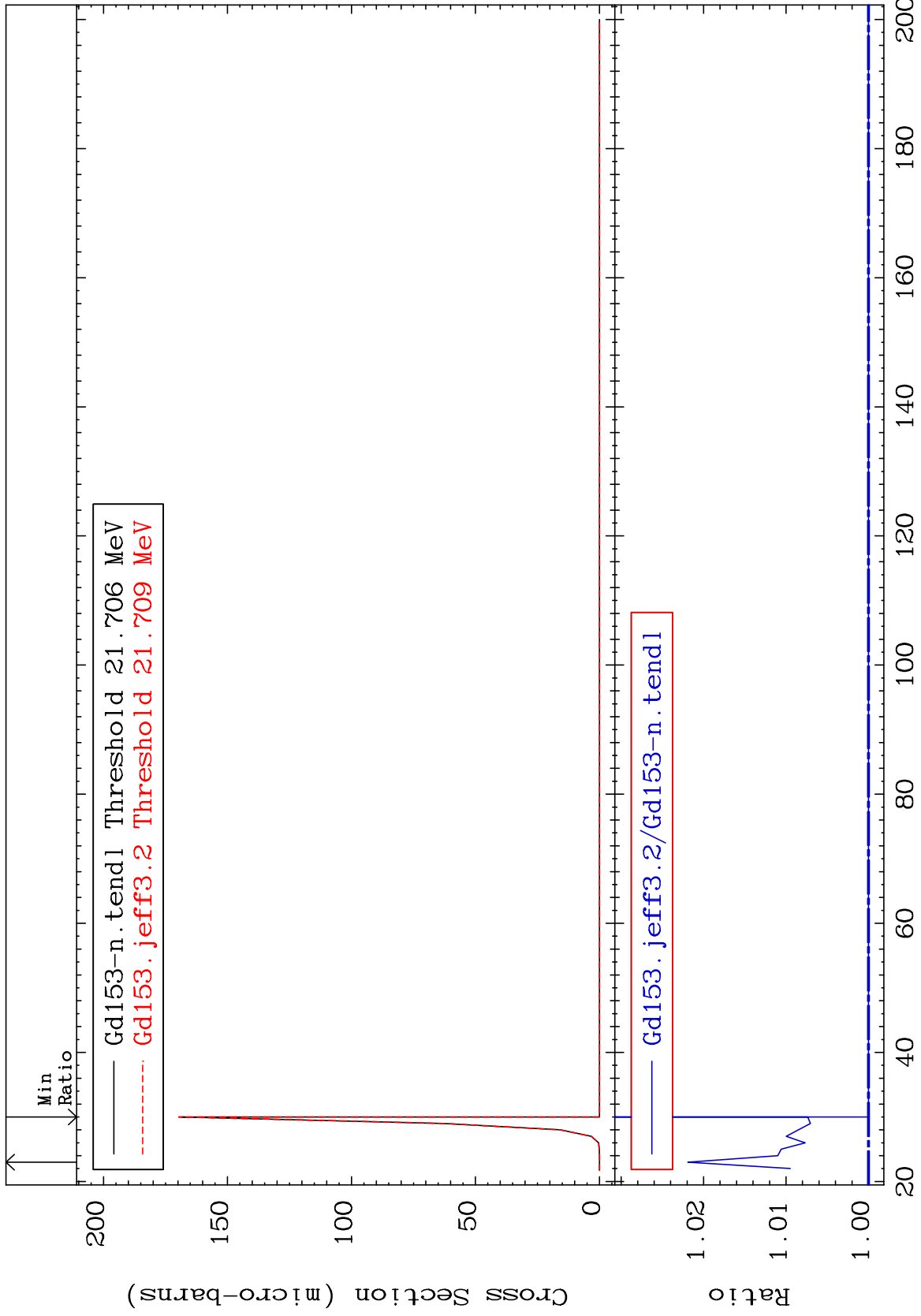


MAT 6428

(n,3n) p:63-Eu-150m1

64-Gd-153

Radionuclide Production Cross Section 0.000 To 2.191 %

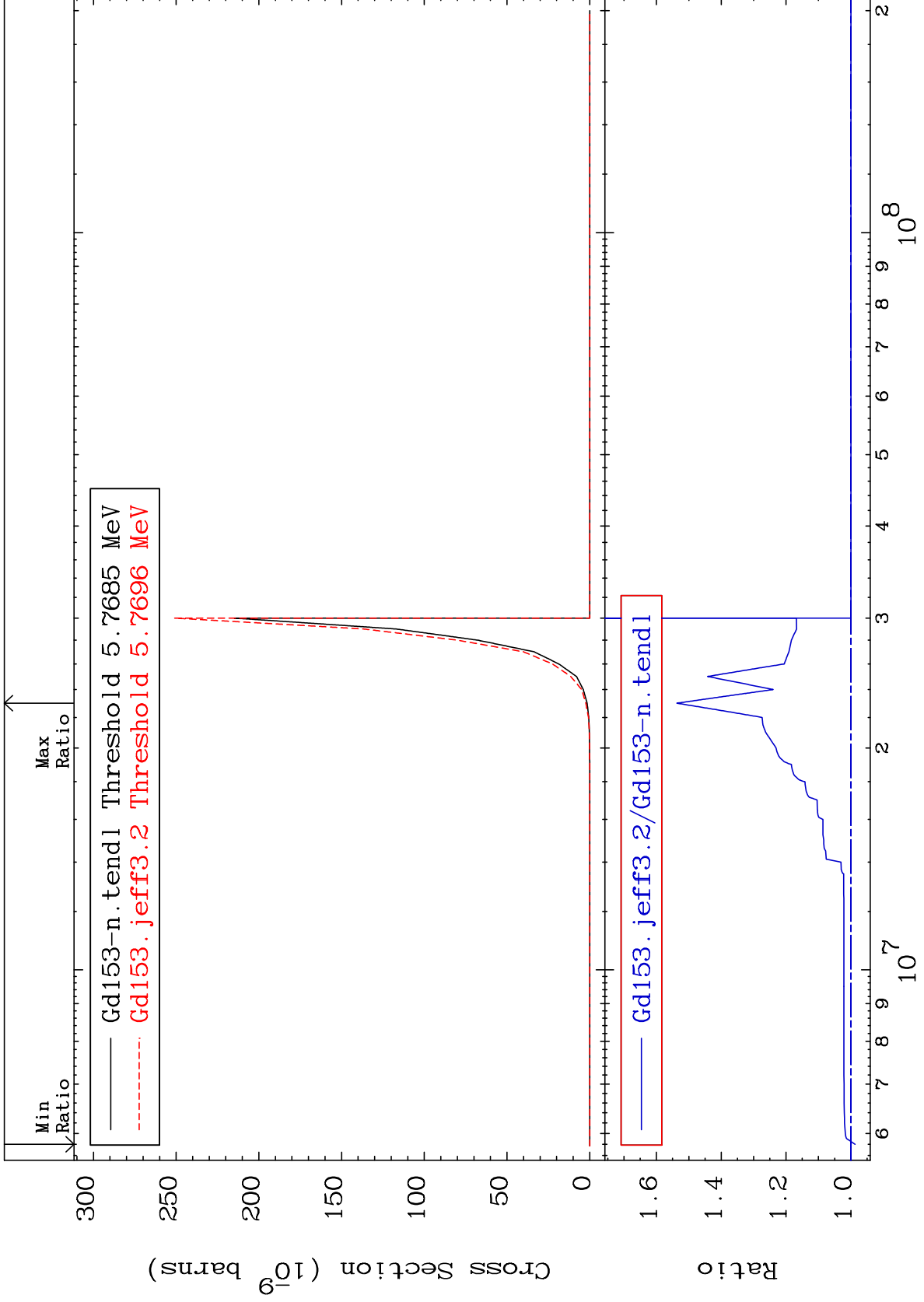


MAT 6428

(n, n') p α : 61-Pm-148g

64-Gd-153

Radionuclide Production Cross Section -1.300 To 53.67 %

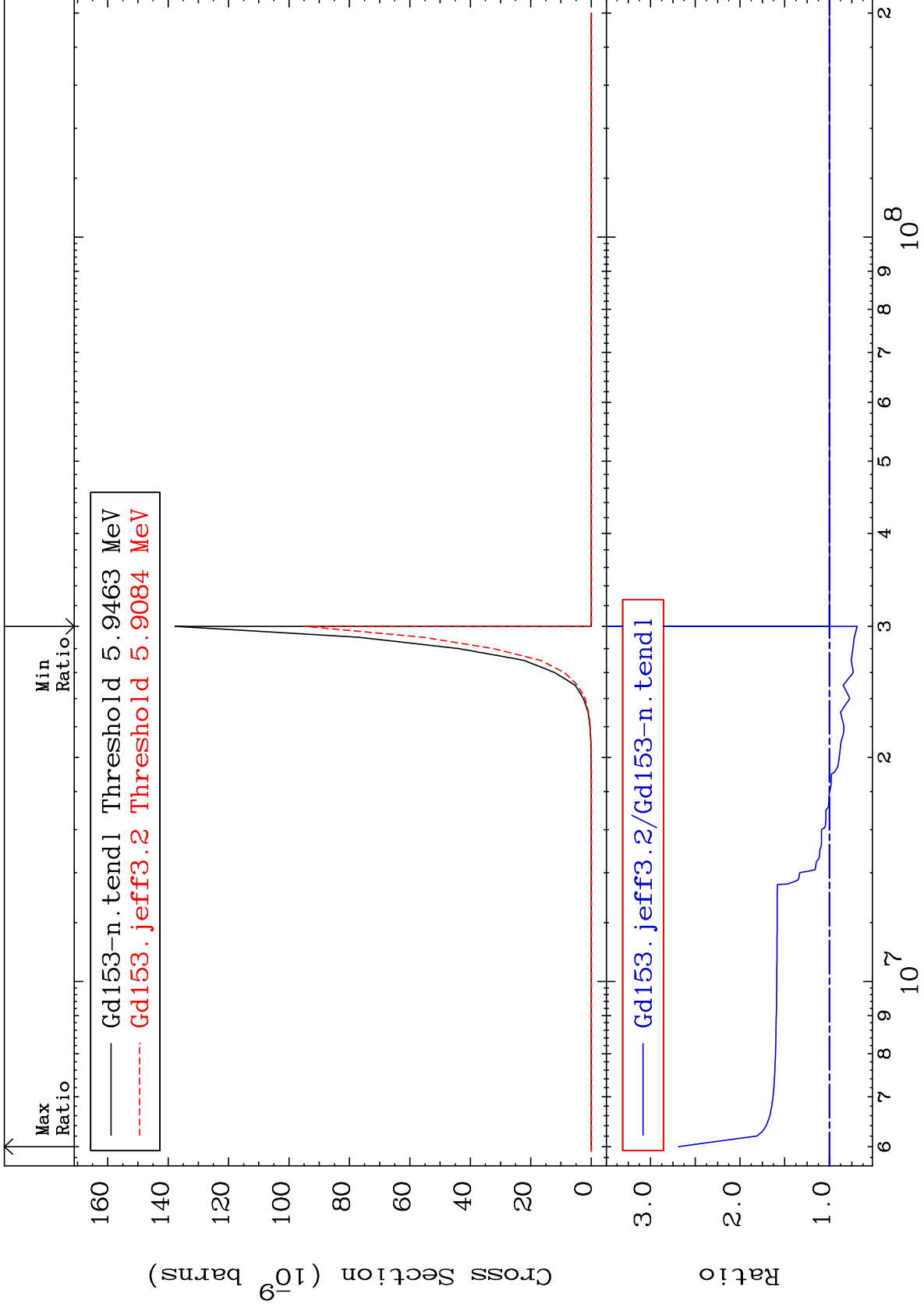


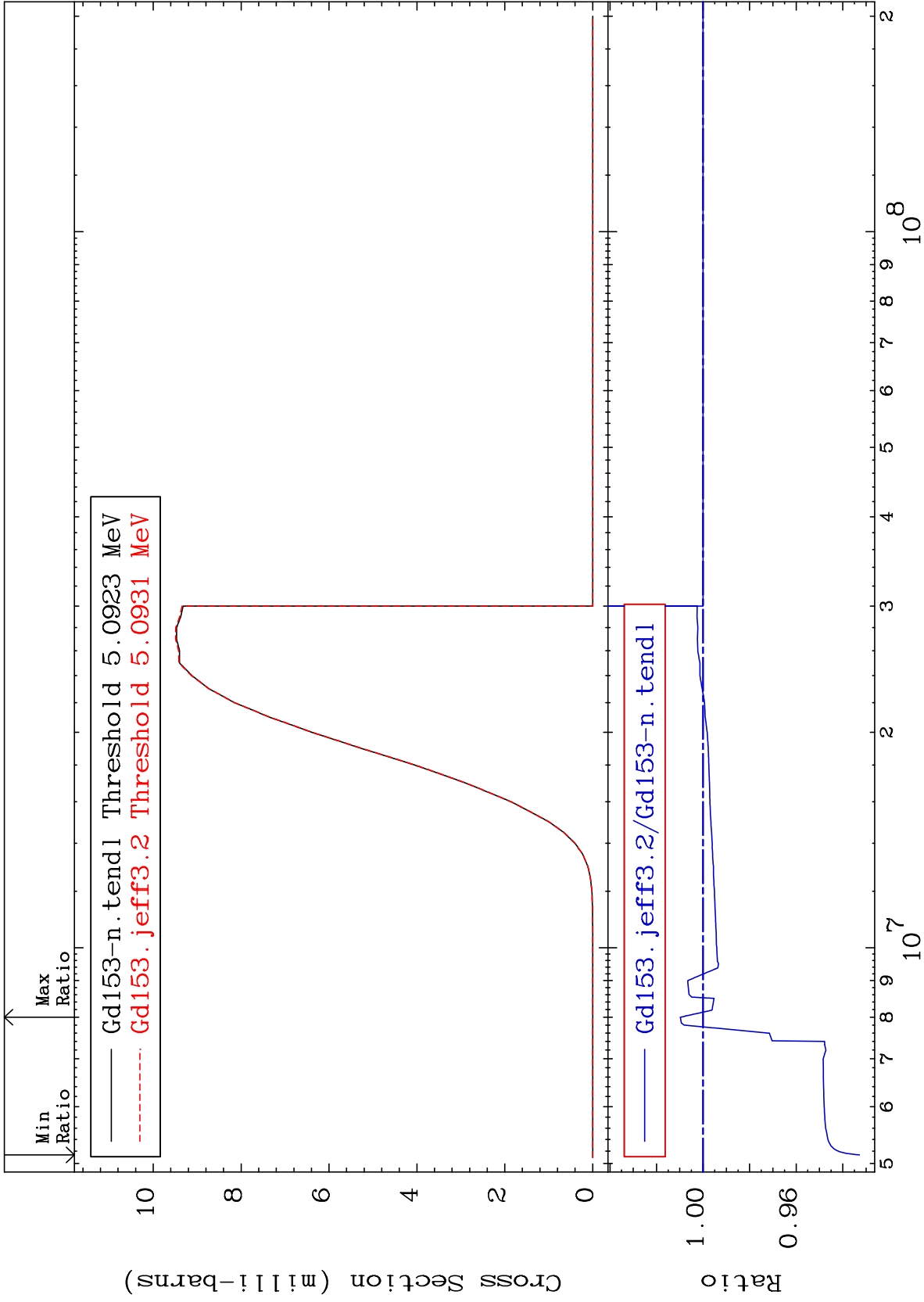
90

Incident Energy (eV)

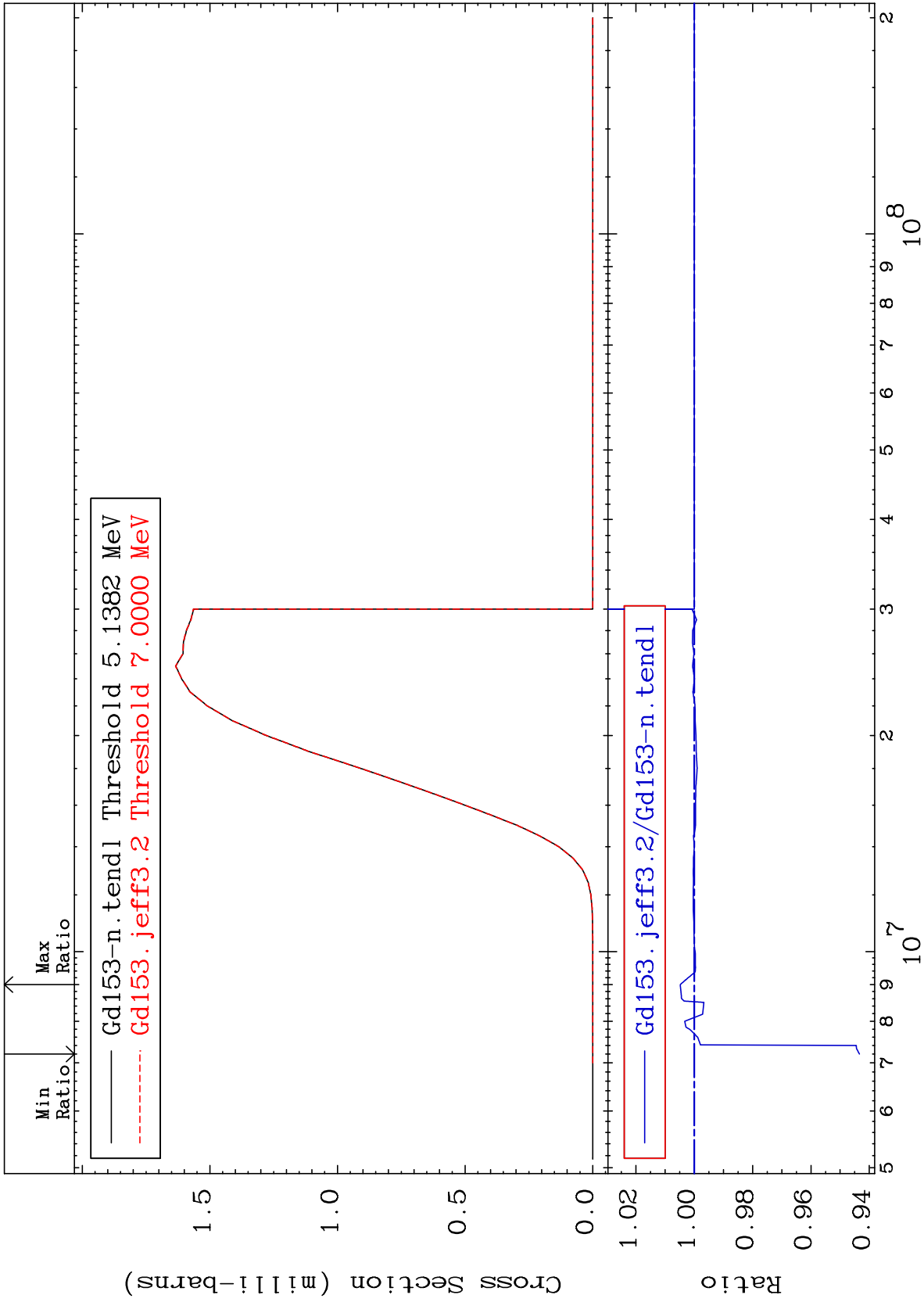
64-Gd-153

Radionuclide Production Cross Section -31.09 To 168.6 %

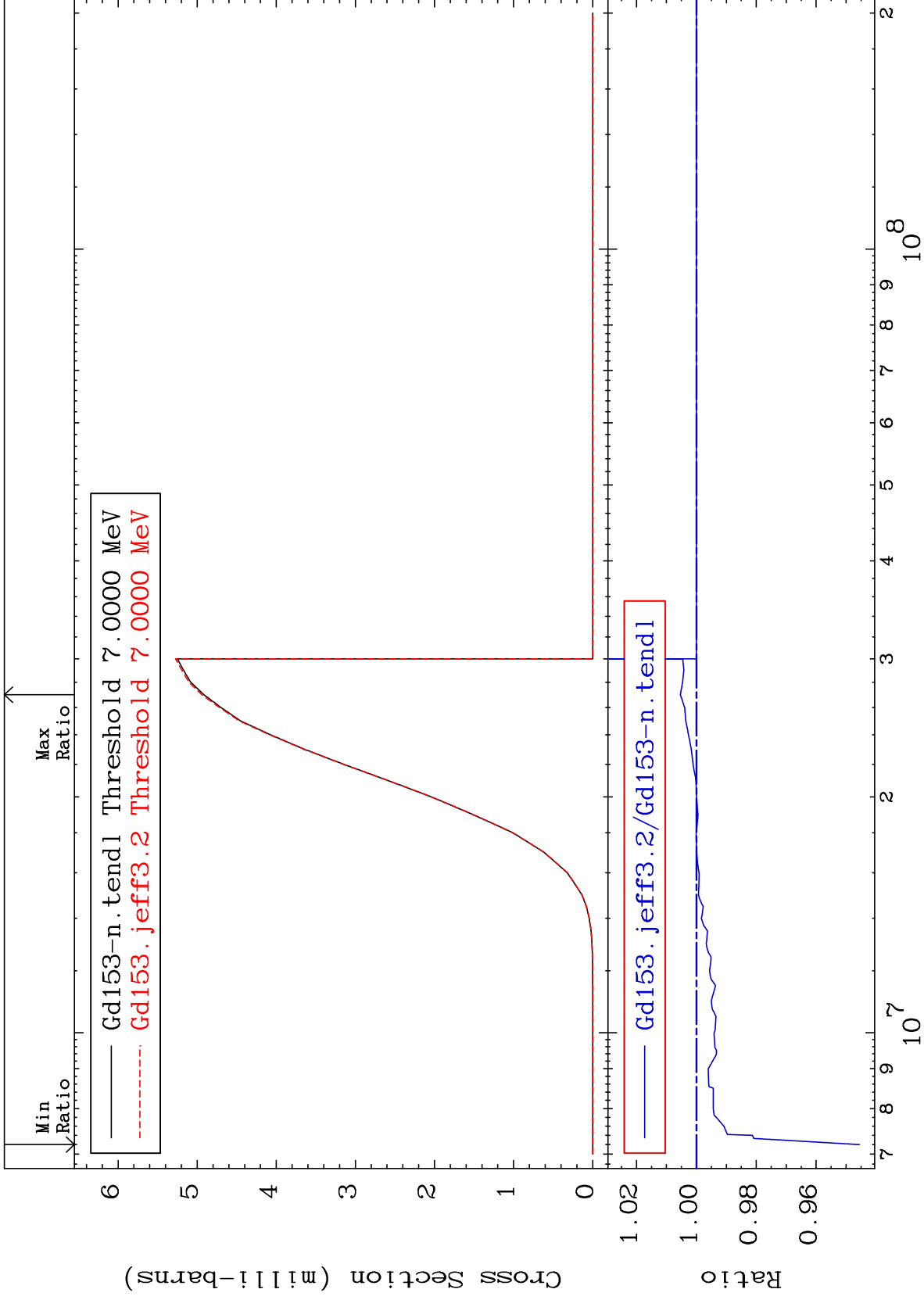




Radionuclide Production Cross Section -5.662 To 0.478 %



Radionuclide Production Cross Section -5.446 To 0.535 %

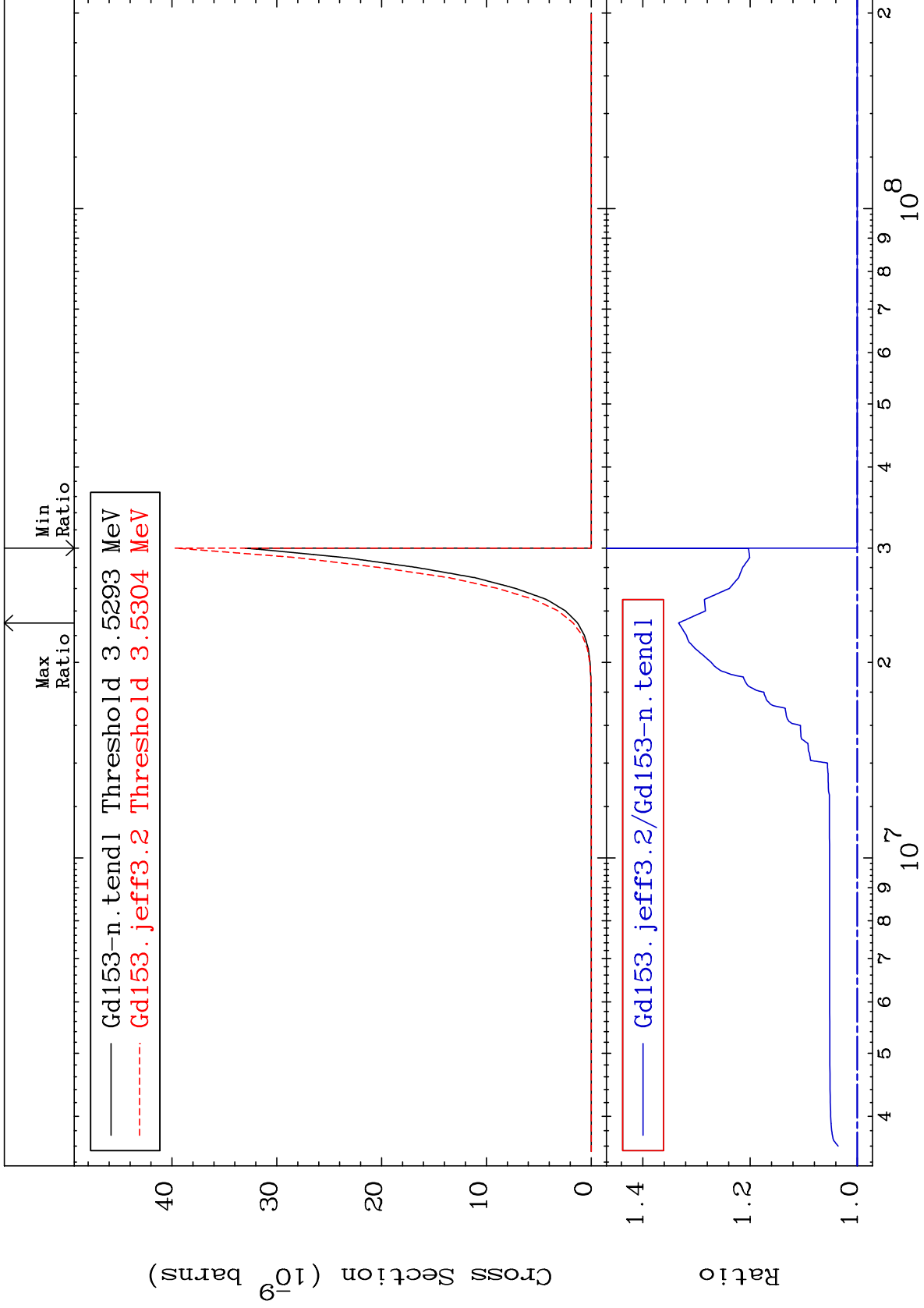


MAT 6428

(n, d) α :61-Pm-148g

64-Gd-153

Radionuclide Production Cross Section 0.000 To 33.33 %



95

Incident Energy (eV)

64-Gd-153

Radionuclide Production Cross Section -29.42 To 92.42 %

