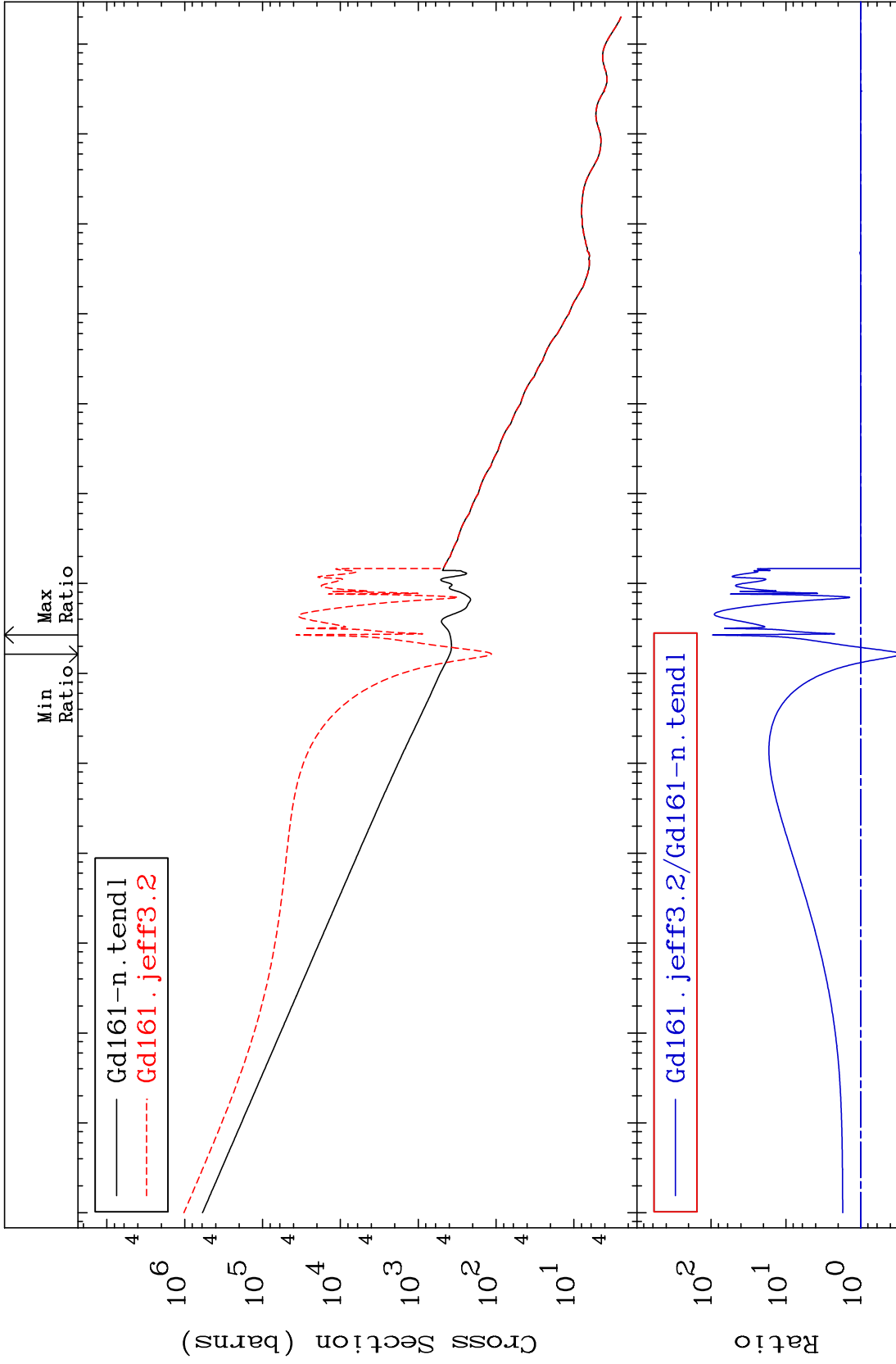


MAT 6452

Total  
Cross Section

64-Gd-161  
-70.72 To 9390. %



10<sup>6</sup>  
10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>

10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

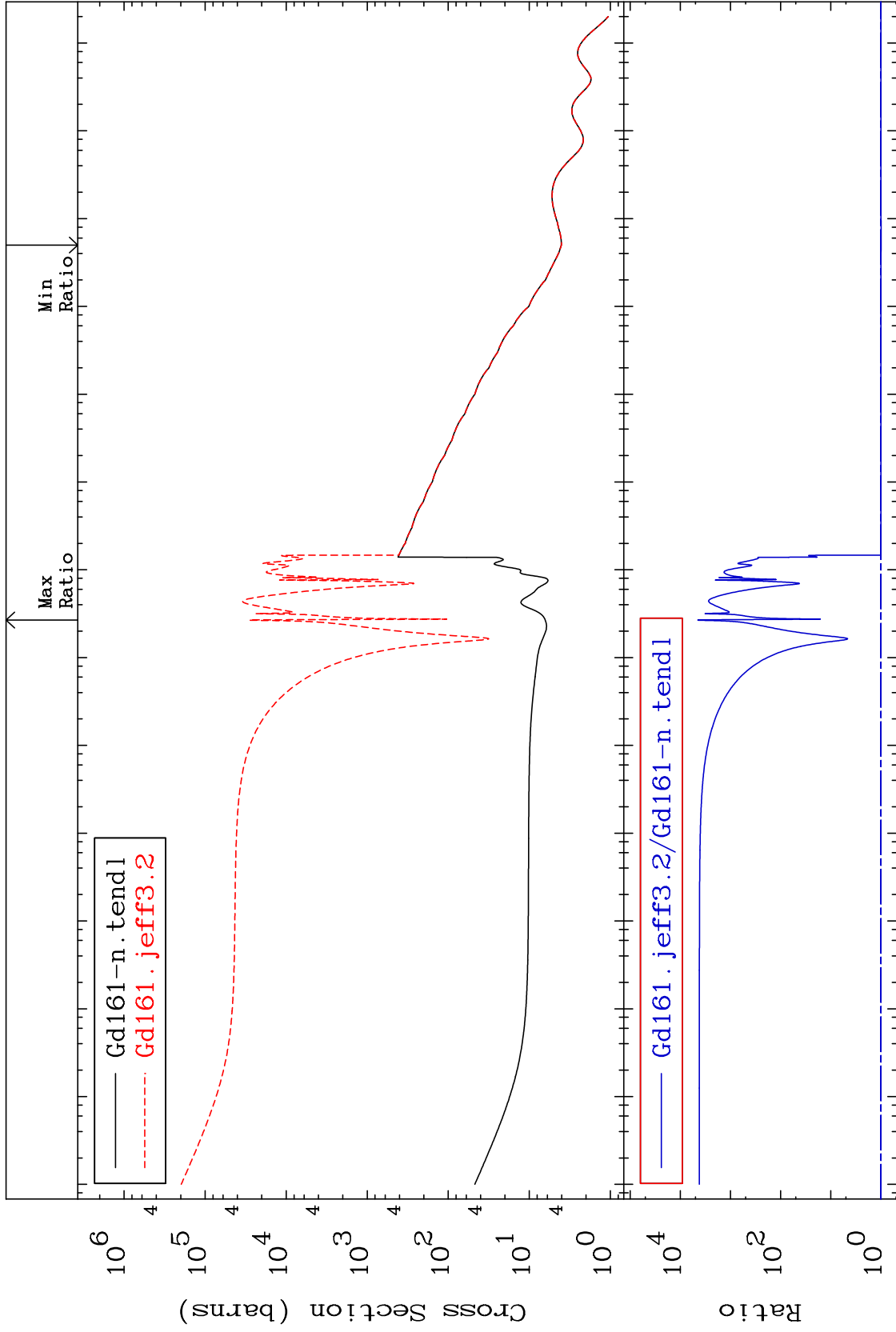
Ratio

Incident Energy (eV)

64-Gd-161

MAT 6452

Elastic Cross Section  
64-Gd-161  
-0.589 To 9999. %



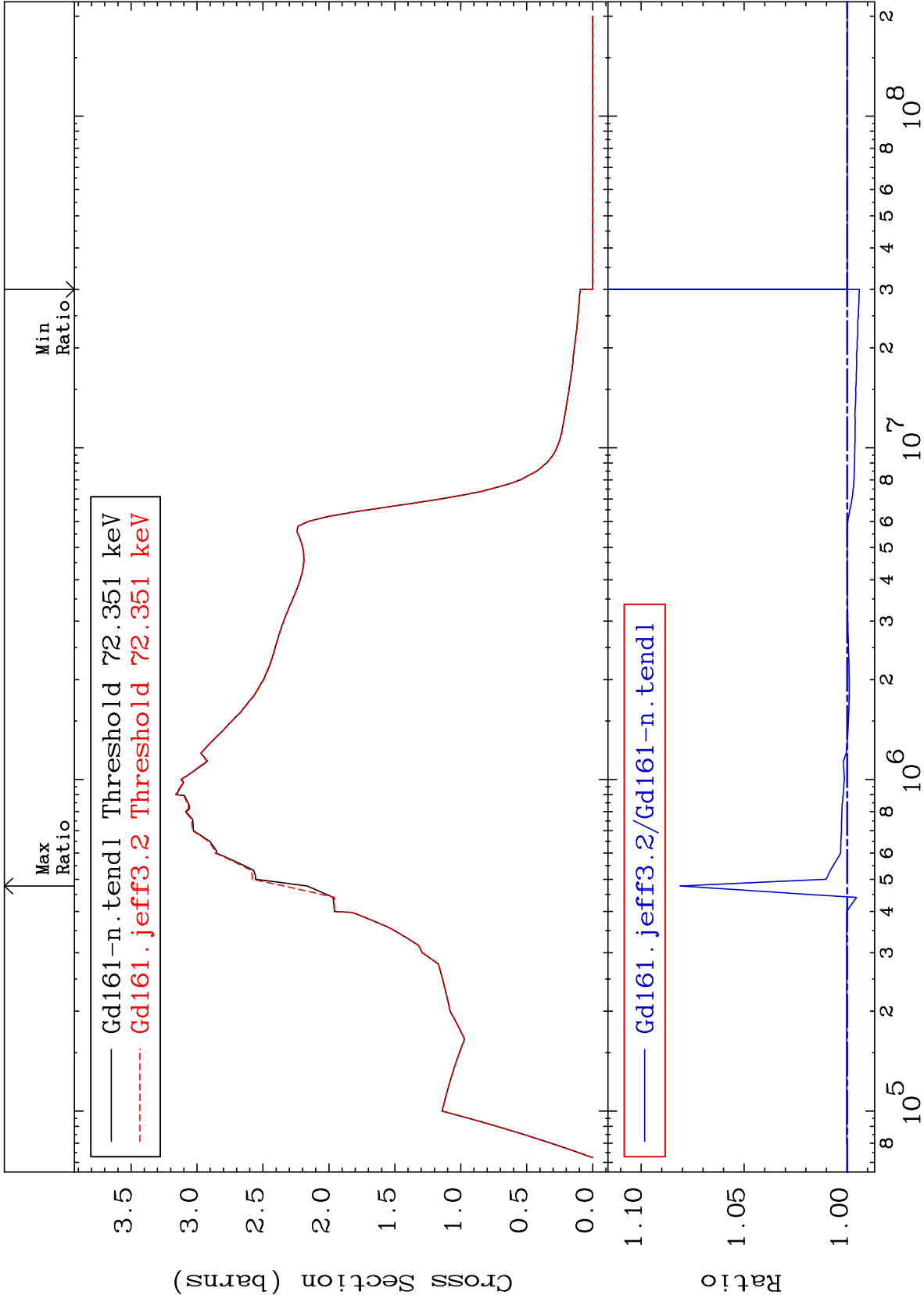
Incident Energy (eV)

64-Gd-161

2

MAT 6452

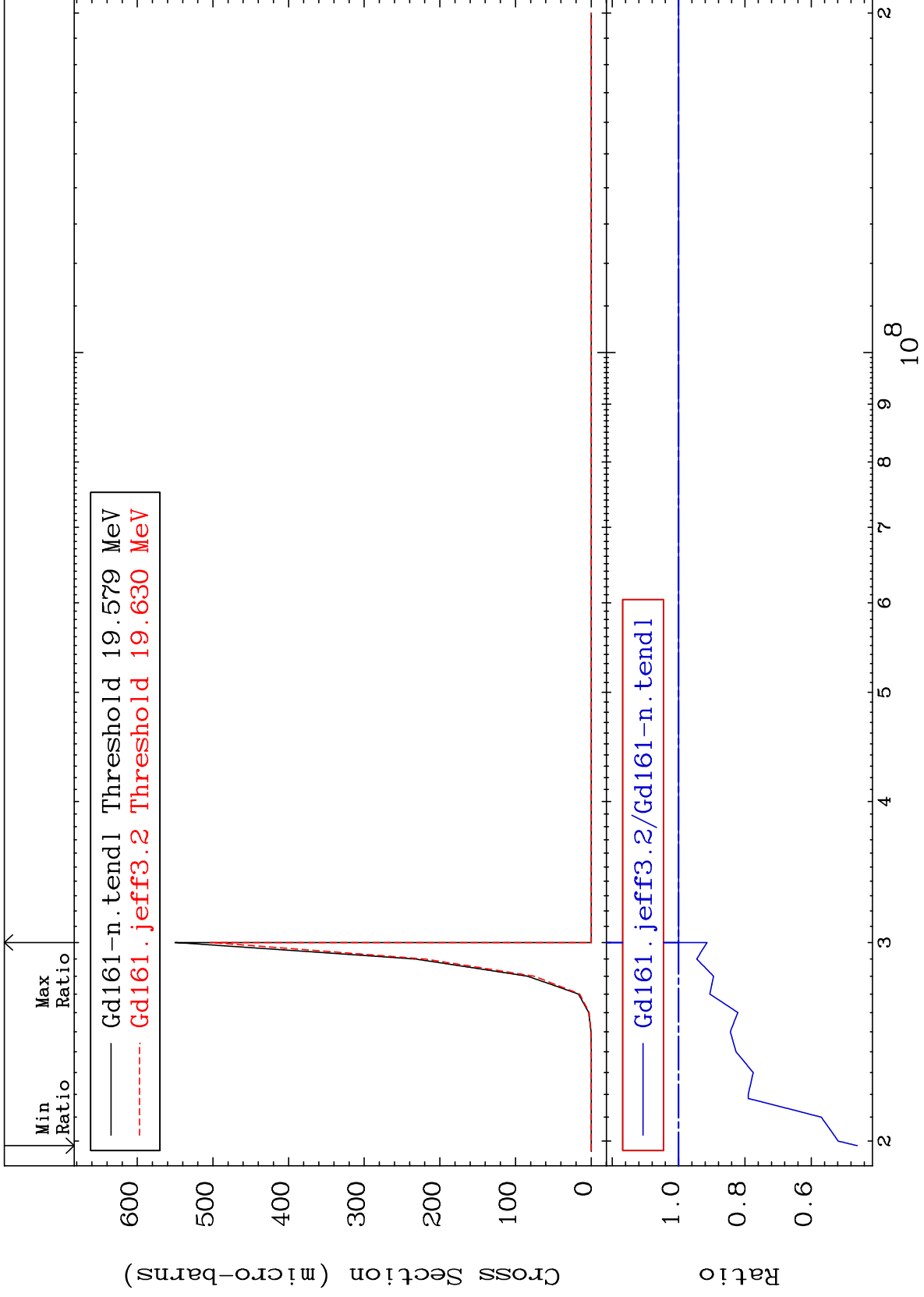
Inelastic Cross Section  
64-Gd-161  
-0.601 To 8.098 %



MAT 6452

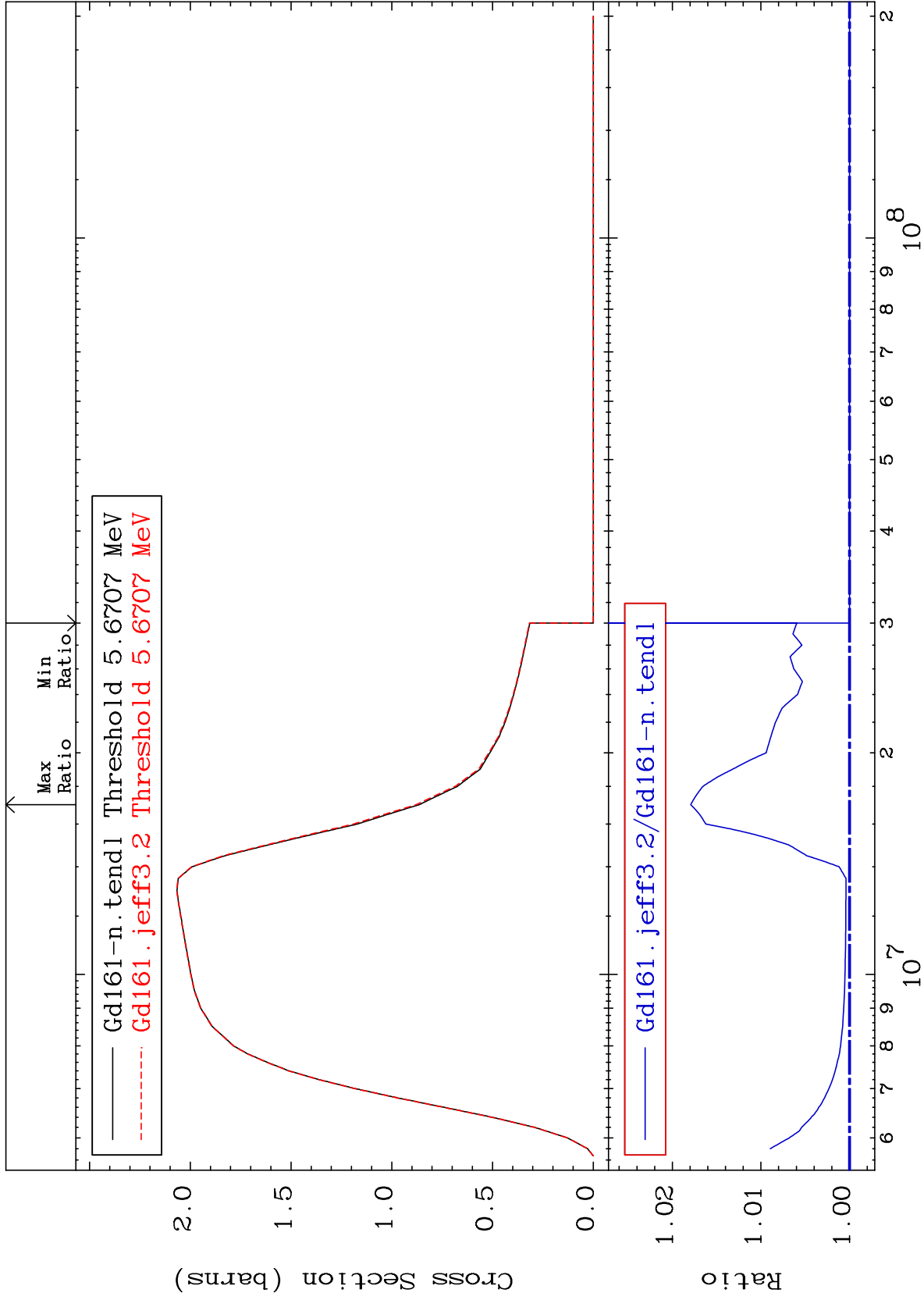
(n,2n) d  
Cross Section

64-Gd-161  
-53.87 To 0.000 %



MAT 6452

(n,2n) Cross Section  
64-Gd-161  
0.000 To 1.792 %



5

Incident Energy (eV)

64-Gd-161

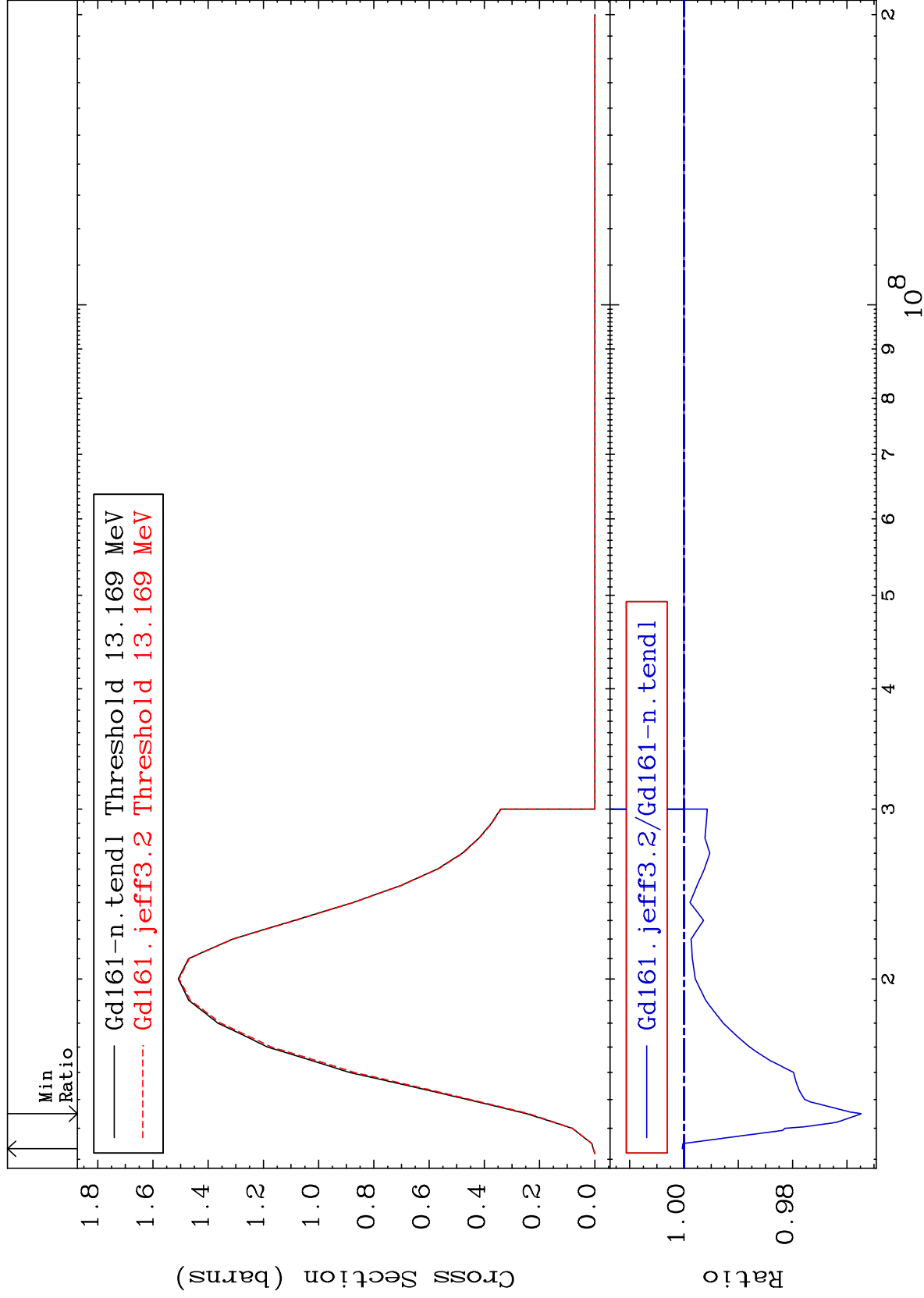
MAT 6452

(n,3n)

64-Gd-161

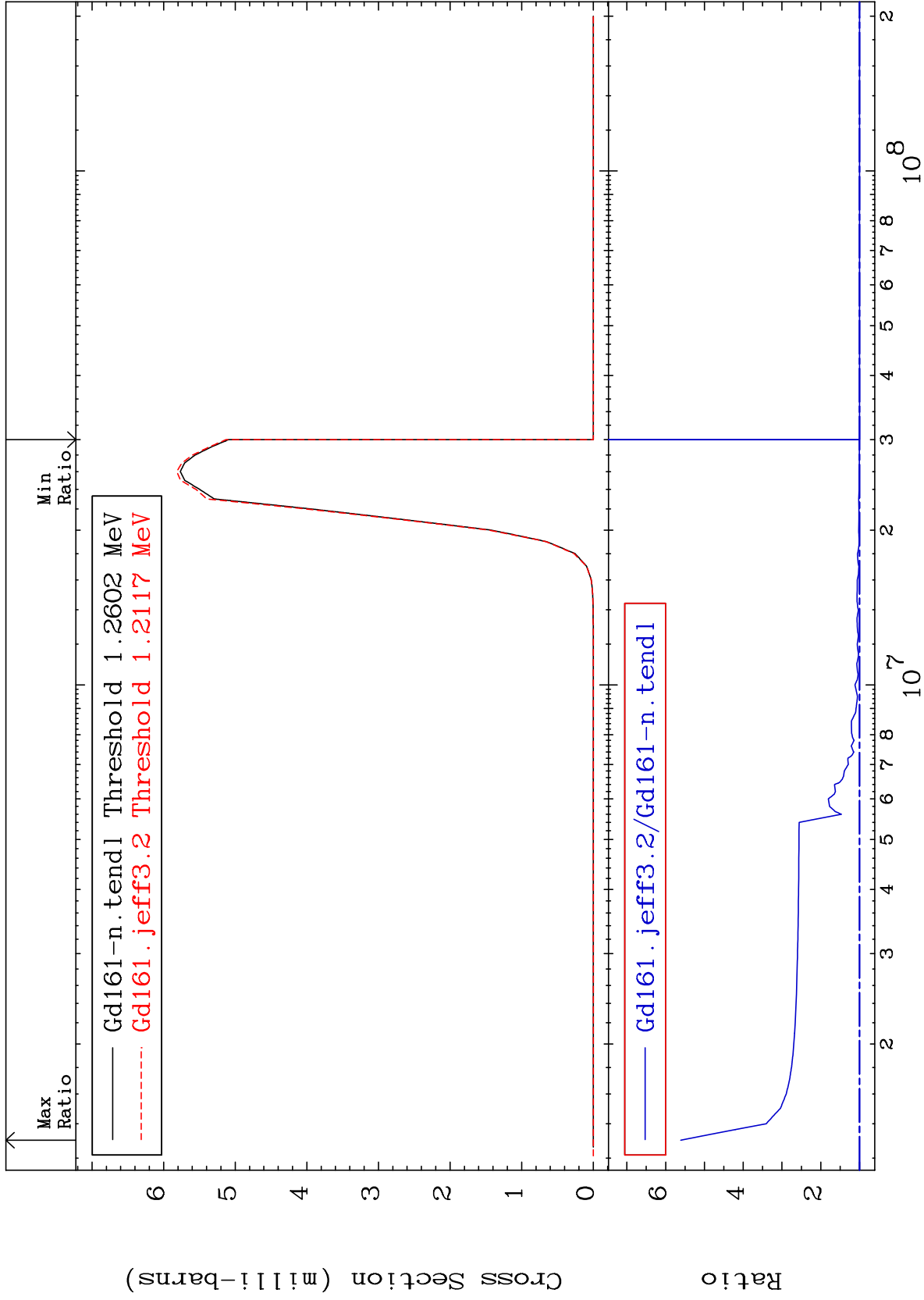
Cross Section

-3.261 To 0.031 %



MAT 6452

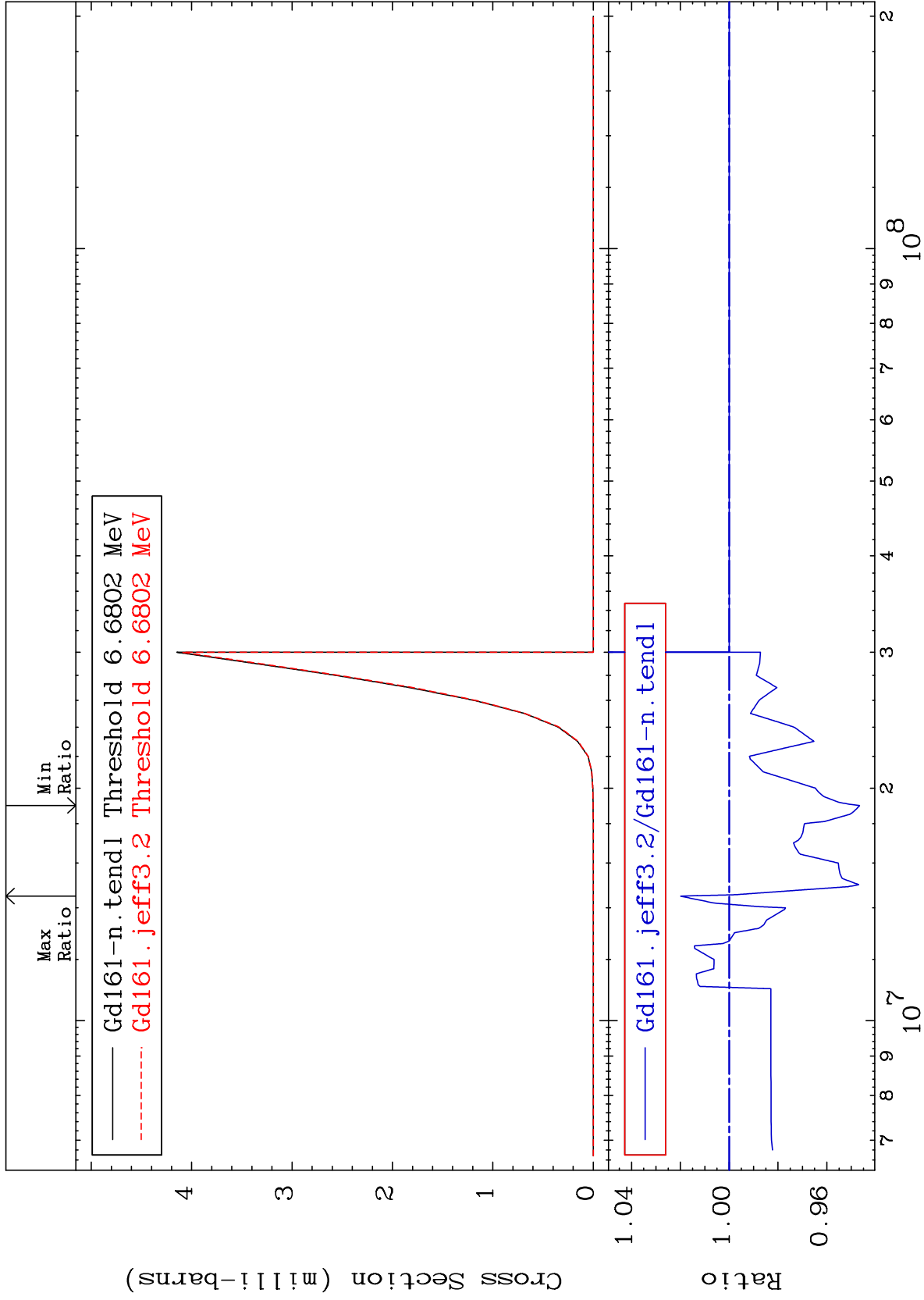
(n,n')  $\alpha$   
Cross Section  
64-Gd-161  
To 461.0 %  
0.000



MAT 6452

(n,2n)  $\alpha$   
Cross Section

64-Gd-161  
-5.339 To 1.984 %



8

Incident Energy (eV)

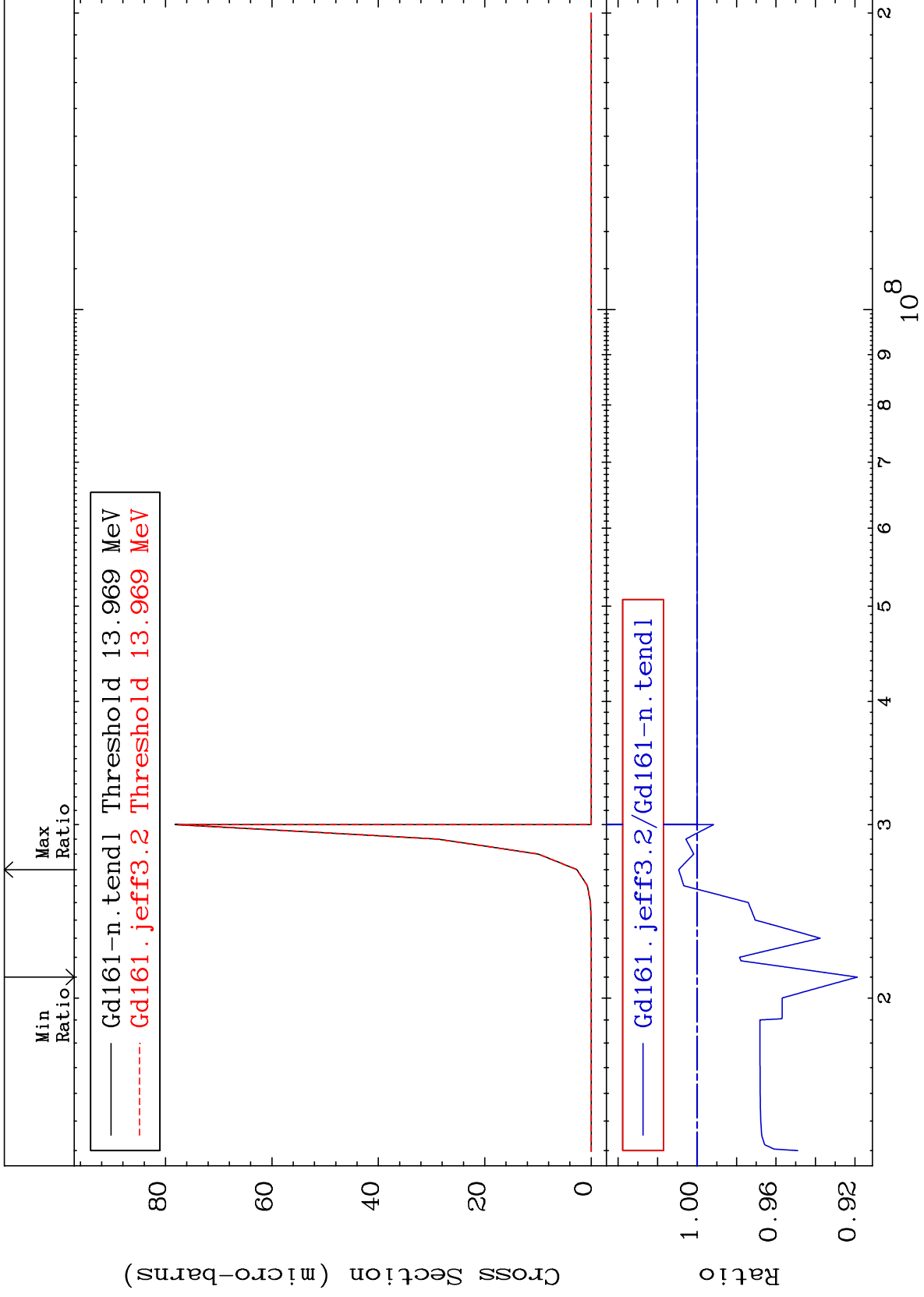
64-Gd-161



MAT 6452

(n,3n)  $\alpha$   
Cross Section

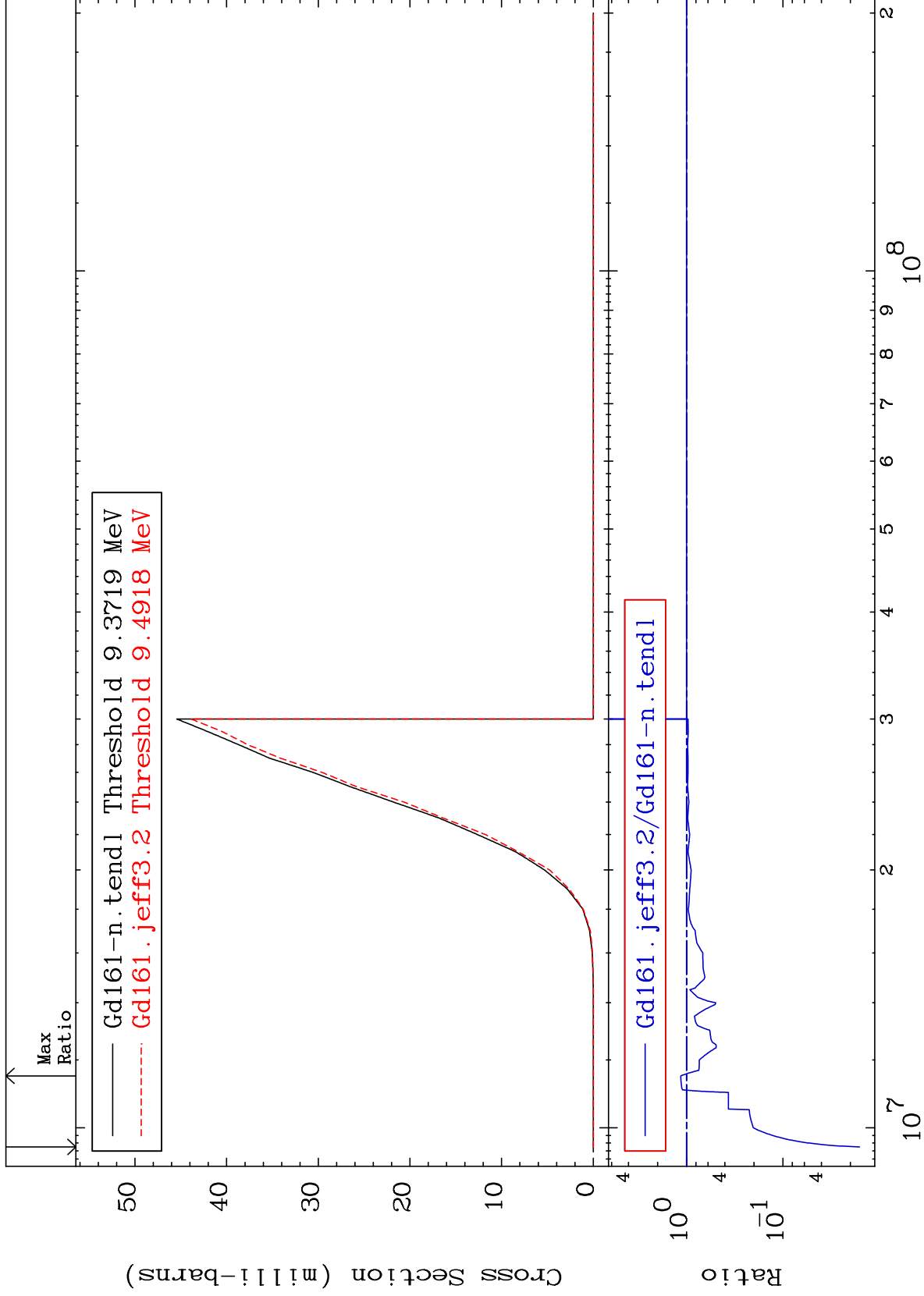
64-Gd-161  
-8.117 To 0.934 %



MAT 6452

(n,n') p  
Cross Section

64-Gd-161  
-98.39 To 14.83 %



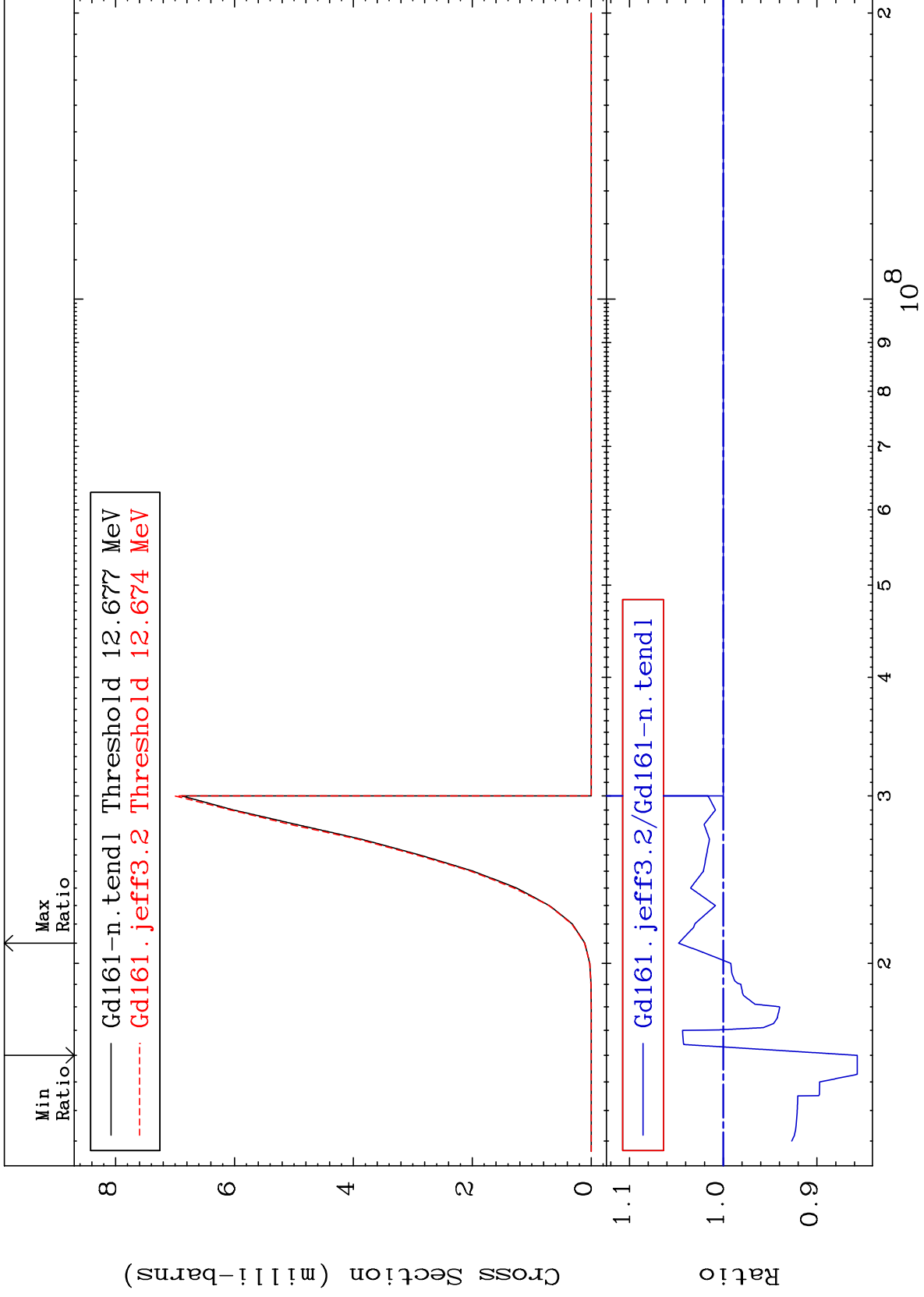
64-Gd-161

64-Gd-161

MAT 6452

(n,n') d  
Cross Section

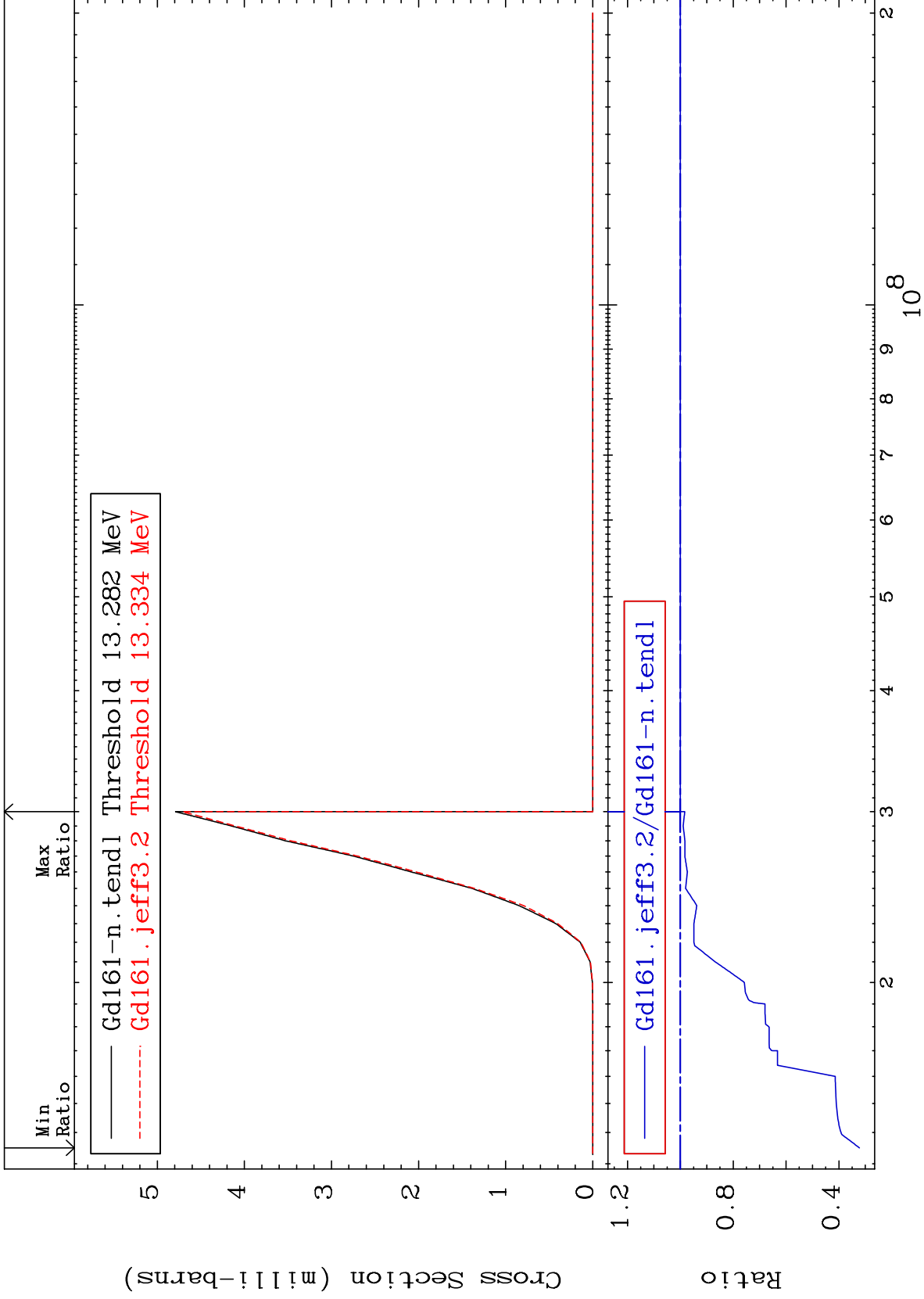
64-Gd-161  
-14.30 To 4.760 %



MAT 6452

(n,n') t  
Cross Section

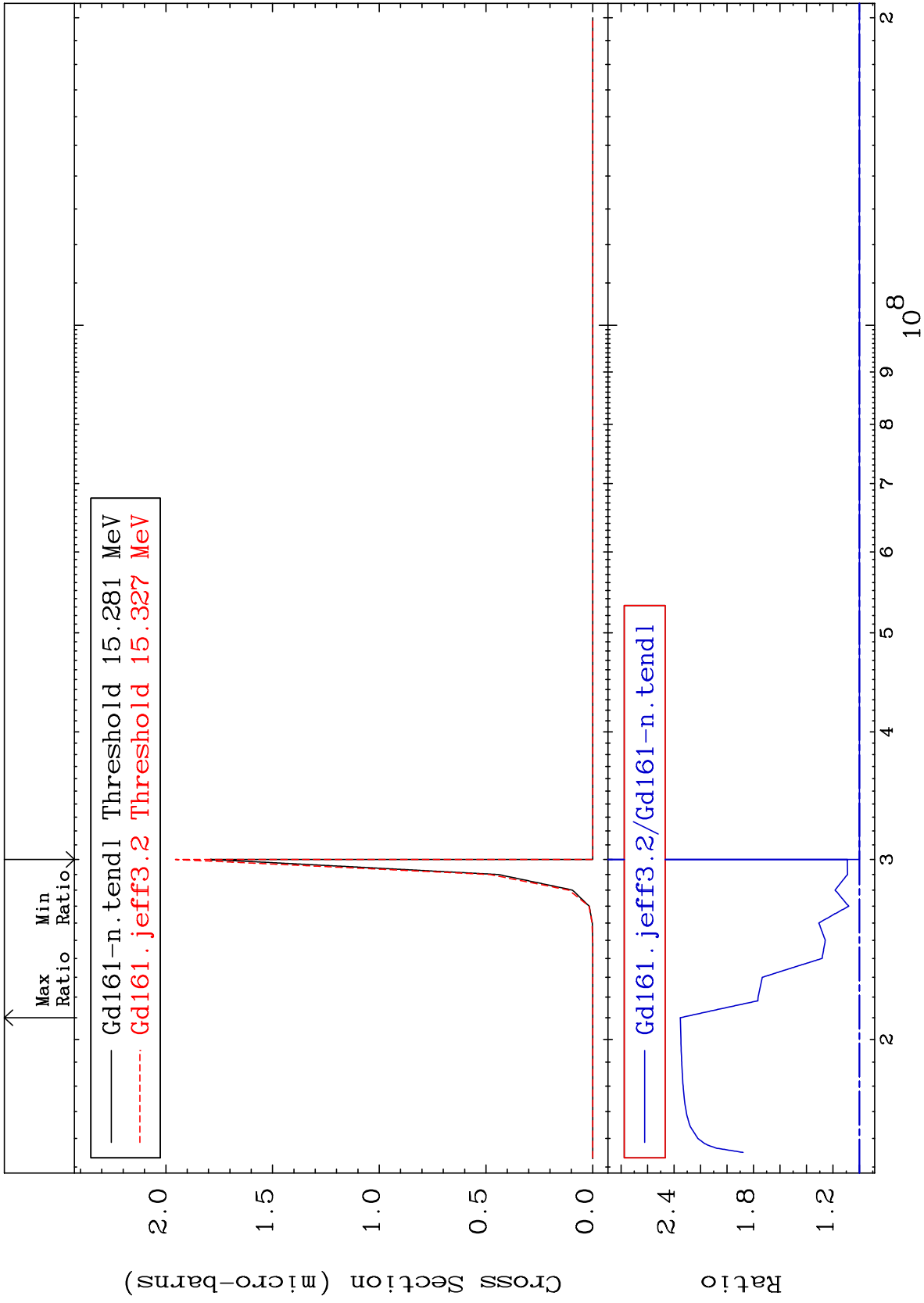
64-Gd-161  
-67.77 To 0.000 %



MAT 6452

(n, n') He-3  
Cross Section

64-Gd-161  
0.000 To 135.2 %



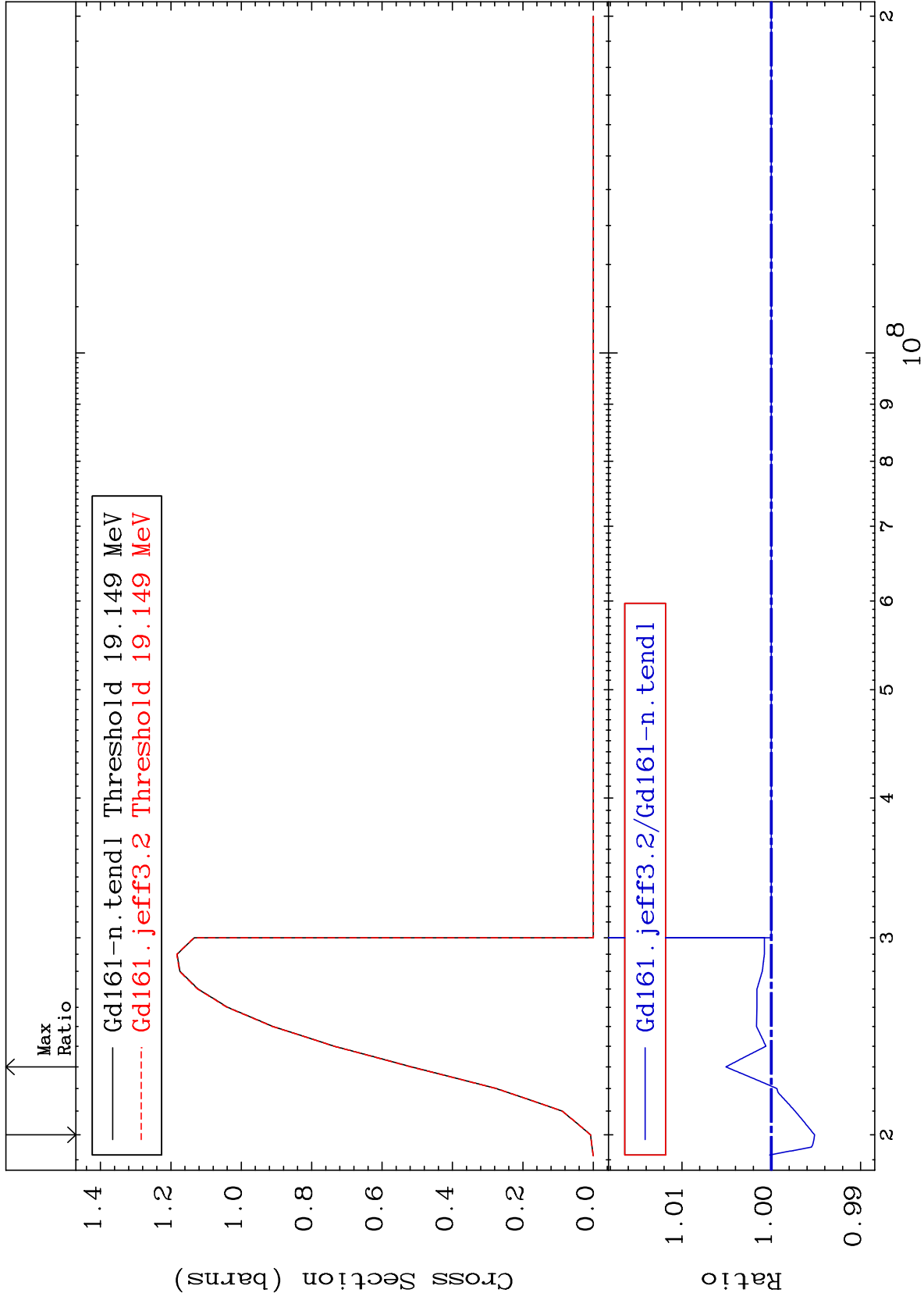
MAT 6452

(n,4n)

64-Gd-161

Cross Section

-0.484 To 0.509 %



14

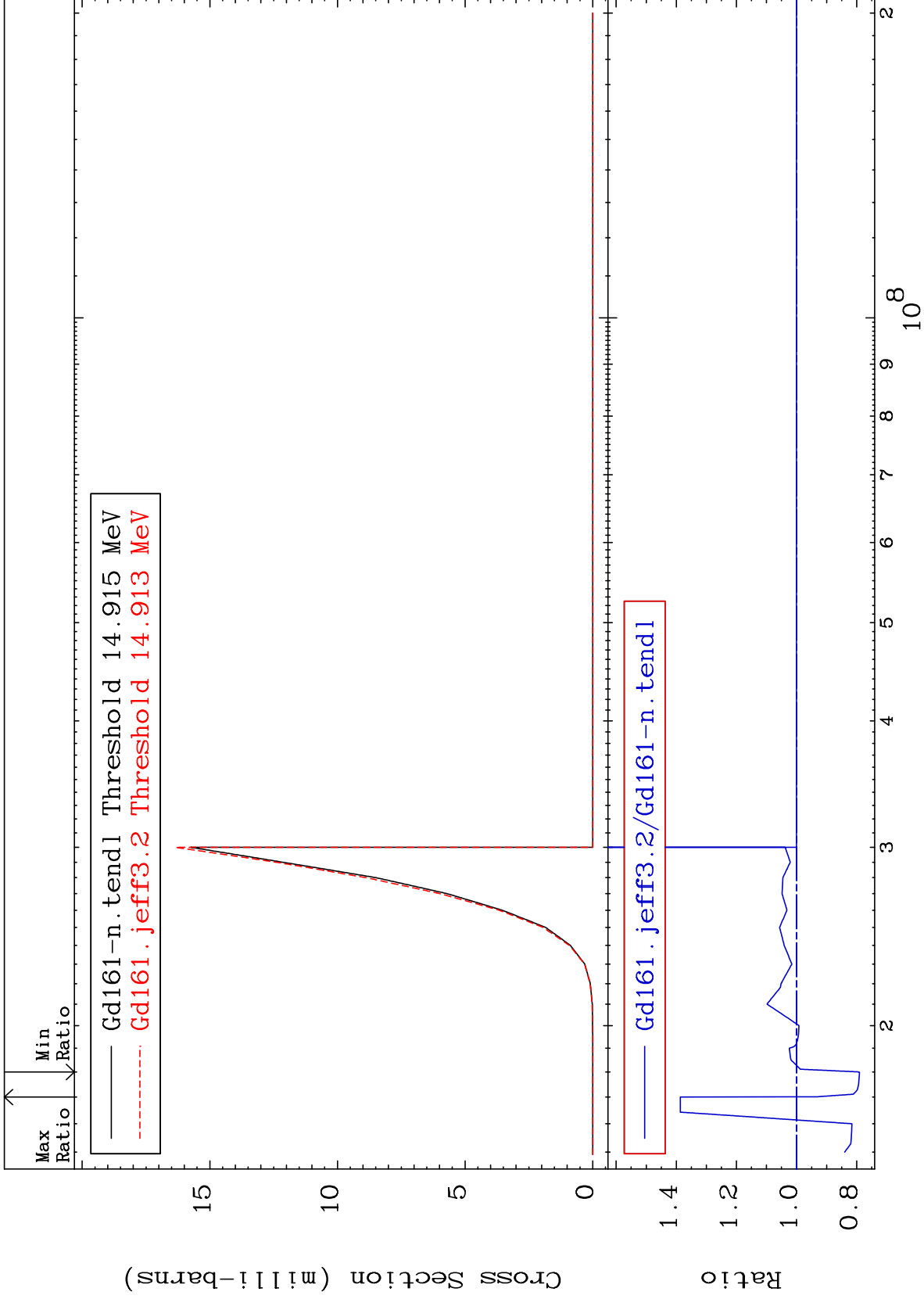
Incident Energy (eV)

64-Gd-161

MAT 6452

(n,2n) p  
Cross Section

64-Gd-161  
-20.91 To 38.65 %



15

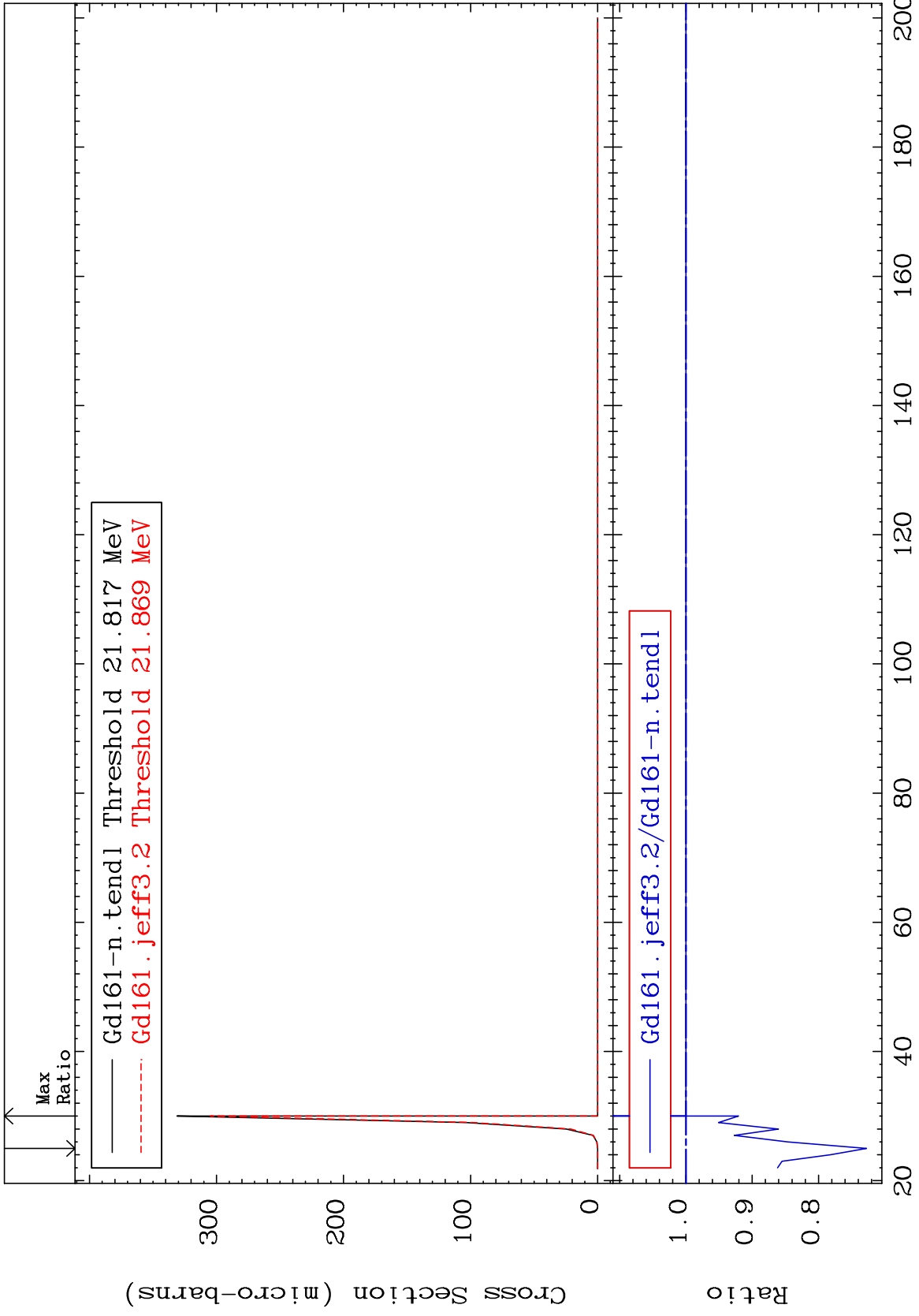
Incident Energy (eV)

64-Gd-161

MAT 6452

(n,3n) p  
Cross Section

64-Gd-161  
-27.25 To 0.000 %

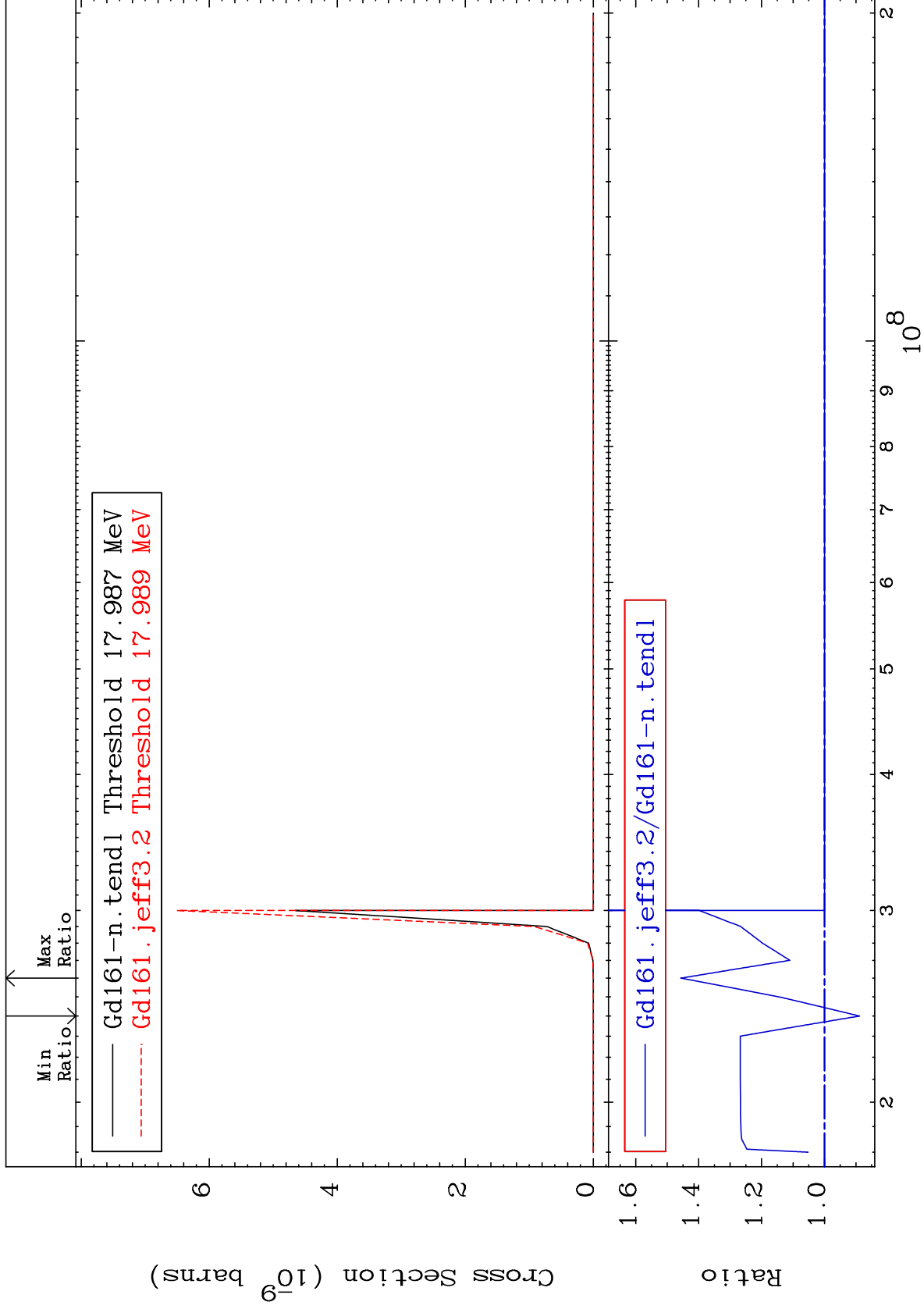




MAT 6452

(n,2n) p  
Cross Section

64-Gd-161  
-11.15 To 45.70 %



17

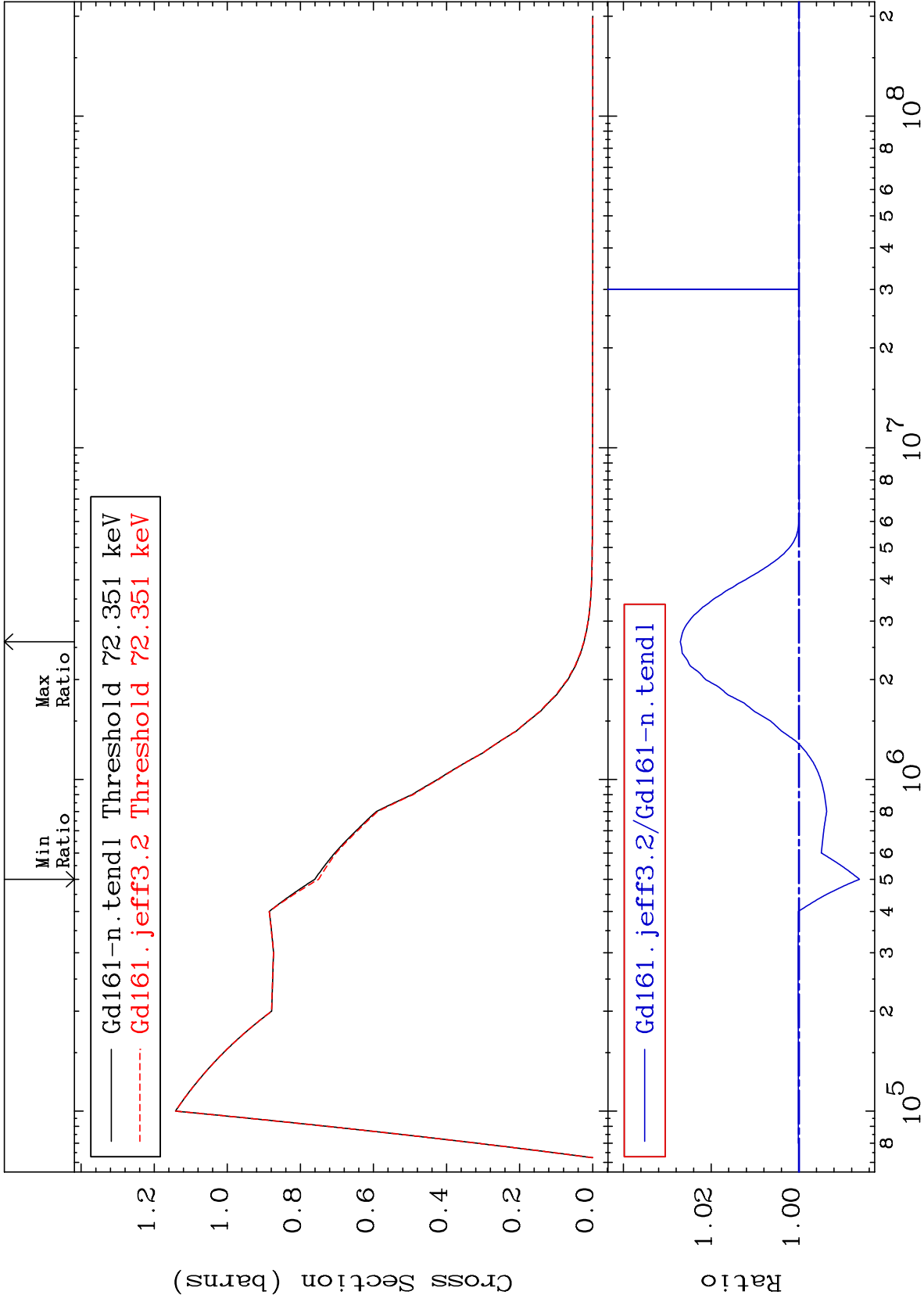
Incident Energy (eV)

64-Gd-161

MAT 6452

71.90 keV (n,n') Level  
Cross Section

64-Gd-161  
-1.378 To 2.703 %



18

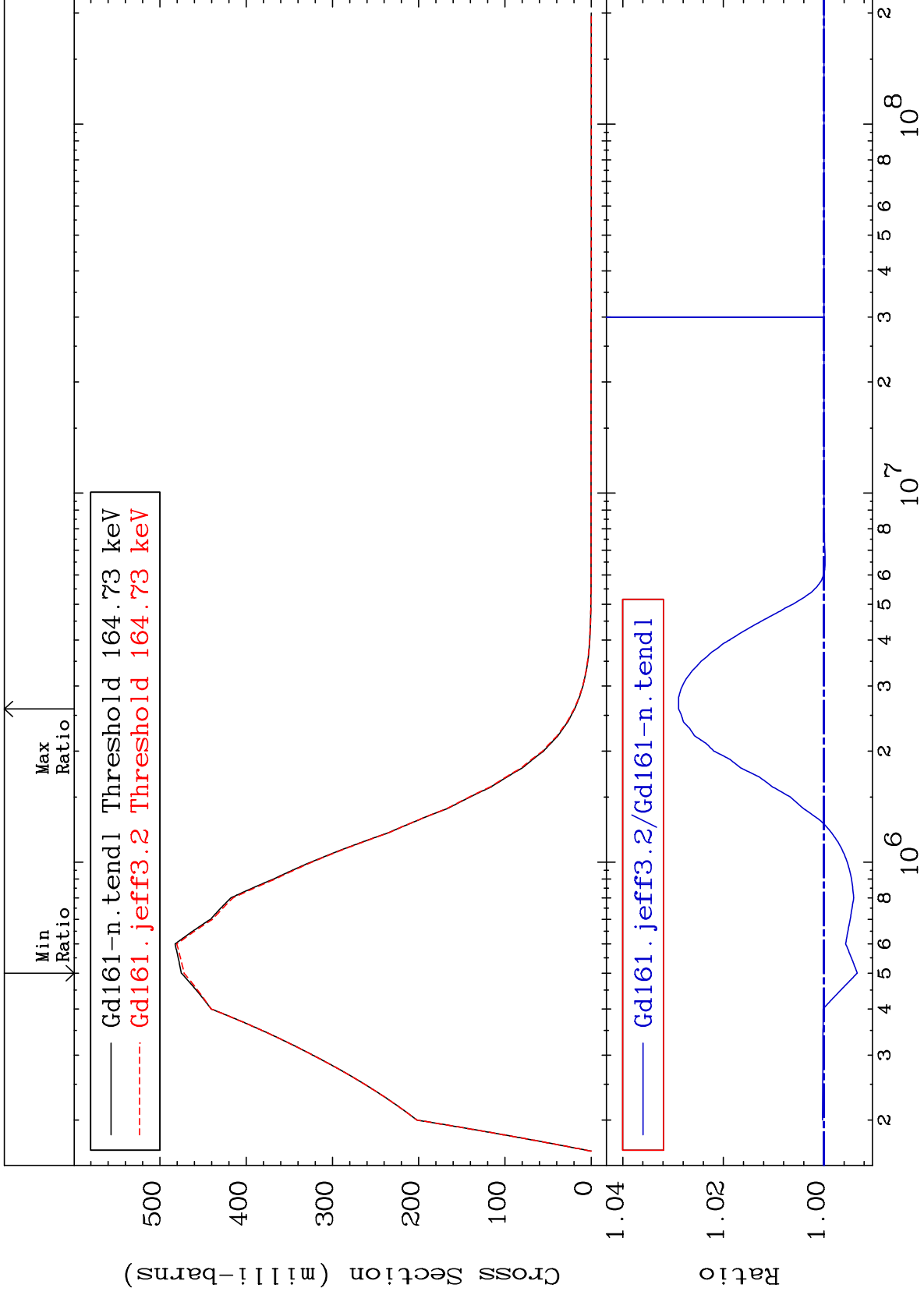
Incident Energy (eV)

64-Gd-161

MAT 6452

163.7 keV (n,n') Level  
Cross Section

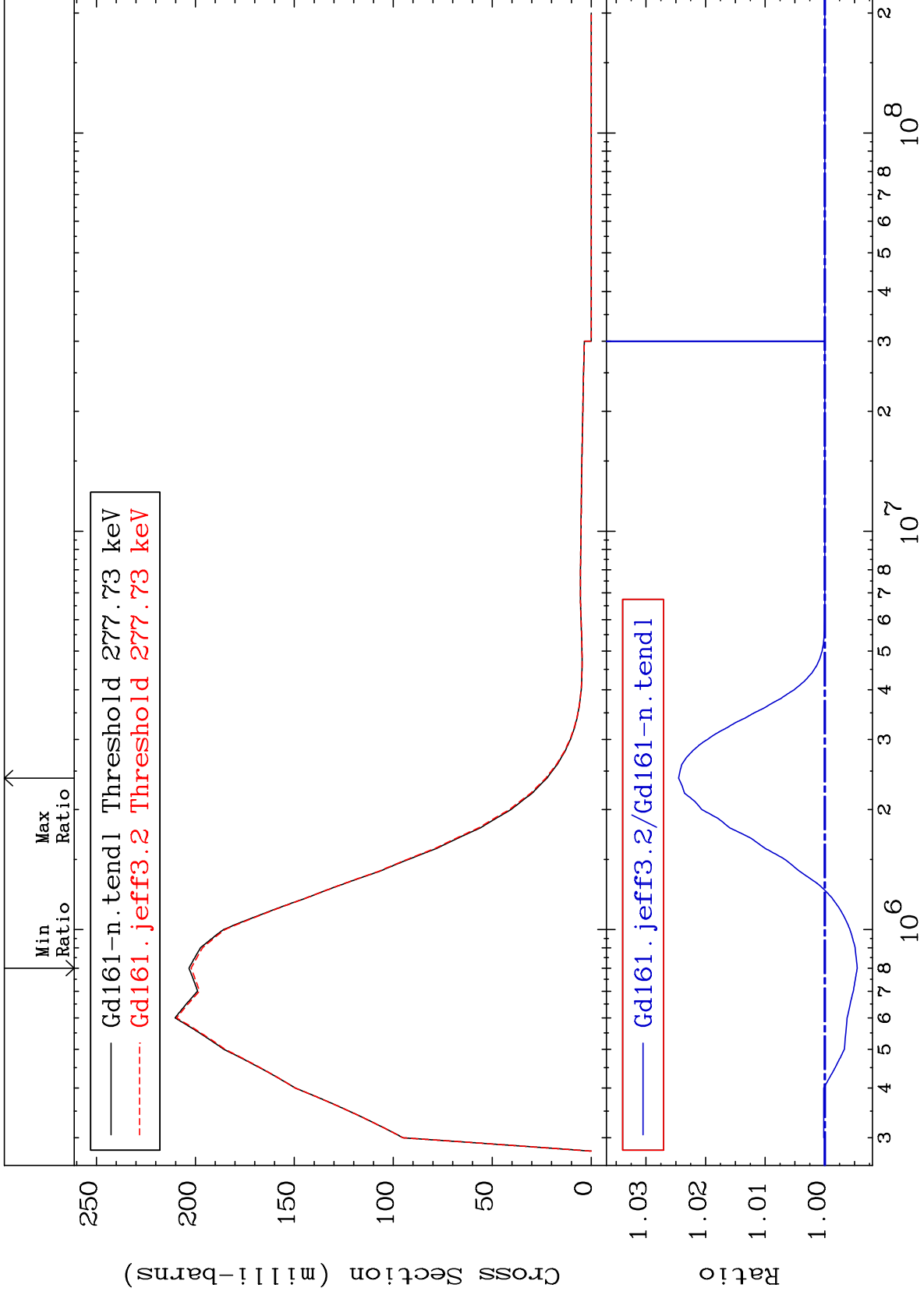
64-Gd-161  
-0.662 To 2.889 %



MAT 6452

276.0 keV (n,n') Level  
Cross Section

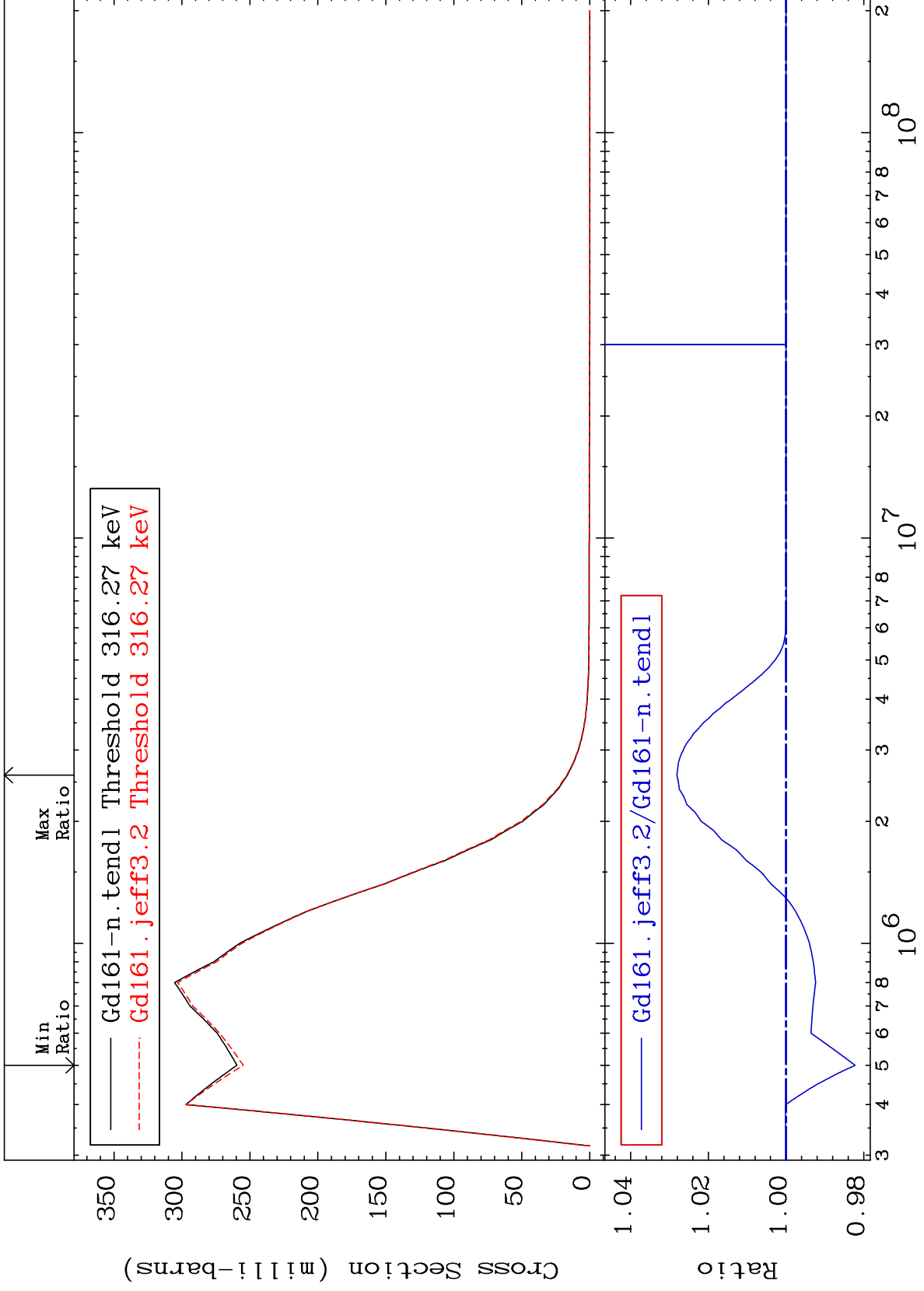
64-Gd-161  
-0.546 To 2.452 %



MAT 6452

314.3 keV (n,n') Level  
Cross Section

64-Gd-161  
-1.778 To 2.810 %



21

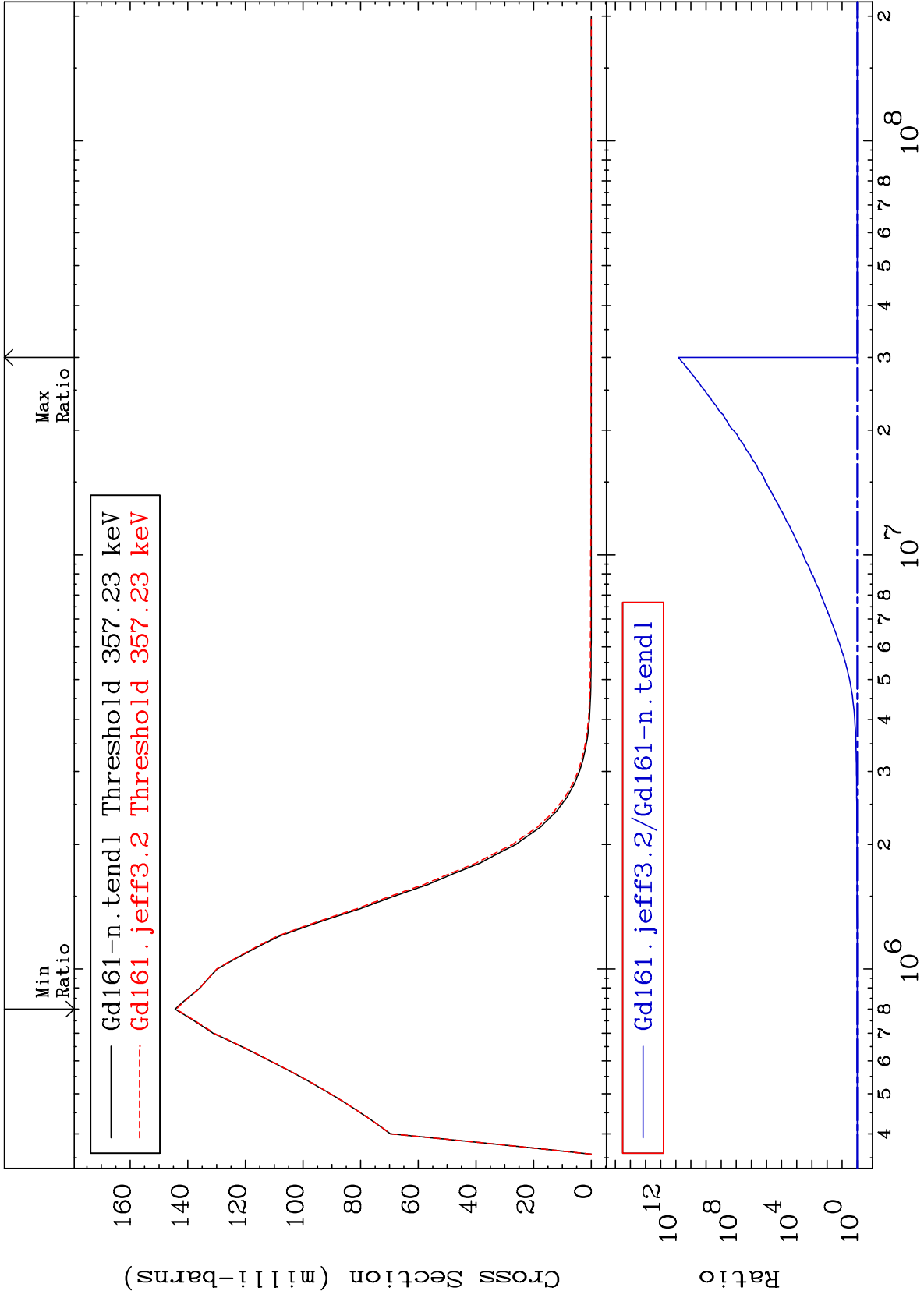
Incident Energy (eV)

64-Gd-161

MAT 6452

355.0 keV (n,n') Level  
Cross Section

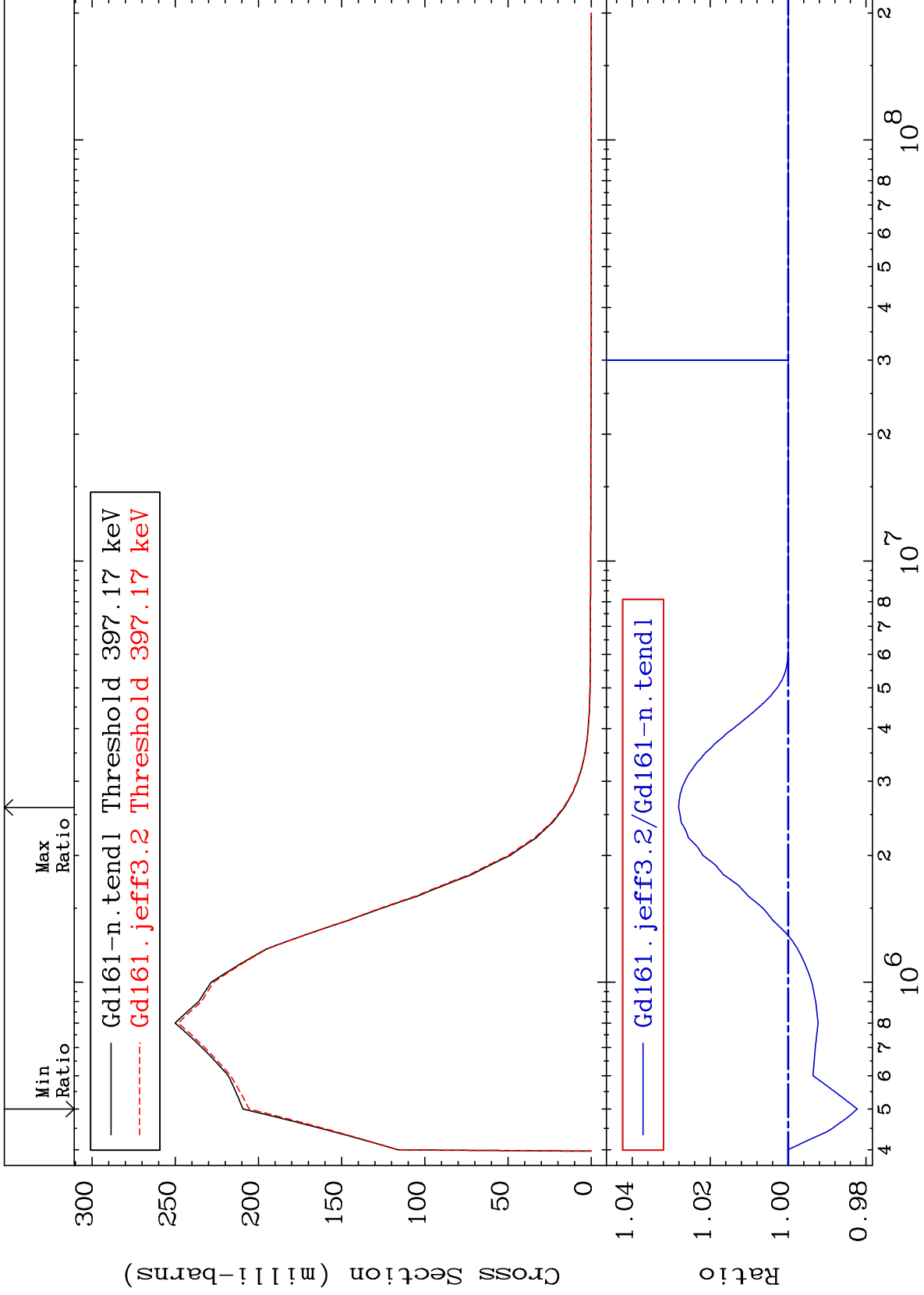
64-Gd-161  
-0.253 To 9999. %



MAT 6452

394.7 keV (n,n') Level  
Cross Section

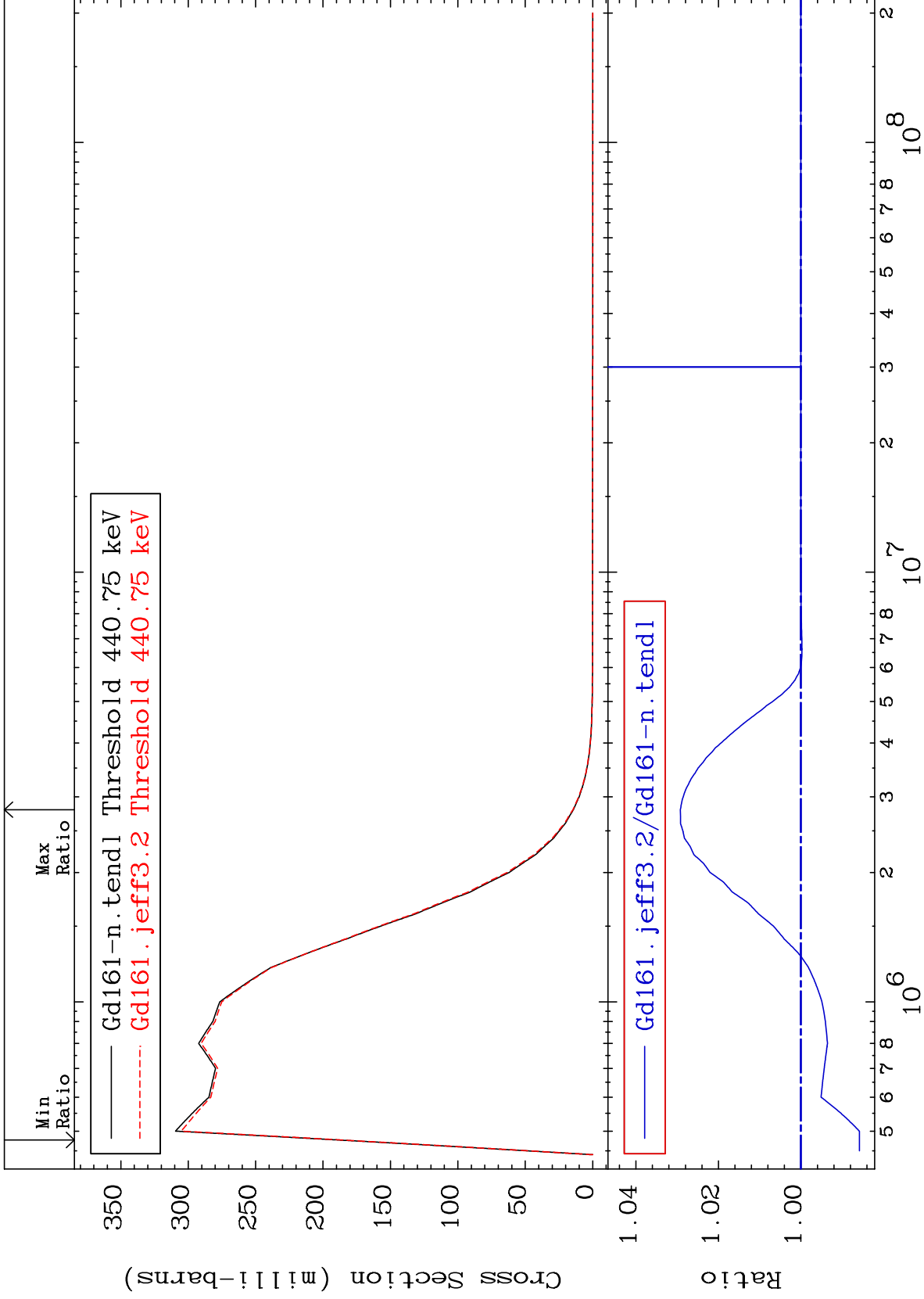
64-Gd-161  
-1.774 To 2.809 %



MAT 6452

438.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-1.418 To 2.923 %

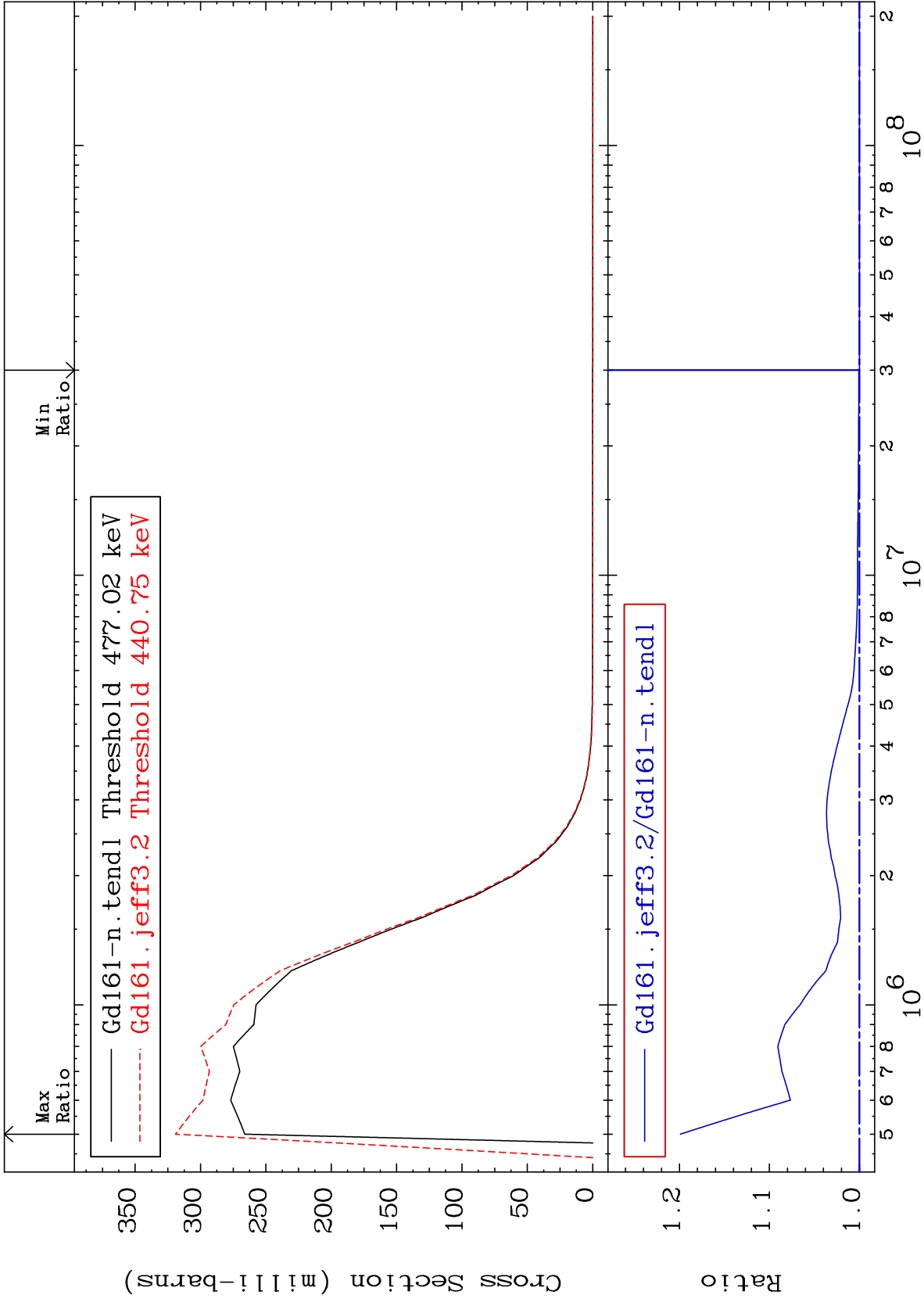




MAT 6452

474.1 keV (n,n') Level  
Cross Section

64-Gd-161  
To 19.90 %



25

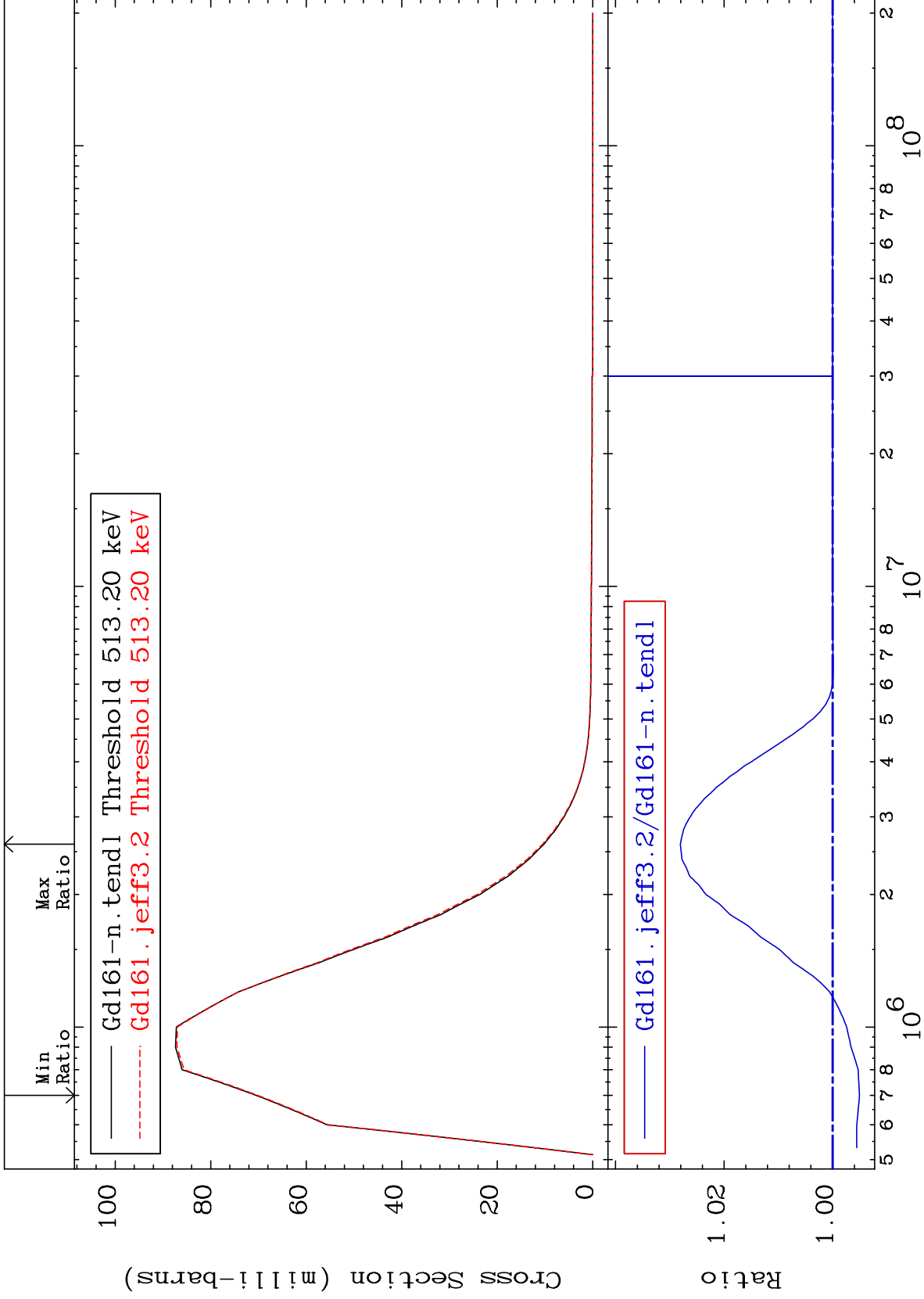
Incident Energy (eV)

64-Gd-161

MAT 6452

510.0 keV (n,n') Level  
Cross Section

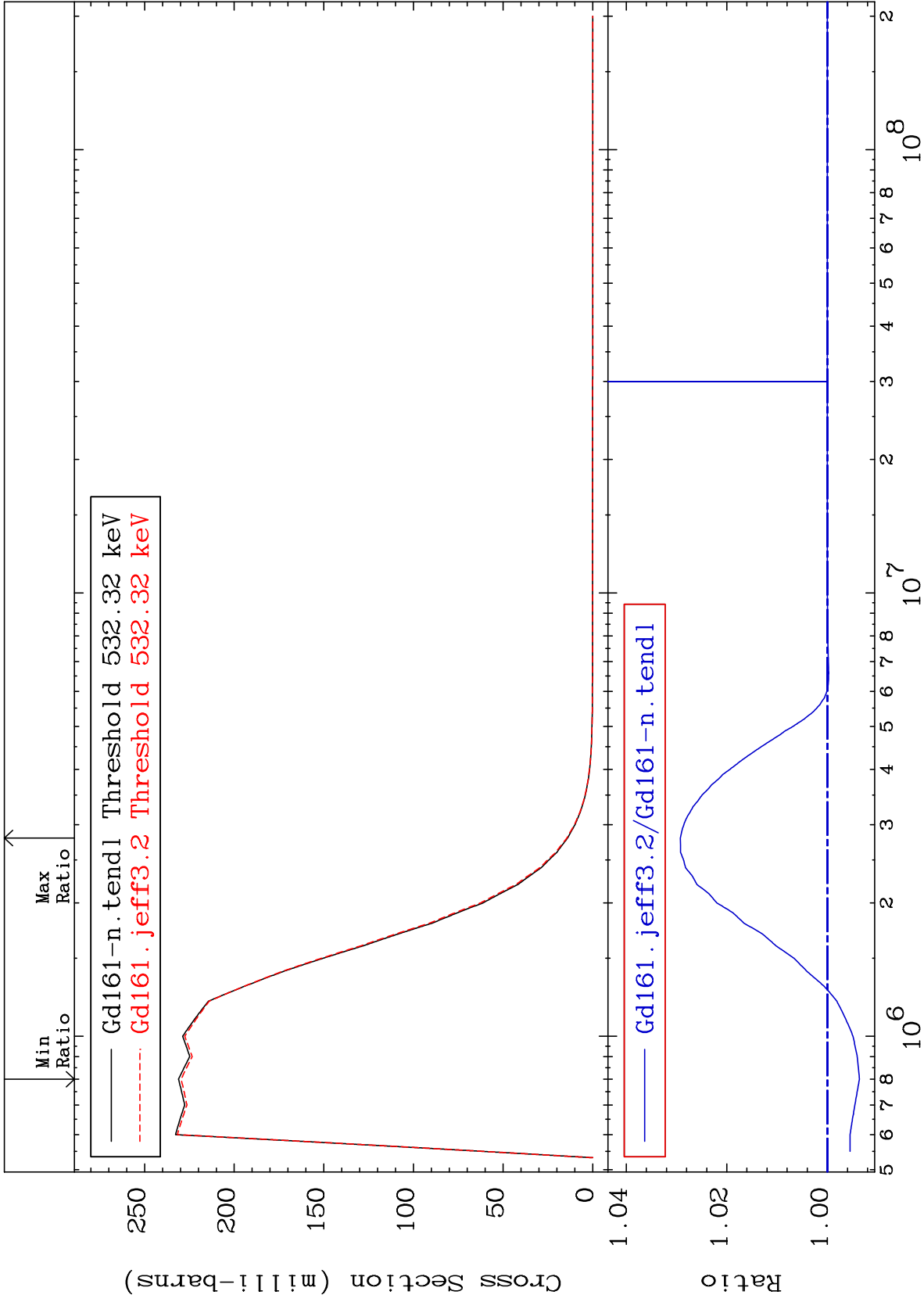
64-Gd-161  
-0.494 To 2.806 %



MAT 6452

529.0 keV (n,n') Level  
Cross Section

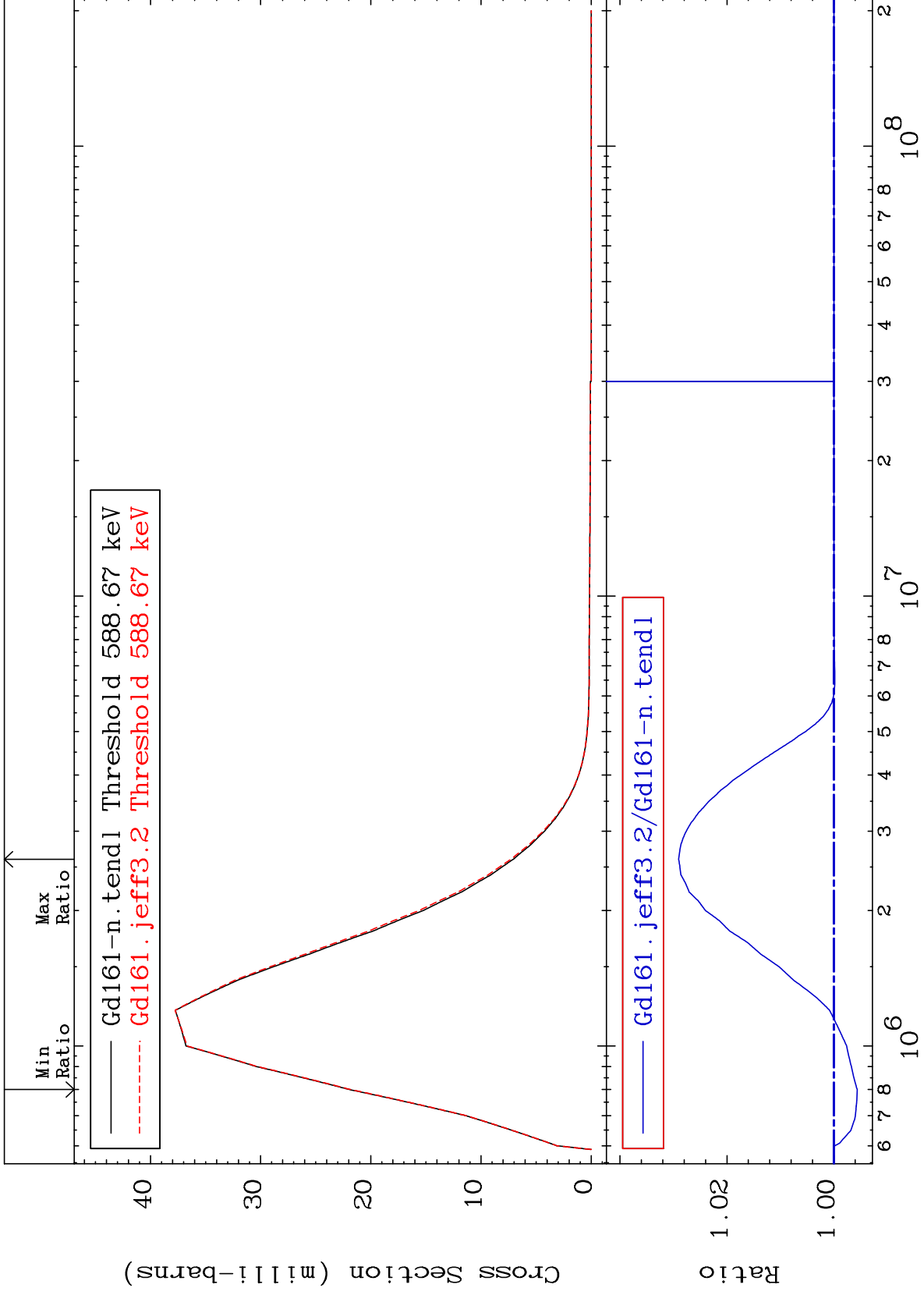
64-Gd-161  
-0.637 To 2.924 %



MAT 6452

585.0 keV (n,n') Level  
Cross Section

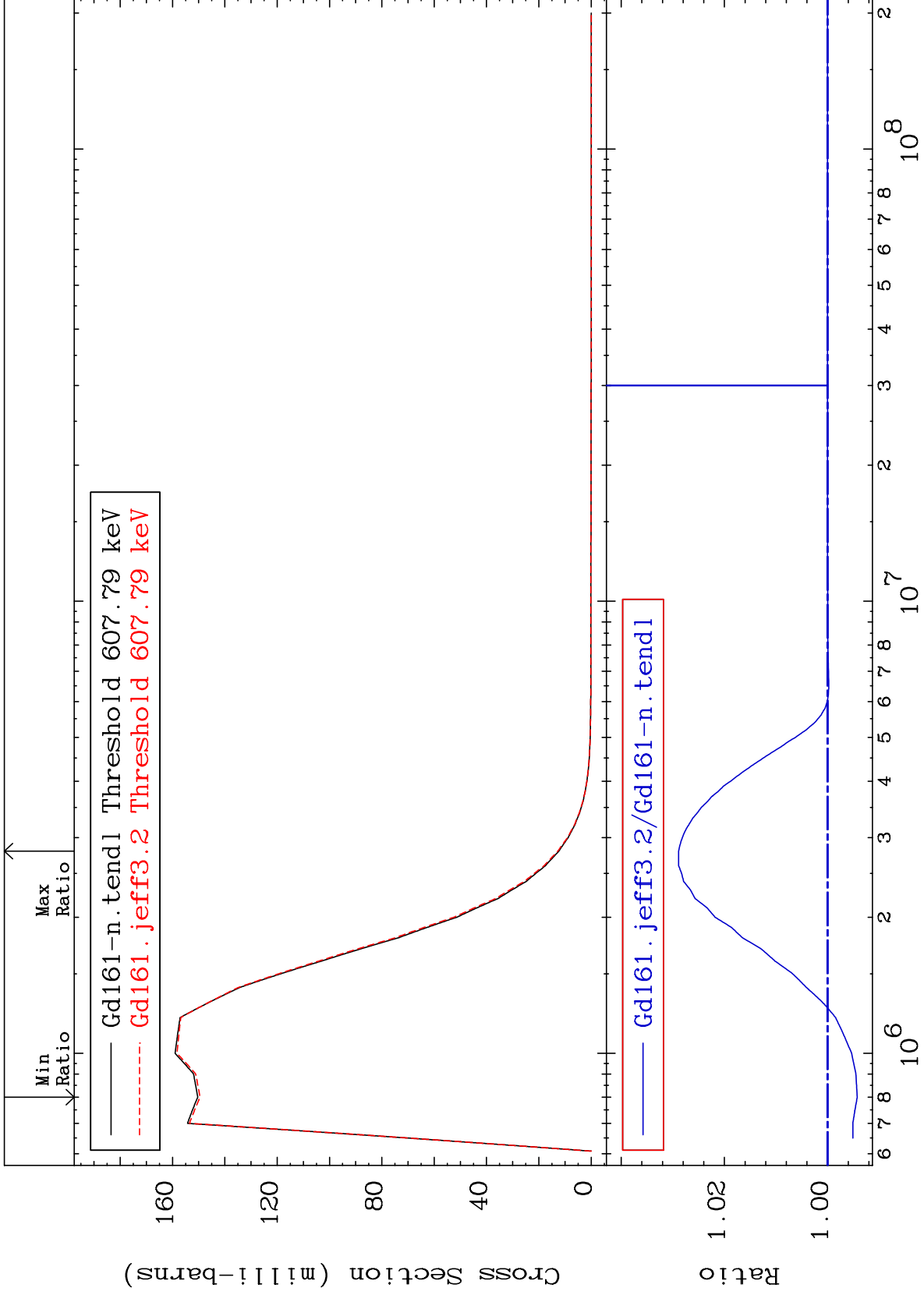
64-Gd-161  
-0.437 To 2.904 %



MAT 6452

604.0 keV (n,n') Level  
Cross Section

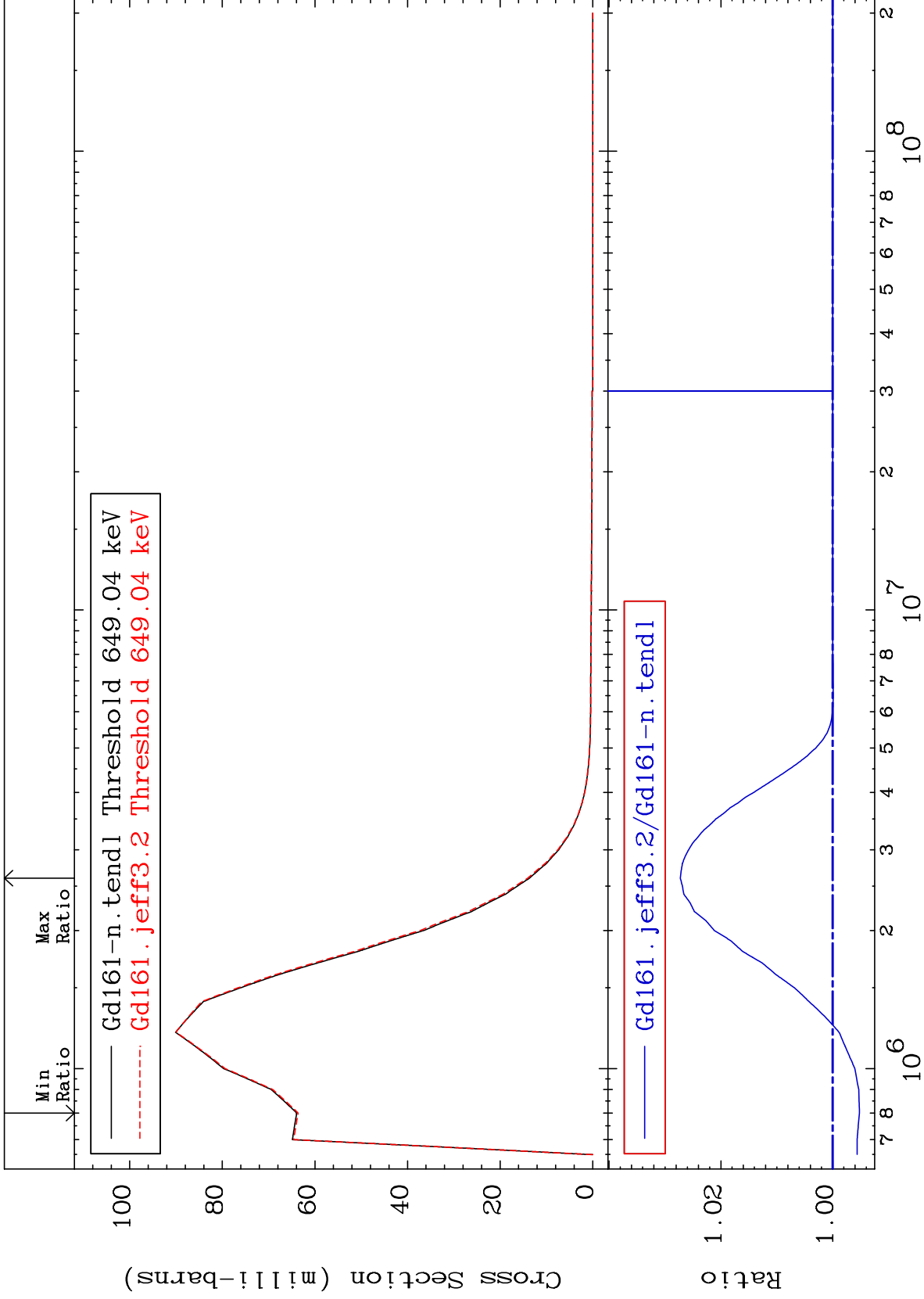
64-Gd-161  
-0.575 To 2.887 %



MAT 6452

645.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.478 To 2.725 %



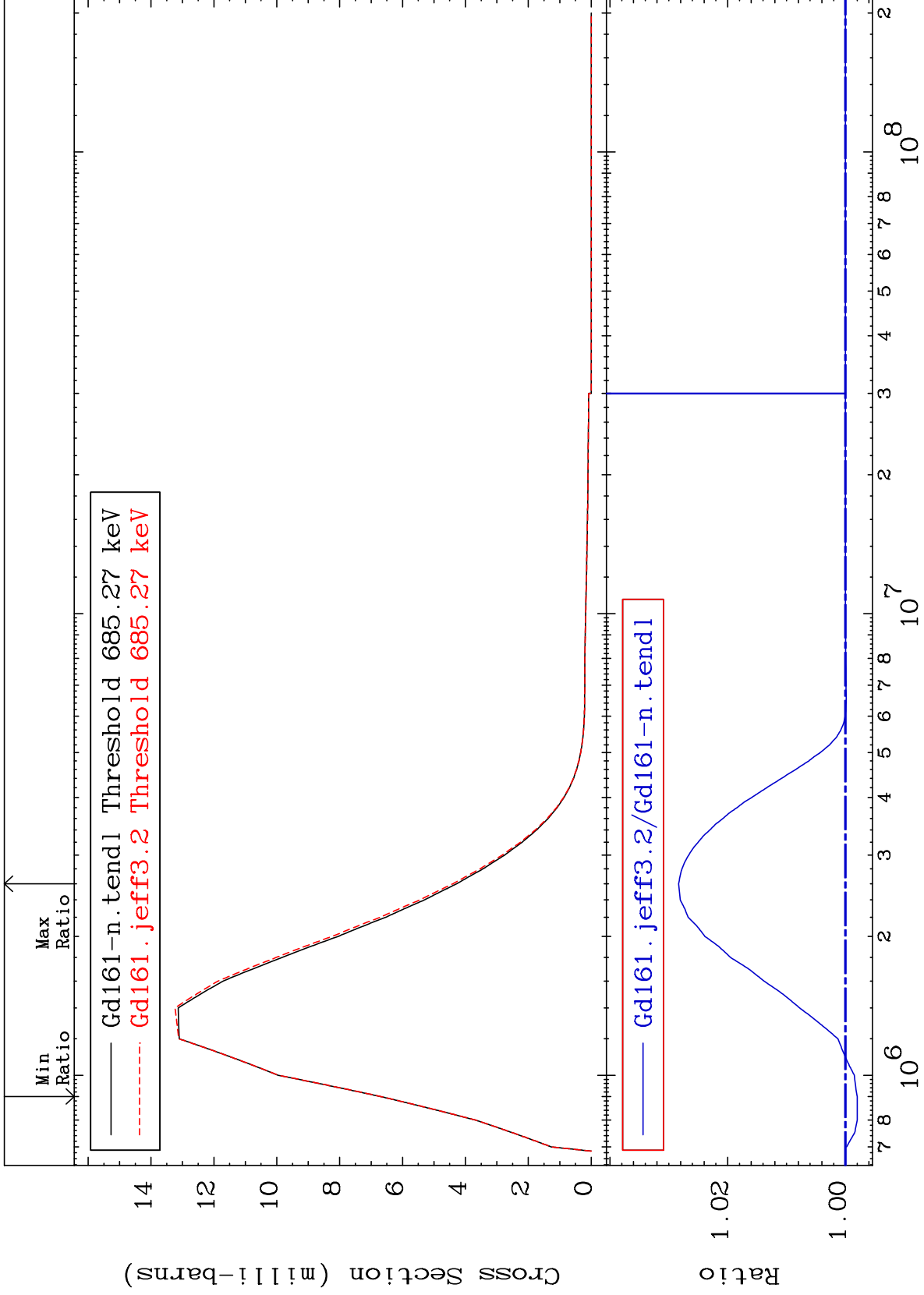
30

64-Gd-161

MAT 6452

681.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.201 To 2.833 %



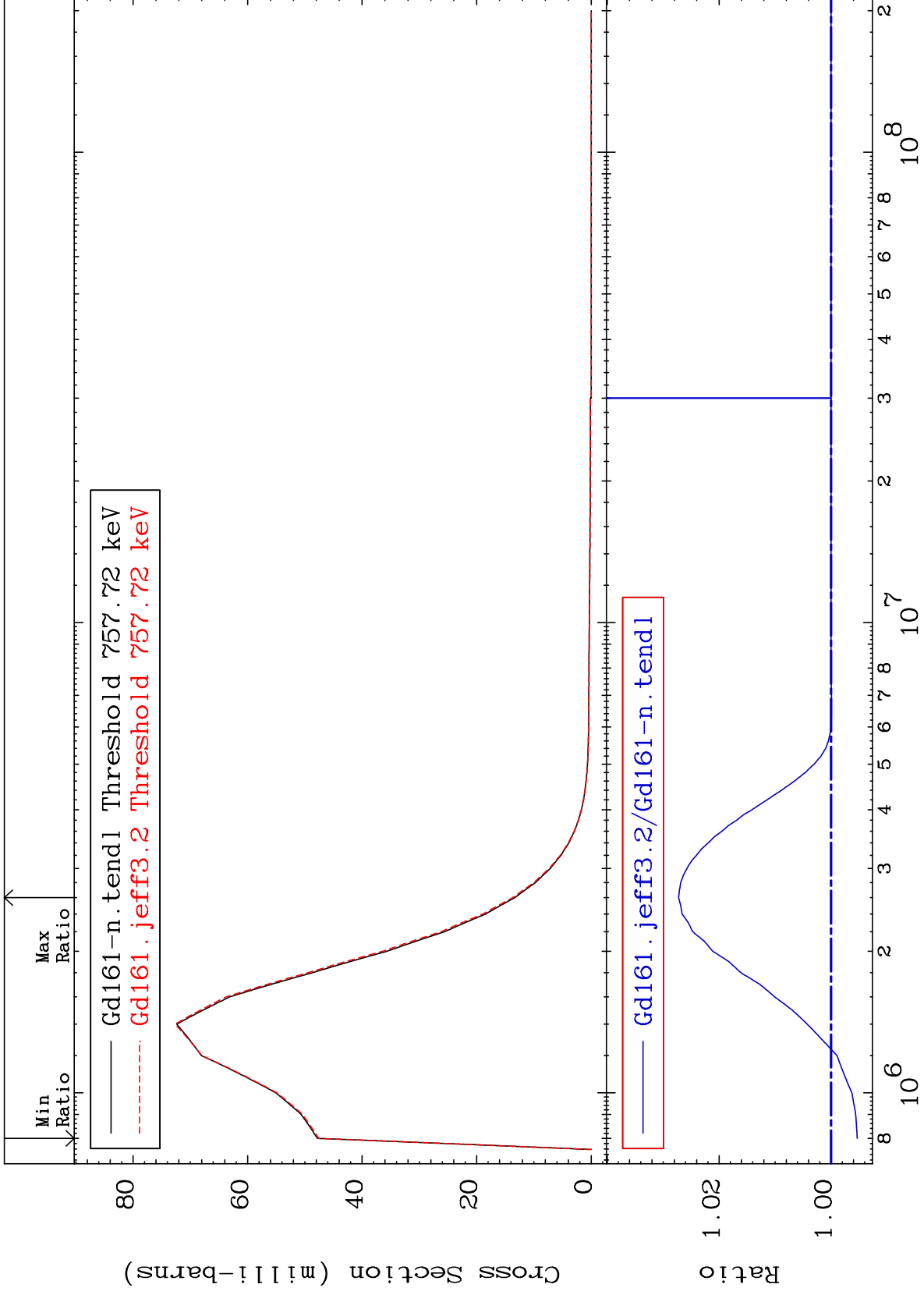
31

64-Gd-161

MAT 6452

753.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.468 To 2.723 %



32

Incident Energy (eV)

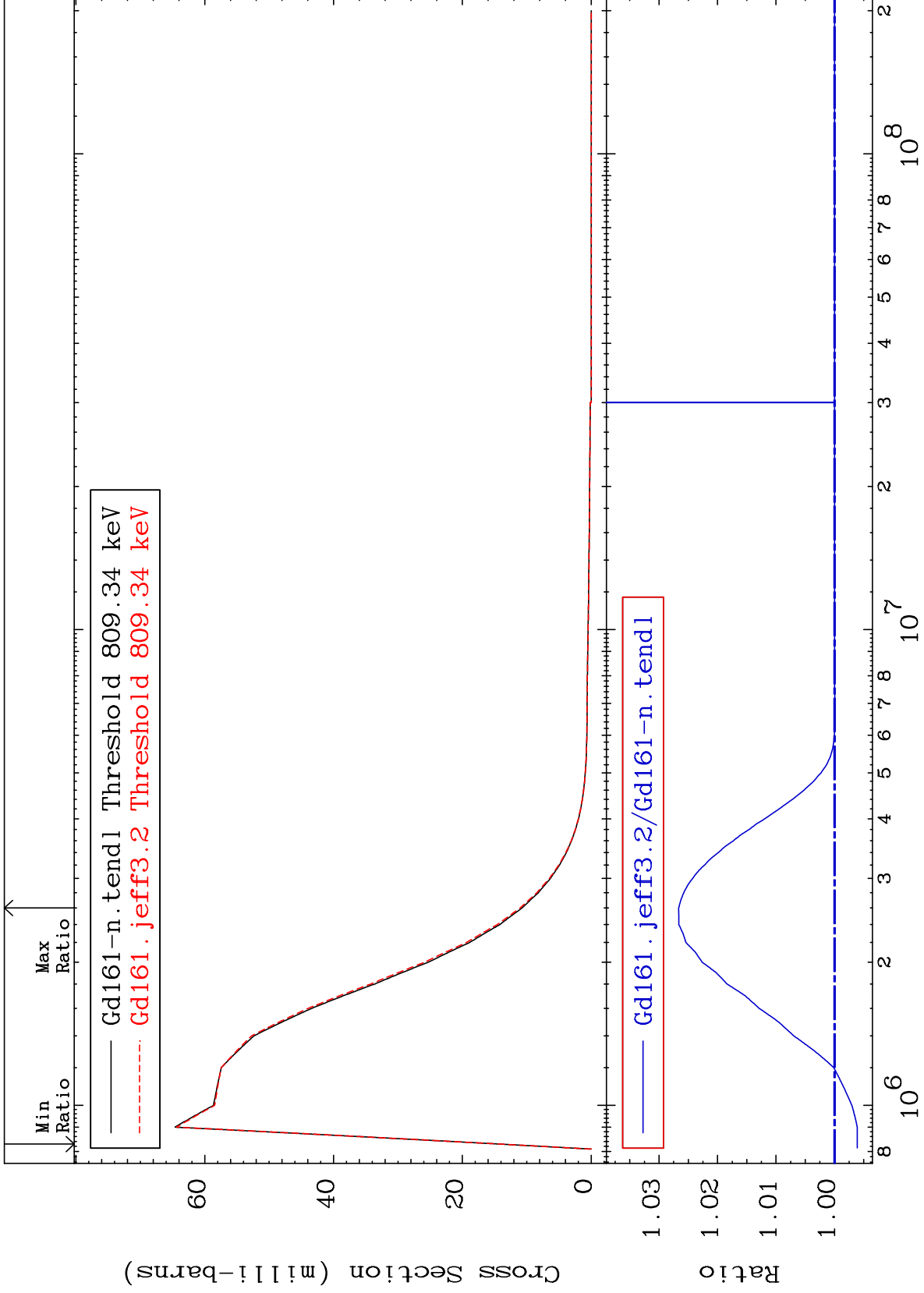
64-Gd-161



MAT 6452

804.3 keV (n,n') Level  
Cross Section

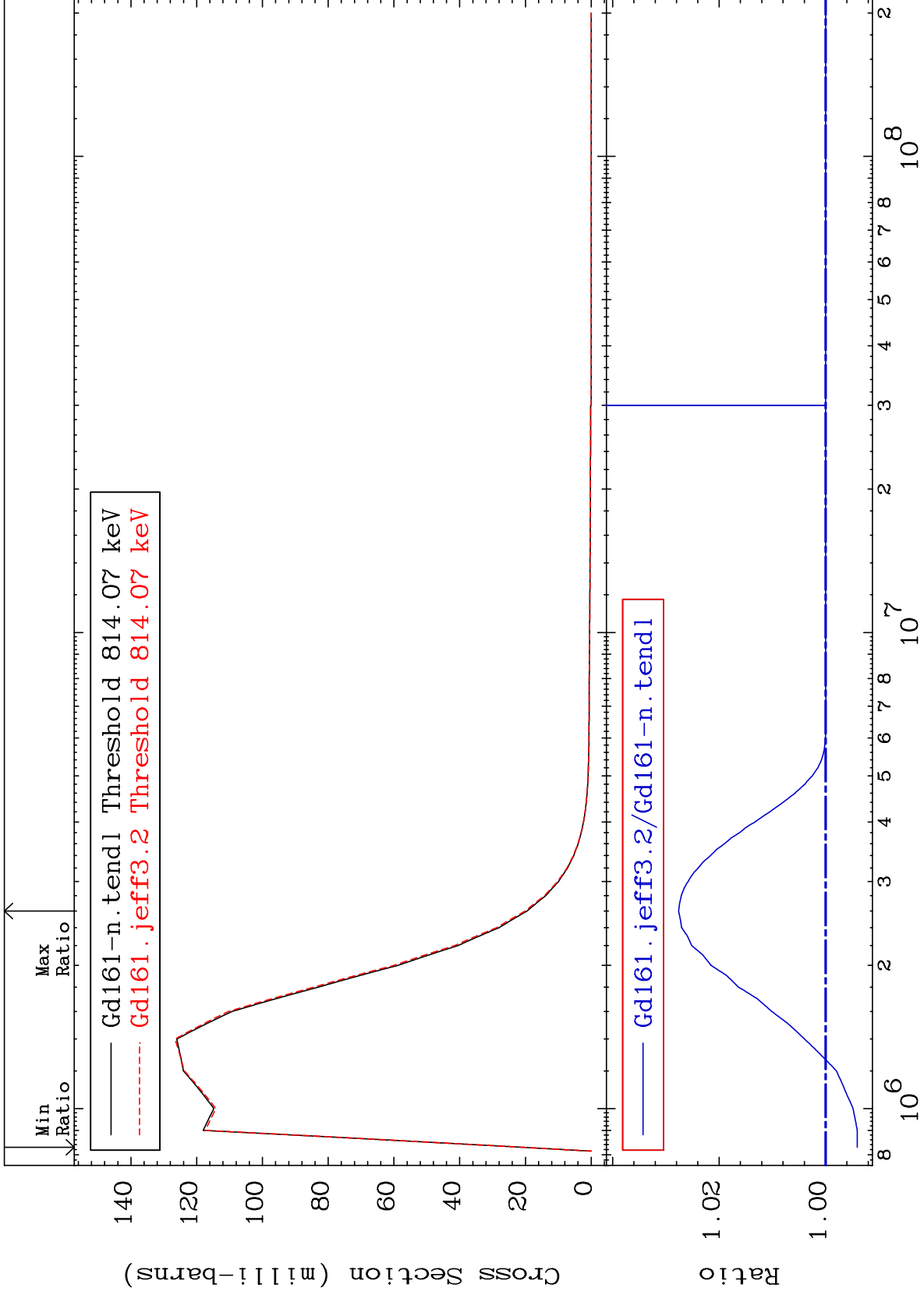
64-Gd-161  
-0.388 To 2.665 %



MAT 6452

809.0 keV (n,n') Level  
Cross Section

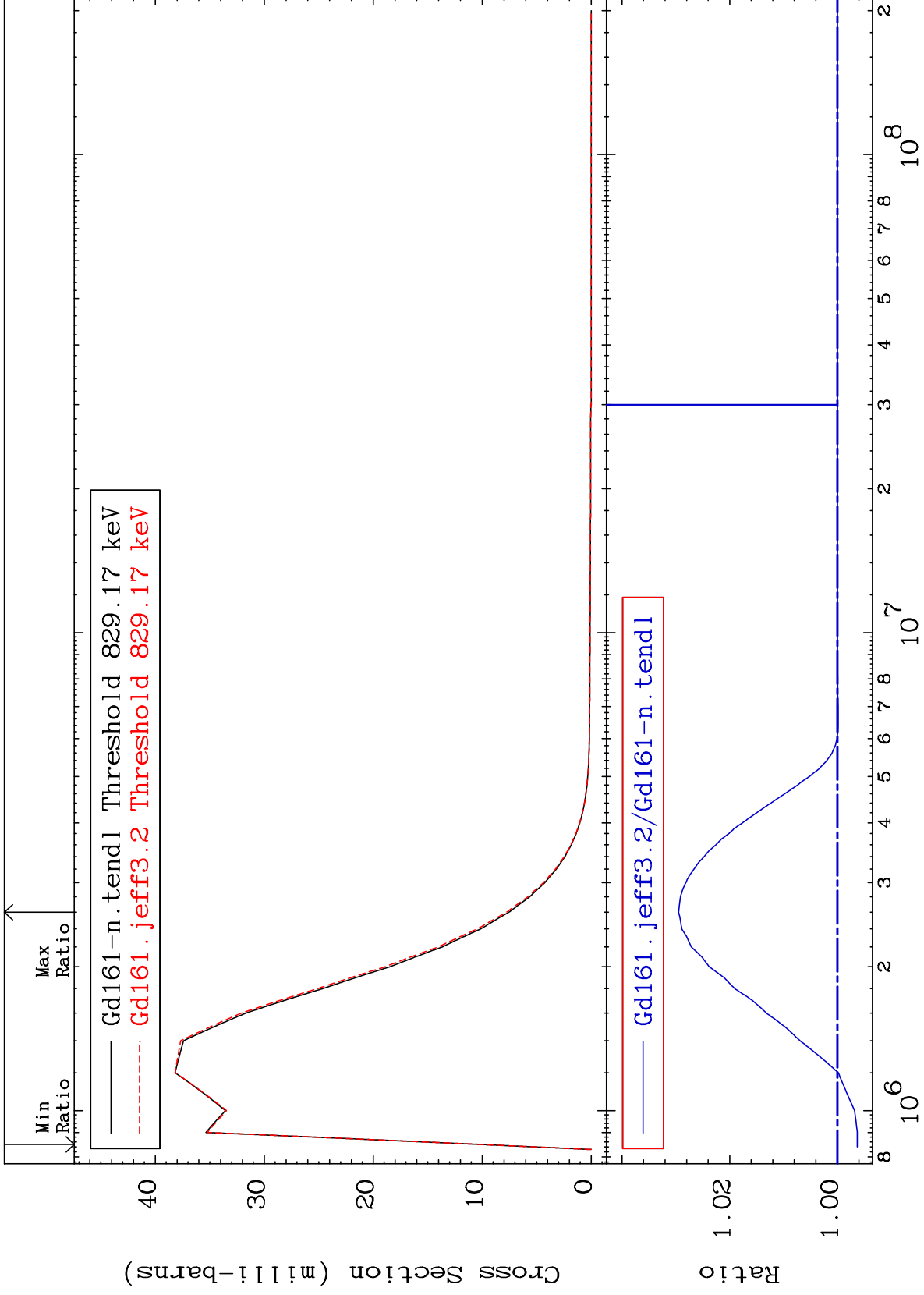
64-Gd-161  
-0.594 To 2.760 %



MAT 6452

824.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.369 To 2.948 %



35

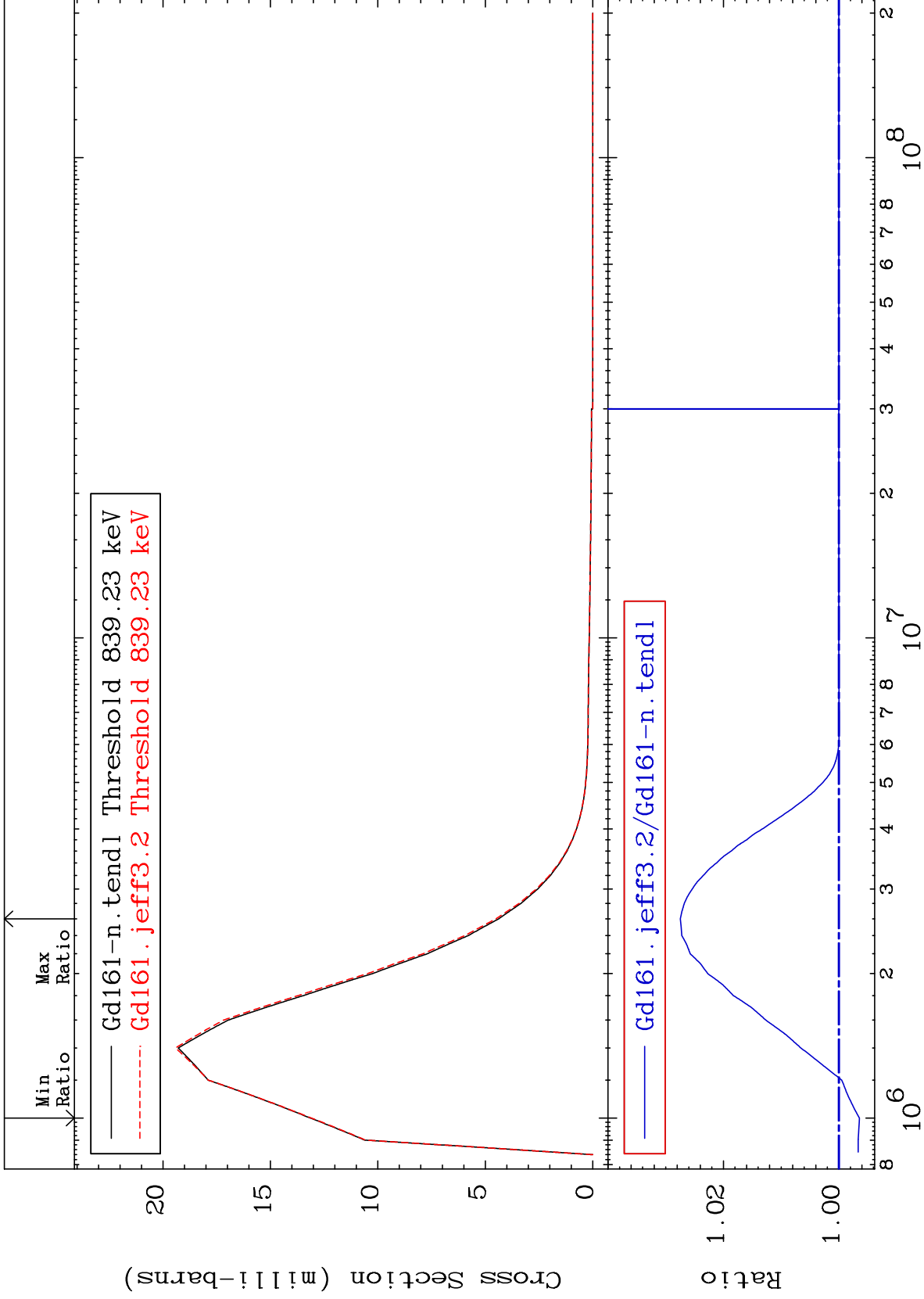
64-Gd-161

64-Gd-161

MAT 6452

834.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.356 To 2.746 %



36

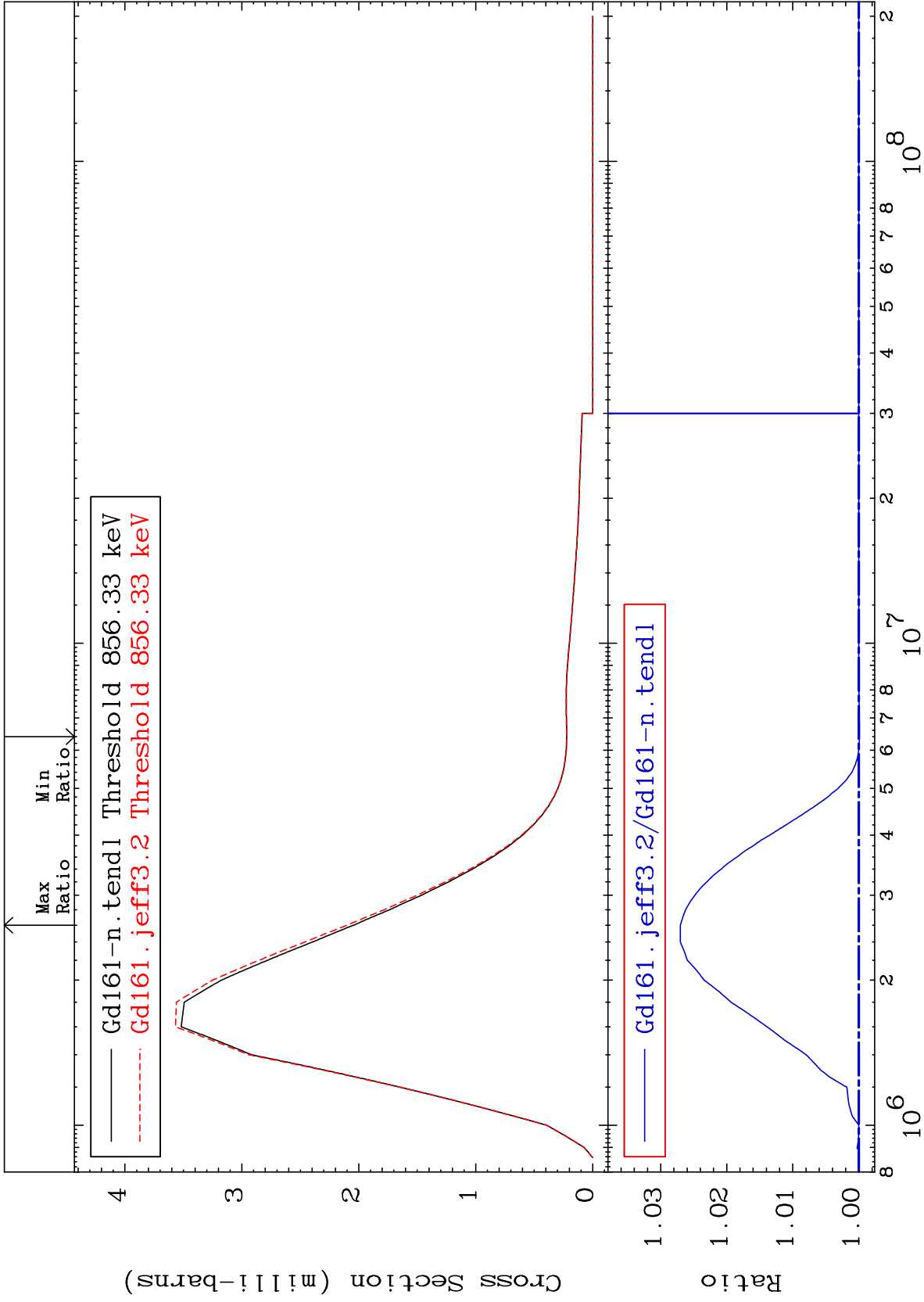
Incident Energy (eV)

64-Gd-161

MAT 6452

851.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.009 To 2.703 %



37

Incident Energy (eV)

64-Gd-161

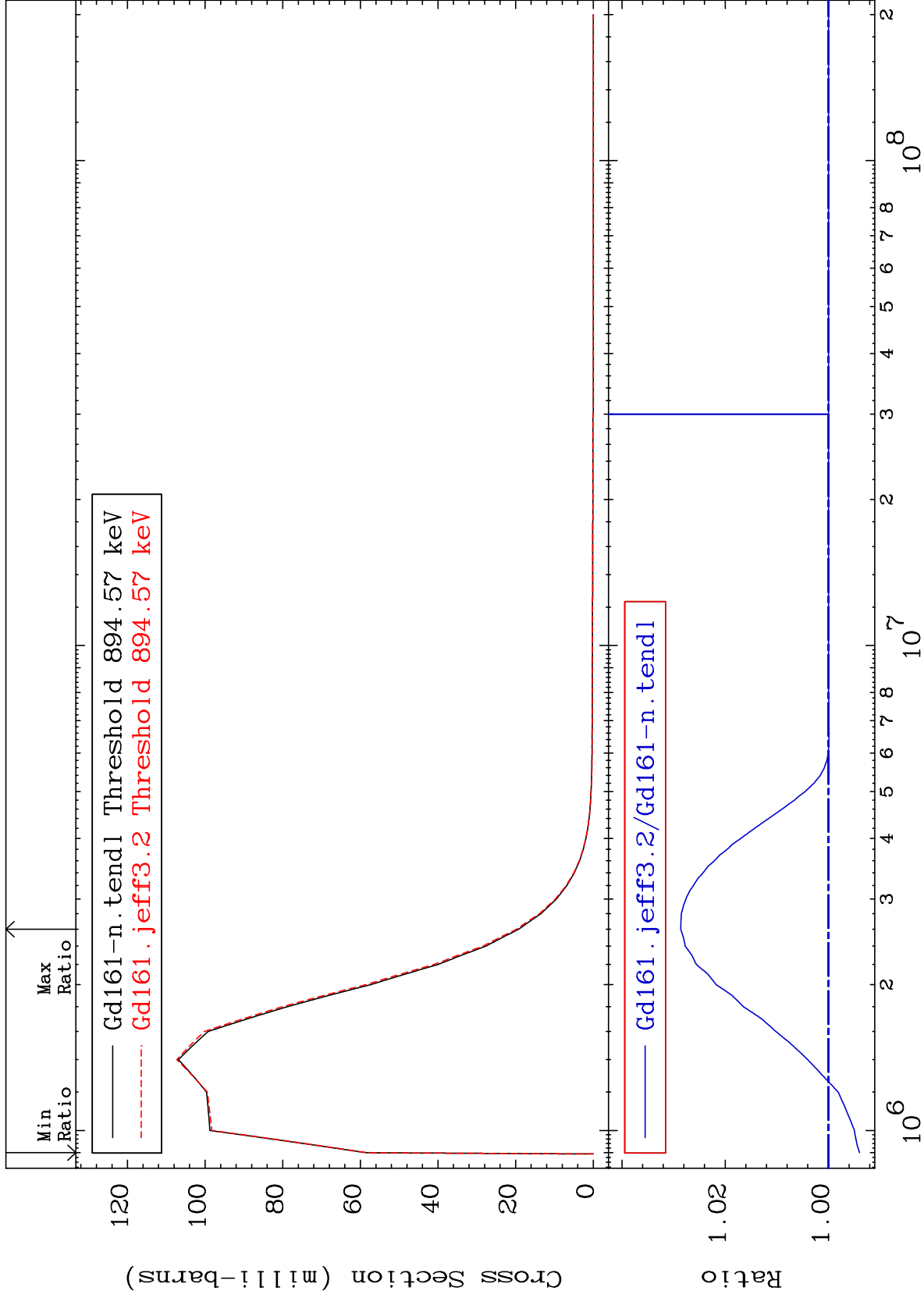
MAT 6452

889.0 keV (n,n') Level

64-Gd-161

-0.602 To 2.861 %

Cross Section



38

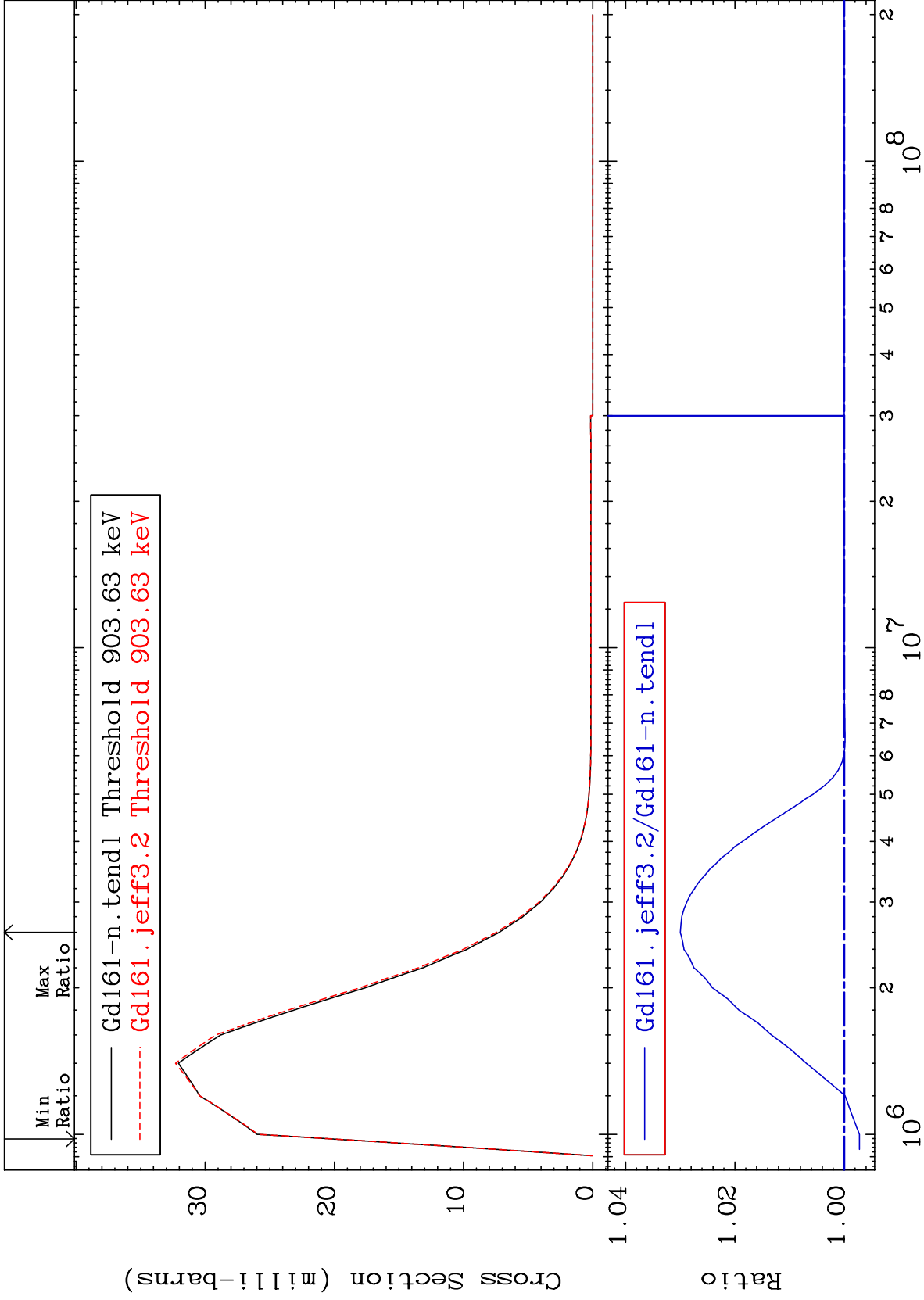
Incident Energy (eV)

64-Gd-161

MAT 6452

898.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.279 To 2.998 %



39

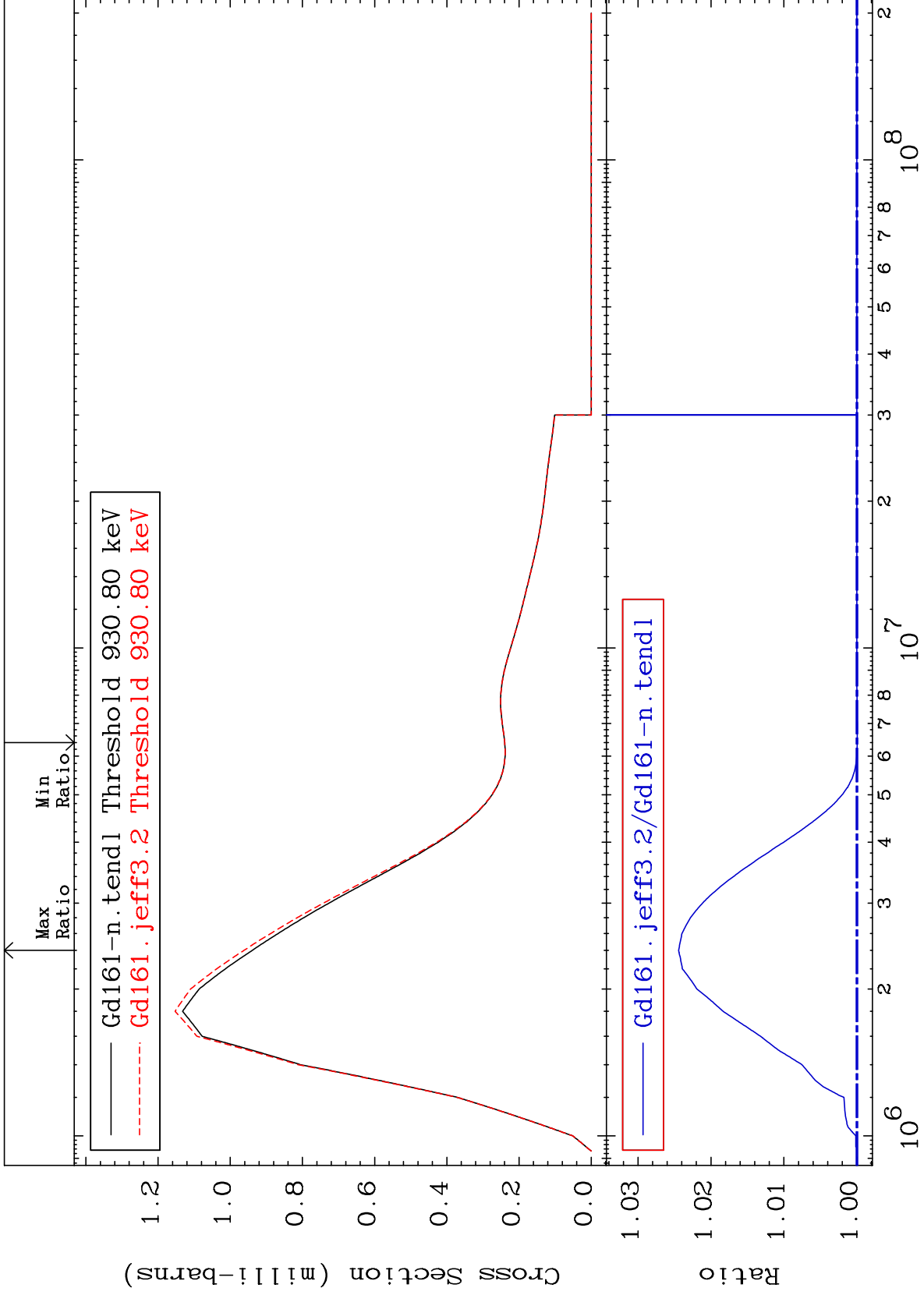
Incident Energy (eV)

64-Gd-161

MAT 6452

925.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.005 To 2.443 %



40

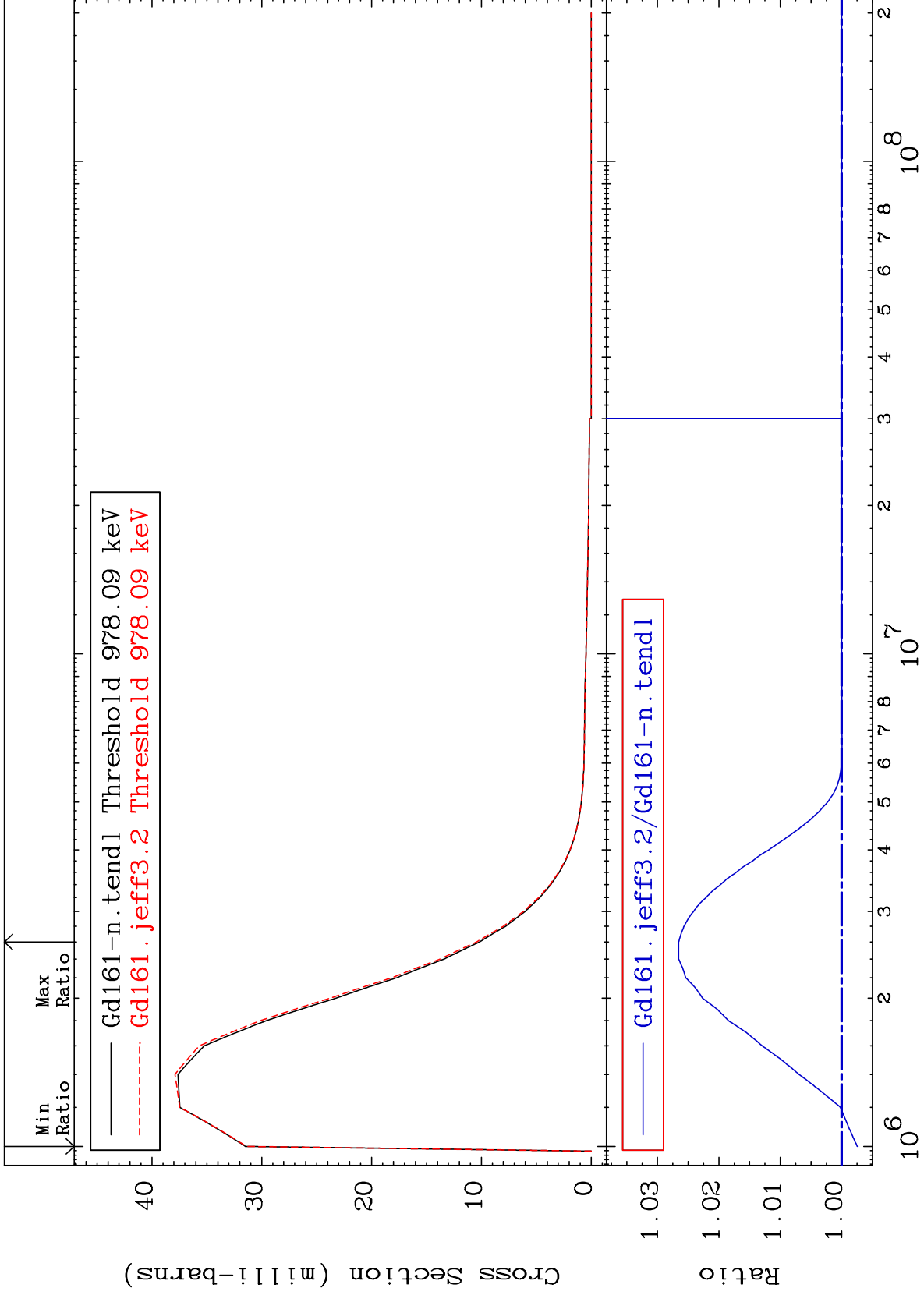
64-Gd-161



MAT 6452

972.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.253 To 2.655 %



41

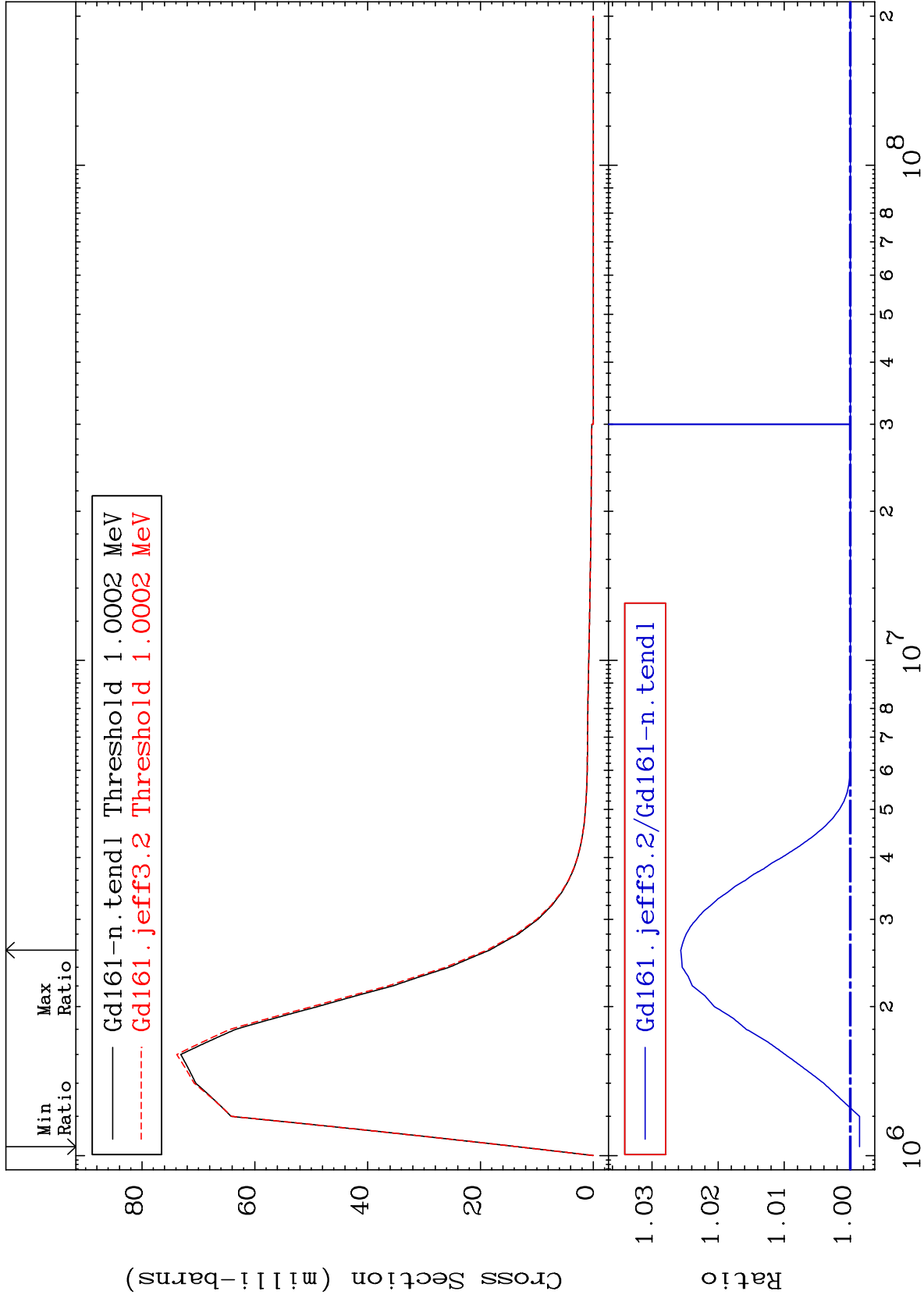
Incident Energy (eV)

64-Gd-161

MAT 6452

994.0 keV (n,n') Level  
Cross Section

64-Gd-161  
-0.140 To 2.565 %



42

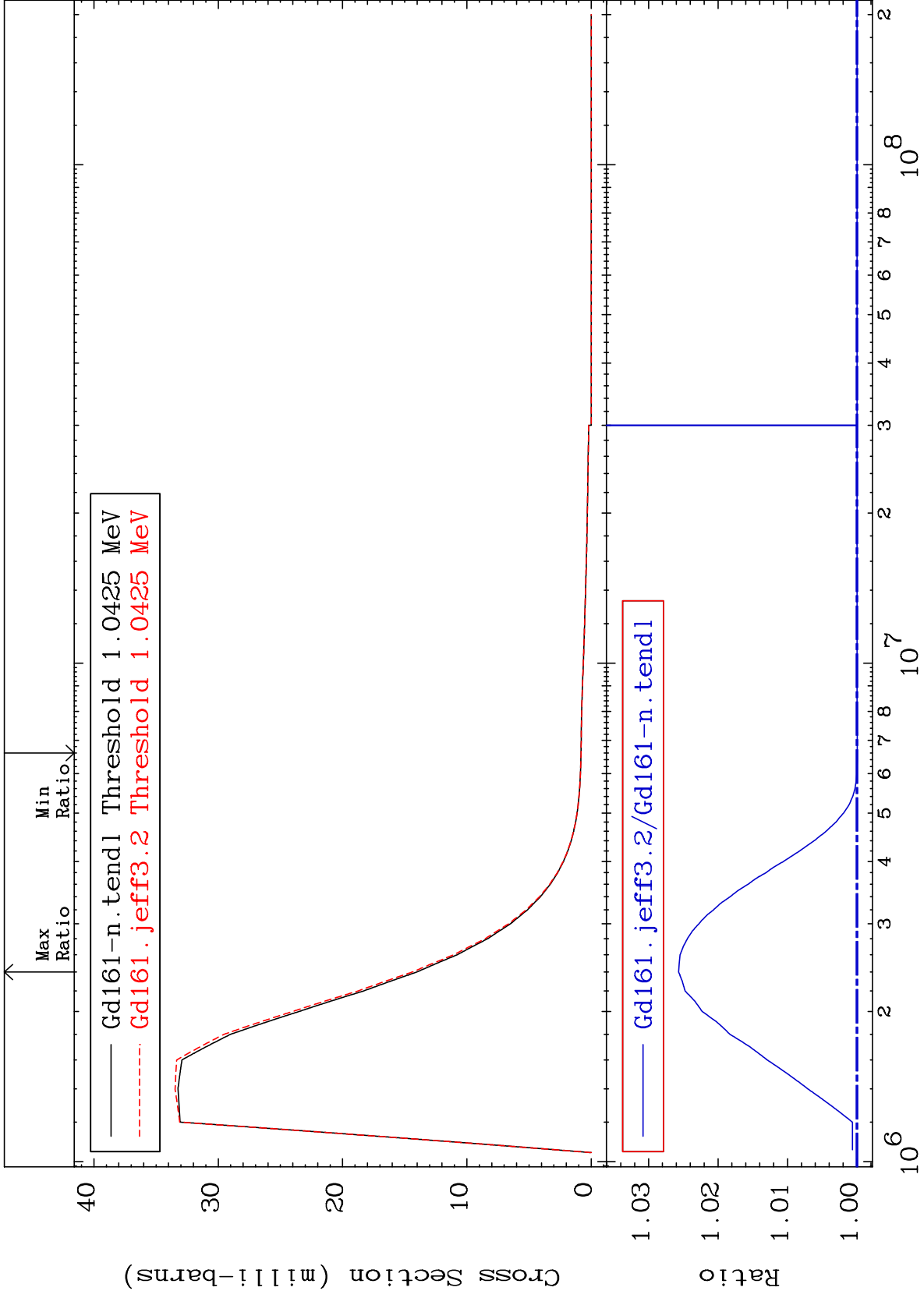
Incident Energy (eV)

64-Gd-161

MAT 6452

1.036 MeV (n,n') Level  
Cross Section

64-Gd-161  
-0.004 To 2.567 %



43

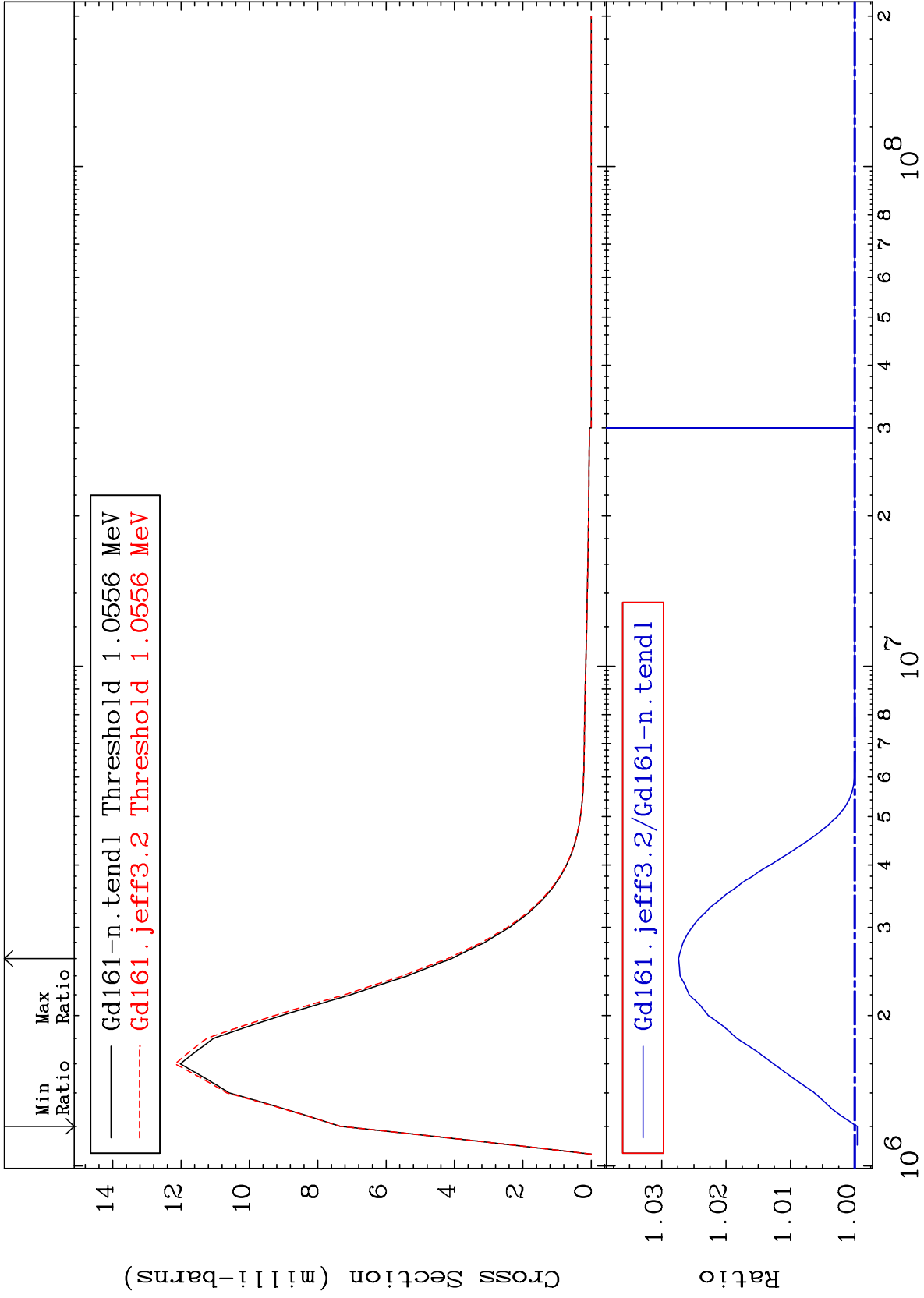
Incident Energy (eV)

64-Gd-161

MAT 6452

1.049 MeV (n,n') Level  
Cross Section

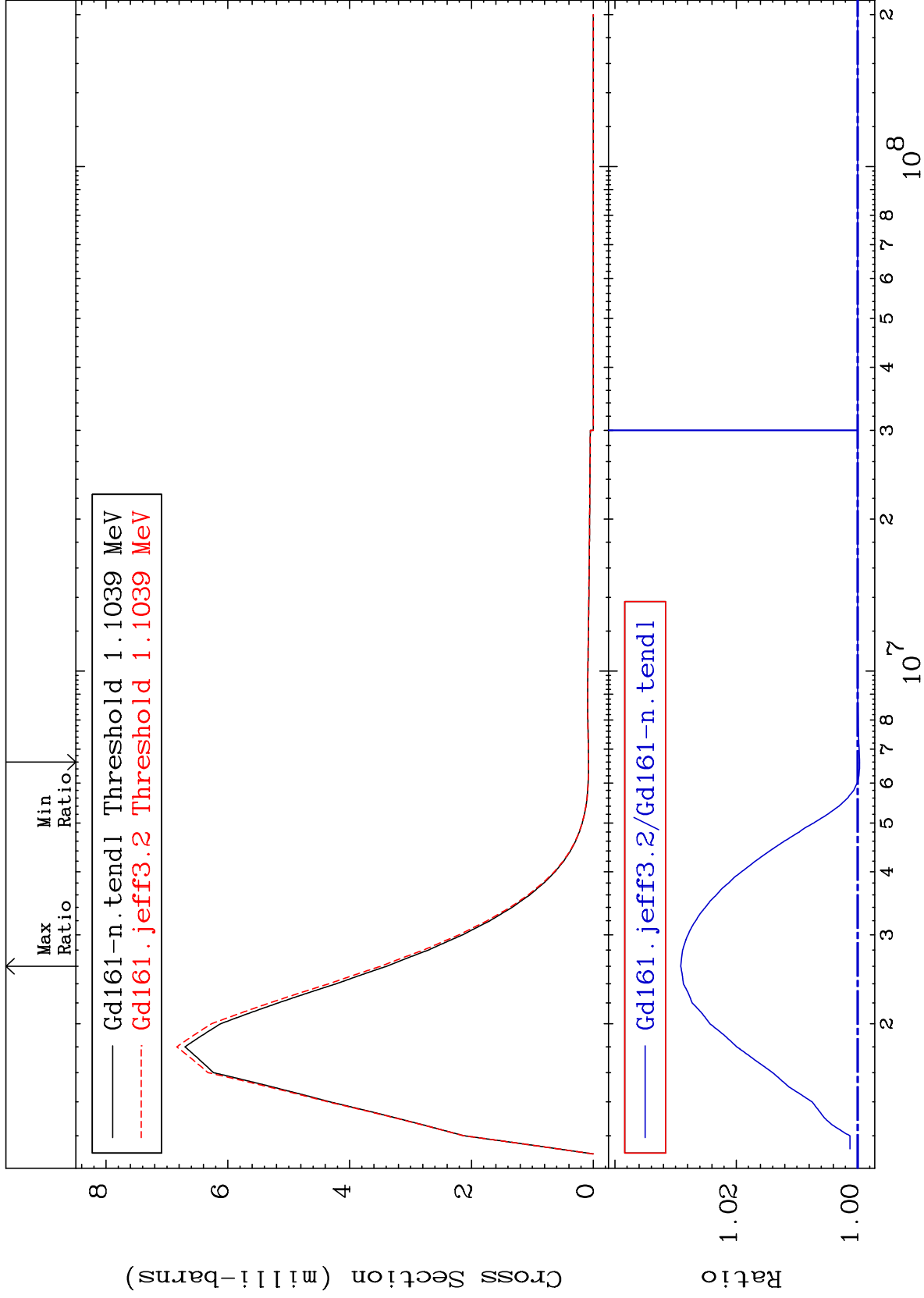
64-Gd-161  
-0.039 To 2.737 %



MAT 6452

1.097 MeV (n,n') Level  
Cross Section

64-Gd-161  
-0.032 To 2.914 %

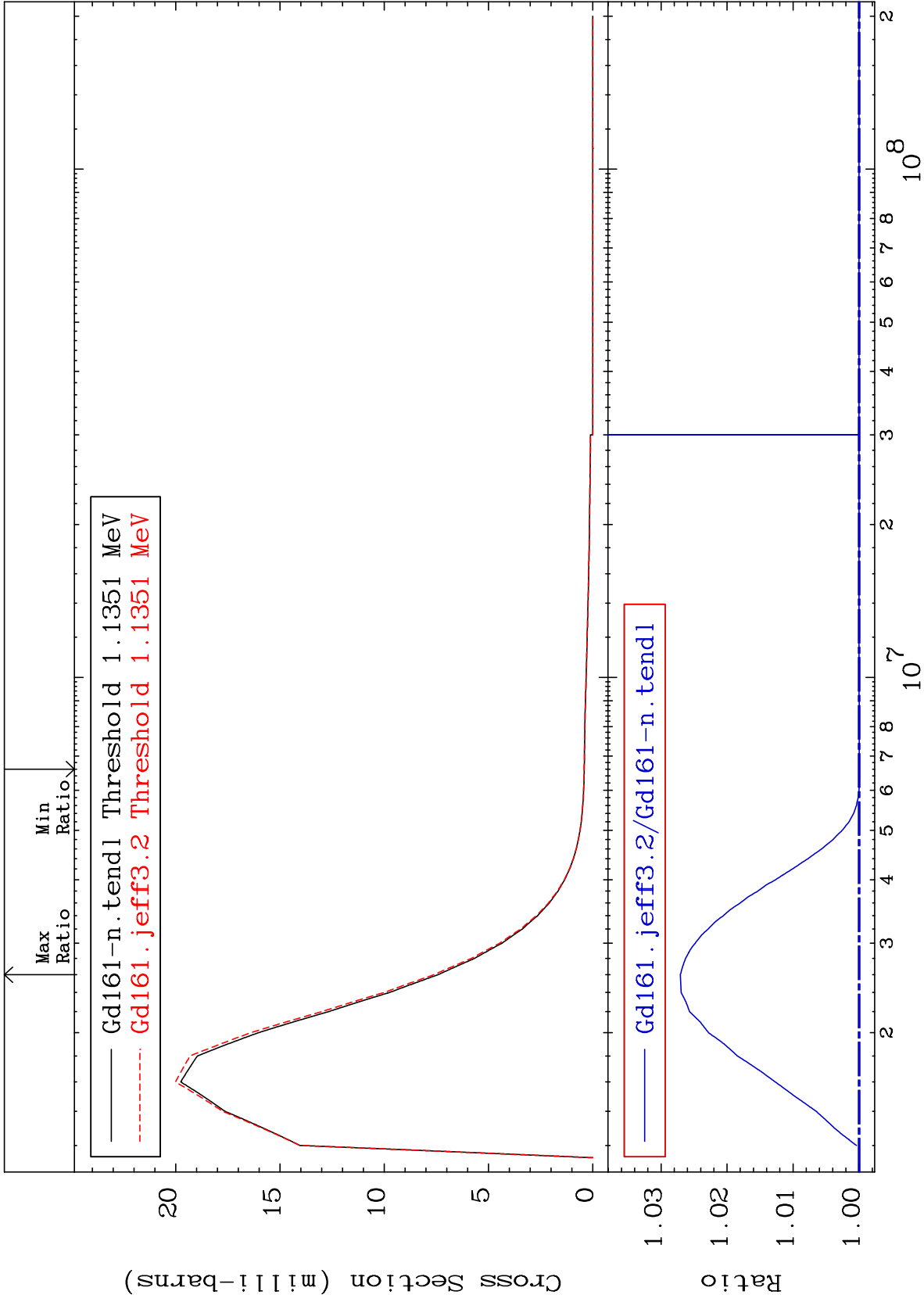


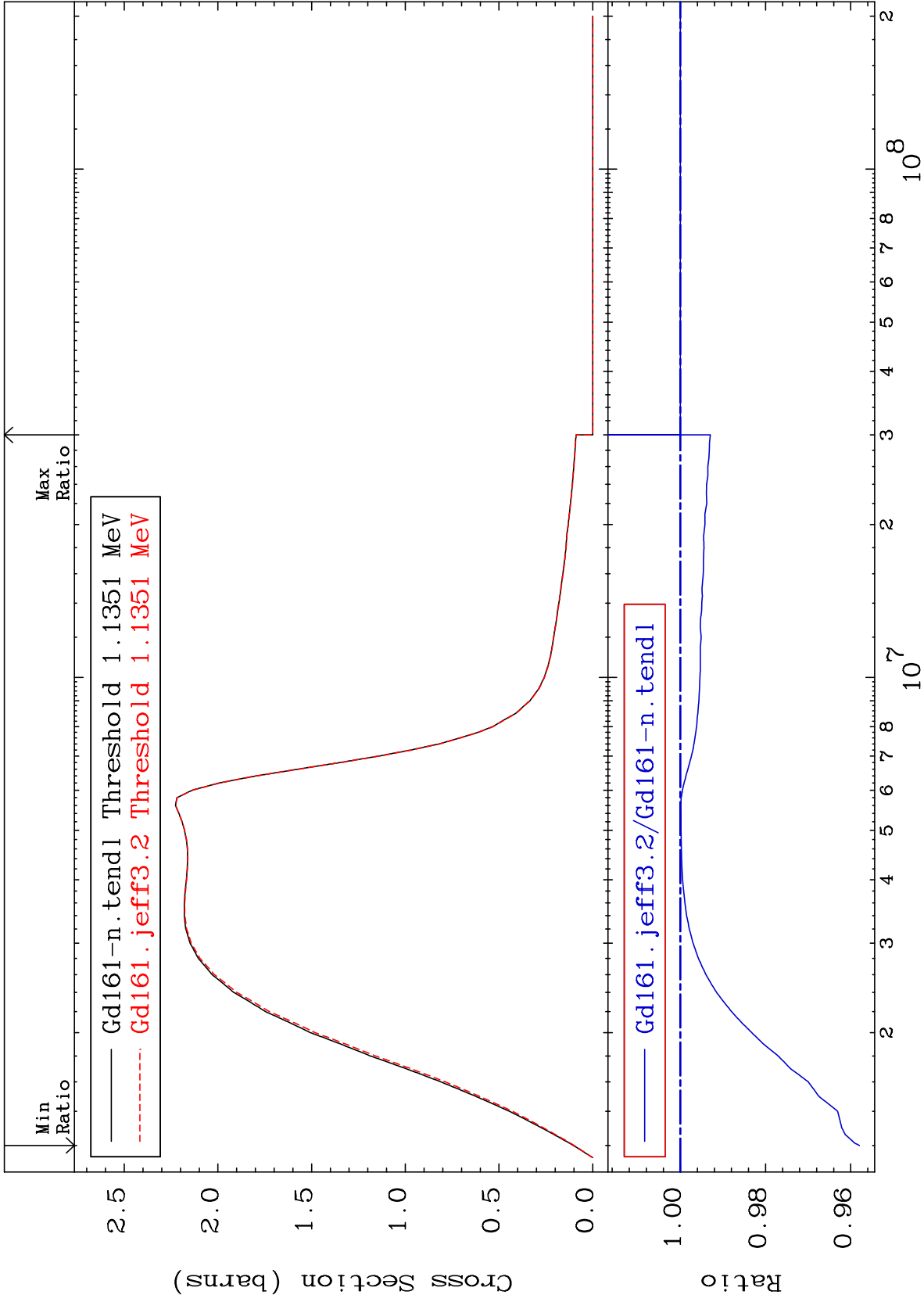


MAT 6452

1.128 MeV (n,n') Level  
Cross Section

64-Gd-161  
-0.005 To 2.707 %



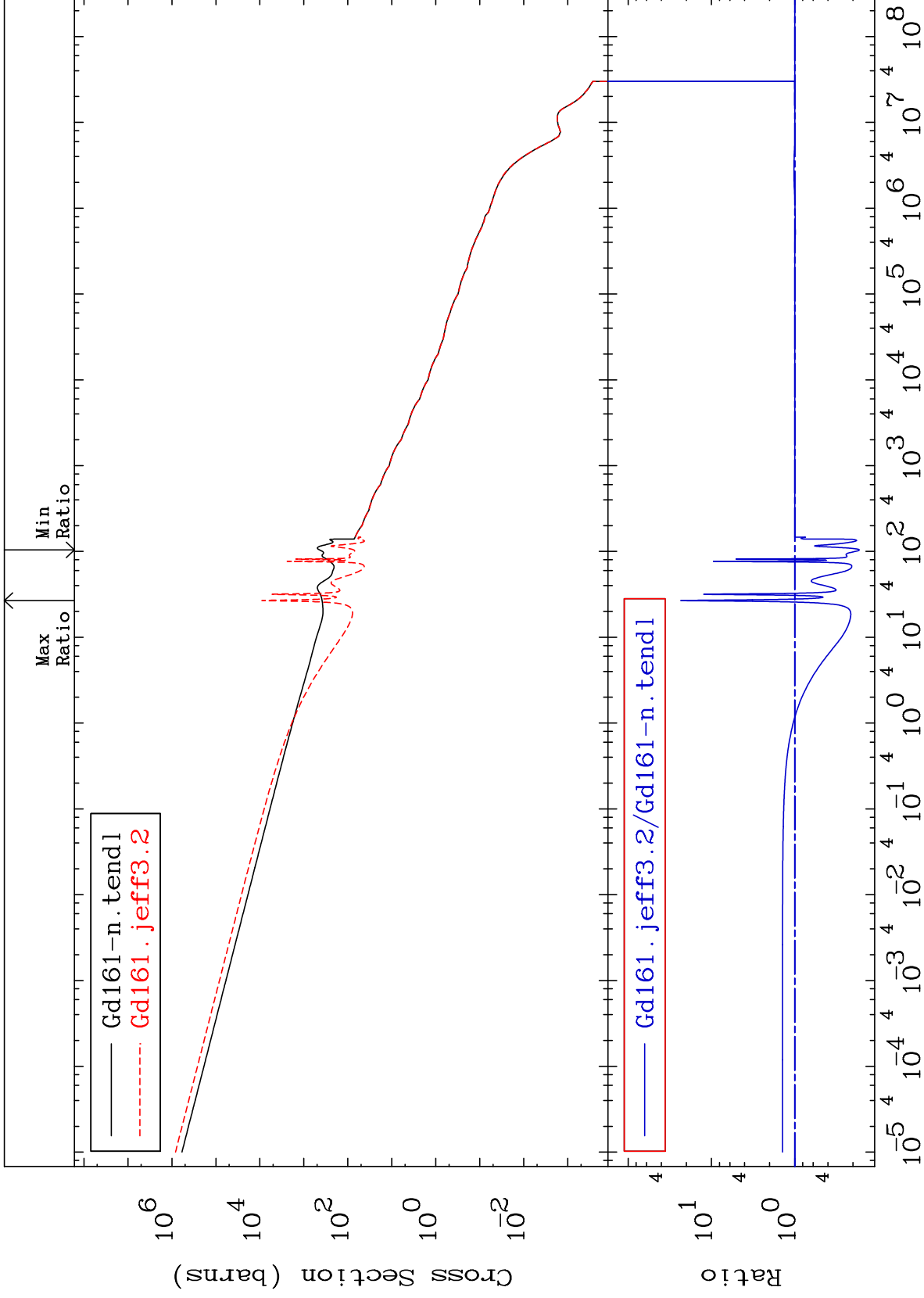




MAT 6452

64-Gd-161  
-83.29 To 2258. %

(n,  $\gamma$ )  
Cross Section



49

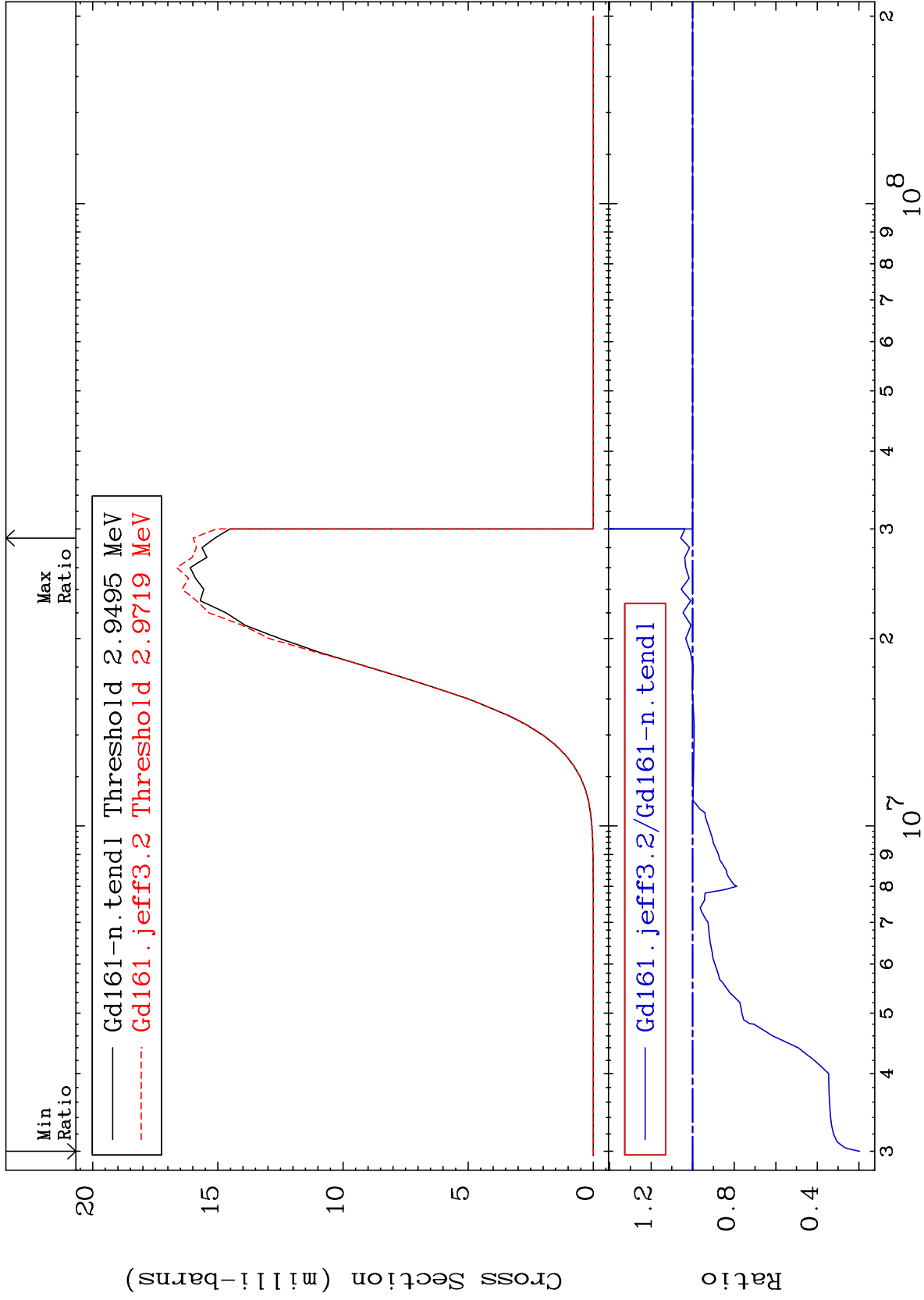
Incident Energy (eV)

64-Gd-161

MAT 6452

64-Gd-161

(n,p)  
Cross Section  
-80.32 To 5.710 %



50

Incident Energy (eV)

64-Gd-161

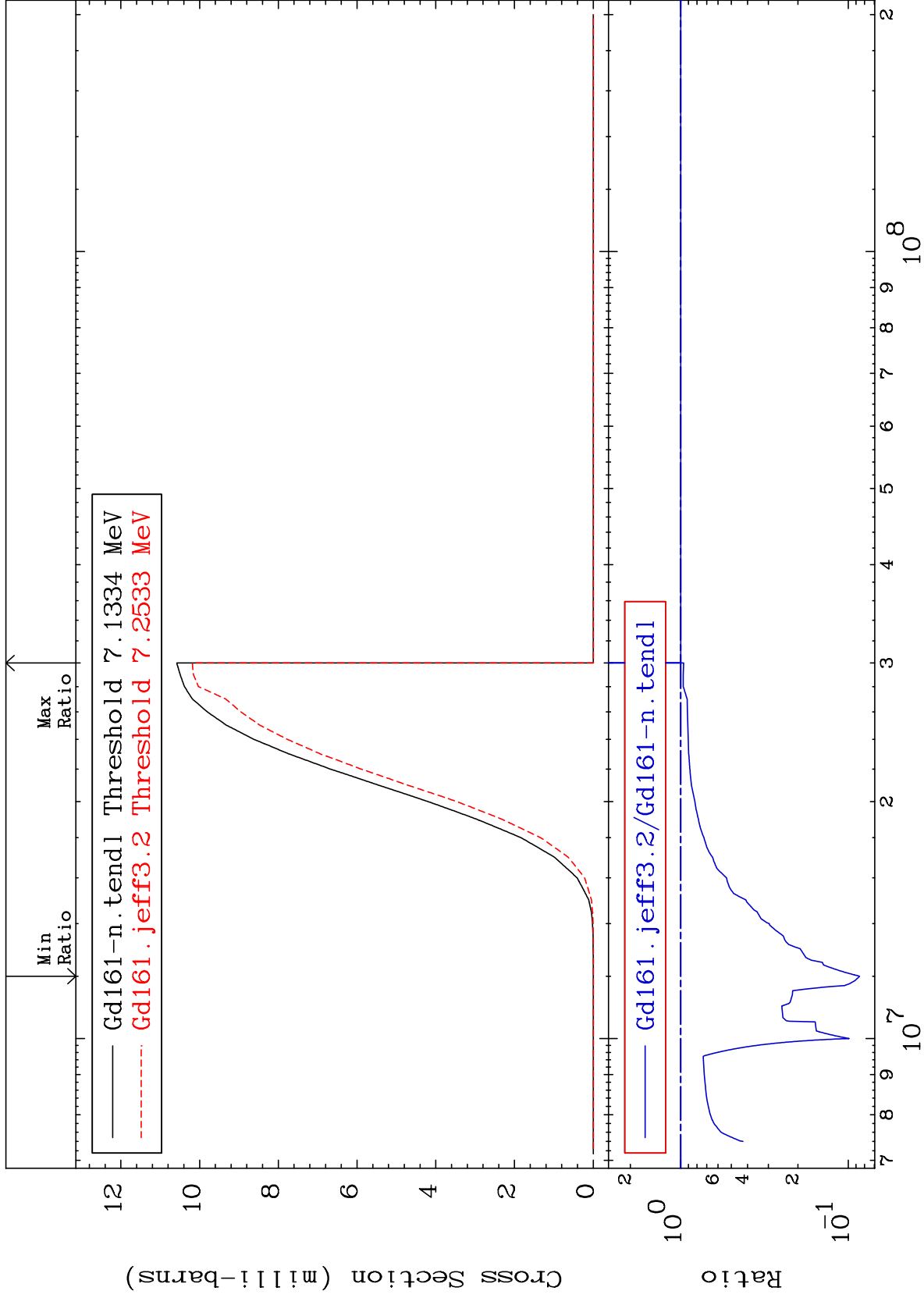
MAT 6452

(n, d)

64-Gd-161

Cross Section

-91.42 To 0.000 %



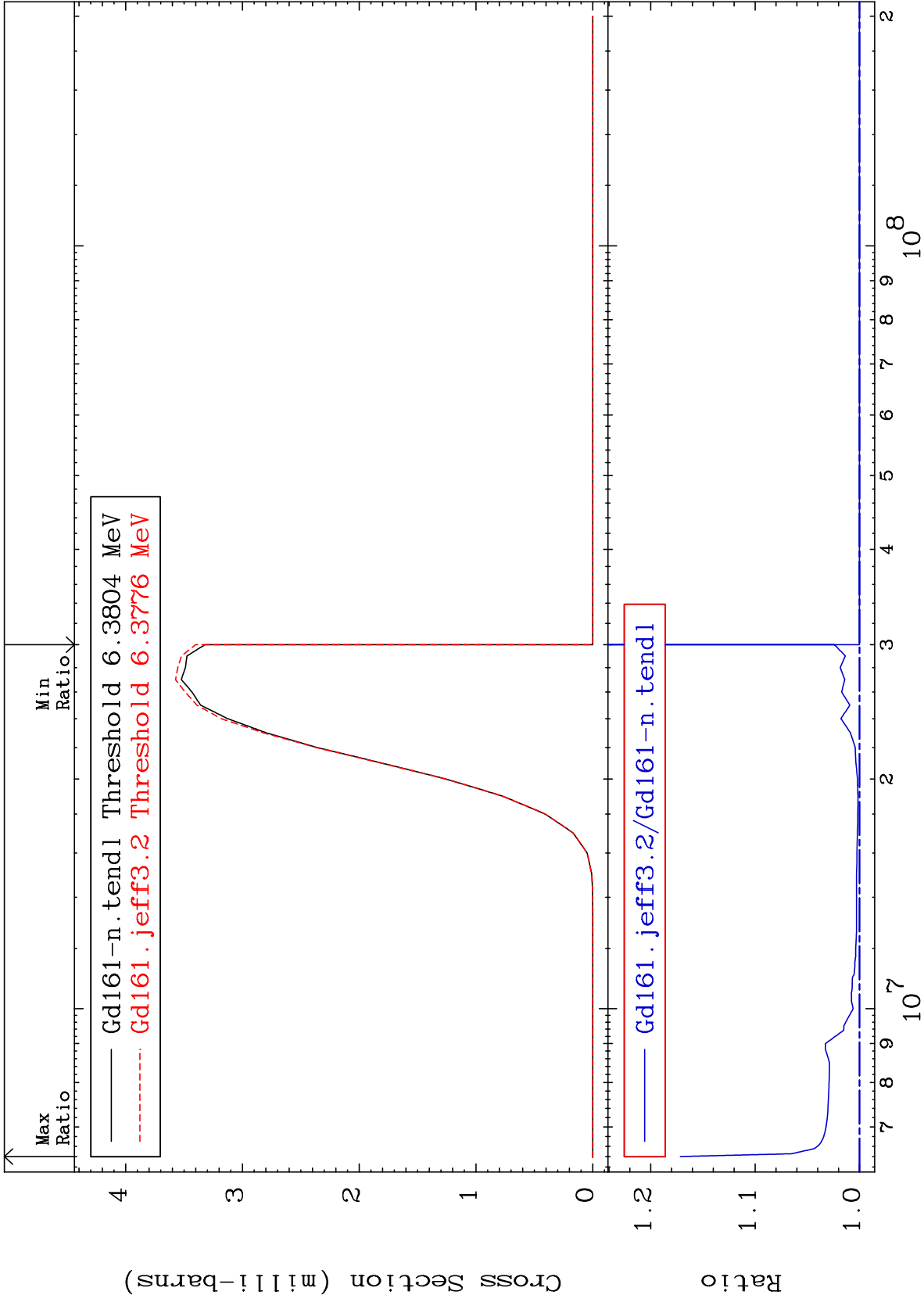
51

Incident Energy (eV)

64-Gd-161

MAT 6452

(n, t)  
Cross Section  
64-Gd-161  
To 17.16 %  
0.000



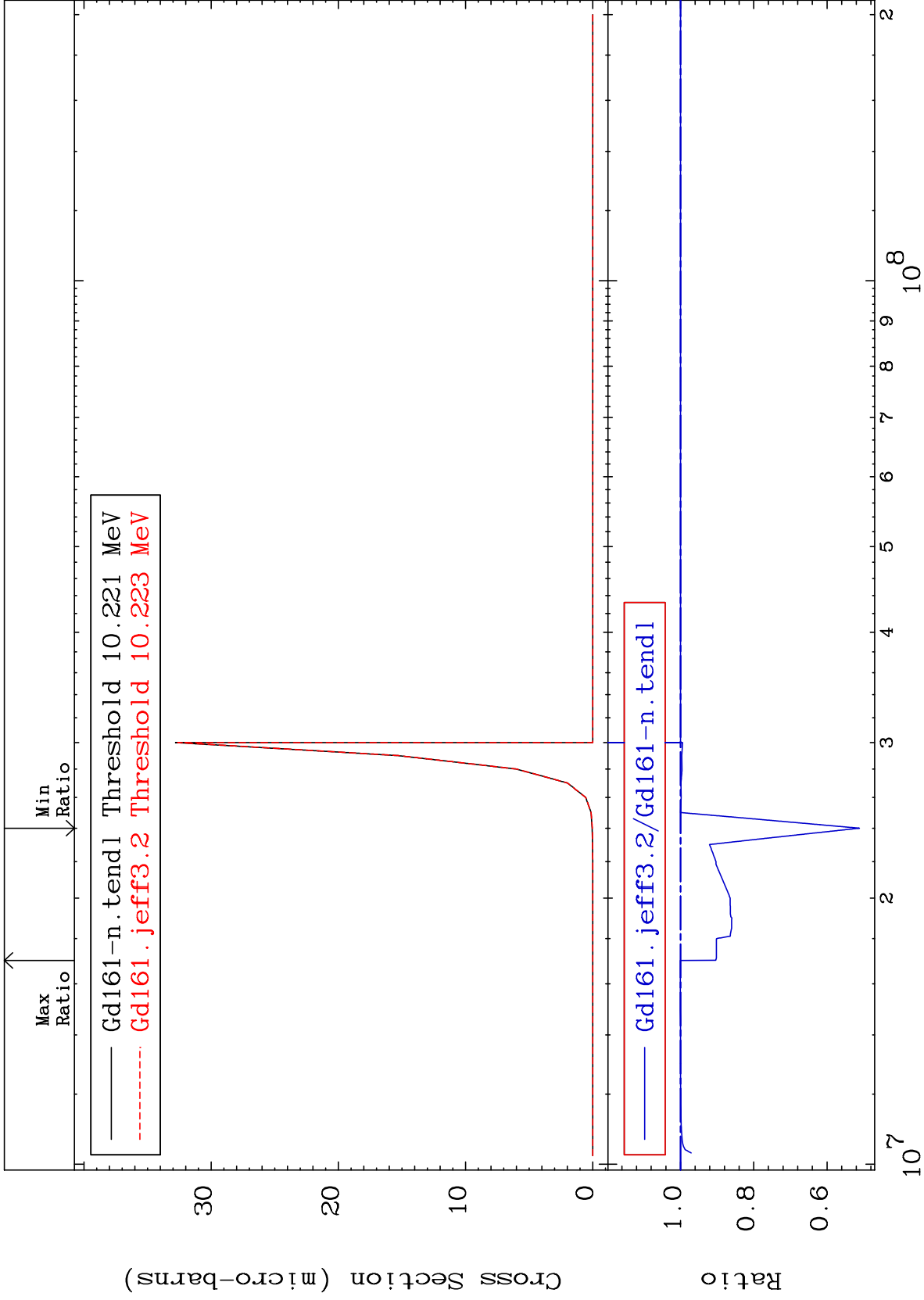
MAT 6452

(n, He-3)

64-Gd-161

Cross Section

-48.85 To 0.036 %



53

Incident Energy (eV)

64-Gd-161

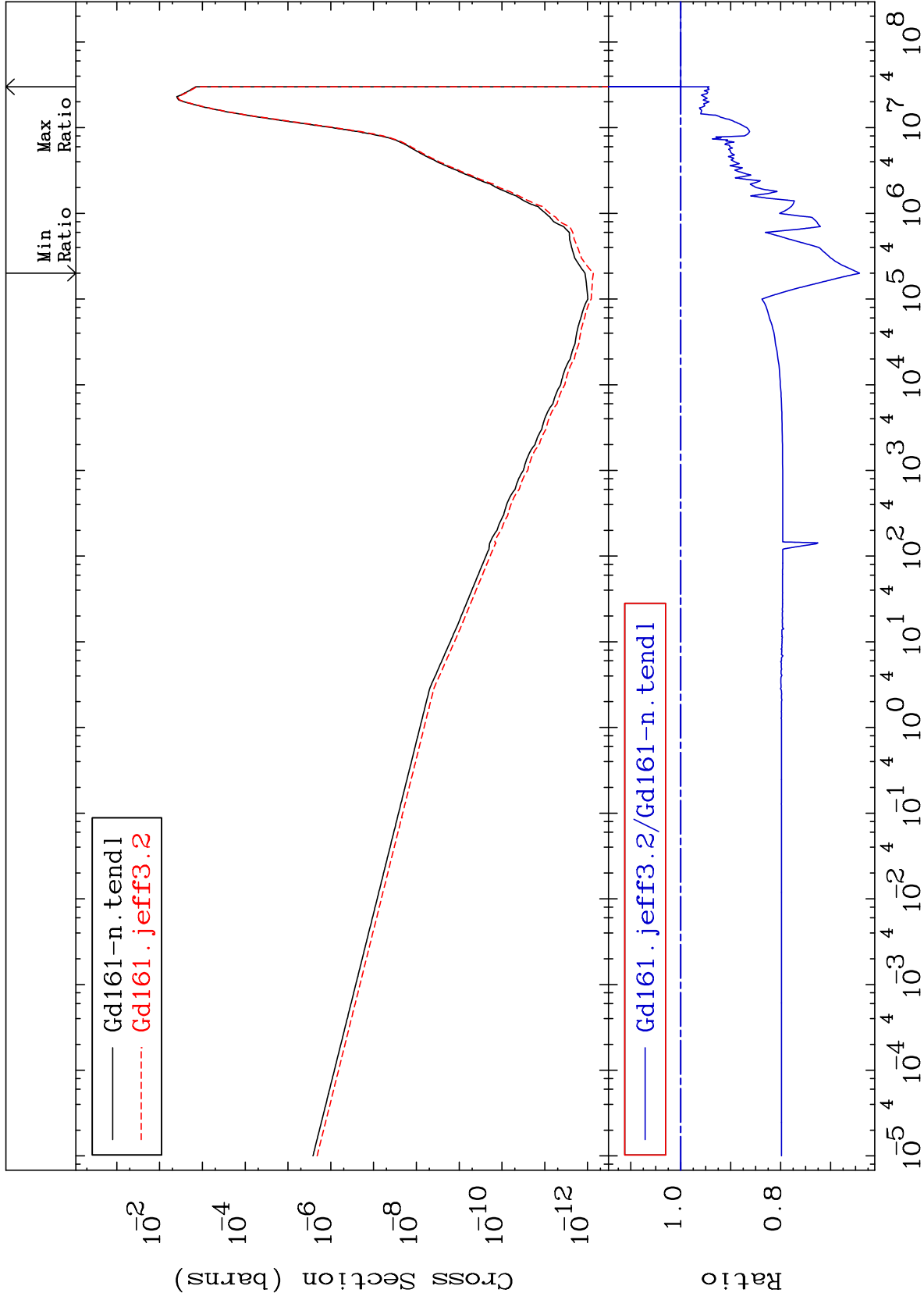
MAT 6452

(n,  $\alpha$ )

64-Gd-161

Cross Section

-35.80 To 0.000 %



MAT 6452

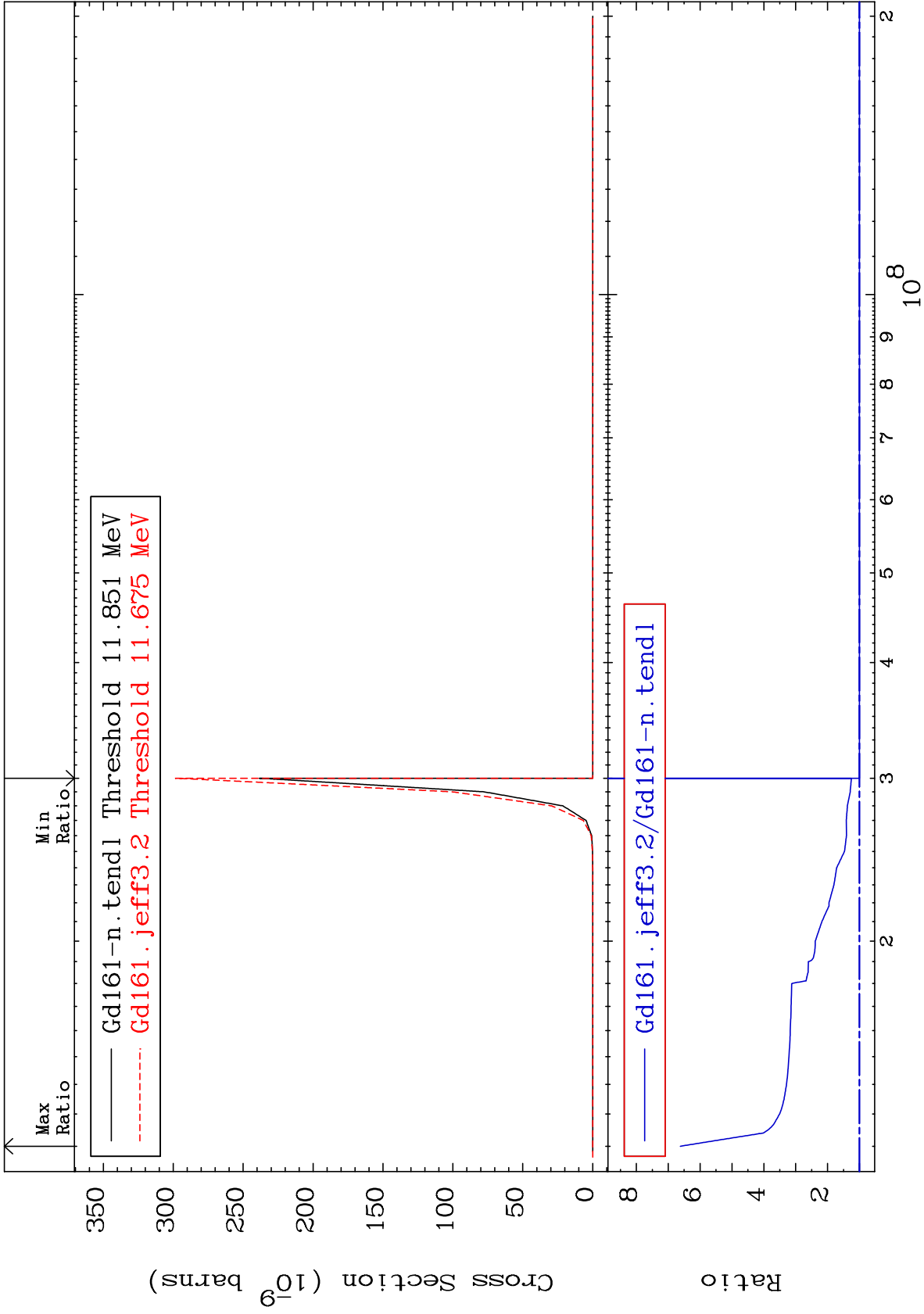
(n,2p)

64-Gd-161

Cross Section

0.000

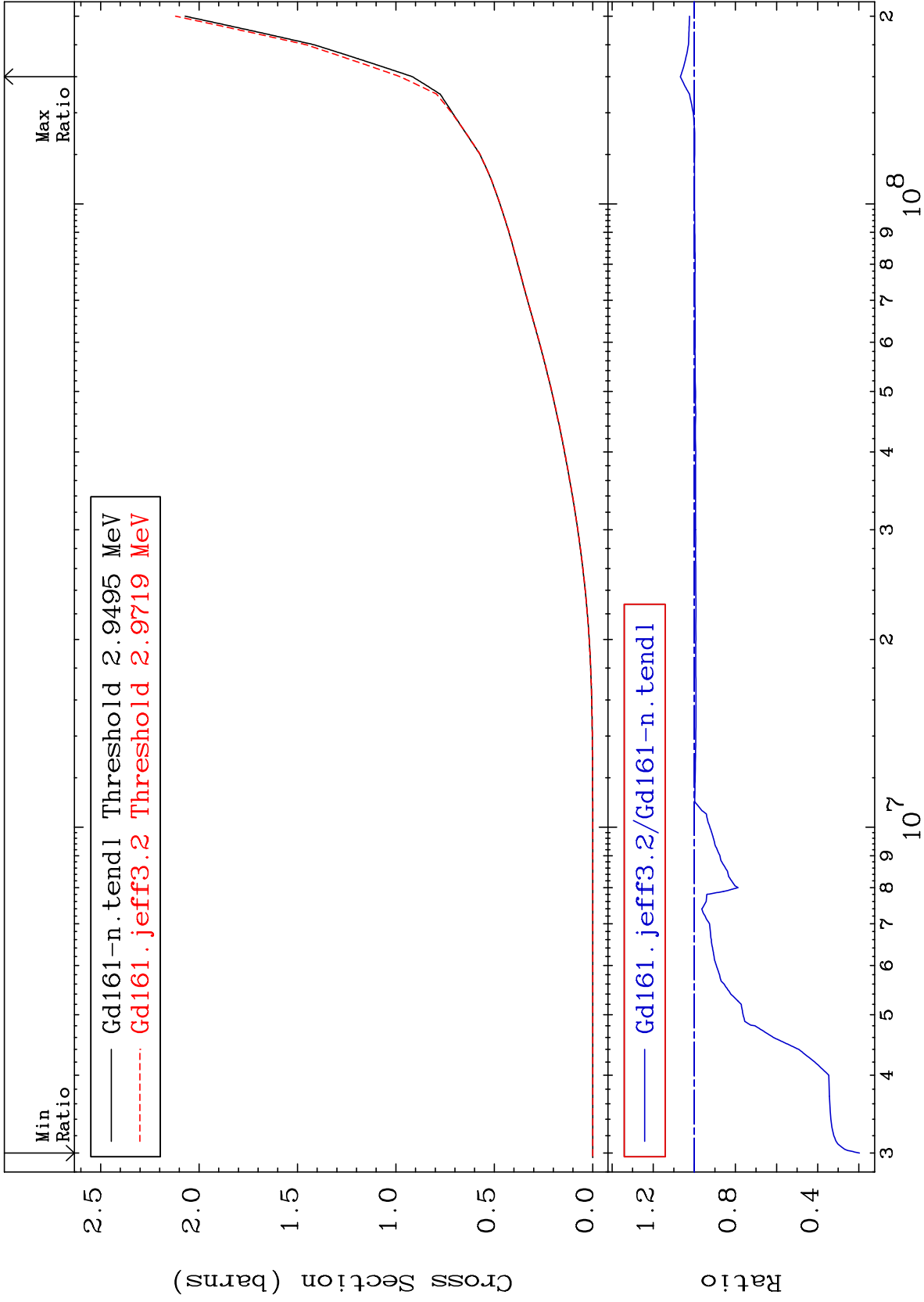
To 562.0 %



MAT 6452

Hydrogen Production  
Cross Section

64-Gd-161  
-80.32 To 6.797 %



56

Incident Energy (eV)

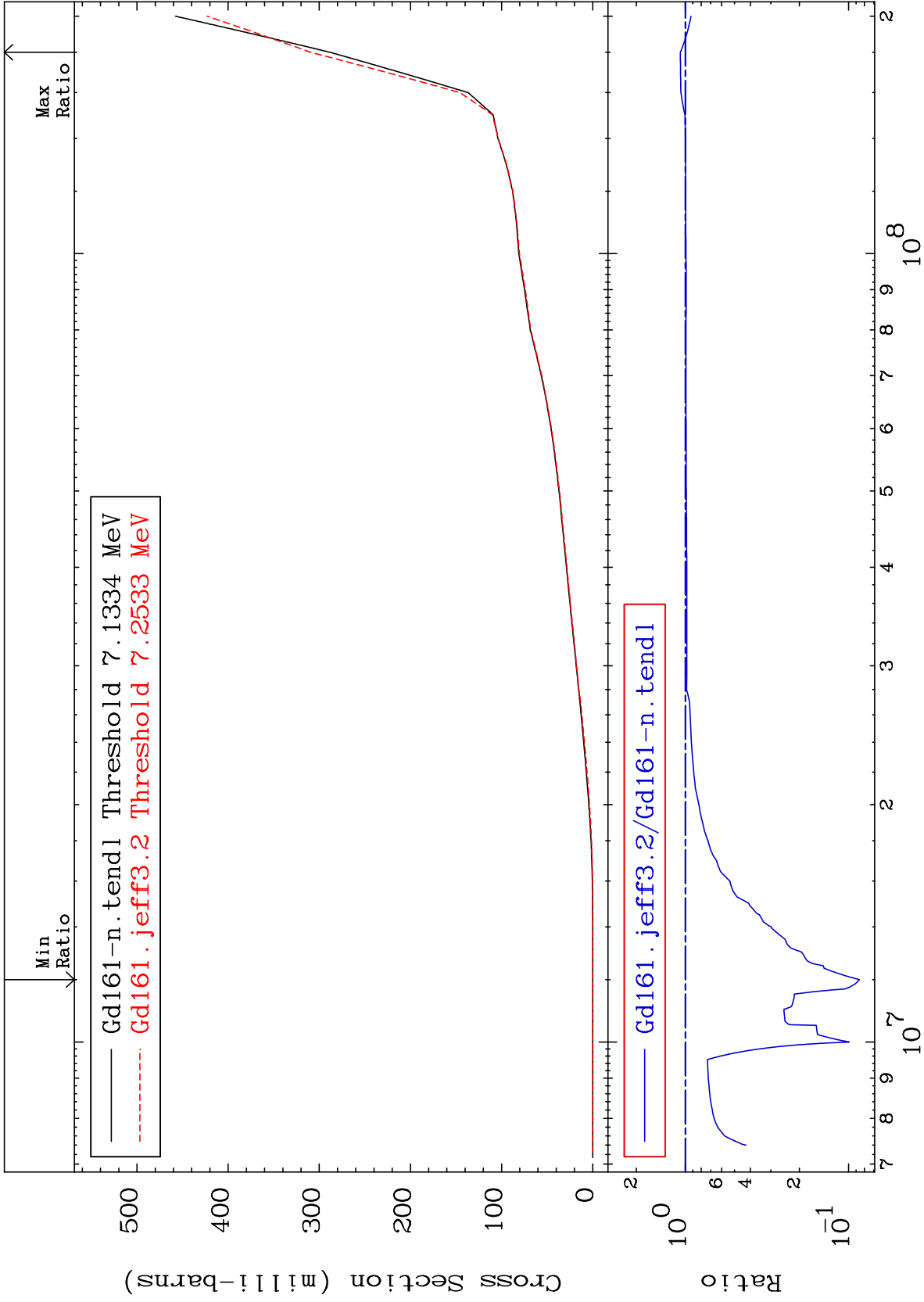
64-Gd-161



MAT 6452

Deuterium Production  
Cross Section

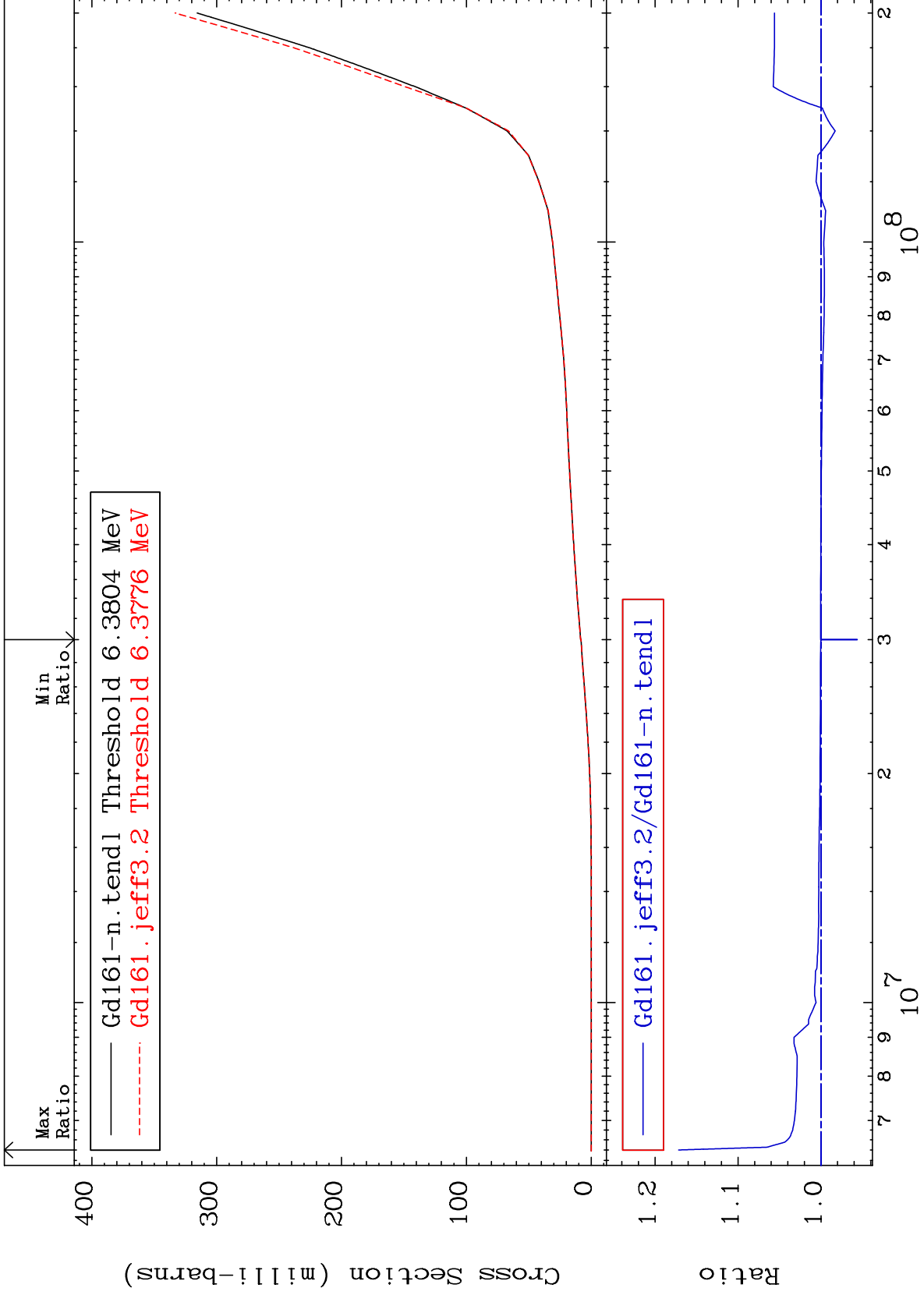
64-Gd-161  
-91.42 To 7.385 %



MAT 6452

Tritium Production  
Cross Section

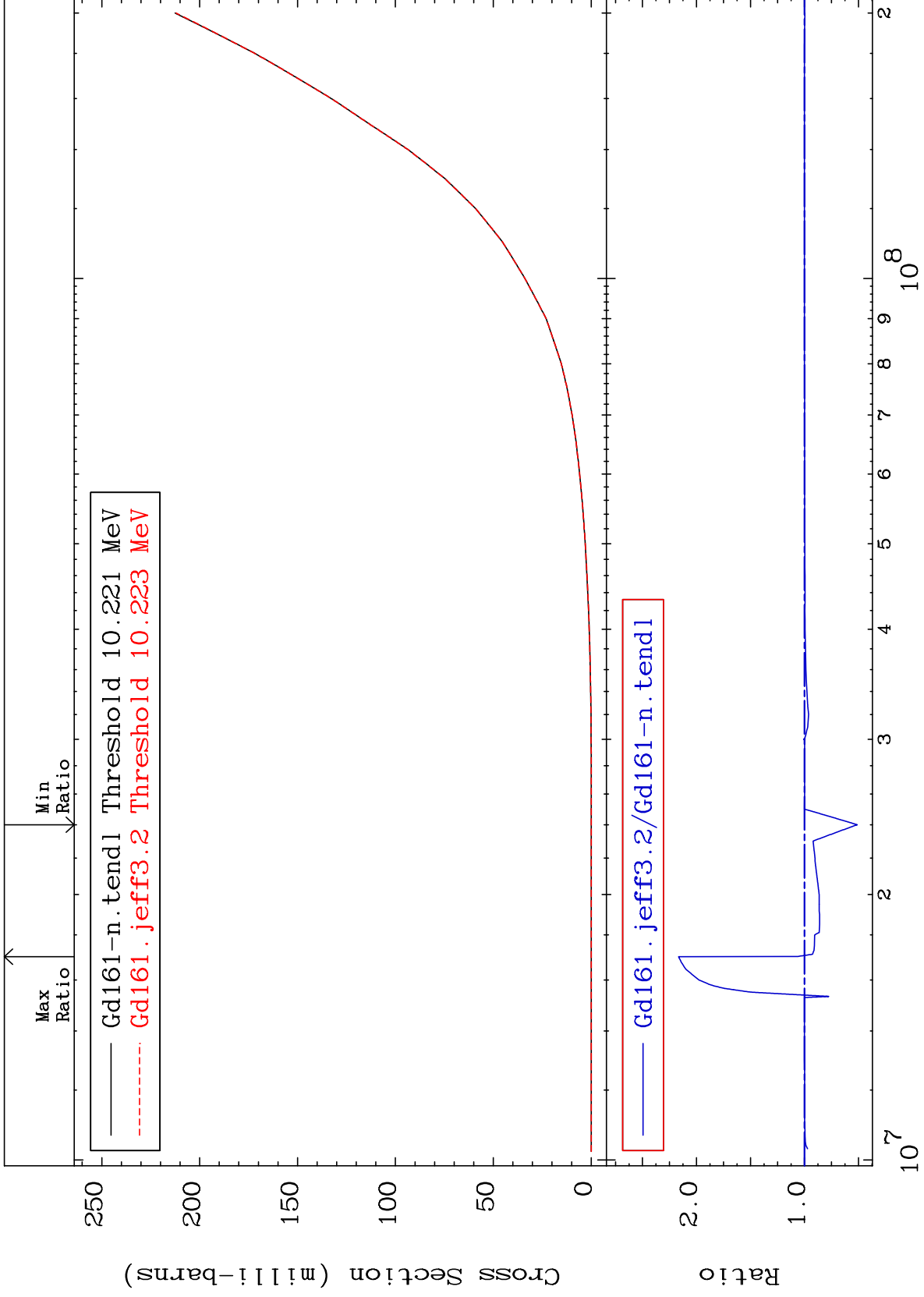
64-Gd-161  
-4.373 To 17.16 %



MAT 6452

He-3 Production  
Cross Section

64-Gd-161  
-48.83 To 116.5 %



59

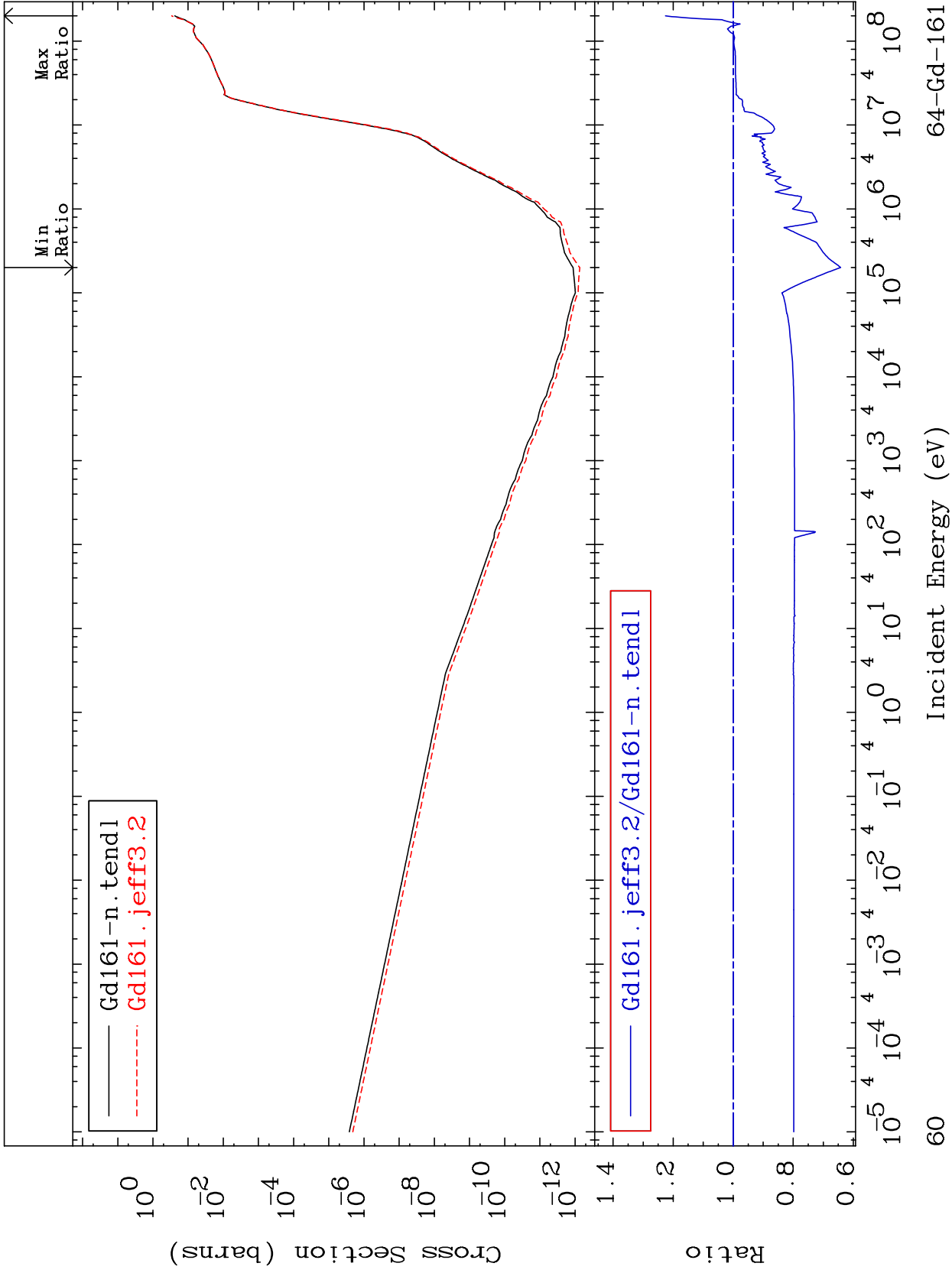
Incident Energy (eV)

64-Gd-161

MAT 6452

He-4 Production  
Cross Section

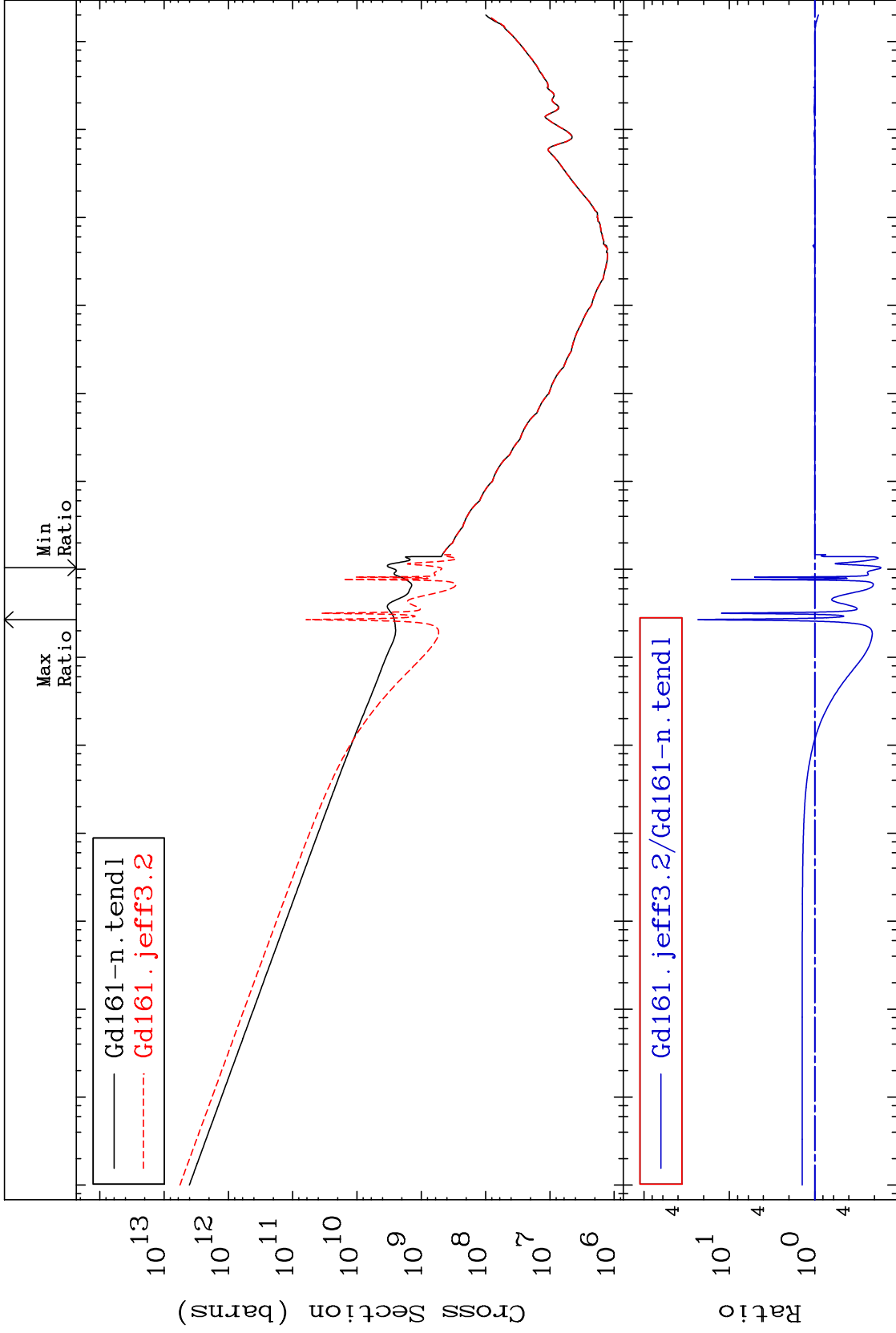
64-Gd-161  
-35.80 To 22.55 %



60

Incident Energy (eV)

64-Gd-161



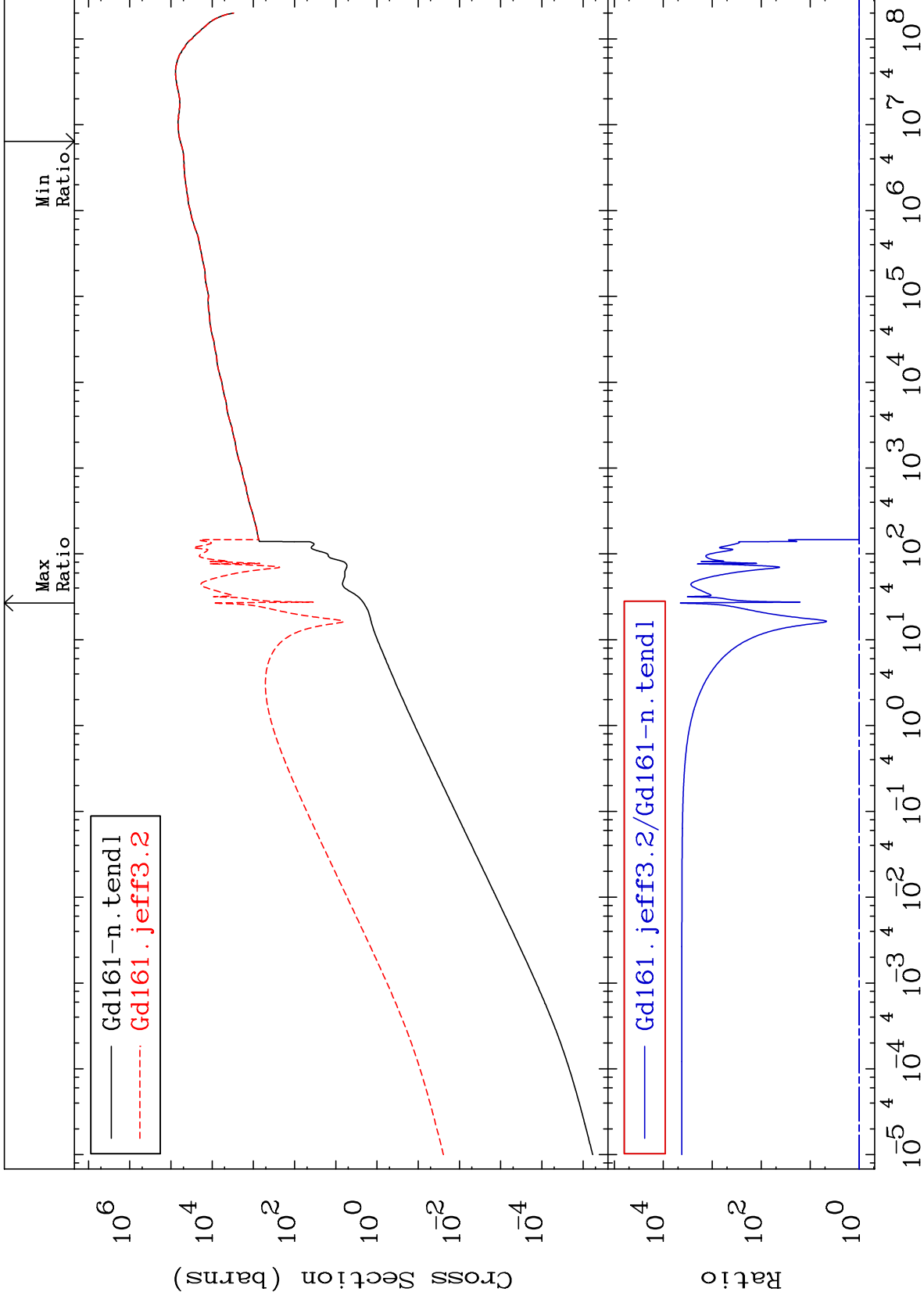
Gd161-n.tendl  
Gd161.jeff3.2

Gd161.jeff3.2/Gd161-n.tendl

MAT 6452

Kerma elastic  
Cross Section

64-Gd-161  
-1.219 To 9999. %

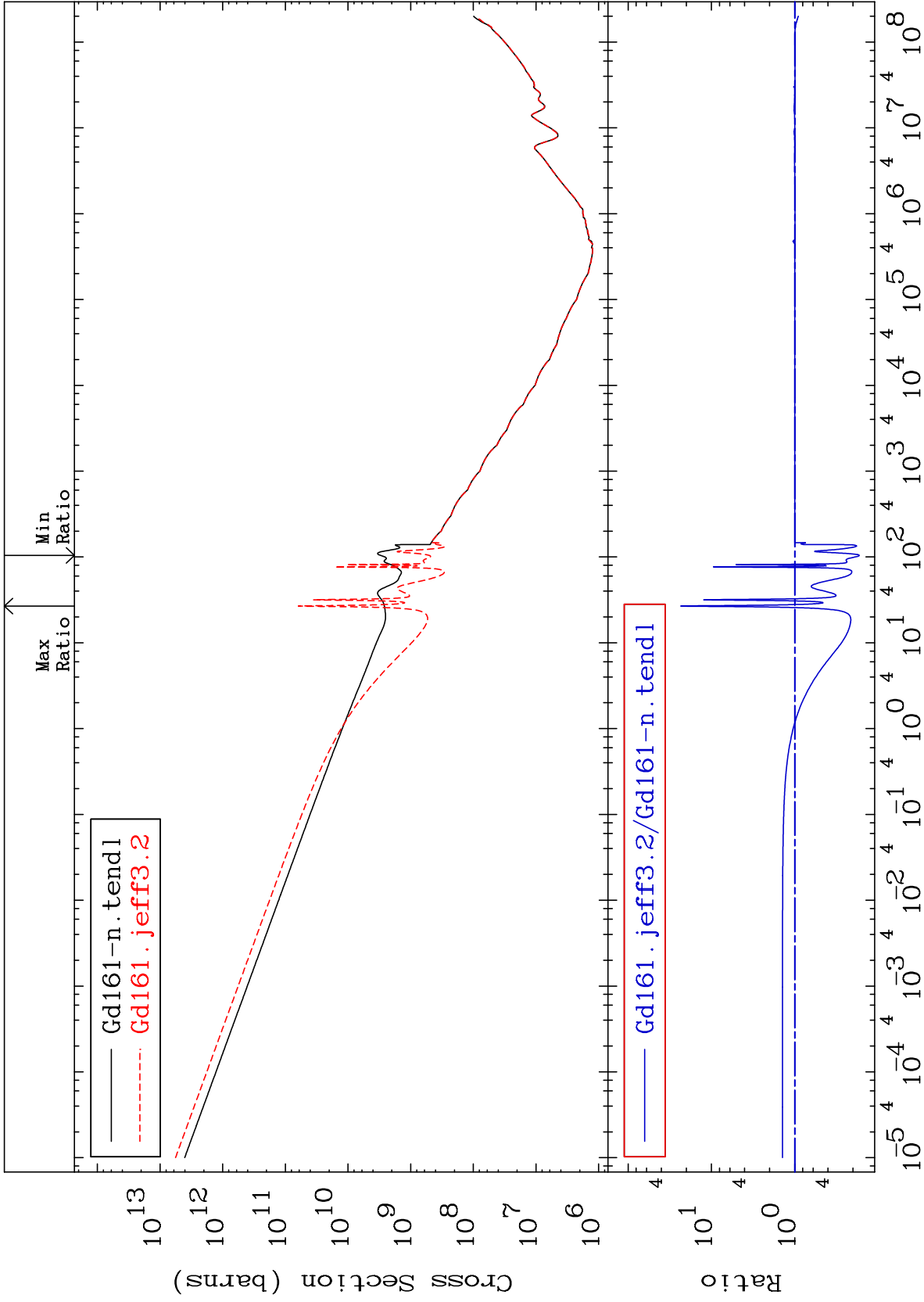


62

Incident Energy (eV)

64-Gd-161

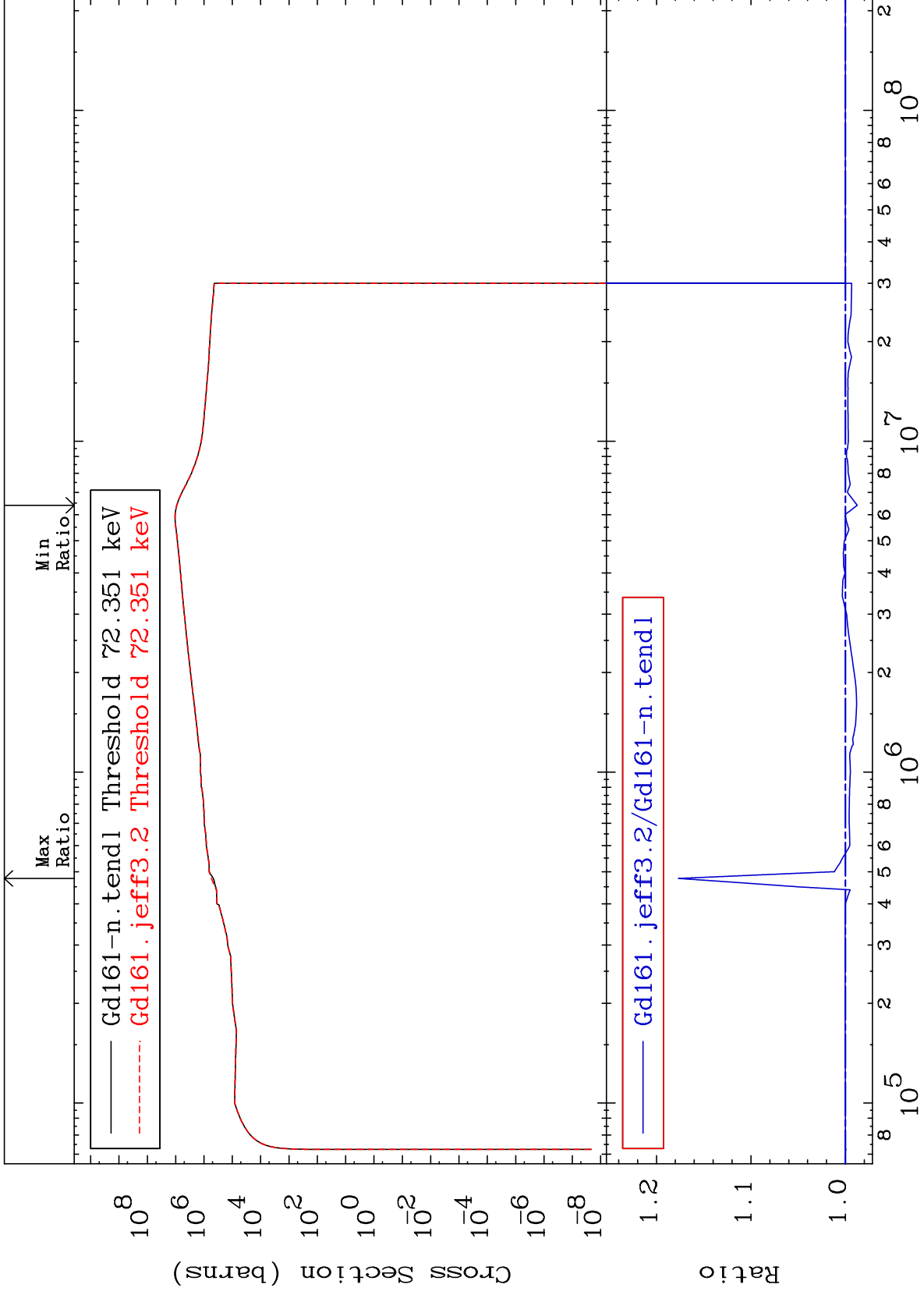
Cross Section



MAT 6452

Kerma inelastic (mt51-91)  
Cross Section

64-Gd-161  
-1.252 To 17.65 %



64

Incident Energy (eV)

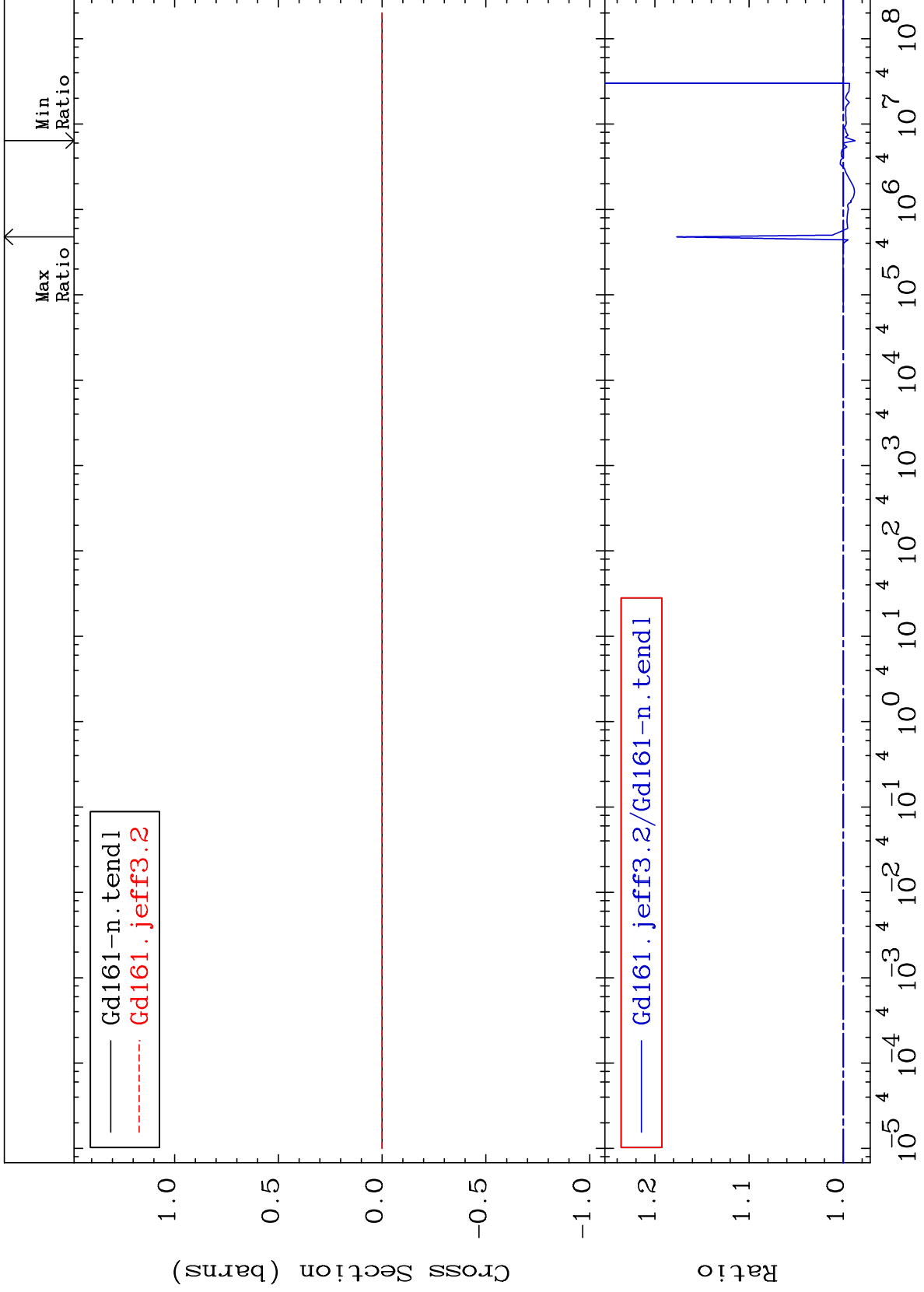
64-Gd-161



MAT 6452

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

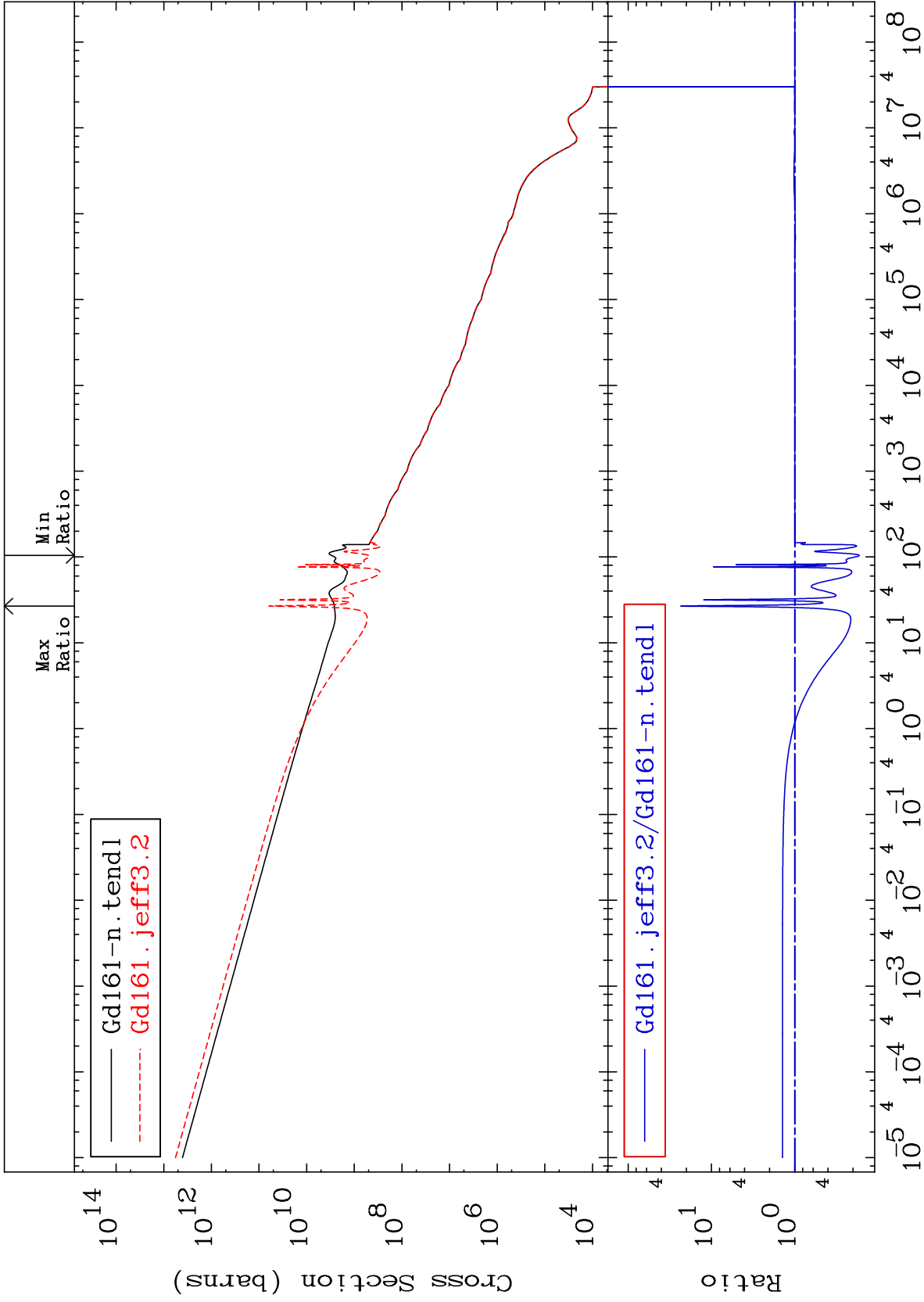
64-Gd-161  
-1.252 To 17.65 %



65

Incident Energy (eV)

64-Gd-161



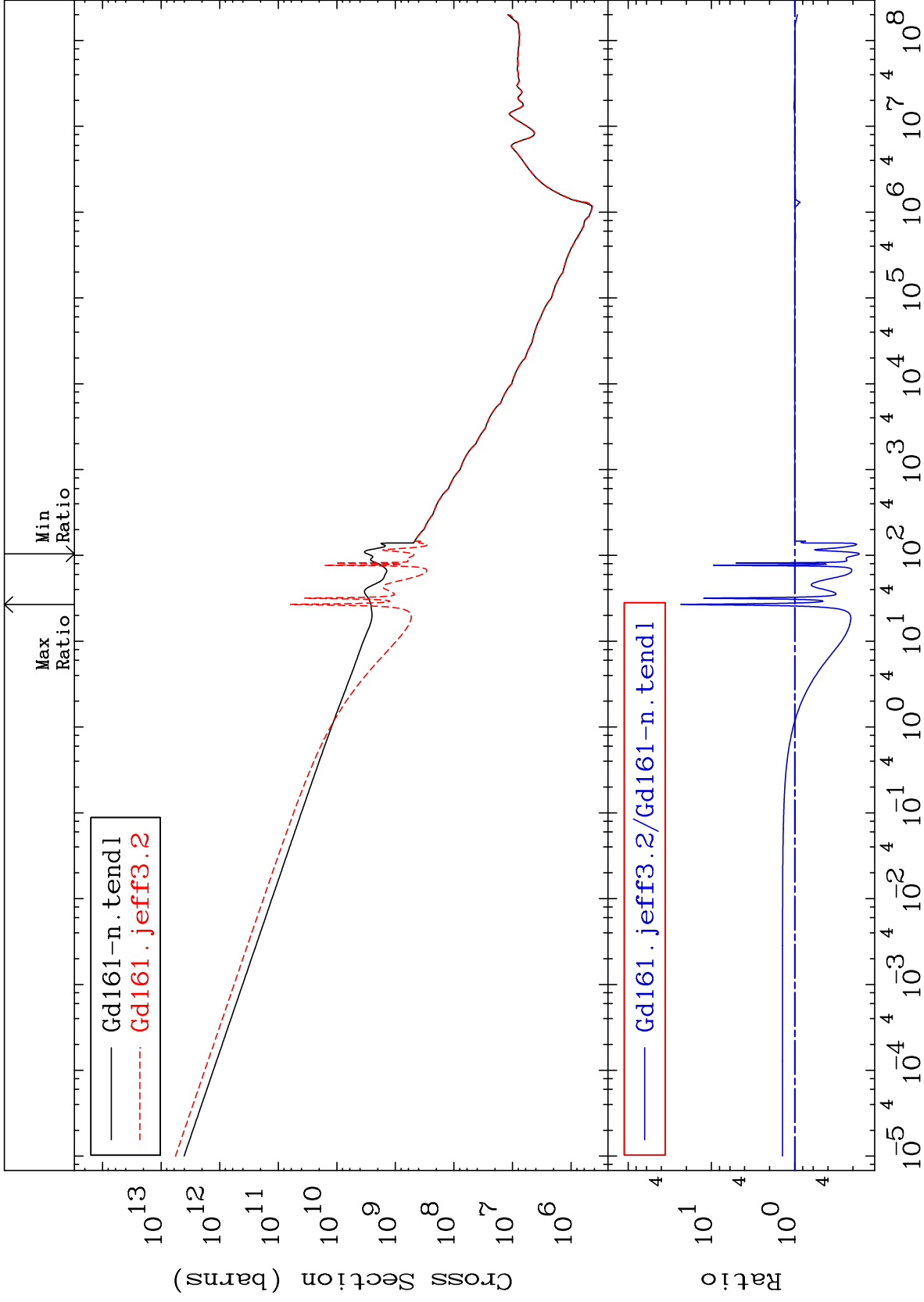
MAT 6452

Total photon (eV-barns)

64-Gd-161

-83.29 To 2258. %

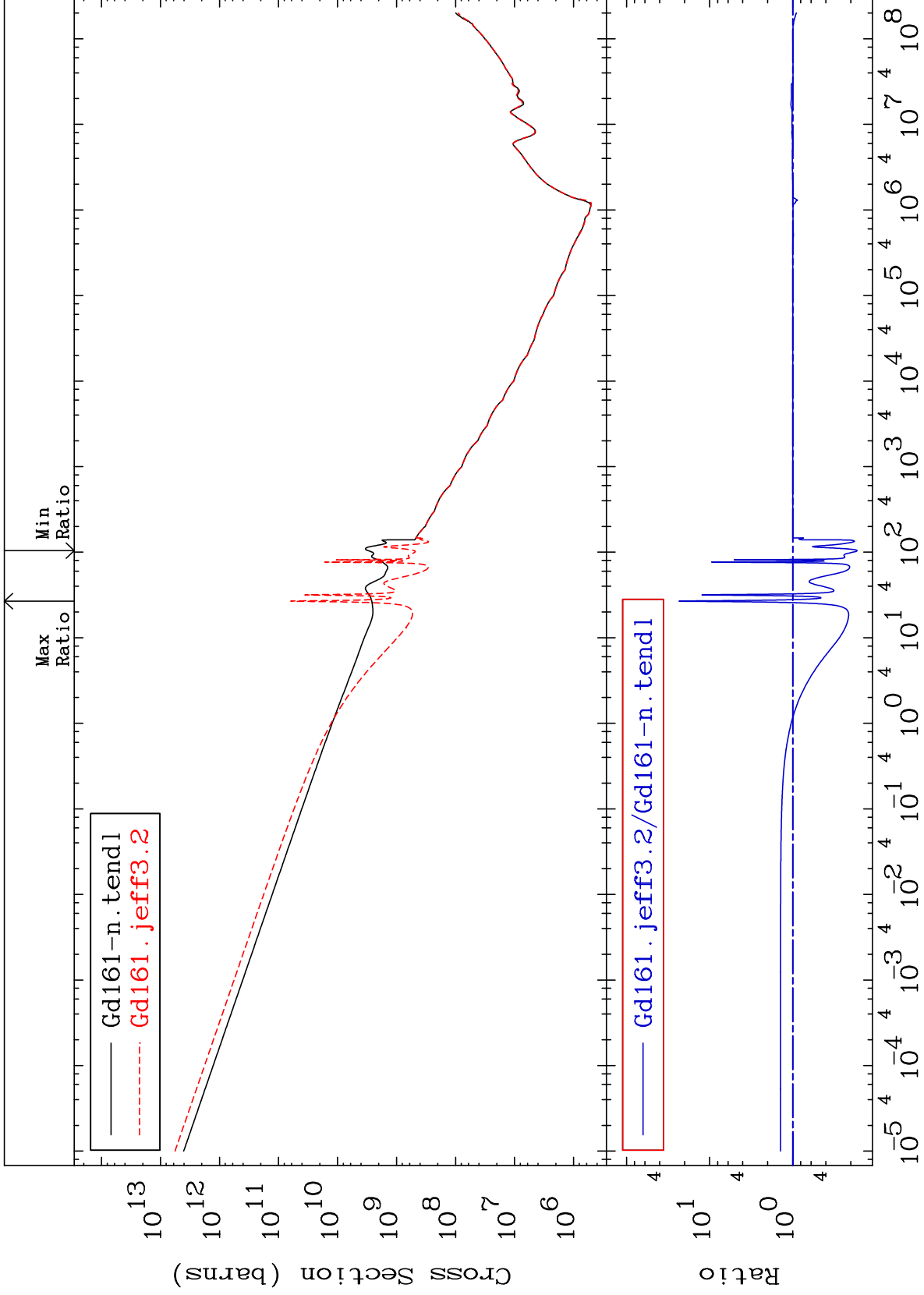
Cross Section



67

Incident Energy (eV)

64-Gd-161



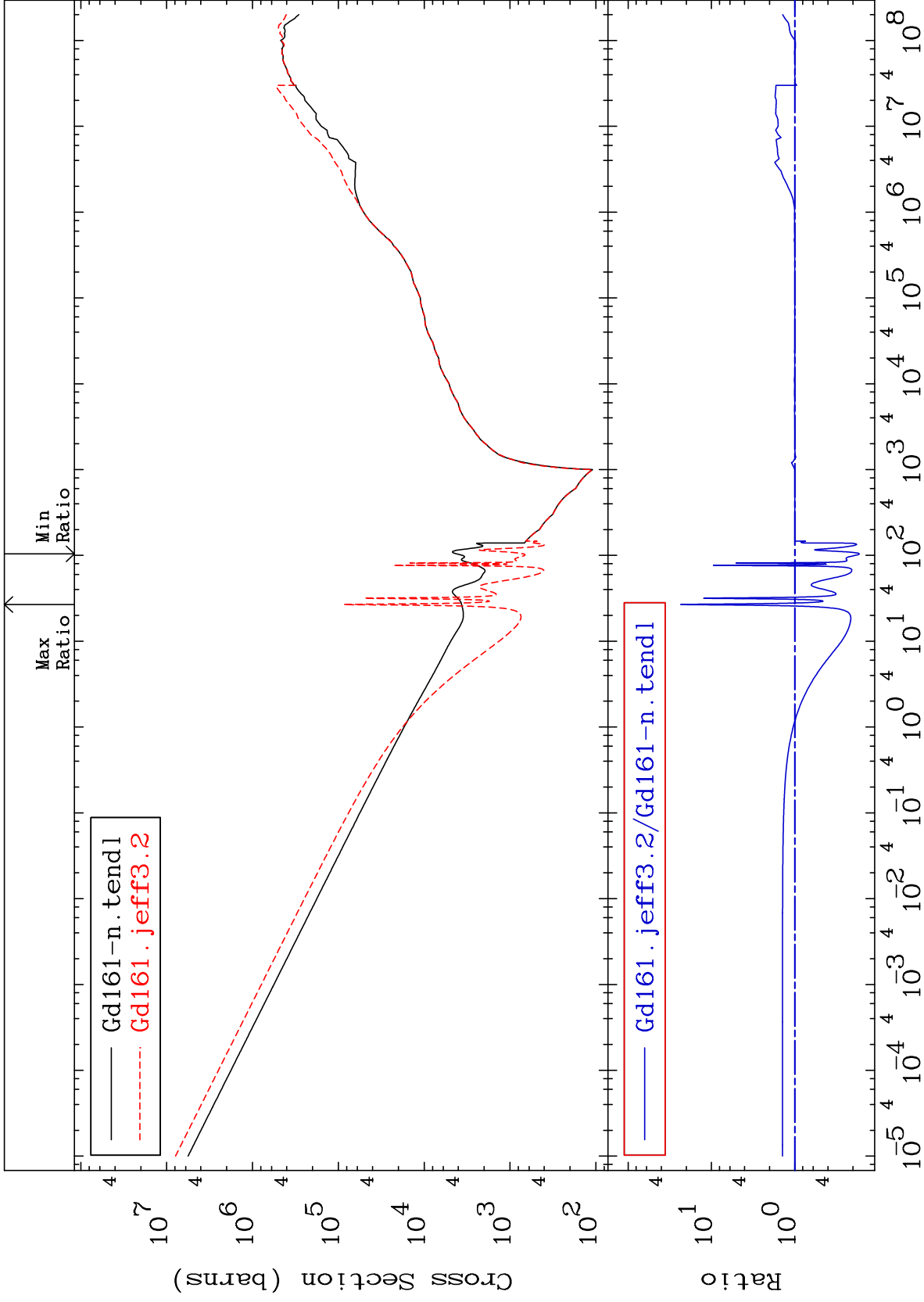
MAT 6452

Dpa total (eV-barns)

64-Gd-161

-83.29 To 2258. %

Cross Section



69

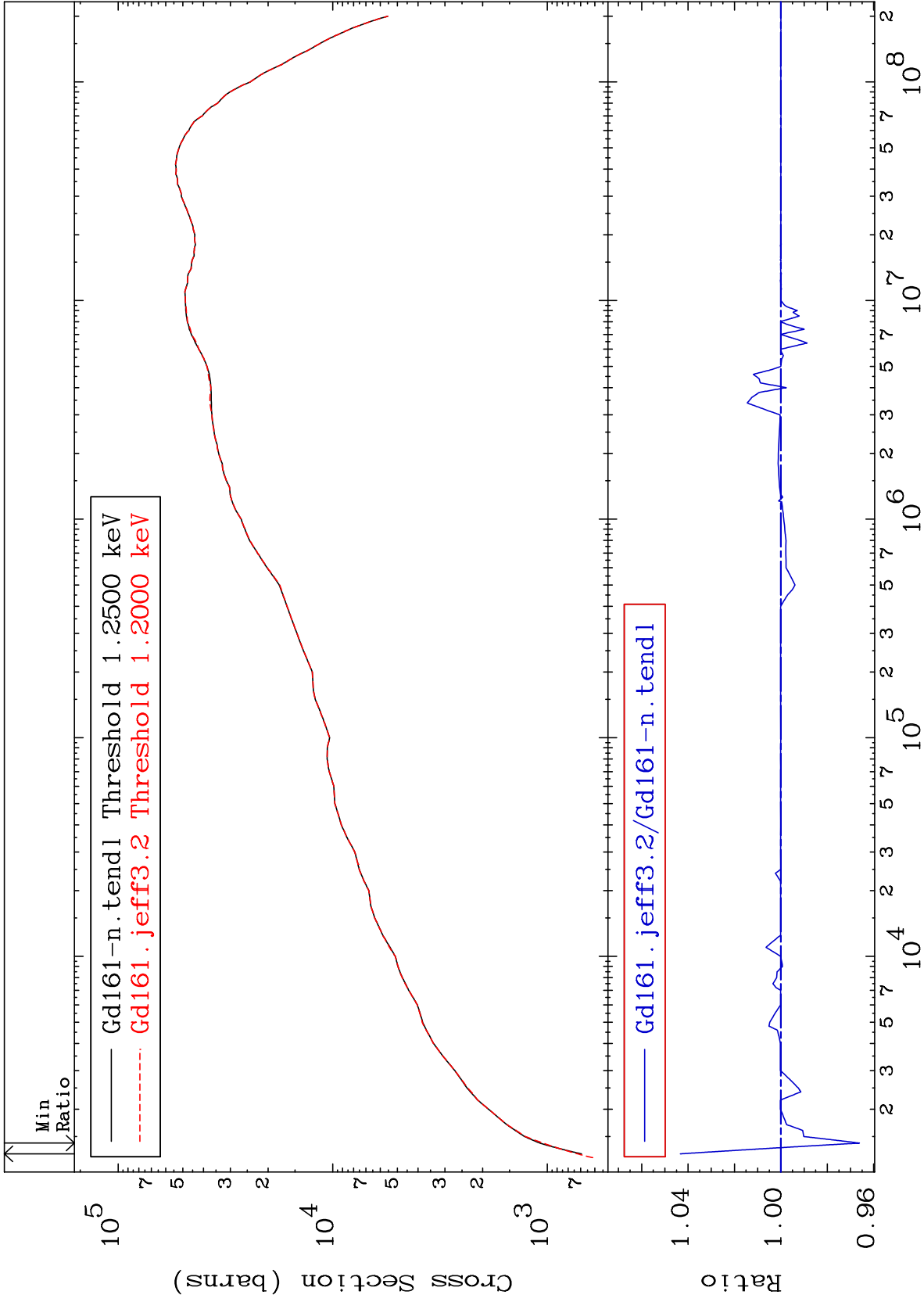
Incident Energy (eV)

64-Gd-161

MAT 6452

Dpa elastic (mt2)  
Cross Section

64-Gd-161  
-3.385 To 4.332 %



70

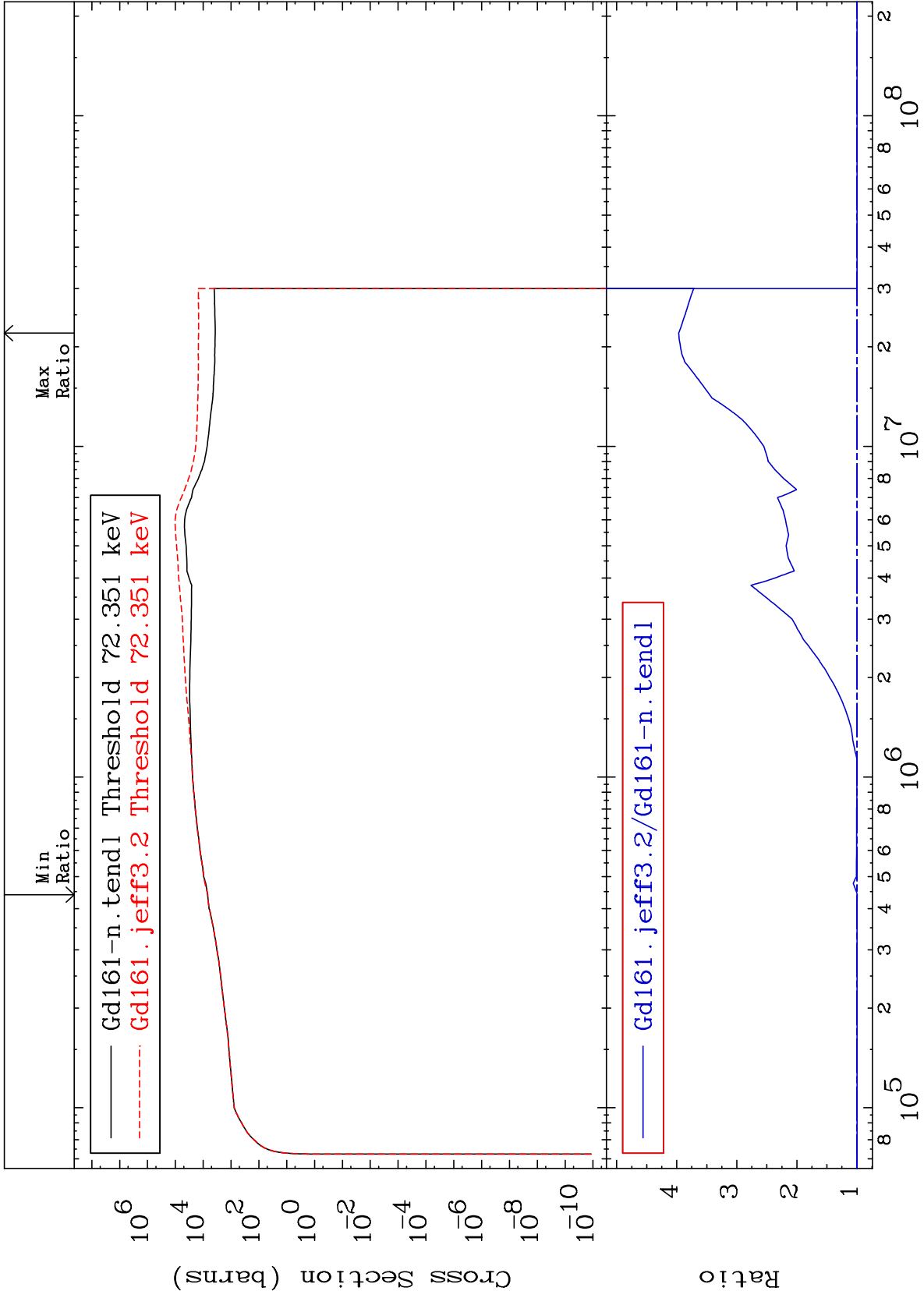
Incident Energy (eV)

64-Gd-161

MAT 6452

Dpa inelastic (mt51-91)  
Cross Section

64-Gd-161  
-0.452 To 296.9 %



71

Incident Energy (eV)

64-Gd-161

