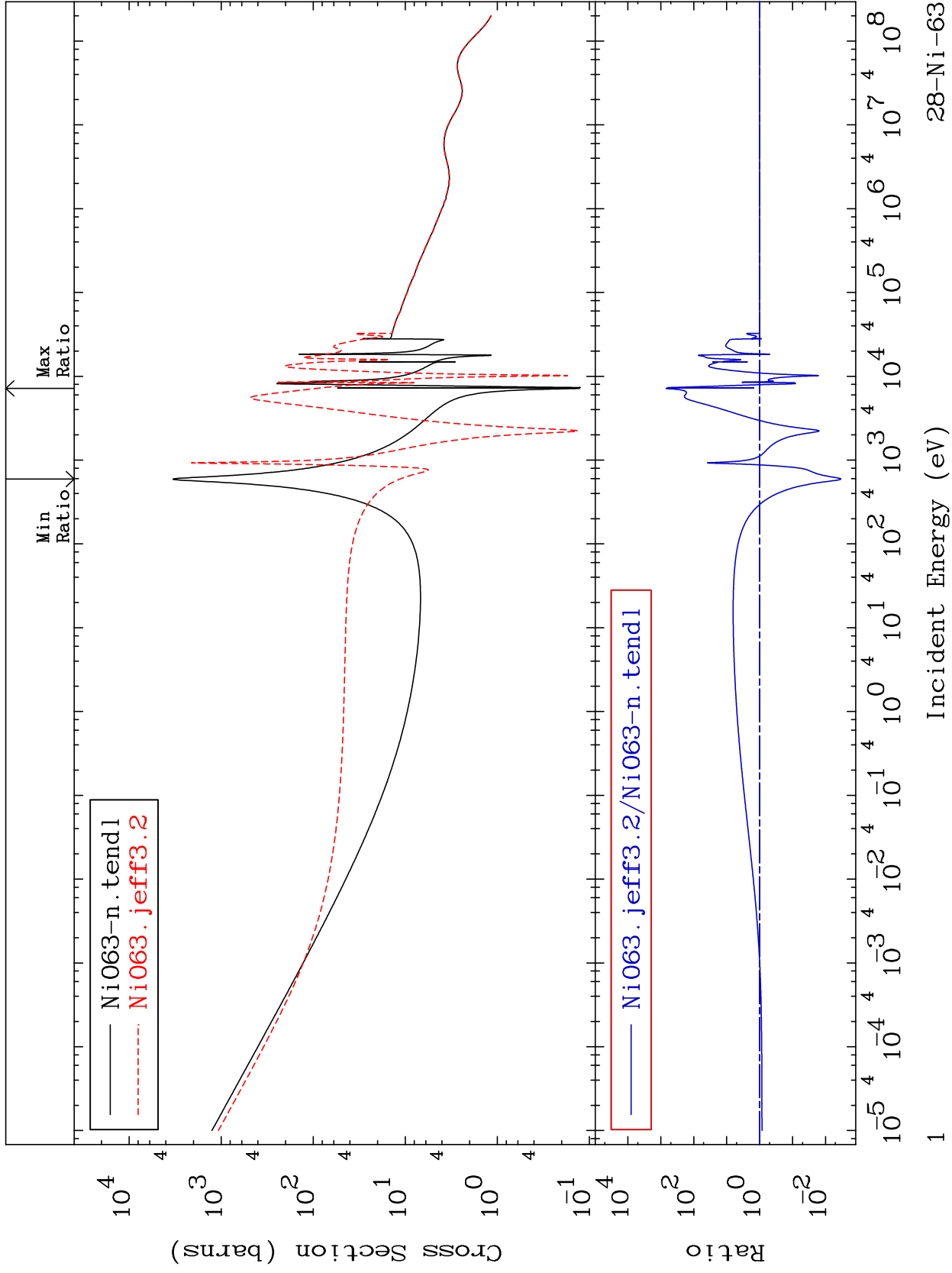


MAT 2840

Total  
Cross Section

28-Ni-63  
-99.66 To 9999. %

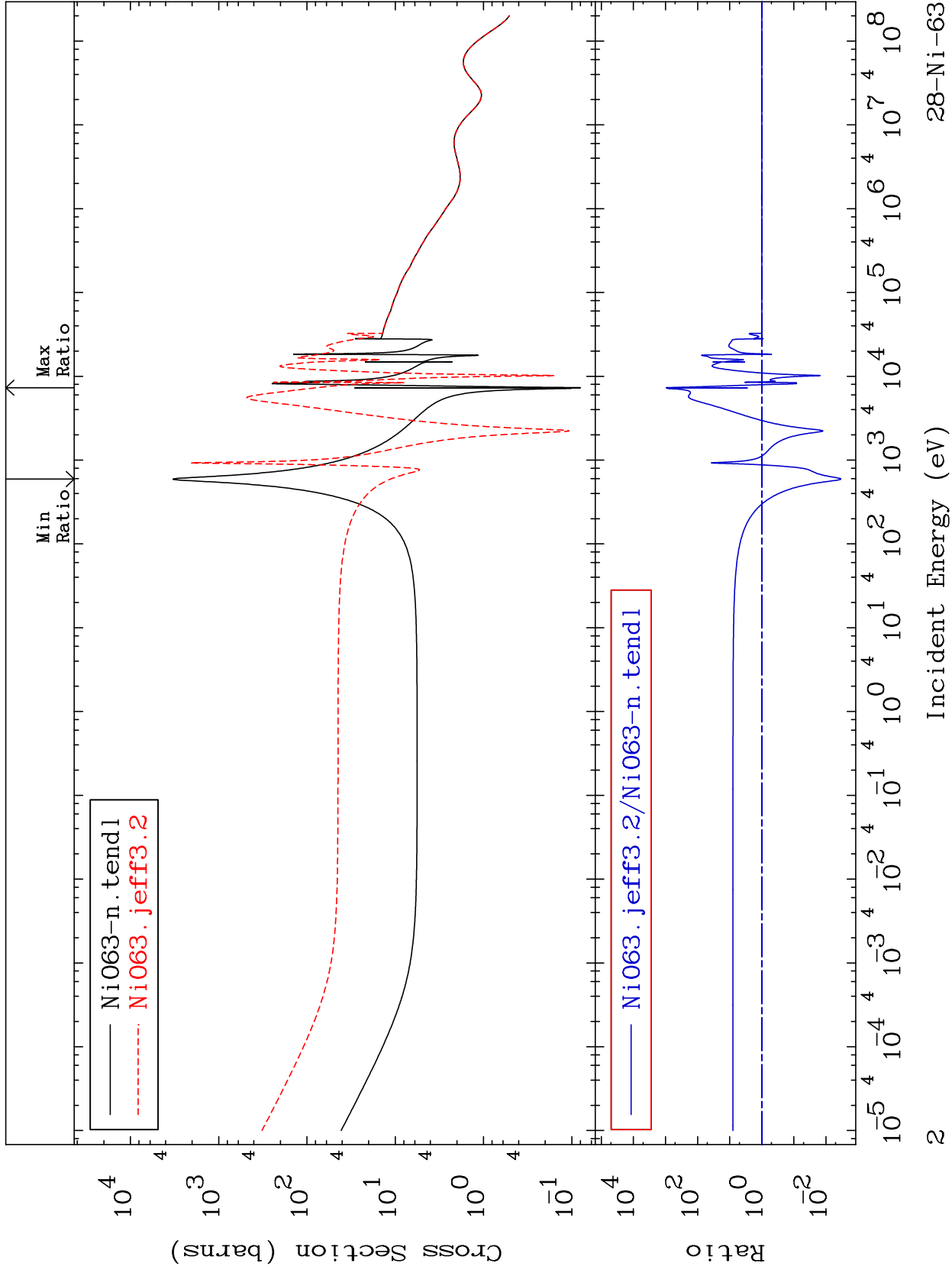


28-Ni-63

MAT 2840

Elastic  
Cross Section

28-Ni-63  
-99.66 To 9999. %

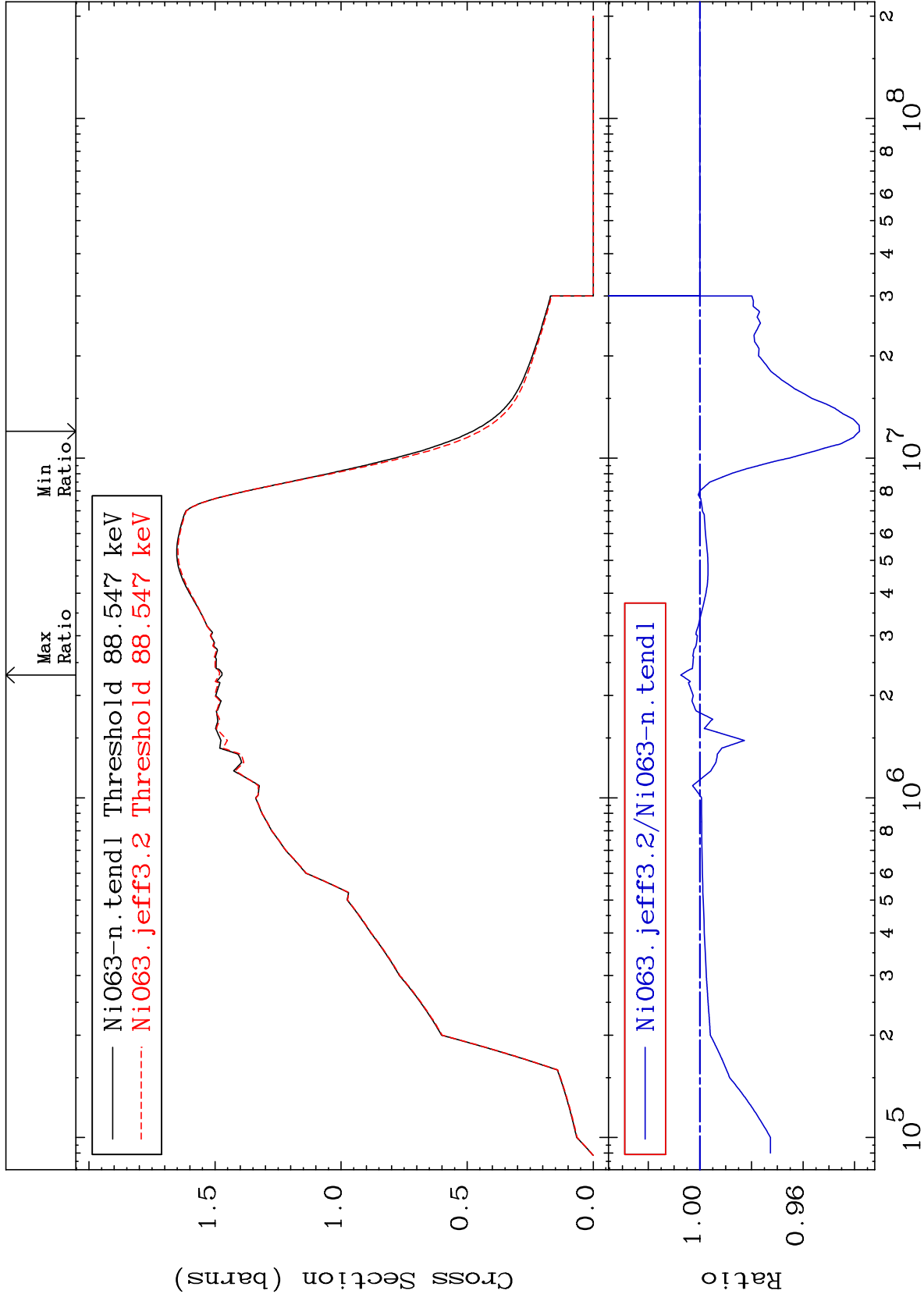


MAT 2840

28-Ni-63

-6.190 To 0.740 %

Inelastic  
Cross Section



3

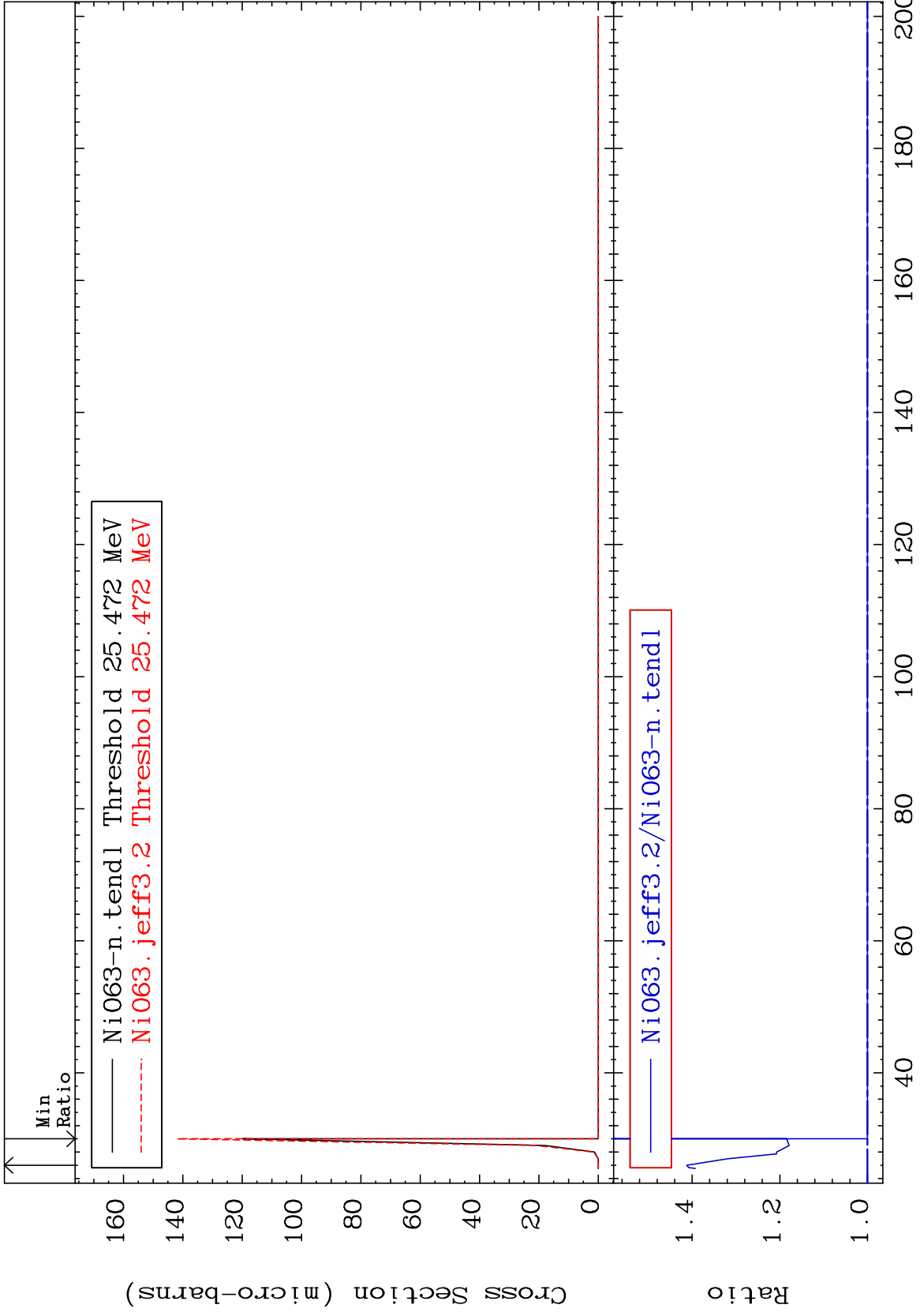
28-Ni-63

28-Ni-63

MAT 2840

(n,2n) d  
Cross Section

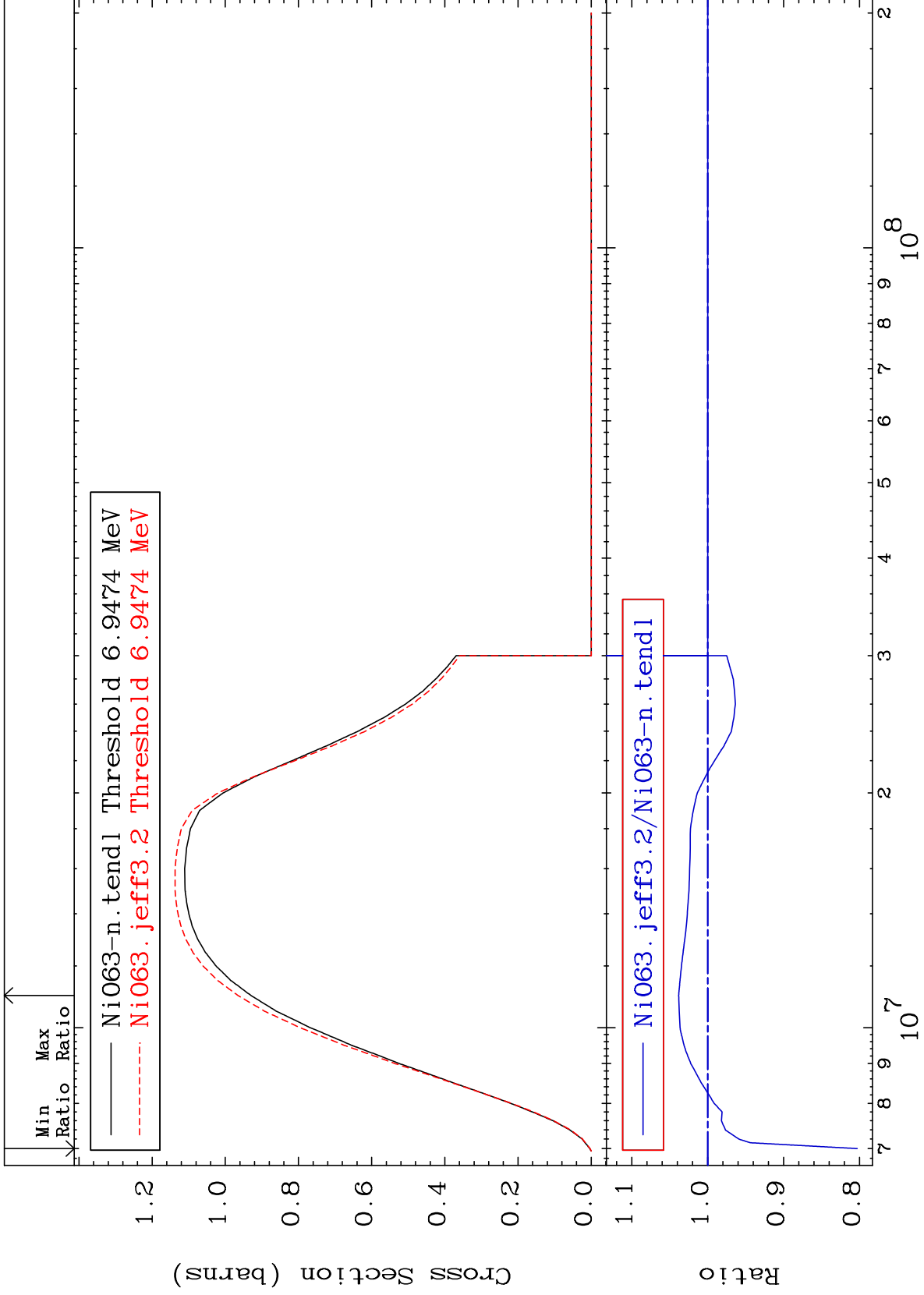
28-Ni-63  
0.000 To 41.25 %



MAT 2840

(n,2n)  
Cross Section

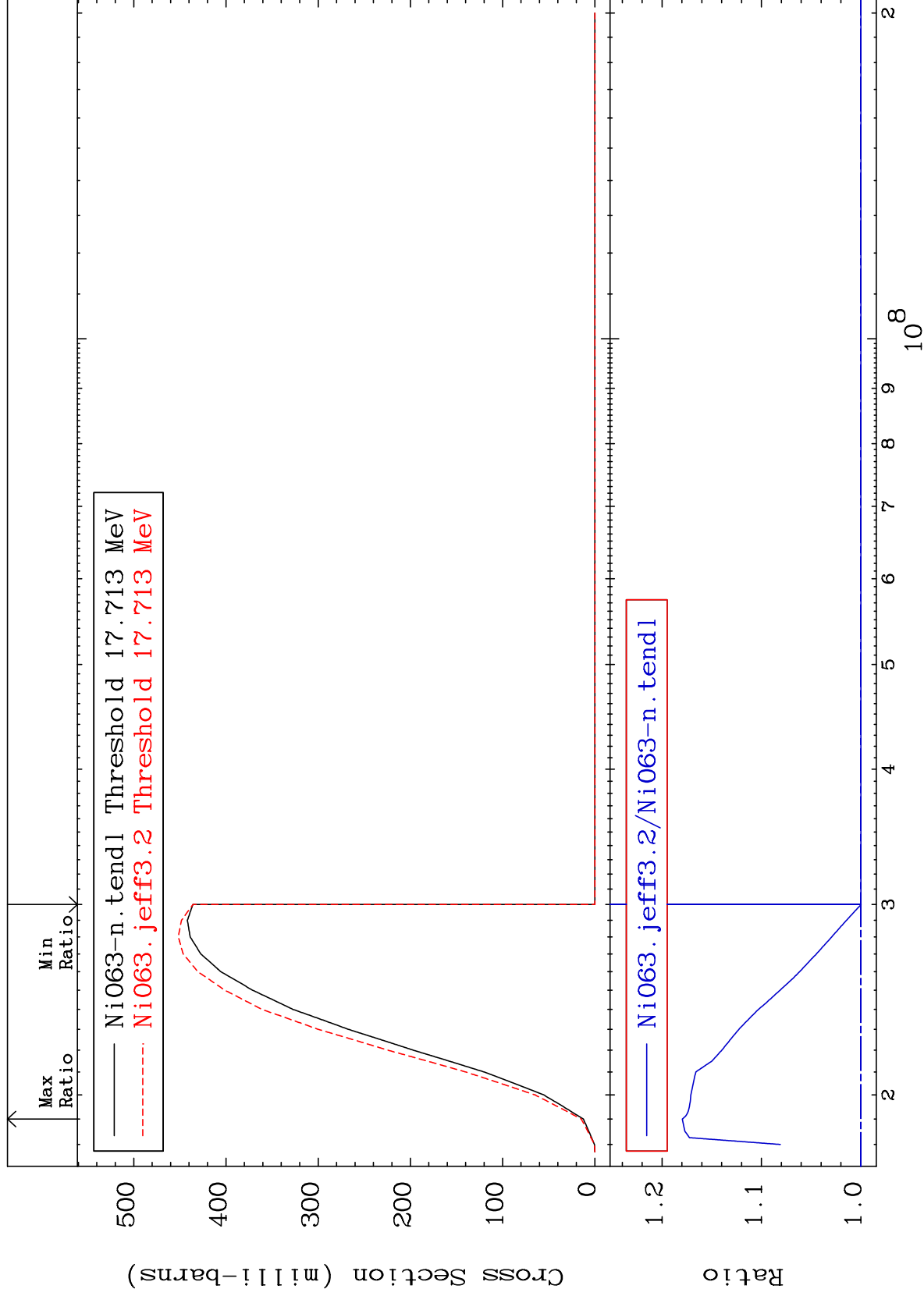
28-Ni-63  
-19.70 To 3.829 %



MAT 2840

(n,3n)  
Cross Section

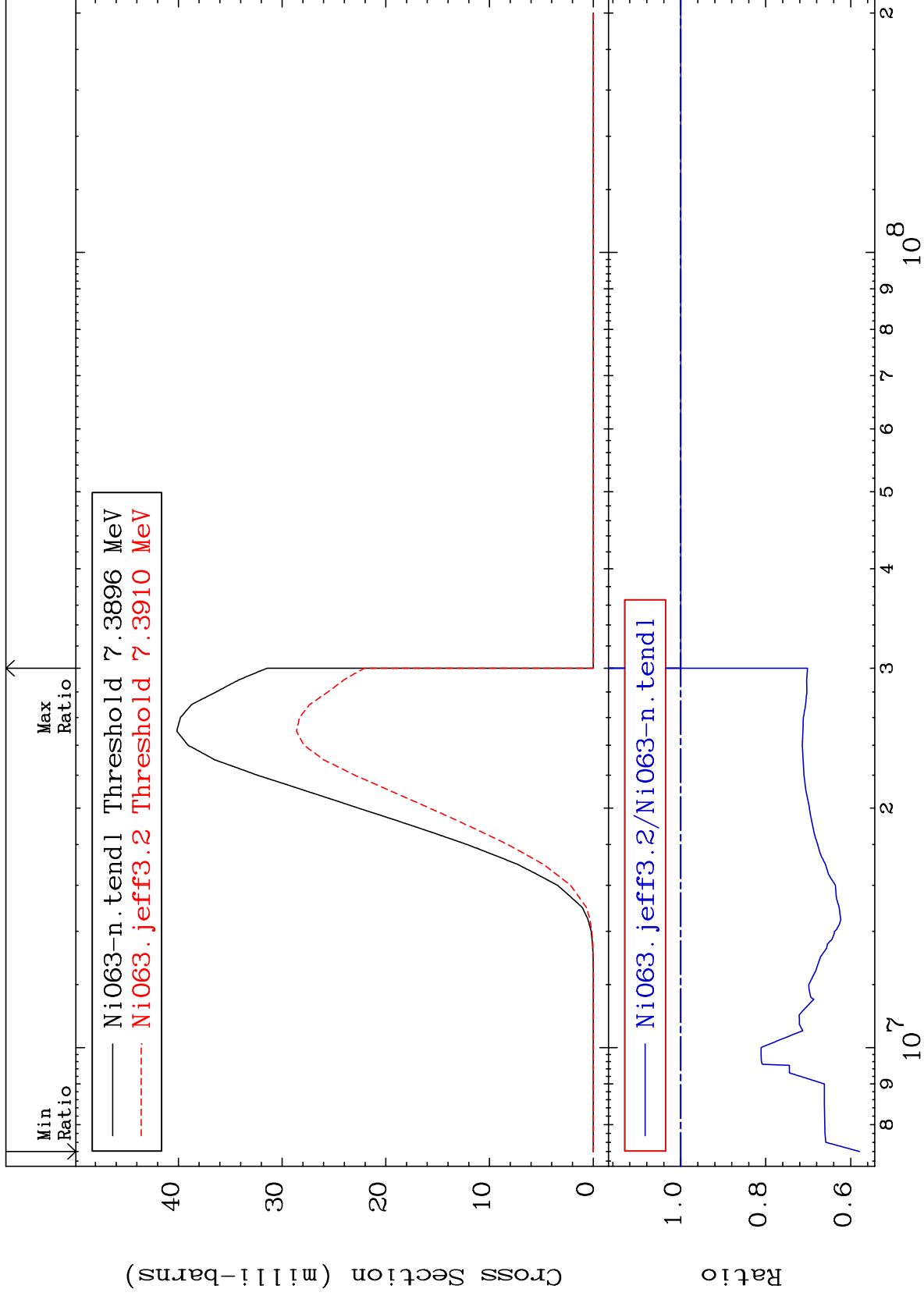
28-Ni-63  
-0.023 To 17.96 %



MAT 2840

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

28-Ni-63  
-42.07 To 0.000 %

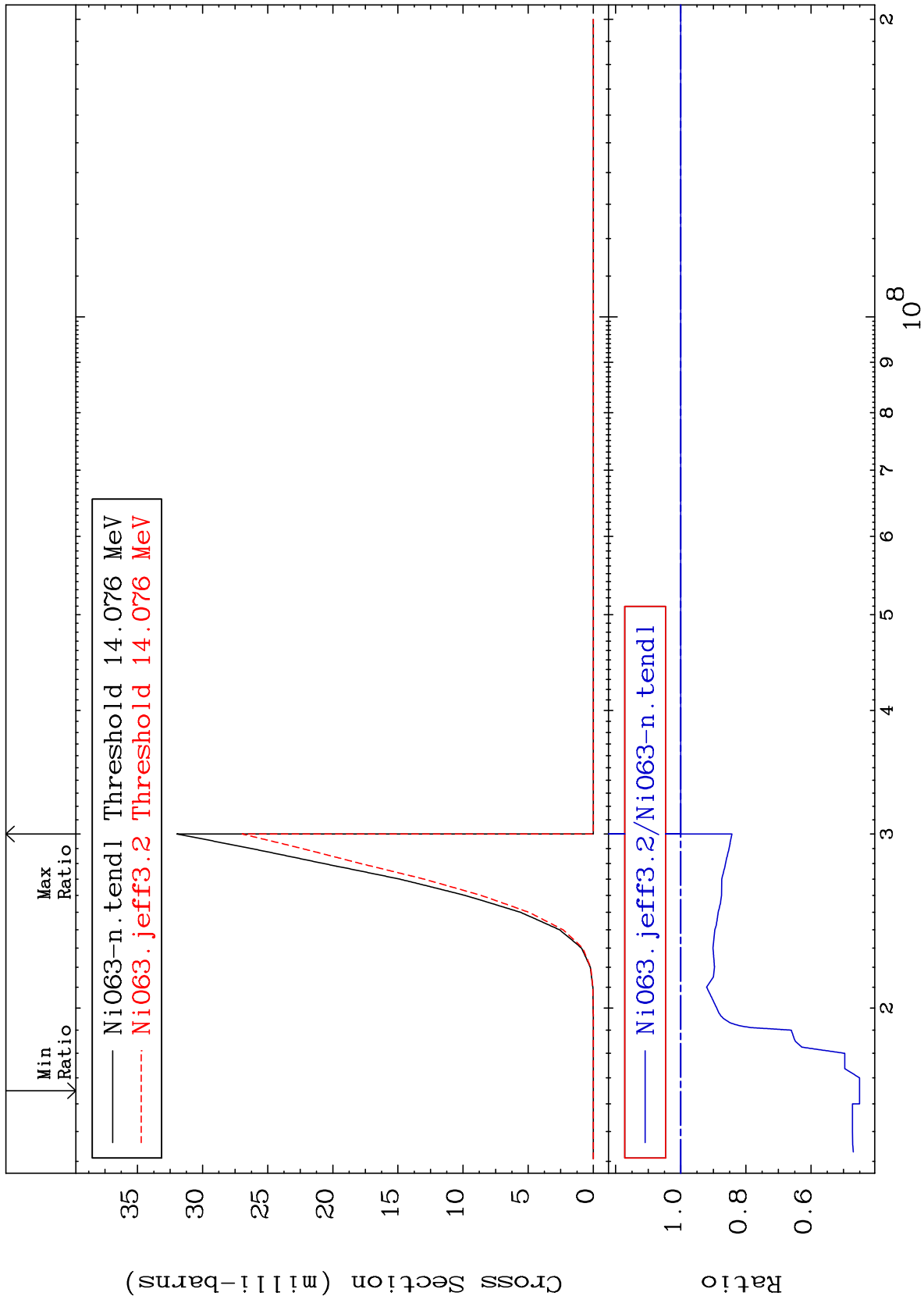


7

Incident Energy (eV)

28-Ni-63

MAT 2840  $(n,2n) \alpha$  28-Ni-63  
 Cross Section -54.91 To 0.000 %

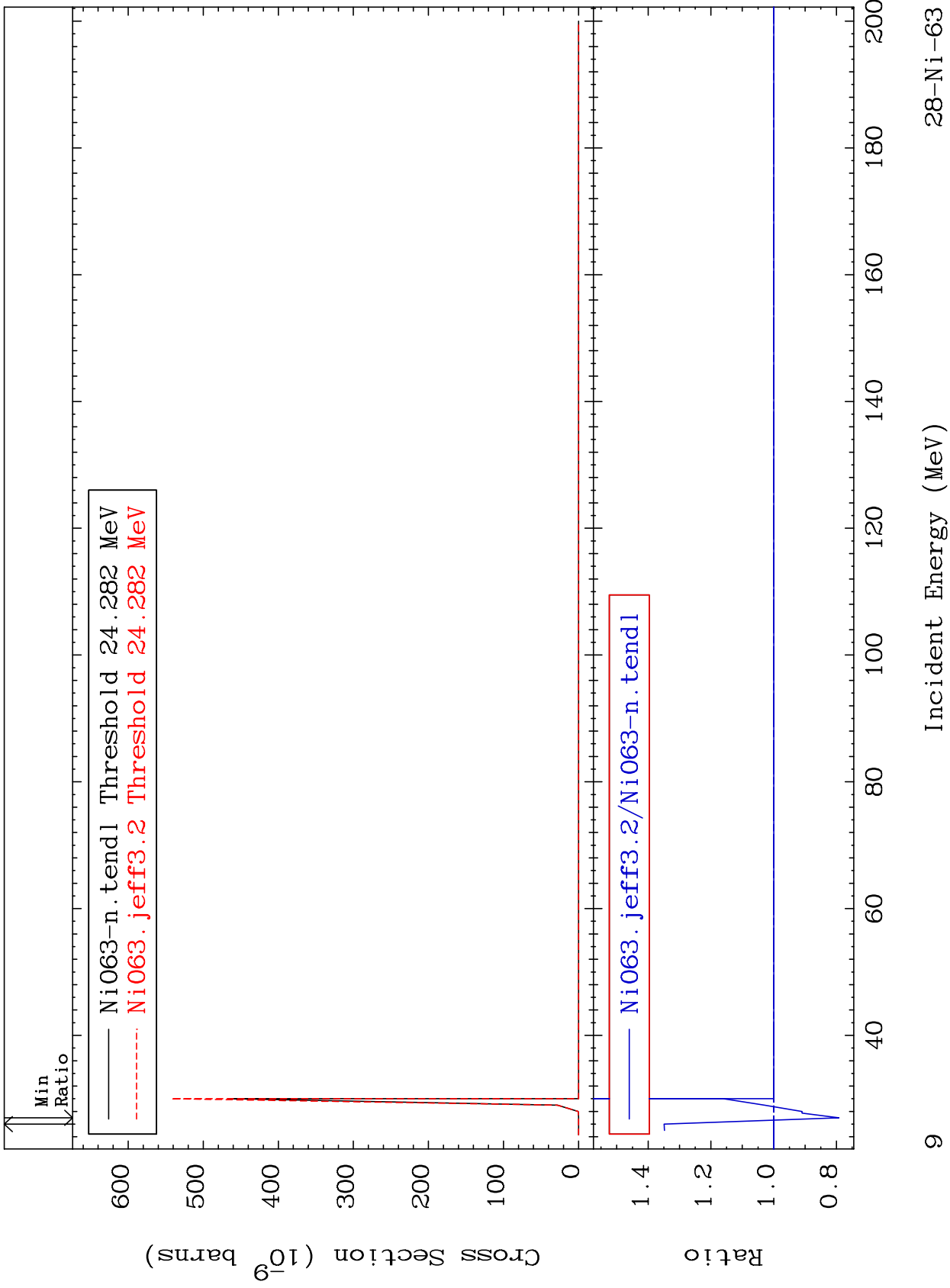




MAT 2840

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

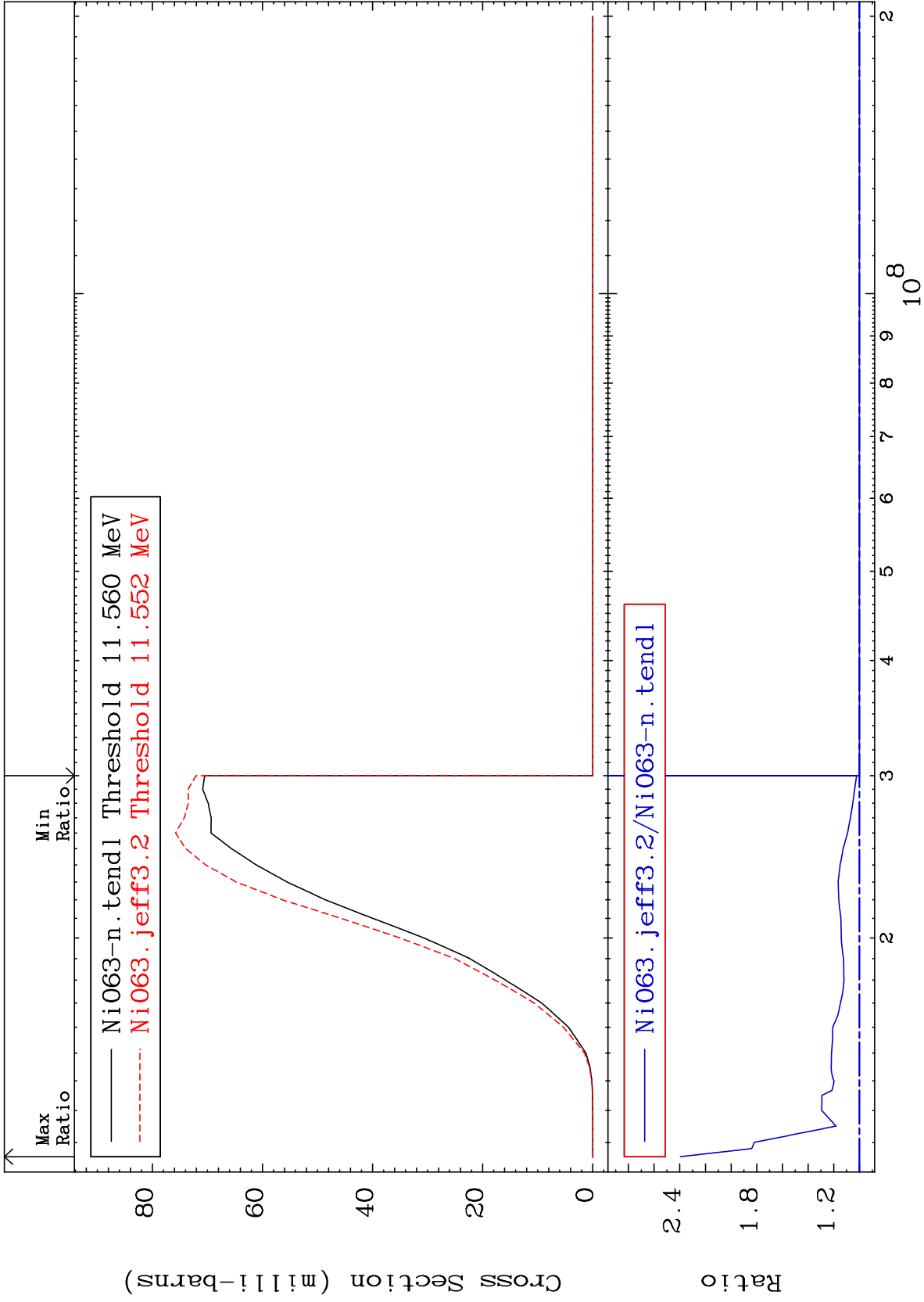
28-Ni-63  
-20.76 To 34.91 %



MAT 2840

(n,n') p  
Cross Section

28-Ni-63  
0.000 To 139.6 %



10

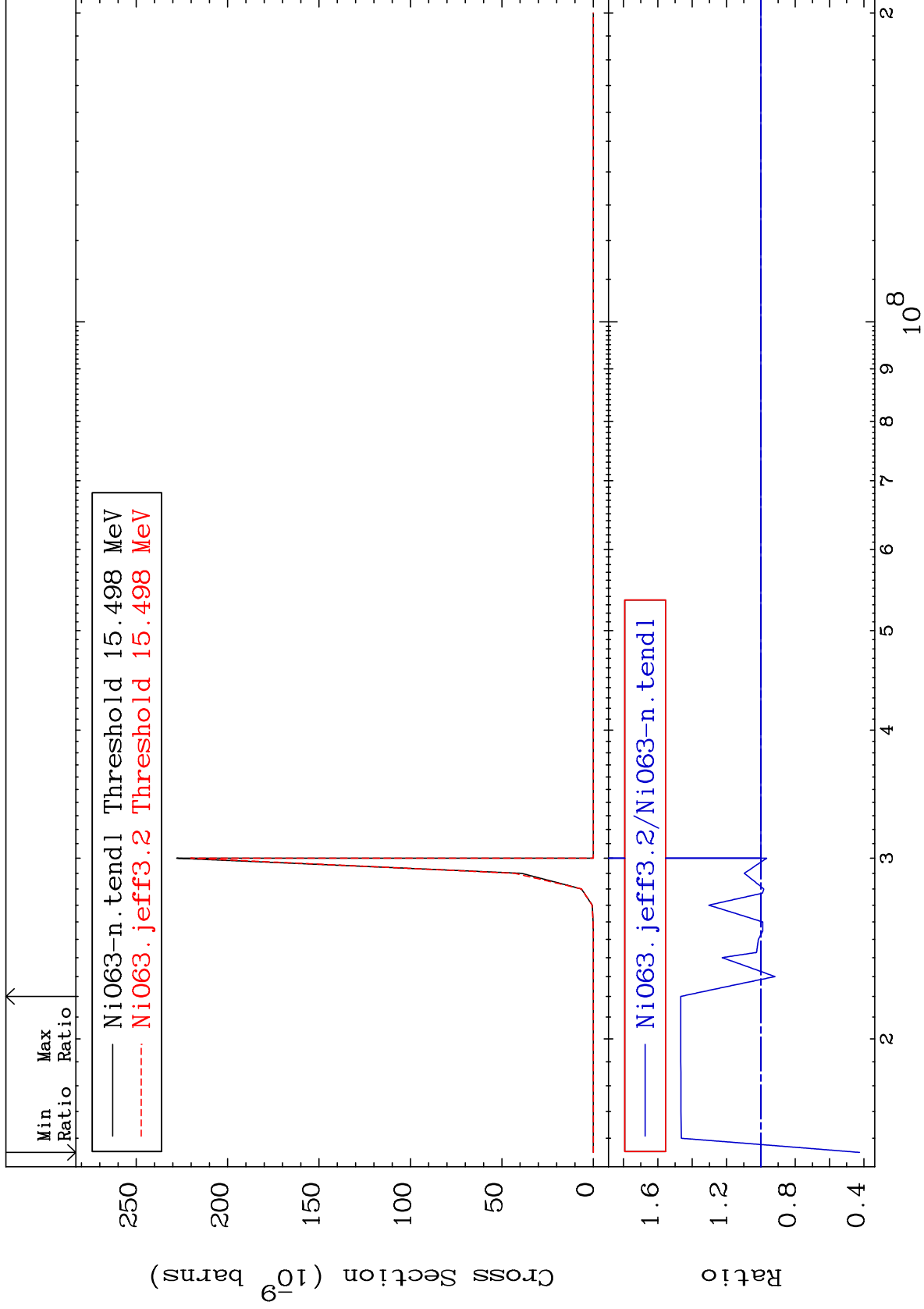
Incident Energy (eV)

28-Ni-63

MAT 2840

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

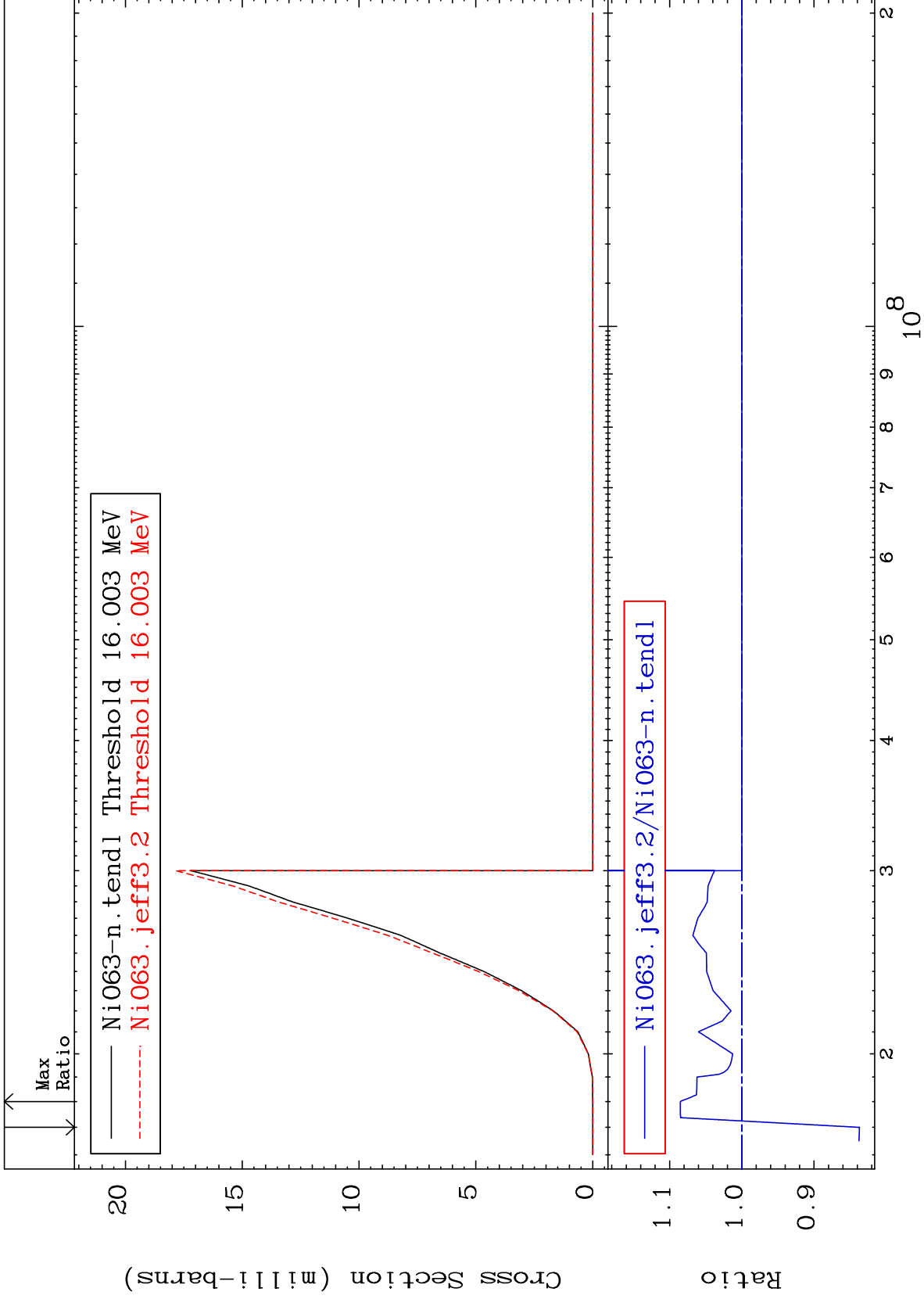
28-Ni-63  
-57.46 To 46.66 %



MAT 2840

(n,n') d  
Cross Section

28-Ni-63  
-16.29 To 8.507 %

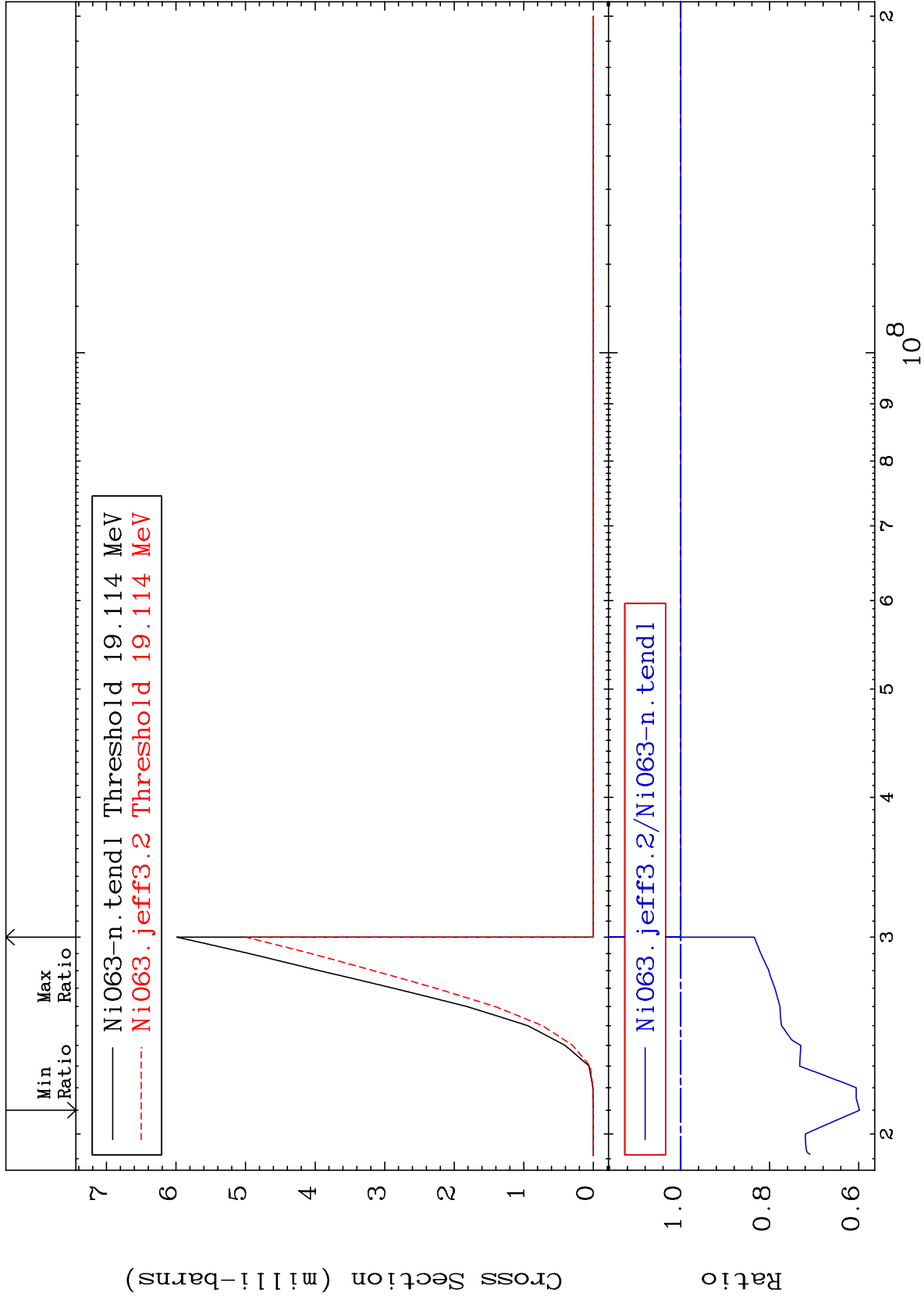


12

Incident Energy (eV)

28-Ni-63

MAT 2840 (n,n') t 28-Ni-63  
 Cross Section -40.20 To 0.000 %

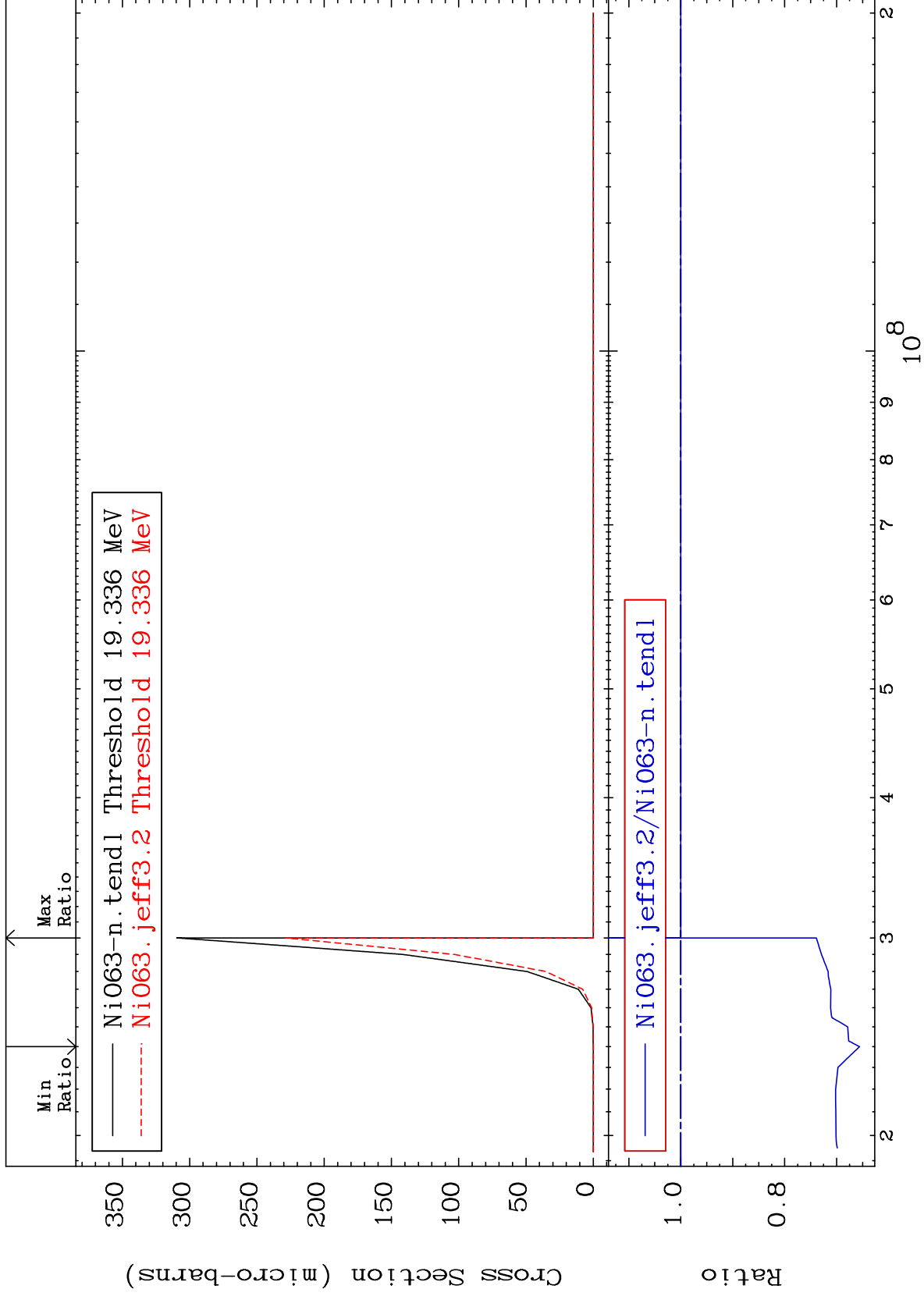


13 28-Ni-63

MAT 2840

(n, n') He-3  
Cross Section

28-Ni-63  
-34.42 To 0.000 %



14

28-Ni-63

28-Ni-63

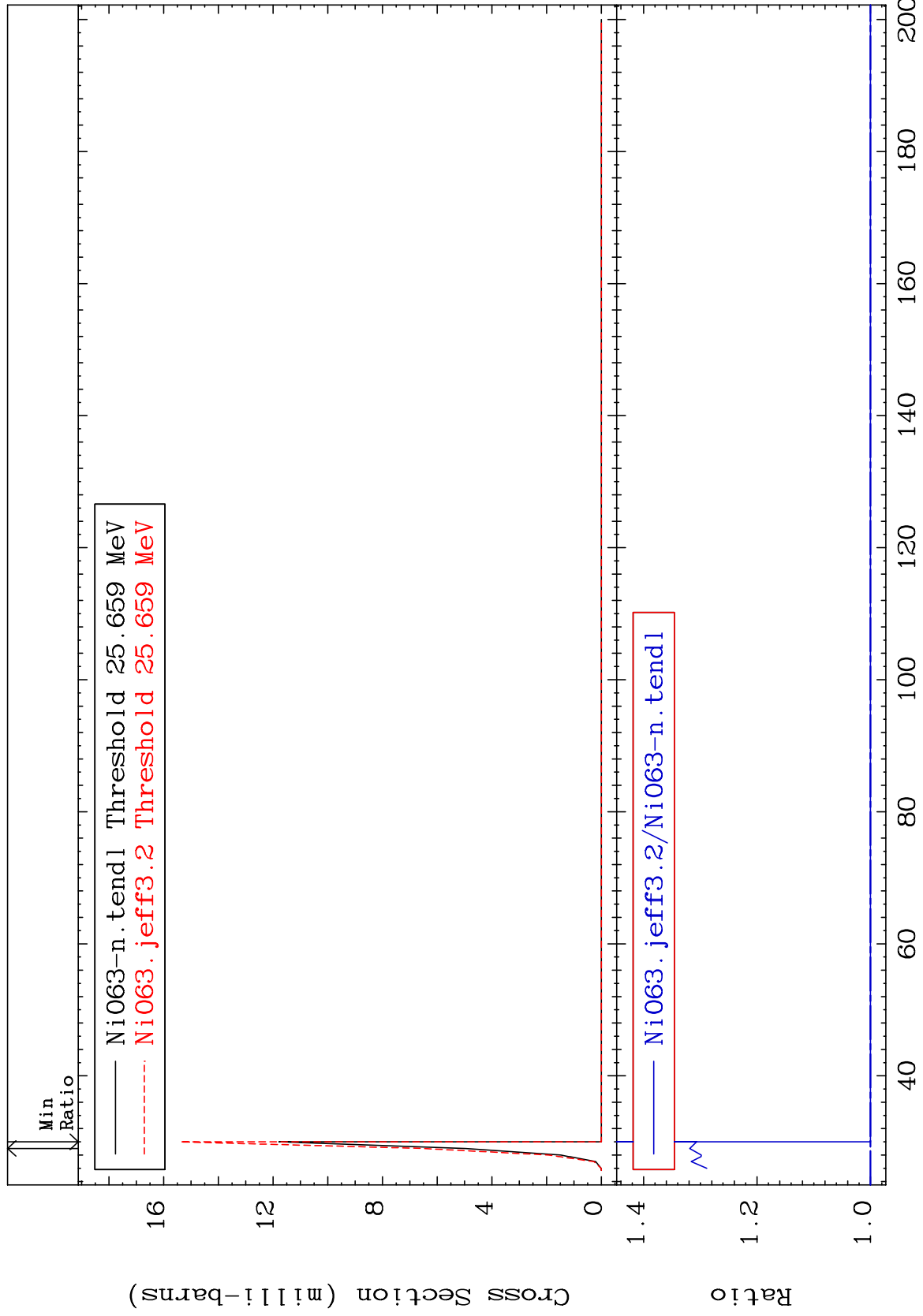
MAT 2840

(n,4n)

28-Ni-63

Cross Section

0.000 To 31.87 %

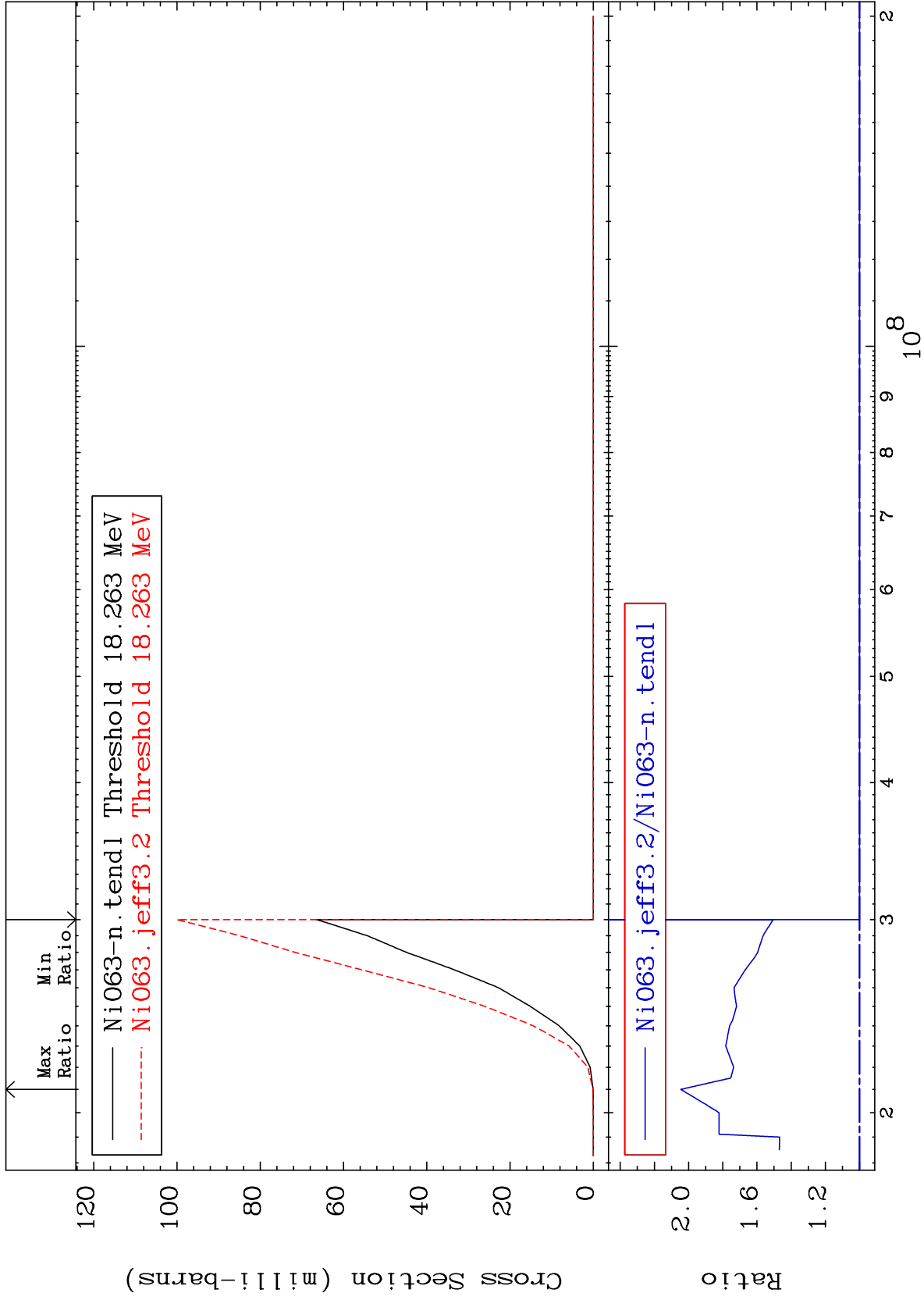


15

Incident Energy (MeV)

28-Ni-63

MAT 2840  $(n,2n)$  p 28-Ni-63  
 Cross Section To 104.6 %



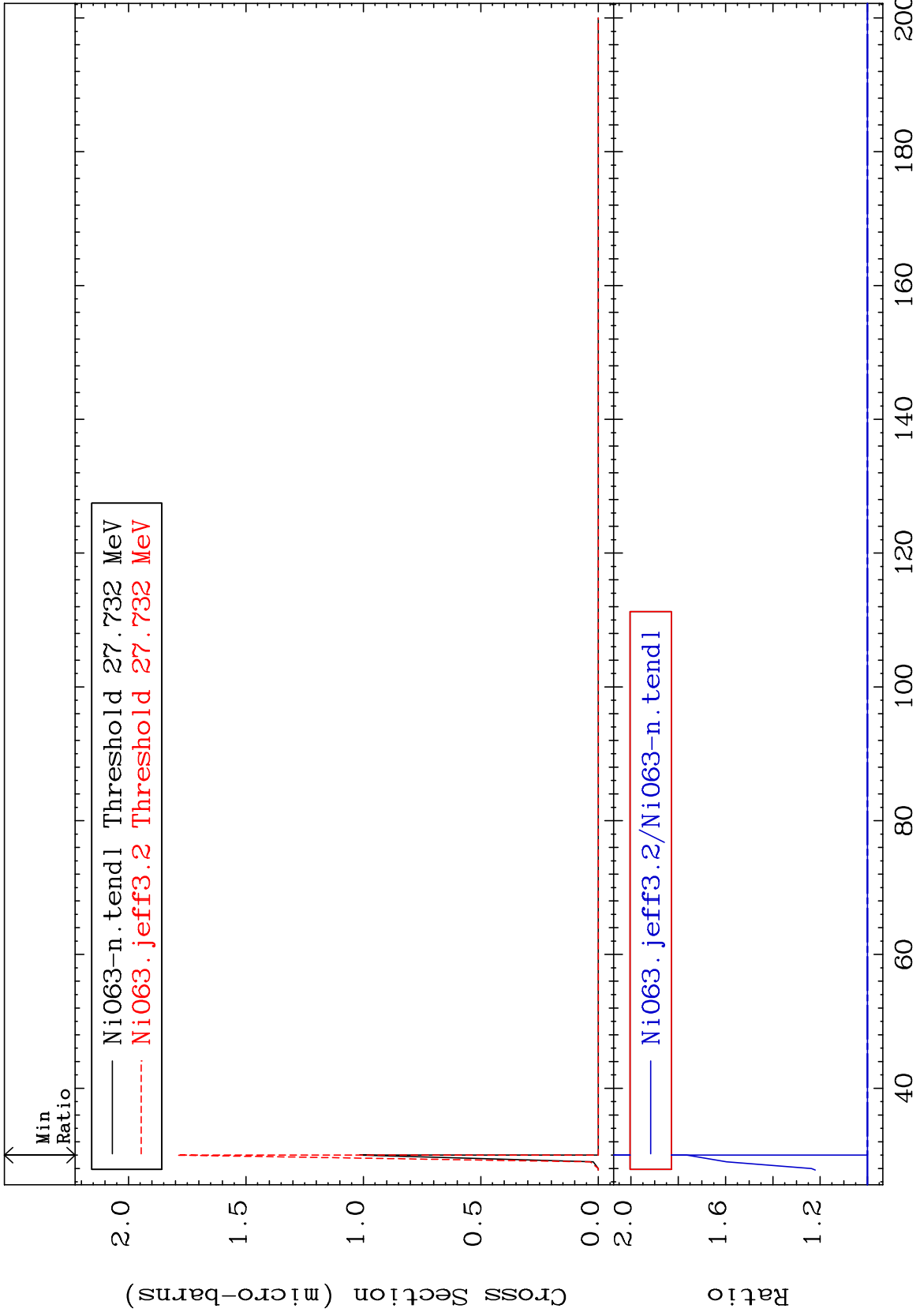
16 Incident Energy (eV) 28-Ni-63



MAT 2840

(n,3n) p  
Cross Section

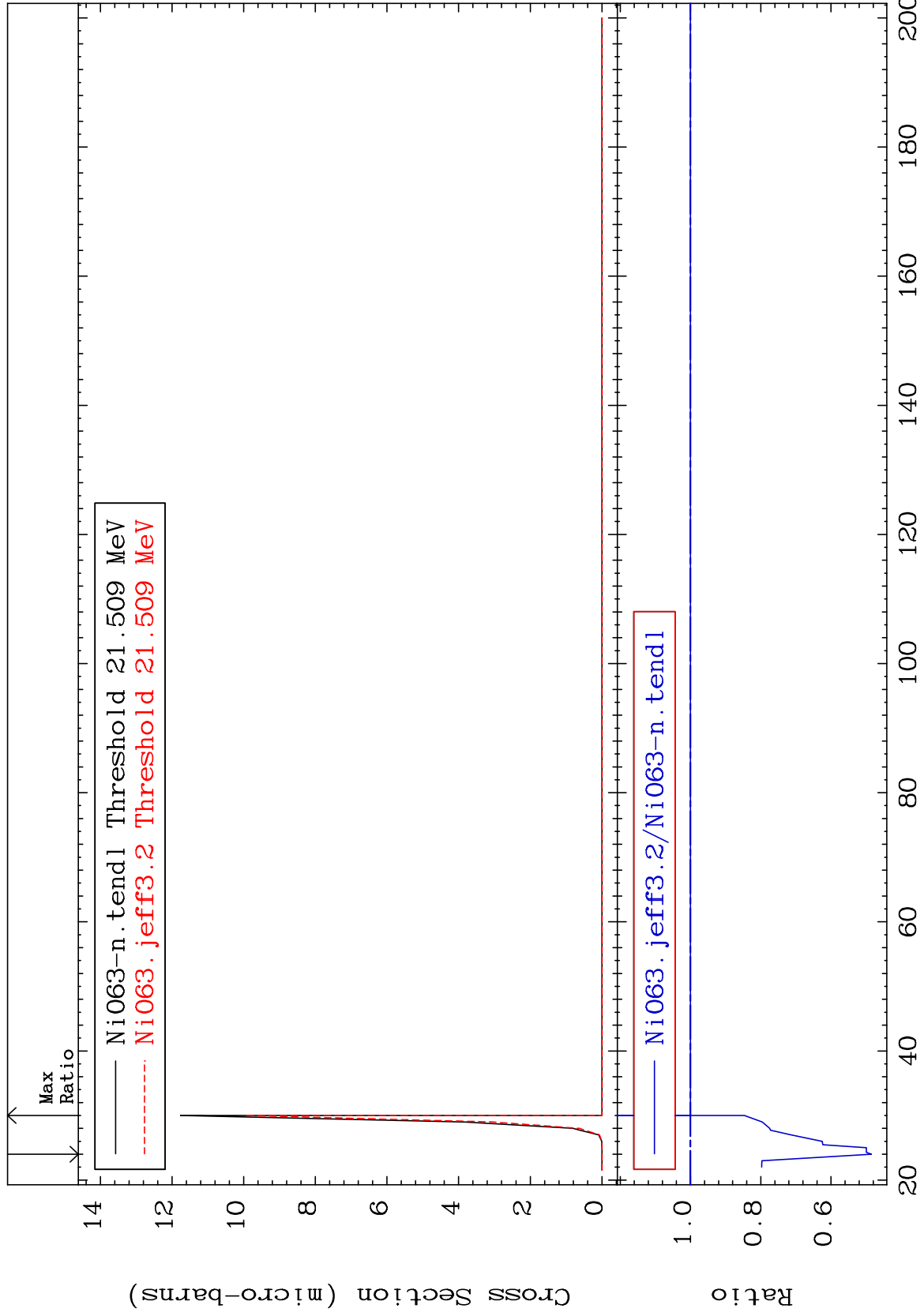
28-Ni-63  
To 76.43 %  
0.000



MAT 2840

(n,2n) p  
Cross Section

28-Ni-63  
-51.48 To 0.000 %



18

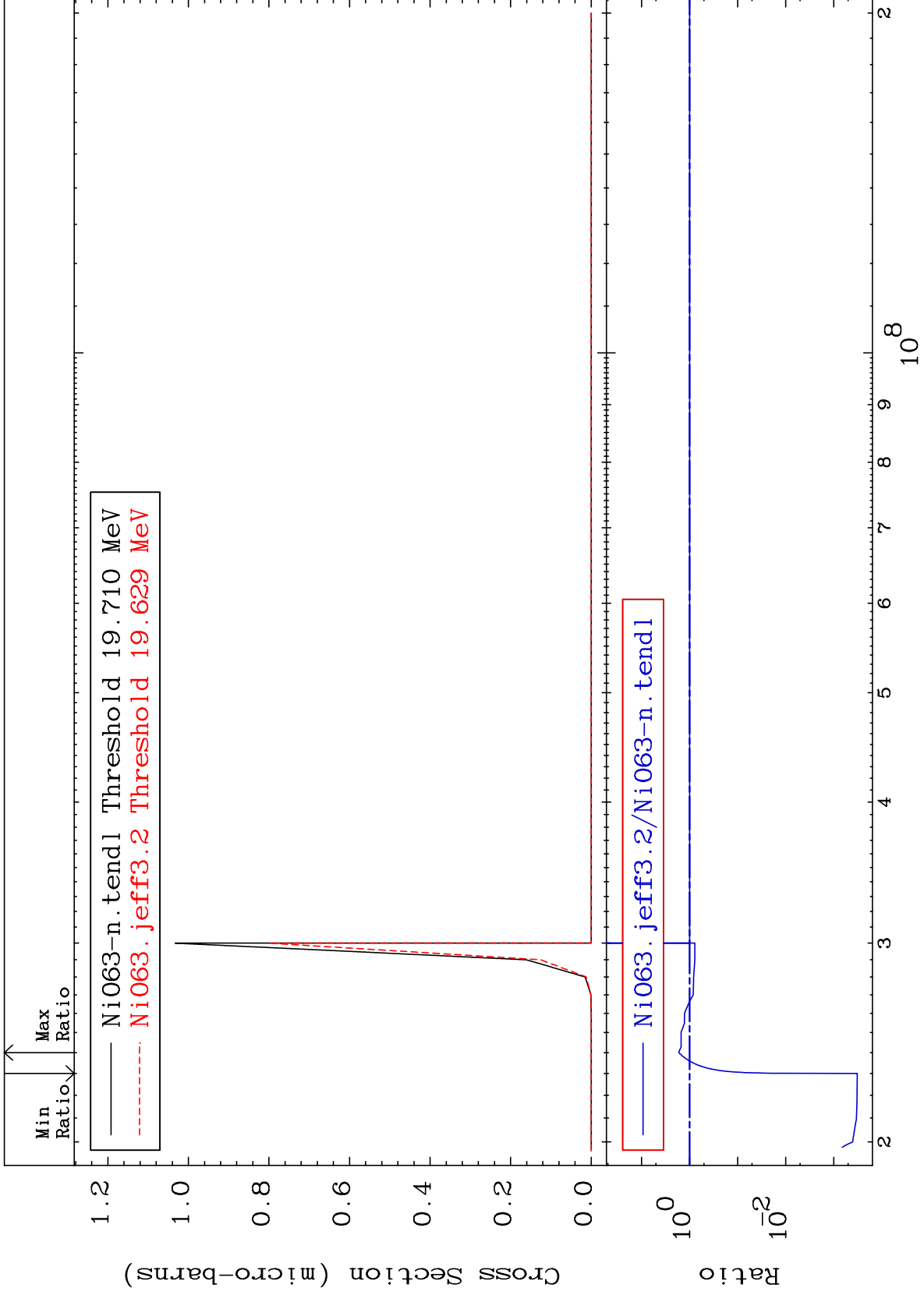
Incident Energy (MeV)

28-Ni-63

MAT 2840

(n,n') p  $\alpha$   
Cross Section

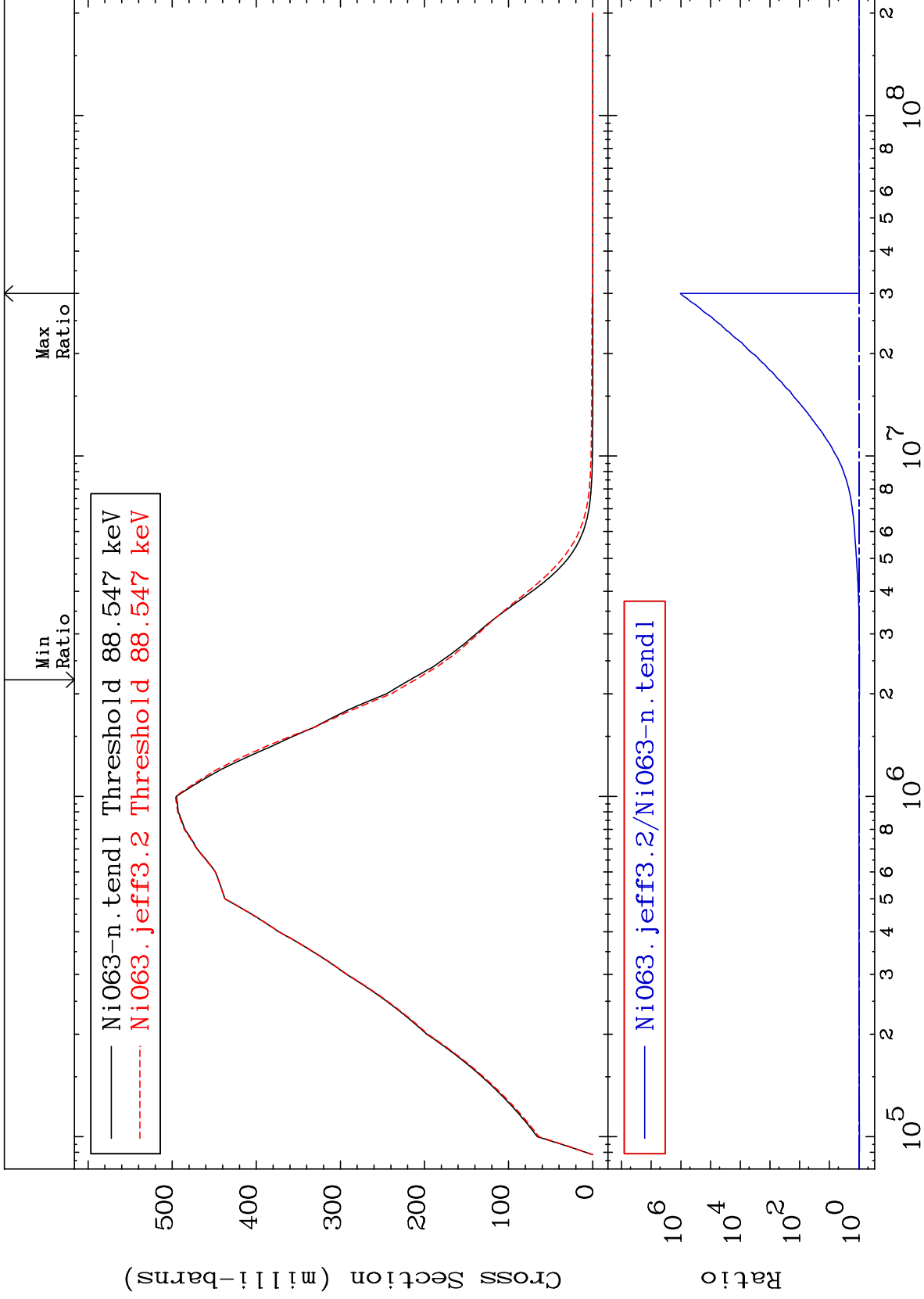
28-Ni-63  
-99.97 To 68.90 %



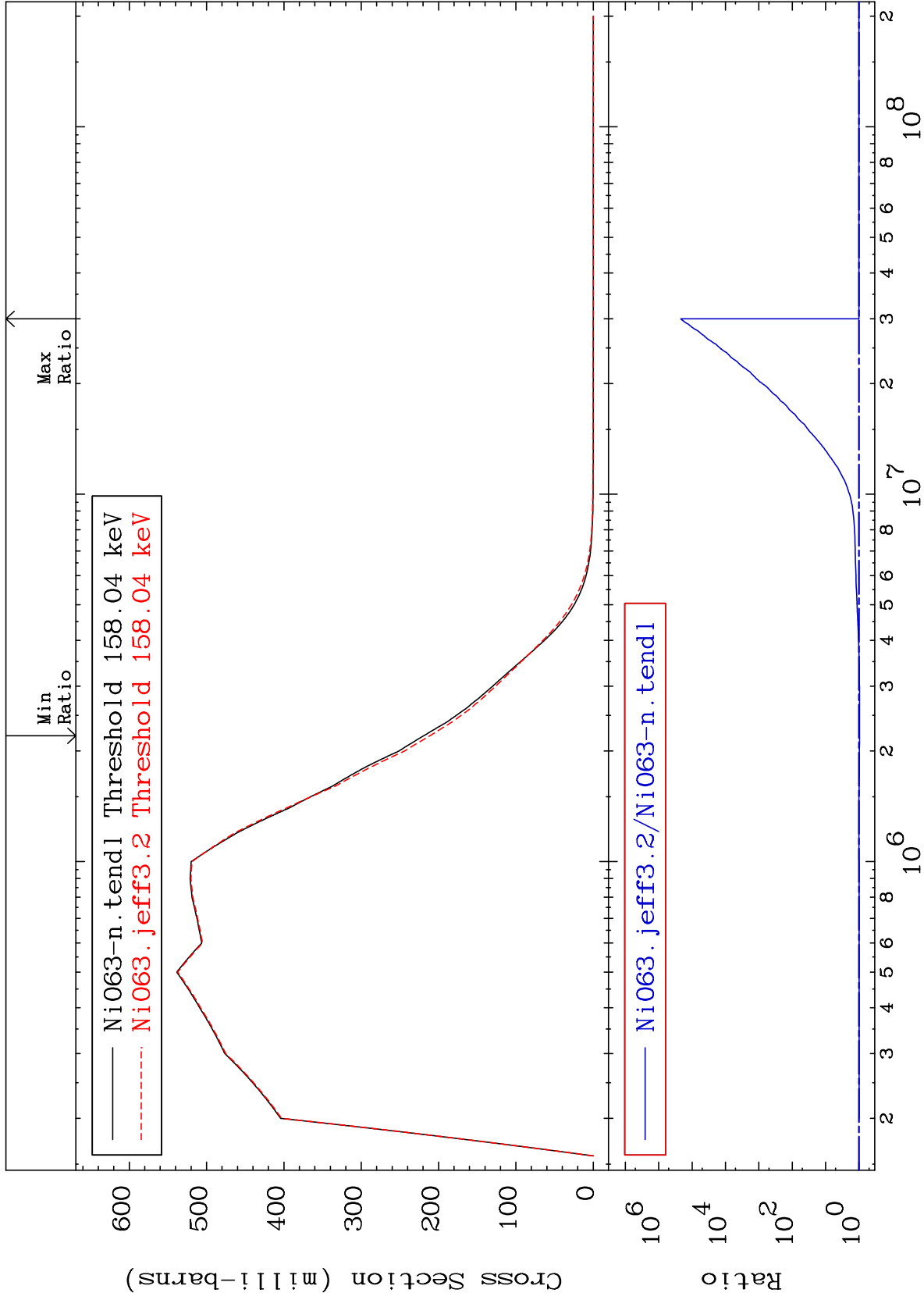
MAT 2840

87.15 keV (n,n') Level  
Cross Section

28-Ni-63  
-2.872 To 9999. %



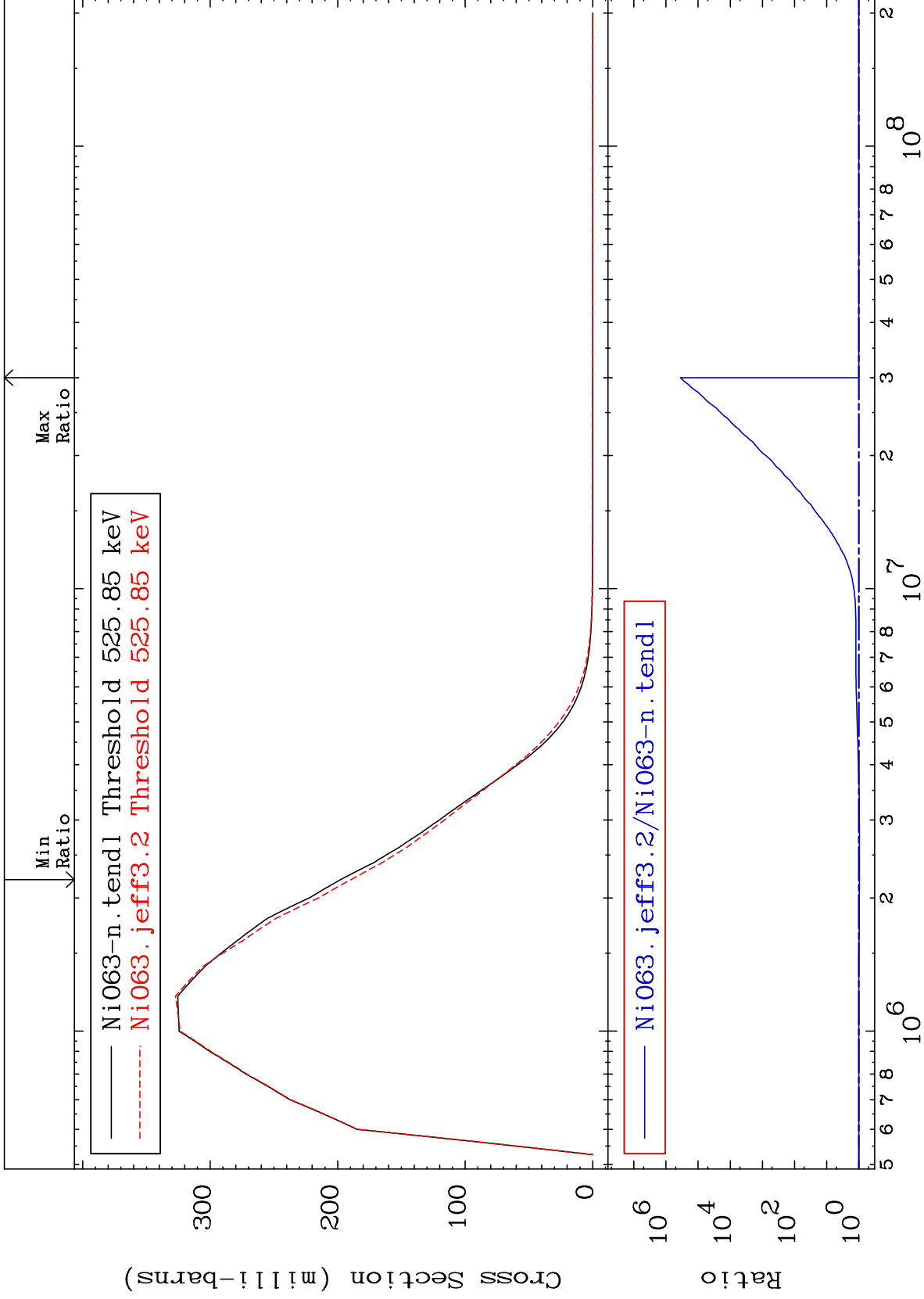
MAT 2840 28-Ni-63  
 155.5 keV (n,n') Level  
 Cross Section -3.710 To 9999. %



MAT 2840

517.6 keV (n,n') Level  
Cross Section

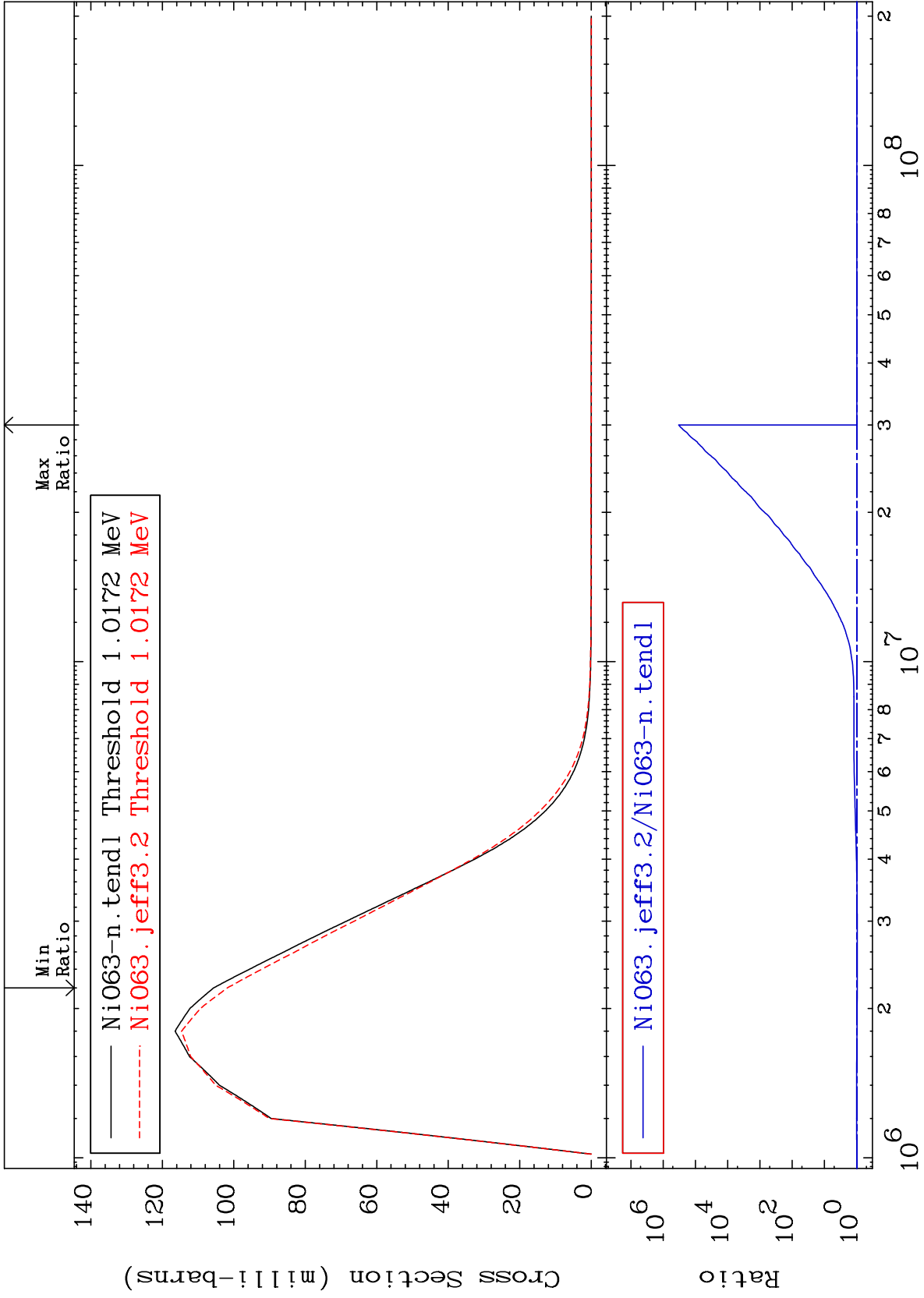
28-Ni-63  
-4.101 To 9999. %



MAT 2840

1.001 MeV (n,n') Level  
Cross Section

28-Ni-63  
-3.644 To 9999. %



23

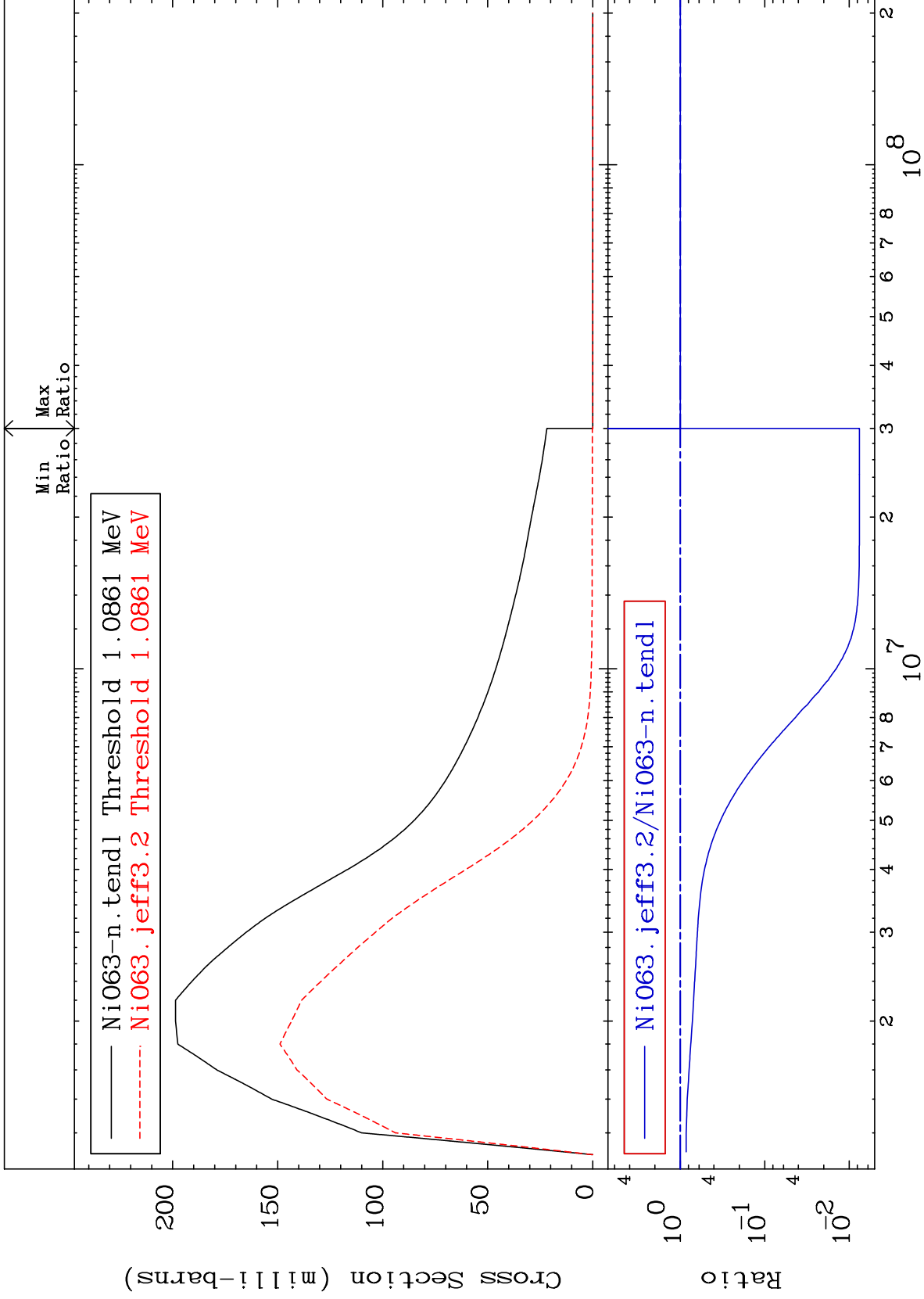
Incident Energy (eV)

28-Ni-63

MAT 2840

1.069 MeV (n,n') Level  
Cross Section

28-Ni-63  
-99.24 To 0.000 %



24

Incident Energy (eV)

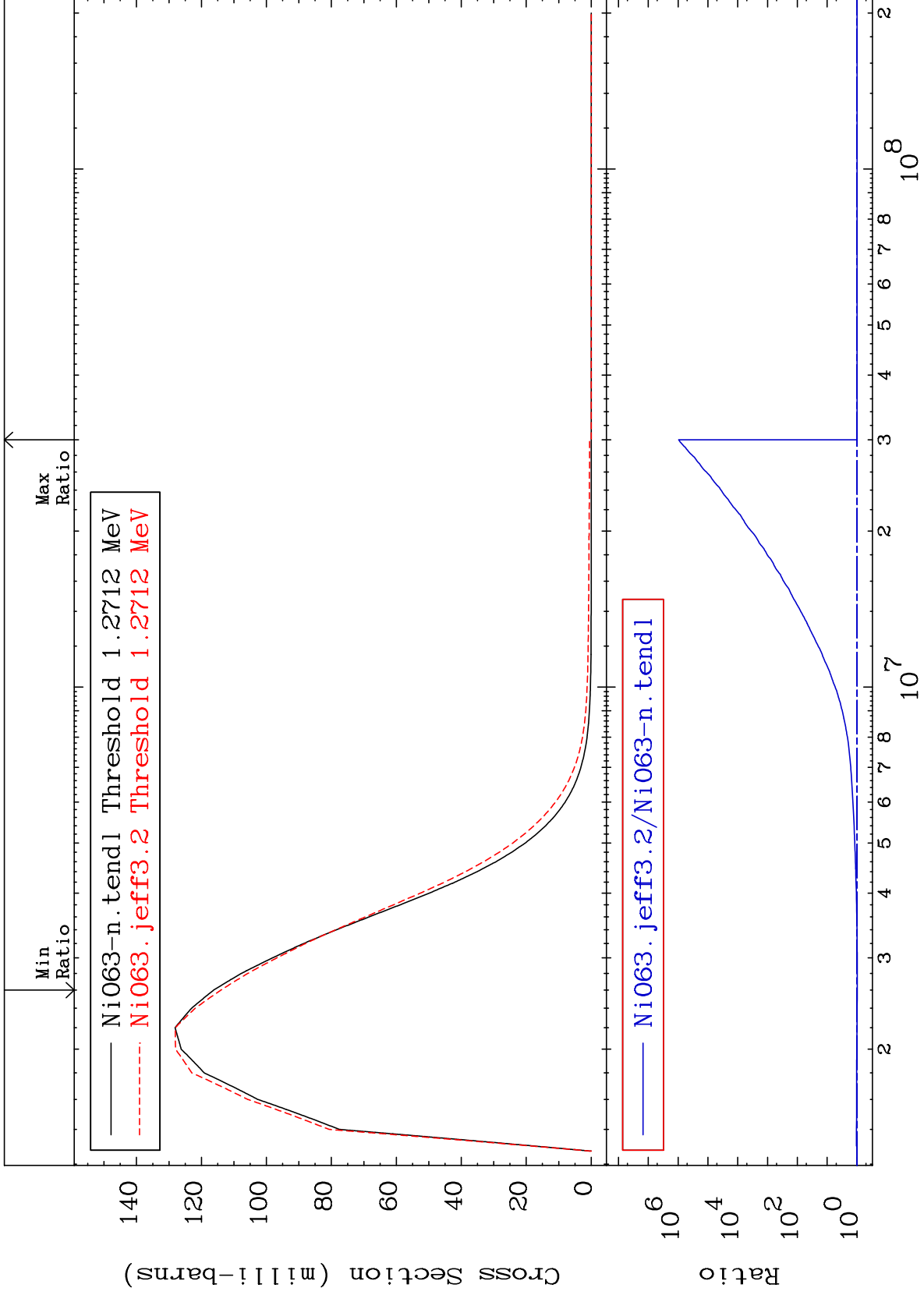
28-Ni-63



MAT 2840

1.251 MeV (n,n') Level  
Cross Section

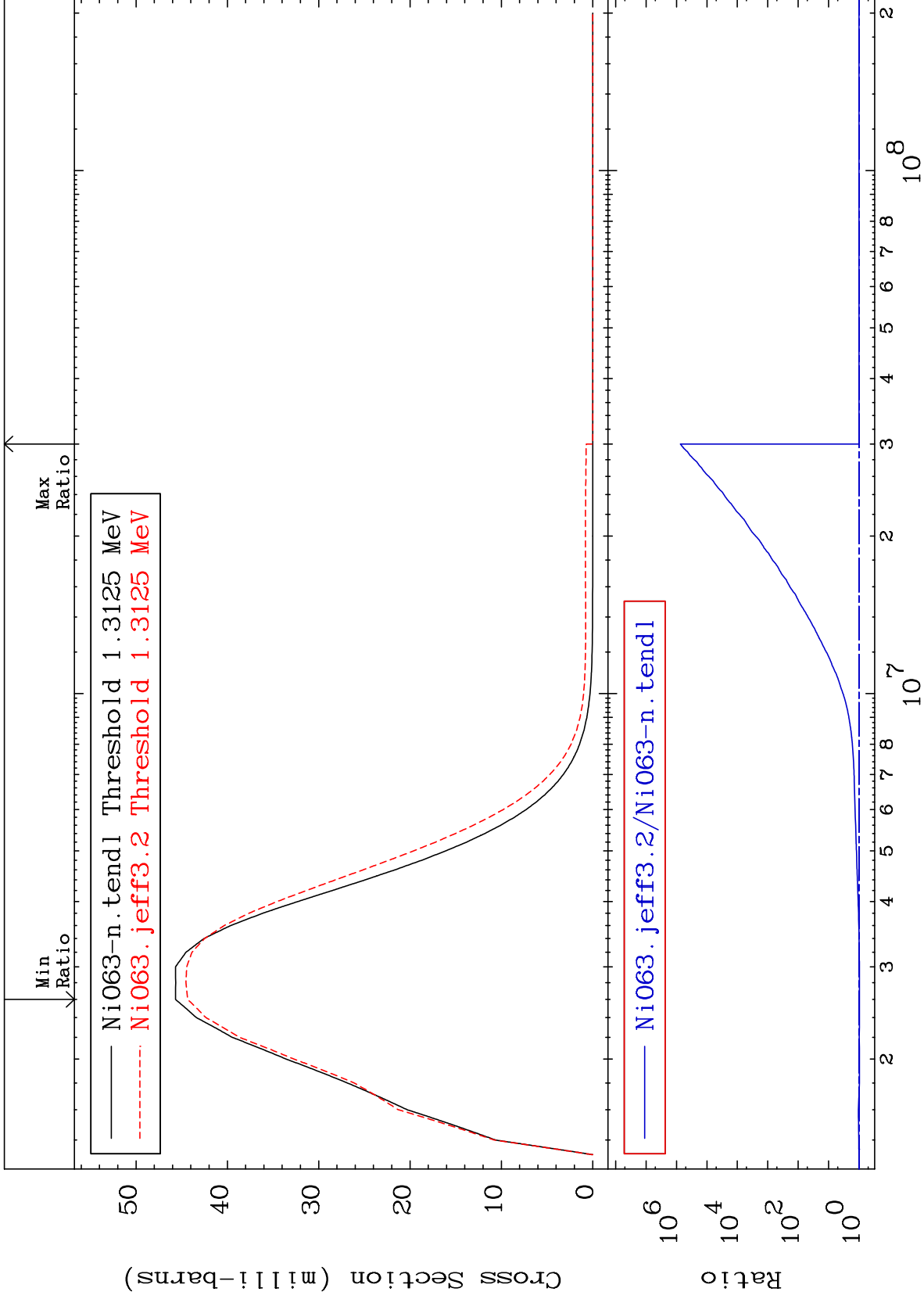
28-Ni-63  
-1.924 To 9999. %



MAT 2840

1.292 MeV (n,n') Level  
Cross Section

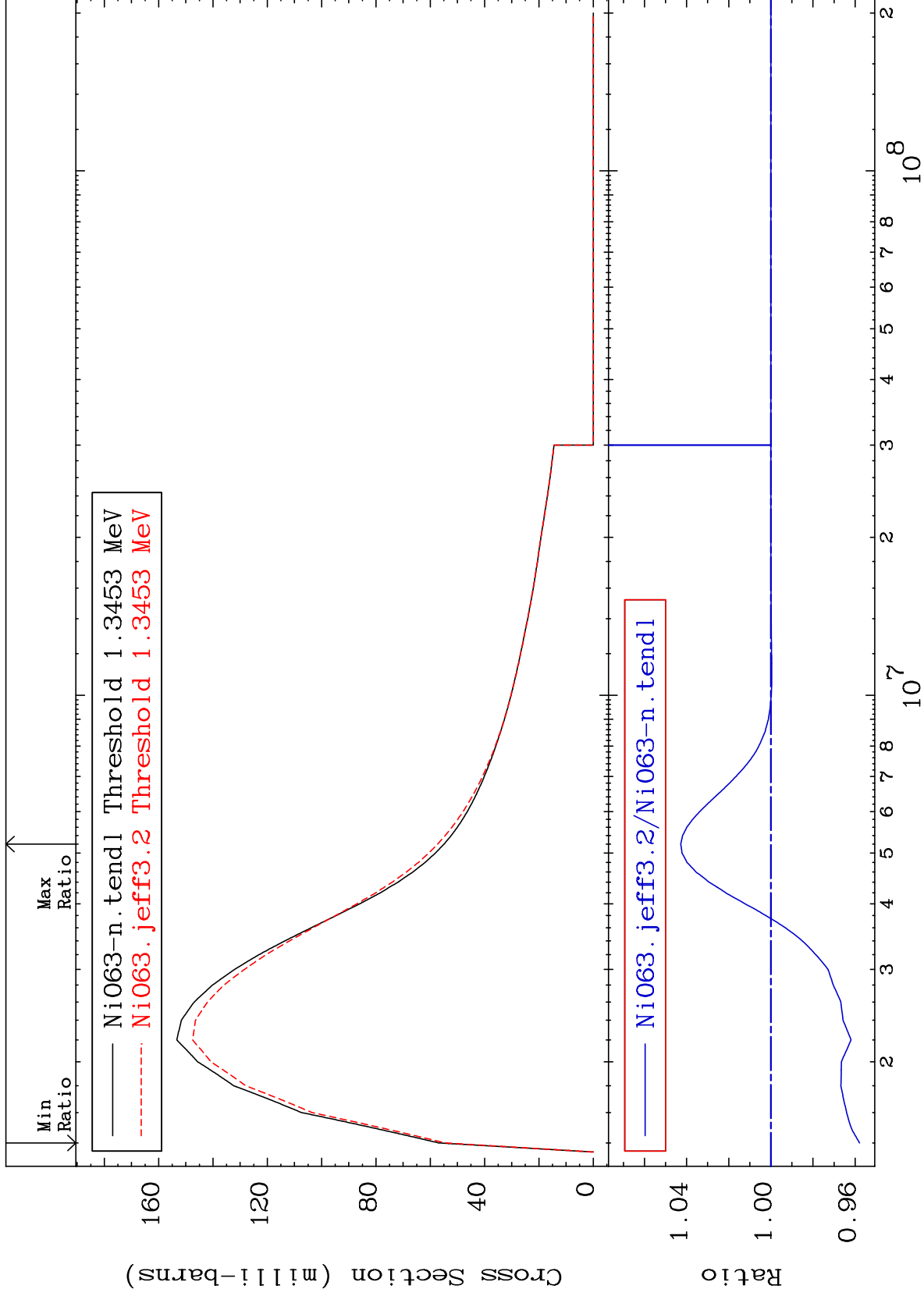
28-Ni-63  
-2.921 To 9999. %



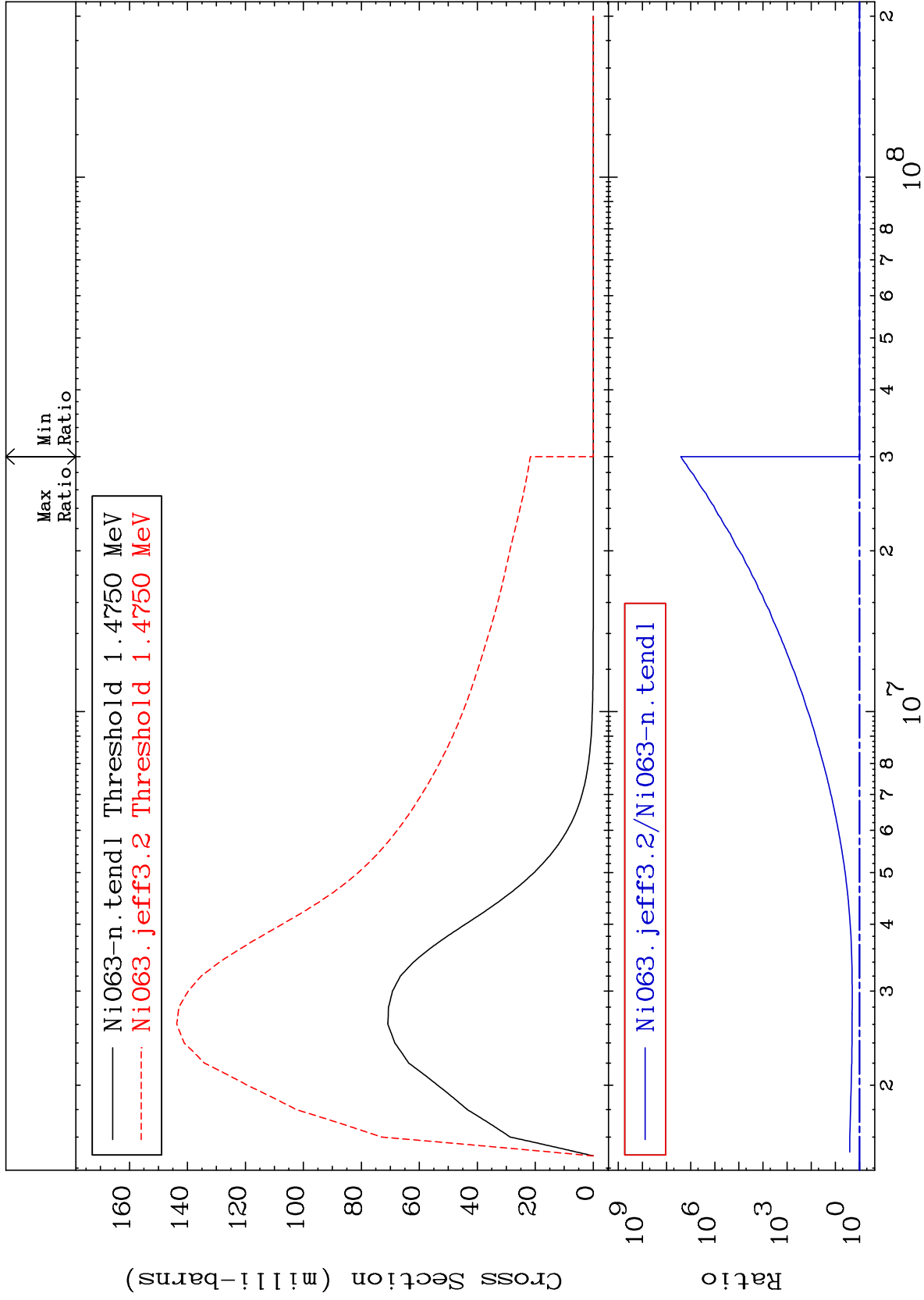
MAT 2840

1.324 MeV (n,n') Level  
Cross Section

28-Ni-63  
-4.211 To 4.278 %



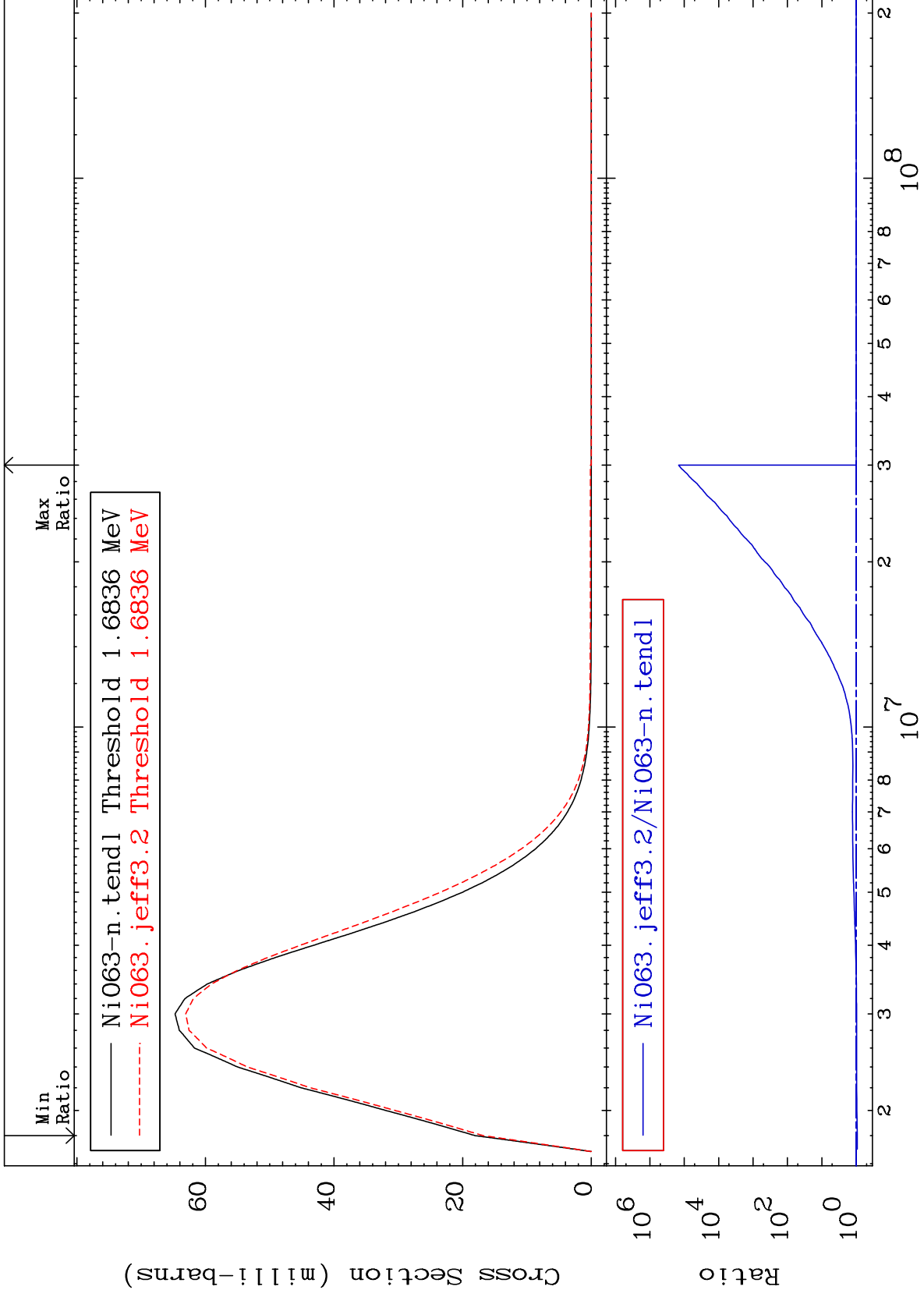
MAT 2840 1.452 MeV (n,n') Level Cross Section 28-Ni-63 To 9999. %



MAT 2840

1.657 MeV (n,n') Level  
Cross Section

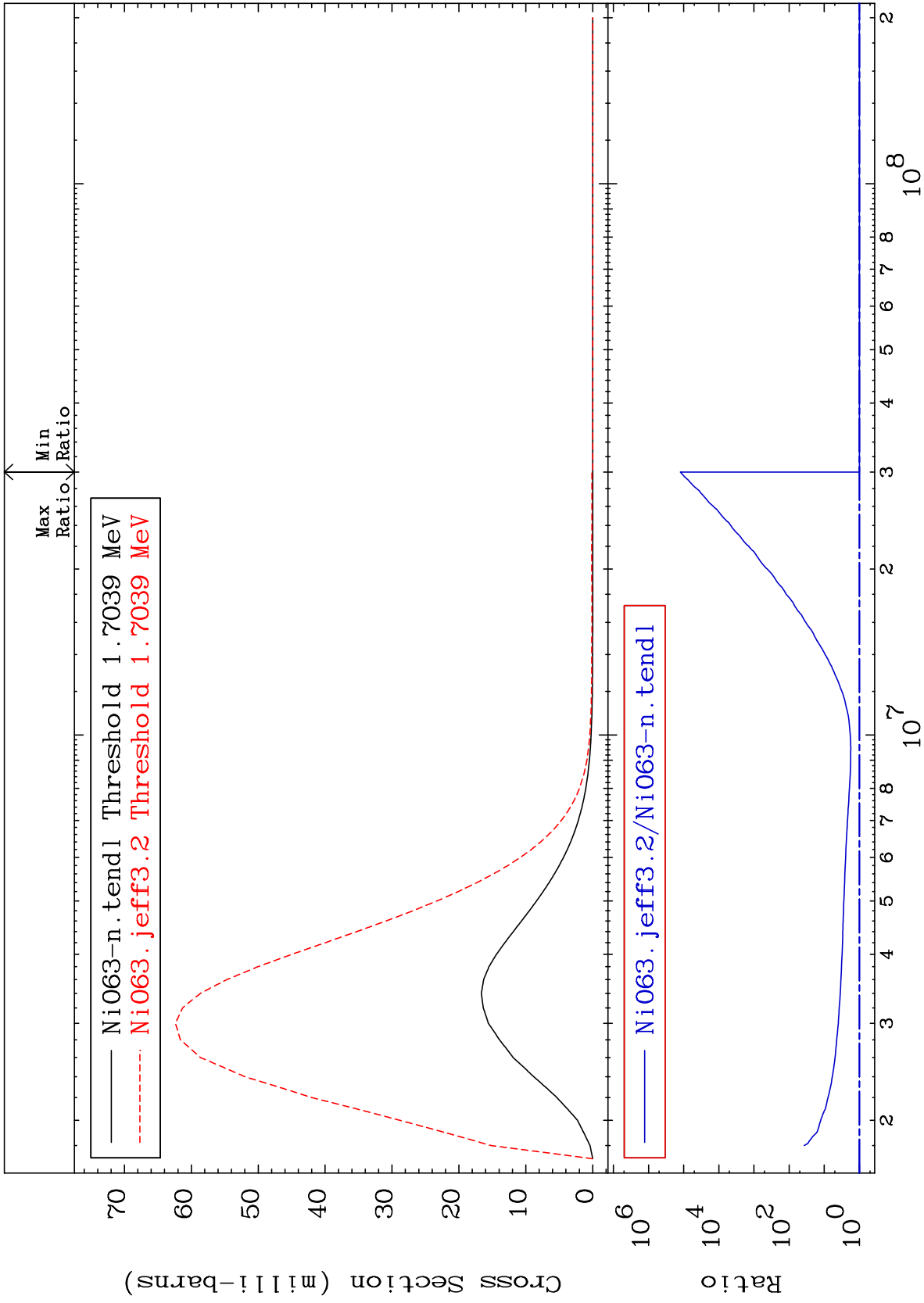
28-Ni-63  
-6.911 To 9999. %



MAT 2840

1.677 MeV (n,n') Level  
Cross Section

28-Ni-63  
0.000 To 9999. %



30

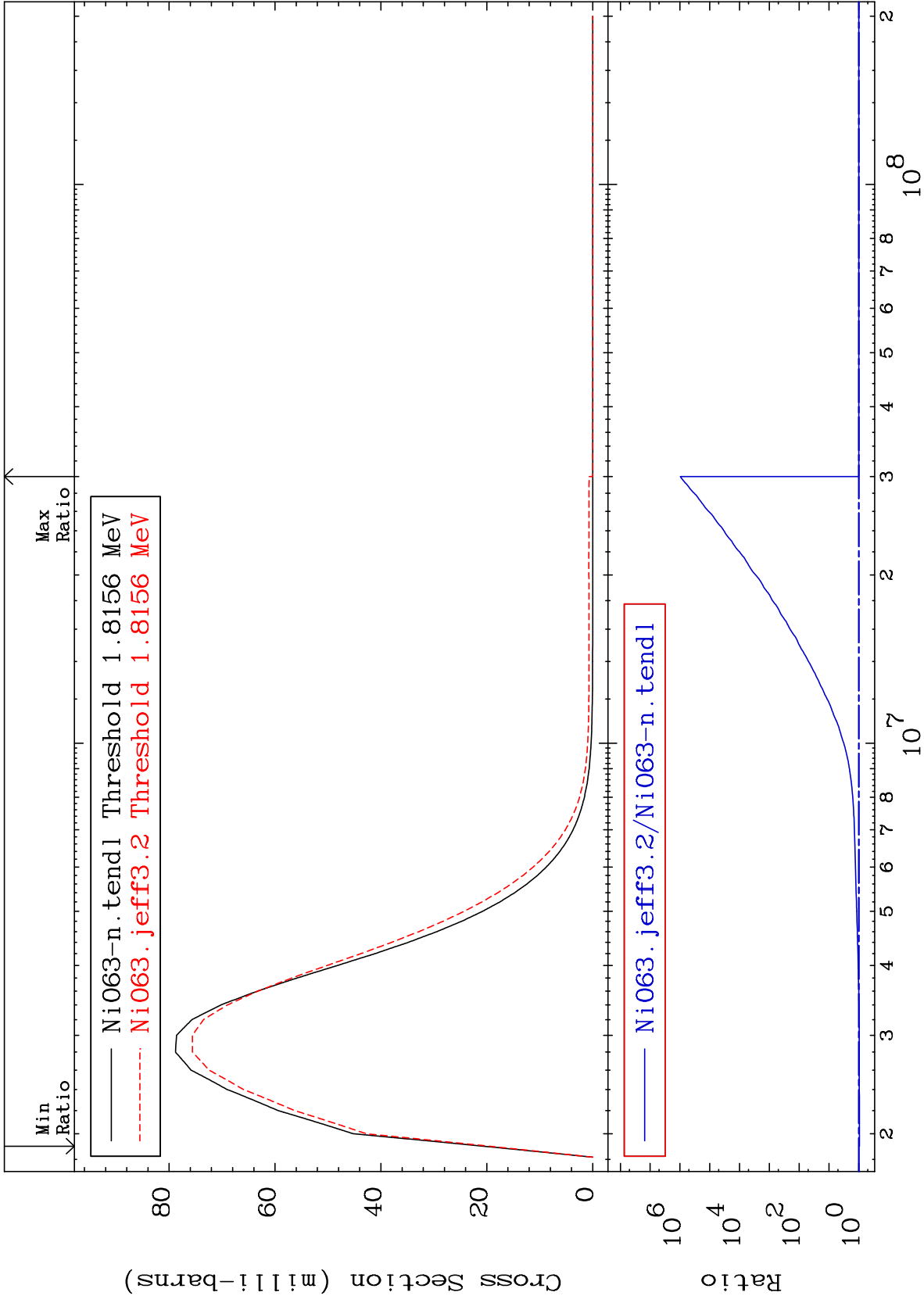
Incident Energy (eV)

28-Ni-63

MAT 2840

1.787 MeV (n,n') Level  
Cross Section

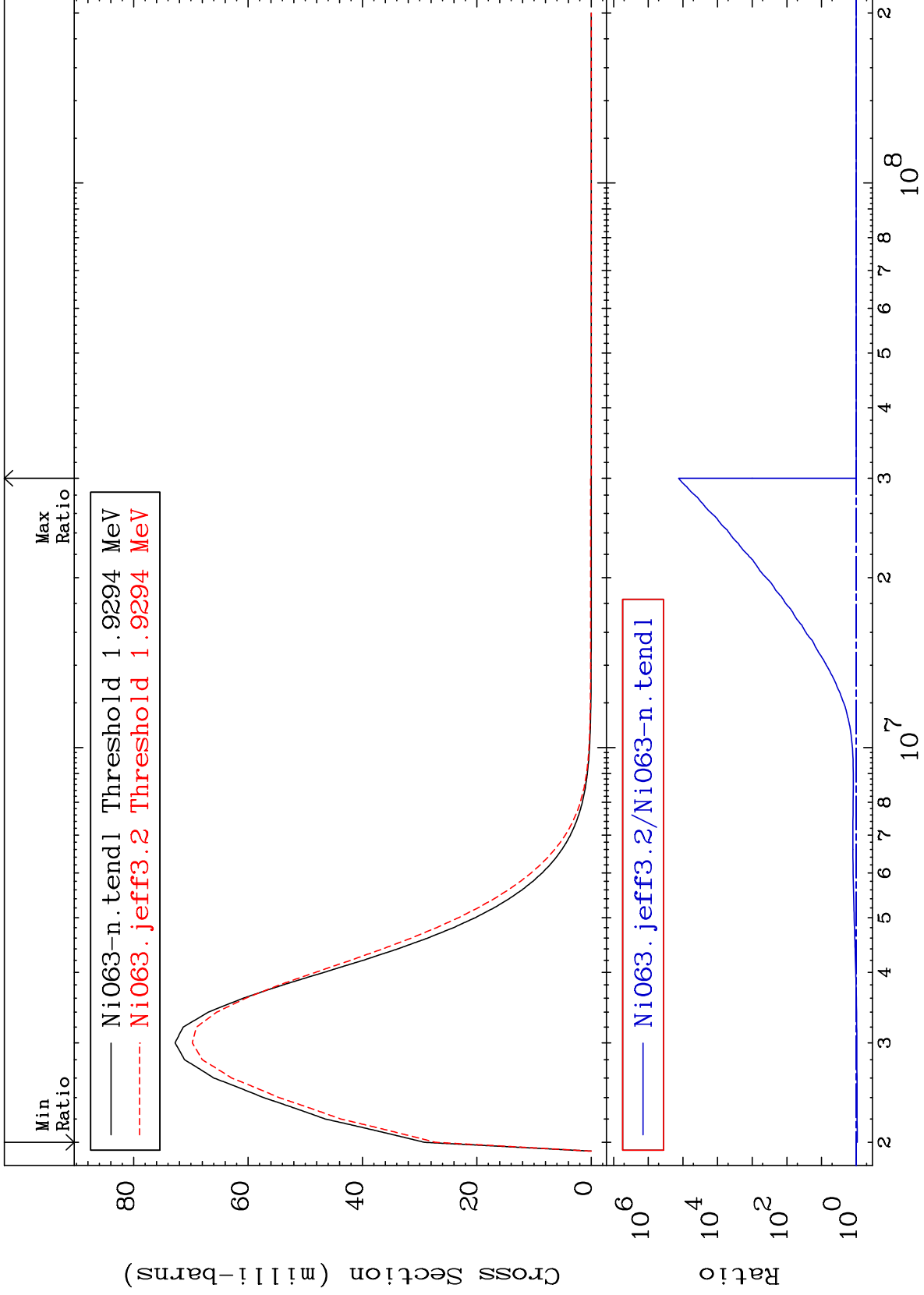
28-Ni-63  
-5.466 To 9999. %



MAT 2840

1.899 MeV (n,n') Level  
Cross Section

28-Ni-63  
-6.660 To 9999. %

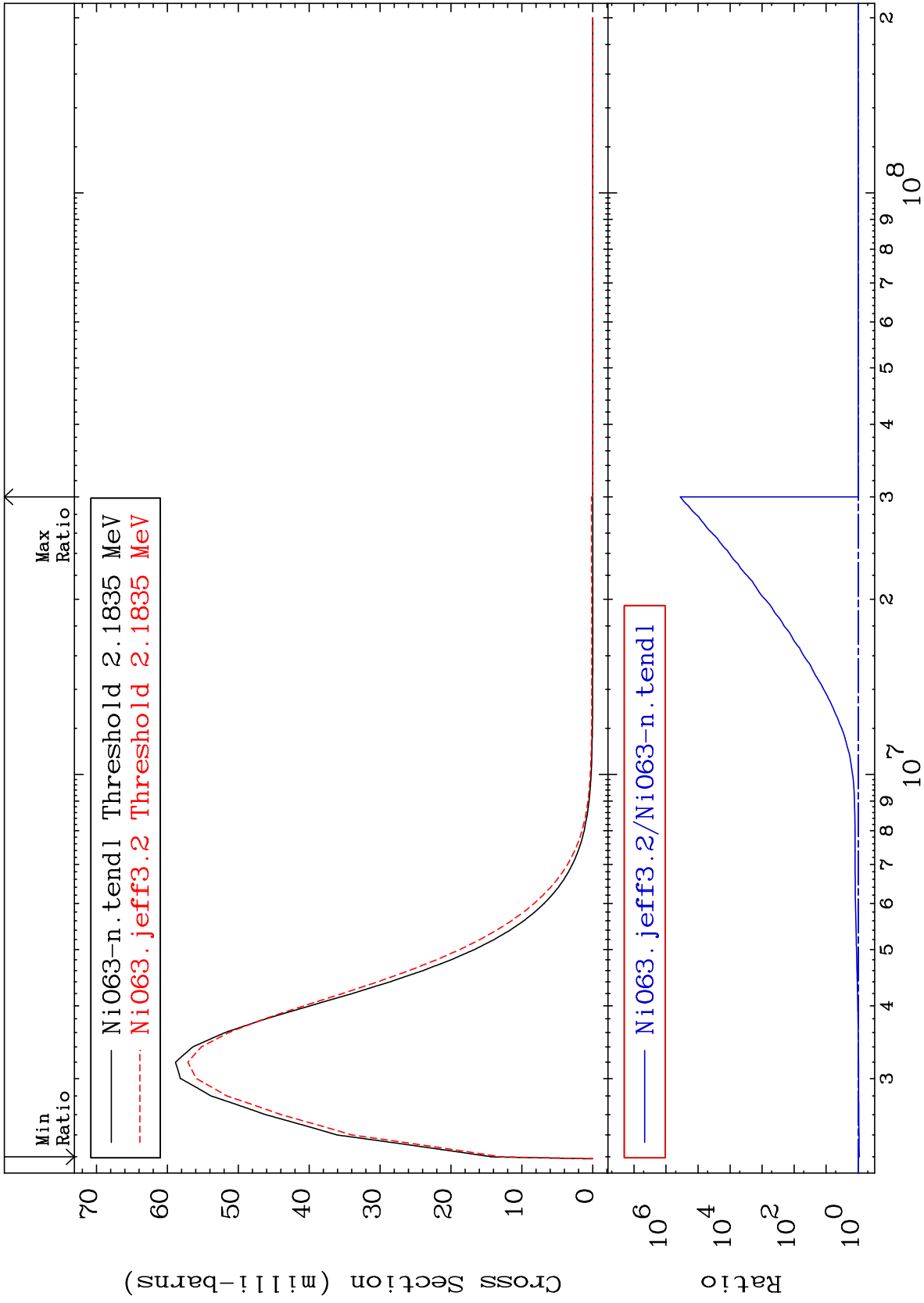




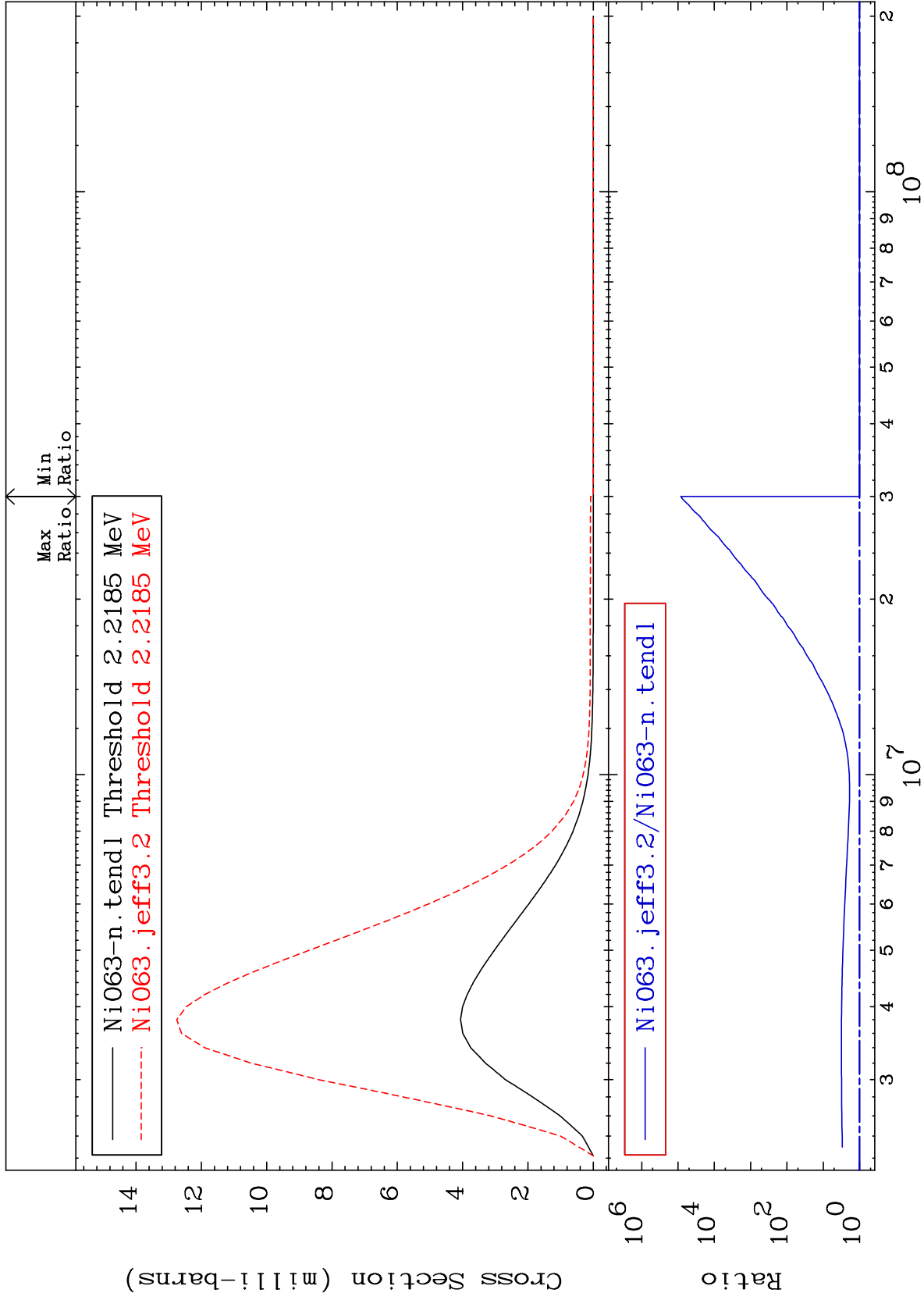
MAT 2840

2.149 MeV (n,n') Level  
Cross Section

28-Ni-63  
-9.274 To 9999. %



MAT 2840 2.184 MeV (n,n') Level Cross Section 28-Ni-63 To 9999. %



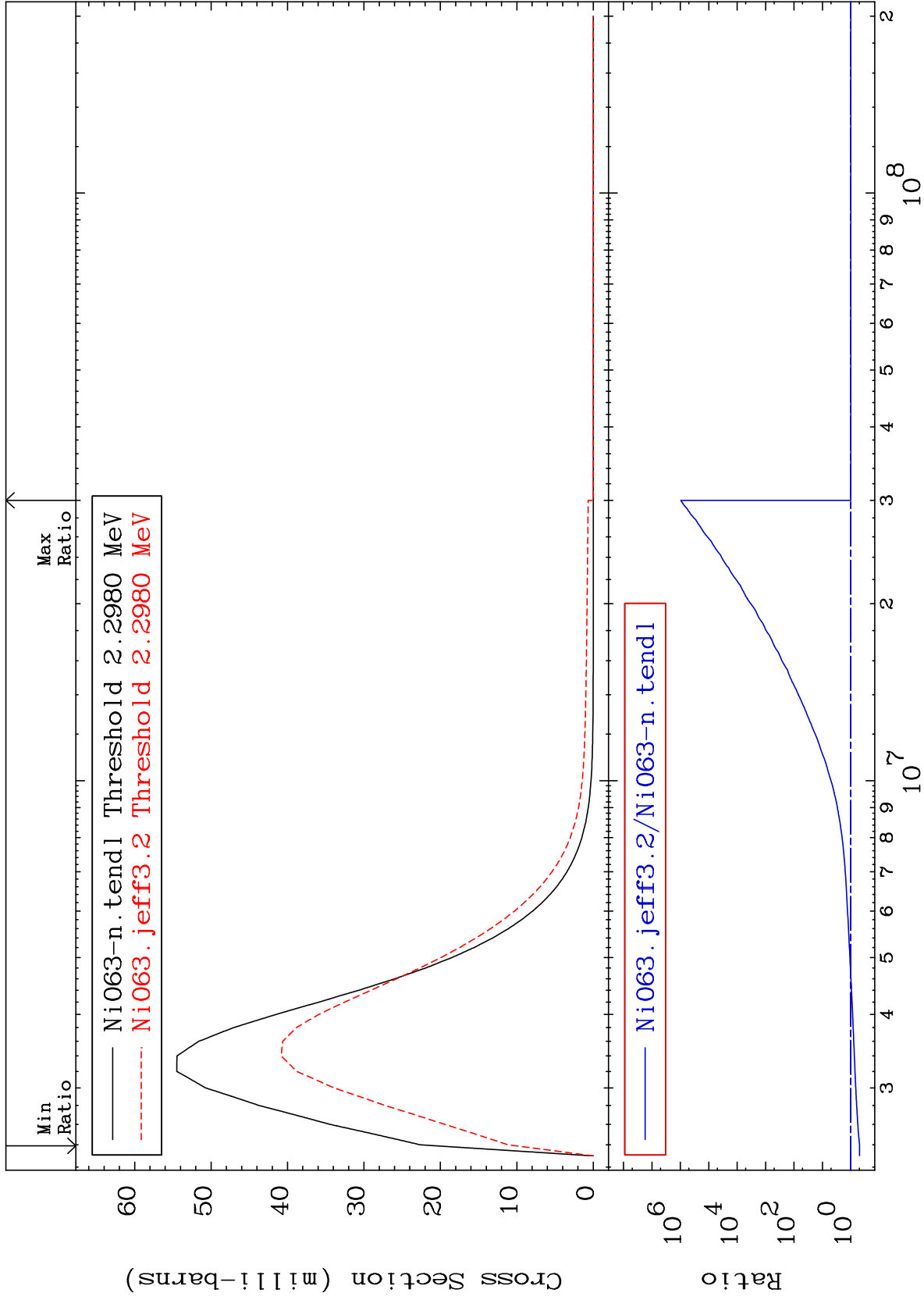
MAT 2840

2.262 MeV (n,n') Level

28-Ni-63

-50.77 To 9999. %

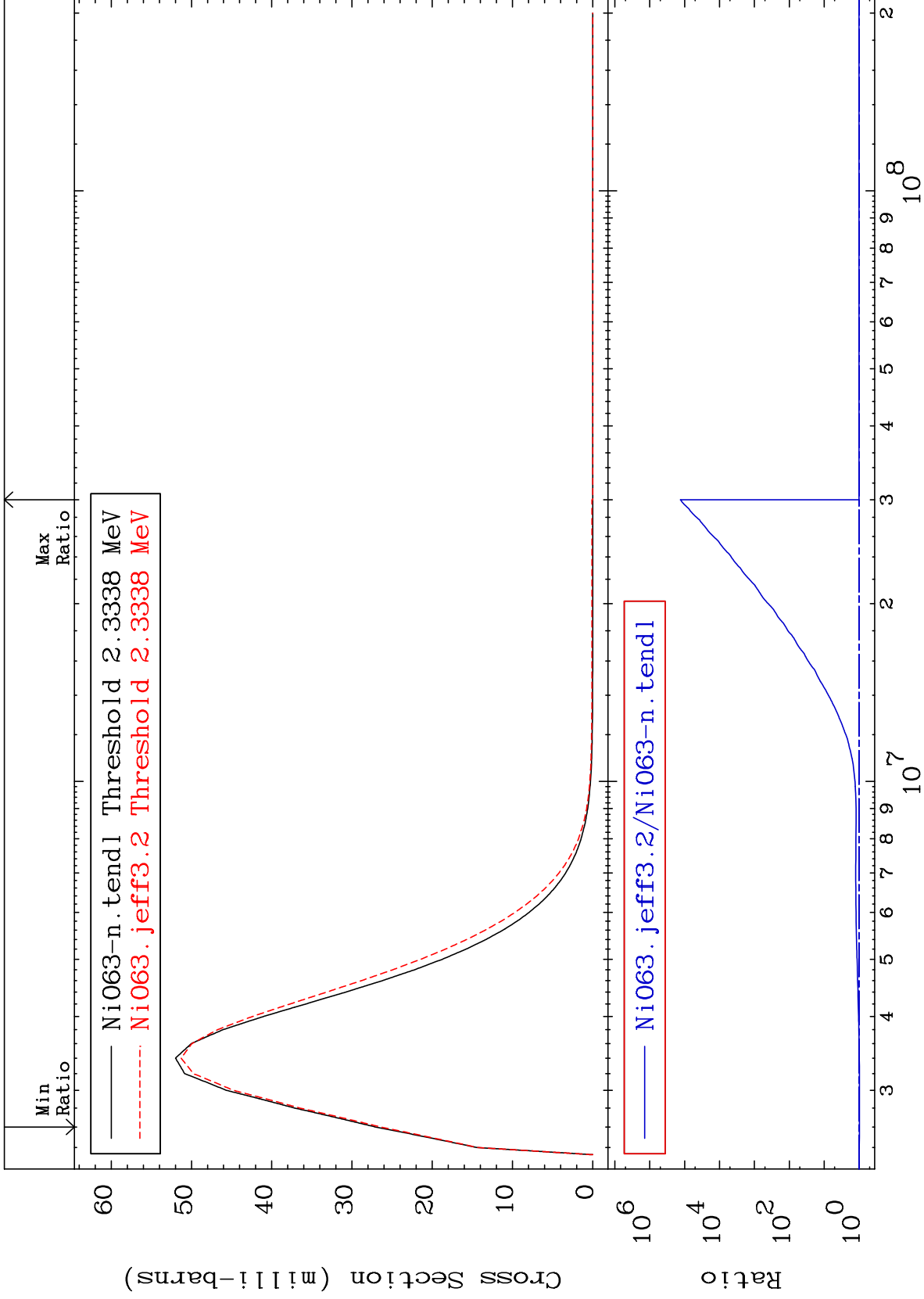
Cross Section



MAT 2840

2.297 MeV (n,n') Level  
Cross Section

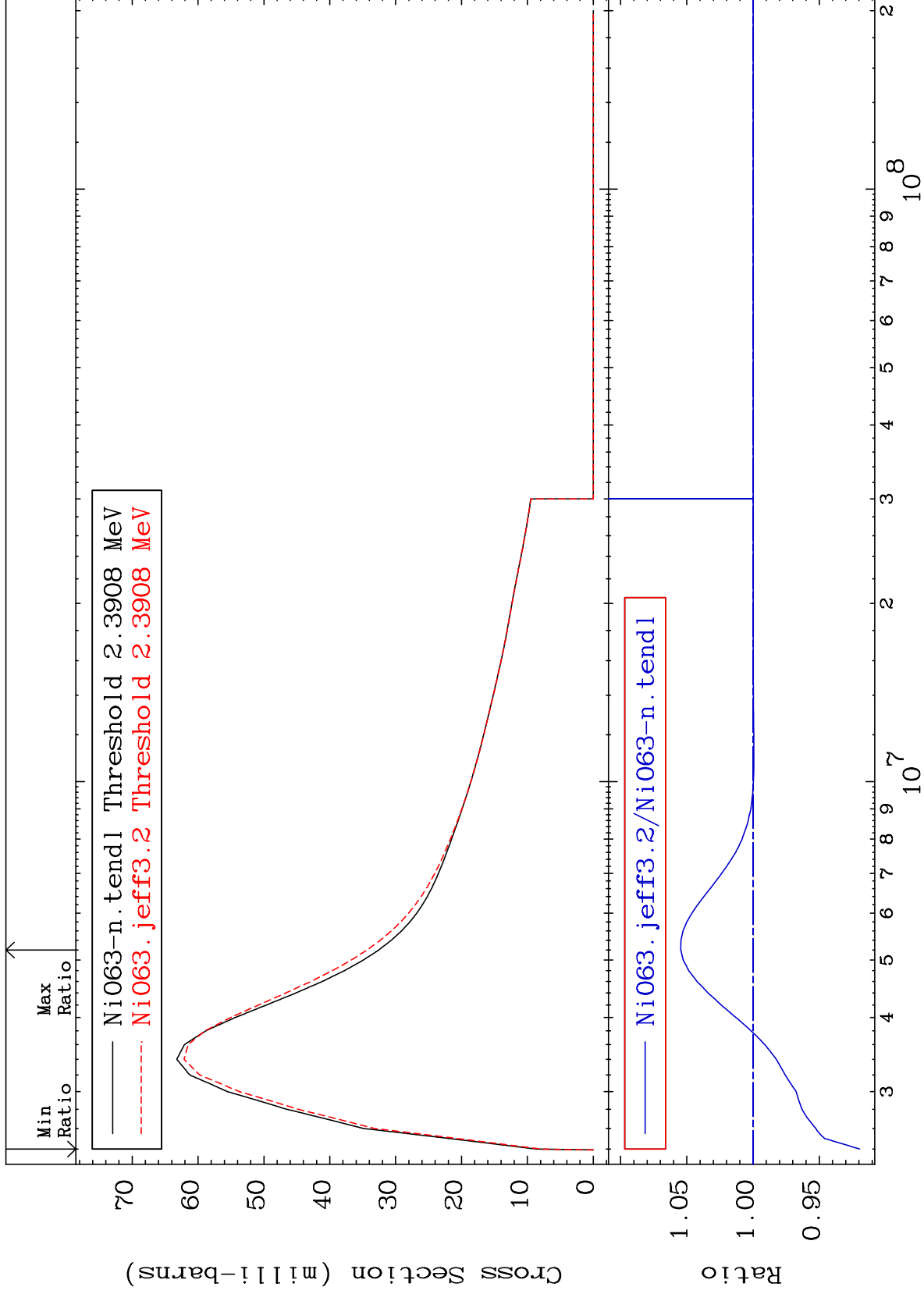
28-Ni-63  
-2.352 To 9999. %



MAT 2840

2.353 MeV (n,n') Level  
Cross Section

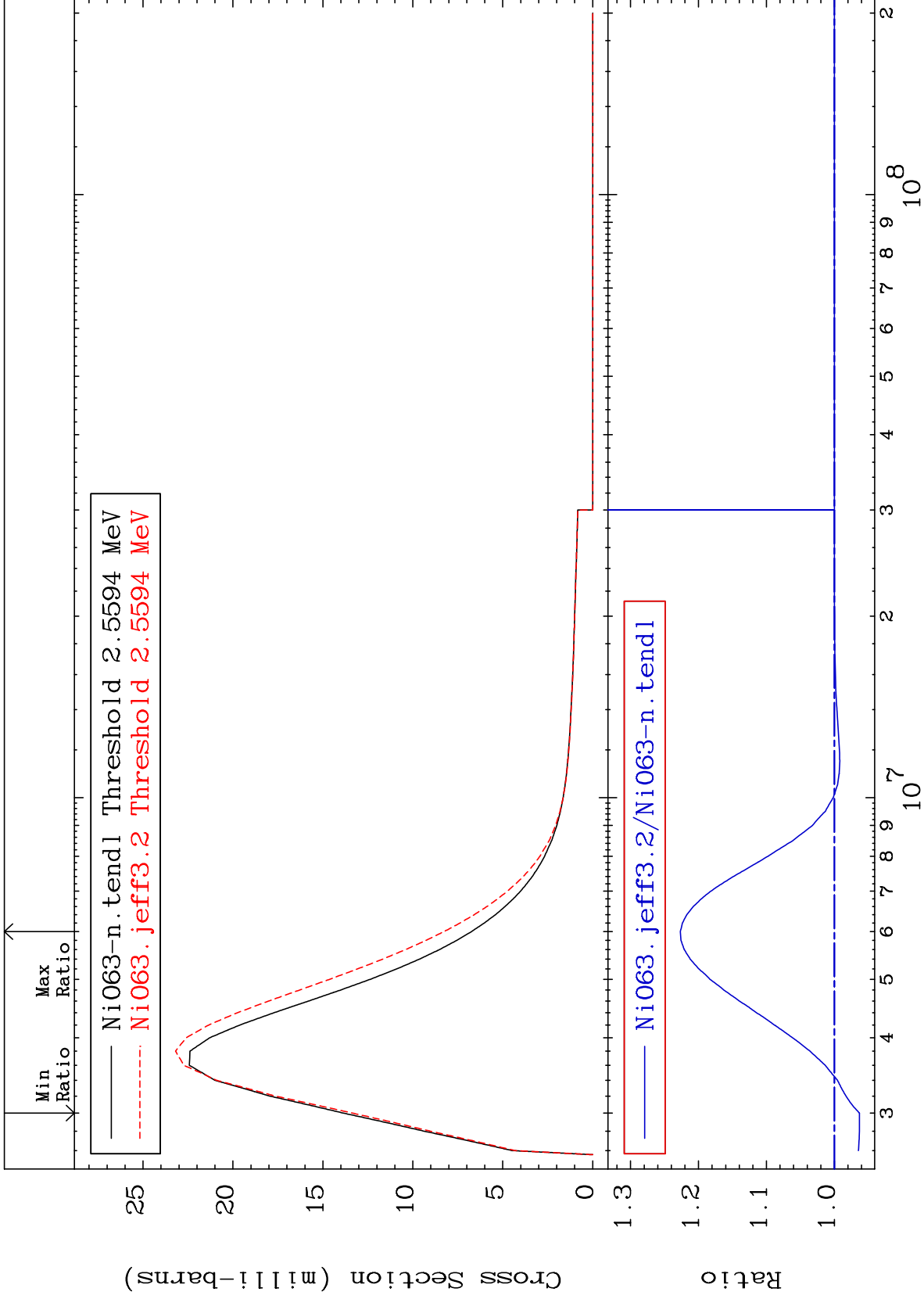
28-Ni-63  
-8.040 To 5.459 %



MAT 2840

2.519 MeV (n,n') Level  
Cross Section

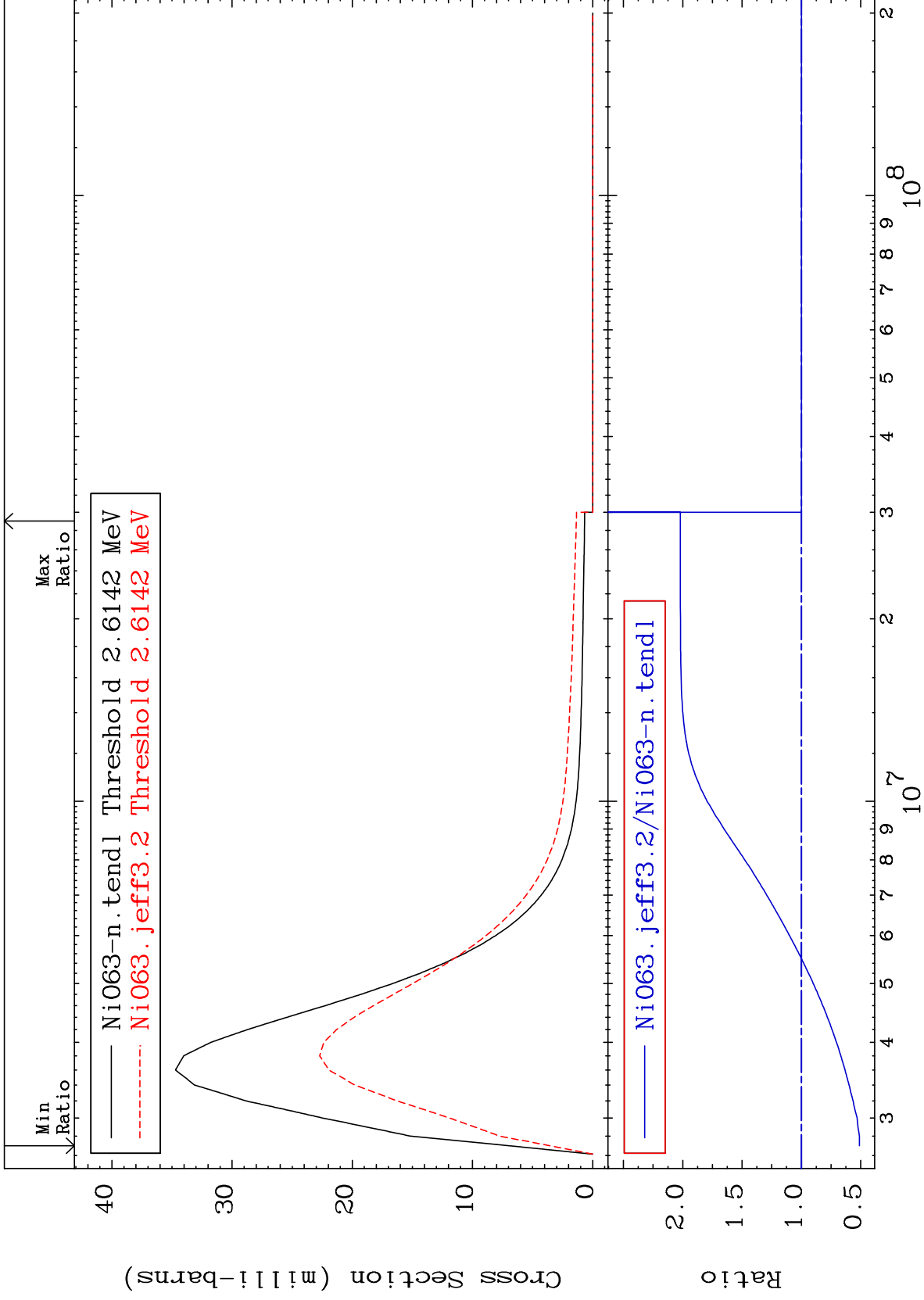
28-Ni-63  
-3.683 To 22.67 %



MAT 2840

2.573 MeV (n,n') Level  
Cross Section

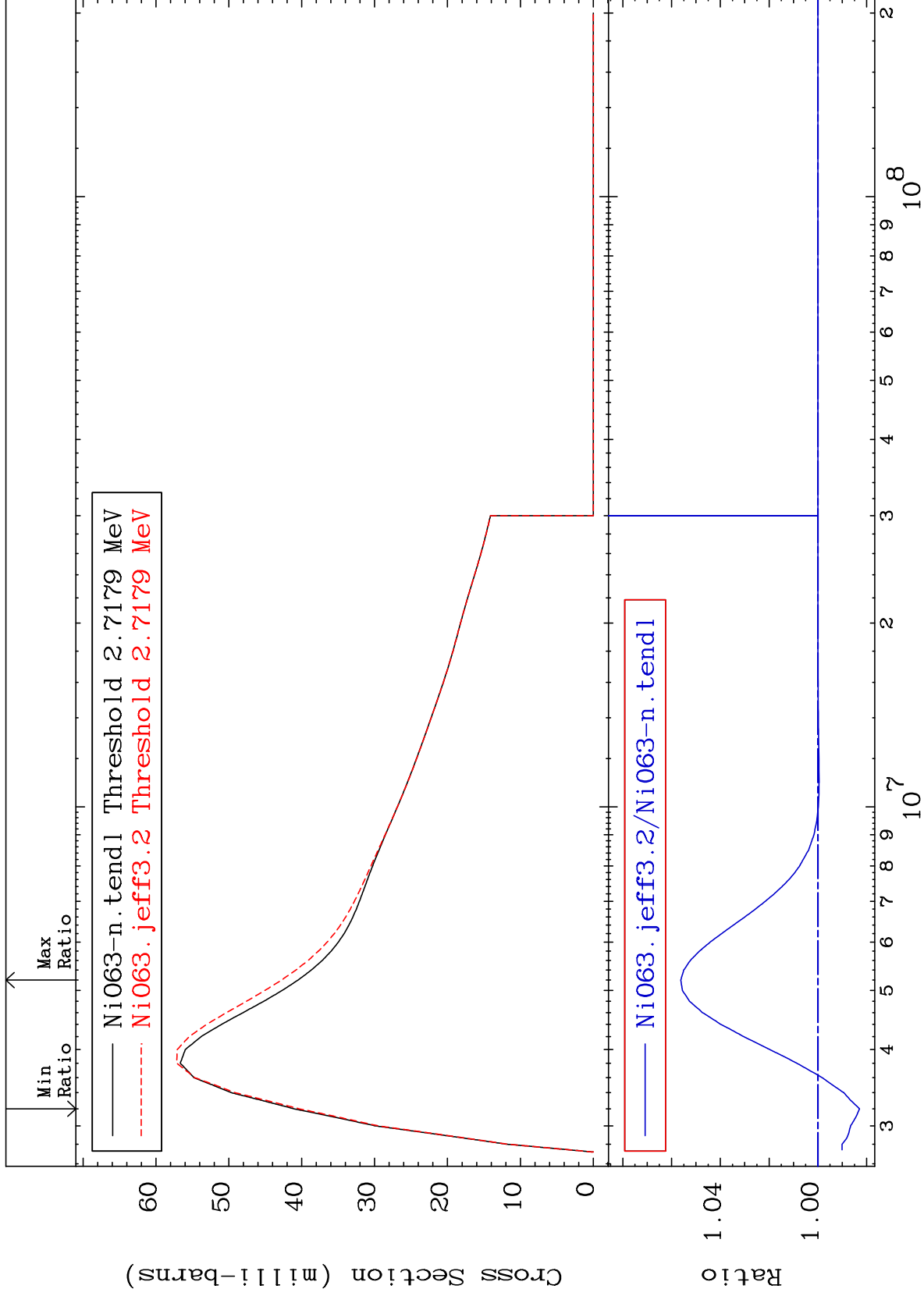
28-Ni-63  
-48.94 To 102.0 %



MAT 2840

2.675 MeV (n,n') Level  
Cross Section

28-Ni-63  
-1.709 To 5.622 %



40

Incident Energy (eV)

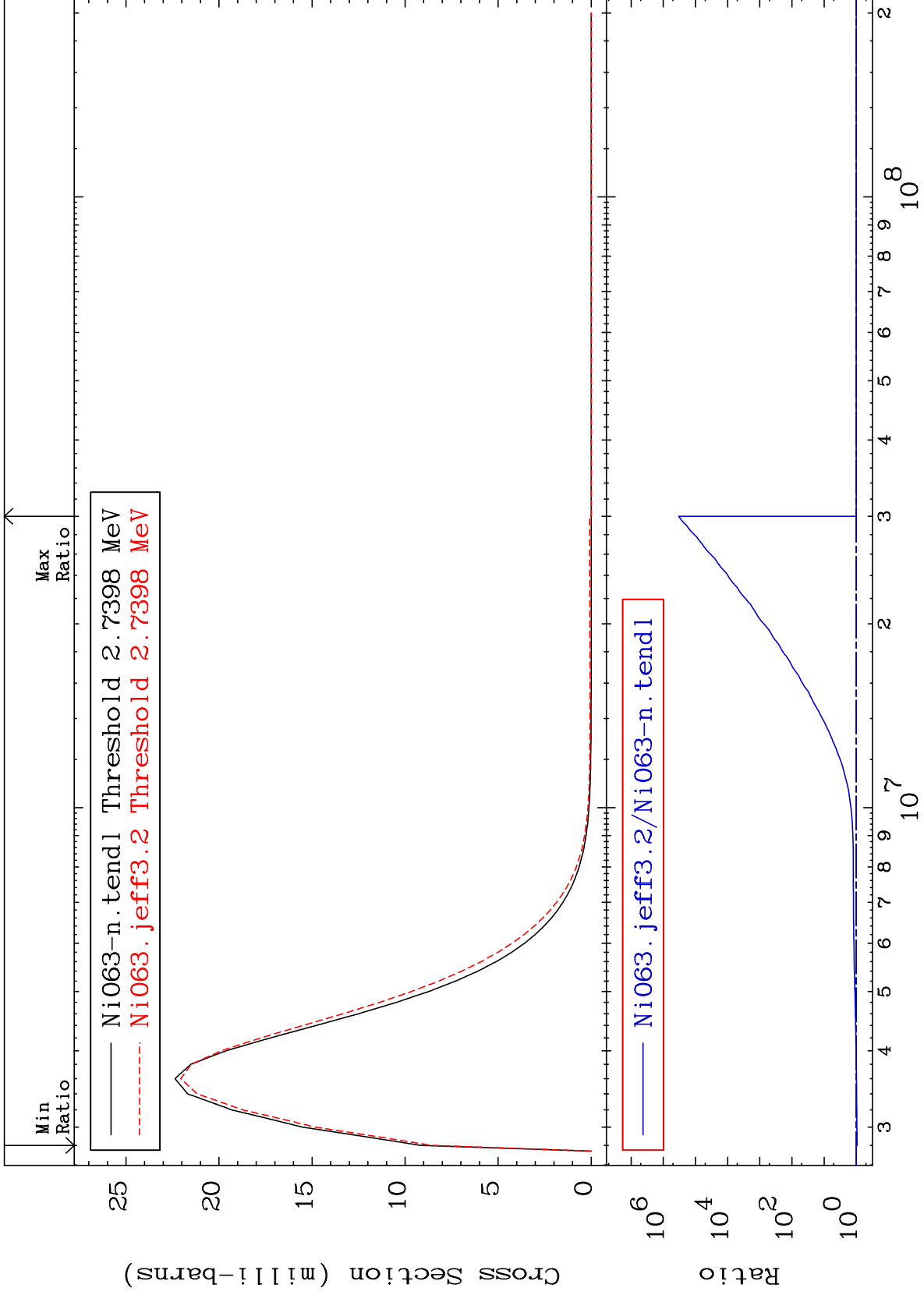
28-Ni-63



MAT 2840

2.697 MeV (n,n') Level  
Cross Section

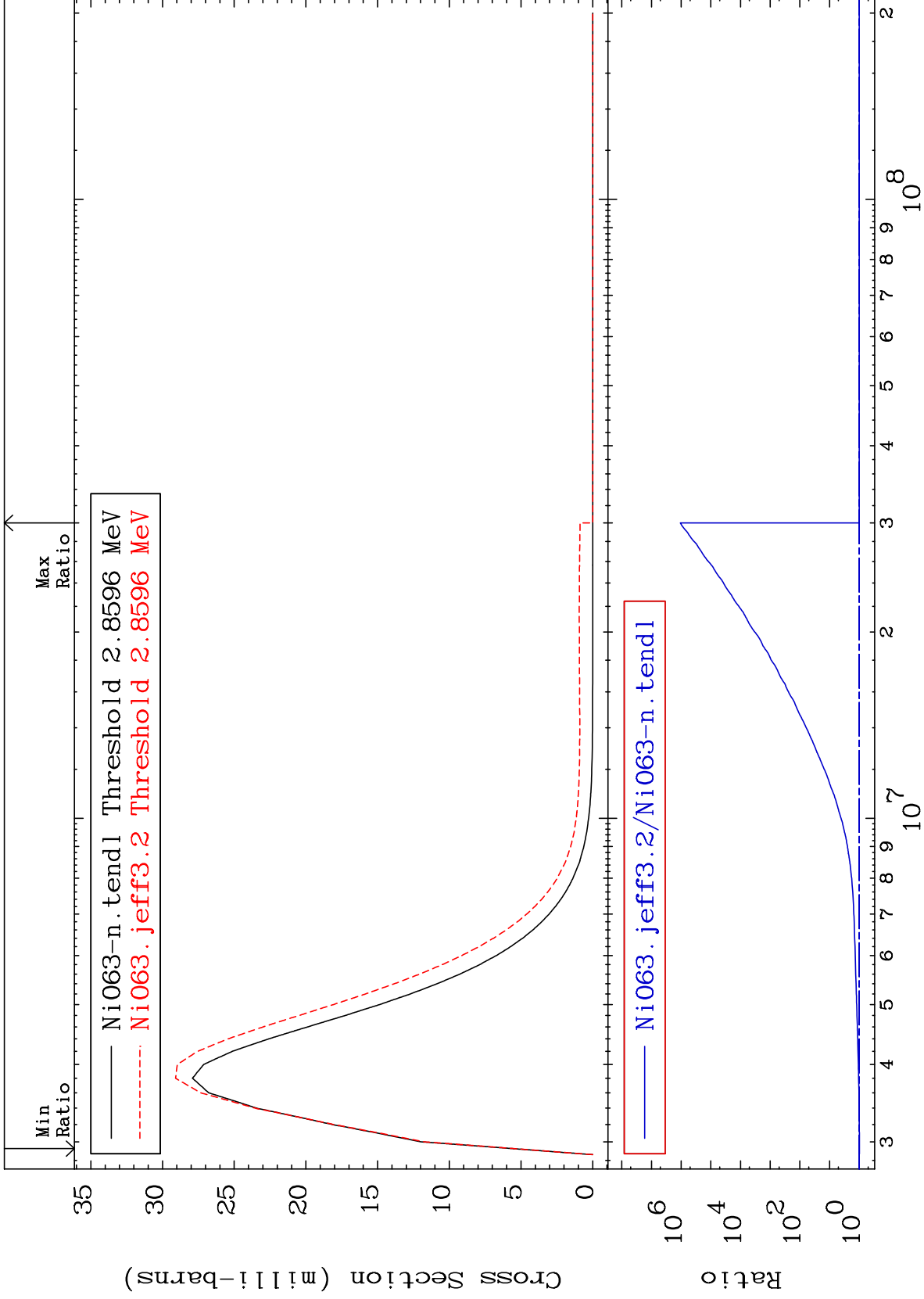
28-Ni-63  
-6.642 To 9999. %



MAT 2840

2.815 MeV (n,n') Level  
Cross Section

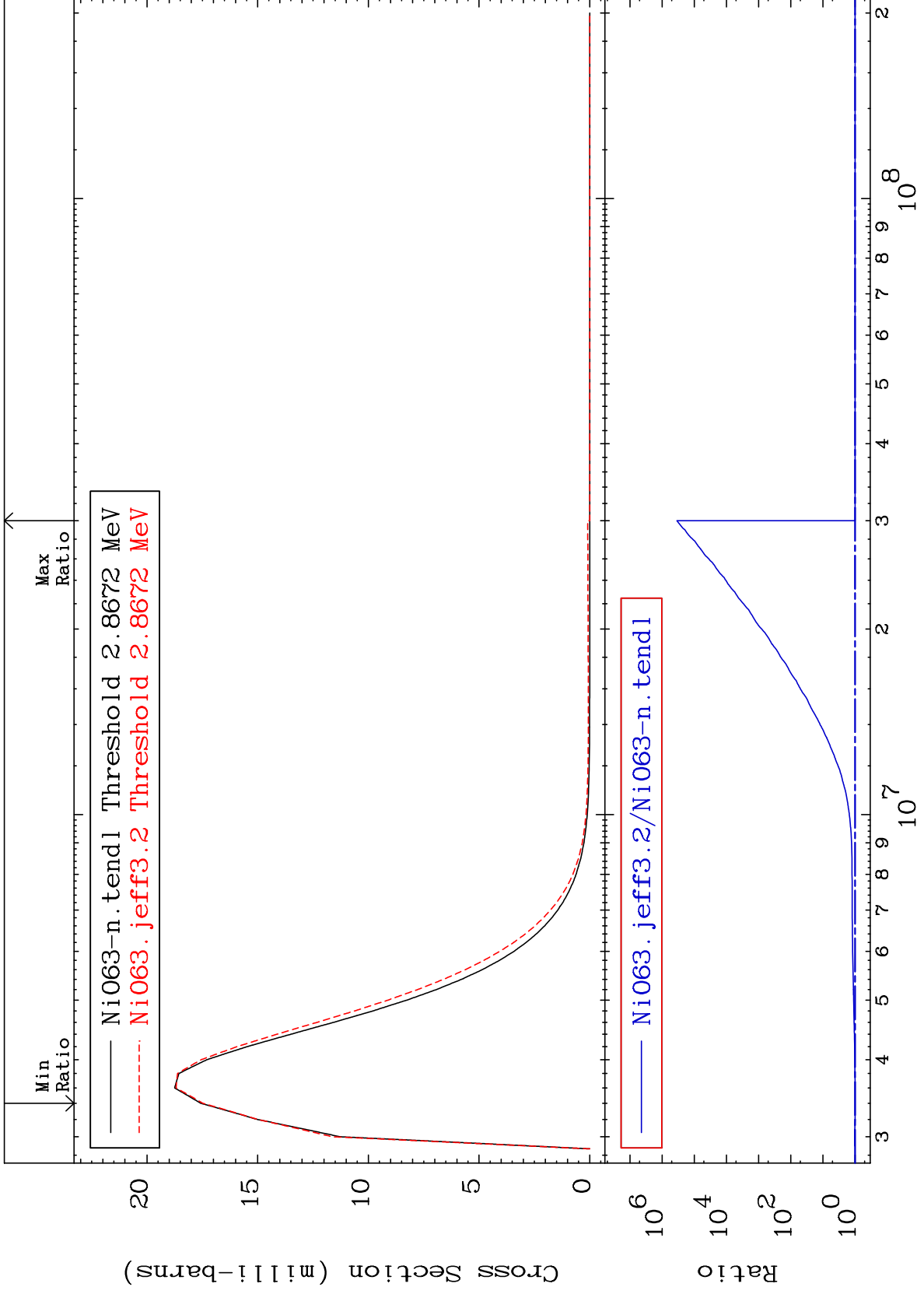
28-Ni-63  
-1.874 To 9999. %



MAT 2840

2.822 MeV (n,n') Level  
Cross Section

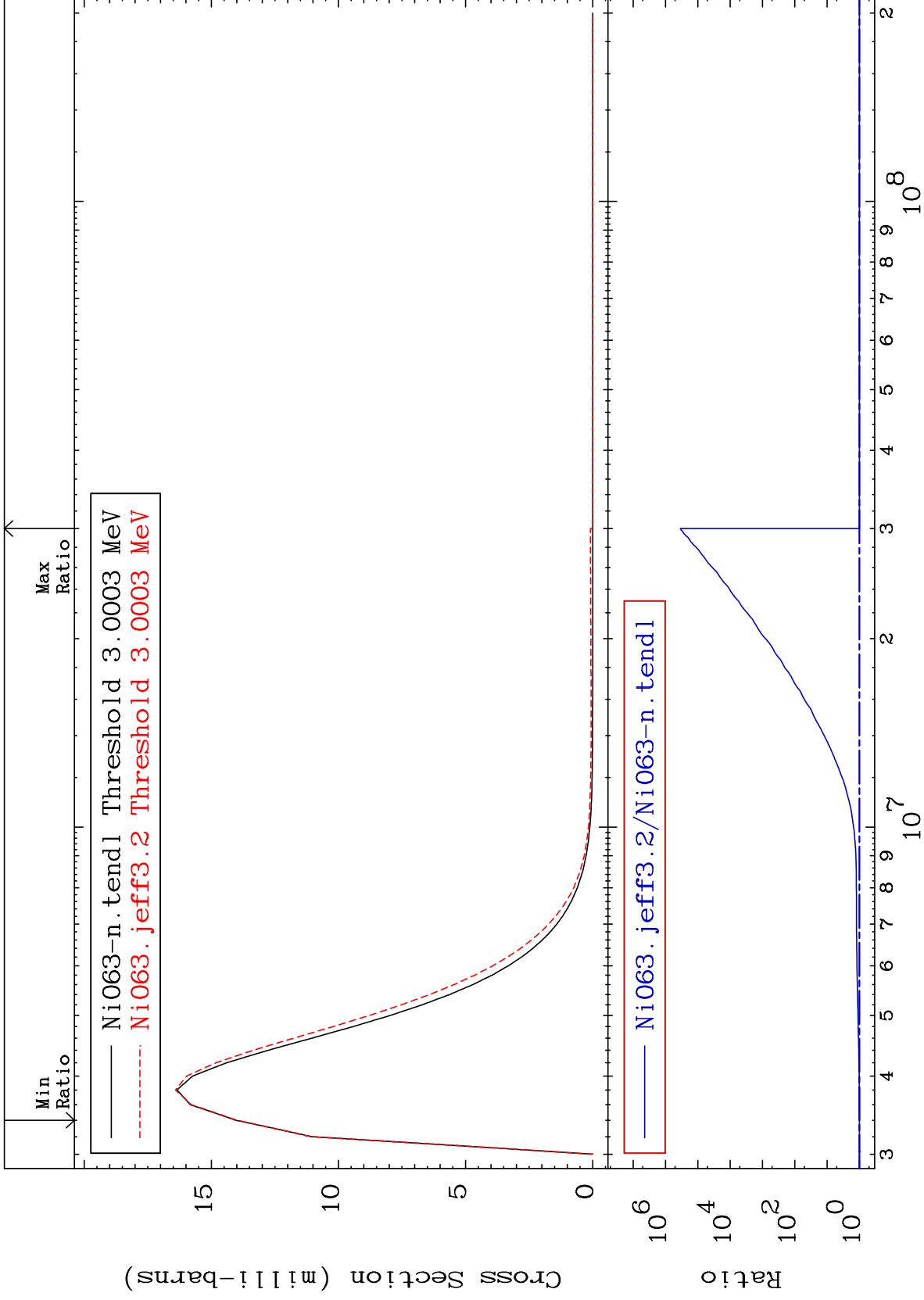
28-Ni-63  
-0.560 To 9999. %



MAT 2840

2.953 MeV (n,n') Level  
Cross Section

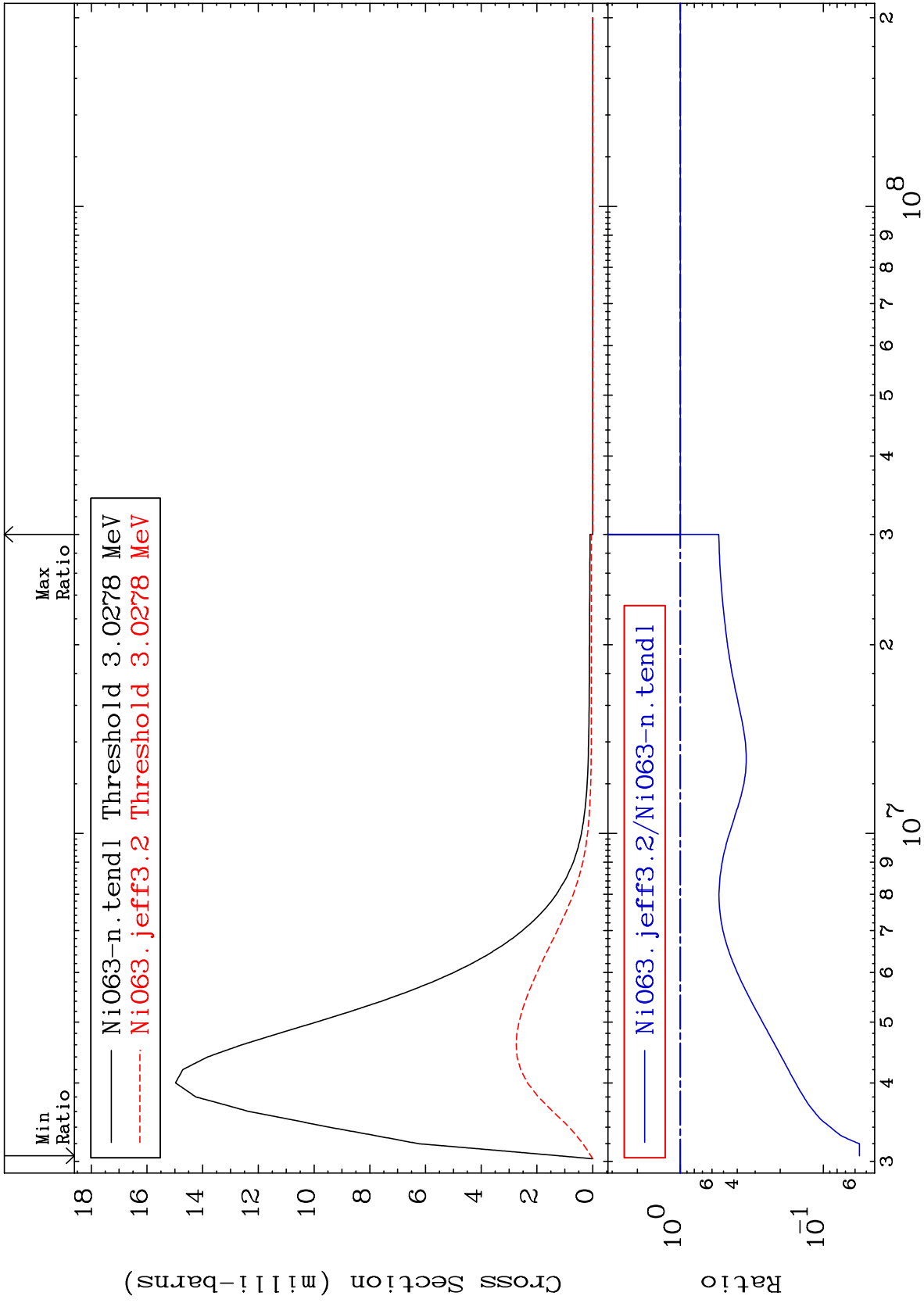
28-Ni-63  
-0.310 To 9999. %



MAT 2840

2.980 MeV (n,n') Level  
Cross Section

28-Ni-63  
-94.41 To 0.000 %



45

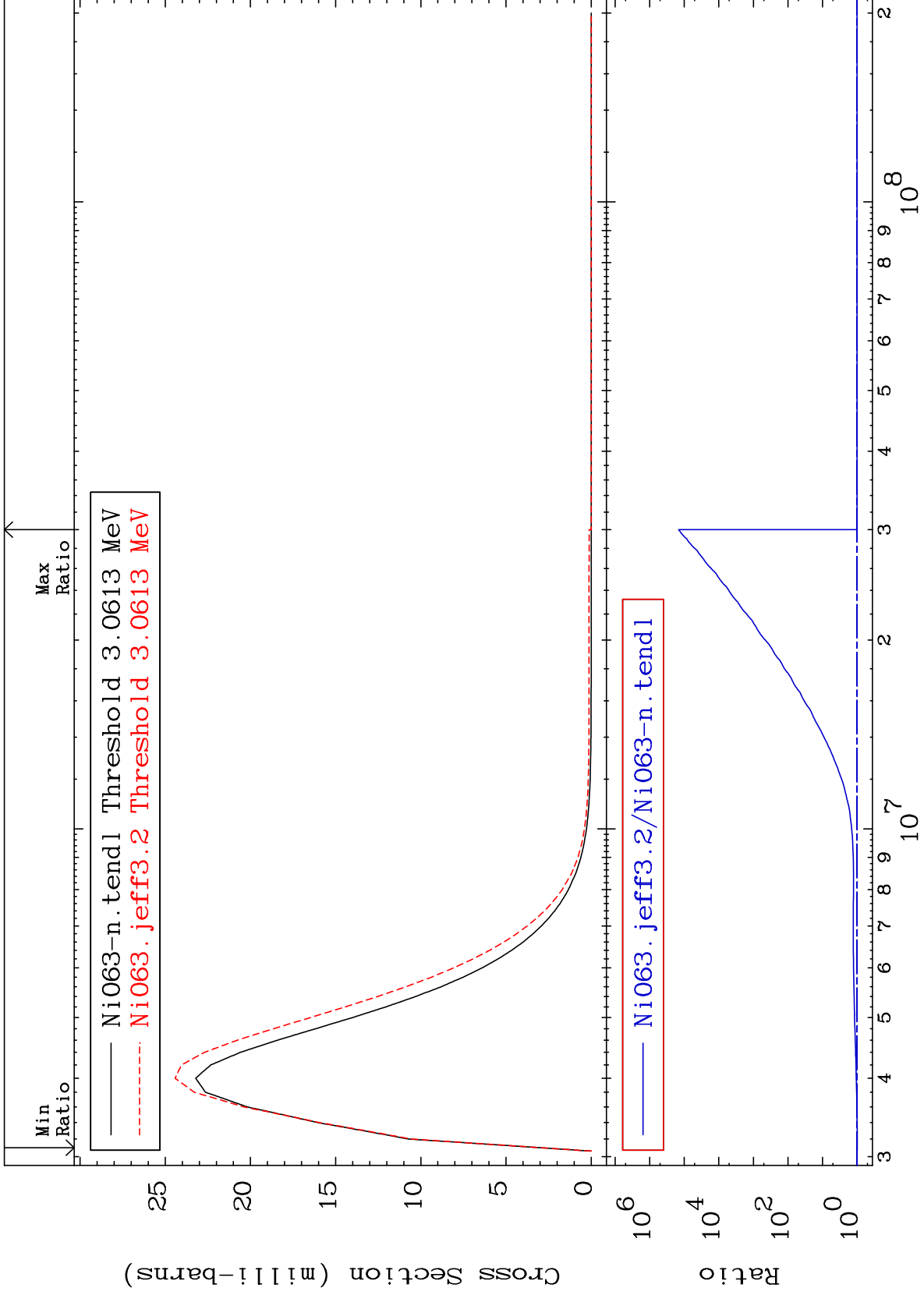
Incident Energy (eV)

28-Ni-63

MAT 2840

3.013 MeV (n,n') Level  
Cross Section

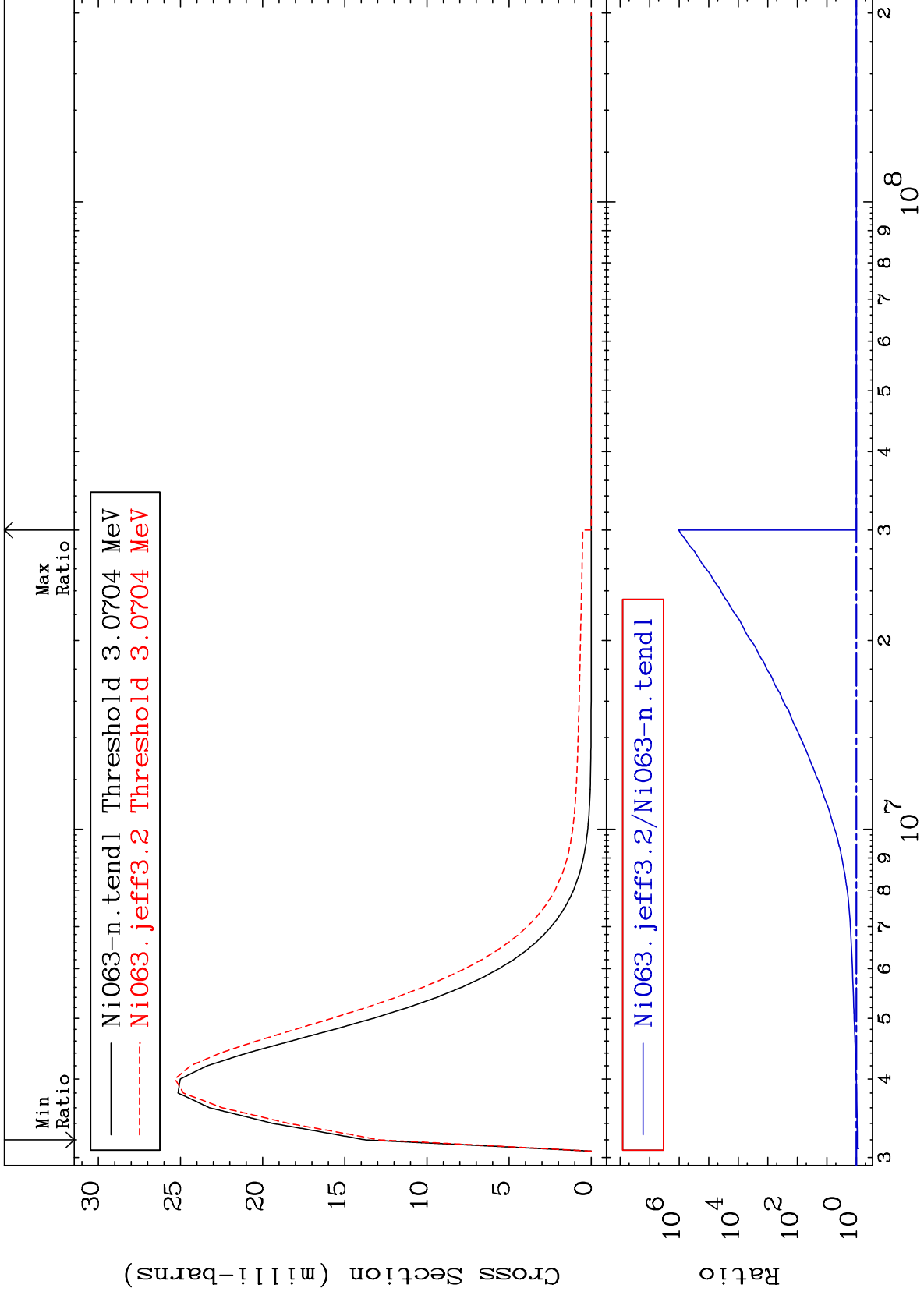
28-Ni-63  
-1.382 To 9999. %



MAT 2840

3.022 MeV (n,n') Level  
Cross Section

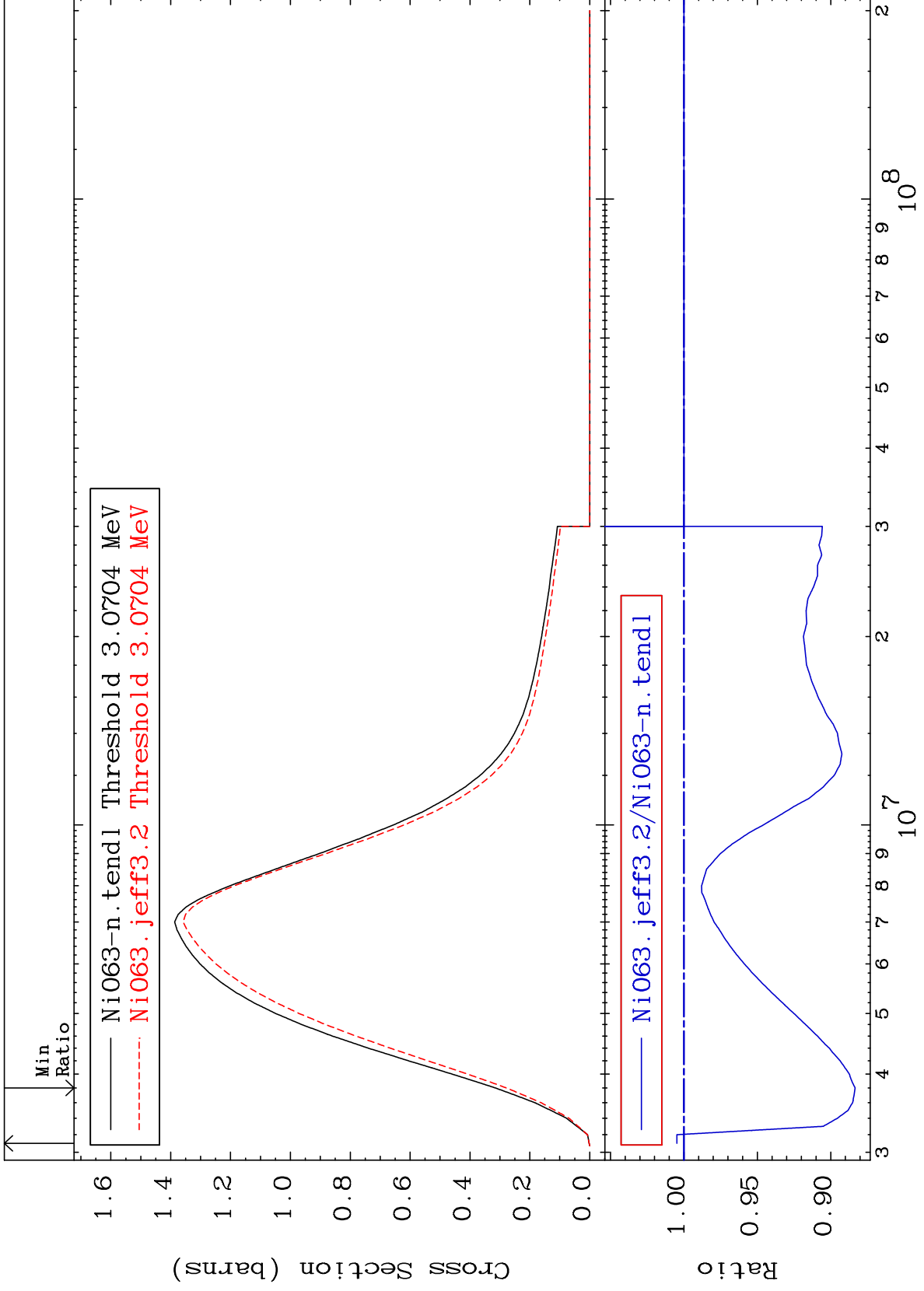
28-Ni-63  
-6.258 To 9999. %



MAT 2840

(n, n') Continuum  
Cross Section

28-Ni-63  
-11.66 To 0.477 %



48

28-Ni-63

28-Ni-63

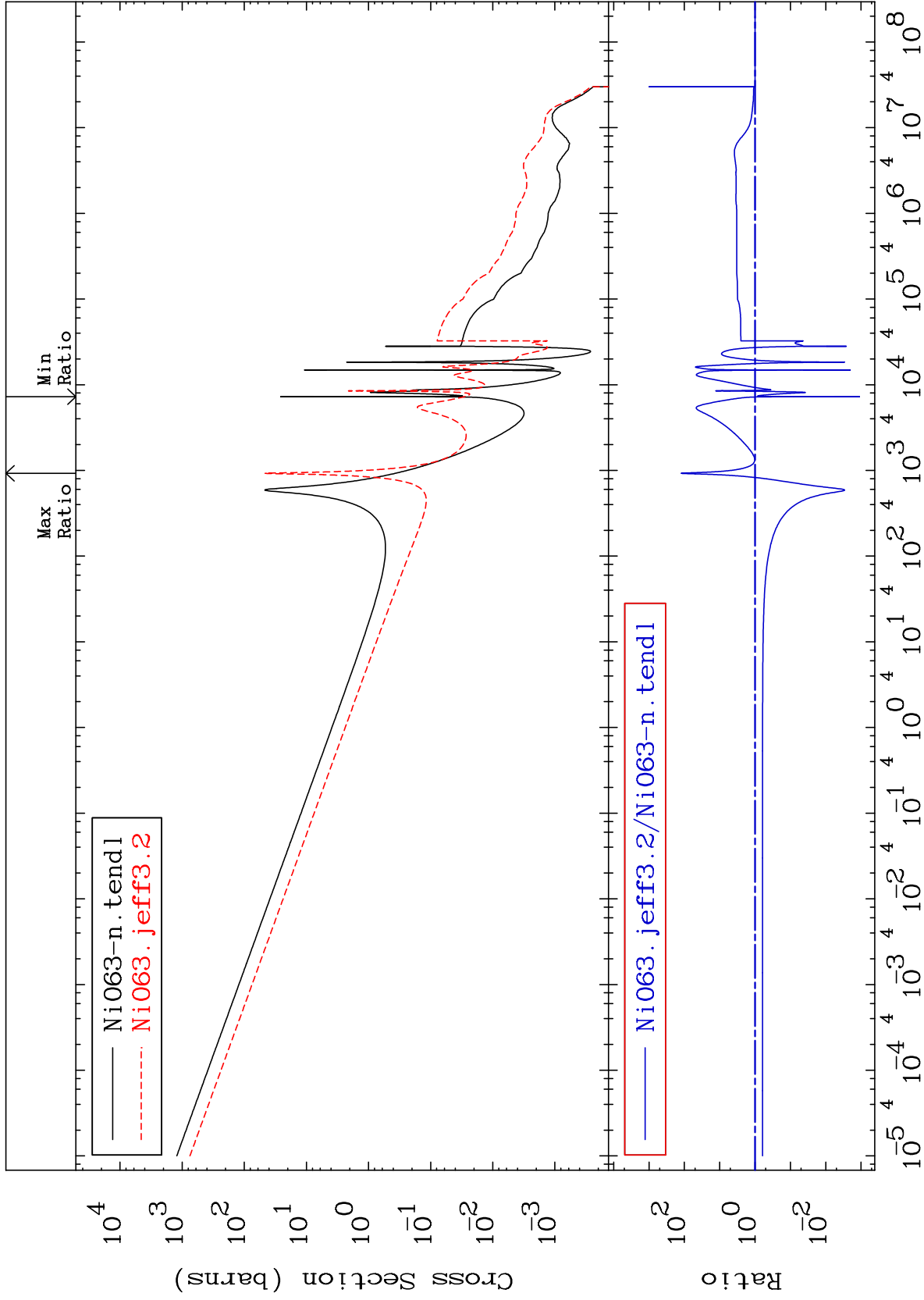


MAT 2840

28-Ni-63

-99.89 To 9999. %

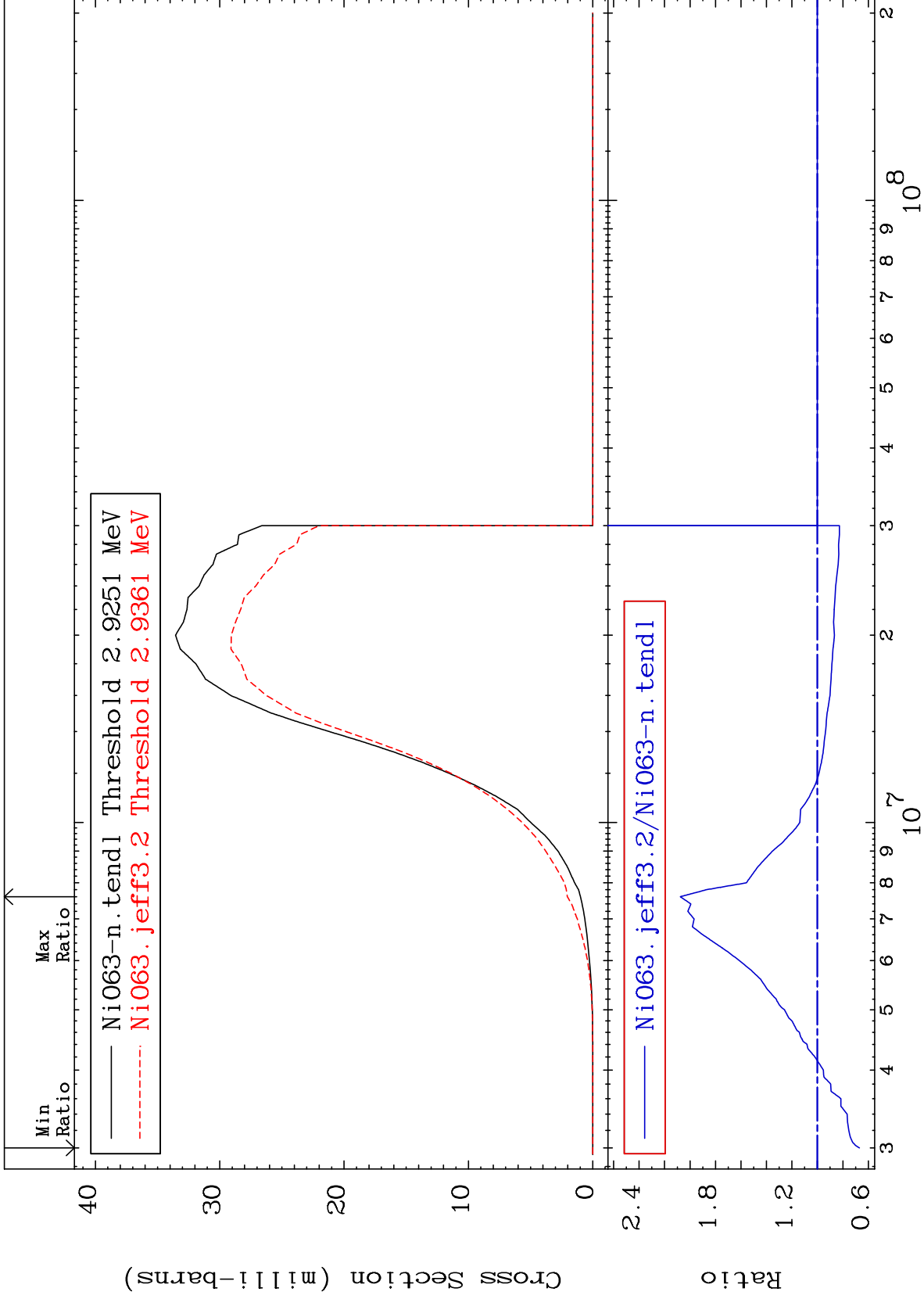
(n,  $\gamma$ )  
Cross Section



MAT 2840

(n,p)  
Cross Section

28-Ni-63  
-33.01 To 107.6 %



50

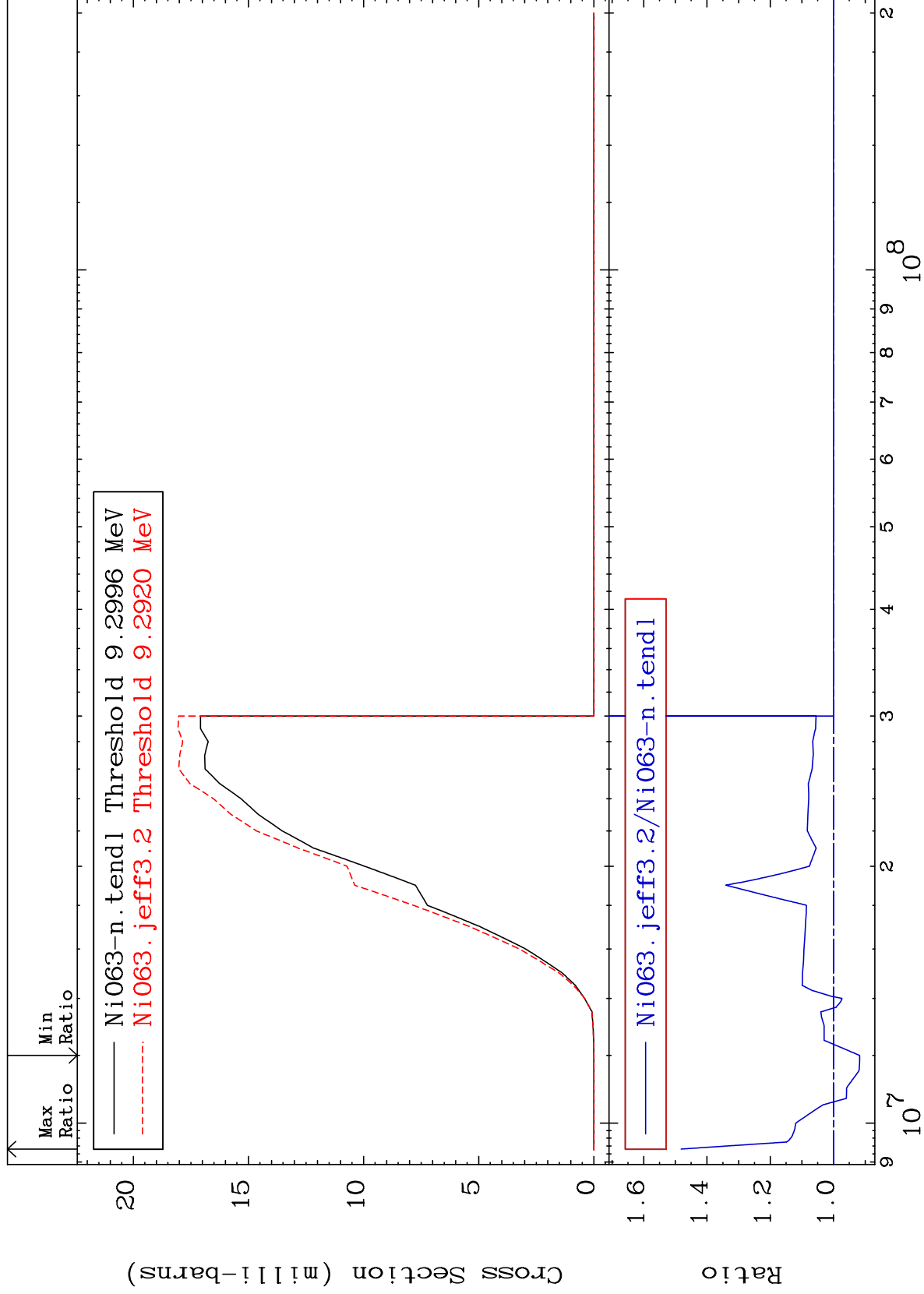
28-Ni-63

28-Ni-63

MAT 2840

(n, d)  
Cross Section

28-Ni-63  
-8.258 To 48.16 %



51

Incident Energy (eV)

28-Ni-63

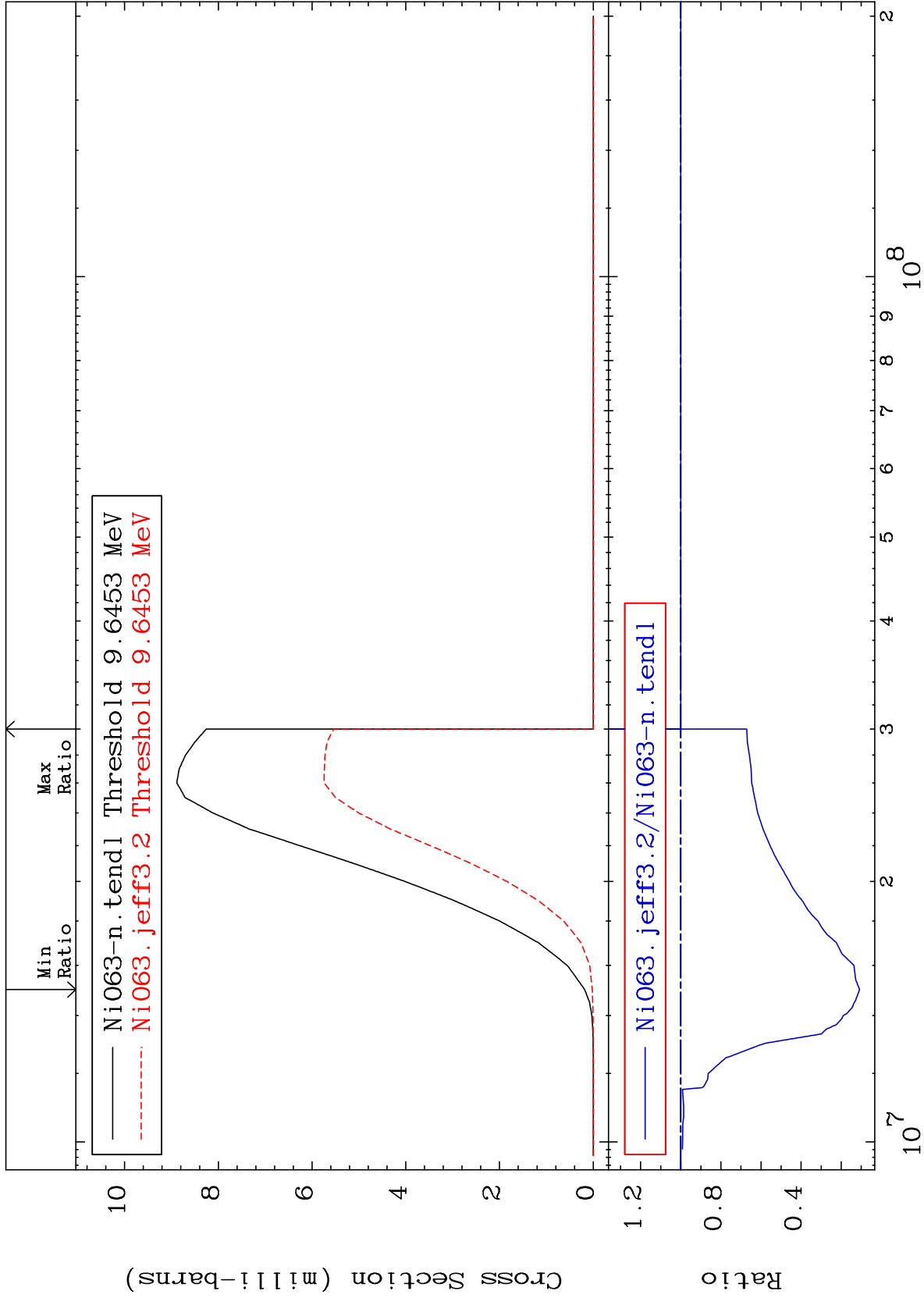
MAT 2840

(n, t)

<sup>28</sup>Ni-63

Cross Section

-89.12 To 0.000 %



52

Incident Energy (eV)

<sup>28</sup>Ni-63

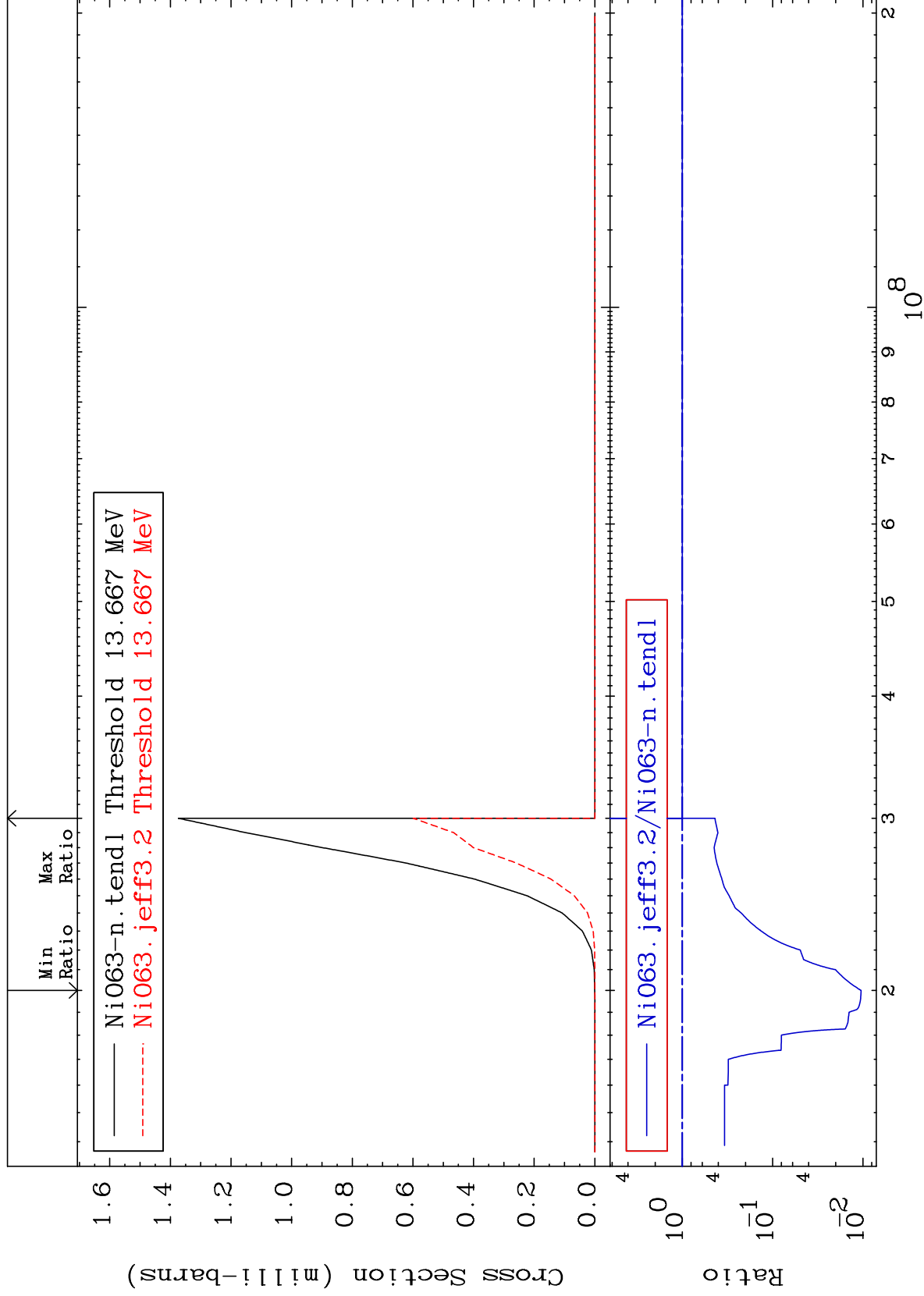
MAT 2840

(n, He-3)

28-Ni-63

Cross Section

-98.95 To 0.000 %



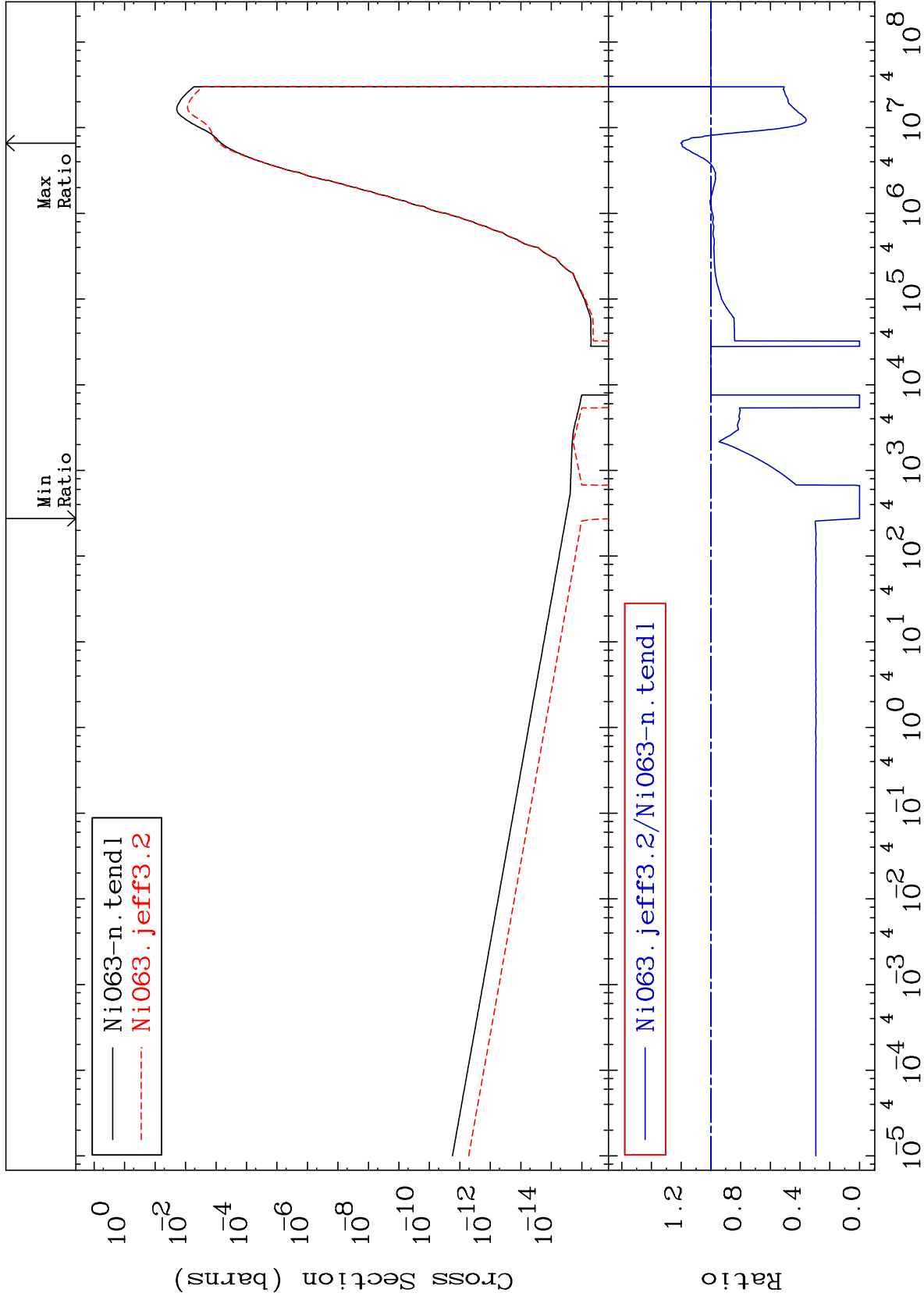
MAT 2840

(n,  $\alpha$ )

28-Ni-63

Cross Section

-100.0 To 20.28 %



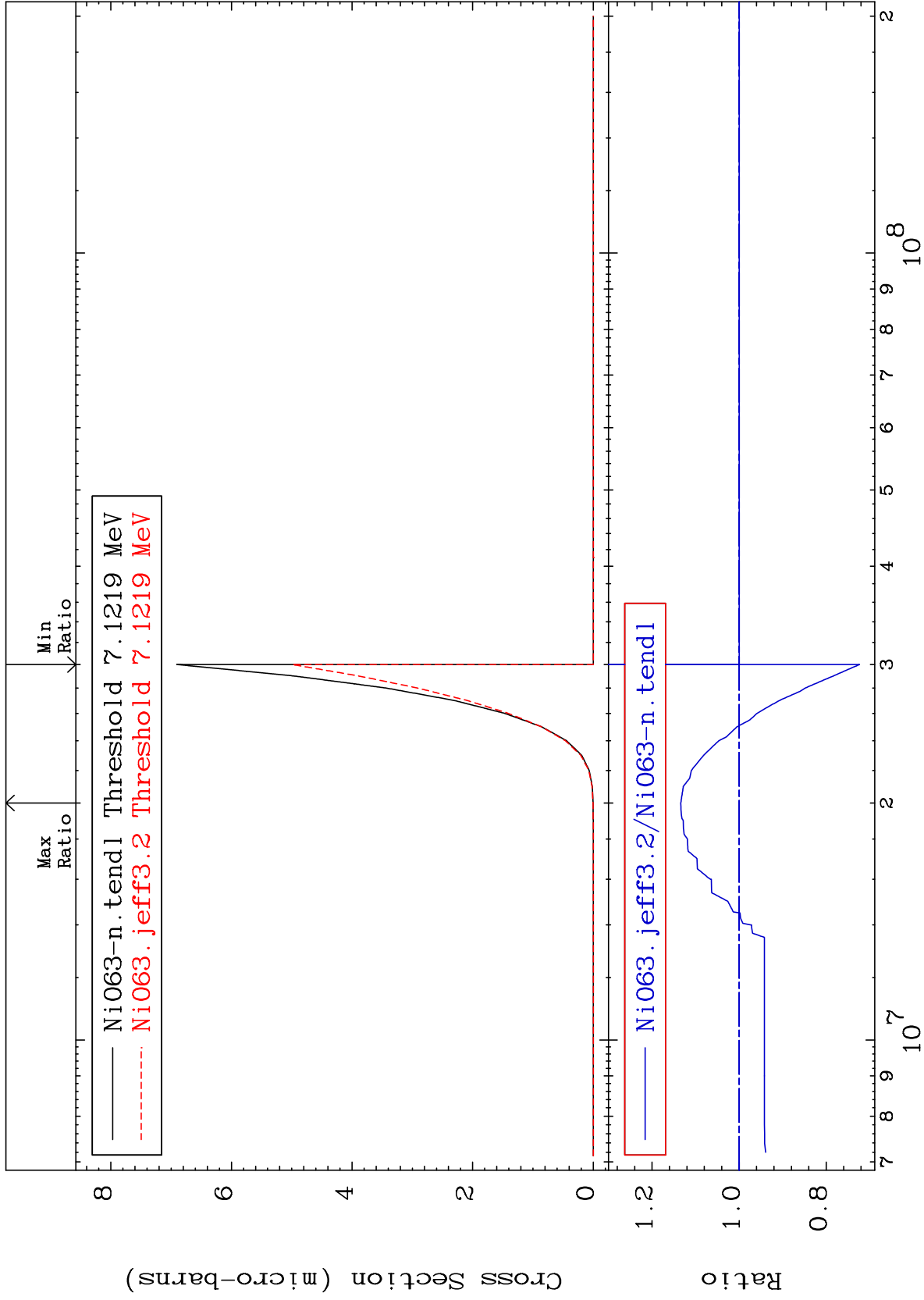
MAT 2840

(n,2α)

28-Ni-63

Cross Section

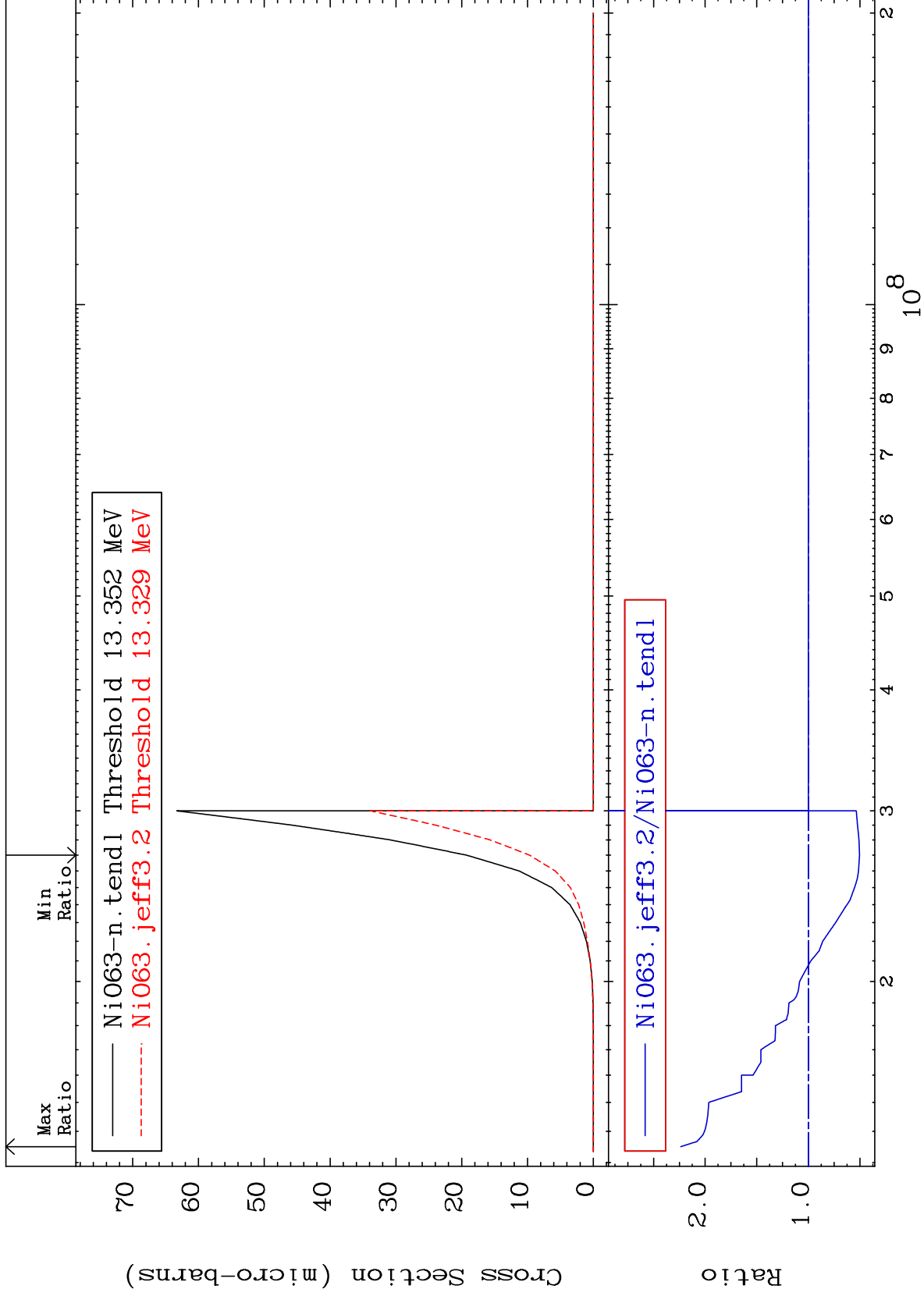
-27.65 To 13.40 %



55

28-Ni-63

28-Ni-63

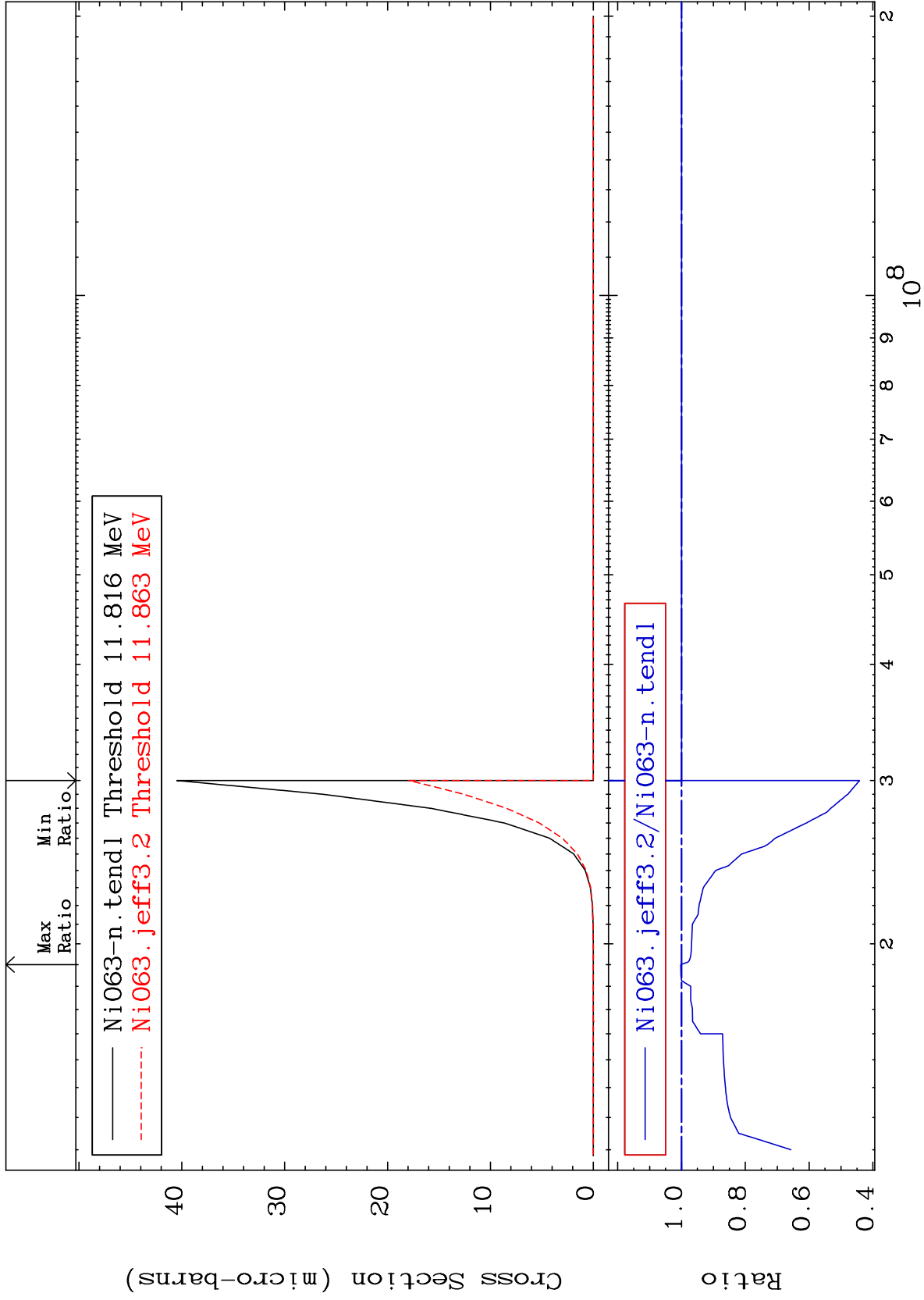




MAT 2840

(n,p)  $\alpha$   
Cross Section

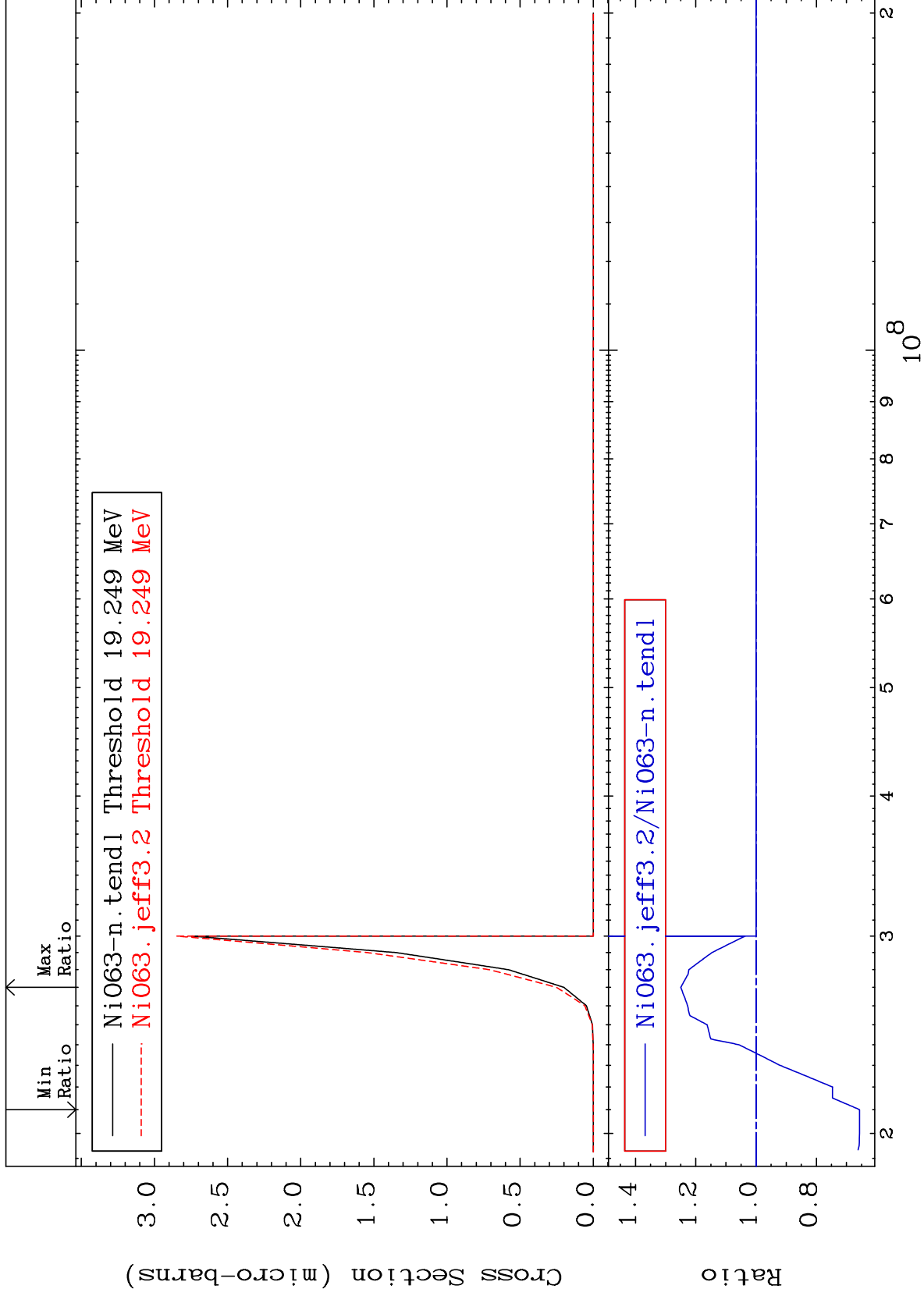
28-Ni-63  
-55.80 To 0.235 %



MAT 2840

(n,p) d  
Cross Section

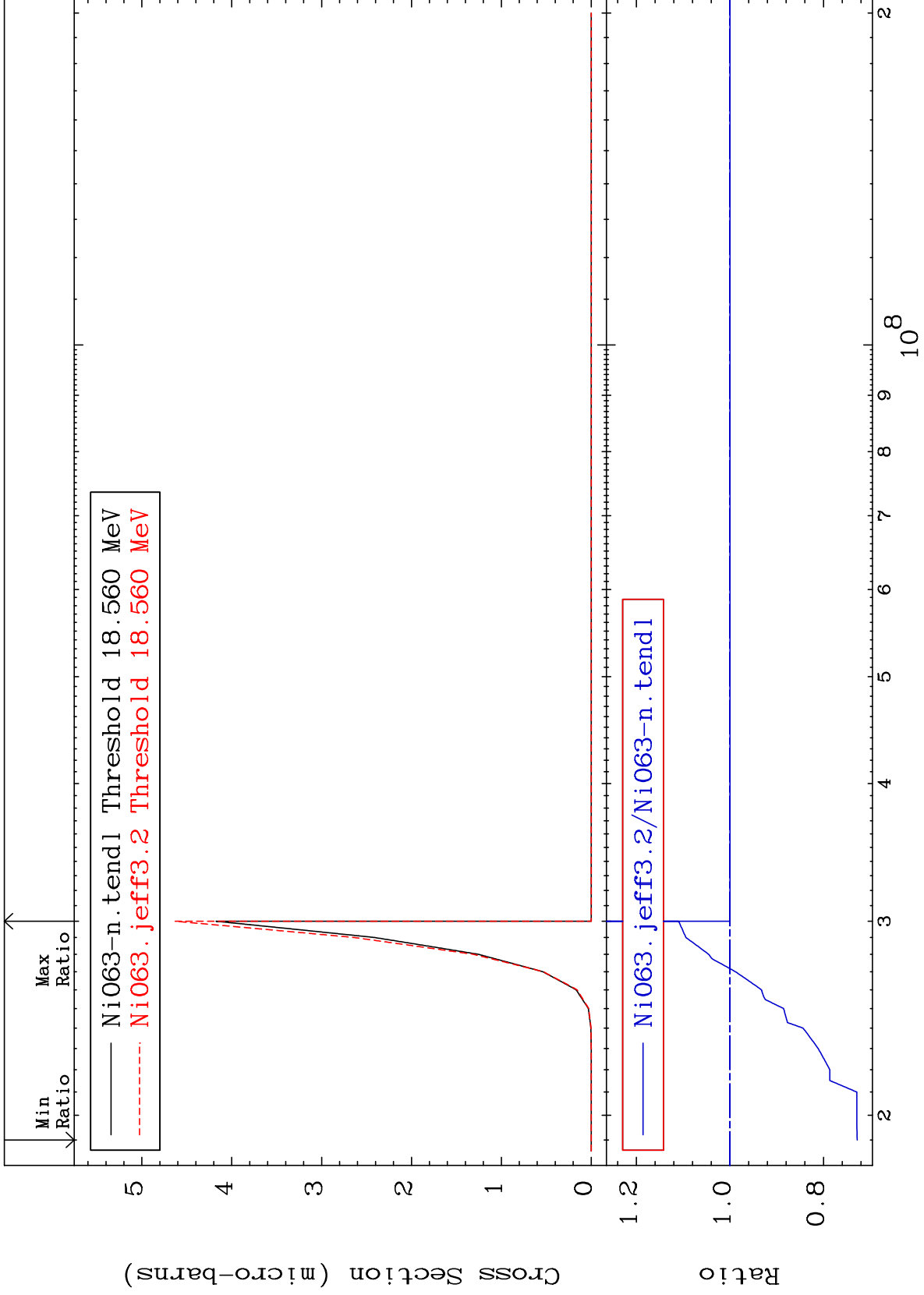
28-Ni-63  
-34.33 To 24.99 %



MAT 2840

(n,p) t  
Cross Section

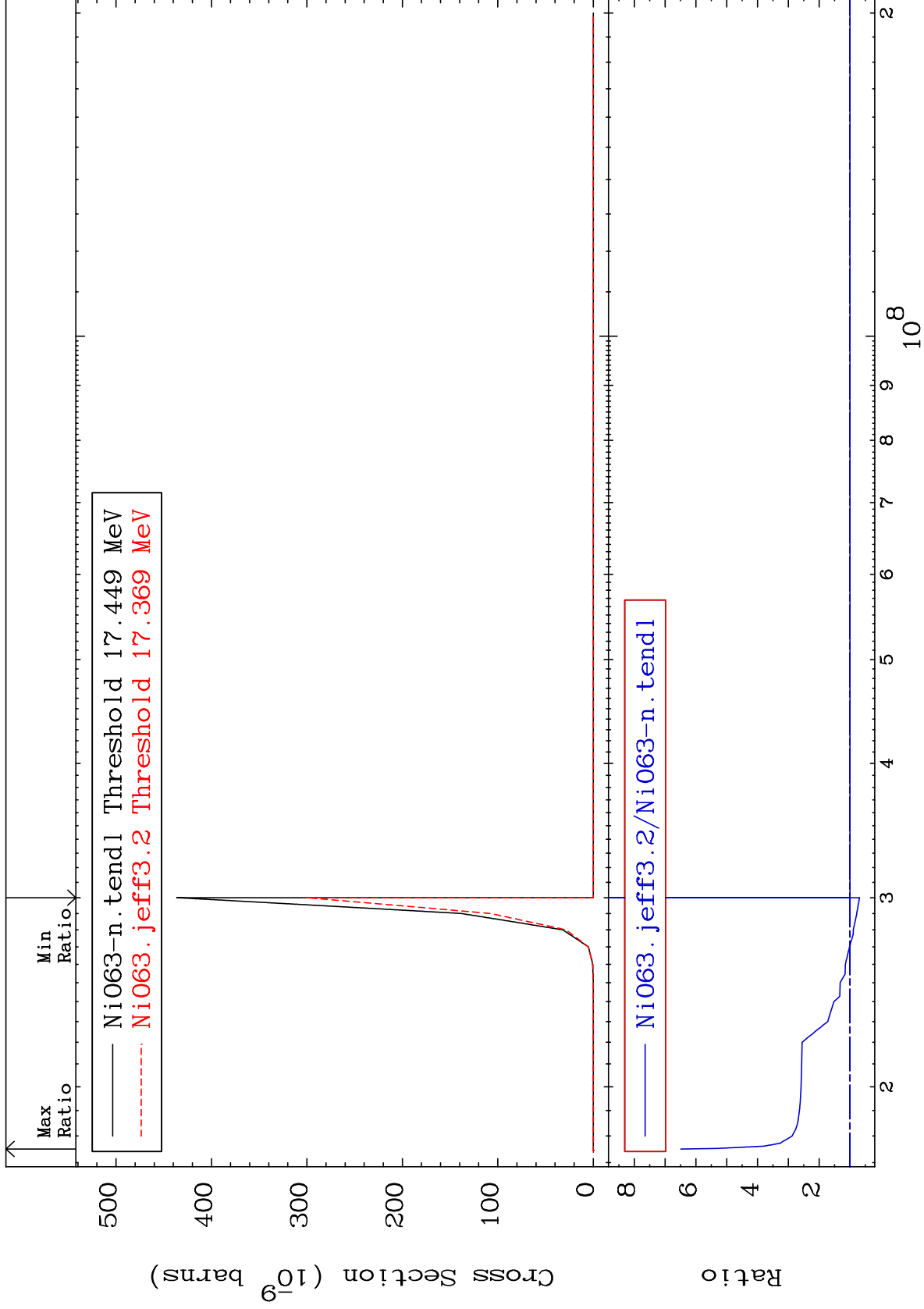
28-Ni-63  
-27.21 To 10.95 %



MAT 2840

(n,d)  $\alpha$   
Cross Section

28-Ni-63  
-31.07 To 549.4 %



60

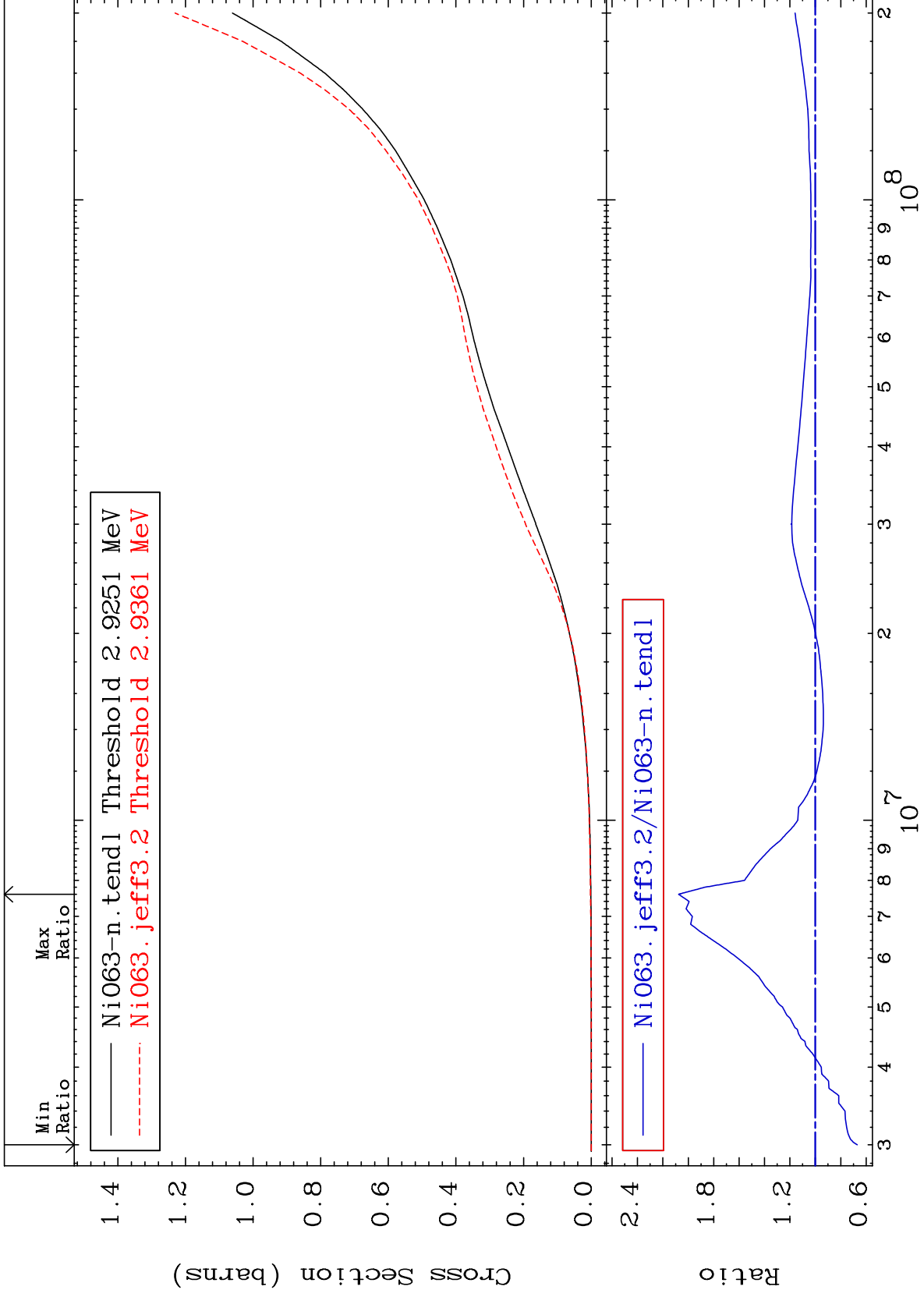
Incident Energy (eV)

28-Ni-63

MAT 2840

Hydrogen Production  
Cross Section

<sup>28</sup>Ni-63  
-33.01 To 107.6 %



61

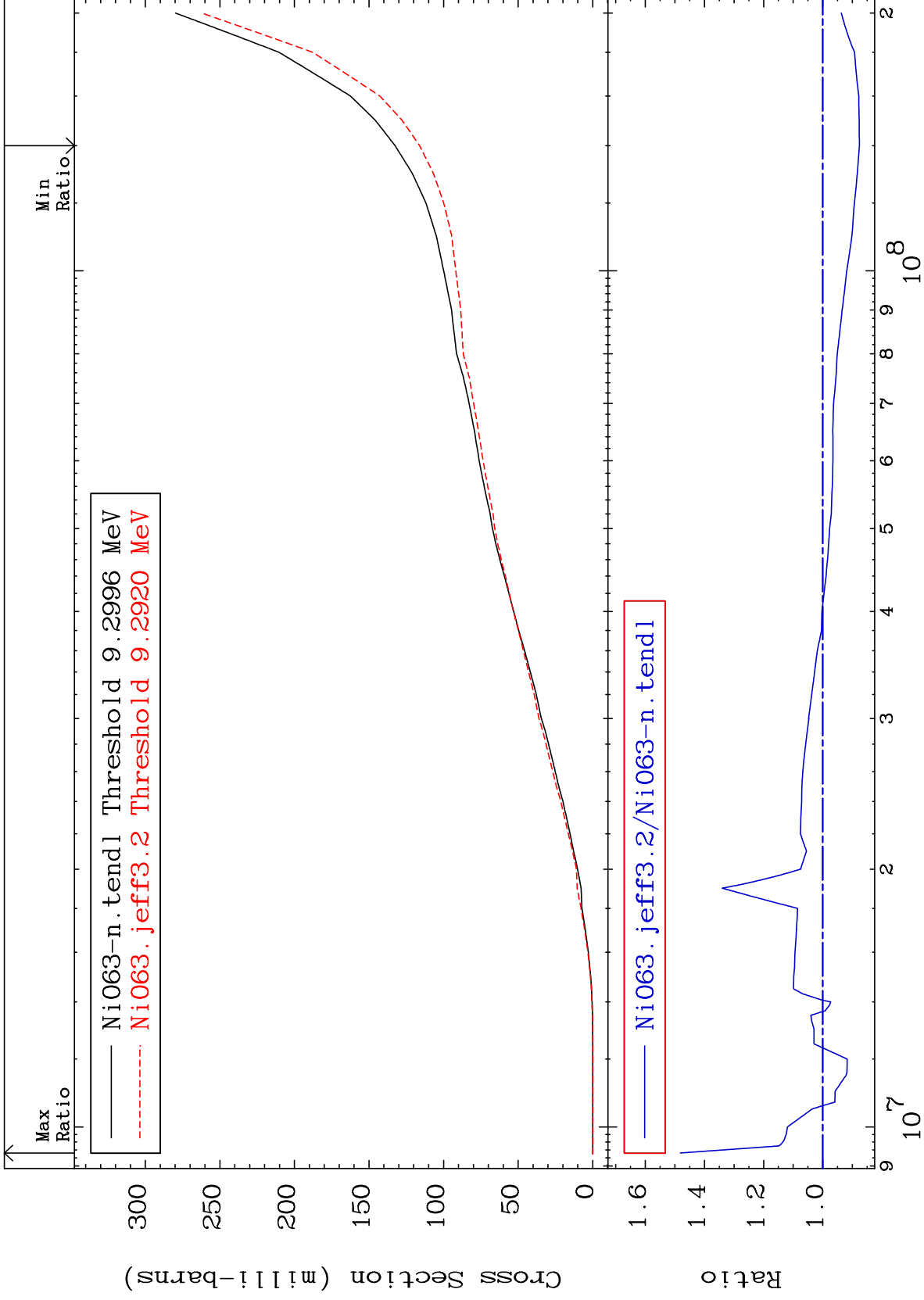
Incident Energy (eV)

<sup>28</sup>Ni-63

MAT 2840

Deuterium Production  
Cross Section

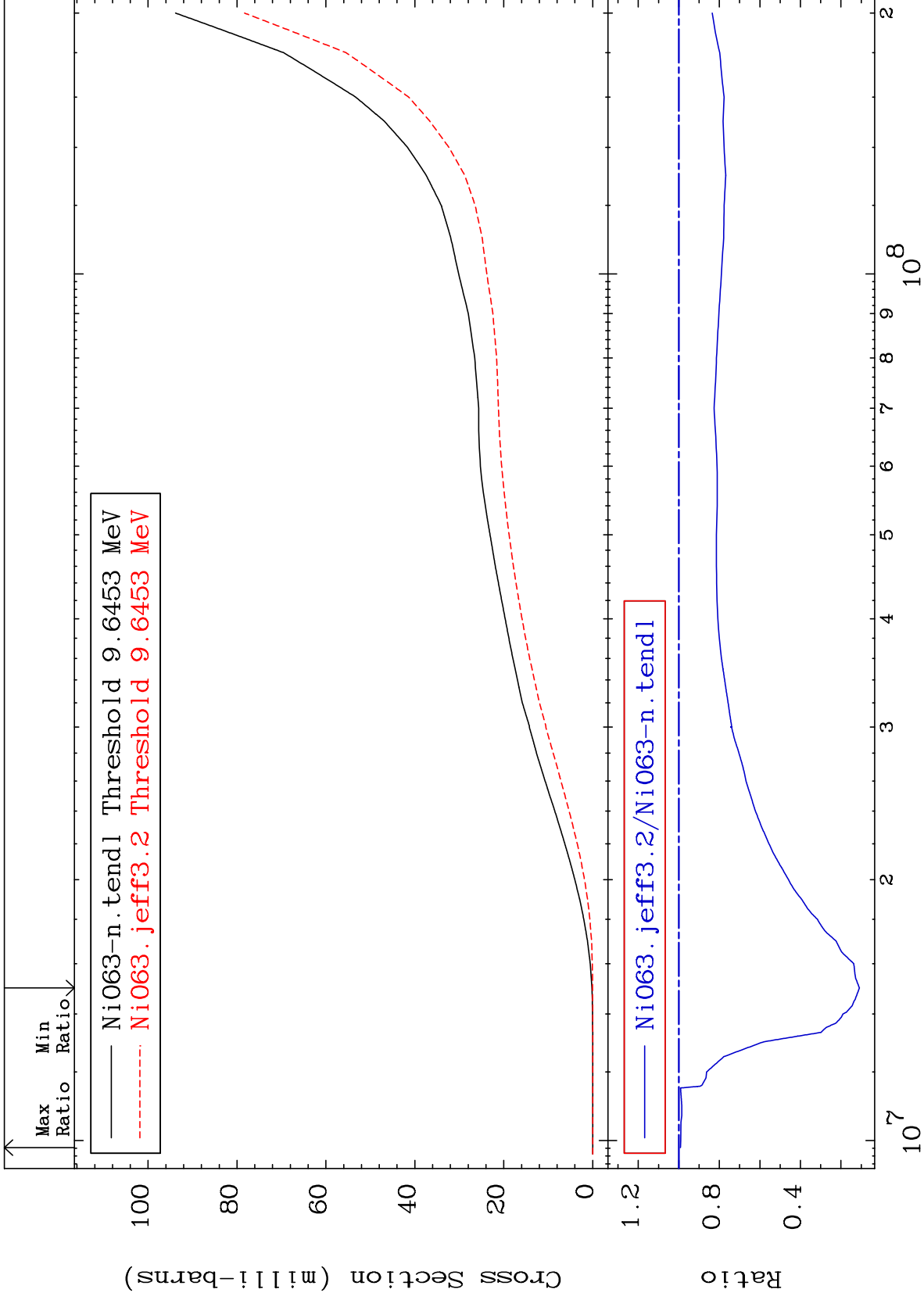
28-Ni-63  
-12.40 To 48.16 %



MAT 2840

Tritium Production  
Cross Section

<sup>28</sup>Ni-63  
-89.12 To -0.766%



63

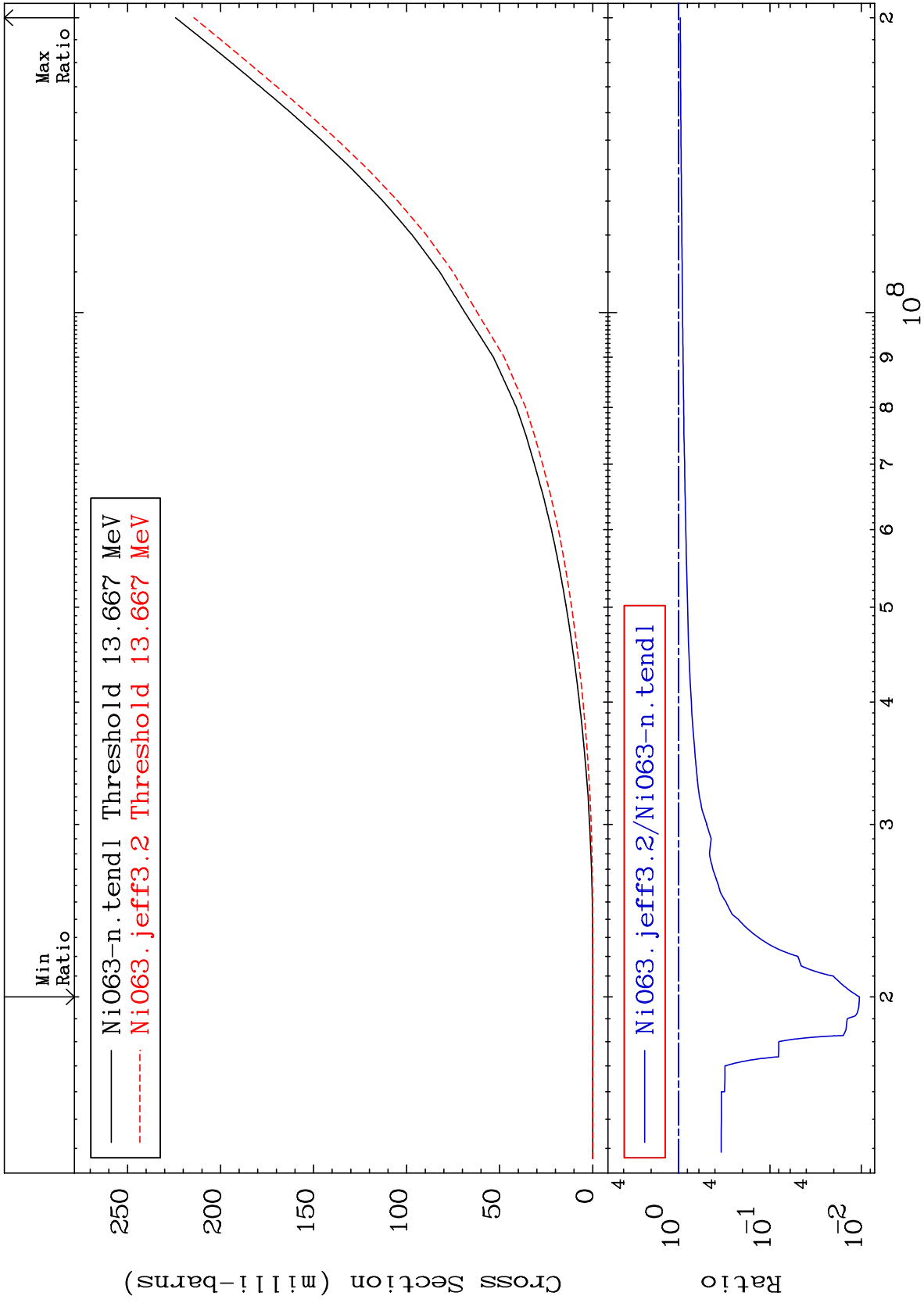
Incident Energy (eV)

<sup>28</sup>Ni-63

MAT 2840

He-3 Production  
Cross Section

28-Ni-63  
-98.95 To -4.395%



64

Incident Energy (eV)

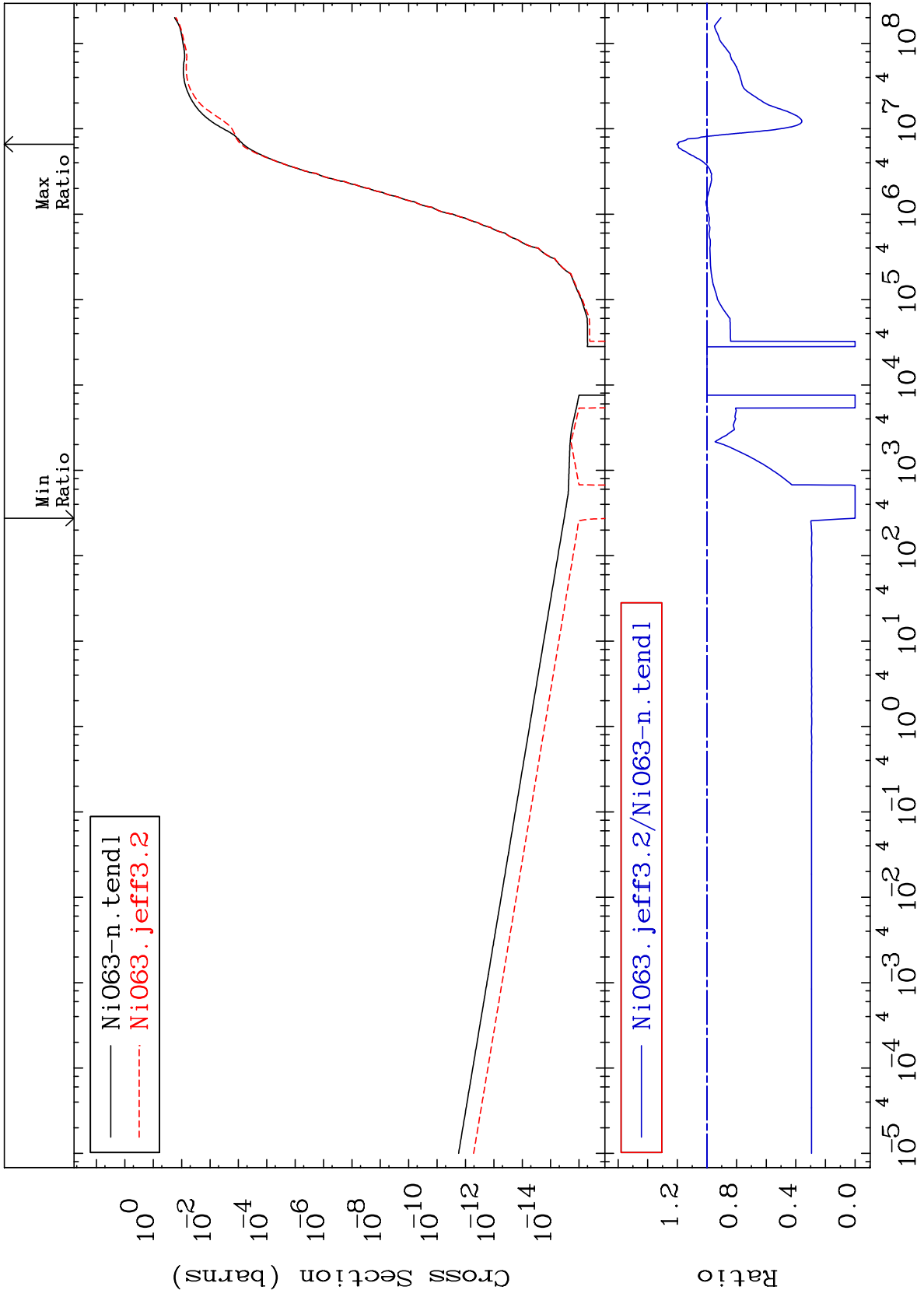
28-Ni-63



MAT 2840

He-4 Production  
Cross Section

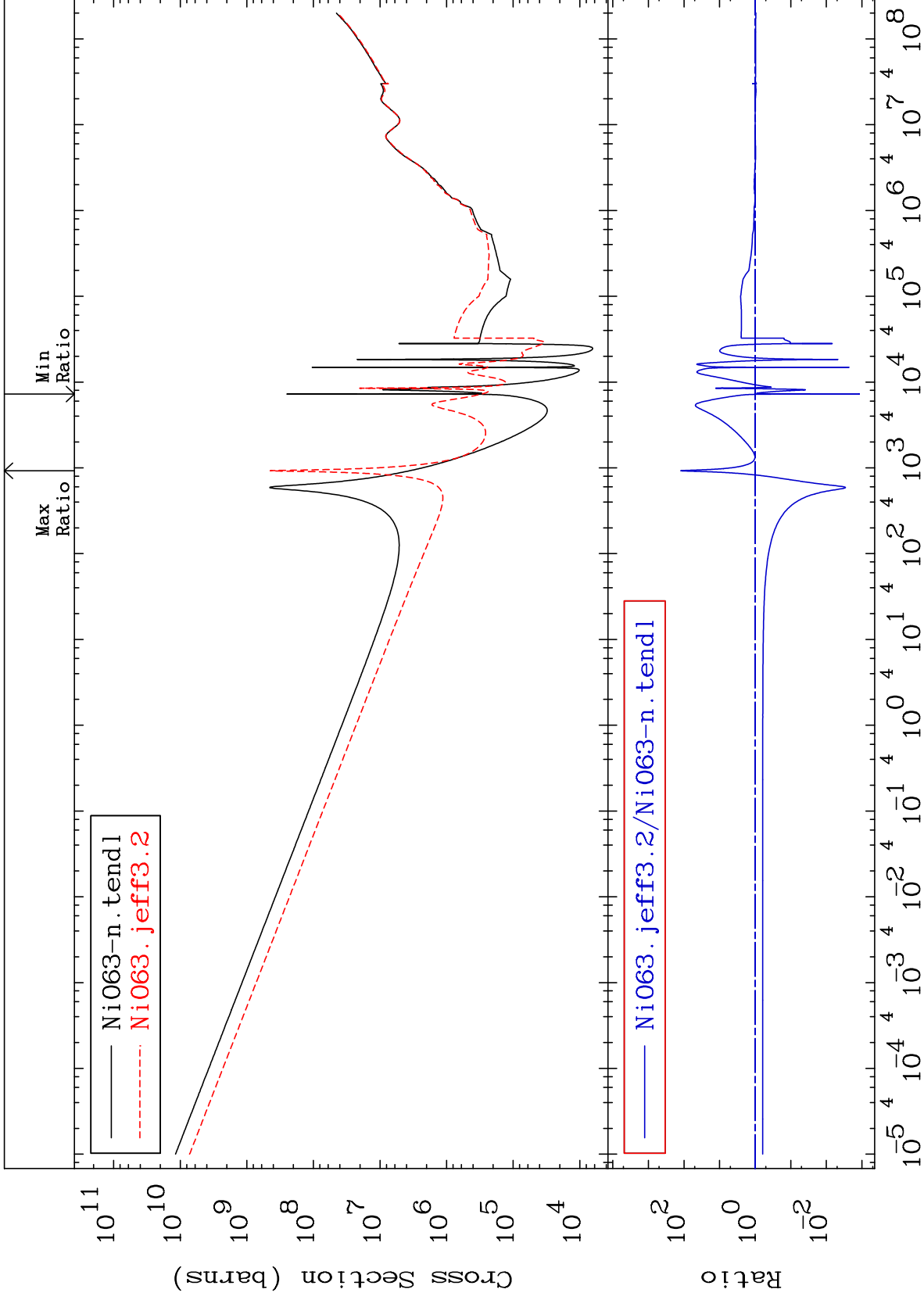
28-Ni-63  
-100.0 To 20.28 %



65

Incident Energy (eV)

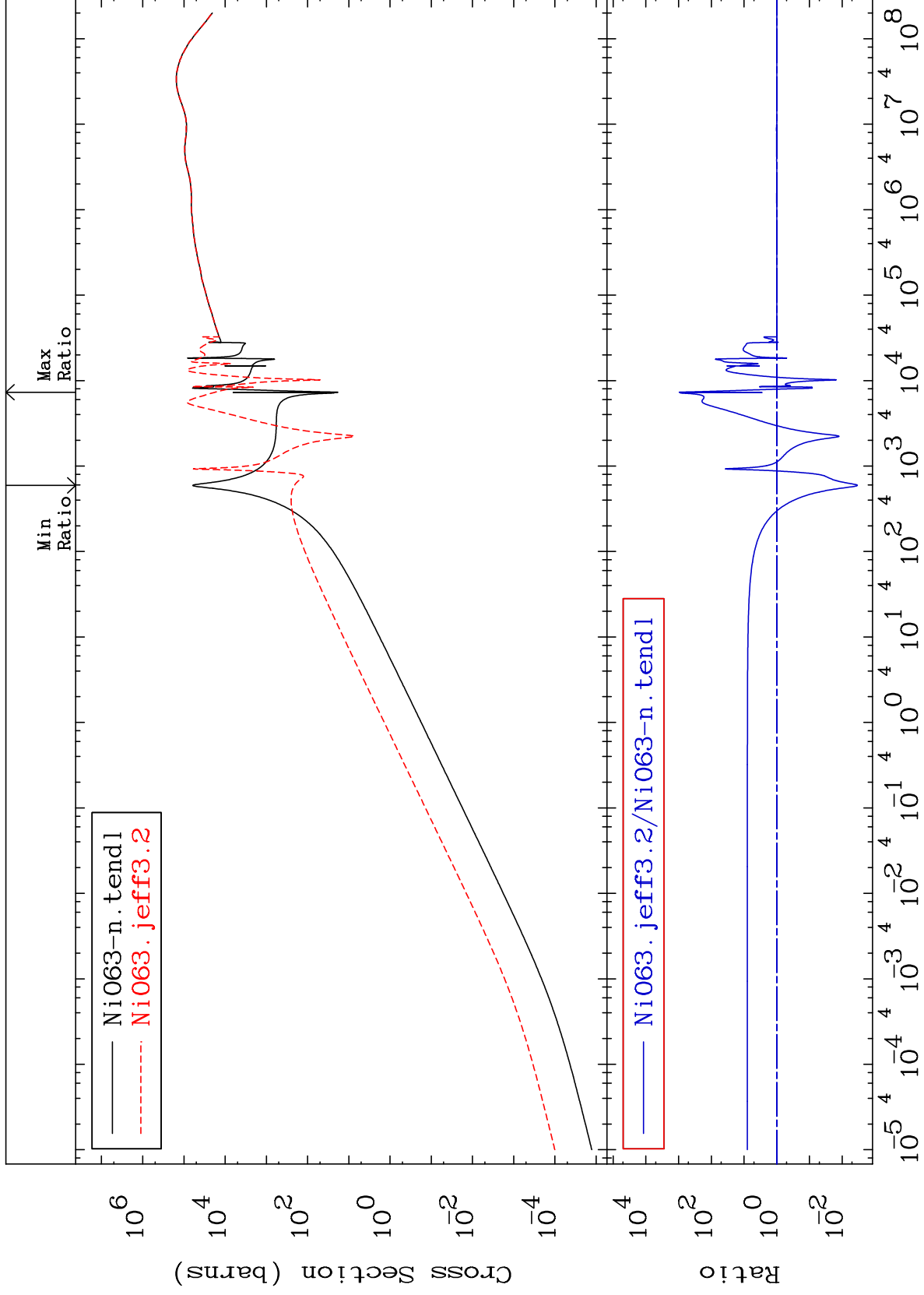
28-Ni-63



MAT 2840

Kerma elastic  
Cross Section

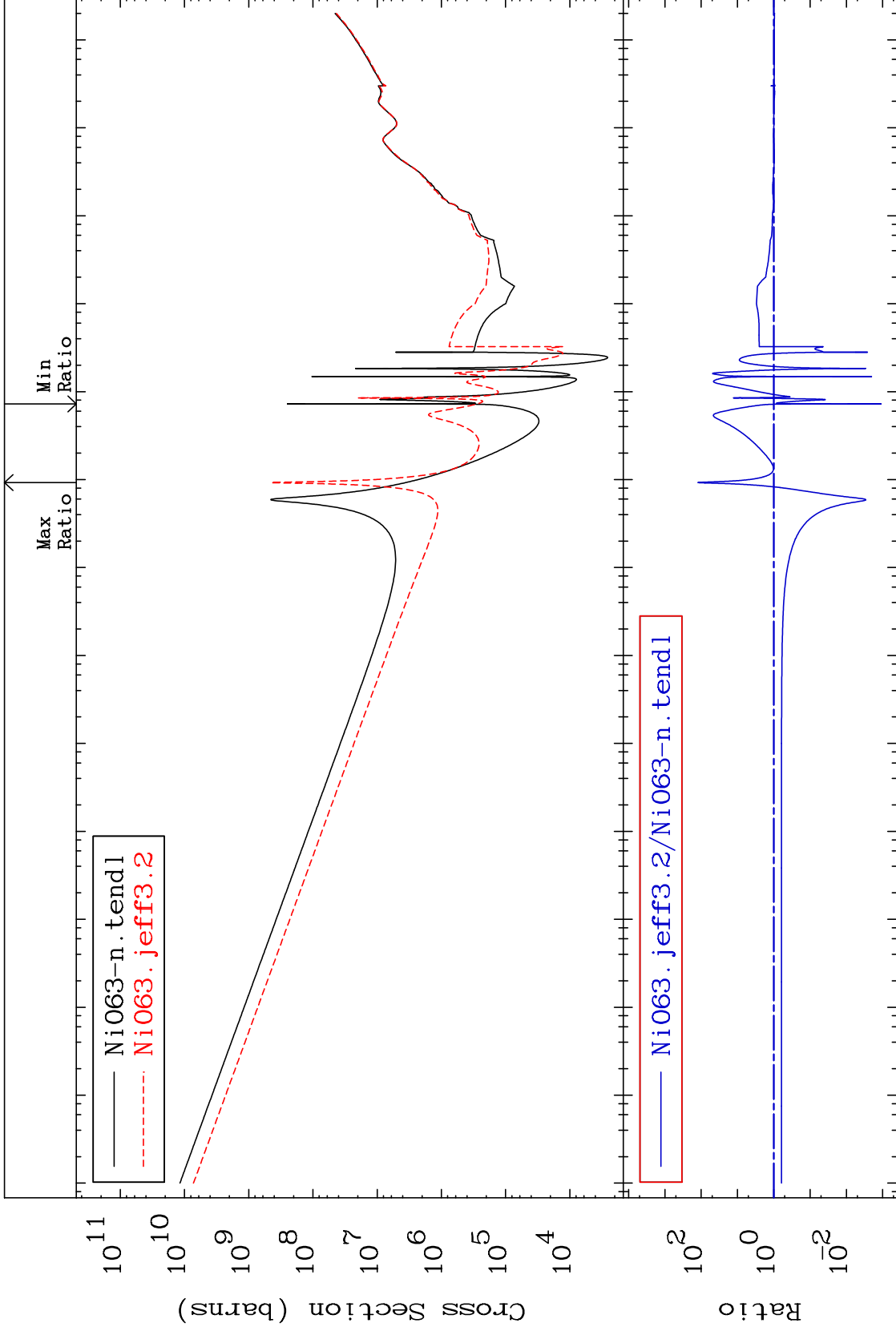
28-Ni-63  
-99.66 To 9999. %



MAT 2840

Kerma non-elastic (all but mt2)  
Cross Section

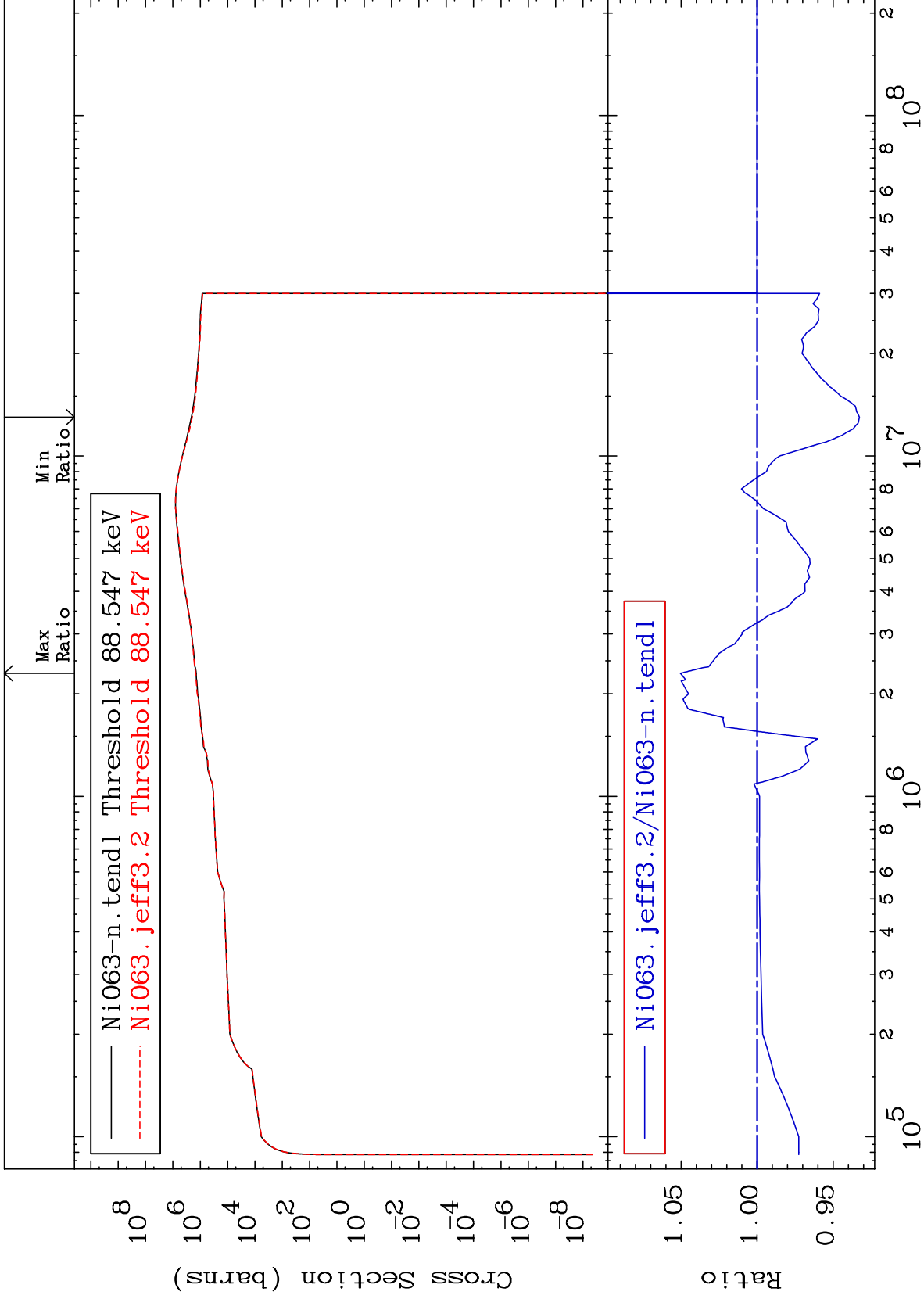
28-Ni-63  
-99.89 To 9999. %



MAT 2840

Kerma inelastic (mt51-91)  
Cross Section

28-Ni-63  
-6.731 To 5.050 %



69

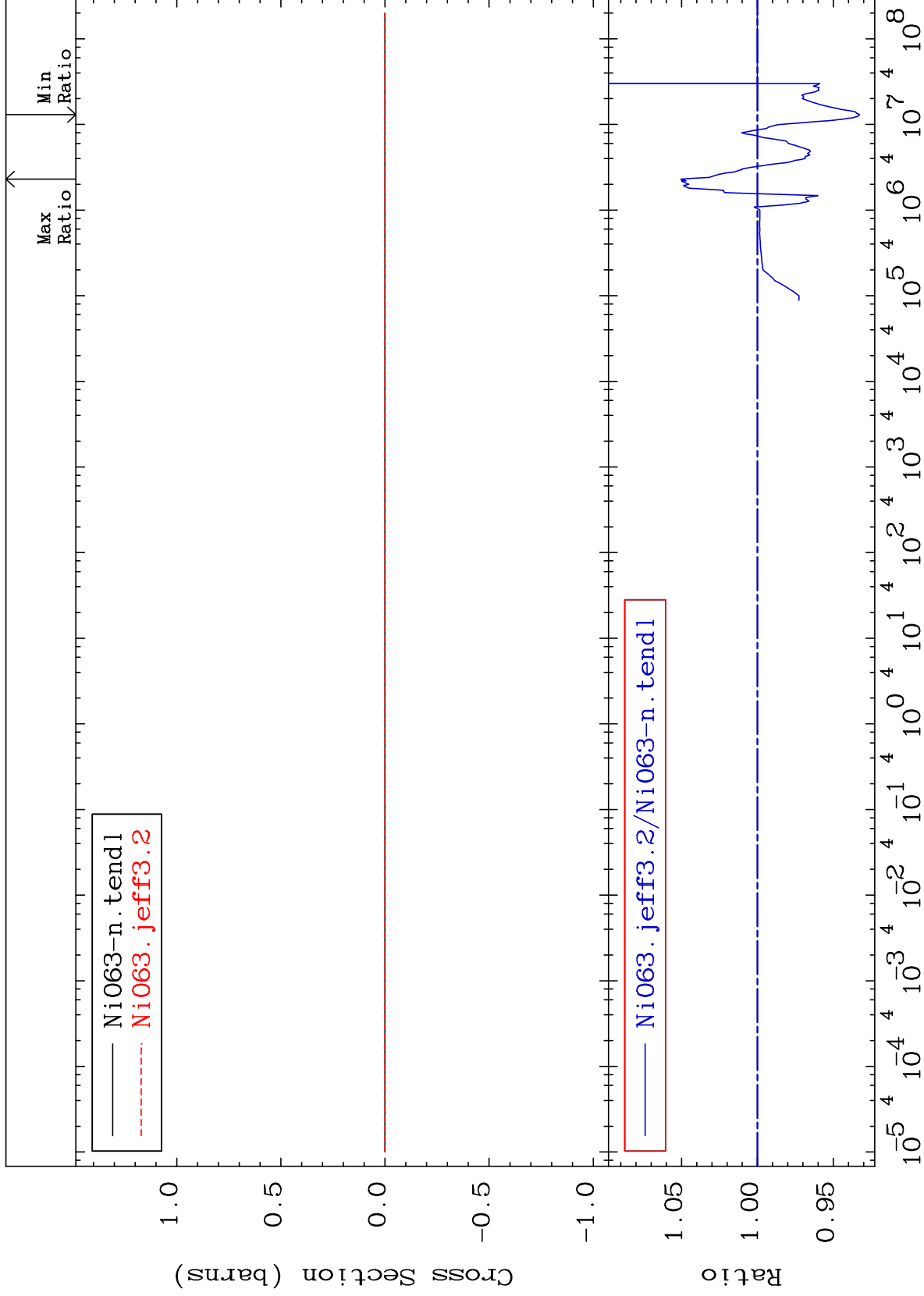
Incident Energy (eV)

28-Ni-63

MAT 2840

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

28-Ni-63  
-6.731 To 5.050 %



70

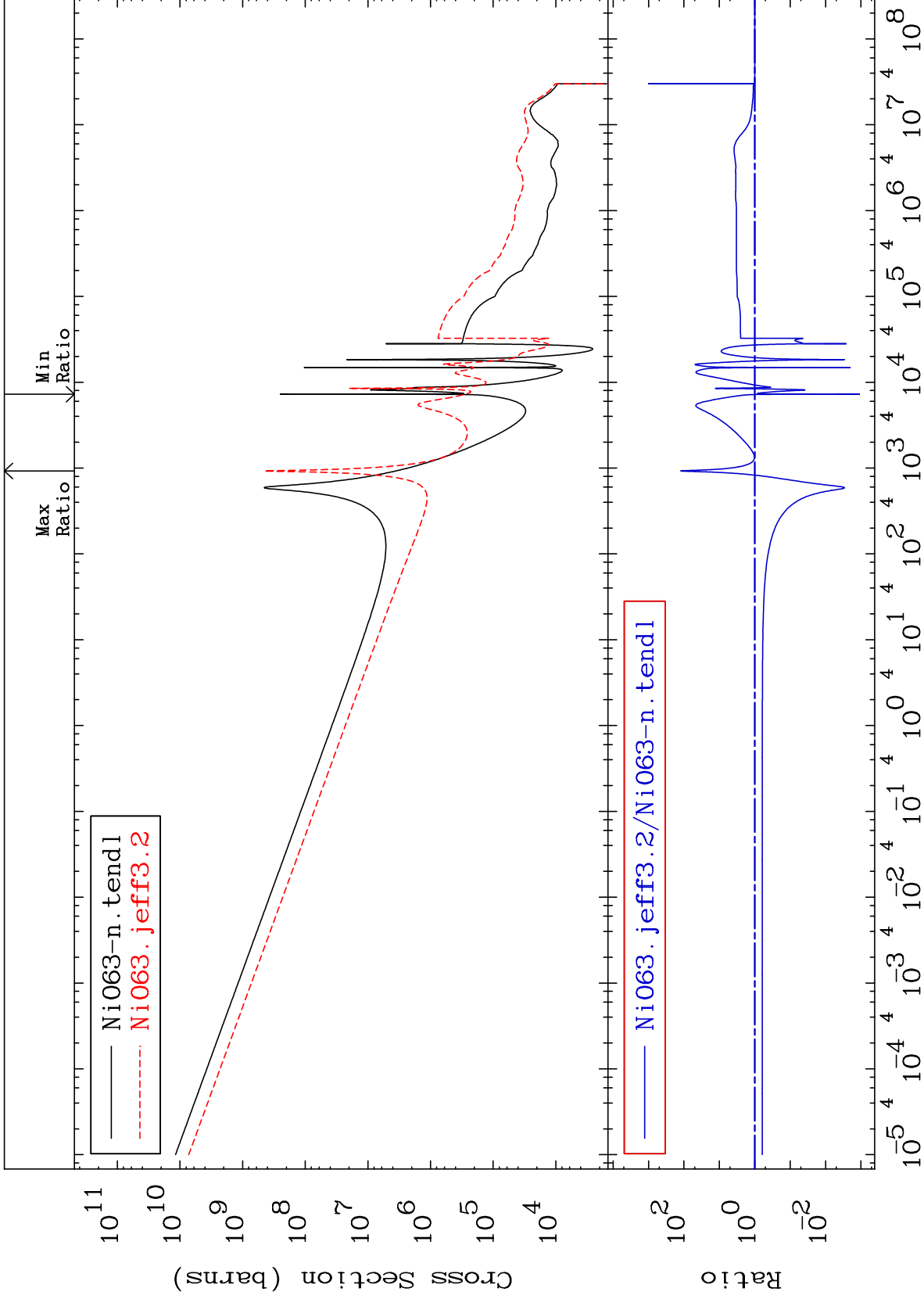
Incident Energy (eV)

28-Ni-63

MAT 2840

Kerma capture (mt102)  
Cross Section

28-Ni-63  
-99.89 To 9999. %



71

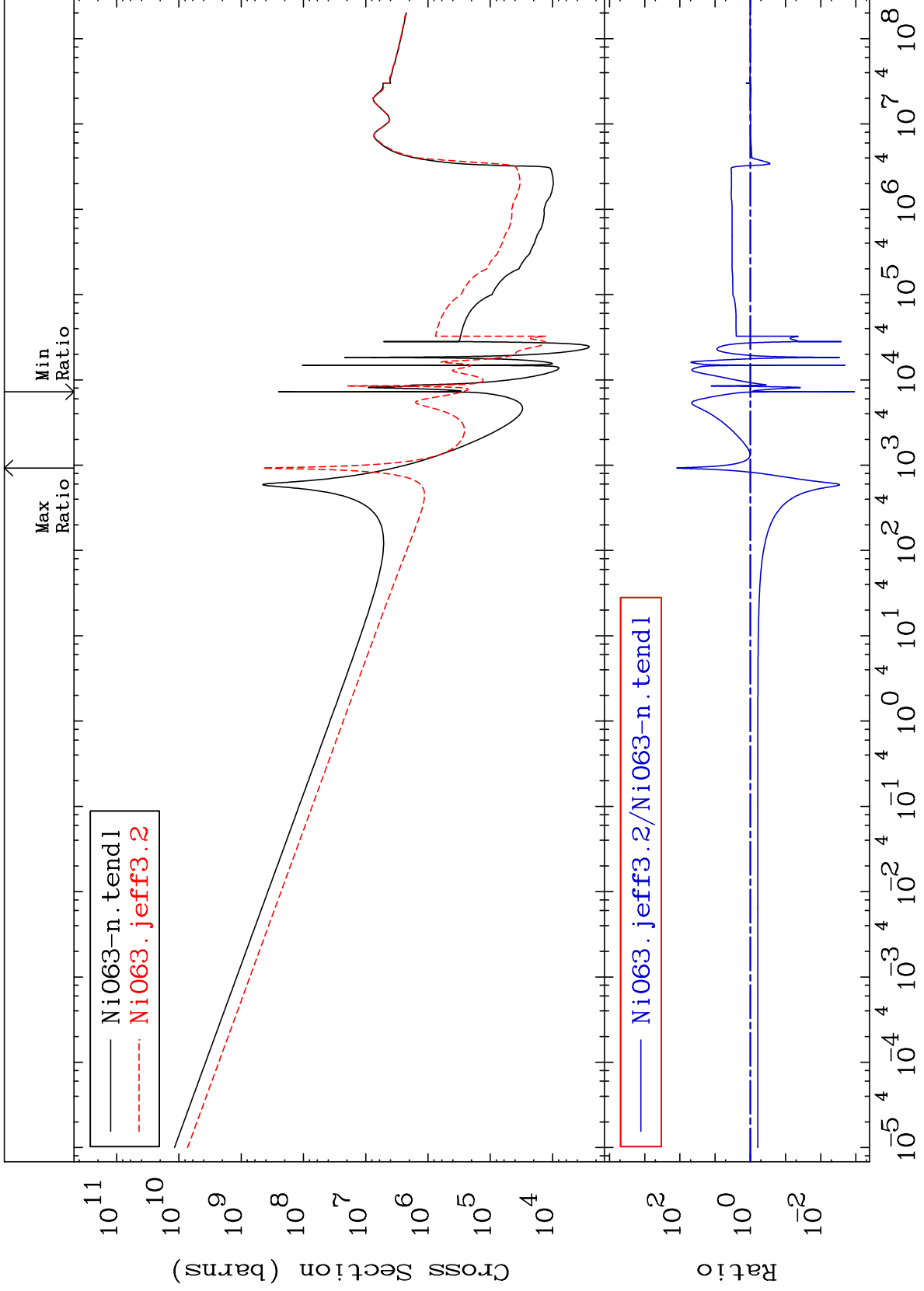
Incident Energy (eV)

28-Ni-63

MAT 2840

Total photon (eV-barns)  
Cross Section

28-Ni-63  
-99.89 To 9999. %



72

Incident Energy (eV)

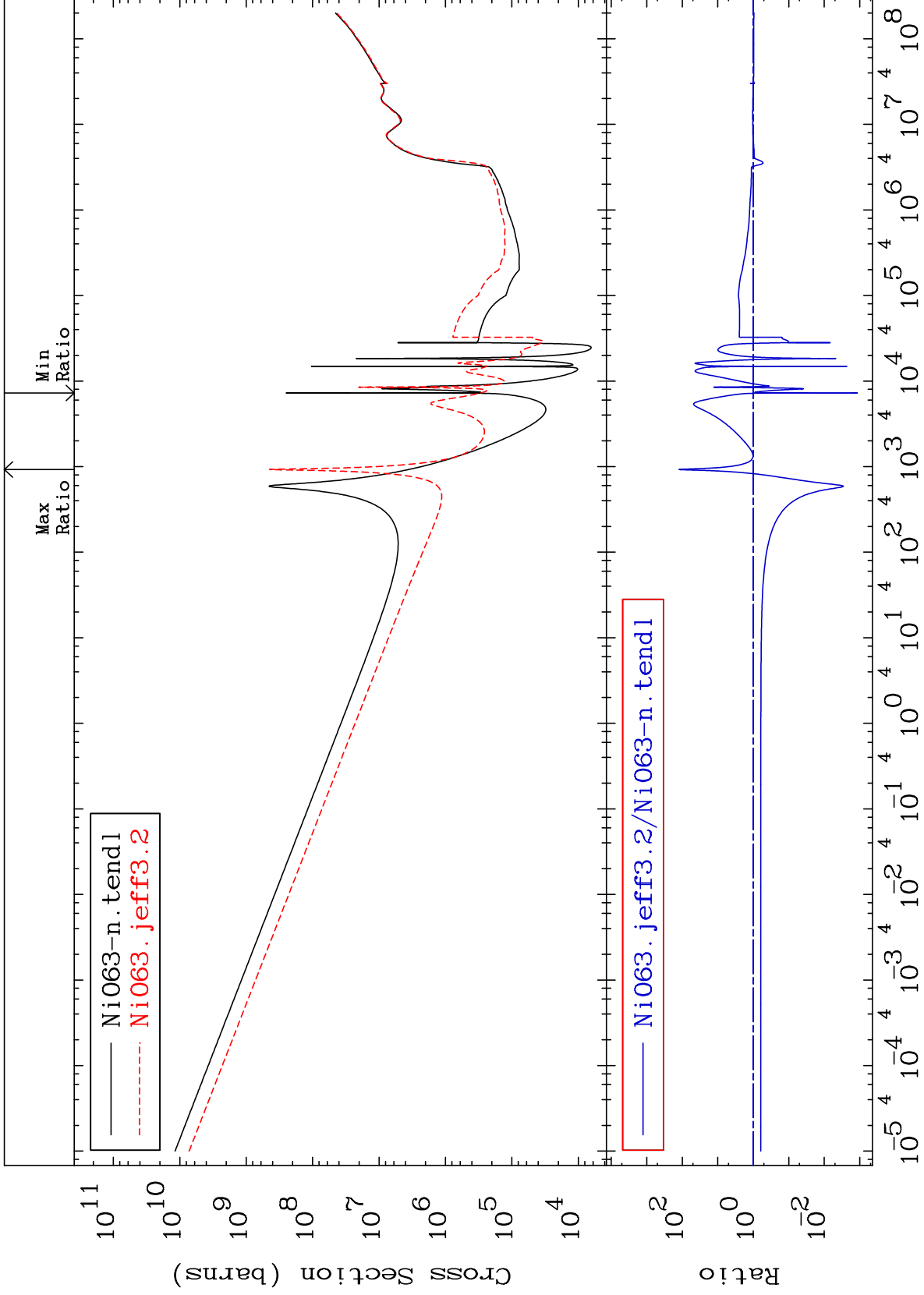
28-Ni-63



MAT 2840

Total kinematic kerma (high limit)  
Cross Section

28-Ni-63  
-99.88 To 9999. %



73

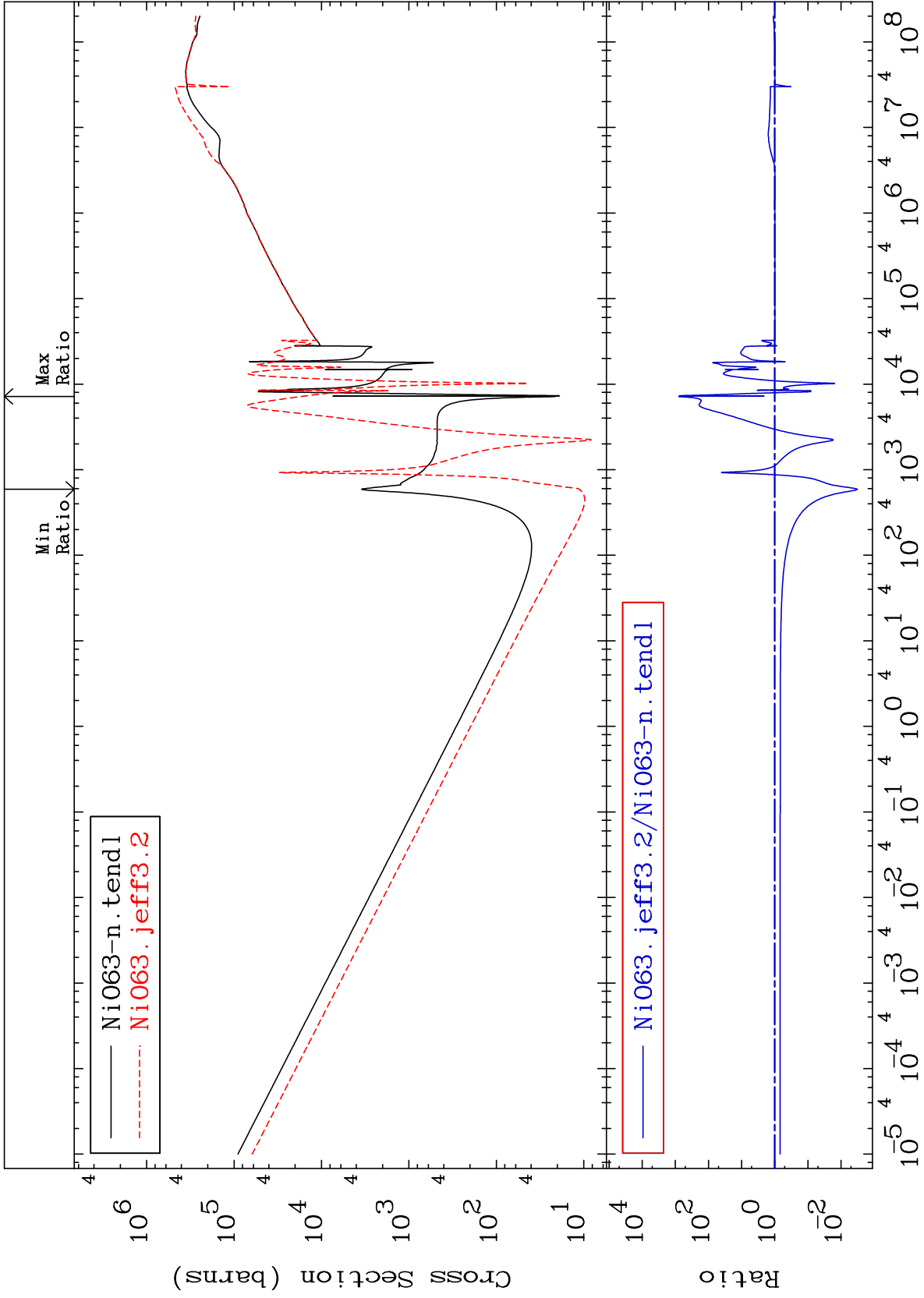
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa total (eV-barns)  
Cross Section

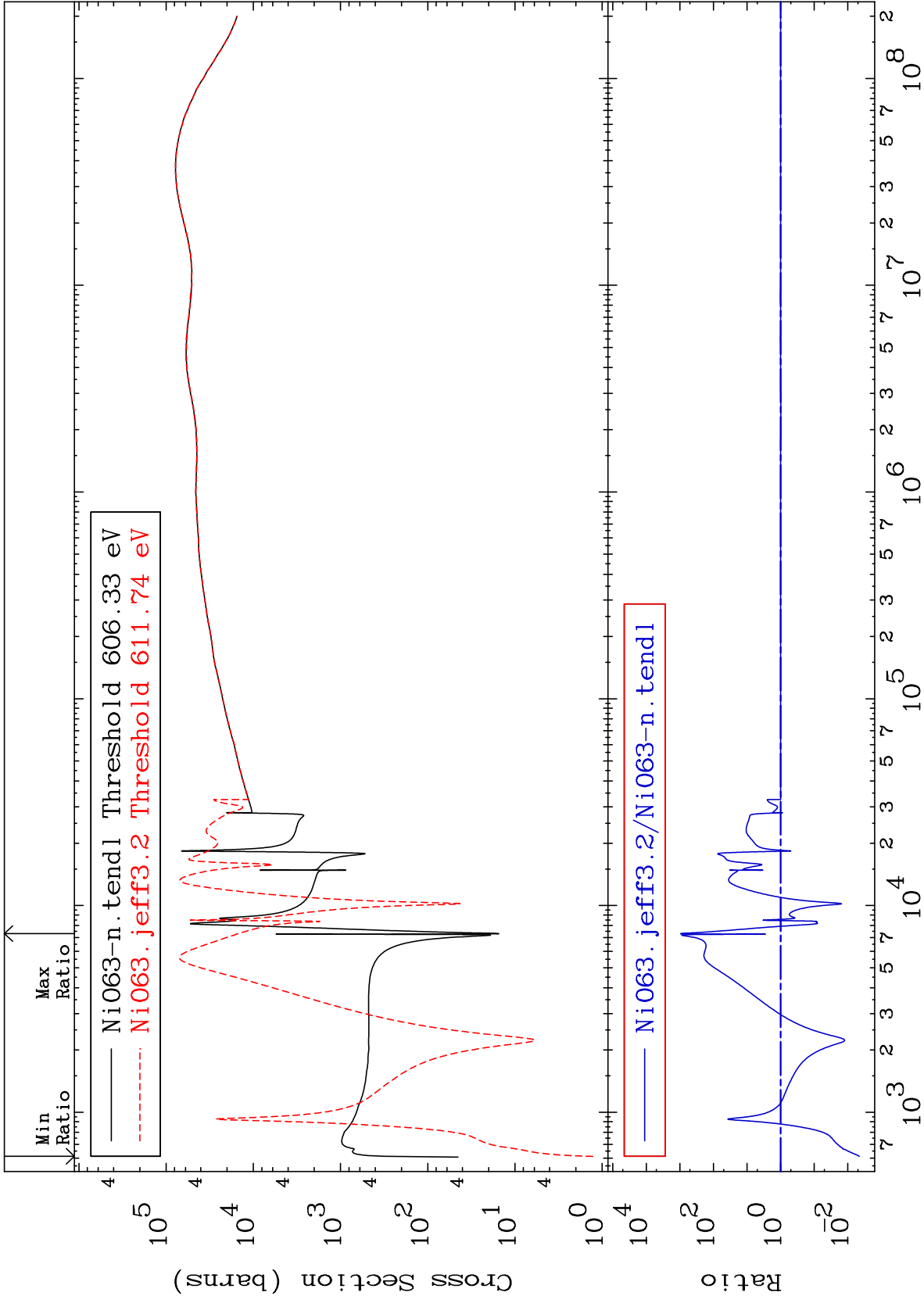
28-Ni-63  
-99.68 To 9999. %



74

Incident Energy (eV)

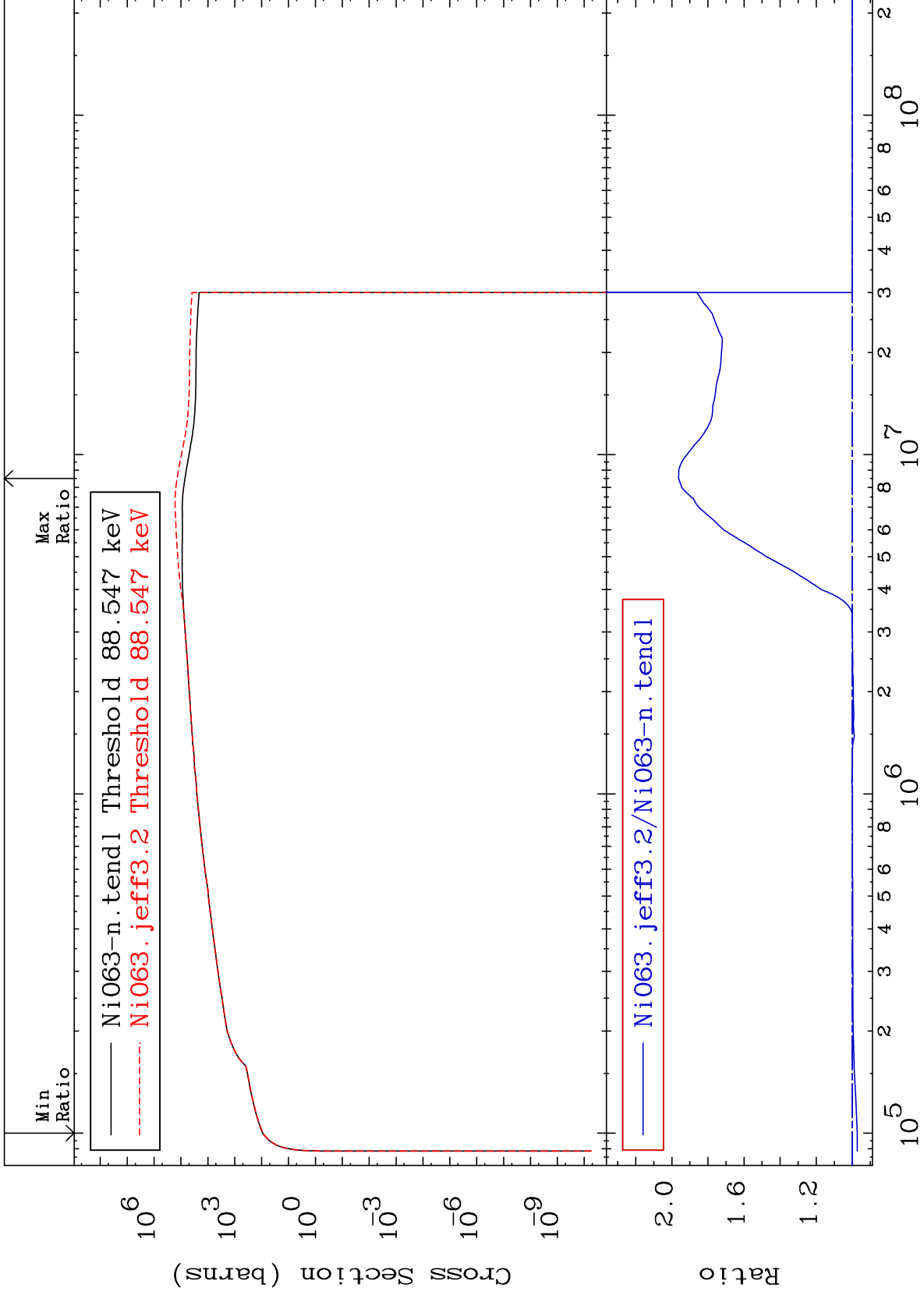
28-Ni-63



MAT 2840

Dpa inelastic (mt51-91)  
Cross Section

28-Ni-63  
-2.737 To 96.25 %



76

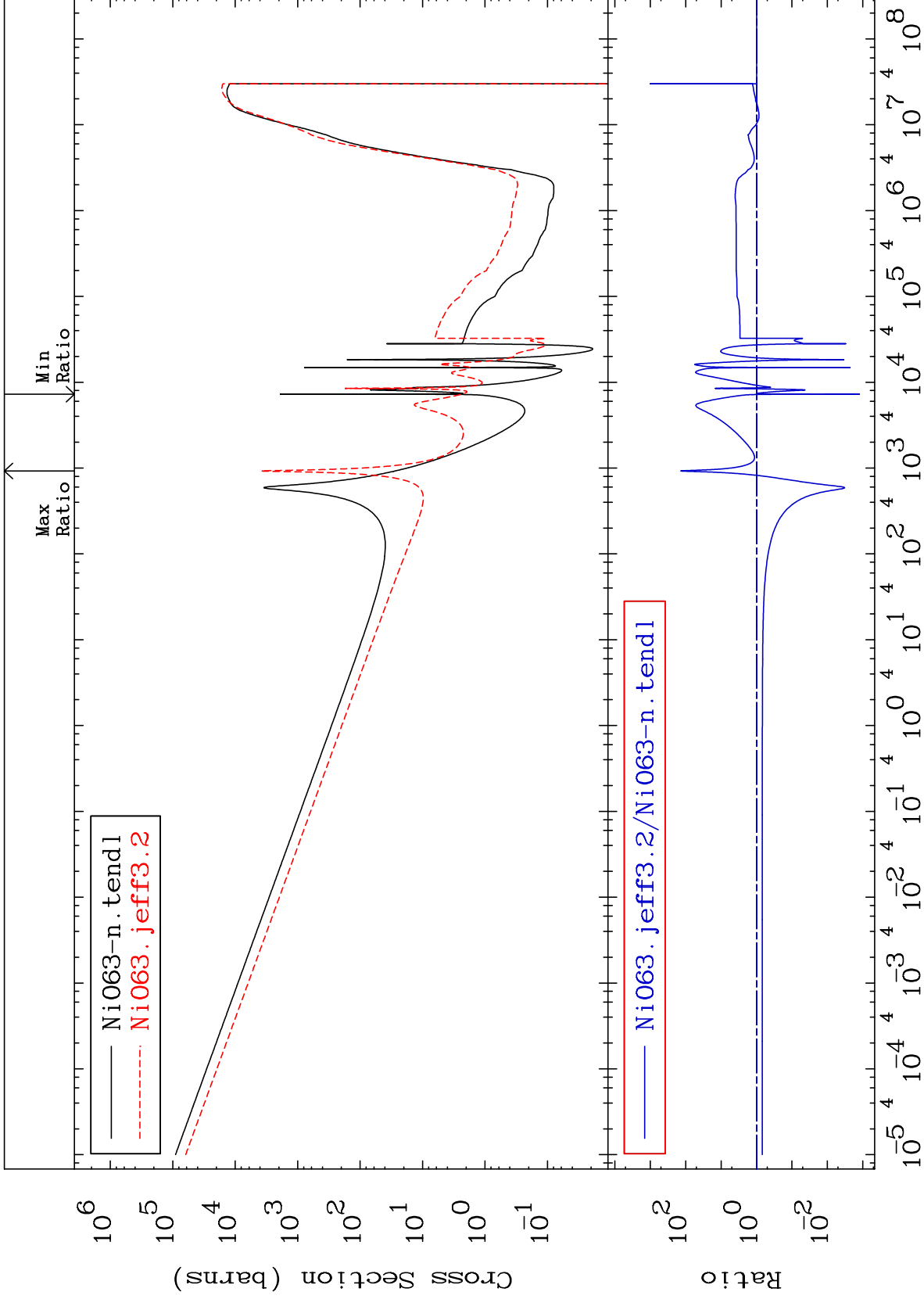
Incident Energy (eV)

28-Ni-63

MAT 2840

Dpa disappearance (mt102 -120)  
Cross Section

28-Ni-63  
-99.88 To 9999. %



77

Incident Energy (eV)

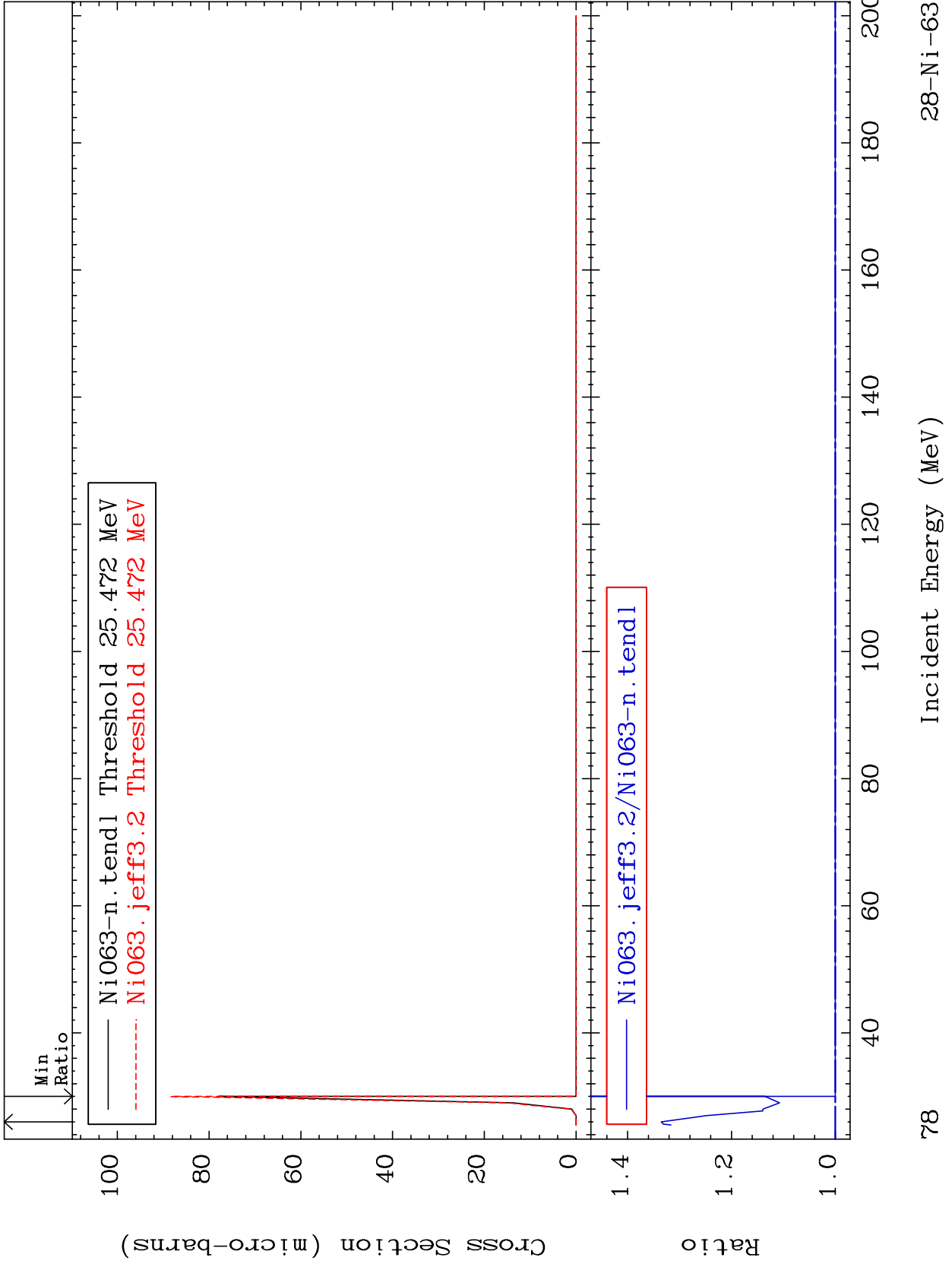
28-Ni-63

MAT 2840

(n,2n) d:27-Co-60g

28-Ni-63

Radionuclide Production Cross Section 0.000 To 33.53 %

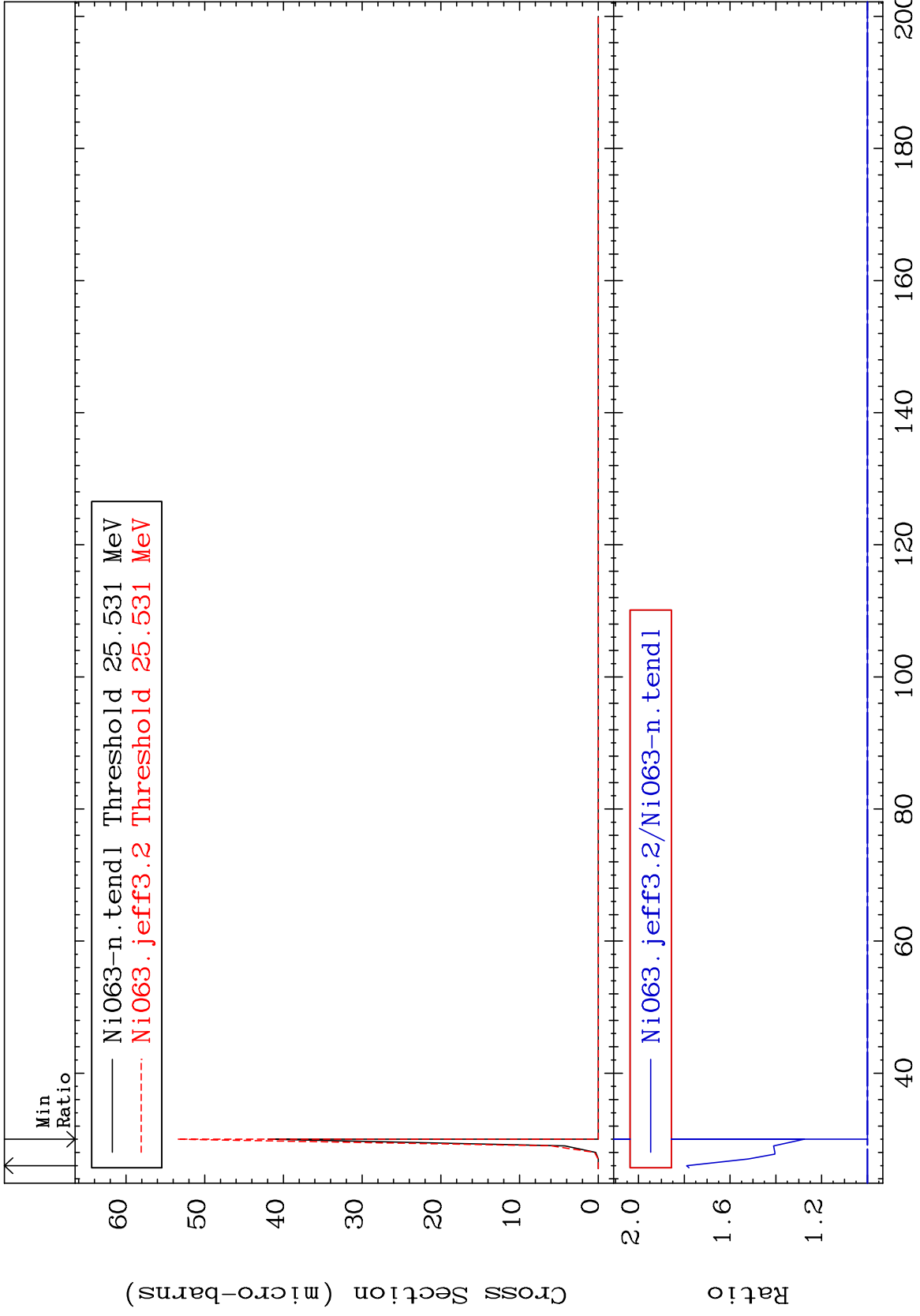


MAT 2840

(n,2n) d:27-Co-60m1

28-Ni-63

Radionuclide Production Cross Section 0.000 To 78.93 %



79

Incident Energy (MeV)

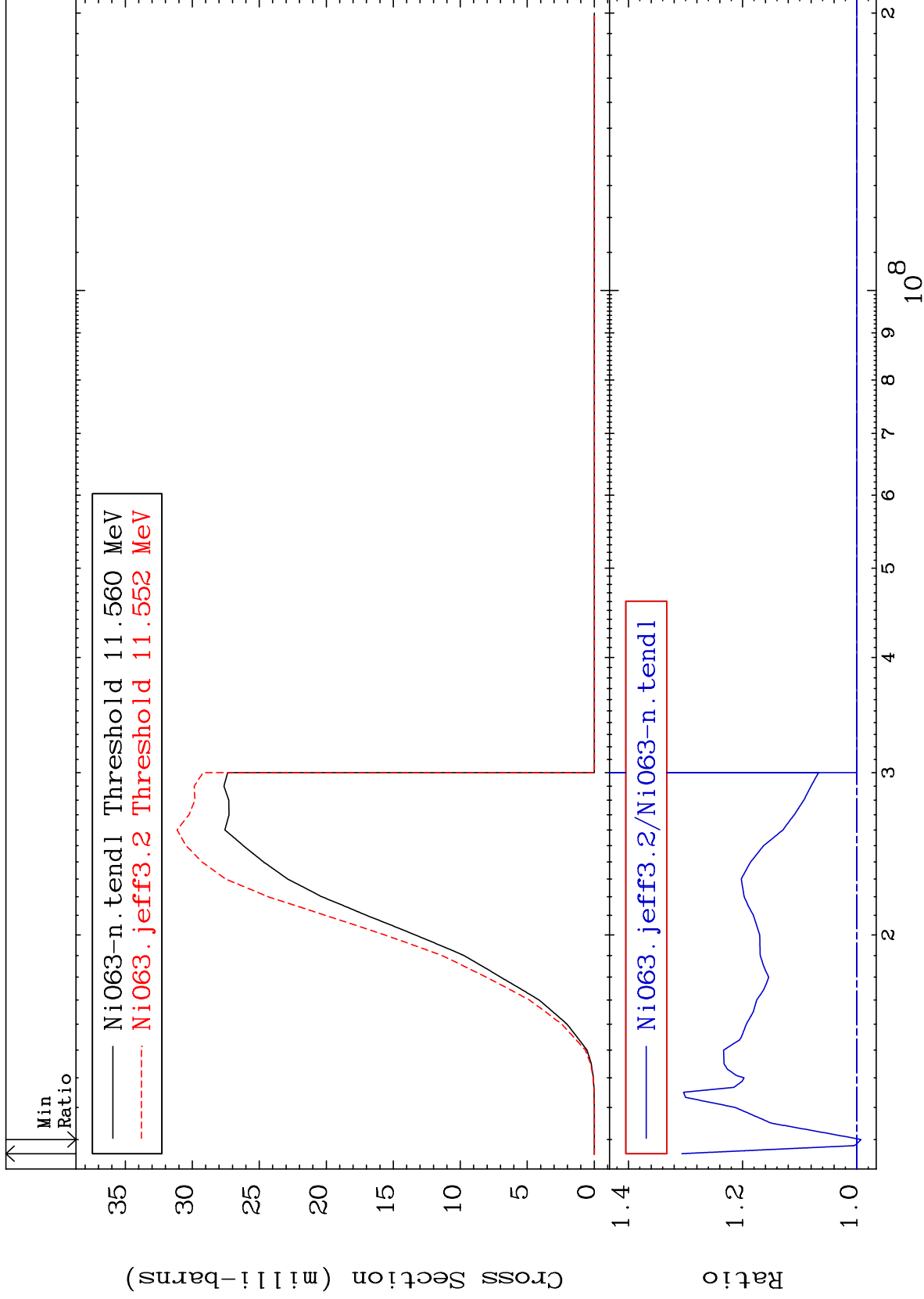
28-Ni-63

MAT 2840

28-Ni-63

(n, n') p:27-Co-62g

Radionuclide Production Cross Section -0.728 To 30.63 %



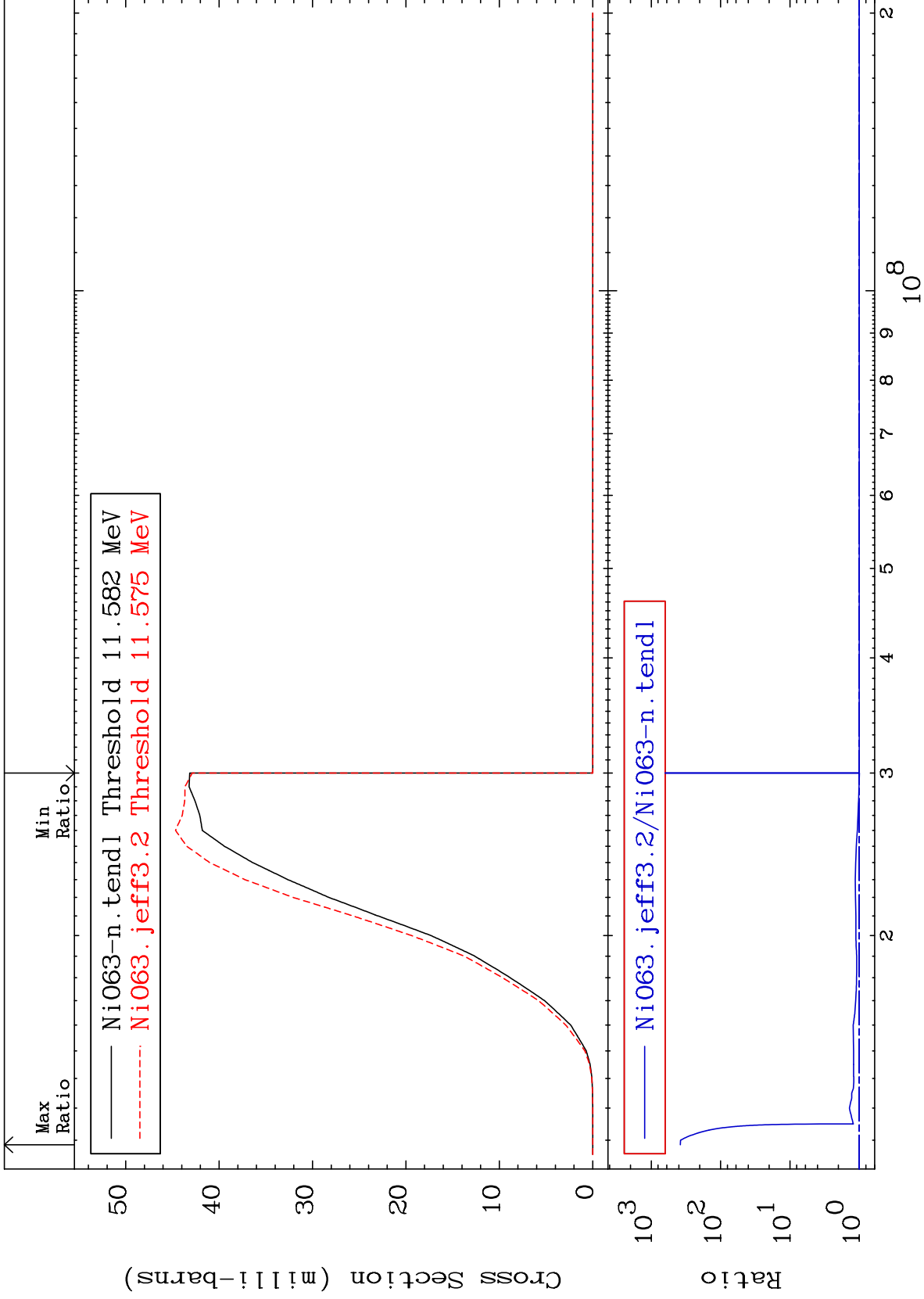
80

Incident Energy (eV)

28-Ni-63



Radionuclide Production Cross Section -0.597 To 9999. %

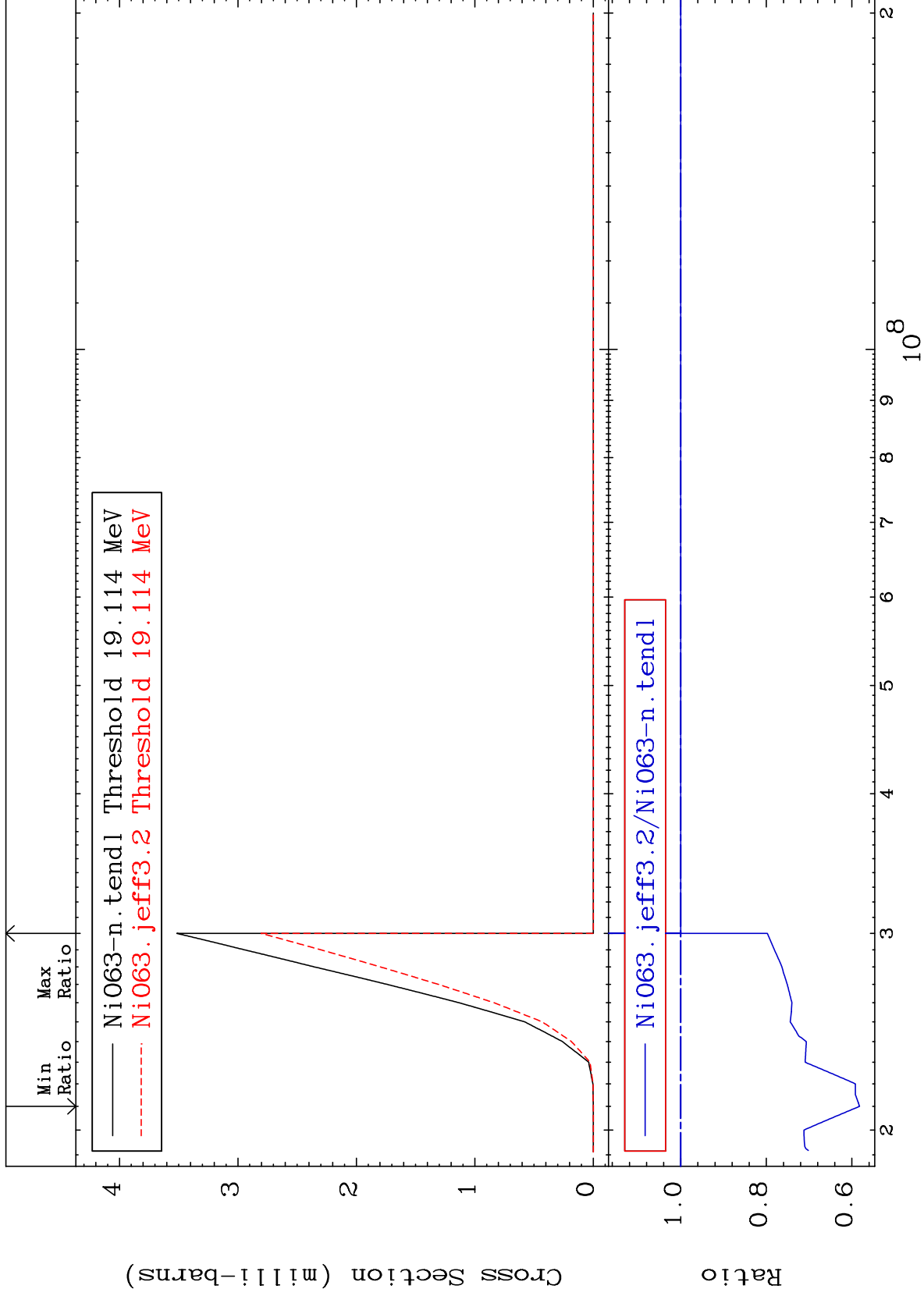


MAT 2840

(n, n') t:27-Co-60g

28-Ni-63

Radionuclide Production Cross Section -41.78 To 0.000 %

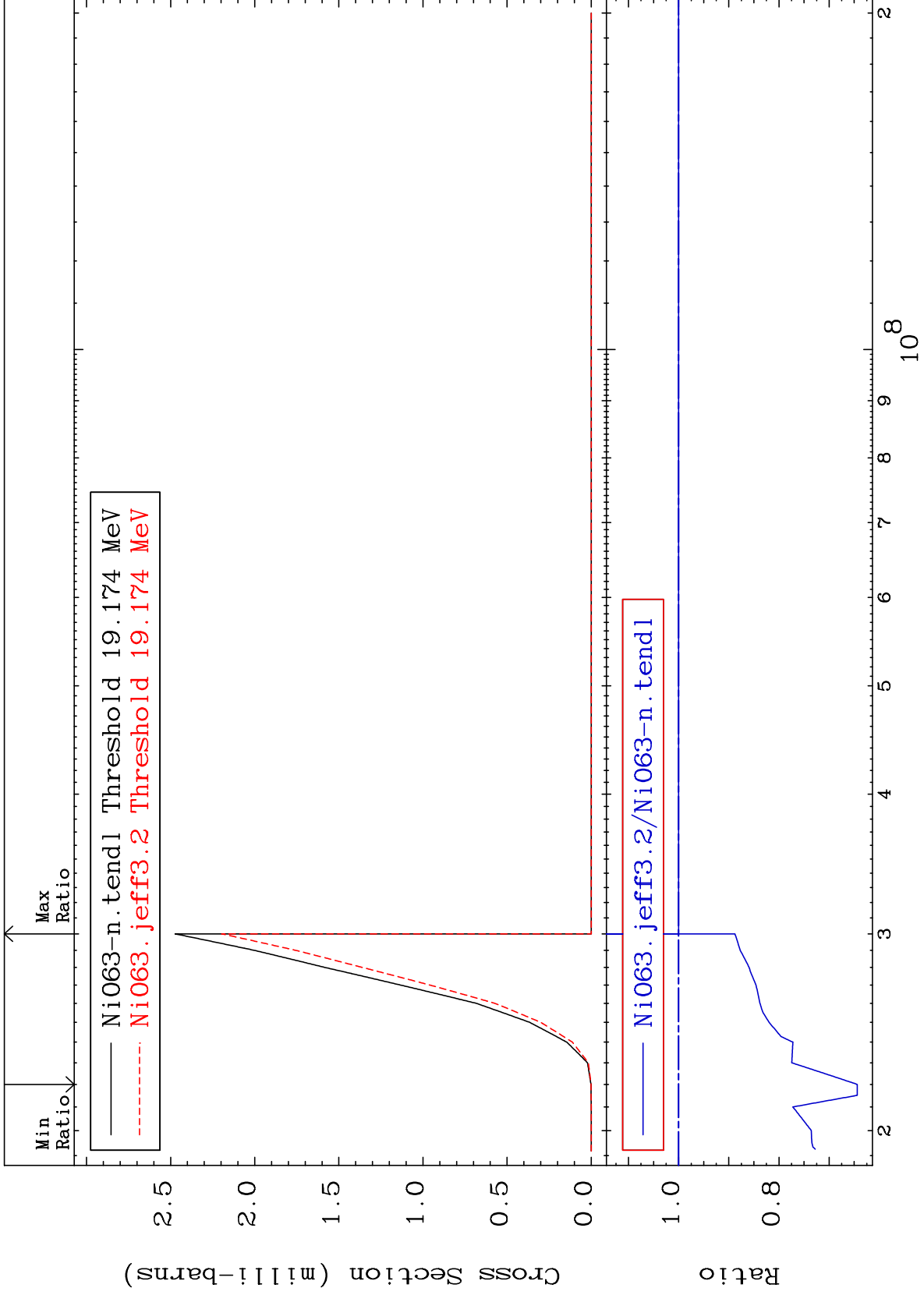


82

Incident Energy (eV)

28-Ni-63

Radionuclide Production Cross Section -35.60 To 0.000 %

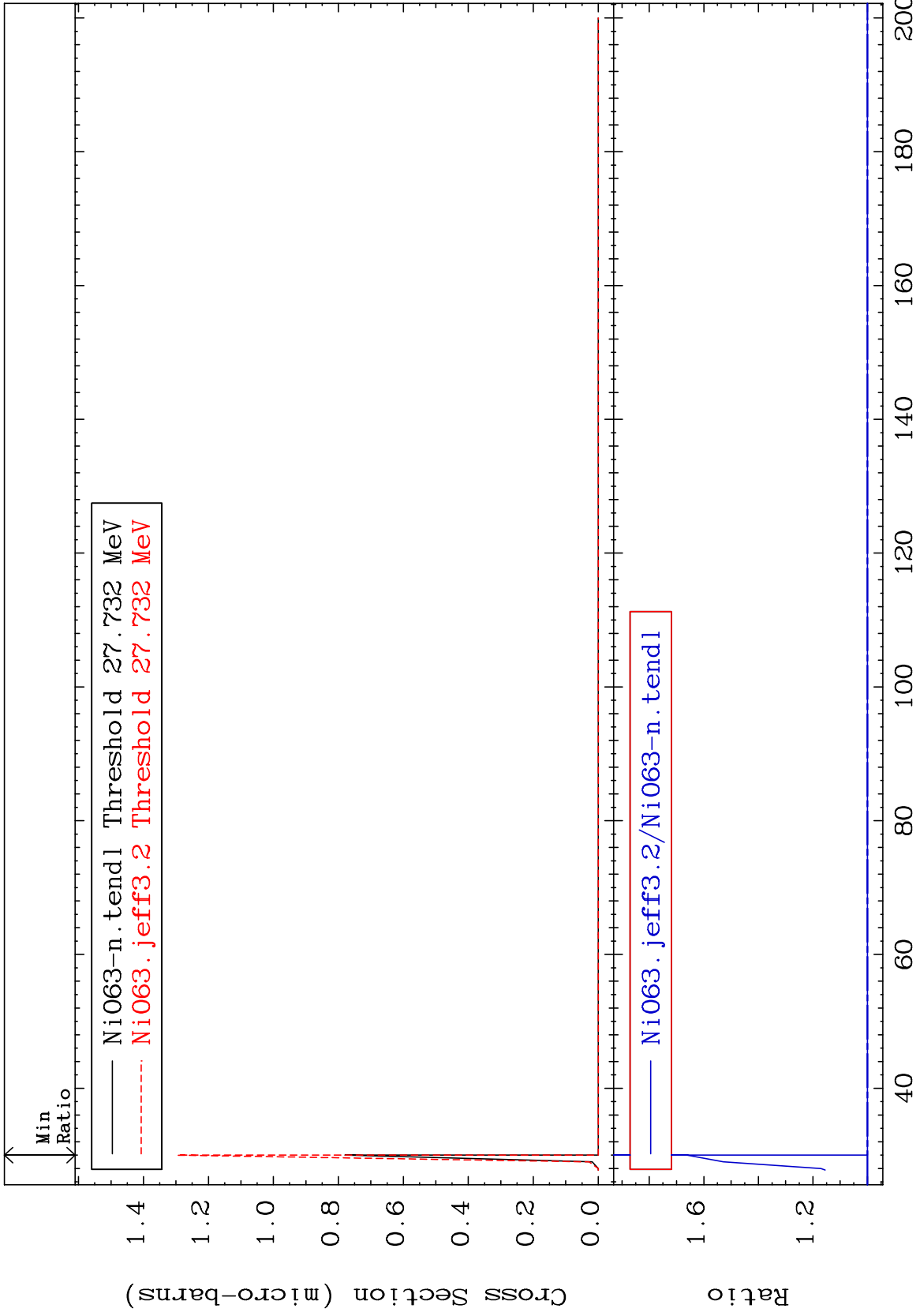


MAT 2840

(n,3n) p:27-Co-60g

28-Ni-63

Radionuclide Production Cross Section 0.000 To 66.28 %

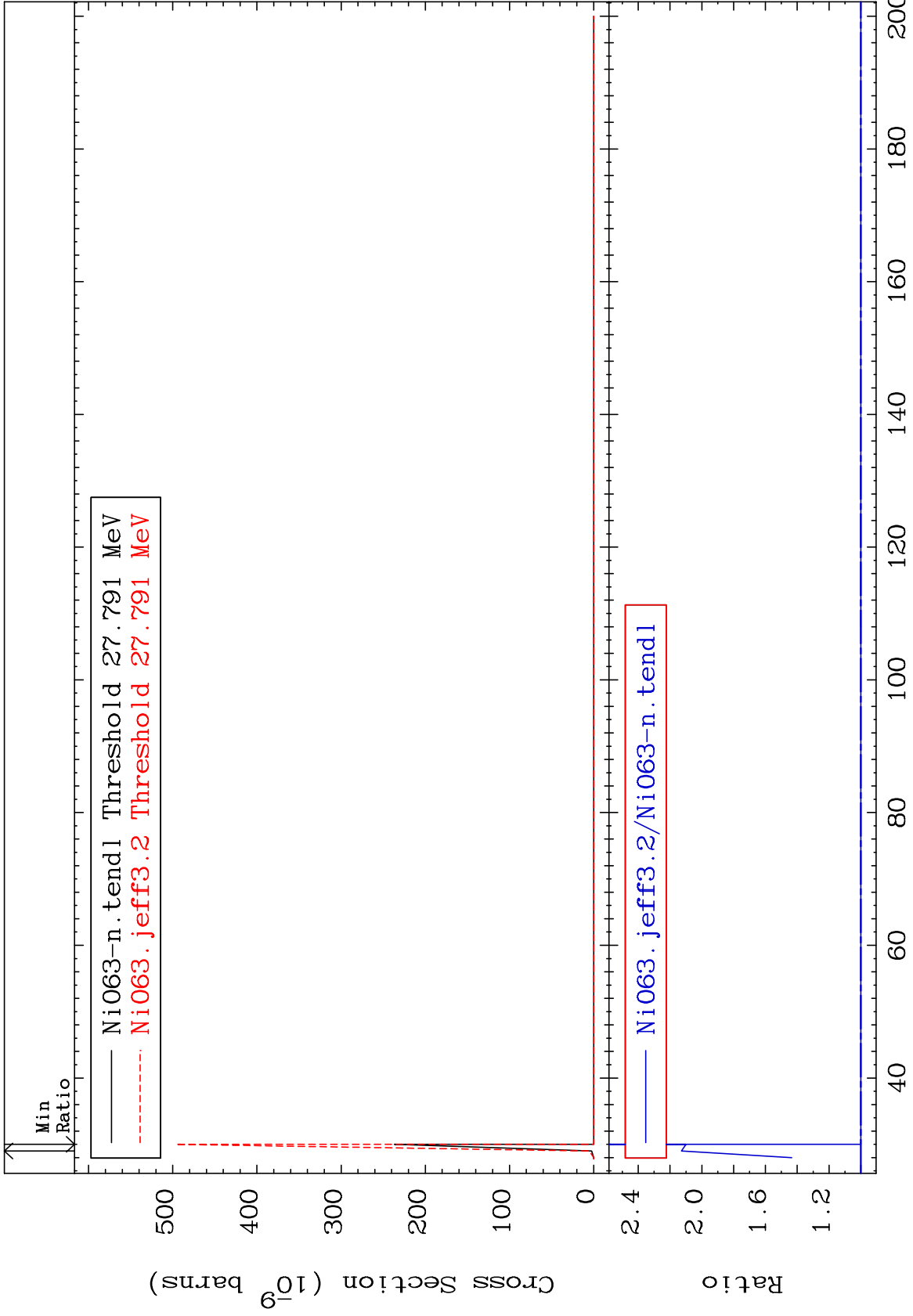


MAT 2840

(n,3n) p:27-Co-60m1

28-Ni-63

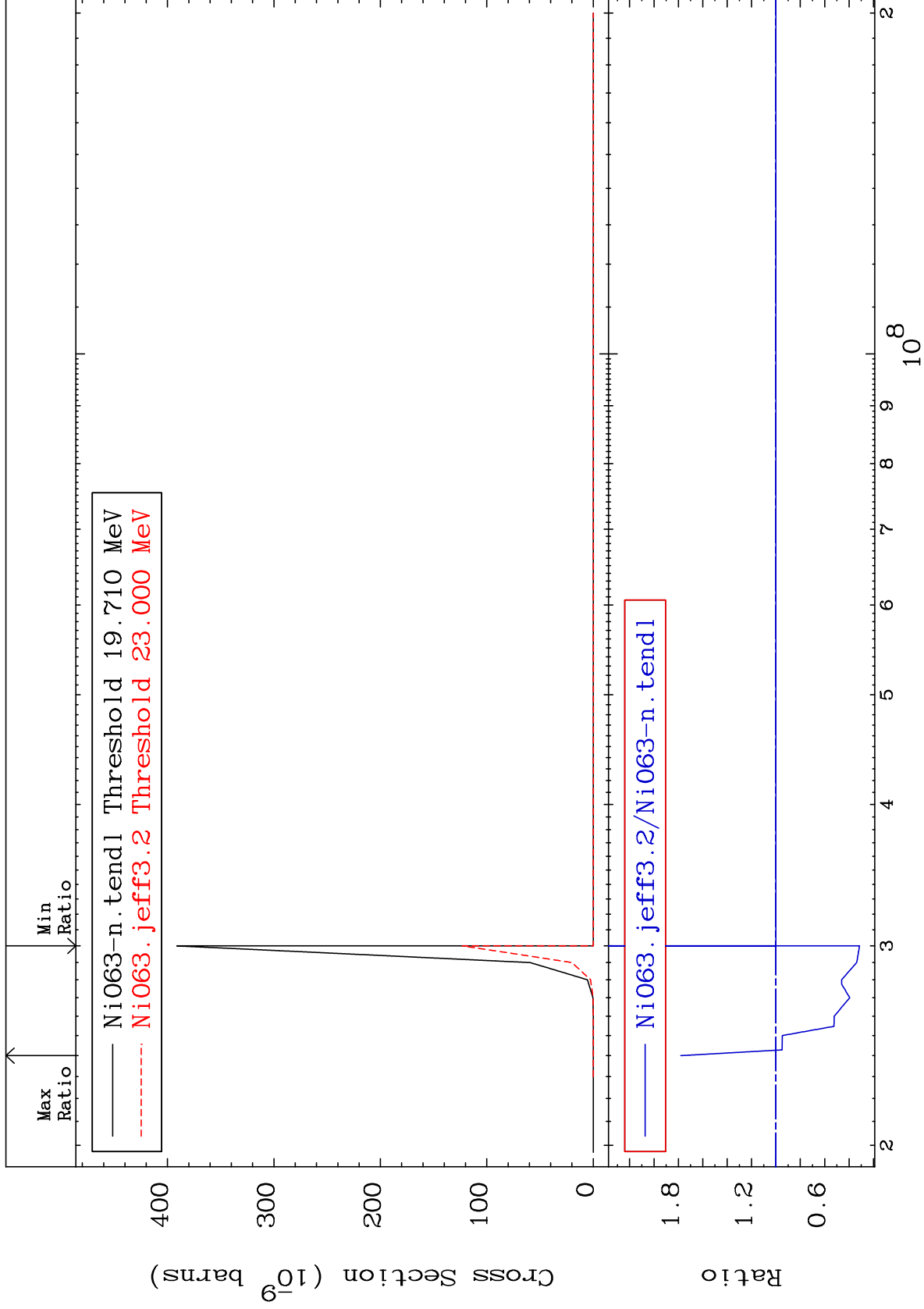
Radionuclide Production Cross Section 0.000 To 112.8 %



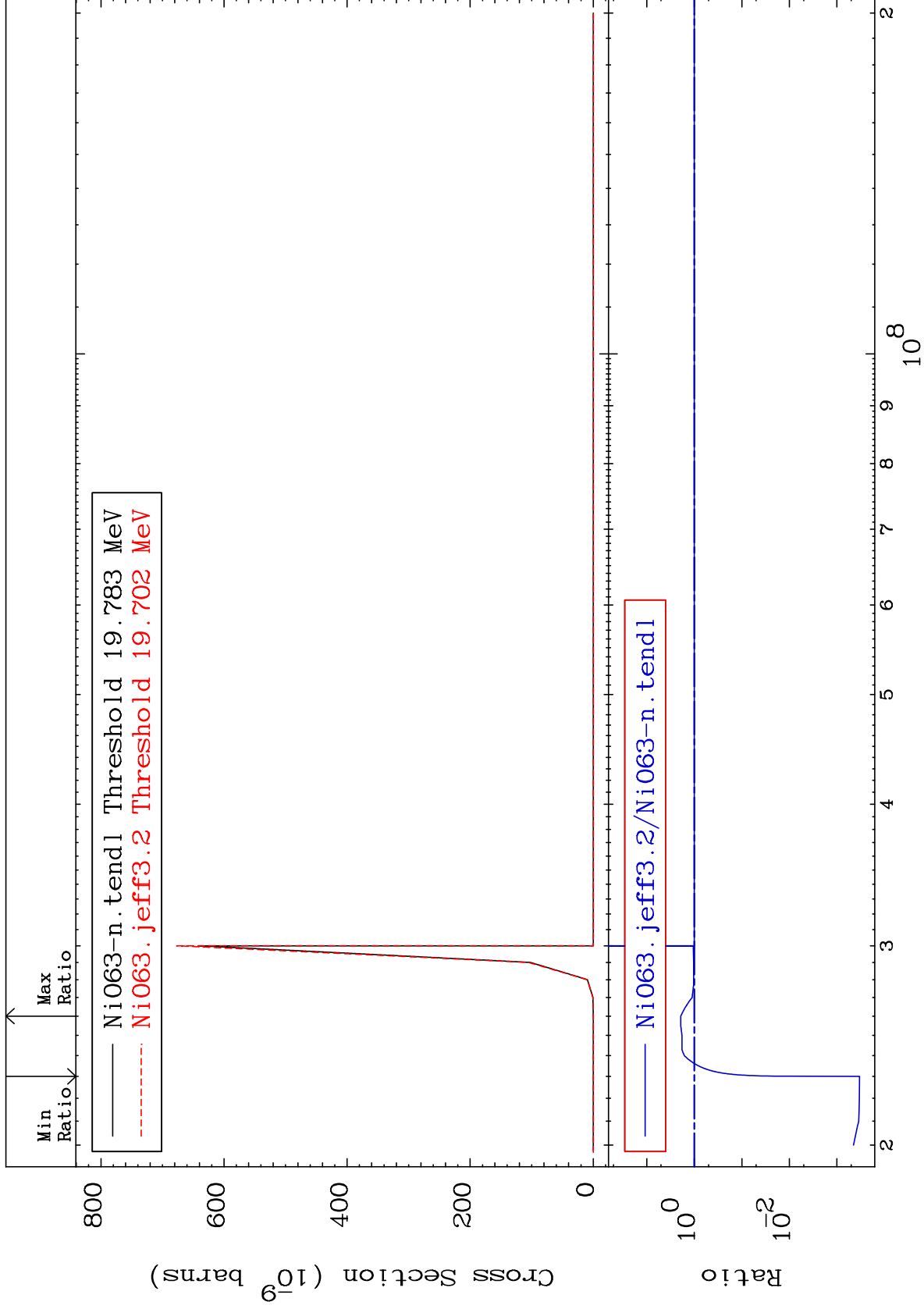
85

Incident Energy (MeV)

28-Ni-63



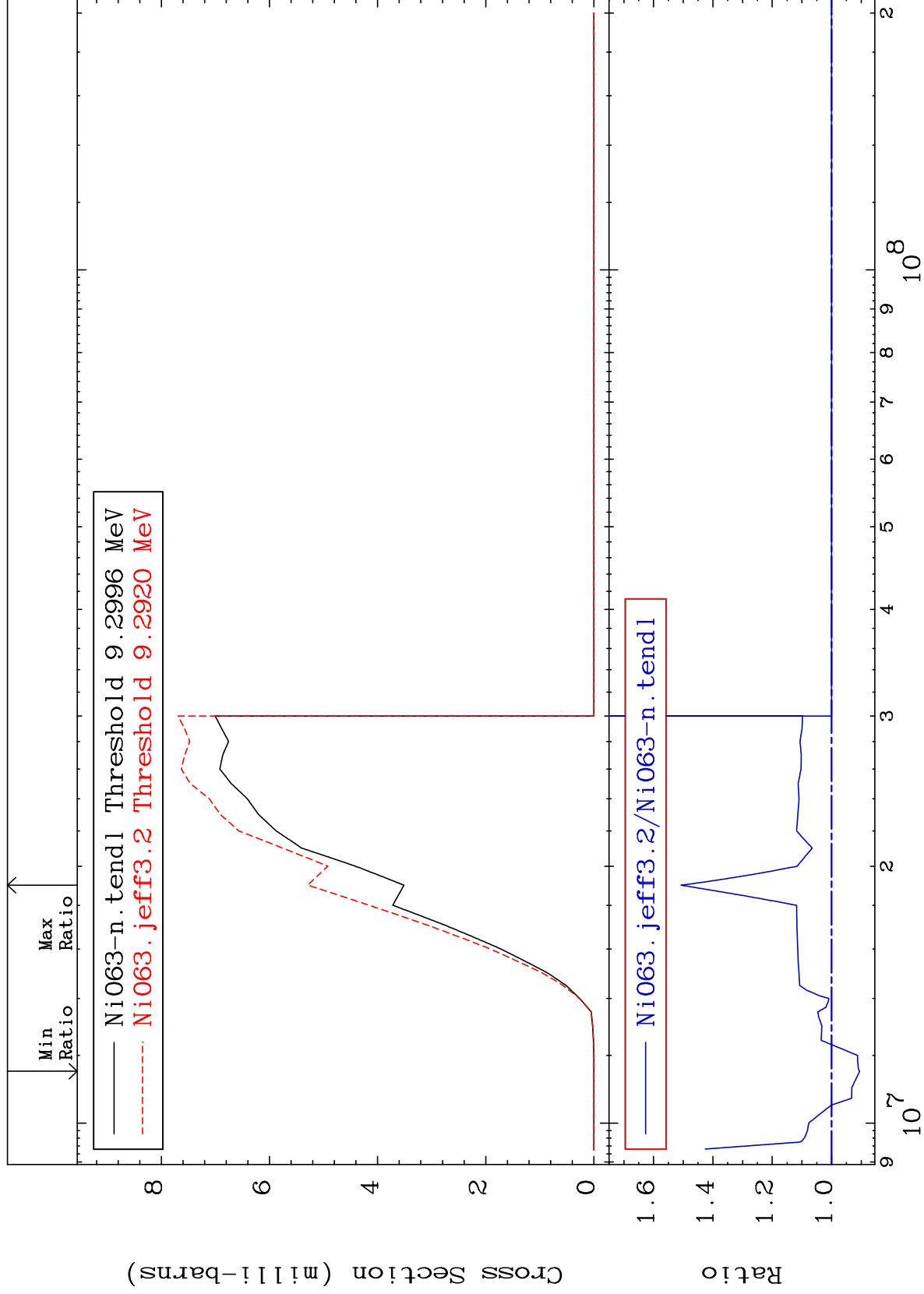
Radionuclide Production Cross Section -99.97 To 92.31 %



MAT 2840

(n, d) : 27-Co-62g 28-Ni-63

Radionuclide Production Cross Section -9.461 To 50.69 %



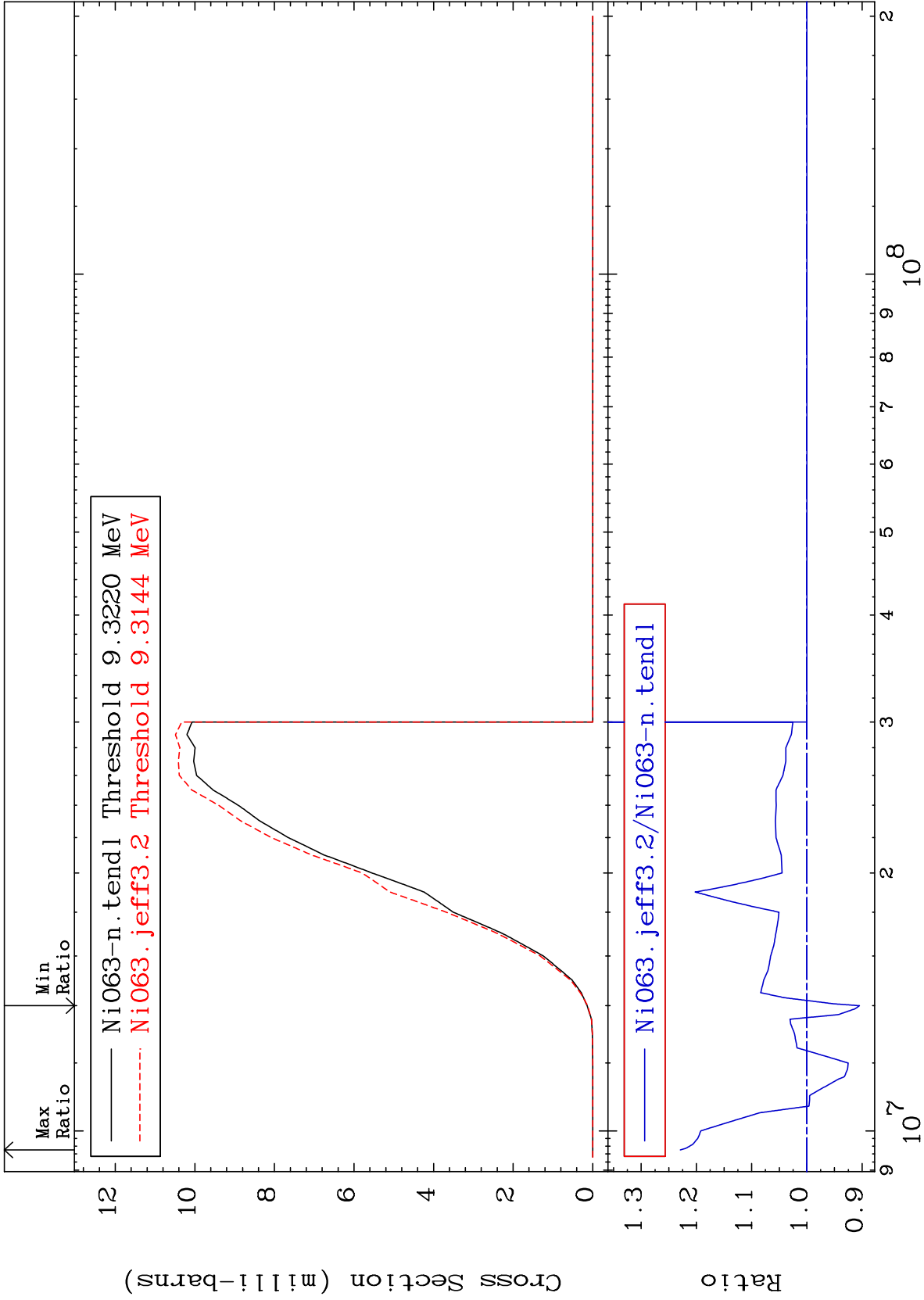
88

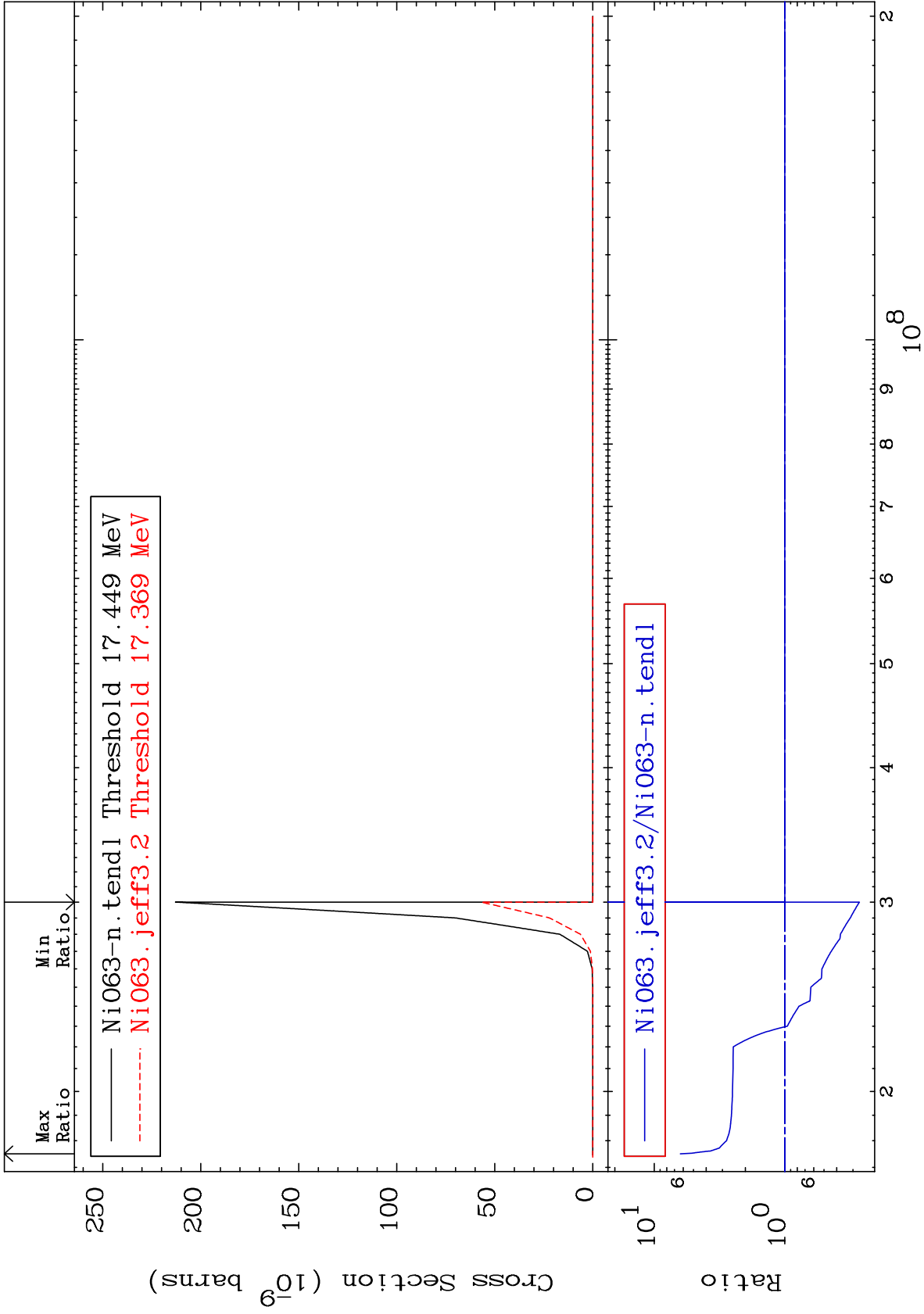
Incident Energy (eV)

28-Ni-63



Radionuclide Production Cross Section -9.513 To 22.91 %





MAT 2840

(n, d)  $\alpha$ :25-Mn-58m1

28-Ni-63

Radionuclide Production Cross Section 0.000 To 396.0 %

