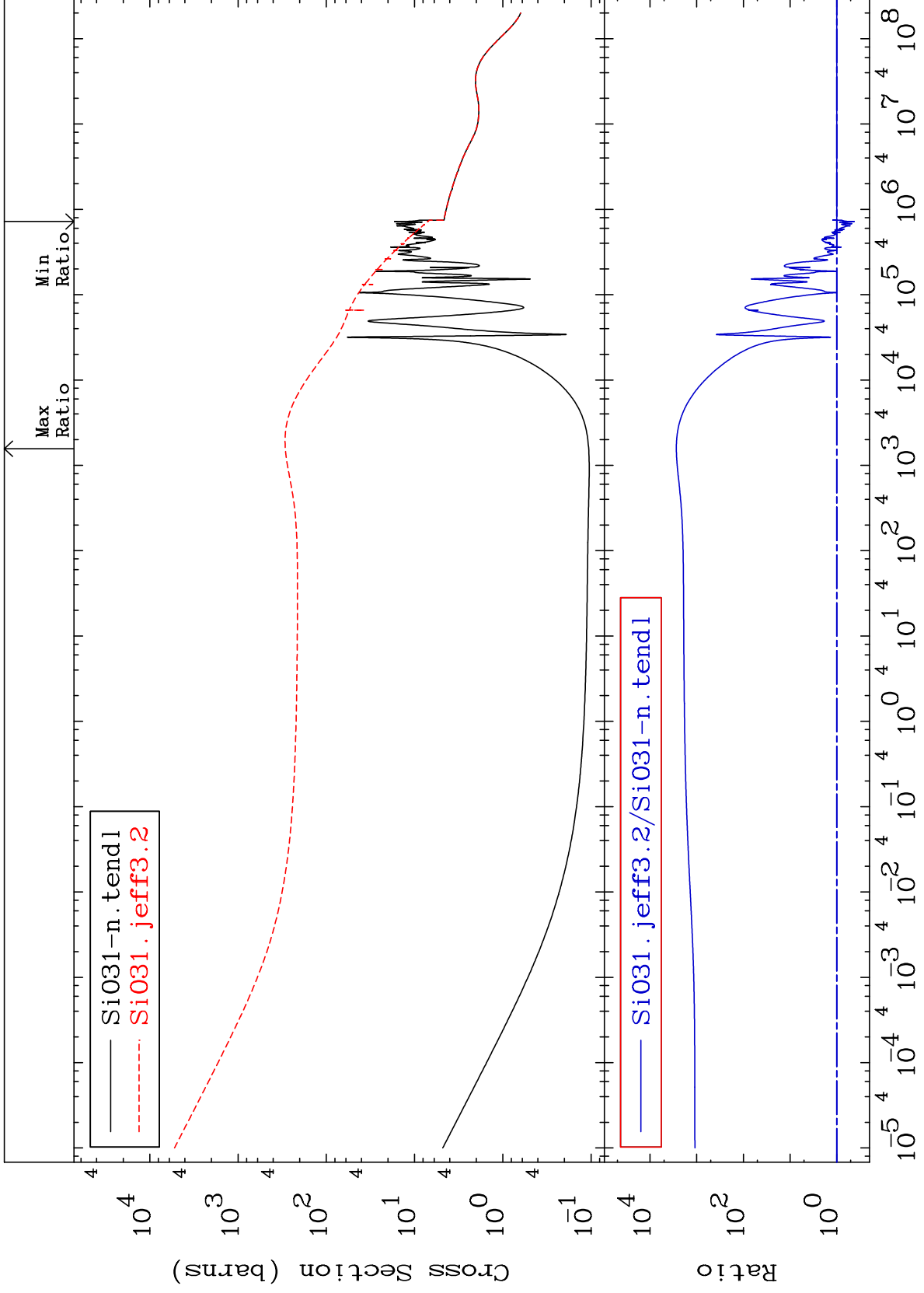


MAT 1434

Total  
Cross Section

14-Si-31  
-58.21 To 9999. %



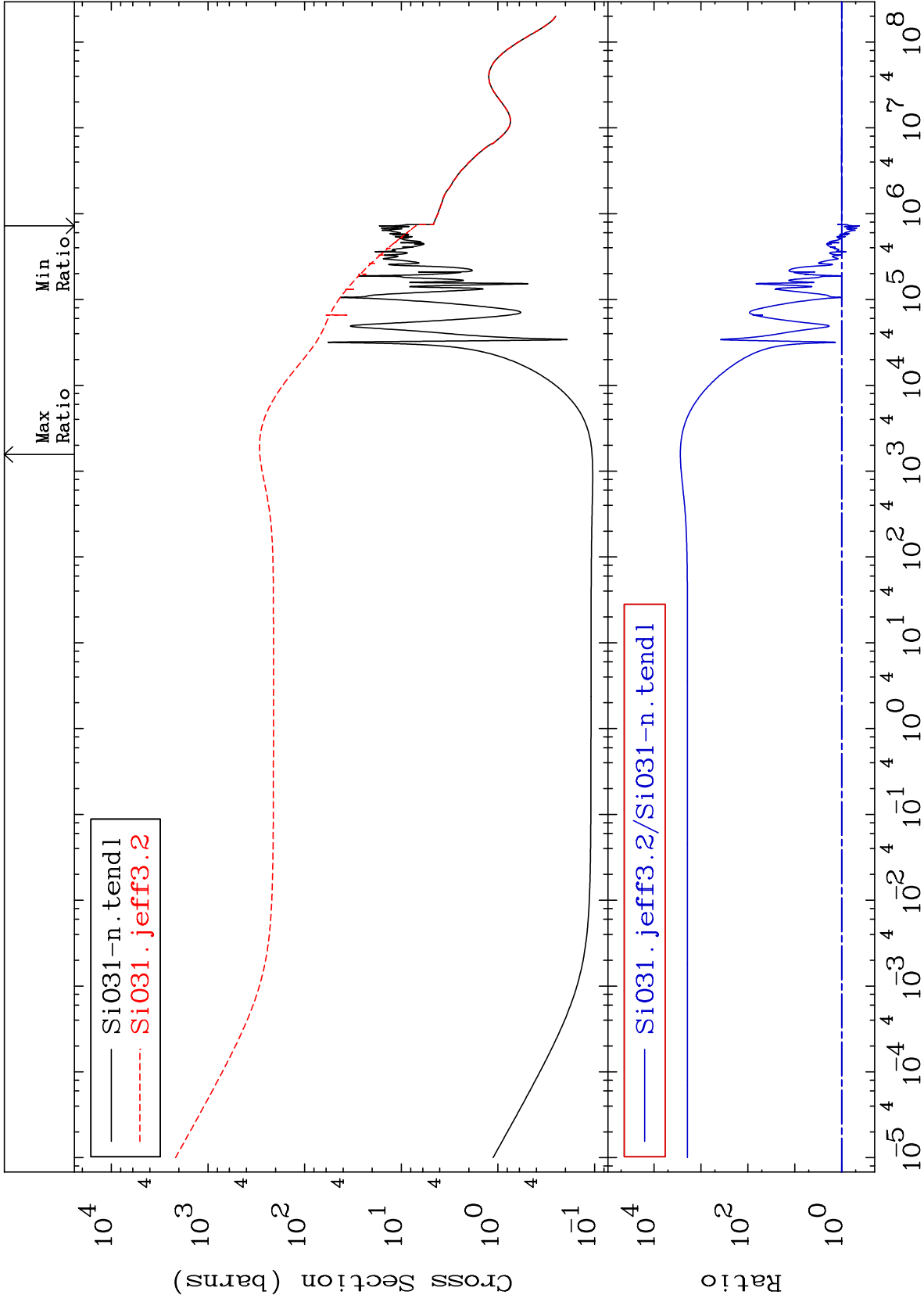
Incident Energy (eV)

14-Si-31

MAT 1434

Elastic  
Cross Section

14-Si-31  
-58.21 To 9999. %



2

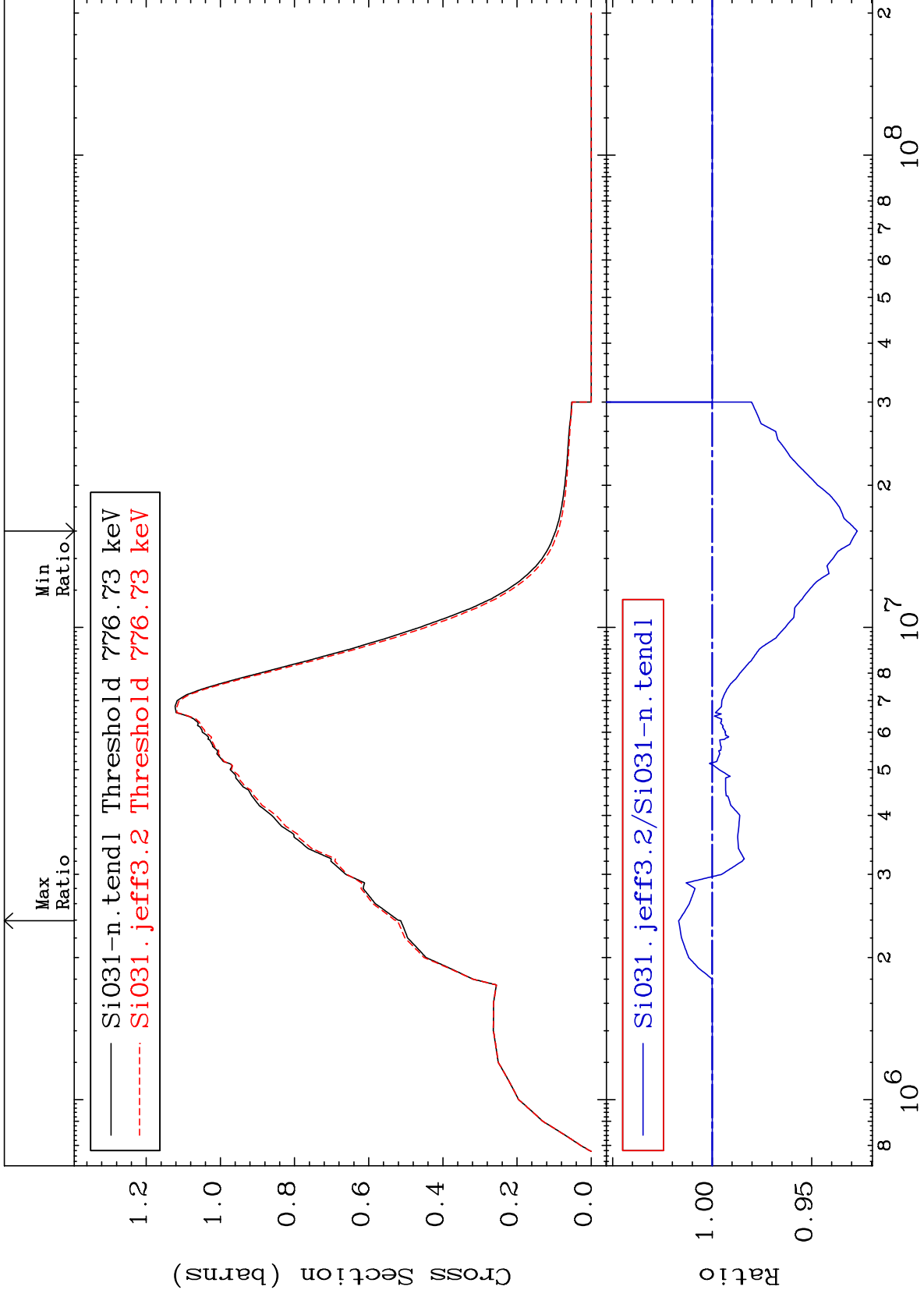
Incident Energy (eV)

14-Si-31

MAT 1434

Inelastic  
Cross Section

14-Si-31  
-7.284 To 1.684 %



3

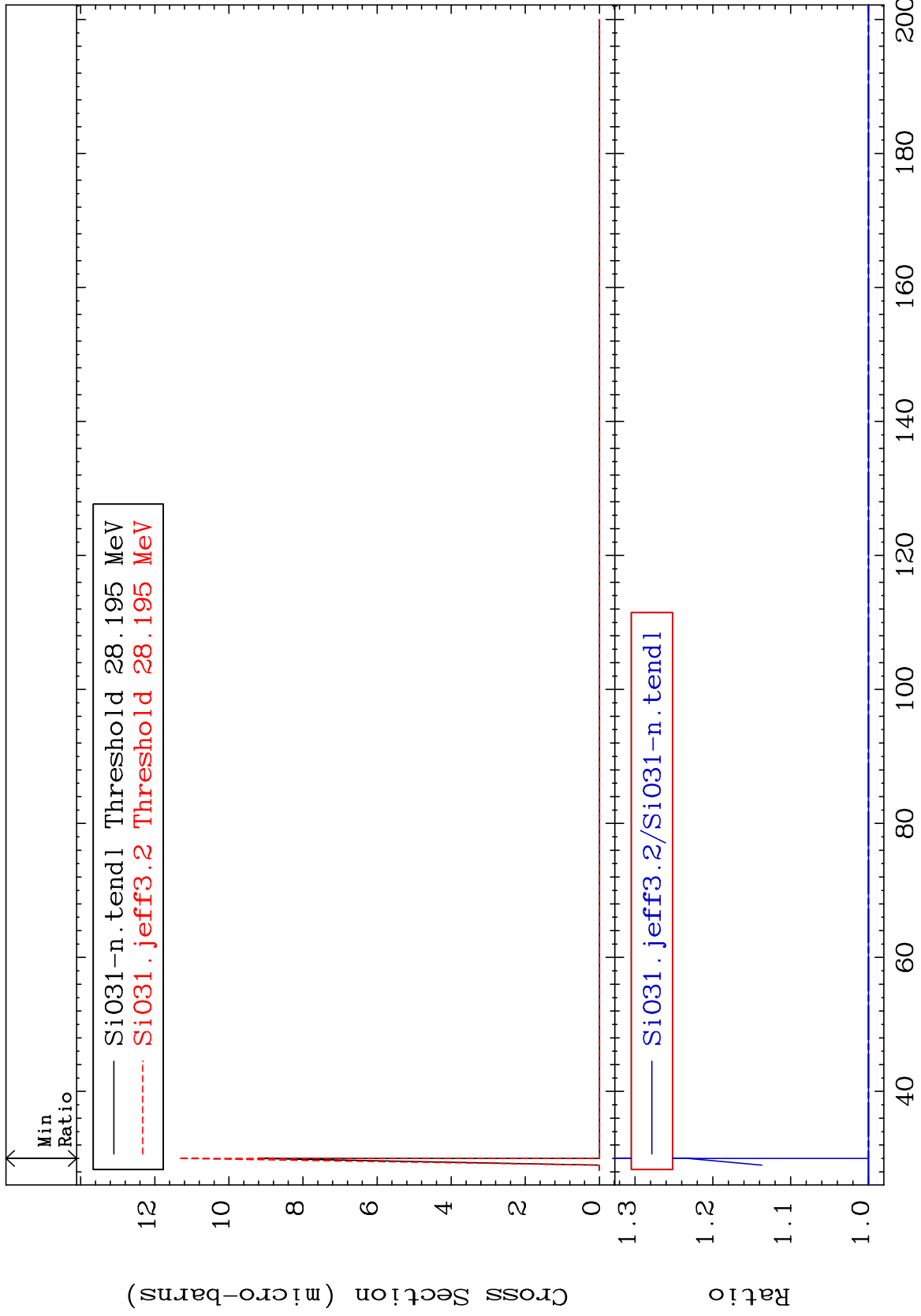
Incident Energy (eV)

14-Si-31

MAT 1434

(n,2n) d  
Cross Section

14-Si-31  
To 23.21 %  
0.000



— Si031-n.tendl Threshold 28.195 MeV  
- - - Si031.jeff3.2 Threshold 28.195 MeV

— Si031.jeff3.2/Si031-n.tendl

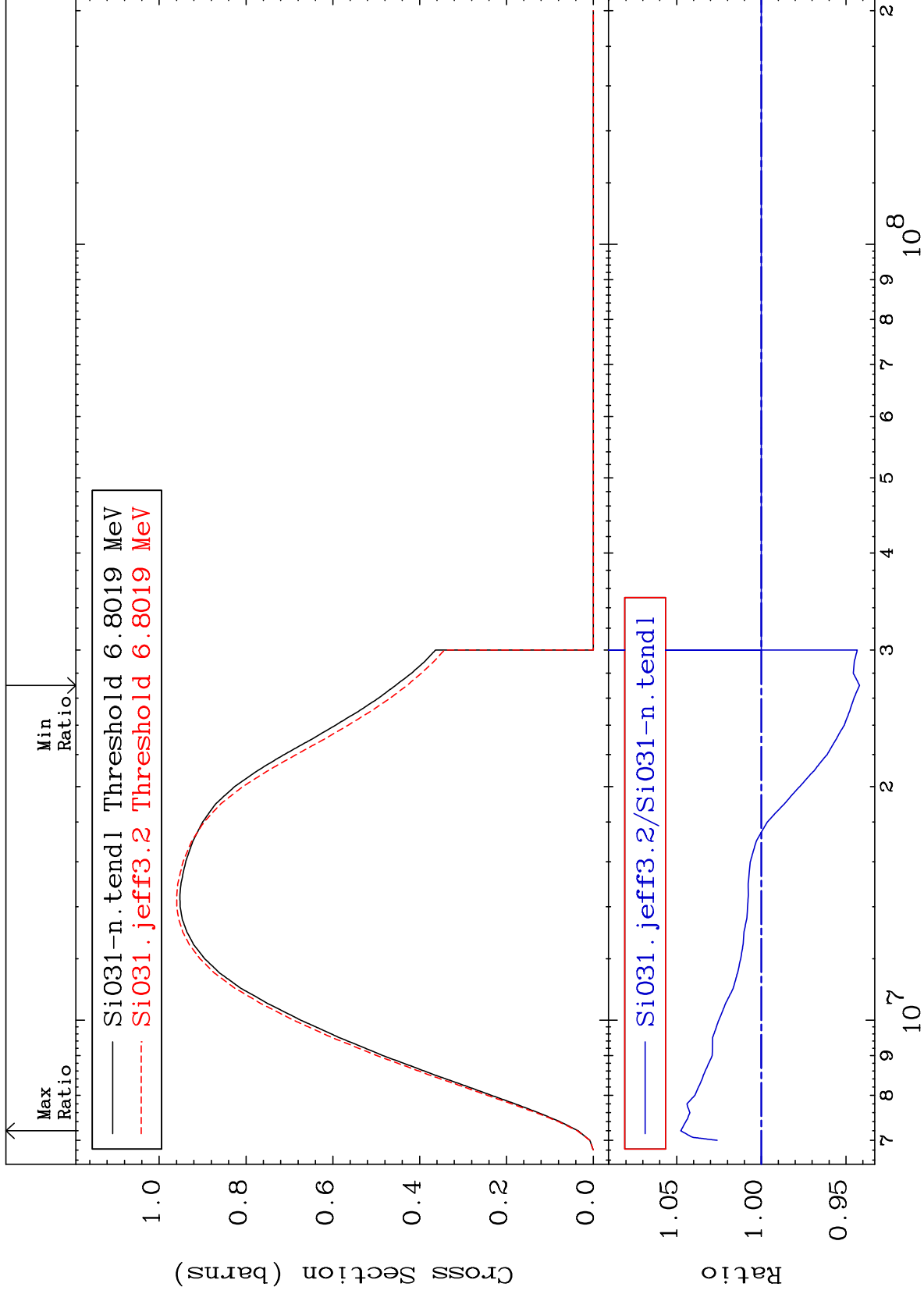
MAT 1434

(n,2n)

14-Si-31

Cross Section

-5.801 To 4.758 %



— Si031-n.tendl Threshold 6.8019 MeV  
- - - Si031.jeff3.2 Threshold 6.8019 MeV

— Si031.jeff3.2/Si031-n.tendl

5

Incident Energy (eV)

14-Si-31

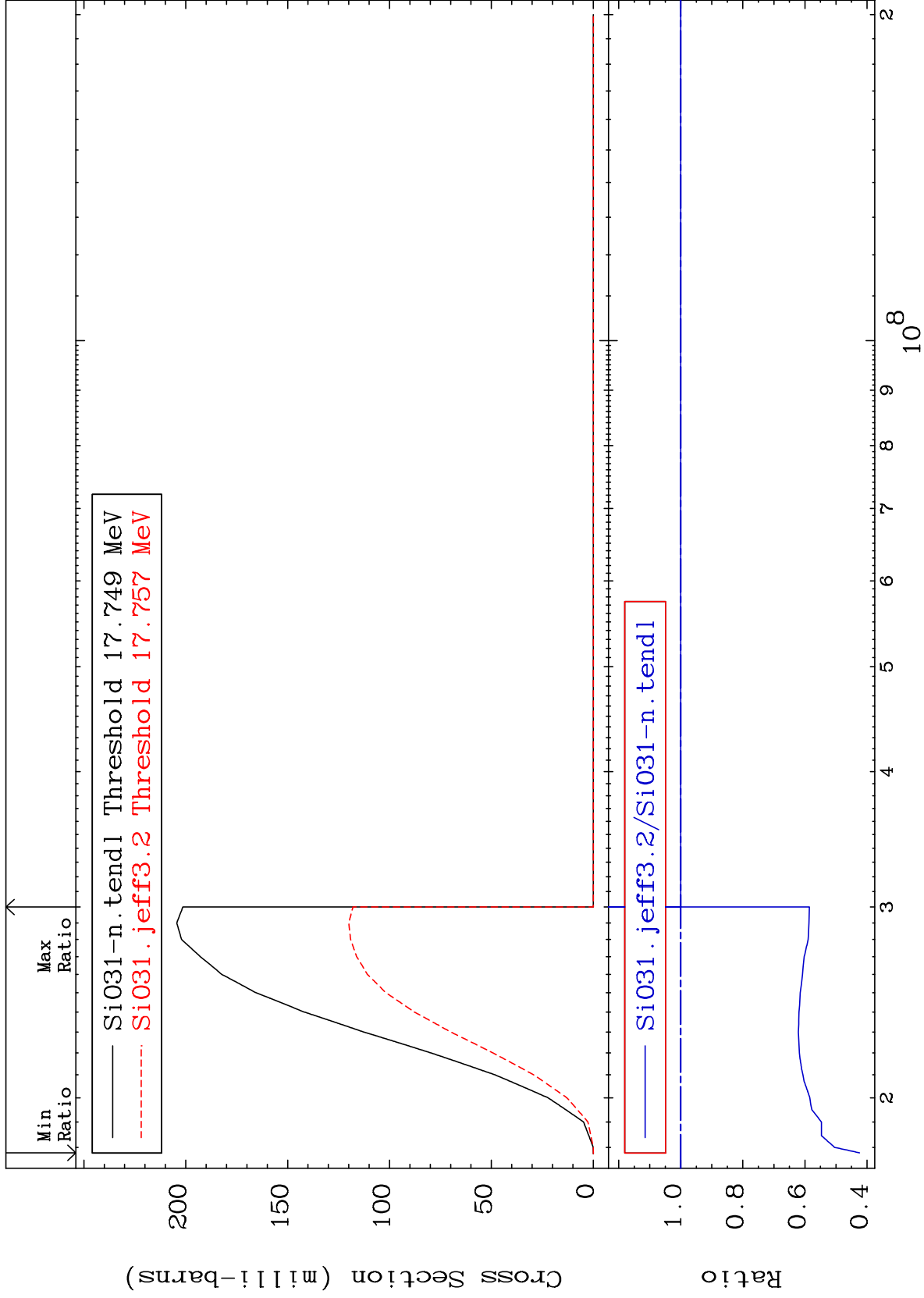
MAT 1434

(n,3n)

14-Si-31

Cross Section

-57.59 To 0.000 %



6

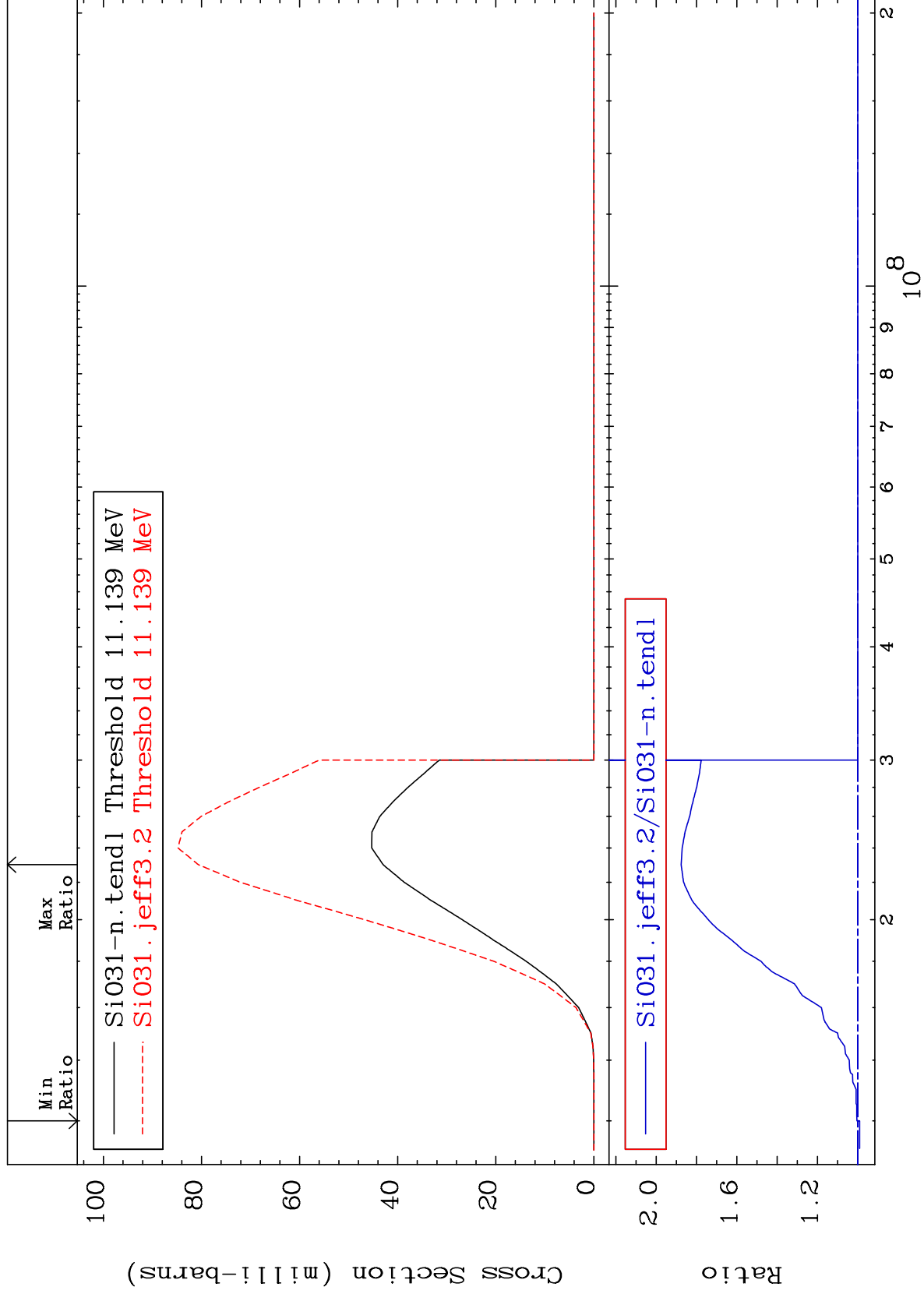
14-Si-31

14-Si-31

MAT 1434

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

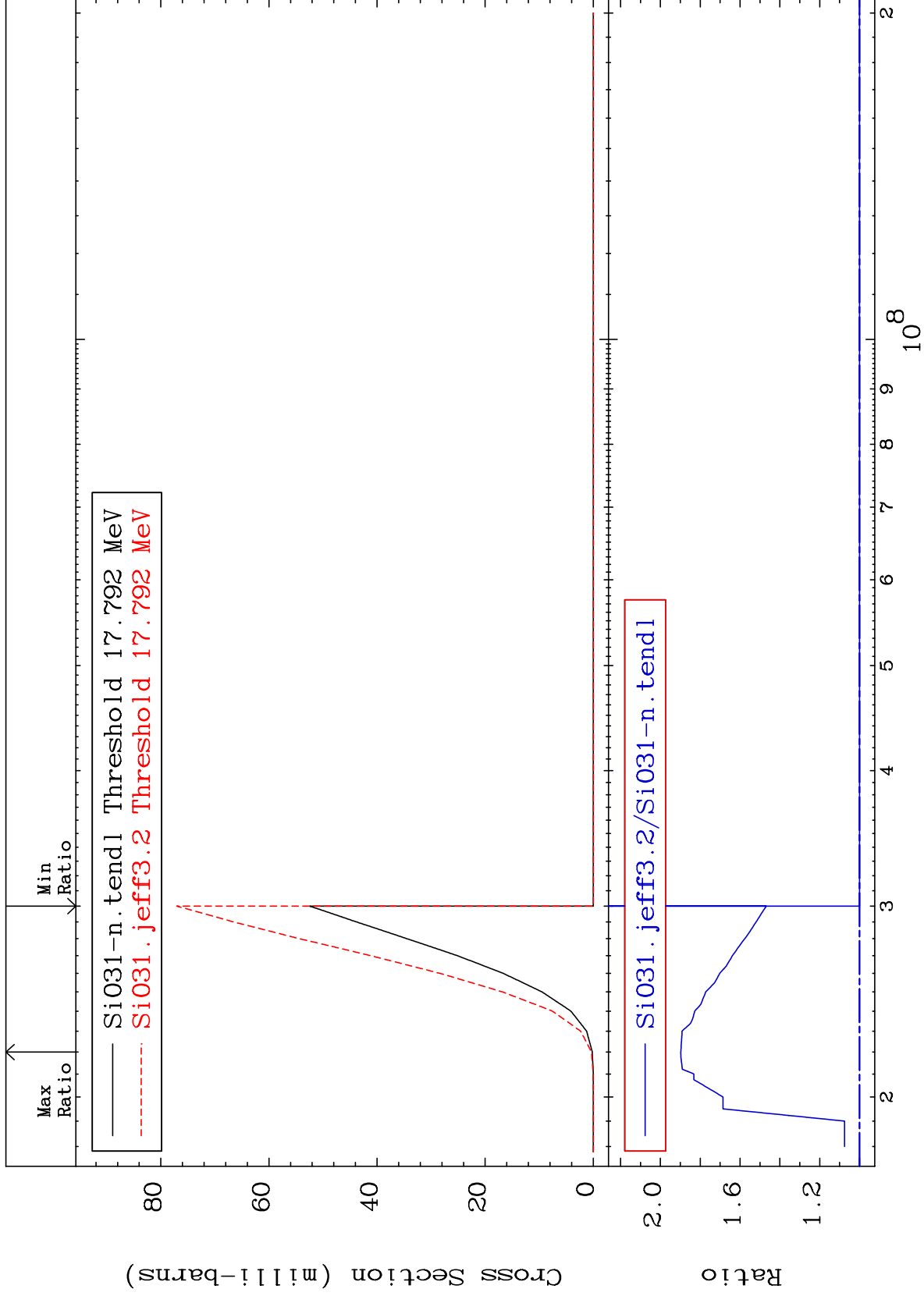
<sup>14</sup>Si-31  
-0.906 To 87.63 %



MAT 1434

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

14-Si-31  
0.000 To 89.76 %

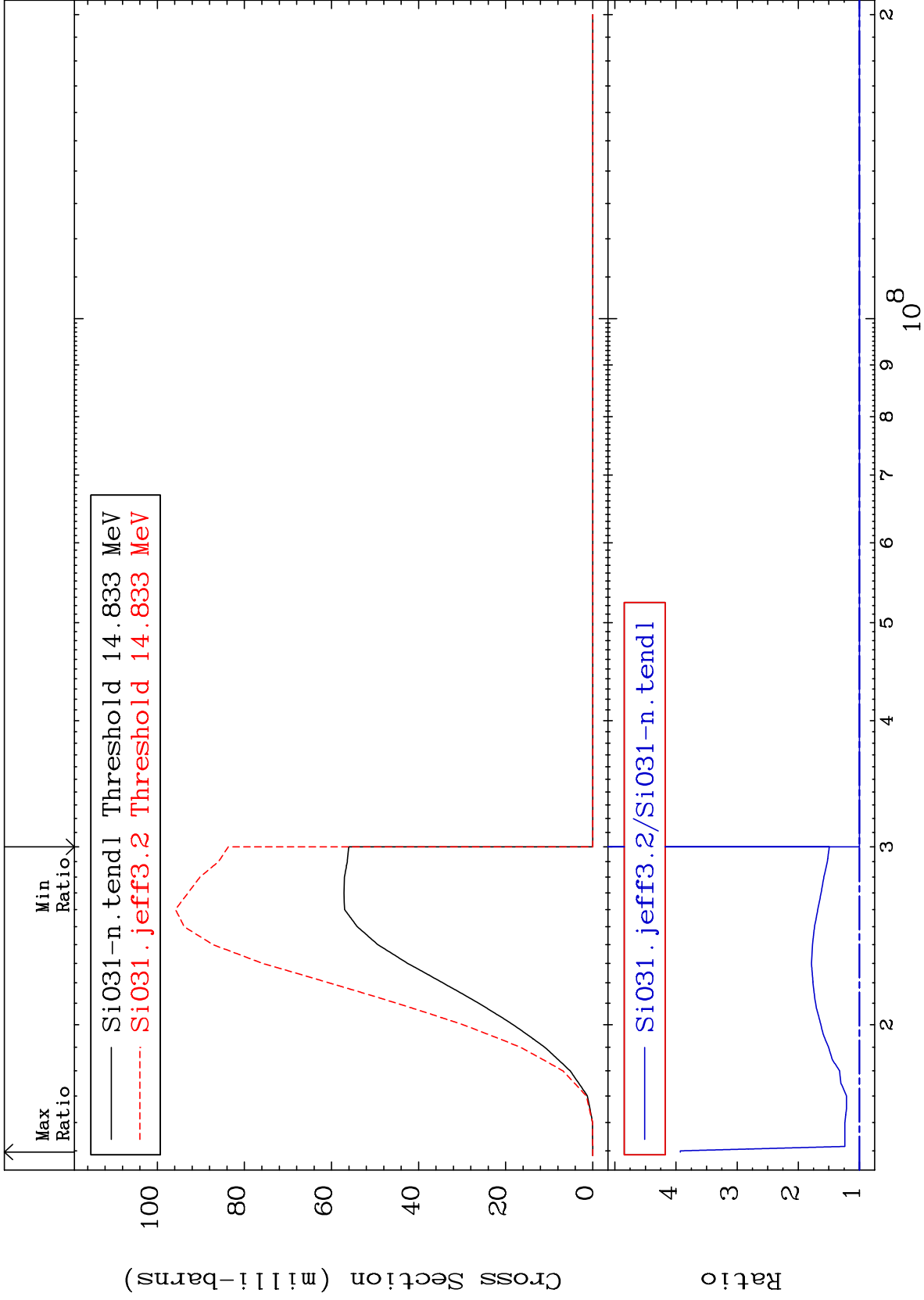




MAT 1434

(n,n') p  
Cross Section

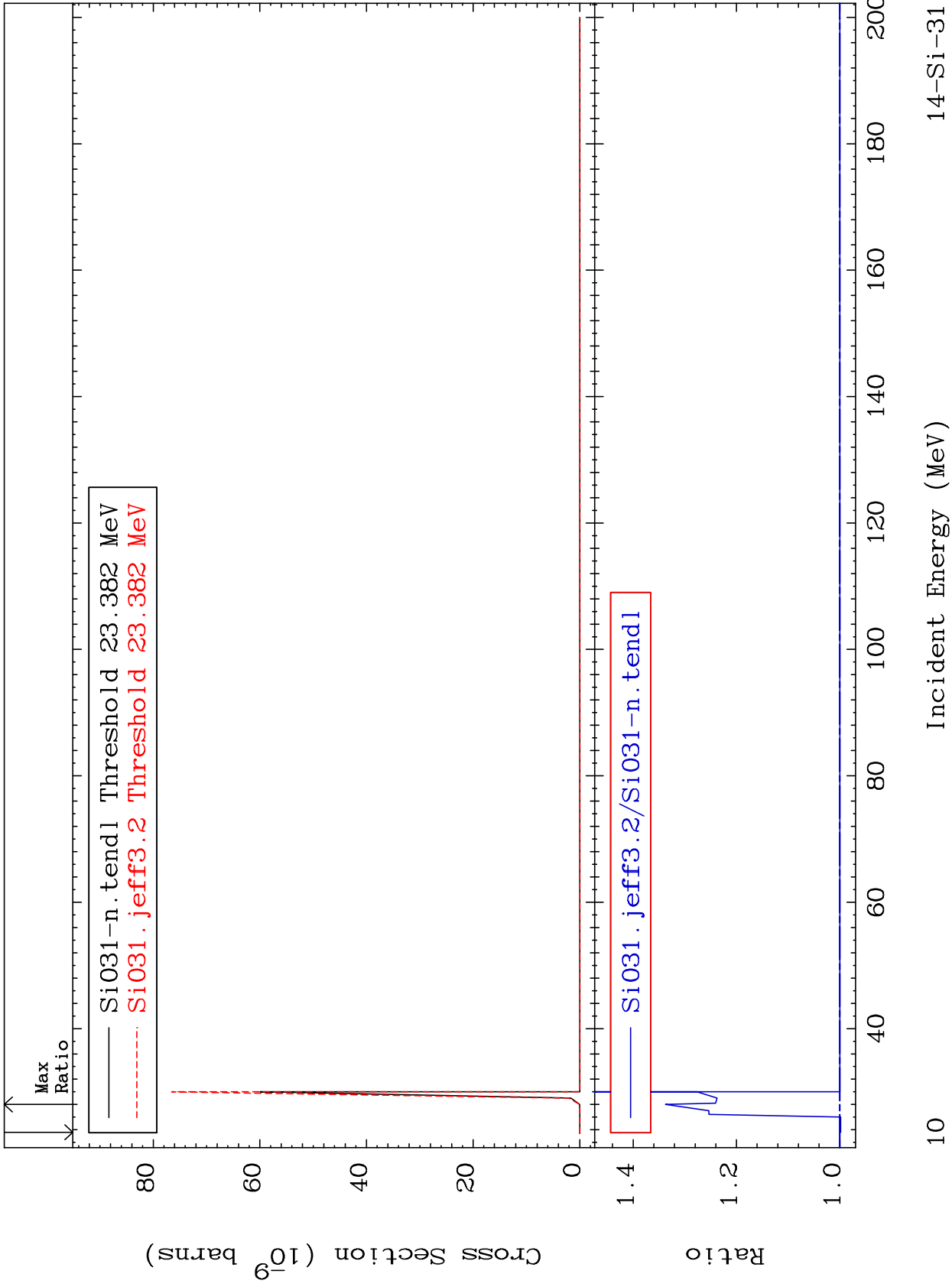
14-Si-31  
0.000 To 292.9 %



MAT 1434

(n,n') 2α  
Cross Section

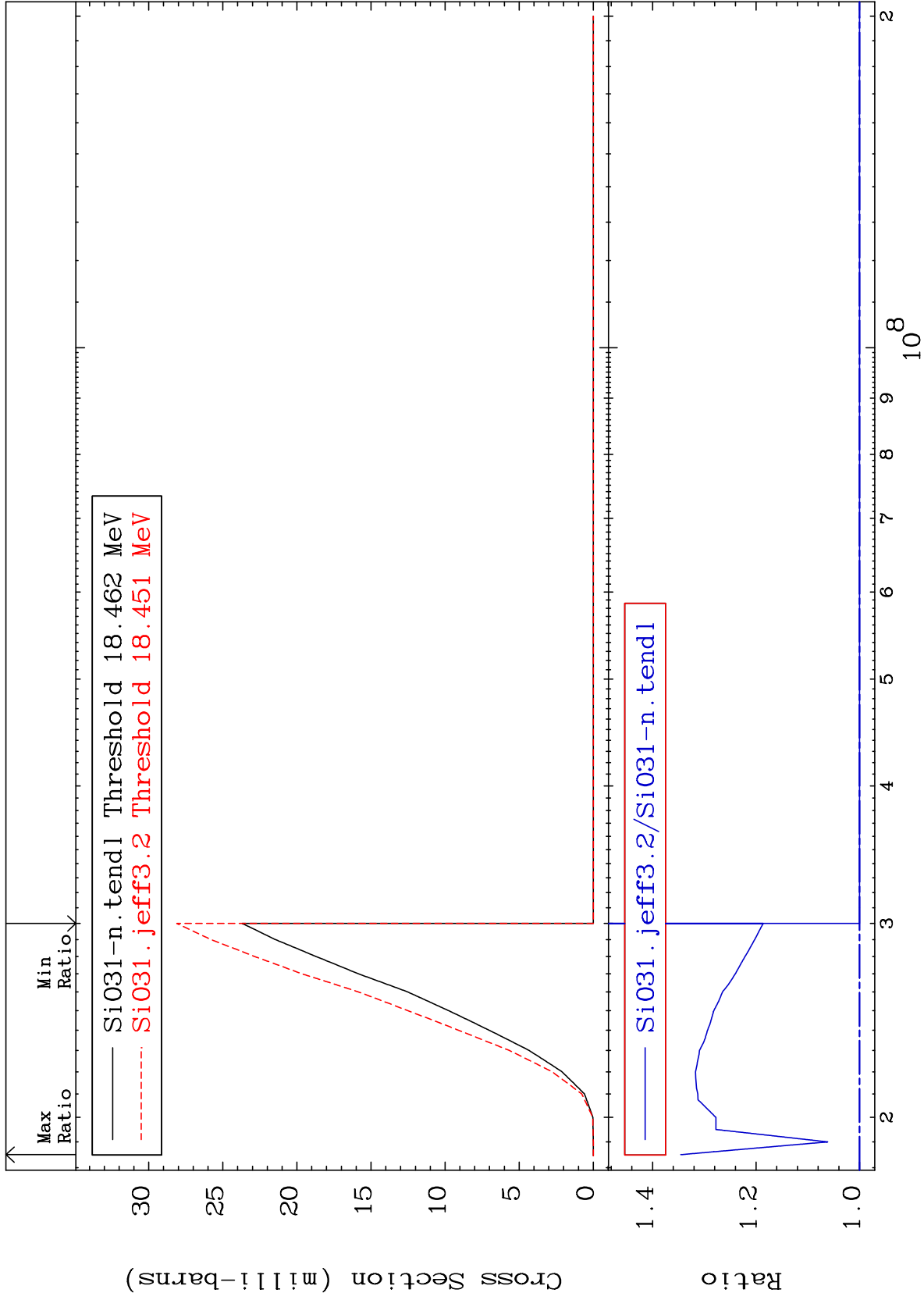
14-Si-31  
-0.177 To 33.74 %



MAT 1434

(n,n') d  
Cross Section

14-Si-31  
To 34.55 %



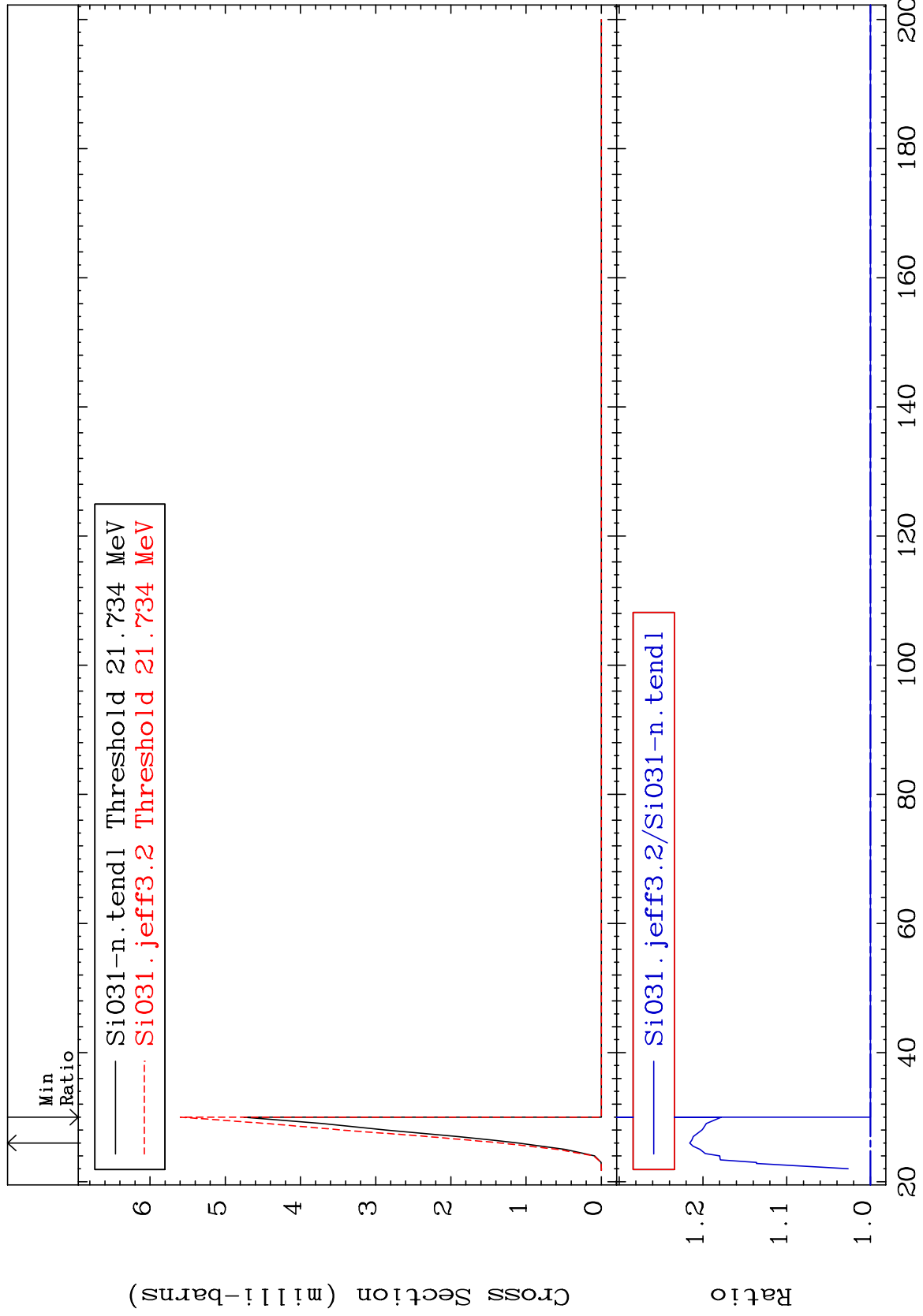
11

14-Si-31

MAT 1434

(n,n') t  
Cross Section

14-Si-31  
To 21.57 %  
0.000



12

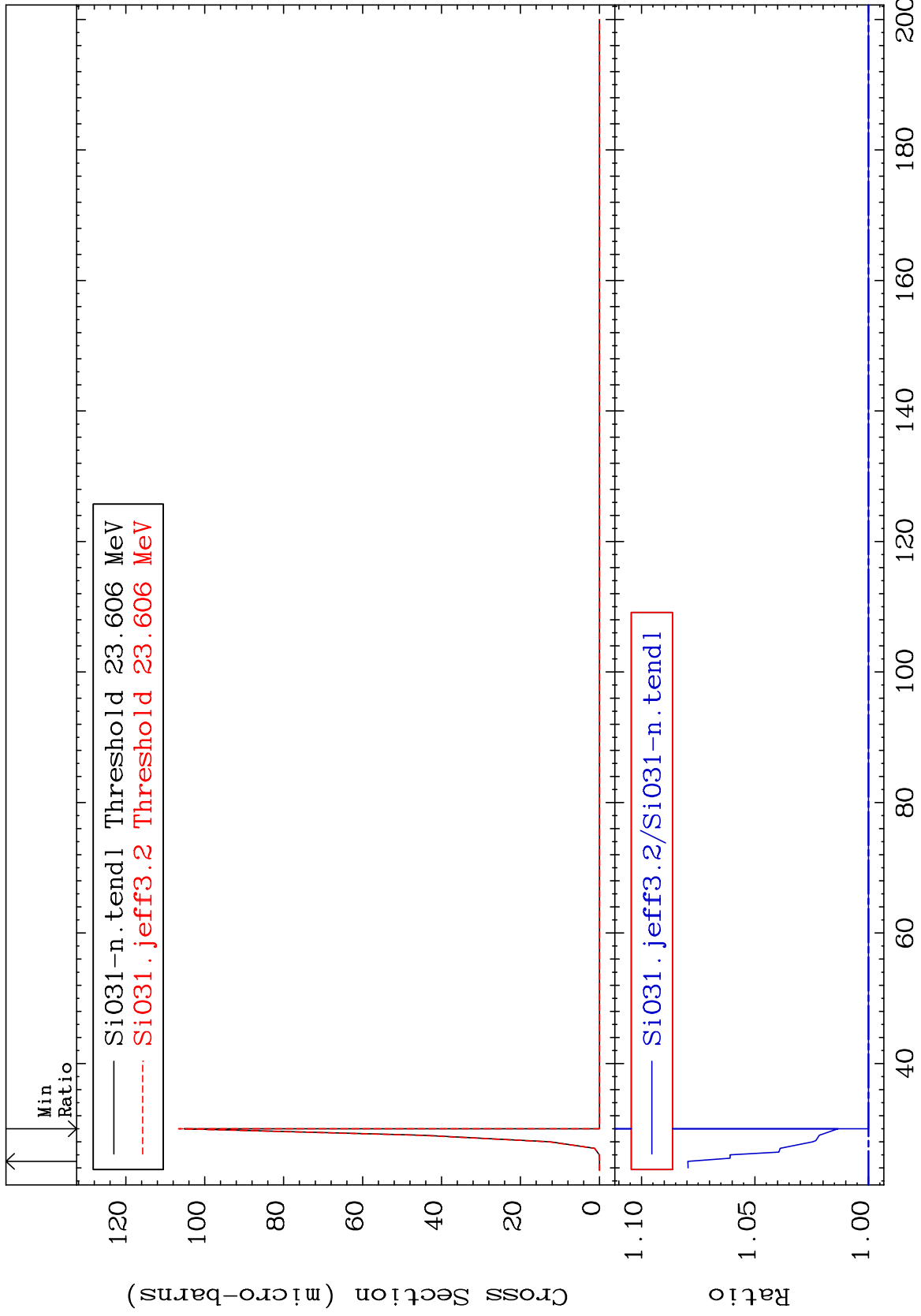
14-Si-31

14-Si-31

MAT 1434

(n, n') He-3  
Cross Section

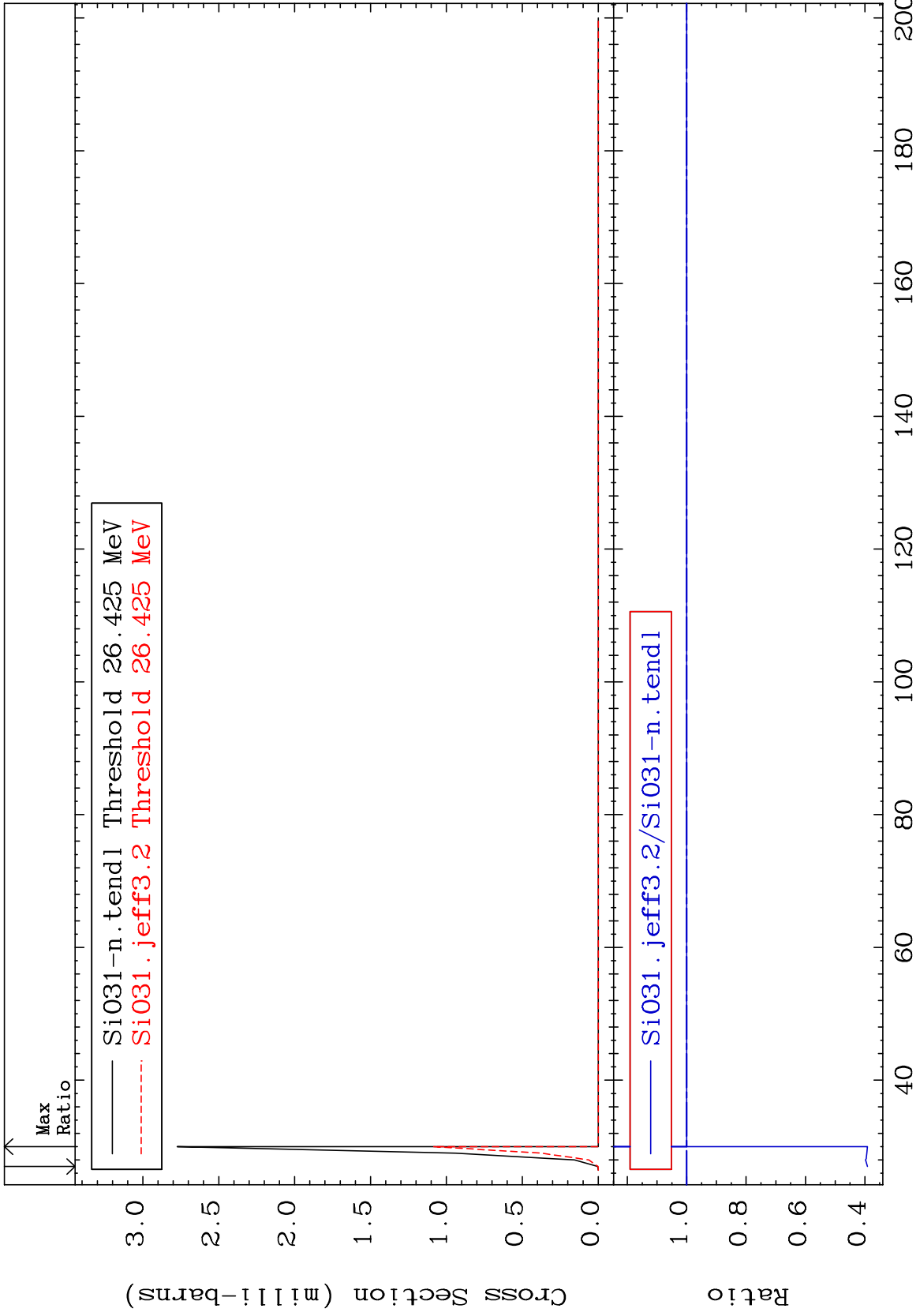
14-Si-31  
0.000 To 7.957 %



MAT 1434

(n,4n)  
Cross Section

14-Si-31  
-60.86 To 0.000 %



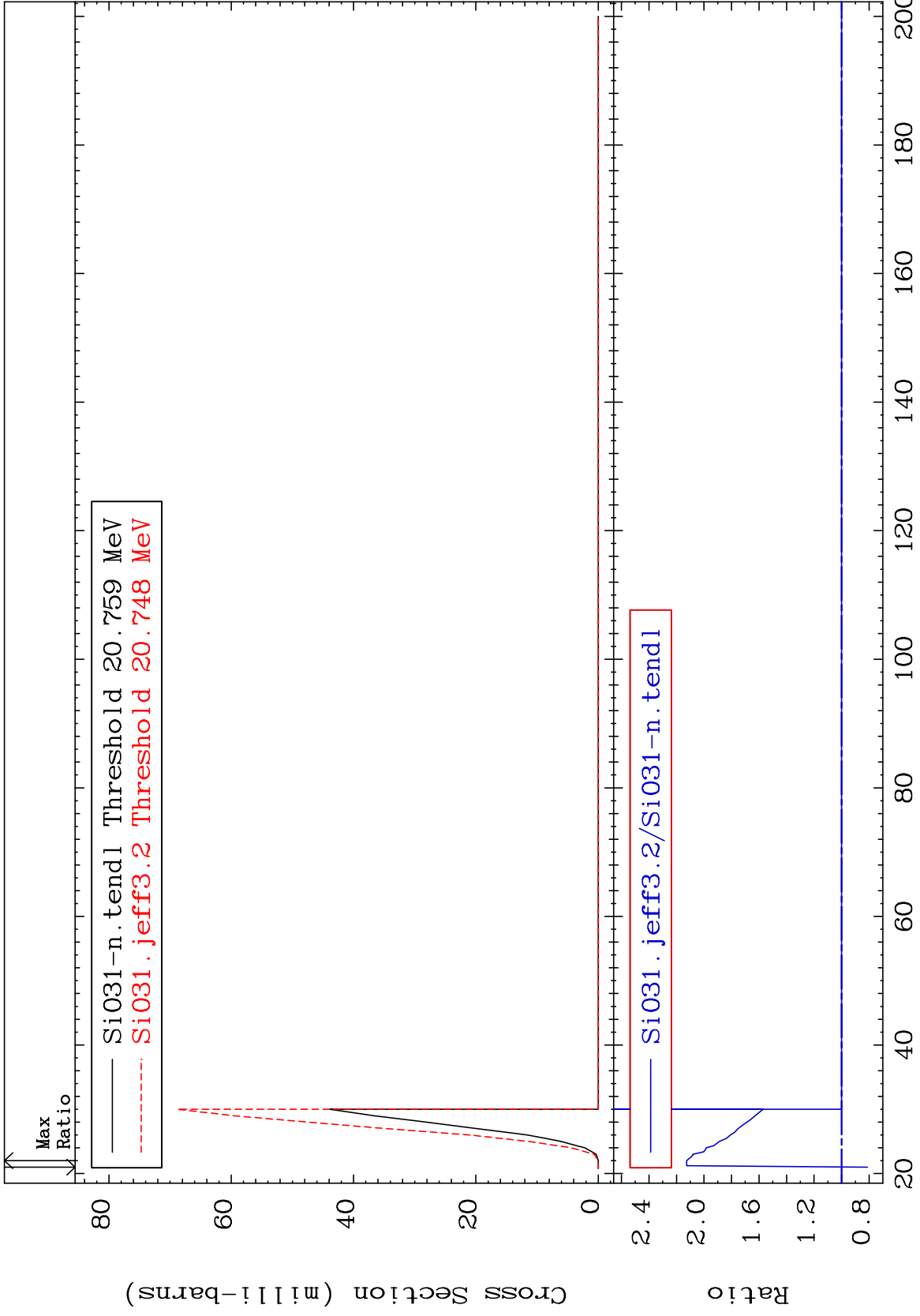
14

14-Si-31

MAT 1434

(n,2n) p  
Cross Section

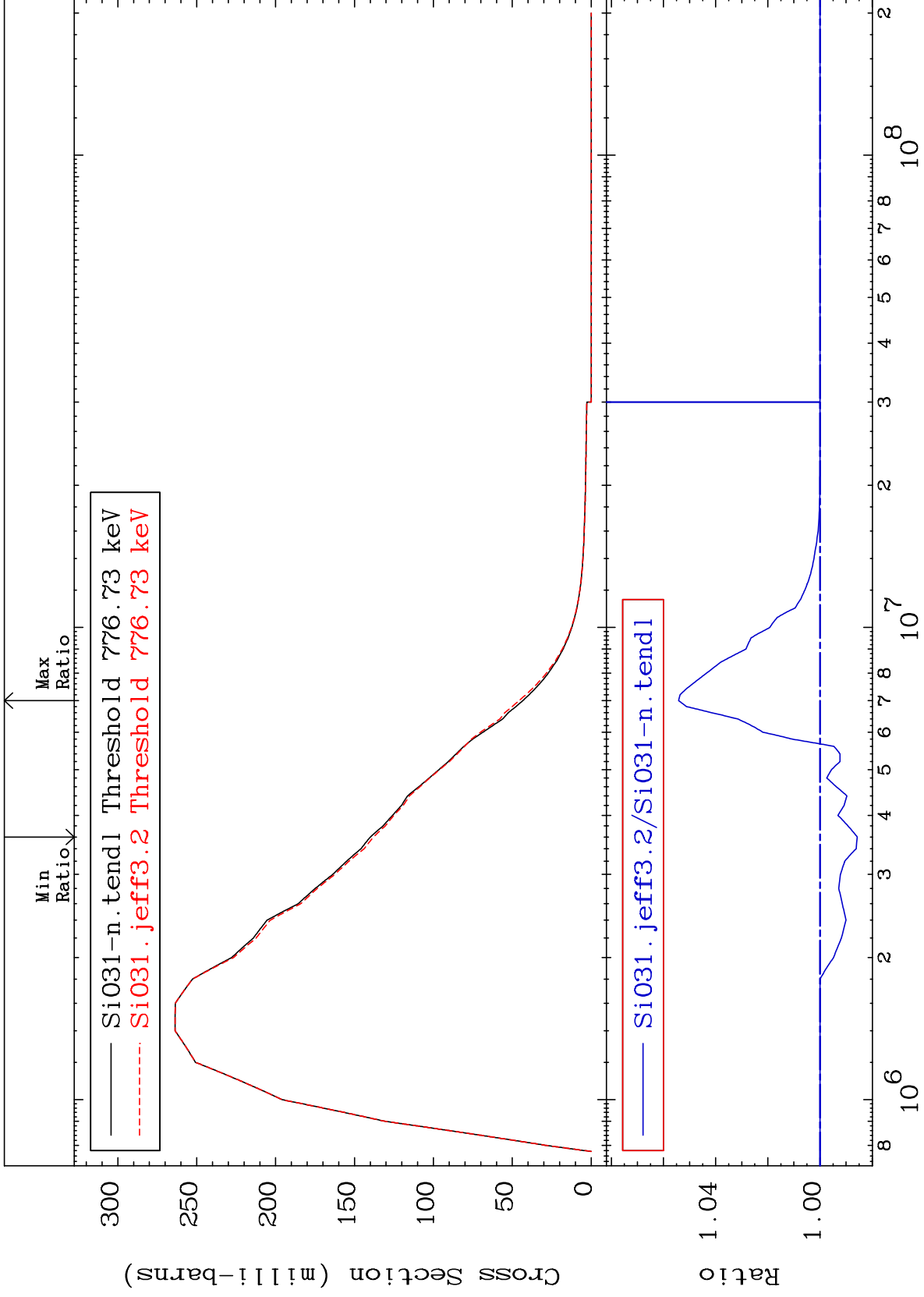
<sup>14</sup>Si-31  
-18.78 To 112.6 %



MAT 1434

752.2 keV (n,n') Level  
Cross Section

14-Si-31  
-1.429 To 5.420 %



16

Incident Energy (eV)

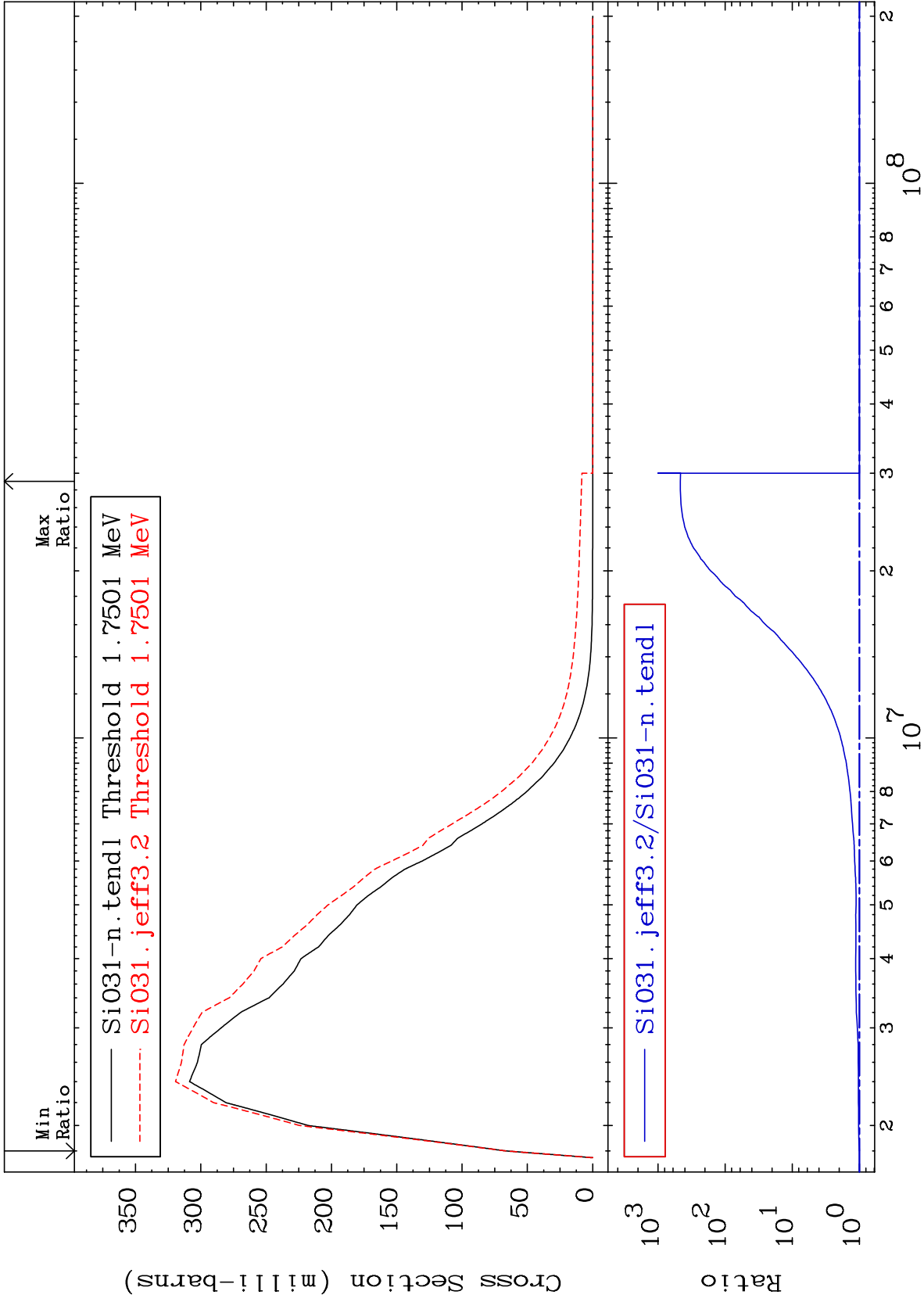
14-Si-31



MAT 1434

1.695 MeV (n,n') Level  
Cross Section

14-Si-31  
-0.017 To 9999. %



17

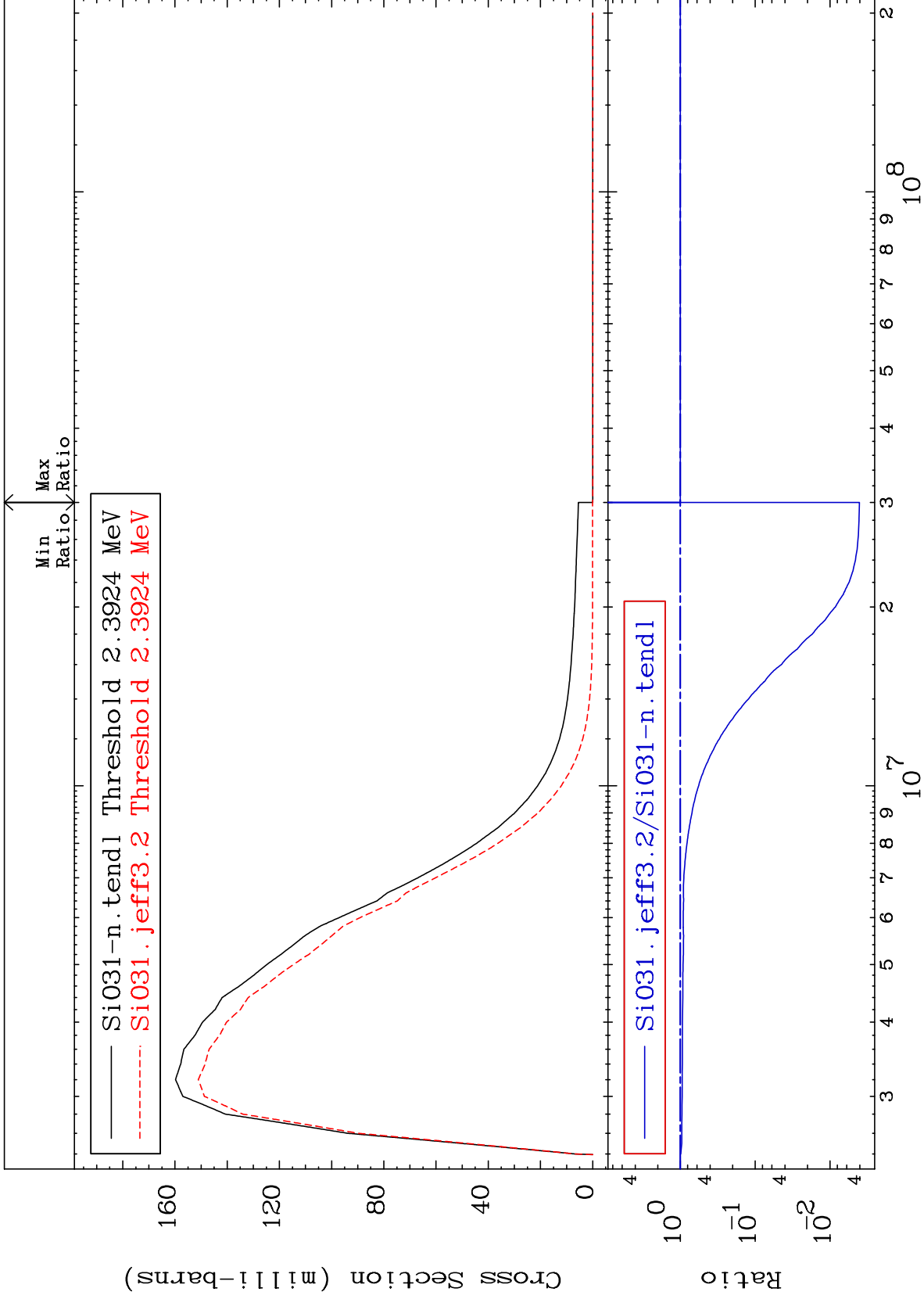
Incident Energy (eV)

14-Si-31

MAT 1434

2.317 MeV (n,n') Level  
Cross Section

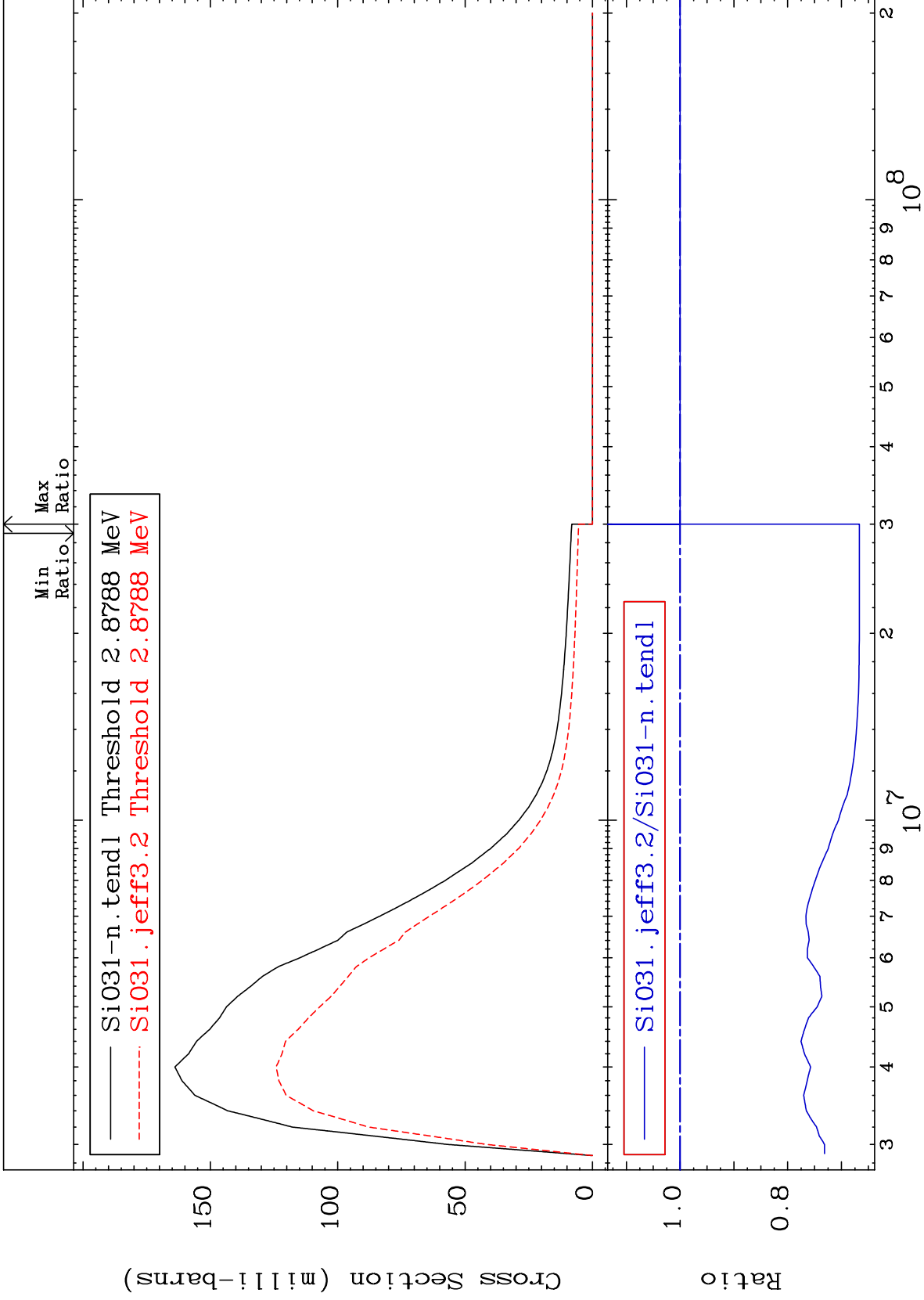
14-Si-31  
-99.59 To 0.000 %



MAT 1434

2.788 MeV (n,n') Level  
Cross Section

14-Si-31  
-33.33 To 0.000 %



19

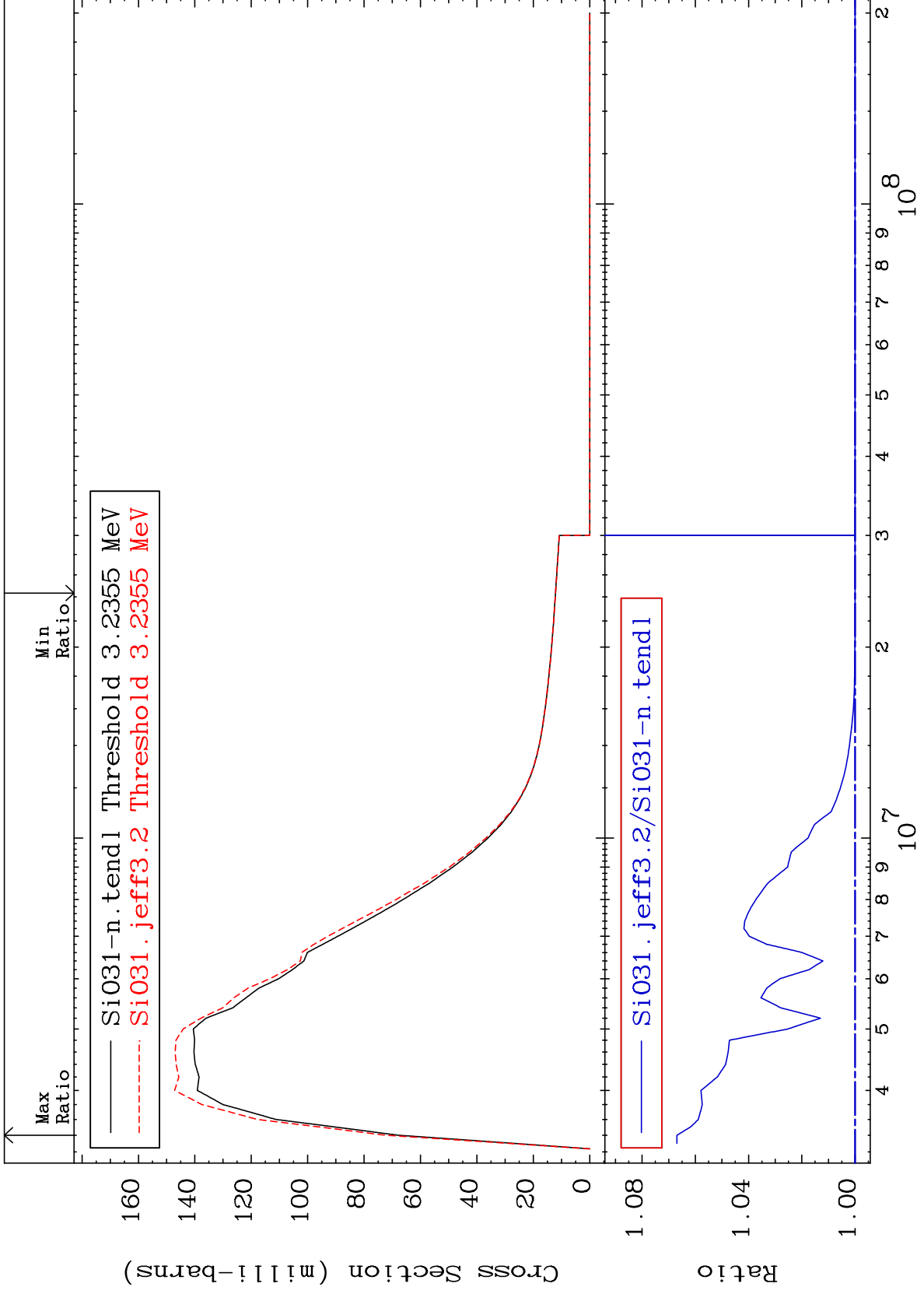
Incident Energy (eV)

14-Si-31

MAT 1434

3.133 MeV (n,n') Level  
Cross Section

14-Si-31  
0.000 To 6.691 %



20

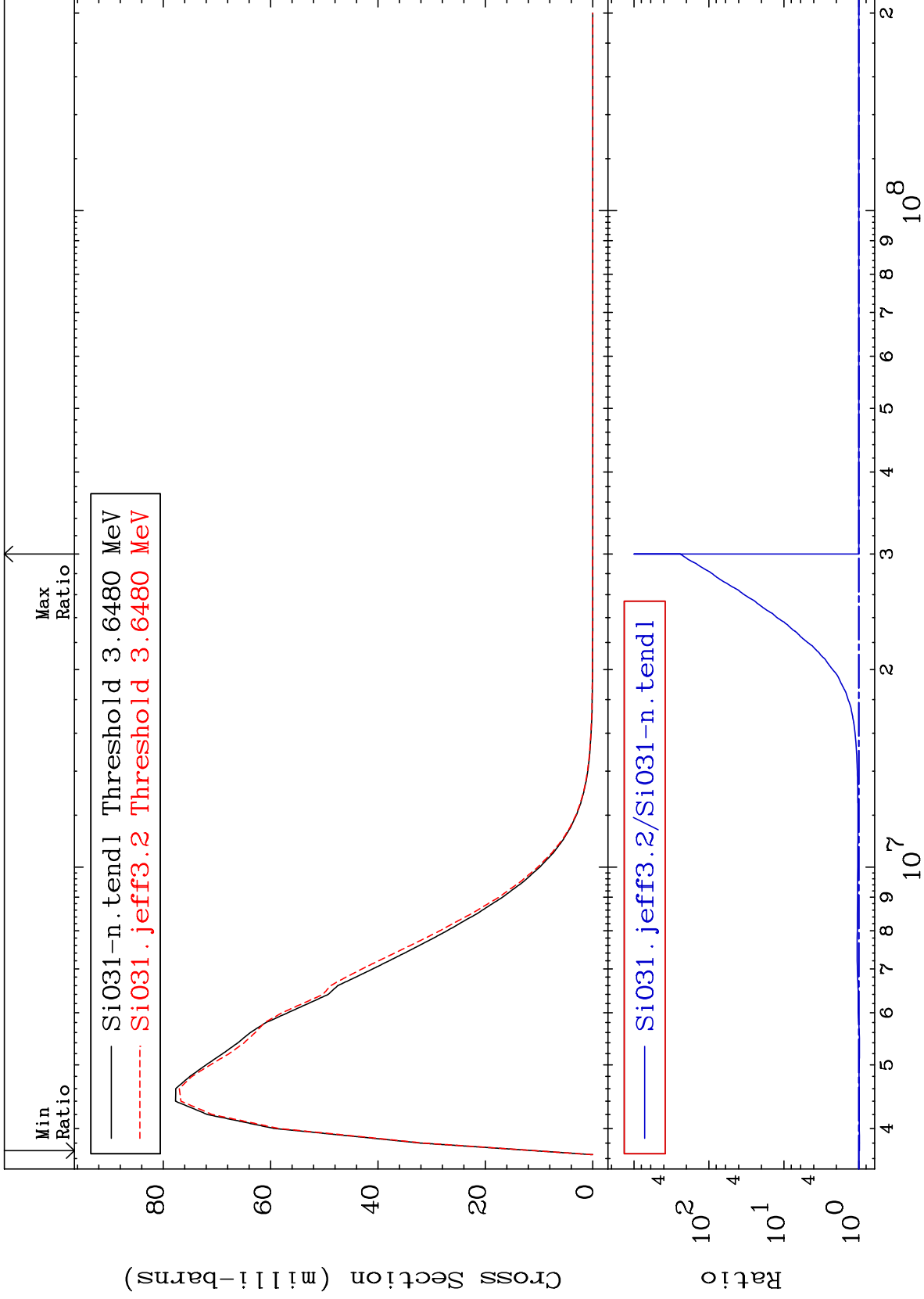
Incident Energy (eV)

14-Si-31

MAT 1434

3.533 MeV (n,n') Level  
Cross Section

14-Si-31  
-1.762 To 9999. %

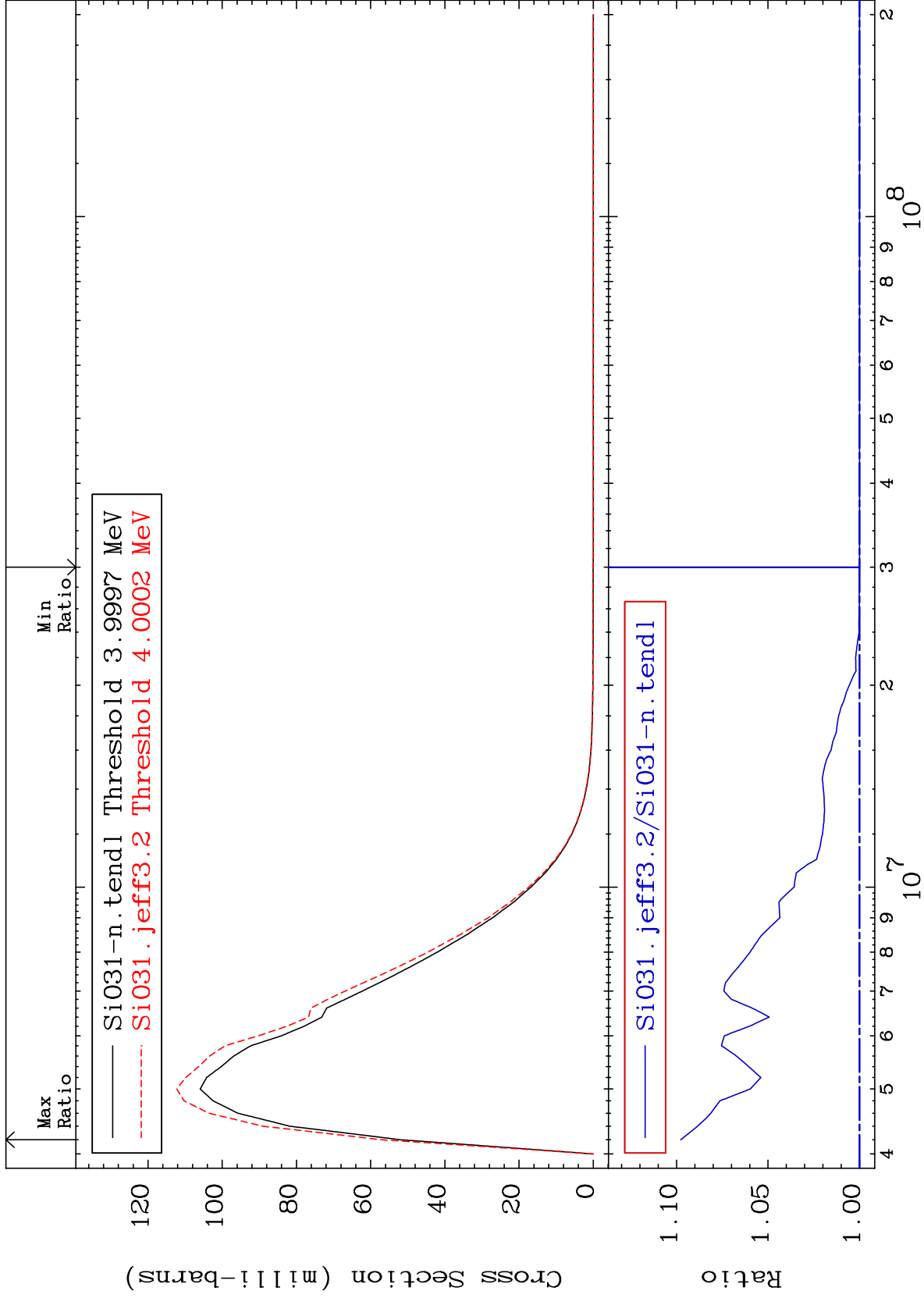


MAT 1434

3.874 MeV (n,n') Level

14-Si-31

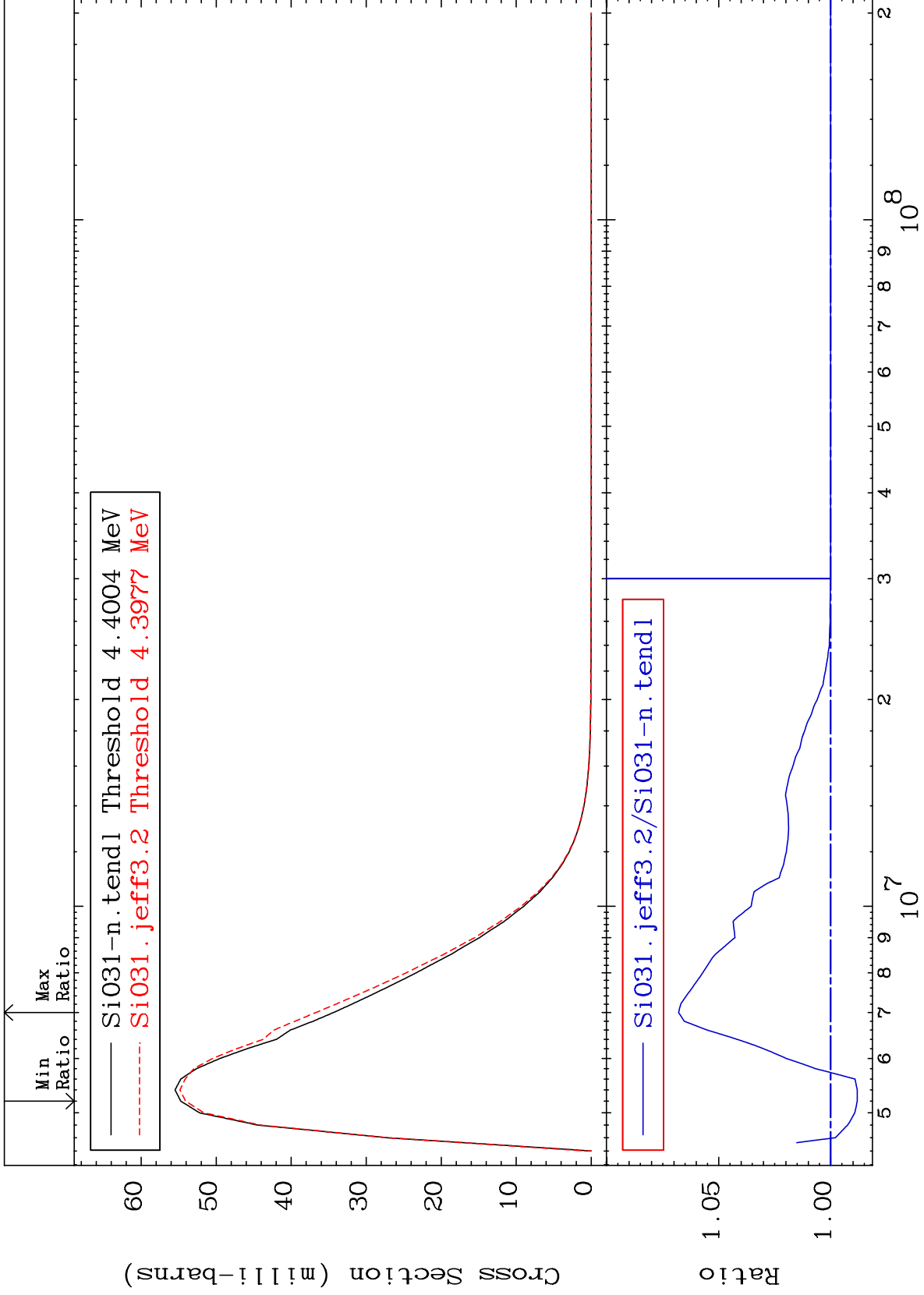
0.000 To 9.768 %



MAT 1434

4.262 MeV (n,n') Level  
Cross Section

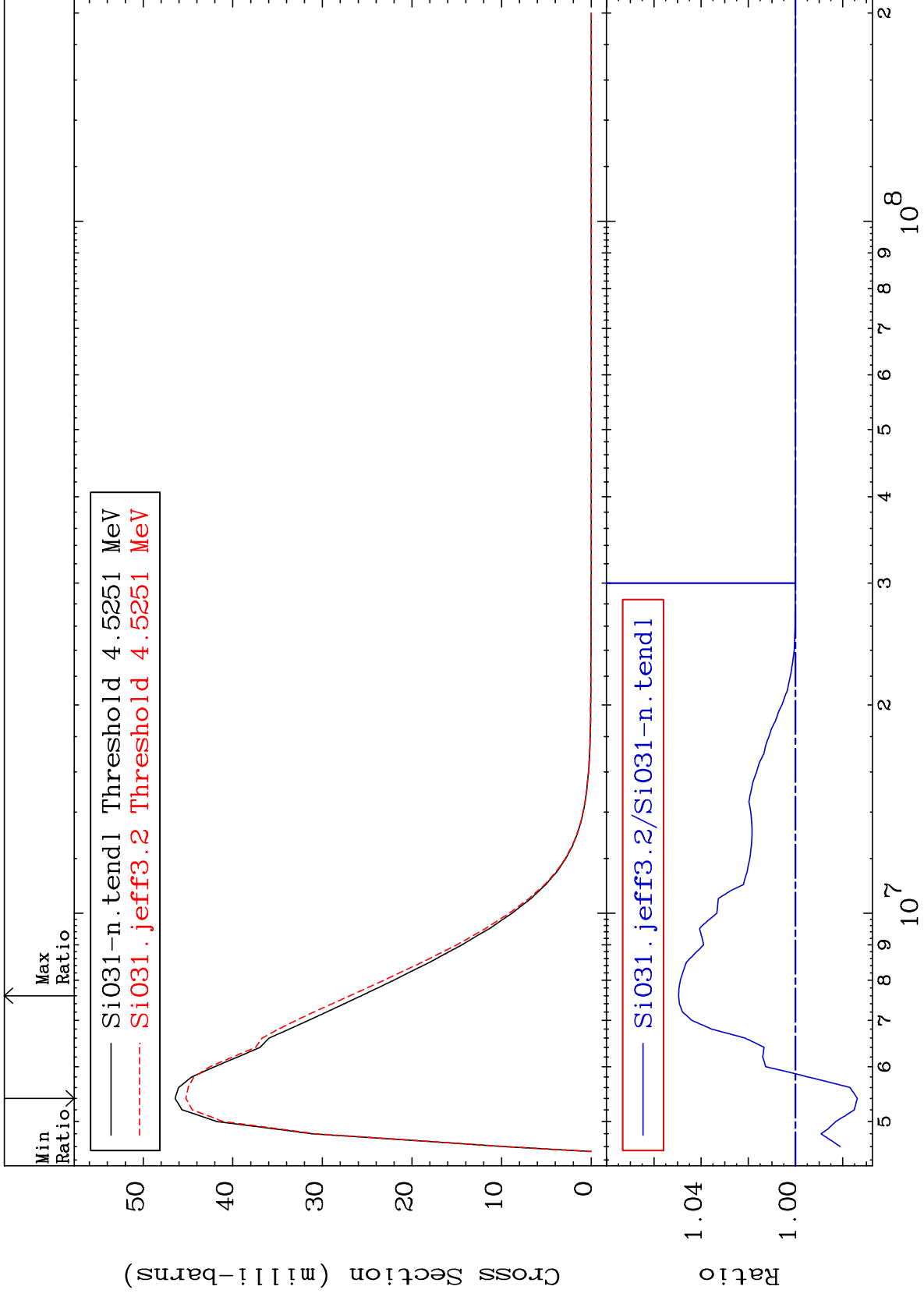
14-Si-31  
-1.187 To 6.790 %



MAT 1434

4.382 MeV (n,n') Level  
Cross Section

14-Si-31  
-2.616 To 4.954 %

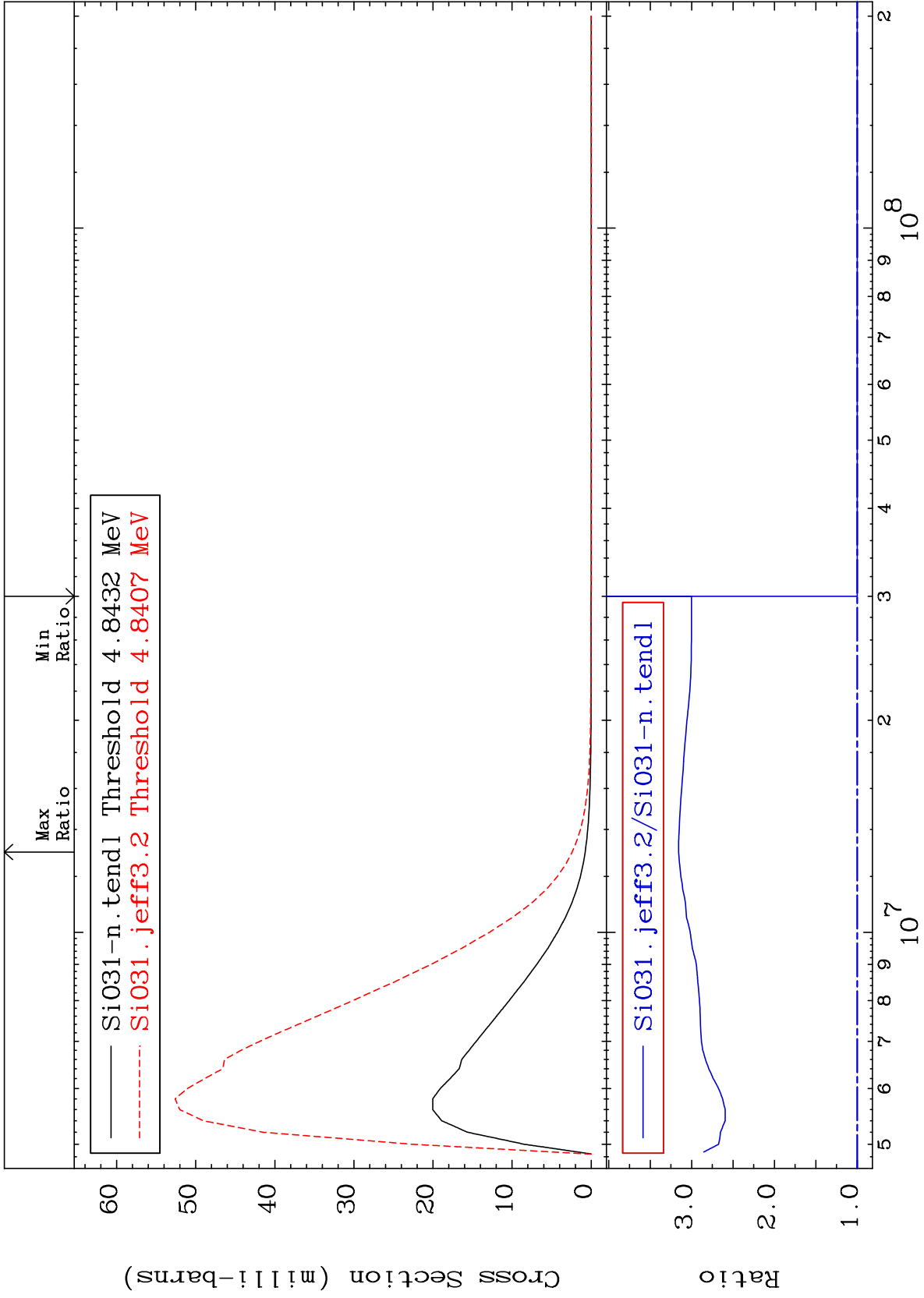




MAT 1434

4.691 MeV (n,n') Level  
Cross Section

14-Si-31  
To 215.7 %



25

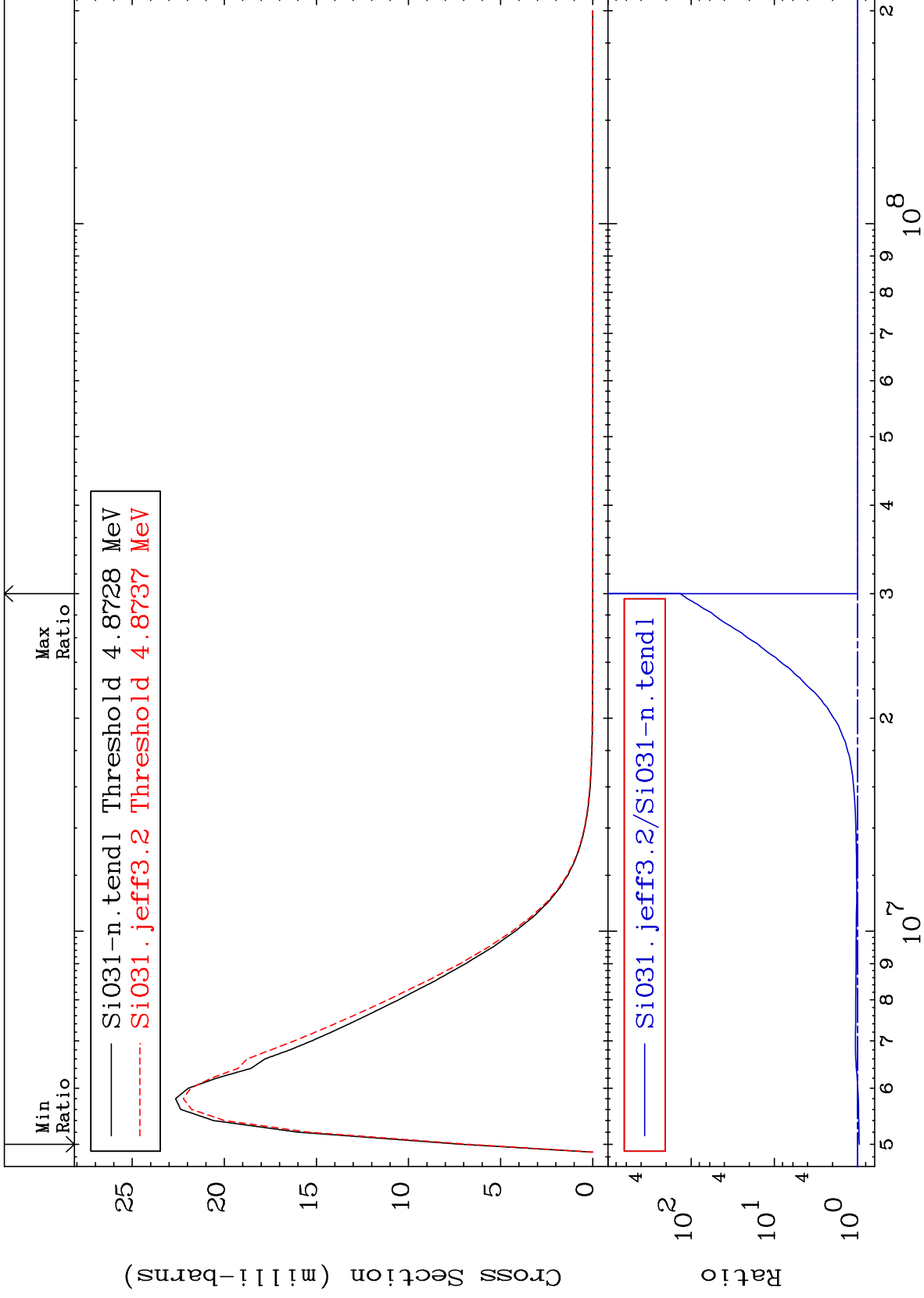
Incident Energy (eV)

14-Si-31

MAT 1434

4.719 MeV (n,n') Level  
Cross Section

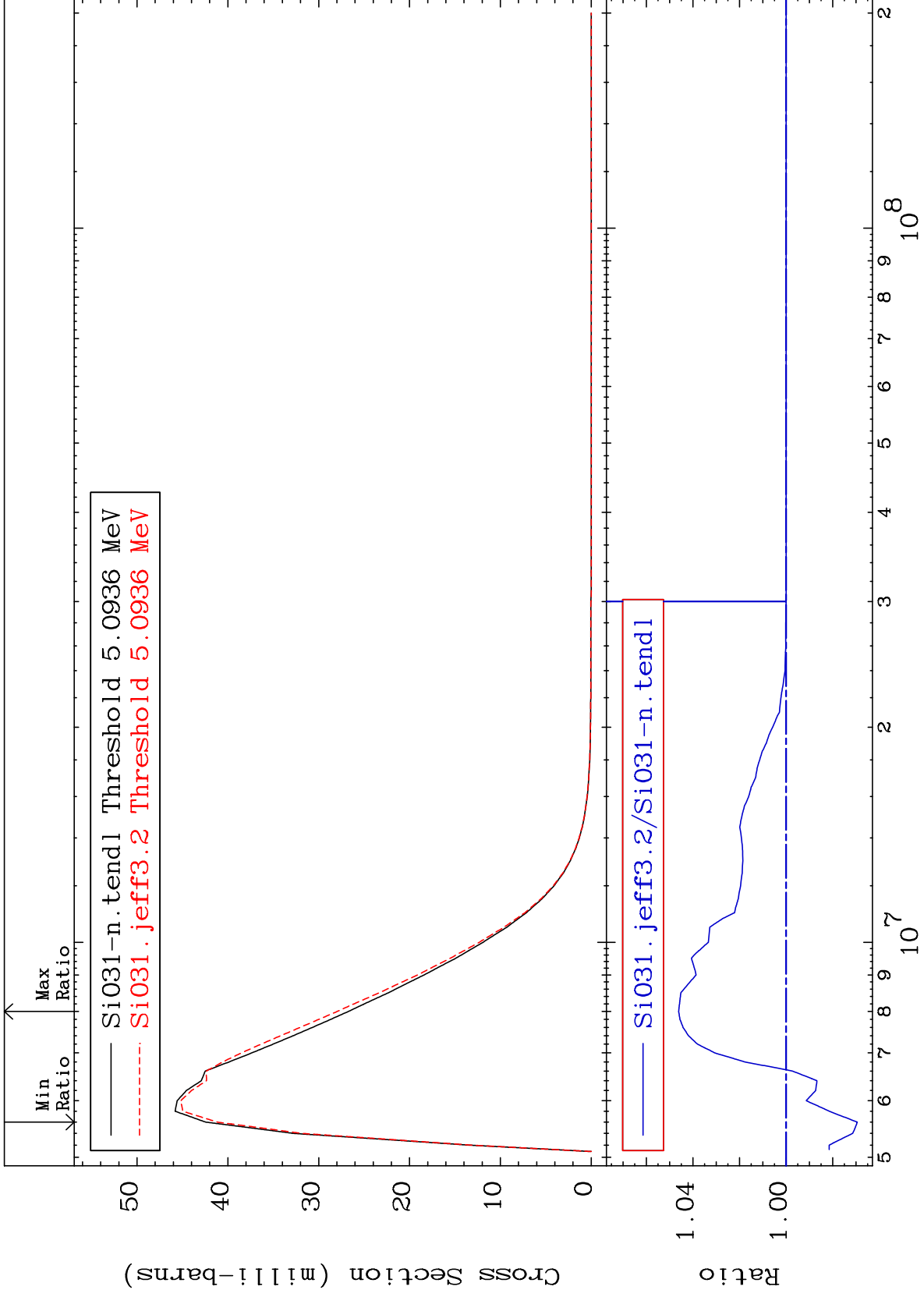
14-Si-31  
-4.826 To 9999. %



MAT 1434

4.933 MeV (n,n') Level  
Cross Section

14-Si-31  
-3.052 To 4.612 %

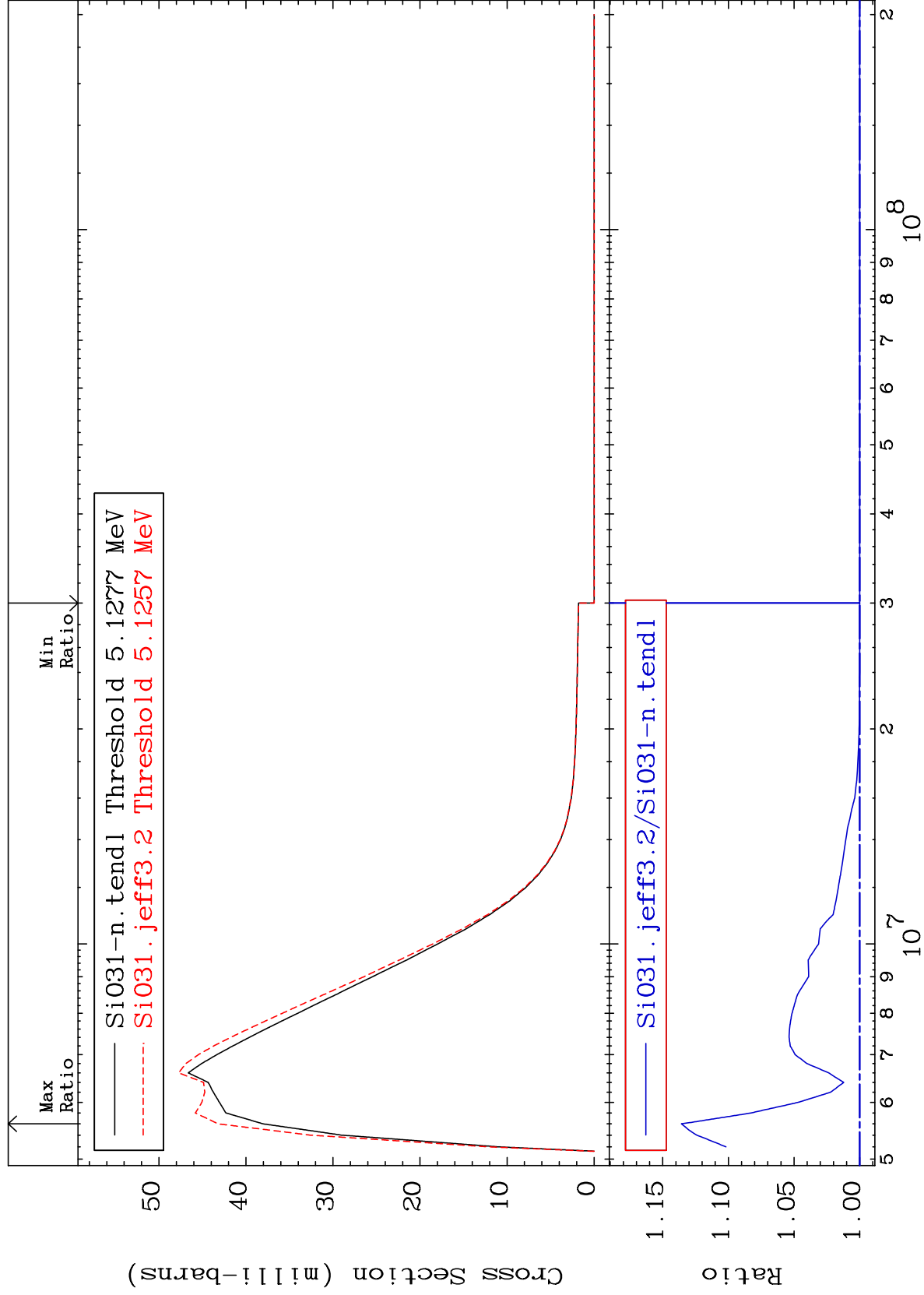


MAT 1434

4.966 MeV (n,n') Level

14-Si-31

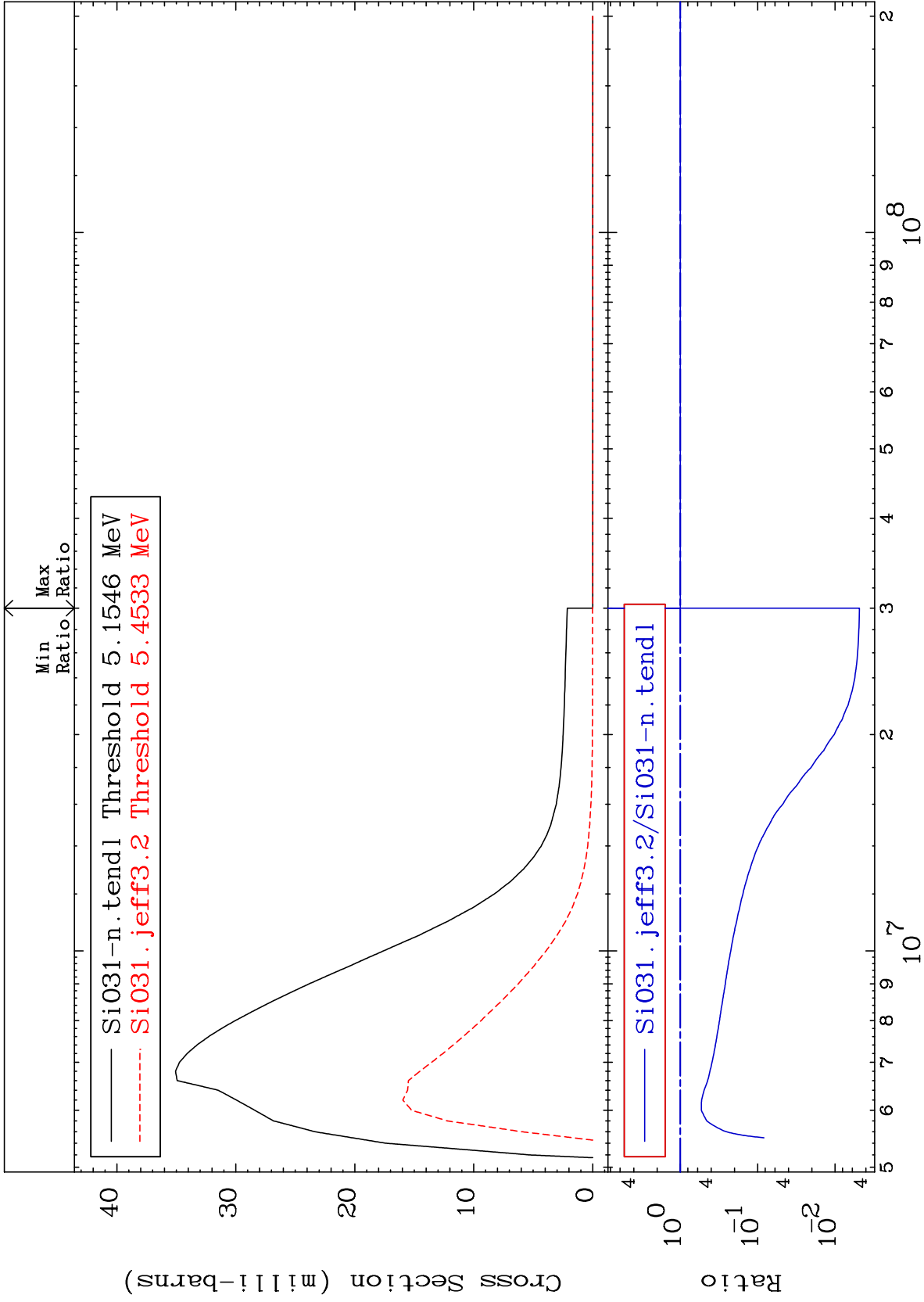
Cross Section To 13.58 %



MAT 1434

4.992 MeV (n,n') Level  
Cross Section

14-Si-31  
-99.52 To 0.000 %

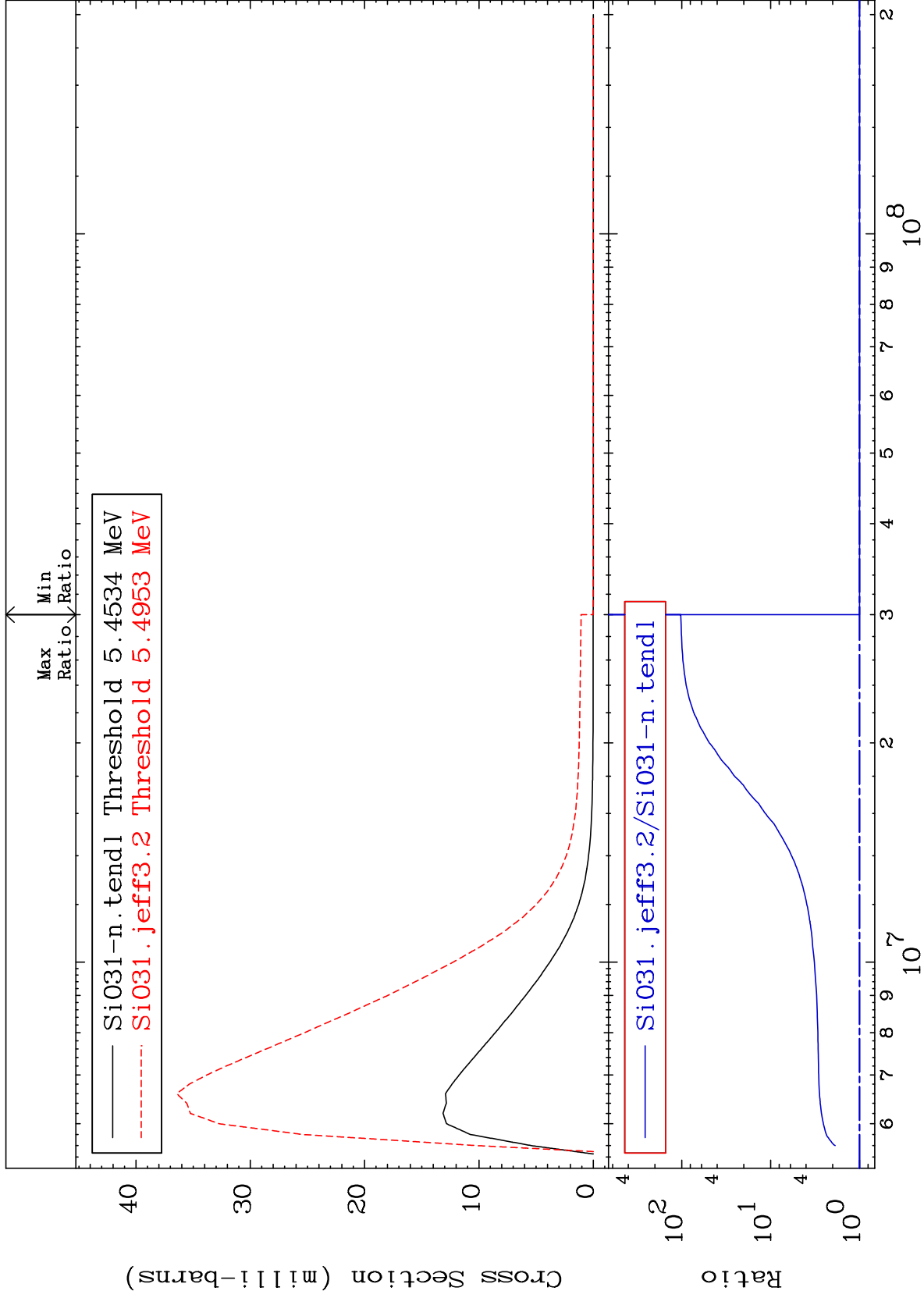


MAT 1434

5.281 MeV (n,n') Level

14-Si-31

Cross Section To 9999. %



30

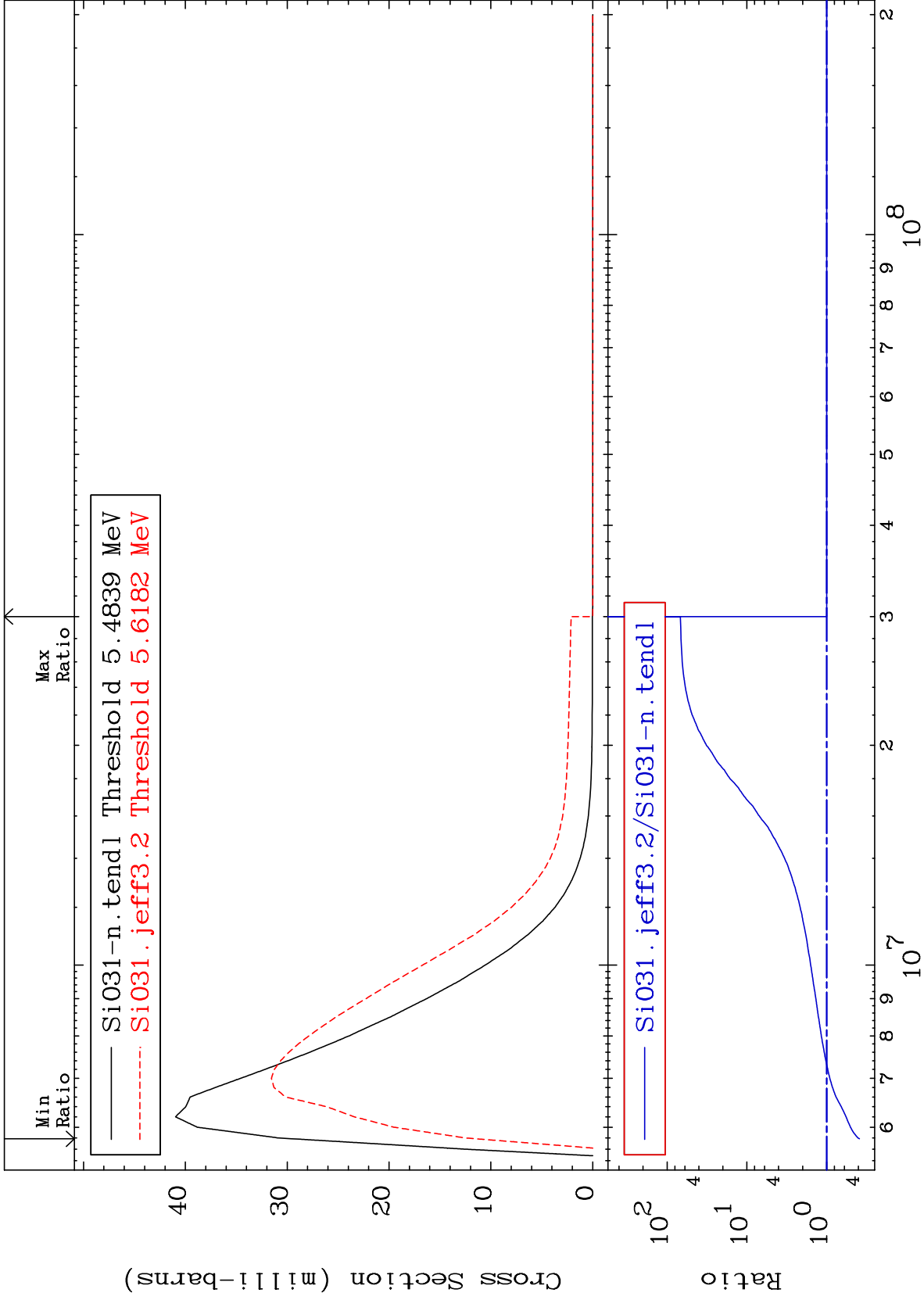
Incident Energy (eV)

14-Si-31

MAT 1434

5.311 MeV (n,n') Level  
Cross Section

14-Si-31  
-61.18 To 6722. %



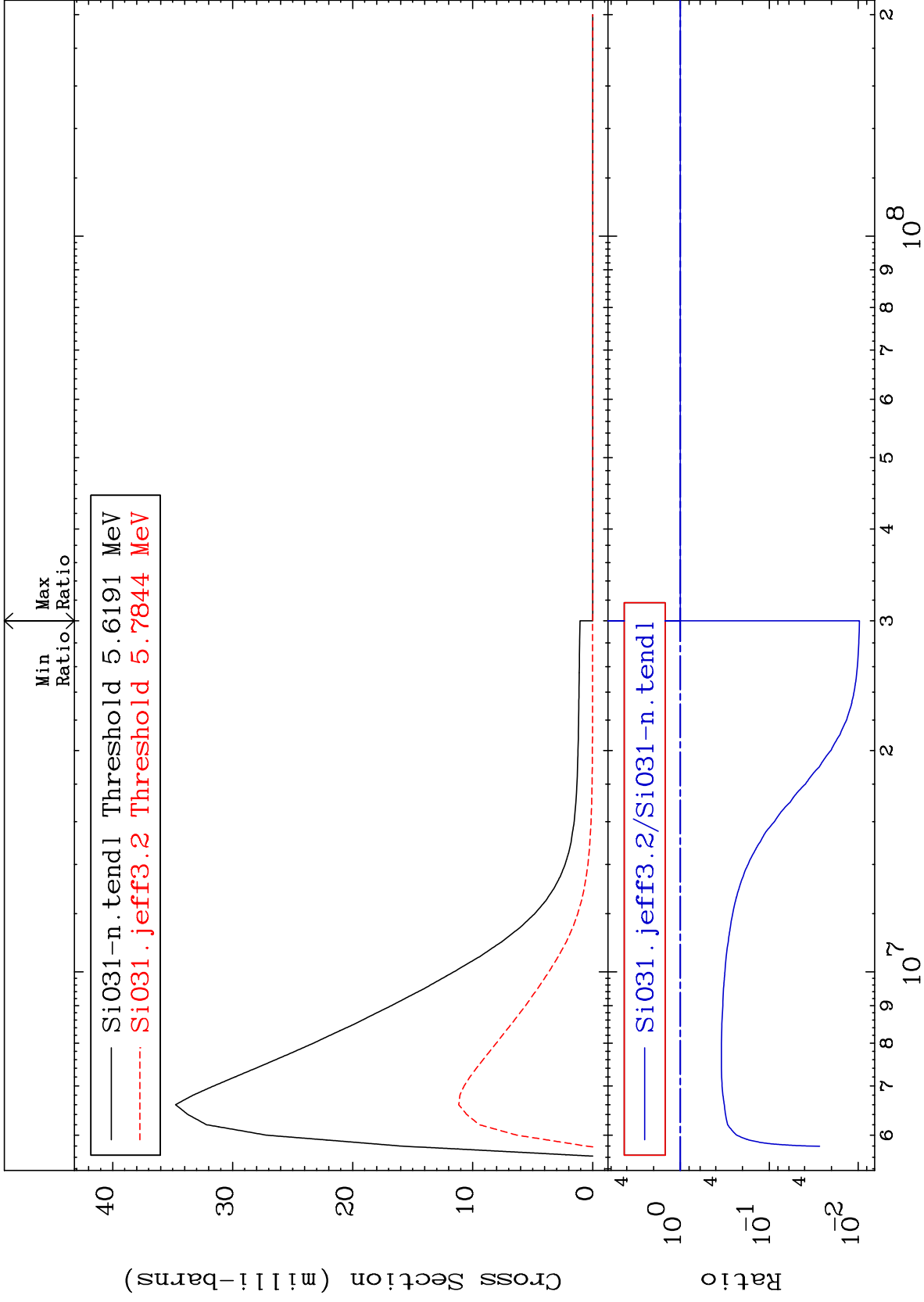
31

14-Si-31

MAT 1434

5.442 MeV (n,n') Level  
Cross Section

14-Si-31  
-99.03 To 0.000 %

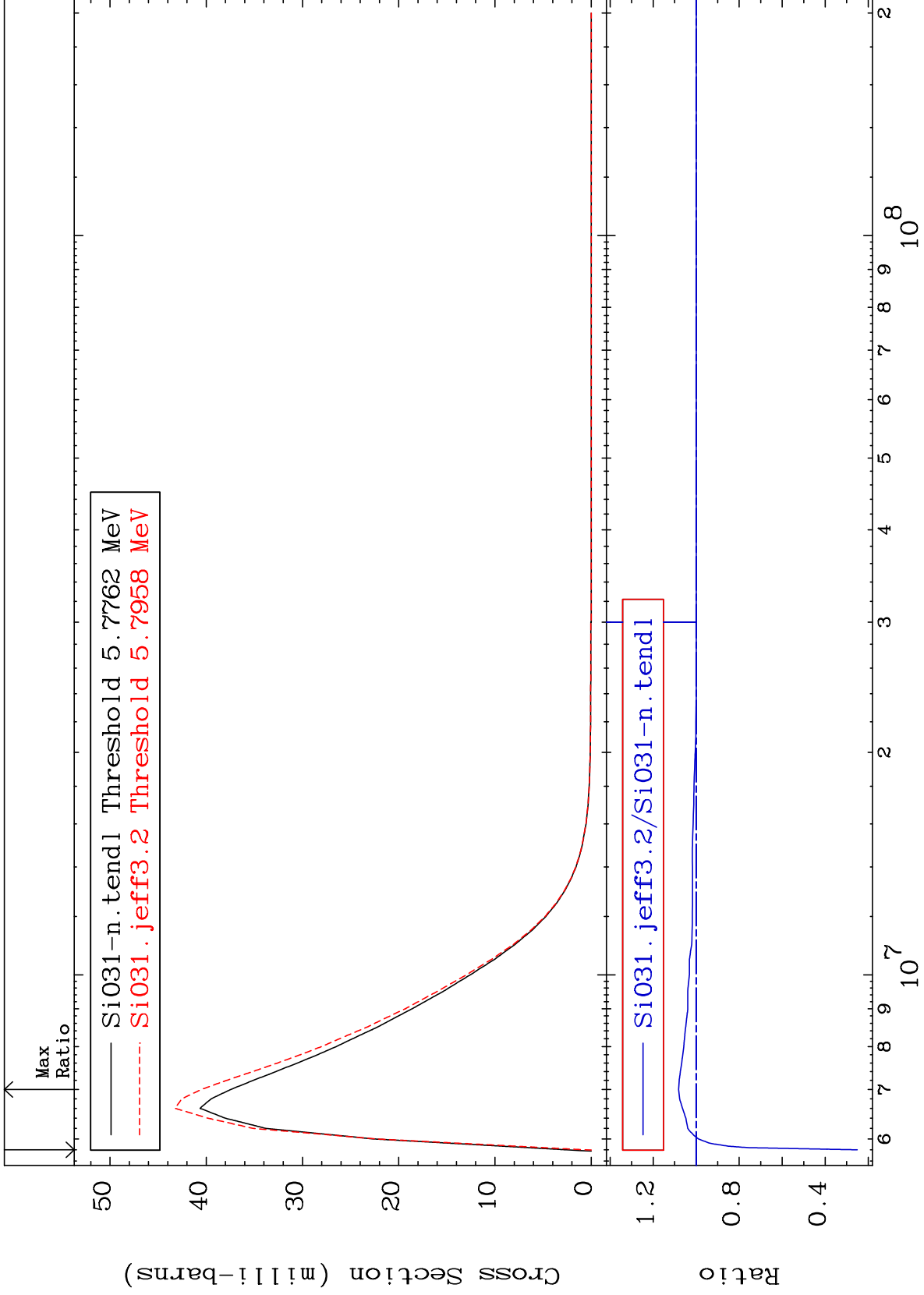




MAT 1434

5.594 MeV (n,n') Level  
Cross Section

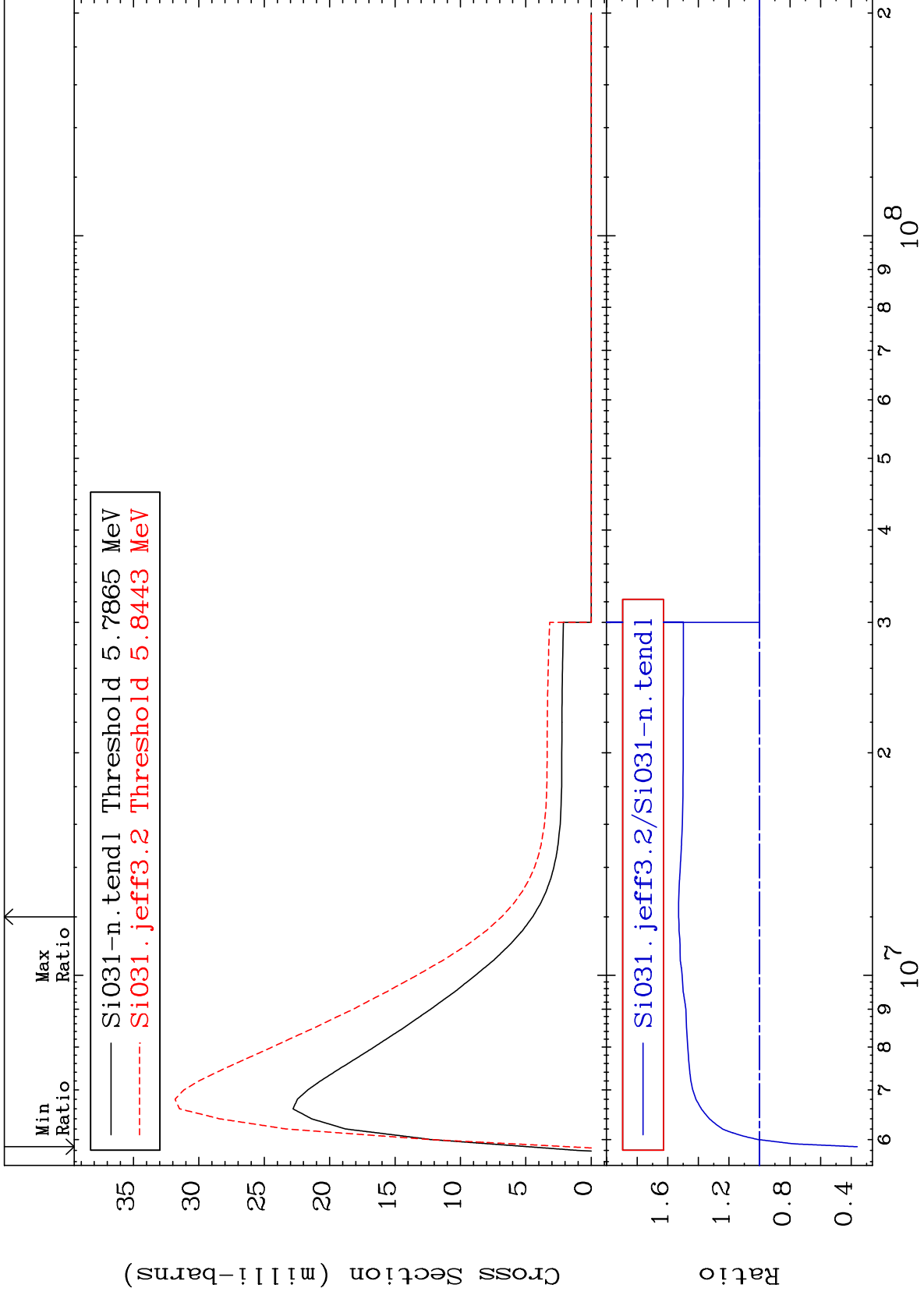
14-Si-31  
-74.90 To 8.160 %



MAT 1434

5.604 MeV (n,n') Level  
Cross Section

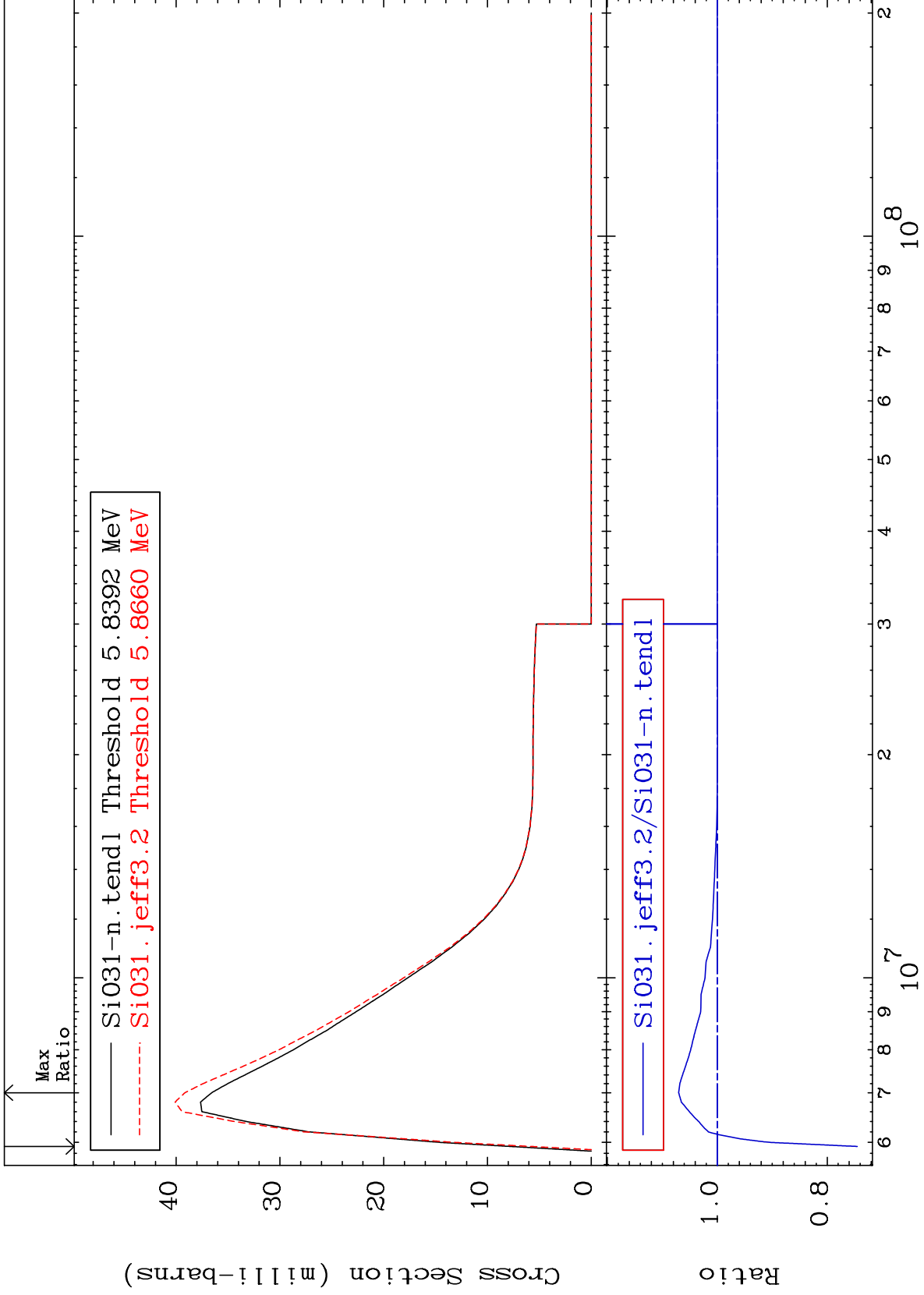
14-Si-31  
-63.90 To 52.92 %



MAT 1434

5.655 MeV (n,n') Level  
Cross Section

14-Si-31  
-25.47 To 7.030 %



35

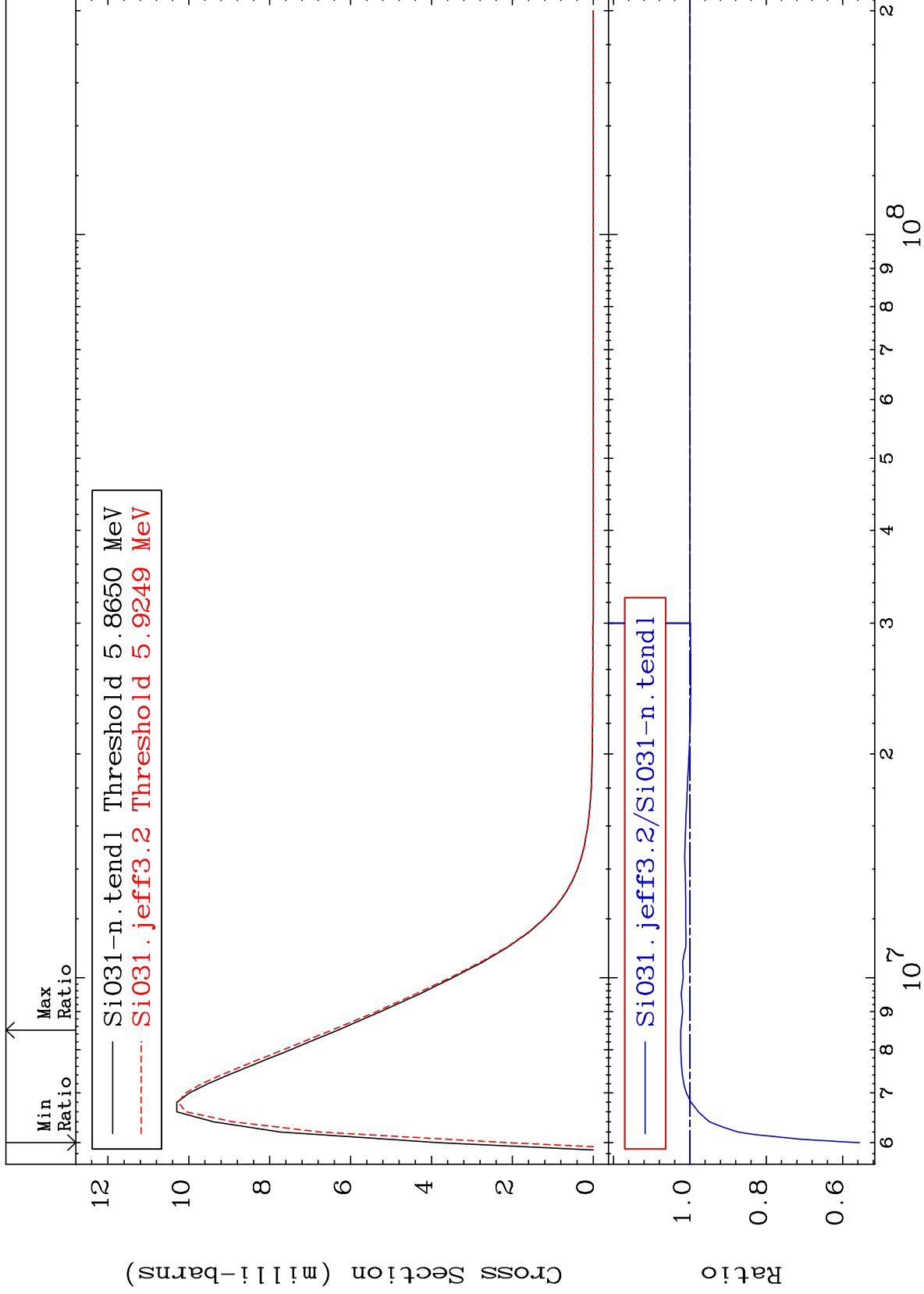
Incident Energy (eV)

14-Si-31

MAT 1434

5.680 MeV (n,n') Level  
Cross Section

14-Si-31  
-44.42 To 2.383 %



36

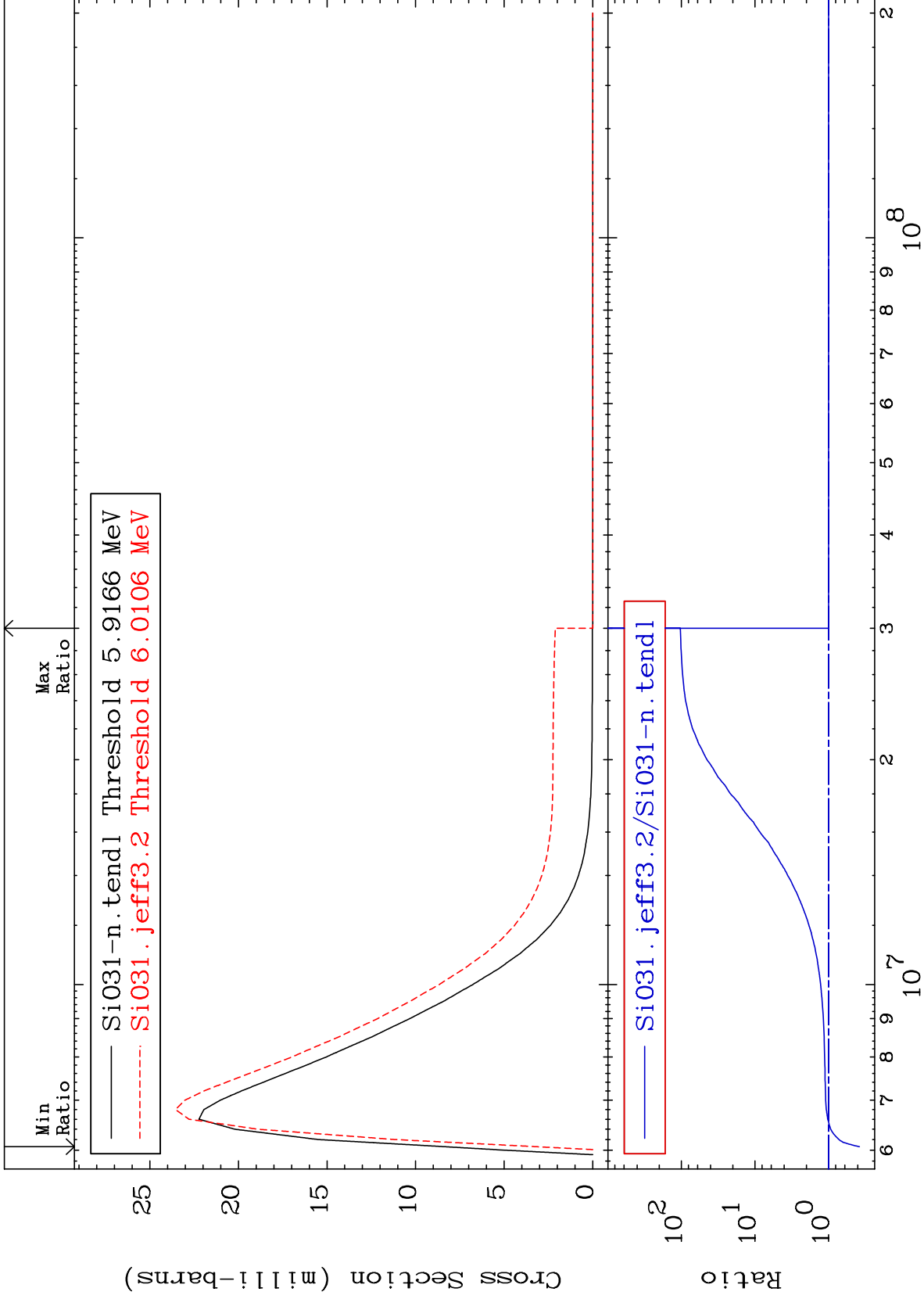
14-Si-31

14-Si-31

MAT 1434

5.730 MeV (n,n') Level  
Cross Section

14-Si-31  
-61.93 To 9999. %



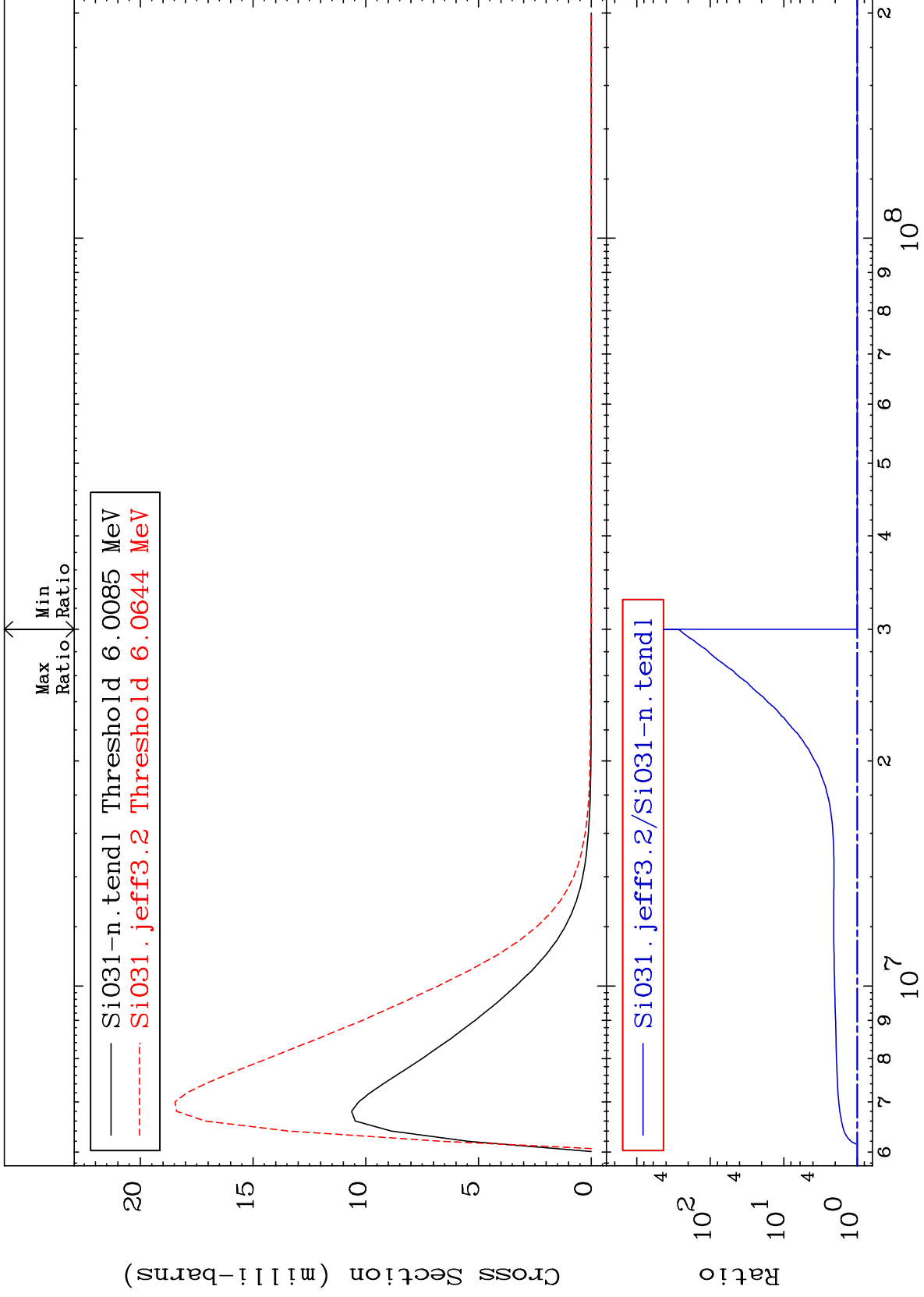
37

14-Si-31

MAT 1434

5.819 MeV (n,n') Level  
Cross Section

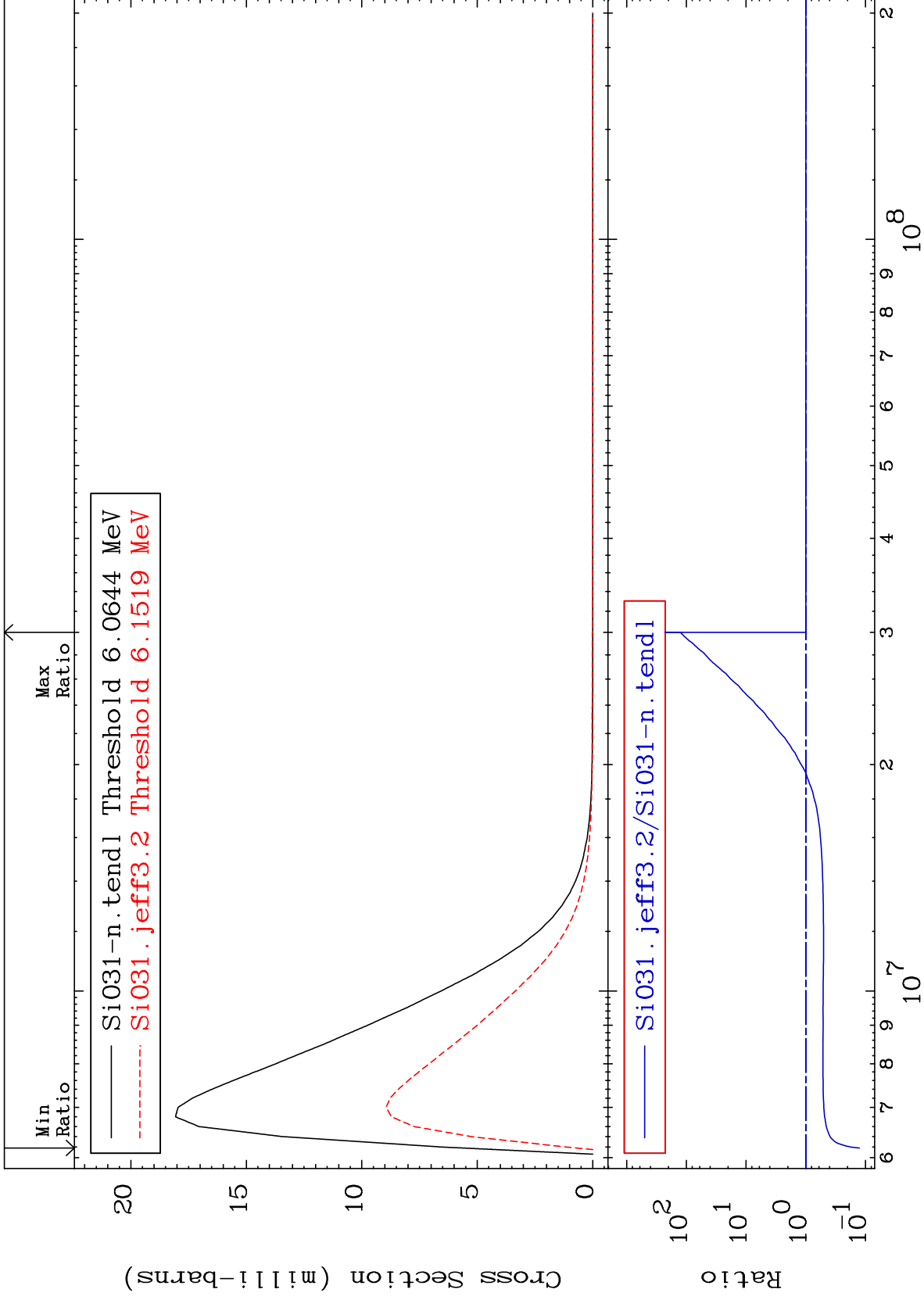
14-Si-31  
0.000 To 9999. %



MAT 1434

5.873 MeV (n,n') Level  
Cross Section

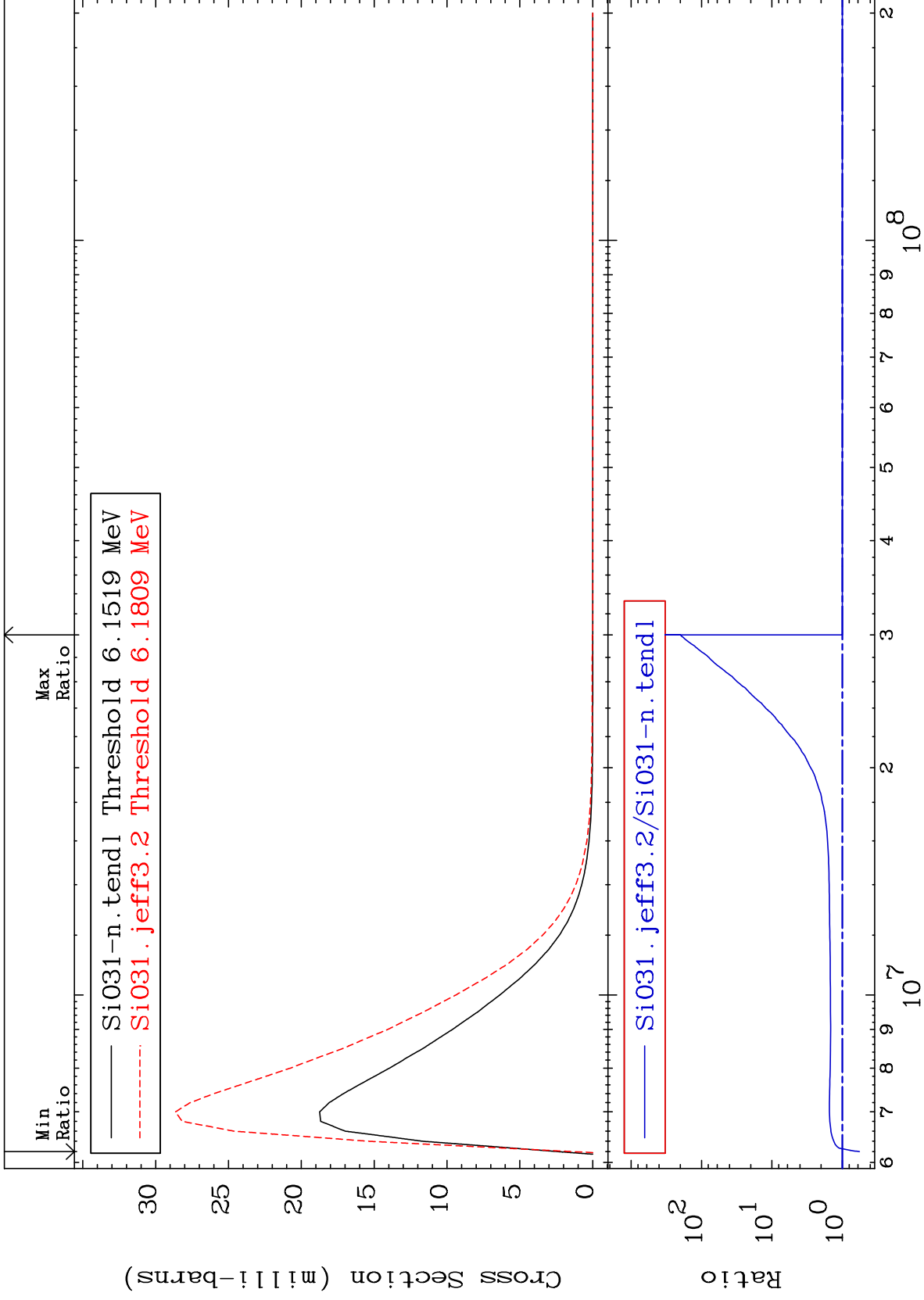
14-Si-31  
-87.37 To 9999. %



MAT 1434

5.958 MeV (n,n') Level  
Cross Section

14-Si-31  
-42.90 To 9999. %



40

Incident Energy (eV)

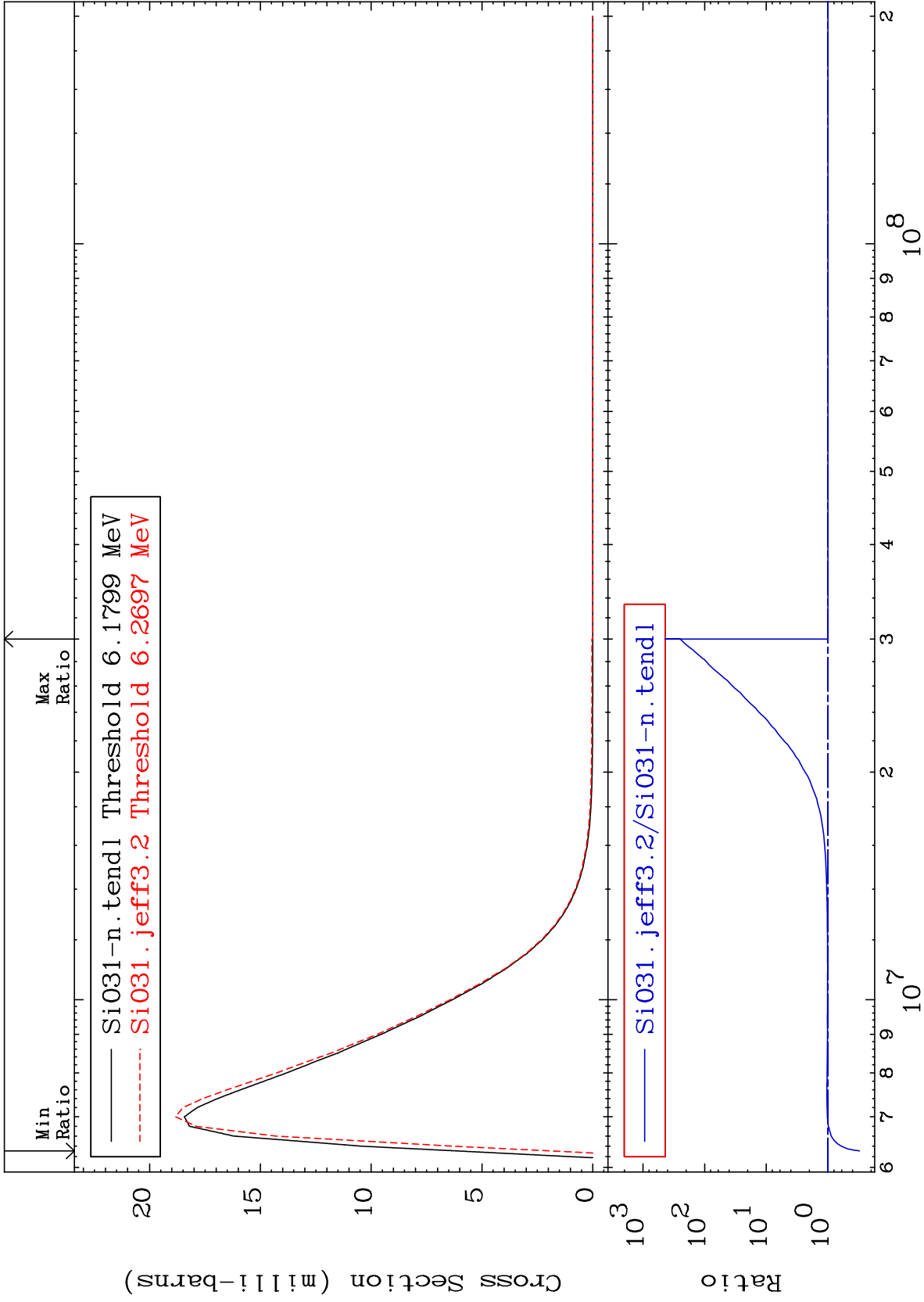
14-Si-31



MAT 1434

5.985 MeV (n,n') Level  
Cross Section

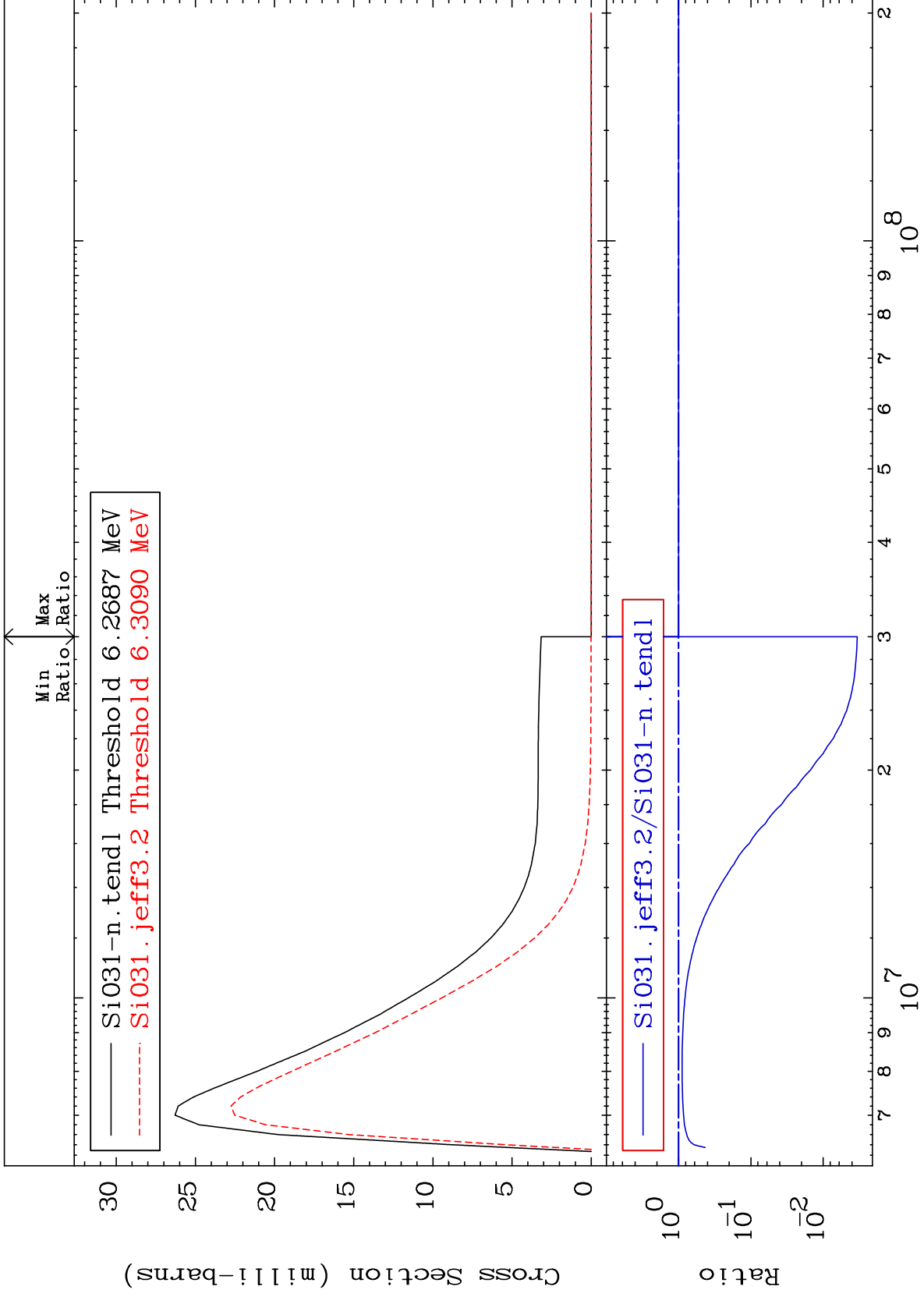
14-Si-31  
-69.13 To 9999. %



MAT 1434

6.071 MeV (n,n') Level  
Cross Section

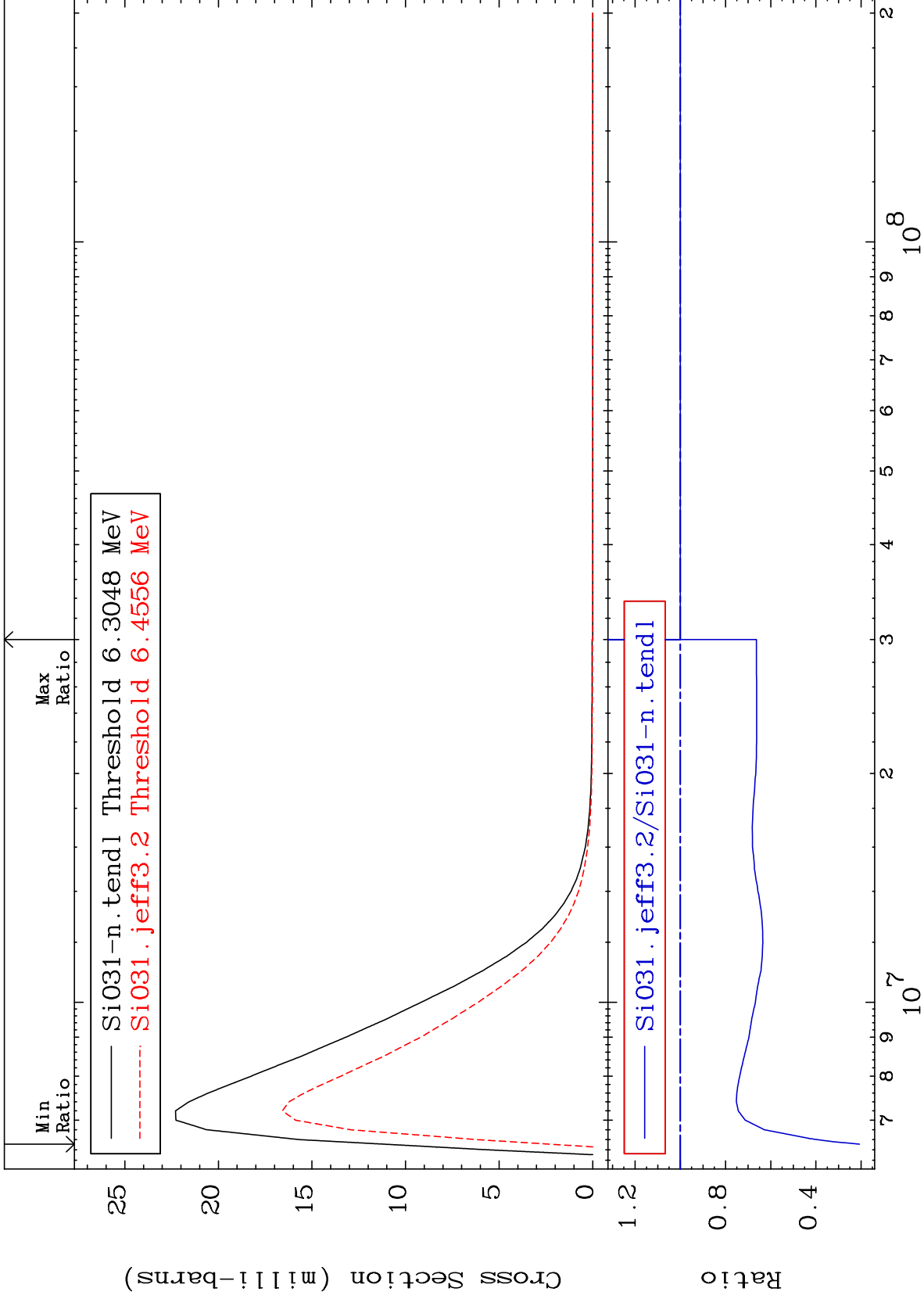
14-Si-31  
-99.66 To 0.000 %



MAT 1434

6.106 MeV (n,n') Level  
Cross Section

14-Si-31  
-79.25 To 0.000 %



43

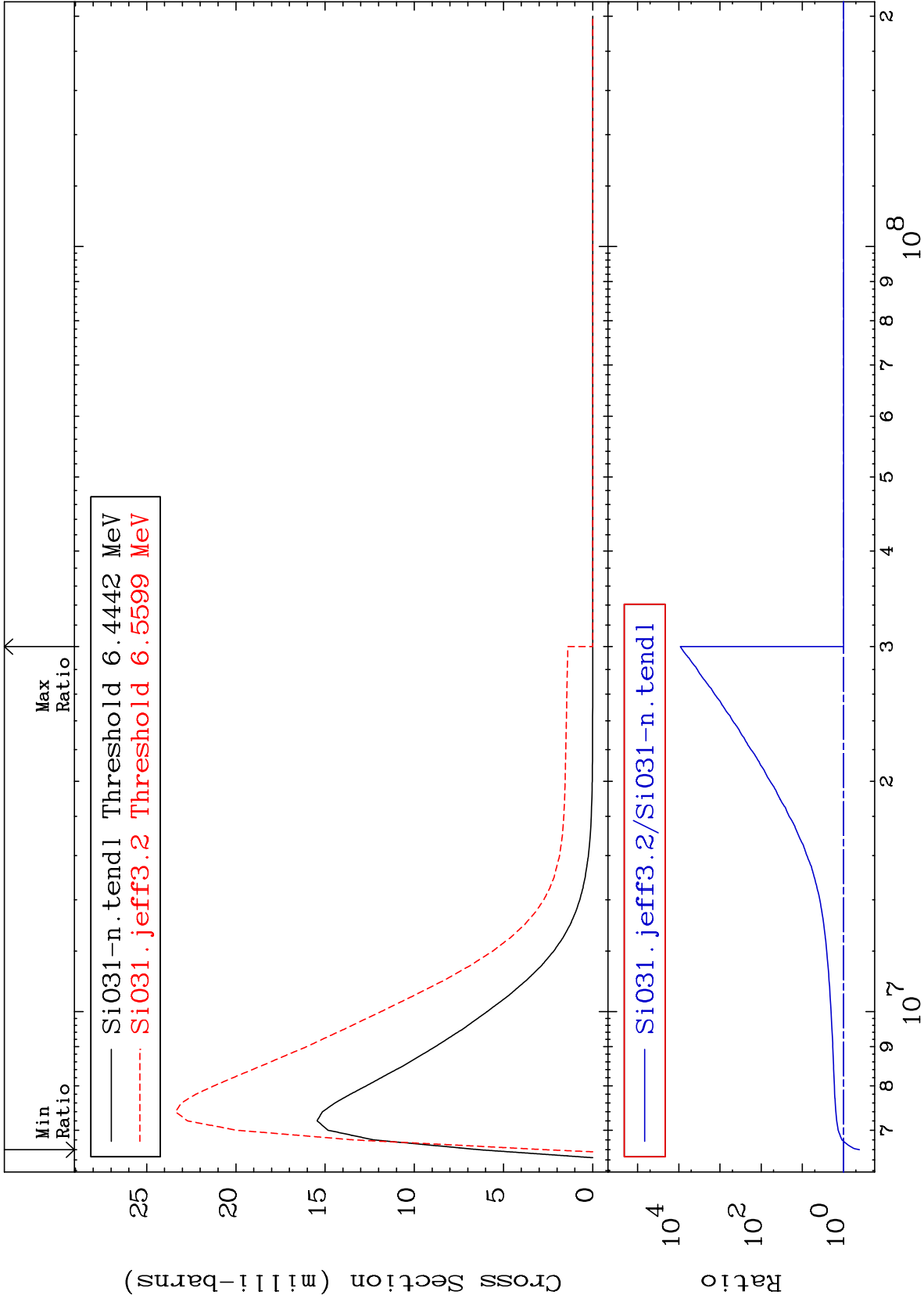
Incident Energy (eV)

14-Si-31

MAT 1434

6.241 MeV (n,n') Level  
Cross Section

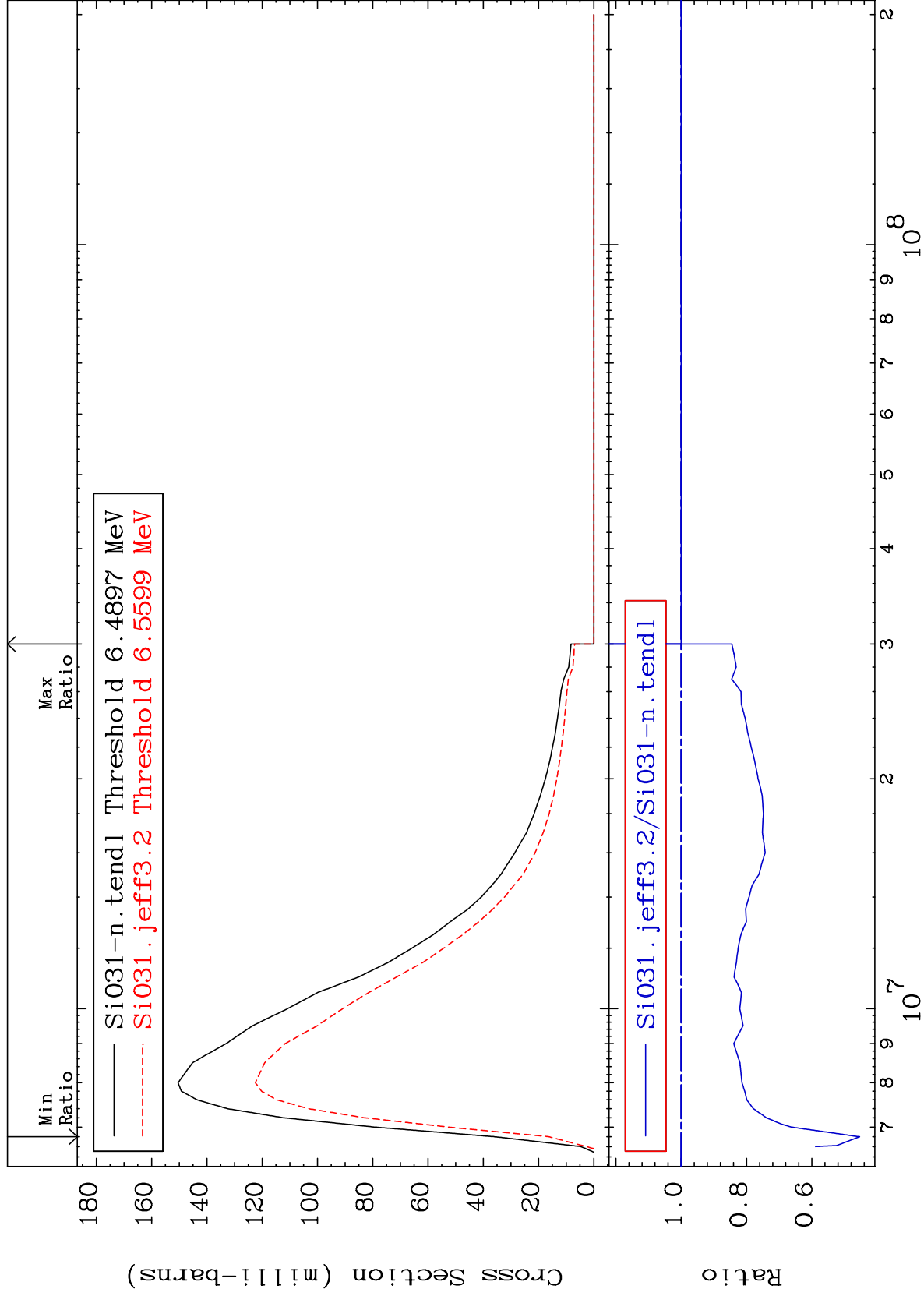
14-Si-31  
-58.95 To 9999. %



MAT 1434

(n, n') Continuum  
Cross Section

14-Si-31  
-54.61 To 0.000 %



45

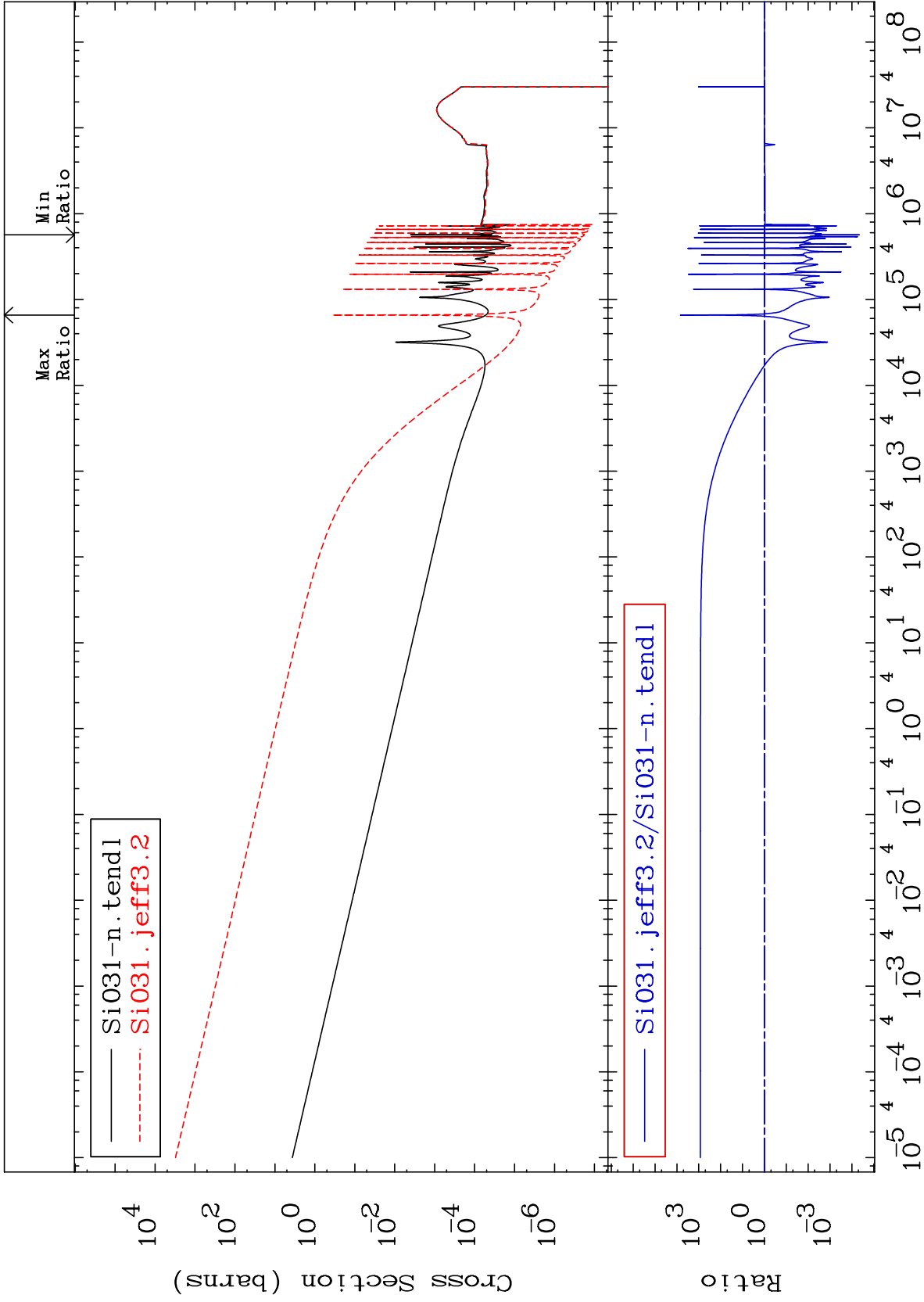
14-Si-31

MAT 1434

(n,  $\gamma$ )  
Cross Section

14-Si-31

-100.0 To 9999. %



Incident Energy (eV)

14-Si-31

46

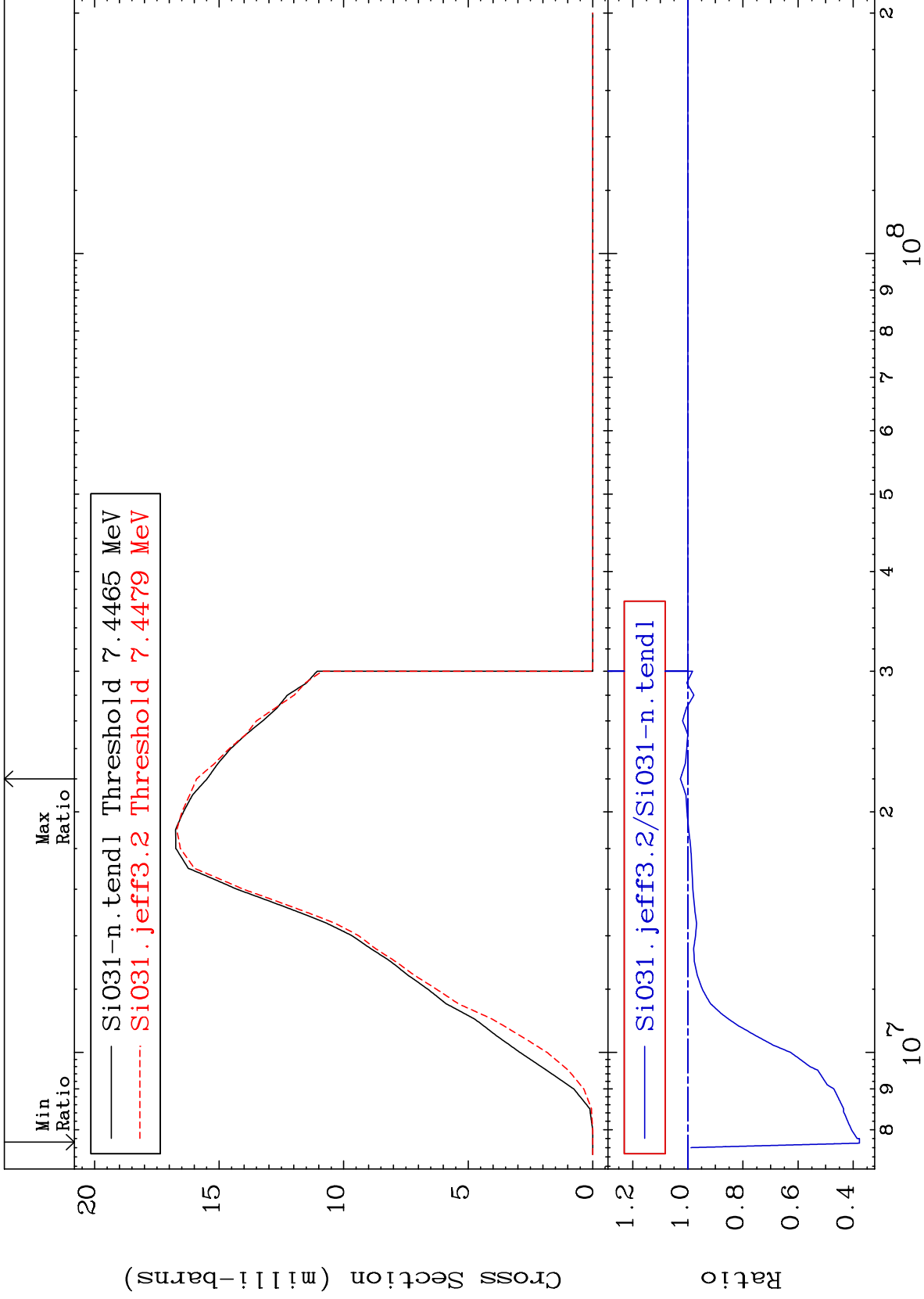
MAT 1434

(n,p)

14-Si-31

Cross Section

-62.24 To 2.707 %



47

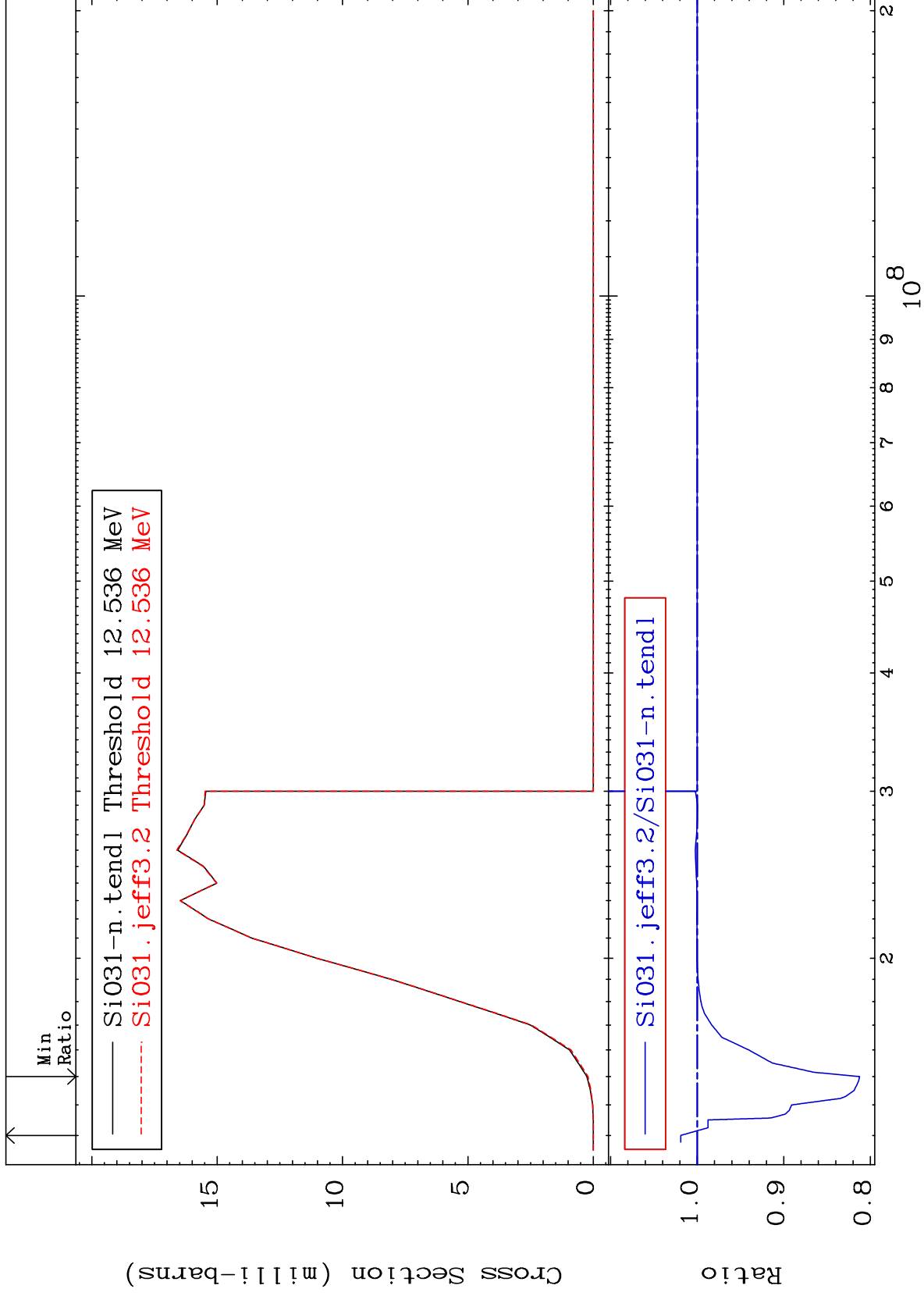
Incident Energy (eV)

14-Si-31

MAT 1434

(n, d)  
Cross Section

<sup>14</sup>Si-31  
-18.75 To 1.898 %

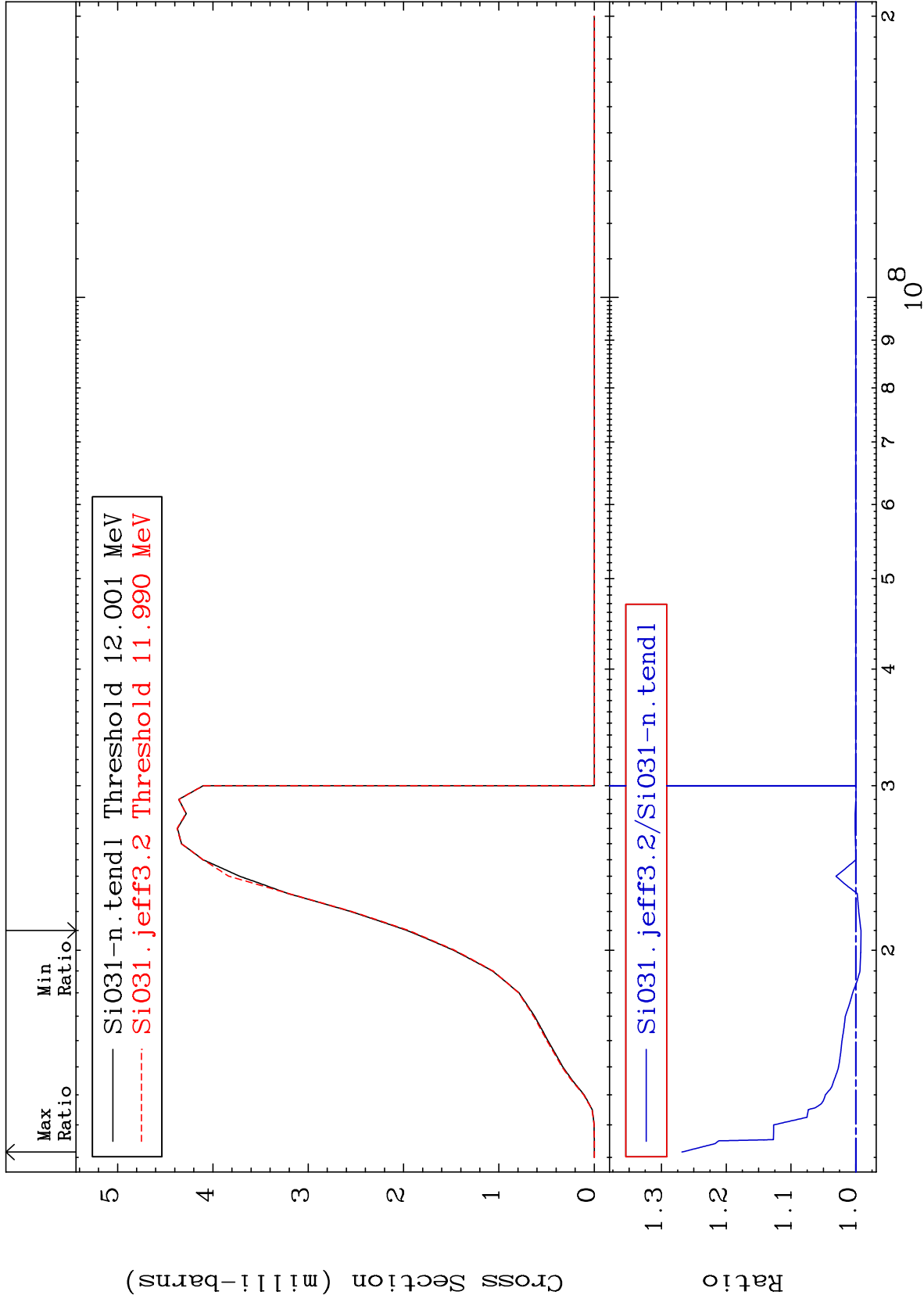




MAT 1434

(n, t)  
Cross Section

14-Si-31  
-0.803 To 26.84 %



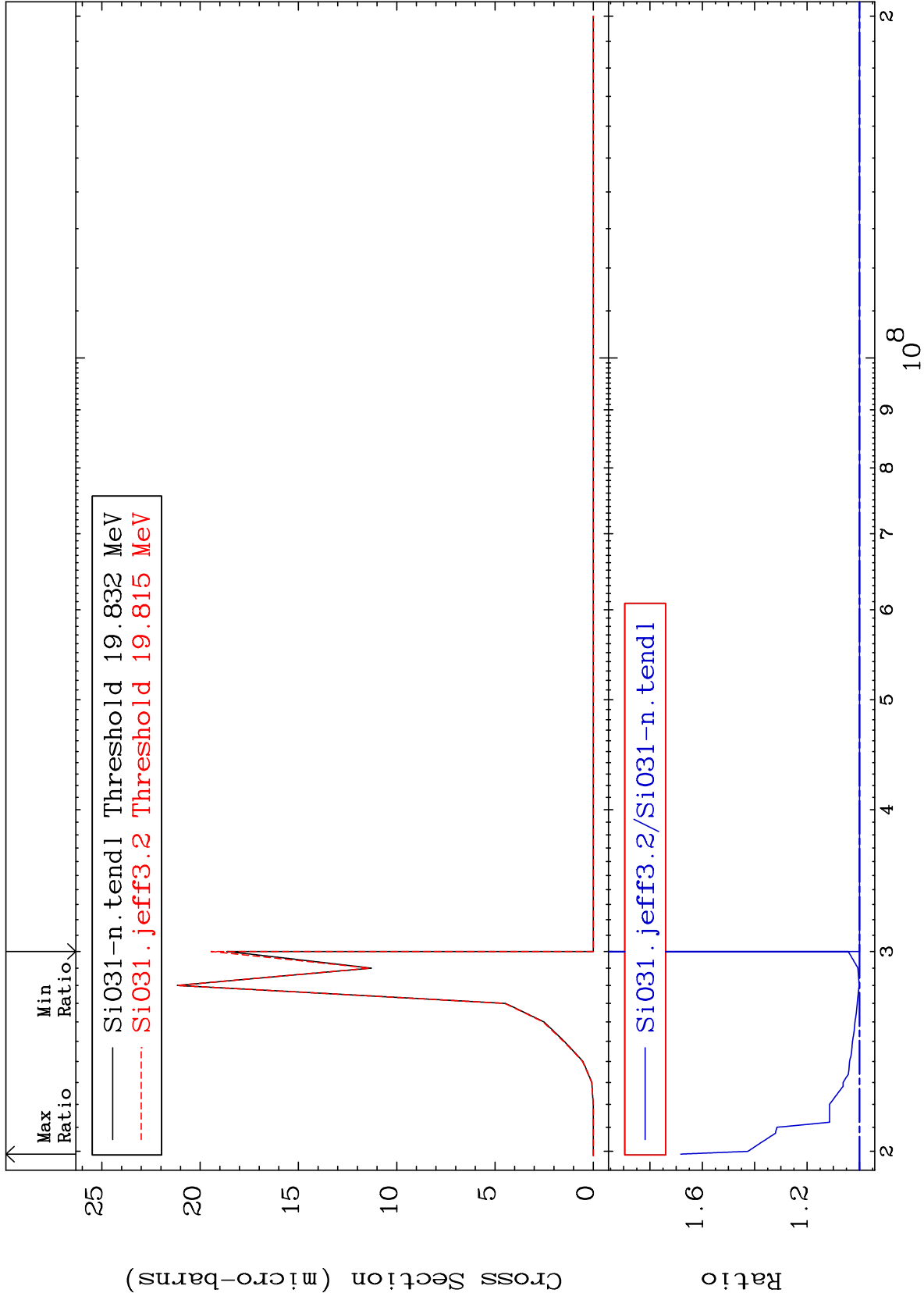
MAT 1434

(n, He-3)

<sup>14</sup>Si-31

Cross Section

0.000 To 68.21 %



50

Incident Energy (eV)

<sup>14</sup>Si-31

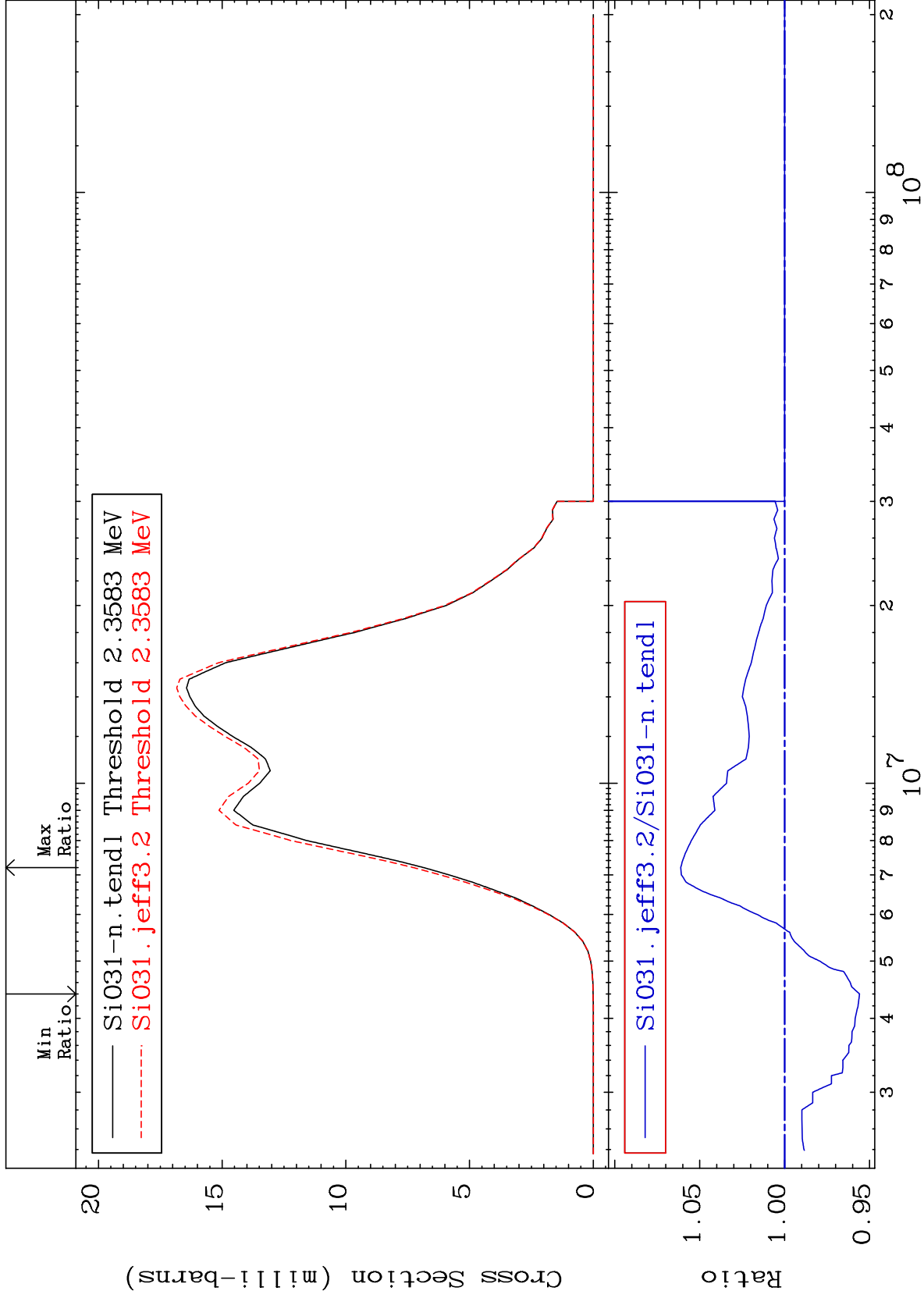
MAT 1434

(n,  $\alpha$ )

14-Si-31

Cross Section

-4.406 To 6.117 %



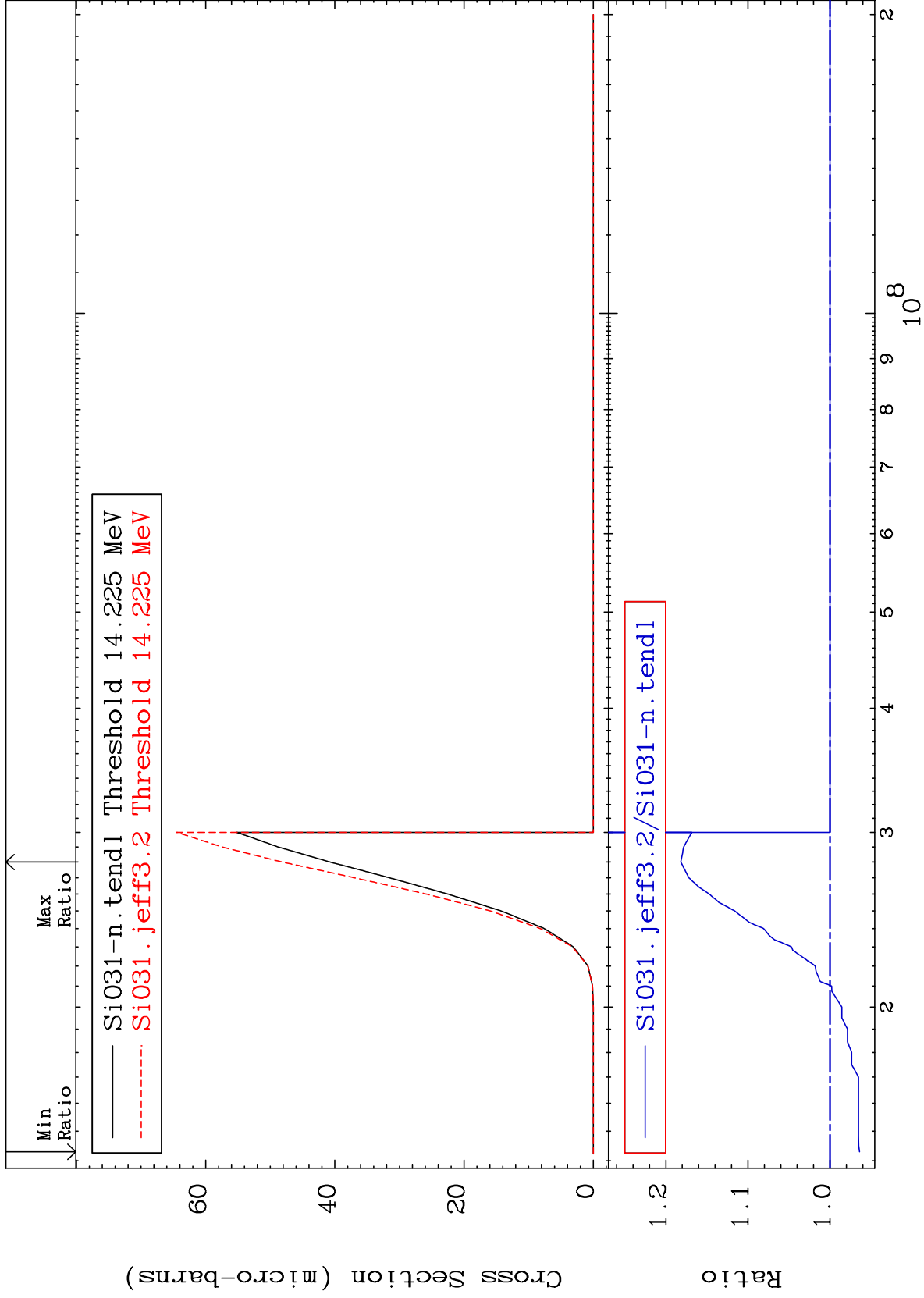
MAT 1434

(n,2α)

14-Si-31

Cross Section

-3.600 To 18.18 %



52

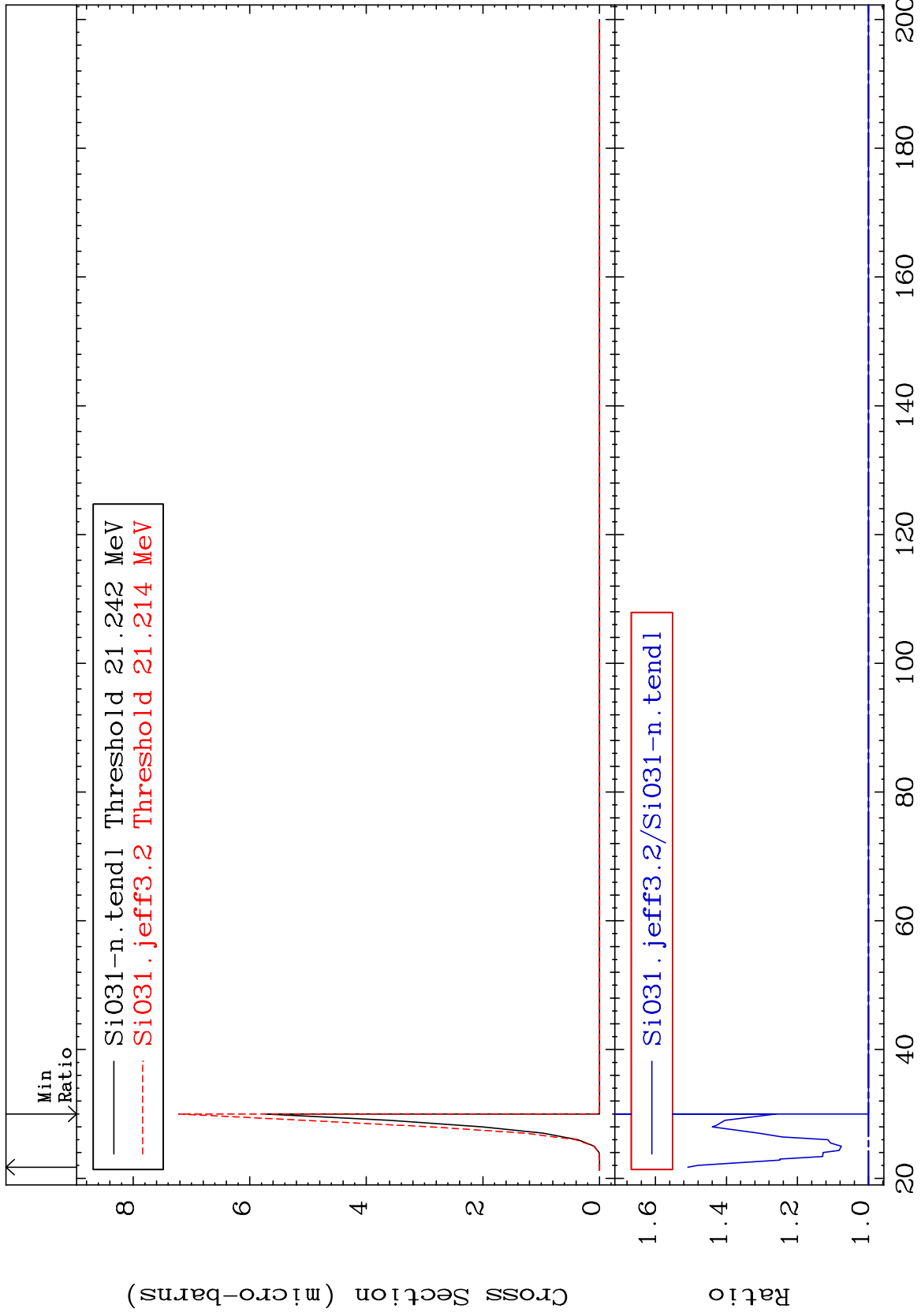
14-Si-31

14-Si-31

MAT 1434

(n,2p)  
Cross Section

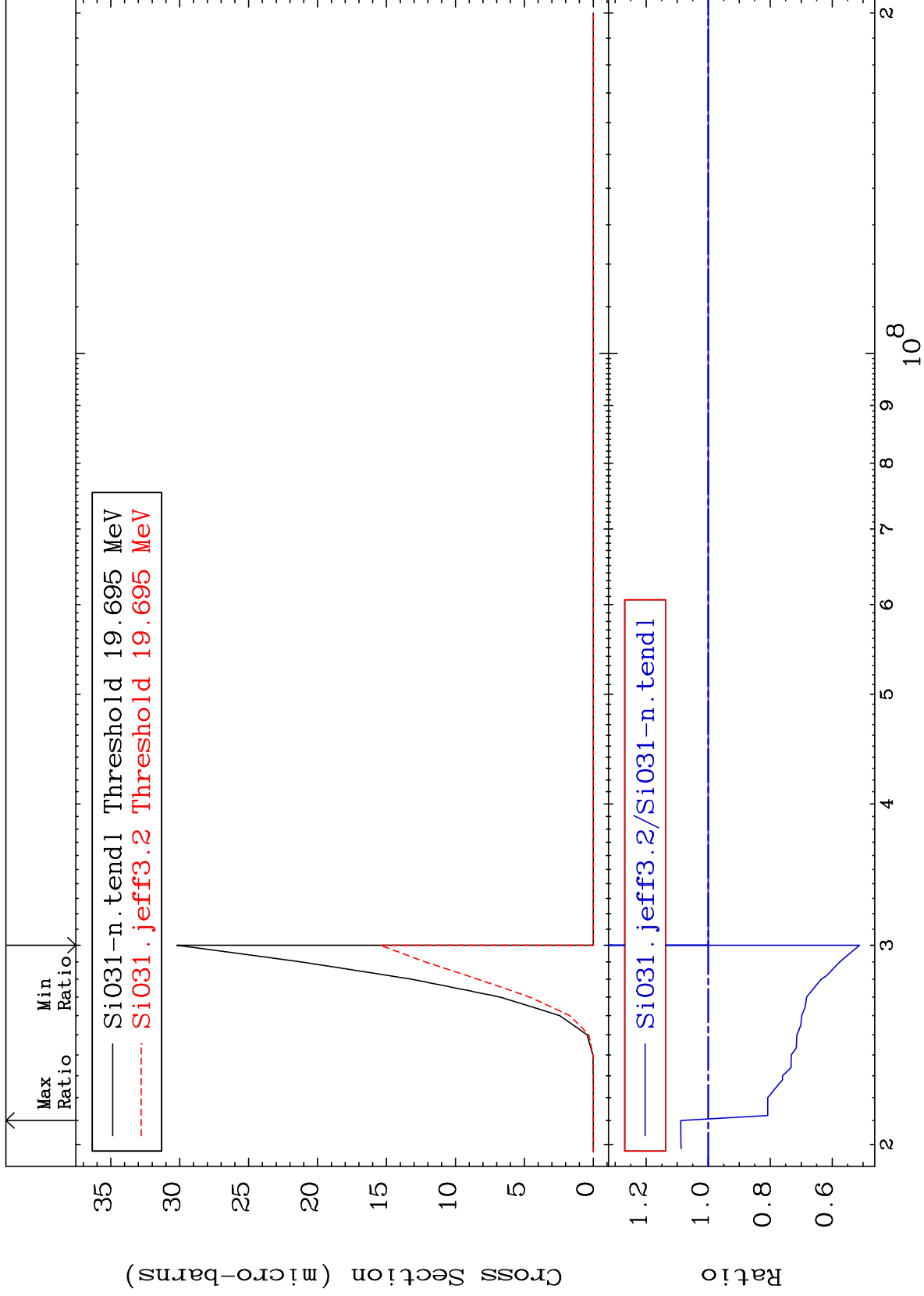
14-Si-31  
0.000 To 50.89 %



MAT 1434

(n,p)  $\alpha$   
Cross Section

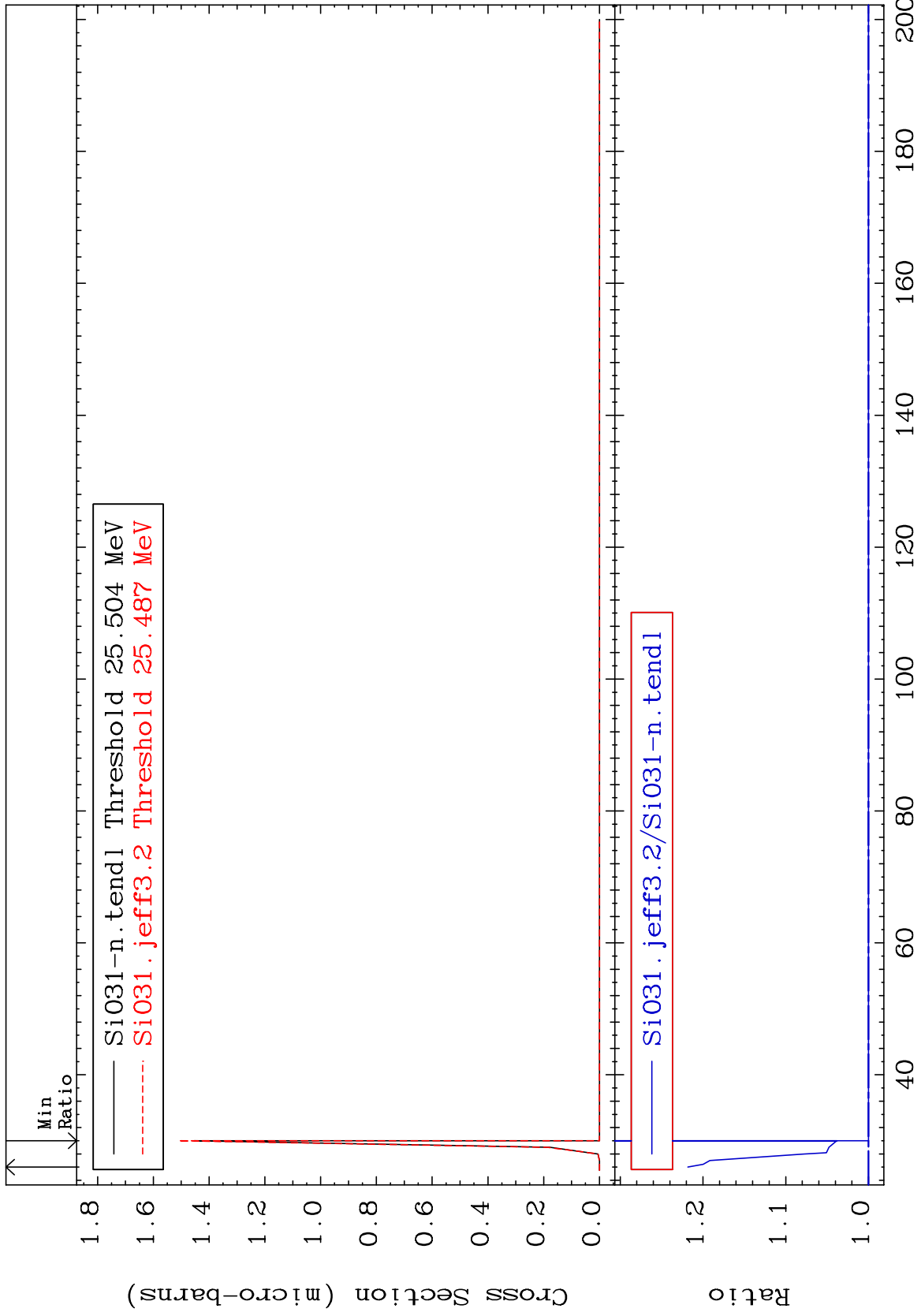
14-Si-31  
-48.83 To 8.859 %



MAT 1434

(n,p) d  
Cross Section

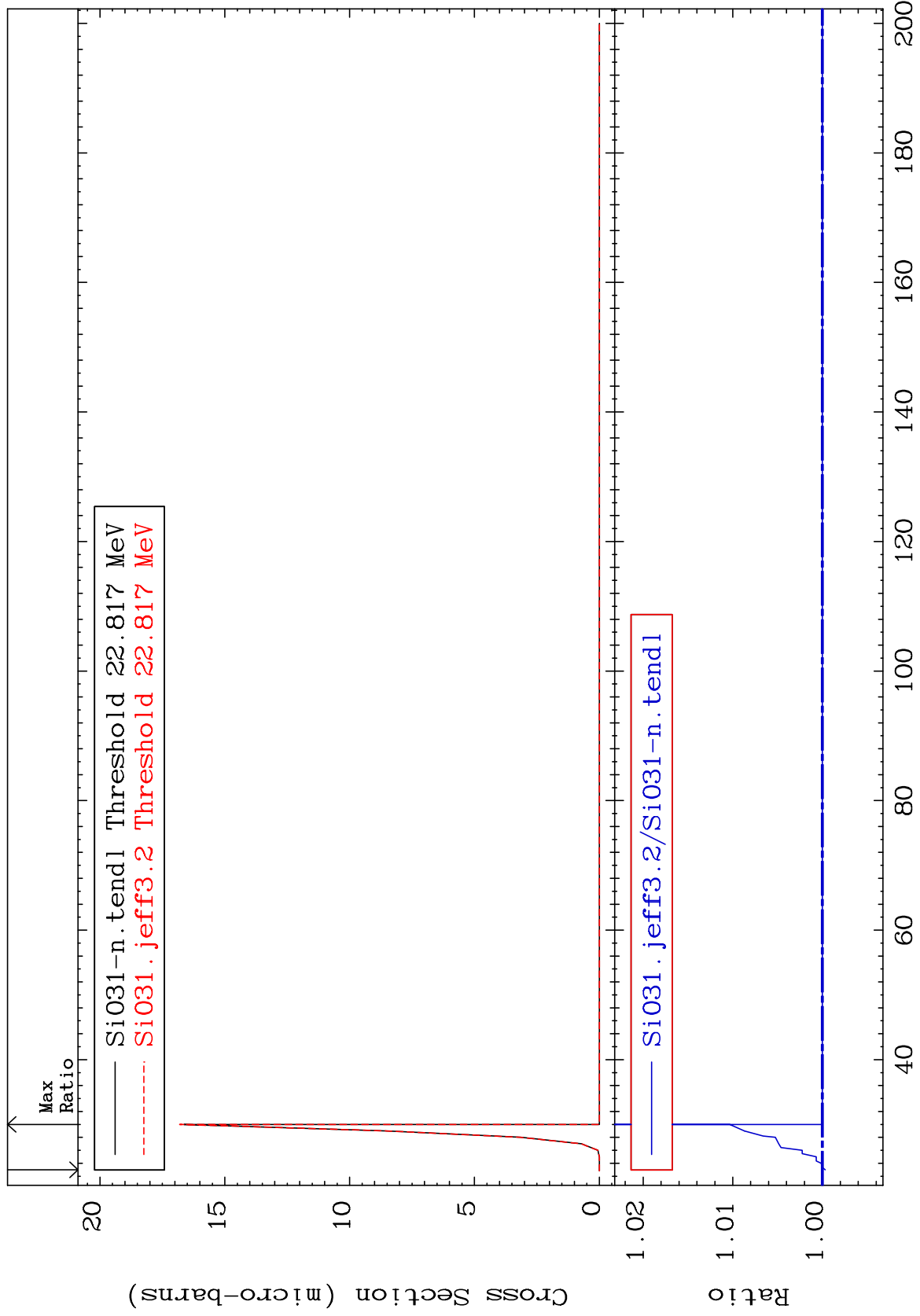
14-Si-31  
To 21.82 %  
0.000



MAT 1434

(n,p) t  
Cross Section

<sup>14</sup>Si-31  
-0.033 To 1.033 %

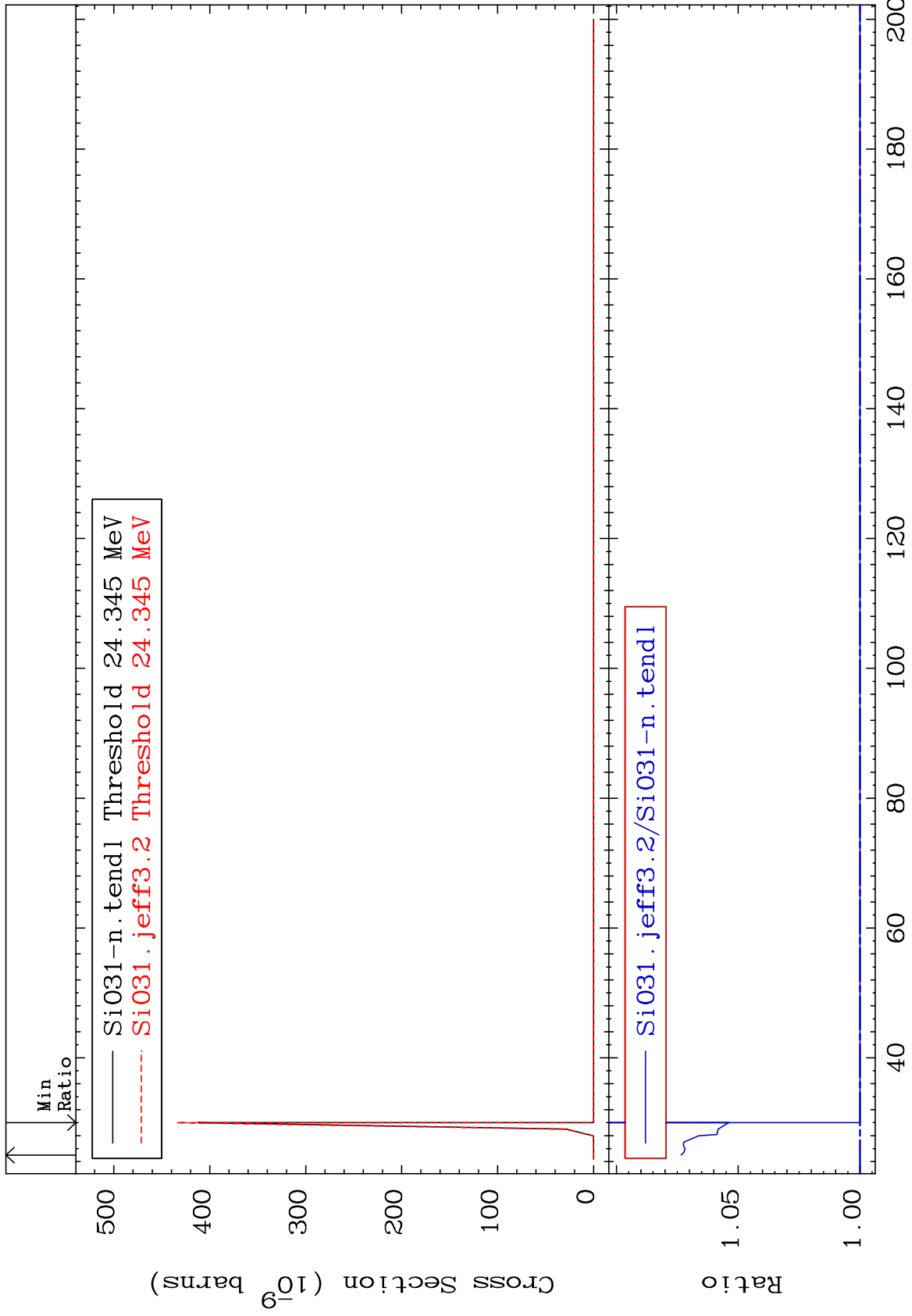




MAT 1434

(n,d)  $\alpha$   
Cross Section

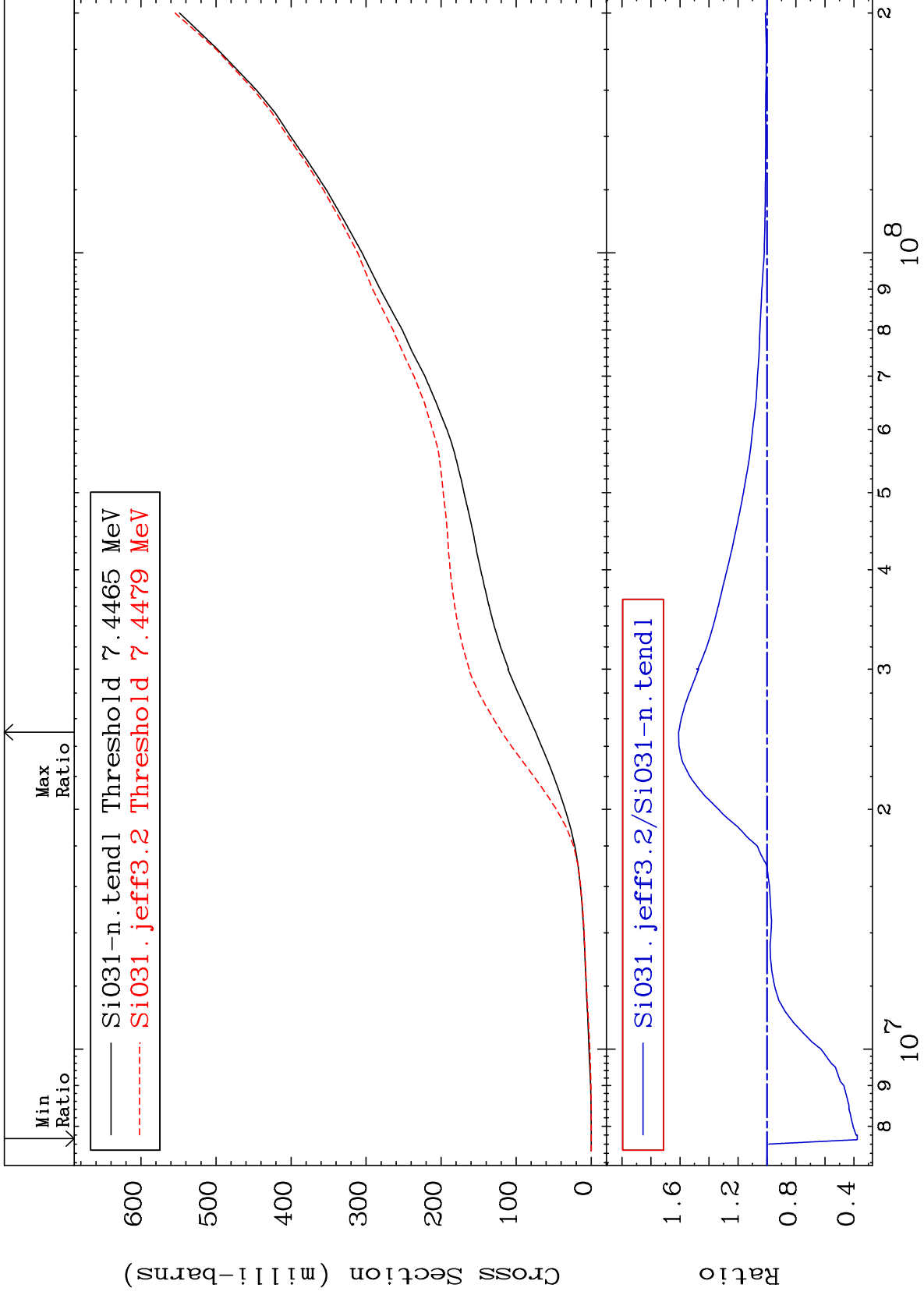
14-Si-31  
0.000 To 7.344 %



MAT 1434

Hydrogen Production  
Cross Section

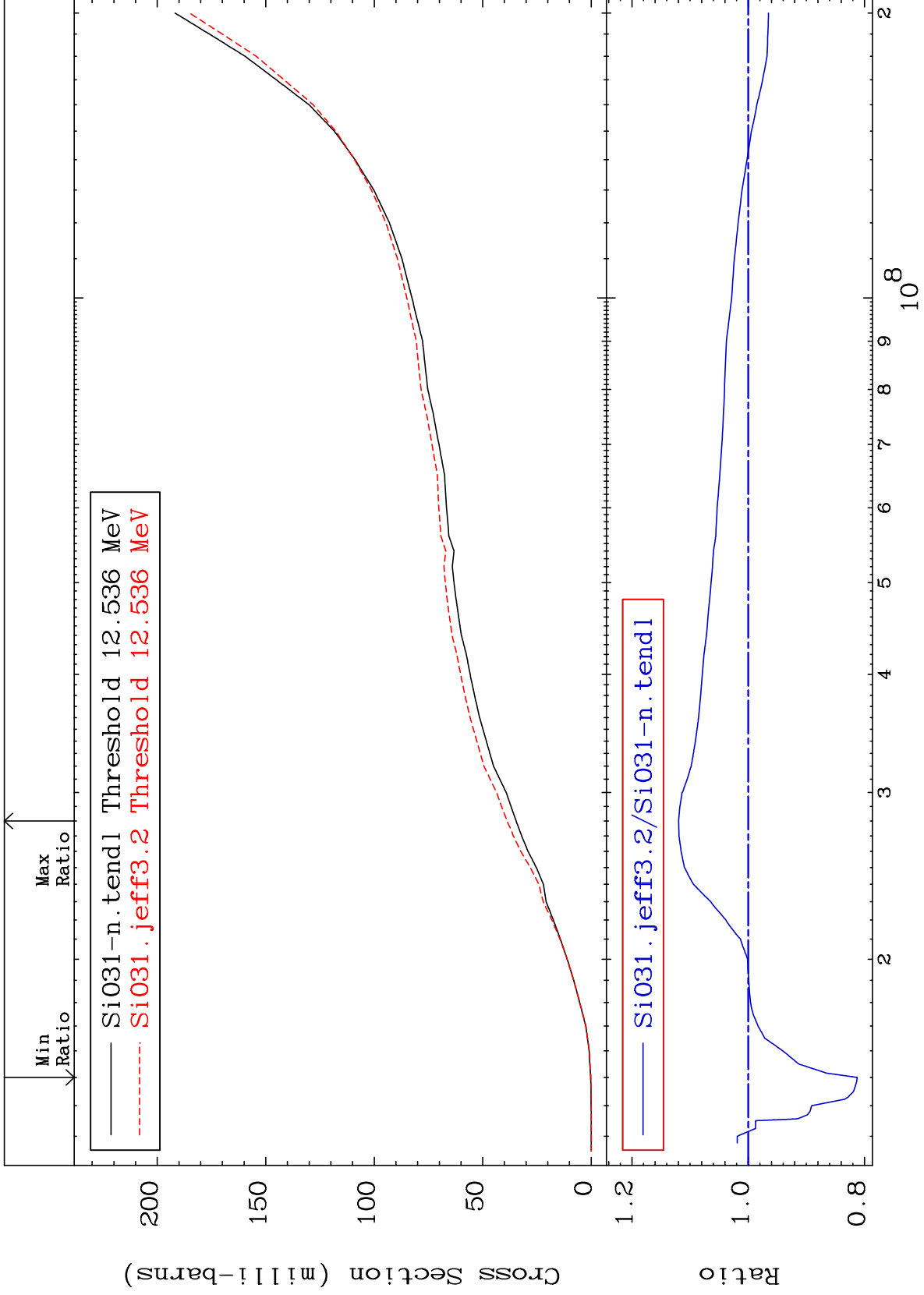
14-Si-31  
-62.24 To 60.93 %



MAT 1434

Deuterium Production  
Cross Section

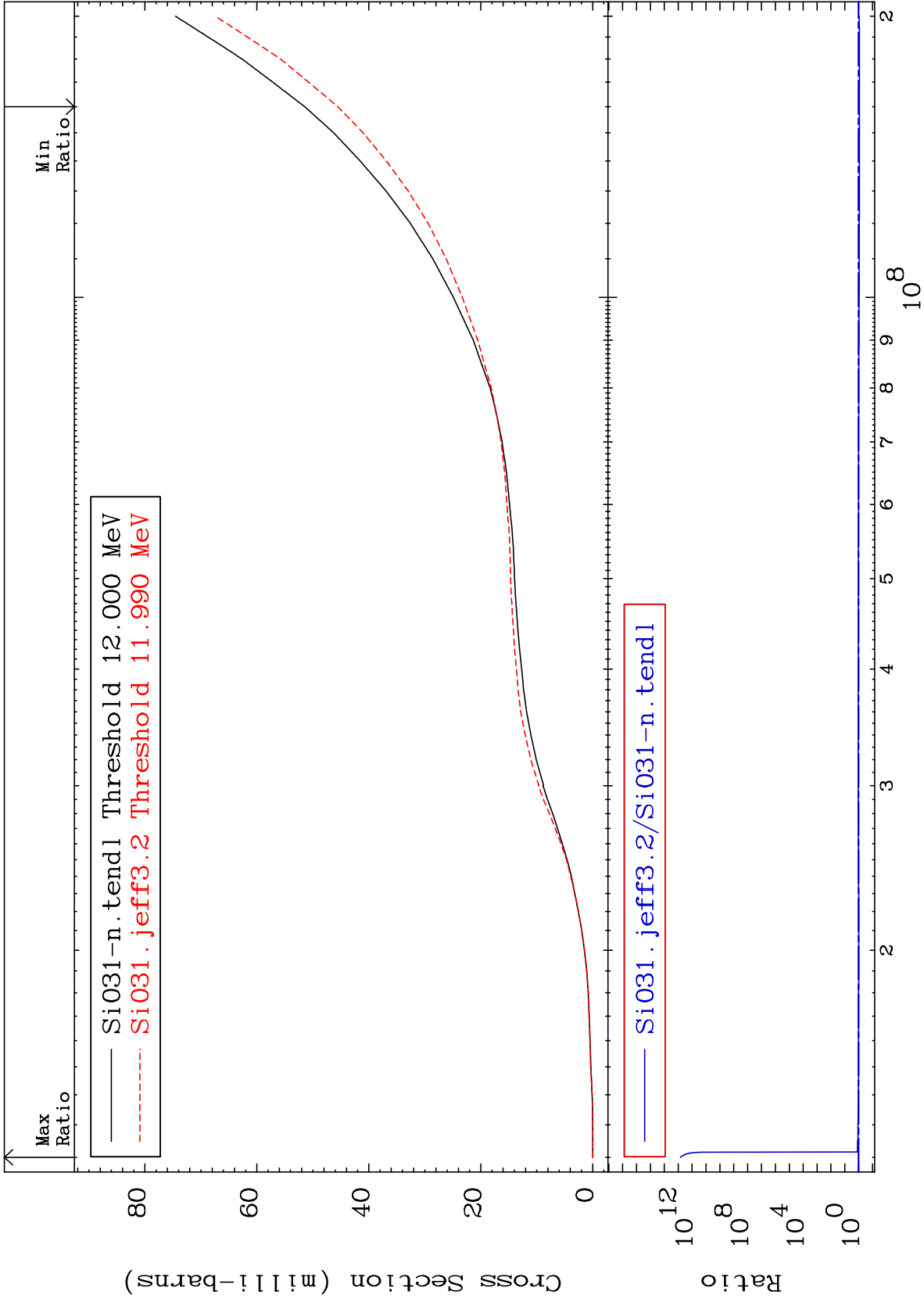
14-Si-31  
-18.75 To 11.96 %



MAT 1434

Tritium Production  
Cross Section

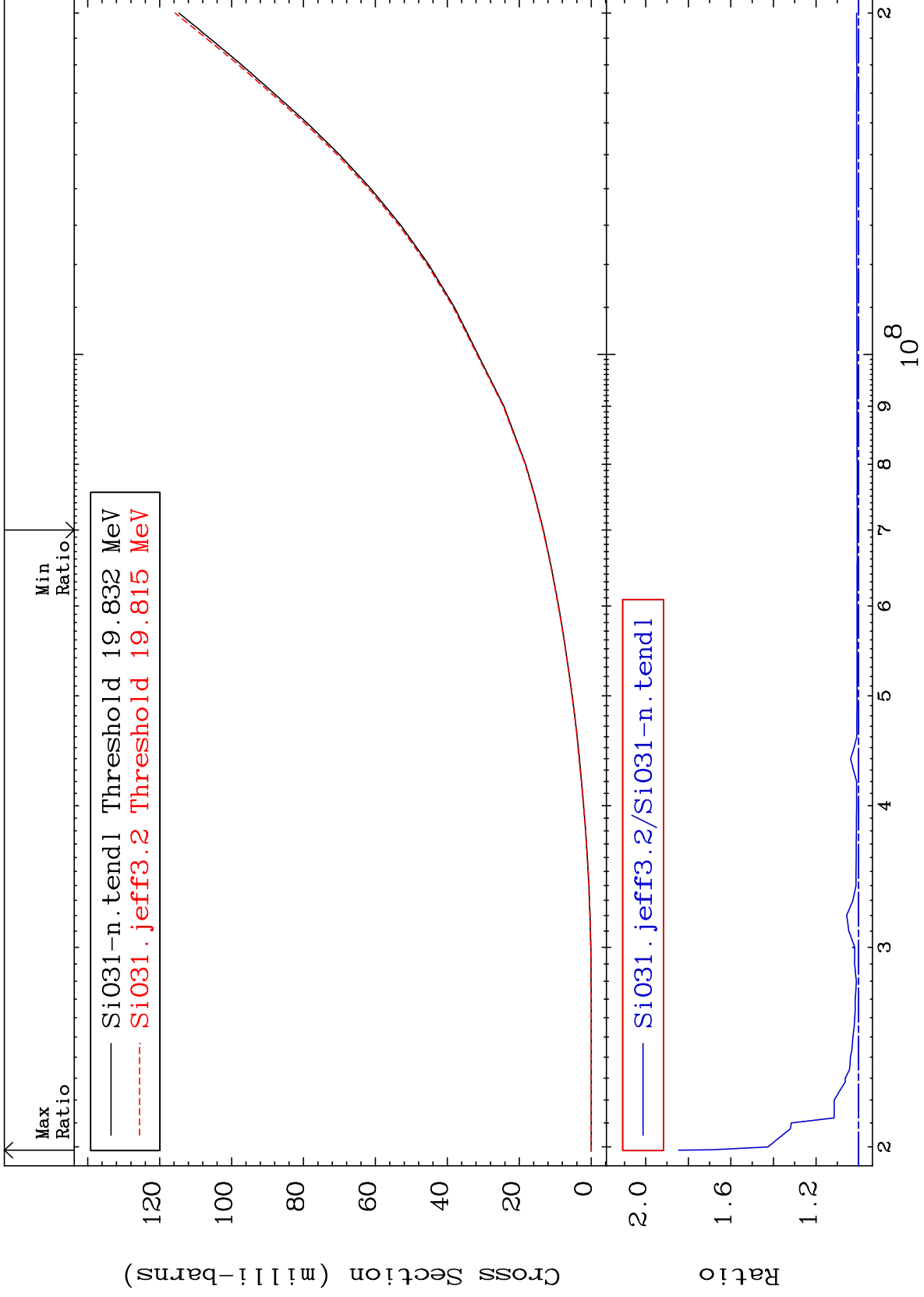
14-Si-31  
-11.49 To 9999. %



MAT 1434

He-3 Production  
Cross Section

14-Si-31  
0.618 To 84.55 %



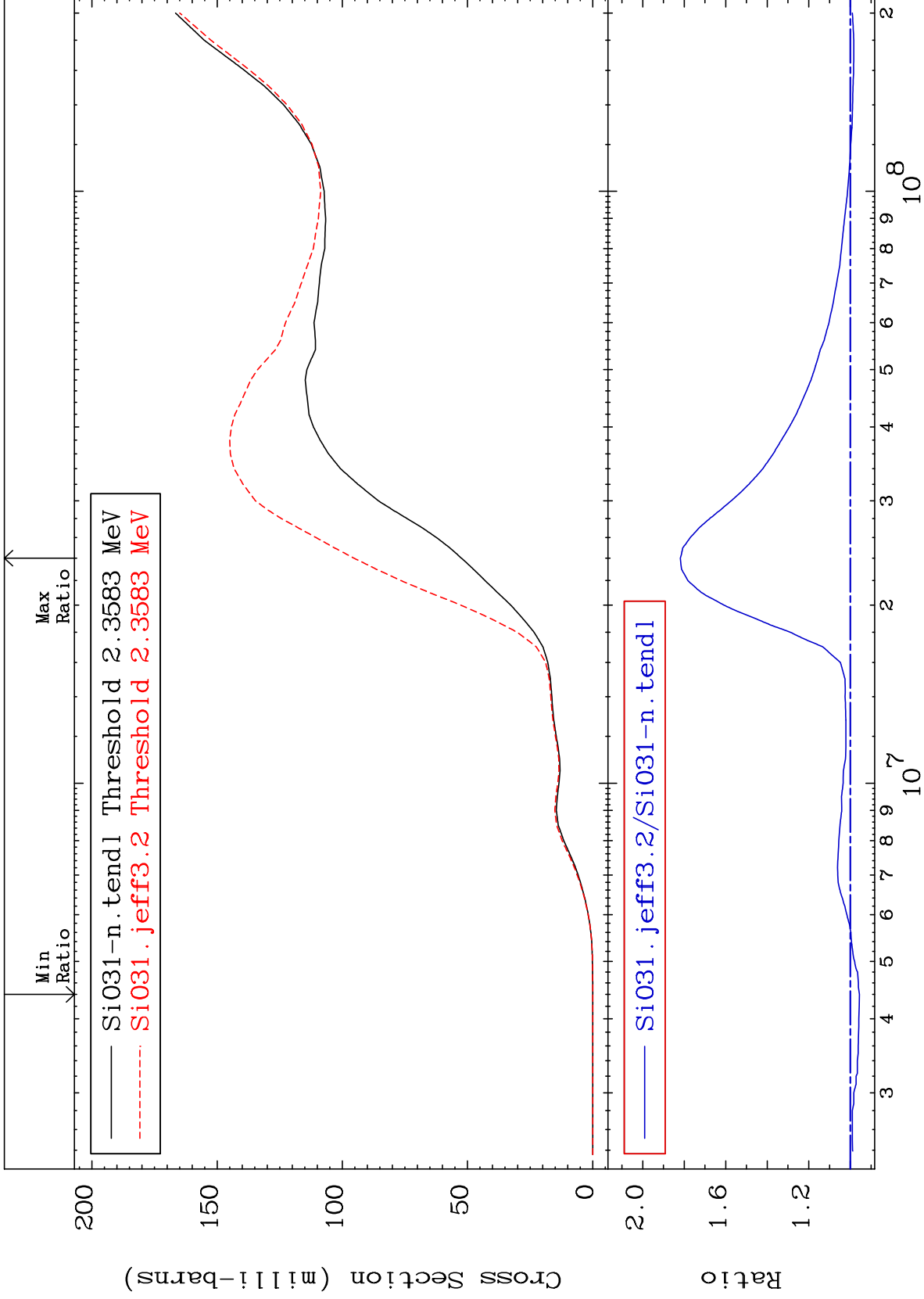
61

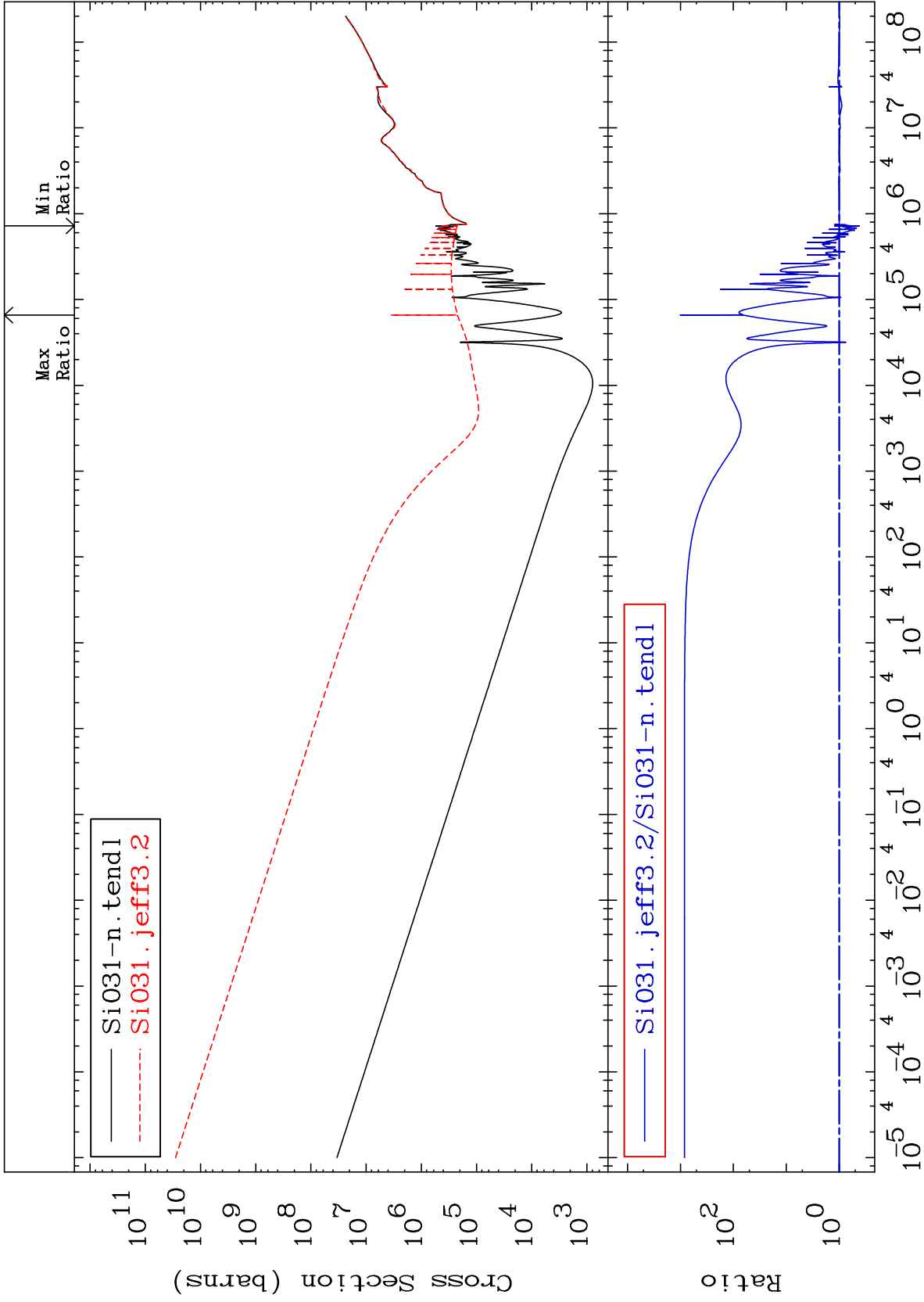
14-Si-31

MAT 1434

He-4 Production  
Cross Section

14-Si-31  
-4.406 To 81.86 %

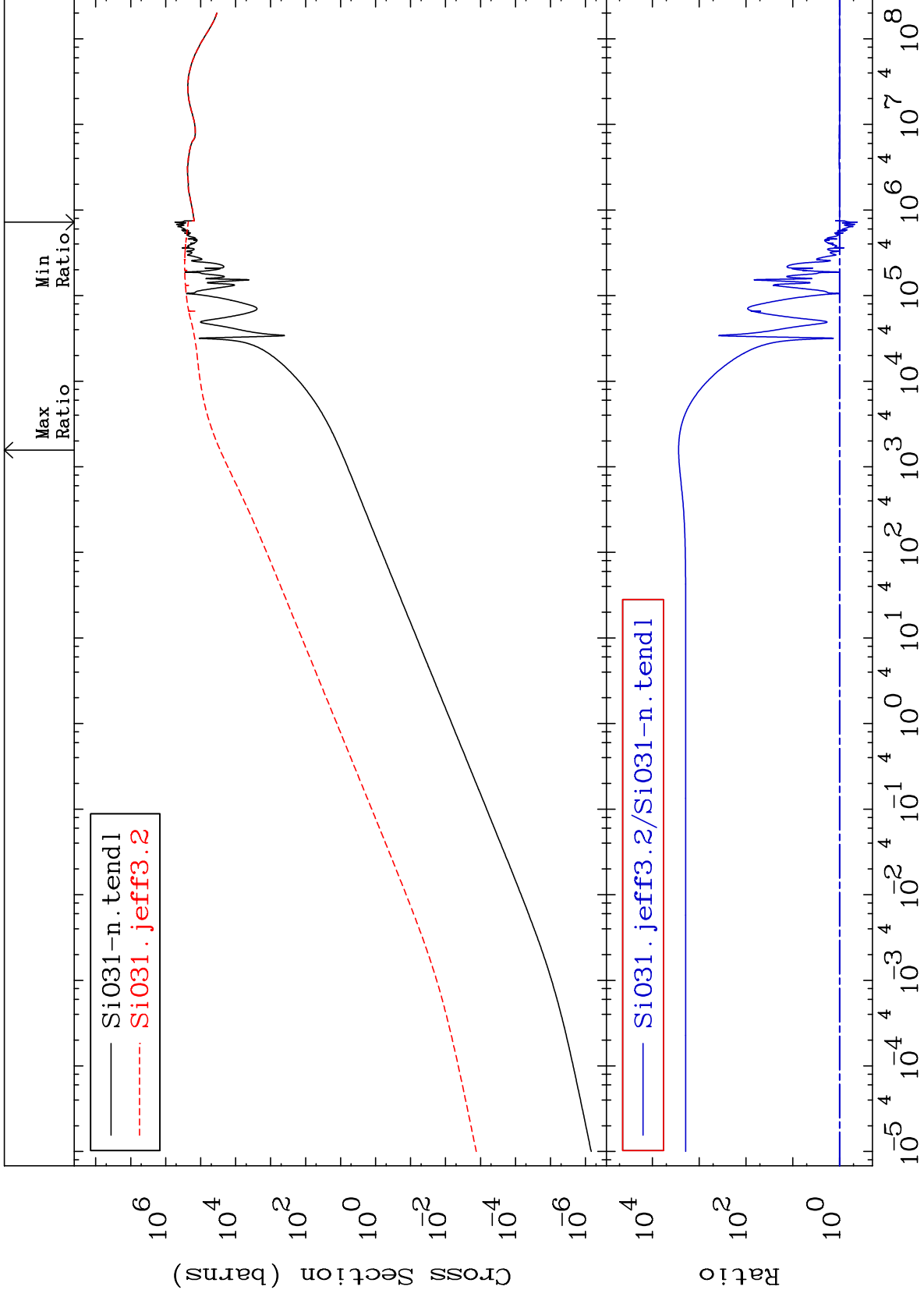




MAT 1434

Kerma elastic  
Cross Section

14-Si-31  
-58.21 To 9999. %



64

Incident Energy (eV)

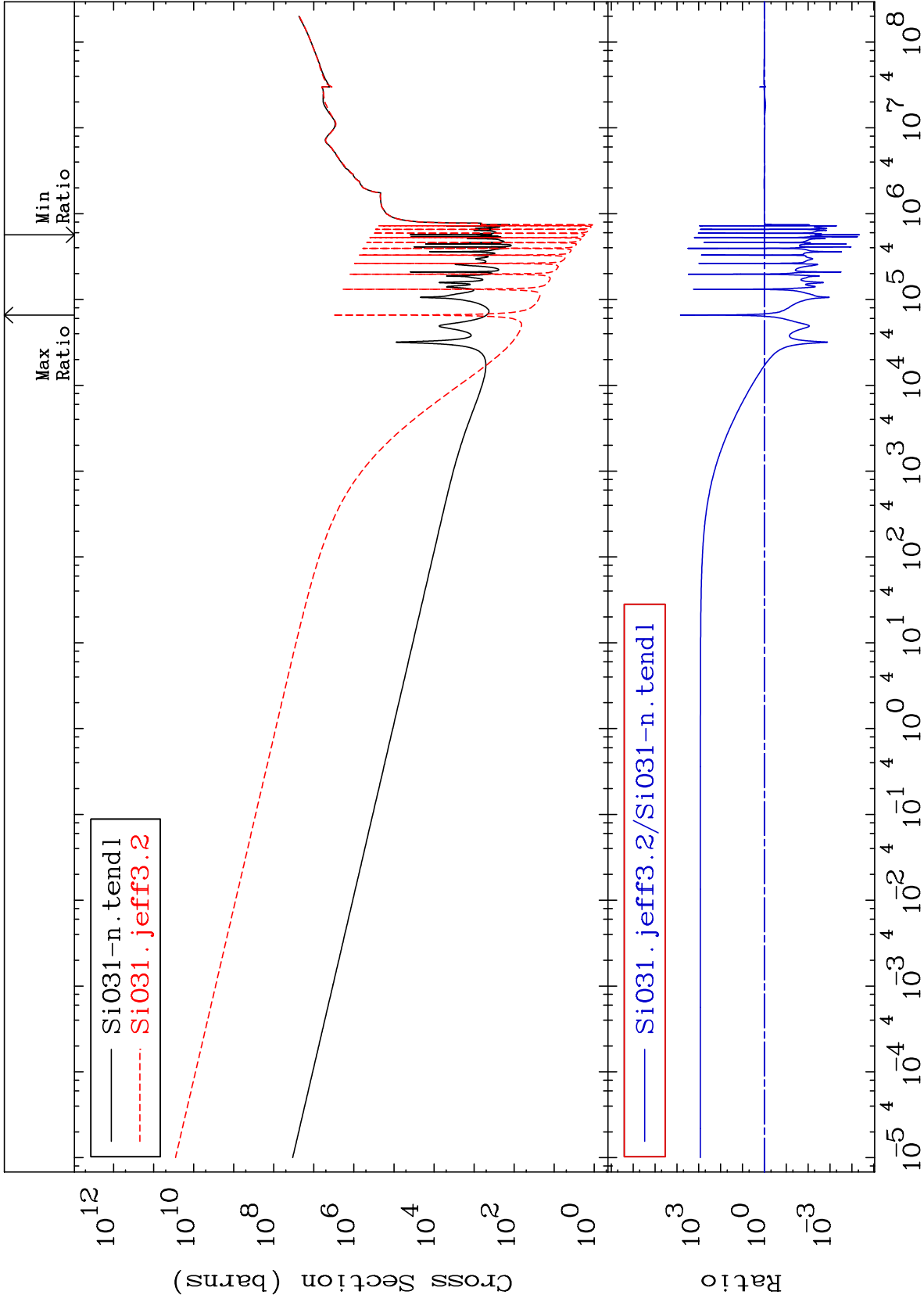
14-Si-31



MAT 1434

Kerma non-elastic (all but mt2)  
Cross Section

14-Si-31  
-100.0 To 9999. %



65

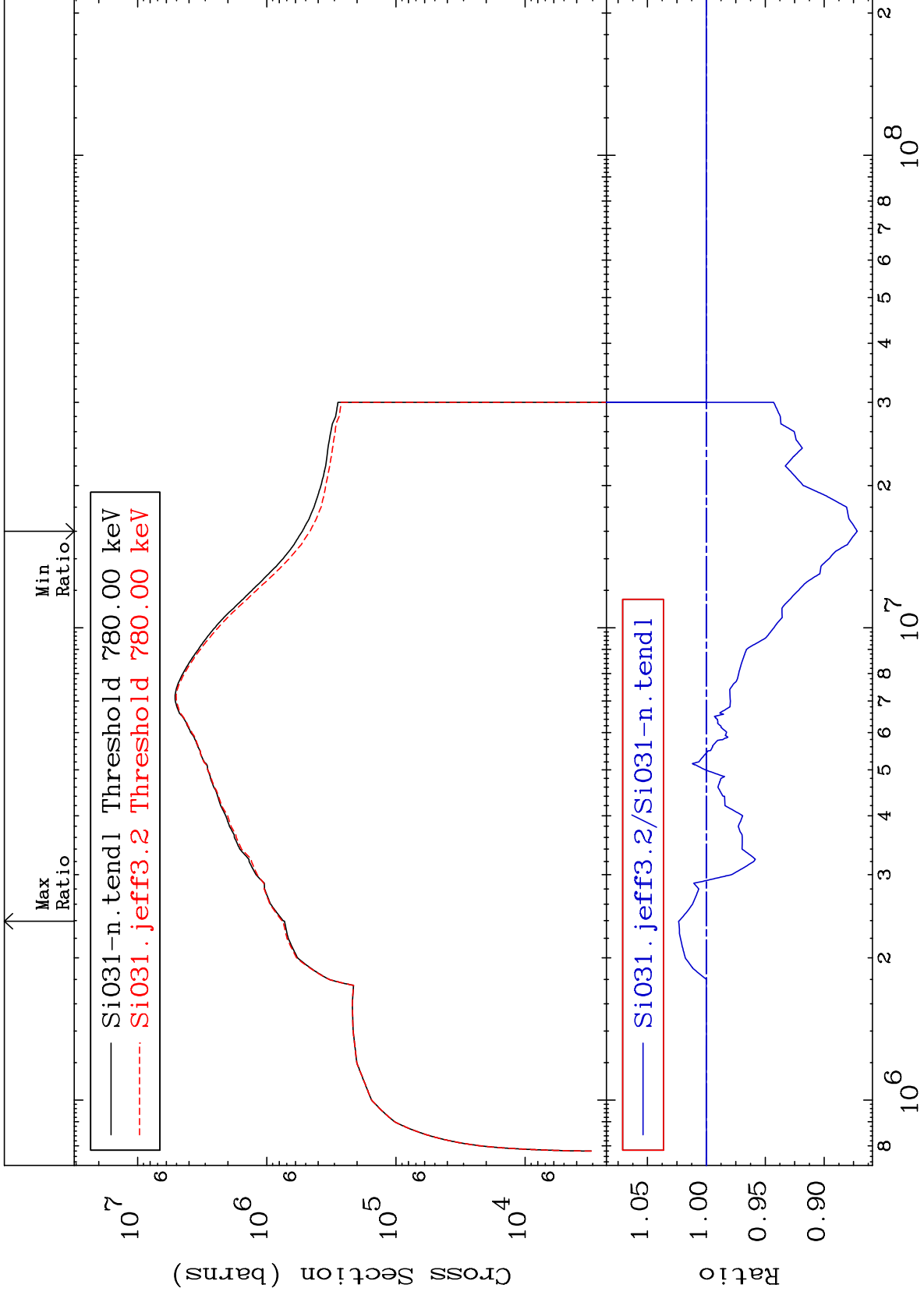
Incident Energy (eV)

14-Si-31

MAT 1434

Kerma inelastic (mt51-91)  
Cross Section

14-Si-31  
-12.81 To 2.353 %



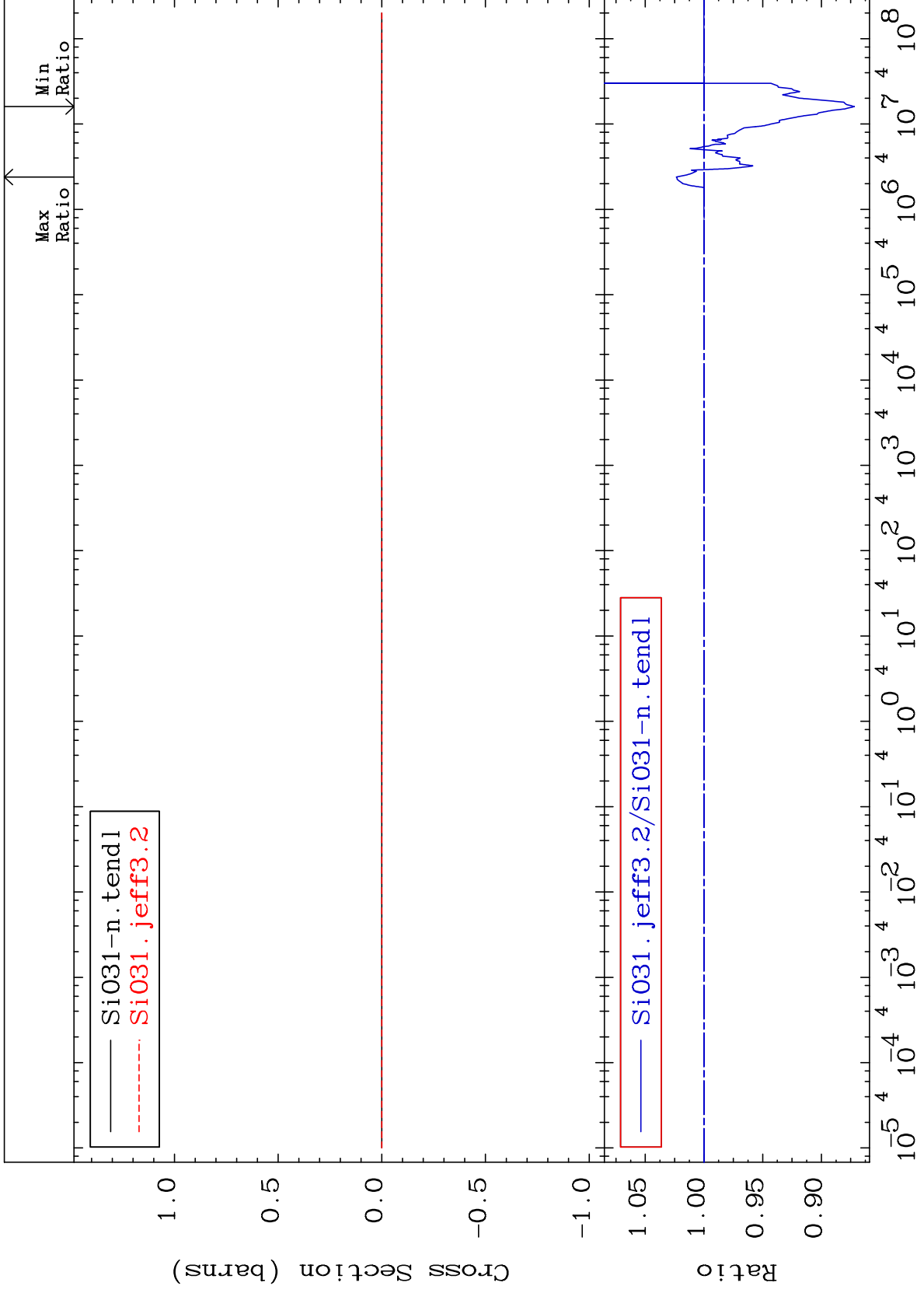
66

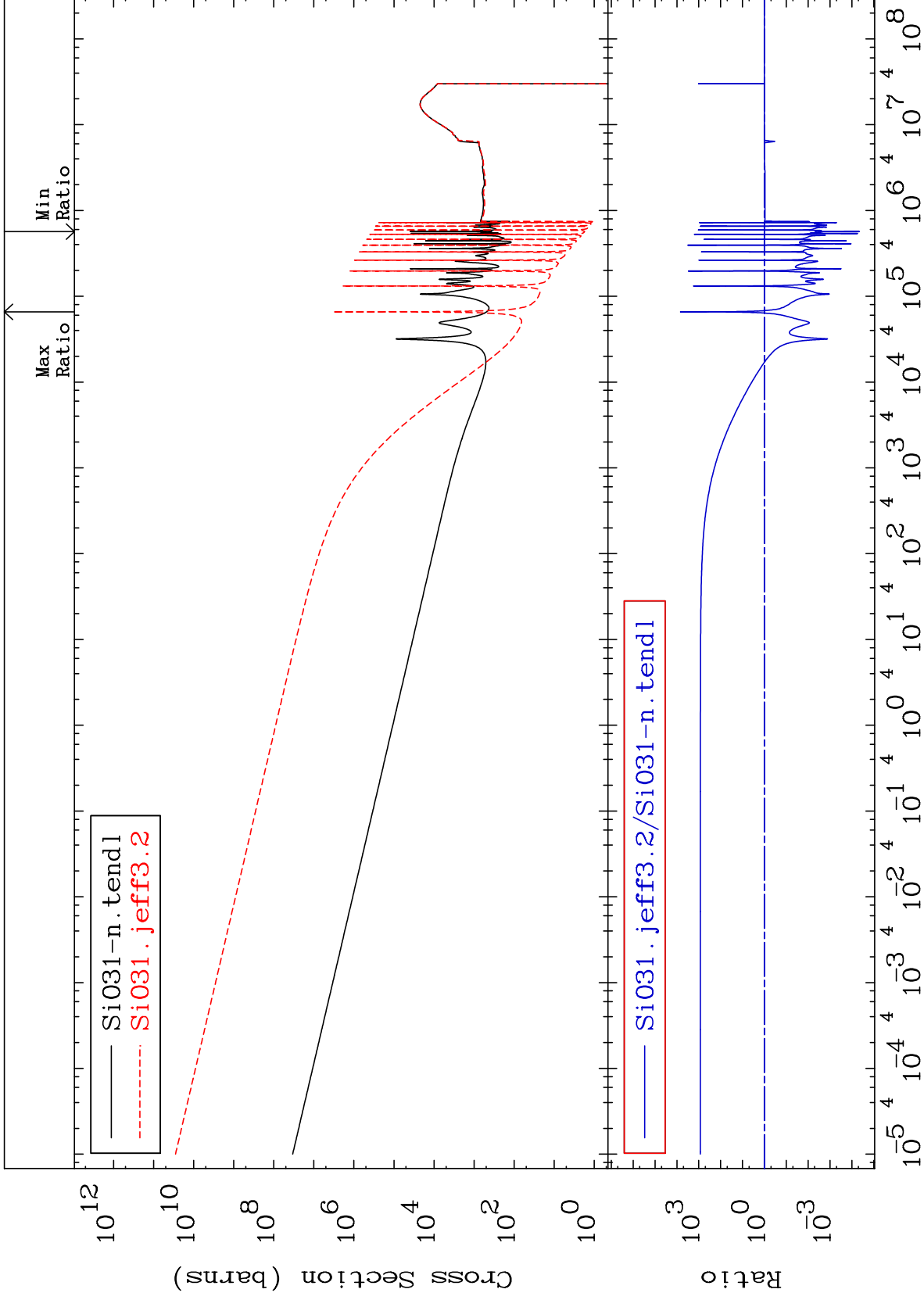
14-Si-31

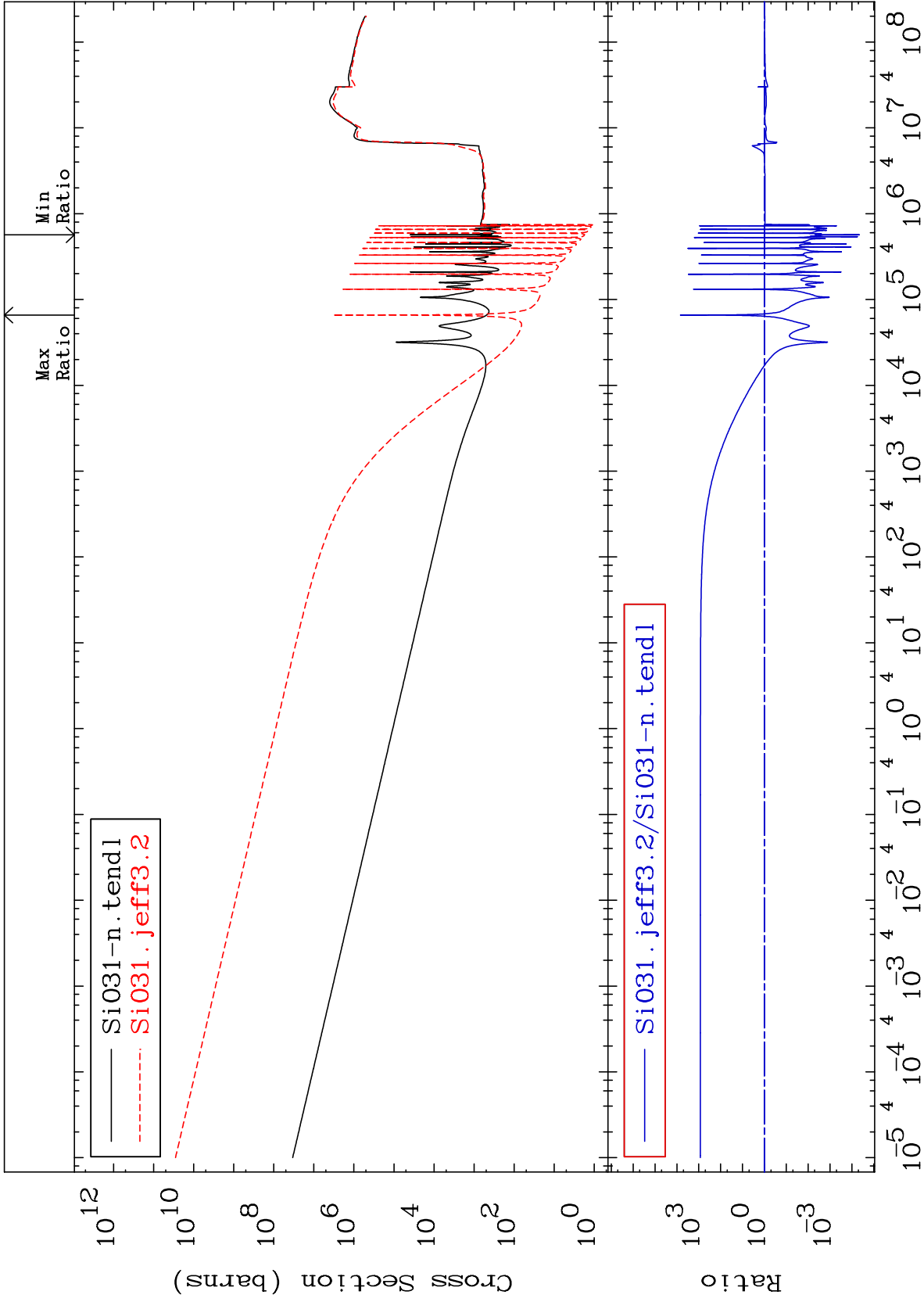
MAT 1434

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

14-Si-31  
-12.81 To 2.353 %



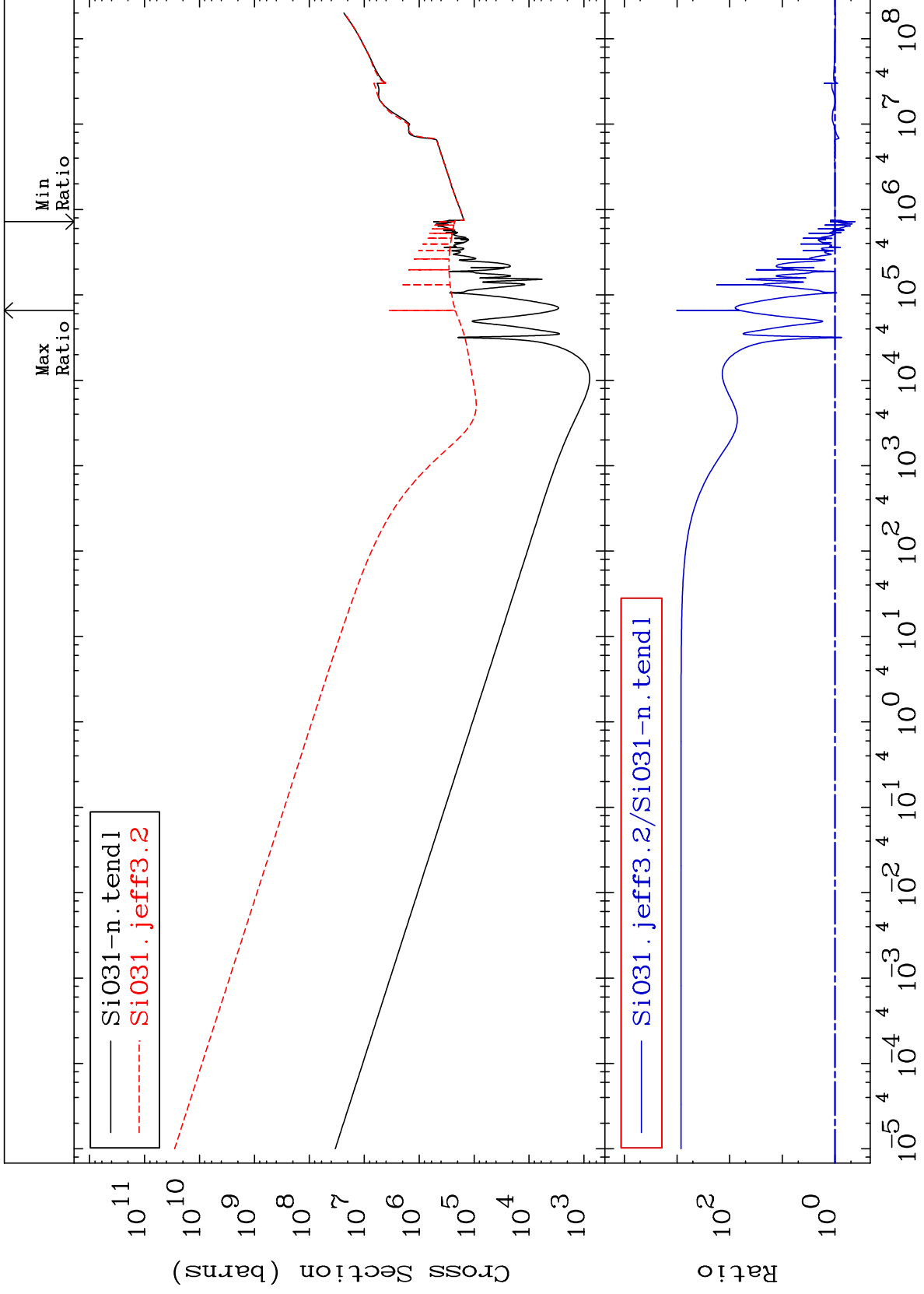




MAT 1434

Total kinematic kerma (high limit)  
Cross Section

14-Si-31  
-58.48 To 9999. %



70

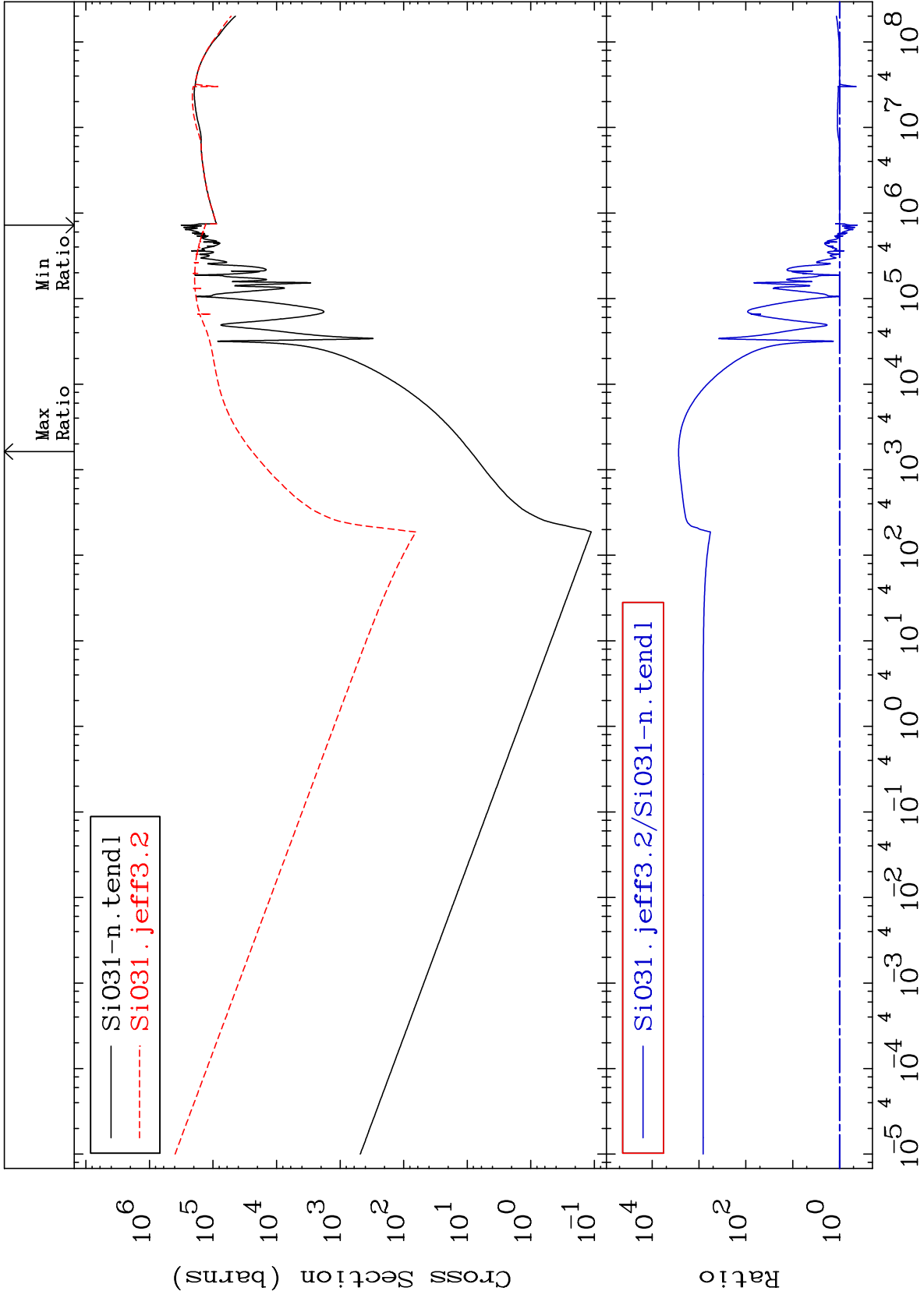
Incident Energy (eV)

14-Si-31

MAT 1434

Dpa total (eV-barns)  
Cross Section

14-Si-31  
-58.21 To 9999. %



71

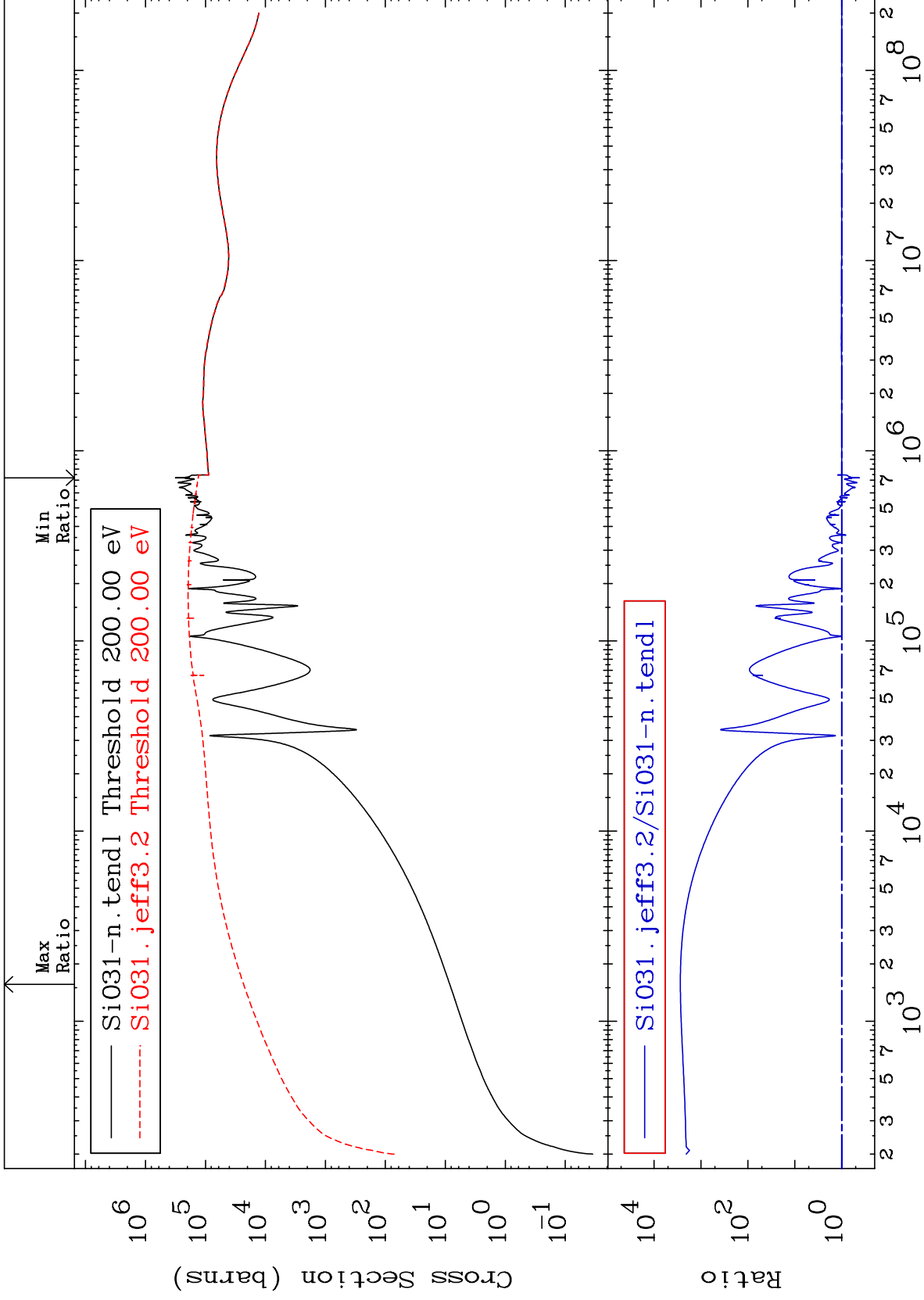
Incident Energy (eV)

14-Si-31

MAT 1434

Dpa elastic (mt2)  
Cross Section

14-Si-31  
-58.21 To 9999. %

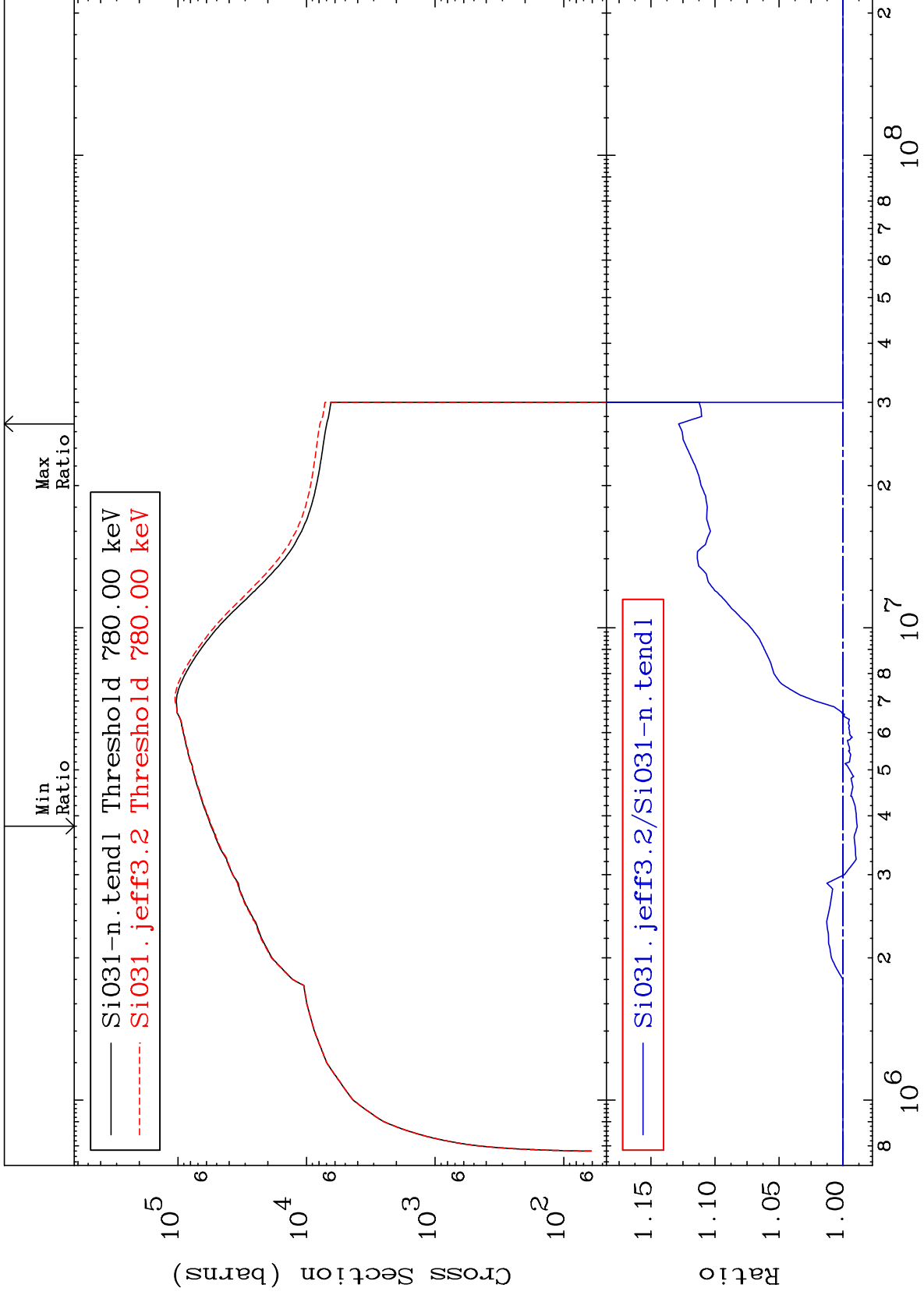




MAT 1434

Dpa inelastic (mt51-91)  
Cross Section

14-Si-31  
-1.114 To 12.84 %



73

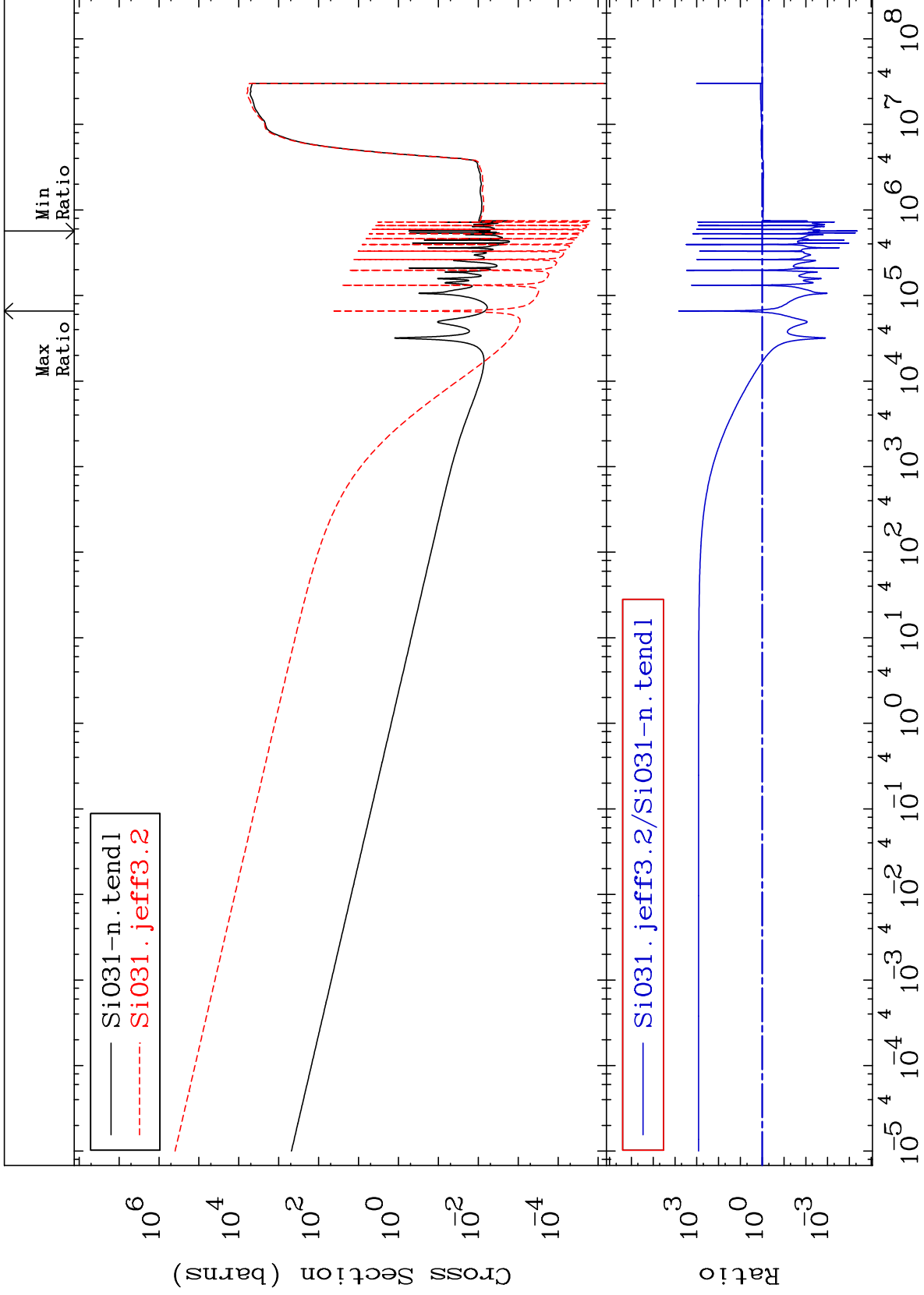
Incident Energy (eV)

14-Si-31

MAT 1434

Dpa disappearance (mt102 -120)  
Cross Section

14-Si-31  
-100.0 To 9999. %



74

Incident Energy (eV)

14-Si-31