

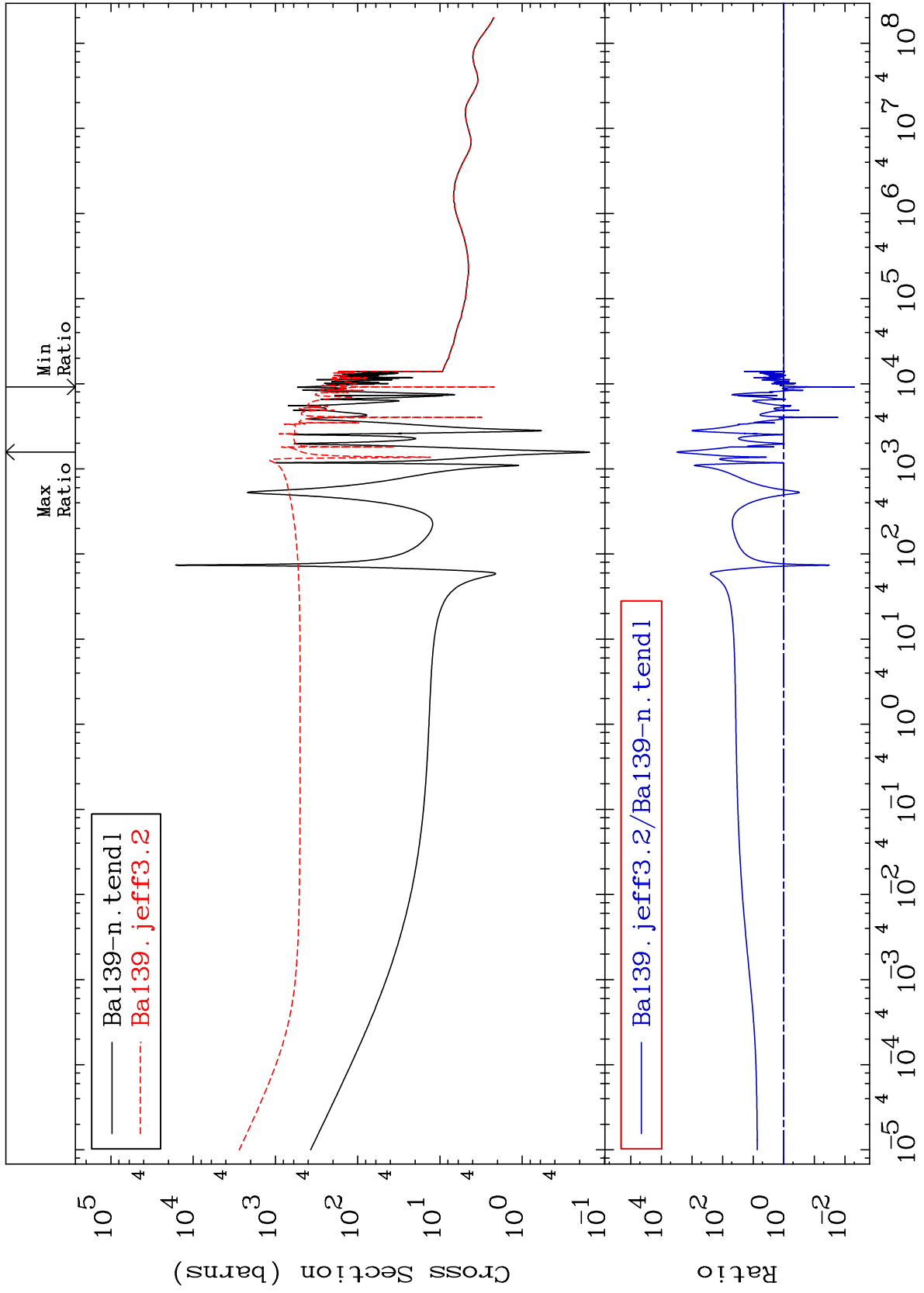
MAT 5652

Total

56-Ba-139

Cross Section

-99.51 To 9999. %



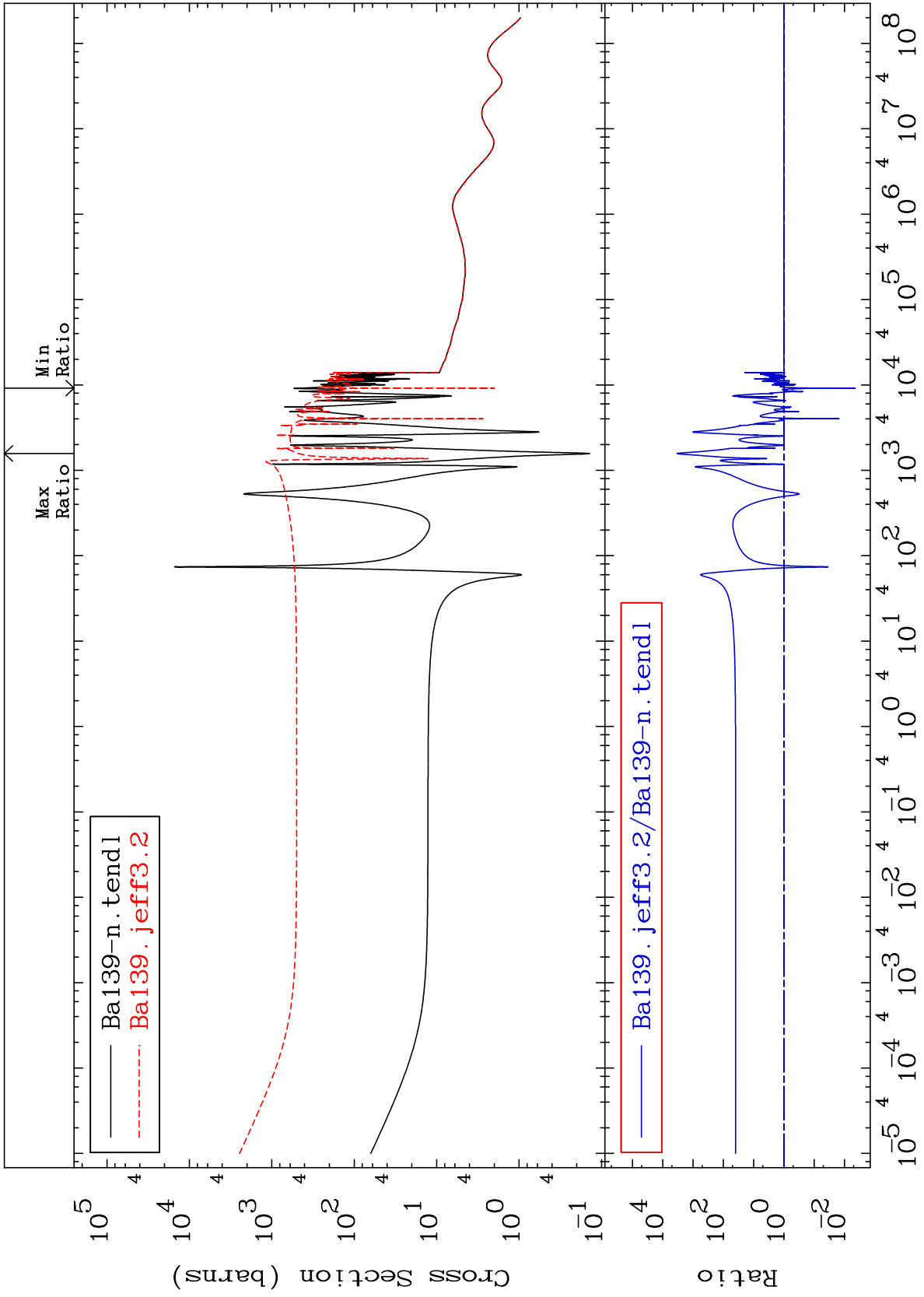
Incident Energy (eV)

56-Ba-139

MAT 5652

Elastic
Cross Section

56-Ba-139
-99.55 To 9999. %



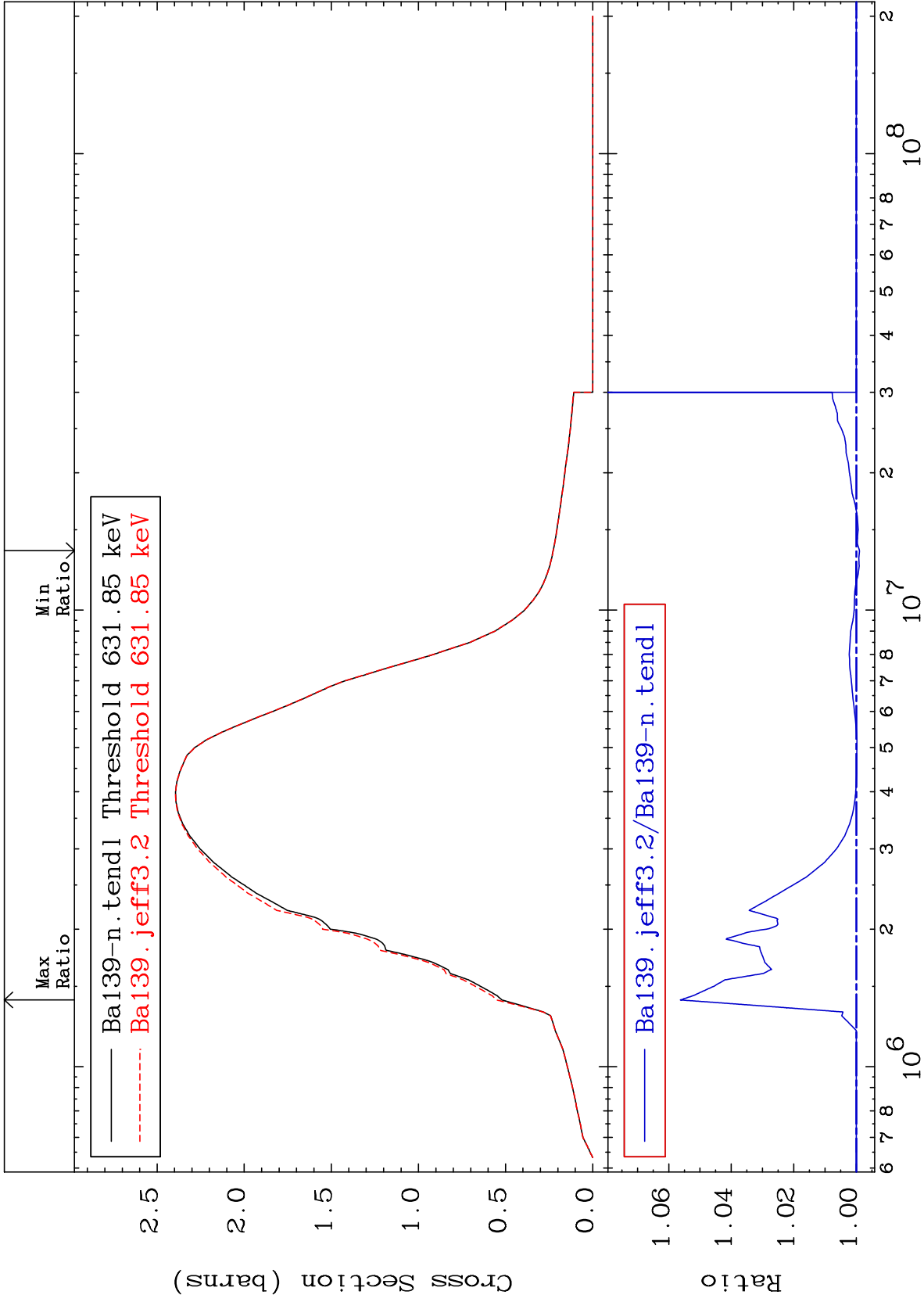
Incident Energy (eV)

56-Ba-139

MAT 5652

Inelastic
Cross Section

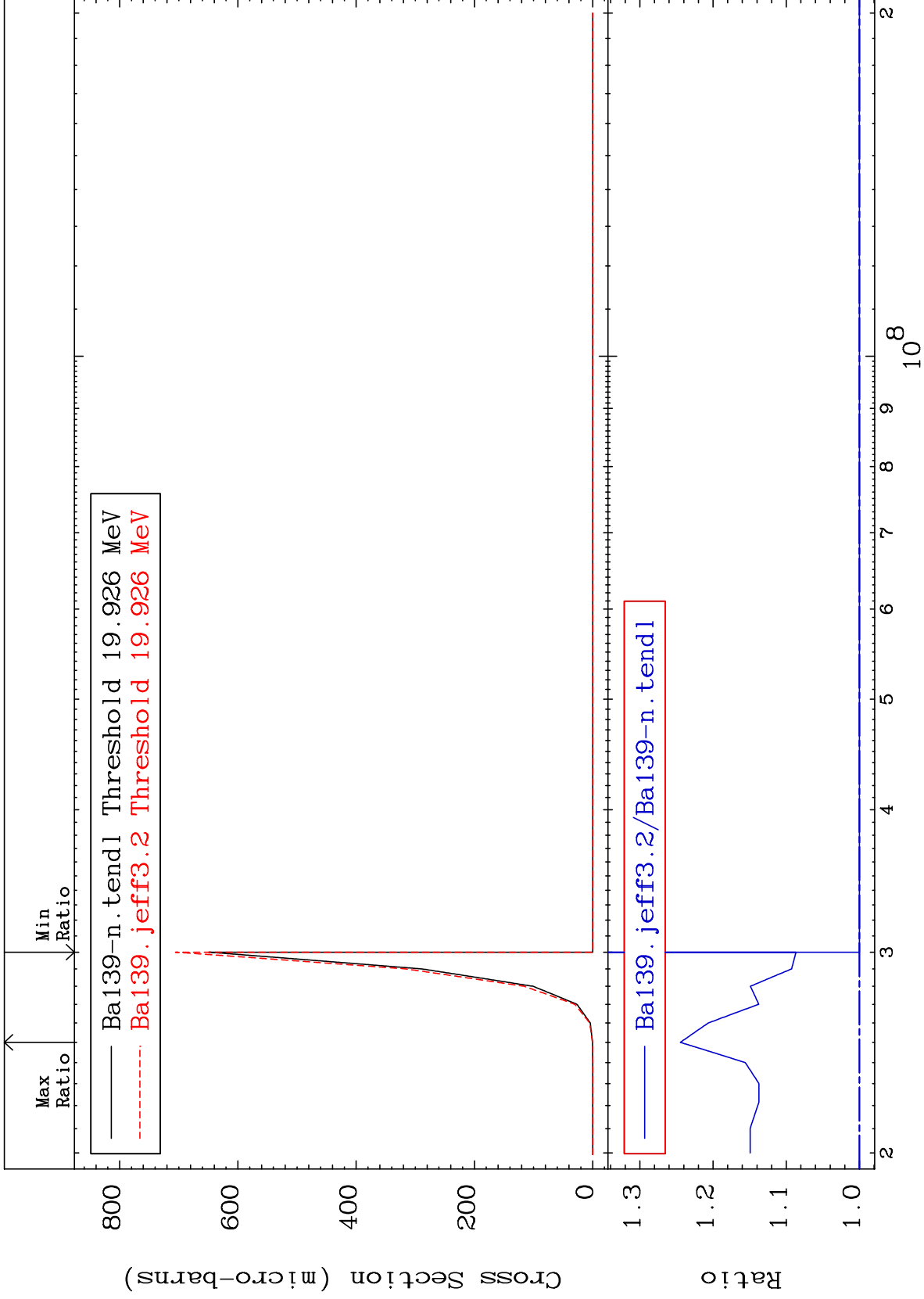
56-Ba-139
-0.099 To 5.629 %



MAT 5652

(n,2n) d
Cross Section

56-Ba-139
0.000 To 24.47 %



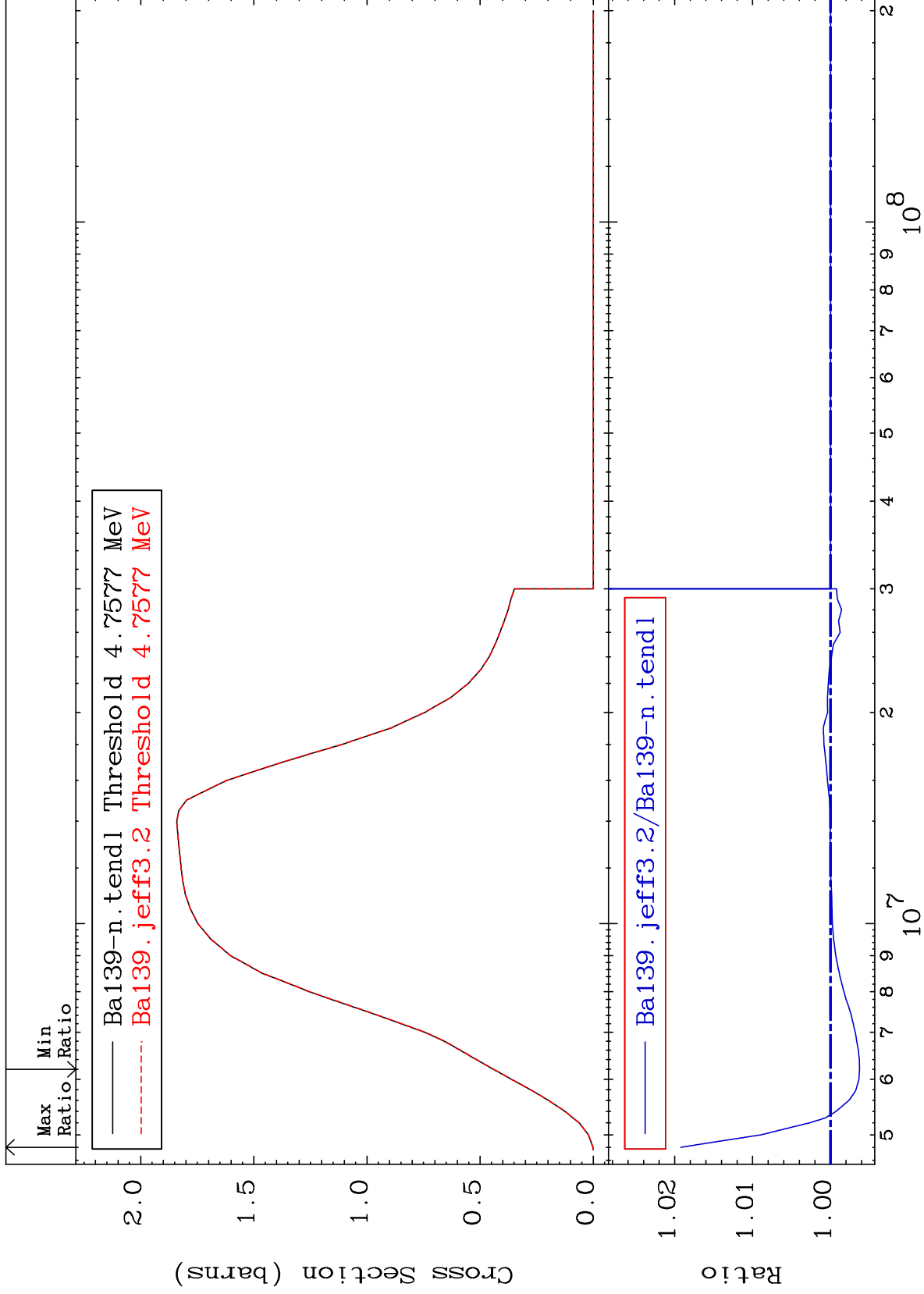
MAT 5652

(n,2n)

56-Ba-139

Cross Section

-0.373 To 1.923 %



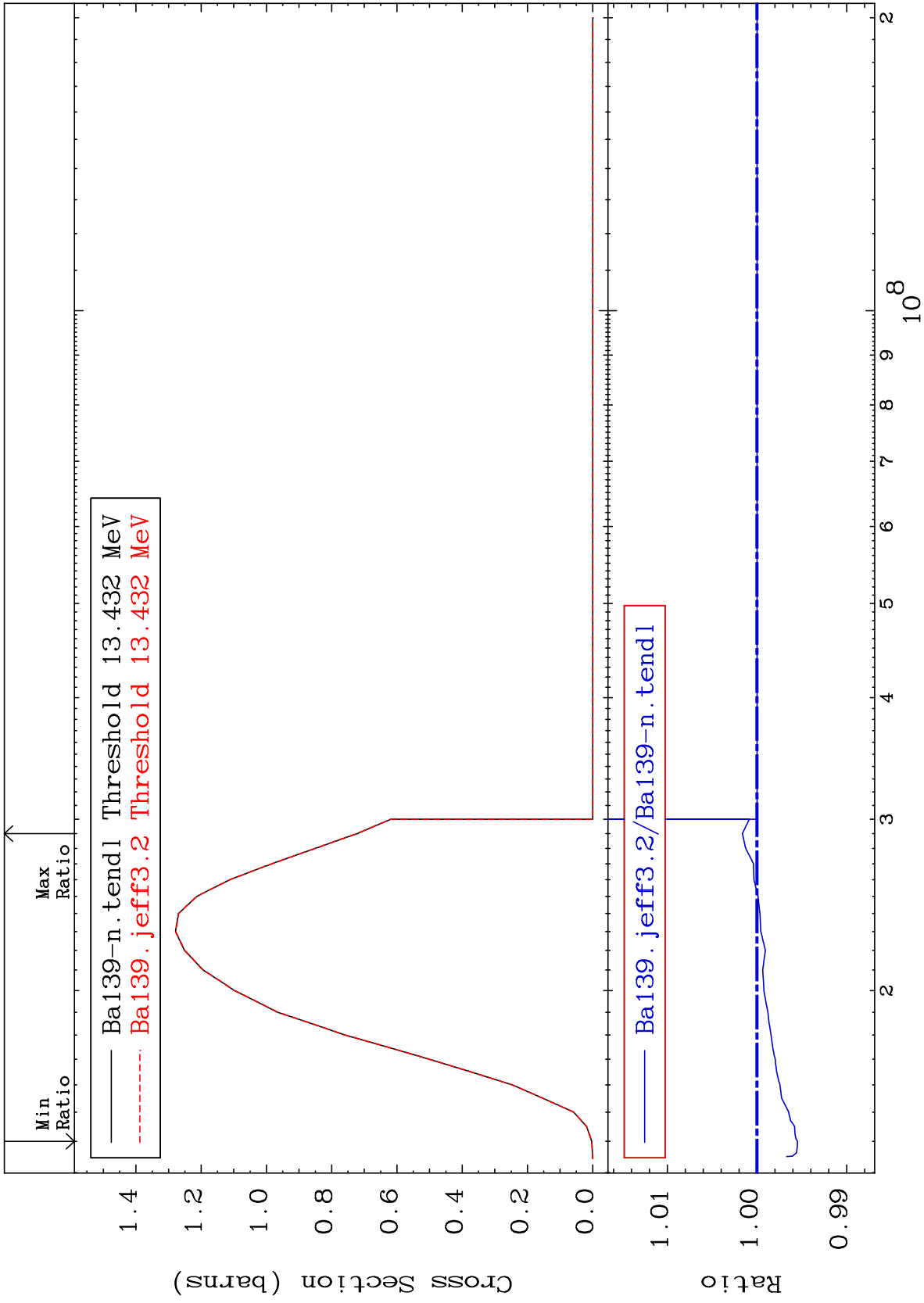
MAT 5652

(n,3n)

56-Ba-139

Cross Section

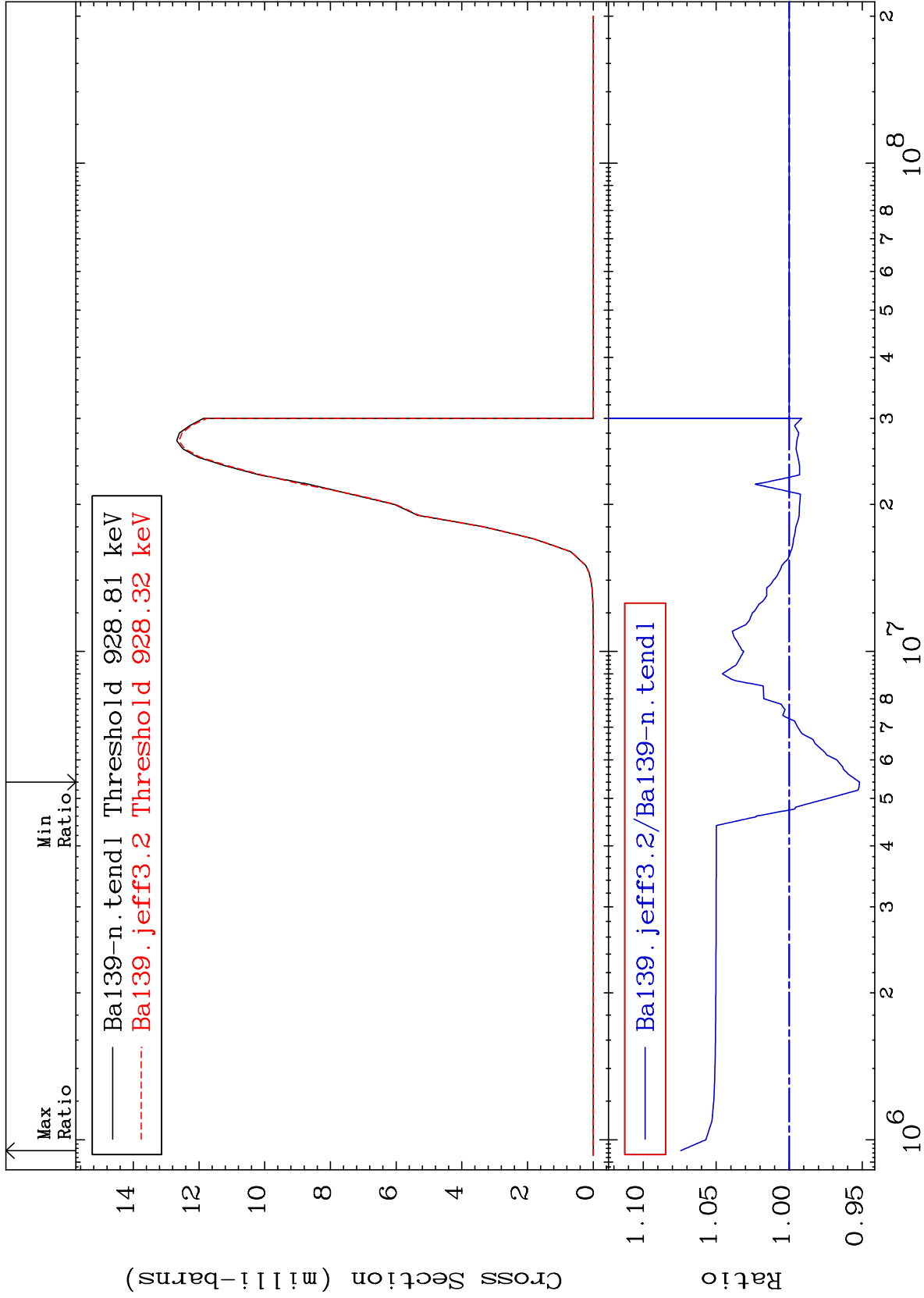
-0.451 To 0.163 %



MAT 5652

(n, n') α
Cross Section

56-Ba-139
-4.812 To 7.425 %



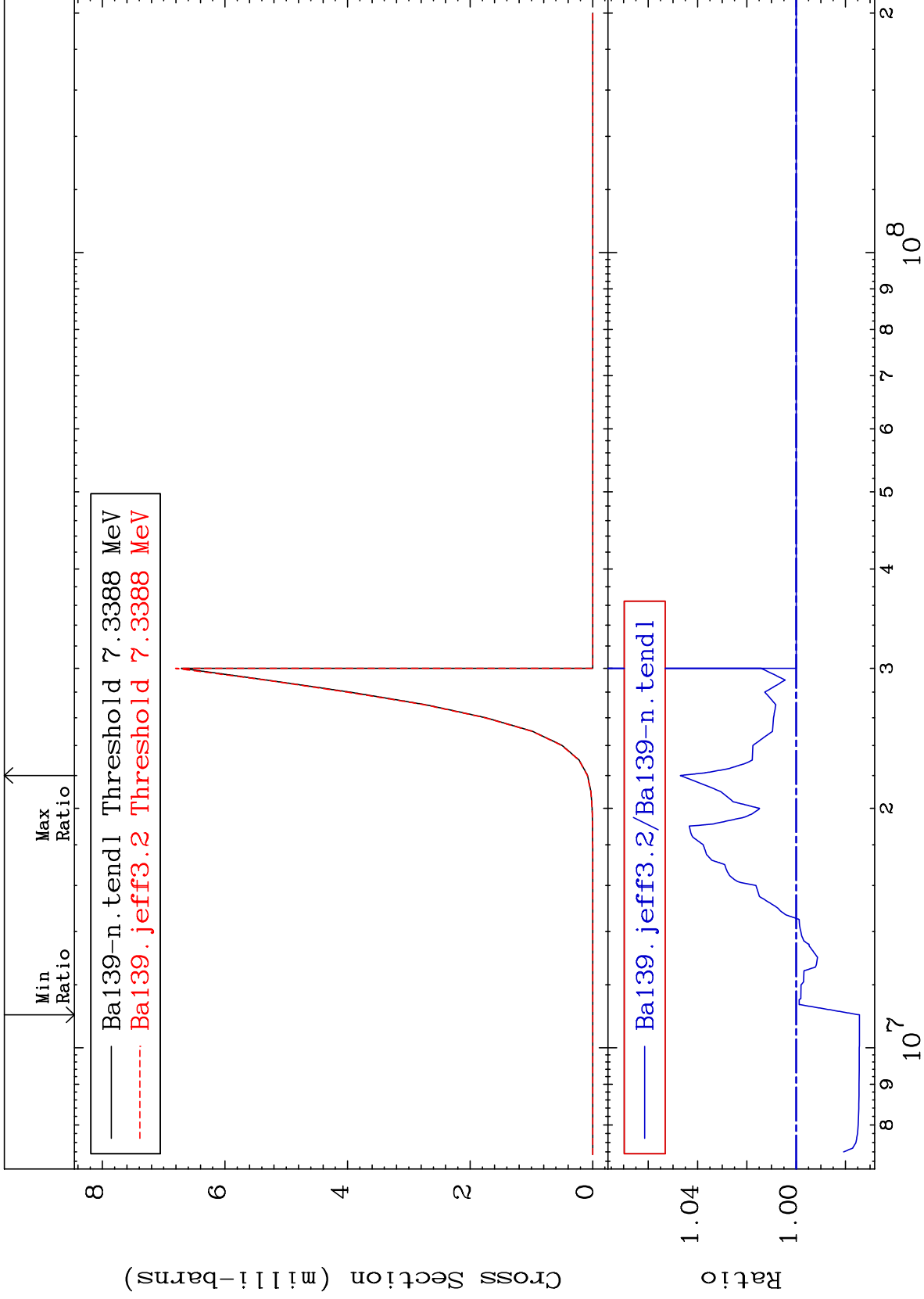
Incident Energy (eV)

56-Ba-139

MAT 5652

(n,2n) α
Cross Section

56-Ba-139
-2.566 To 4.698 %



8

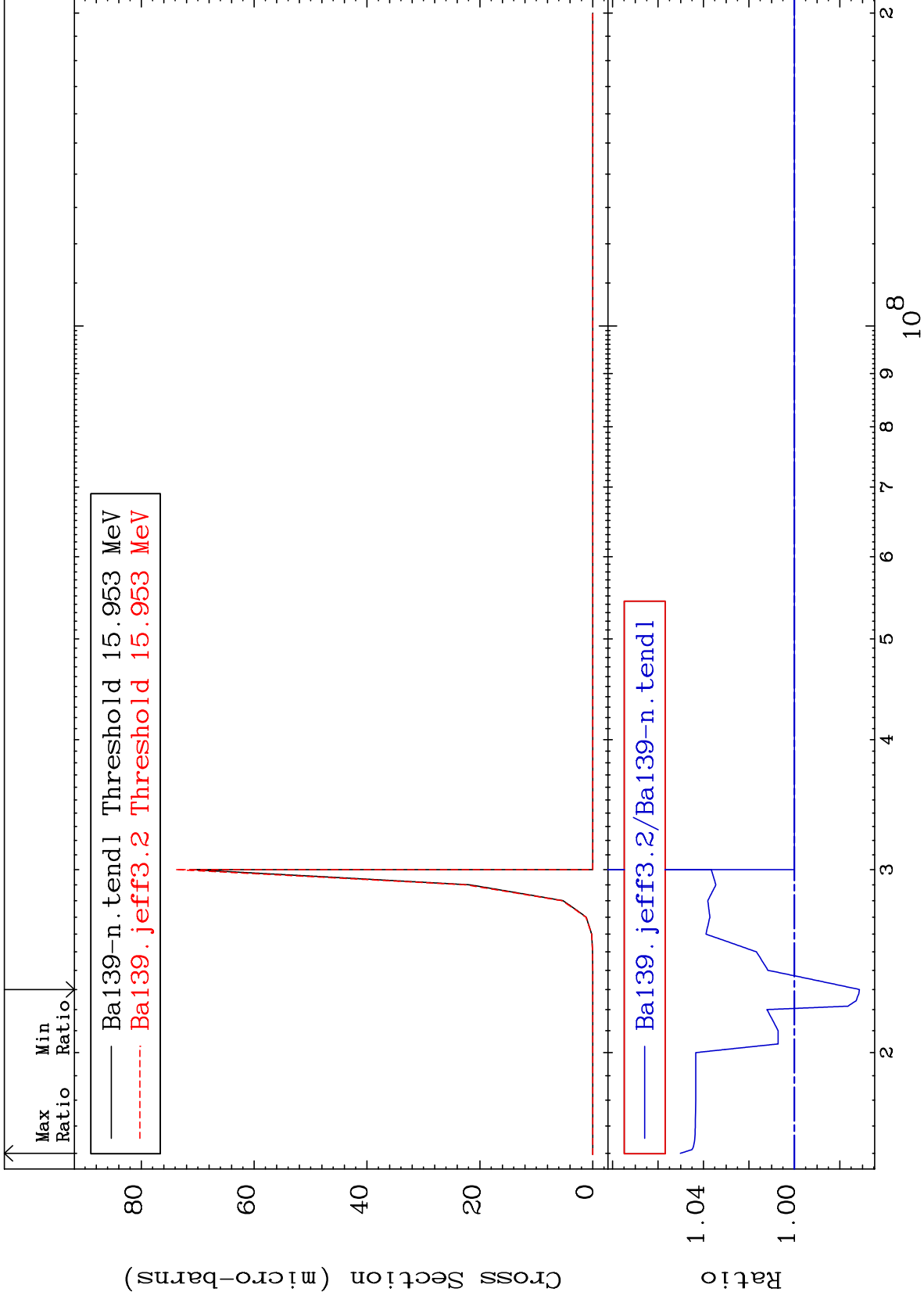
Incident Energy (eV)

56-Ba-139

MAT 5652

(n,3n) α
Cross Section

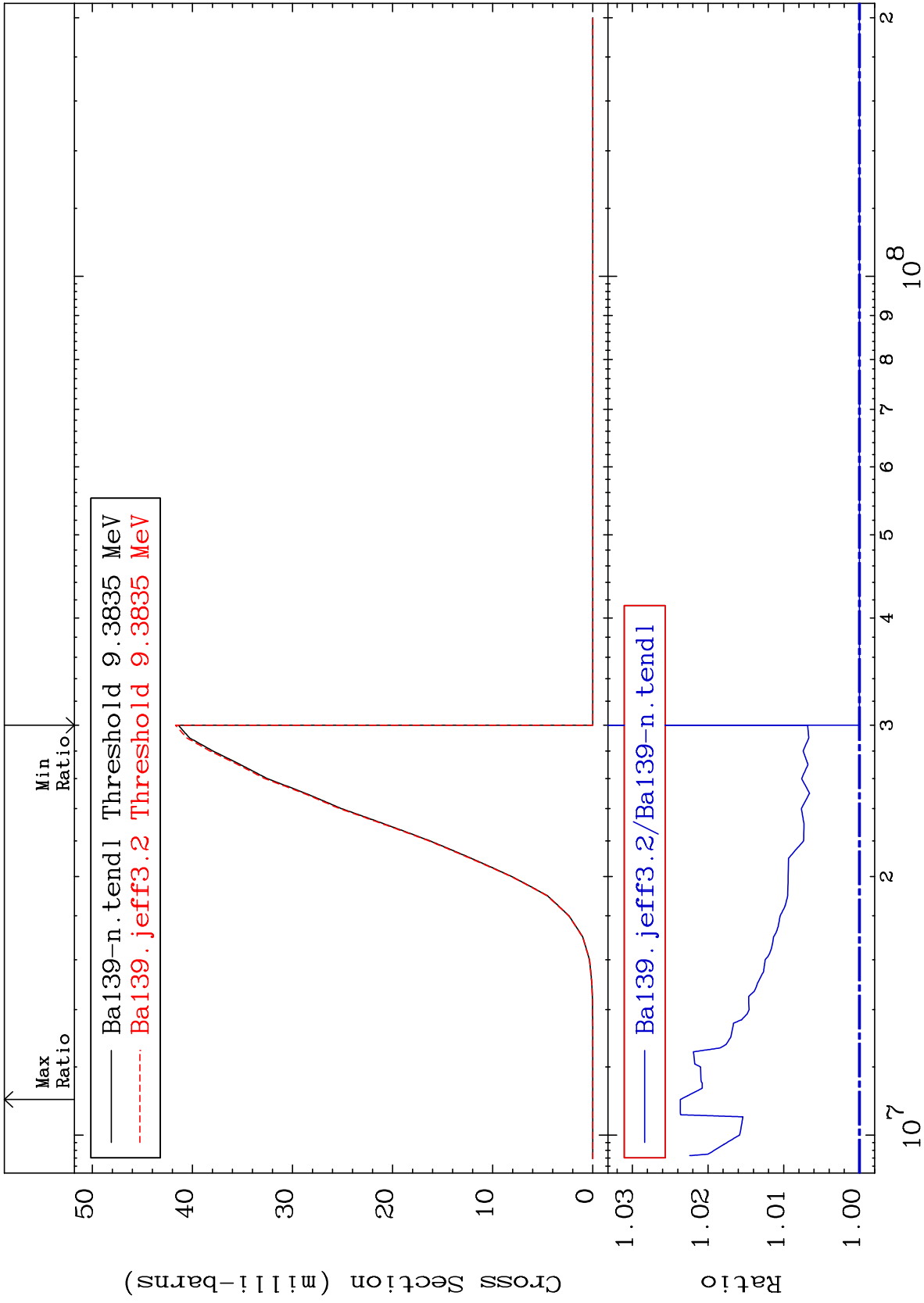
56-Ba-139
-2.865 To 5.016 %



MAT 5652

(n,n') p
Cross Section

56-Ba-139
To 2.365 %
0.000



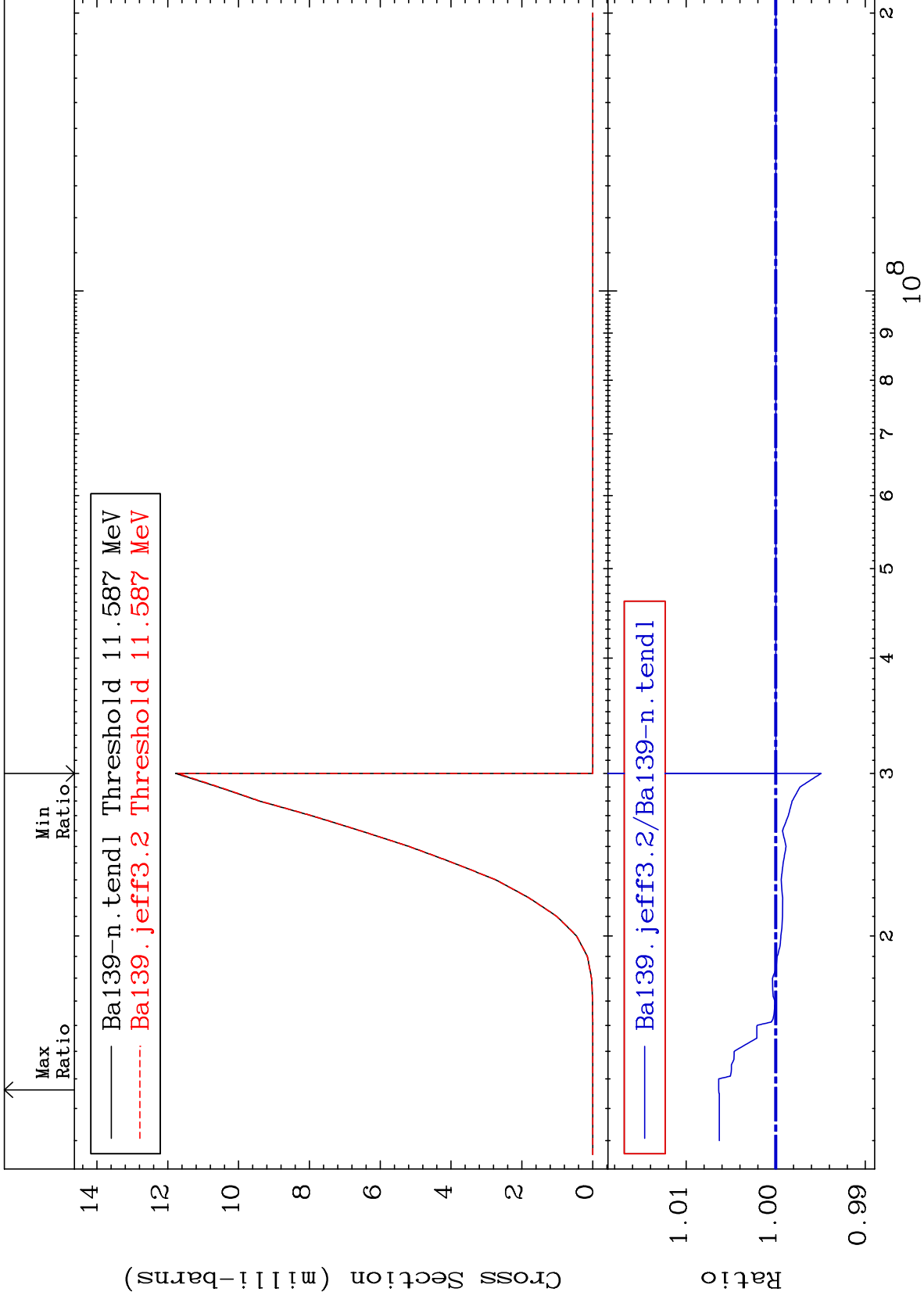
56-Ba-139

56-Ba-139

MAT 5652

(n, n') d
Cross Section

56-Ba-139
-0.507 To 0.637 %



11

Incident Energy (eV)

56-Ba-139

MAT 5652

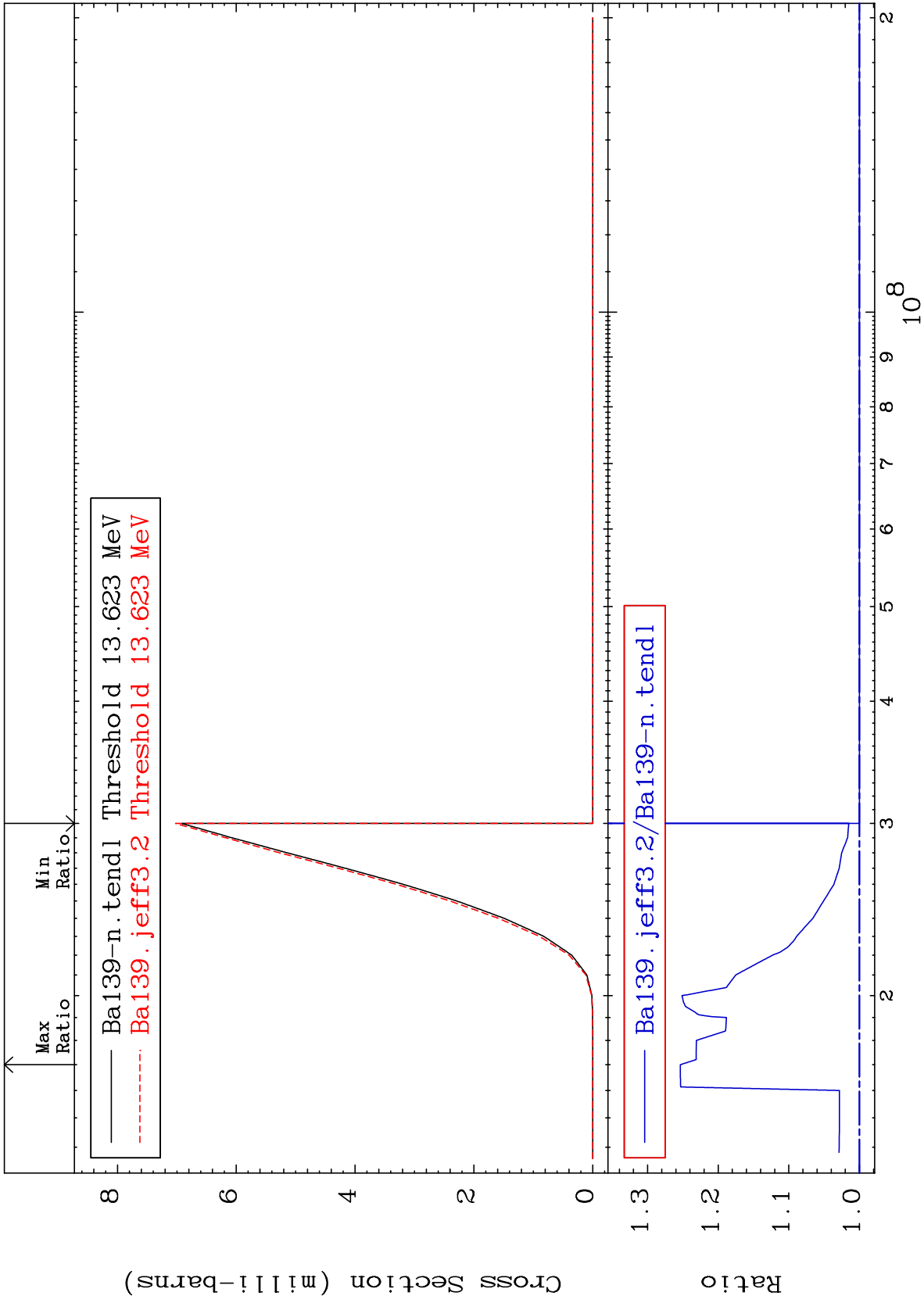
(n,n') t

56-Ba-139

Cross Section

0.000

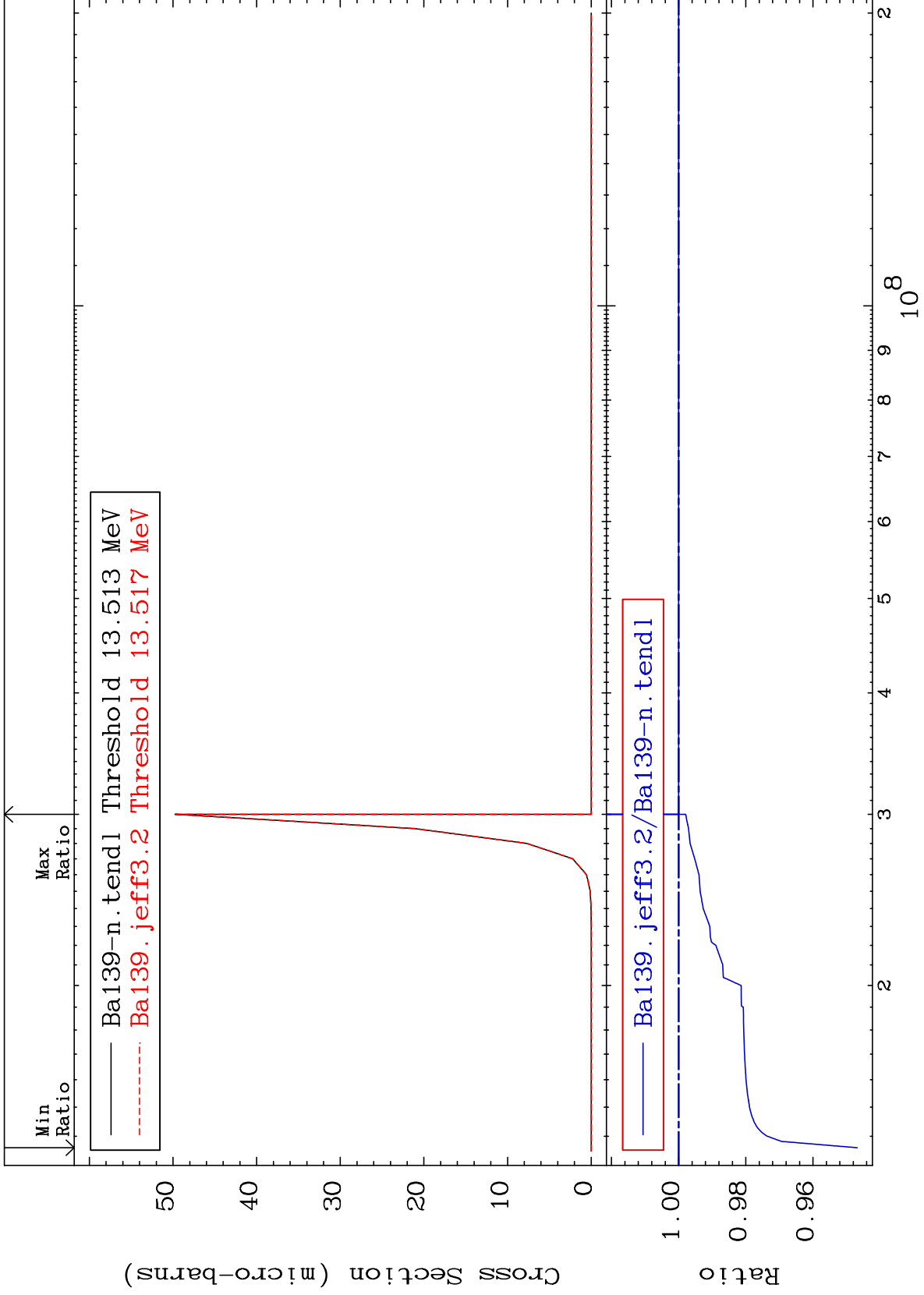
To 25.36 %



MAT 5652

(n, n') He-3
Cross Section

56-Ba-139
-5.318 To 0.000 %



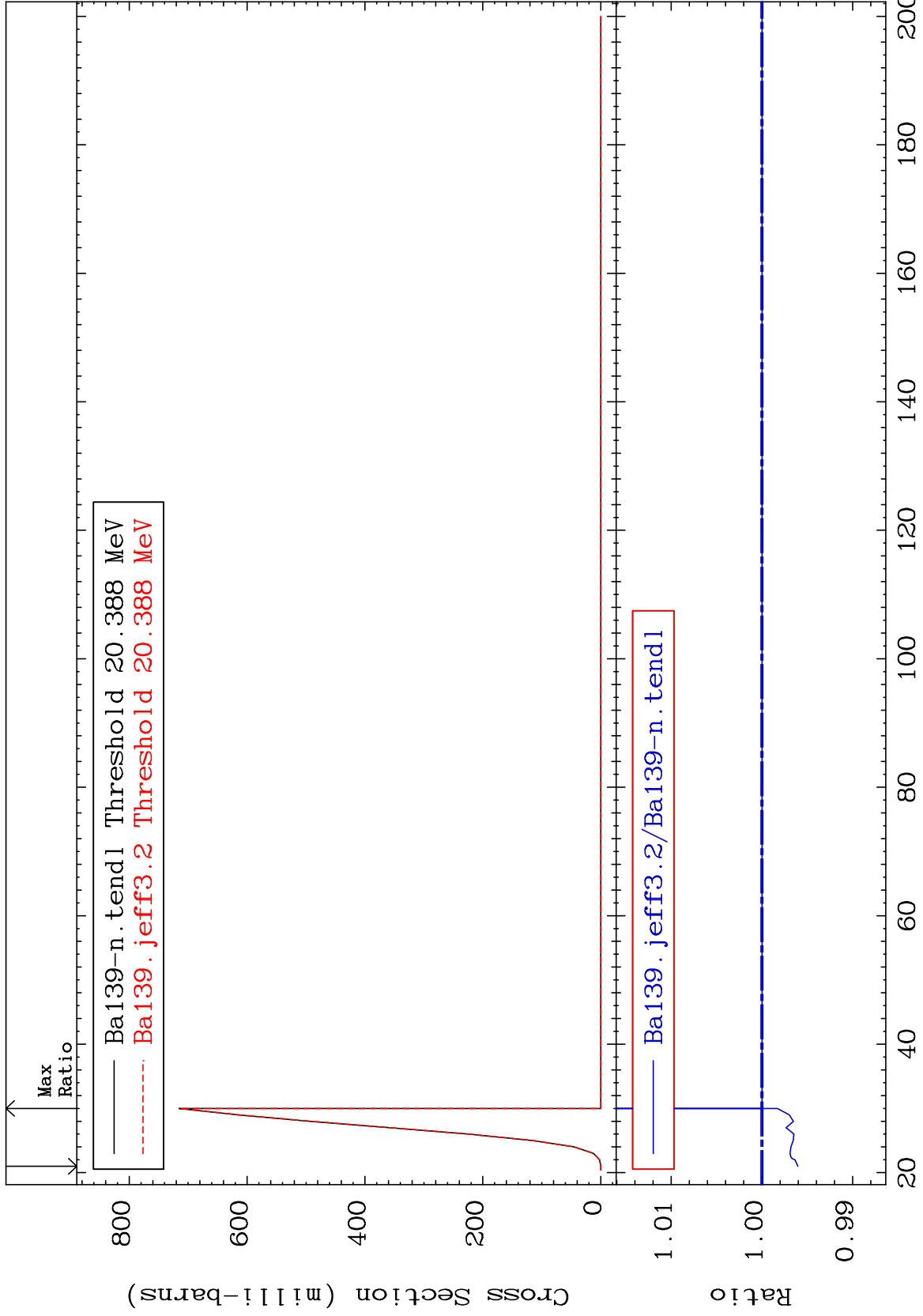
MAT 5652

(n,4n)

56-Ba-139

Cross Section

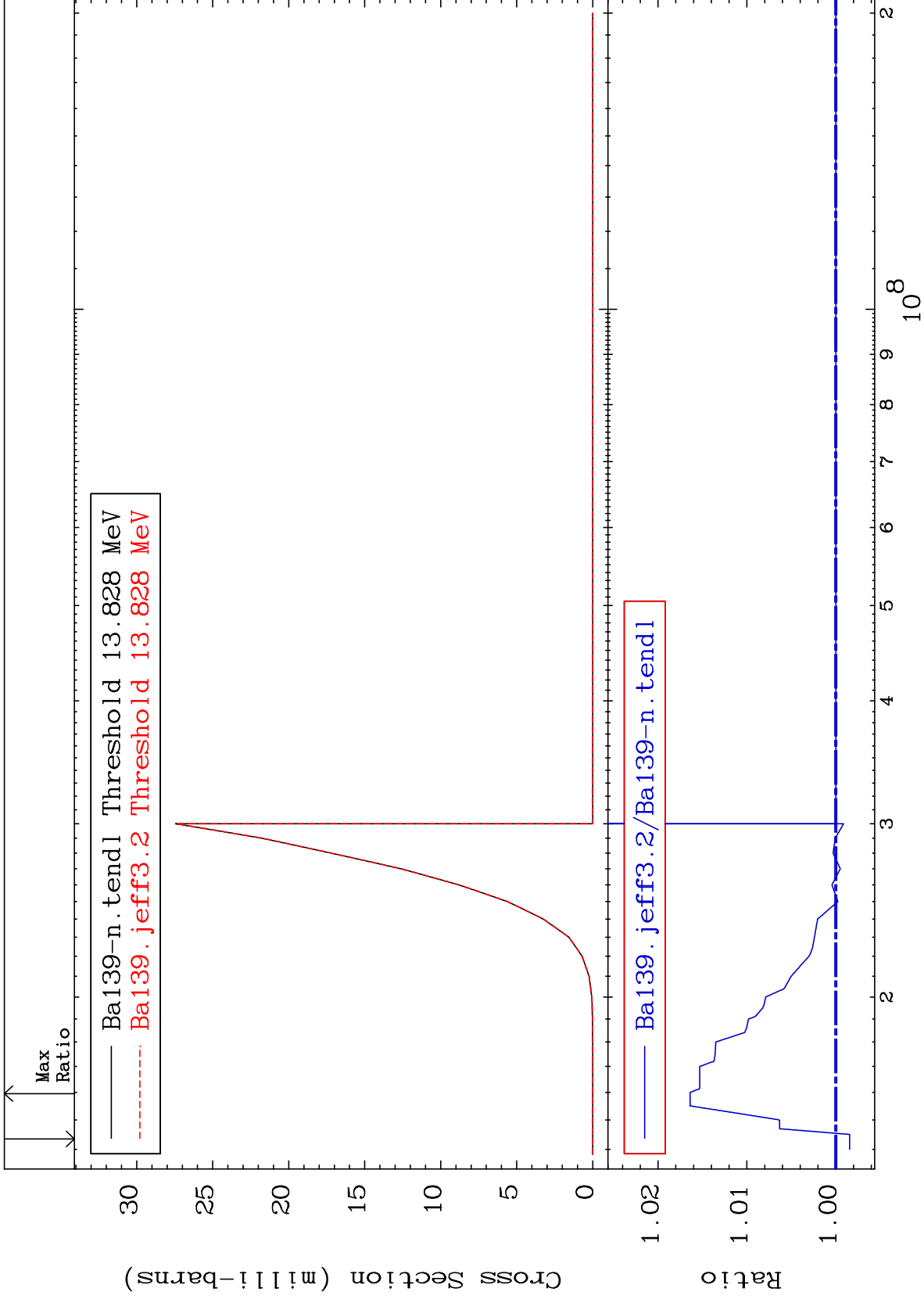
-0.396 To 0.000 %



MAT 5652

(n,2n) p
Cross Section

56-Ba-139
-0.155 To 1.638 %



15

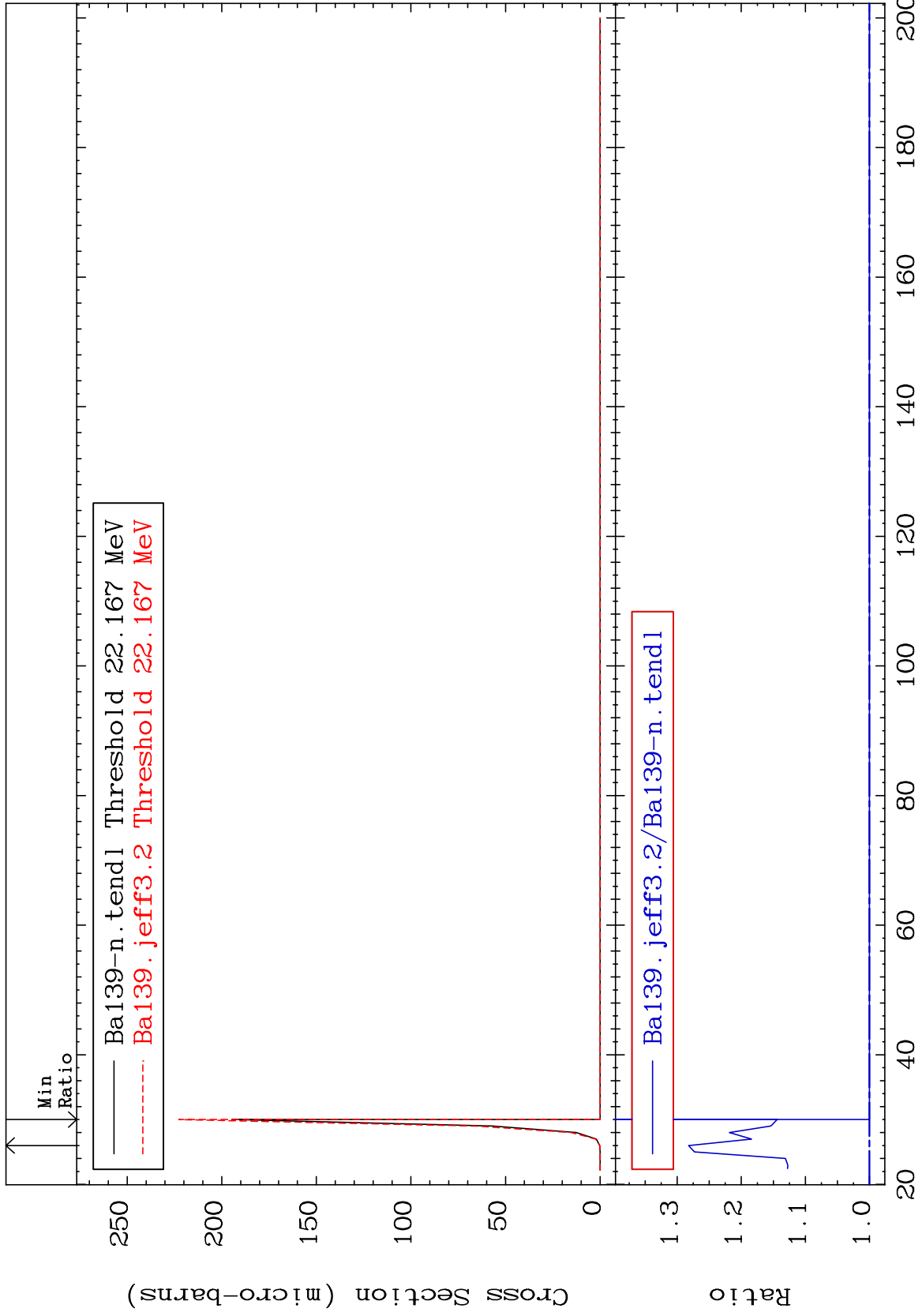
Incident Energy (eV)

56-Ba-139

MAT 5652

(n,3n) p
Cross Section

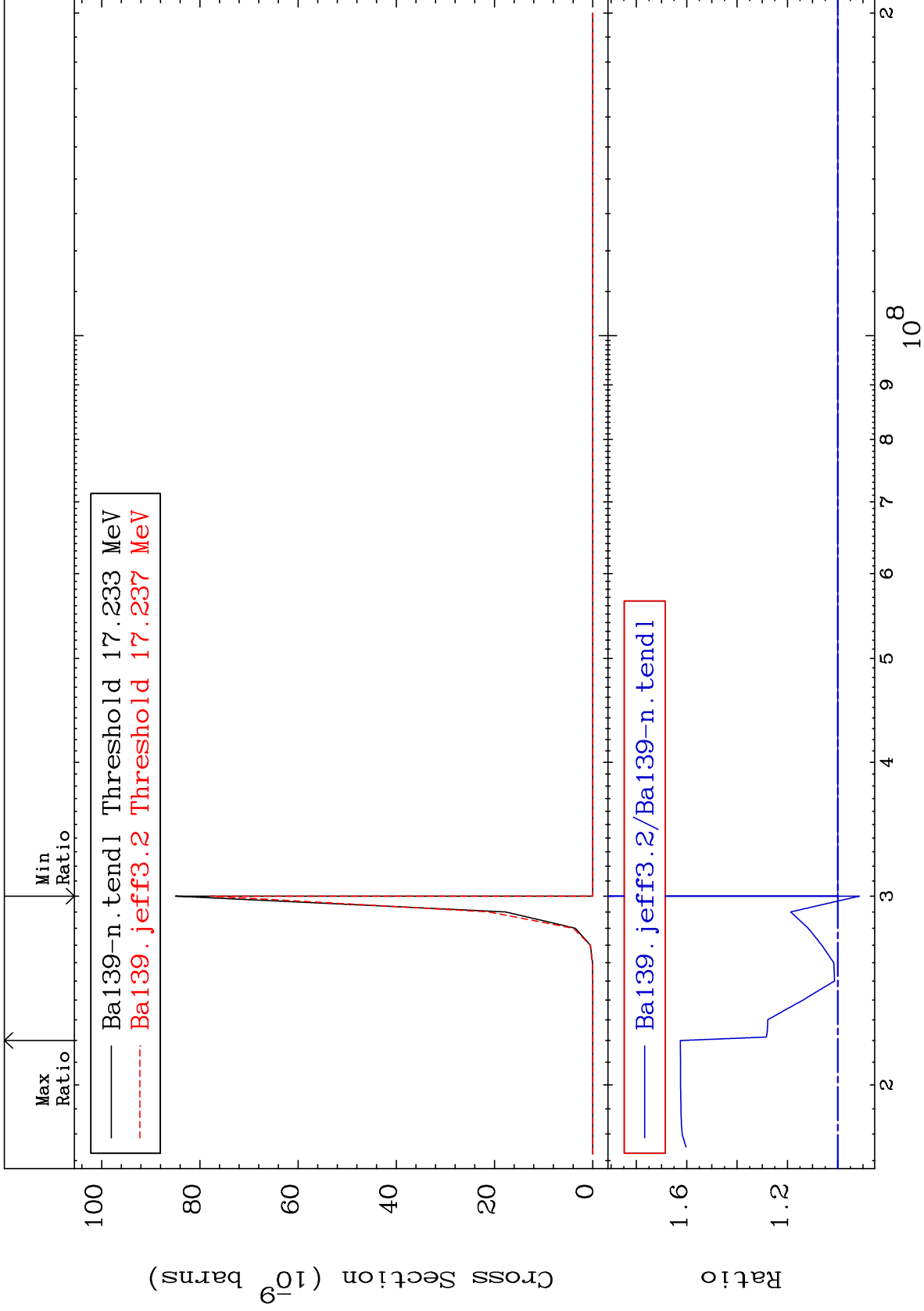
56-Ba-139
To 28.22 %



MAT 5652

(n,2n) p
Cross Section

56-Ba-139
-8.597 To 62.52 %



17

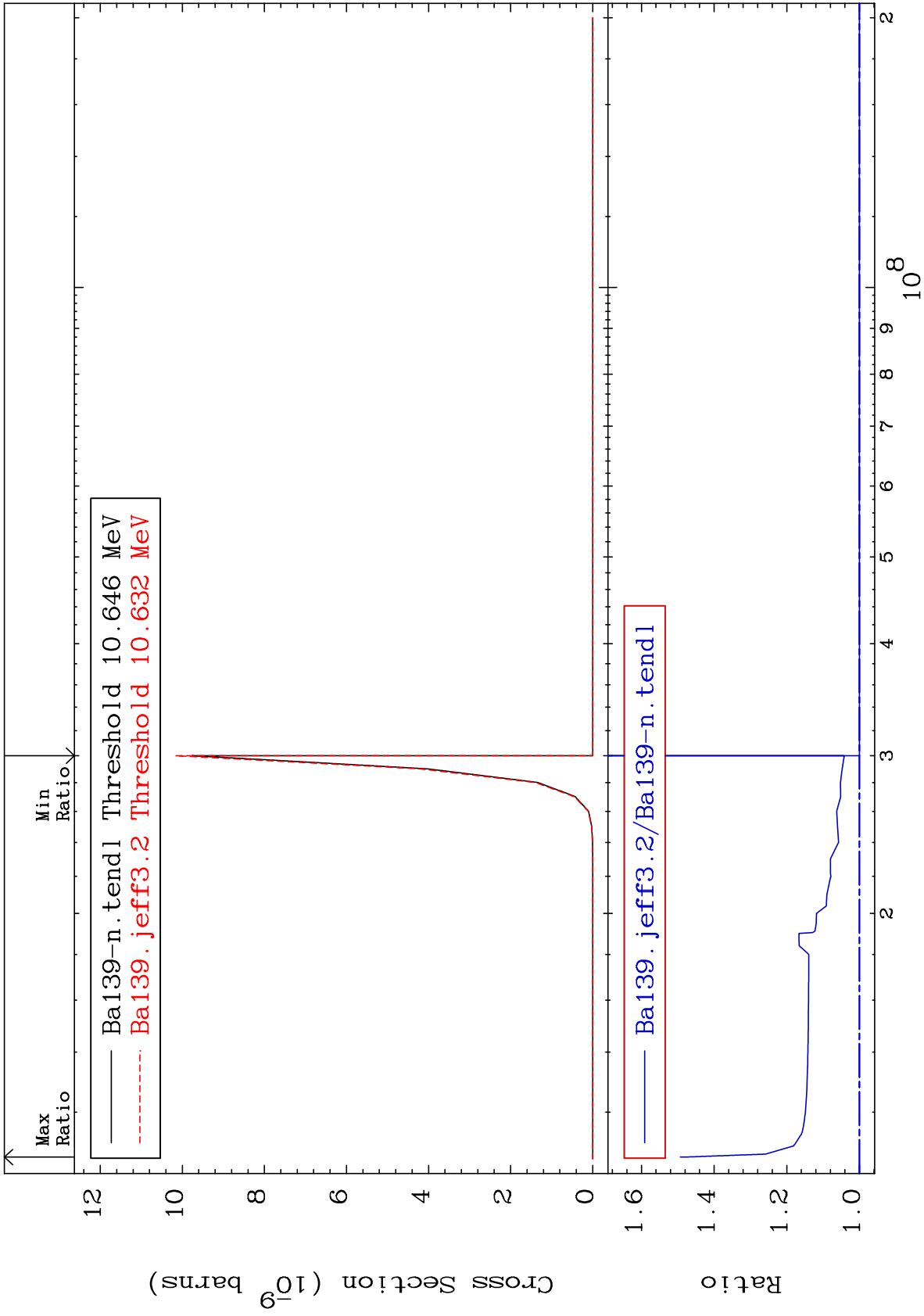
Incident Energy (eV)

56-Ba-139

MAT 5652

(n,n') p α
Cross Section

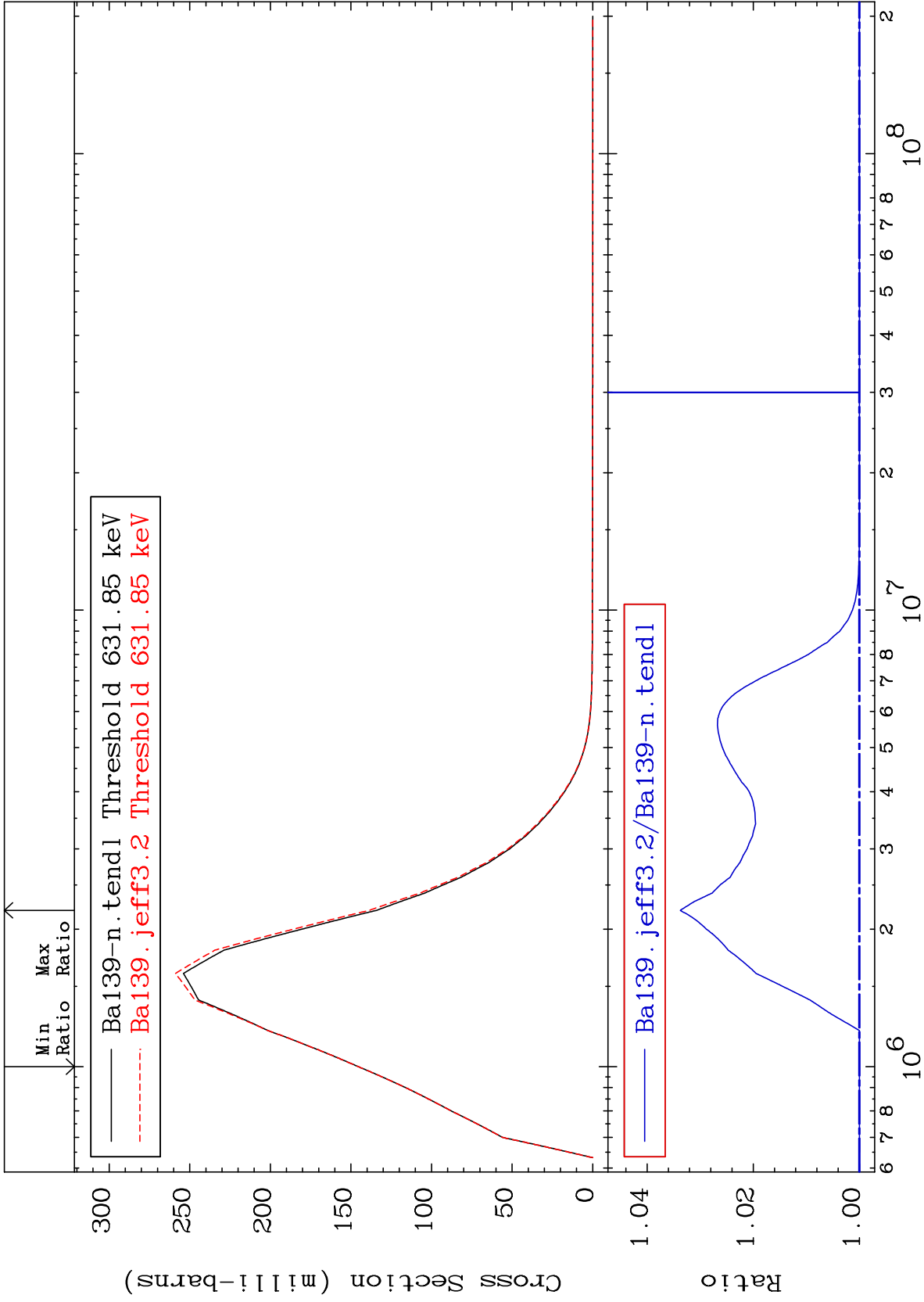
56-Ba-139
0.000 To 49.29 %



MAT 5652

627.3 keV (n,n') Level
Cross Section

56-Ba-139
0.000 To 3.374 %



19

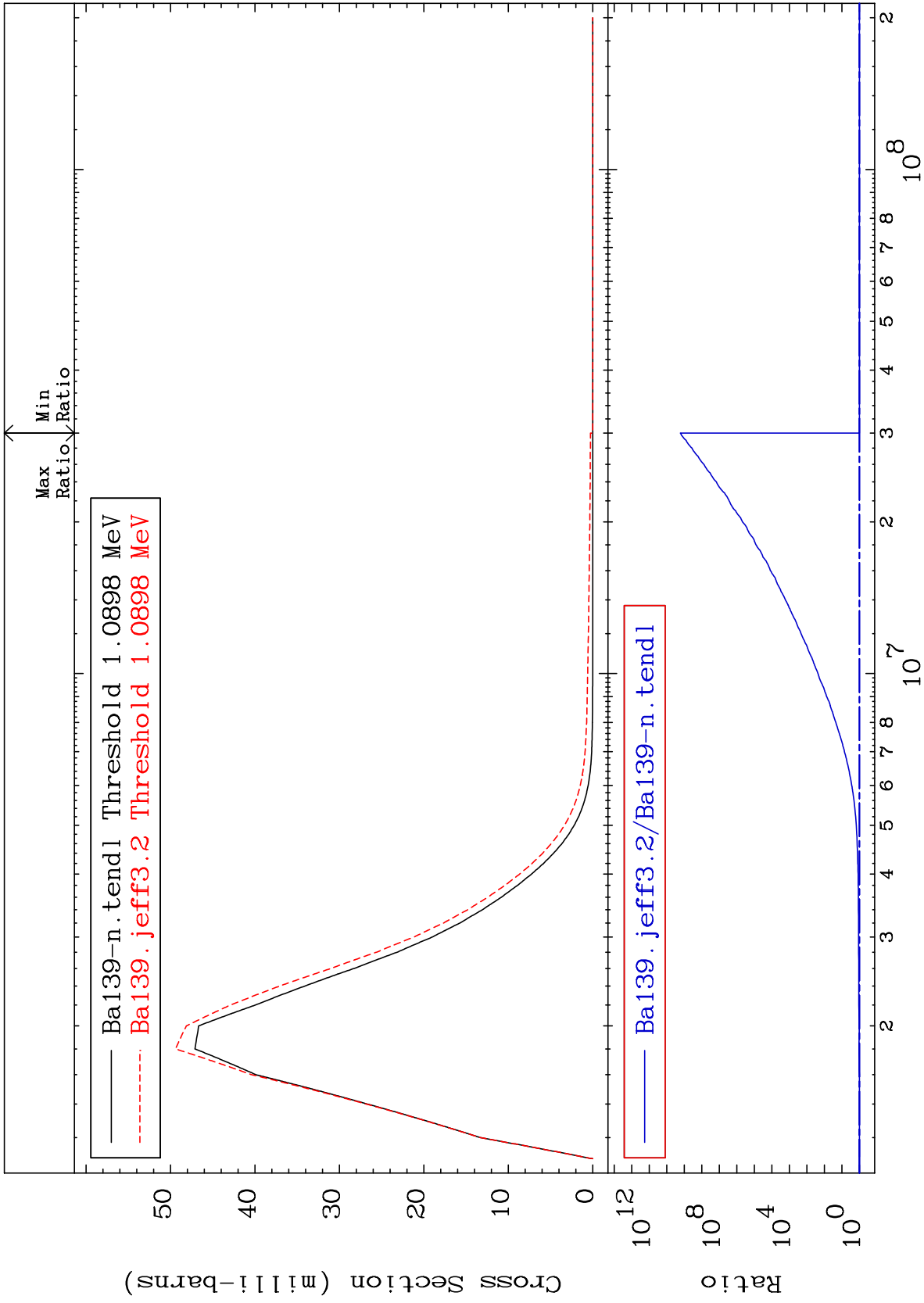
Incident Energy (eV)

56-Ba-139

MAT 5652

1.082 MeV (n,n') Level
Cross Section

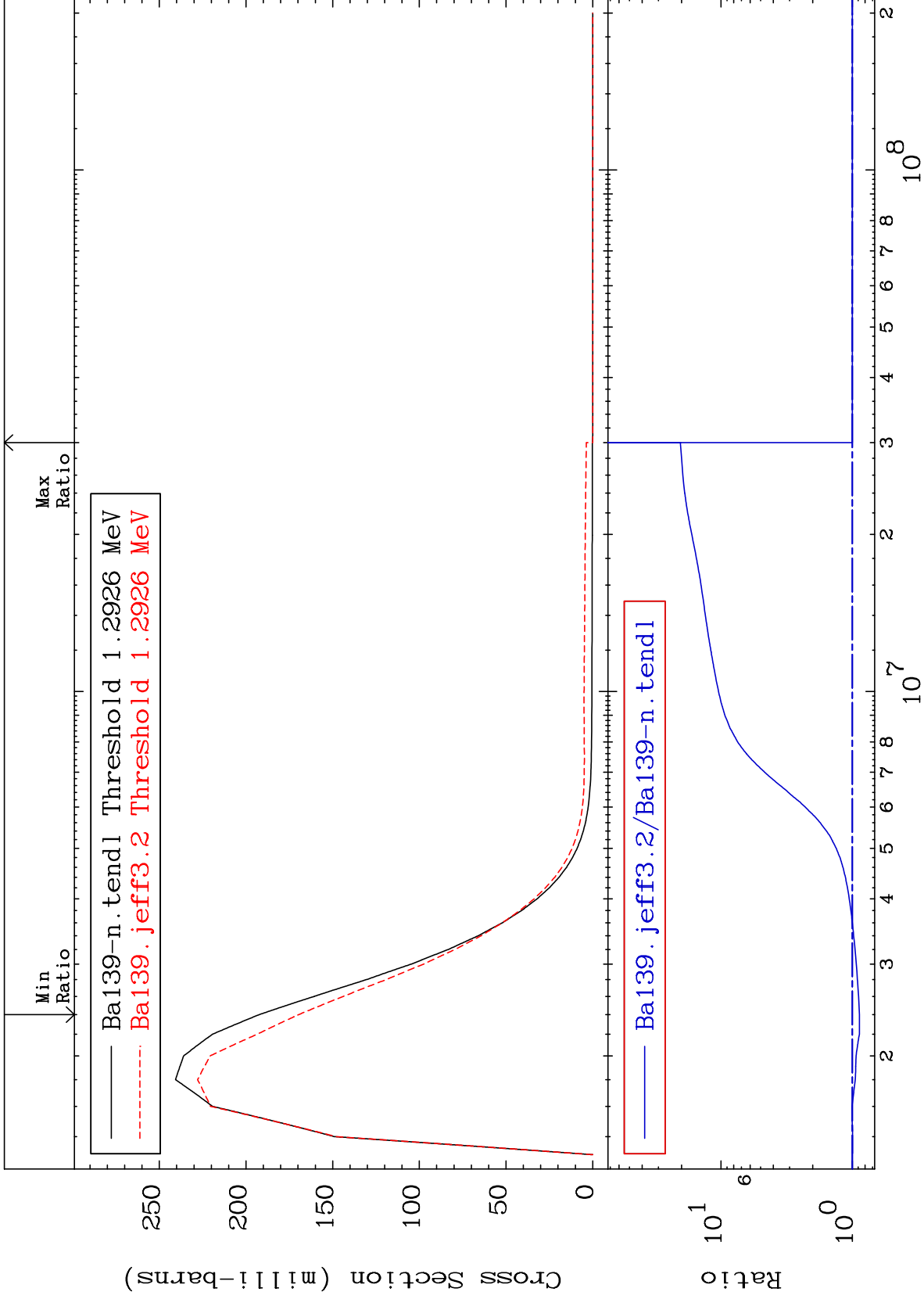
56-Ba-139
To 9999. %
0.000



MAT 5652

1.283 MeV (n,n') Level
Cross Section

56-Ba-139
-11.86 To 1942. %

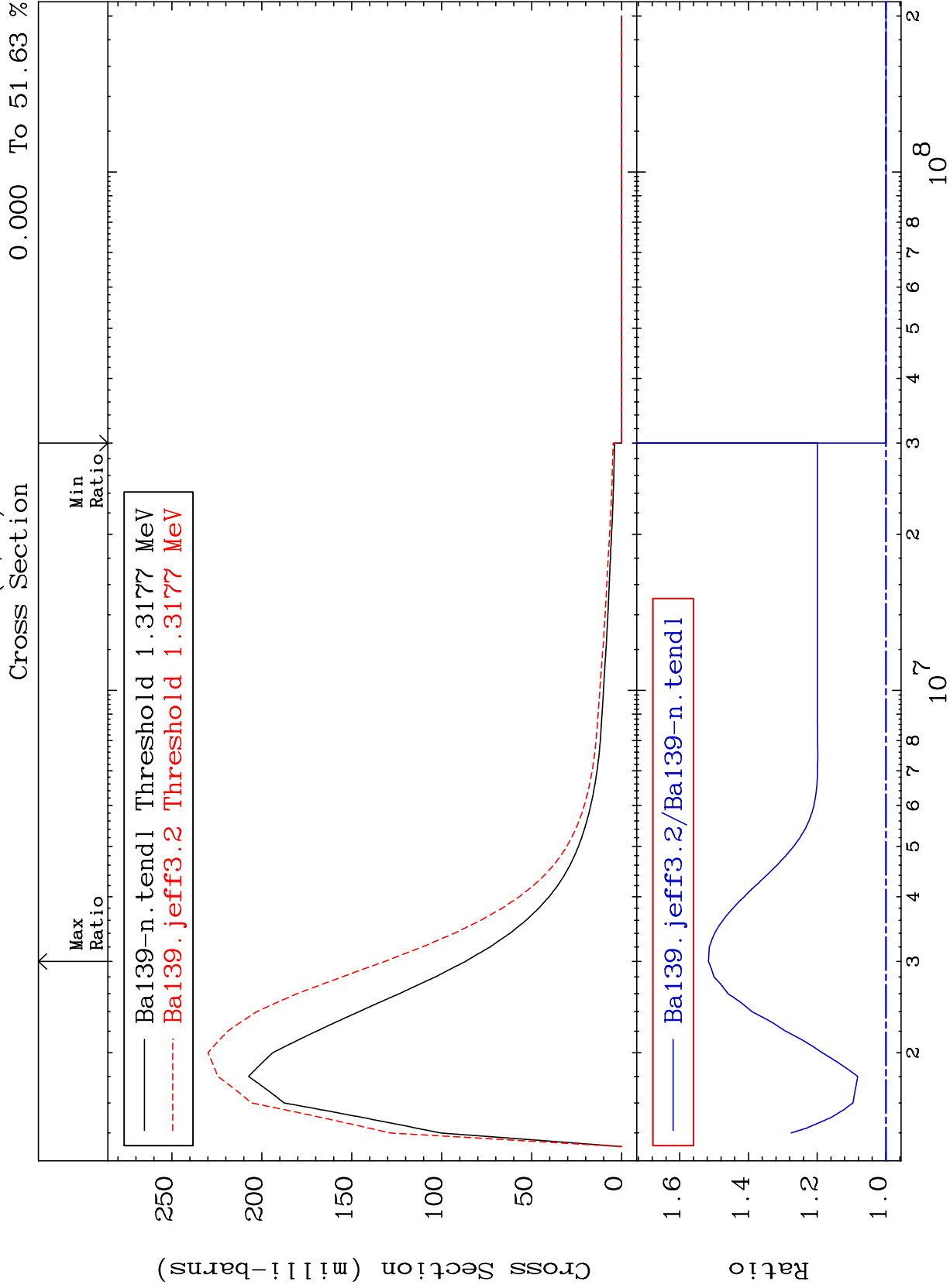


MAT 5652

1.308 MeV (n,n') Level

56-Ba-139

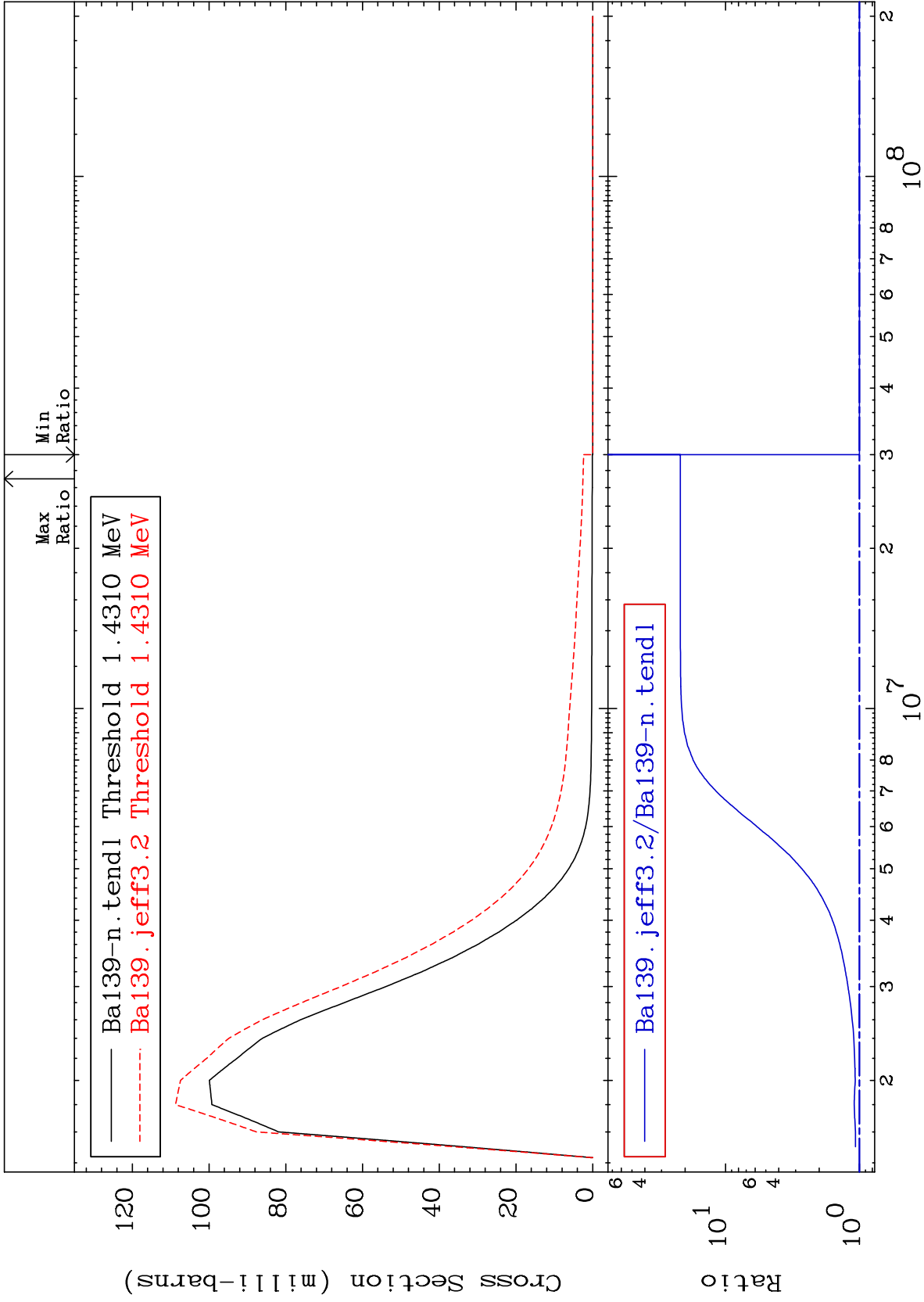
0.000 To 51.63 %



MAT 5652

1.421 MeV (n,n') Level
Cross Section

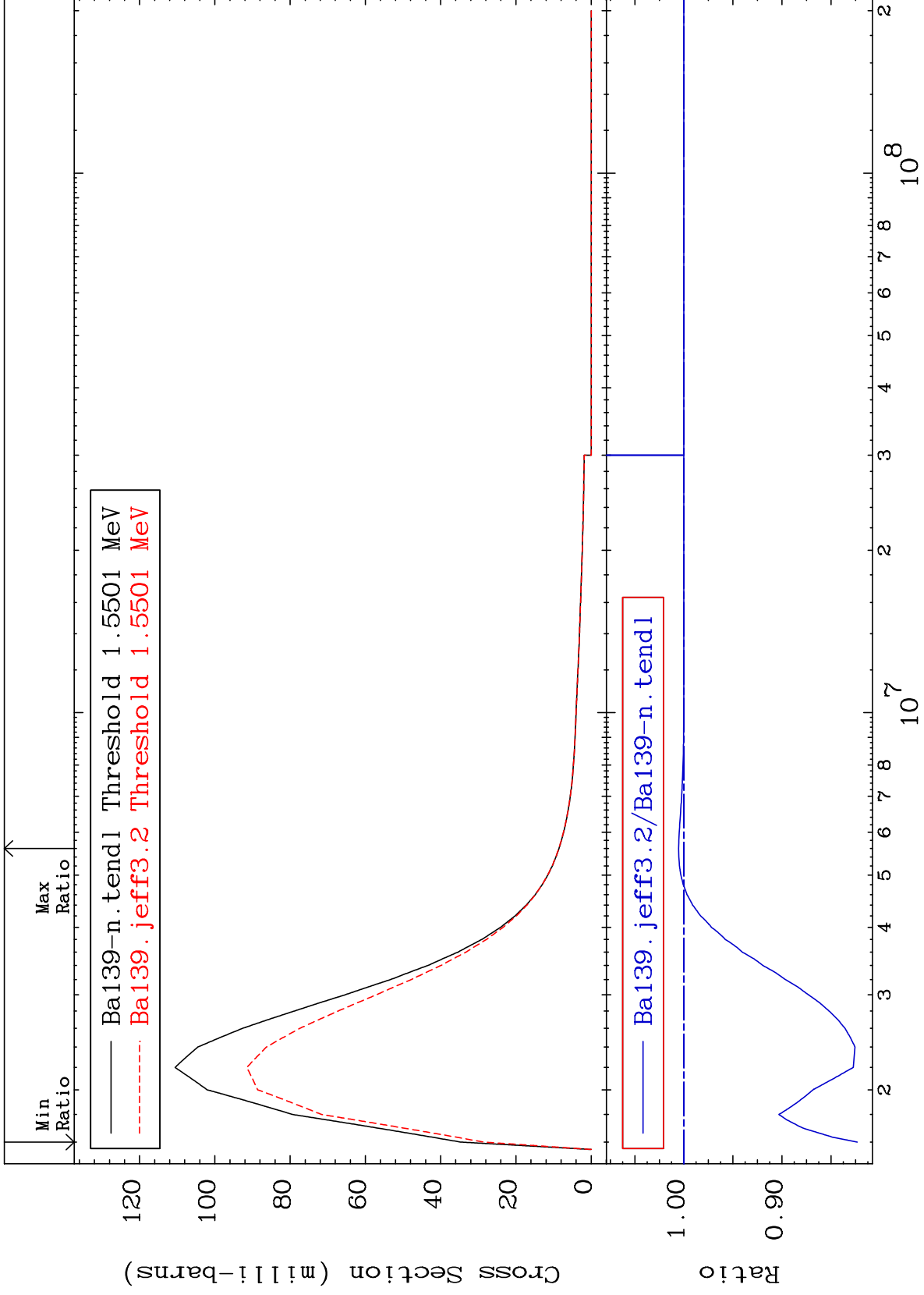
56-Ba-139
To 2073. %



MAT 5652

1.539 MeV (n,n') Level
Cross Section

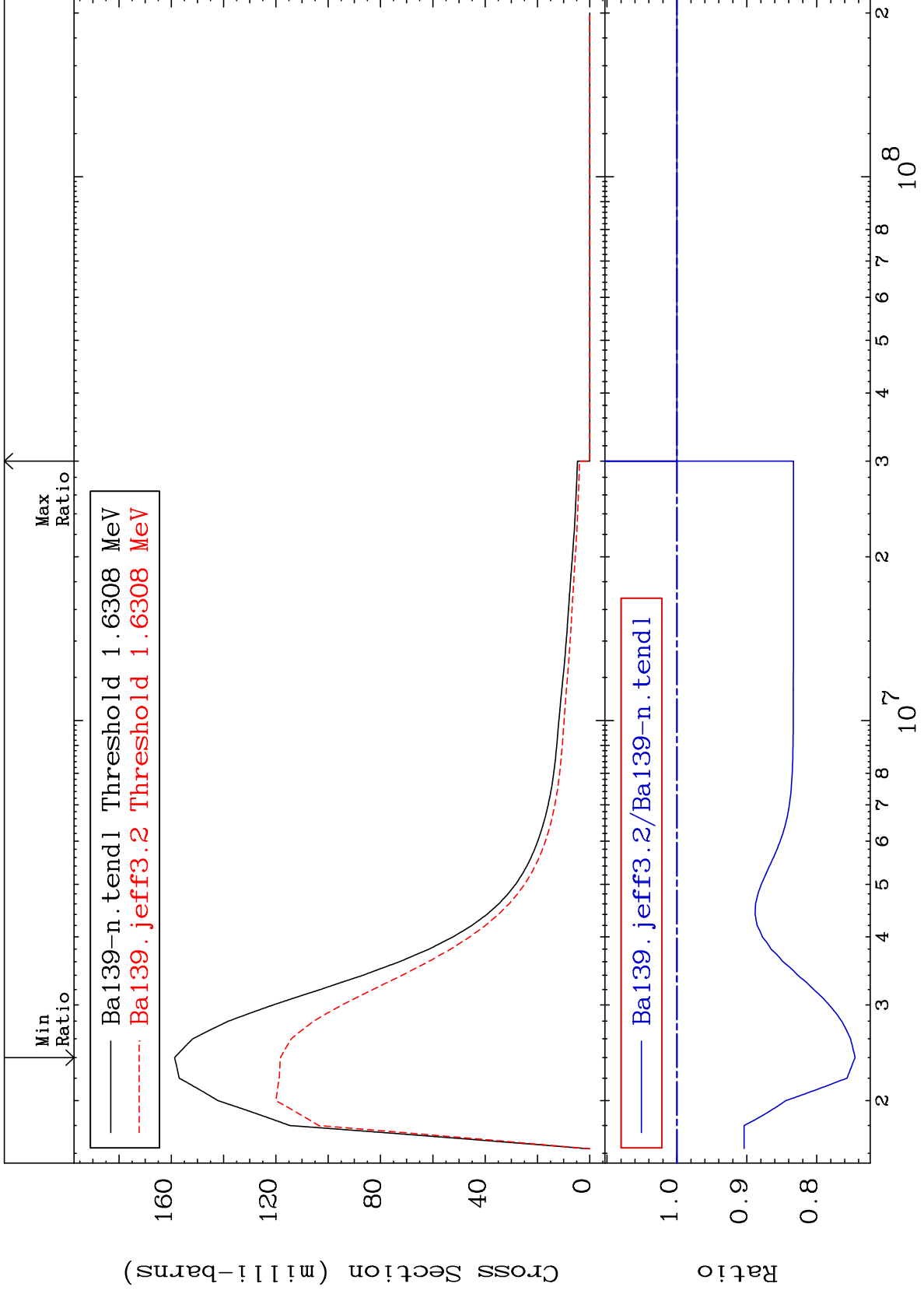
56-Ba-139
-17.67 To 0.535 %



MAT 5652

1.619 MeV (n,n') Level
Cross Section

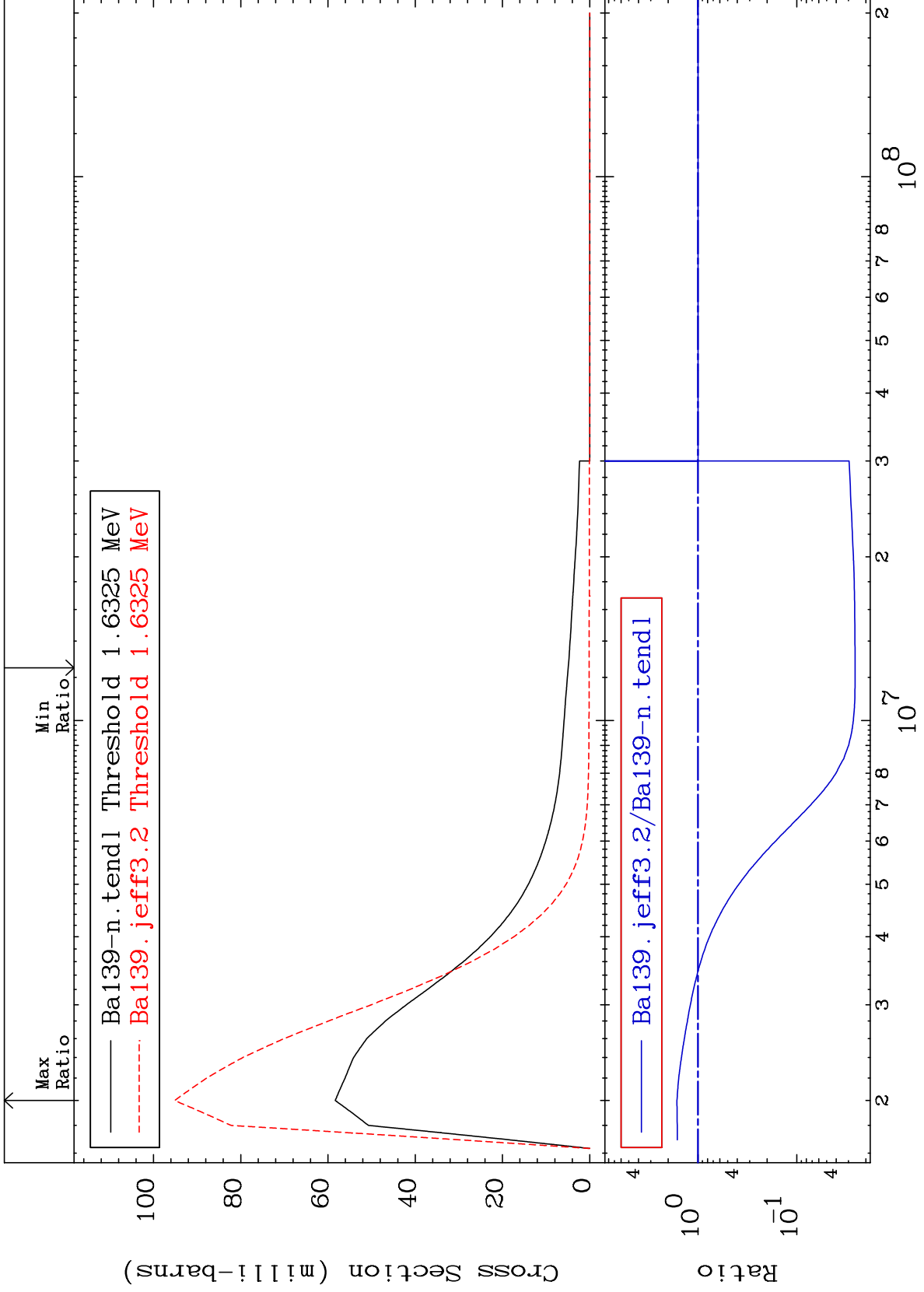
56-Ba-139
-25.49 To 0.000 %



MAT 5652

1.621 MeV (n,n') Level
Cross Section

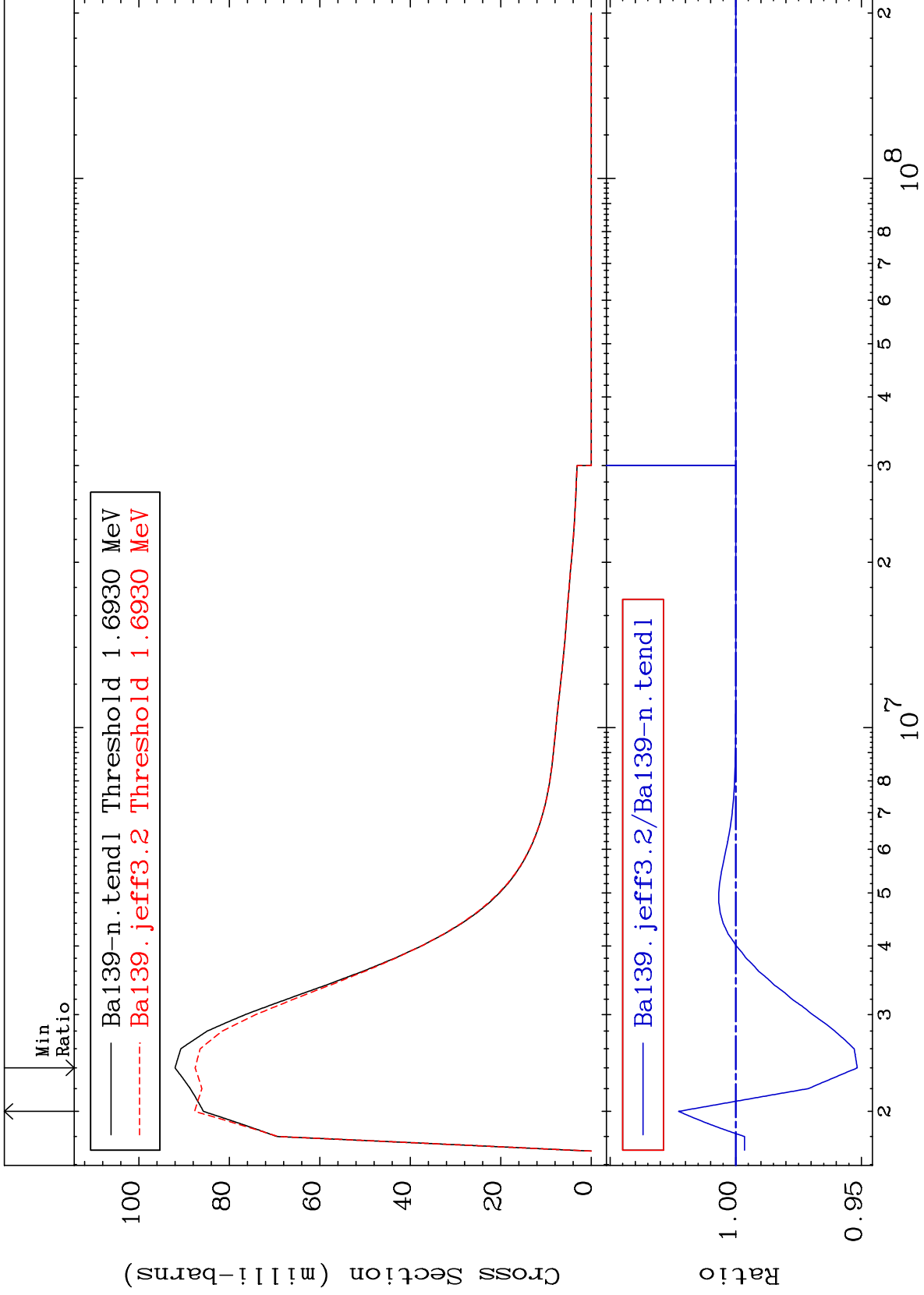
56-Ba-139
-97.42 To 63.11 %



MAT 5652

1.681 MeV (n,n') Level
Cross Section

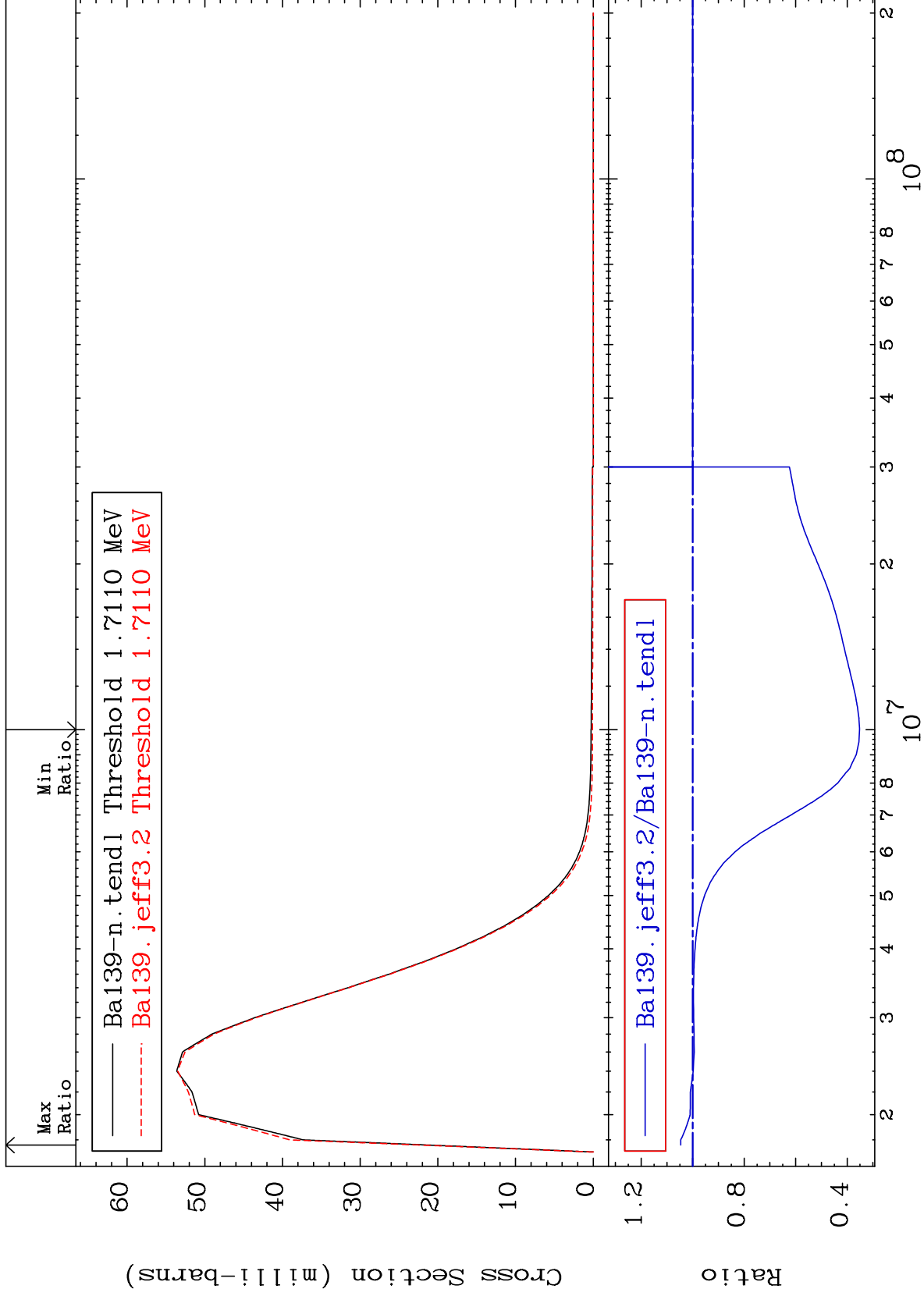
56-Ba-139
-4.835 To 2.273 %



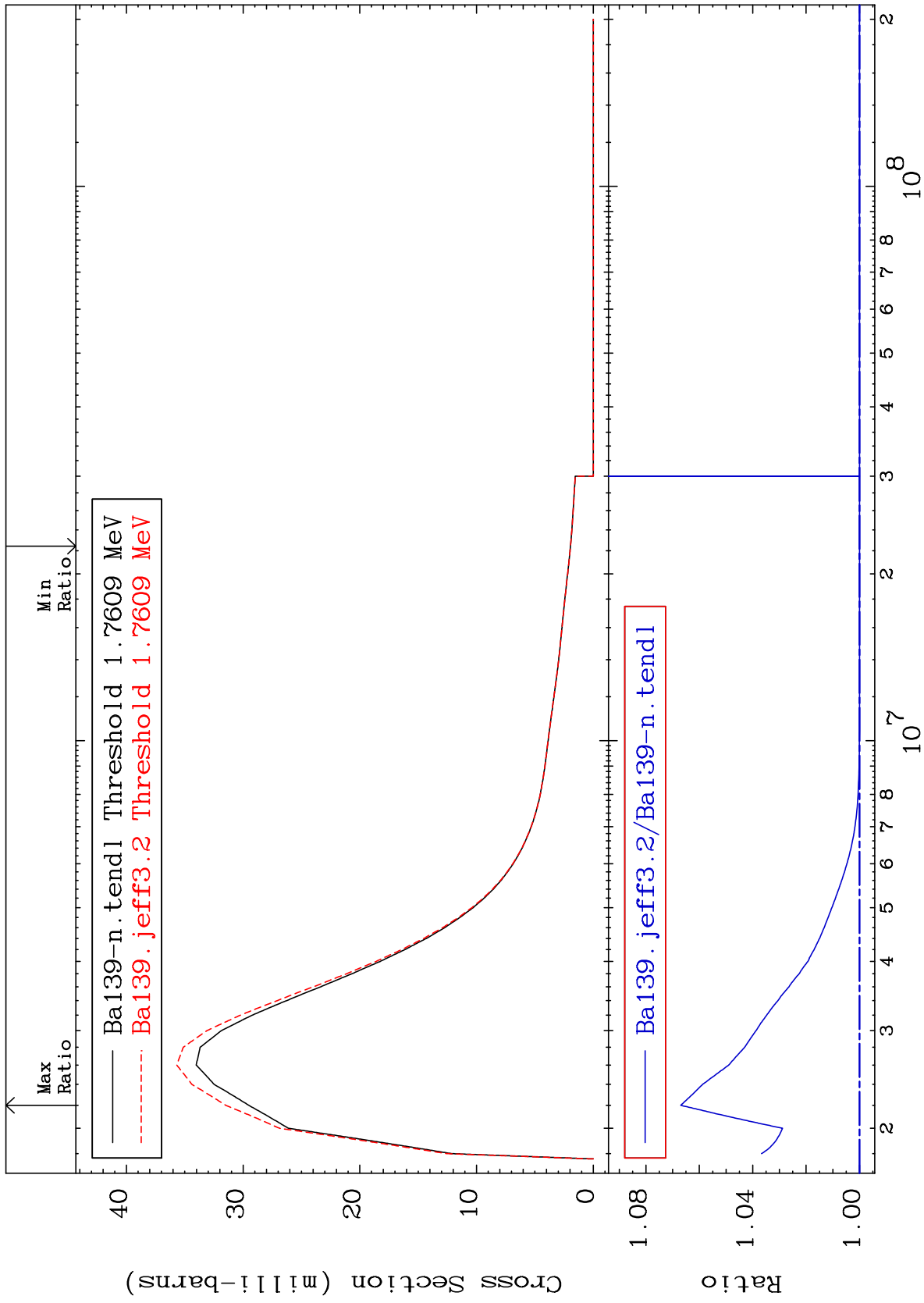
MAT 5652

1.699 MeV (n,n') Level
Cross Section

56-Ba-139
-64.81 To 4.624 %



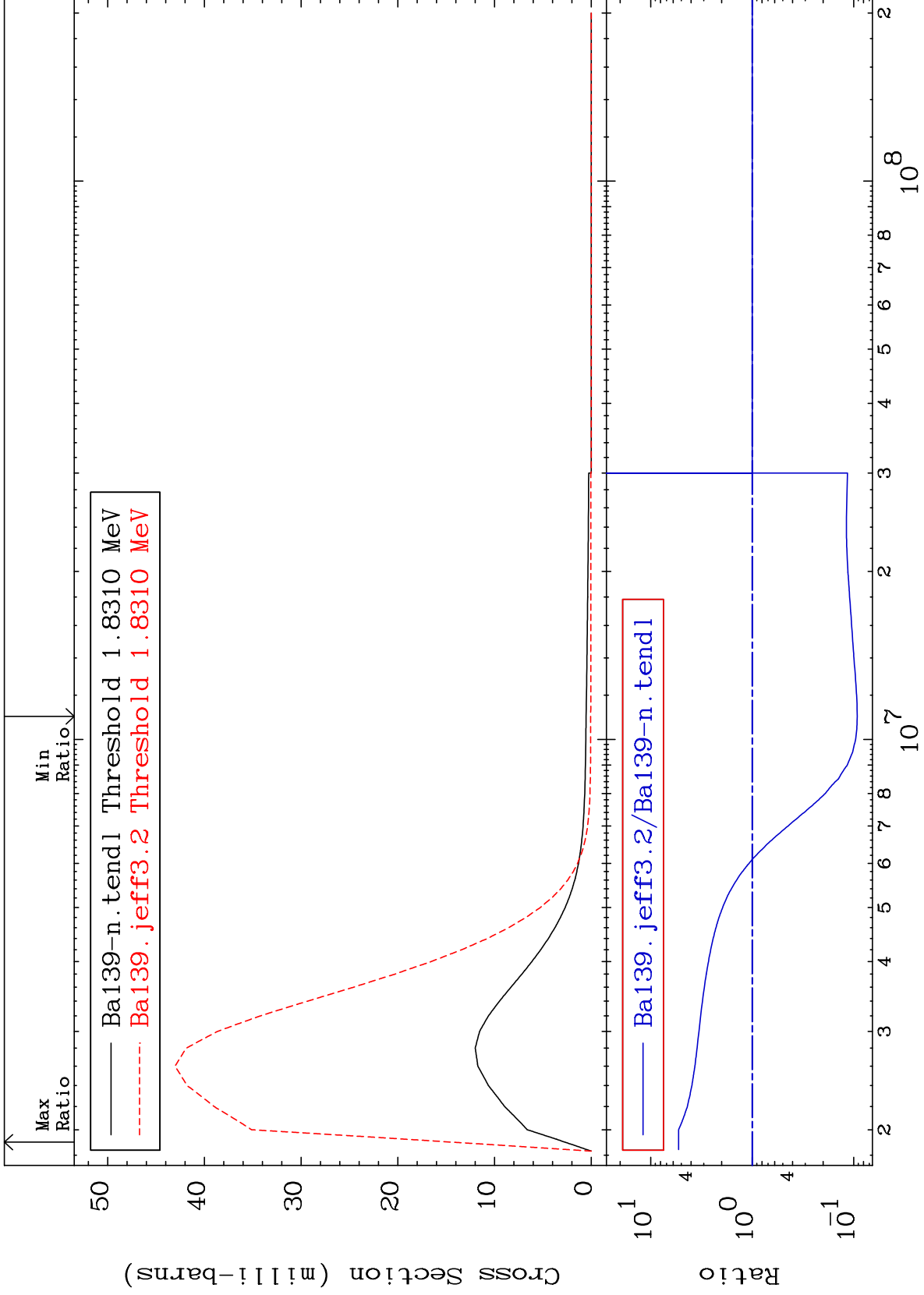
MAT 5652 1.748 MeV (n,n') Level Cross Section 56-Ba-139 To 6.695 %



MAT 5652

1.818 MeV (n,n') Level
Cross Section

56-Ba-139
-90.78 To 430.9 %



30

56-Ba-139

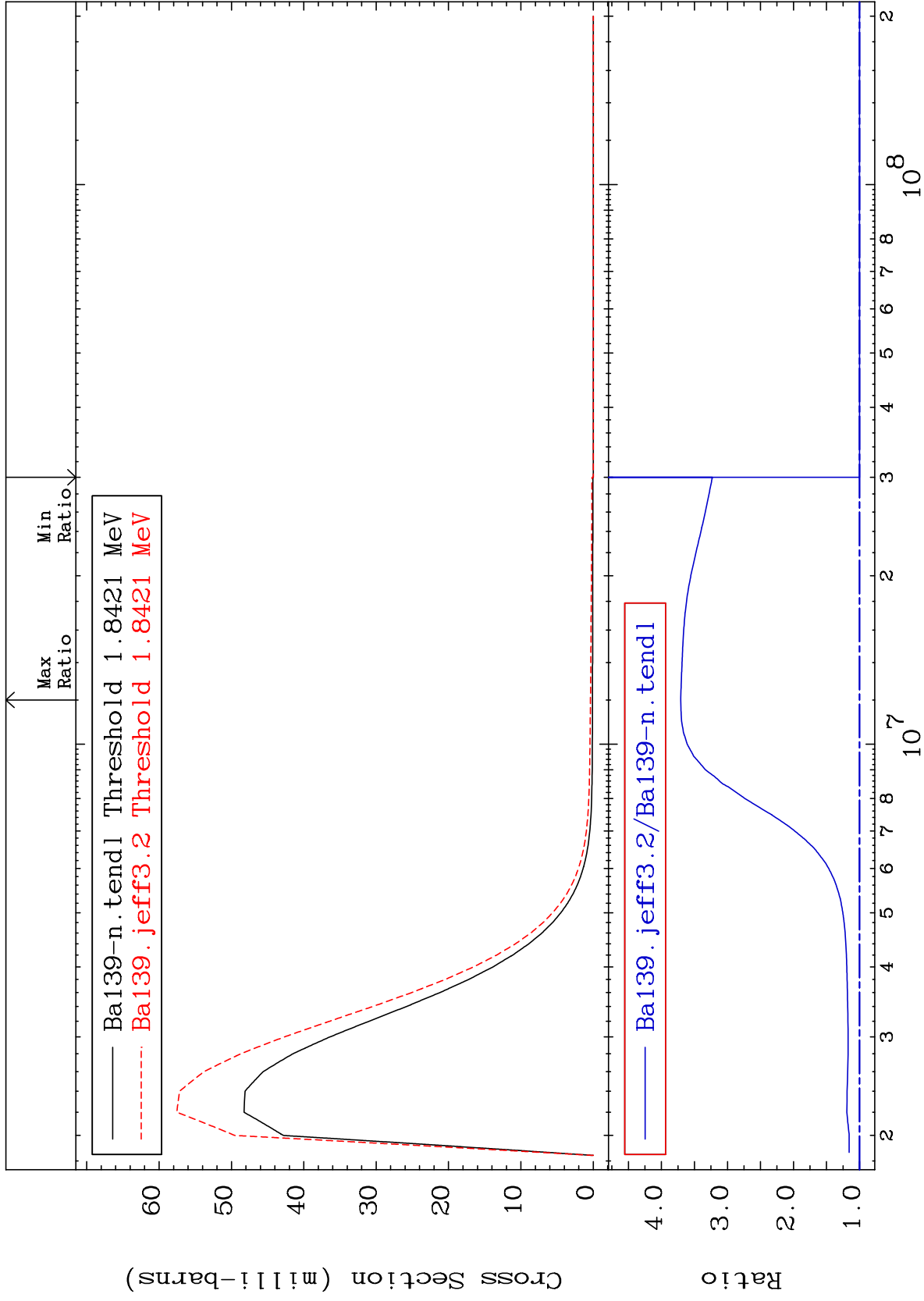
56-Ba-139

MAT 5652

1.829 MeV (n,n') Level

56-Ba-139

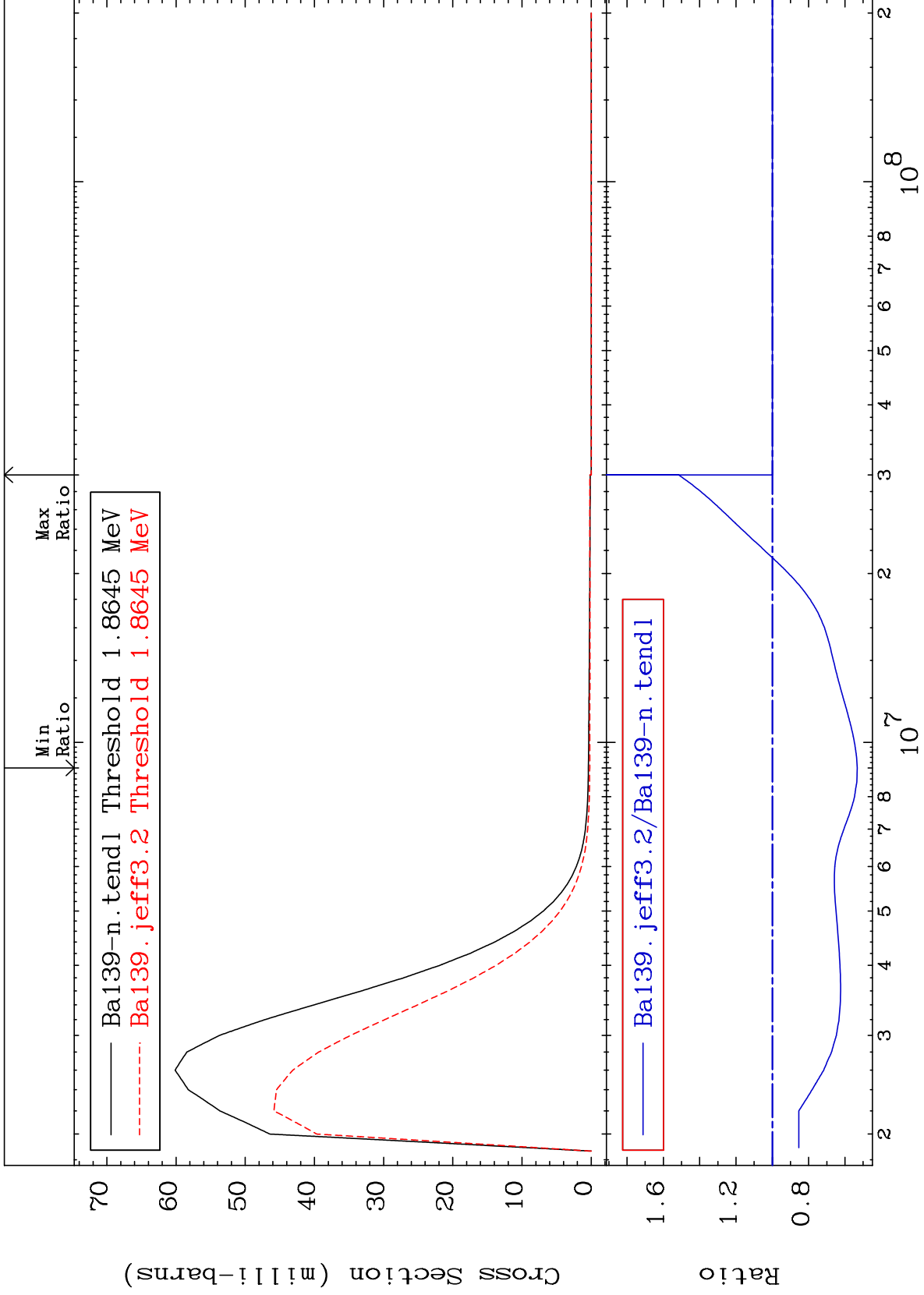
0.000 To 270.7 %



MAT 5652

1.851 MeV (n,n') Level
Cross Section

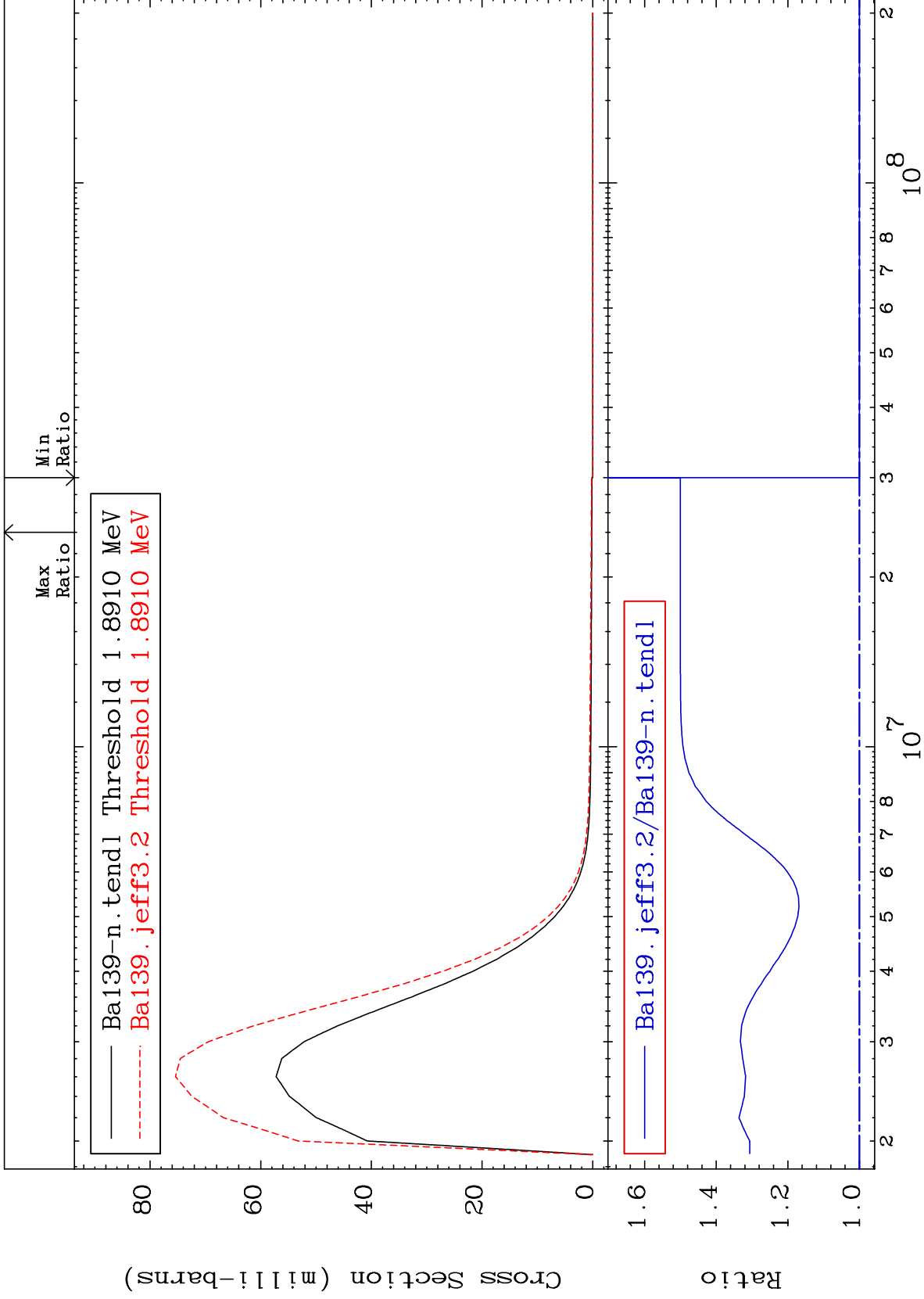
56-Ba-139
-46.77 To 51.59 %



MAT 5652

1.877 MeV (n,n') Level
Cross Section

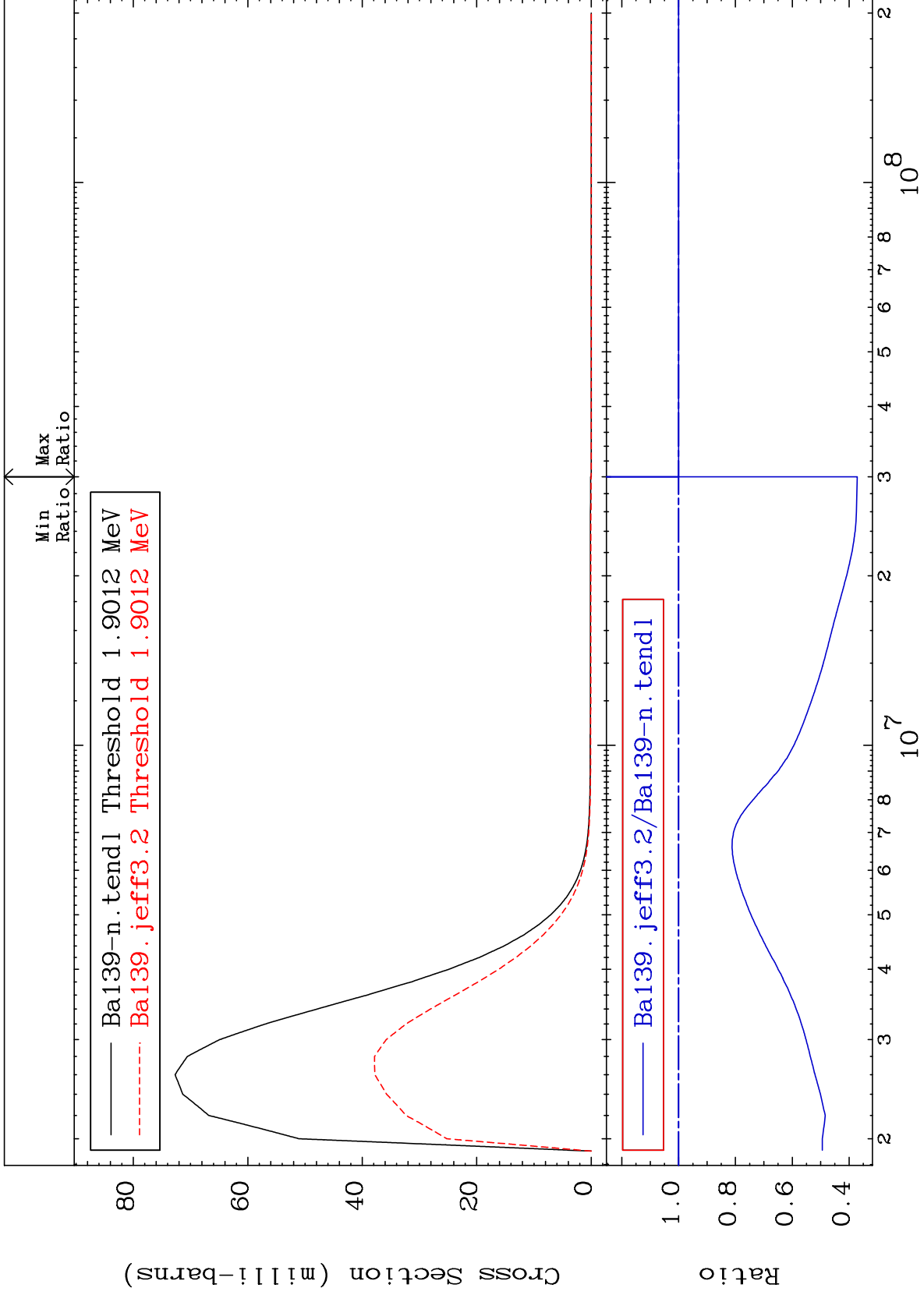
56-Ba-139
0.000 To 50.02 %



MAT 5652

1.888 MeV (n,n') Level
Cross Section

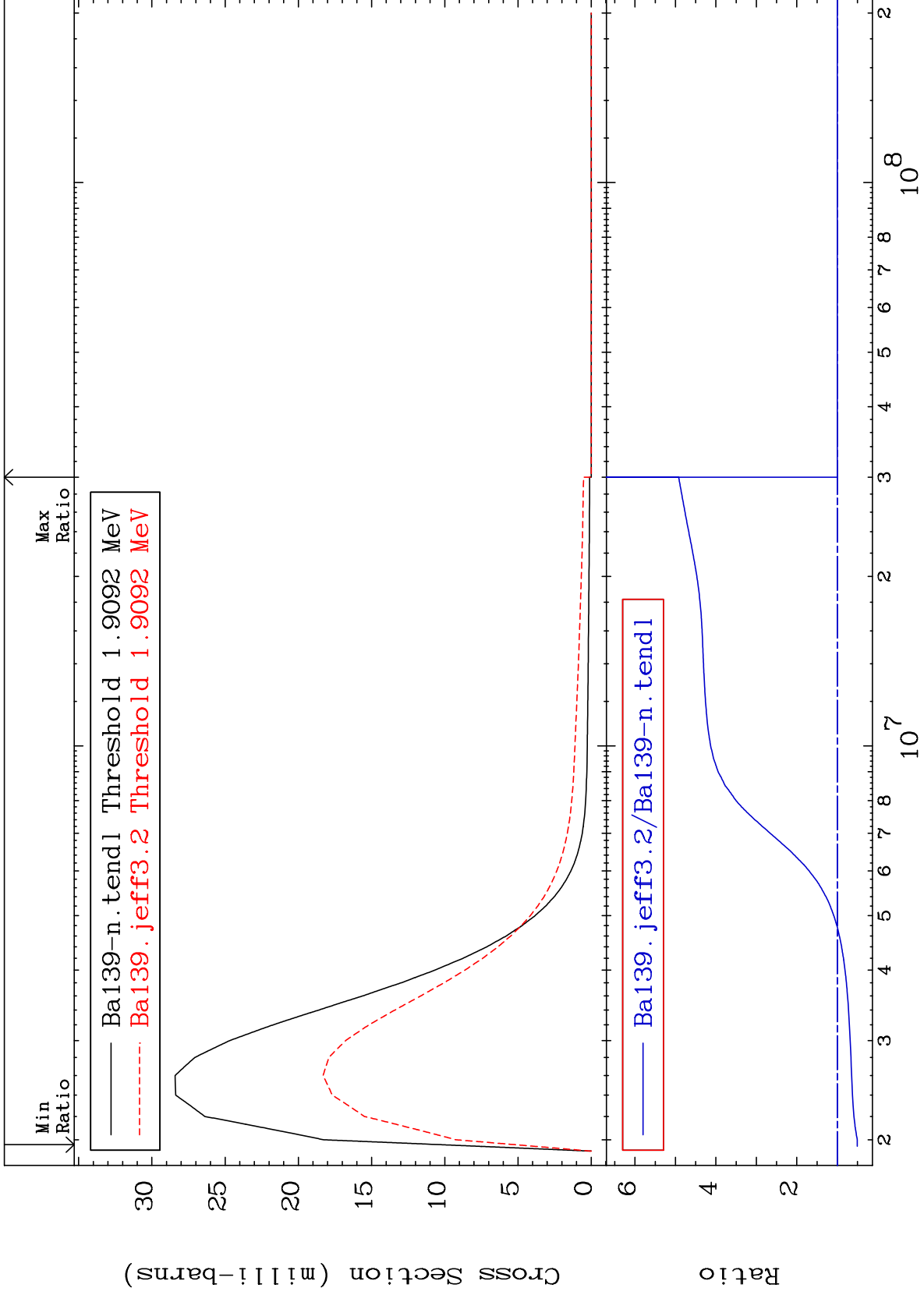
56-Ba-139
-62.88 To 0.000 %



MAT 5652

1.895 MeV (n,n') Level
Cross Section

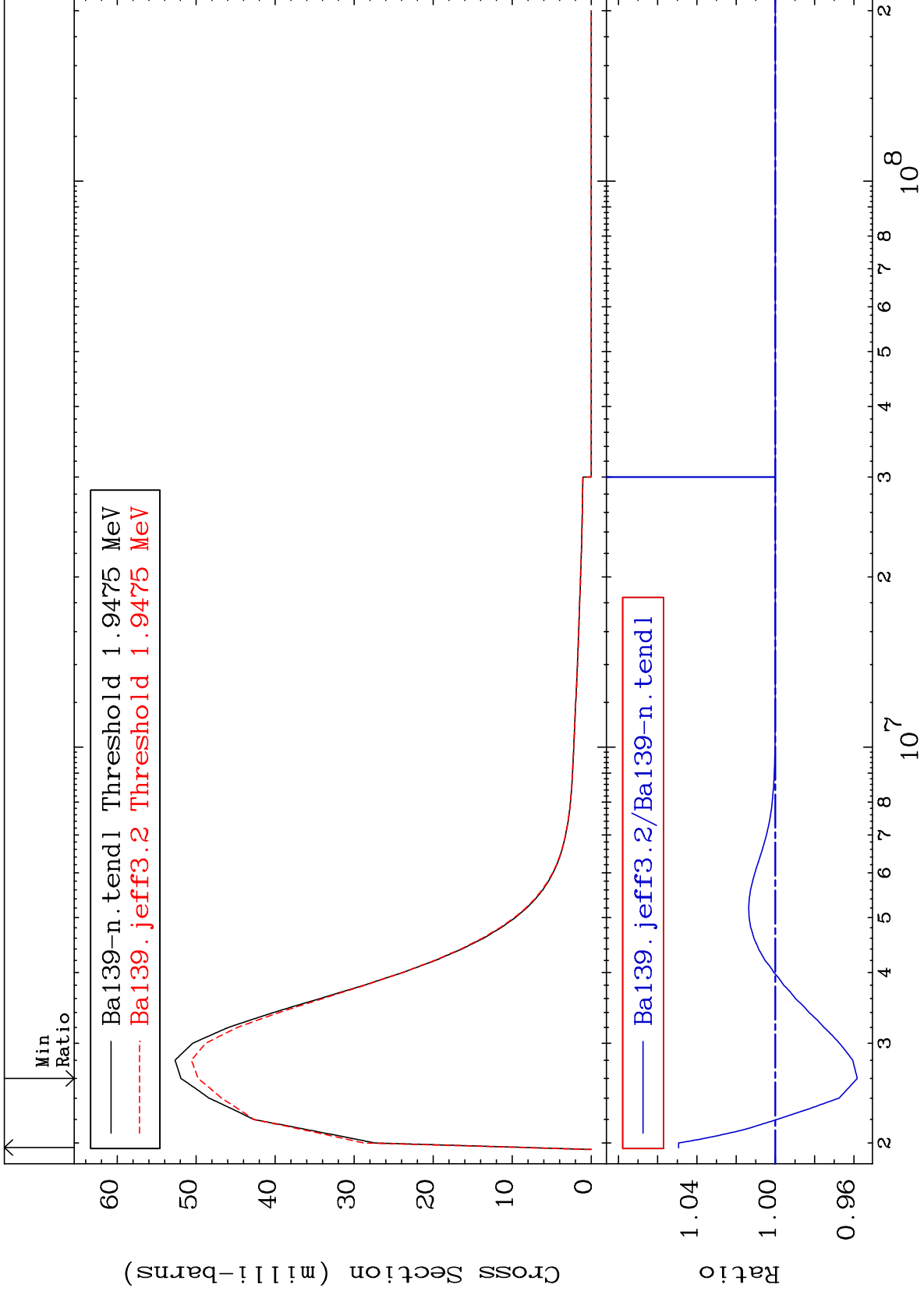
56-Ba-139
-49.47 To 392.1 %



MAT 5652

1.933 MeV (n,n') Level
Cross Section

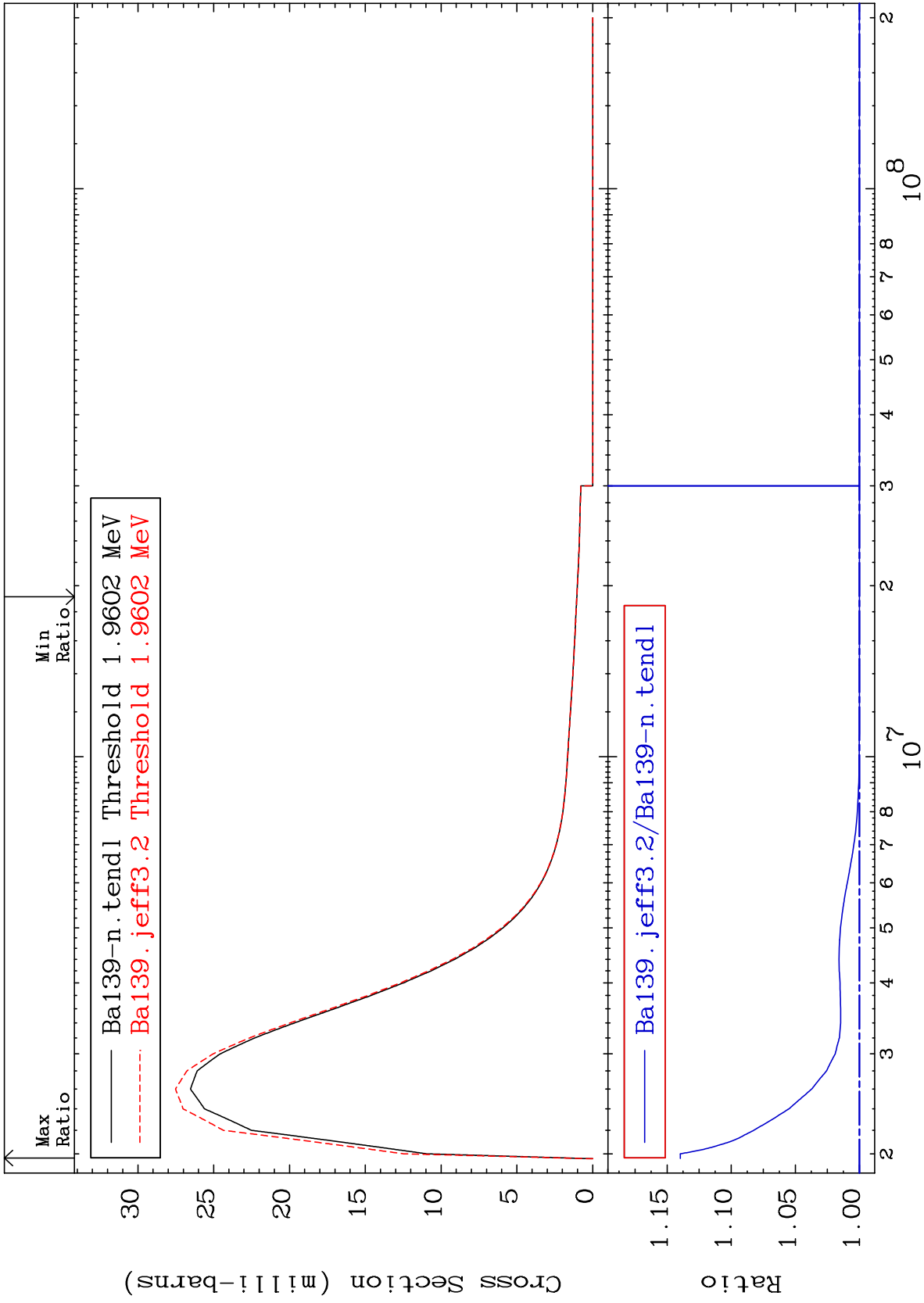
56-Ba-139
-4.172 To 4.930 %



MAT 5652

1.946 MeV (n,n') Level
Cross Section

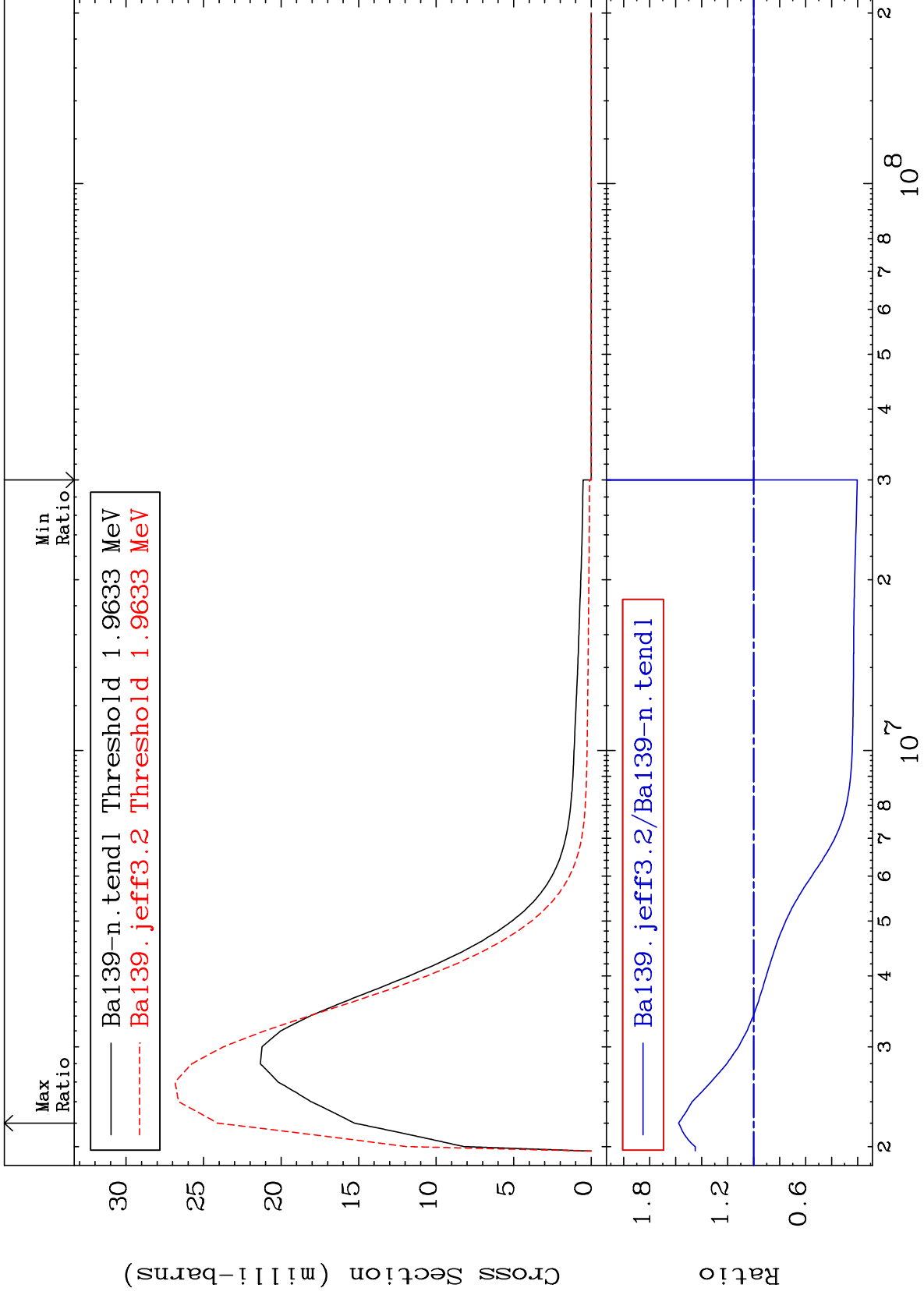
56-Ba-139
To 13.96 %



MAT 5652

1.949 MeV (n,n') Level
Cross Section

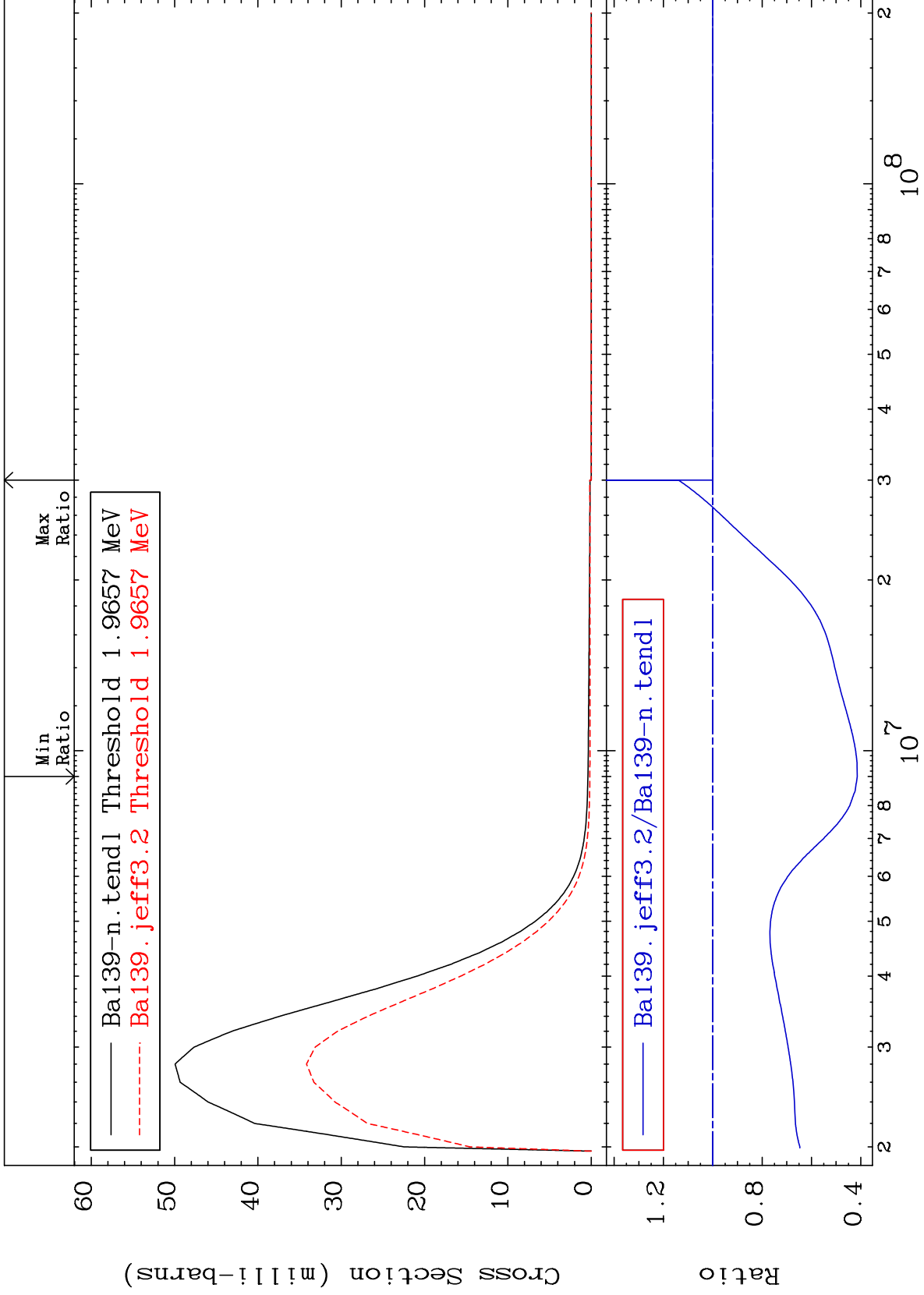
56-Ba-139
-79.69 To 57.78 %



MAT 5652

1.952 MeV (n,n') Level
Cross Section

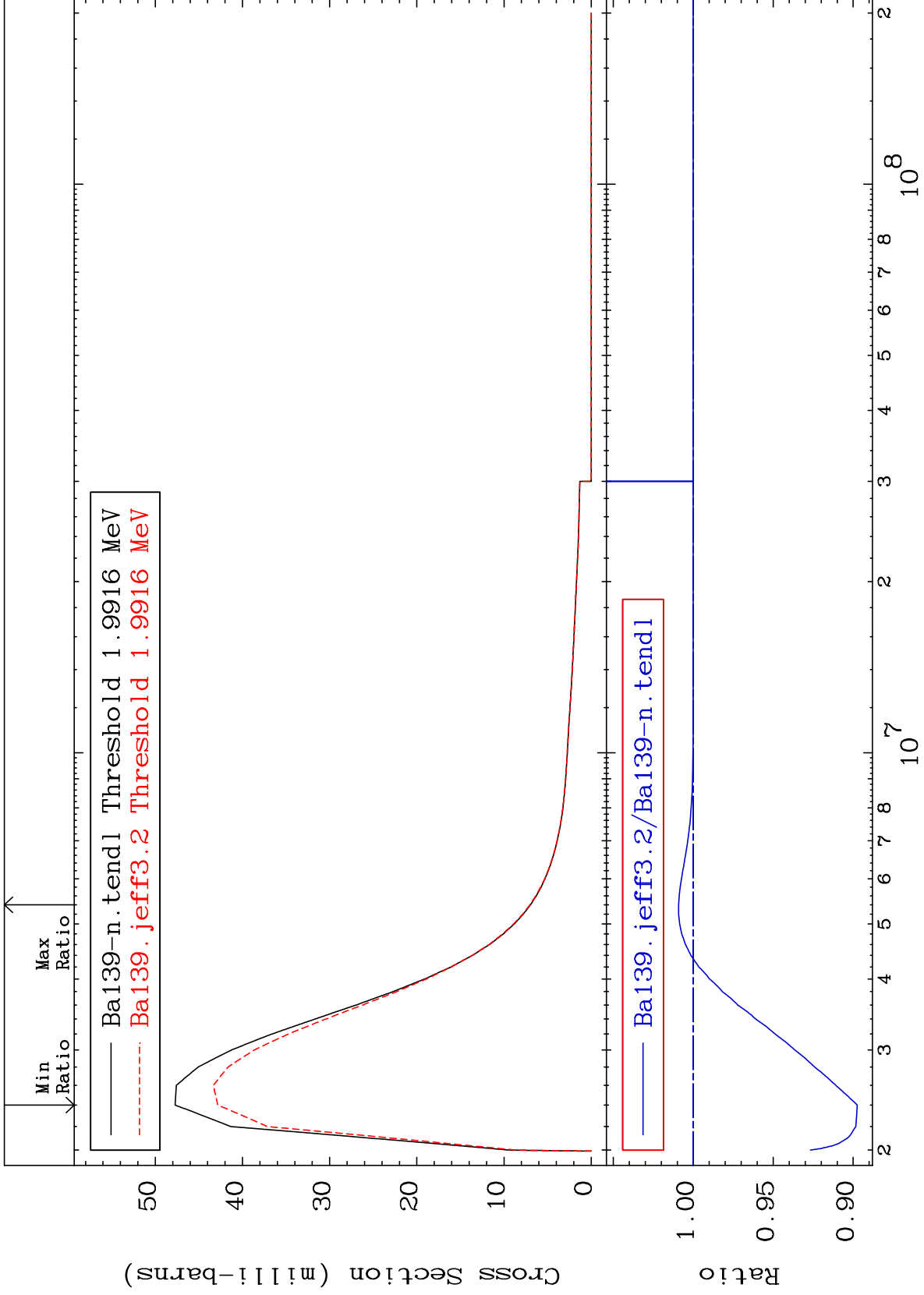
56-Ba-139
-58.57 To 13.84 %



MAT 5652

1.977 MeV (n,n') Level
Cross Section

56-Ba-139
-10.25 To 0.913 %



40

Incident Energy (eV)

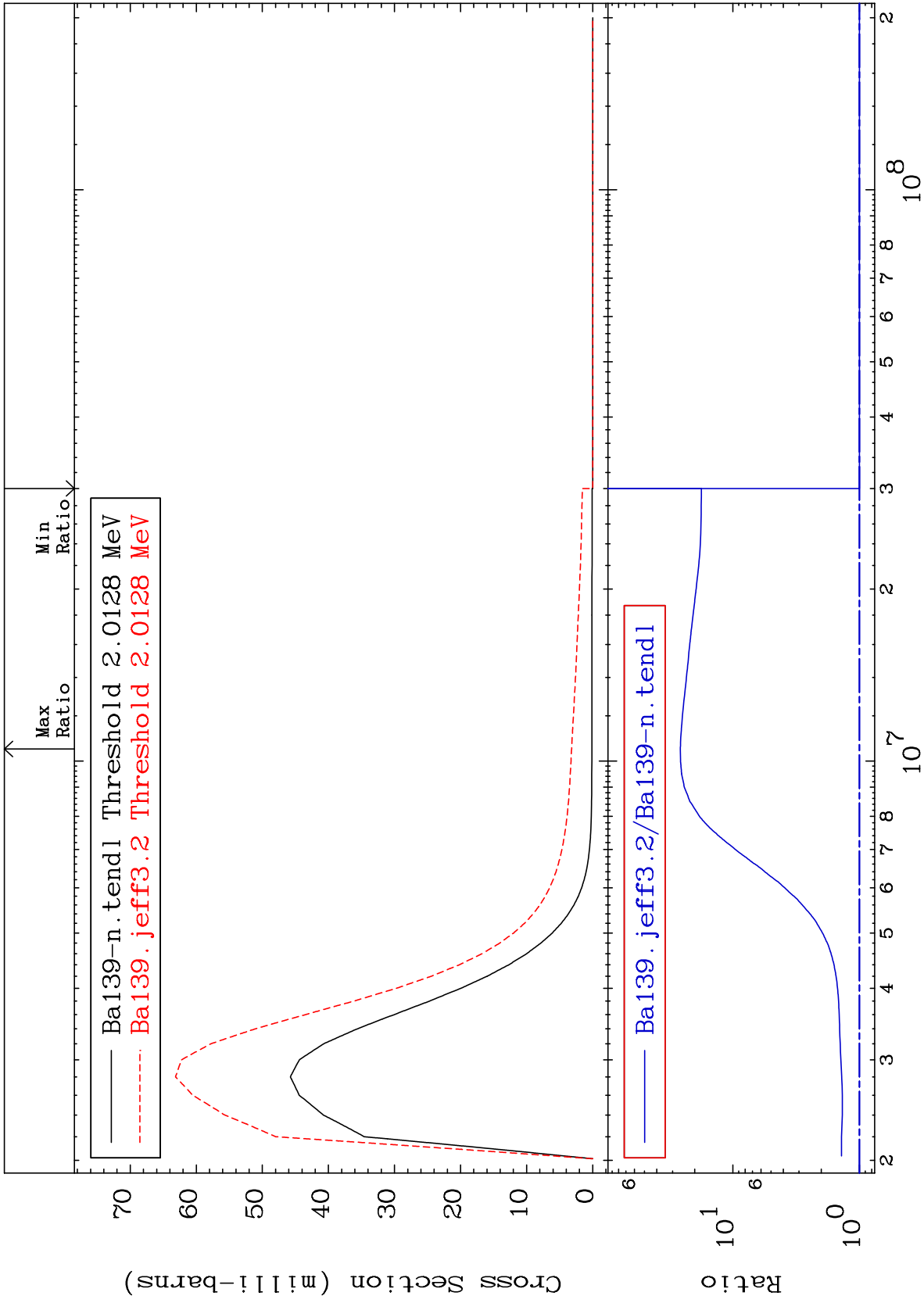
56-Ba-139

MAT 5652

1.998 MeV (n,n') Level

56-Ba-139

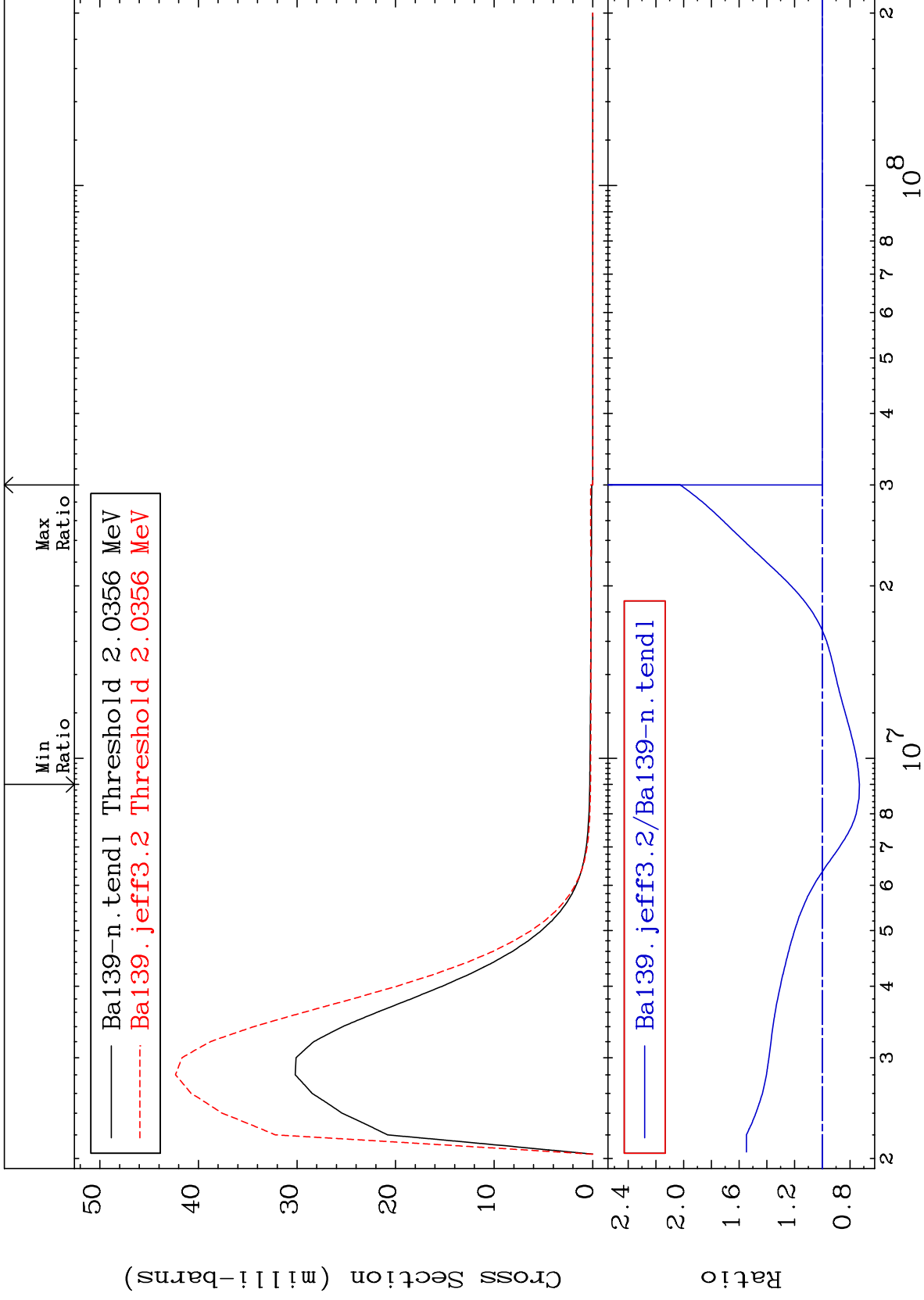
0.000 To 2501. %



MAT 5652

2.021 MeV (n,n') Level
Cross Section

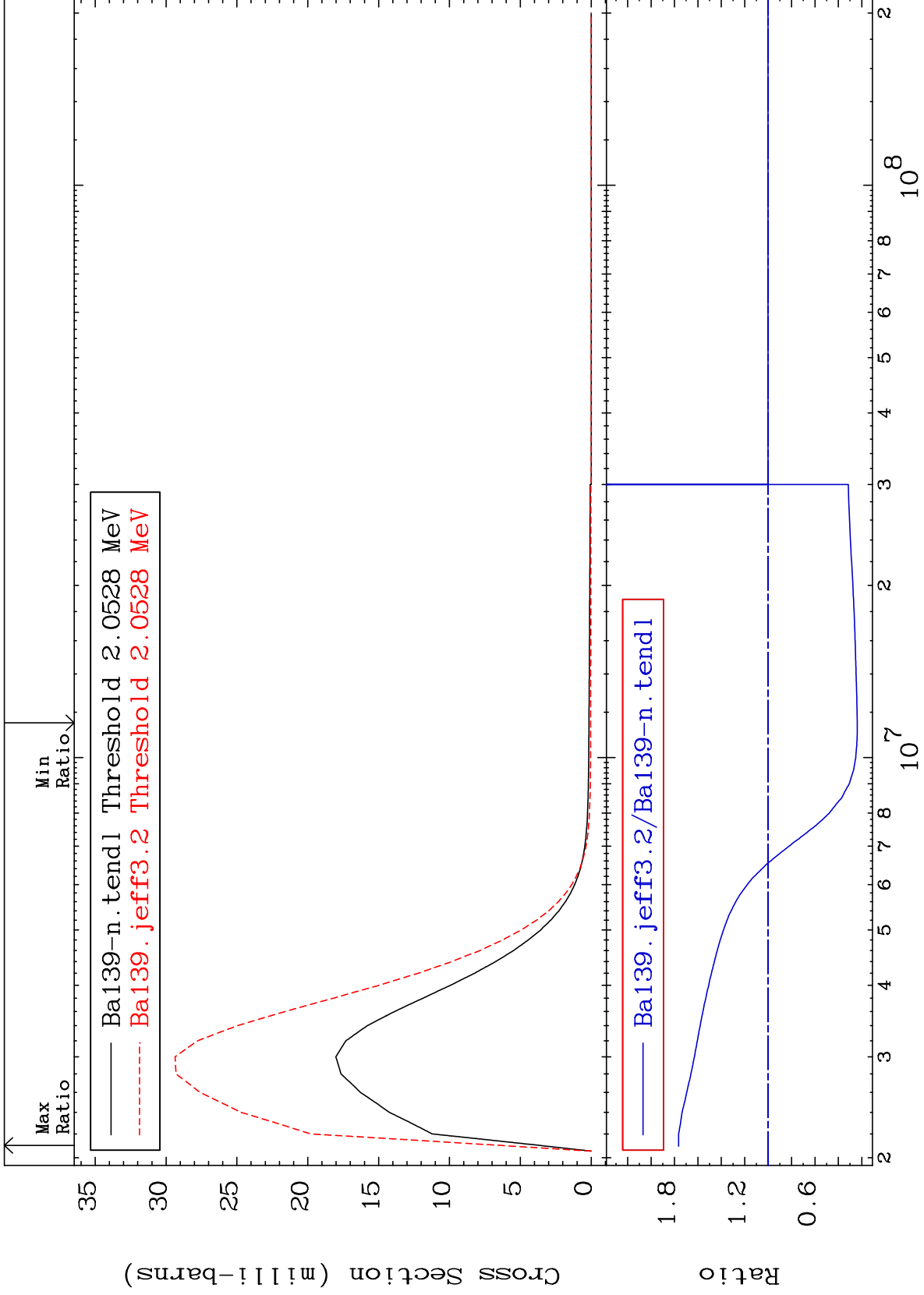
56-Ba-139
-26.82 To 102.4 %



MAT 5652

2.038 MeV (n,n') Level
Cross Section

56-Ba-139
-76.16 To 76.44 %

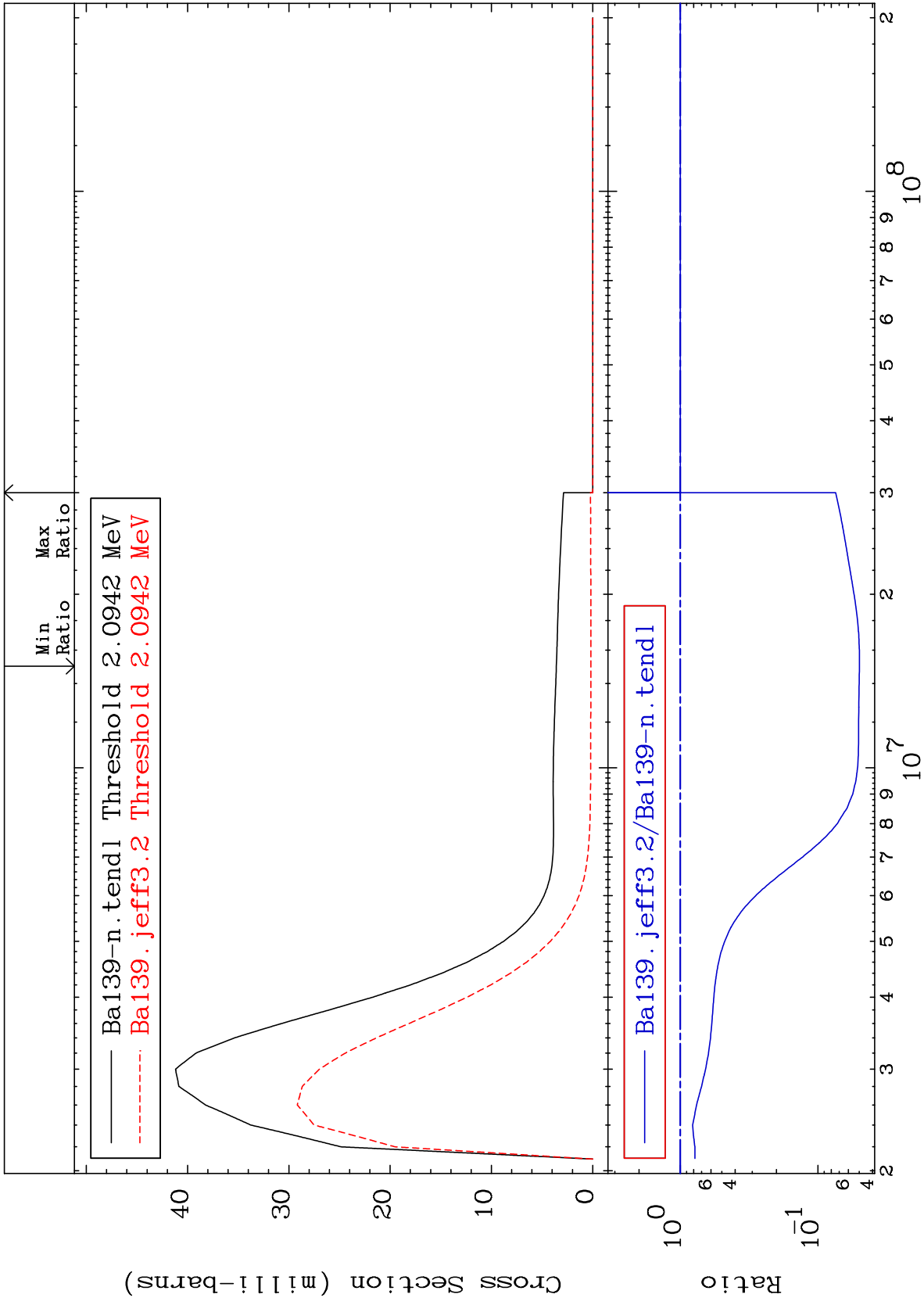


MAT 5652

2.079 MeV (n,n') Level

56-Ba-139

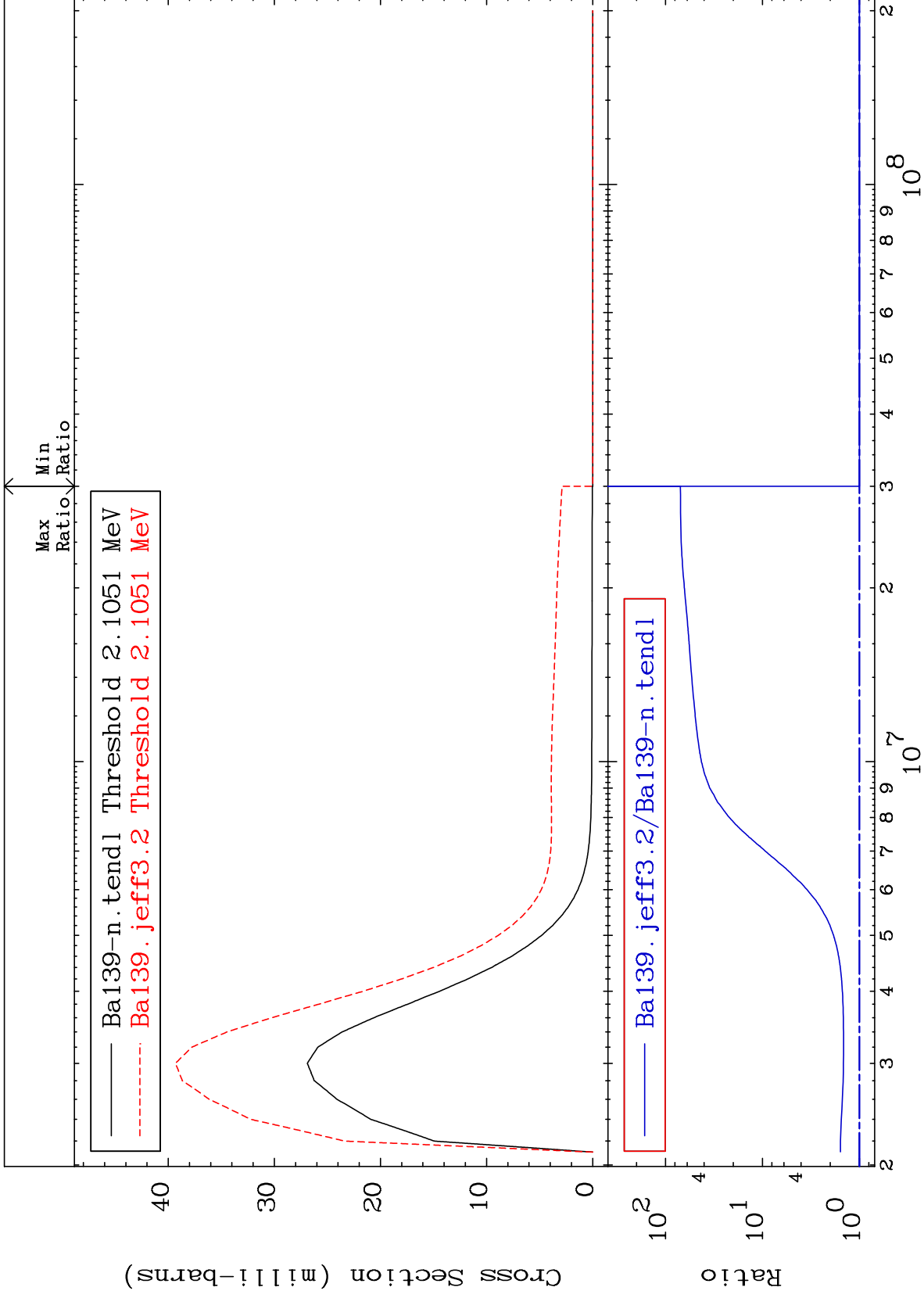
-95.01 To 0.000 %



MAT 5652

2.090 MeV (n,n') Level
Cross Section

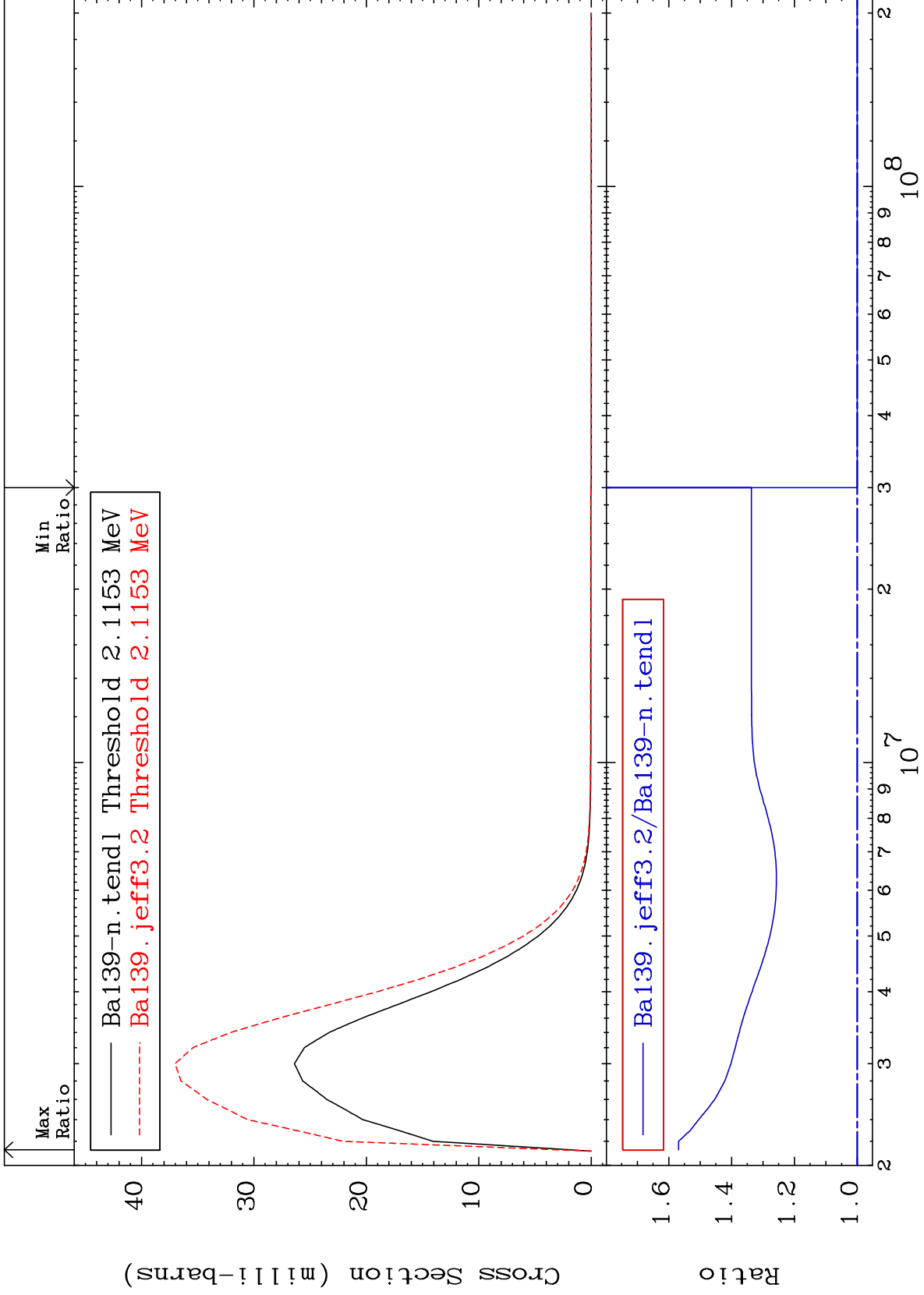
56-Ba-139
To 6943. %



MAT 5652

2.100 MeV (n,n') Level
Cross Section

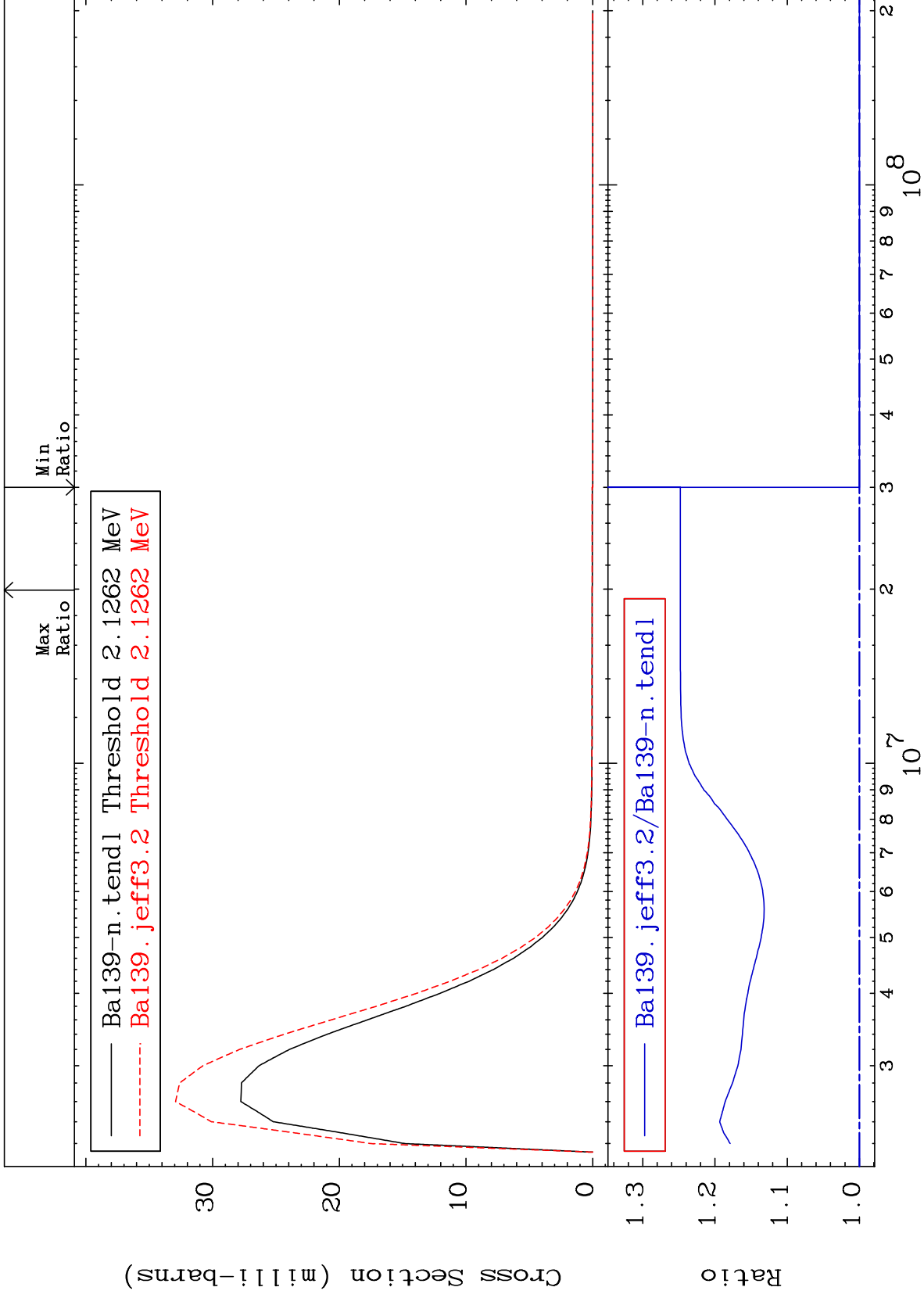
56-Ba-139
To 56.86 %

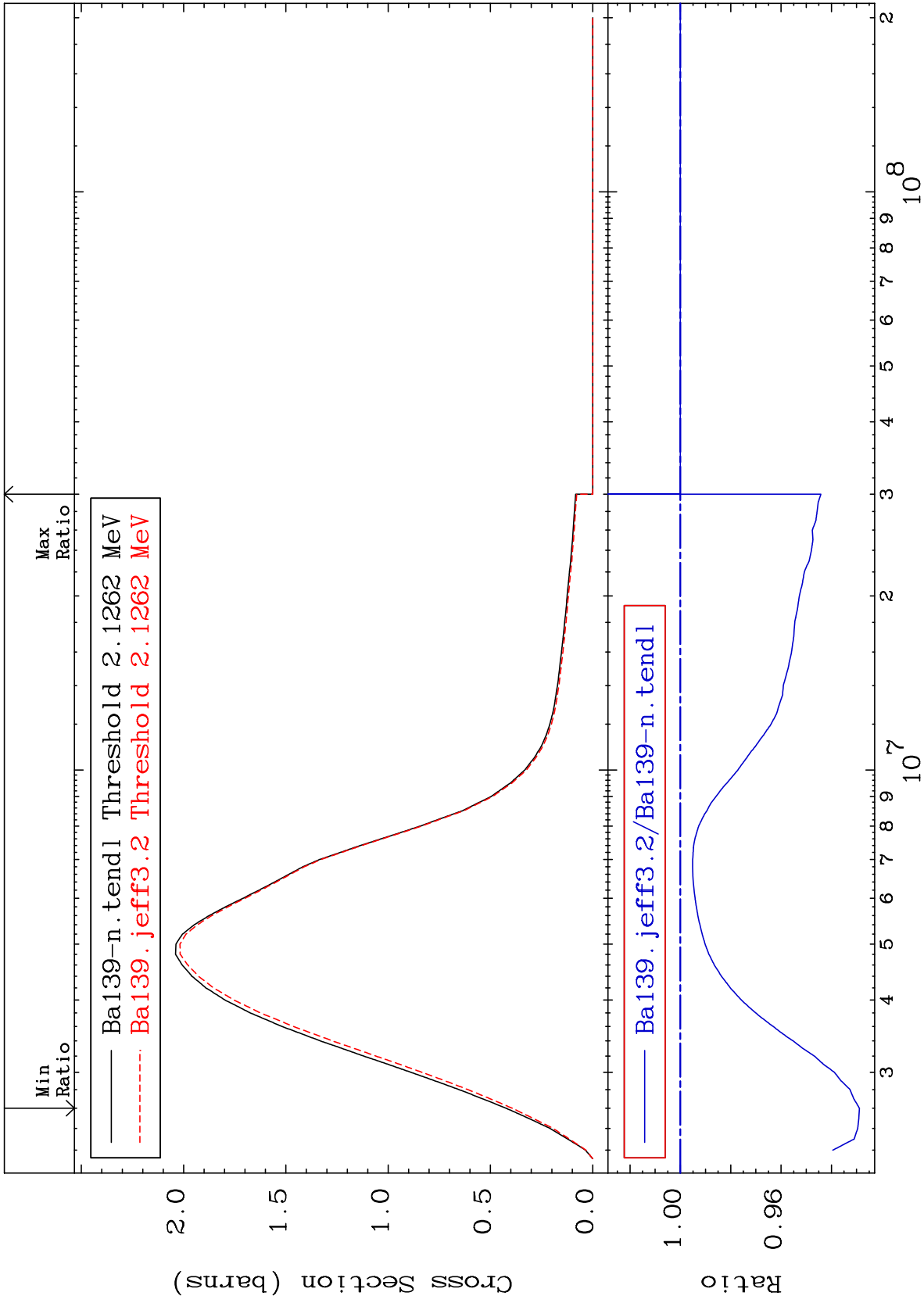


MAT 5652

2.111 MeV (n,n') Level
Cross Section

56-Ba-139
To 24.80 %



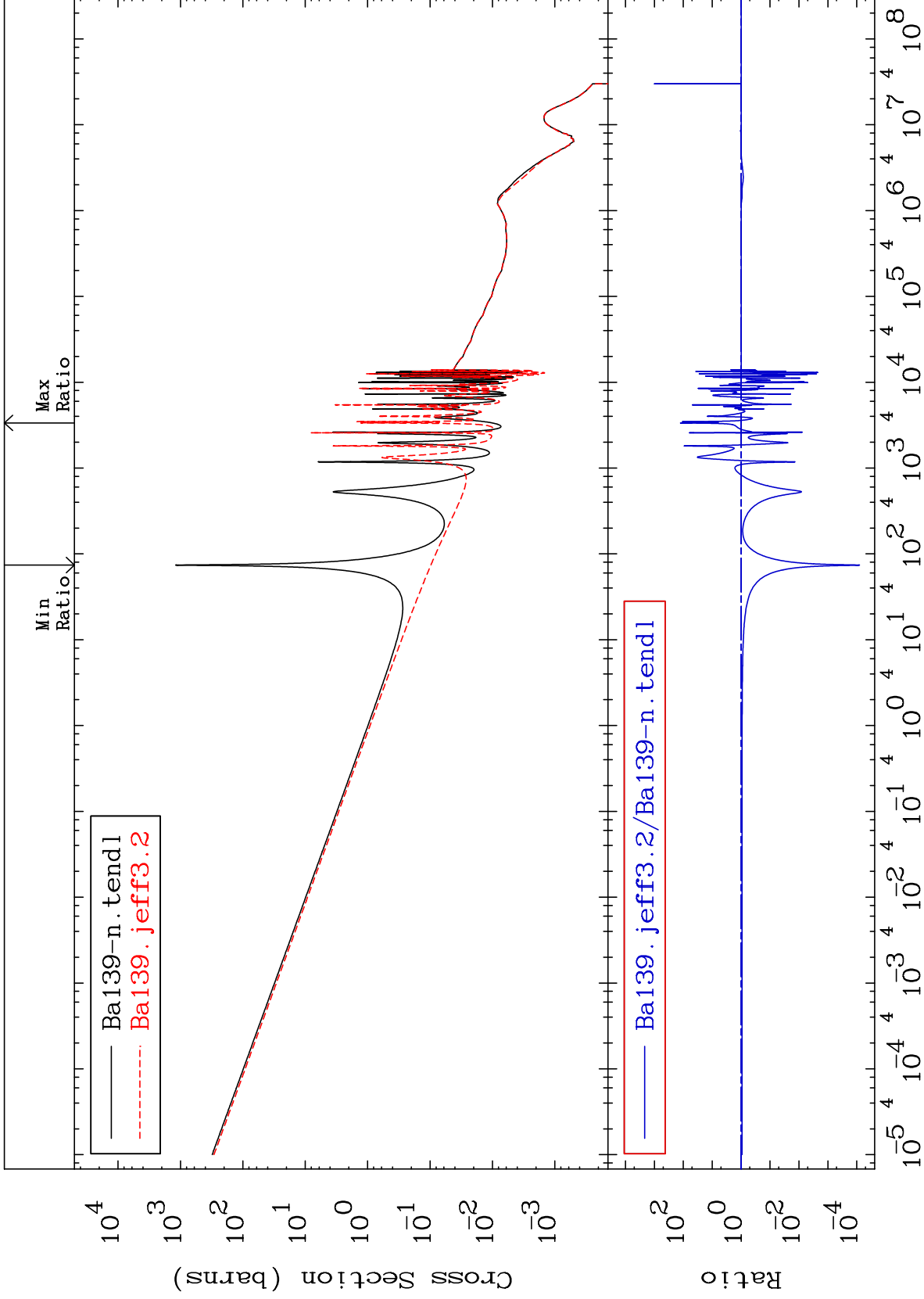


MAT 5652

56-Ba-139

-99.99 To 9999. %

(n, γ)
Cross Section



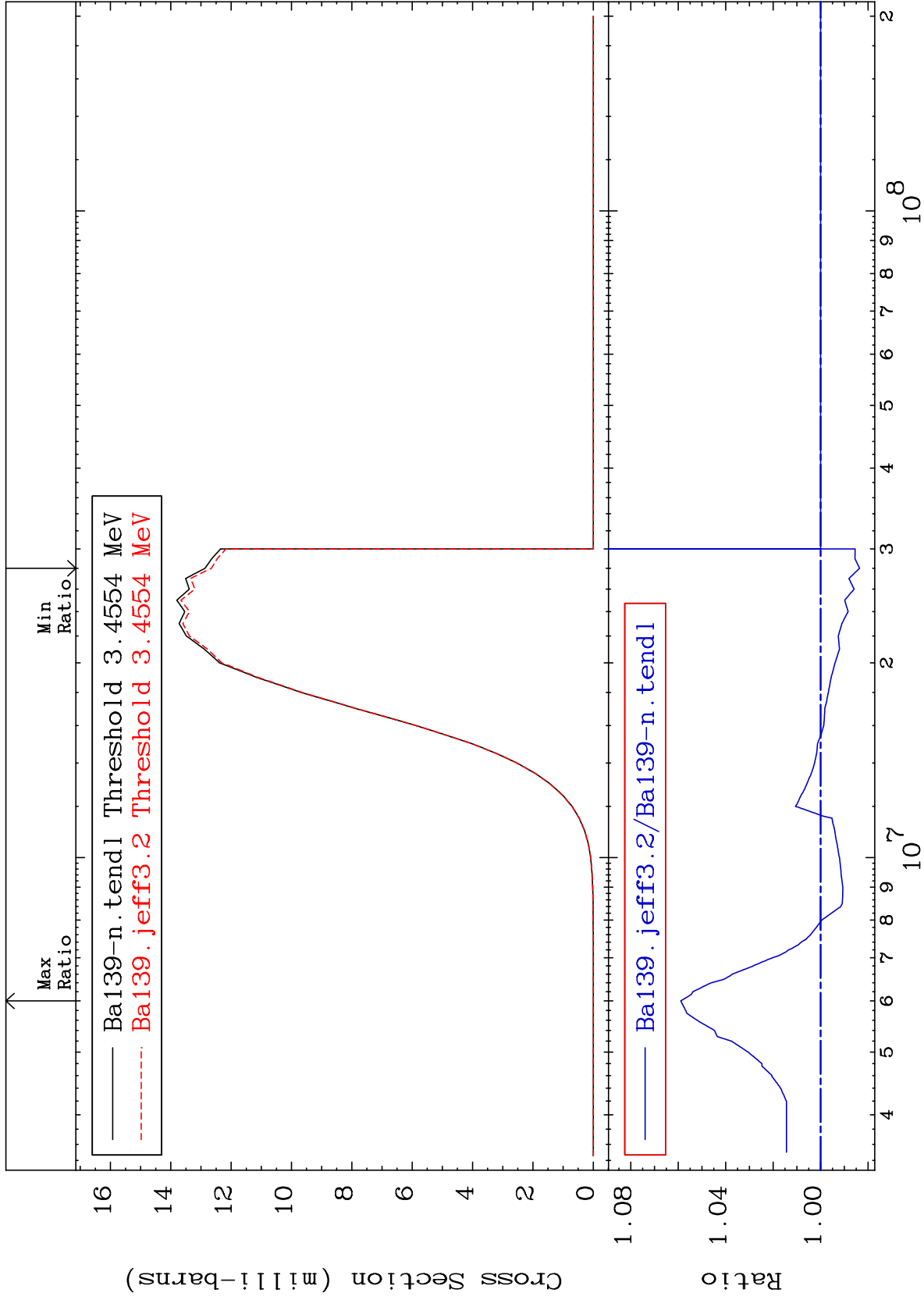
MAT 5652

(n, p)

56-Ba-139

Cross Section

-1.637 To 5.893 %



51

Incident Energy (eV)

56-Ba-139

MAT 5652

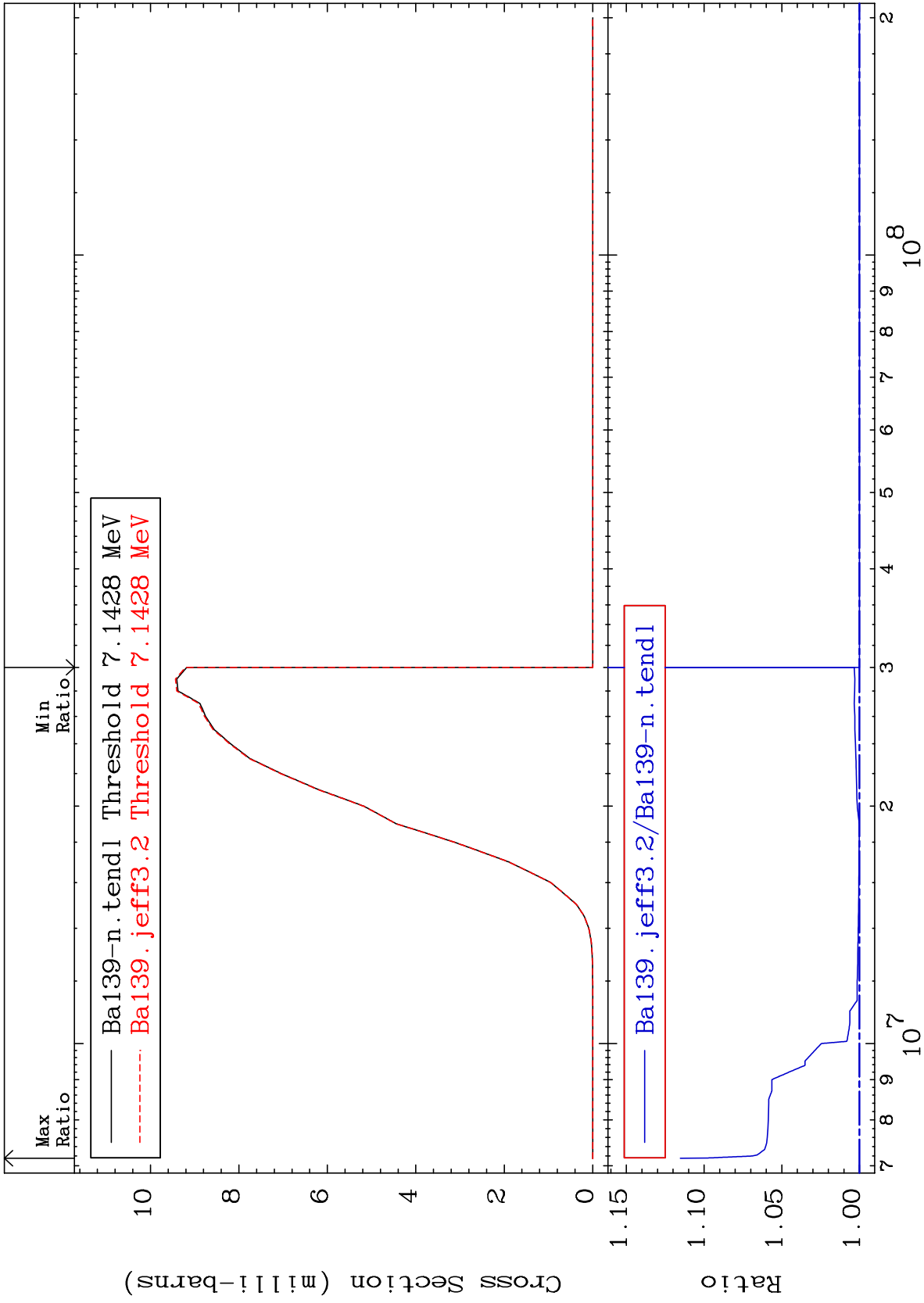
(n, d)

56-Ba-139

Cross Section

0.000

To 11.53 %



52

Incident Energy (eV)

56-Ba-139

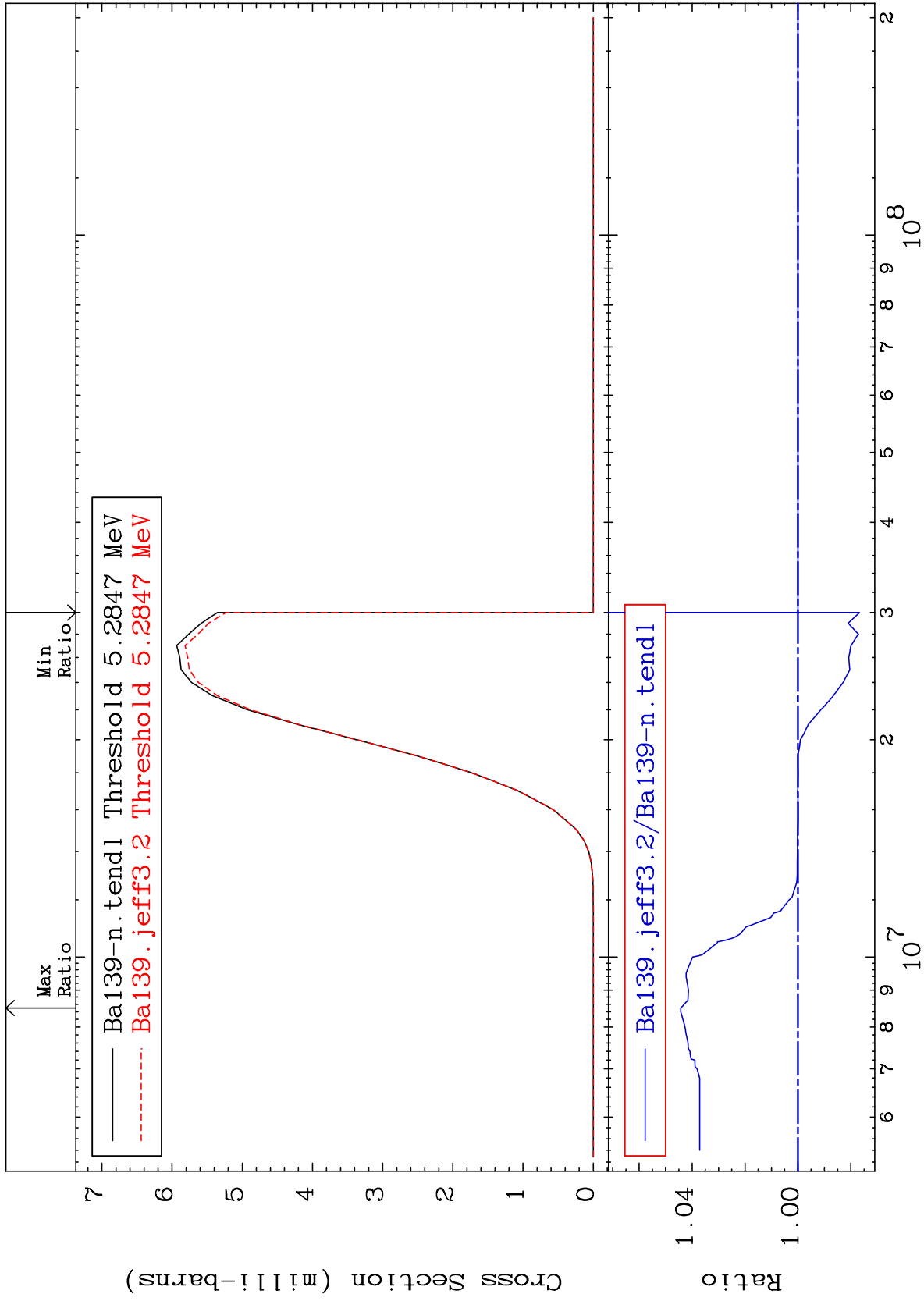
MAT 5652

(n, t)

56-Ba-139

Cross Section

-2.330 To 4.427 %



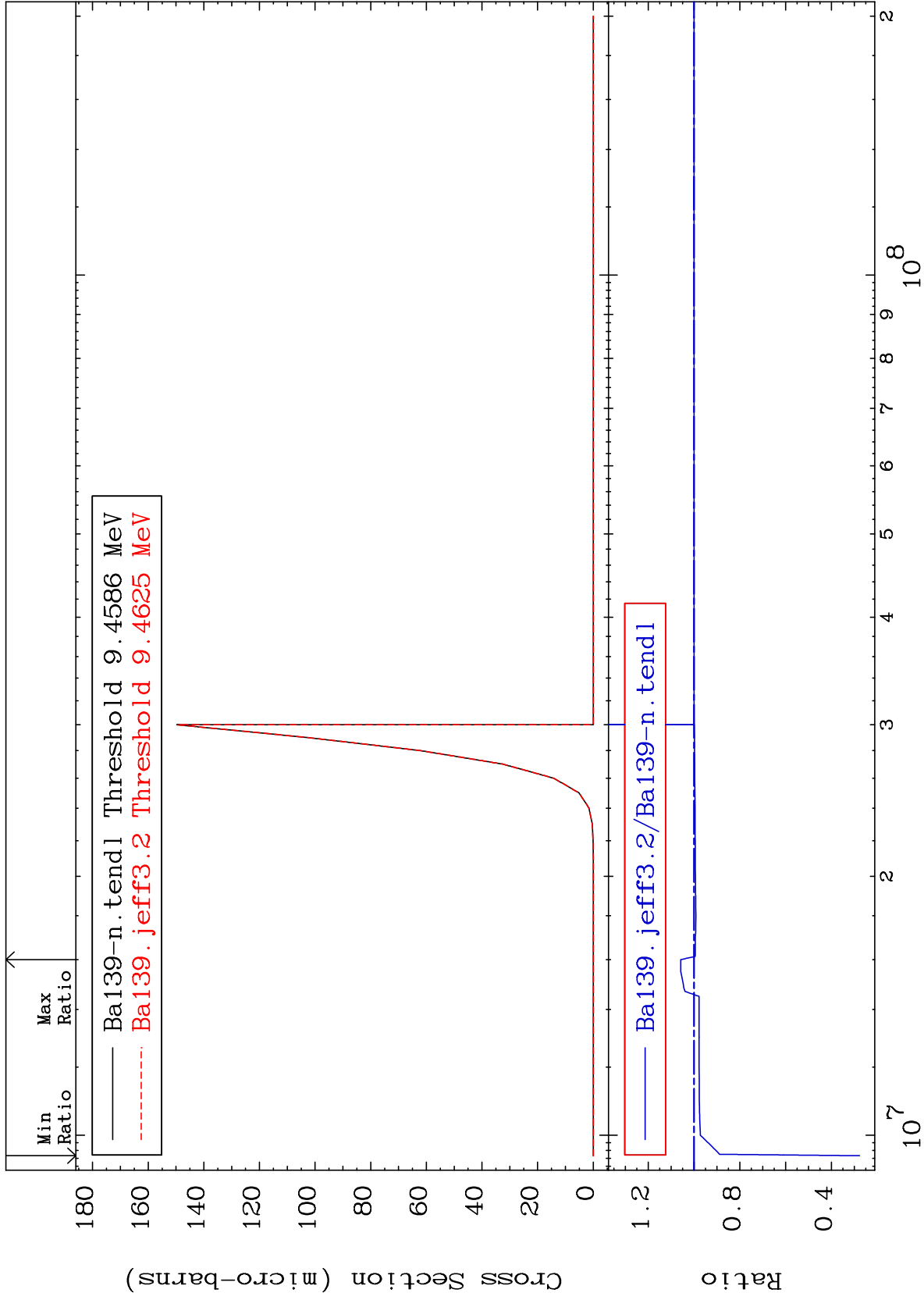
MAT 5652

(n, He-3)

56-Ba-139

Cross Section

-72.26 To 5.798 %



54

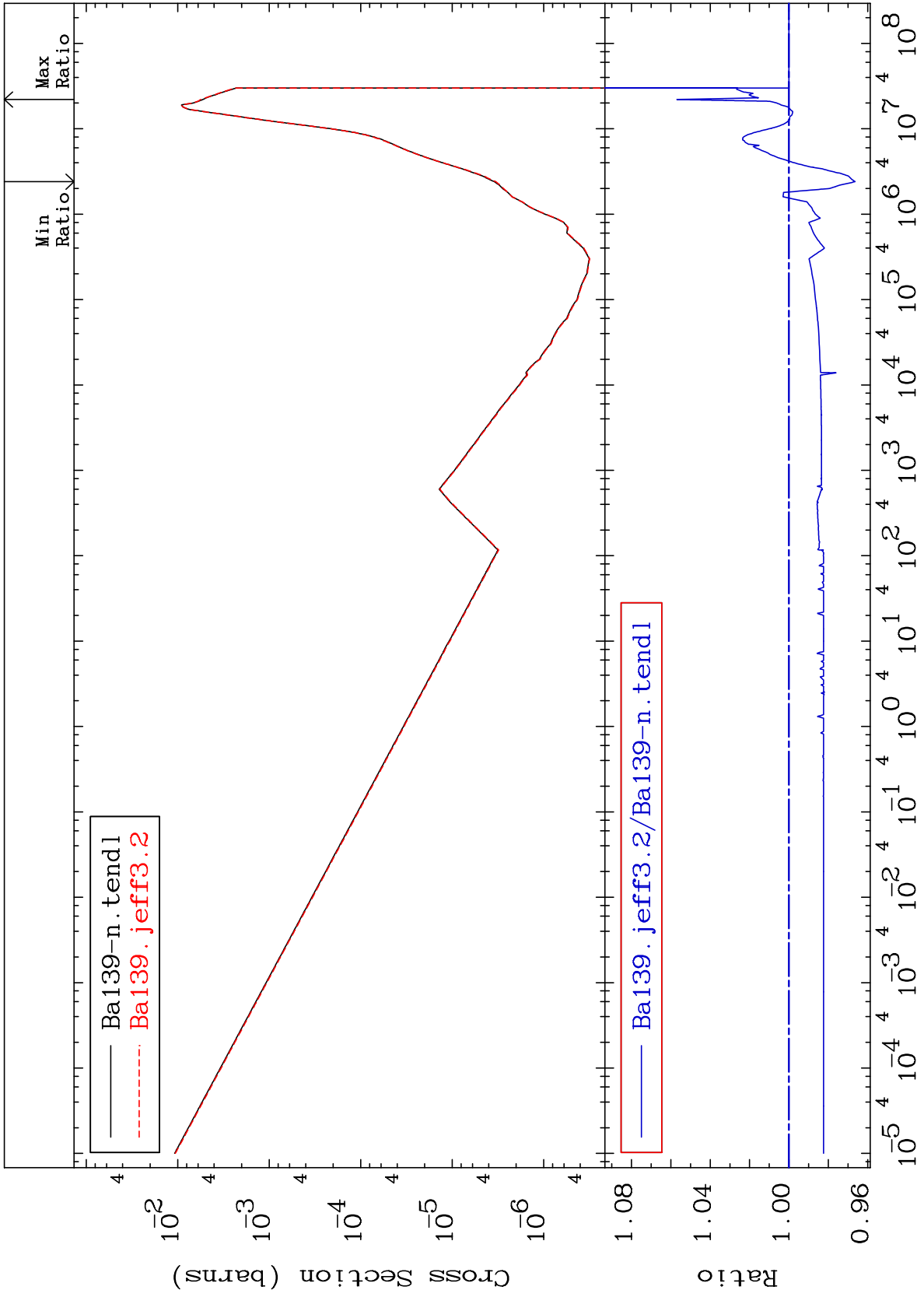
Incident Energy (eV)

56-Ba-139

MAT 5652

(n, α)
Cross Section

56-Ba-139
-3.356 To 5.689 %



55

Incident Energy (eV)

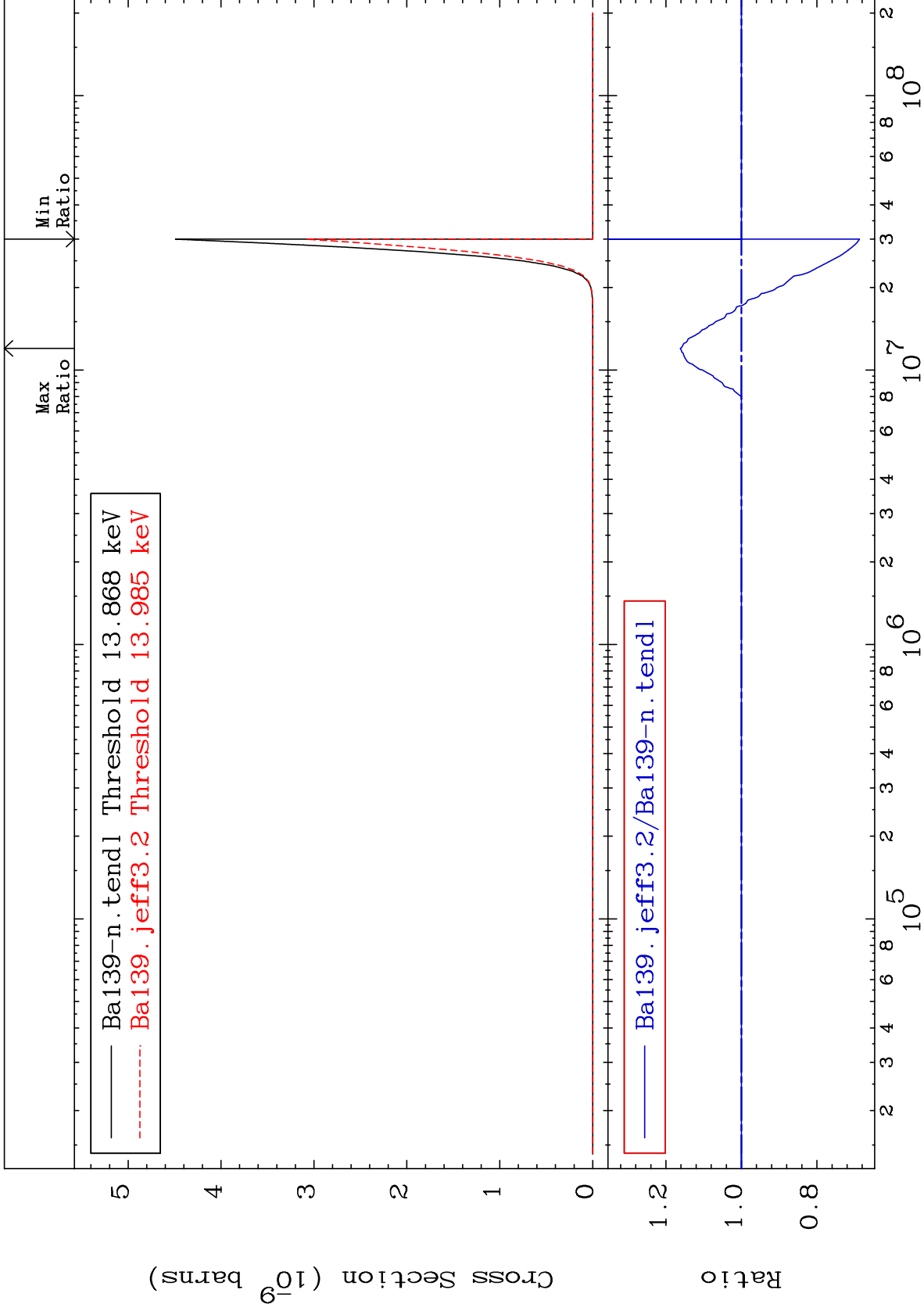
56-Ba-139

MAT 5652

(n,2α)

Cross Section

56-Ba-139
-31.26 To 16.18 %



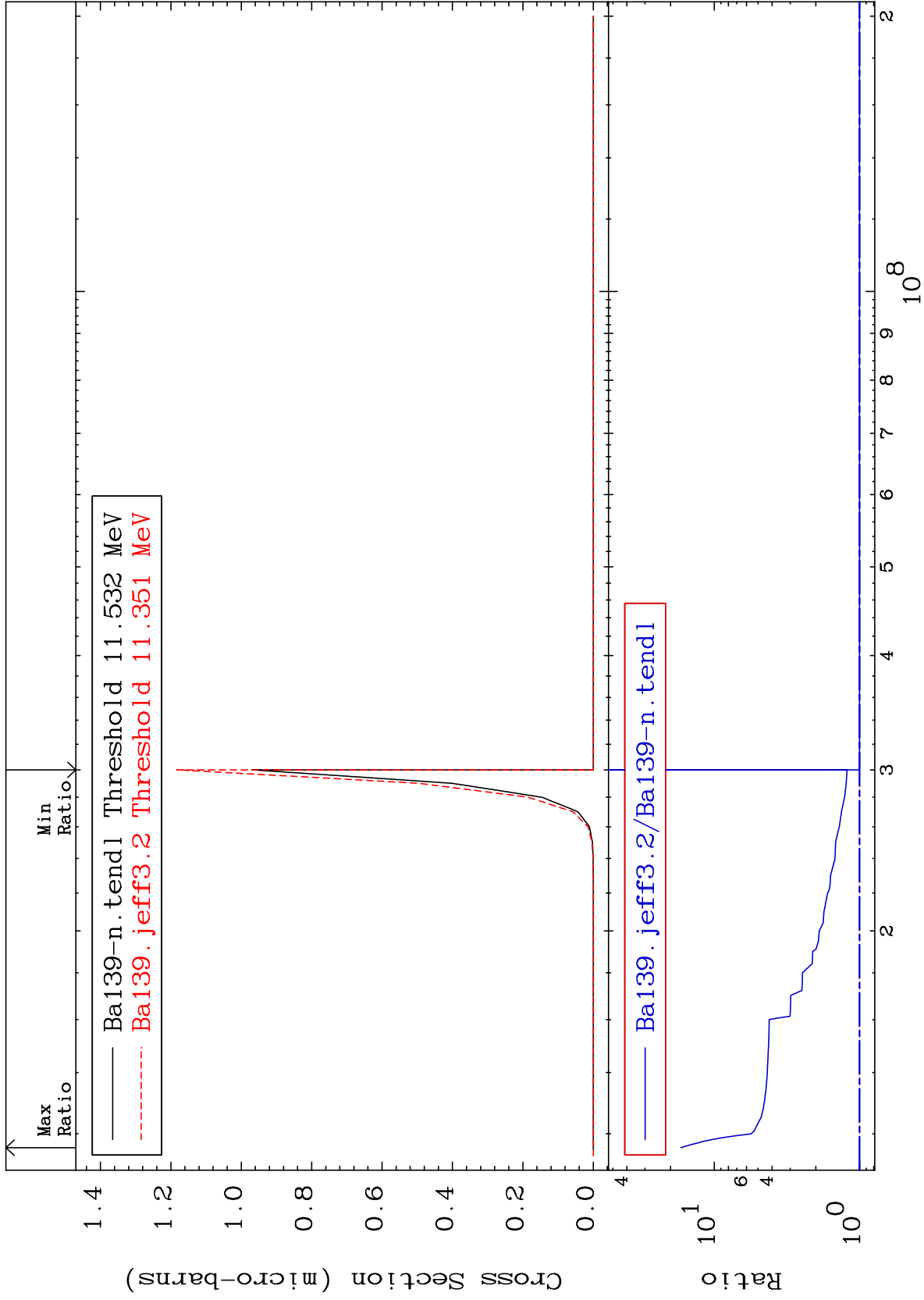
MAT 5652

(n,2p)

56-Ba-139

Cross Section

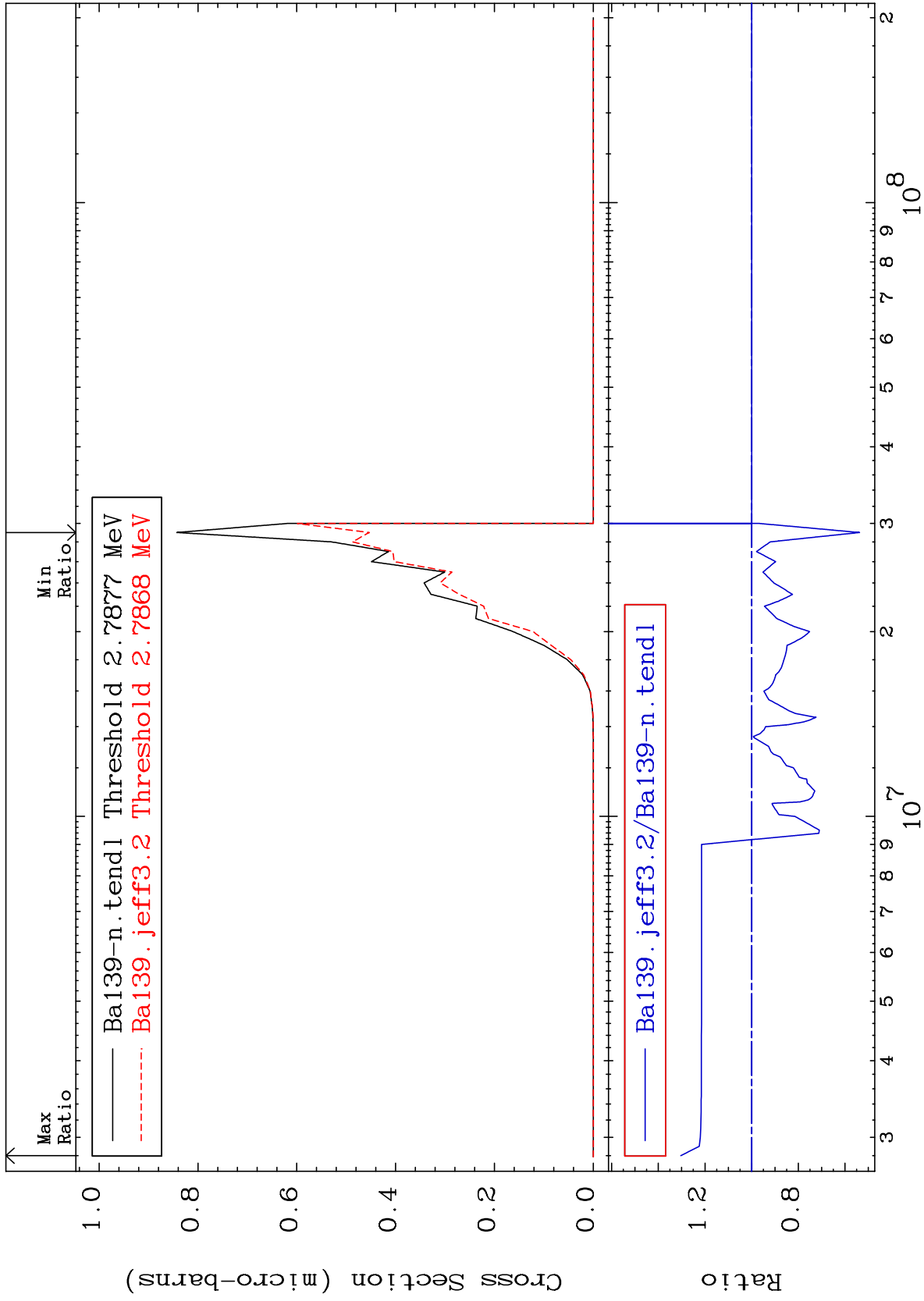
0.000 To 1601. %

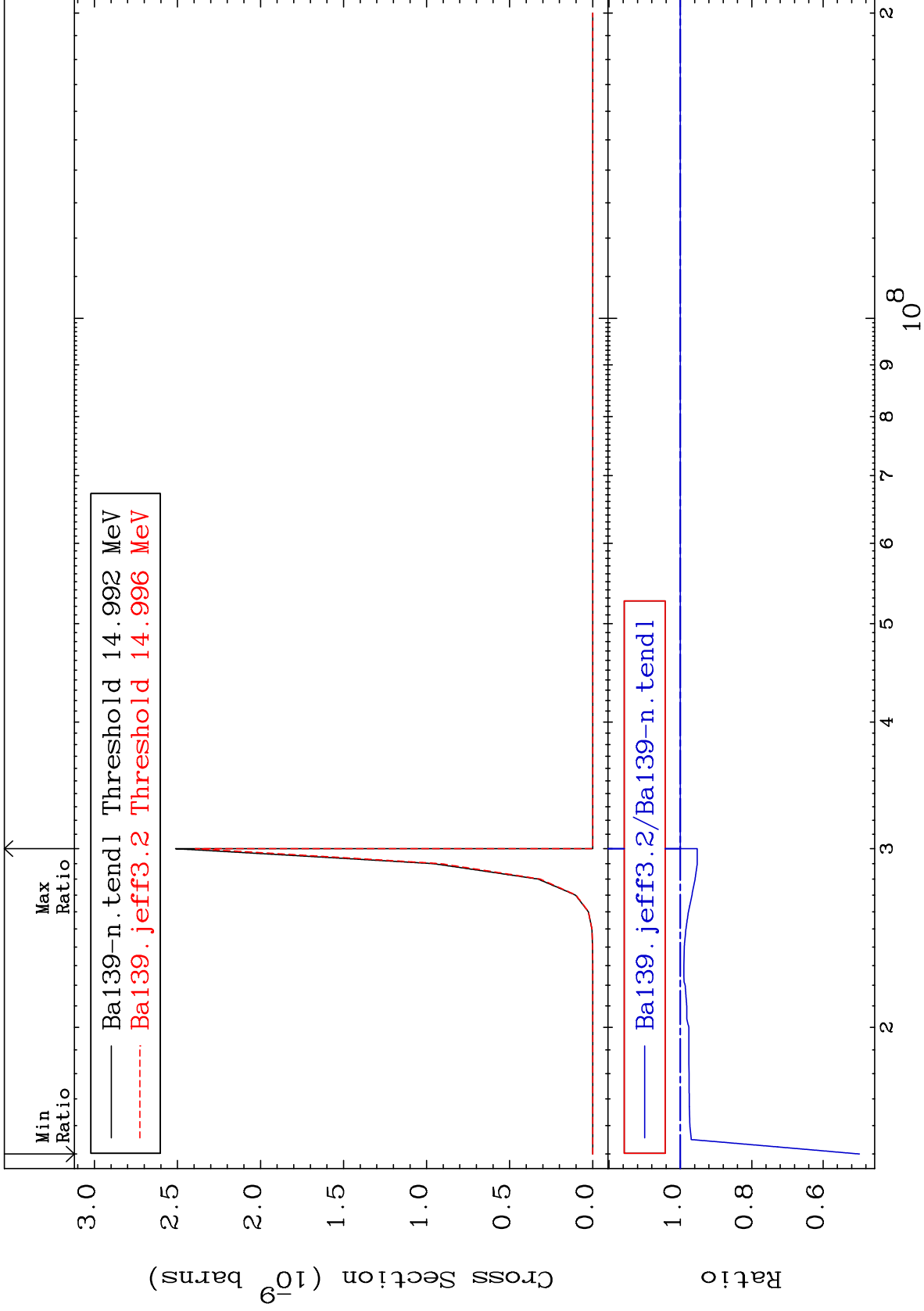


MAT 5652

(n, p) α
Cross Section

56-Ba-139
-46.22 To 30.37 %

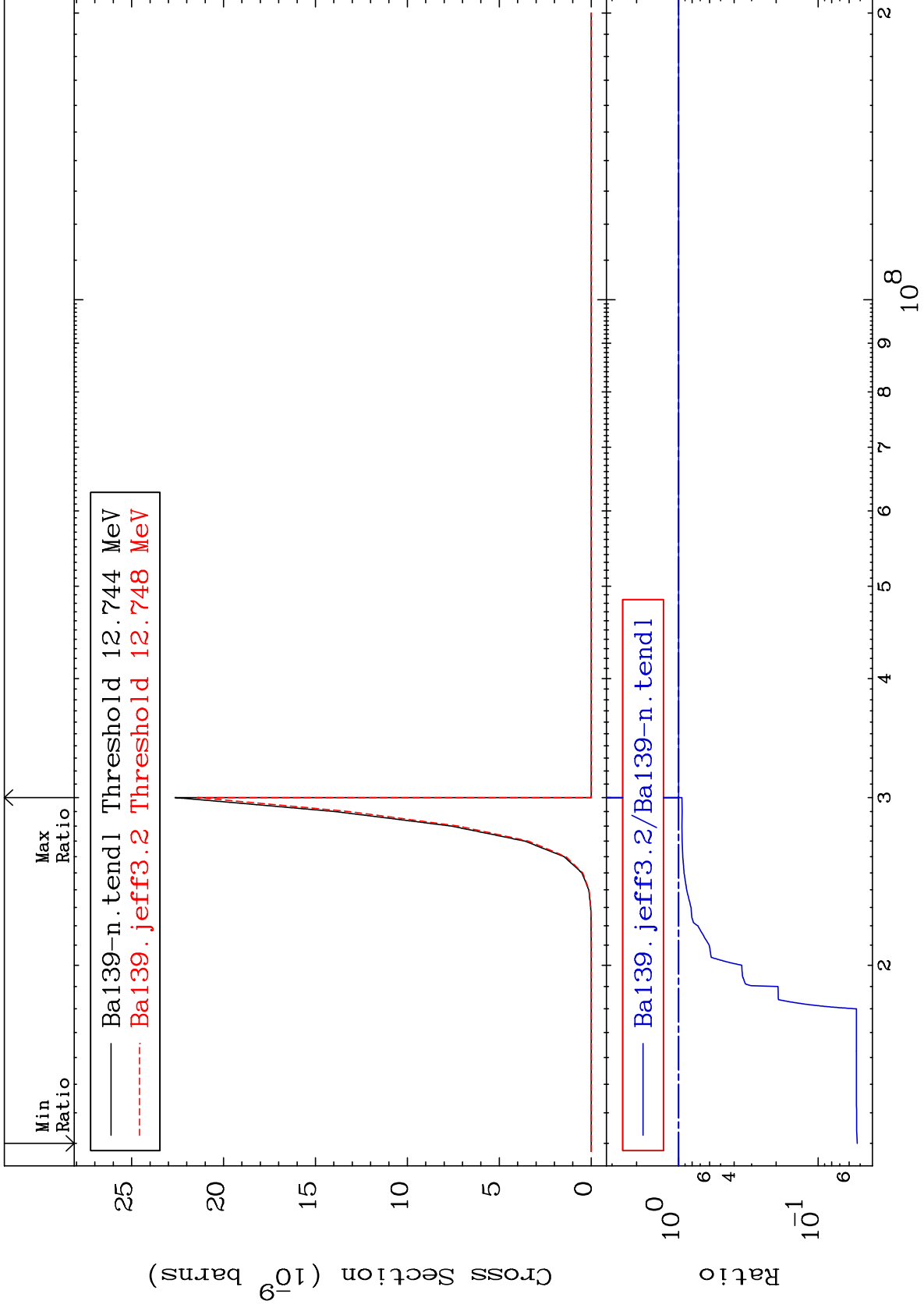




MAT 5652

(n, p) t
Cross Section

56-Ba-139
-94.75 To 0.000 %



60

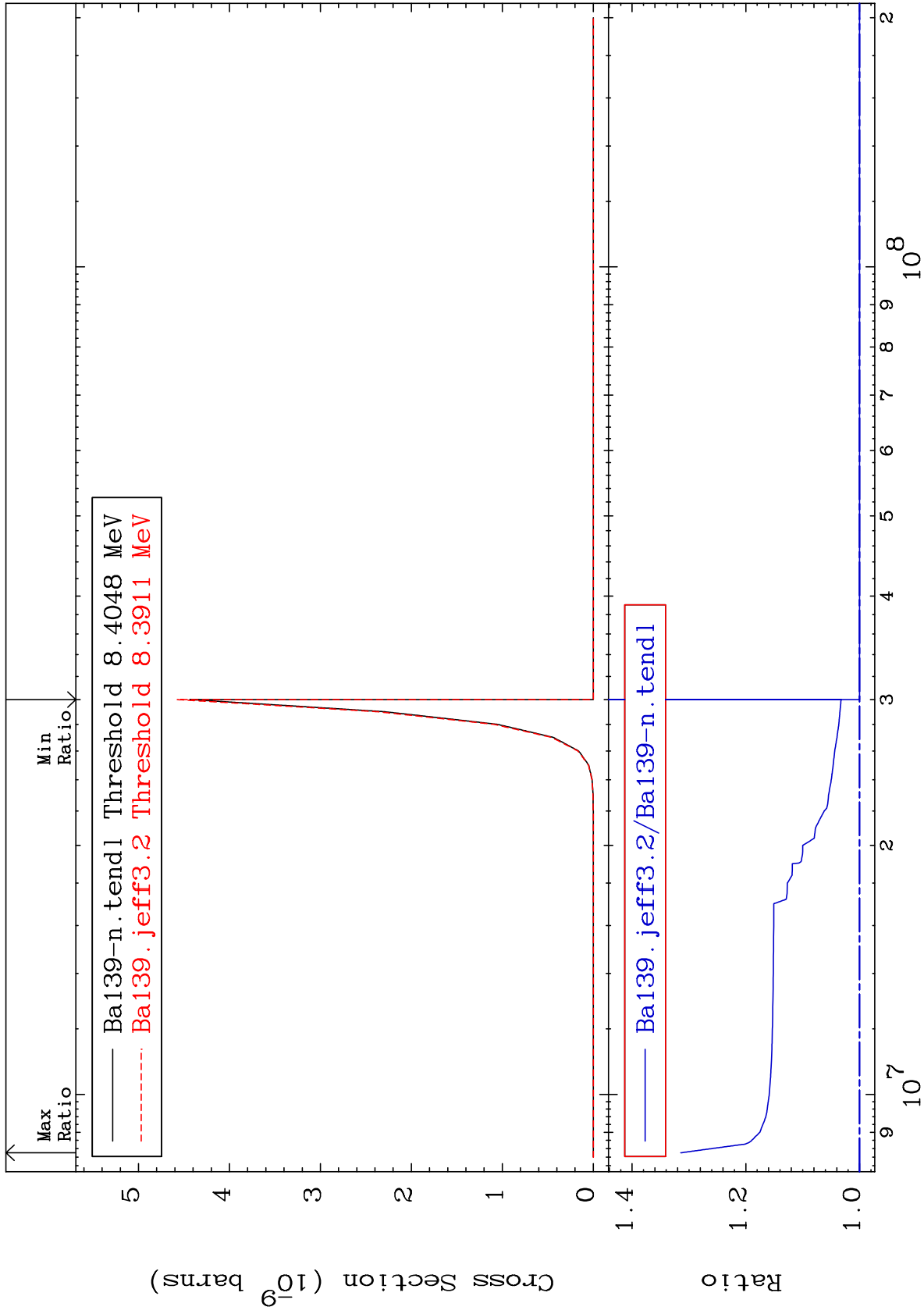
56-Ba-139

56-Ba-139

MAT 5652

(n, d) α
Cross Section

56-Ba-139
To 31.44 %
0.000



61

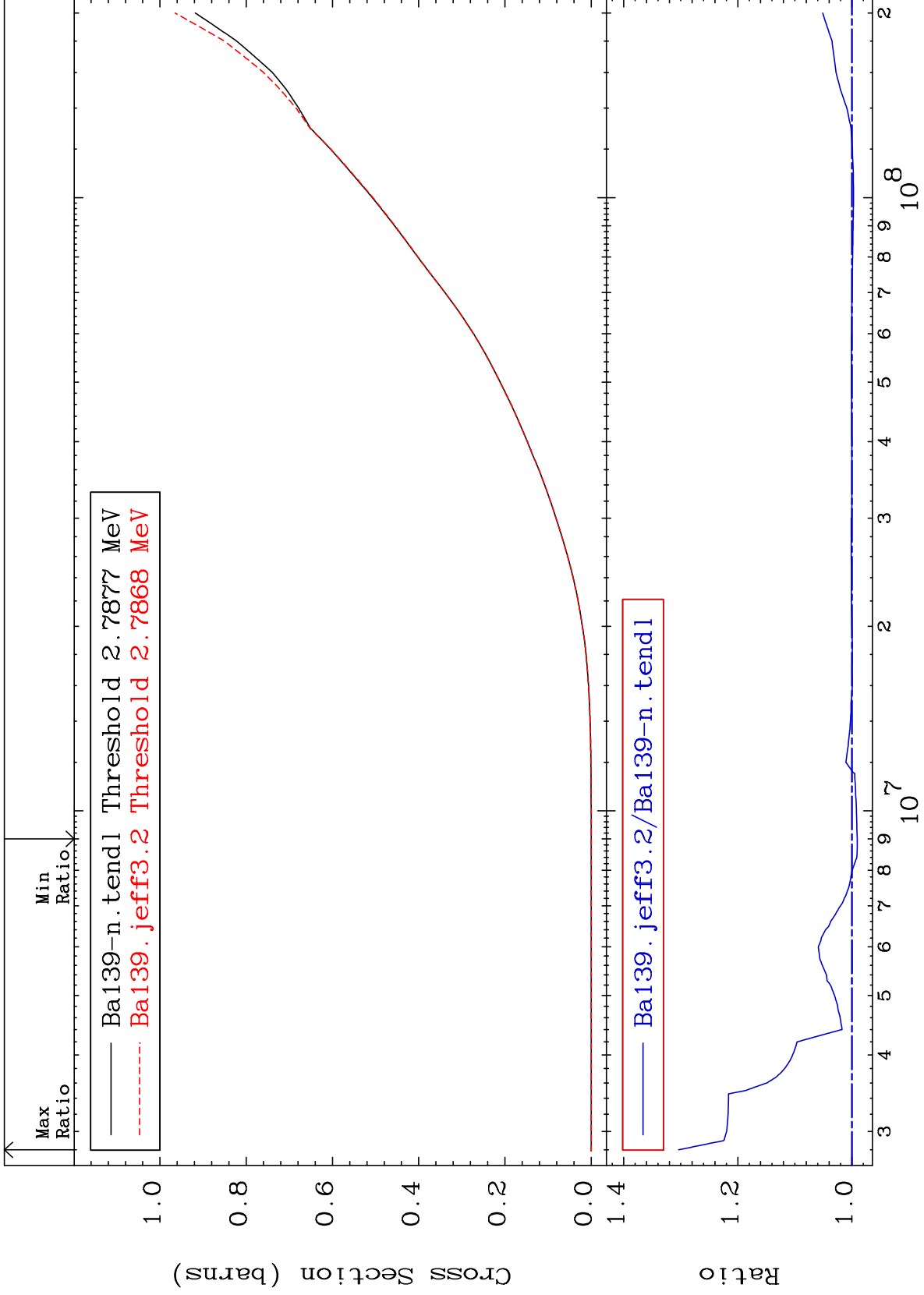
Incident Energy (eV)

56-Ba-139

MAT 5652

Hydrogen Production
Cross Section

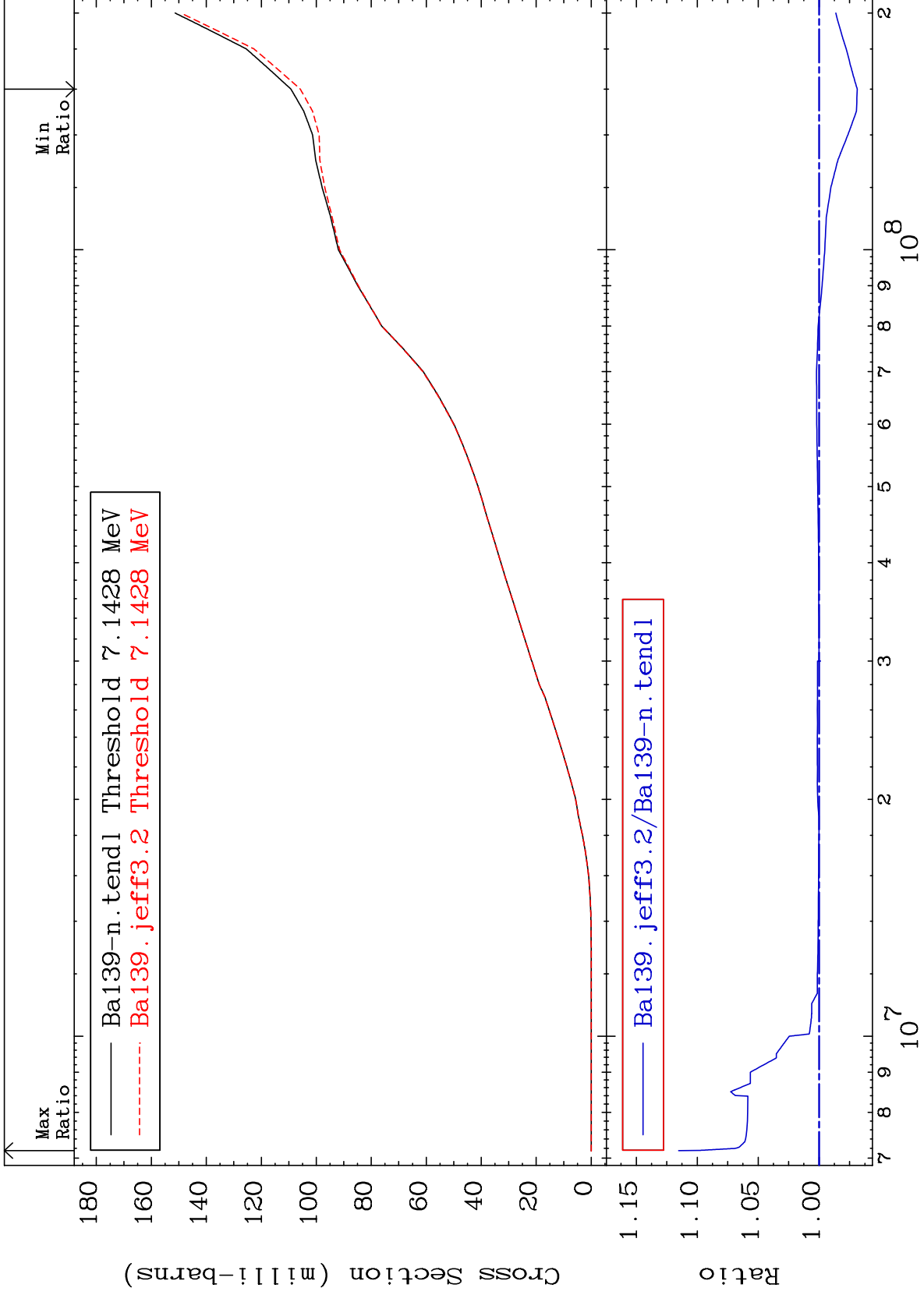
56-Ba-139
-0.933 To 30.37 %



MAT 5652

Deuterium Production
Cross Section

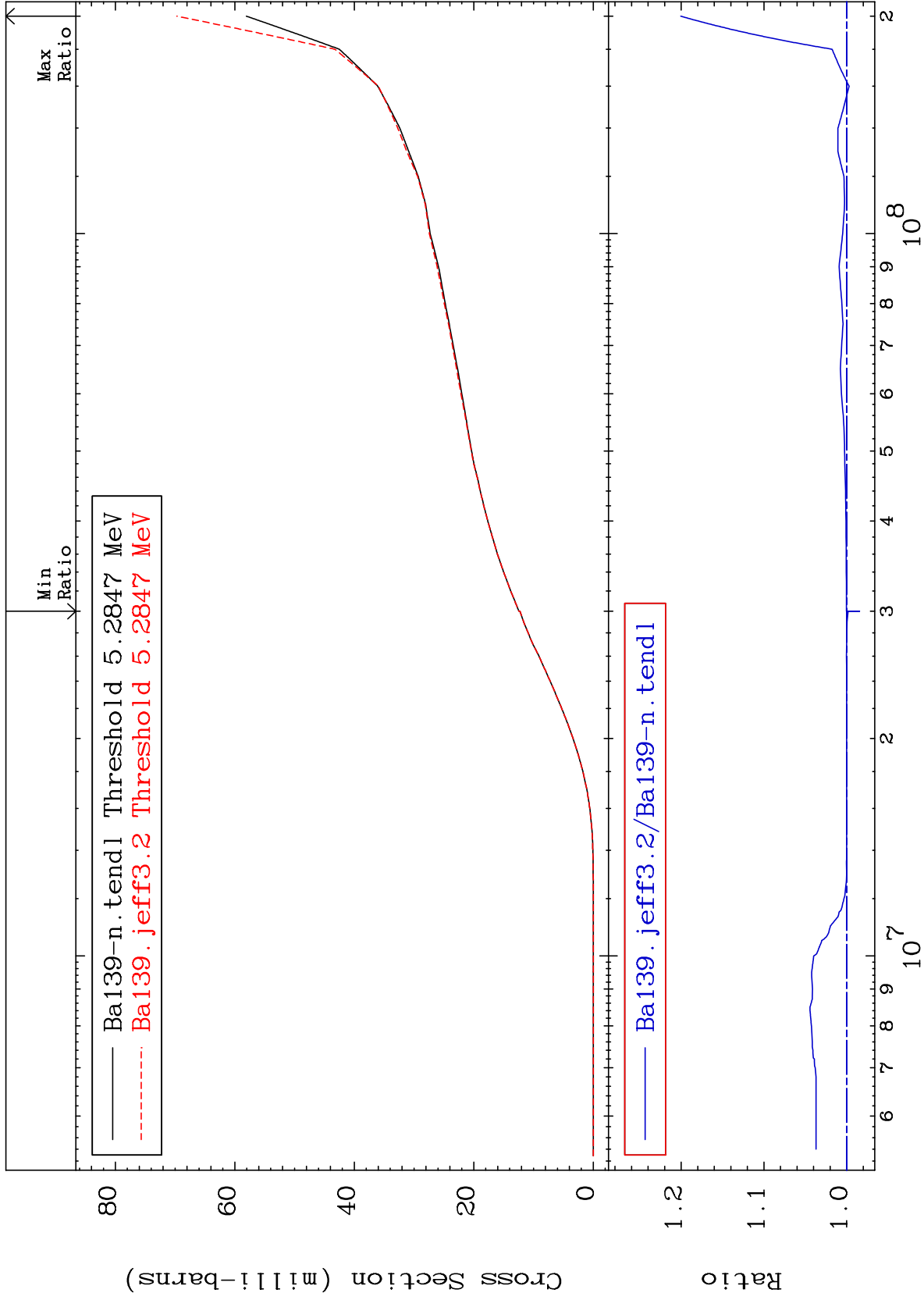
56-Ba-139
-3.127 To 11.53 %



MAT 5652

Tritium Production
Cross Section

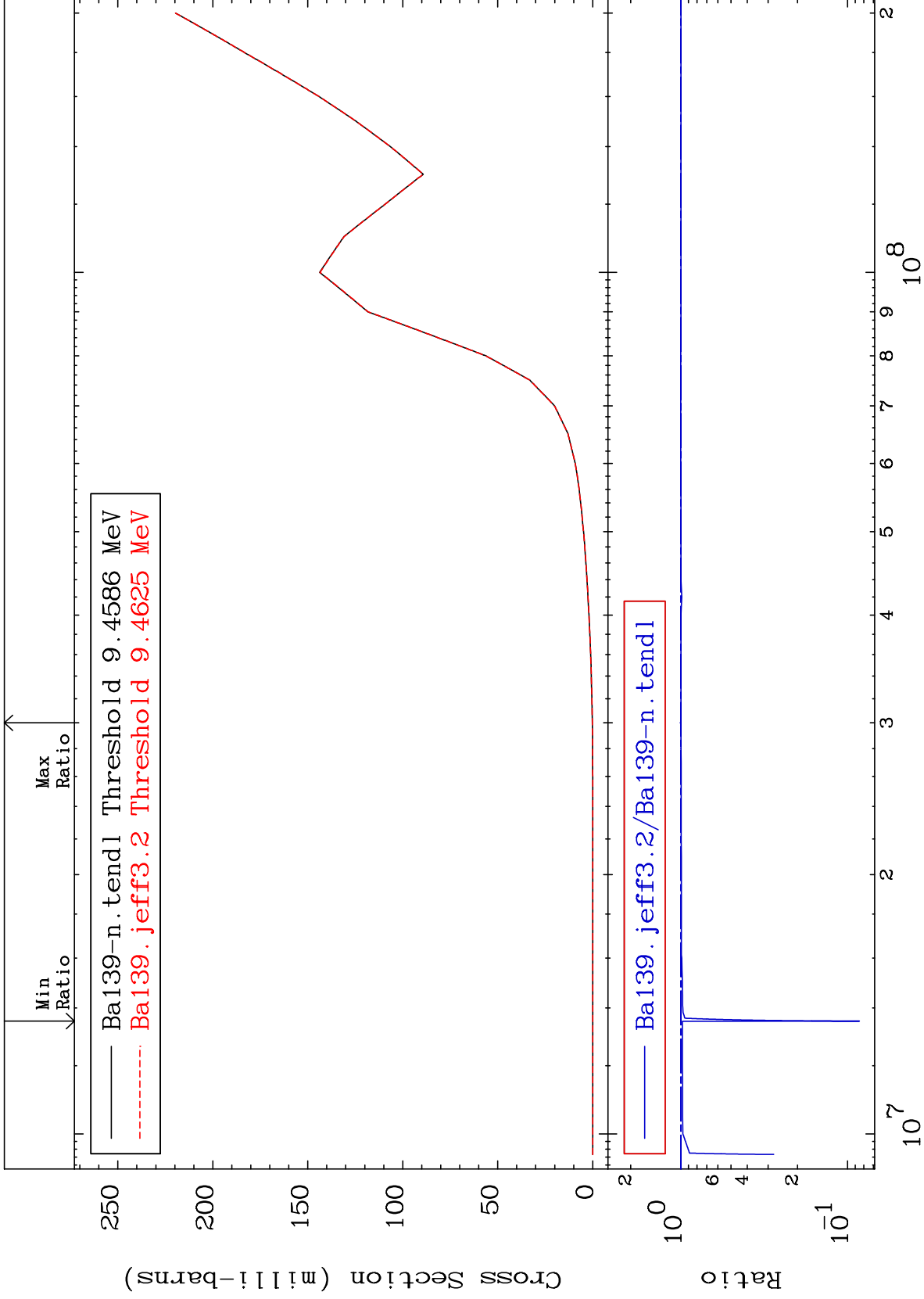
56-Ba-139
-1.554 To 20.05 %



MAT 5652

He-3 Production
Cross Section

56-Ba-139
-91.50 To 0.714 %



65

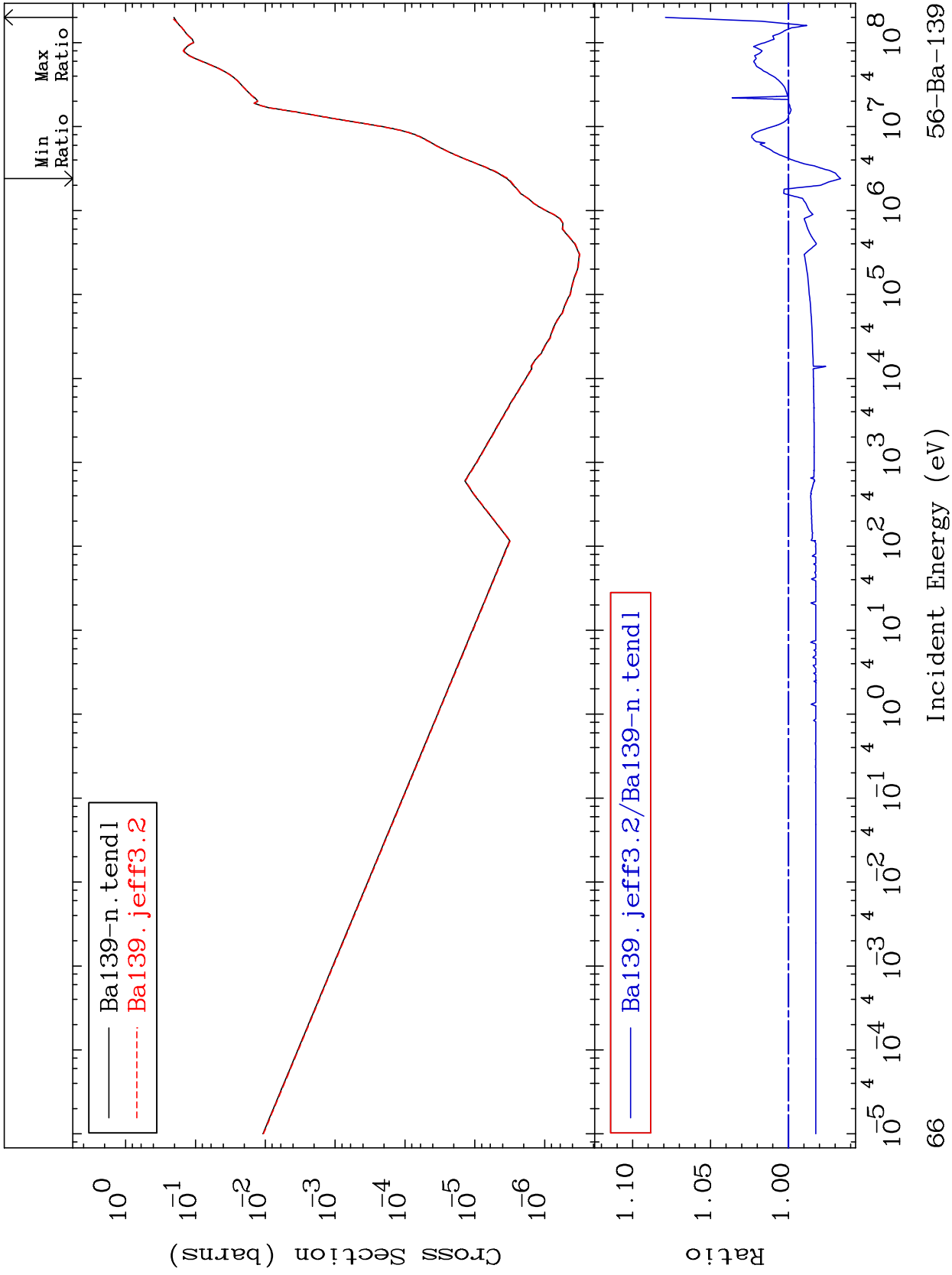
Incident Energy (eV)

56-Ba-139

MAT 5652

He-4 Production
Cross Section

56-Ba-139
-3.356 To 7.890 %



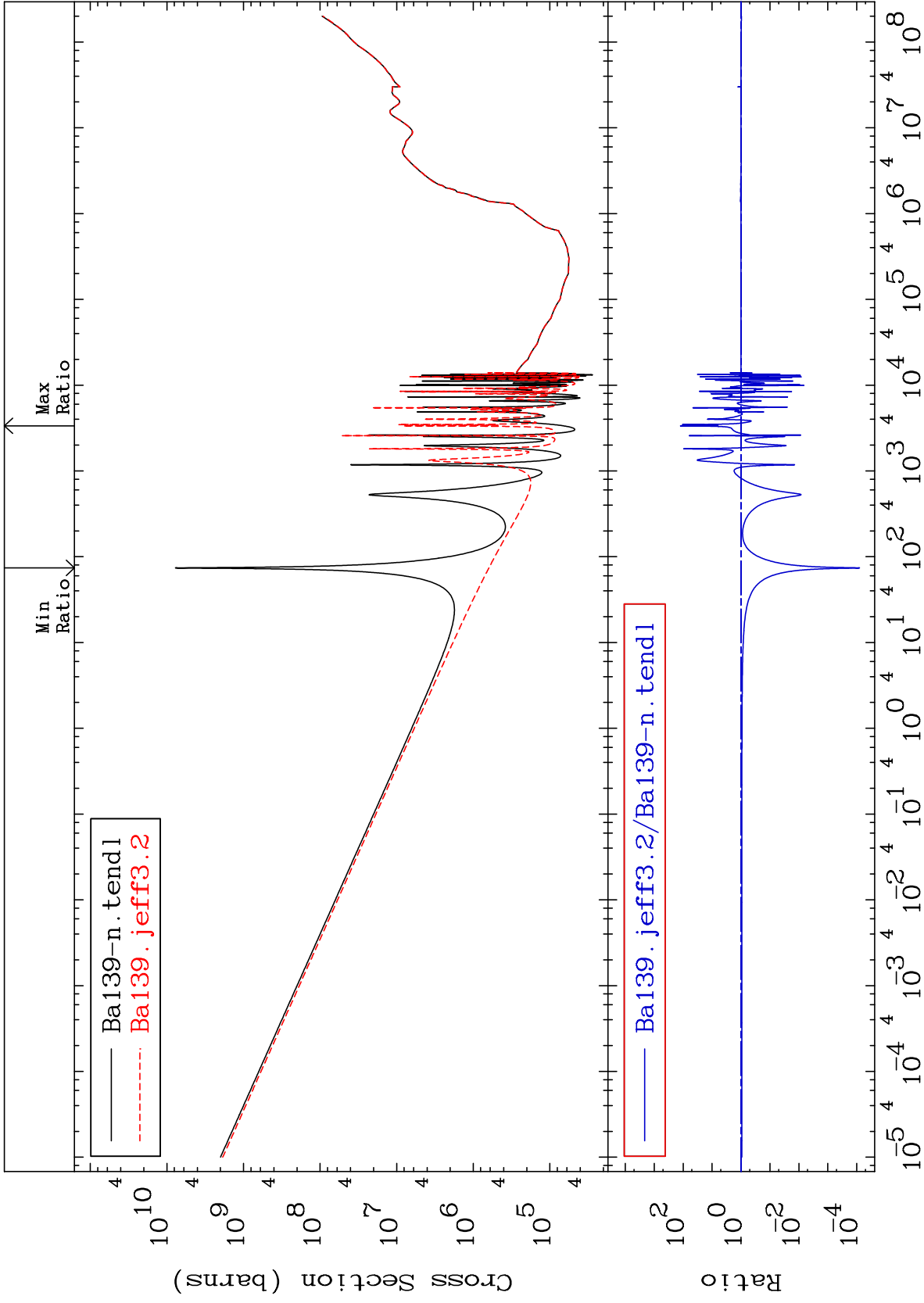
MAT 5652

Kerma total (eV-barns)

56-Ba-139

Cross Section

-99.99 To 9999. %



67

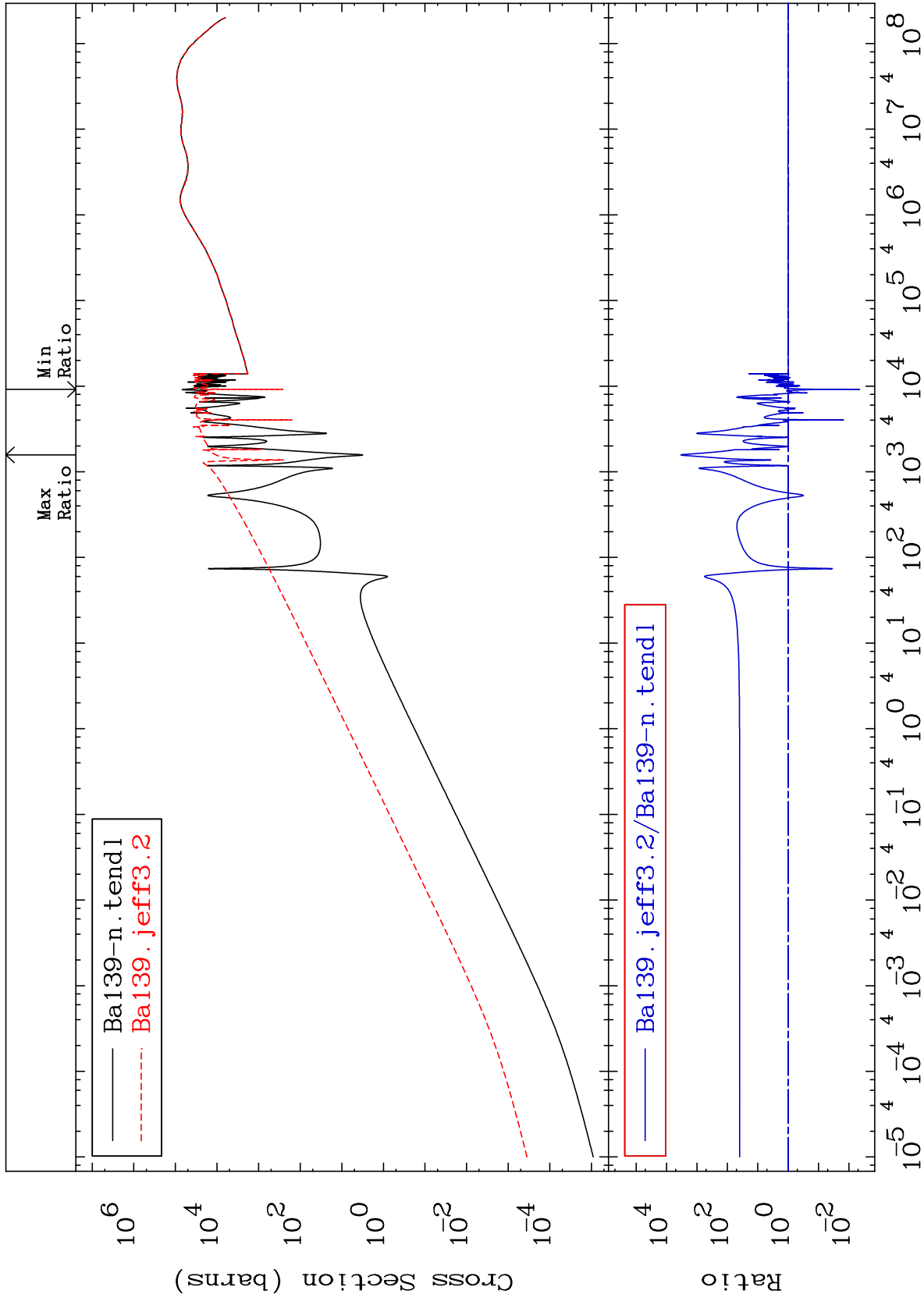
Incident Energy (eV)

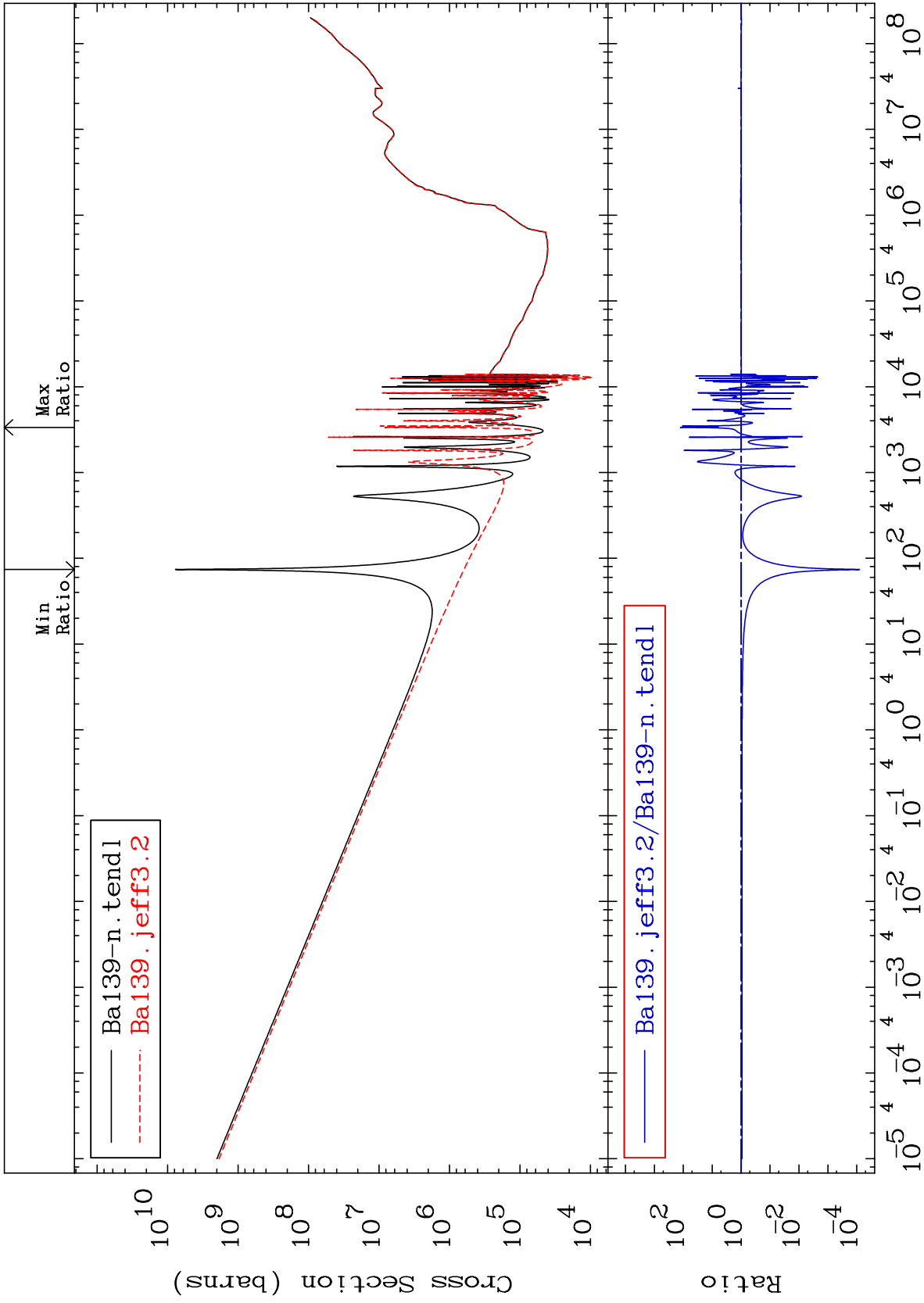
56-Ba-139

MAT 5652

Kerma elastic
Cross Section

56-Ba-139
-99.55 To 9999. %

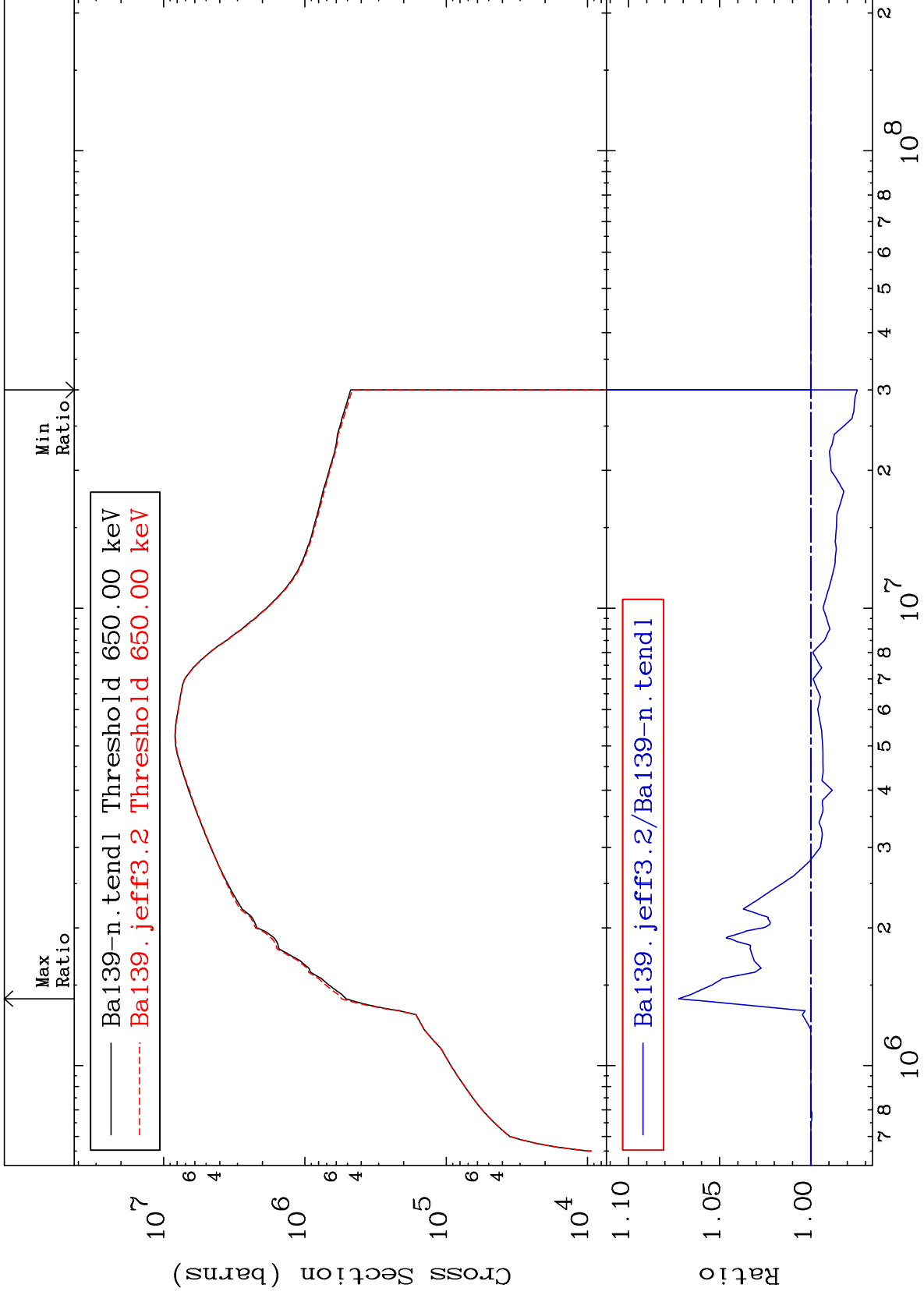




MAT 5652

Kerma inelastic (mt51-91)
Cross Section

56-Ba-139
-2.547 To 7.250 %



70

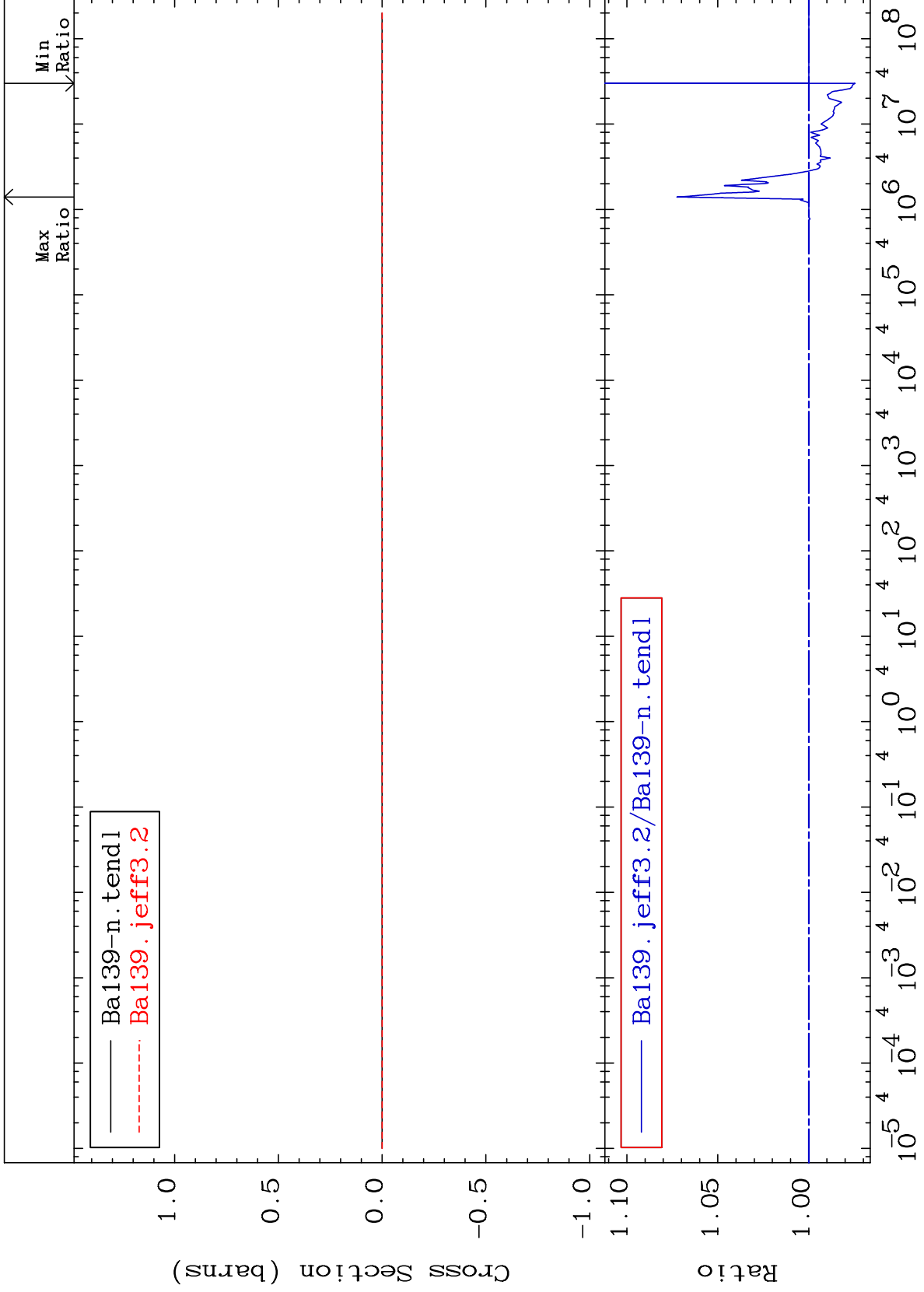
Incident Energy (eV)

56-Ba-139

MAT 5652

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

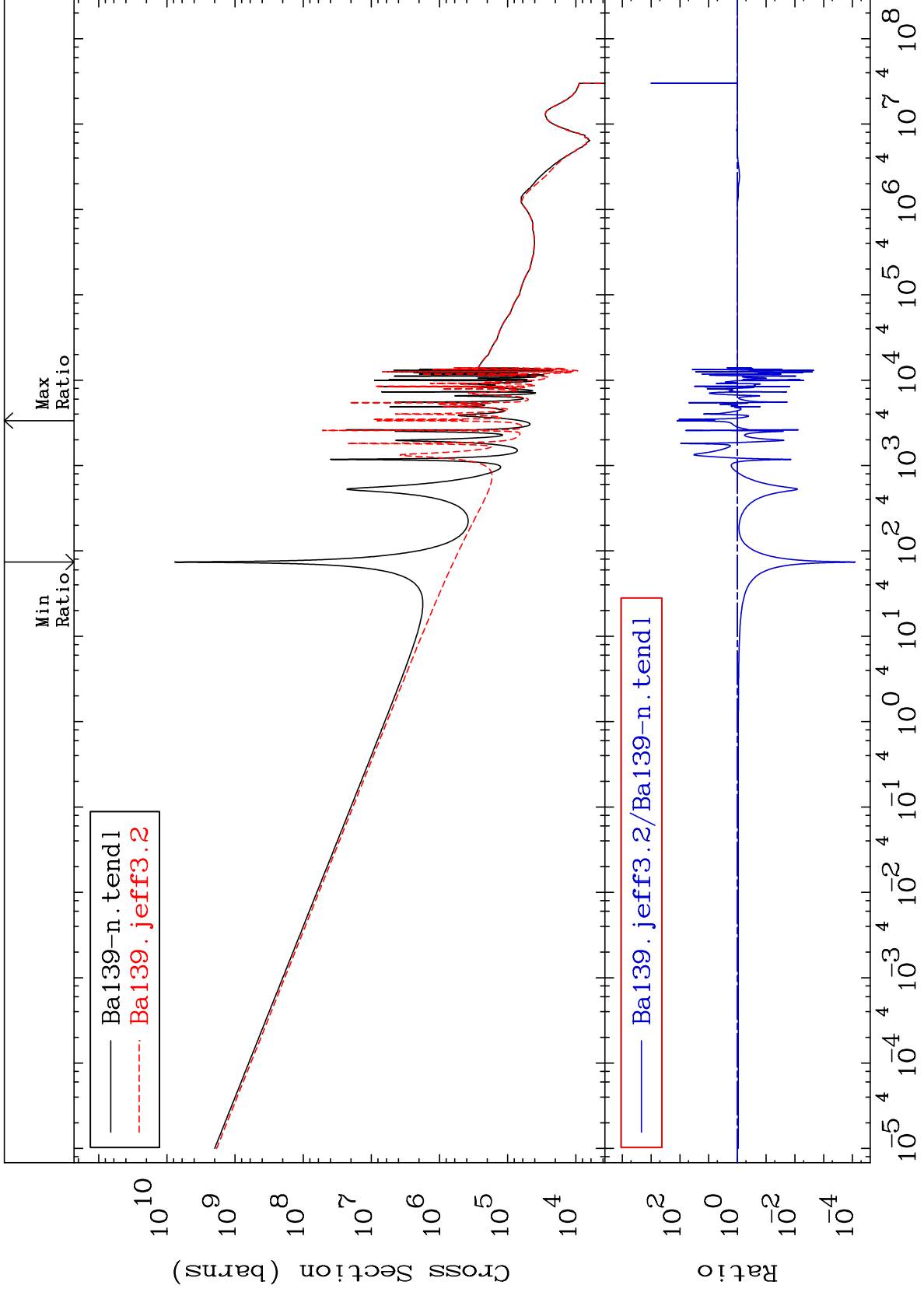
56-Ba-139
-2.547 To 7.250 %



MAT 5652

Kerma capture (mt102)
Cross Section

56-Ba-139
-99.99 To 9999. %



72

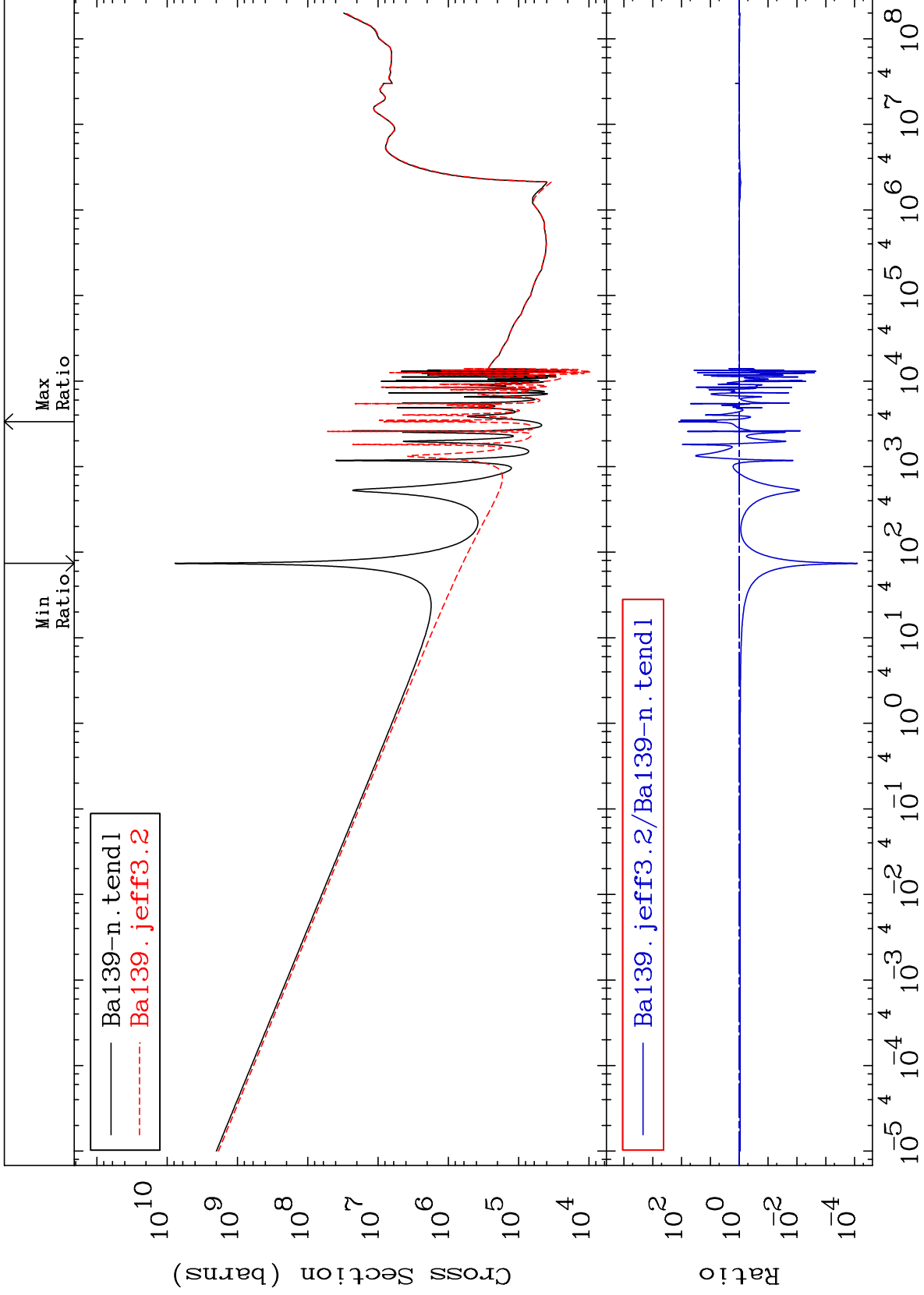
Incident Energy (eV)

56-Ba-139

MAT 5652

Total photon (eV-barns)
Cross Section

56-Ba-139
-99.99 To 9999. %



73

Incident Energy (eV)

56-Ba-139

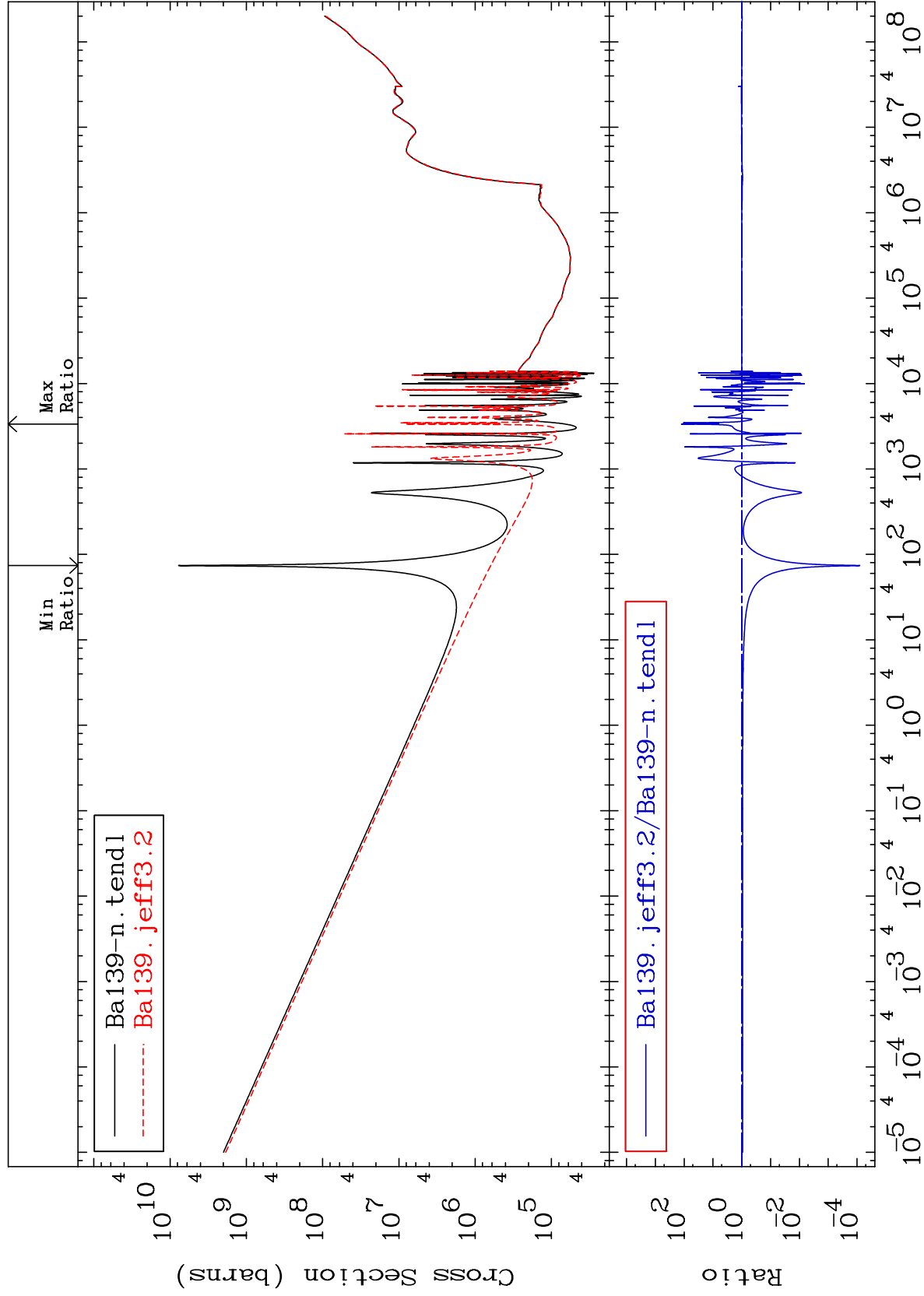
MAT 5652

Total kinematic kerma (high limit)

56-Ba-139

-99.99 To 9999. %

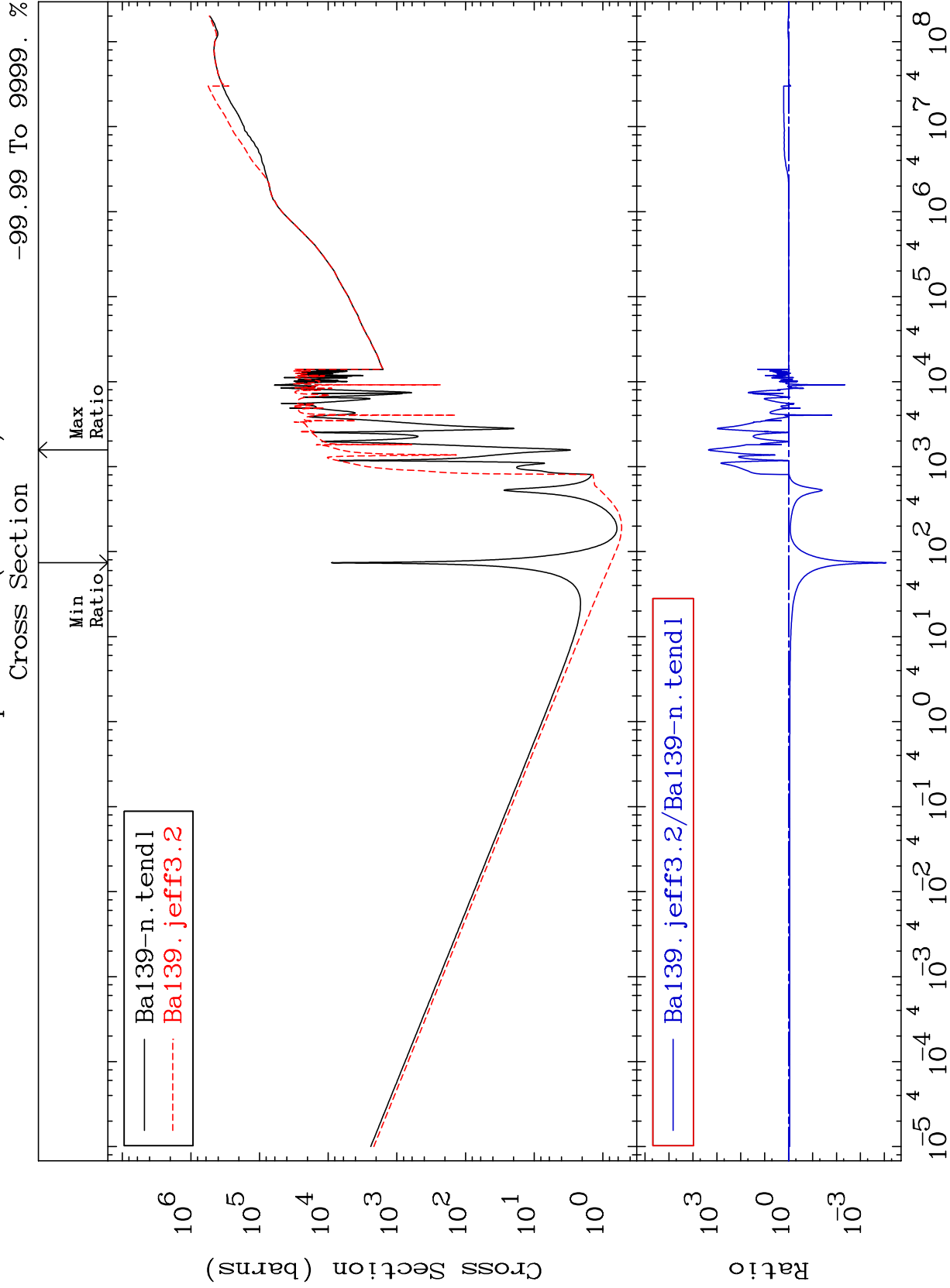
Cross Section



74

Incident Energy (eV)

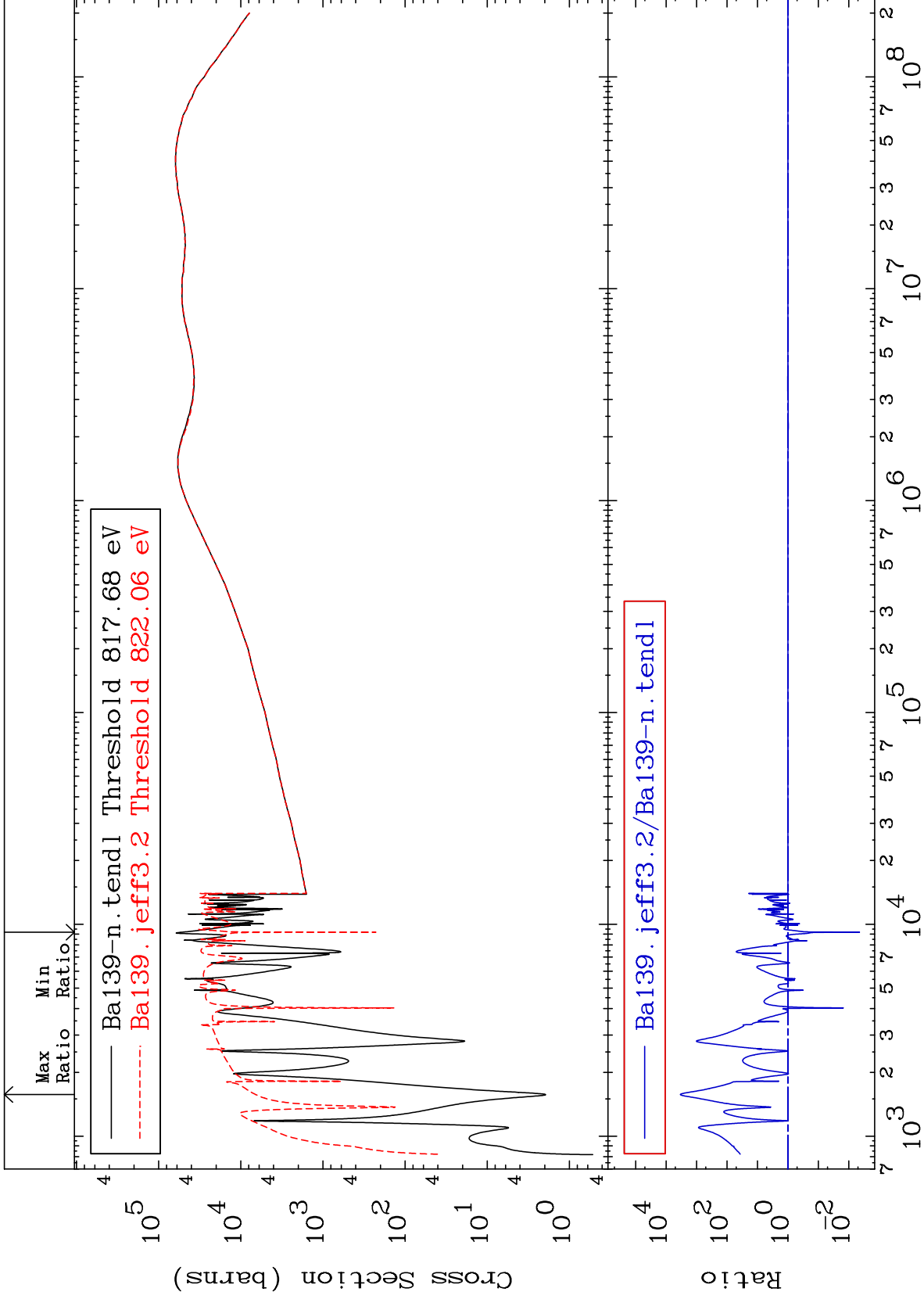
56-Ba-139



MAT 5652

Dpa elastic (mt2)
Cross Section

56-Ba-139
-99.55 To 9999. %



76

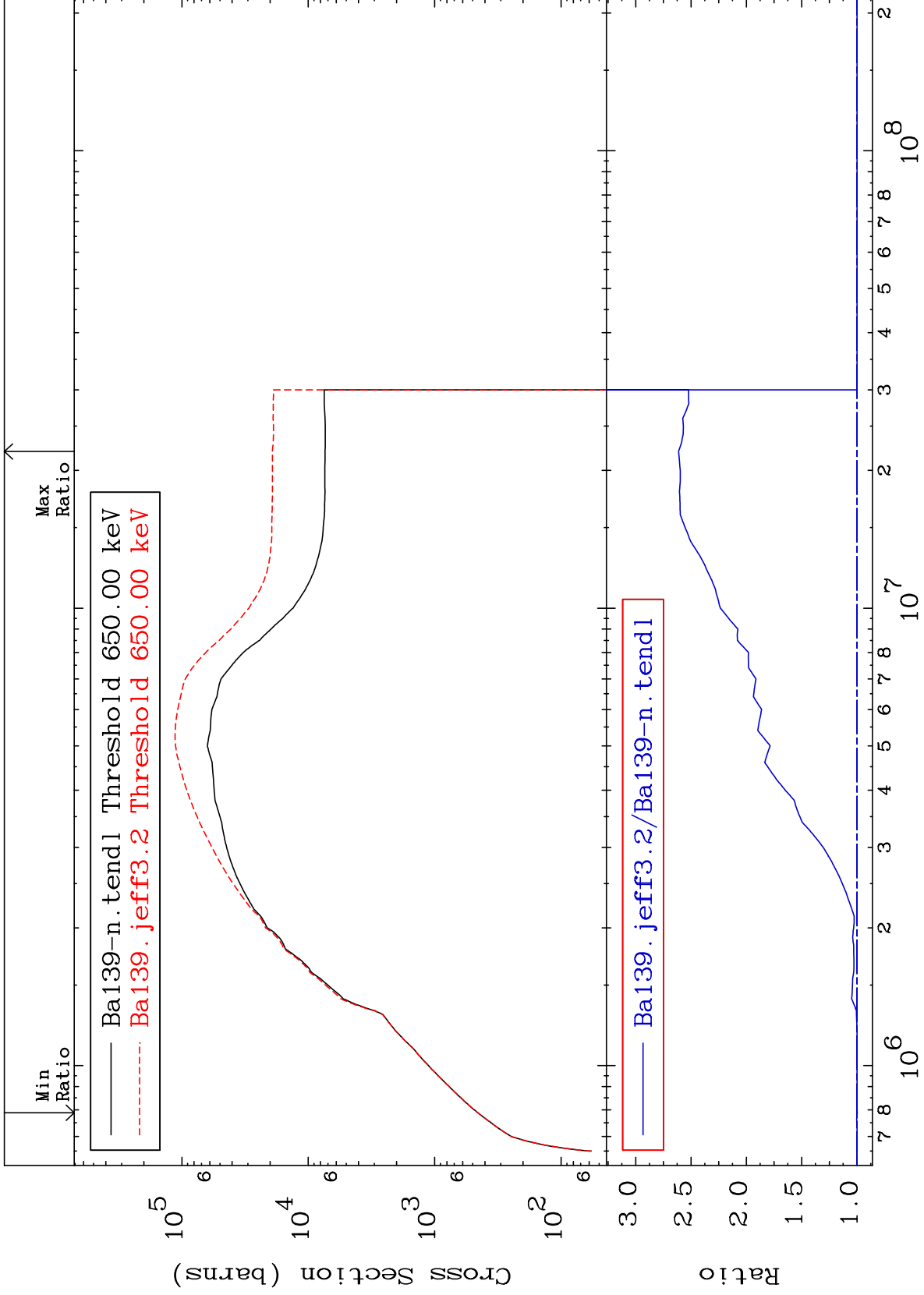
Incident Energy (eV)

56-Ba-139

MAT 5652

Dpa inelastic (mt51-91)
Cross Section

56-Ba-139
-0.242 To 161.2 %



77

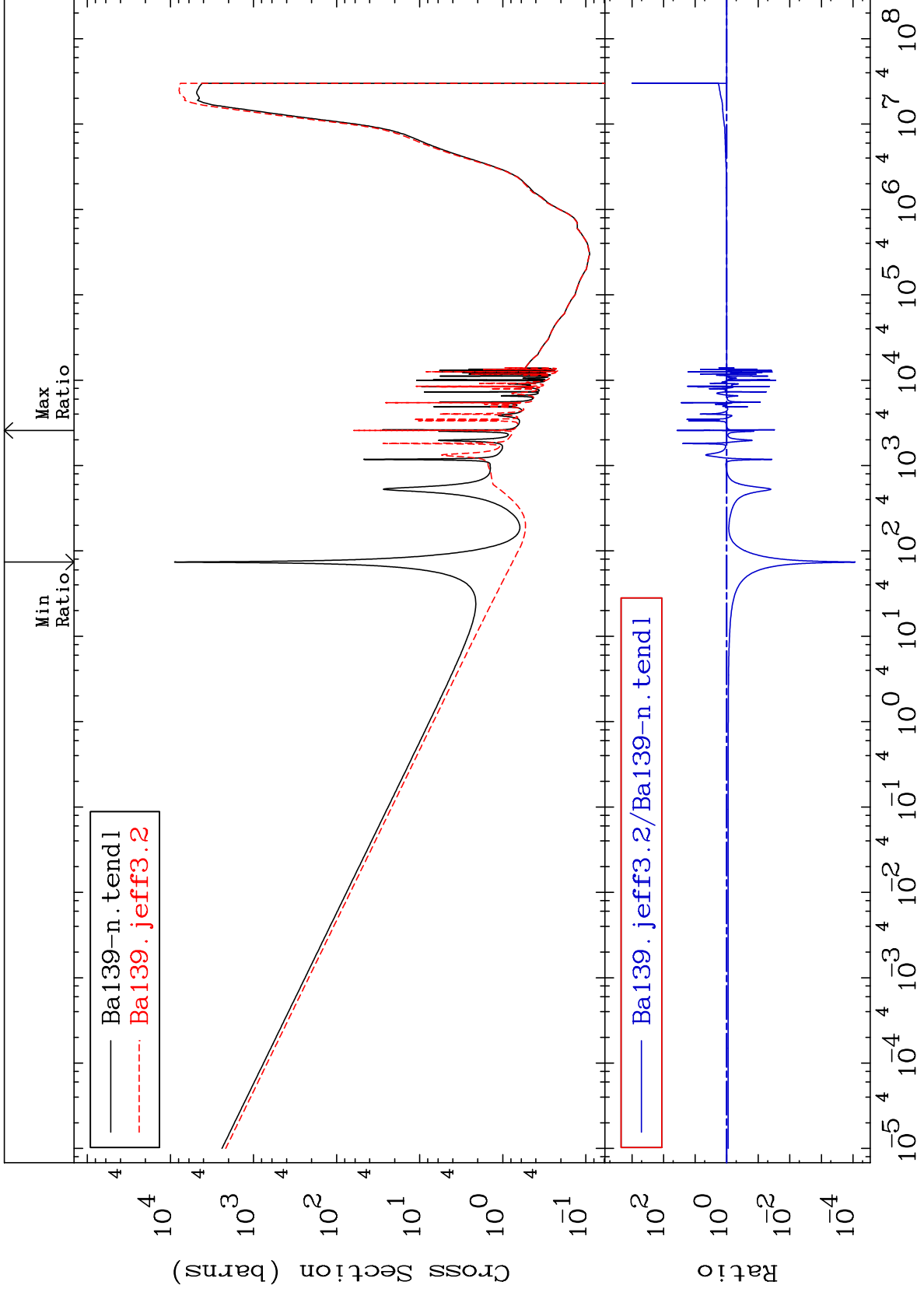
Incident Energy (eV)

56-Ba-139

MAT 5652

Dpa disappearance (mt102 -120)
Cross Section

56-Ba-139
-99.99 To 3678. %



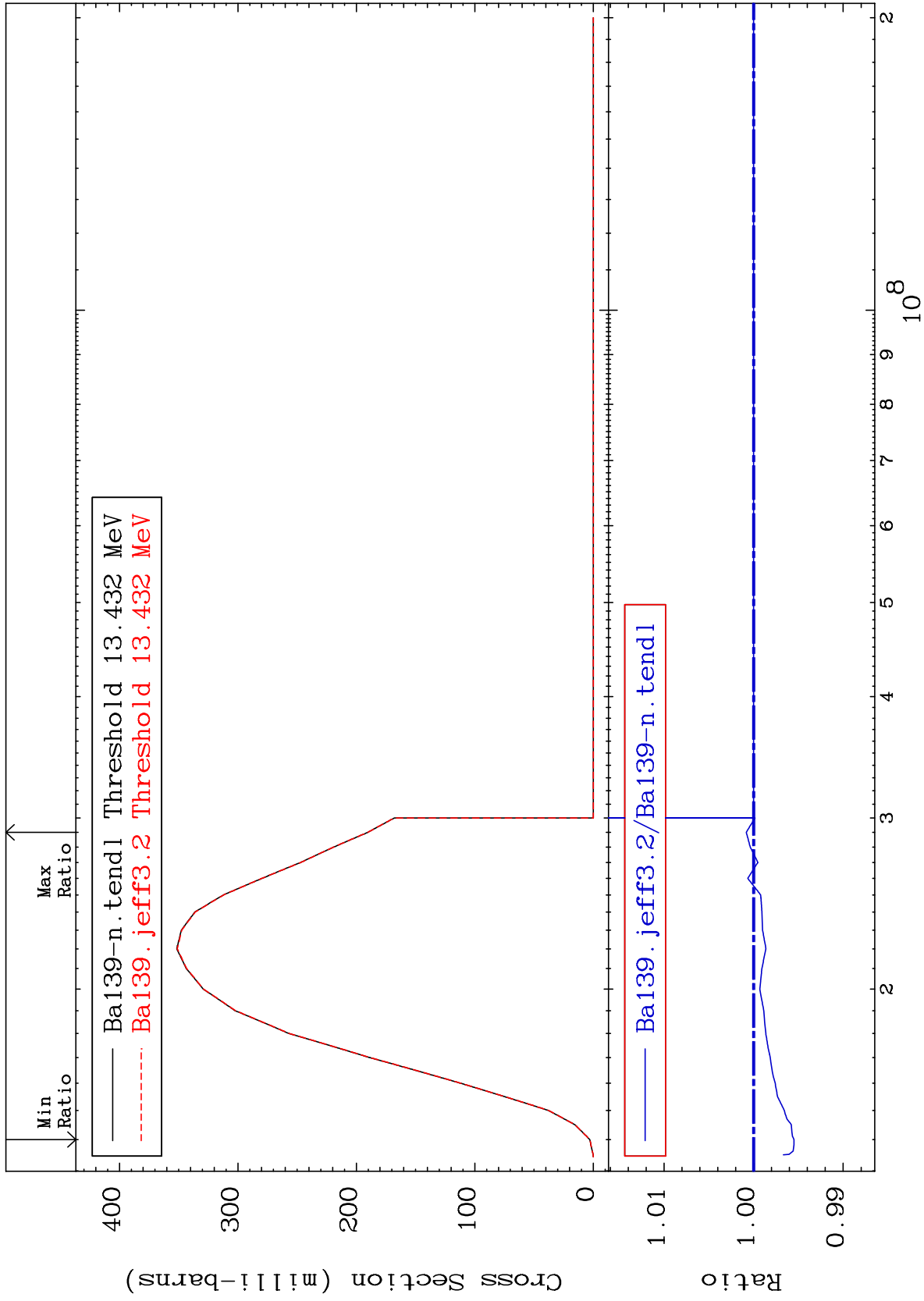
MAT 5652

(n,3n):56-Ba-137g

56-Ba-139

Radionuclide Production Cross Section

-0.451 To 0.083 %



79

Incident Energy (eV)

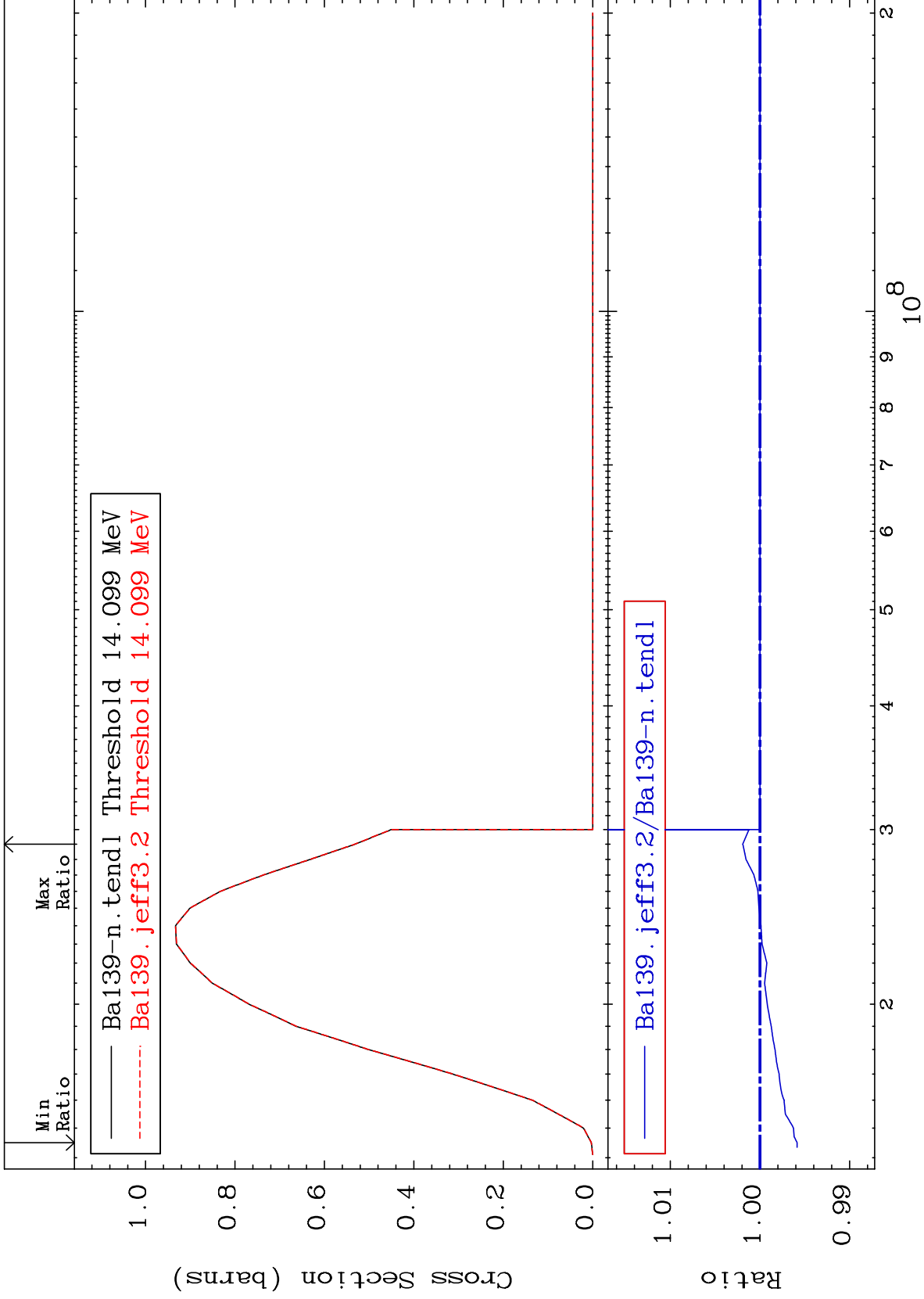
56-Ba-139

MAT 5652

(n,3n):56-Ba-137m2

56-Ba-139

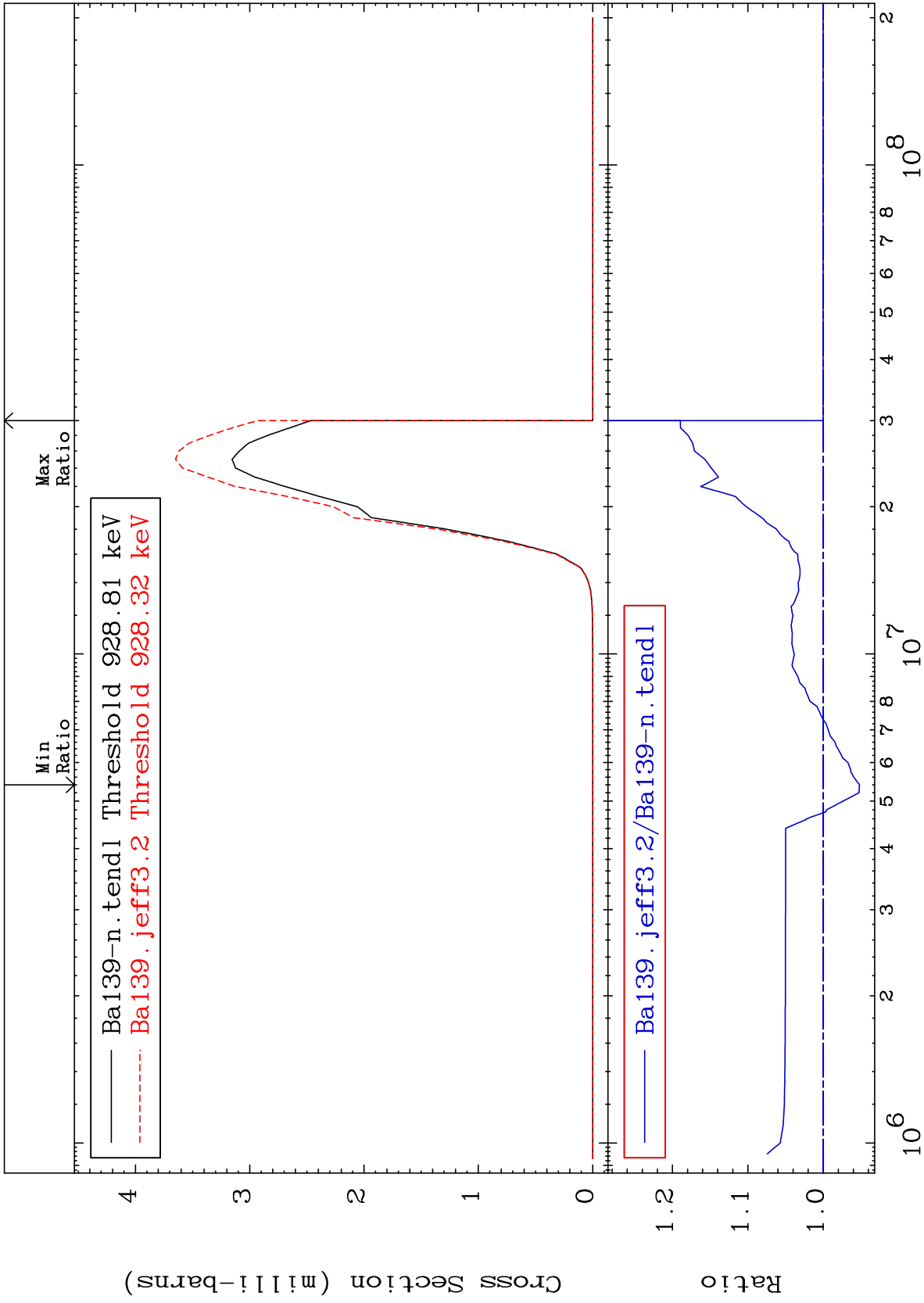
Radionuclide Production Cross Section -0.413 To 0.192 %



MAT 5652

(n, n') α :54-Xe-135g
Radionuclide Production Cross Section -4.801 To 18.95 %

56-Ba-139



81

Incident Energy (eV)

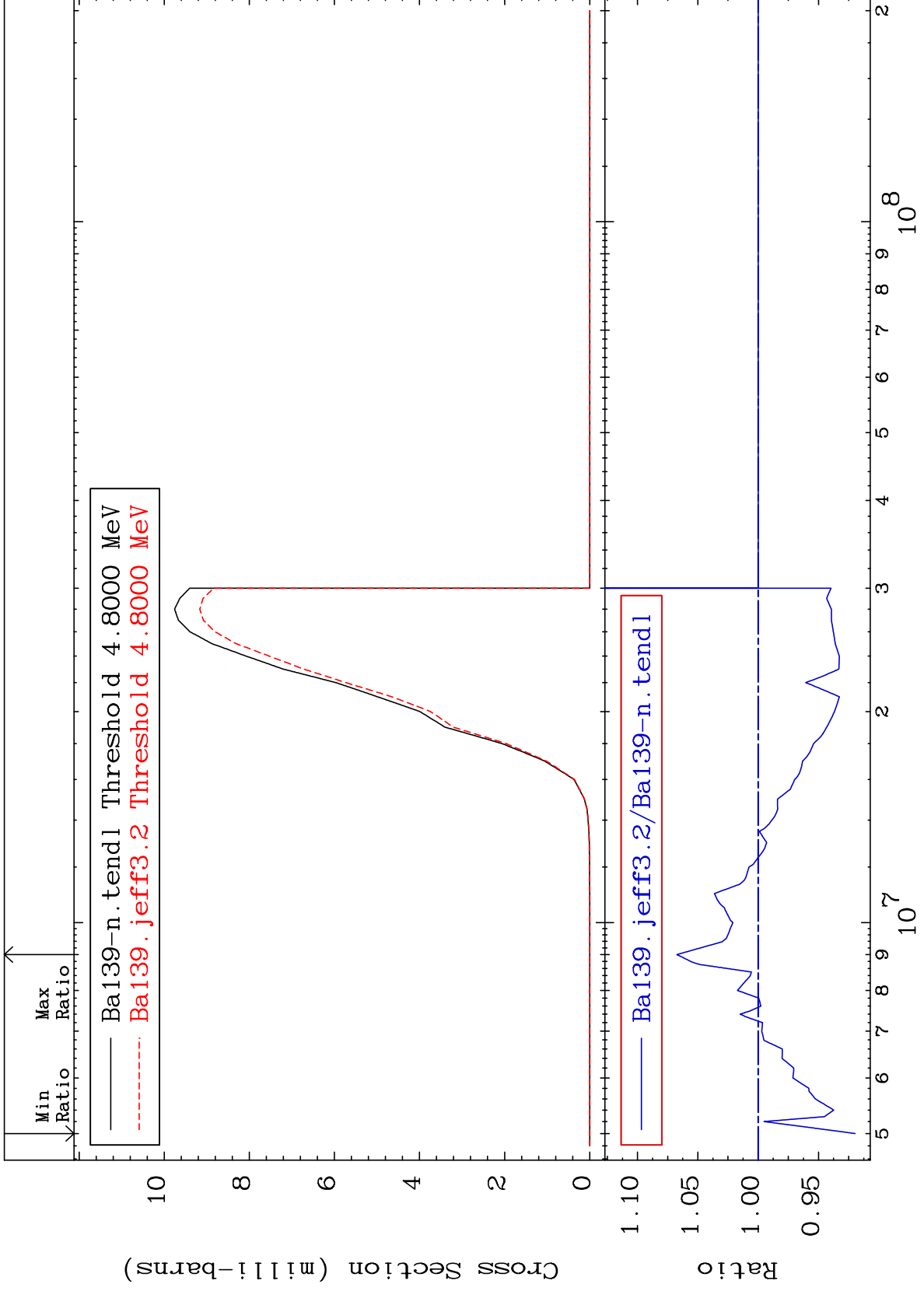
56-Ba-139

MAT 5652

(n,n') α :54-Xe-135m2

56-Ba-139

Radionuclide Production Cross Section -8.035 To 6.733 %



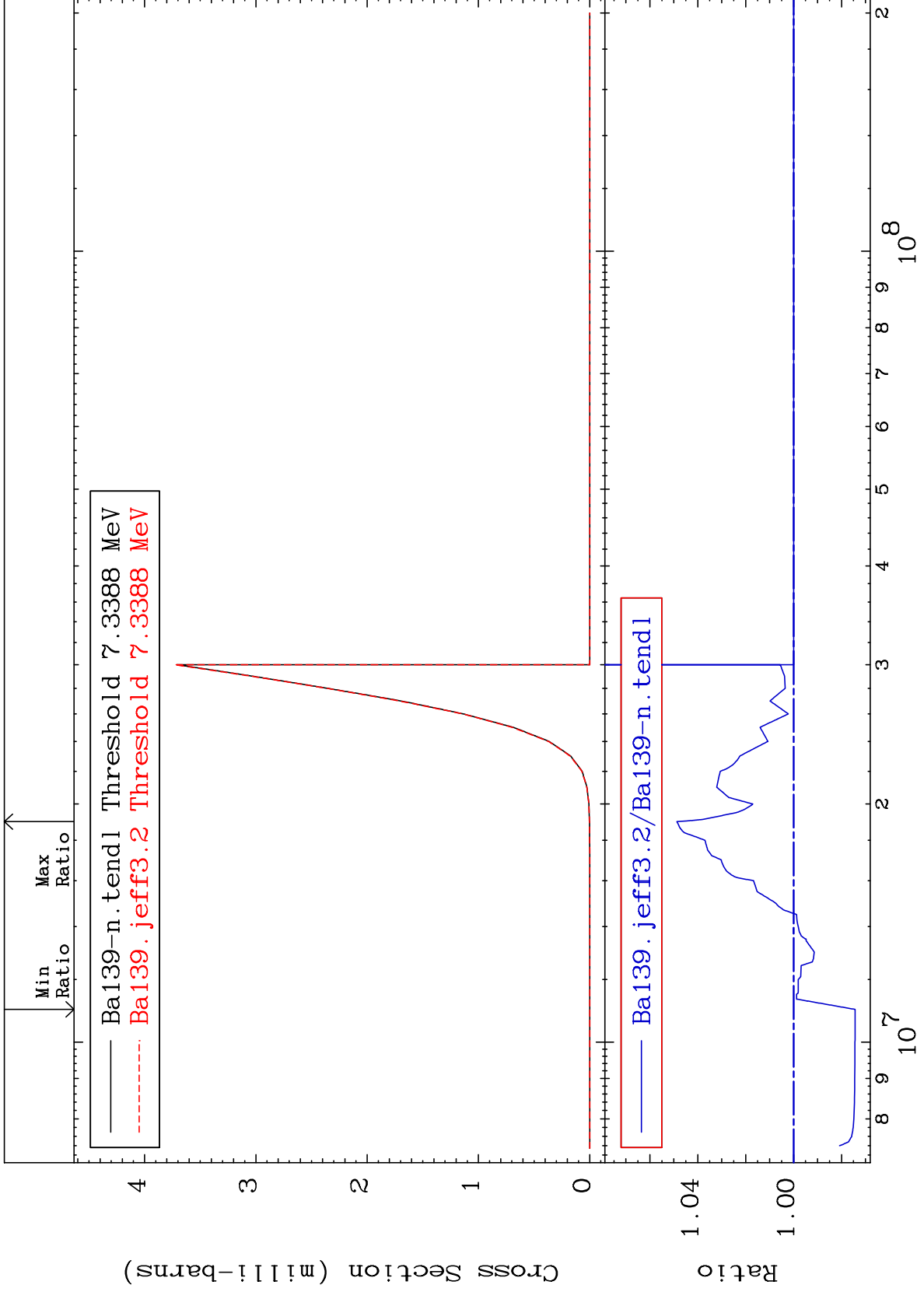
MAT 5652

(n,2n) α :54-Xe-134g

56-Ba-139

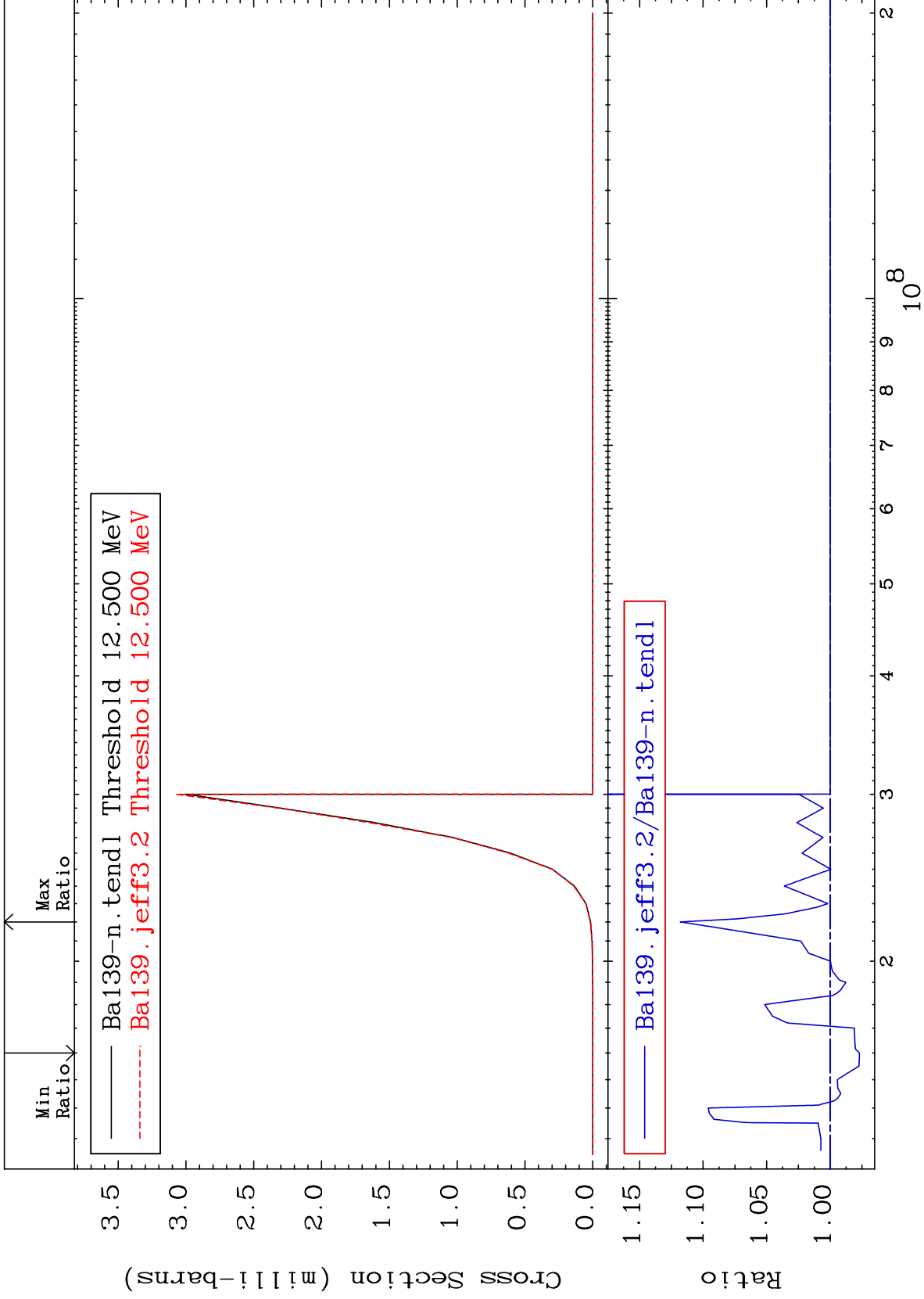
Radionuclide Production Cross Section

-2.566 To 4.870 %



Radionuclide Production Cross Section

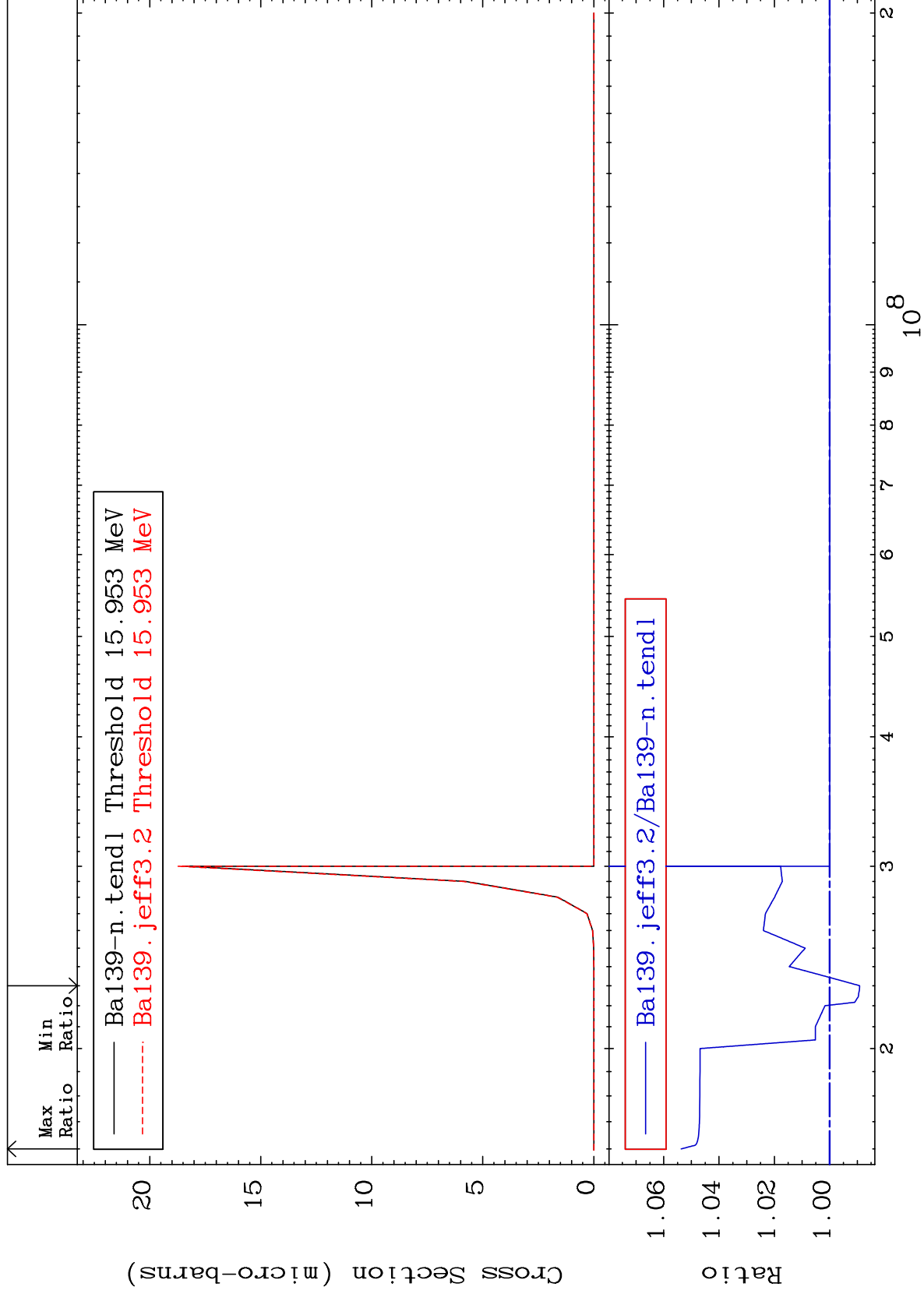
-2.299 To 11.79 %



MAT 5652

(n,3n) α :54-Xe-133g 56-Ba-139

Radionuclide Production Cross Section -1.086 To 5.370 %

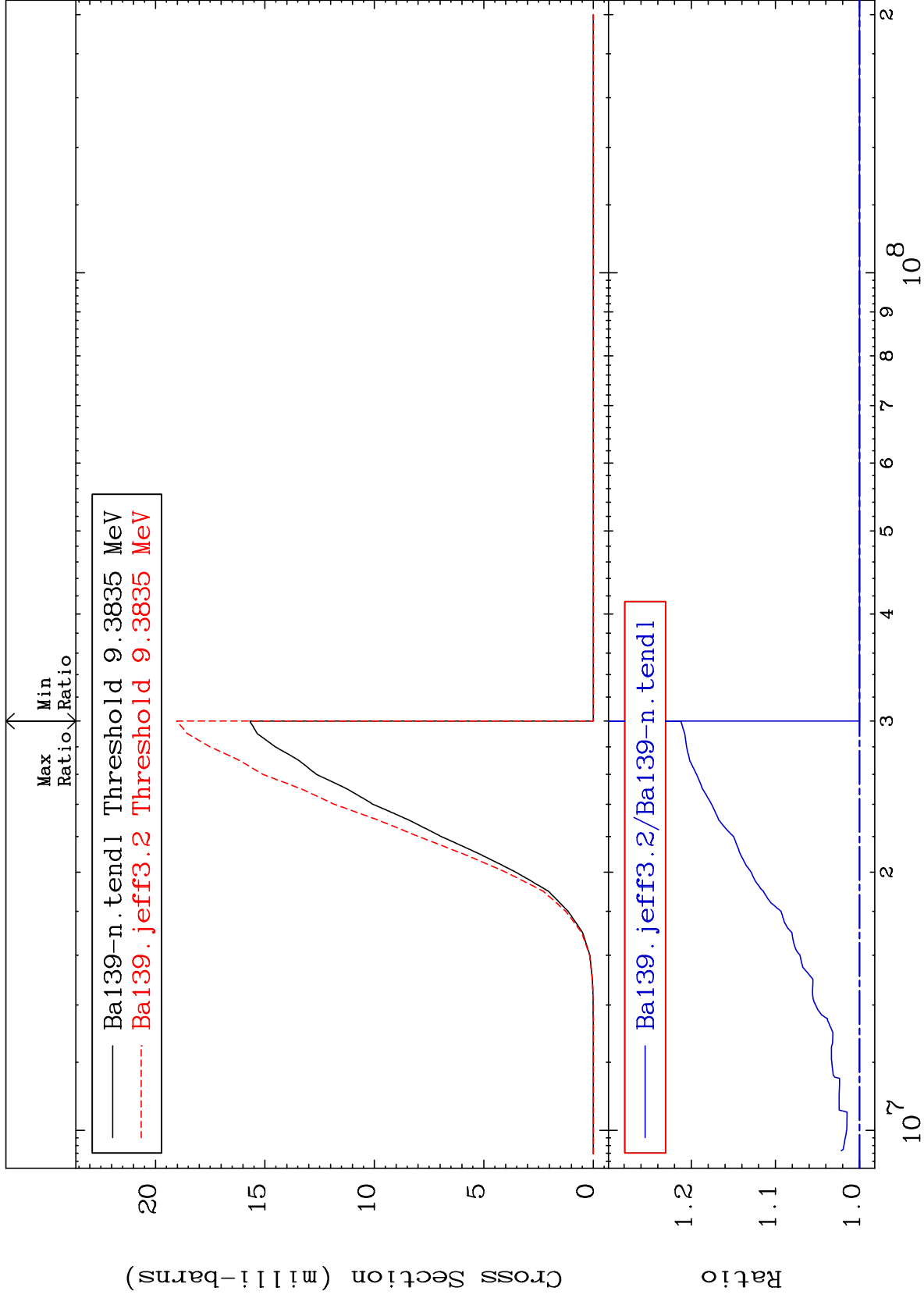


MAT 5652

(n, n') p:55-Cs-138g

56-Ba-139

Radionuclide Production Cross Section 0.000 To 21.26 %



87

Incident Energy (eV)

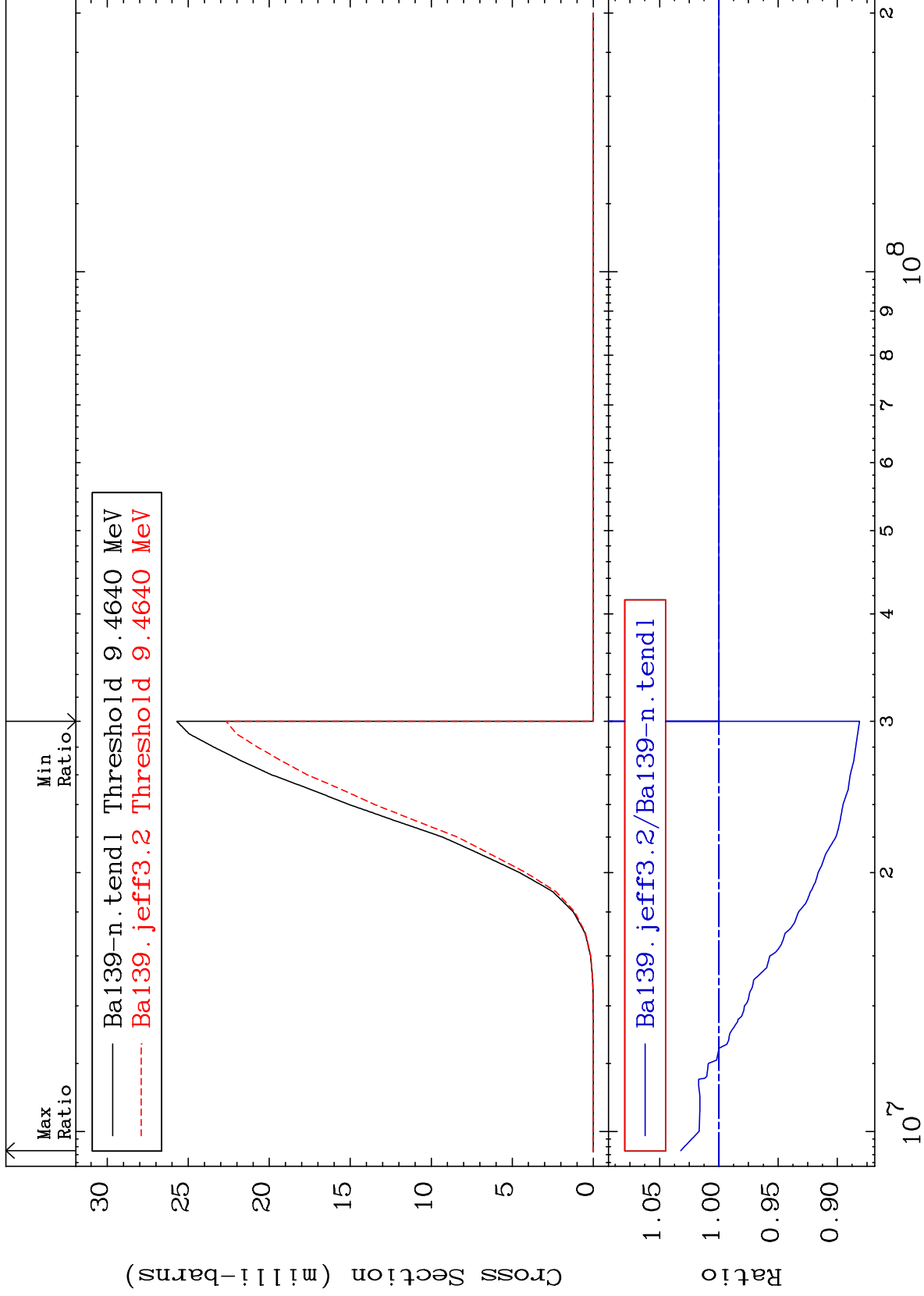
56-Ba-139

MAT 5652

(n,n') p:55-Cs-138m3

56-Ba-139

Radionuclide Production Cross Section -11.87 To 3.215 %



88

Incident Energy (eV)

56-Ba-139

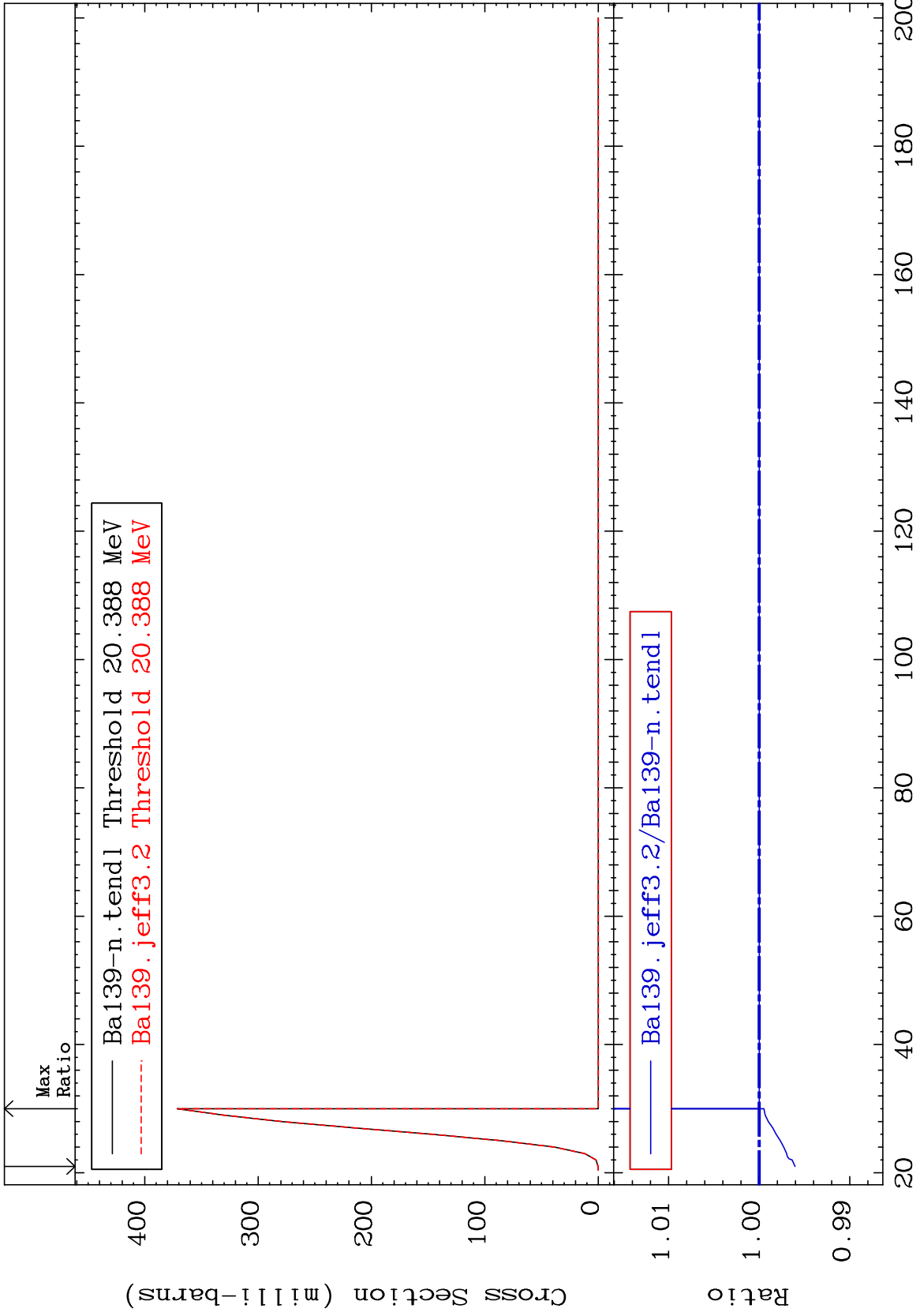
MAT 5652

(n, 4n):56-Ba-136g

56-Ba-139

Radionuclide Production Cross Section

-0.396 To 0.000 %

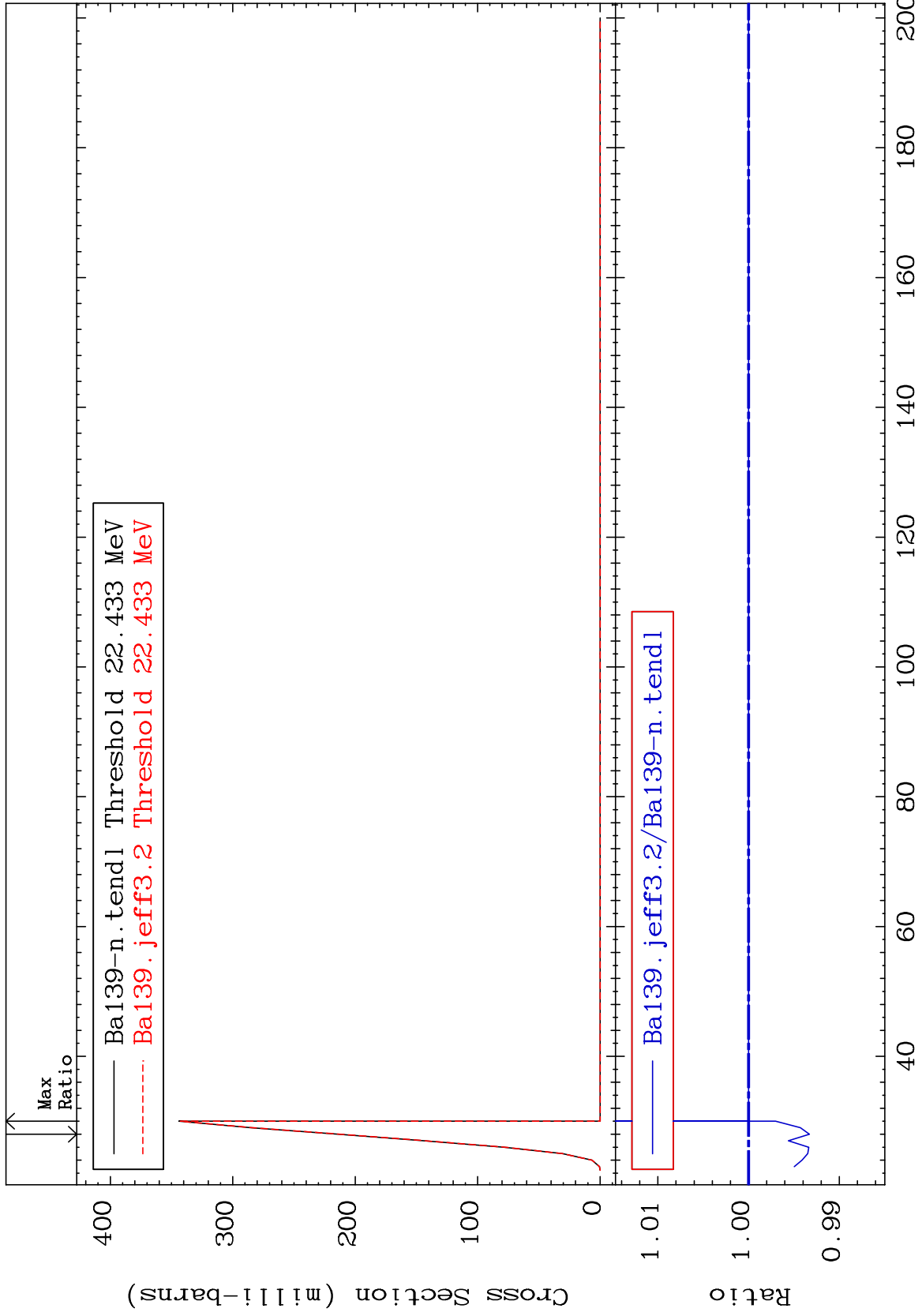


MAT 5652

(n, 4n):56-Ba-136m5

56-Ba-139

Radionuclide Production Cross Section -0.671 To 0.000 %



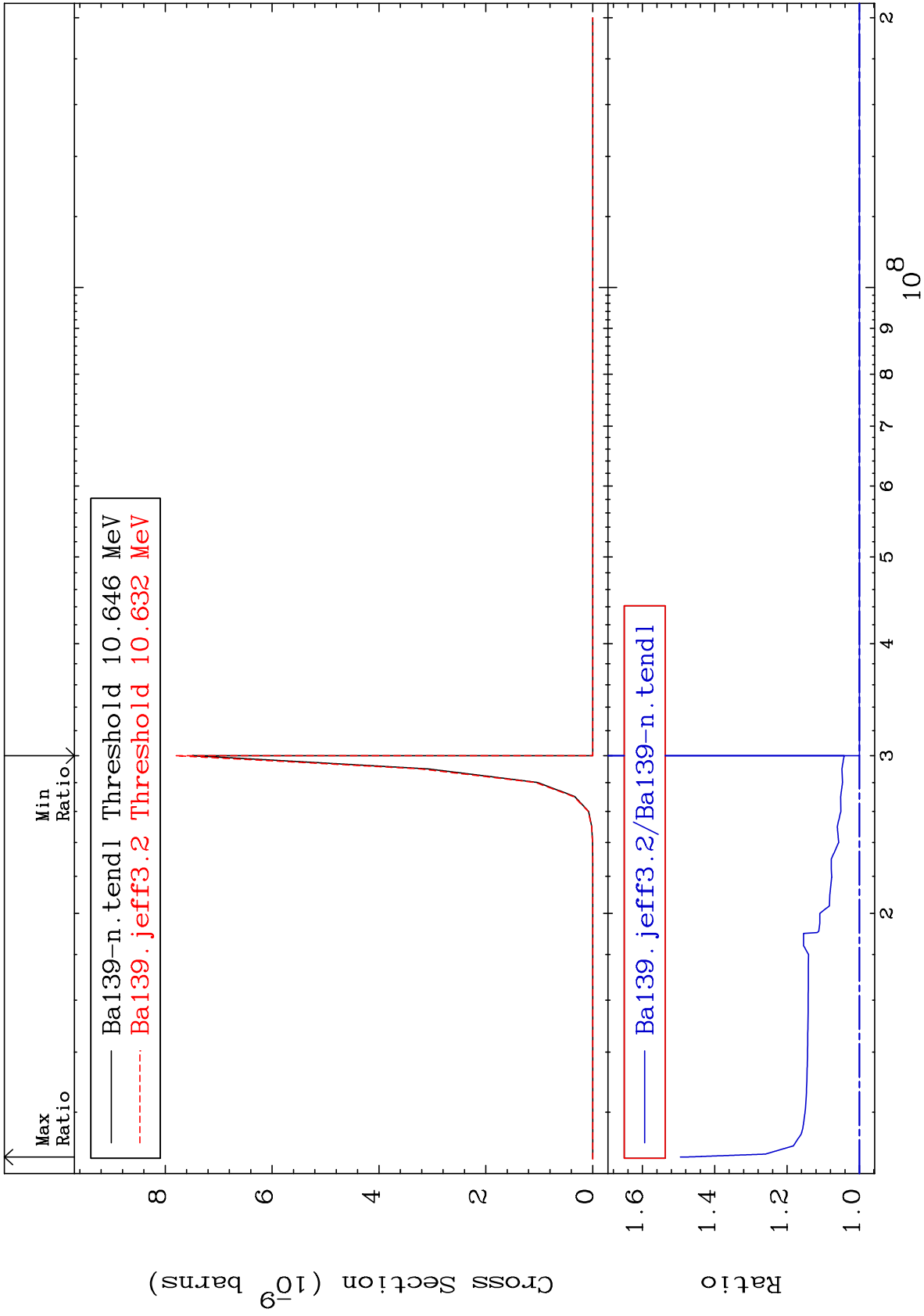
90

Incident Energy (MeV)

56-Ba-139

MAT 5652

(n,n') p α :53-I -134g 56-Ba-139
Radionuclide Production Cross Section 0.000 To 49.50 %

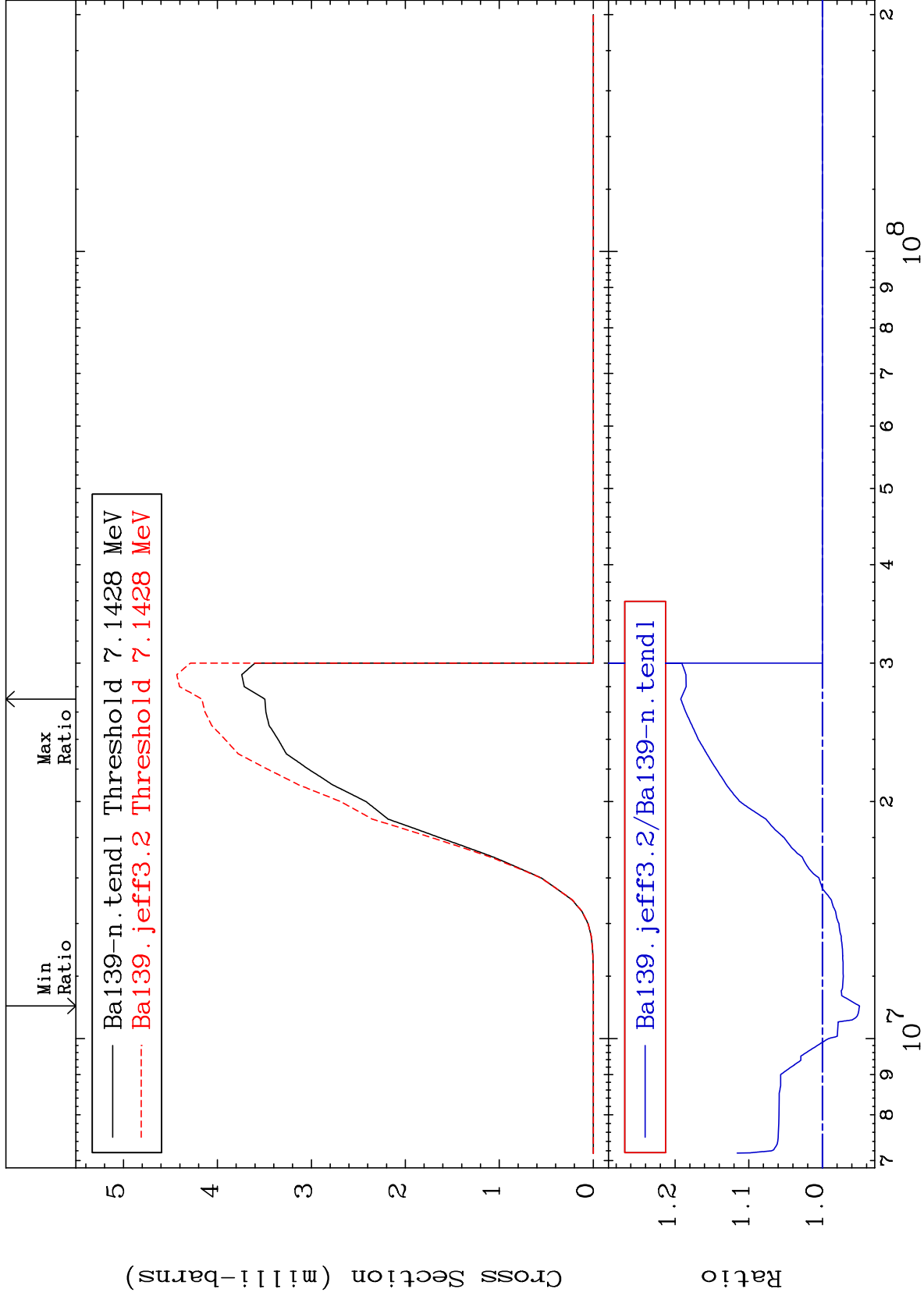


MAT 5652

(n, d) : 55-Cs-138g

56-Ba-139

Radionuclide Production Cross Section -5.040 To 19.23 %



93

Incident Energy (eV)

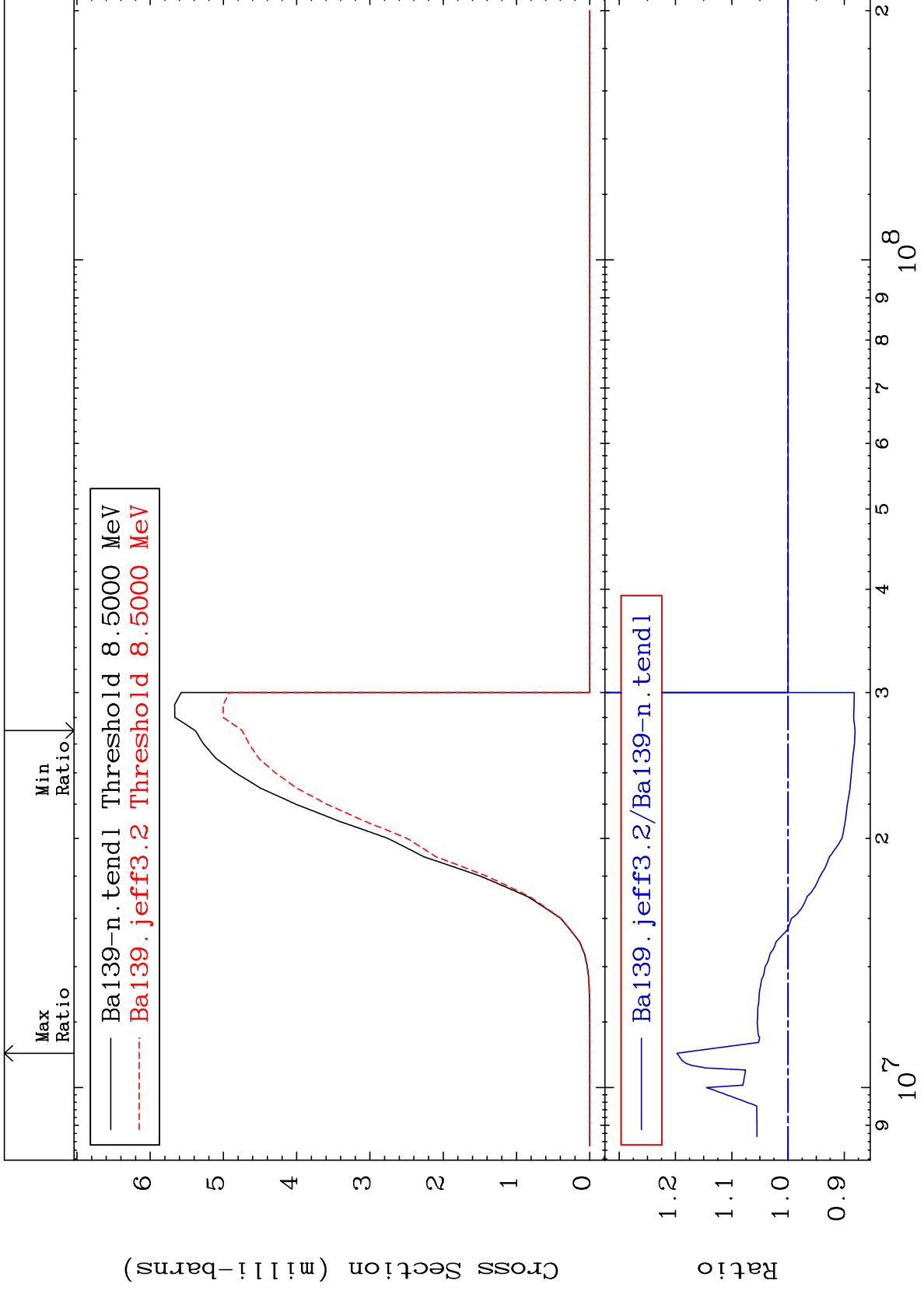
56-Ba-139

MAT 5652

(n, d) : 55-Cs-138m3

56-Ba-139

Radionuclide Production Cross Section -11.91 To 19.75 %

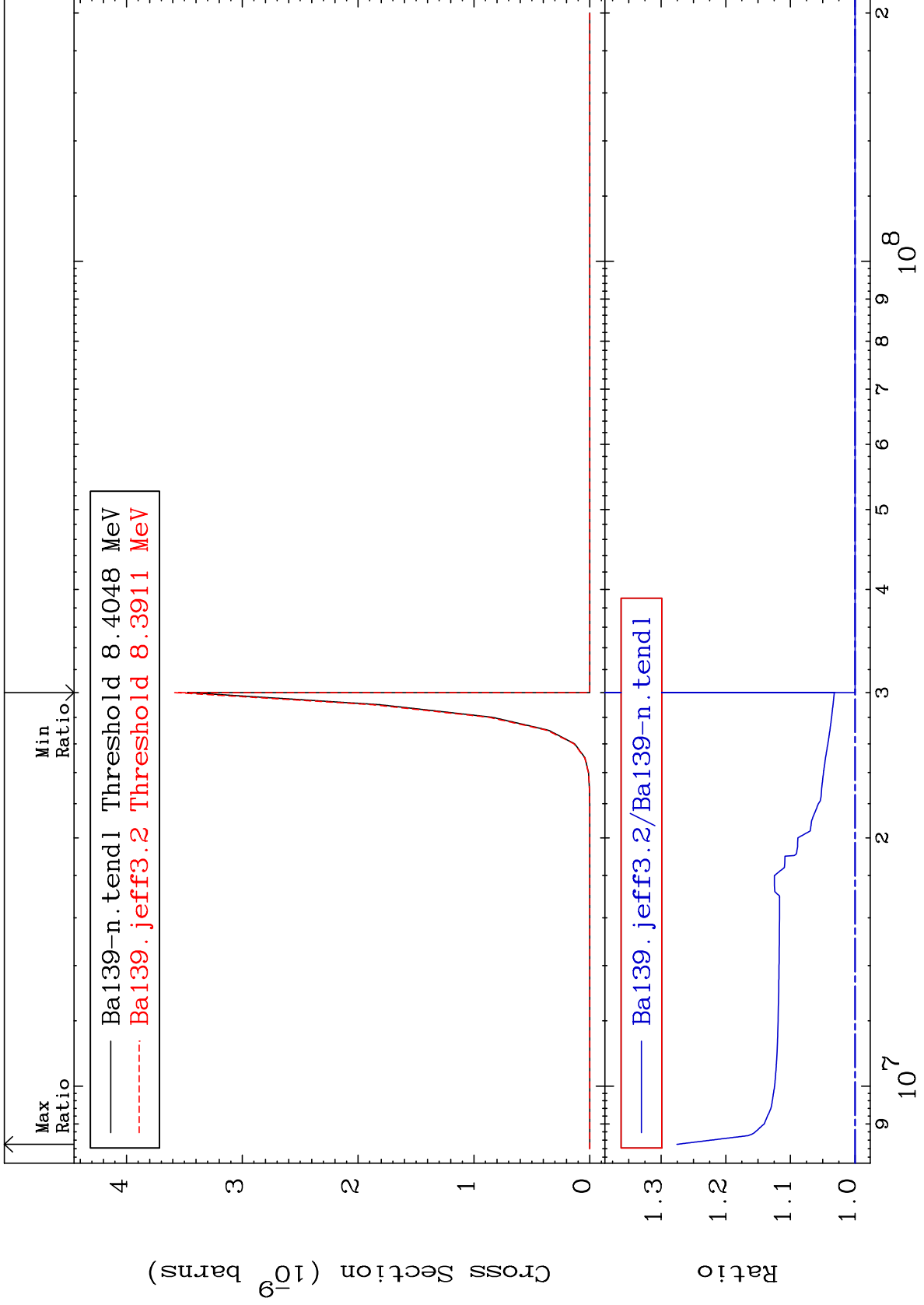


MAT 5652

(n, d) α :53-I -134g

56-Ba-139

Radionuclide Production Cross Section 0.000 To 27.55 %



95

Incident Energy (eV)

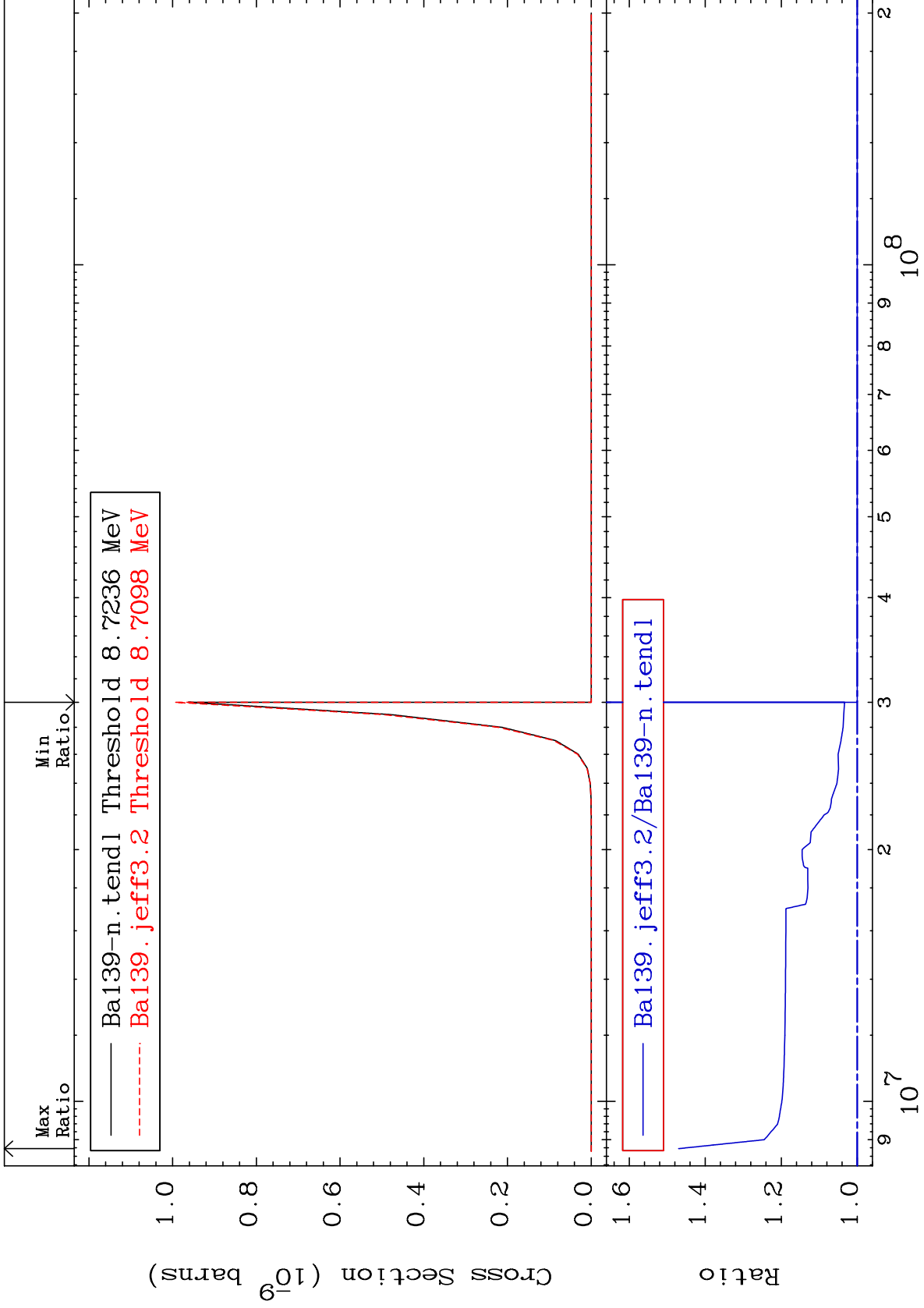
56-Ba-139

MAT 5652

(n,d) α :53-I -134m5

56-Ba-139

Radionuclide Production Cross Section 0.000 To 47.00 %



96

Incident Energy (eV)

56-Ba-139