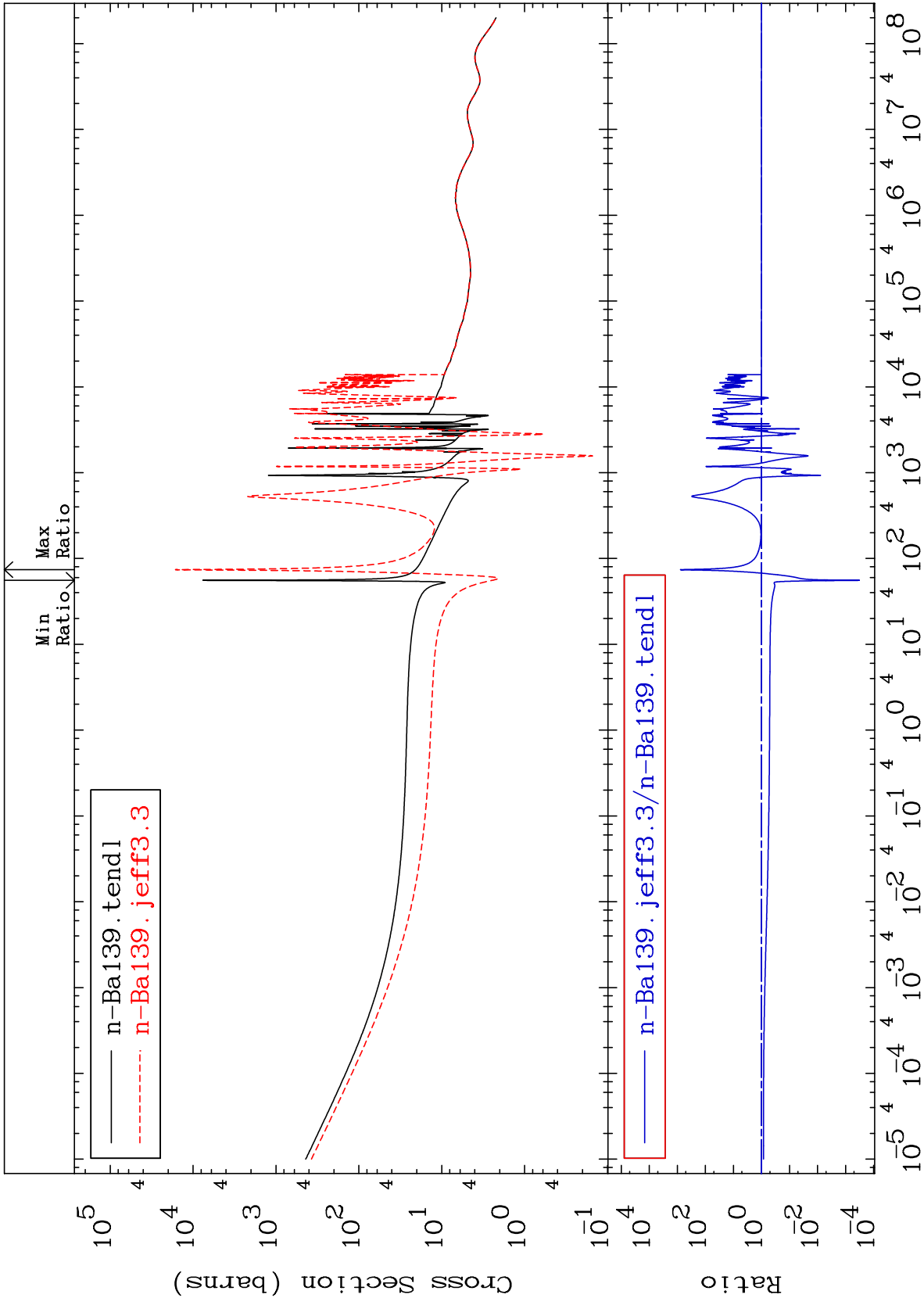


MAT 5652

56-Ba-139

-99.97 To 9999. %

Total
Cross Section

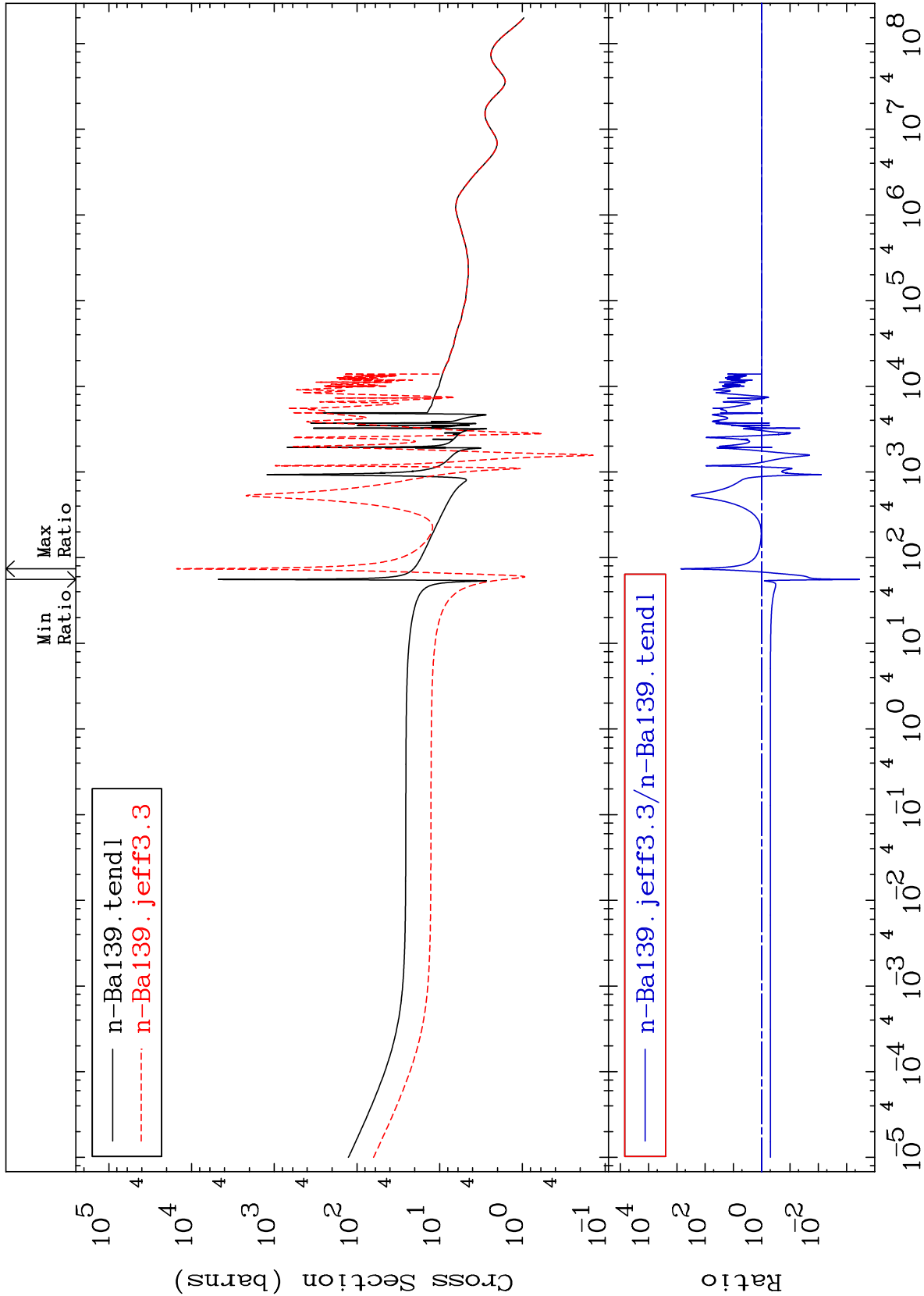


MAT 5652

56-Ba-139

Elastic
Cross Section

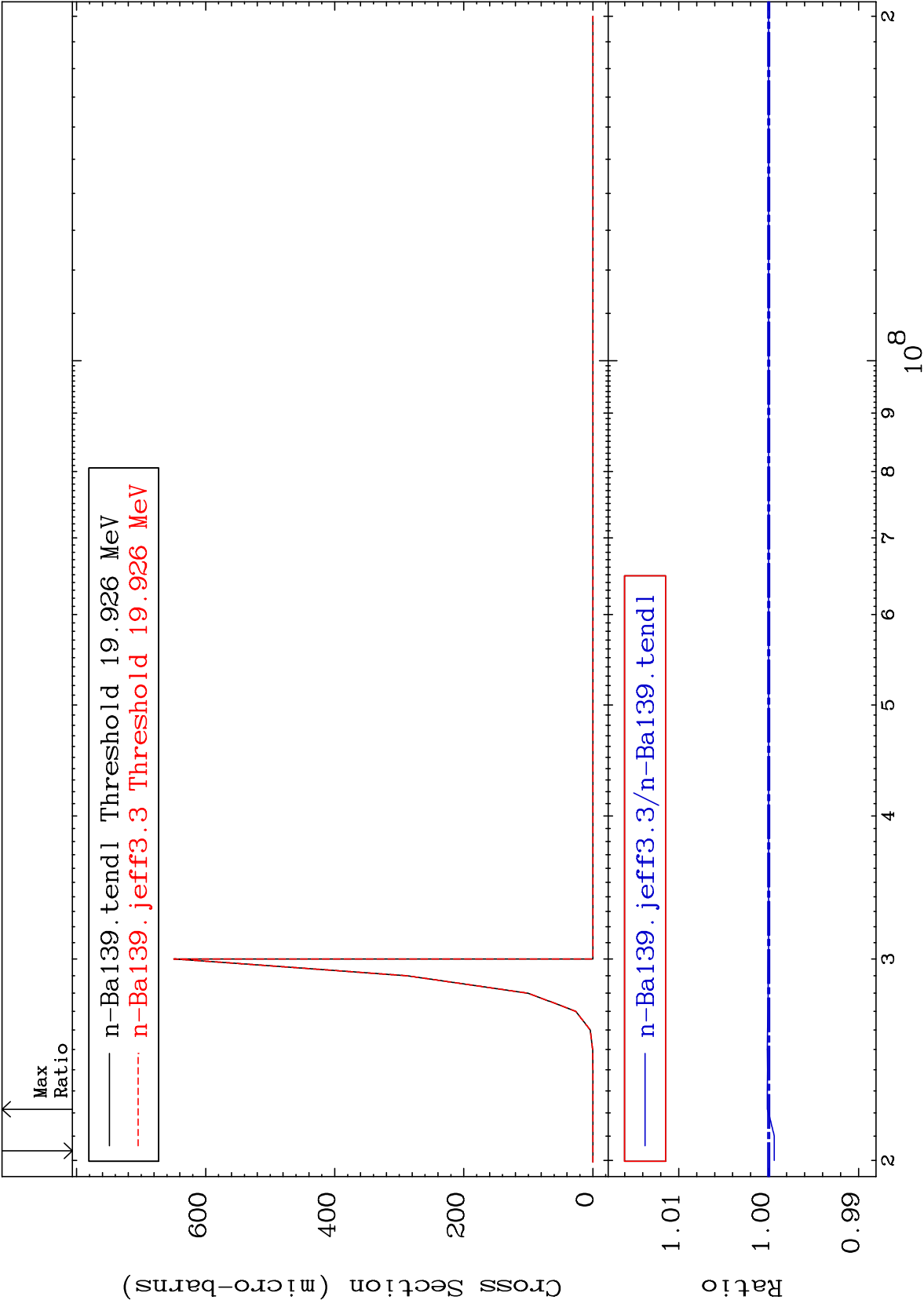
-99.97 To 9999. %



MAT 5652

(n,2n) d
Cross Section

56-Ba-139
-0.063 To 0.015 %

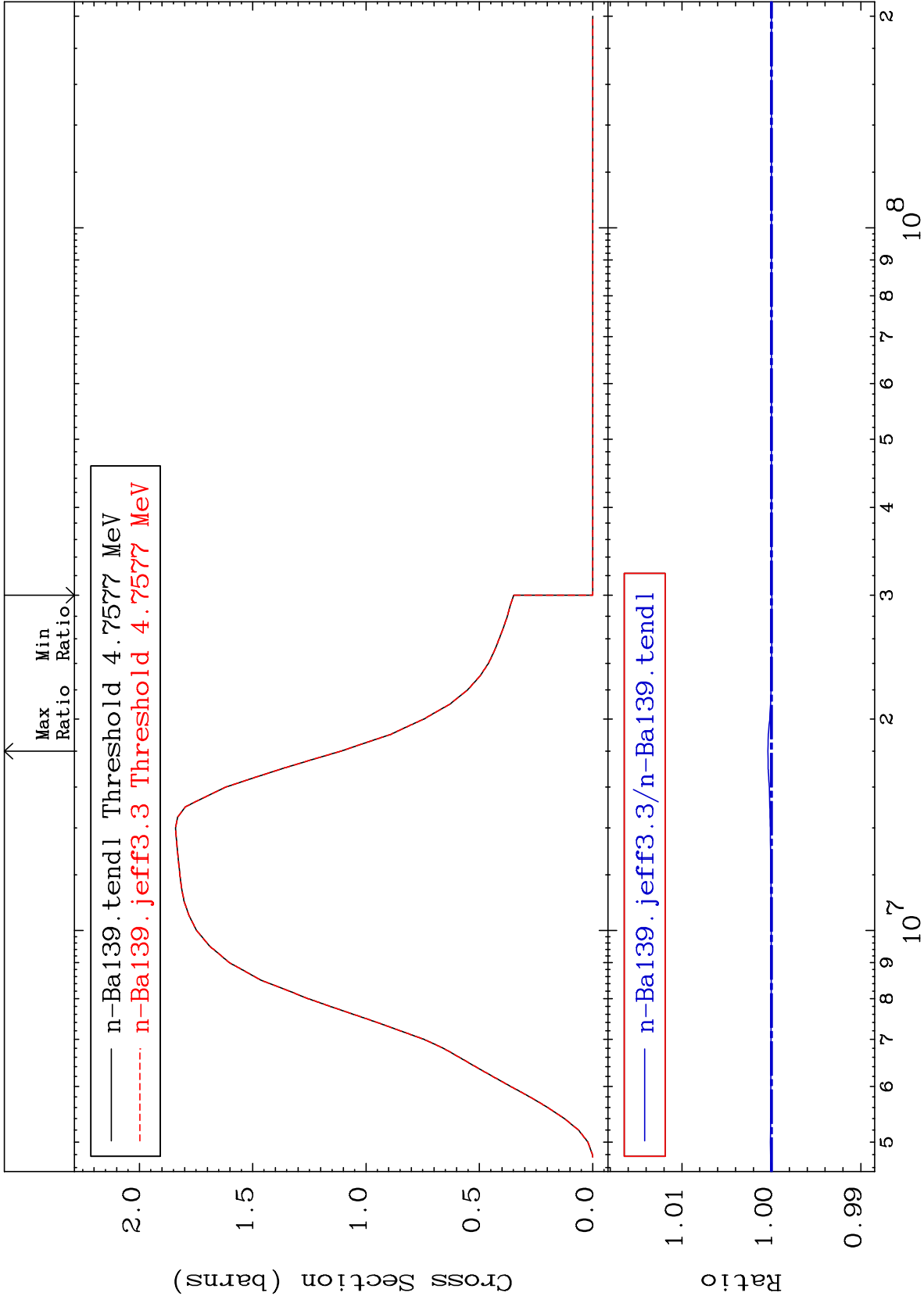


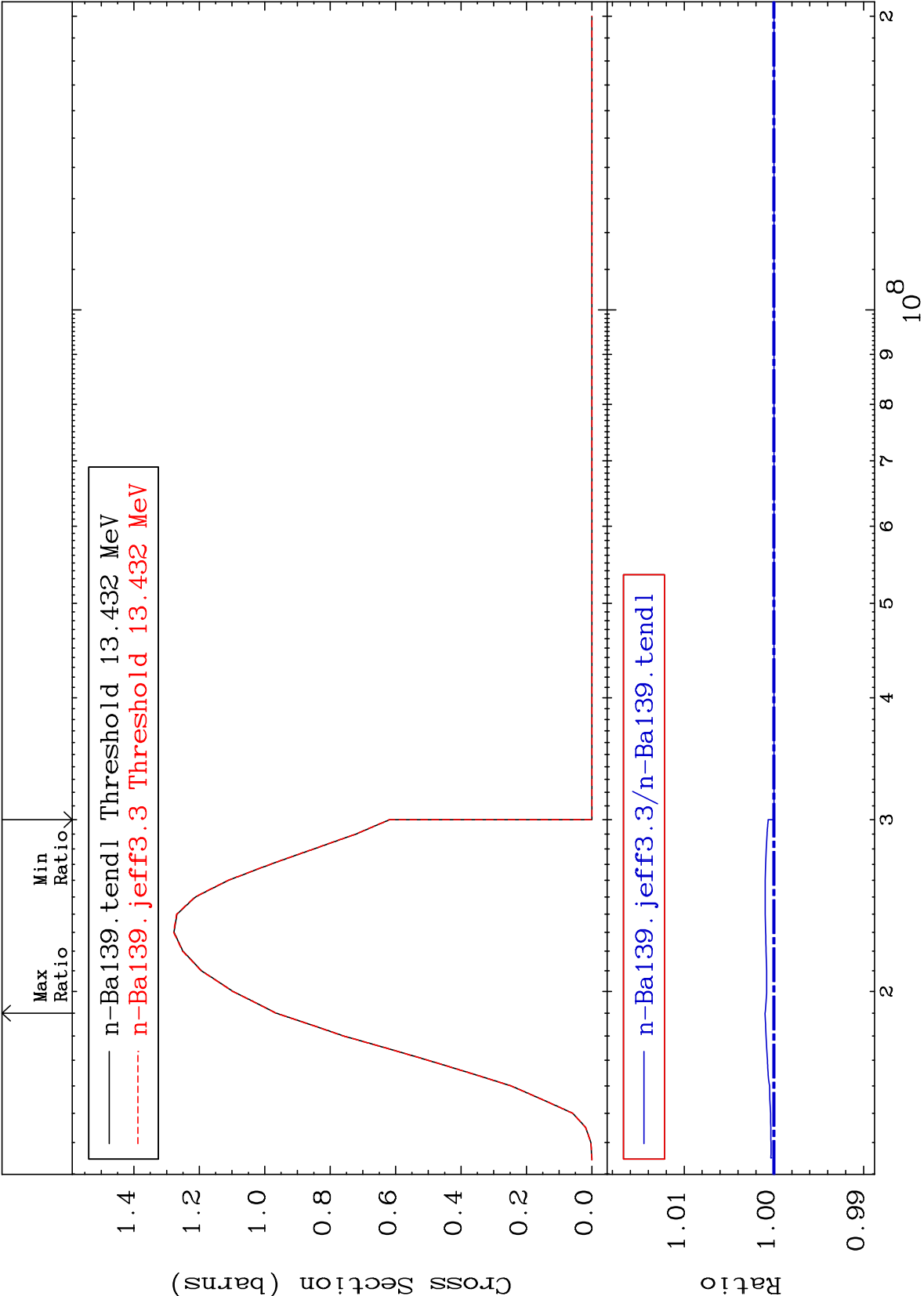
MAT 5652

(n,2n) 56-Ba-139

Cross Section

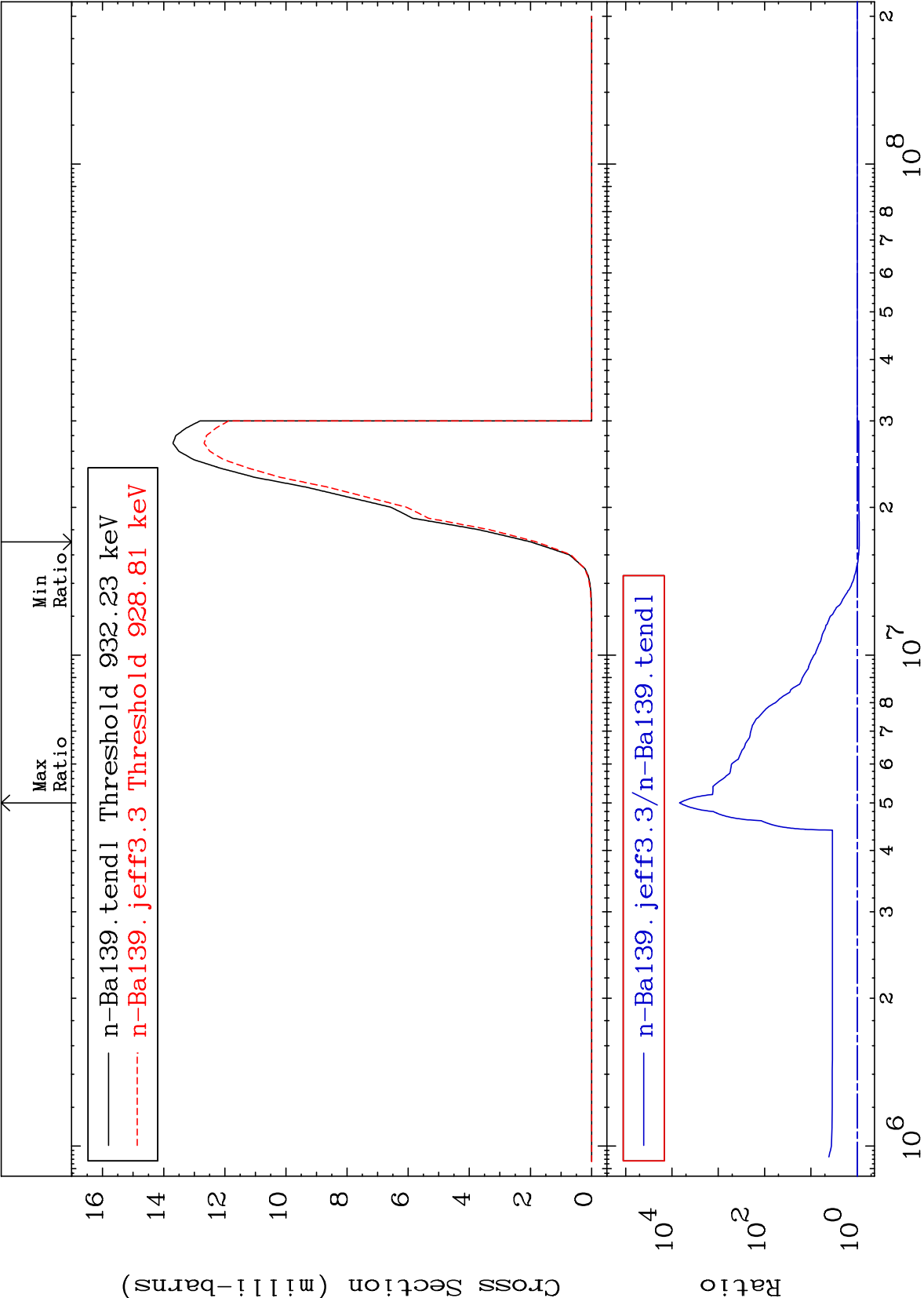
-0.005 To 0.039 %





MAT 5652

$(n, n') \alpha$
Cross Section
56-Ba-139
-9.416 To 9999. %

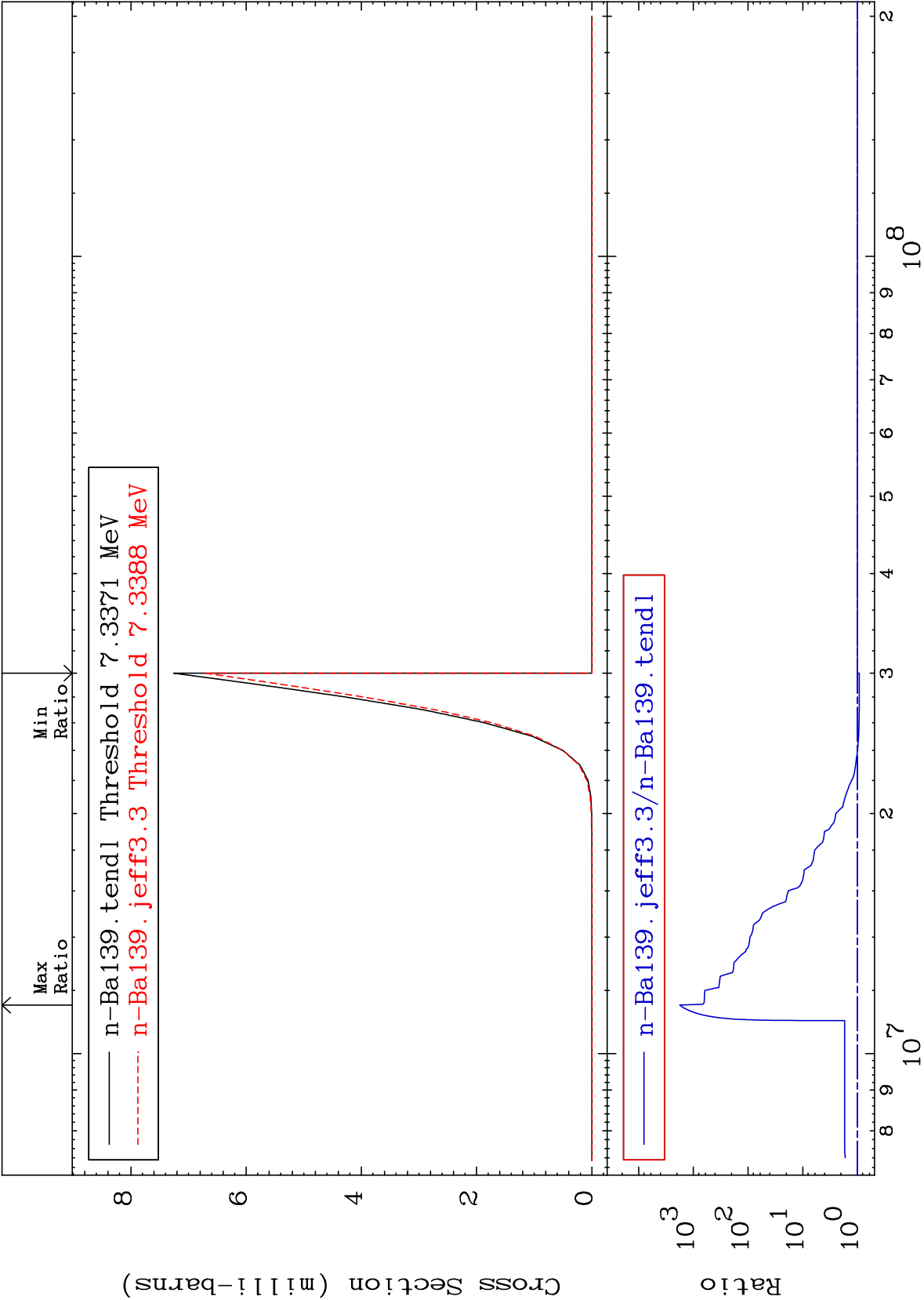


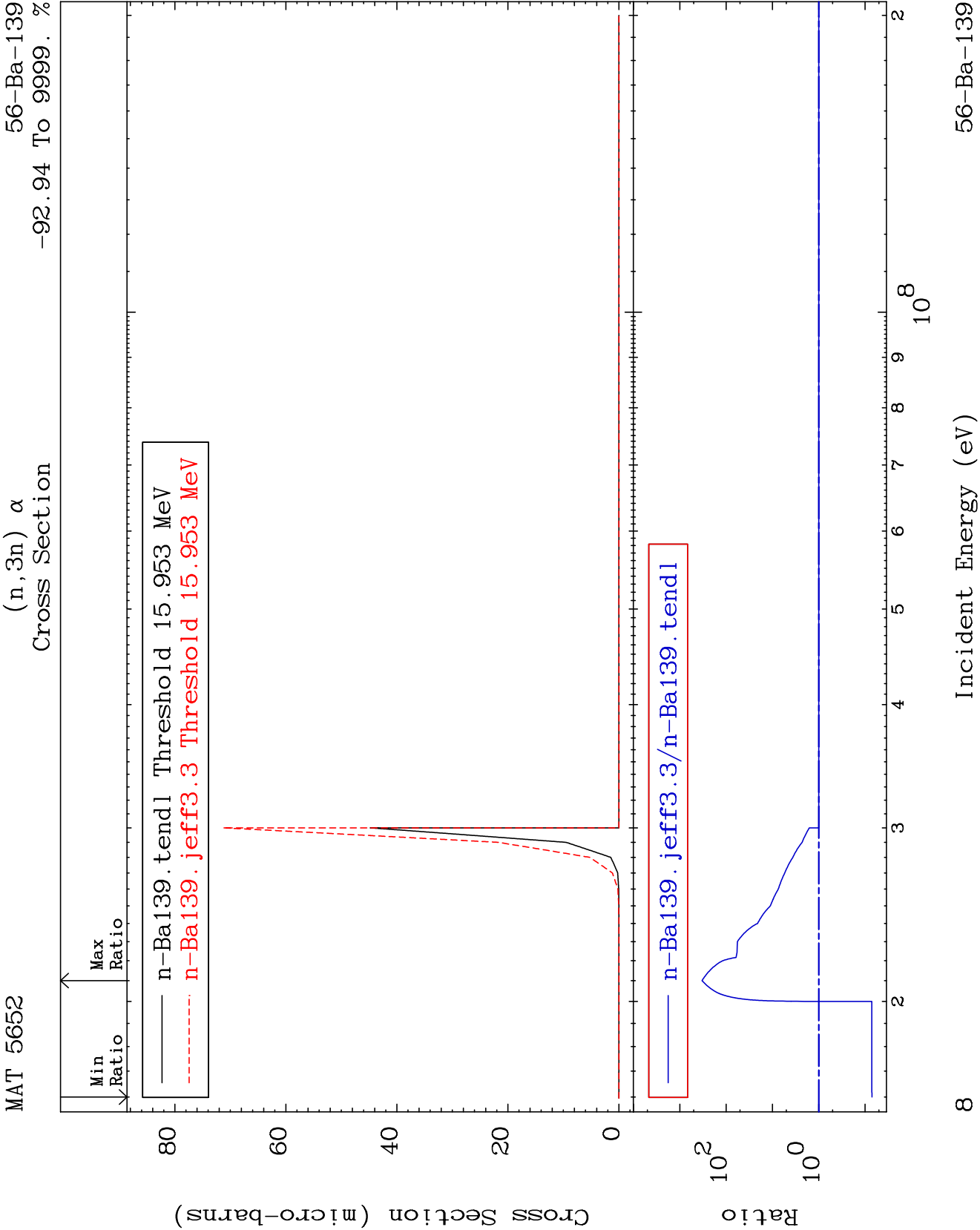
Incident Energy (eV)

56-Ba-139

MAT 5652

(n,2n) α 56-Ba-139
Cross Section -7.536 To 9999. %





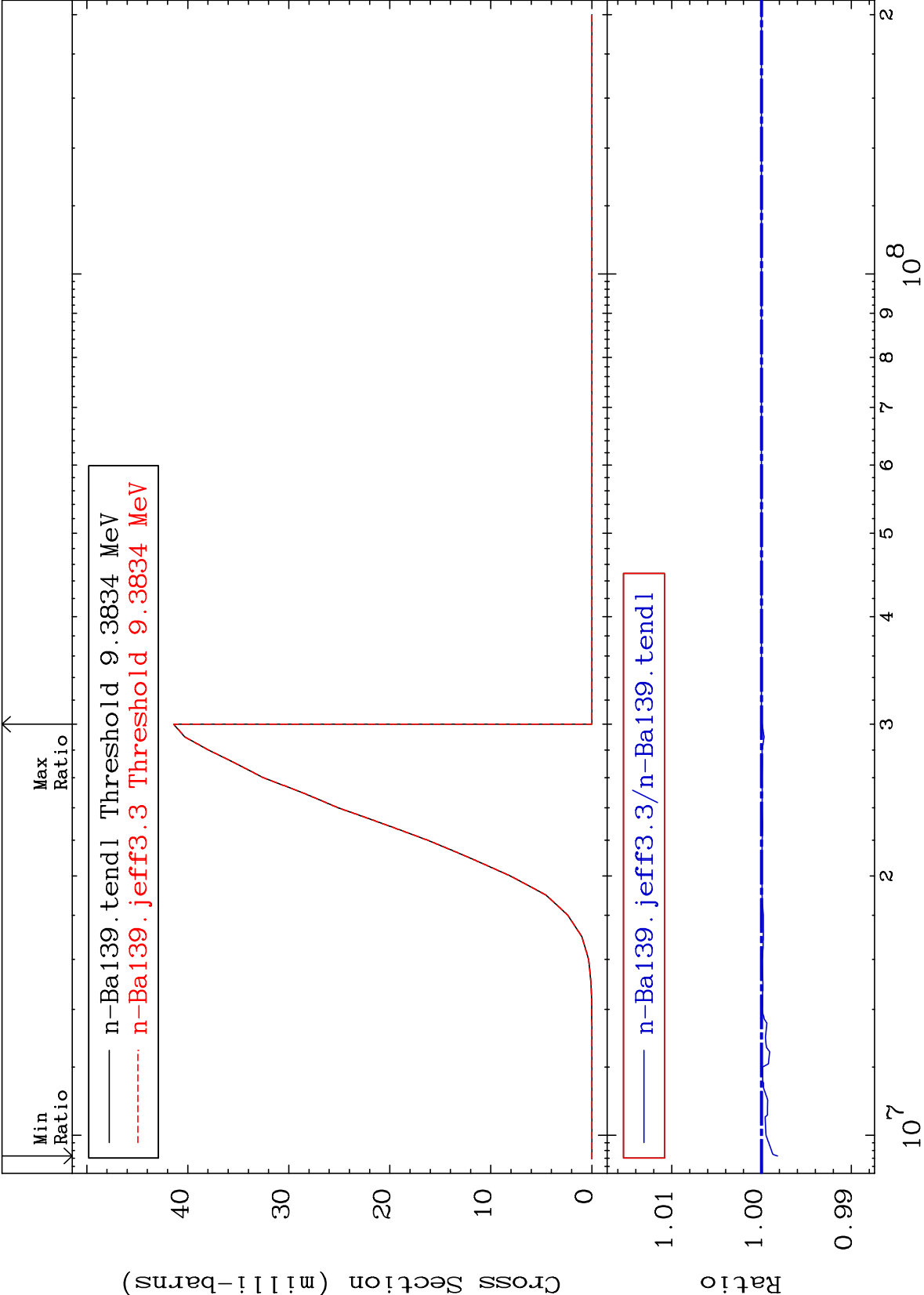
MAT 5652

56-Ba-139

(n,n') p

Cross Section

-0.178 To 0.000 %



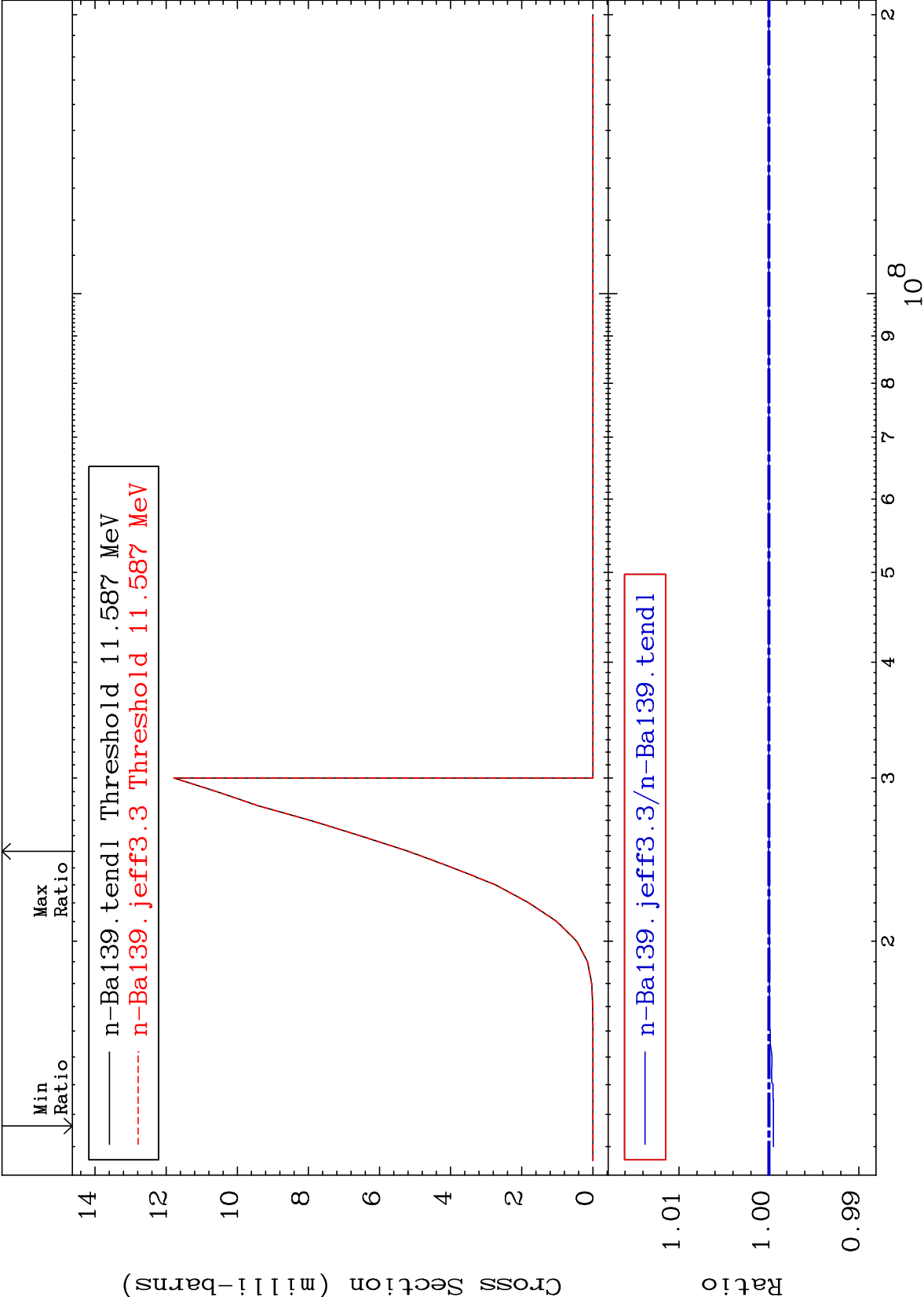
MAT 5652

(n,n') d

56-Ba-139

Cross Section

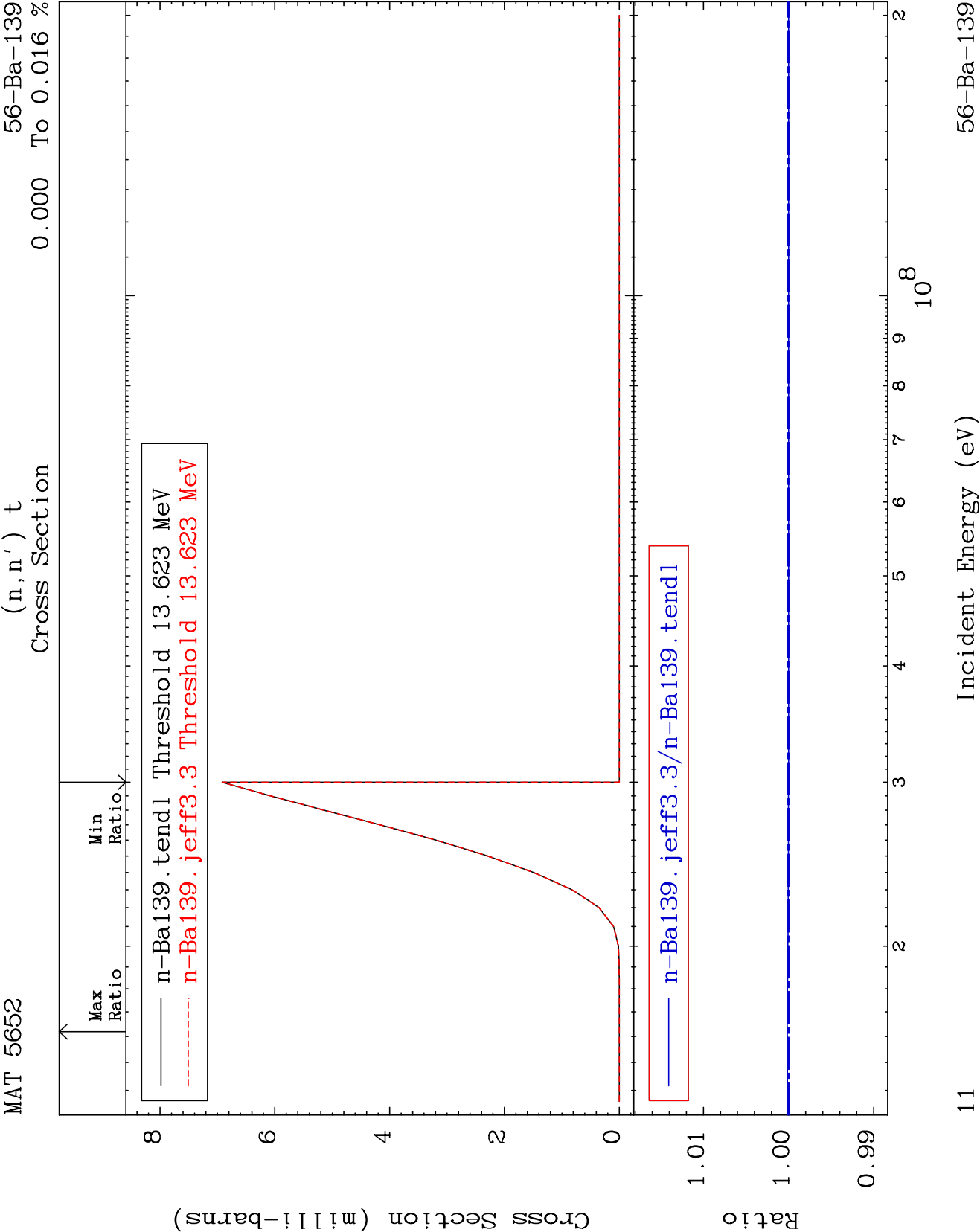
-0.049 To 0.007 %

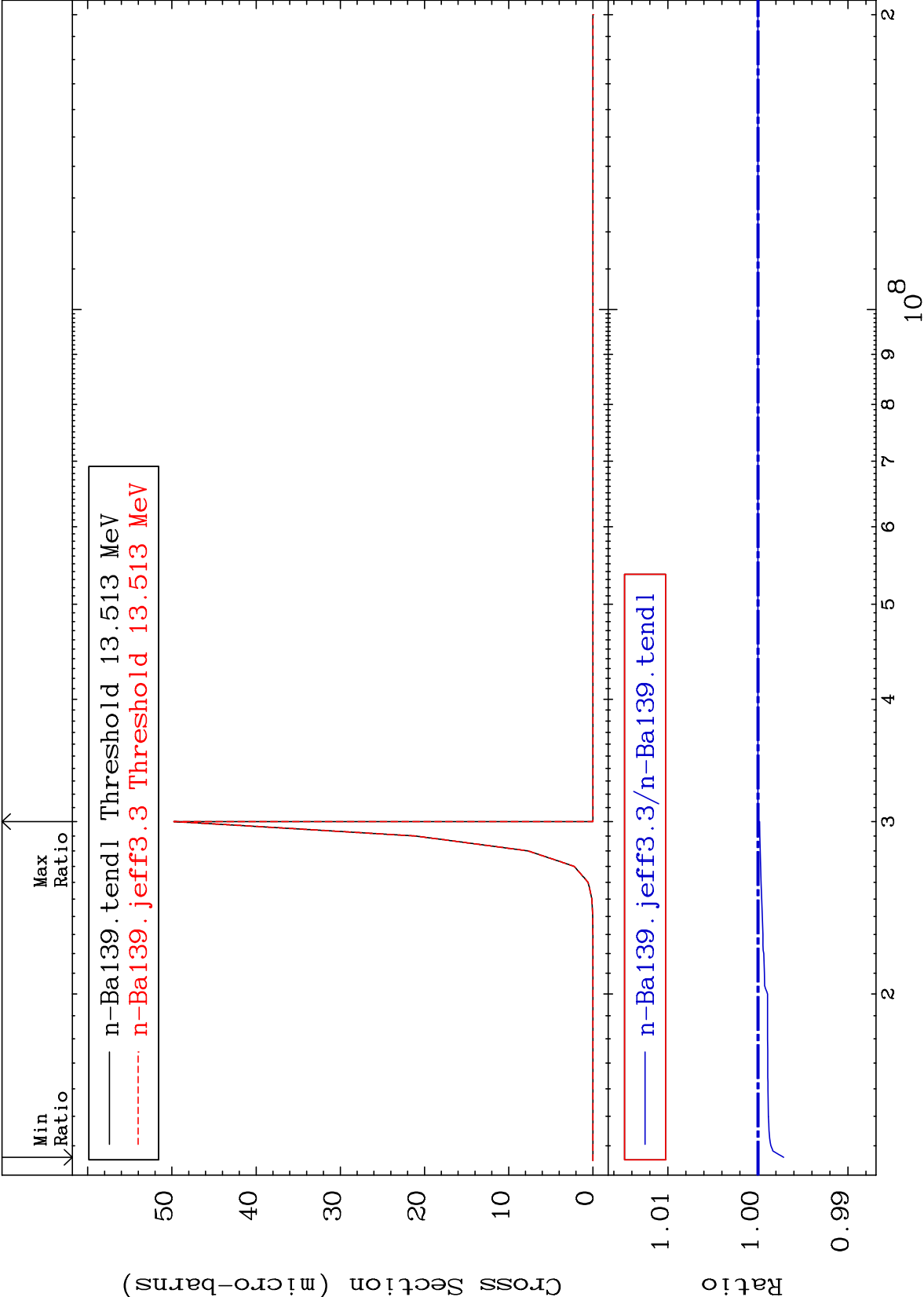


10

Incident Energy (eV)

56-Ba-139





MAT 5652

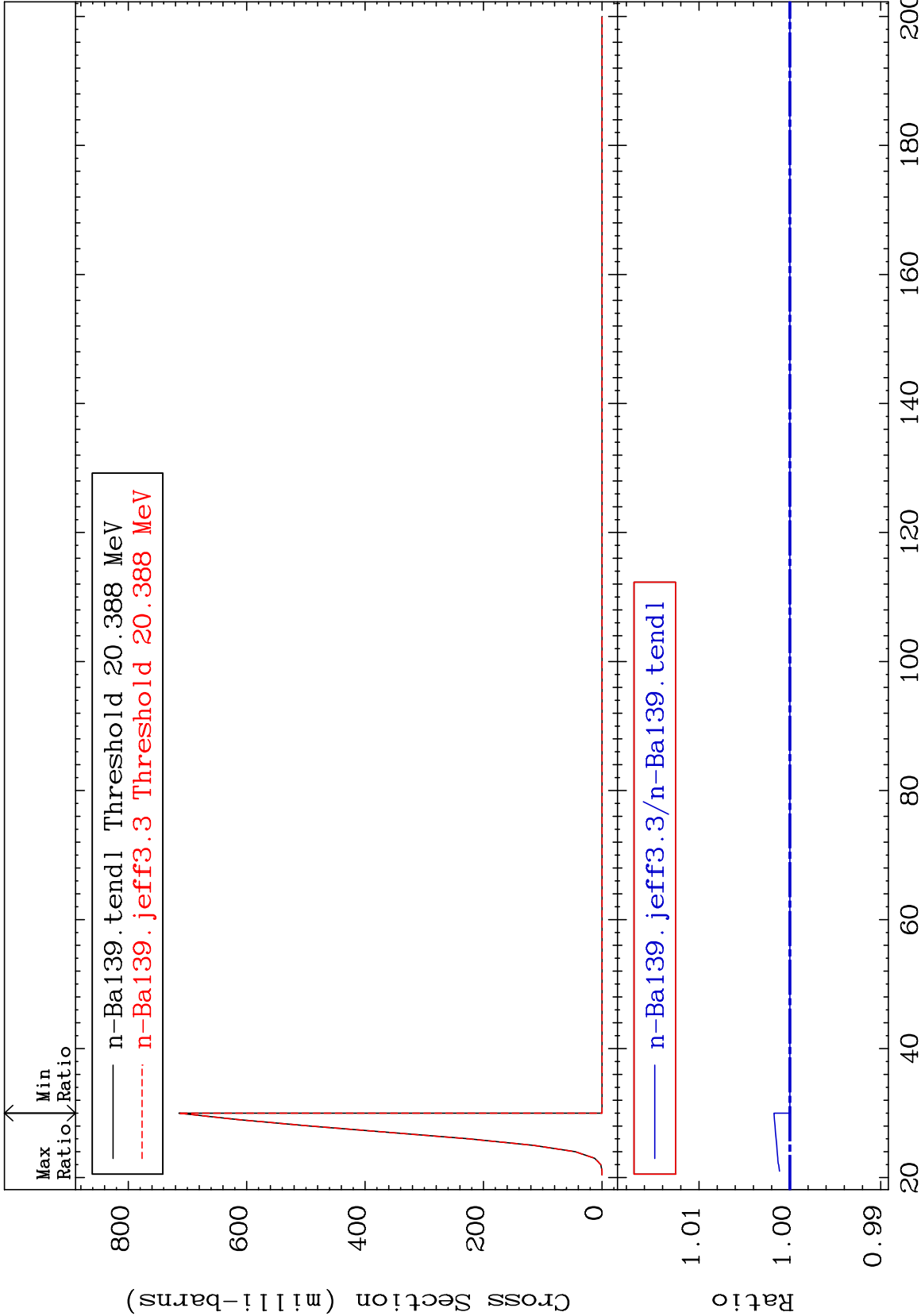
(n,4n)

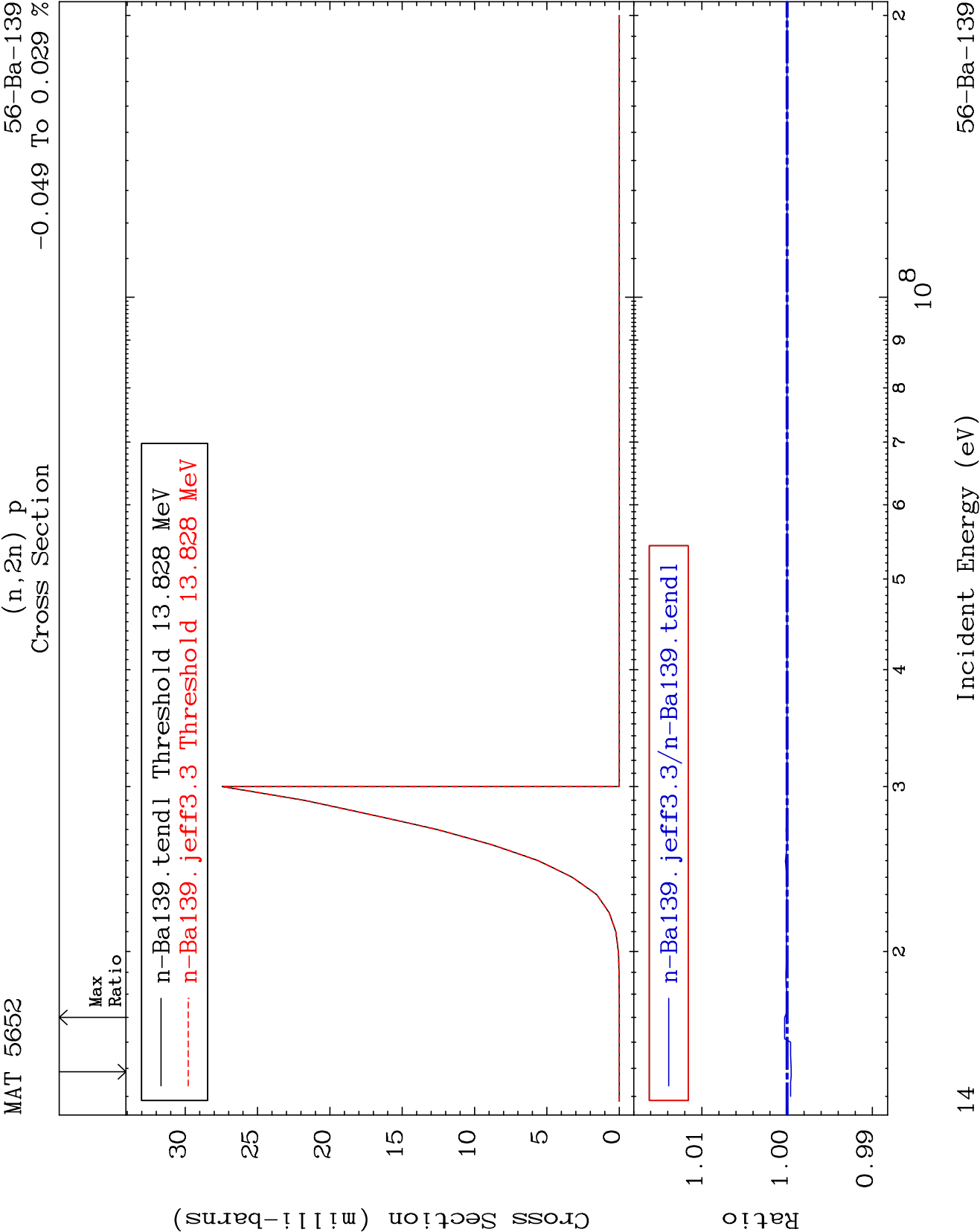
56-Ba-139

Cross Section

0.000

To 0.173 %

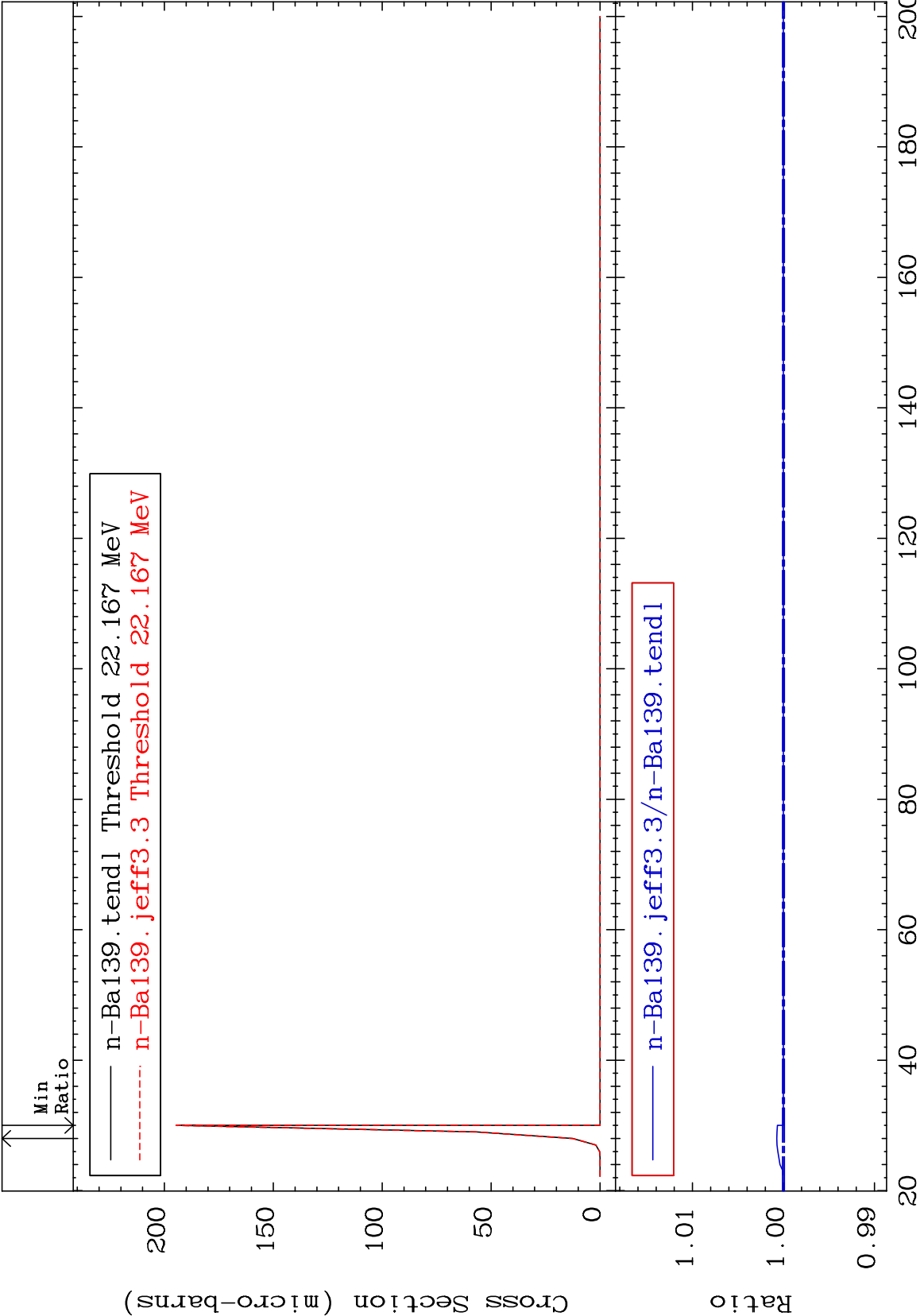




MAT 5652

(n,3n) p
Cross Section

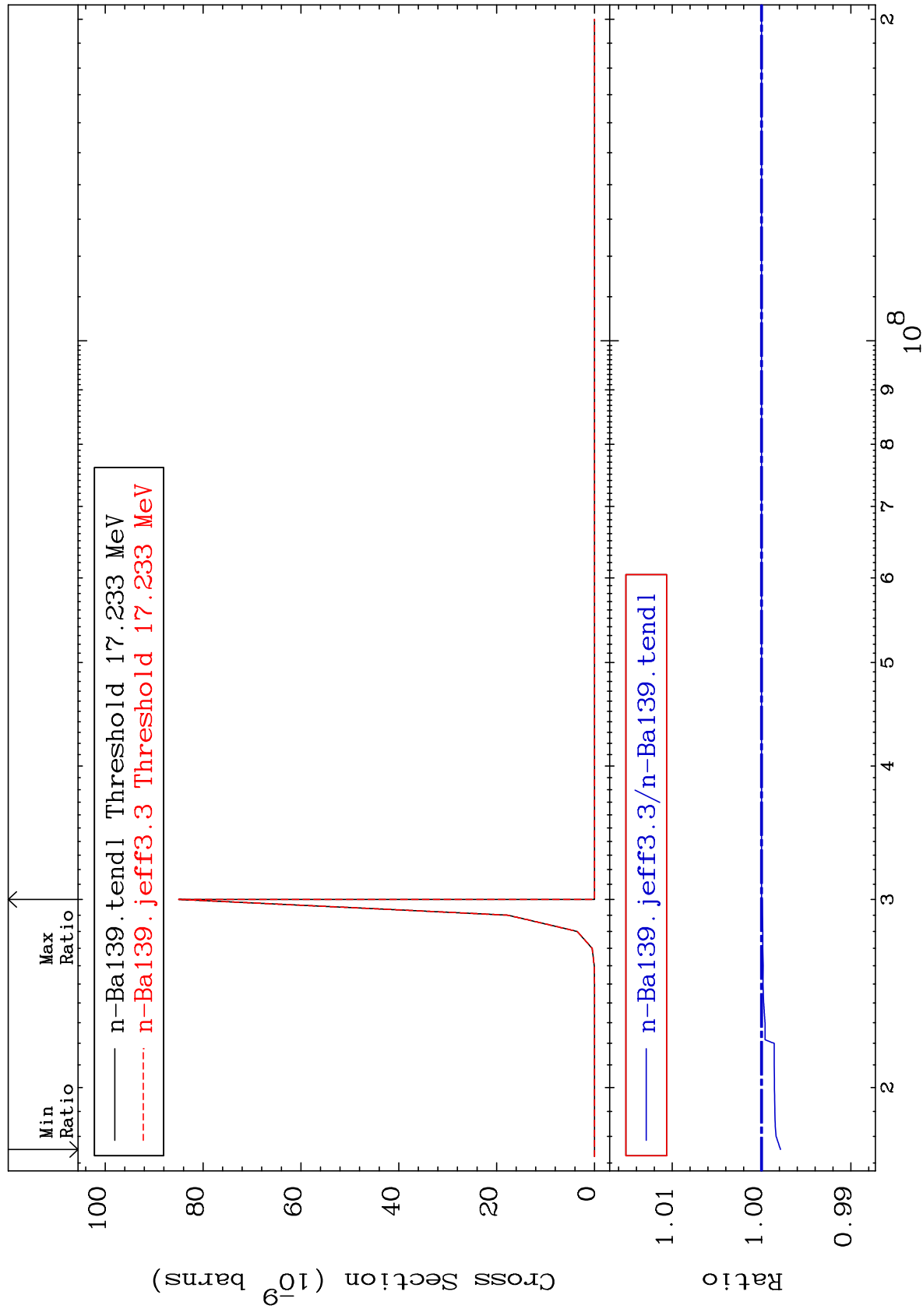
56-Ba-139
0.000 To 0.074 %



56-Ba-139

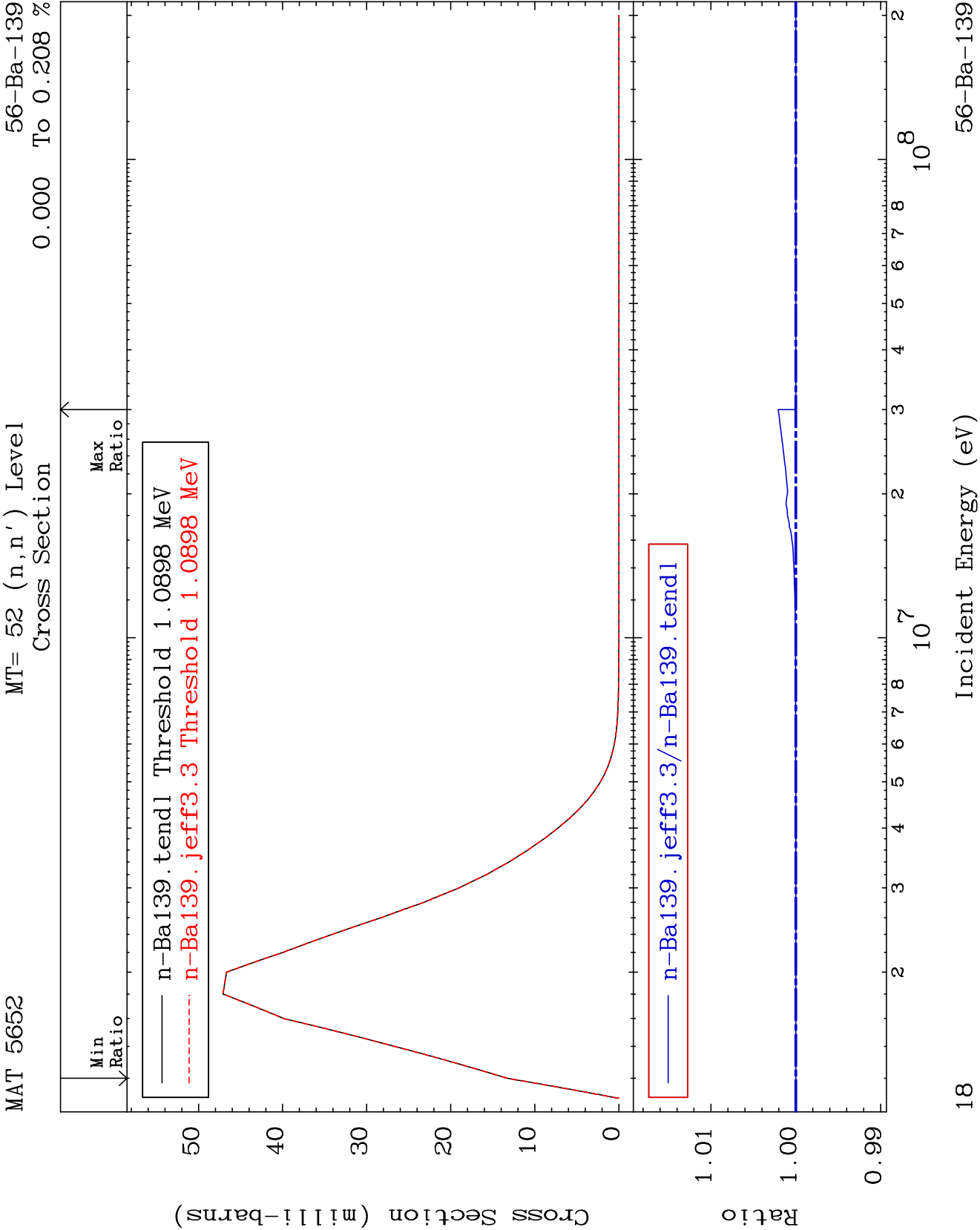
Cross Section

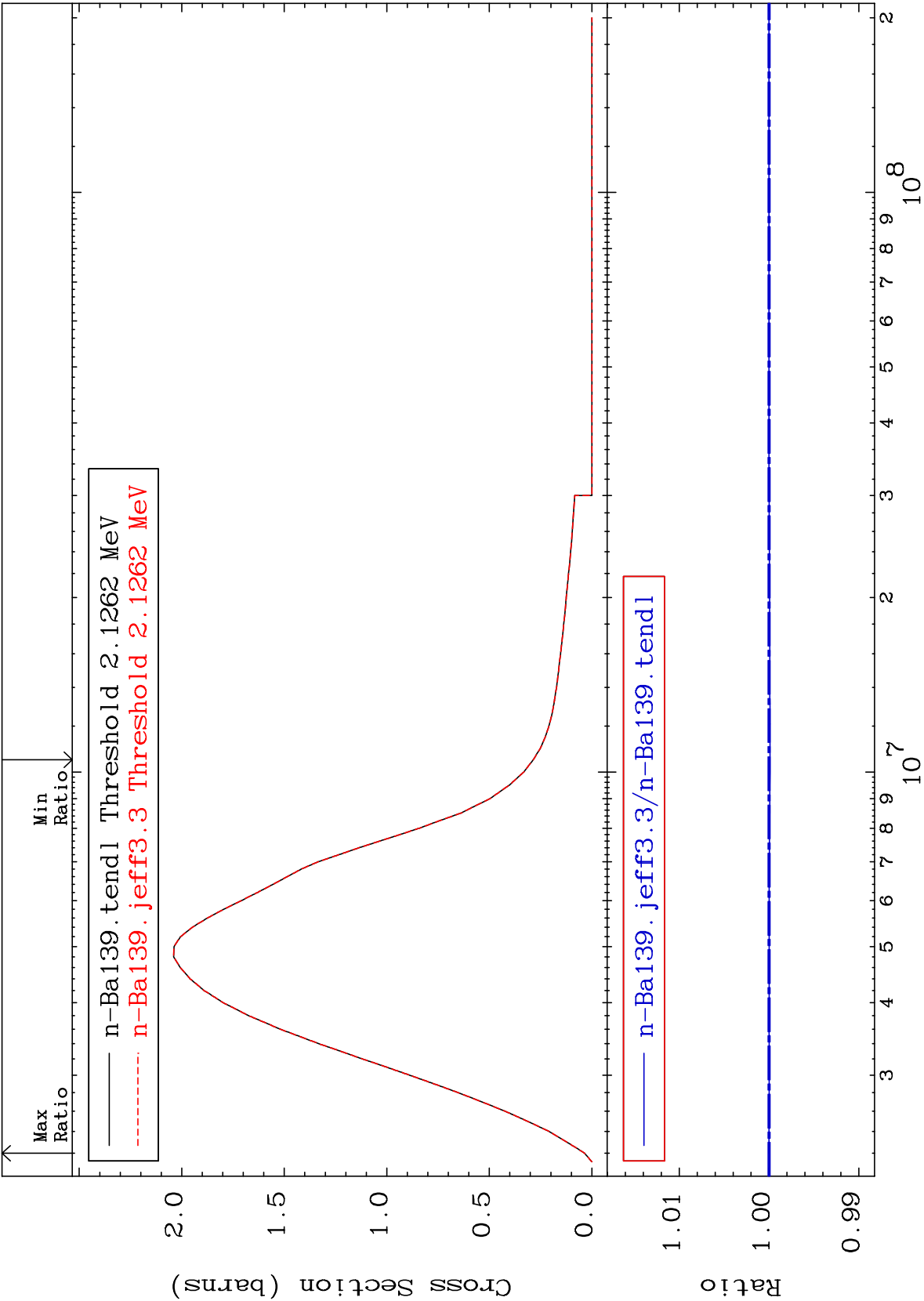
-0.212 To



56-Ba-139

Incident Energy (eV)



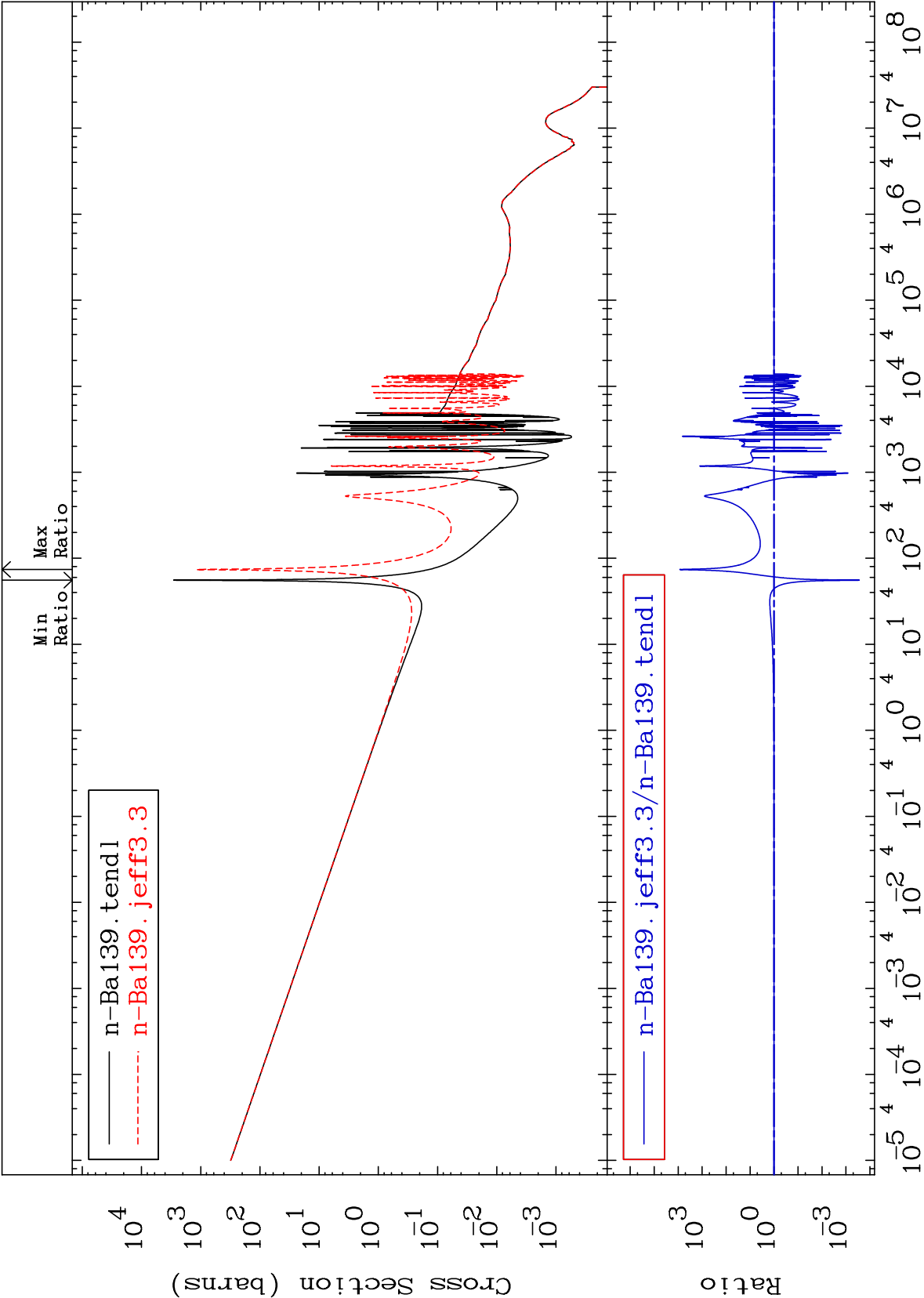


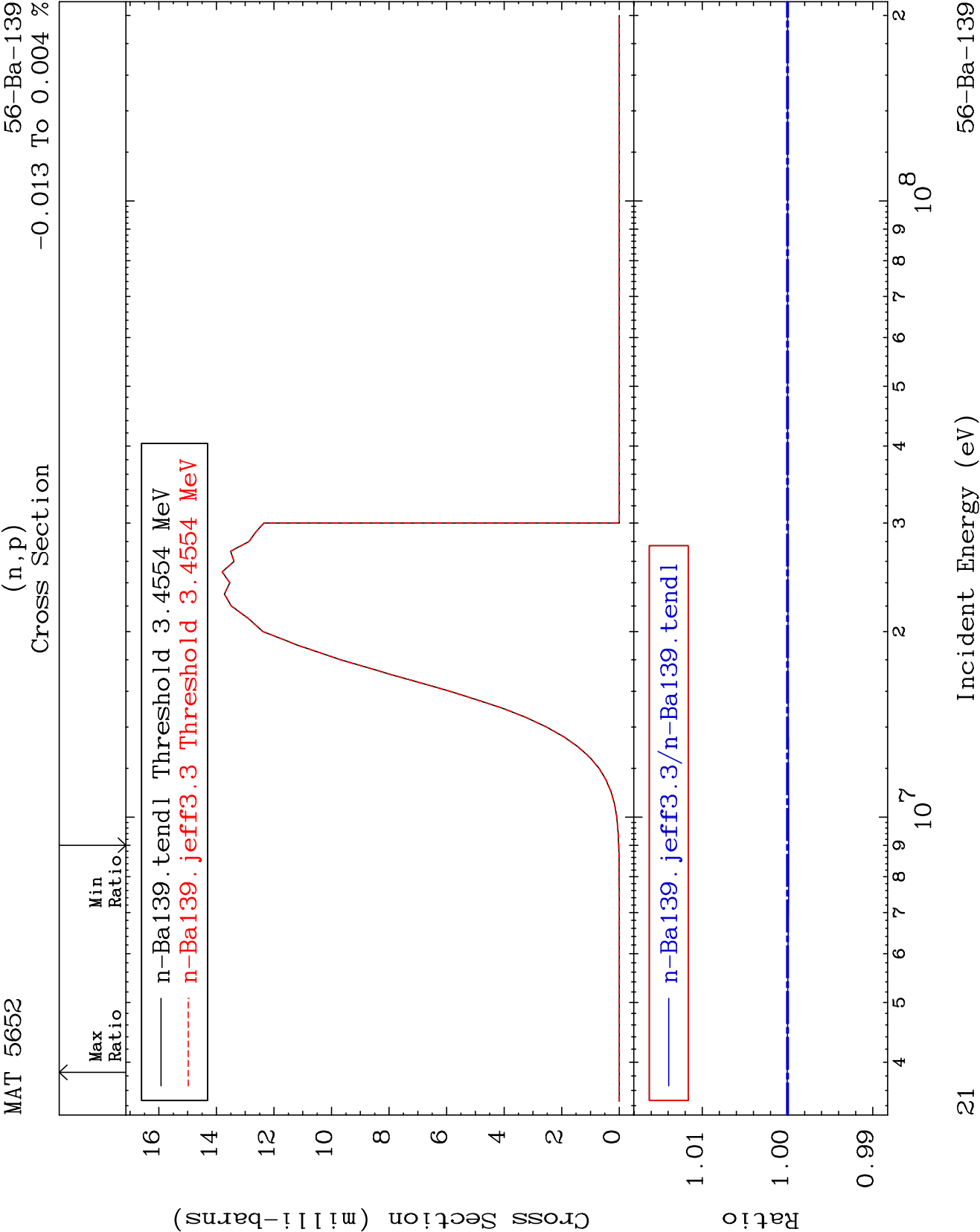
MAT 5652

56-Ba-139

-99.97 To 9999. %

(n, γ)
Cross Section



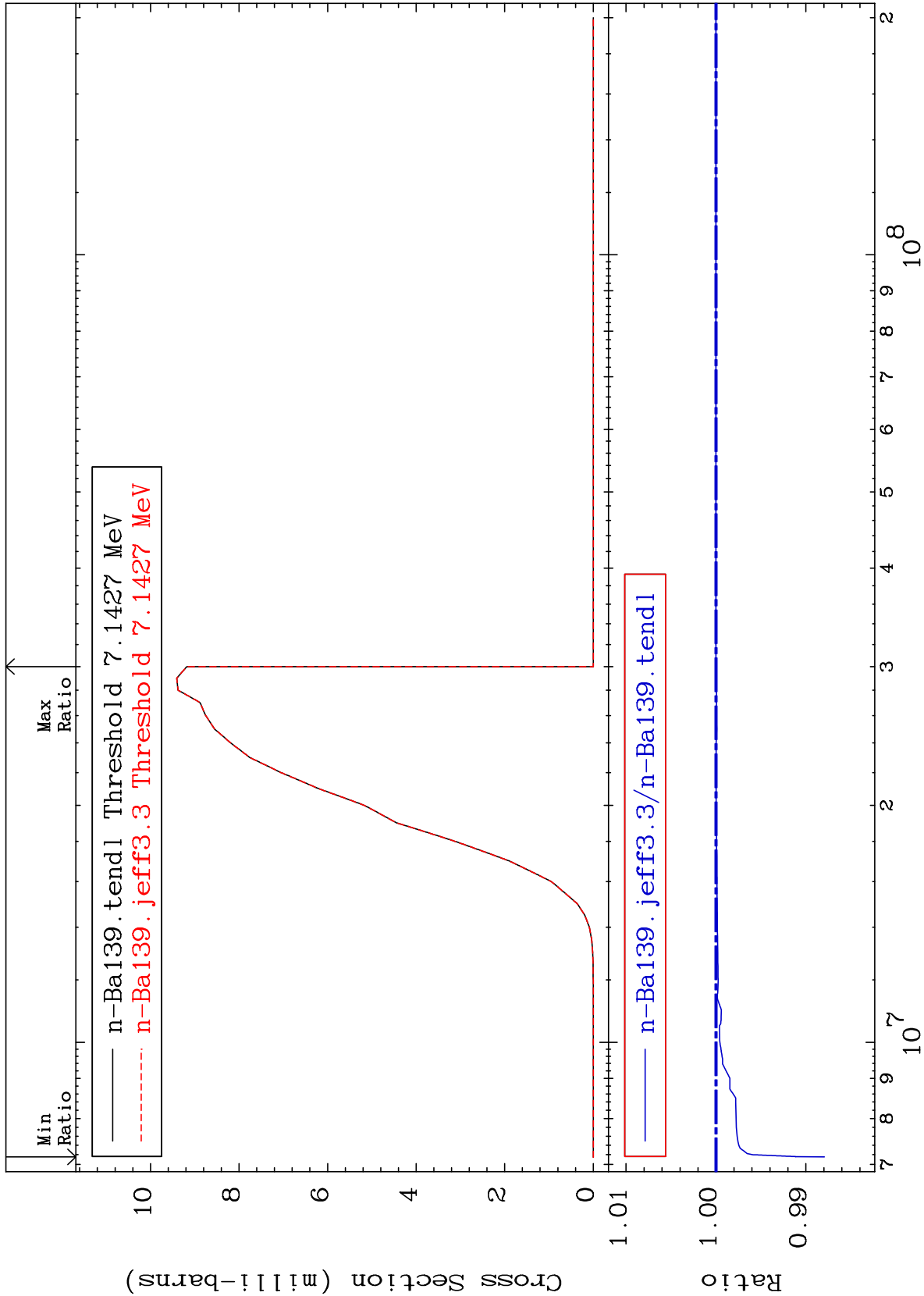


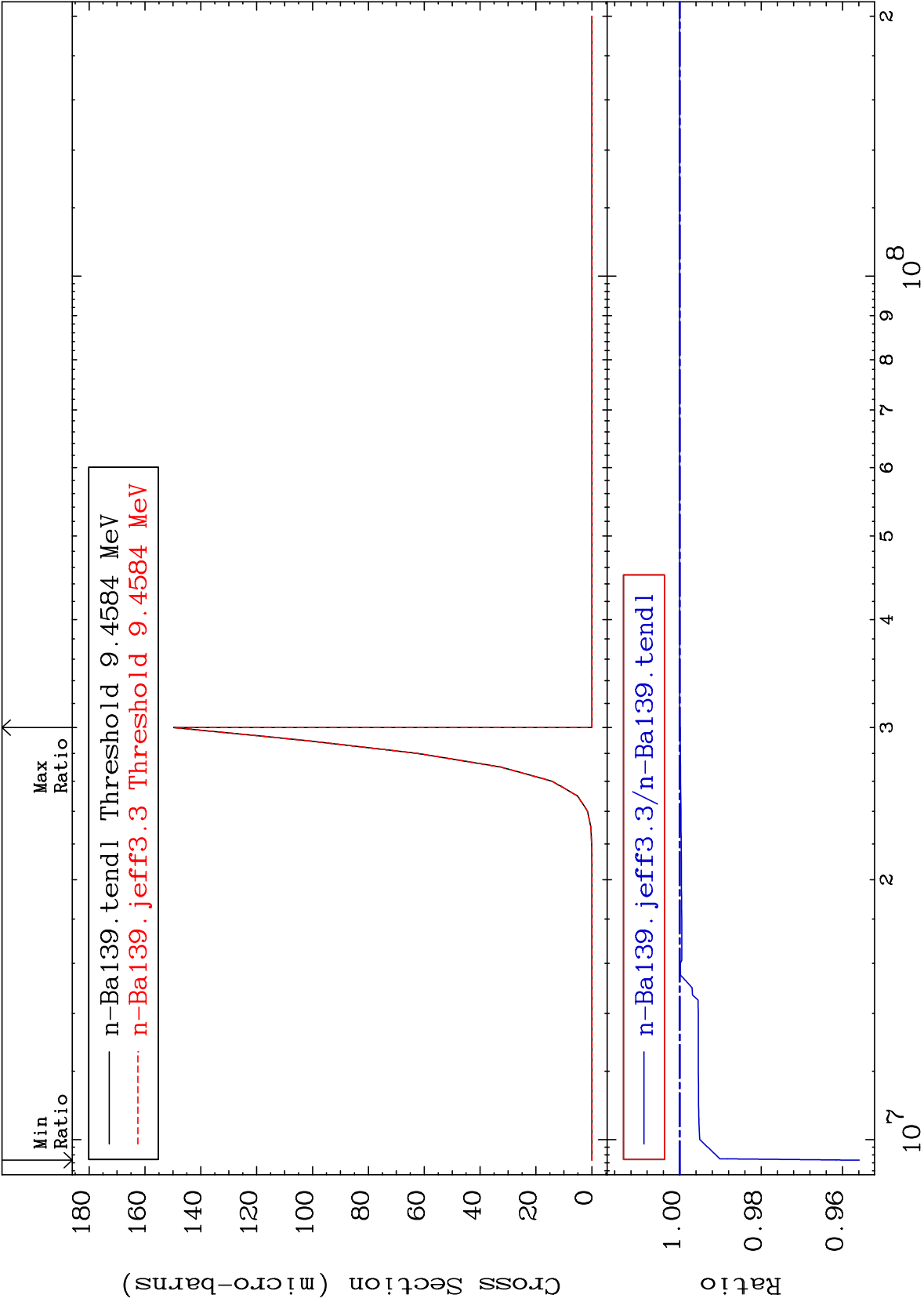
21

56-Ba-139

(n,d)
Cross Section

-1.204 To 0.000 %





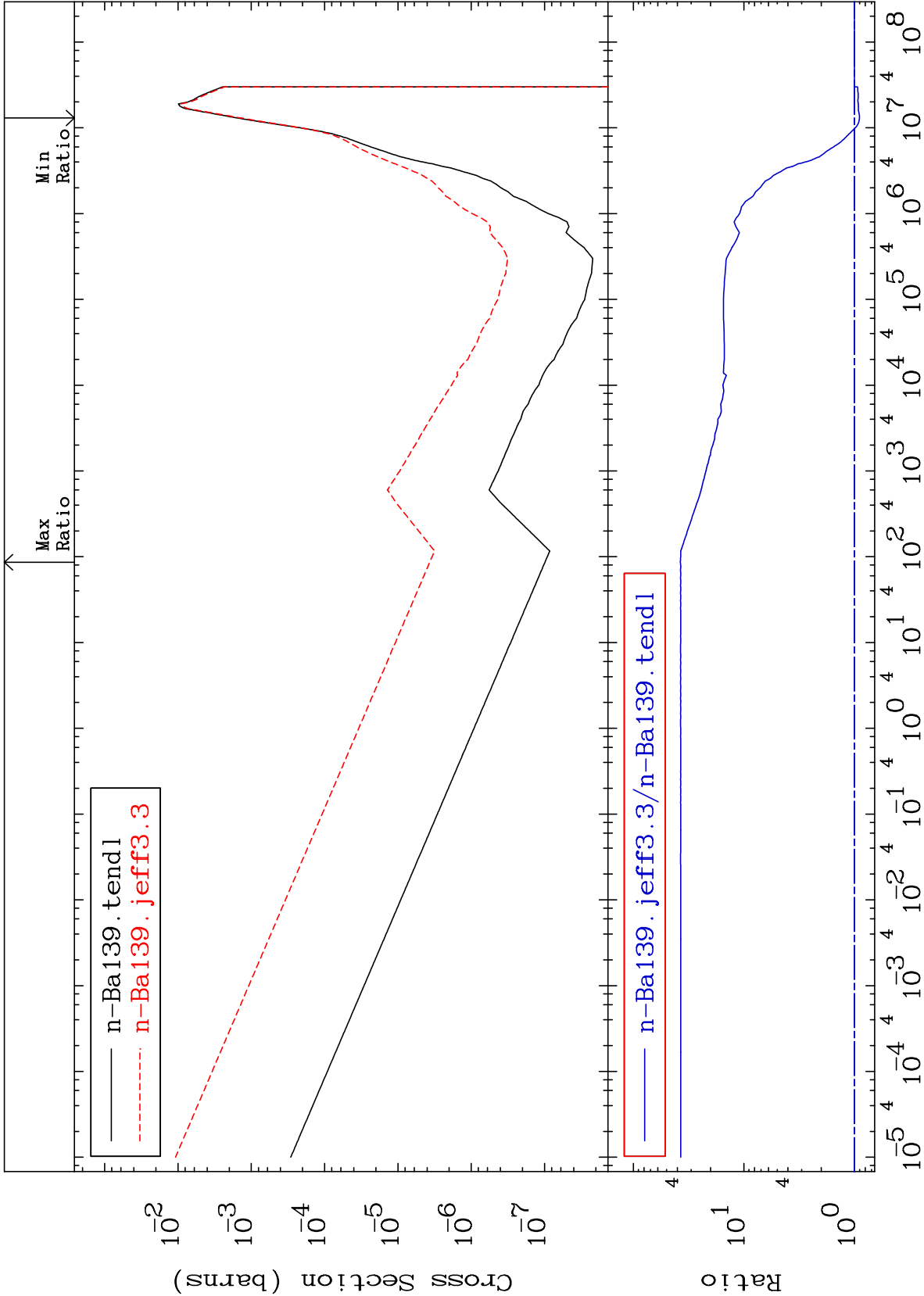
MAT 5652

56-Ba-139

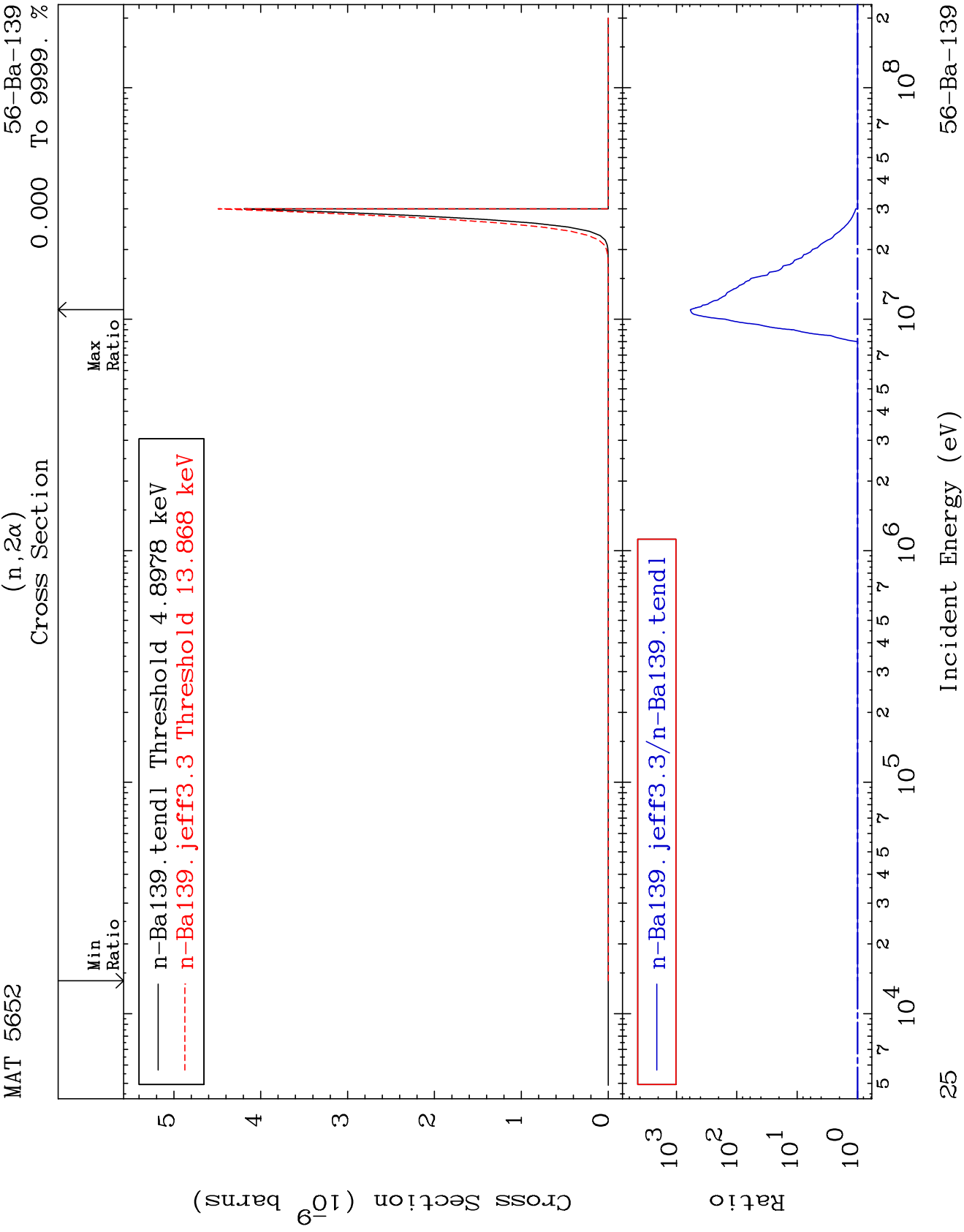
(n, α)

Cross Section

-9.768 To 3657. %

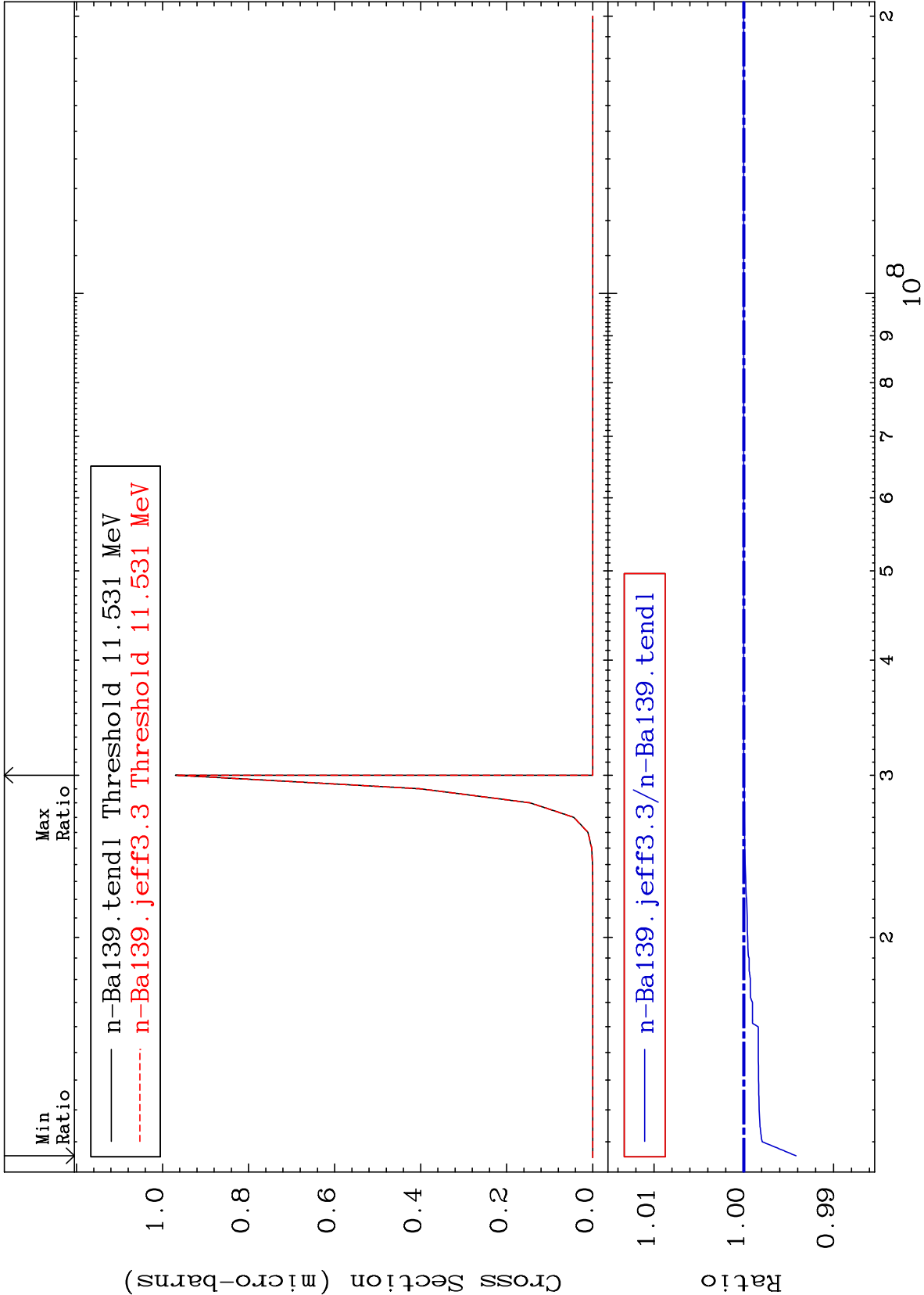


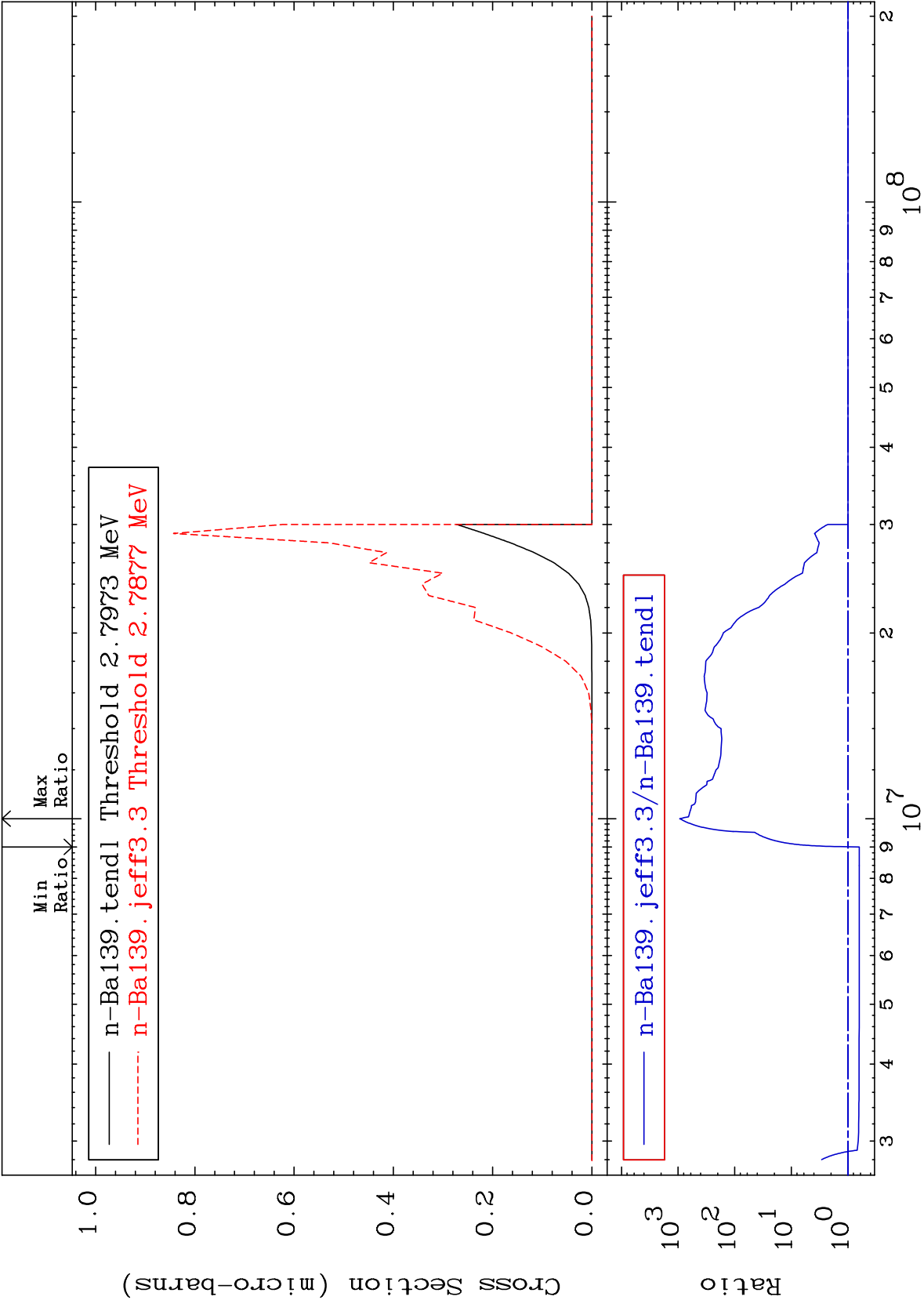
56-Ba-139

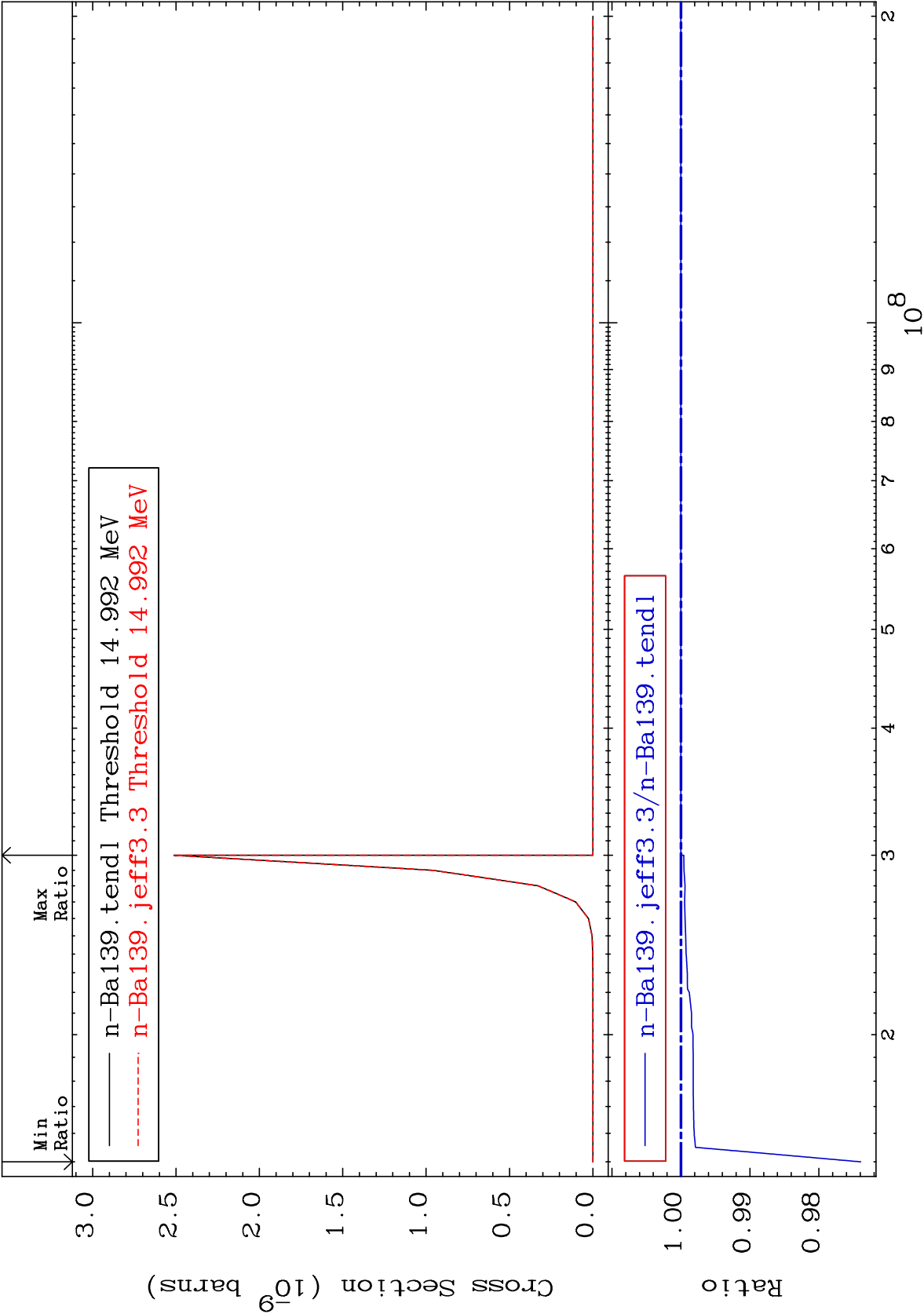


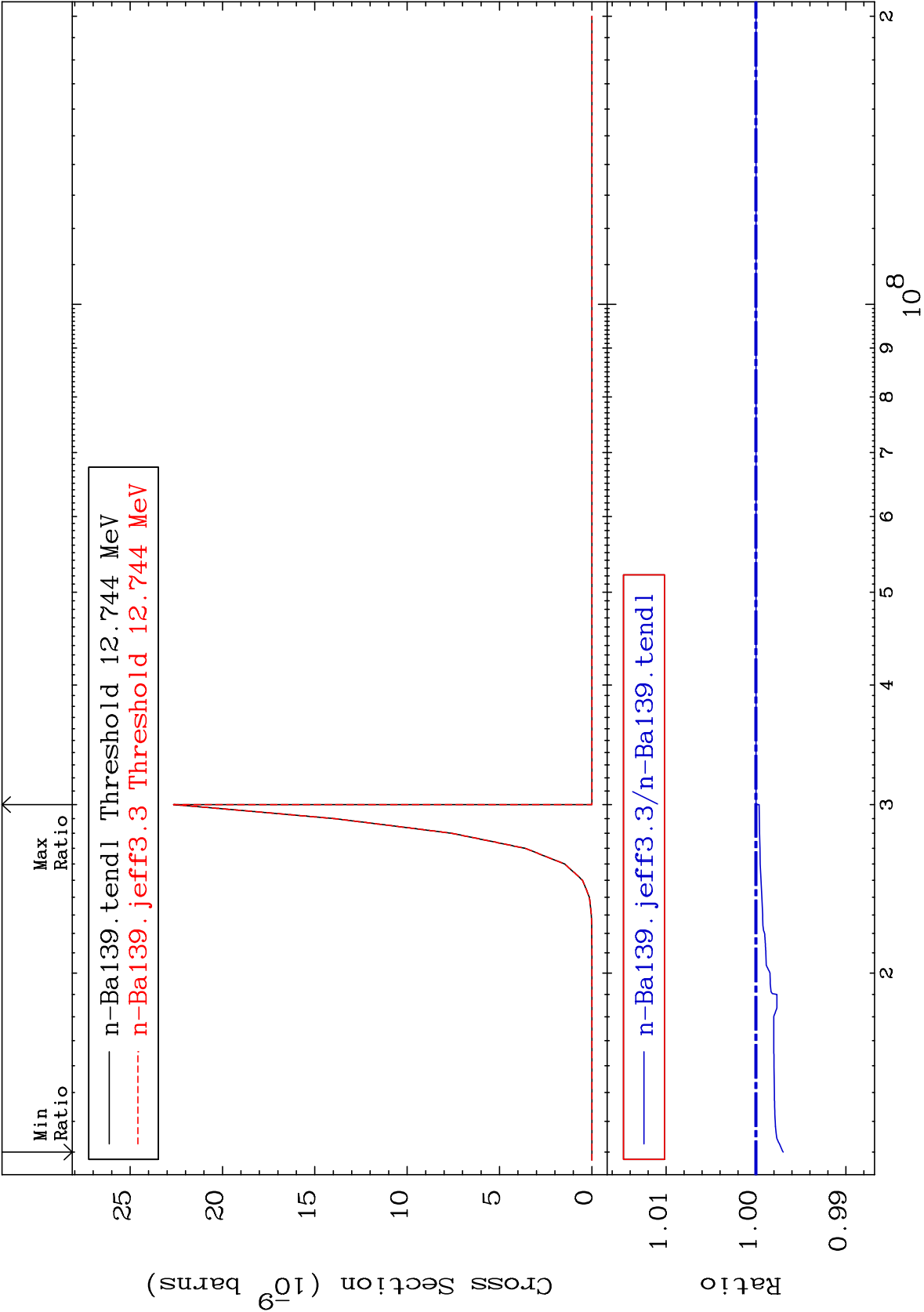
Cross Section

-0.582 To 0.000 %



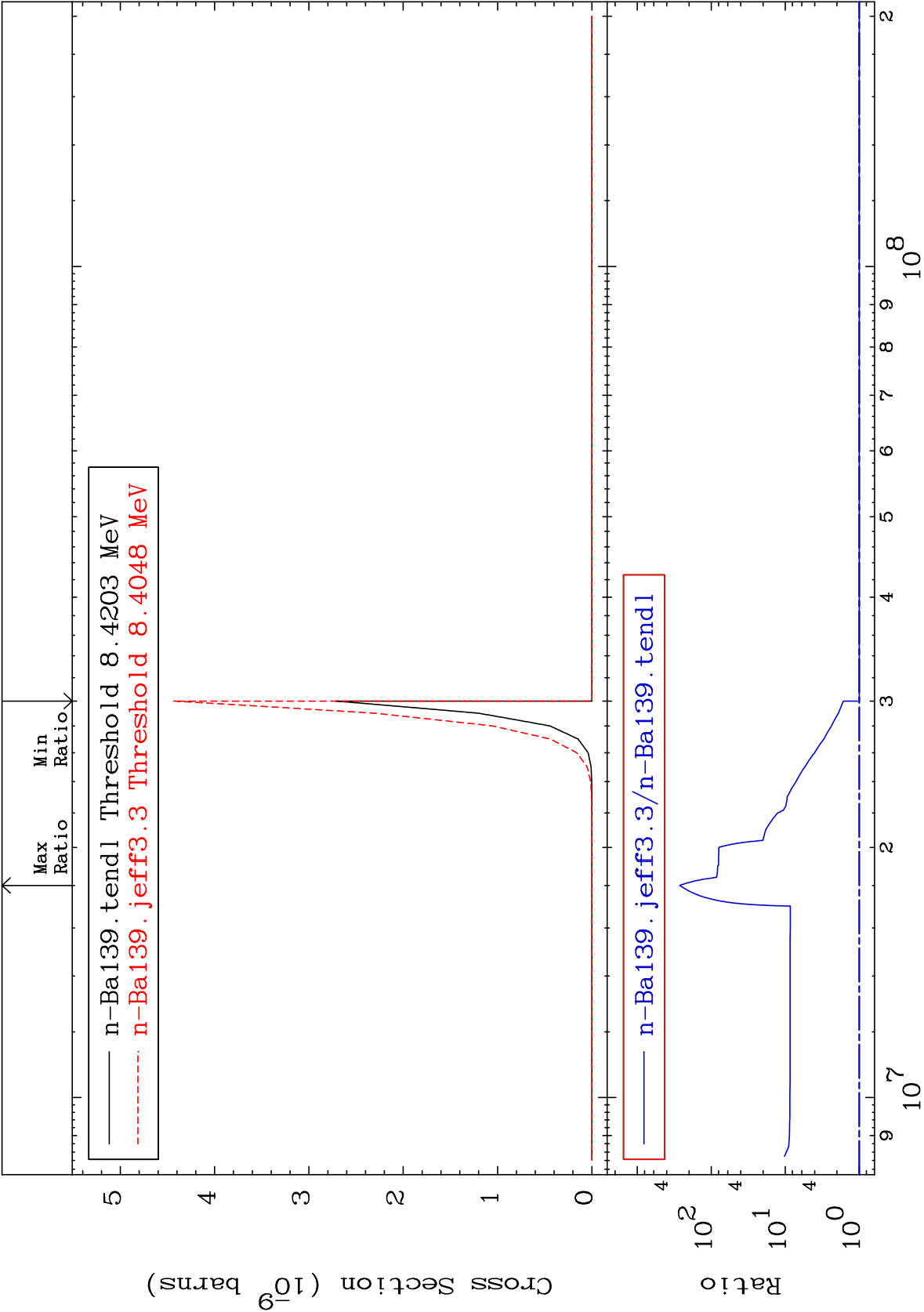


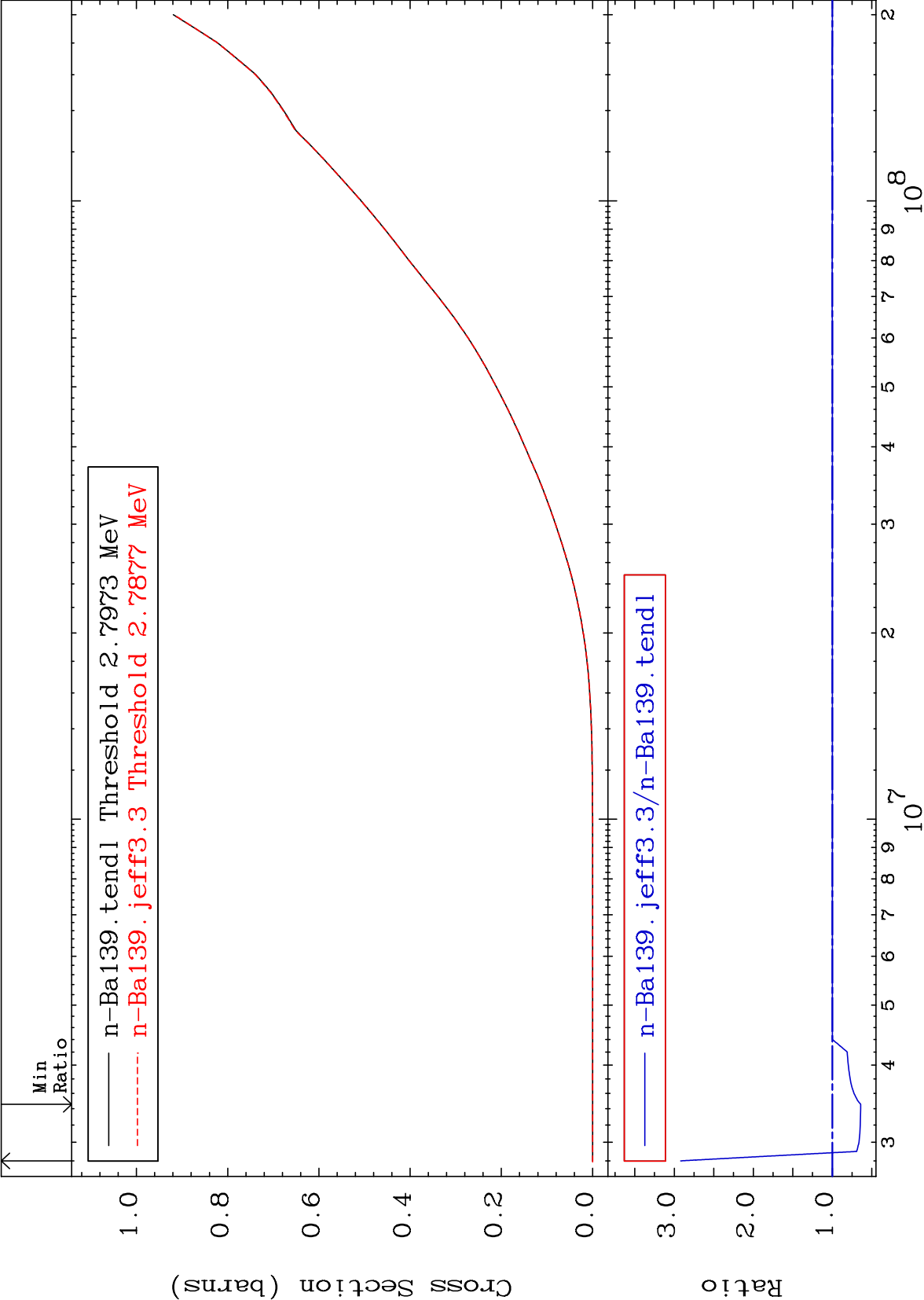




MAT 5652

(n,d) α
Cross Section
0.000 To 9999. %
56-Ba-139

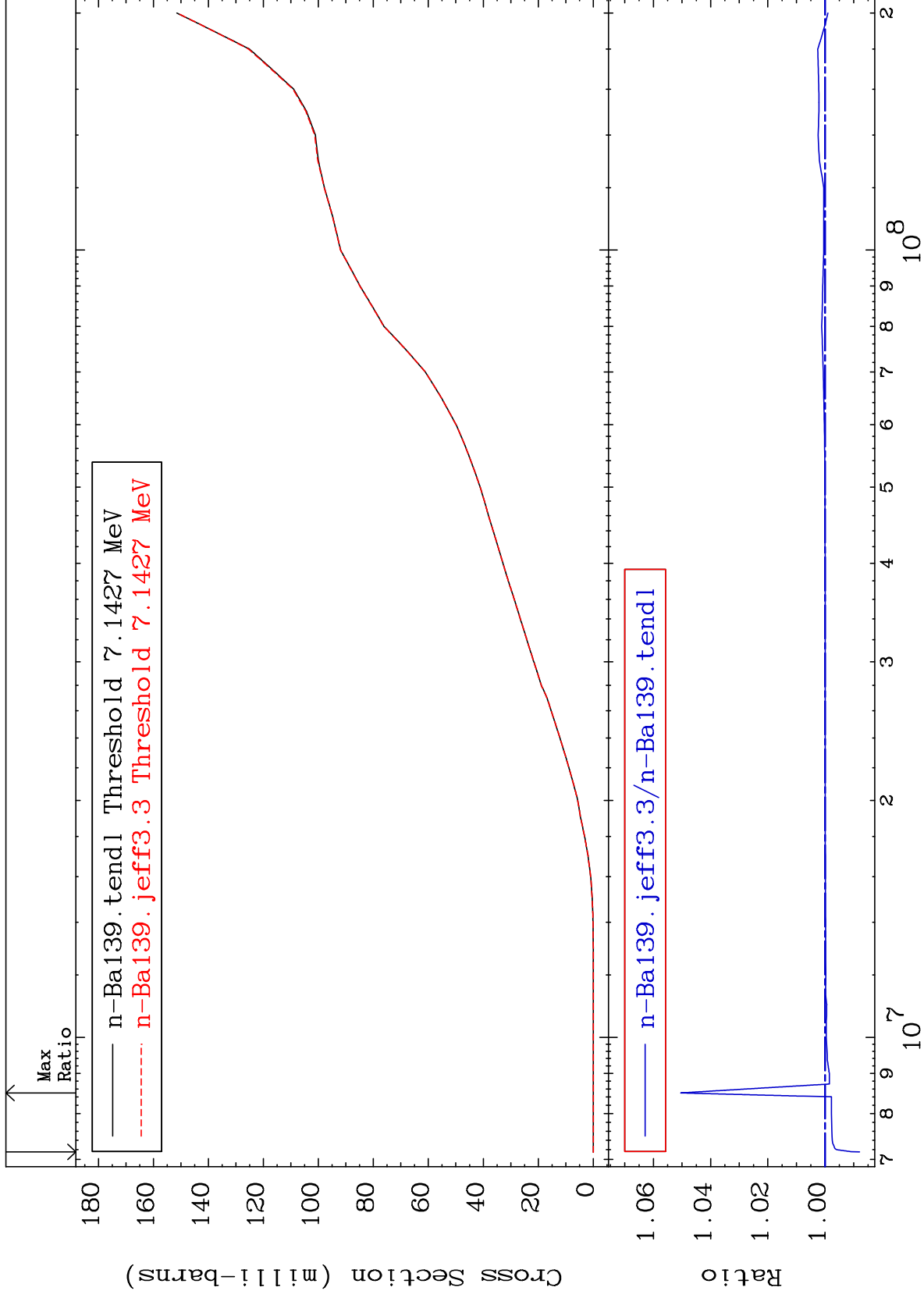




MAT 5652

Deuterium Production
Cross Section

56-Ba-139
-1.204 To 5.042 %



32

Incident Energy (eV)

56-Ba-139

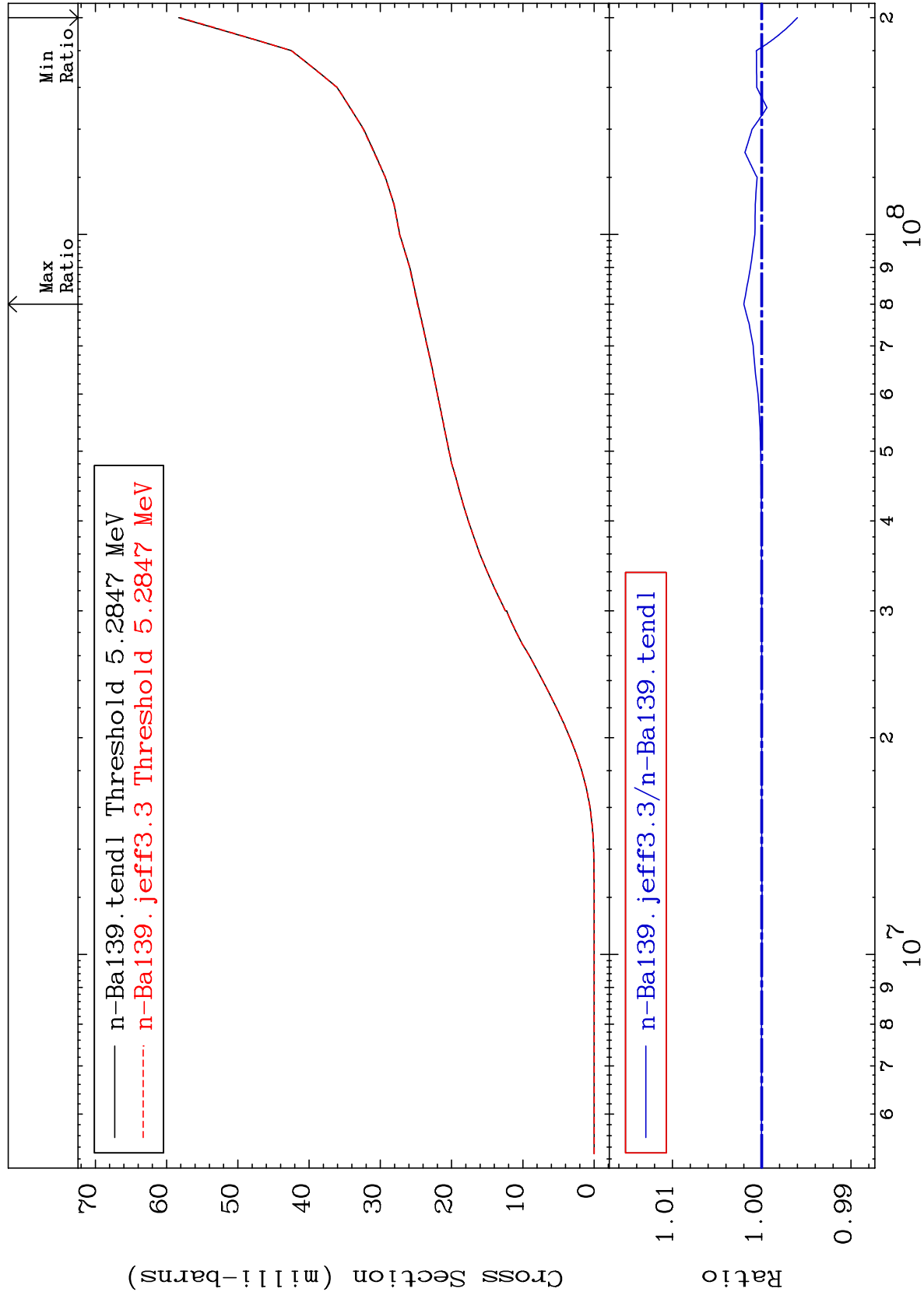
MAT 5652

Tritium Production

56-Ba-139

Cross Section

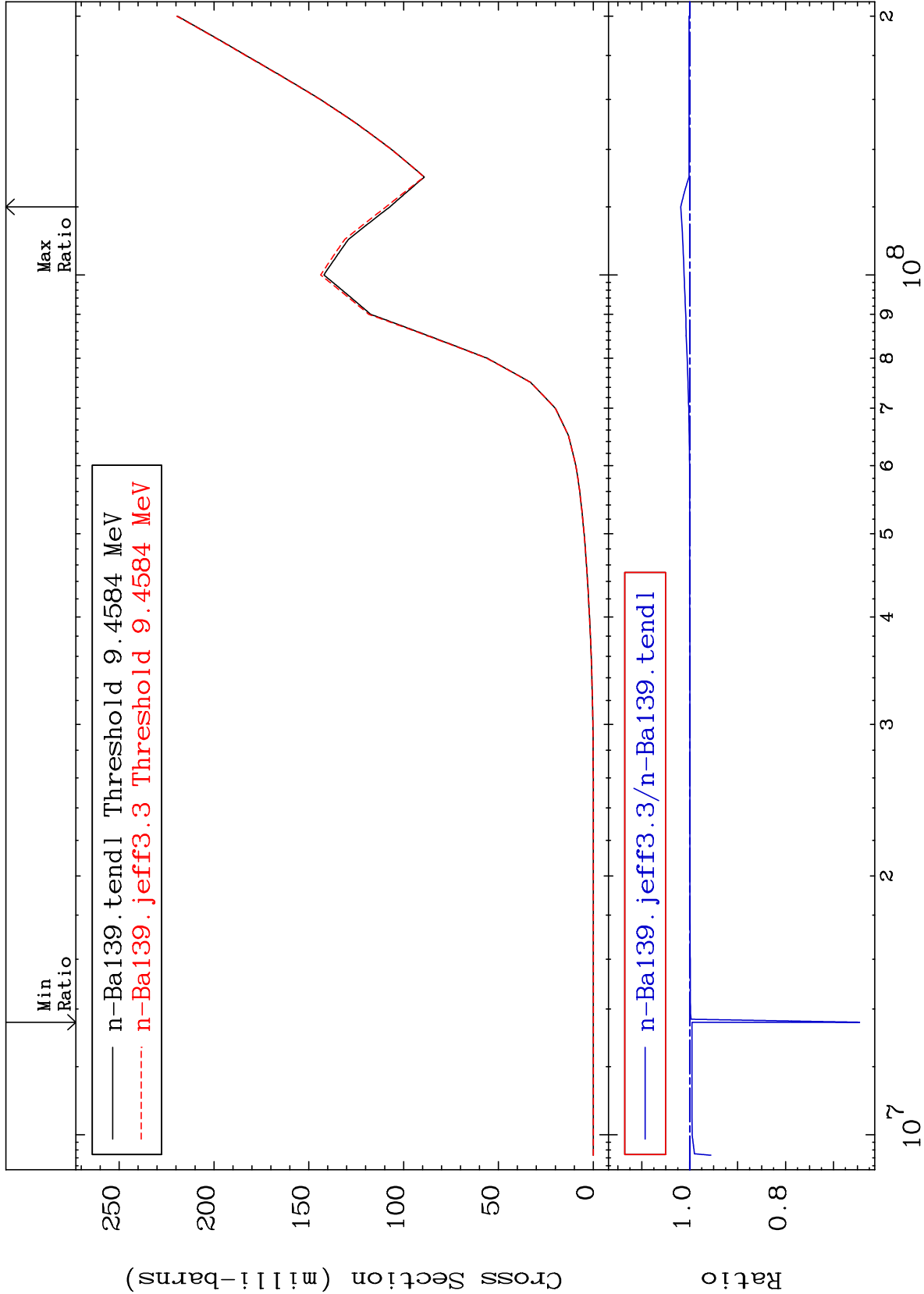
-0.400 To 0.200 %



MAT 5652

He-3 Production
Cross Section

56-Ba-139
-35.45 To 1.876 %



34

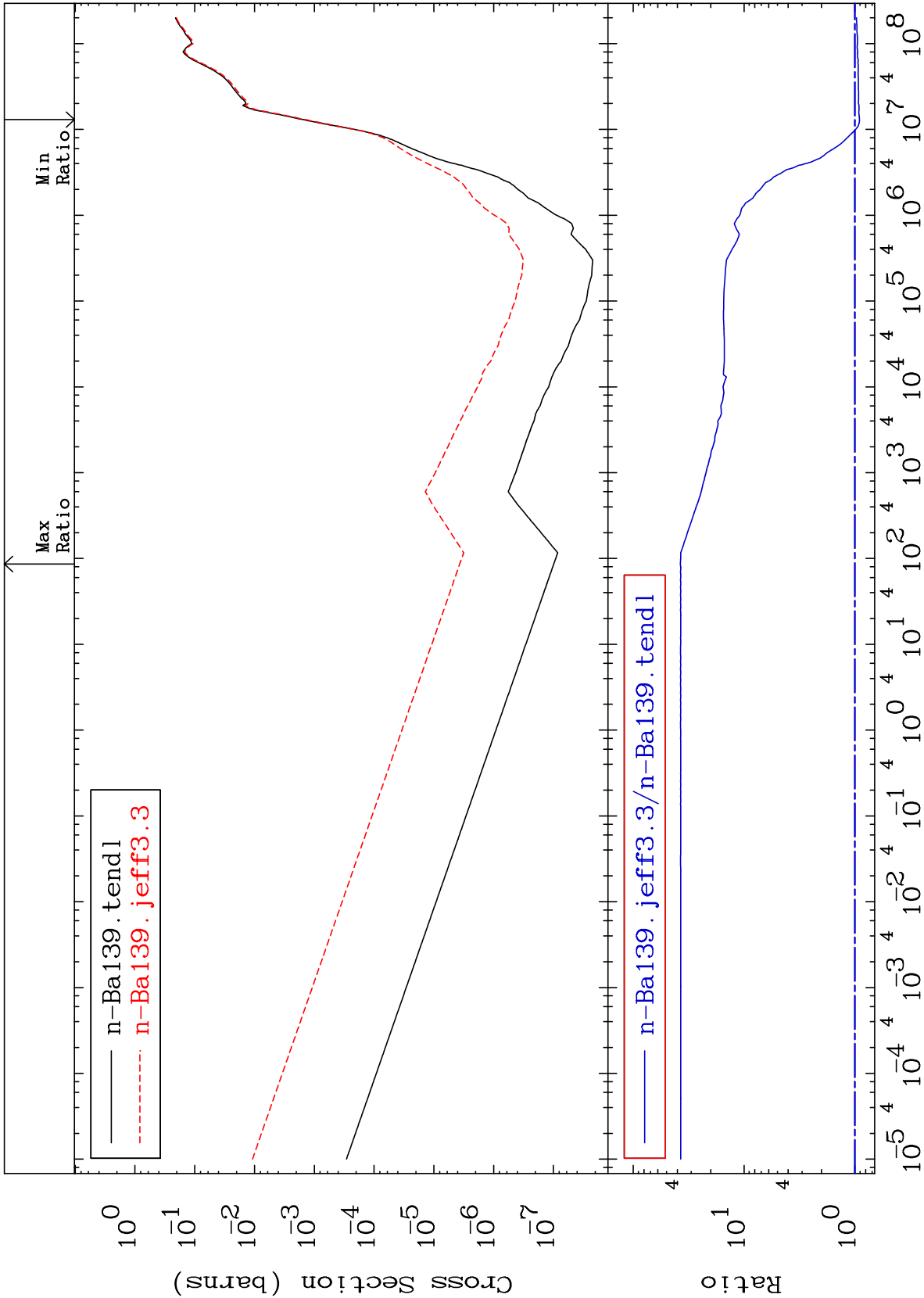
Incident Energy (eV)

56-Ba-139

MAT 5652

He-4 Production
Cross Section

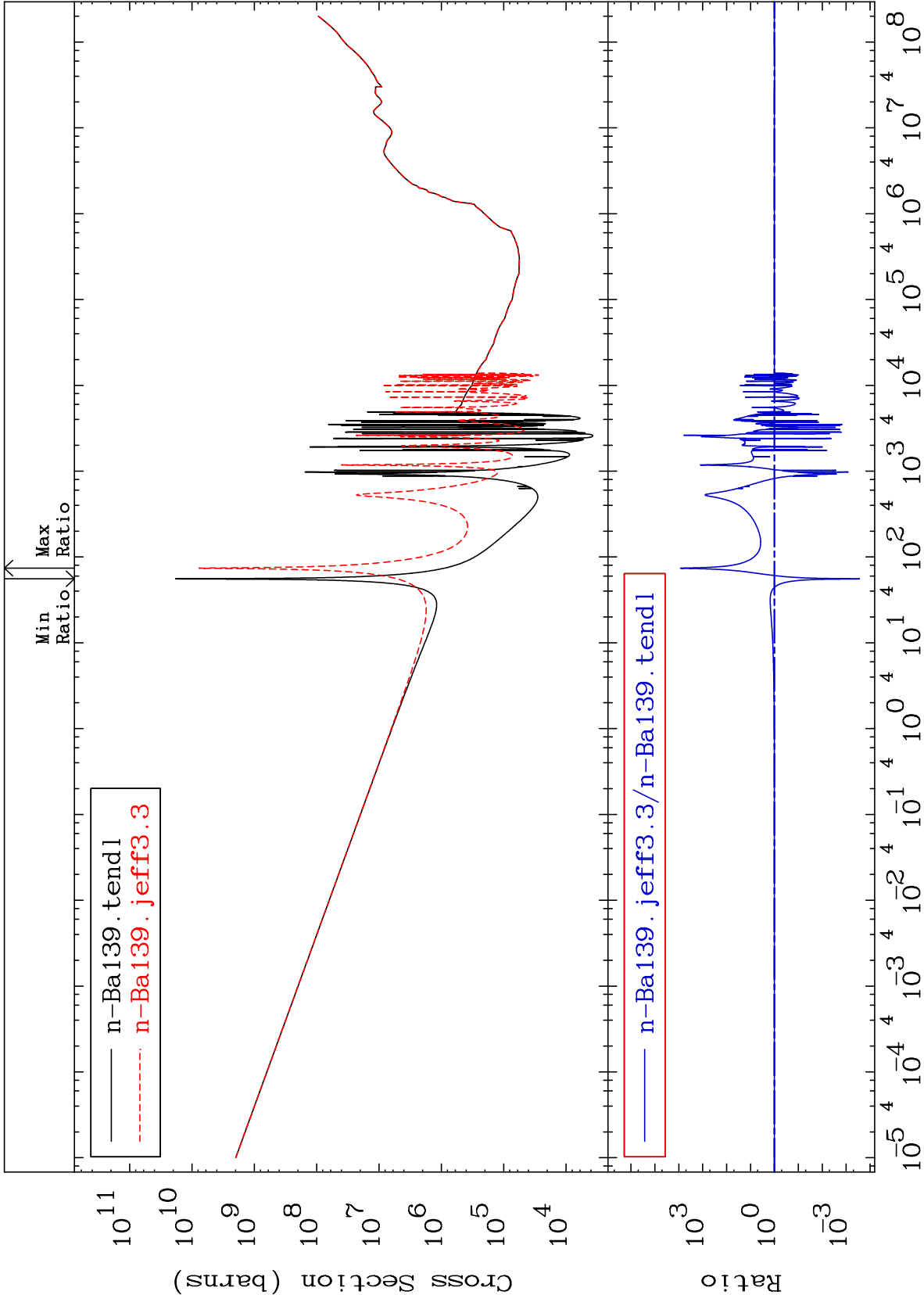
56-Ba-139
-9.025 To 3657. %

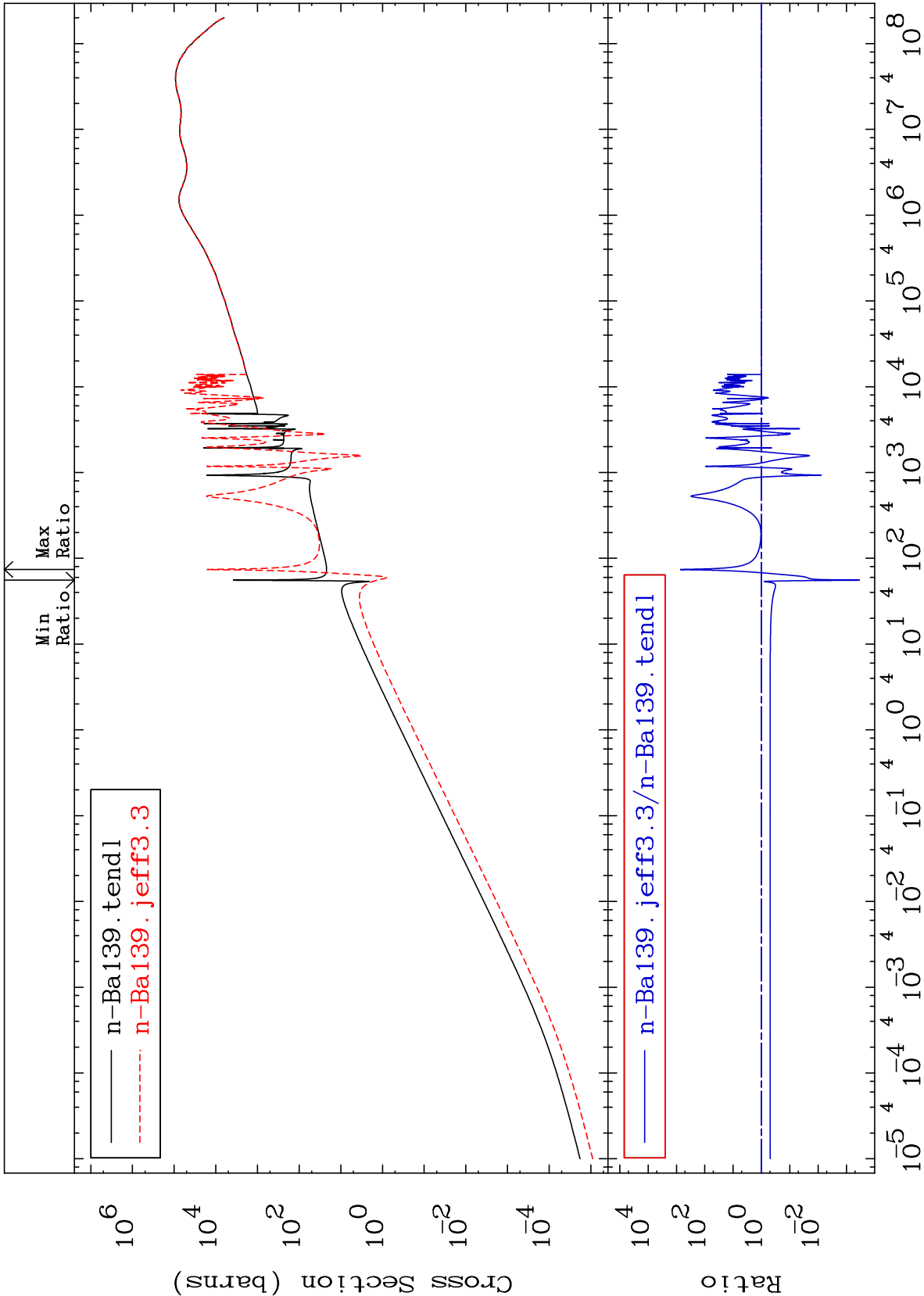


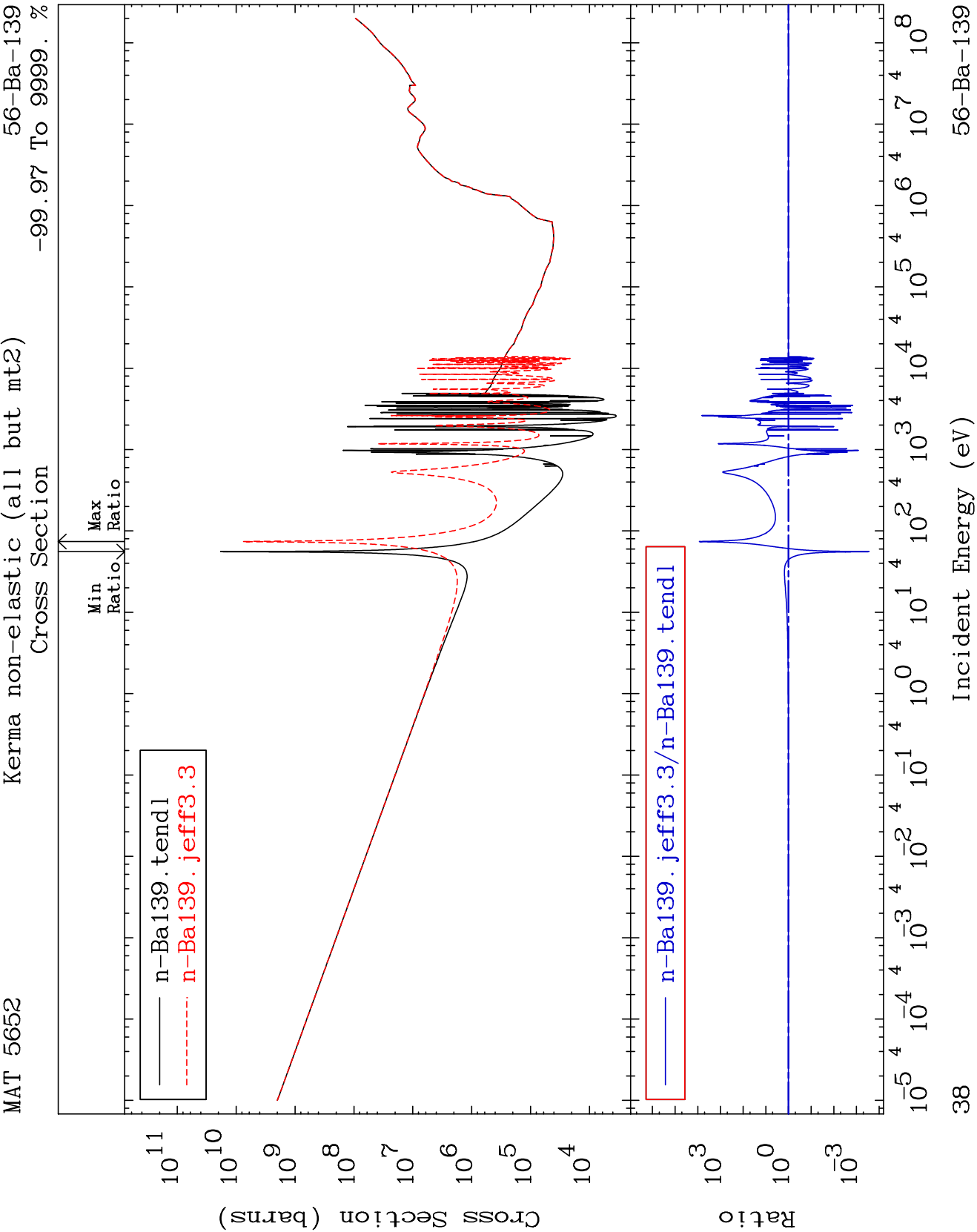
35

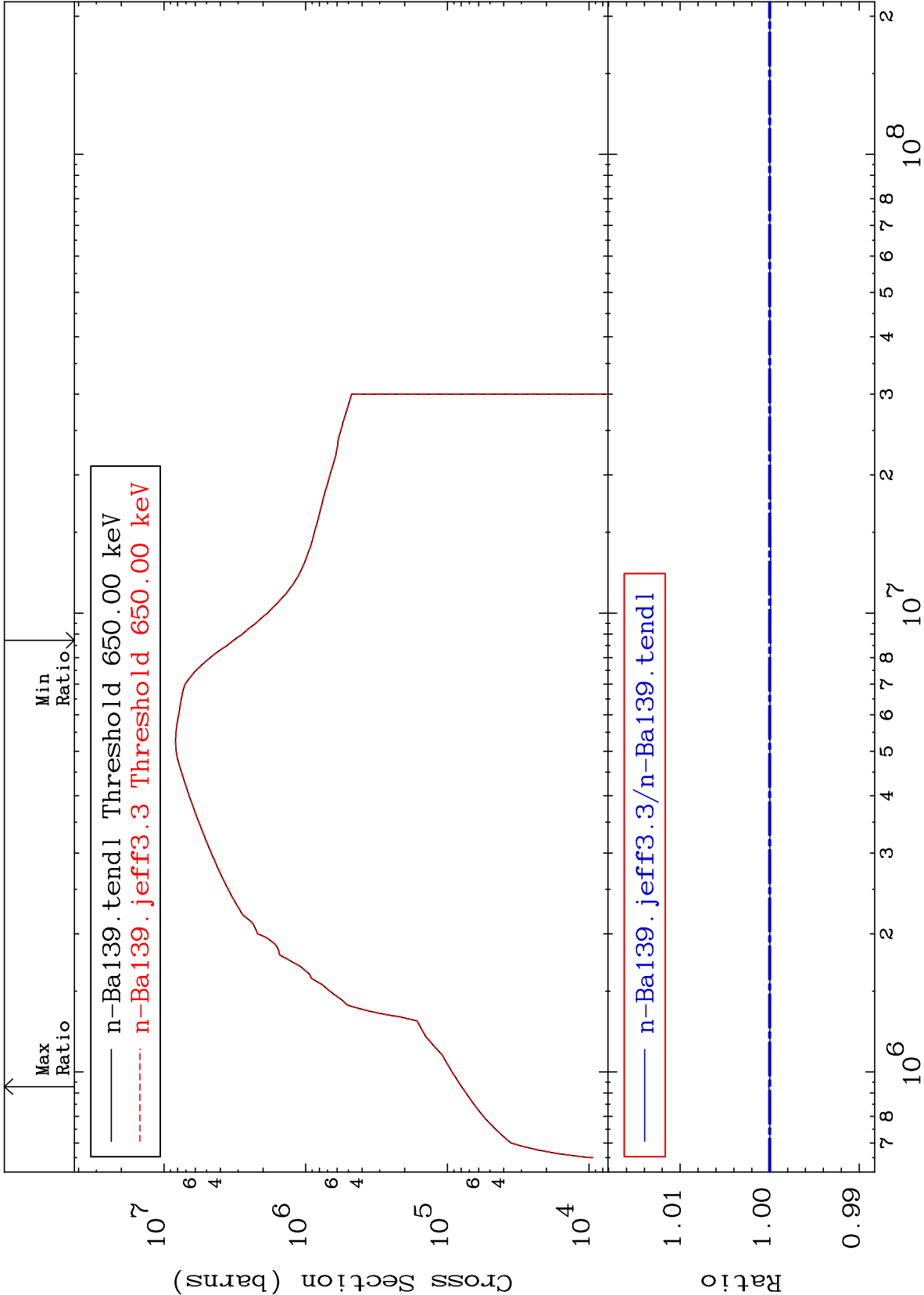
Incident Energy (eV)

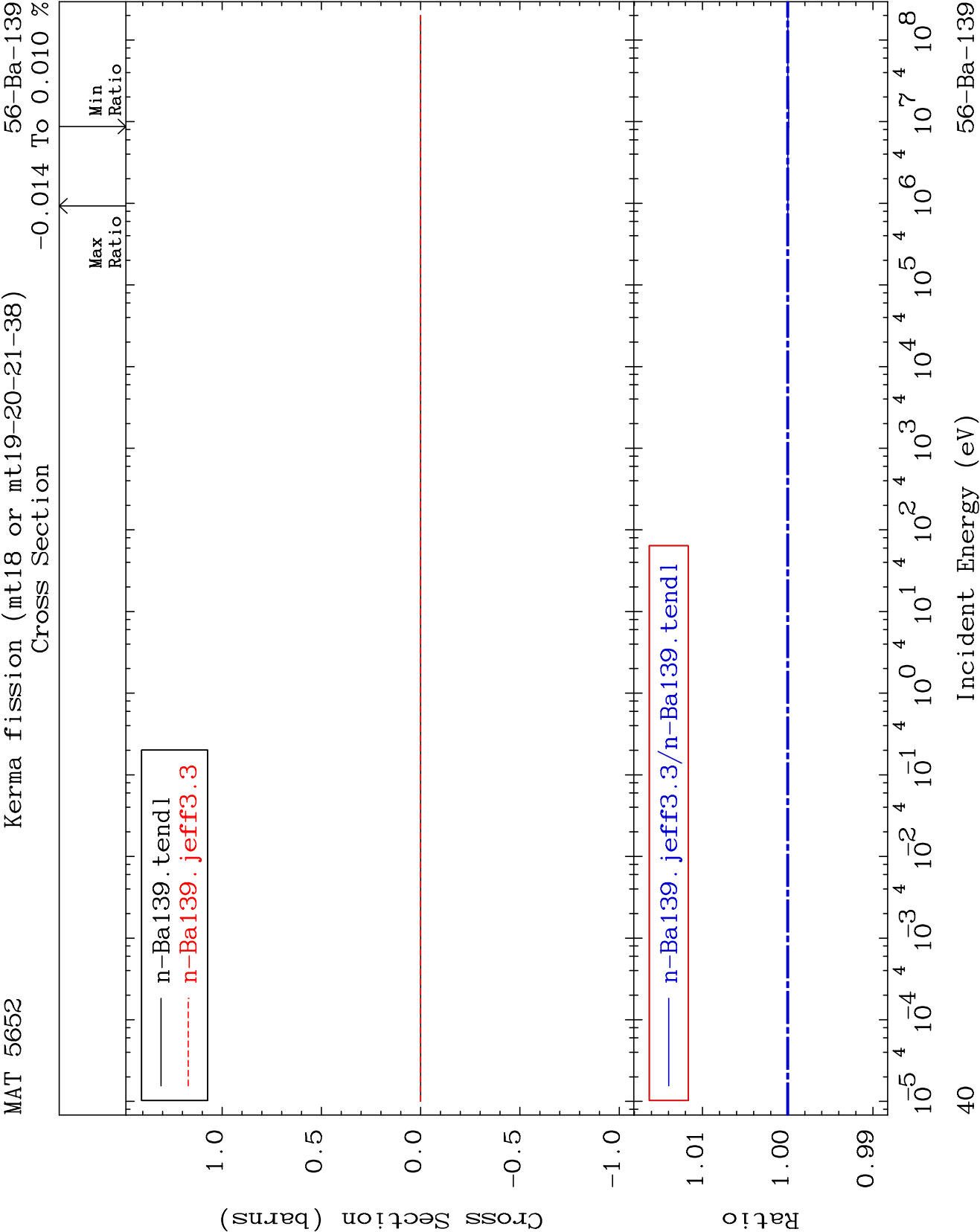
56-Ba-139

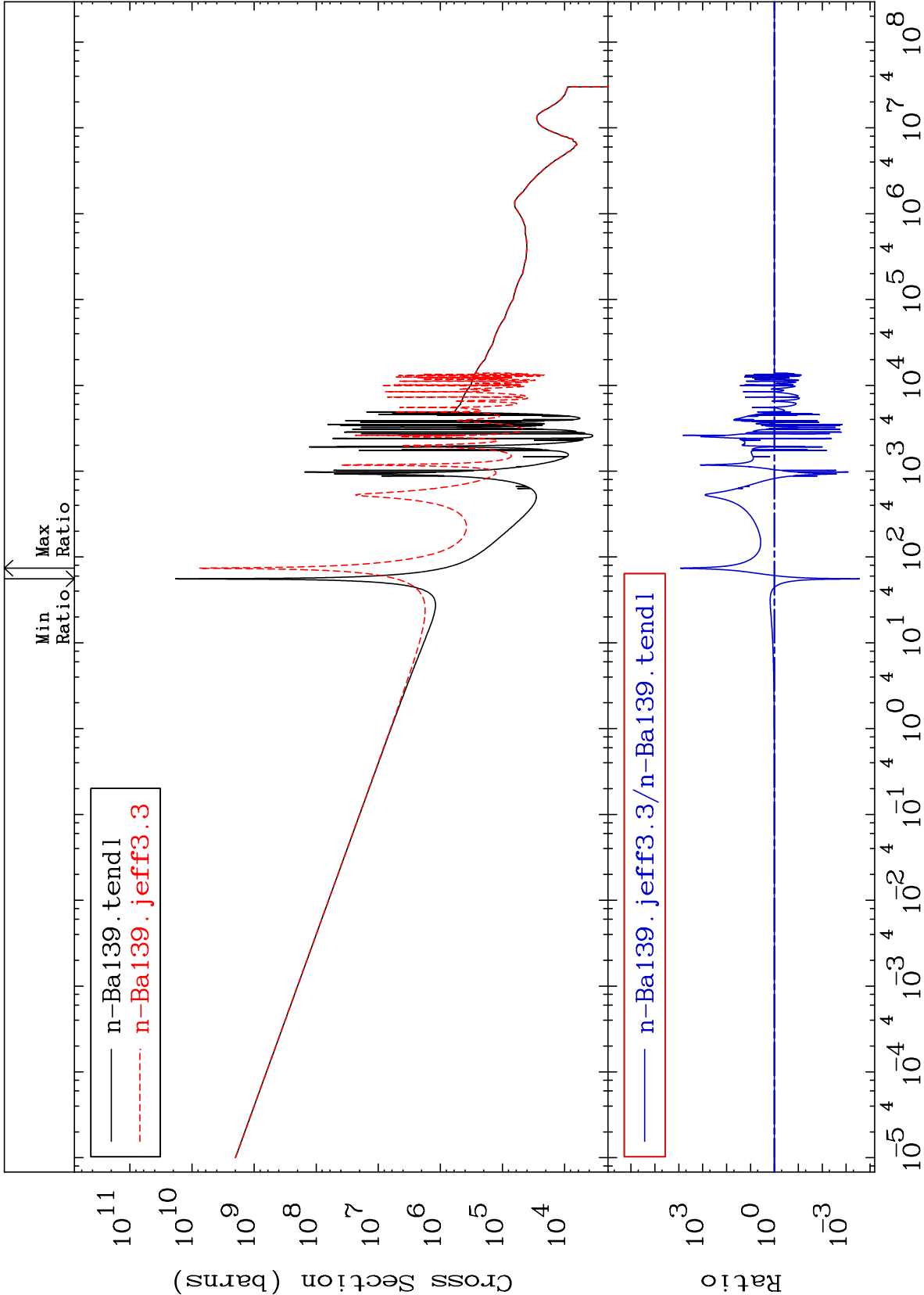


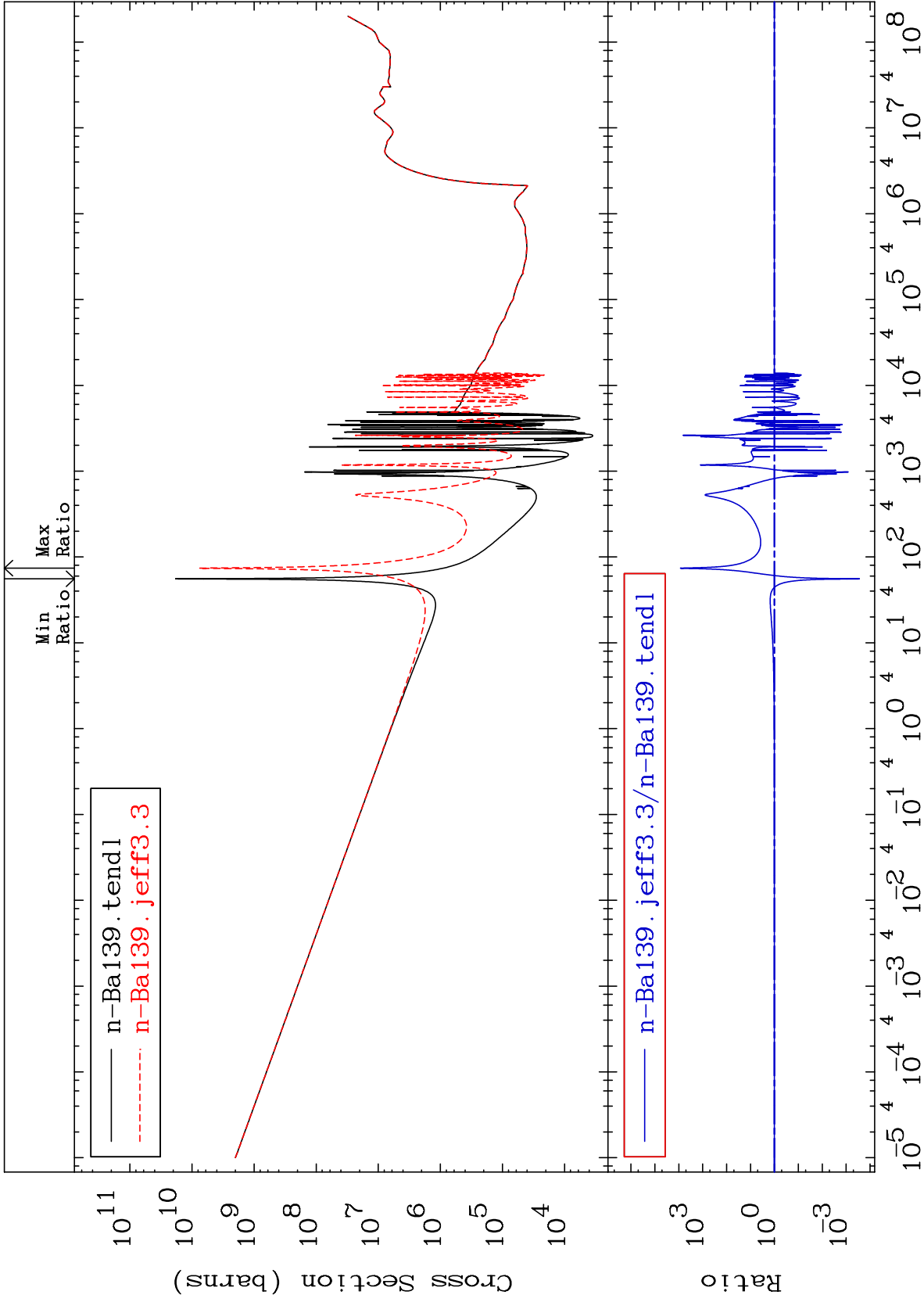


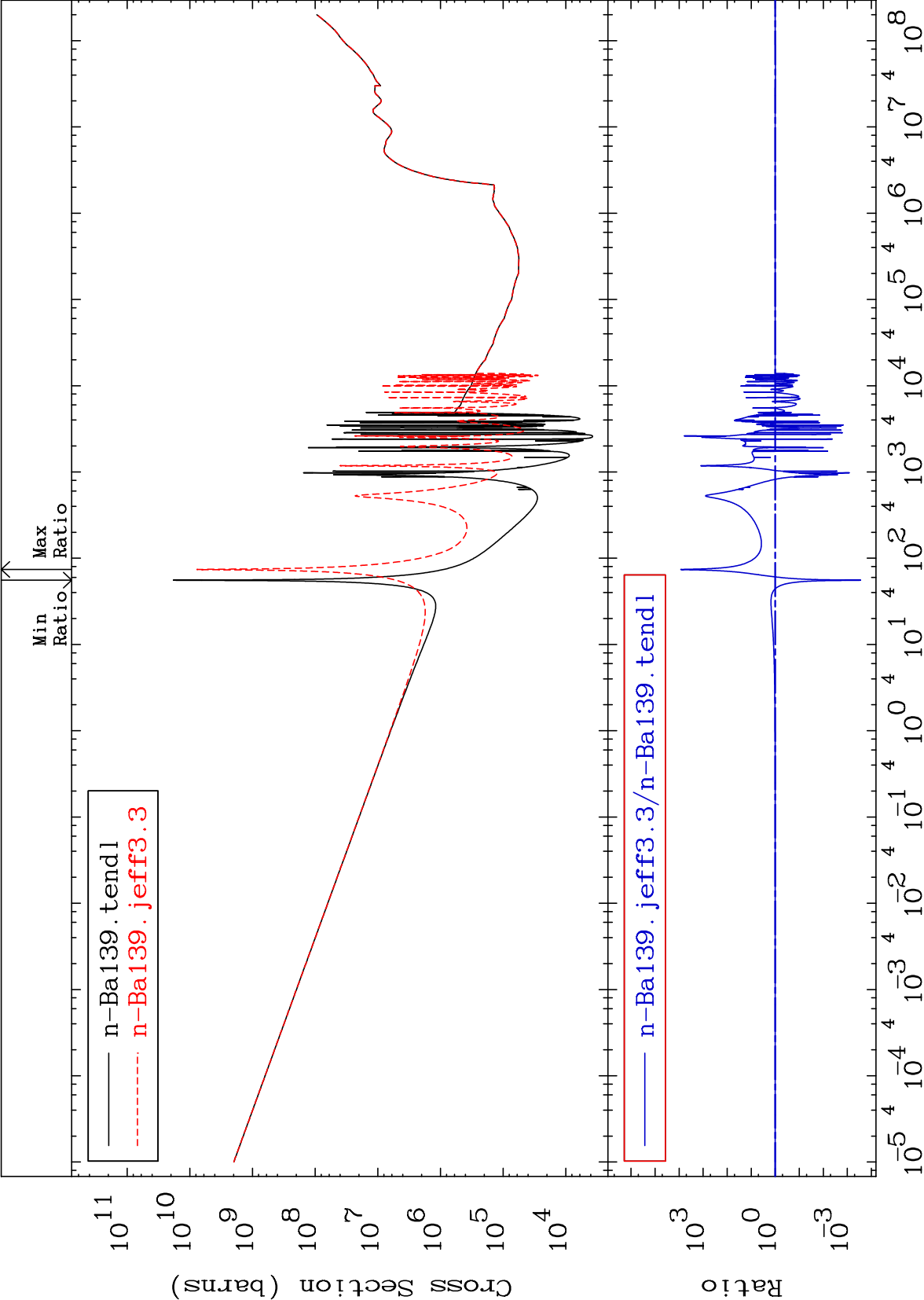


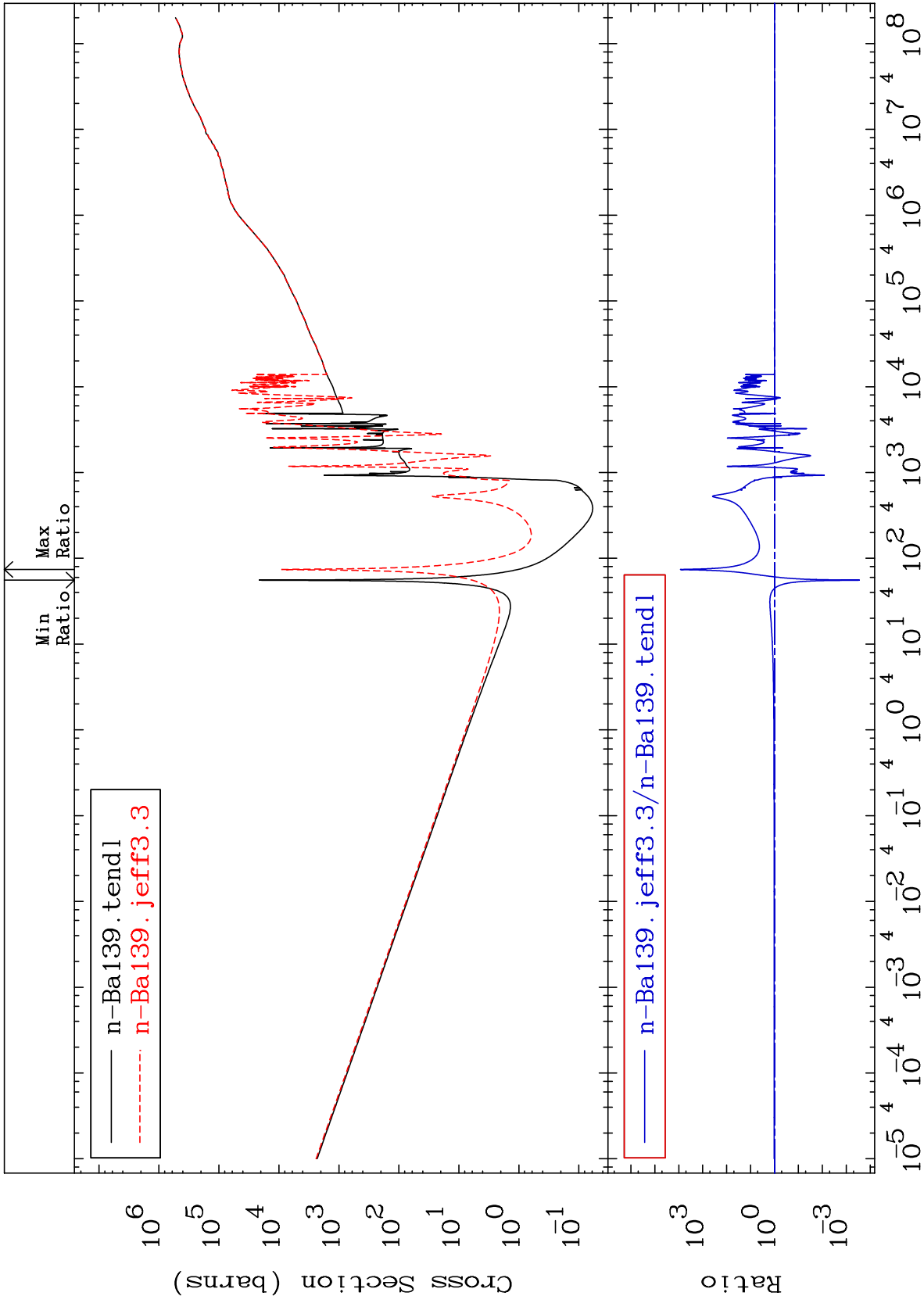


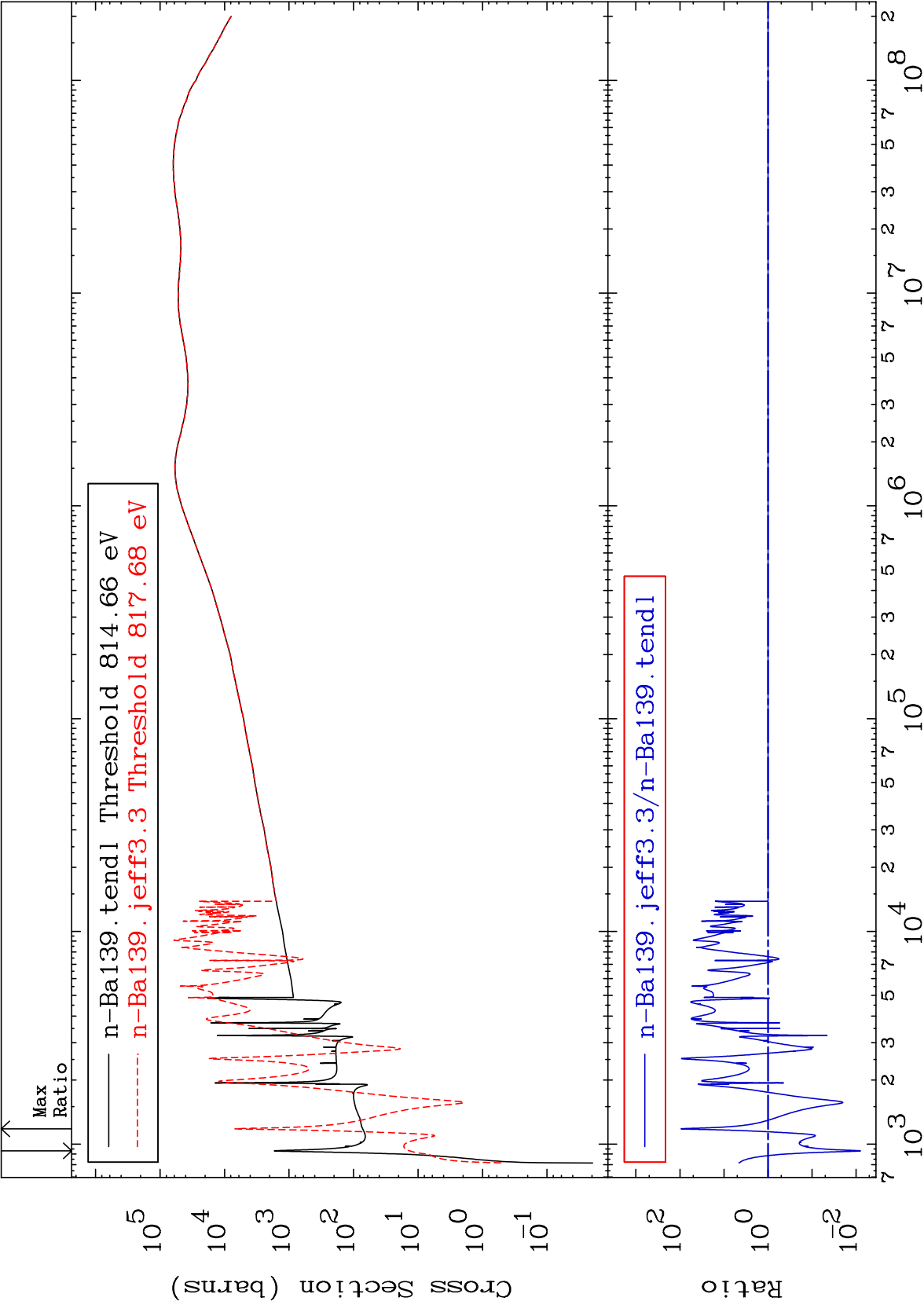


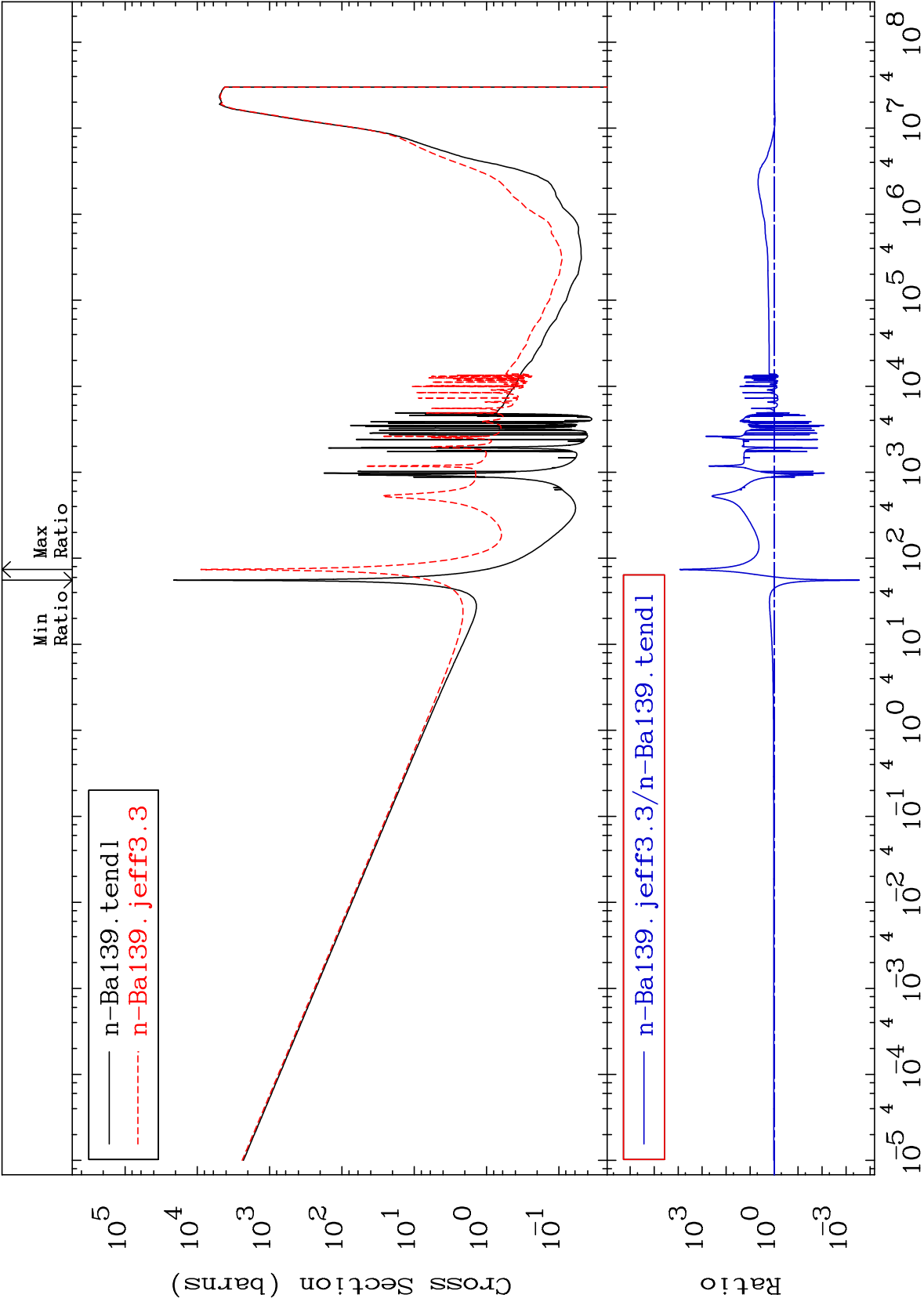


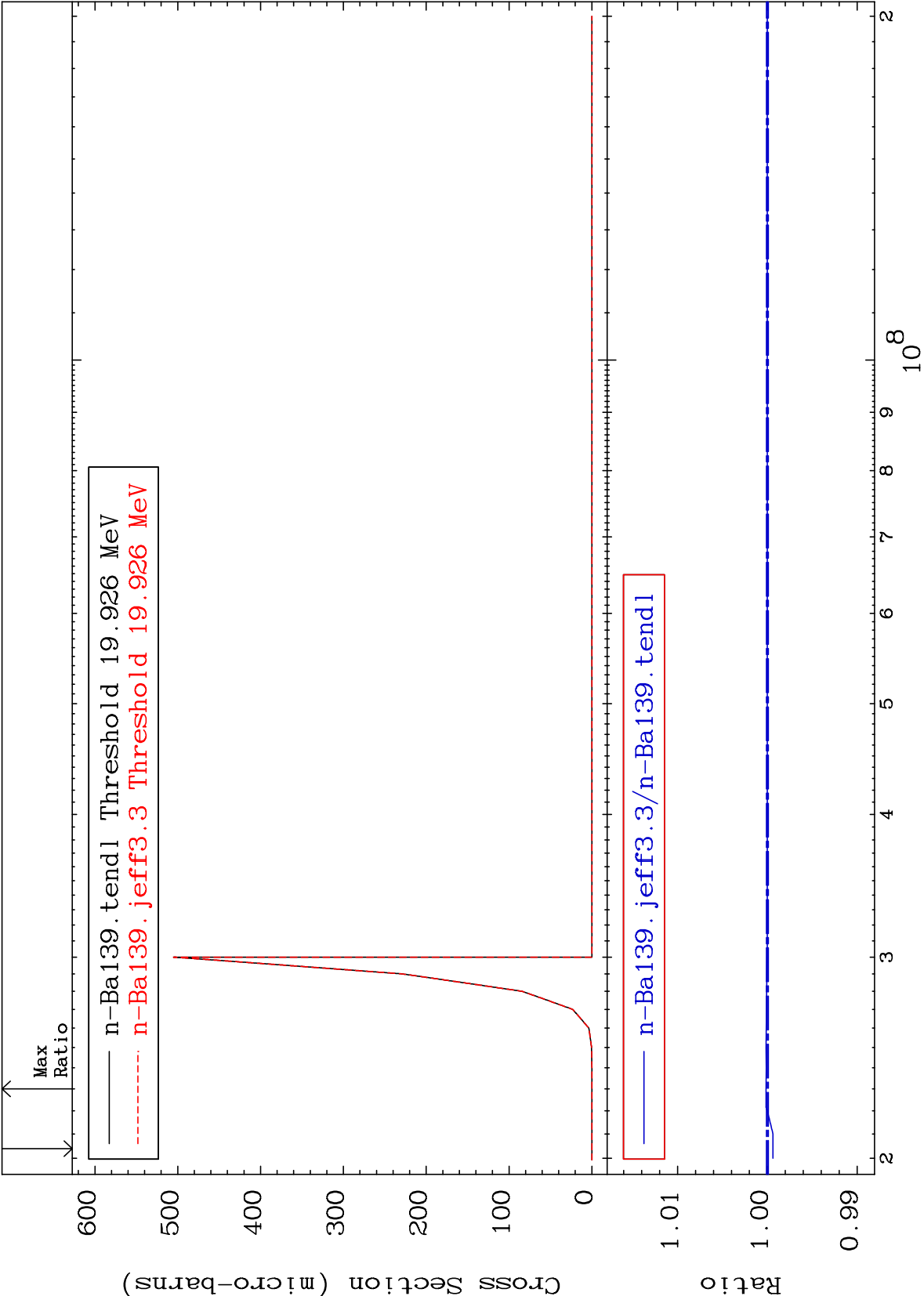












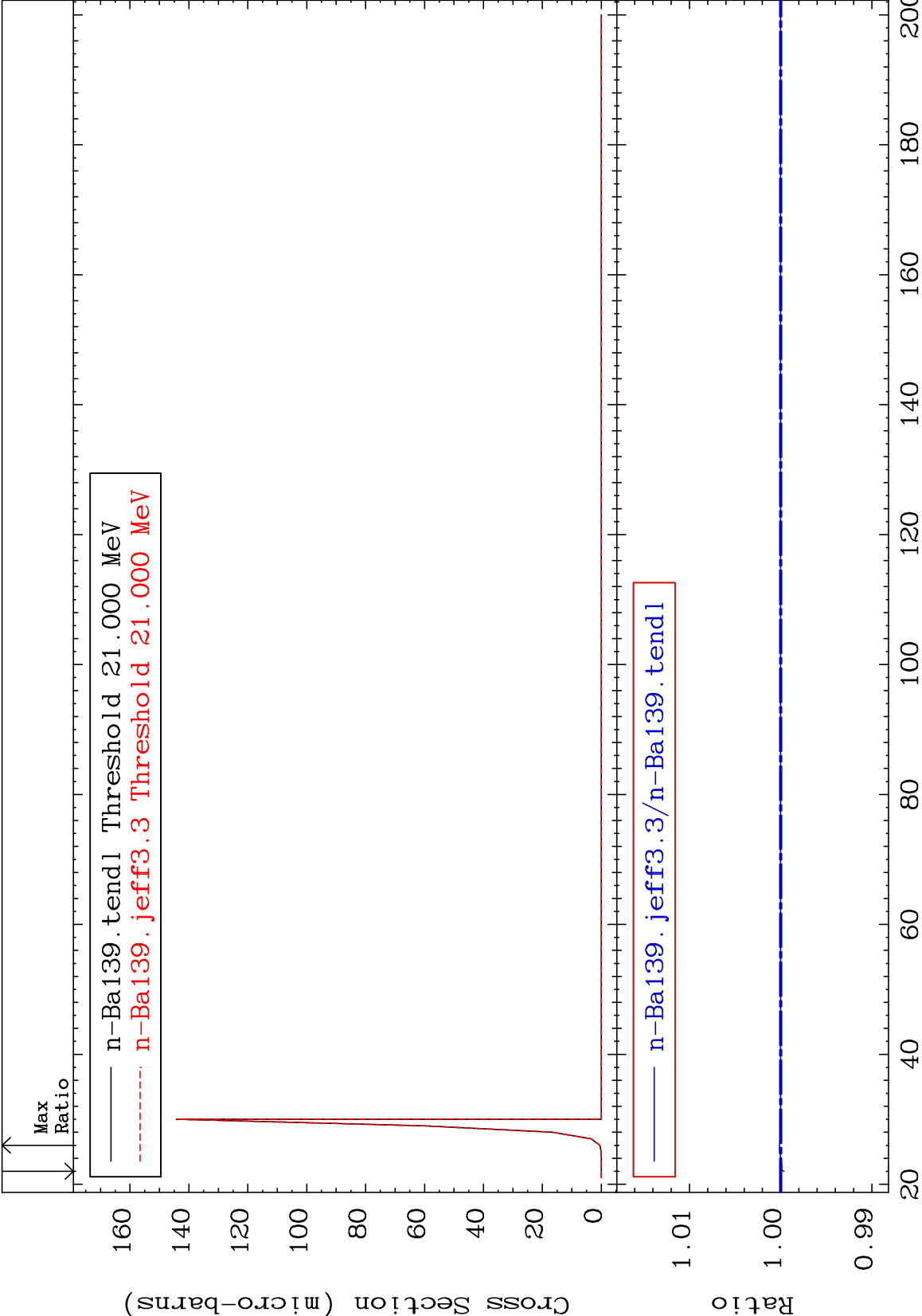
MAT 5652

(n,2n) d:55-Cs-136m1

56-Ba-139

Radionuclide Production Cross Section

-0.037 To 0.012 %



MAT 5652

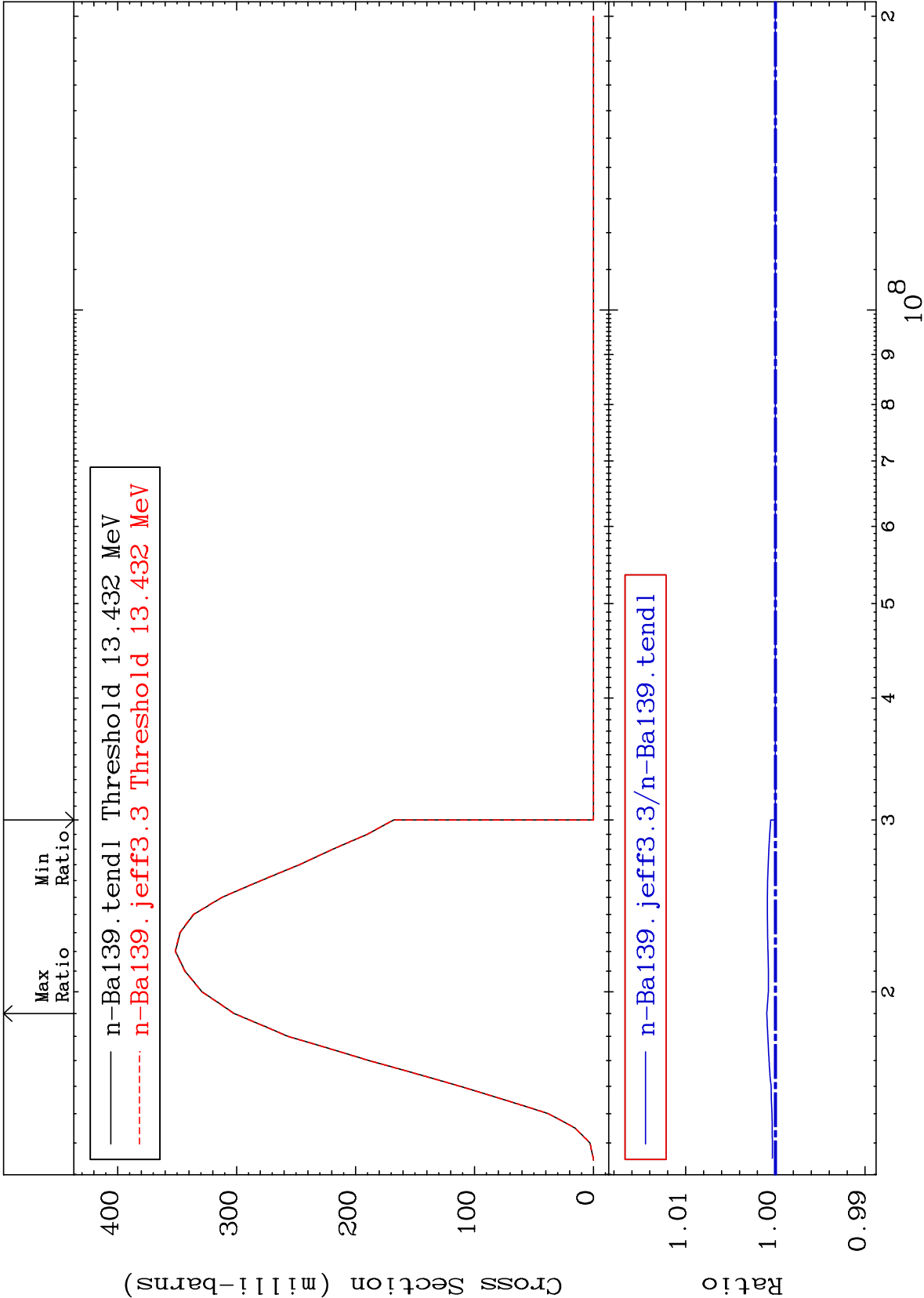
(n,3n):56-Ba-137g

56-Ba-139

Radionuclide Production Cross Section

0.000

To 0.096 %



50

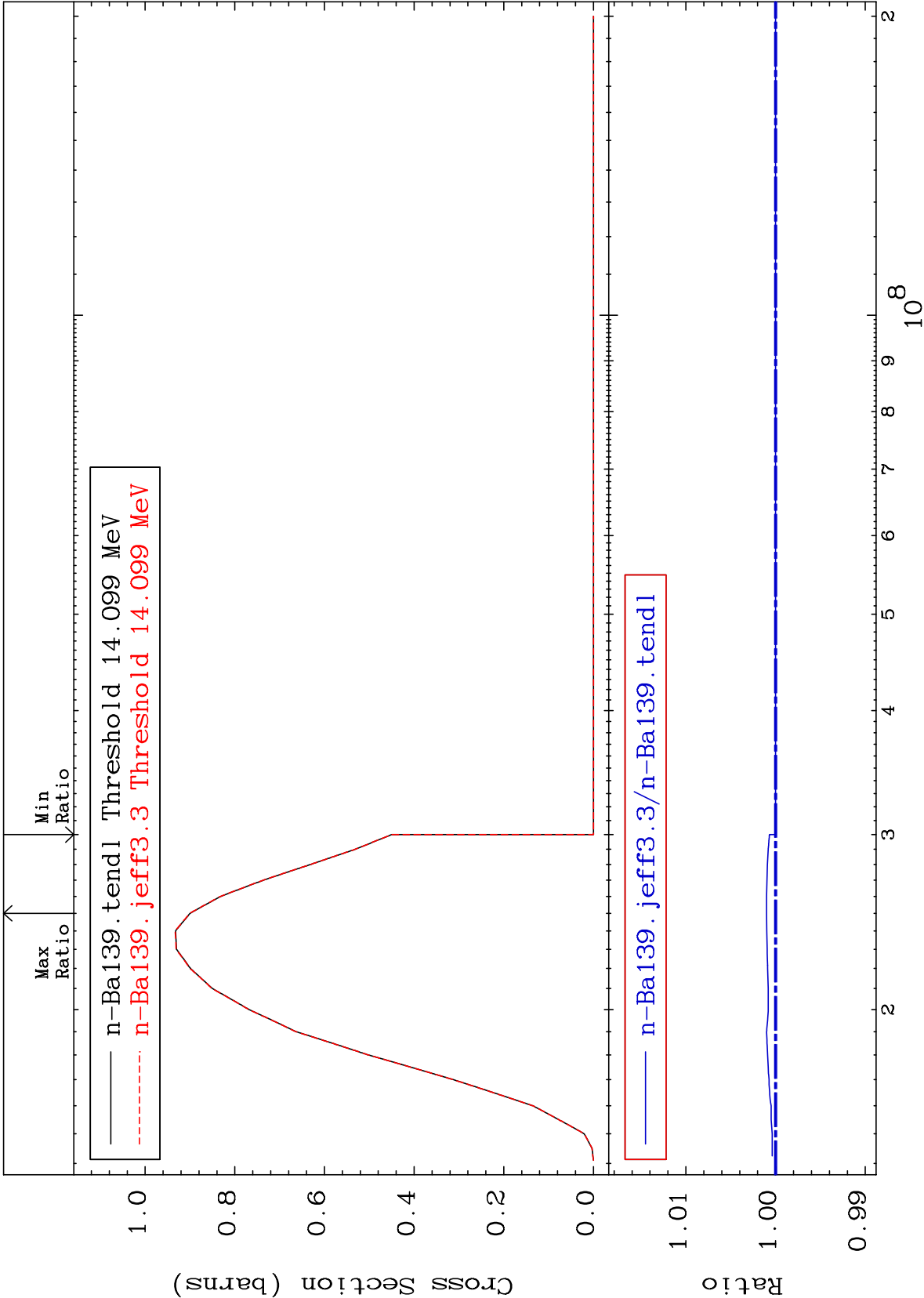
Incident Energy (eV)

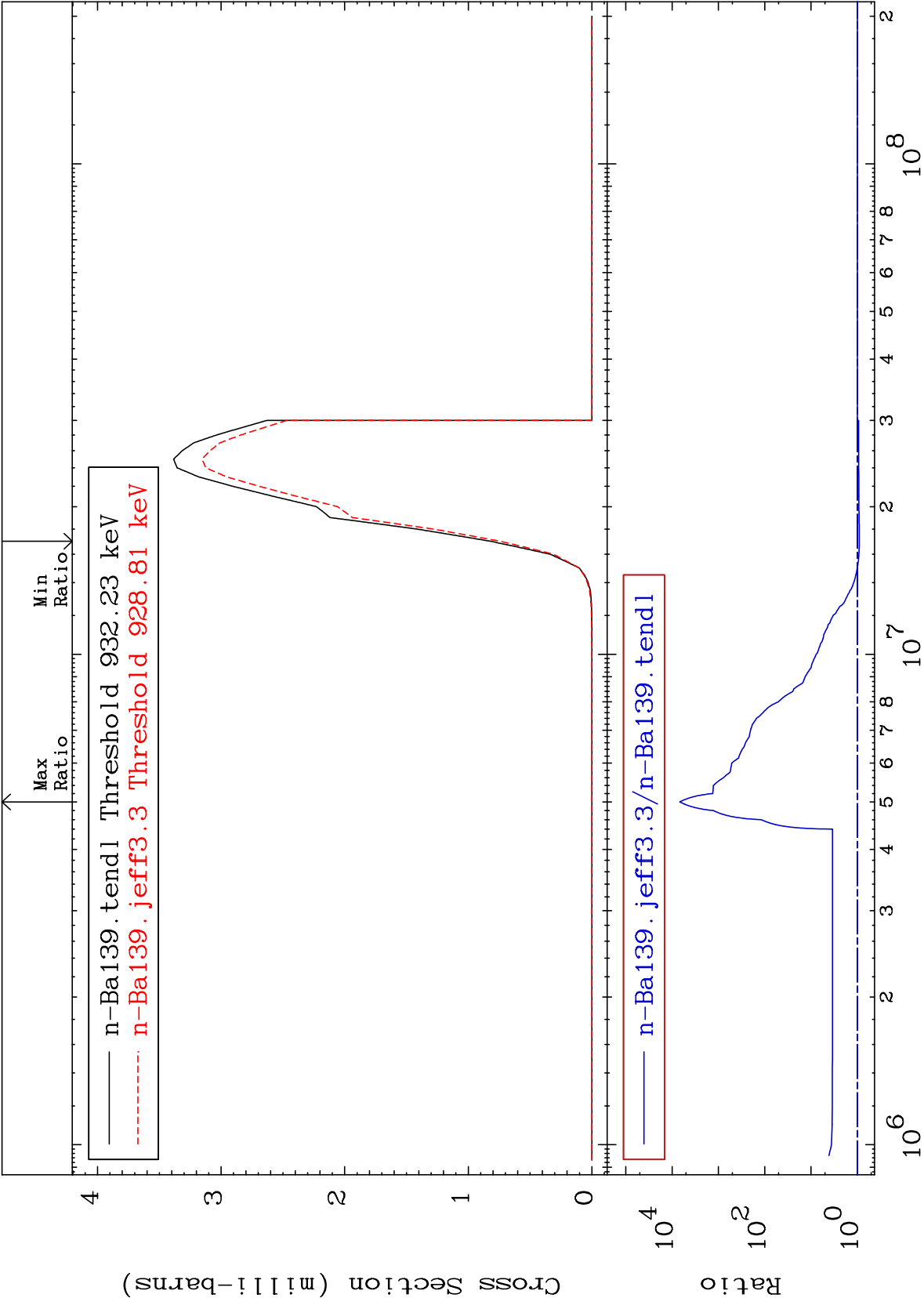
56-Ba-139

Radionuclide Production Cross Section

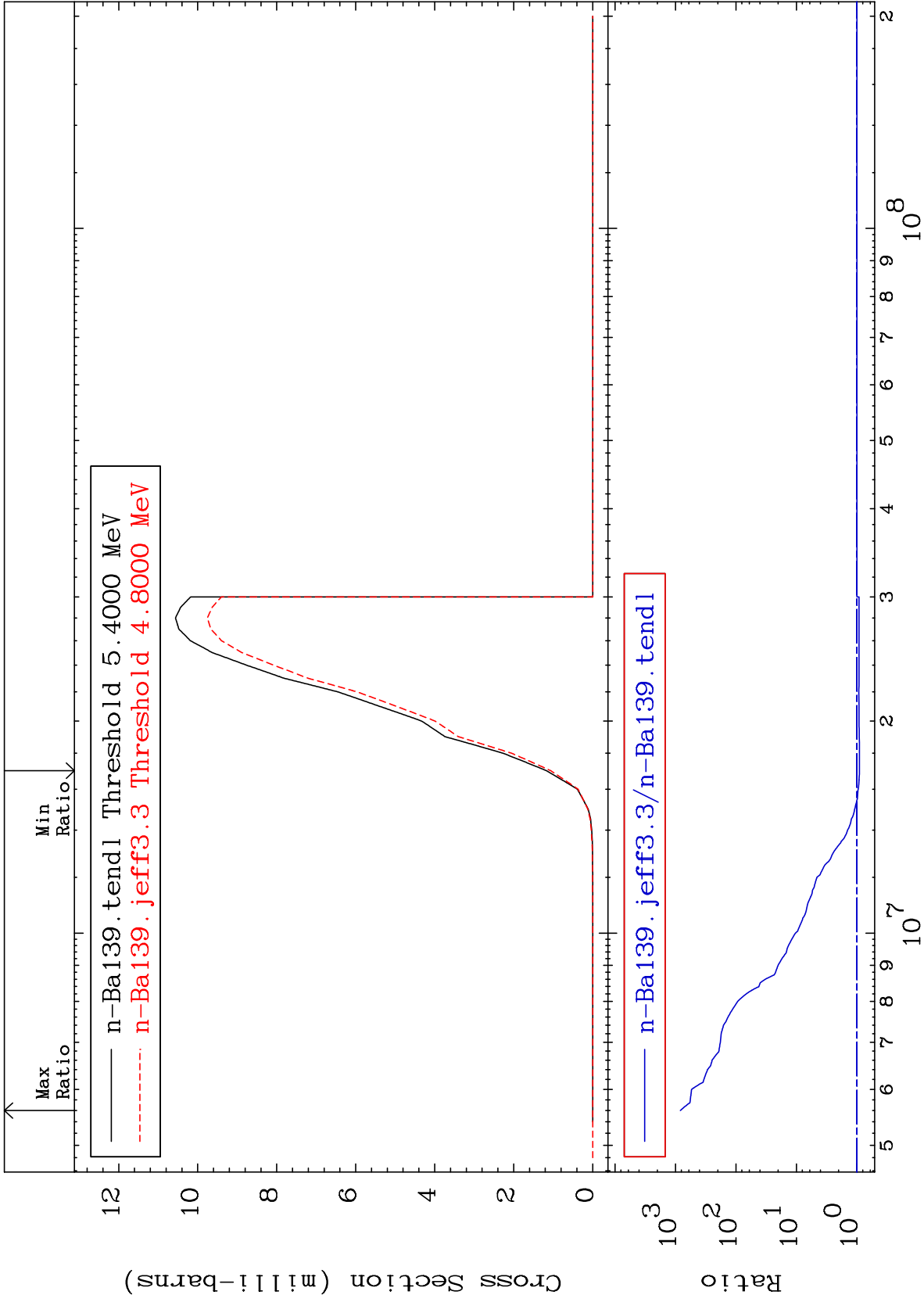
0.000

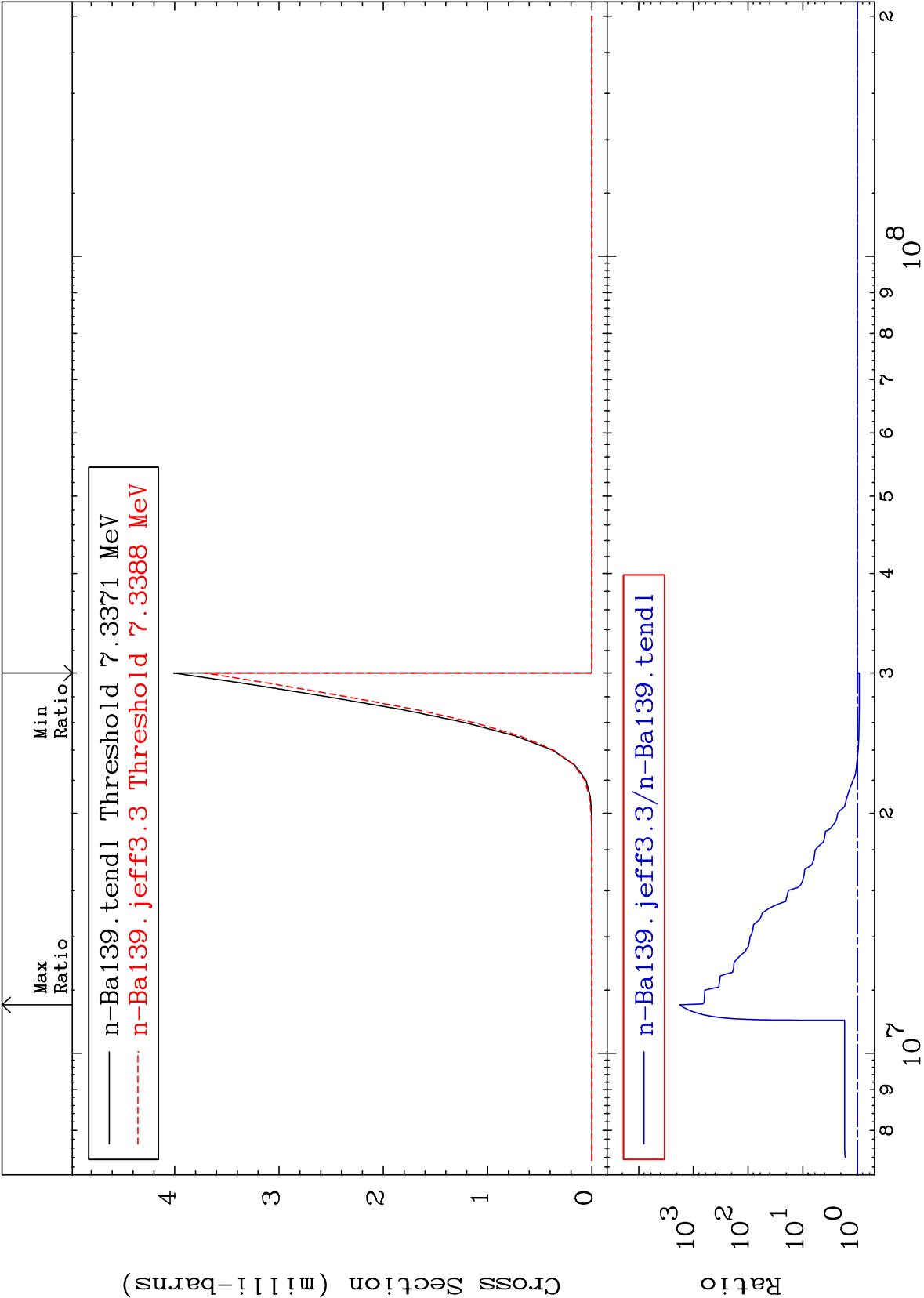
To 0.101 %

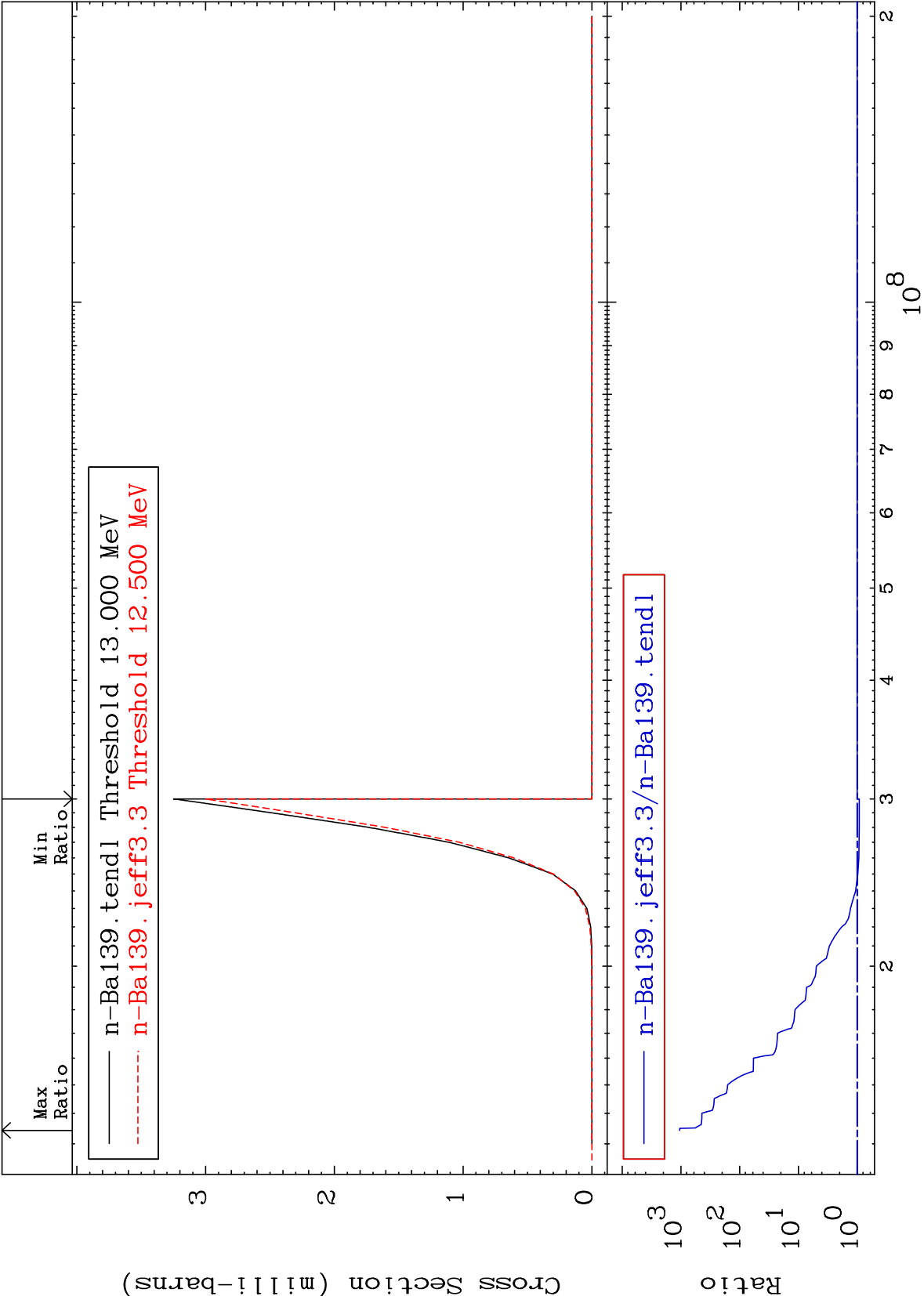


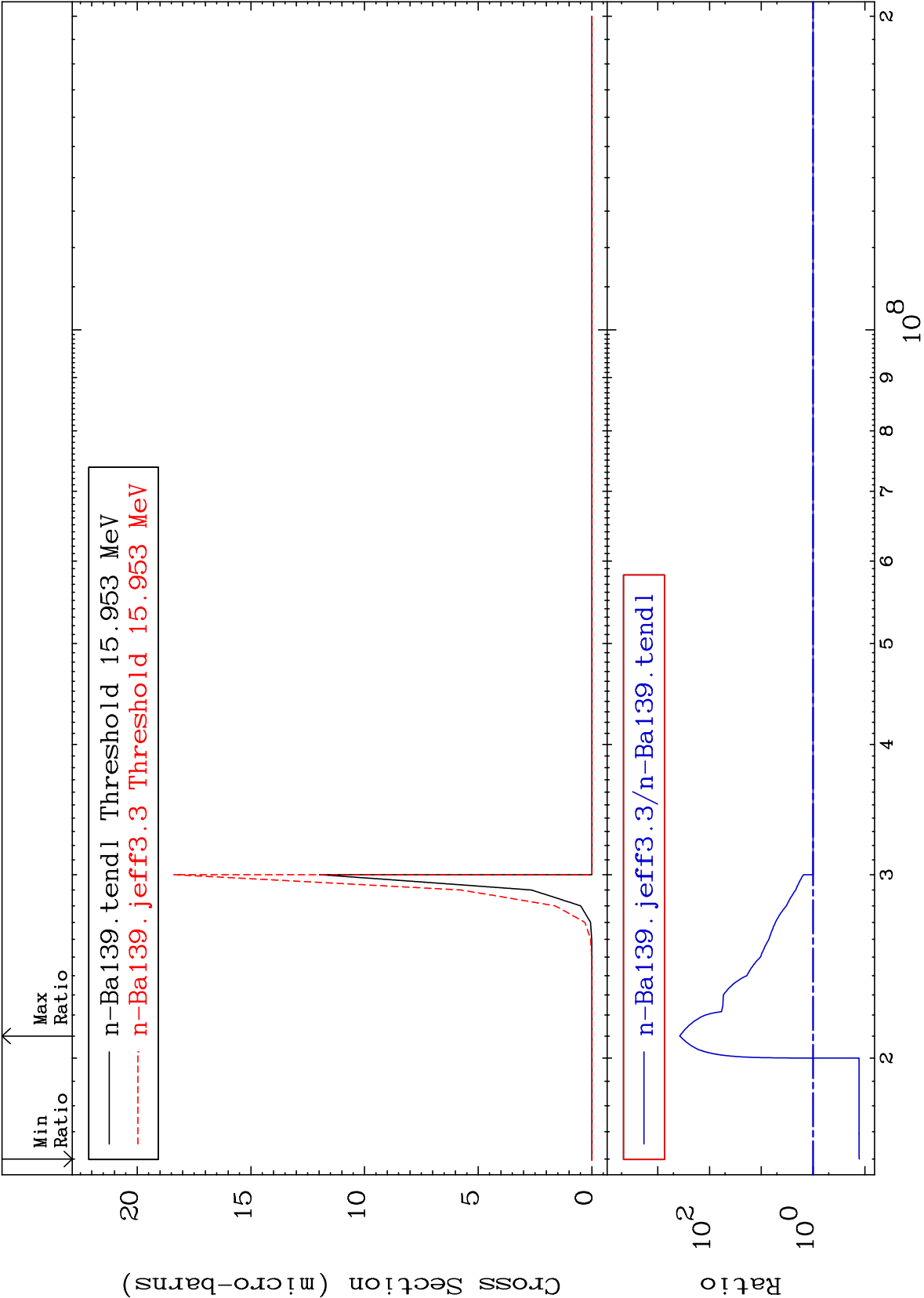


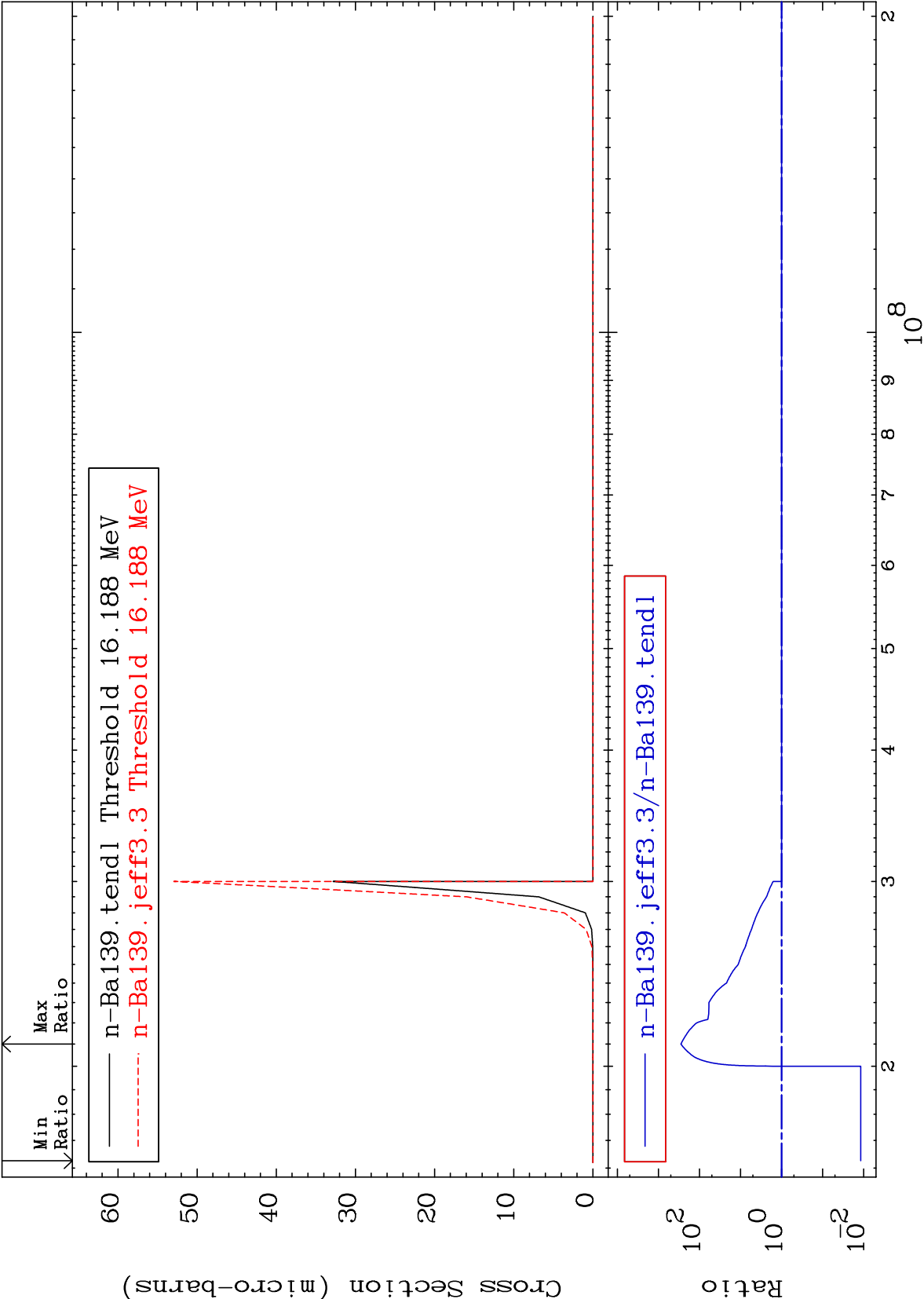
Radionuclide Production Cross Section -9.432 To 9999. %







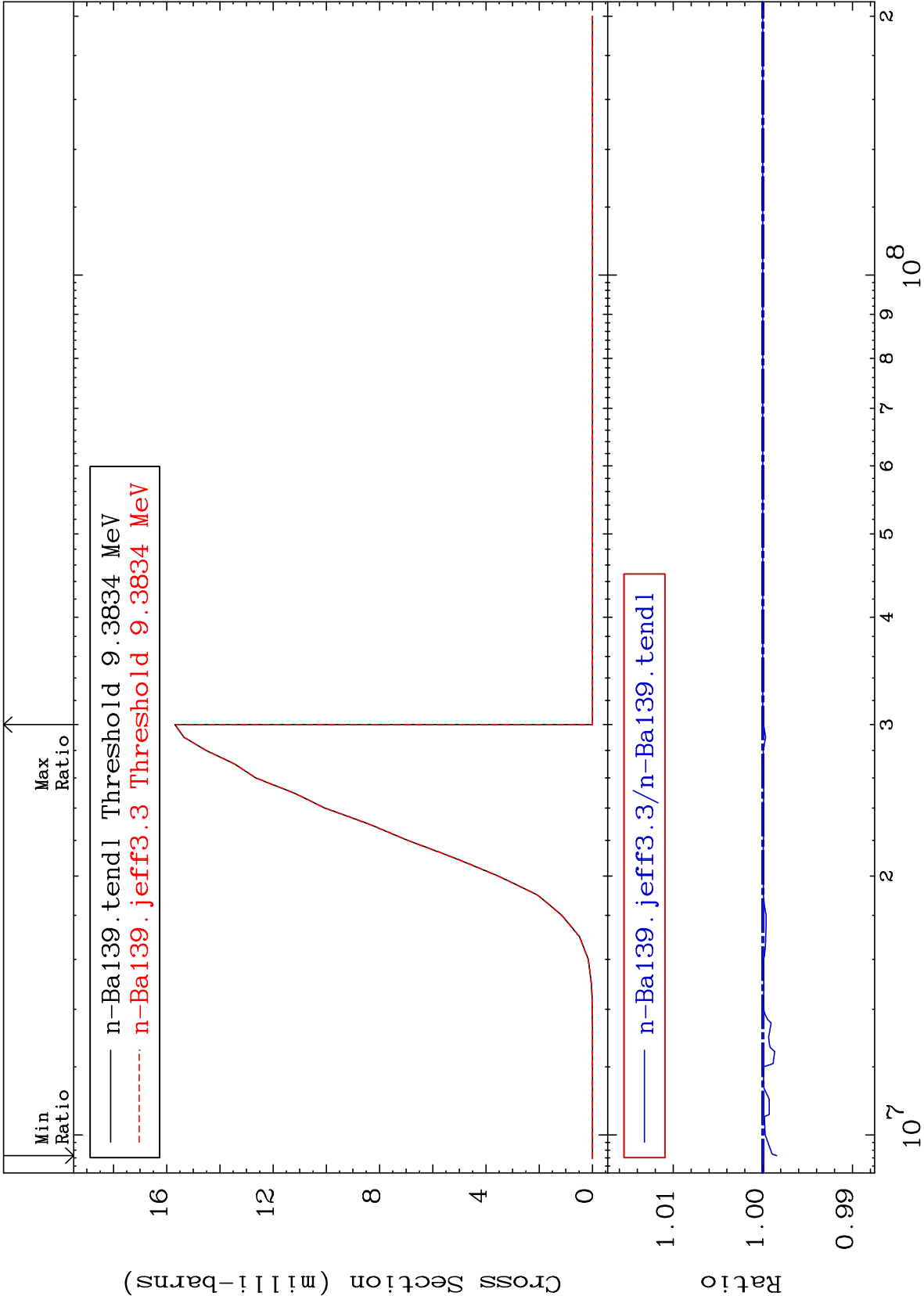




MAT 5652

(n,n') p:55-Cs-138g 56-Ba-139

Radionuclide Production Cross Section -0.155 To 0.000 %



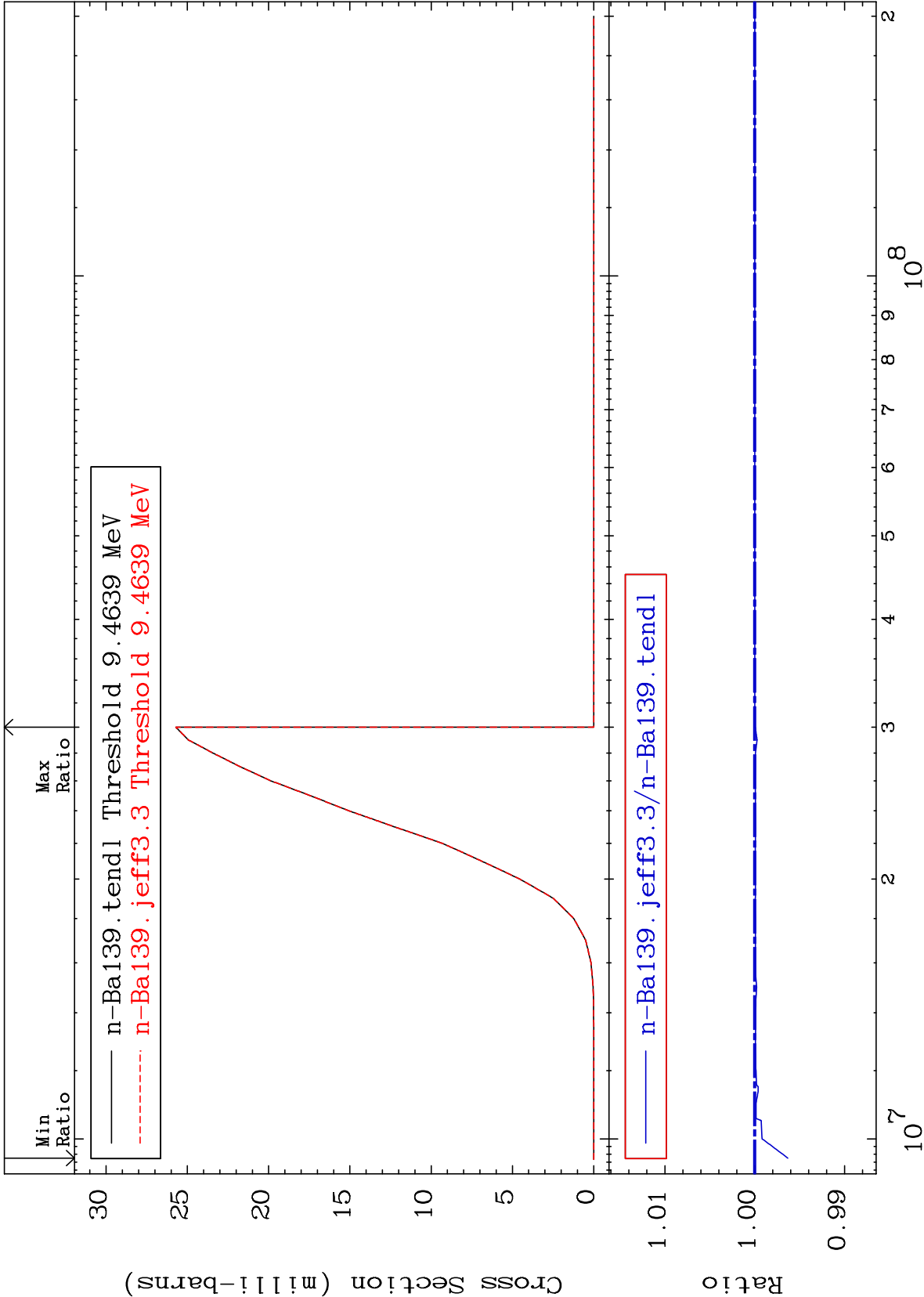
MAT 5652

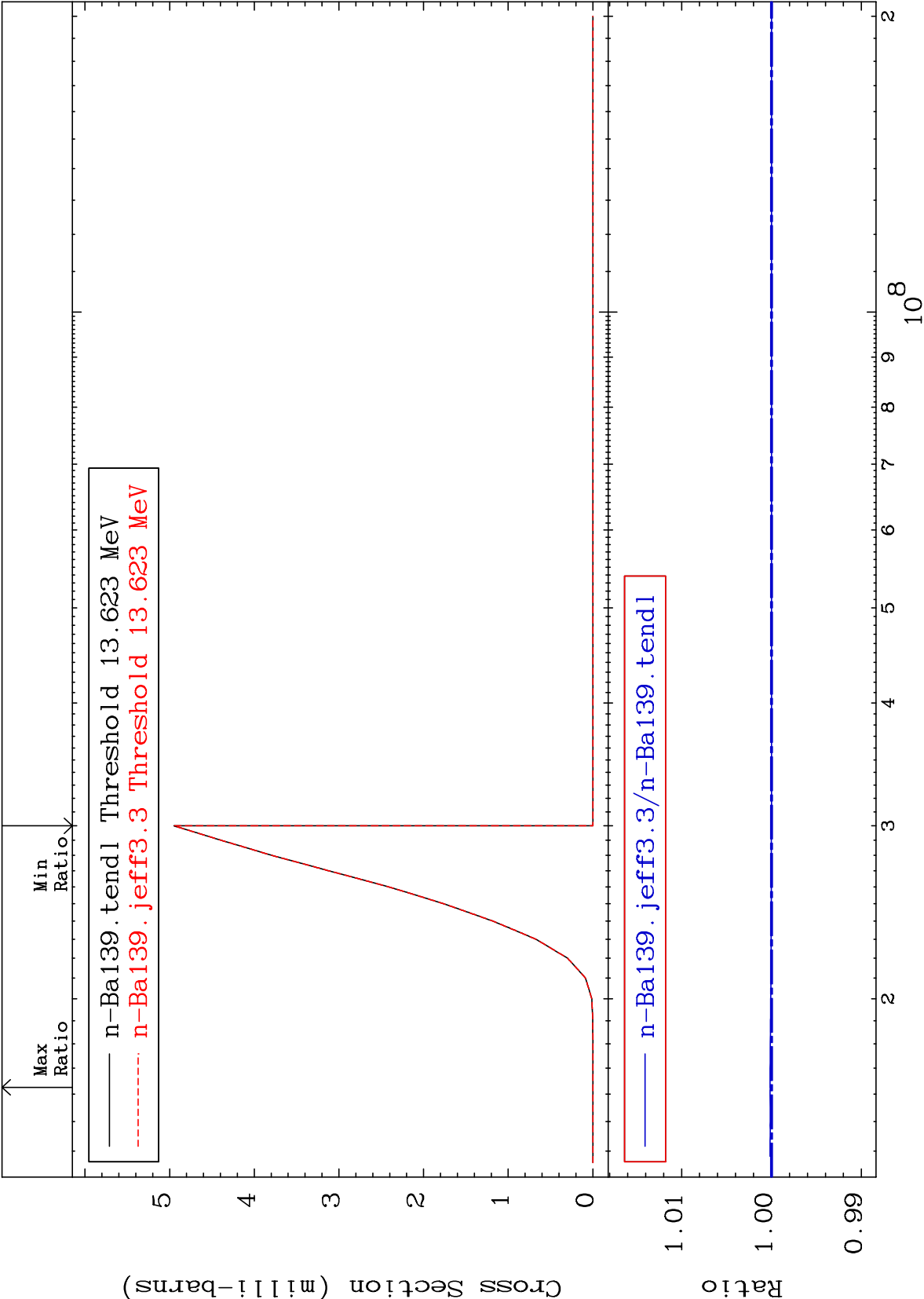
(n,n') p:55-Cs-138m3

56-Ba-139

Radionuclide Production Cross Section

-0.367 To 0.000 %

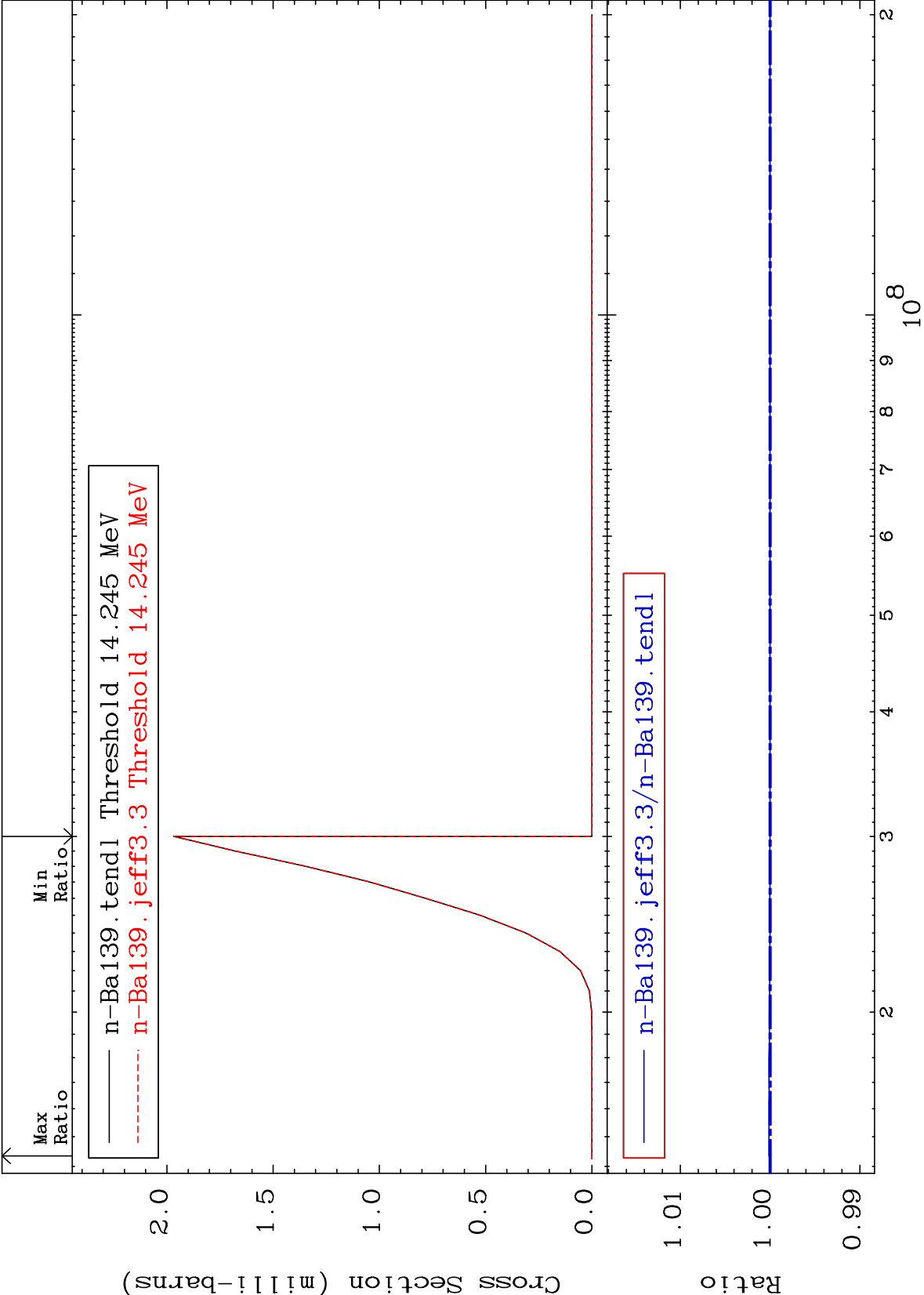




Radionuclide Production Cross Section

0.000

To 0.012 %



MAT 5652

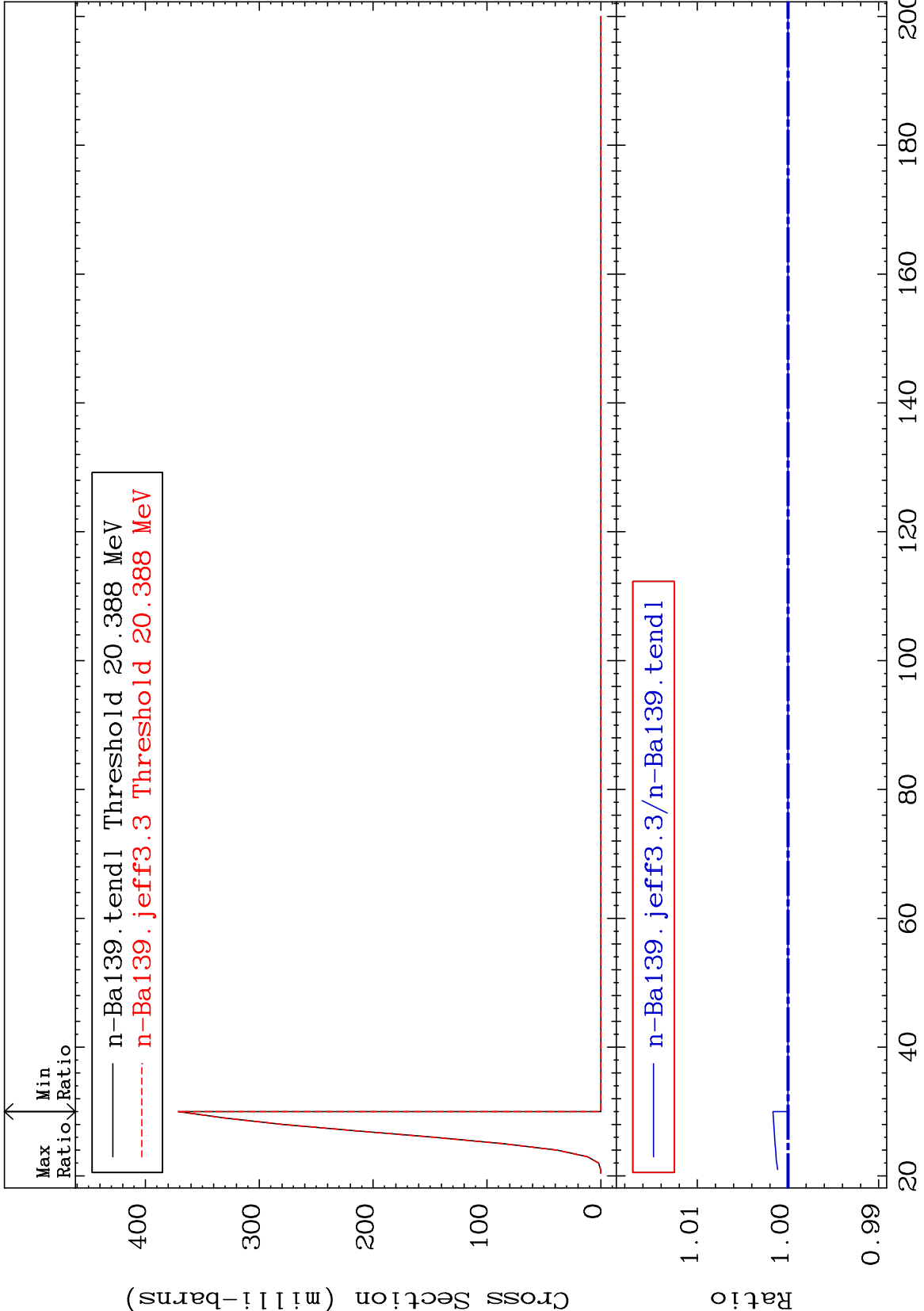
(n,4n):56-Ba-136g

56-Ba-139

Radionuclide Production Cross Section

0.000

To 0.167 %



Incident Energy (MeV)

56-Ba-139

MAT 5652

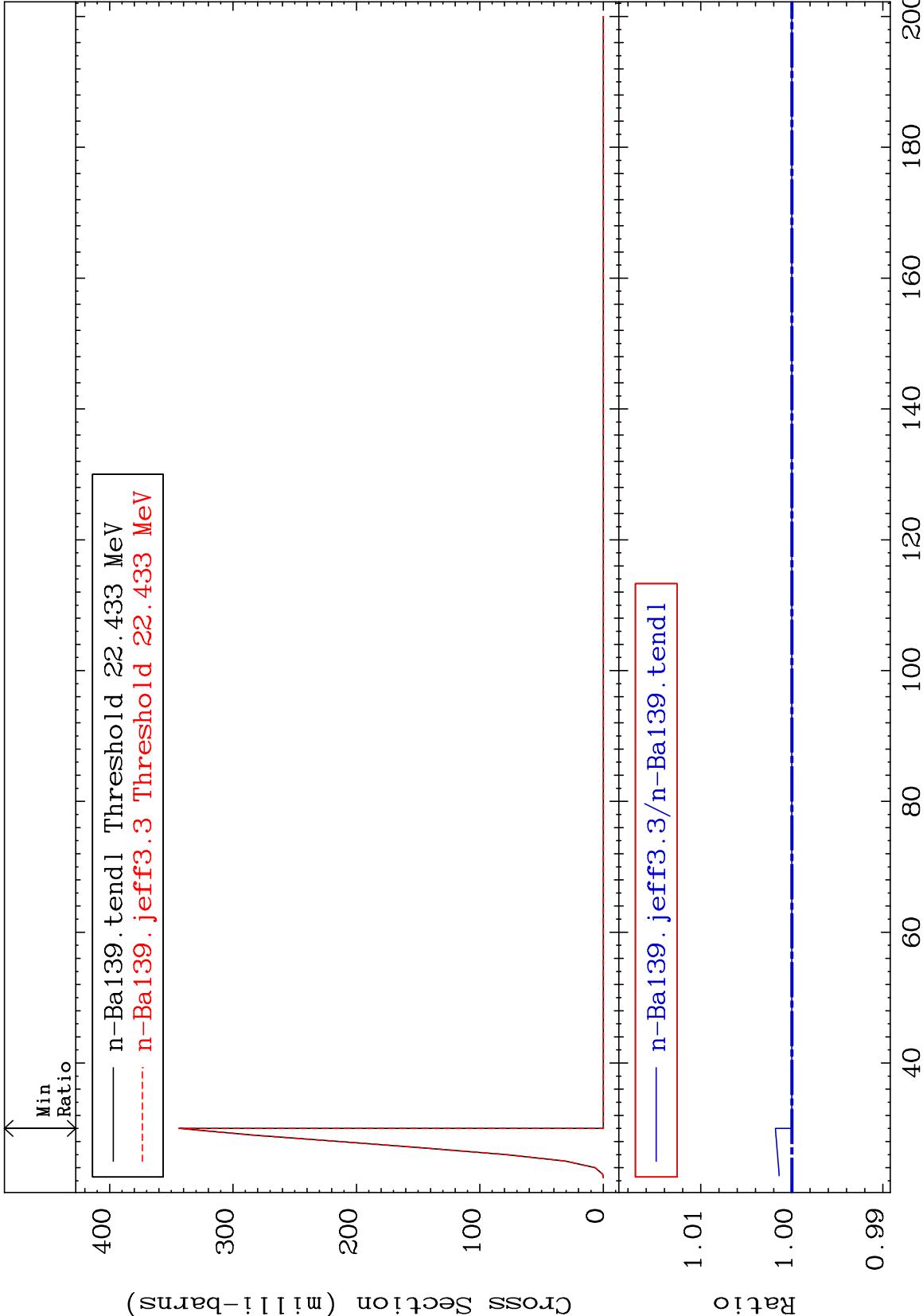
(n,4n):56-Ba-136m5

56-Ba-139

Radionuclide Production Cross Section

0.000

To 0.181 %



MAT 5652

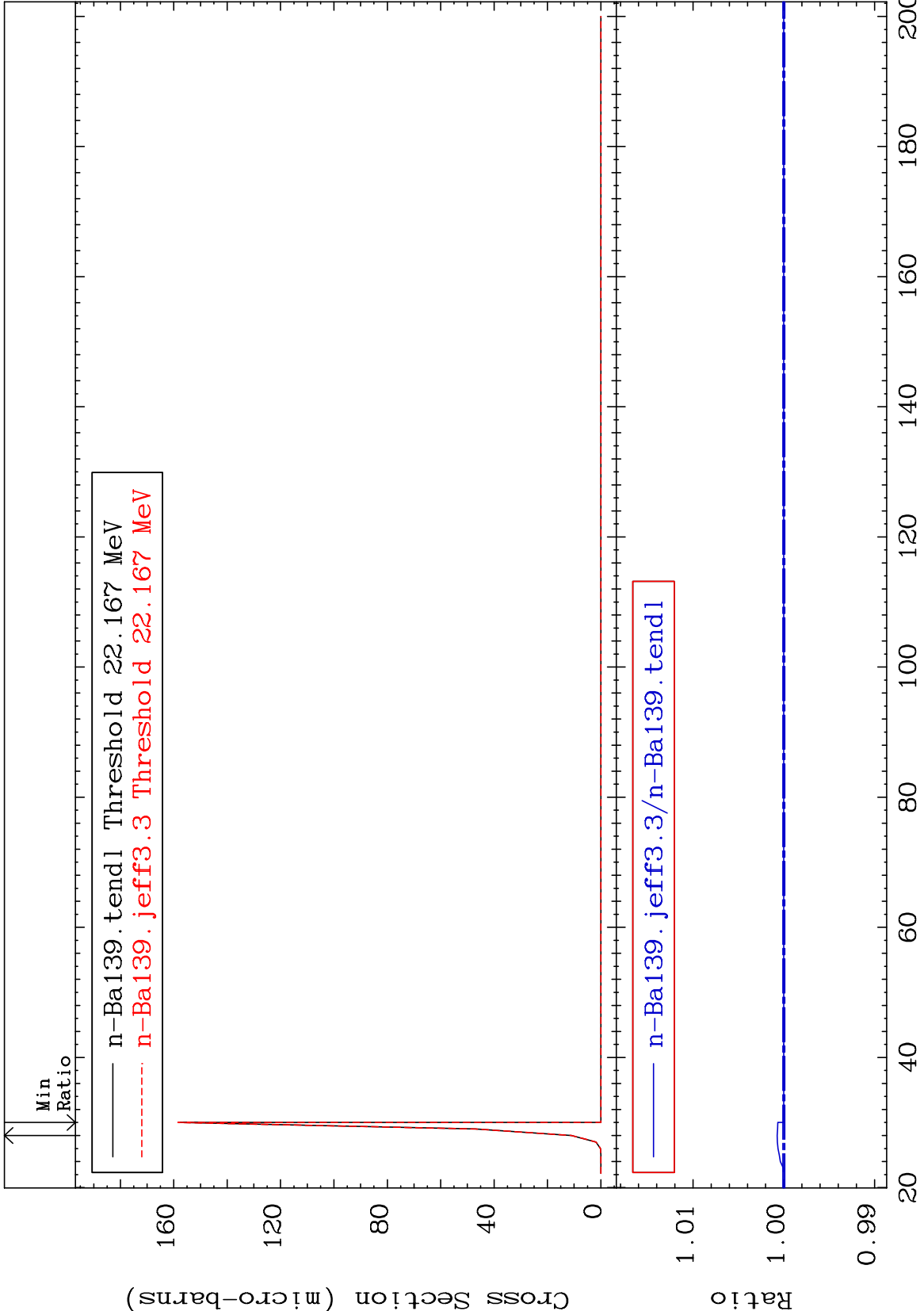
(n,3n) p:55-Cs-136g

56-Ba-139

Radionuclide Production Cross Section

0.000

To 0.073 %



64

Incident Energy (MeV)

56-Ba-139

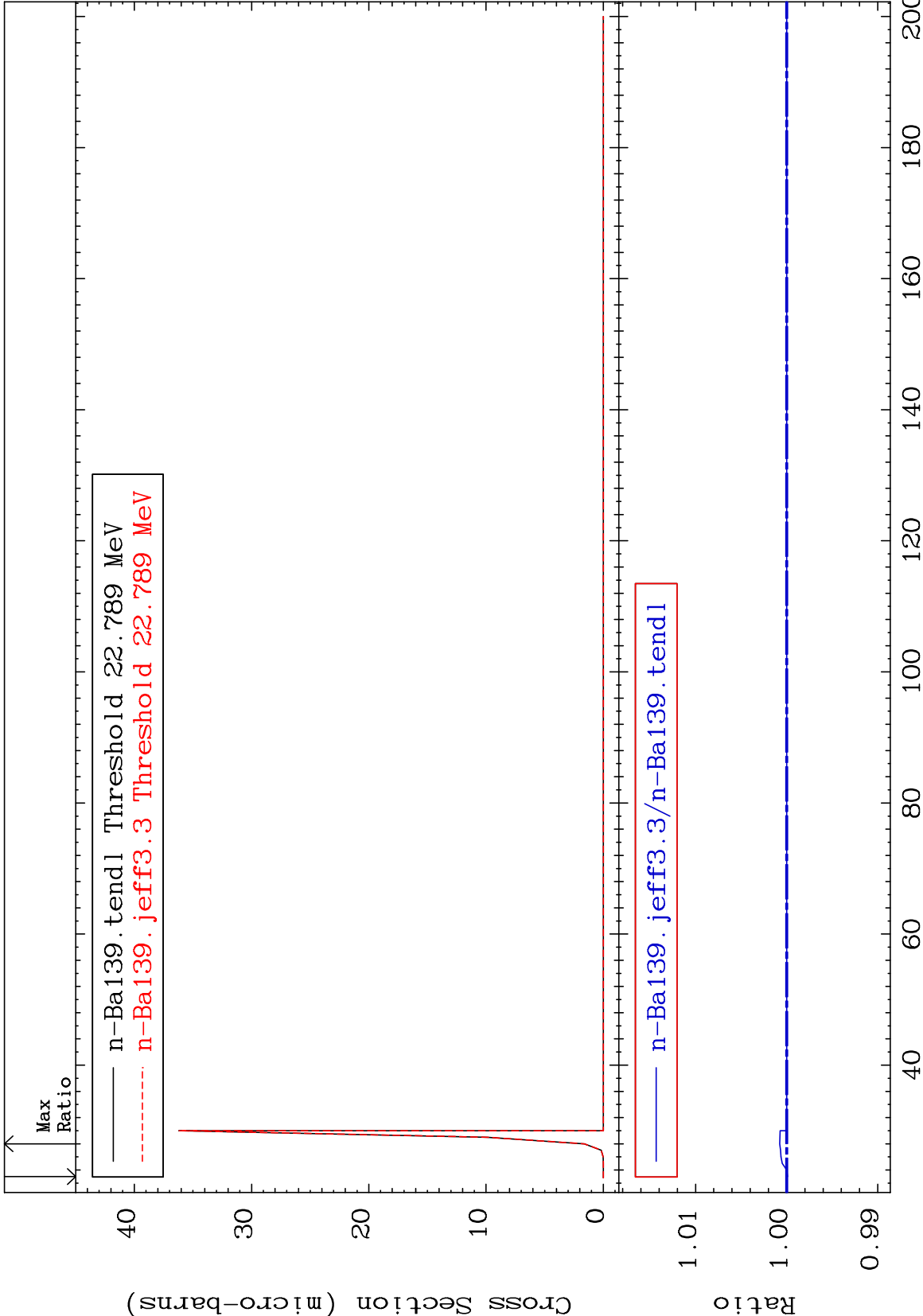
MAT 5652

(n,3n) p:55-Cs-136m1

56-Ba-139

Radionuclide Production Cross Section

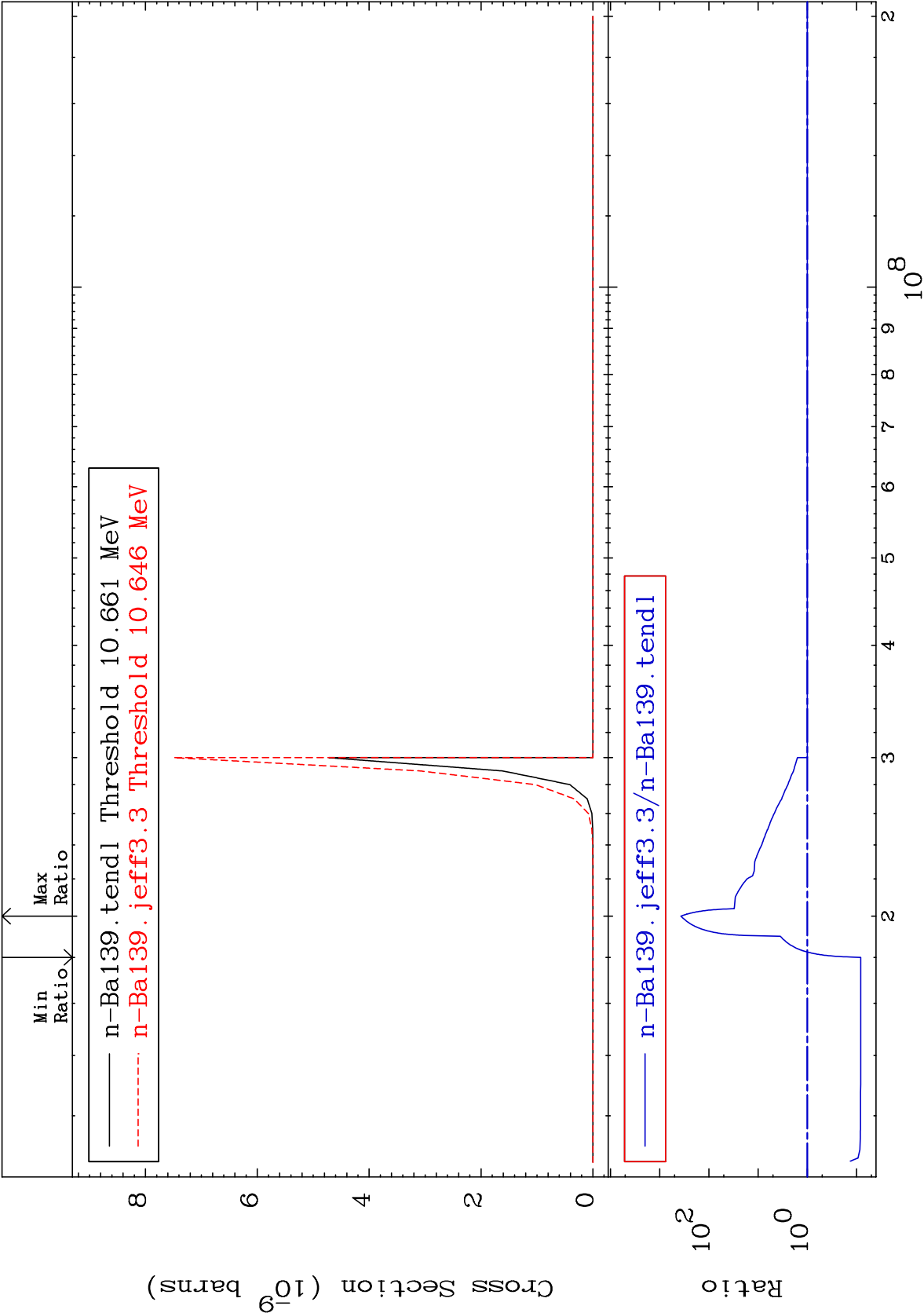
-0.011 To 0.077 %

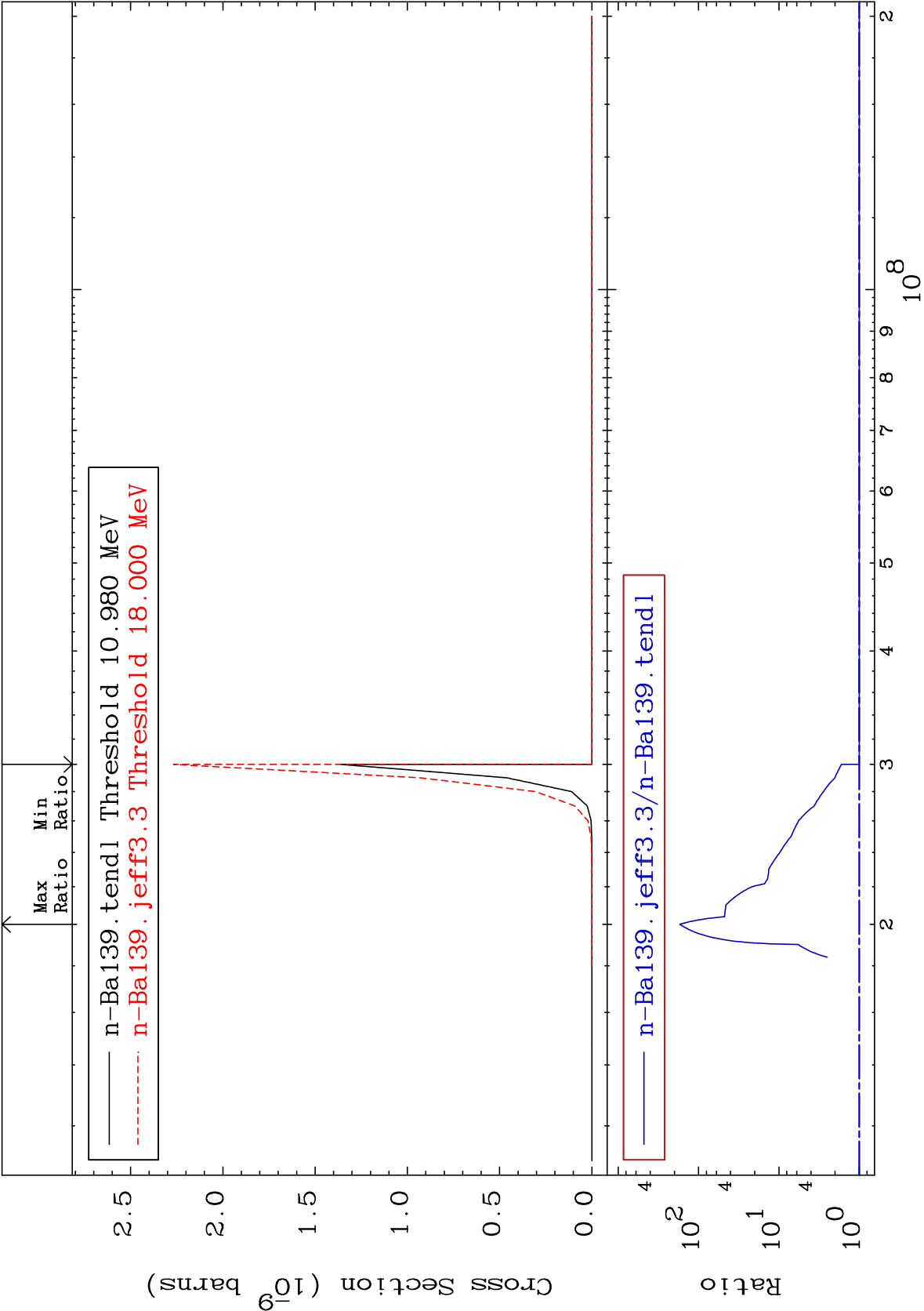


65

Incident Energy (MeV)

56-Ba-139



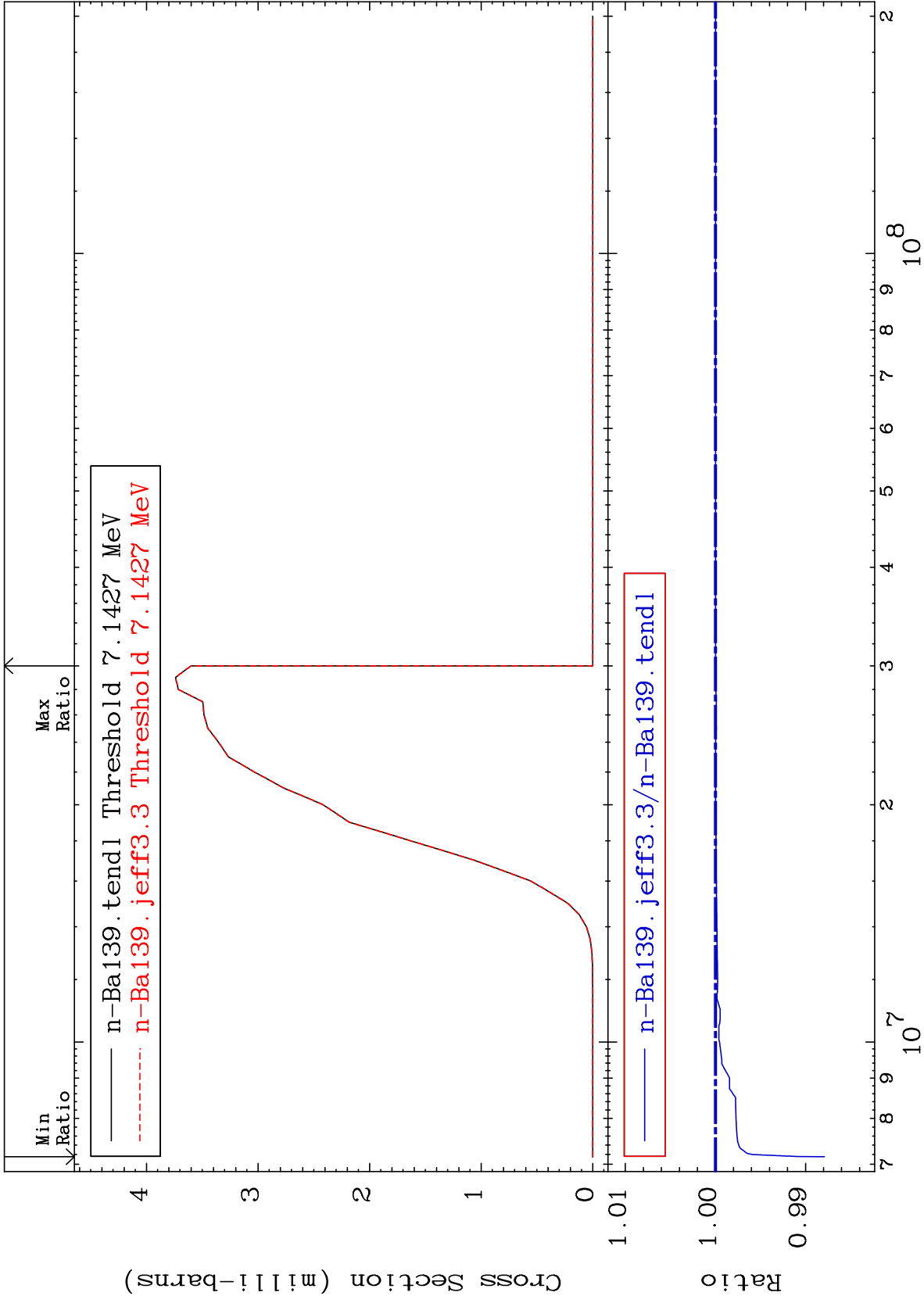


MAT 5652

56-Ba-139

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

Radionuclide Production Cross Section -1.209 To 0.000 %



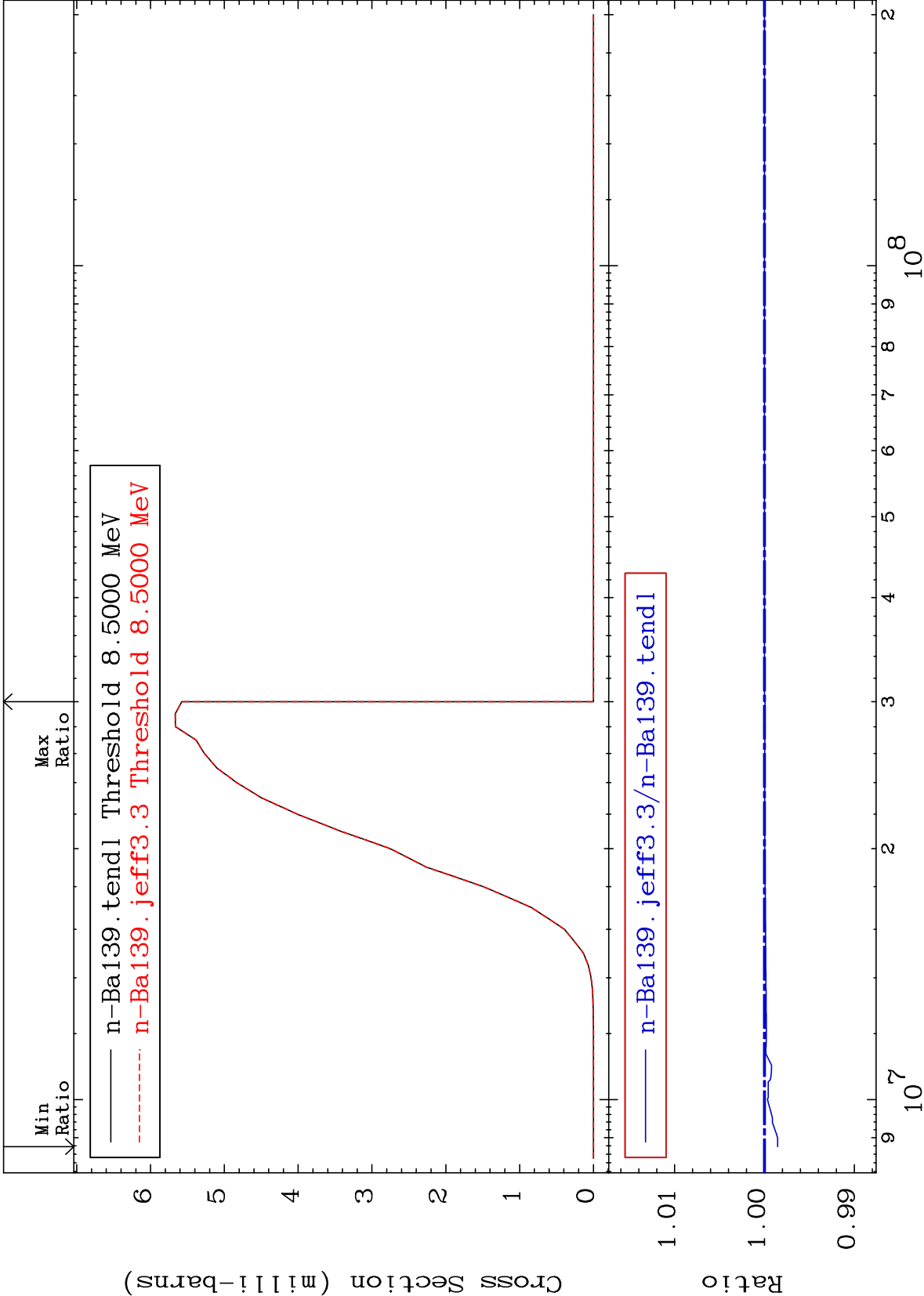
MAT 5652

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

56-Ba-139

Radionuclide Production Cross Section

-0.146 To 0.000 %



69

Incident Energy (eV)

56-Ba-139

MAT 5652

(n,d) α :53-I -134g

56-Ba-139

Radionuclide Production Cross Section

0.000

To 9999. %

