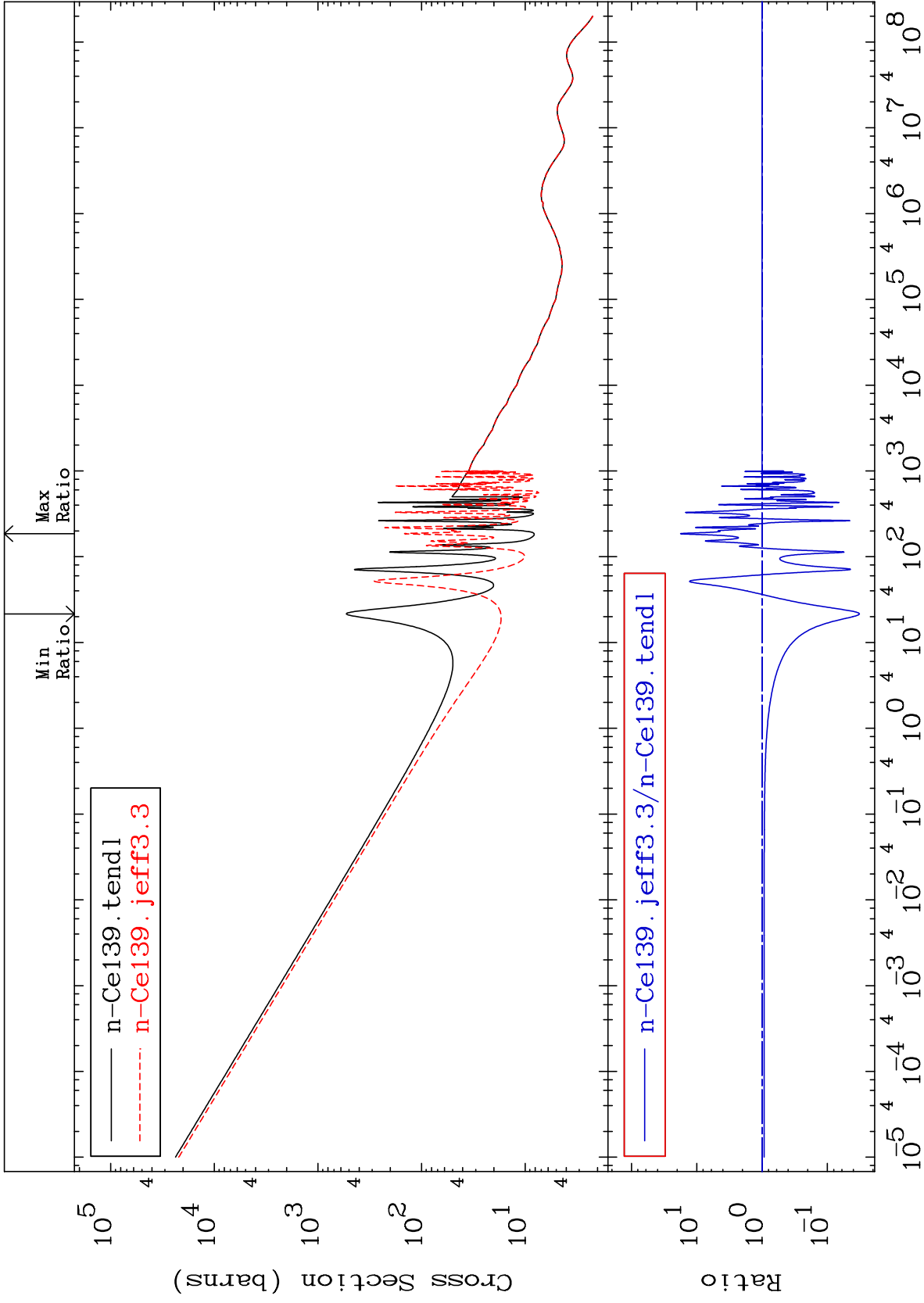


MAT 5834

Total
Cross Section

58-Ce-139
-96.77 To 1686. %



Incident Energy (eV)

58-Ce-139

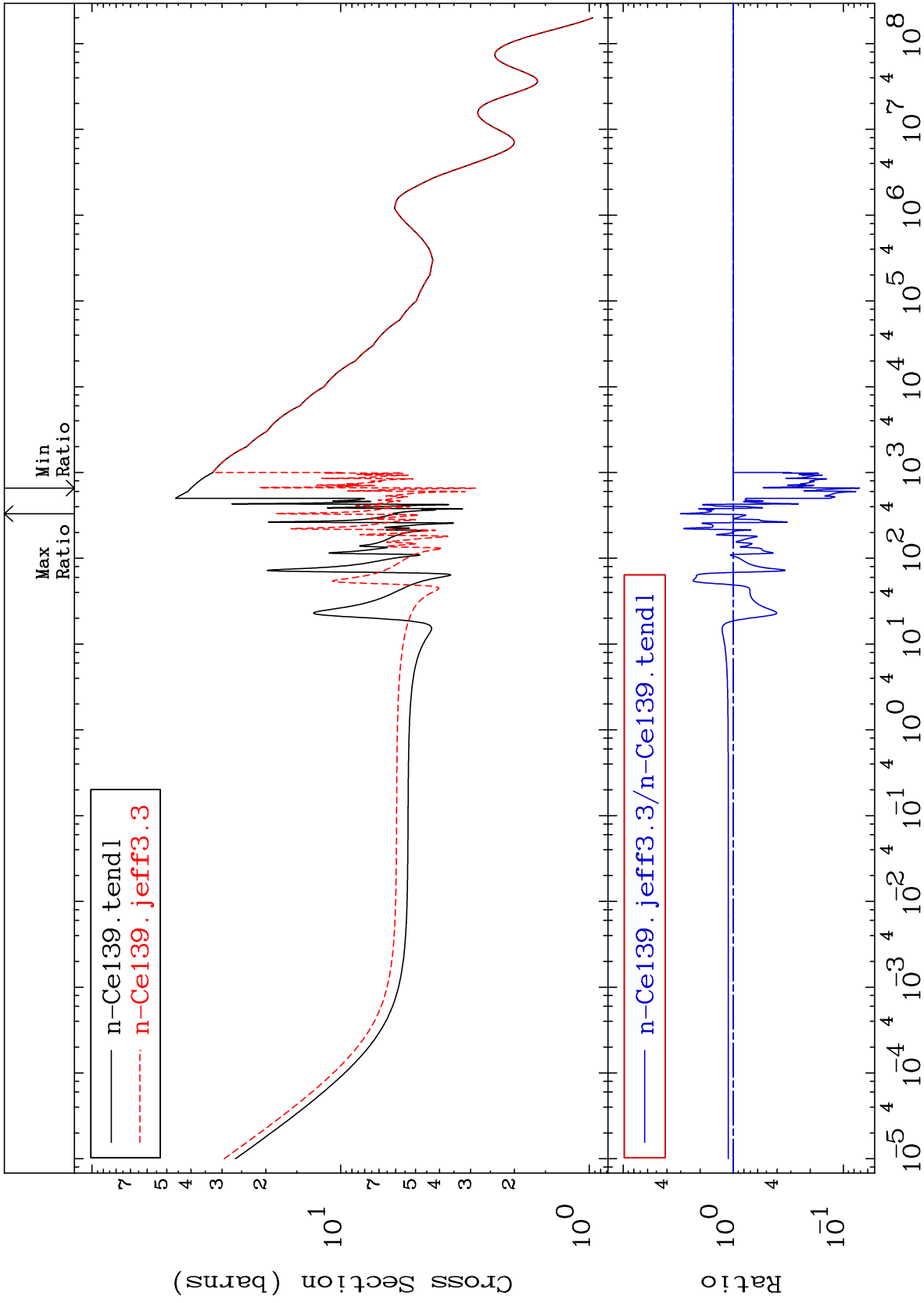
MAT 5834

Elastic

58-Ce-139

Cross Section

-92.84 To 202.8 %



2

Incident Energy (eV)

58-Ce-139

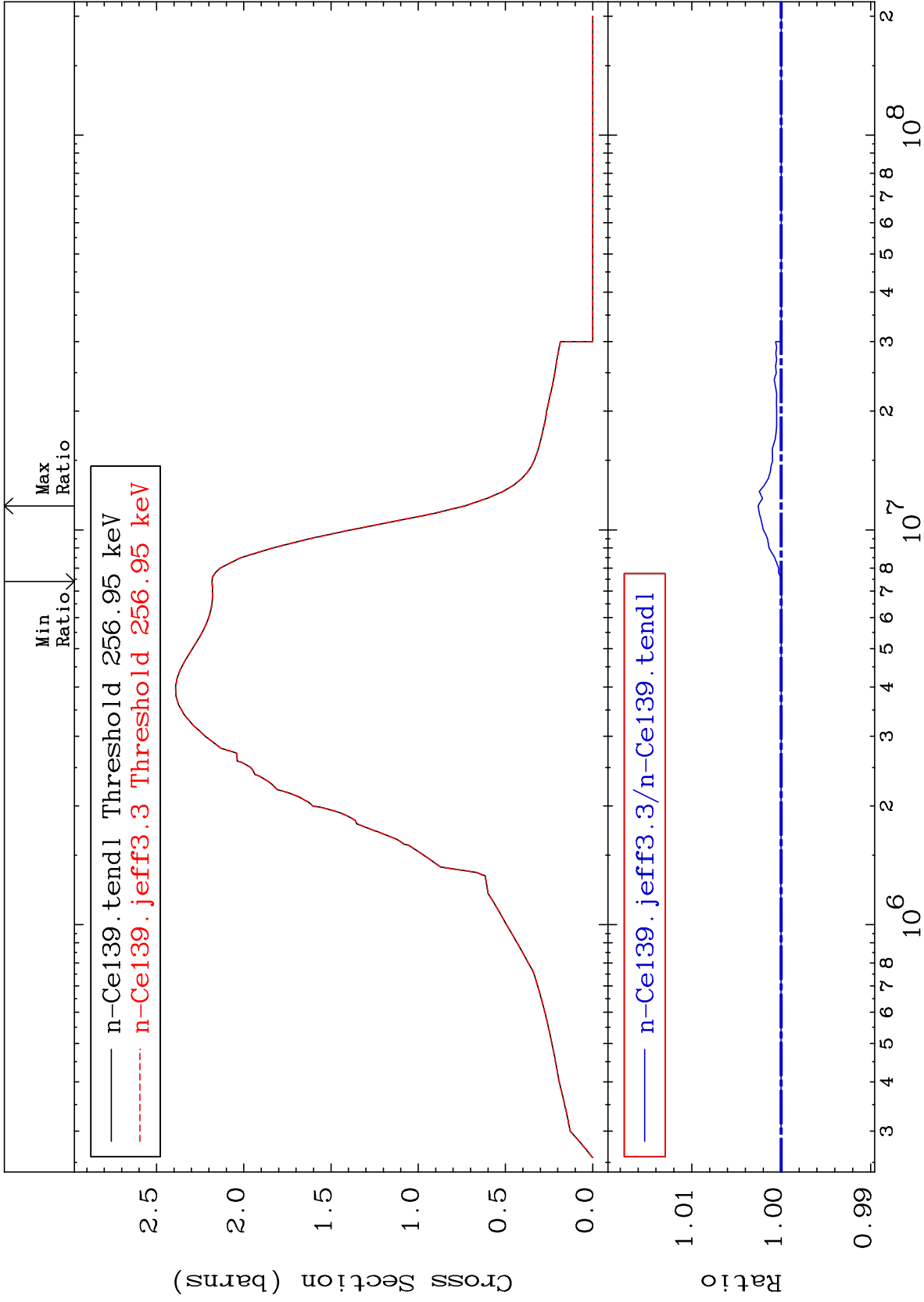
MAT 5834

Inelastic

58-Ce-139

Cross Section

-0.006 To 0.258 %



3

Incident Energy (eV)

58-Ce-139

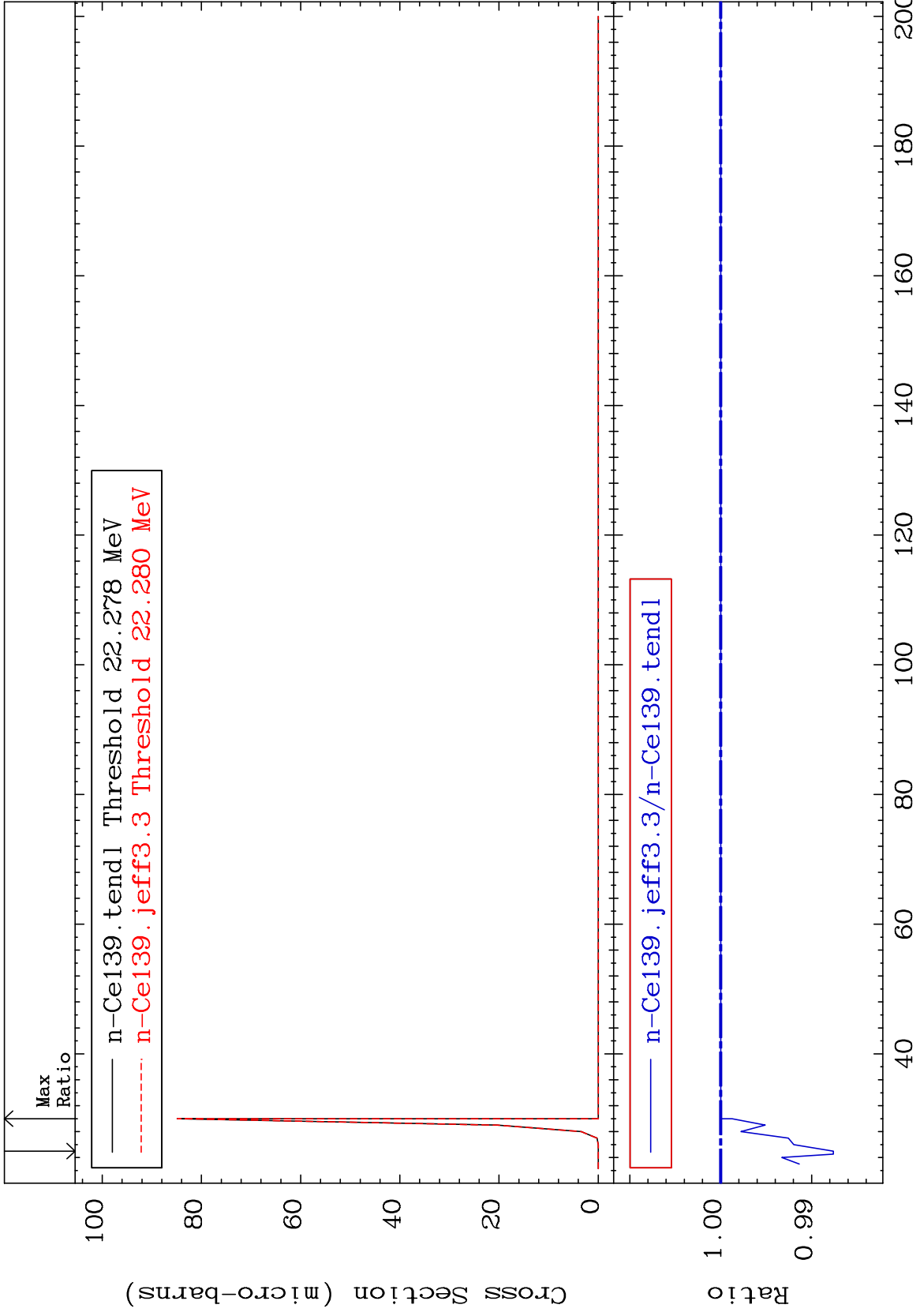
MAT 5834

(n,2n) d

58-Ce-139

Cross Section

-1.240 To 0.000 %



Incident Energy (MeV)

58-Ce-139

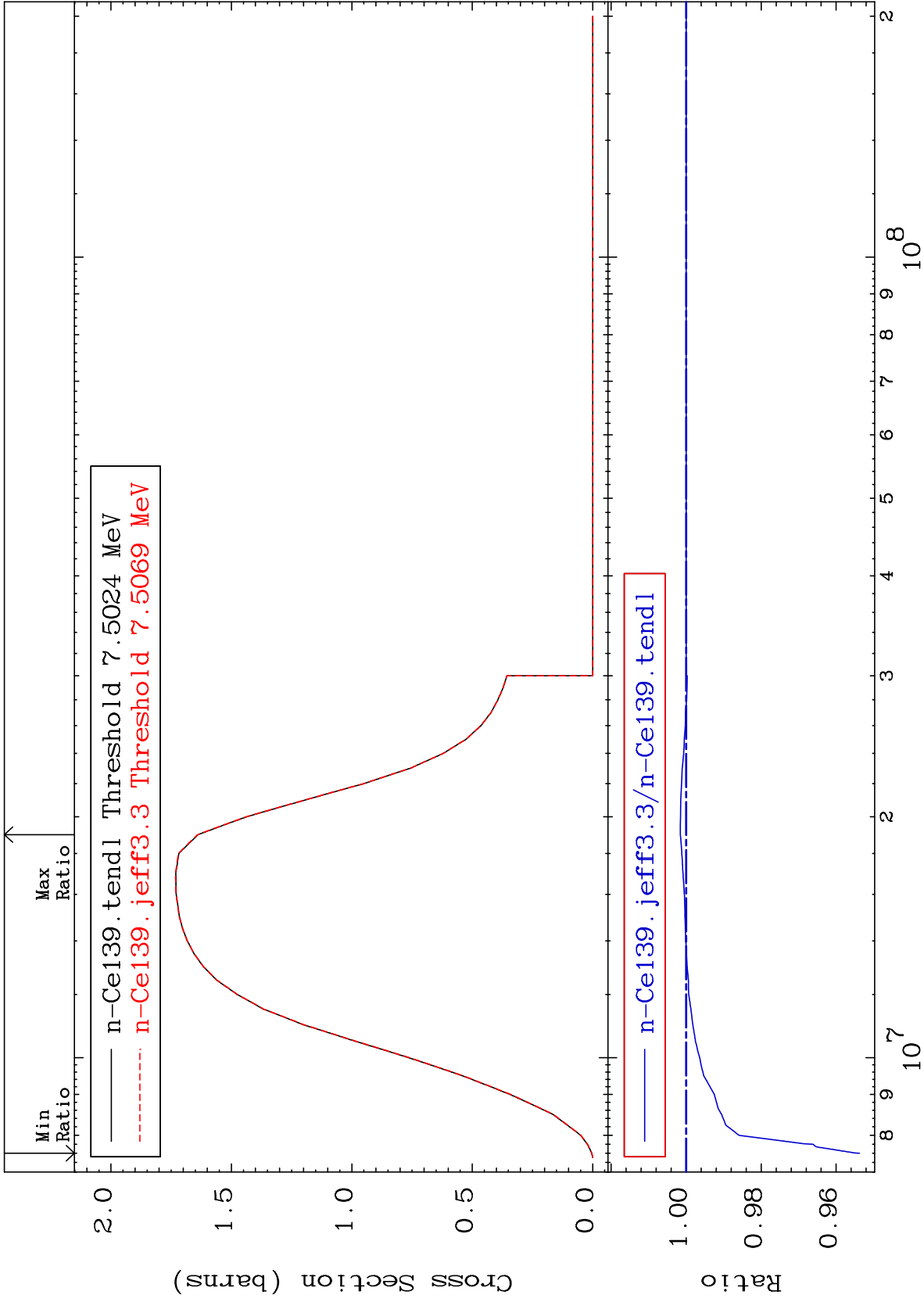
MAT 5834

(n,2n)

58-Ce-139

Cross Section

-4.620 To 0.153 %



5

Incident Energy (eV)

58-Ce-139

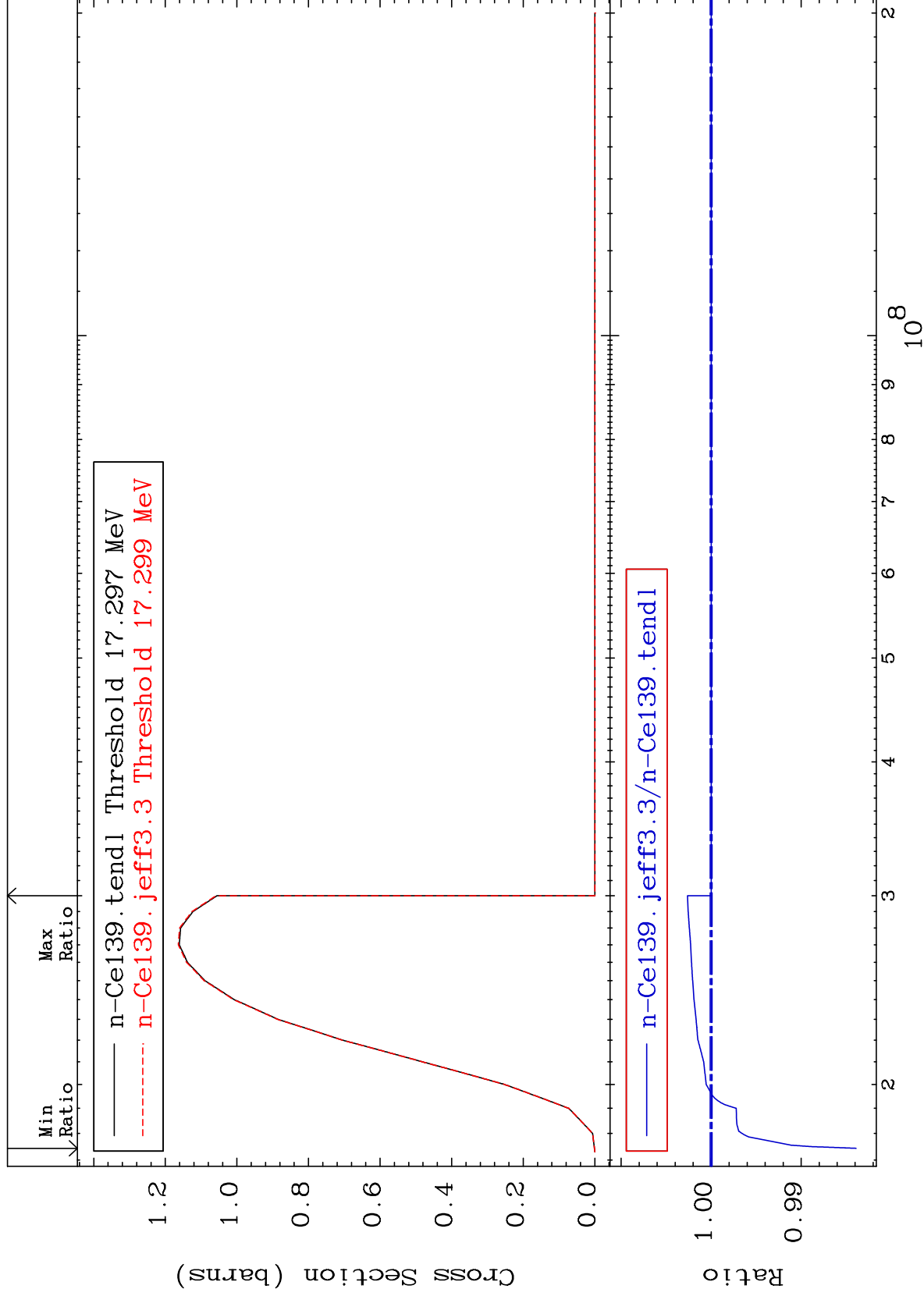
MAT 5834

(n,3n)

58-Ce-139

Cross Section

-1.610 To 0.264 %

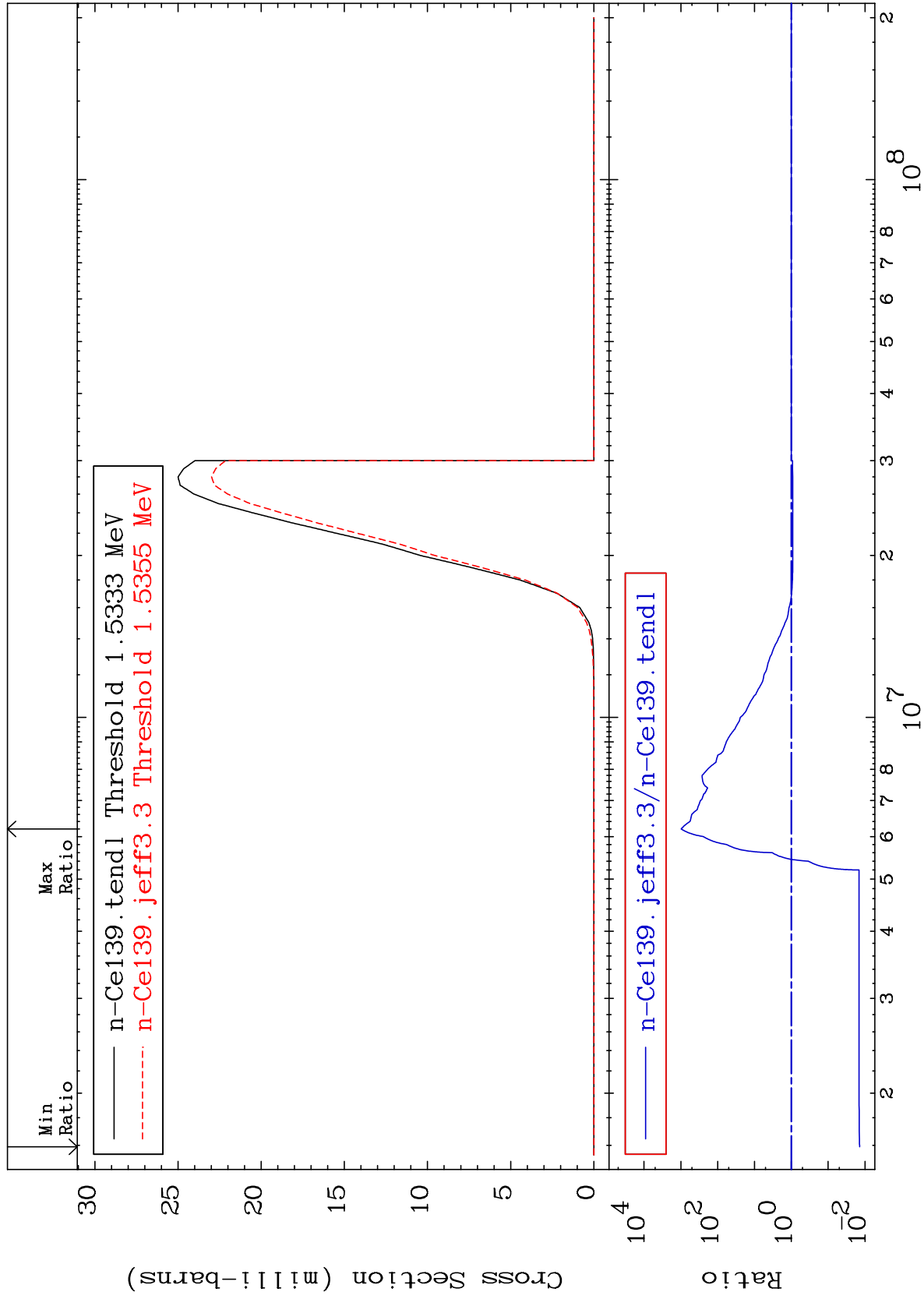


MAT 5834

(n,n') α
Cross Section

58-Ce-139

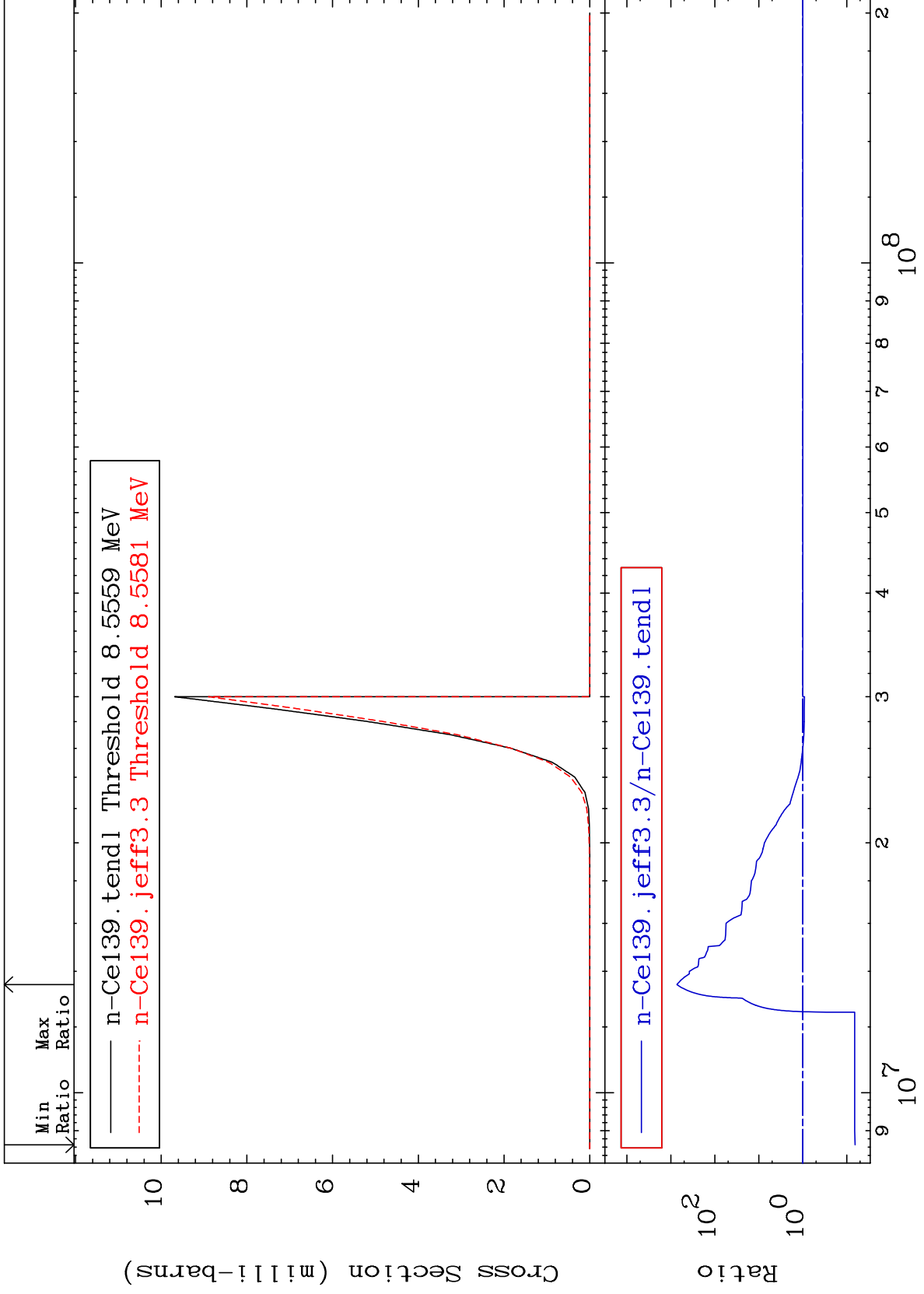
-98.60 To 9999. %



MAT 5834

(n,2n) α
Cross Section

58-Ce-139
-93.53 To 9999. %



8

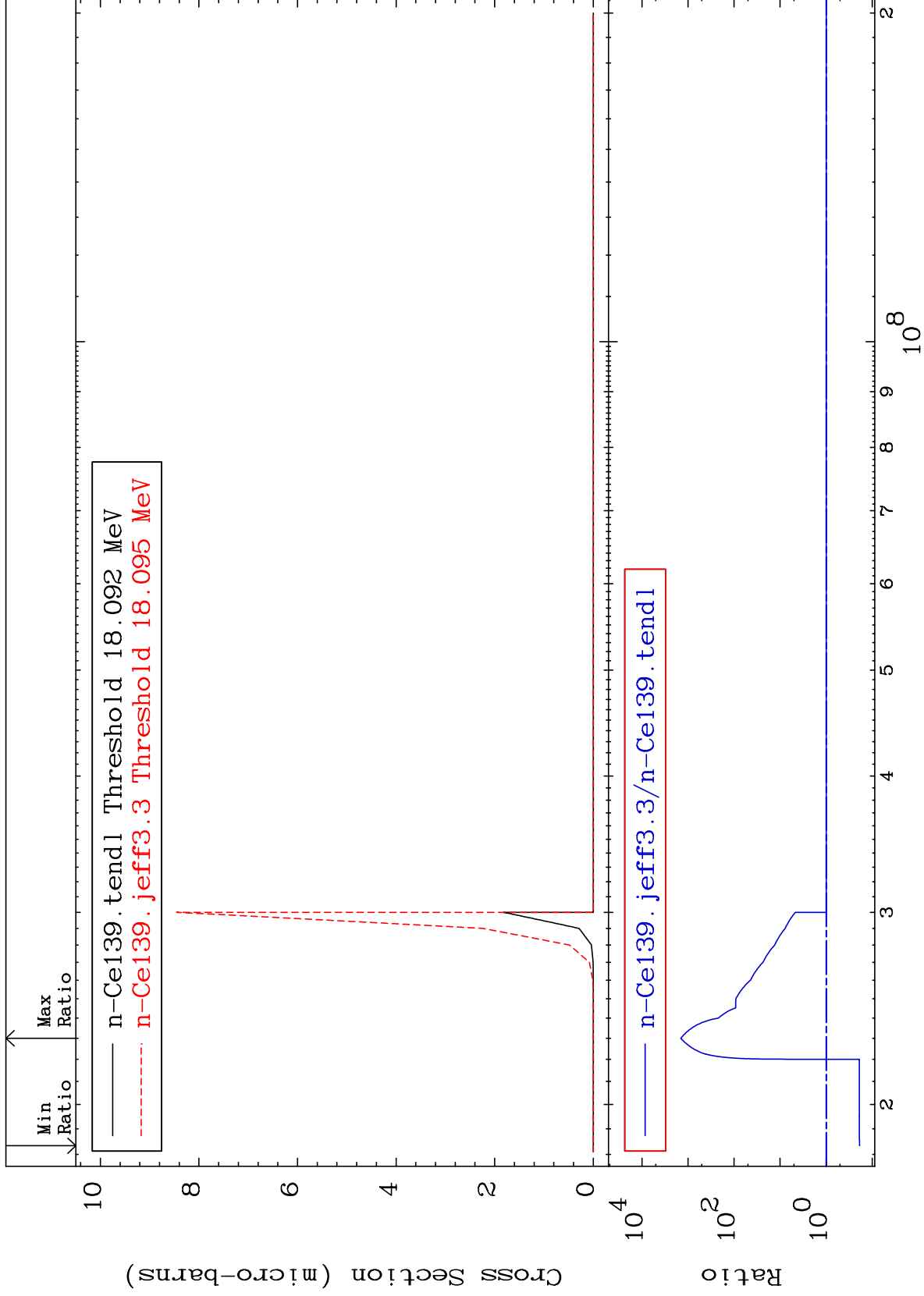
Incident Energy (eV)

58-Ce-139

MAT 5834

(n,3n) α
Cross Section

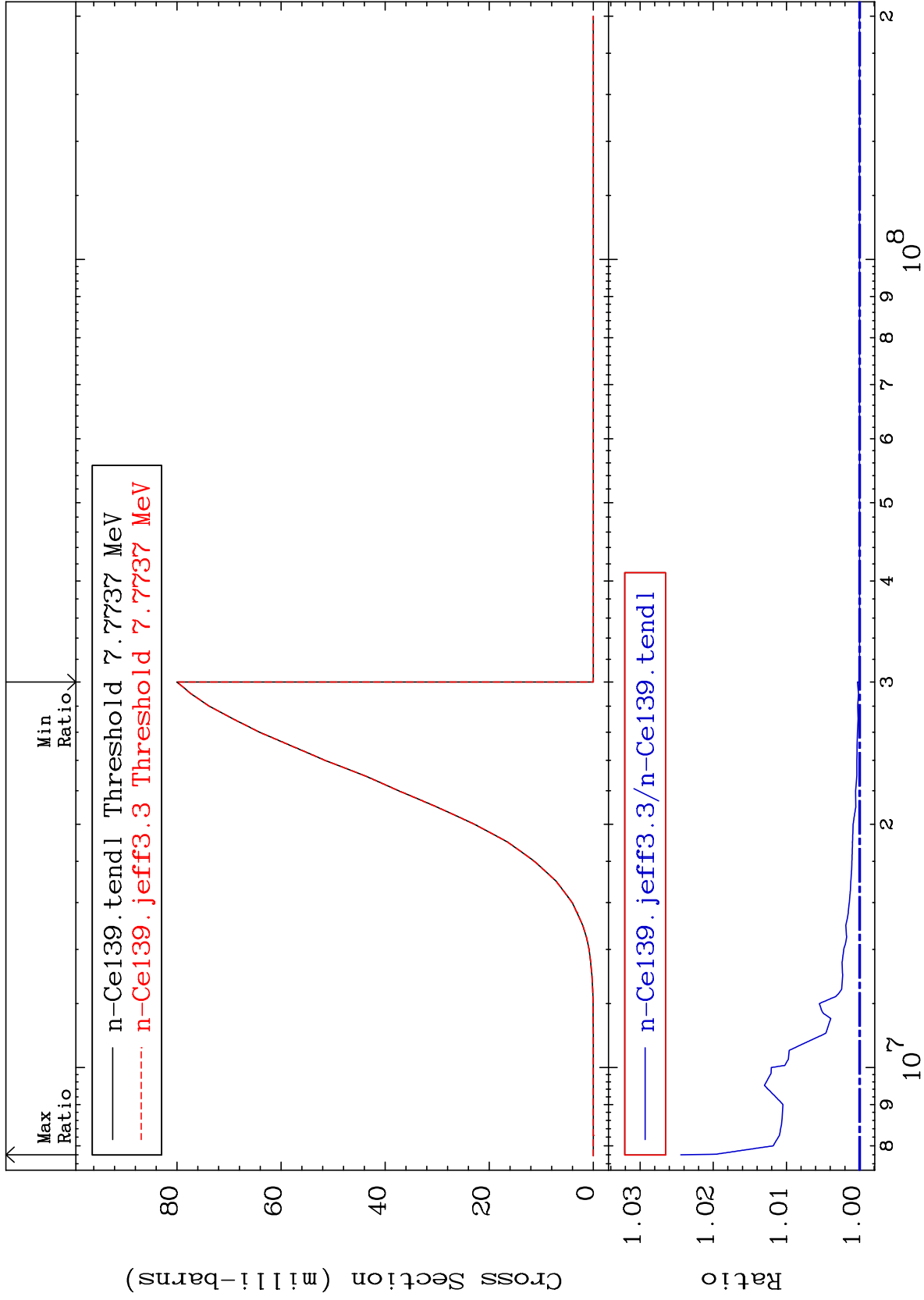
58-Ce-139
-81.13 To 9999. %



MAT 5834

(n,n') p
Cross Section

58-Ce-139
To 2.444 %



58-Ce-139

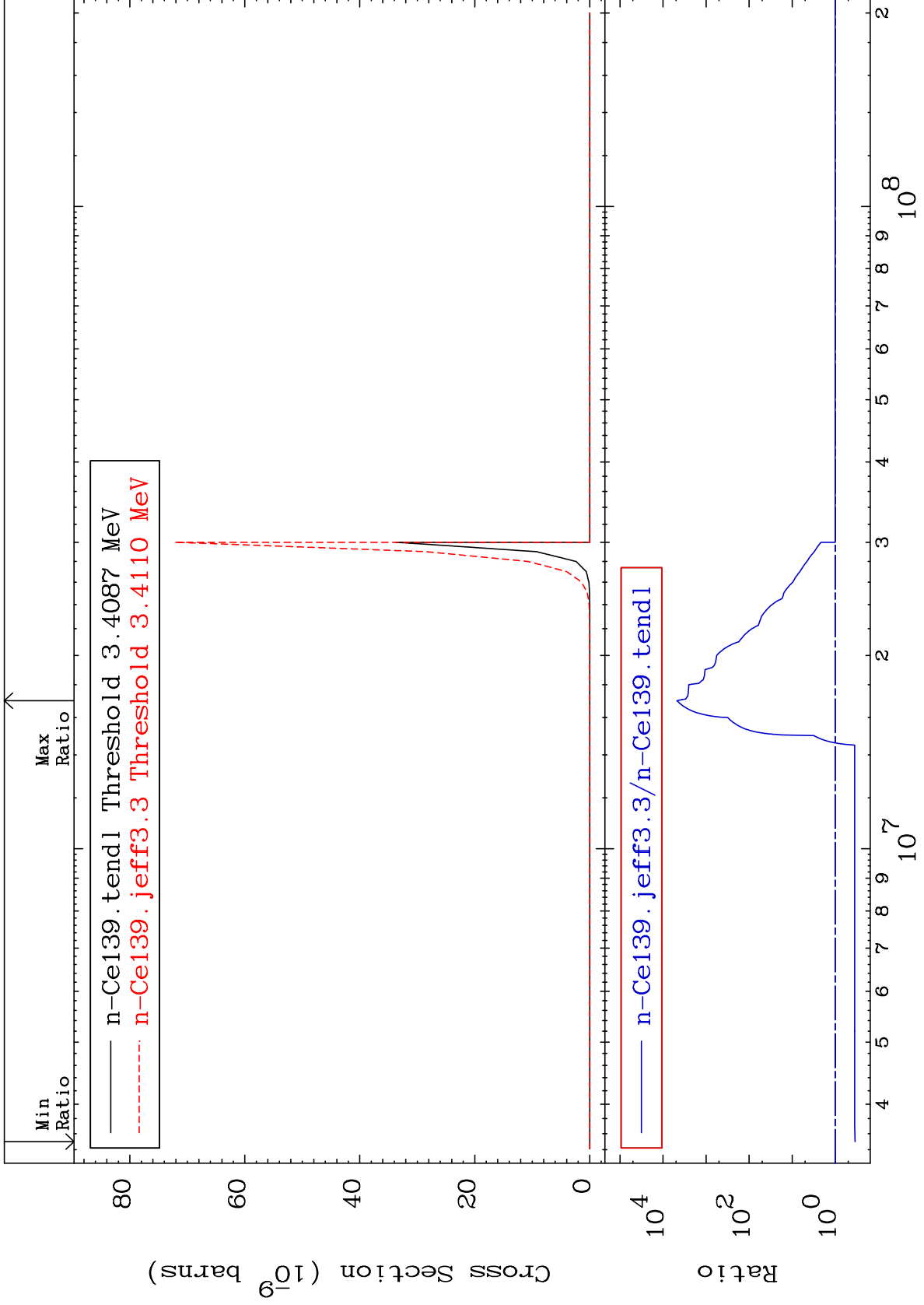
Incident Energy (eV)

10

MAT 5834

(n, n') 2α
Cross Section

58-Ce-139
-65.41 To 9999. %



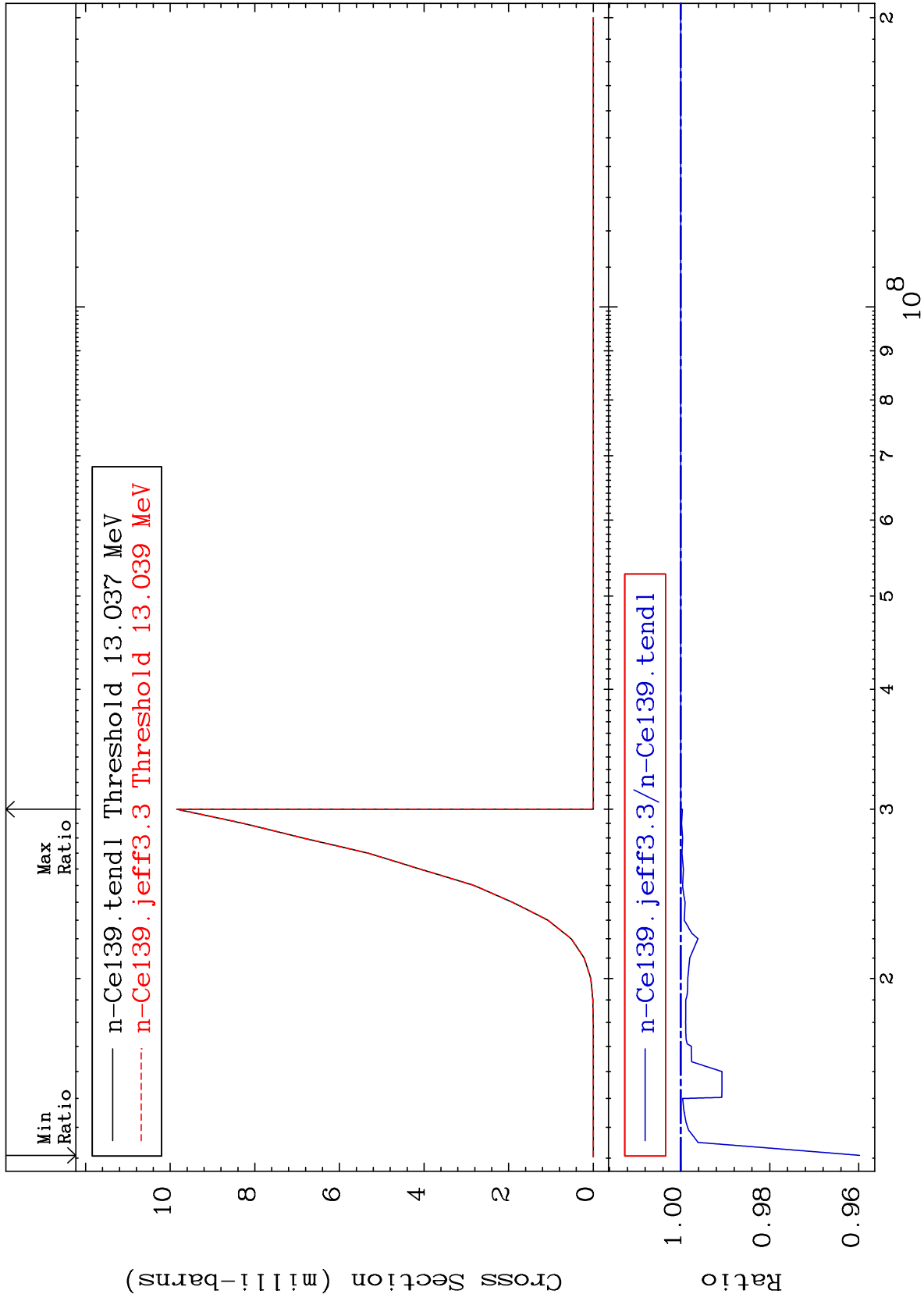
MAT 5834

(n,n') d

58-Ce-139

Cross Section

-4.017 To 0.000 %



12

Incident Energy (eV)

58-Ce-139

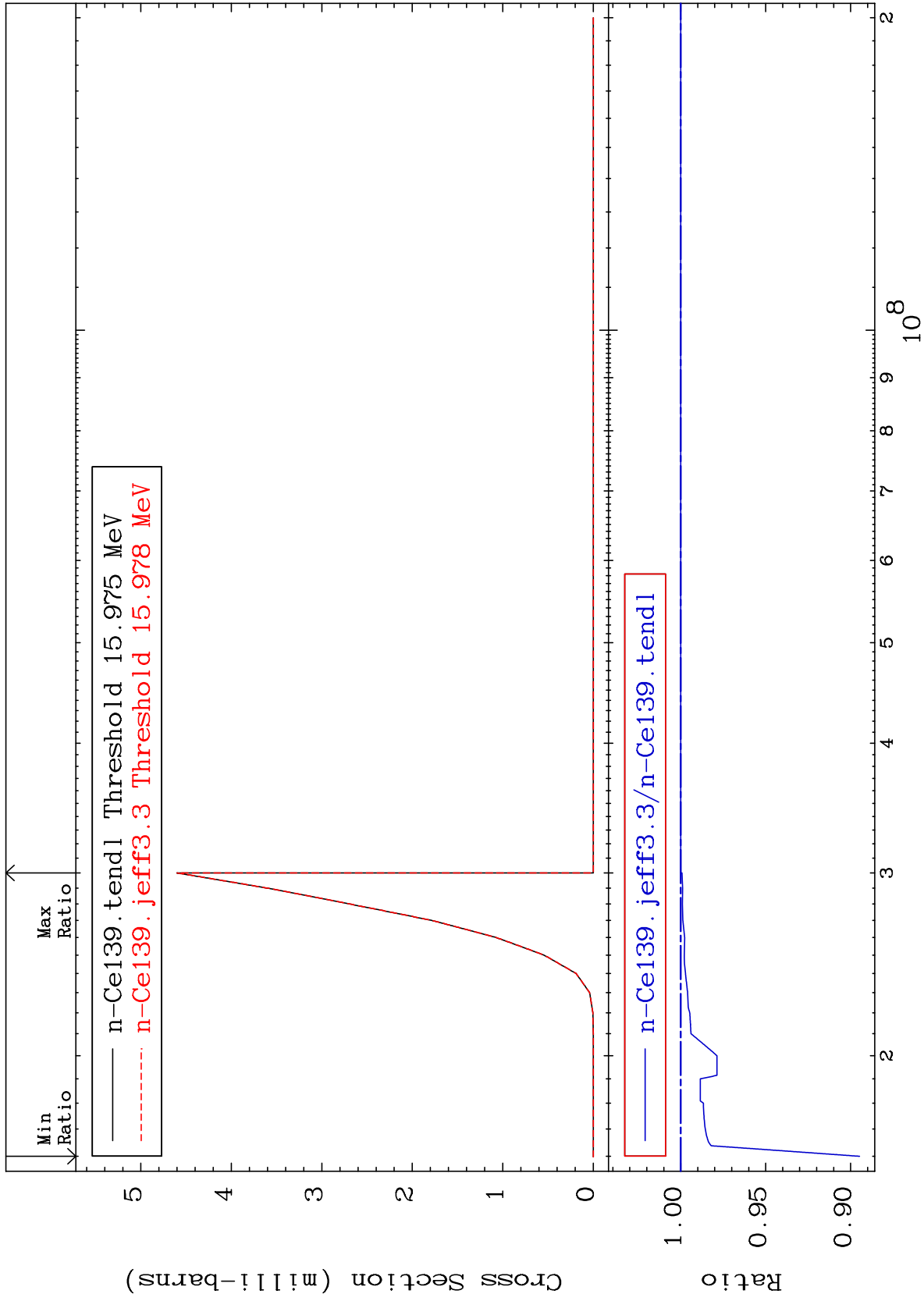
MAT 5834

(n,n') t

58-Ce-139

Cross Section

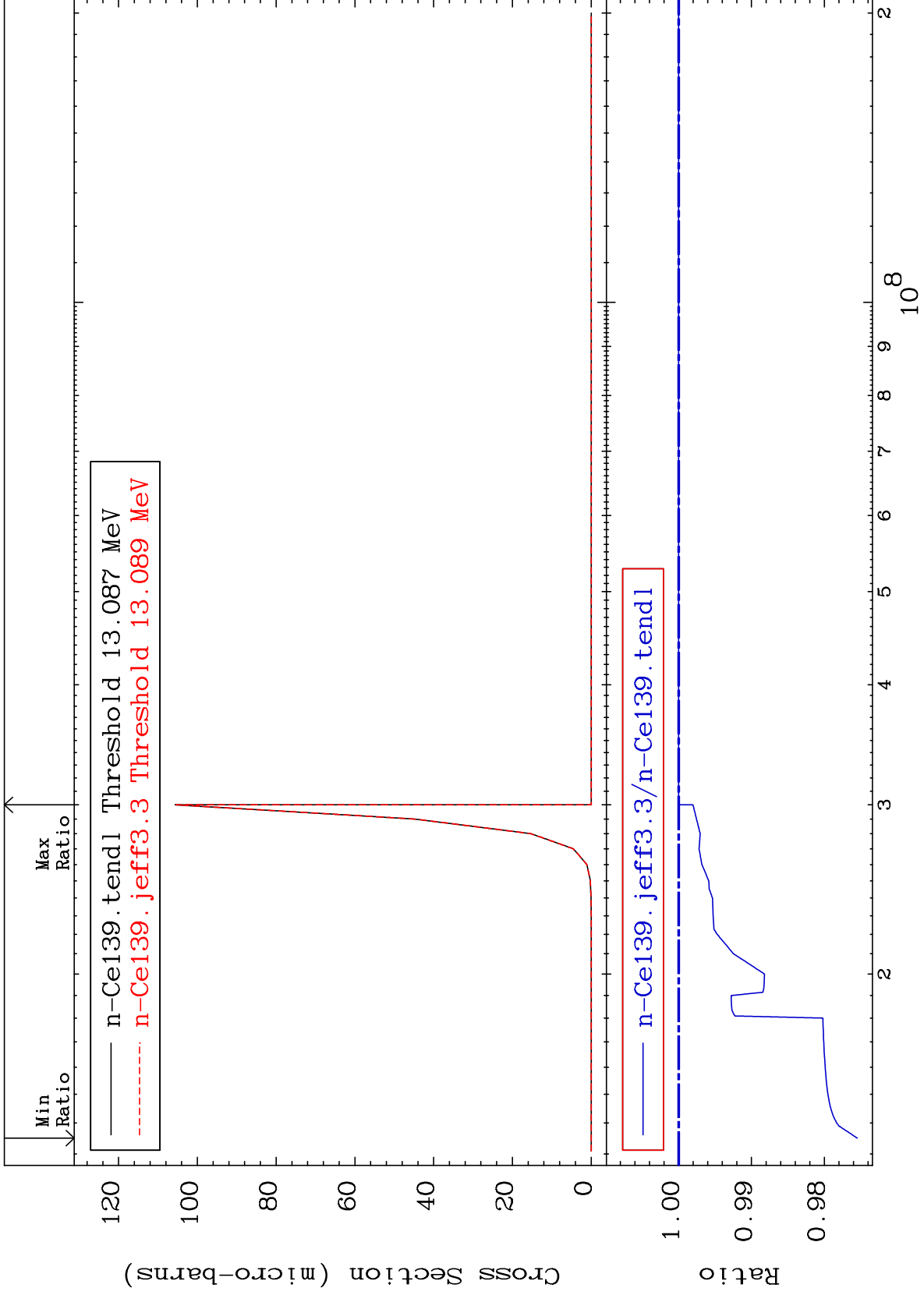
-10.52 To 0.000 %



MAT 5834

(n, n') He-3
Cross Section

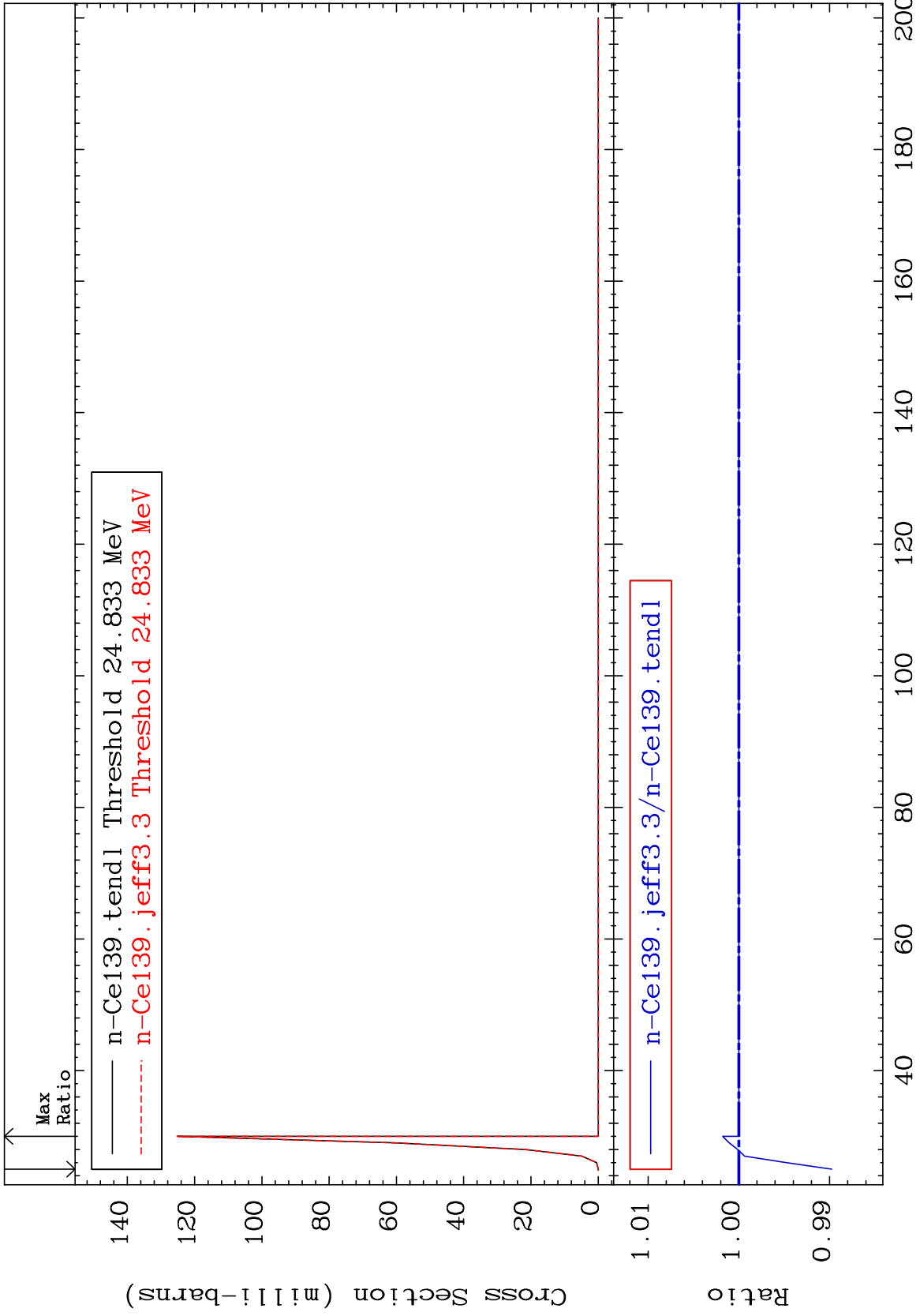
58-Ce-139
-2.452 To 0.000 %



MAT 5834

(n,4n)
Cross Section

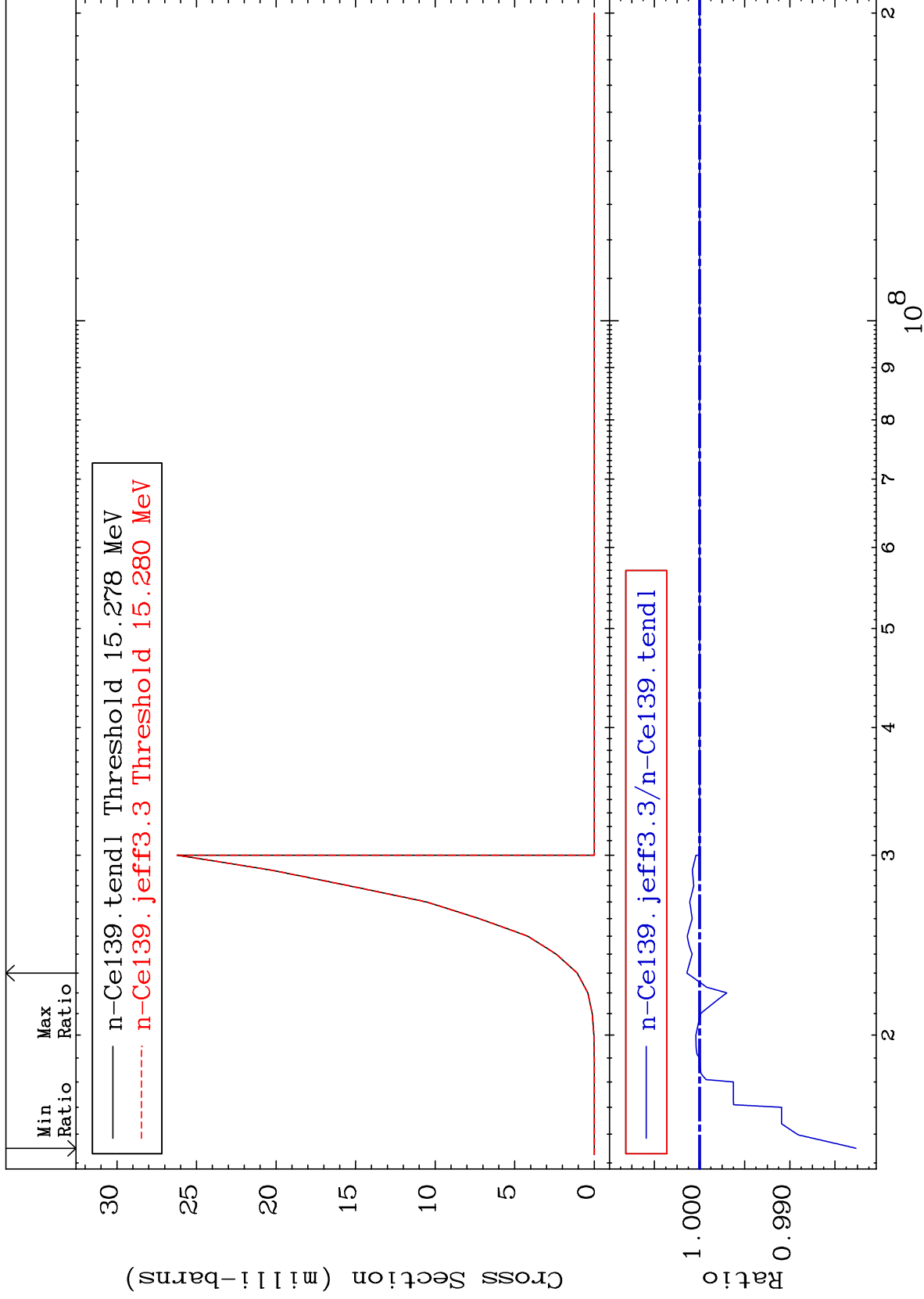
58-Ce-139
-1.022 To 0.179 %



MAT 5834

(n,2n) p
Cross Section

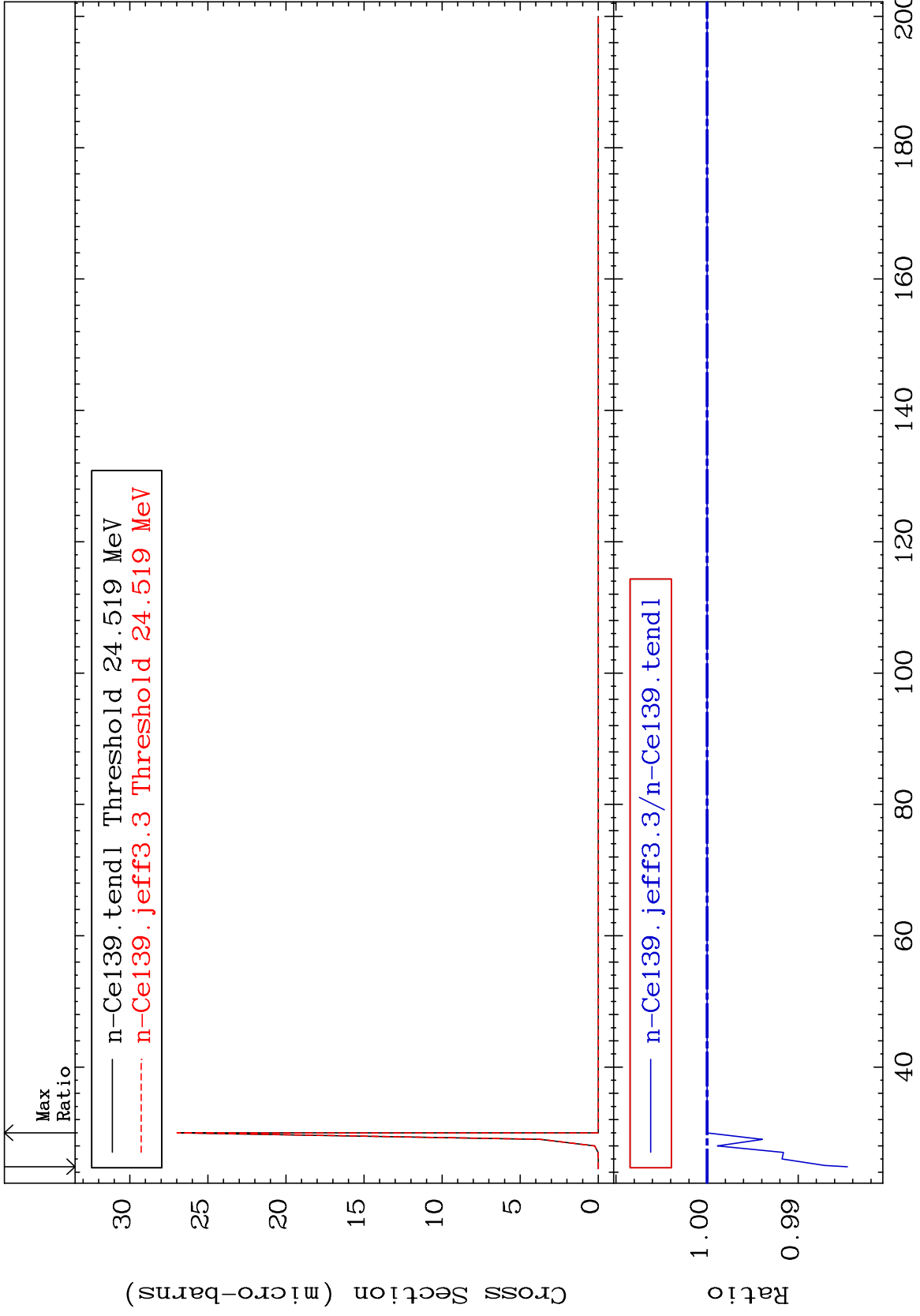
58-Ce-139
-1.734 To 0.141 %



MAT 5834

(n,3n) p
Cross Section

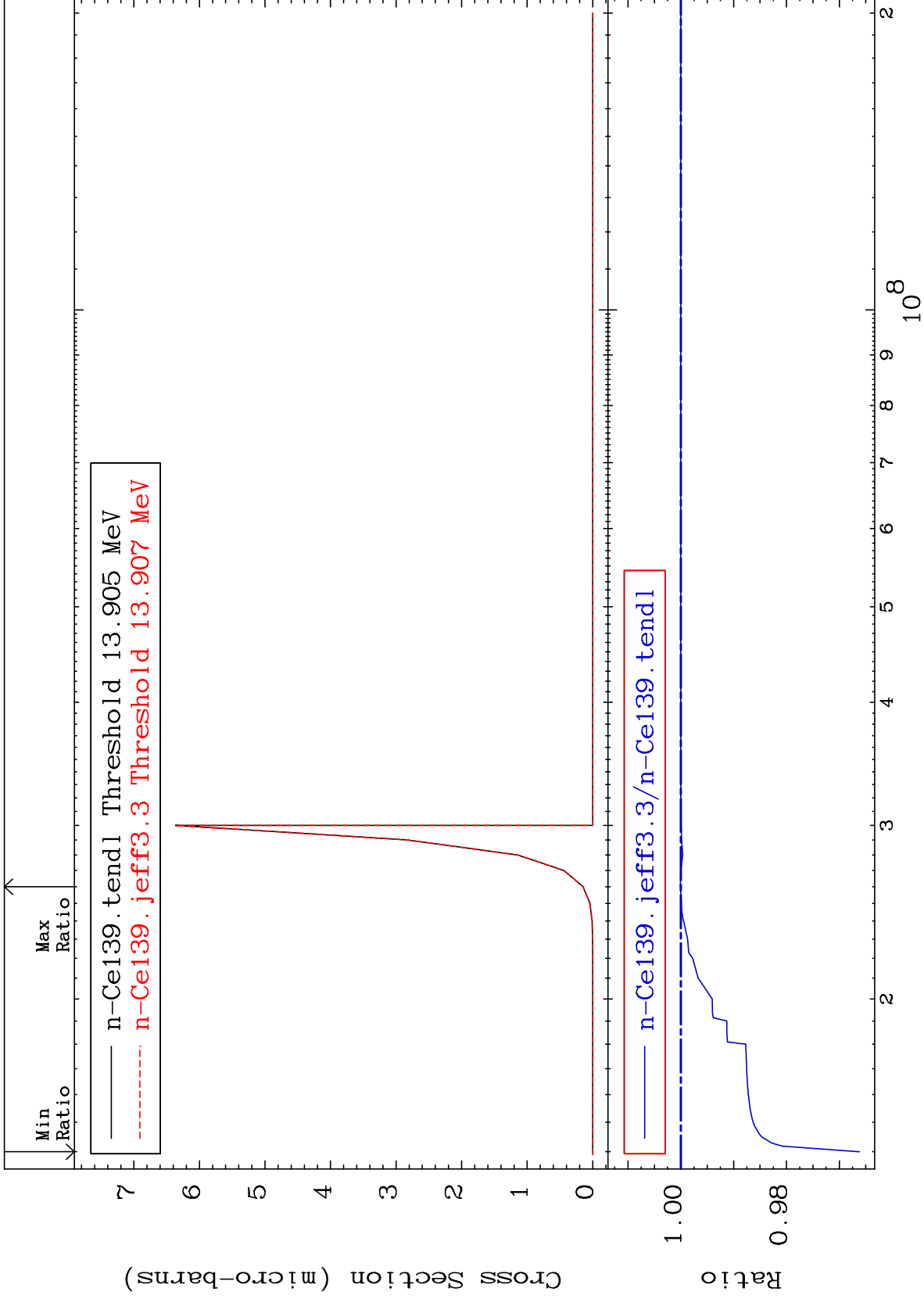
58-Ce-139
-1.542 To 0.005 %



MAT 5834

(n,2n) p
Cross Section

58-Ce-139
-3.380 To 0.008 %



18

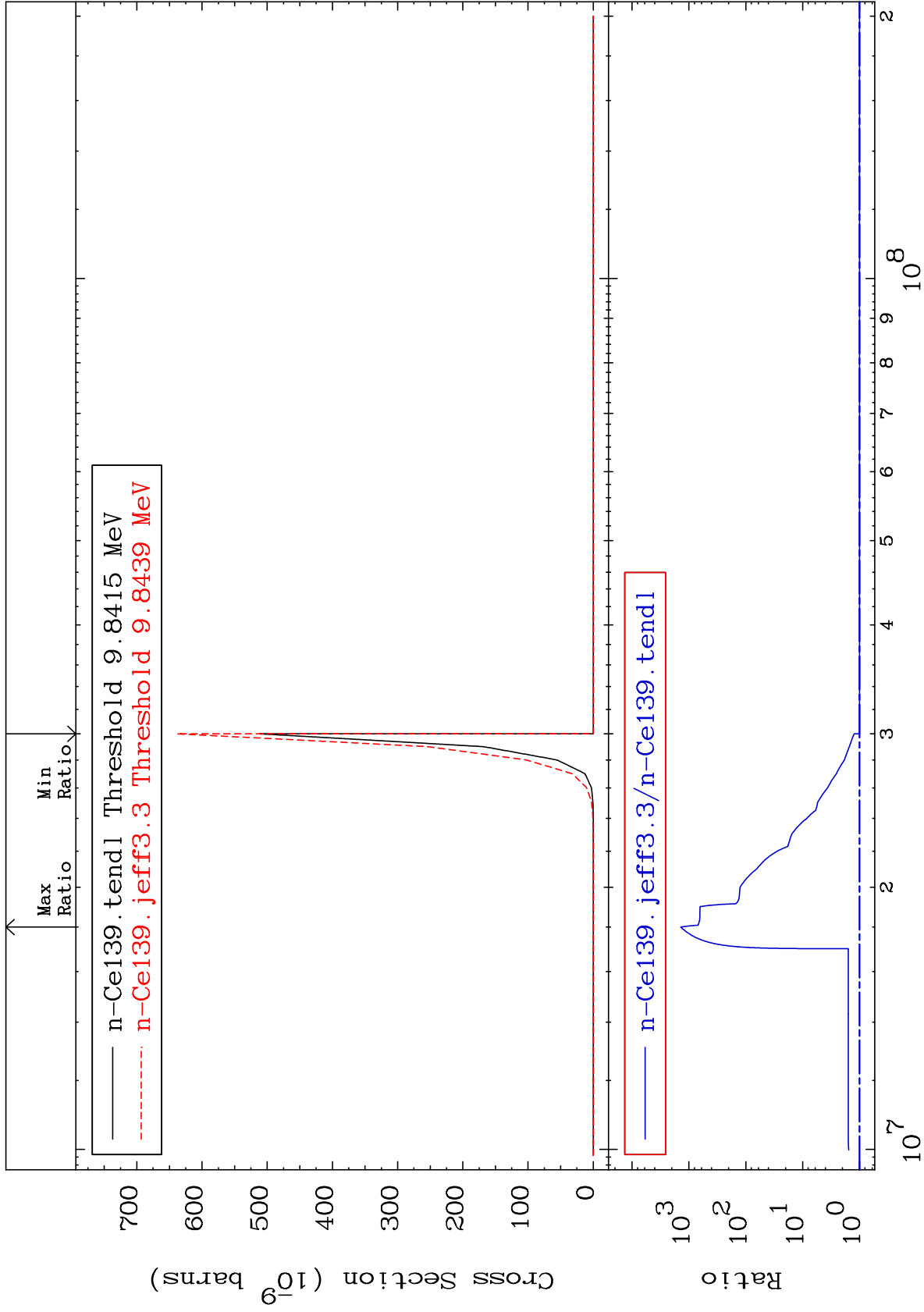
Incident Energy (eV)

58-Ce-139

MAT 5834

(n,n') p α
Cross Section

58-Ce-139
To 9999. %



19

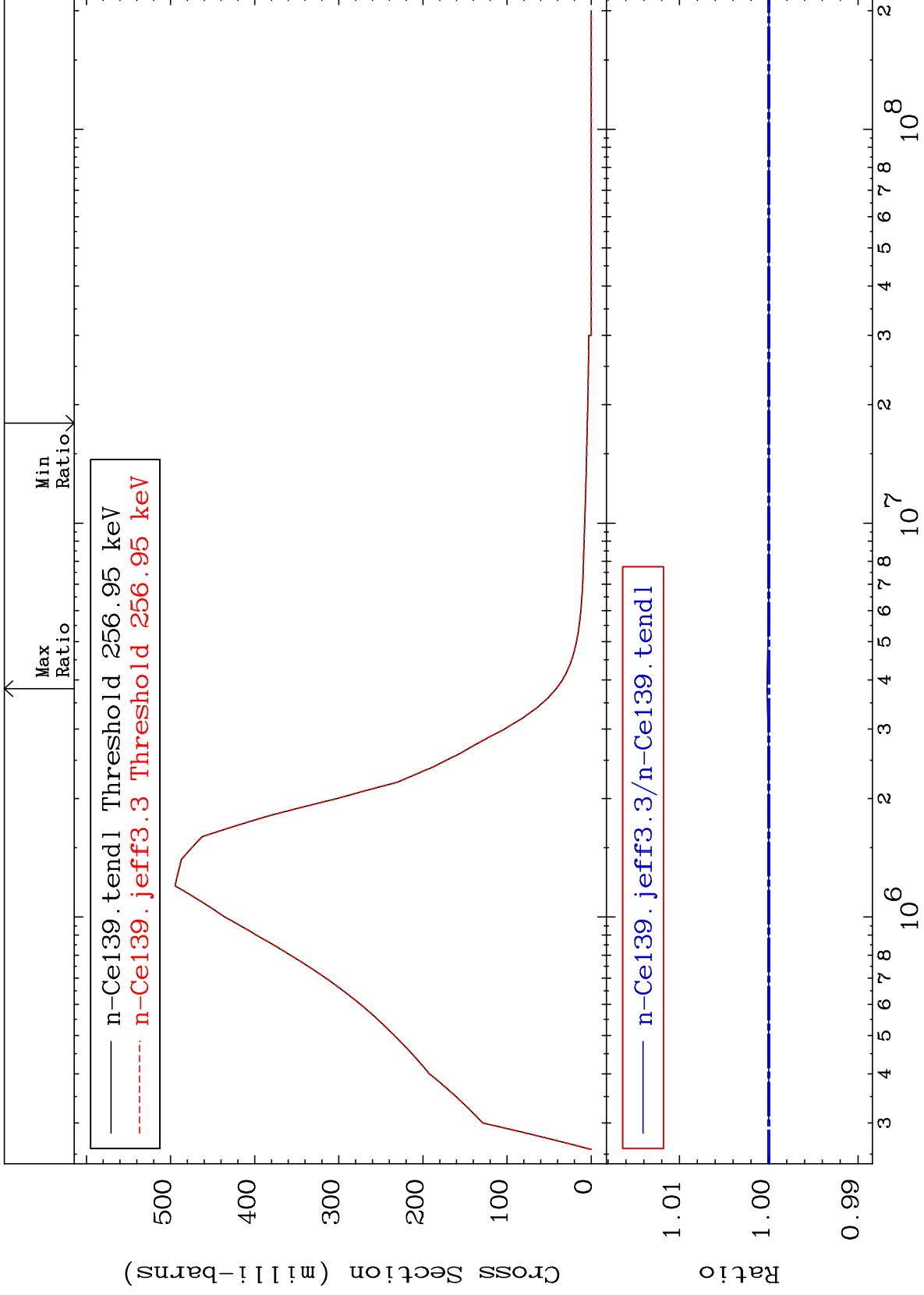
Incident Energy (eV)

58-Ce-139

MAT 5834

MT= 51 (n,n') Level
Cross Section

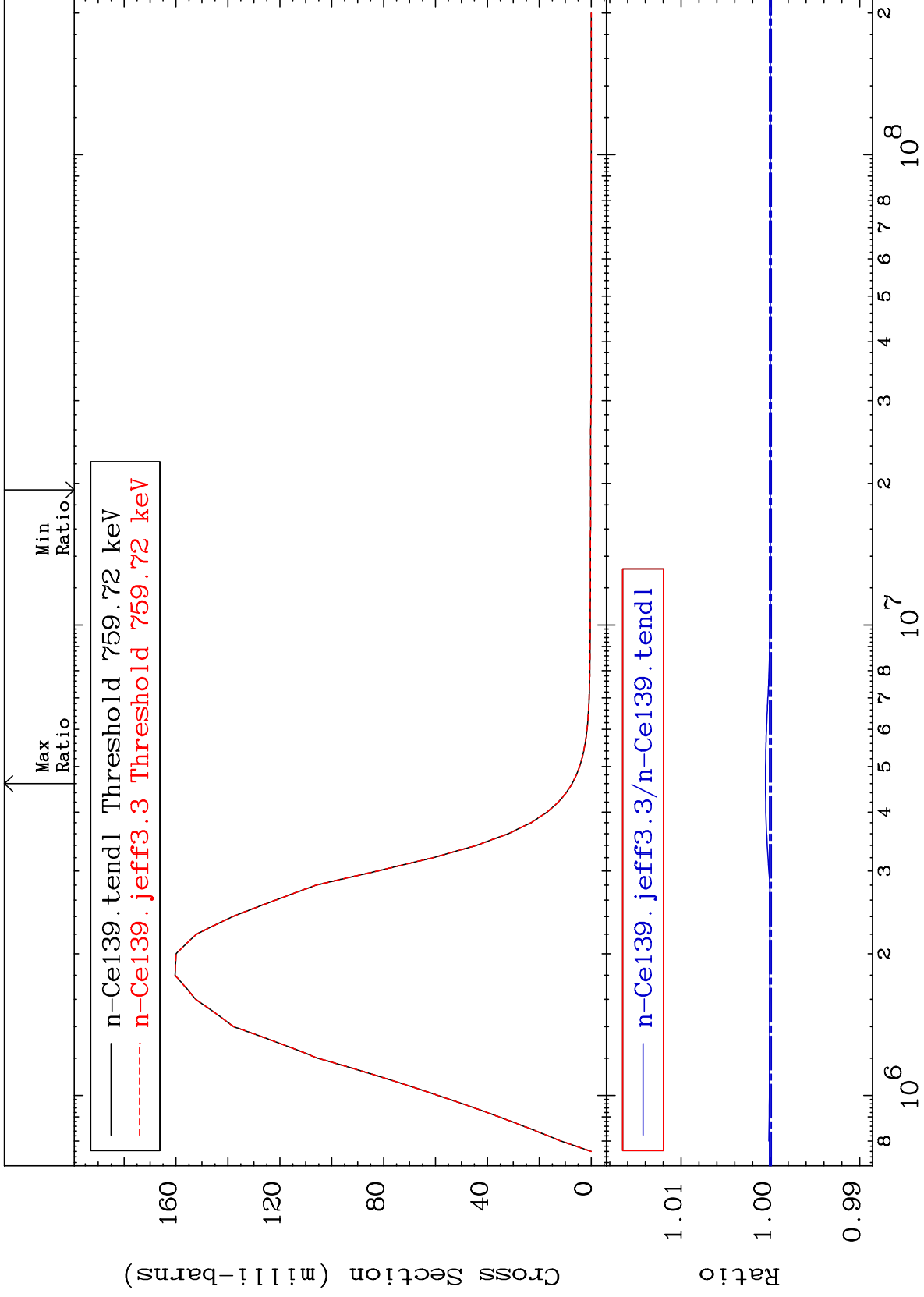
58-Ce-139
To 0.019 %



MAT 5834

MT= 52 (n,n') Level
Cross Section

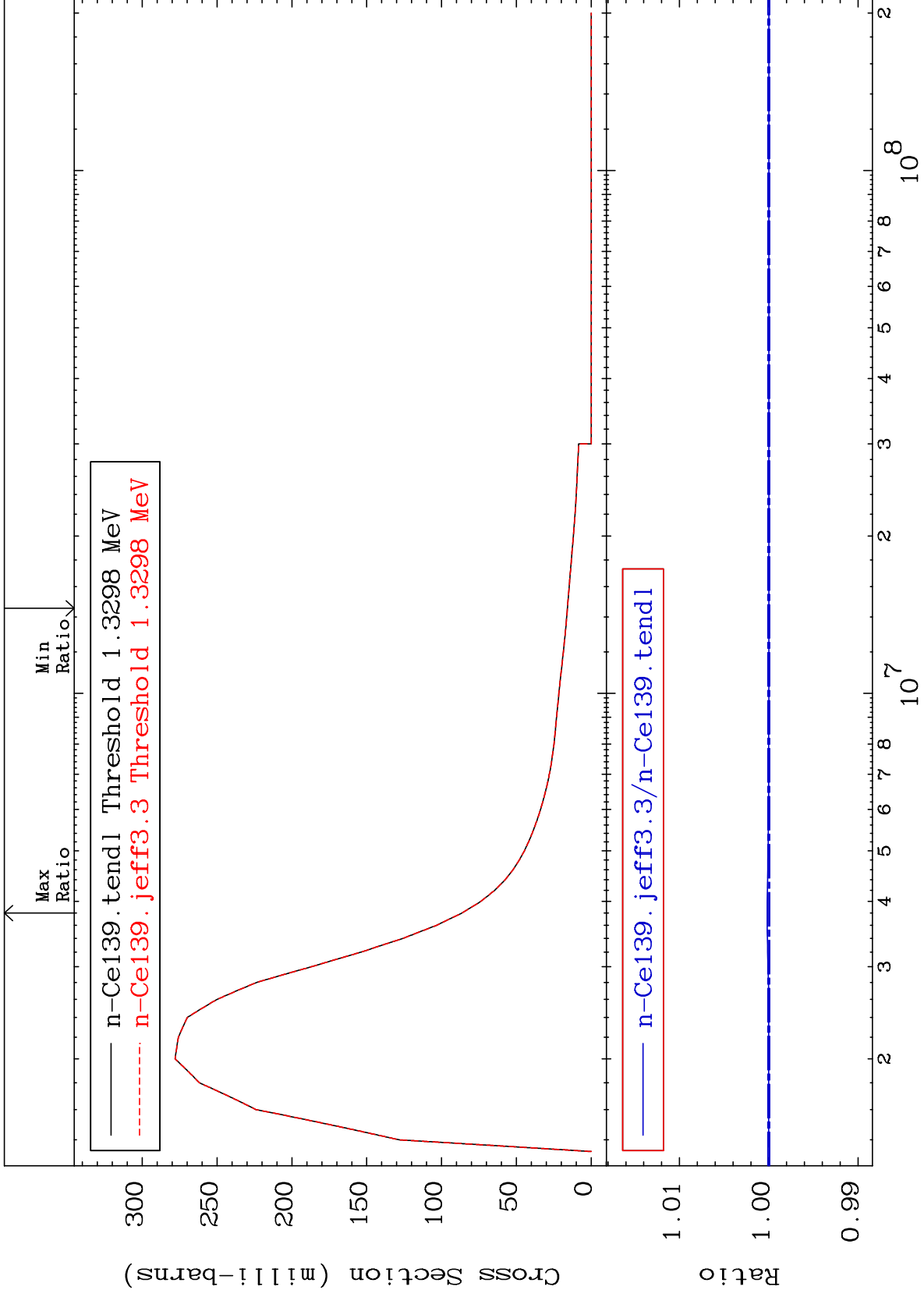
58-Ce-139
To 0.055 %



MAT 5834

MT= 53 (n,n') Level
Cross Section

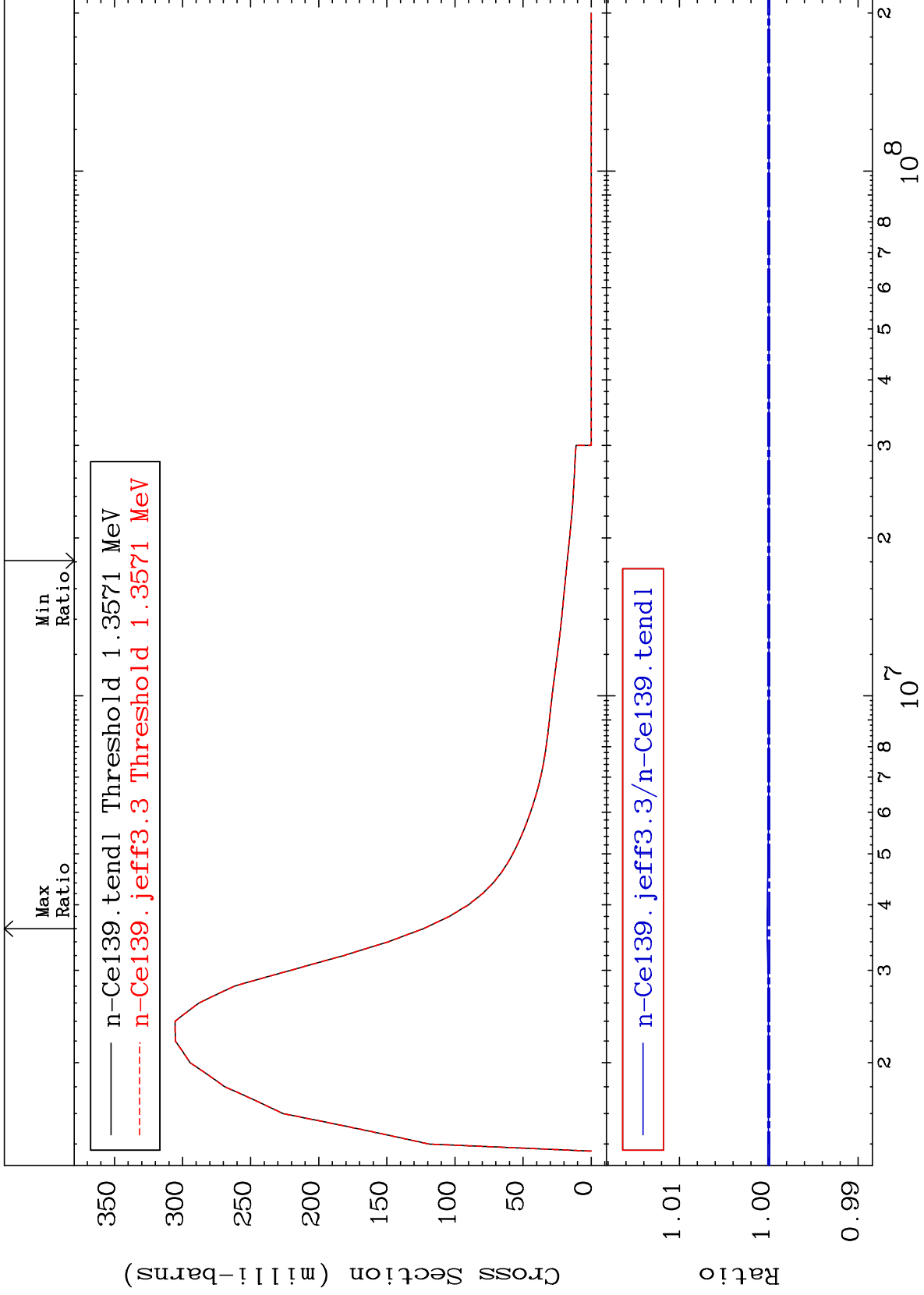
58-Ce-139
To 0.018 %



MAT 5834

MT= 54 (n,n') Level
Cross Section

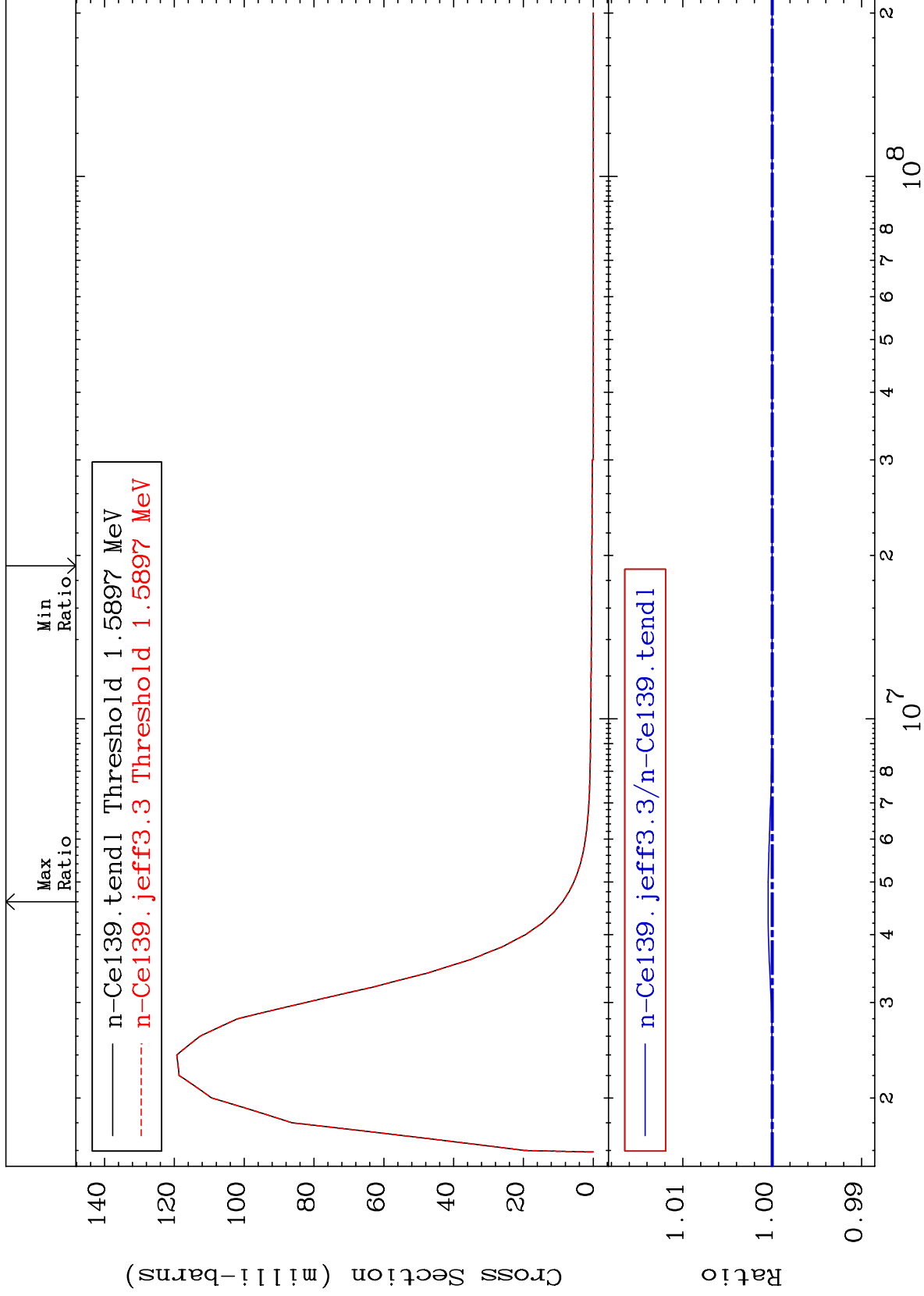
58-Ce-139
To 0.019 %



MAT 5834

MT= 55 (n,n') Level
Cross Section

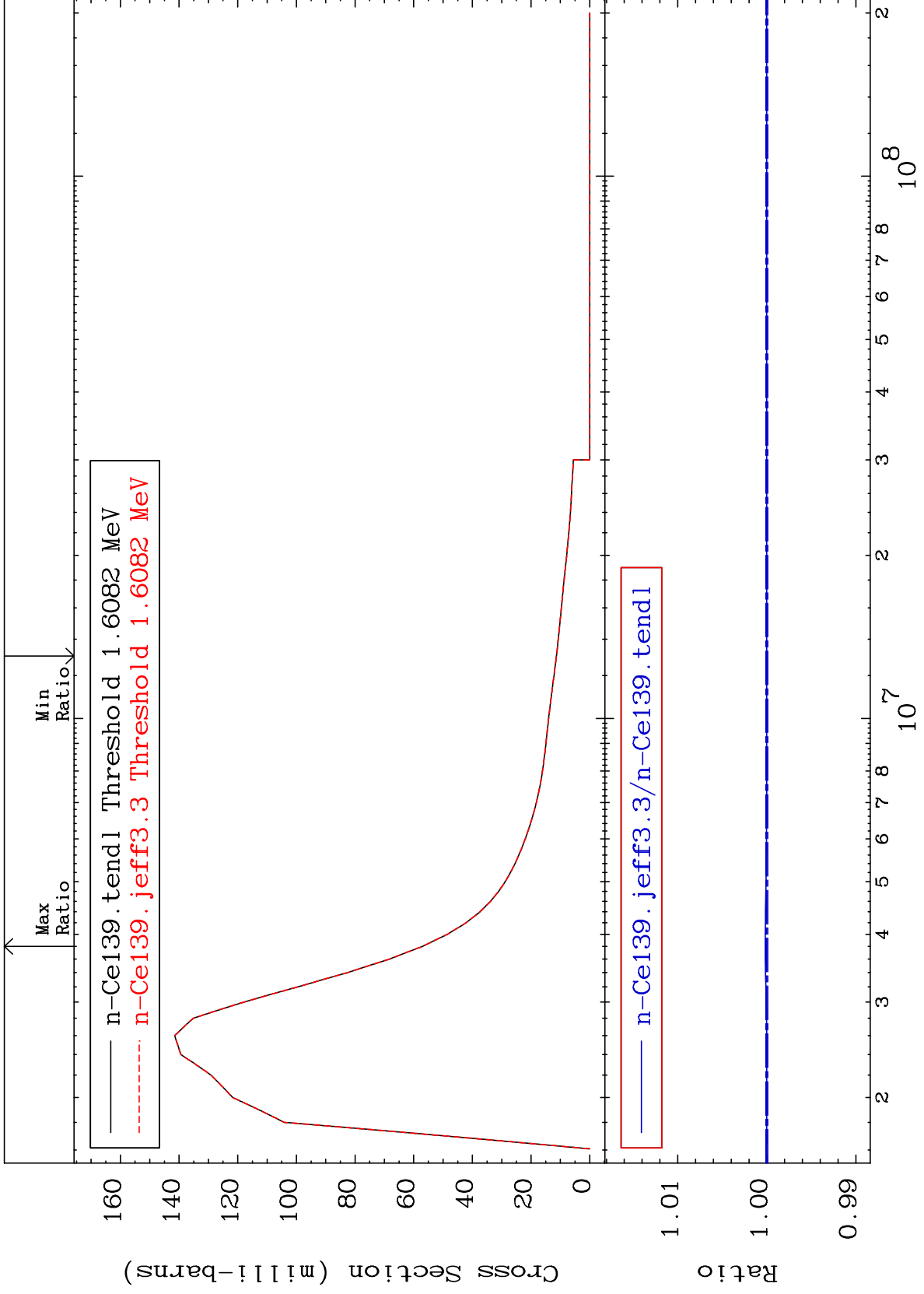
58-Ce-139
To 0.046 %



MAT 5834

MT= 56 (n,n') Level
Cross Section

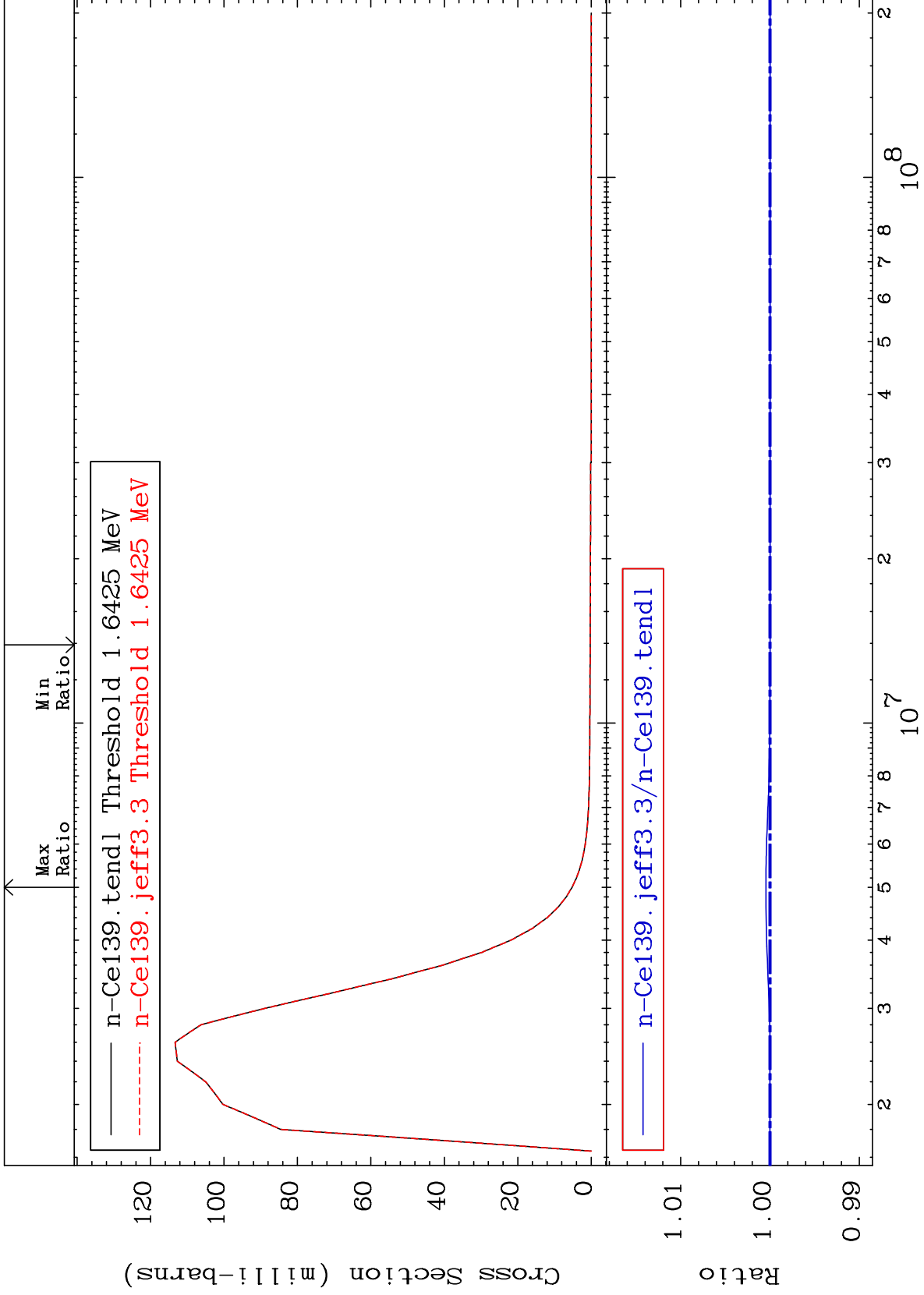
58-Ce-139
To 0.018 %



MAT 5834

MT= 57 (n,n') Level
Cross Section

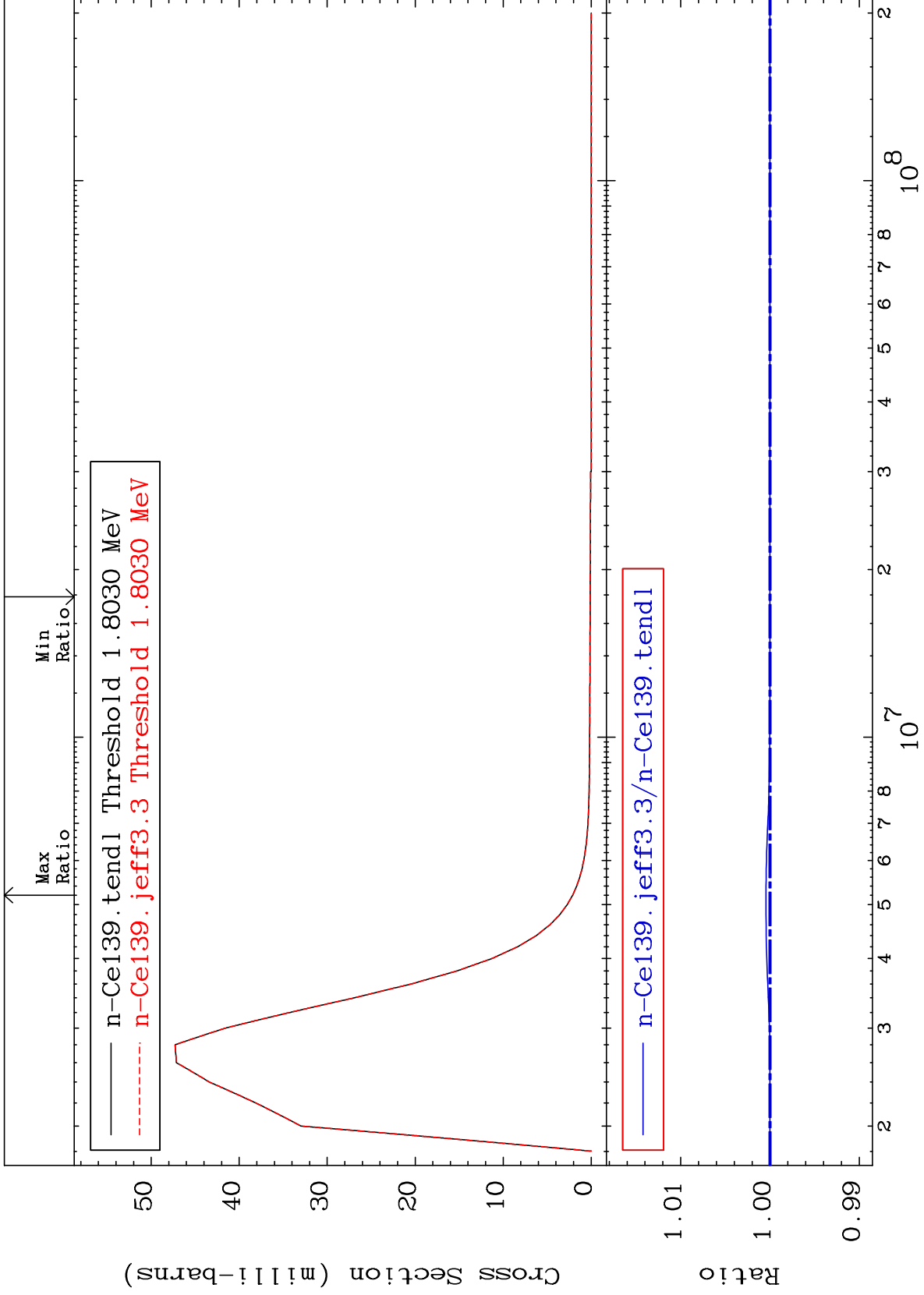
58-Ce-139
To 0.047 %



MAT 5834

MT= 58 (n,n') Level
Cross Section

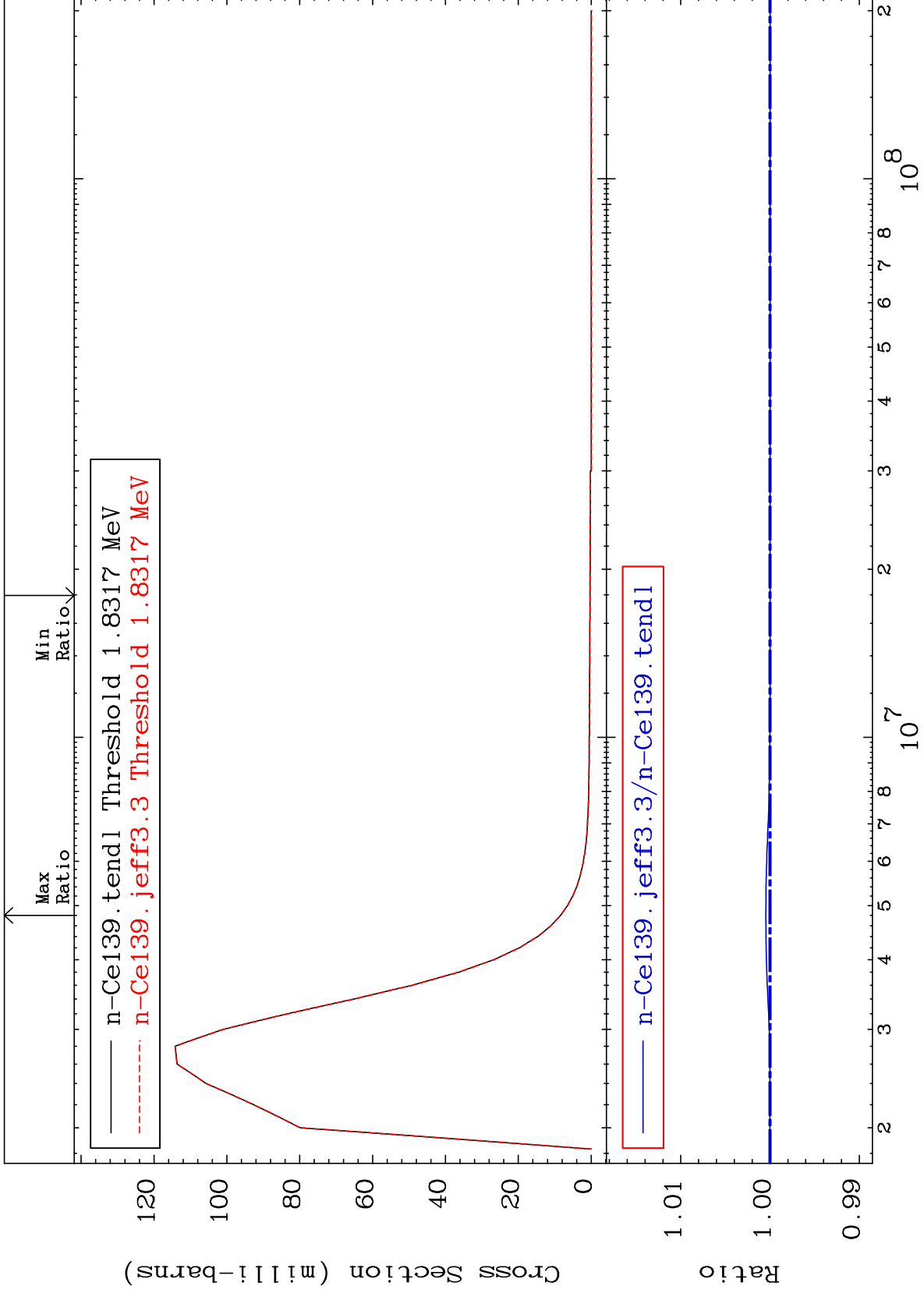
58-Ce-139
To 0.046 %



MAT 5834

MT= 59 (n,n') Level
Cross Section

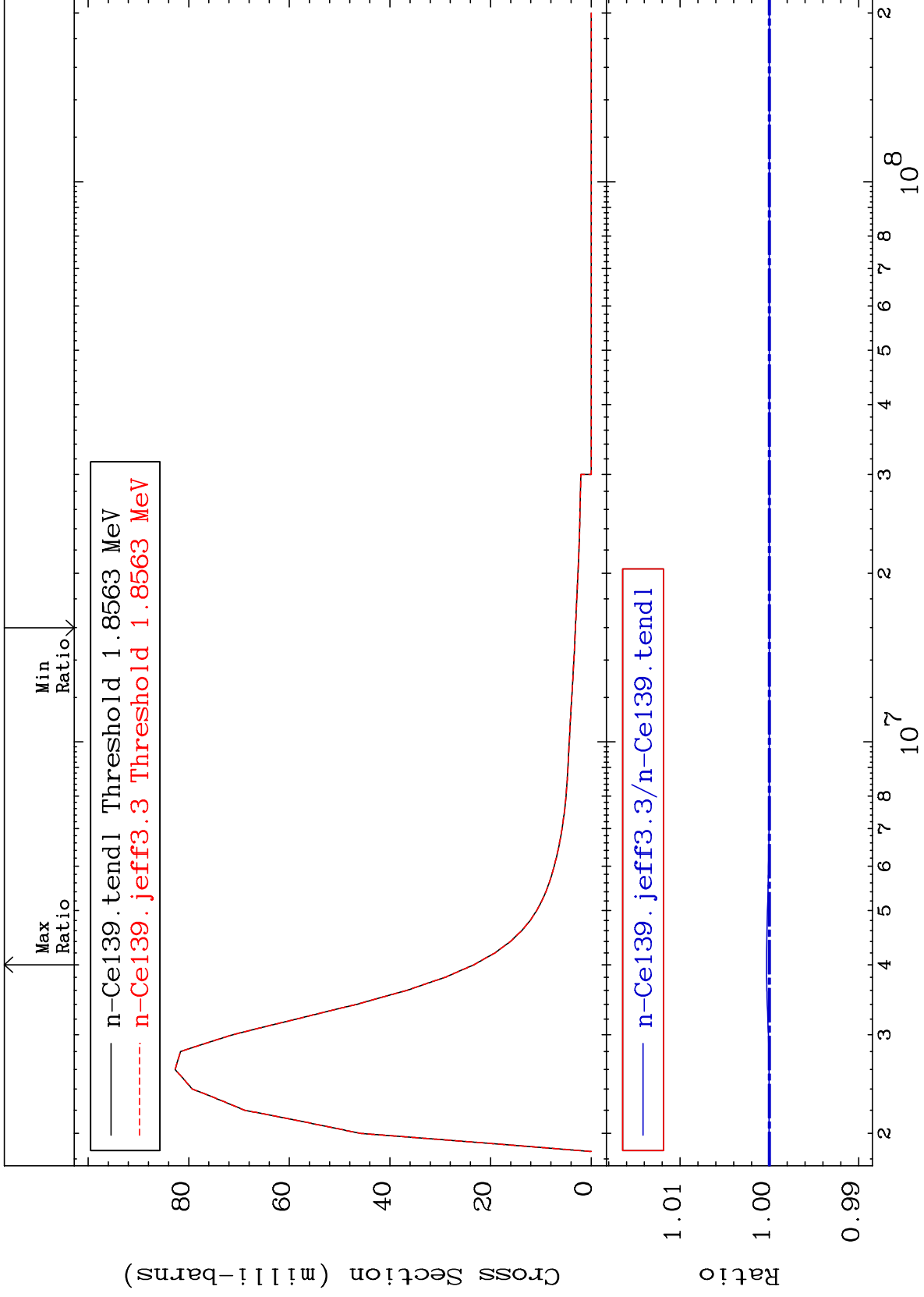
58-Ce-139
To 0.047 %



MAT 5834

MT= 60 (n,n') Level
Cross Section

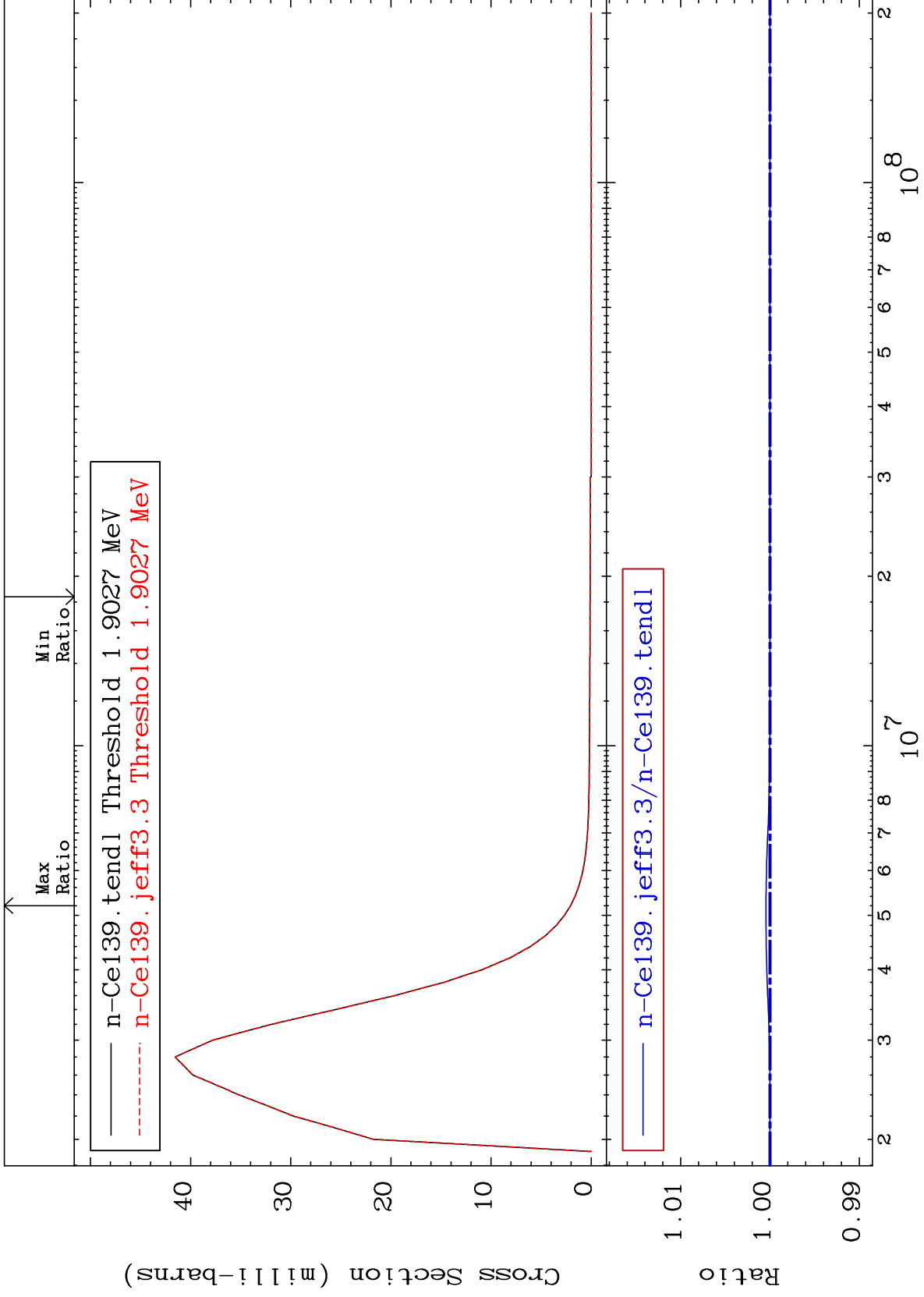
58-Ce-139
0.000 To 0.032 %



MAT 5834

MT= 61 (n,n') Level
Cross Section

58-Ce-139
To 0.046 %



30

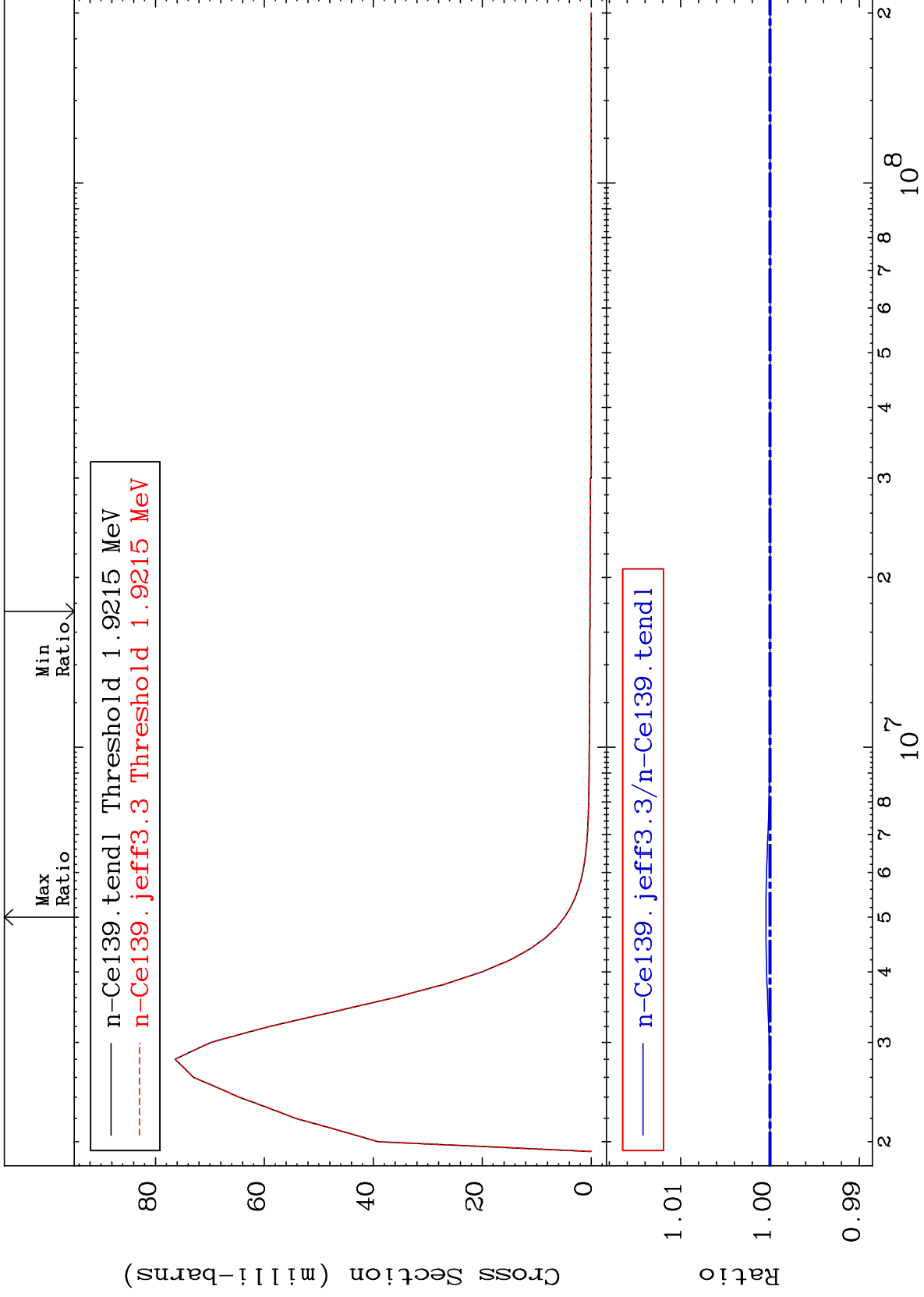
Incident Energy (eV)

58-Ce-139

MAT 5834

MT= 62 (n,n') Level
Cross Section

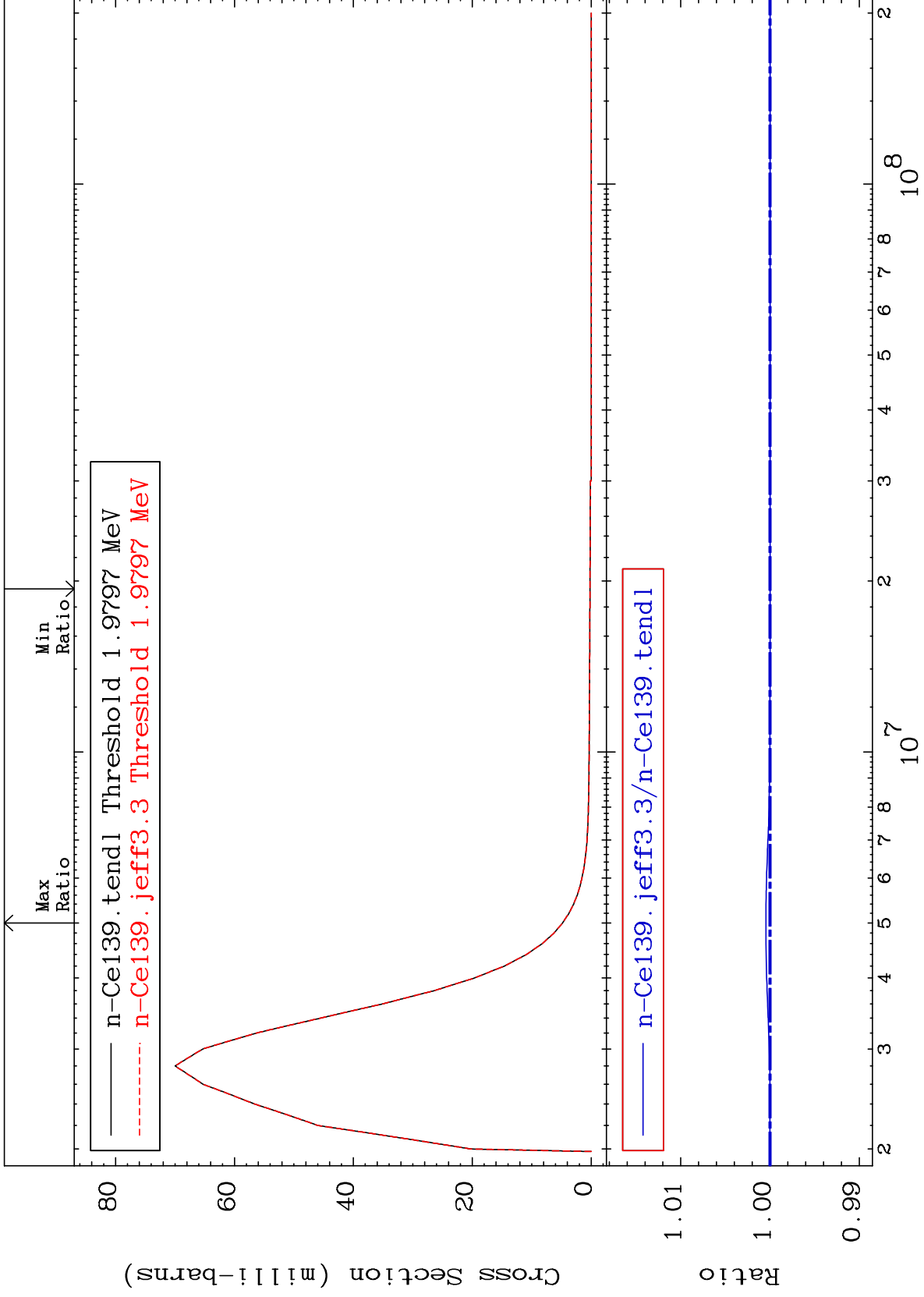
58-Ce-139
To 0.046 %



MAT 5834

MT= 63 (n,n') Level
Cross Section

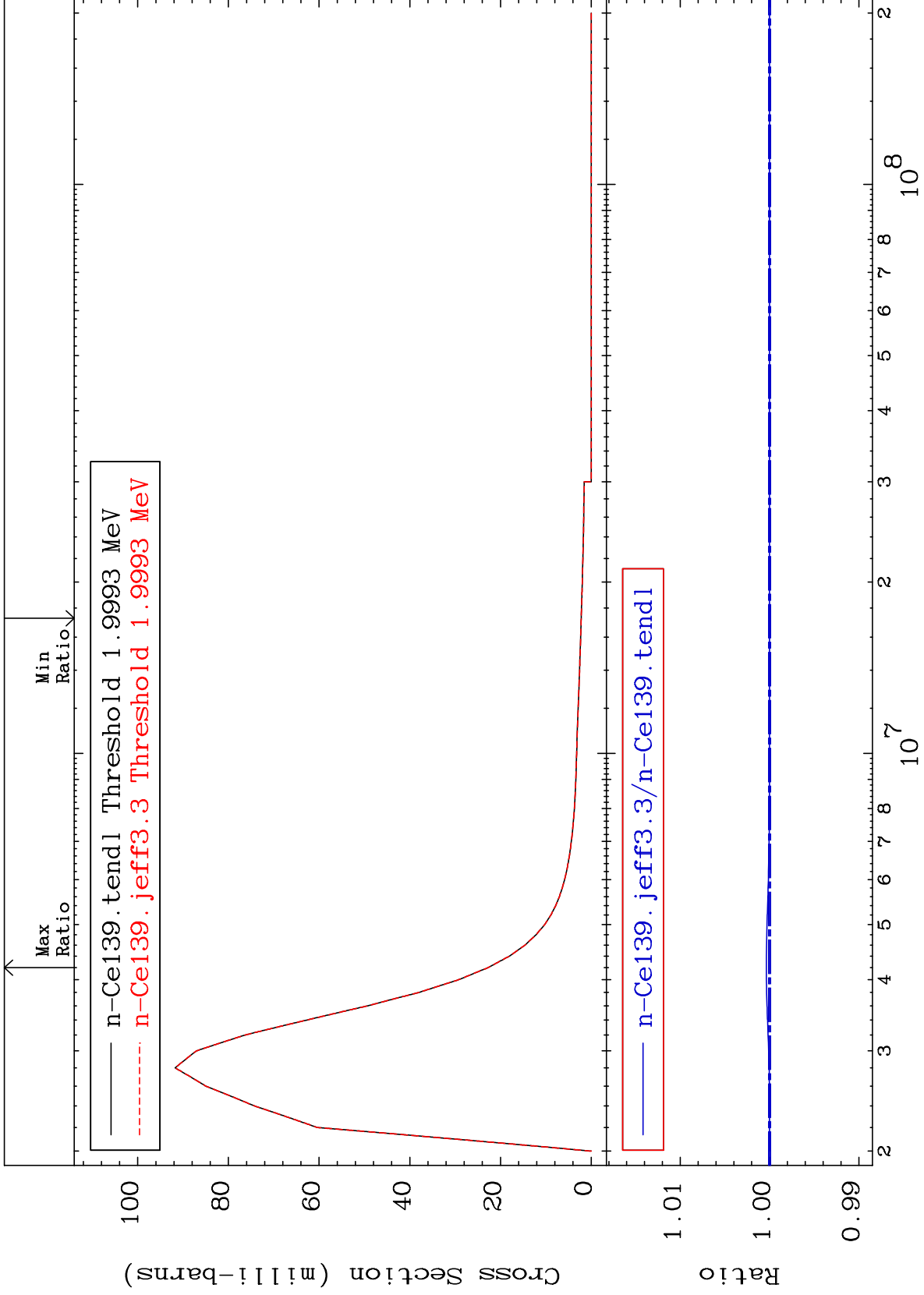
58-Ce-139
To 0.046 %



MAT 5834

MT= 64 (n,n') Level
Cross Section

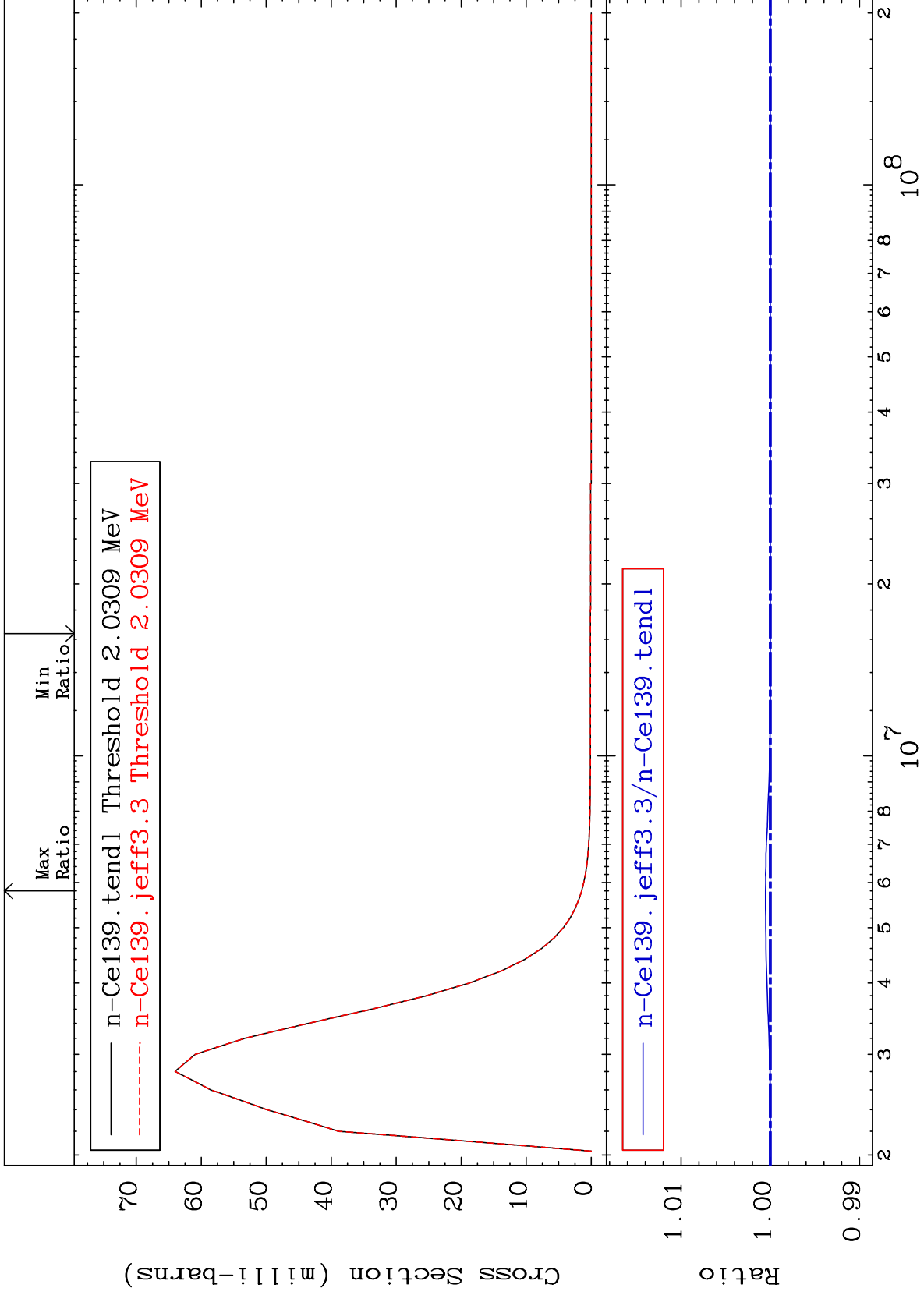
58-Ce-139
To 0.036 %



MAT 5834

MT= 65 (n,n') Level
Cross Section

58-Ce-139
To 0.053 %

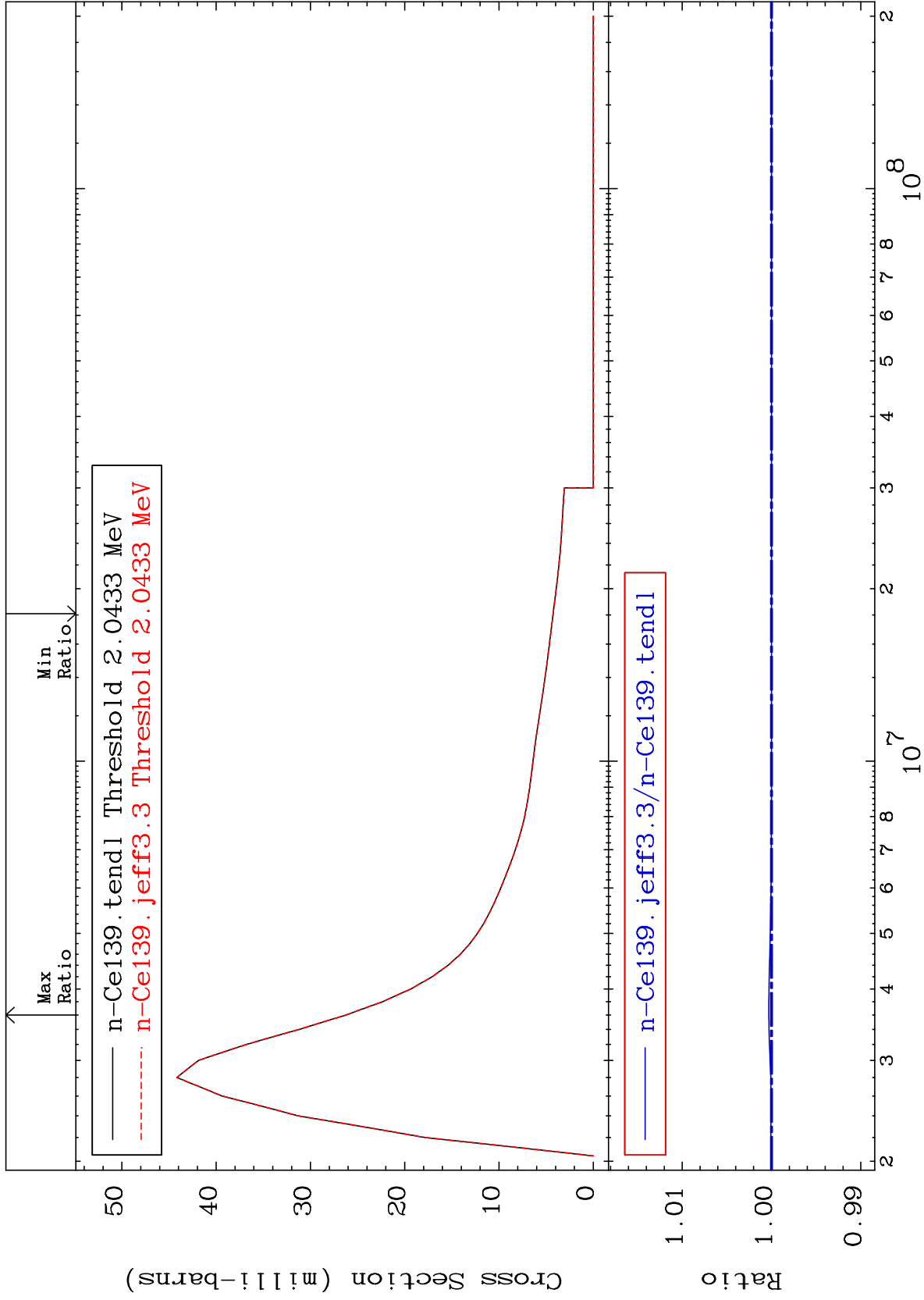


MAT 5834

MT= 66 (n,n') Level

58-Ce-139

Cross Section
0.000 To 0.030 %



35

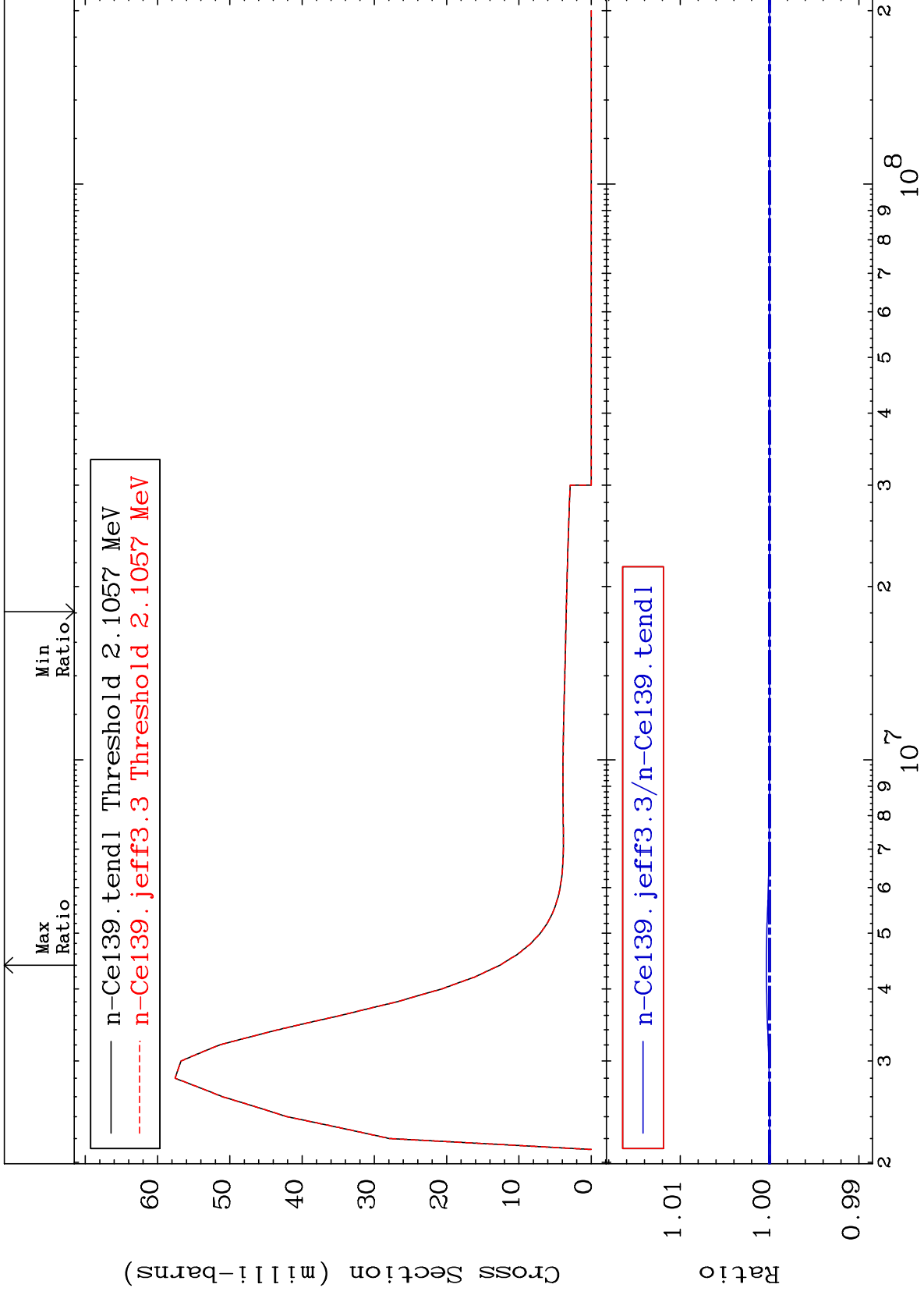
Incident Energy (eV)

58-Ce-139

MAT 5834

MT= 67 (n,n') Level
Cross Section

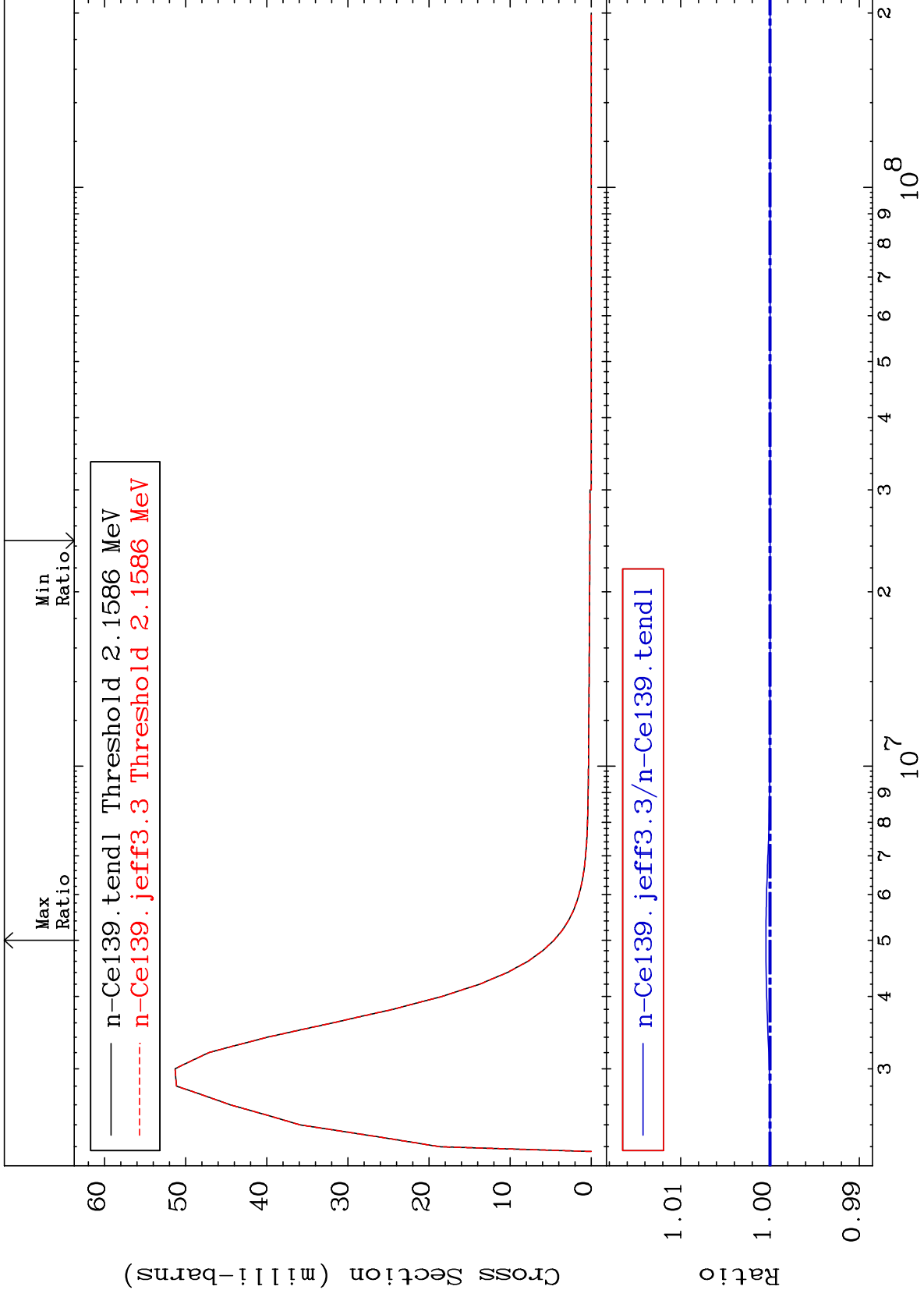
58-Ce-139
To 0.036 %



MAT 5834

MT= 68 (n,n') Level
Cross Section

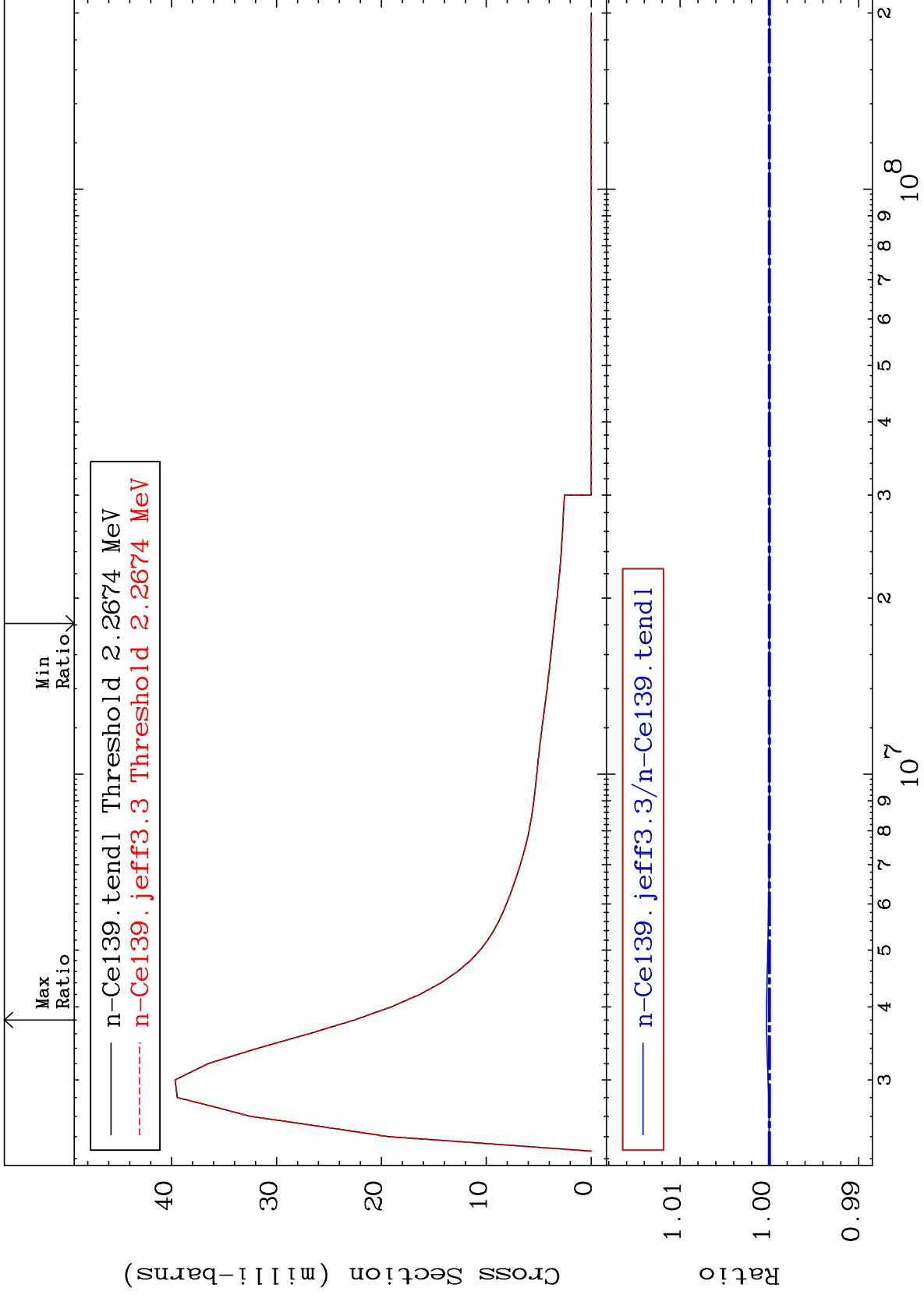
58-Ce-139
To 0.046 %



MAT 5834

MT= 69 (n,n') Level
Cross Section

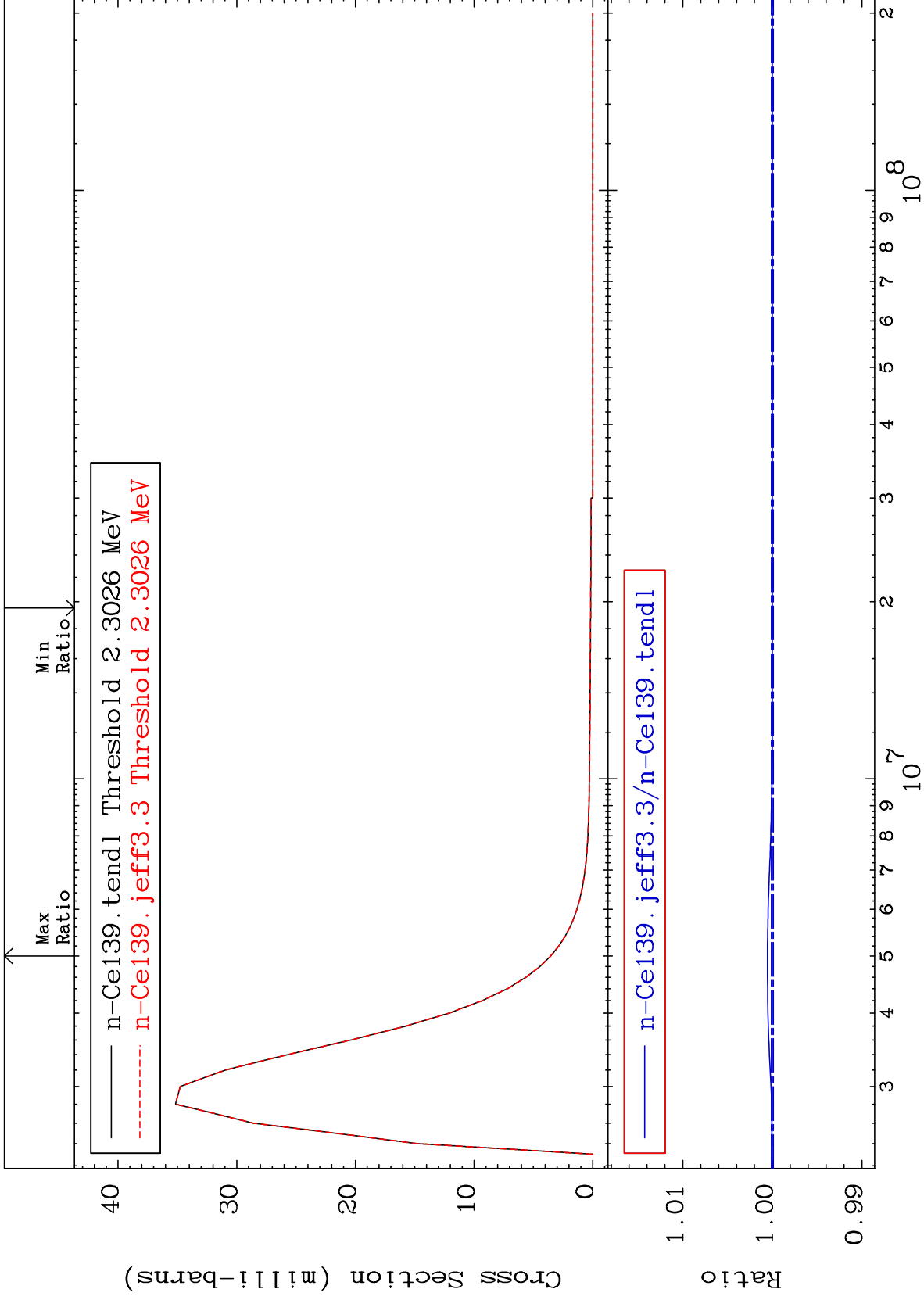
58-Ce-139
To 0.032 %



MAT 5834

MT= 70 (n,n') Level
Cross Section

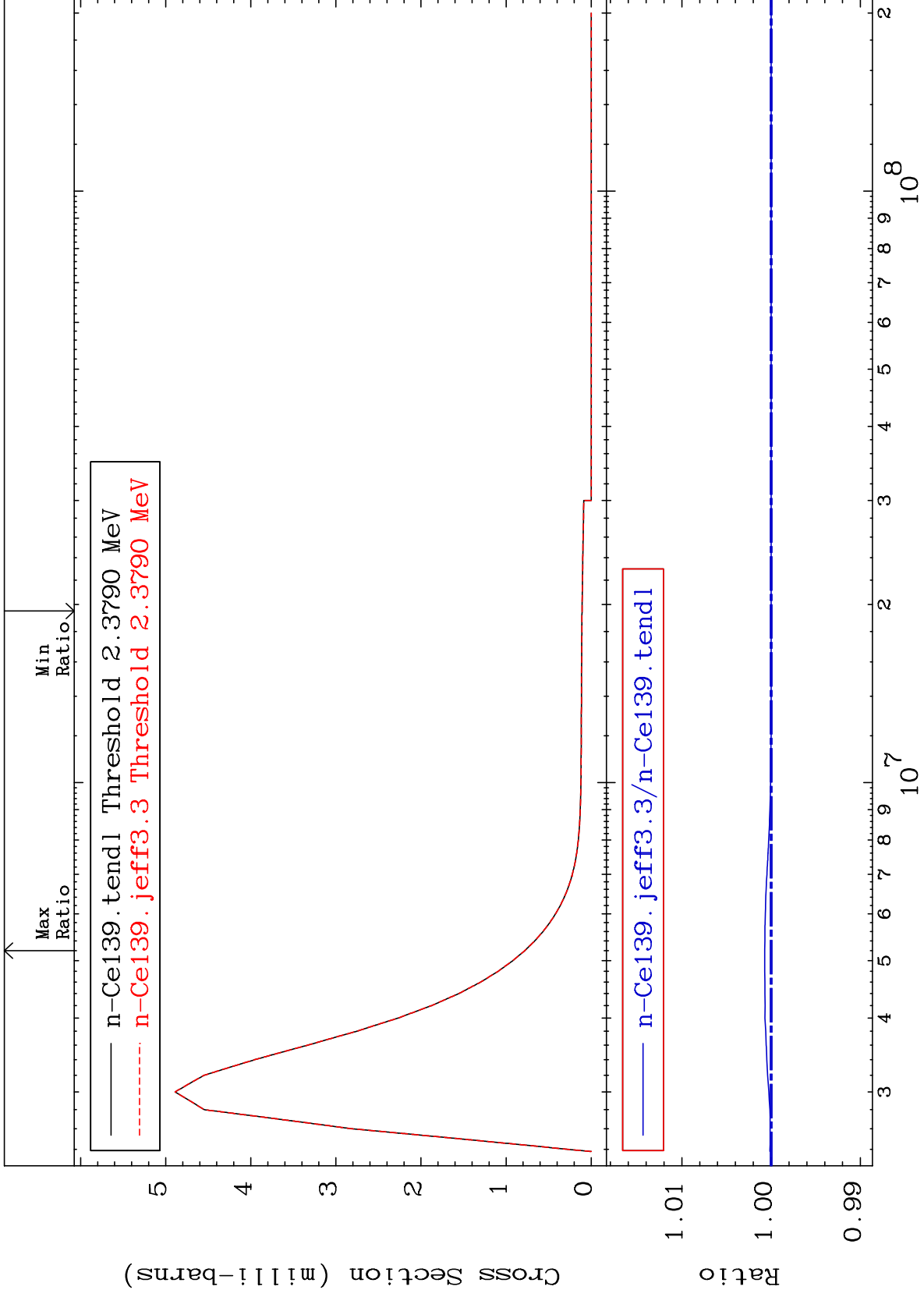
58-Ce-139
0.000 To 0.055 %



MAT 5834

MT= 71 (n,n') Level
Cross Section

58-Ce-139
0.000 To 0.072 %



40

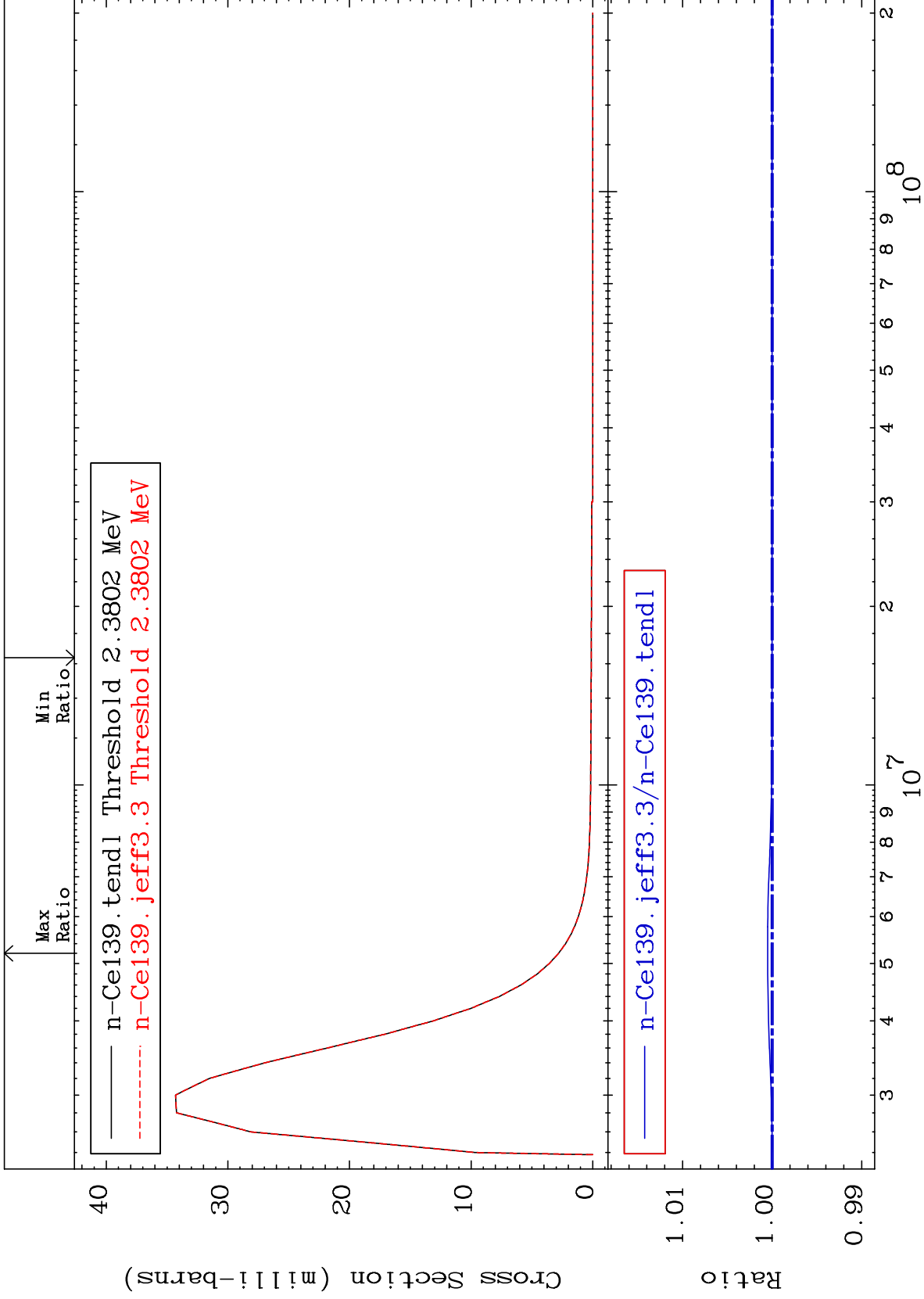
Incident Energy (eV)

58-Ce-139

MAT 5834

MT= 72 (n,n') Level
Cross Section

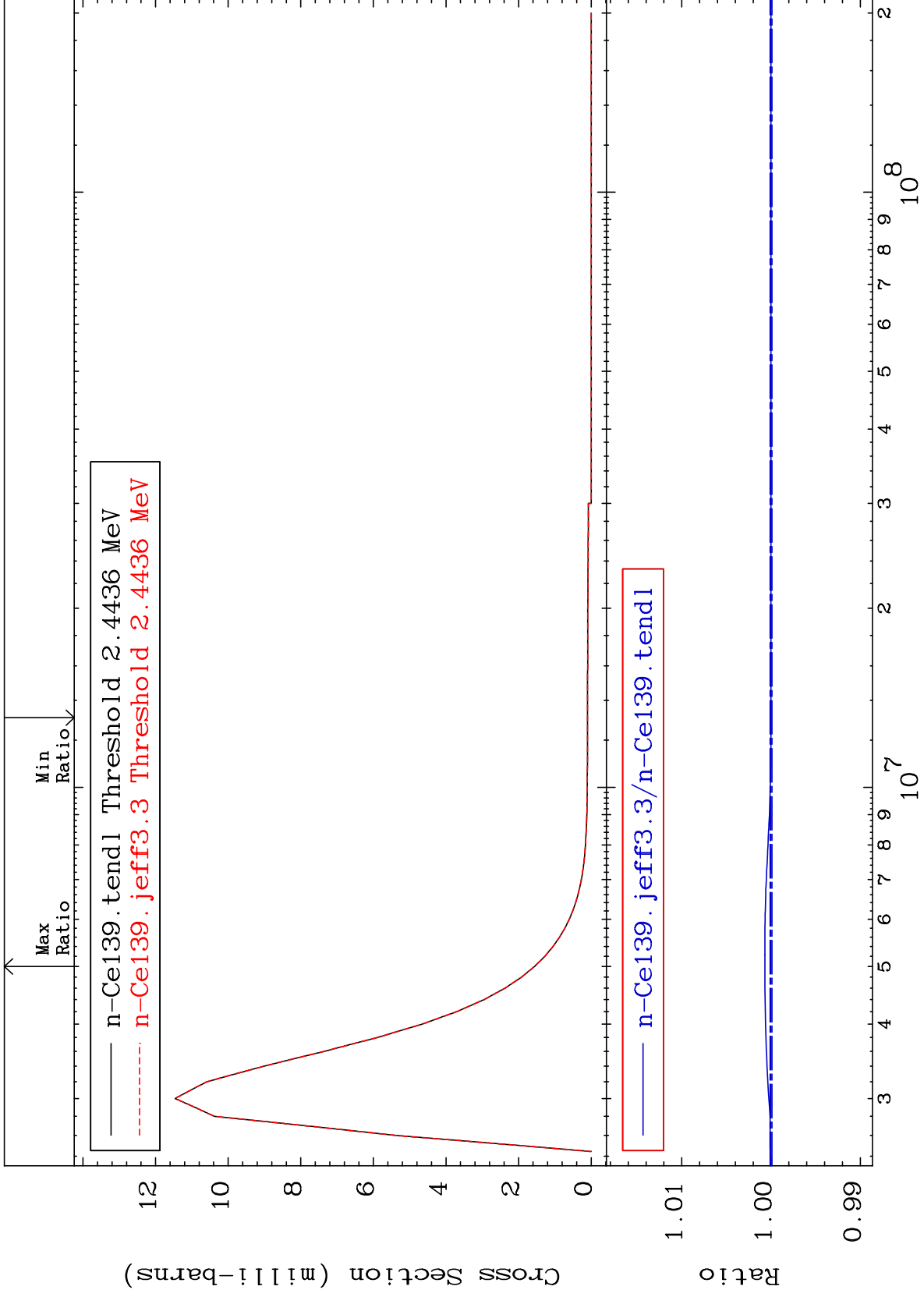
58-Ce-139
0.000 To 0.051 %



MAT 5834

MT= 73 (n,n') Level
Cross Section

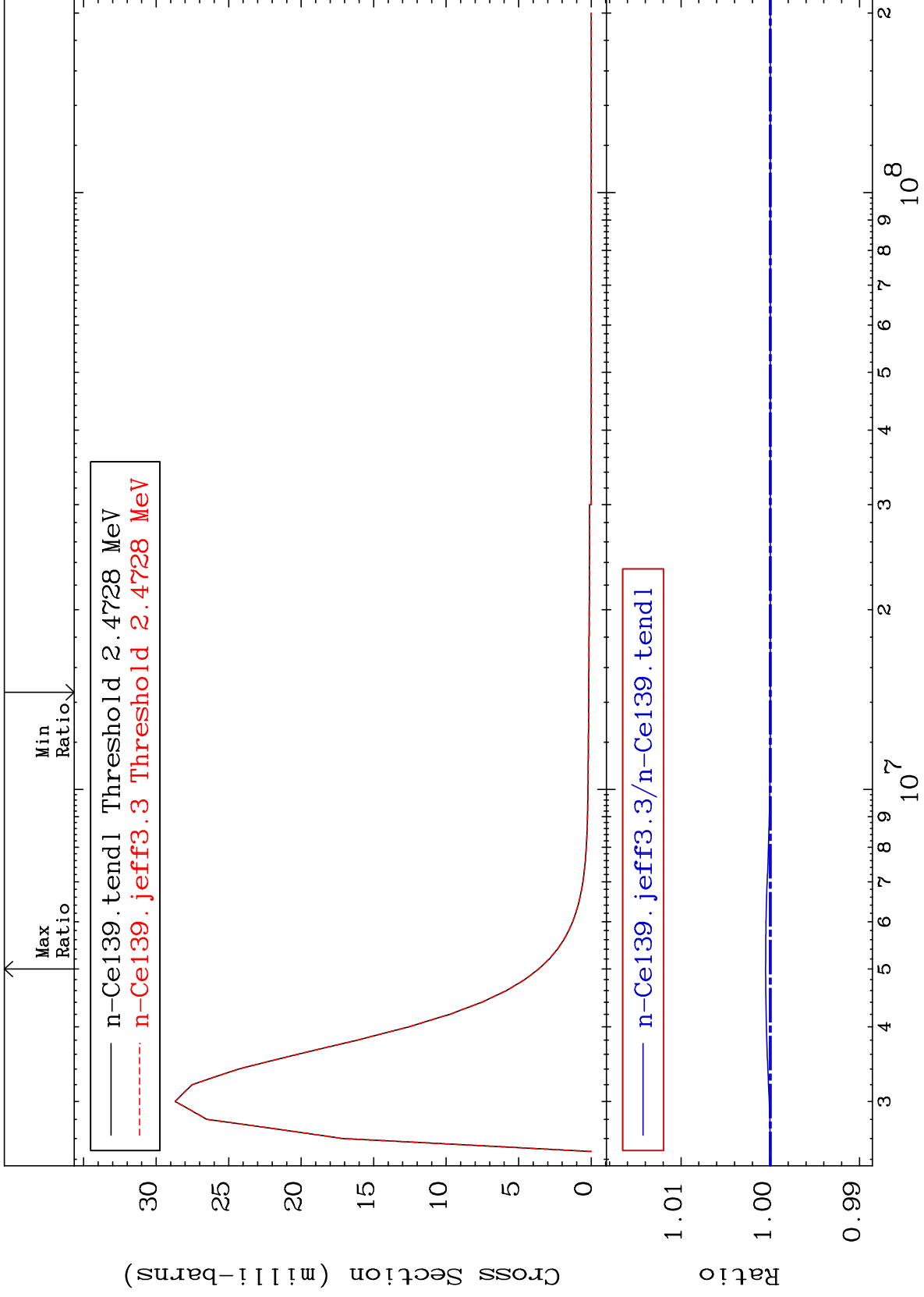
58-Ce-139
To 0.069 %



MAT 5834

MT= 74 (n,n') Level
Cross Section

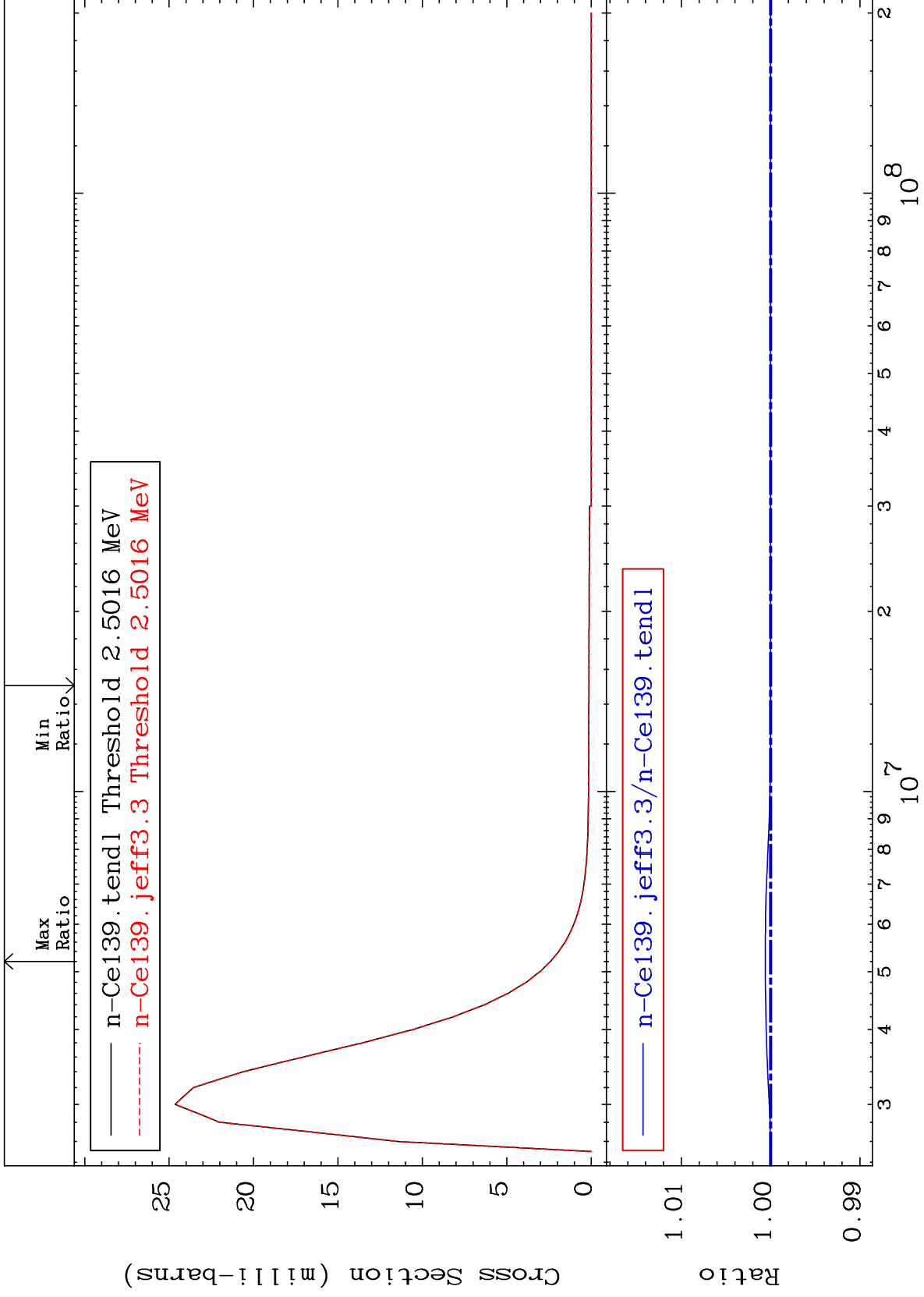
58-Ce-139
To 0.053 %



MAT 5834

MT= 75 (n,n') Level
Cross Section

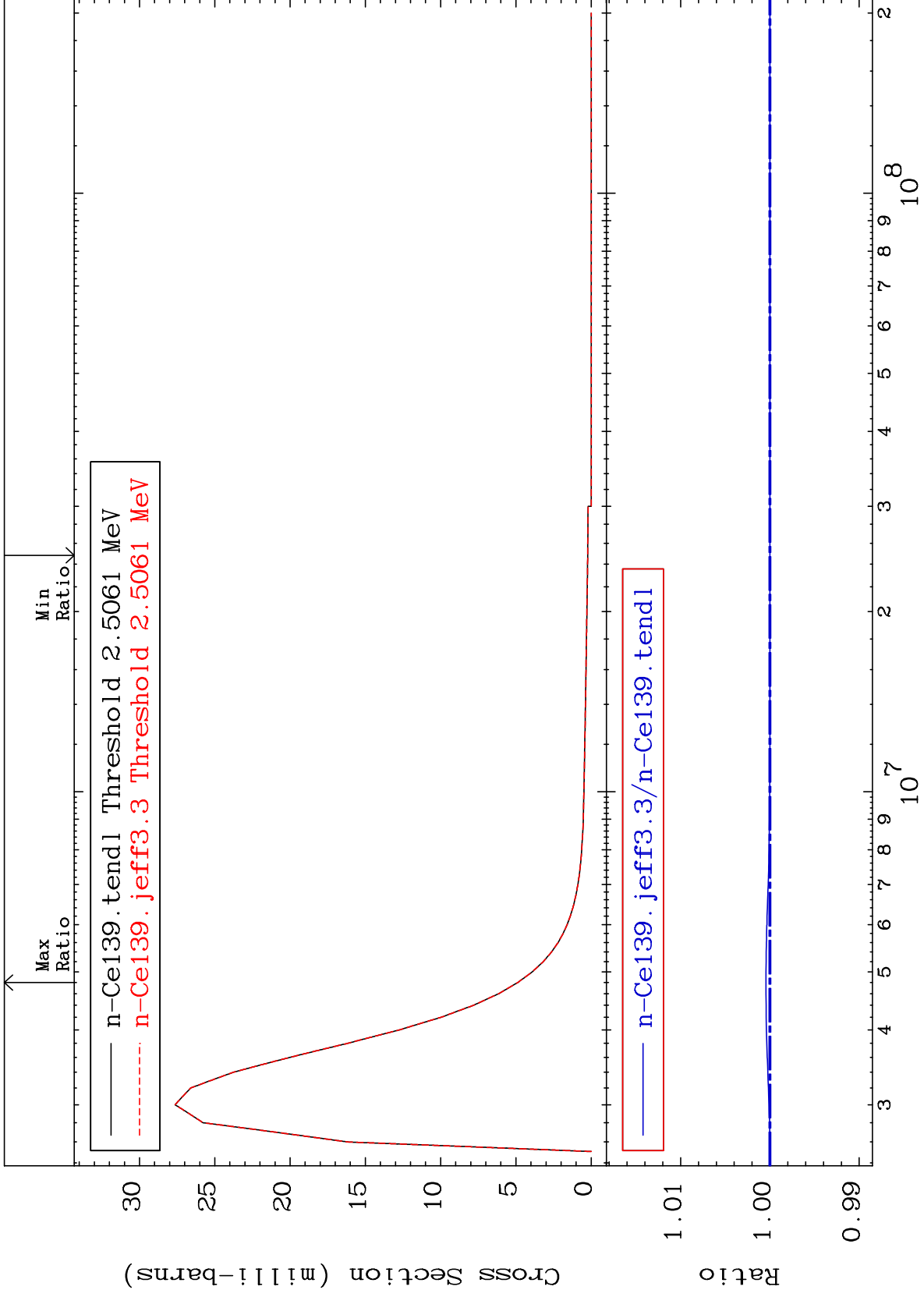
58-Ce-139
To 0.060 %



MAT 5834

MT= 76 (n,n') Level
Cross Section

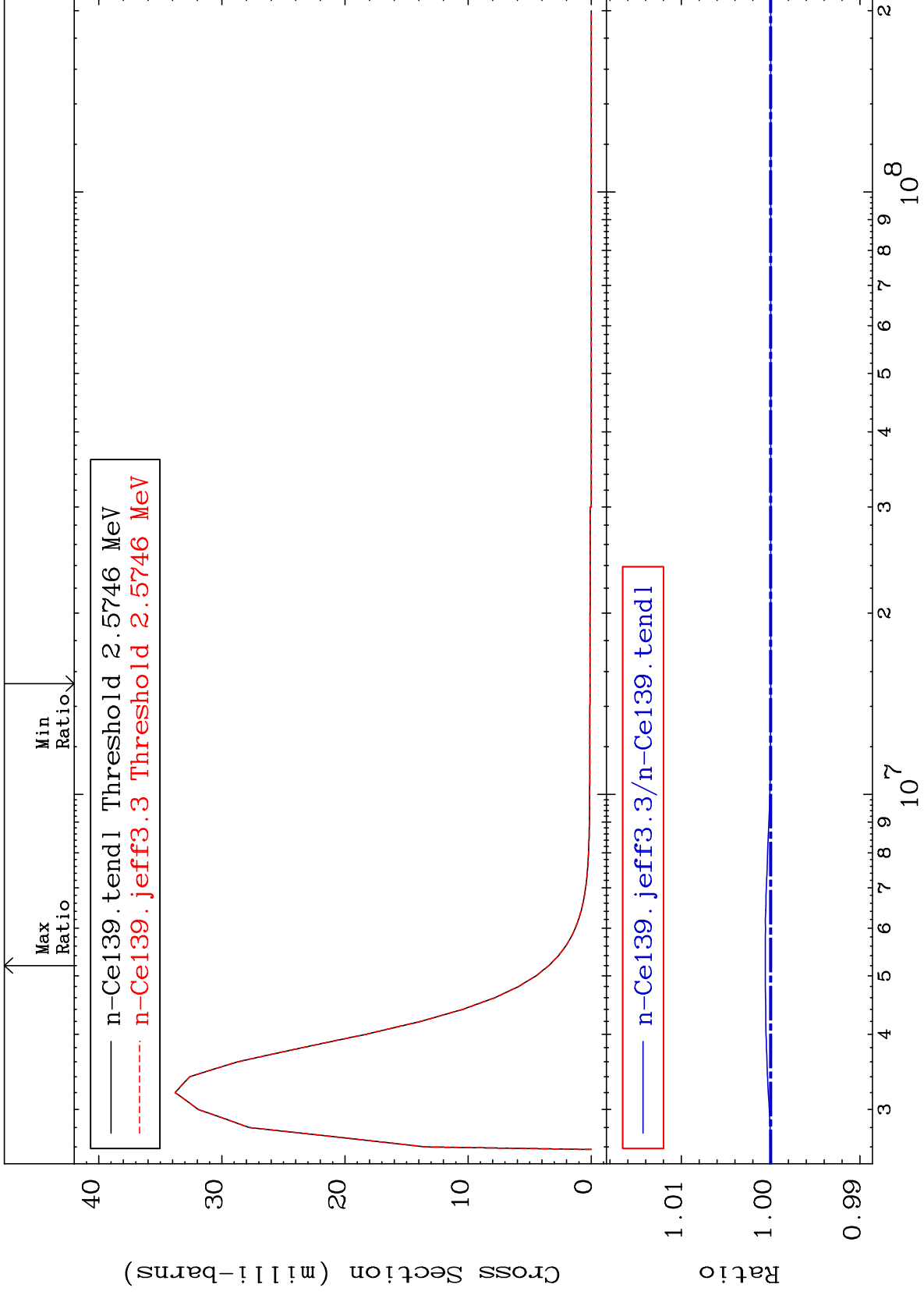
58-Ce-139
0.000 To 0.044 %



MAT 5834

MT= 77 (n,n') Level
Cross Section

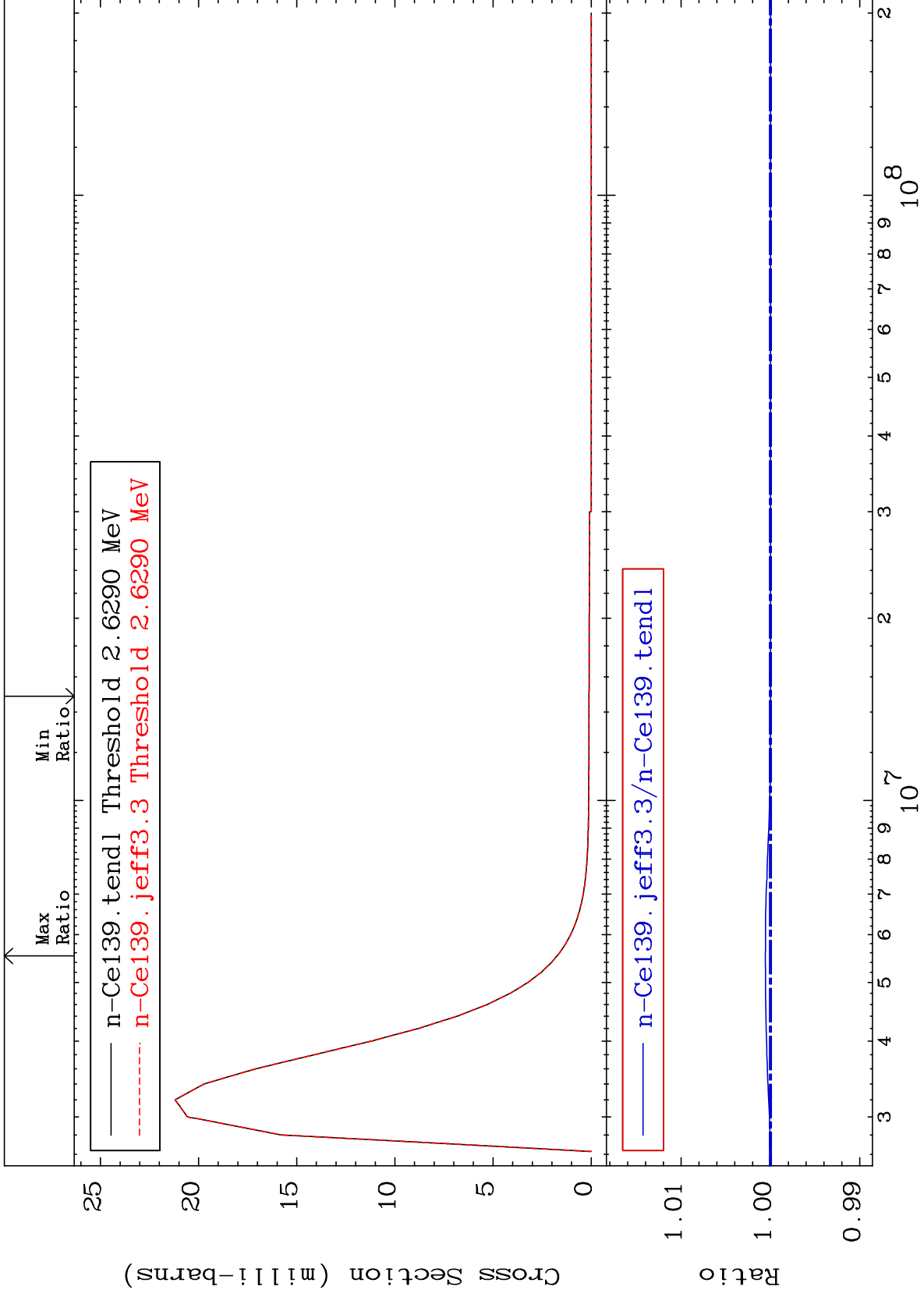
58-Ce-139
To 0.060 %



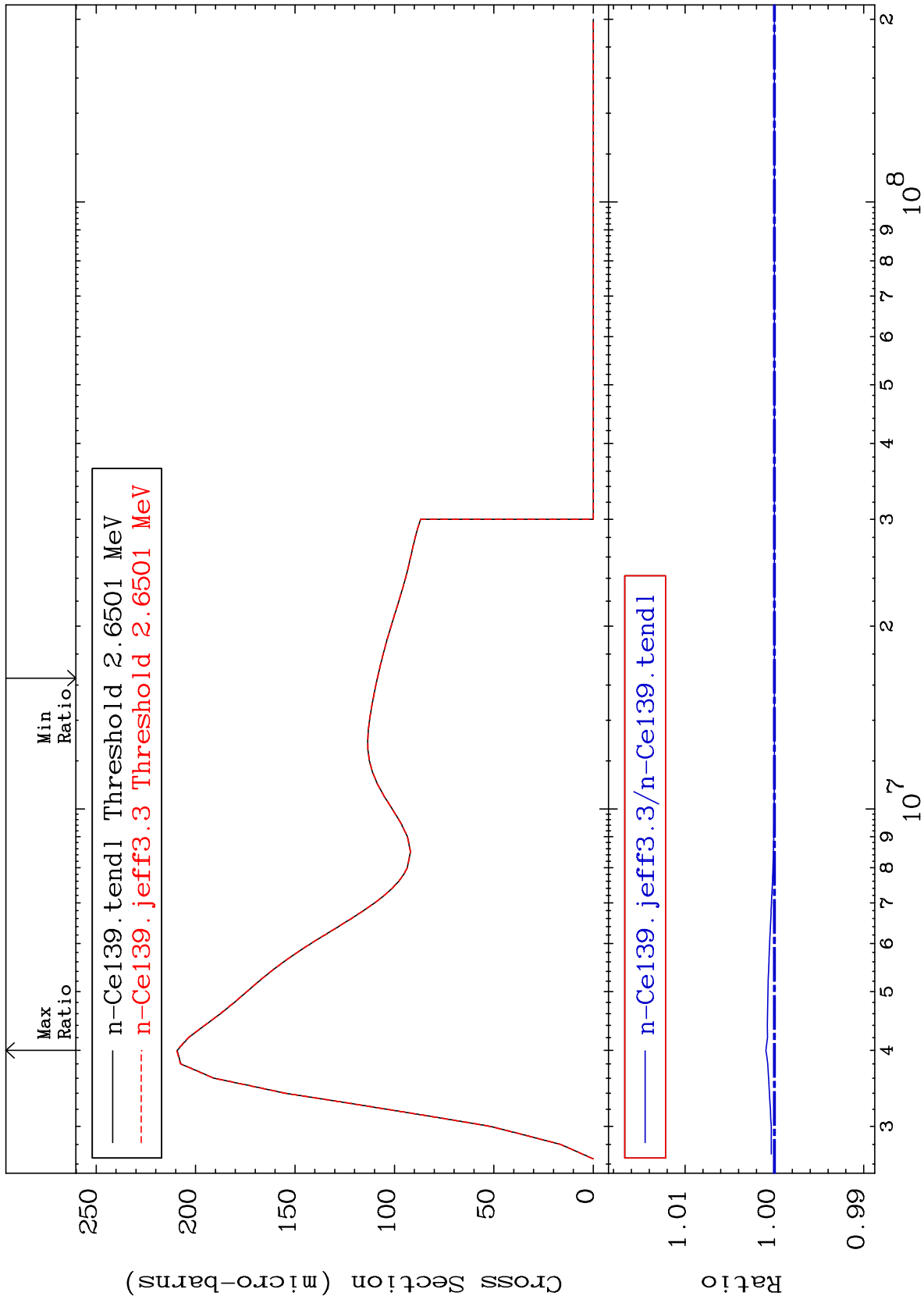
MAT 5834

MT= 78 (n,n') Level
Cross Section

58-Ce-139
To 0.057 %



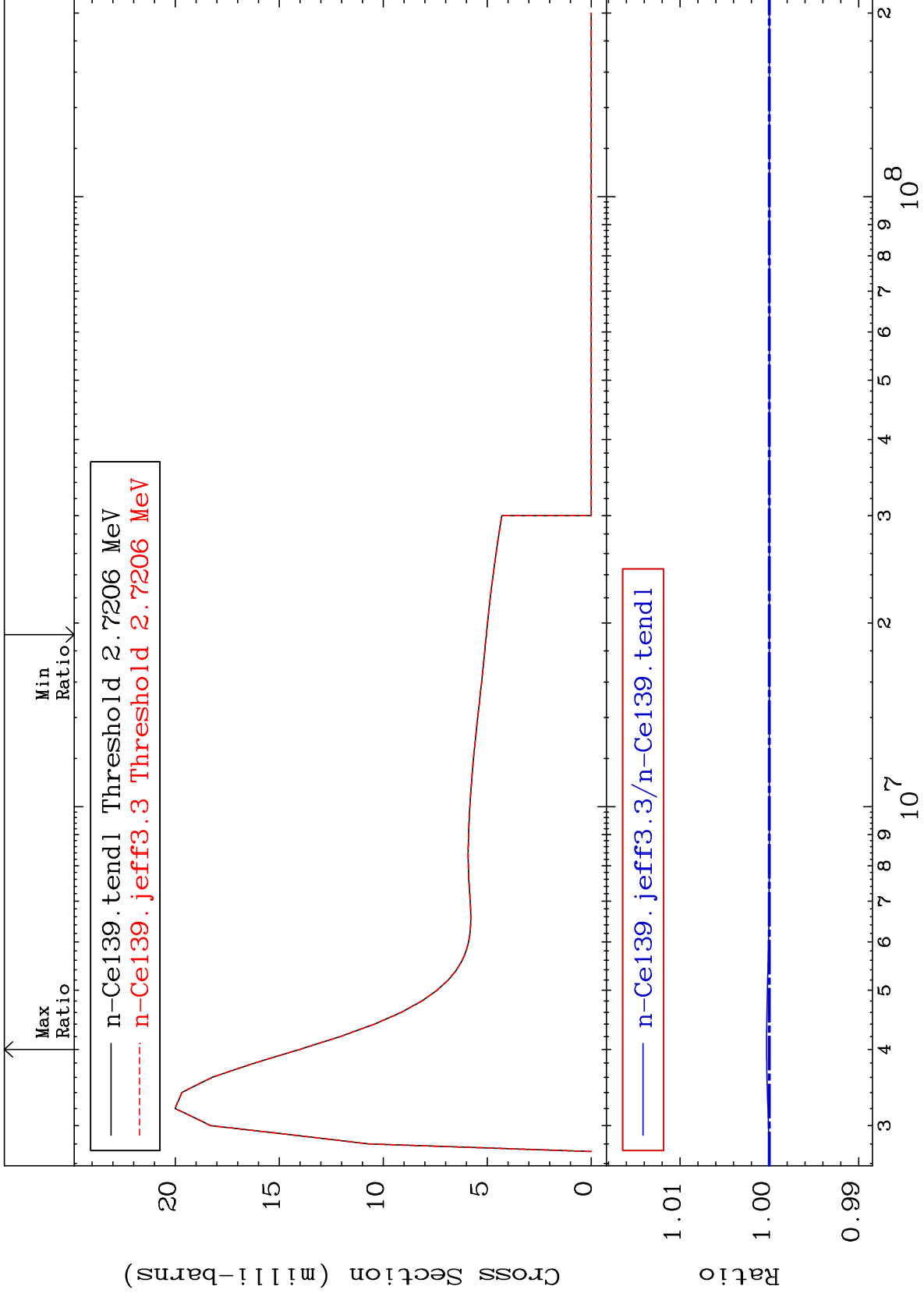
MAT 5834 MT= 79 (n,n') Level Cross Section 58-Ce-139 To 0.095 %



MAT 5834

MT= 80 (n,n') Level
Cross Section

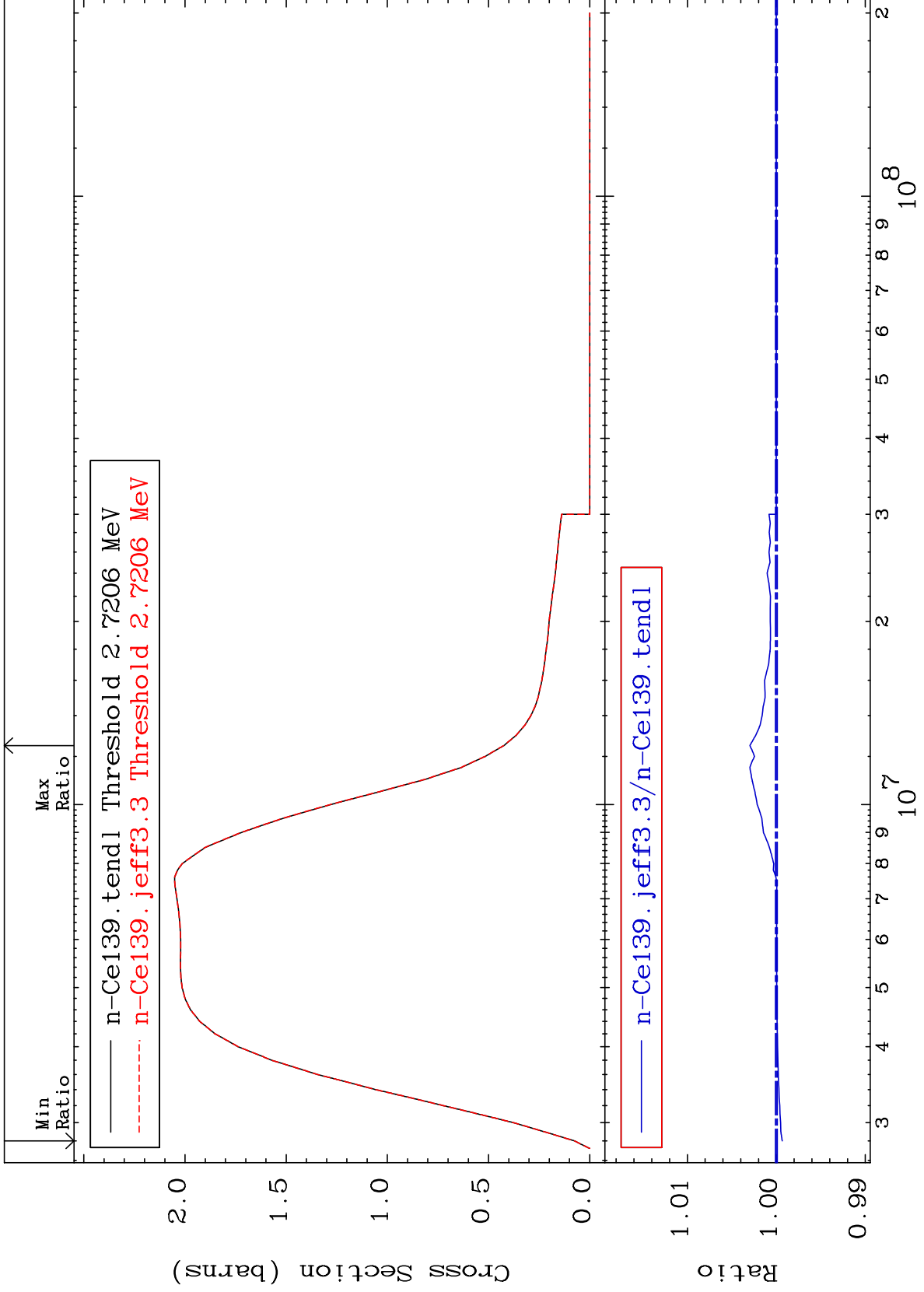
58-Ce-139
0.000 To 0.031 %



MAT 5834

(n, n') Continuum
Cross Section

58-Ce-139
-0.066 To 0.298 %



50

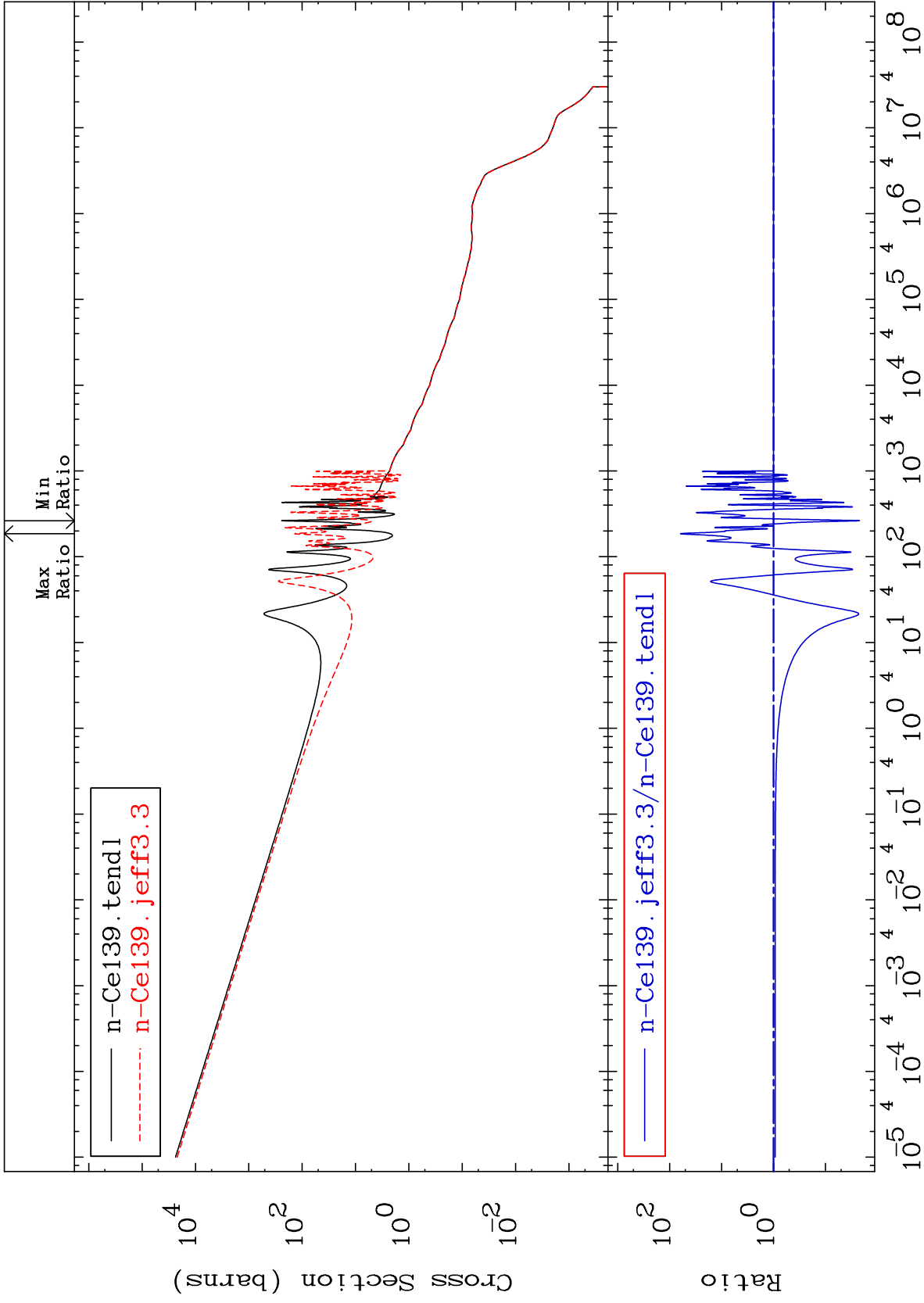
Incident Energy (eV)

58-Ce-139

MAT 5834

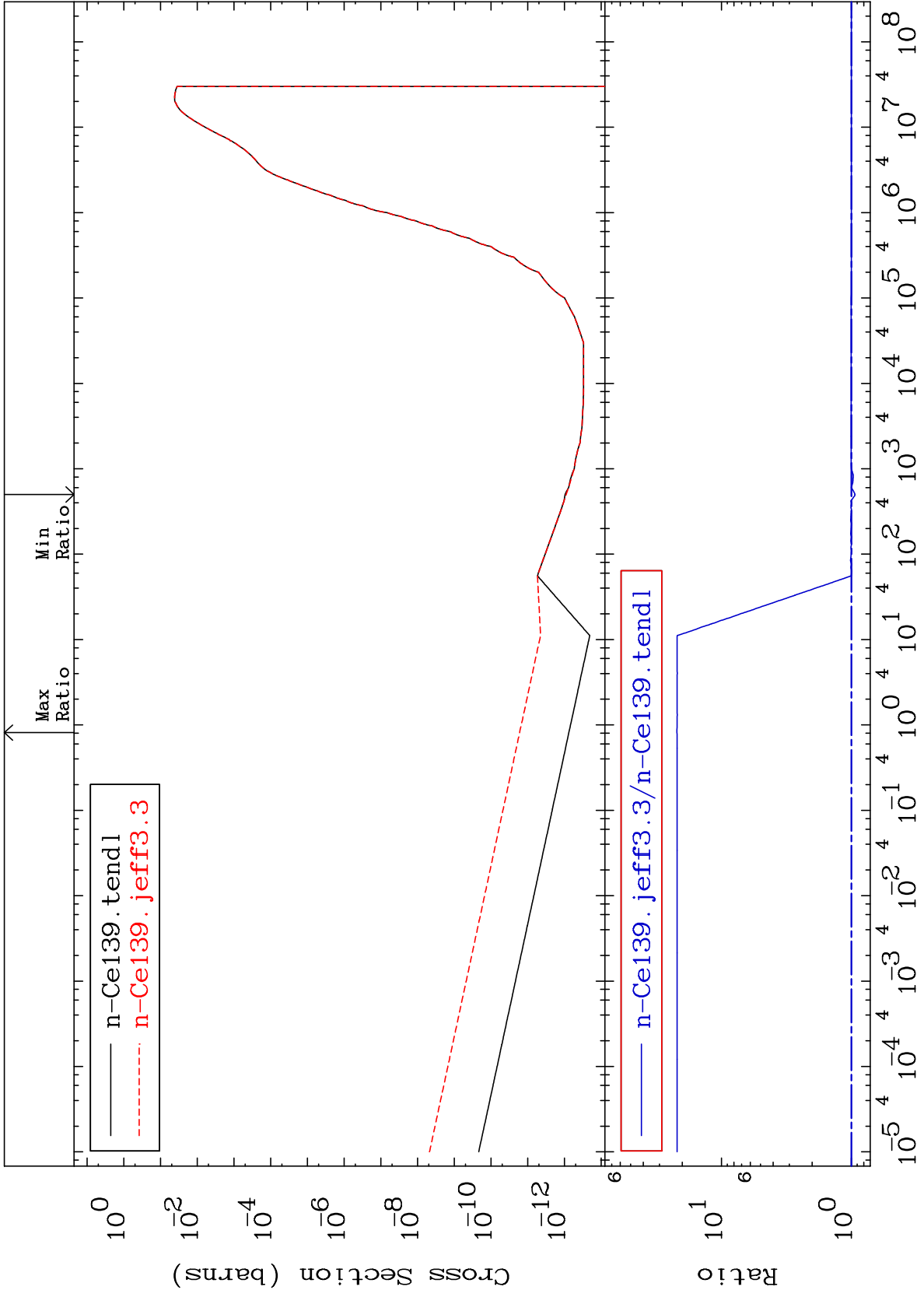
(n, γ)
Cross Section

58-Ce-139
-97.78 To 6117. %



MAT 5834

(n,p)
Cross Section
58-Ce-139
-6.506 To 2100. %



52

Incident Energy (eV)

58-Ce-139

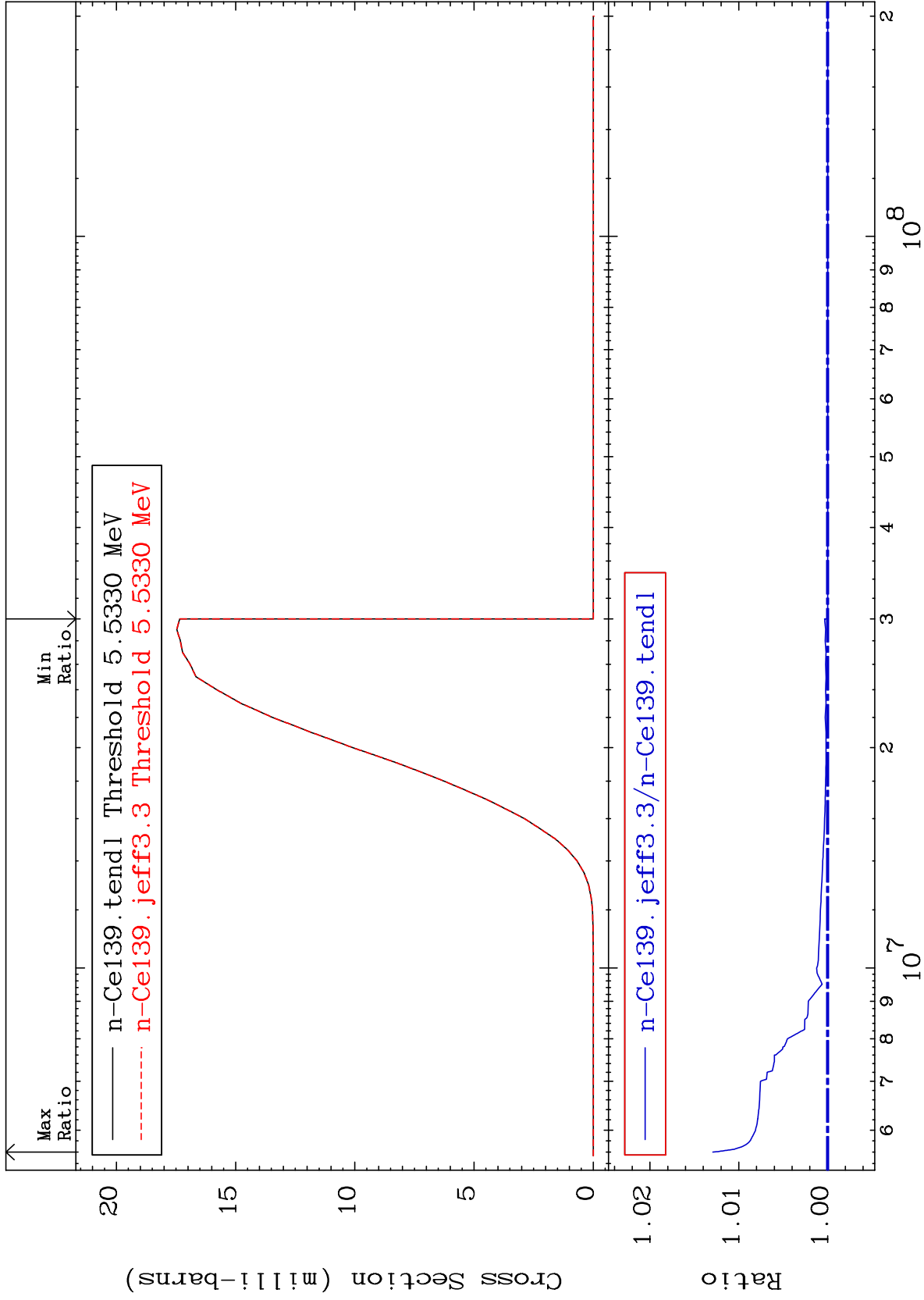
MAT 5834

(n, d)

58-Ce-139

Cross Section

0.000 To 1.294 %



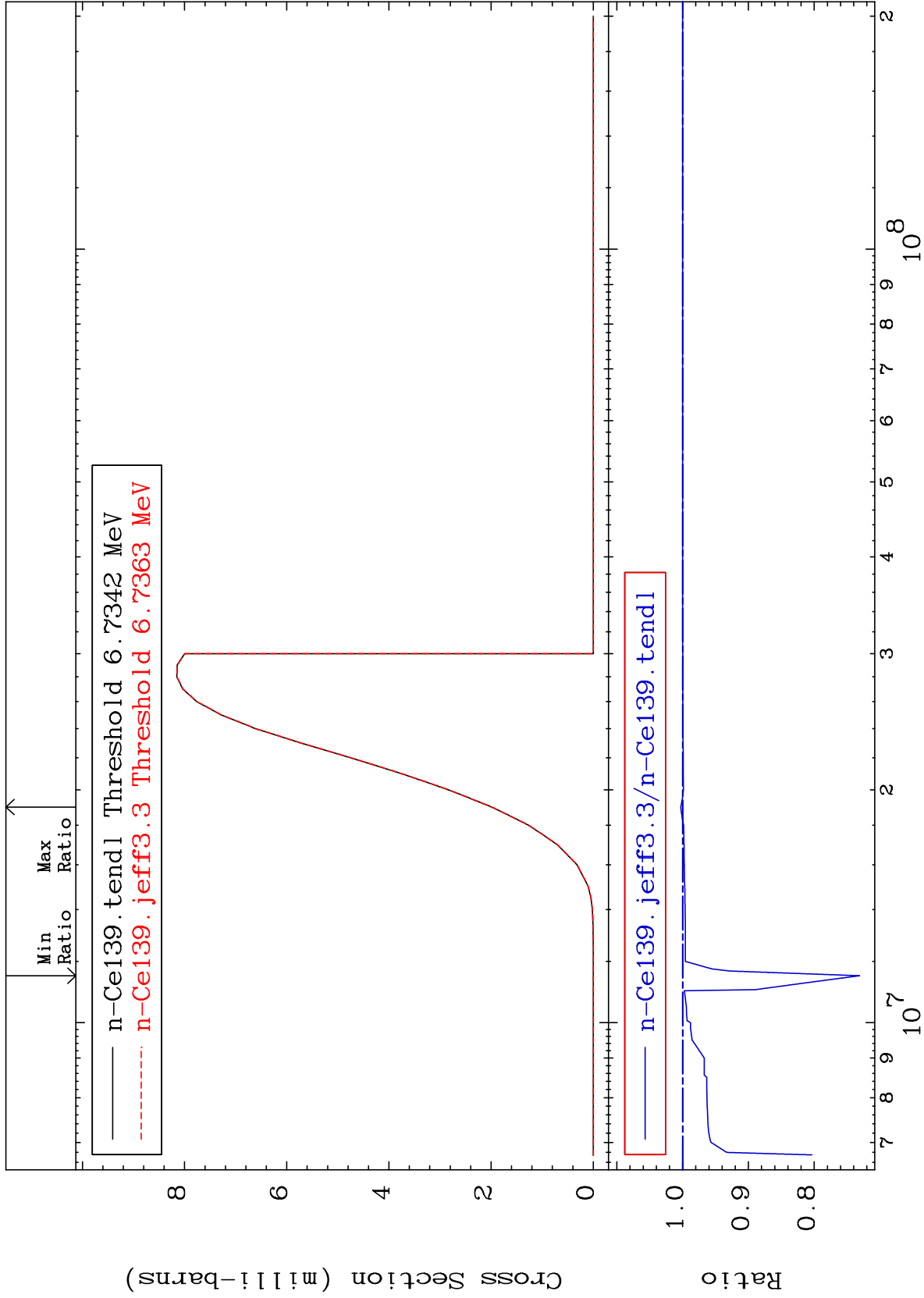
MAT 5834

(n, t)

58-Ce-139

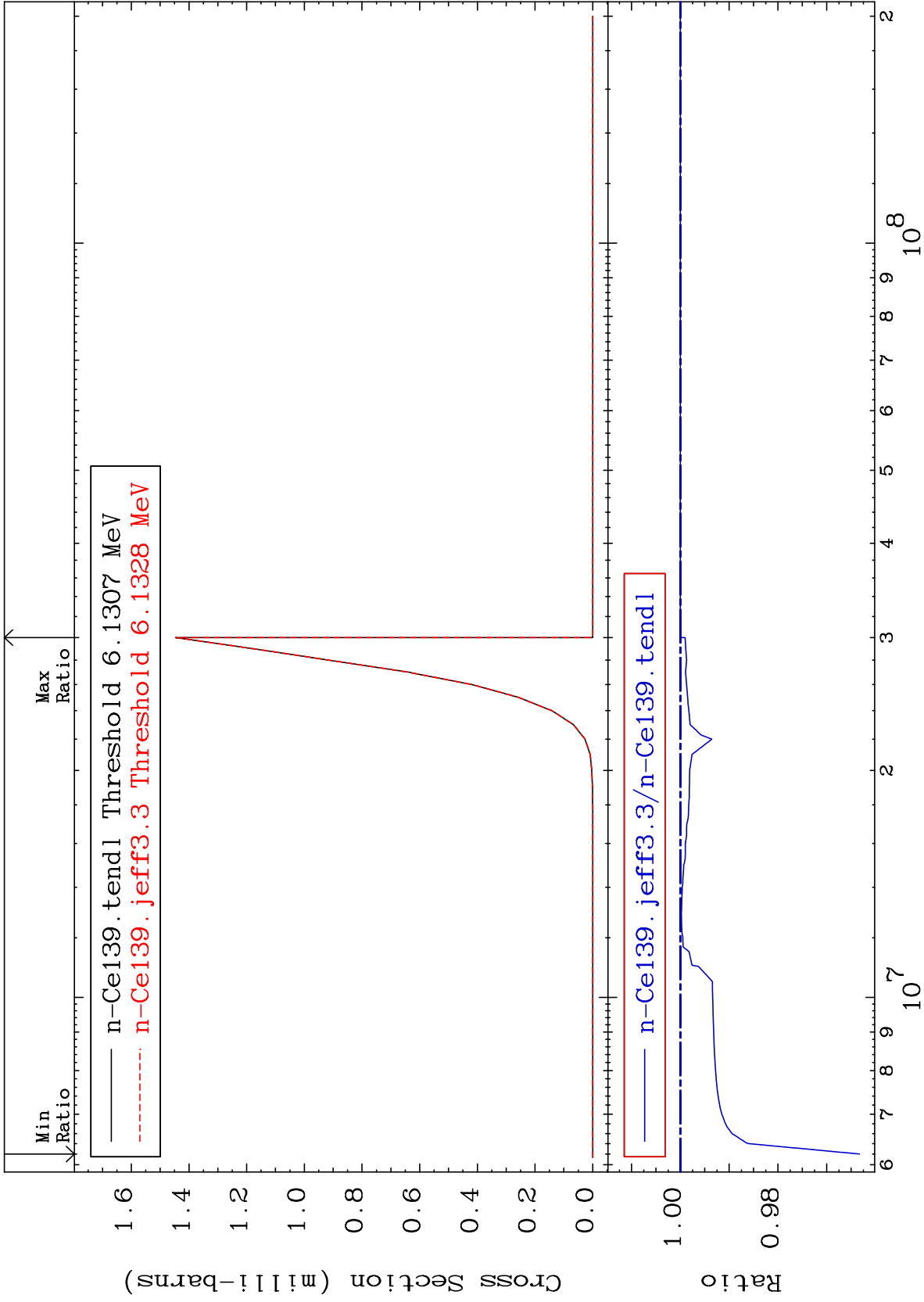
Cross Section

-26.89 To 0.286 %



Cross Section

-3.669 To 0.000 %



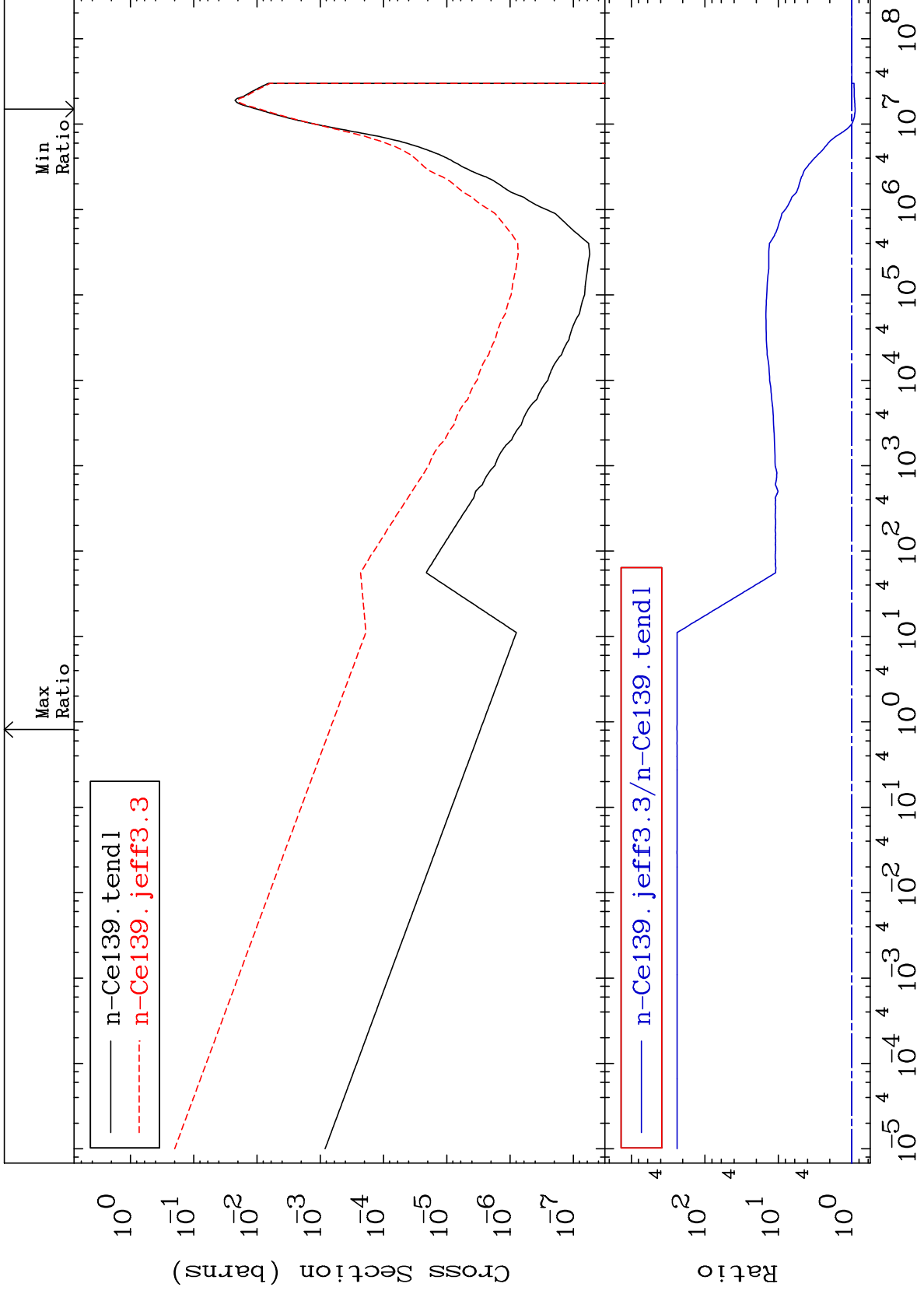
MAT 5834

(n, α)

58-Ce-139

Cross Section

-9.707 To 9999. %



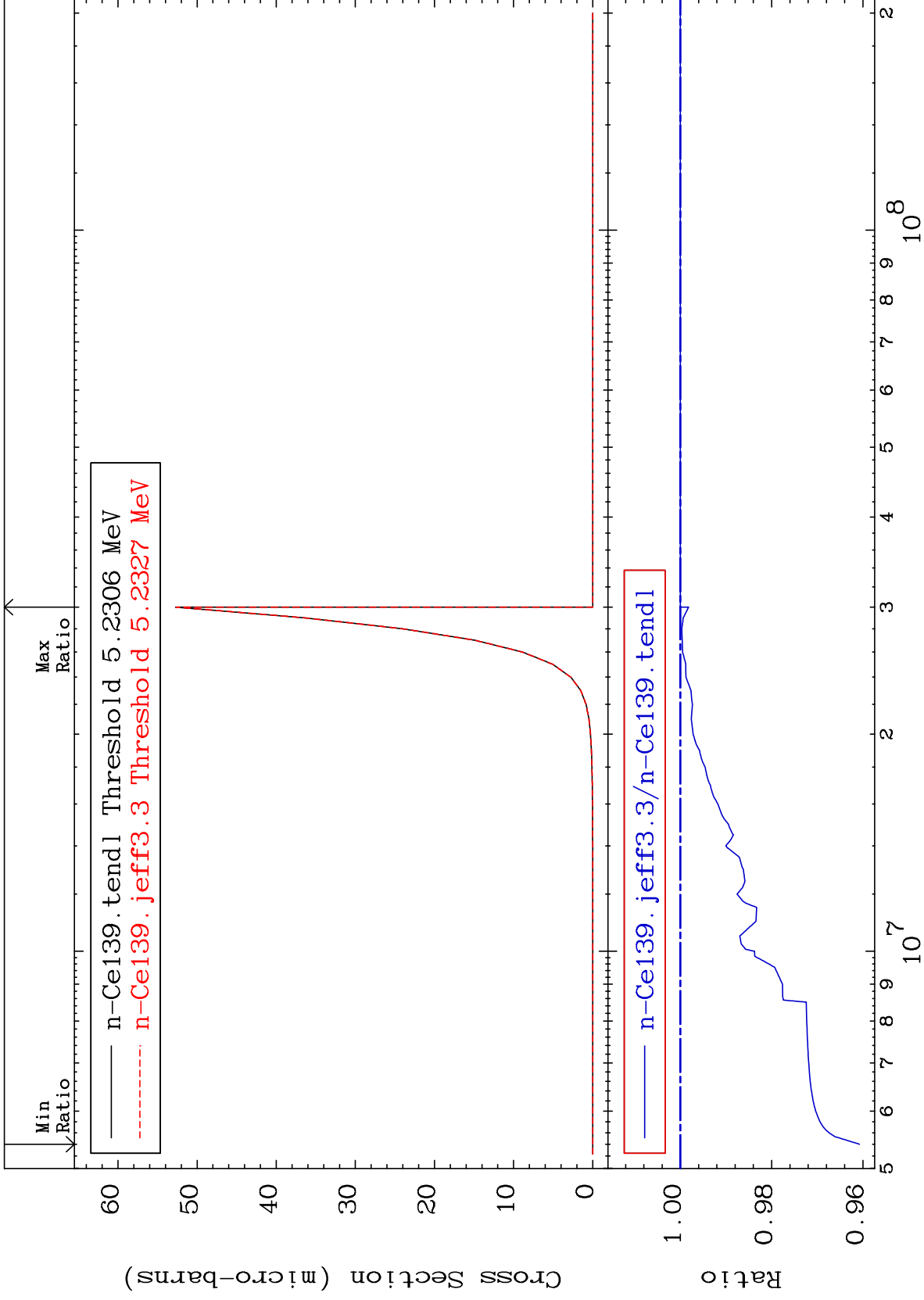
MAT 5834

(n,2p)

58-Ce-139

Cross Section

-3.924 To 0.000 %



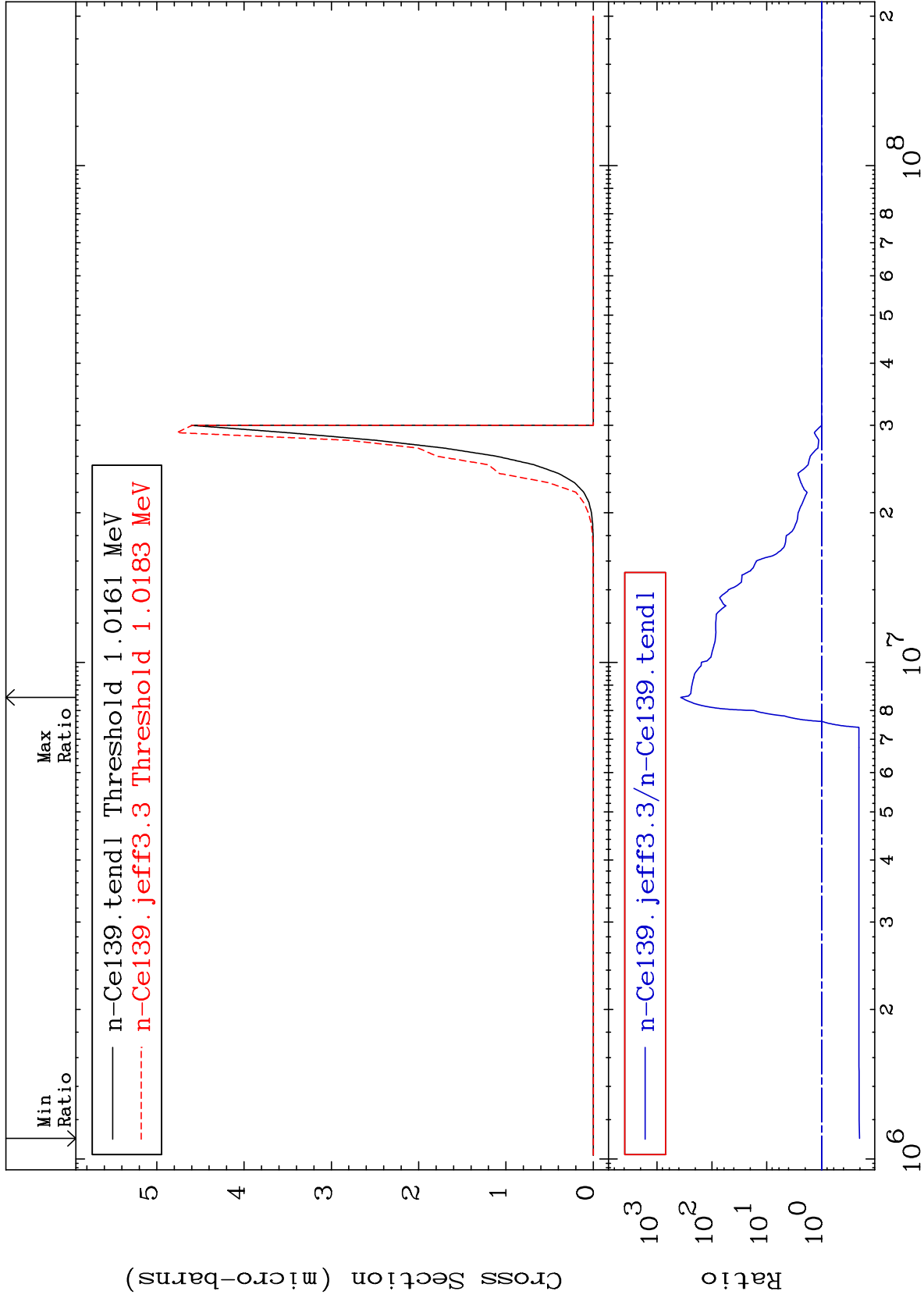
MAT 5834

(n, p) α

58-Ce-139

Cross Section

-79.61 To 9999. %



59

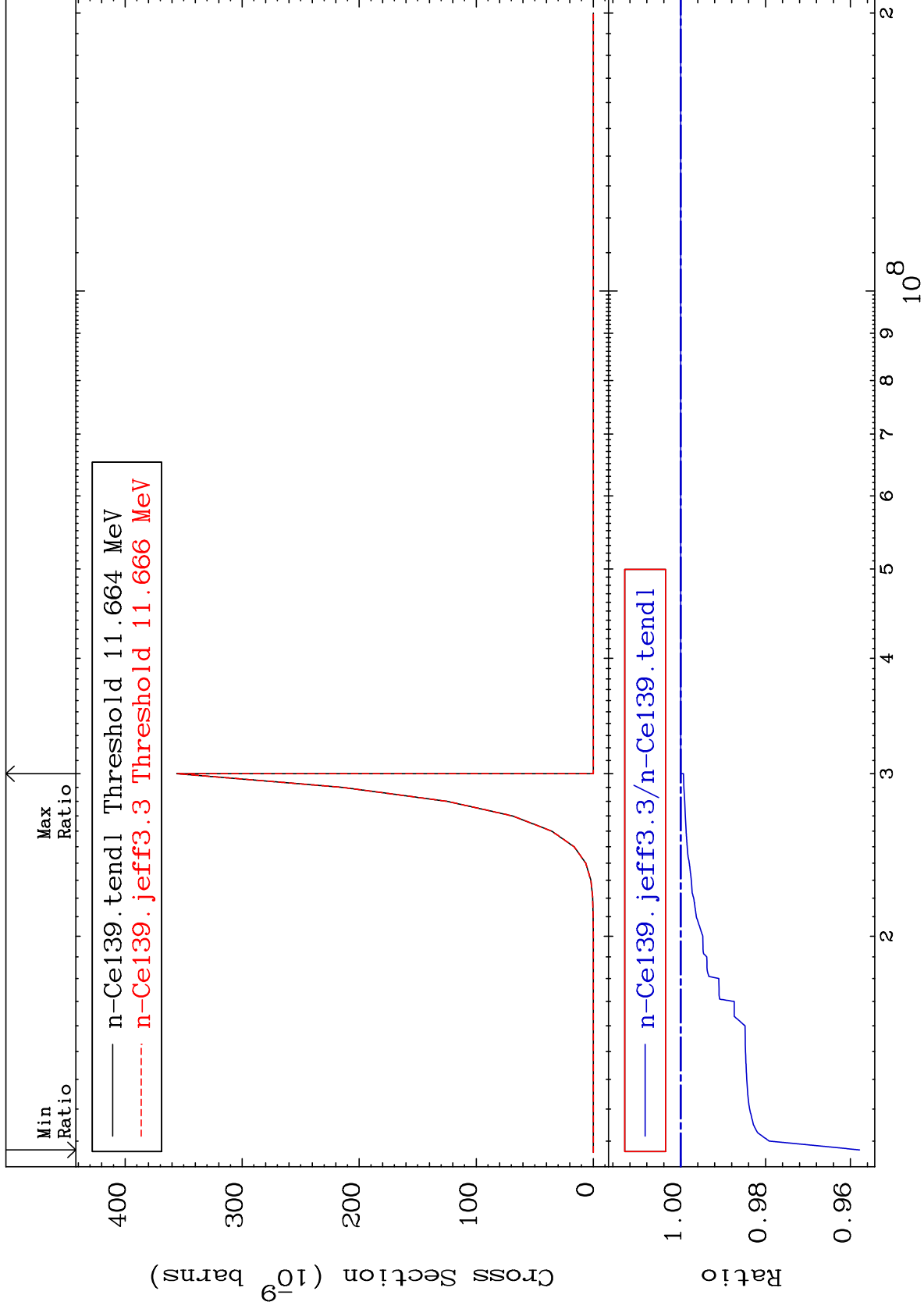
Incident Energy (eV)

58-Ce-139

MAT 5834

(n, p) d
Cross Section

58-Ce-139
-4.216 To 0.000 %



60

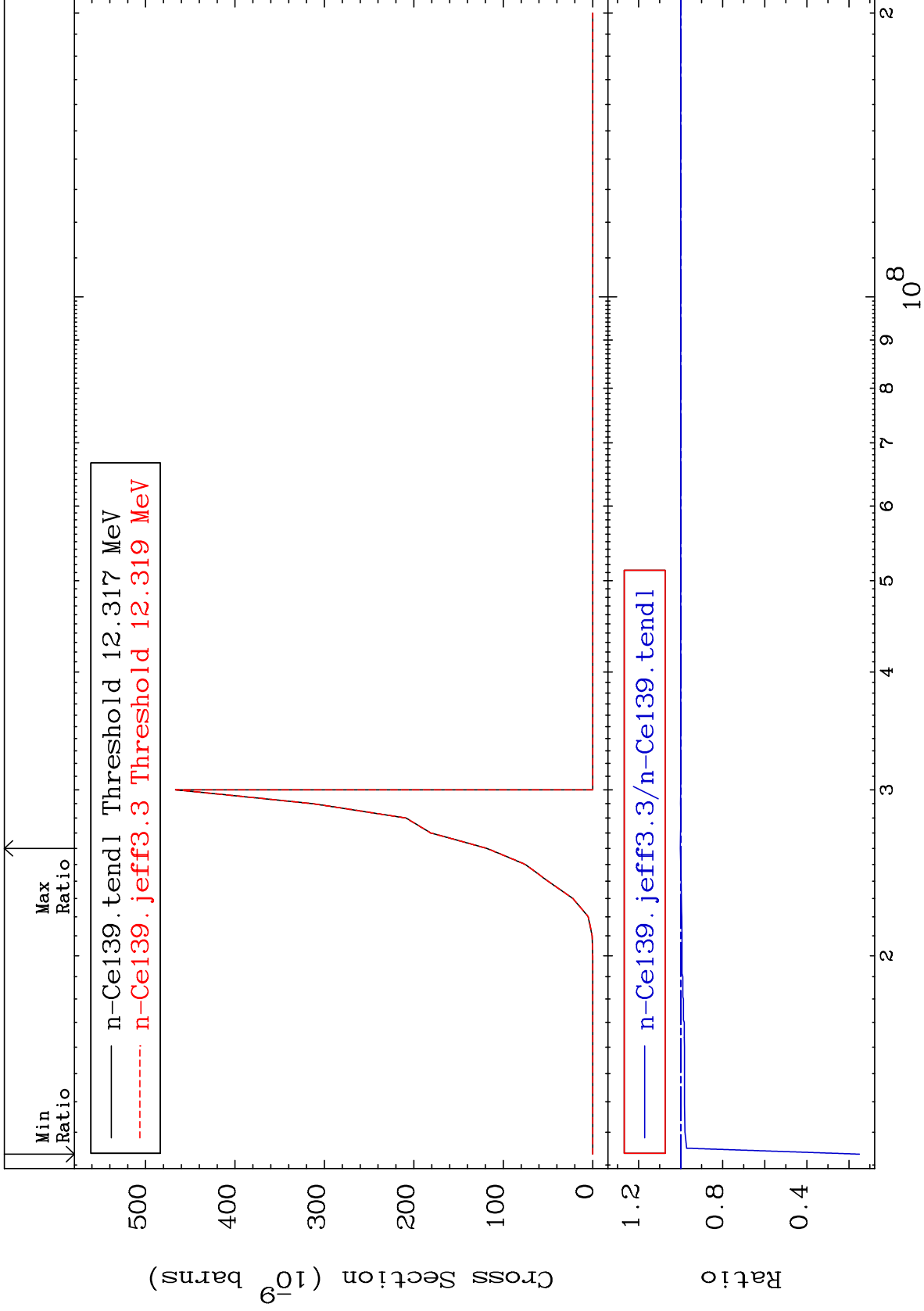
Incident Energy (eV)

58-Ce-139

MAT 5834

(n,p) t
Cross Section

58-Ce-139
-85.00 To 0.138 %

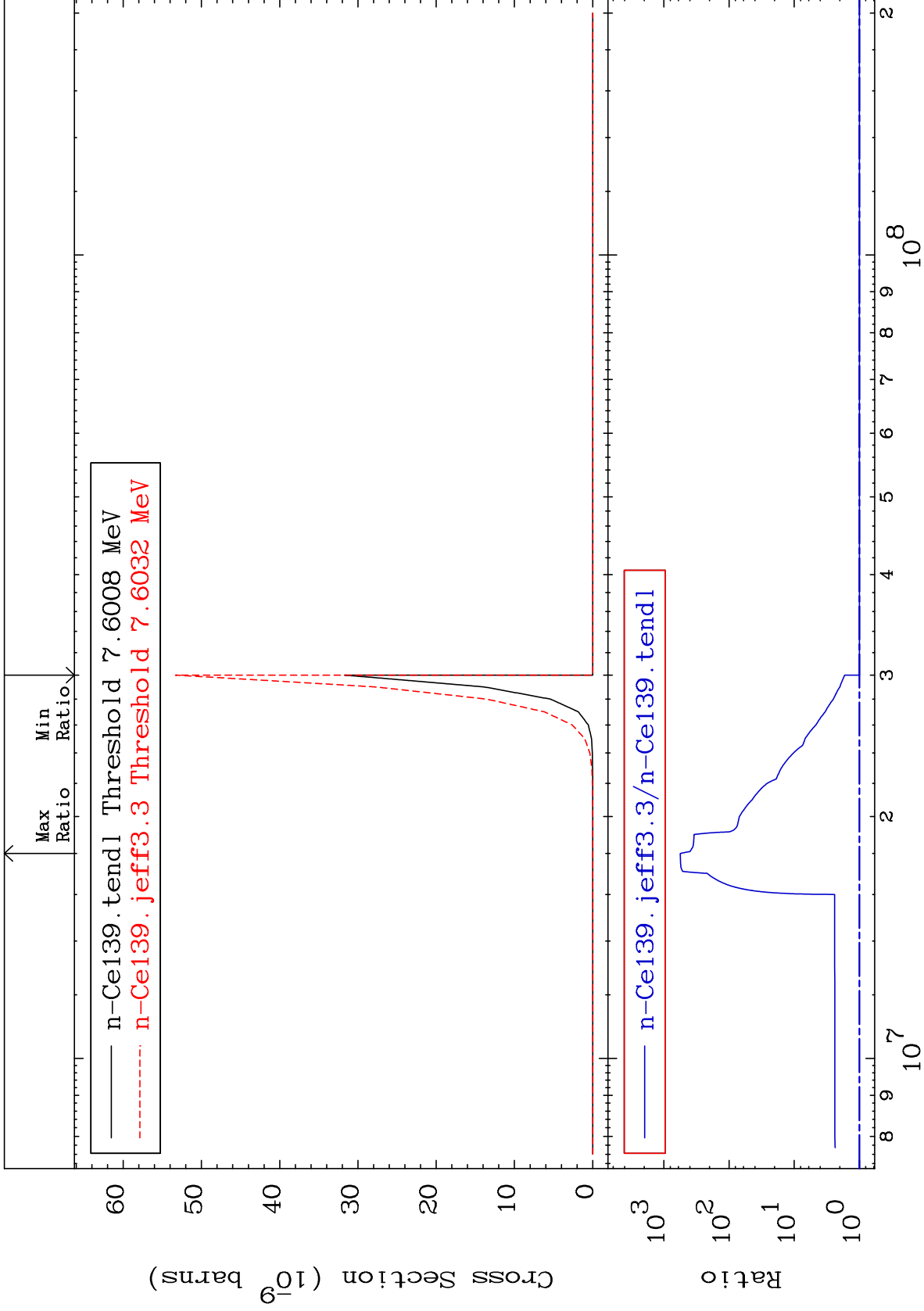


MAT 5834

(n, d) α

58-Ce-139
To 9999. %
0.000

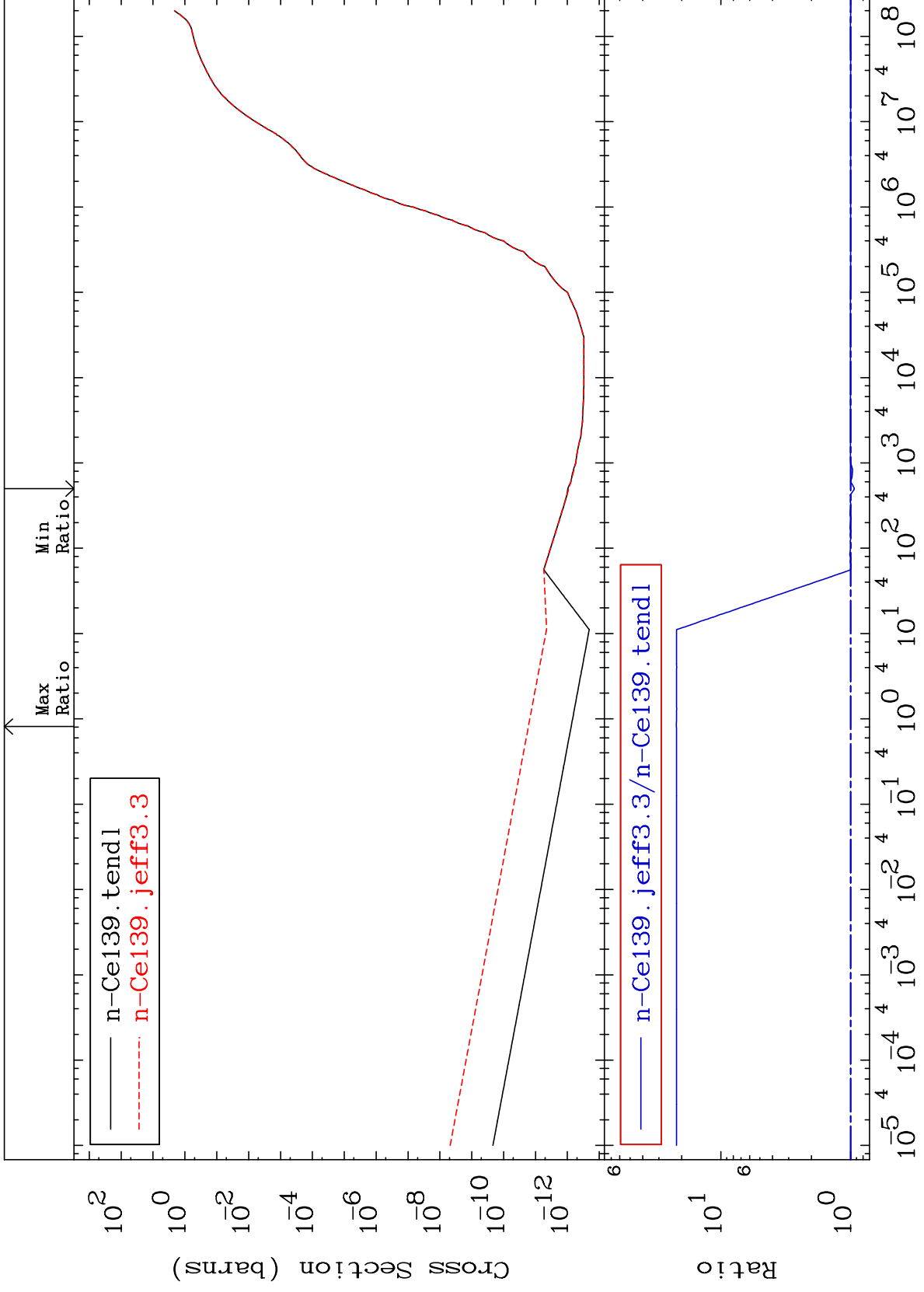
Cross Section



MAT 5834

Hydrogen Production
Cross Section

58-Ce-139
-6.506 To 2100. %



63

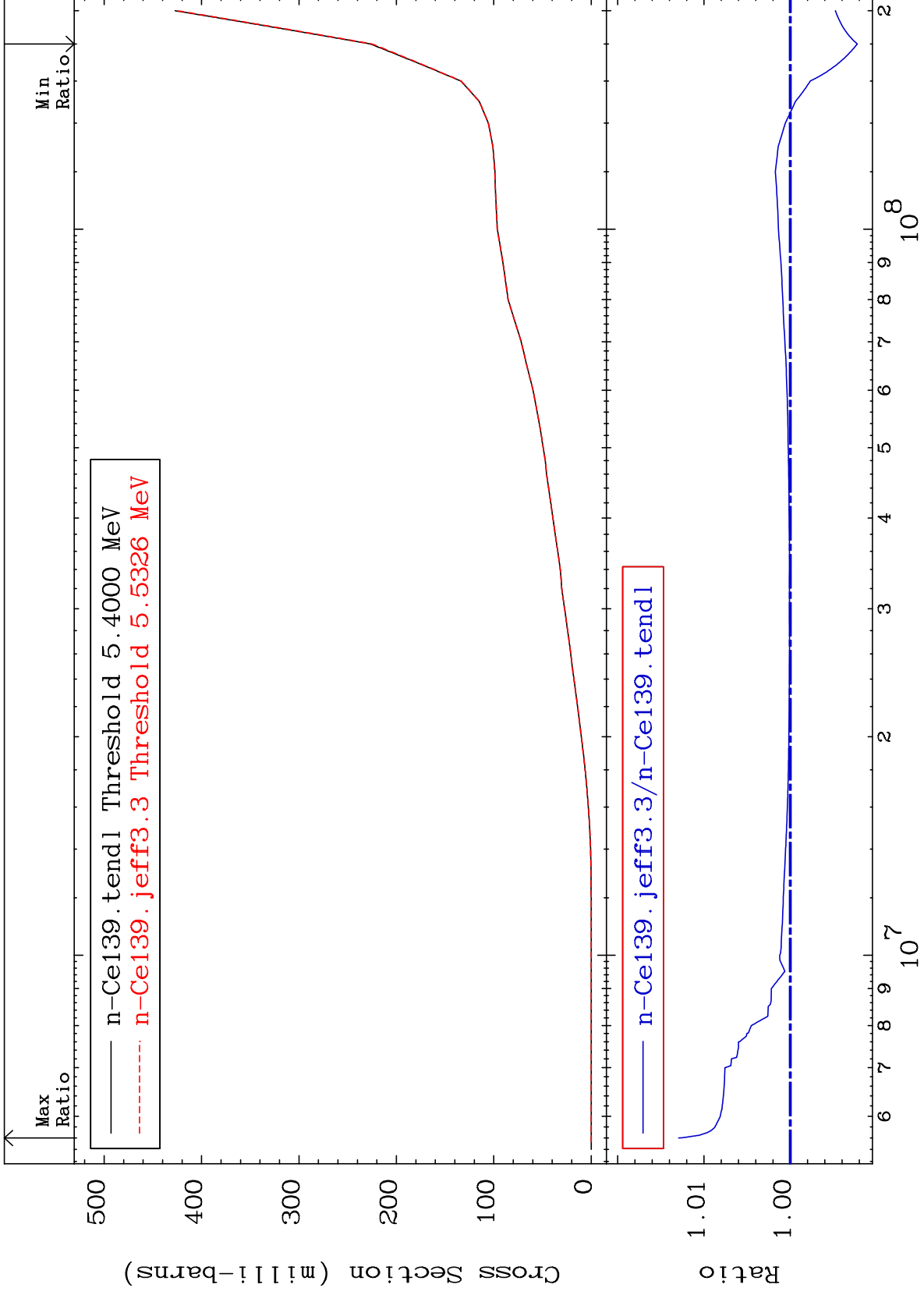
Incident Energy (eV)

58-Ce-139

MAT 5834

Deuterium Production
Cross Section

58-Ce-139
-0.777 To 1.294 %



64

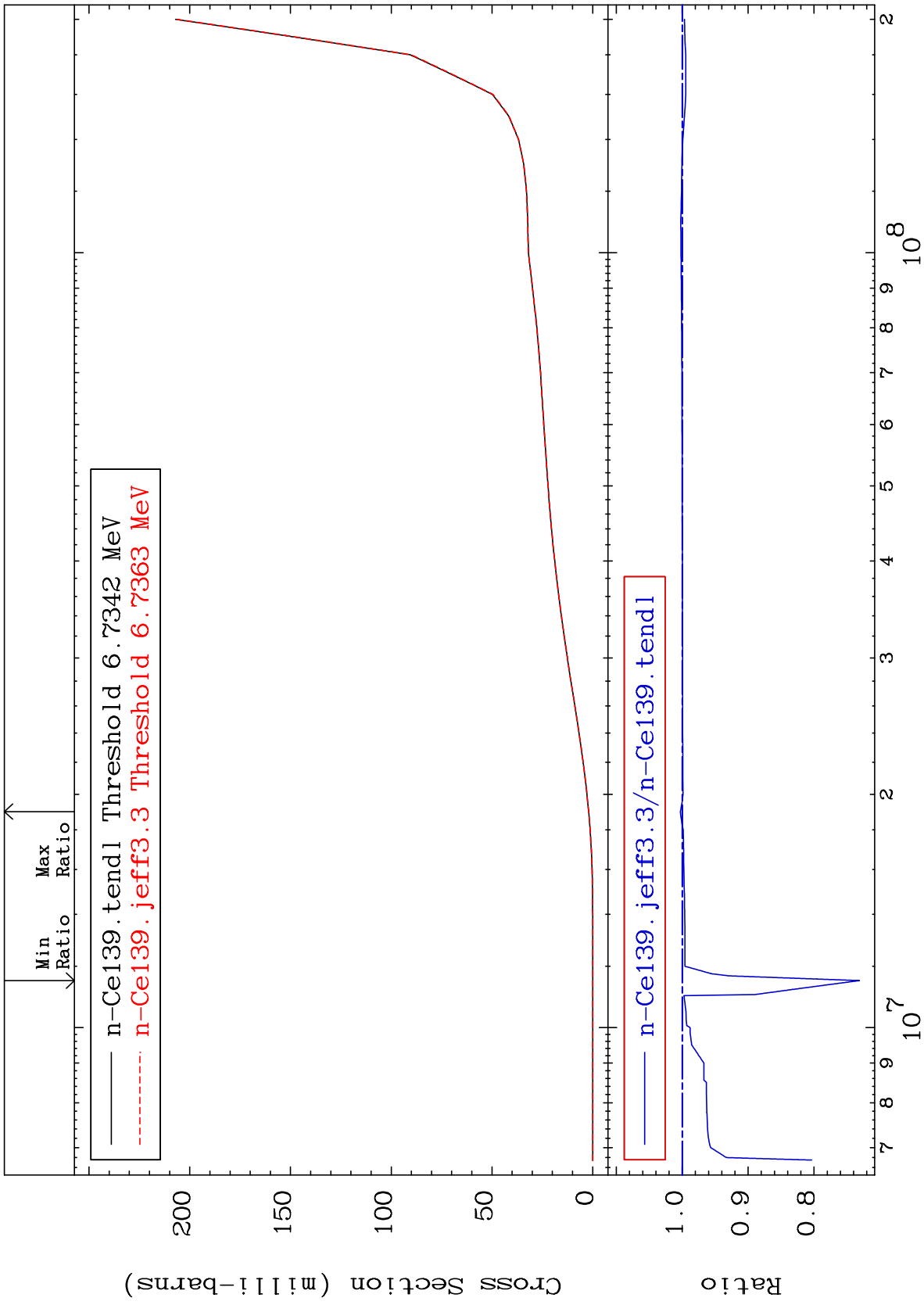
Incident Energy (eV)

58-Ce-139

MAT 5834

Tritium Production
Cross Section

58-Ce-139
-26.89 To 0.286 %



65

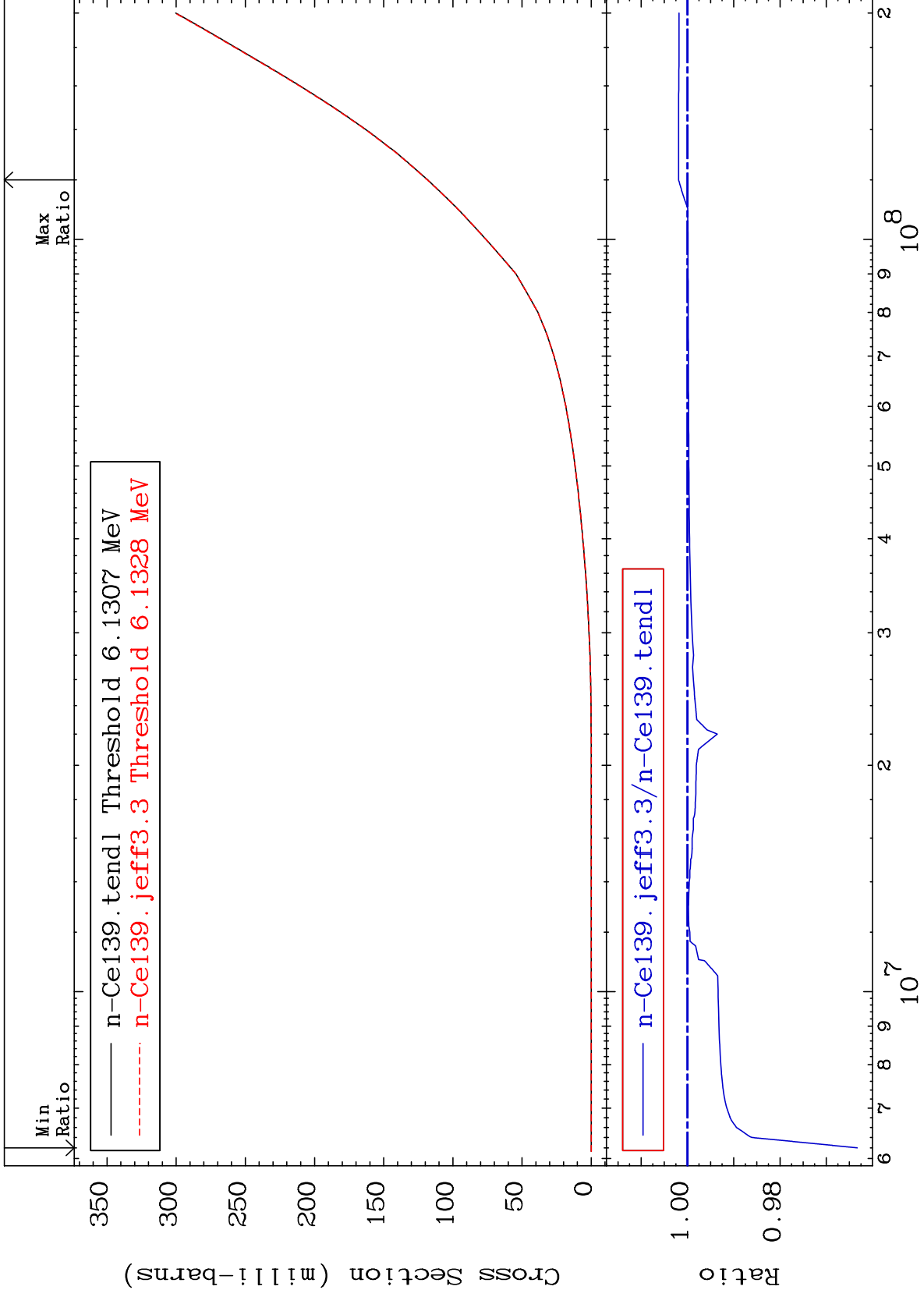
Incident Energy (eV)

58-Ce-139

MAT 5834

He-3 Production
Cross Section

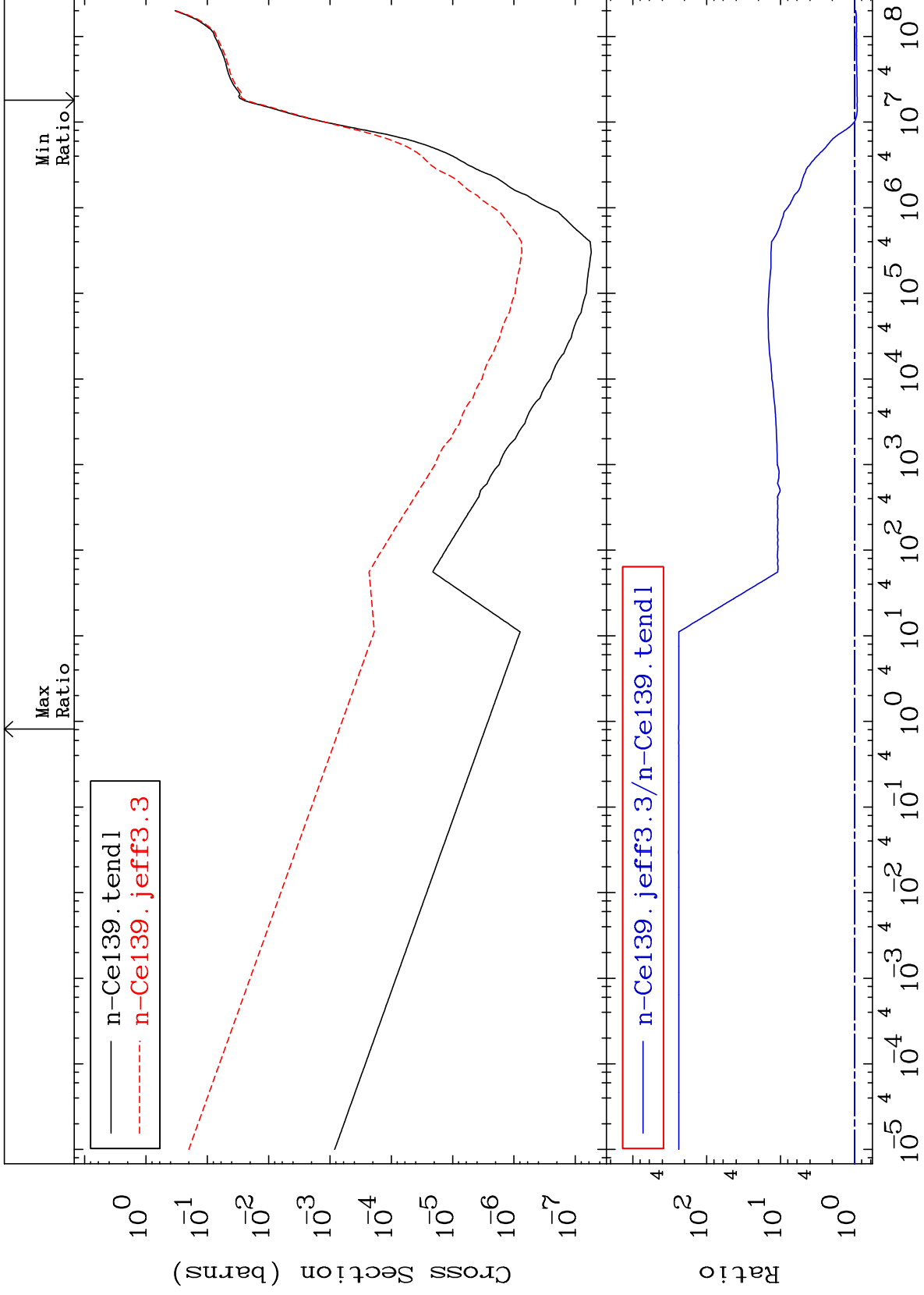
58-Ce-139
-3.669 To 0.190 %

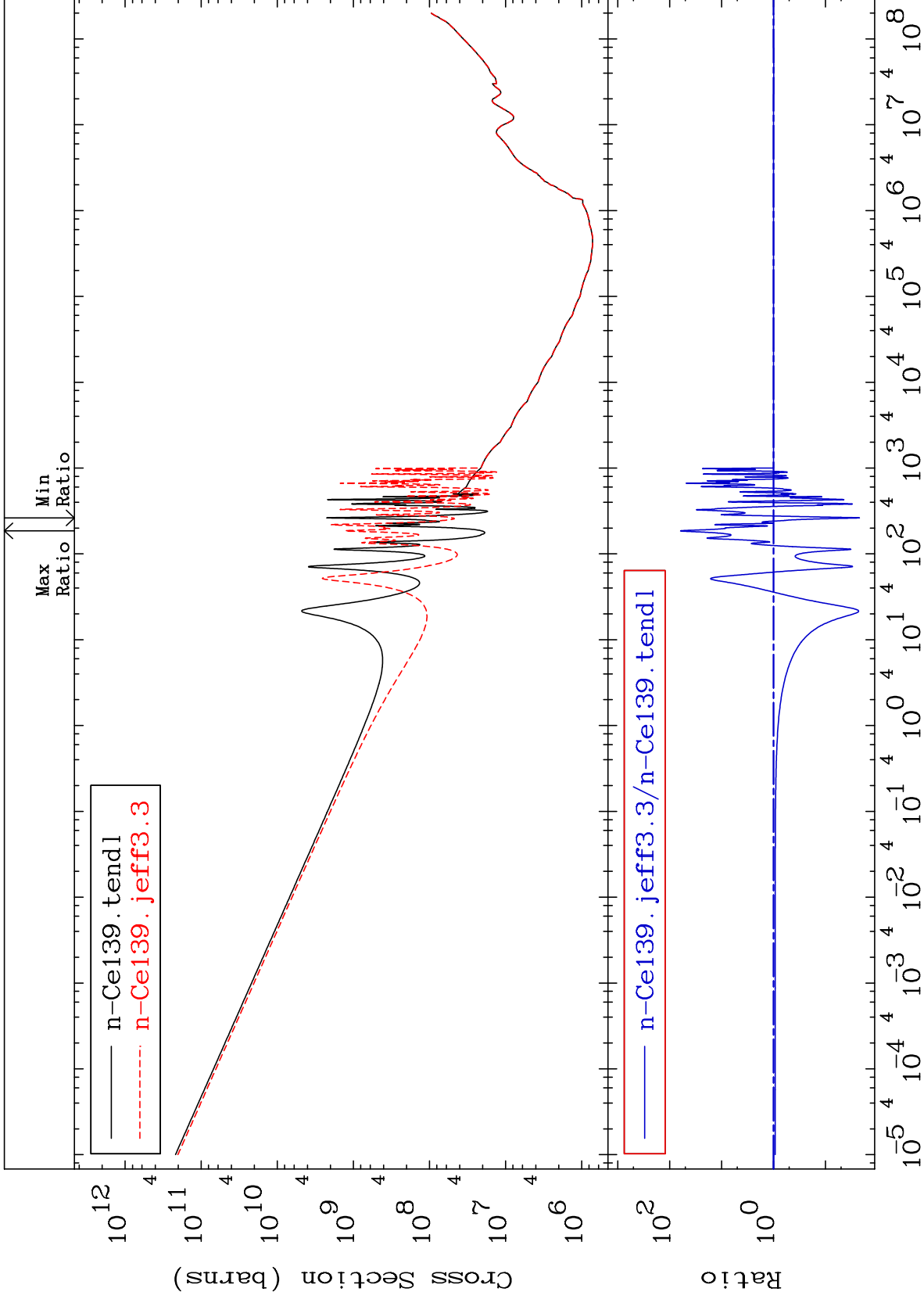


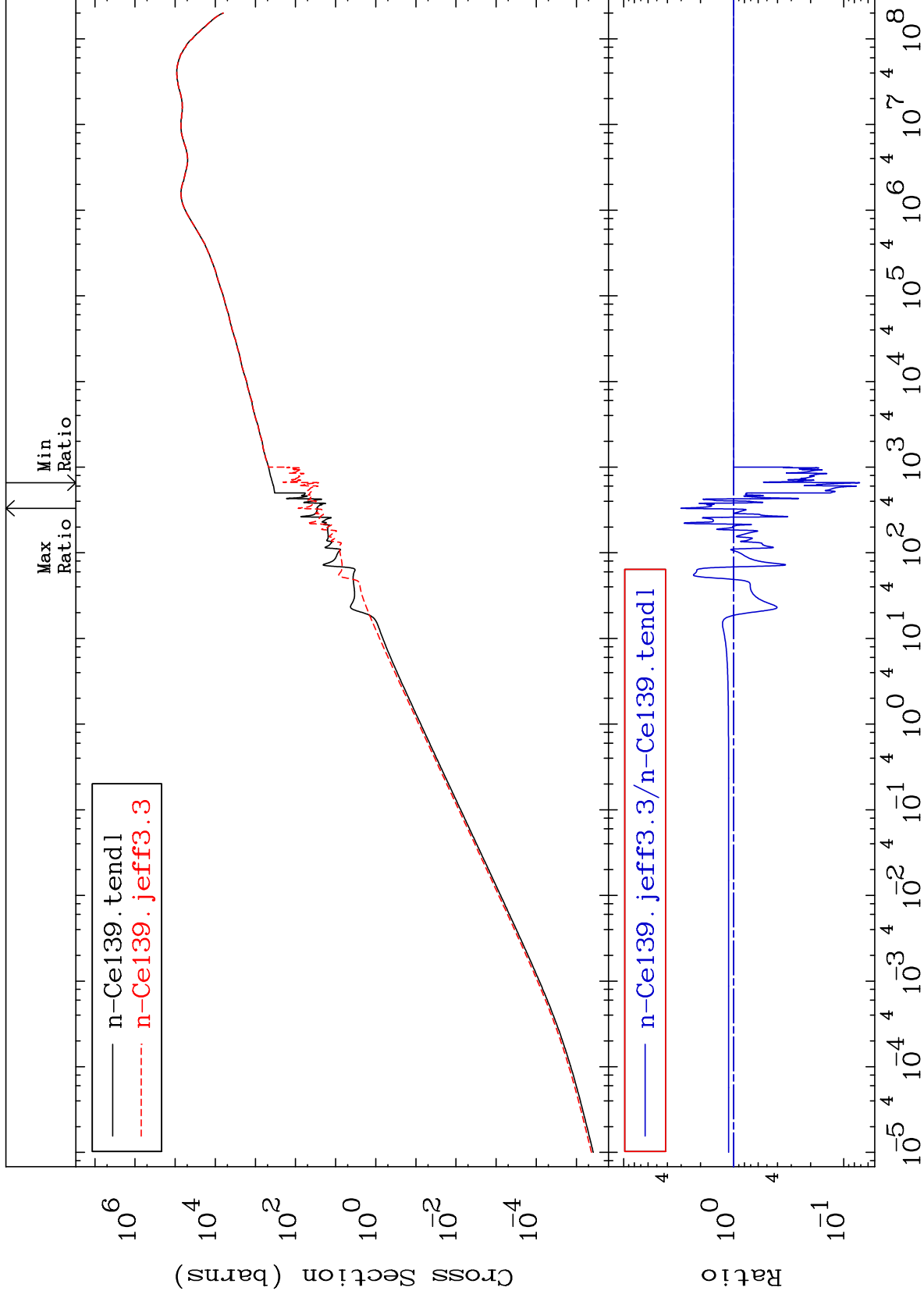
MAT 5834

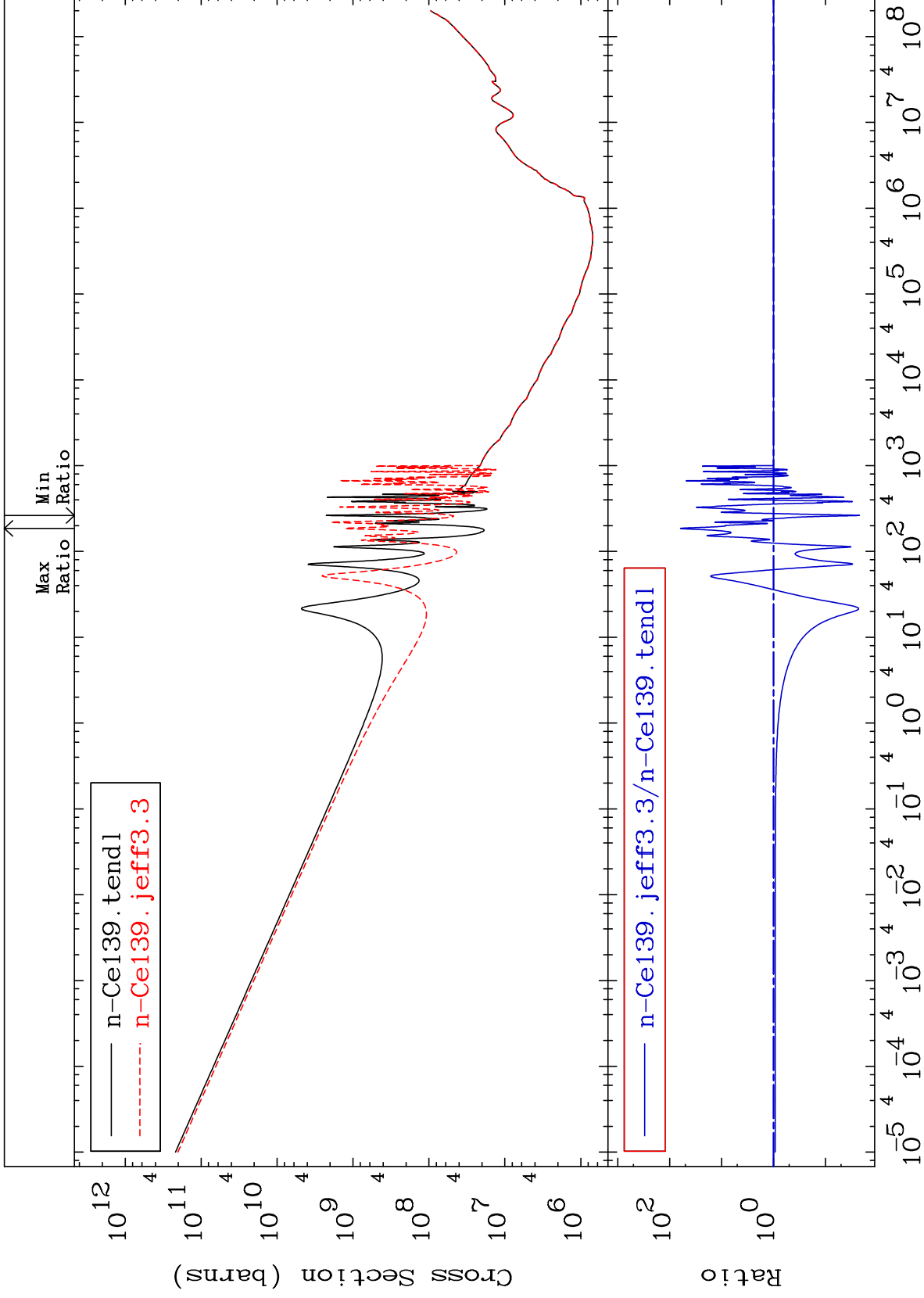
He-4 Production
Cross Section

58-Ce-139
-8.341 To 9999. %





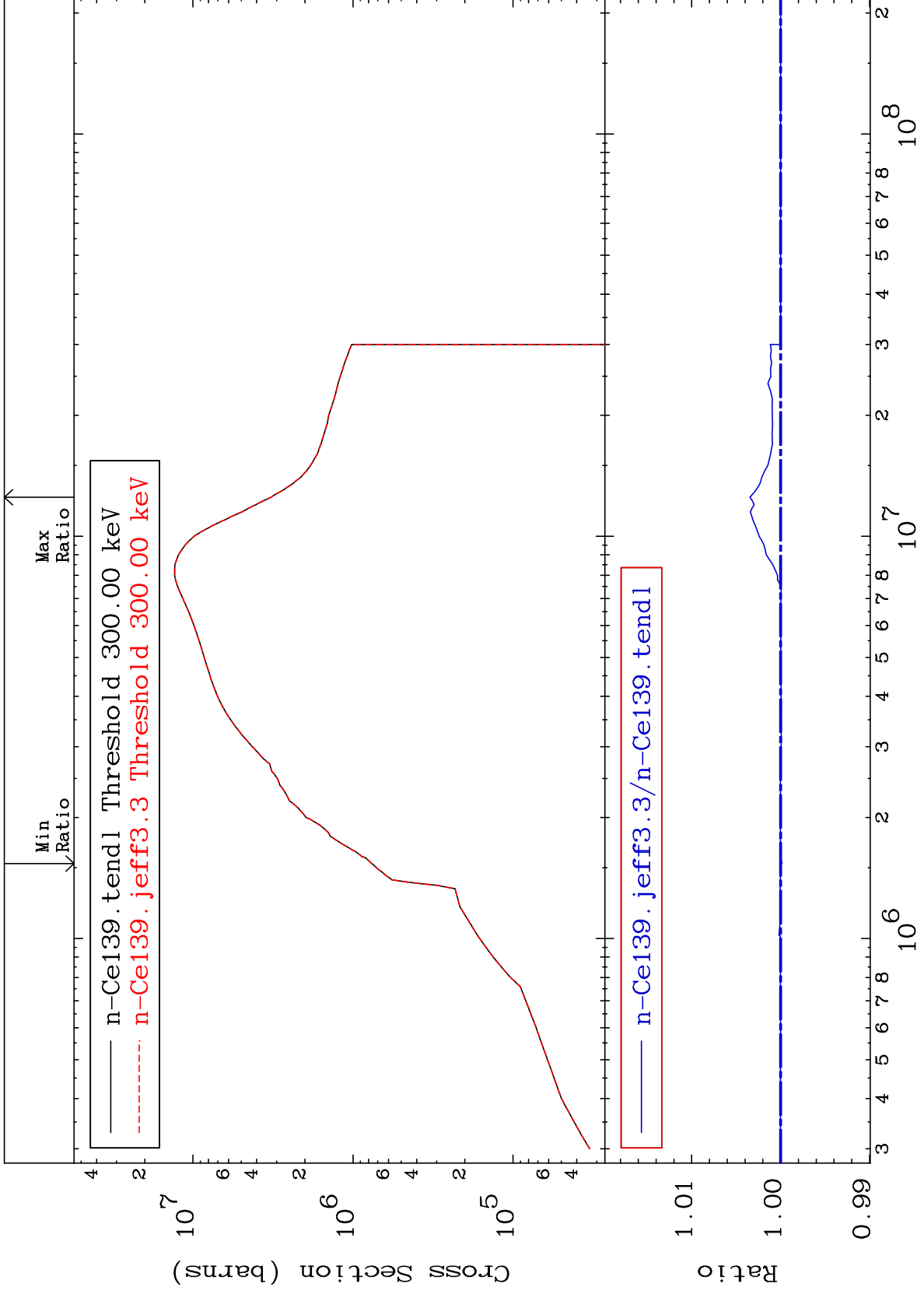




MAT 5834

Kerma inelastic (mt51-91)
Cross Section

58-Ce-139
-0.016 To 0.345 %



71

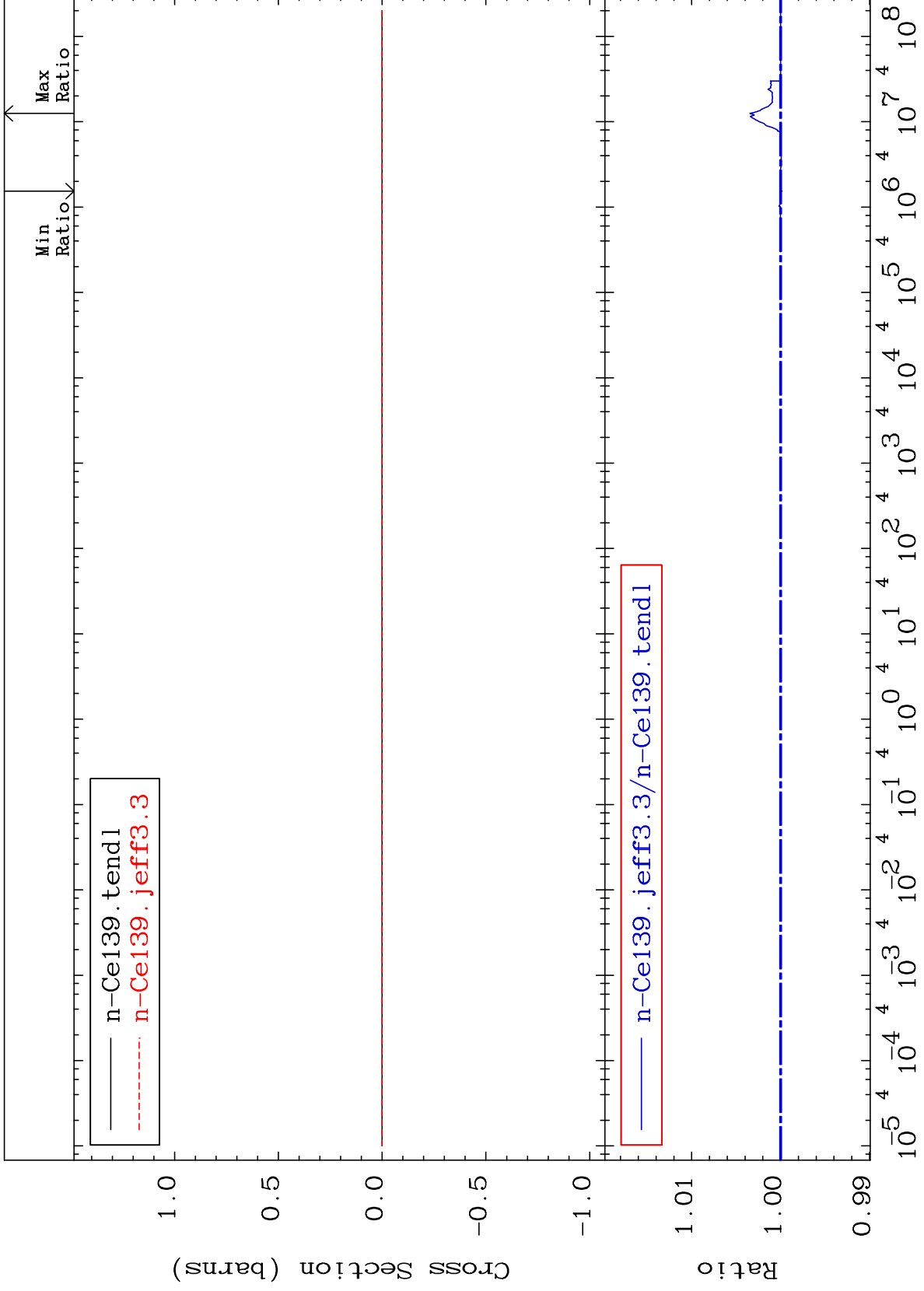
Incident Energy (eV)

58-Ce-139

MAT 5834

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

58-Ce-139
-0.016 To 0.345 %



72

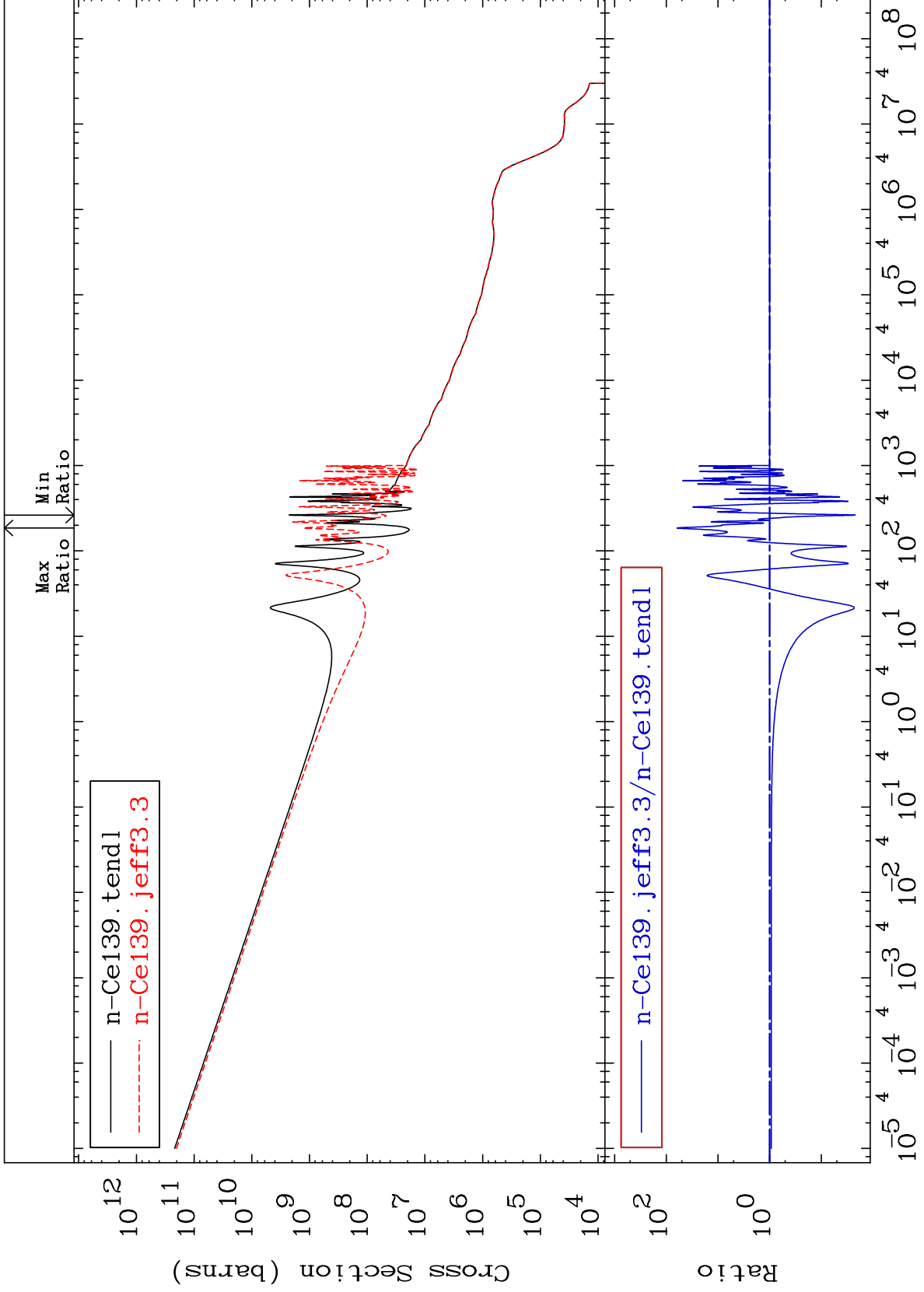
Incident Energy (eV)

58-Ce-139

MAT 5834

Kerma capture (mt102)
Cross Section

58-Ce-139
-97.78 To 6117. %



73

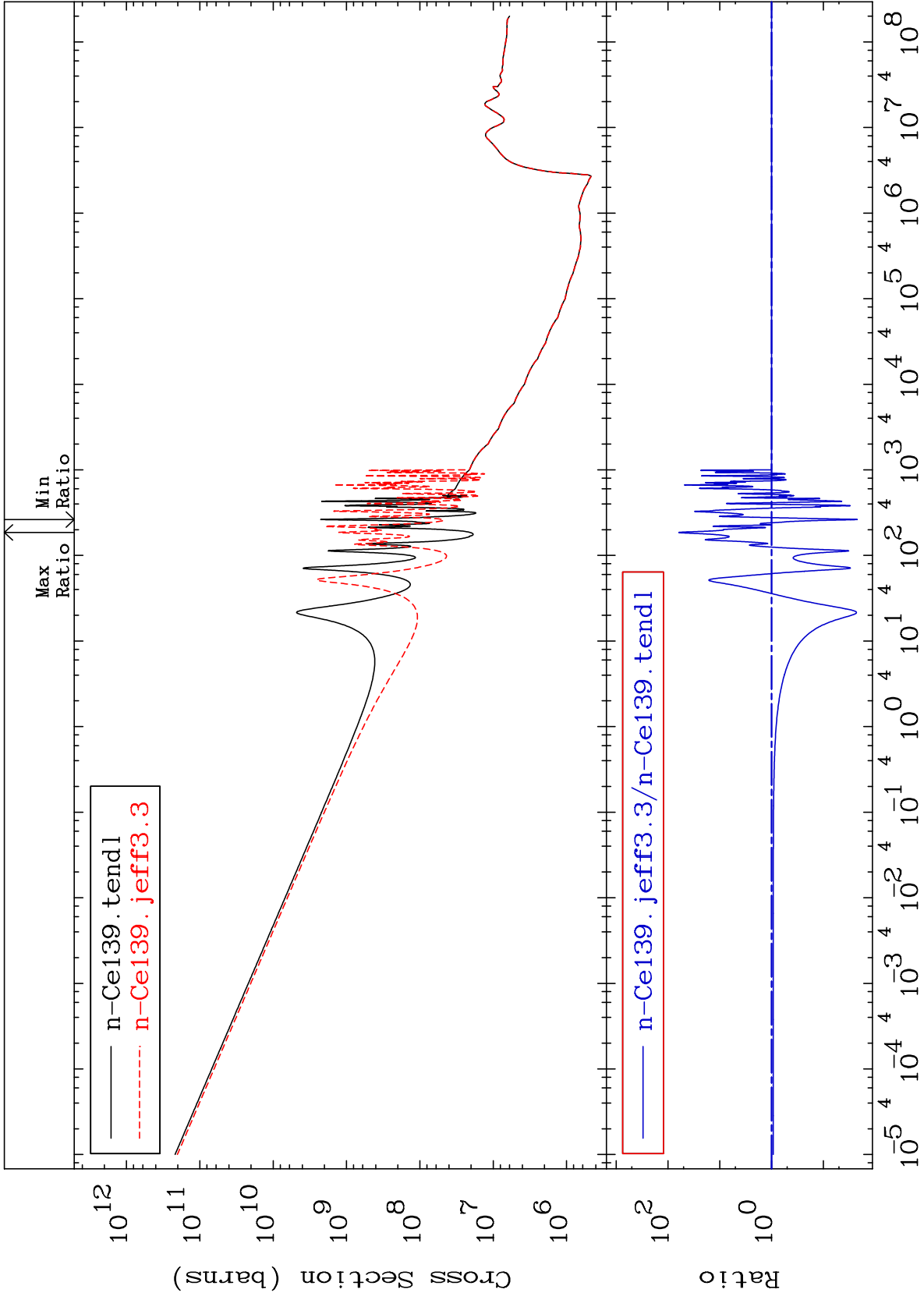
Incident Energy (eV)

58-Ce-139

MAT 5834

Total photon (eV-barns)
Cross Section

58-Ce-139
-97.78 To 6117. %



74

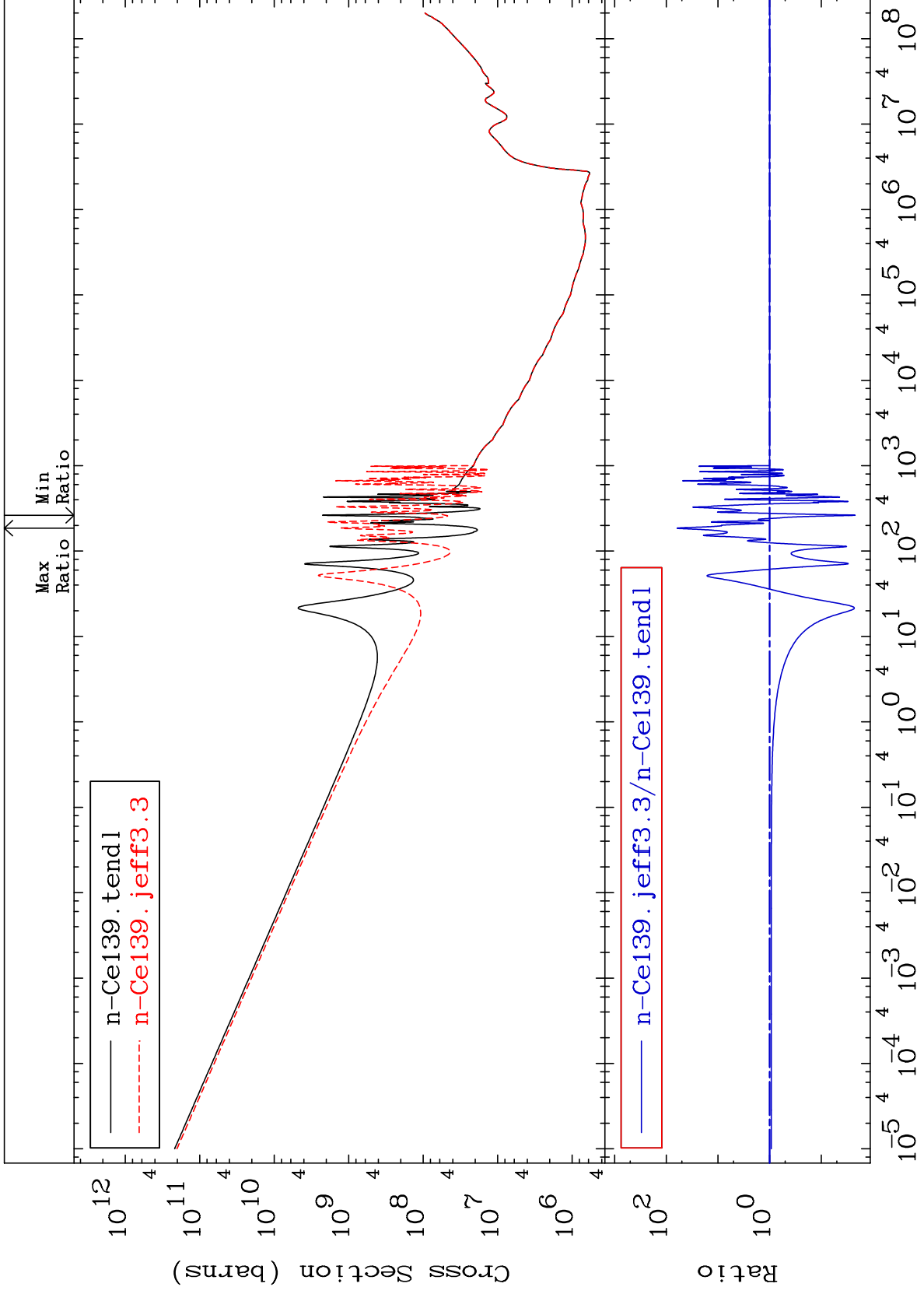
Incident Energy (eV)

58-Ce-139

MAT 5834

Total kinematic kerma (high limit)
Cross Section

58-Ce-139
-97.78 To 6117. %



75

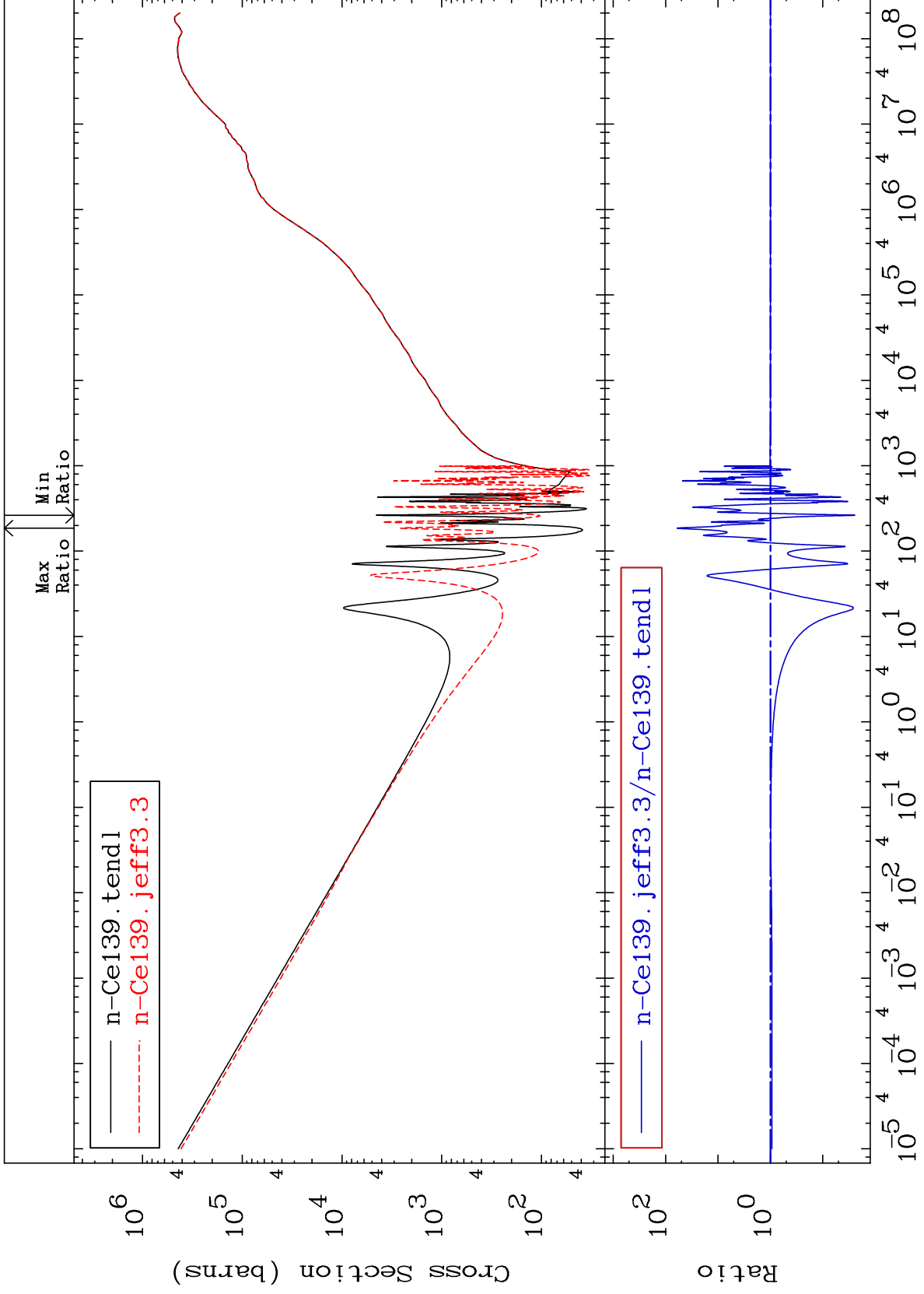
Incident Energy (eV)

58-Ce-139

MAT 5834

Dpa total (eV-barns)
Cross Section

58-Ce-139
-97.59 To 5988. %



76

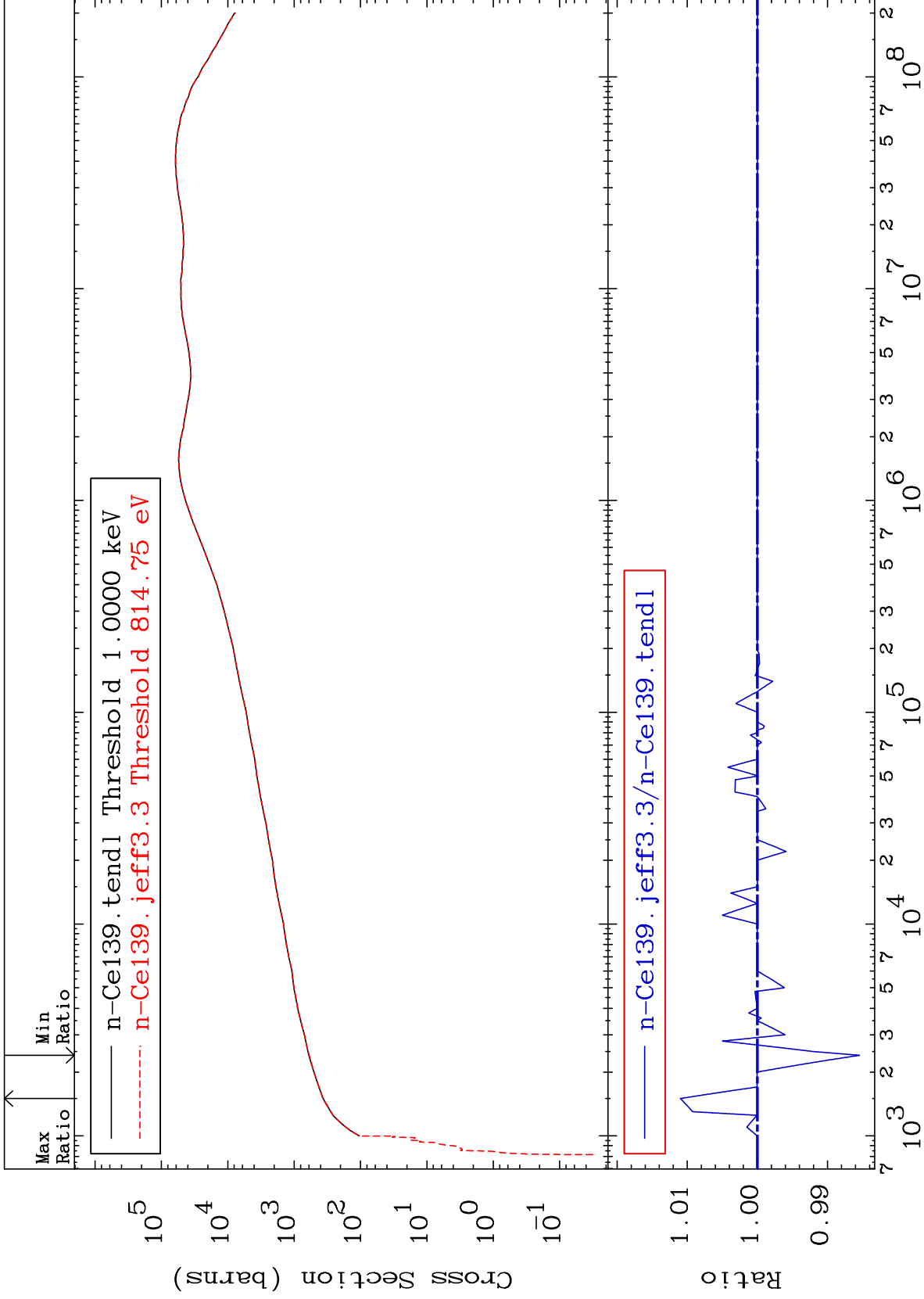
Incident Energy (eV)

58-Ce-139

MAT 5834

Dpa elastic (mt2)
Cross Section

58-Ce-139
-1.456 To 1.099 %



77

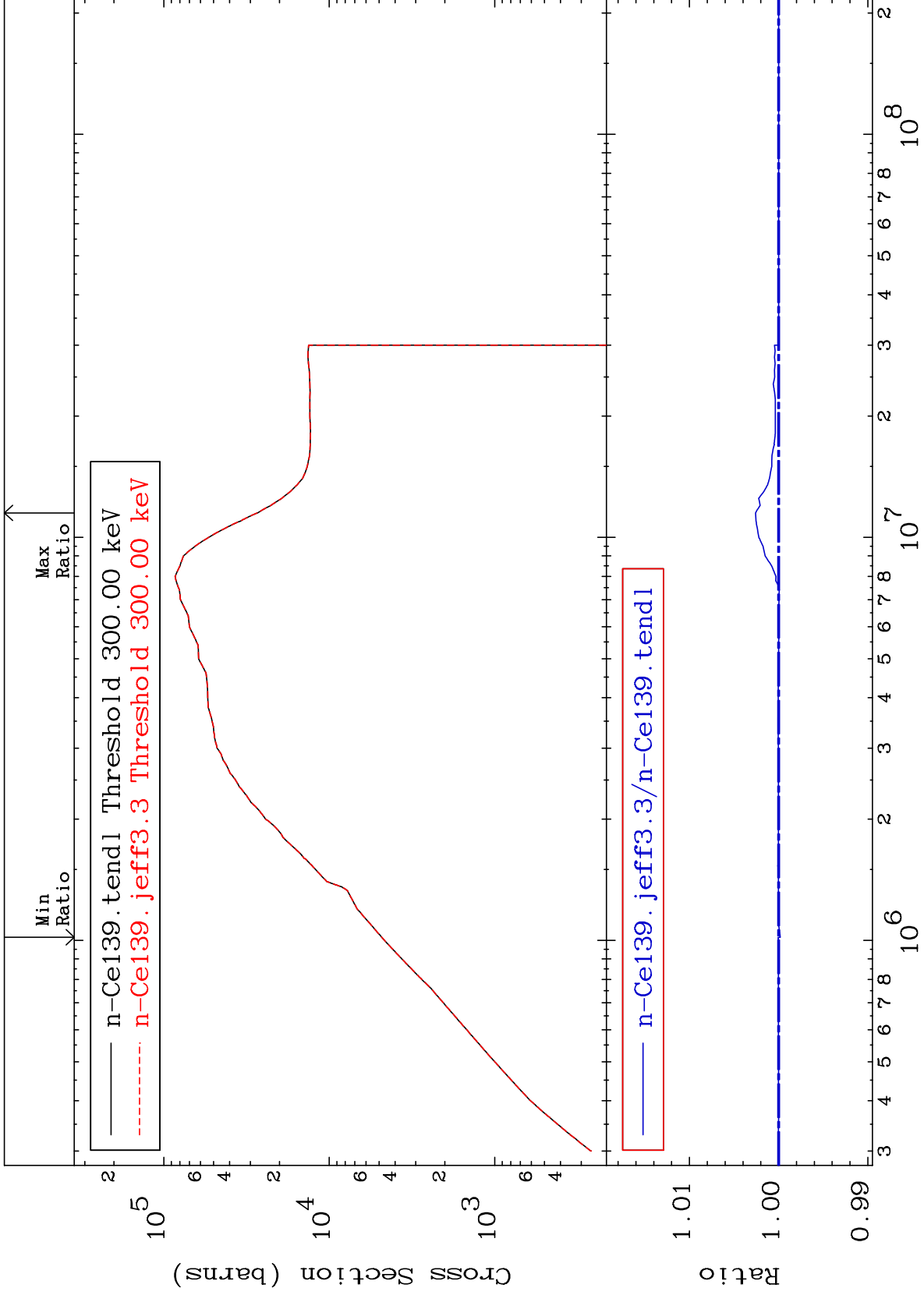
Incident Energy (eV)

58-Ce-139

MAT 5834

Dpa inelastic (mt51-91)
Cross Section

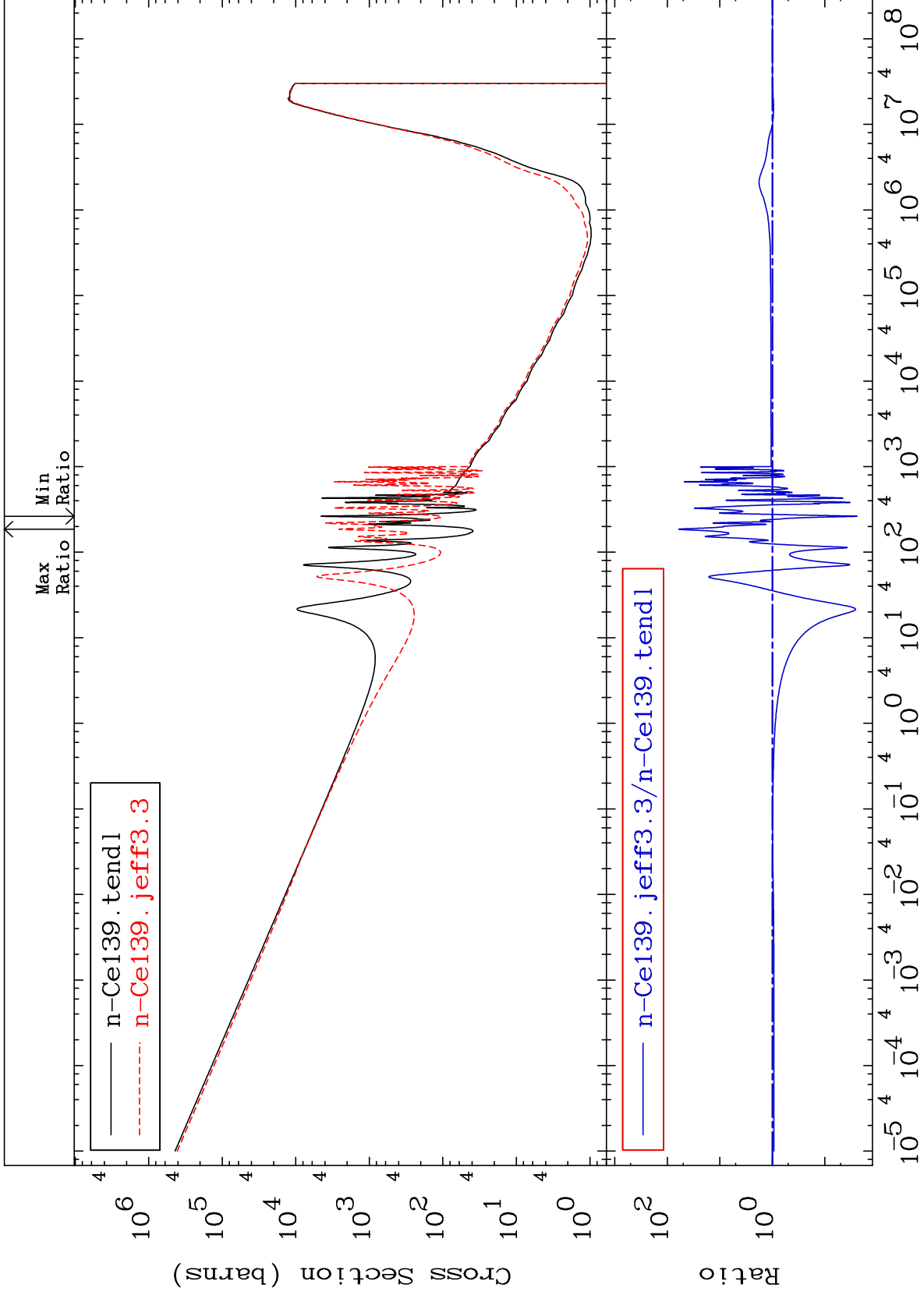
58-Ce-139
-0.018 To 0.259 %



78

Incident Energy (eV)

58-Ce-139

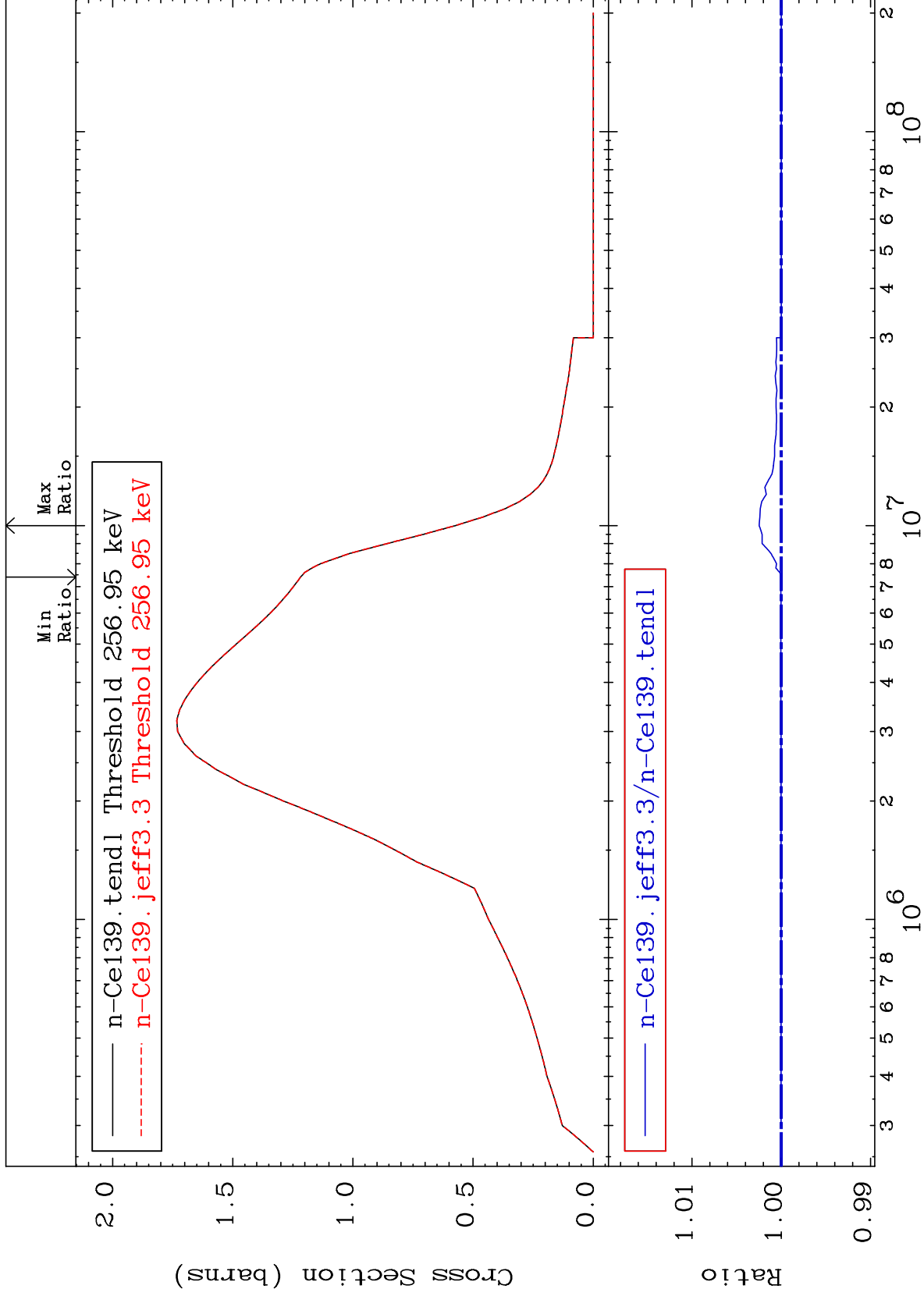


MAT 5834

Inelastic:58-Ce-139g

58-Ce-139

Radionuclide Production Cross Section 0.000 To 0.247 %



80

Incident Energy (eV)

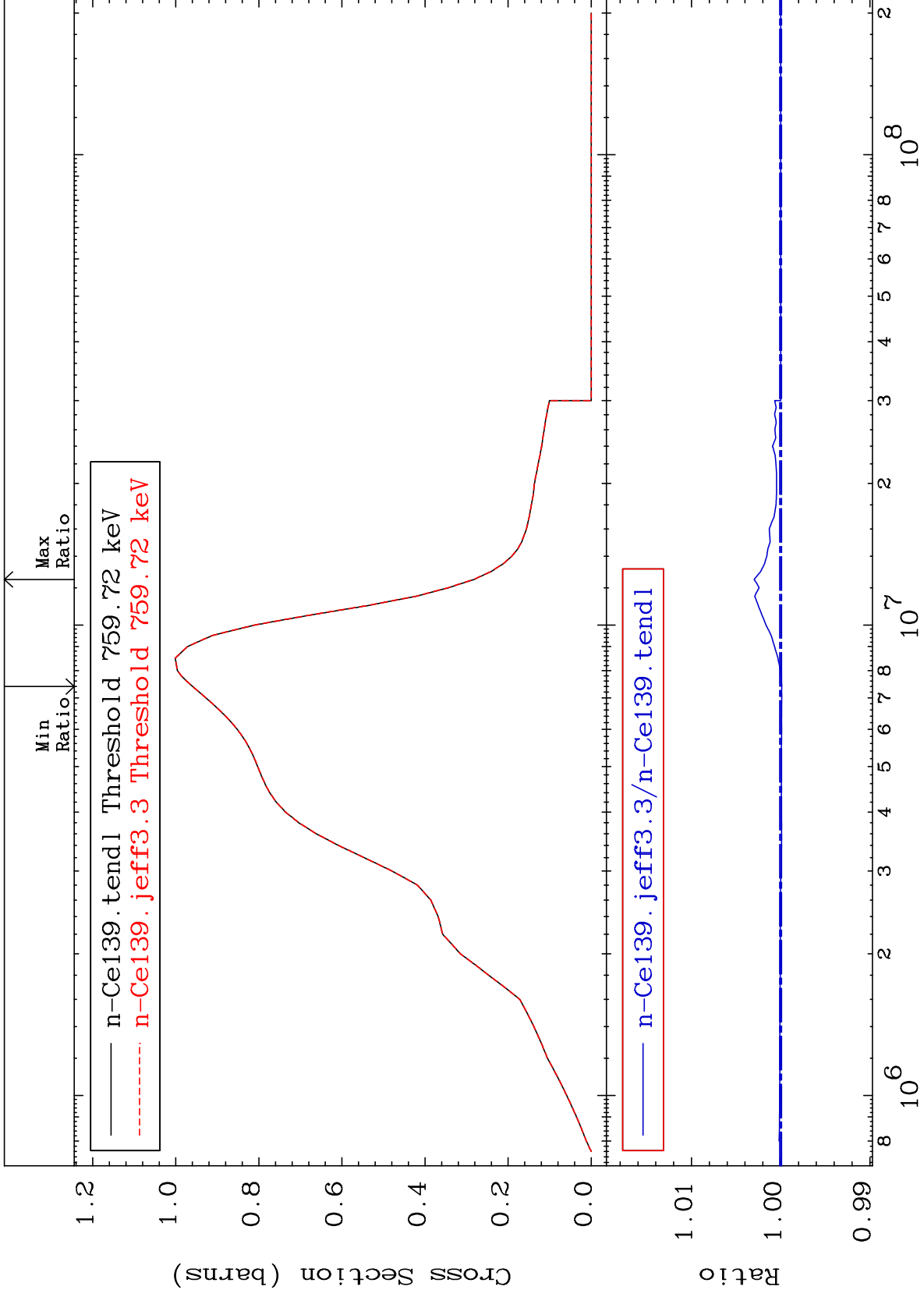
58-Ce-139

MAT 5834

Inelastic: 58-Ce-139m2

58-Ce-139

Radionuclide Production Cross Section -0.013 To 0.298 %



81

Incident Energy (eV)

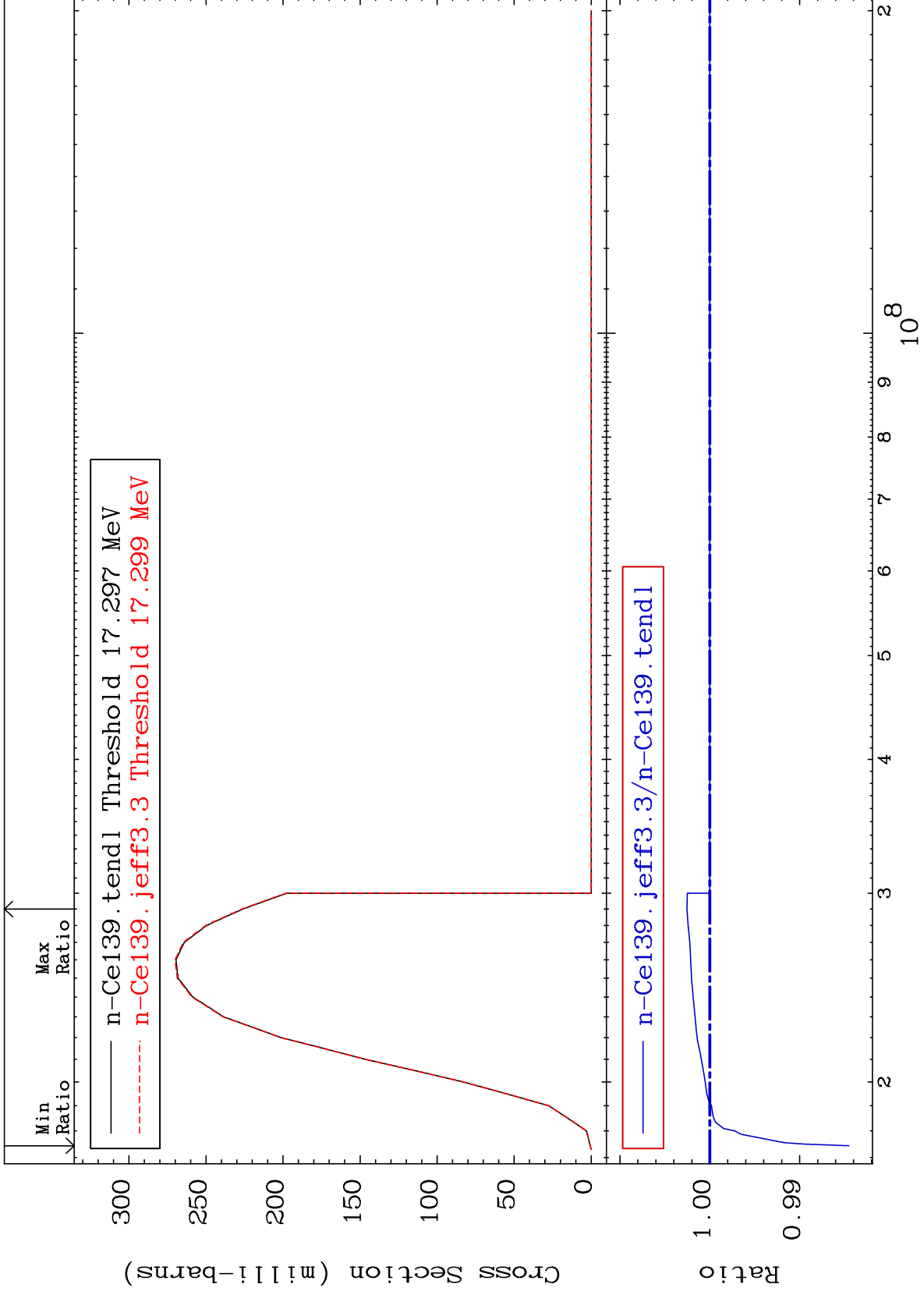
58-Ce-139

MAT 5834

(n,3n):58-Ce-137g

58-Ce-139

Radionuclide Production Cross Section -1.548 To 0.253 %

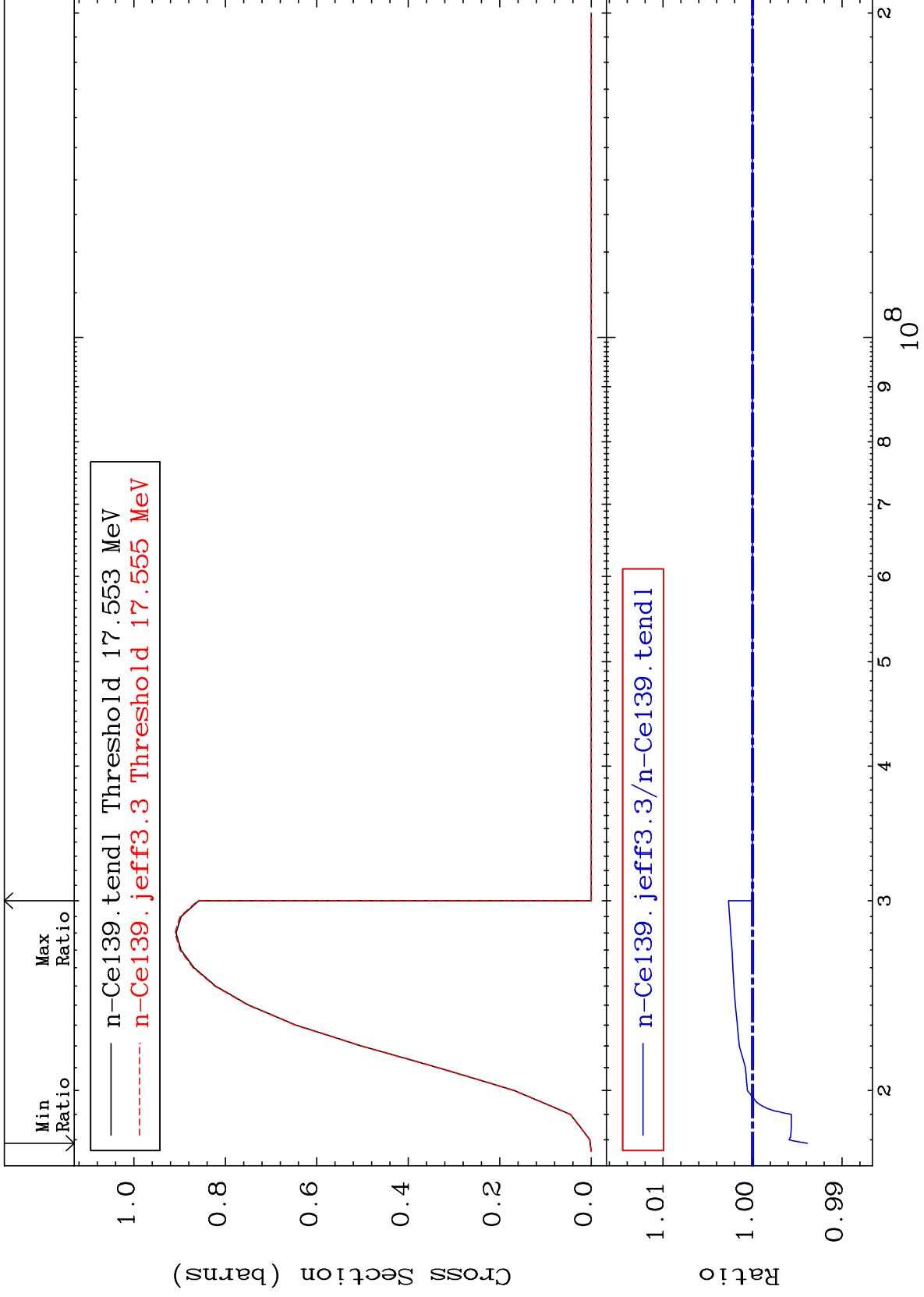


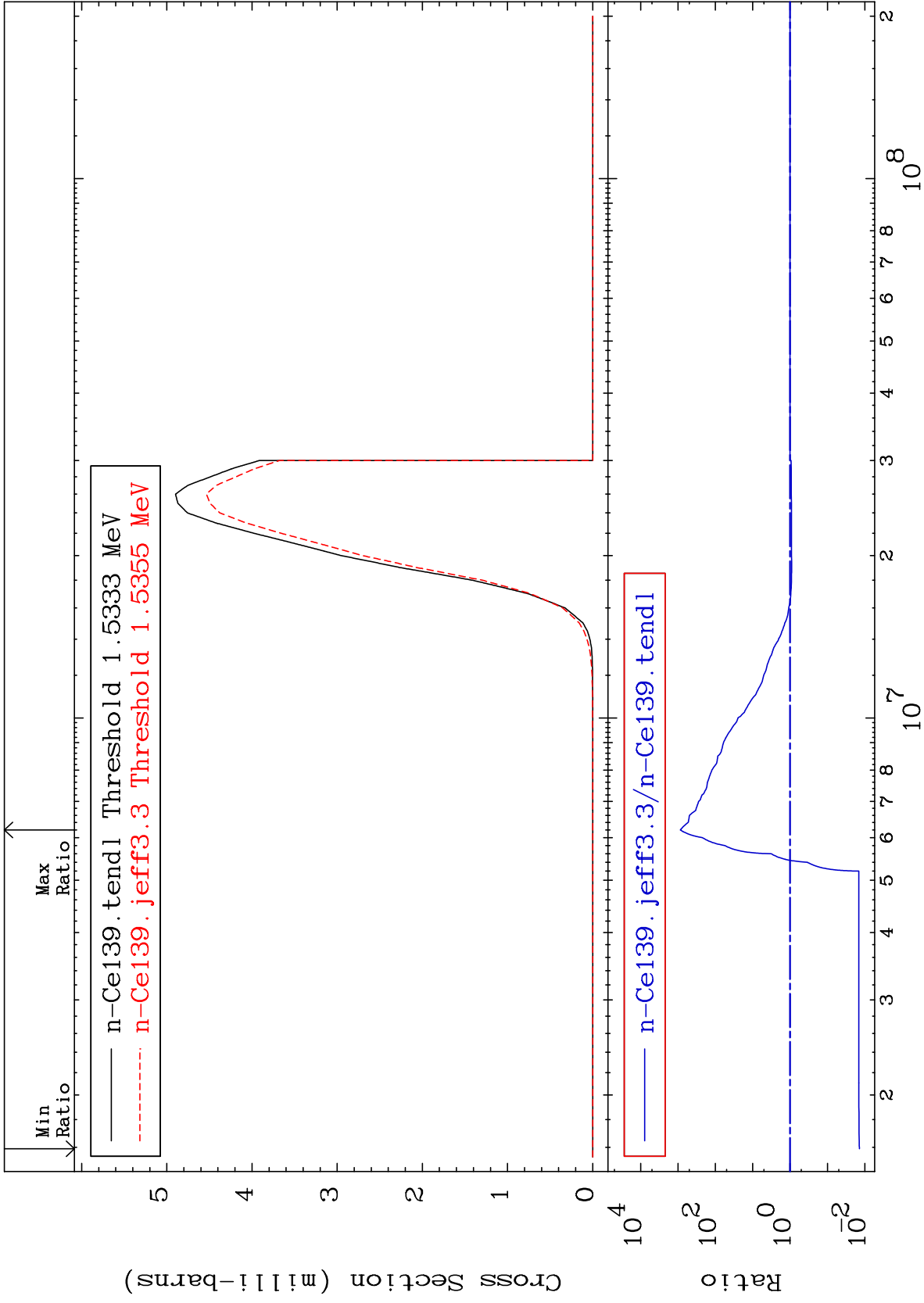
MAT 5834

(n,3n):58-Ce-137m2

58-Ce-139

Radionuclide Production Cross Section -0.612 To 0.267 %





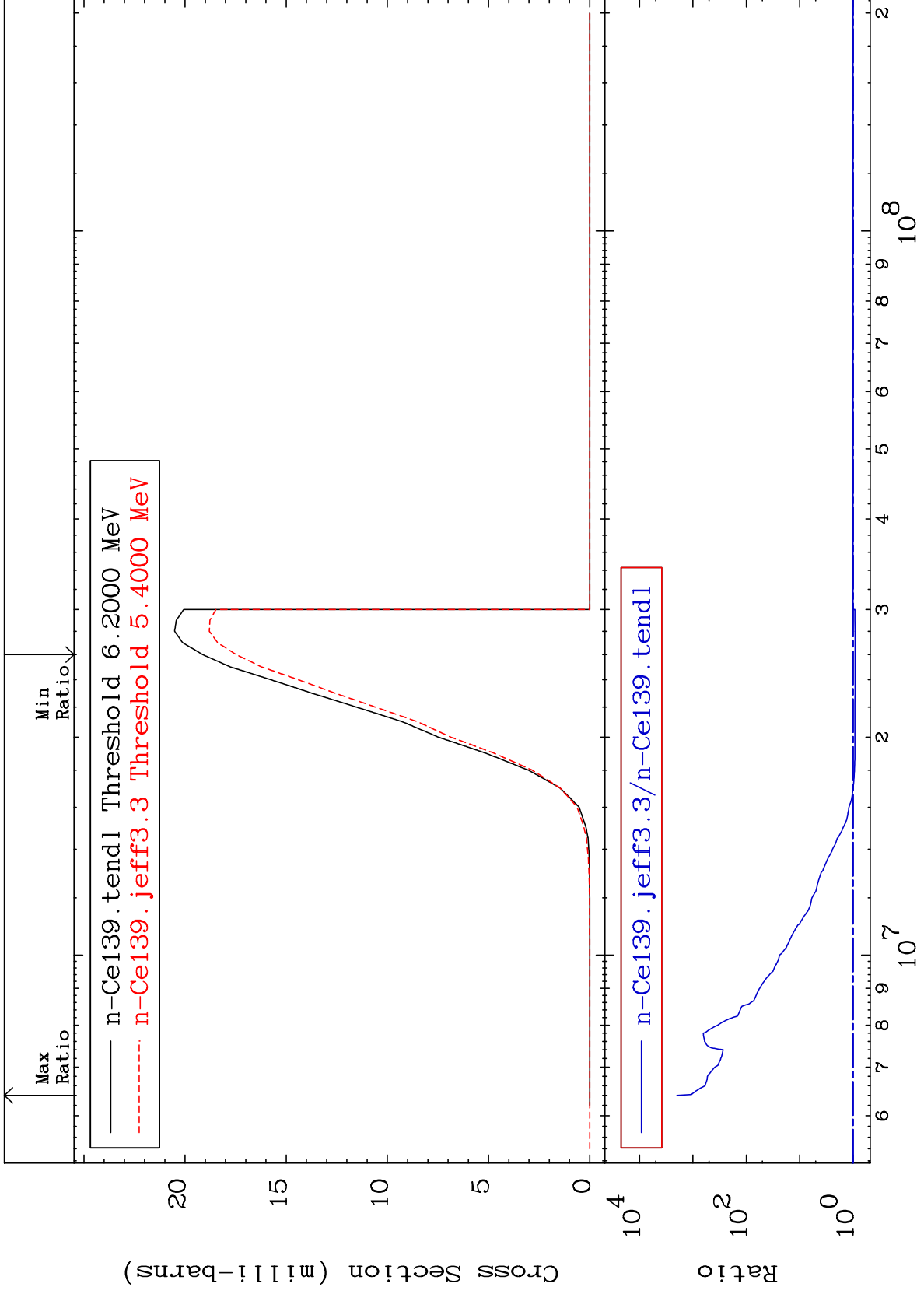
MAT 5834

(n, n') α :56-Ba-135m2

58-Ce-139

Radionuclide Production Cross Section

-8.691 To 9999. %



85

Incident Energy (eV)

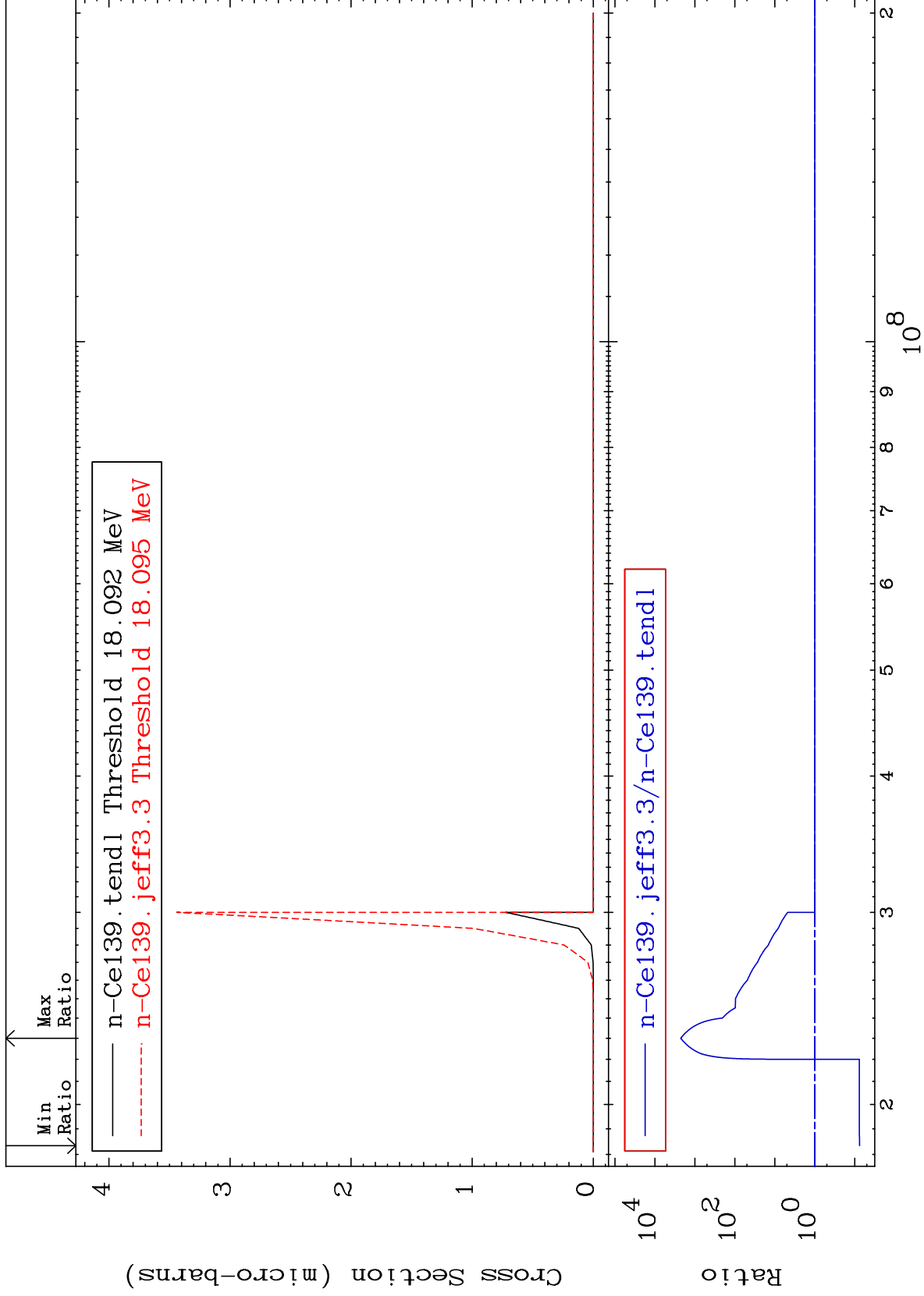
58-Ce-139

MAT 5834

(n,3n) α :56-Ba-133g

58-Ce-139

Radionuclide Production Cross Section -92.42 To 9999. %

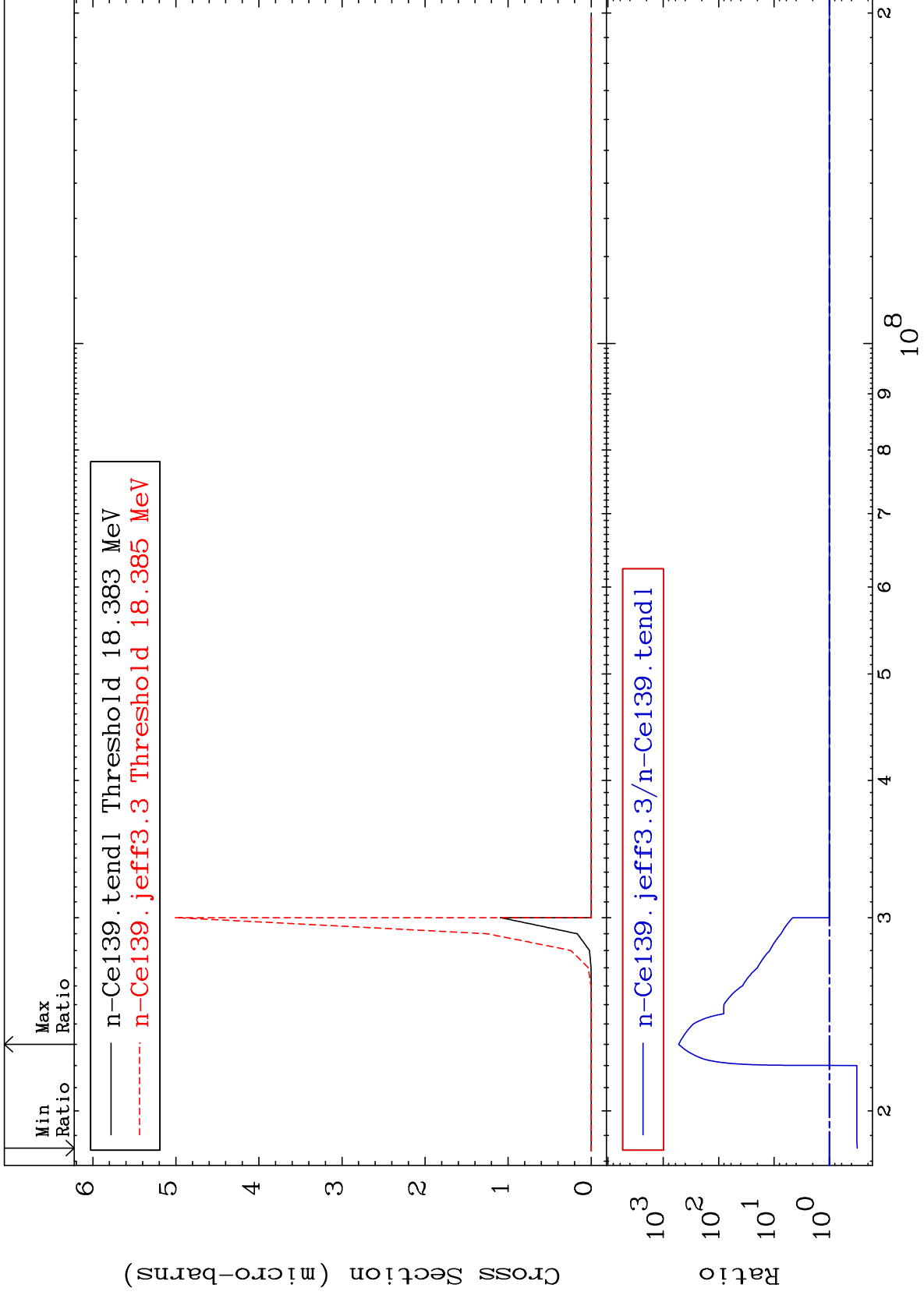


MAT 5834

(n, 3n) α : 56-Ba-133m2

58-Ce-139

Radionuclide Production Cross Section -68.62 To 9999. %

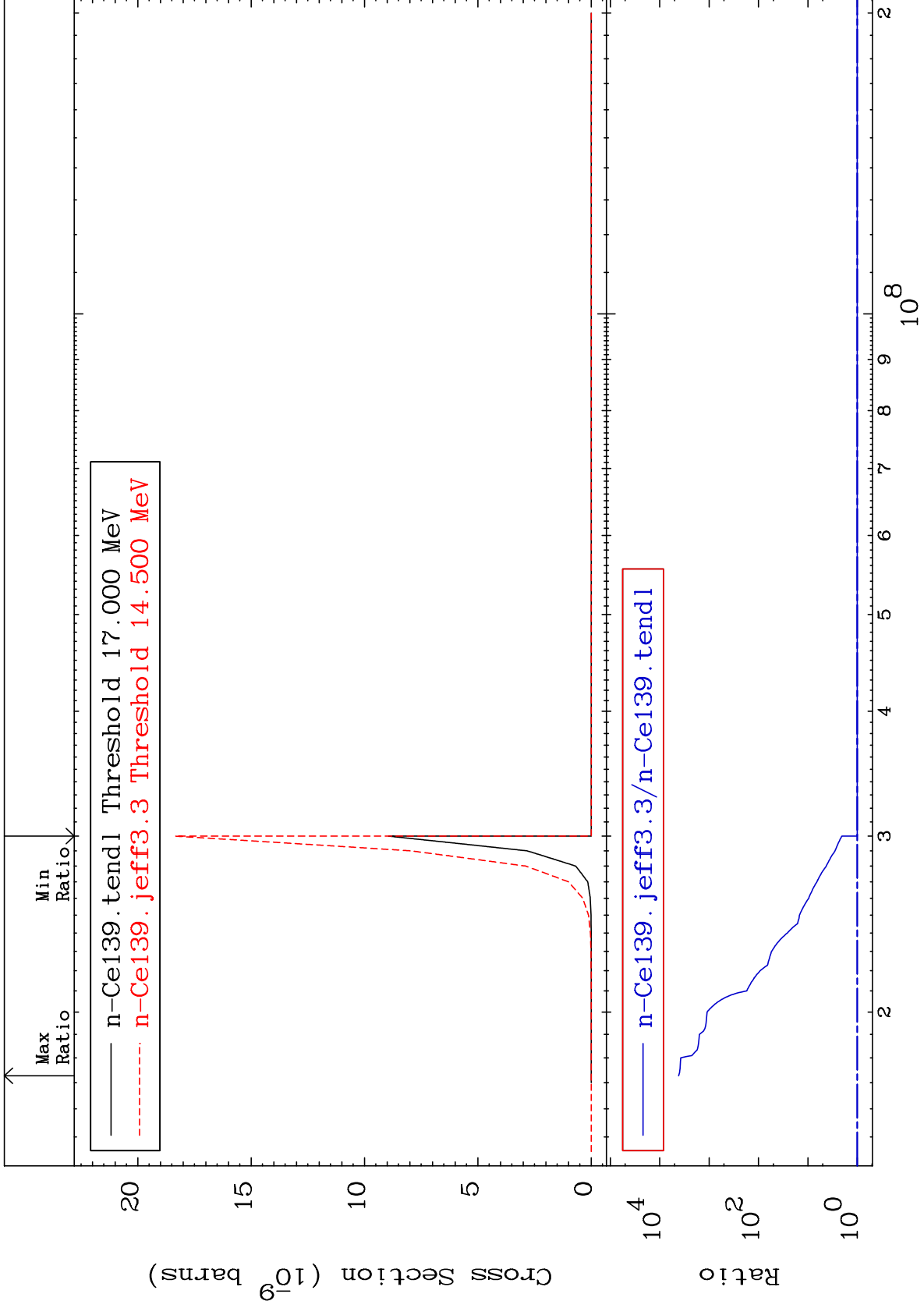


MAT 5834

(n,n') 2α:54-Xe-131g

58-Ce-139

Radionuclide Production Cross Section 0.000 To 9999. %



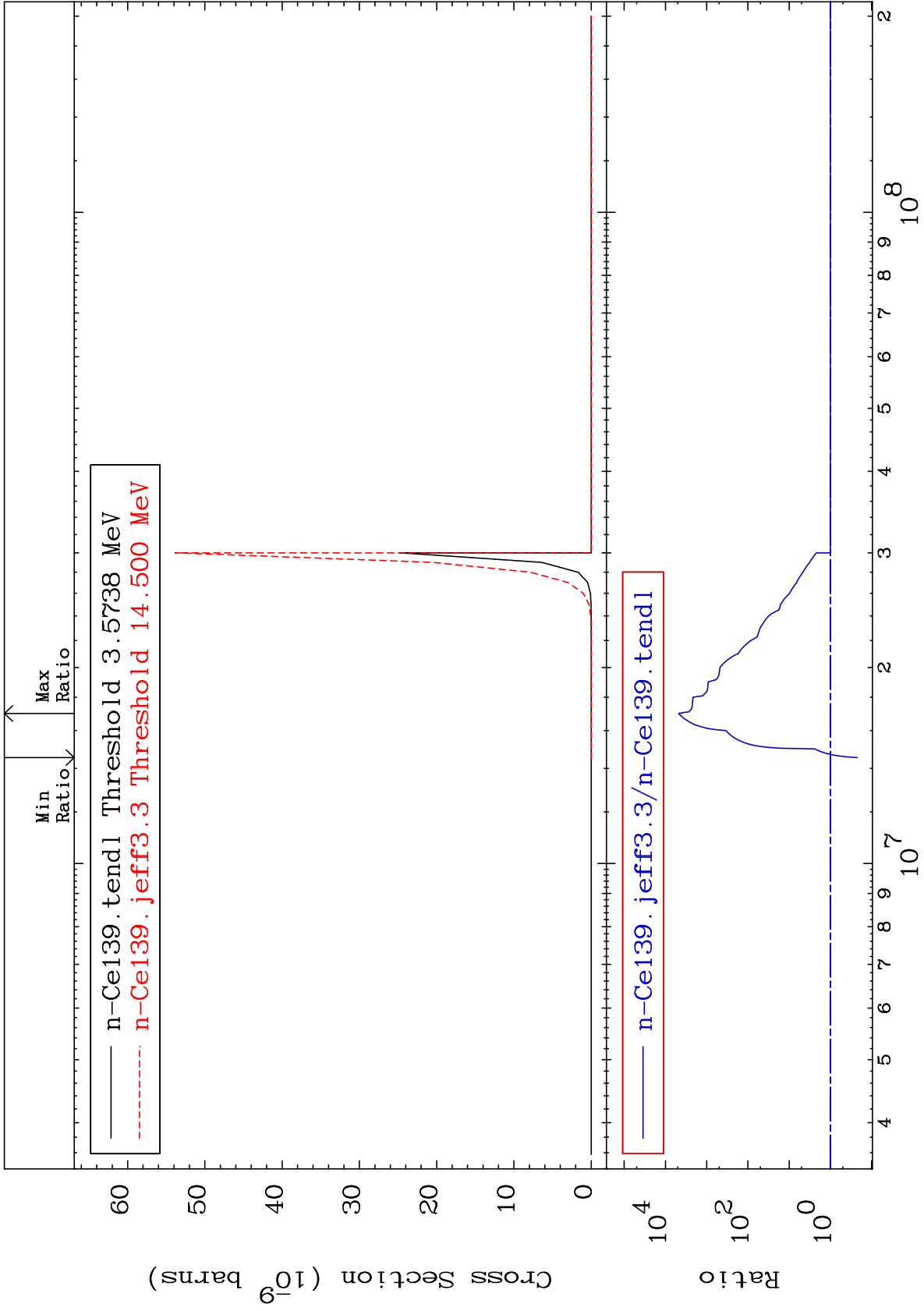
MAT 5834

(n, n') 2α:54-Xe-131m2

58-Ce-139

Radionuclide Production Cross Section

-77.69 To 9999. %



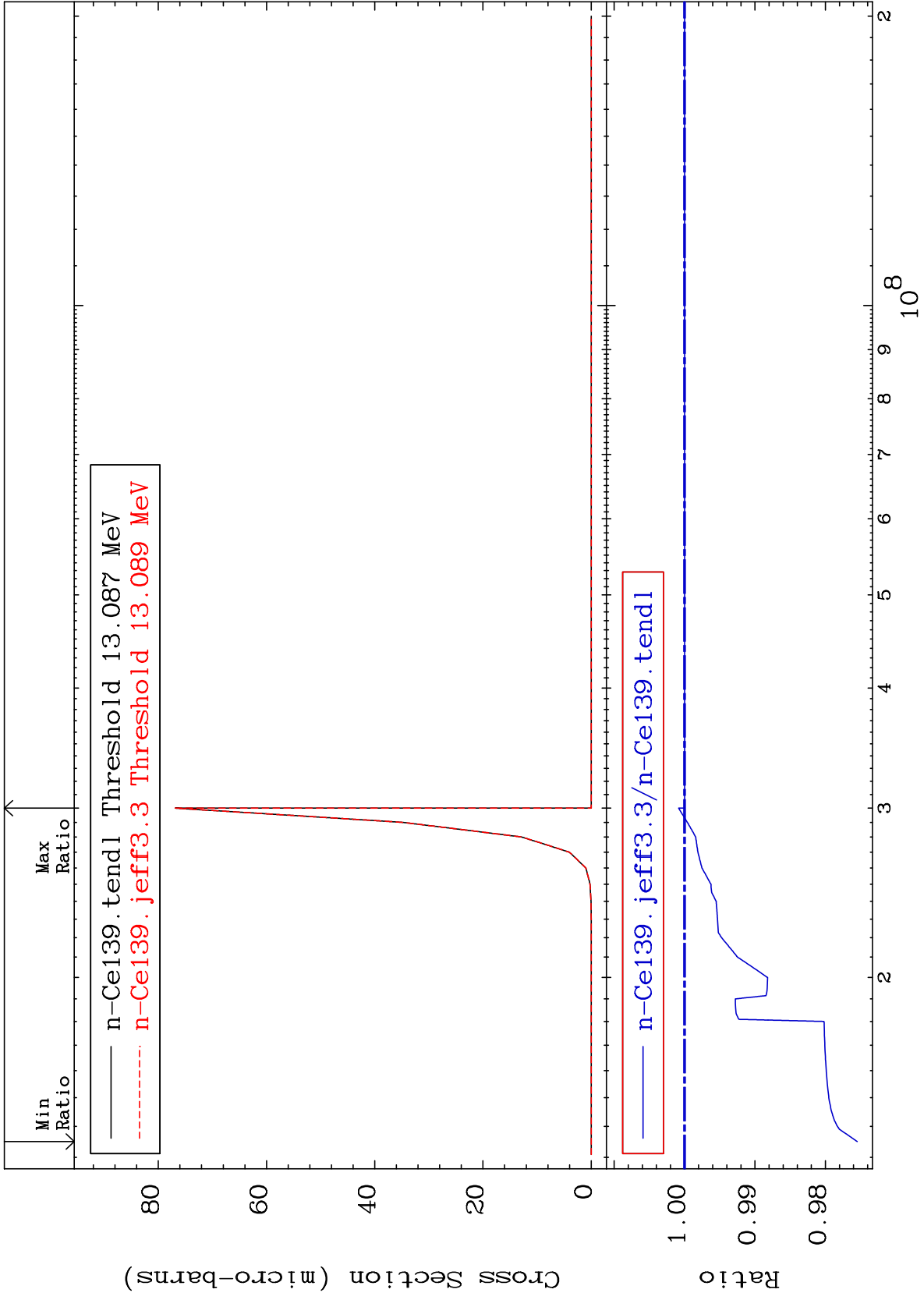
89

Incident Energy (eV)

58-Ce-139

MAT 5834

(n, n') He-3:56-Ba-136g 58-Ce-139
Radionuclide Production Cross Section -2.452 To 0.084 %



90

Incident Energy (eV)

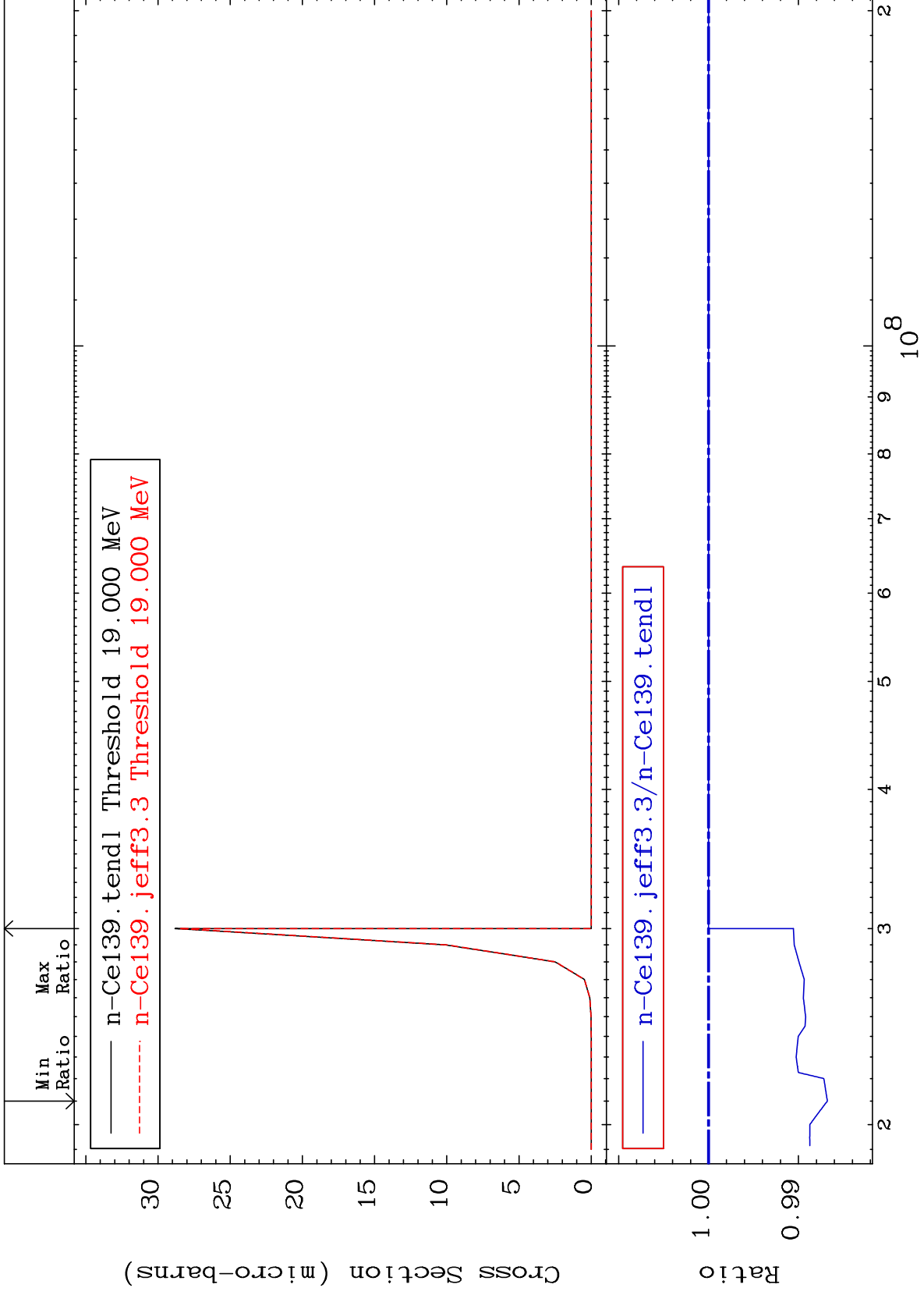
58-Ce-139

MAT 5834

(n, n') He-3:56-Ba-136m5

58-Ce-139

Radionuclide Production Cross Section -1.322 To 0.000 %

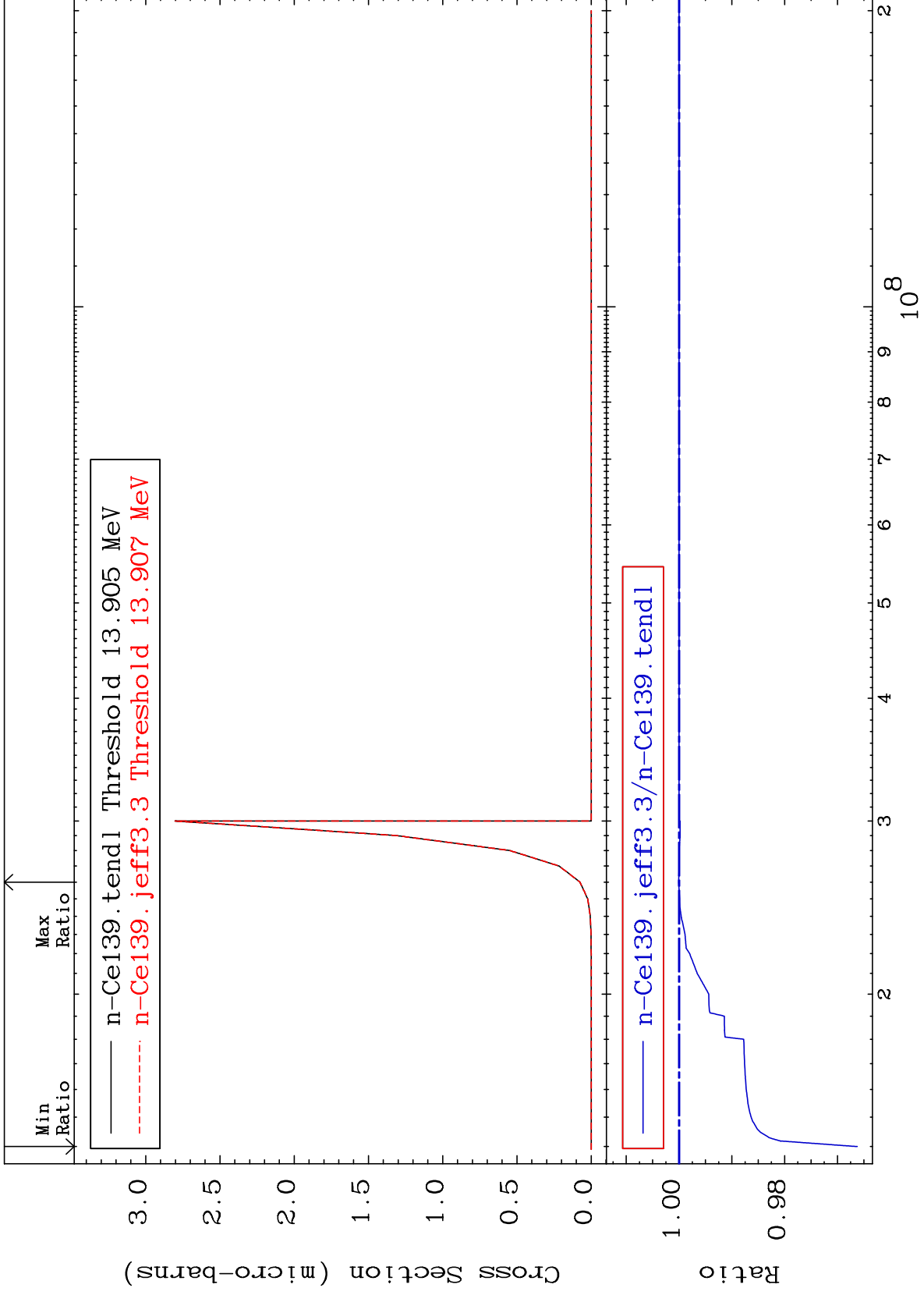


MAT 5834

(n,2n) p:56-Ba-137g

58-Ce-139

Radionuclide Production Cross Section -3.375 To 0.008 %

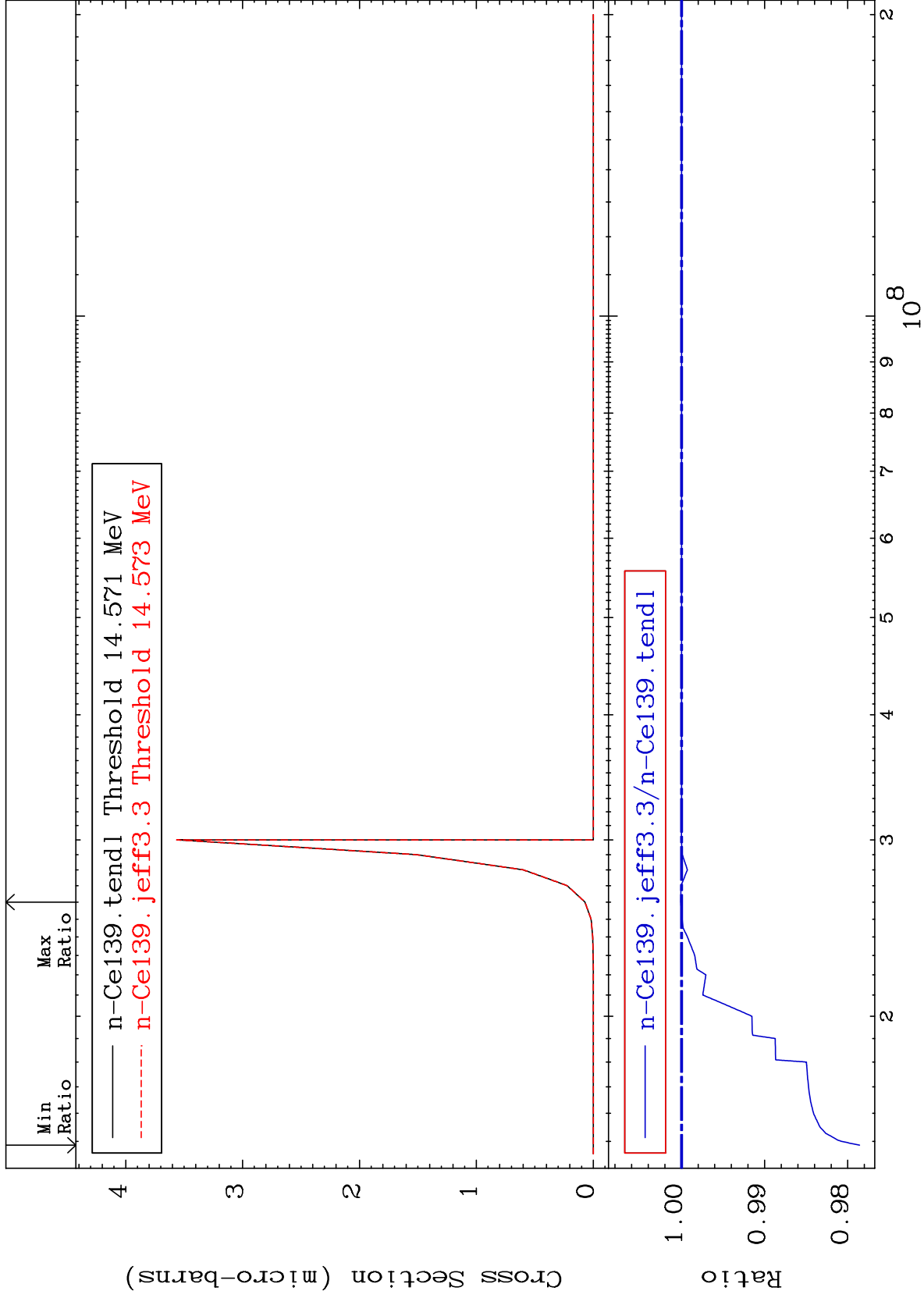


MAT 5834

(n,2n) p:56-Ba-137m2

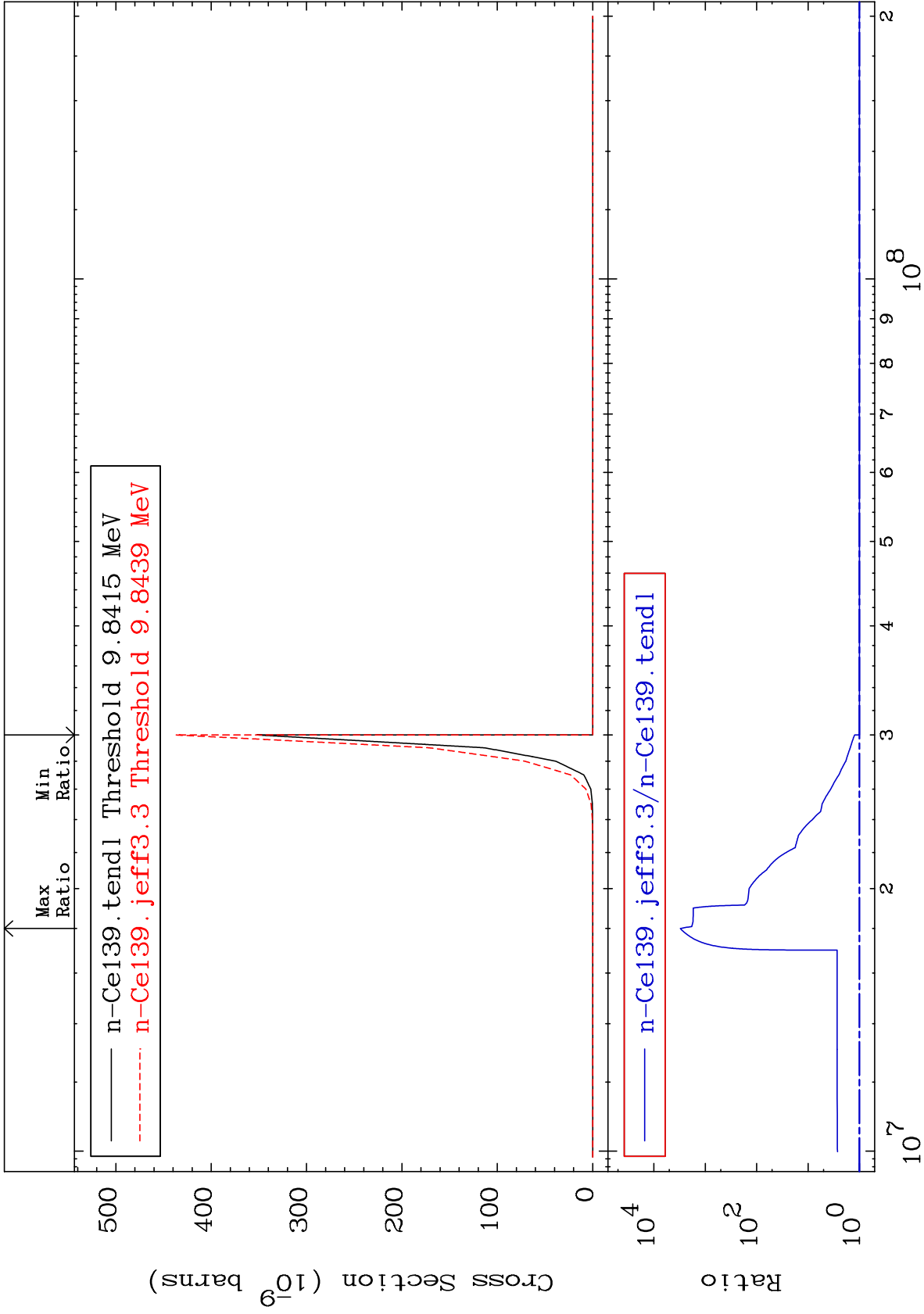
58-Ce-139

Radionuclide Production Cross Section -2.142 To 0.009 %



MAT 5834

(n,n') p α:55-Cs-134g 58-Ce-139
Radionuclide Production Cross Section 0.000 To 9999. %

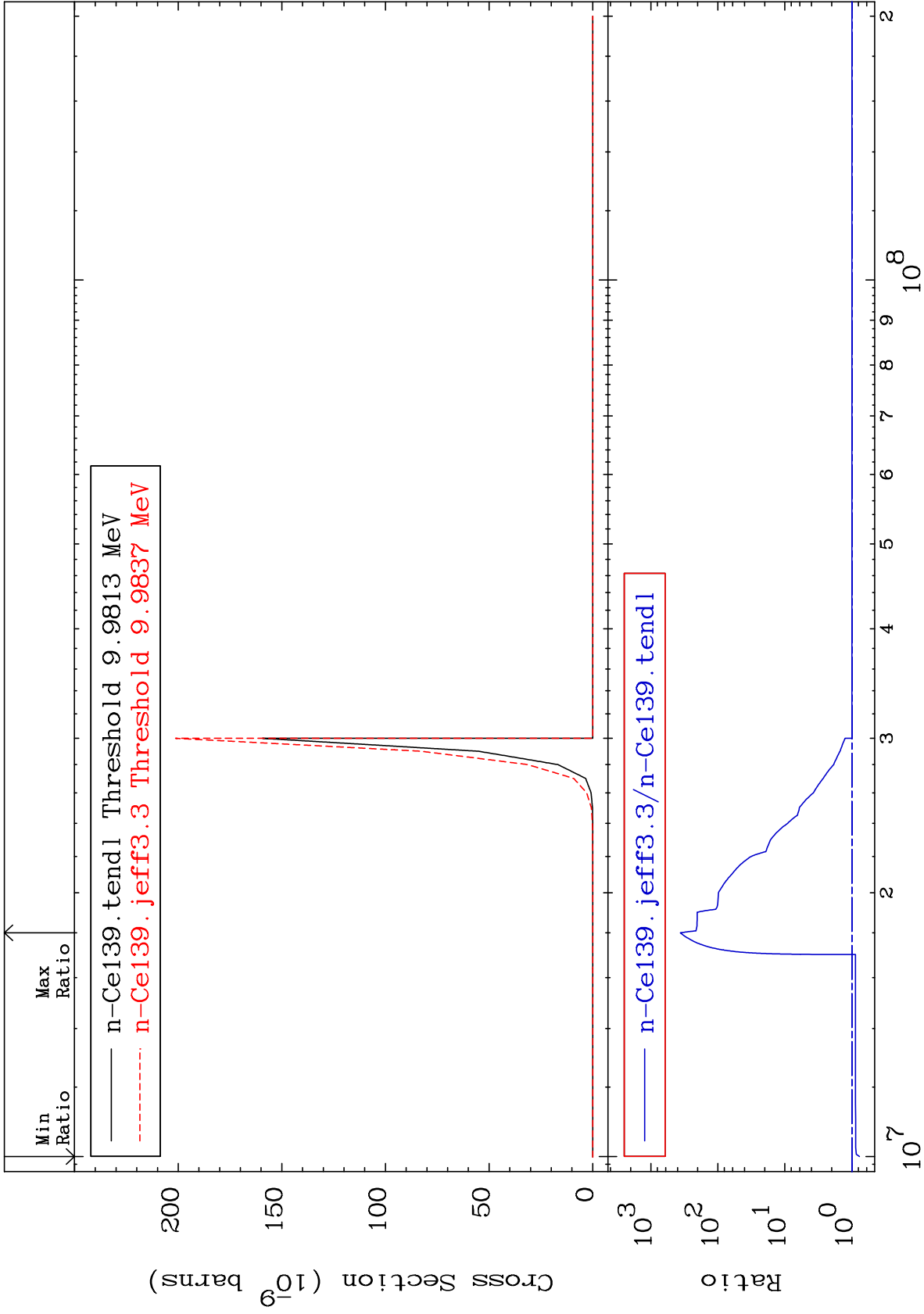


94

58-Ce-139

MAT 5834

(n, n') p α :55-Cs-134m3 58-Ce-139
Radionuclide Production Cross Section -22.94 To 9999. %



95

Incident Energy (eV)

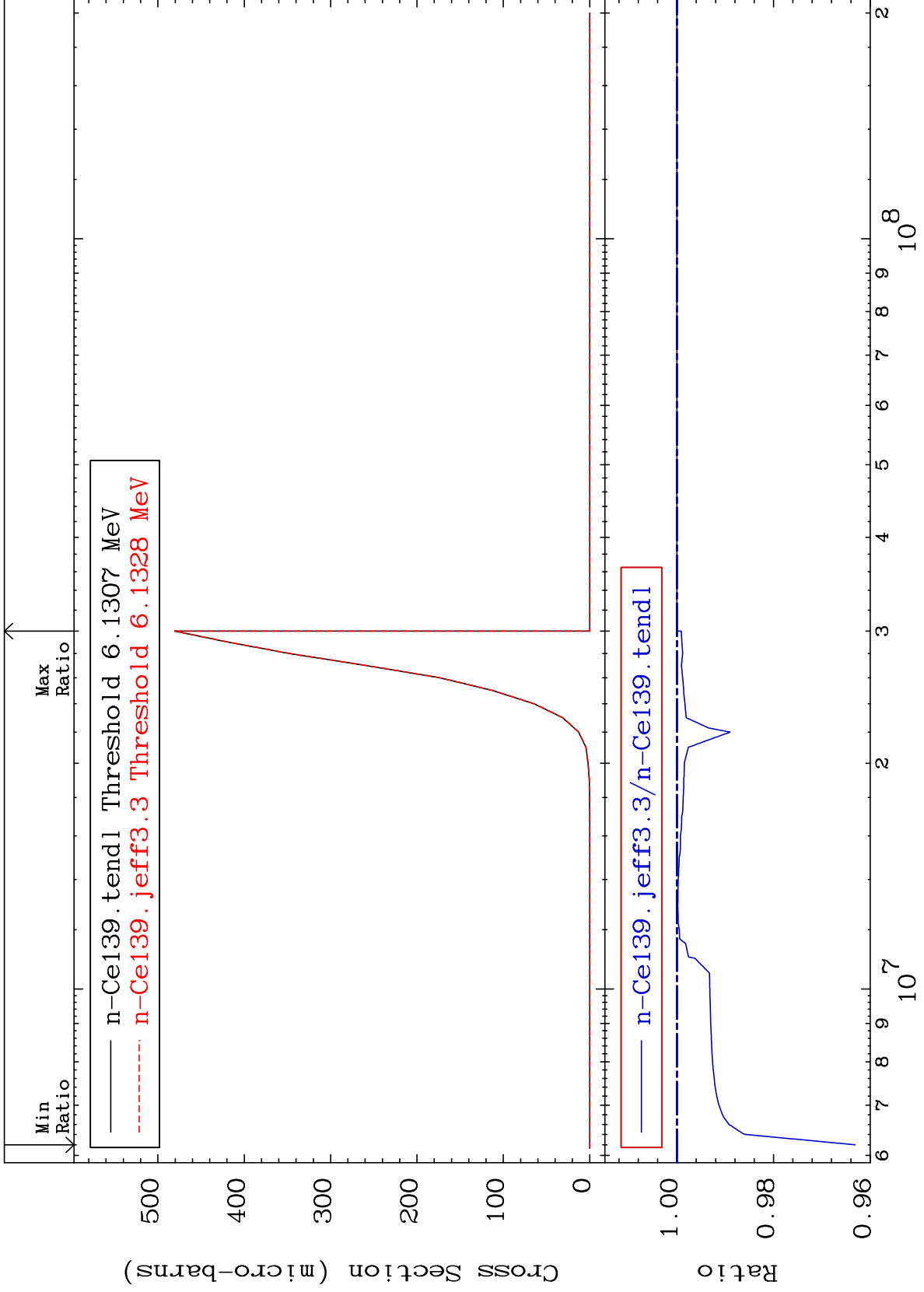
58-Ce-139

MAT 5834

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

58-Ce-139

Radionuclide Production Cross Section -3.688 To 0.000 %



96

Incident Energy (eV)

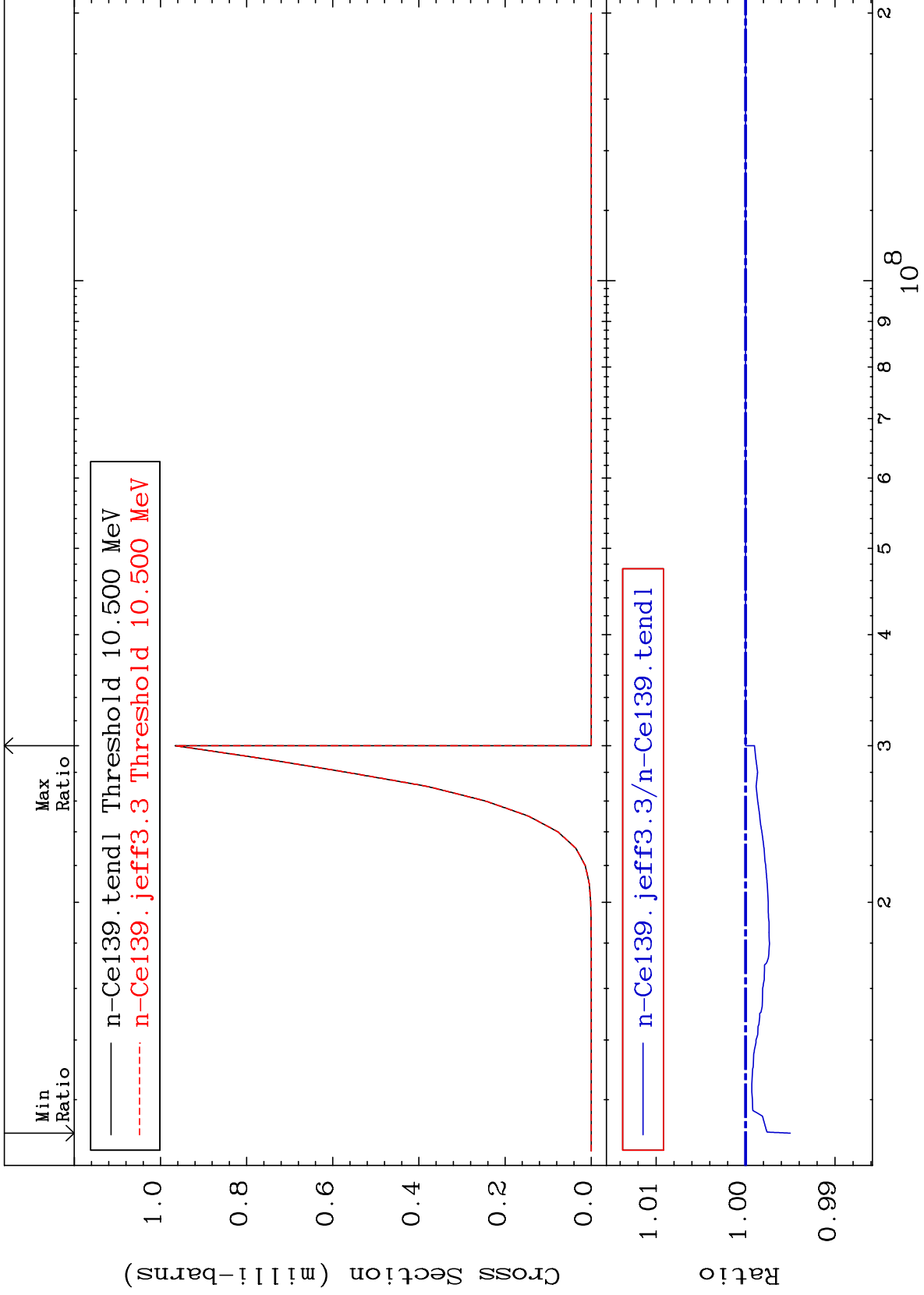
58-Ce-139

MAT 5834

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

58-Ce-139

Radionuclide Production Cross Section -0.500 To 0.000 %



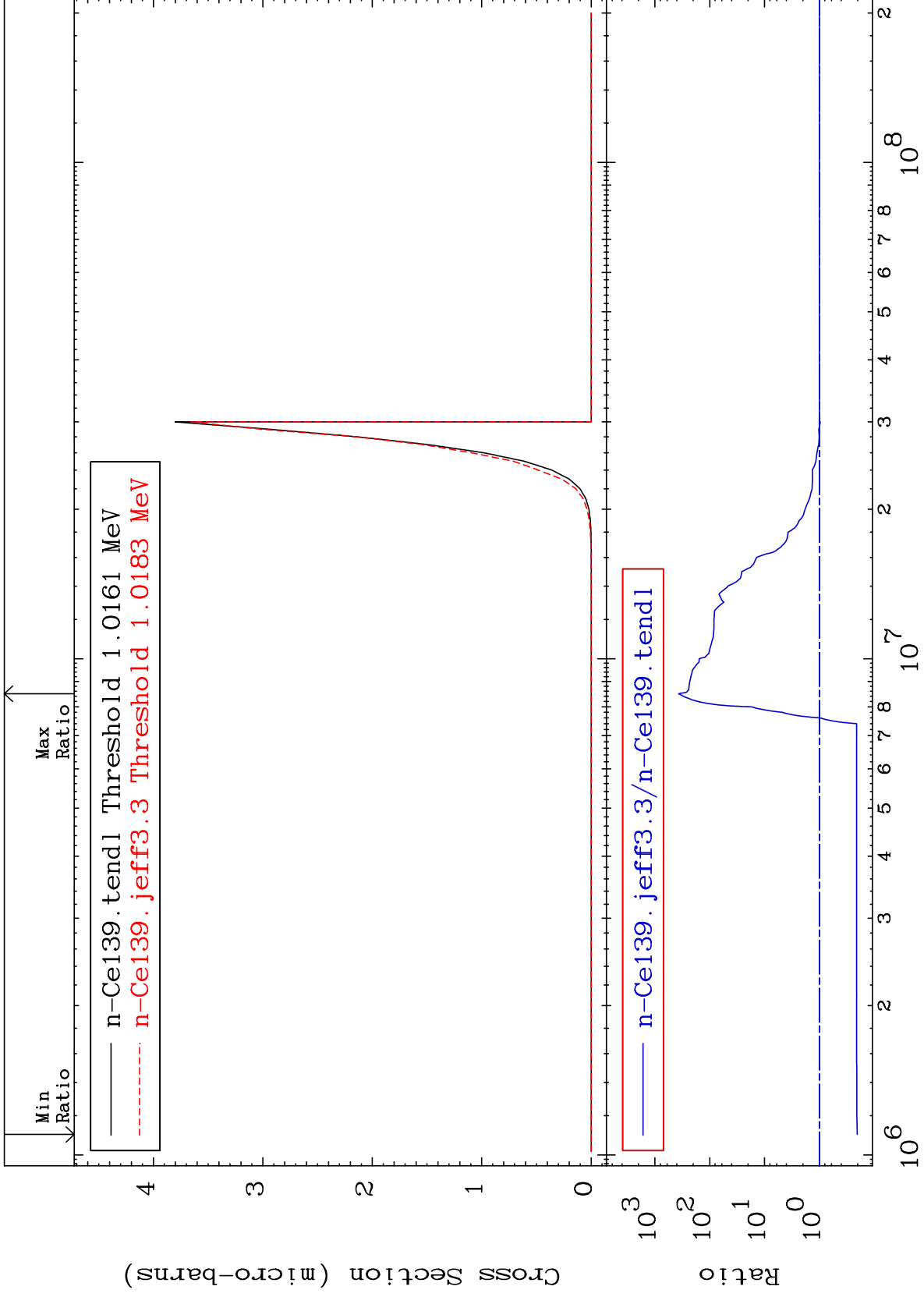
MAT 5834

(n, p) α :55-Cs-135g

58-Ce-139

Radionuclide Production Cross Section

-79.61 To 9999. %



98

Incident Energy (eV)

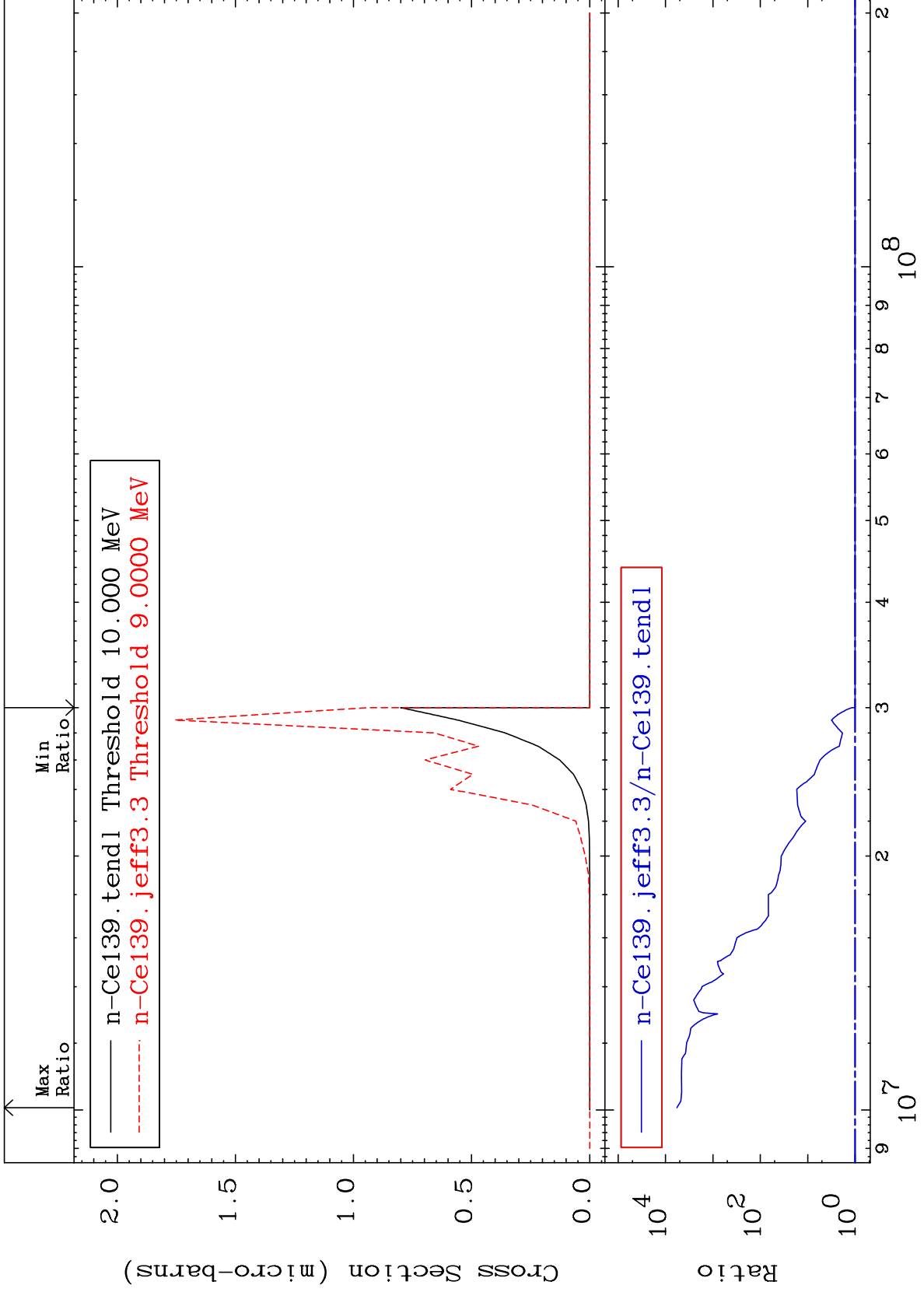
58-Ce-139

MAT 5834

(n,p) α :55-Cs-135m10

58-Ce-139

Radionuclide Production Cross Section 0.000 To 9999. %



99

Incident Energy (eV)

58-Ce-139

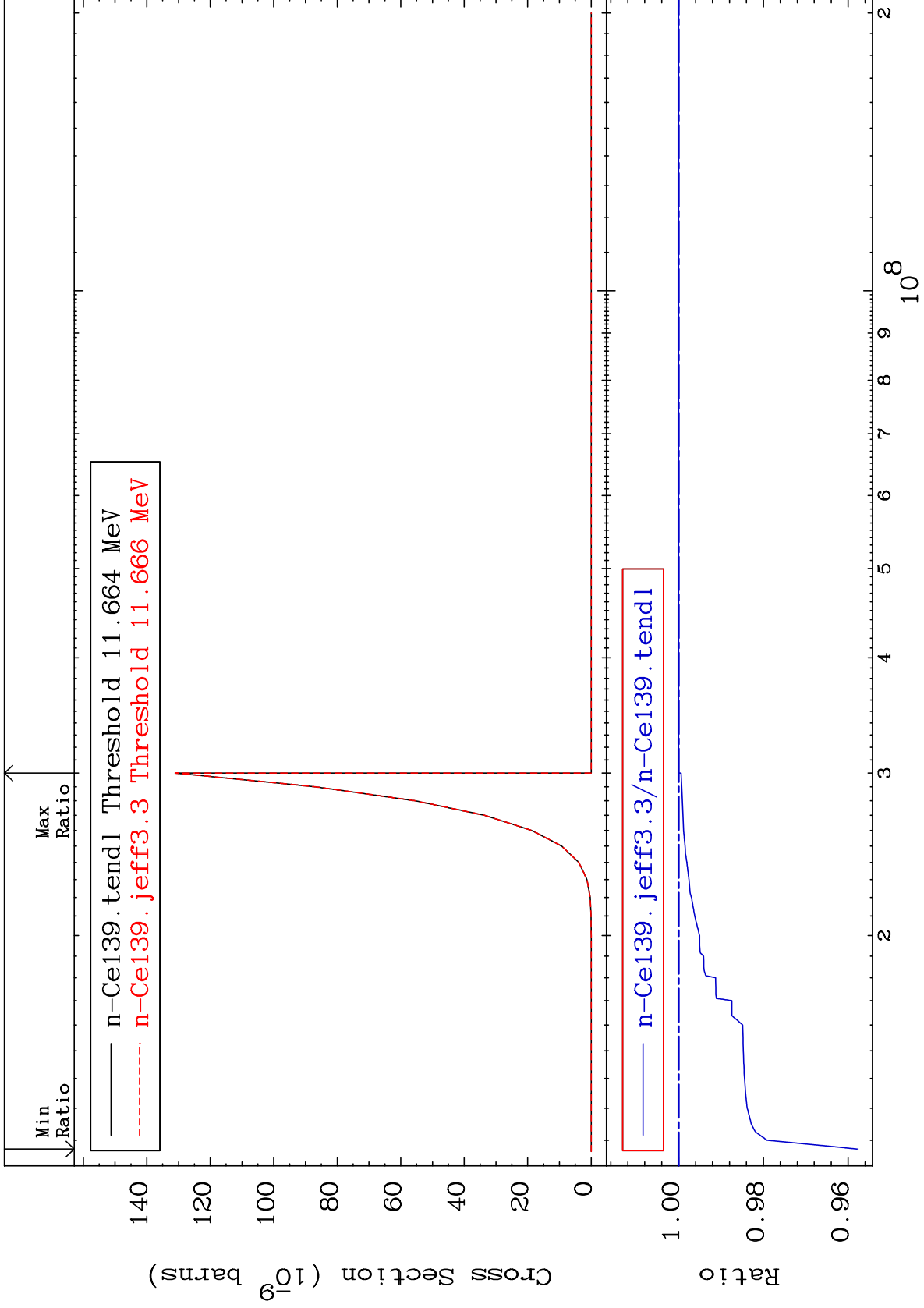
MAT 5834

(n, p) d:56-Ba-137g

58-Ce-139

Radionuclide Production Cross Section

-4.215 To 0.000 %



100

Incident Energy (eV)

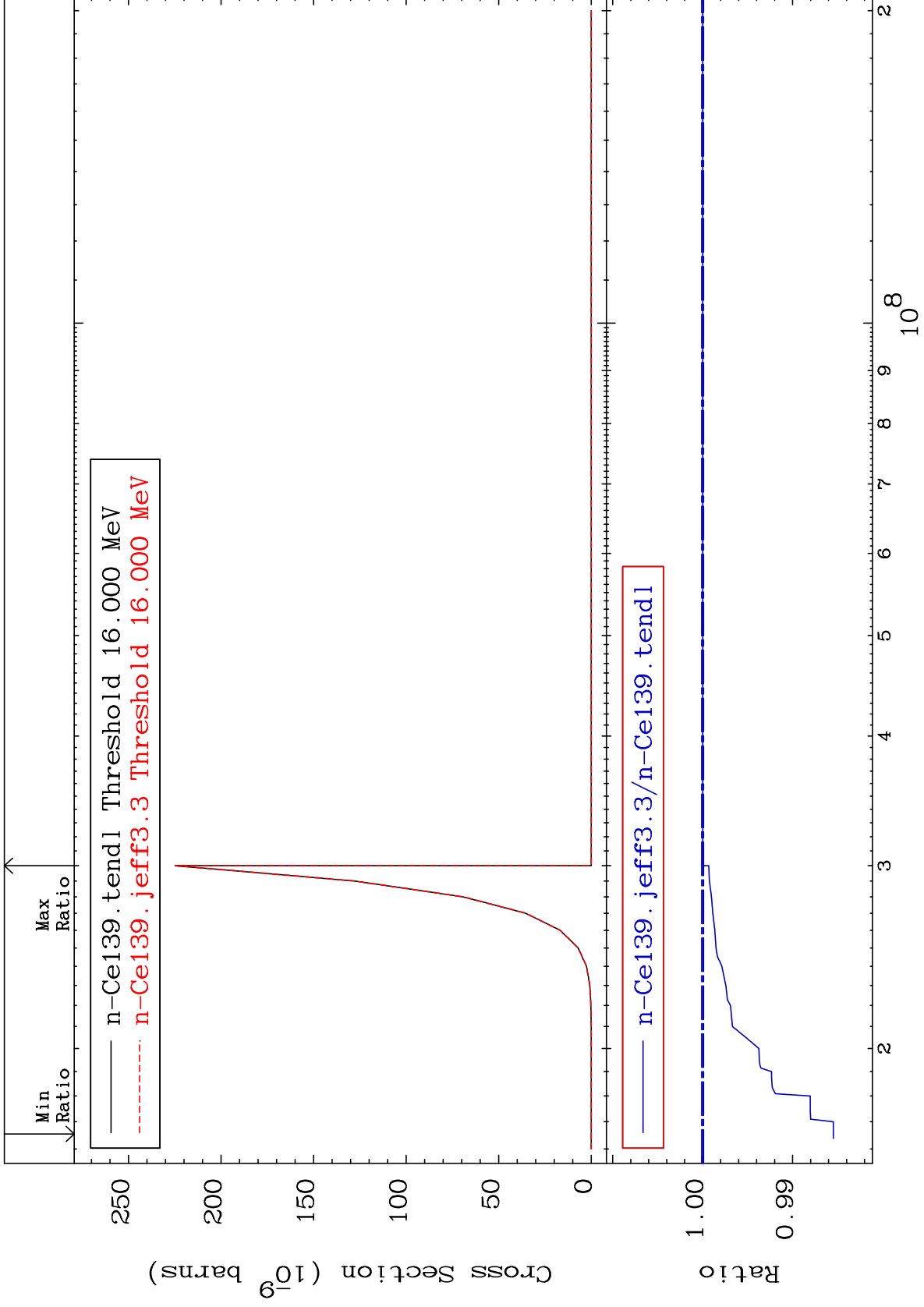
58-Ce-139

MAT 5834

(n, p) d:56-Ba-137m2

58-Ce-139

Radionuclide Production Cross Section -1.452 To 0.000 %



101

Incident Energy (eV)

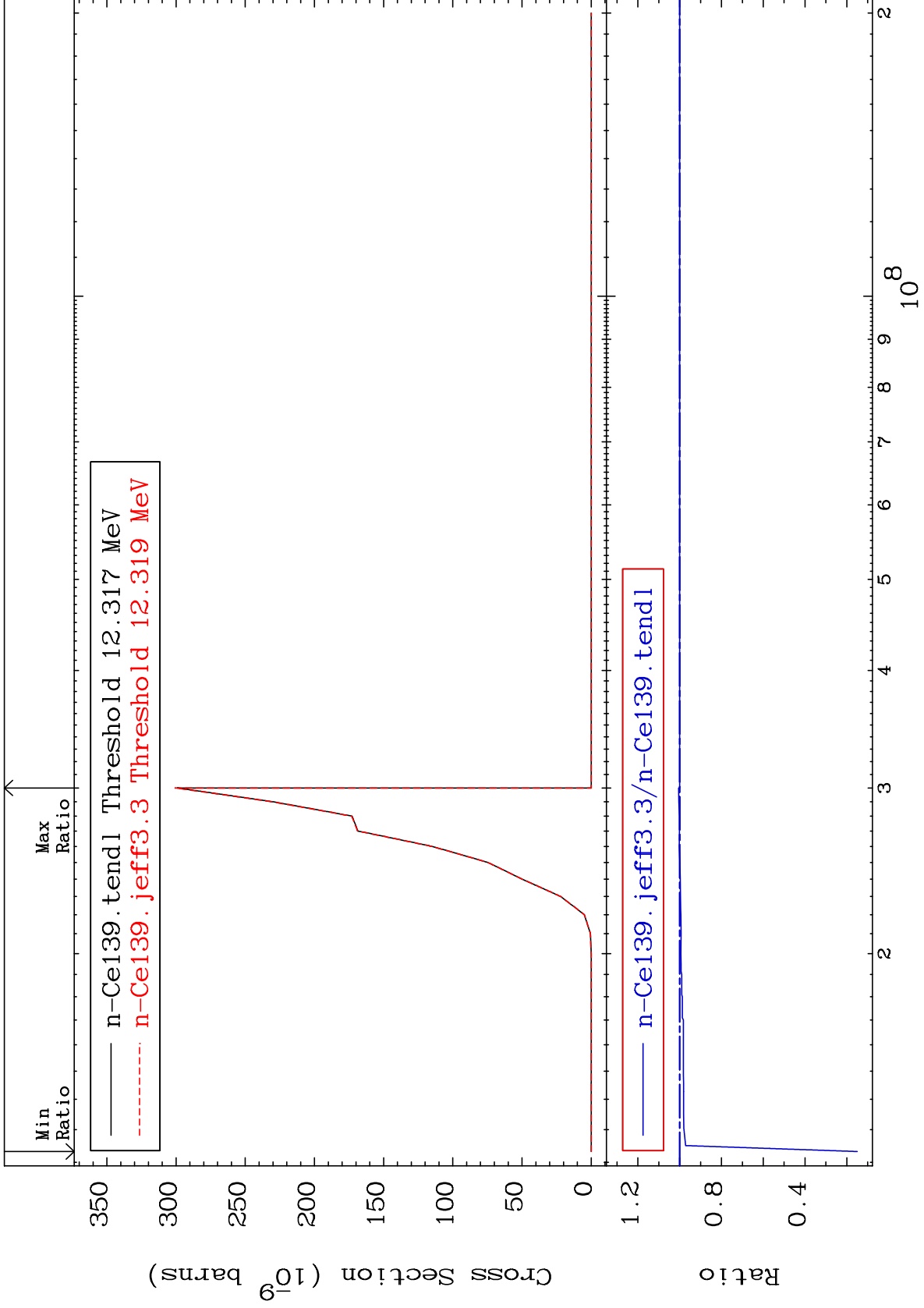
58-Ce-139

MAT 5834

(n, p) t:56-Ba-136g

58-Ce-139

Radionuclide Production Cross Section -85.00 To 0.508 %



102

Incident Energy (eV)

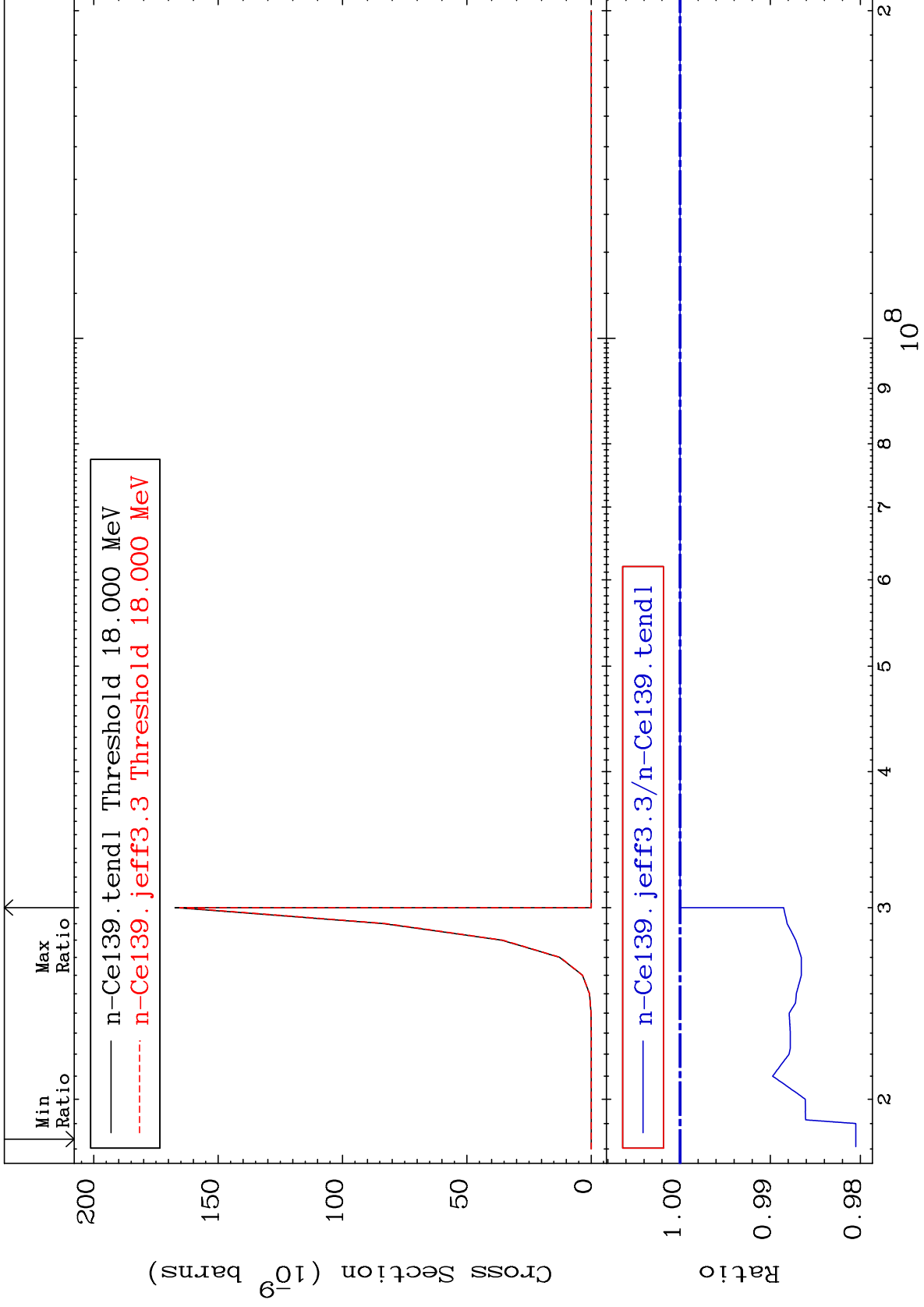
58-Ce-139

MAT 5834

(n,p) t:56-Ba-136m5

58-Ce-139

Radionuclide Production Cross Section -1.949 To 0.000 %



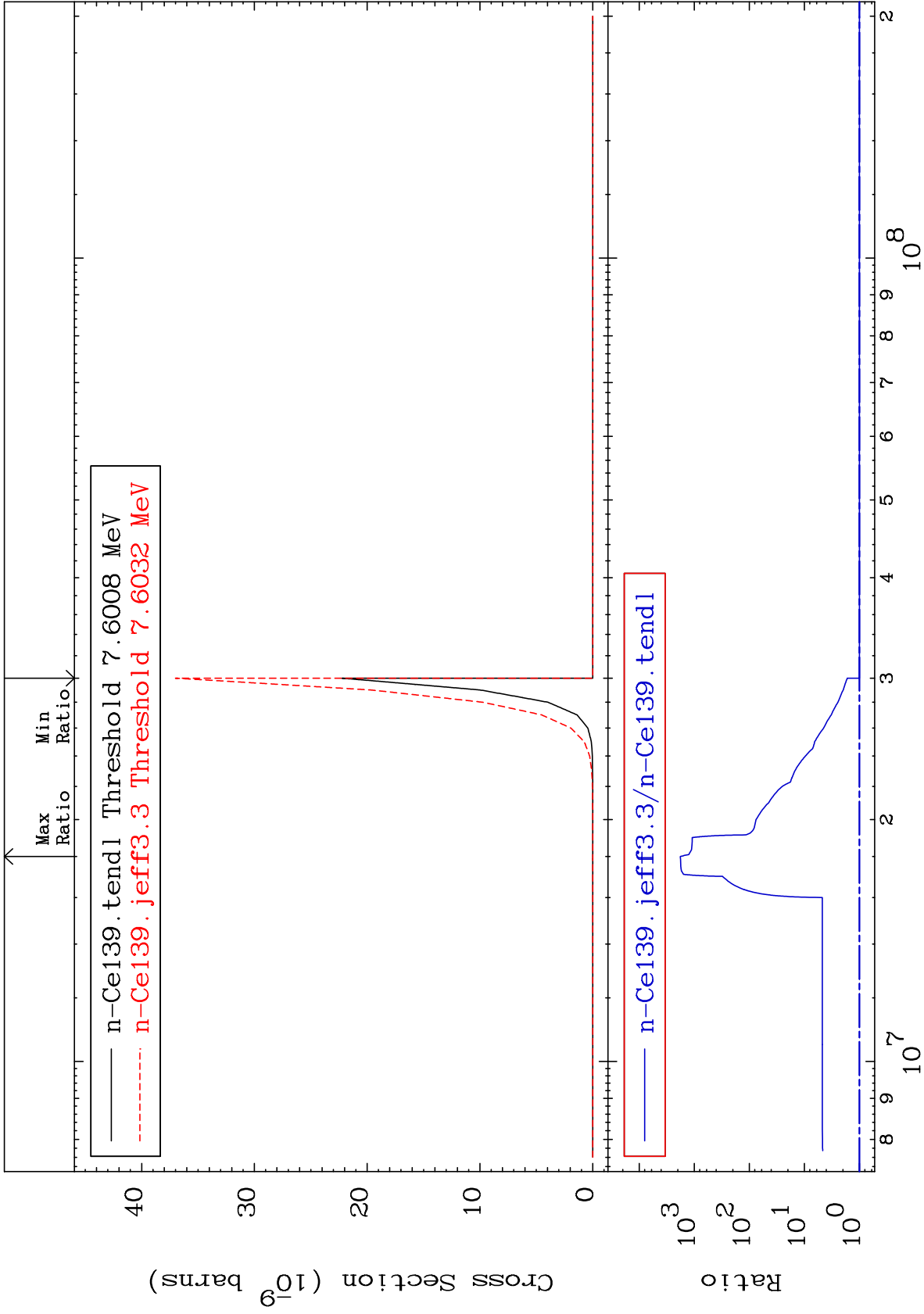
103

Incident Energy (eV)

58-Ce-139

MAT 5834

(n, d) α :55-Cs-134g 58-Ce-139
Radionuclide Production Cross Section 0.000 To 9999. %



104

Incident Energy (eV)

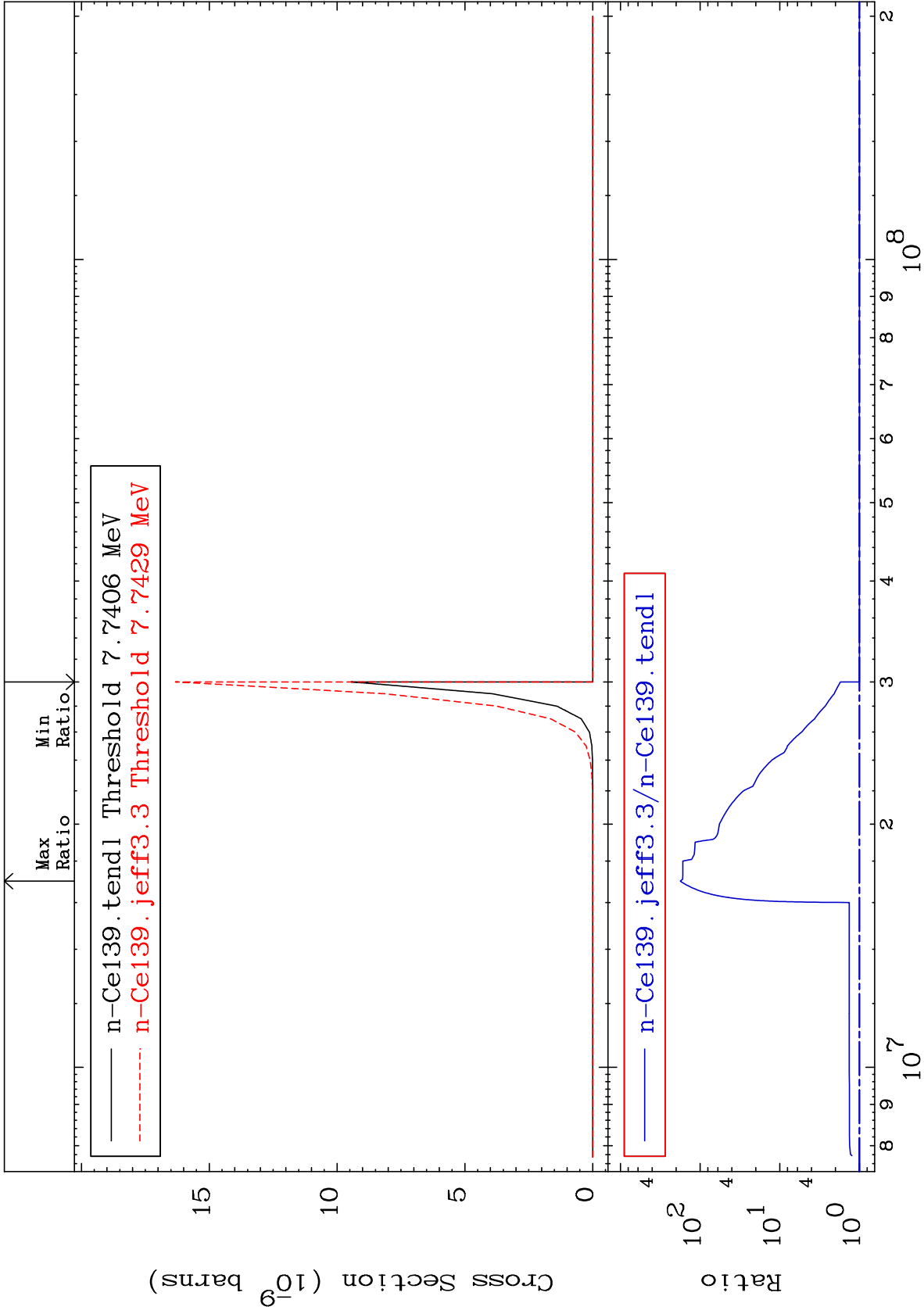
58-Ce-139

MAT 5834

(n,d) α :55-Cs-134m3

58-Ce-139

Radionuclide Production Cross Section 0.000 To 9999. %



105

Incident Energy (eV)

58-Ce-139