

Program Complot  
(Version 2018-1)

by

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Press Mouse Button to Start

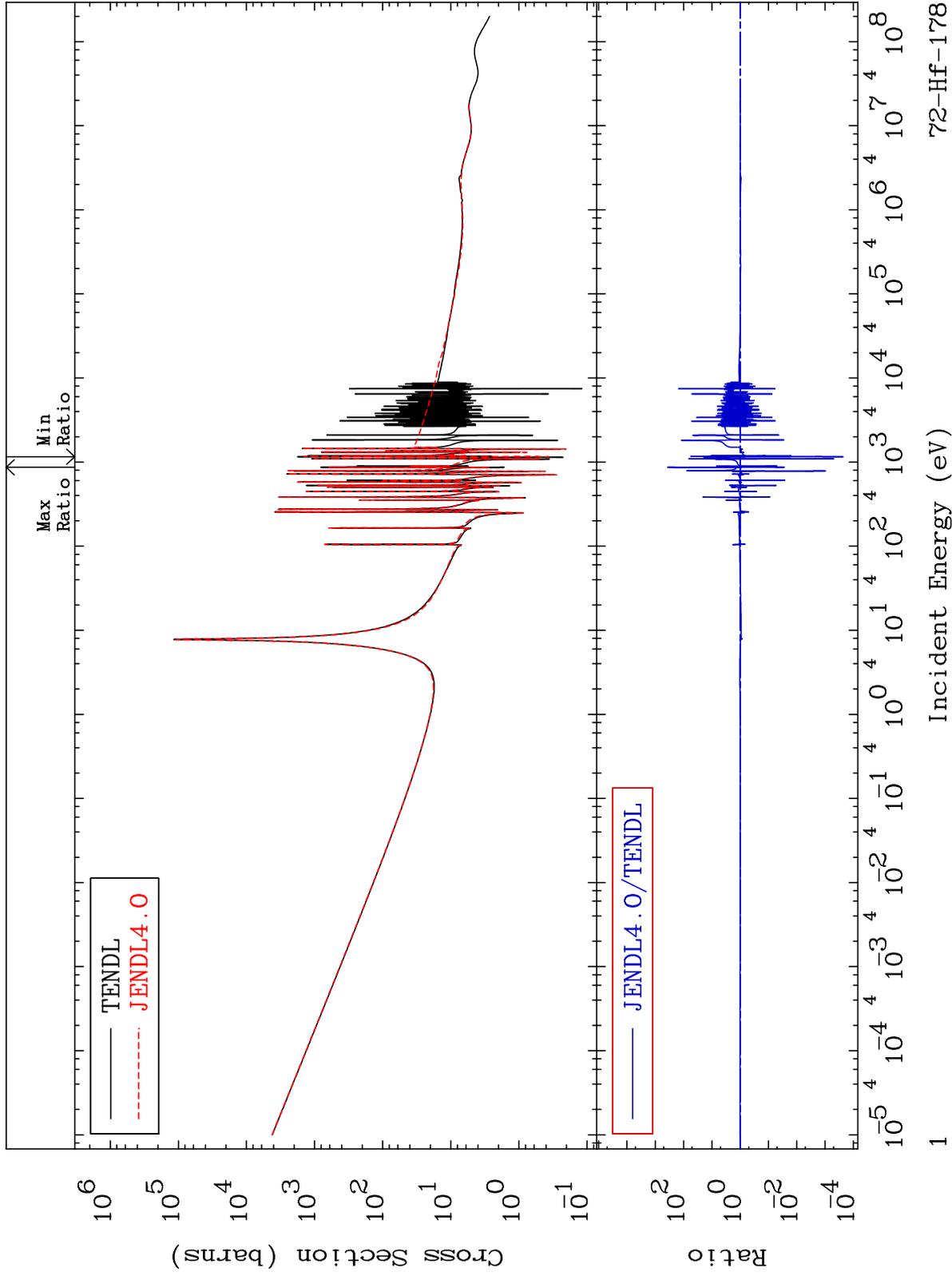
MAT 7237

Total

72-Hf-178

-99.98 To 9999. %

Cross Section



Incident Energy (eV)

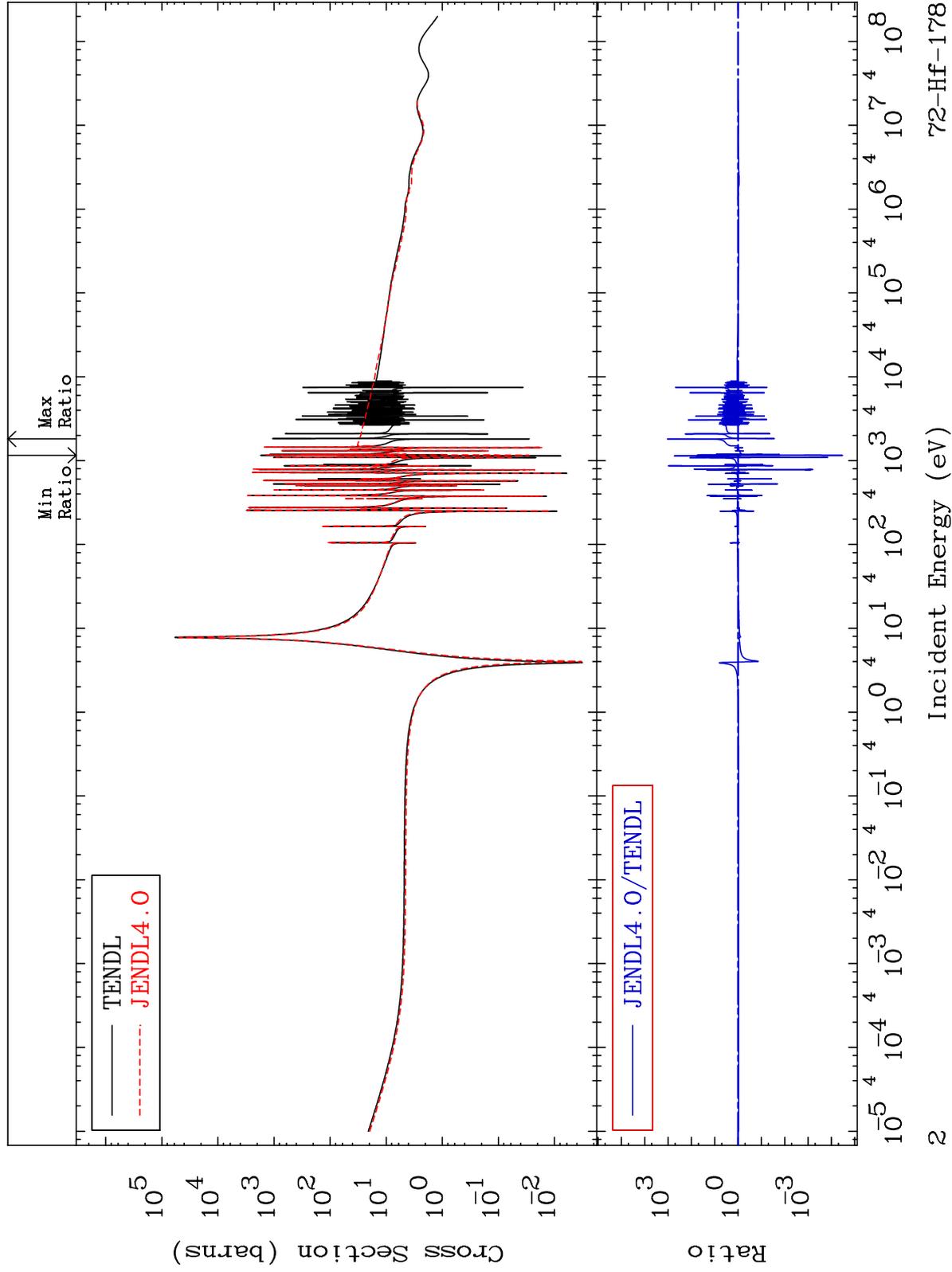
72-Hf-178

1

MAT 7237

Elastic  
Cross Section

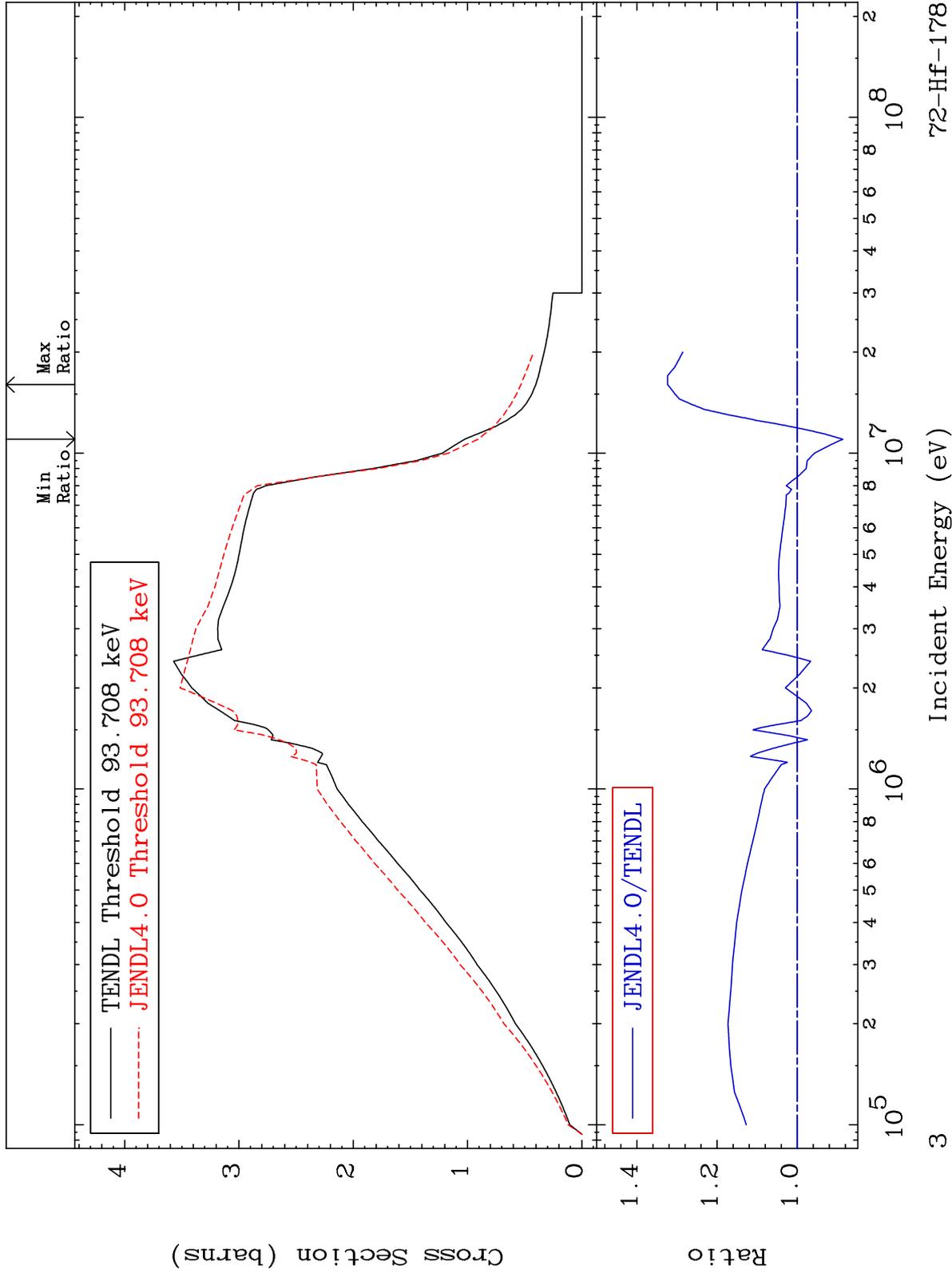
72-Hf-178  
-100.0 To 9999. %



MAT 7237

Inelastic  
Cross Section

72-Hf-178  
-11.37 To 32.34 %



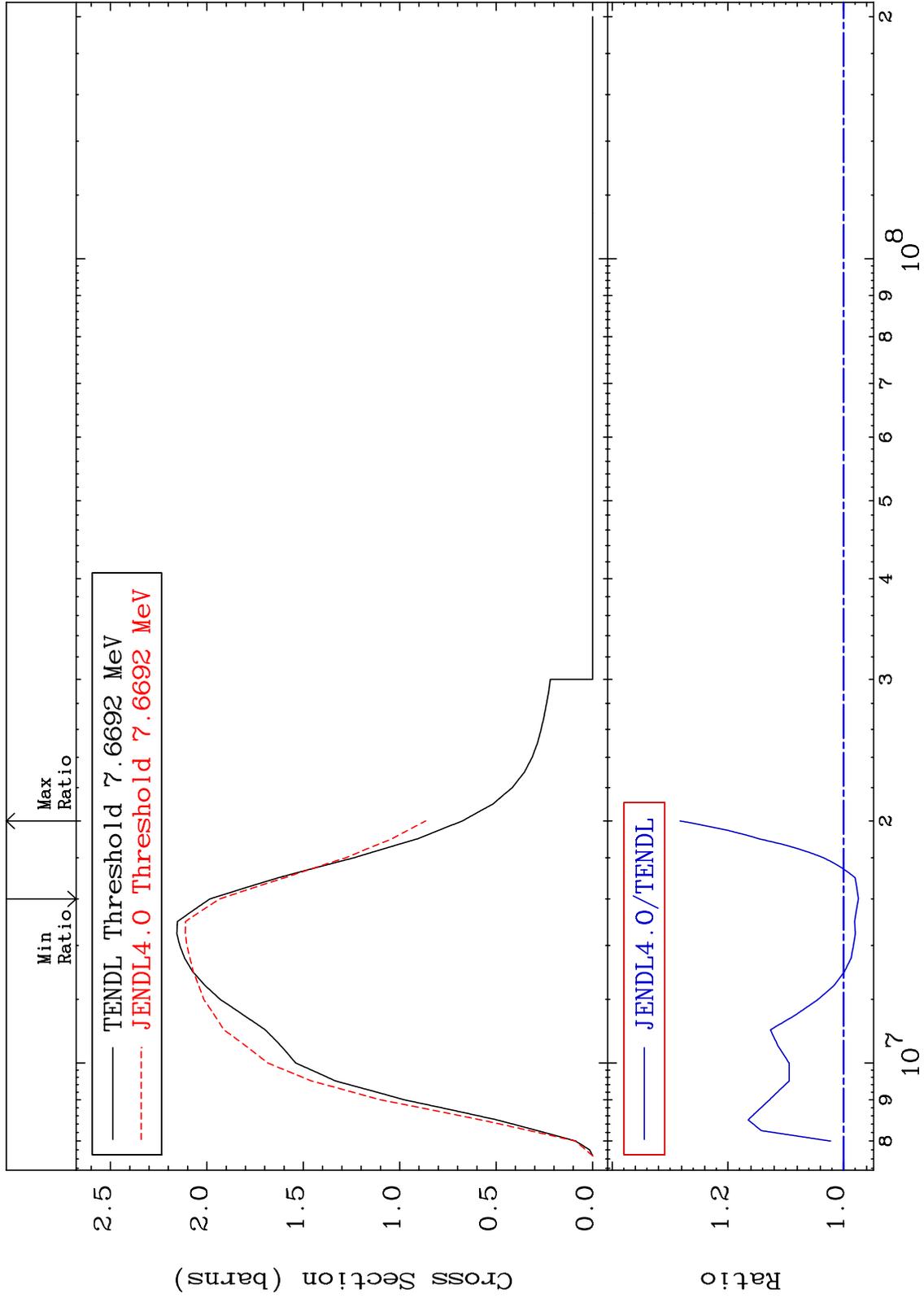
MAT 7237

(n,2n)

72-Hf-178

Cross Section

-2.579 To 28.28 %



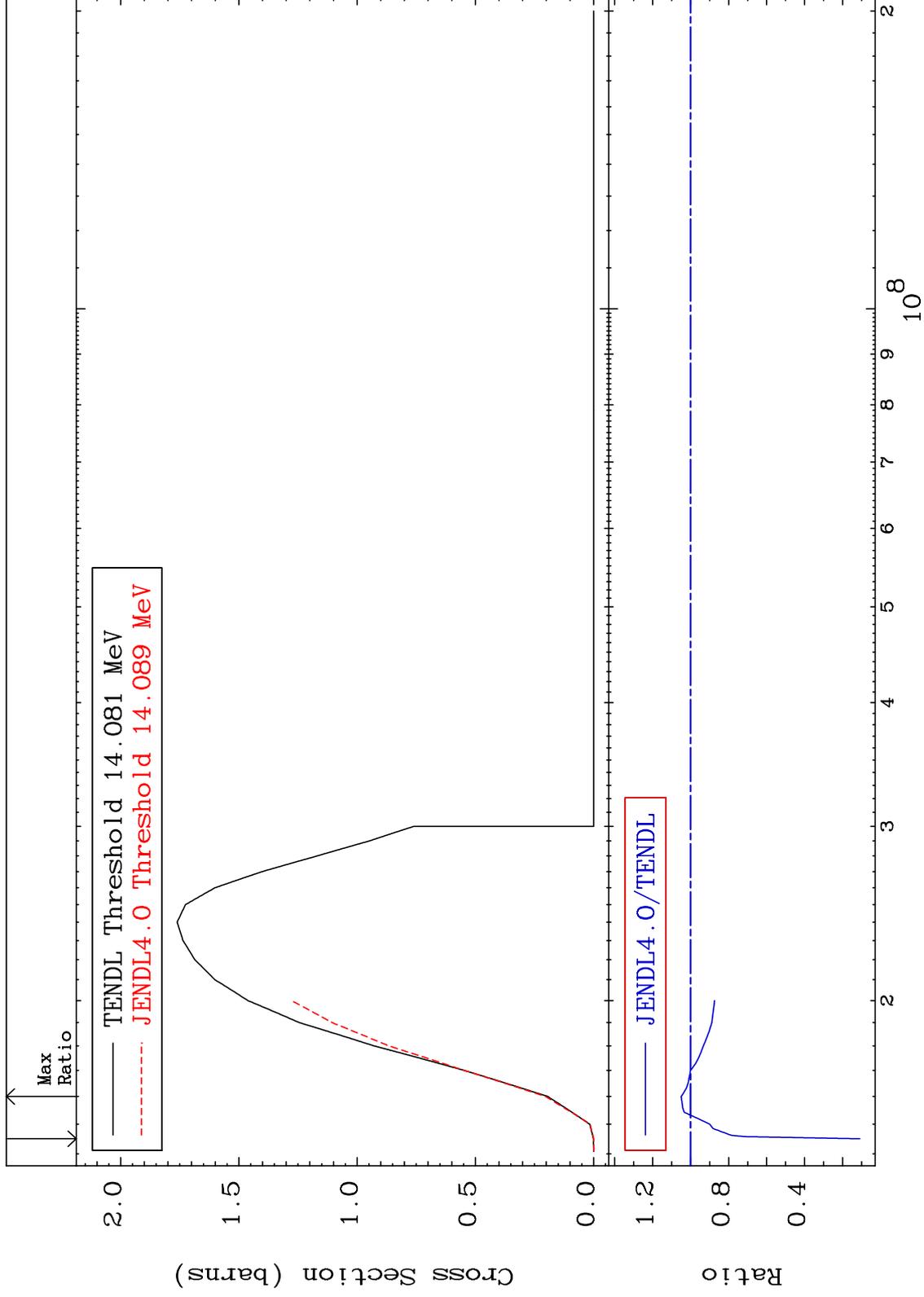
MAT 7237

(n, 3n)

<sup>72</sup>Hf-178

Cross Section

-89.07 To 4.984 %



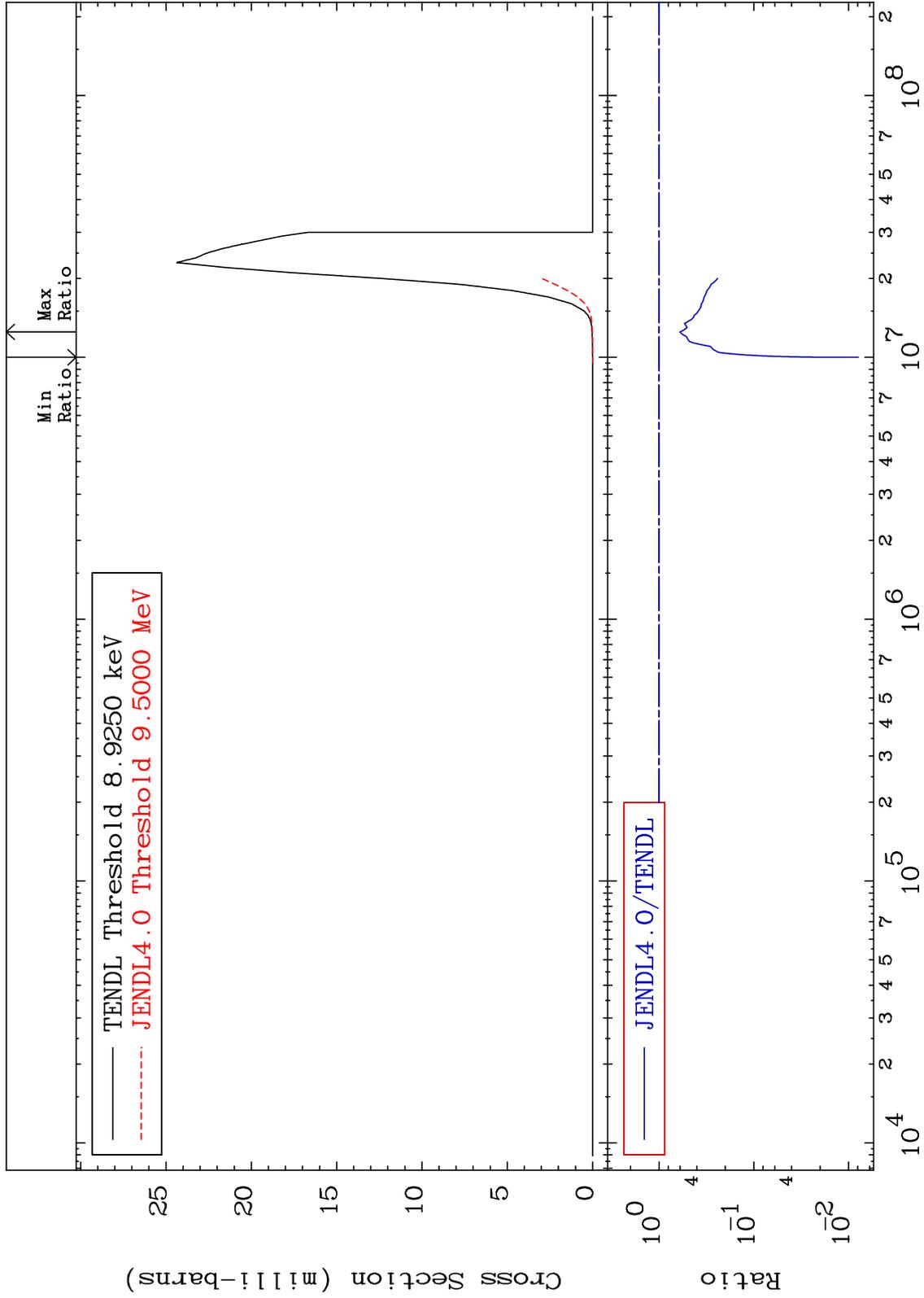
MAT 7237

(n,n')  $\alpha$

72-Hf-178

Cross Section

-99.21 To -39.67%



6

Incident Energy (eV)

72-Hf-178

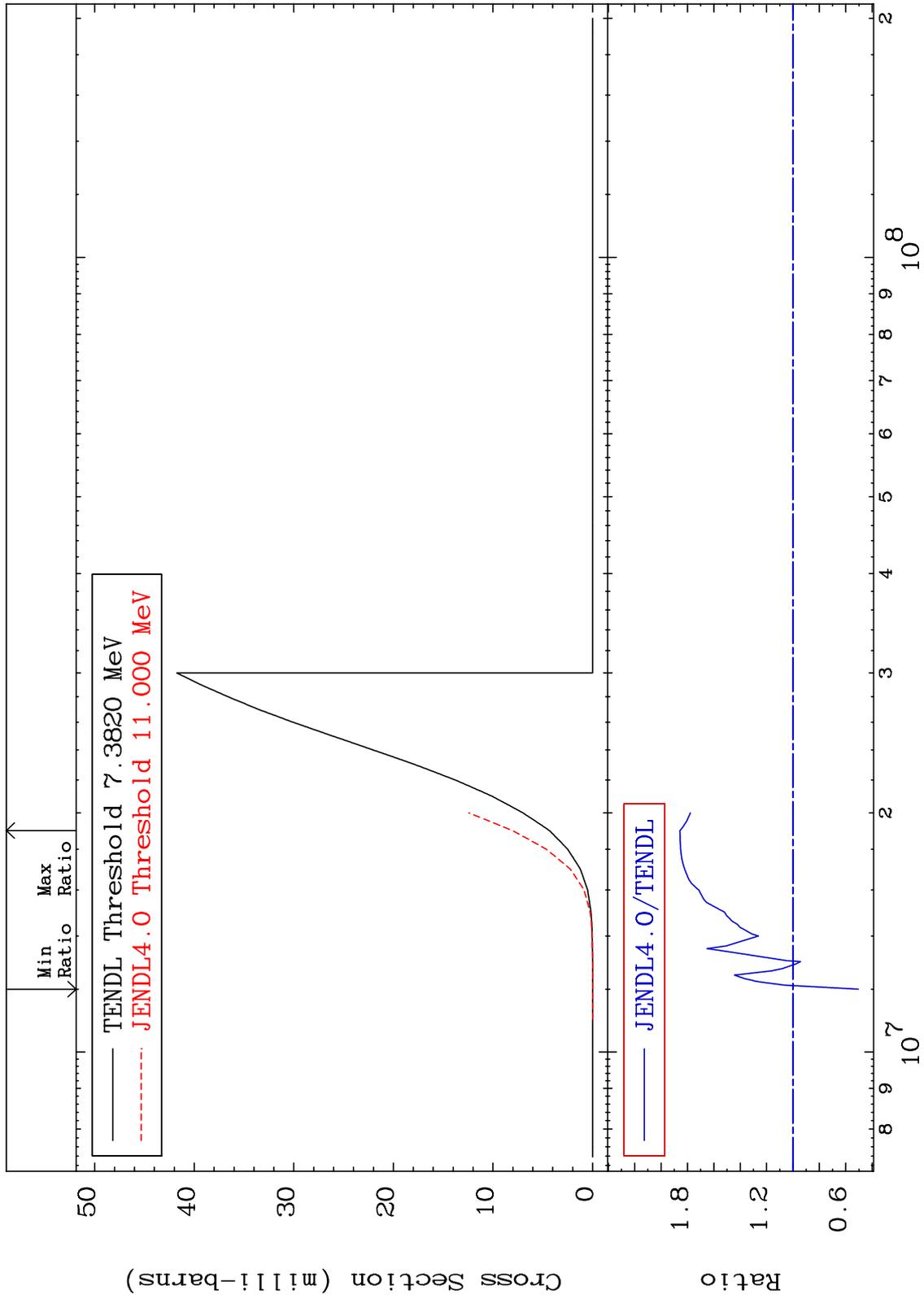
MAT 7237

(n,n') p

72-Hf-178

Cross Section

-49.58 To 85.68 %



7

Incident Energy (eV)

72-Hf-178

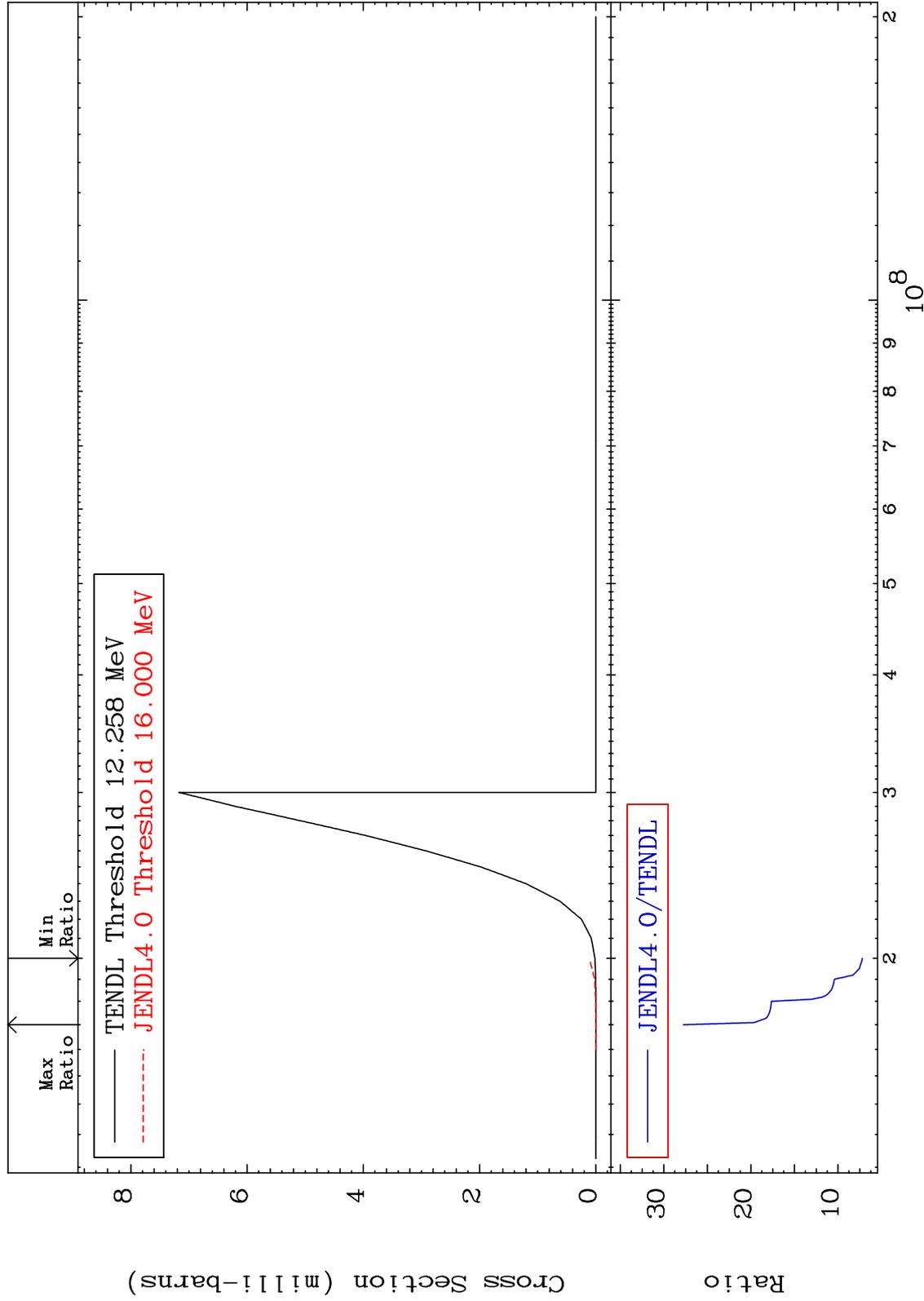
MAT 7237

(n,n') d

72-Hf-178

Cross Section

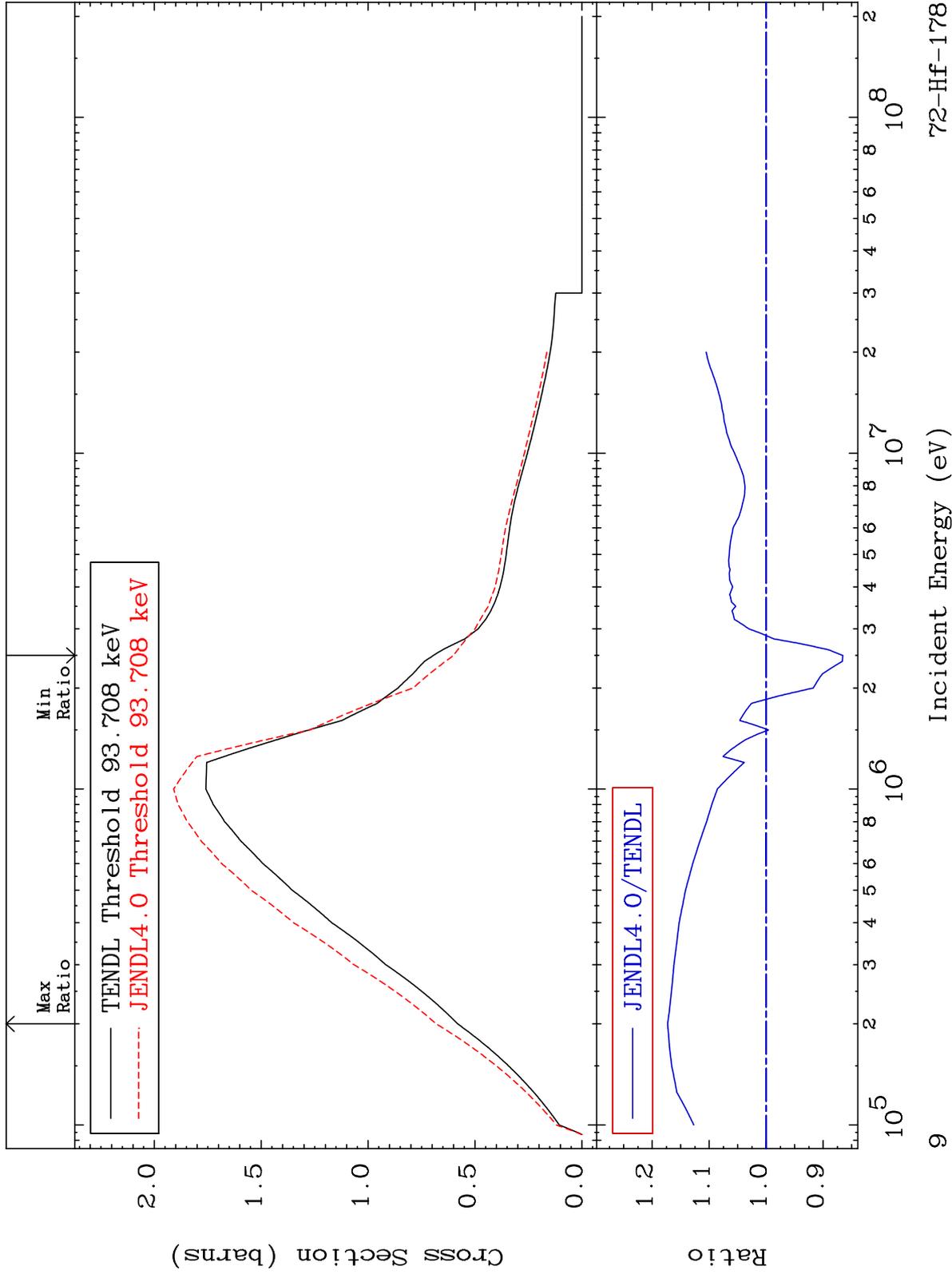
621.7 To 2676. %



MAT 7237

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

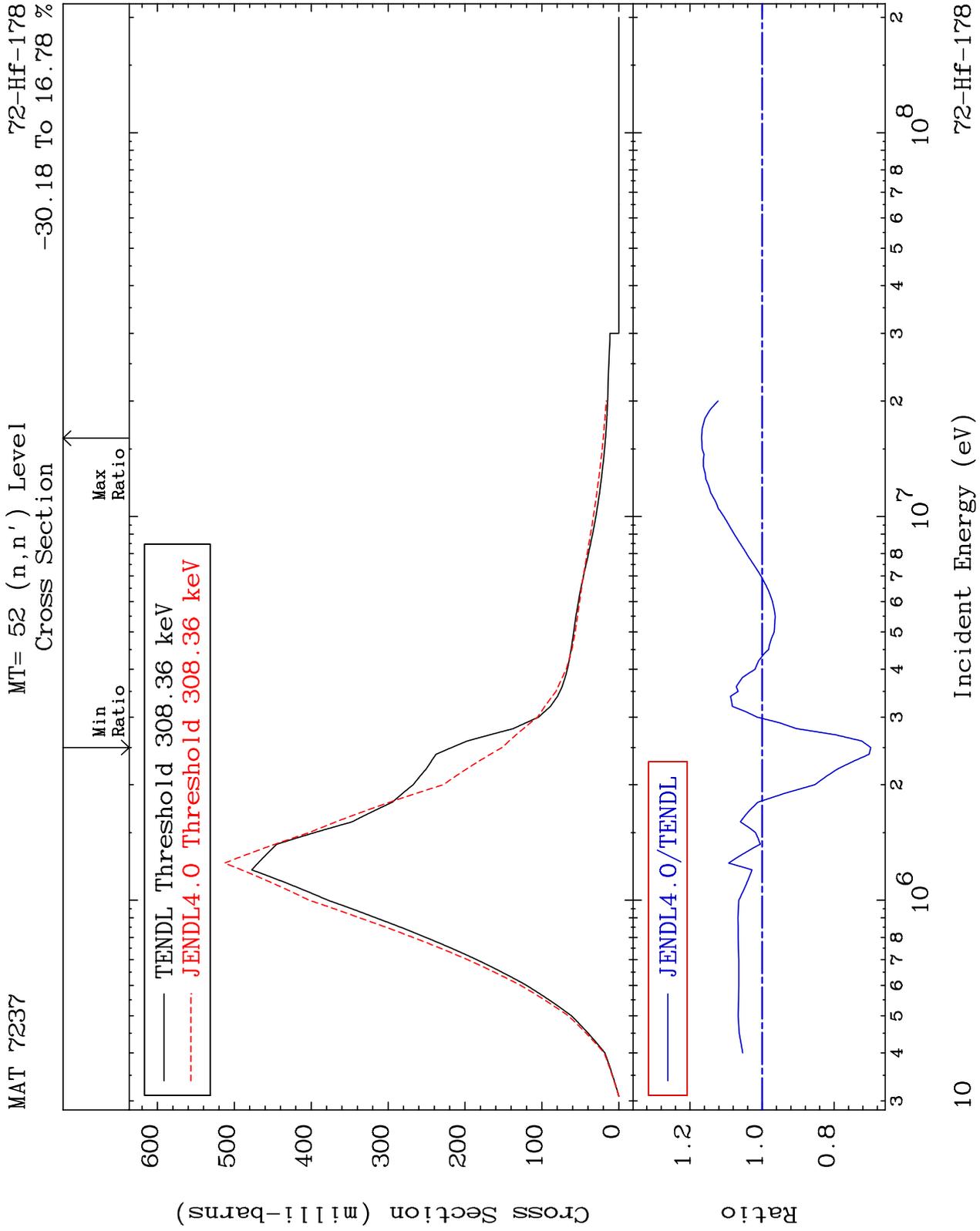
72-Hf-178  
-13.45 To 17.29 %



72-Hf-178

Incident Energy (eV)

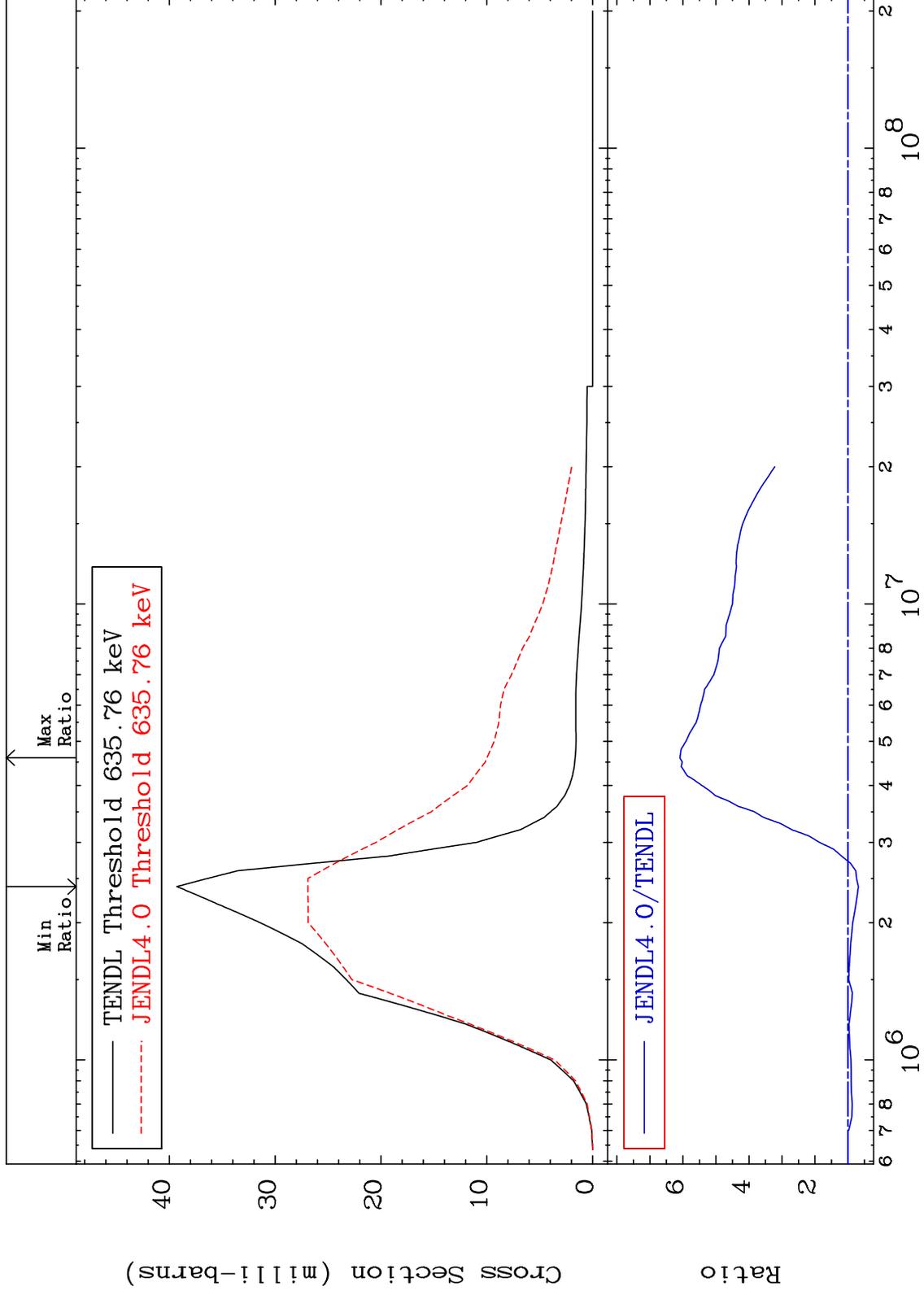
9



MAT 7237

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

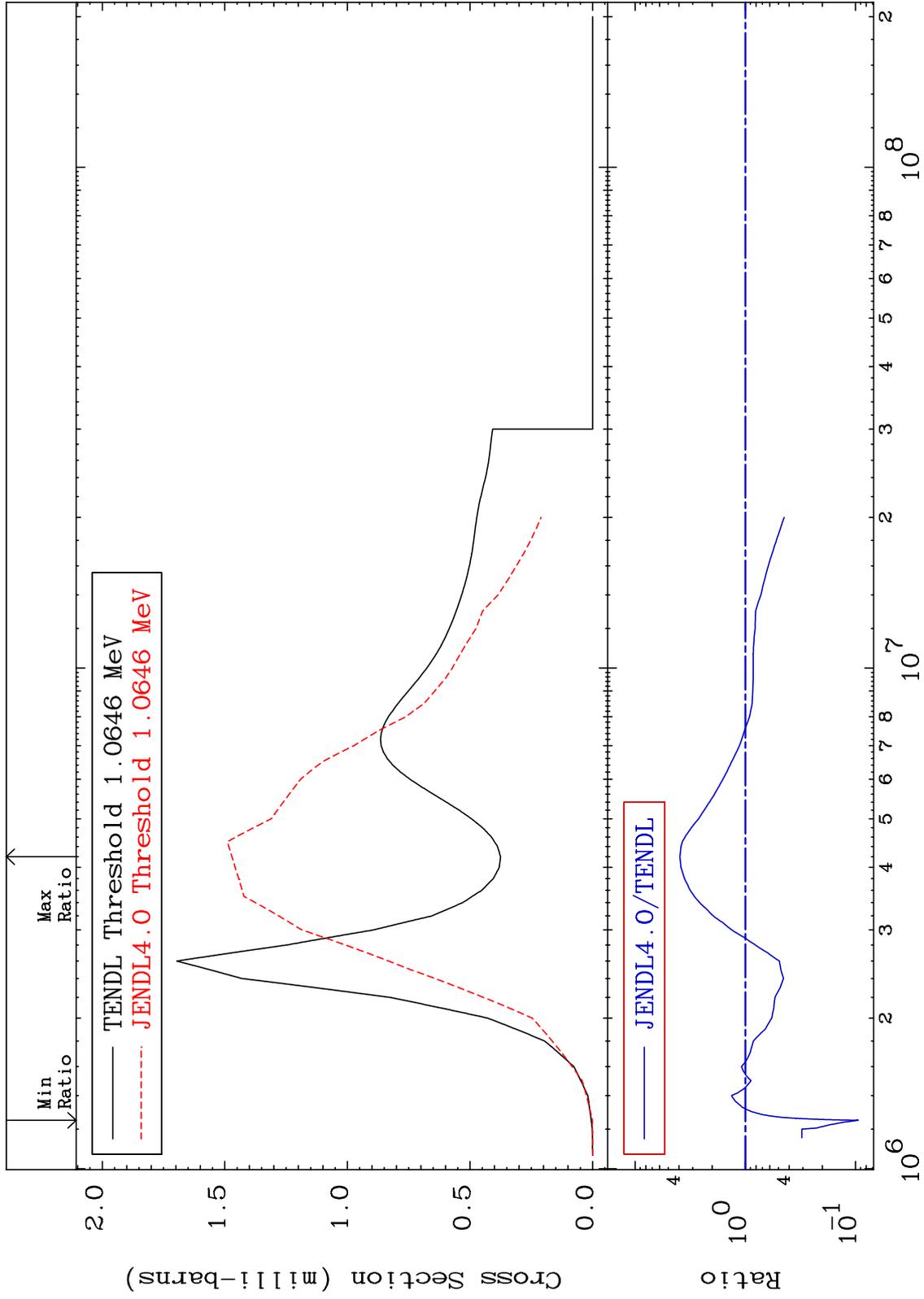
72-Hf-178  
-31.54 To 509.1 %



MAT 7237

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

72-Hf-178  
-90.60 To 291.7 %



12

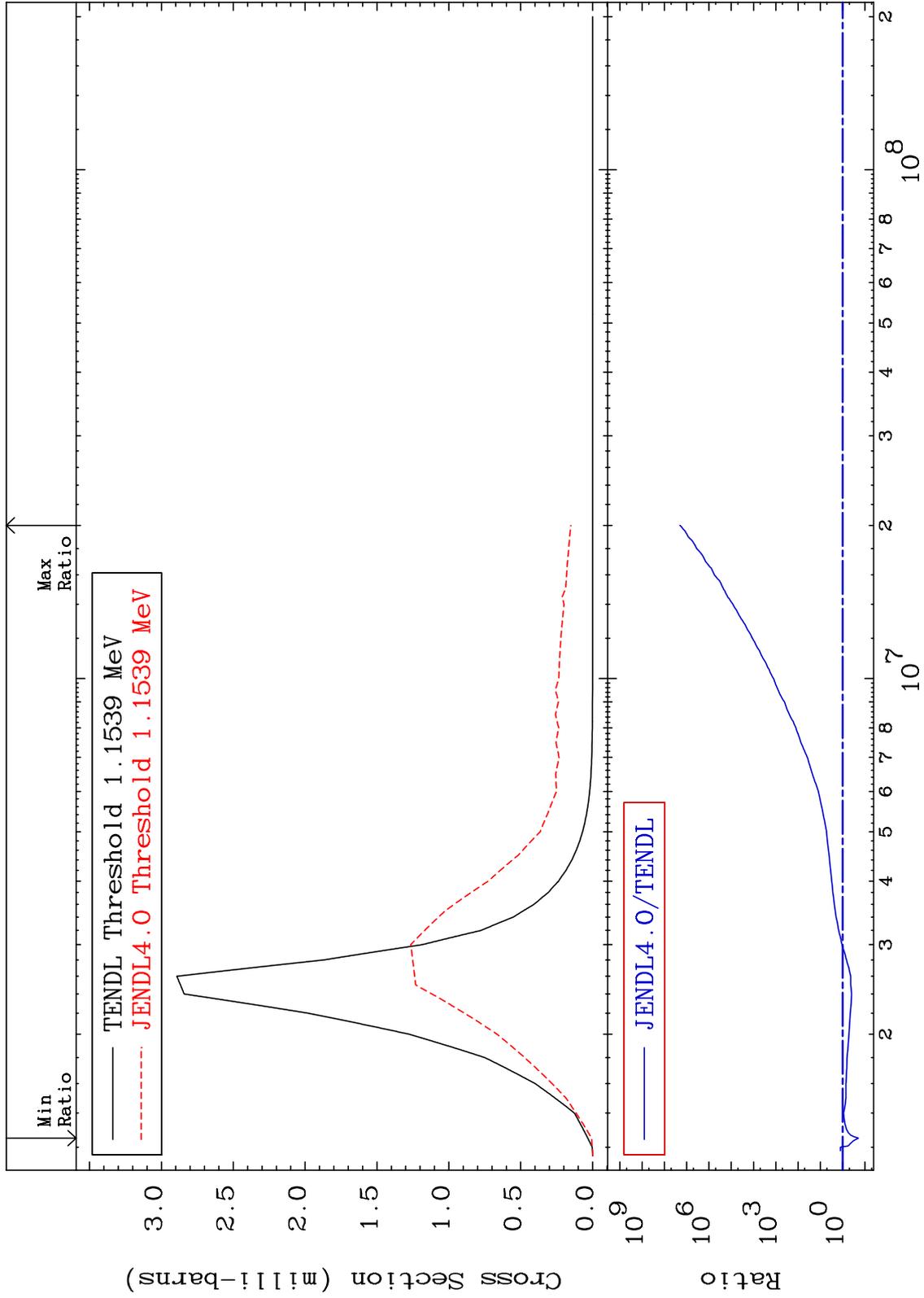
Incident Energy (eV)

72-Hf-178

MAT 7237

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

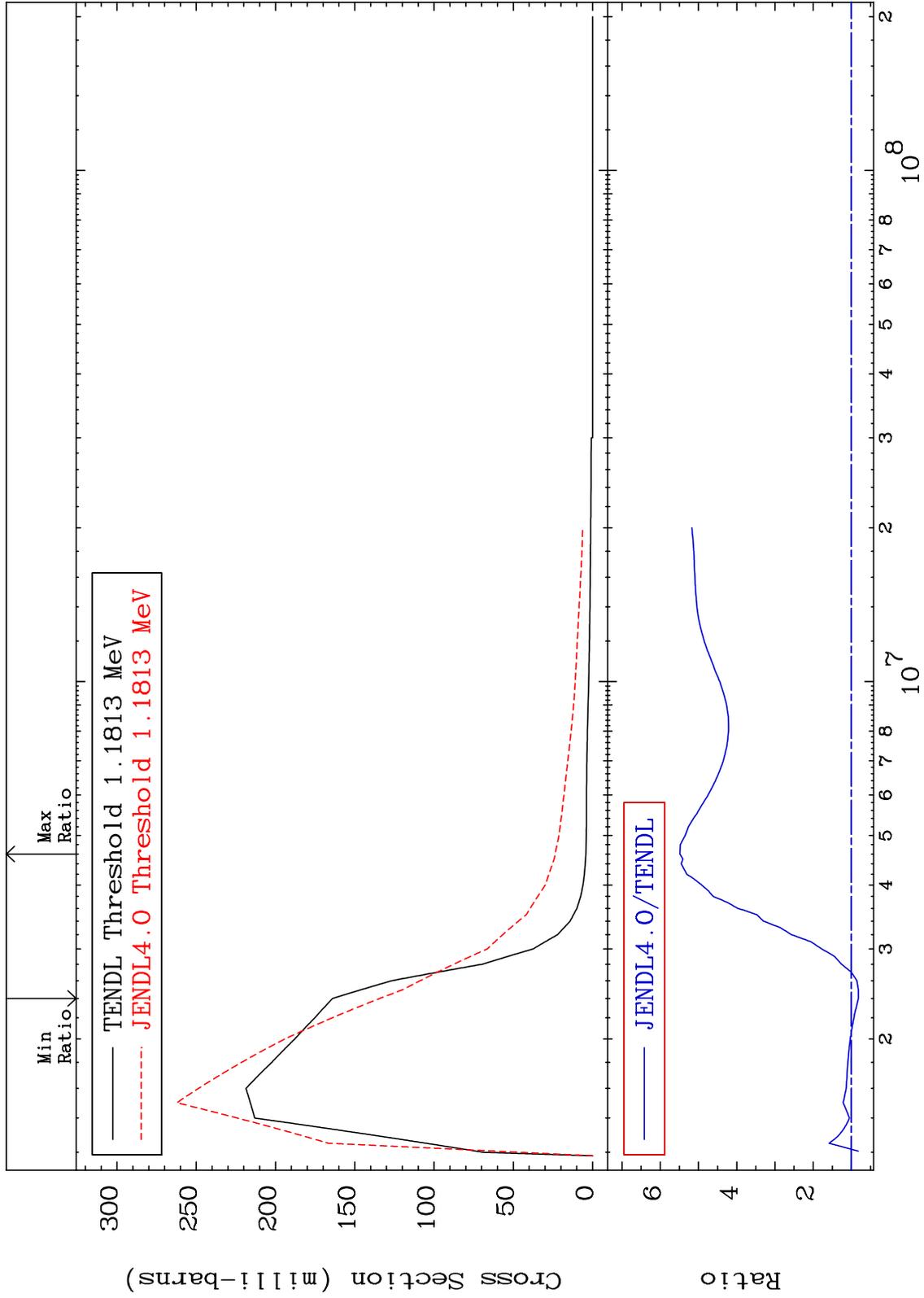
72-Hf-178  
-80.49 To 9999. %



MAT 7237

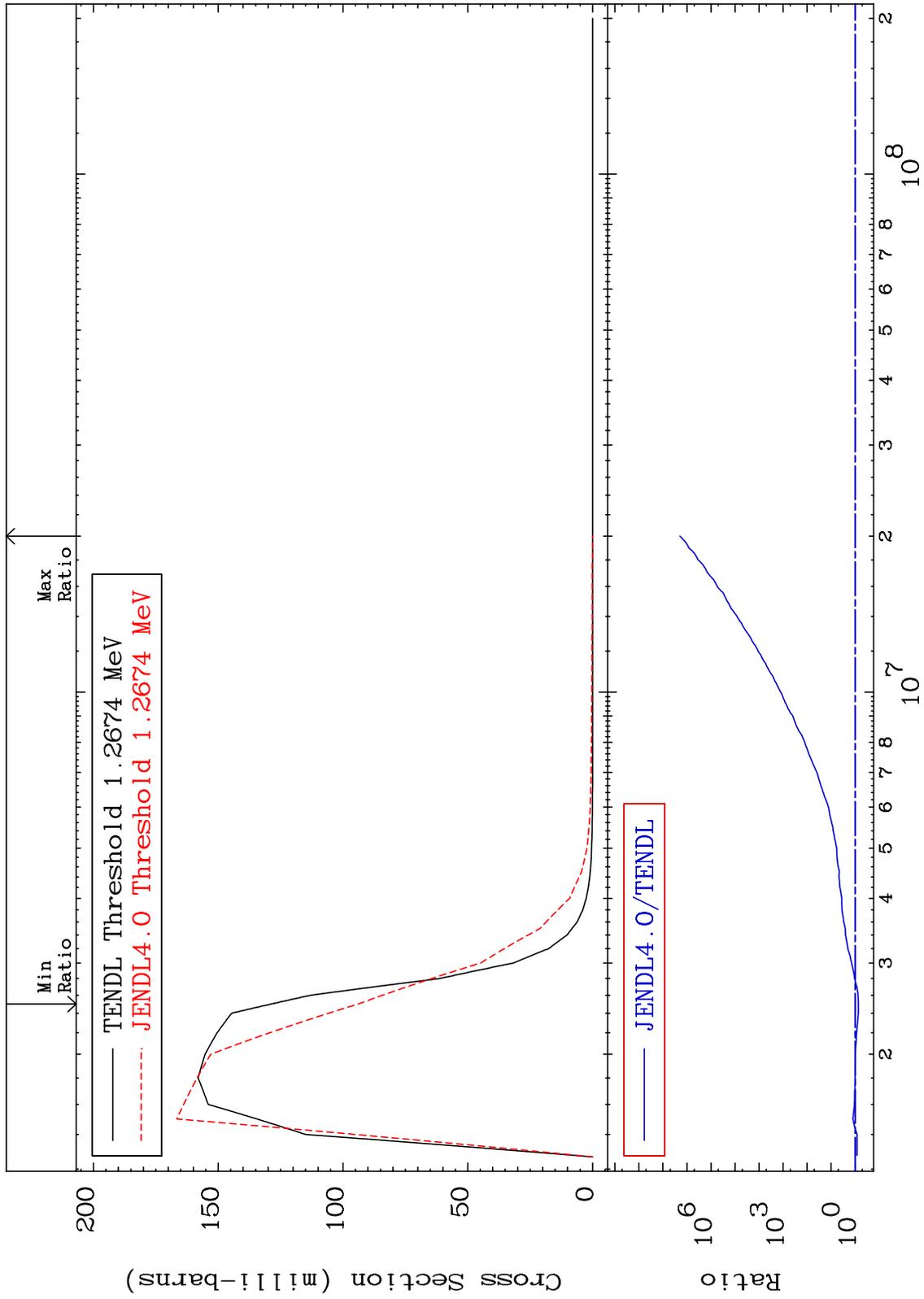
MT= 56 (n,n') Level  
Cross Section

72-Hf-178  
-18.14 To 448.4 %





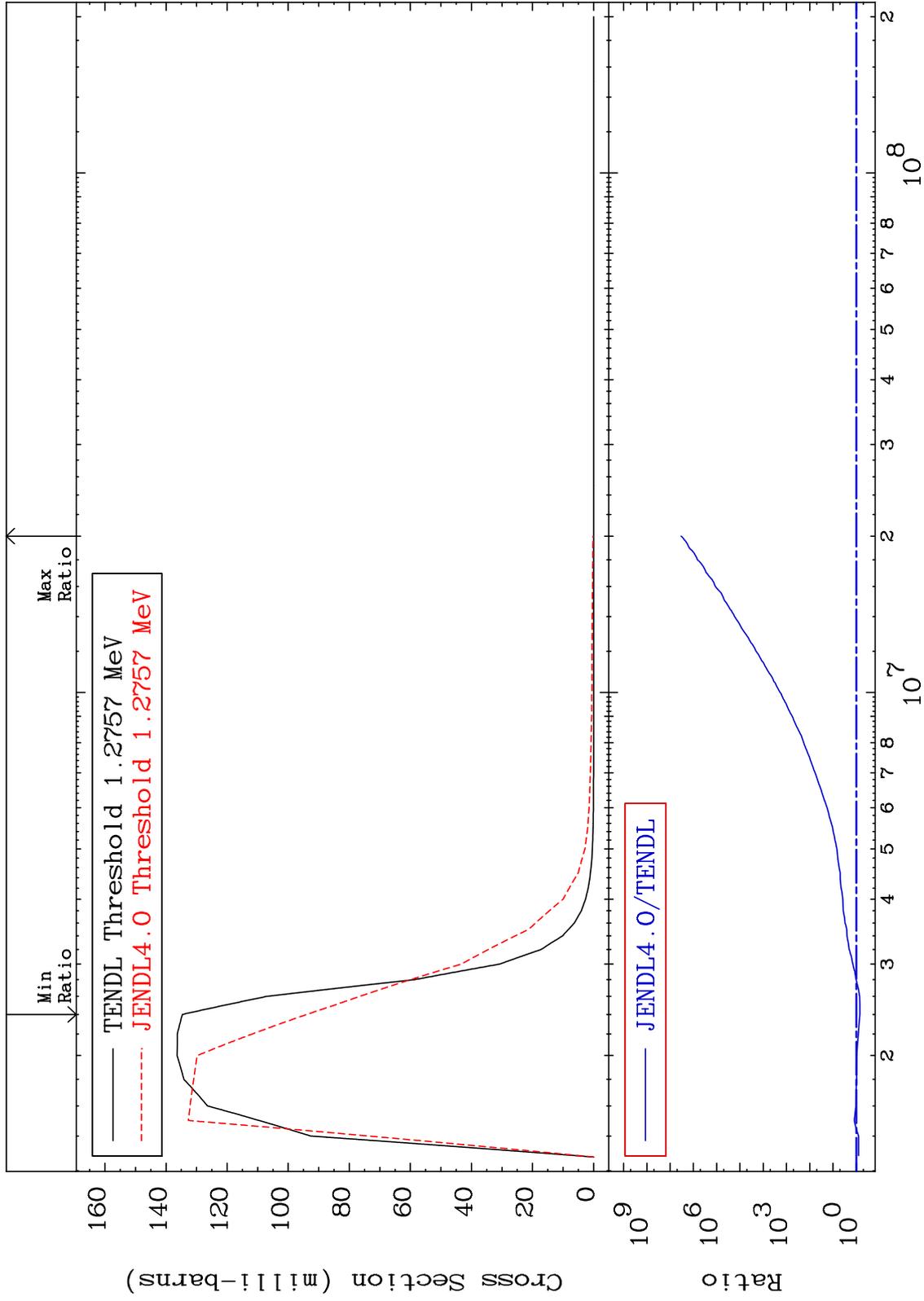
MAT 7237 MT= 58 (n,n') Level Cross Section 72-Hf-178  
 -27.03 To 9999. %



MAT 7237

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

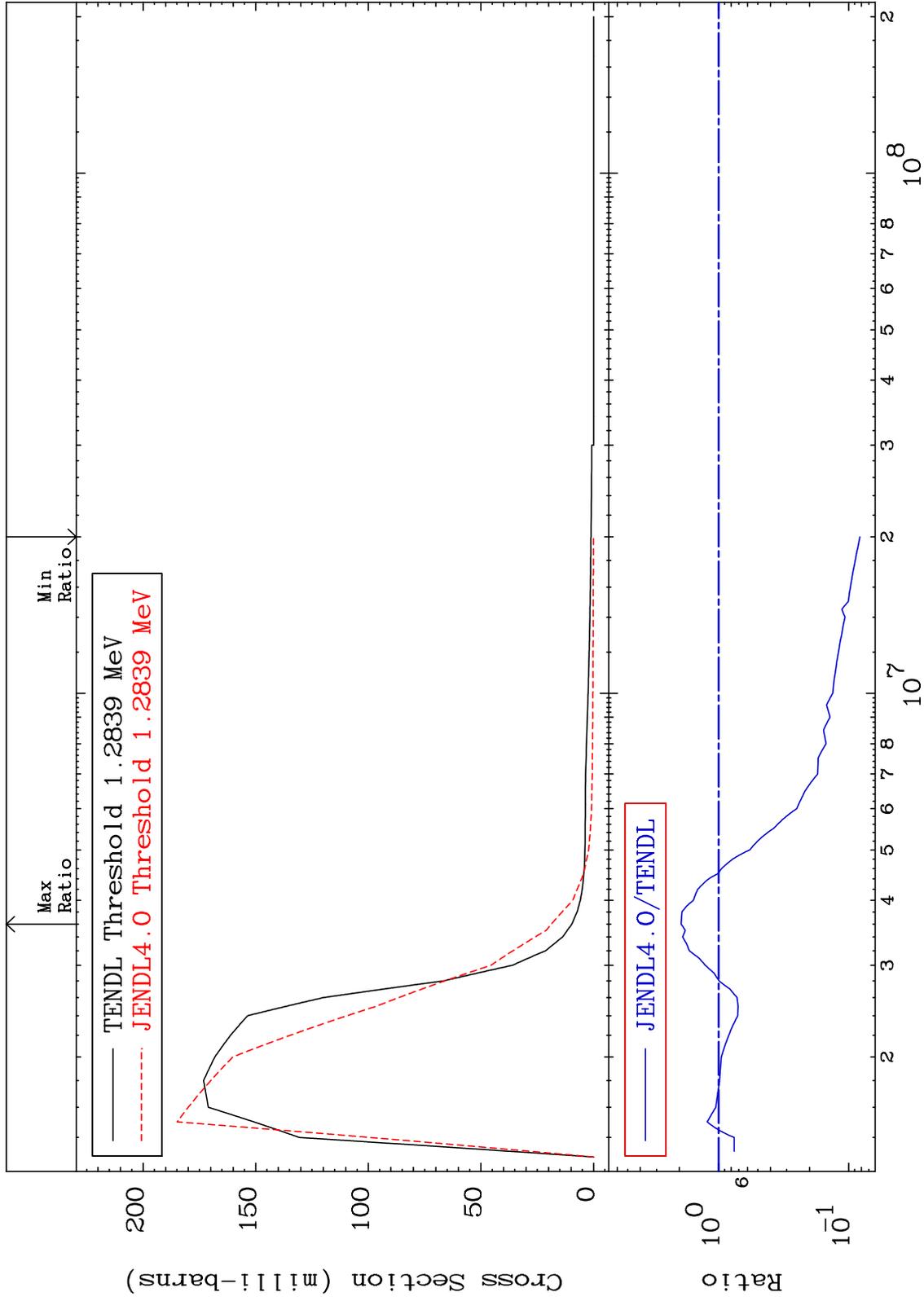
<sup>72</sup>Hf-178  
-30.28 To 9999. %



MAT 7237

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

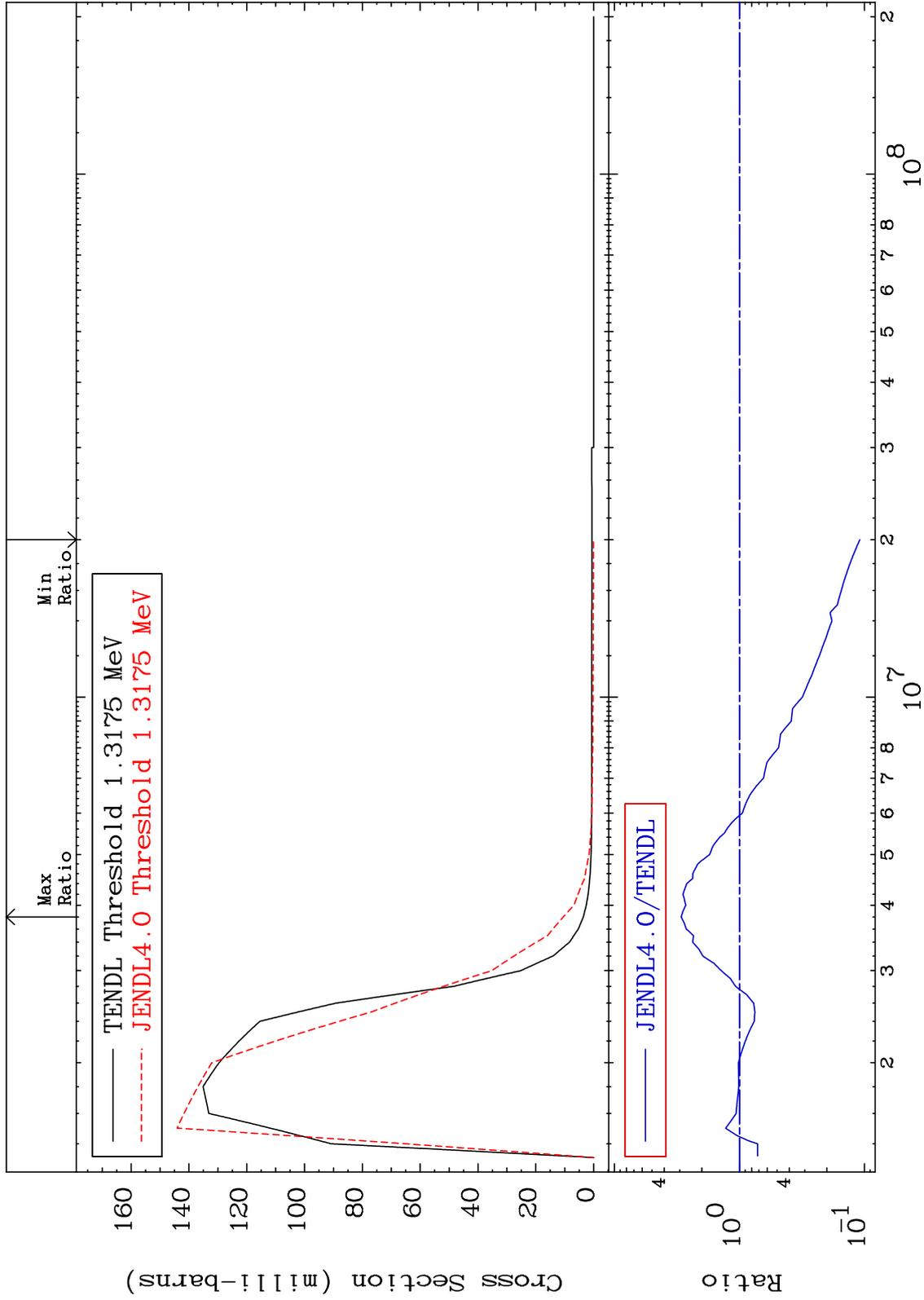
<sup>72</sup>Hf-178  
-91.79 To 94.04 %



MAT 7237

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

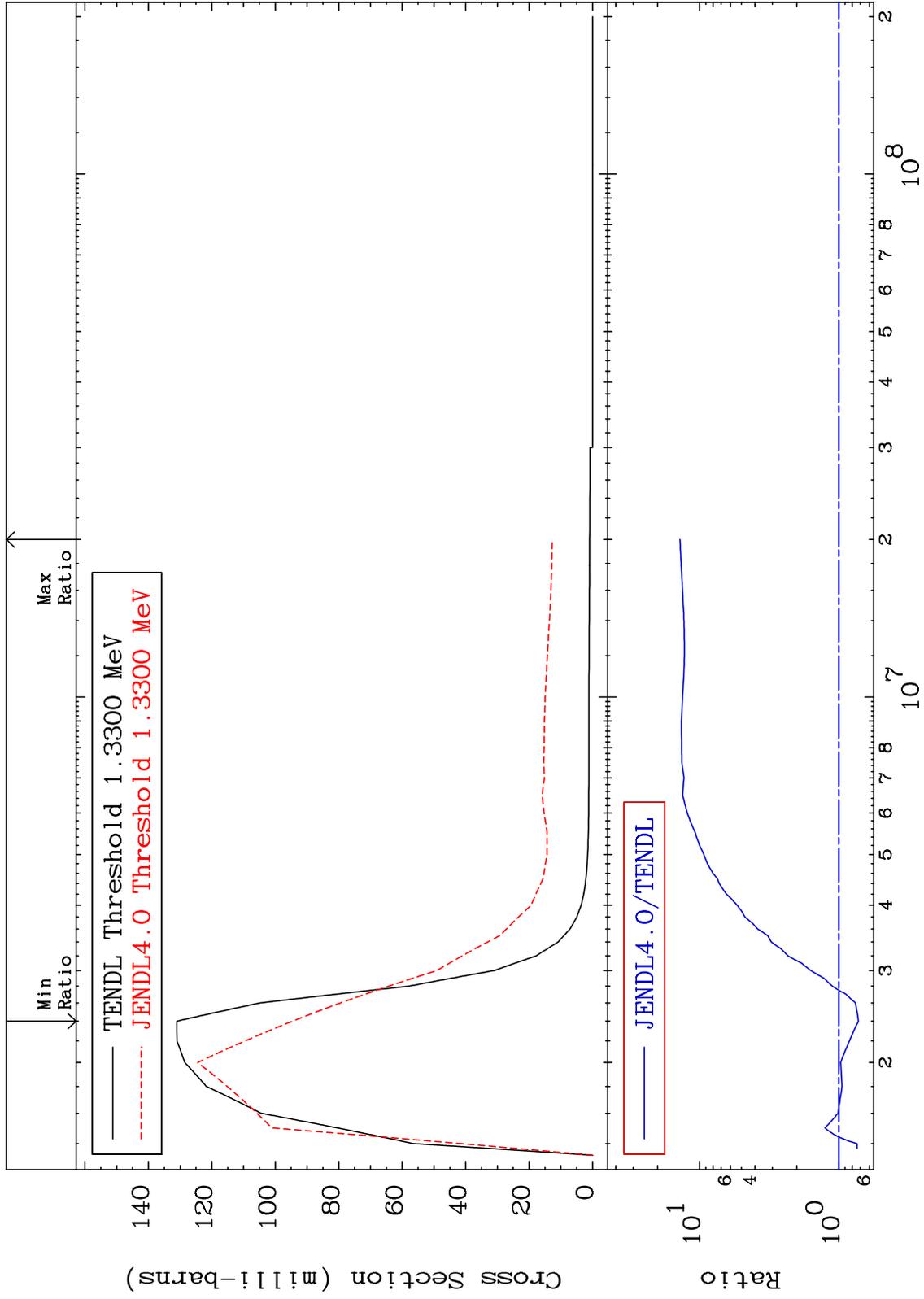
72-Hf-178  
-89.12 To 192.7 %



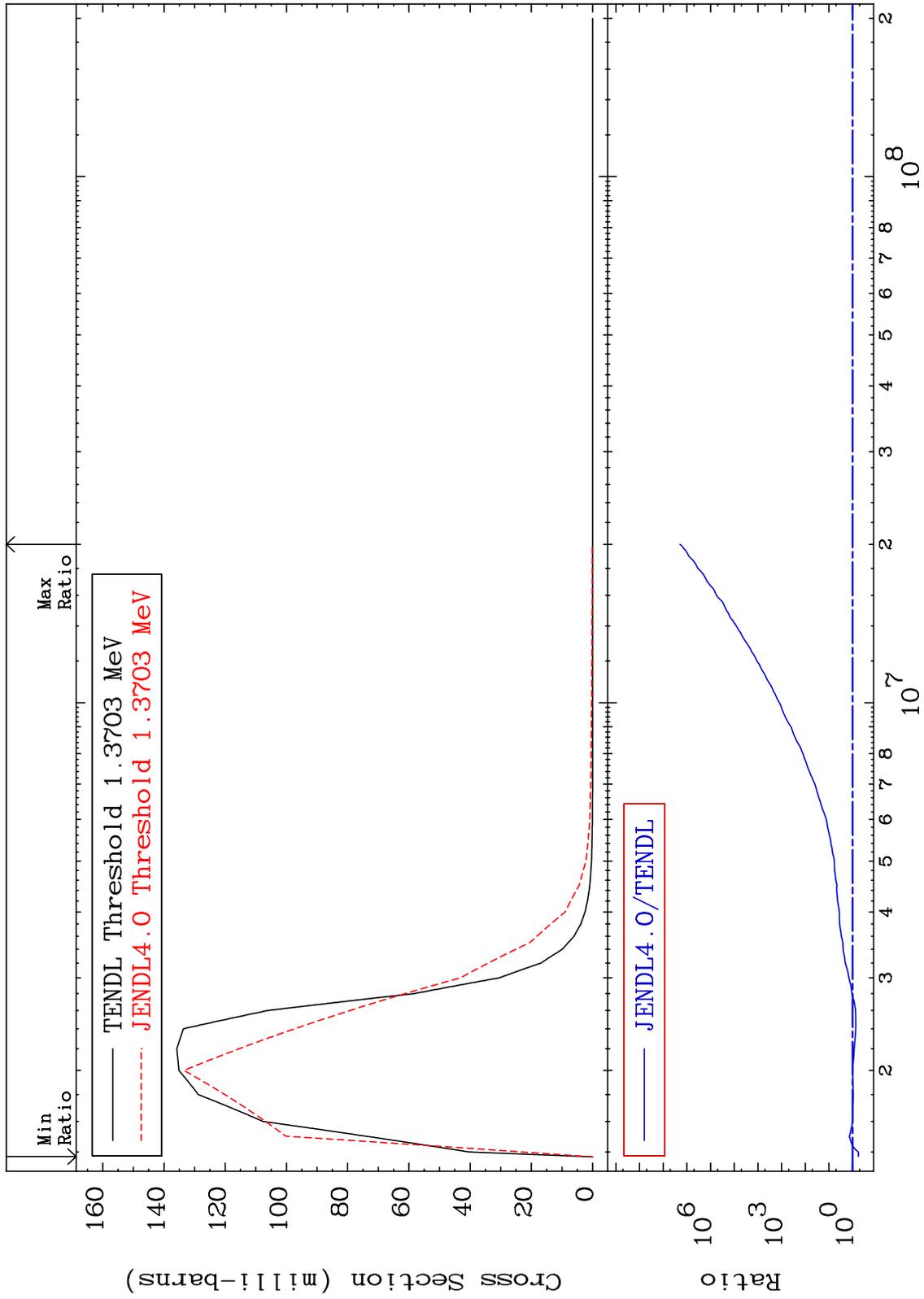
MAT 7237

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

72-Hf-178  
-27.86 To 1283. %



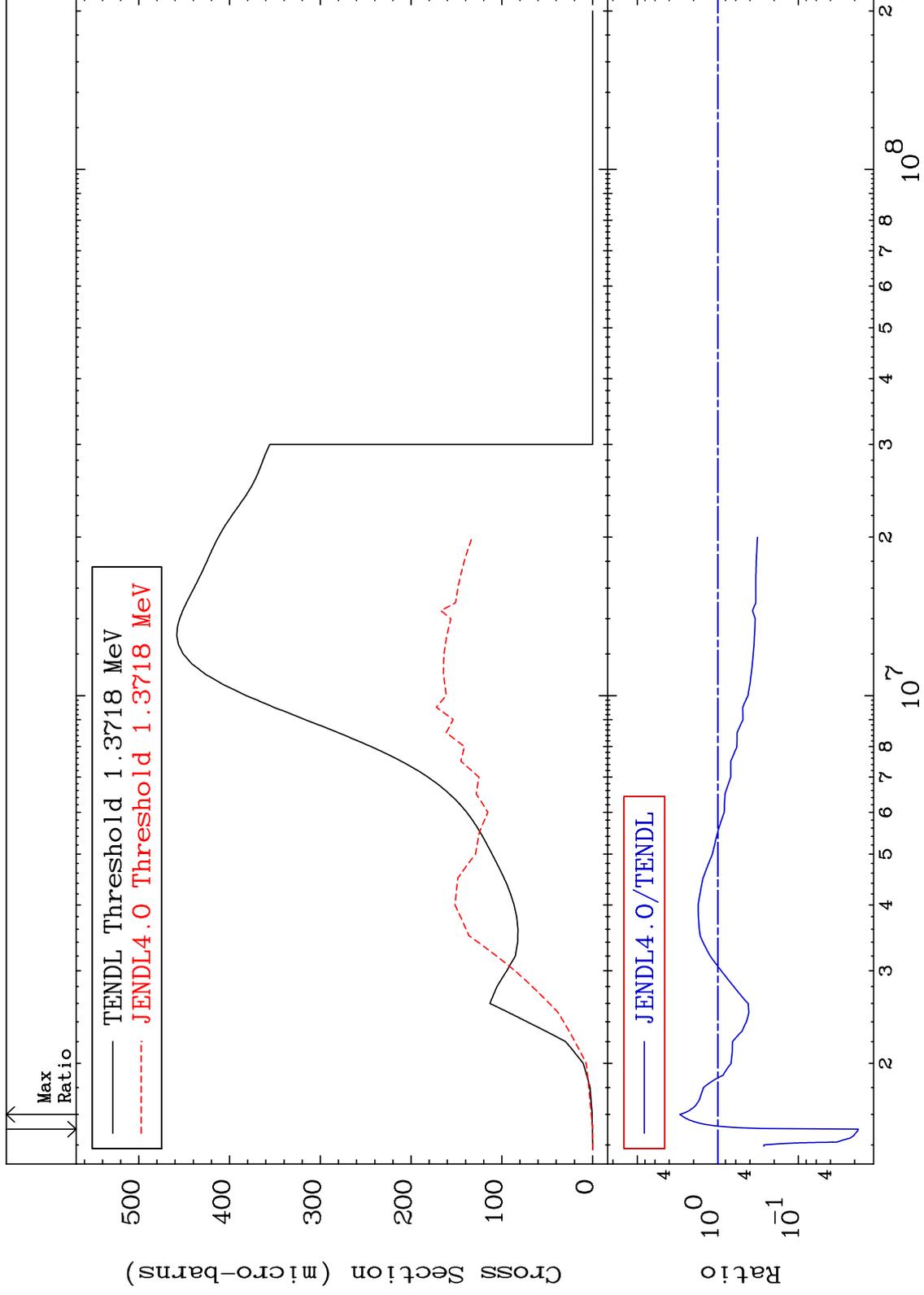
MAT 7237 MT= 63 (n,n') Level Cross Section 72-Hf-178  
 -43.28 To 9999. %



MAT 7237

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

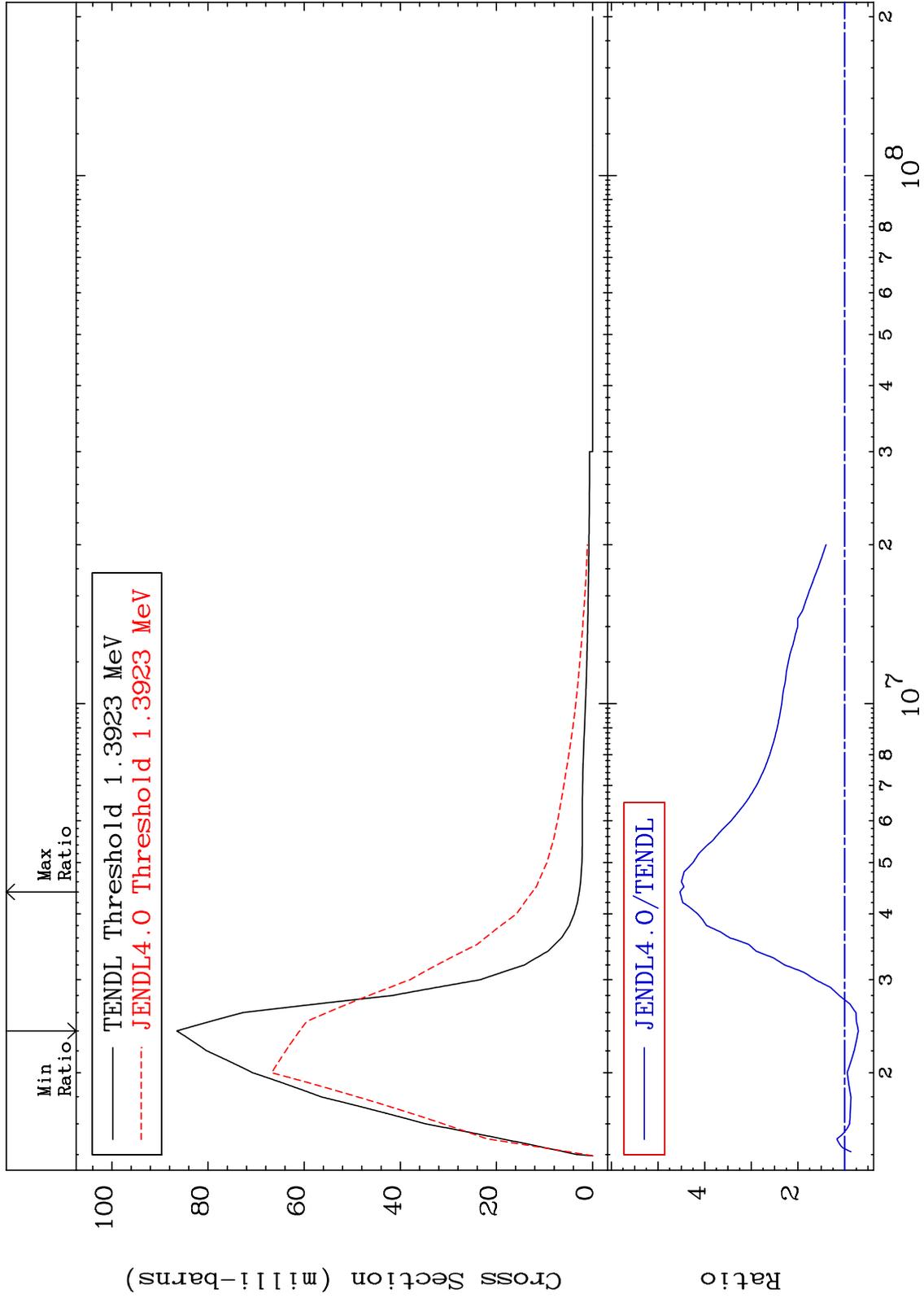
72-Hf-178  
-98.20 To 194.9 %



MAT 7237

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

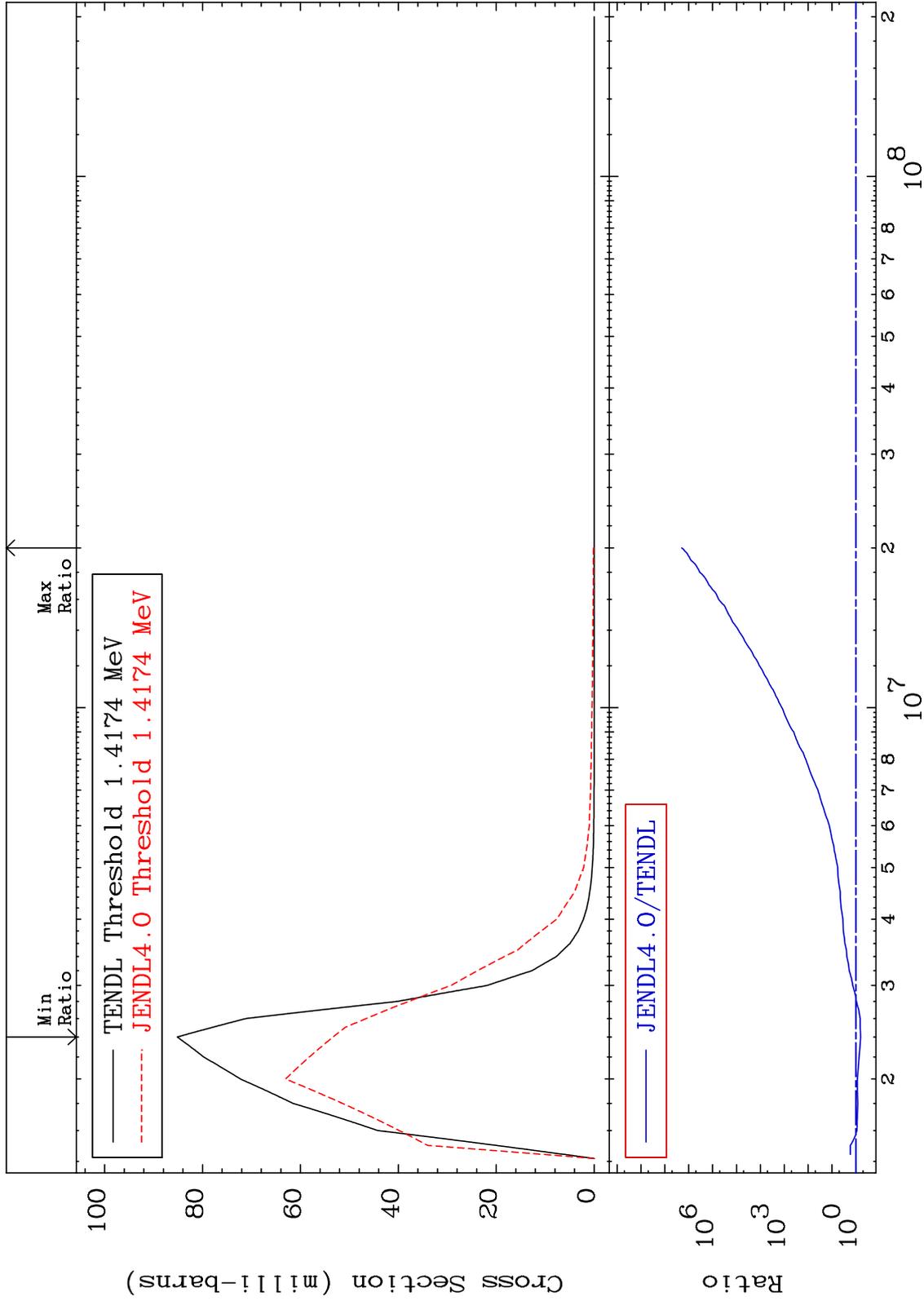
72-Hf-178  
-29.54 To 353.0 %



MAT 7237

MT= 66 (n,n') Level  
Cross Section

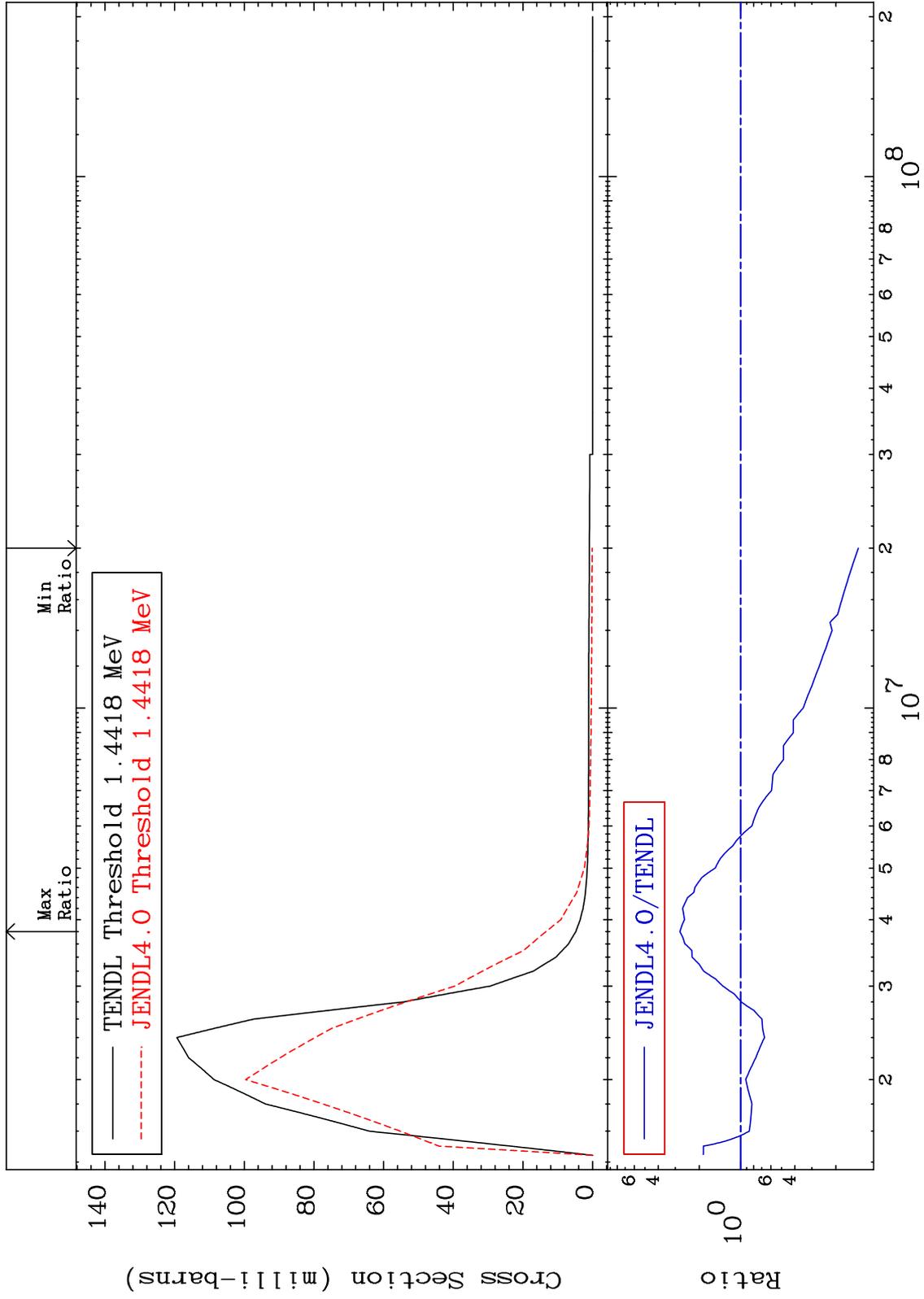
72-Hf-178  
-37.38 To 9999. %



MAT 7237

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

72-Hf-178  
-86.30 To 177.6 %

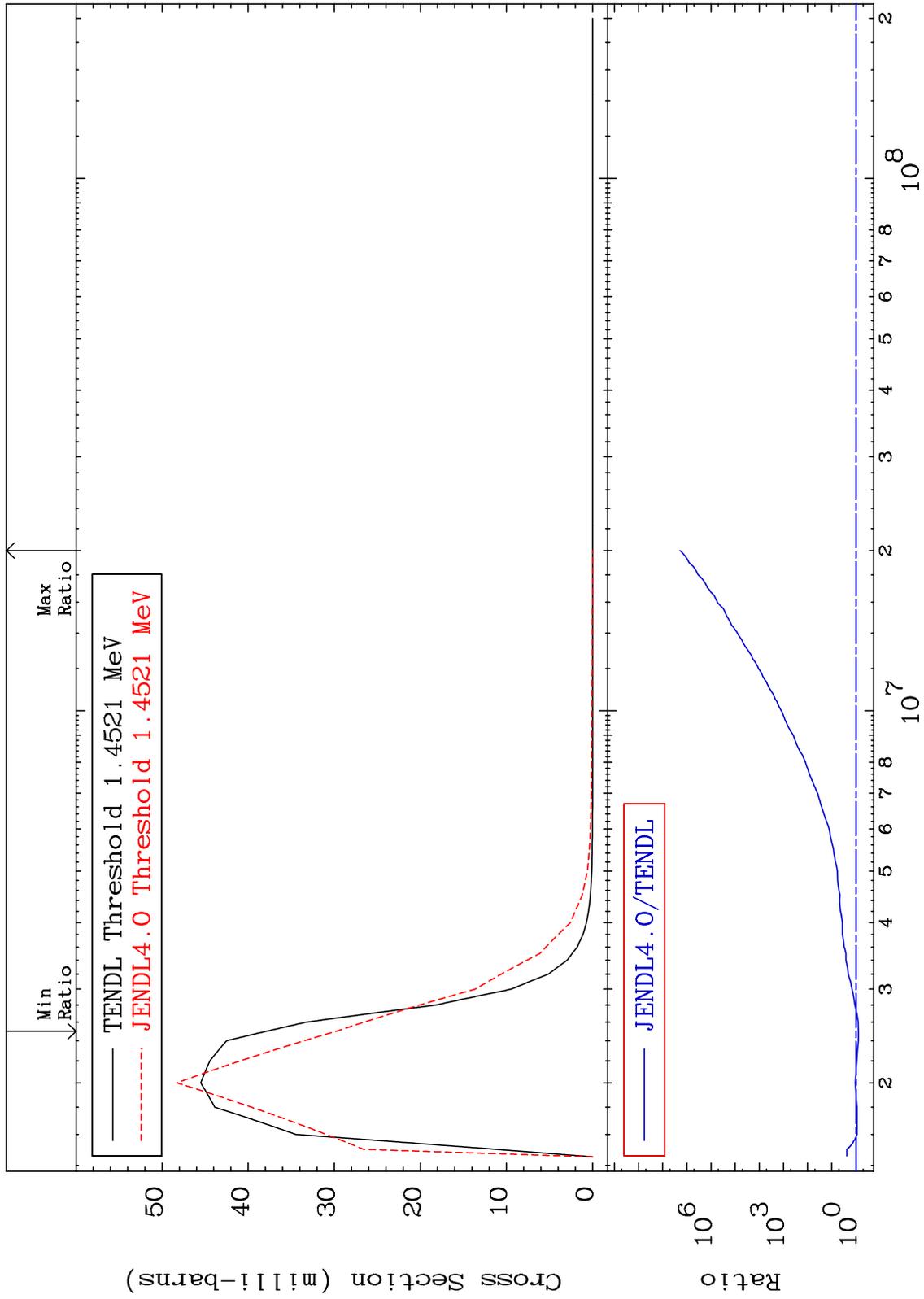




MAT 7237

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

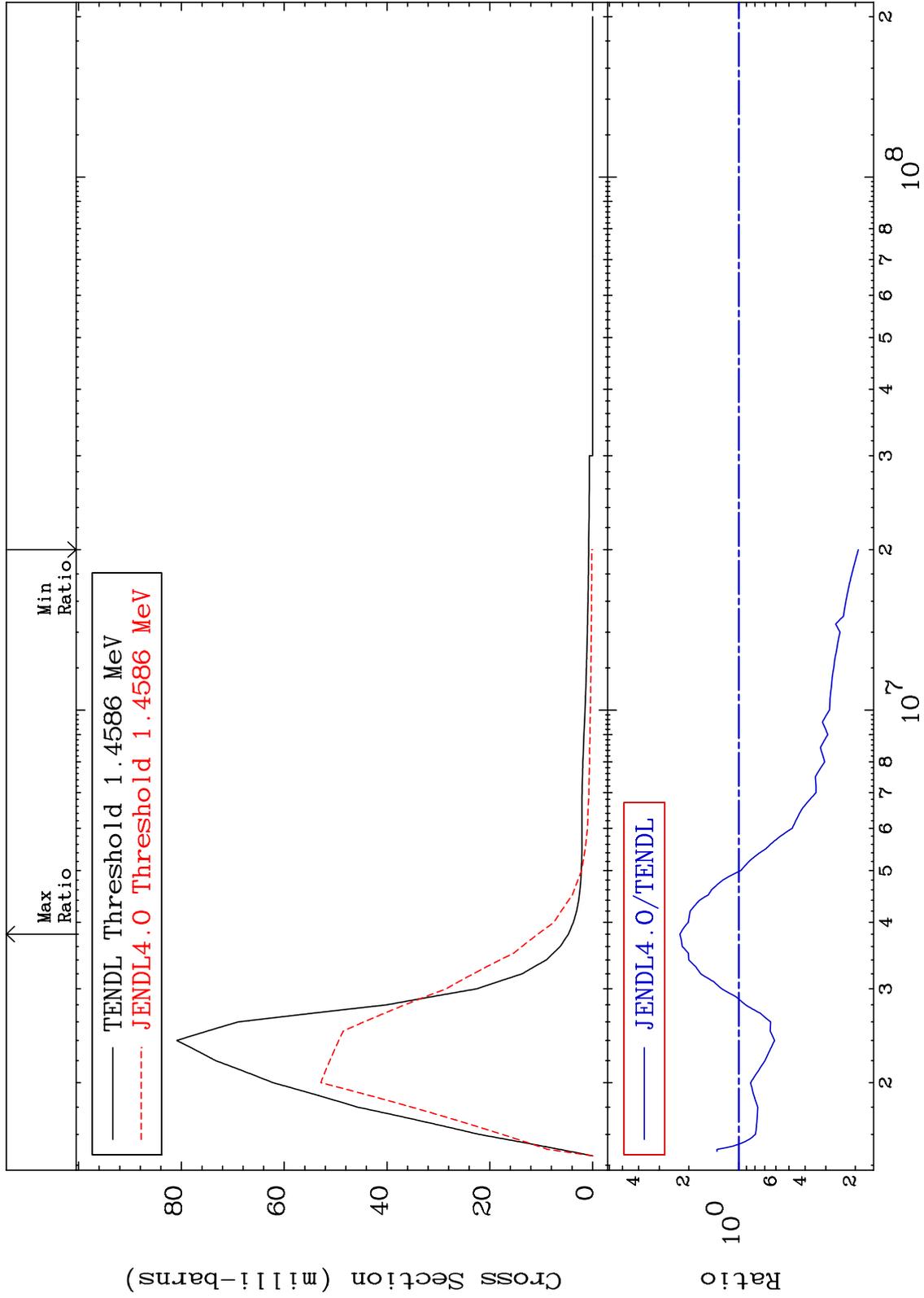
<sup>72</sup>Hf-178  
-21.41 To 9999. %



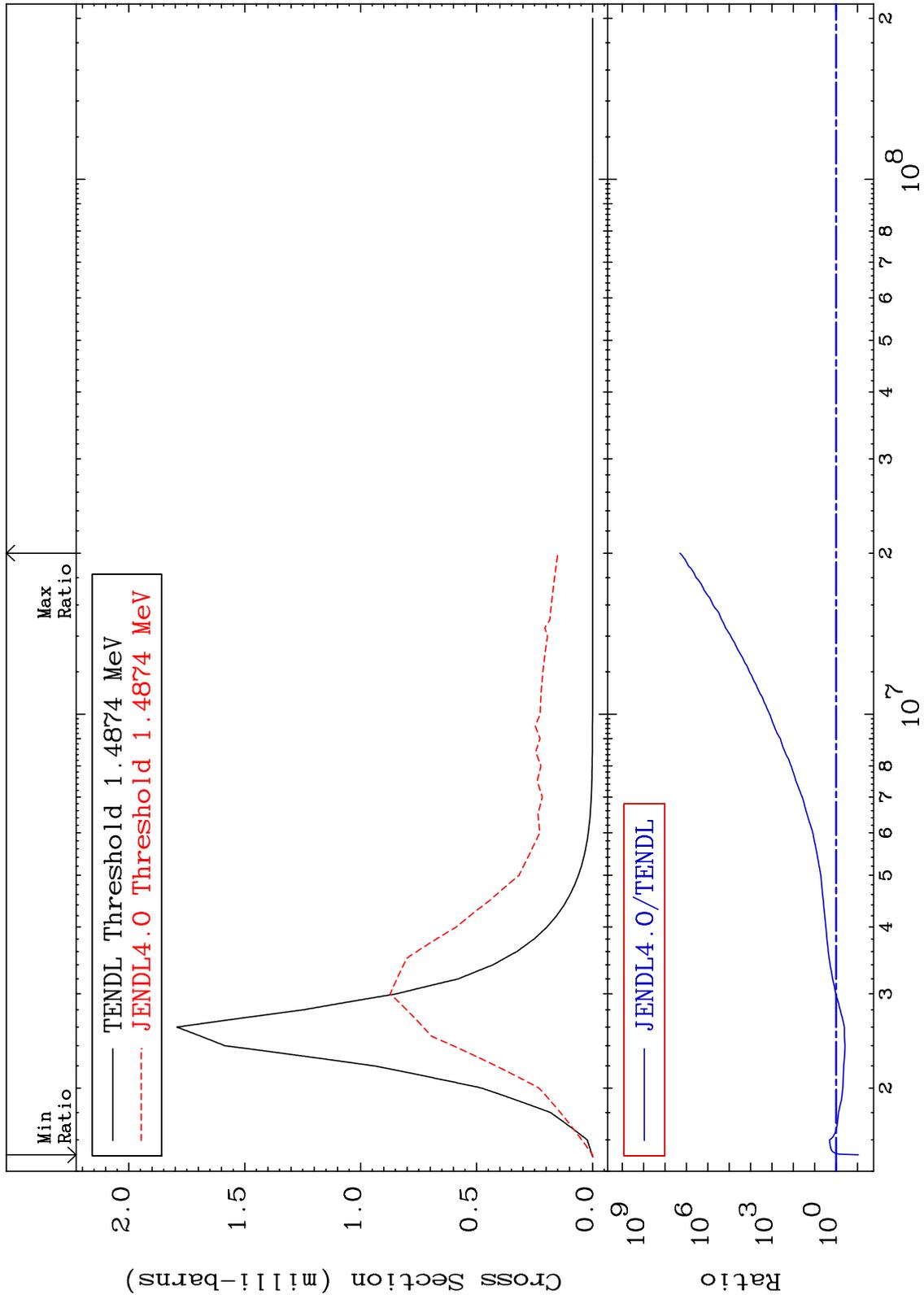
MAT 7237

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

<sup>72</sup>Hf-178  
-80.86 To 126.0 %



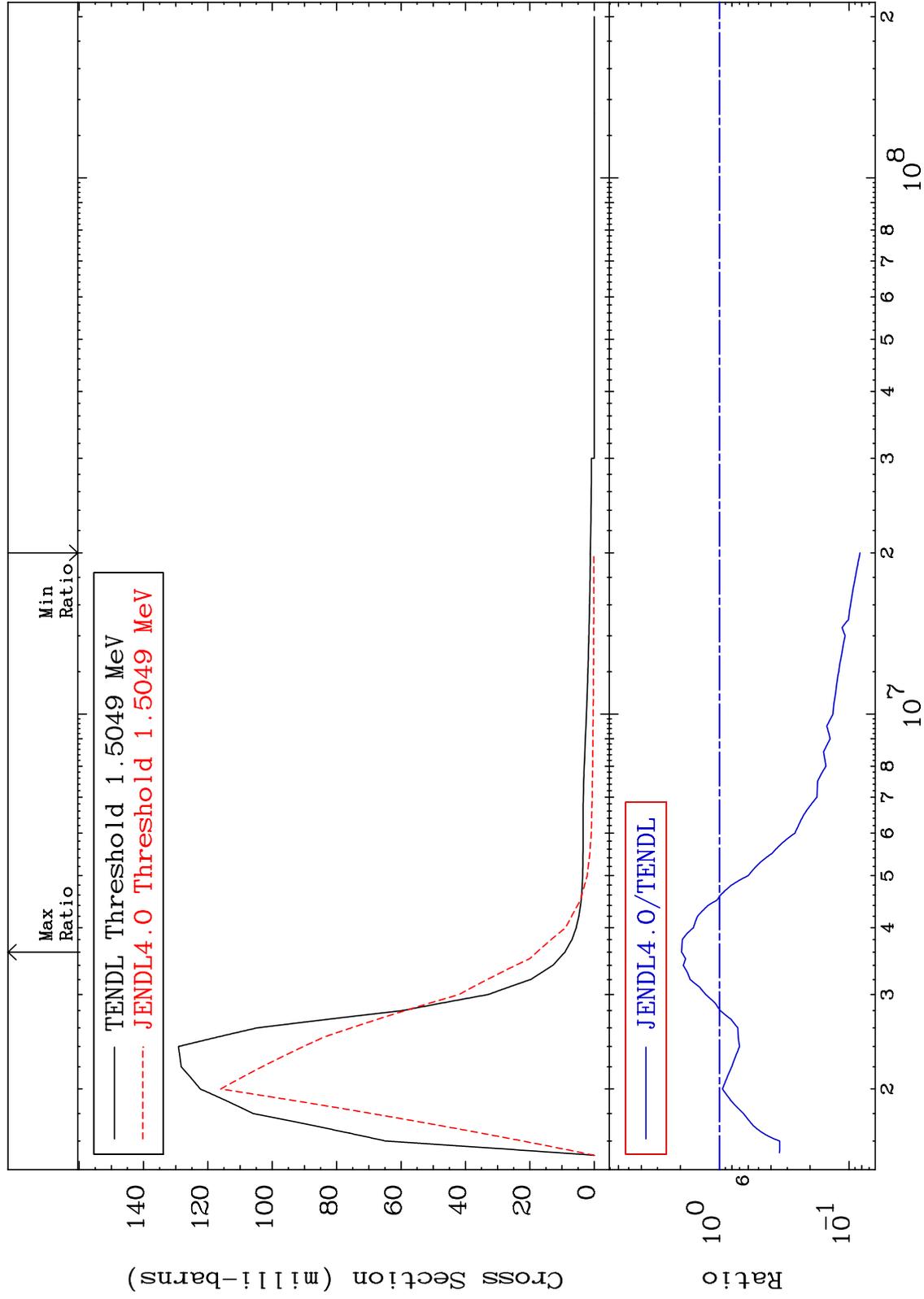
MAT 7237 MT= 71 (n,n') Level Cross Section 72-Hf-178  
 -90.96 To 9999. %



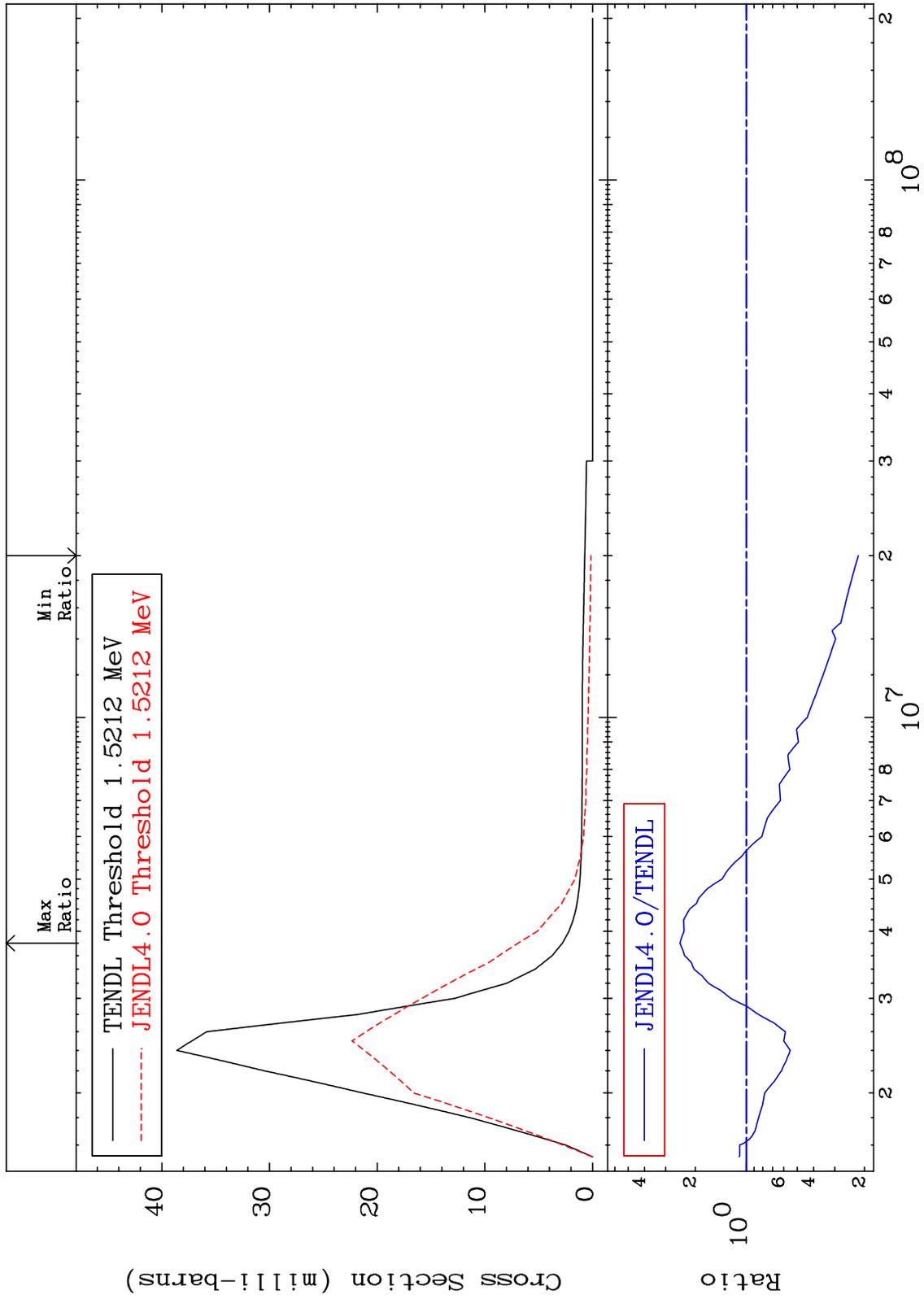
MAT 7237

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

72-Hf-178  
-91.76 To 95.90 %



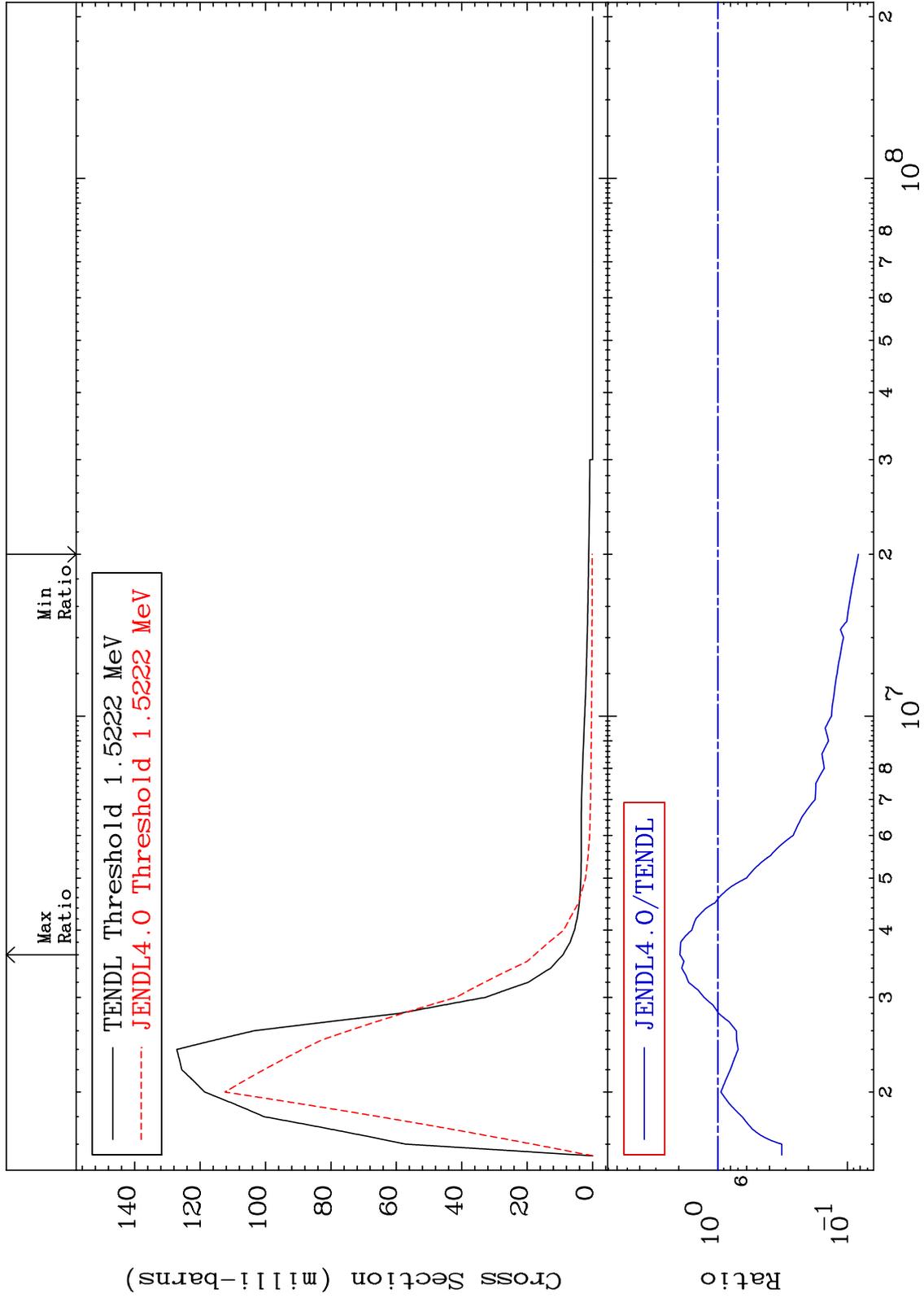
MAT 7237 MT= 73 (n,n') Level Cross Section 72-Hf-178 -78.27 To 146.9 %



MAT 7237

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

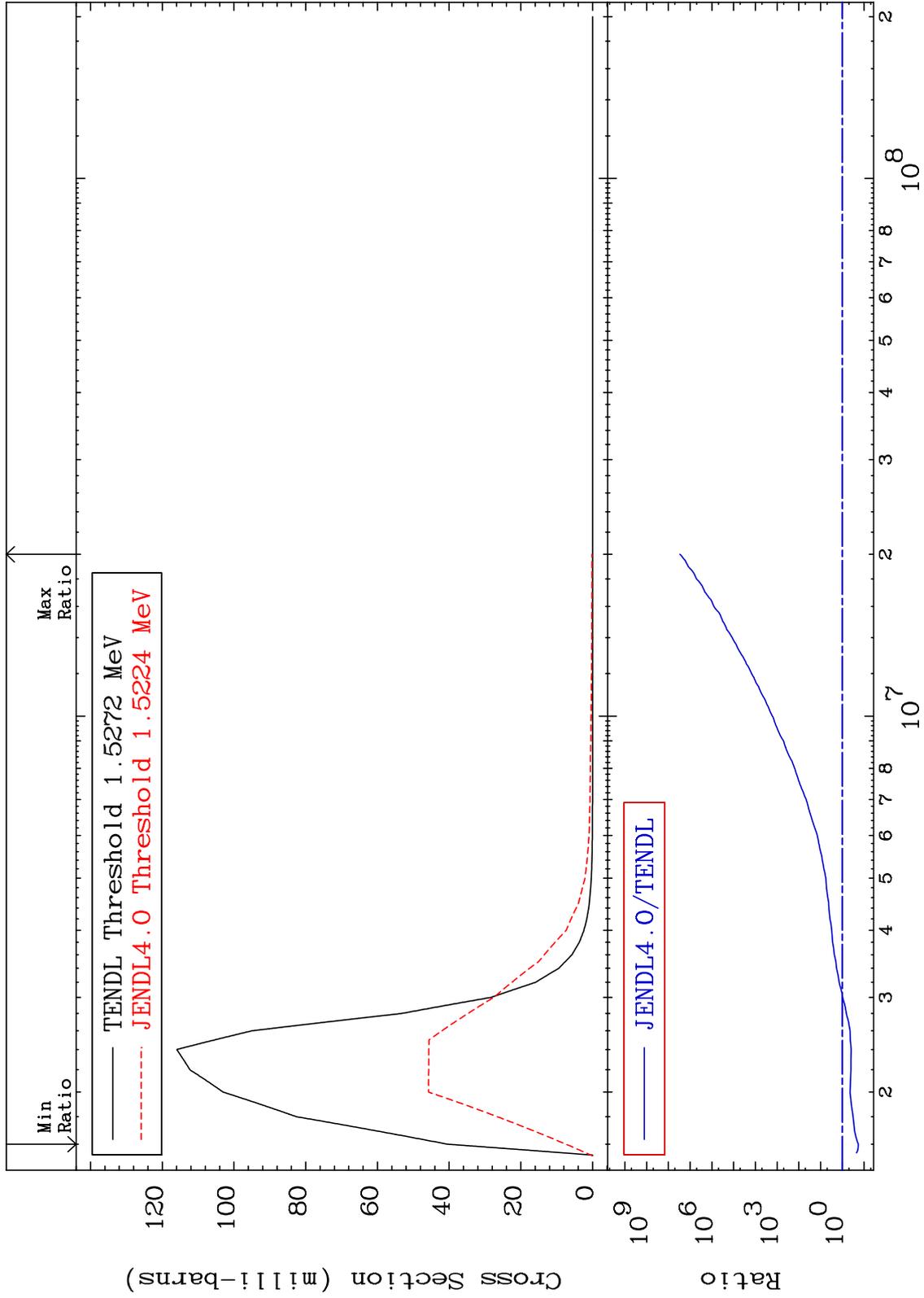
72-Hf-178  
-91.76 To 96.03 %



MAT 7237

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

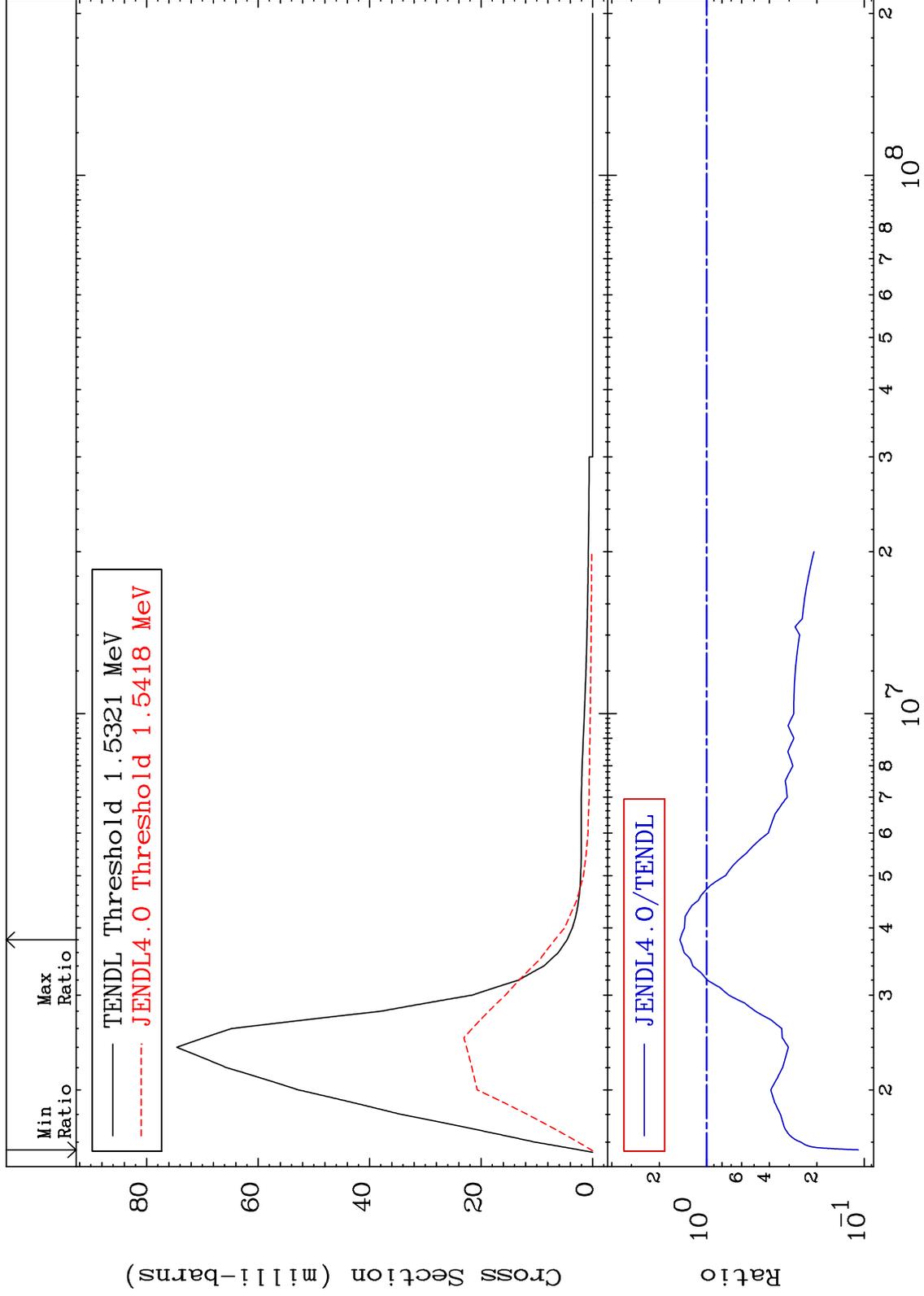
72-Hf-178  
-81.65 To 9999. %



MAT 7237

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

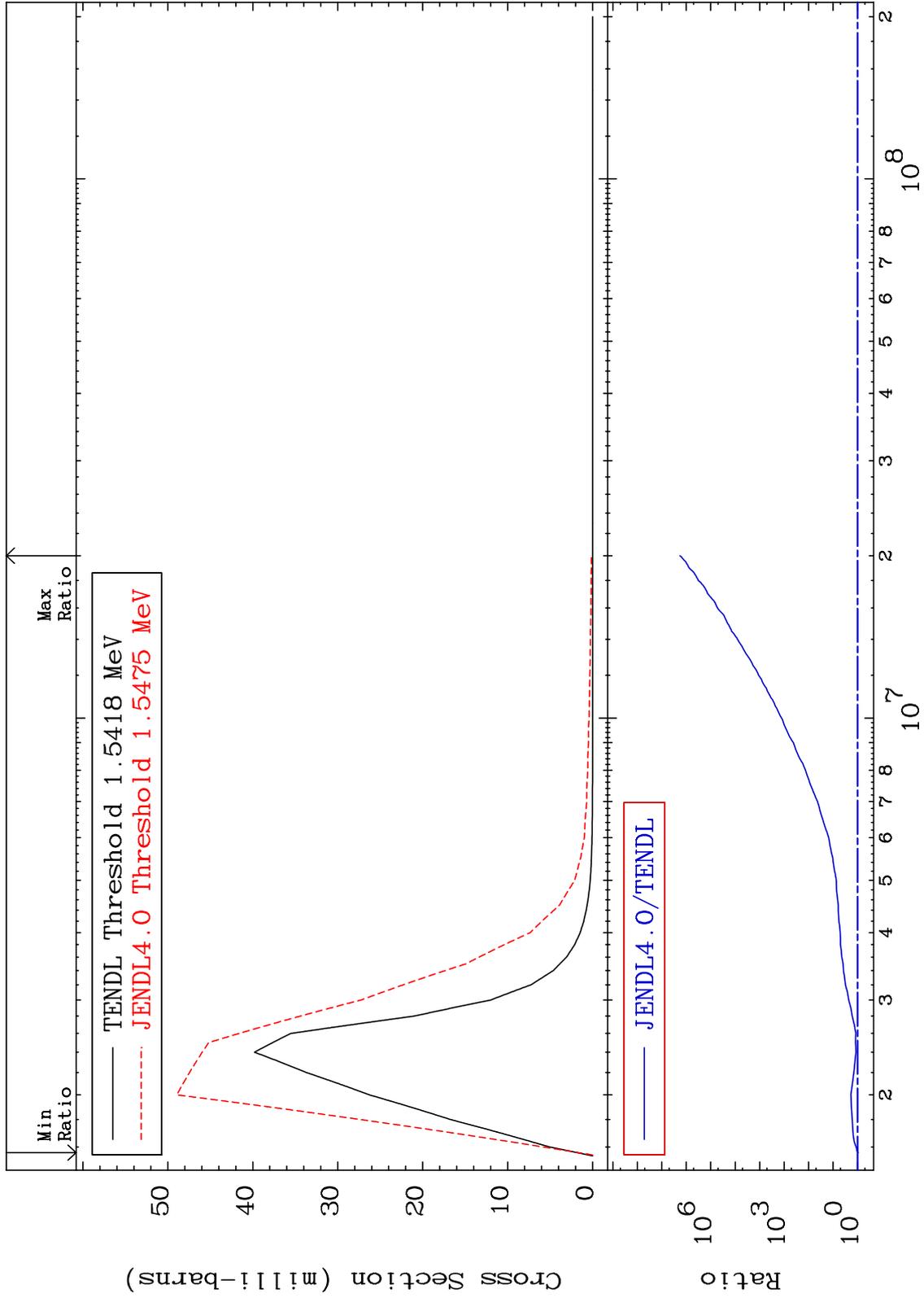
72-Hf-178  
-89.10 To 47.85 %



MAT 7237

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

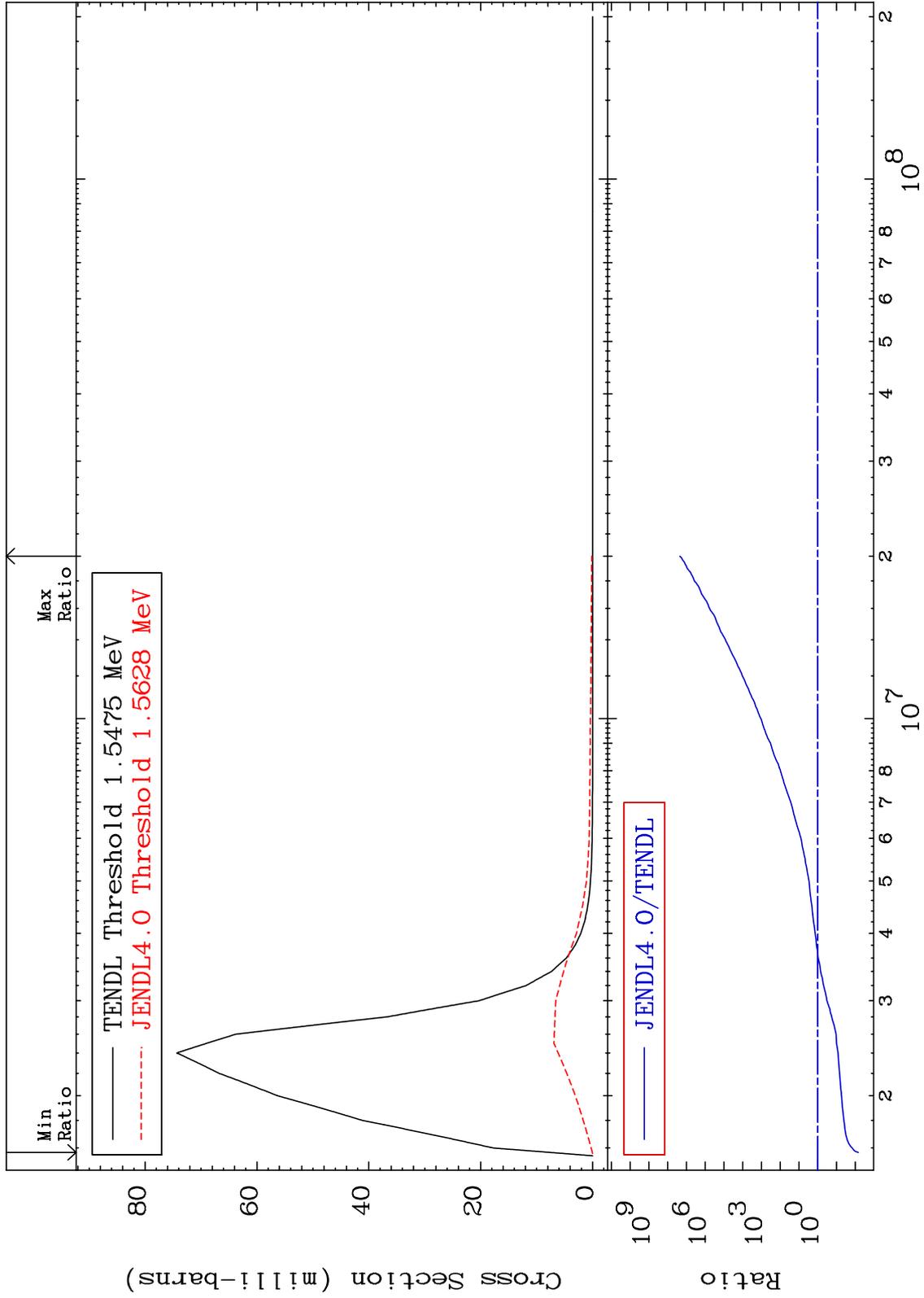
72-Hf-178  
-8.271 To 9999. %



MAT 7237

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

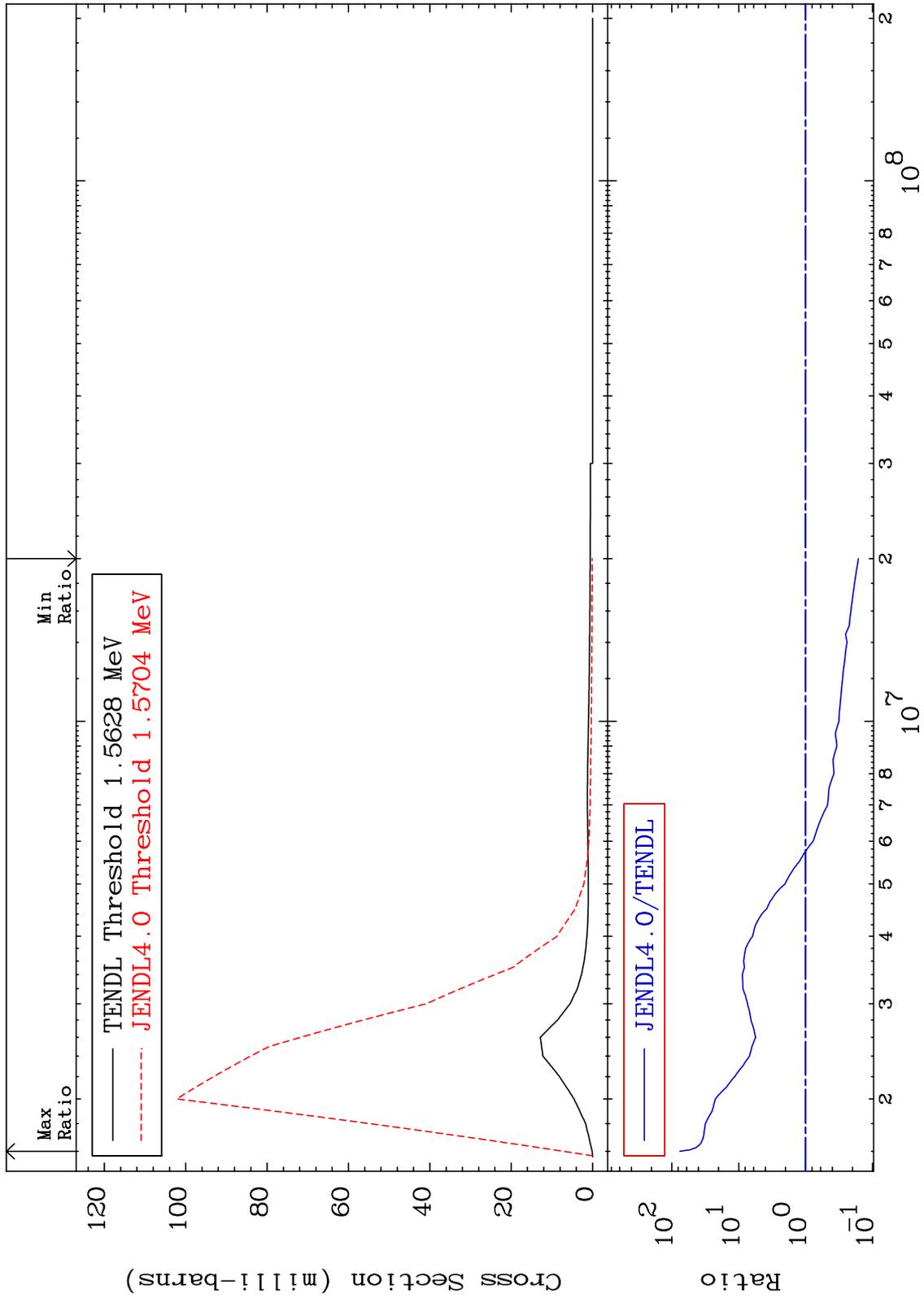
72-Hf-178  
-99.31 To 9999. %

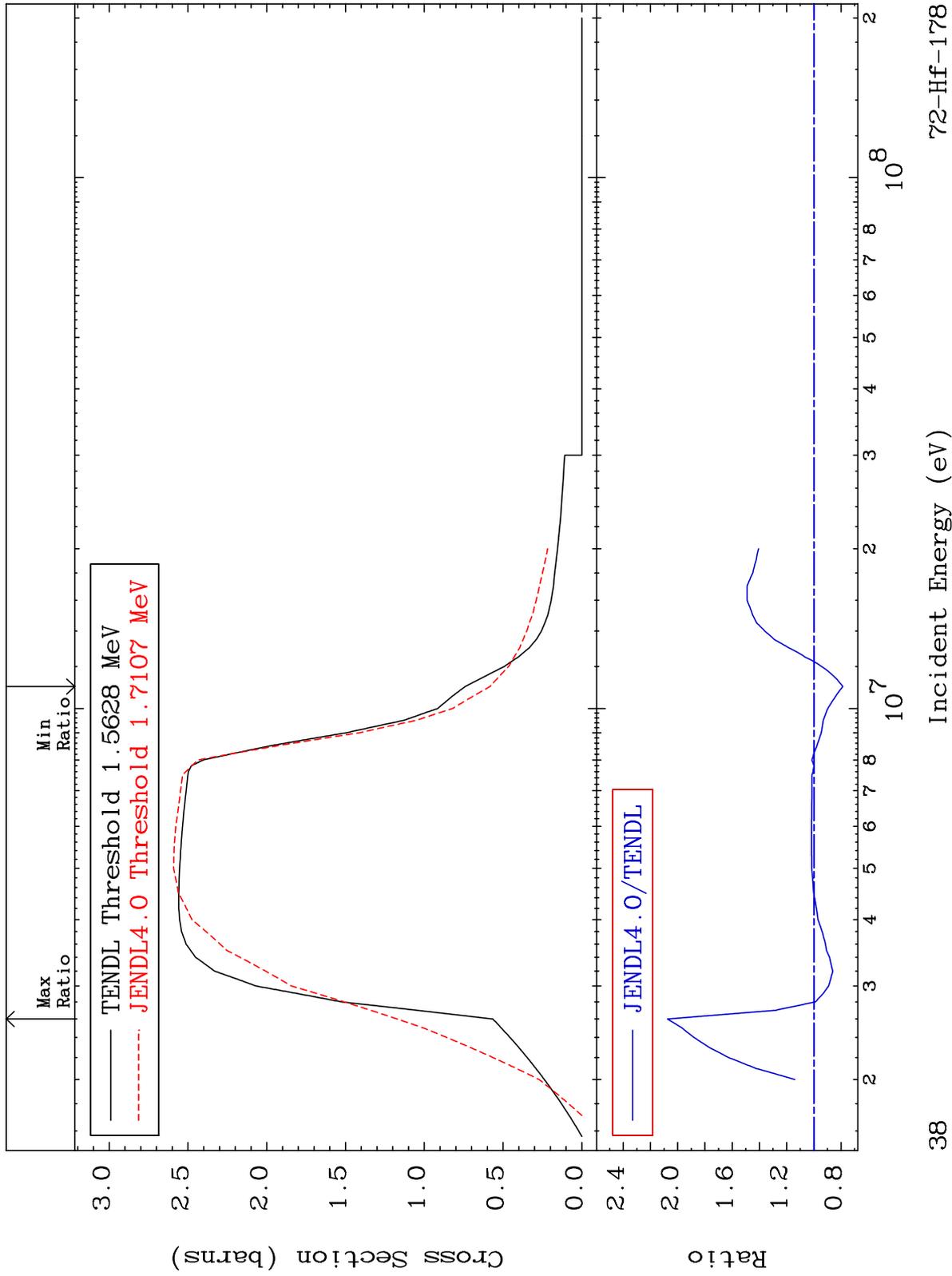


MAT 7237

MT= 79 (n,n') Level  
Cross Section

72-Hf-178  
-83.70 To 7443. %





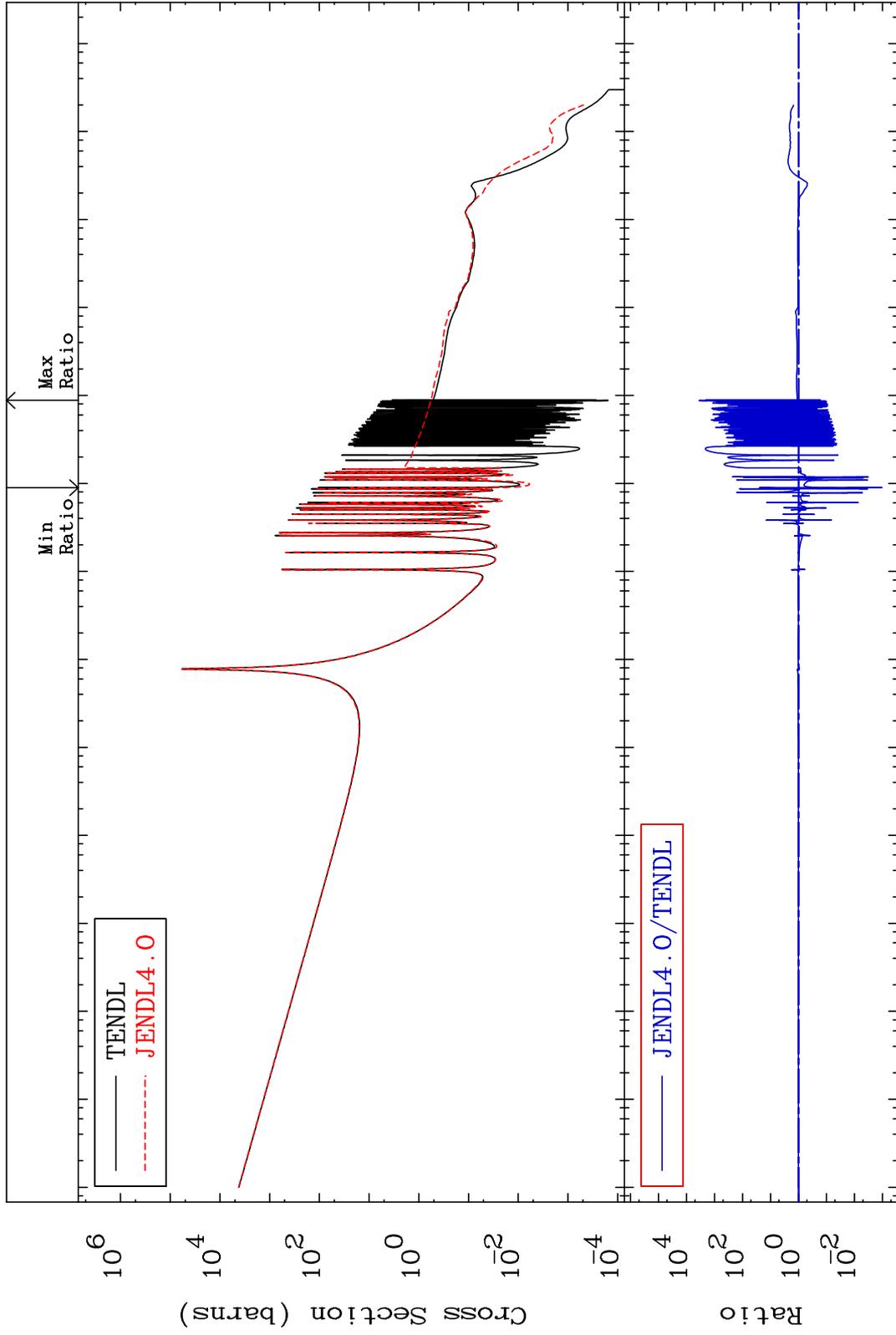
MAT 7237

(n,  $\gamma$ )

72-Hf-178

Cross Section

-99.90 To 9999. %



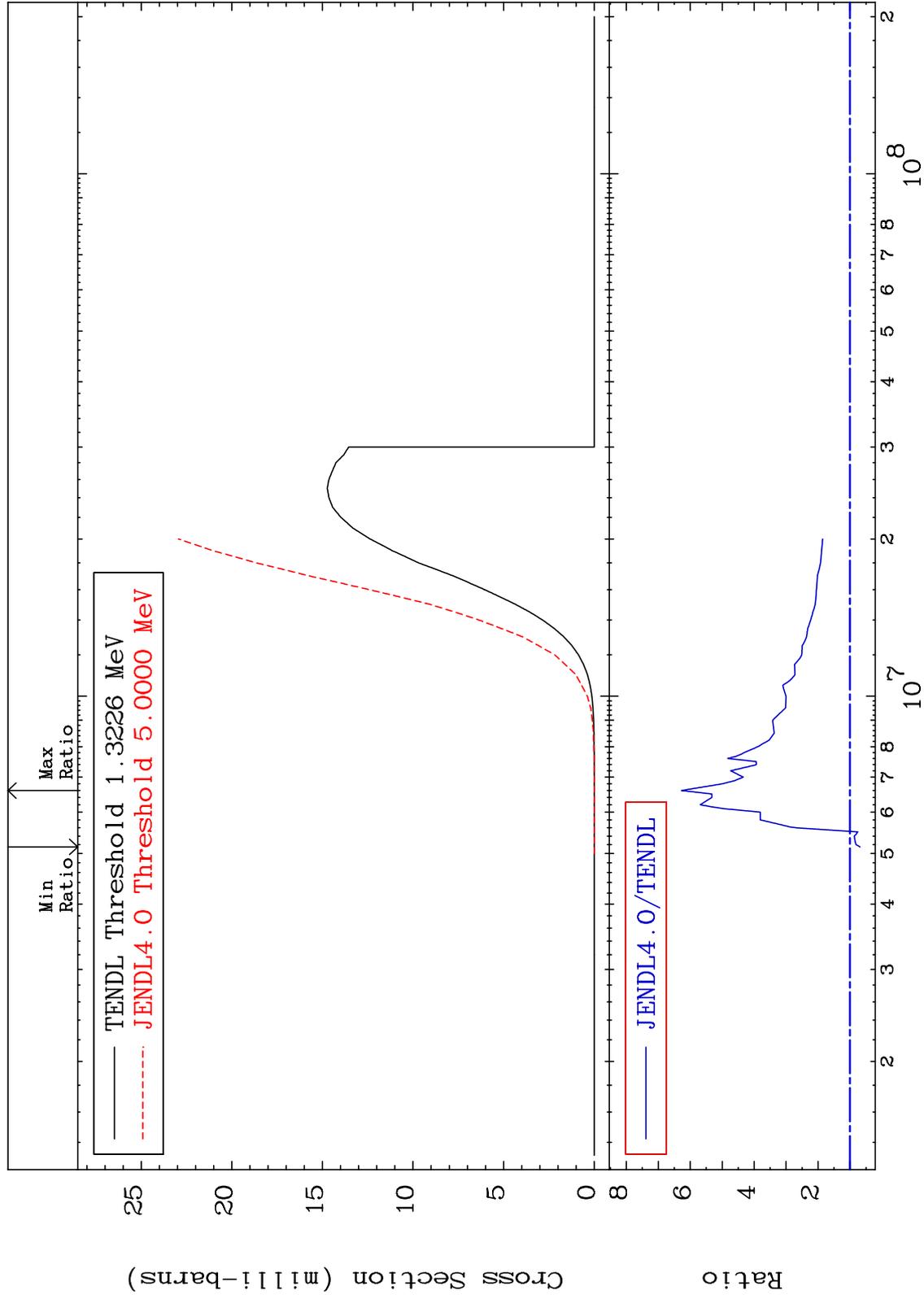
MAT 7237

(n, p)

<sup>72</sup>Hf-178

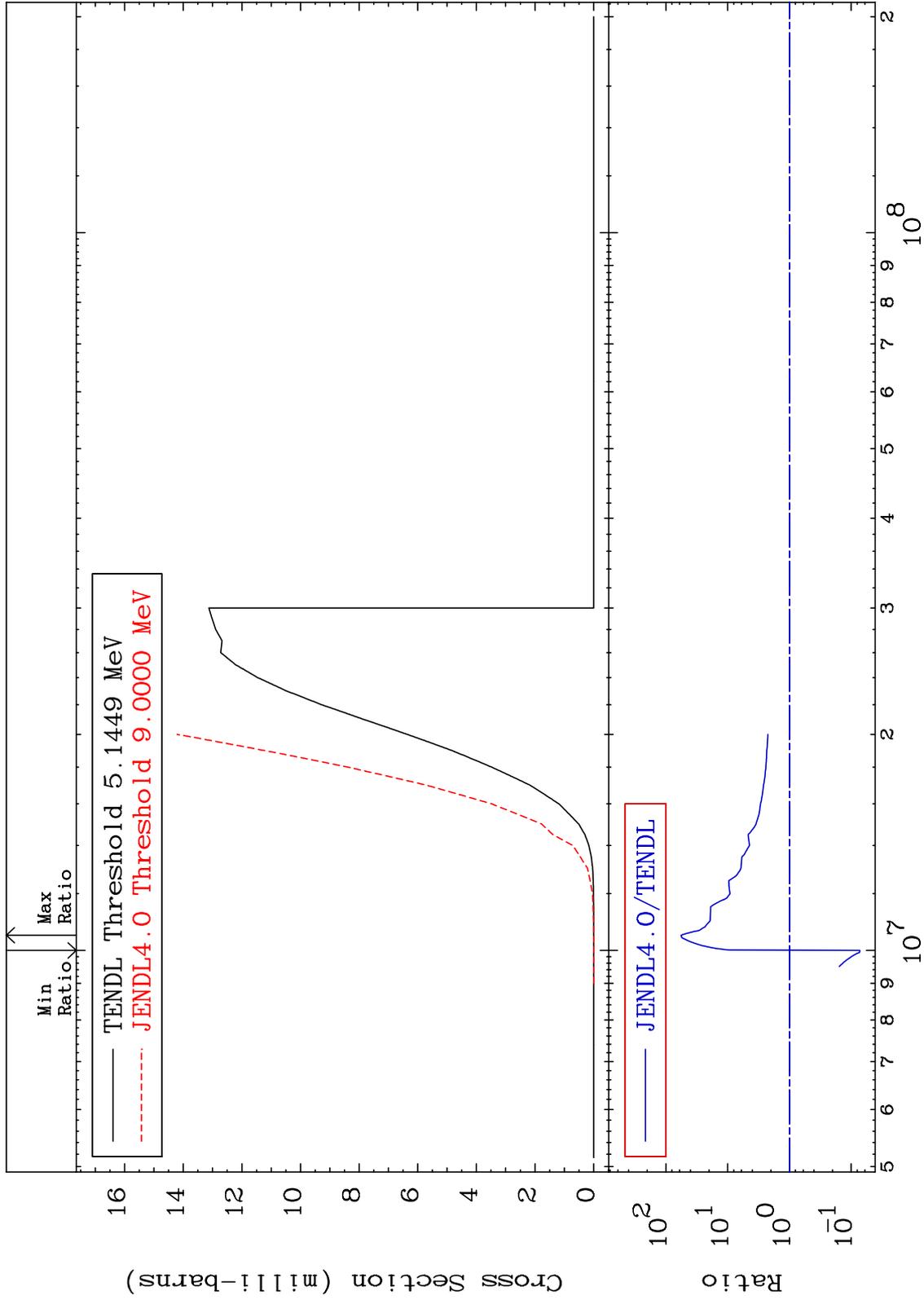
Cross Section

-31.36 To 527.1 %



Cross Section

-92.77 To 5564. %



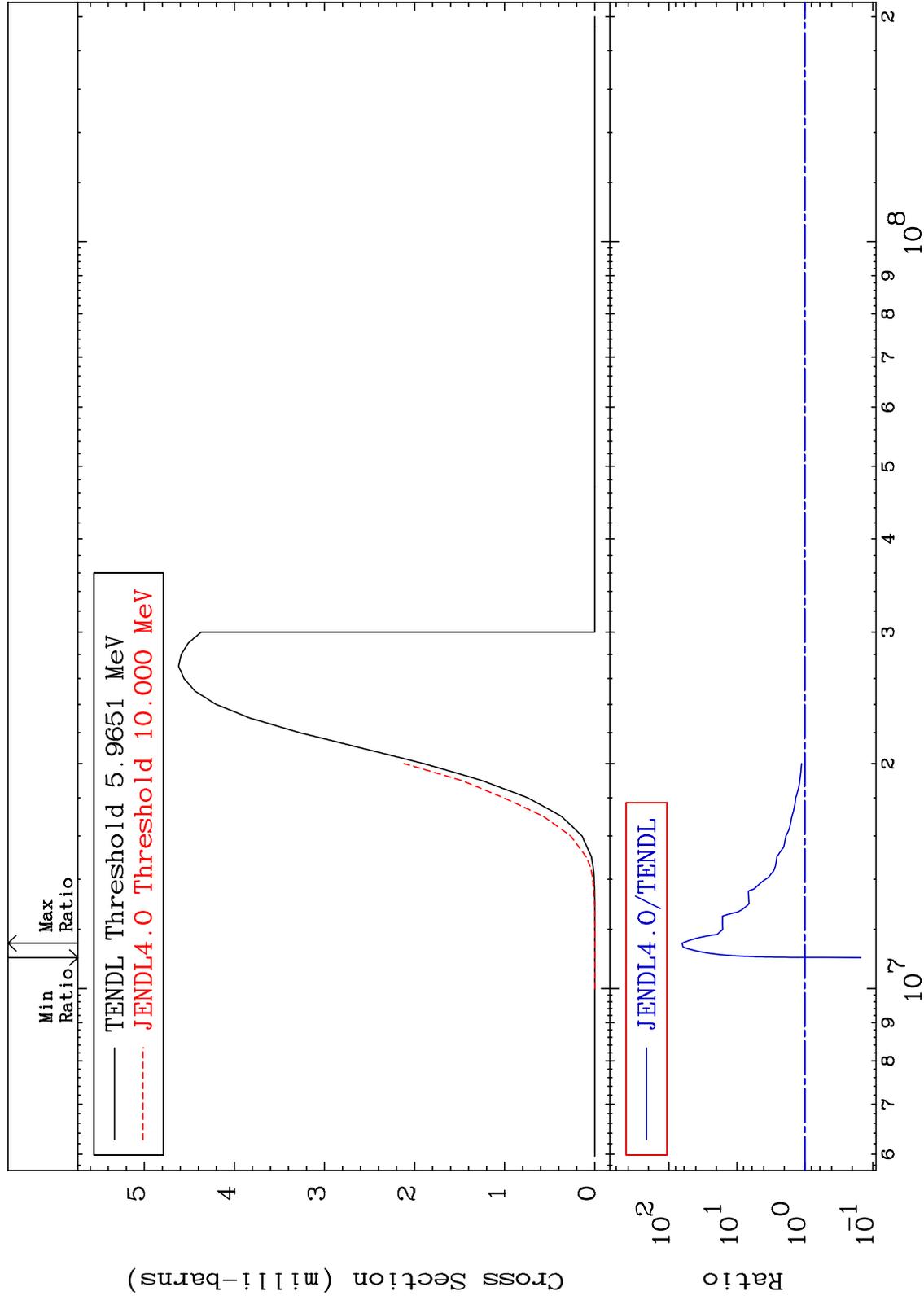
MAT 7237

(n, t)

72-Hf-178

Cross Section

-85.04 To 6285. %



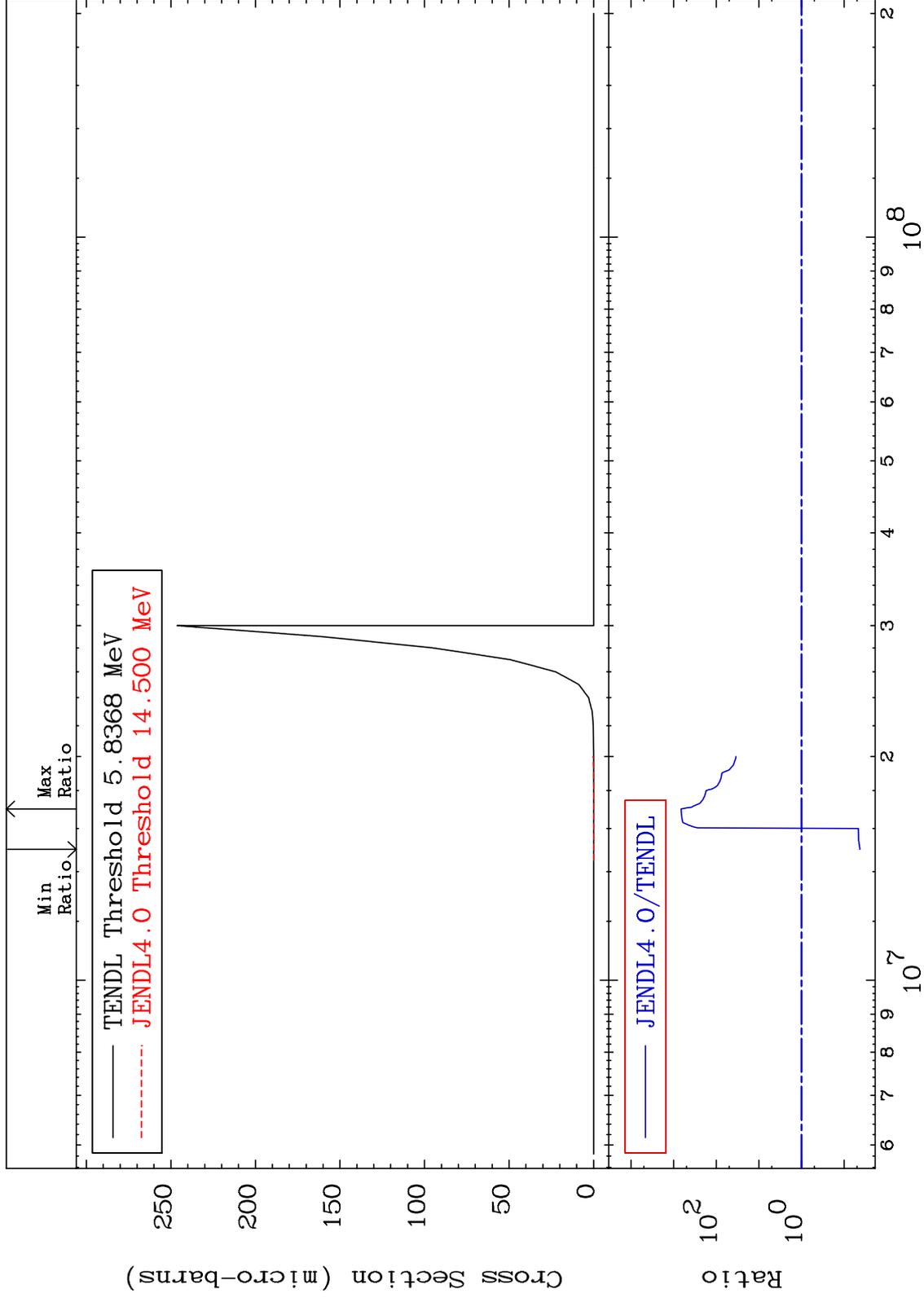
MAT 7237

(n, He-3)

72-Hf-178

Cross Section

-95.73 To 9999. %



43

Incident Energy (eV)

72-Hf-178

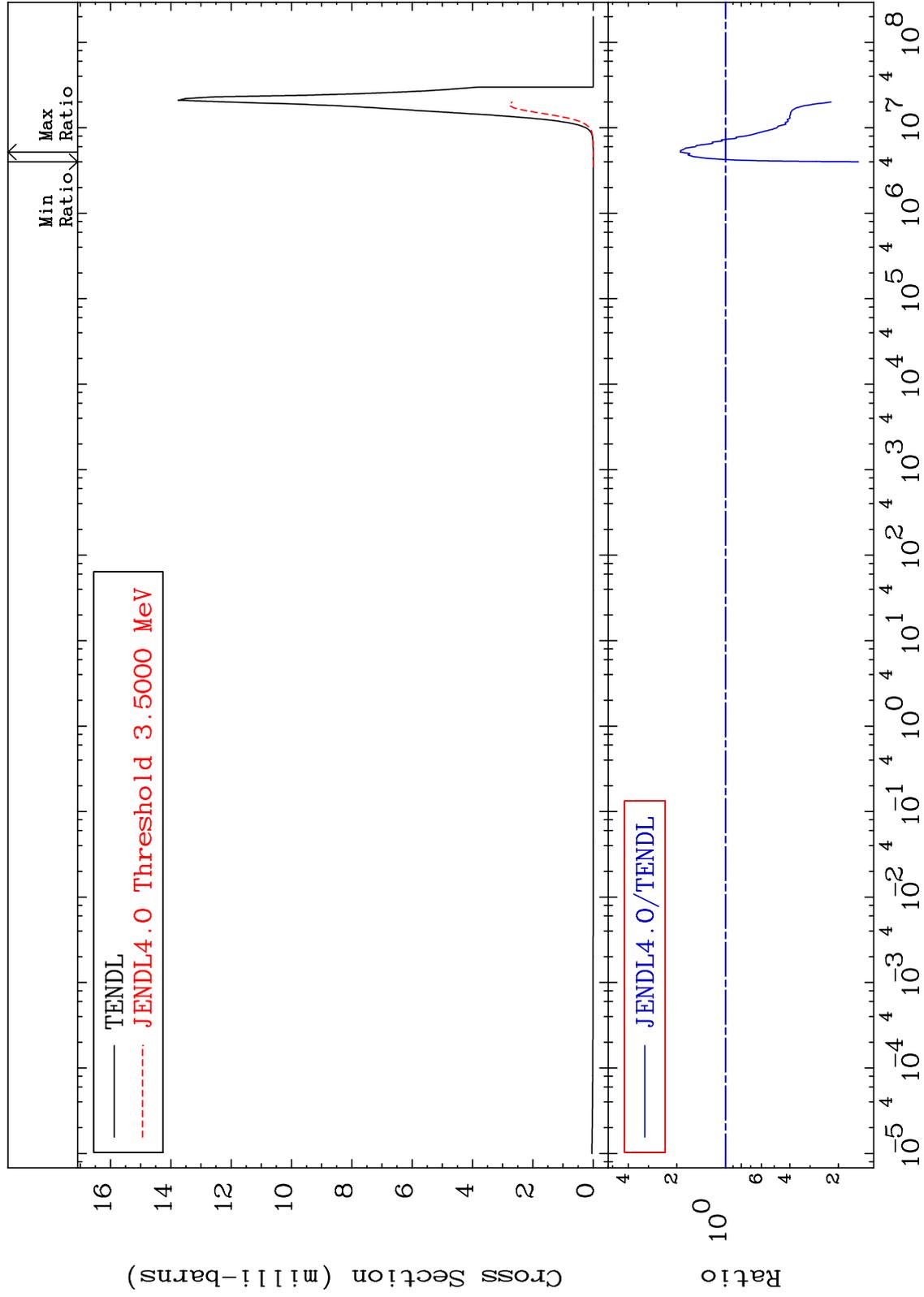
MAT 7237

(n,  $\alpha$ )

72-Hf-178

Cross Section

-84.96 To 90.26 %



44

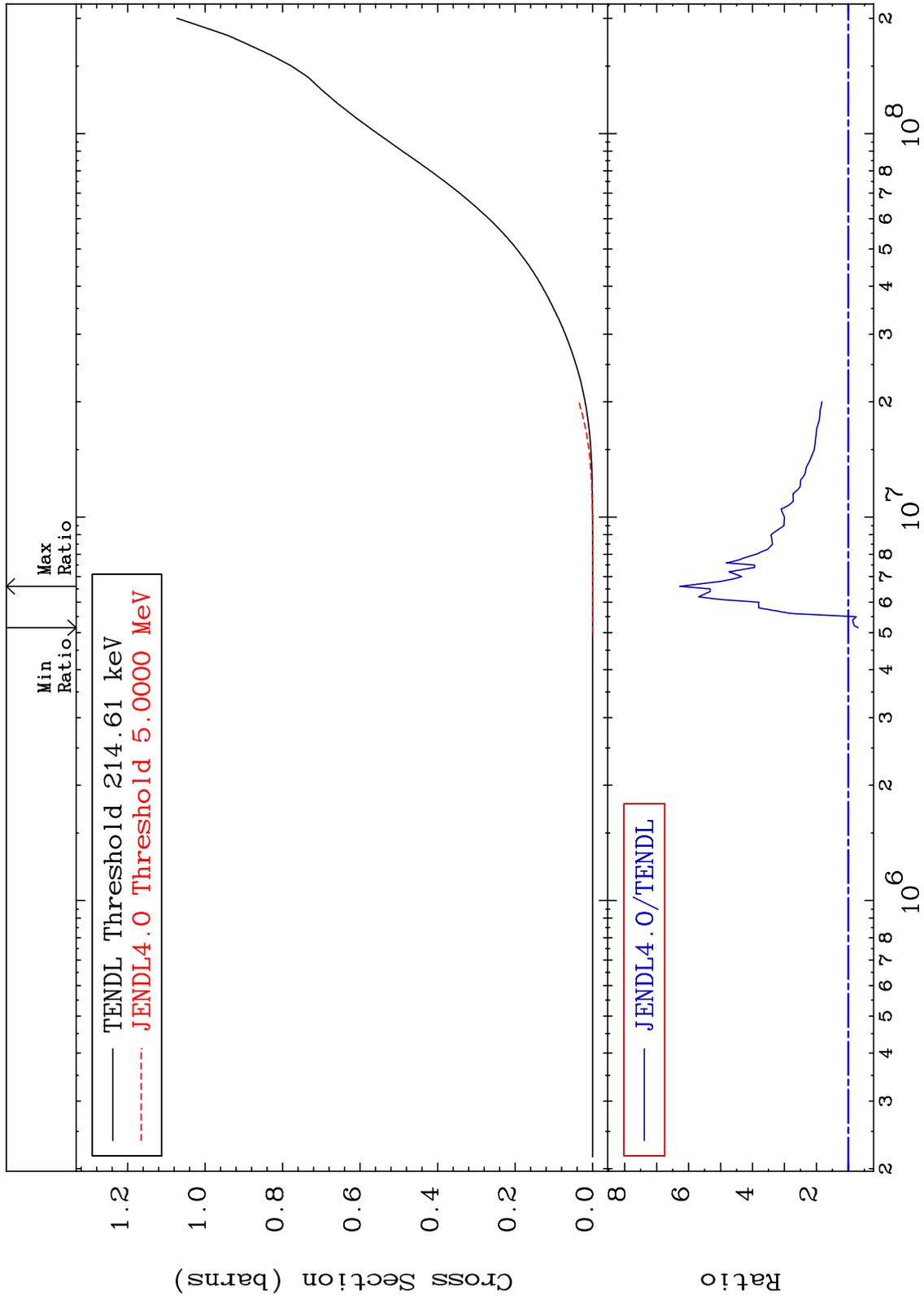
Incident Energy (eV)

72-Hf-178

MAT 7237

Hydrogen Production  
Cross Section

<sup>72</sup>Hf-178  
-31.36 To 527.1 %



45

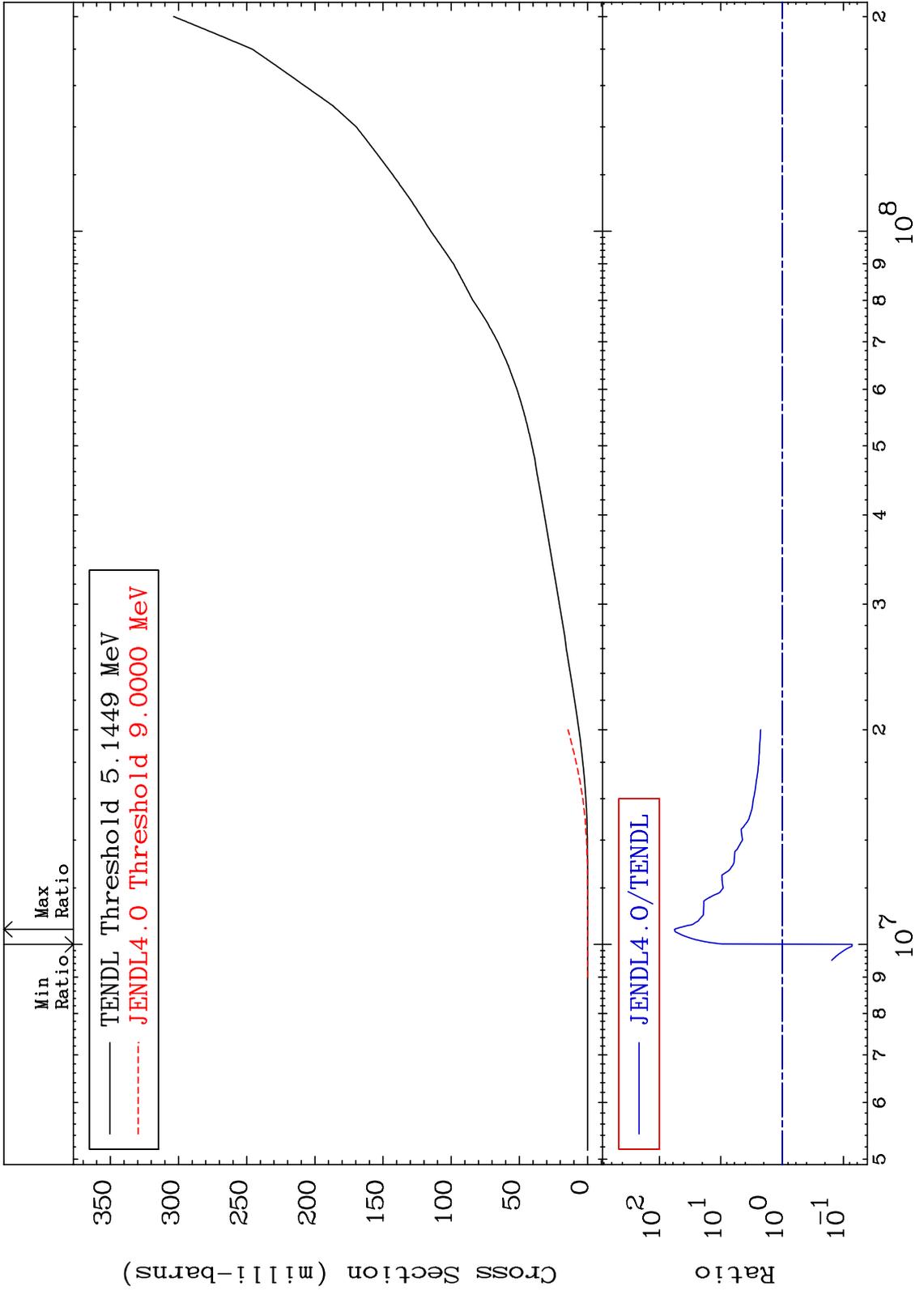
Incident Energy (eV)

<sup>72</sup>Hf-178

MAT 7237

Deuterium Production  
Cross Section

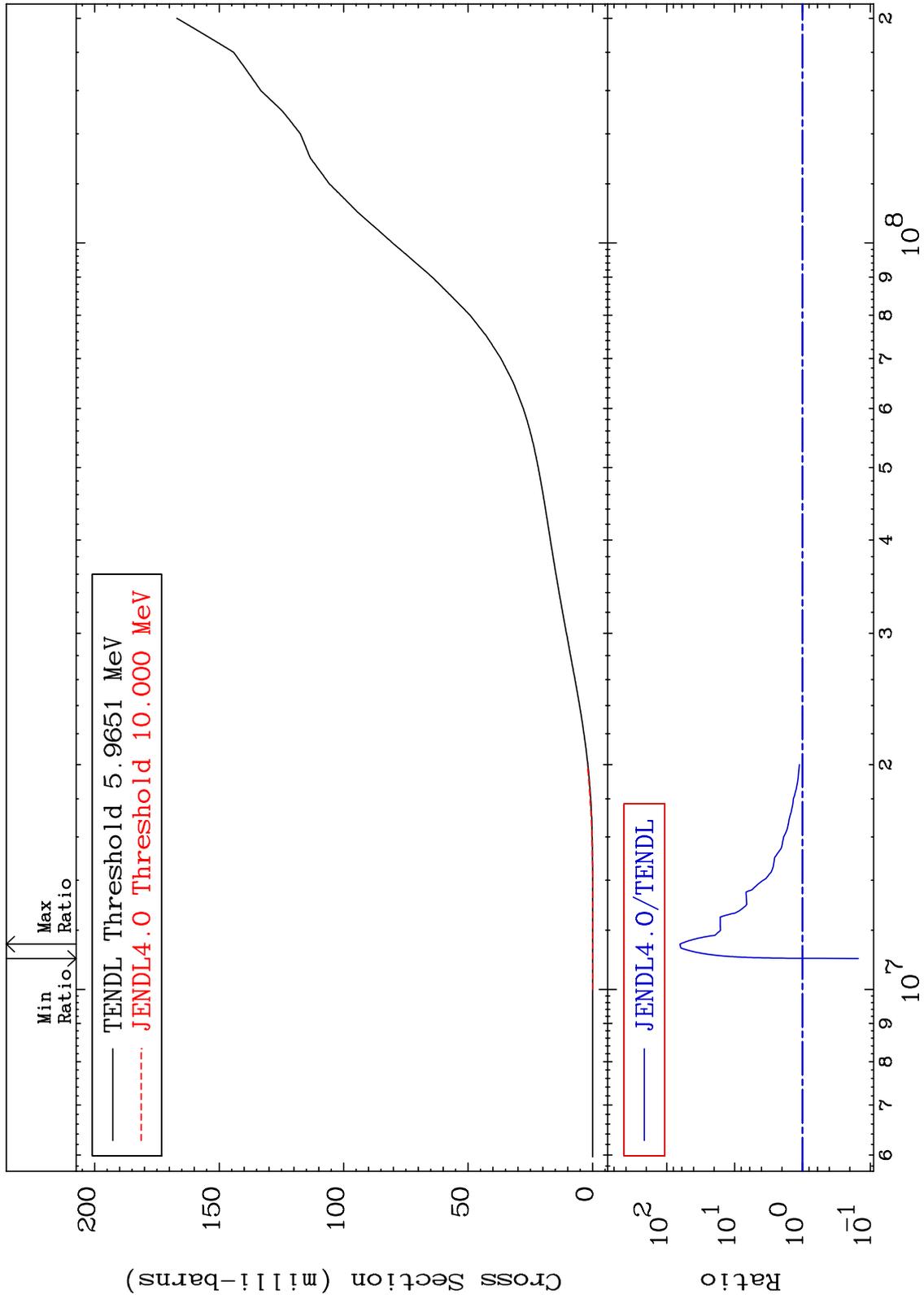
72-Hf-178  
-92.77 To 5564. %



MAT 7237

Tritium Production  
Cross Section

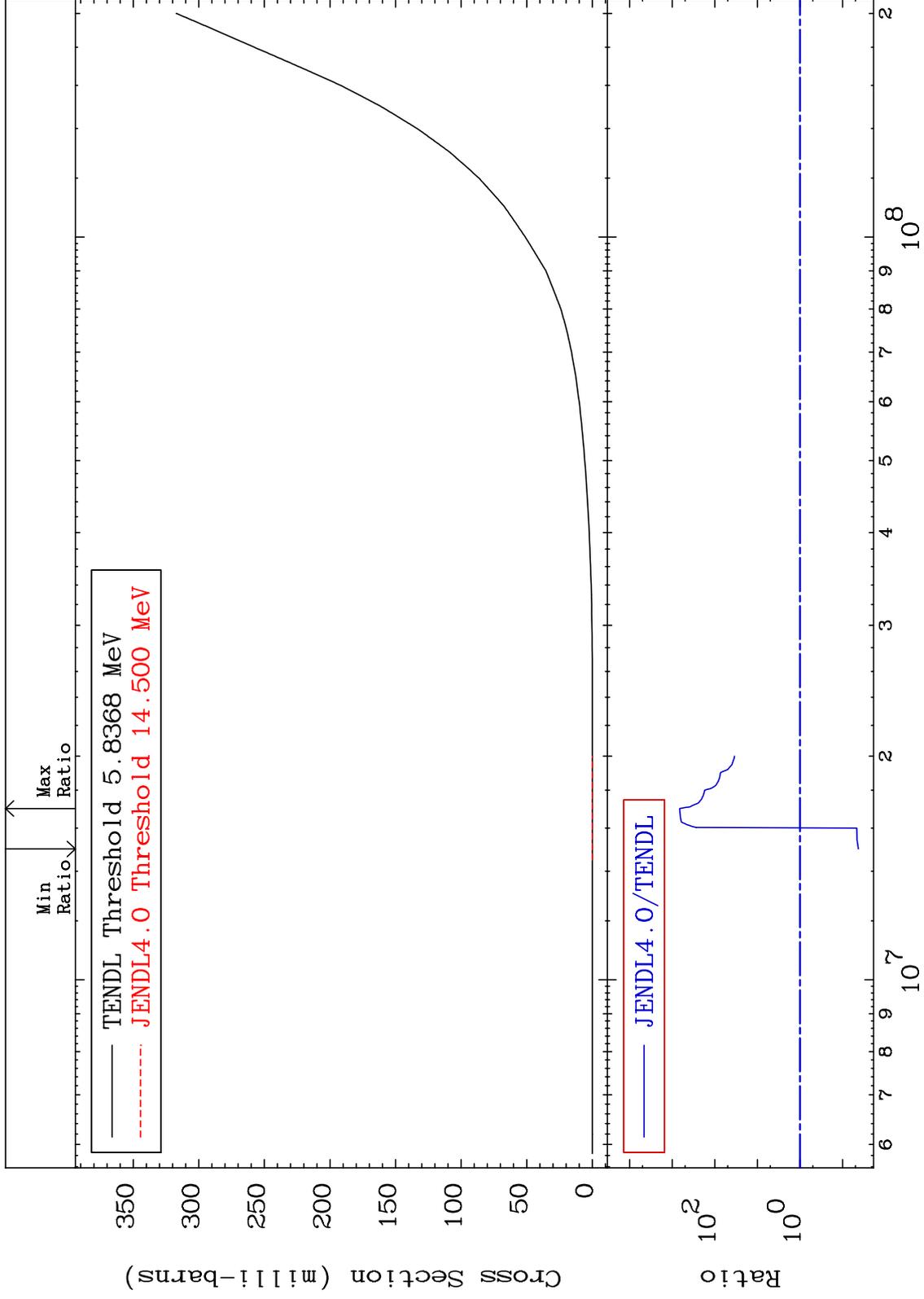
<sup>72</sup>Hf-178  
-85.04 To 6285. %



MAT 7237

He-3 Production  
Cross Section

72-Hf-178  
-95.74 To 9999. %



48

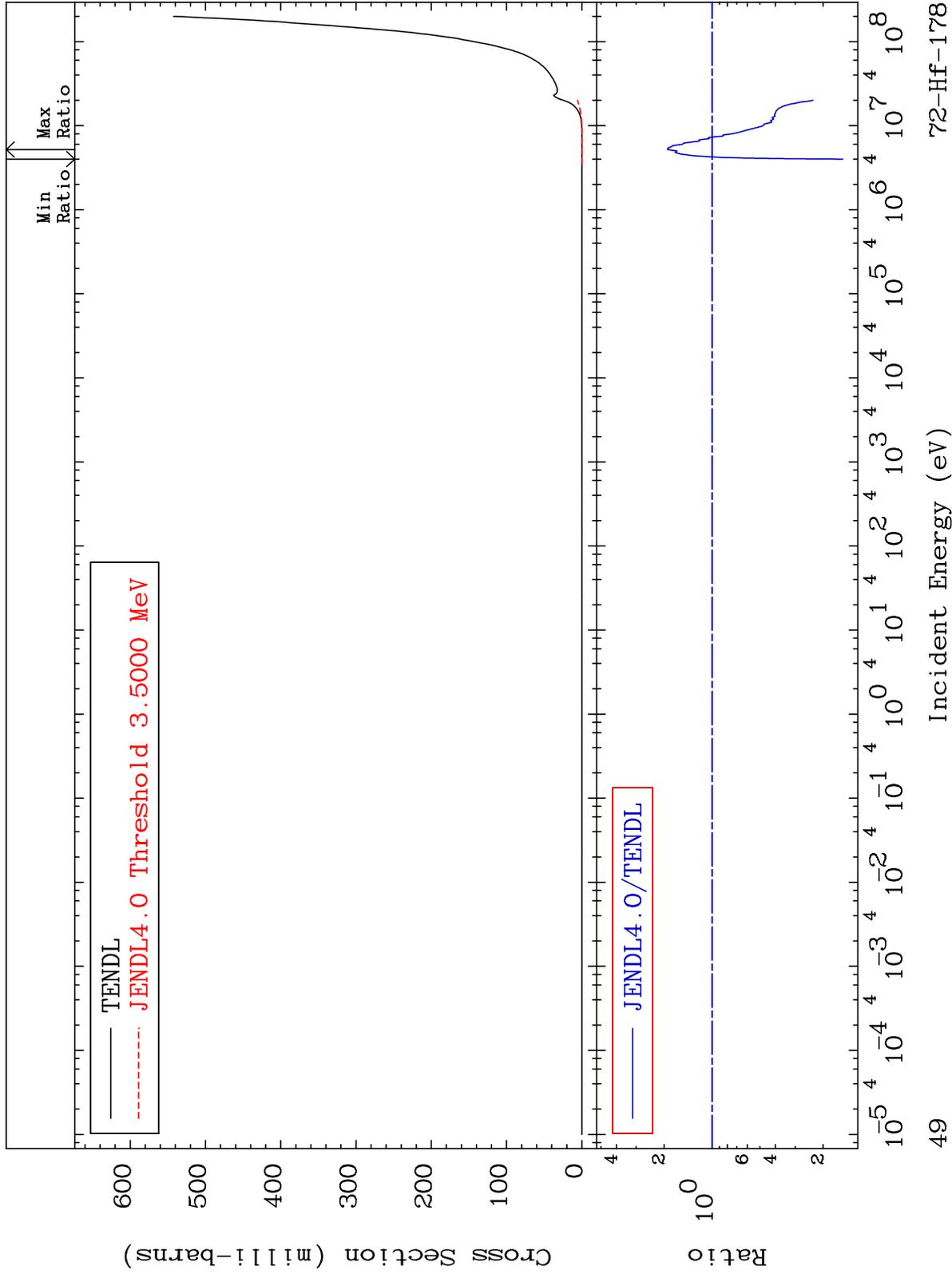
Incident Energy (eV)

72-Hf-178

MAT 7237

He-4 Production  
Cross Section

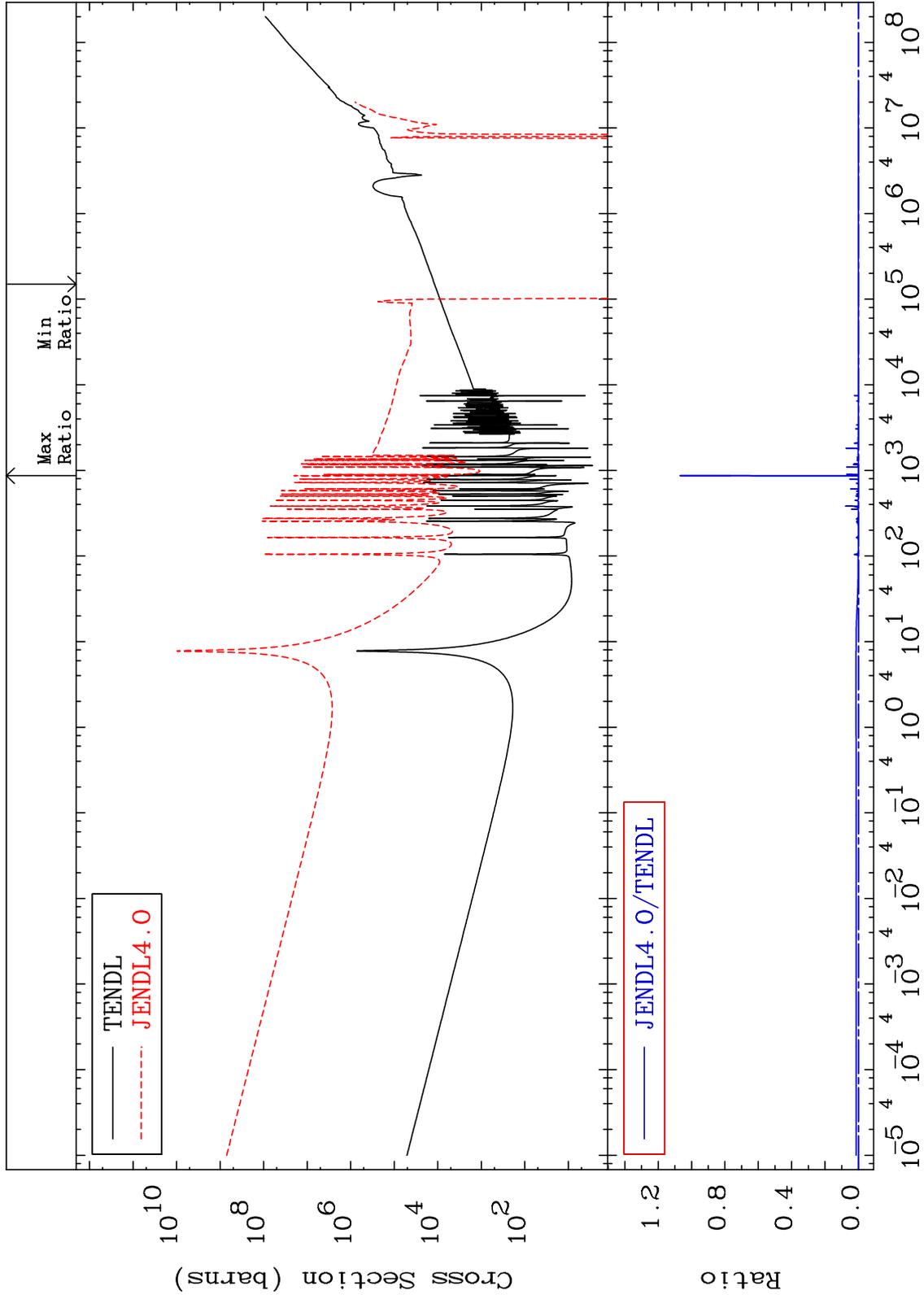
72-Hf-178  
-84.96 To 90.23 %



MAT 7237

Kerma total (eV-barns)  
Cross Section

72-Hf-178  
-2004. To 9999. %



50

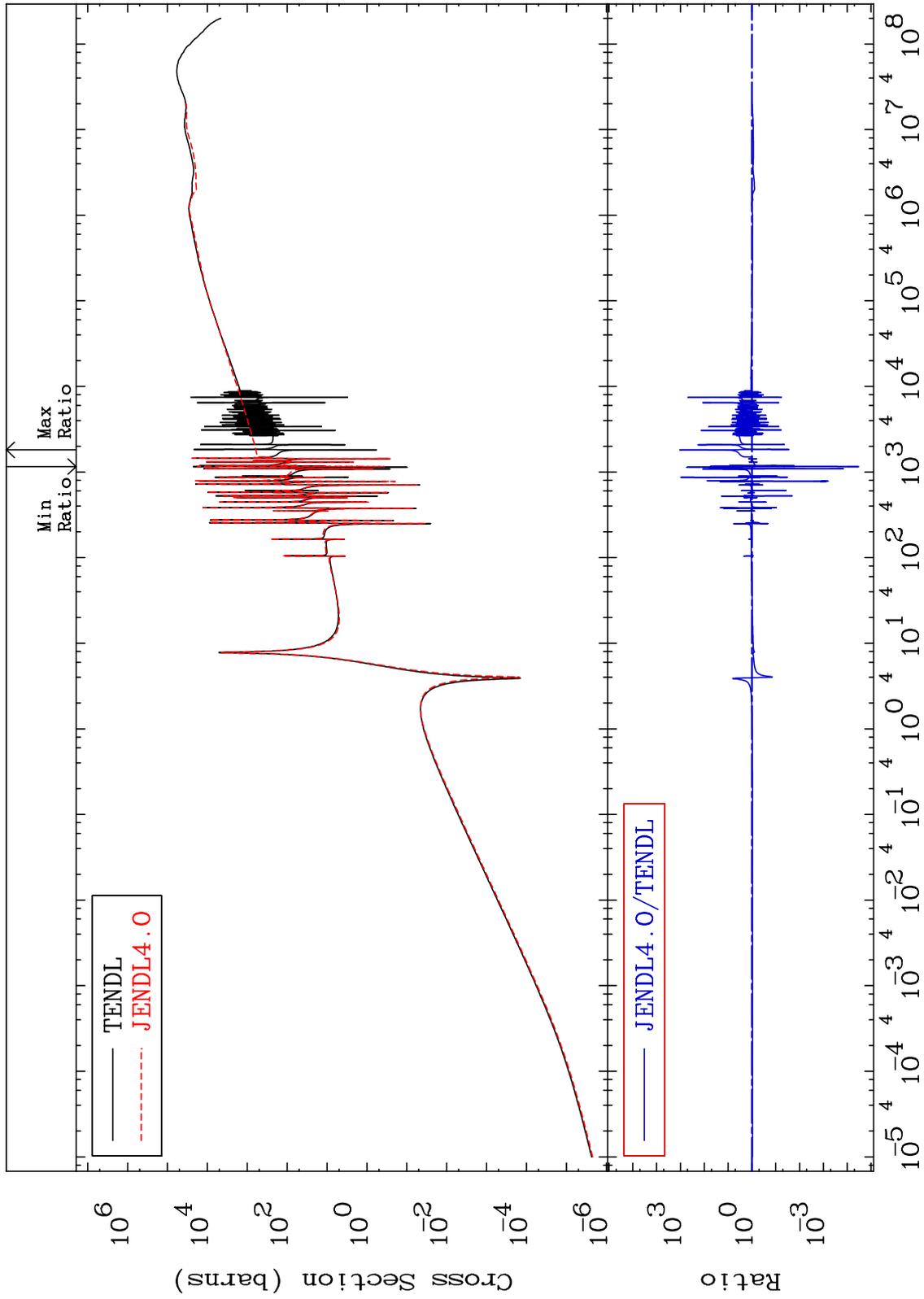
Incident Energy (eV)

72-Hf-178

MAT 7237

Kerma elastic  
Cross Section

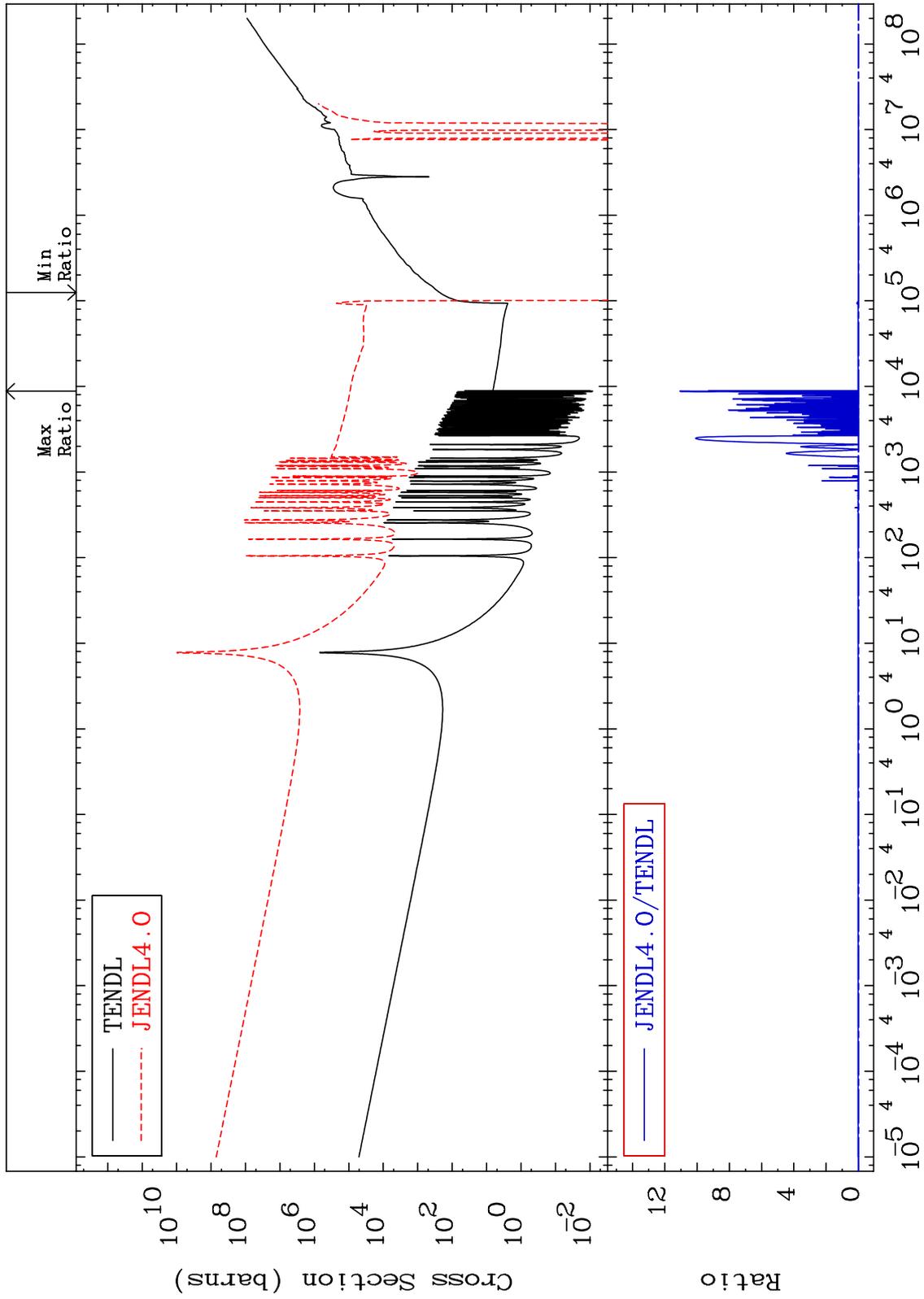
72-Hf-178  
-100.0 To 9999. %



MAT 7237

Kerma non-elastic (all but mt2)  
Cross Section

72-Hf-178  
-9999. To 9999. %



52

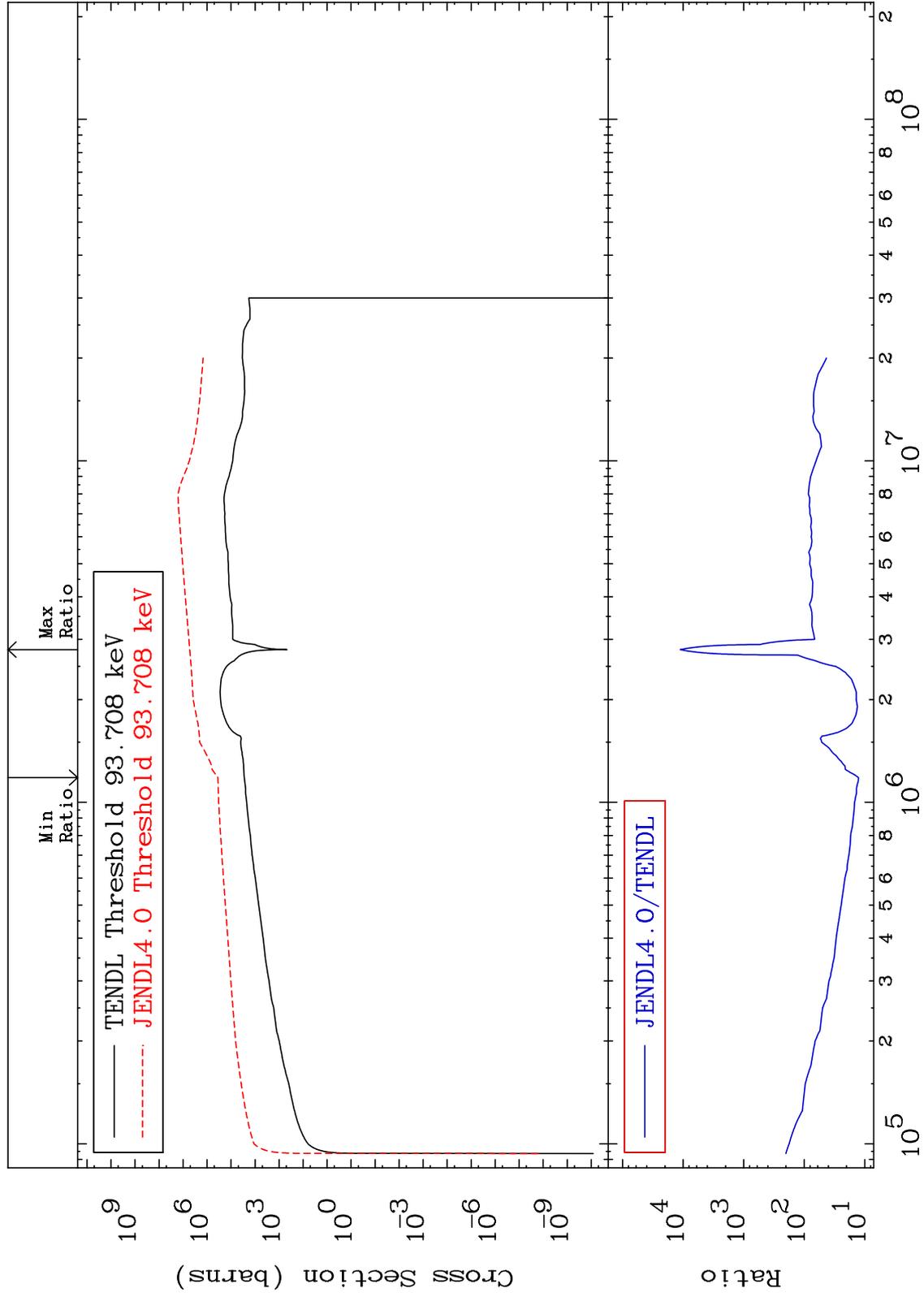
Incident Energy (eV)

72-Hf-178

MAT 7237

Kerma inelastic (mt51-91)  
Cross Section

72-Hf-178  
1168. To 9999. %



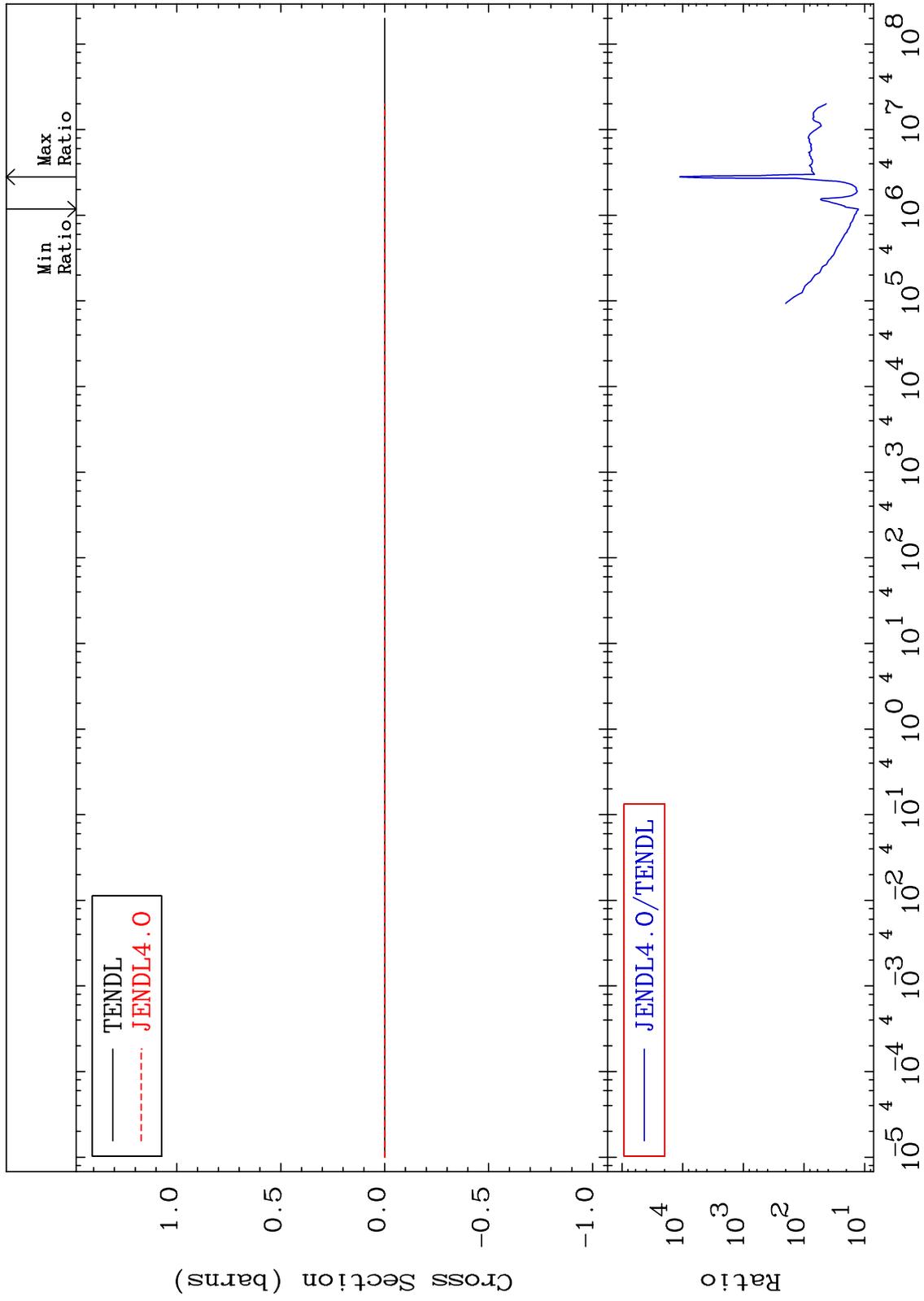
53

72-Hf-178

MAT 7237

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

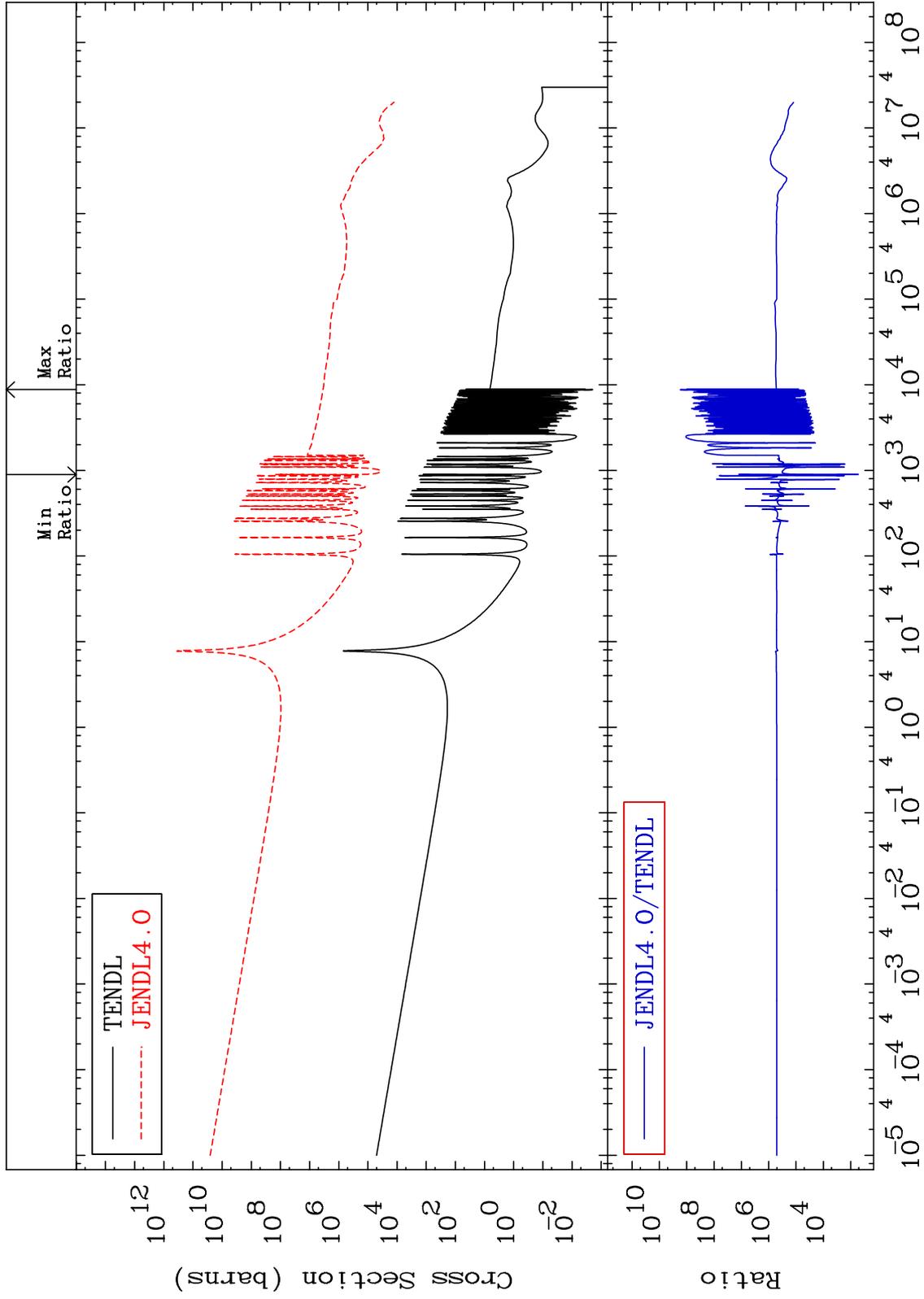
72-Hf-178  
1168. To 9999. %



MAT 7237

Kerma capture (mt102)  
Cross Section

72-Hf-178  
9999. To 9999. %



55

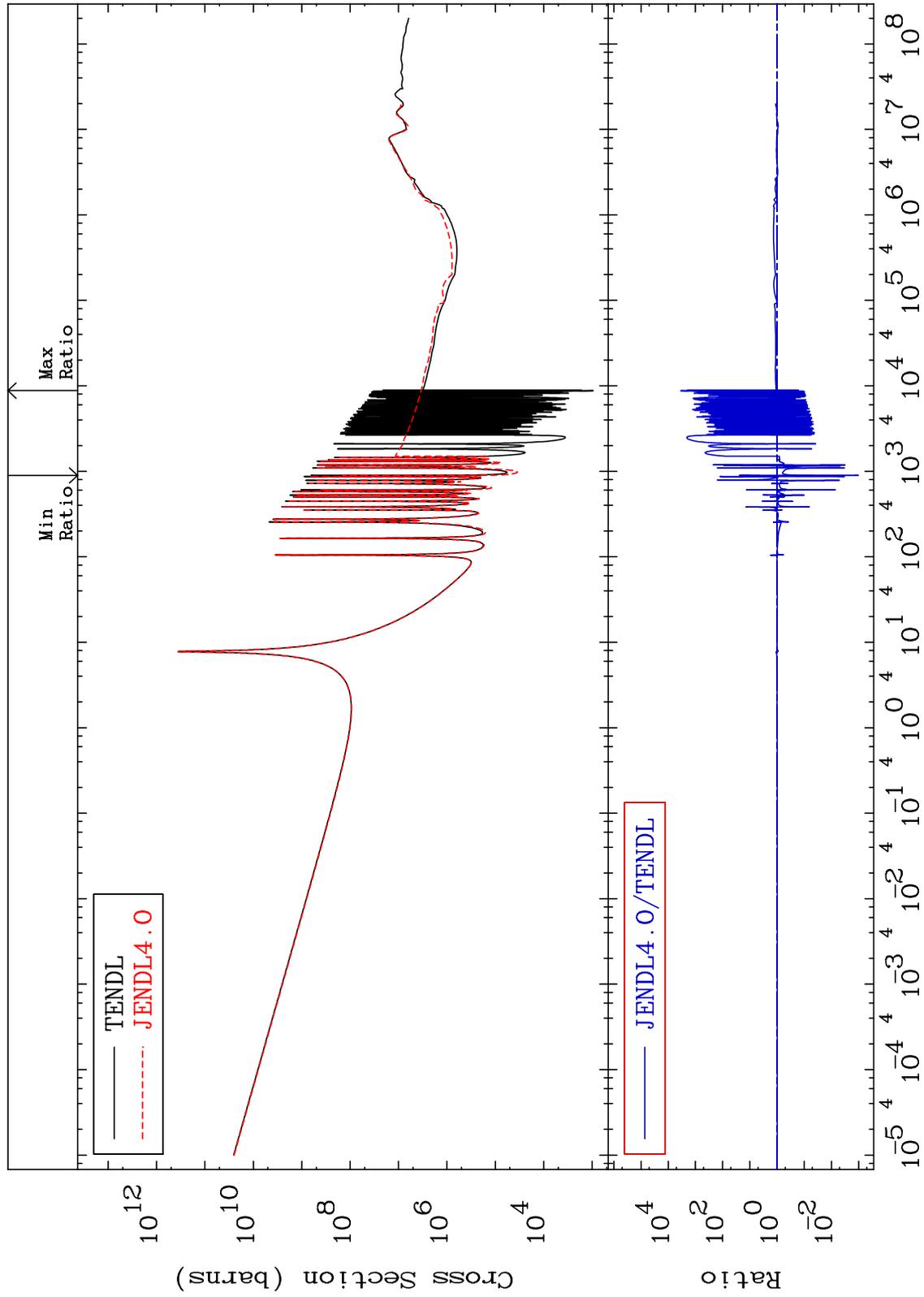
Incident Energy (eV)

72-Hf-178

MAT 7237

Total photon (eV-barns)  
Cross Section

72-Hf-178  
-99.90 To 9999. %



56

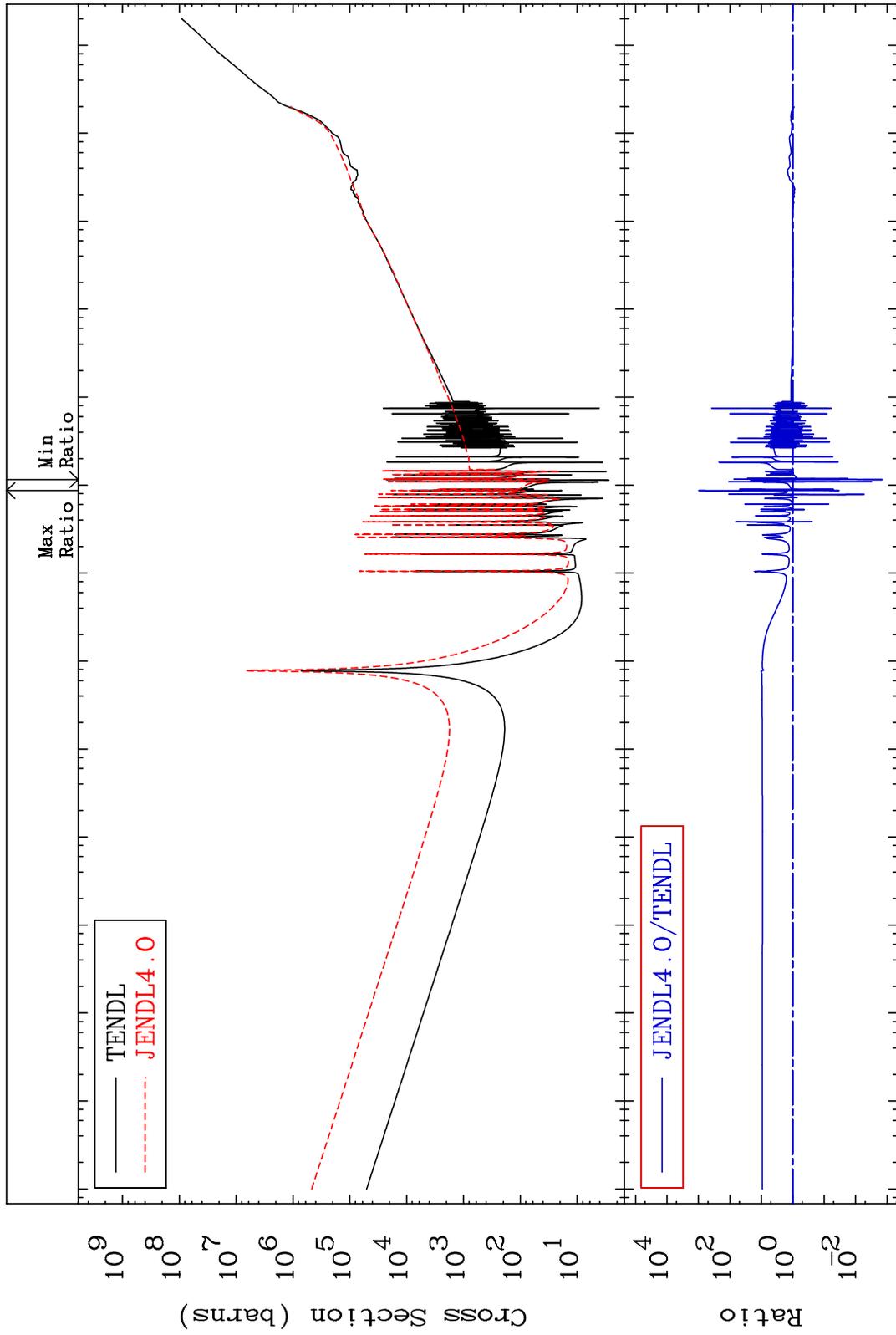
Incident Energy (eV)

72-Hf-178

MAT 7237

Total kinematic kerma (high limit)  
Cross Section

72-Hf-178  
-99.86 To 9999. %



57

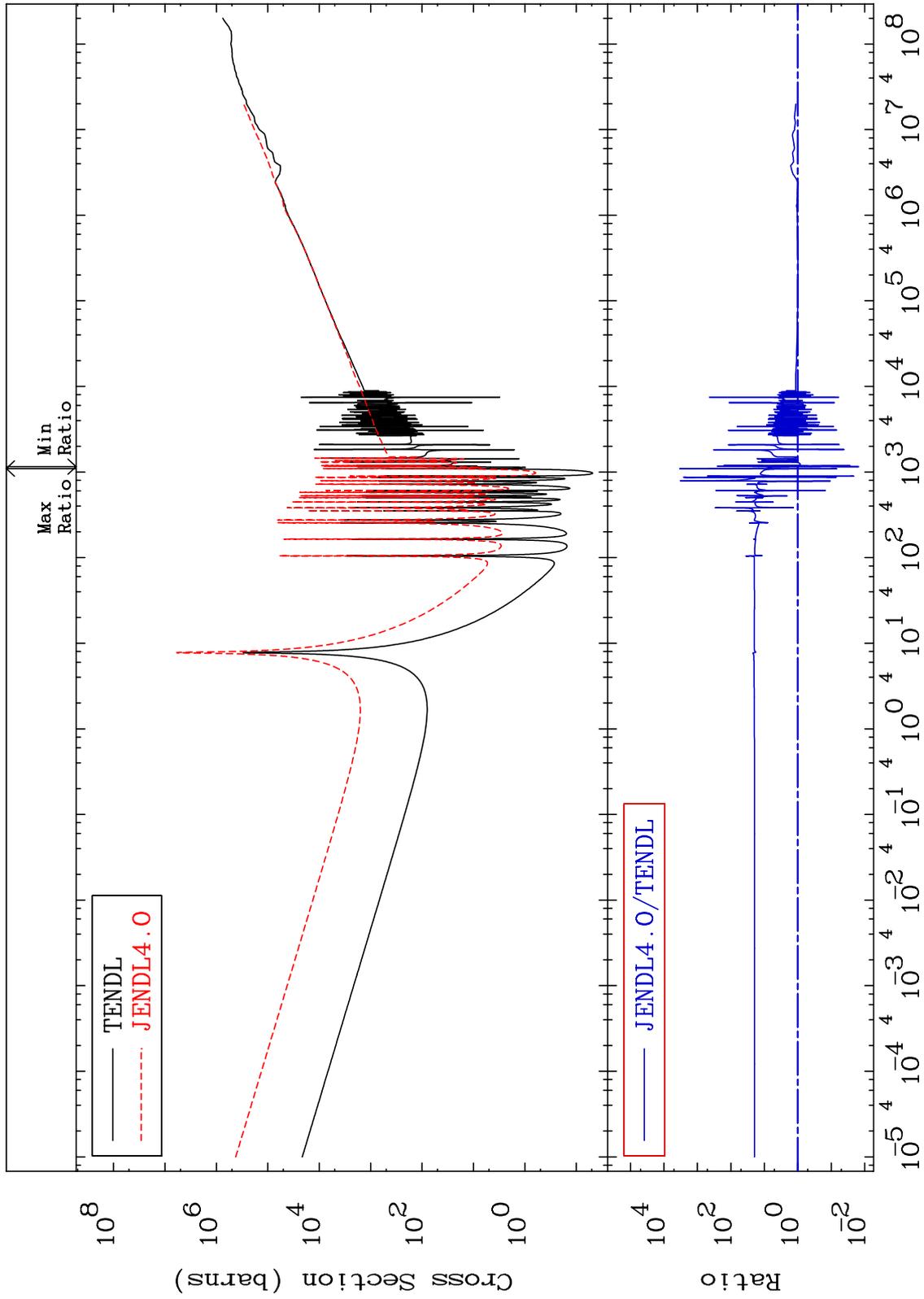
Incident Energy (eV)

72-Hf-178

MAT 7237

Dpa total (eV-barns)  
Cross Section

72-Hf-178  
-98.46 To 9999. %



58

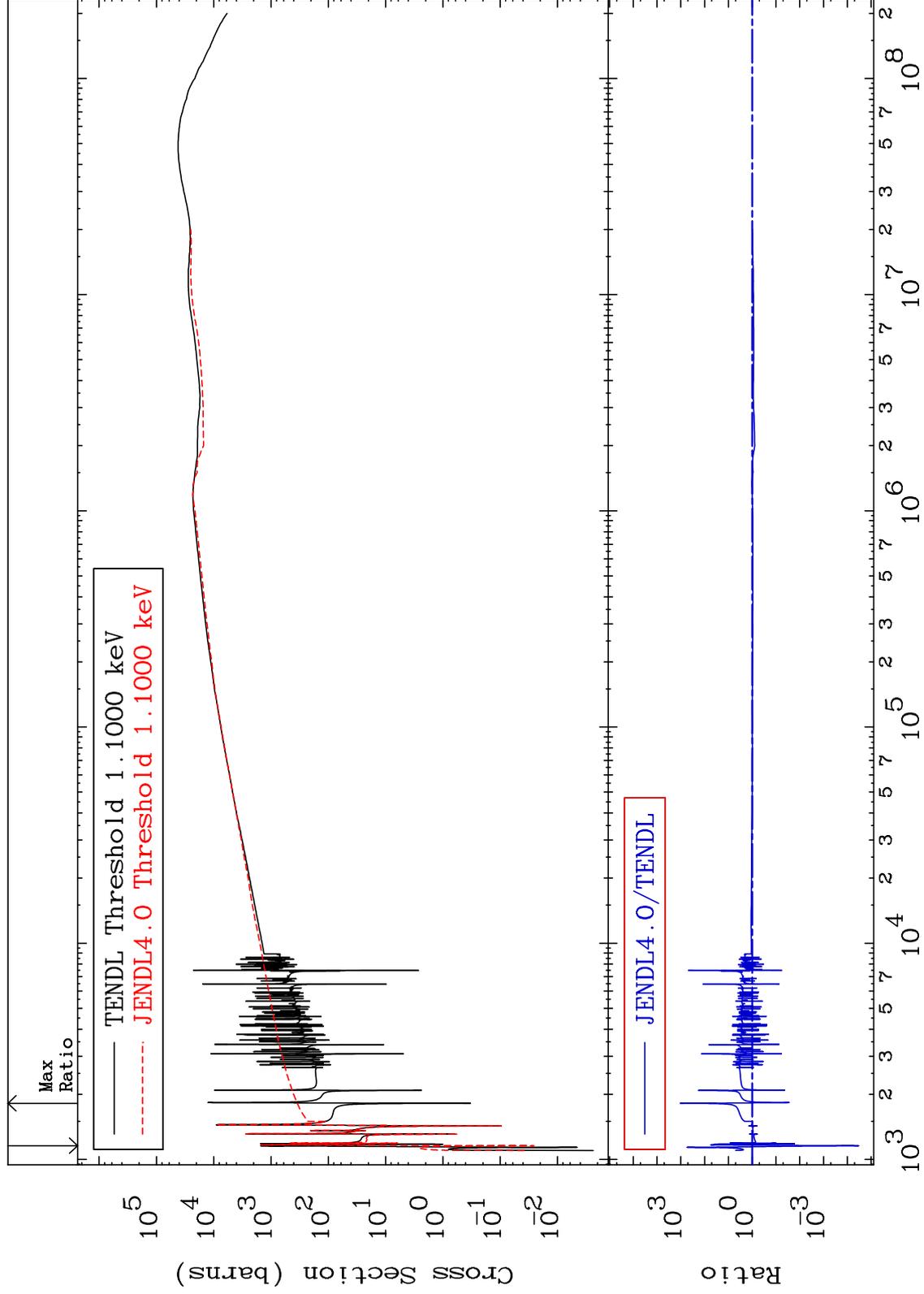
Incident Energy (eV)

72-Hf-178

MAT 7237

Dpa elastic (mt2)  
Cross Section

72-Hf-178  
-100.0 To 9999. %



59

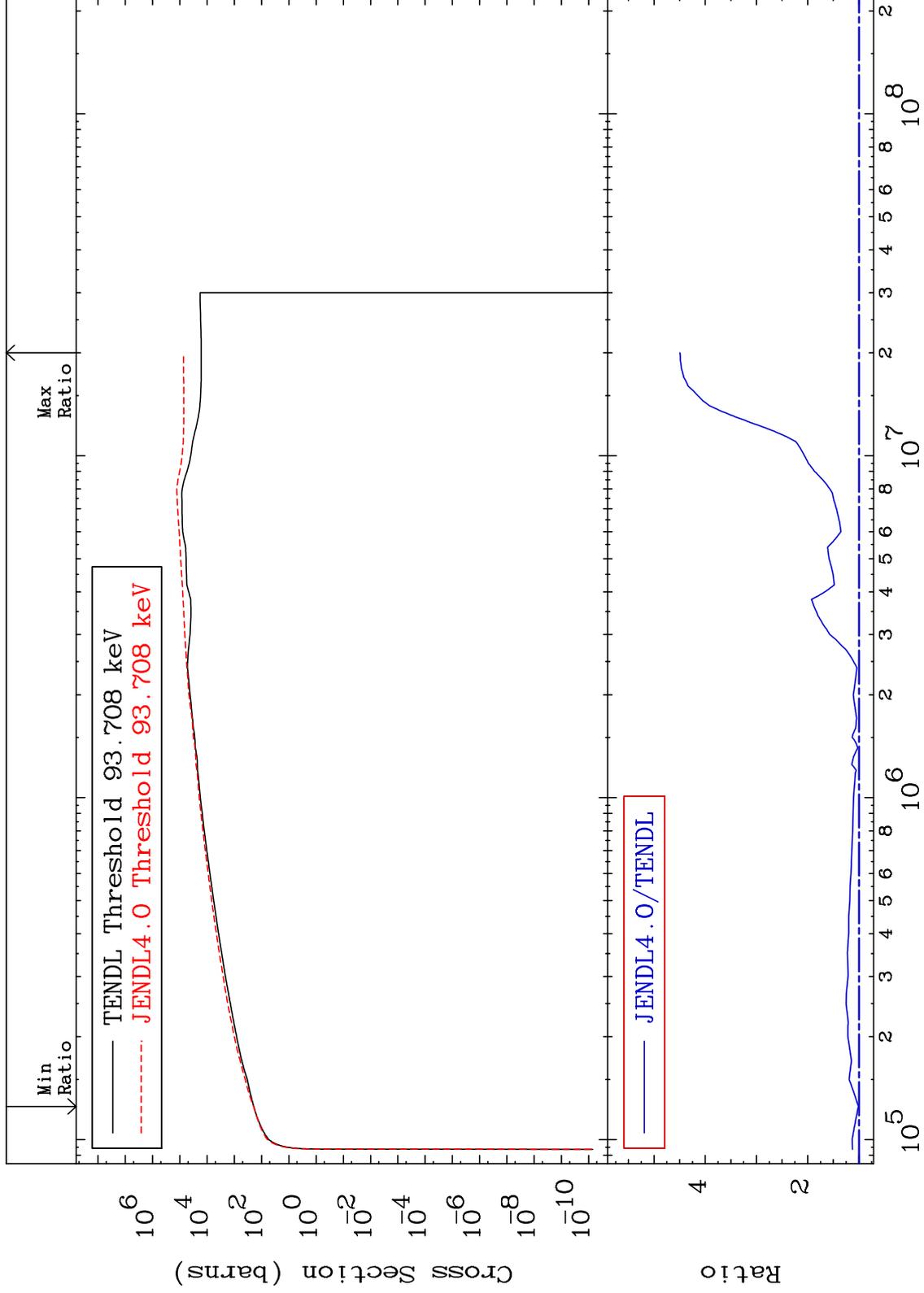
Incident Energy (eV)

72-Hf-178

MAT 7237

Dpa inelastic (mt51-91)  
Cross Section

72-Hf-178  
0.995 To 349.4 %



72-Hf-178

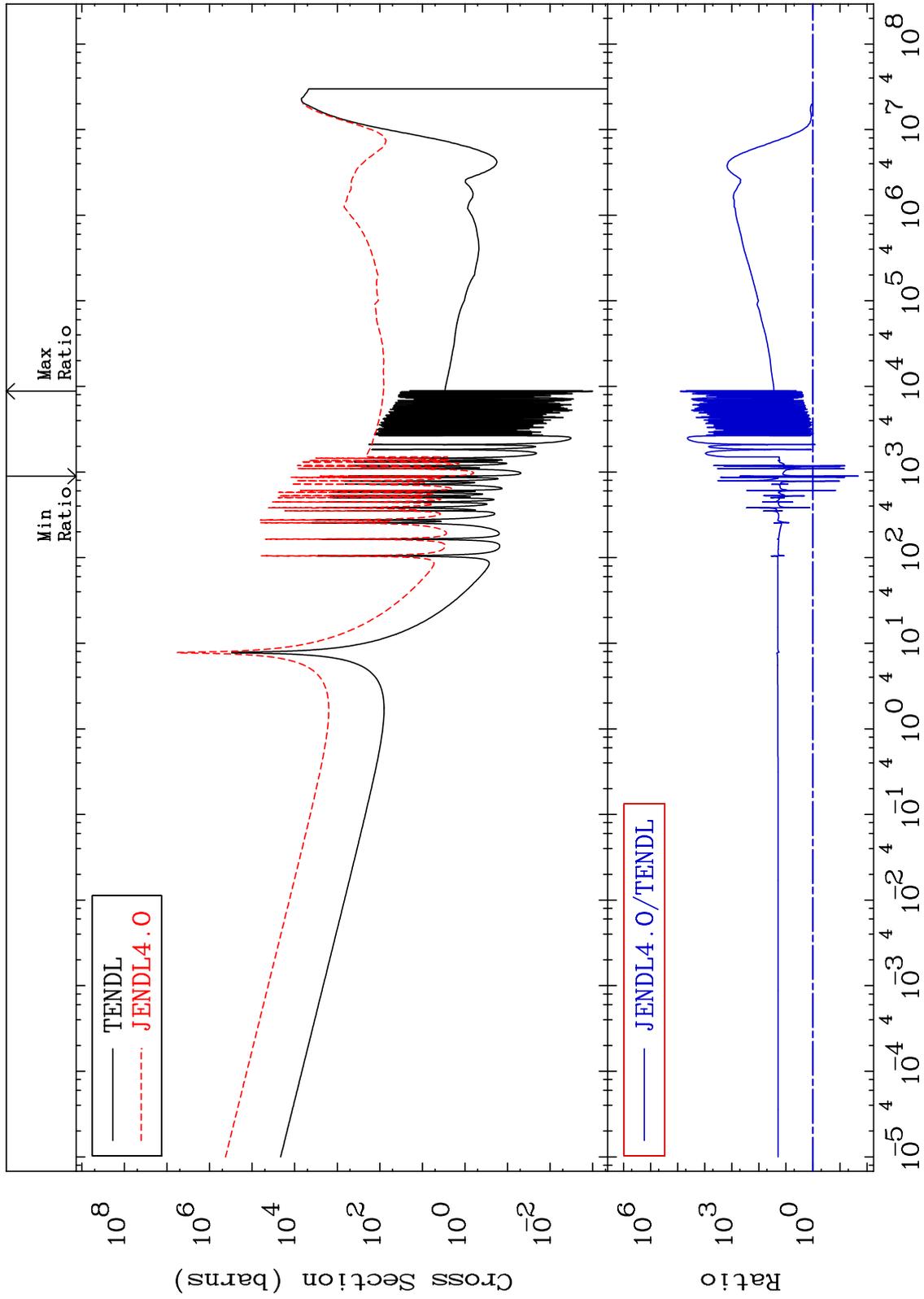
Incident Energy (eV)

60

MAT 7237

Dpa disappearance (mt102 -120)  
Cross Section

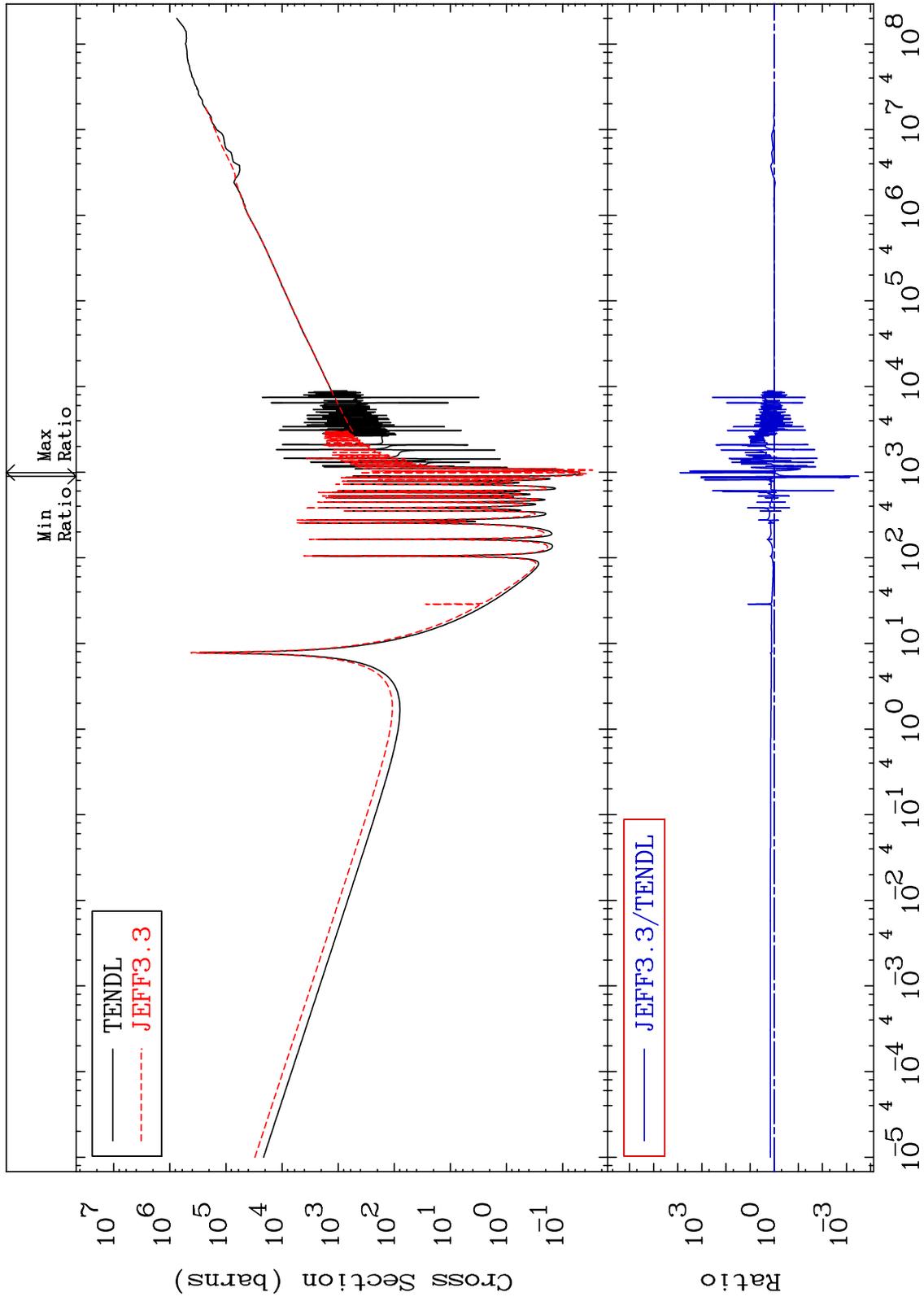
72-Hf-178  
-97.89 To 9999. %



MAT 7237

Dpa total (eV-barns)  
Cross Section

72-Hf-178  
-99.97 To 9999. %



62

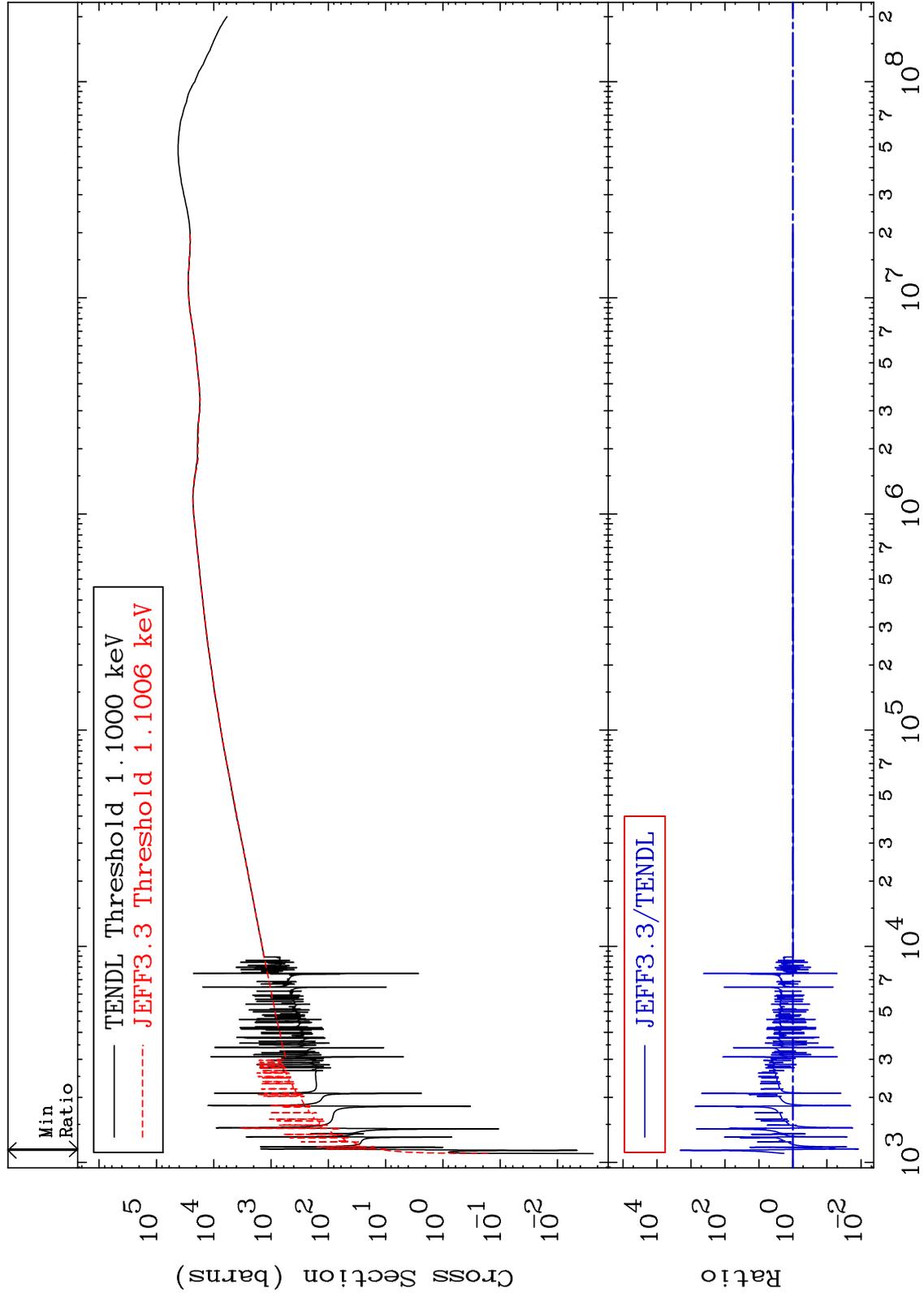
Incident Energy (eV)

72-Hf-178

MAT 7237

Dpa elastic (mt2)  
Cross Section

72-Hf-178  
-98.82 To 9999. %



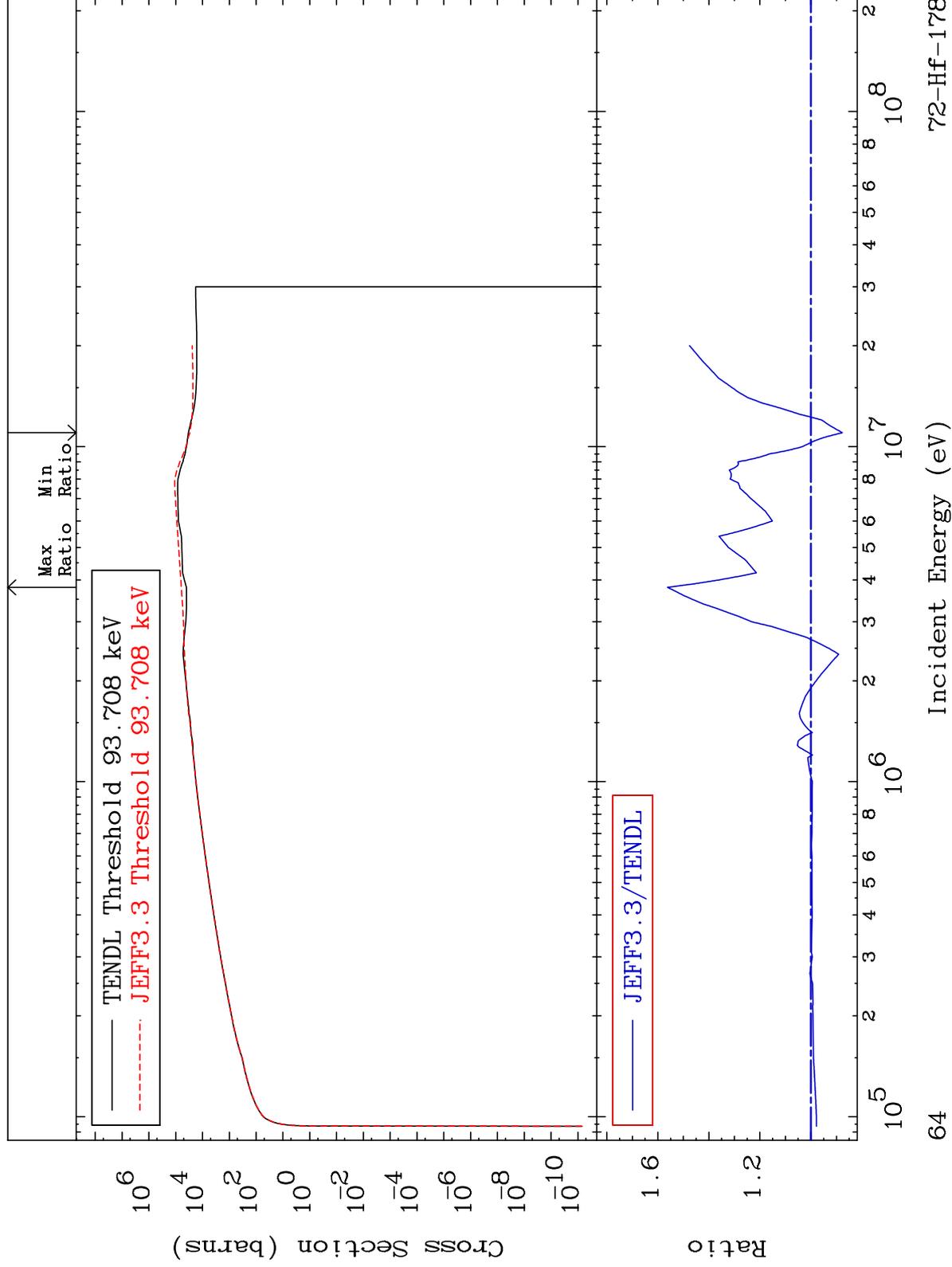
63

72-Hf-178

MAT 7237

Dpa inelastic (mt51-91)  
Cross Section

72-Hf-178  
-12.32 To 56.20 %



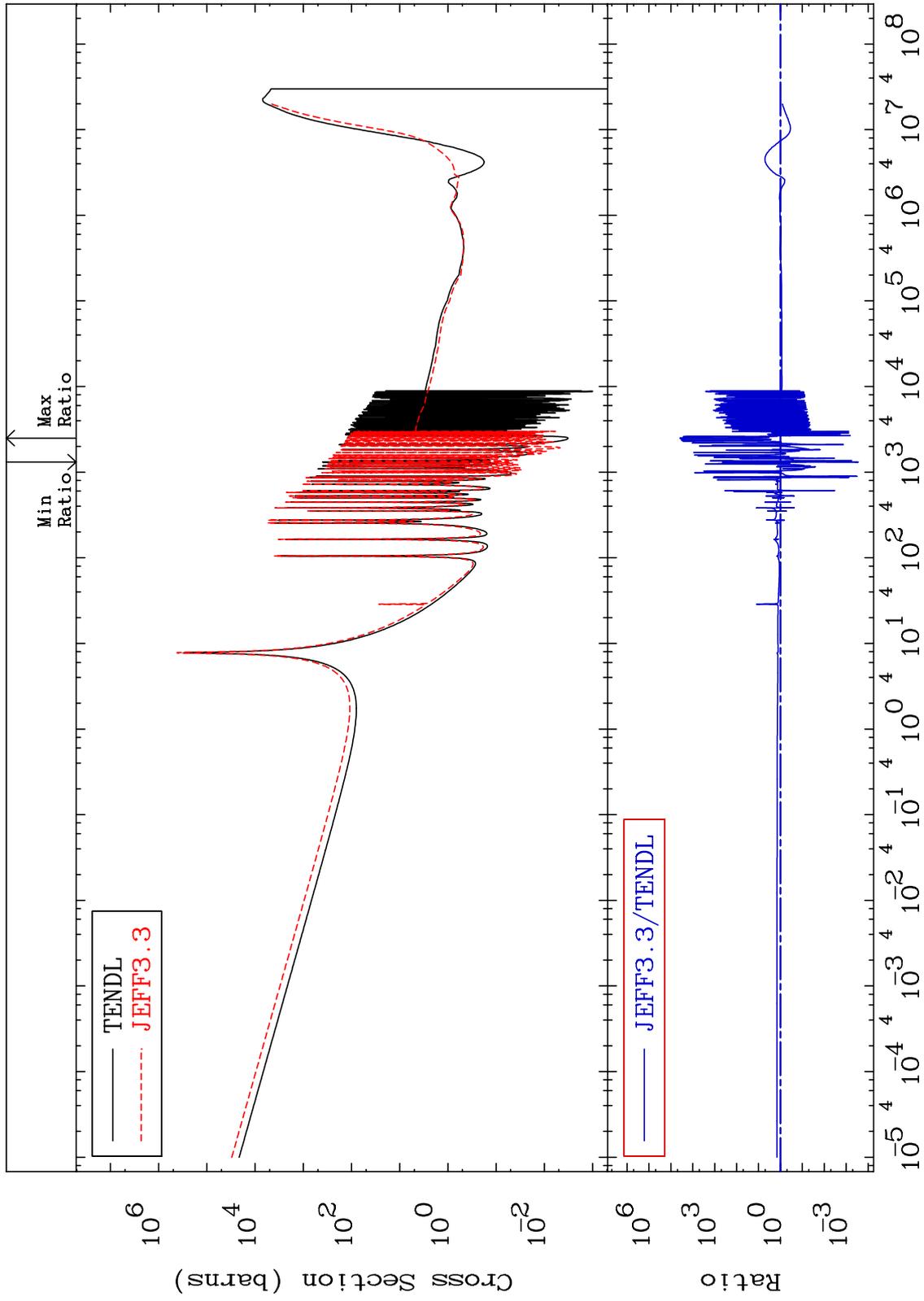
64

72-Hf-178

MAT 7237

Dpa disappearance (mt102 -120)  
Cross Section

72-Hf-178  
-99.97 To 9999. %



65

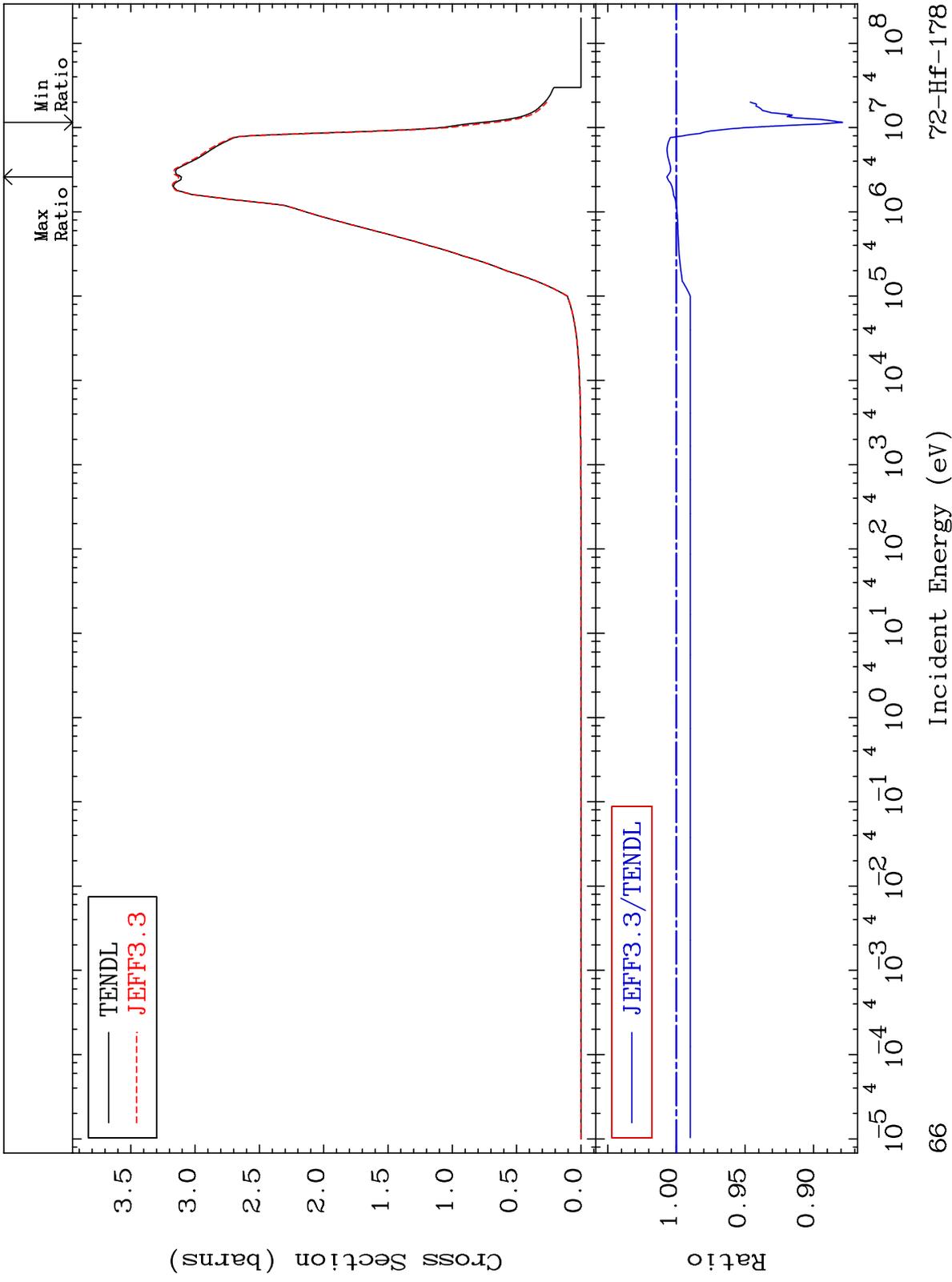
Incident Energy (eV)

72-Hf-178

MAT 7237

Inelastic: 72-Hf-178  
Radionuclide Production Cross Section -12.11 To 0.687 %

72-Hf-178



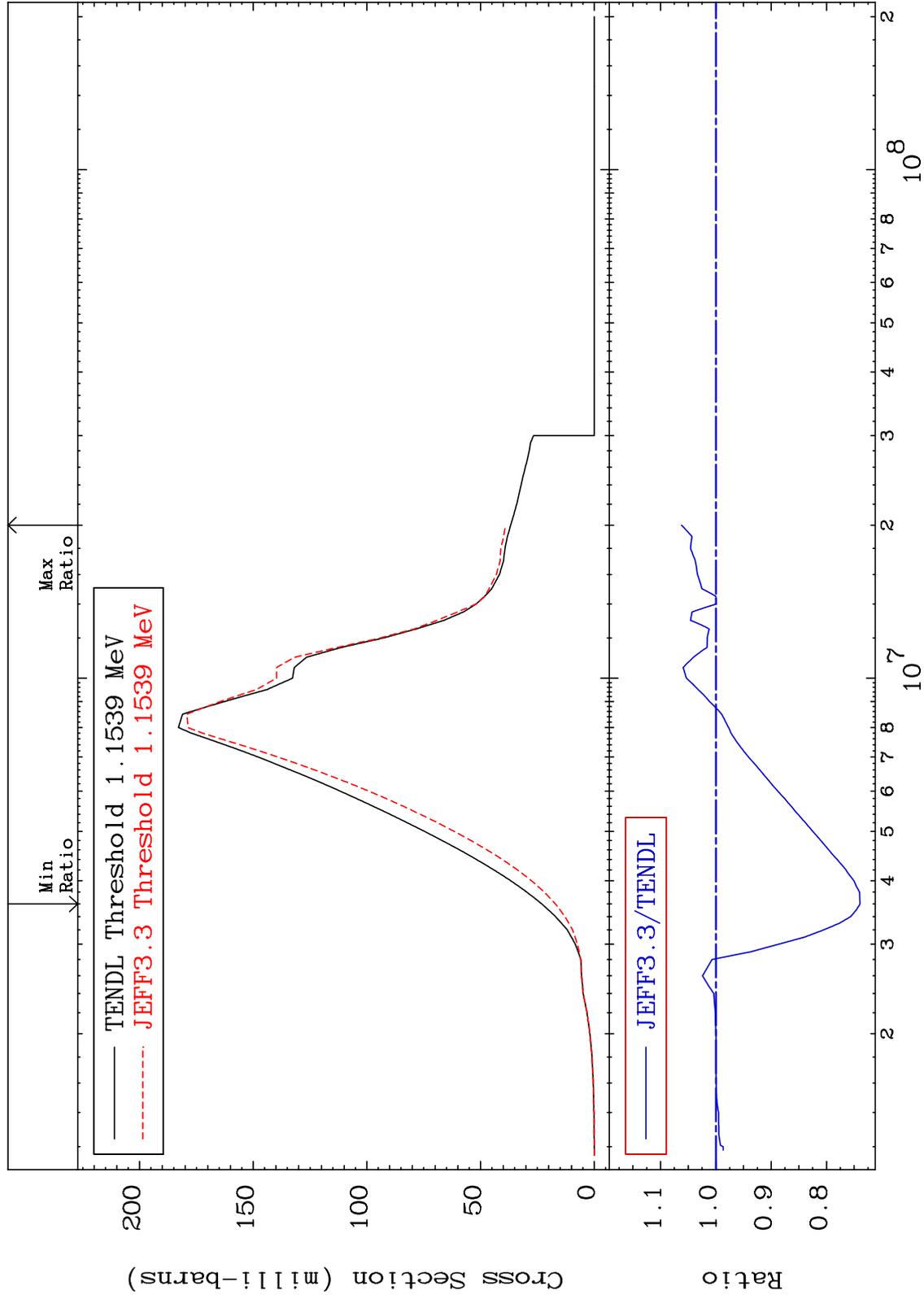
MAT 7237

Inelastic: 72-Hf-178m5

72-Hf-178

Radionuclide Production Cross Section

-26.06 To 6.204 %



67

Incident Energy (eV)

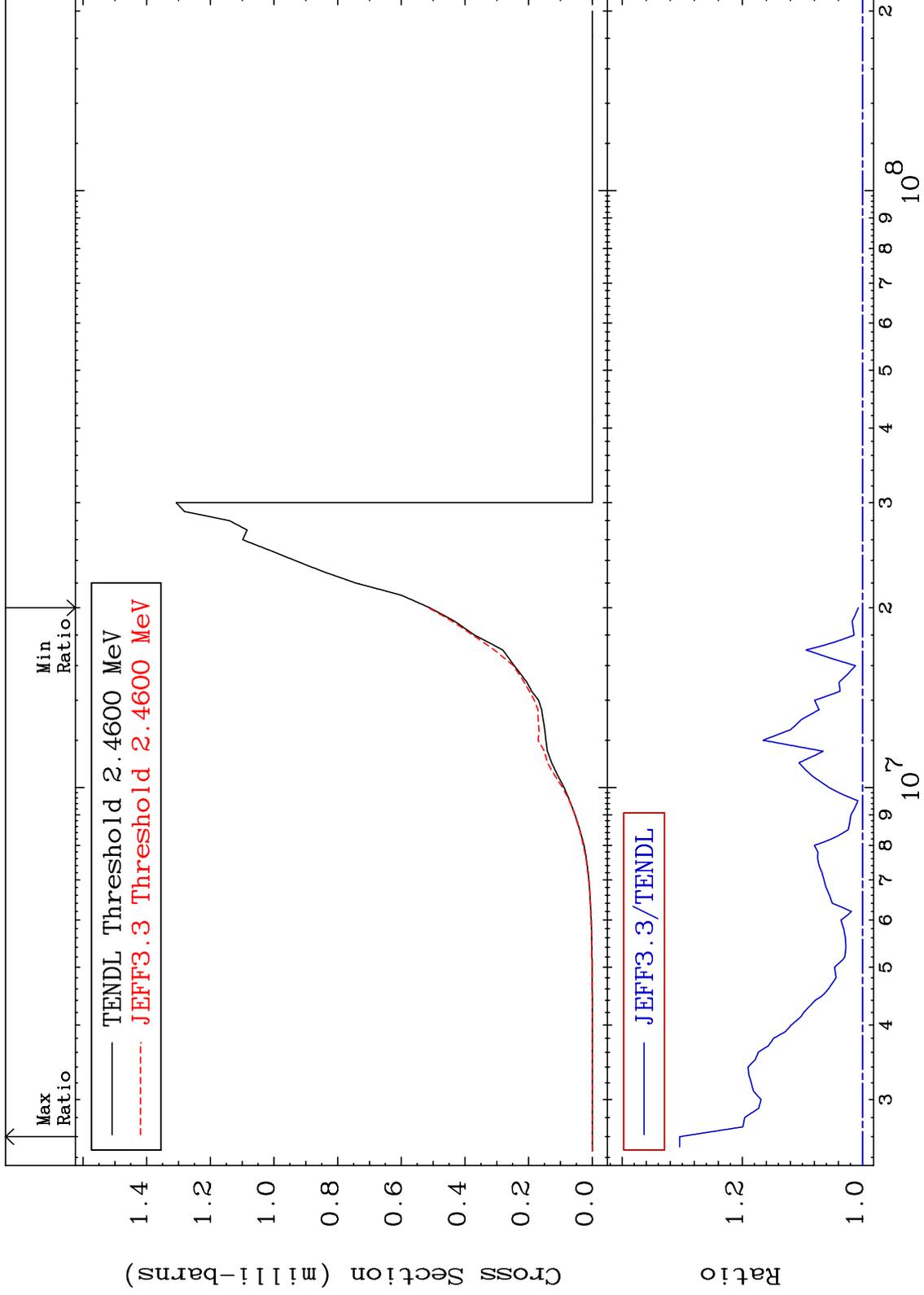
72-Hf-178

MAT 7237

Inelastic: 72-Hf-178m30

72-Hf-178

Radionuclide Production Cross Section 0.699 To 30.42 %

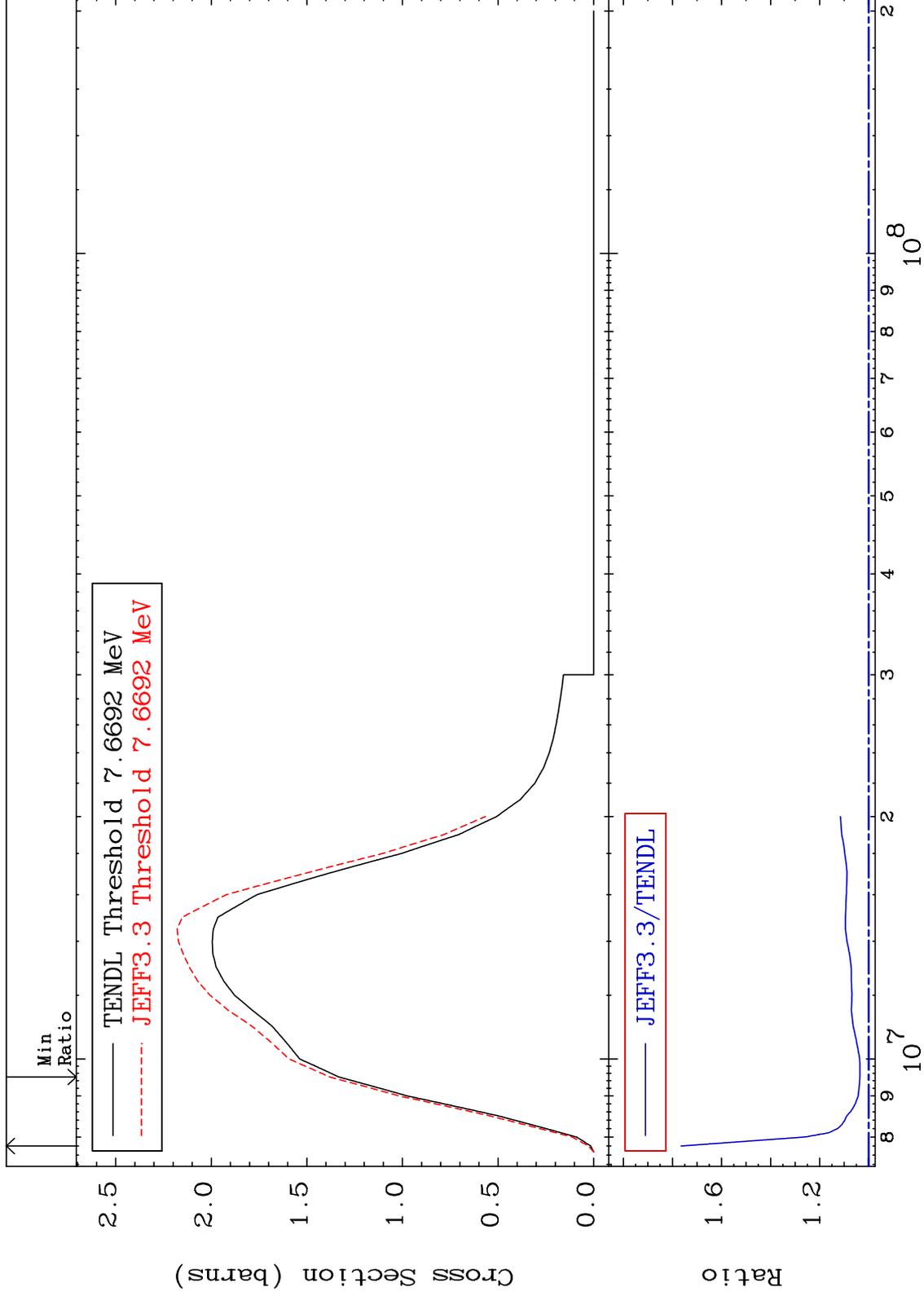


MAT 7237

(n,2n):72-Hf-177g

72-Hf-178

Radionuclide Production Cross Section 3.581 To 76.46 %



69

Incident Energy (eV)

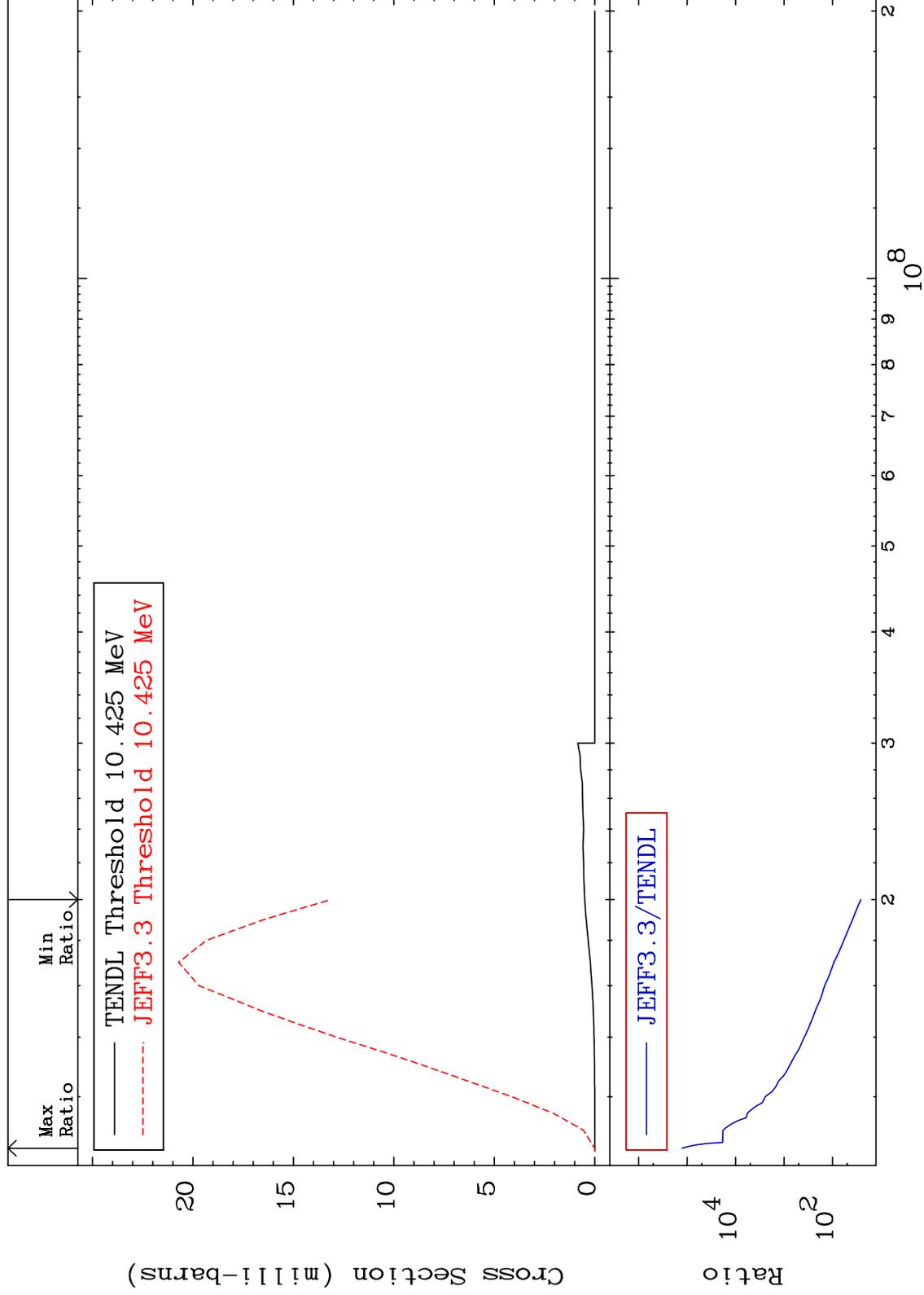
72-Hf-178

MAT 7237

(n,2n):72-Hf-177m10

72-Hf-178

Radionuclide Production Cross Section 2522. To 9999. %



70

Incident Energy (eV)

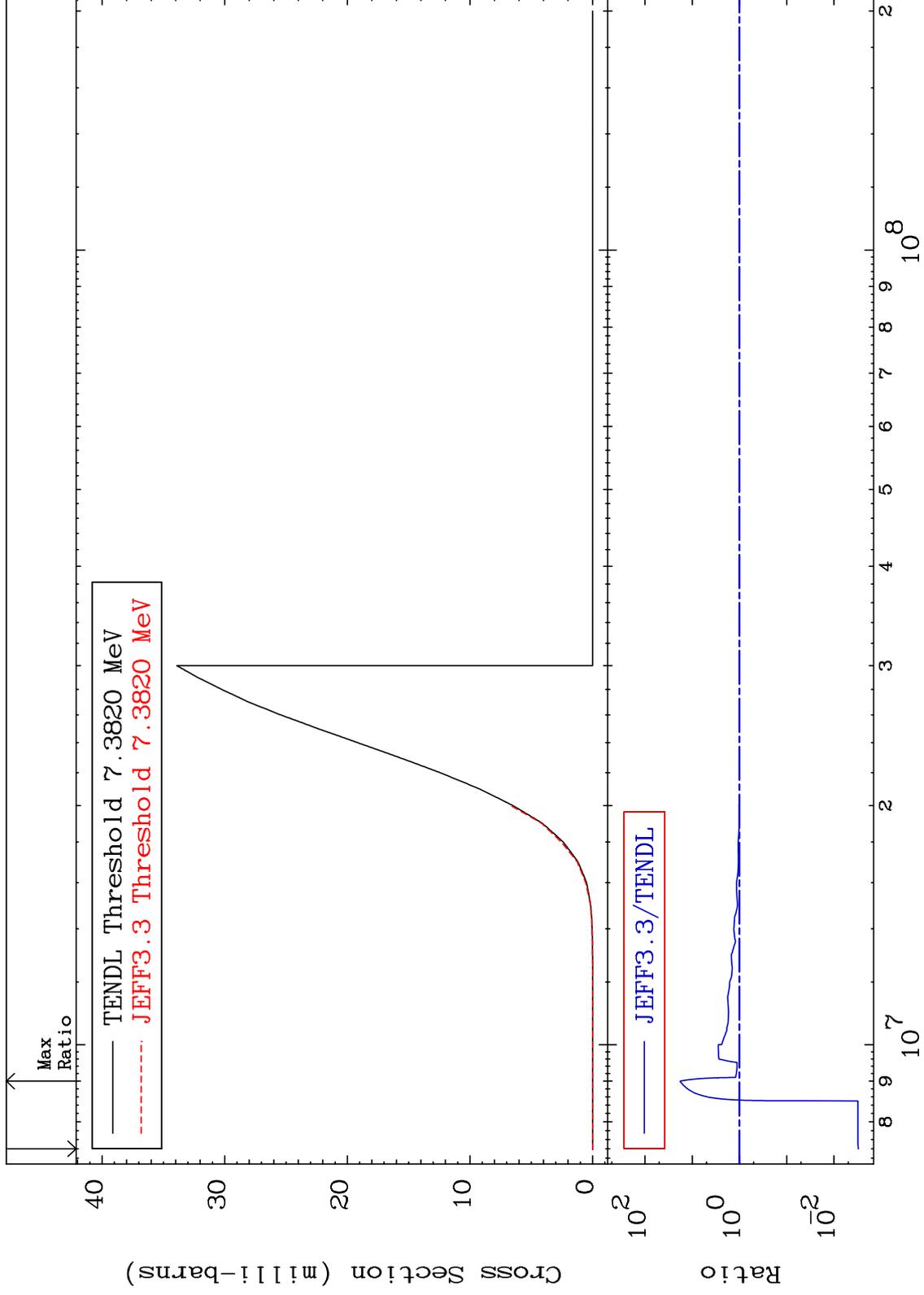
72-Hf-178

MAT 7237

(n, n') p:71-Lu-177g

72-Hf-178

Radionuclide Production Cross Section -99.70 To 1717. %



71

Incident Energy (eV)

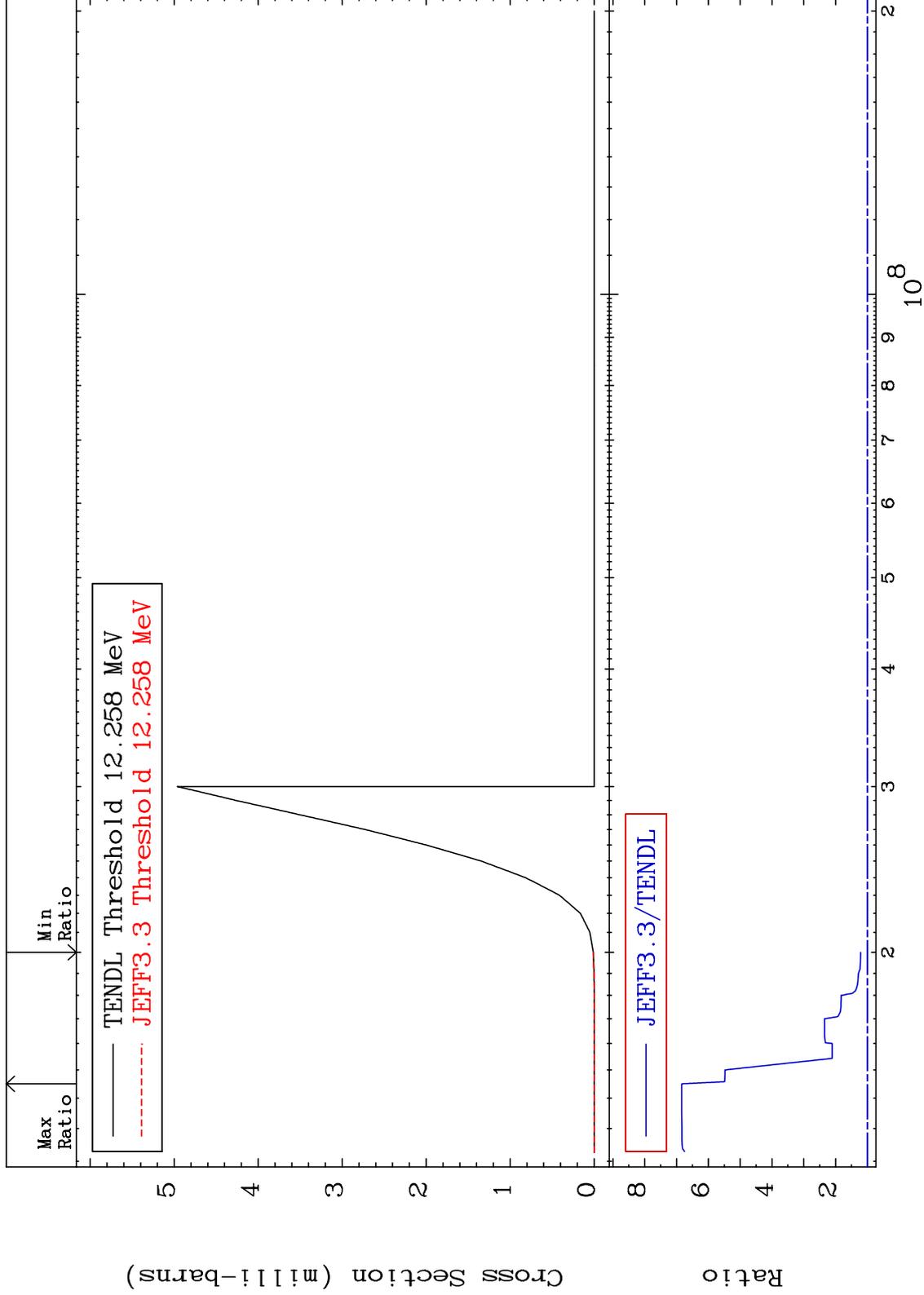
72-Hf-178

MAT 7237

(n, n') d:71-Lu-176g

72-Hf-178

Radionuclide Production Cross Section 21.18 To 583.6 %



72

Incident Energy (eV)

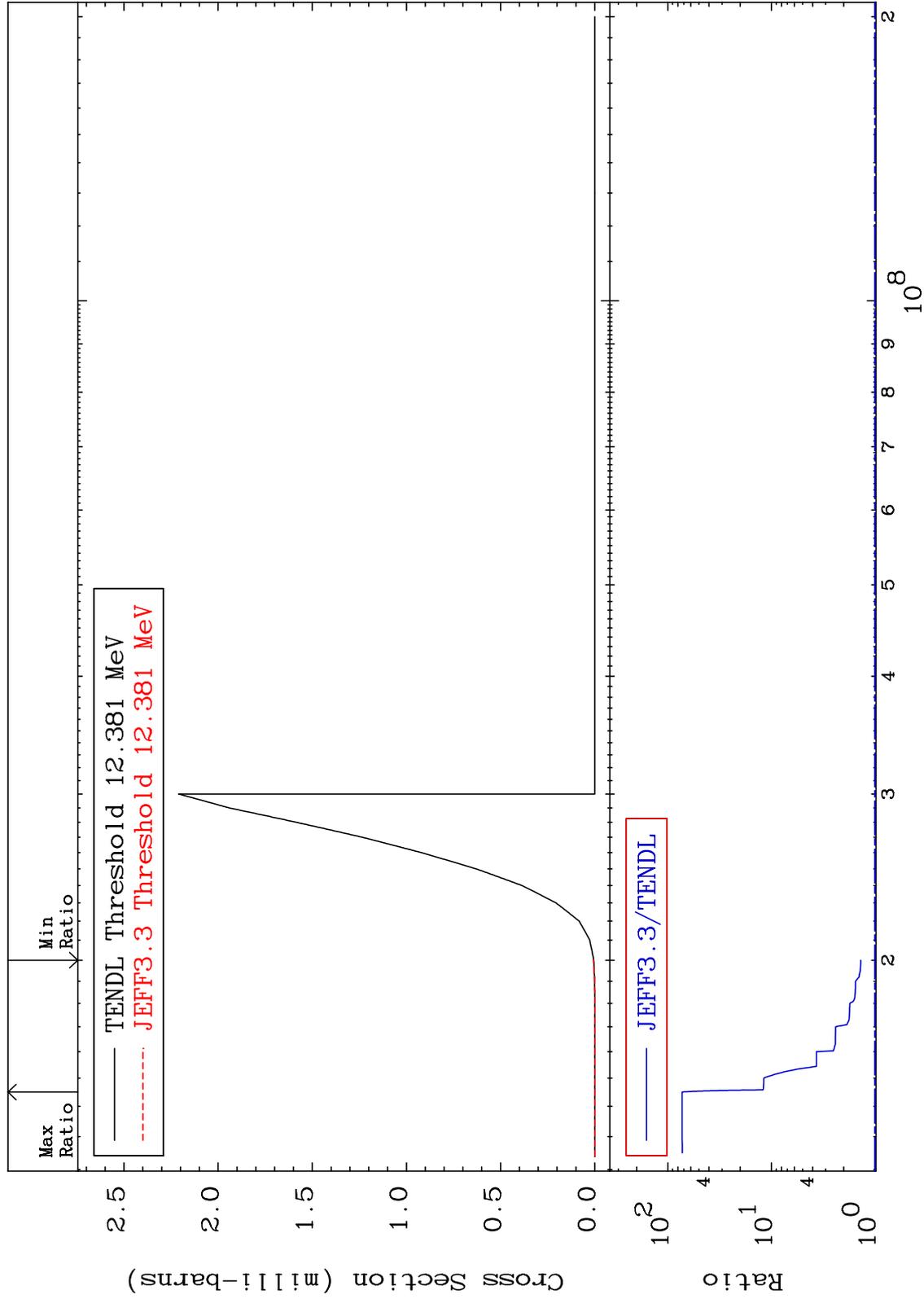
72-Hf-178

MAT 7237

(n, n') d:71-Lu-176m1

72-Hf-178

Radionuclide Production Cross Section 37.08 To 7167. %



73

Incident Energy (eV)

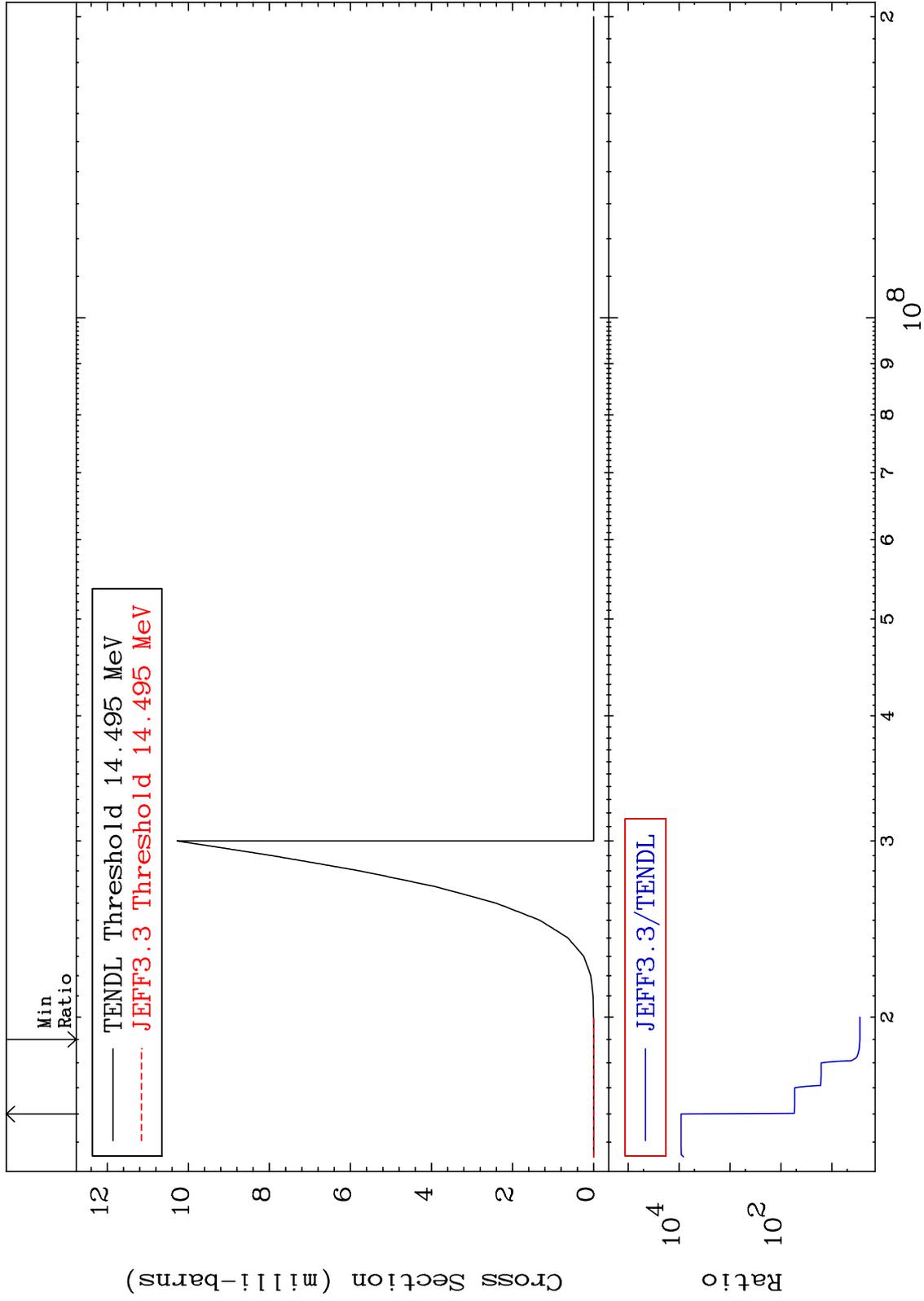
72-Hf-178

MAT 7237

(n,2n) p:71-Lu-176g

72-Hf-178

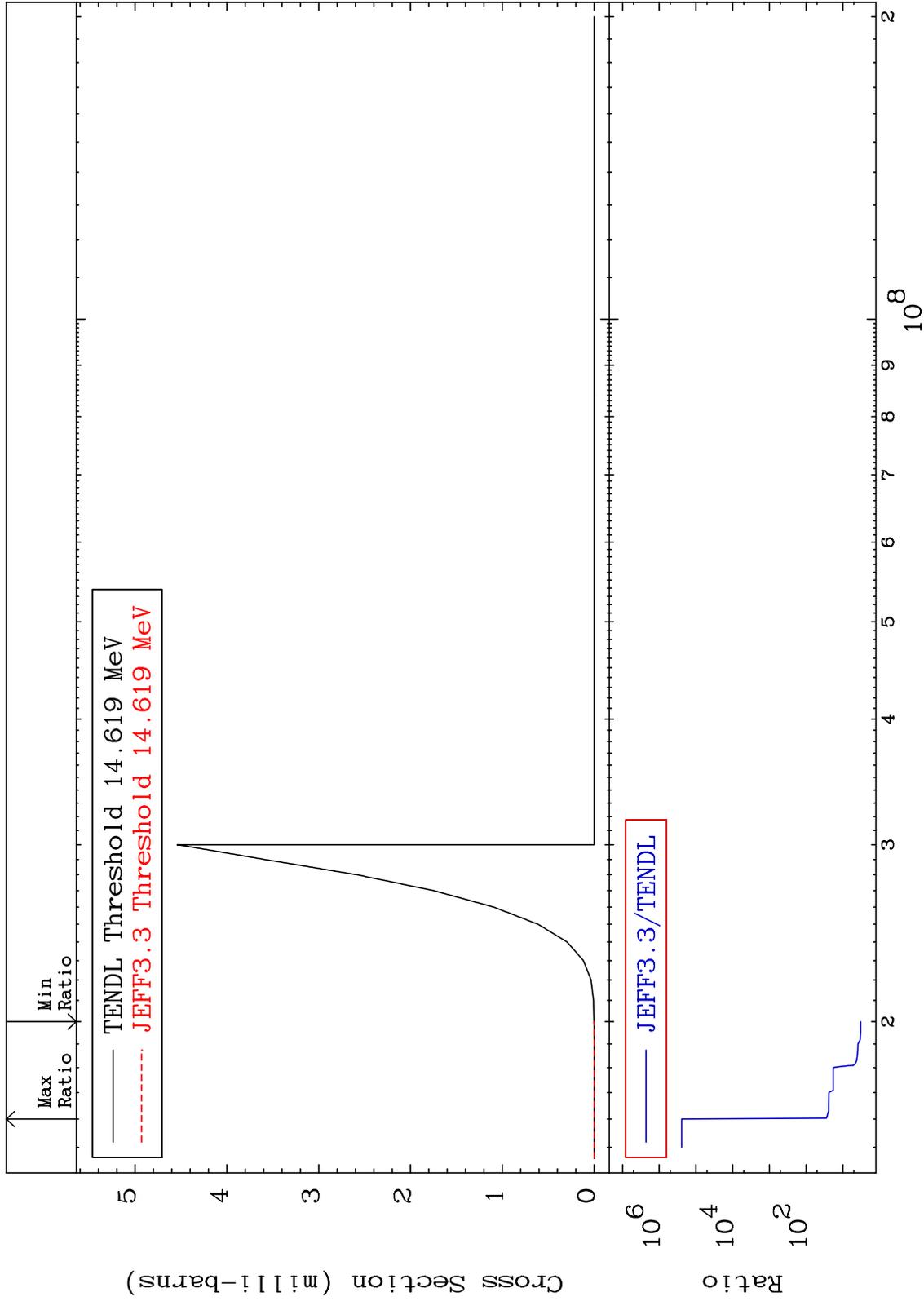
Radionuclide Production Cross Section 180.7 To 9999. %



74

Incident Energy (eV)

72-Hf-178

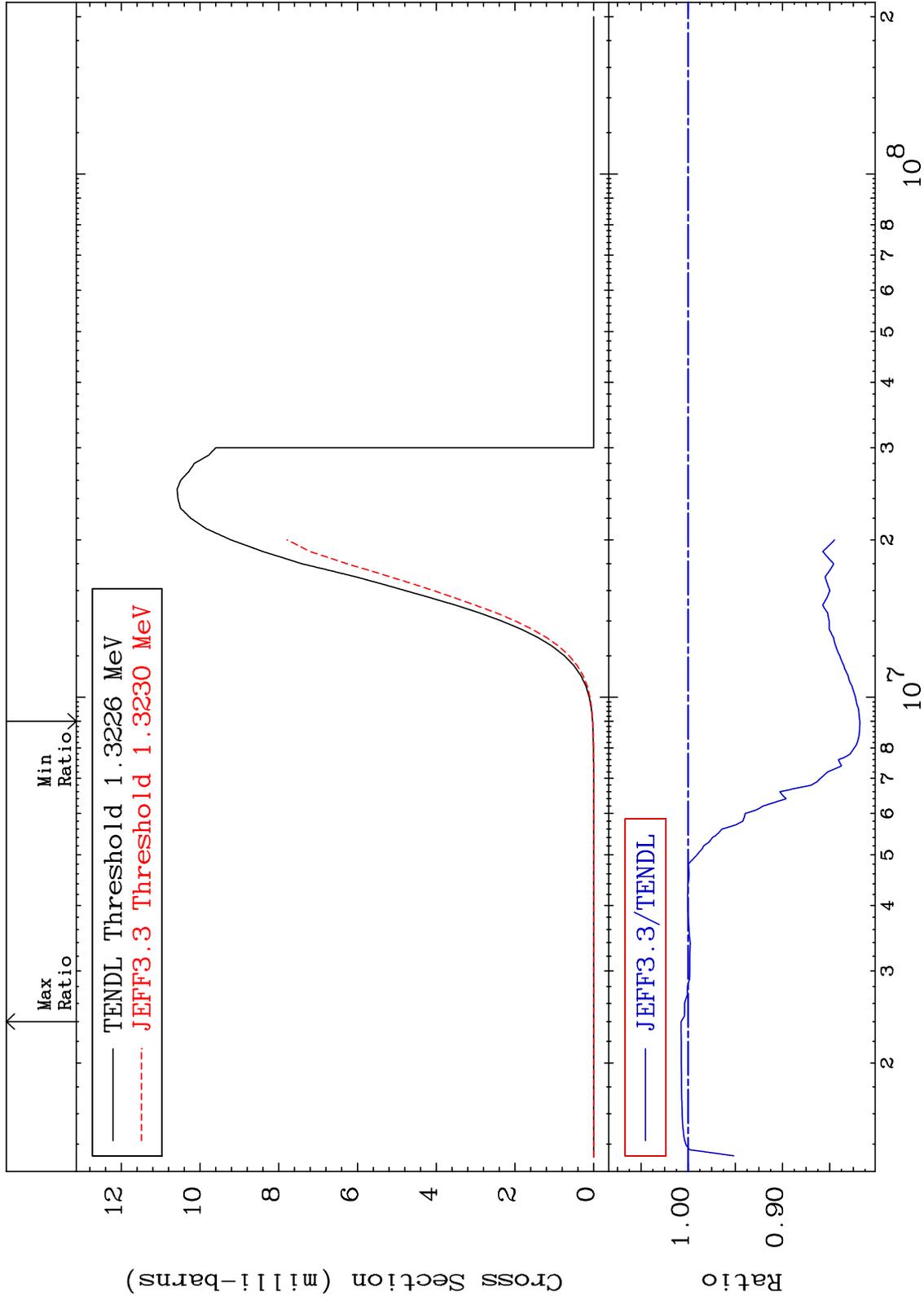


MAT 7237

(n,p):71-Lu-178g

72-Hf-178

Radionuclide Production Cross Section -18.20 To 0.746 %



76

72-Hf-178

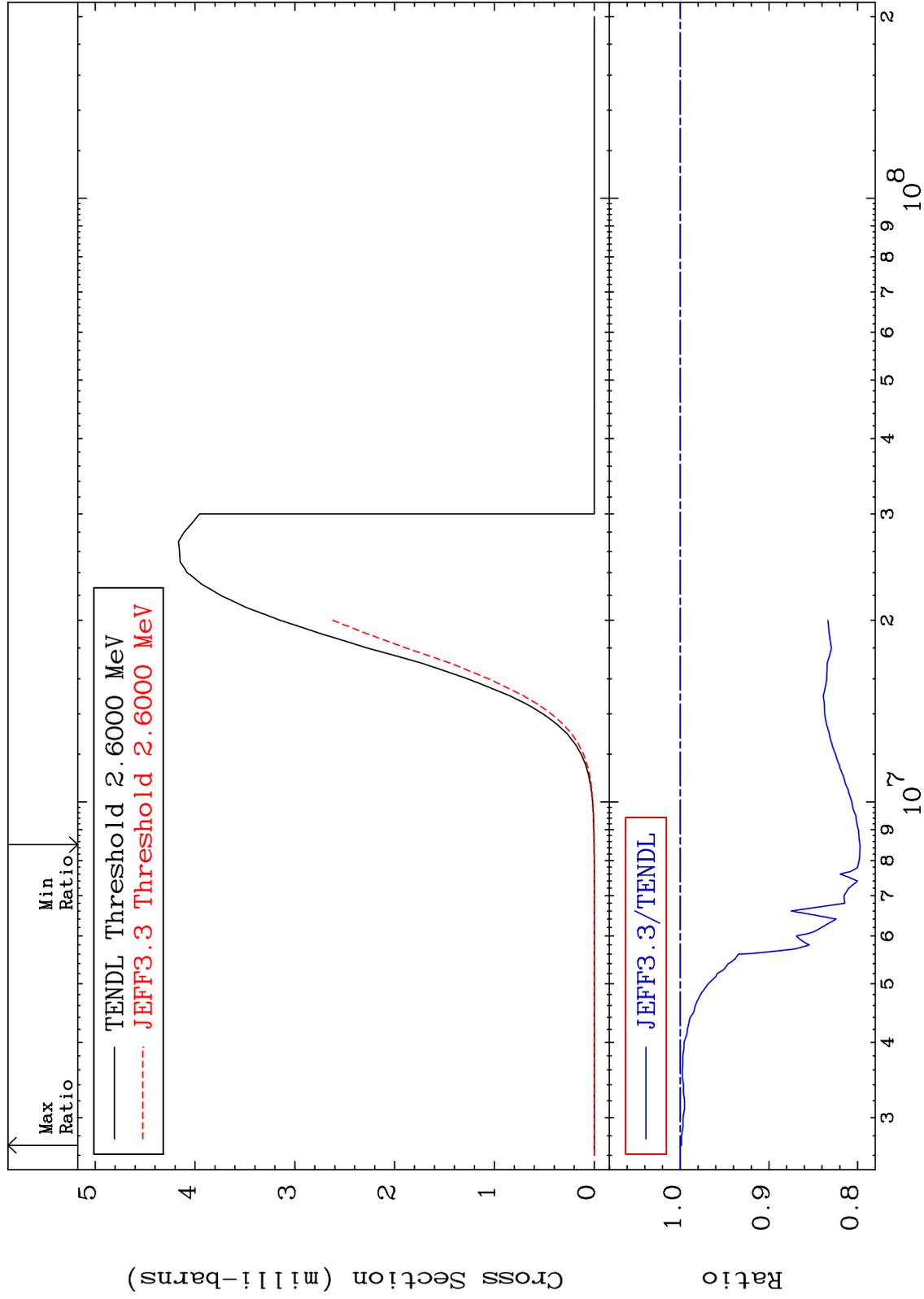
72-Hf-178

MAT 7237

(n, p): 71-Lu-178m3

72-Hf-178

Radionuclide Production Cross Section -20.28 To -0.139%



77

Incident Energy (eV)

72-Hf-178

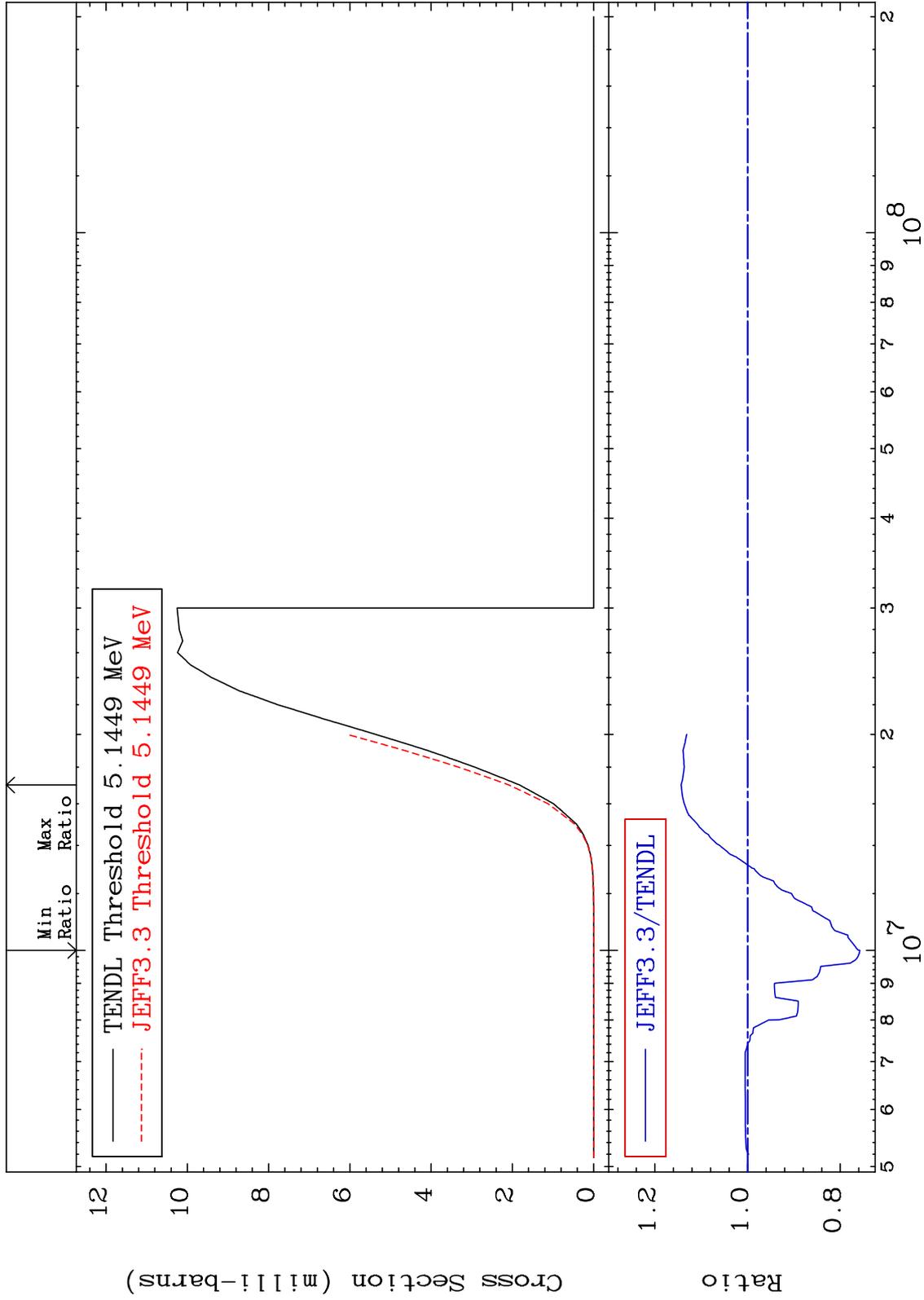
MAT 7237

(n, d): 71-Lu-177g

72-Hf-178

Radionuclide Production Cross Section

-24.24 To 14.34 %



78

Incident Energy (eV)

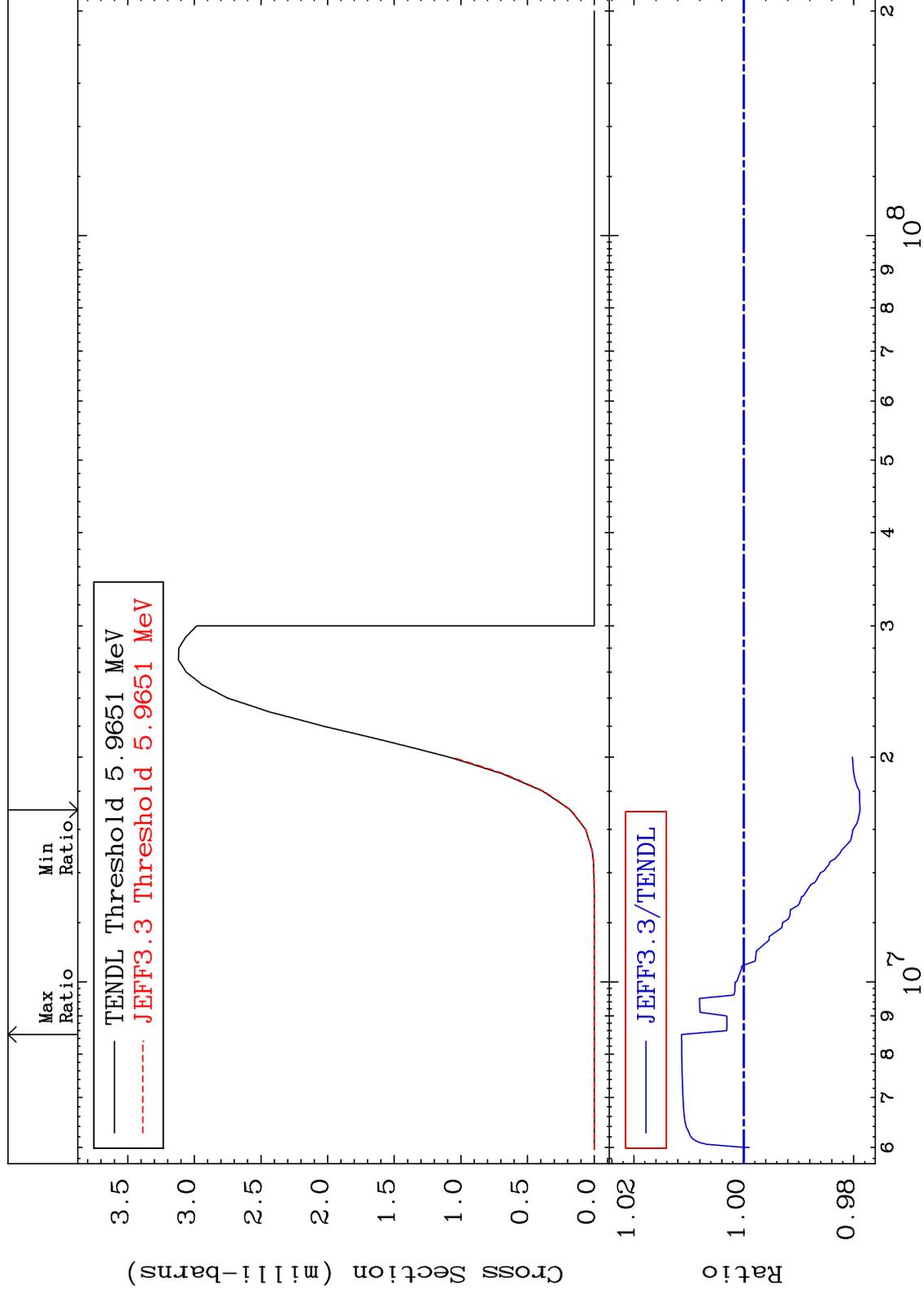
72-Hf-178

MAT 7237

(n, t): 71-Lu-176g

72-Hf-178

Radionuclide Production Cross Section -2.115 To 1.133 %



79

Incident Energy (eV)

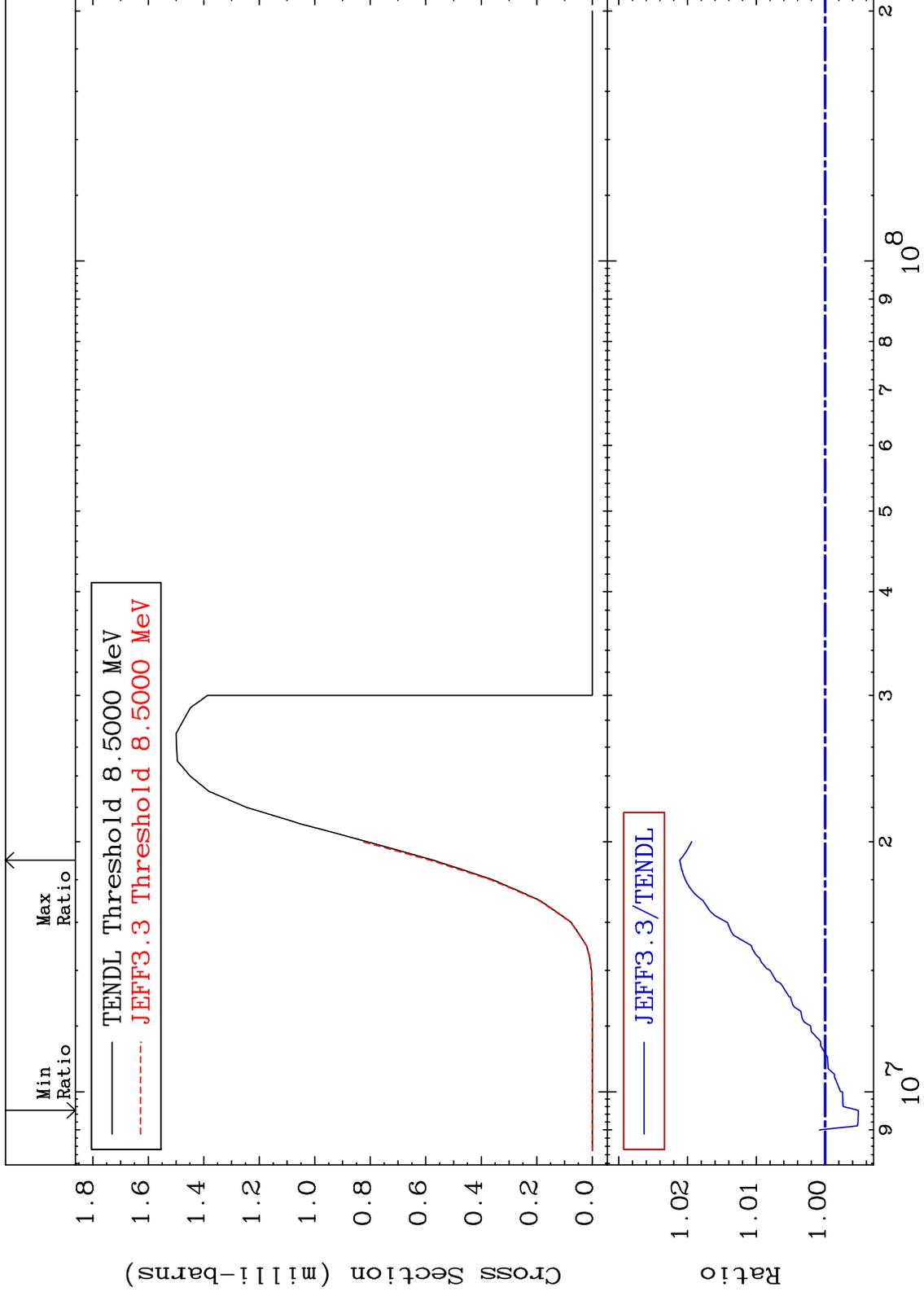
72-Hf-178

MAT 7237

(n, t): 71-Lu-176m1

72-Hf-178

Radionuclide Production Cross Section -0.482 To 2.114 %



80

Incident Energy (eV)

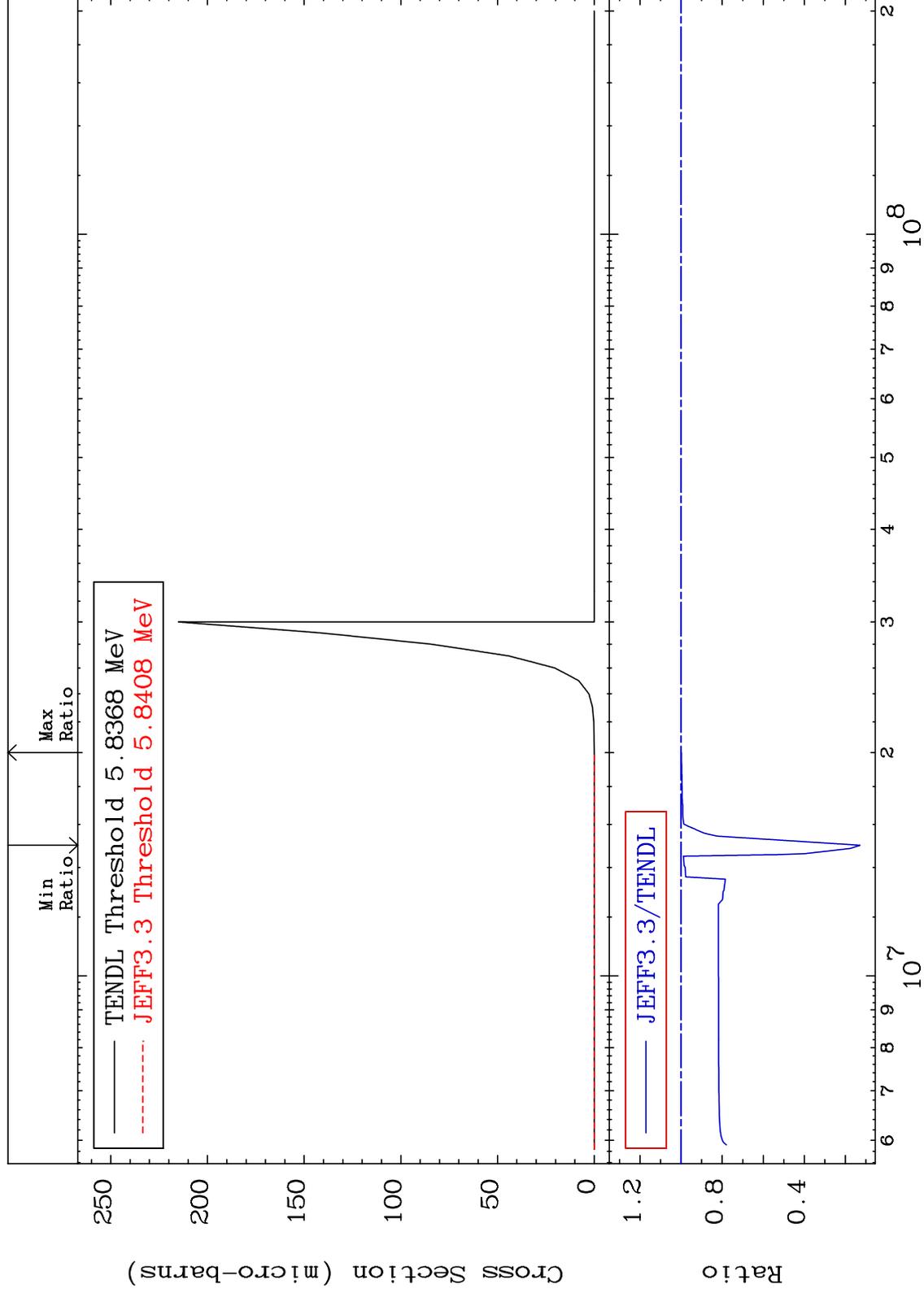
72-Hf-178

MAT 7237

(n, He-3):70-Yb-176g

72-Hf-178

Radionuclide Production Cross Section -87.11 To -0.224%

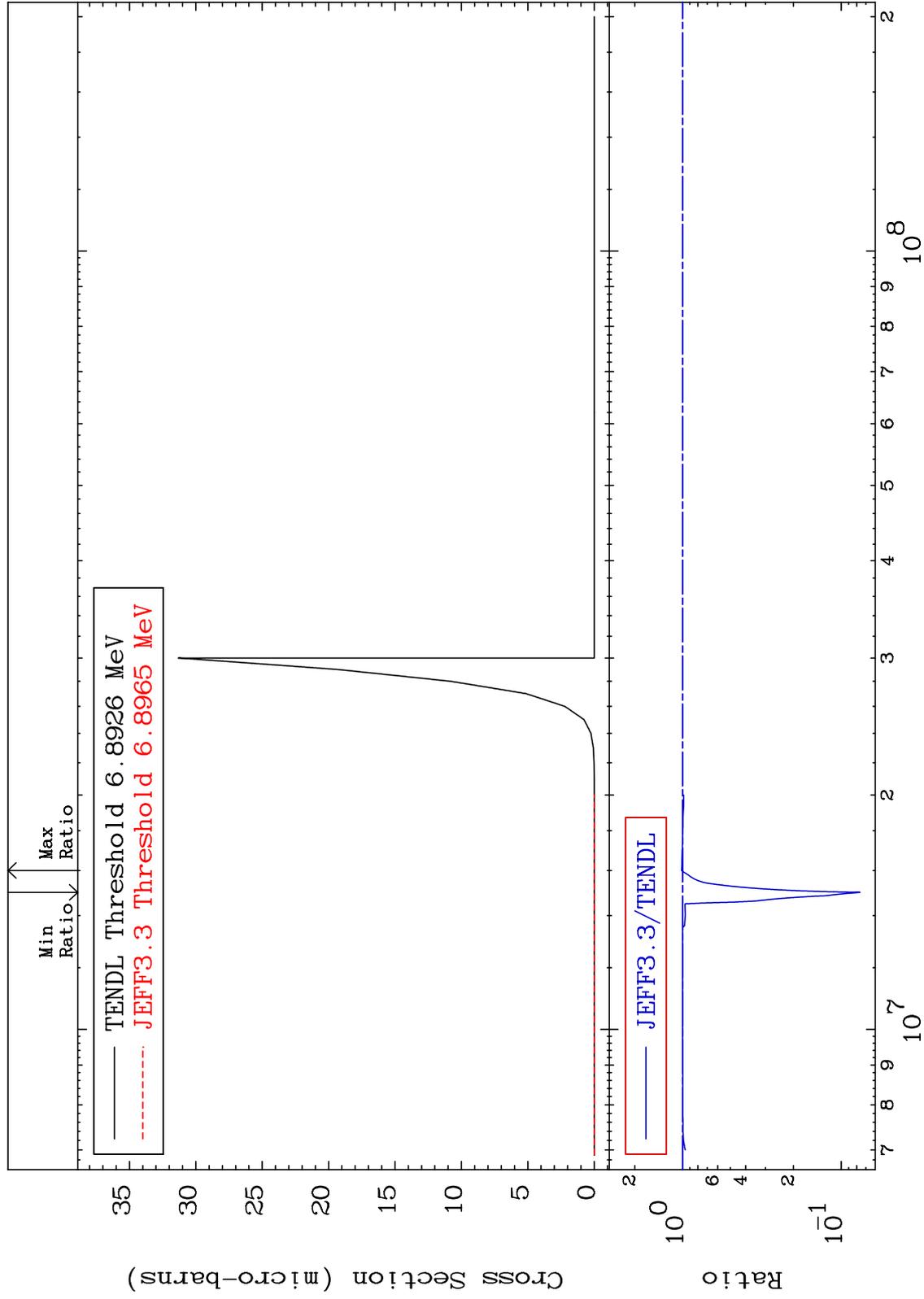


MAT 7237

(n, He-3) : 70-Yb-176m5

72-Hf-178

Radionuclide Production Cross Section -92.38 To 1.457 %



82

Incident Energy (eV)

72-Hf-178