Program Complot
(Version 2021-1)
by
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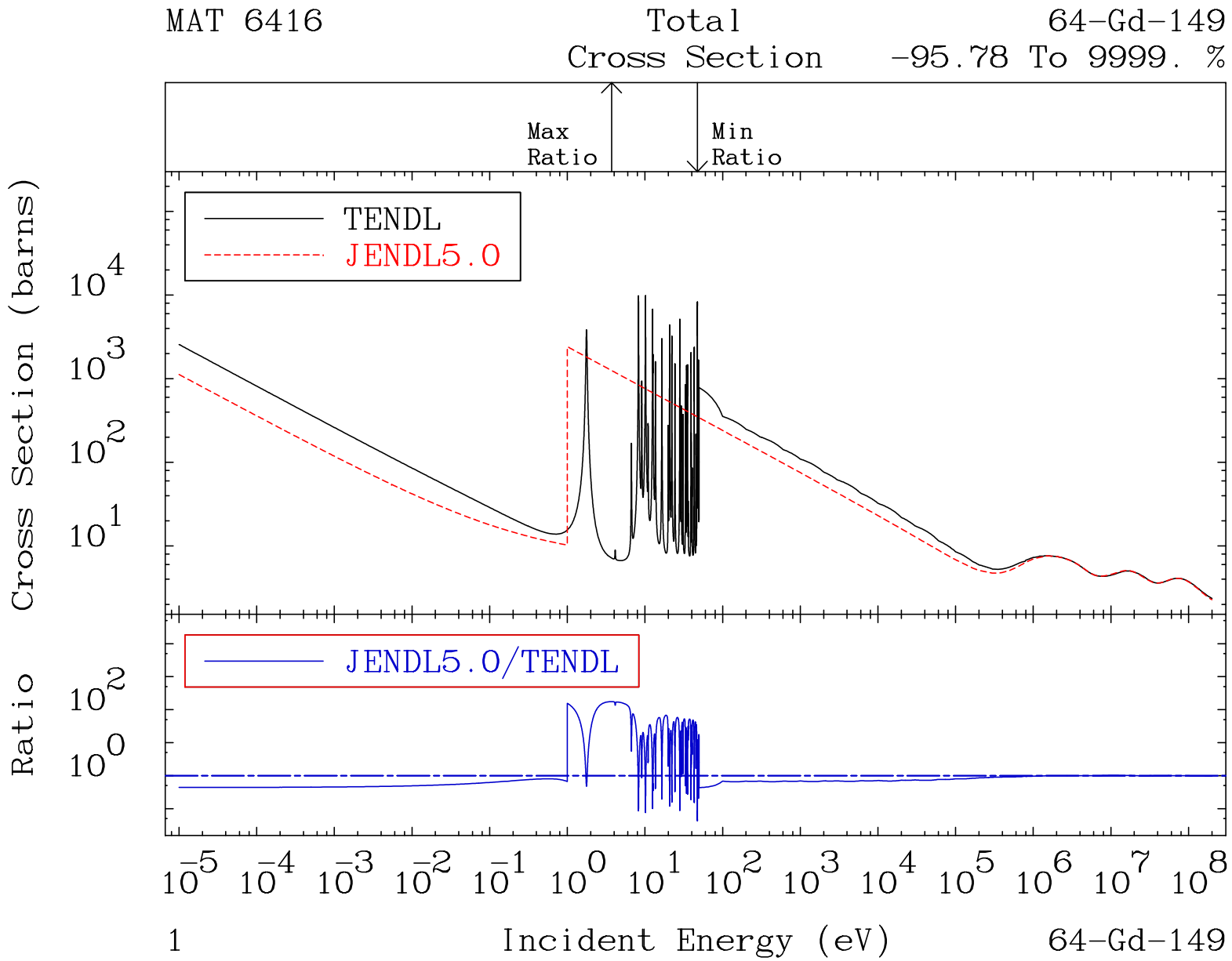
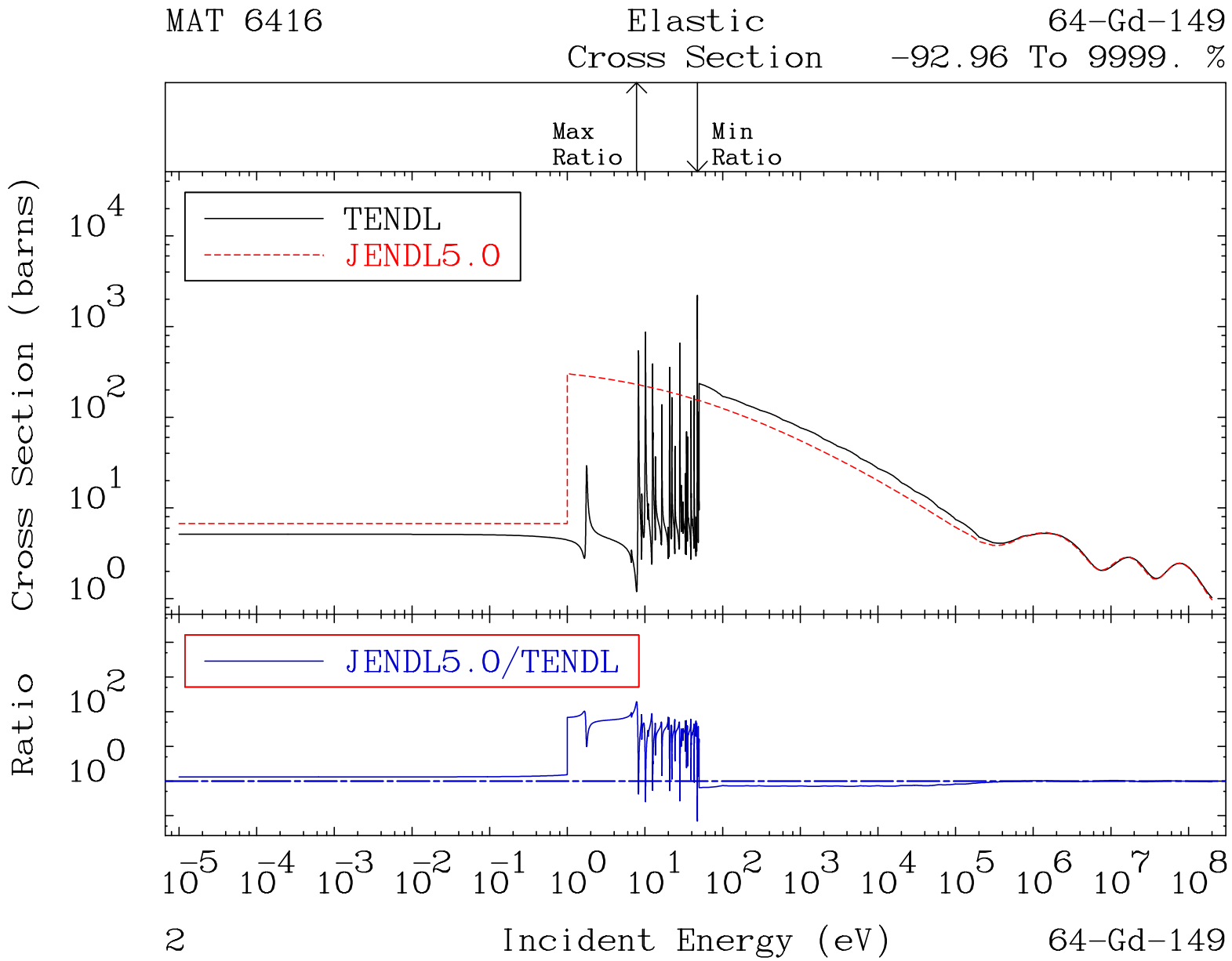
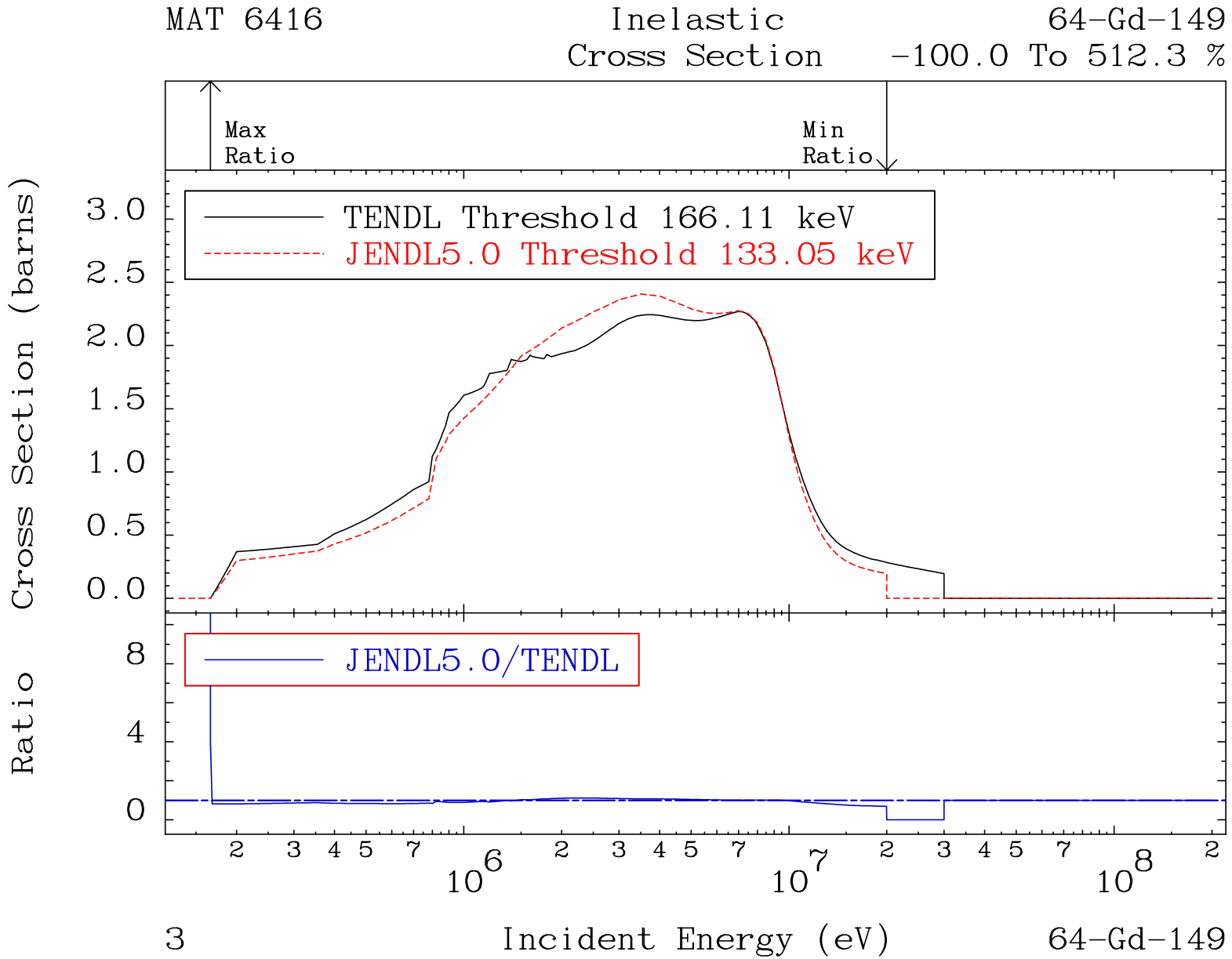
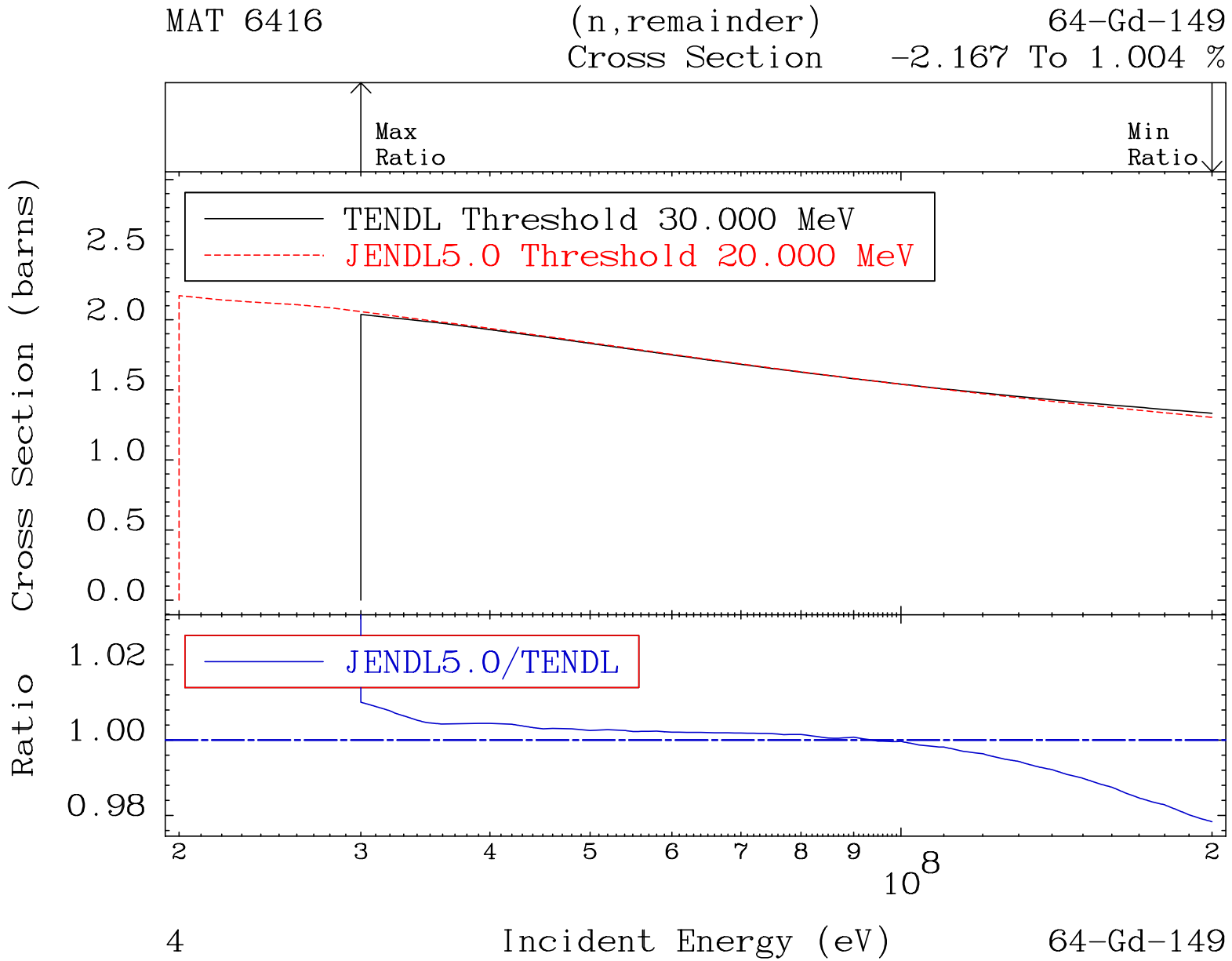
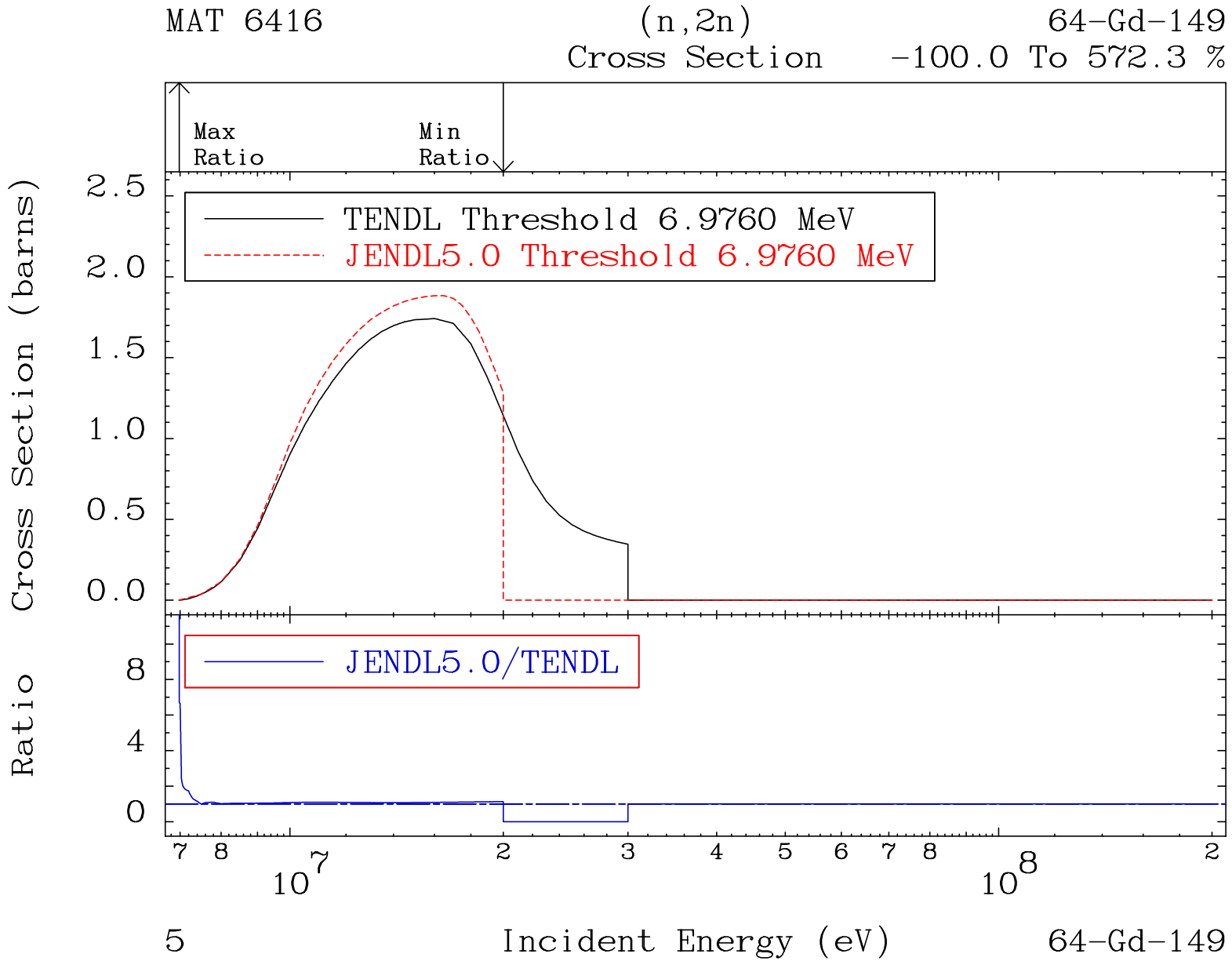
Press Mouse Button to Start

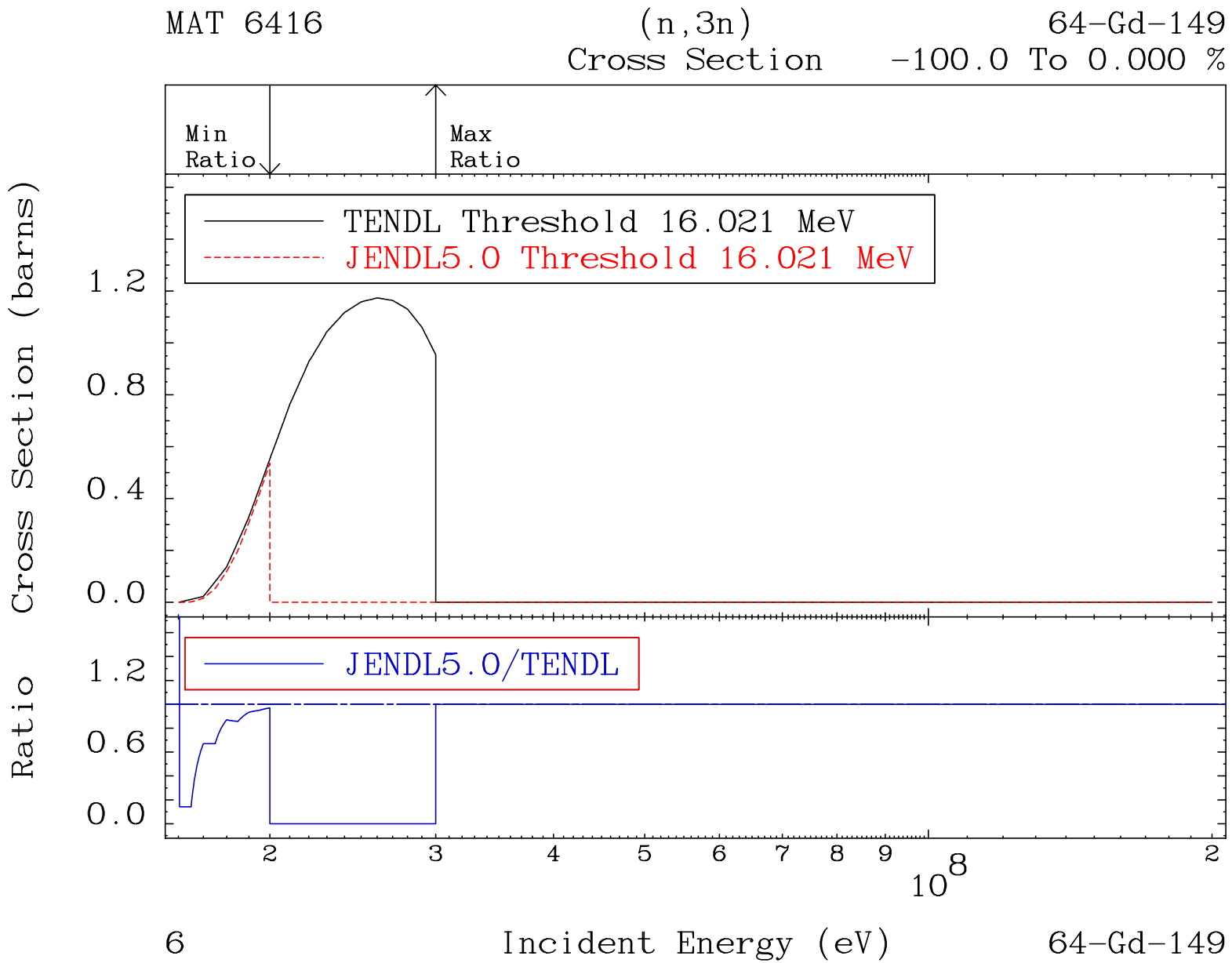

MAT 6416
Total
Cross Section
64-Gd-149
-95.78 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^4
10^3
10^2
10^1
JENDL5.0/TENDL
Ratio
10^2
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
1
Incident Energy (eV)
64-Gd-149

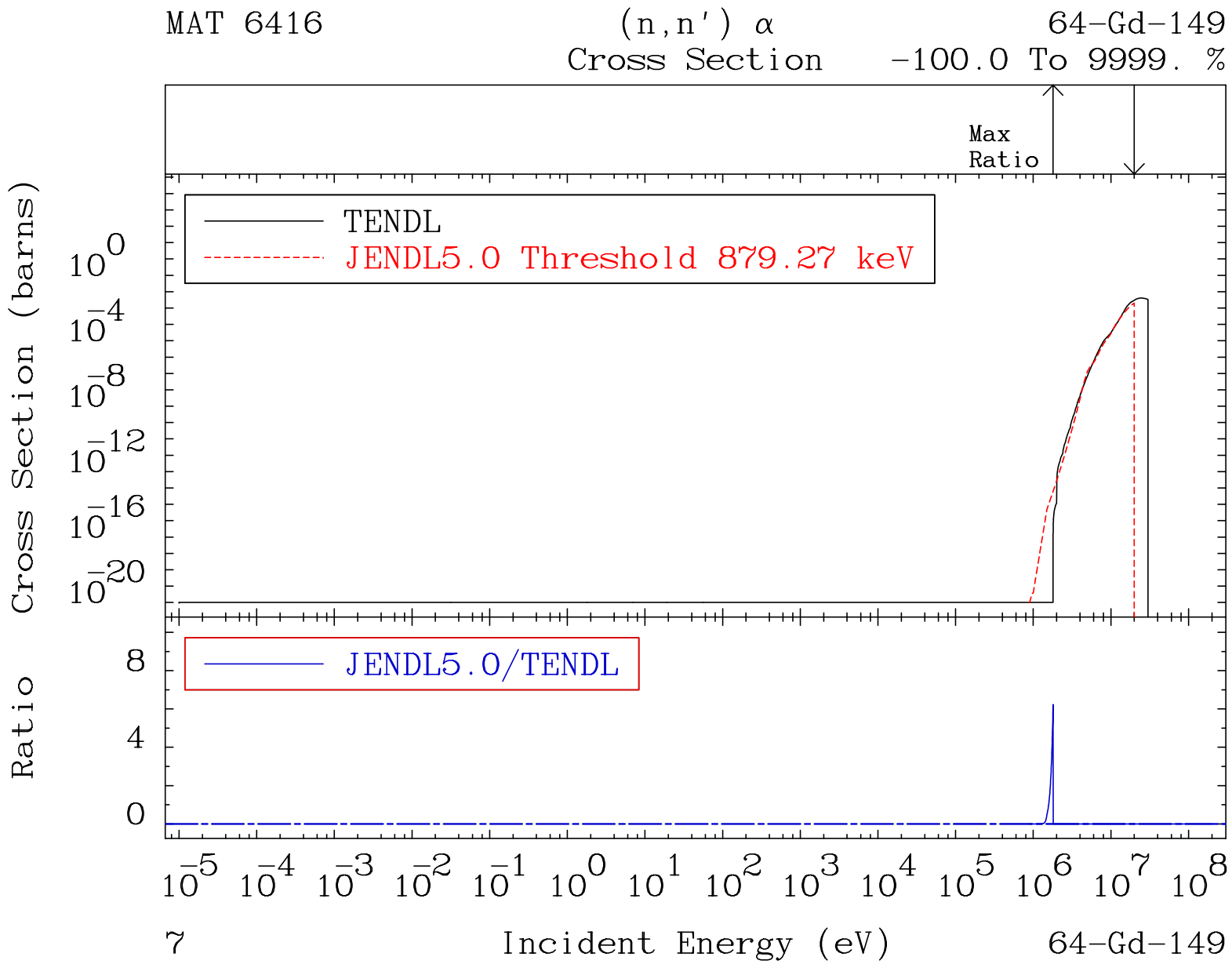

MAT 6416
Elastic
Cross Section
64-Gd-149
-92.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
64-Gd-149

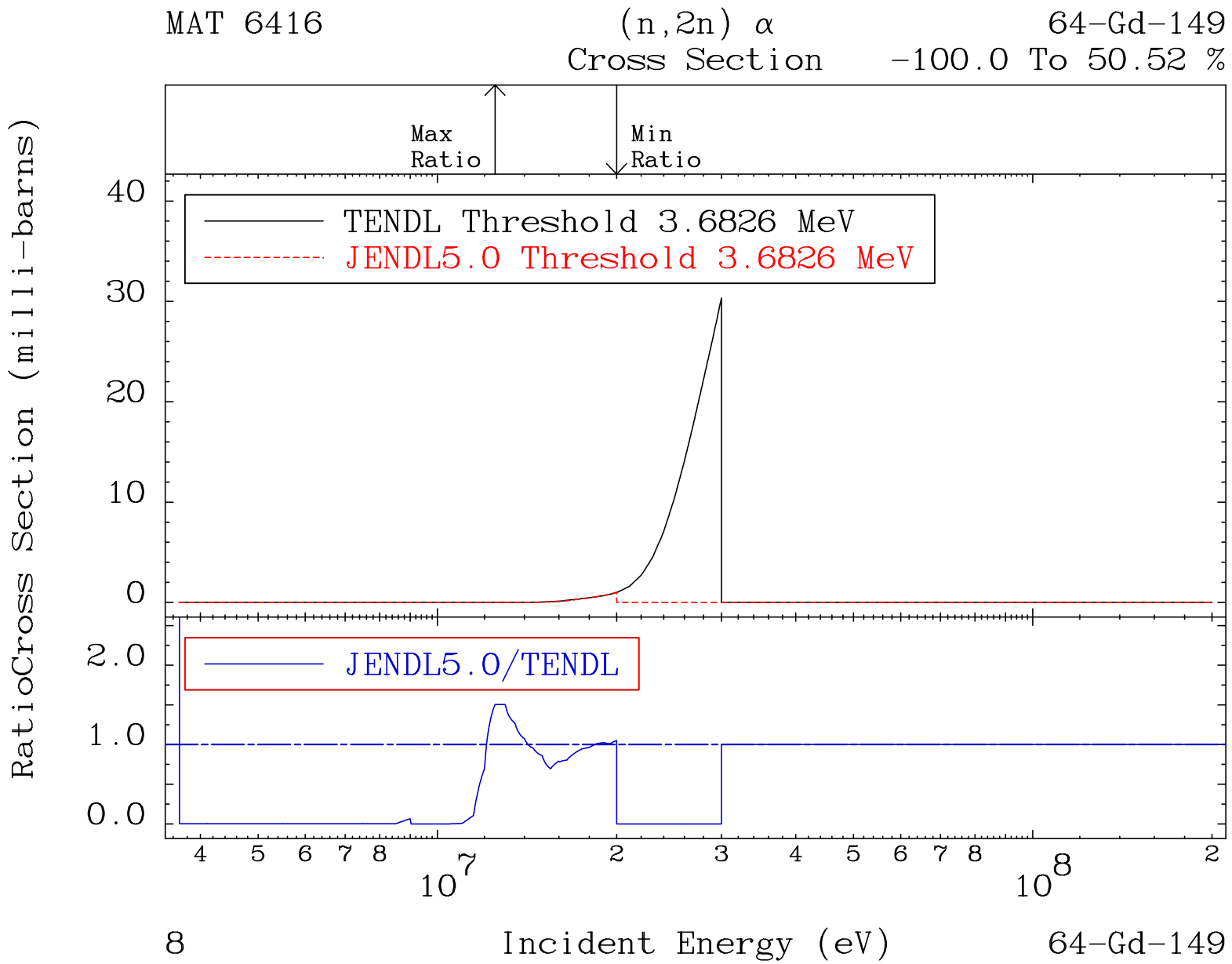

MAT 6416
Inelastic
Cross Section
64-Gd-149
-100.0 To 512.3 %
Max
Ratio
Min
Ratio
TENDL Threshold 166.11 keV
JENDL5.0 Threshold 133.05 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
8
4
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
3
64-Gd-149

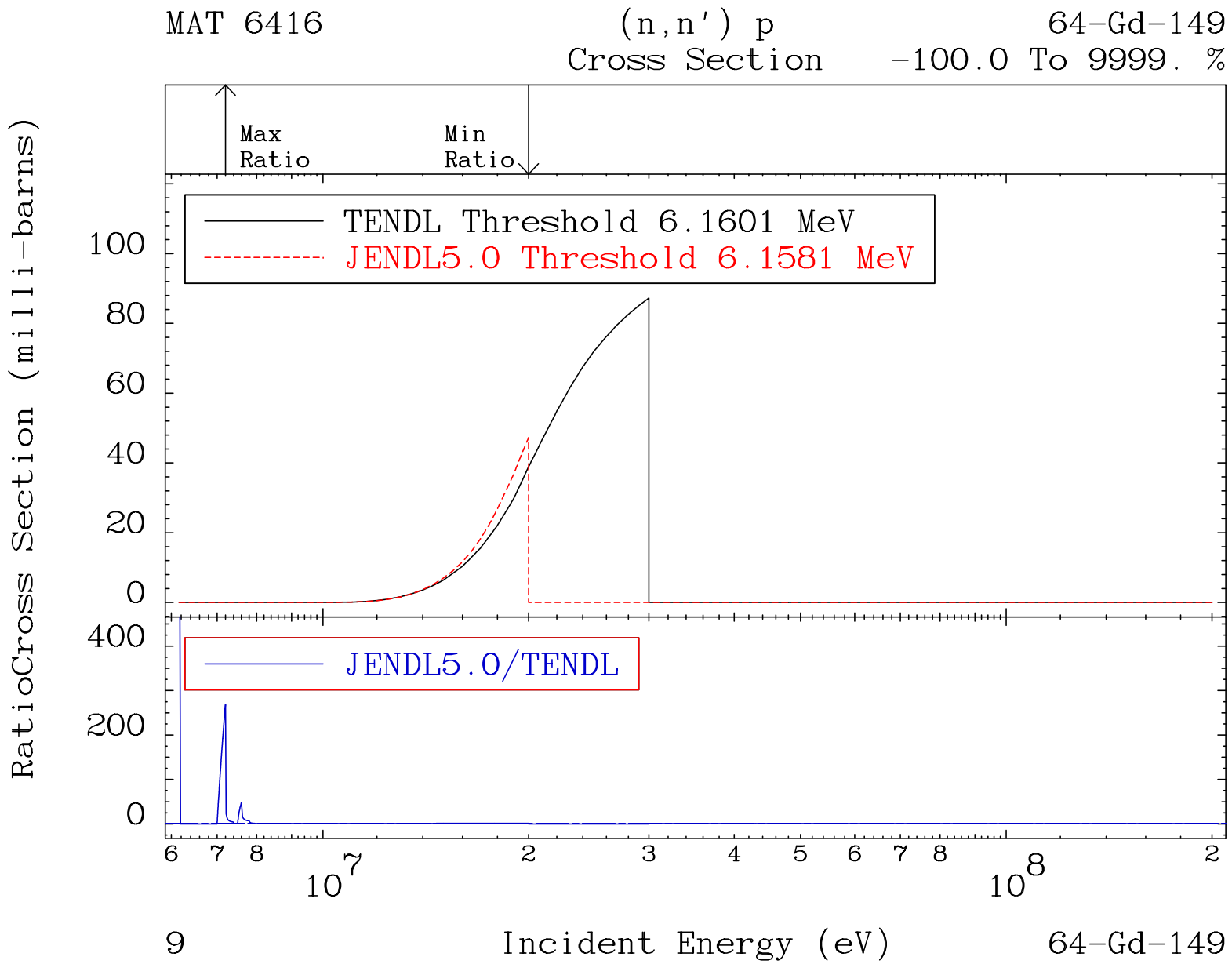

MAT 6416
(n,remainder)
Cross Section
64-Gd-149
-2.167 To 1.004 %
Max Ratio
Min Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.02
1.00
0.98
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
64-Gd-149

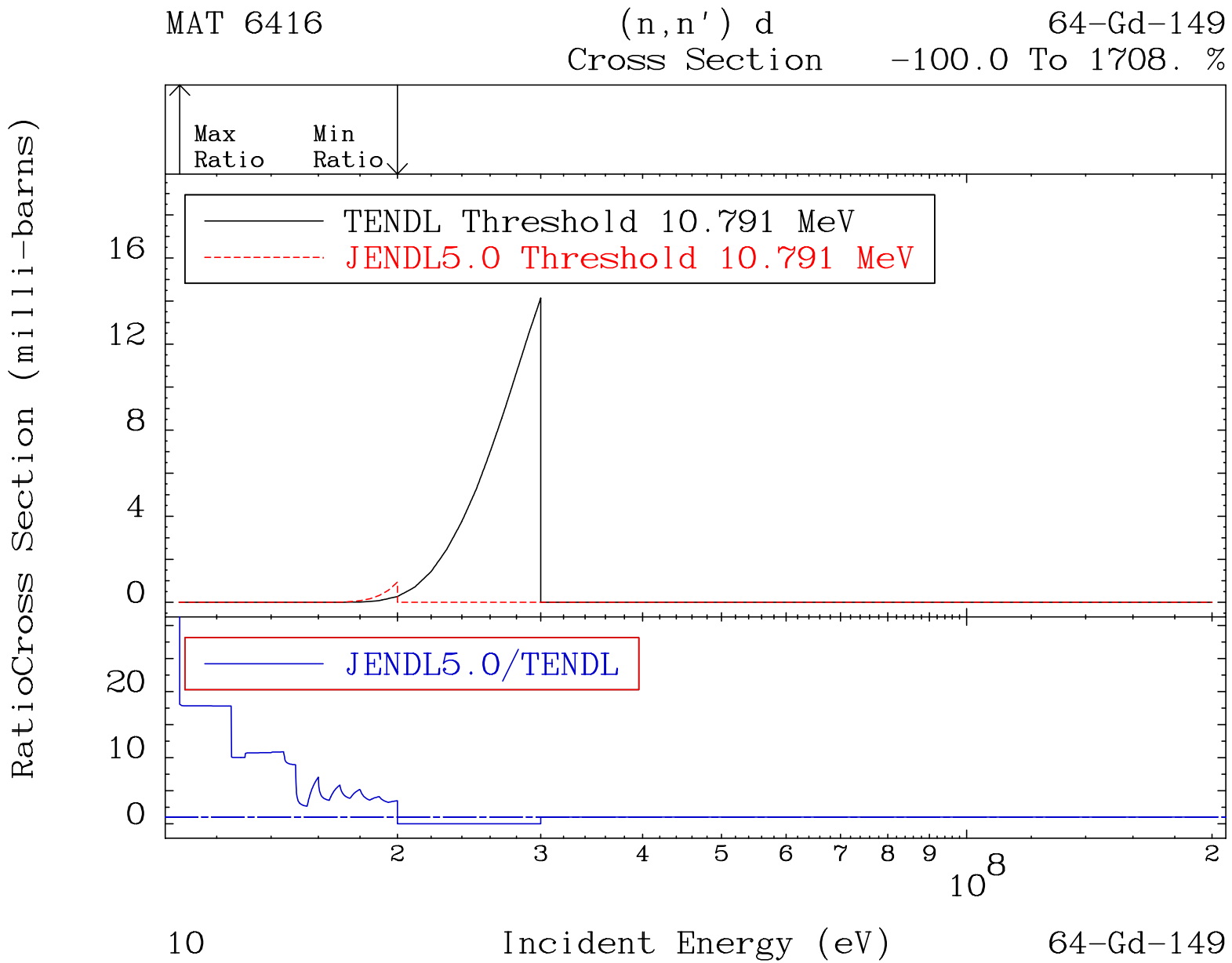

MAT 6416
(n,2n)
Cross Section
64-Gd-149
-100.0 To 572.3 %
Max Ratio
Min Ratio
TENDL Threshold 6.9760 MeV
JENDL5.0 Threshold 6.9760 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64-Gd-149
5

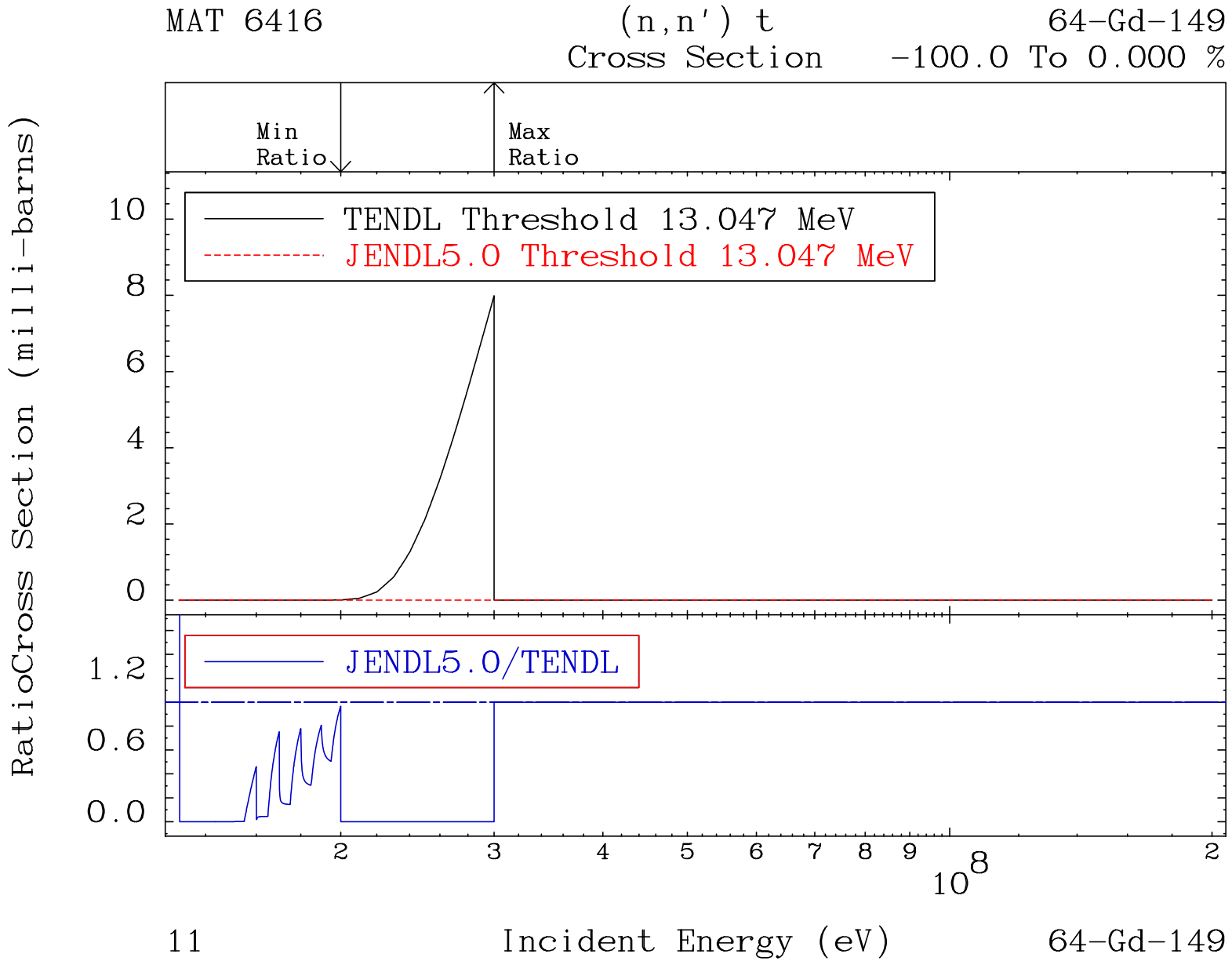

MAT 6416
(n,3n)
64-Gd-149
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.021 MeV
JENDL5.0 Threshold 16.021 MeV
Cross Section (barns)
1.2
0.8
0.4
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
64-Gd-149

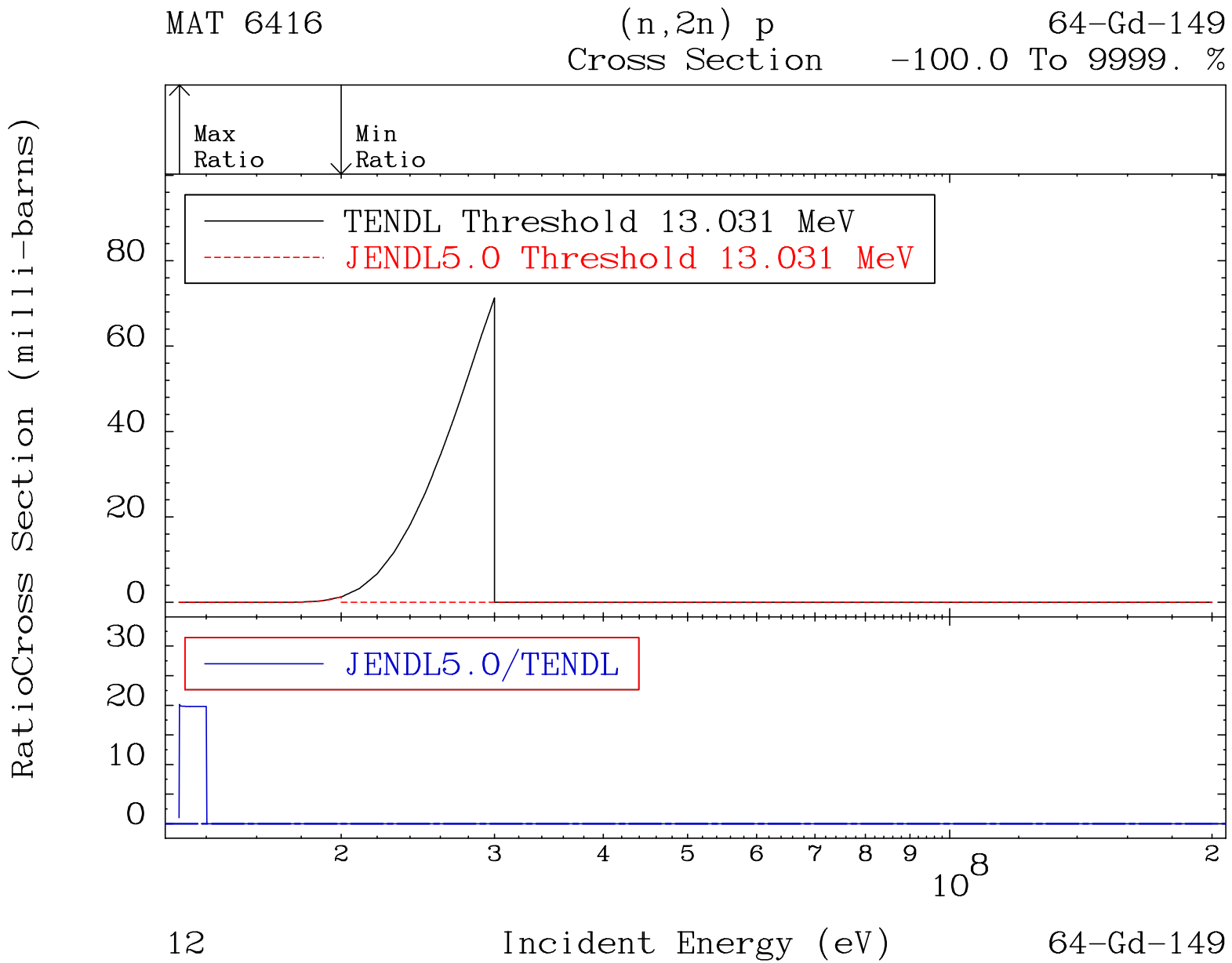

MAT 6416
(n,n') α
Cross Section
64-Gd-149
-100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0 Threshold 879.27 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64-Gd-149
7

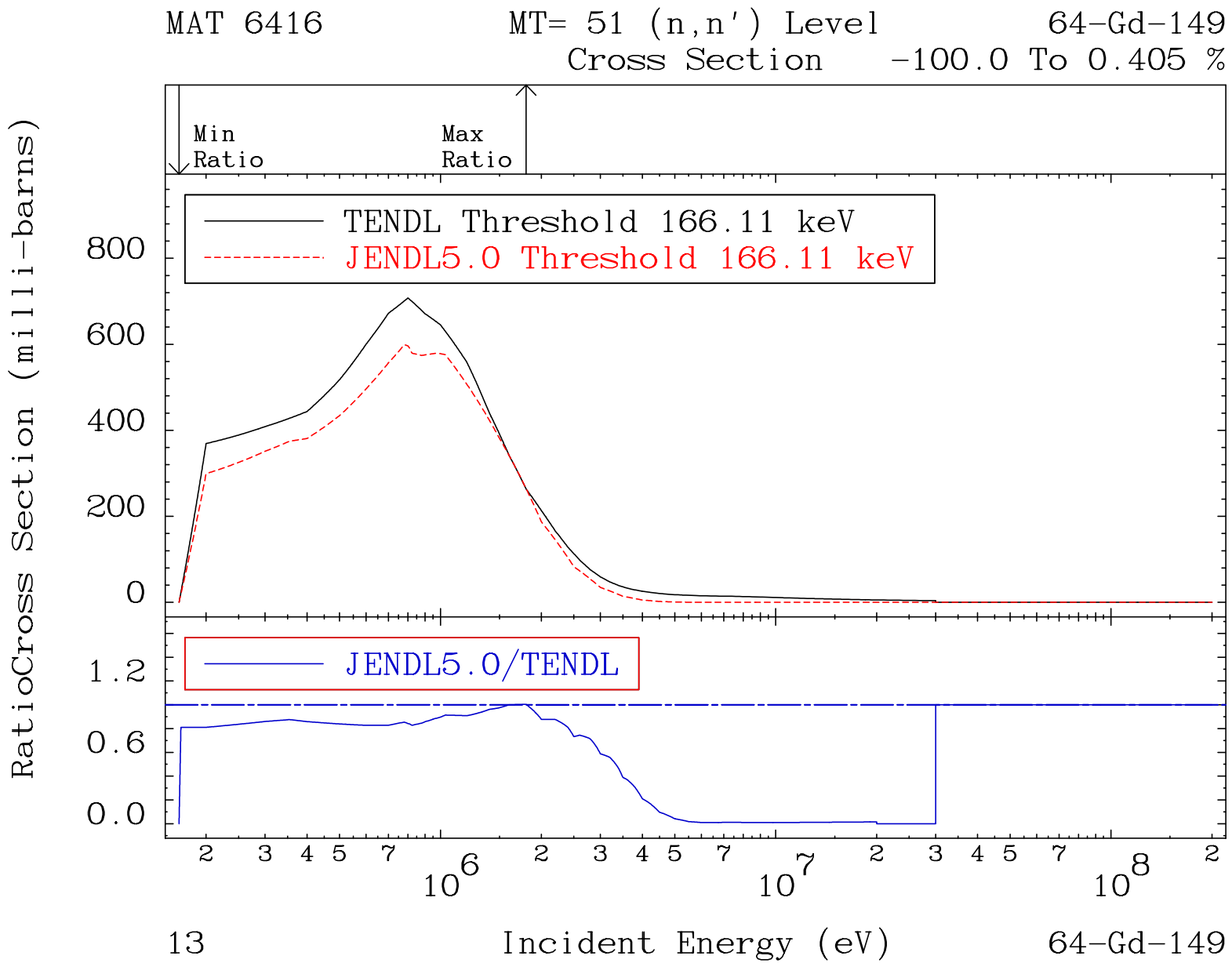

MAT 6416
(n,2n) α
Cross Section
64-Gd-149
-100.0 To 50.52 %
Max Ratio
Min Ratio
TENDL Threshold 3.6826 MeV
JENDL5.0 Threshold 3.6826 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
64-Gd-149

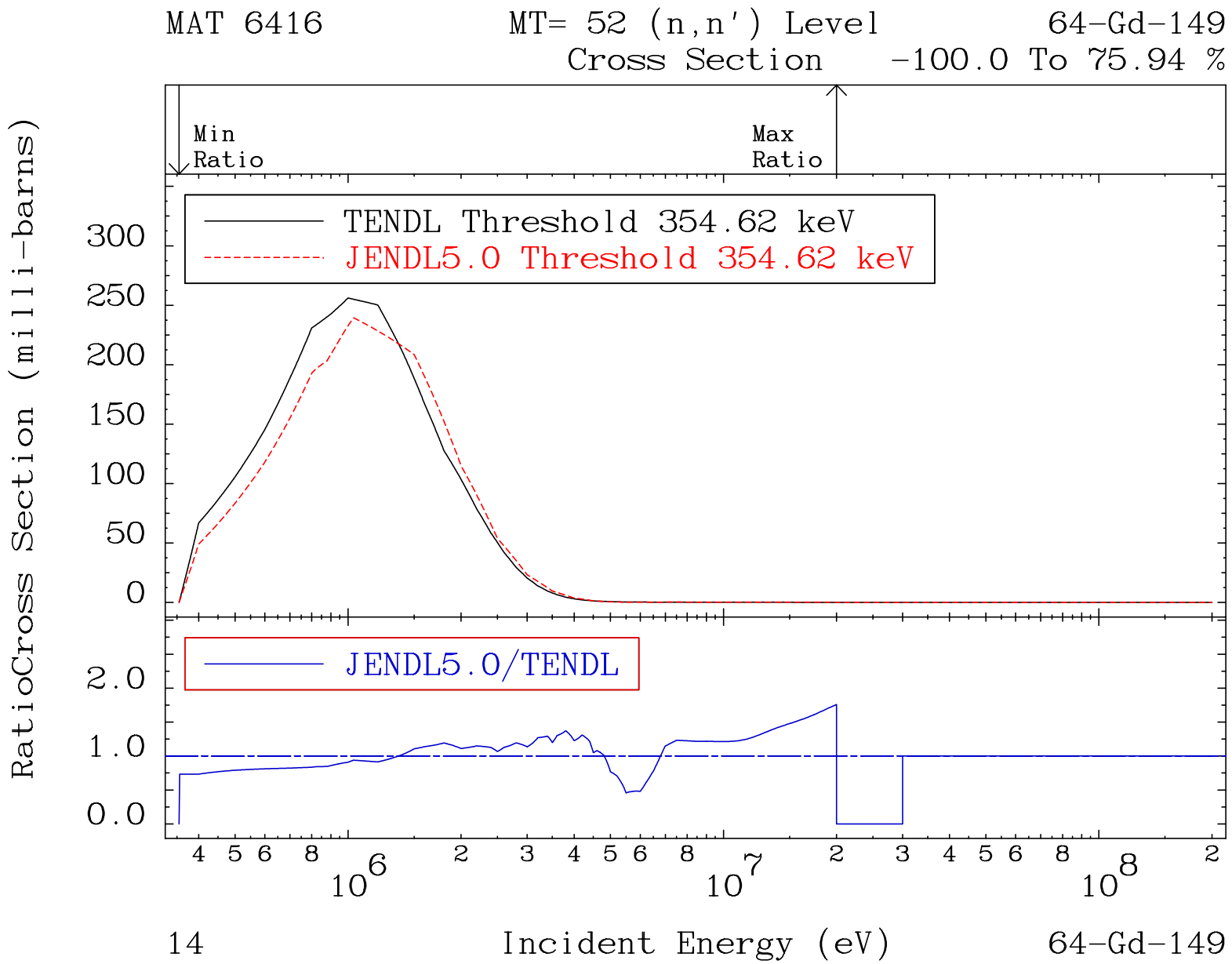

MAT 6416
(n,n') p
Cross Section
64-Gd-149
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.1601 MeV
JENDL5.0 Threshold 6.1581 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
400
200
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
9
Incident Energy (eV)
64-Gd-149

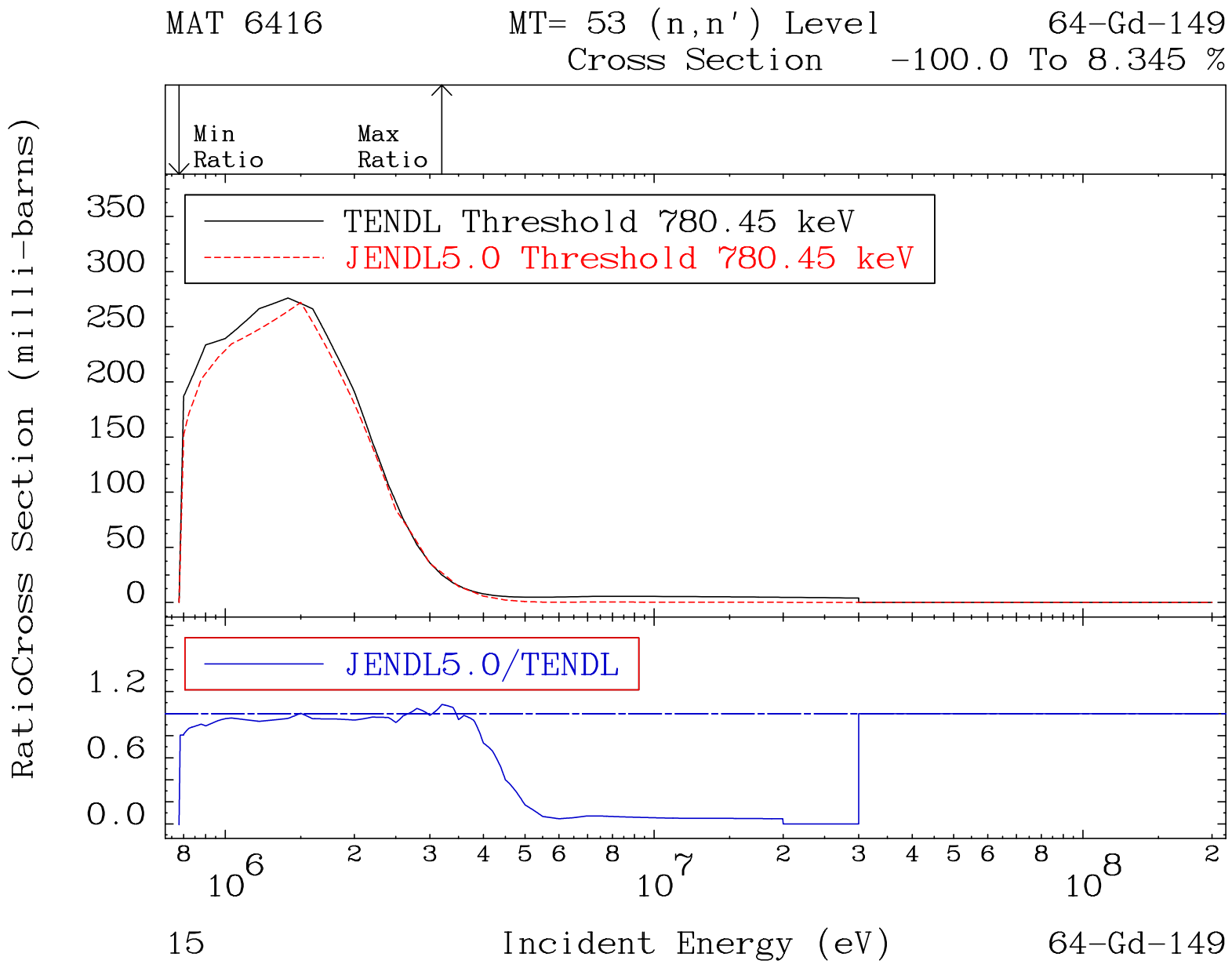

MAT 6416
(n,n') d
Cross Section
64-Gd-149
-100.0 To 1708. %
Max Ratio
Min Ratio
TENDL Threshold 10.791 MeV
JENDL5.0 Threshold 10.791 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
20
10
0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
64-Gd-149

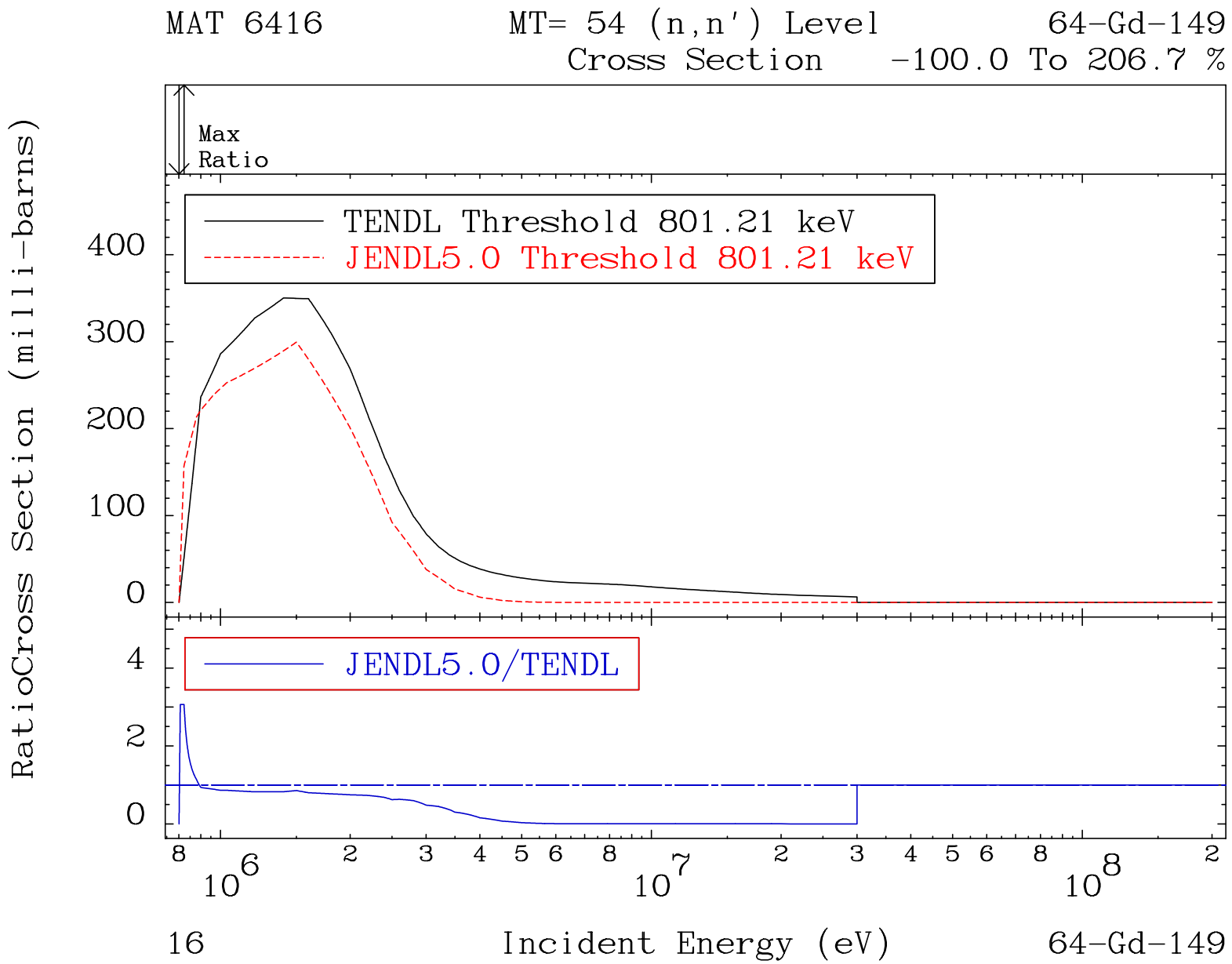

MAT 6416
(n,n') t
Cross Section
64-Gd-149
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.047 MeV
JENDL5.0 Threshold 13.047 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
64-Gd-149

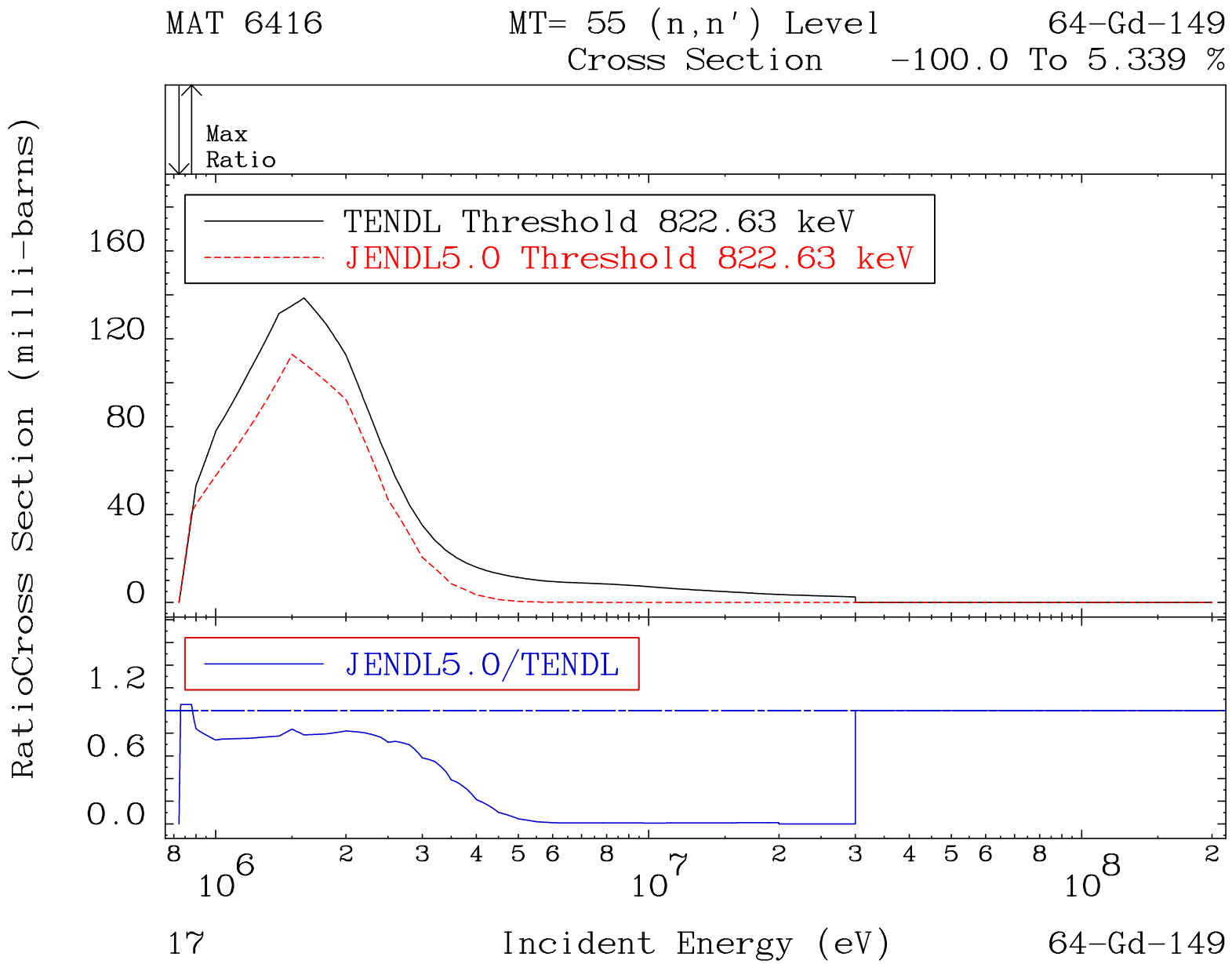

MAT 6416
(n,2n) p
64-Gd-149
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 13.031 MeV
JENDL5.0 Threshold 13.031 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
30
20
10
0
2
3
4
5
6
7
8
9
2
10^8
12
Incident Energy (eV)
64-Gd-149

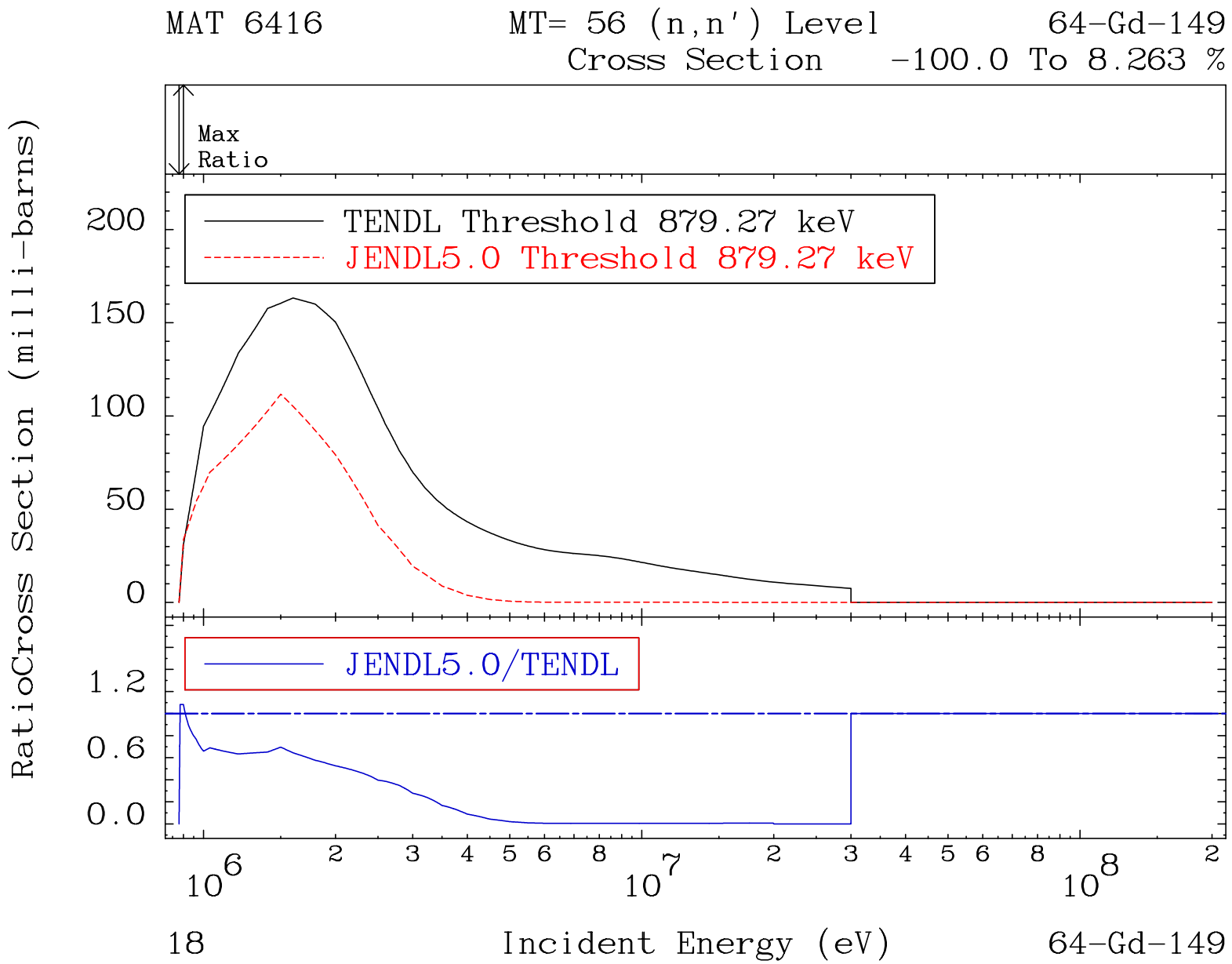

MAT 6416
MT= 51 (n,n') Level
64-Gd-149
Cross Section -100.0 To 0.405 %
Min Ratio
Max Ratio
TENDL Threshold 166.11 keV
JENDL5.0 Threshold 166.11 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
13
Incident Energy (eV)
64-Gd-149

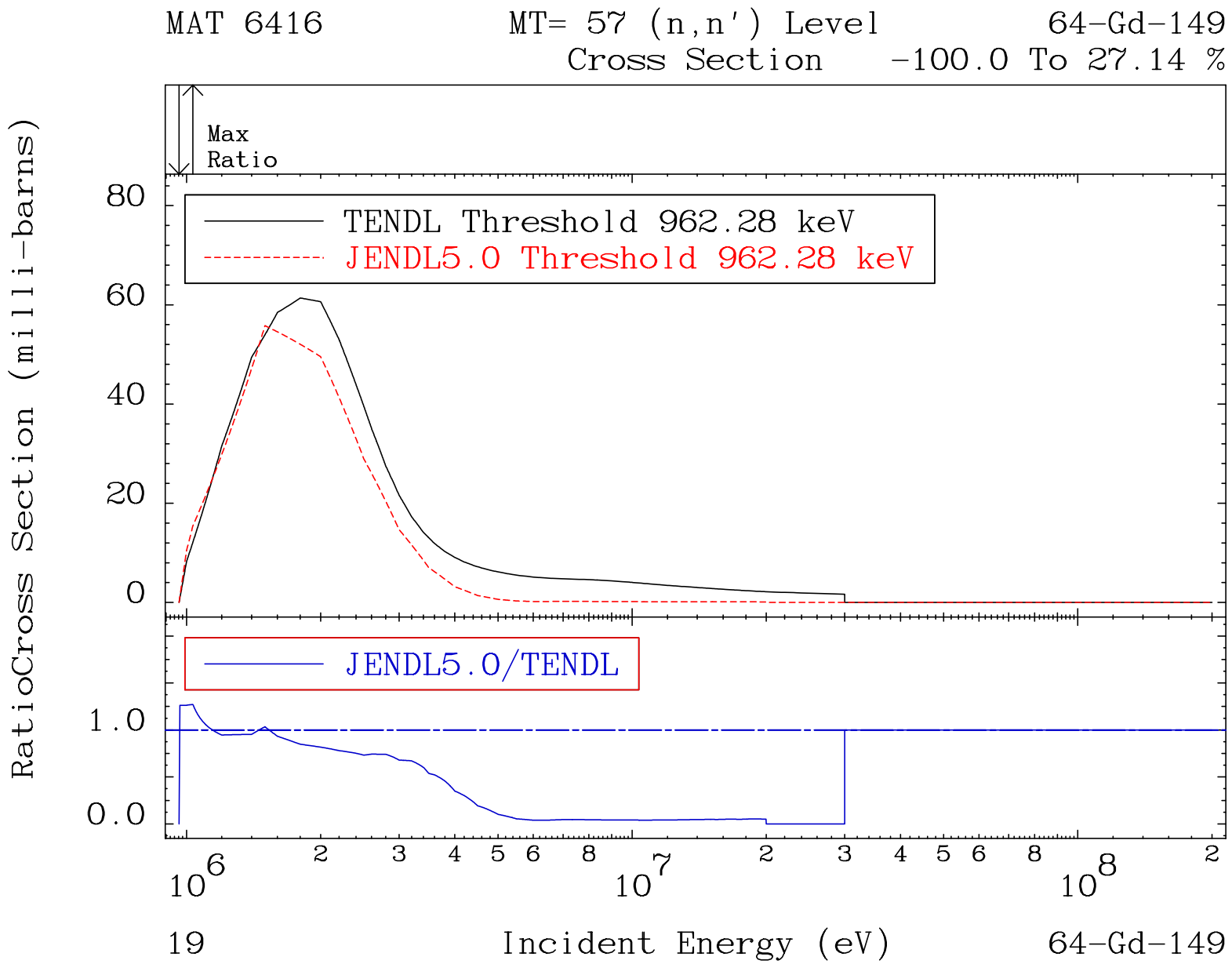

MAT 6416
MT= 52 (n,n') Level
64-Gd-149
Cross Section
-100.0 To 75.94 %
Min Ratio
Max Ratio
TENDL Threshold 354.62 keV
JENDL5.0 Threshold 354.62 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
64-Gd-149

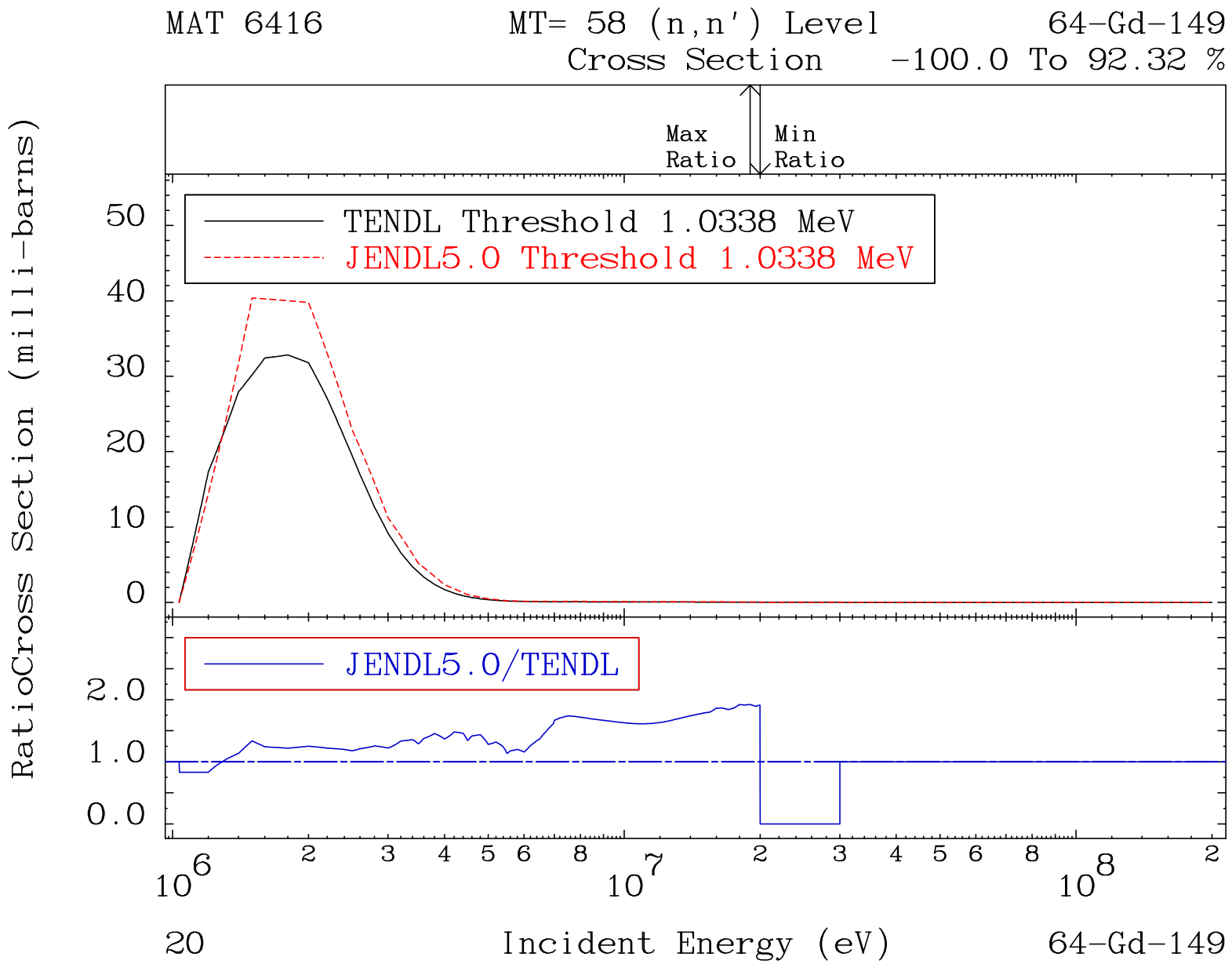

MAT 6416
MT= 53 (n,n') Level
64-Gd-149
Cross Section
-100.0 To 8.345 %
Min Ratio
Max Ratio
TENDL Threshold 780.45 keV
JENDL5.0 Threshold 780.45 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
15
Incident Energy (eV)
64-Gd-149

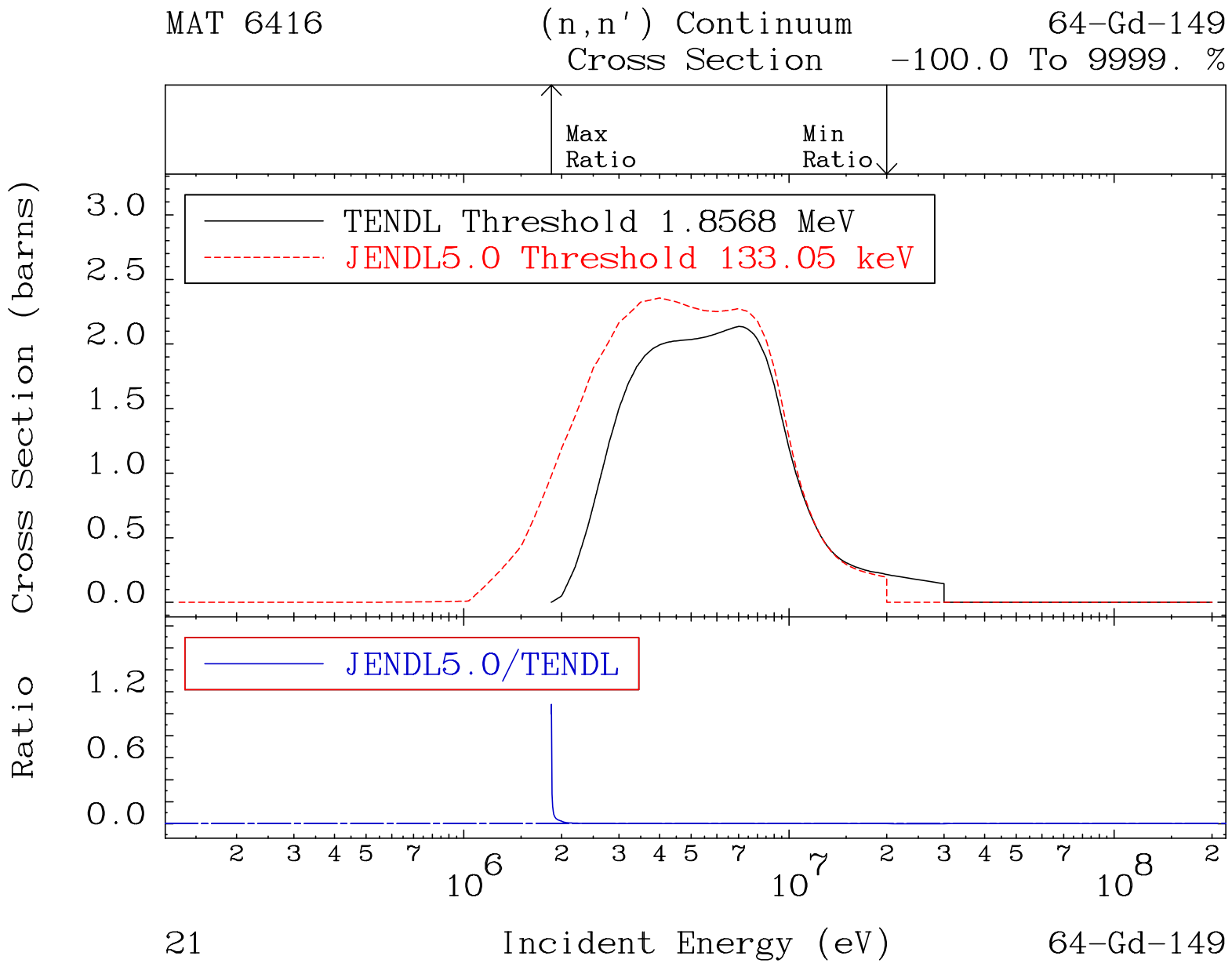

MAT 6416
MT= 54 (n,n') Level
64-Gd-149
Cross Section -100.0 To 206.7 %
Max
Ratio
TENDL Threshold 801.21 keV
JENDL5.0 Threshold 801.21 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
4
2
0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
16
Incident Energy (eV)
64-Gd-149

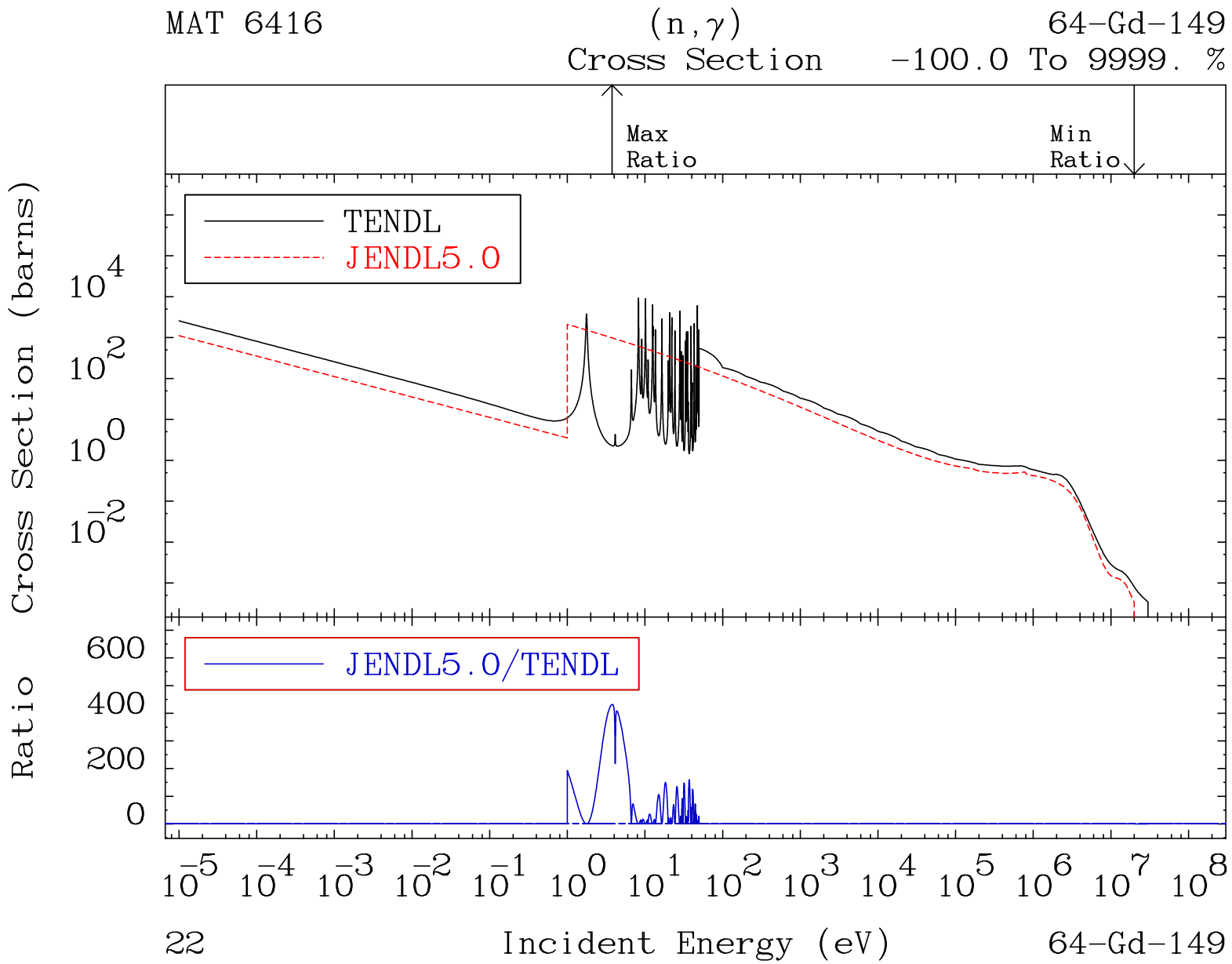

MAT 6416
MT= 55 (n,n') Level
64-Gd-149
Cross Section
-100.0 To 5.339 %
Max
Ratio
TENDL Threshold 822.63 keV
JENDL5.0 Threshold 822.63 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.6
0.0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
17
Incident Energy (eV)
64-Gd-149

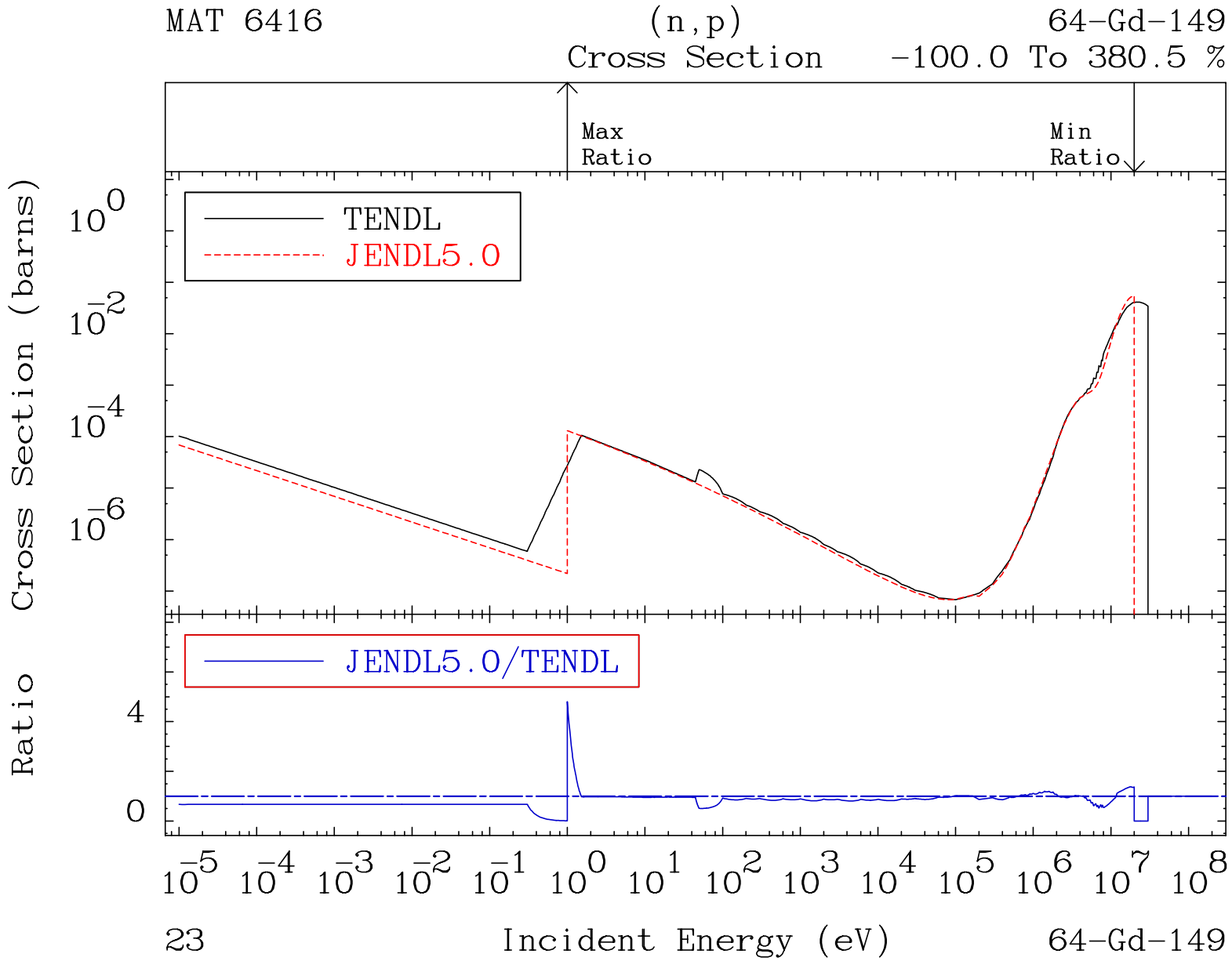

MAT 6416
MT= 56 (n,n') Level
64-Gd-149
Cross Section
-100.0 To 8.263 %
Max
Ratio
TENDL Threshold 879.27 keV
JENDL5.0 Threshold 879.27 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
10^6
10^7
10^8
Incident Energy (eV)
18
64-Gd-149

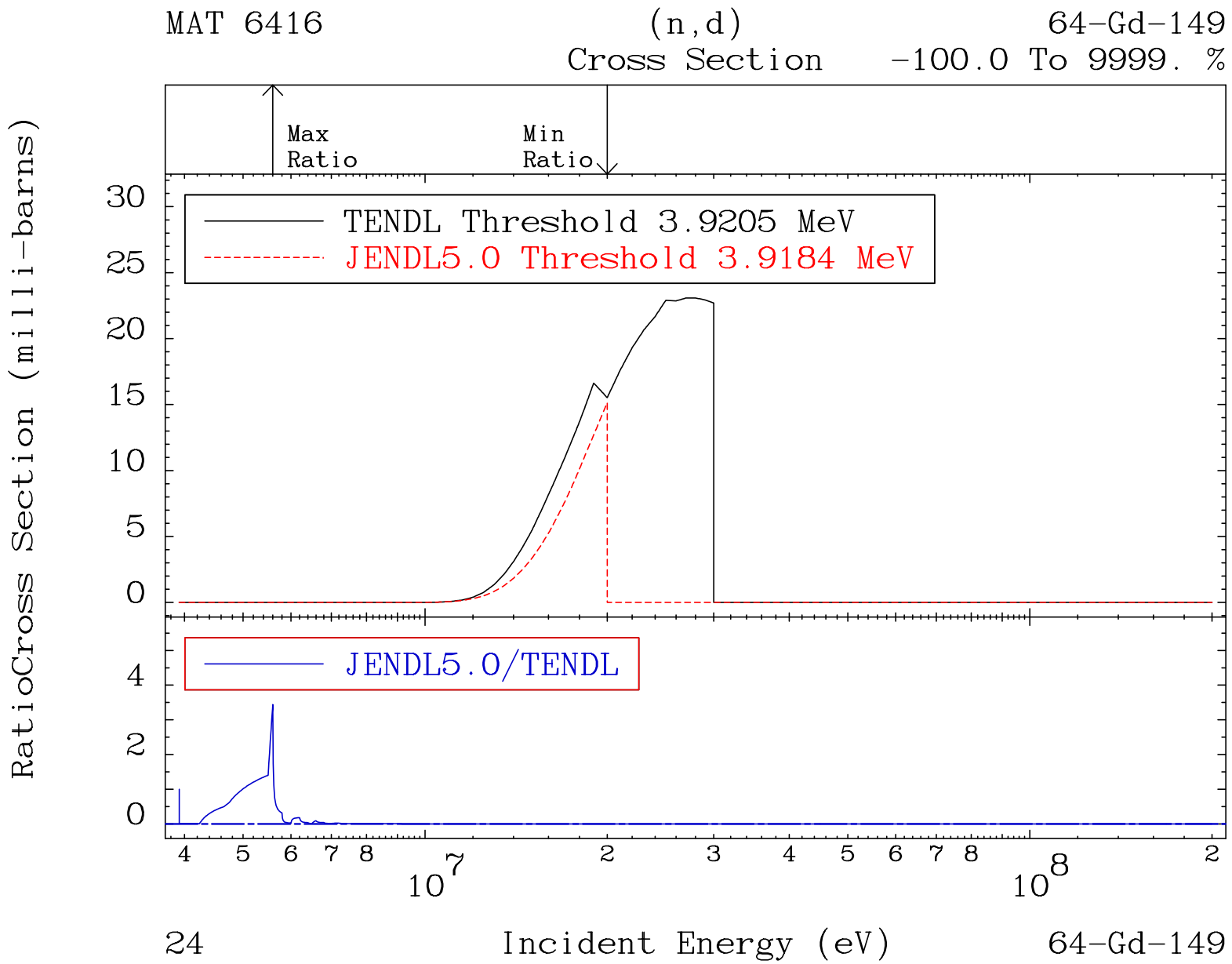

MAT 6416
MT= 57 (n,n') Level
64-Gd-149
Cross Section
-100.0 To 27.14 %
Max
Ratio
80
60
40
20
0
TENDL Threshold 962.28 keV
JENDL5.0 Threshold 962.28 keV
JENDL5.0/TENDL
1.0
0.0
RatioCross Section (milli-barns)
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
19
Incident Energy (eV)
64-Gd-149

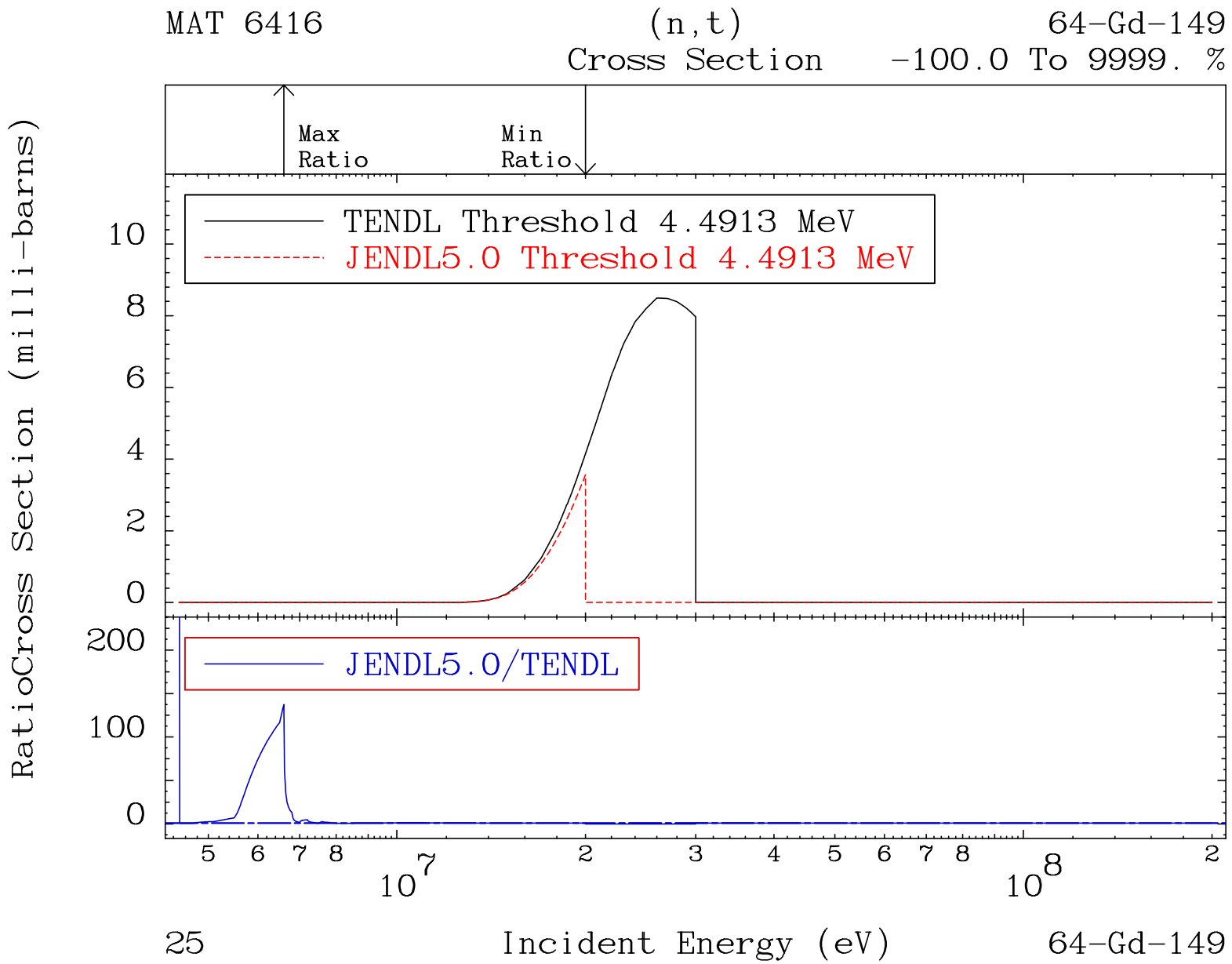

MAT 6416
MT= 58 (n,n') Level
64-Gd-149
Cross Section -100.0 To 92.32 %
Max Ratio
Min Ratio
TENDL Threshold 1.0338 MeV
JENDL5.0 Threshold 1.0338 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
10^6
10^7
10^8
Incident Energy (eV)
20
64-Gd-149

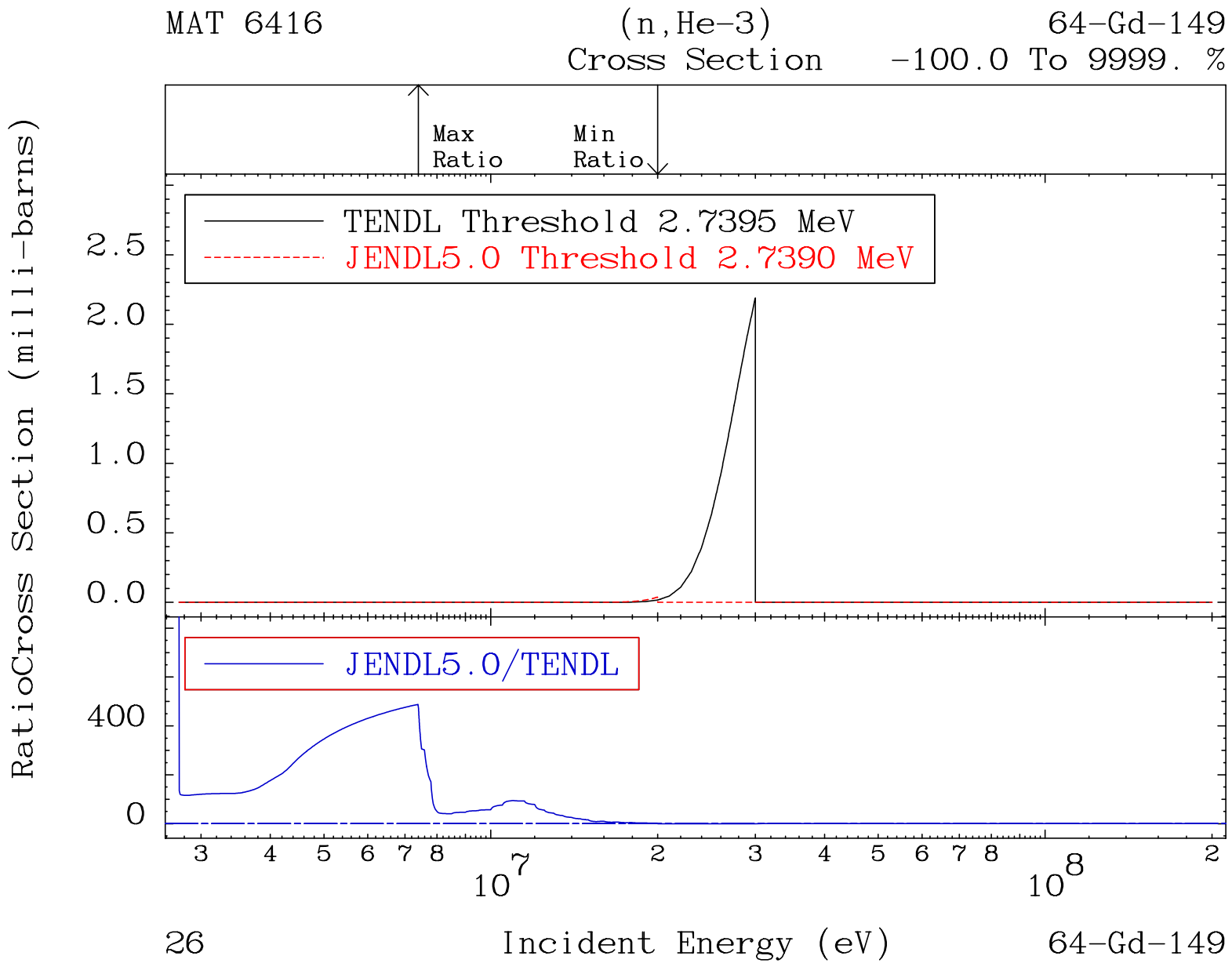

MAT 6416
(n,n') Continuum
Cross Section
64-Gd-149
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.8568 MeV
JENDL5.0 Threshold 133.05 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
21
Incident Energy (eV)
64-Gd-149

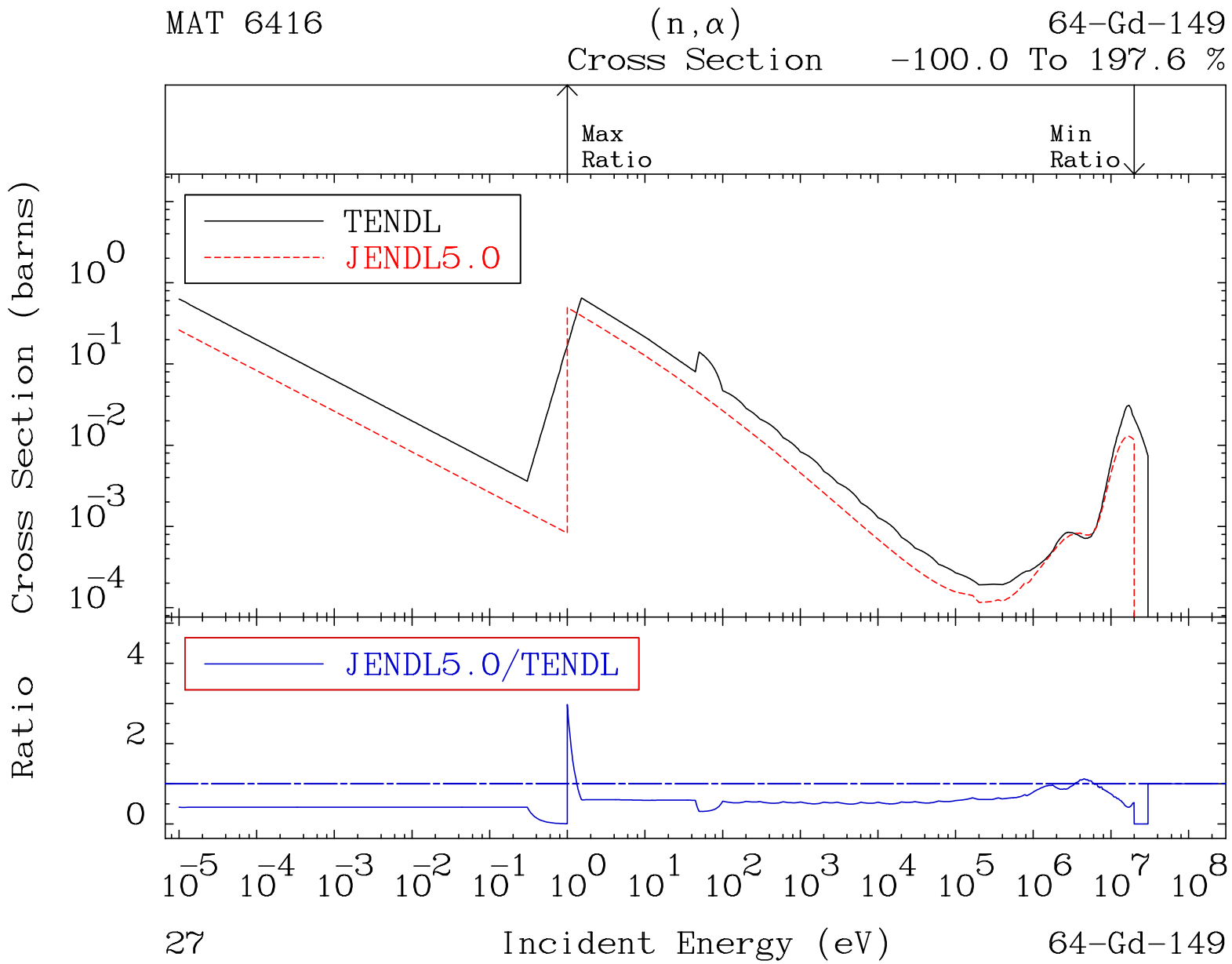

MAT 6416
(n,γ)
Cross Section
64-Gd-149
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
22
64-Gd-149

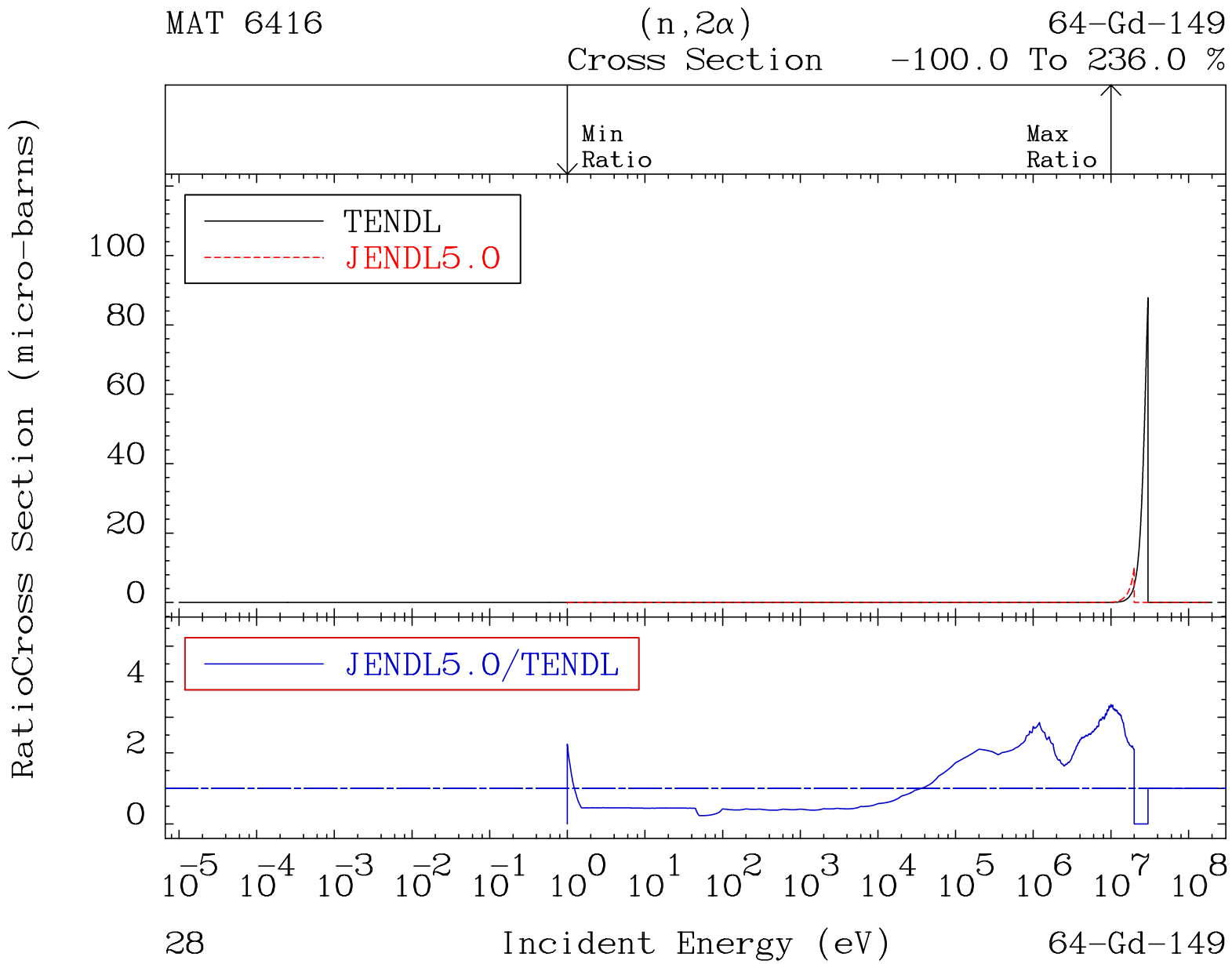

MAT 6416
(n,p)
64-Gd-149
Cross Section
-100.0 To 380.5 %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
23
64-Gd-149

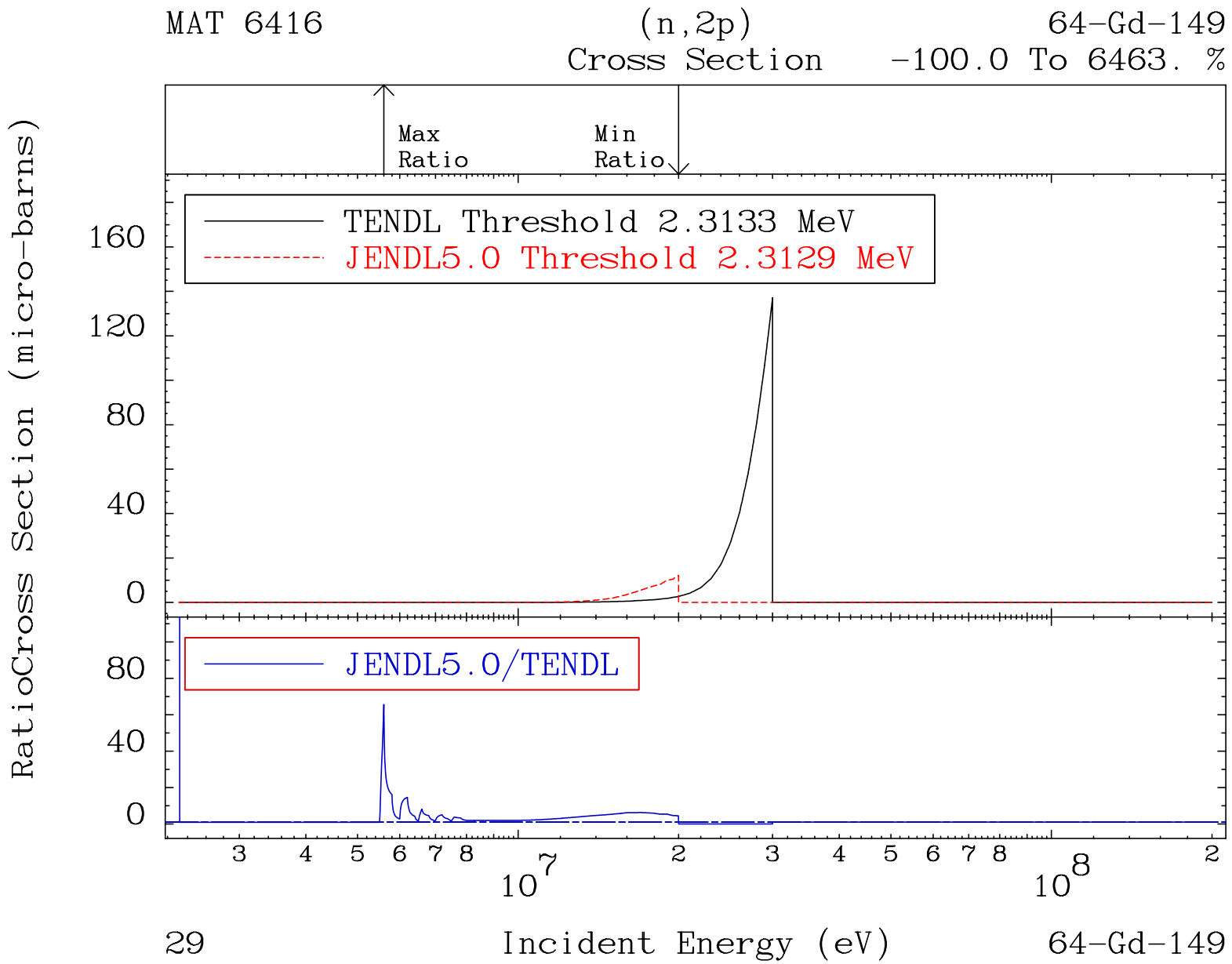

MAT 6416
(n,d)
64-Gd-149
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.9205 MeV
JENDL5.0 Threshold 3.9184 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
64-Gd-149

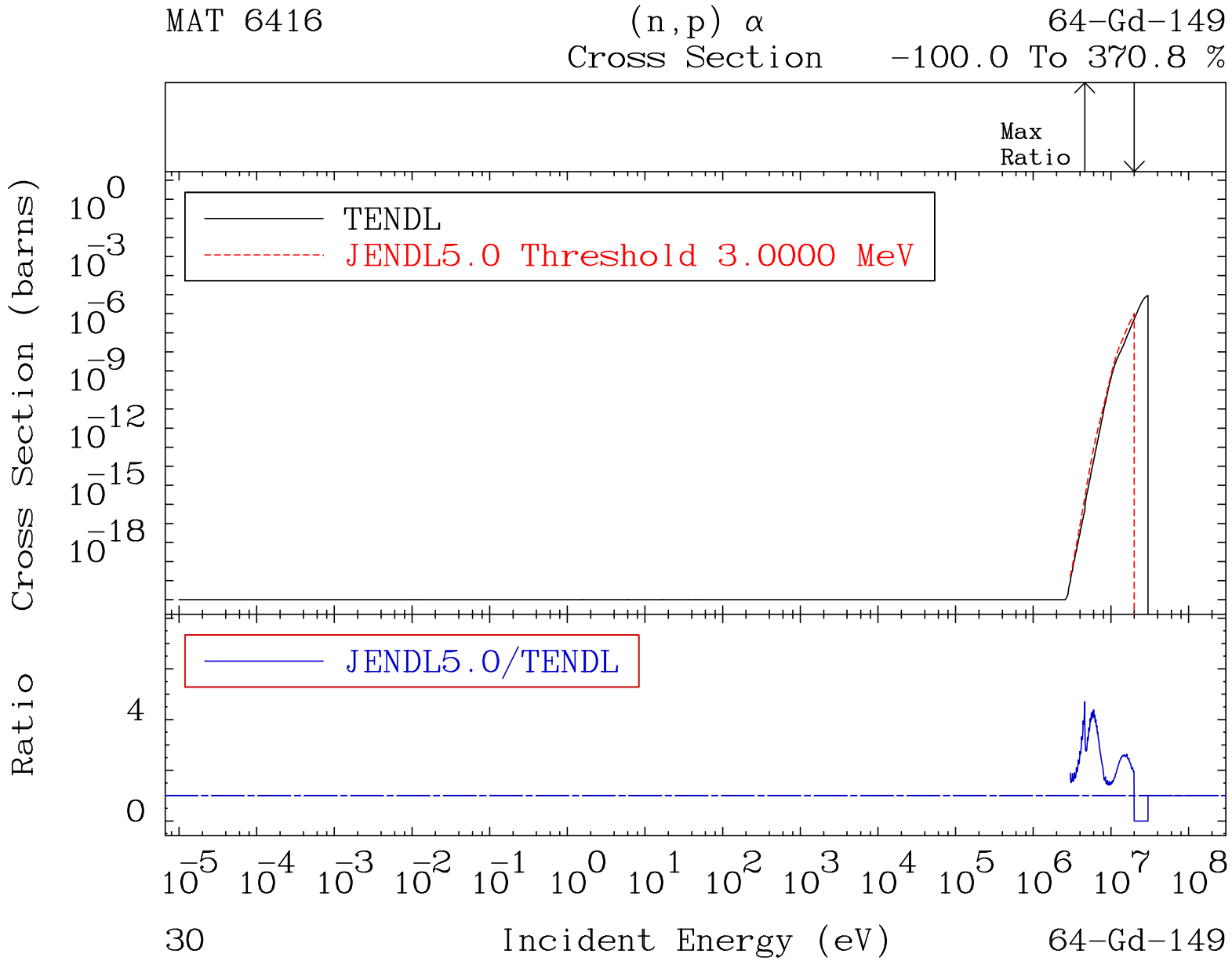

MAT 6416
(n,t)
Cross Section
64-Gd-149
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.4913 MeV
JENDL5.0 Threshold 4.4913 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
64-Gd-149

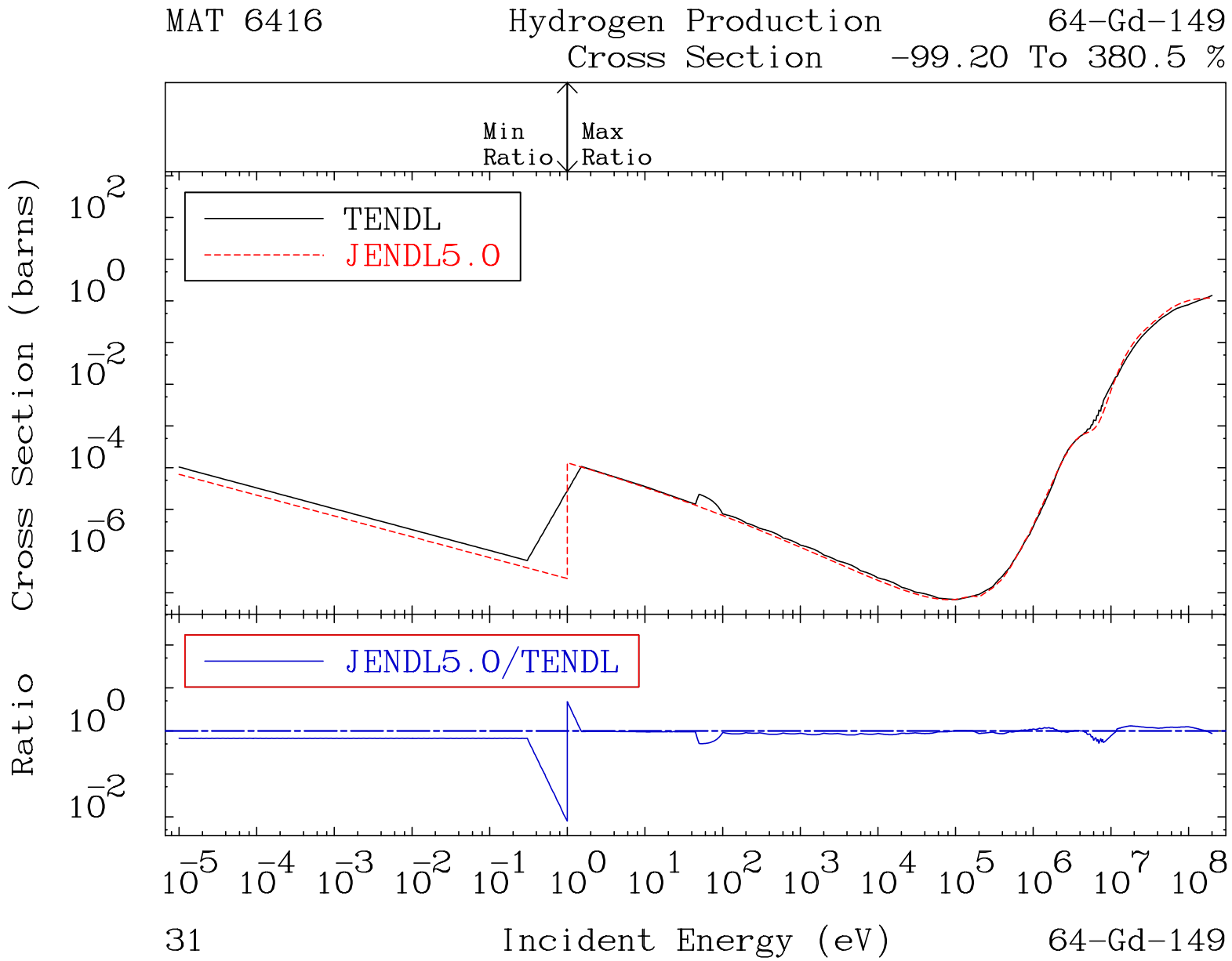

MAT 6416
(n,He-3)
64-Gd-149
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7395 MeV
JENDL5.0 Threshold 2.7390 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
400
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
64-Gd-149

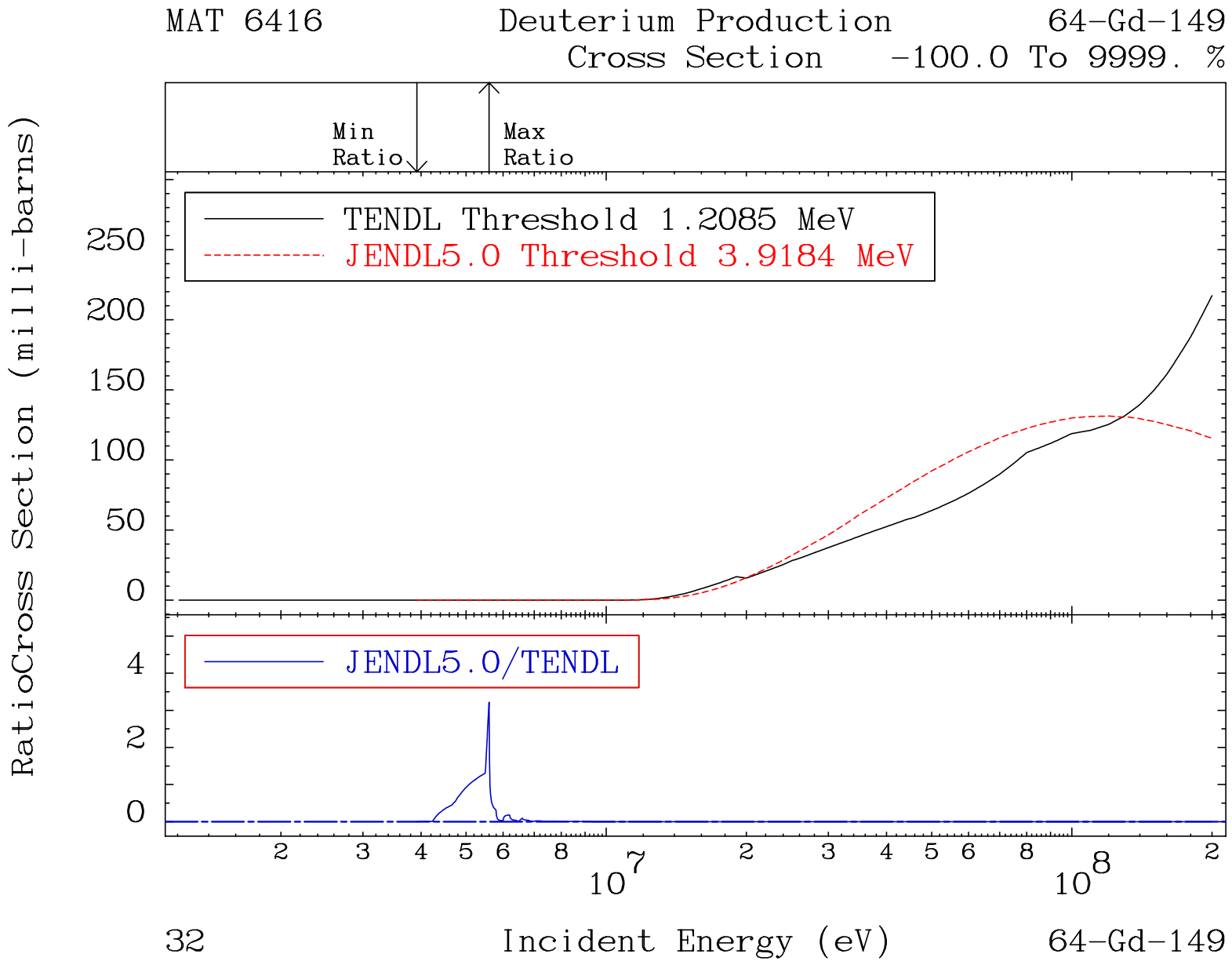

MAT 6416
(n,α)
64-Gd-149
Cross Section
-100.0 To 197.6 %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^0
10^-1
10^-2
10^-3
10^-4
JENDL5.0/TENDL
Ratio
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
64-Gd-149

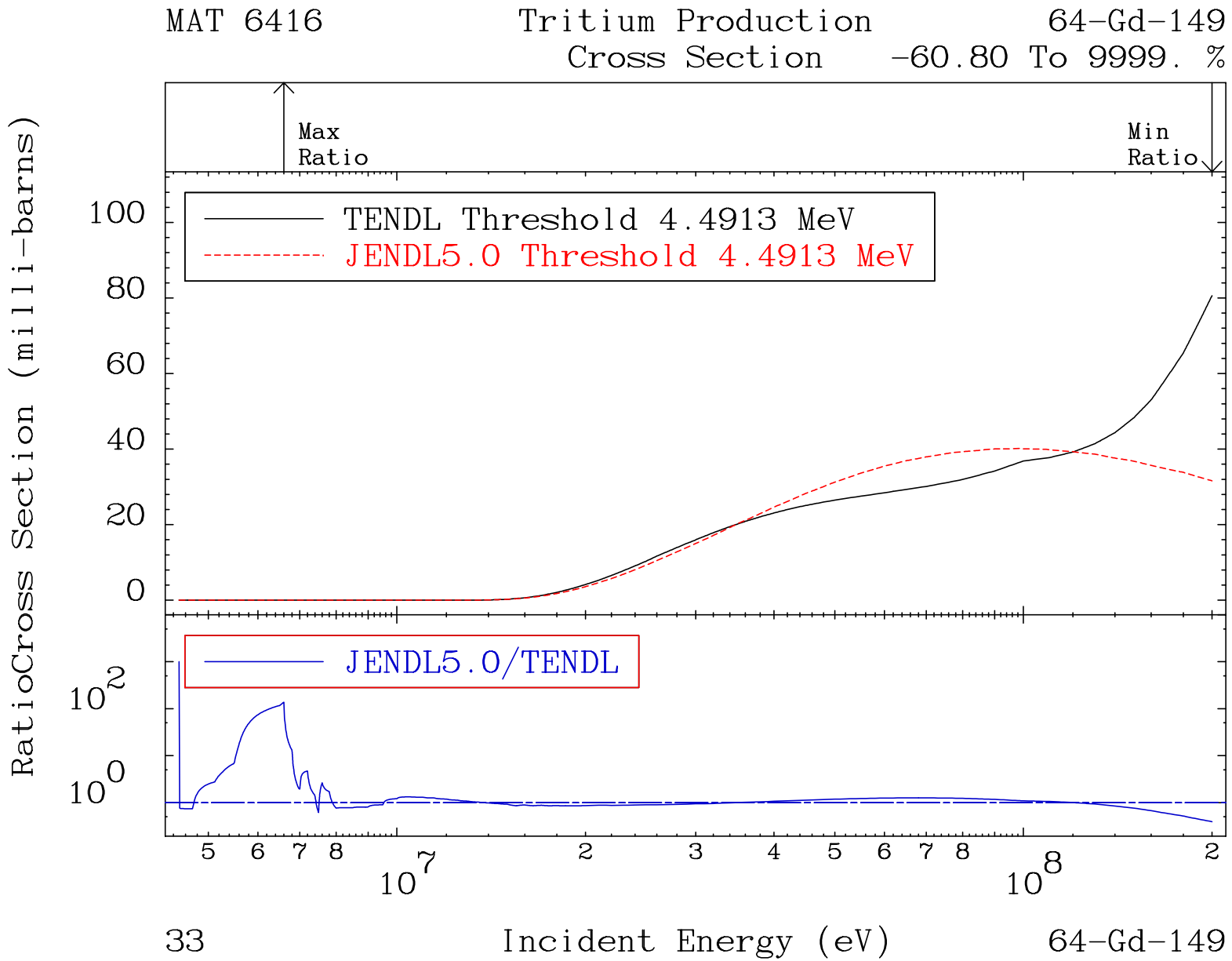

MAT 6416
(n,2α)
64-Gd-149
Cross Section
-100.0 To 236.0 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
4
2
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
64-Gd-149

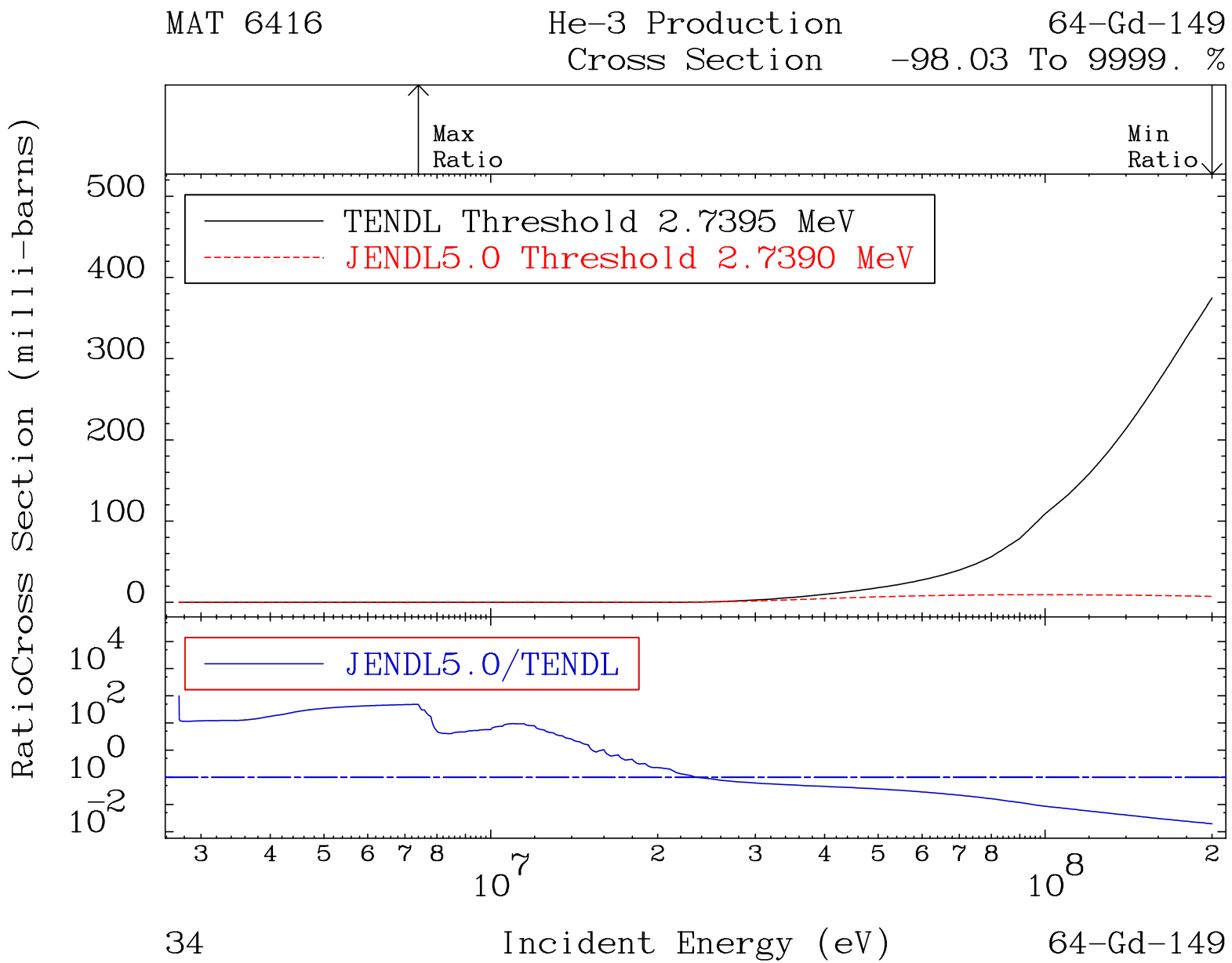

MAT 6416
(n,2p)
64-Gd-149
Cross Section
-100.0 To 6463. %
Max Ratio
Min Ratio
TENDL Threshold 2.3133 MeV
JENDL5.0 Threshold 2.3129 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
80
40
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
64-Gd-149

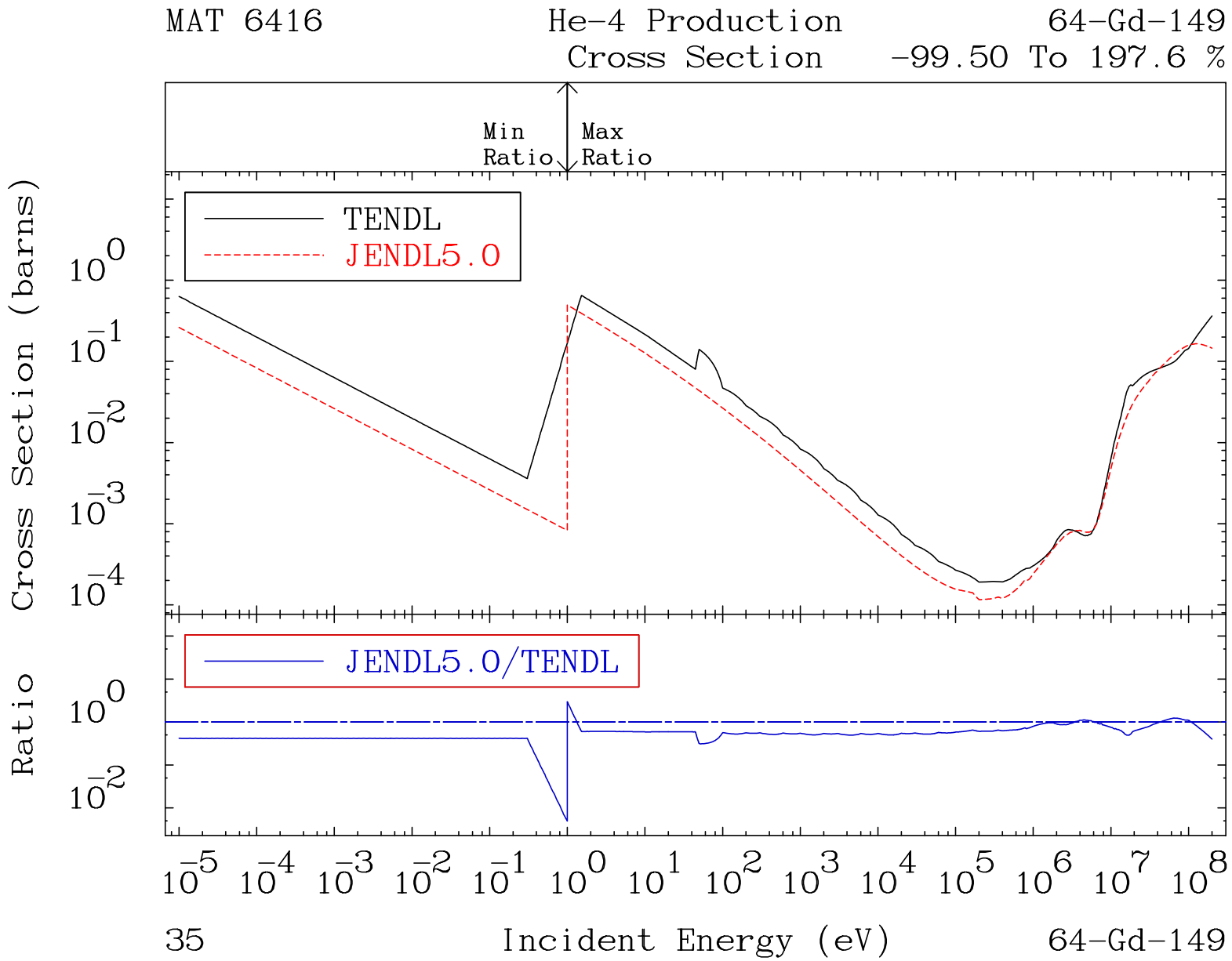

MAT 6416
(n,p) α
Cross Section
64-Gd-149
-100.0 To 370.8 %
Max
Ratio
TENDL
JENDL5.0 Threshold 3.0000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
30
64-Gd-149

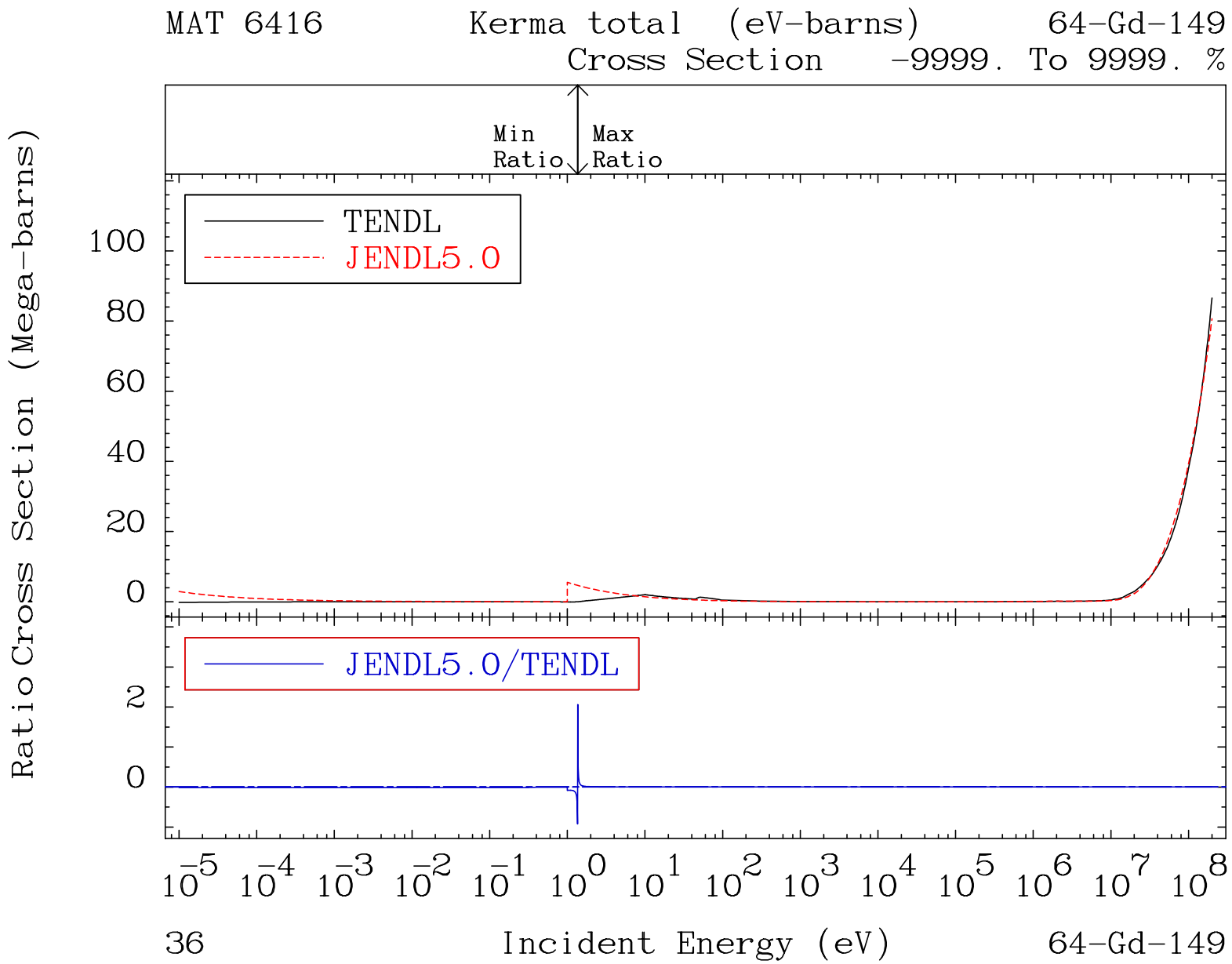

MAT 6416
Hydrogen Production
64-Gd-149
Cross Section
-99.20 To 380.5 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
64-Gd-149

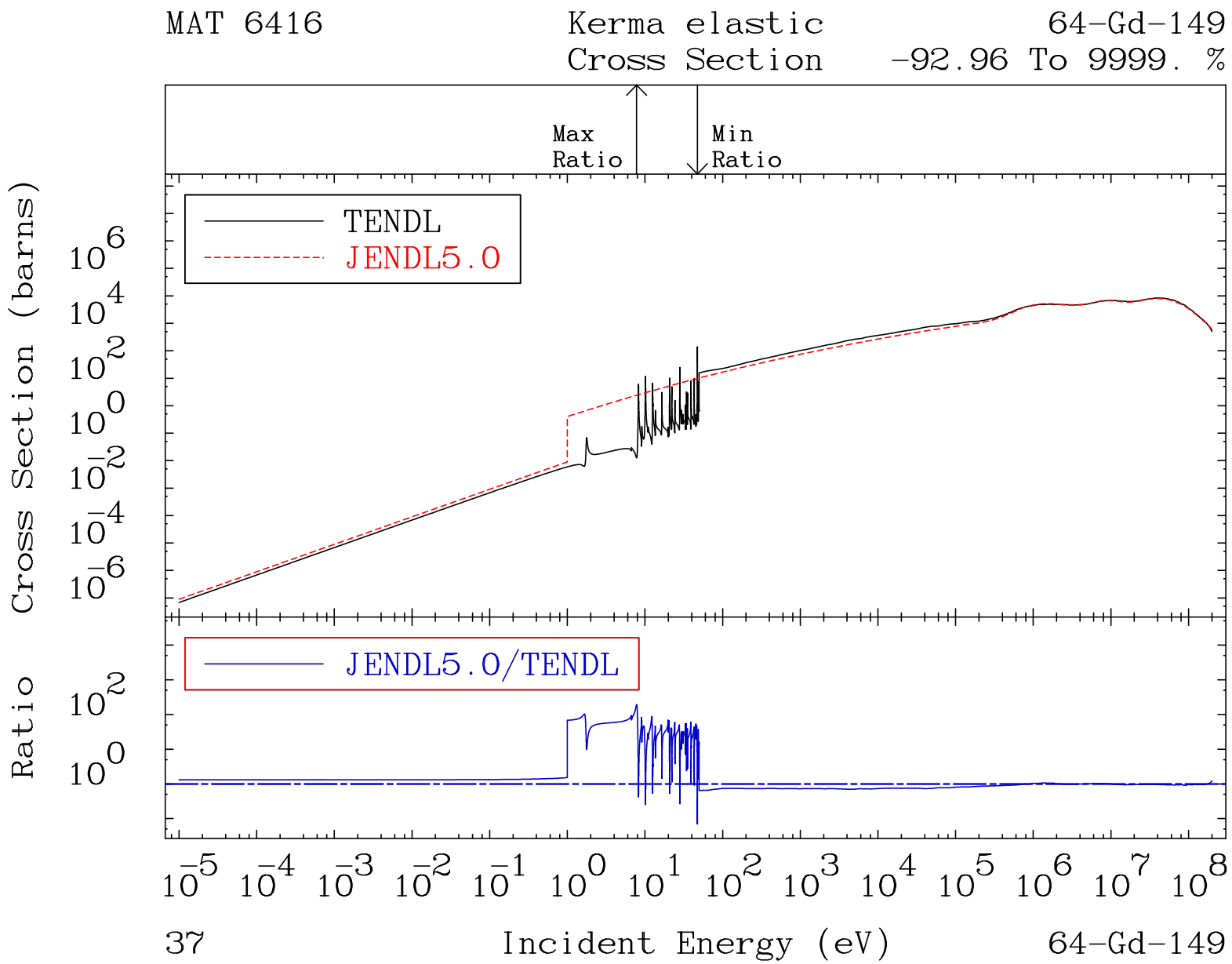

MAT 6416
Deuterium Production
64-Gd-149
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2085 MeV
JENDL5.0 Threshold 3.9184 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
32
Incident Energy (eV)
64-Gd-149

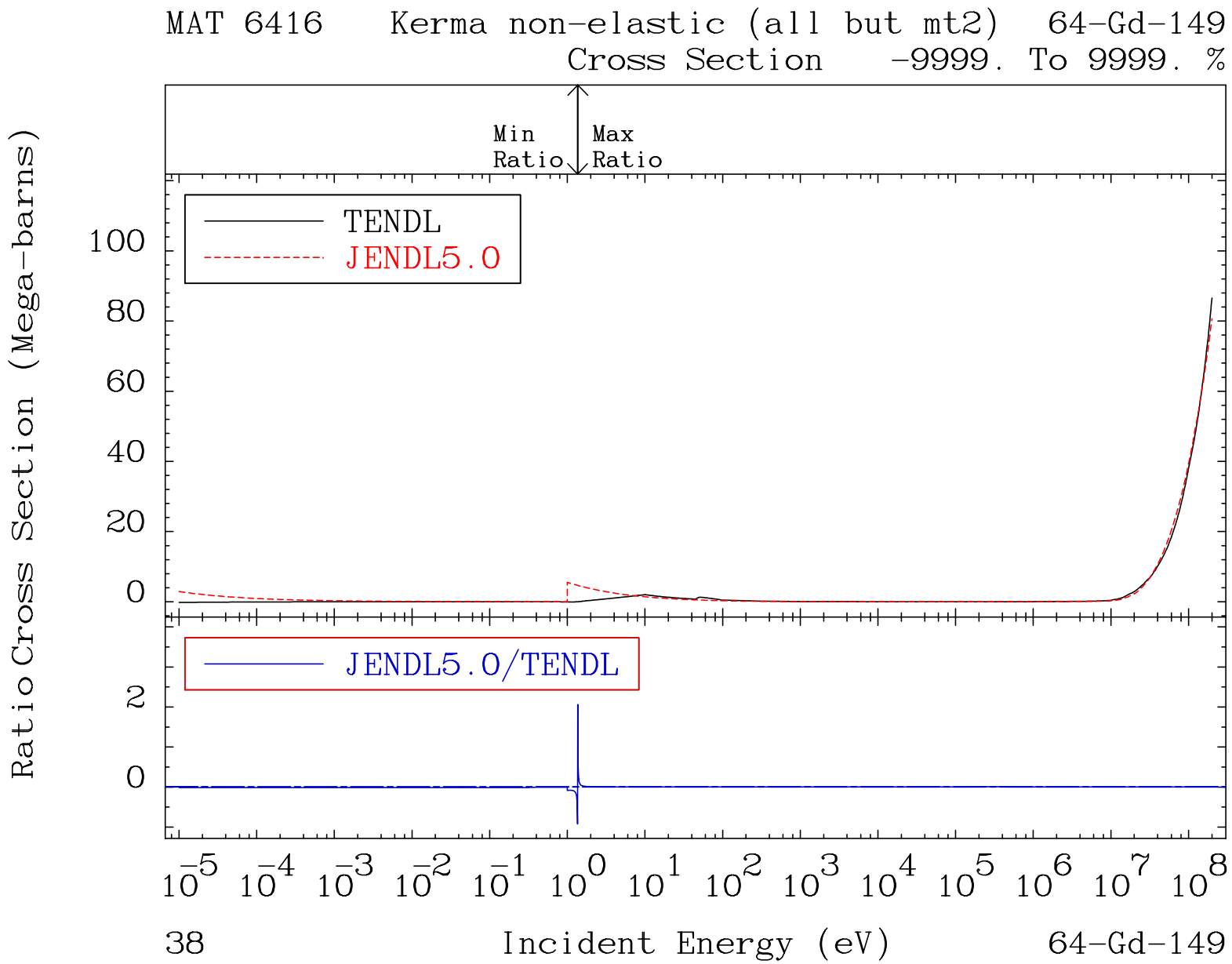

MAT 6416
Tritium Production
64-Gd-149
Cross Section
-60.80 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.4913 MeV
JENDL5.0 Threshold 4.4913 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^2
10^0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
64-Gd-149

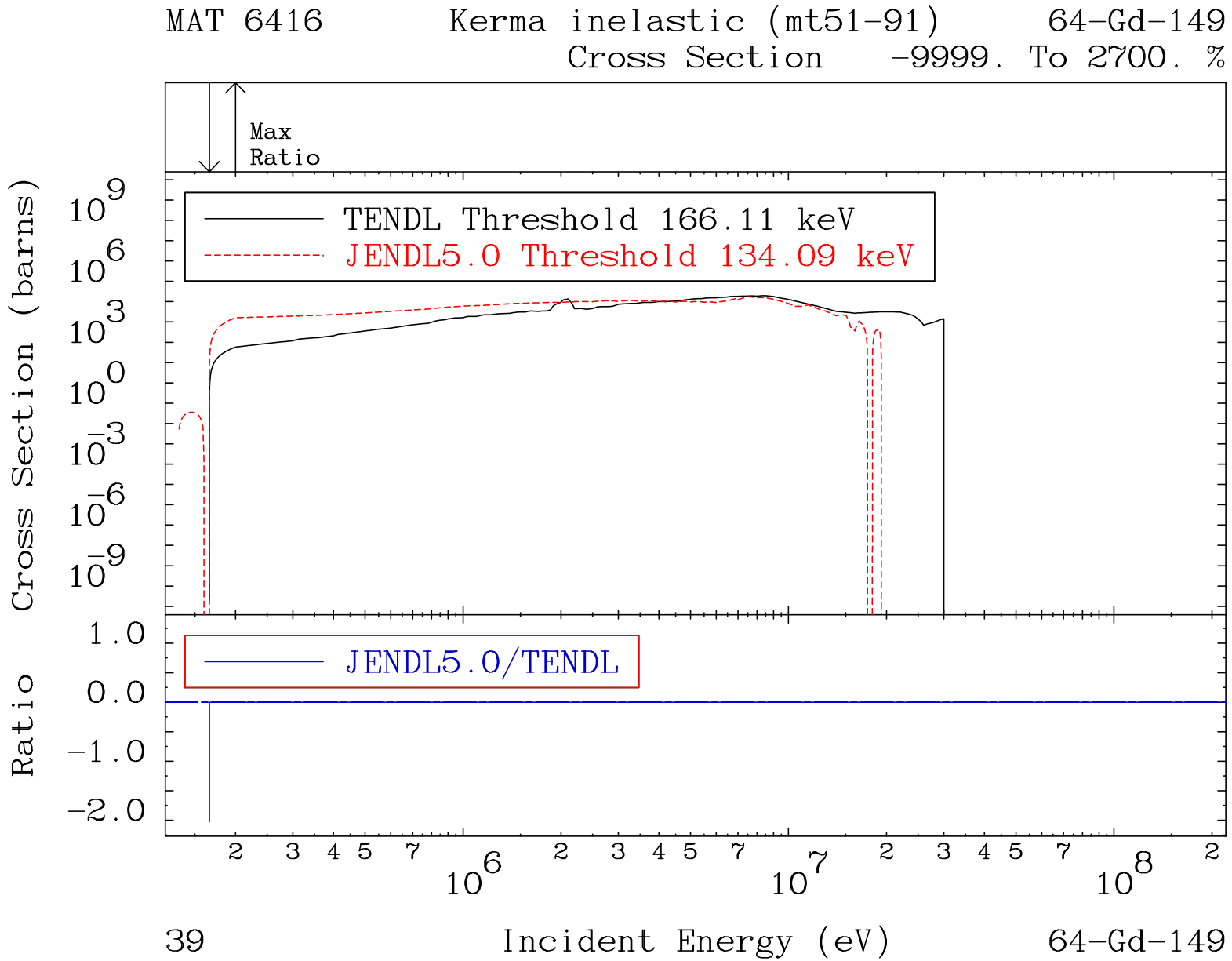

MAT 6416
He-3 Production
Cross Section
64-Gd-149
-98.03 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.7395 MeV
JENDL5.0 Threshold 2.7390 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
10^4
10^2
10^0
10^-2
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
64-Gd-149

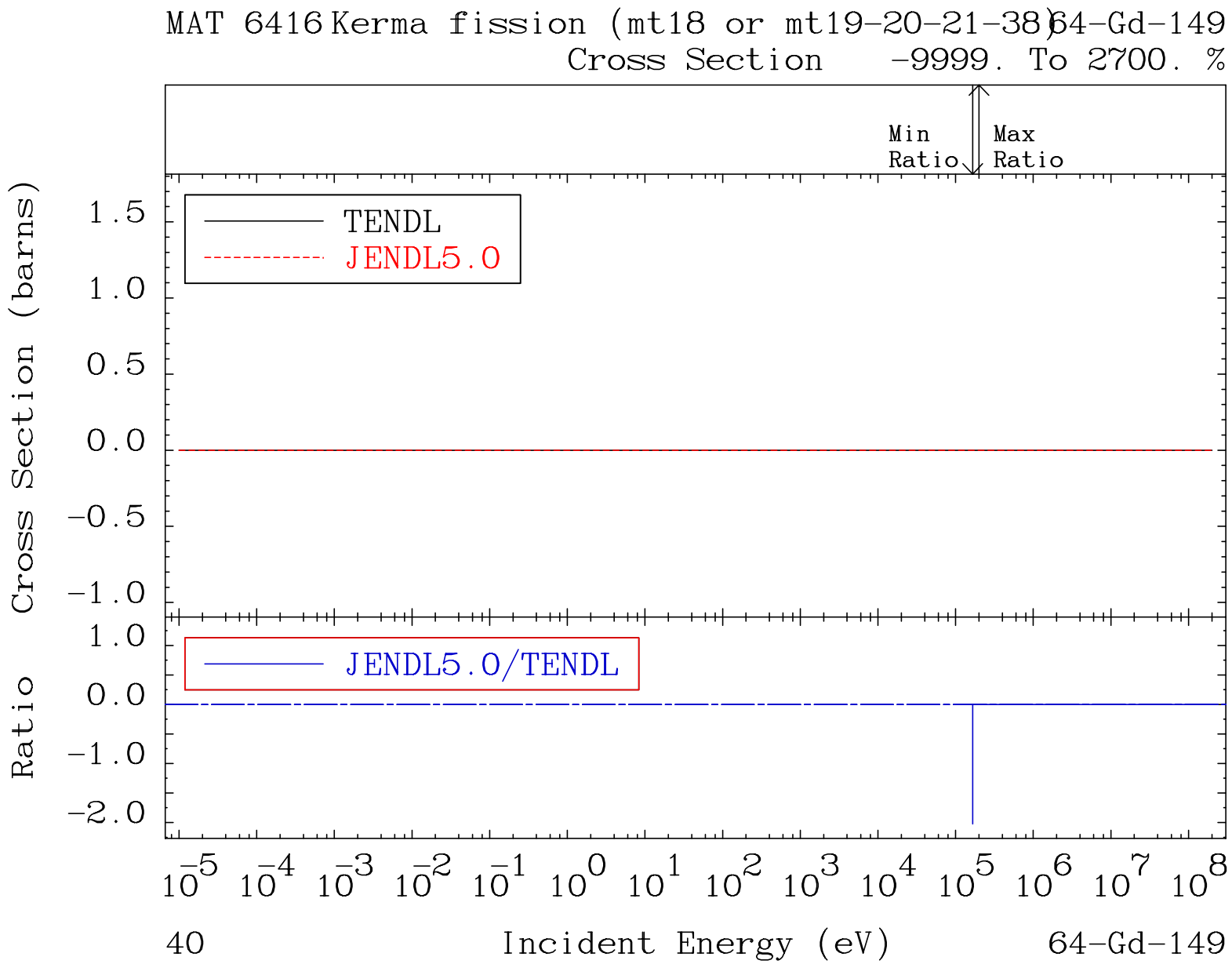

MAT 6416
He-4 Production
Cross Section
64-Gd-149
-99.50 To 197.6 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
35
64-Gd-149

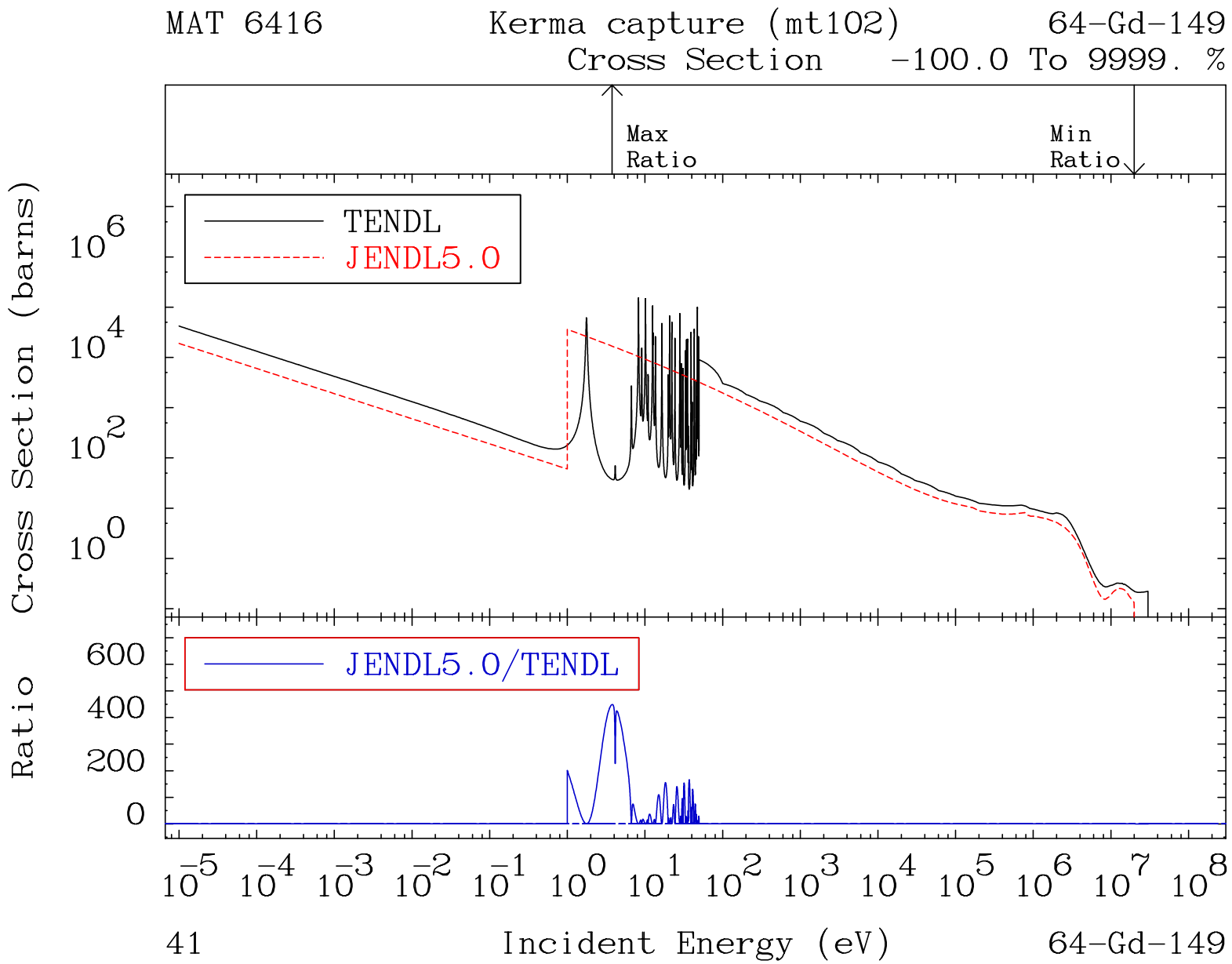

MAT 6416
Kerma total (eV-barns)
64-Gd-149
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
100
80
60
40
20
0
2
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
Incident Energy (eV)

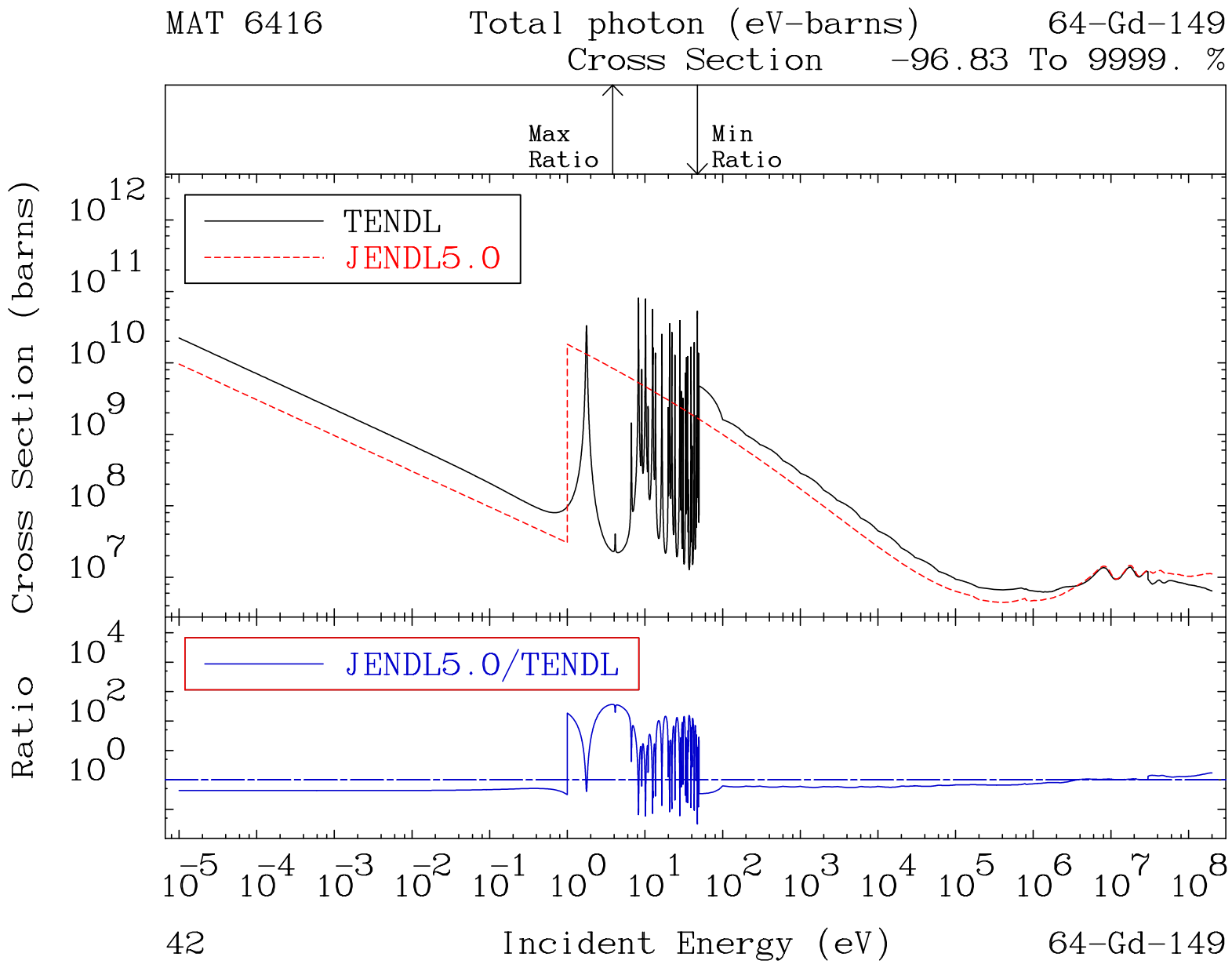

MAT 6416
Kerma elastic
Cross Section
64-Gd-149
-92.96 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
37
64-Gd-149

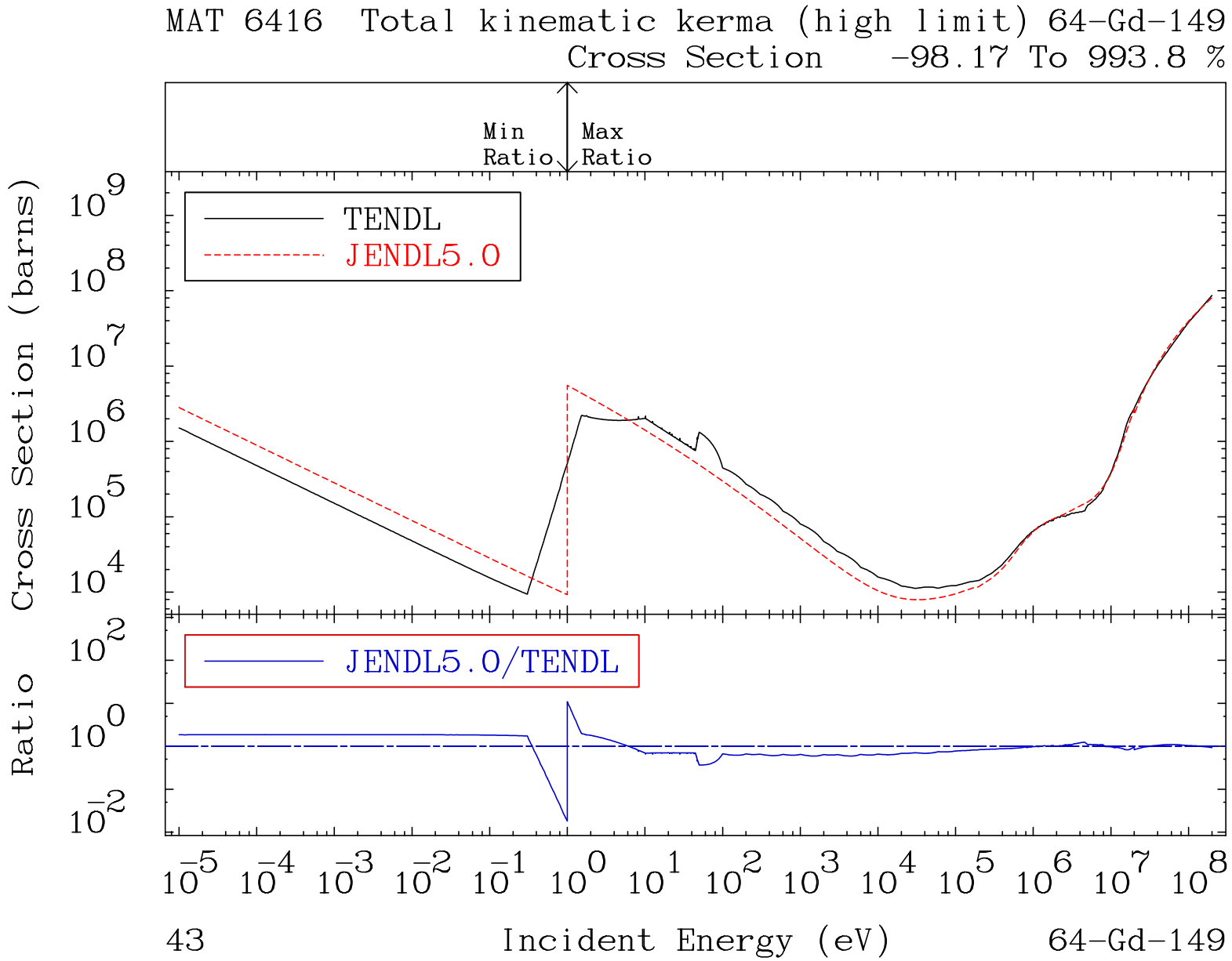

MAT 6416 Kerma non-elastic (all but mt2) 64-Gd-149
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Ratio Cross Section (Mega-barns)
100
80
60
40
20
0
2
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
38
Incident Energy (eV)
64-Gd-149

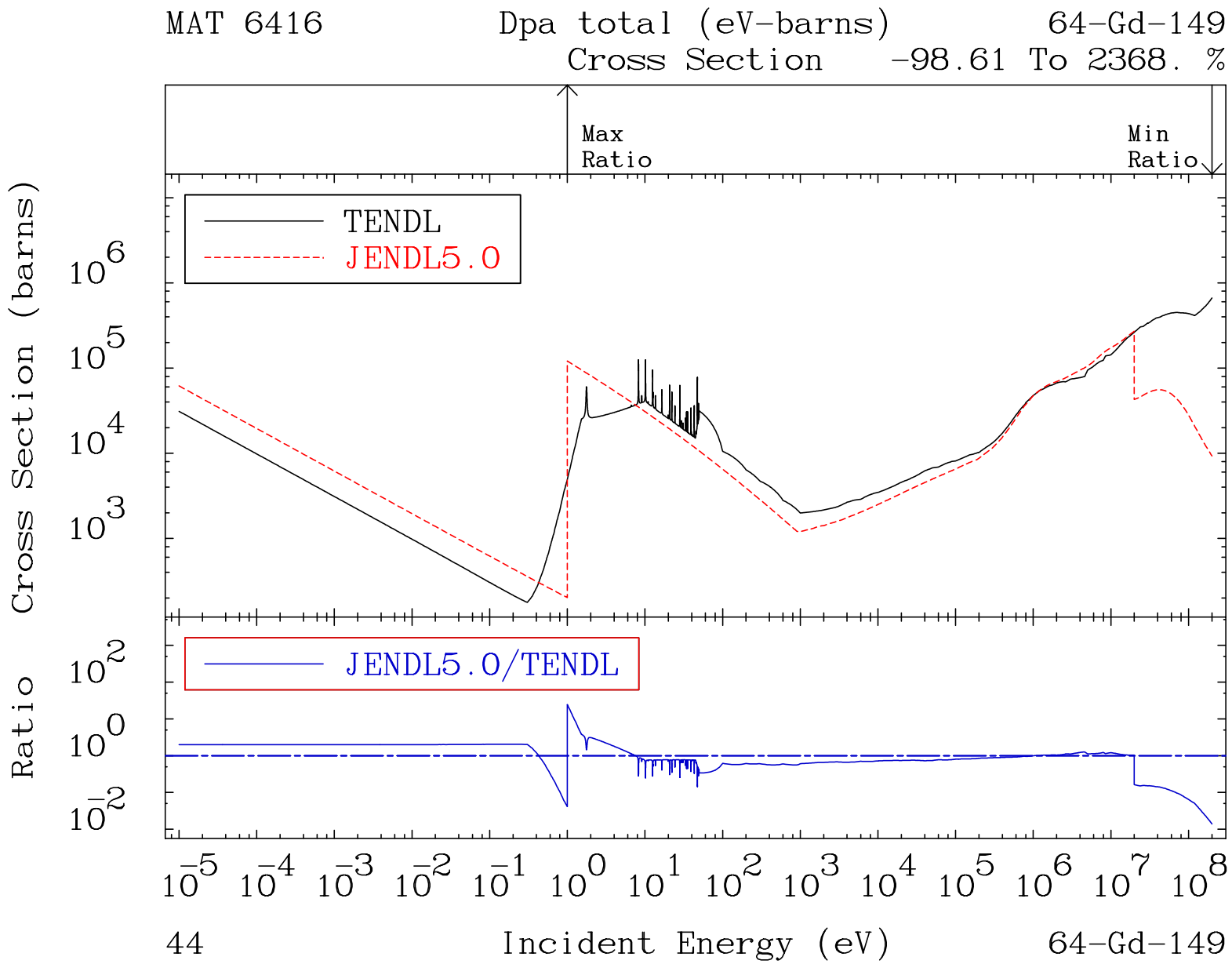

MAT 6416
Kerma inelastic (mt51-91)
64-Gd-149
Cross Section -9999. To 2700. %
Max
Ratio
TENDL Threshold 166.11 keV
JENDL5.0 Threshold 134.09 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
39
64-Gd-149

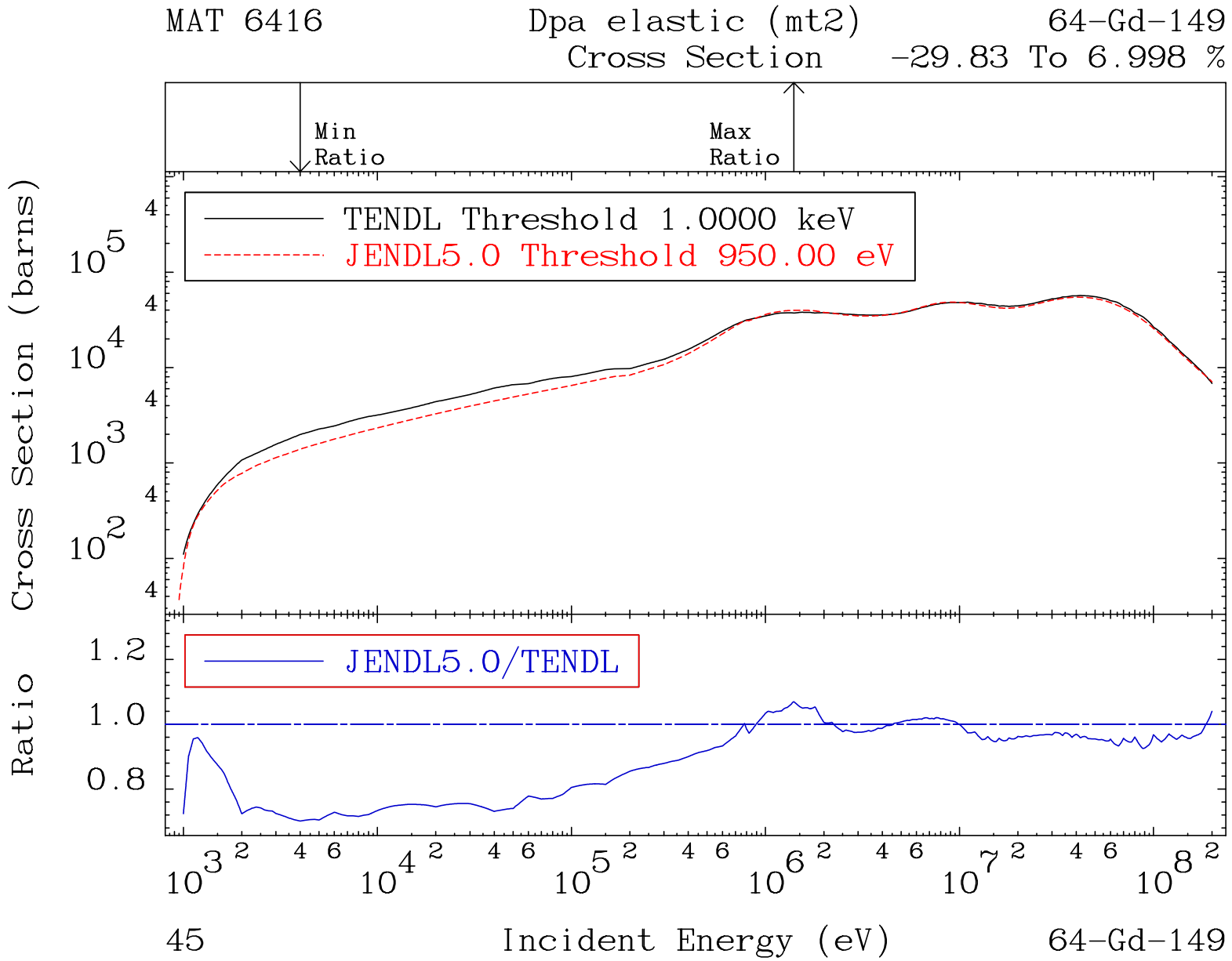

MAT 6416 Kerma fission (mt18 or mt19-20-21-38) 64-Gd-149
Cross Section -9999. To 2700. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.0
0.0
-1.0
-2.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
40
64-Gd-149

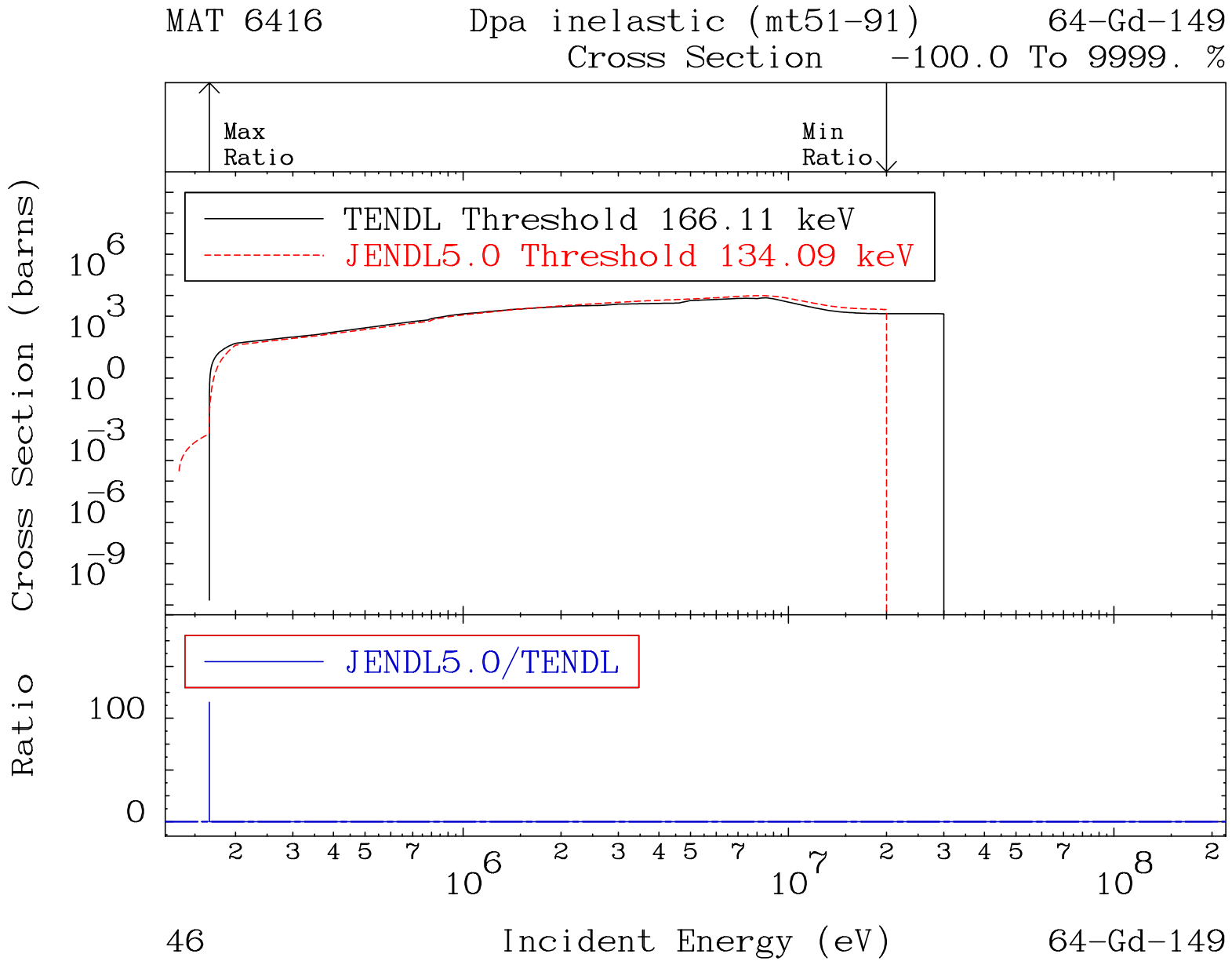

MAT 6416
Kerma capture (mt102)
64-Gd-149
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^6
10^4
10^2
10^0
JENDL5.0/TENDL
Ratio
600
400
200
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
41
Incident Energy (eV)
64-Gd-149

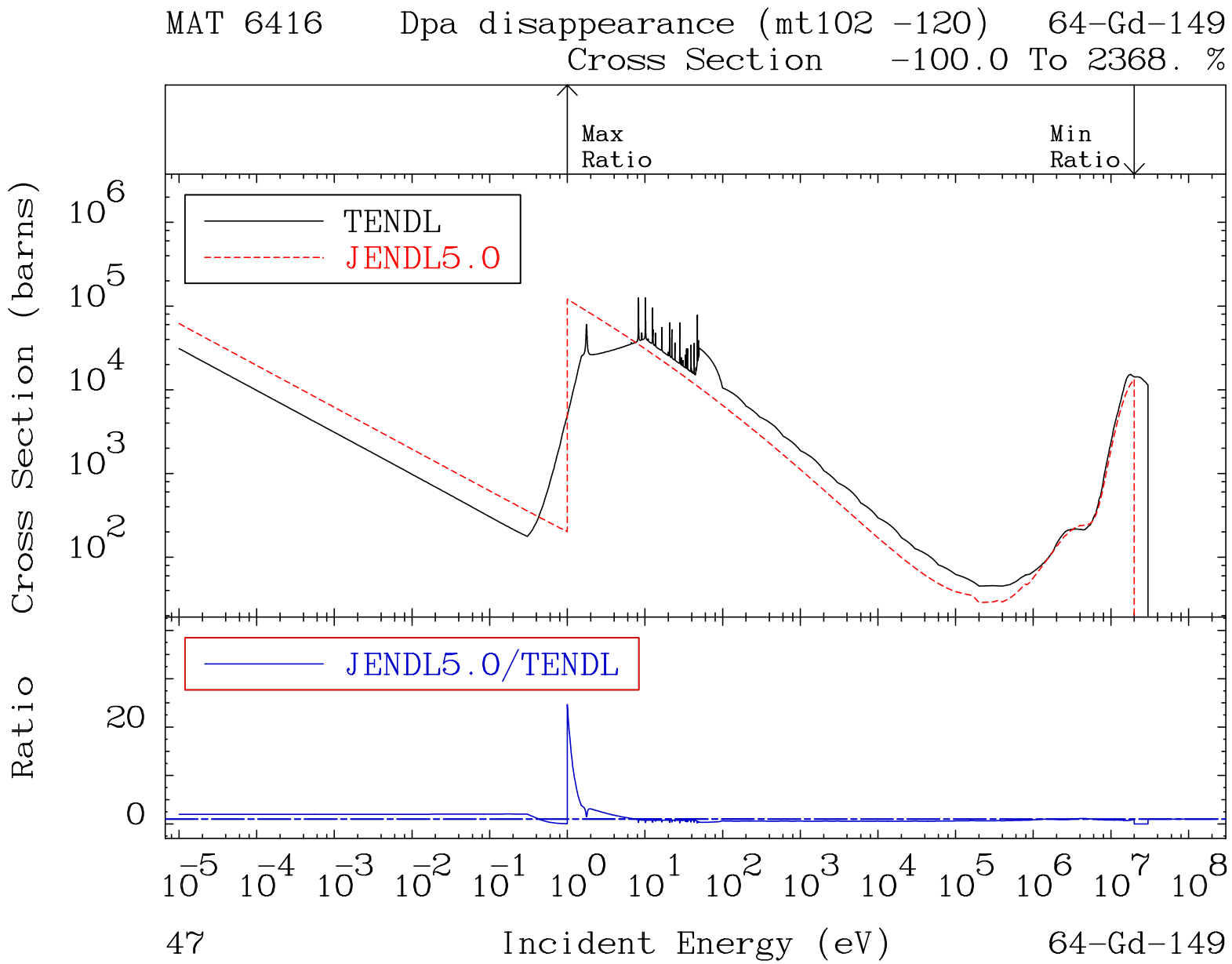

MAT 6416
Total photon (eV-barns)
64-Gd-149
Cross Section -96.83 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
42
64-Gd-149

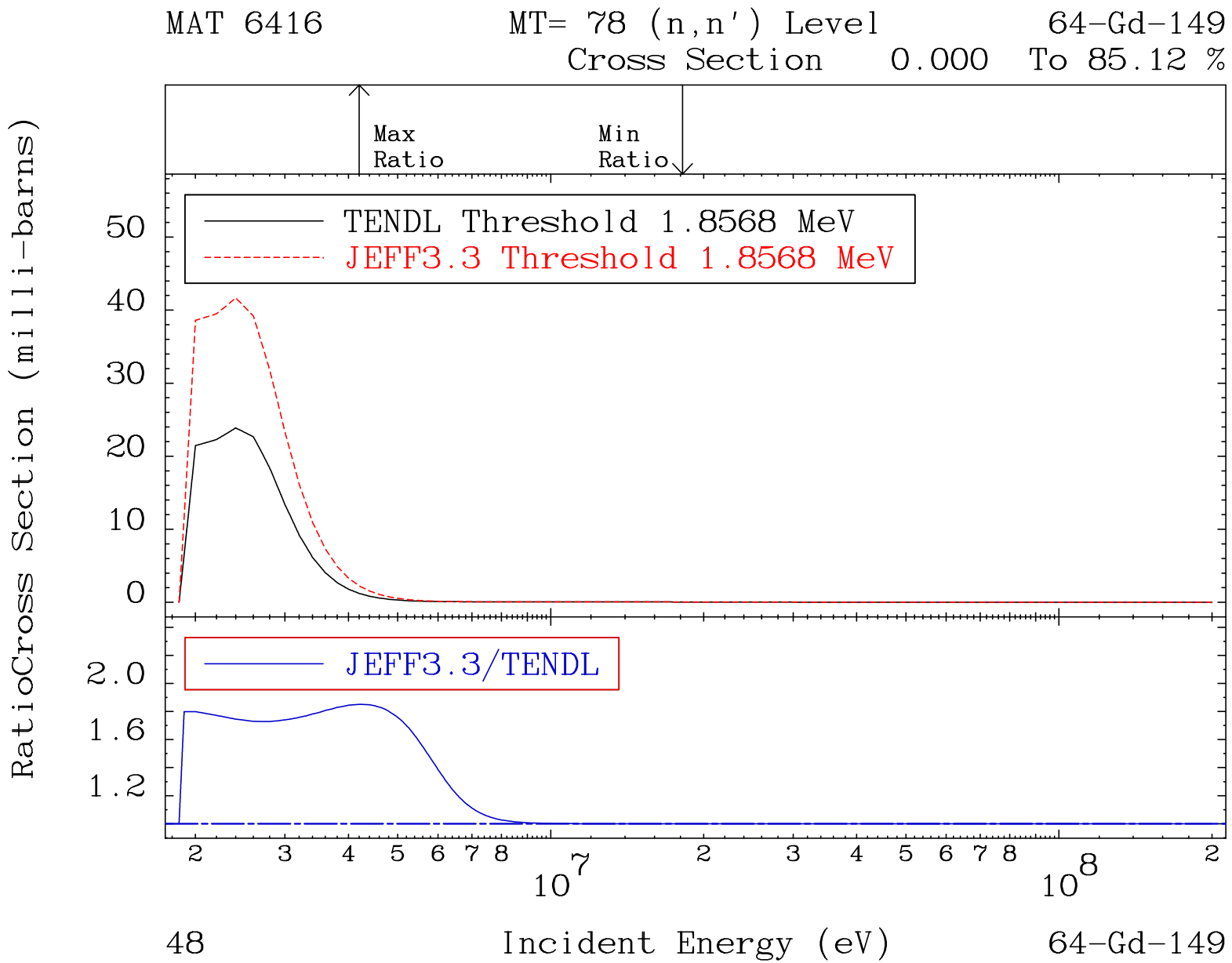

MAT 6416 Total kinematic kerma (high limit) 64-Gd-149
Cross Section -98.17 To 993.8 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
64-Gd-149

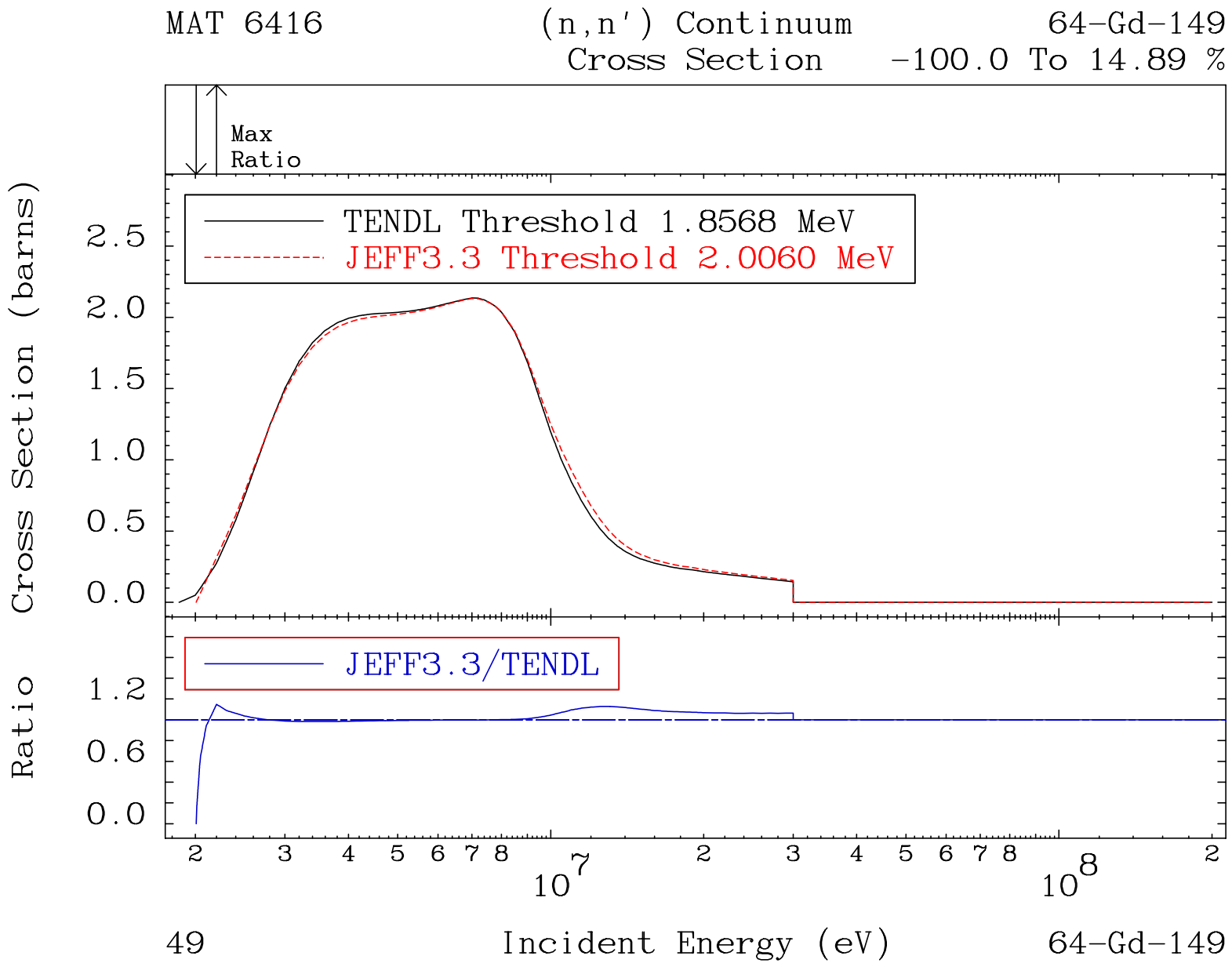

MAT 6416
Dpa total (eV-barns)
64-Gd-149
Cross Section -98.61 To 2368. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
64-Gd-149

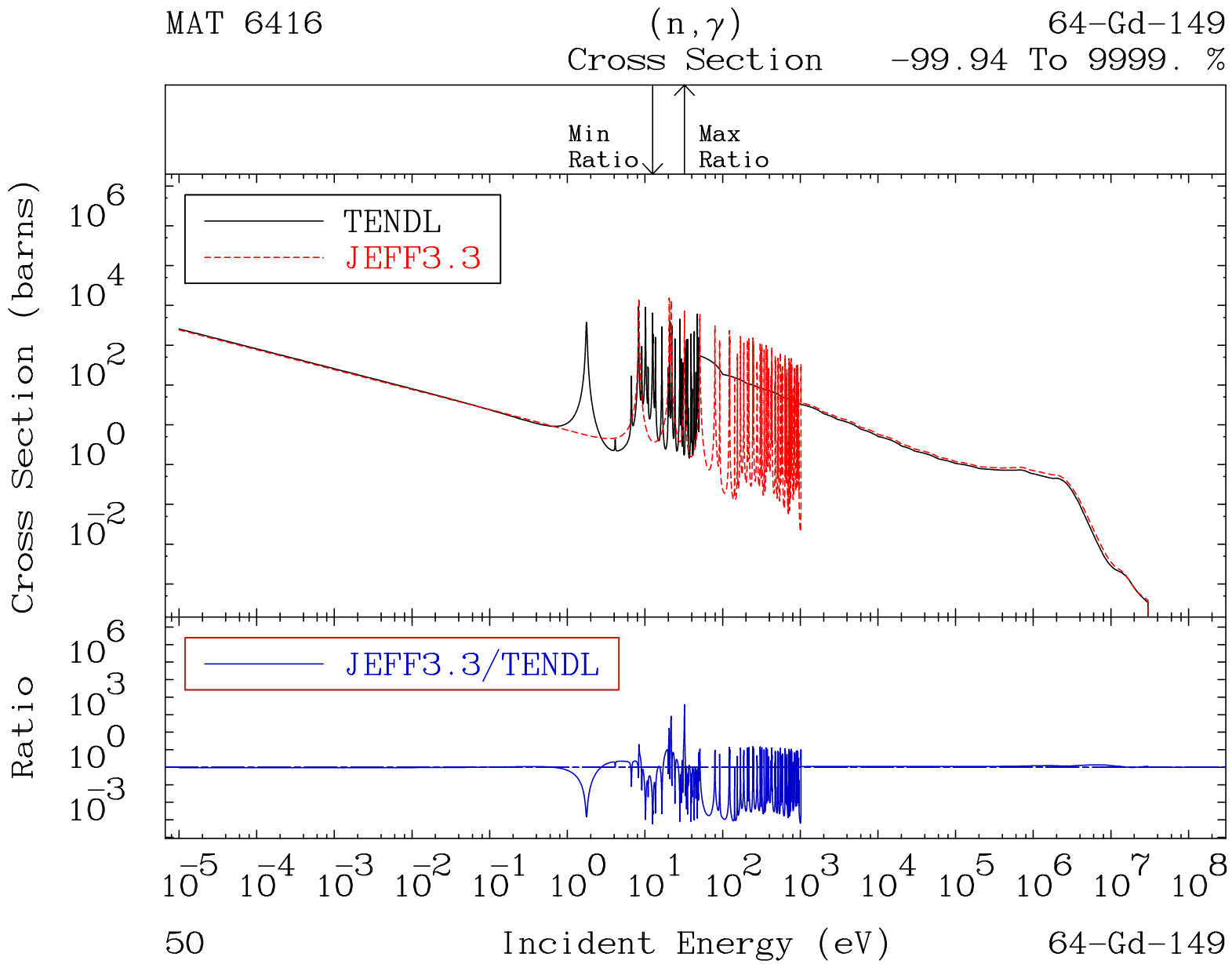

MAT 6416
Dpa elastic (mt2)
Cross Section
64-Gd-149
-29.83 To 6.998 %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0000 keV
JENDL5.0 Threshold 950.00 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
64-Gd-149

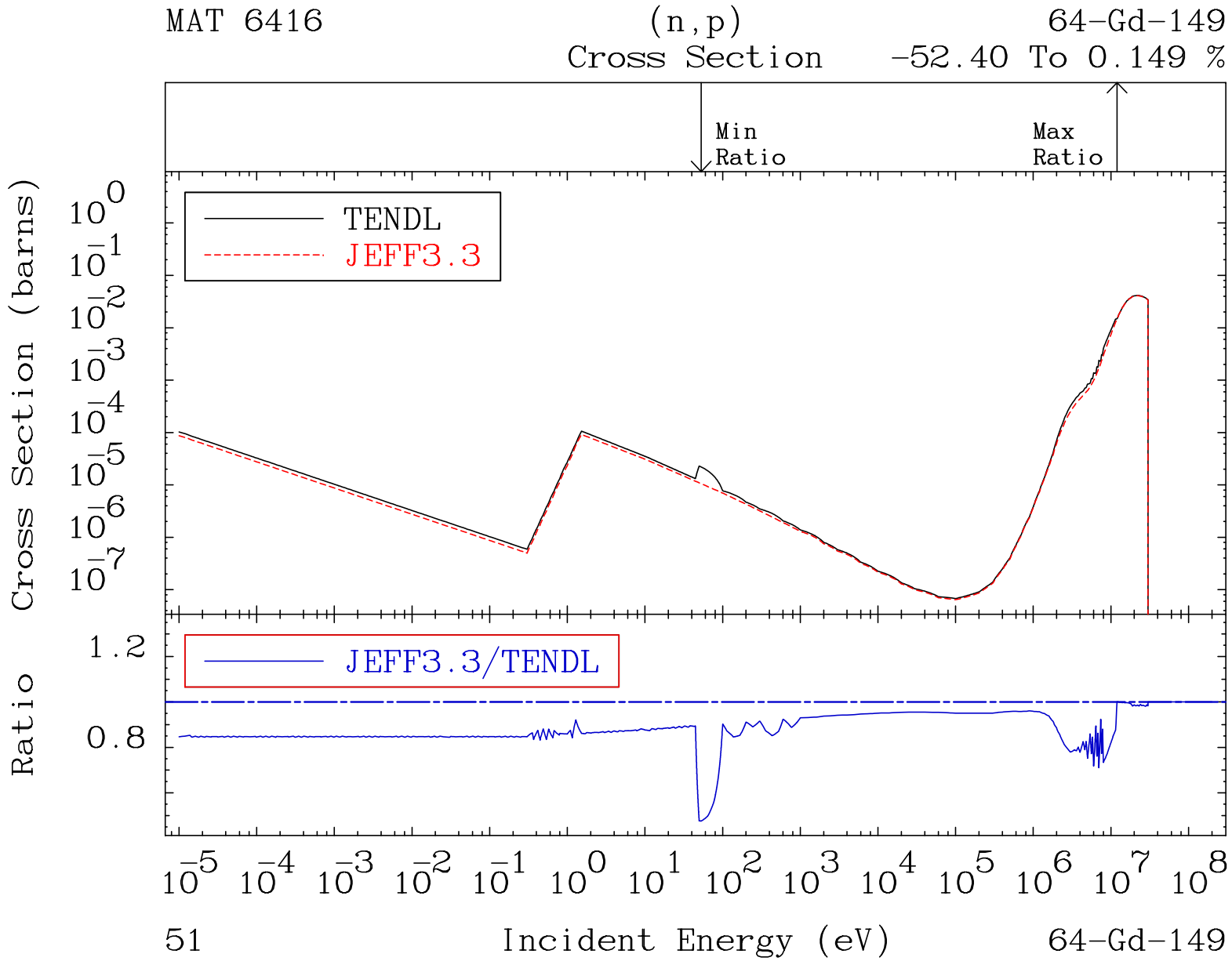

MAT 6416
Dpa inelastic (mt51-91)
64-Gd-149
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 166.11 keV
JENDL5.0 Threshold 134.09 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
46
64-Gd-149

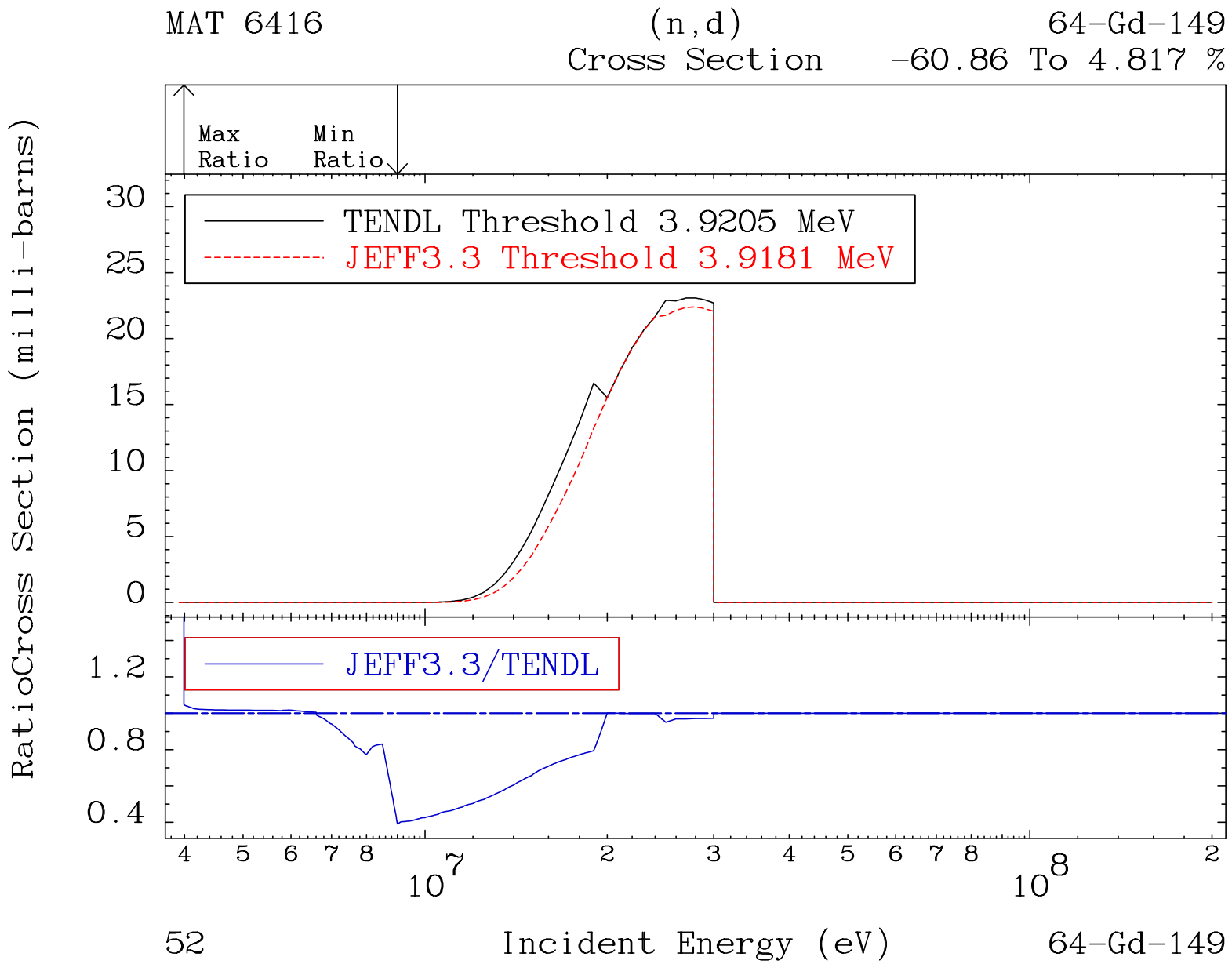

MAT 6416 Dpa disappearance (mt102 -120) 64-Gd-149
Cross Section -100.0 To 2368. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
64-Gd-149

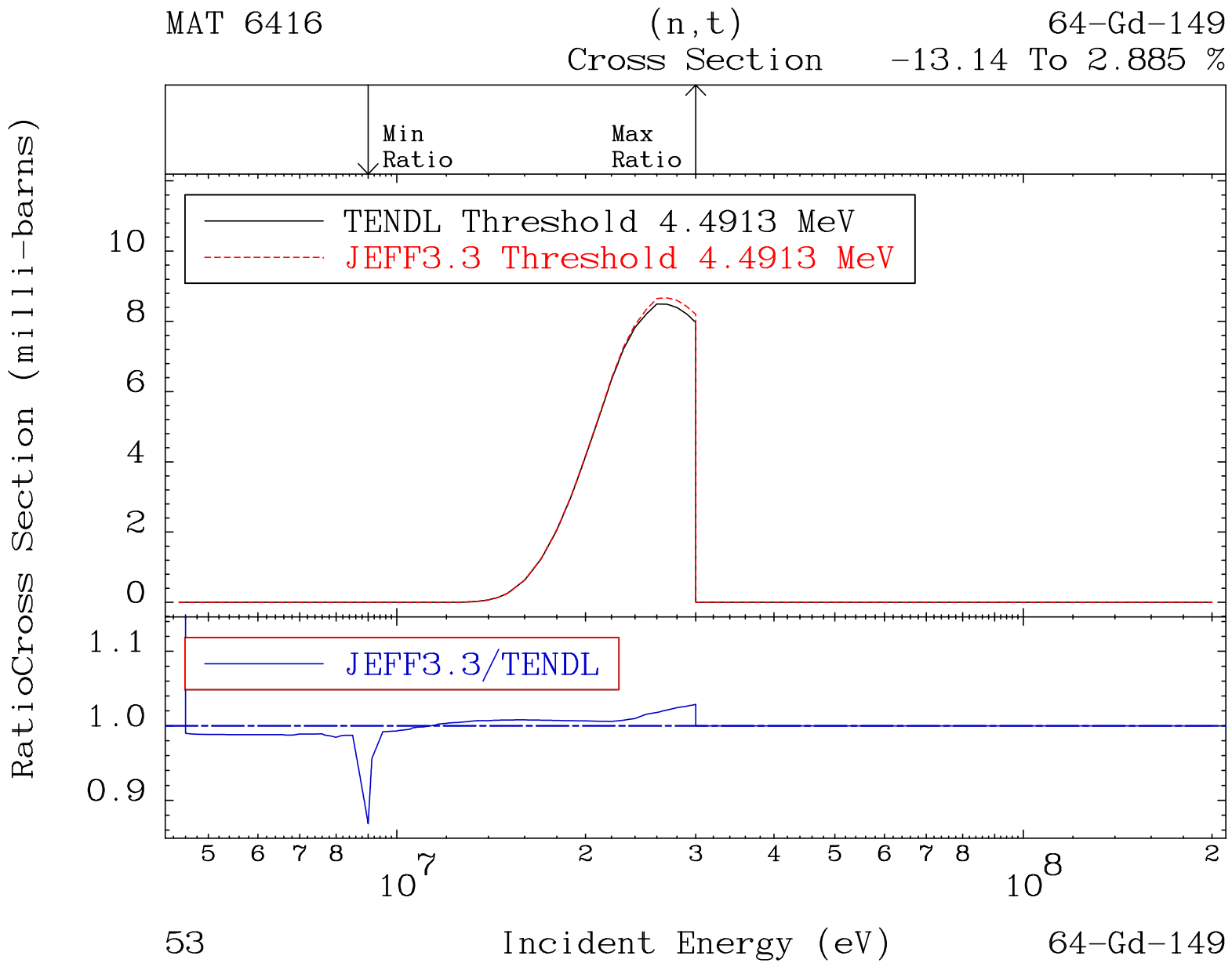

MAT 6416
MT= 78 (n,n') Level
64-Gd-149
Cross Section 0.000 To 85.12 %
Max Ratio
Min Ratio
TENDL Threshold 1.8568 MeV
JEFF3.3 Threshold 1.8568 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.6
1.2
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
64-Gd-149

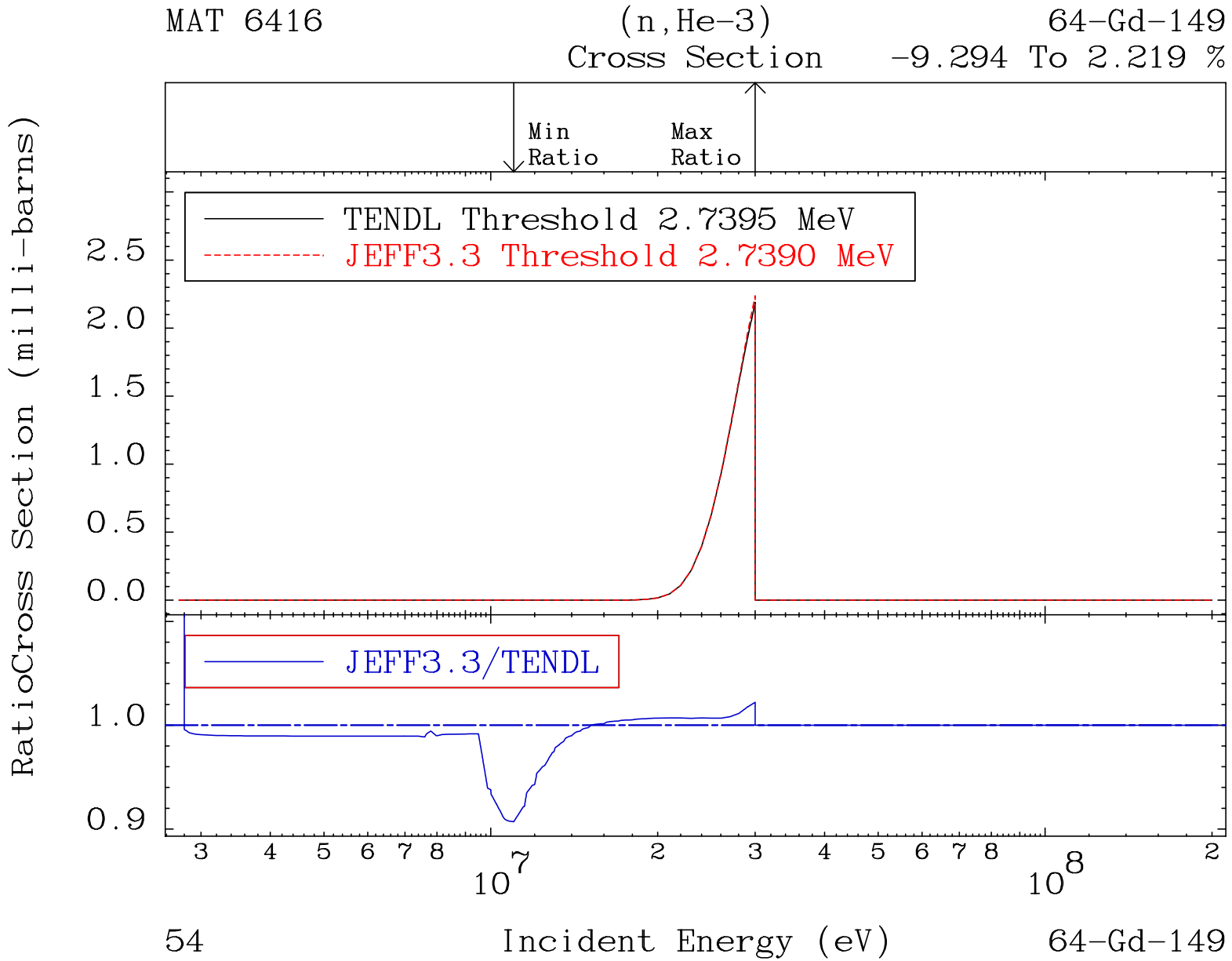

MAT 6416
(n,n') Continuum
Cross Section
64-Gd-149
-100.0 To 14.89 %
Max
Ratio
TENDL Threshold 1.8568 MeV
JEFF3.3 Threshold 2.0060 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
49
Incident Energy (eV)
64-Gd-149

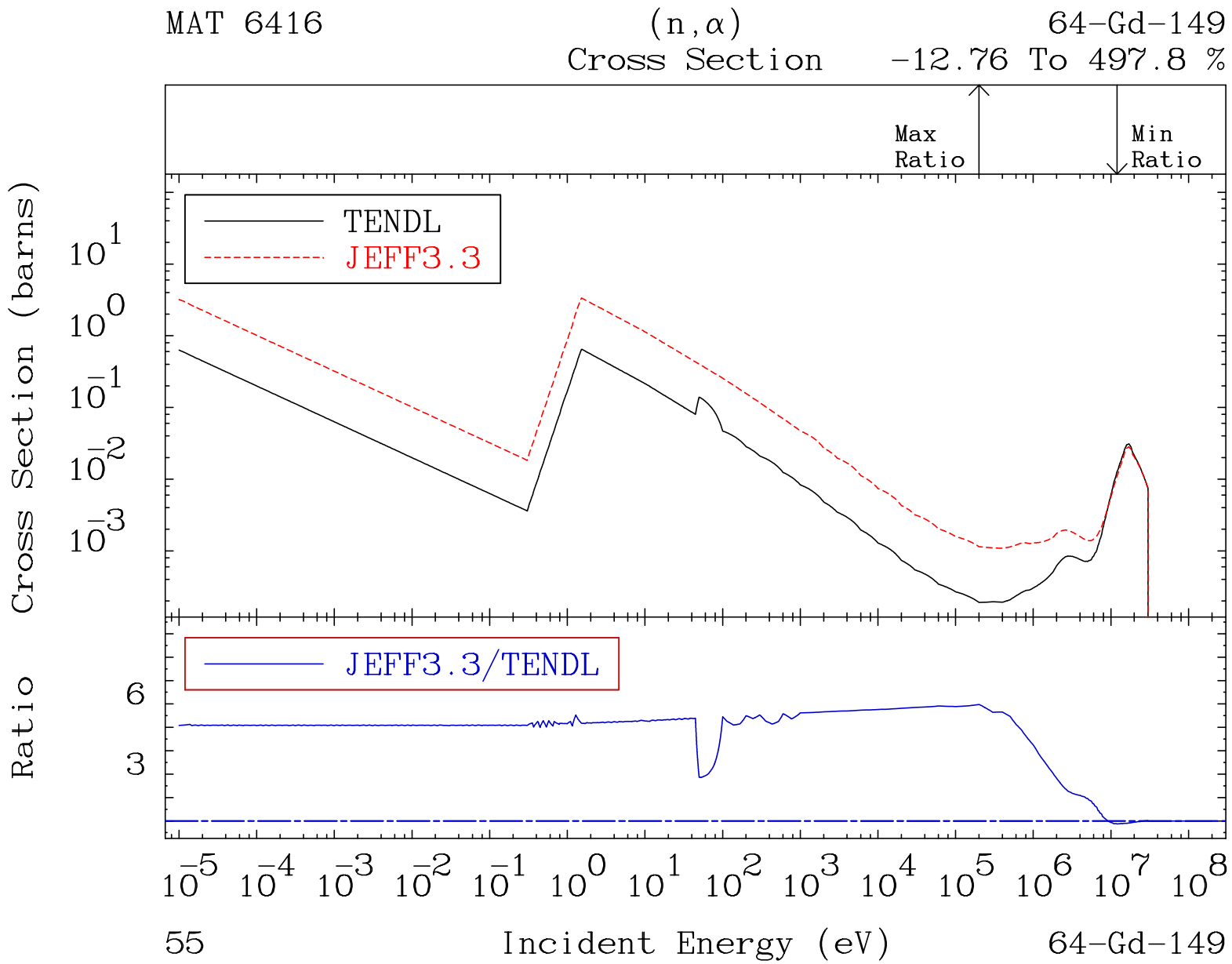

MAT 6416
(n,γ)
64-Gd-149
Cross Section
-99.94 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
64-Gd-149

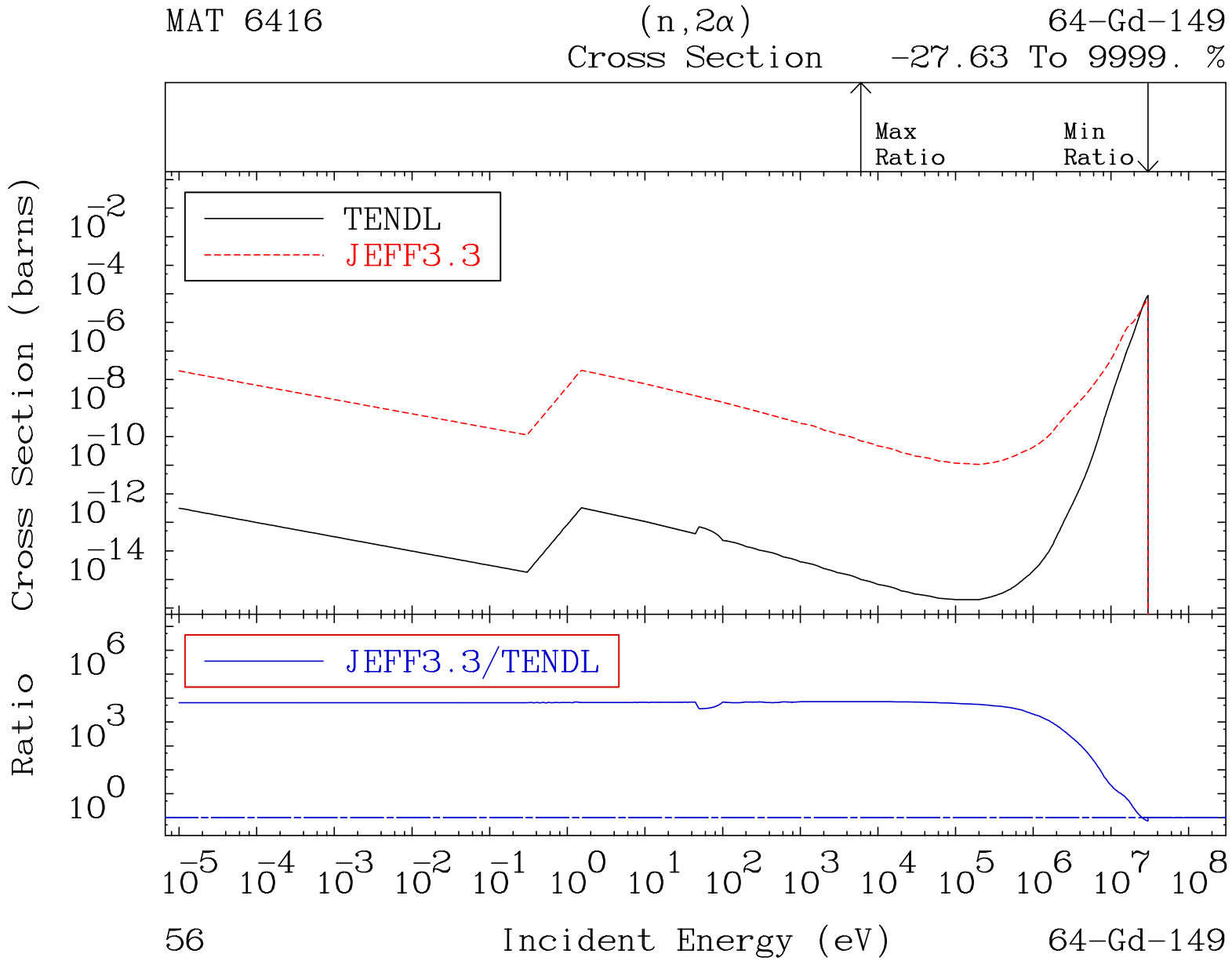

MAT 6416
(n,p)
Cross Section
64-Gd-149
-52.40 To 0.149 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
51
64-Gd-149

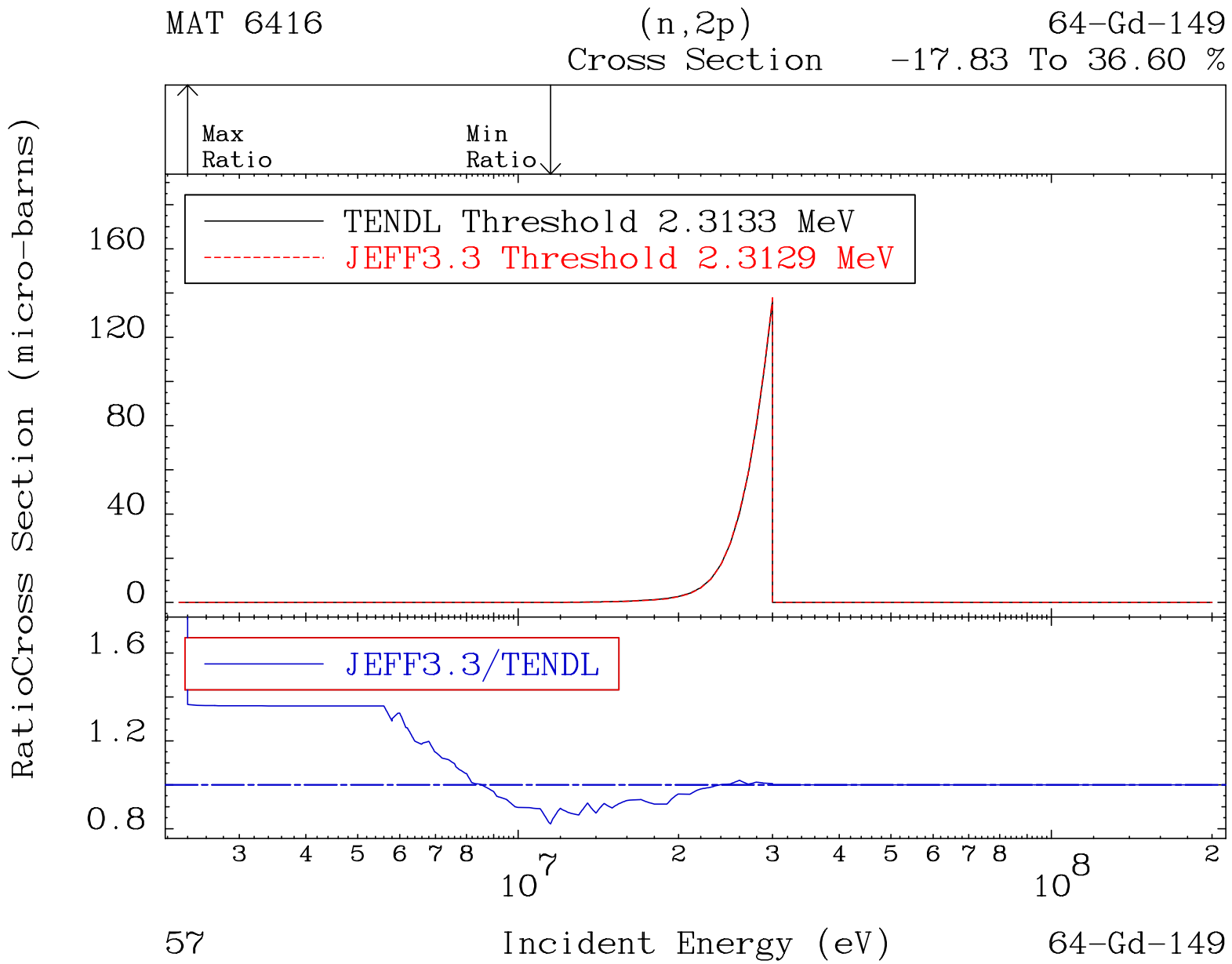

MAT 6416
(n,d)
Cross Section
64-Gd-149
-60.86 To 4.817 %
Max Ratio
Min Ratio
TENDL Threshold 3.9205 MeV
JEFF3.3 Threshold 3.9181 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.8
0.4
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
52
Incident Energy (eV)
64-Gd-149

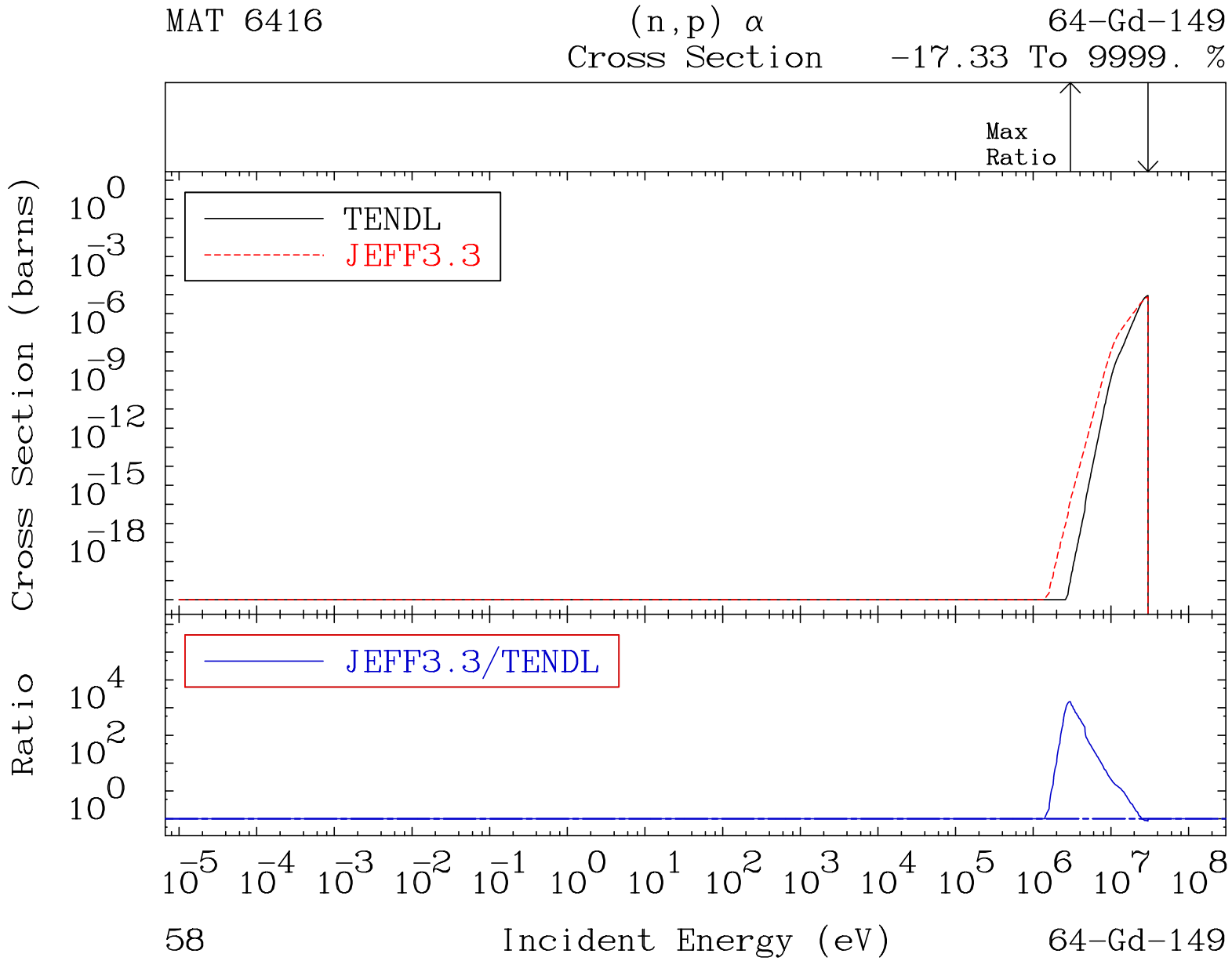

MAT 6416
(n,t)
Cross Section
64-Gd-149
-13.14 To 2.885 %
Min Ratio
Max Ratio
TENDL Threshold 4.4913 MeV
JEFF3.3 Threshold 4.4913 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
53
64-Gd-149

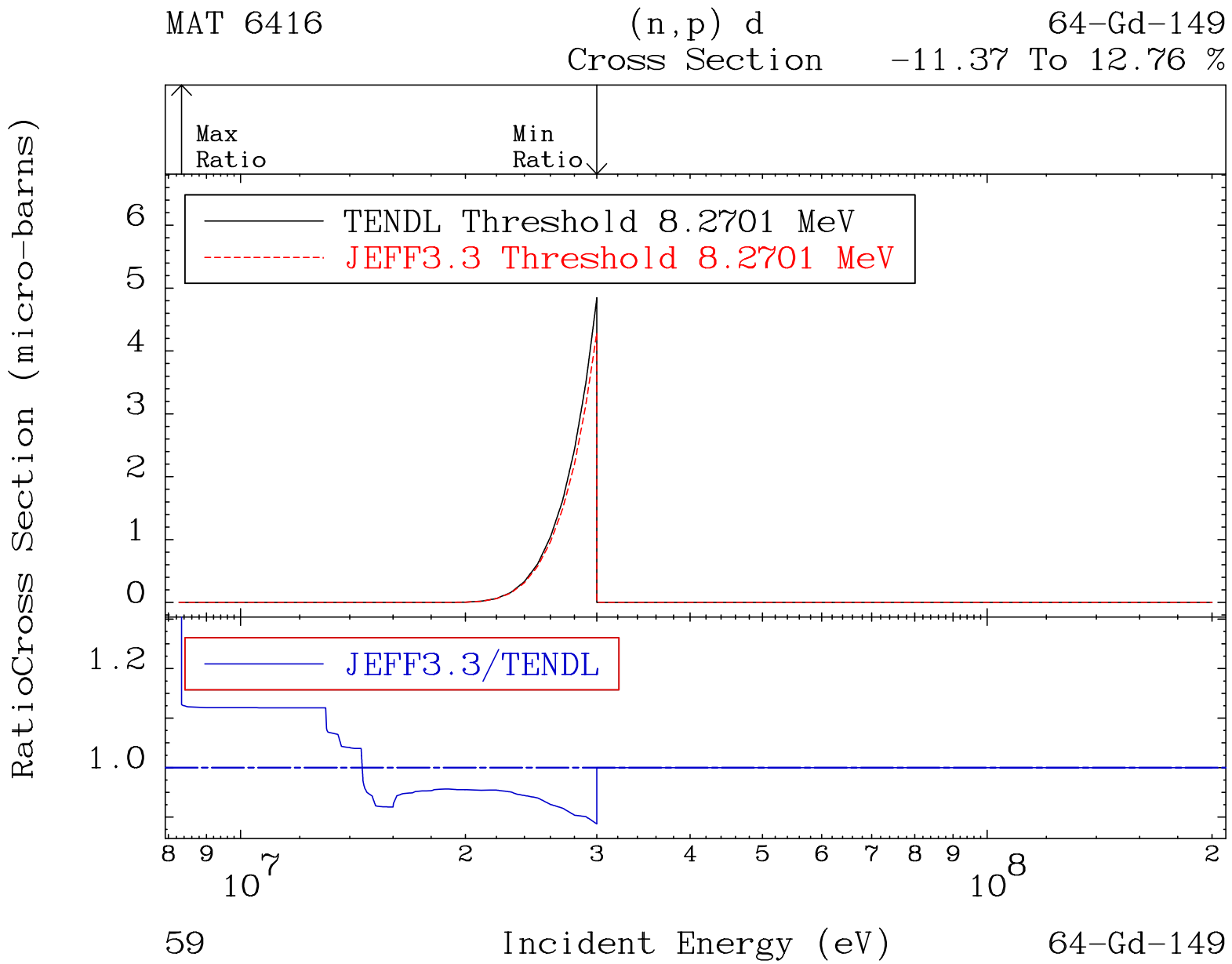

MAT 6416
(n,He-3)
Cross Section
64-Gd-149
-9.294 To 2.219 %
Min Ratio
Max Ratio
TENDL Threshold 2.7395 MeV
JEFF3.3 Threshold 2.7390 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
1.0
0.9
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
54
Incident Energy (eV)
64-Gd-149

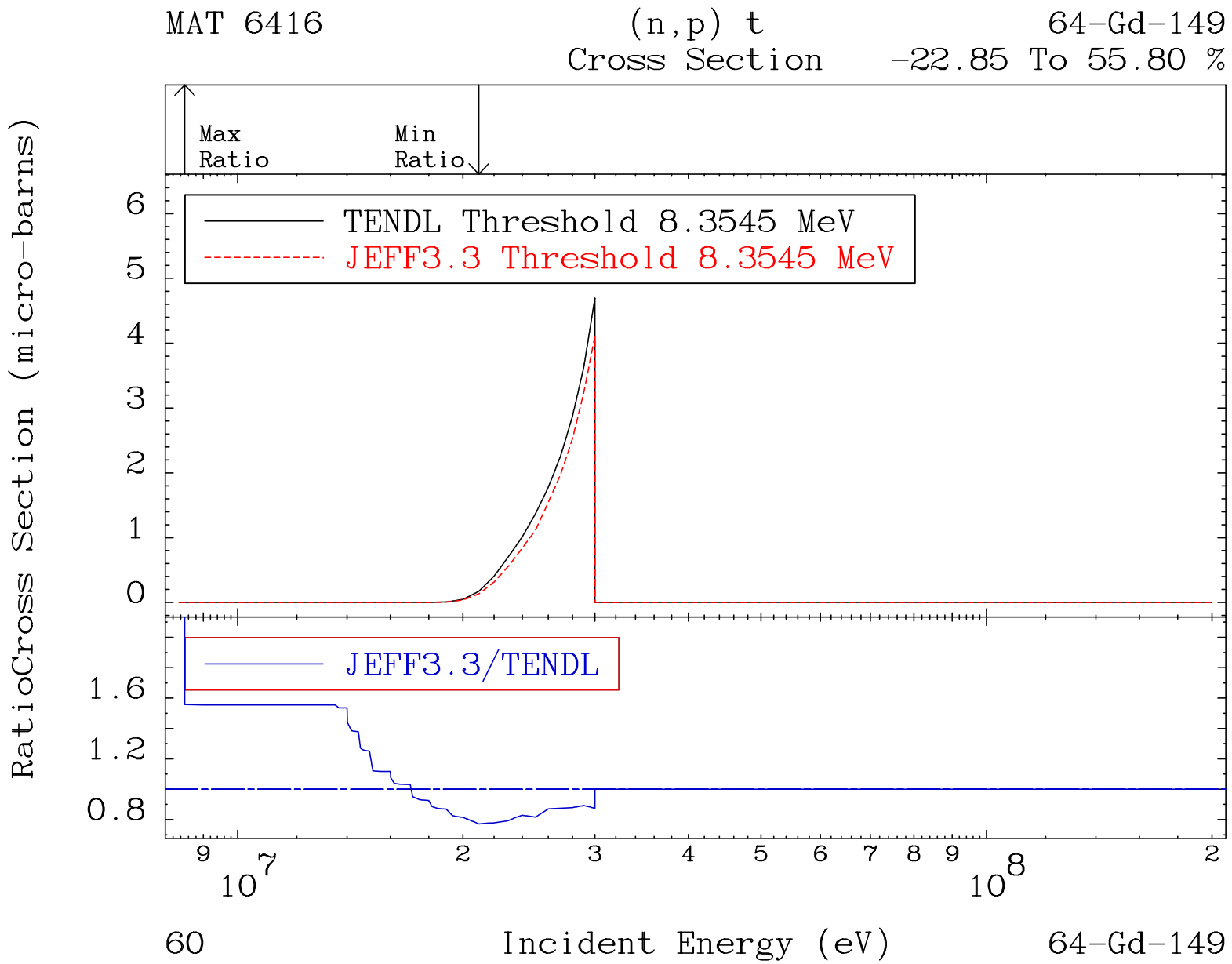

MAT 6416
(n,α)
Cross Section
64-Gd-149
-12.76 To 497.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
55
64-Gd-149

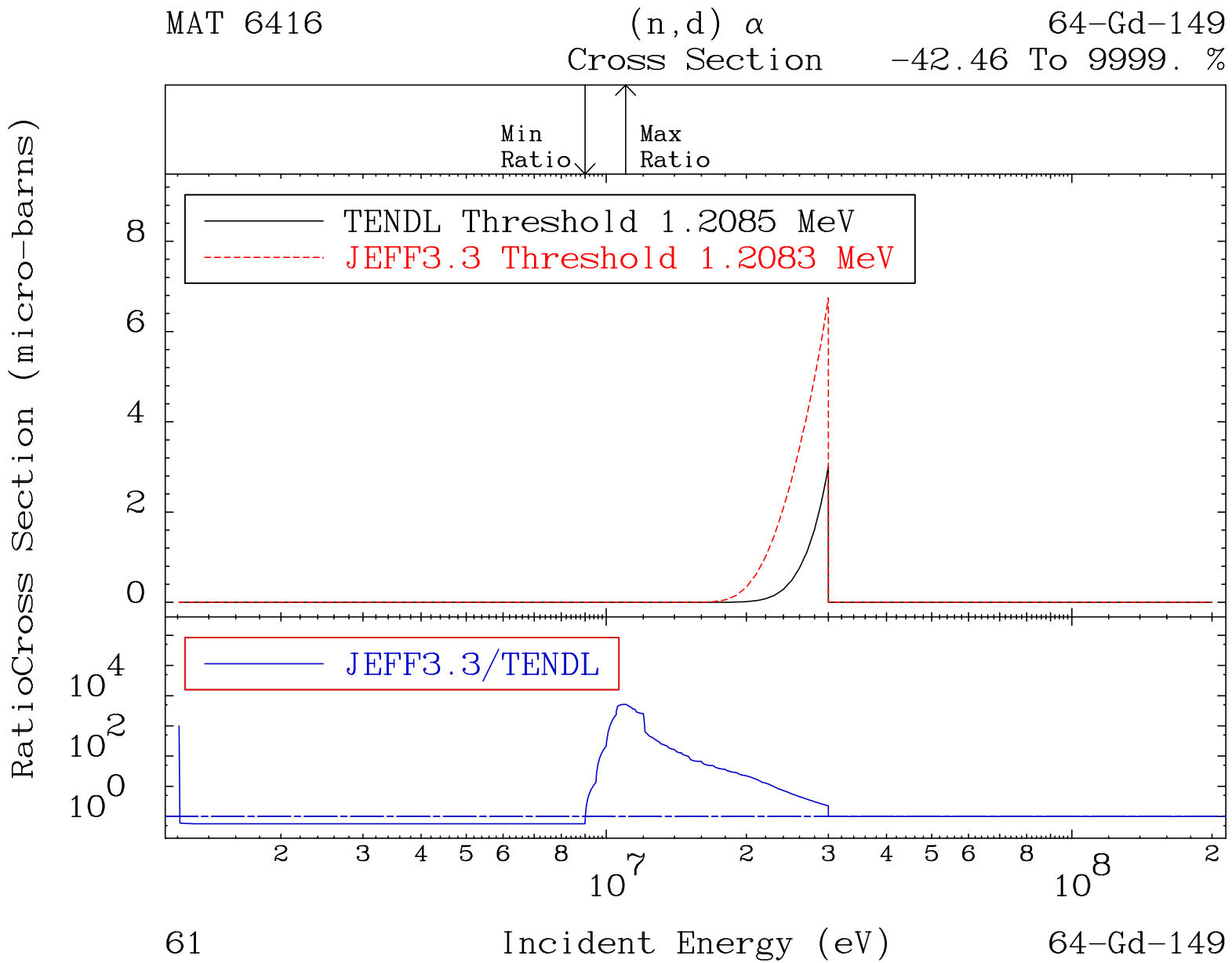

MAT 6416
(n,2α)
64-Gd-149
Cross Section
-27.63 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
56
64-Gd-149

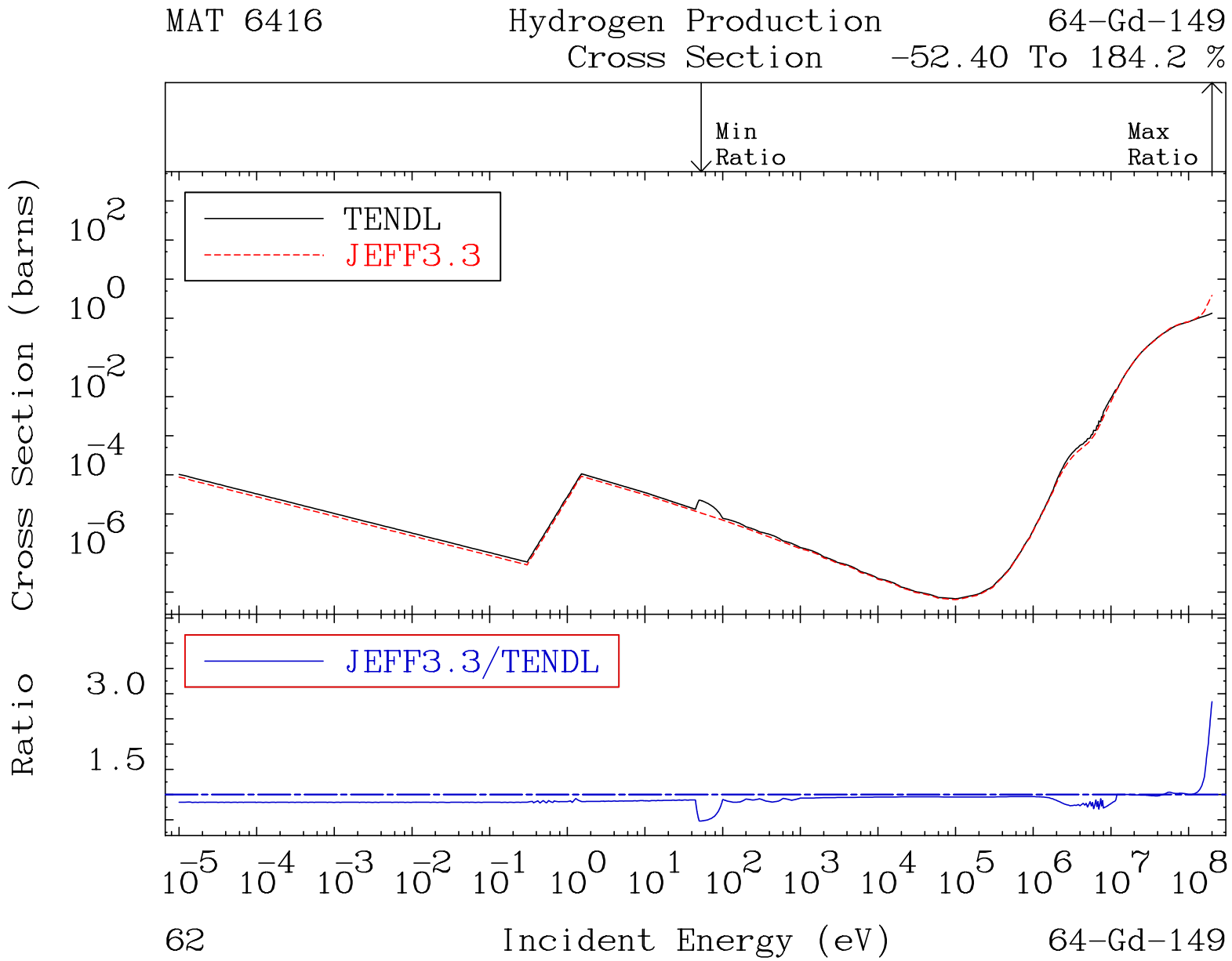

MAT 6416
(n,2p)
Cross Section
64-Gd-149
-17.83 To 36.60 %
Max Ratio
Min Ratio
TENDL Threshold 2.3133 MeV
JEFF3.3 Threshold 2.3129 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
1.6
1.2
0.8
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
57
Incident Energy (eV)
64-Gd-149

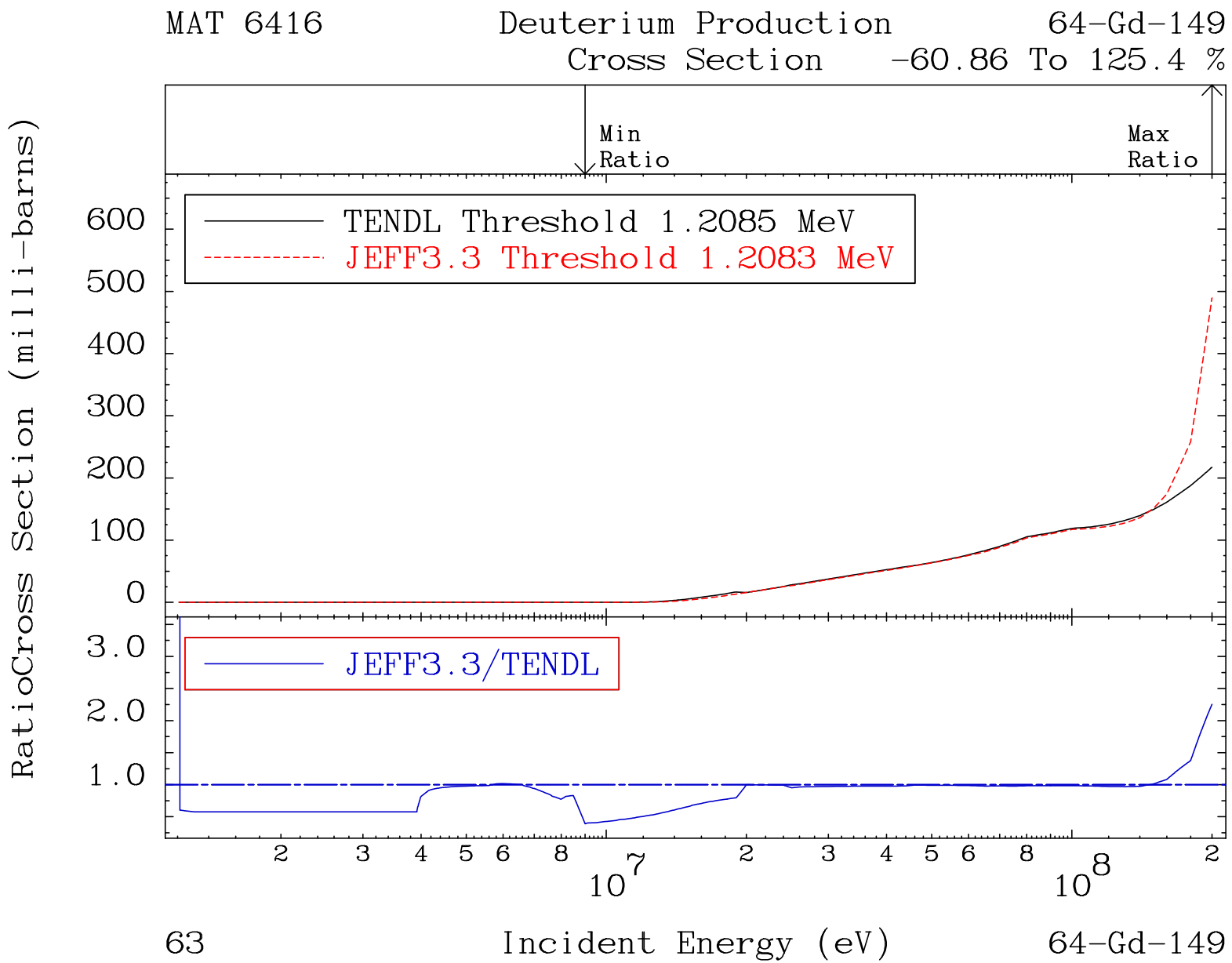

MAT 6416
(n,p) α
64-Gd-149
Cross Section
-17.33 To 9999. %
Max
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
64-Gd-149

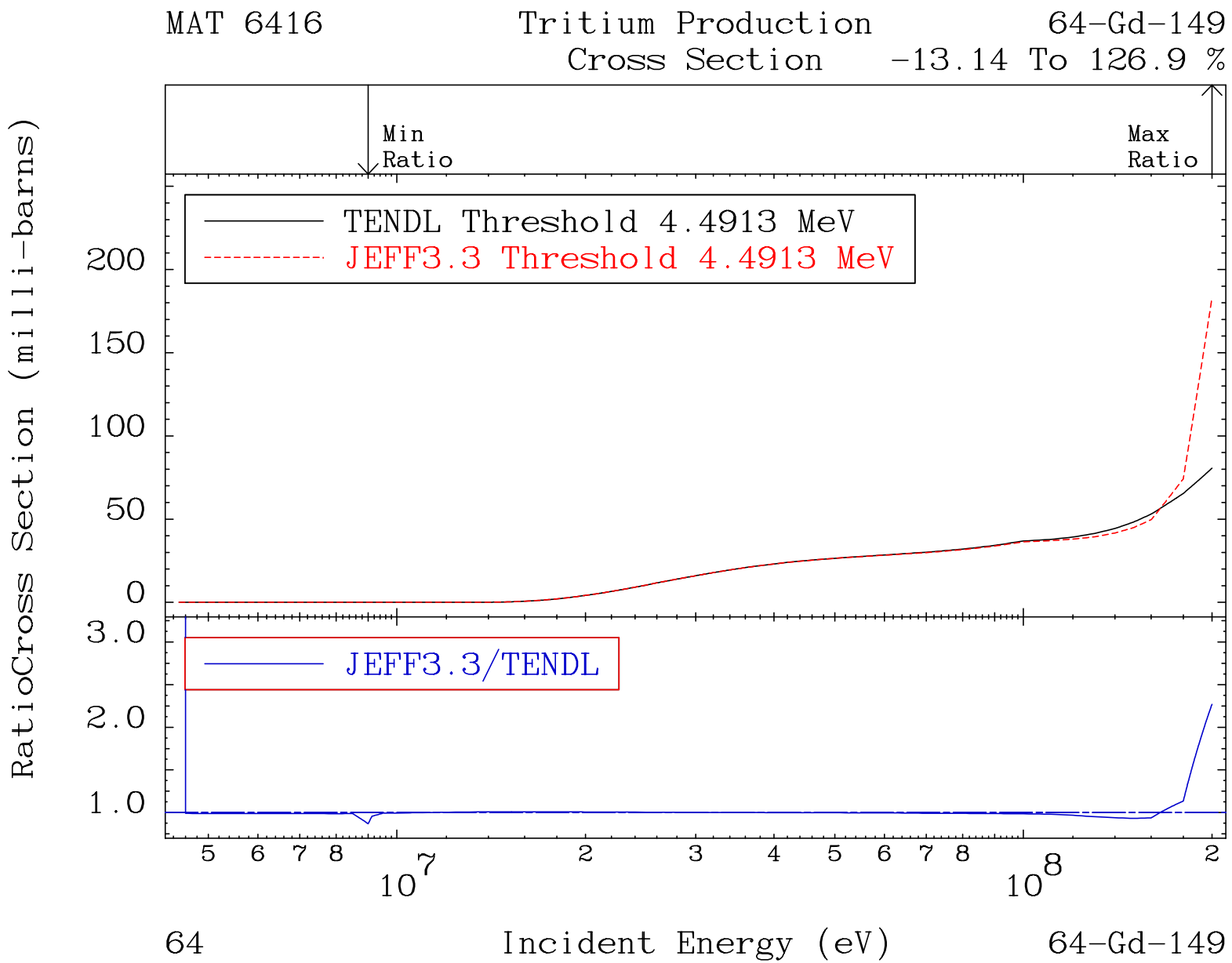

MAT 6416
(n,p) d
64-Gd-149
Cross Section
-11.37 To 12.76 %
Max Ratio
Min Ratio
TENDL Threshold 8.2701 MeV
JEFF3.3 Threshold 8.2701 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
59
64-Gd-149

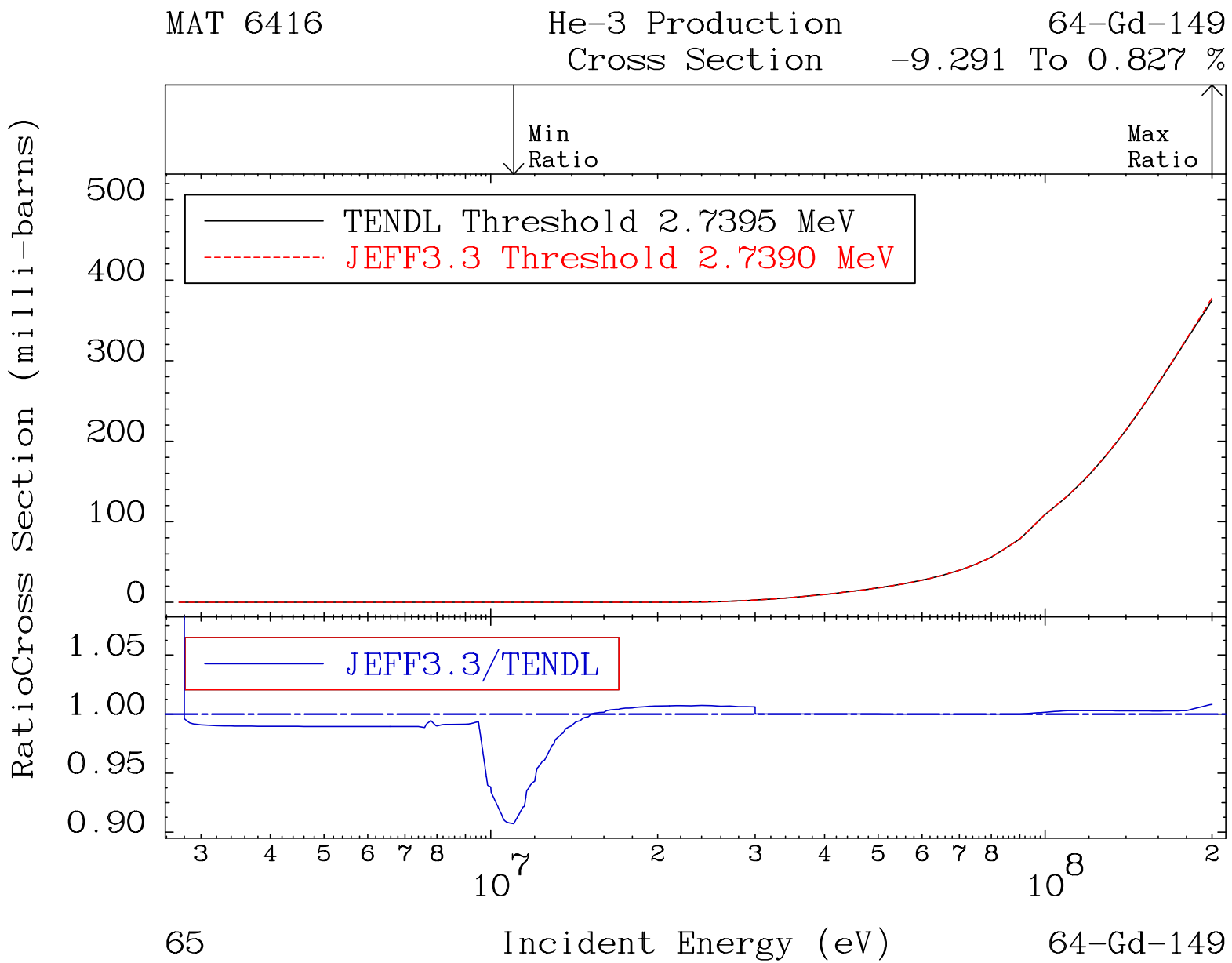

MAT 6416
(n,p) t
64-Gd-149
Cross Section
-22.85 To 55.80 %
Max Ratio
Min Ratio
TENDL Threshold 8.3545 MeV
JEFF3.3 Threshold 8.3545 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
60
64-Gd-149

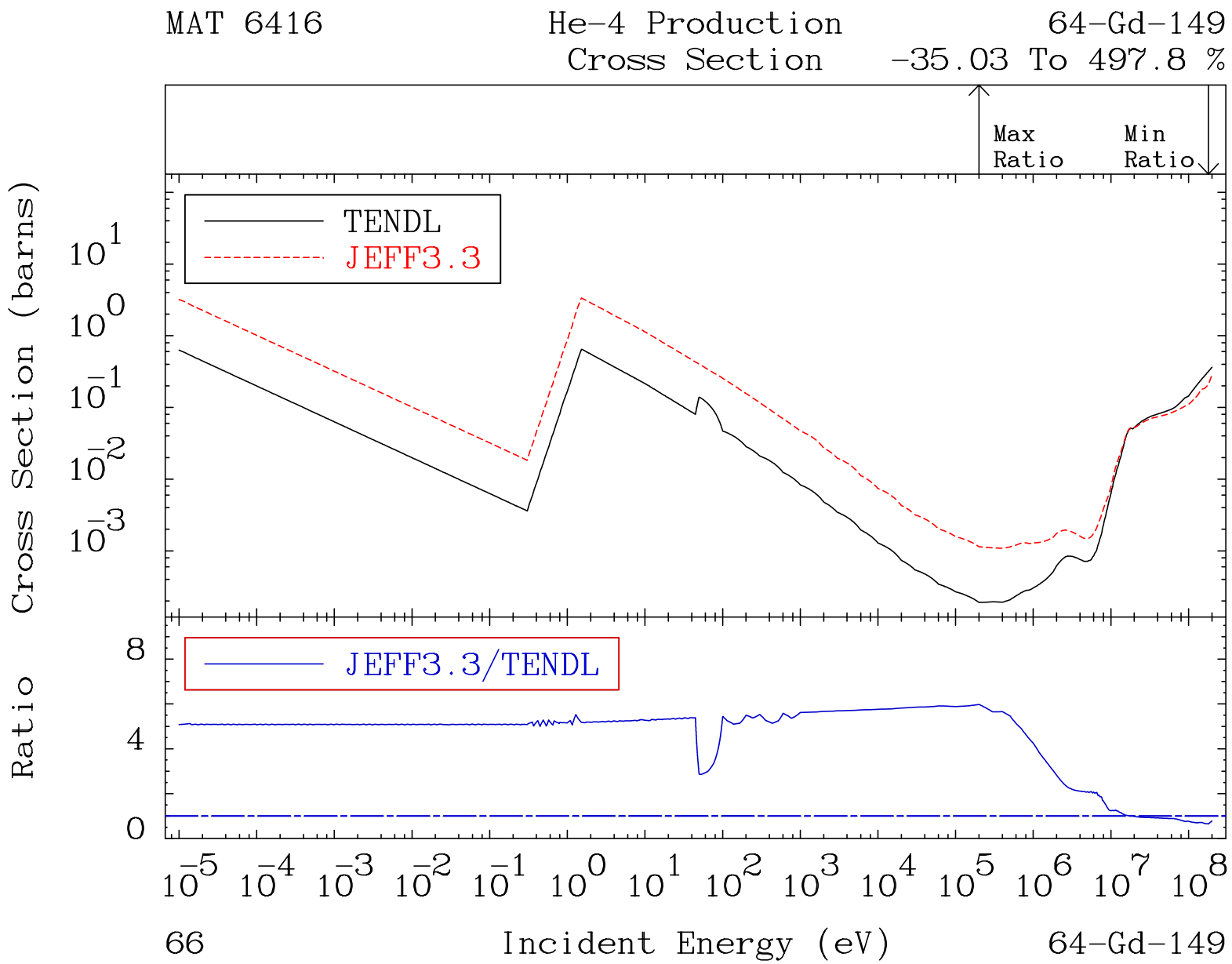

MAT 6416
(n,d) α
Cross Section
64-Gd-149
-42.46 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2085 MeV
JEFF3.3 Threshold 1.2083 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
61
64-Gd-149

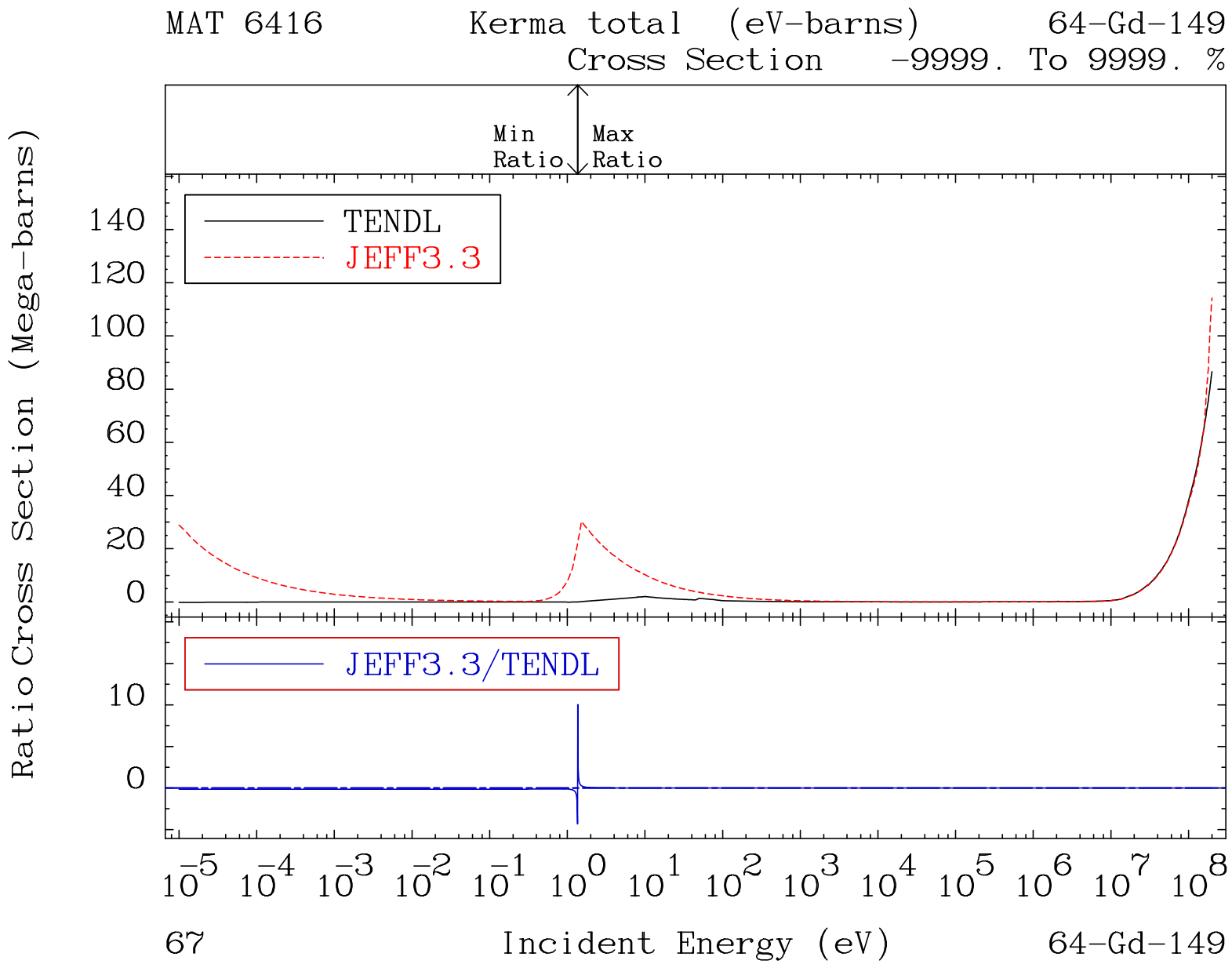

MAT 6416
Hydrogen Production
Cross Section
64-Gd-149
-52.40 To 184.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
64-Gd-149

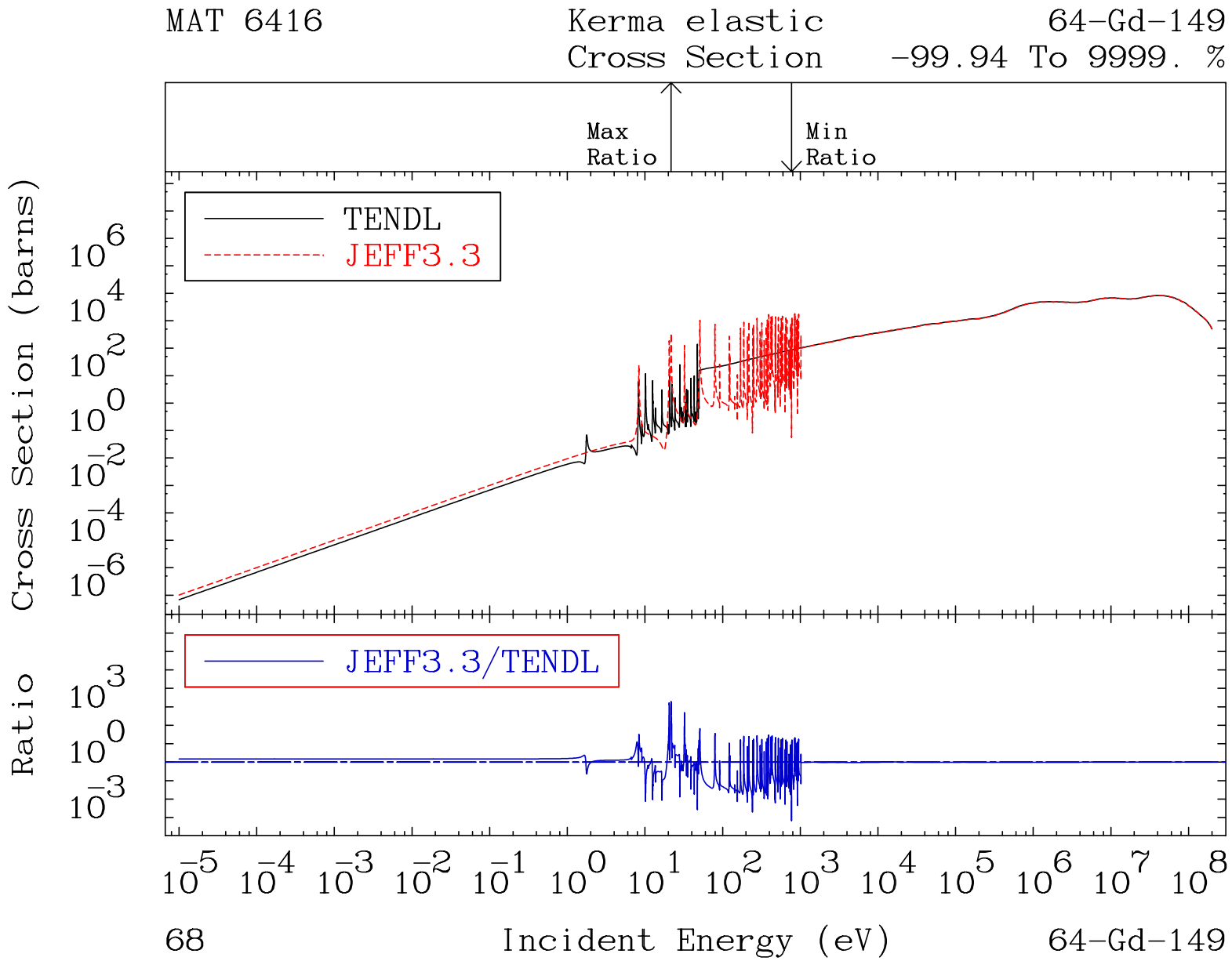

MAT 6416
Deuterium Production
64-Gd-149
Cross Section
-60.86 To 125.4 %
Min Ratio
Max Ratio
TENDL Threshold 1.2085 MeV
JEFF3.3 Threshold 1.2083 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
3.0
2.0
1.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
63
Incident Energy (eV)
64-Gd-149

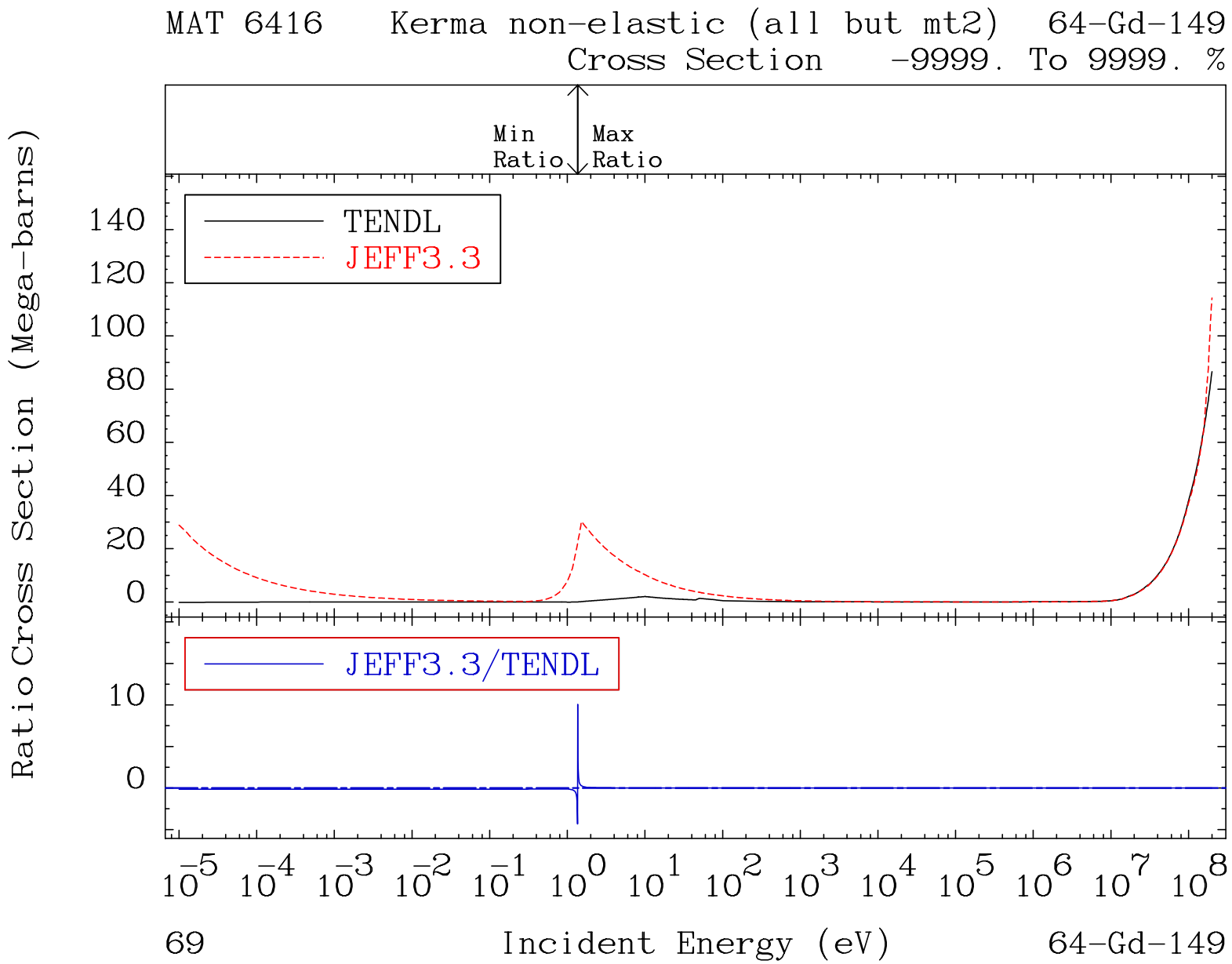

MAT 6416
Tritium Production
64-Gd-149
Cross Section
-13.14 To 126.9 %
Min
Ratio
Max
Ratio
TENDL Threshold 4.4913 MeV
JEFF3.3 Threshold 4.4913 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
3.0
2.0
1.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
64
Incident Energy (eV)
64-Gd-149

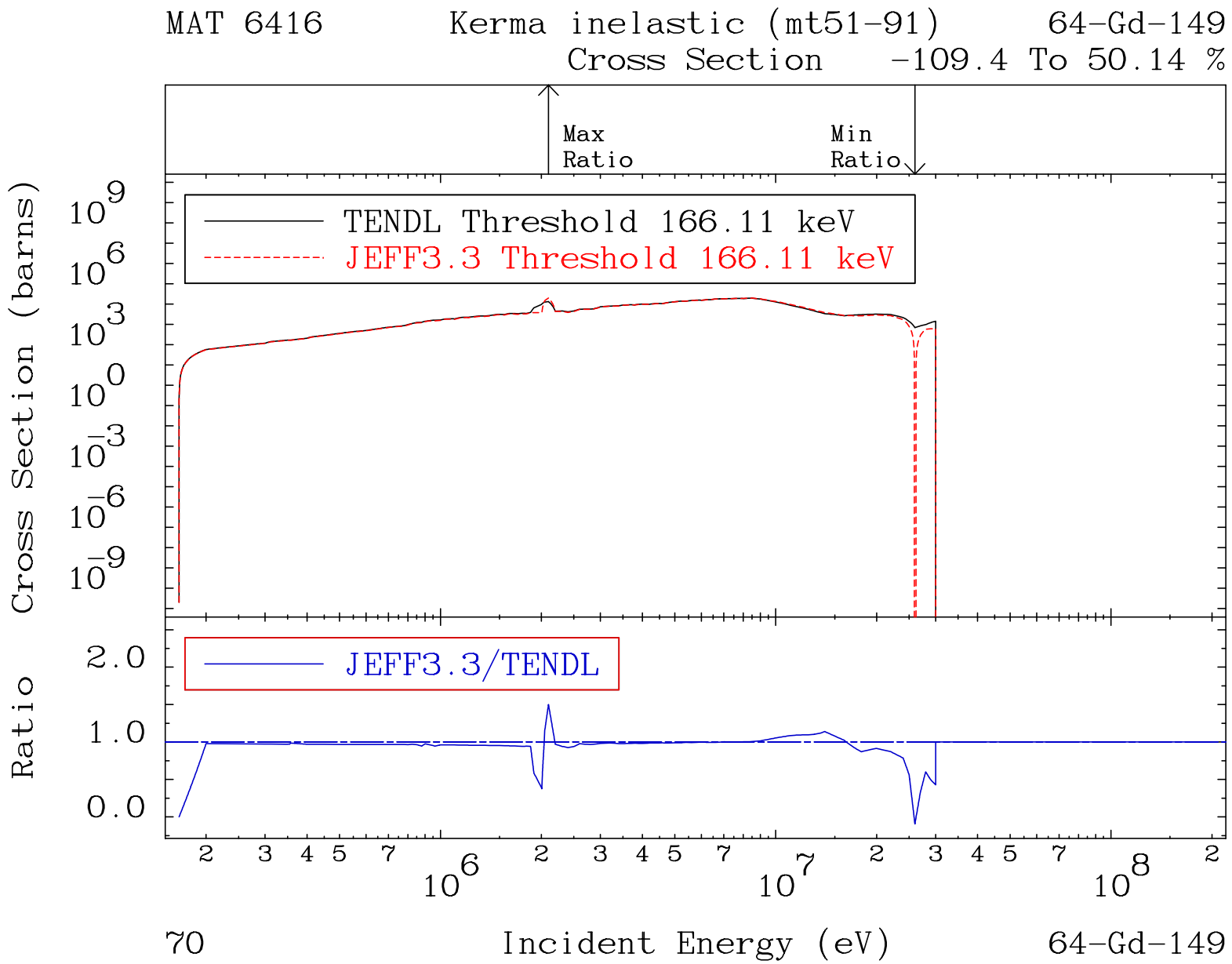

MAT 6416
He-3 Production
Cross Section
64-Gd-149
-9.291 To 0.827 %
Min
Ratio
Max
Ratio
TENDL Threshold 2.7395 MeV
JEFF3.3 Threshold 2.7390 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.05
1.00
0.95
0.90
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
65
Incident Energy (eV)
64-Gd-149

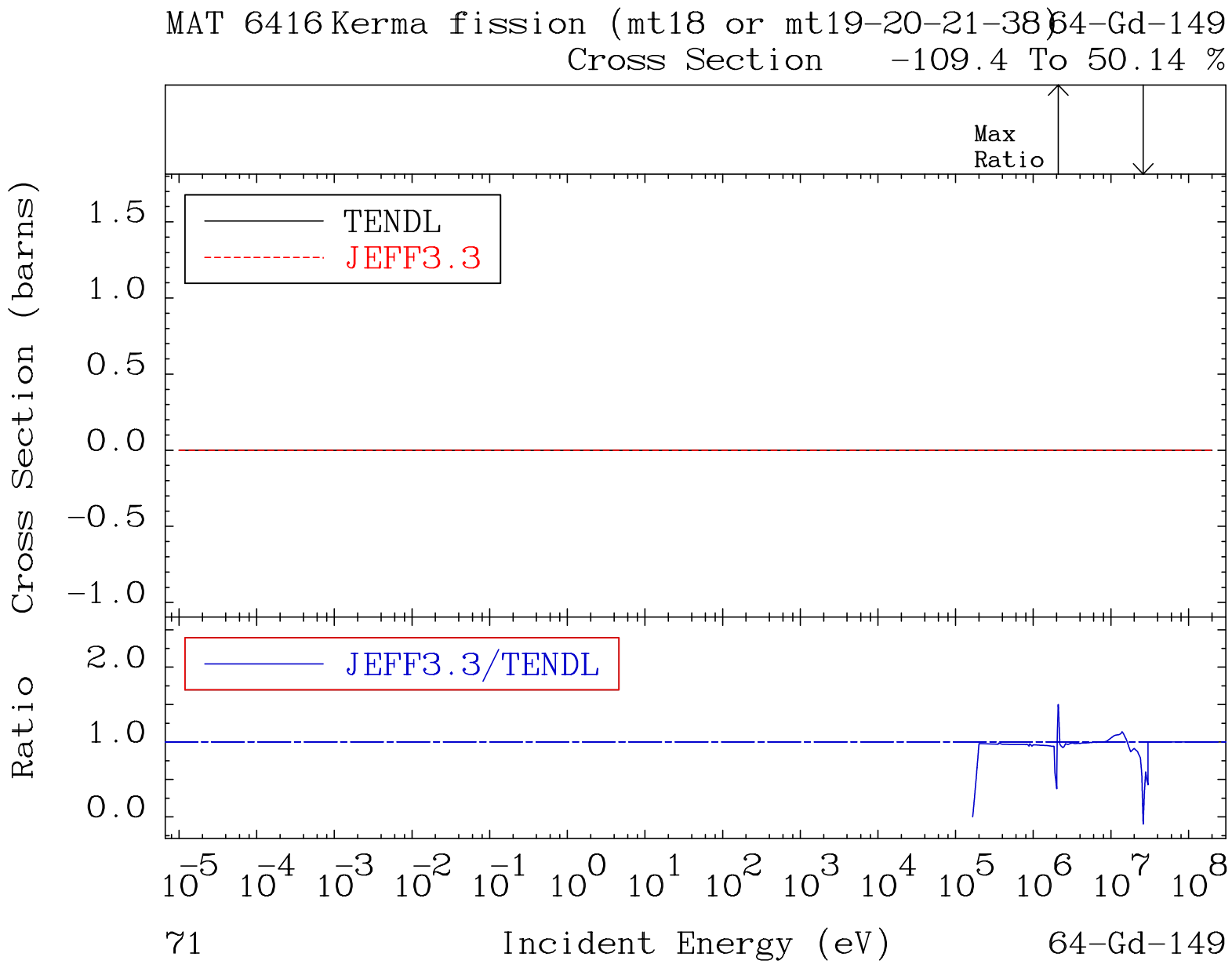

MAT 6416
He-4 Production
Cross Section
64-Gd-149
-35.03 To 497.8 %
Max Ratio
Min Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
66
64-Gd-149

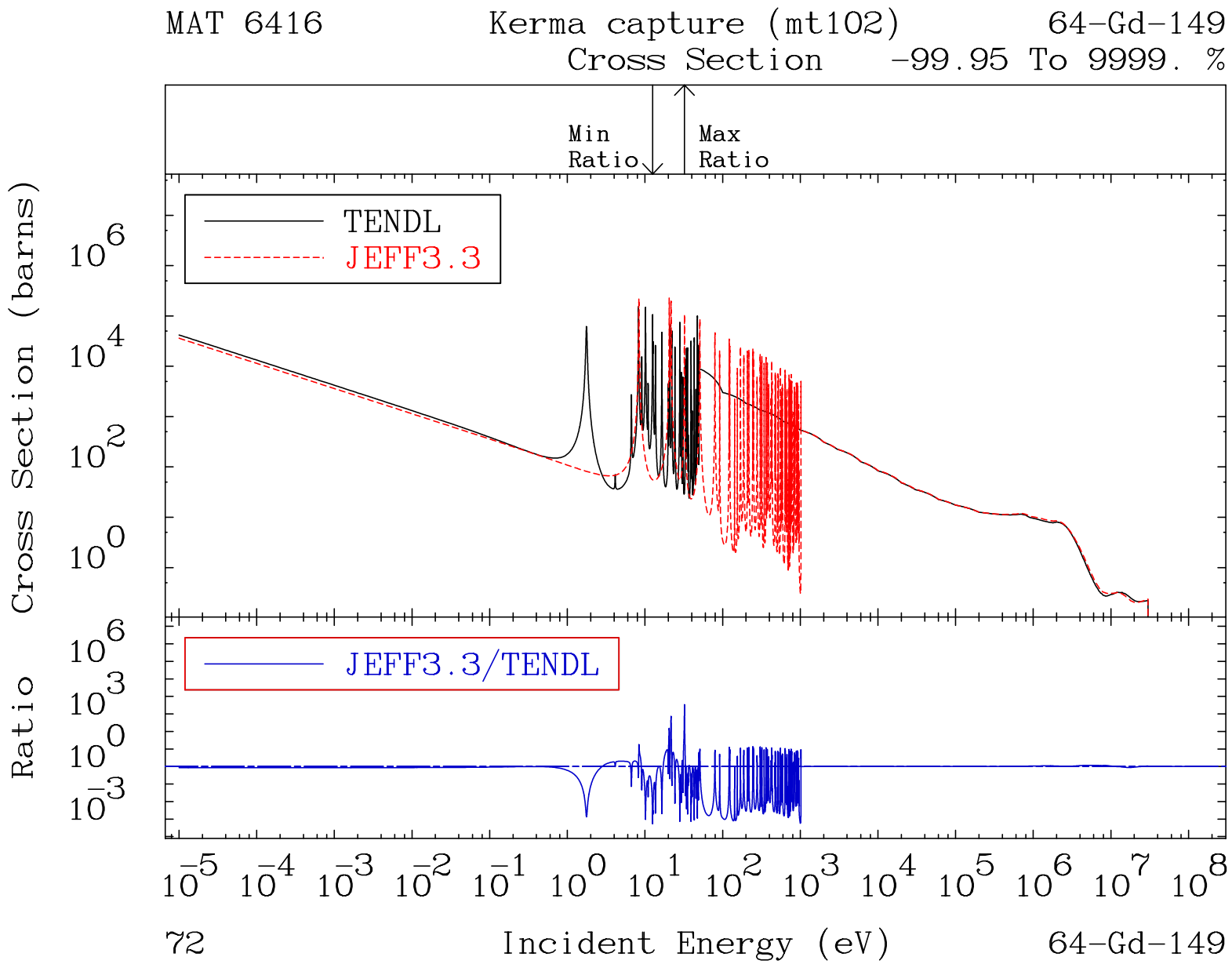

MAT 6416
Kerma total (eV-barns)
64-Gd-149
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Ratio Cross Section (Mega-barns)
140
120
100
80
60
40
20
0
10
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
67
Incident Energy (eV)
64-Gd-149

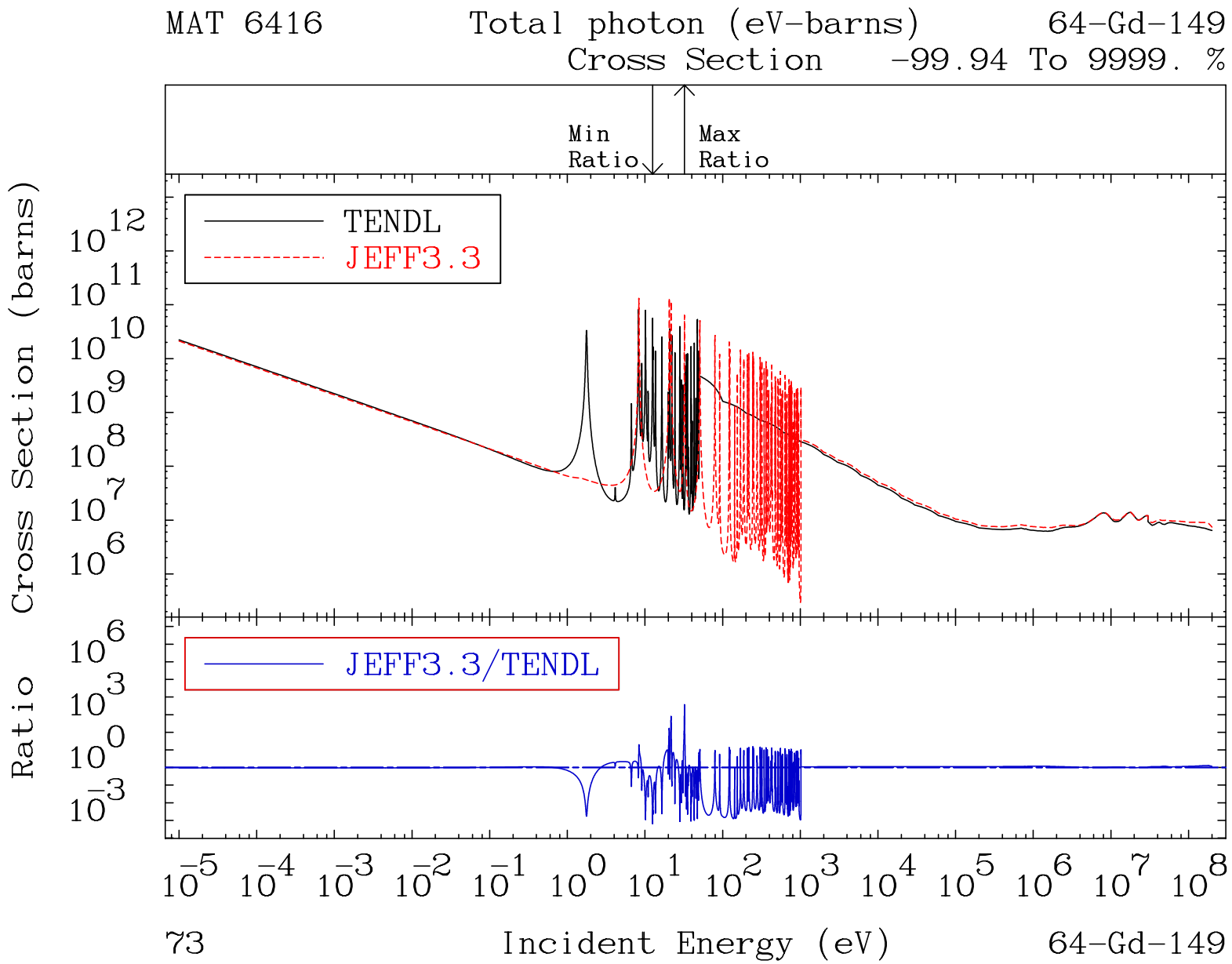

MAT 6416
Kerma elastic
Cross Section
64-Gd-149
-99.94 To 9999. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
64-Gd-149

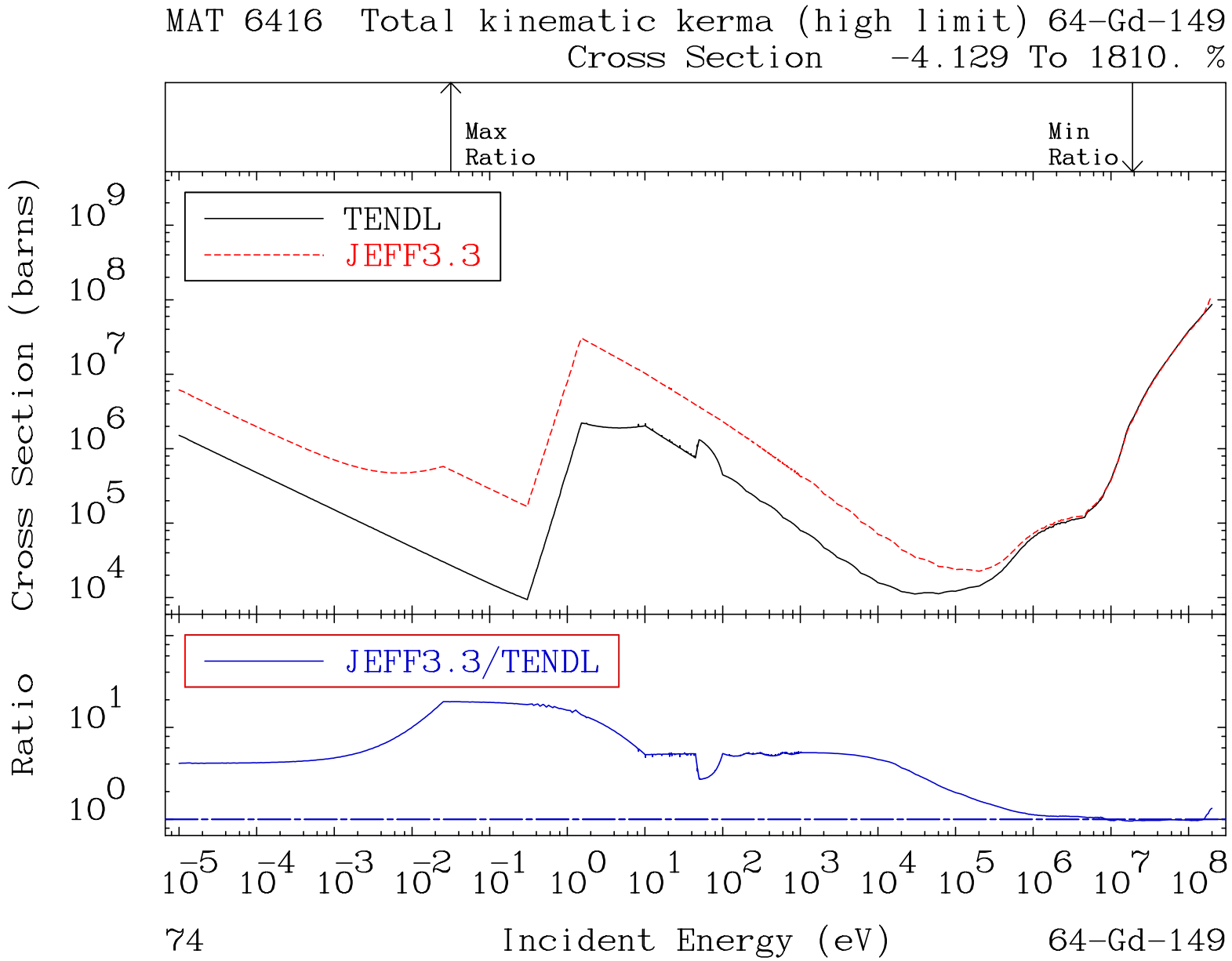

MAT 6416 Kerma non-elastic (all but mt2) 64-Gd-149
Cross Section -9999. To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Ratio Cross Section (Mega-barns)
140
120
100
80
60
40
20
0
10
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
69
Incident Energy (eV)
64-Gd-149

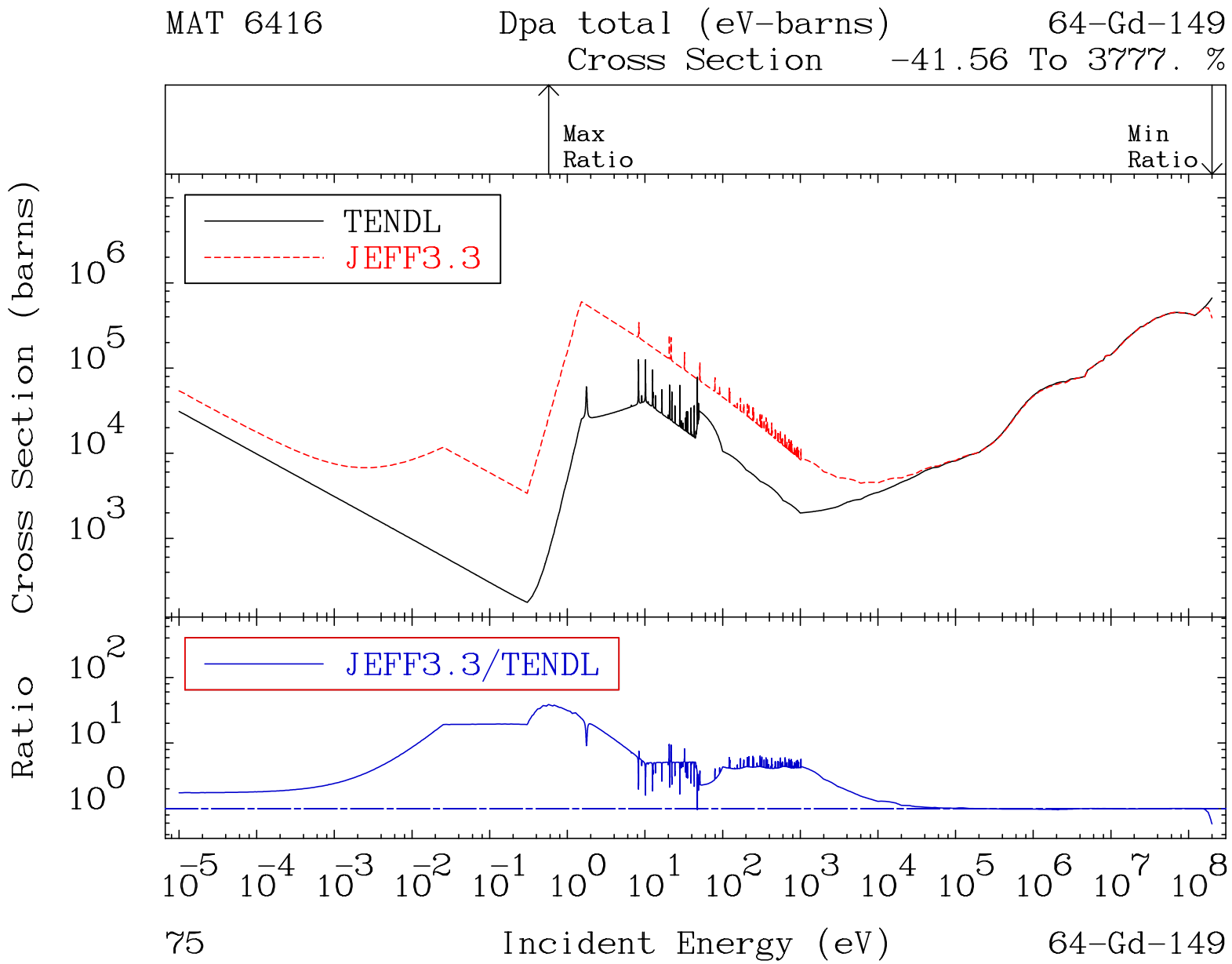

MAT 6416
Kerma inelastic (mt51-91)
64-Gd-149
Cross Section -109.4 To 50.14 %
Max Ratio
Min Ratio
TENDL Threshold 166.11 keV
JEFF3.3 Threshold 166.11 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
64-Gd-149

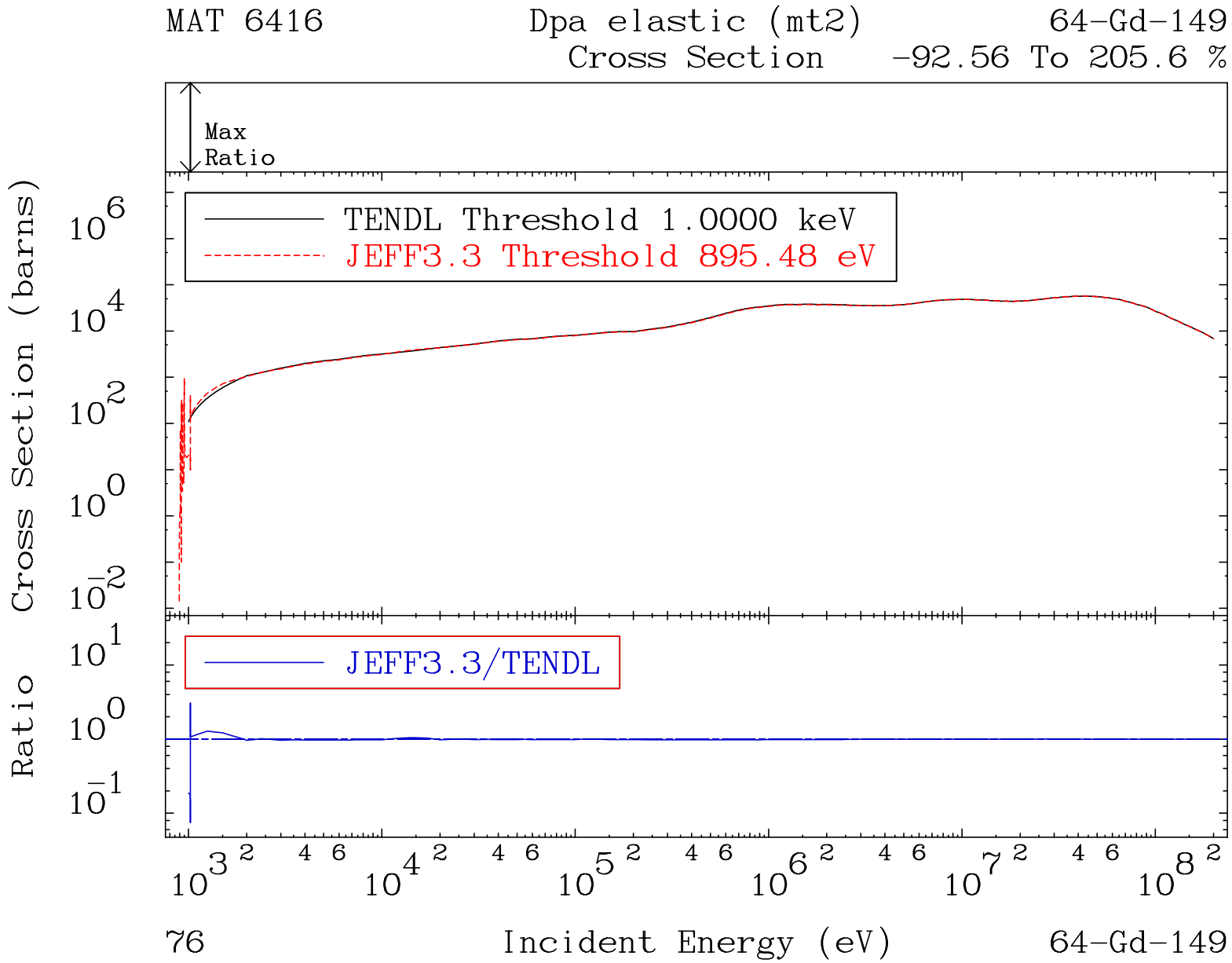

MAT 6416 Kerma fission (mt18 or mt19-20-21-38) 64-Gd-149
Cross Section -109.4 To 50.14 %
Max
Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
71
Incident Energy (eV)
64-Gd-149

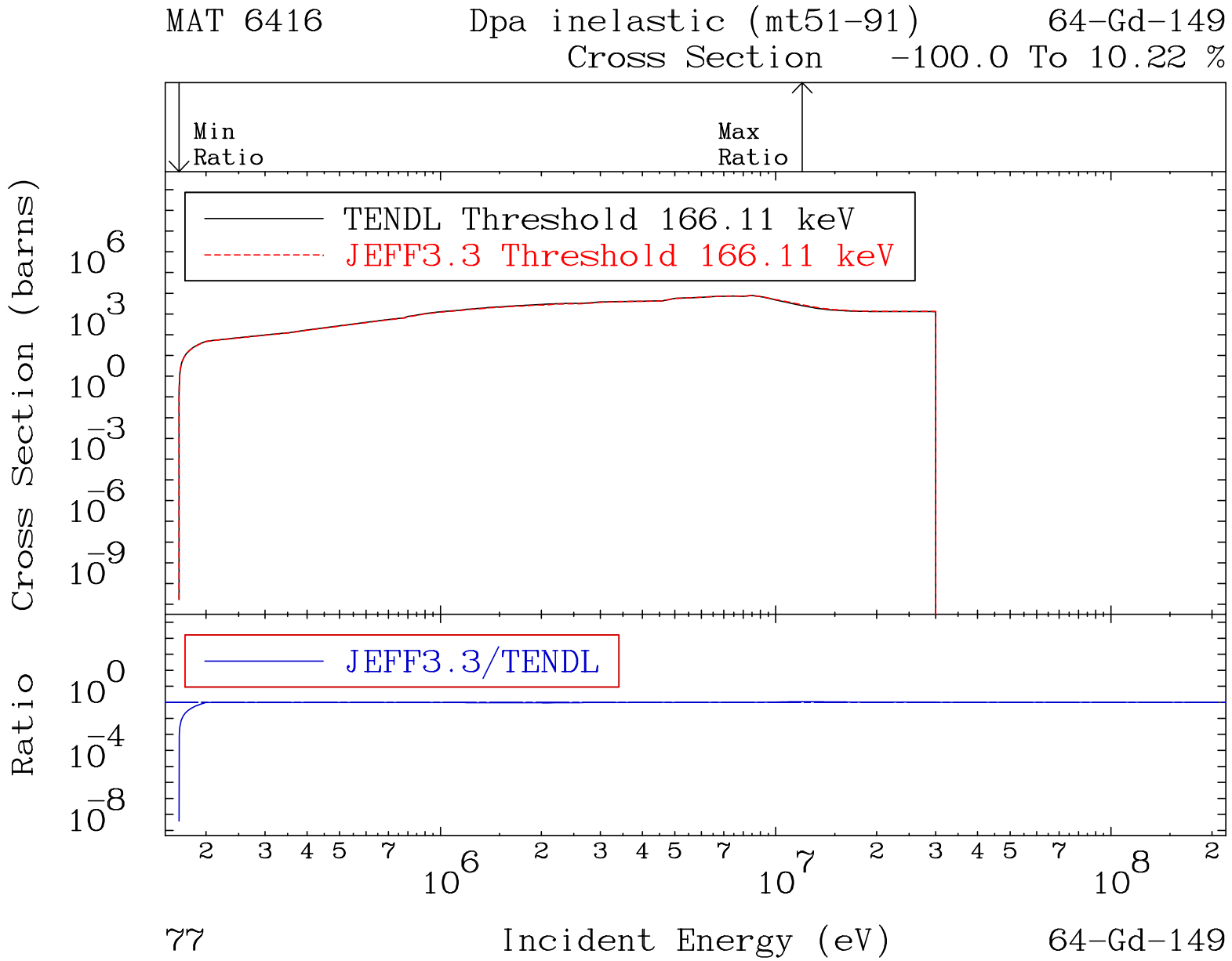

MAT 6416
Kerma capture (mt102)
64-Gd-149
Cross Section -99.95 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
64-Gd-149

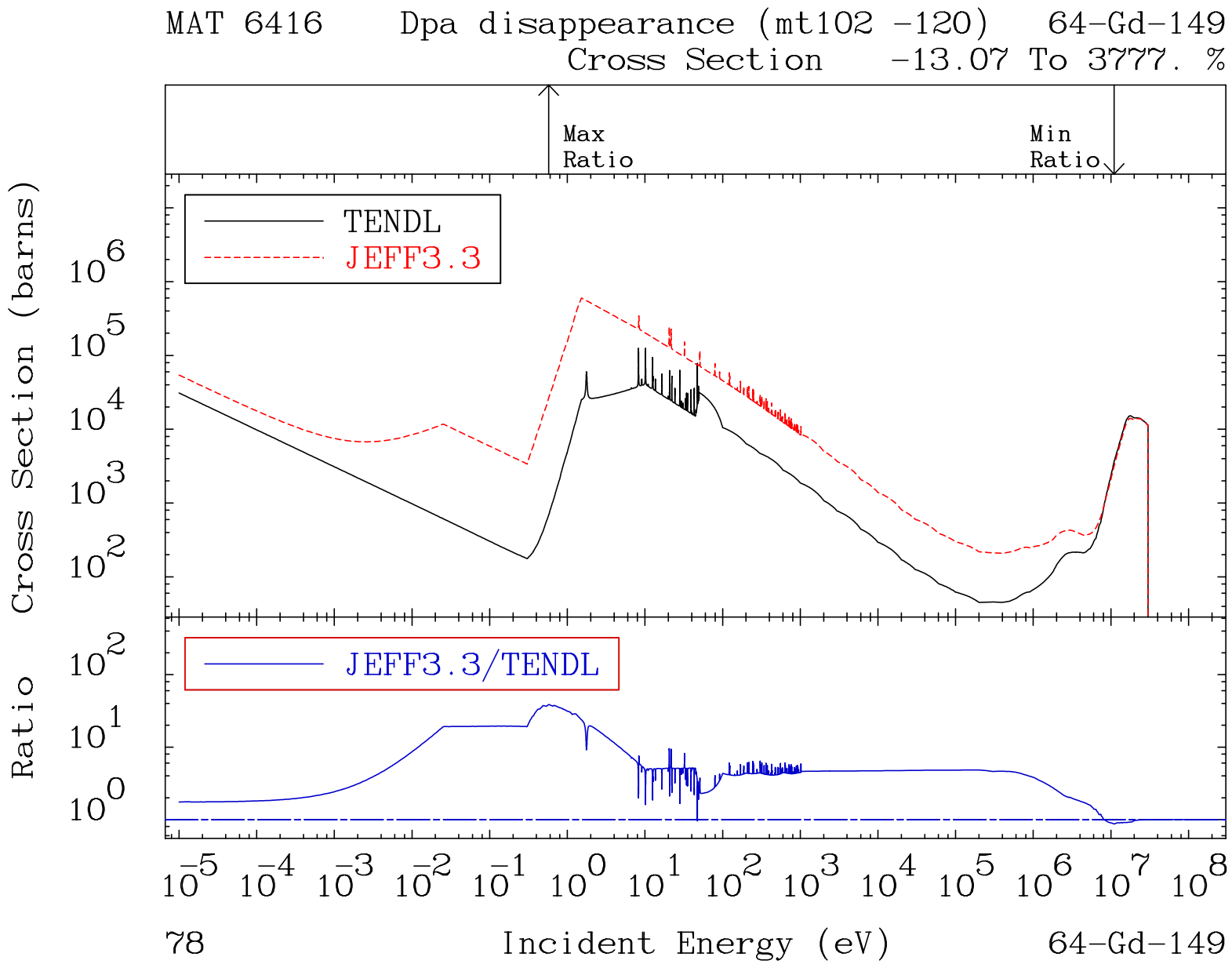

MAT 6416
Total photon (eV-barns)
64-Gd-149
Cross Section -99.94 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
64-Gd-149

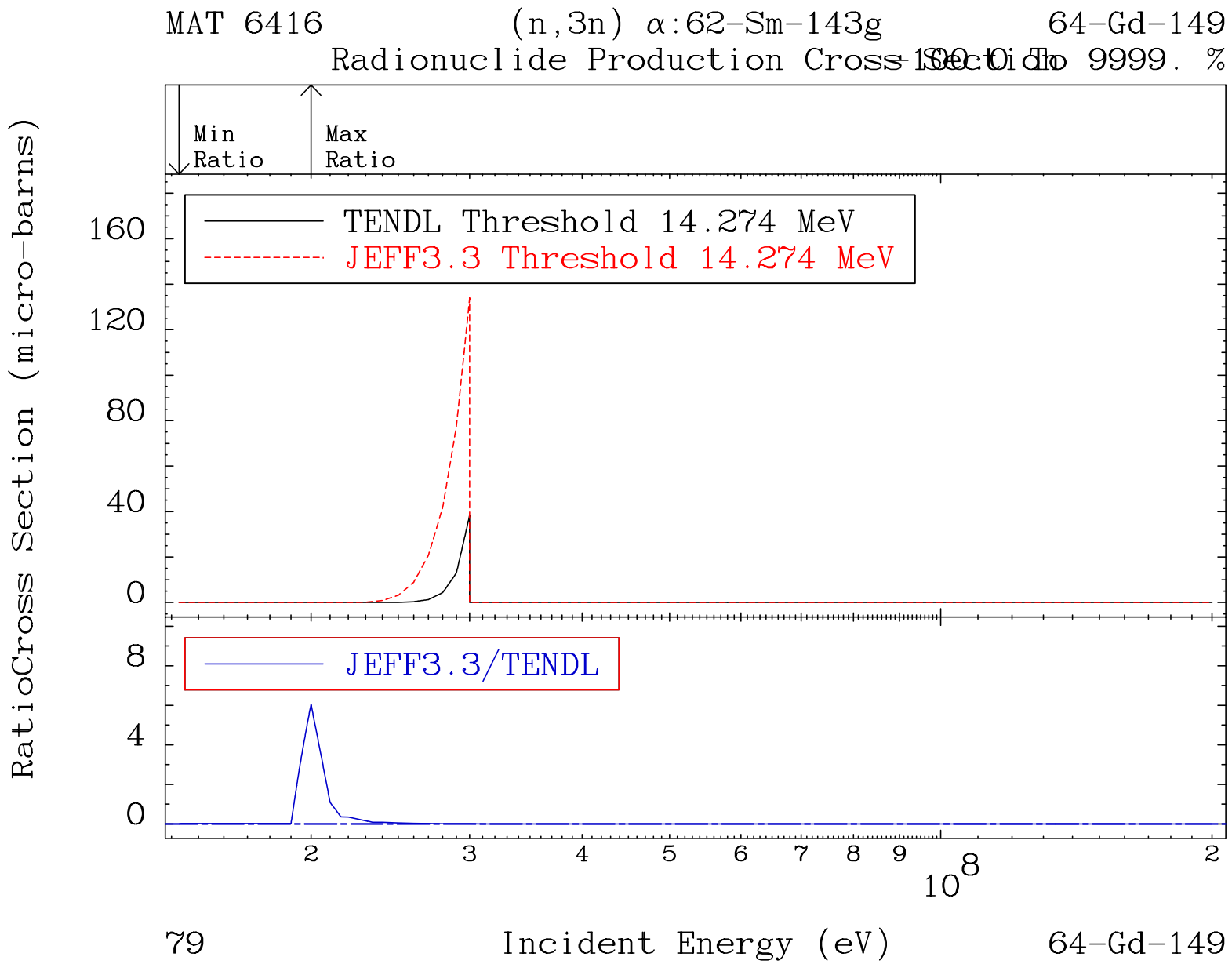

MAT 6416 Total kinematic kerma (high limit) 64-Gd-149
Cross Section -4.129 To 1810. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
64-Gd-149

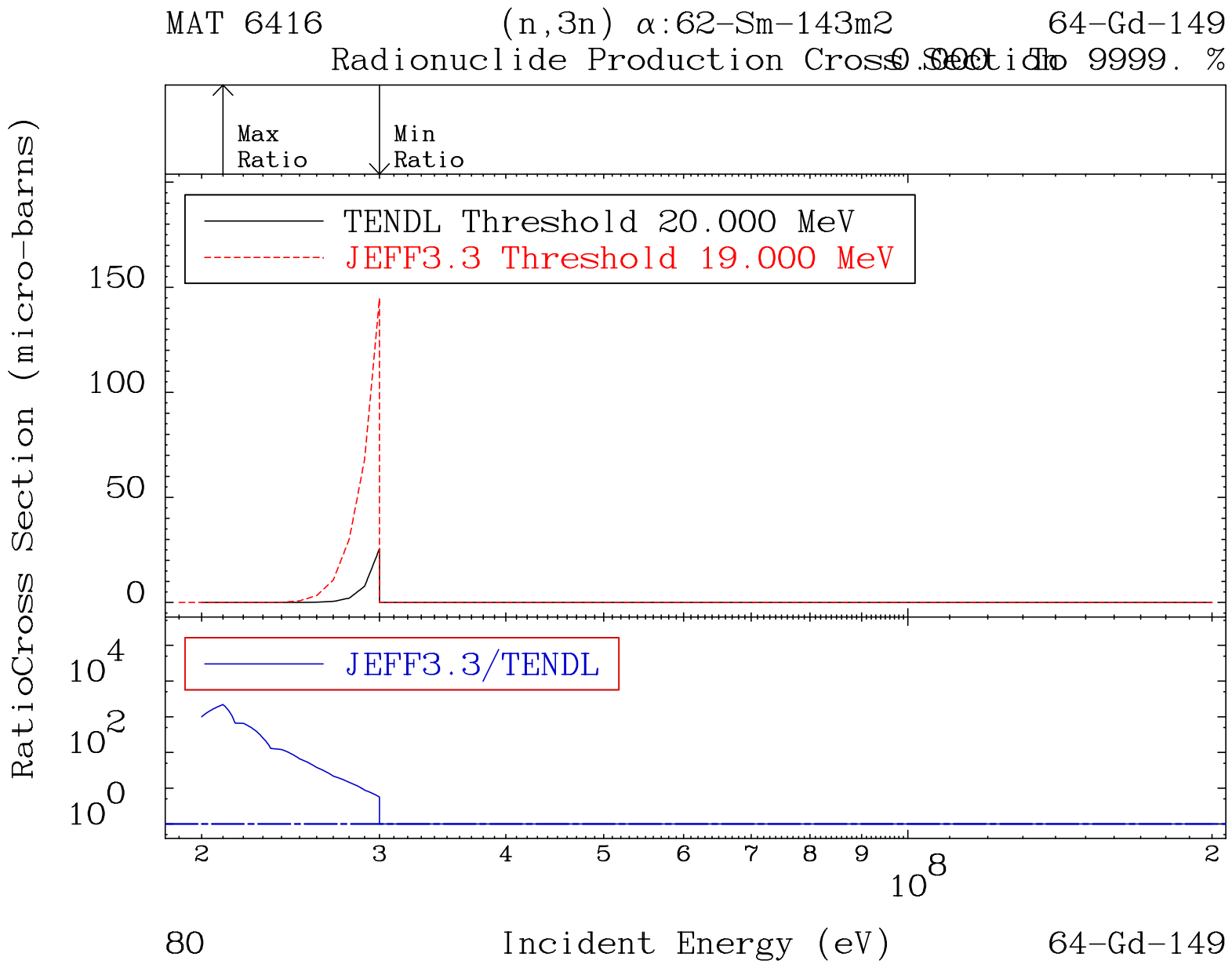

MAT 6416
Dpa total (eV-barns)
64-Gd-149
Cross Section -41.56 To 3777. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
75
64-Gd-149


MAT 6416
Dpa elastic (mt2)
Cross Section
64-Gd-149
-92.56 To 205.6 %
Max
Ratio
TENDL Threshold 1.0000 keV
JEFF3.3 Threshold 895.48 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
76
64-Gd-149


MAT 6416
Dpa inelastic (mt51-91)
64-Gd-149
Cross Section
-100.0 To 10.22 %
Min Ratio
Max Ratio
TENDL Threshold 166.11 keV
JEFF3.3 Threshold 166.11 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
77
64-Gd-149


MAT 6416 Dpa disappearance (mt102 -120) 64-Gd-149
Cross Section -13.07 To 3777. %
Max Ratio
Min Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
78
64-Gd-149


MAT 6416
(n,3n) α:62-Sm-143g
64-Gd-149
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 14.274 MeV
JEFF3.3 Threshold 14.274 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
160
120
80
40
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
64-Gd-149


MAT 6416
(n,3n) α:62-Sm-143m2
64-Gd-149
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 19.000 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
150
100
50
0
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
64-Gd-149