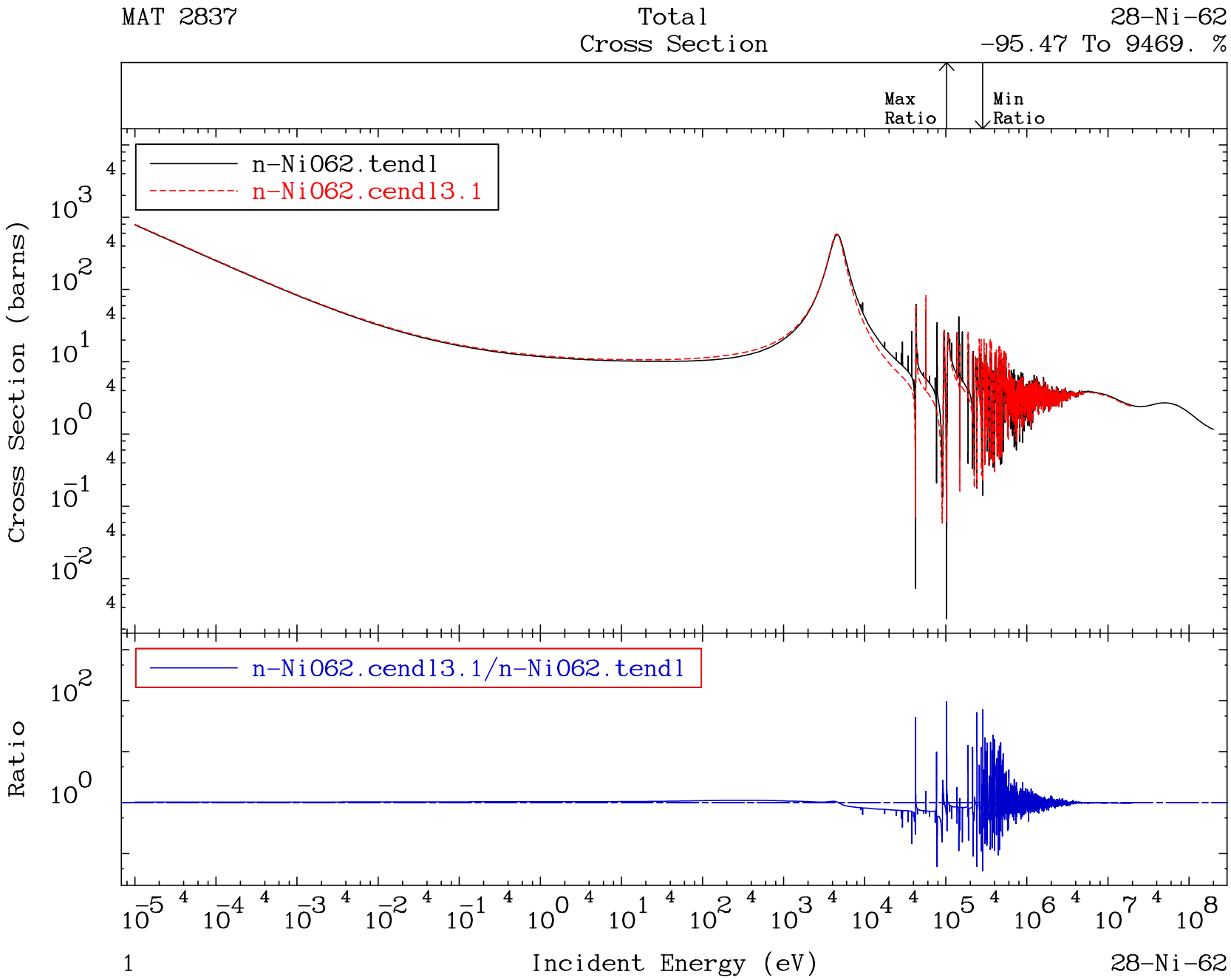
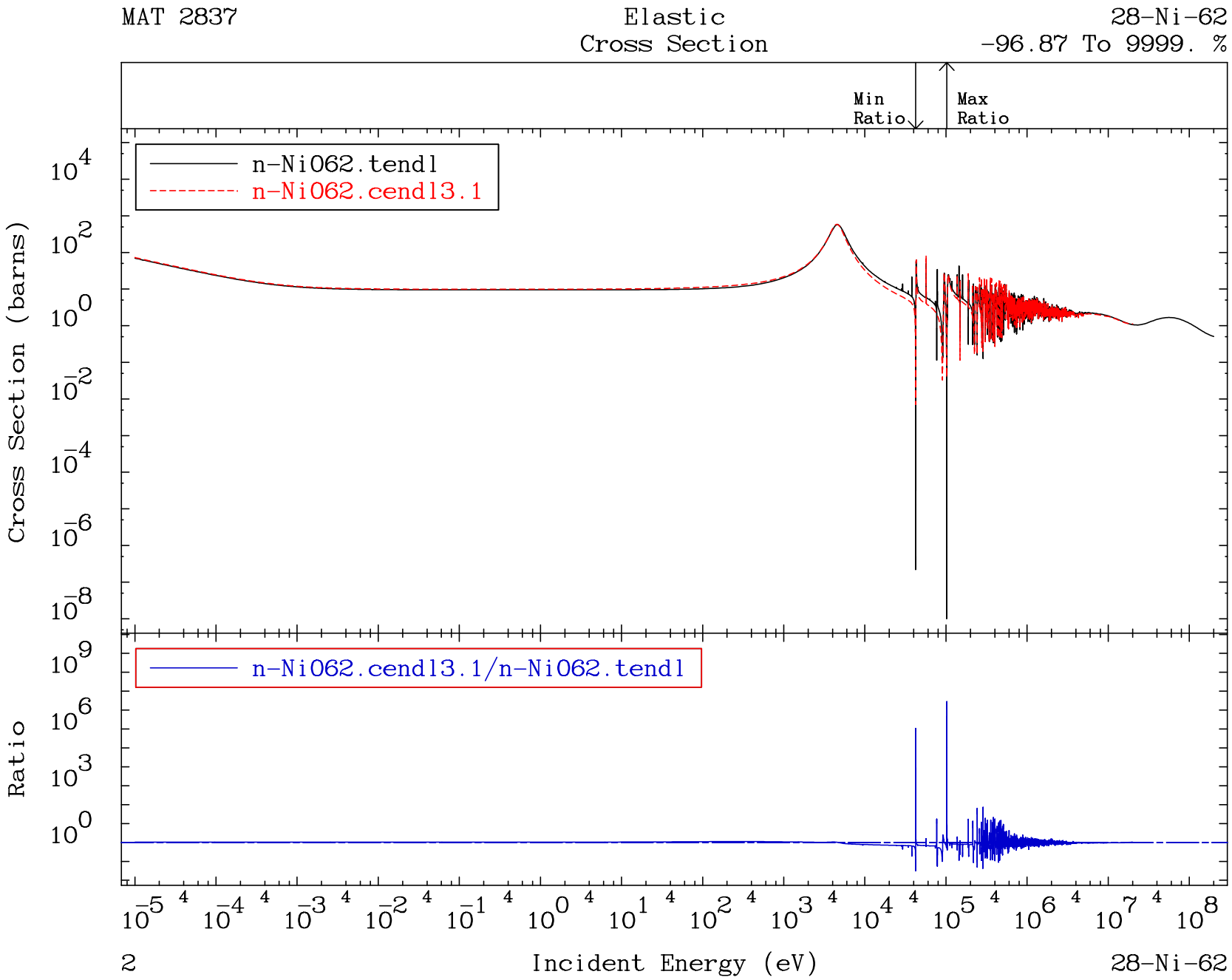
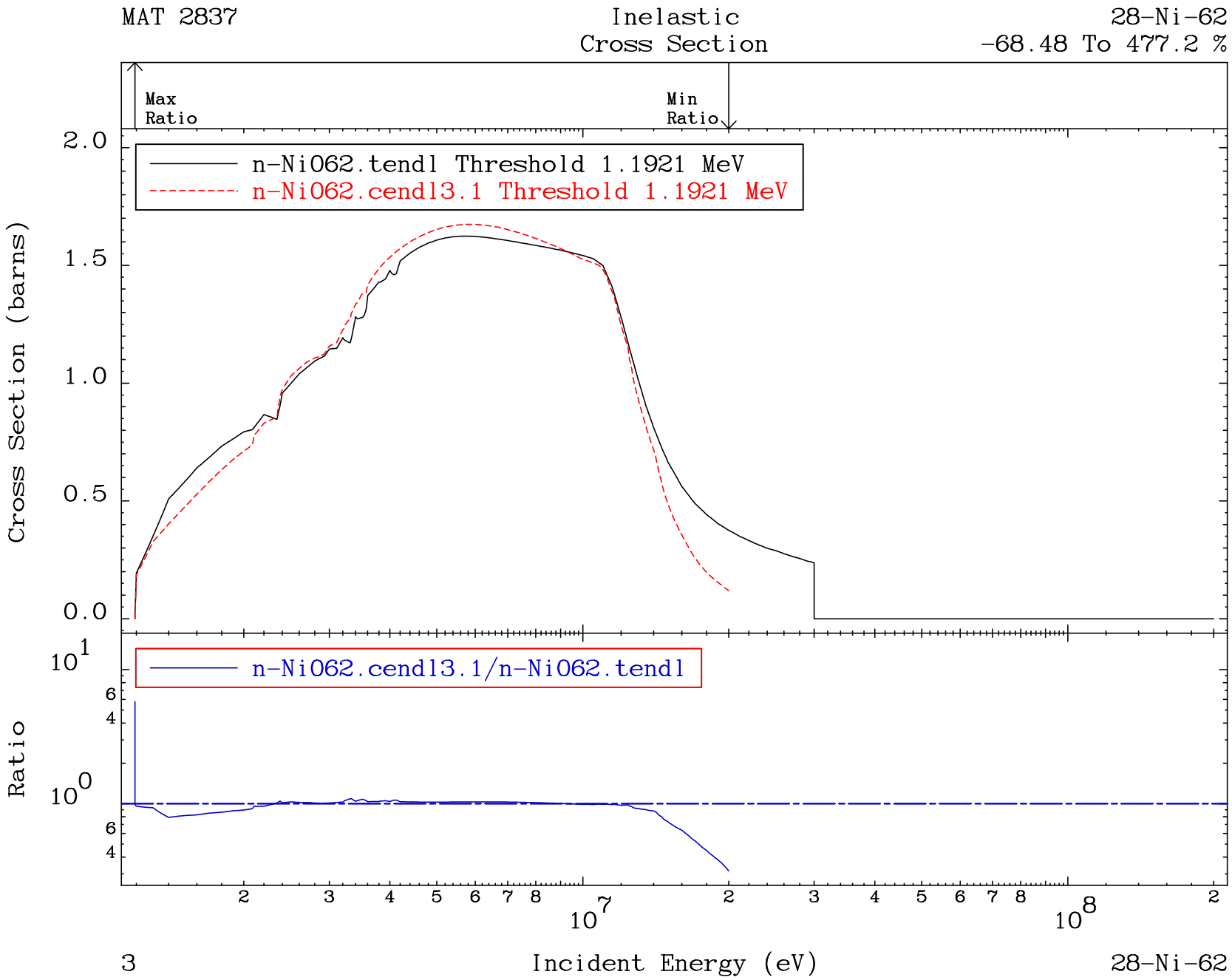
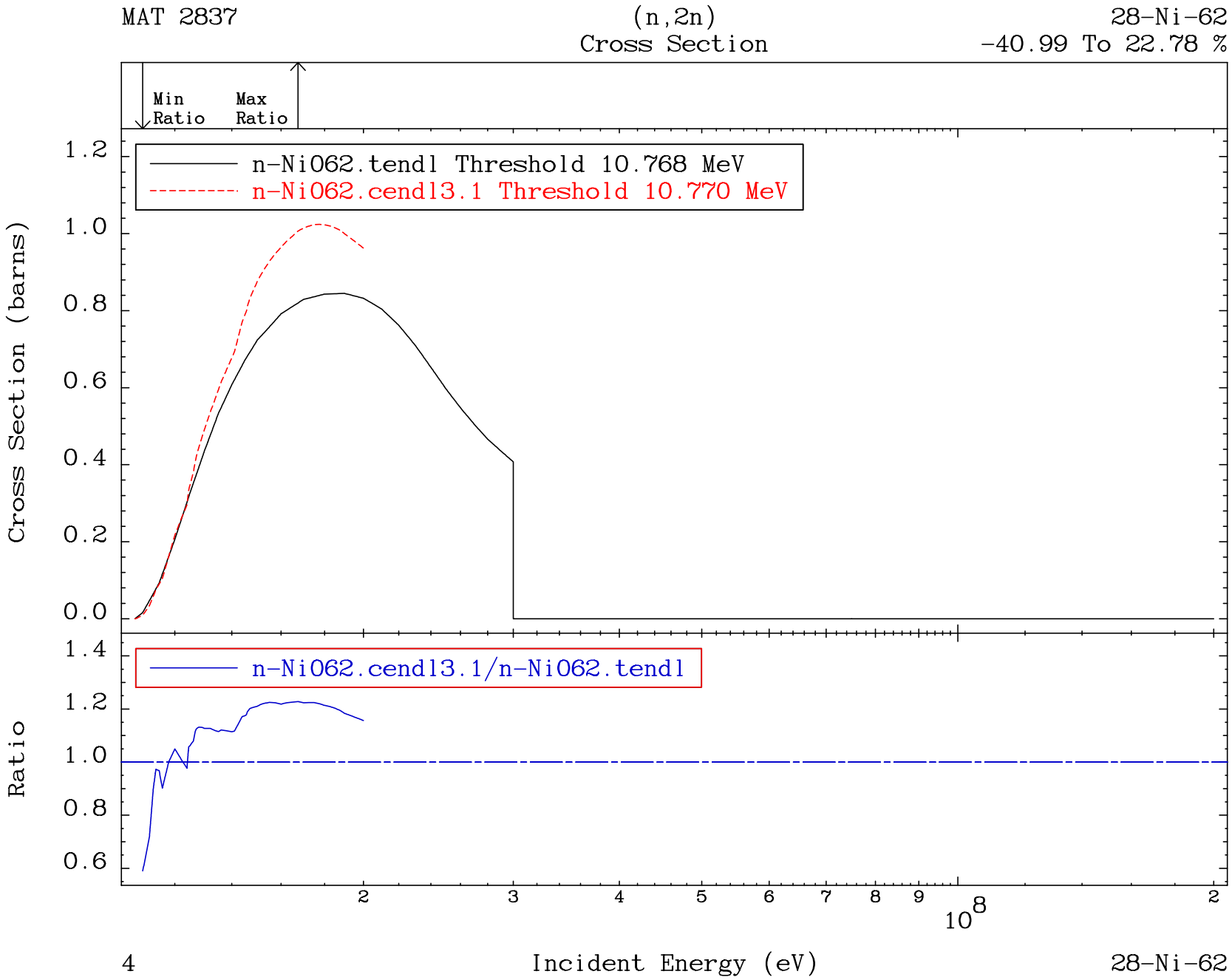
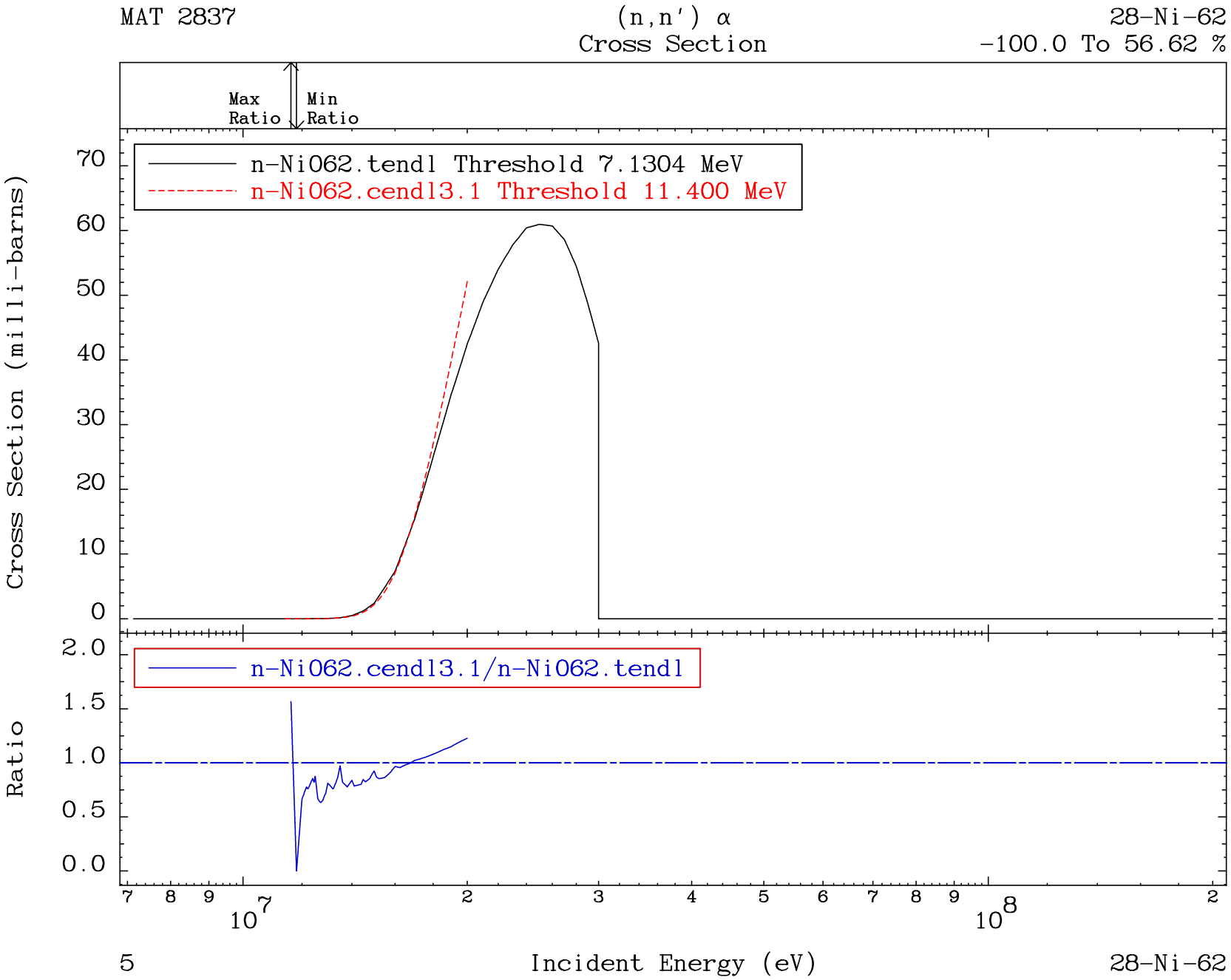
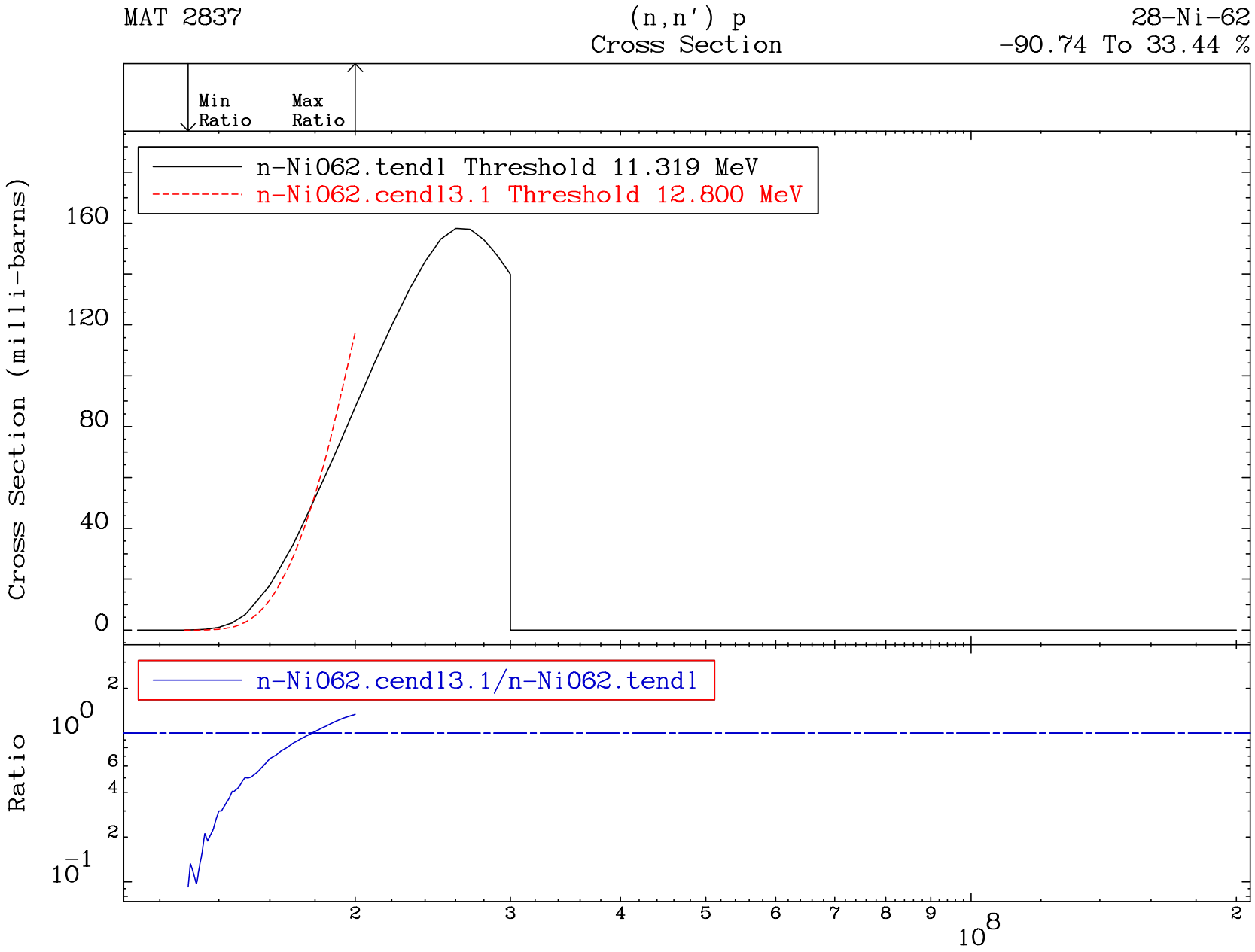

MAT 2837
Total
Cross Section
28-Ni-62
-95.47 To 9469. %
Max
Ratio
Min
Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
1
28-Ni-62

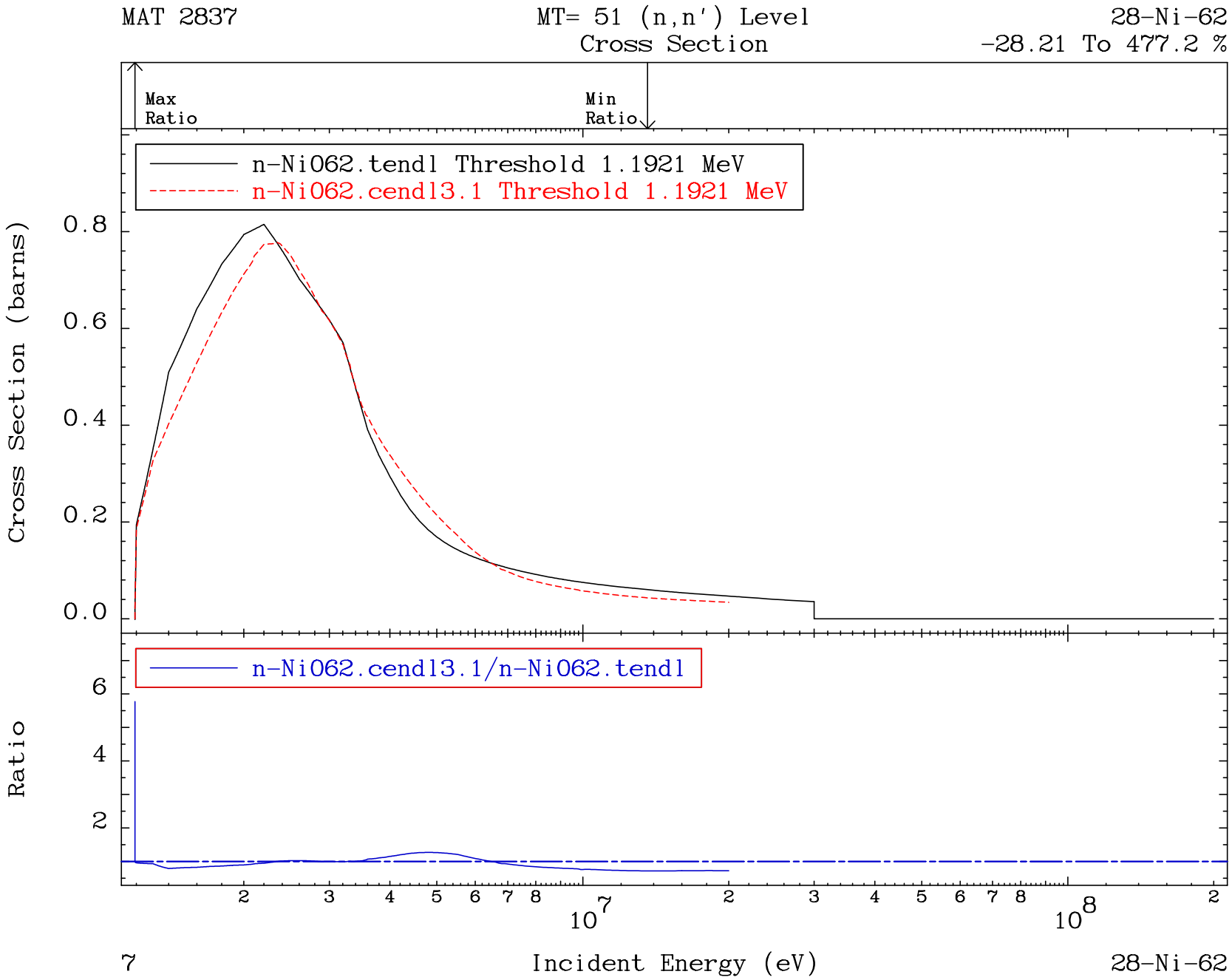

MAT 2837
Elastic
Cross Section
28-Ni-62
-96.87 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
Ratio
n-Ni062.cendl3.1/n-Ni062.tendl
Incident Energy (eV)
2
28-Ni-62

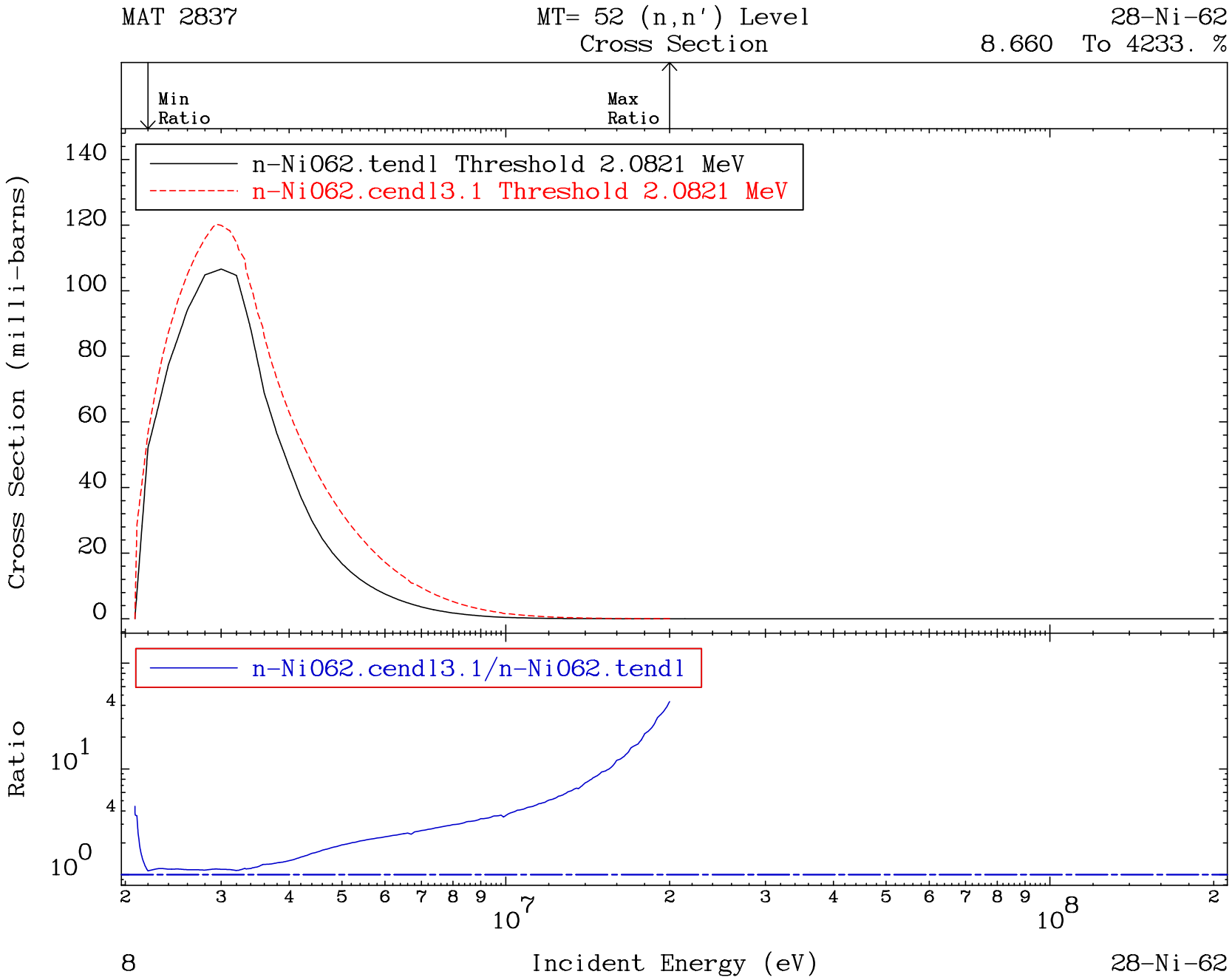

MAT 2837
Inelastic
Cross Section
28-Ni-62
-68.48 To 477.2 %
Max
Ratio
Min
Ratio
n-Ni062.tendl Threshold 1.1921 MeV
n-Ni062.cendl3.1 Threshold 1.1921 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^1
10^0
6
4
6
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
28-Ni-62

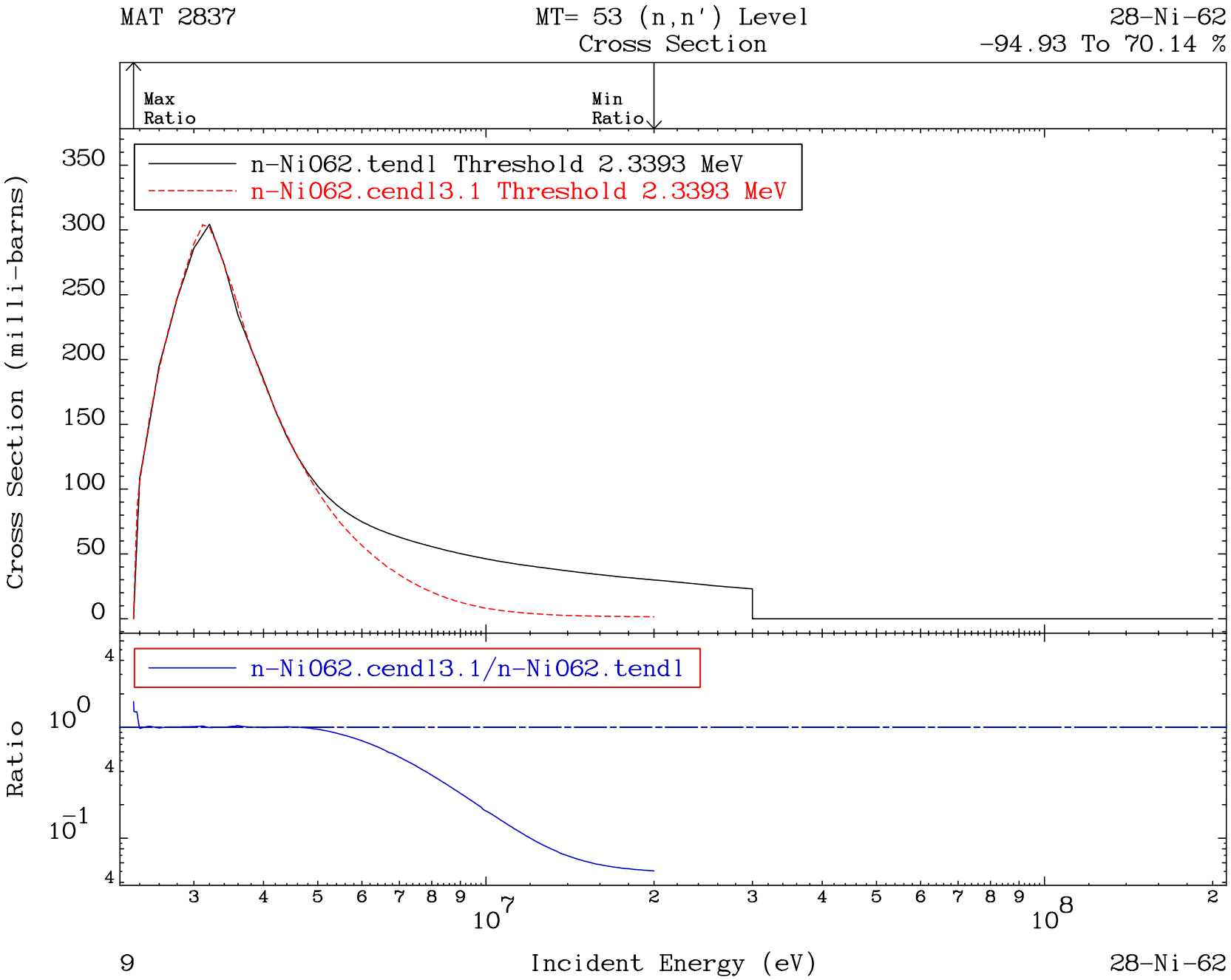

MAT 2837
(n,2n)
Cross Section
28-Ni-62
-40.99 To 22.78 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 10.768 MeV
n-Ni062.cendl3.1 Threshold 10.770 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
1.4
1.2
1.0
0.8
0.6
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
28-Ni-62

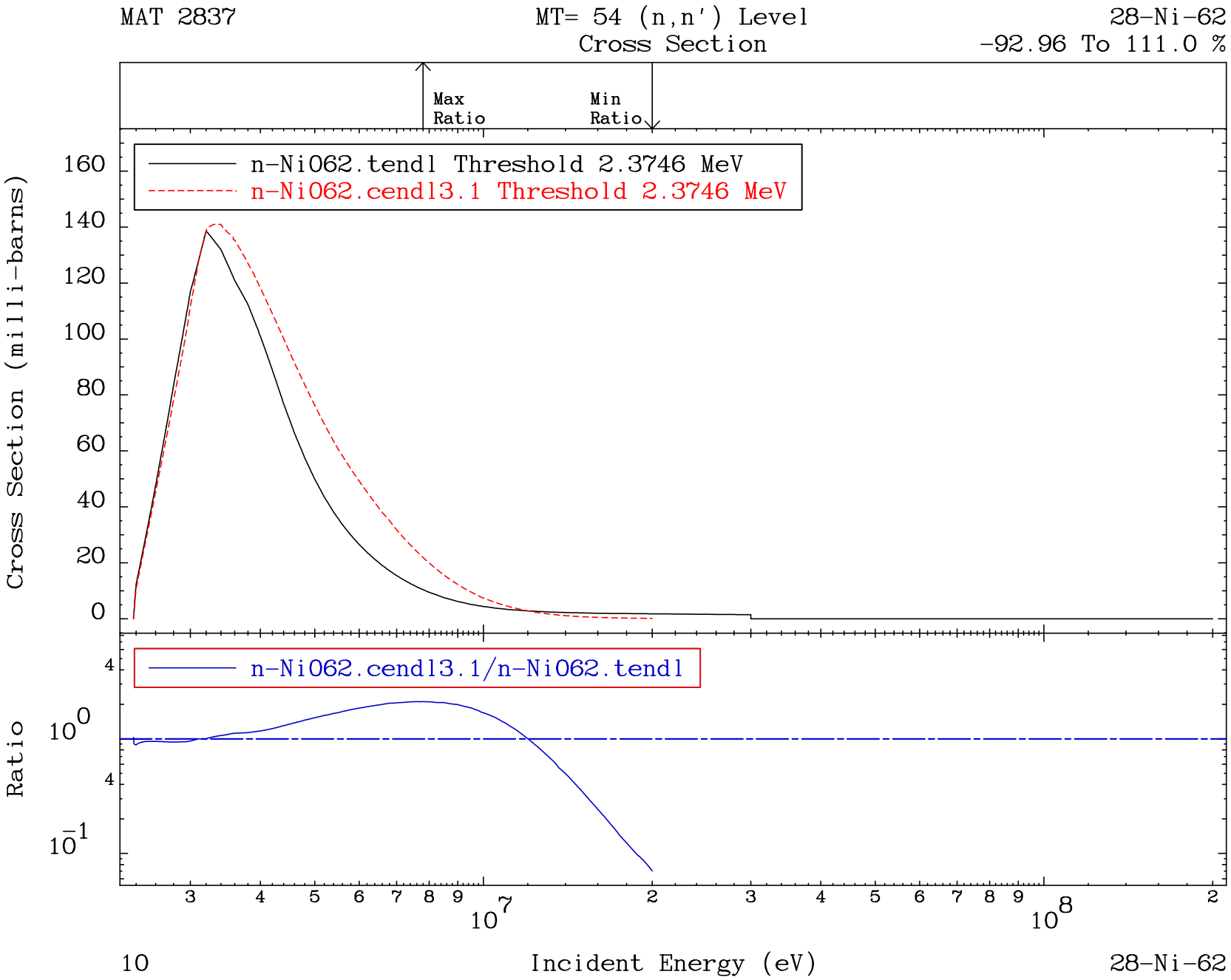

MAT 2837
(n,n') α
Cross Section
28-Ni-62
-100.0 To 56.62 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 7.1304 MeV
n-Ni062.cendl3.1 Threshold 11.400 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
2.0
1.5
1.0
0.5
0.0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
5
28-Ni-62

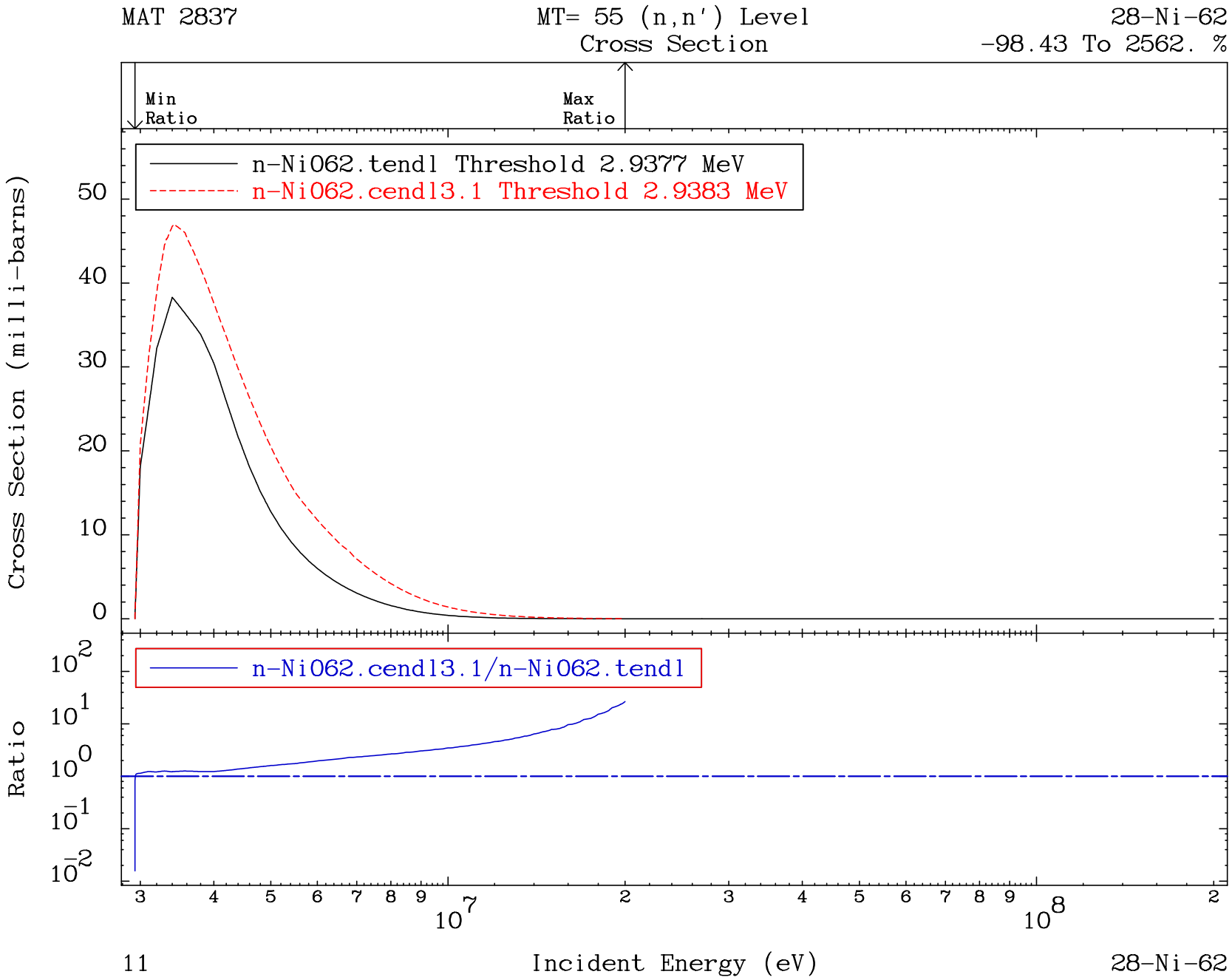

MAT 2837
(n,n') p
Cross Section
28-Ni-62
-90.74 To 33.44 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 11.319 MeV
n-Ni062.cendl3.1 Threshold 12.800 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
2
10^0
6
4
2
10^-1
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
28-Ni-62

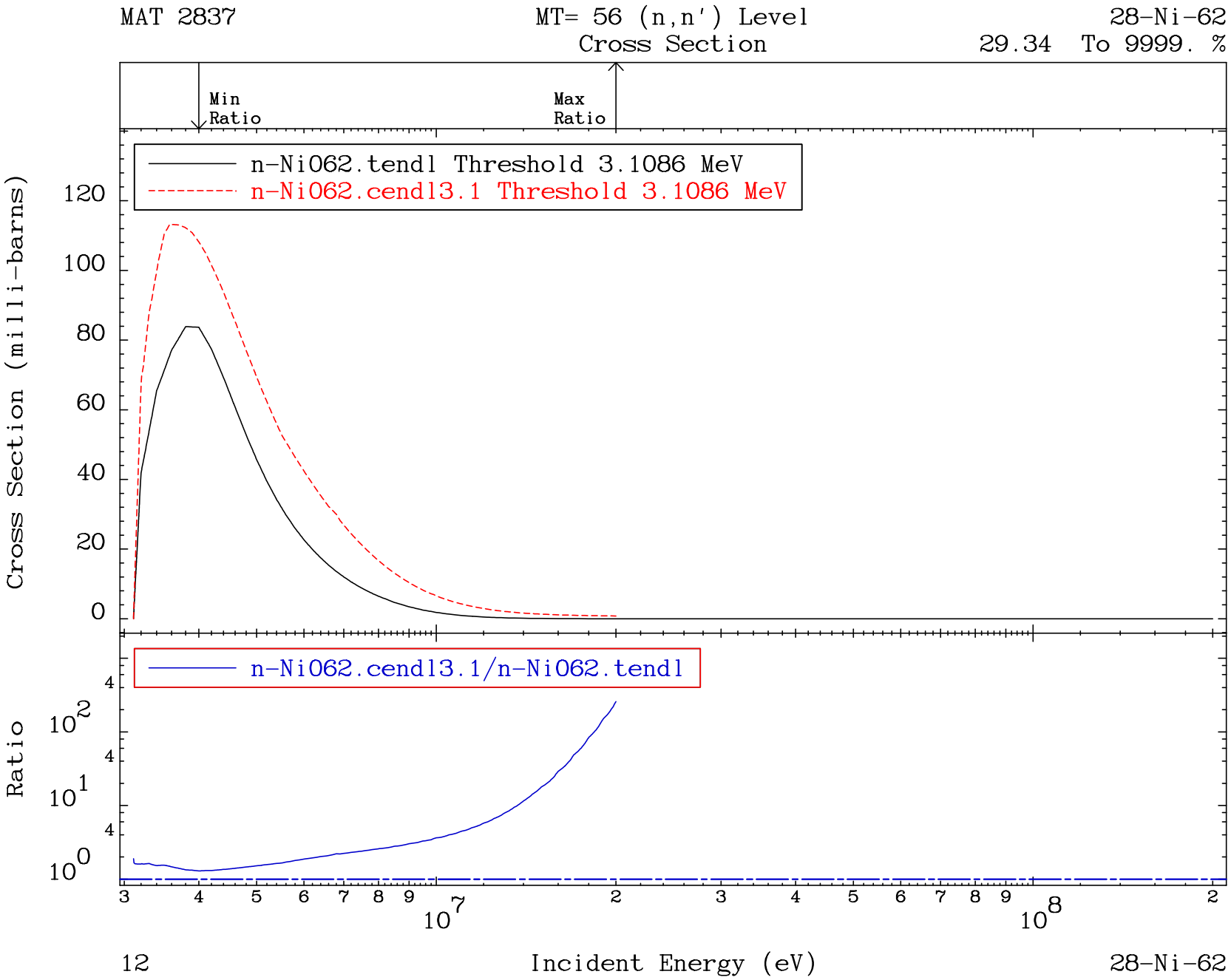

MAT 2837
MT= 51 (n,n') Level
Cross Section
28-Ni-62
-28.21 To 477.2 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 1.1921 MeV
n-Ni062.cendl3.1 Threshold 1.1921 MeV
Cross Section (barns)
0.0
0.2
0.4
0.6
0.8
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
2
4
6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
28-Ni-62

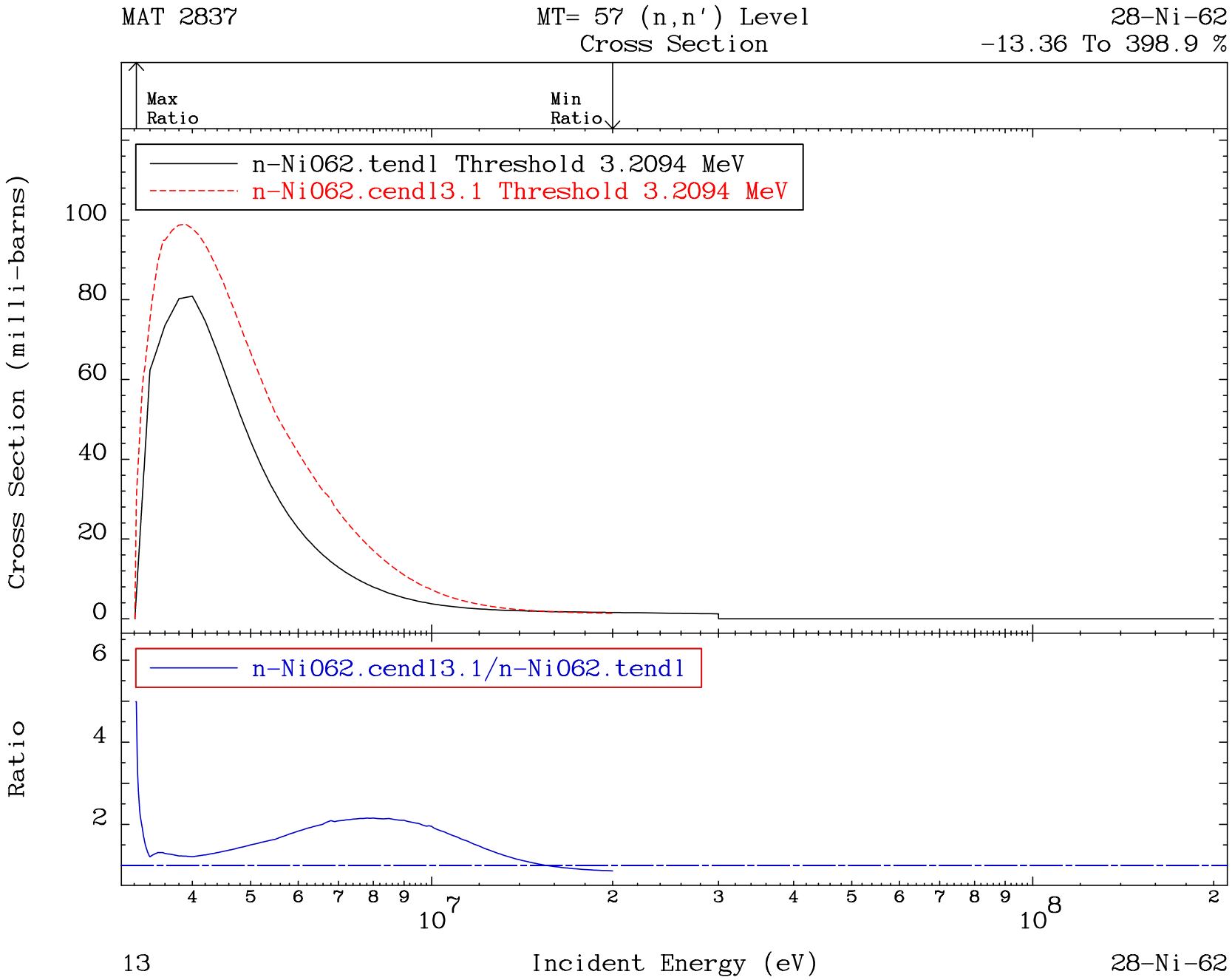

MAT 2837
MT= 52 (n,n') Level
Cross Section
28-Ni-62
8.660 To 4233. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 2.0821 MeV
n-Ni062.cendl3.1 Threshold 2.0821 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^1
10^0
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
28-Ni-62

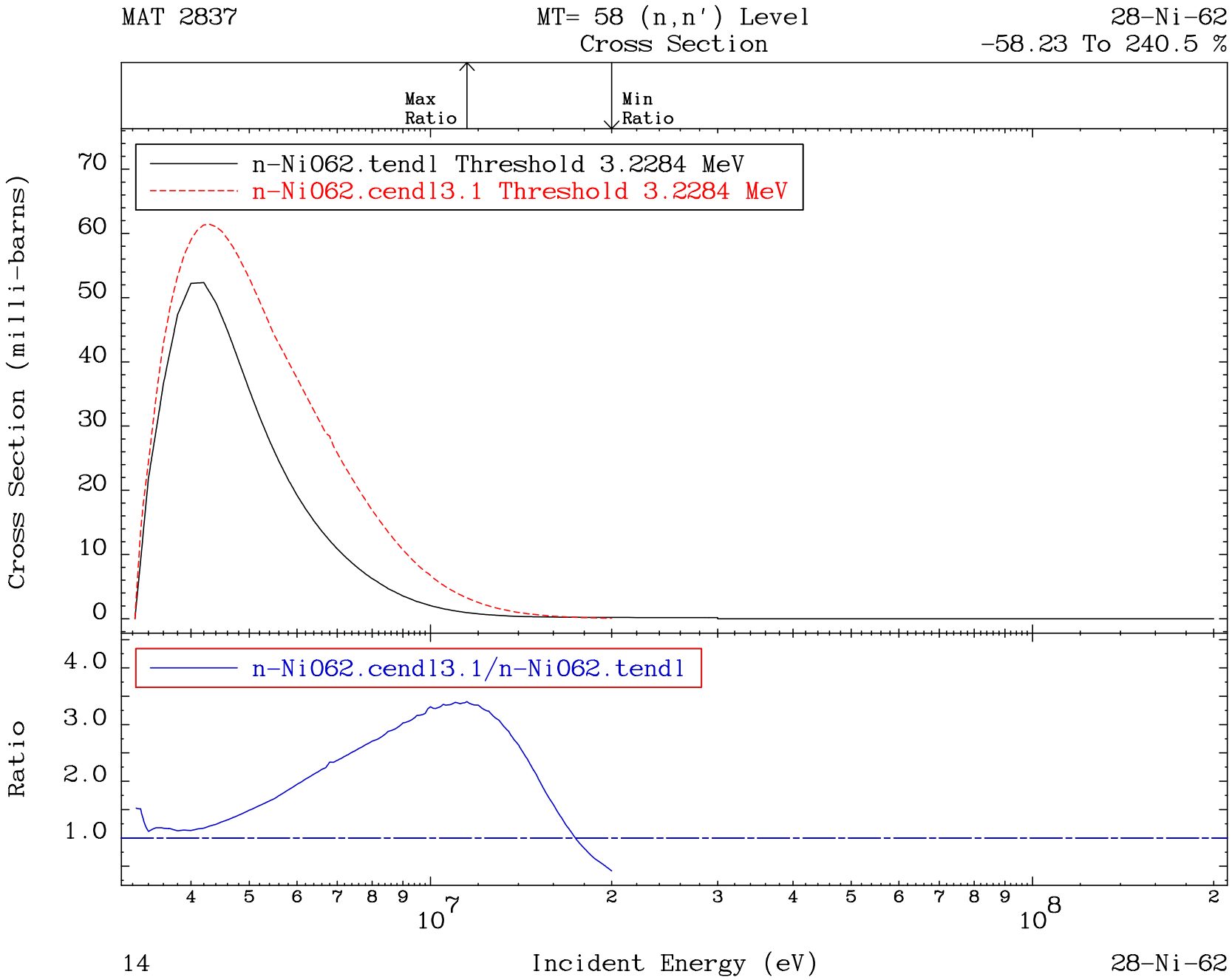

MAT 2837
MT= 53 (n,n') Level
Cross Section
28-Ni-62
-94.93 To 70.14 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 2.3393 MeV
n-Ni062.cendl3.1 Threshold 2.3393 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^{0}
10^{-1}
4
3
4
5
6
7
8
9
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
9
Incident Energy (eV)
28-Ni-62

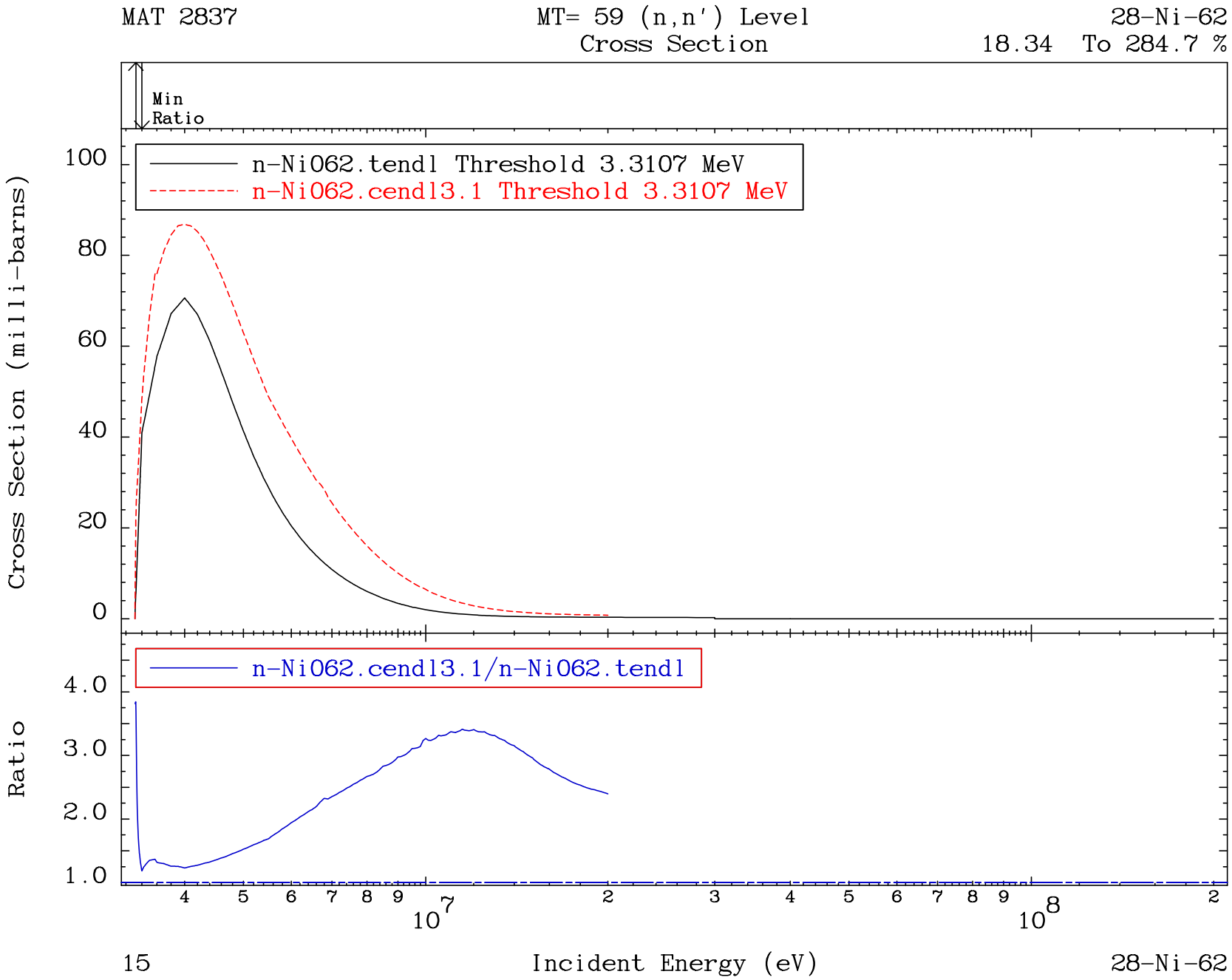

MAT 2837
MT= 54 (n,n') Level
Cross Section
28-Ni-62
-92.96 To 111.0 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 2.3746 MeV
n-Ni062.cendl3.1 Threshold 2.3746 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
4
10^0
4
10^{-1}
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
28-Ni-62

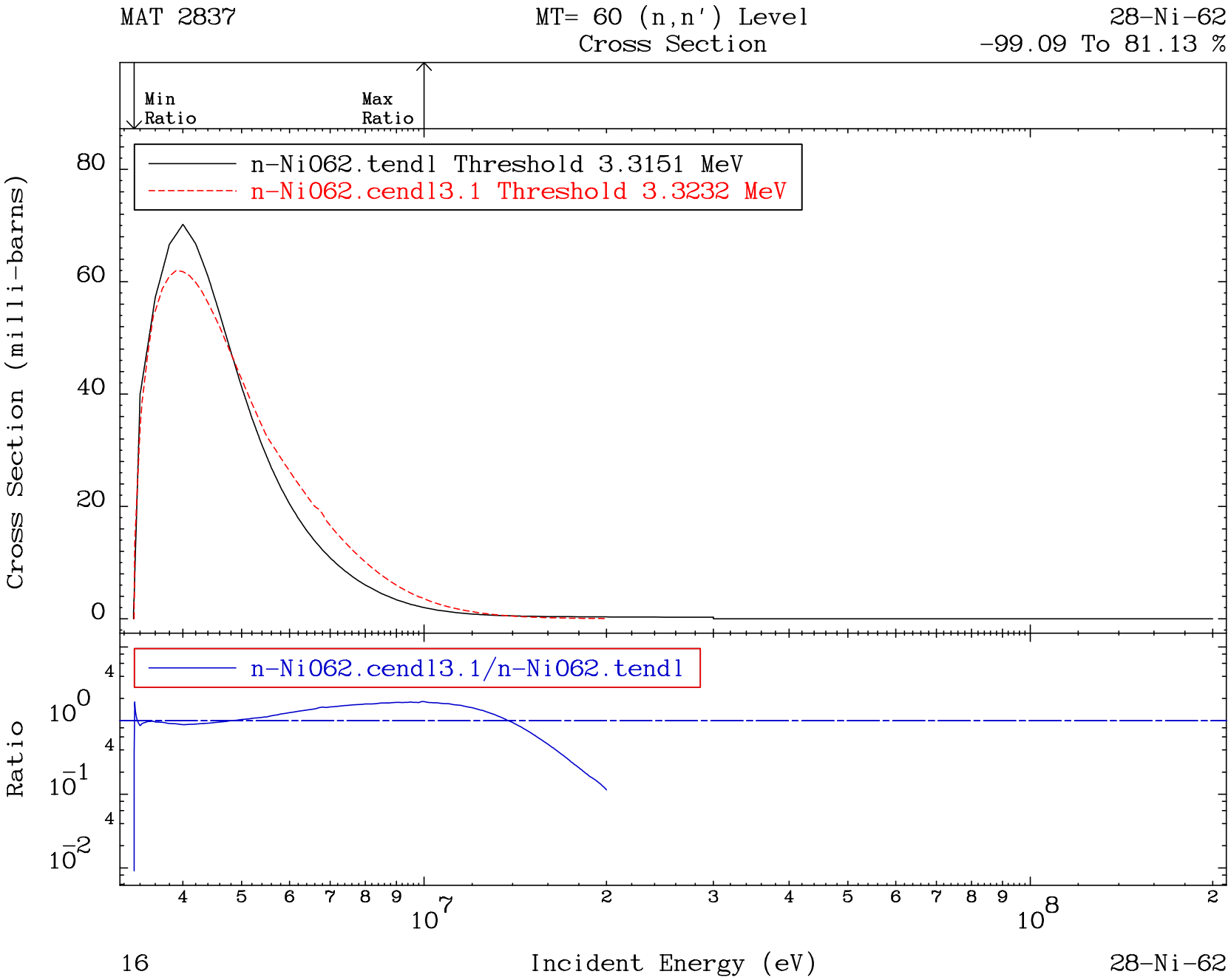

MAT 2837
MT= 55 (n,n') Level
Cross Section
28-Ni-62
-98.43 To 2562. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 2.9377 MeV
n-Ni062.cendl3.1 Threshold 2.9383 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^2
10^1
10^0
10^-1
10^-2
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
11
Incident Energy (eV)
28-Ni-62

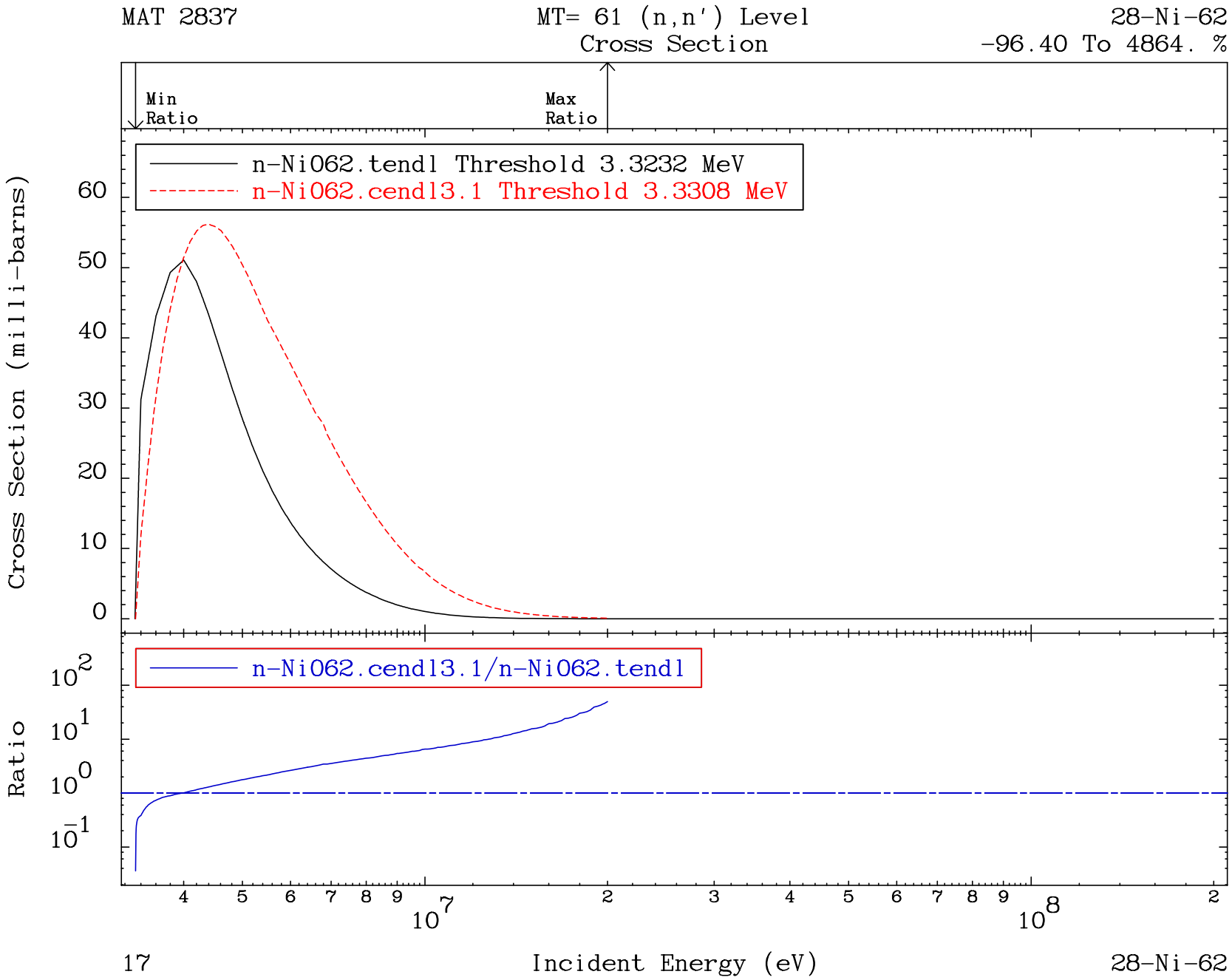

MAT 2837
MT= 56 (n,n') Level
Cross Section
28-Ni-62
29.34 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 3.1086 MeV
n-Ni062.cendl3.1 Threshold 3.1086 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
28-Ni-62

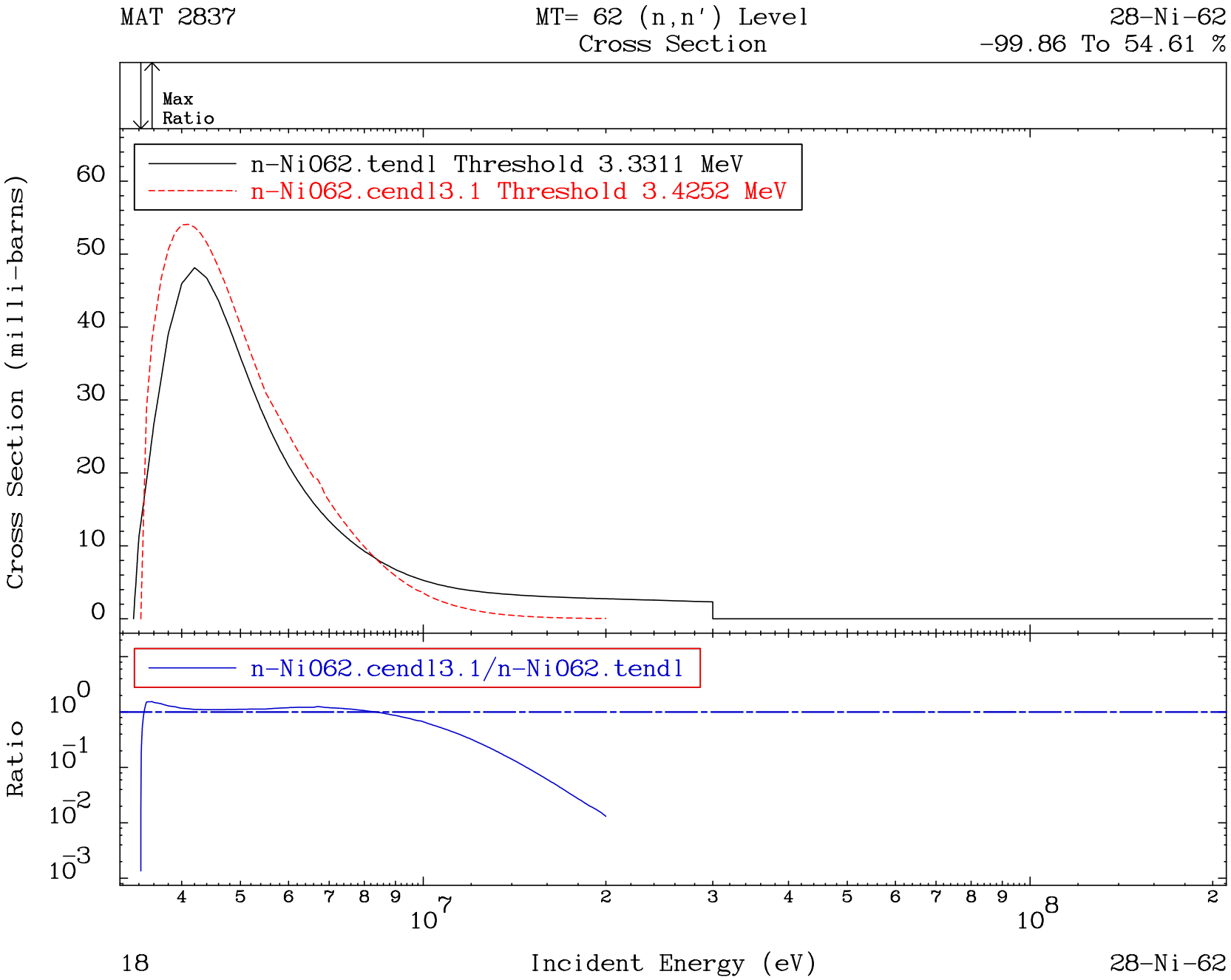

MAT 2837
MT= 57 (n,n') Level
Cross Section
28-Ni-62
-13.36 To 398.9 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 3.2094 MeV
n-Ni062.cendl3.1 Threshold 3.2094 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
6
4
2
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
28-Ni-62

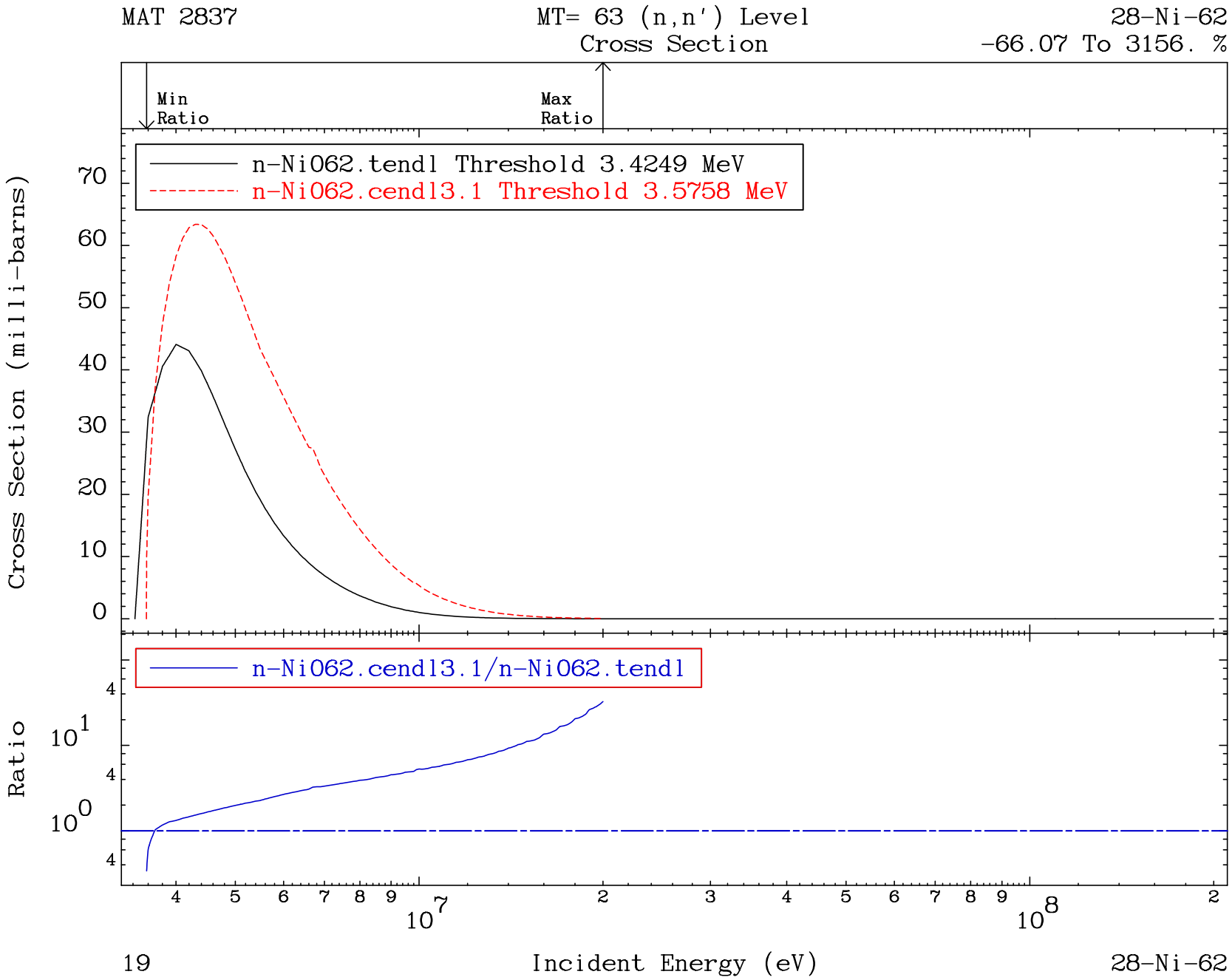

MAT 2837
MT= 58 (n,n') Level
Cross Section
28-Ni-62
-58.23 To 240.5 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 3.2284 MeV
n-Ni062.cendl3.1 Threshold 3.2284 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
4.0
3.0
2.0
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
28-Ni-62

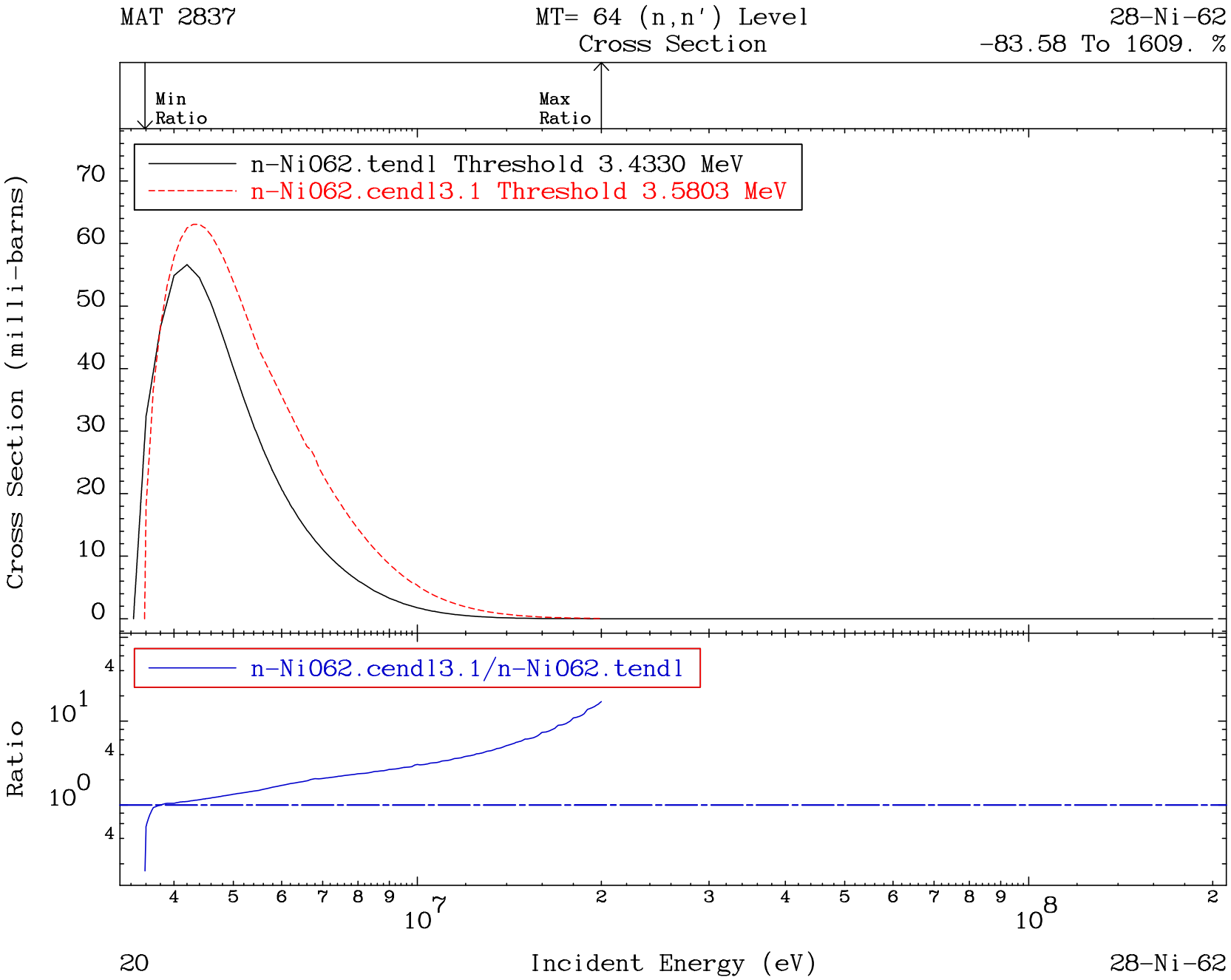

MAT 2837
MT= 59 (n,n') Level
Cross Section
28-Ni-62
18.34 To 284.7 %
Min
Ratio
n-Ni062.tendl Threshold 3.3107 MeV
n-Ni062.cendl3.1 Threshold 3.3107 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
4.0
3.0
2.0
1.0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
28-Ni-62

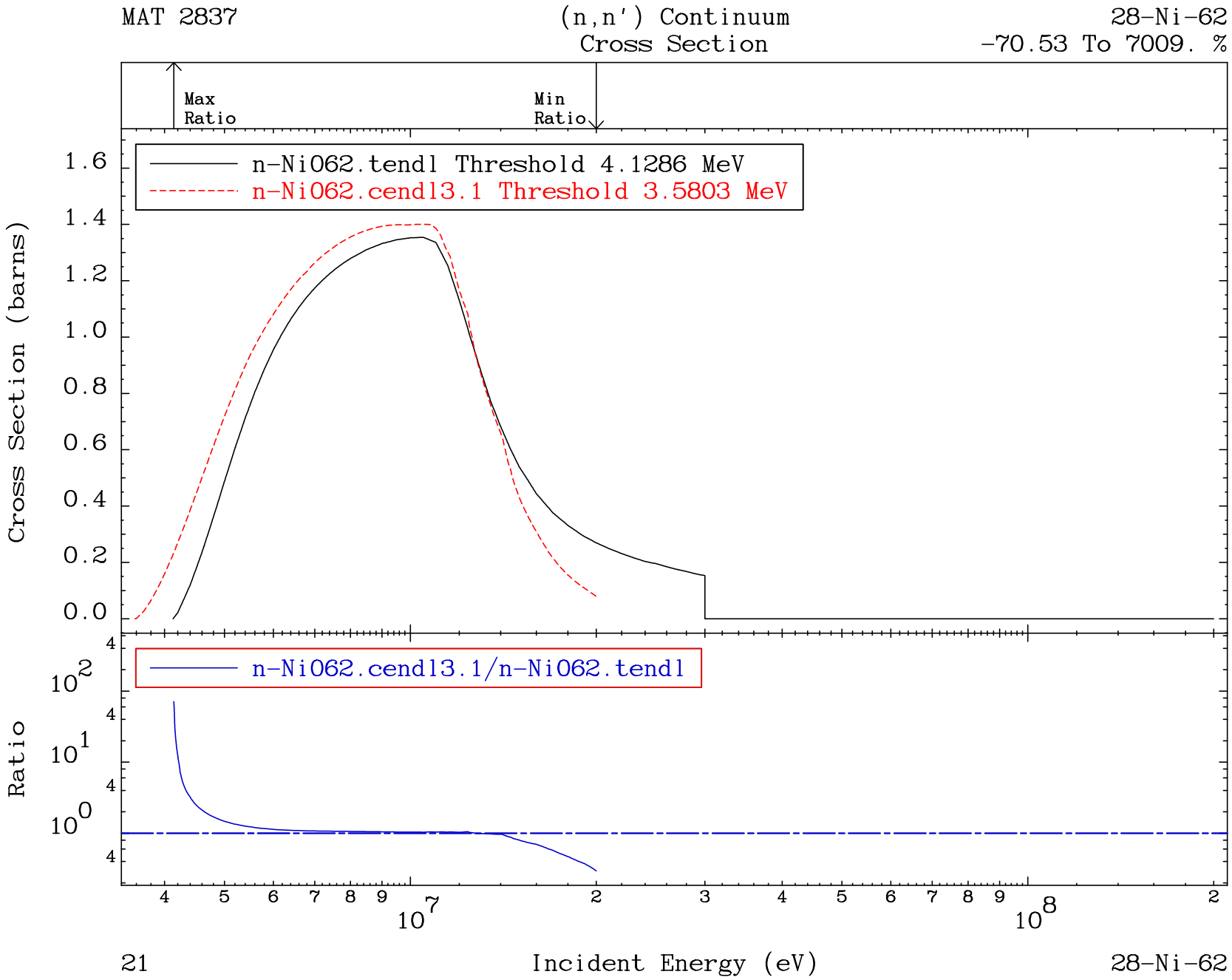

MAT 2837
MT= 60 (n,n') Level
Cross Section
28-Ni-62
-99.09 To 81.13 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 3.3151 MeV
n-Ni062.cendl3.1 Threshold 3.3232 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
4
10^{0}
4
10^{-1}
4
10^{-2}
4 5 6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
16
Incident Energy (eV)
28-Ni-62

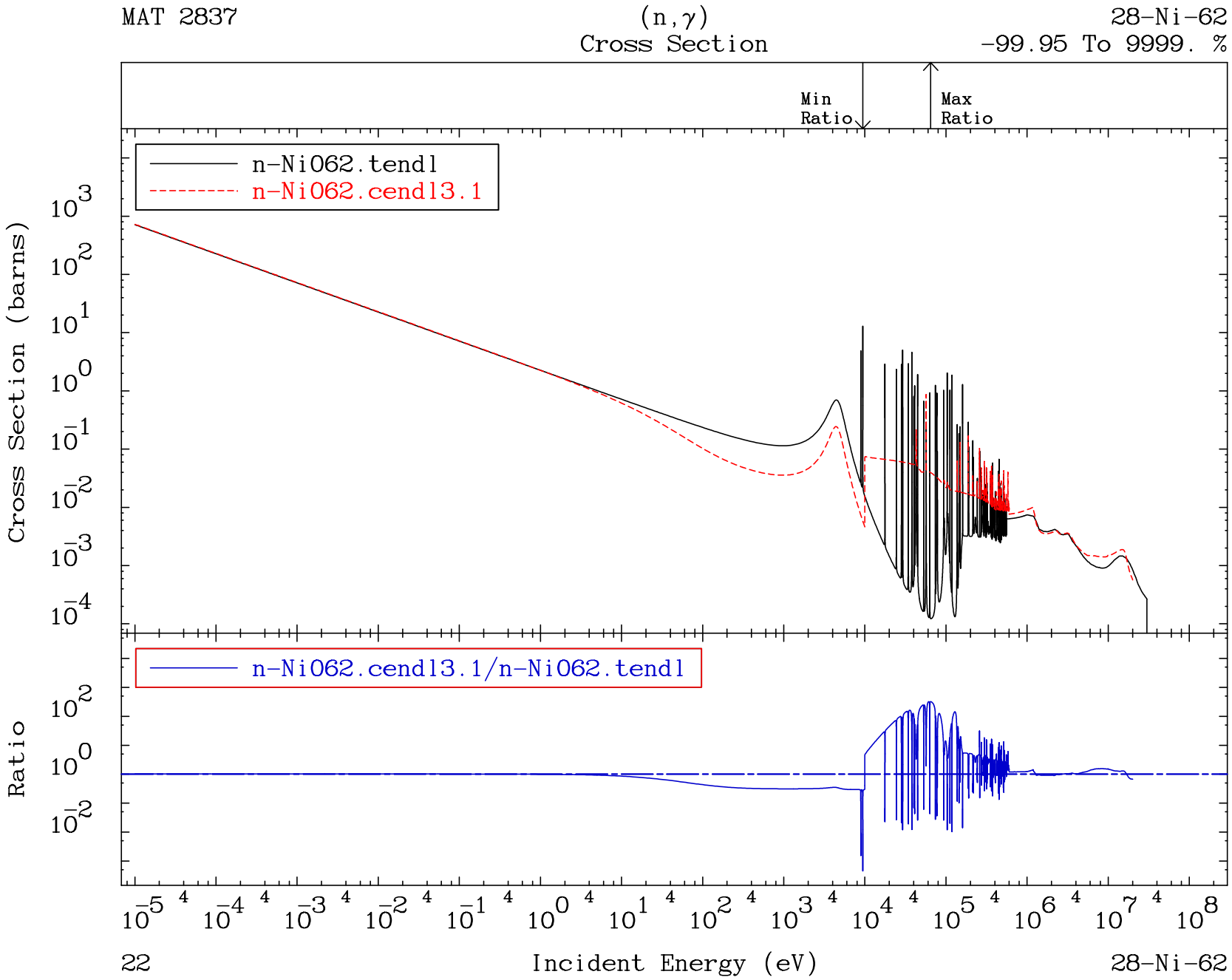

MAT 2837
MT= 61 (n,n') Level
Cross Section
28-Ni-62
-96.40 To 4864. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 3.3232 MeV
n-Ni062.cendl3.1 Threshold 3.3308 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^2
10^1
10^0
10^-1
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
28-Ni-62

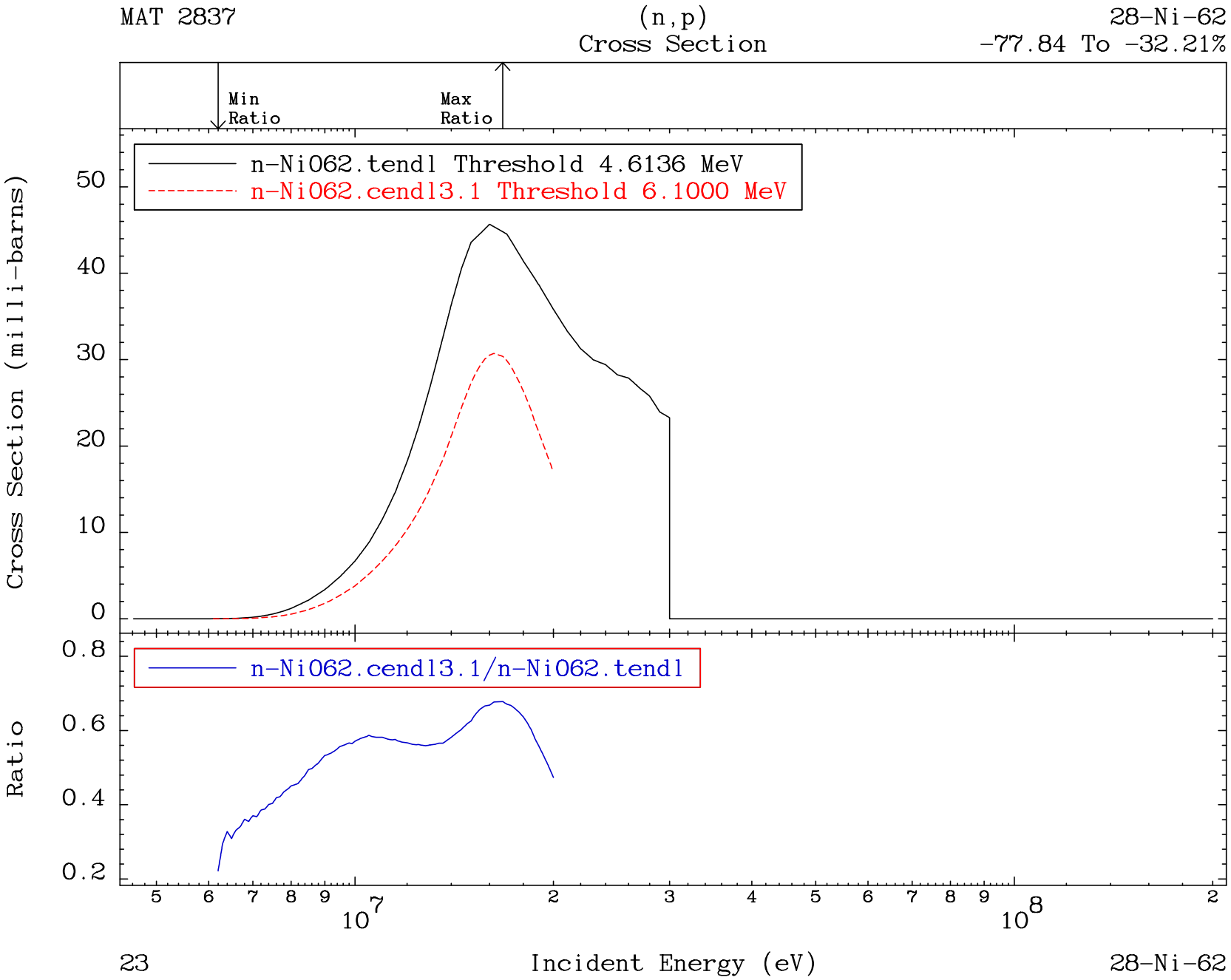

MAT 2837
MT= 62 (n,n') Level
Cross Section
28-Ni-62
-99.86 To 54.61 %
Max
Ratio
n-Ni062.tendl Threshold 3.3311 MeV
n-Ni062.cendl3.1 Threshold 3.4252 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^0
10^-1
10^-2
10^-3
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
28-Ni-62

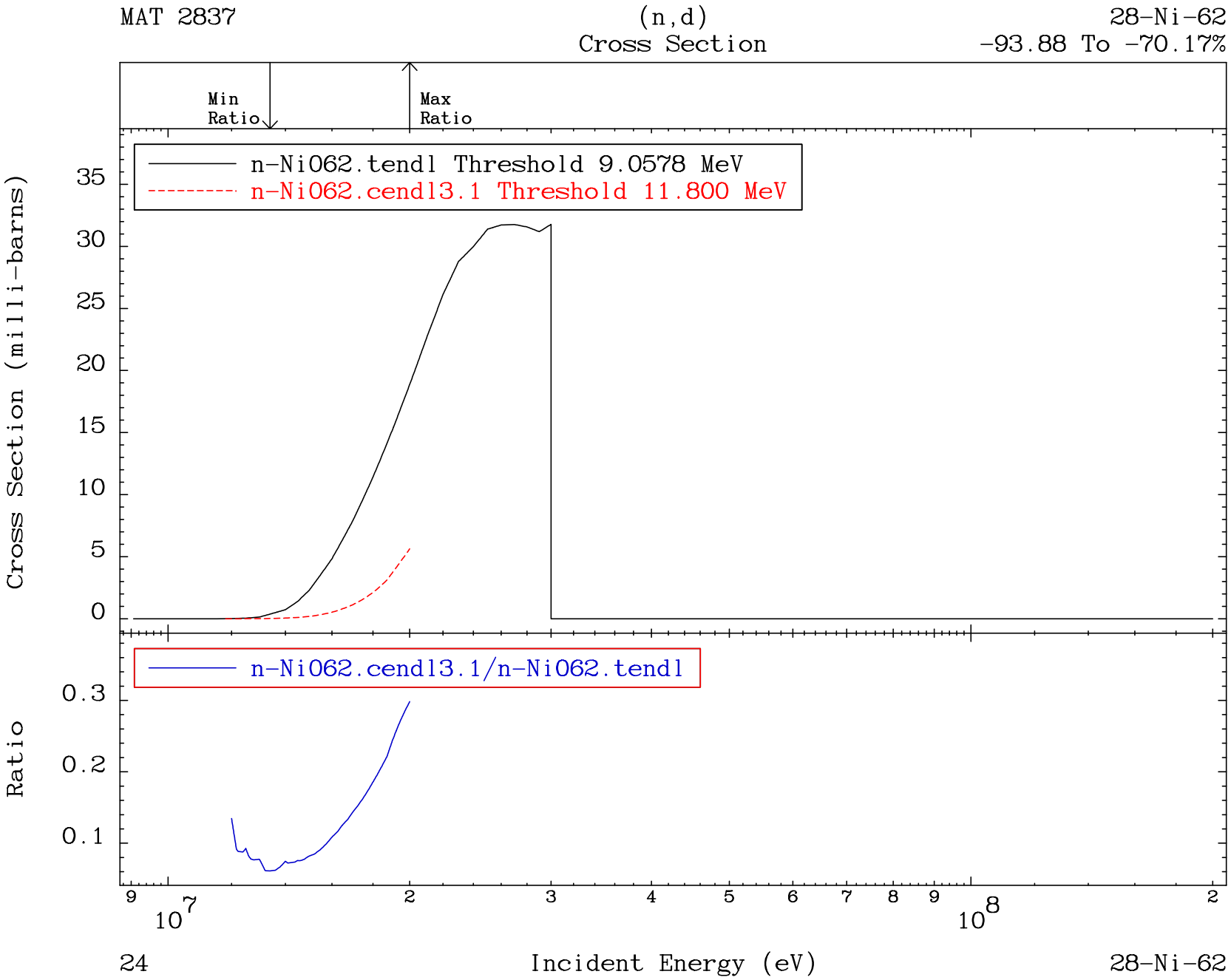

MAT 2837
MT= 63 (n,n') Level
Cross Section
28-Ni-62
-66.07 To 3156. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 3.4249 MeV
n-Ni062.cendl3.1 Threshold 3.5758 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^1
10^0
4
4
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
28-Ni-62

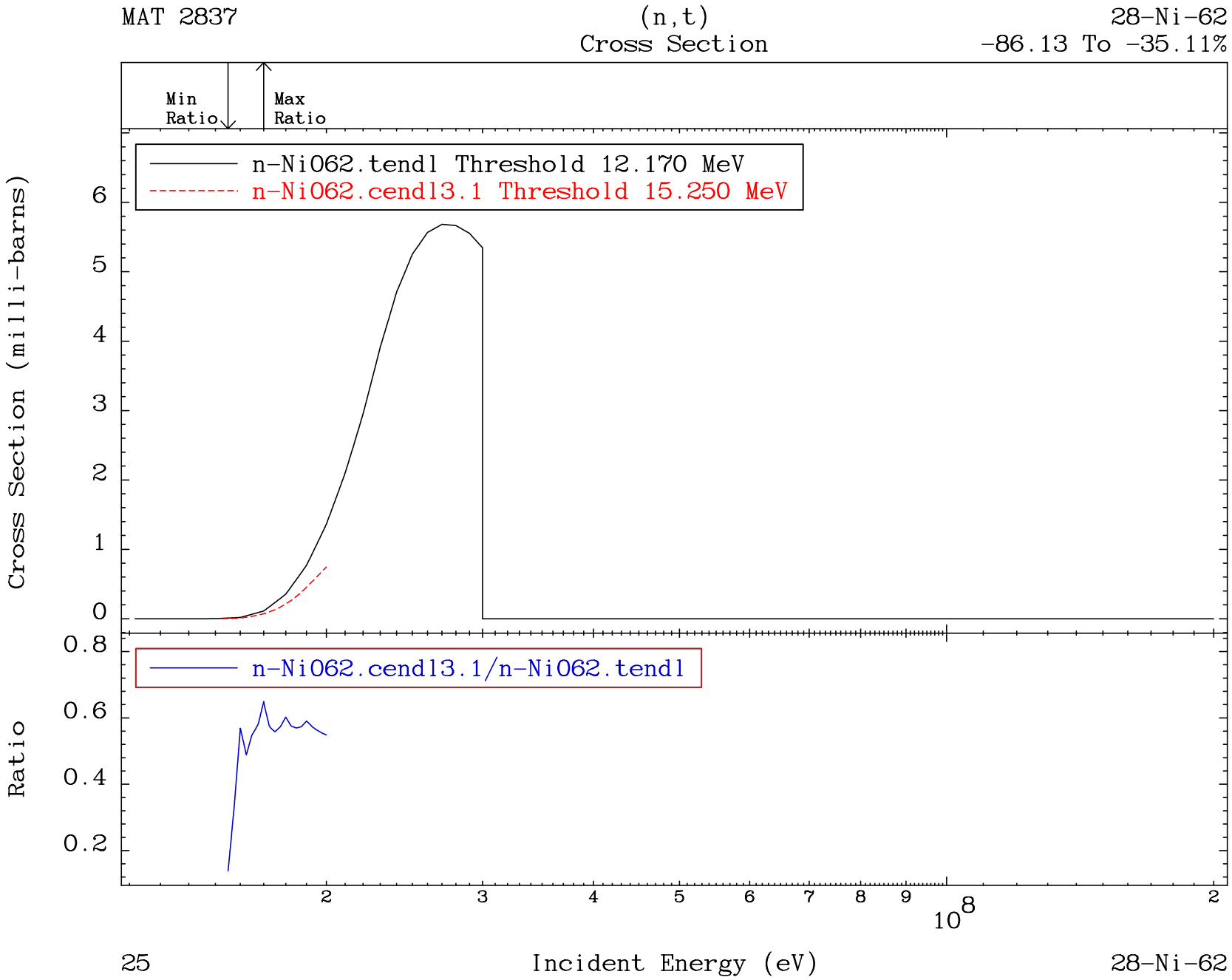

MAT 2837
MT= 64 (n,n') Level
Cross Section
28-Ni-62
-83.58 To 1609. %
Min
Ratio
Max
Ratio
n-Ni062.tendl Threshold 3.4330 MeV
n-Ni062.cendl3.1 Threshold 3.5803 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^1
10^0
4
4
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
28-Ni-62

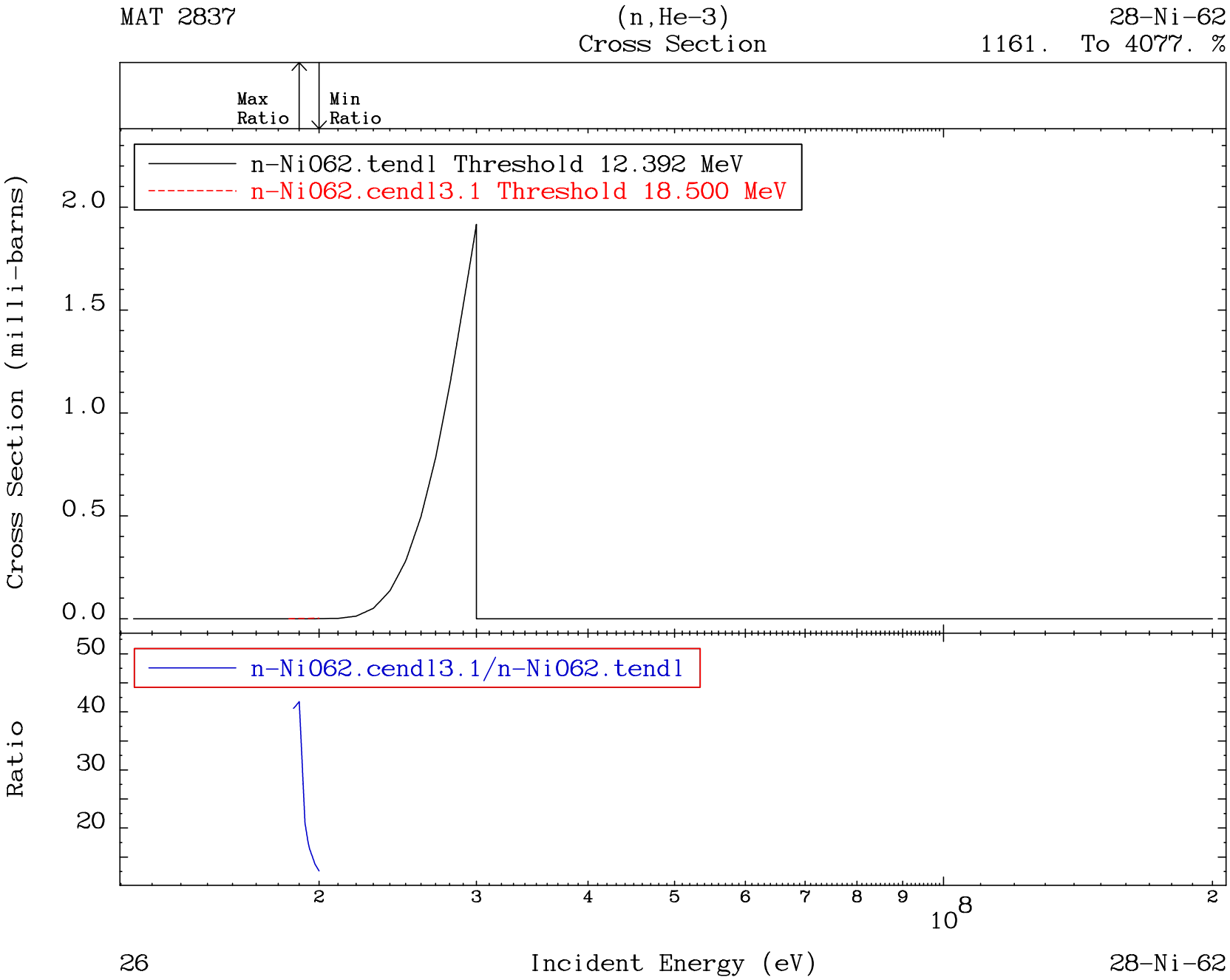

MAT 2837
(n,n') Continuum
Cross Section
28-Ni-62
-70.53 To 7009. %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 4.1286 MeV
n-Ni062.cendl3.1 Threshold 3.5803 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^2
10^1
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
28-Ni-62

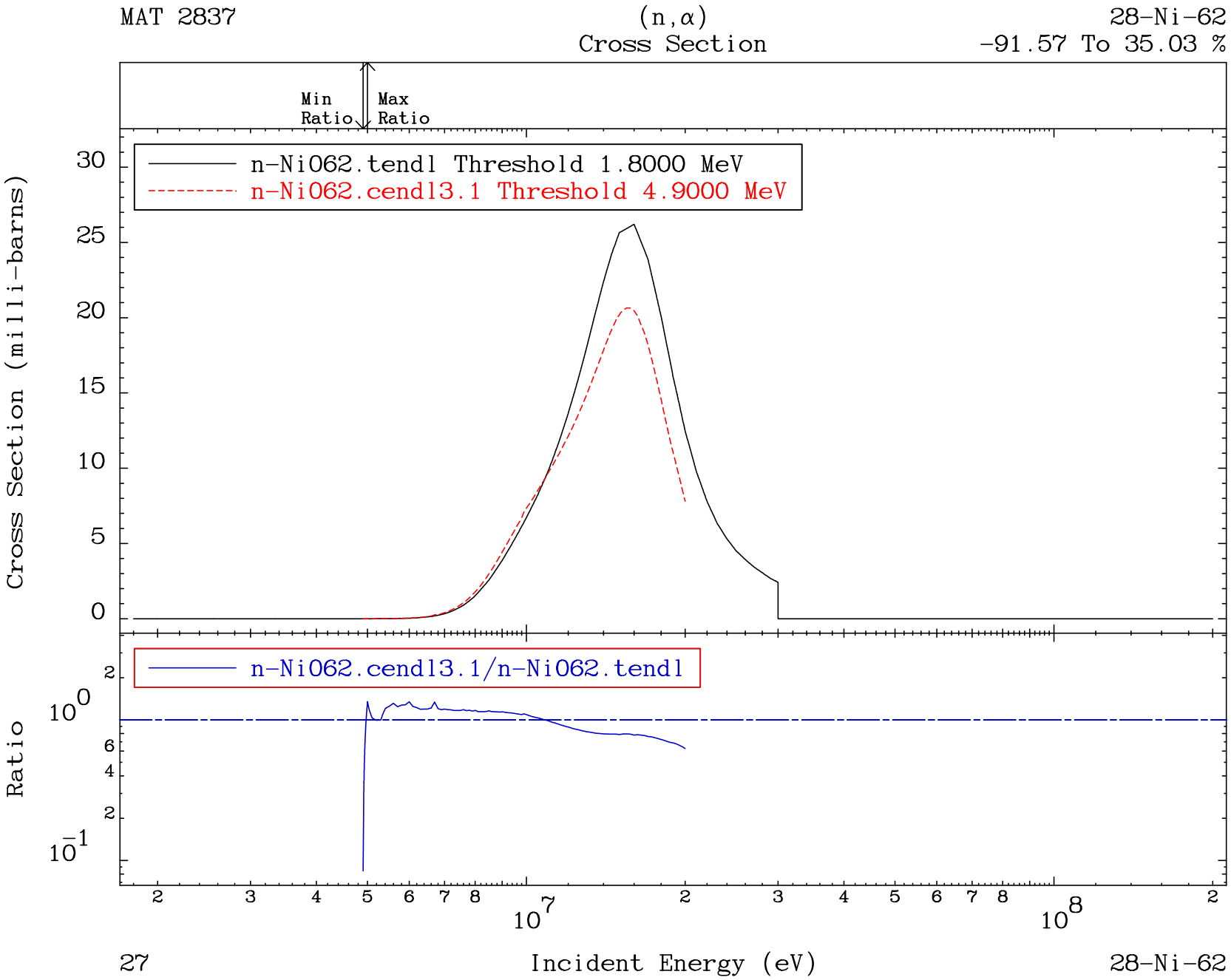

MAT 2837
(n,γ)
Cross Section
28-Ni-62
-99.95 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
22
28-Ni-62

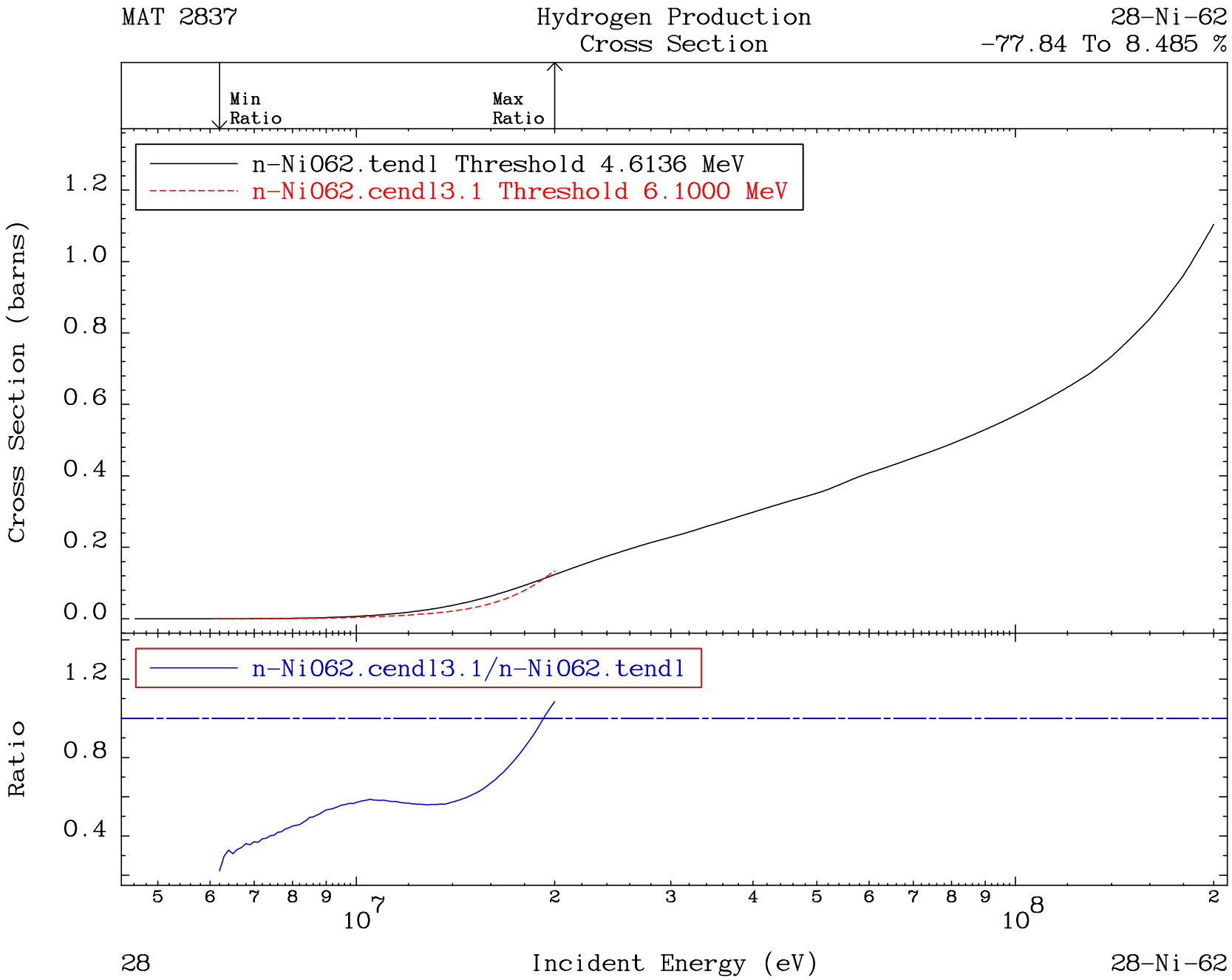

MAT 2837
(n,p)
Cross Section
28-Ni-62
-77.84 To -32.21%
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 4.6136 MeV
n-Ni062.cendl3.1 Threshold 6.1000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
0.8
0.6
0.4
0.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
28-Ni-62

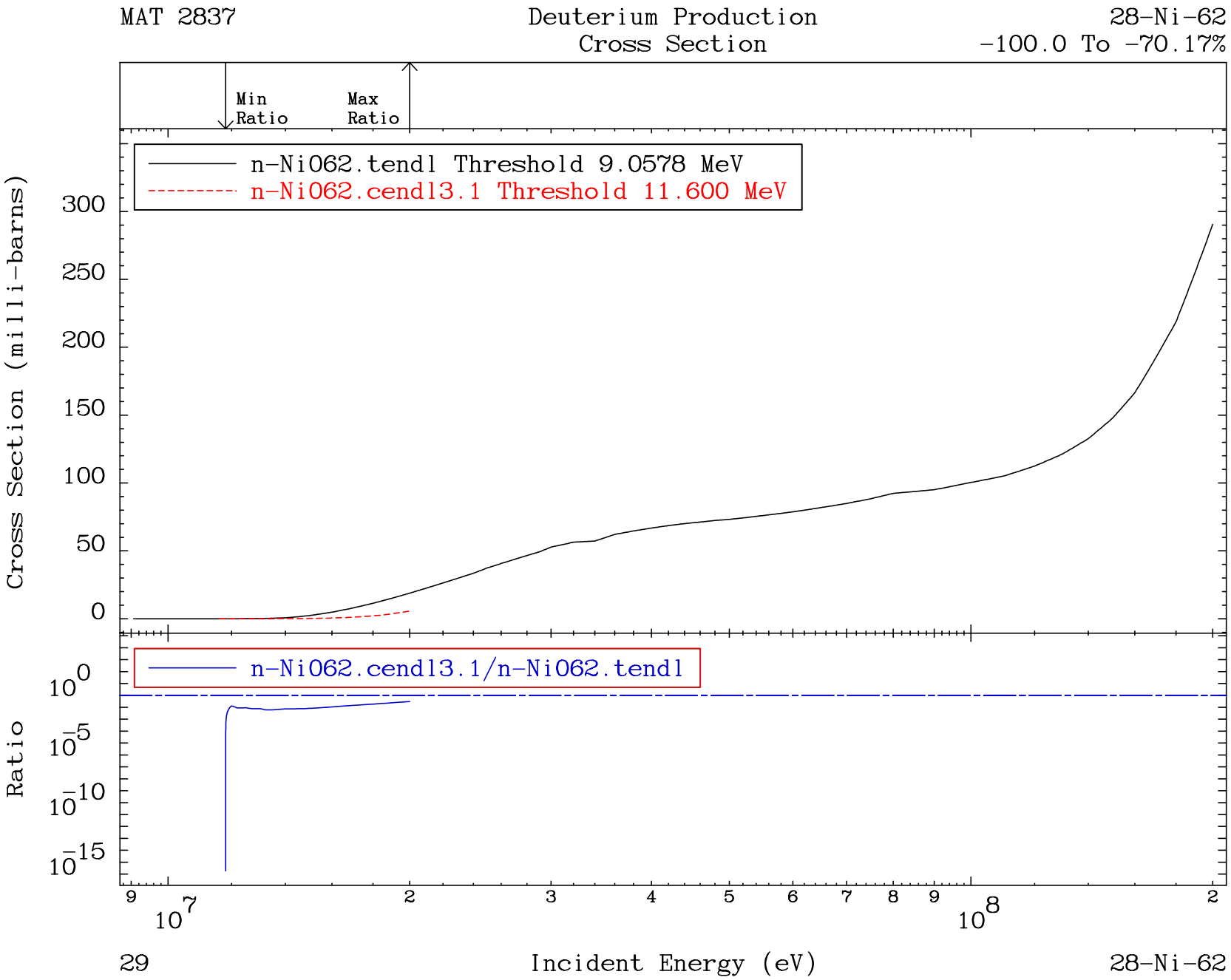

MAT 2837
(n,d)
Cross Section
28-Ni-62
-93.88 To -70.17%
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 9.0578 MeV
n-Ni062.cendl3.1 Threshold 11.800 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
0.3
0.2
0.1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
28-Ni-62

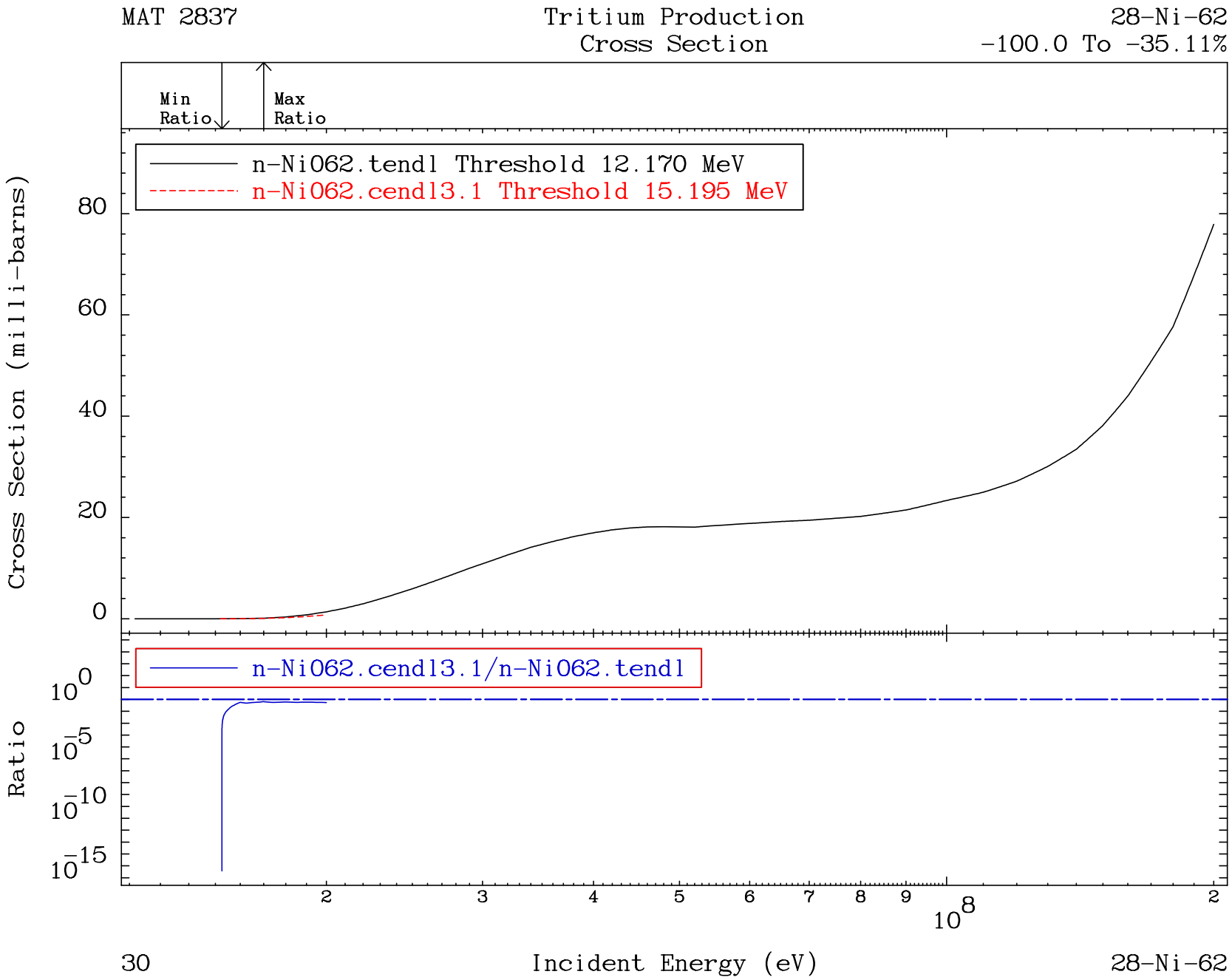

MAT 2837
(n,t)
Cross Section
28-Ni-62
-86.13 To -35.11%
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 12.170 MeV
n-Ni062.cendl3.1 Threshold 15.250 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
0.2
0.4
0.6
0.8
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
28-Ni-62

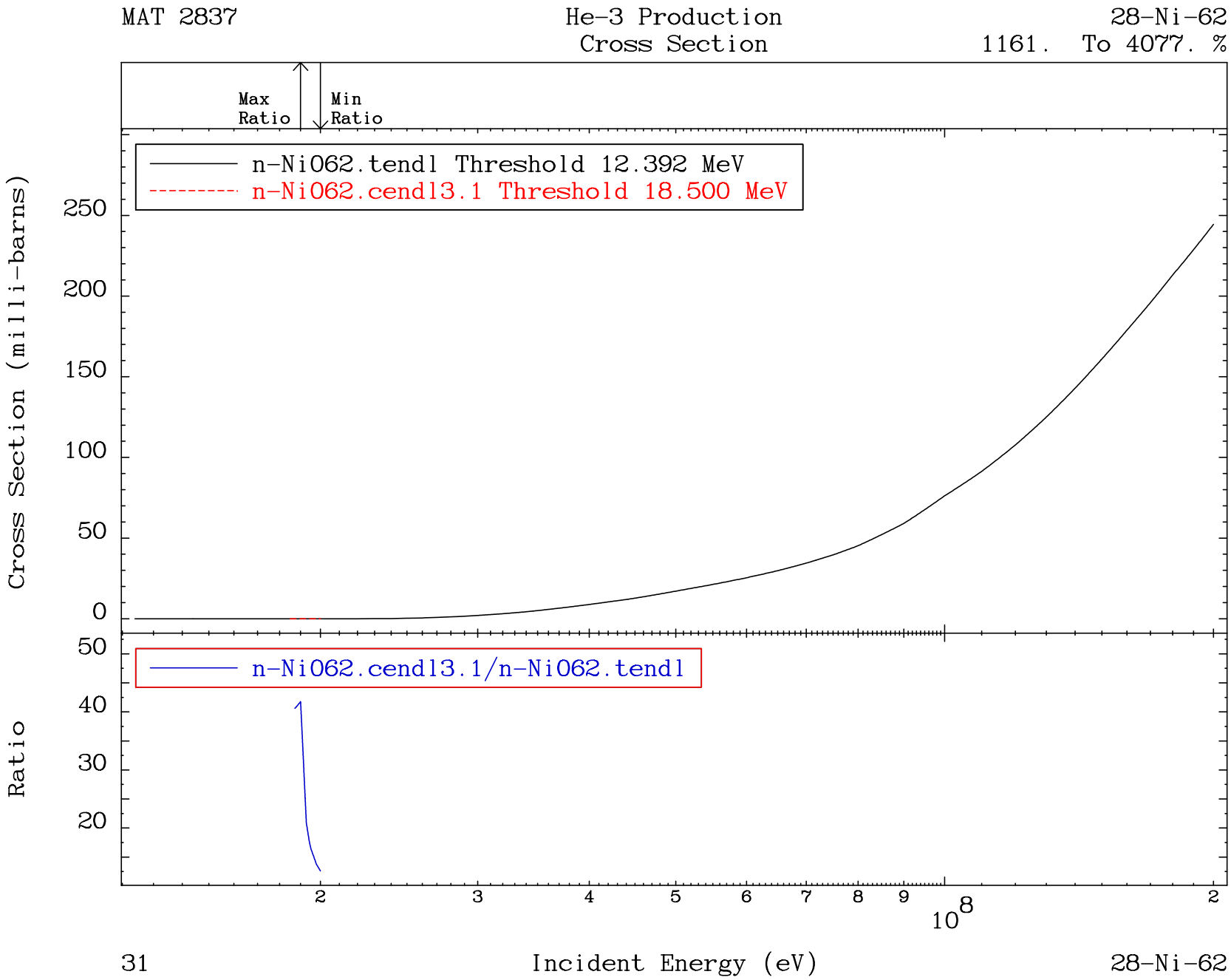

MAT 2837
(n,He-3)
Cross Section
28-Ni-62
1161. To 4077. %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 12.392 MeV
n-Ni062.cendl3.1 Threshold 18.500 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
50
40
30
20
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
28-Ni-62

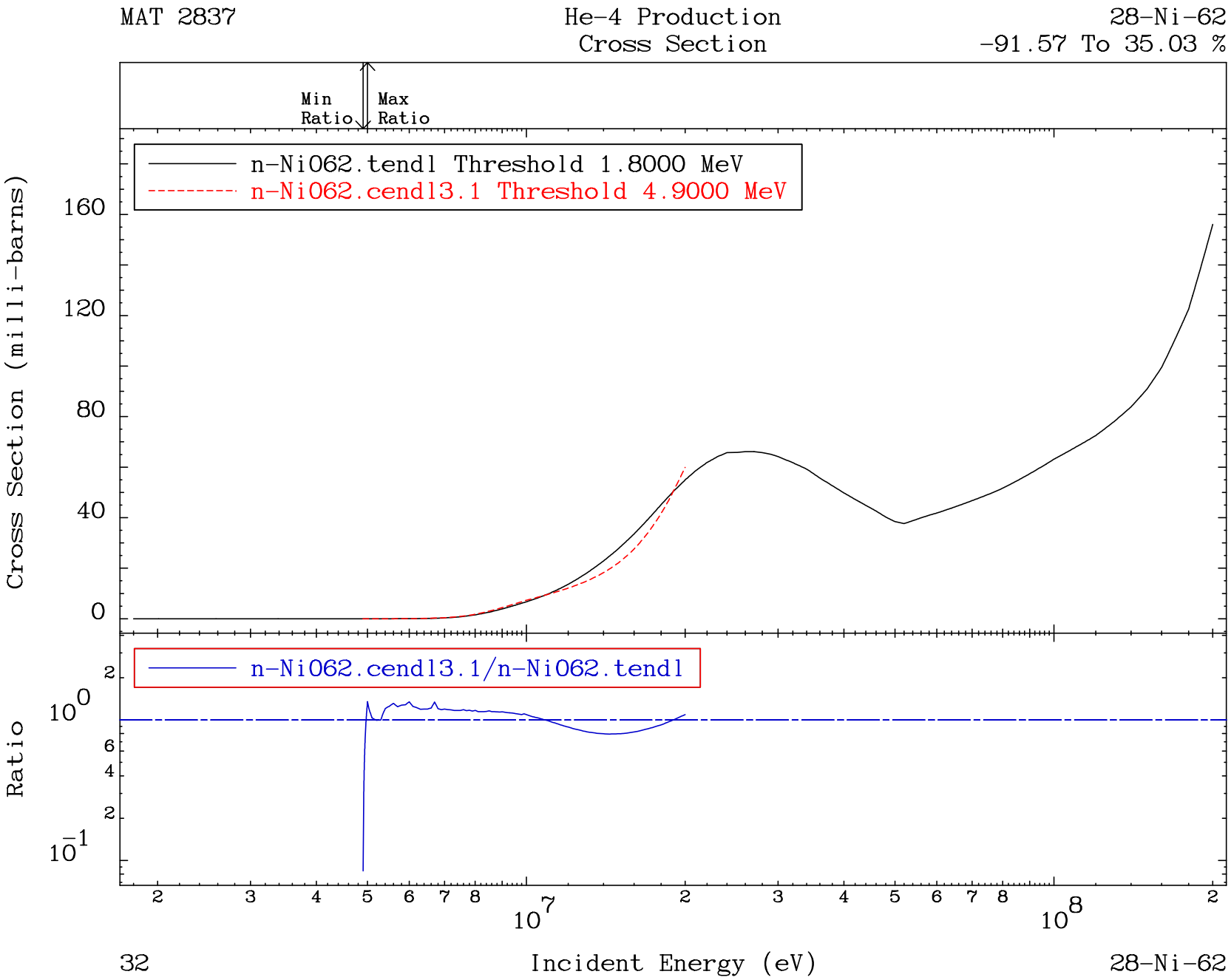

MAT 2837
(n,α)
Cross Section
28-Ni-62
-91.57 To 35.03 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 1.8000 MeV
n-Ni062.cendl3.1 Threshold 4.9000 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^0
10^-1
2
6
4
2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
28-Ni-62

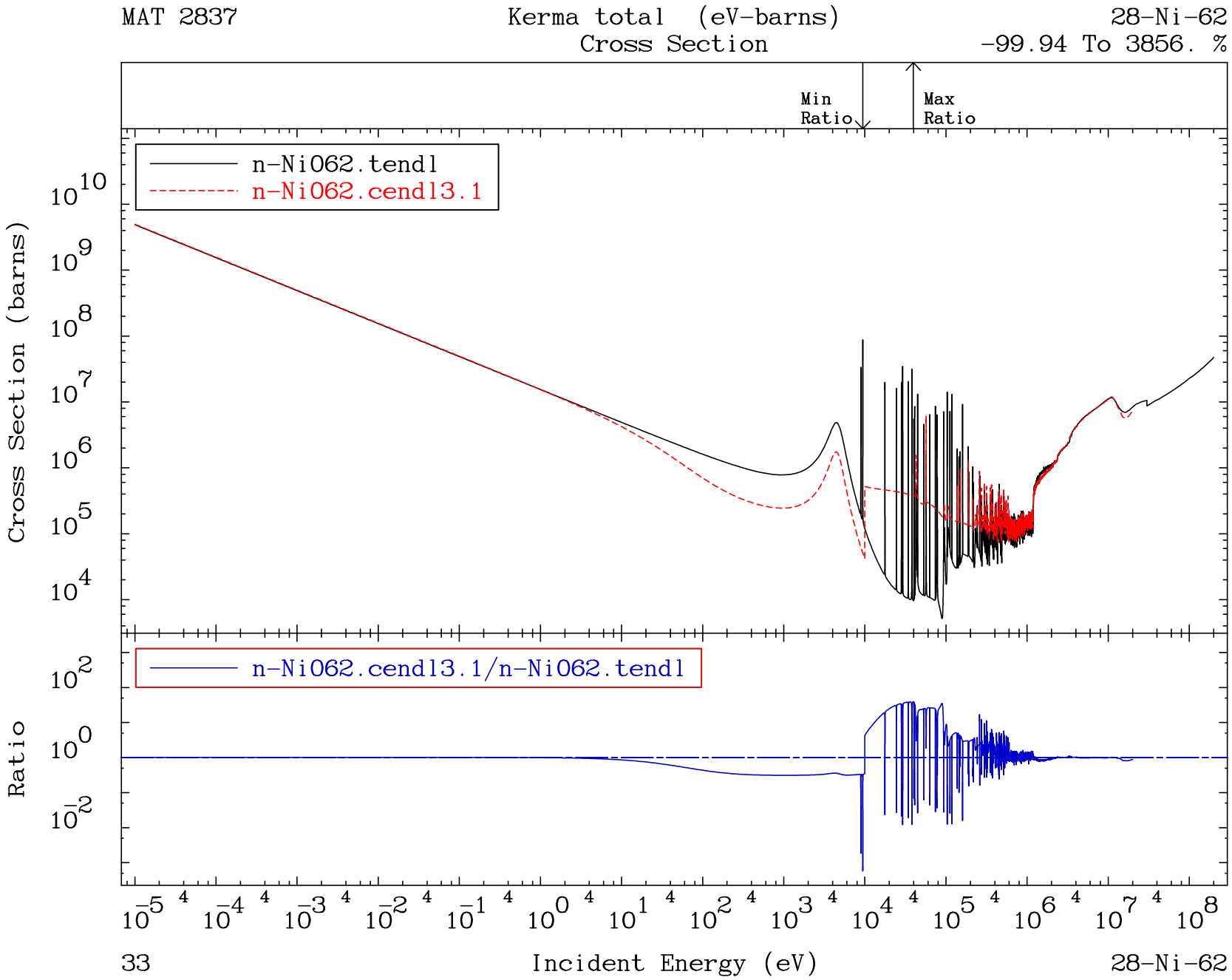

MAT 2837
Hydrogen Production
Cross Section
28-Ni-62
-77.84 To 8.485 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 4.6136 MeV
n-Ni062.cendl3.1 Threshold 6.1000 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
28-Ni-62

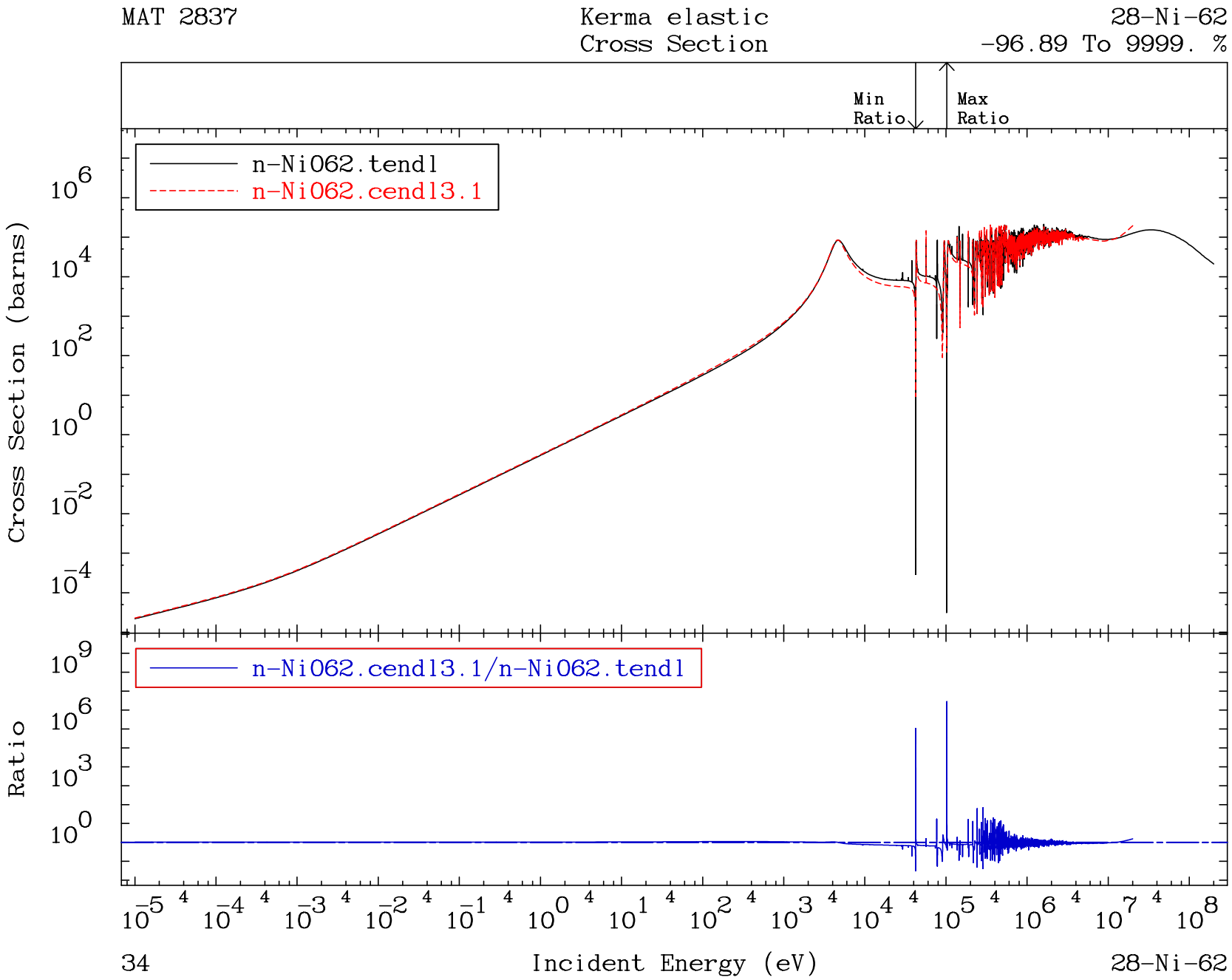

MAT 2837
Deuterium Production
Cross Section
28-Ni-62
-100.0 To -70.17%
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 9.0578 MeV
n-Ni062.cendl3.1 Threshold 11.600 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^0
10^-5
10^-10
10^-15
9
10^7
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
28-Ni-62

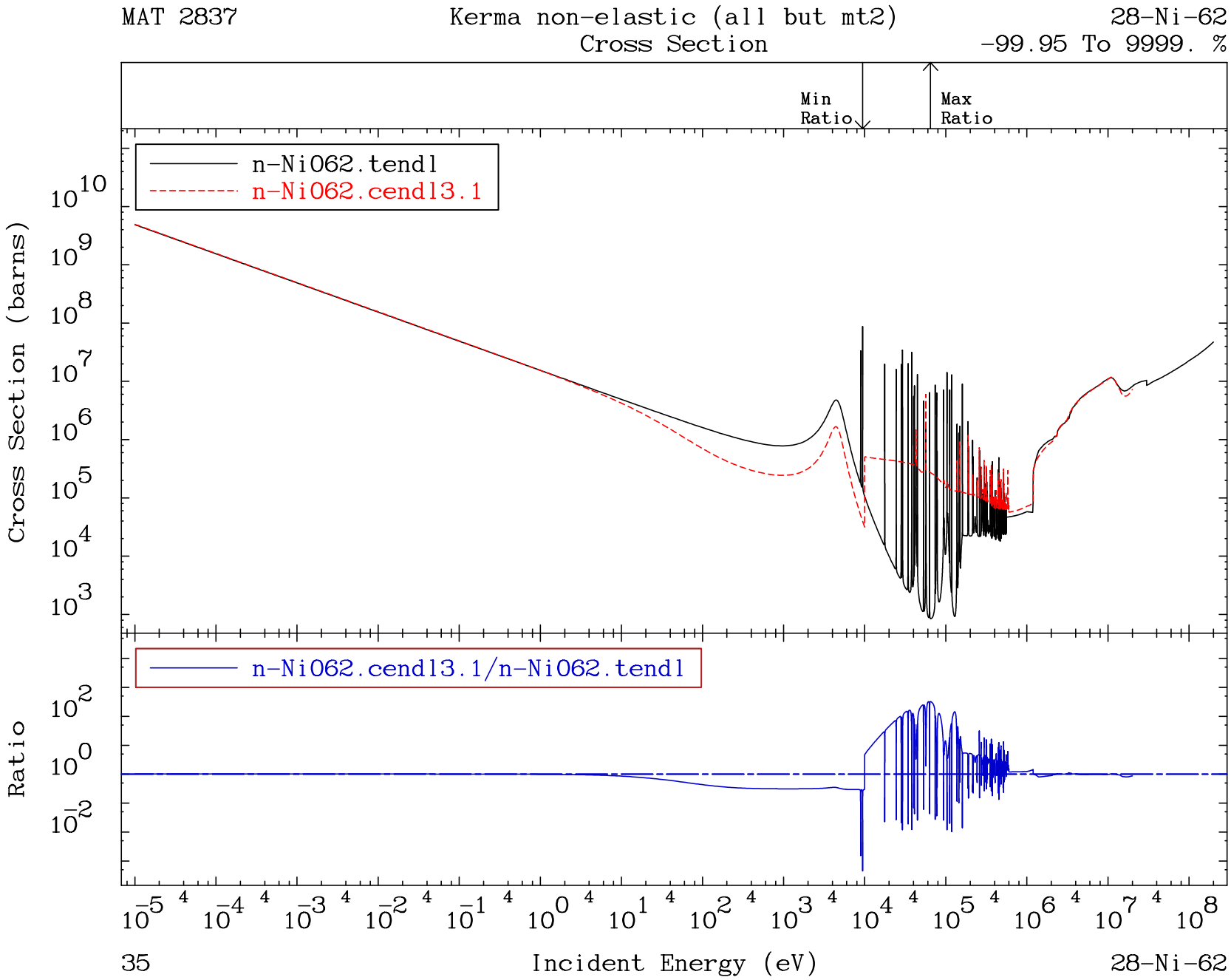

MAT 2837
Tritium Production
Cross Section
28-Ni-62
-100.0 To -35.11%
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 12.170 MeV
n-Ni062.cendl3.1 Threshold 15.195 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^0
10^-5
10^-10
10^-15
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
28-Ni-62

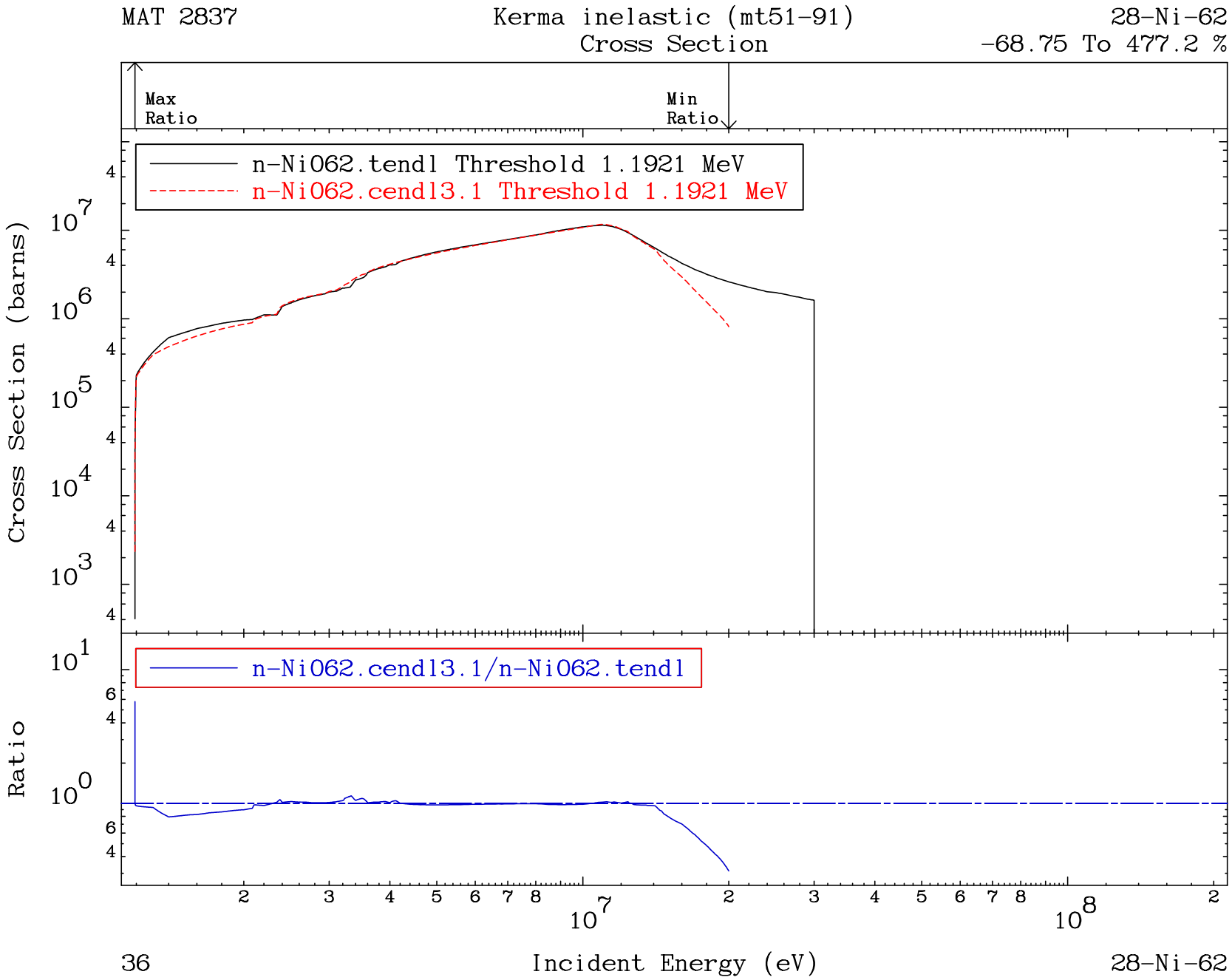

MAT 2837
He-3 Production
Cross Section
28-Ni-62
1161. To 4077. %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 12.392 MeV
n-Ni062.cendl3.1 Threshold 18.500 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
50
40
30
20
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
28-Ni-62

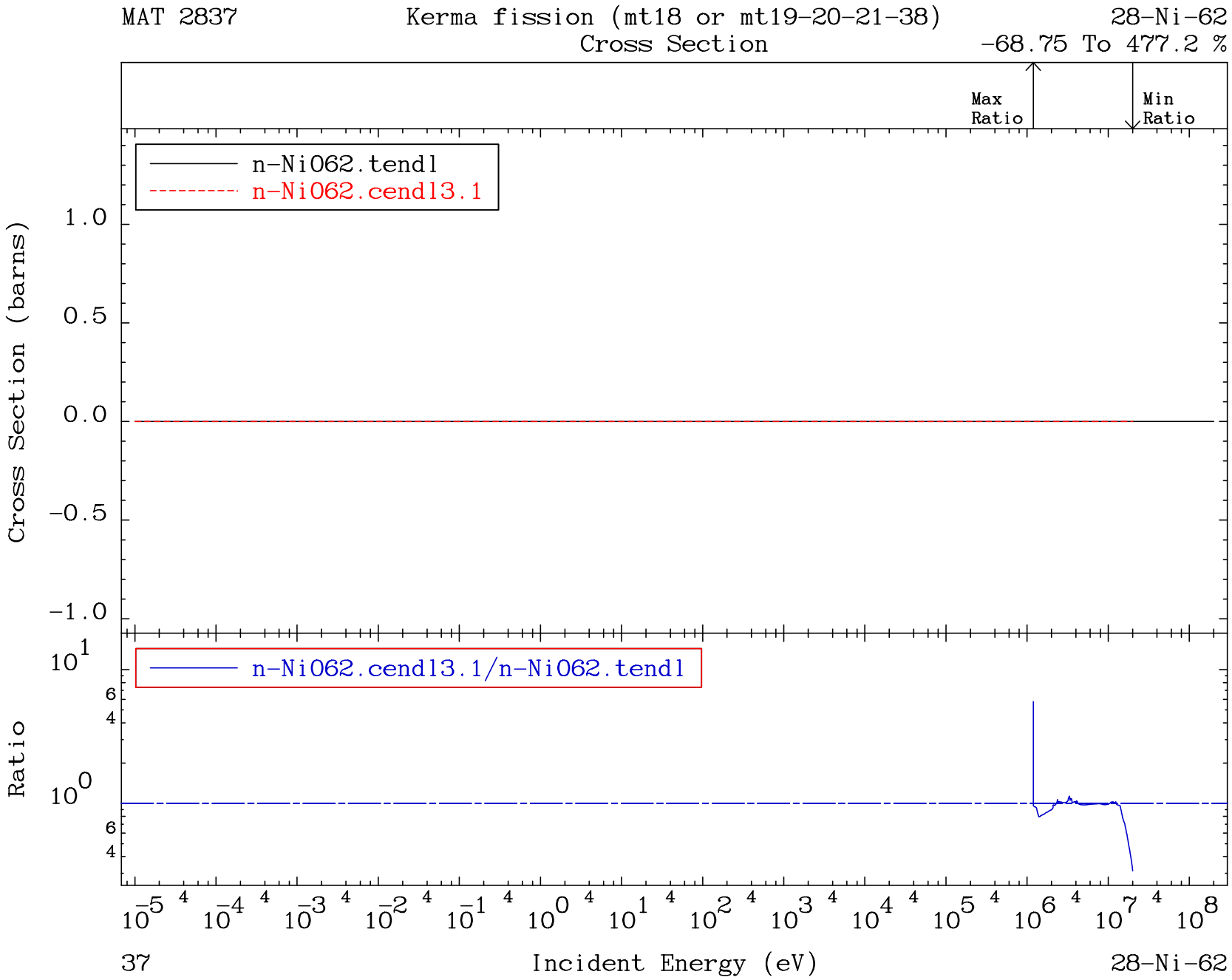

MAT 2837
He-4 Production
Cross Section
28-Ni-62
-91.57 To 35.03 %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 1.8000 MeV
n-Ni062.cendl3.1 Threshold 4.9000 MeV
Cross Section (milli-barns)
160
120
80
40
0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^{0}
10^{-1}
2
6
4
2
2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
32
Incident Energy (eV)
28-Ni-62

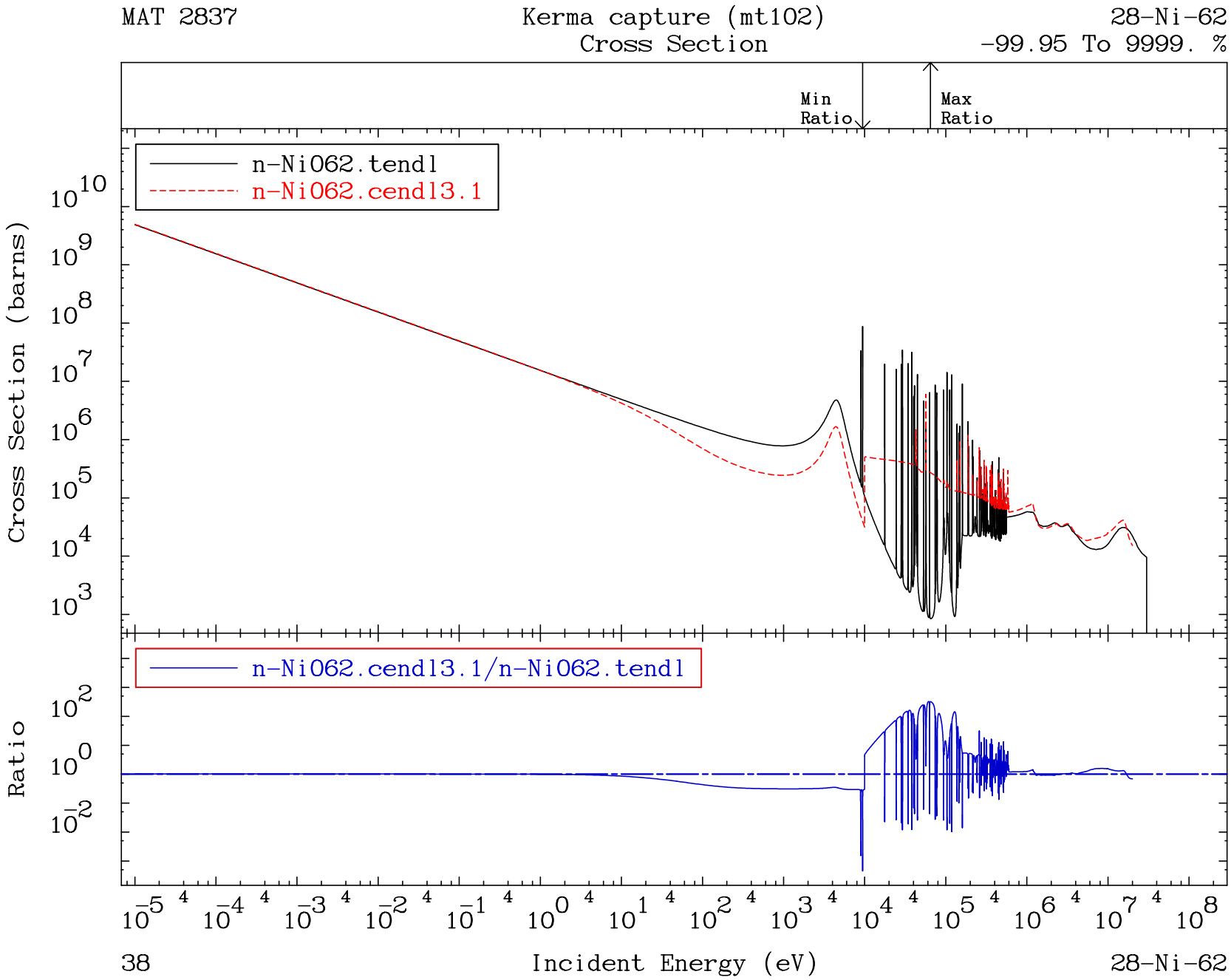

MAT 2837
Kerma total (eV-barns)
Cross Section
28-Ni-62
-99.94 To 3856. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
33
28-Ni-62

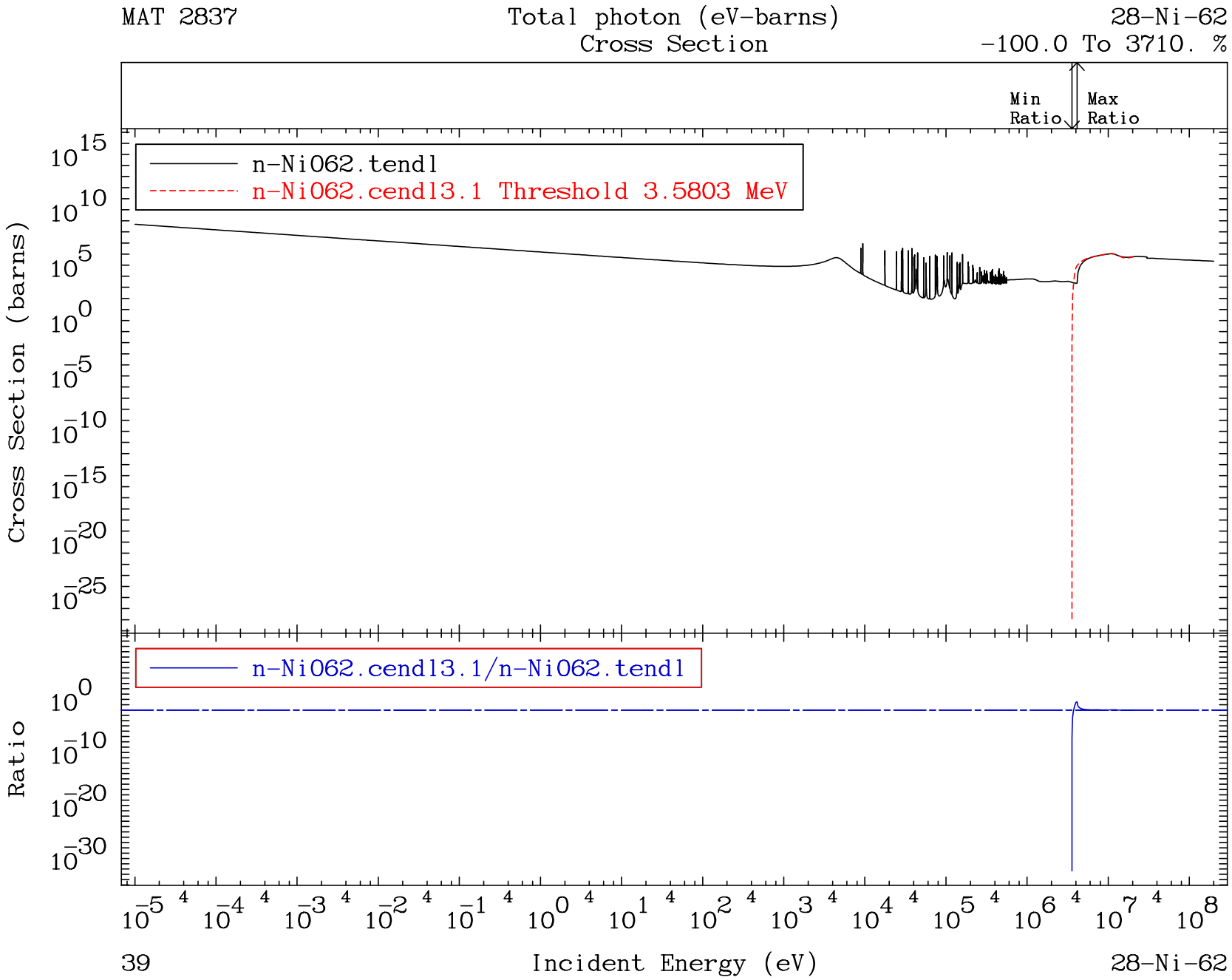

MAT 2837
Kerma elastic
Cross Section
28-Ni-62
-96.89 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
34
28-Ni-62

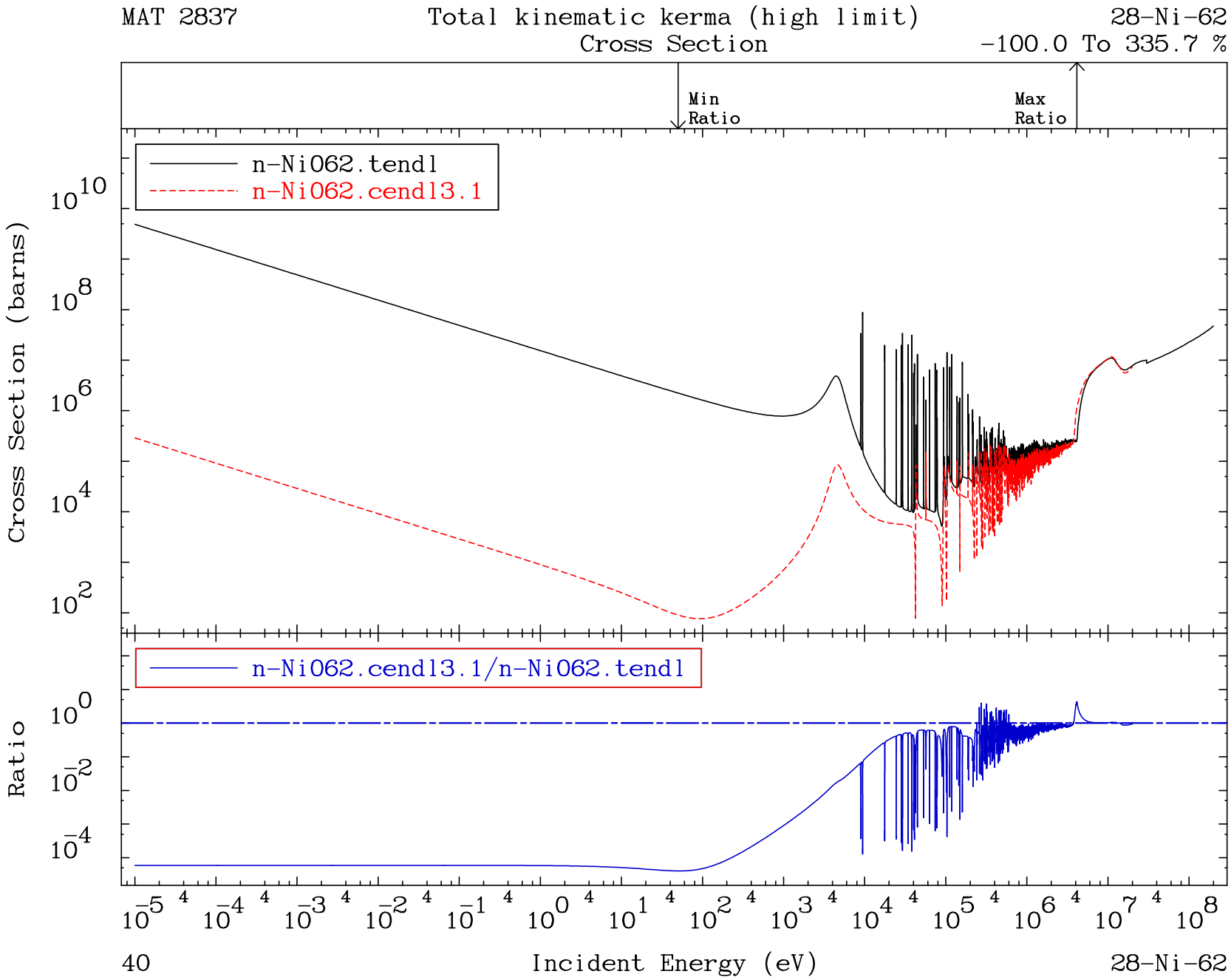

MAT 2837
Kerma non-elastic (all but mt2)
Cross Section
28-Ni-62
-99.95 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
35
28-Ni-62

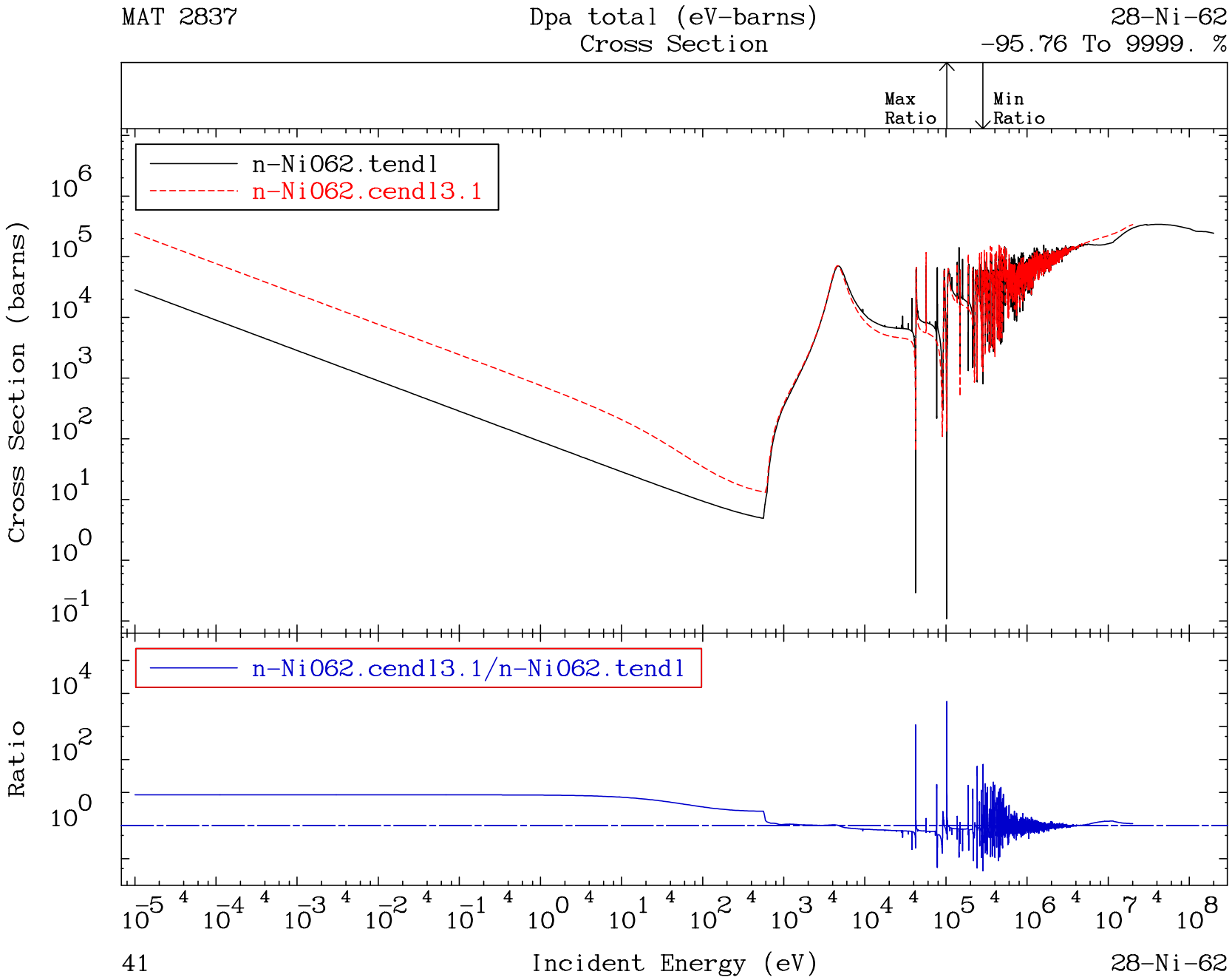

MAT 2837
Kerma inelastic (mt51-91)
Cross Section
28-Ni-62
-68.75 To 477.2 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 1.1921 MeV
n-Ni062.cendl3.1 Threshold 1.1921 MeV
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
36
28-Ni-62

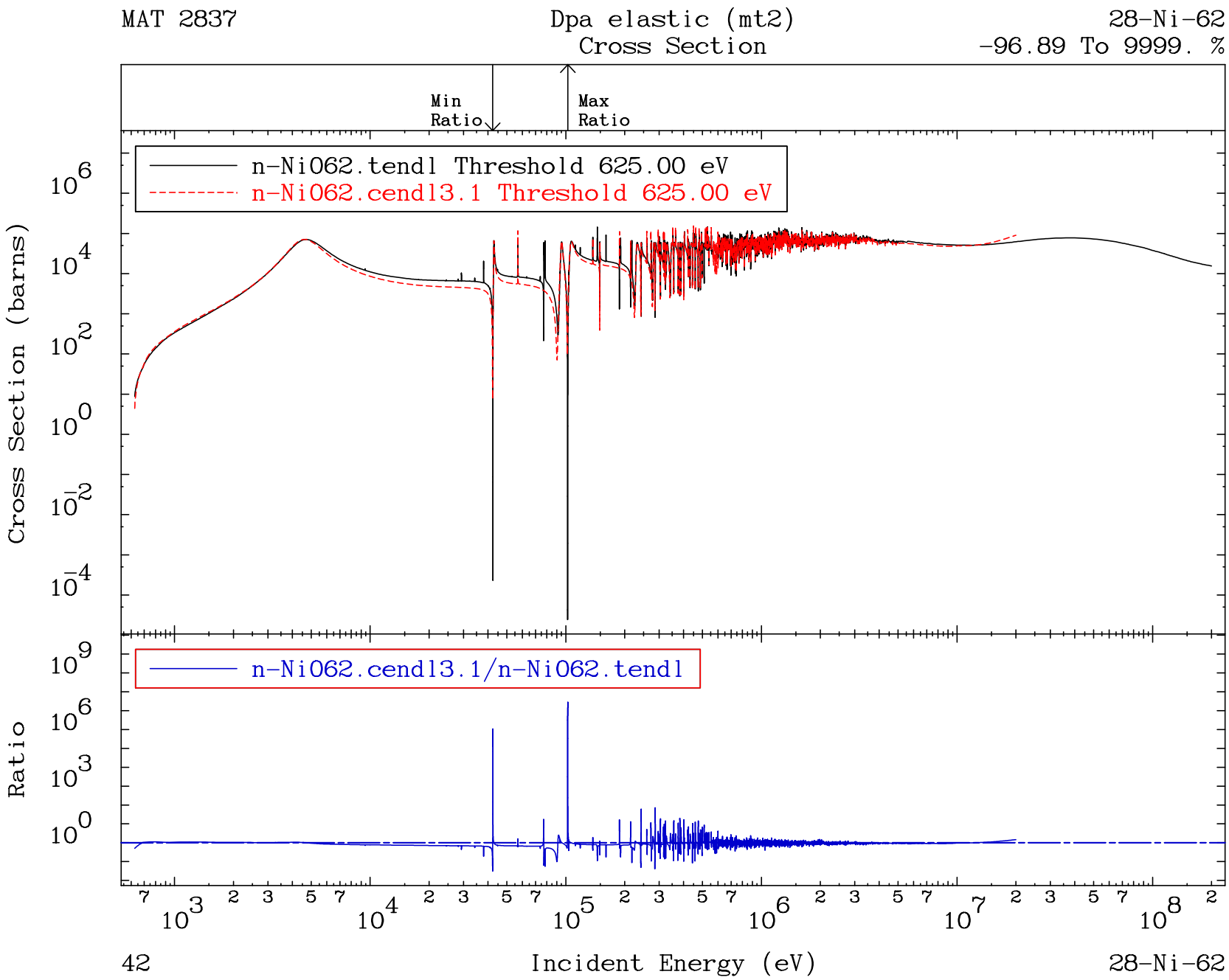

MAT 2837
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
28-Ni-62
-68.75 To 477.2 %
Max Ratio
Min Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
10^1
10^0
6
4
6
4
10^-5 4 10^-4 4 10^-3 4 10^-2 4 10^-1 4 10^0 4 10^1 4 10^2 4 10^3 4 10^4 4 10^5 4 10^6 4 10^7 4 10^8
37
Incident Energy (eV)
28-Ni-62

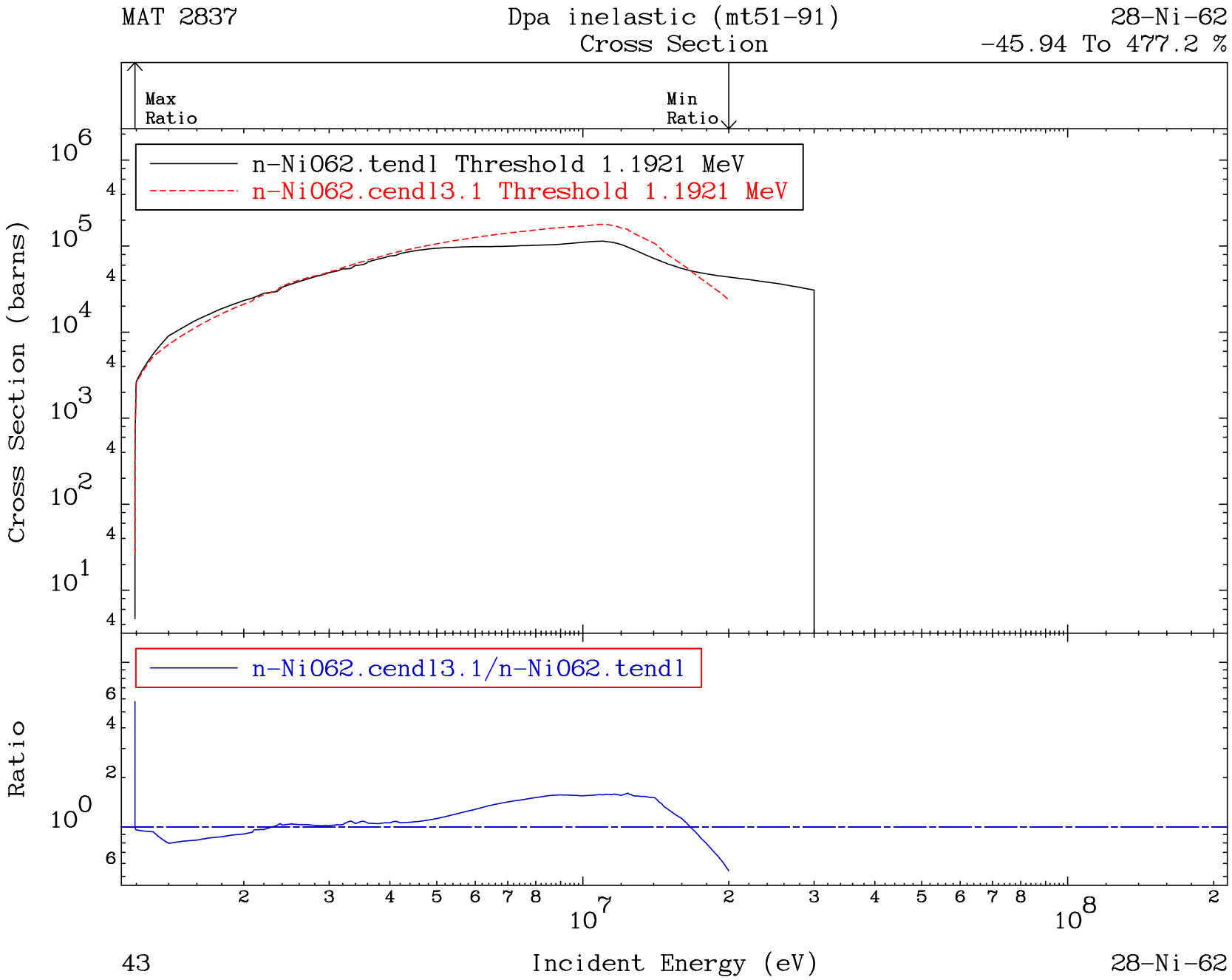

MAT 2837
Kerma capture (mt102)
Cross Section
28-Ni-62
-99.95 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
38
28-Ni-62

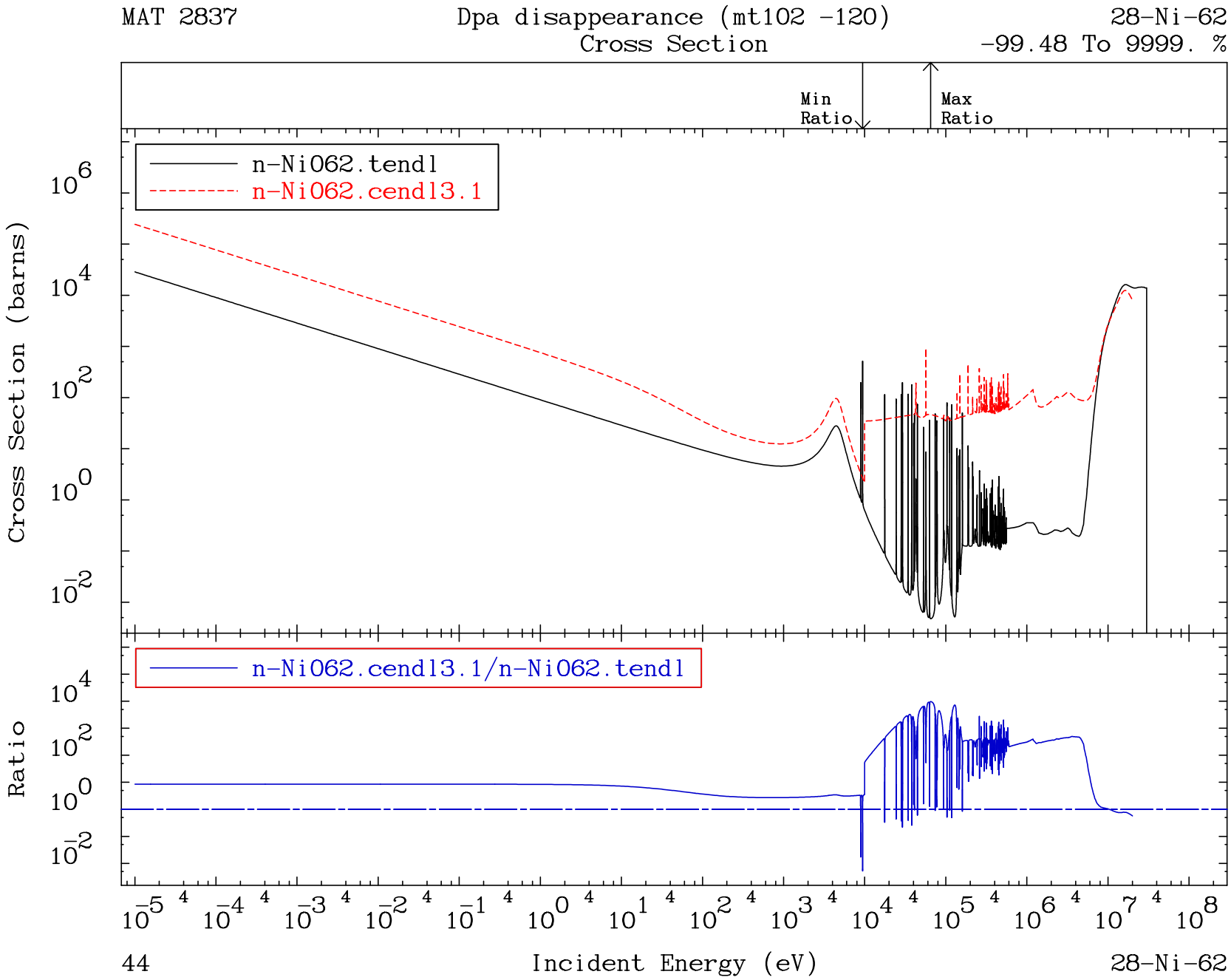

MAT 2837
Total photon (eV-barns)
Cross Section
28-Ni-62
-100.0 To 3710. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1 Threshold 3.5803 MeV
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
39
Incident Energy (eV)
28-Ni-62


MAT 2837
Total kinematic kerma (high limit)
Cross Section
28-Ni-62
-100.0 To 335.7 %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
Ratio
n-Ni062.cendl3.1/n-Ni062.tendl
Incident Energy (eV)
40
28-Ni-62


MAT 2837
Dpa total (eV-barns)
Cross Section
28-Ni-62
-95.76 To 9999. %
Max Ratio
Min Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
41
28-Ni-62


MAT 2837
Dpa elastic (mt2)
Cross Section
28-Ni-62
-96.89 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl Threshold 625.00 eV
n-Ni062.cendl3.1 Threshold 625.00 eV
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
42
28-Ni-62


MAT 2837
Dpa inelastic (mt51-91)
Cross Section
28-Ni-62
-45.94 To 477.2 %
Max Ratio
Min Ratio
n-Ni062.tendl Threshold 1.1921 MeV
n-Ni062.cendl3.1 Threshold 1.1921 MeV
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
43
28-Ni-62


MAT 2837
Dpa disappearance (mt102 -120)
Cross Section
28-Ni-62
-99.48 To 9999. %
Min Ratio
Max Ratio
n-Ni062.tendl
n-Ni062.cendl3.1
Cross Section (barns)
n-Ni062.cendl3.1/n-Ni062.tendl
Ratio
Incident Energy (eV)
44
28-Ni-62