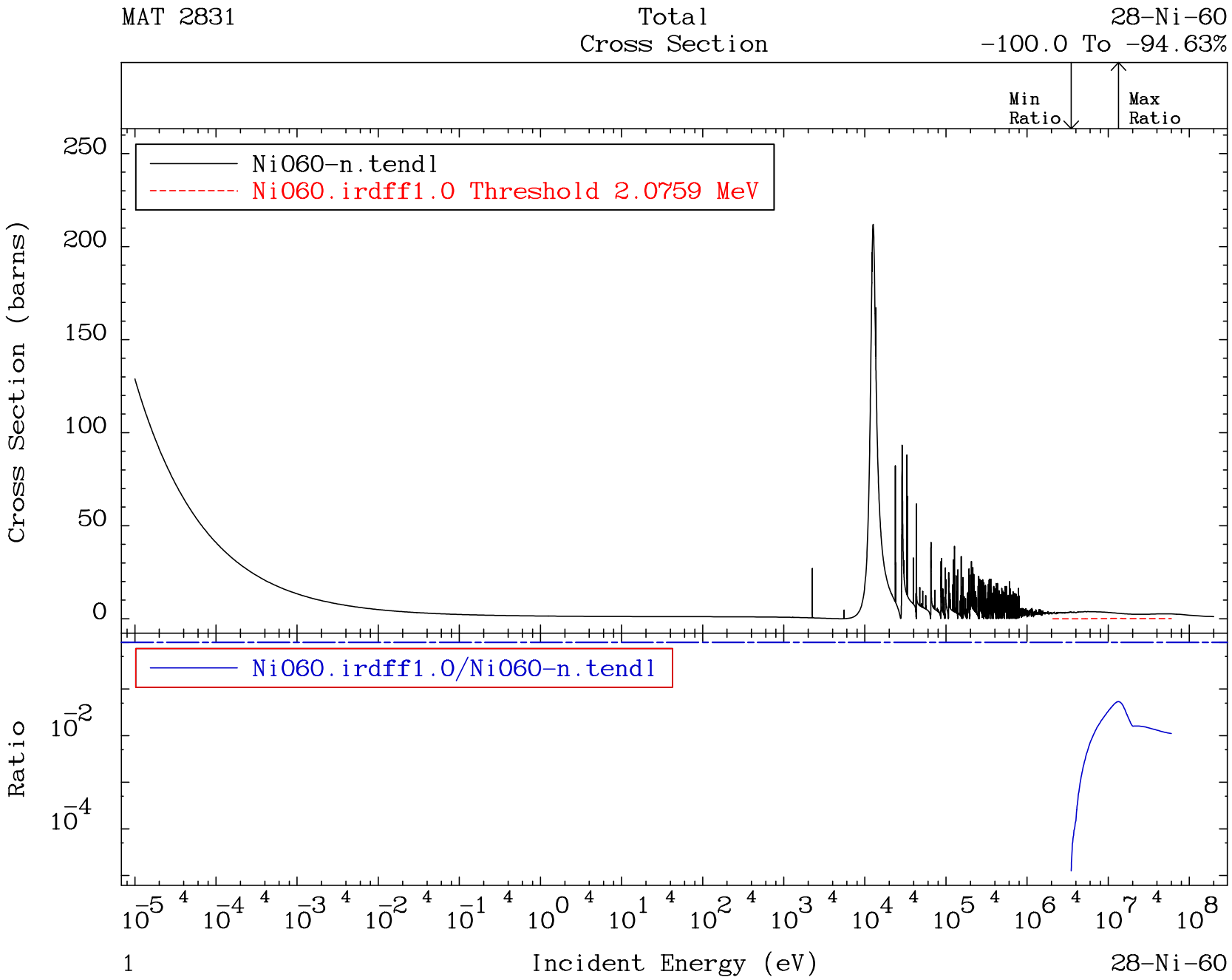
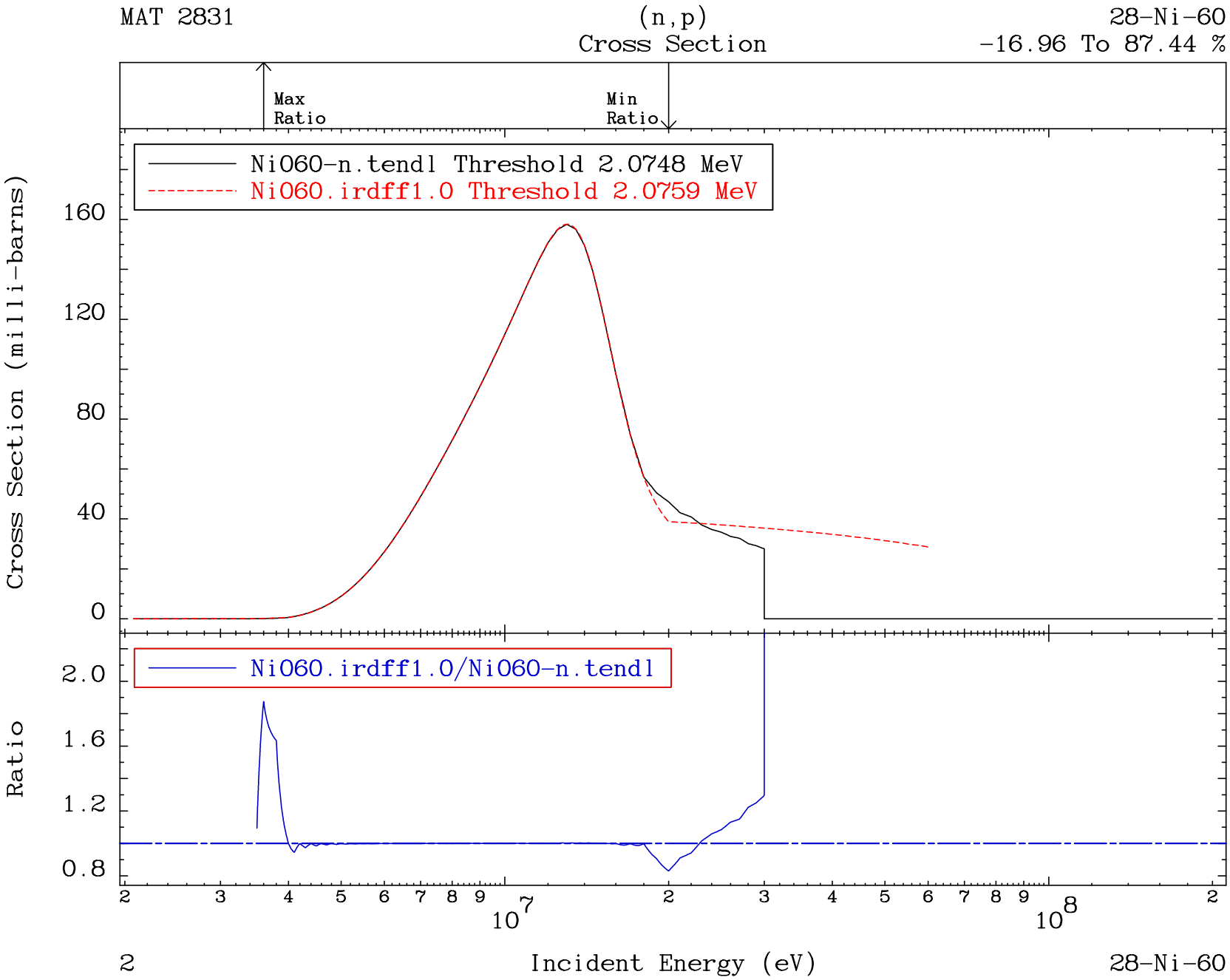
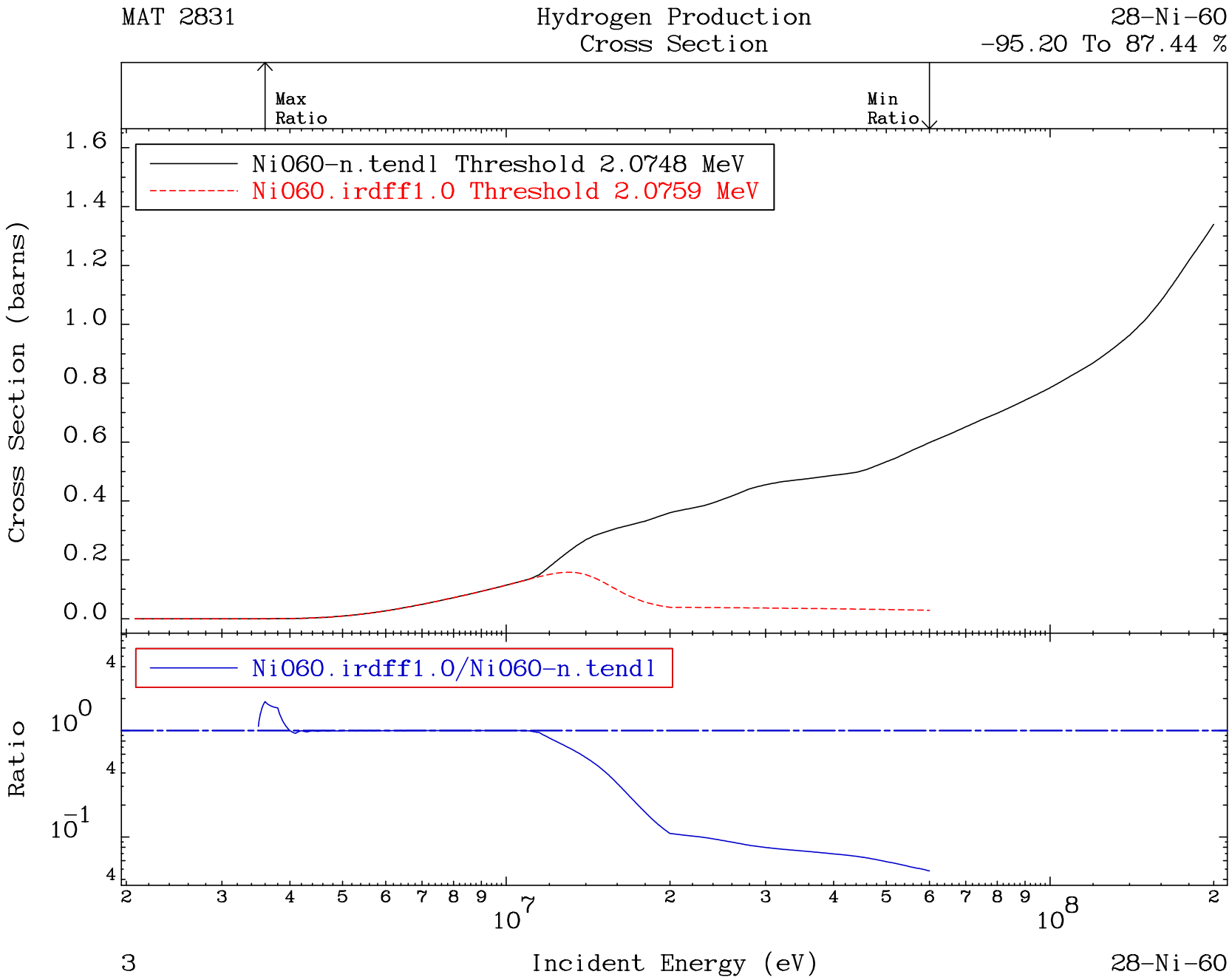
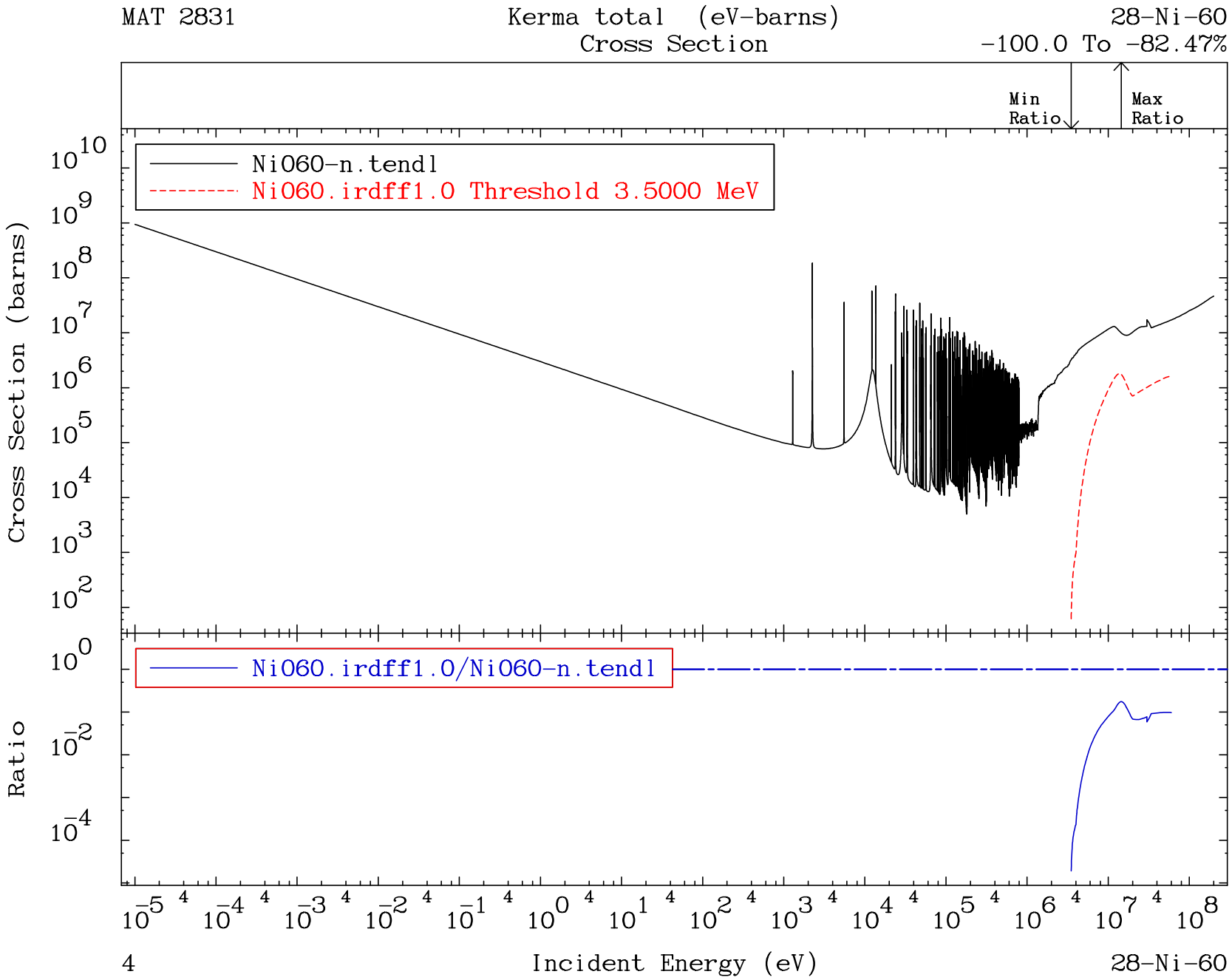
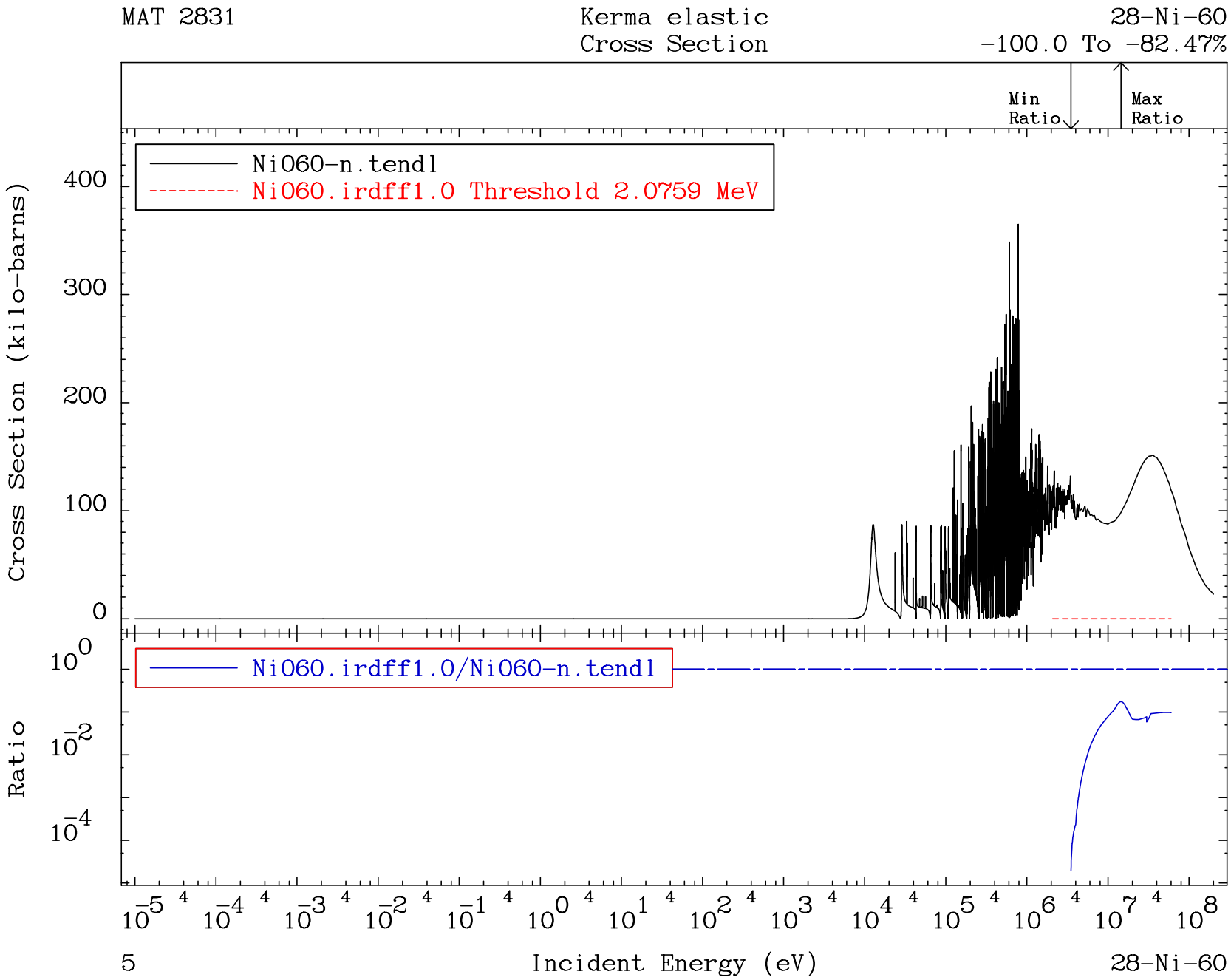
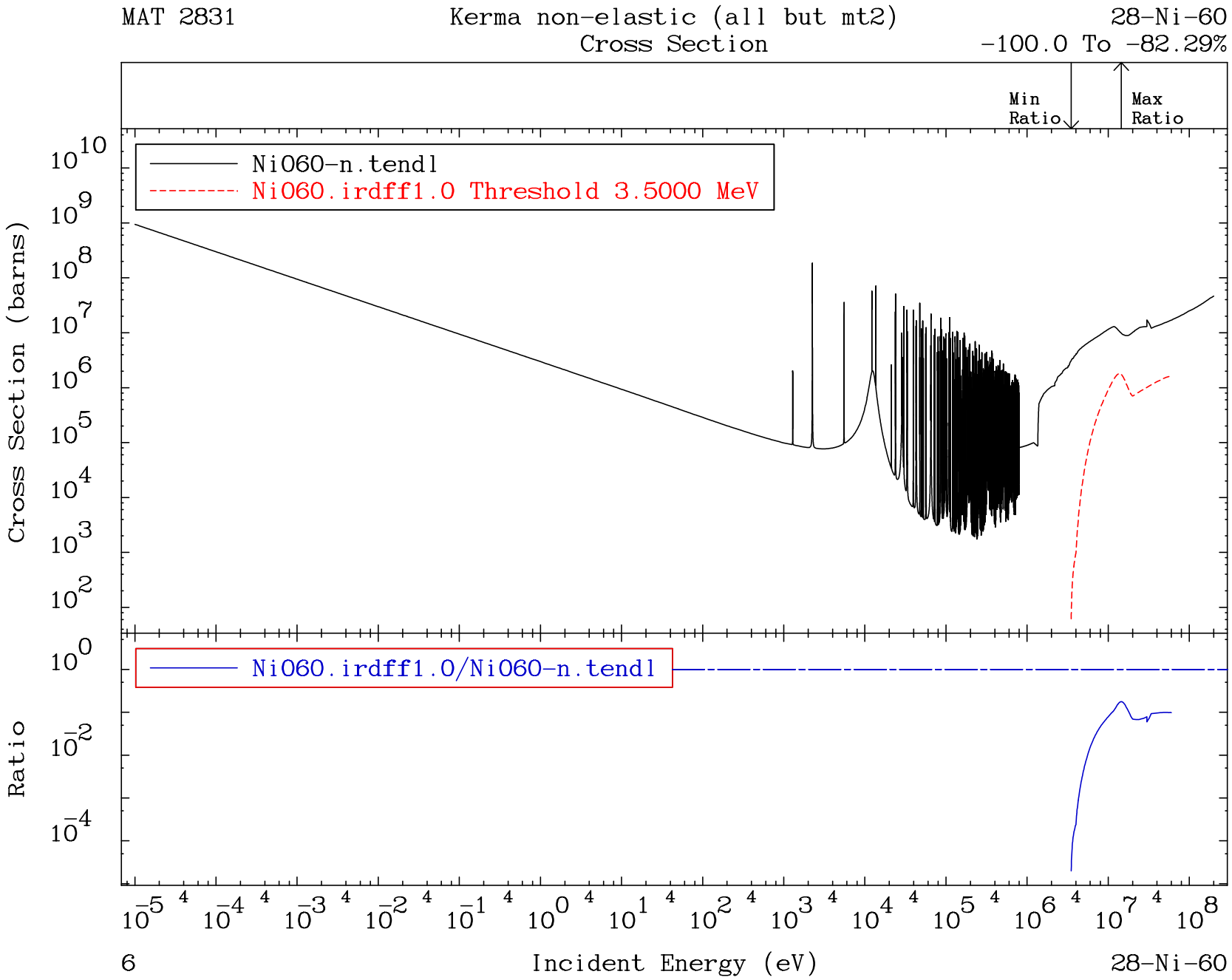

MAT 2831
Total
Cross Section
28-Ni-60
-100.0 To -94.63%
Min
Ratio
Max
Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (barns)
250
200
150
100
50
0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10-2
10-4
10-5
10-4
10-3
10-2
10-1
100
101
102
103
104
105
106
107
108
1
Incident Energy (eV)
28-Ni-60

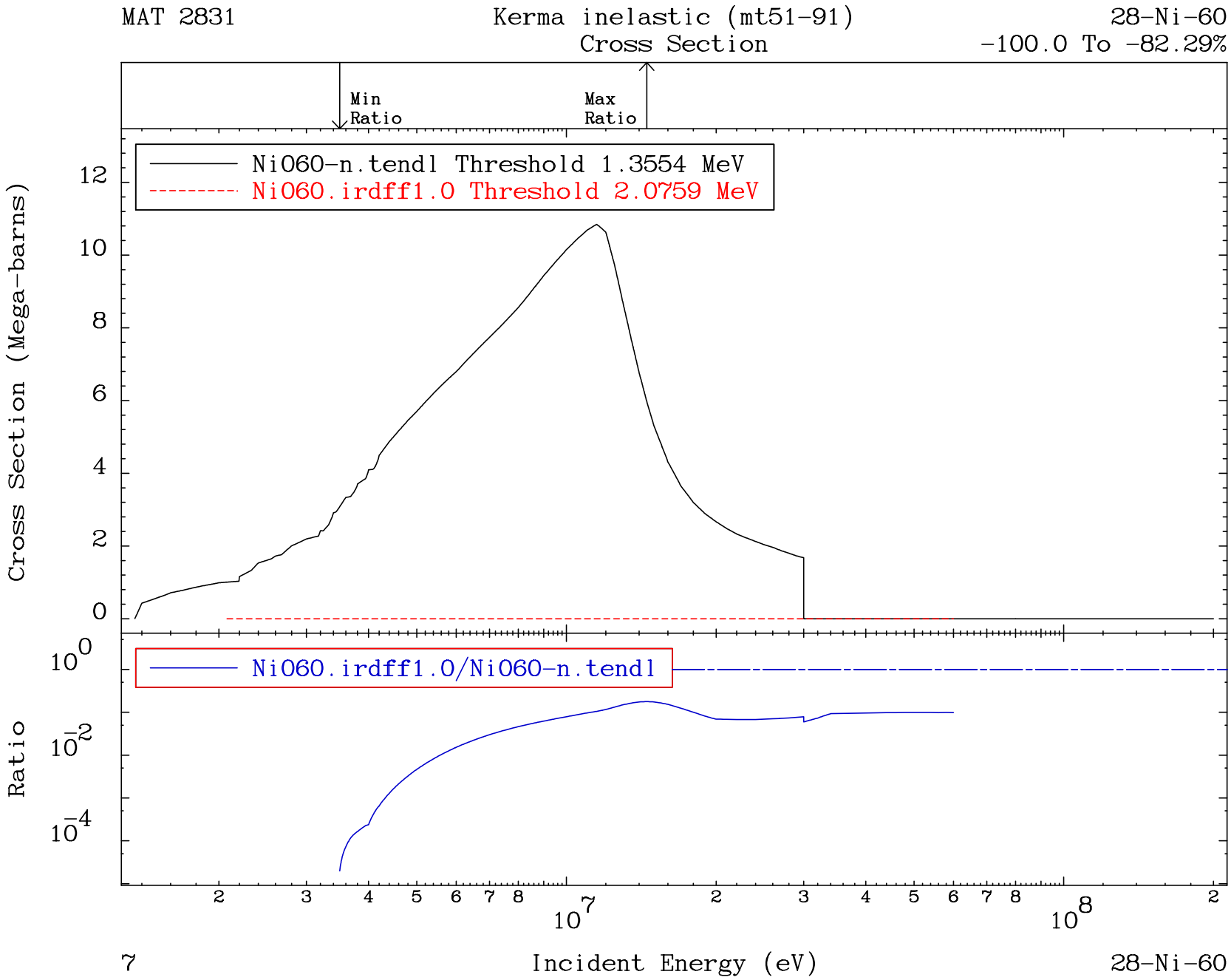

MAT 2831
(n,p)
Cross Section
28-Ni-60
-16.96 To 87.44 %
Max Ratio
Min Ratio
Ni060-n.tendl Threshold 2.0748 MeV
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (milli-barns)
160
120
80
40
0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
2.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
28-Ni-60

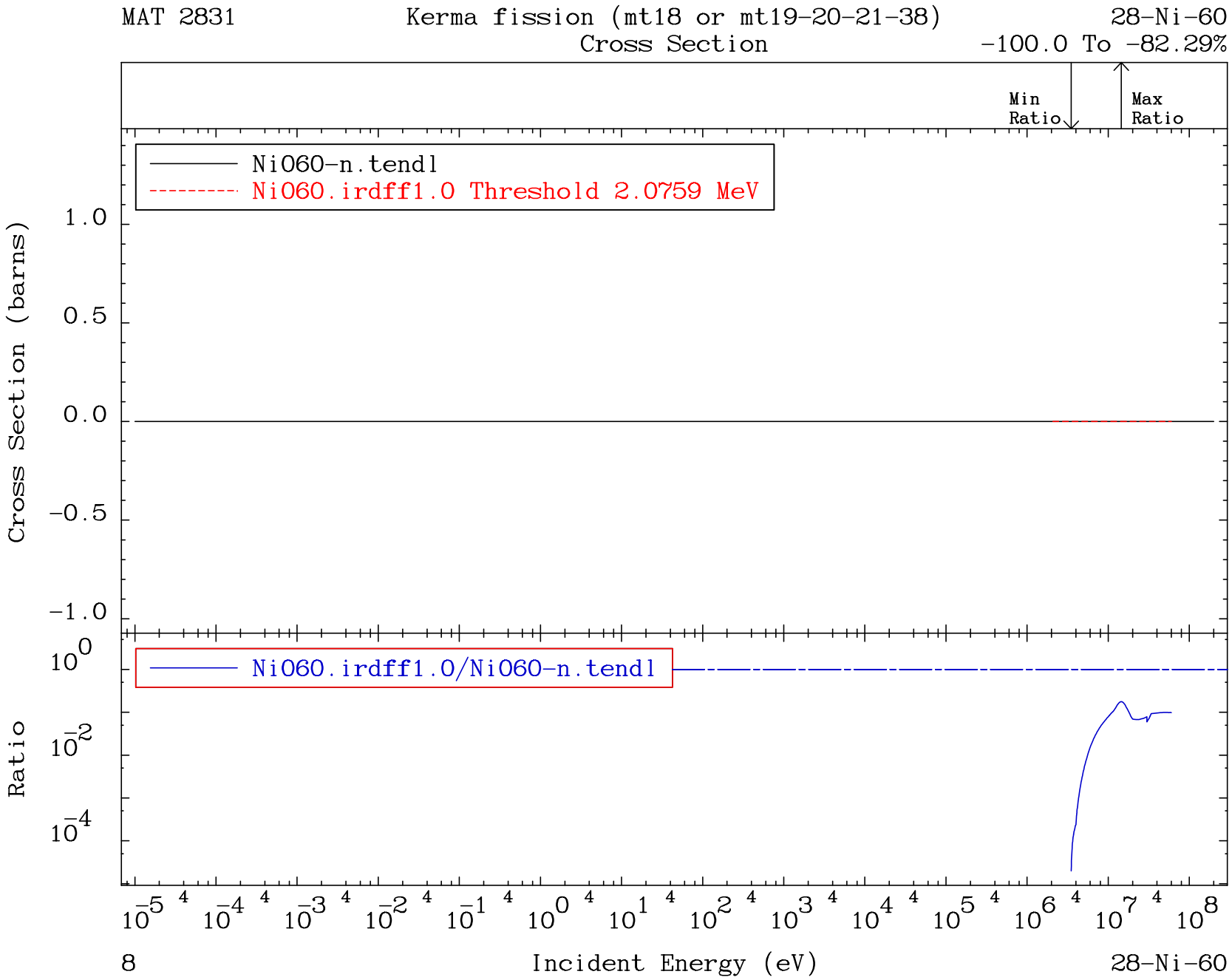

MAT 2831
Hydrogen Production
Cross Section
28-Ni-60
-95.20 To 87.44 %
Max Ratio
Min Ratio
Ni060-n.tendl Threshold 2.0748 MeV
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
4
10^0
4
10^-1
4
2 3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
3
Incident Energy (eV)
28-Ni-60

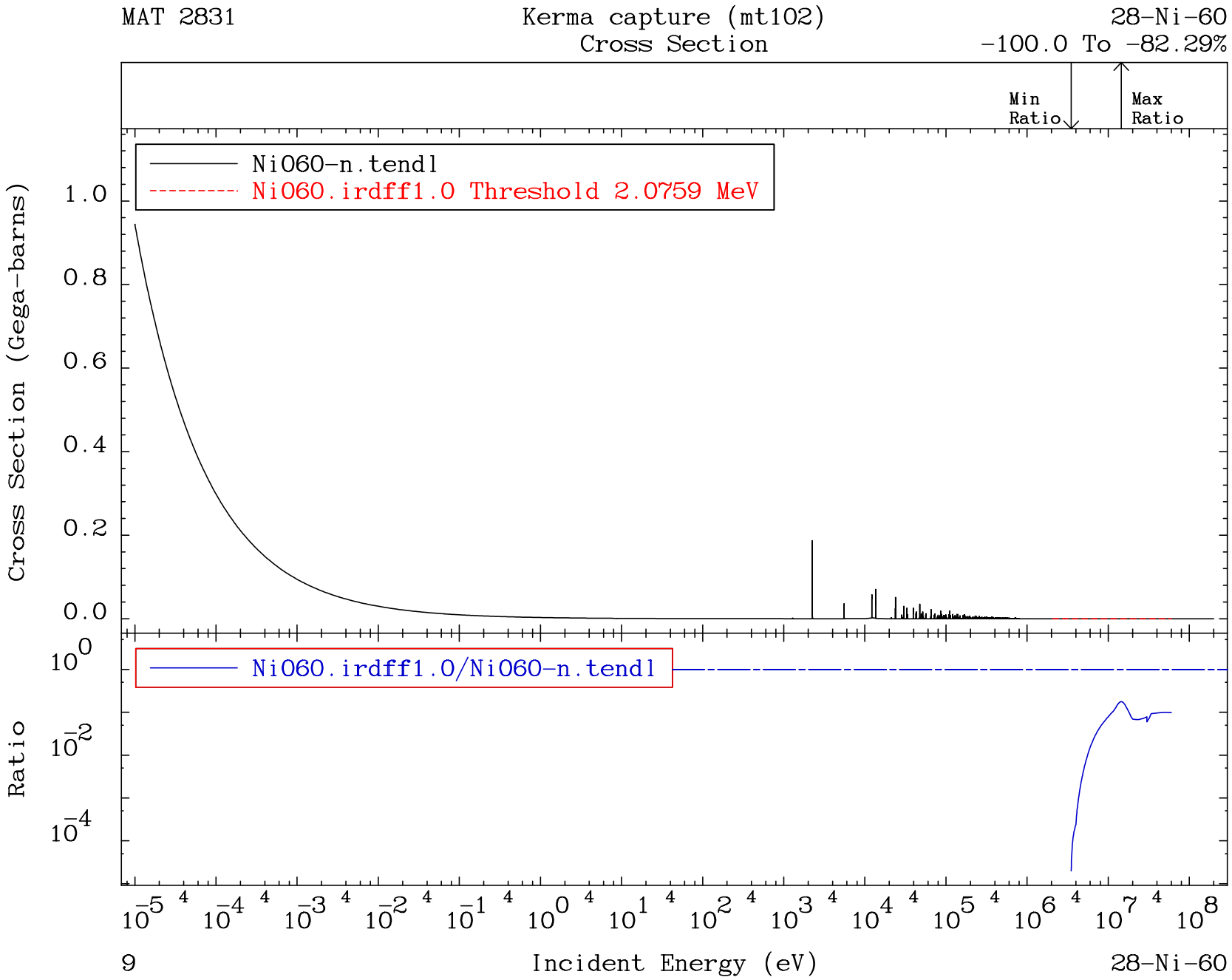

MAT 2831
Kerma total (eV-barns)
Cross Section
28-Ni-60
-100.0 To -82.47%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 3.5000 MeV
Ni060.irdff1.0/Ni060-n.tendl
Cross Section (barns)
Ratio
Incident Energy (eV)
4
28-Ni-60

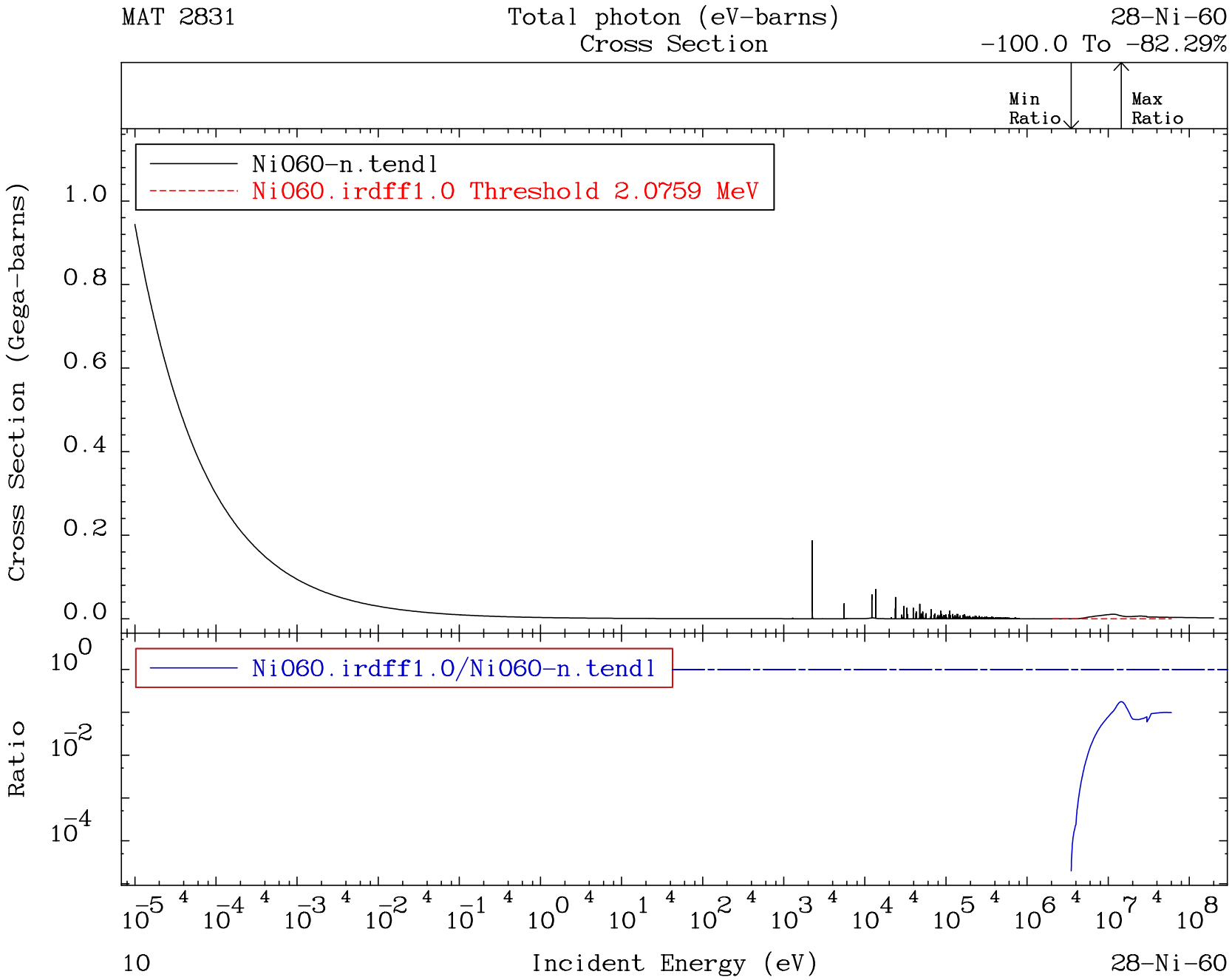

MAT 2831
Kerma elastic
Cross Section
28-Ni-60
-100.0 To -82.47%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (kilo-barns)
400
300
200
100
0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^0
10^-2
10^-4
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
5
Incident Energy (eV)
28-Ni-60

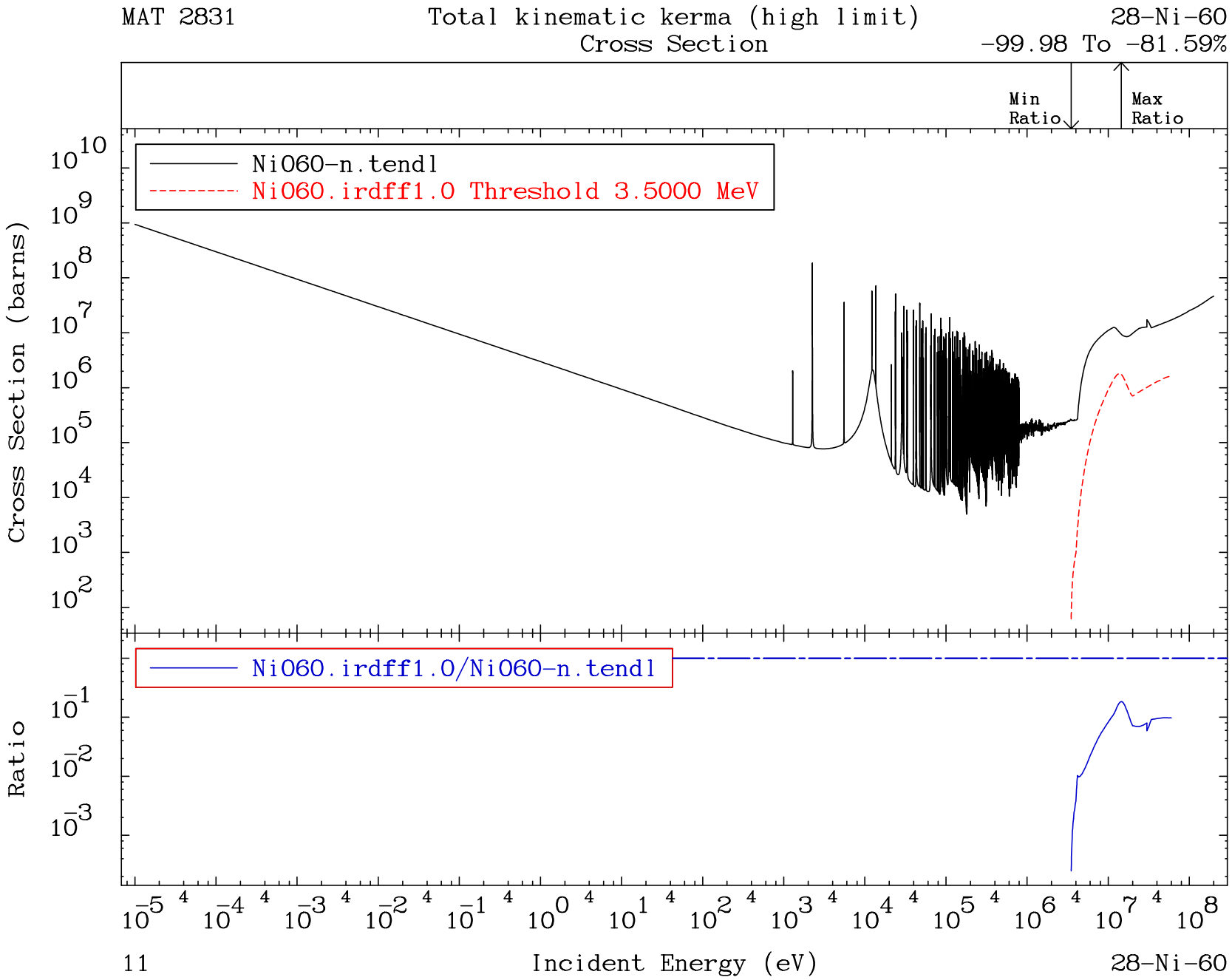

MAT 2831
Kerma non-elastic (all but mt2)
Cross Section
28-Ni-60
-100.0 To -82.29%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 3.5000 MeV
Cross Section (barns)
Ni060.irdff1.0/Ni060-n.tendl
Ratio
Incident Energy (eV)
6
28-Ni-60

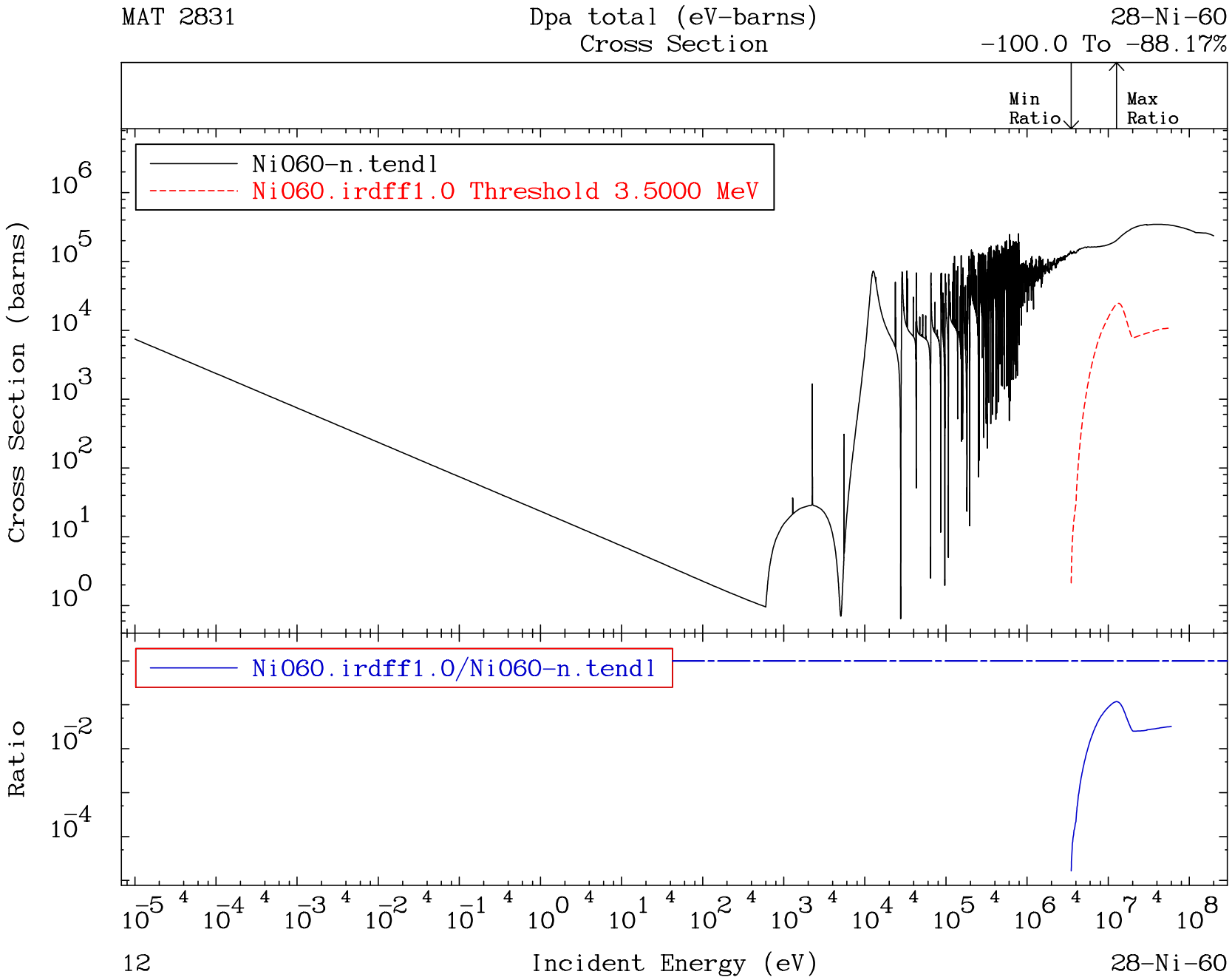

MAT 2831
Kerma inelastic (mt51-91)
Cross Section
28-Ni-60
-100.0 To -82.29%
Min Ratio
Max Ratio
Ni060-n.tendl Threshold 1.3554 MeV
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (Mega-barns)
0
2
4
6
8
10
12
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^0
10^-2
10^-4
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7
Incident Energy (eV)
28-Ni-60

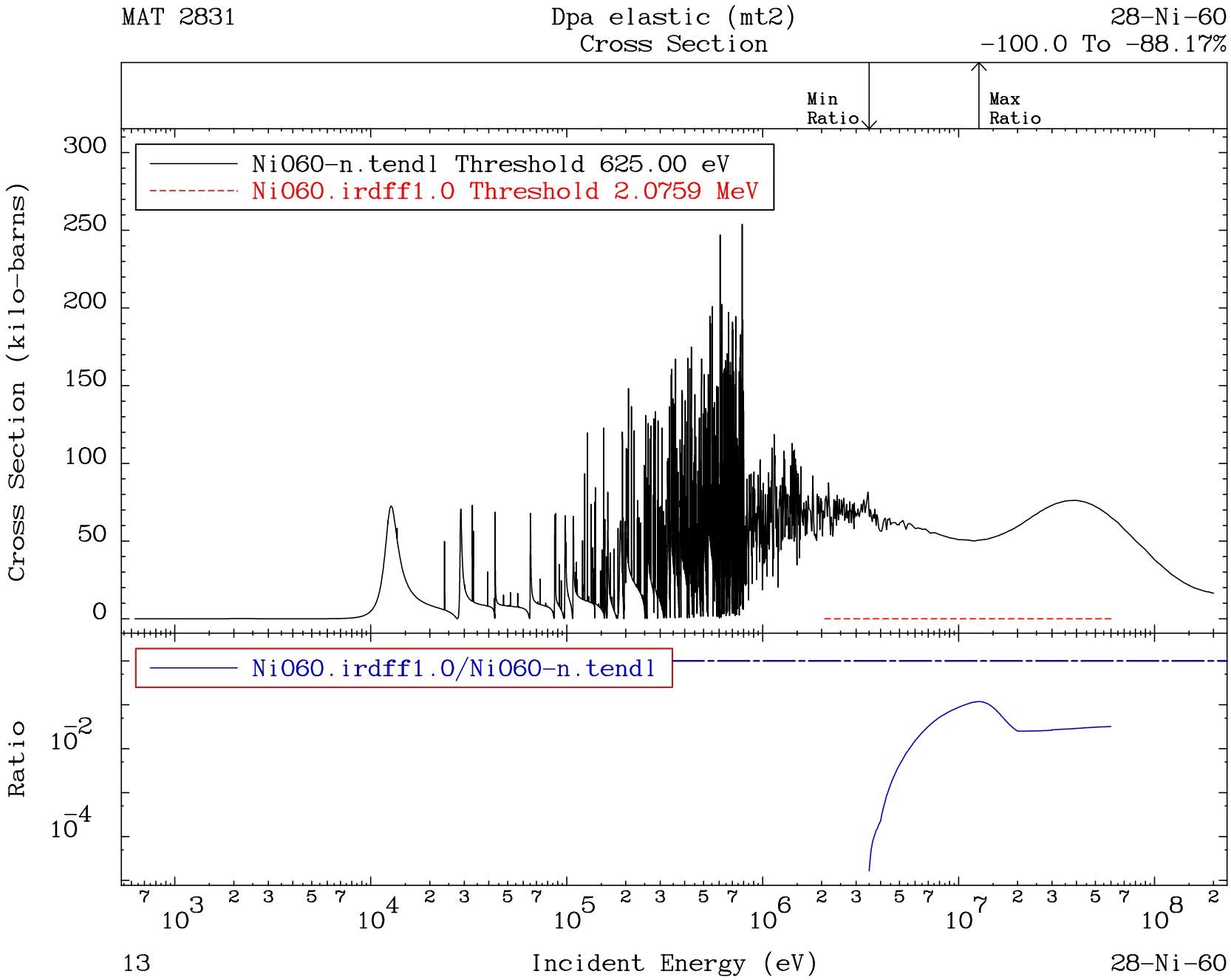

MAT 2831
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
28-Ni-60
-100.0 To -82.29%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^{0}
10^{-2}
10^{-4}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
Incident Energy (eV)
8
28-Ni-60

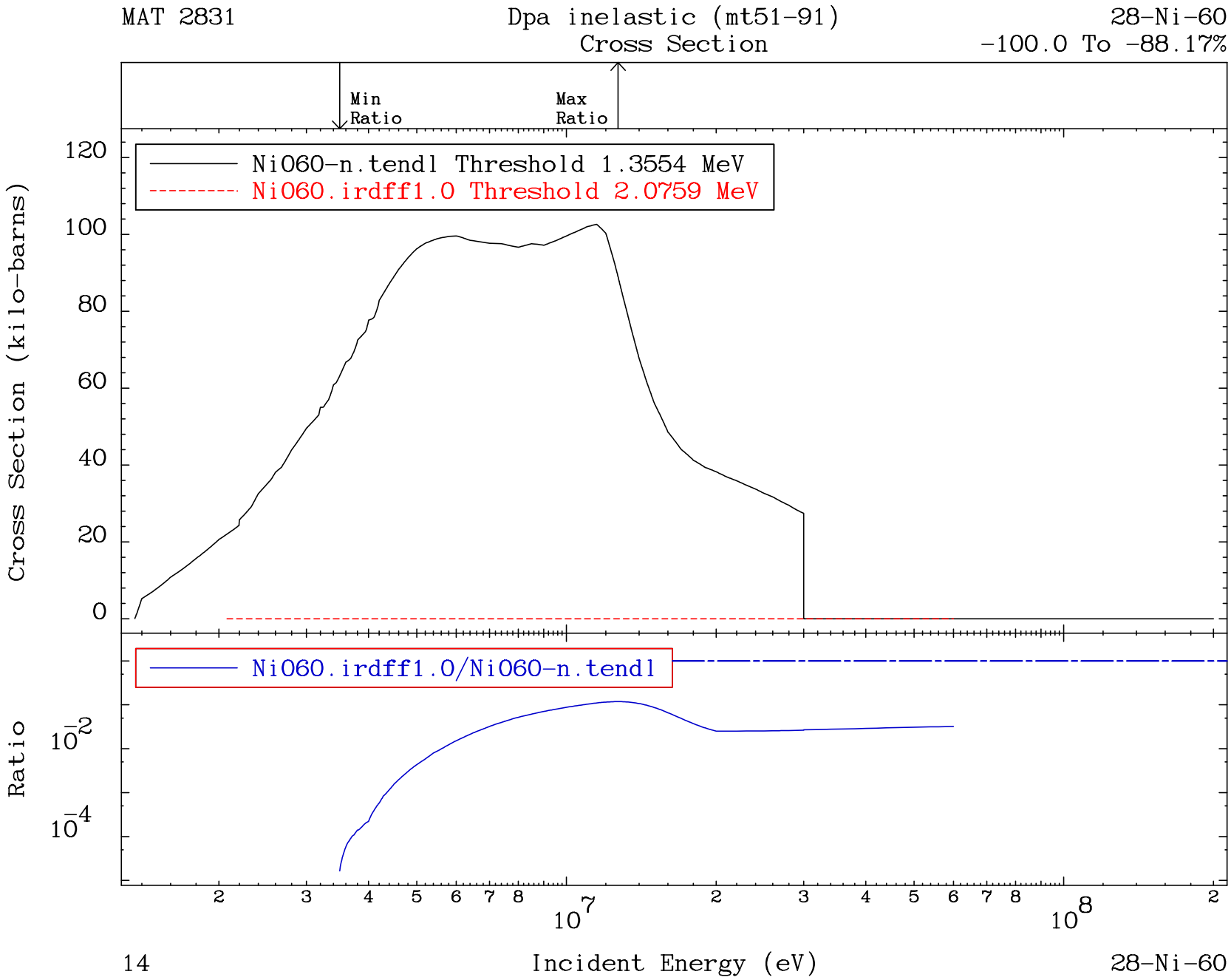

MAT 2831
Kerma capture (mt102)
Cross Section
28-Ni-60
-100.0 To -82.29%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (Giga-barns)
1.0
0.8
0.6
0.4
0.2
0.0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^0
10^-2
10^-4
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
9
Incident Energy (eV)
28-Ni-60

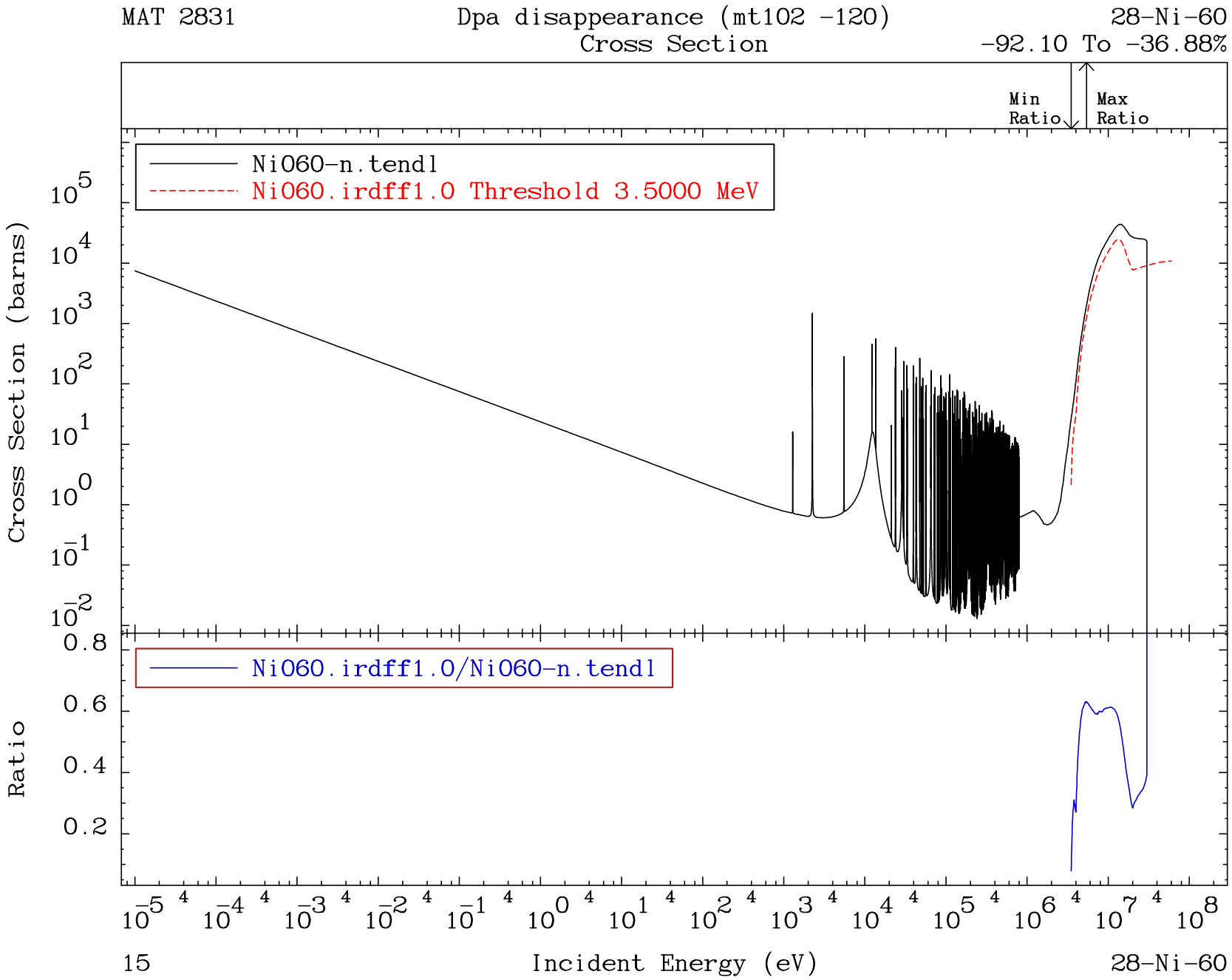

MAT 2831
Total photon (eV-barns)
Cross Section
28-Ni-60
-100.0 To -82.29%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (Giga-barns)
1.0
0.8
0.6
0.4
0.2
0.0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^0
10^-2
10^-4
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
10
Incident Energy (eV)
28-Ni-60


MAT 2831
Total kinematic kerma (high limit)
Cross Section
28-Ni-60
-99.98 To -81.59%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 3.5000 MeV
Cross Section (barns)
Ni060.irdff1.0/Ni060-n.tendl
Ratio
Incident Energy (eV)
11
28-Ni-60


MAT 2831
Dpa total (eV-barns)
Cross Section
28-Ni-60
-100.0 To -88.17%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 3.5000 MeV
Cross Section (barns)
Ni060.irdff1.0/Ni060-n.tendl
Ratio
Incident Energy (eV)
12
28-Ni-60


MAT 2831
Dpa elastic (mt2)
Cross Section
28-Ni-60
-100.0 To -88.17%
Min
Ratio
Max
Ratio
Ni060-n.tendl Threshold 625.00 eV
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (kilo-barns)
300
250
200
150
100
50
0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^-2
10^-4
7
10^3
2
3
5
7
10^4
2
3
5
7
10^5
2
3
5
7
10^6
2
3
5
7
10^7
2
3
5
7
10^8
2
13
Incident Energy (eV)
28-Ni-60


MAT 2831
Dpa inelastic (mt51-91)
Cross Section
28-Ni-60
-100.0 To -88.17%
Min Ratio
Max Ratio
Ni060-n.tendl Threshold 1.3554 MeV
Ni060.irdff1.0 Threshold 2.0759 MeV
Cross Section (kilo-barns)
120
100
80
60
40
20
0
Ni060.irdff1.0/Ni060-n.tendl
Ratio
10^{-2}
10^{-4}
2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
14
Incident Energy (eV)
28-Ni-60


MAT 2831
Dpa disappearance (mt102 -120)
Cross Section
28-Ni-60
-92.10 To -36.88%
Min Ratio
Max Ratio
Ni060-n.tendl
Ni060.irdff1.0 Threshold 3.5000 MeV
Cross Section (barns)
Ni060.irdff1.0/Ni060-n.tendl
Ratio
Incident Energy (eV)
15
28-Ni-60