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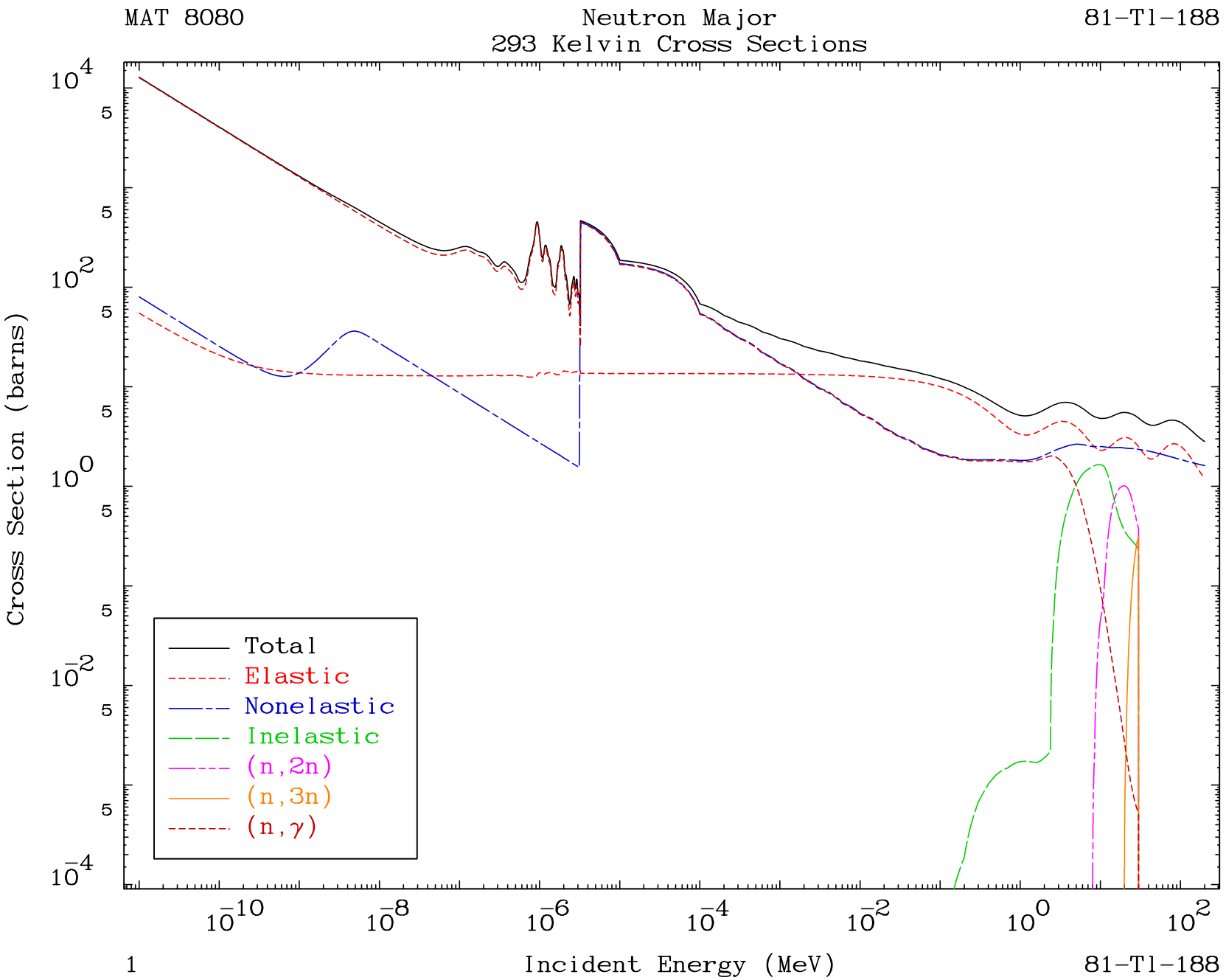
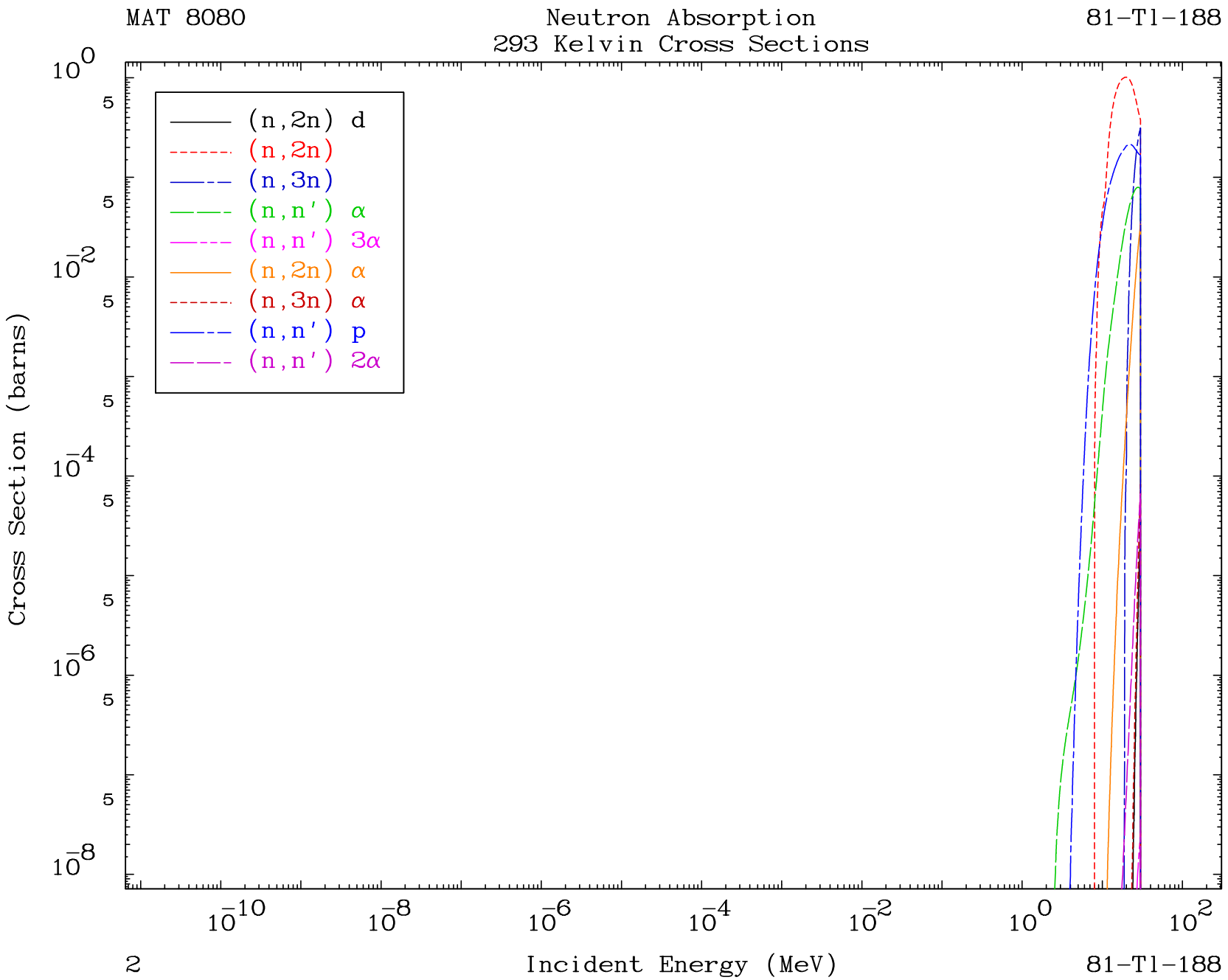
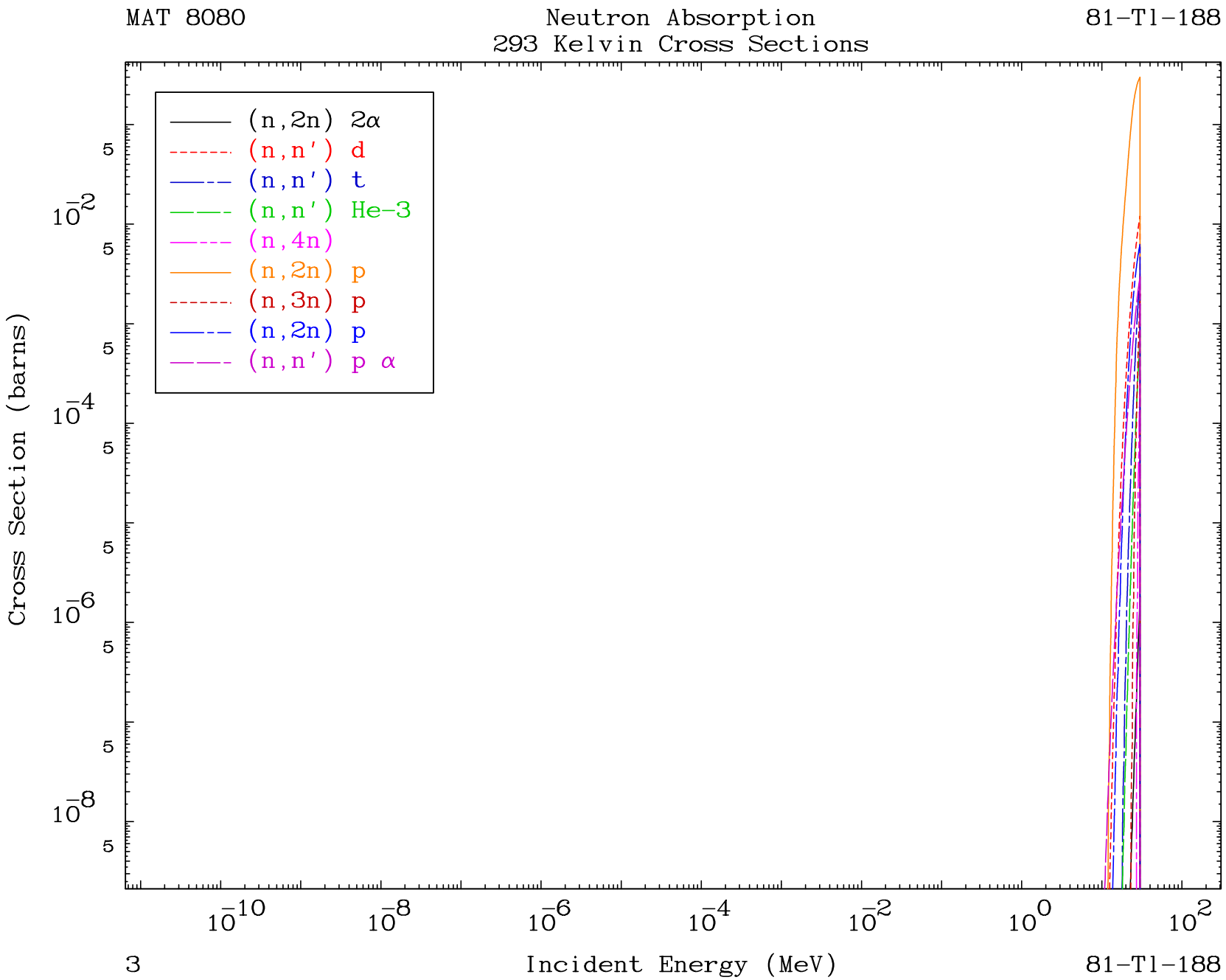
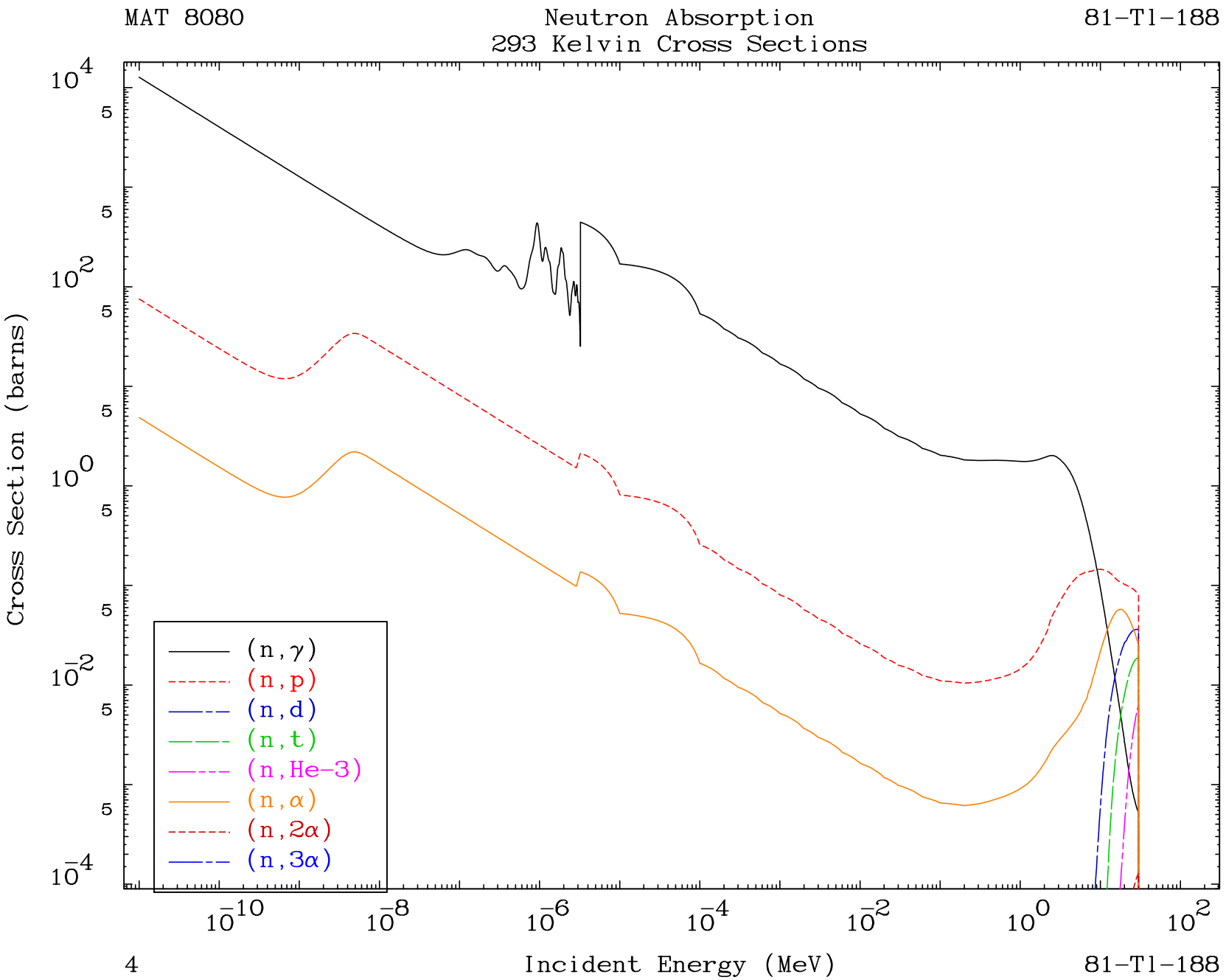
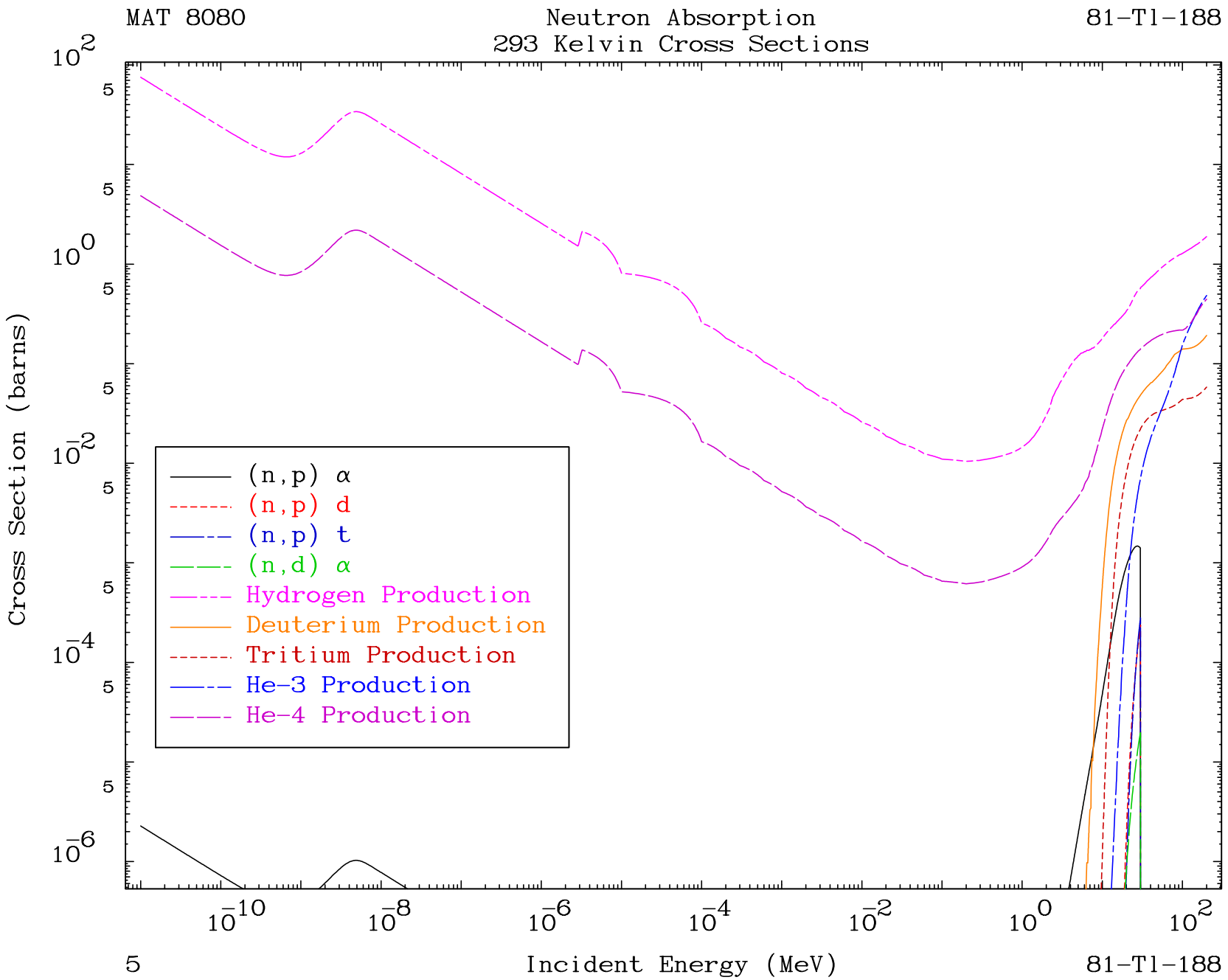
Press Mouse Button to Start

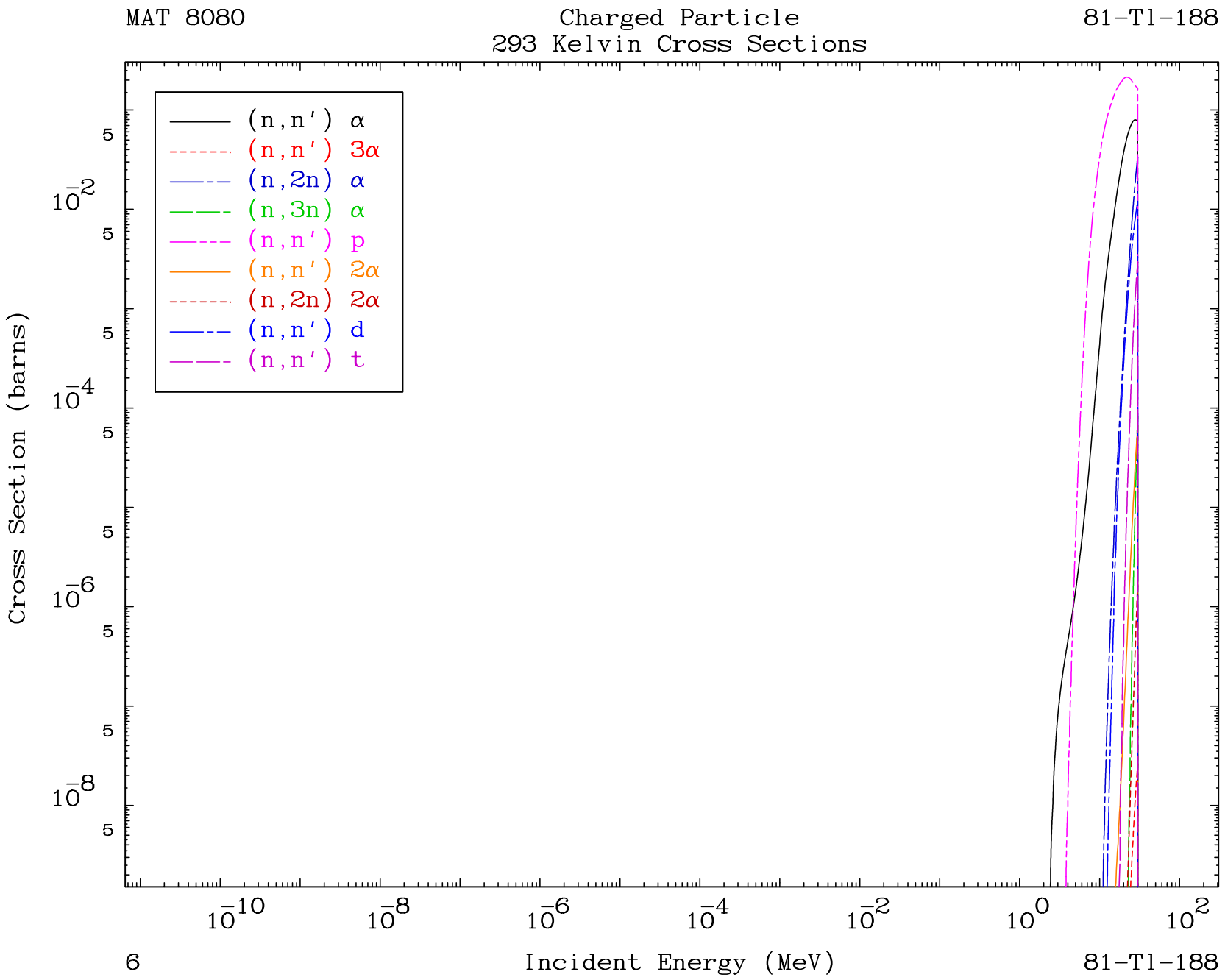

MAT 8080
Neutron Major
81-Tl-188
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
81-Tl-188
1
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)

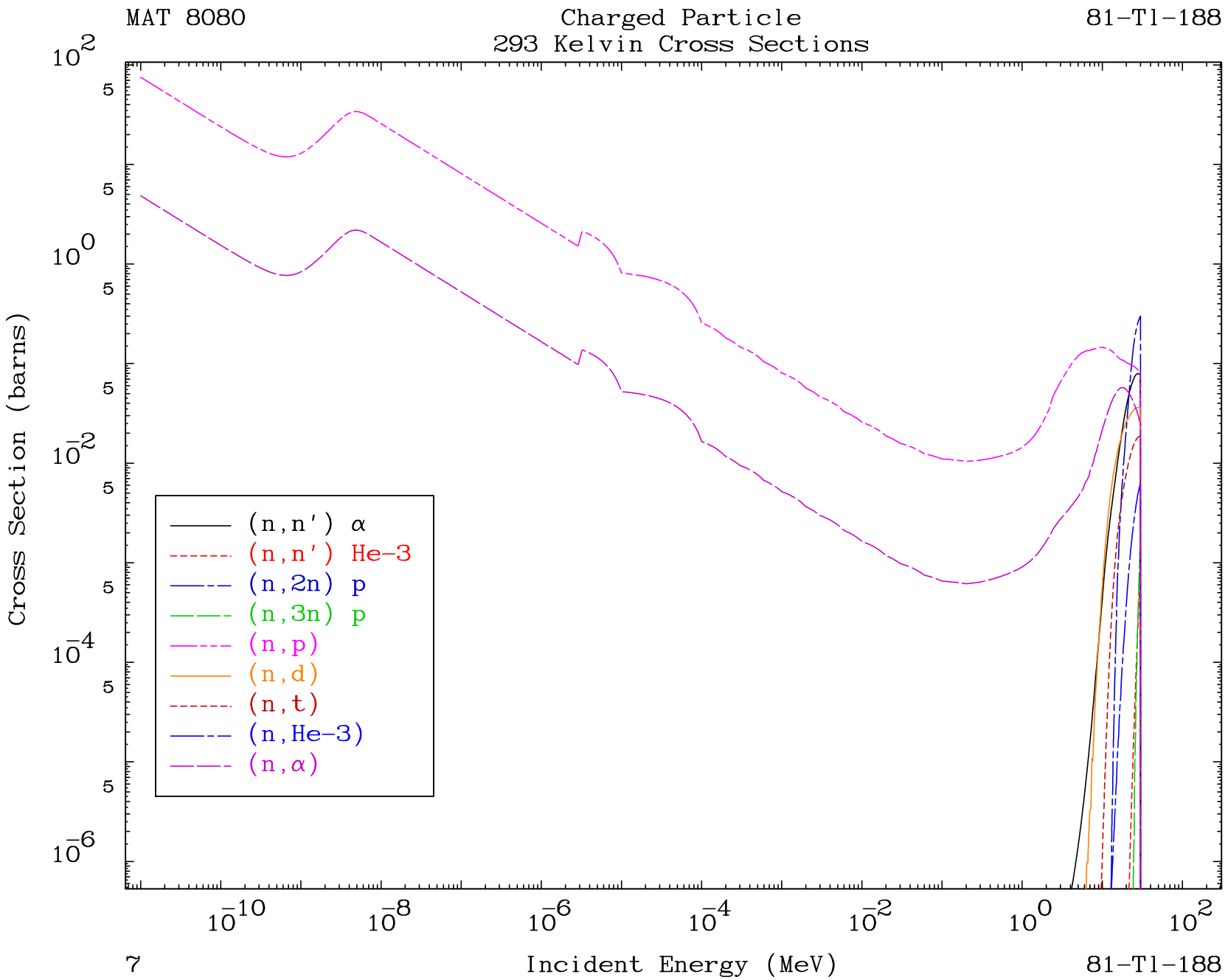

MAT 8080
Neutron Absorption
293 Kelvin Cross Sections
81-Tl-188
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,n') 3α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
2
81-Tl-188

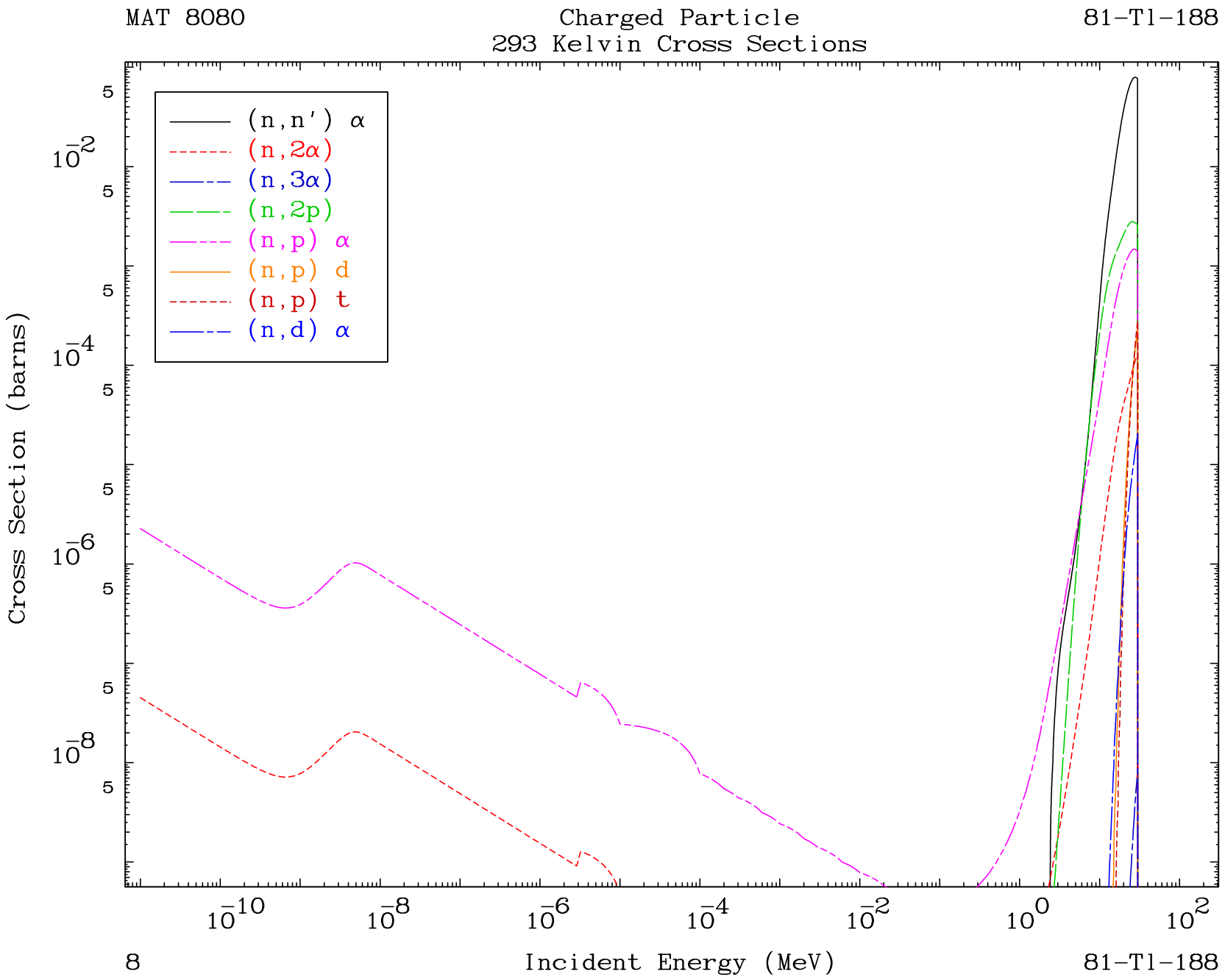

MAT 8080
Neutron Absorption
293 Kelvin Cross Sections
81-Tl-188
(n,2n) 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
Cross Section (barns)
Incident Energy (MeV)
3
81-Tl-188

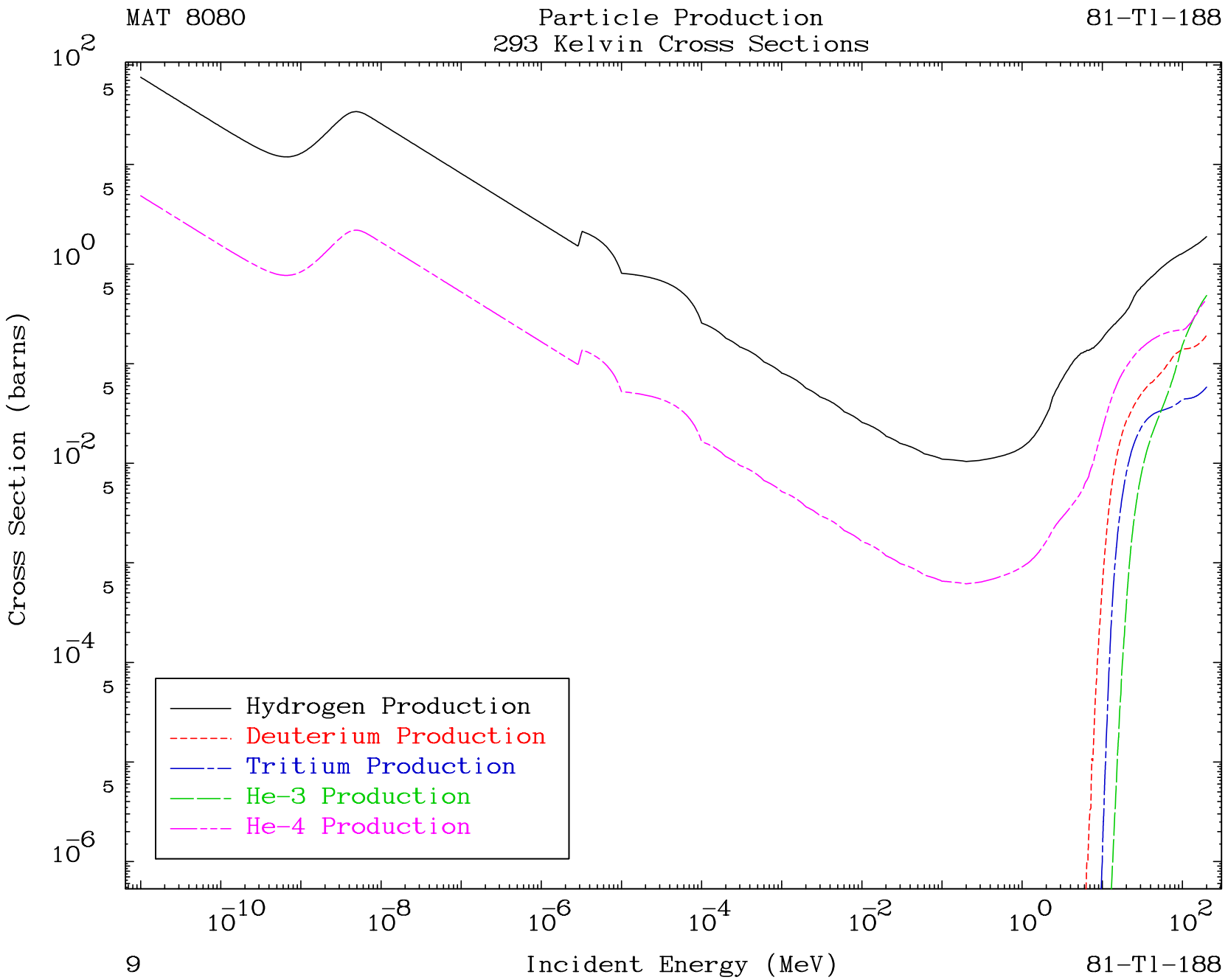

MAT 8080
Neutron Absorption
293 Kelvin Cross Sections
81-Tl-188
Cross Section (barns)
Incident Energy (MeV)
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,3α)
4
81-Tl-188

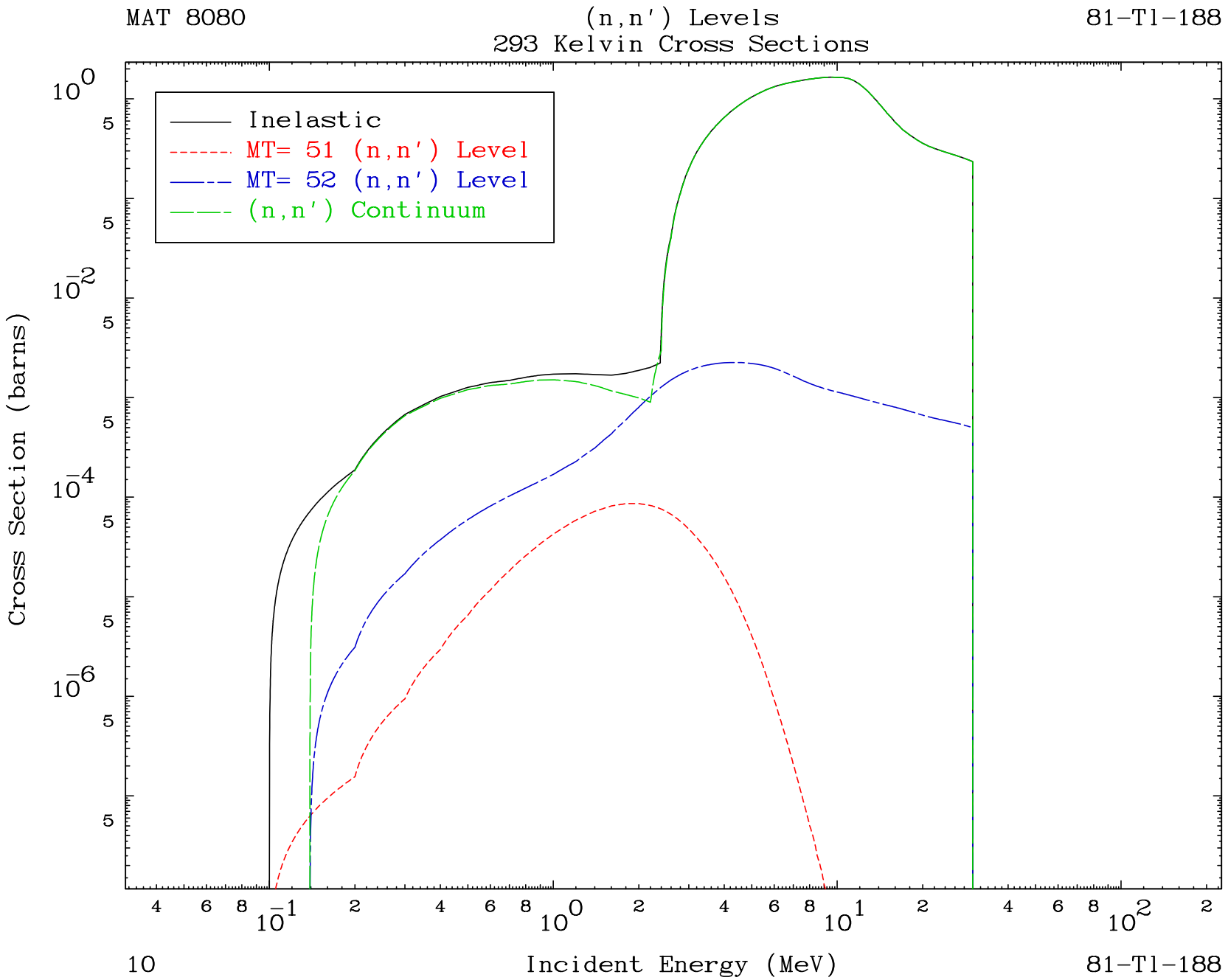

MAT 8080
Neutron Absorption
293 Kelvin Cross Sections
81-Tl-188
Cross Section (barns)
Incident Energy (MeV)
81-Tl-188
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

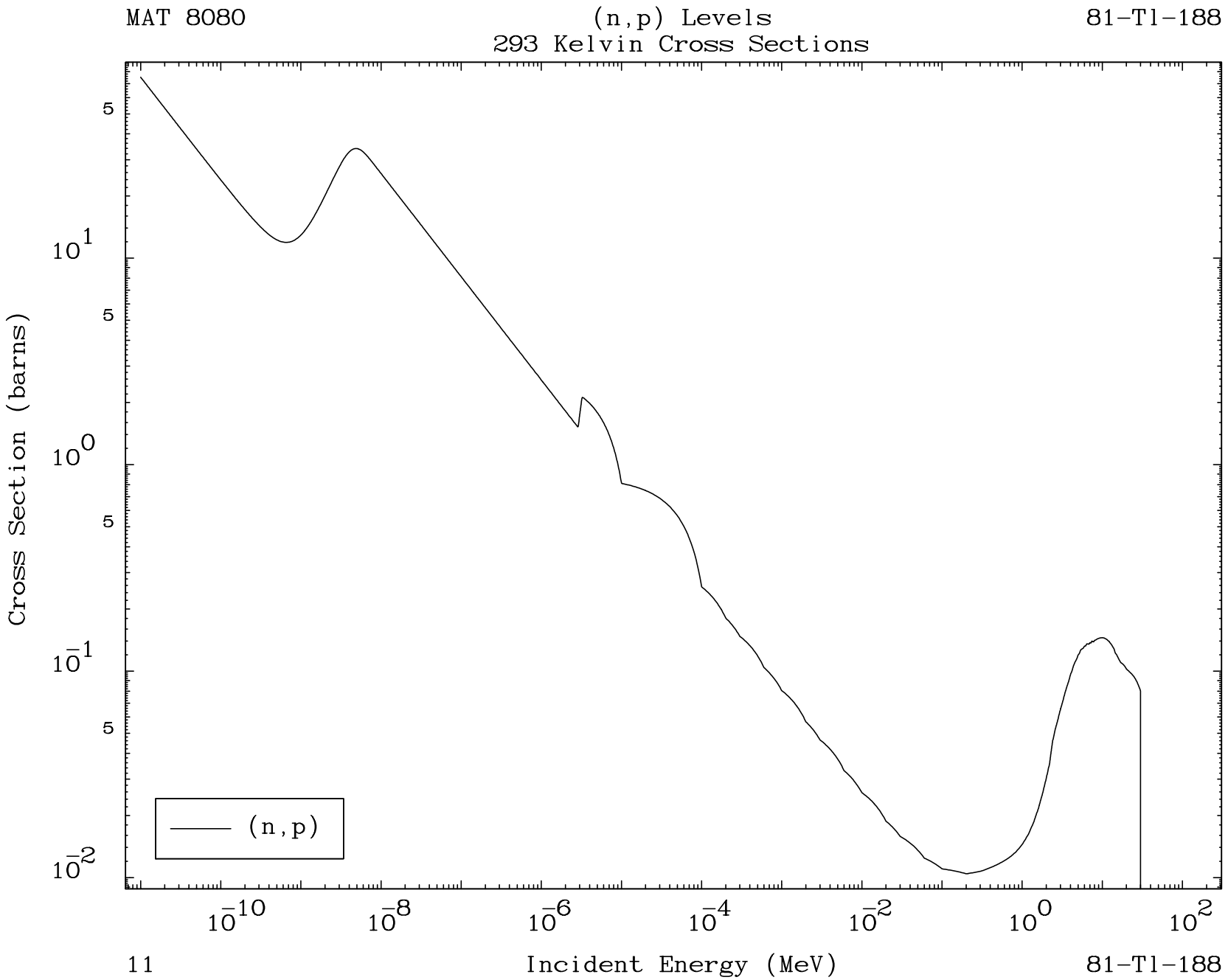

MAT 8080
Charged Particle
293 Kelvin Cross Sections
81-Tl-188
(n,n') α
(n,n') 3α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,2n) 2α
(n,n') d
(n,n') t
Cross Section (barns)
Incident Energy (MeV)
6
81-Tl-188

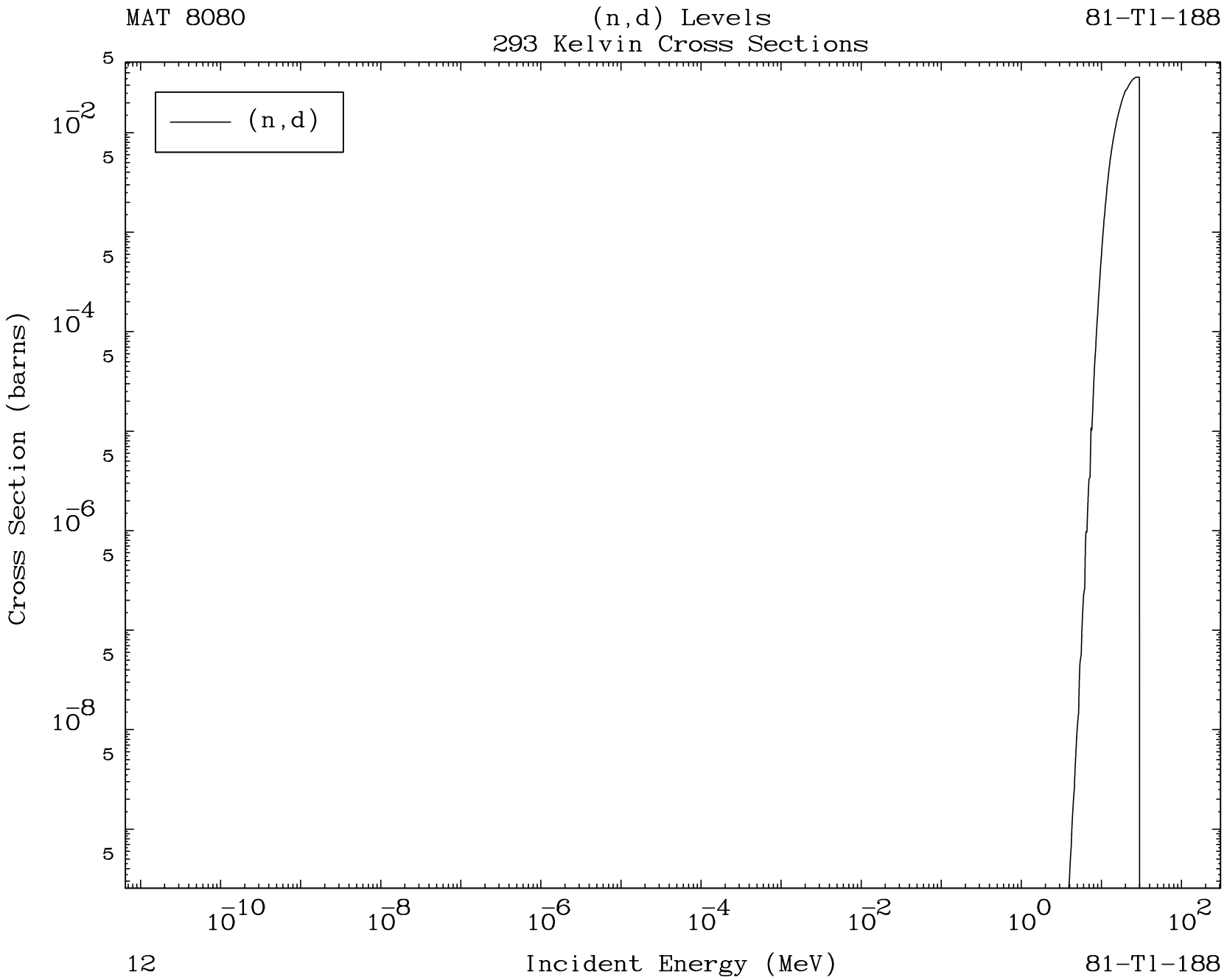

MAT 8080
Charged Particle
293 Kelvin Cross Sections
81-Tl-188
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
7
81-Tl-188

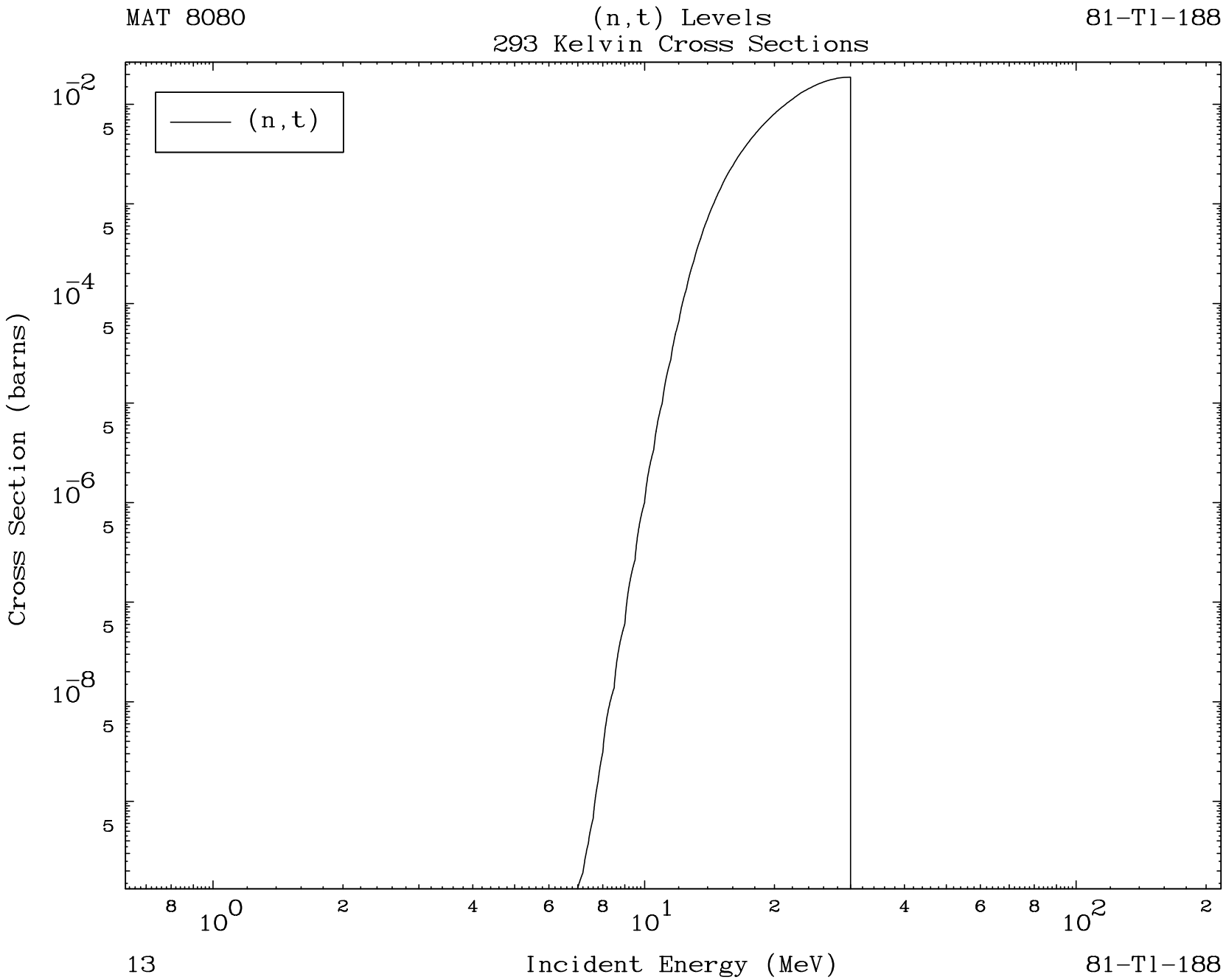

MAT 8080
Charged Particle
293 Kelvin Cross Sections
81-Tl-188
(n,n') α
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
Incident Energy (MeV)
8
81-Tl-188

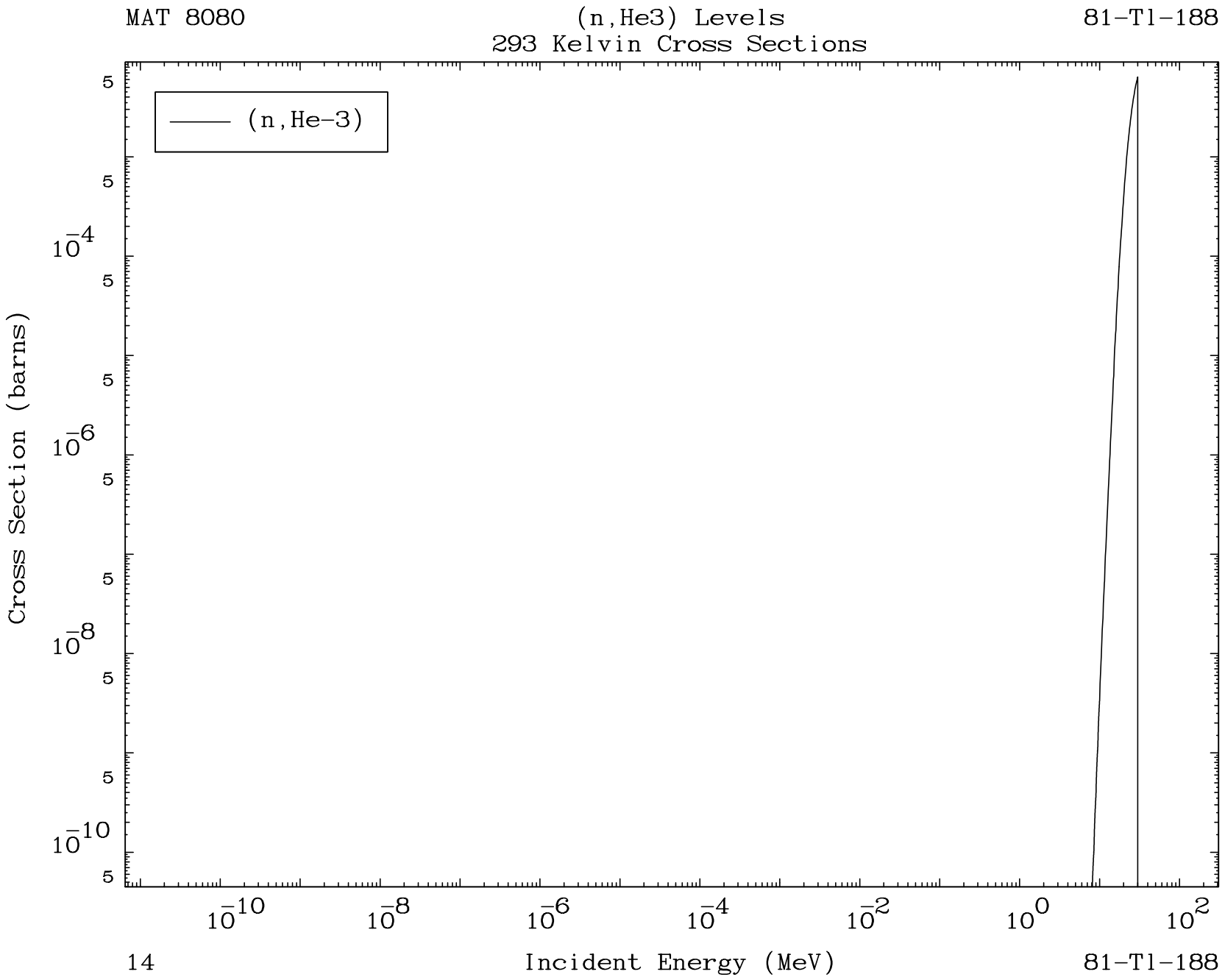

MAT 8080
Particle Production
293 Kelvin Cross Sections
81-Tl-188
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
9
81-Tl-188

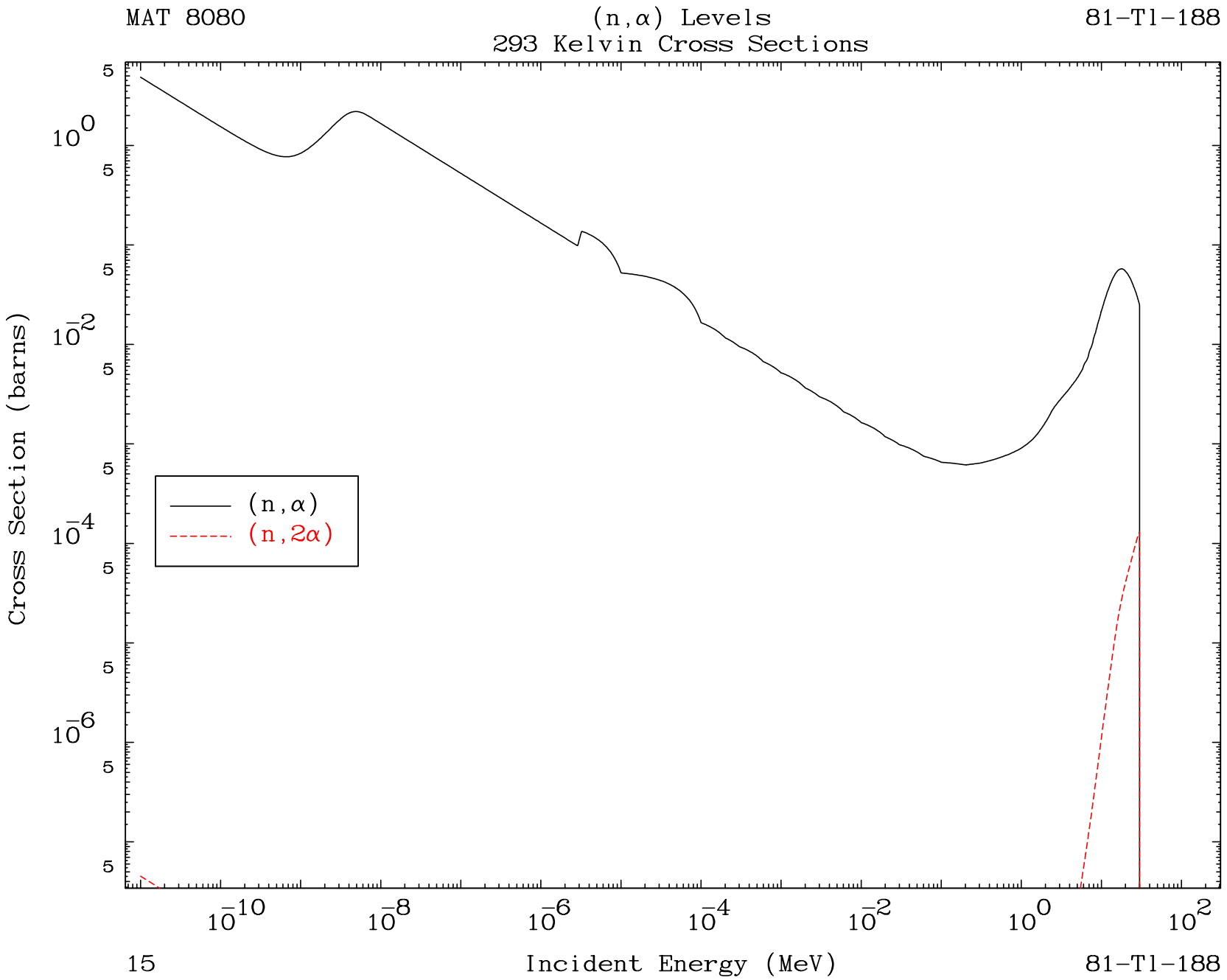

MAT 8080
(n,n') Levels
81-Tl-188
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
81-Tl-188

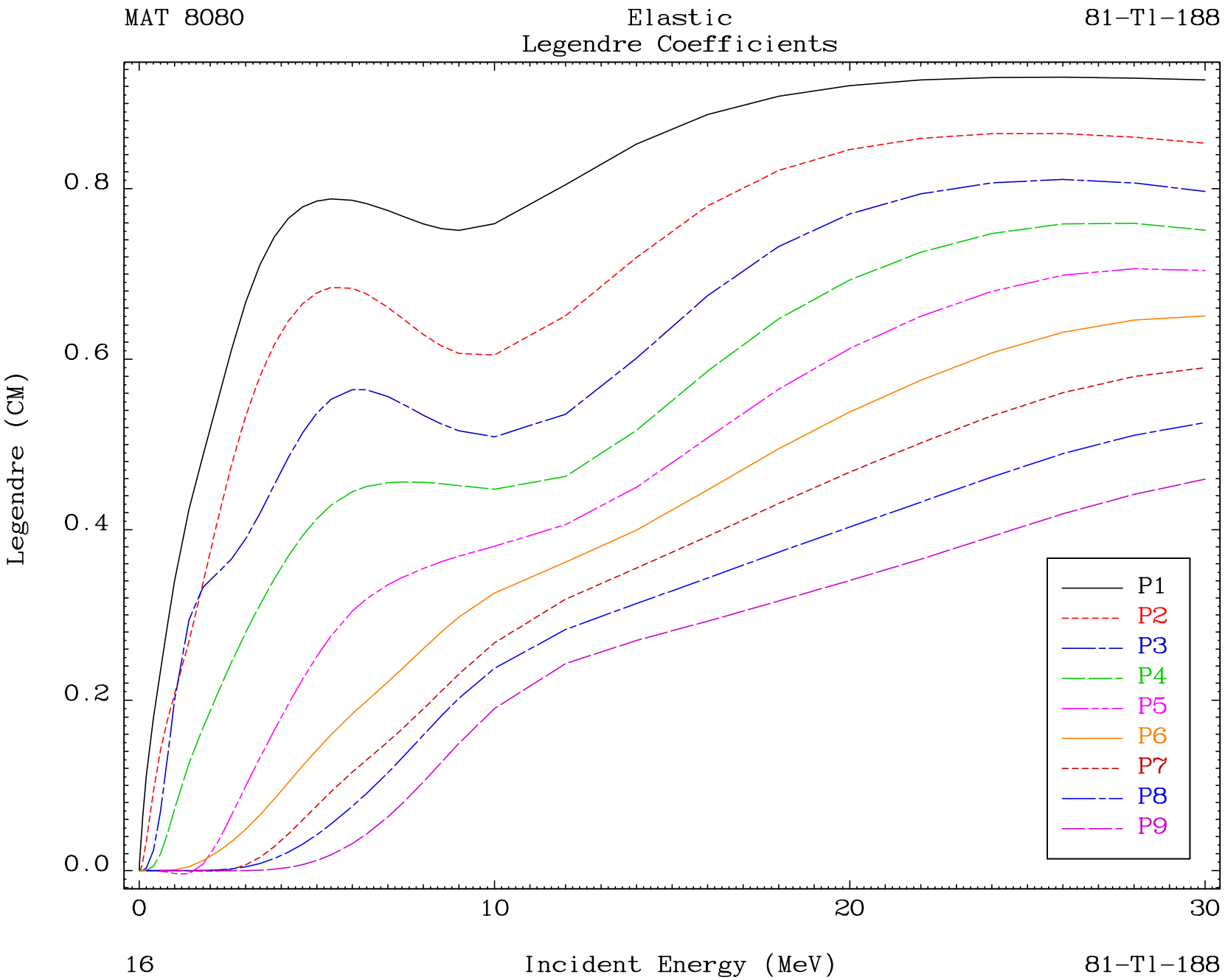

MAT 8080
(n,p) Levels
81-Tl-188
293 Kelvin Cross Sections
Cross Section (barns)
10^1
10^0
10^-1
10^-2
5
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
11
Incident Energy (MeV)
81-Tl-188

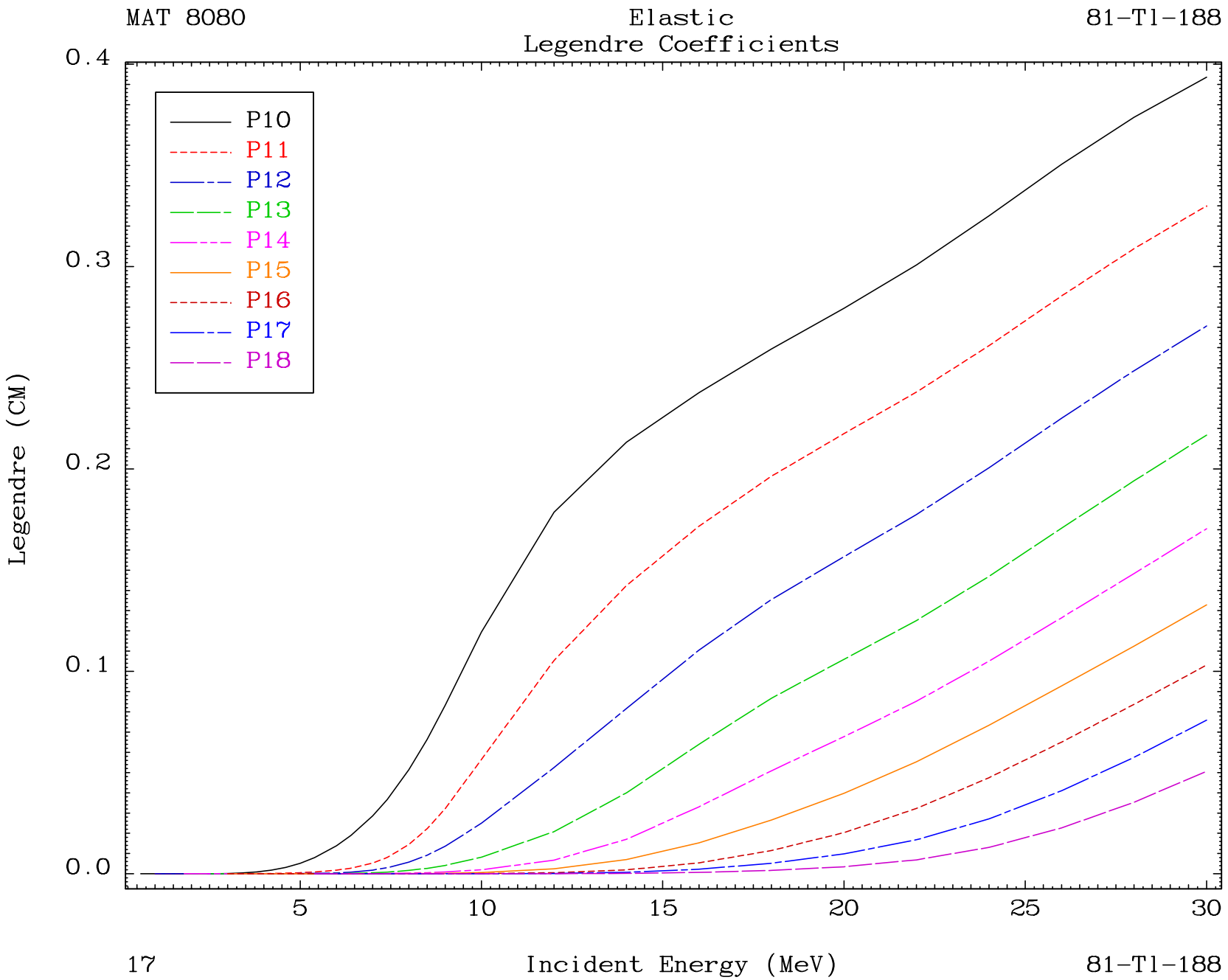

MAT 8080
(n,d) Levels
81-Tl-188
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
12
81-Tl-188

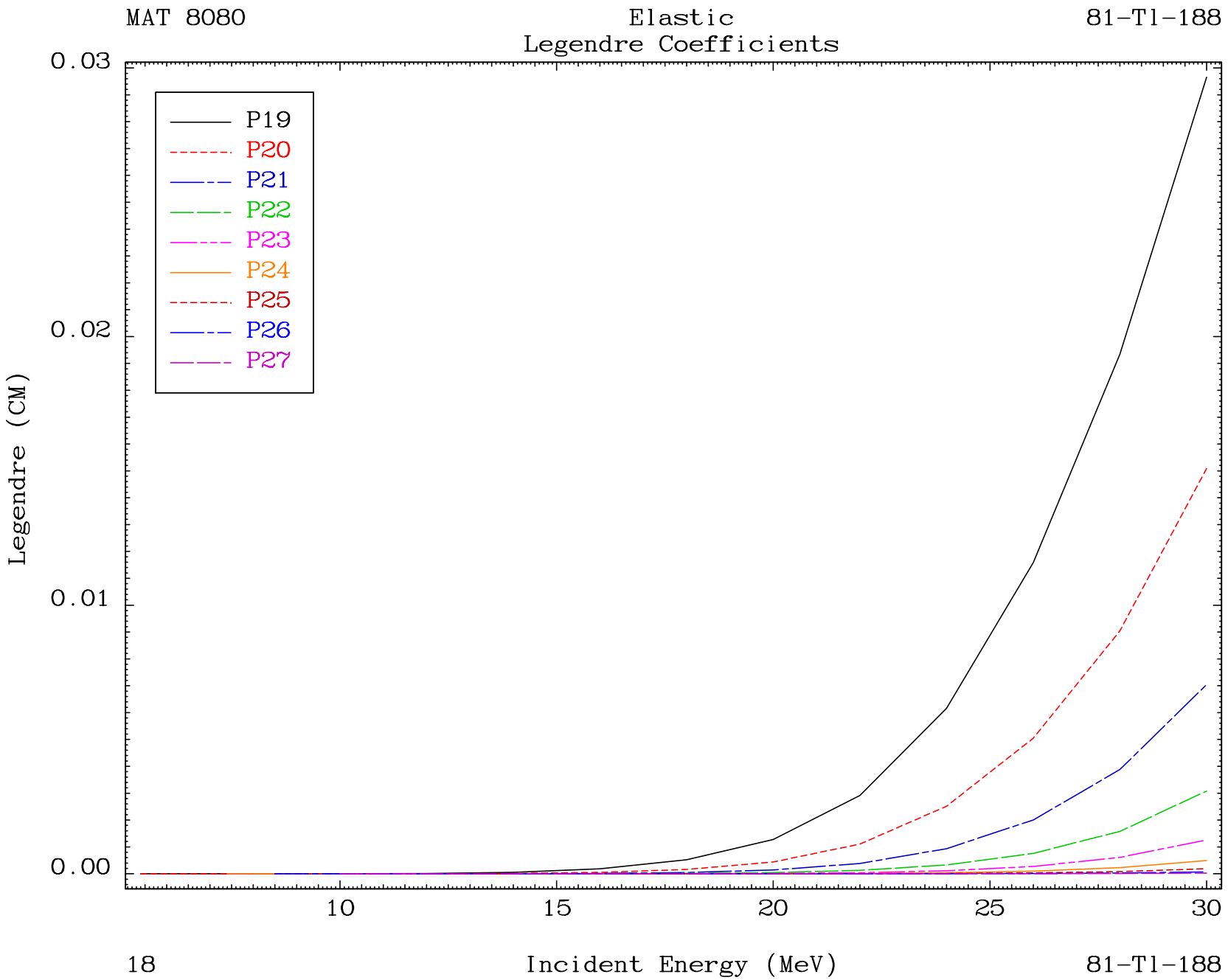

MAT 8080
(n,t) Levels
81-Tl-188
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
13
81-Tl-188

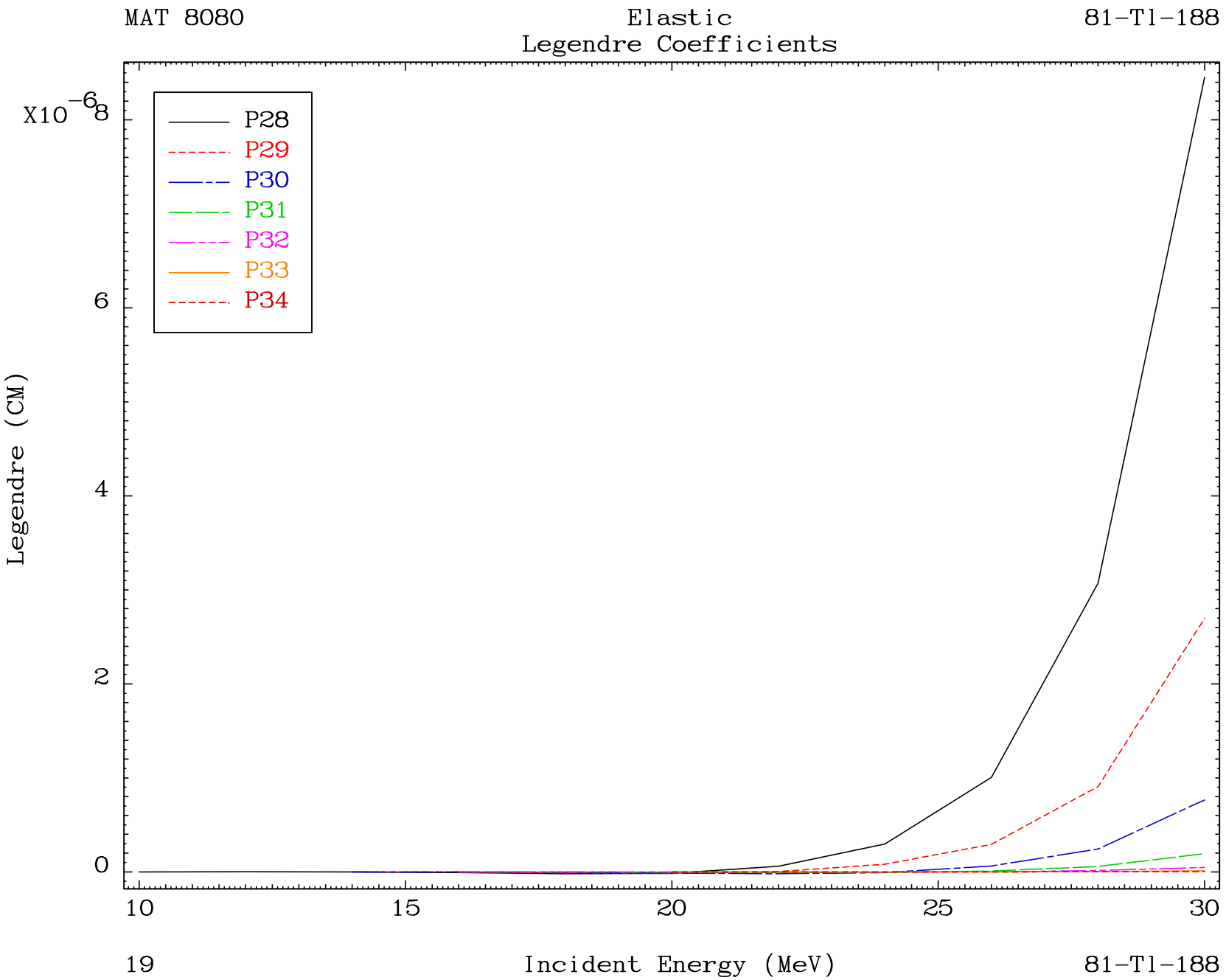

MAT 8080
(n,He3) Levels
81-Tl-188
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
14
81-Tl-188

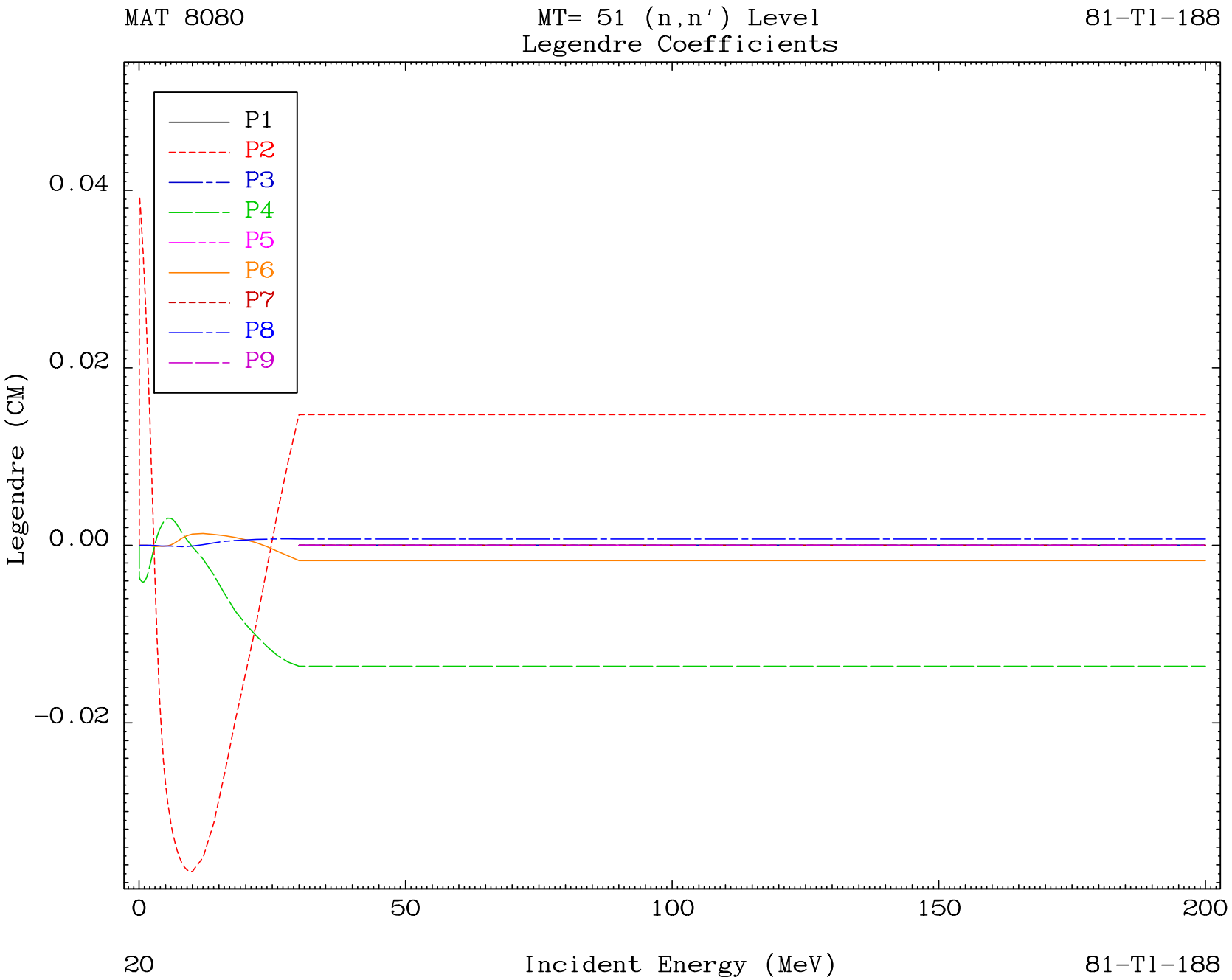

MAT 8080
(n,α) Levels
81-Tl-188
293 Kelvin Cross Sections
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
(n,α)
(n,2α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
15
81-Tl-188

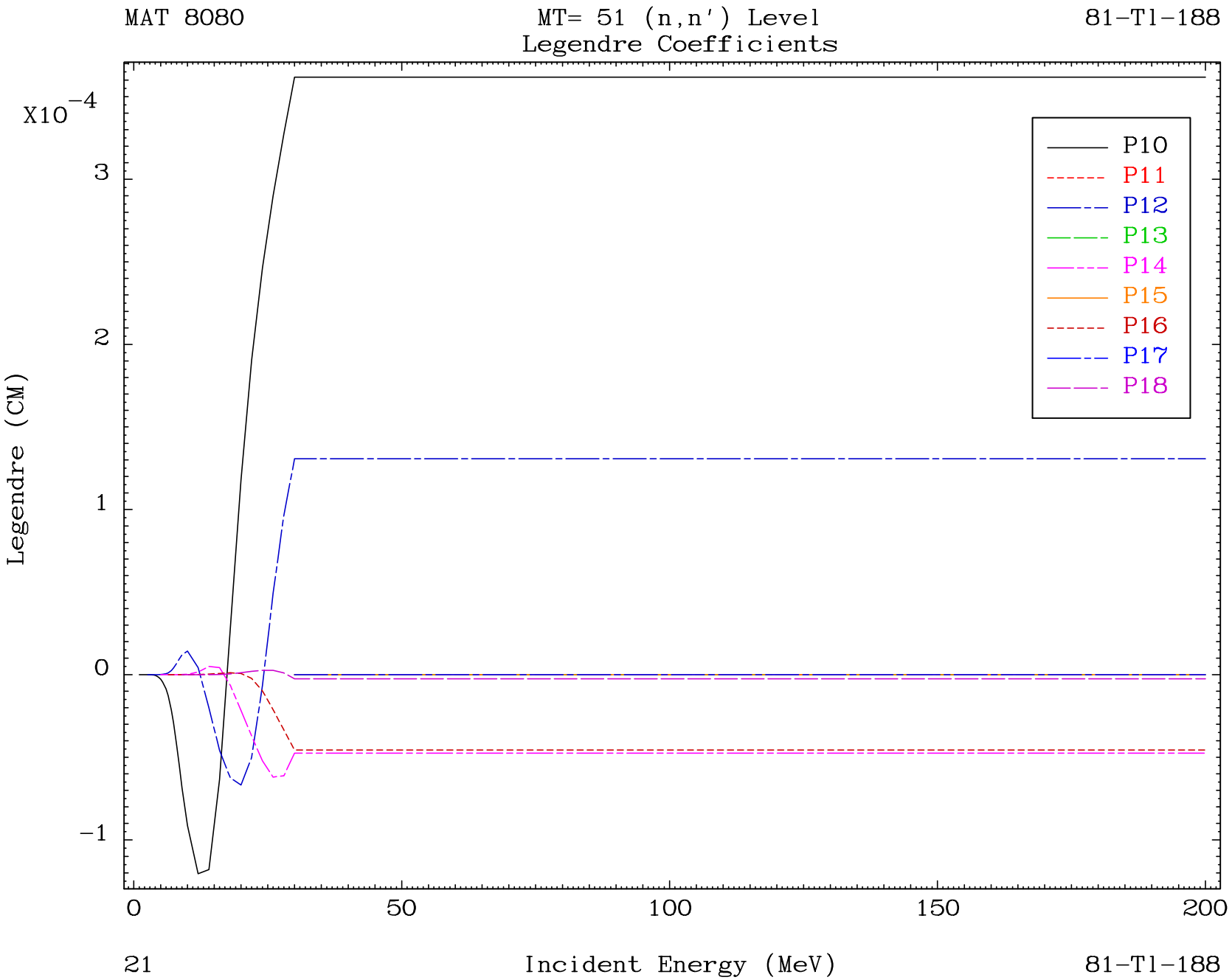

MAT 8080
Elastic
Legendre Coefficients
81-Tl-188
Legendre (CM)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
16
Incident Energy (MeV)
81-Tl-188
P1
P2
P3
P4
P5
P6
P7
P8
P9

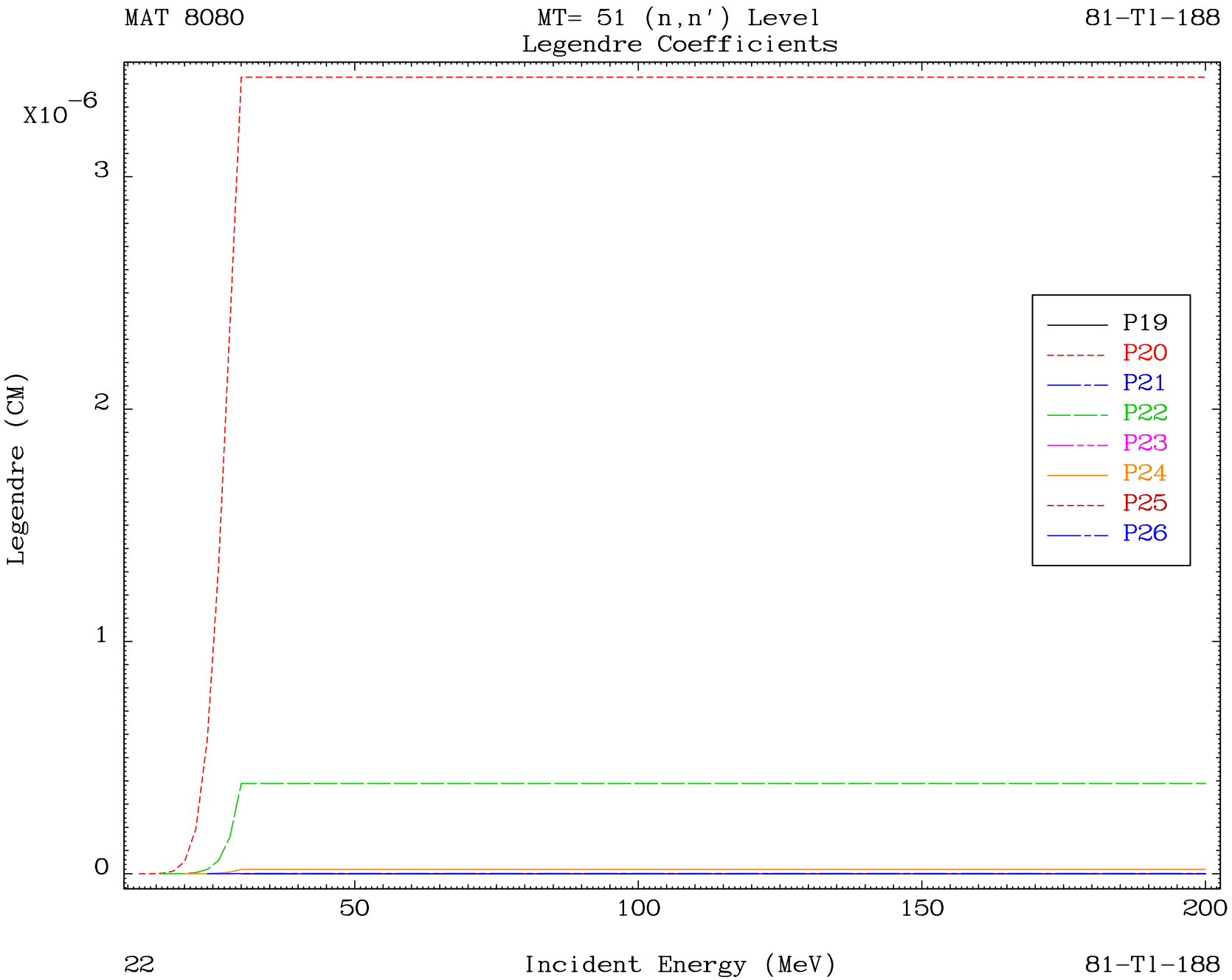

MAT 8080
Elastic
Legendre Coefficients
81-Tl-188
P10
P11
P12
P13
P14
P15
P16
P17
P18
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
5
10
15
20
25
30
17
Incident Energy (MeV)
81-Tl-188

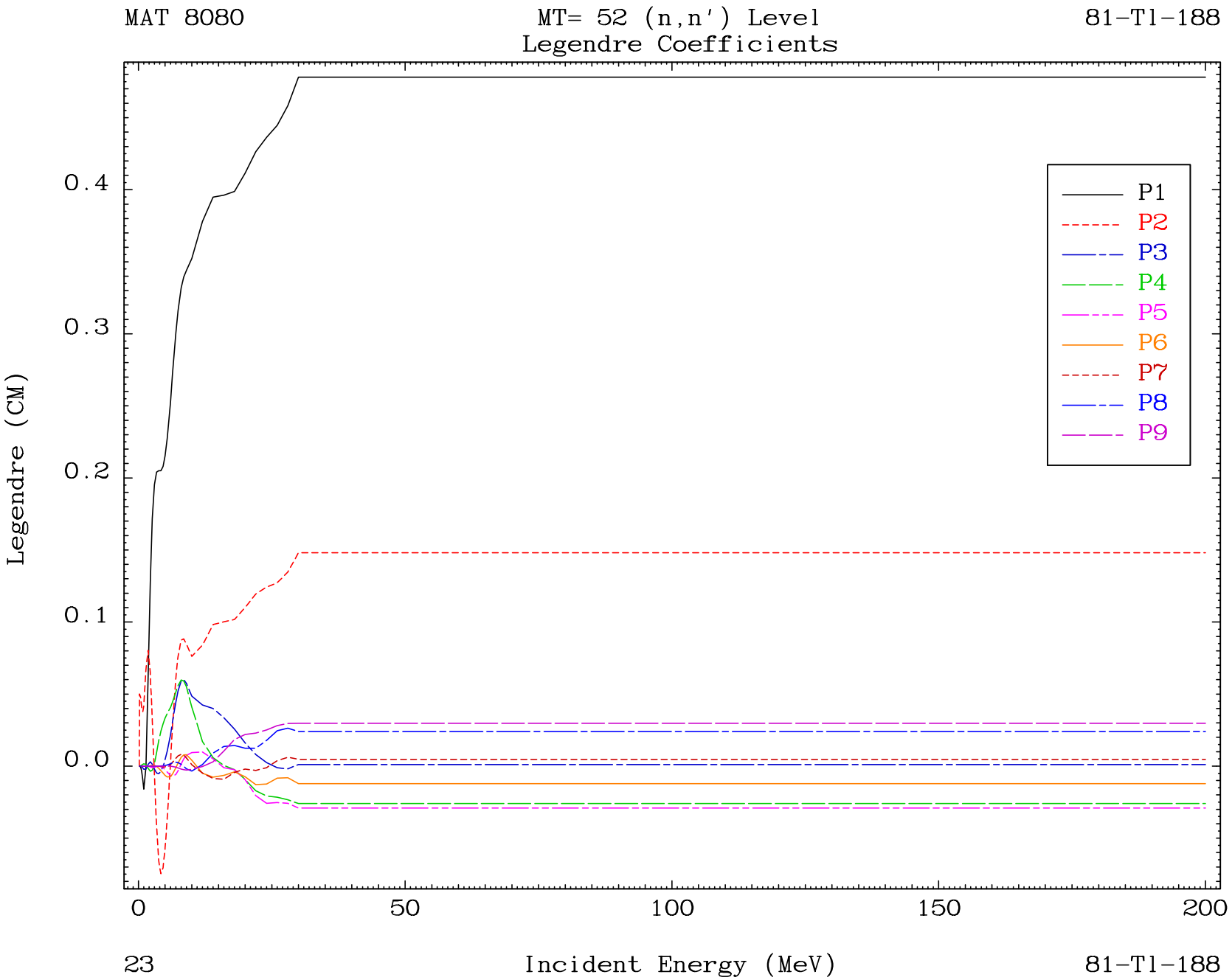

MAT 8080
Elastic
Legendre Coefficients
81-Tl-188
P19
P20
P21
P22
P23
P24
P25
P26
P27
0.03
0.02
0.01
0.00
Legendre (CM)
10
15
20
25
30
18
Incident Energy (MeV)
81-Tl-188

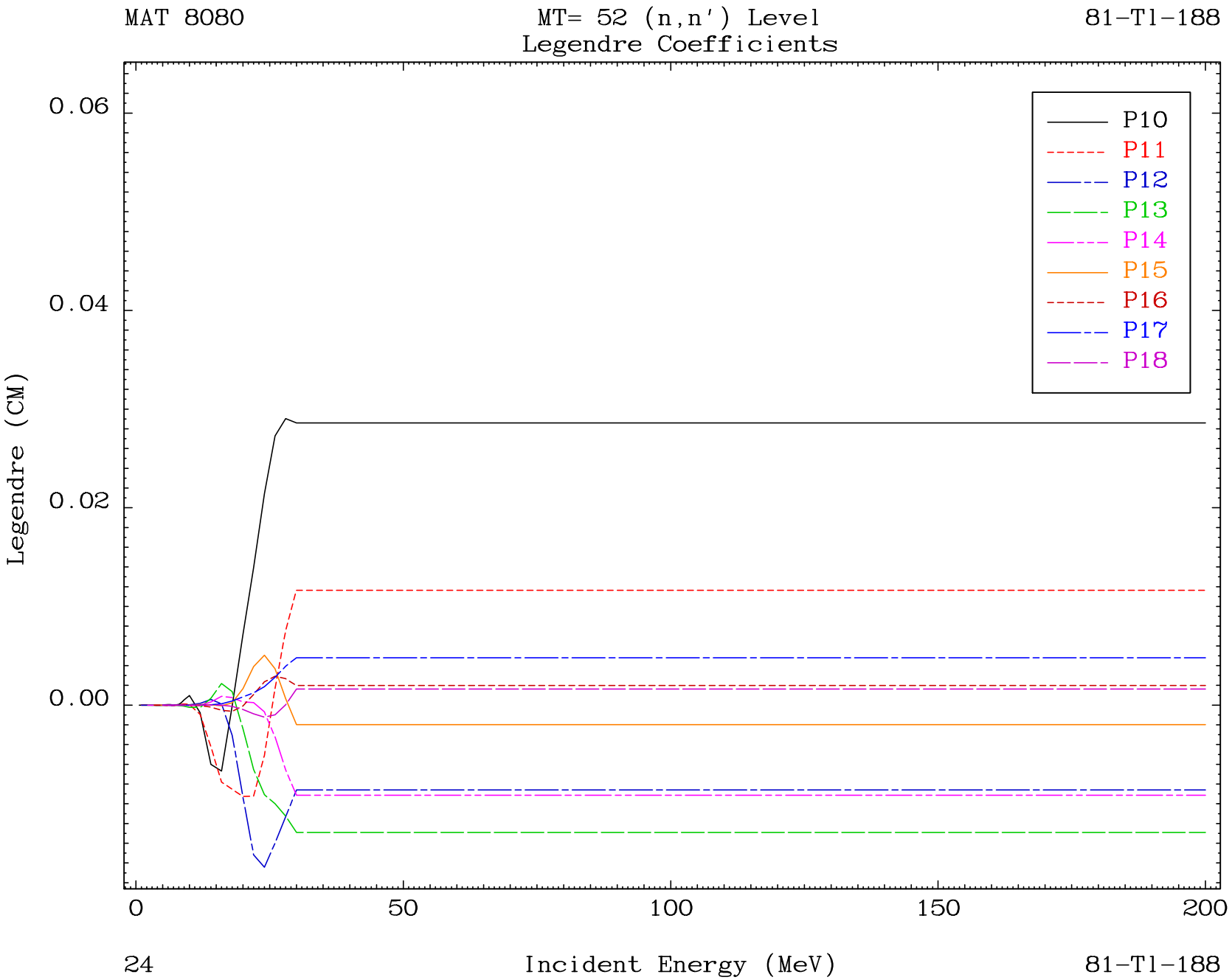

MAT 8080
Elastic
Legendre Coefficients
81-Tl-188
X10 -6
8
6
4
2
0
P28
P29
P30
P31
P32
P33
P34
Legendre (CM)
10
15
20
25
30
19
Incident Energy (MeV)
81-Tl-188

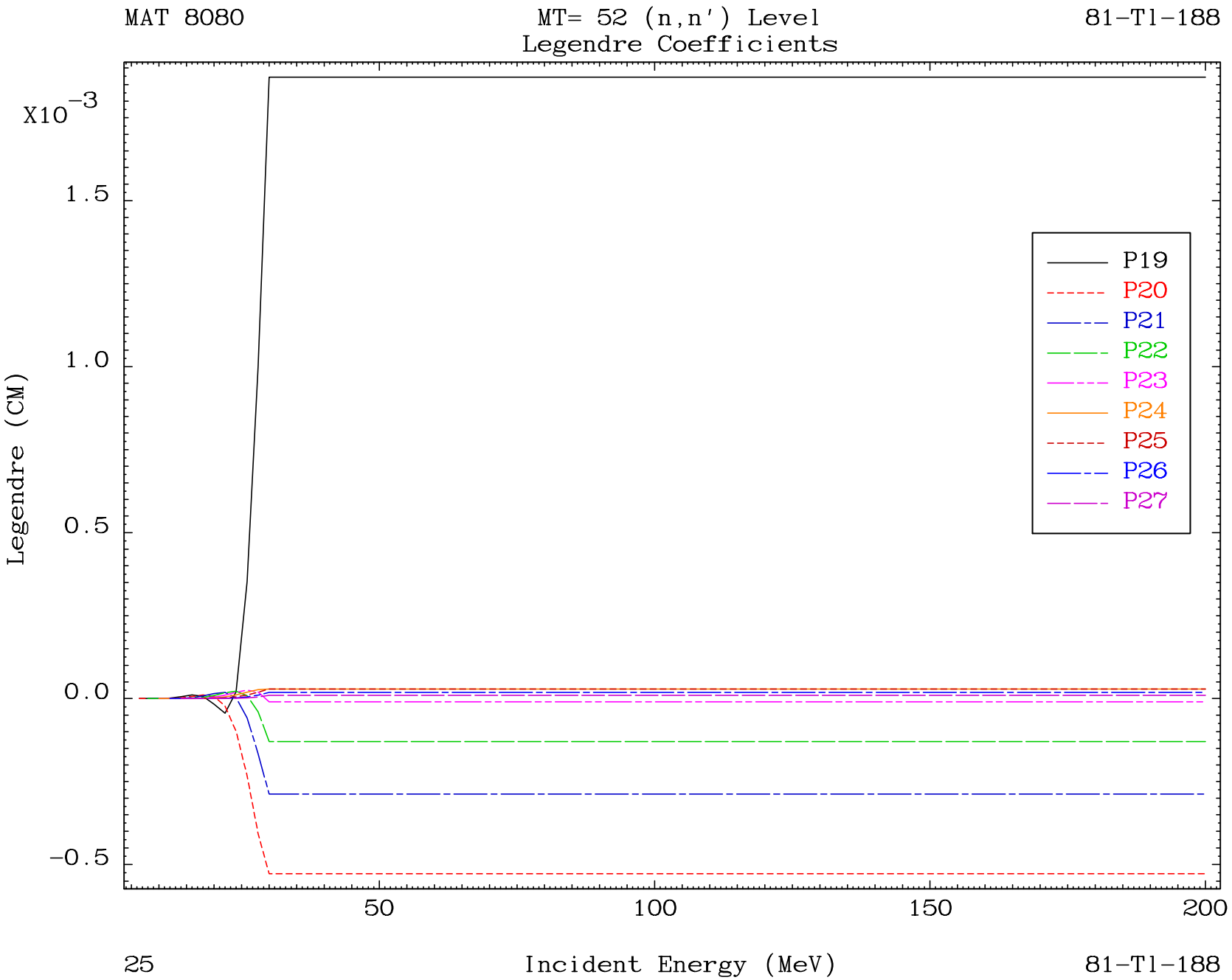

MAT 8080
MT= 51 (n,n') Level
Legendre Coefficients
81-Tl-188
P1
P2
P3
P4
P5
P6
P7
P8
P9
0.04
0.02
0.00
-0.02
Legendre (CM)
0
50
100
150
200
20
Incident Energy (MeV)
81-Tl-188

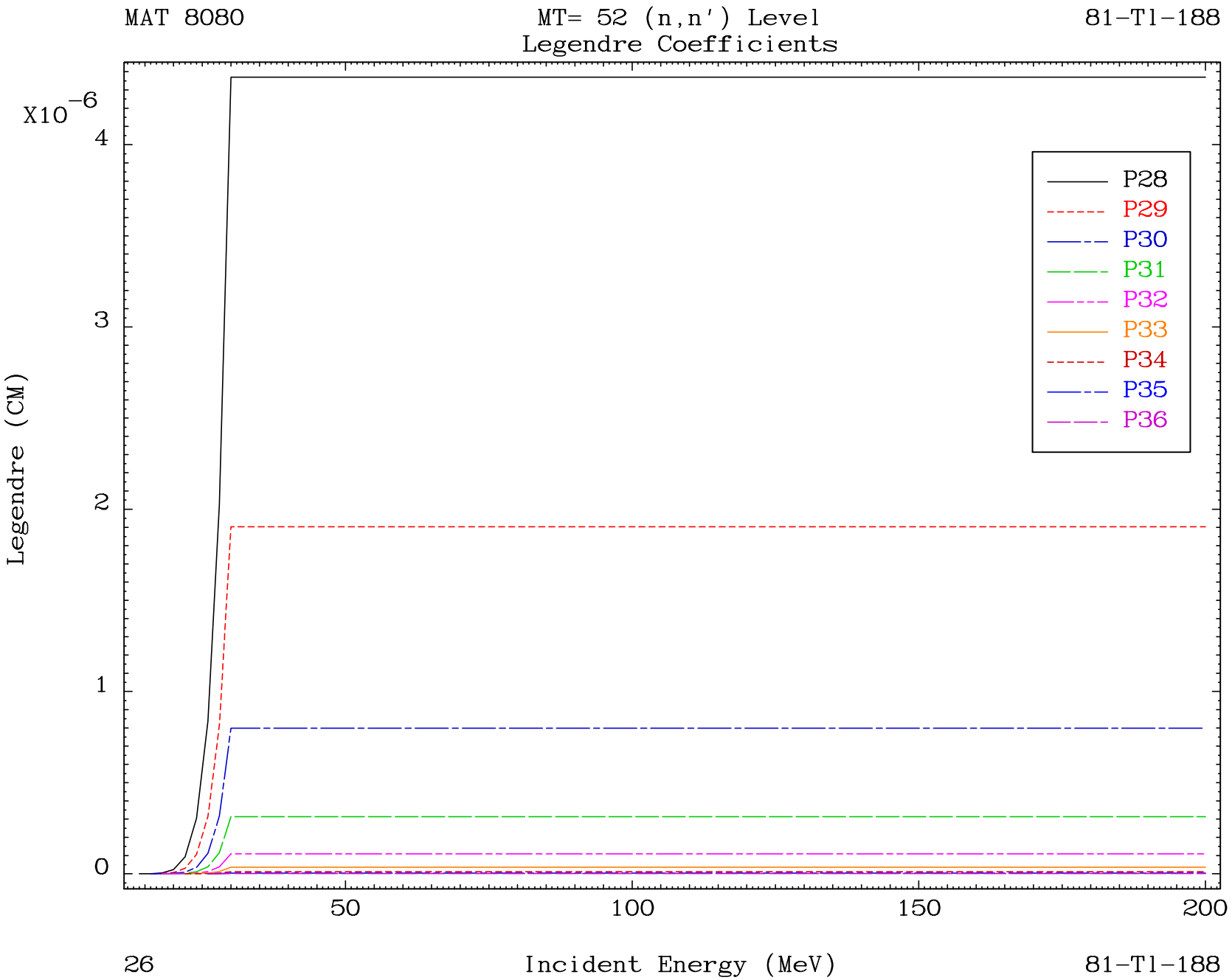

MAT 8080
MT= 51 (n,n') Level
Legendre Coefficients
81-Tl-188
X10^-4
3
2
1
0
-1
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
21
Incident Energy (MeV)
81-Tl-188

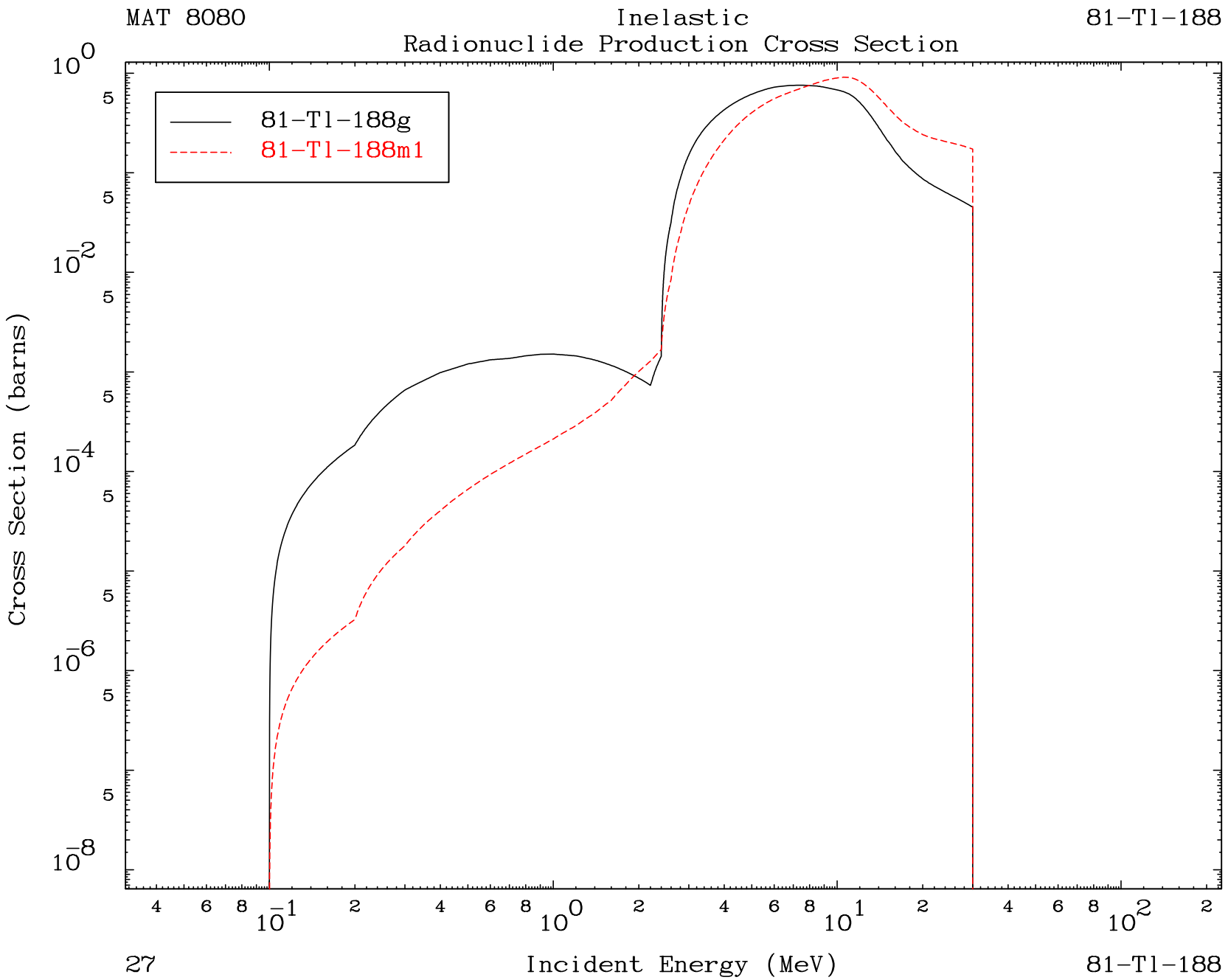

MAT 8080
MT= 51 (n,n') Level
Legendre Coefficients
81-Tl-188
X10^-6
3
2
1
0
Legendre (CM)
50
100
150
200
22
Incident Energy (MeV)
81-Tl-188
P19
P20
P21
P22
P23
P24
P25
P26

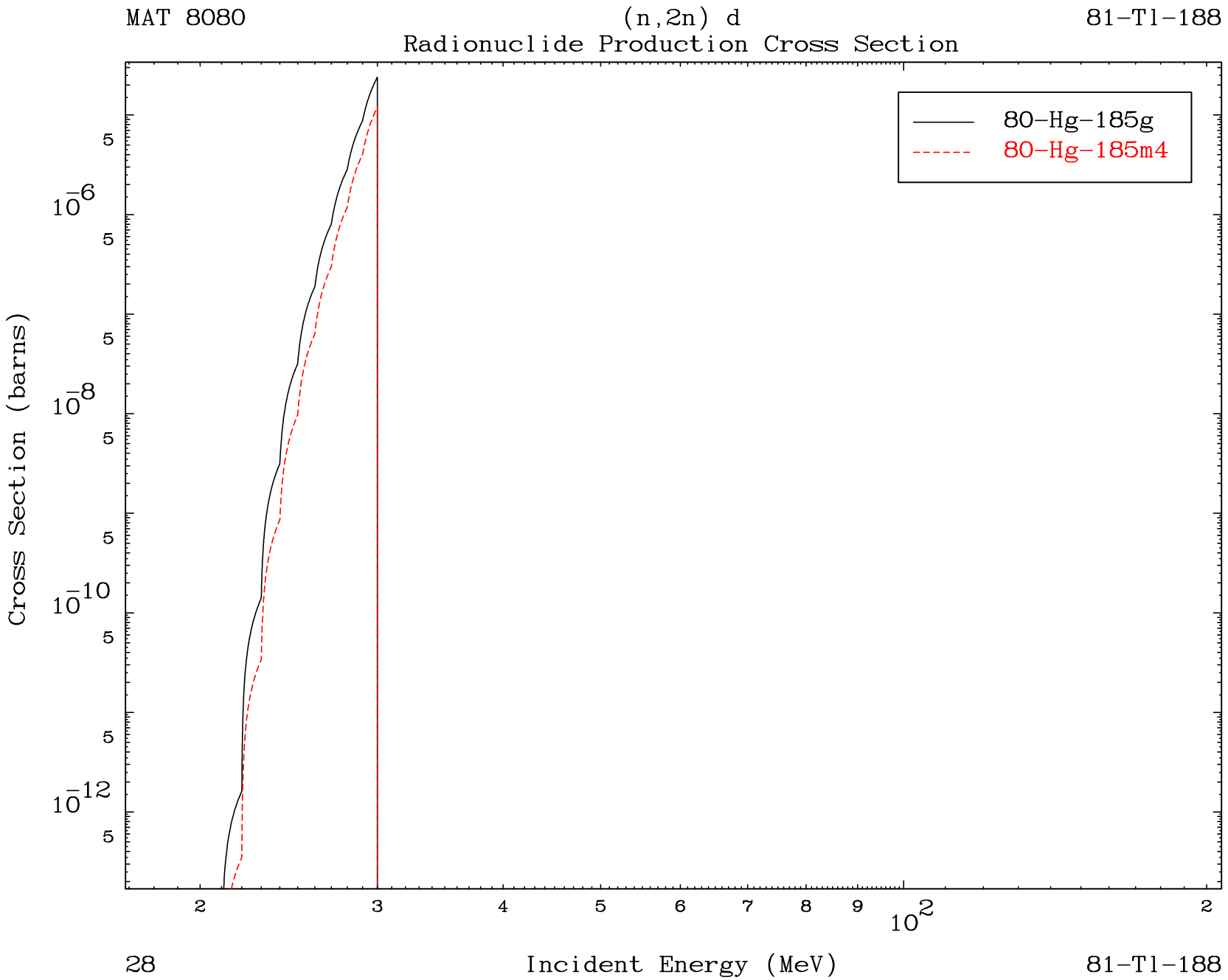

MAT 8080
MT= 52 (n,n') Level
Legendre Coefficients
81-Tl-188
Legendre (CM)
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
P1
P2
P3
P4
P5
P6
P7
P8
P9
23
Incident Energy (MeV)
81-Tl-188

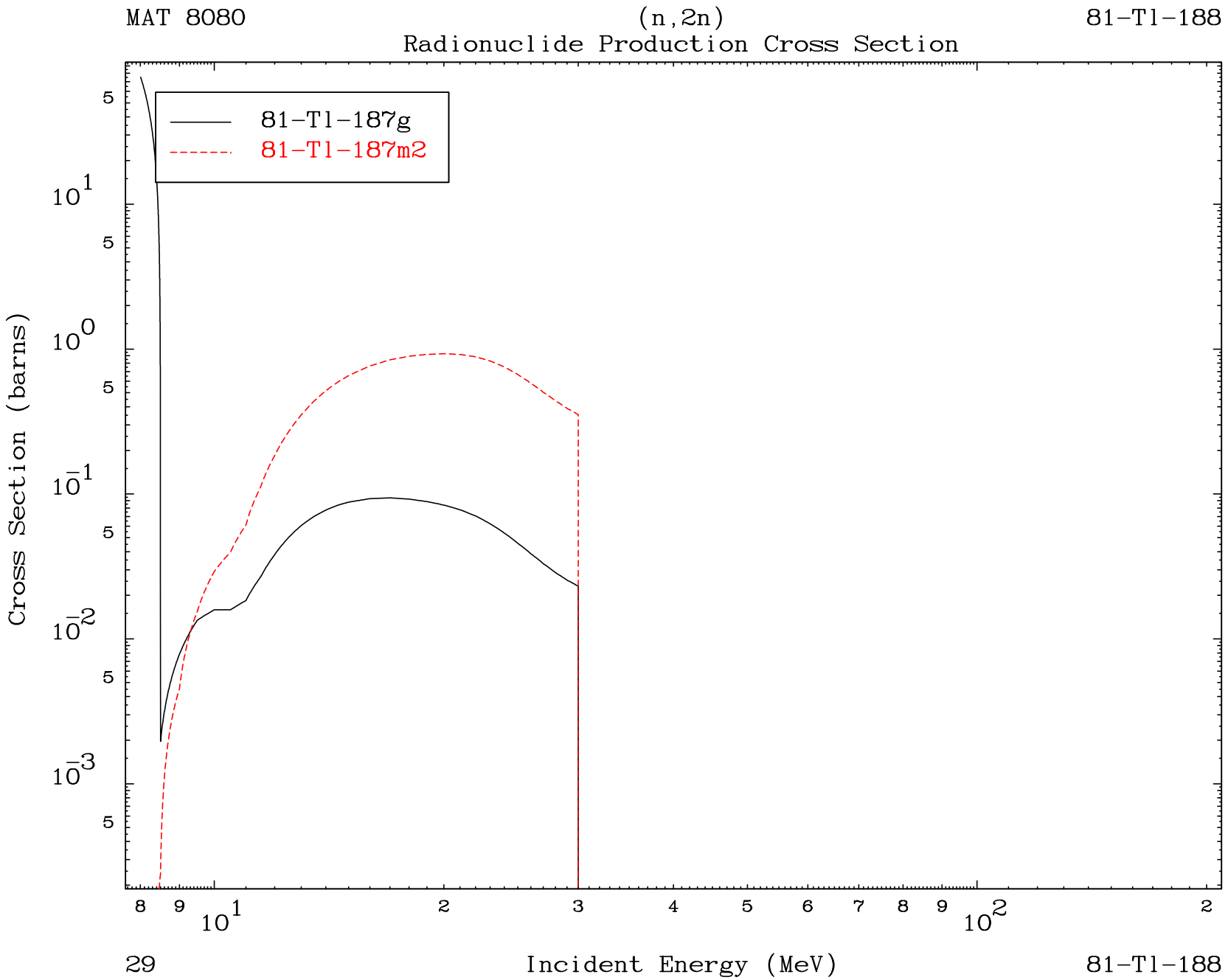

MAT 8080
MT= 52 (n,n') Level
Legendre Coefficients
81-Tl-188
0.06
0.04
0.02
0.00
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
0
50
100
150
200
24
Incident Energy (MeV)
81-Tl-188

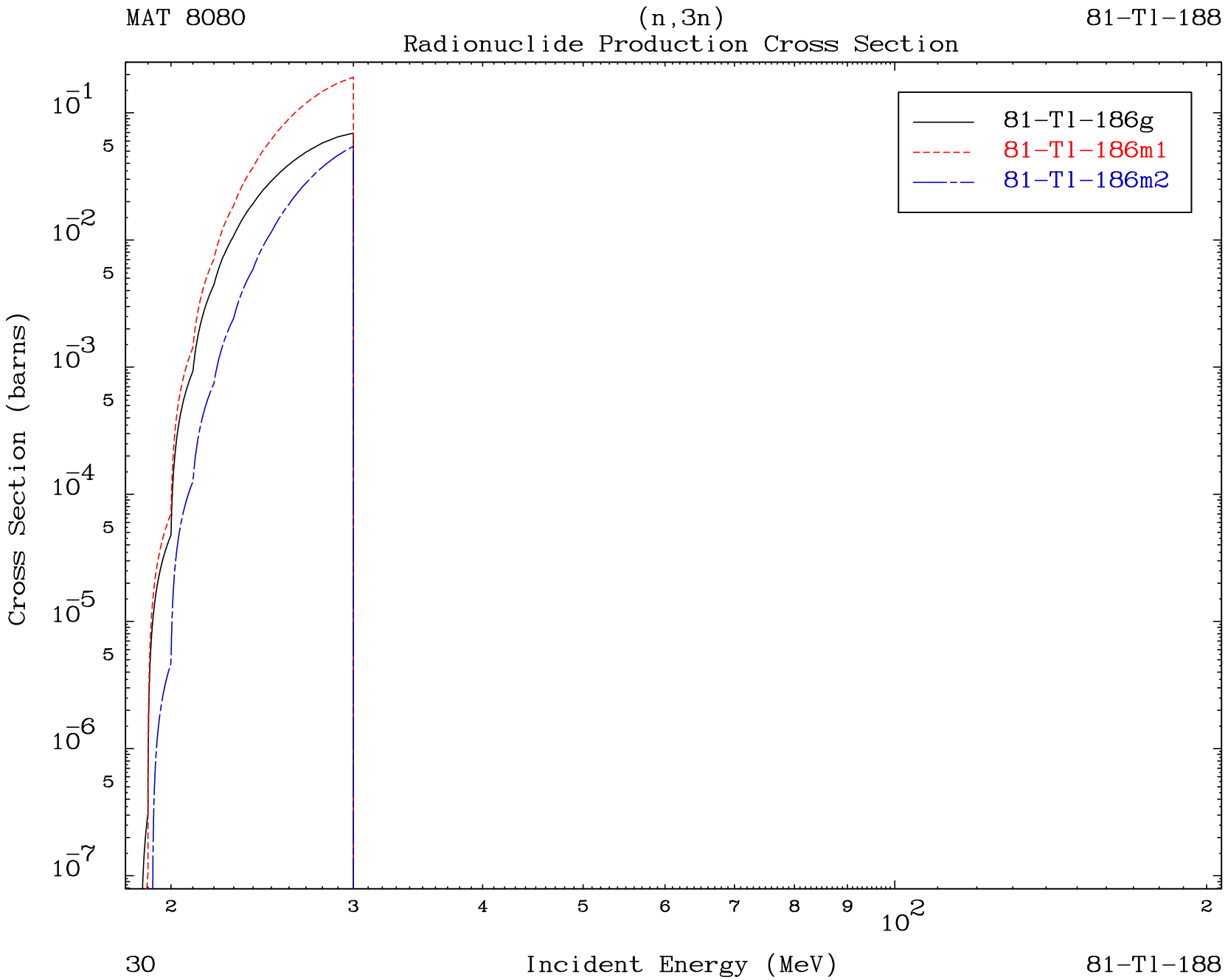

MAT 8080
MT= 52 (n,n') Level
Legendre Coefficients
81-Tl-188
X10^-3
1.5
1.0
0.5
0.0
-0.5
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
P27
50
100
150
200
25
Incident Energy (MeV)
81-Tl-188

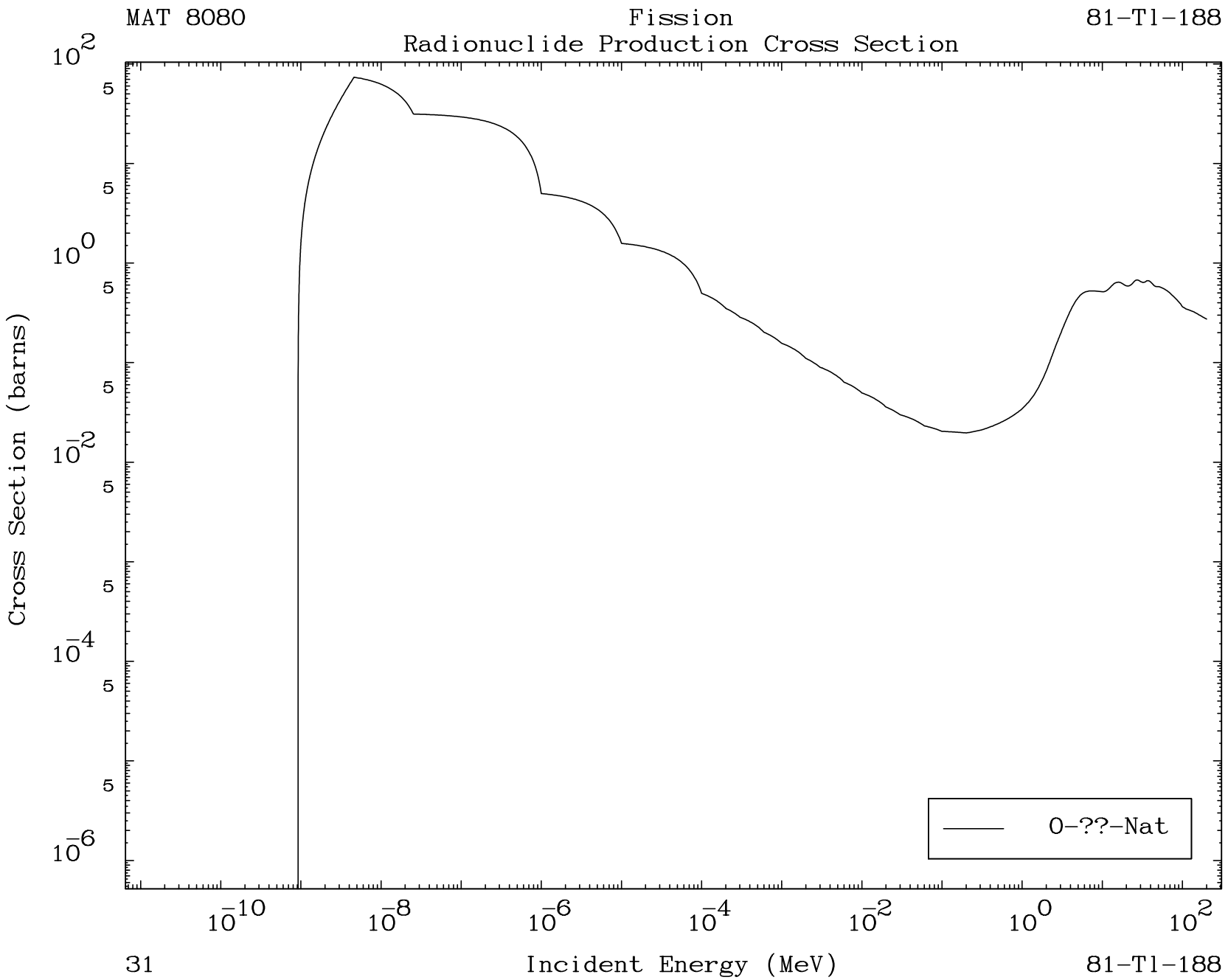

MAT 8080
MT= 52 (n,n') Level
Legendre Coefficients
81-Tl-188
X10^-6
4
3
2
1
0
Legendre (CM)
P28
P29
P30
P31
P32
P33
P34
P35
P36
50
100
150
200
26
Incident Energy (MeV)
81-Tl-188

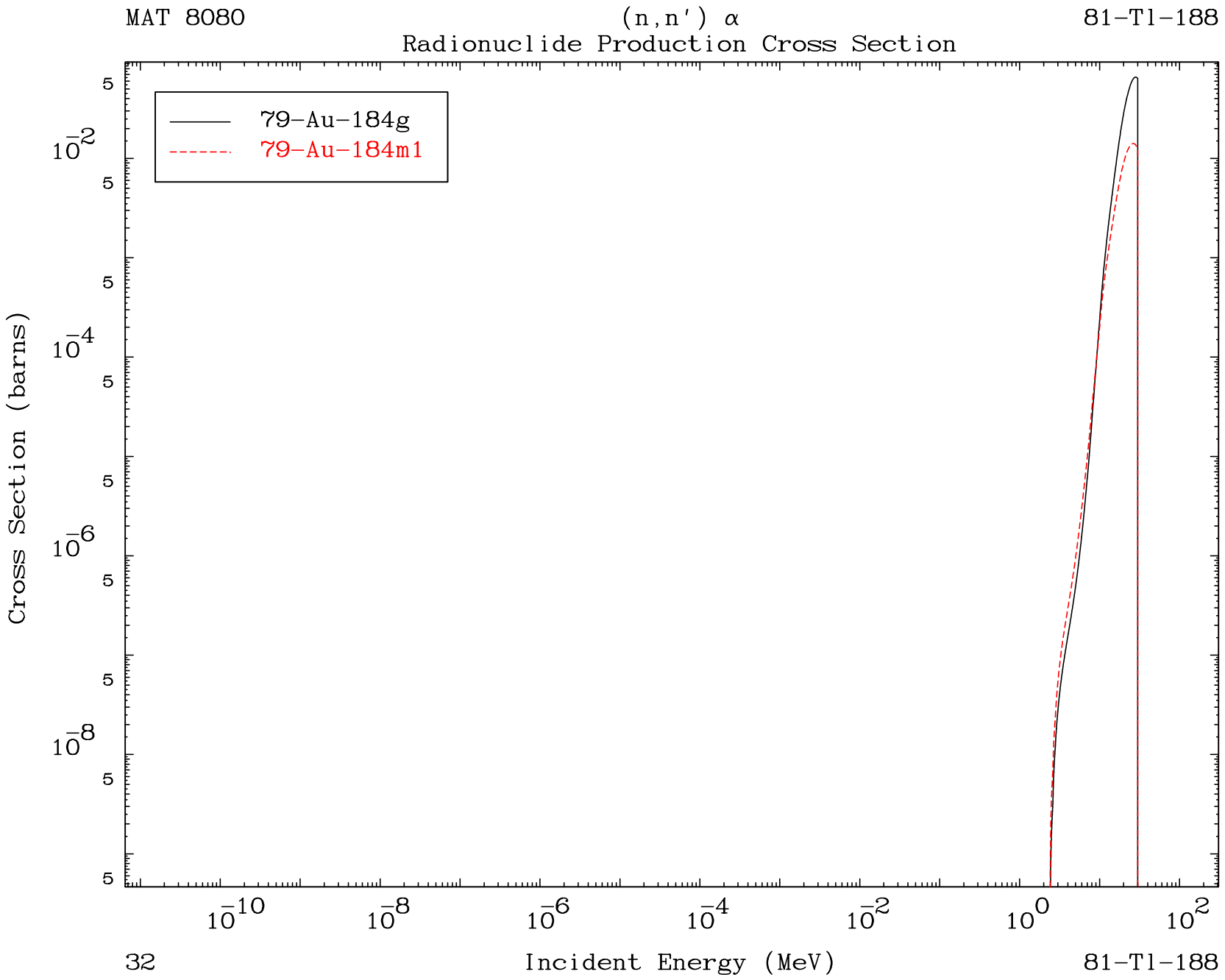

MAT 8080
Inelastic
81-Tl-188
Radionuclide Production Cross Section
81-Tl-188g
81-Tl-188m1
Cross Section (barns)
Incident Energy (MeV)
27
81-Tl-188

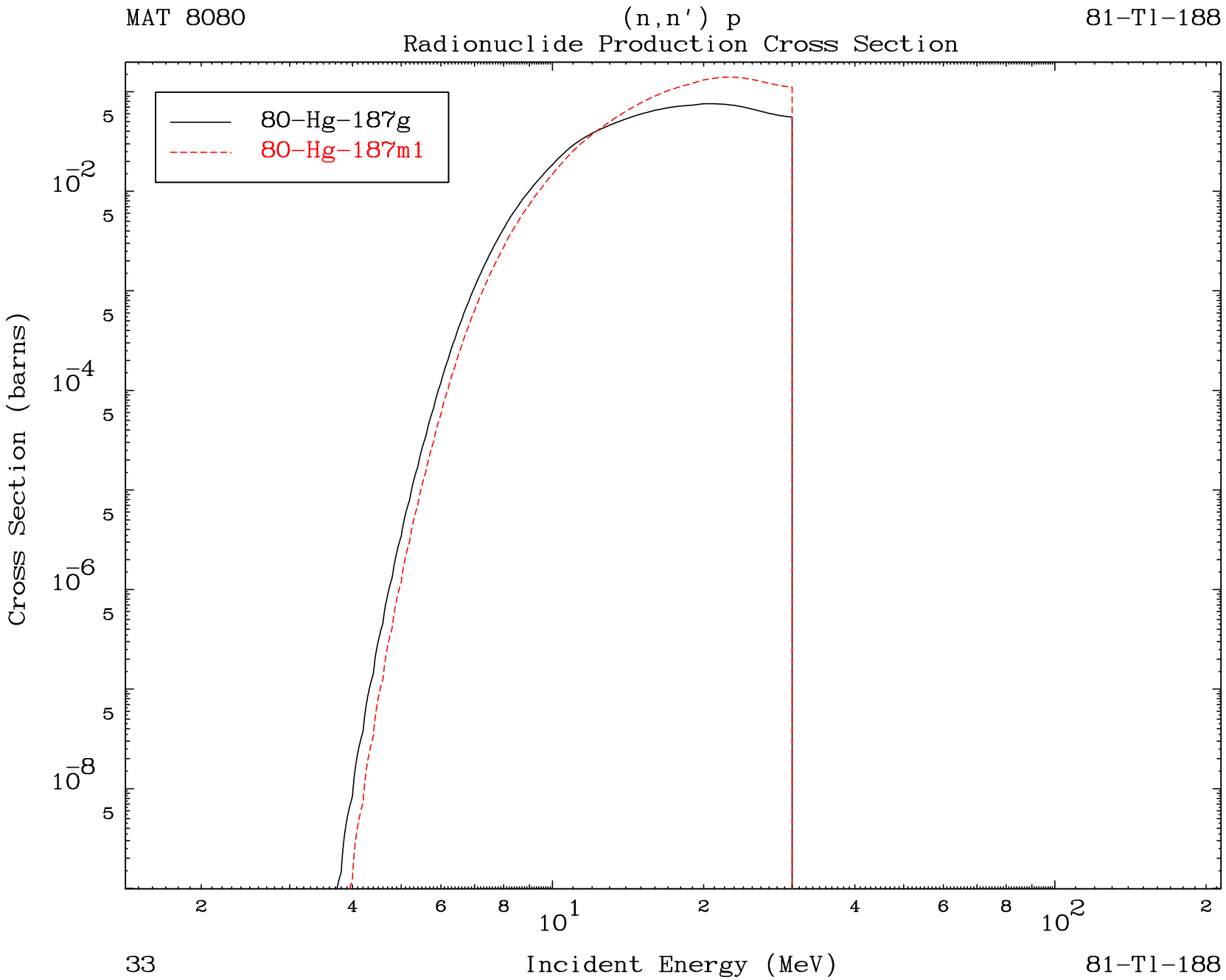

MAT 8080
(n,2n) d
81-Tl-188
Radionuclide Production Cross Section
80-Hg-185g
80-Hg-185m4
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
28
Incident Energy (MeV)
81-Tl-188

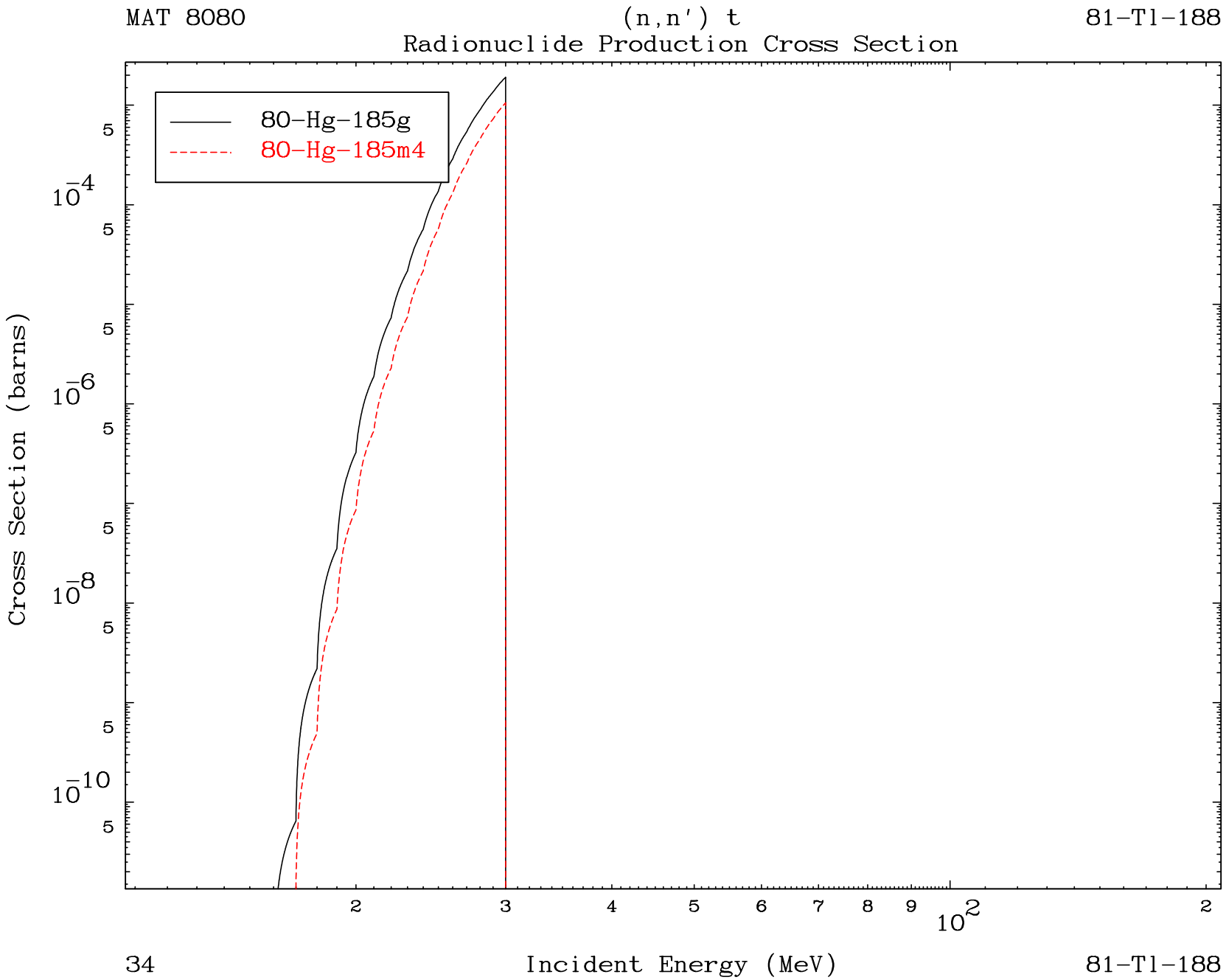

MAT 8080
(n,2n)
81-Tl-188
Radionuclide Production Cross Section
81-Tl-187g
81-Tl-187m2
Cross Section (barns)
Incident Energy (MeV)
29
81-Tl-188

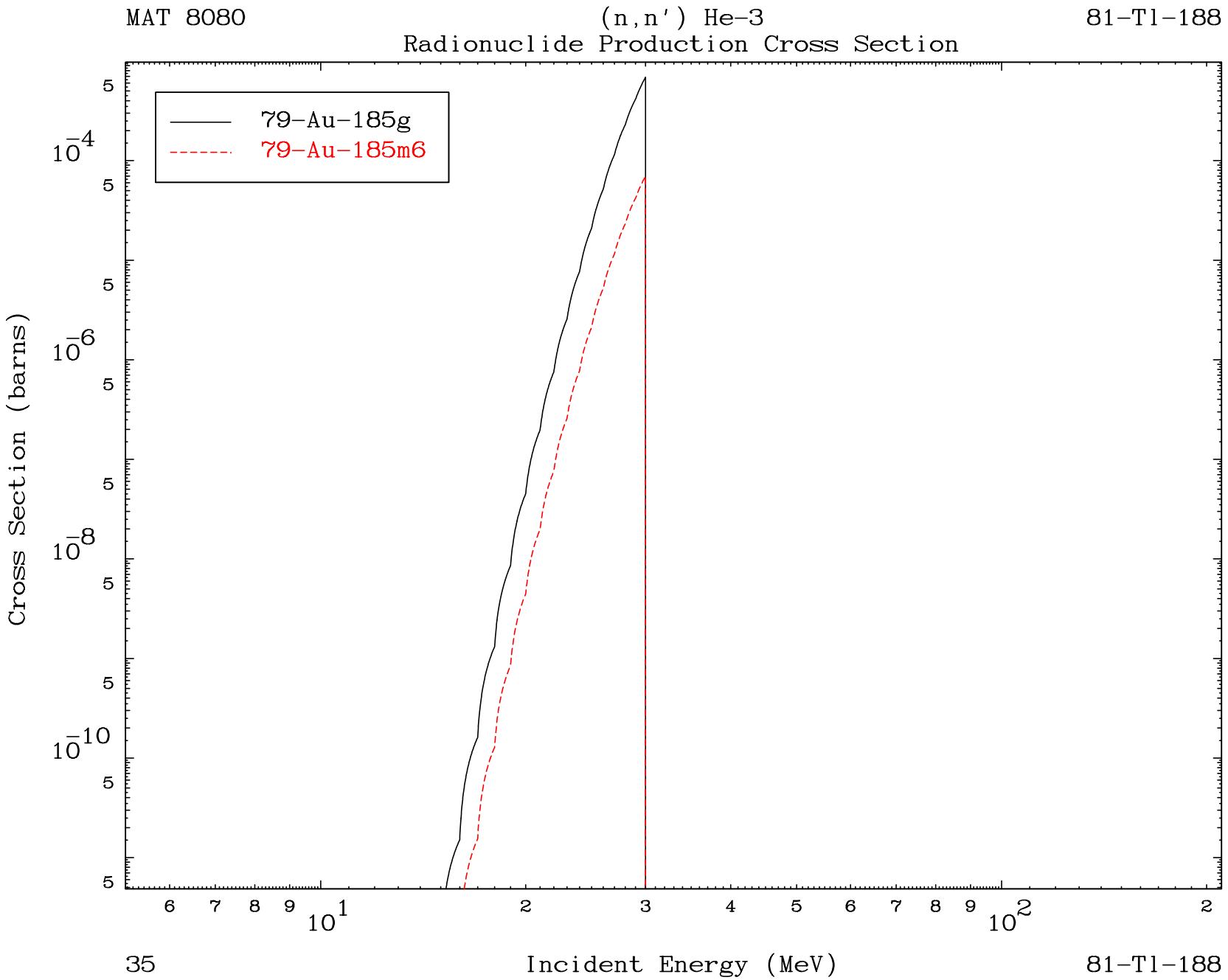

MAT 8080
(n,3n)
81-Tl-188
Radionuclide Production Cross Section
81-Tl-186g
81-Tl-186m1
81-Tl-186m2
Cross Section (barns)
Incident Energy (MeV)
30
81-Tl-188

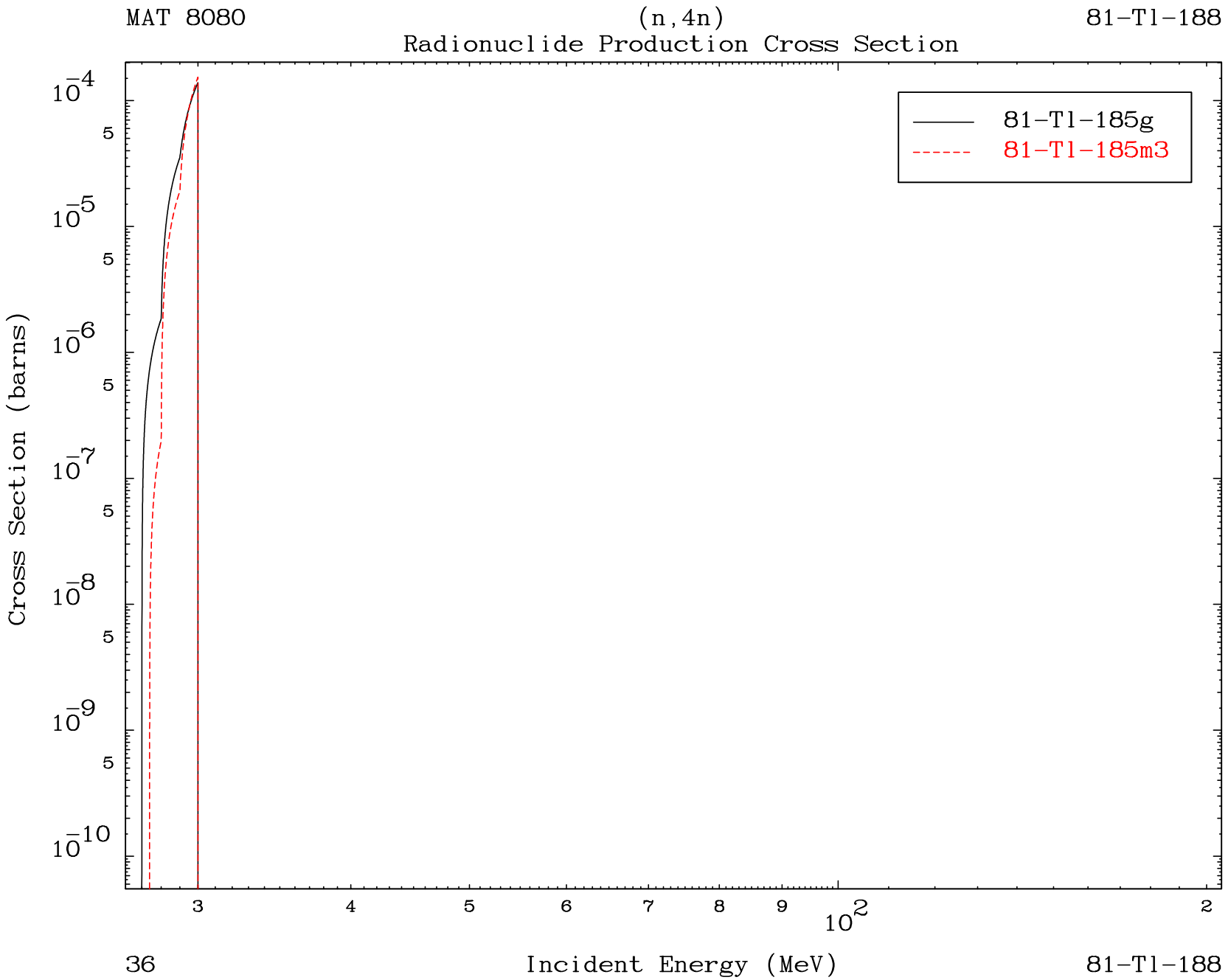

MAT 8080
Fission
81-Tl-188
Radionuclide Production Cross Section
Cross Section (barns)
10^2
5
10^0
5
10^-2
5
10^-4
5
10^-6
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
0-??-Nat
31
81-Tl-188

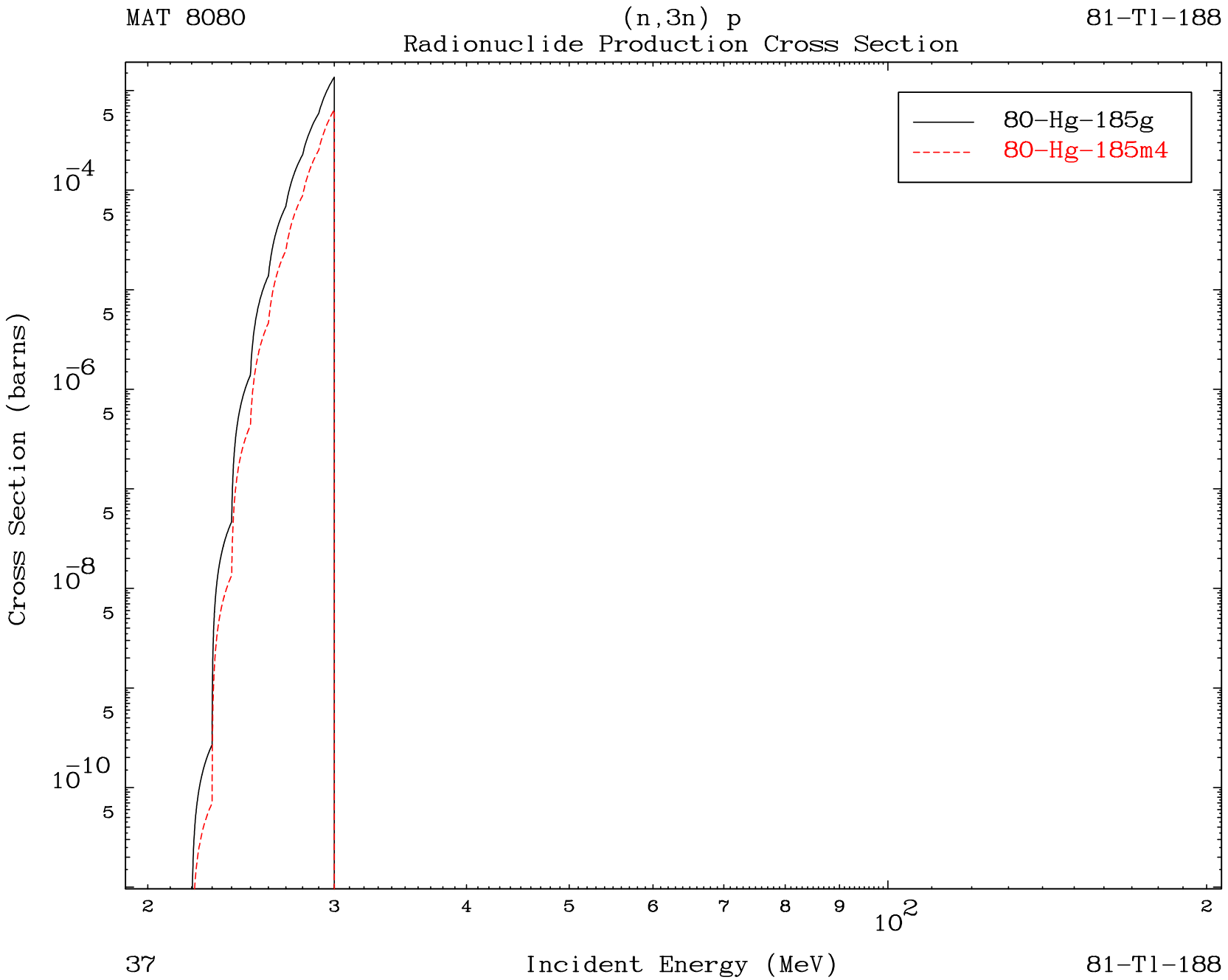

MAT 8080
(n,n') α
81-Tl-188
Radionuclide Production Cross Section
79-Au-184g
79-Au-184m1
Cross Section (barns)
Incident Energy (MeV)
32
81-Tl-188

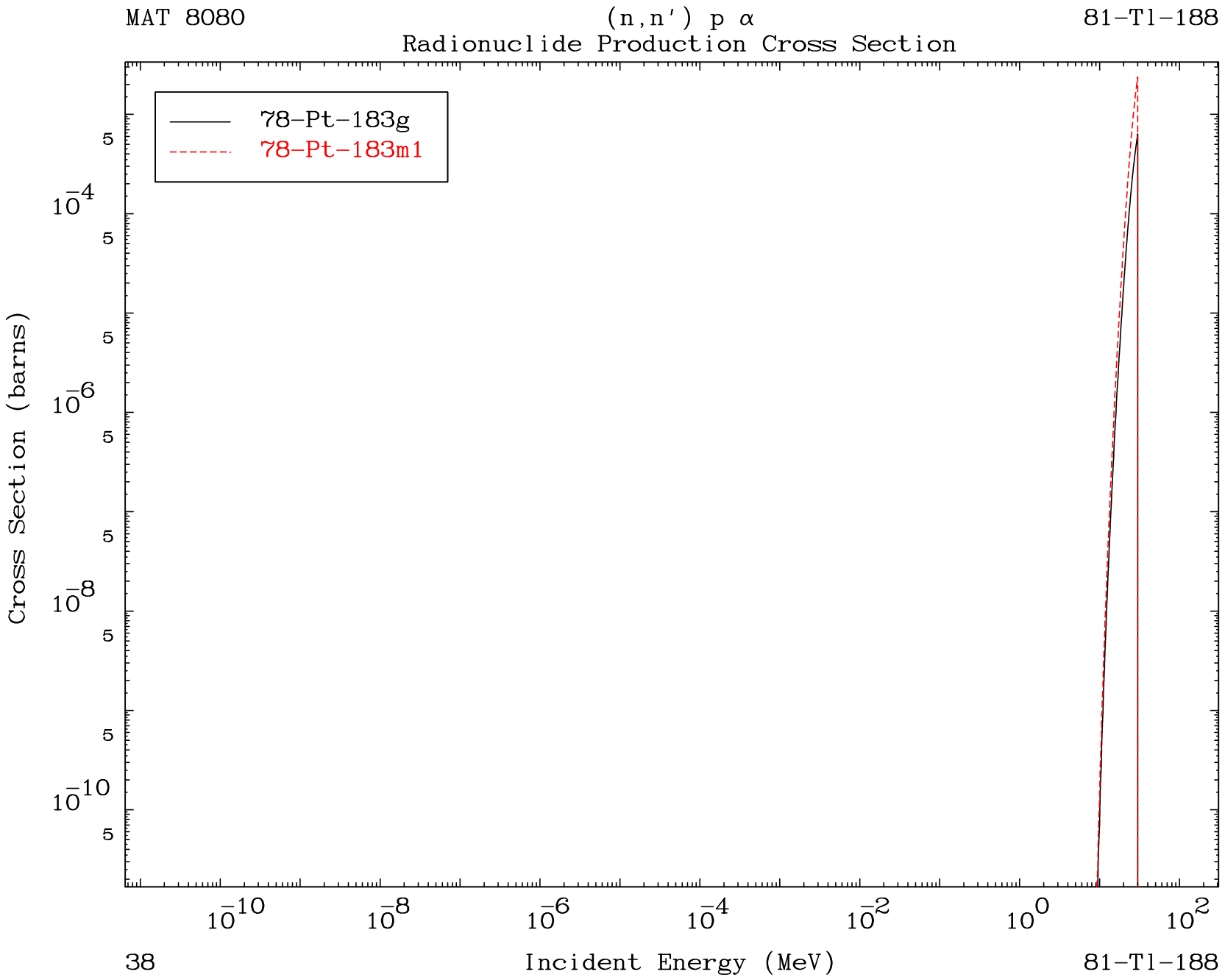

MAT 8080
(n,n') p
81-Tl-188
Radionuclide Production Cross Section
80-Hg-187g
80-Hg-187m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
4
6
8
101
102
33
Incident Energy (MeV)
81-Tl-188

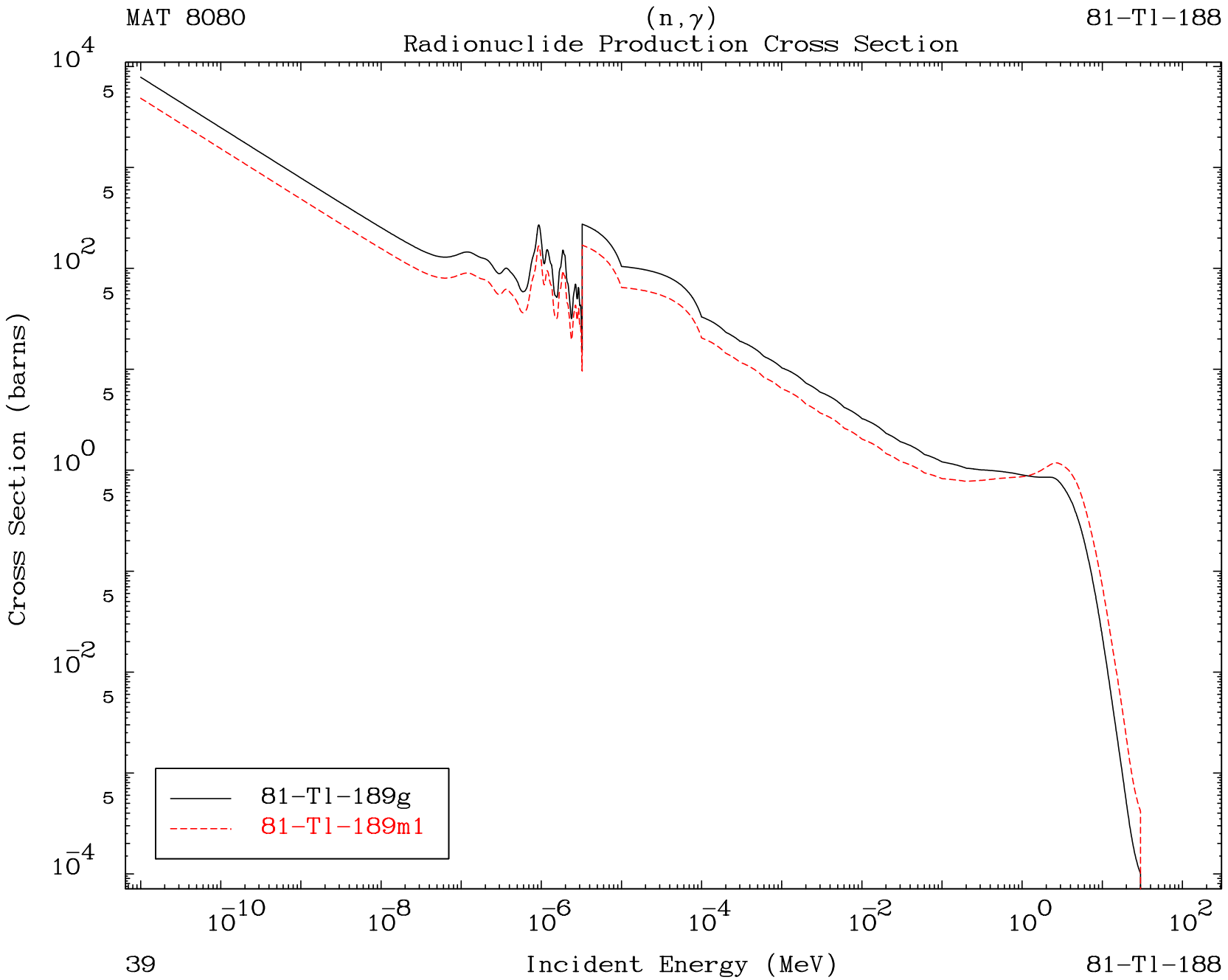

MAT 8080
(n,n') t
81-Tl-188
Radionuclide Production Cross Section
80-Hg-185g
80-Hg-185m4
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
34
Incident Energy (MeV)
81-Tl-188

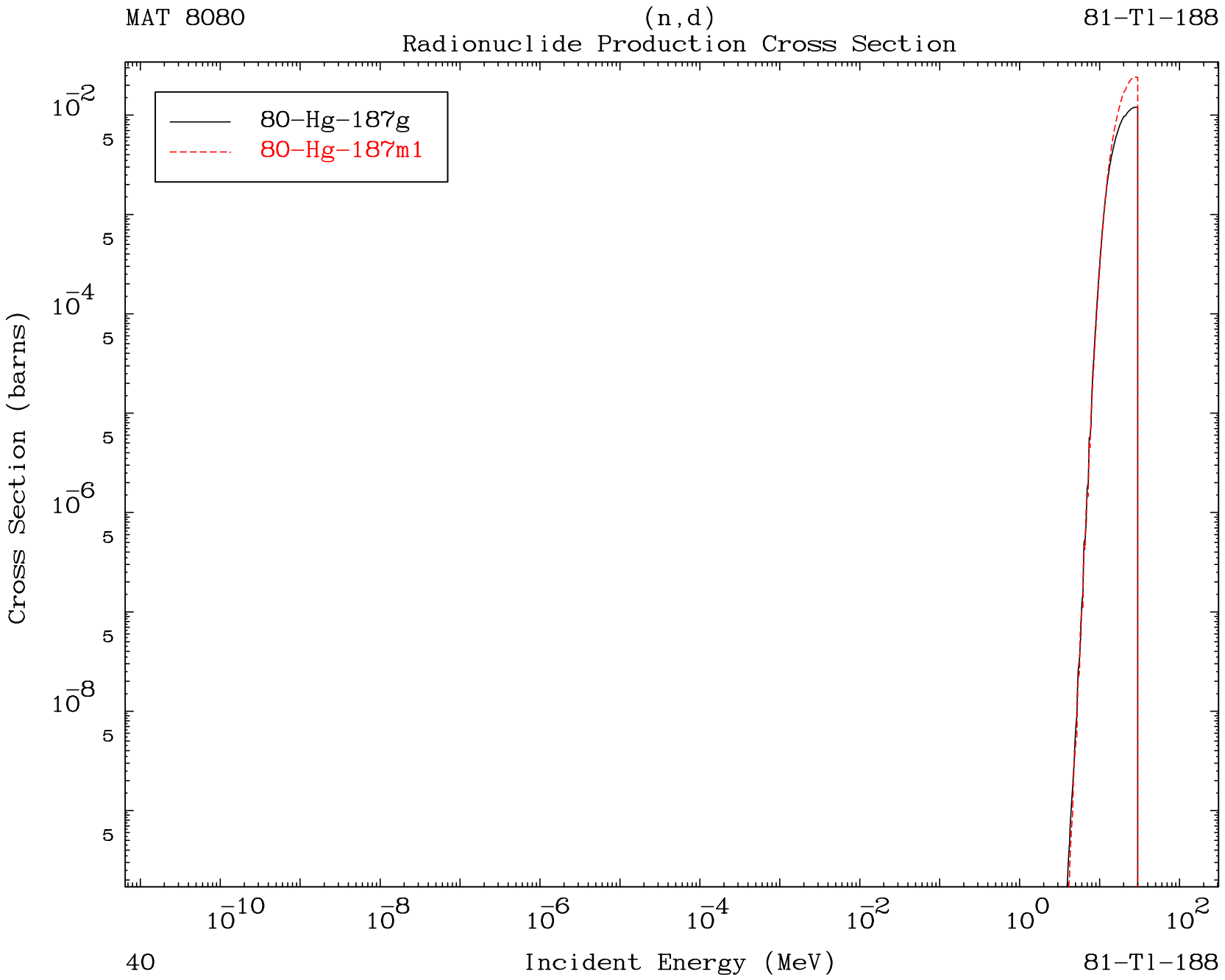

MAT 8080
(n,n') He-3
81-Tl-188
Radionuclide Production Cross Section
79-Au-185g
79-Au-185m6
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
35
81-Tl-188

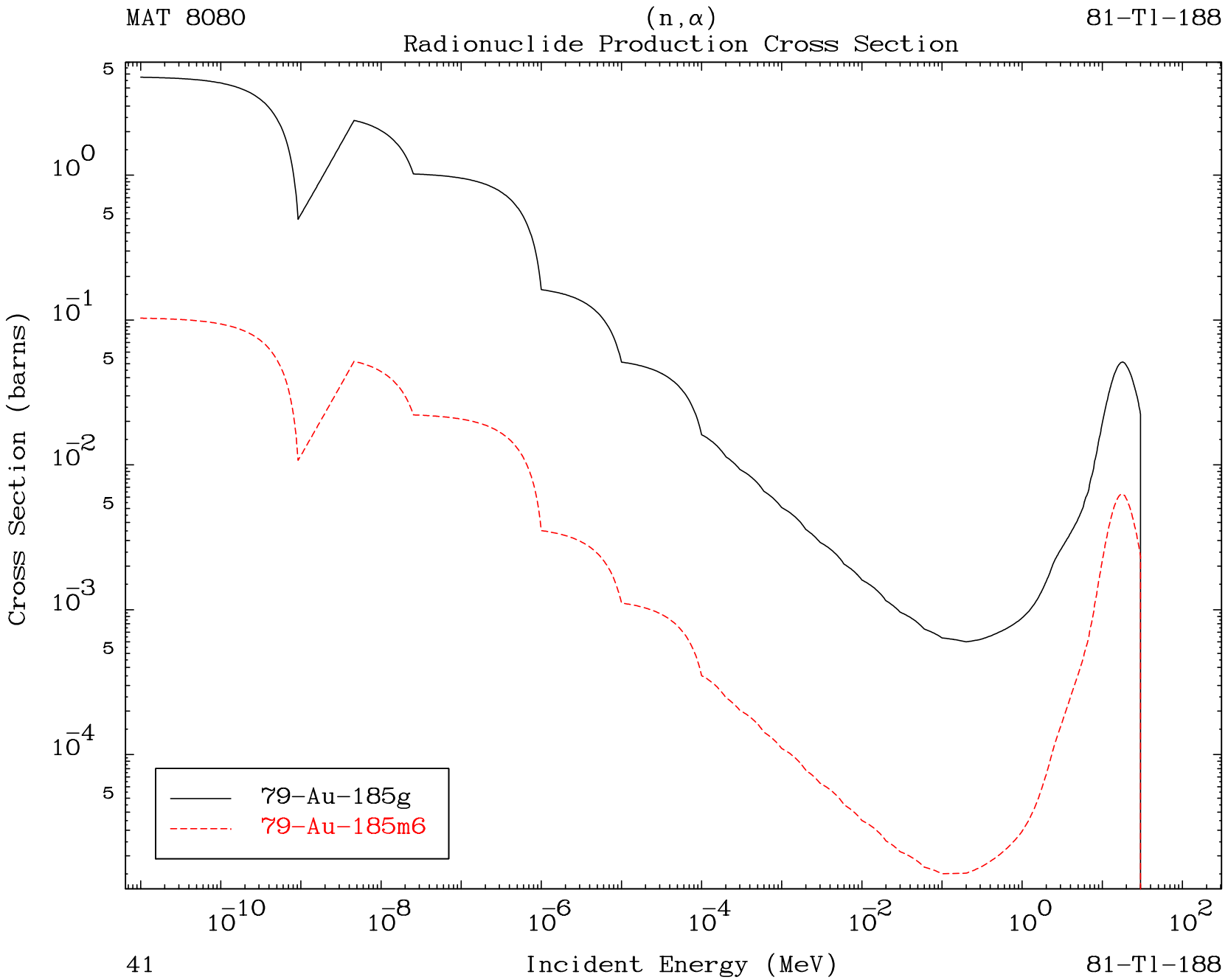

MAT 8080
(n,4n)
81-Tl-188
Radionuclide Production Cross Section
81-Tl-185g
81-Tl-185m3
Cross Section (barns)
10-4
10-5
10-6
10-7
10-8
10-9
10-10
3
4
5
6
7
8
9
10 2
2
36
Incident Energy (MeV)
81-Tl-188

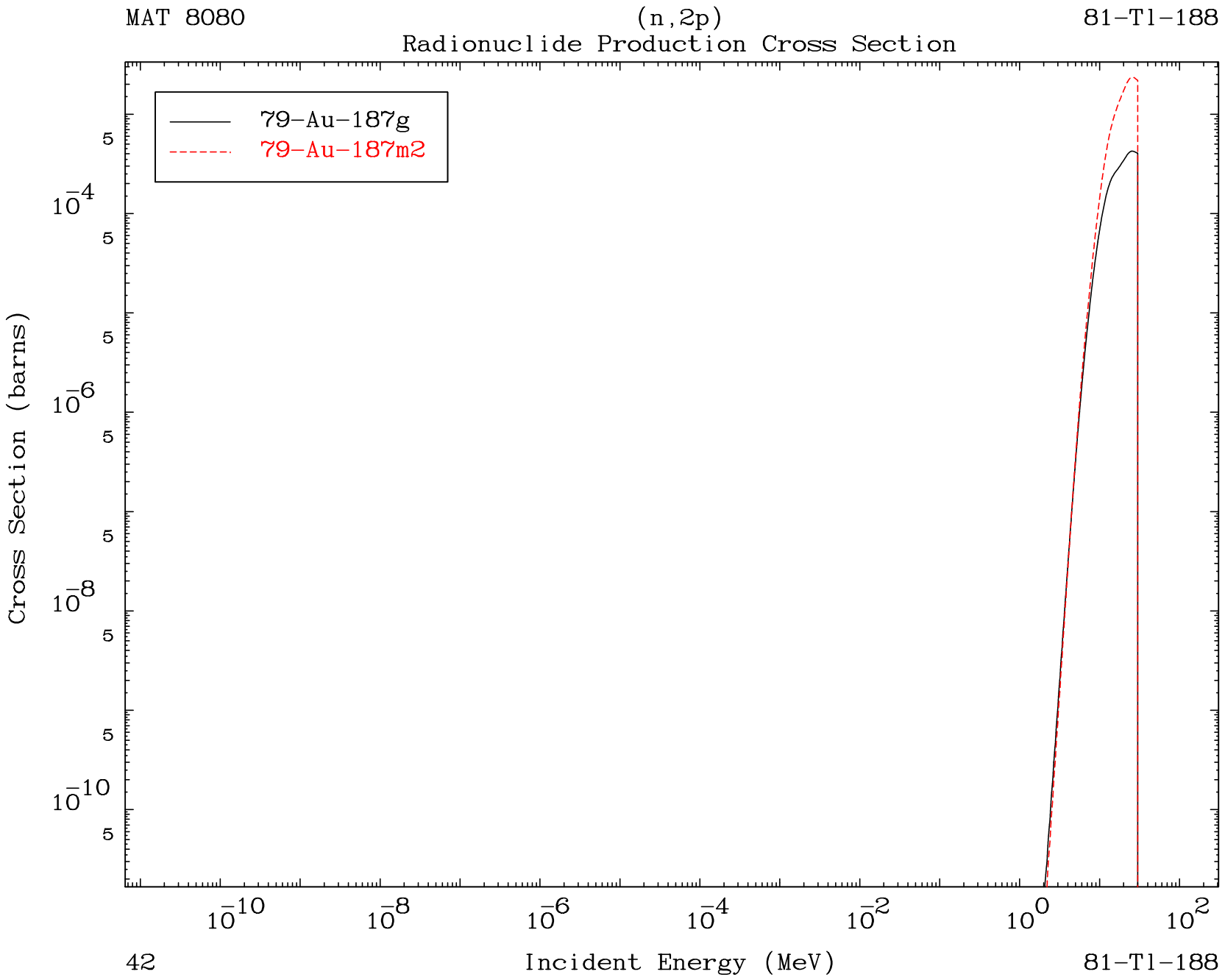

MAT 8080
(n,3n) p
81-Tl-188
Radionuclide Production Cross Section
80-Hg-185g
80-Hg-185m4
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
37
Incident Energy (MeV)
81-Tl-188

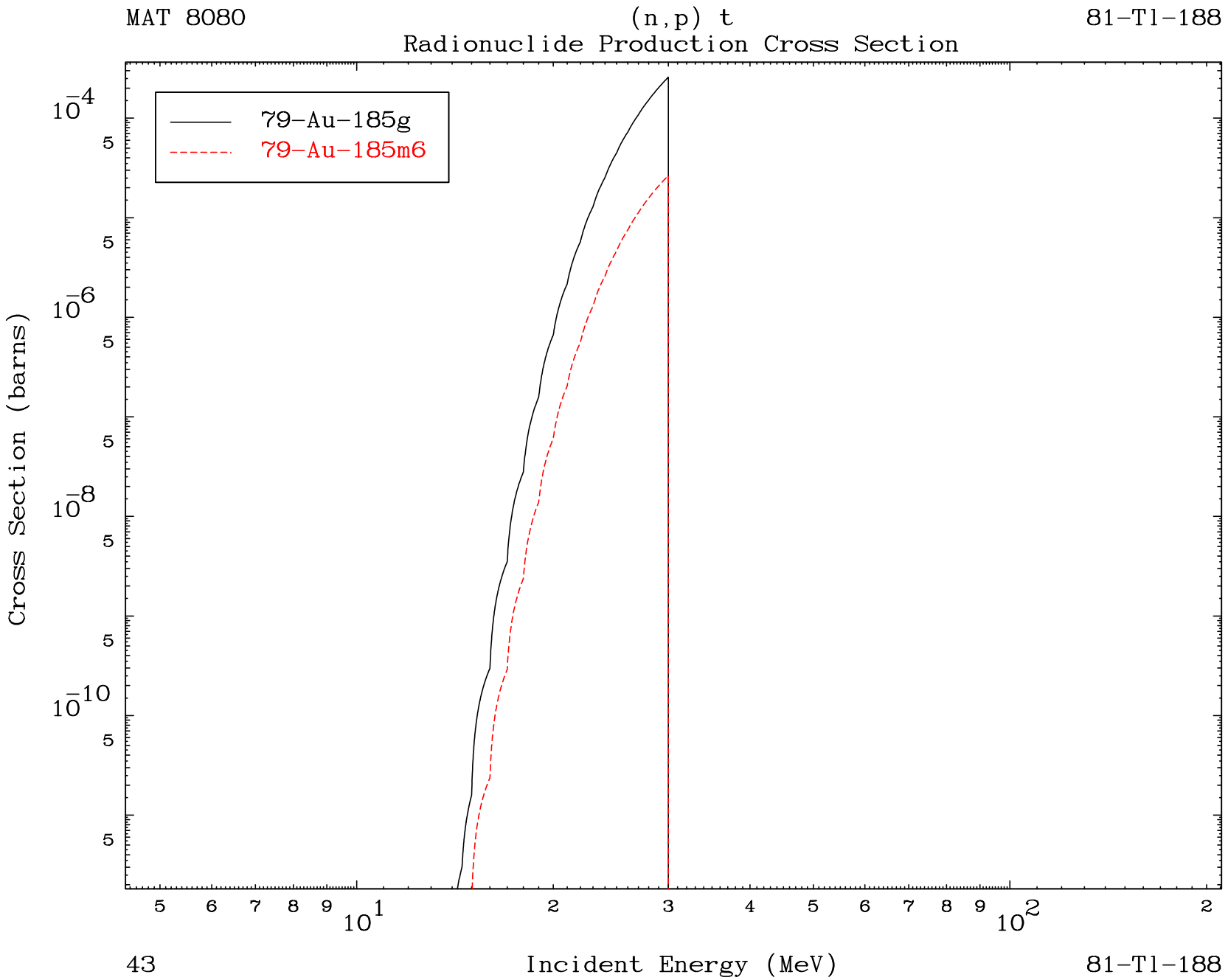

MAT 8080
(n,n') p α
81-Tl-188
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
38
Incident Energy (MeV)
81-Tl-188

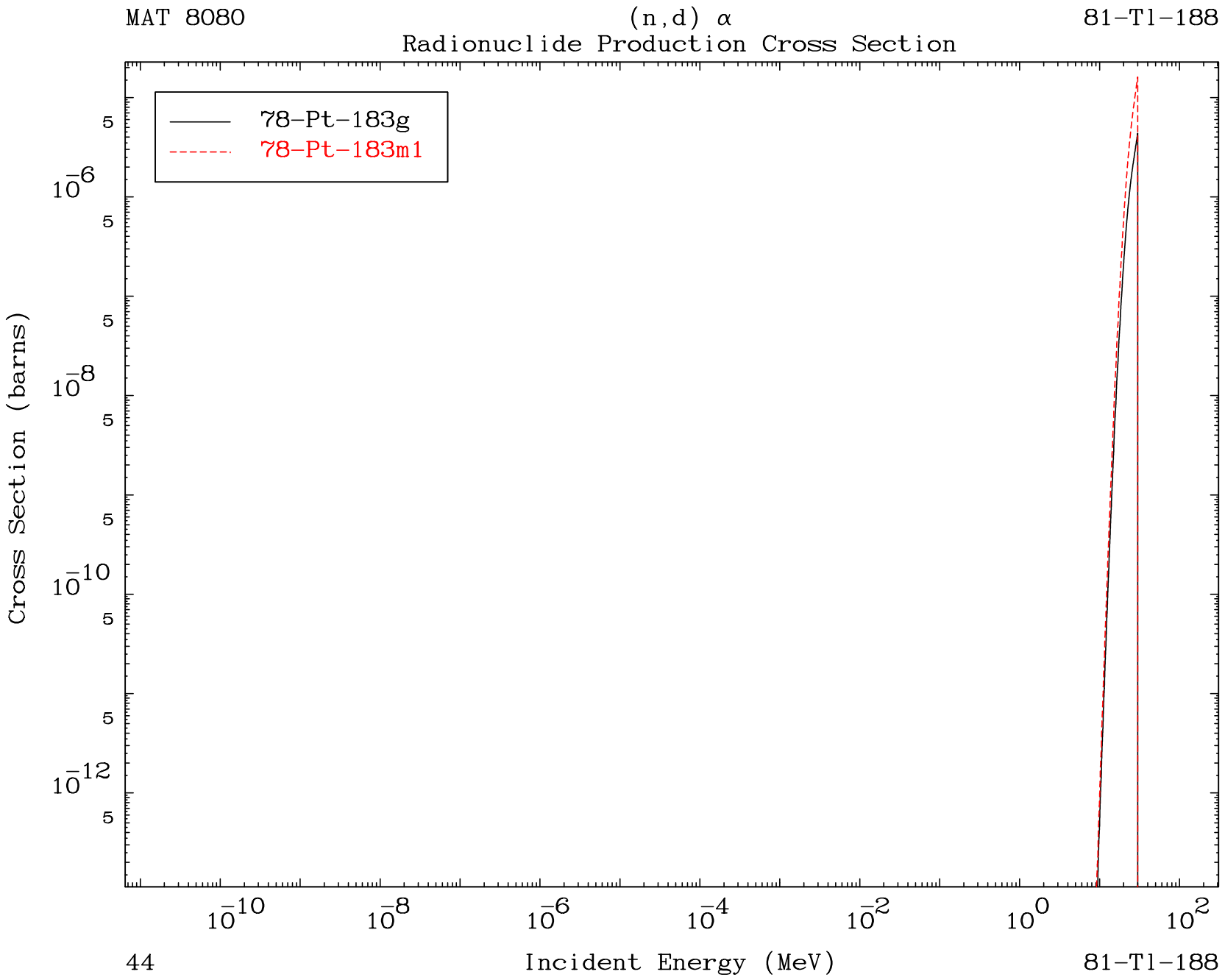

MAT 8080
(n,γ)
81-Tl-188
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
81-Tl-189g
81-Tl-189m1
39
81-Tl-188


MAT 8080
(n,d)
81-Tl-188
Radionuclide Production Cross Section
80-Hg-187g
80-Hg-187m1
Cross Section (barns)
Incident Energy (MeV)
40
81-Tl-188


MAT 8080
(n,α)
81-Tl-188
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-1
10^-2
10^-3
10^-4
5
79-Au-185g
79-Au-185m6
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
41
Incident Energy (MeV)
81-Tl-188


MAT 8080
(n,2p)
81-Tl-188
Radionuclide Production Cross Section
79-Au-187g
79-Au-187m2
Cross Section (barns)
Incident Energy (MeV)
42
81-Tl-188


MAT 8080
(n,p) t
81-Tl-188
Radionuclide Production Cross Section
79-Au-185g
79-Au-185m6
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^1
2
3
4
10^2
Incident Energy (MeV)
43
81-Tl-188


MAT 8080
(n,d) α
81-Tl-188
Radionuclide Production Cross Section
78-Pt-183g
78-Pt-183m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
44
Incident Energy (MeV)
81-Tl-188