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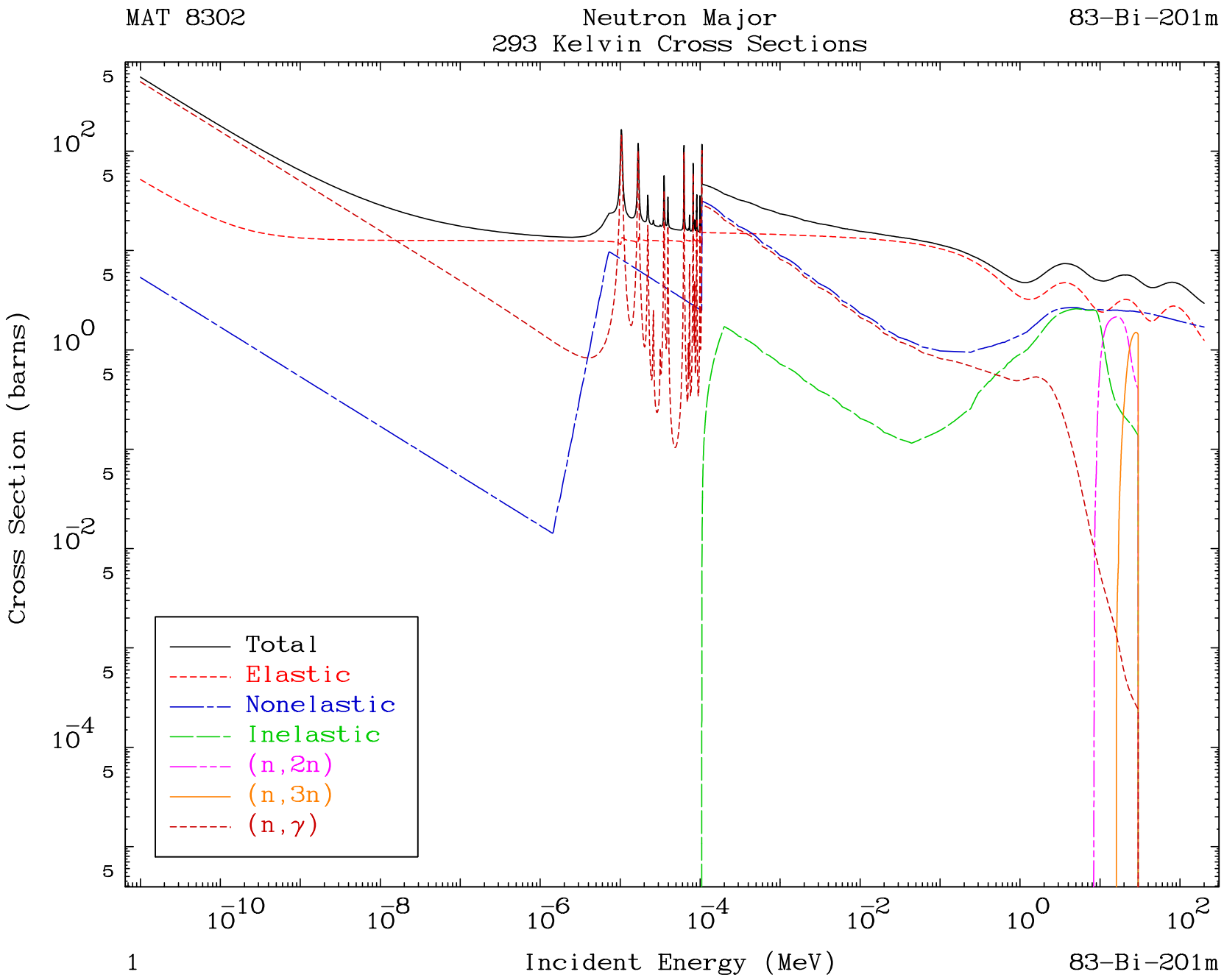
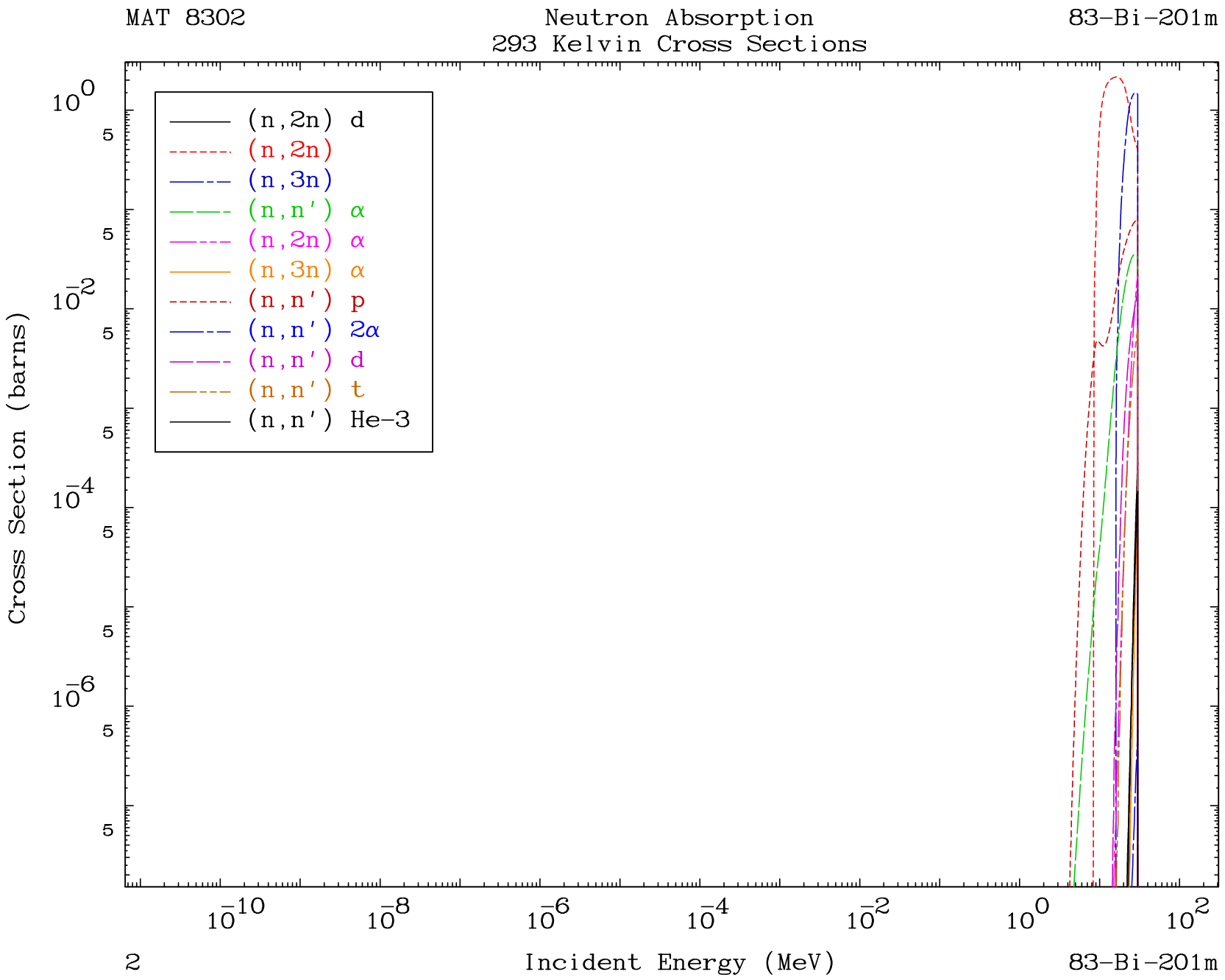
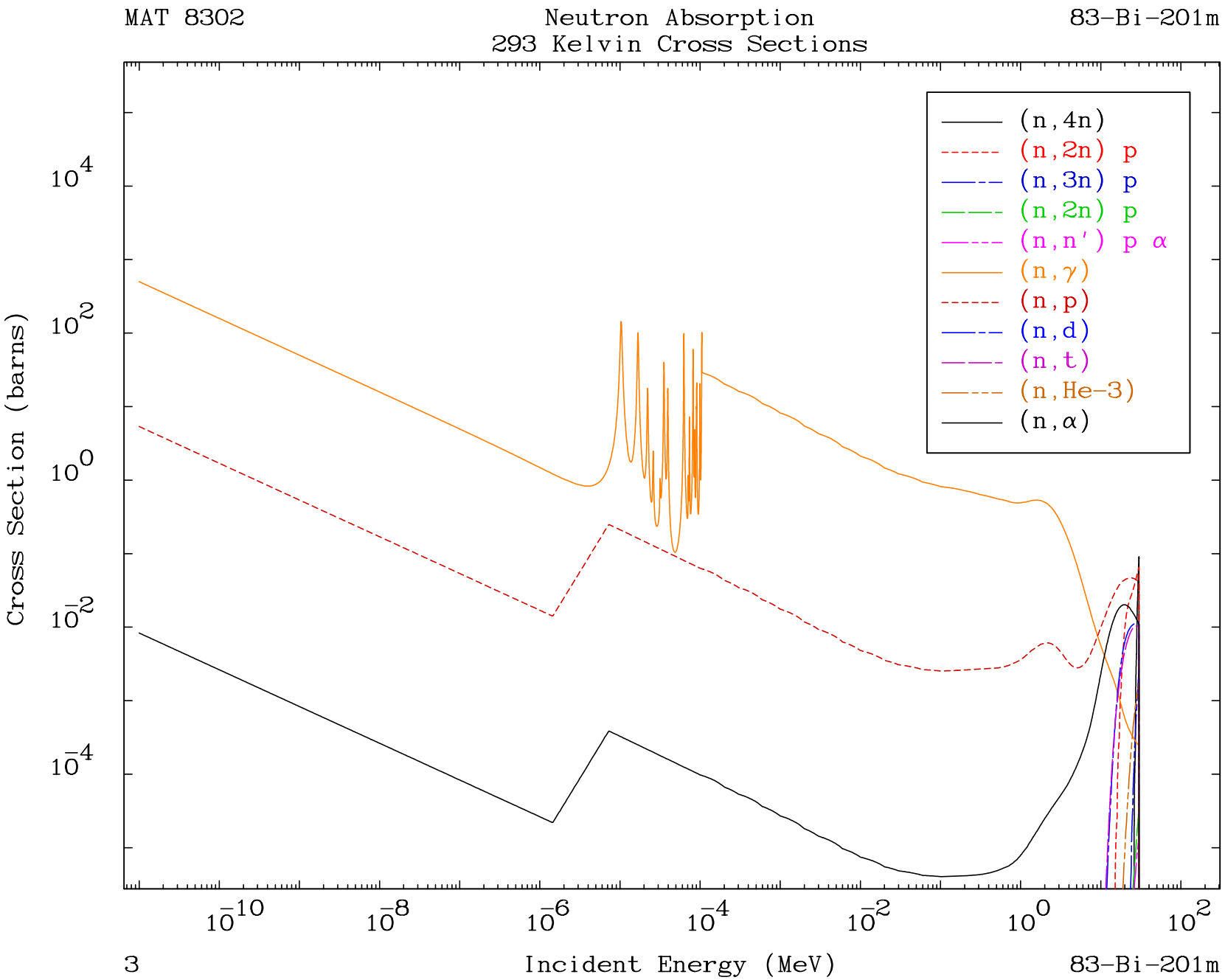
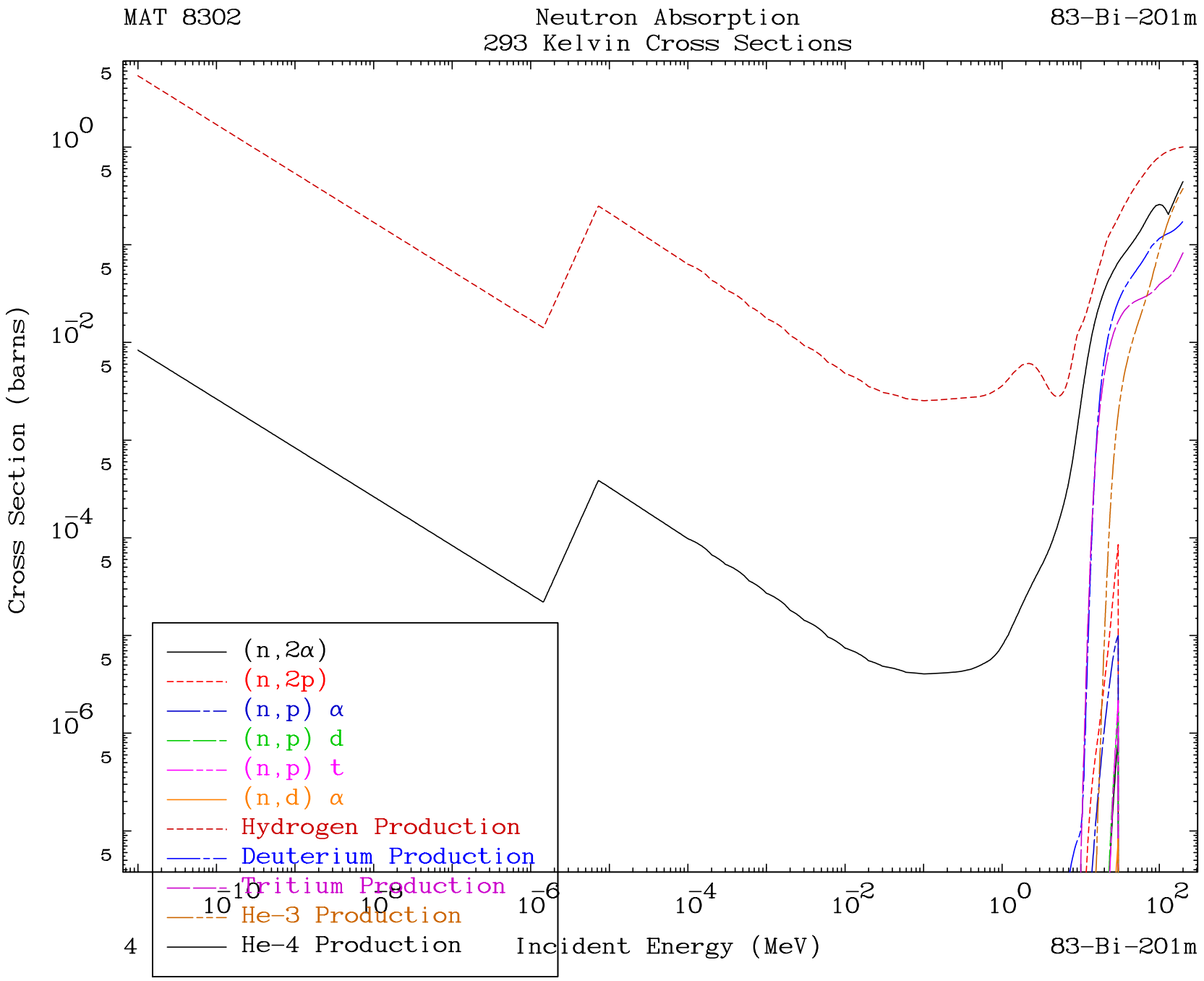
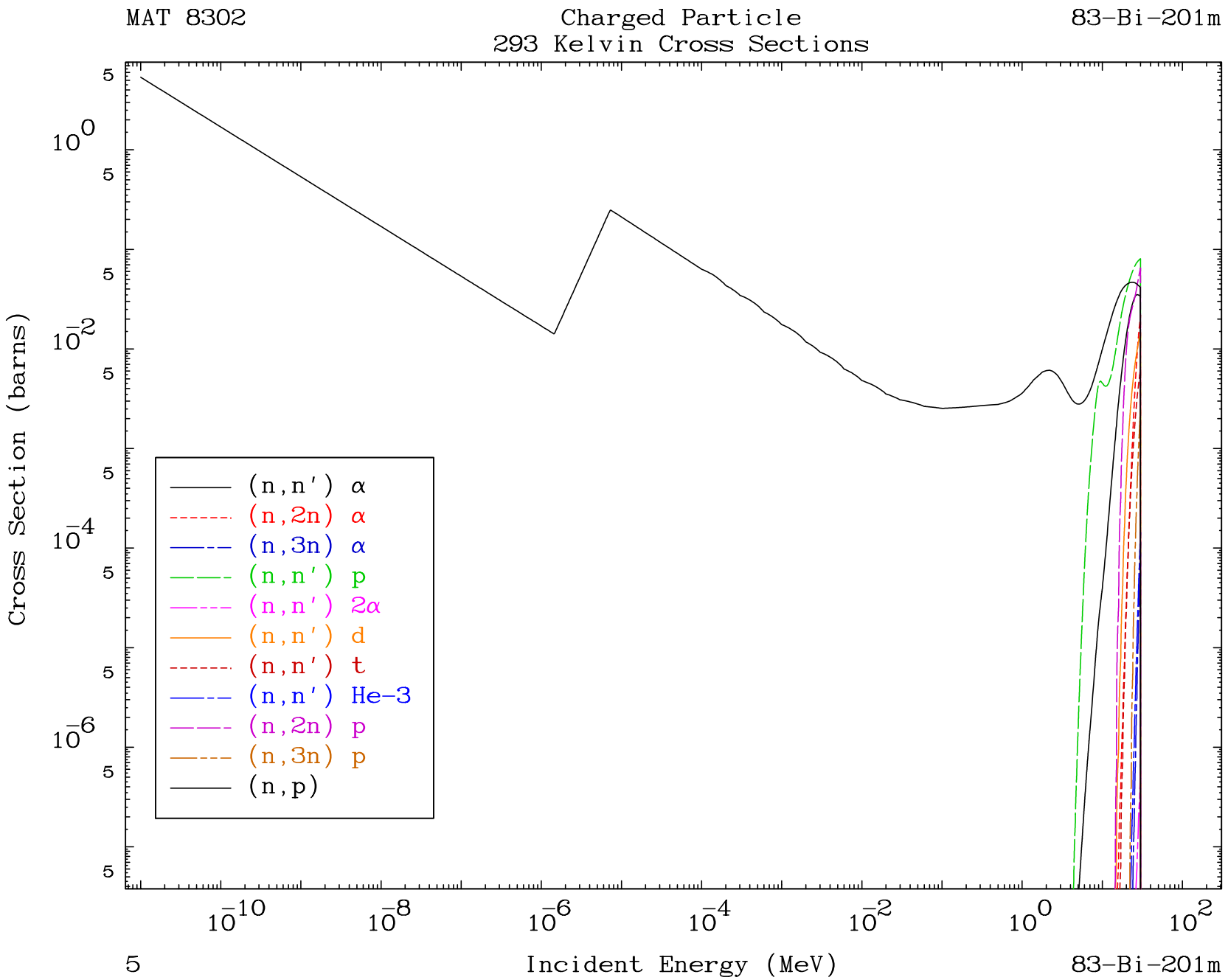
Press Mouse Button to Start

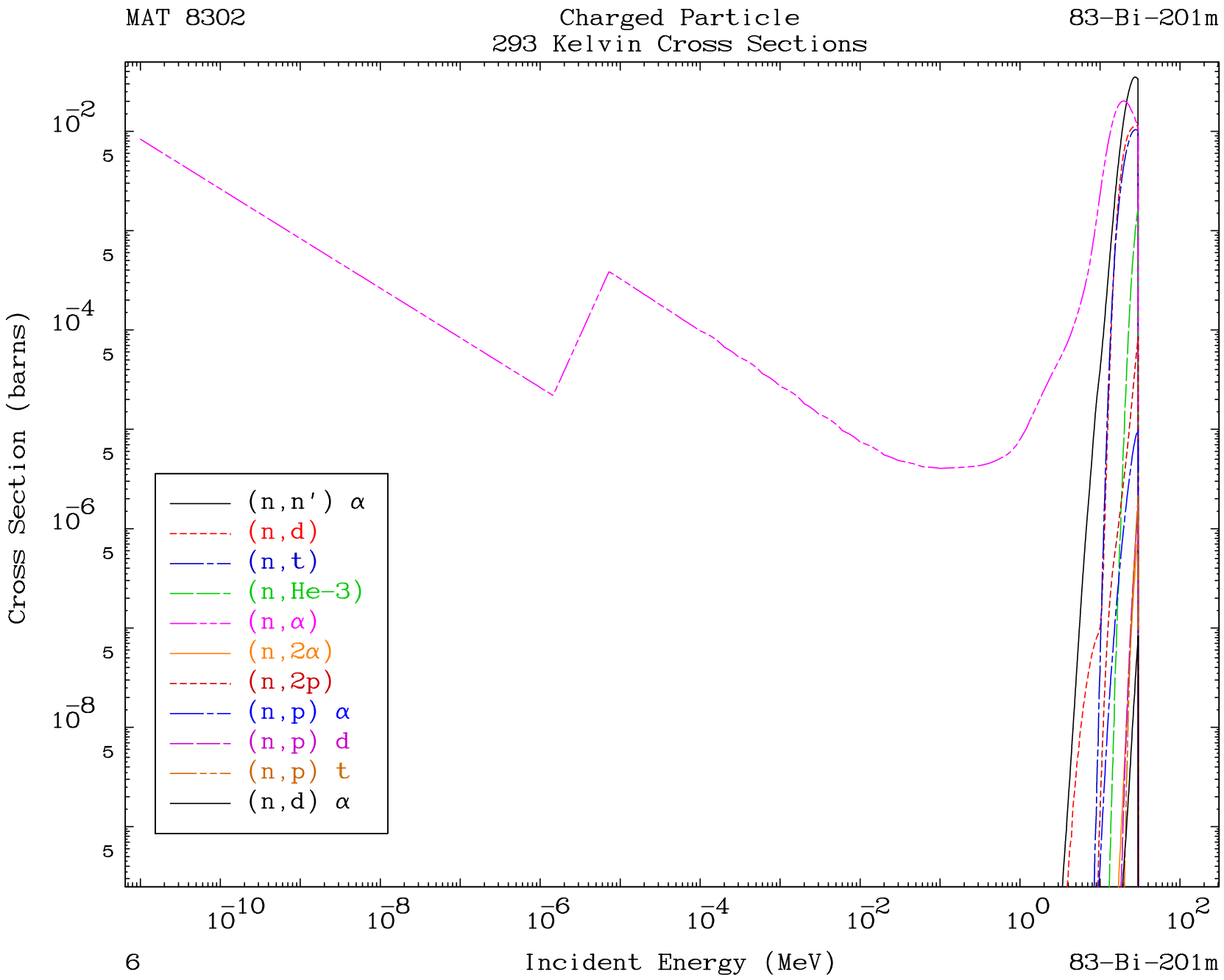

MAT 8302
Neutron Major
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
83-Bi-201m

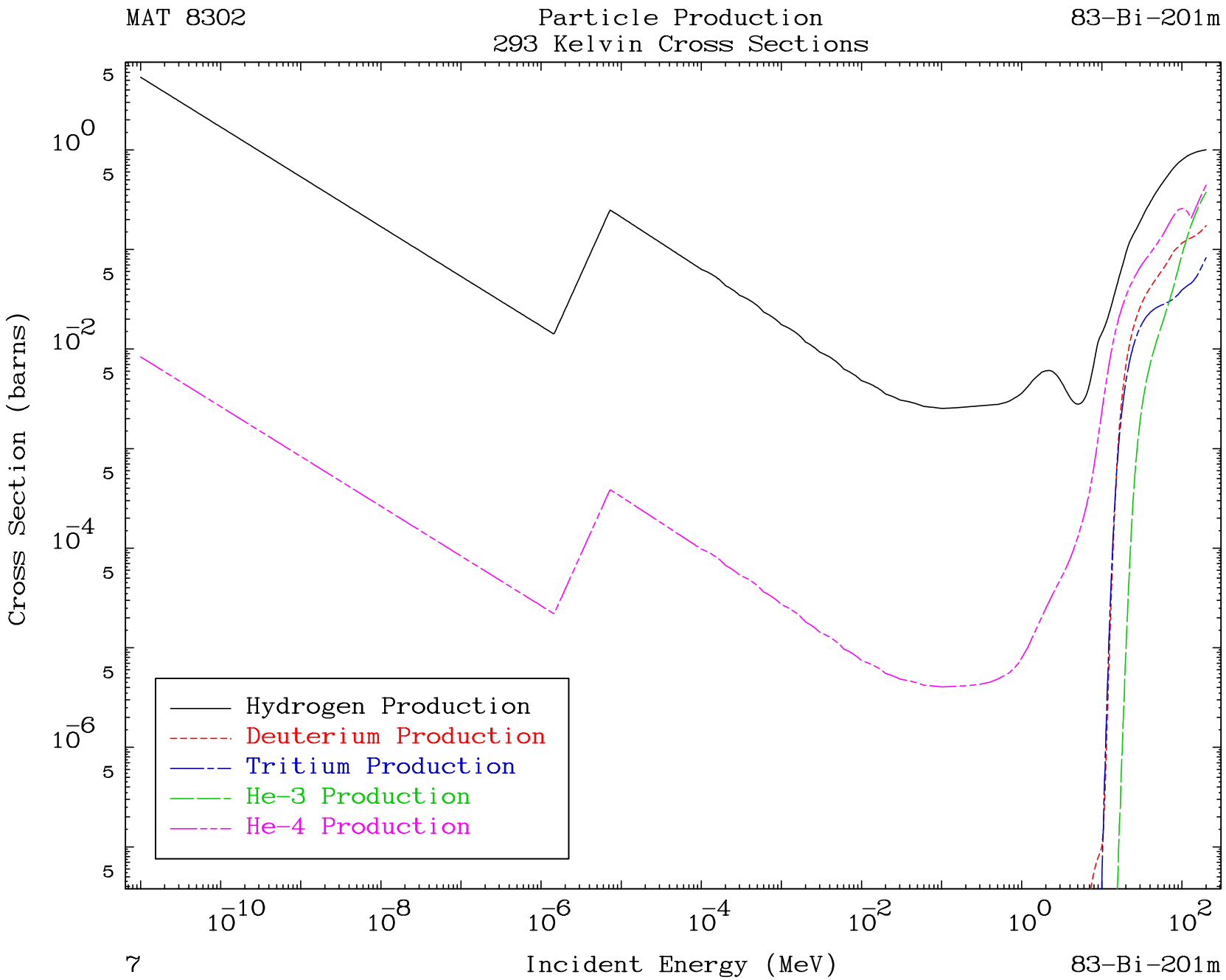

MAT 8302
Neutron Absorption
293 Kelvin Cross Sections
83-Bi-201m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
Cross Section (barns)
Incident Energy (MeV)
2
83-Bi-201m

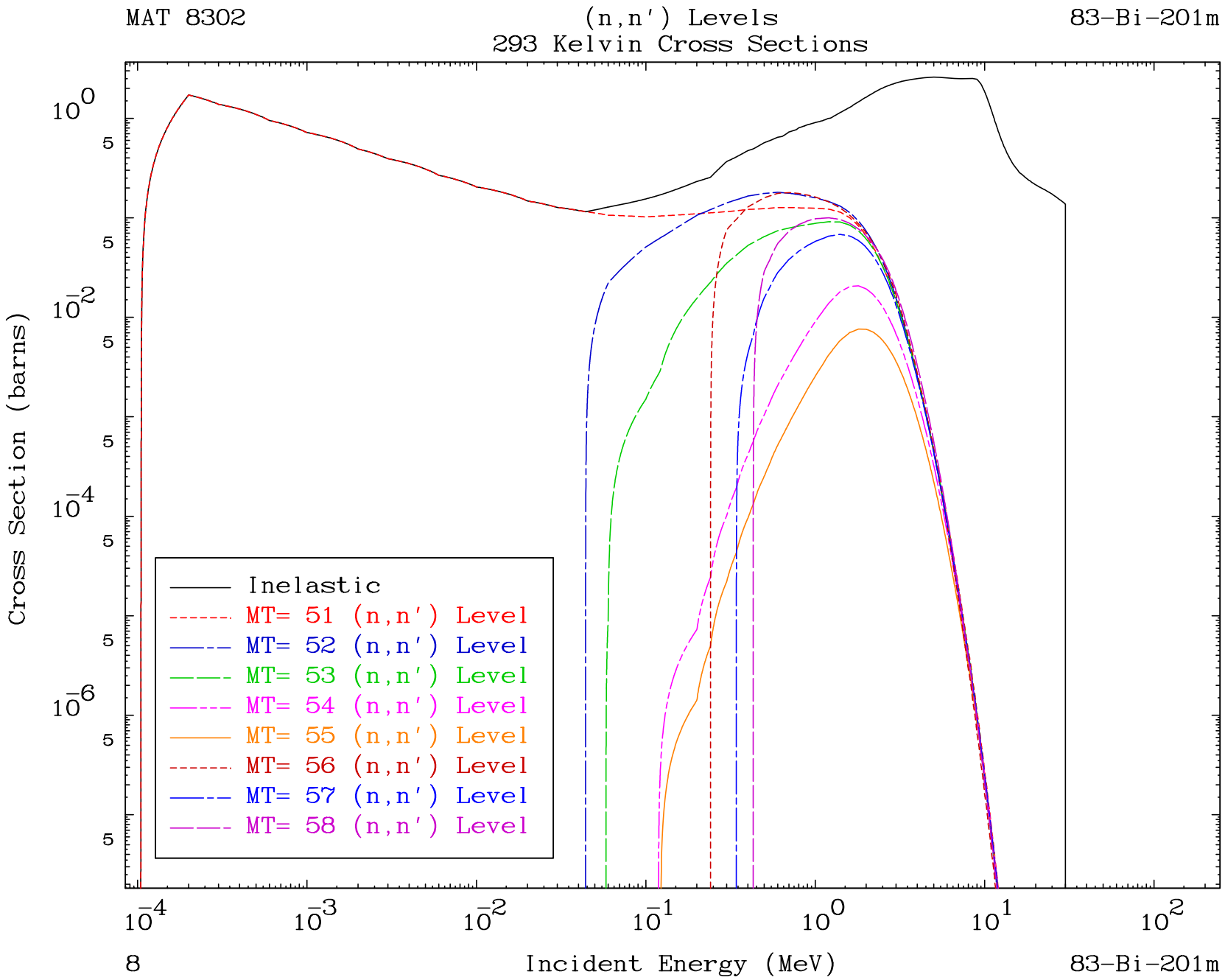

MAT 8302
Neutron Absorption
293 Kelvin Cross Sections
83-Bi-201m
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
3
83-Bi-201m

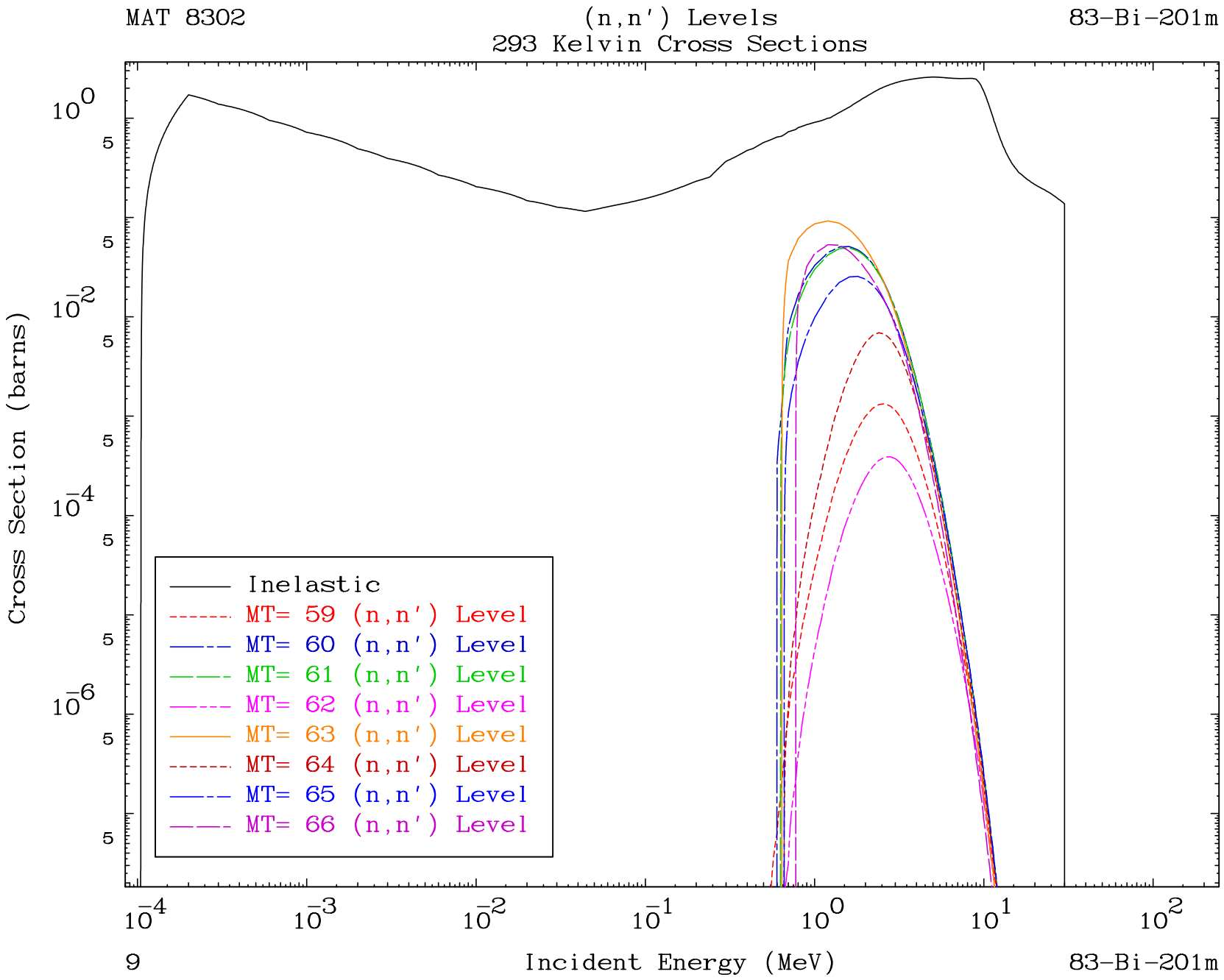

MAT 8302
Neutron Absorption
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
83-Bi-201m
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

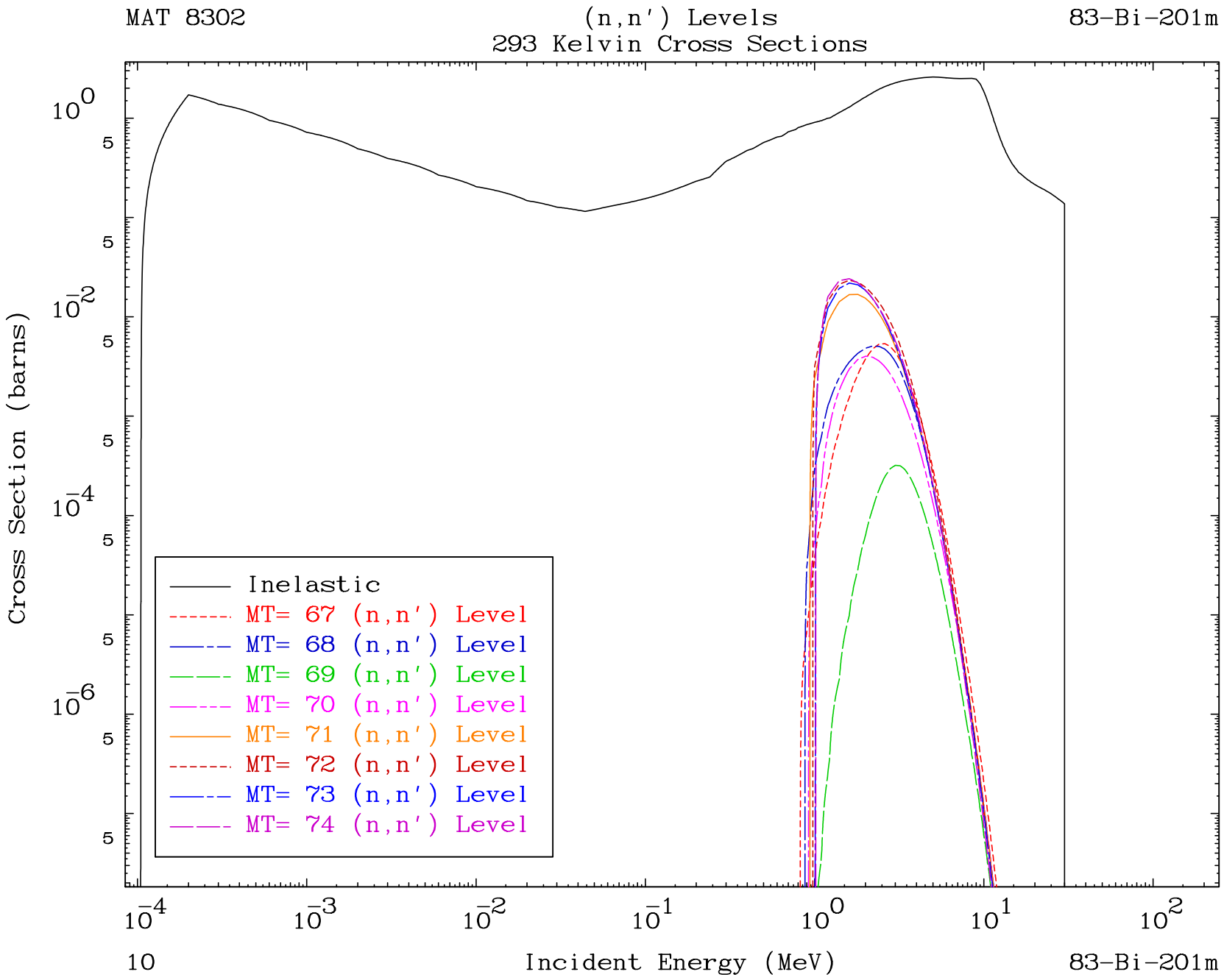

MAT 8302
Charged Particle
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
83-Bi-201m
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)

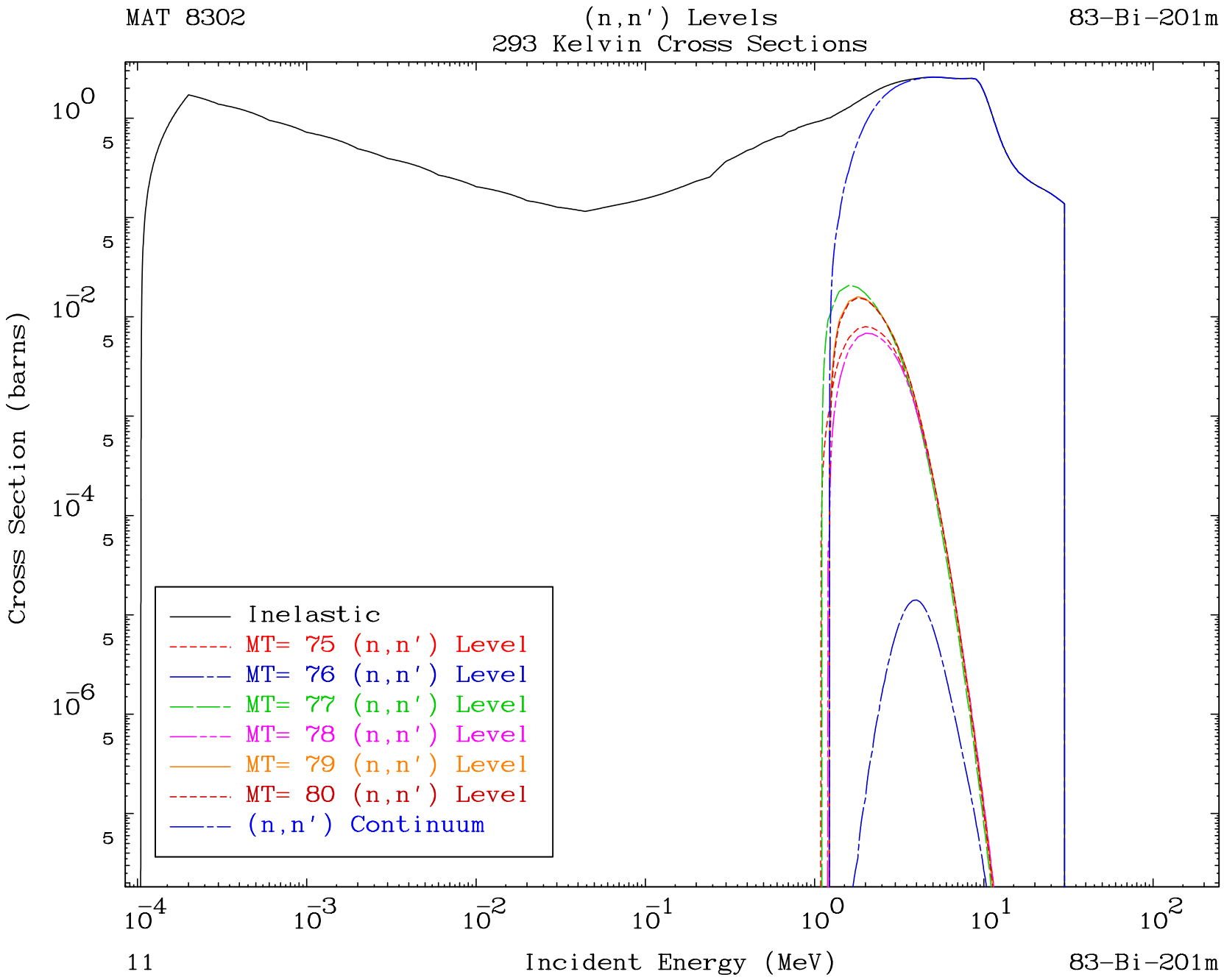

MAT 8302
Charged Particle
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
6
83-Bi-201m

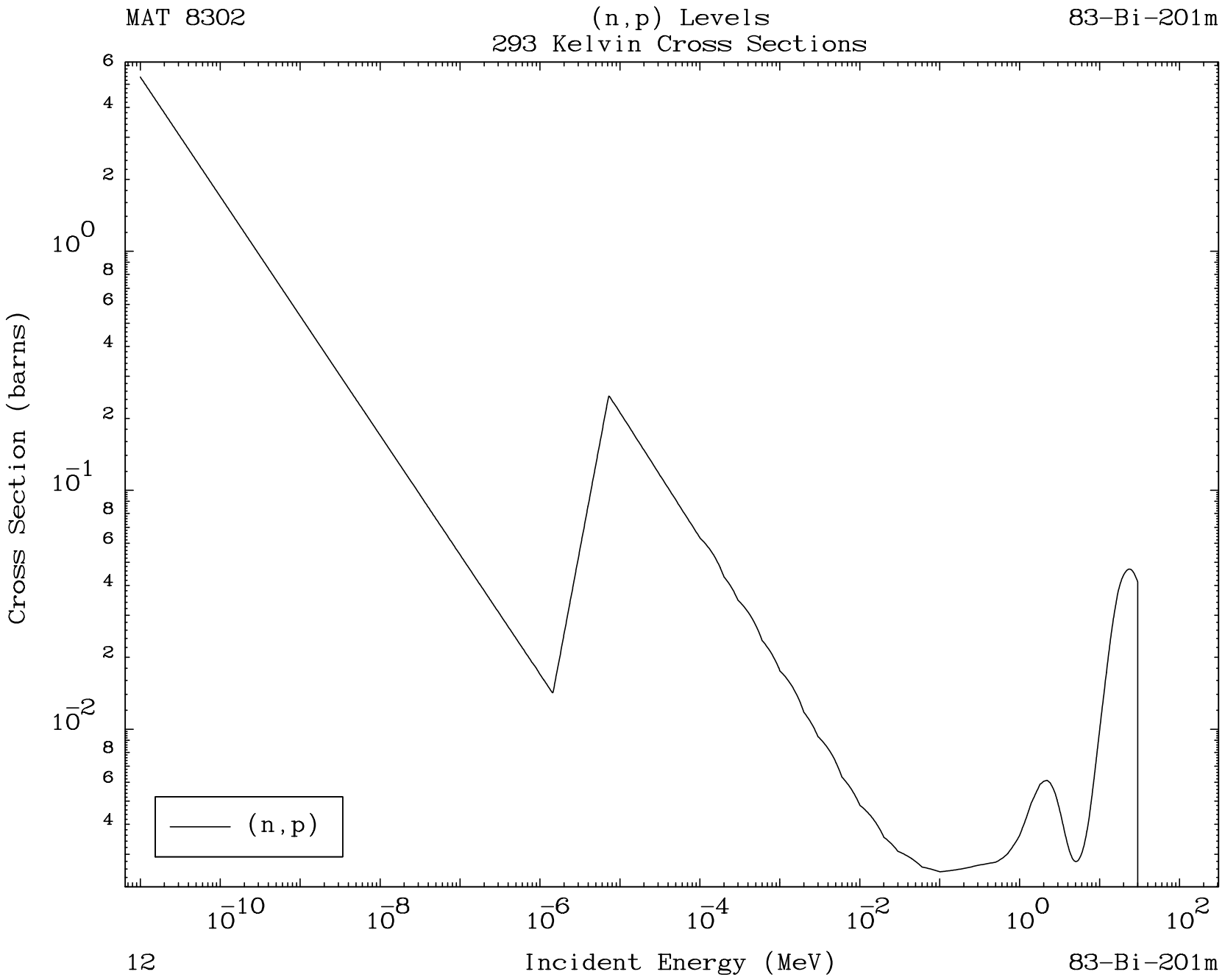

MAT 8302
Particle Production
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
83-Bi-201m

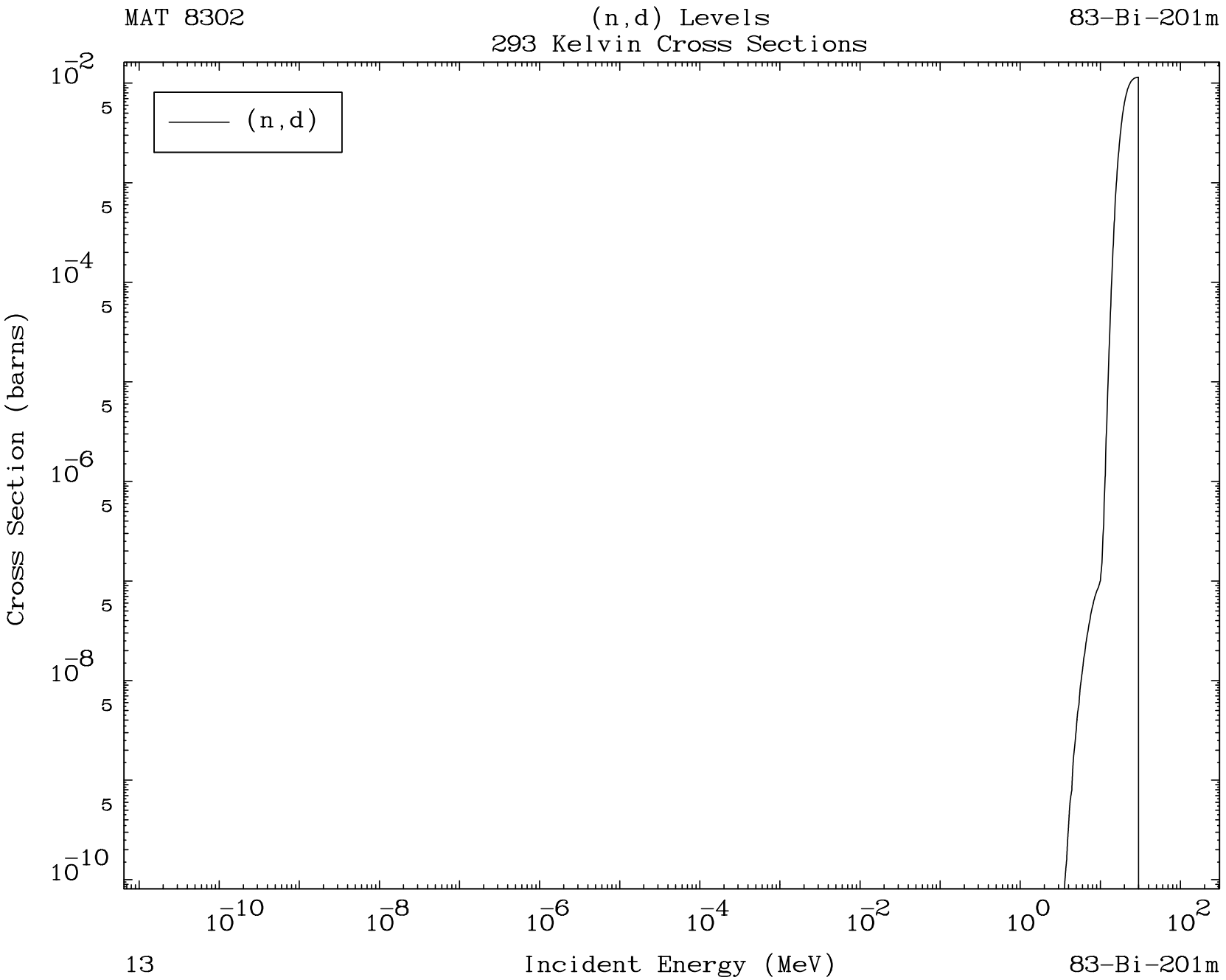

MAT 8302
(n,n') Levels
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
8
83-Bi-201m

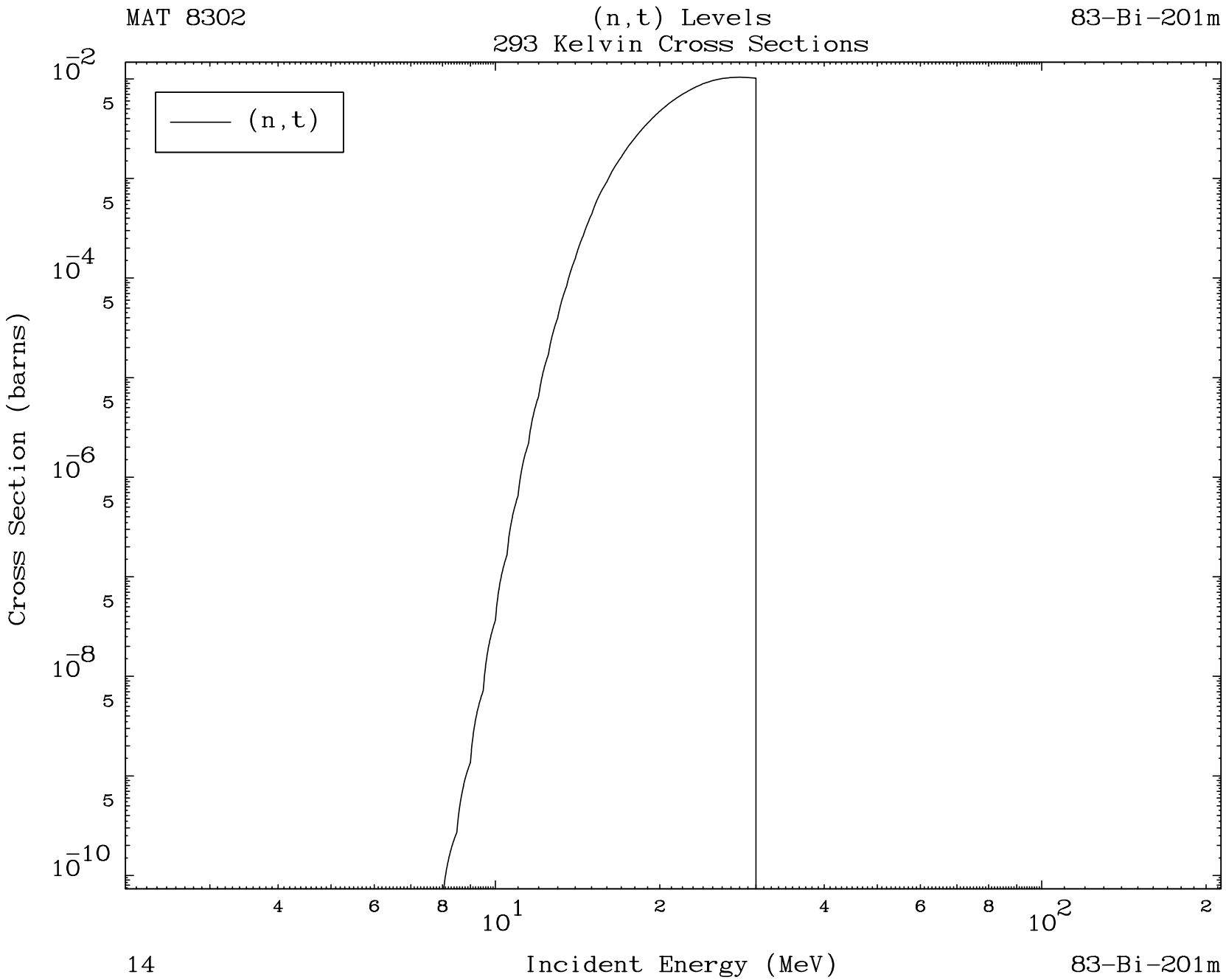

MAT 8302
(n,n') Levels
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
9
83-Bi-201m

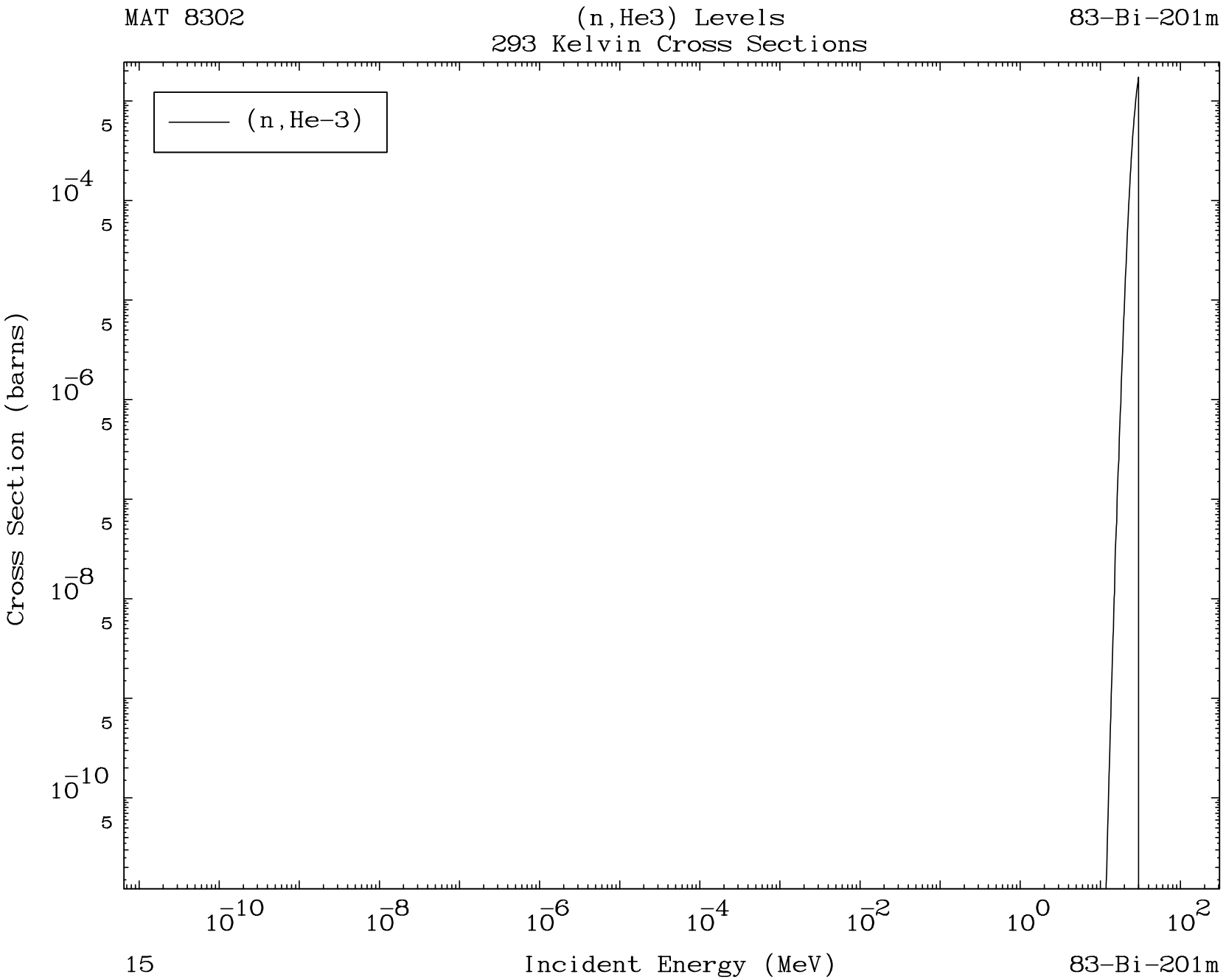

MAT 8302
(n,n') Levels
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Incident Energy (MeV)
83-Bi-201m
Inelastic
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level

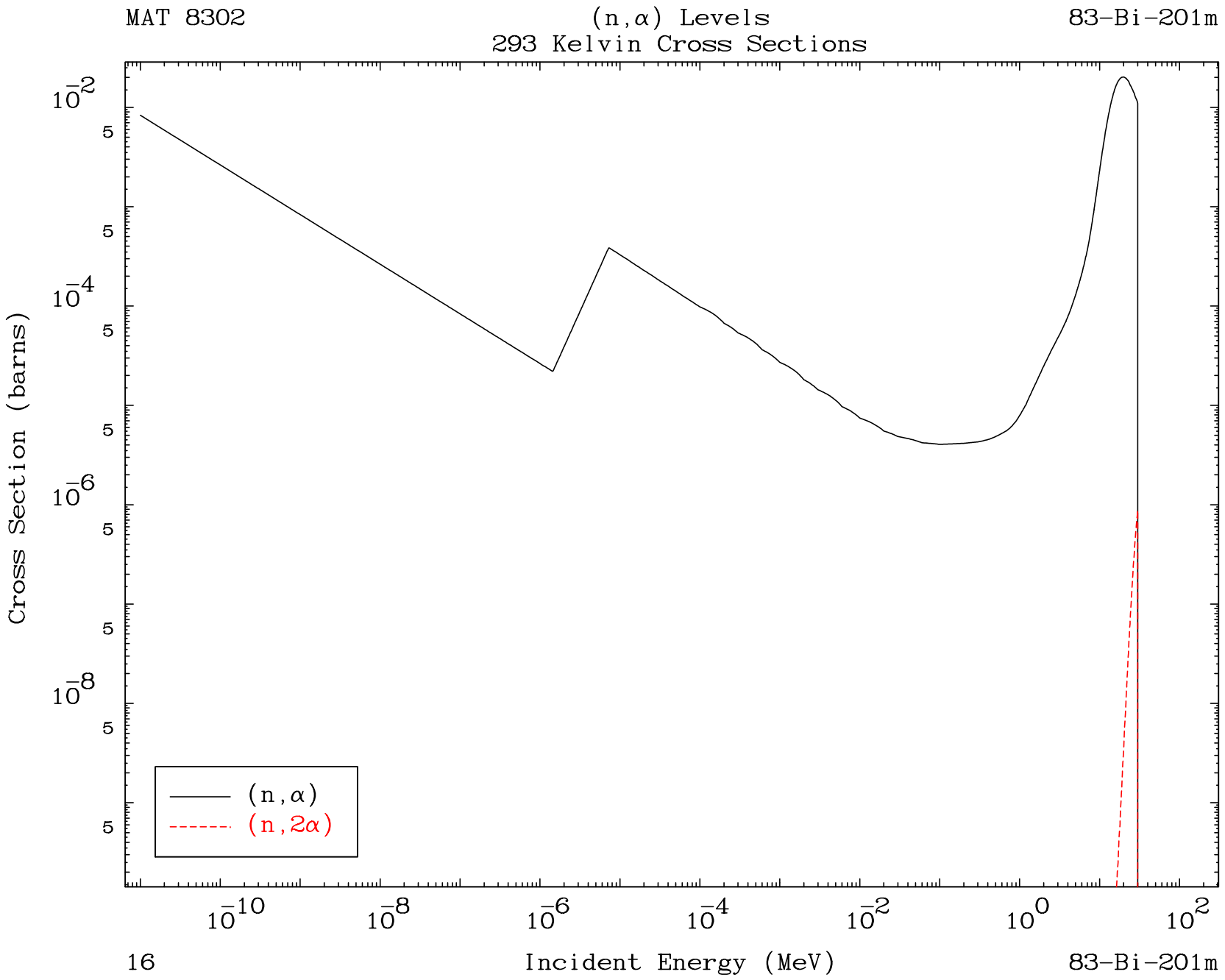

MAT 8302
(n,n') Levels
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
Inelastic
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Incident Energy (MeV)
11
83-Bi-201m

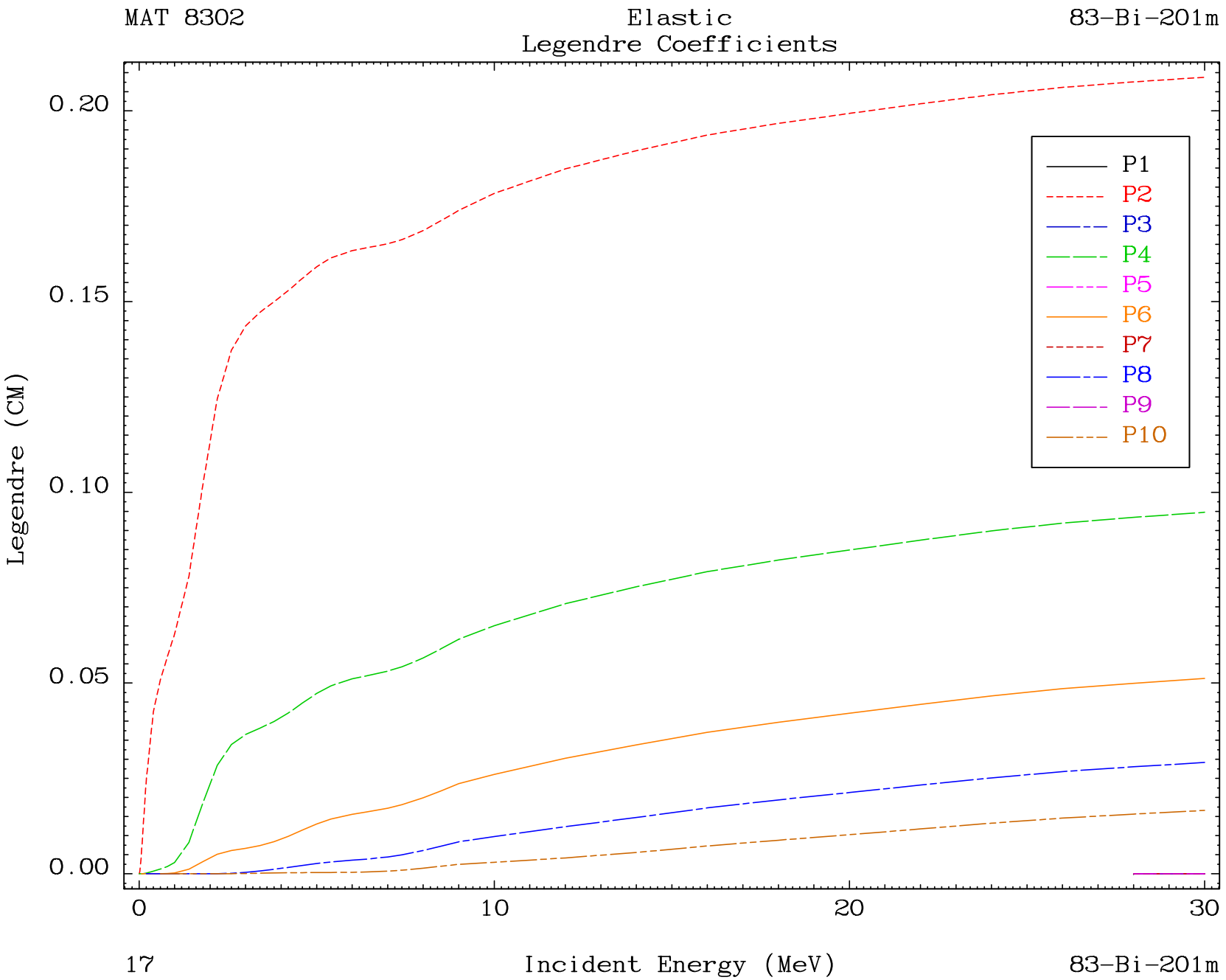

MAT 8302
(n,p) Levels
83-Bi-201m
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
12
83-Bi-201m

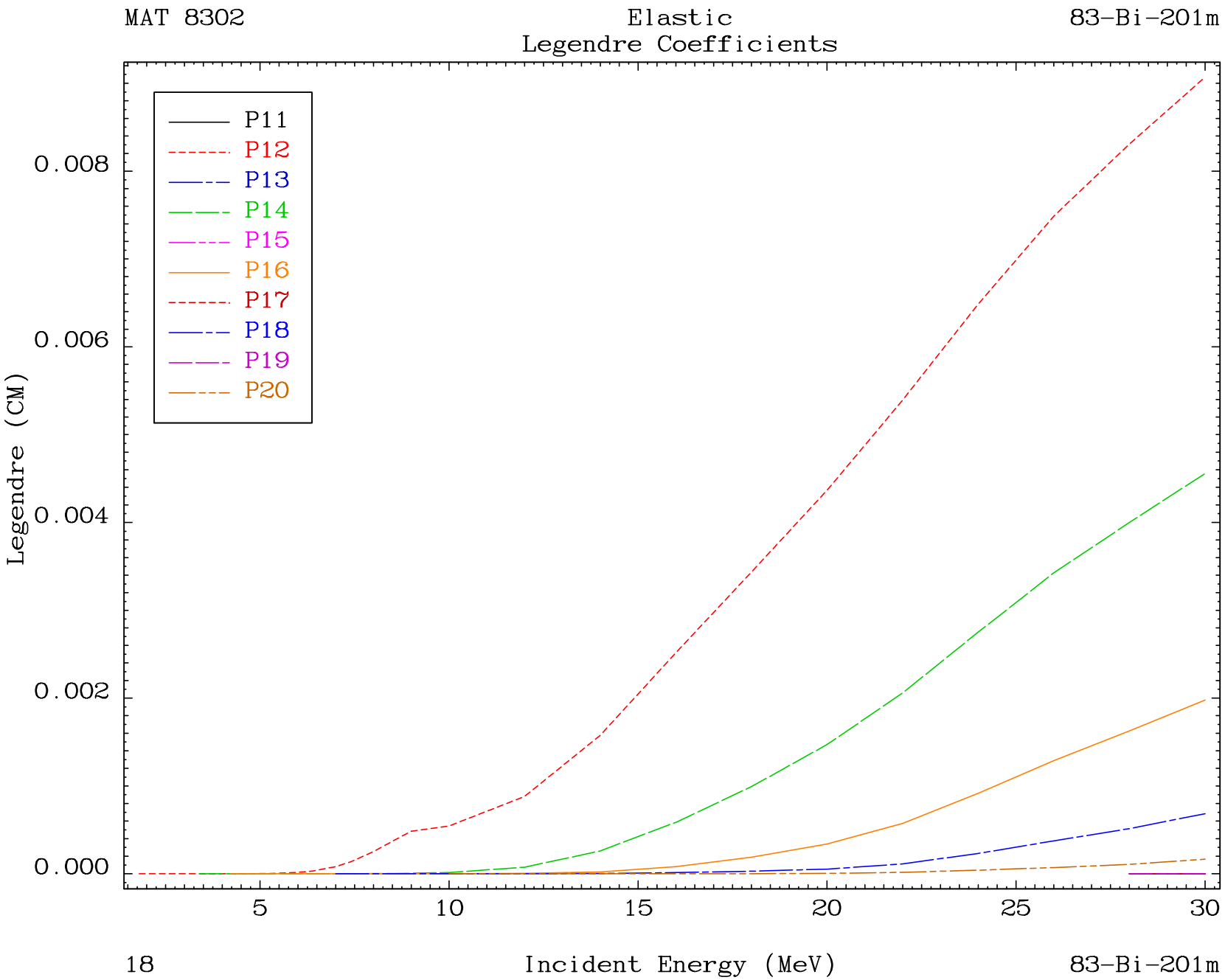

MAT 8302
(n,d) Levels
293 Kelvin Cross Sections
83-Bi-201m
(n,d)
Cross Section (barns)
Incident Energy (MeV)
13
83-Bi-201m

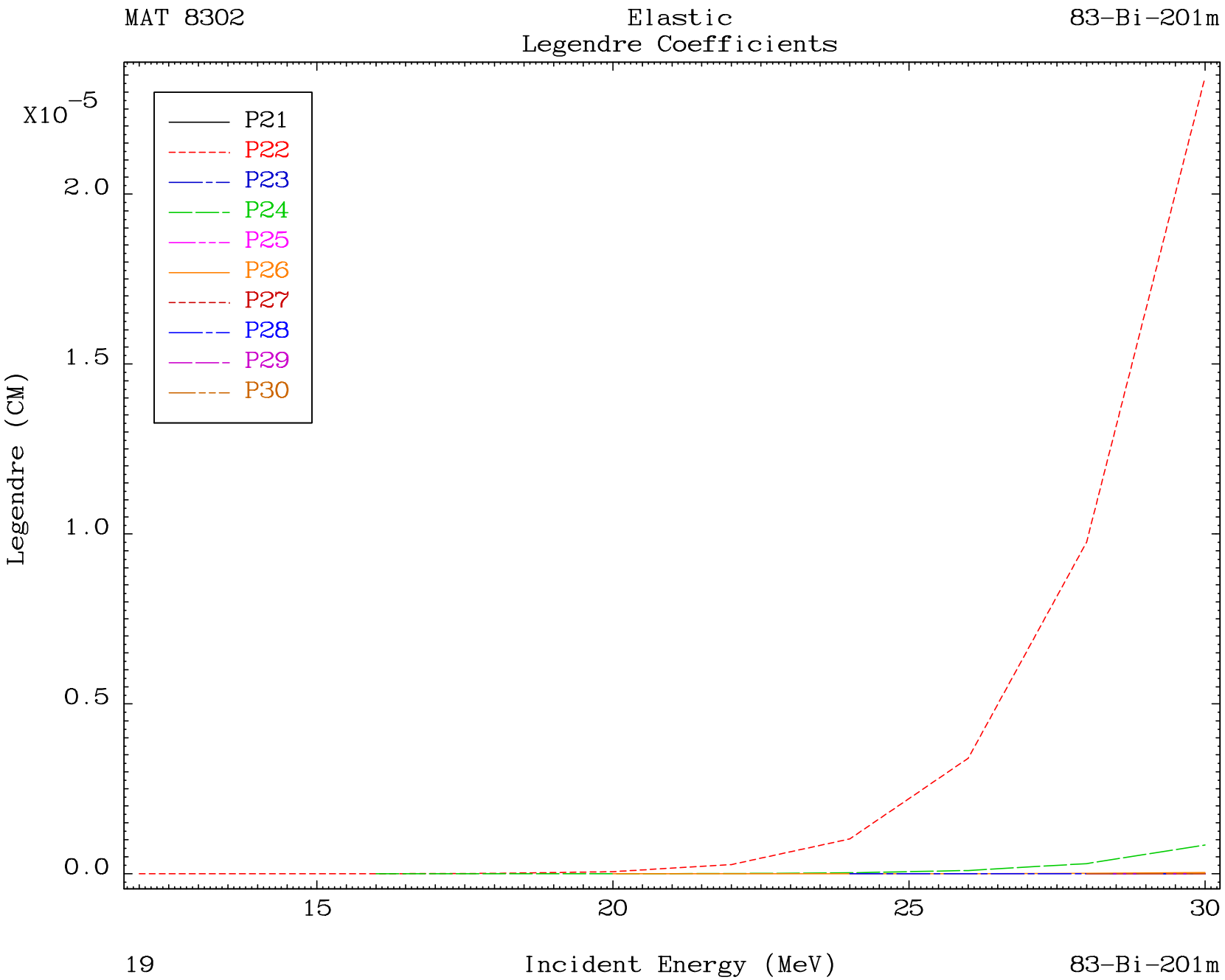

MAT 8302
(n,t) Levels
293 Kelvin Cross Sections
83-Bi-201m
(n,t)
Cross Section (barns)
Incident Energy (MeV)
14
83-Bi-201m

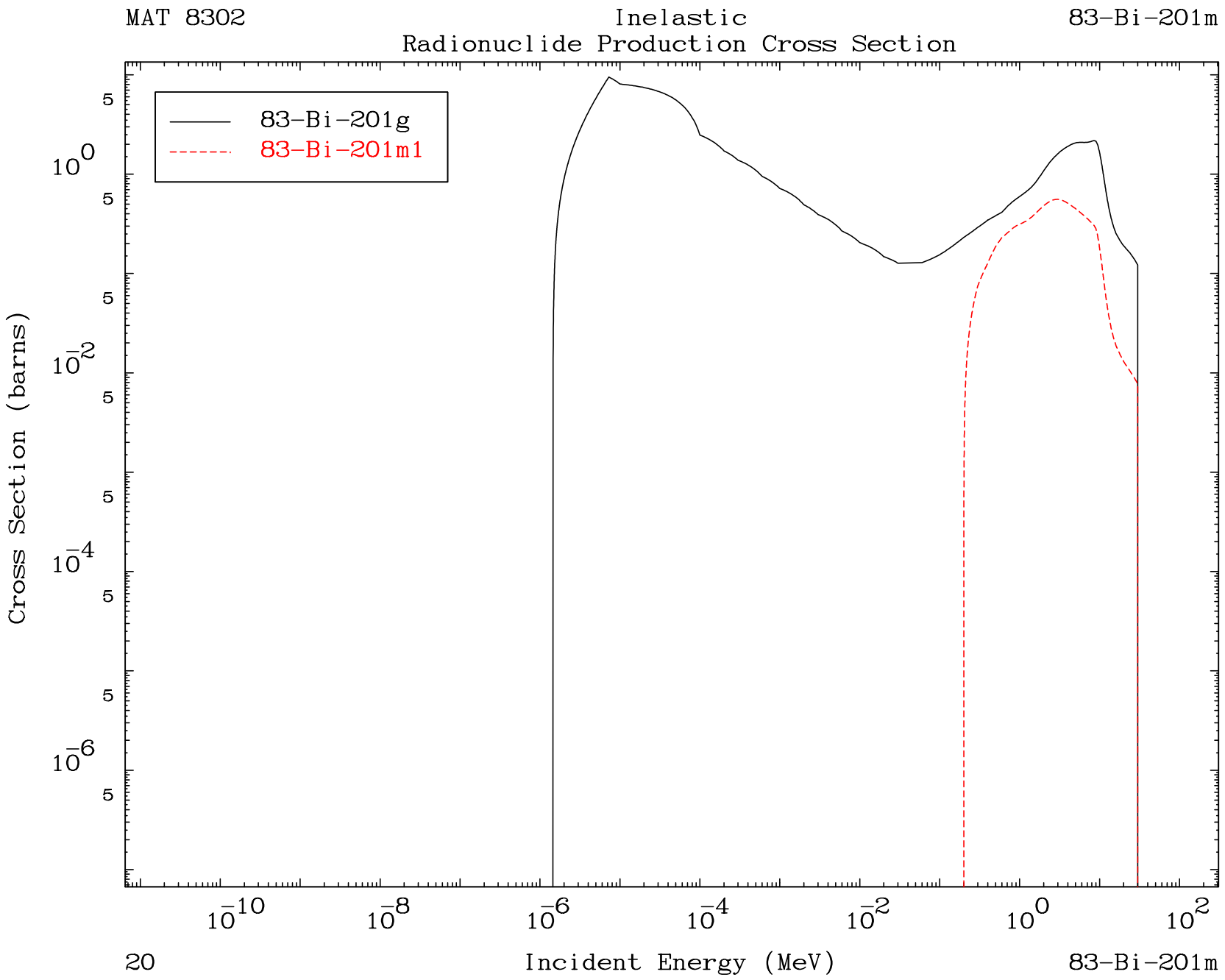

MAT 8302
(n,He3) Levels
293 Kelvin Cross Sections
83-Bi-201m
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
15
83-Bi-201m

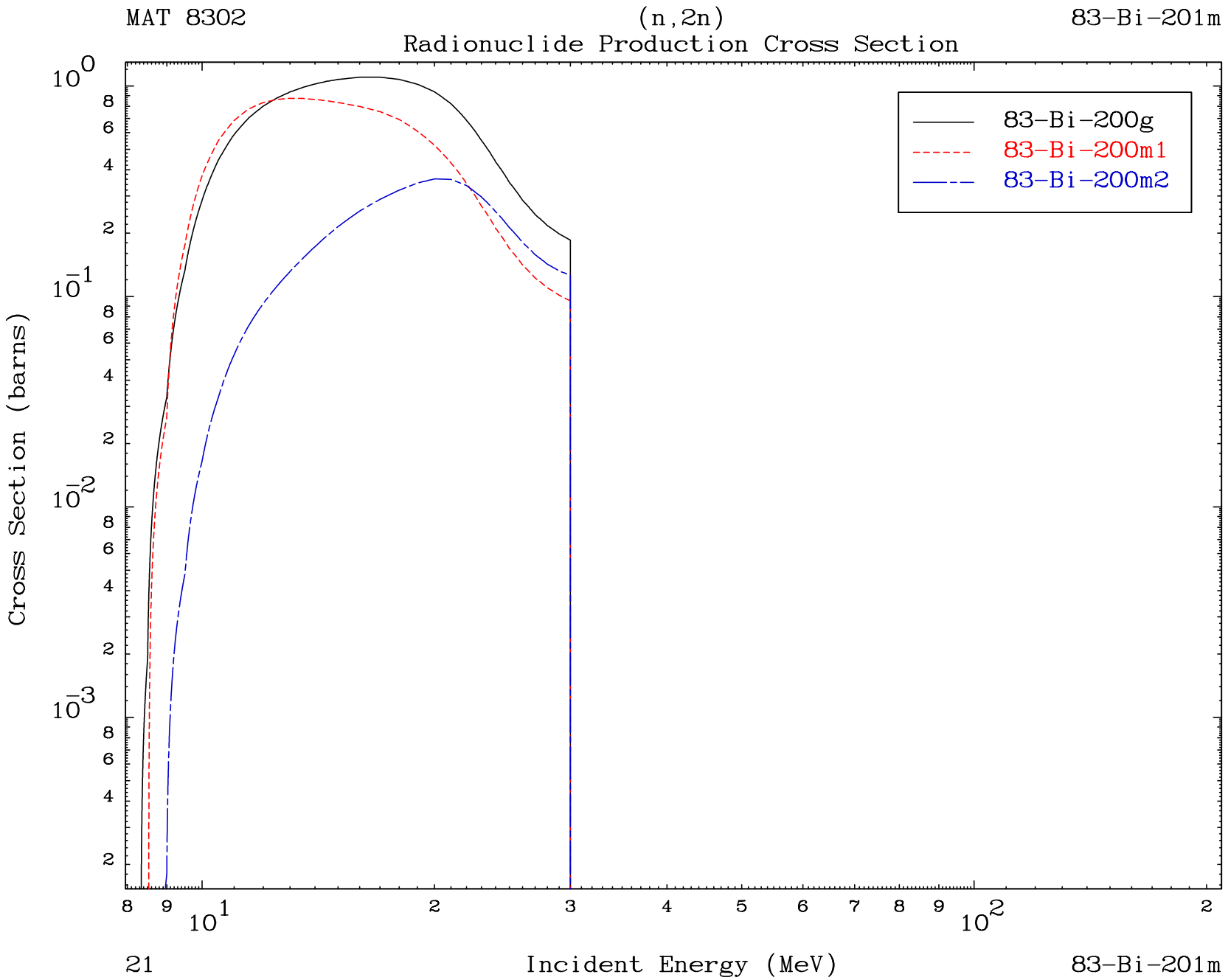

MAT 8302
(n,α) Levels
293 Kelvin Cross Sections
83-Bi-201m
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
(n,α)
(n,2α)
10-10
10-8
10-6
10-4
10-2
100
102
16
Incident Energy (MeV)
83-Bi-201m

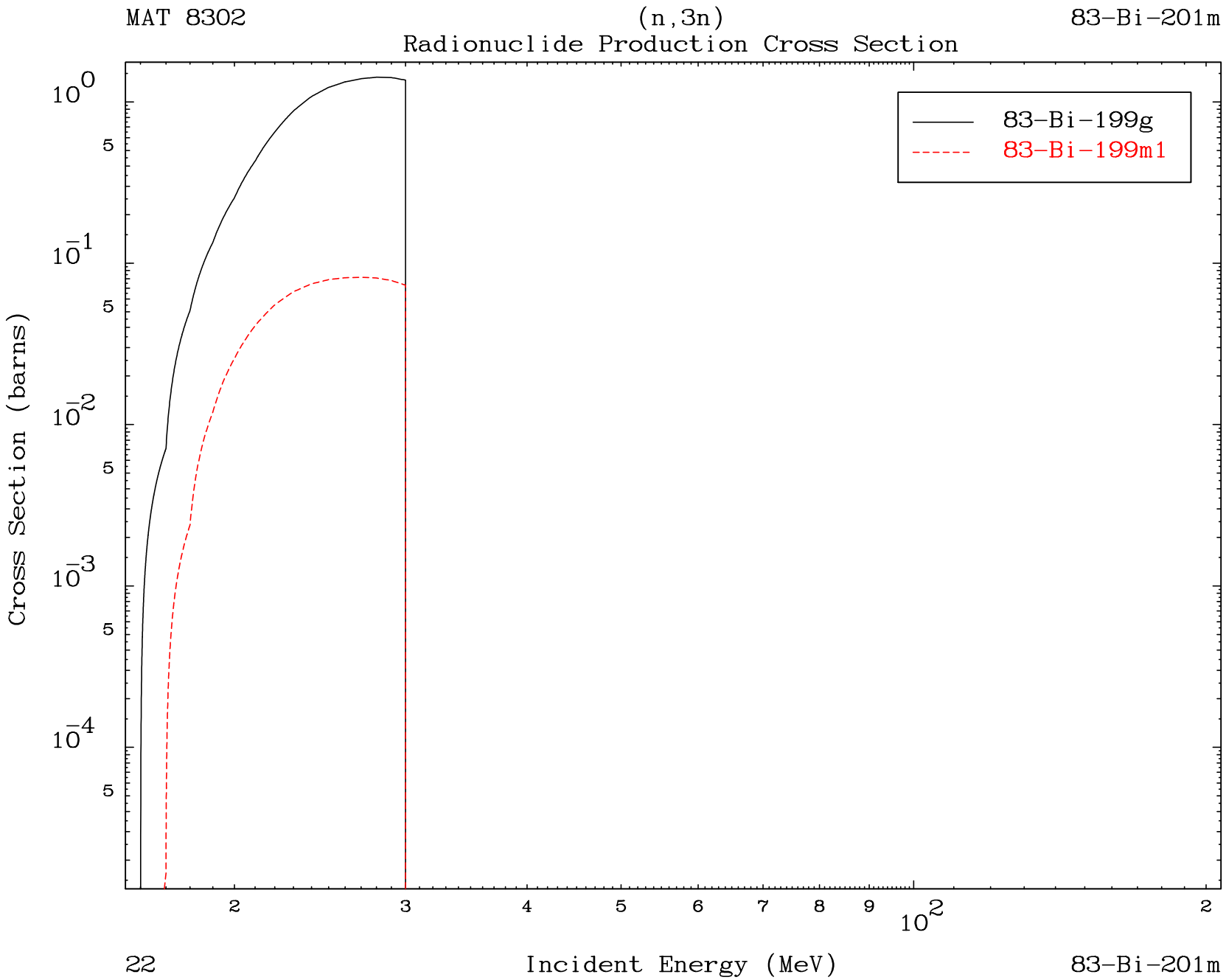

MAT 8302
Elastic
Legendre Coefficients
83-Bi-201m
0.20
0.15
0.10
0.05
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
10
20
30
17
Incident Energy (MeV)
83-Bi-201m

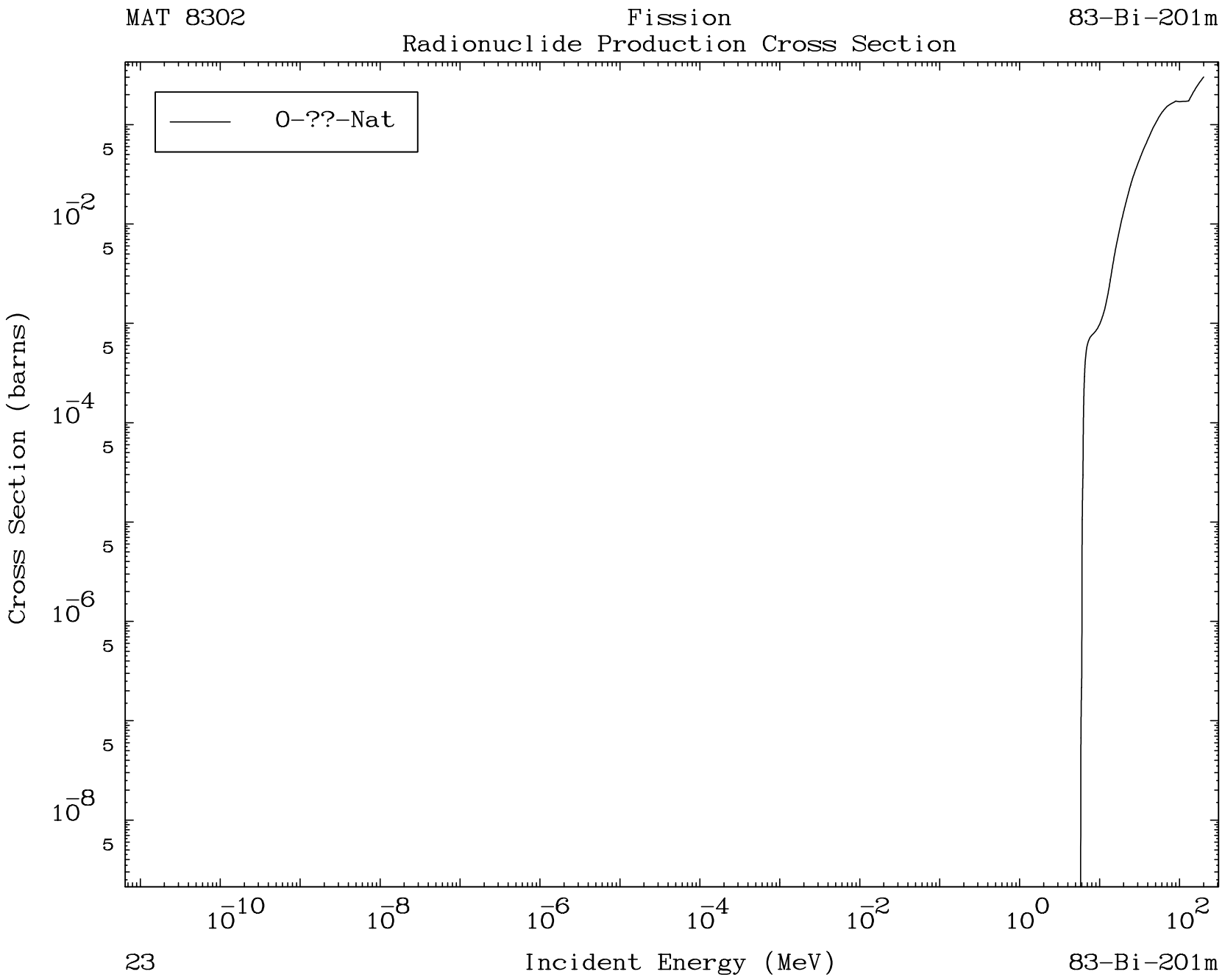

MAT 8302
Elastic
Legendre Coefficients
83-Bi-201m
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
0.008
0.006
0.004
0.002
0.000
Legendre (CM)
5
10
15
20
25
30
18
Incident Energy (MeV)
83-Bi-201m

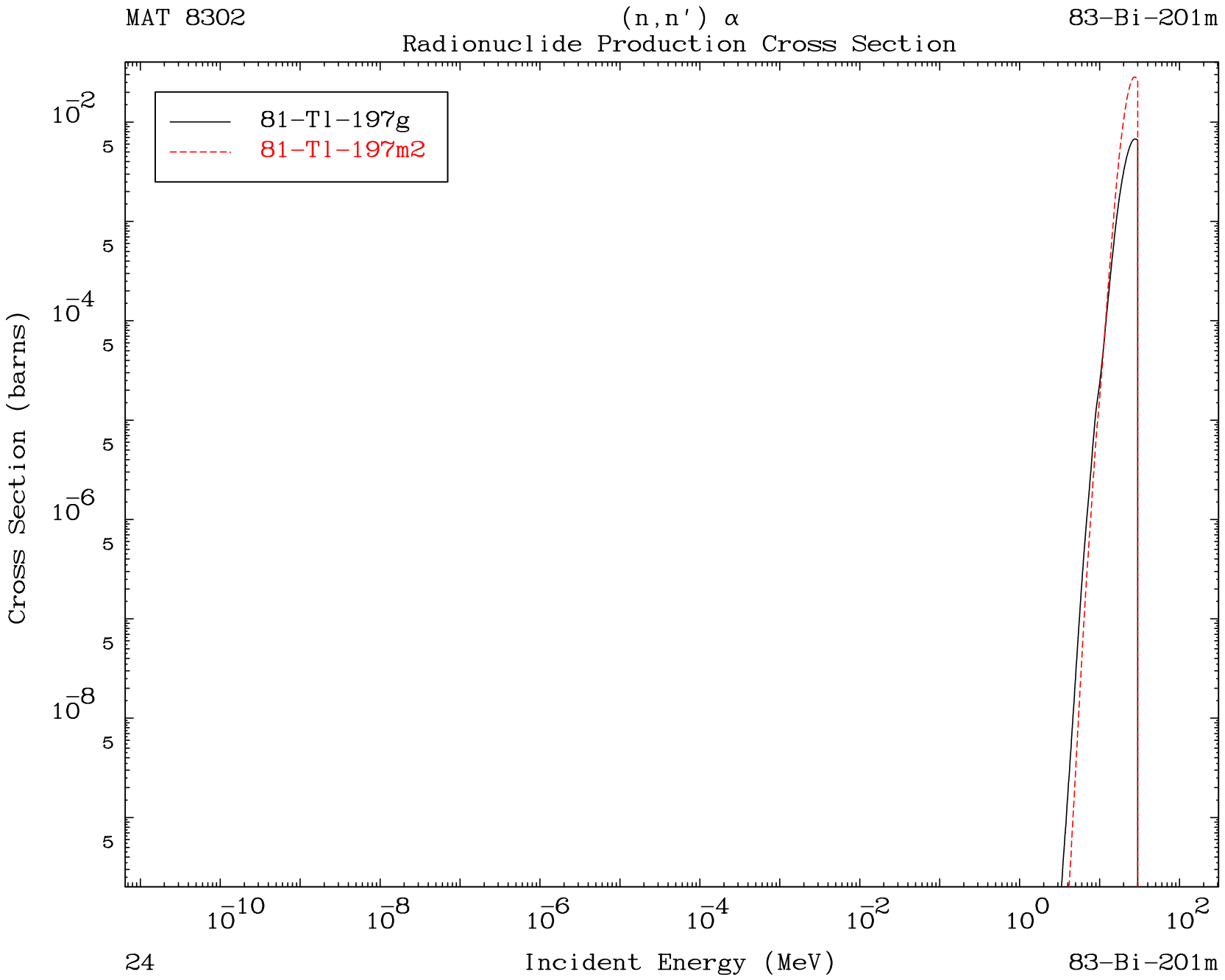

MAT 8302
Elastic
Legendre Coefficients
83-Bi-201m
X10 -5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
P29
P30
15
20
25
30
19
Incident Energy (MeV)
83-Bi-201m

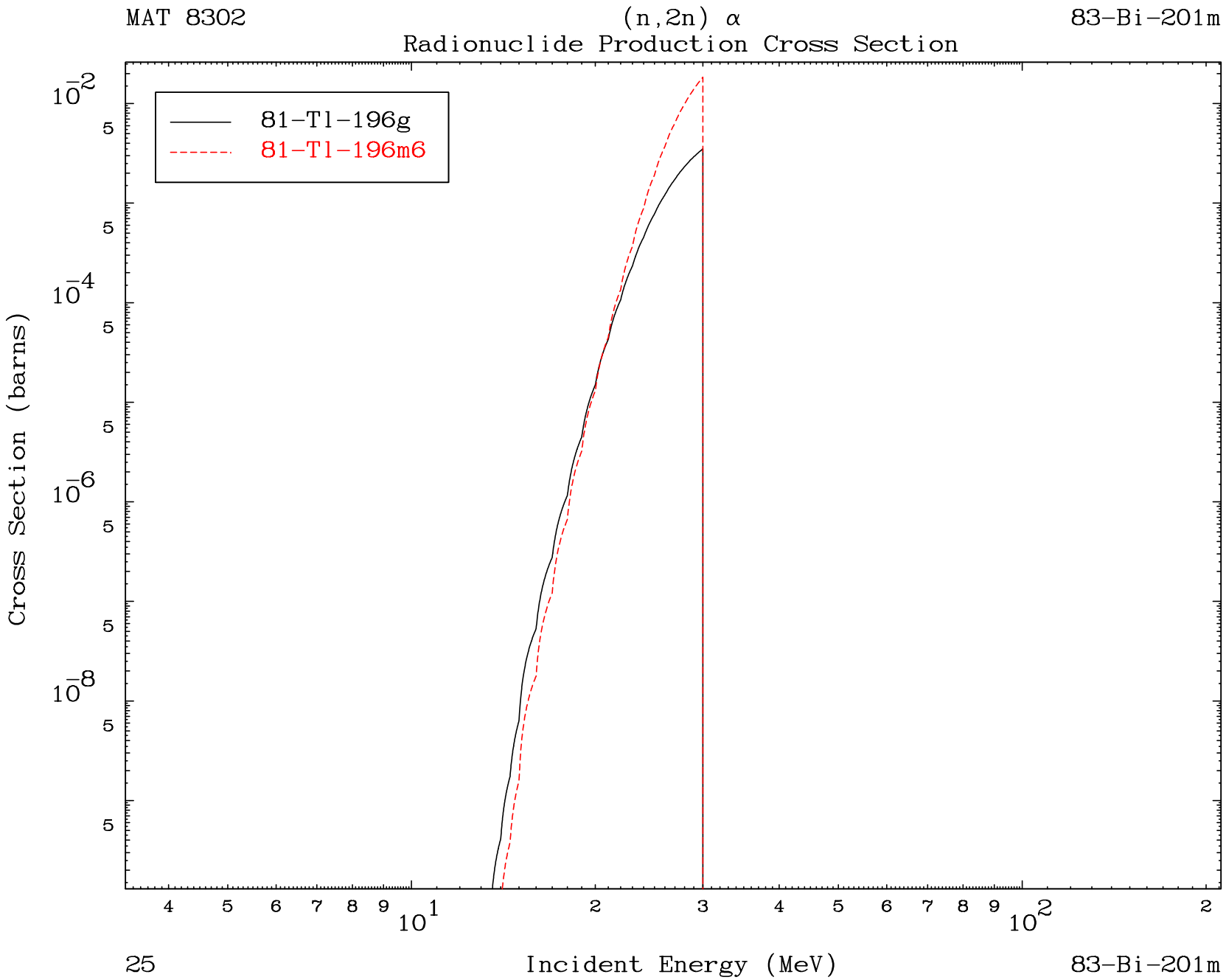

MAT 8302
Inelastic
83-Bi-201m
Radionuclide Production Cross Section
83-Bi-201g
83-Bi-201m1
Cross Section (barns)
Incident Energy (MeV)
20
83-Bi-201m

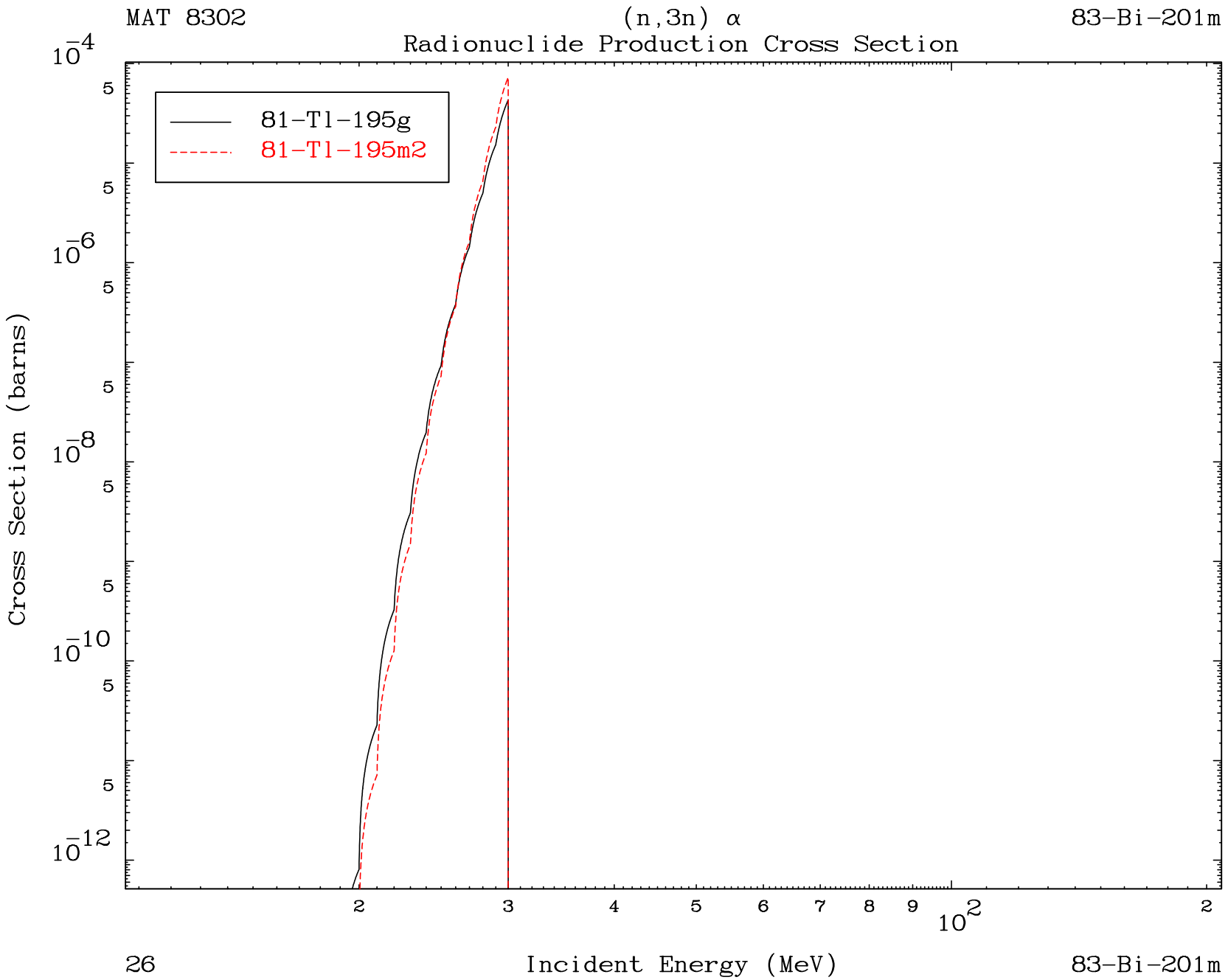

MAT 8302
(n,2n)
83-Bi-201m
Radionuclide Production Cross Section
83-Bi-200g
83-Bi-200m1
83-Bi-200m2
Cross Section (barns)
Incident Energy (MeV)
21
83-Bi-201m

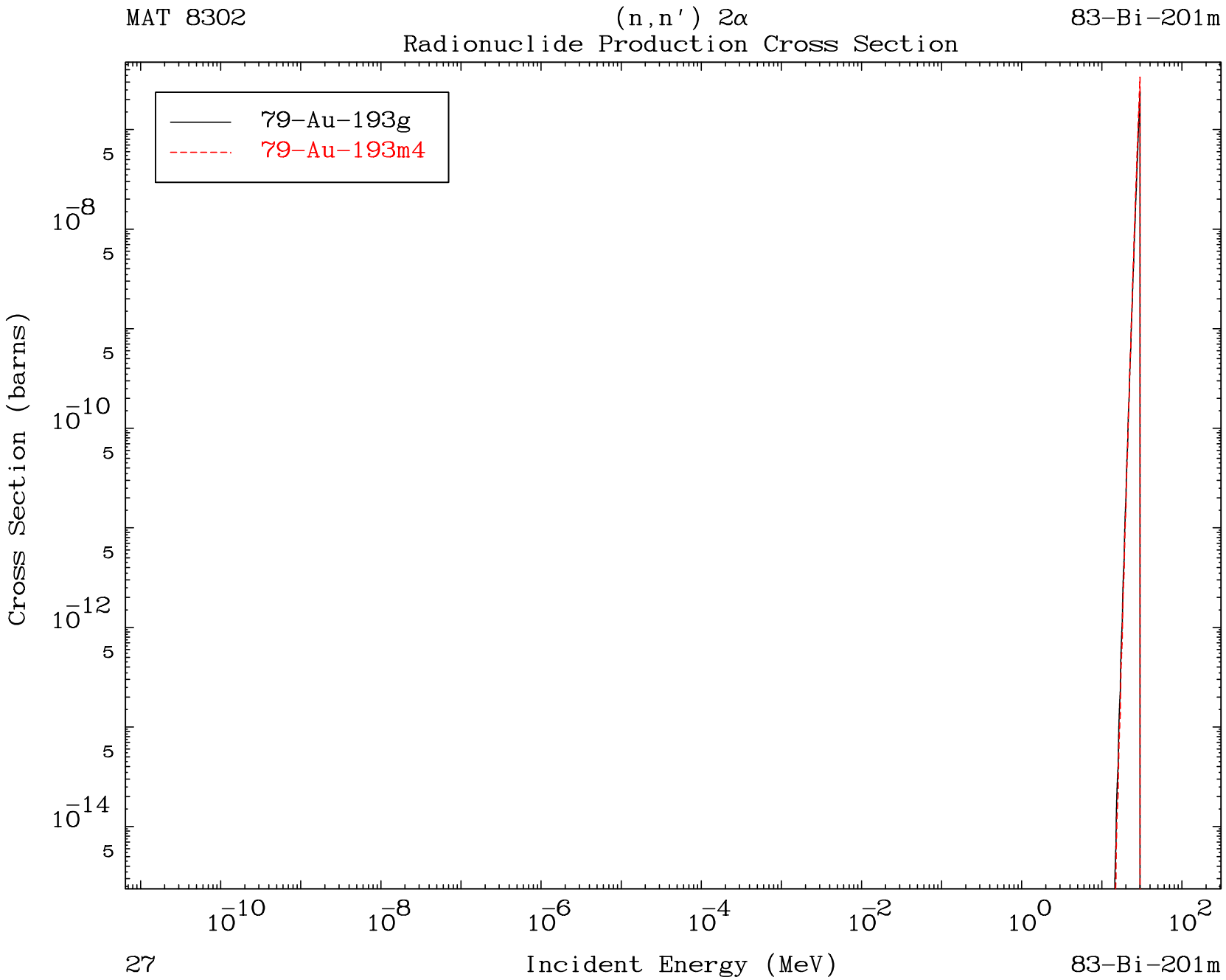

MAT 8302
(n,3n)
83-Bi-201m
Radionuclide Production Cross Section
83-Bi-199g
83-Bi-199m1
Cross Section (barns)
Incident Energy (MeV)
22
83-Bi-201m

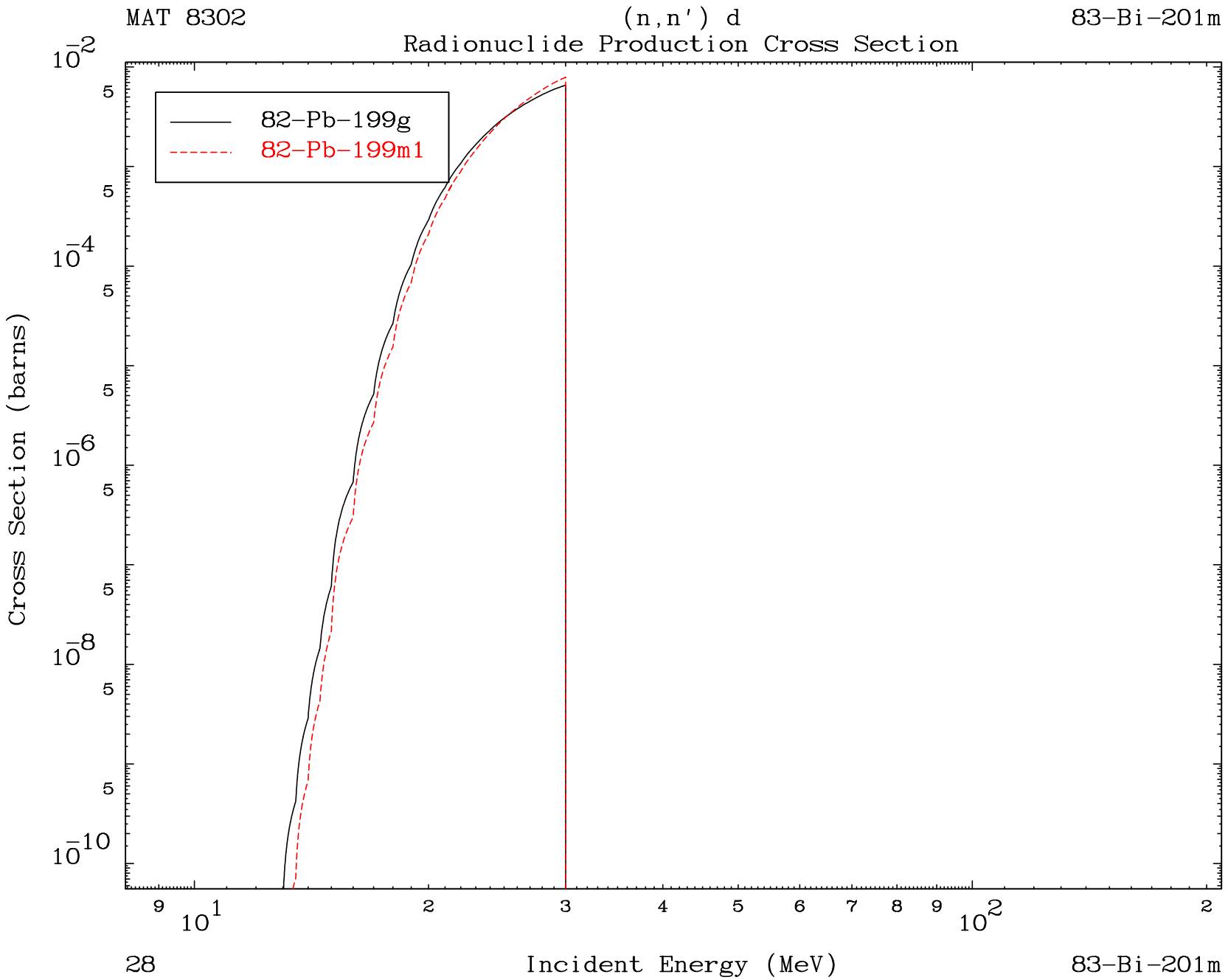

MAT 8302
Fission
83-Bi-201m
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
23
83-Bi-201m

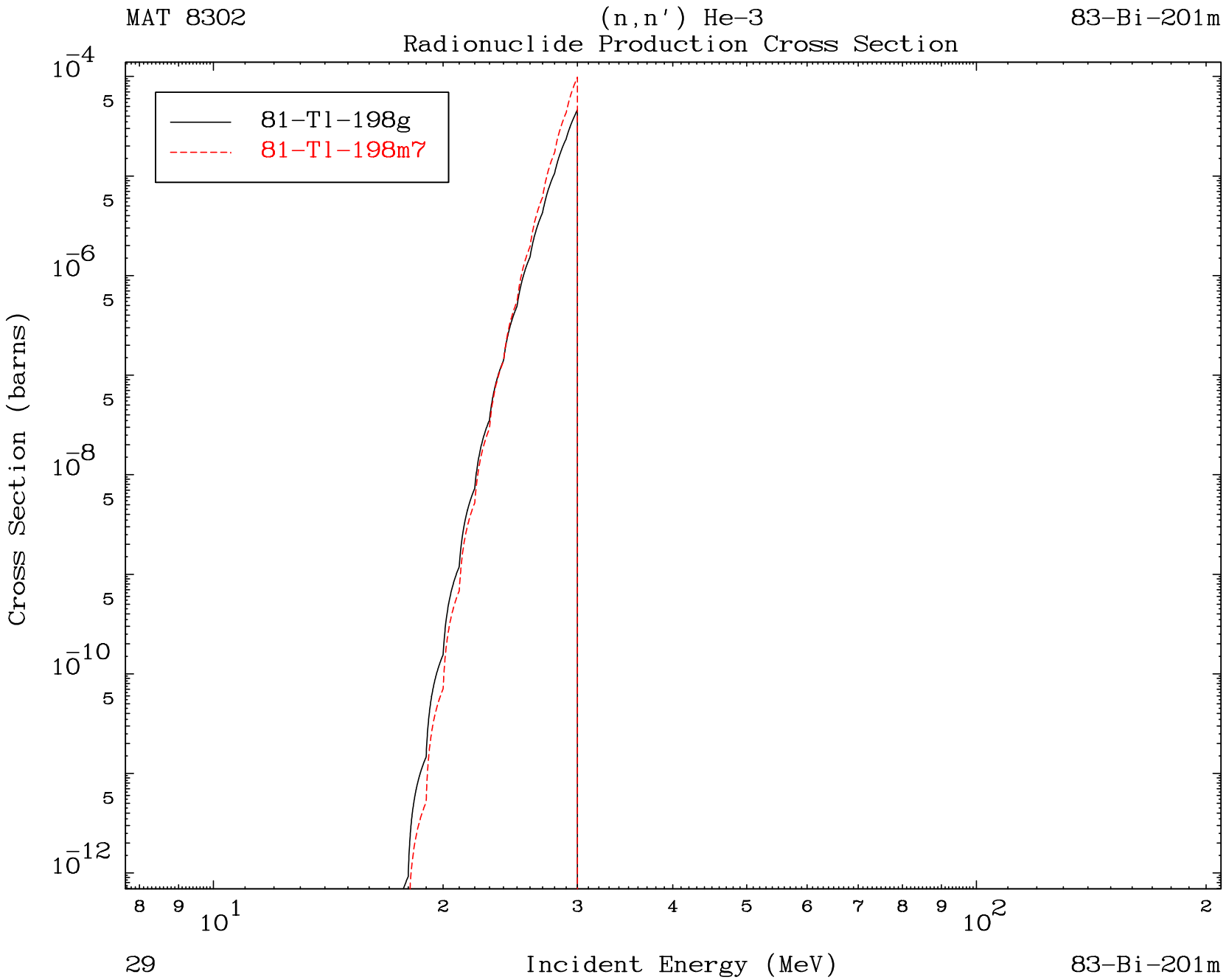

MAT 8302
(n,n') α
83-Bi-201m
Radionuclide Production Cross Section
81-Tl-197g
81-Tl-197m2
Cross Section (barns)
Incident Energy (MeV)
24
83-Bi-201m

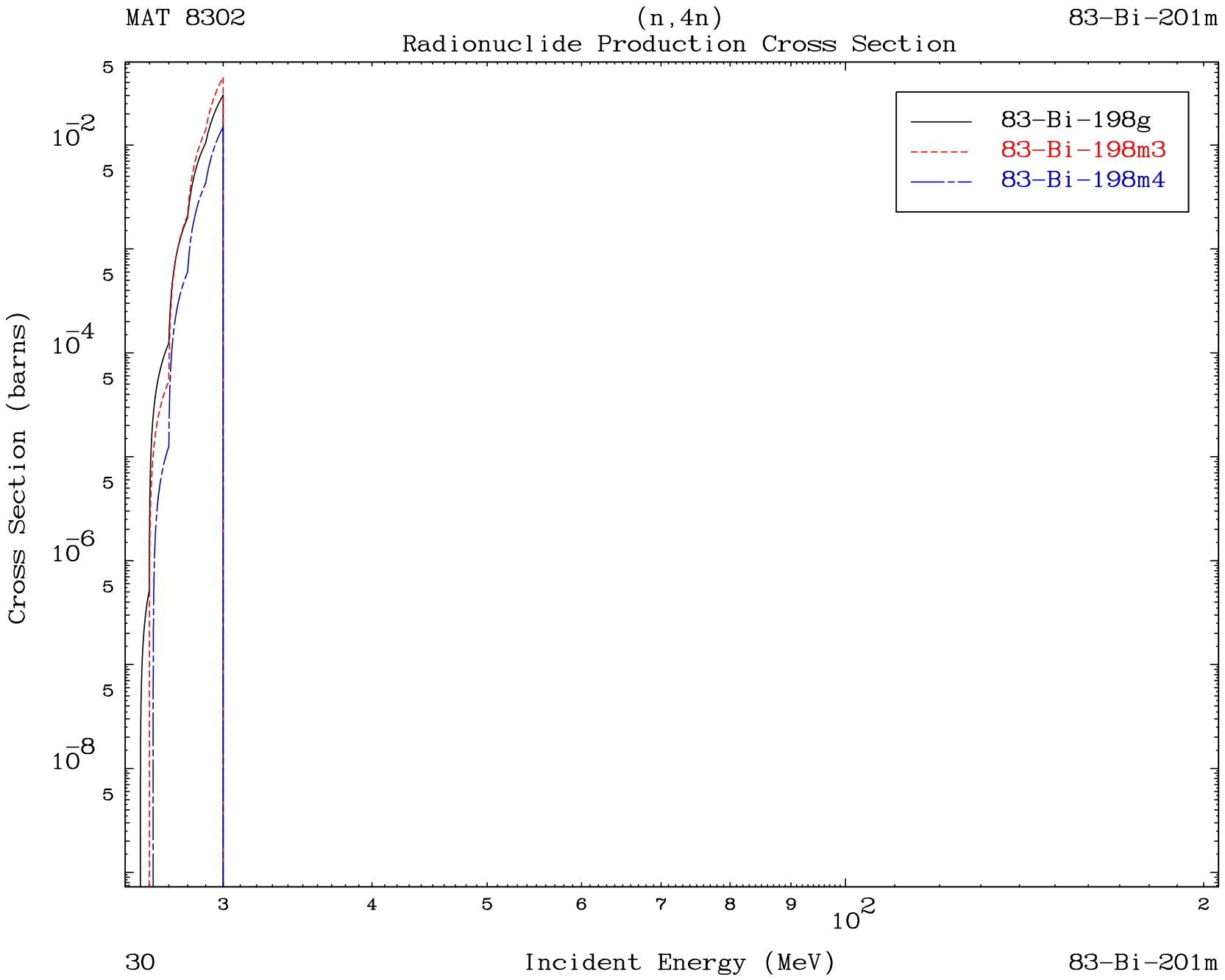

MAT 8302
(n,2n) α
83-Bi-201m
Radionuclide Production Cross Section
81-Tl-196g
81-Tl-196m6
Cross Section (barns)
Incident Energy (MeV)
25
83-Bi-201m

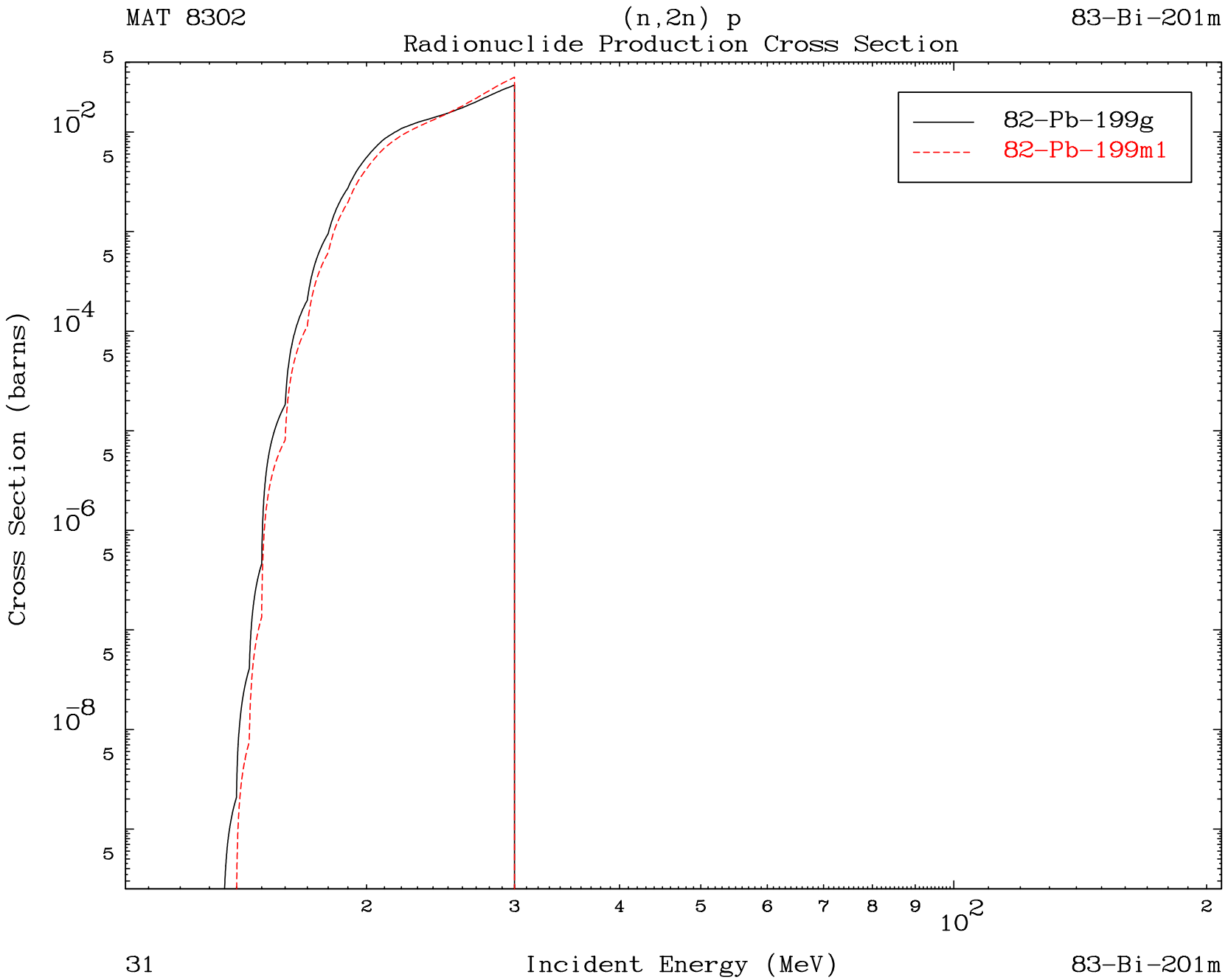

MAT 8302
(n,3n) α
83-Bi-201m
Radionuclide Production Cross Section
81-Tl-195g
81-Tl-195m2
Cross Section (barns)
Incident Energy (MeV)
26
83-Bi-201m

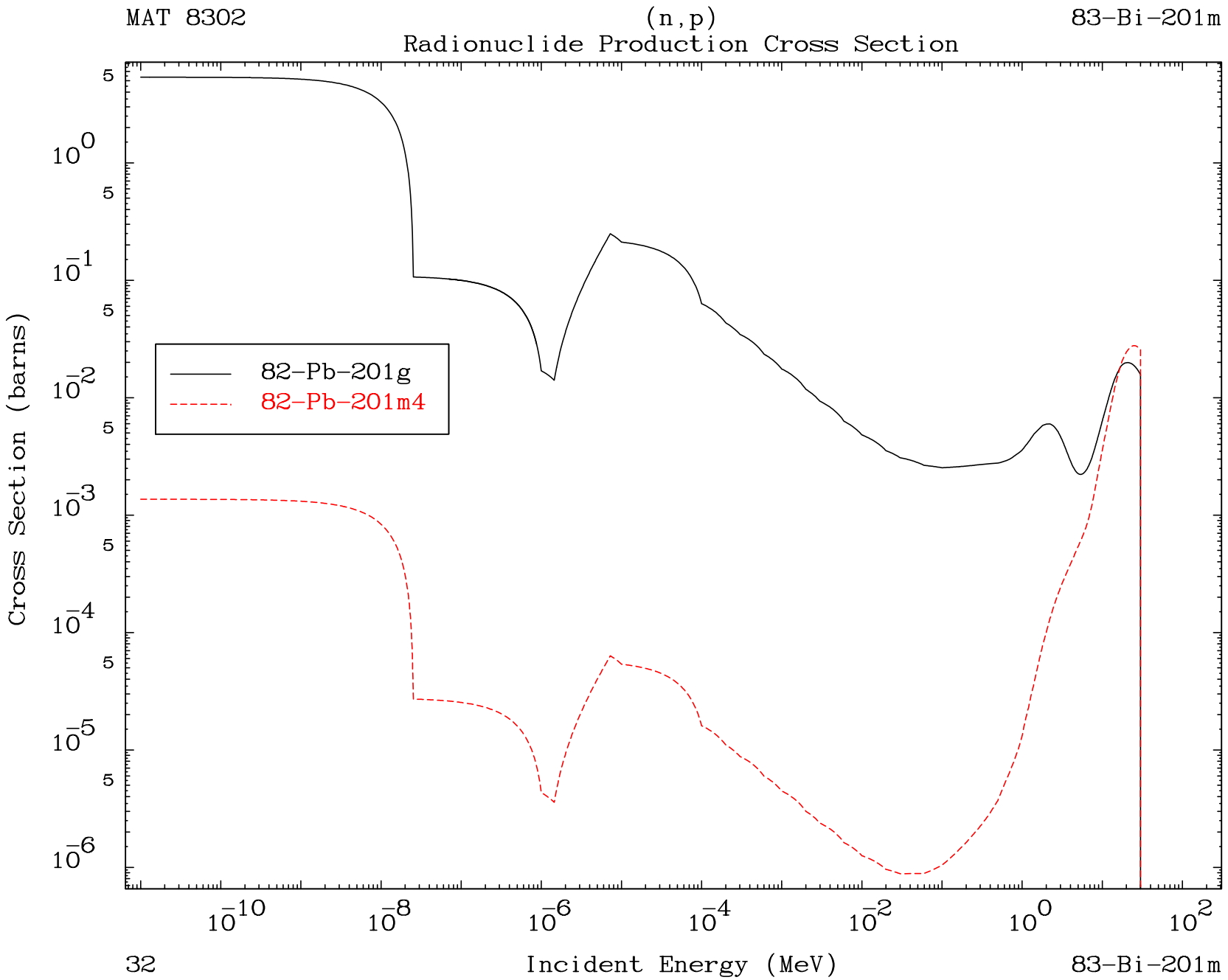

MAT 8302
(n,n') 2α
83-Bi-201m
Radionuclide Production Cross Section
79-Au-193g
79-Au-193m4
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
27
Incident Energy (MeV)
83-Bi-201m

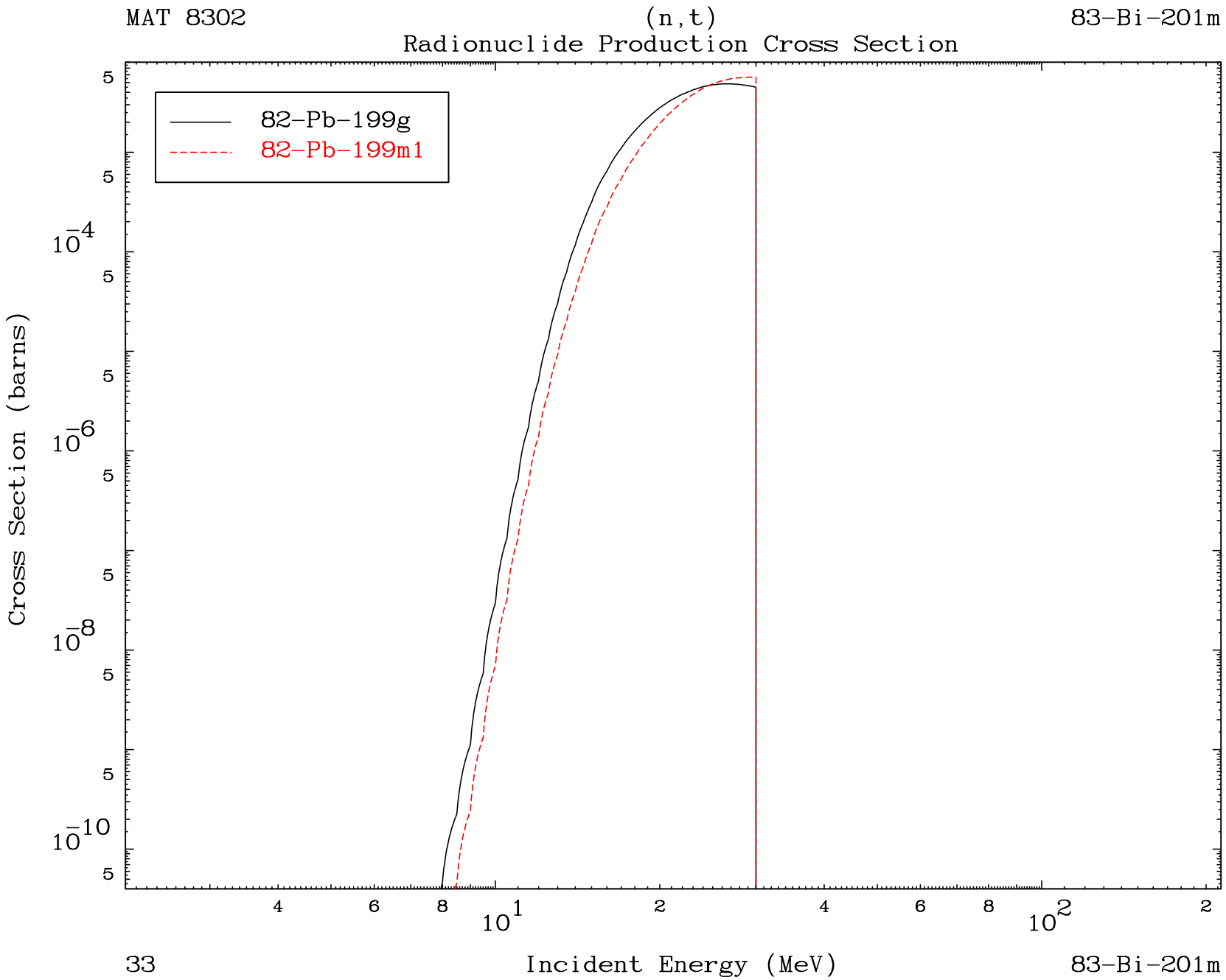

MAT 8302
(n,n') d
83-Bi-201m
Radionuclide Production Cross Section
82-Pb-199g
82-Pb-199m1
Cross Section (barns)
Incident Energy (MeV)
28
83-Bi-201m

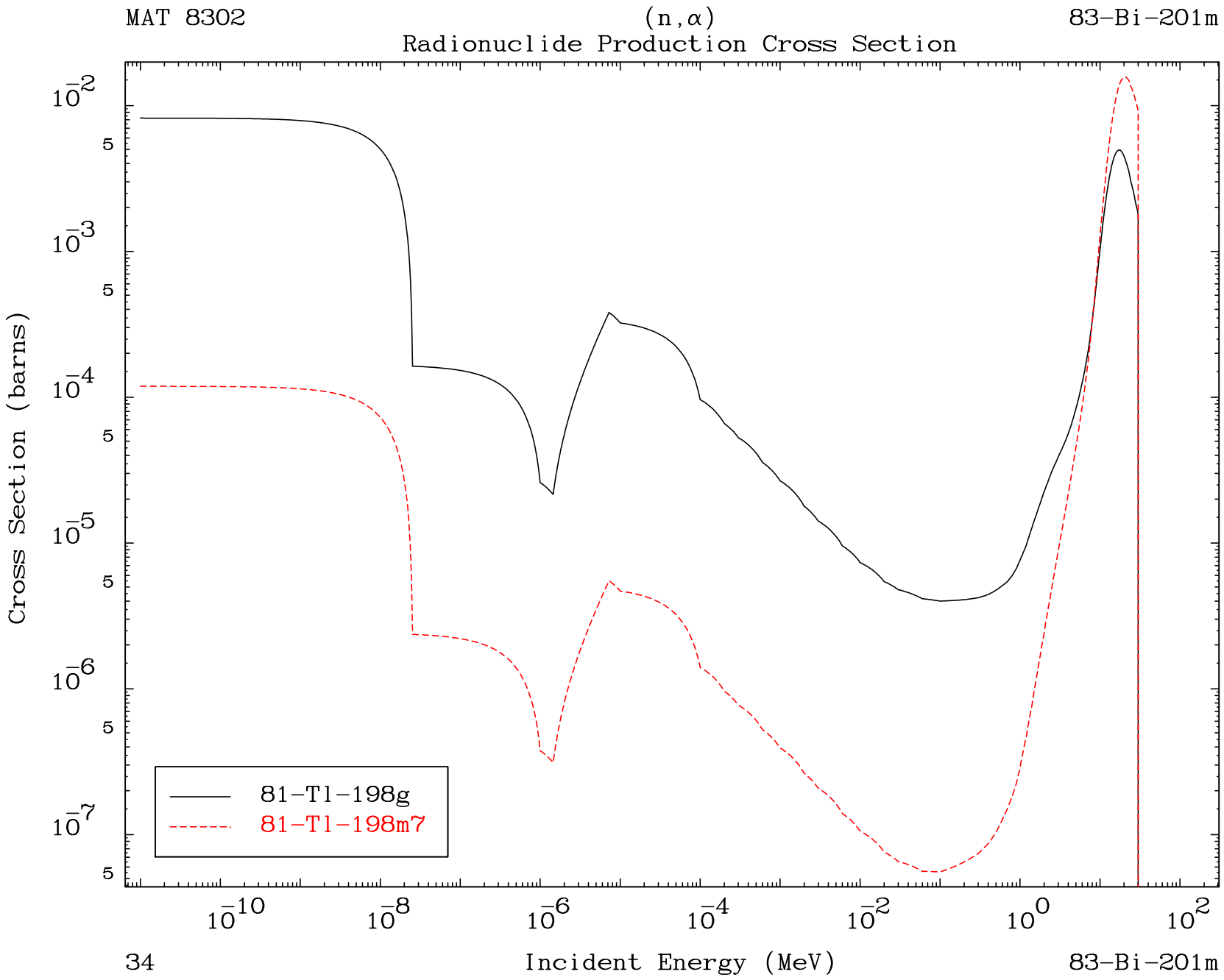

MAT 8302
(n,n') He-3
83-Bi-201m
Radionuclide Production Cross Section
81-Tl-198g
81-Tl-198m7
Cross Section (barns)
Incident Energy (MeV)
29
83-Bi-201m

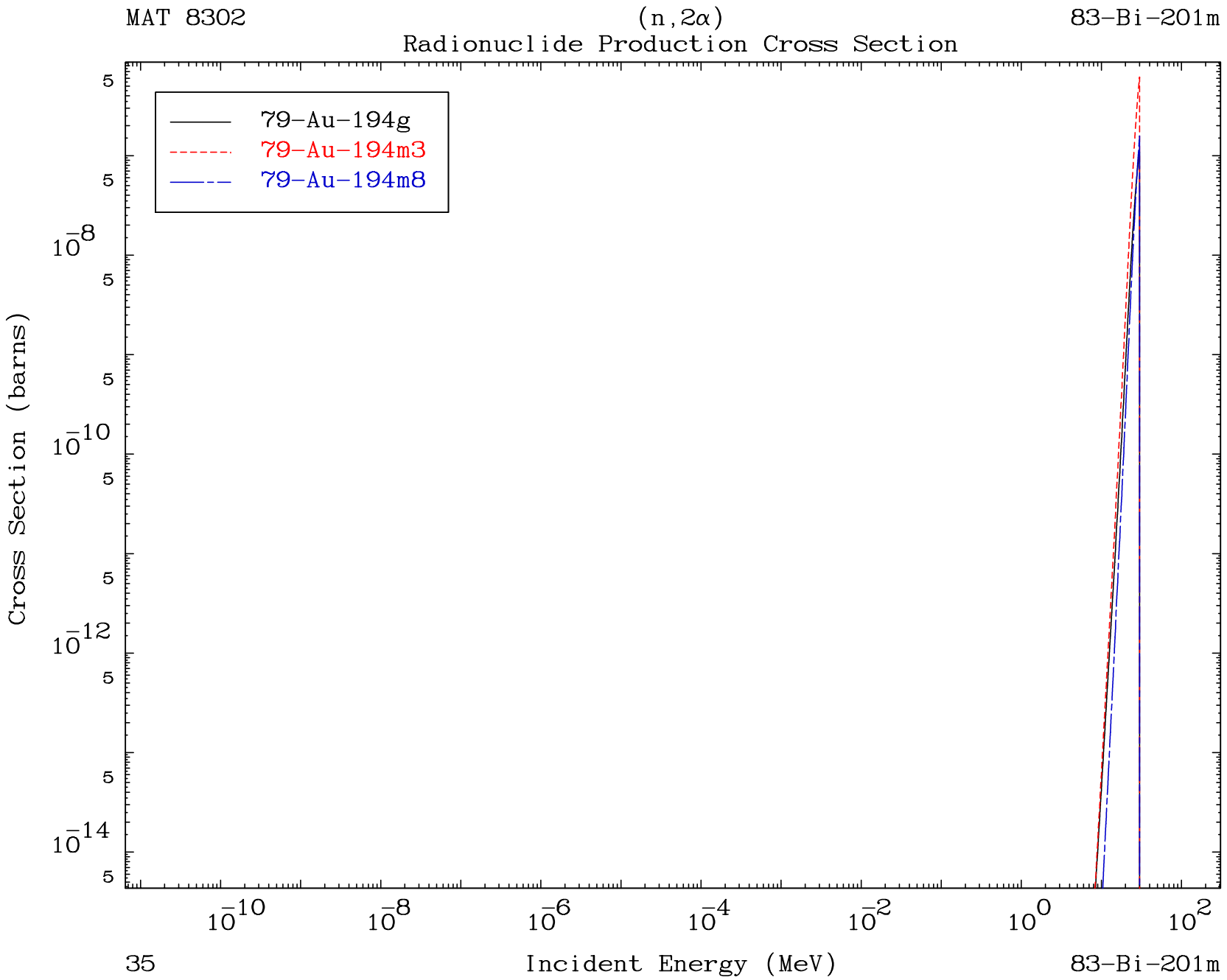

MAT 8302
(n,4n)
83-Bi-201m
Radionuclide Production Cross Section
83-Bi-198g
83-Bi-198m3
83-Bi-198m4
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
30
Incident Energy (MeV)
83-Bi-201m

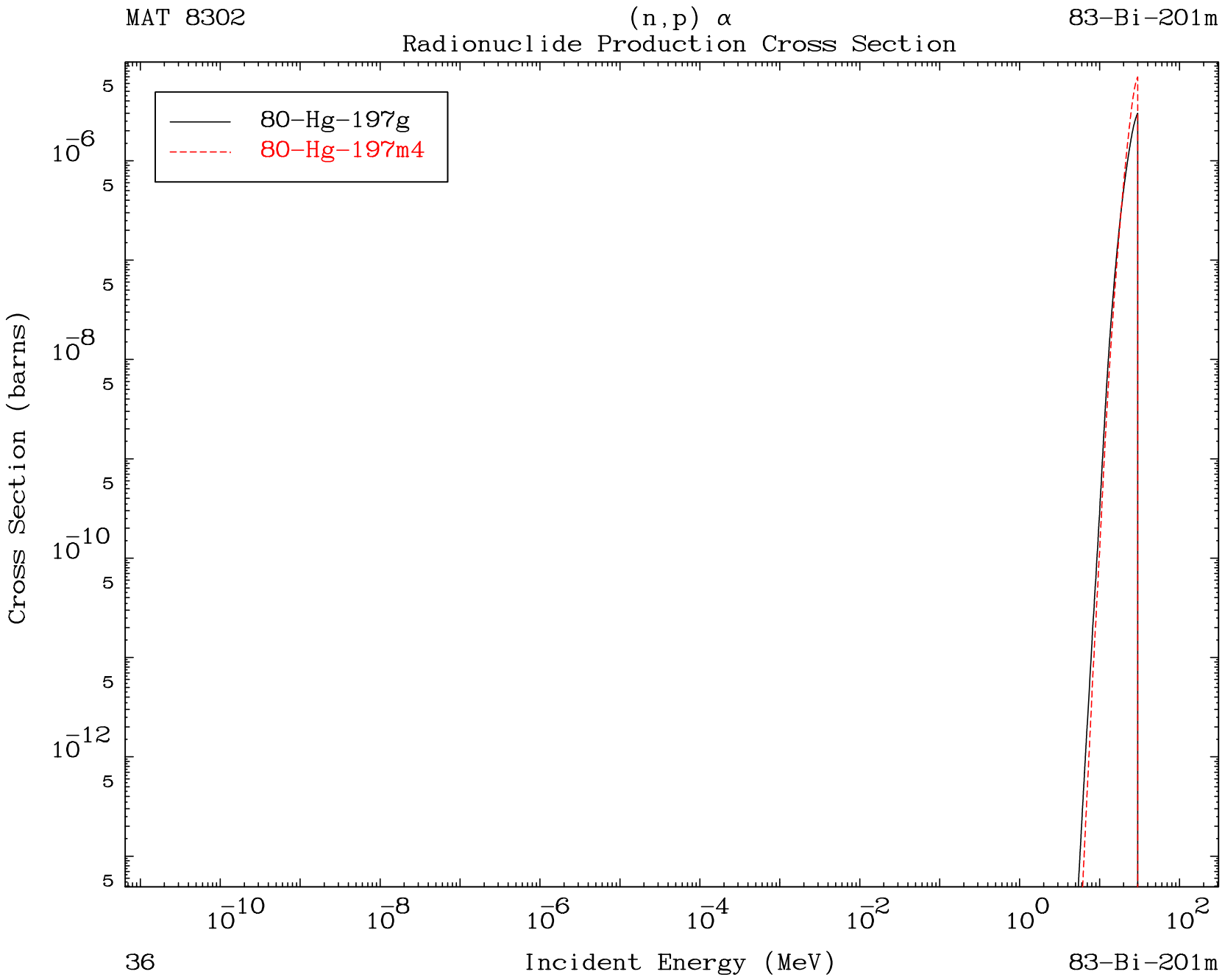

MAT 8302
(n,2n) p
83-Bi-201m
Radionuclide Production Cross Section
82-Pb-199g
82-Pb-199m1
Cross Section (barns)
Incident Energy (MeV)
31
83-Bi-201m

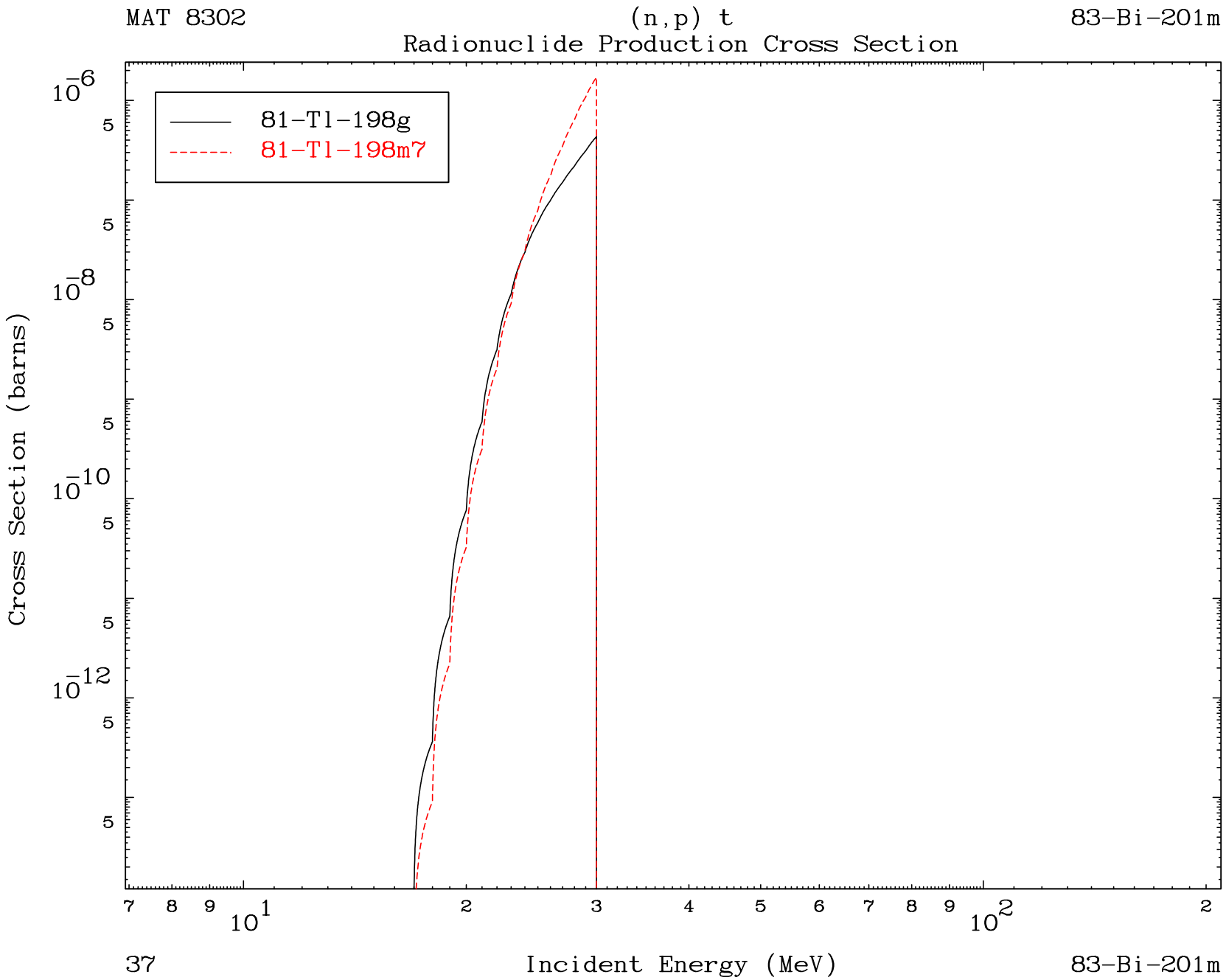

MAT 8302
(n,p)
83-Bi-201m
Radionuclide Production Cross Section
Cross Section (barns)
82-Pb-201g
82-Pb-201m4
Incident Energy (MeV)
32
83-Bi-201m


MAT 8302
(n,t)
83-Bi-201m
Radionuclide Production Cross Section
82-Pb-199g
82-Pb-199m1
Cross Section (barns)
Incident Energy (MeV)
33
83-Bi-201m


MAT 8302
(n,α)
83-Bi-201m
Radionuclide Production Cross Section
Cross Section (barns)
10^-2
5
10^-3
5
10^-4
5
10^-5
5
10^-6
5
10^-7
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
81-Tl-198g
81-Tl-198m7
34
Incident Energy (MeV)
83-Bi-201m


MAT 8302
(n,2α)
83-Bi-201m
Radionuclide Production Cross Section
79-Au-194g
79-Au-194m3
79-Au-194m8
Cross Section (barns)
Incident Energy (MeV)
35
83-Bi-201m


MAT 8302
(n,p) α
83-Bi-201m
Radionuclide Production Cross Section
80-Hg-197g
80-Hg-197m4
Cross Section (barns)
Incident Energy (MeV)
36
83-Bi-201m


MAT 8302
(n,p) t
83-Bi-201m
Radionuclide Production Cross Section
81-Tl-198g
81-Tl-198m7
Cross Section (barns)
Incident Energy (MeV)
37
83-Bi-201m