Program EVALPLOT
(Version 2018-1)
by
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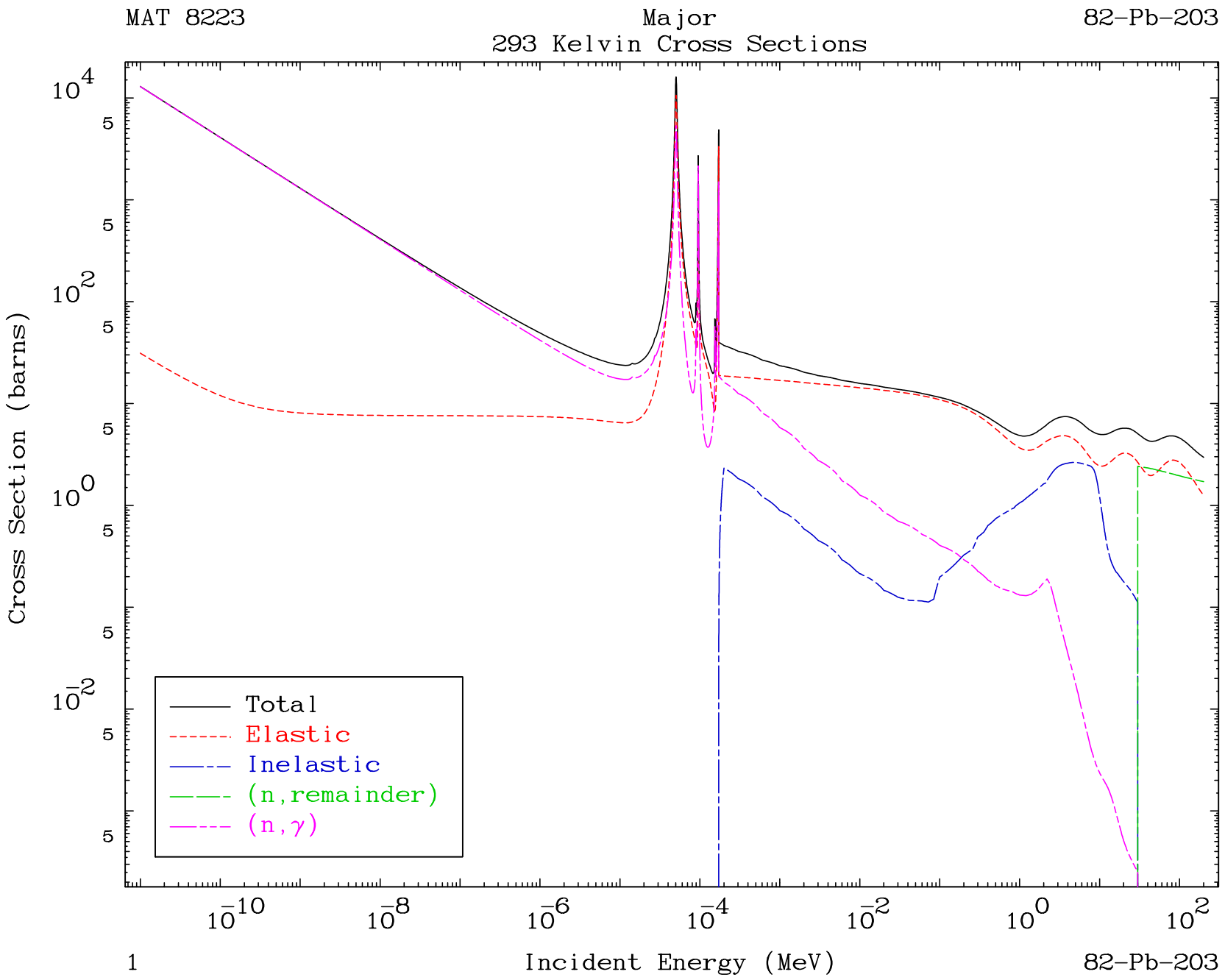
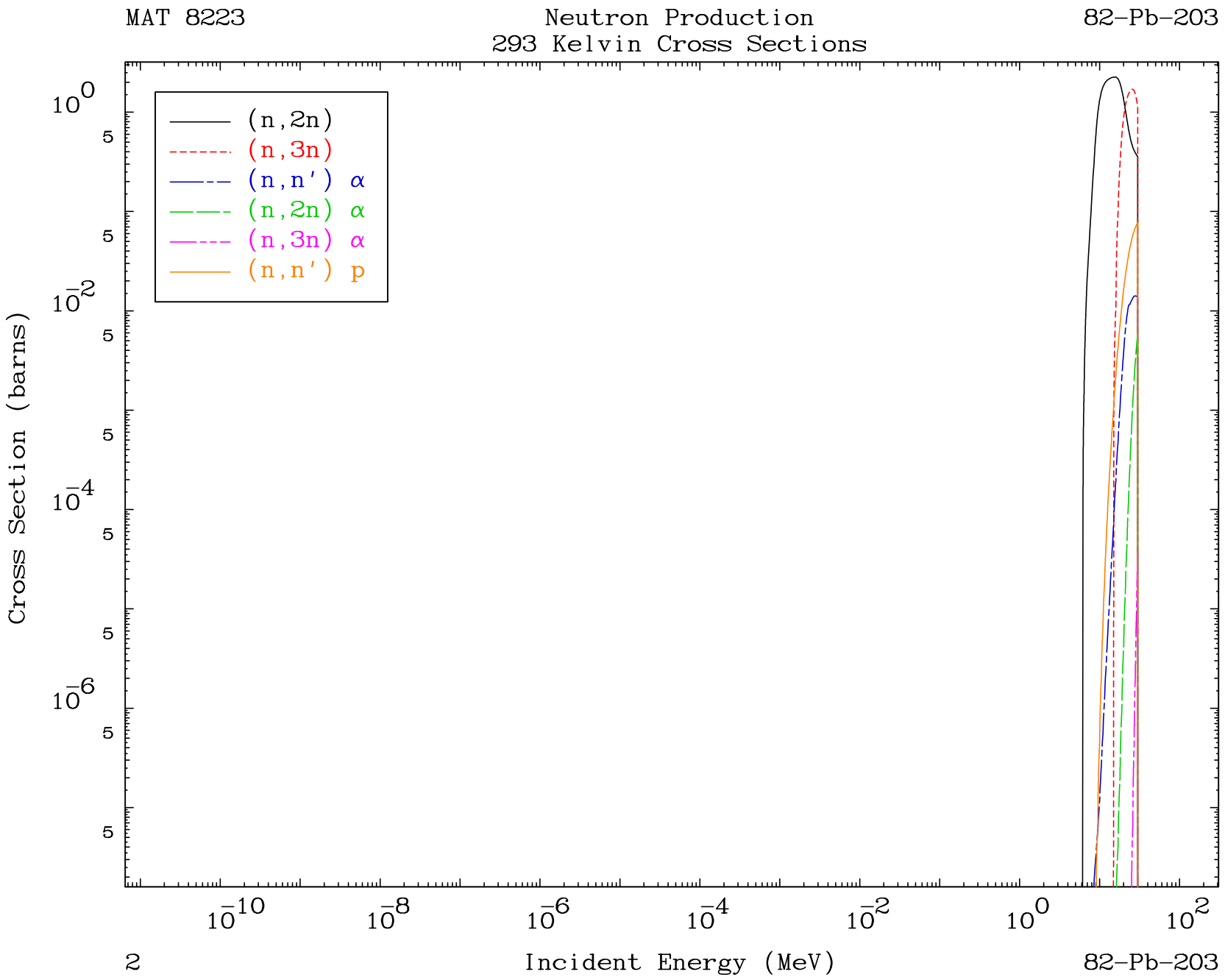
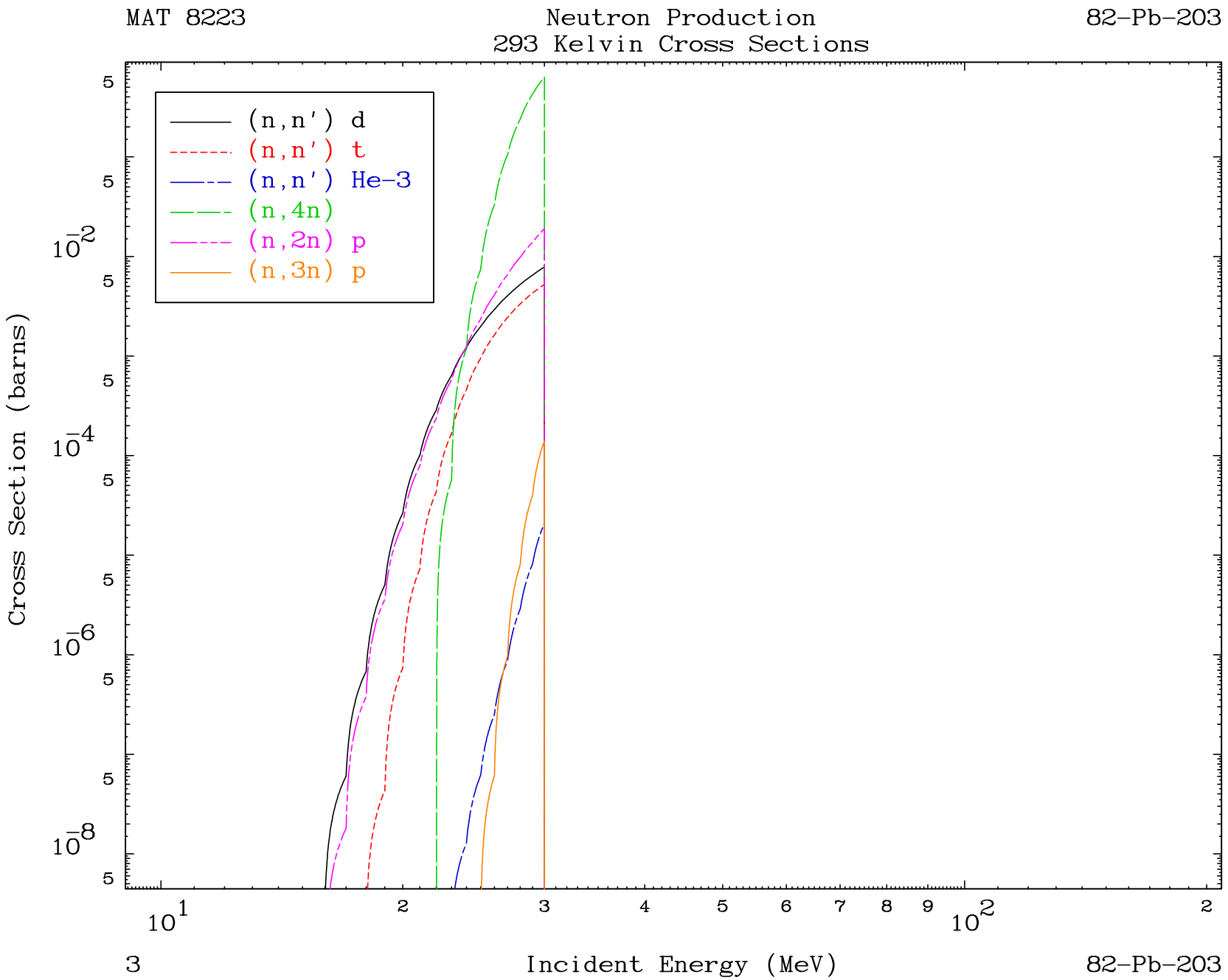
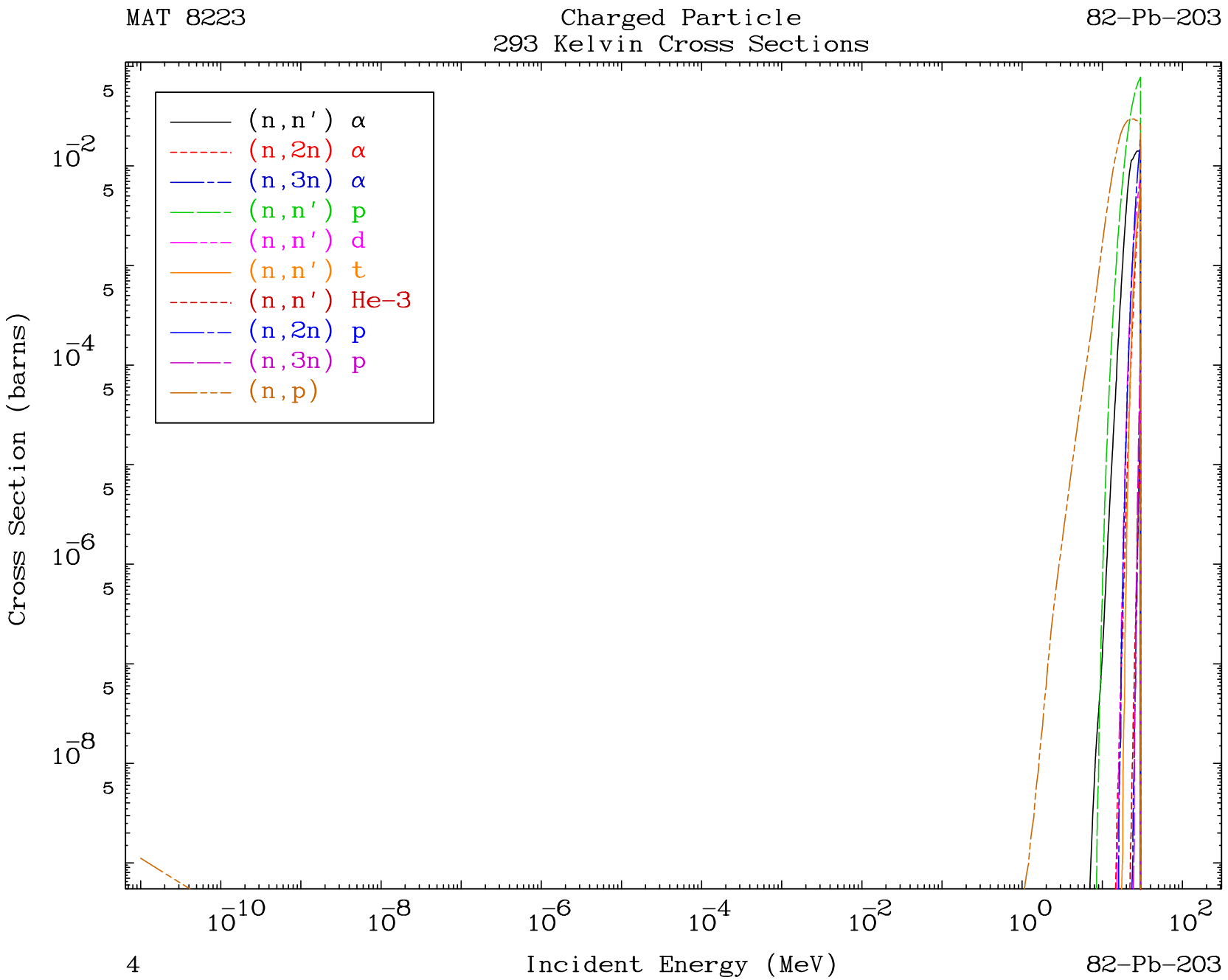
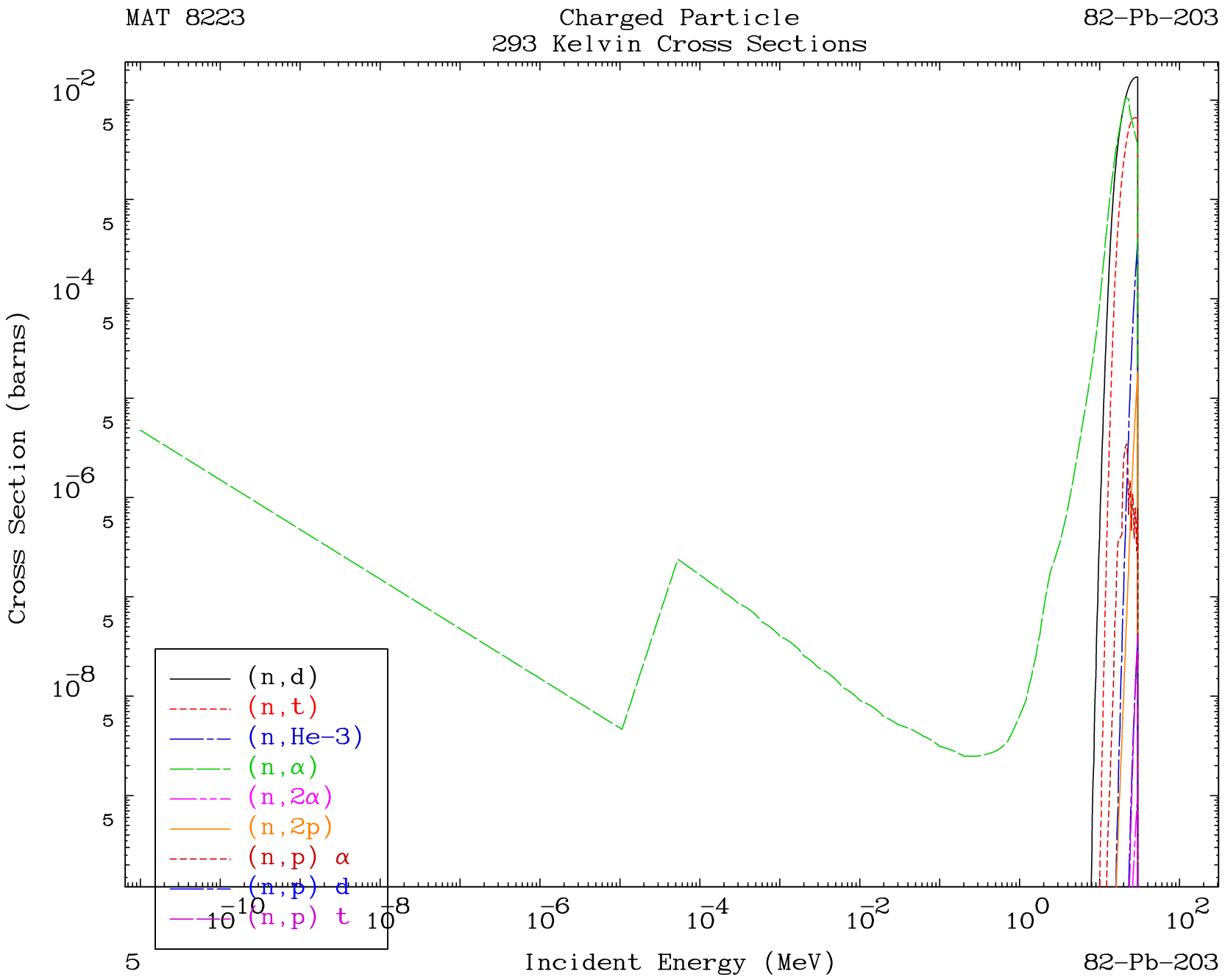
Press Mouse Button to Start

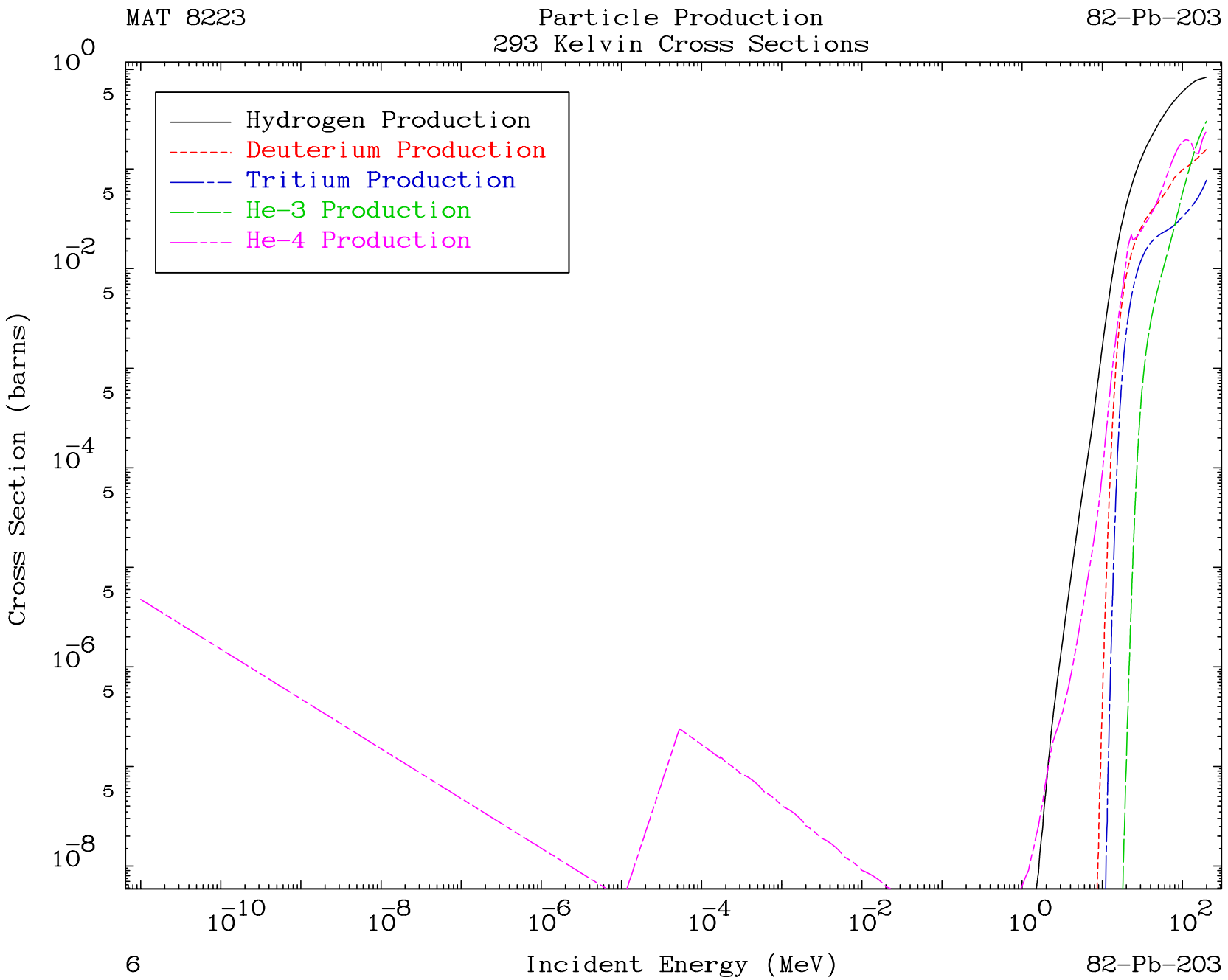

MAT 8223
Major
82-Pb-203
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
82-Pb-203
1
Total
Elastic
Inelastic
(n,remainder)
(n,γ)

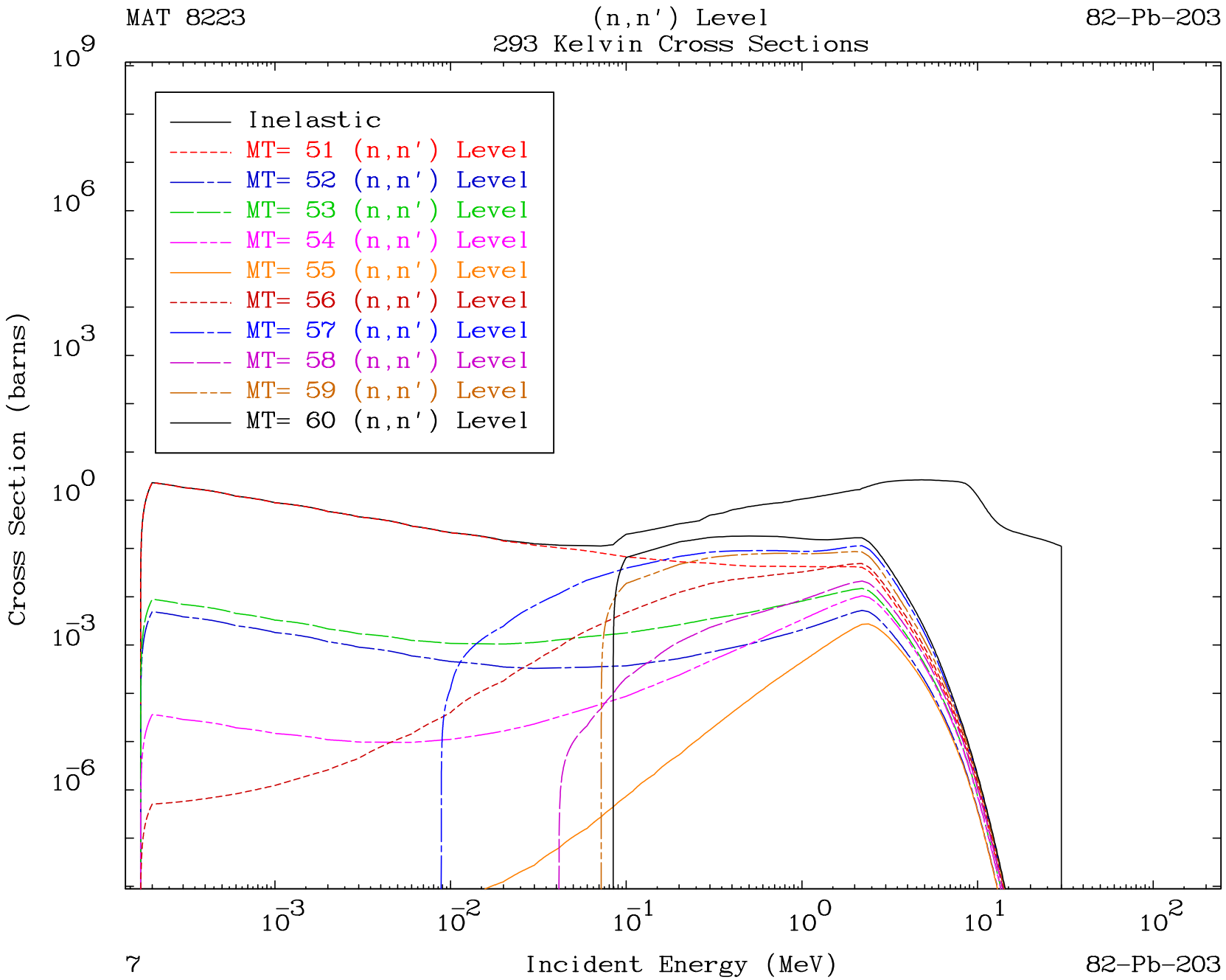

MAT 8223
Neutron Production
293 Kelvin Cross Sections
82-Pb-203
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
Cross Section (barns)
Incident Energy (MeV)
82-Pb-203
2

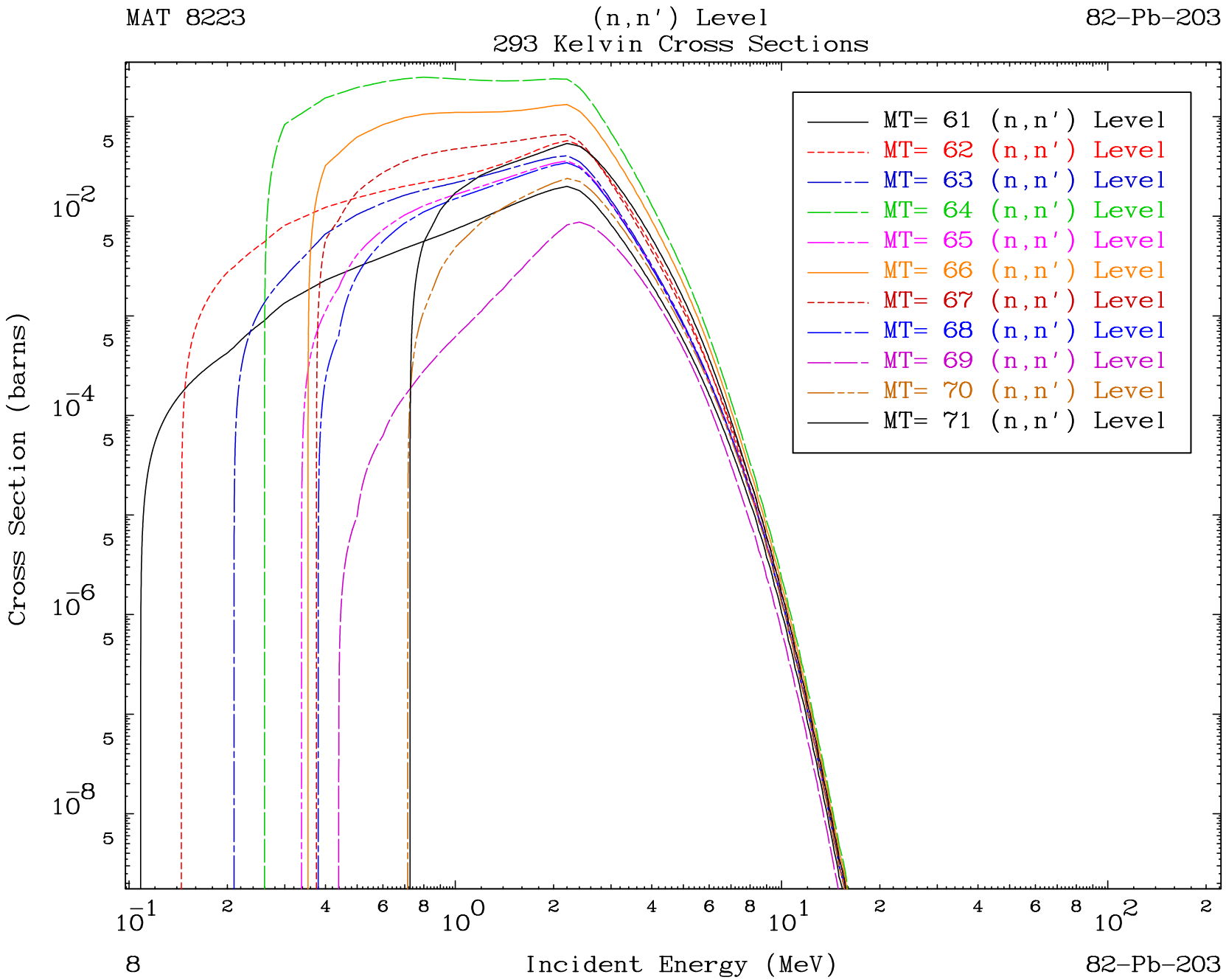

MAT 8223
Neutron Production
293 Kelvin Cross Sections
82-Pb-203
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
82-Pb-203
3

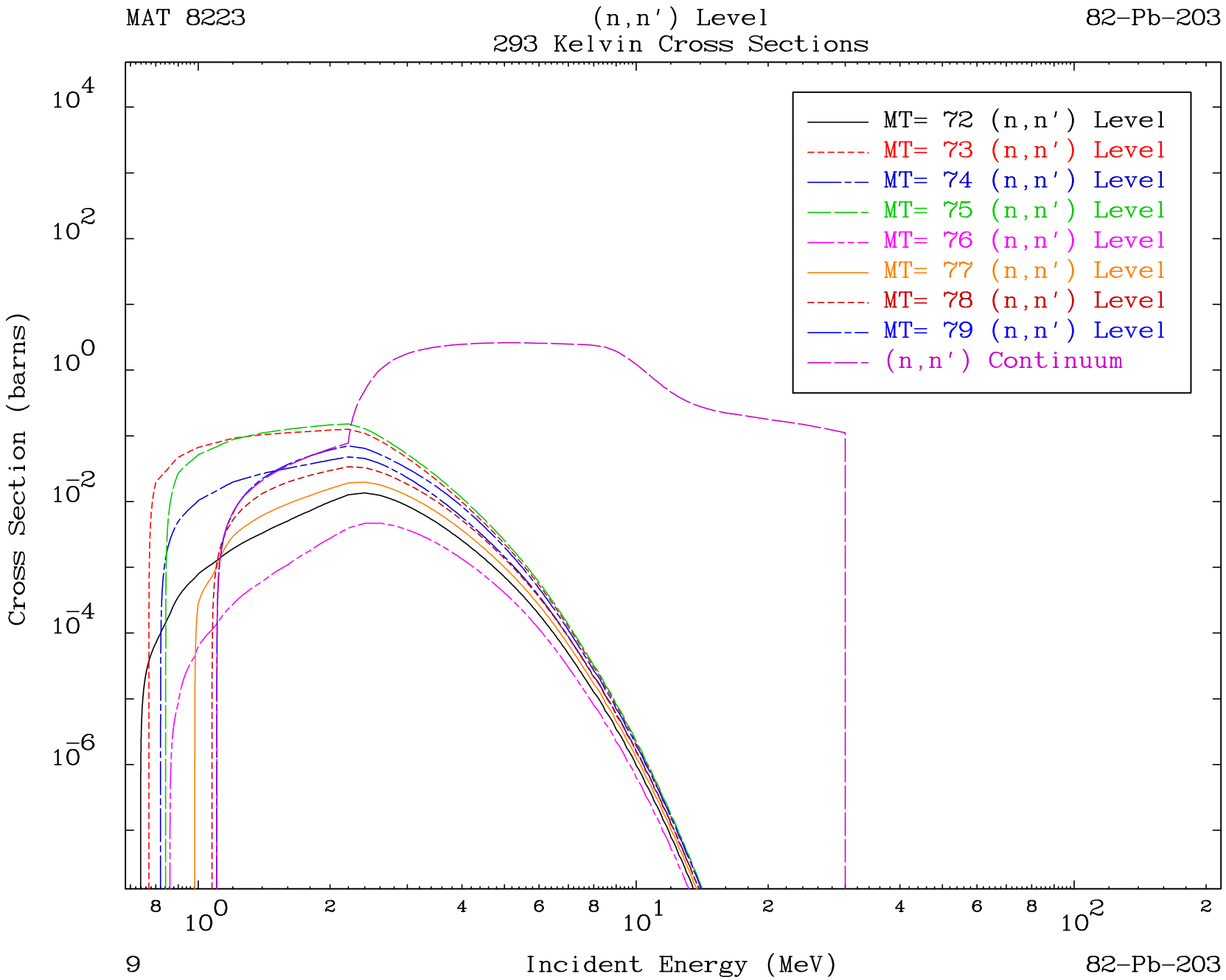

MAT 8223
Charged Particle
293 Kelvin Cross Sections
82-Pb-203
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
Cross Section (barns)
Incident Energy (MeV)
4
82-Pb-203

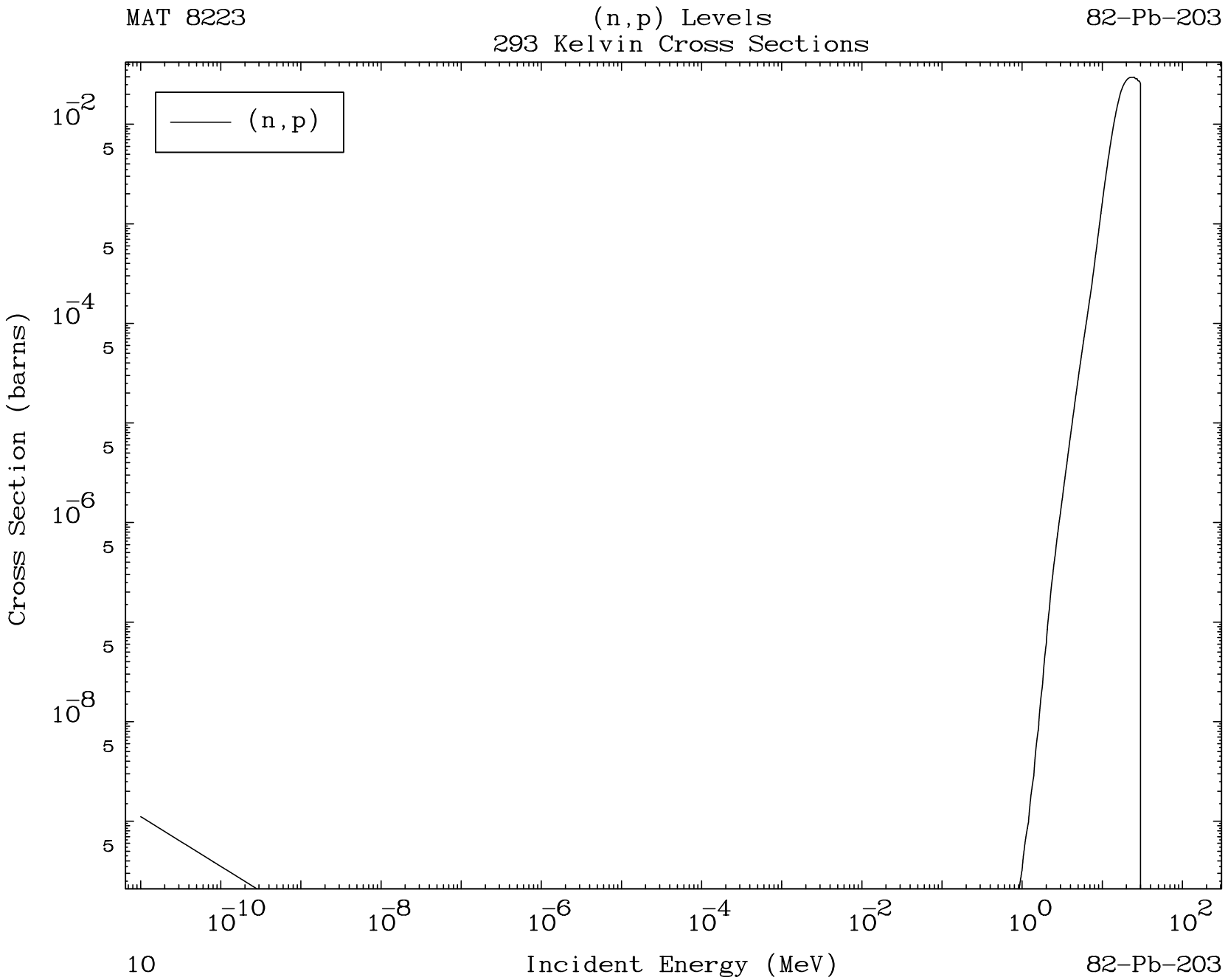

MAT 8223
Charged Particle
293 Kelvin Cross Sections
82-Pb-203
Cross Section (barns)
Incident Energy (MeV)
82-Pb-203
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

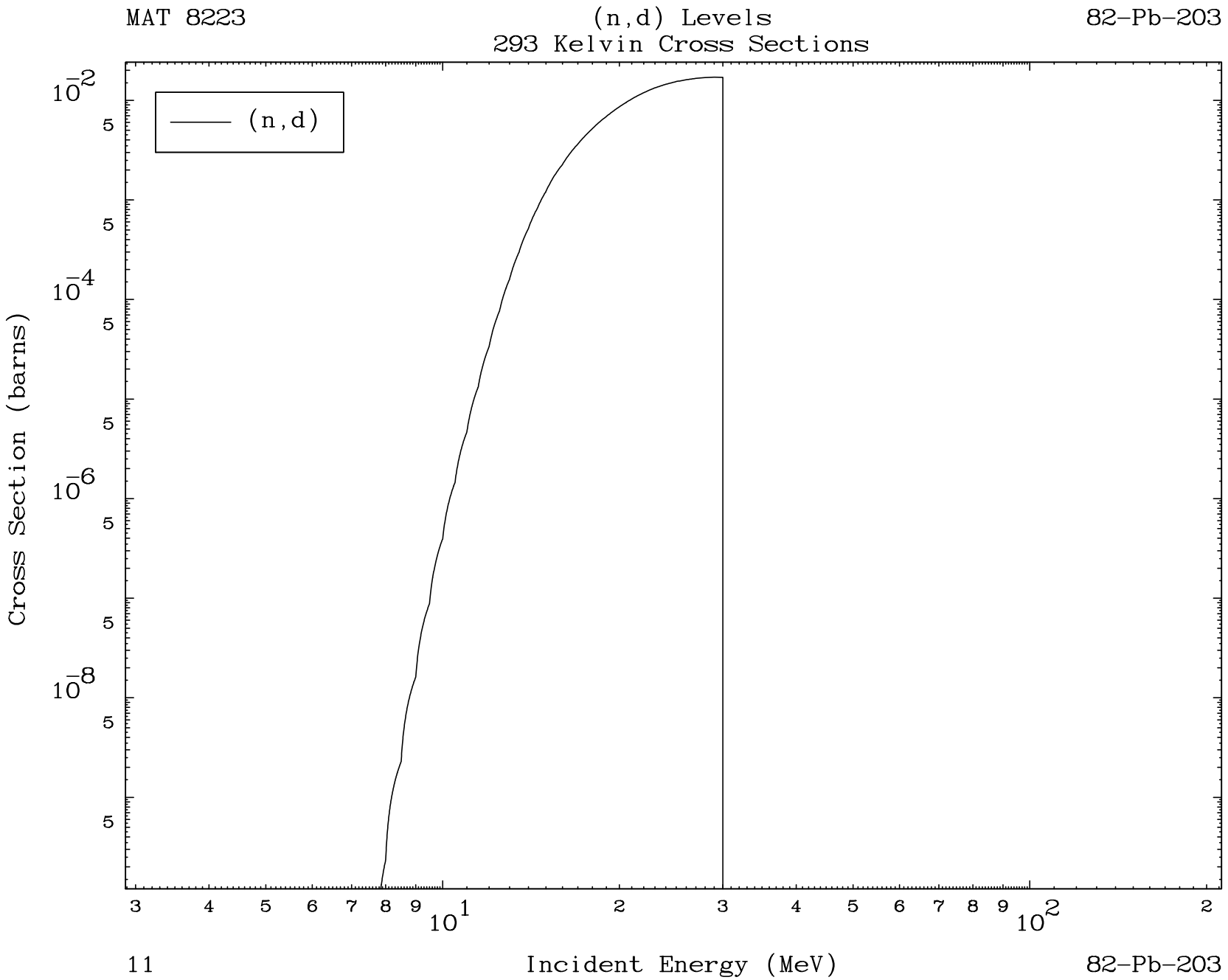

MAT 8223
Particle Production
293 Kelvin Cross Sections
82-Pb-203
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
82-Pb-203
6

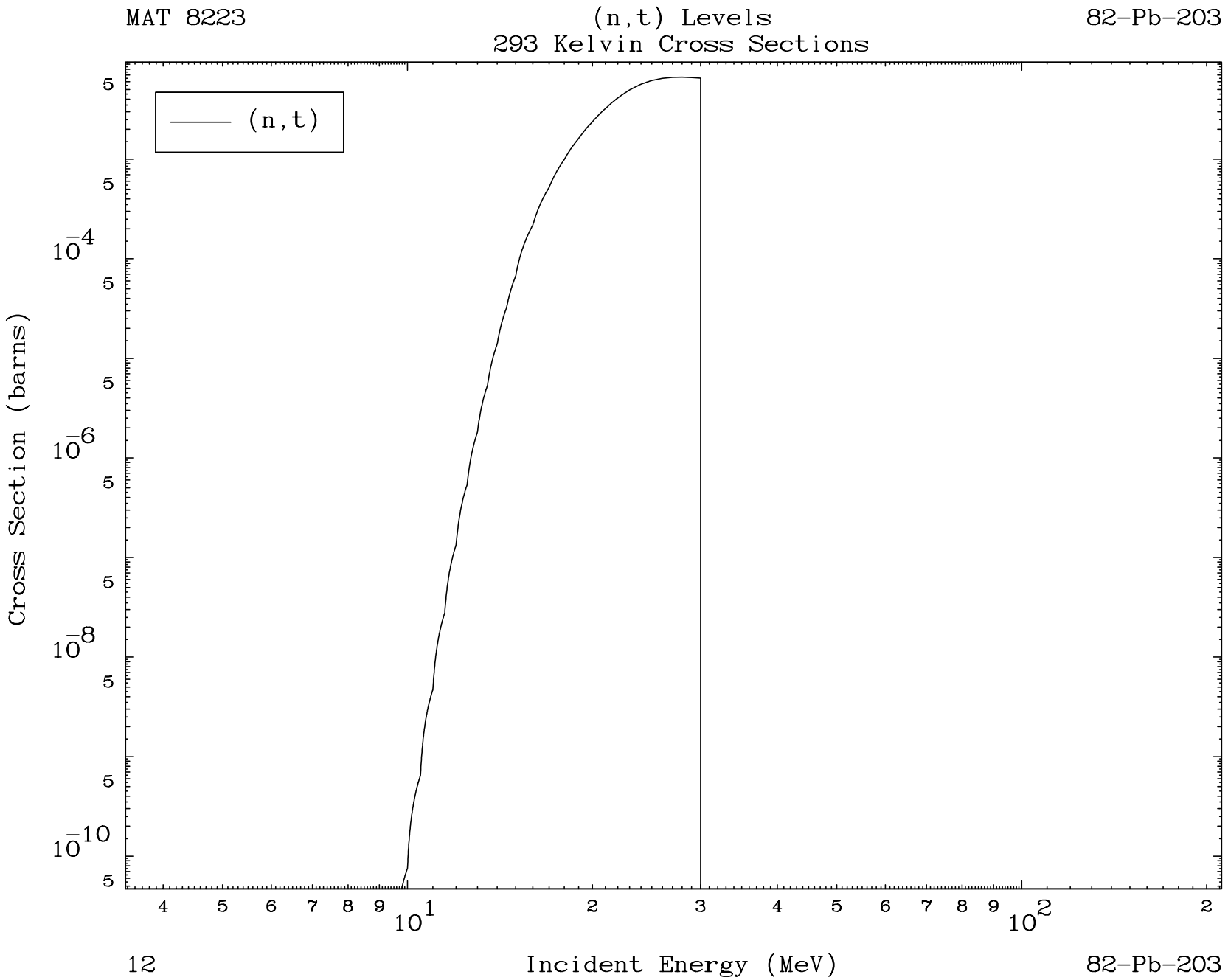

MAT 8223
(n,n') Level
82-Pb-203
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
82-Pb-203

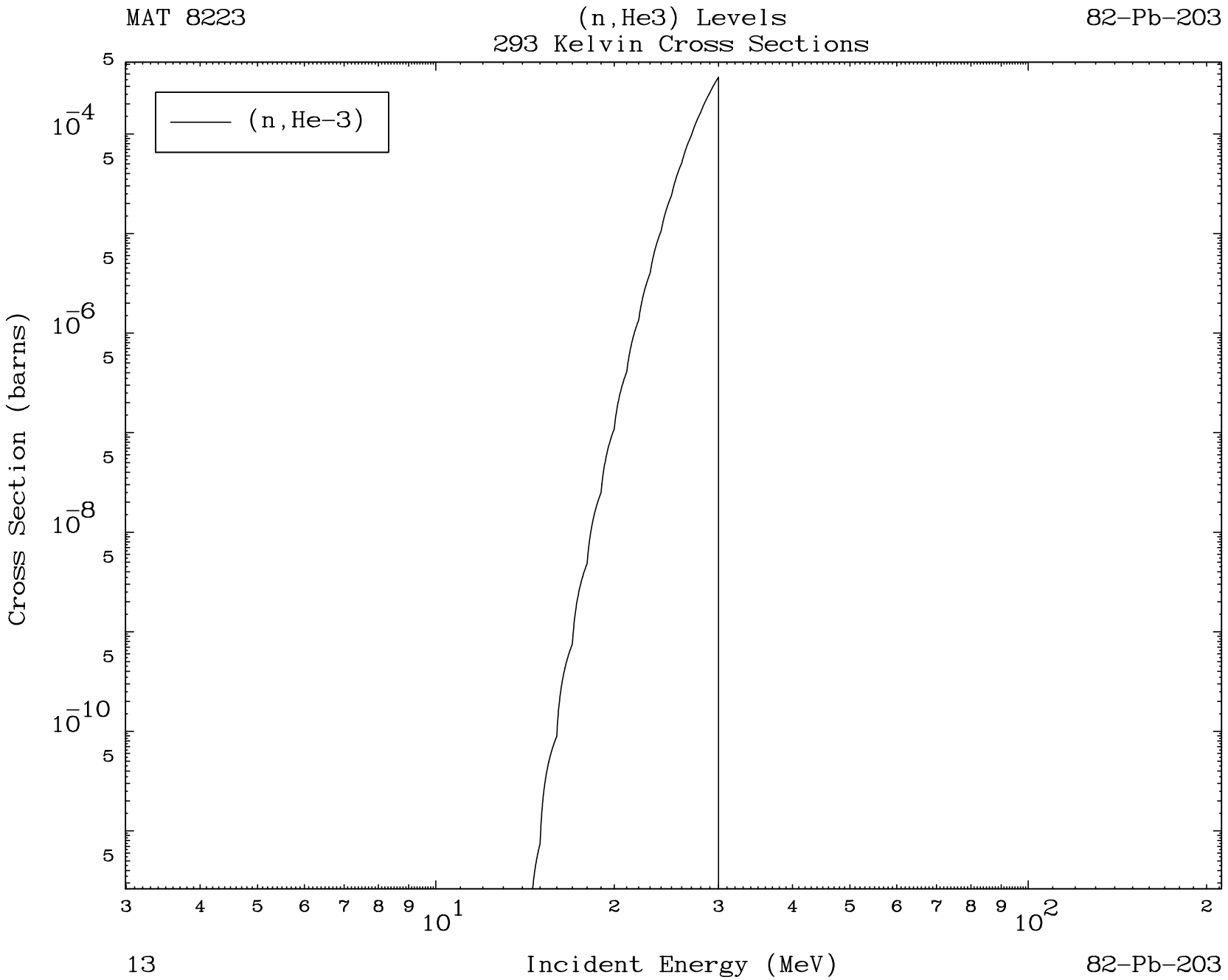

MAT 8223
(n,n') Level
82-Pb-203
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
8
82-Pb-203

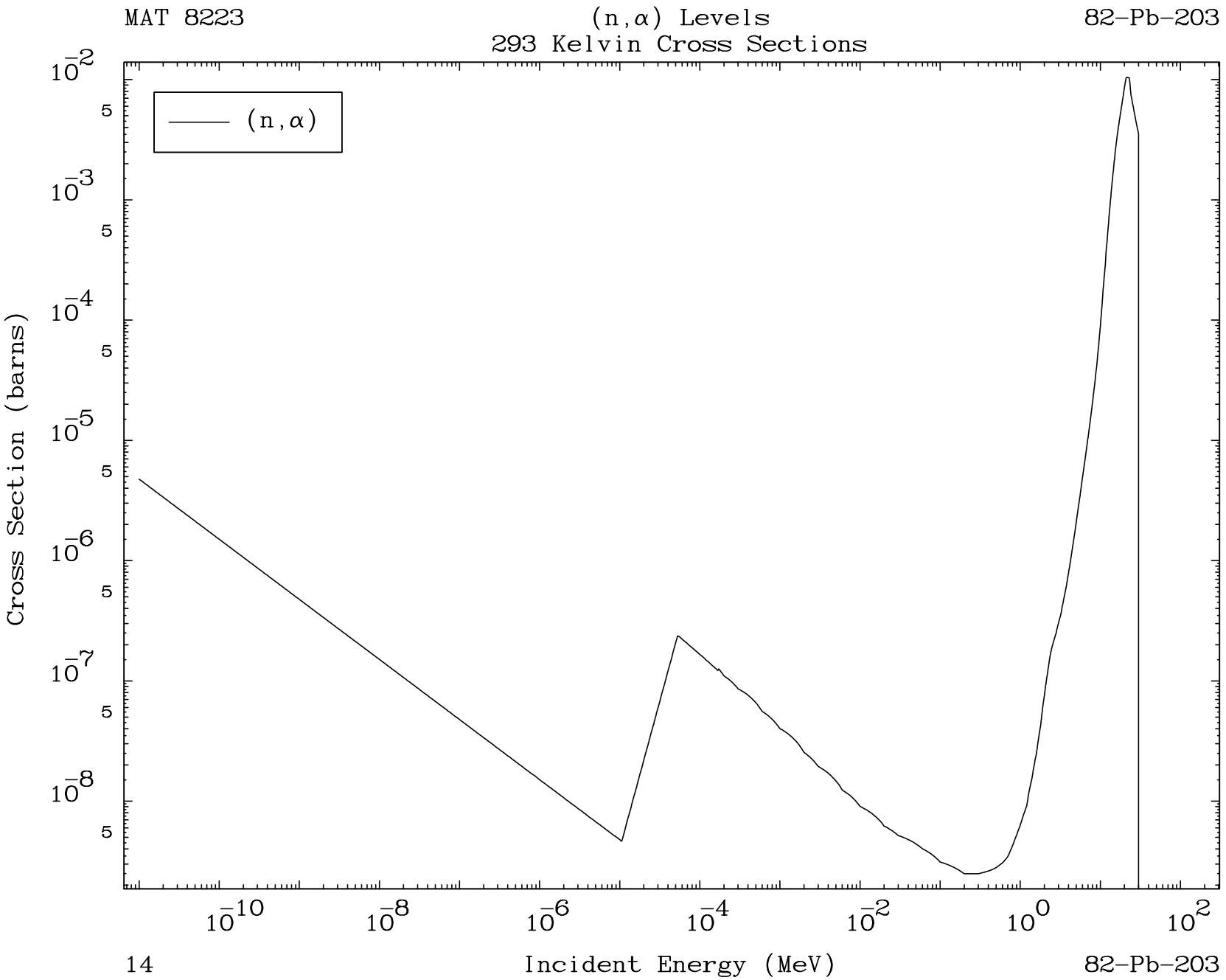

MAT 8223
(n,n') Level
82-Pb-203
293 Kelvin Cross Sections
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
82-Pb-203

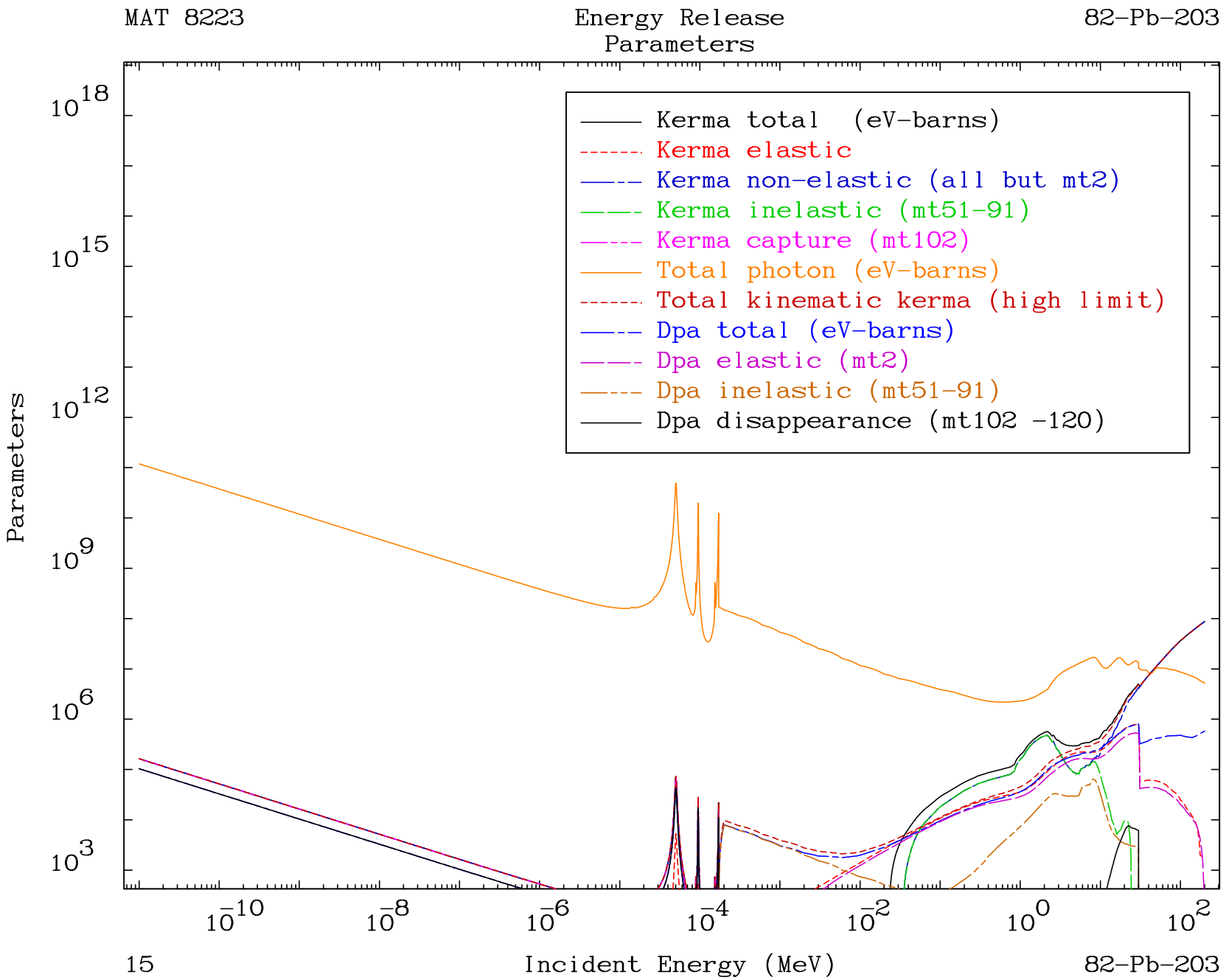

MAT 8223
(n,p) Levels
82-Pb-203
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
5
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
10
Incident Energy (MeV)
82-Pb-203

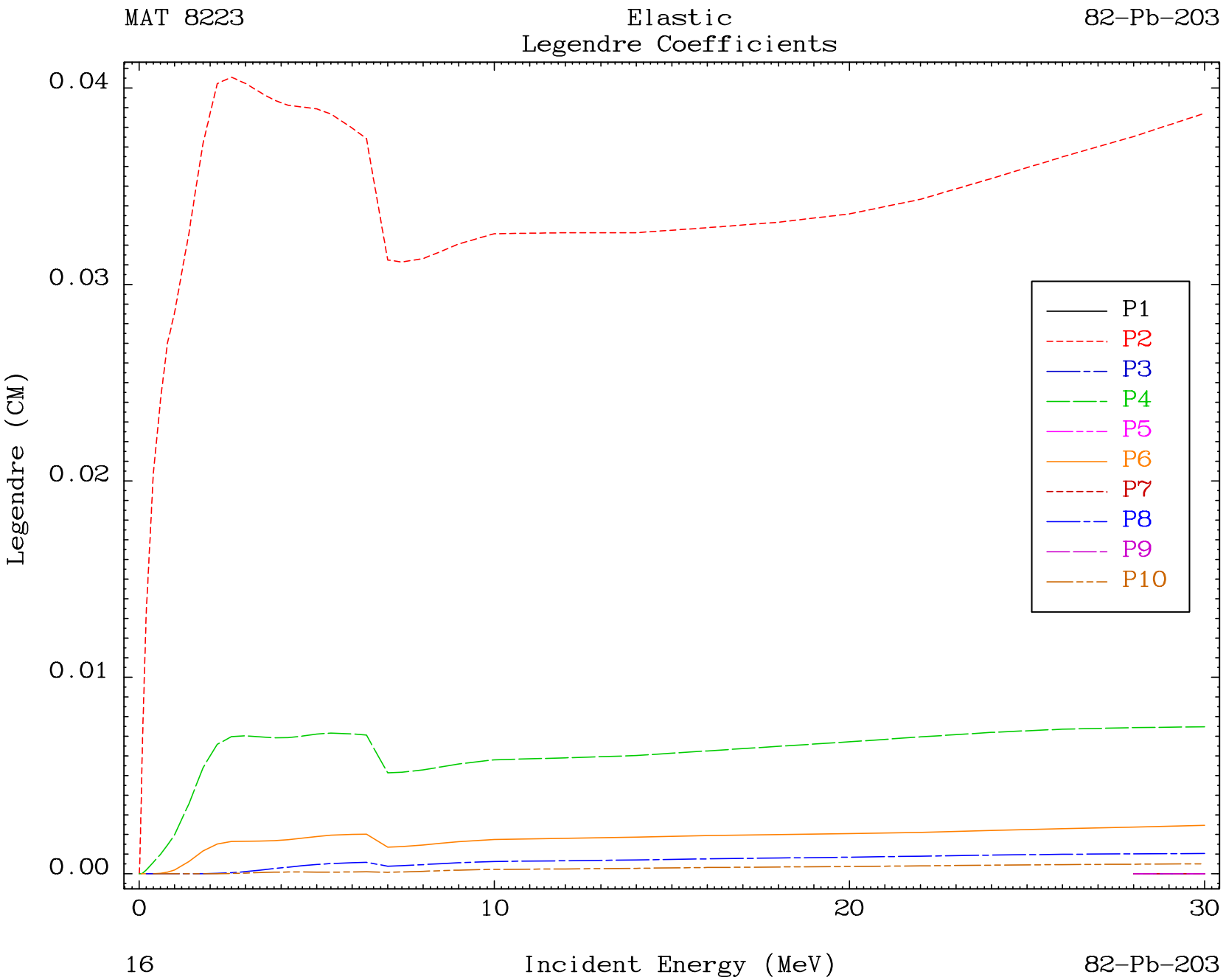

MAT 8223
(n,d) Levels
82-Pb-203
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
3 4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
11
Incident Energy (MeV)
82-Pb-203

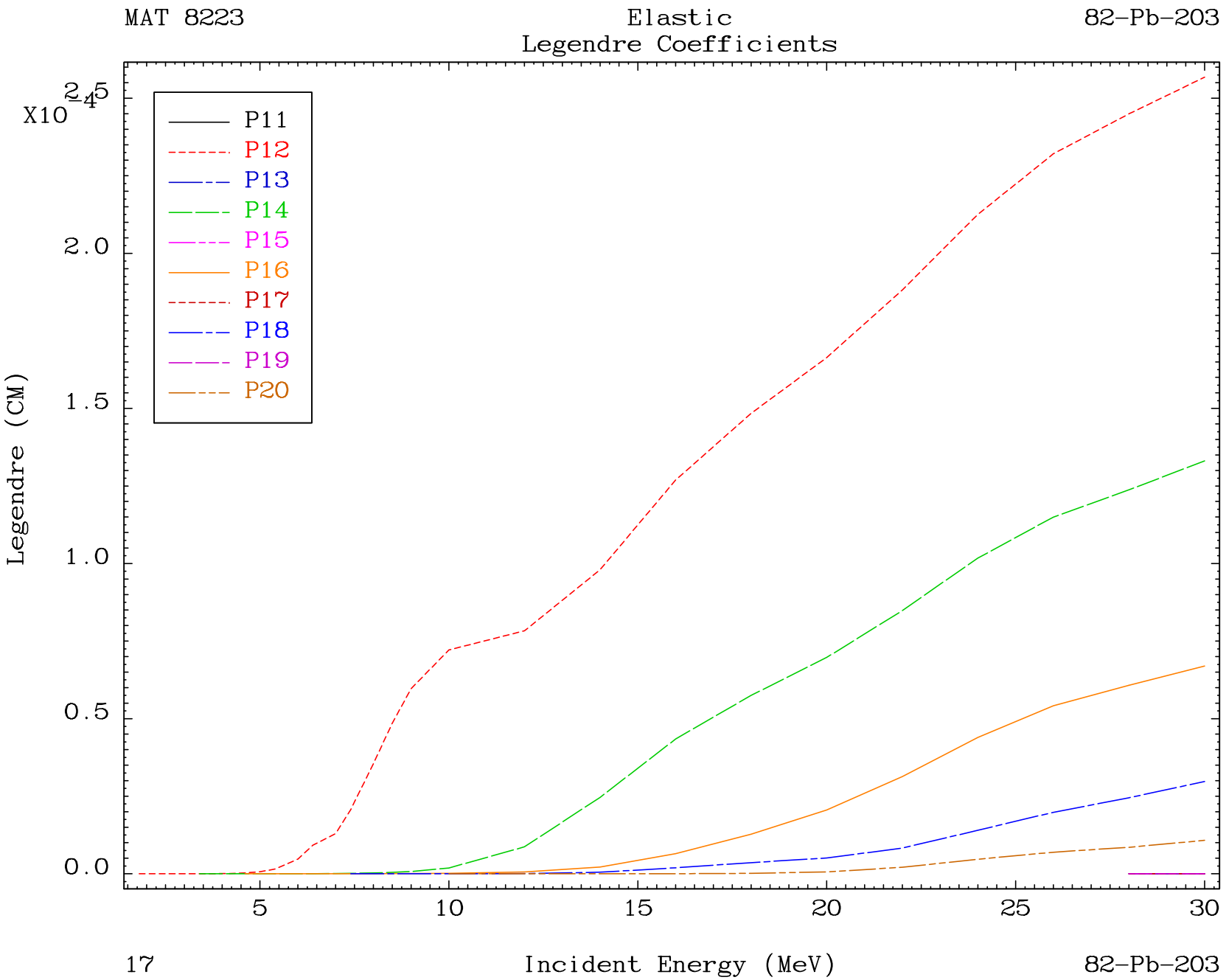

MAT 8223
(n,t) Levels
82-Pb-203
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
82-Pb-203

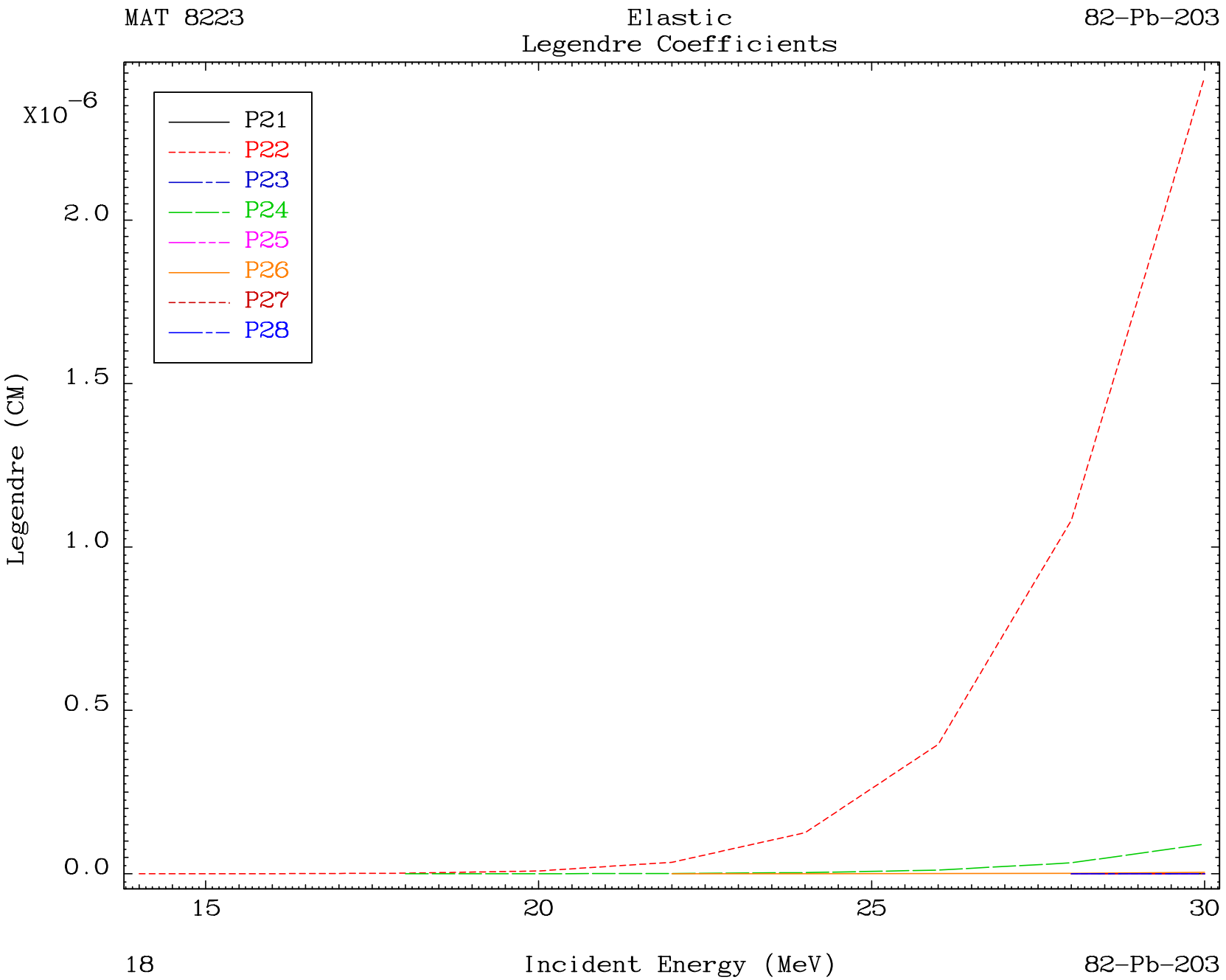

MAT 8223
(n,He3) Levels
82-Pb-203
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
Incident Energy (MeV)
10 1
10 2
13
82-Pb-203

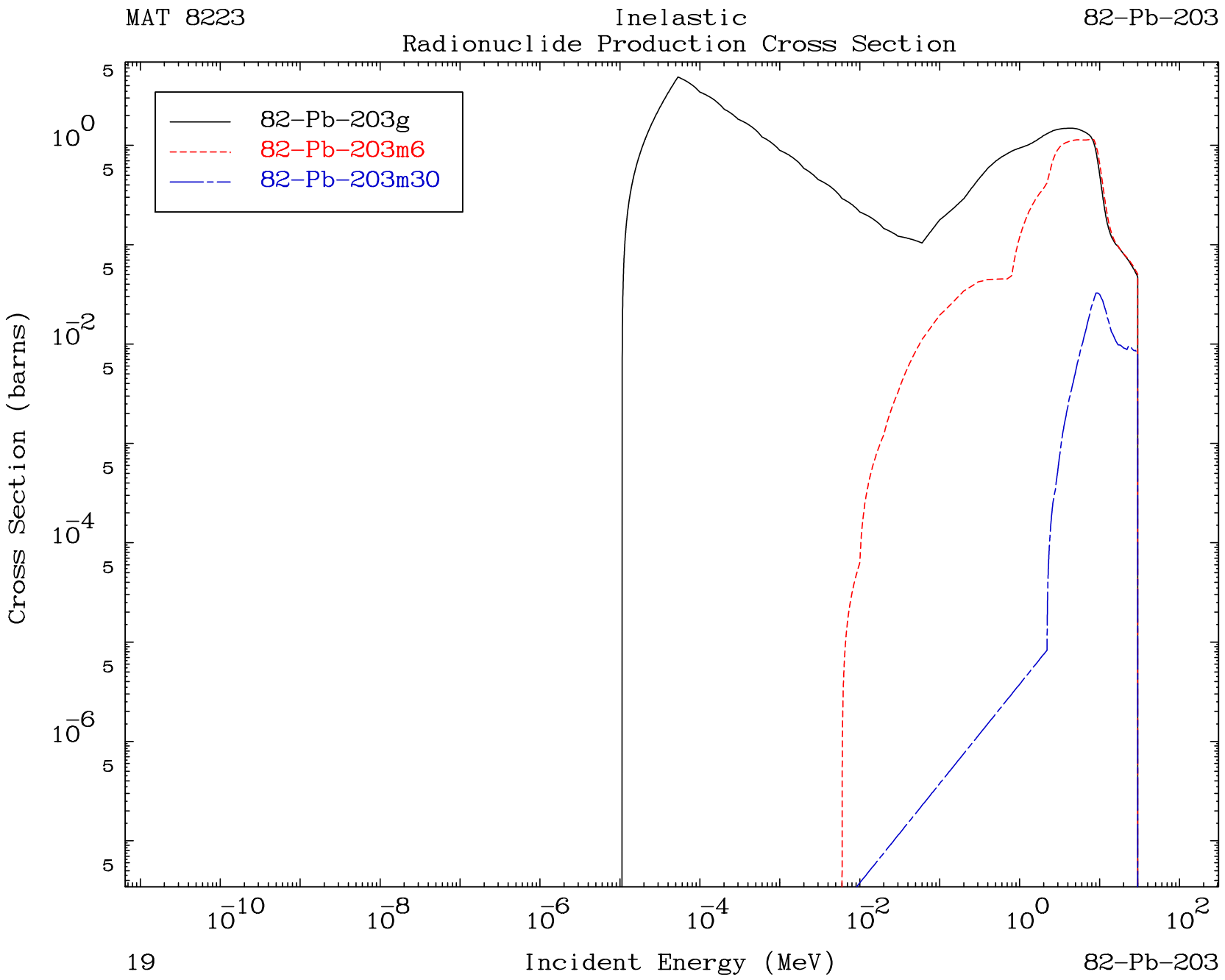

MAT 8223
(n,α) Levels
82-Pb-203
293 Kelvin Cross Sections
(n,α)
Cross Section (barns)
Incident Energy (MeV)
14
82-Pb-203

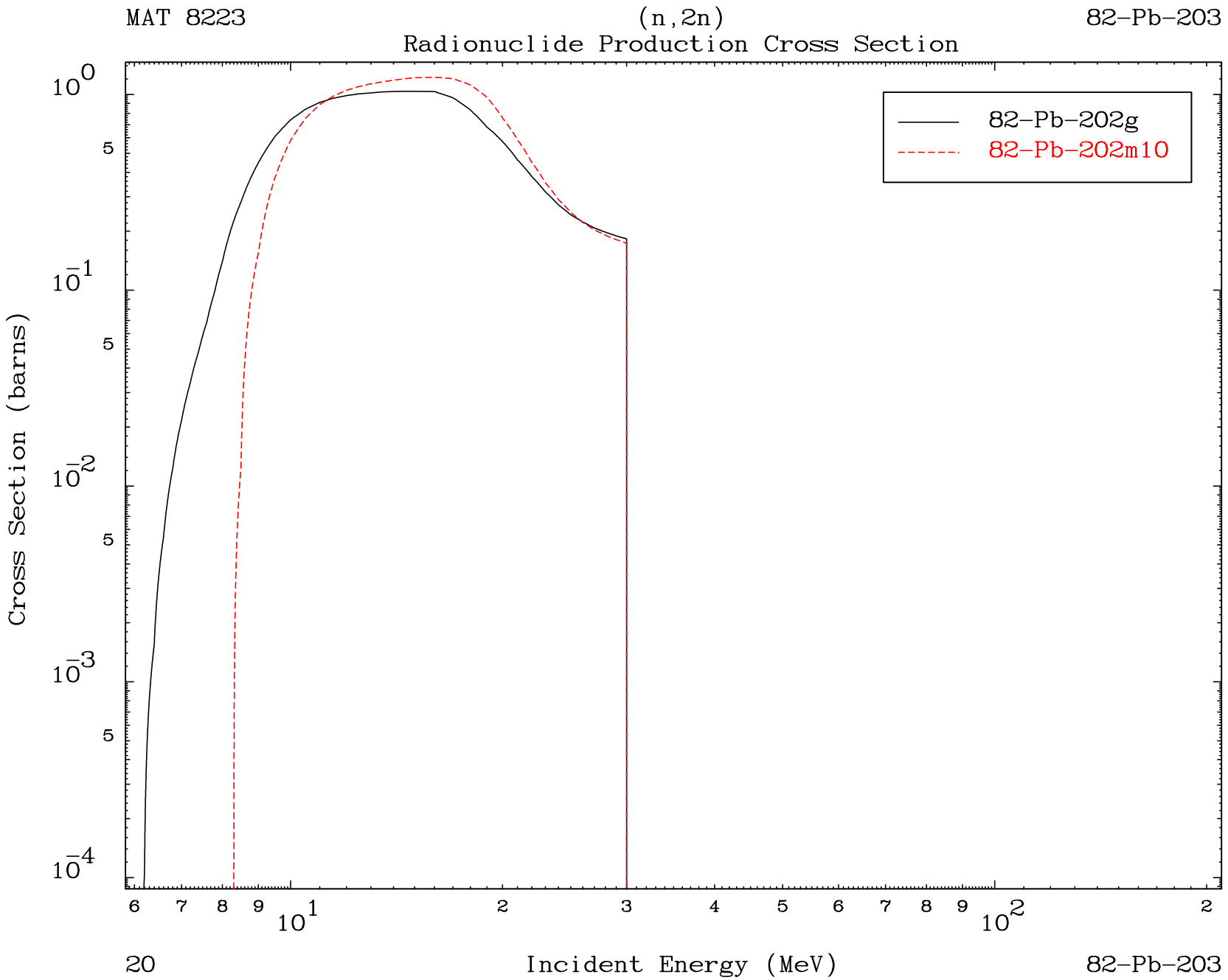

MAT 8223
Energy Release
Parameters
82-Pb-203
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{18}
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
Incident Energy (MeV)
15
82-Pb-203

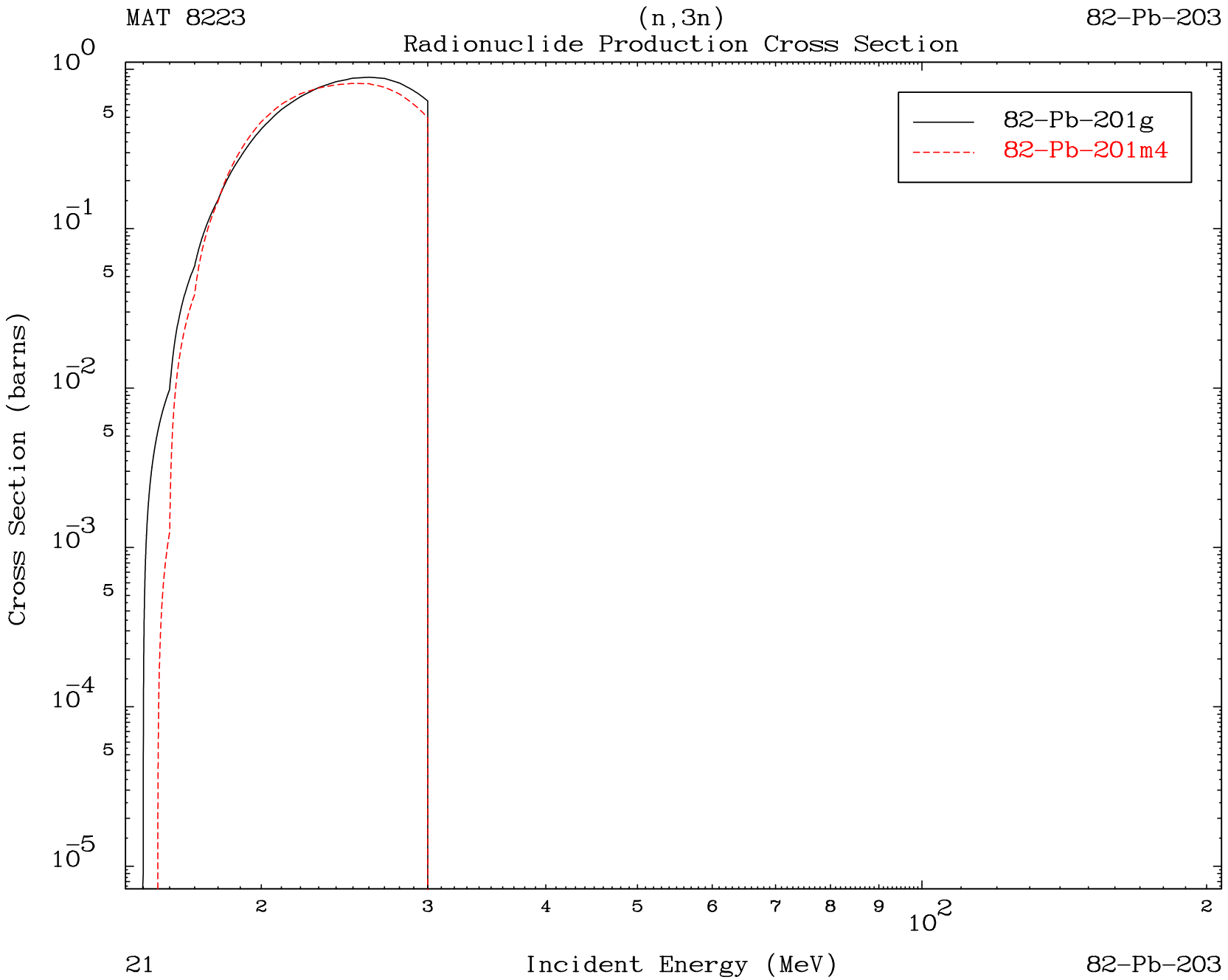

MAT 8223
Elastic
Legendre Coefficients
82-Pb-203
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
10
20
30
16
Incident Energy (MeV)
82-Pb-203

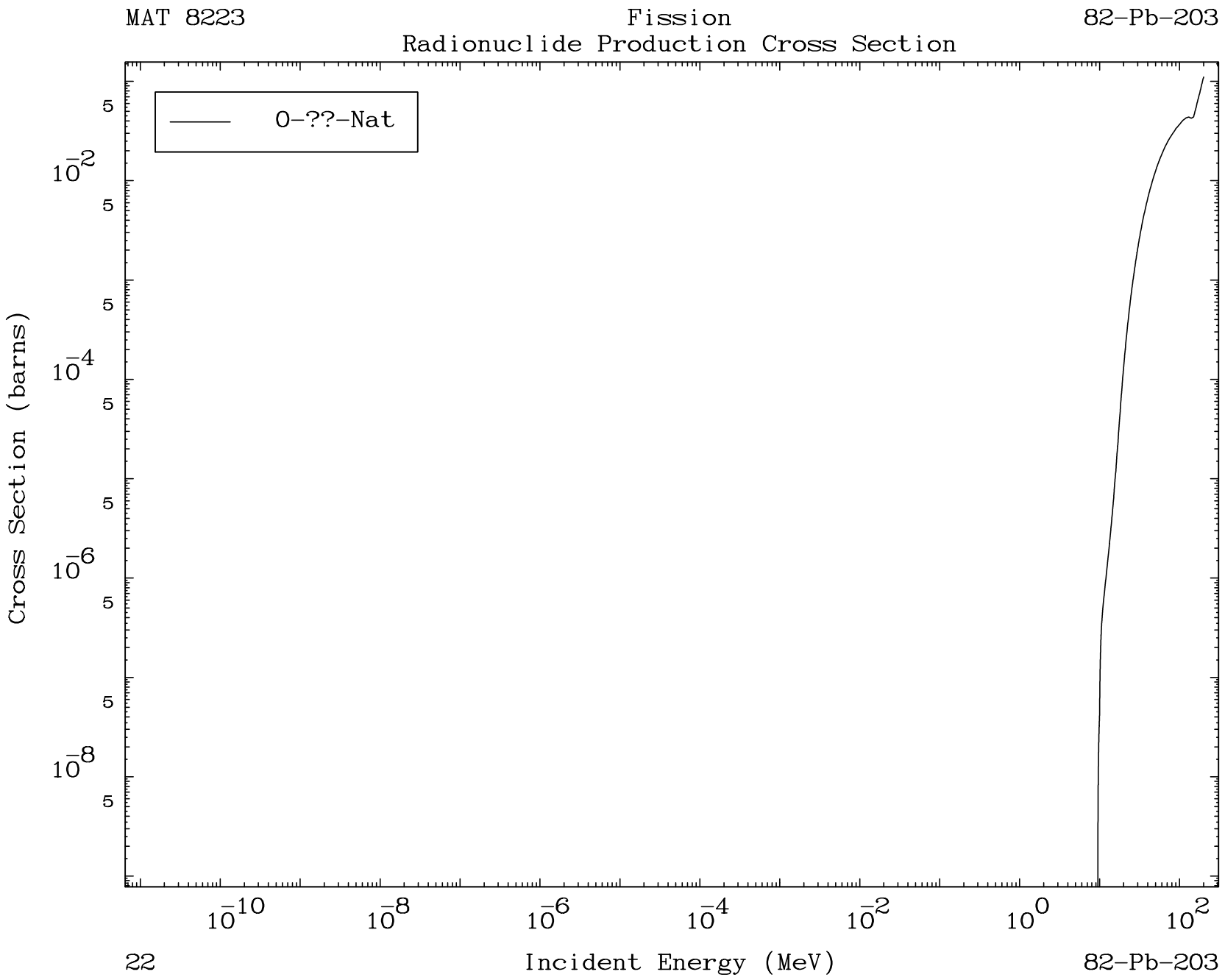

MAT 8223
Elastic
Legendre Coefficients
82-Pb-203
X10 -4
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
5
10
15
20
25
30
17
Incident Energy (MeV)
82-Pb-203

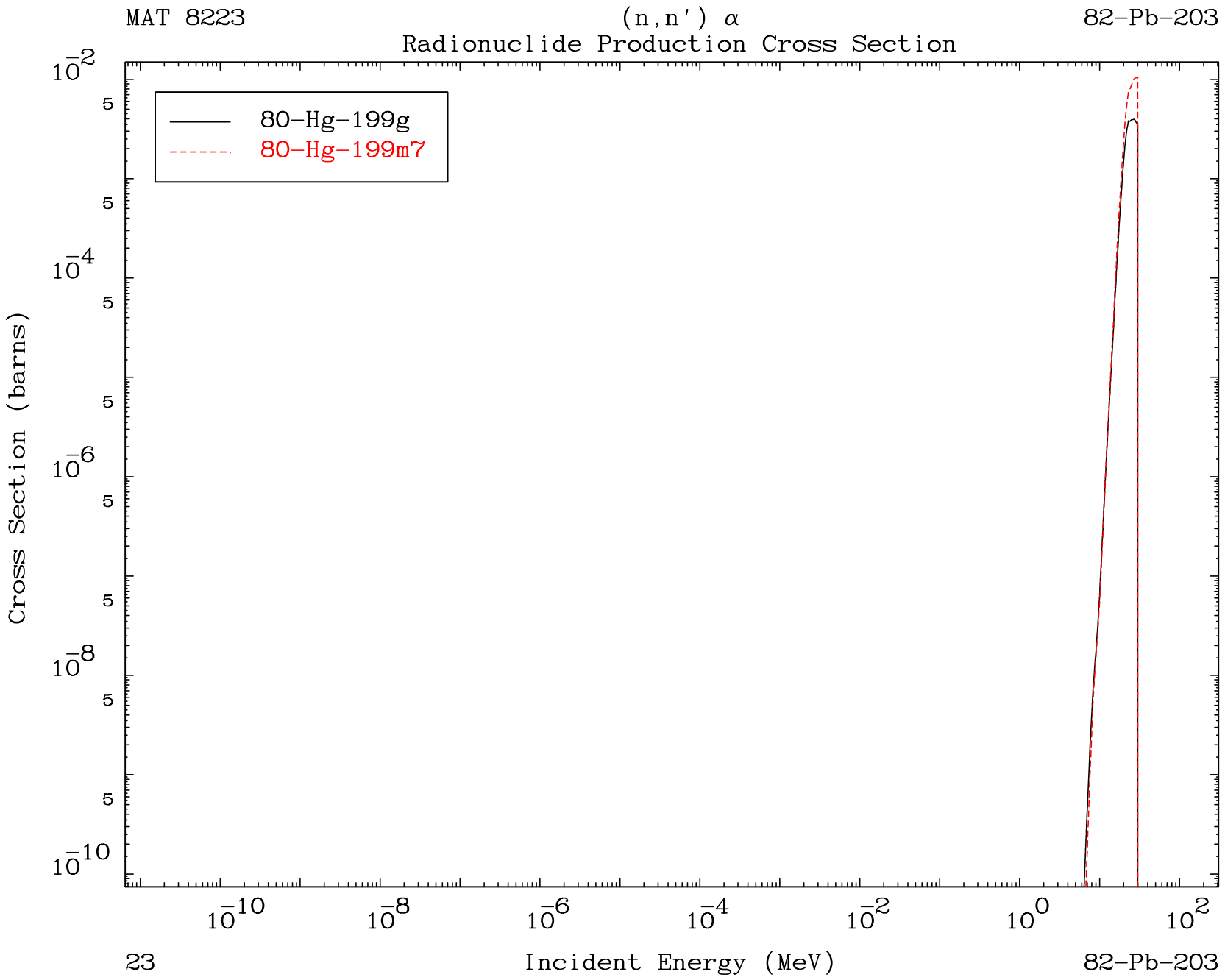

MAT 8223
Elastic
Legendre Coefficients
82-Pb-203
X10^-6
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
15
20
25
30
18
Incident Energy (MeV)
82-Pb-203

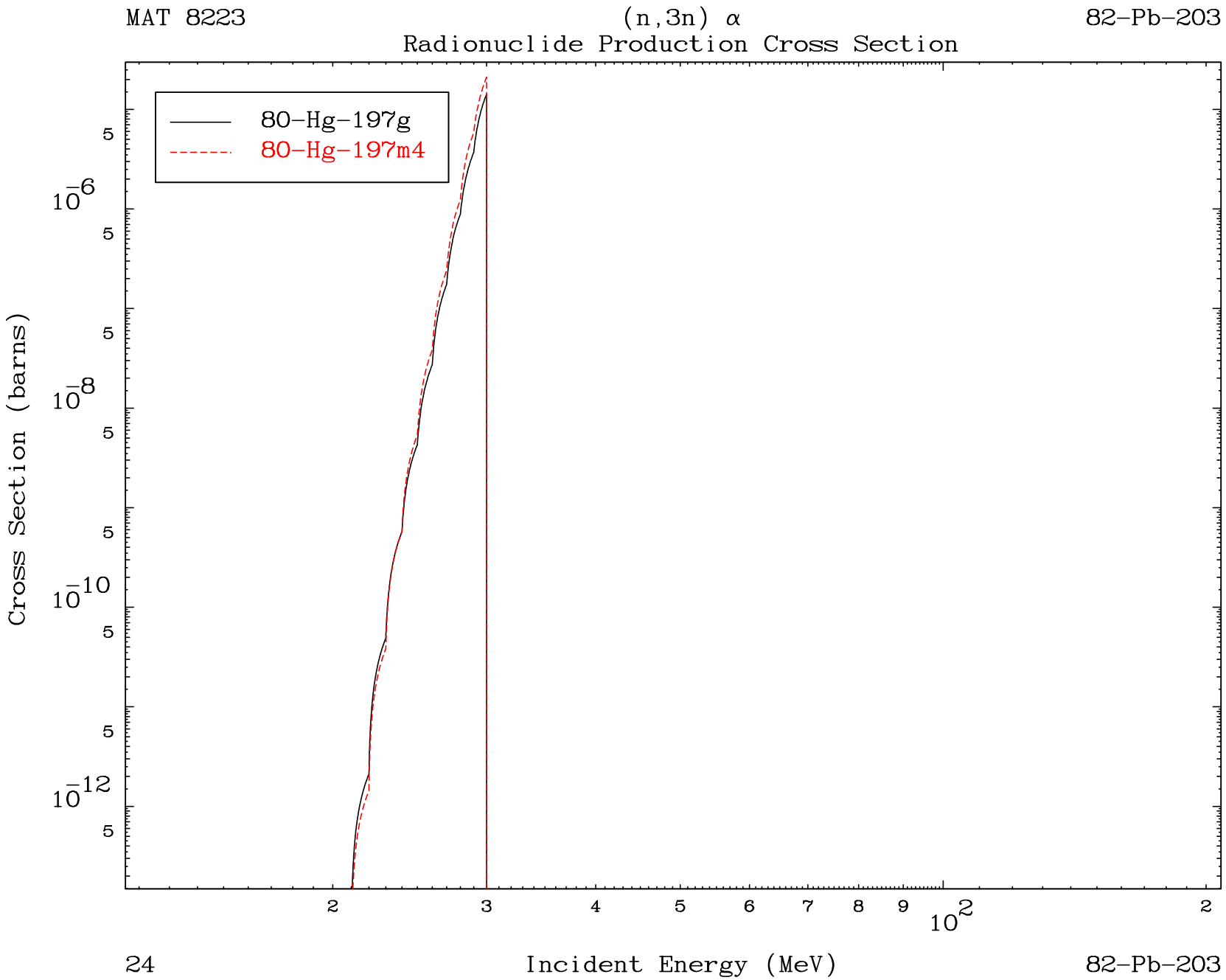

MAT 8223
Inelastic
82-Pb-203
Radionuclide Production Cross Section
82-Pb-203g
82-Pb-203m6
82-Pb-203m30
Cross Section (barns)
Incident Energy (MeV)
19
82-Pb-203

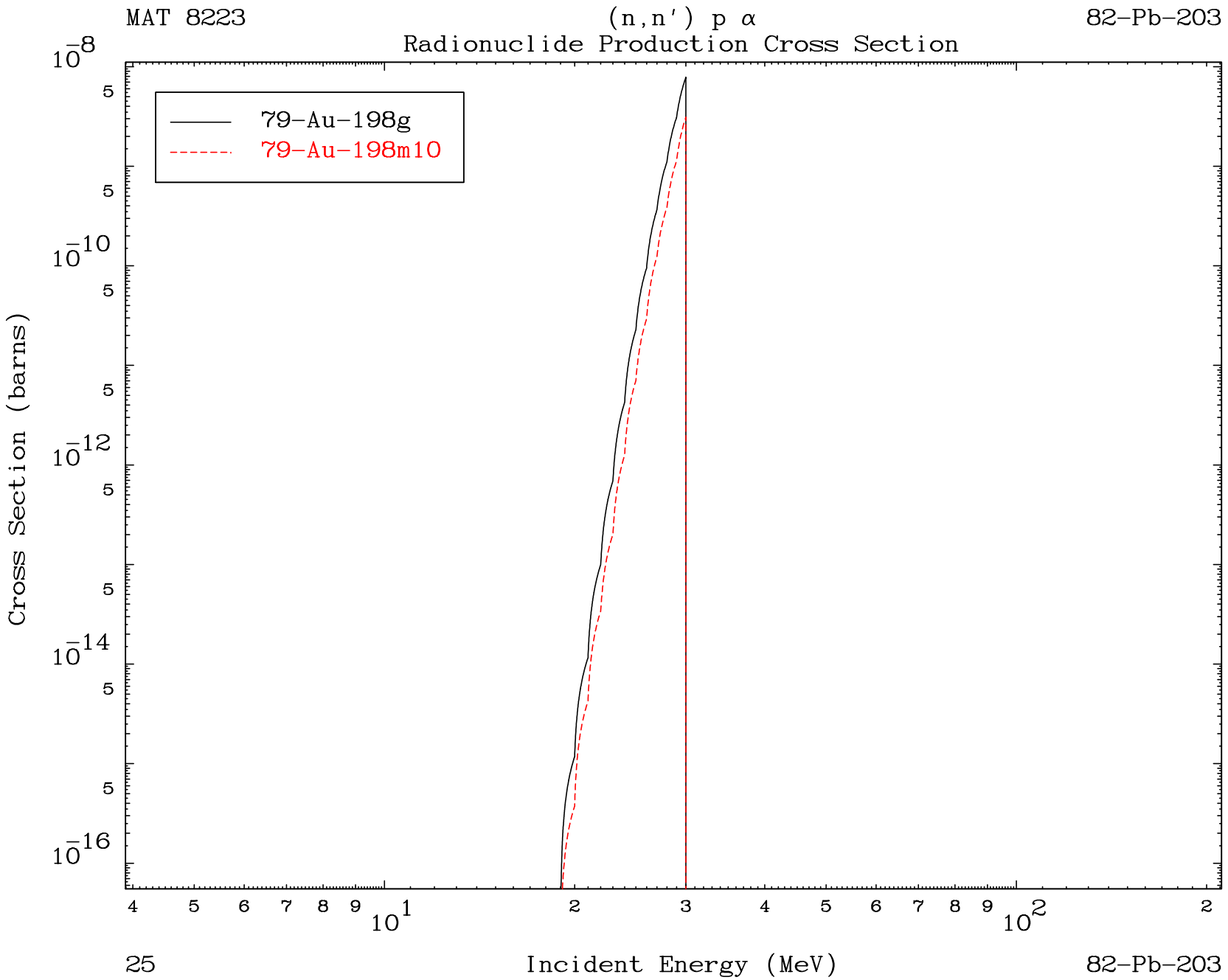

MAT 8223
(n,2n)
82-Pb-203
Radionuclide Production Cross Section
82-Pb-202g
82-Pb-202m10
Cross Section (barns)
Incident Energy (MeV)
20
82-Pb-203

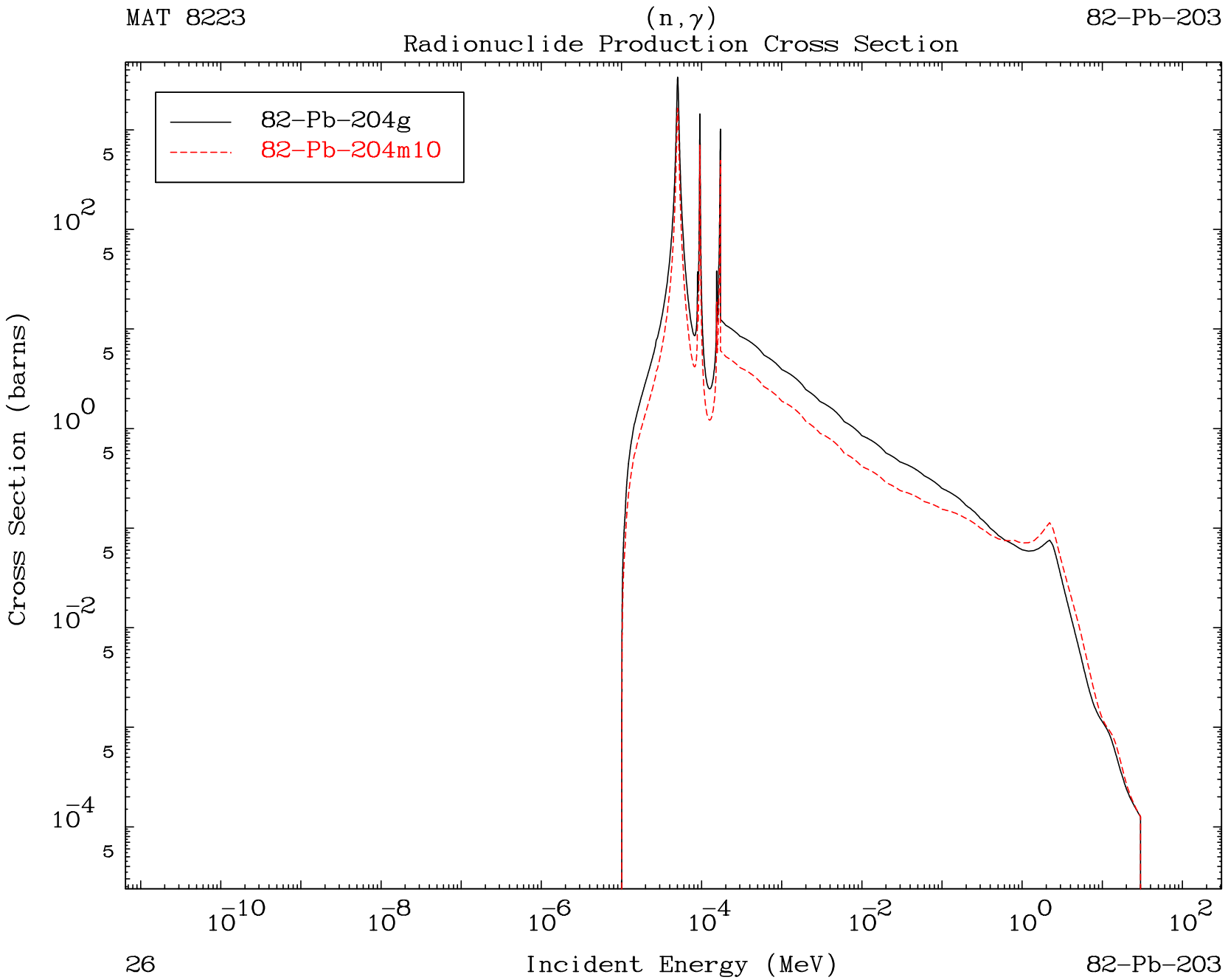

MAT 8223
(n,3n)
82-Pb-203
Radionuclide Production Cross Section
82-Pb-201g
82-Pb-201m4
Cross Section (barns)
Incident Energy (MeV)
21
82-Pb-203


MAT 8223
Fission
82-Pb-203
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
22
82-Pb-203


MAT 8223
(n,n') α
82-Pb-203
Radionuclide Production Cross Section
80-Hg-199g
80-Hg-199m7
Cross Section (barns)
Incident Energy (MeV)
23
82-Pb-203


MAT 8223
(n,3n) α
82-Pb-203
Radionuclide Production Cross Section
80-Hg-197g
80-Hg-197m4
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
24
Incident Energy (MeV)
82-Pb-203


MAT 8223
(n,n') p α
82-Pb-203
Radionuclide Production Cross Section
79-Au-198g
79-Au-198m10
Cross Section (barns)
Incident Energy (MeV)
25
82-Pb-203


MAT 8223
(n,γ)
82-Pb-203
Radionuclide Production Cross Section
82-Pb-204g
82-Pb-204m10
Cross Section (barns)
Incident Energy (MeV)
26
82-Pb-203