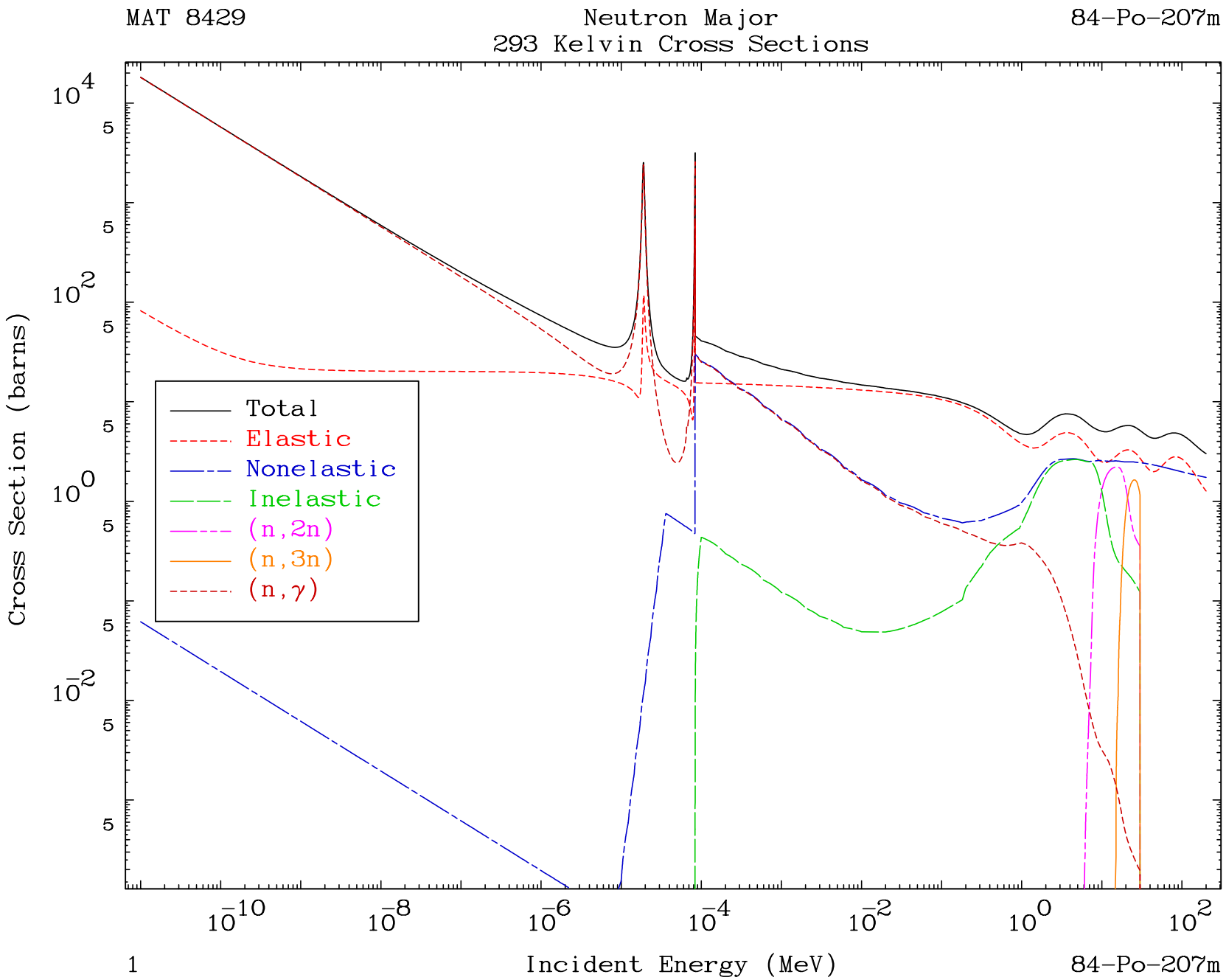
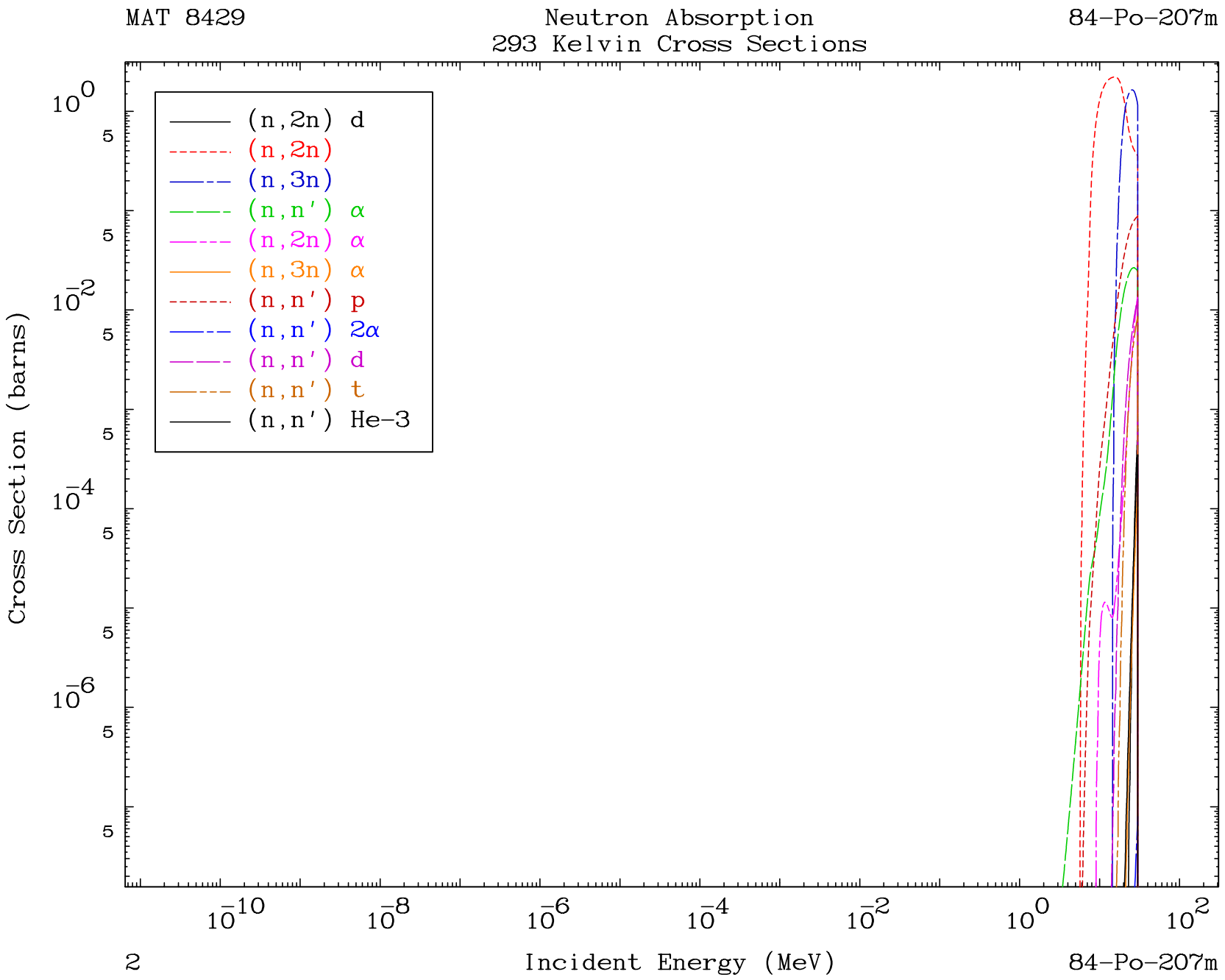
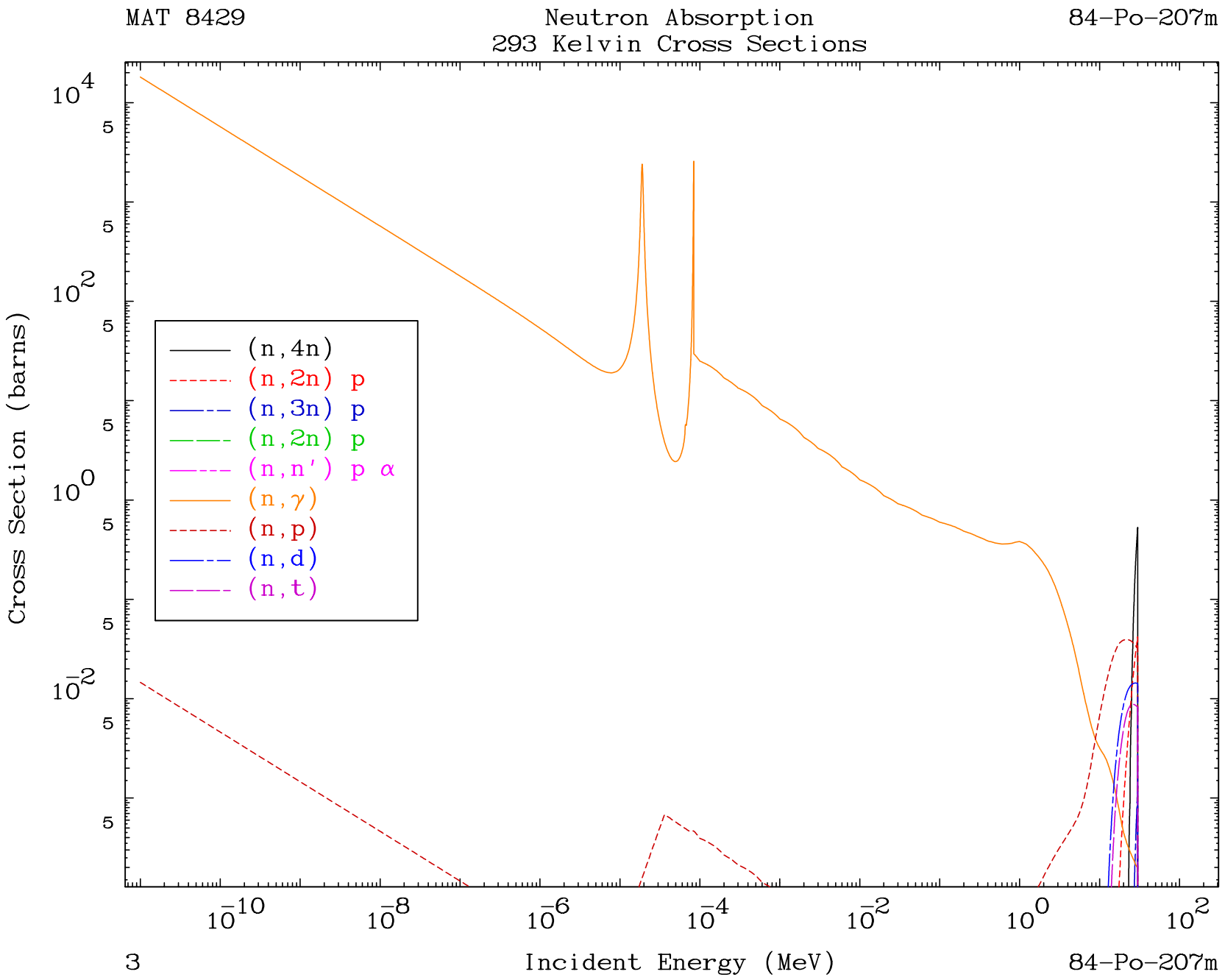
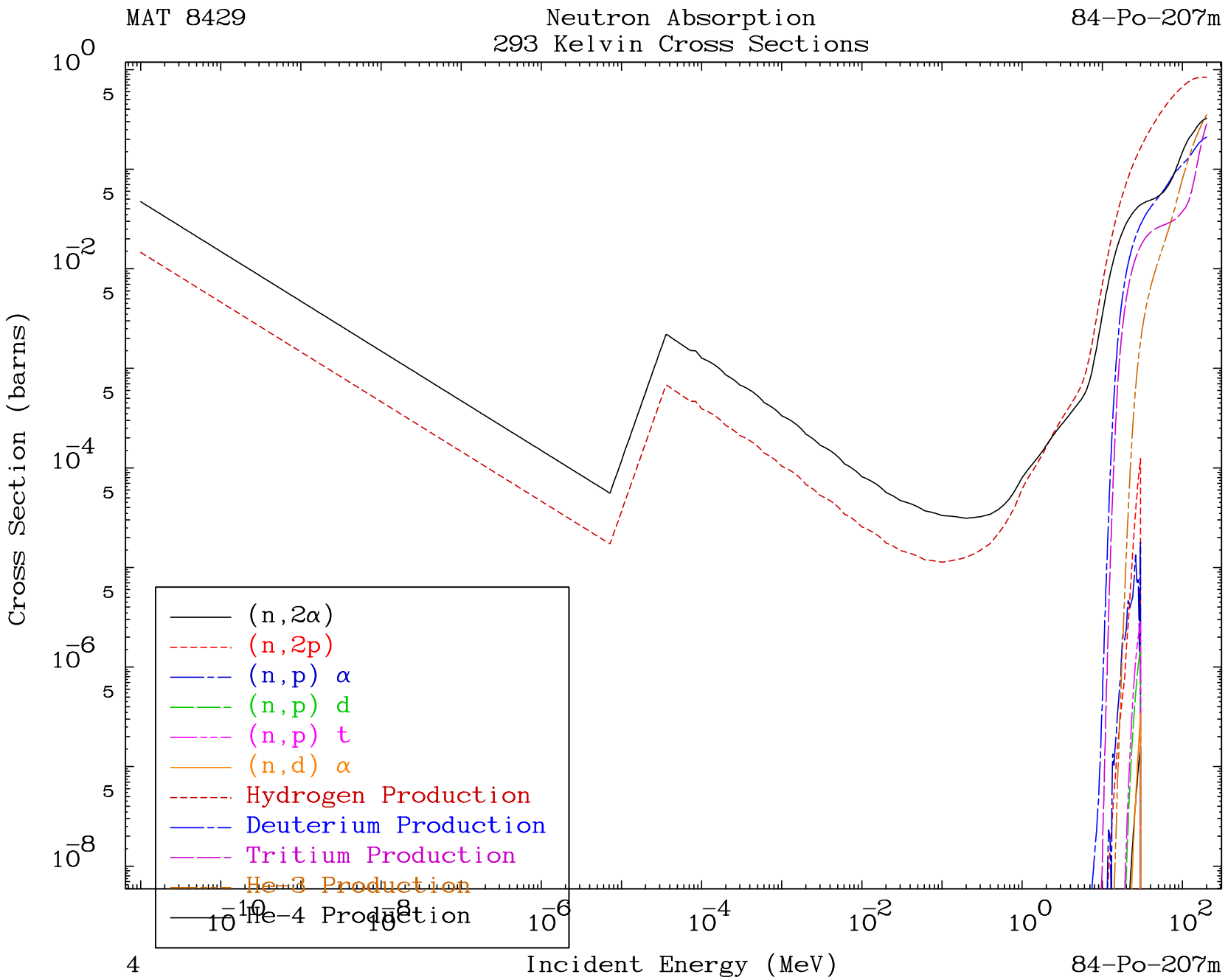
Program EVALPLOT
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

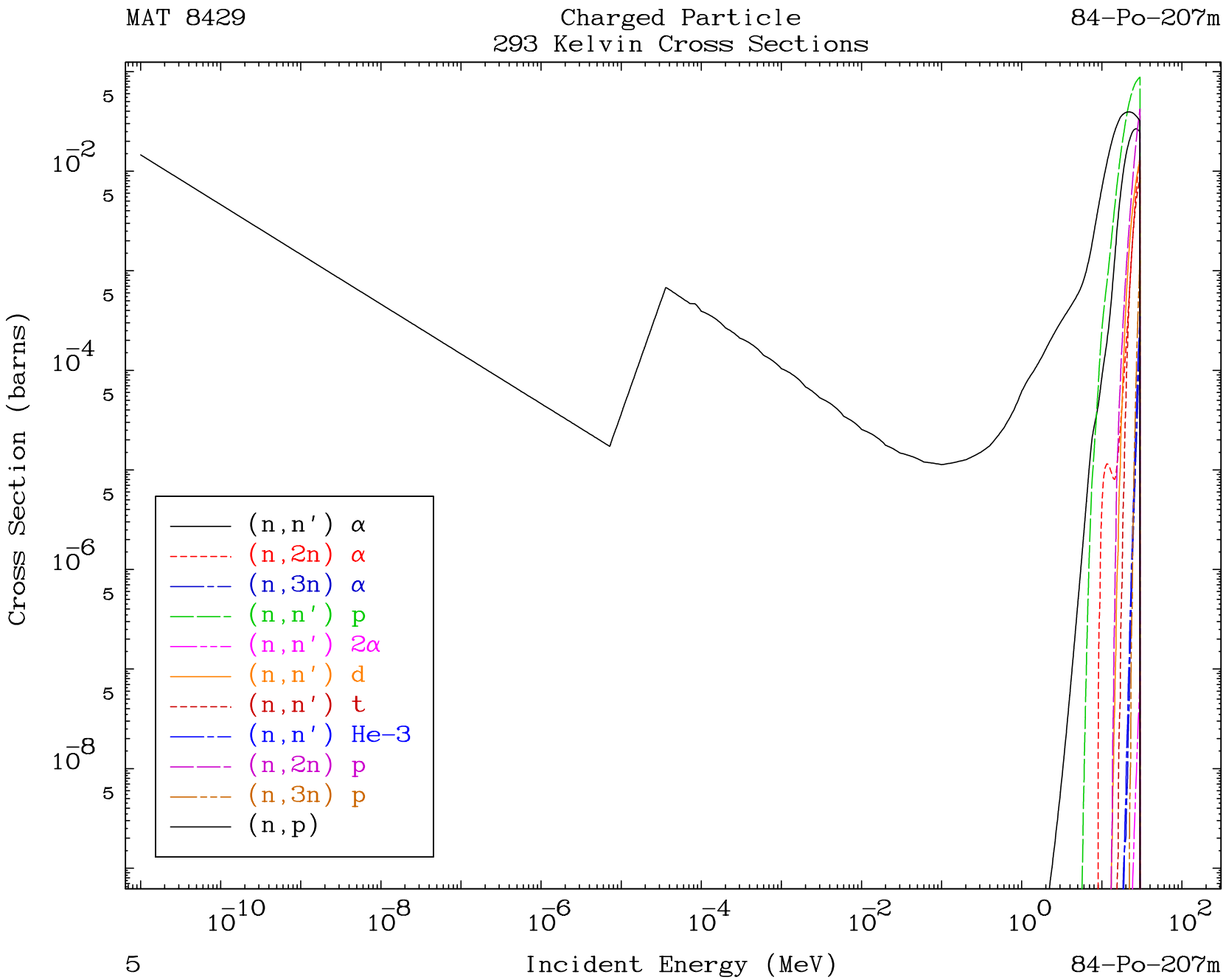
Press Mouse Button to Start

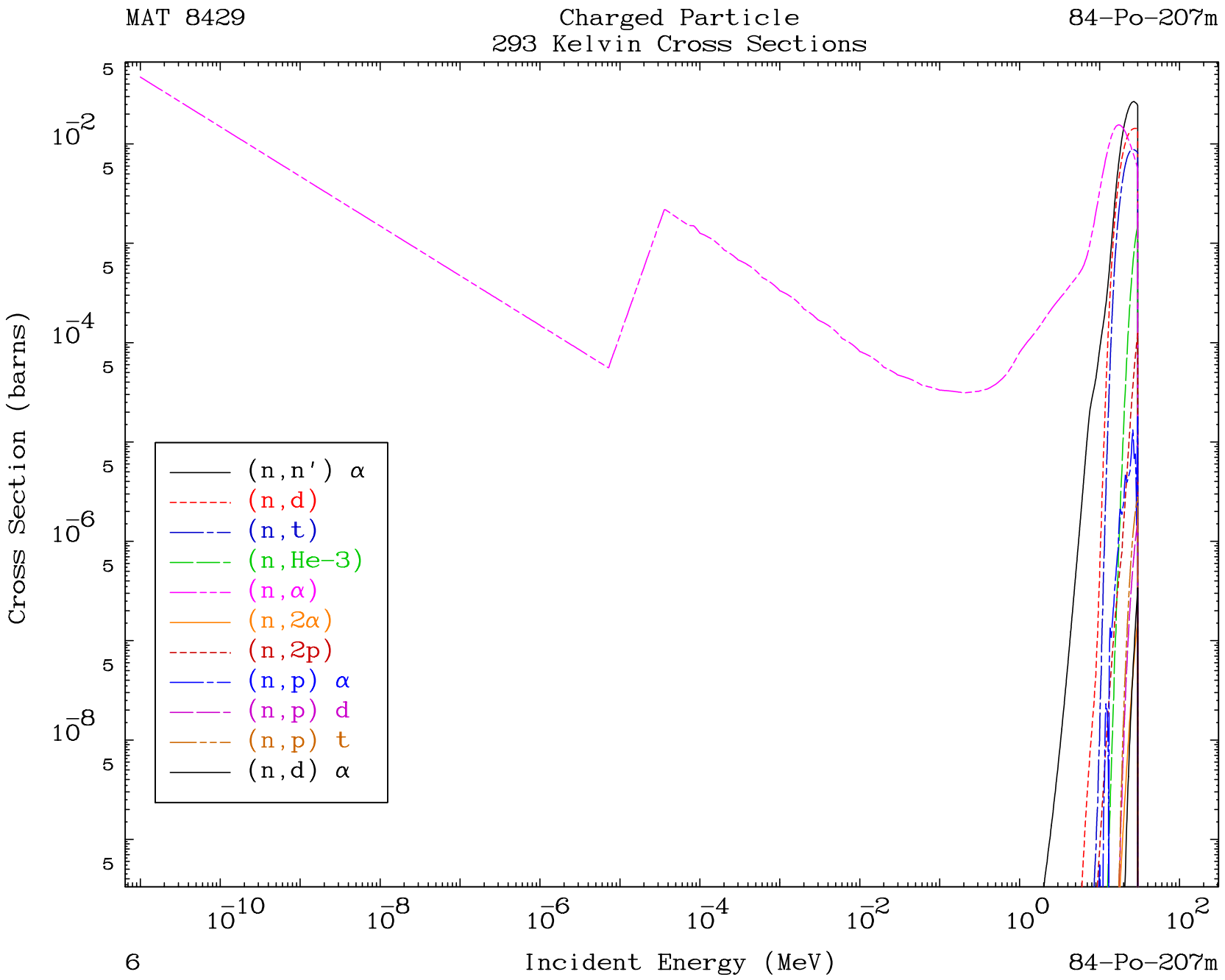

MAT 8429
Neutron Major
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
84-Po-207m
1

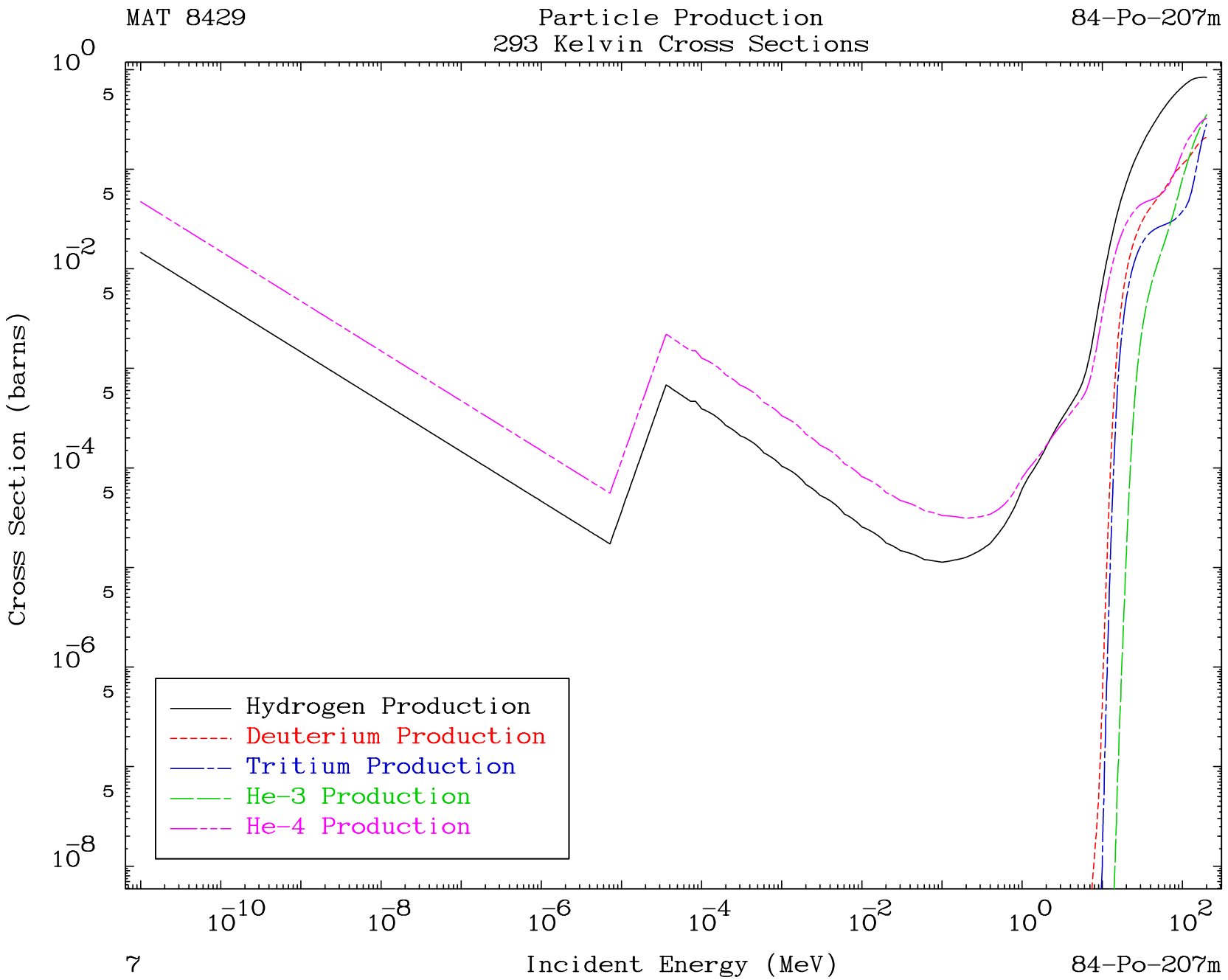

MAT 8429
Neutron Absorption
293 Kelvin Cross Sections
84-Po-207m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
Cross Section (barns)
Incident Energy (MeV)
2
84-Po-207m

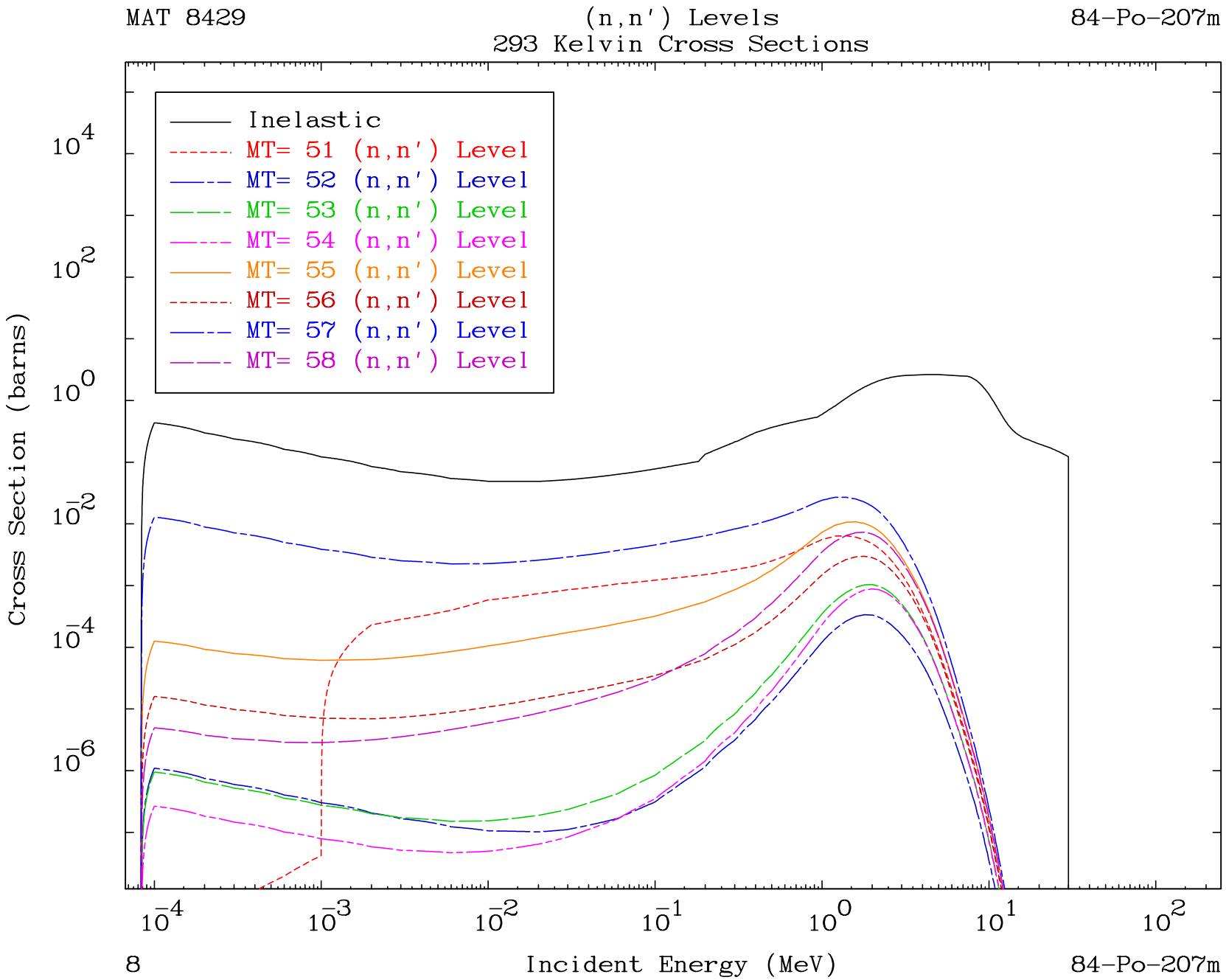

MAT 8429
Neutron Absorption
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
(n,4n)
(n,2n) p
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
3
84-Po-207m

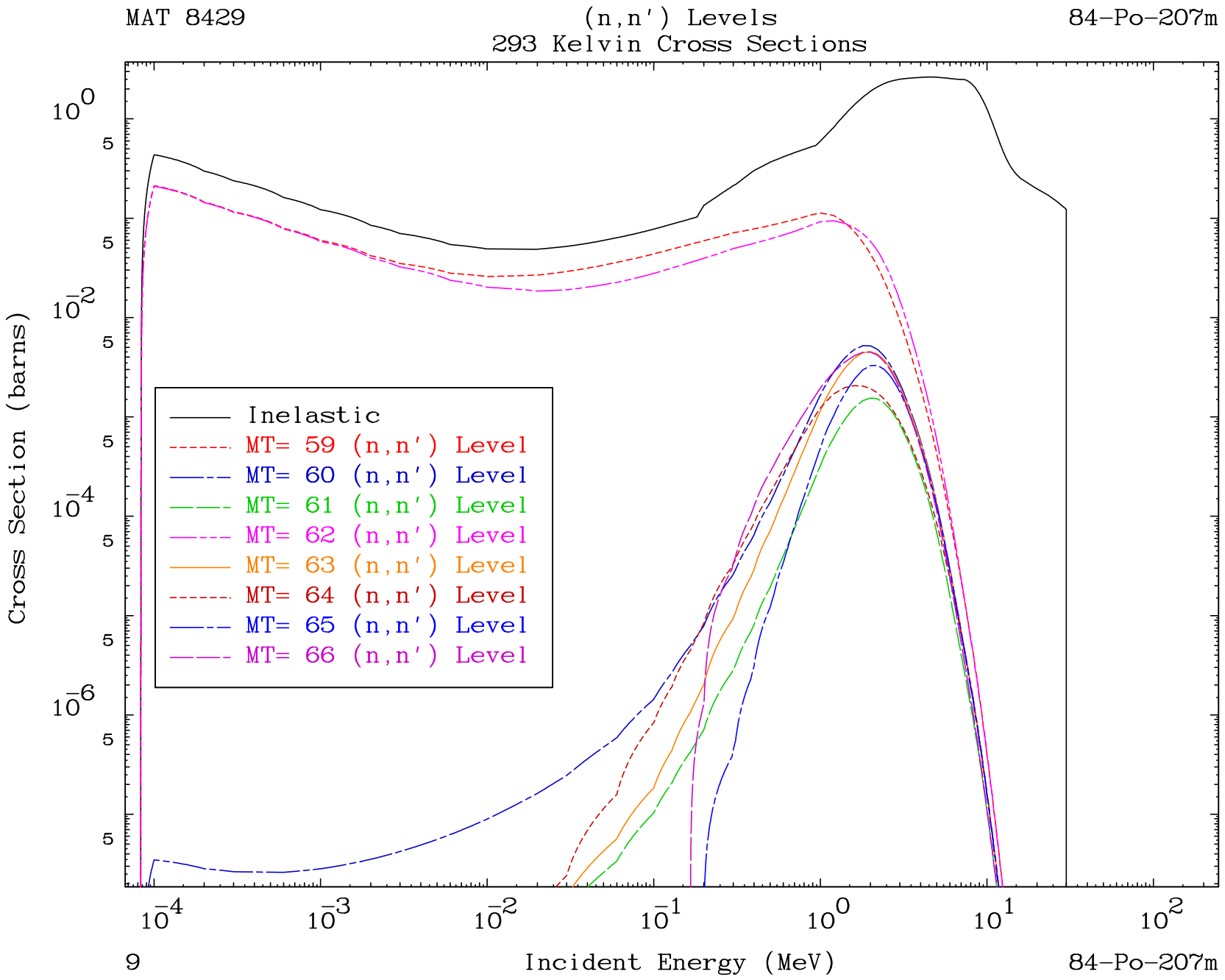

MAT 8429
Neutron Absorption
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
84-Po-207m
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production

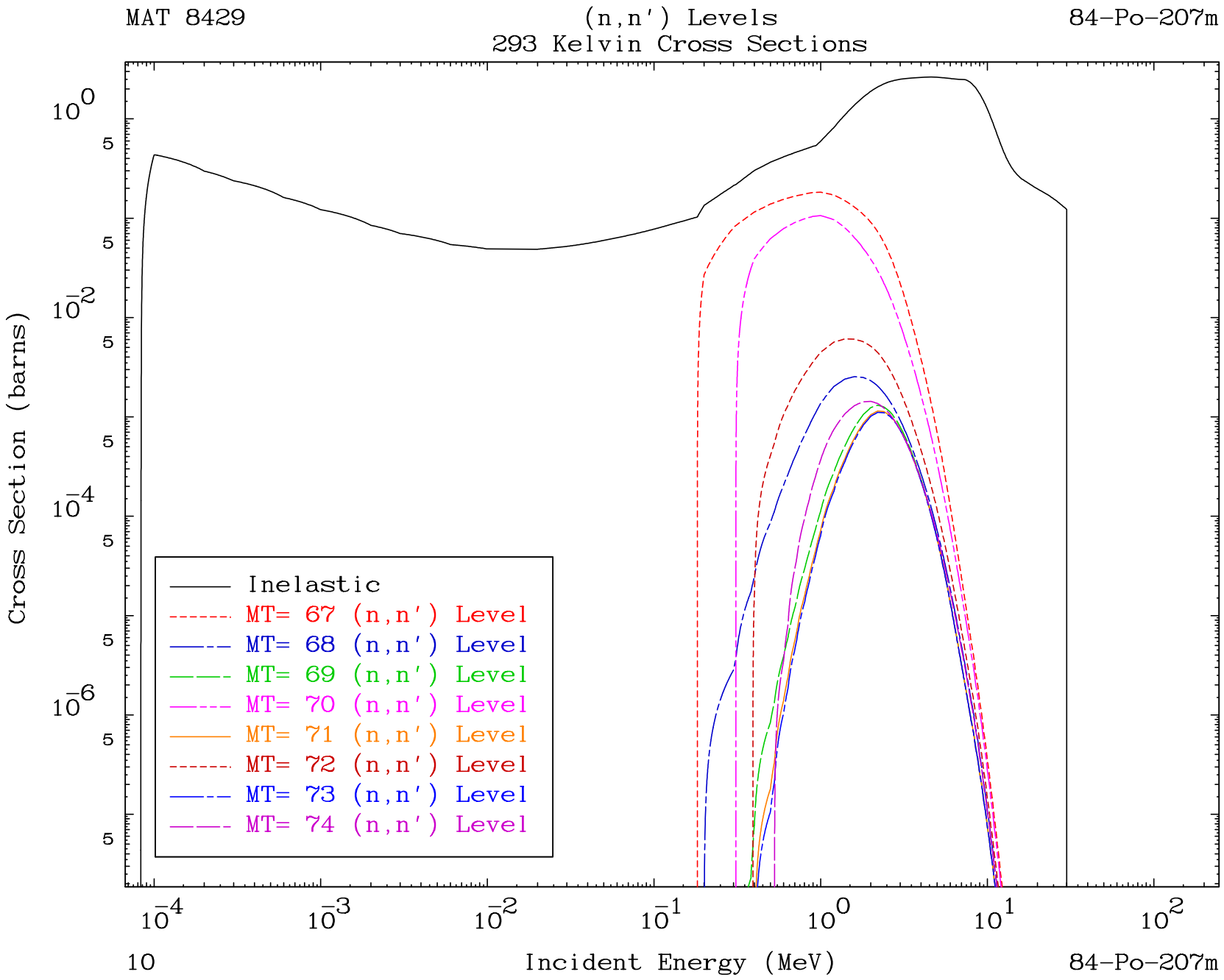

MAT 8429
Charged Particle
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
84-Po-207m
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)

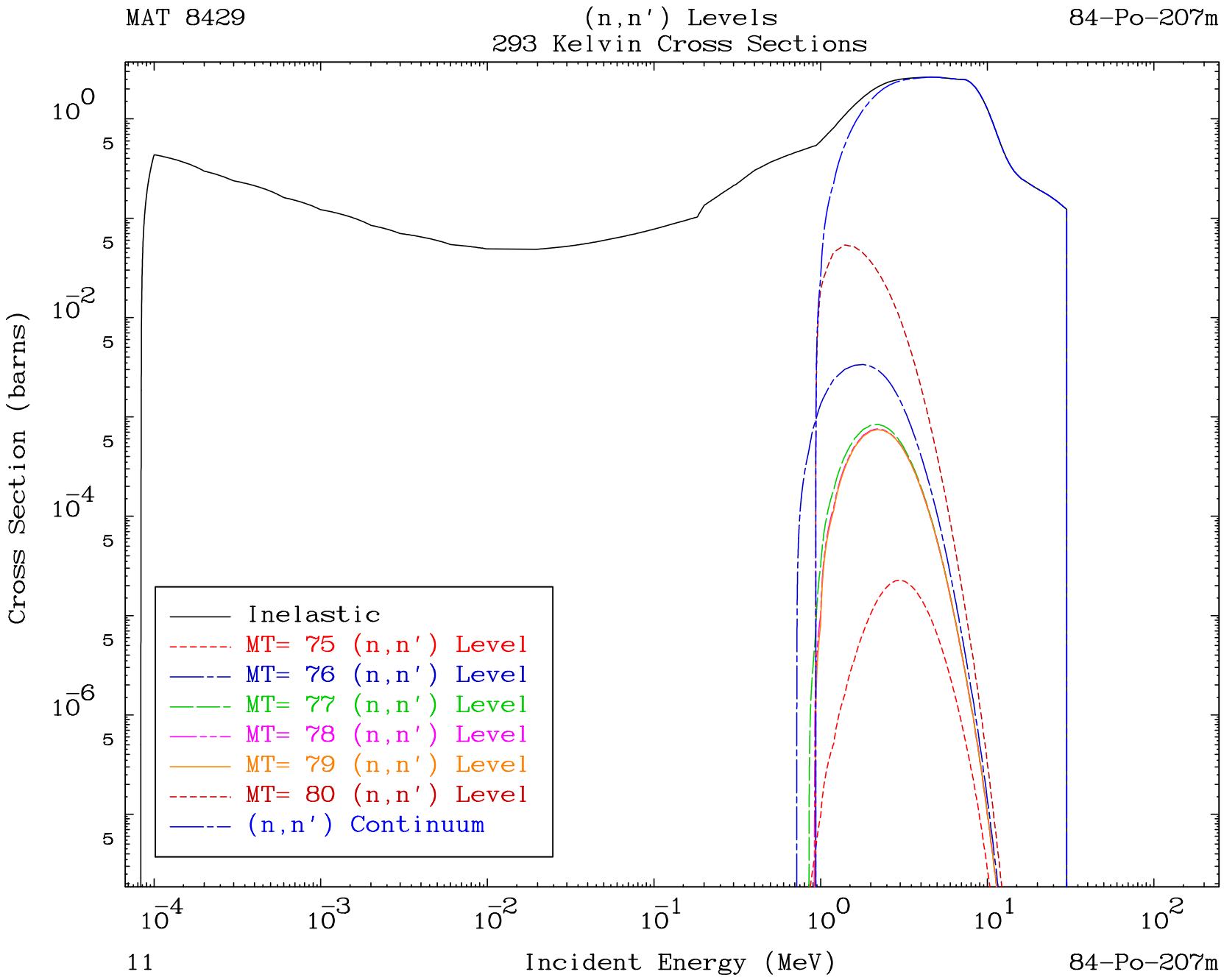

MAT 8429
Charged Particle
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
6
84-Po-207m

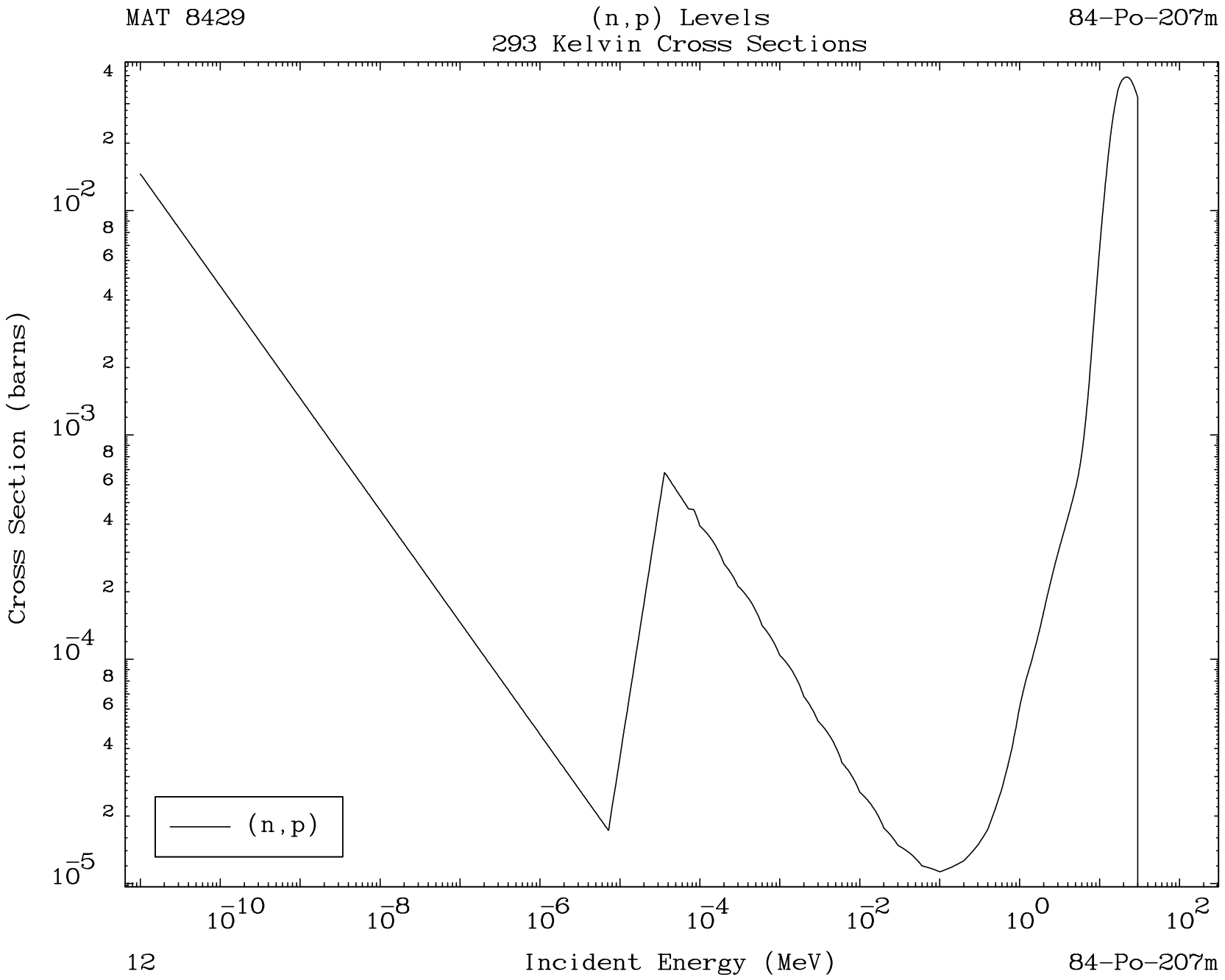

MAT 8429
Particle Production
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
7
84-Po-207m

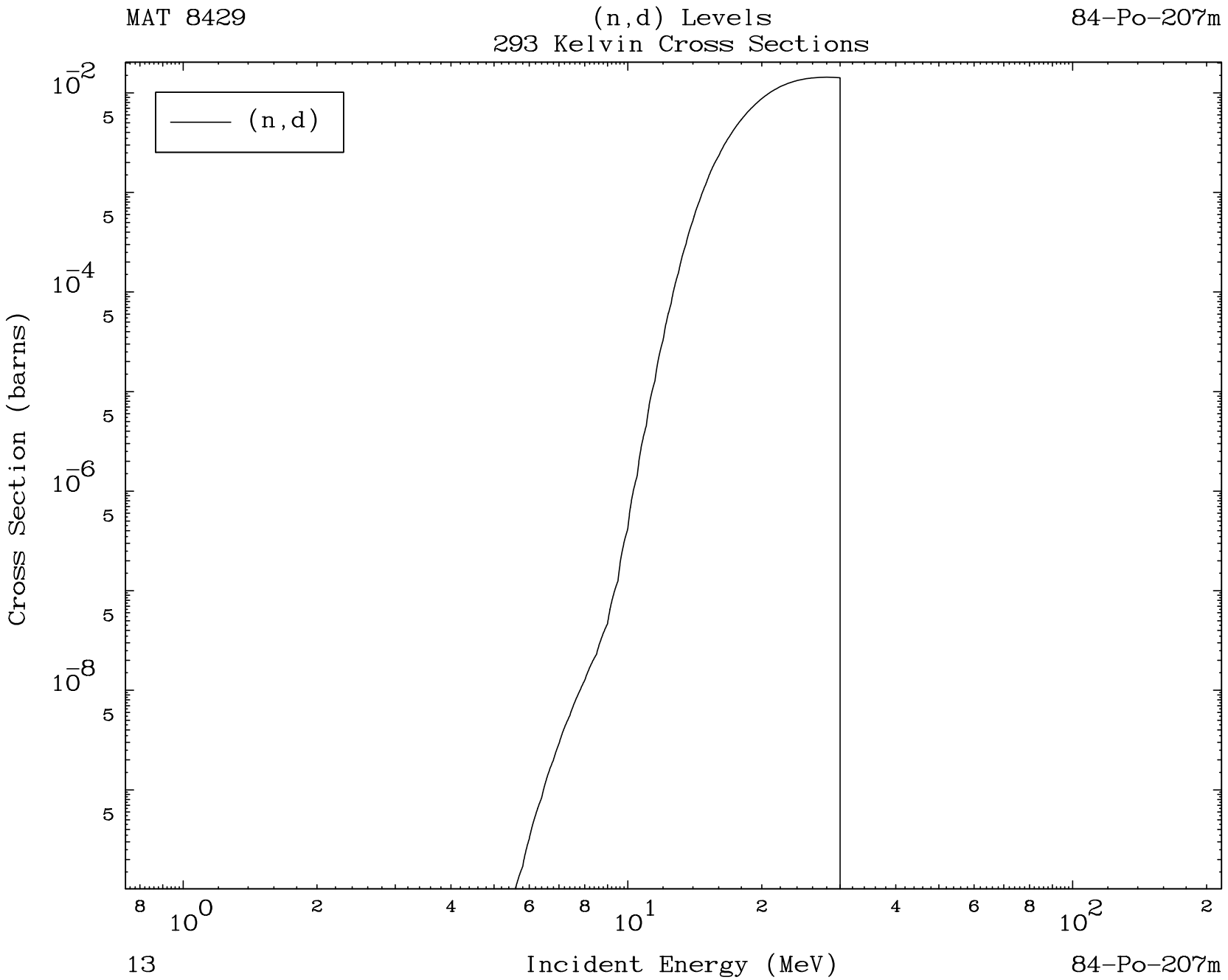

MAT 8429
(n,n') Levels
293 Kelvin Cross Sections
84-Po-207m
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
Incident Energy (MeV)
8
84-Po-207m

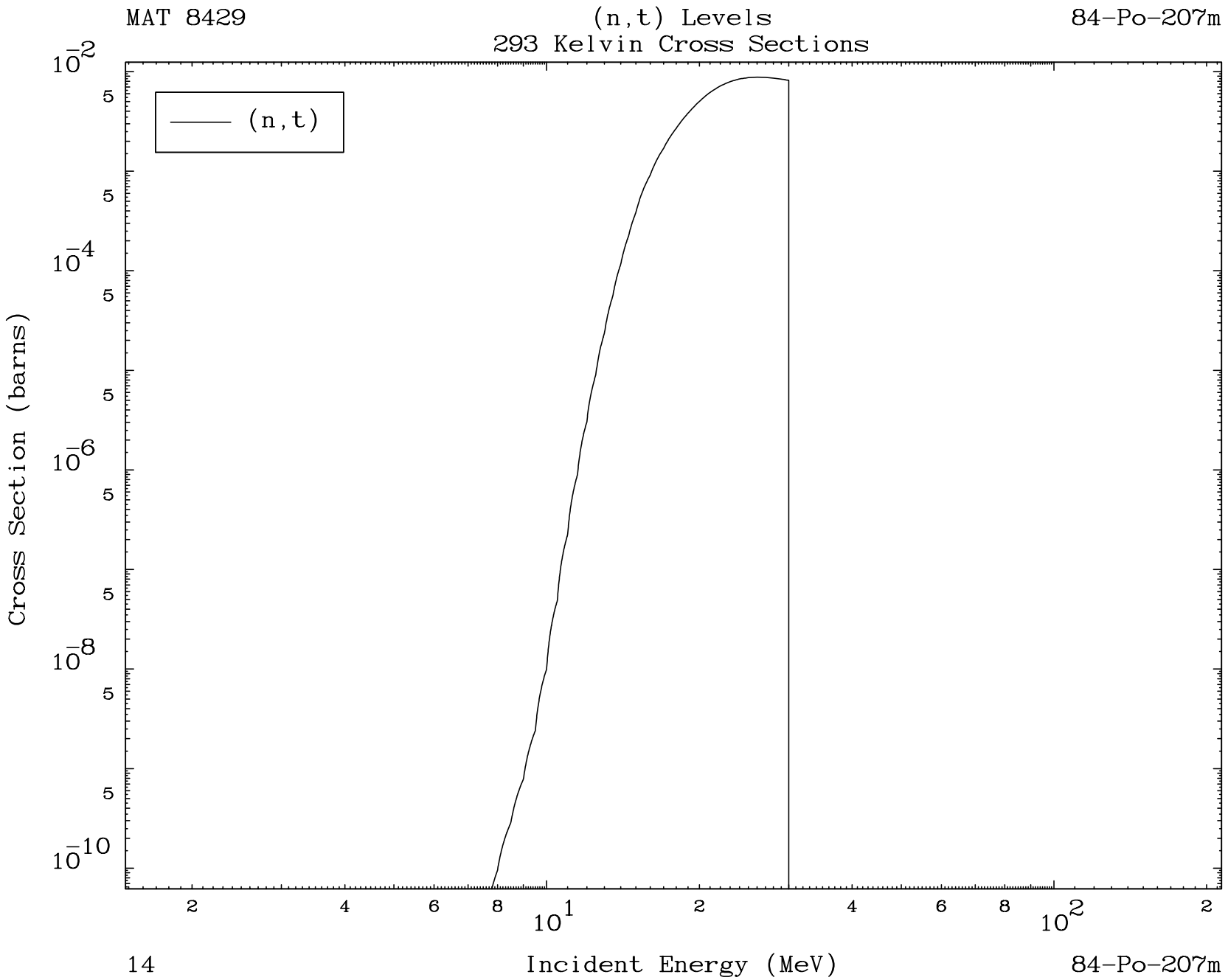

MAT 8429
(n,n') Levels
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
9
84-Po-207m

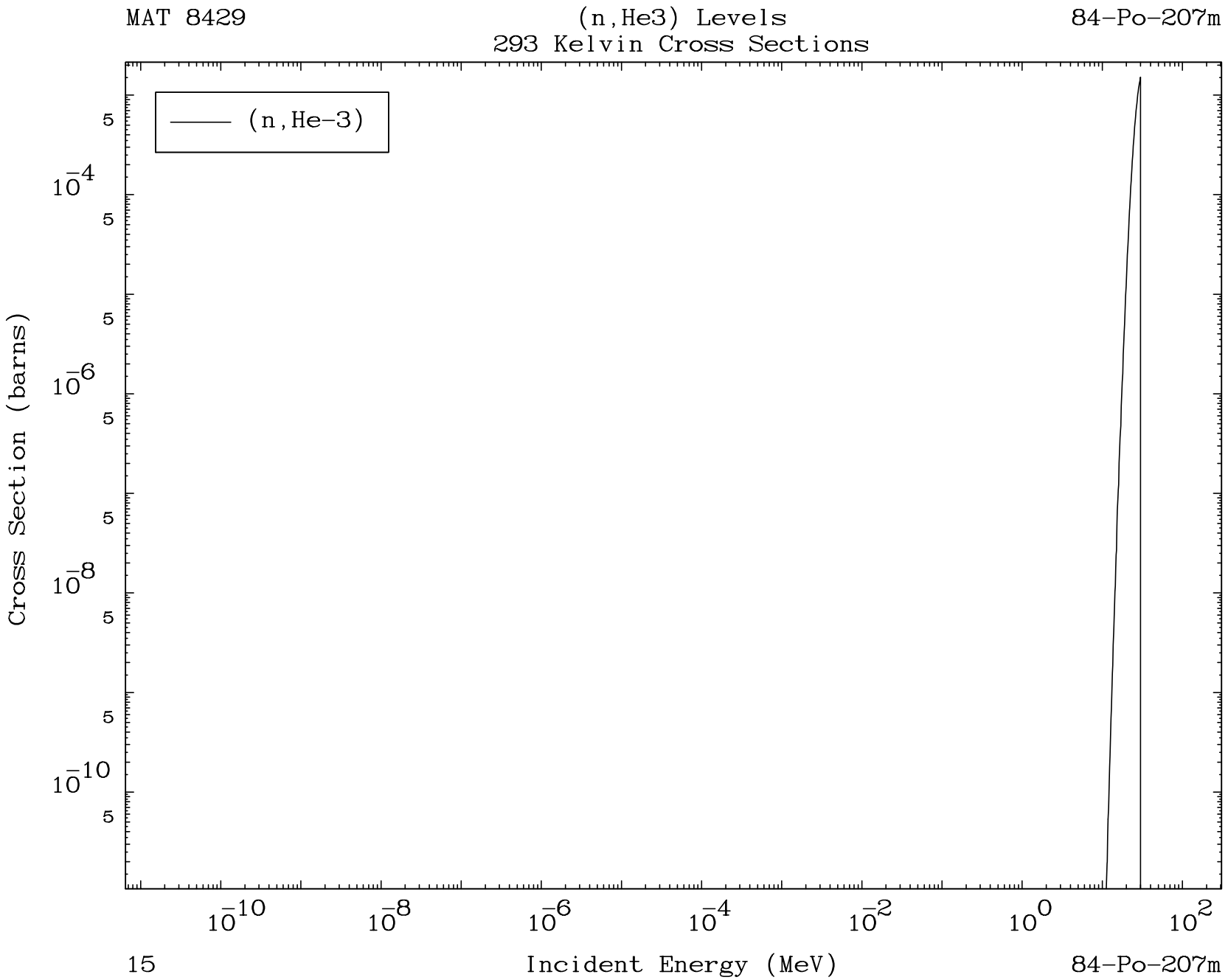

MAT 8429
(n,n') Levels
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
84-Po-207m
Inelastic
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level

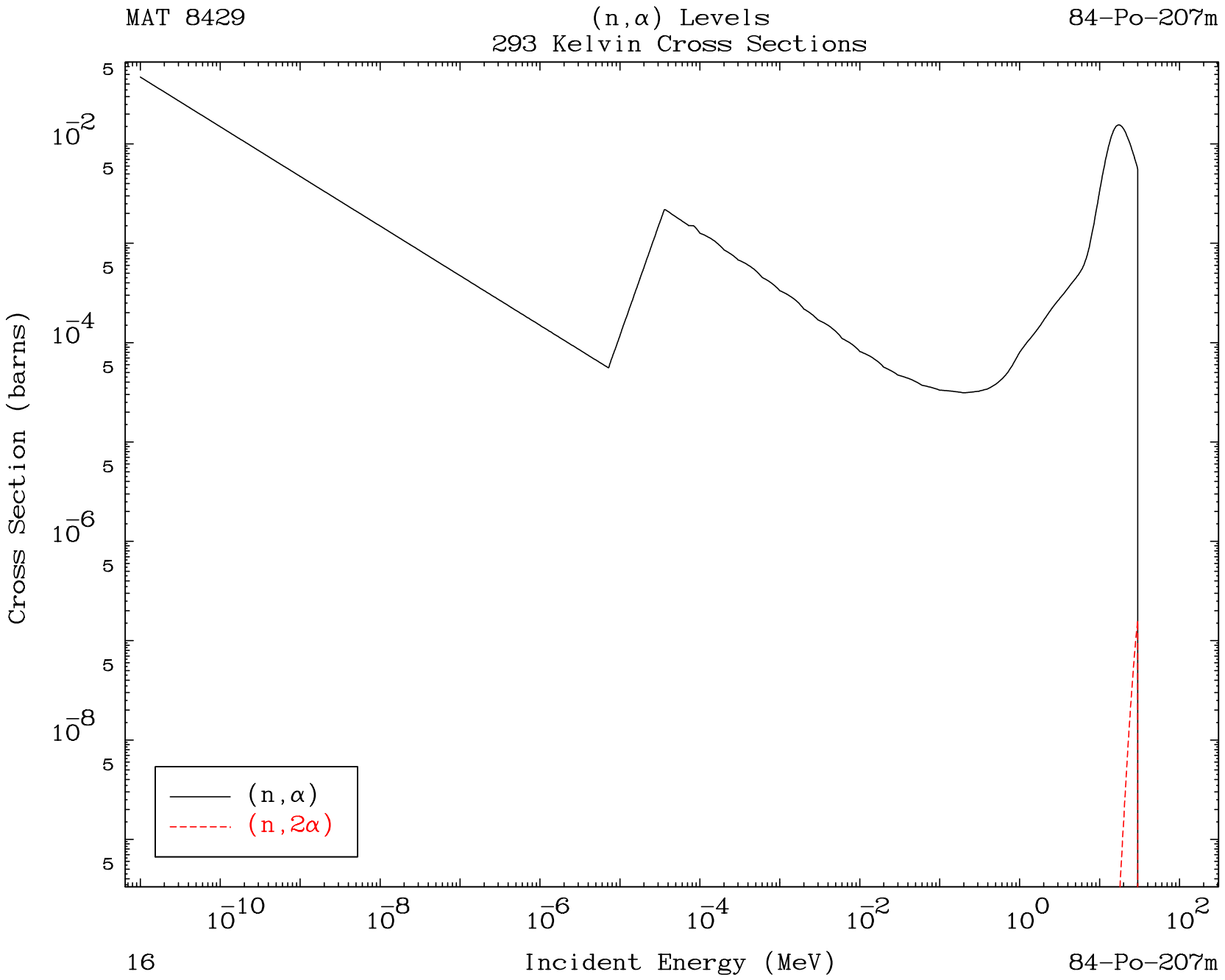

MAT 8429
(n,n') Levels
293 Kelvin Cross Sections
84-Po-207m
Cross Section (barns)
Incident Energy (MeV)
Inelastic
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
11
84-Po-207m

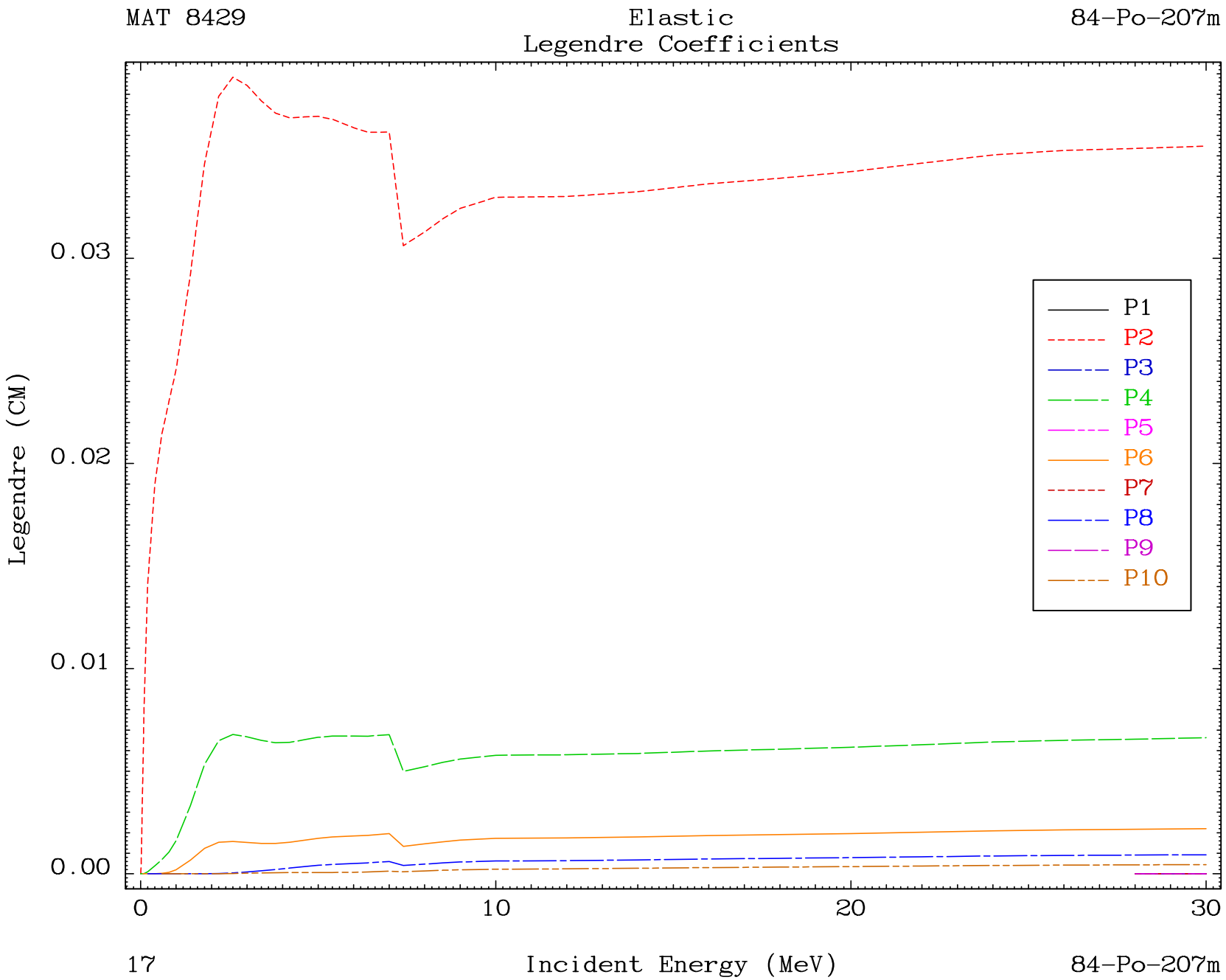

MAT 8429
(n,p) Levels
84-Po-207m
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
12
84-Po-207m

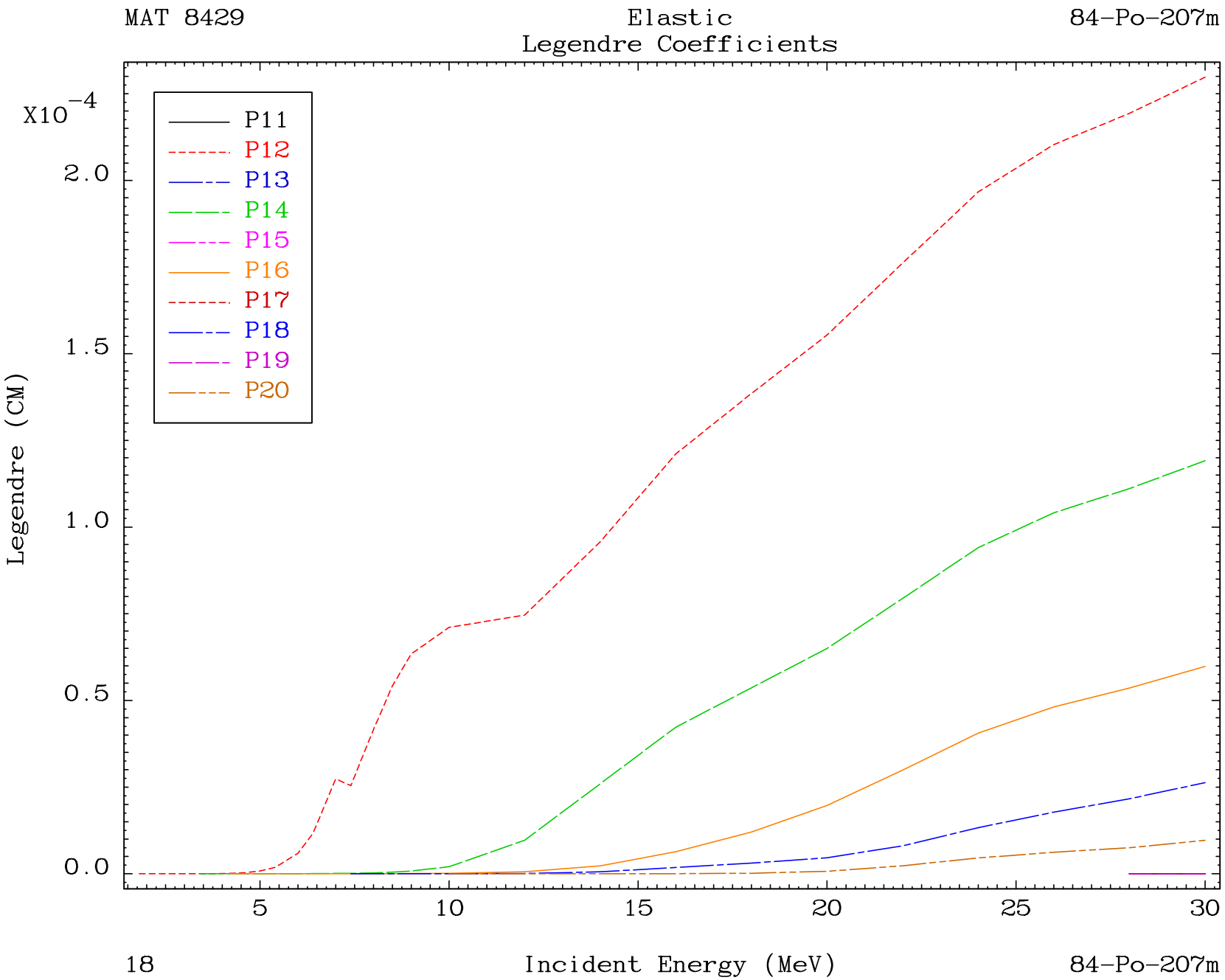

MAT 8429
(n,d) Levels
84-Po-207m
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
13
84-Po-207m

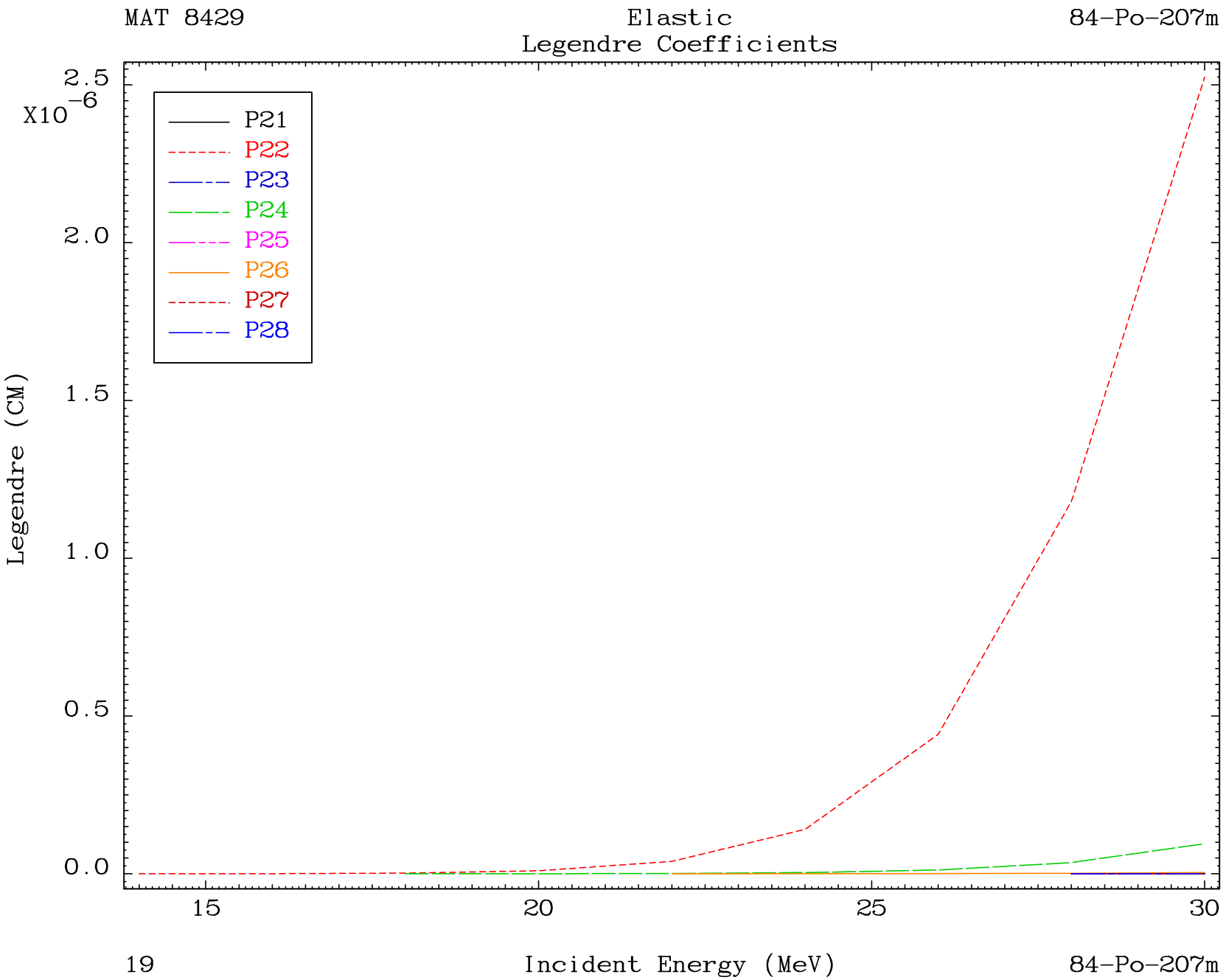

MAT 8429
(n,t) Levels
84-Po-207m
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
14
84-Po-207m

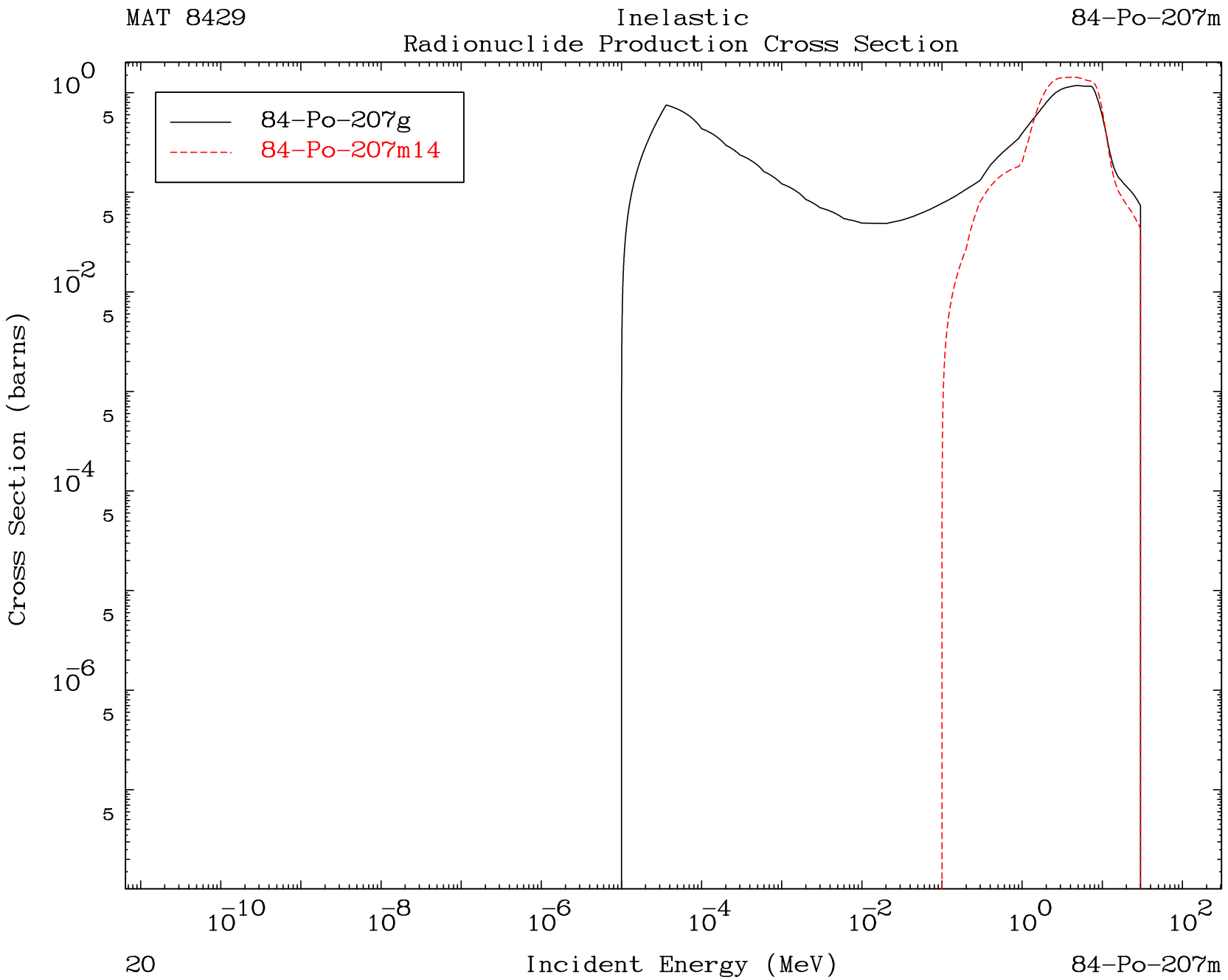

MAT 8429
(n,He3) Levels
84-Po-207m
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
15
84-Po-207m

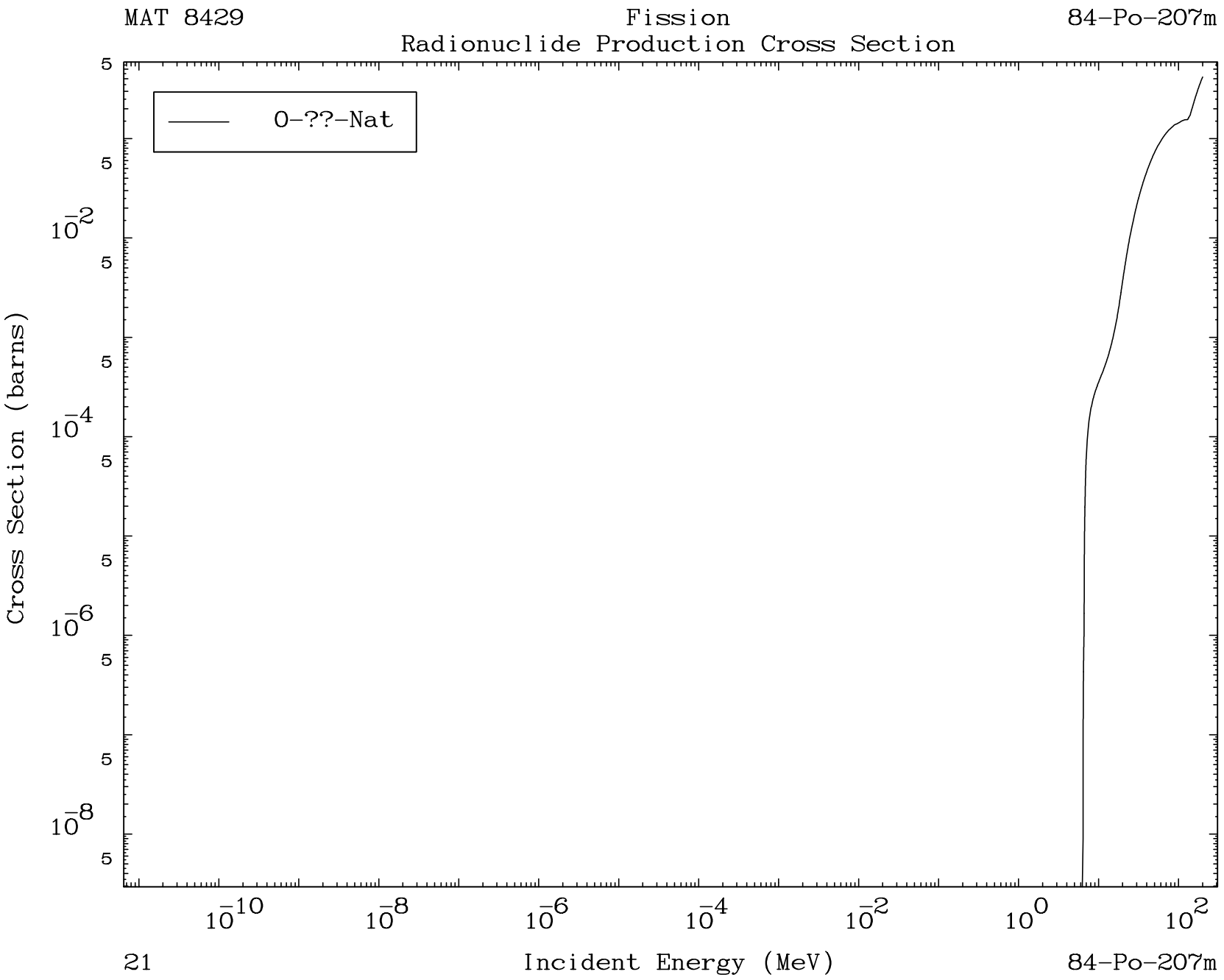

MAT 8429
(n,α) Levels
84-Po-207m
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
(n,α)
(n,2α)
16
84-Po-207m

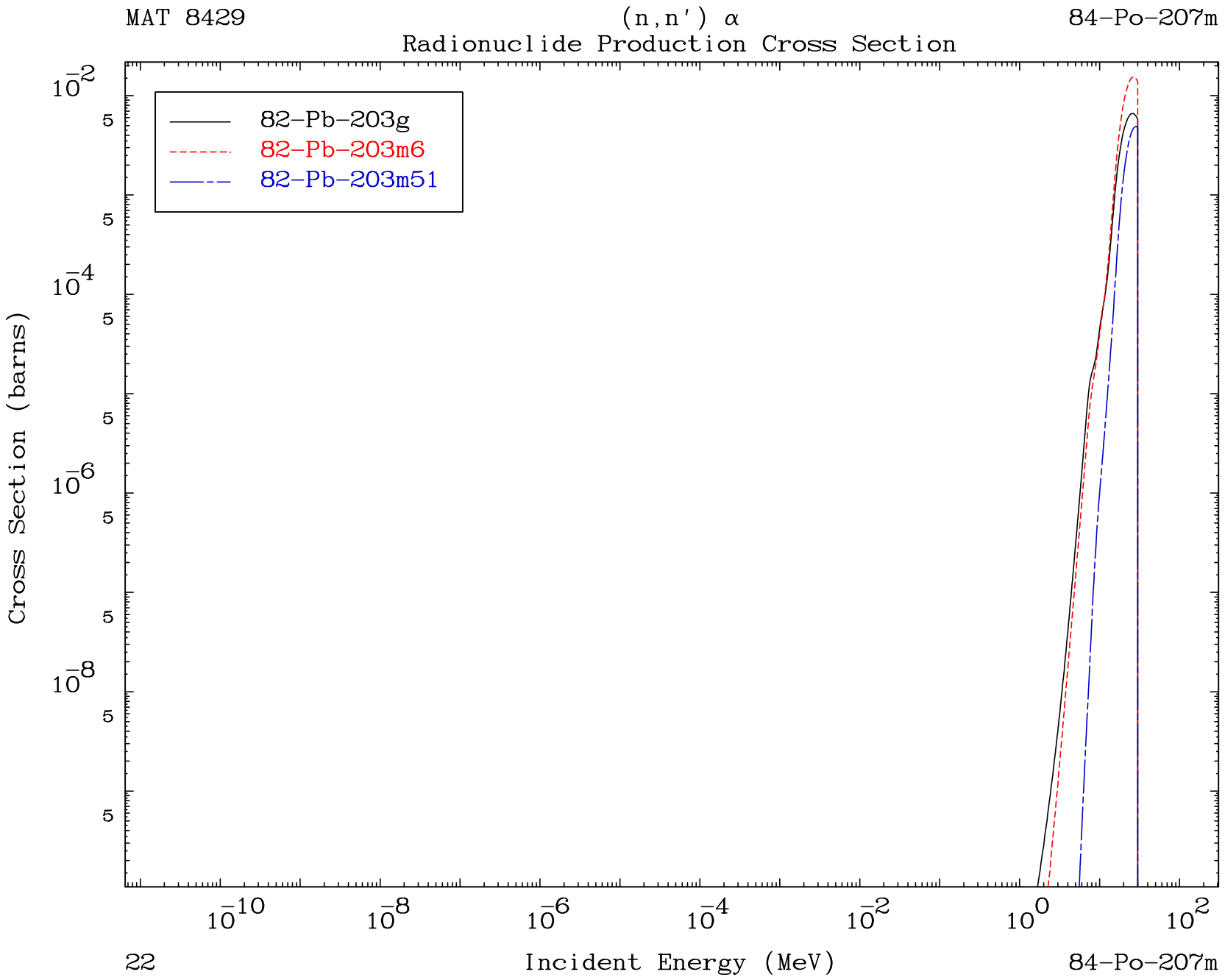

MAT 8429
Elastic
Legendre Coefficients
84-Po-207m
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
0
10
20
30
17
Incident Energy (MeV)
84-Po-207m

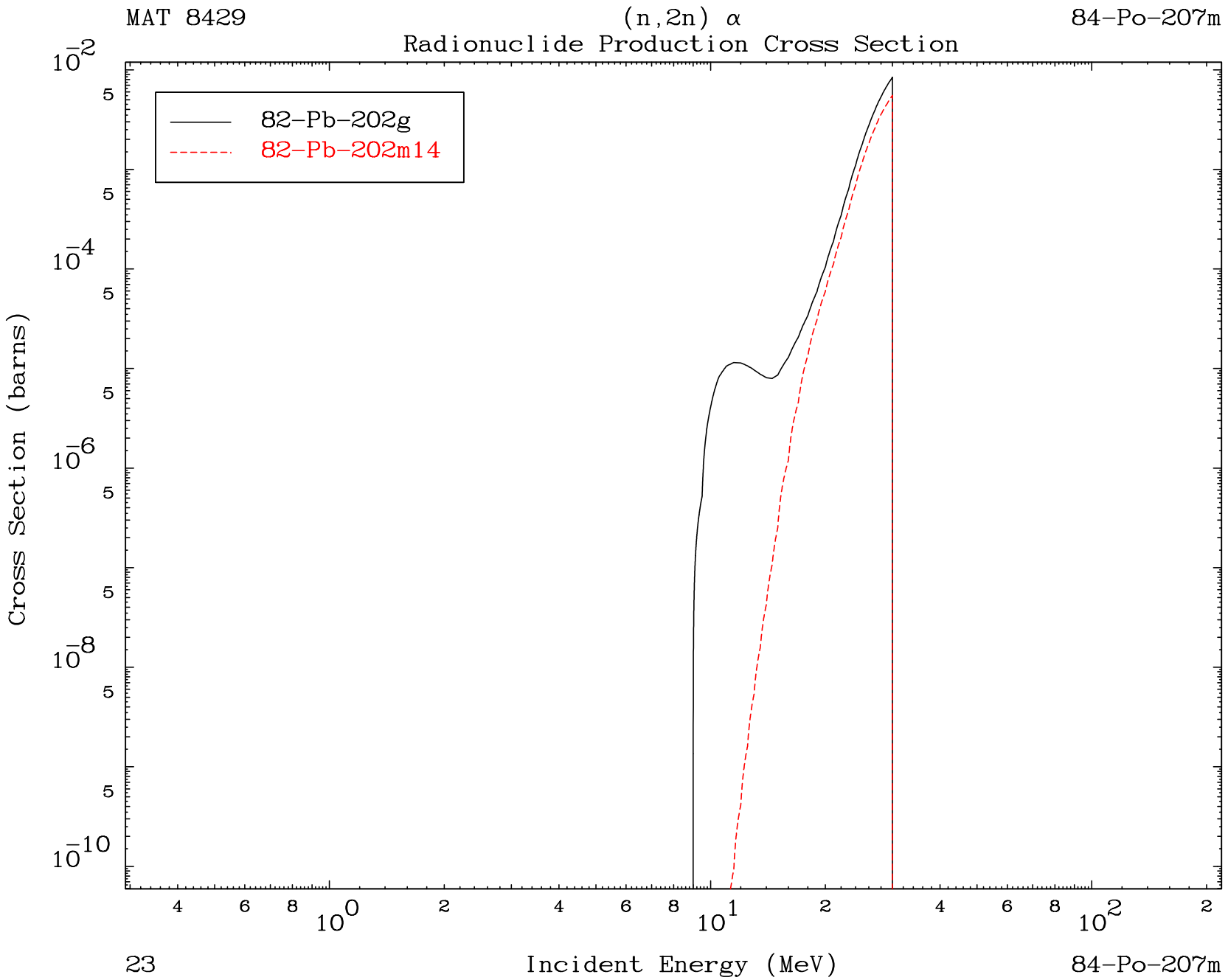

MAT 8429
Elastic
Legendre Coefficients
84-Po-207m
X10^{-4}
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
5
10
15
20
25
30
18
Incident Energy (MeV)
84-Po-207m

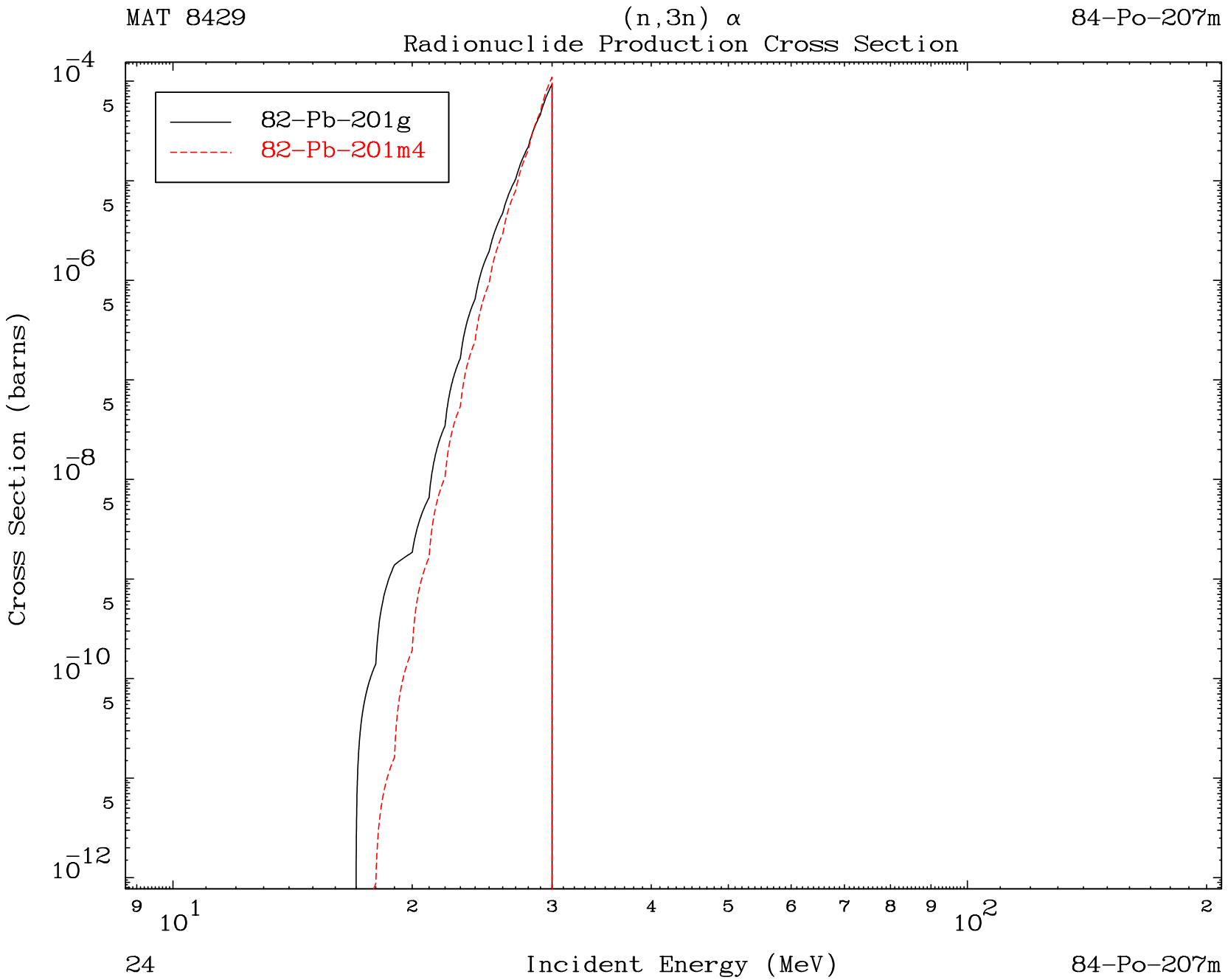

MAT 8429
Elastic
Legendre Coefficients
84-Po-207m
X10 -6
2.5
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
15
20
25
30
19
Incident Energy (MeV)
84-Po-207m

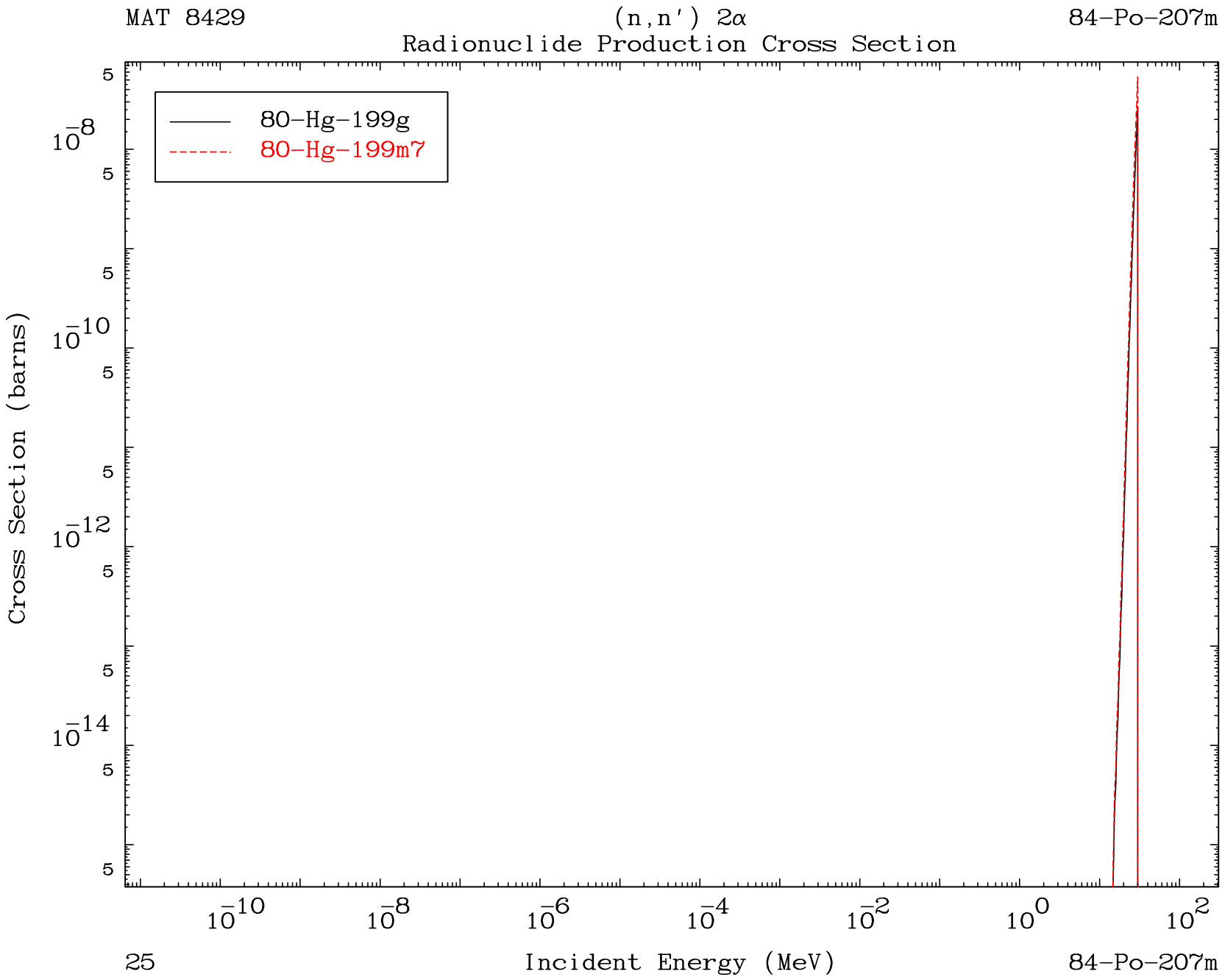

MAT 8429
Inelastic
84-Po-207m
Radionuclide Production Cross Section
84-Po-207g
84-Po-207m14
Cross Section (barns)
Incident Energy (MeV)
20
84-Po-207m

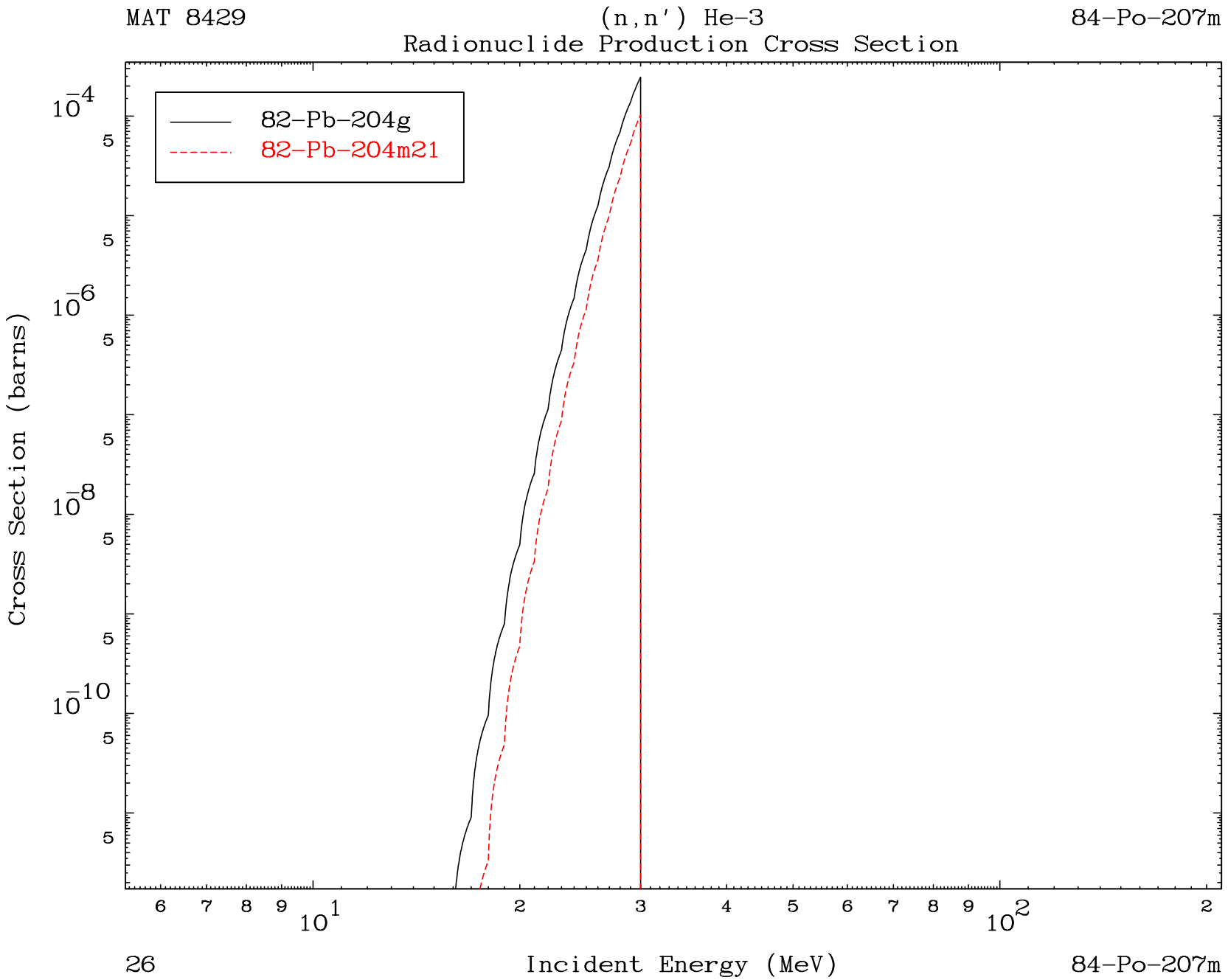

MAT 8429
Fission
84-Po-207m
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
21
84-Po-207m

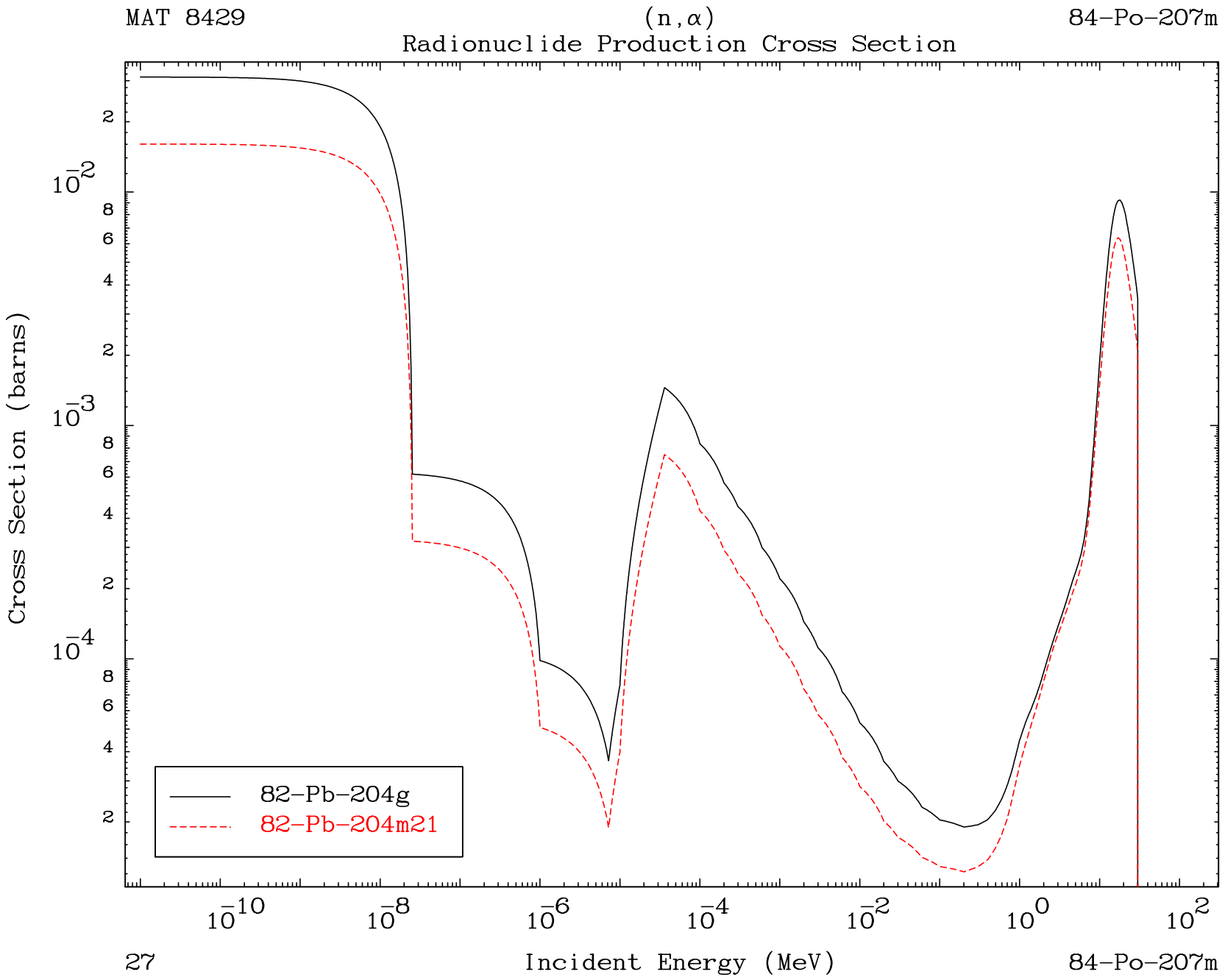

MAT 8429
(n,n') α
84-Po-207m
Radionuclide Production Cross Section
82-Pb-203g
82-Pb-203m6
82-Pb-203m51
Cross Section (barns)
Incident Energy (MeV)
22
84-Po-207m

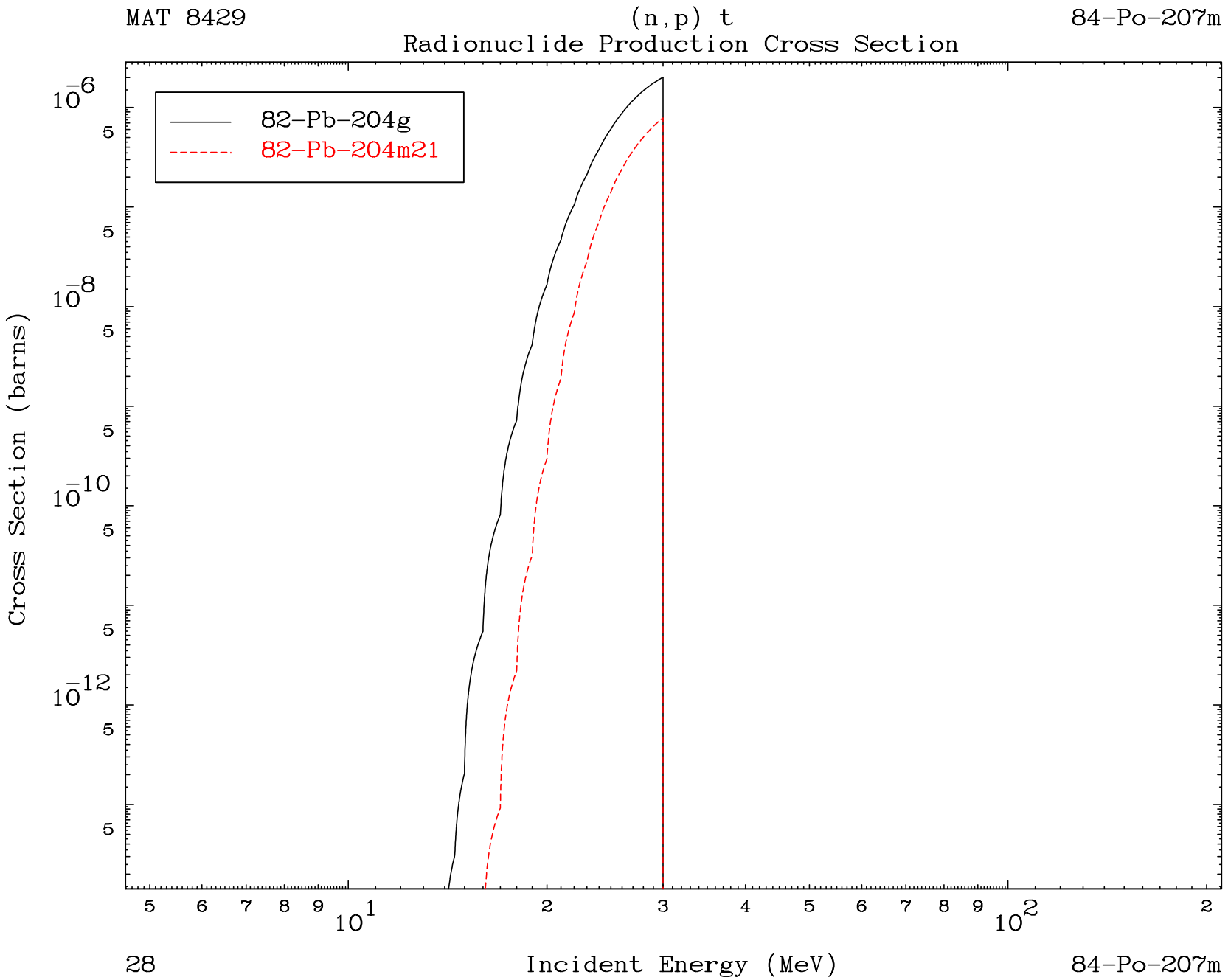

MAT 8429
(n,2n) α
84-Po-207m
Radionuclide Production Cross Section
82-Pb-202g
82-Pb-202m14
Cross Section (barns)
Incident Energy (MeV)
23
84-Po-207m


MAT 8429
(n,3n) α
84-Po-207m
Radionuclide Production Cross Section
82-Pb-201g
82-Pb-201m4
Cross Section (barns)
Incident Energy (MeV)
24
84-Po-207m


MAT 8429
(n,n') 2α
84-Po-207m
Radionuclide Production Cross Section
80-Hg-199g
80-Hg-199m7
Cross Section (barns)
Incident Energy (MeV)
25
84-Po-207m


MAT 8429
(n,n') He-3
84-Po-207m
Radionuclide Production Cross Section
82-Pb-204g
82-Pb-204m21
Cross Section (barns)
Incident Energy (MeV)
26
84-Po-207m


MAT 8429
(n,α)
84-Po-207m
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
82-Pb-204g
82-Pb-204m21
27
84-Po-207m


MAT 8429
(n,p) t
84-Po-207m
Radionuclide Production Cross Section
82-Pb-204g
82-Pb-204m21
Cross Section (barns)
Incident Energy (MeV)
28
84-Po-207m