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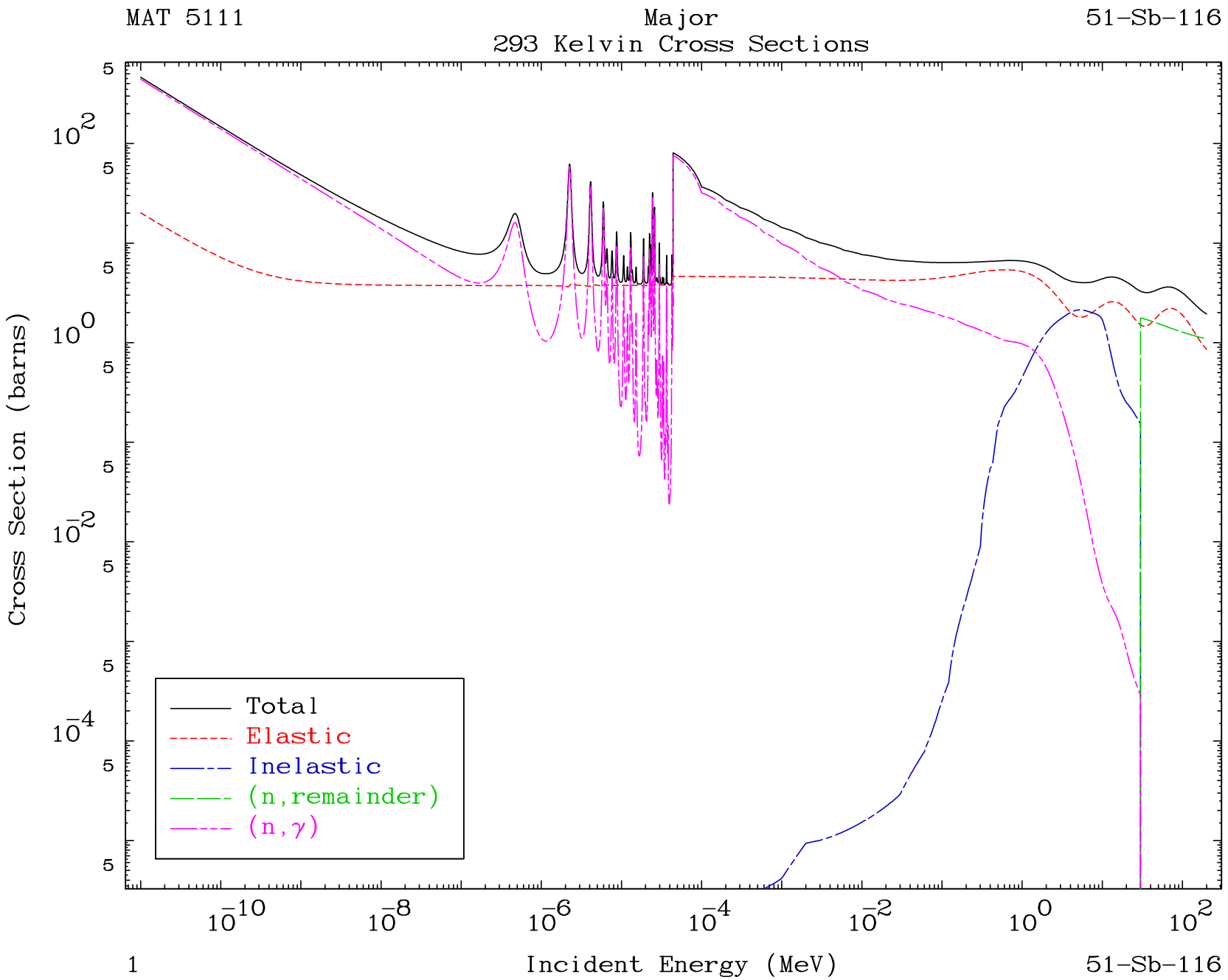
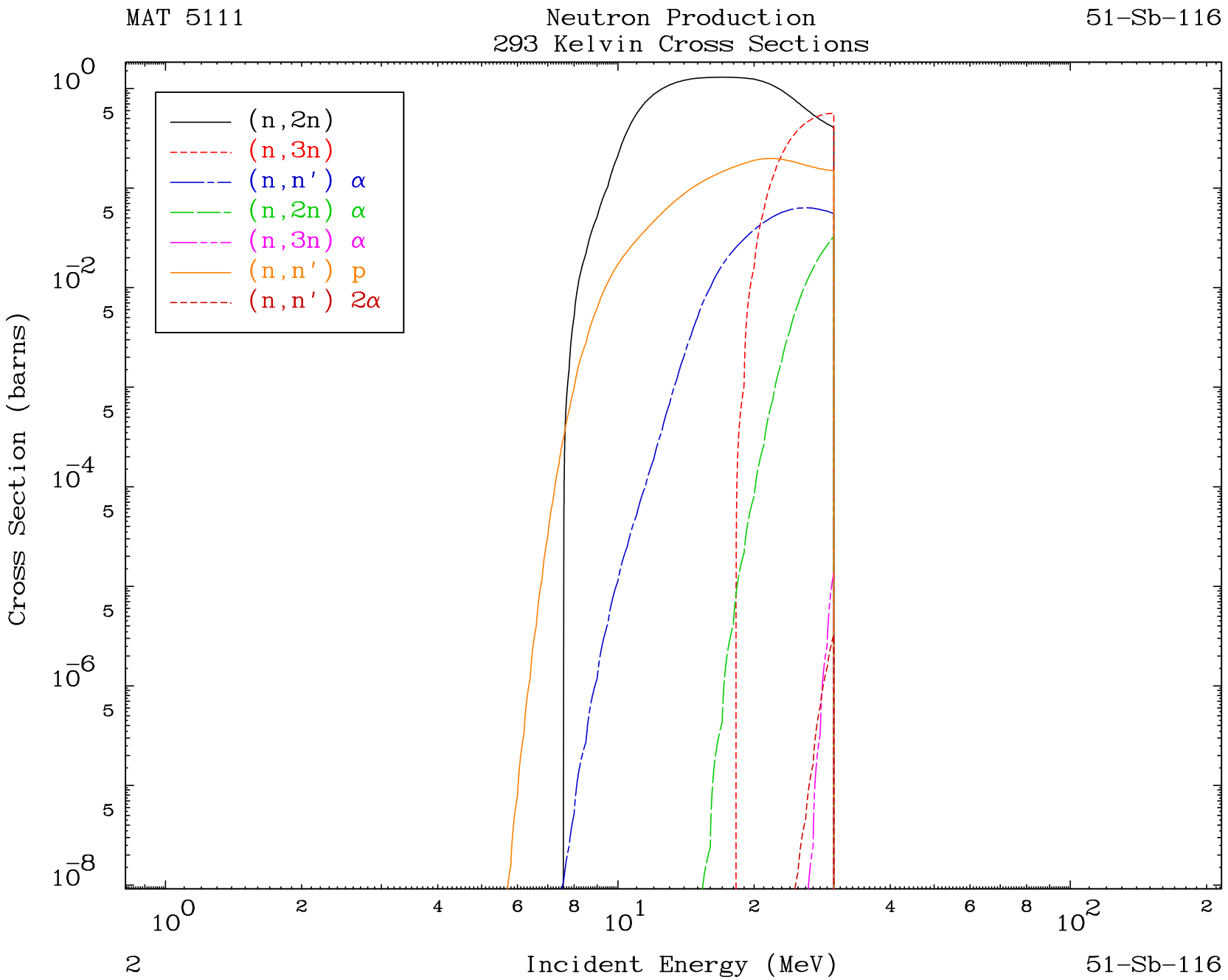
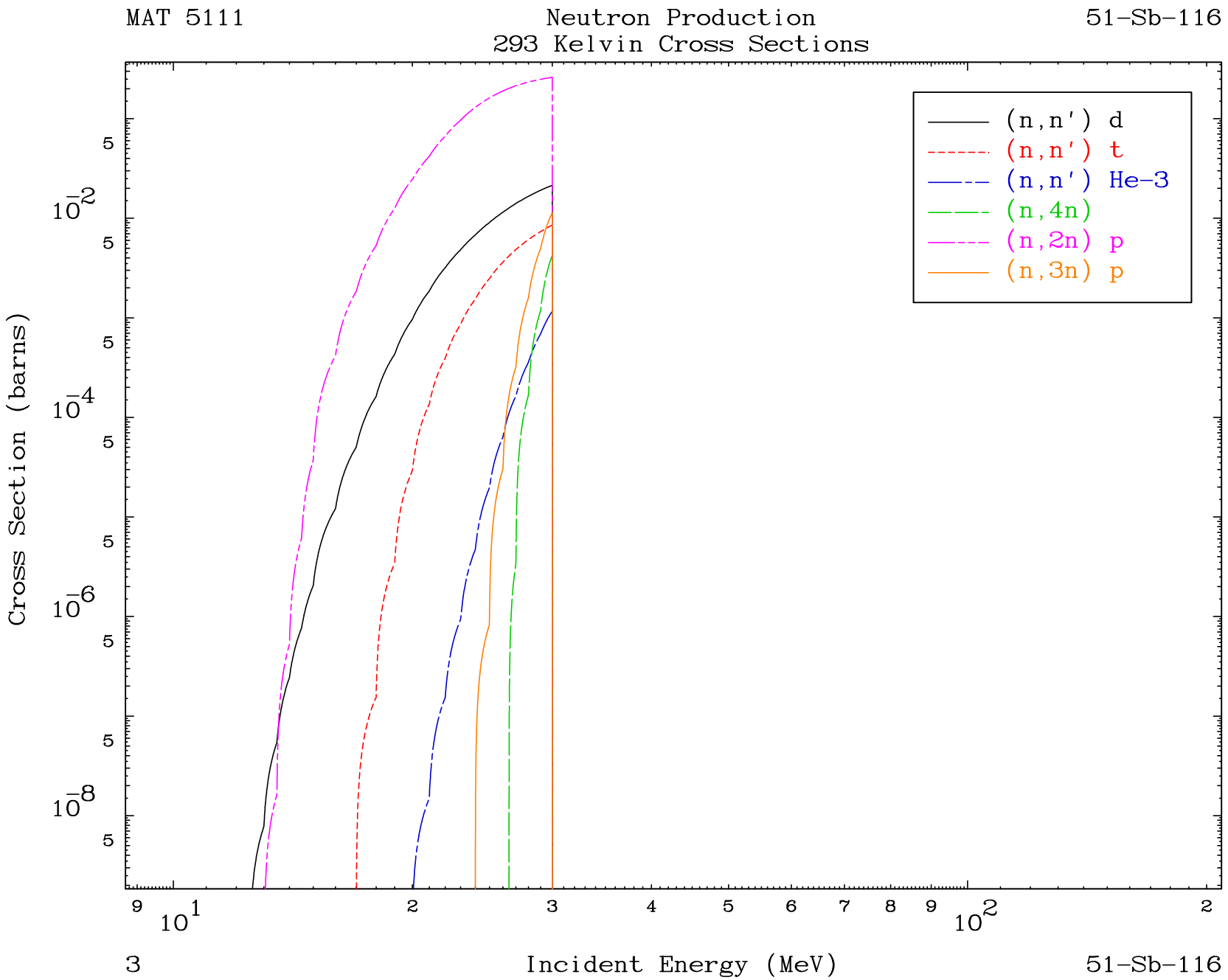
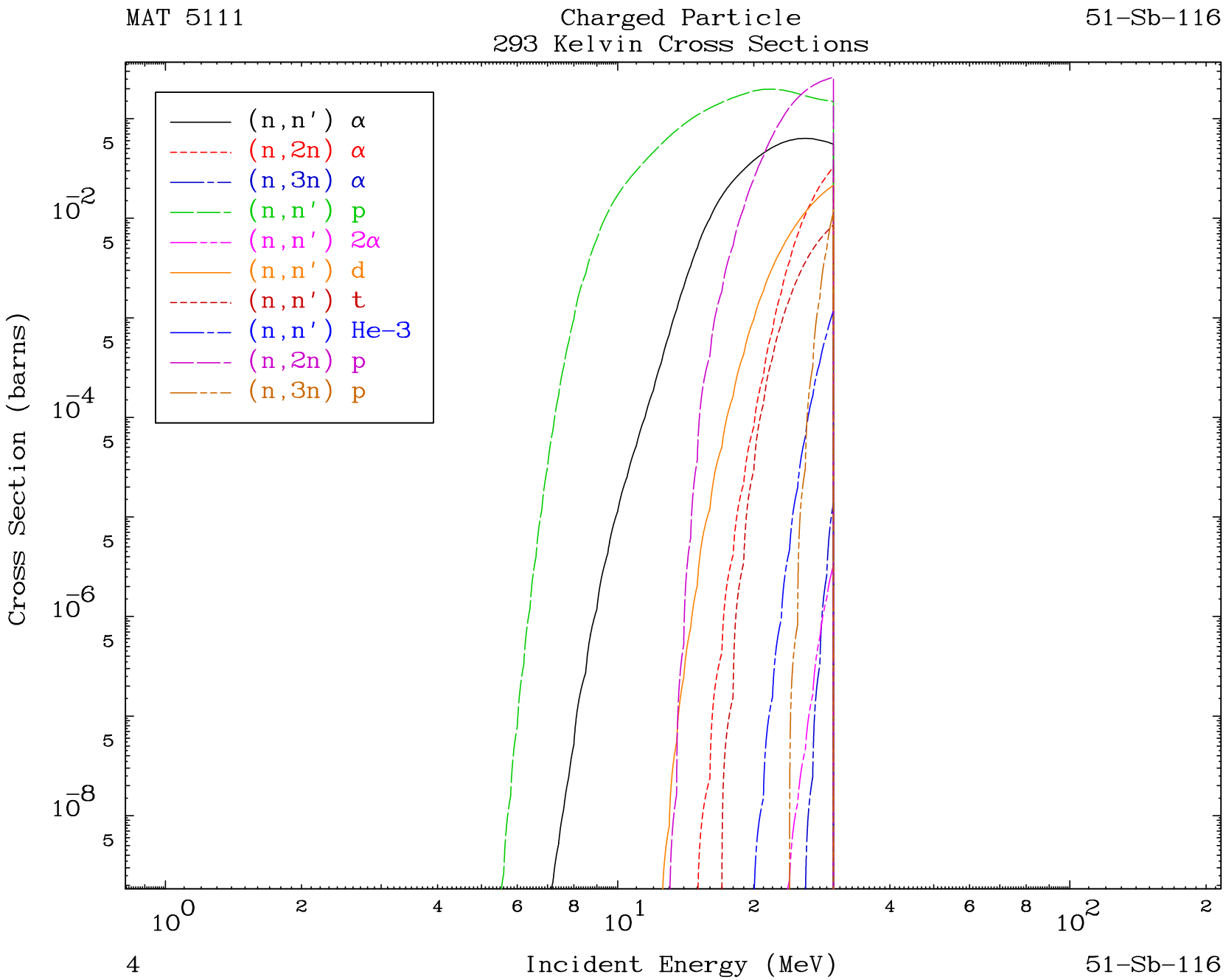
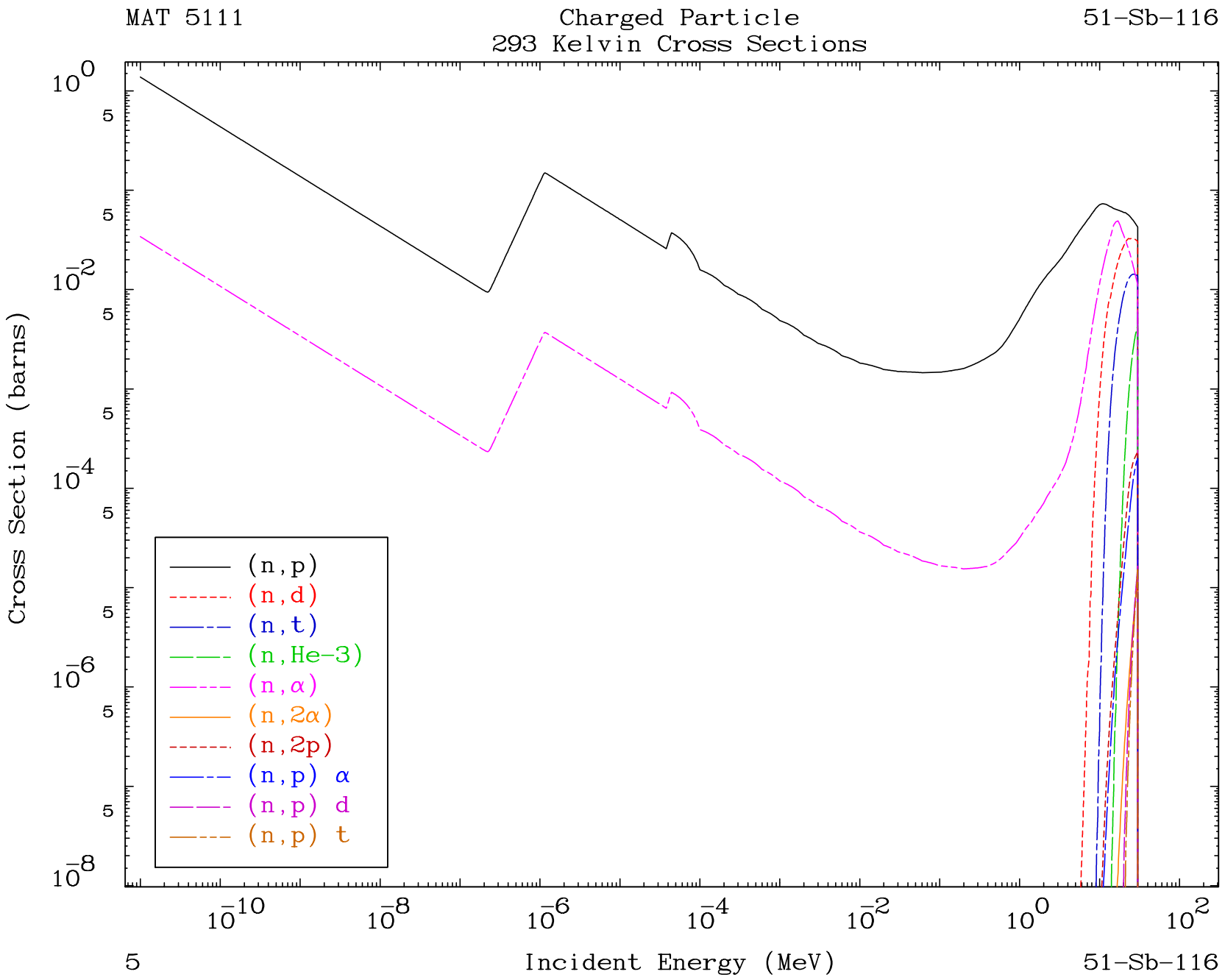
Press Mouse Button to Start

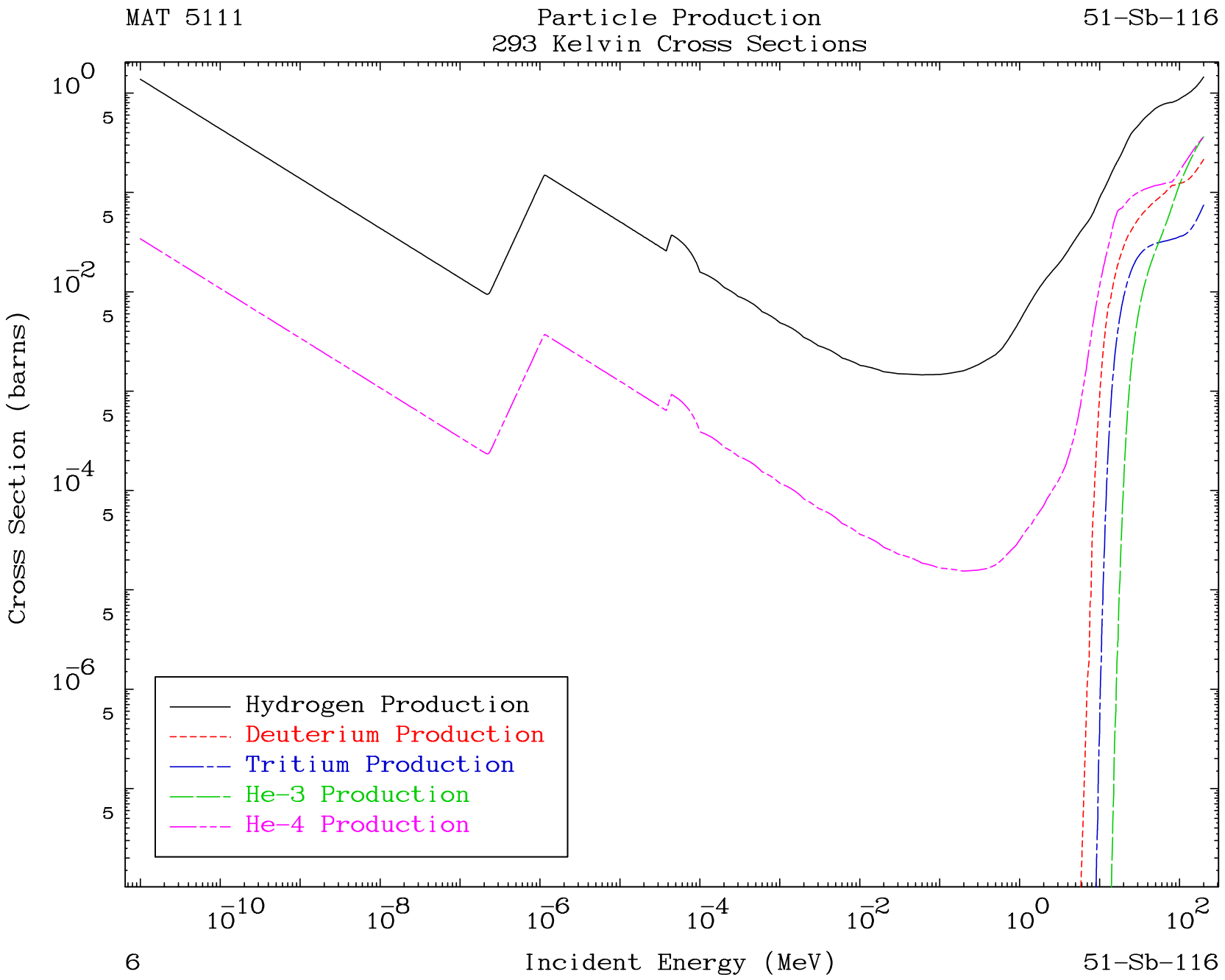

MAT 5111
Major
51-Sb-116
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
51-Sb-116

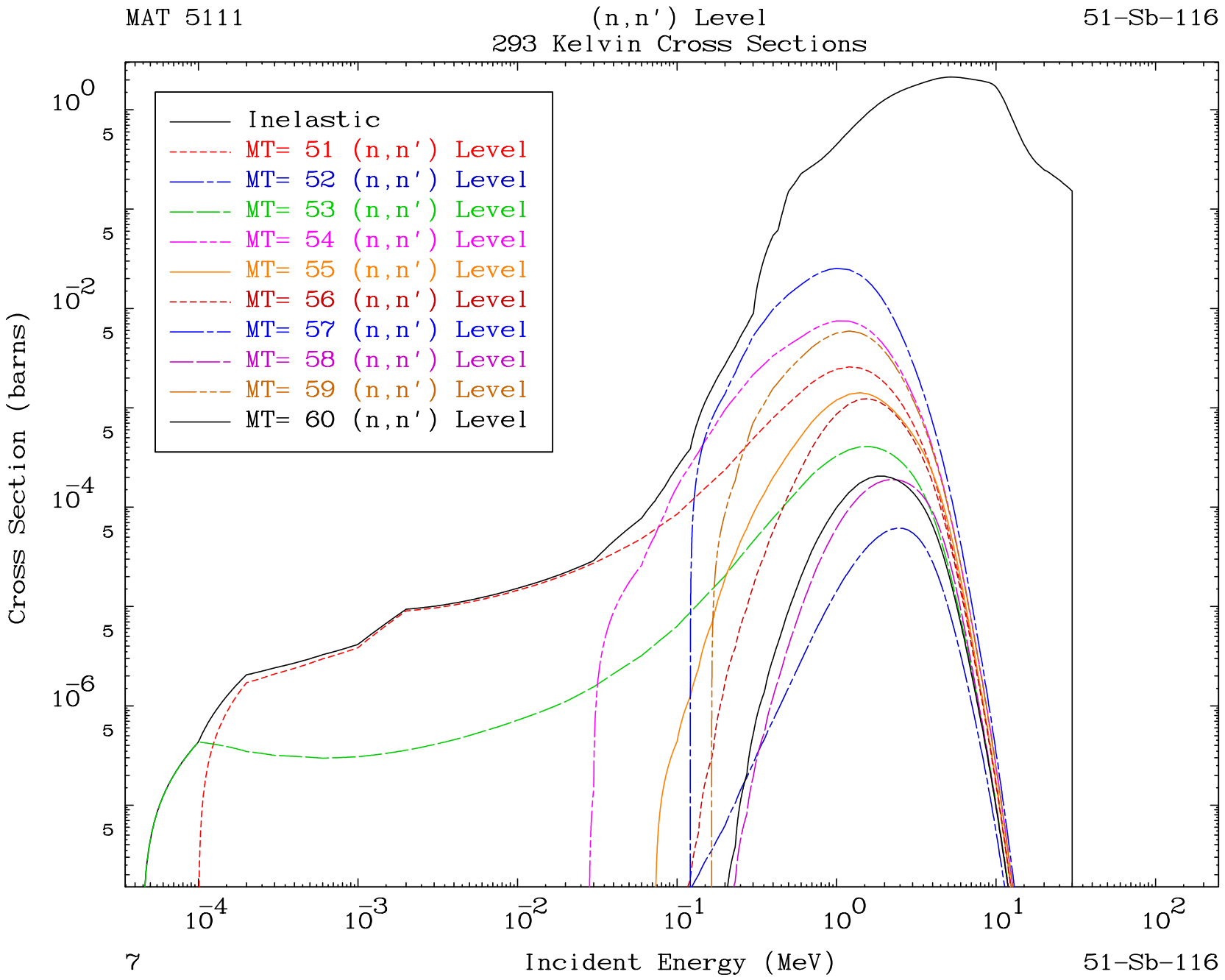

MAT 5111
Neutron Production
293 Kelvin Cross Sections
51-Sb-116
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
Cross Section (barns)
Incident Energy (MeV)
51-Sb-116

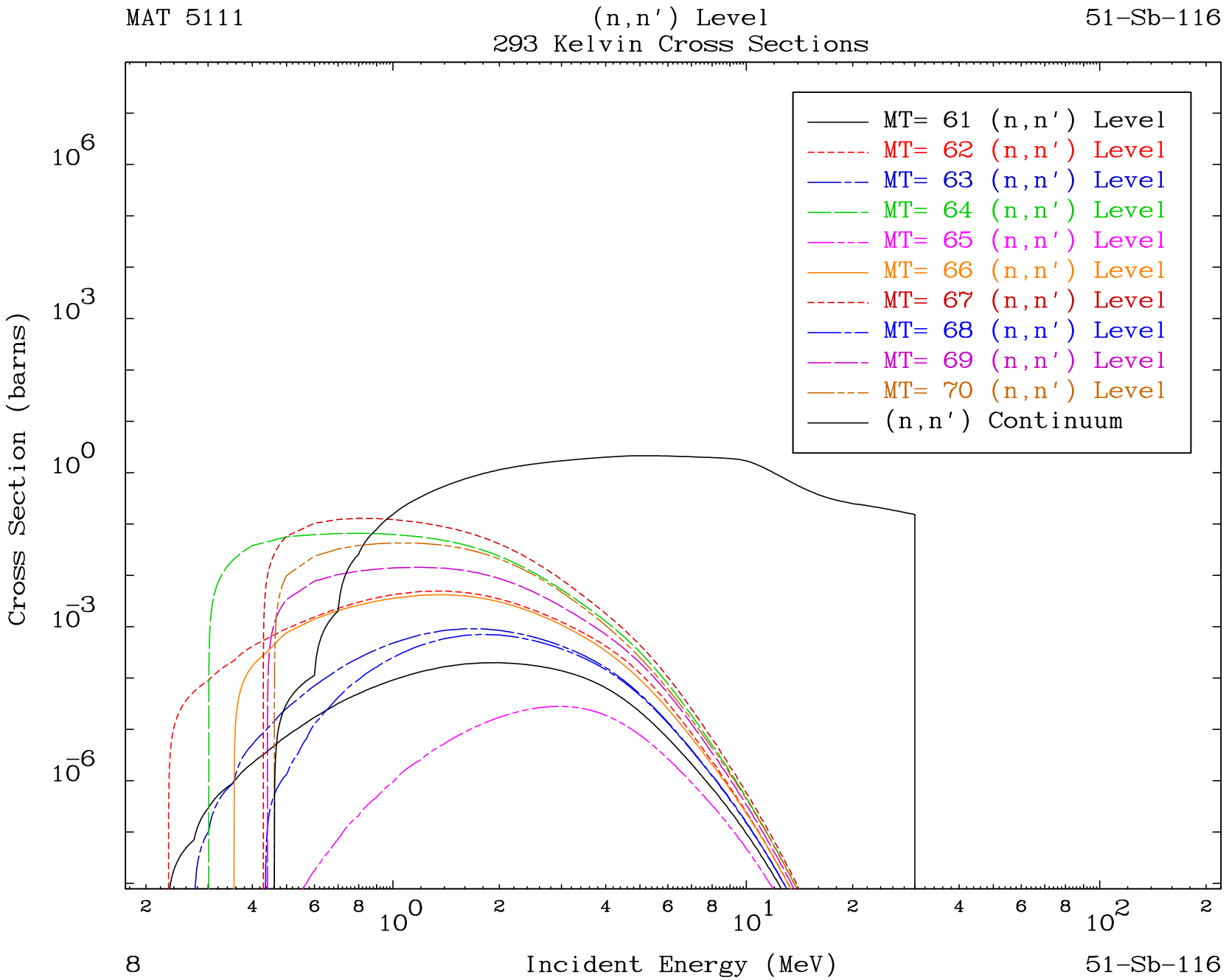

MAT 5111
Neutron Production
293 Kelvin Cross Sections
51-Sb-116
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
51-Sb-116

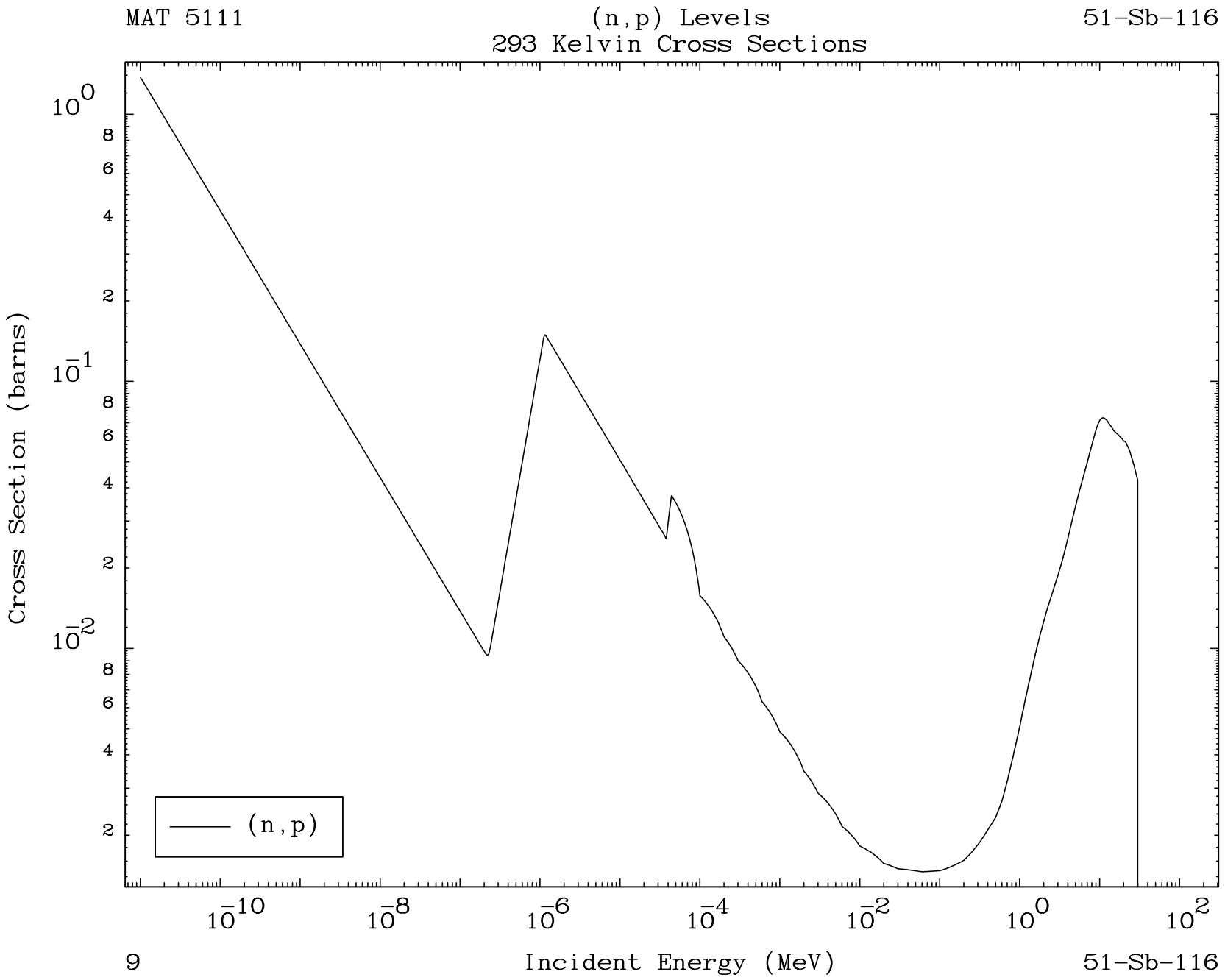

MAT 5111
Charged Particle
293 Kelvin Cross Sections
51-Sb-116
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
10^0
10^1
10^2
Incident Energy (MeV)
4
51-Sb-116

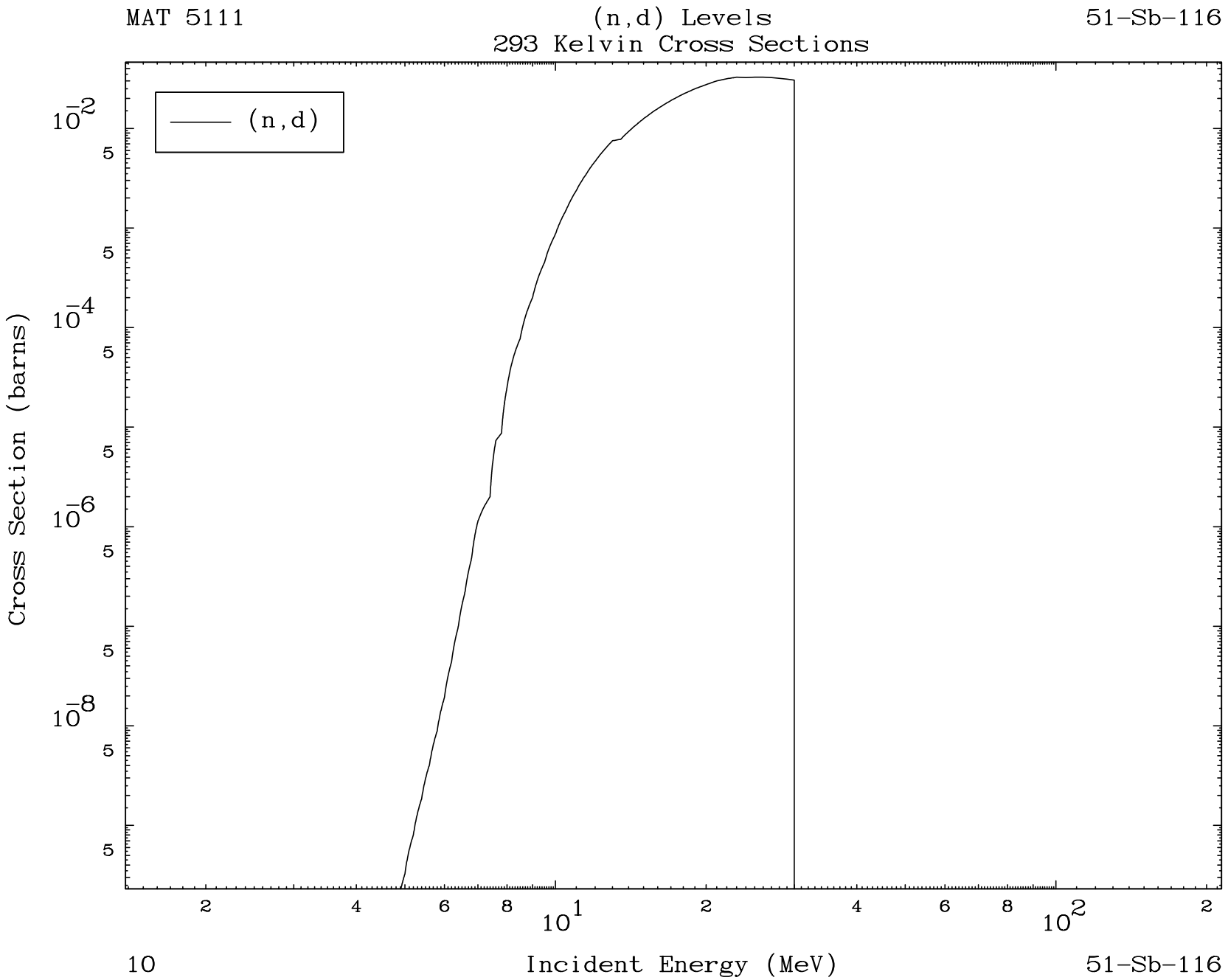

MAT 5111
Charged Particle
293 Kelvin Cross Sections
51-Sb-116
Cross Section (barns)
Incident Energy (MeV)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t

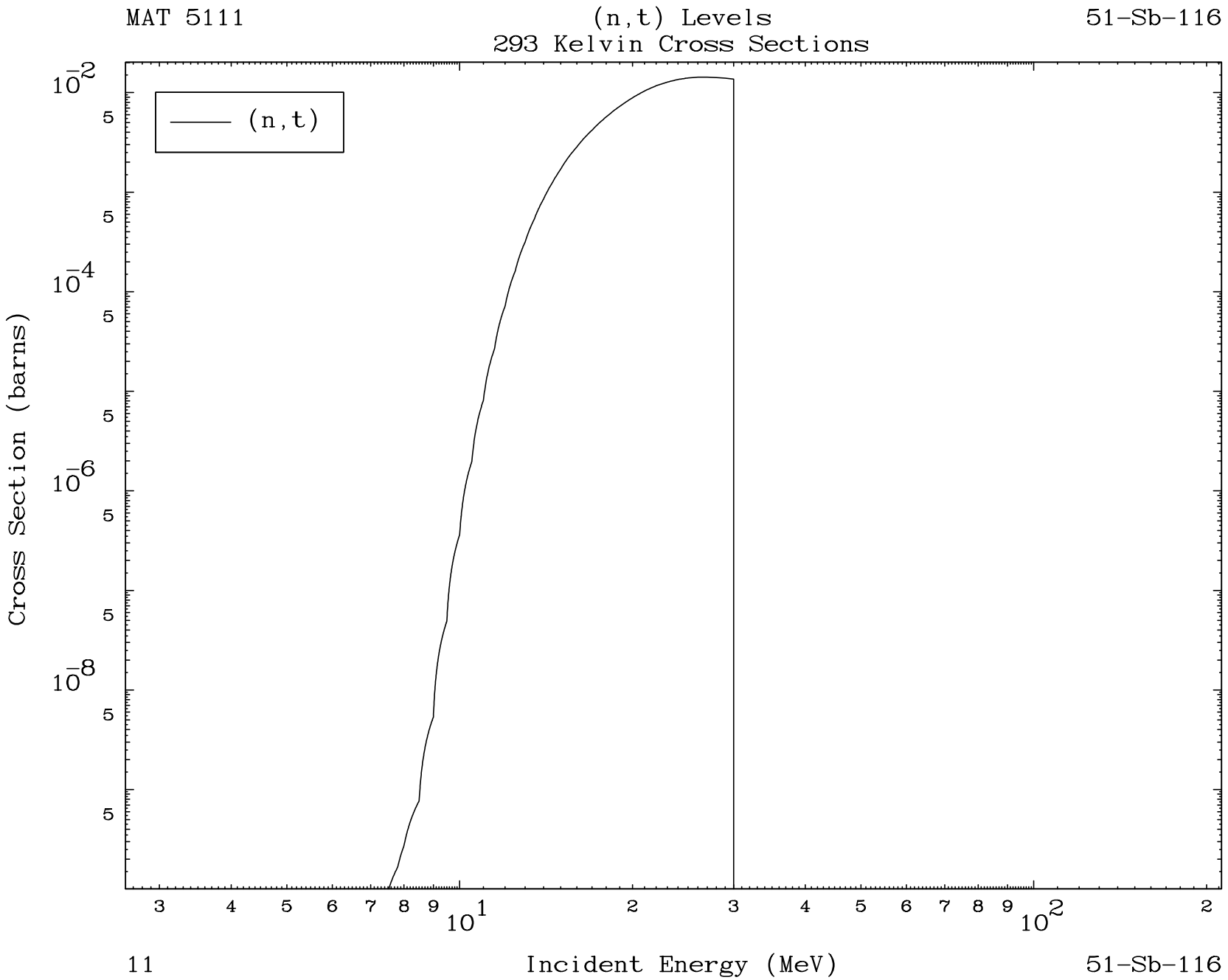

MAT 5111
Particle Production
293 Kelvin Cross Sections
51-Sb-116
Cross Section (barns)
10^0
5
10^-2
5
10^-4
5
10^-6
5
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
6
51-Sb-116

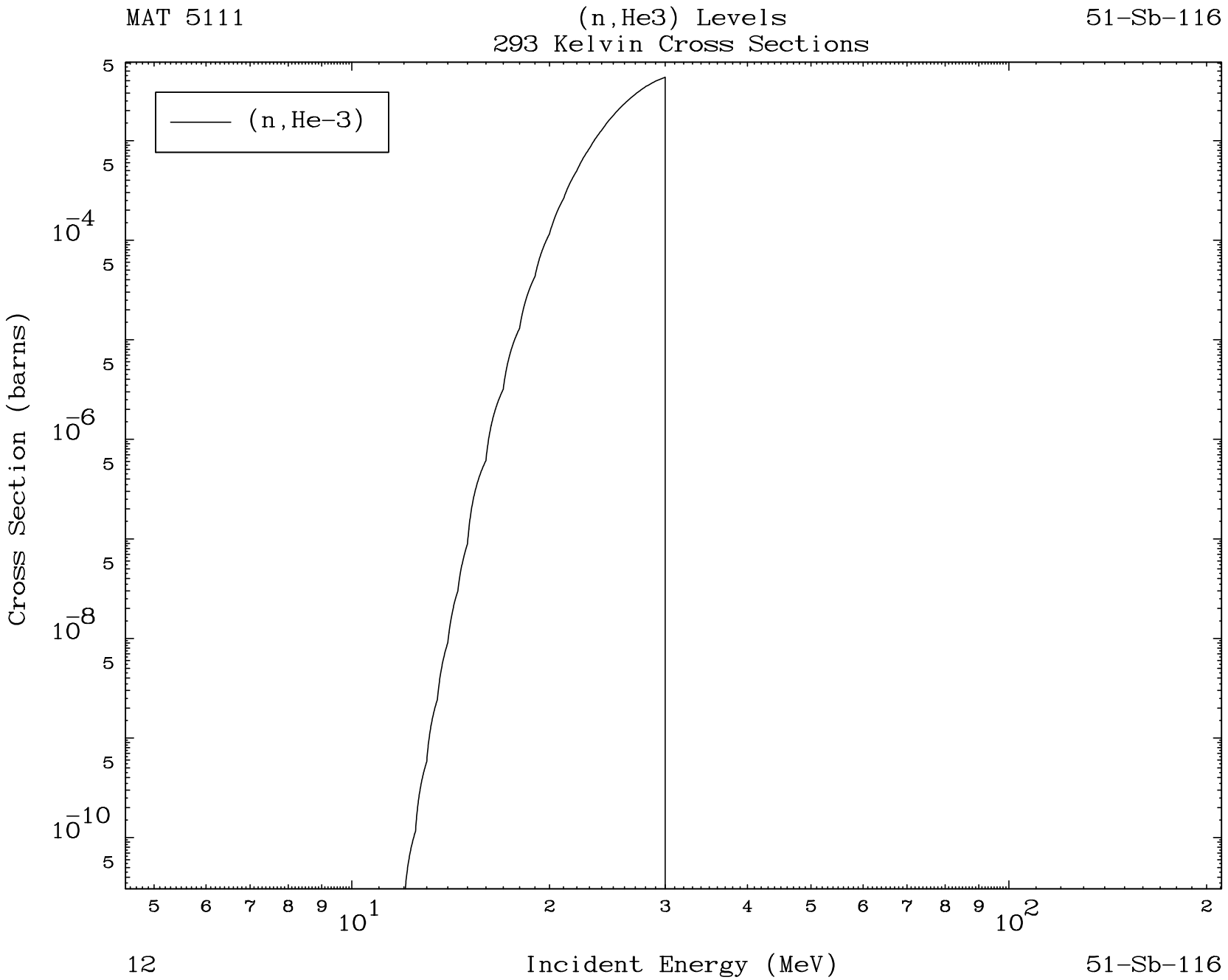

MAT 5111
(n,n') Level
51-Sb-116
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
51-Sb-116

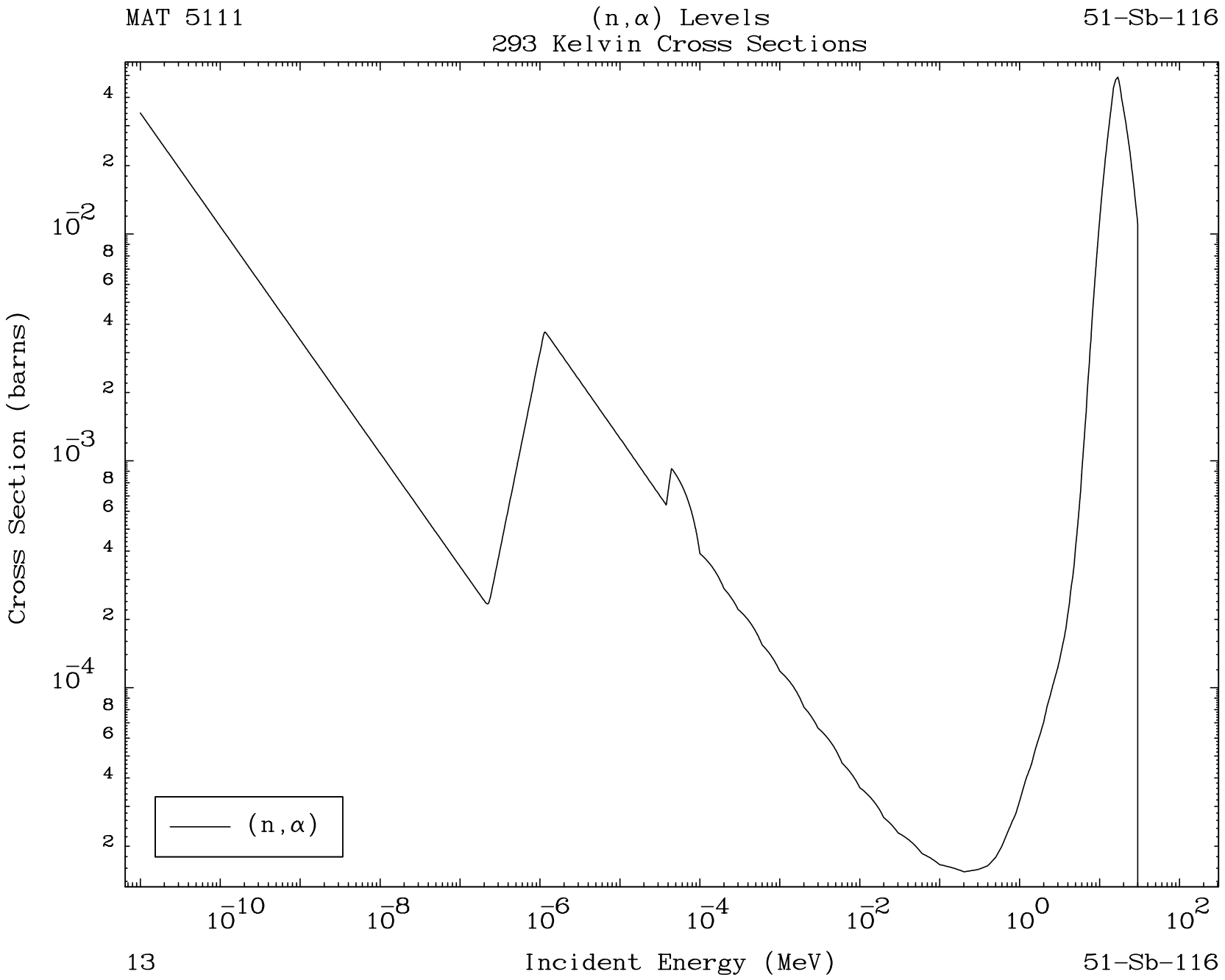

MAT 5111
(n,n') Level
293 Kelvin Cross Sections
51-Sb-116
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
8
51-Sb-116

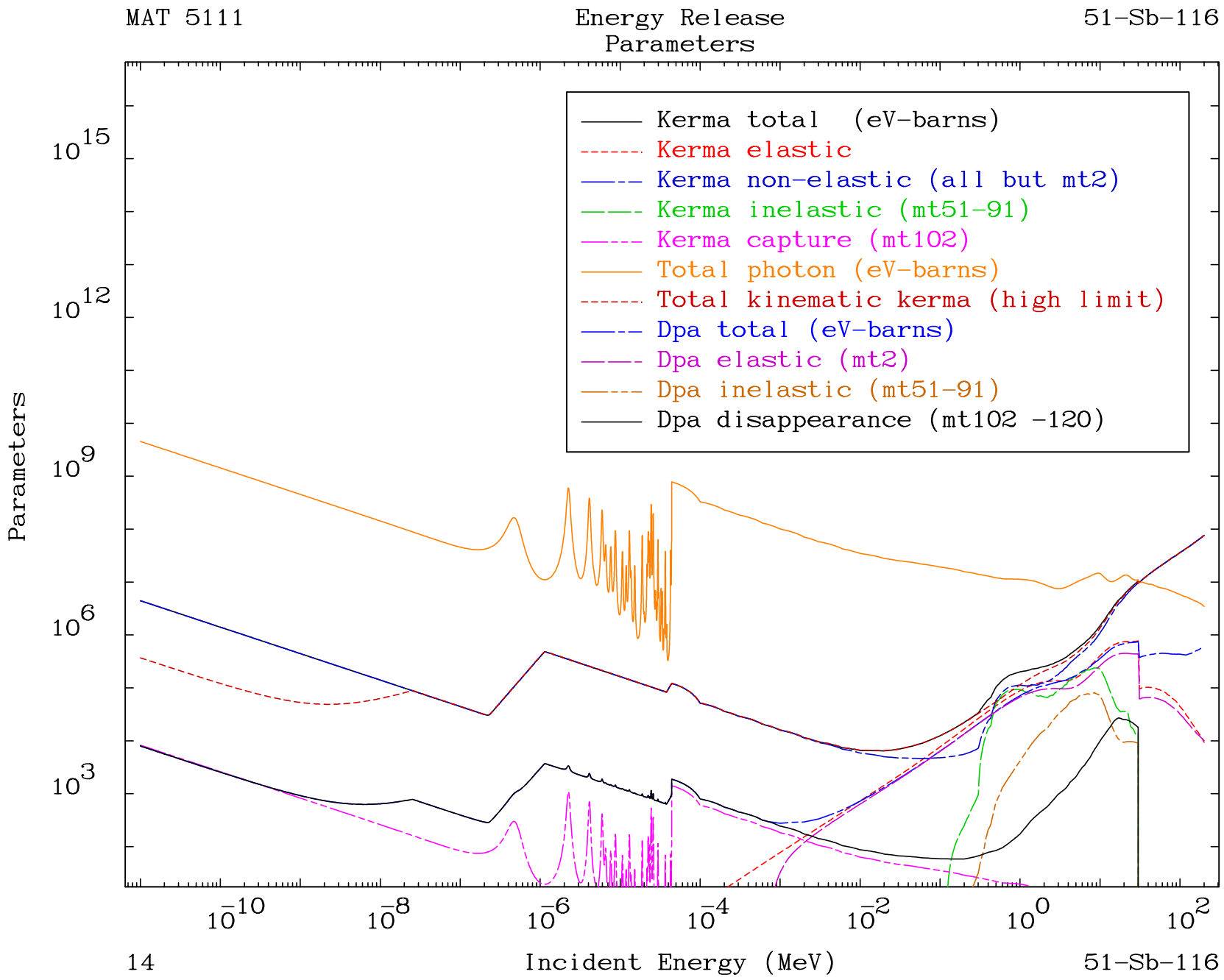

MAT 5111
(n,p) Levels
51-Sb-116
293 Kelvin Cross Sections
Cross Section (barns)
10^0
10^-1
10^-2
8
6
4
2
(n,p)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
9
51-Sb-116

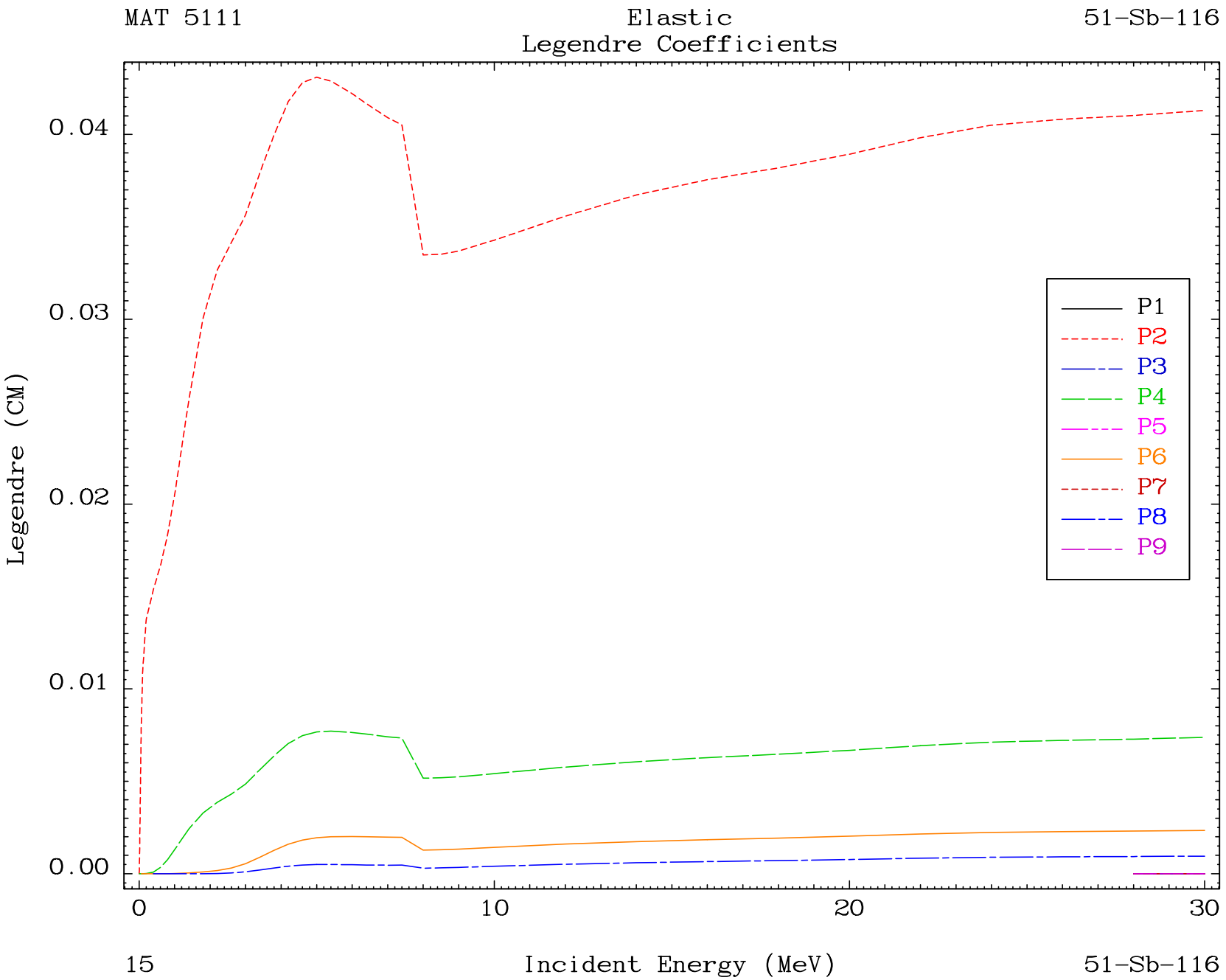

MAT 5111
(n,d) Levels
51-Sb-116
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
2
4
6
8
10^1
2
4
6
8
10^2
2
10
Incident Energy (MeV)
51-Sb-116

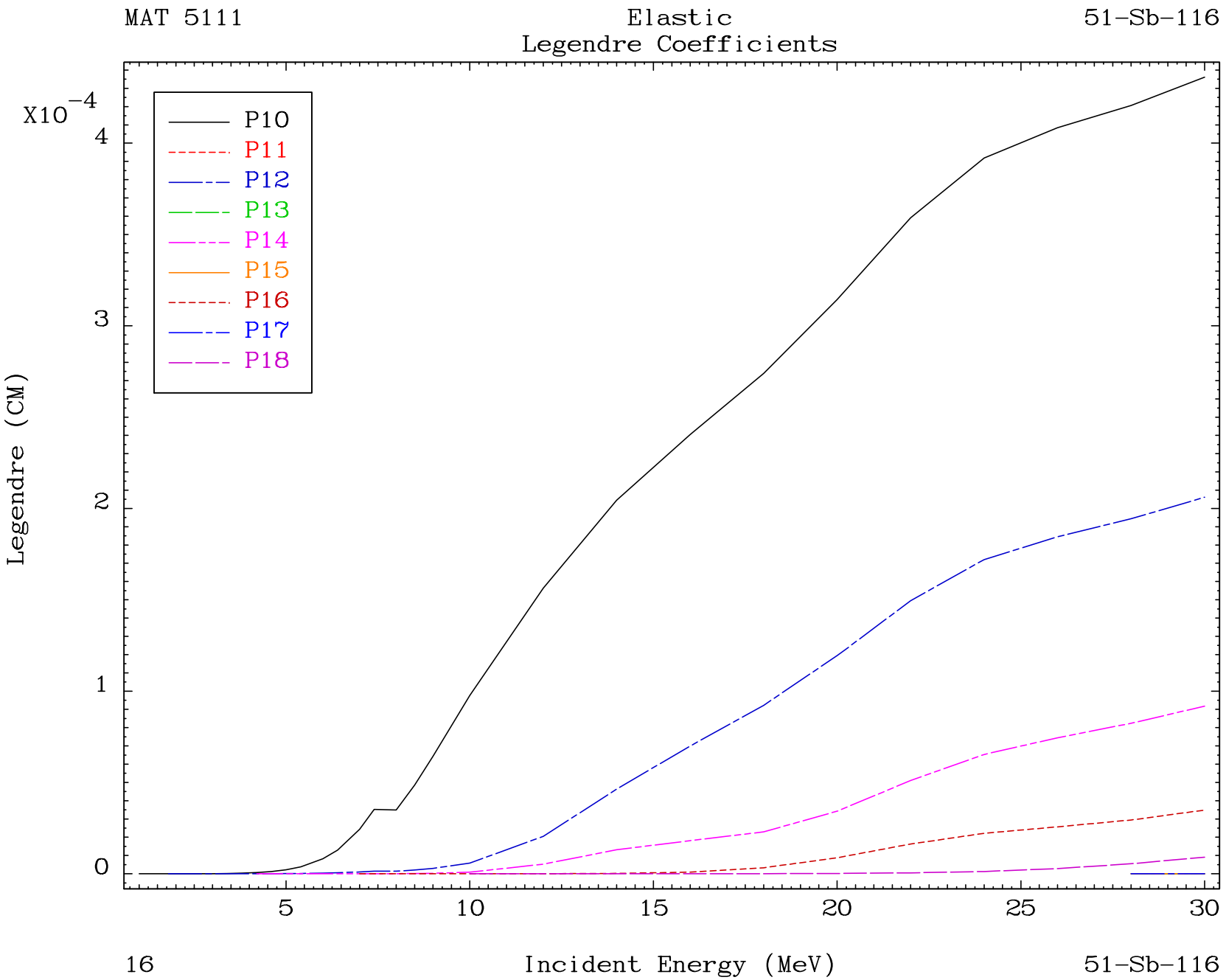

MAT 5111
(n,t) Levels
51-Sb-116
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
11
51-Sb-116

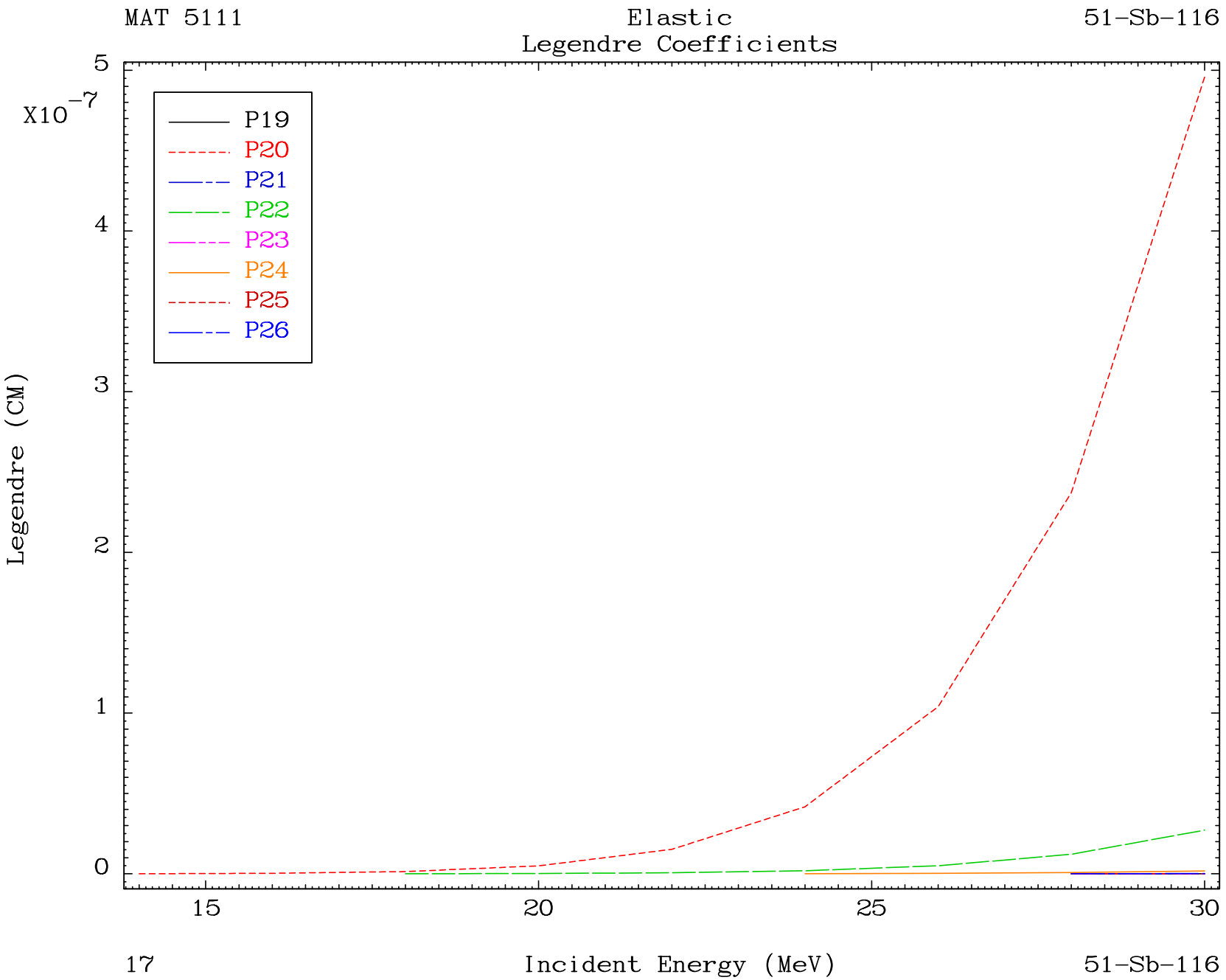

MAT 5111
(n,He3) Levels
51-Sb-116
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
Incident Energy (MeV)
12
51-Sb-116

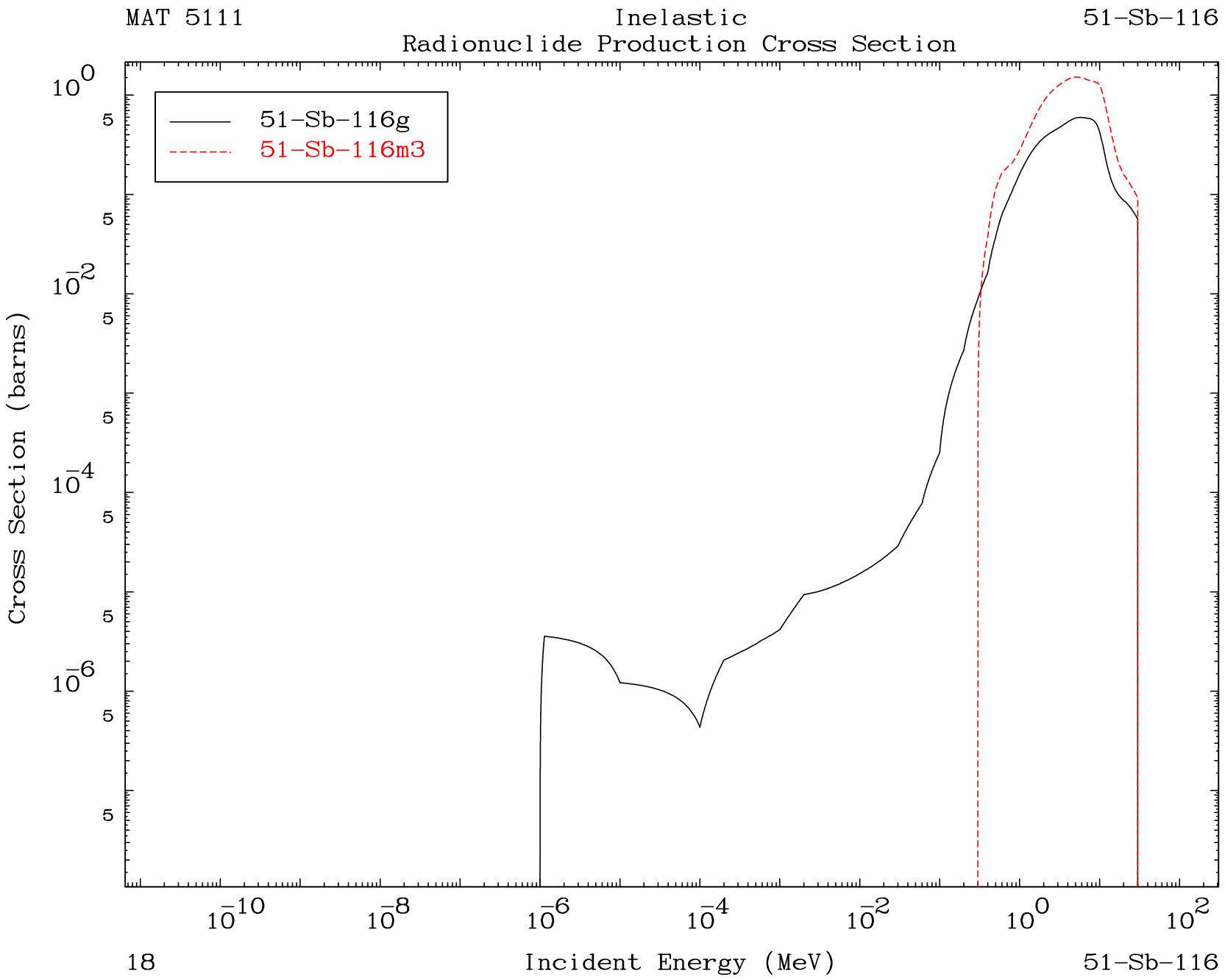

MAT 5111
(n,α) Levels
51-Sb-116
293 Kelvin Cross Sections
Cross Section (barns)
10^-2
10^-3
10^-4
(n,α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
13
Incident Energy (MeV)
51-Sb-116

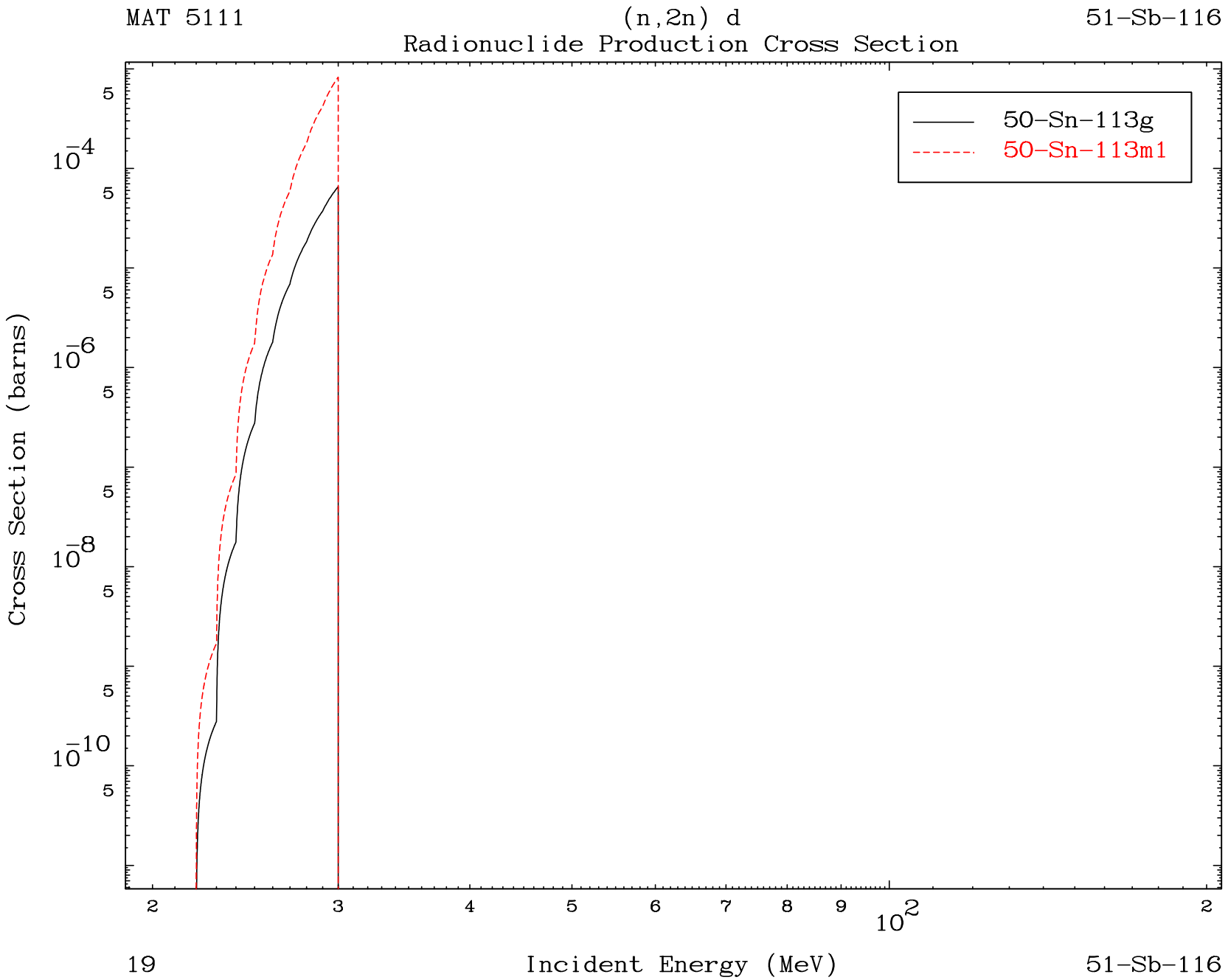

MAT 5111
Energy Release Parameters
51-Sb-116
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
14
Incident Energy (MeV)
51-Sb-116

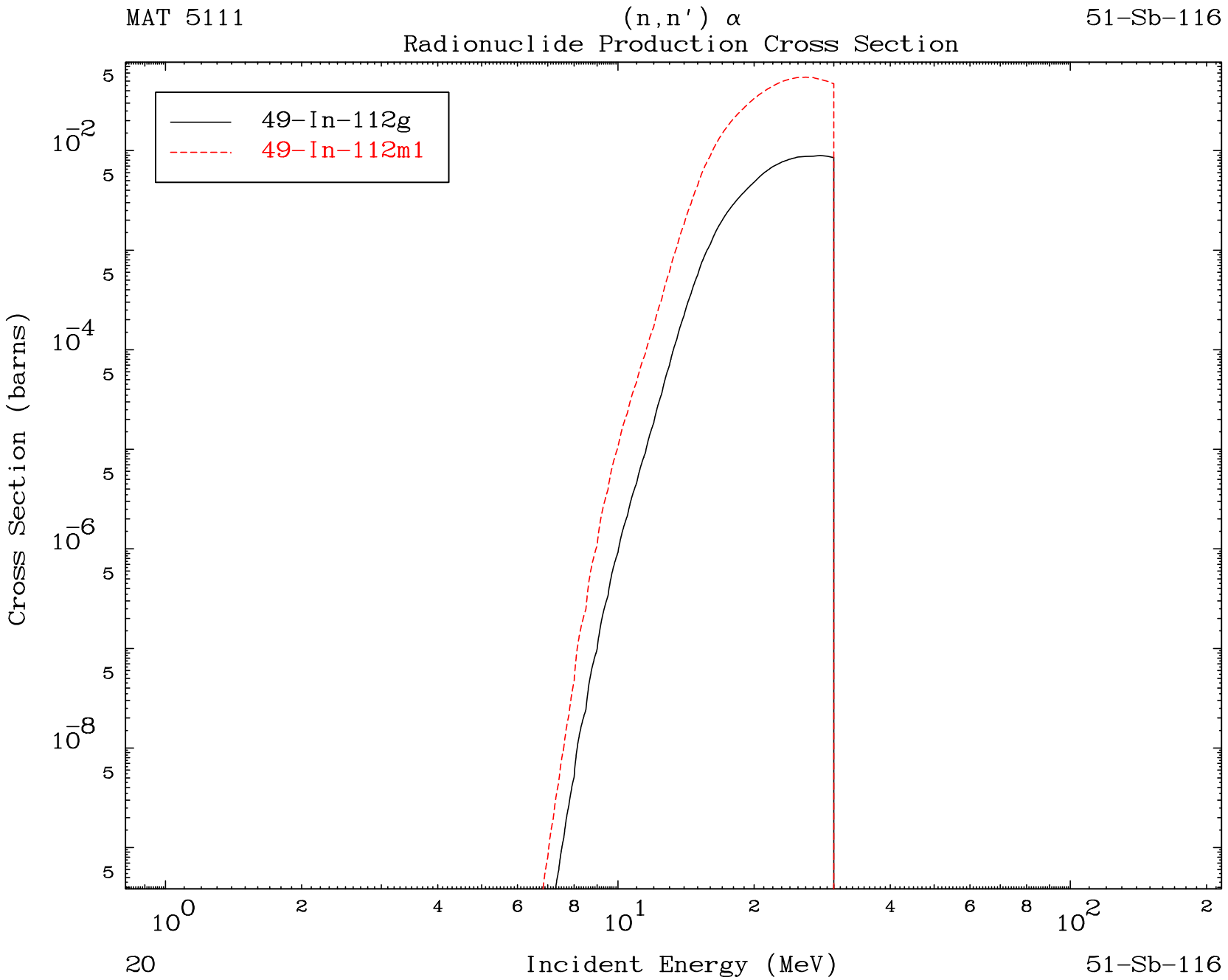

MAT 5111
Elastic
Legendre Coefficients
51-Sb-116
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
P9
0
10
20
30
15
Incident Energy (MeV)
51-Sb-116

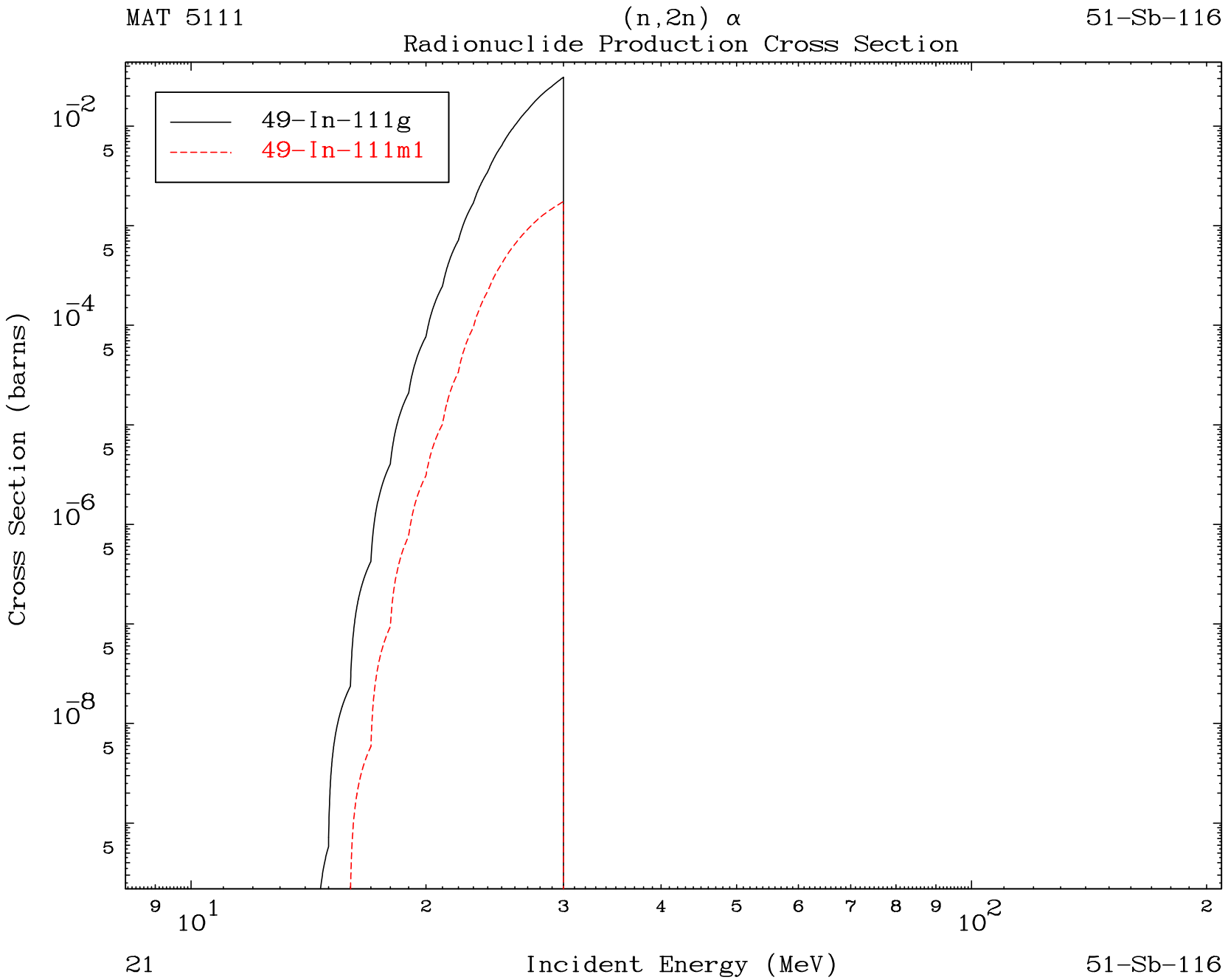

MAT 5111
Elastic
Legendre Coefficients
51-Sb-116
X10 −4
4
3
2
1
0
Legendre (CM)
P10
P11
P12
P13
P14
P15
P16
P17
P18
5
10
15
20
25
30
16
Incident Energy (MeV)
51-Sb-116

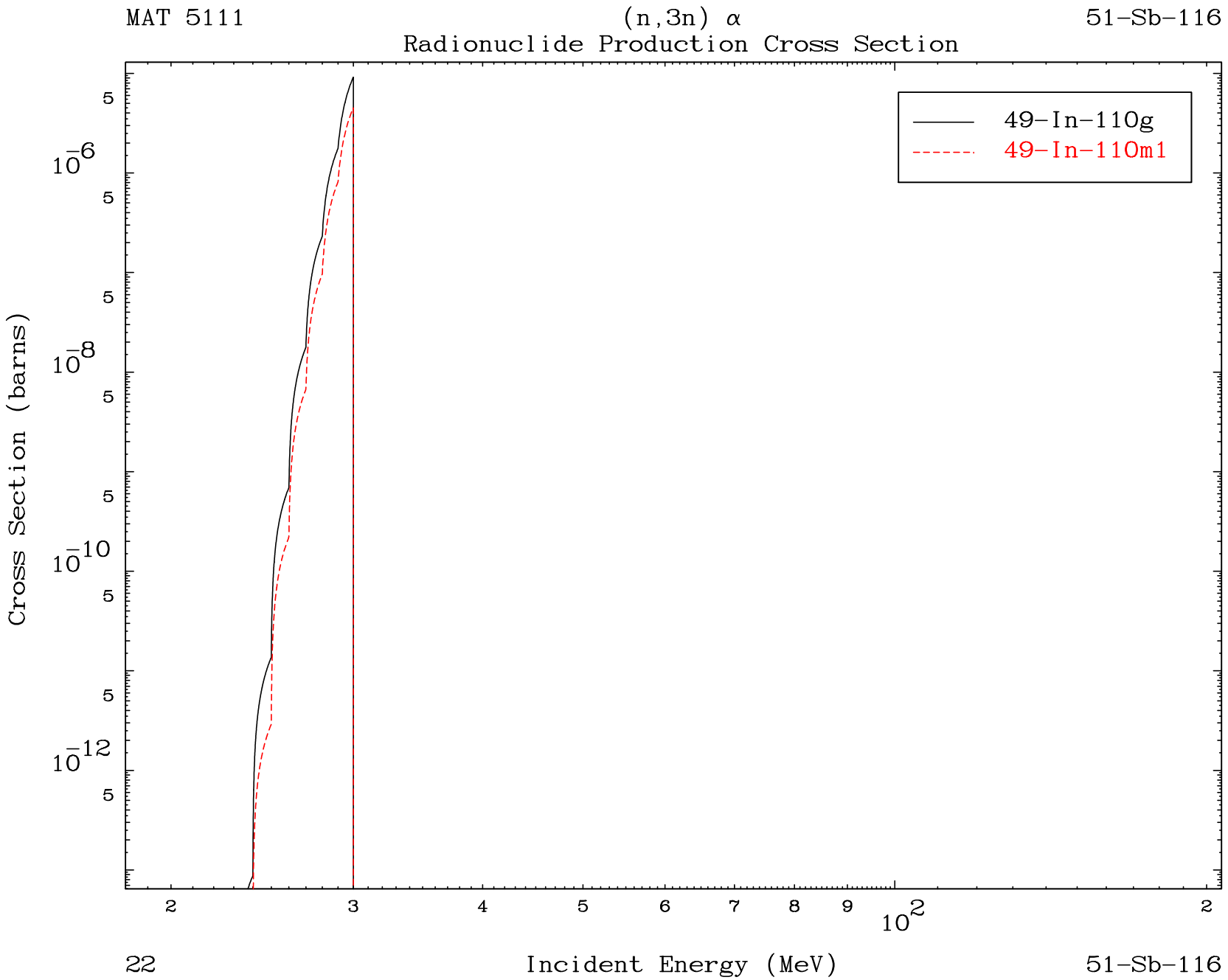

MAT 5111
Elastic
Legendre Coefficients
51-Sb-116
X10^-7
Legendre (CM)
P19
P20
P21
P22
P23
P24
P25
P26
5
4
3
2
1
0
15
20
25
30
17
Incident Energy (MeV)
51-Sb-116

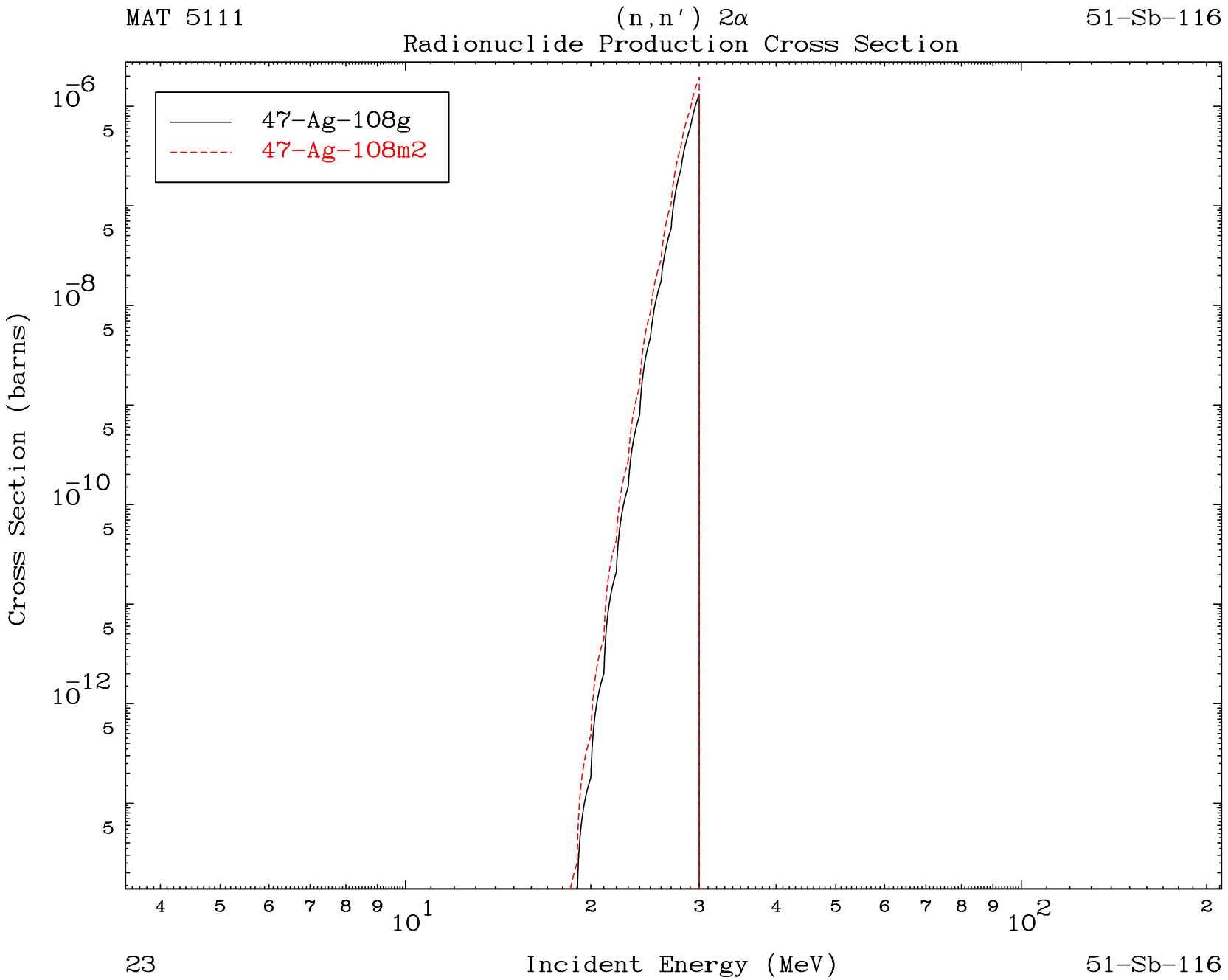

MAT 5111
Inelastic
51-Sb-116
Radionuclide Production Cross Section
51-Sb-116g
51-Sb-116m3
Cross Section (barns)
Incident Energy (MeV)
18
51-Sb-116

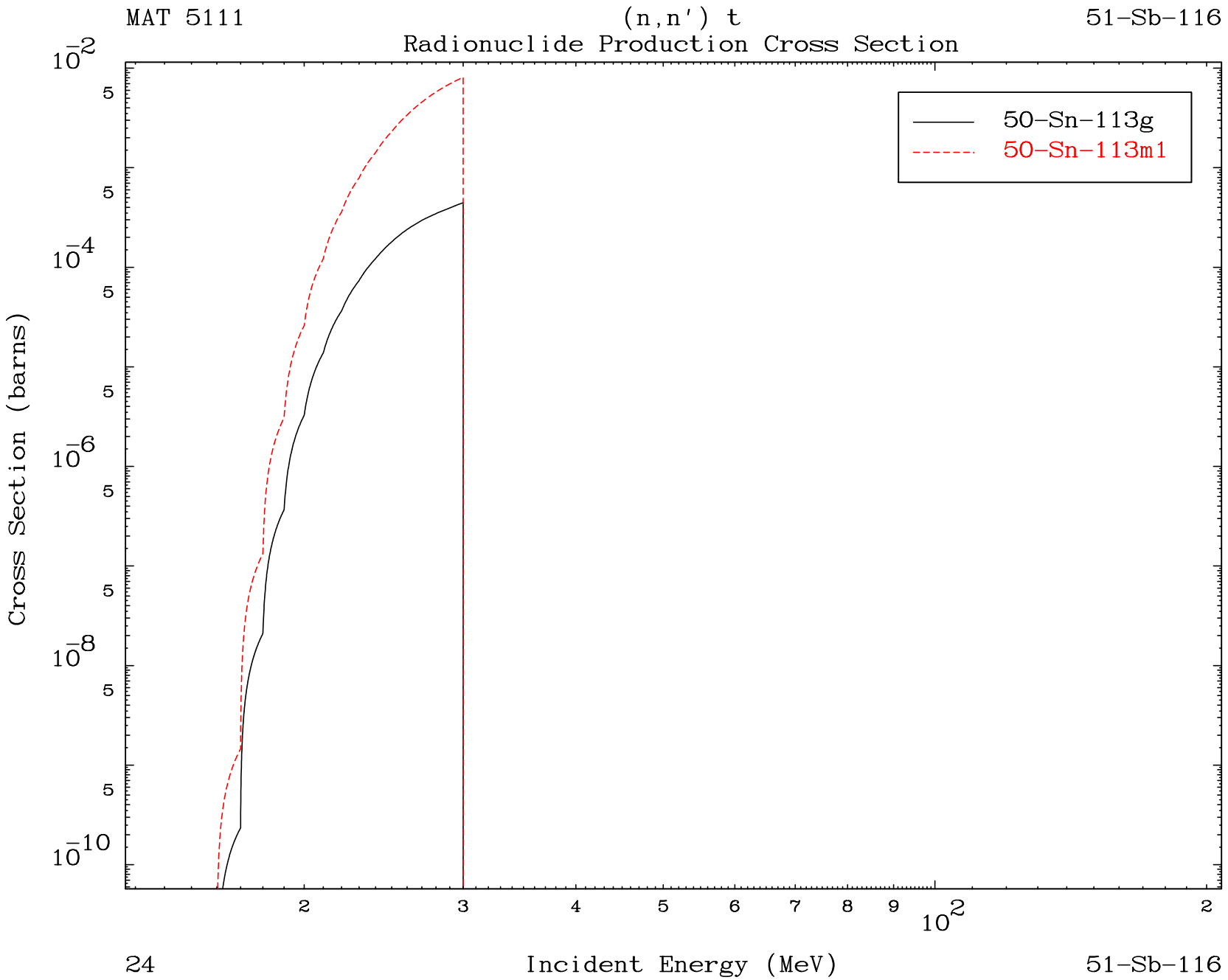

MAT 5111
(n,2n) d
51-Sb-116
Radionuclide Production Cross Section
50-Sn-113g
50-Sn-113m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
19
Incident Energy (MeV)
51-Sb-116

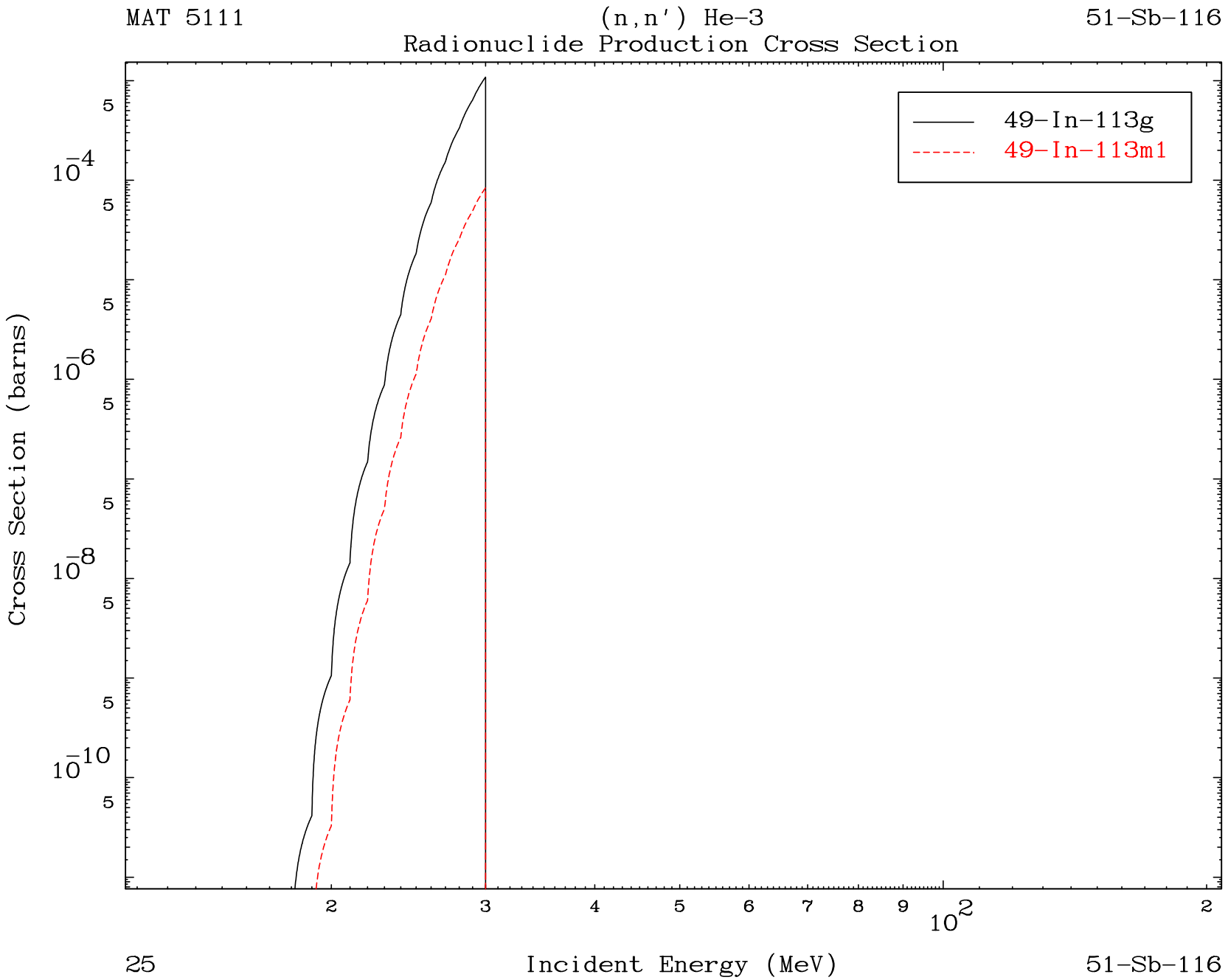

MAT 5111
(n,n') α
51-Sb-116
Radionuclide Production Cross Section
49-In-112g
49-In-112m1
Cross Section (barns)
Incident Energy (MeV)
20
51-Sb-116

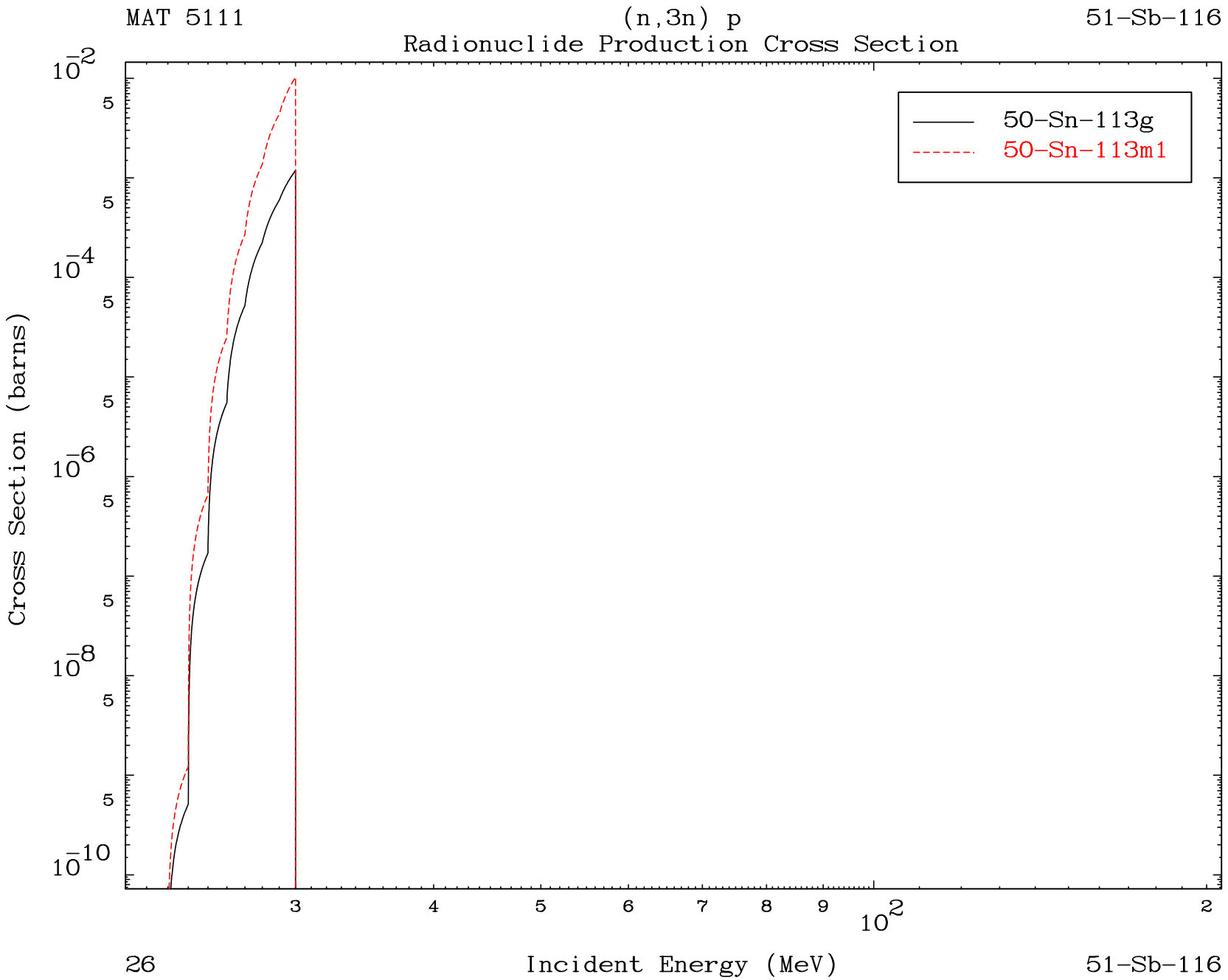

MAT 5111
(n,2n) α
51-Sb-116
Radionuclide Production Cross Section
49-In-111g
49-In-111m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
9
101
2
3
4
5
6
7
8
9
102
2
21
Incident Energy (MeV)
51-Sb-116

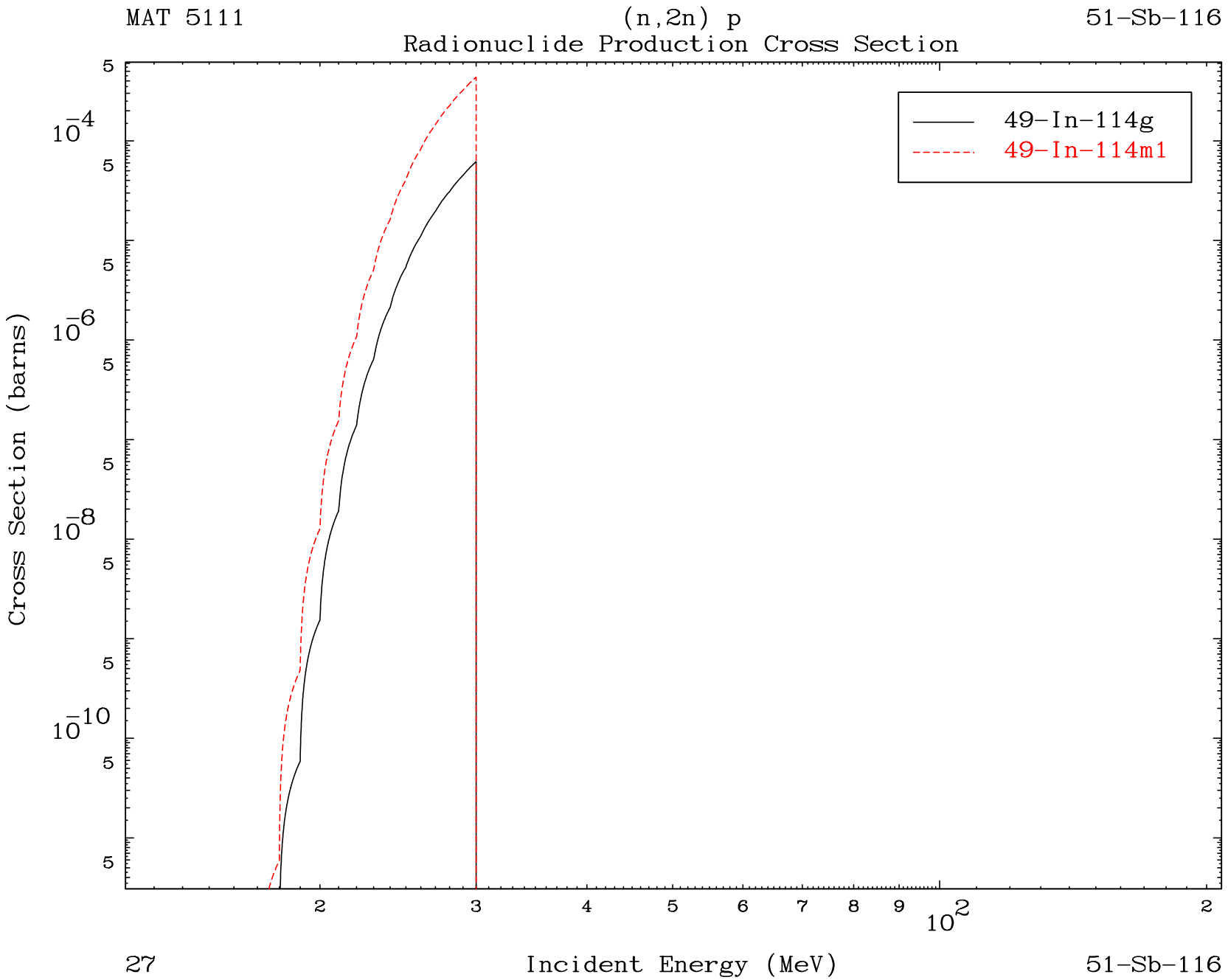

MAT 5111
(n,3n) α
51-Sb-116
Radionuclide Production Cross Section
49-In-110g
49-In-110m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
22
Incident Energy (MeV)
51-Sb-116

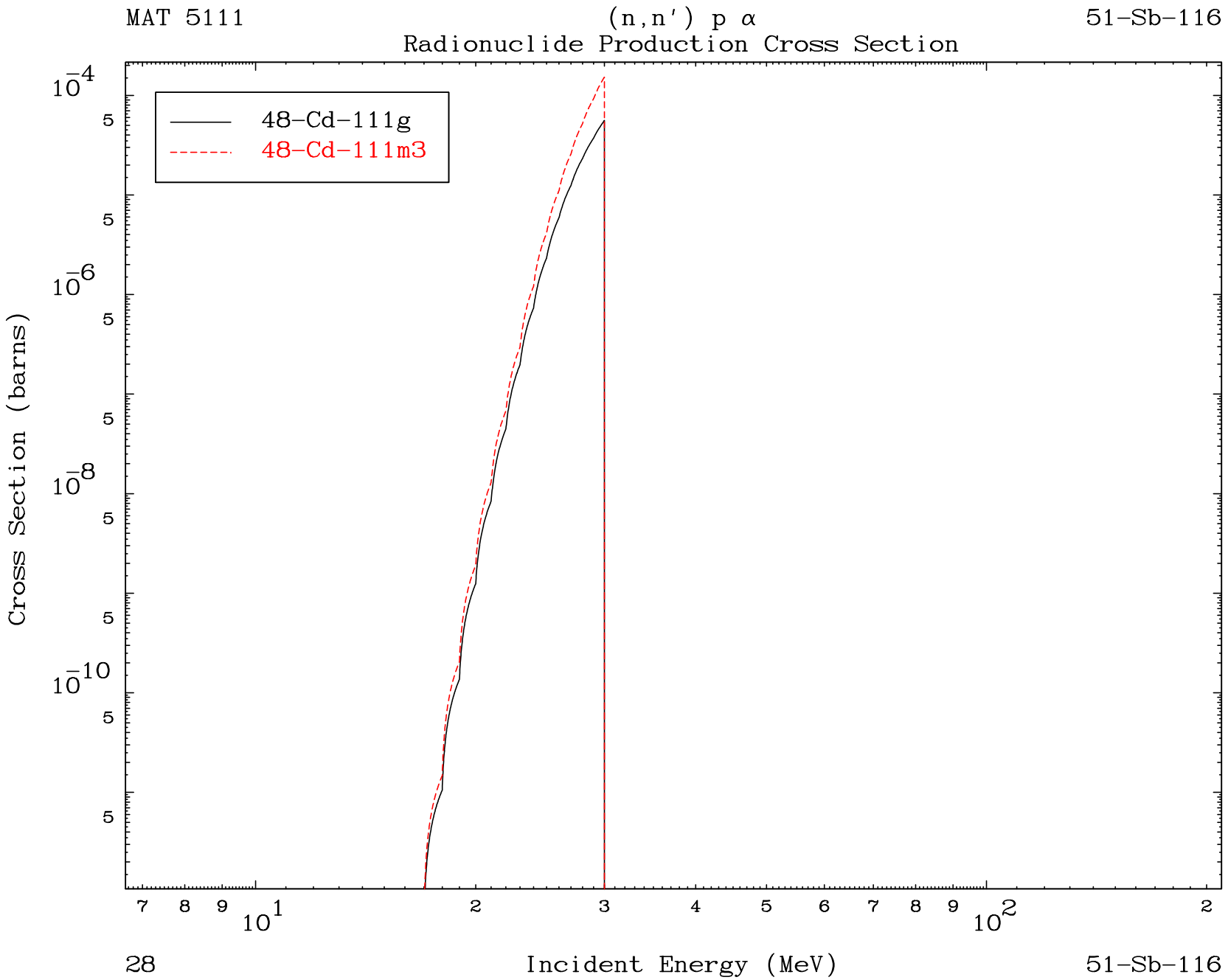

MAT 5111
(n,n') 2α
51-Sb-116
Radionuclide Production Cross Section
47-Ag-108g
47-Ag-108m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
4 5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
23
Incident Energy (MeV)
51-Sb-116

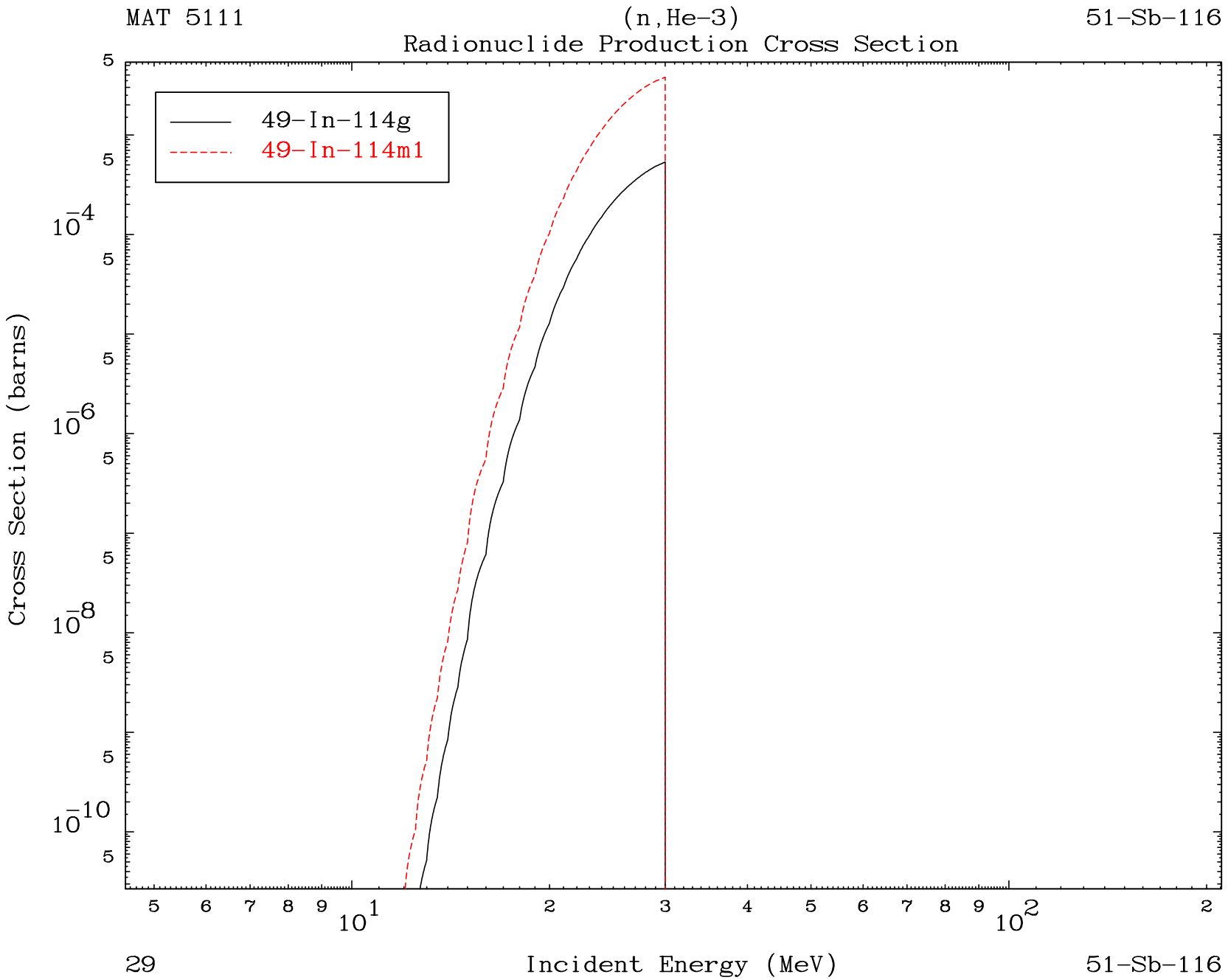

MAT 5111
(n,n') t
51-Sb-116
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
50-Sn-113g
50-Sn-113m1
24
Incident Energy (MeV)
51-Sb-116

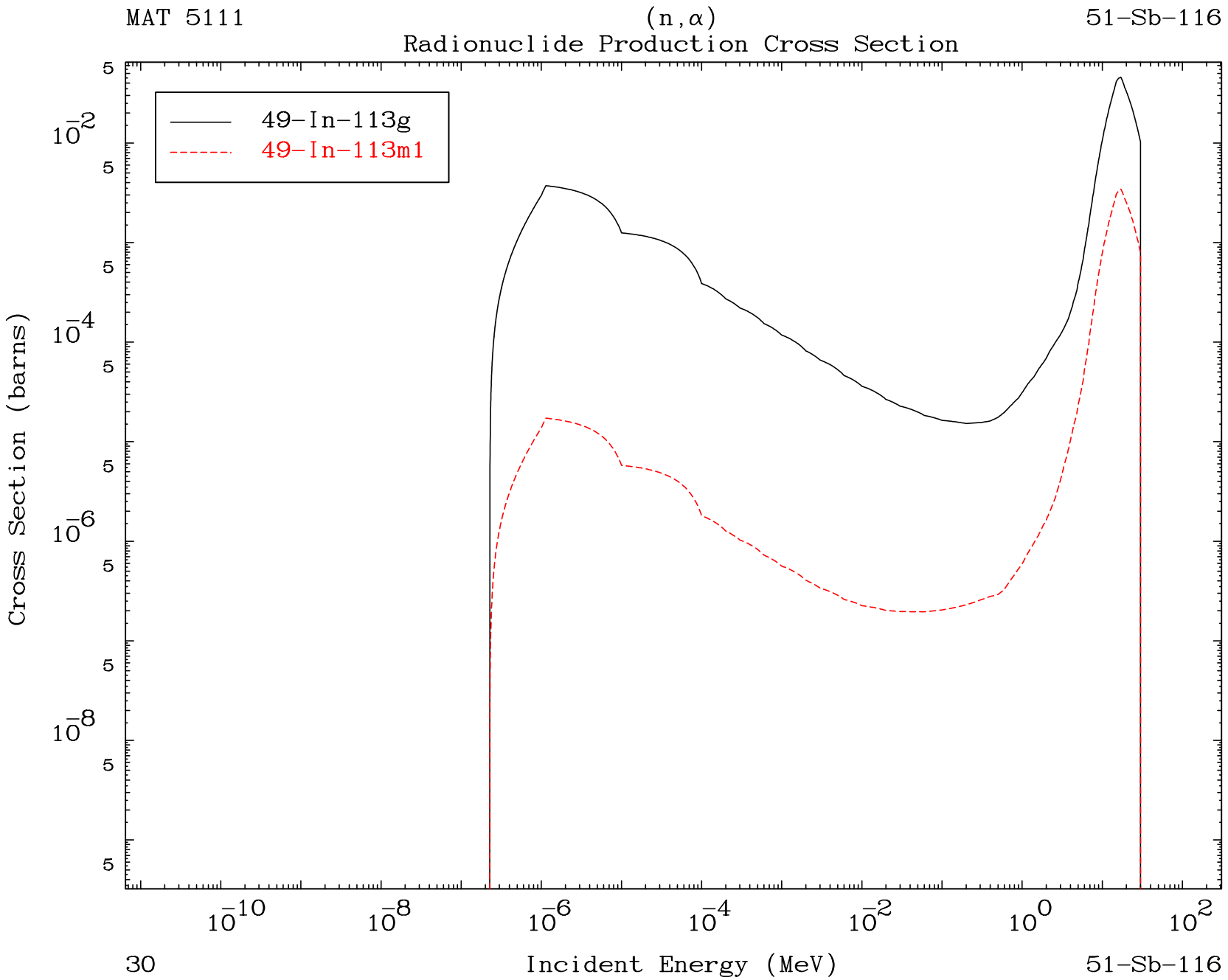

MAT 5111
(n,n') He-3
51-Sb-116
Radionuclide Production Cross Section
49-In-113g
49-In-113m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
25
Incident Energy (MeV)
51-Sb-116

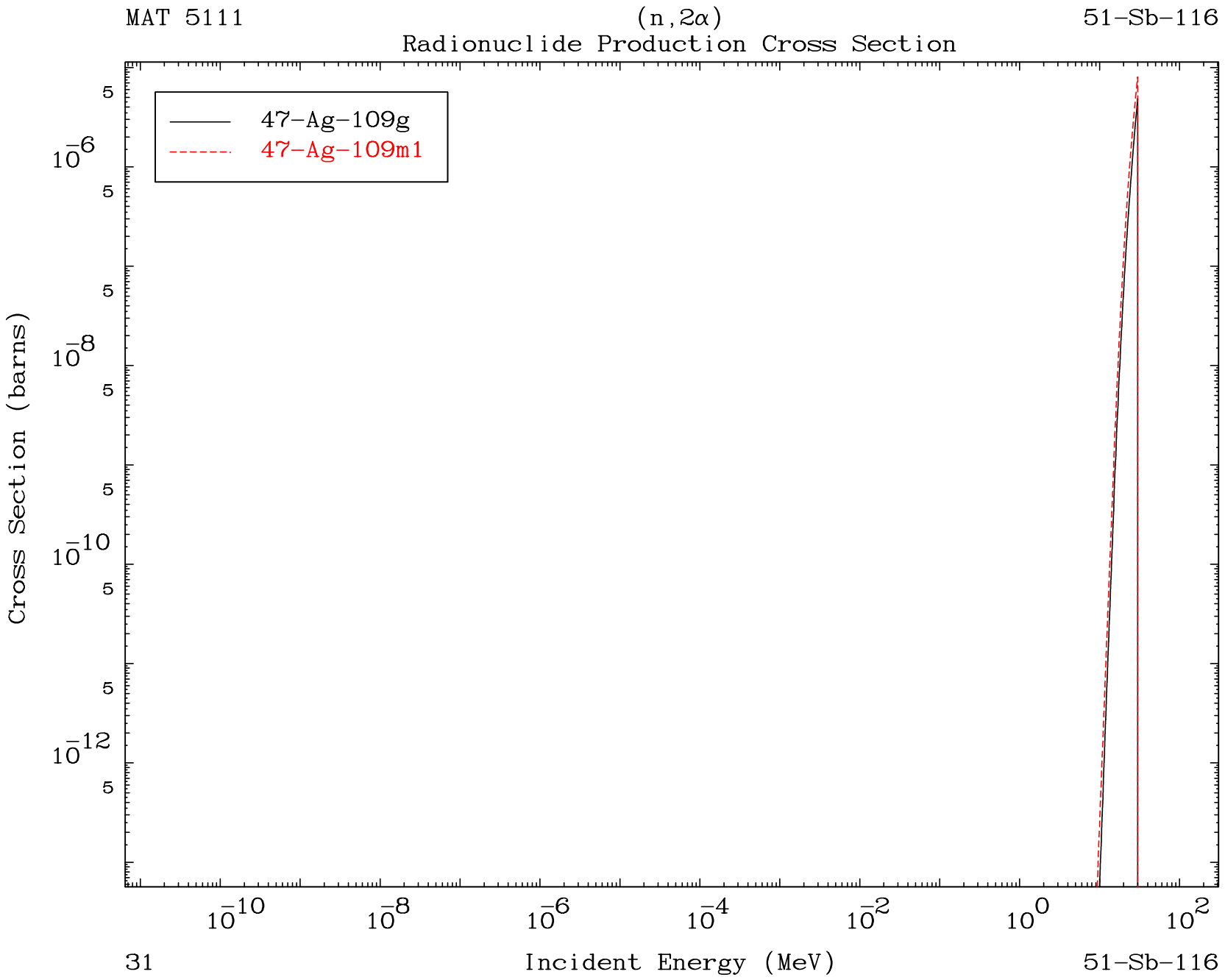

MAT 5111
(n,3n) p
51-Sb-116
Radionuclide Production Cross Section
50-Sn-113g
50-Sn-113m1
Cross Section (barns)
Incident Energy (MeV)
26
51-Sb-116

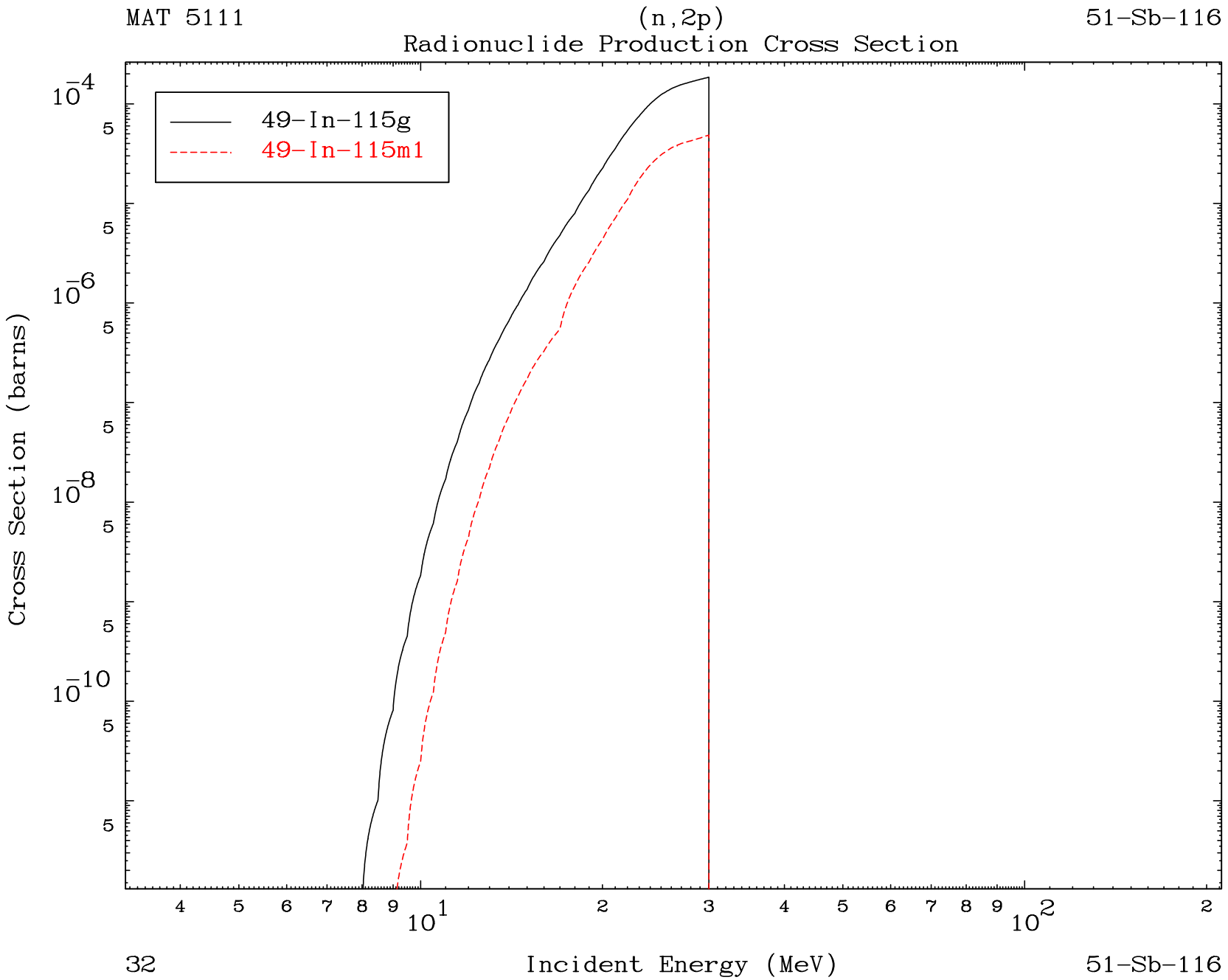

MAT 5111
(n,2n) p
51-Sb-116
Radionuclide Production Cross Section
49-In-114g
49-In-114m1
Cross Section (barns)
Incident Energy (MeV)
27
51-Sb-116

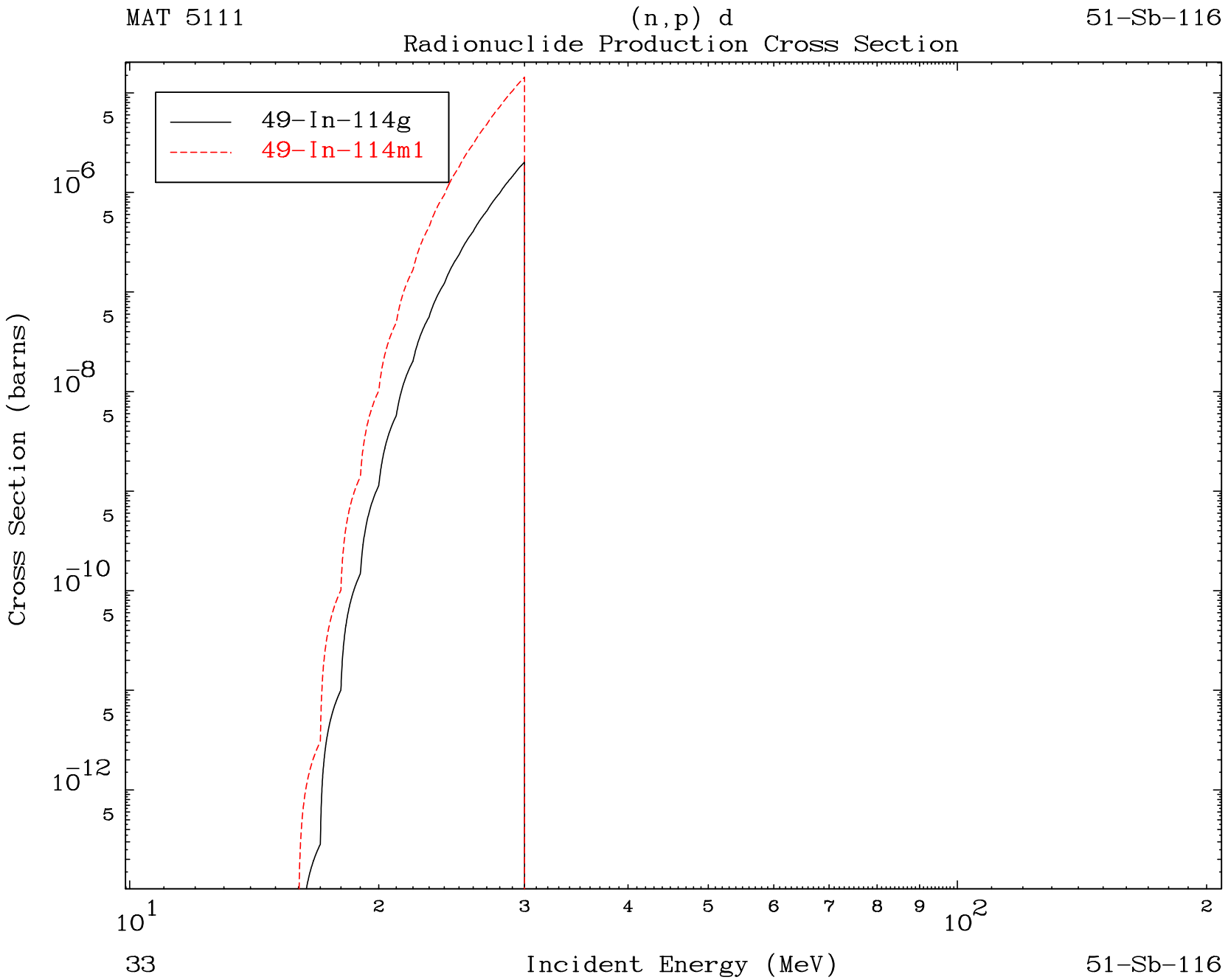

MAT 5111
(n,n') p α
51-Sb-116
Radionuclide Production Cross Section
48-Cd-111g
48-Cd-111m3
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
Incident Energy (MeV)
10^1
10^2
28
51-Sb-116

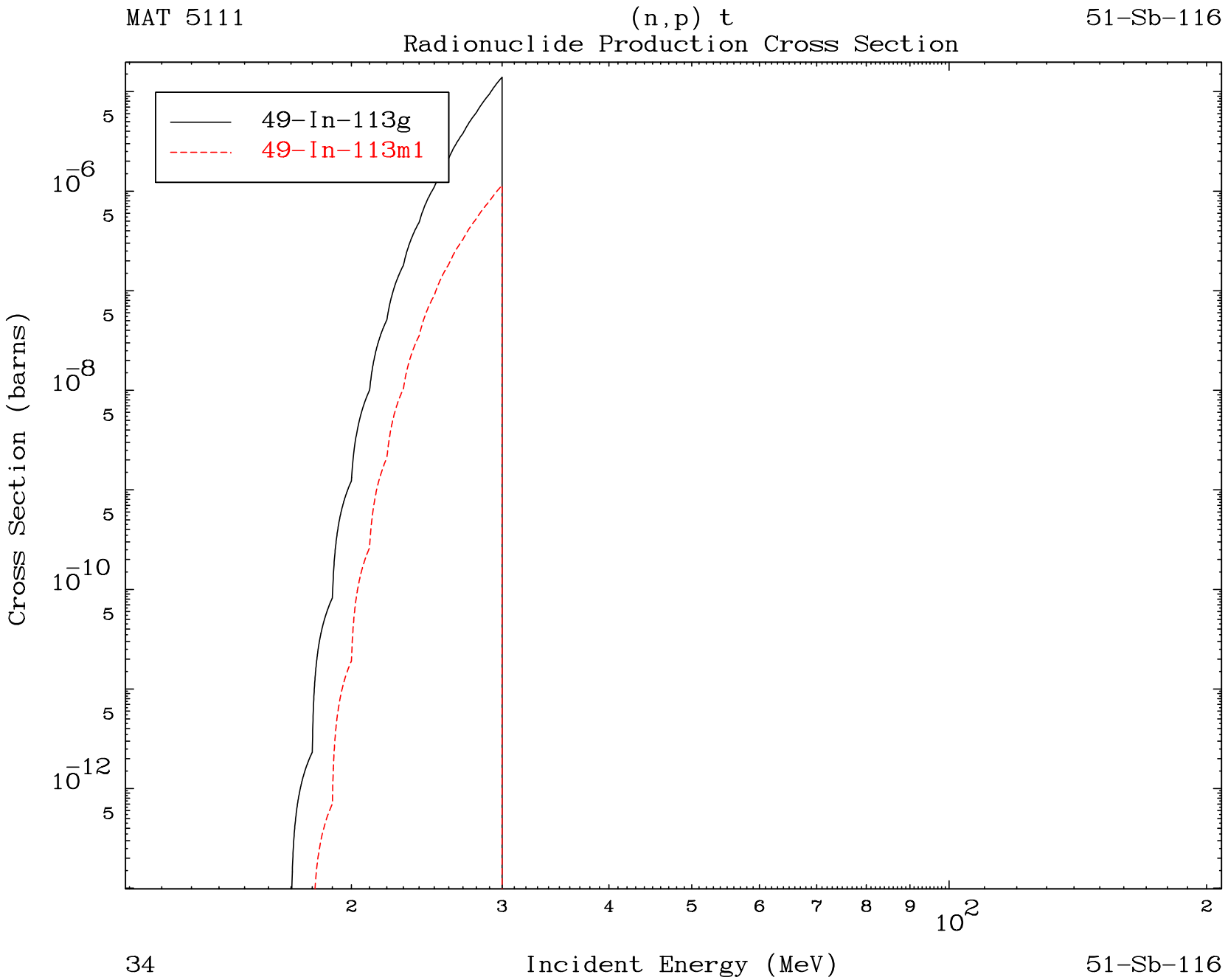

MAT 5111
(n,He-3)
51-Sb-116
Radionuclide Production Cross Section
49-In-114g
49-In-114m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^1
2
3
4
5
6
7
8
9
10^2
2
29
Incident Energy (MeV)
51-Sb-116

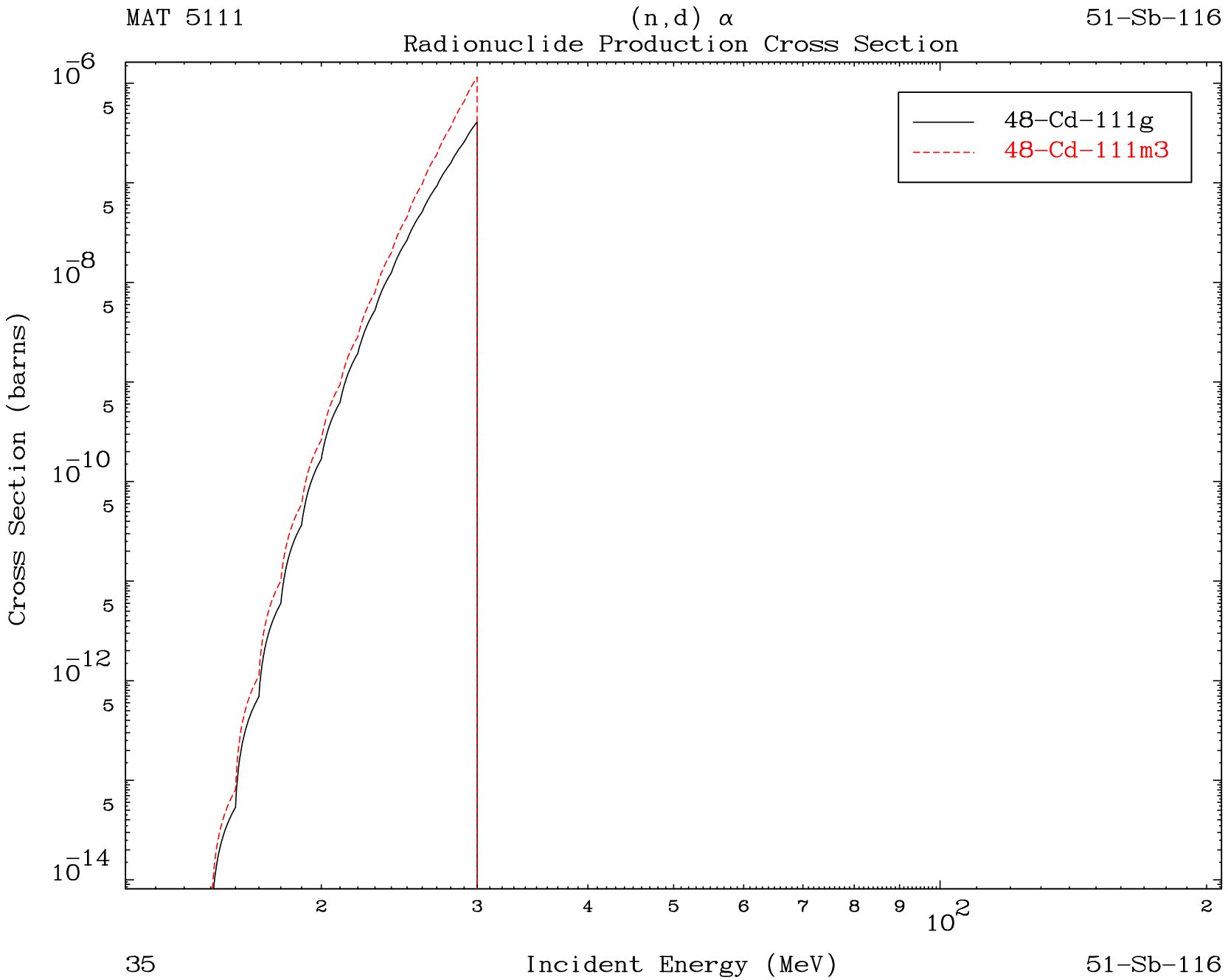

MAT 5111
(n,α)
51-Sb-116
Radionuclide Production Cross Section
49-In-113g
49-In-113m1
Cross Section (barns)
Incident Energy (MeV)
30
51-Sb-116


MAT 5111
(n,2α)
51-Sb-116
Radionuclide Production Cross Section
47-Ag-109g
47-Ag-109m1
Cross Section (barns)
Incident Energy (MeV)
31
51-Sb-116


MAT 5111
(n,2p)
51-Sb-116
Radionuclide Production Cross Section
49-In-115g
49-In-115m1
Cross Section (barns)
Incident Energy (MeV)
32
51-Sb-116


MAT 5111
(n,p) d
51-Sb-116
Radionuclide Production Cross Section
49-In-114g
49-In-114m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
101
2
3
4
5
6
7
8
9
102
2
33
Incident Energy (MeV)
51-Sb-116


MAT 5111
(n,p) t
51-Sb-116
Radionuclide Production Cross Section
49-In-113g
49-In-113m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
2
3
4
5
6
7
8
9
10^2
2
34
Incident Energy (MeV)
51-Sb-116


MAT 5111
(n,d) α
51-Sb-116
Radionuclide Production Cross Section
48-Cd-111g
48-Cd-111m3
Cross Section (barns)
Incident Energy (MeV)
35
51-Sb-116