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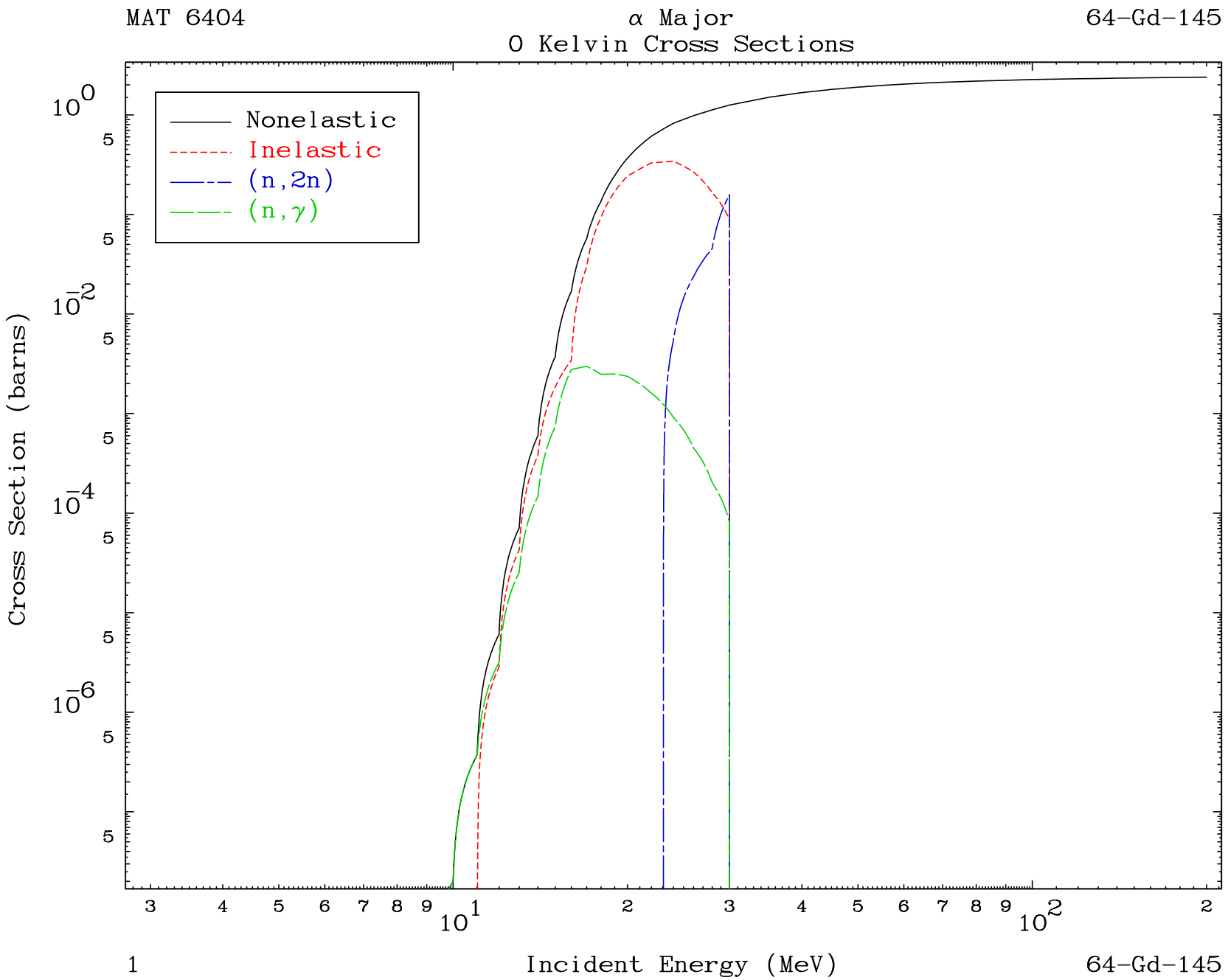
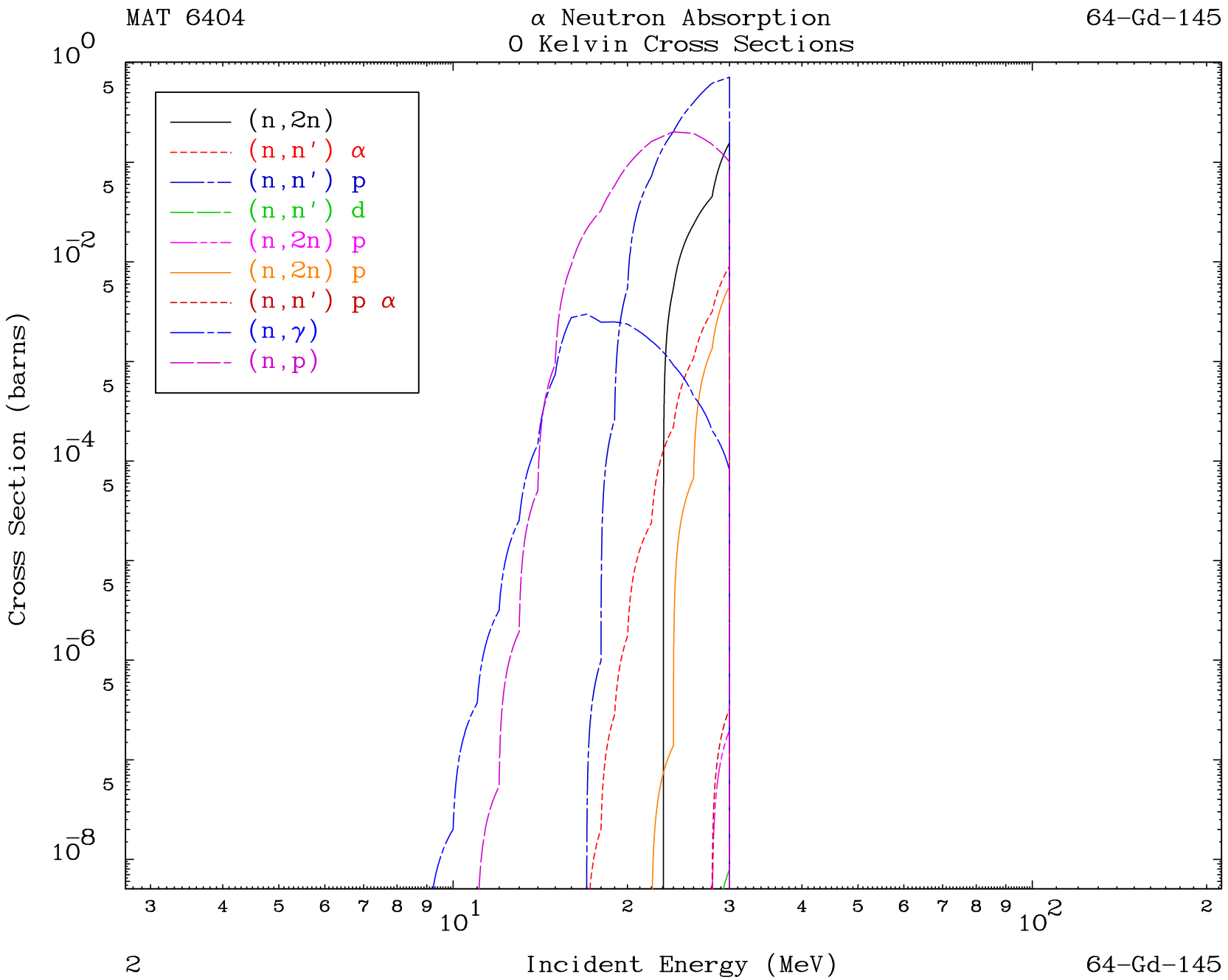
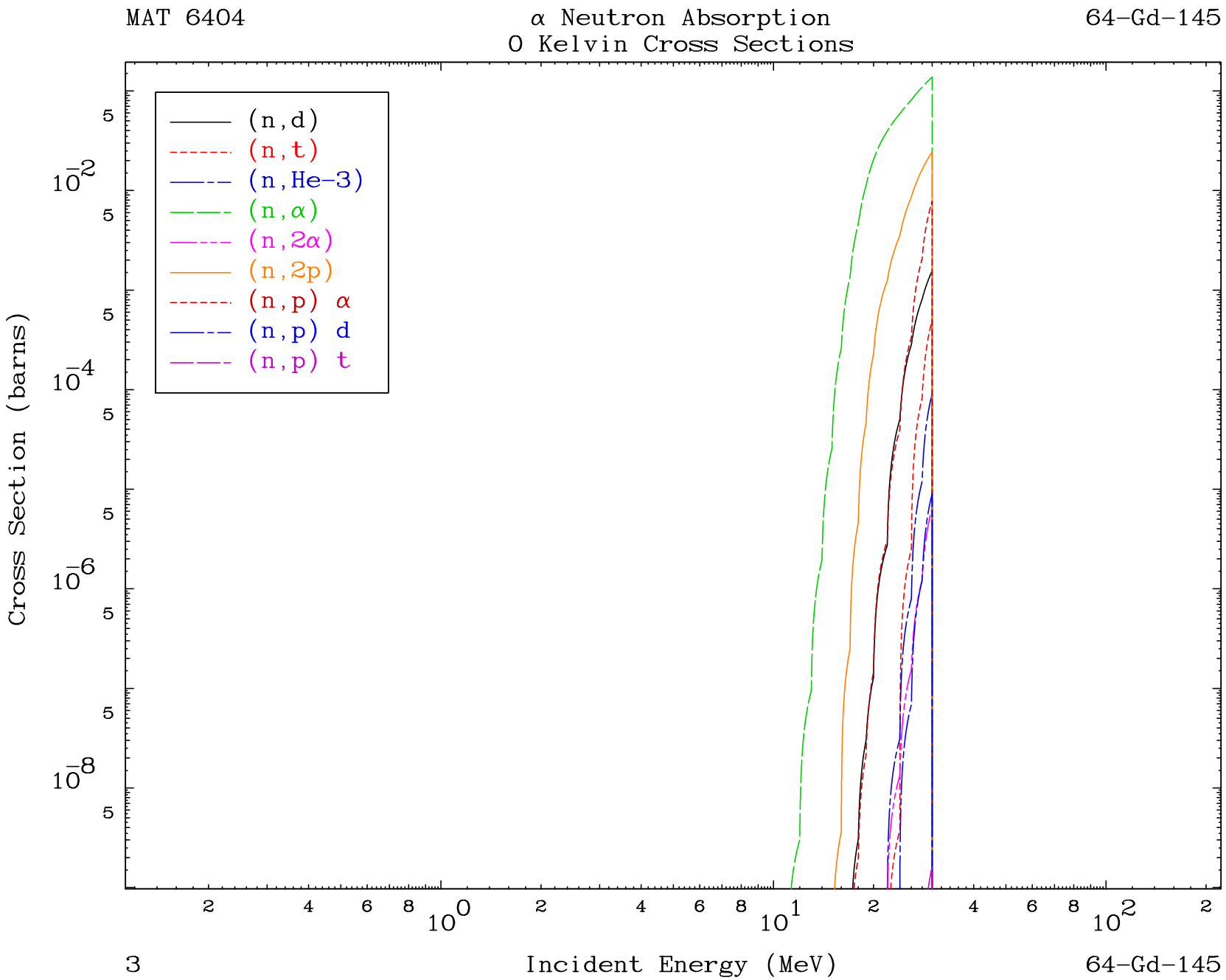
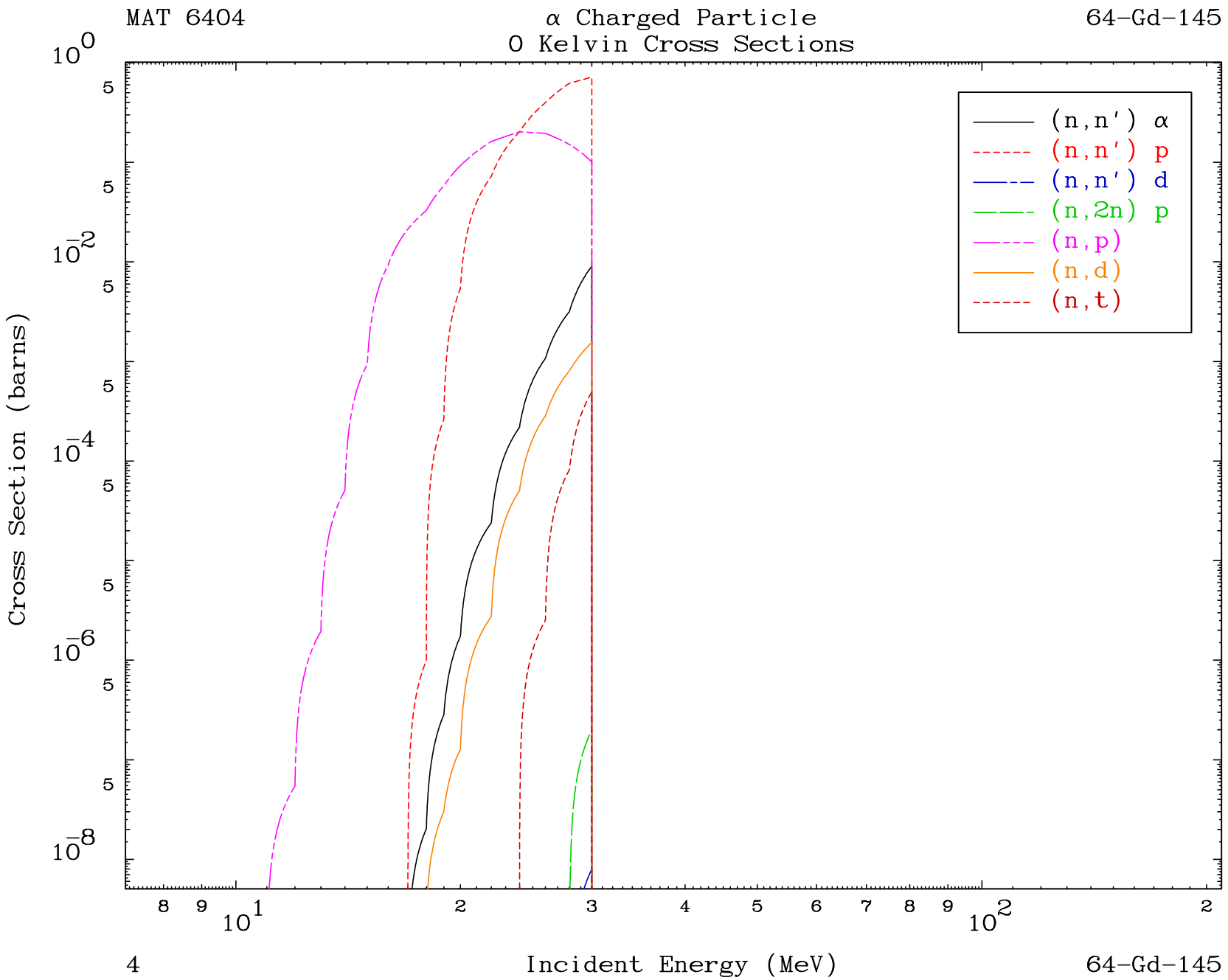
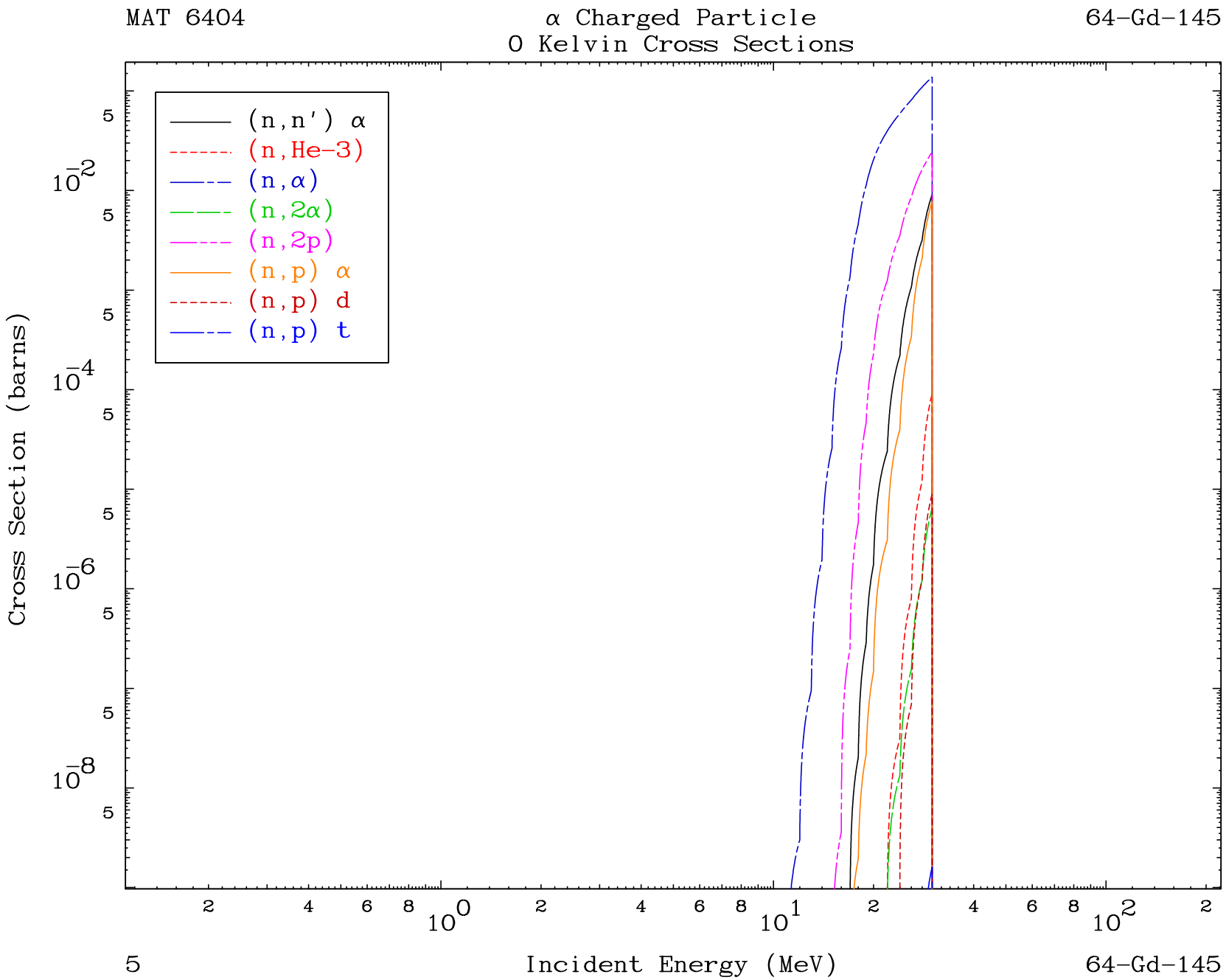
Press Mouse Button to Start

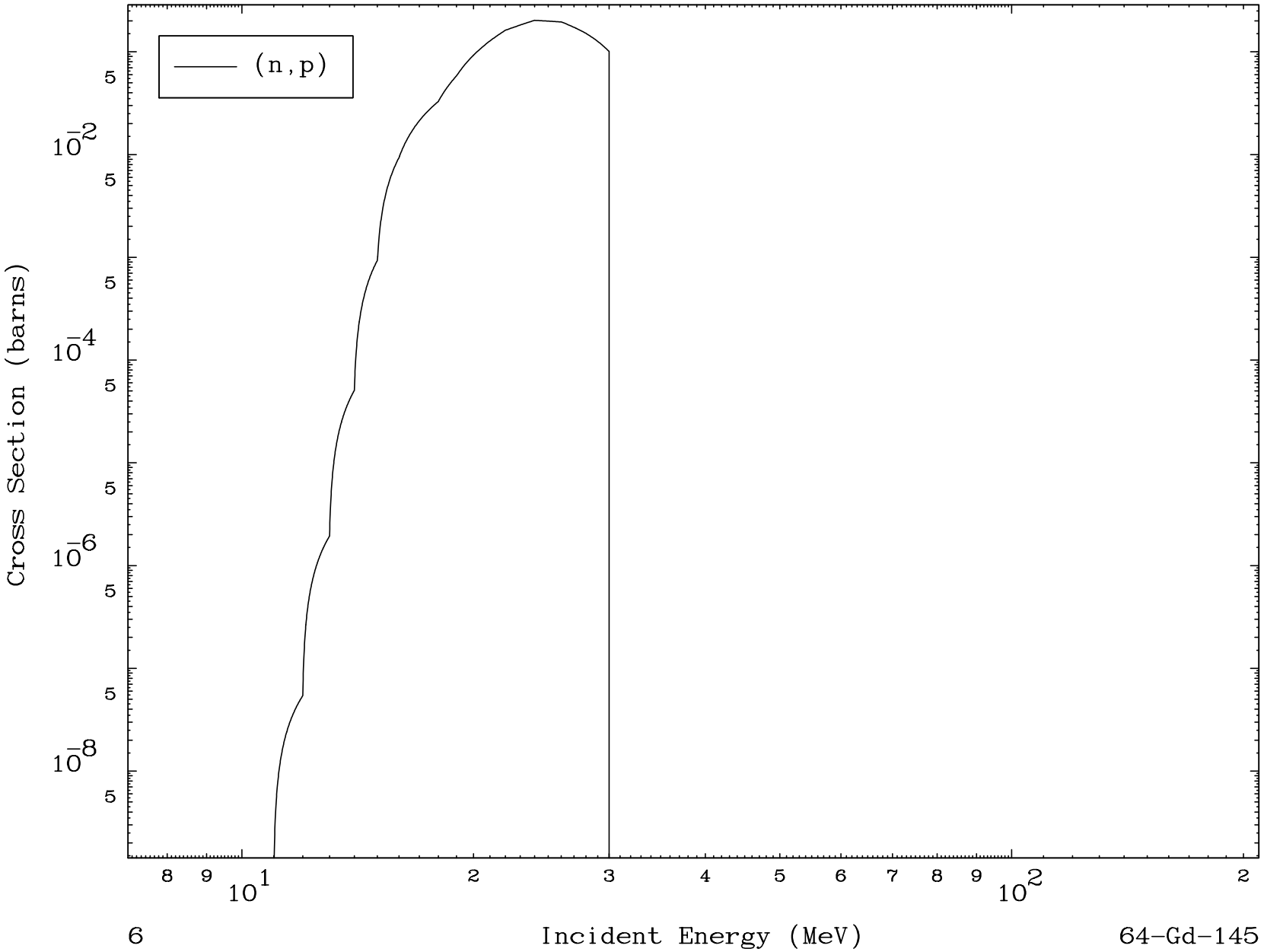

MAT 6404
α Major
64-Gd-145
0 Kelvin Cross Sections
Nonelastic
Inelastic
(n,2n)
(n,γ)
Cross Section (barns)
Incident Energy (MeV)
64-Gd-145


MAT 6404
α Neutron Absorption
0 Kelvin Cross Sections
64-Gd-145
(n,2n)
(n,n') α
(n,n') p
(n,n') d
(n,2n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
Cross Section (barns)
Incident Energy (MeV)
64-Gd-145
2

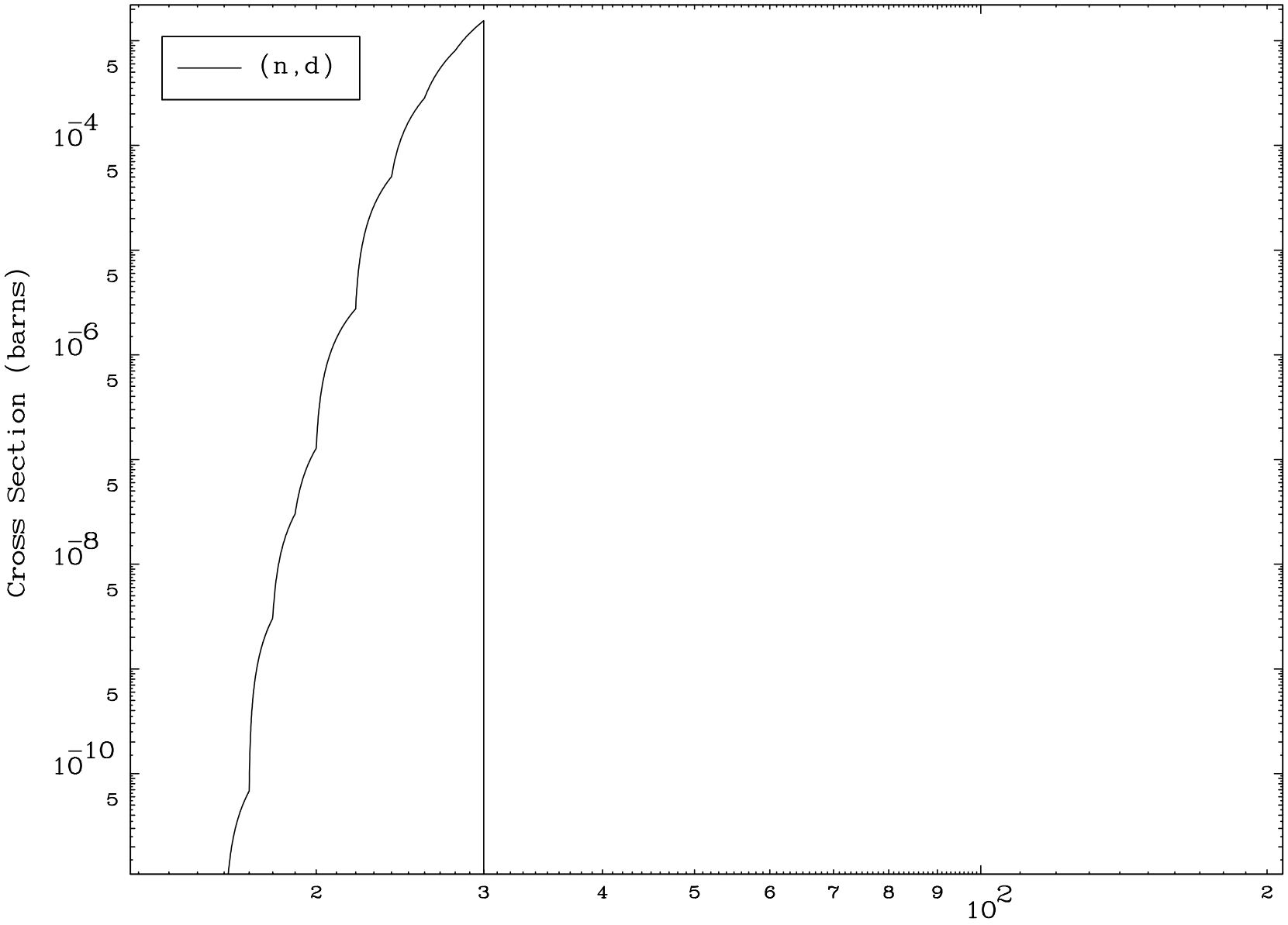

MAT 6404
α Neutron Absorption
0 Kelvin Cross Sections
64-Gd-145
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
Cross Section (barns)
10-2
10-4
10-6
10-8
100
101
102
Incident Energy (MeV)
3
64-Gd-145

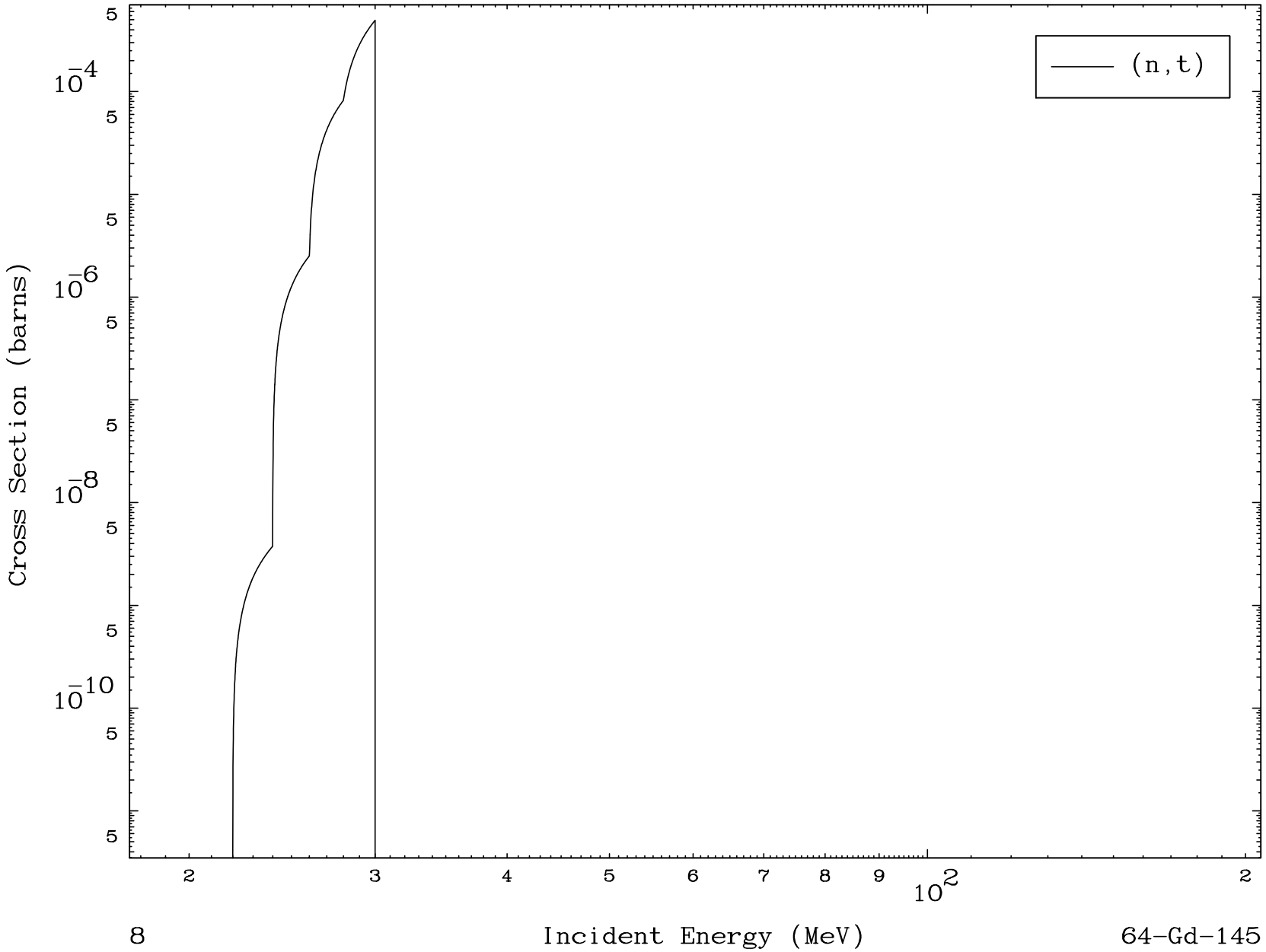

MAT 6404
α Charged Particle
0 Kelvin Cross Sections
64-Gd-145
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,n') p
(n,n') d
(n,2n) p
(n,p)
(n,d)
(n,t)
4
64-Gd-145

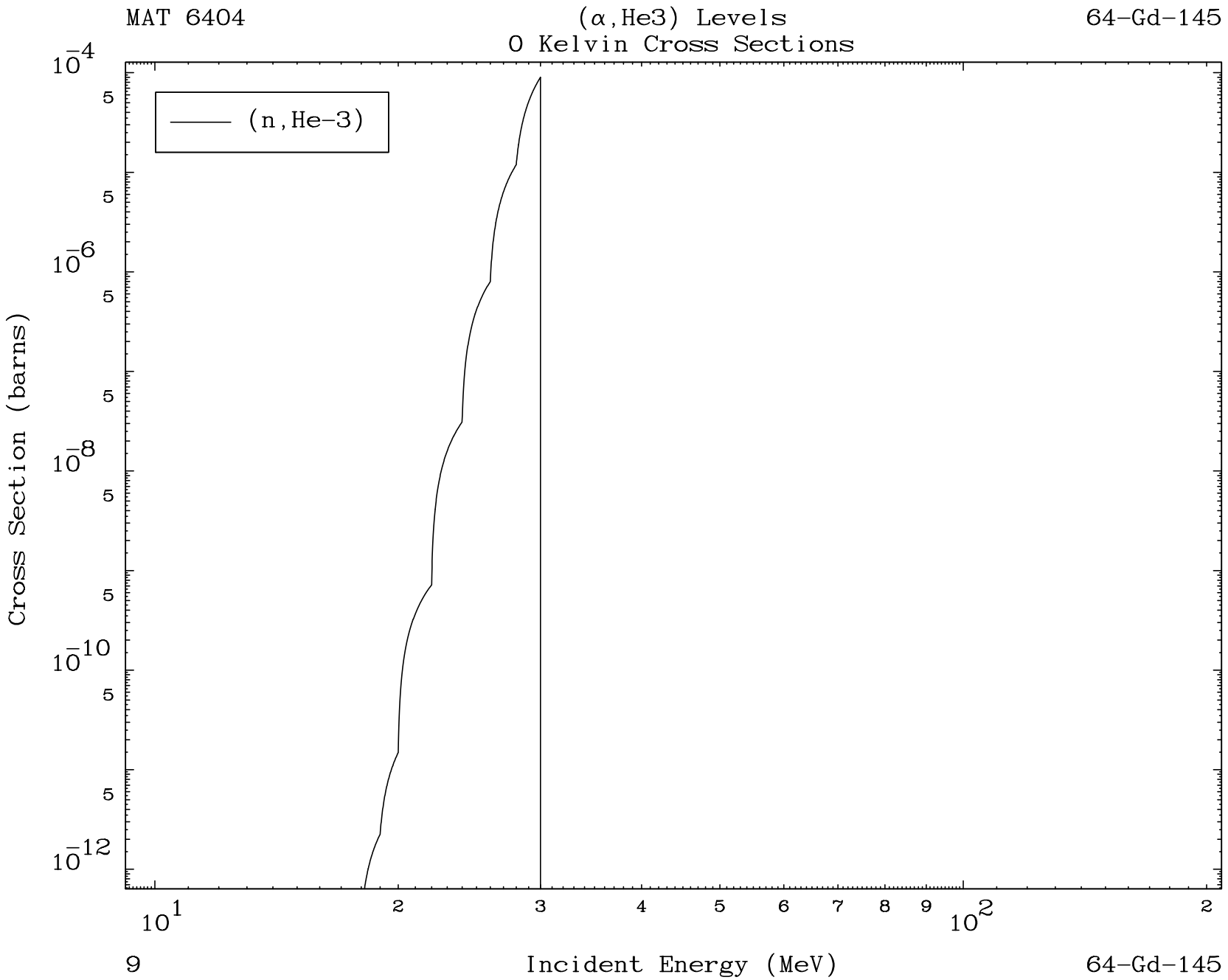

MAT 6404
α Charged Particle
0 Kelvin Cross Sections
64-Gd-145
(n,n') α
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
5
64-Gd-145

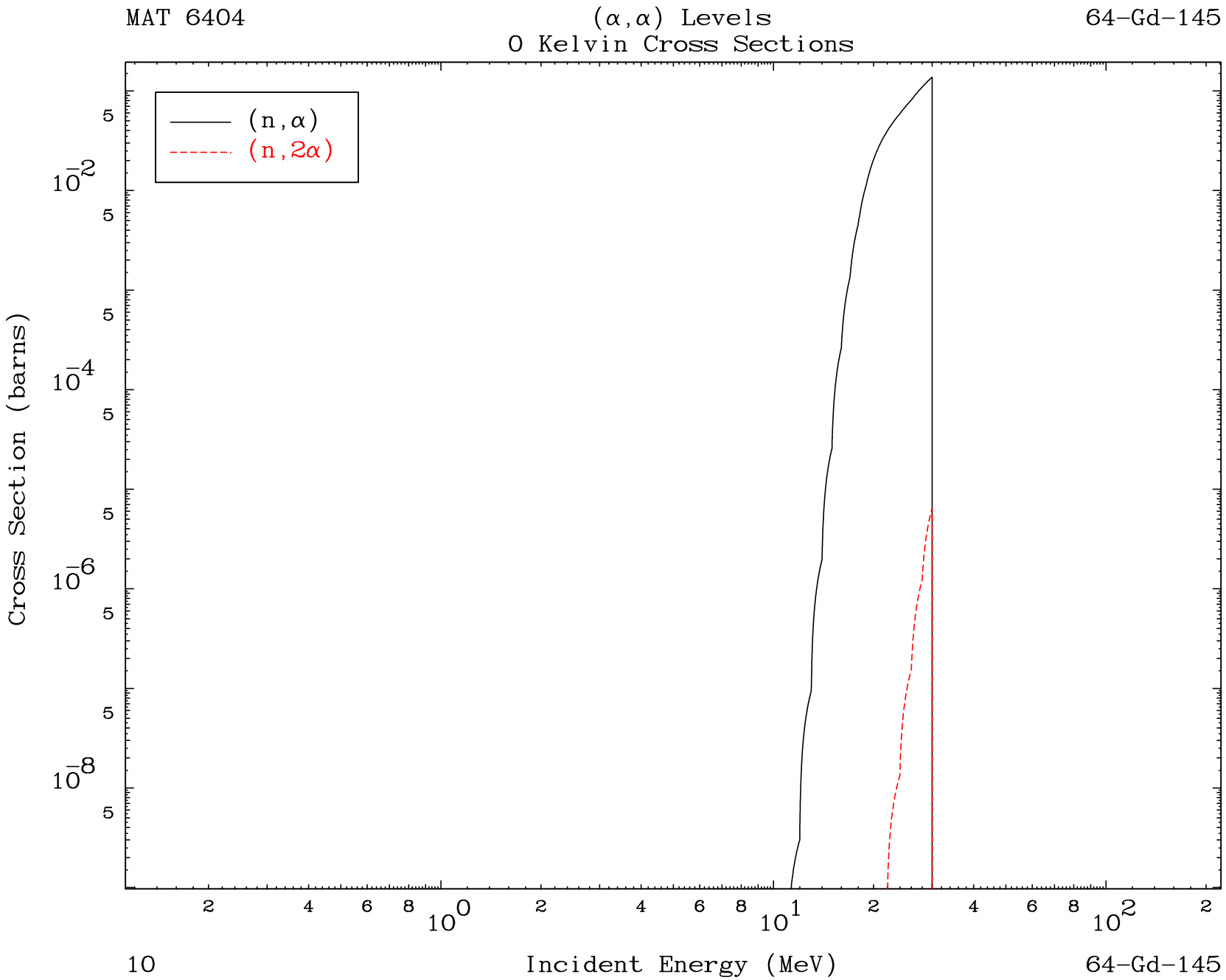

0 Kelvin Cross Sections
(n,p)
Cross Section (barns)
10-2
10-4
10-6
10-8
5
8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)

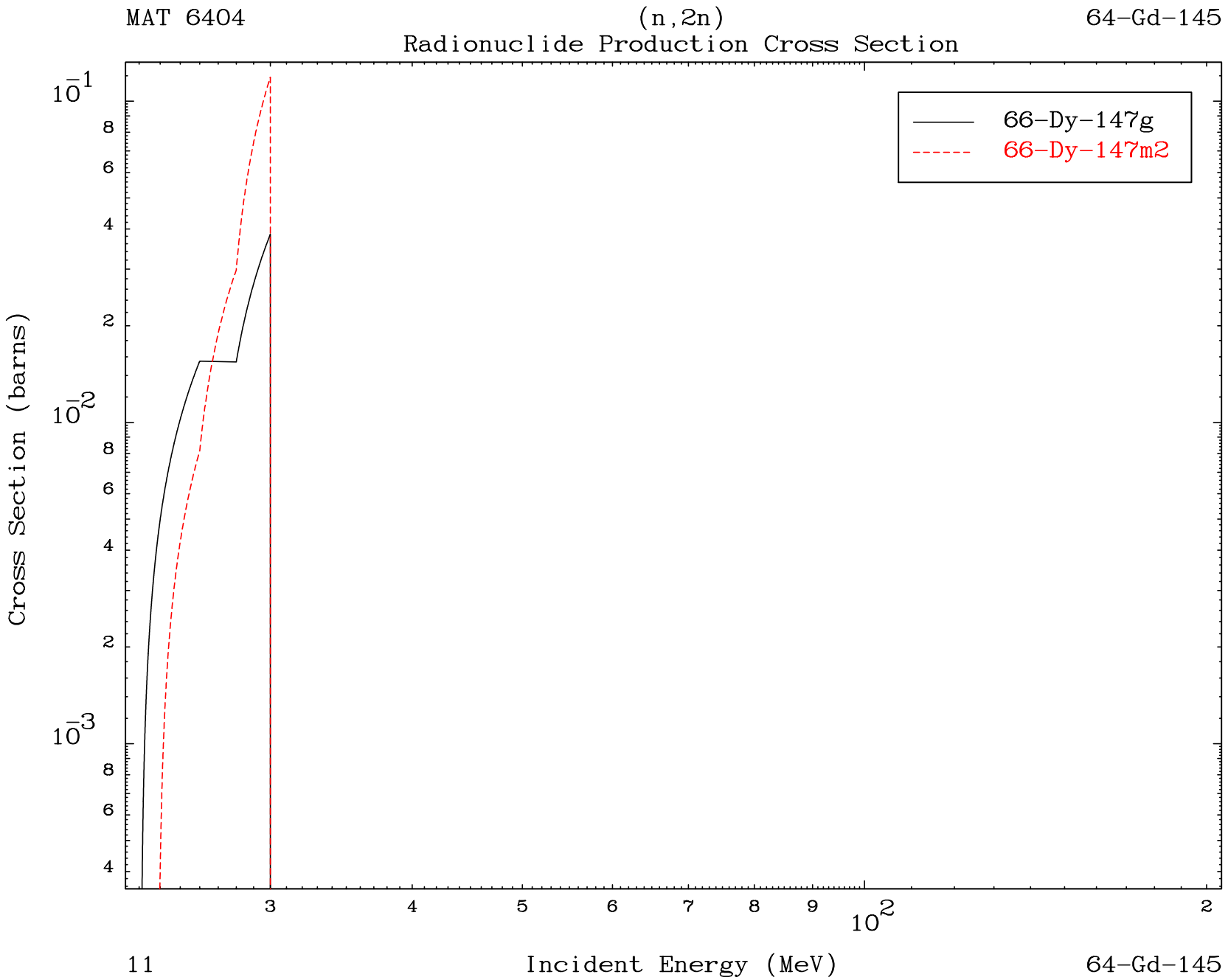
0 Kelvin Cross Sections

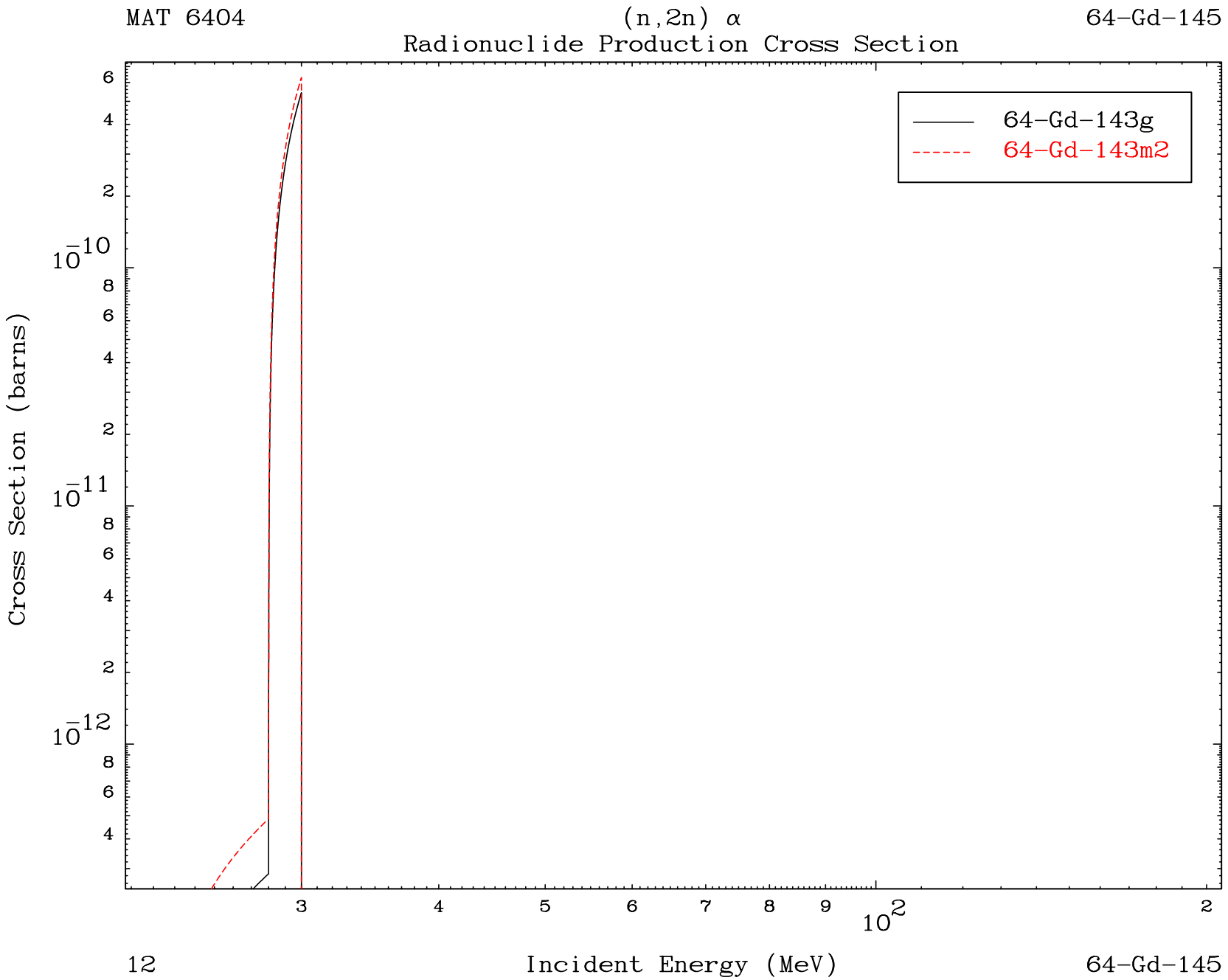


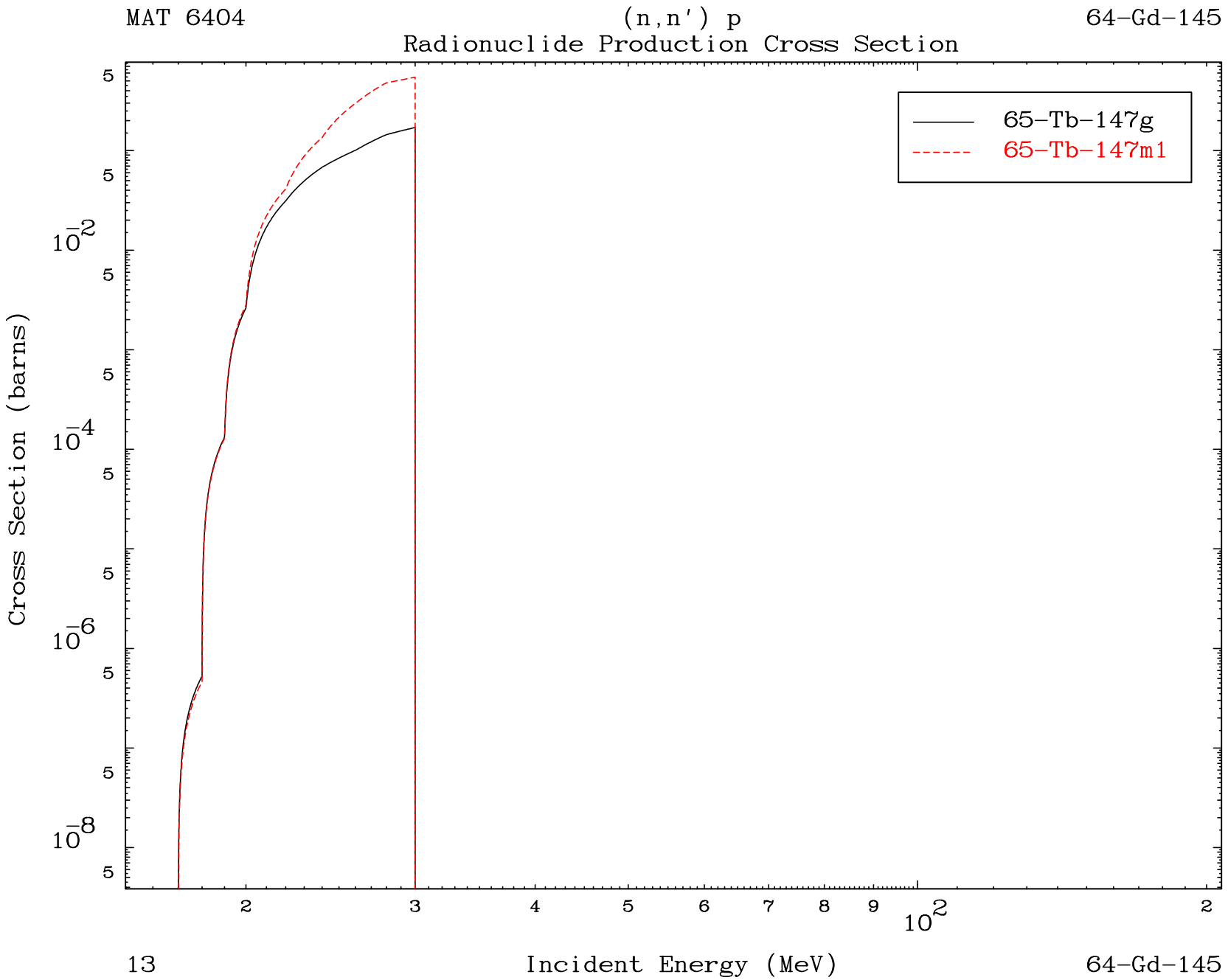

0 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)

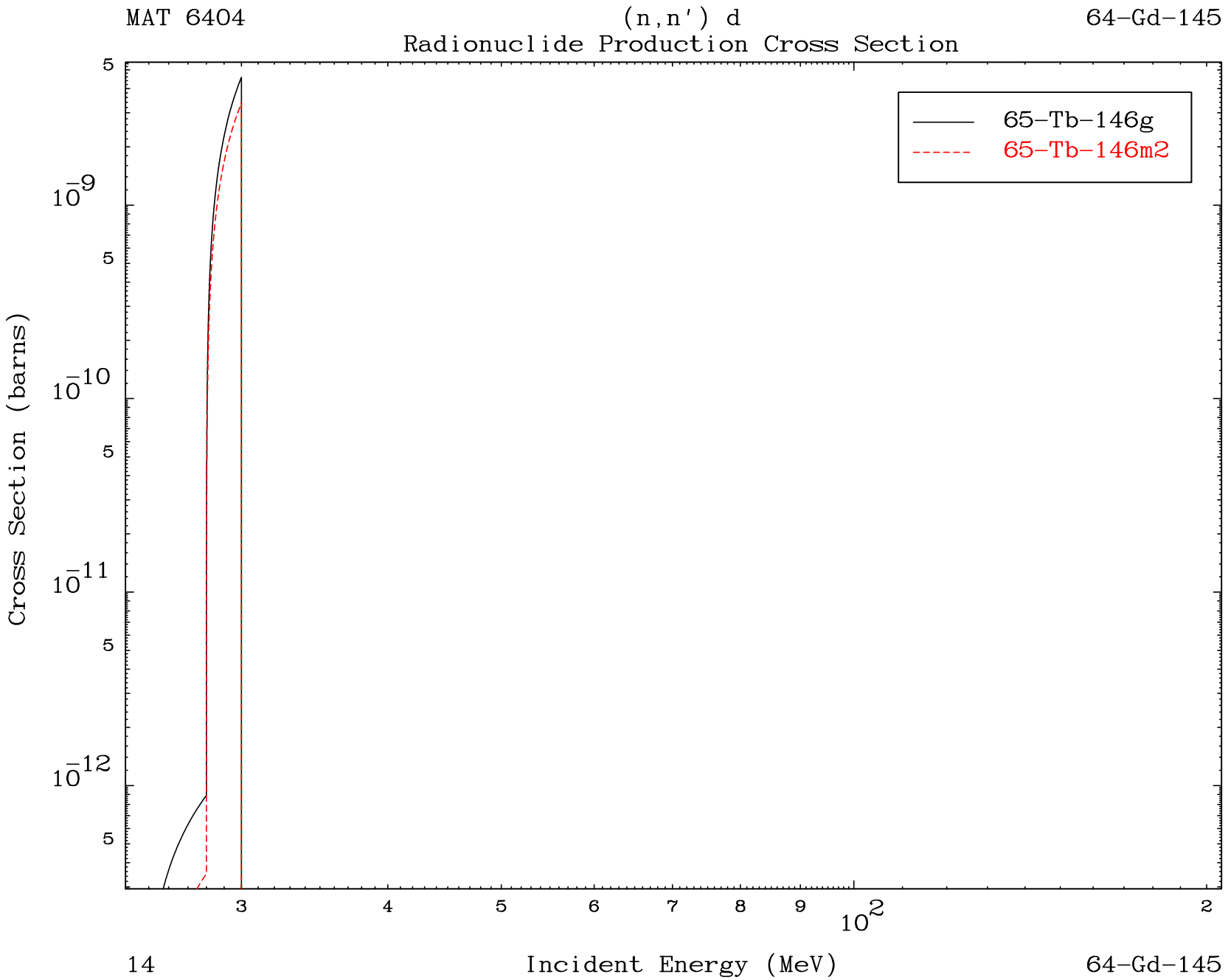

MAT 6404
(α,He3) Levels
64-Gd-145
0 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-12
10^1
10^2
Incident Energy (MeV)
9
64-Gd-145

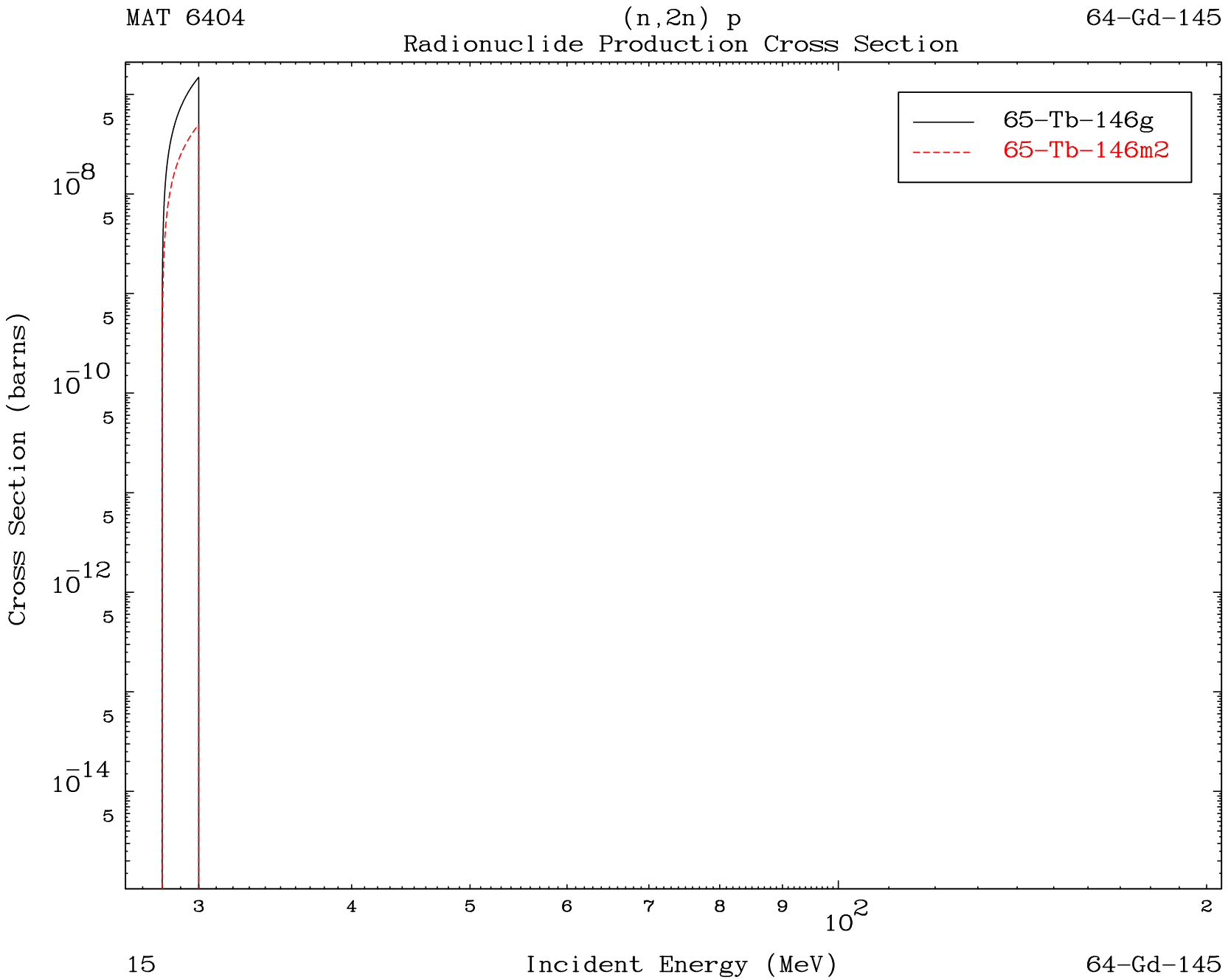

MAT 6404
(α,α) Levels
64-Gd-145
0 Kelvin Cross Sections
(n,α)
(n,2α)
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
10^0
10^1
10^2
Incident Energy (MeV)
10
64-Gd-145

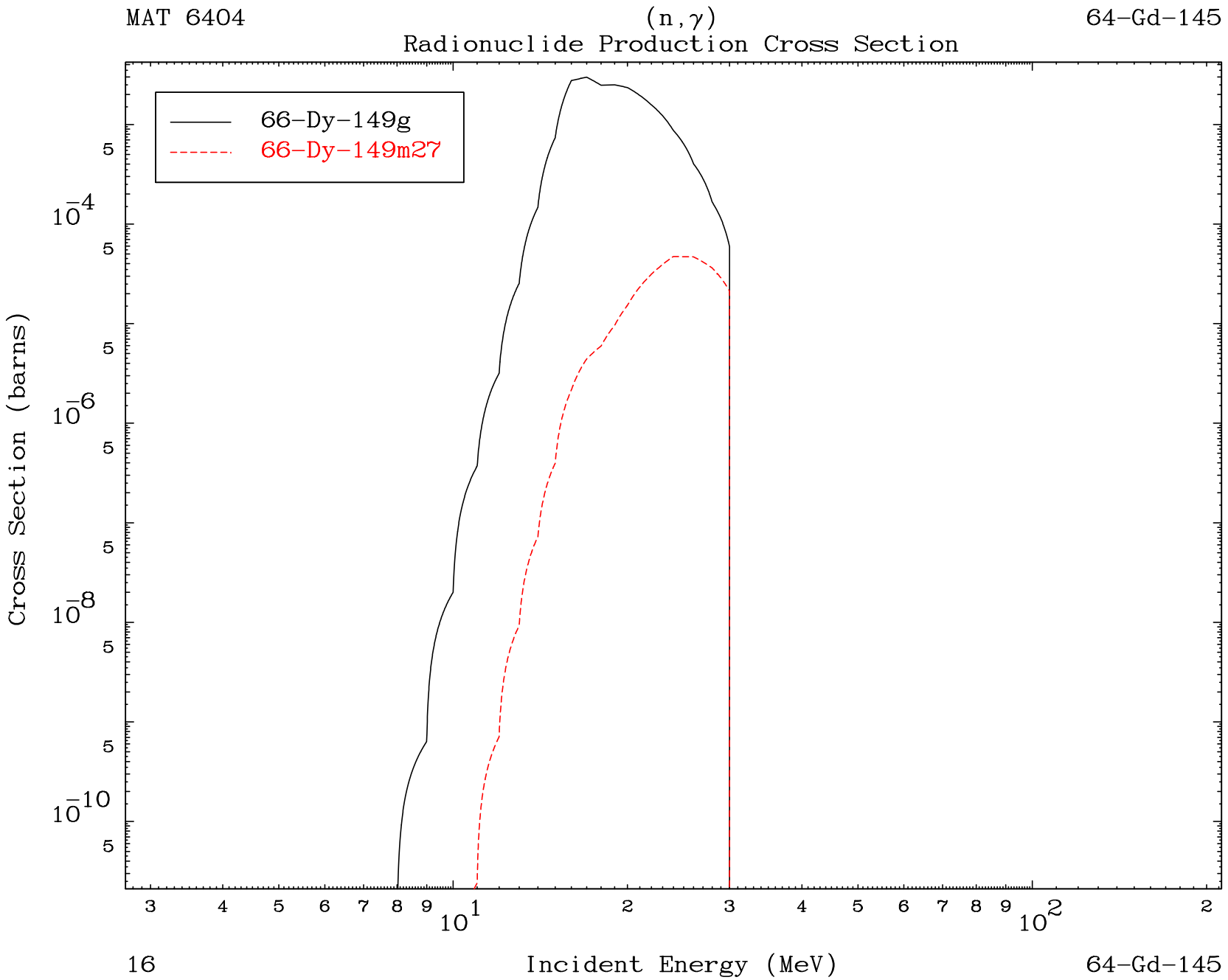

MAT 6404
(n,2n)
64-Gd-145
Radionuclide Production Cross Section
66-Dy-147g
66-Dy-147m2
Cross Section (barns)
Incident Energy (MeV)
11
64-Gd-145

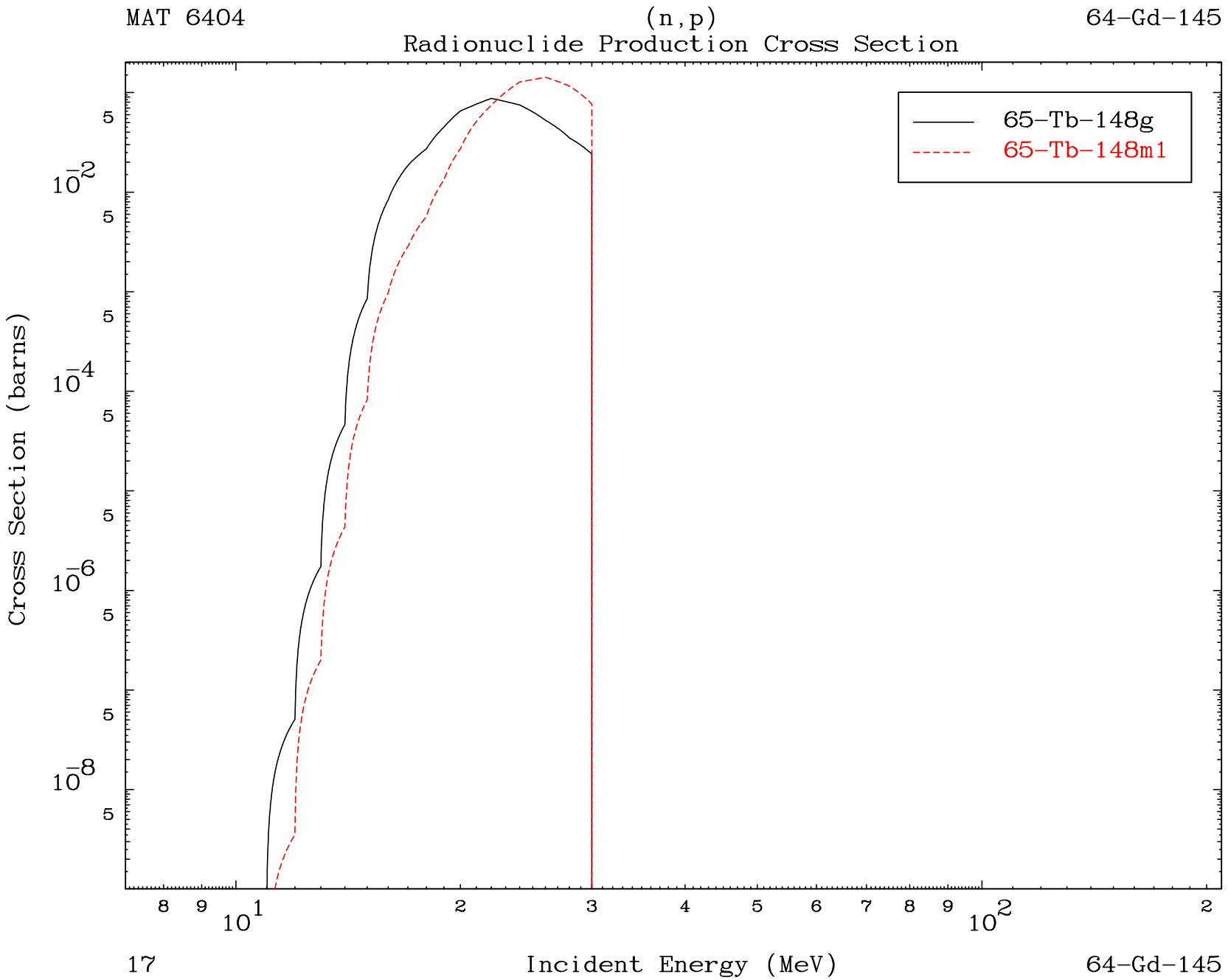

MAT 6404
(n,2n) α
64-Gd-145
Radionuclide Production Cross Section
64-Gd-143g
64-Gd-143m2
Cross Section (barns)
10^-10
10^-11
10^-12
6
4
2
8
3
4
5
6
7
8
9
10^2
2
12
Incident Energy (MeV)
64-Gd-145

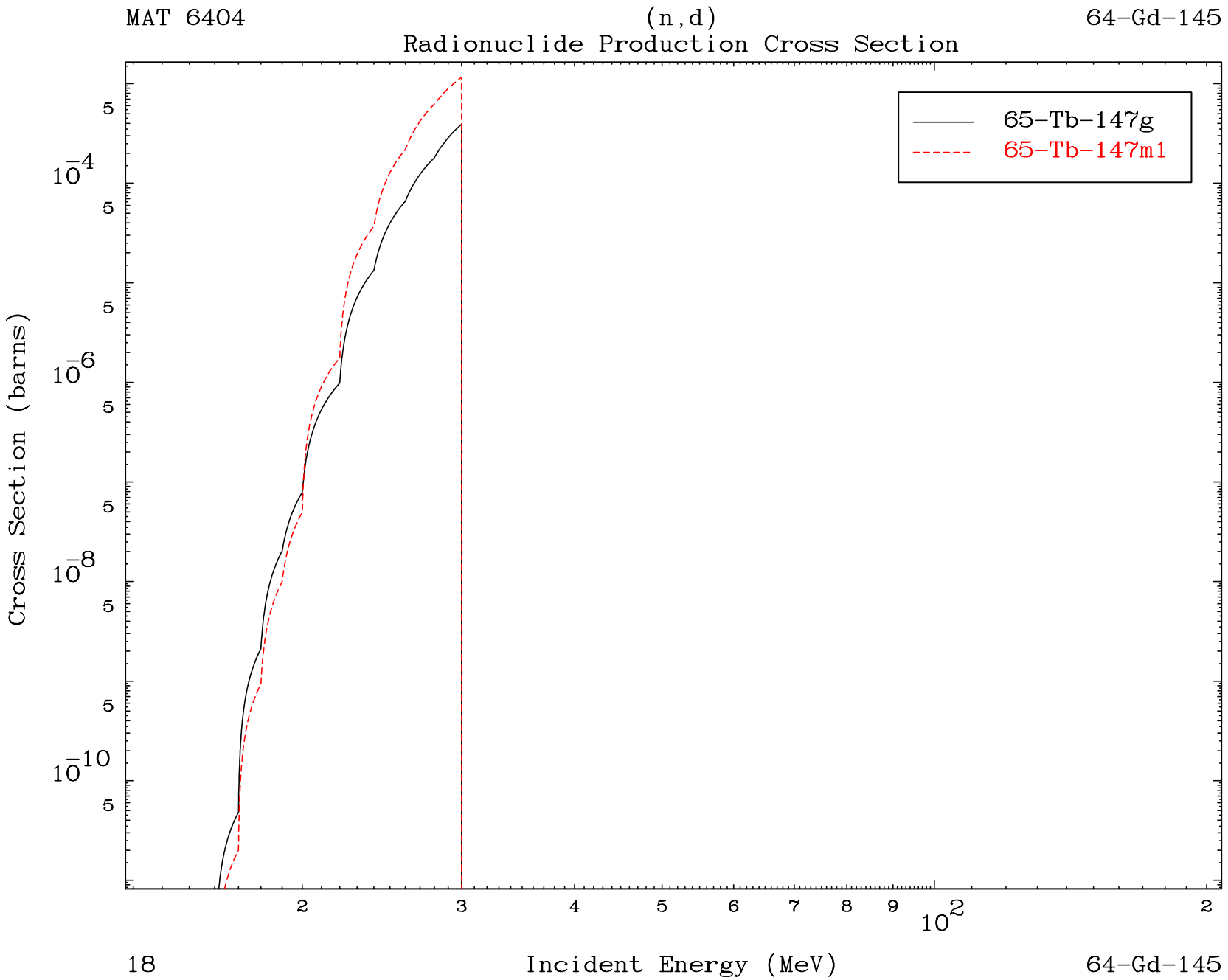

MAT 6404
(n,n') p
64-Gd-145
Radionuclide Production Cross Section
65-Tb-147g
65-Tb-147m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
6
7
8
9
10 2
Incident Energy (MeV)
13
64-Gd-145

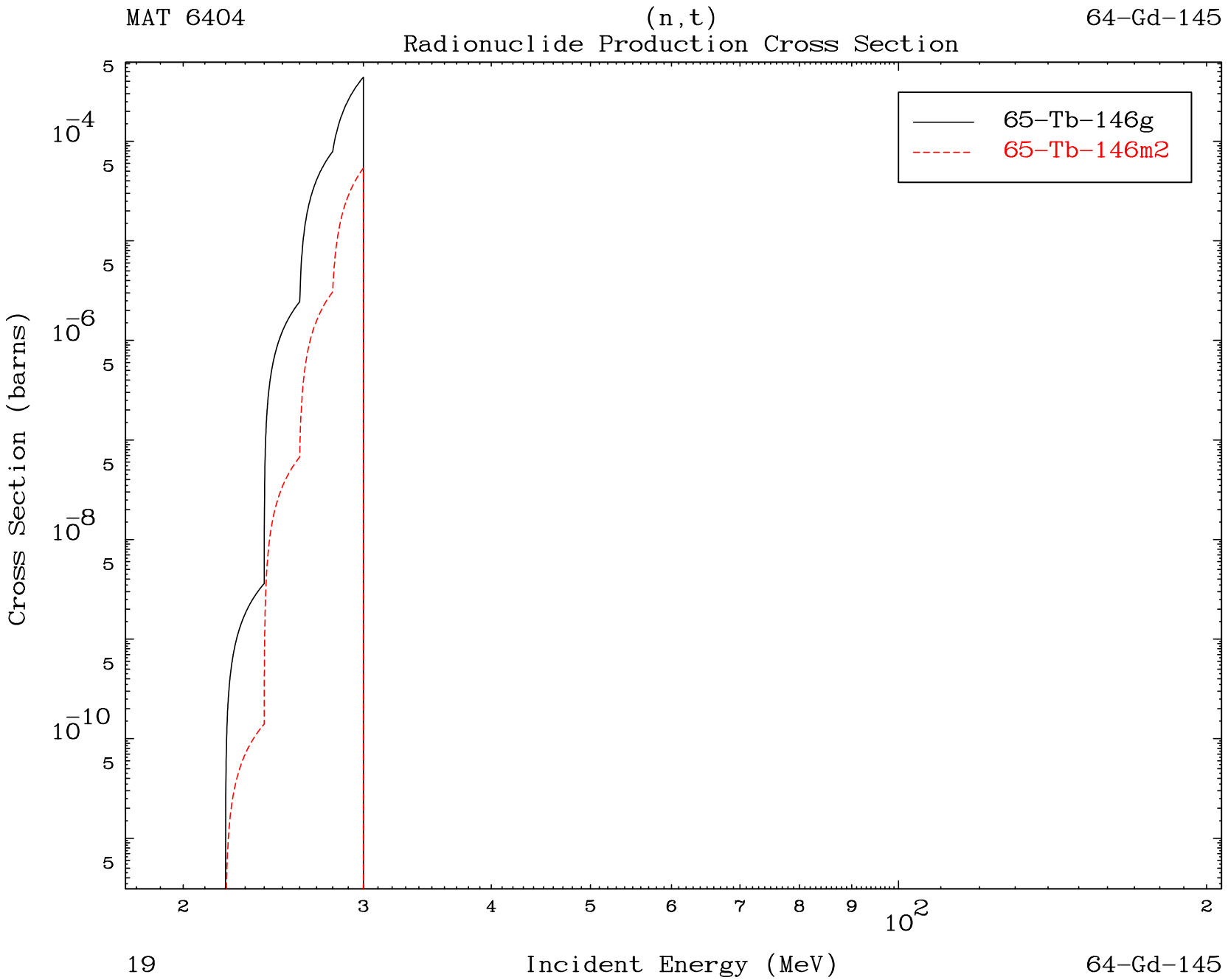

MAT 6404
(n,n') d
64-Gd-145
Radionuclide Production Cross Section
65-Tb-146g
65-Tb-146m2
Cross Section (barns)
10-9
10-10
10-11
10-12
5
3
4
5
6
7
8
9
10 2
2
14
Incident Energy (MeV)
64-Gd-145

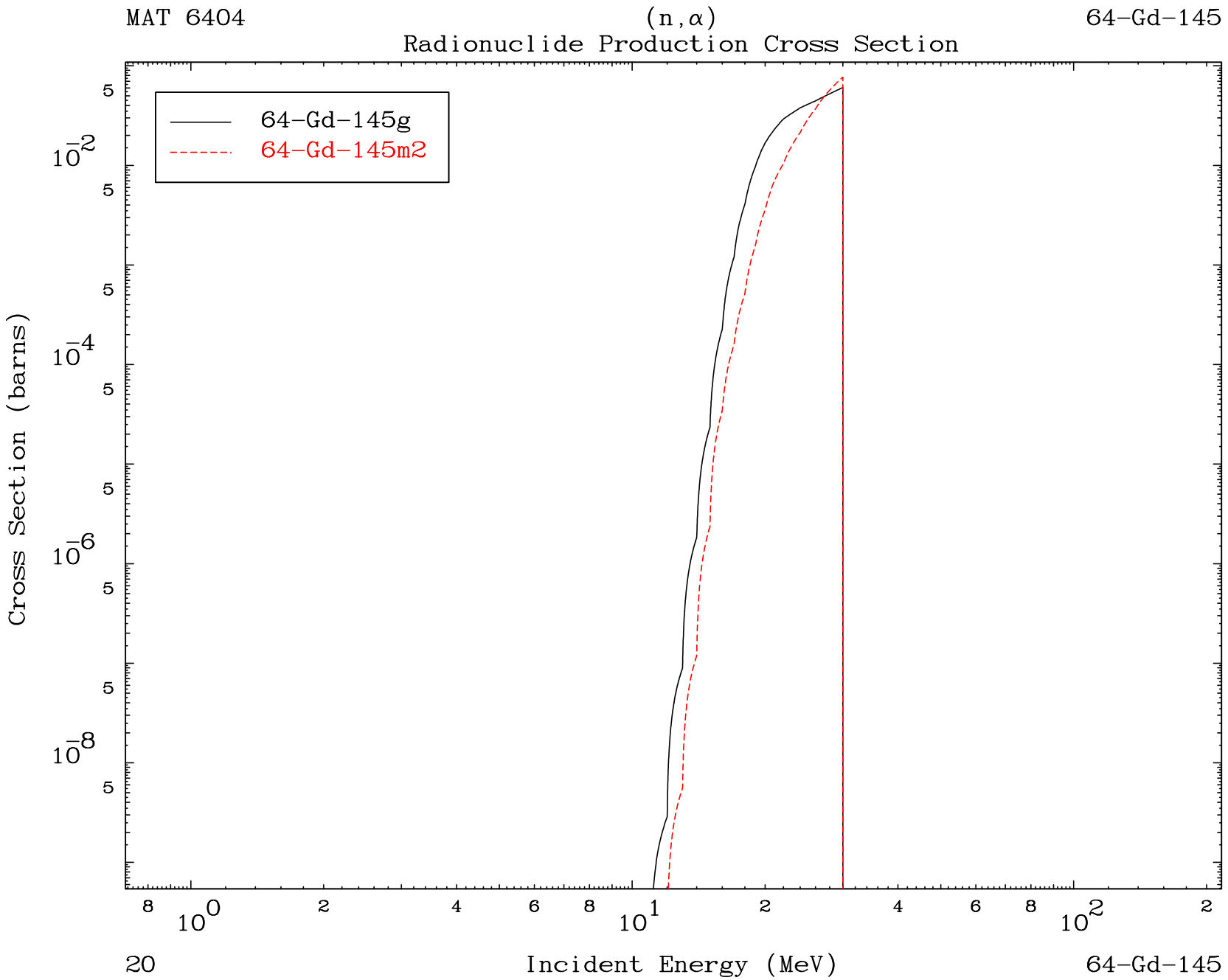

MAT 6404
(n,2n) p
64-Gd-145
Radionuclide Production Cross Section
65-Tb-146g
65-Tb-146m2
Cross Section (barns)
10-8
10-10
10-12
10-14
5
3
4
5
6
7
8
9
10 2
2
15
Incident Energy (MeV)
64-Gd-145

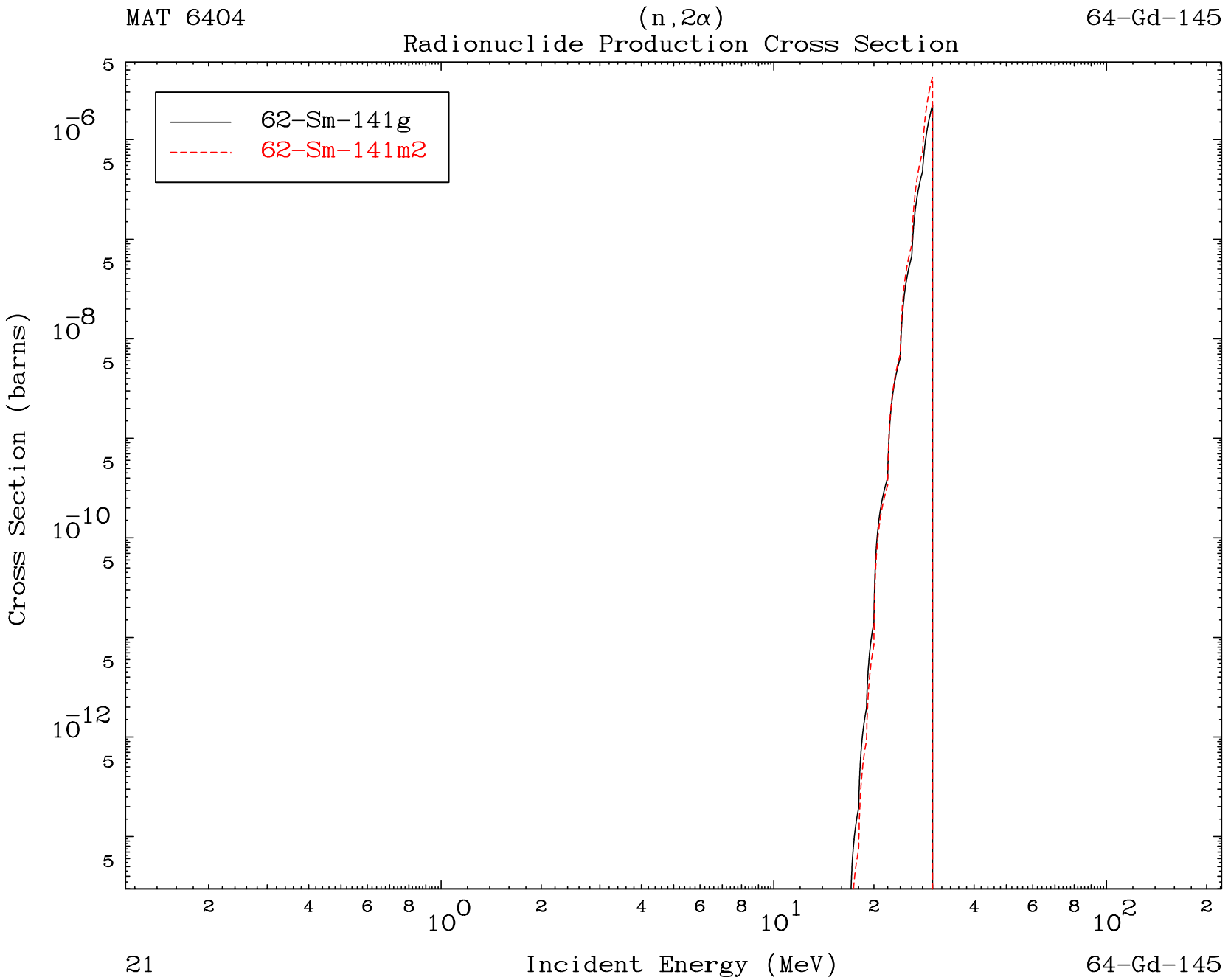

MAT 6404
(n,γ)
64-Gd-145
Radionuclide Production Cross Section
66-Dy-149g
66-Dy-149m27
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^1
10^2
Incident Energy (MeV)
16
64-Gd-145

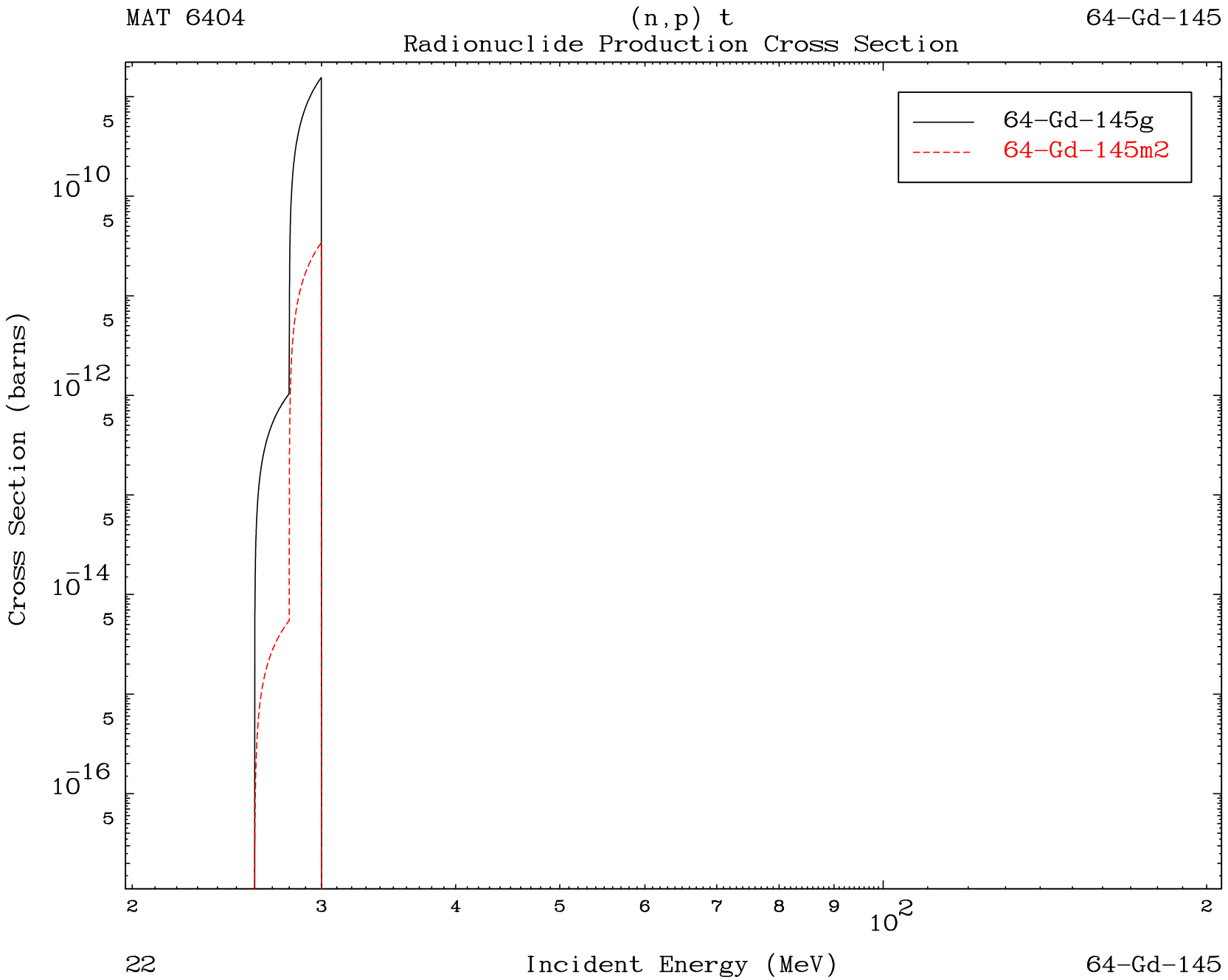

MAT 6404
(n,p)
64-Gd-145
Radionuclide Production Cross Section
65-Tb-148g
65-Tb-148m1
Cross Section (barns)
Incident Energy (MeV)
17
64-Gd-145


MAT 6404
(n,d)
64-Gd-145
Radionuclide Production Cross Section
65-Tb-147g
65-Tb-147m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
18
Incident Energy (MeV)
64-Gd-145


MAT 6404
(n,t)
64-Gd-145
Radionuclide Production Cross Section
65-Tb-146g
65-Tb-146m2
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
Incident Energy (MeV)
19
64-Gd-145


MAT 6404
(n,α)
64-Gd-145
Radionuclide Production Cross Section
64-Gd-145g
64-Gd-145m2
Cross Section (barns)
Incident Energy (MeV)
20
64-Gd-145


MAT 6404
(n,2α)
64-Gd-145
Radionuclide Production Cross Section
62-Sm-141g
62-Sm-141m2
Cross Section (barns)
Incident Energy (MeV)
21
64-Gd-145


MAT 6404
(n,p) t
64-Gd-145
Radionuclide Production Cross Section
64-Gd-145g
64-Gd-145m2
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
2
3
4
5
6
7
8
9
10^2
22
Incident Energy (MeV)
64-Gd-145