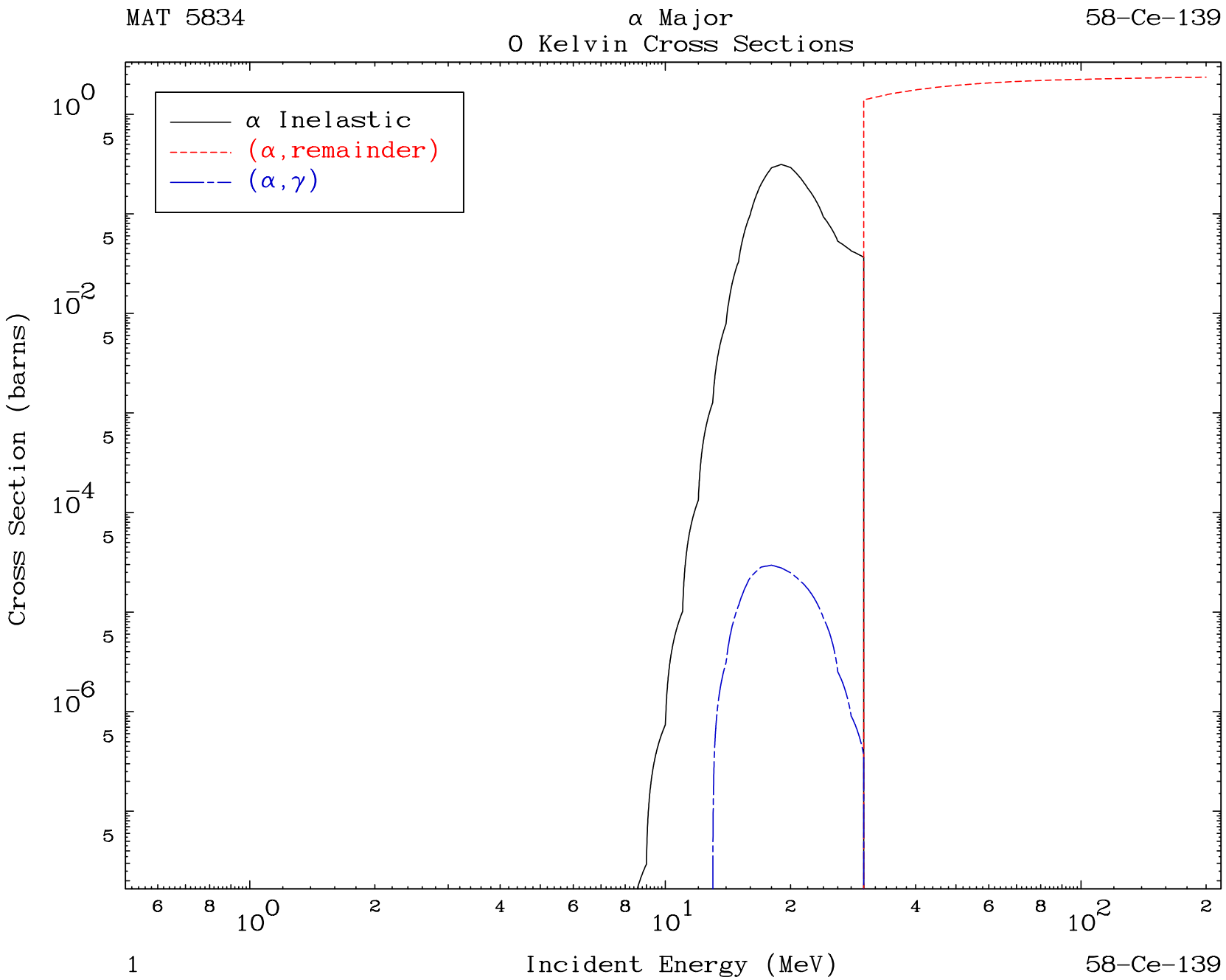
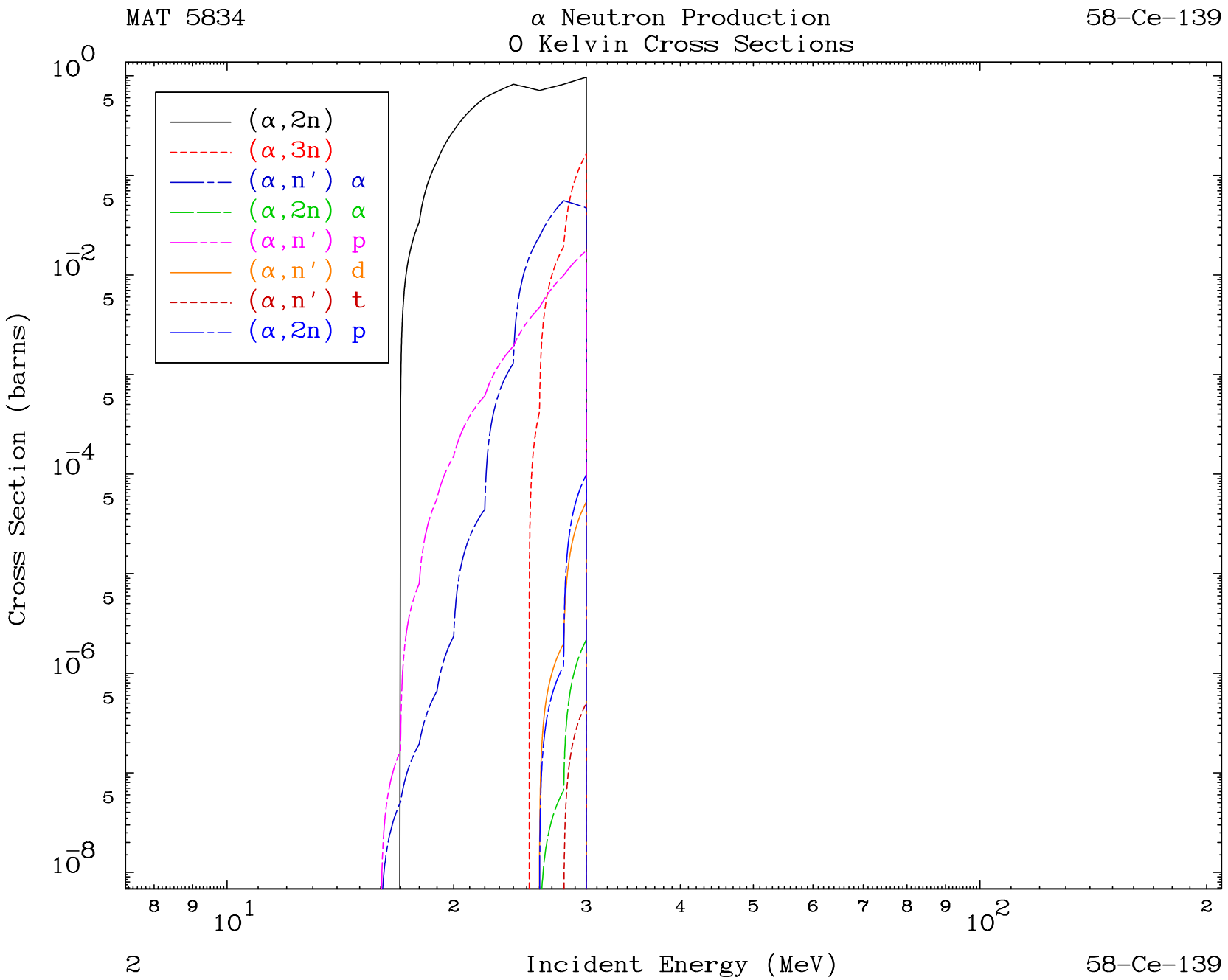
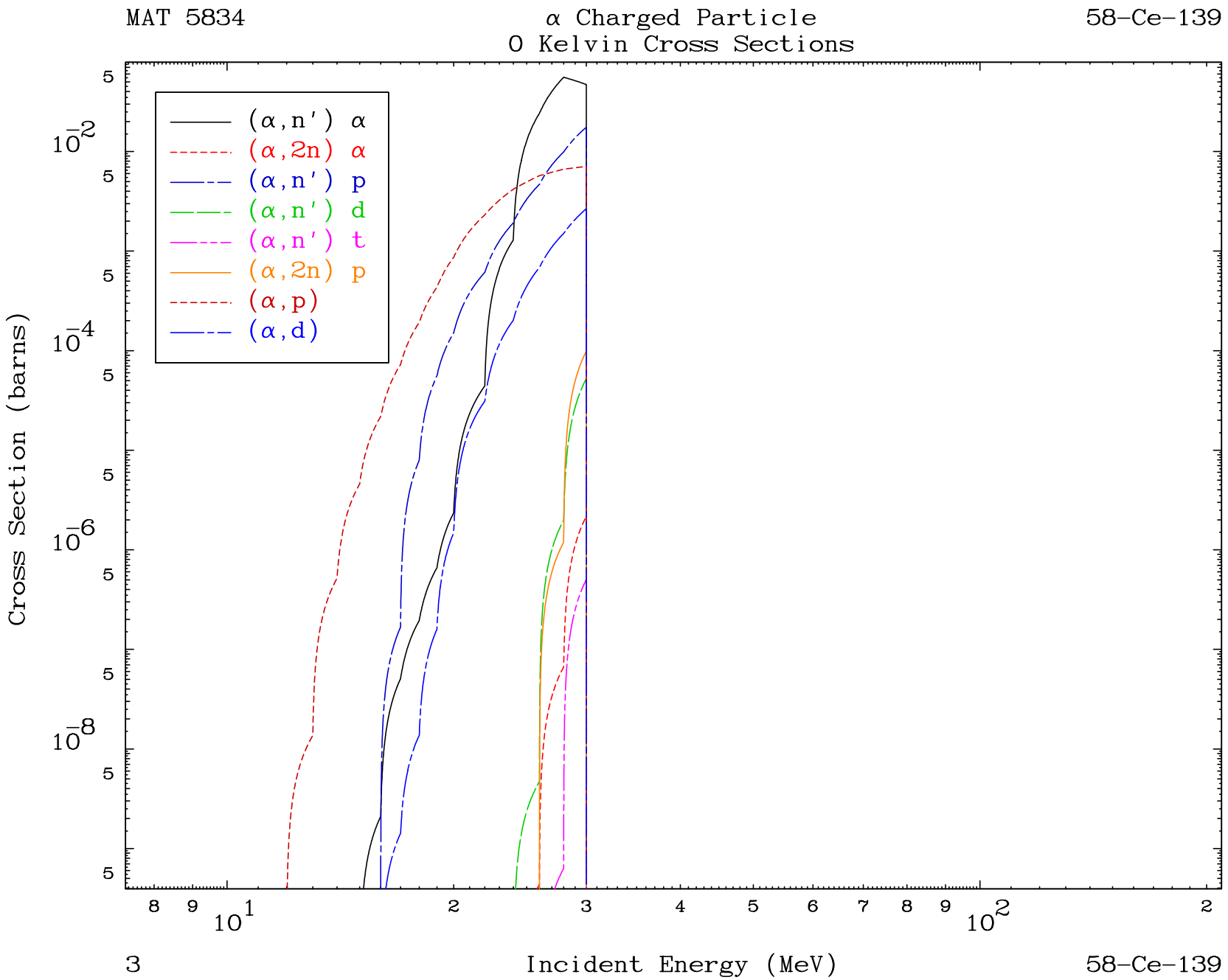
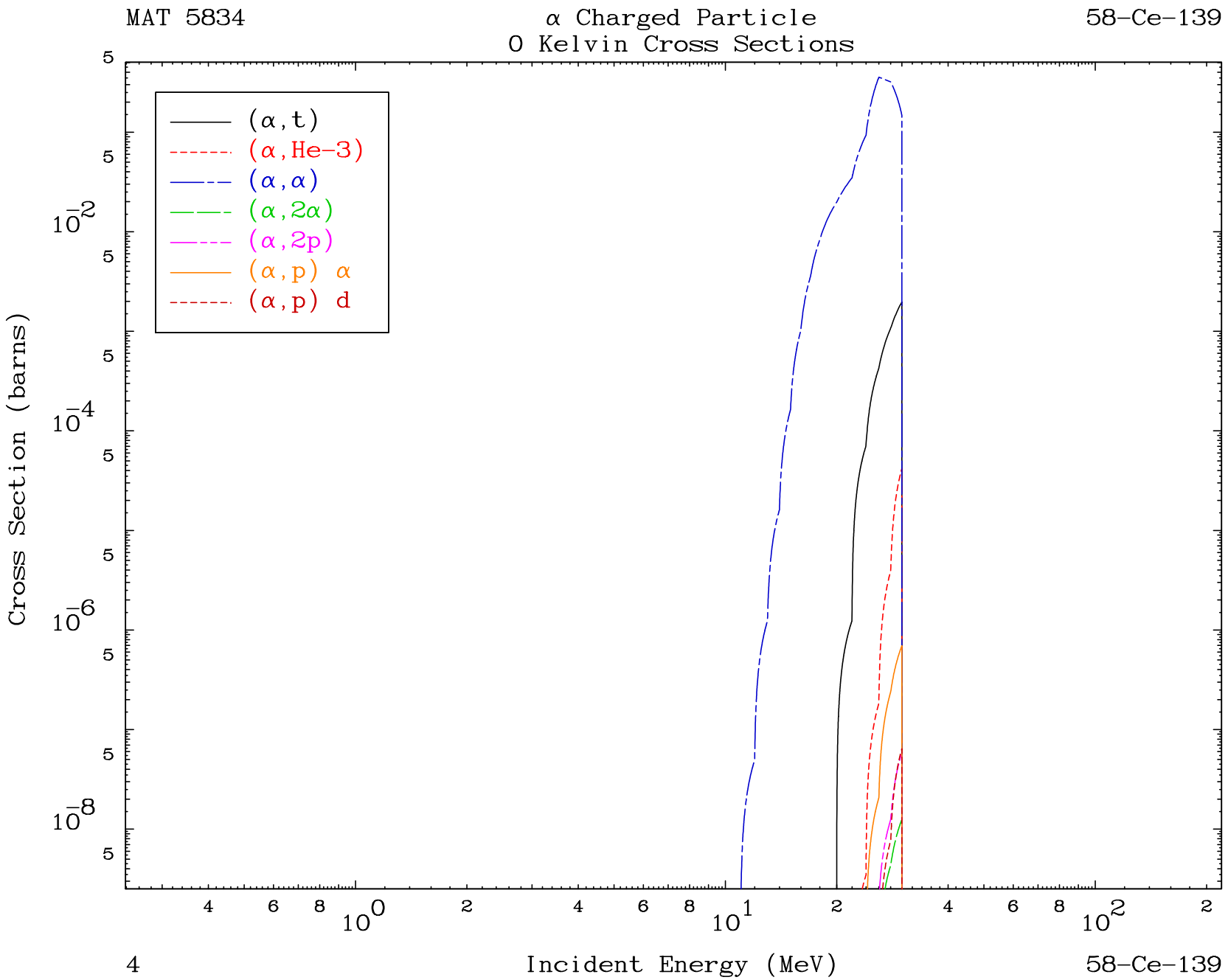
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

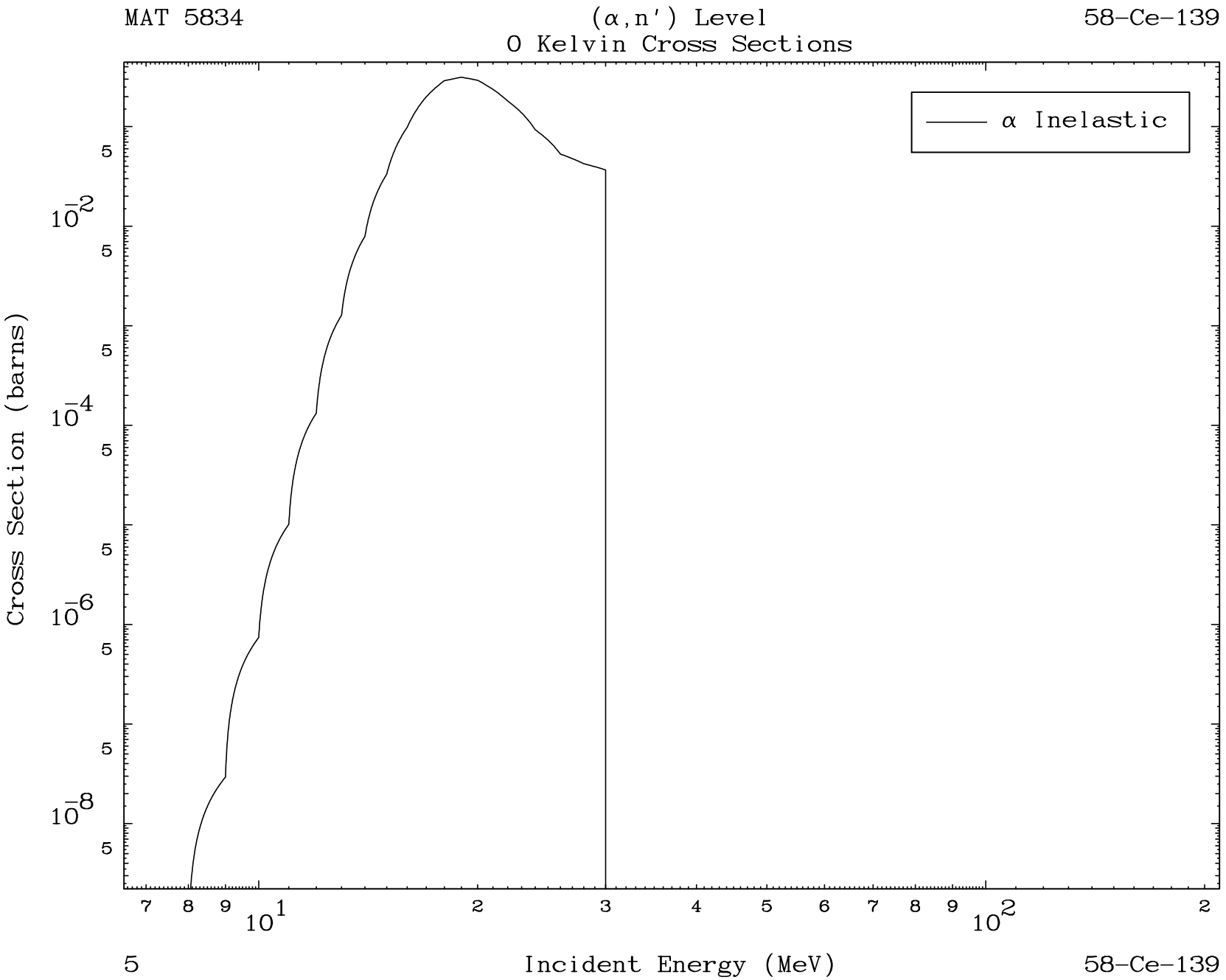
Press Mouse Button to Start

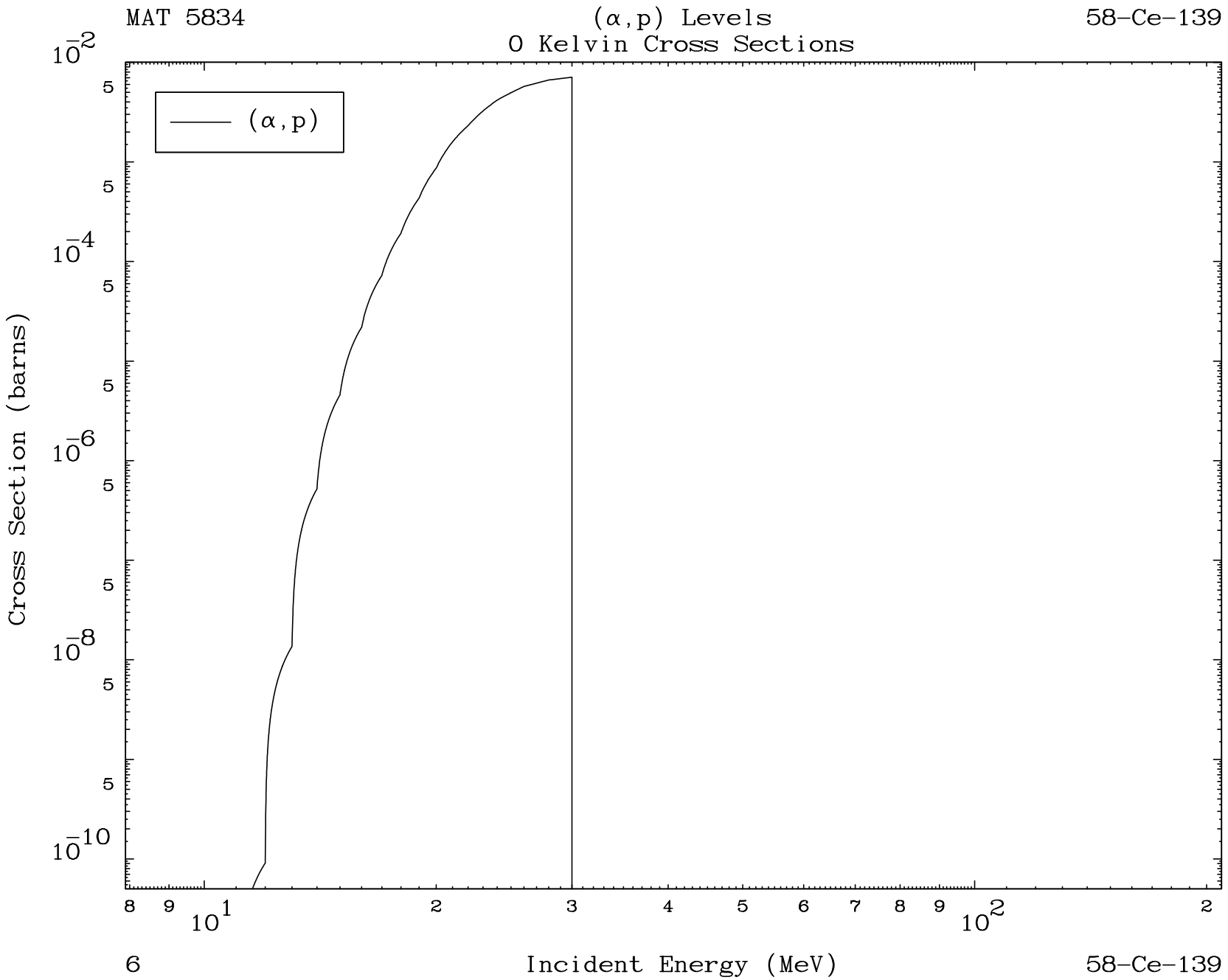

MAT 5834
α Major
58-Ce-139
0 Kelvin Cross Sections
α Inelastic
(α,remainder)
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
58-Ce-139
1

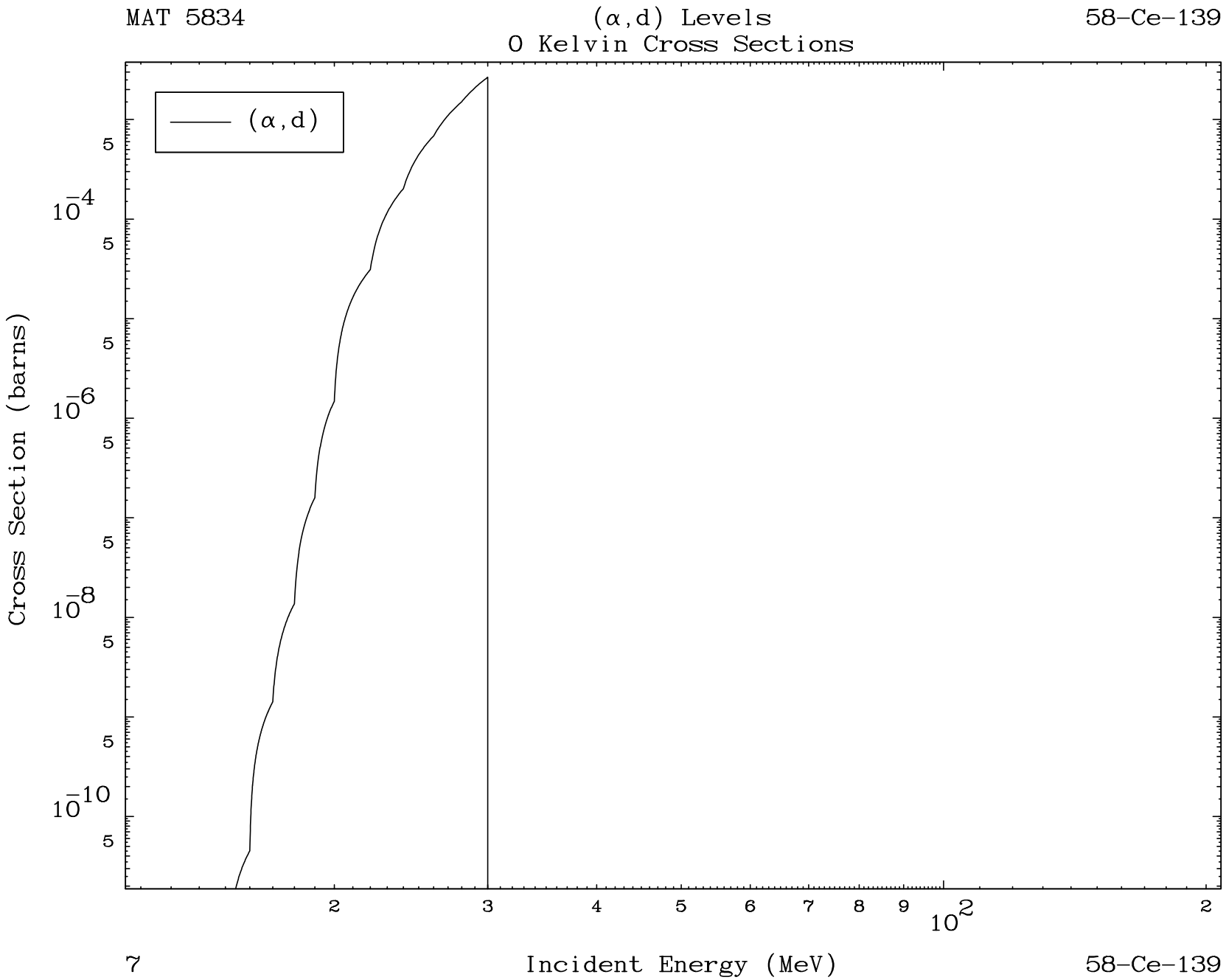

MAT 5834
α Neutron Production
0 Kelvin Cross Sections
58-Ce-139
(α,2n)
(α,3n)
(α,n') α
(α,2n) α
(α,n') p
(α,n') d
(α,n') t
(α,2n) p
Cross Section (barns)
Incident Energy (MeV)
58-Ce-139

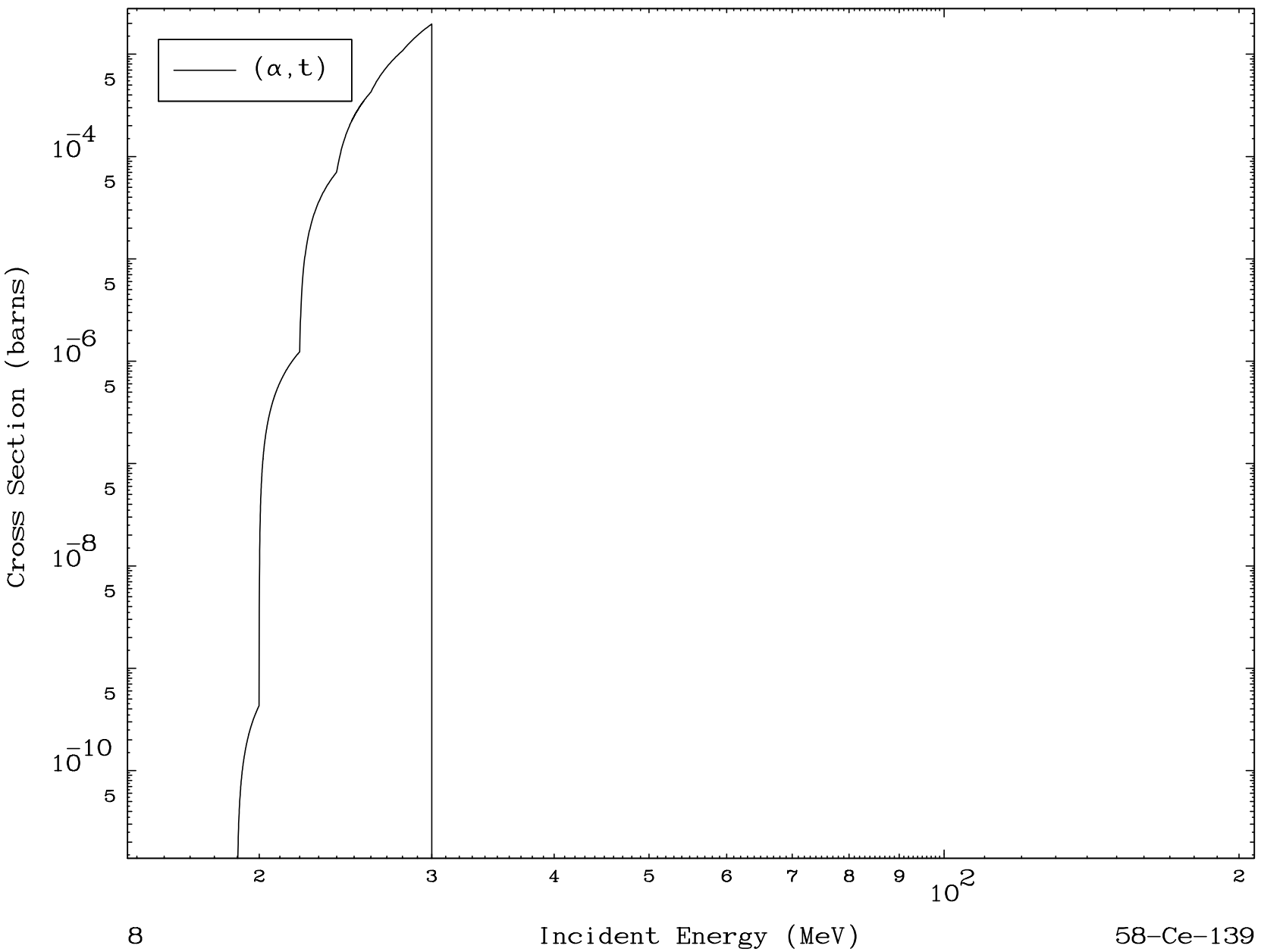

MAT 5834
α Charged Particle
0 Kelvin Cross Sections
58-Ce-139
(α,n') α
(α,2n) α
(α,n') p
(α,n') d
(α,n') t
(α,2n) p
(α,p)
(α,d)
Cross Section (barns)
Incident Energy (MeV)
3
58-Ce-139

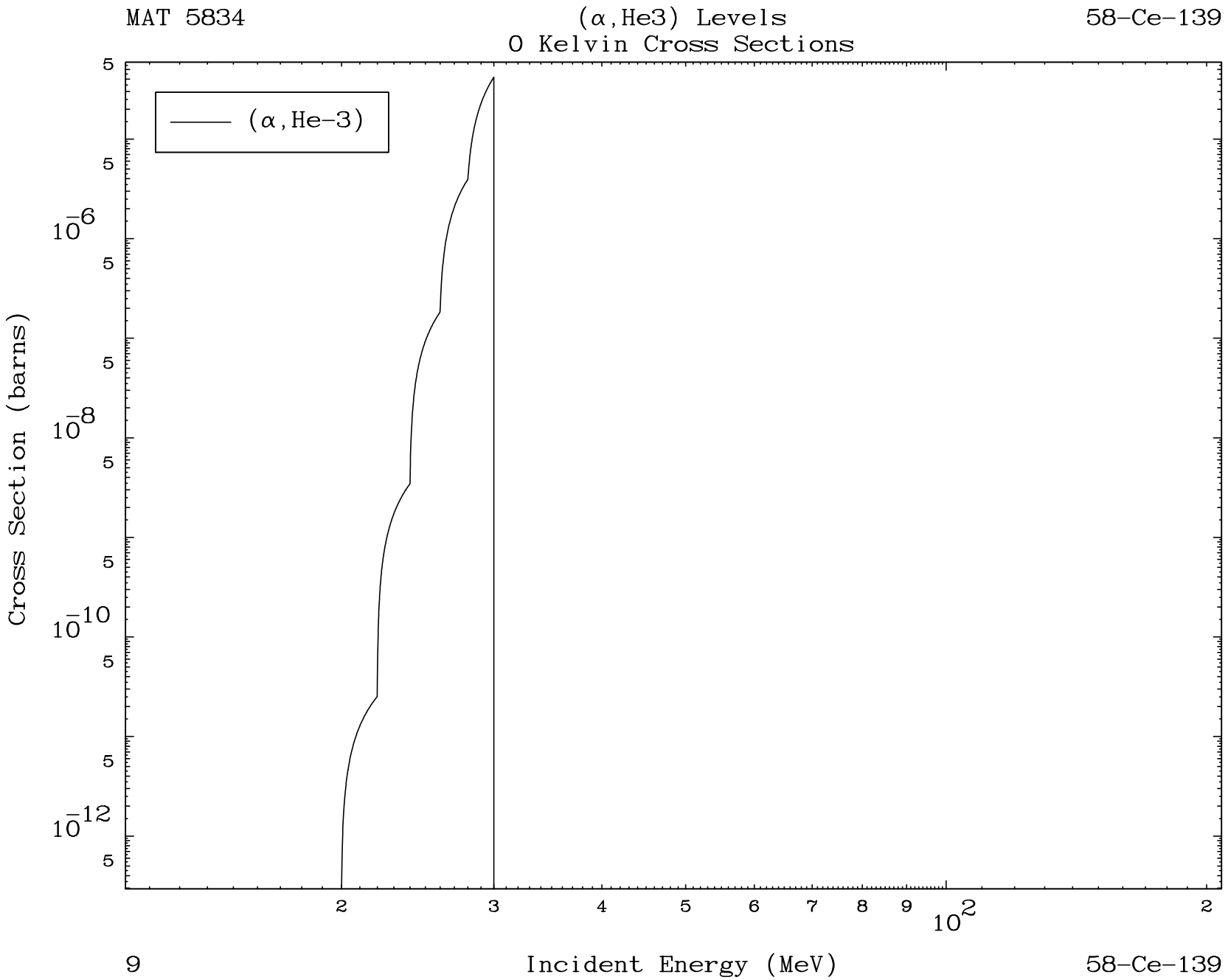

MAT 5834
α Charged Particle
0 Kelvin Cross Sections
58-Ce-139
(α,t)
(α,He-3)
(α,α)
(α,2α)
(α,2p)
(α,p) α
(α,p) d
Cross Section (barns)
Incident Energy (MeV)
4
58-Ce-139

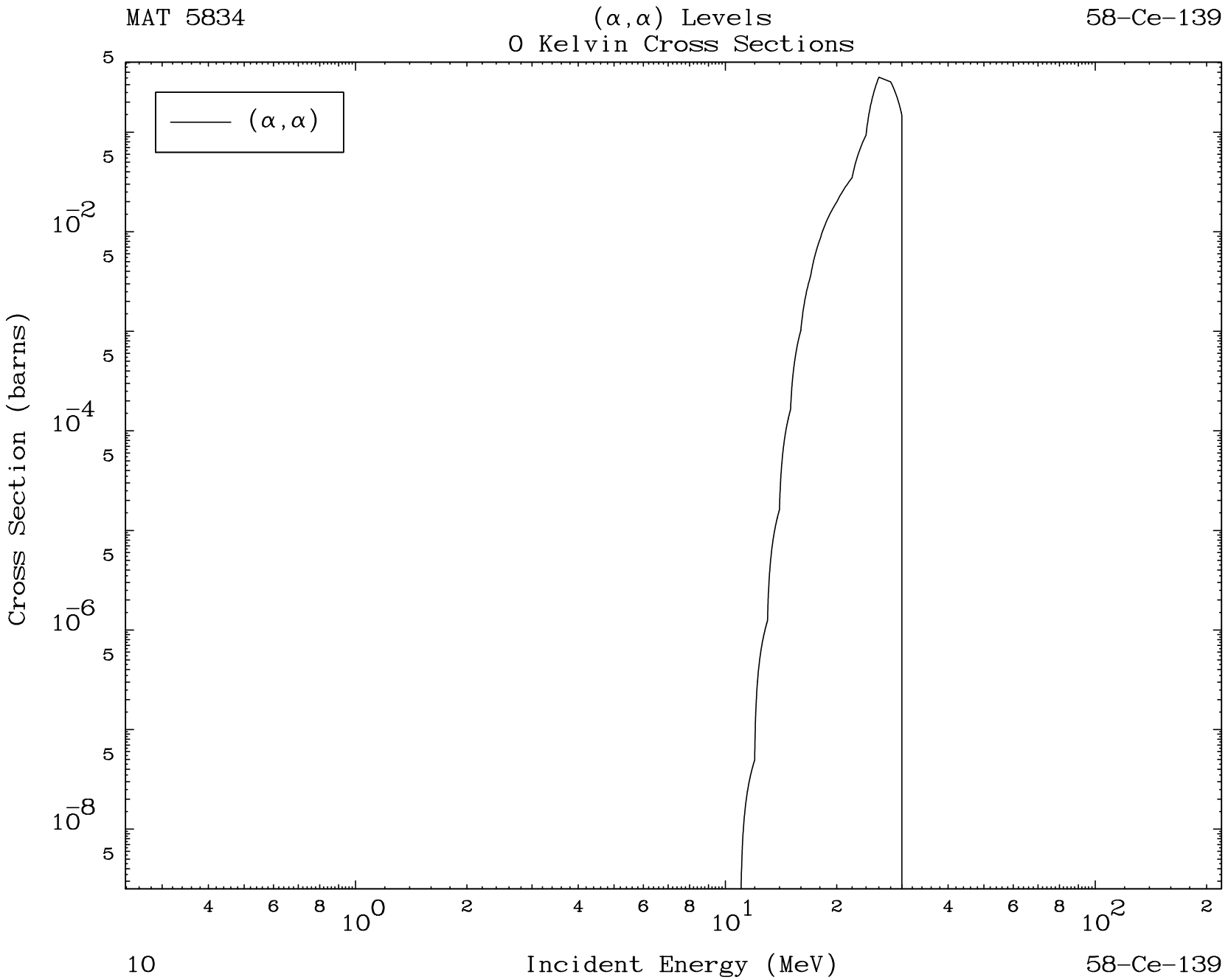

MAT 5834
(α,n') Level
58-Ce-139
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
5
Incident Energy (MeV)
58-Ce-139

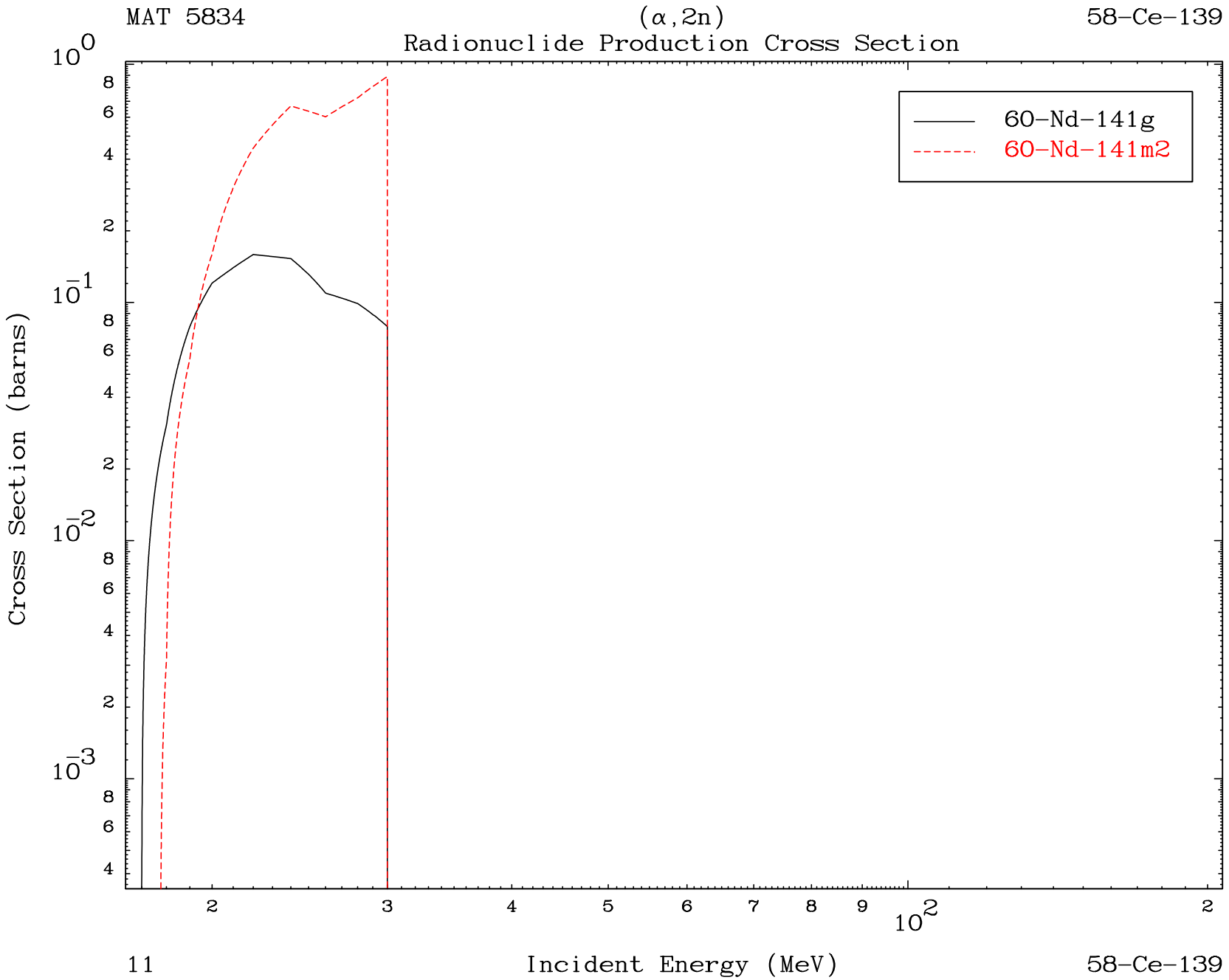

MAT 5834
(α,p) Levels
58-Ce-139
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
Incident Energy (MeV)
58-Ce-139
6

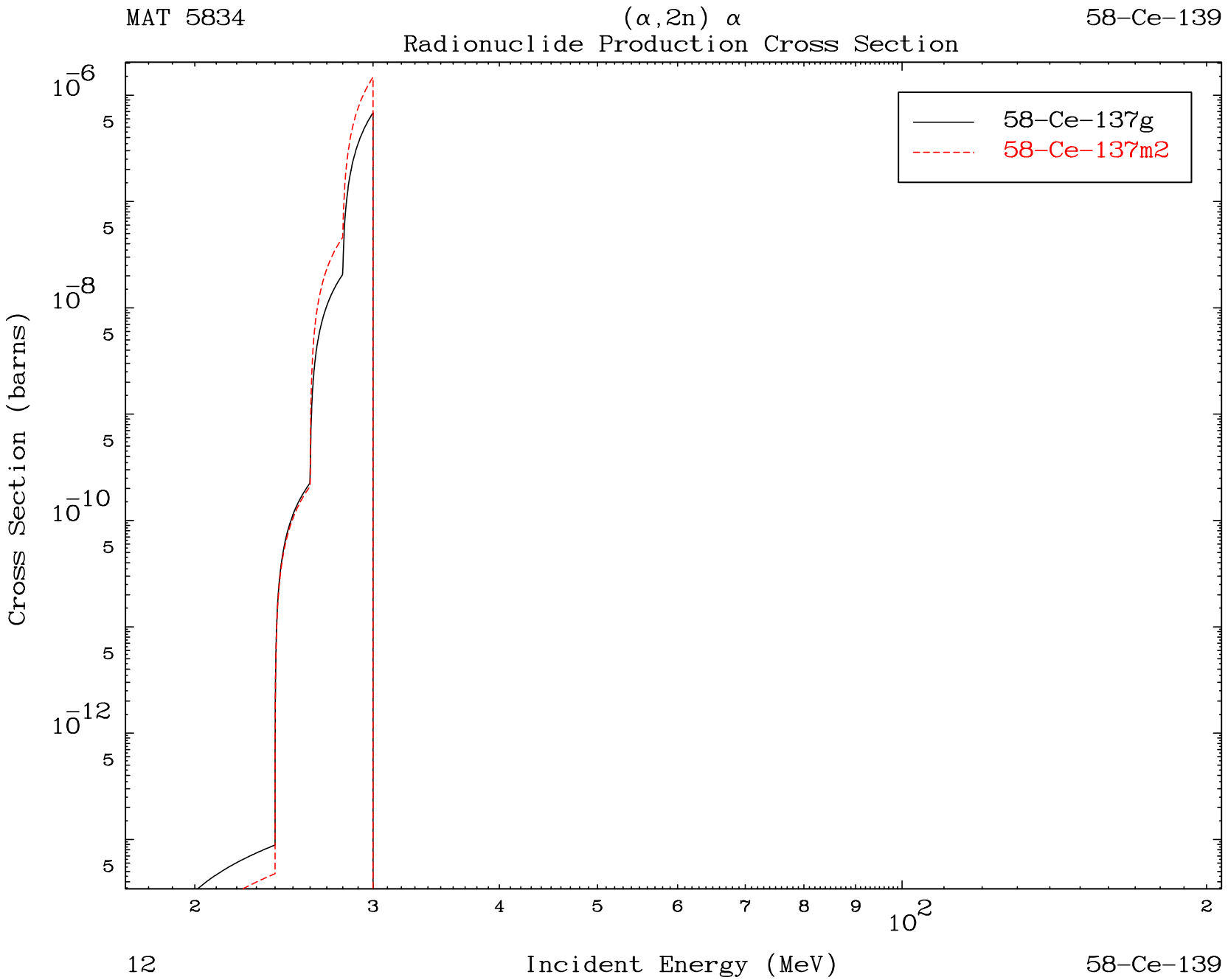

MAT 5834
(α,d) Levels
58-Ce-139
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
7
Incident Energy (MeV)
58-Ce-139

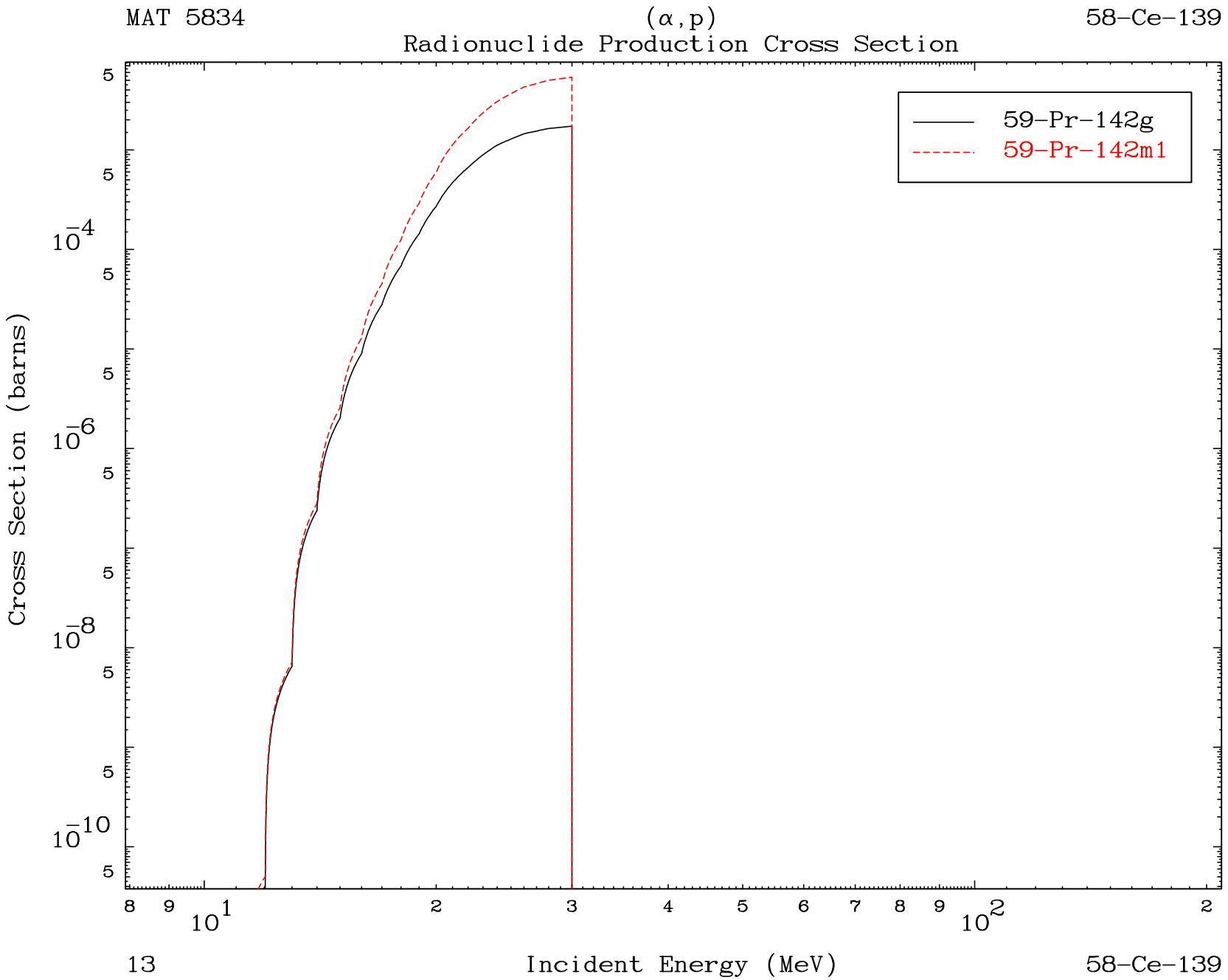

0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)

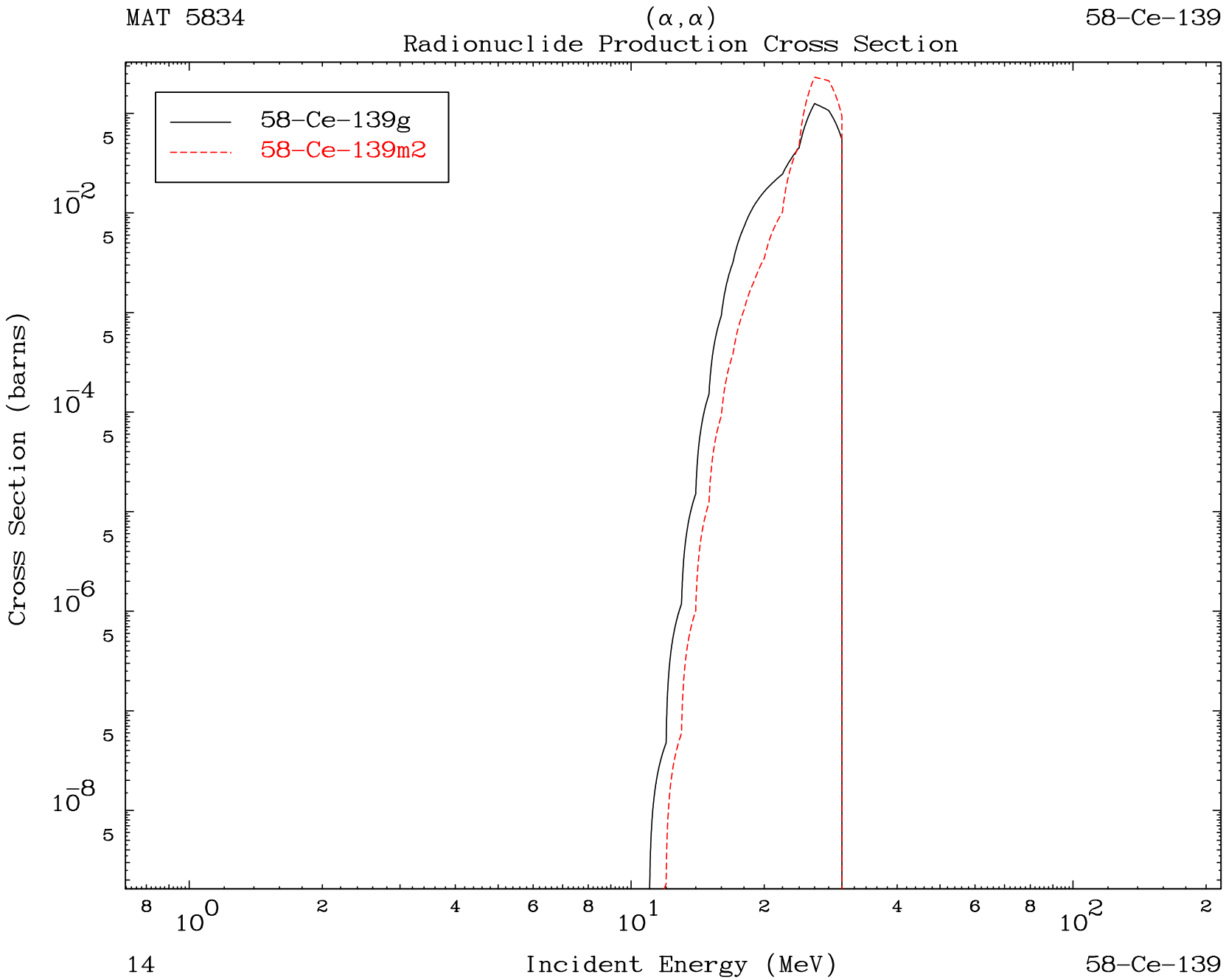

MAT 5834
(α,He3) Levels
58-Ce-139
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
Incident Energy (MeV)
9
58-Ce-139

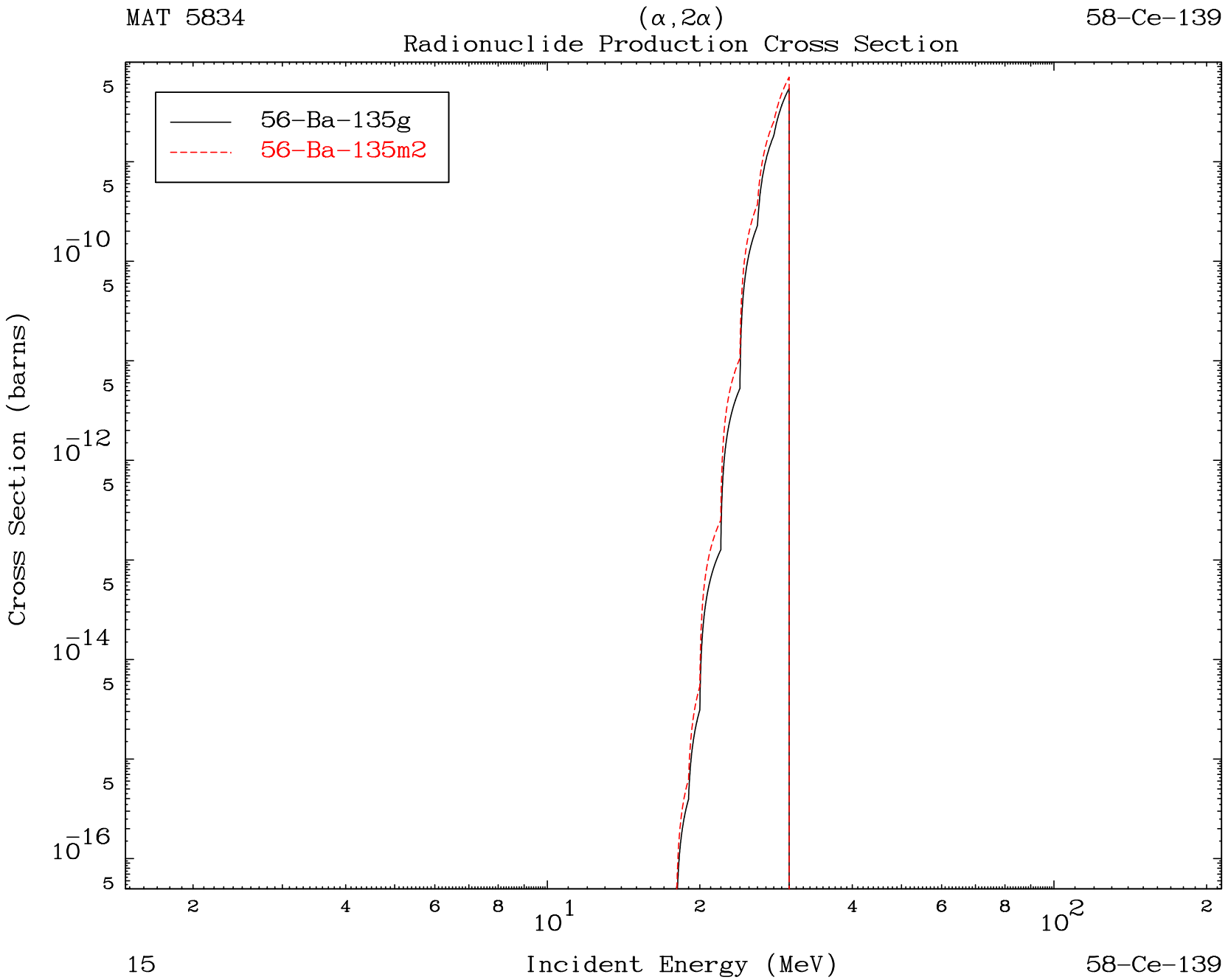

MAT 5834
(α,α) Levels
58-Ce-139
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
Incident Energy (MeV)
58-Ce-139
10


MAT 5834
(α,2n)
58-Ce-139
Radionuclide Production Cross Section
60-Nd-141g
60-Nd-141m2
Cross Section (barns)
Incident Energy (MeV)
11
58-Ce-139


MAT 5834
(α,2n) α
58-Ce-139
Radionuclide Production Cross Section
58-Ce-137g
58-Ce-137m2
Cross Section (barns)
10-6
10-8
10-10
10-12
2
3
4
5
6
7
8
9
10 2
12
Incident Energy (MeV)
58-Ce-139


MAT 5834
(α,p)
58-Ce-139
Radionuclide Production Cross Section
59-Pr-142g
59-Pr-142m1
Cross Section (barns)
10-4
10-6
10-8
10-10
10 1
10 2
Incident Energy (MeV)
13
58-Ce-139


MAT 5834
(α,α)
58-Ce-139
Radionuclide Production Cross Section
58-Ce-139g
58-Ce-139m2
Cross Section (barns)
Incident Energy (MeV)
14
58-Ce-139


MAT 5834
(α,2α)
58-Ce-139
Radionuclide Production Cross Section
56-Ba-135g
56-Ba-135m2
Cross Section (barns)
Incident Energy (MeV)
15
58-Ce-139