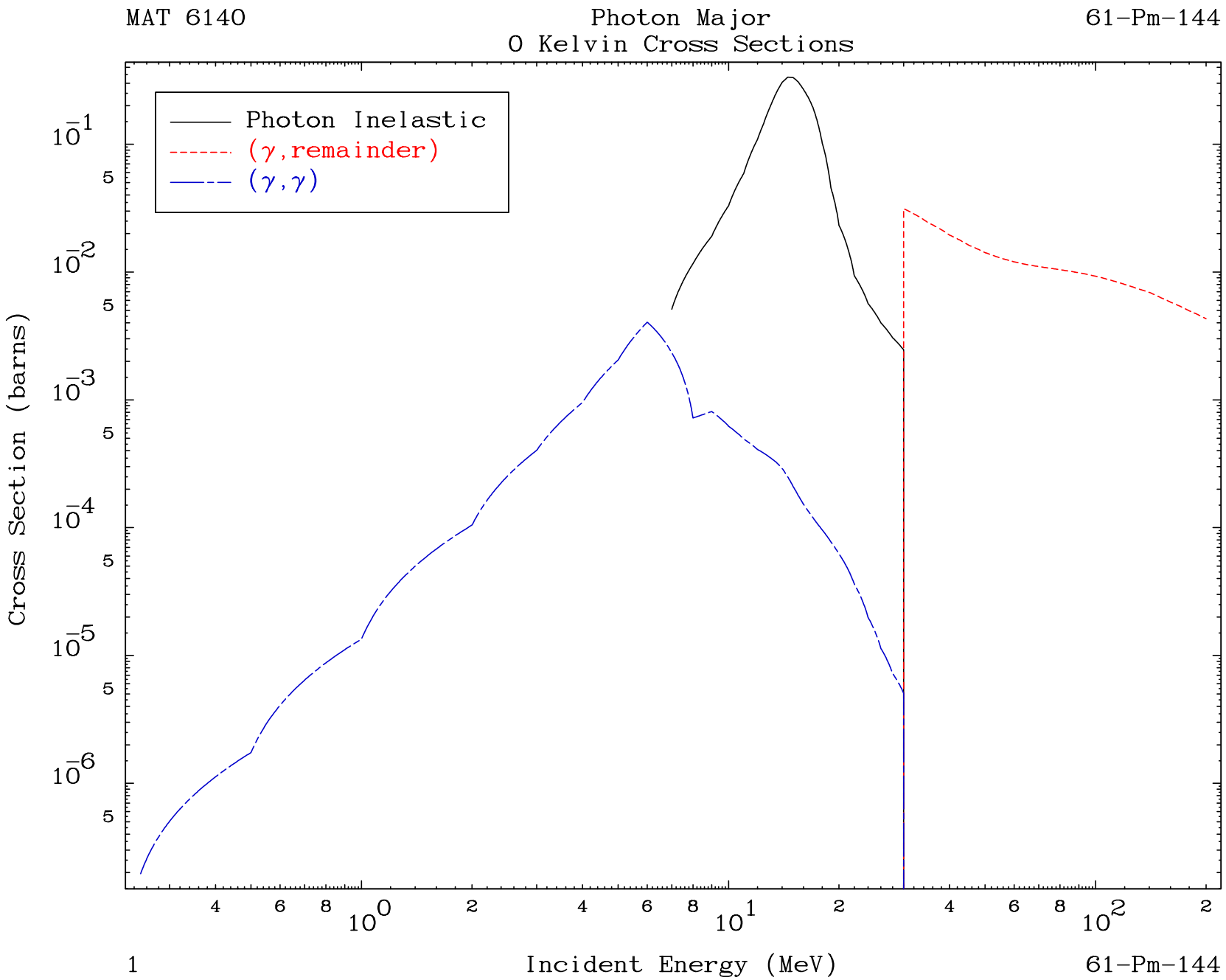
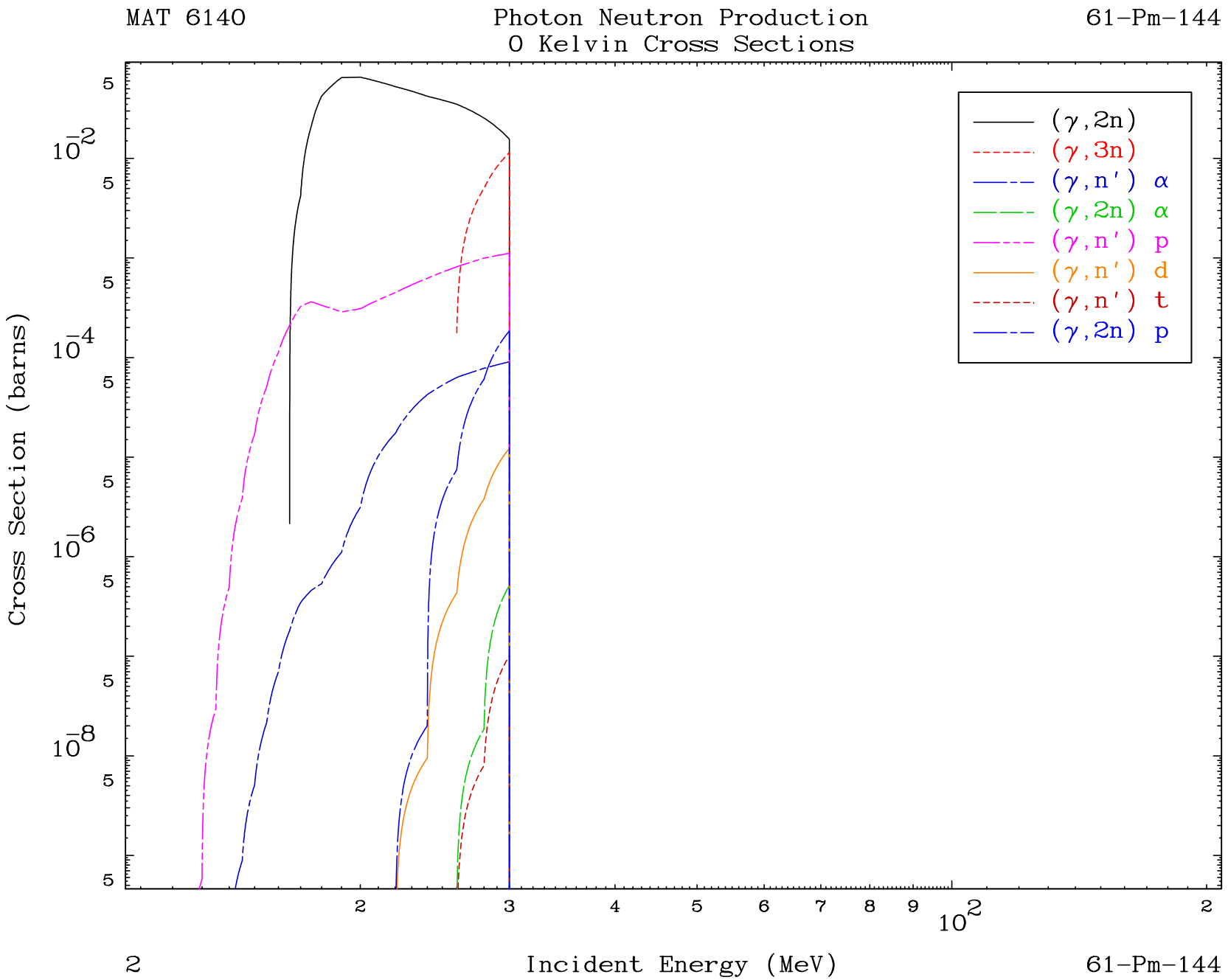
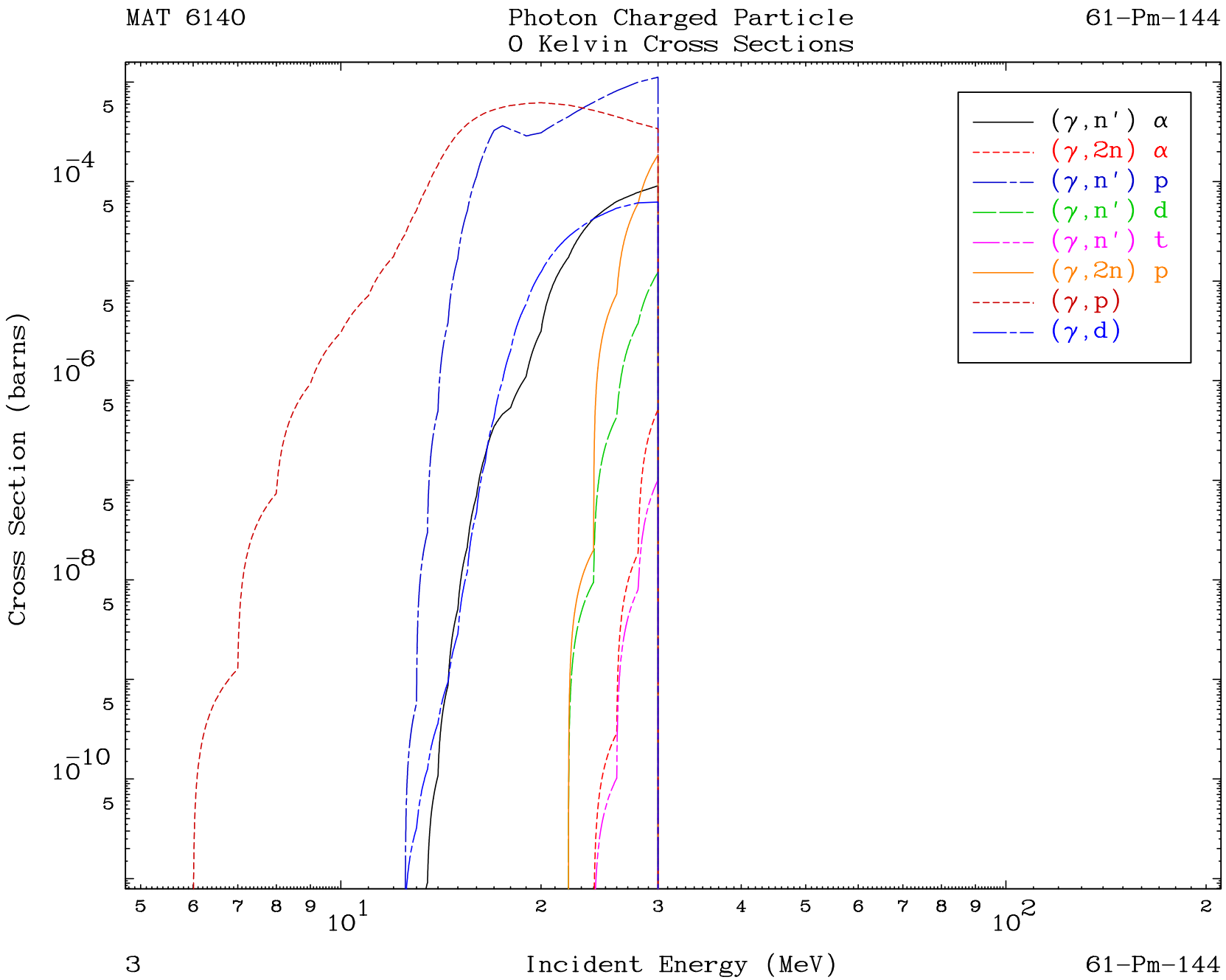
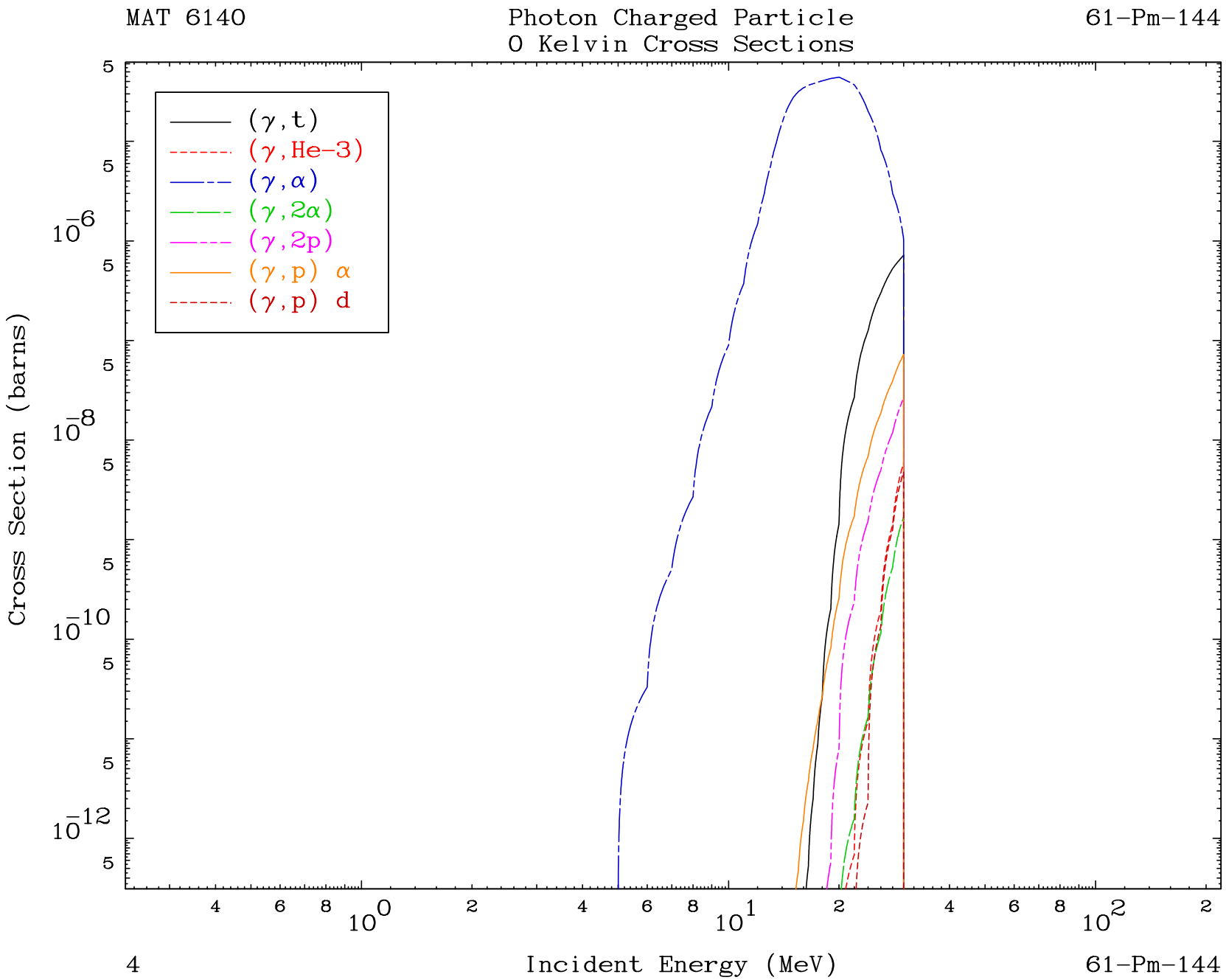
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

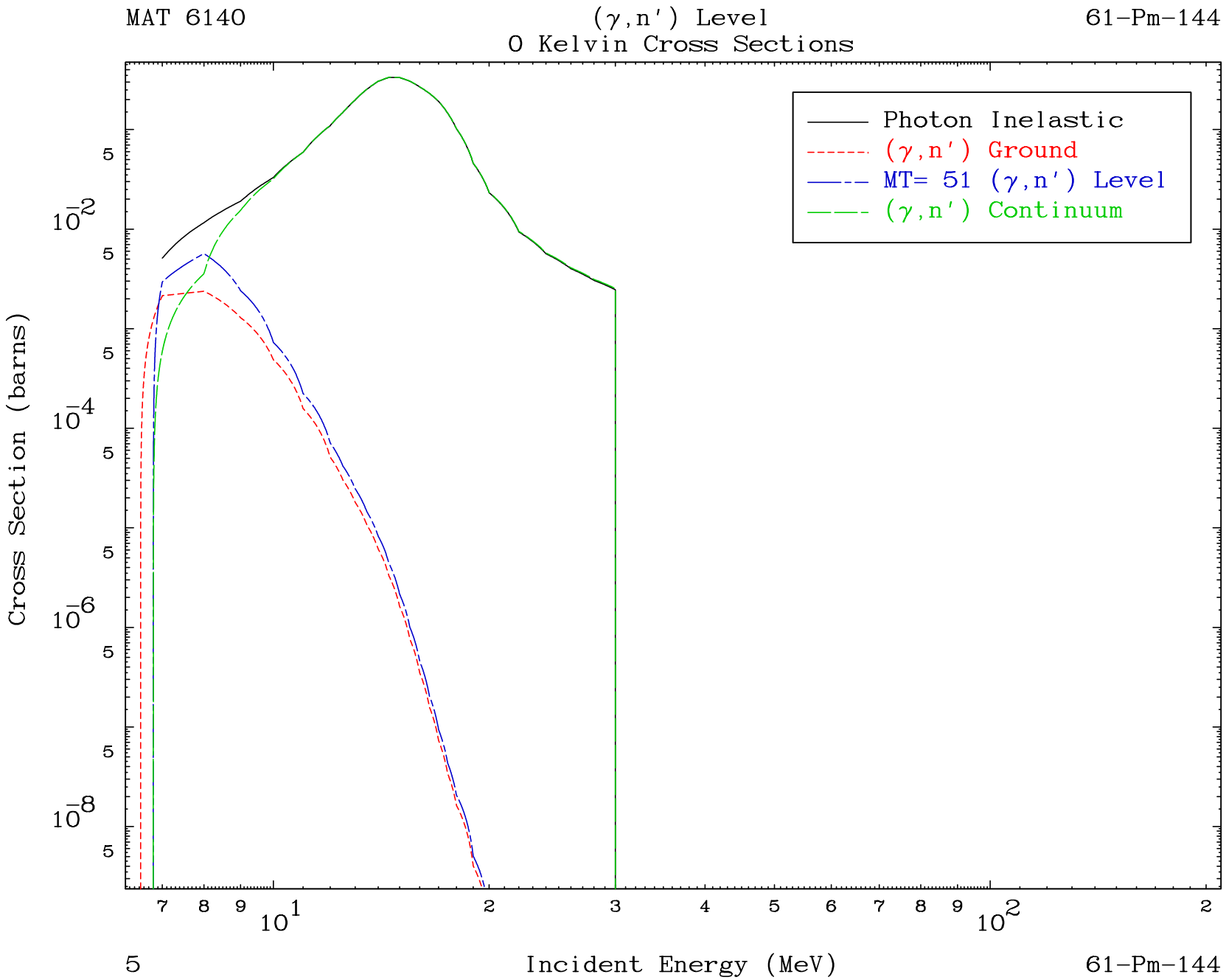
Press Mouse Button to Start

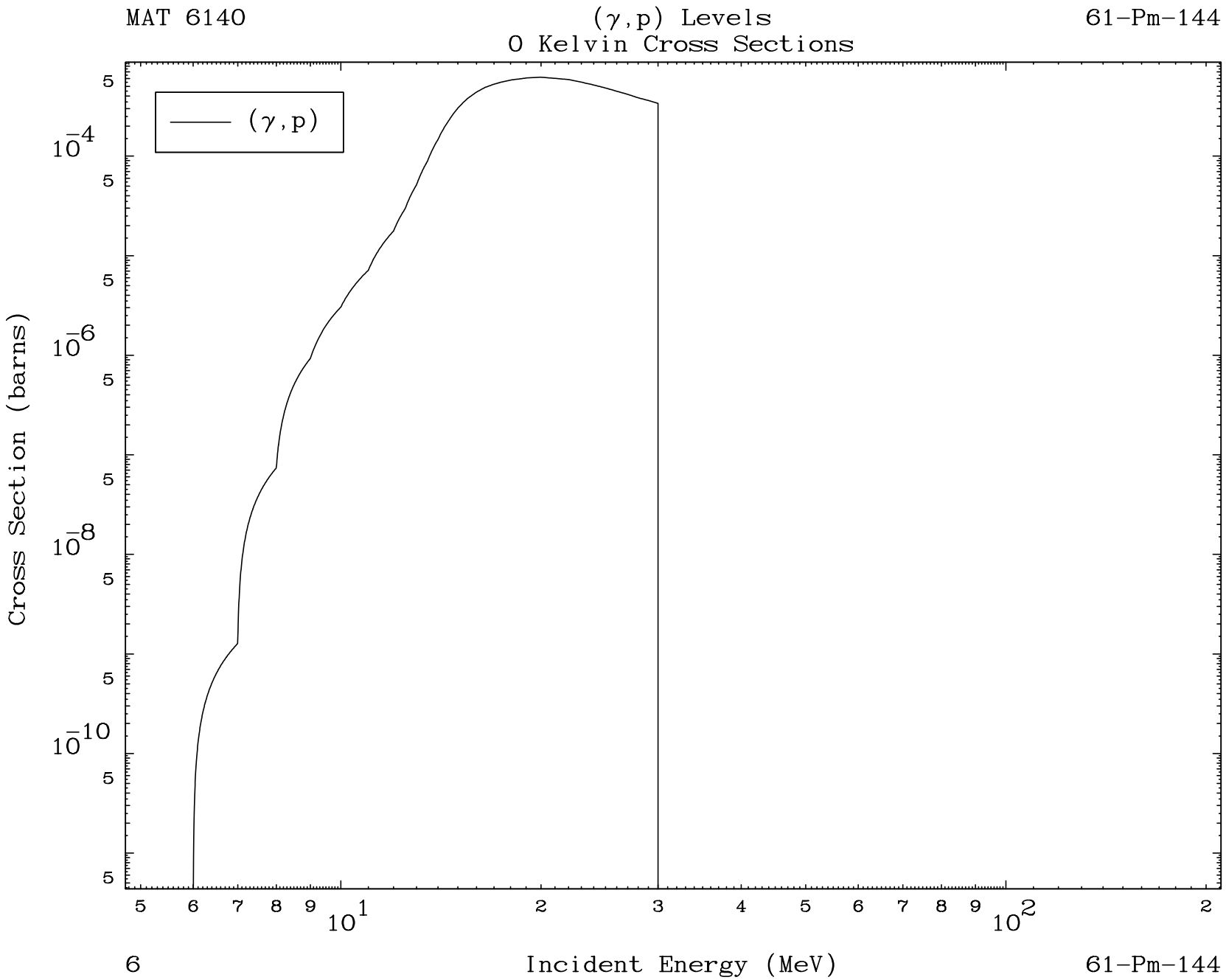

MAT 6140
Photon Major
61-Pm-144
0 Kelvin Cross Sections
Photon Inelastic
(γ,remainder)
(γ,γ)
Cross Section (barns)
Incident Energy (MeV)
61-Pm-144

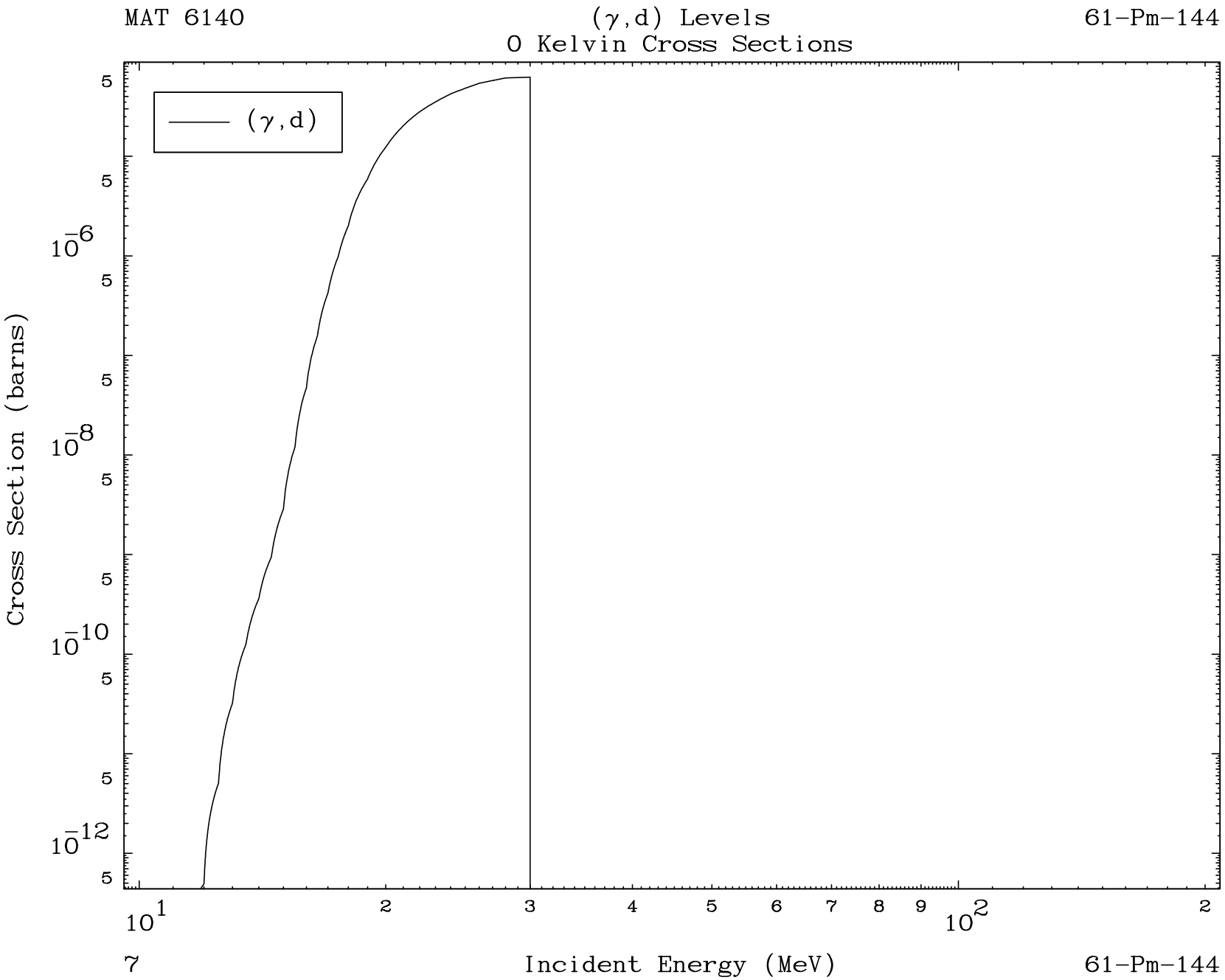

MAT 6140
Photon Neutron Production
0 Kelvin Cross Sections
61-Pm-144
Cross Section (barns)
Incident Energy (MeV)
61-Pm-144
(γ,2n)
(γ,3n)
(γ,n') α
(γ,2n) α
(γ,n') p
(γ,n') d
(γ,n') t
(γ,2n) p

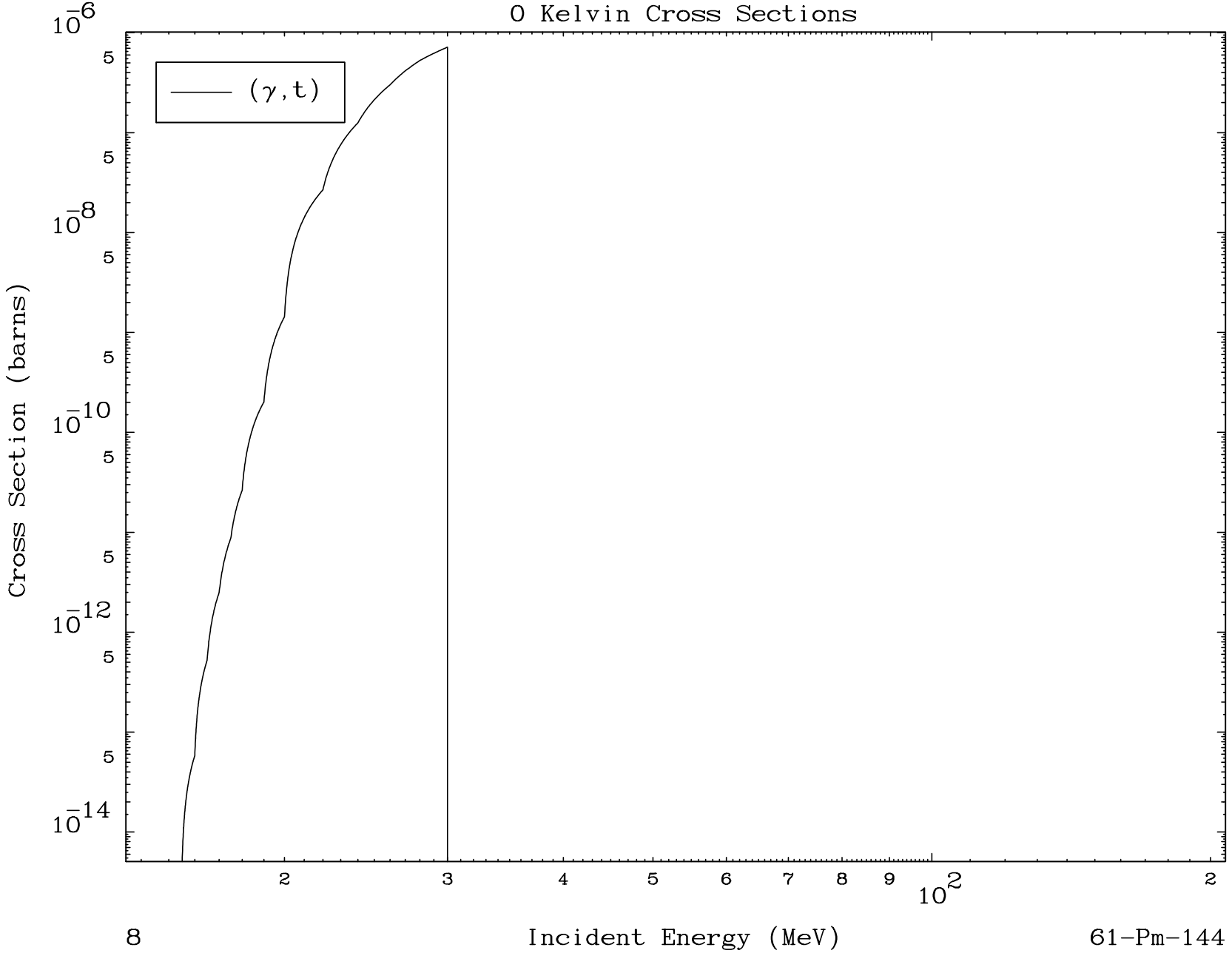

MAT 6140
Photon Charged Particle
0 Kelvin Cross Sections
61-Pm-144
Cross Section (barns)
Incident Energy (MeV)
3
61-Pm-144
(γ,n') α
(γ,2n) α
(γ,n') p
(γ,n') d
(γ,n') t
(γ,2n) p
(γ,p)
(γ,d)

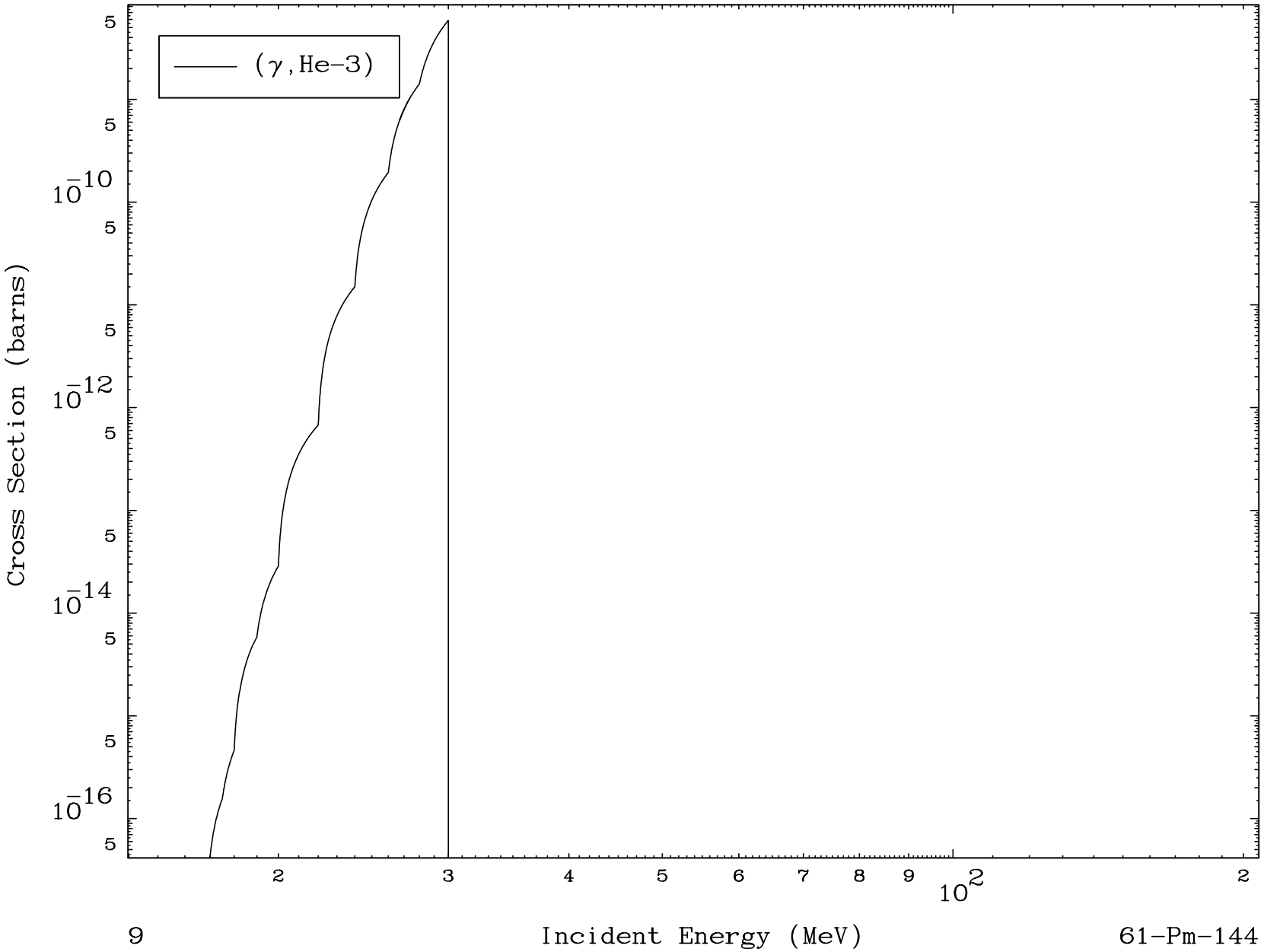

MAT 6140
Photon Charged Particle
0 Kelvin Cross Sections
61-Pm-144
(γ,t)
(γ,He-3)
(γ,α)
(γ,2α)
(γ,2p)
(γ,p) α
(γ,p) d
Cross Section (barns)
Incident Energy (MeV)
4
61-Pm-144

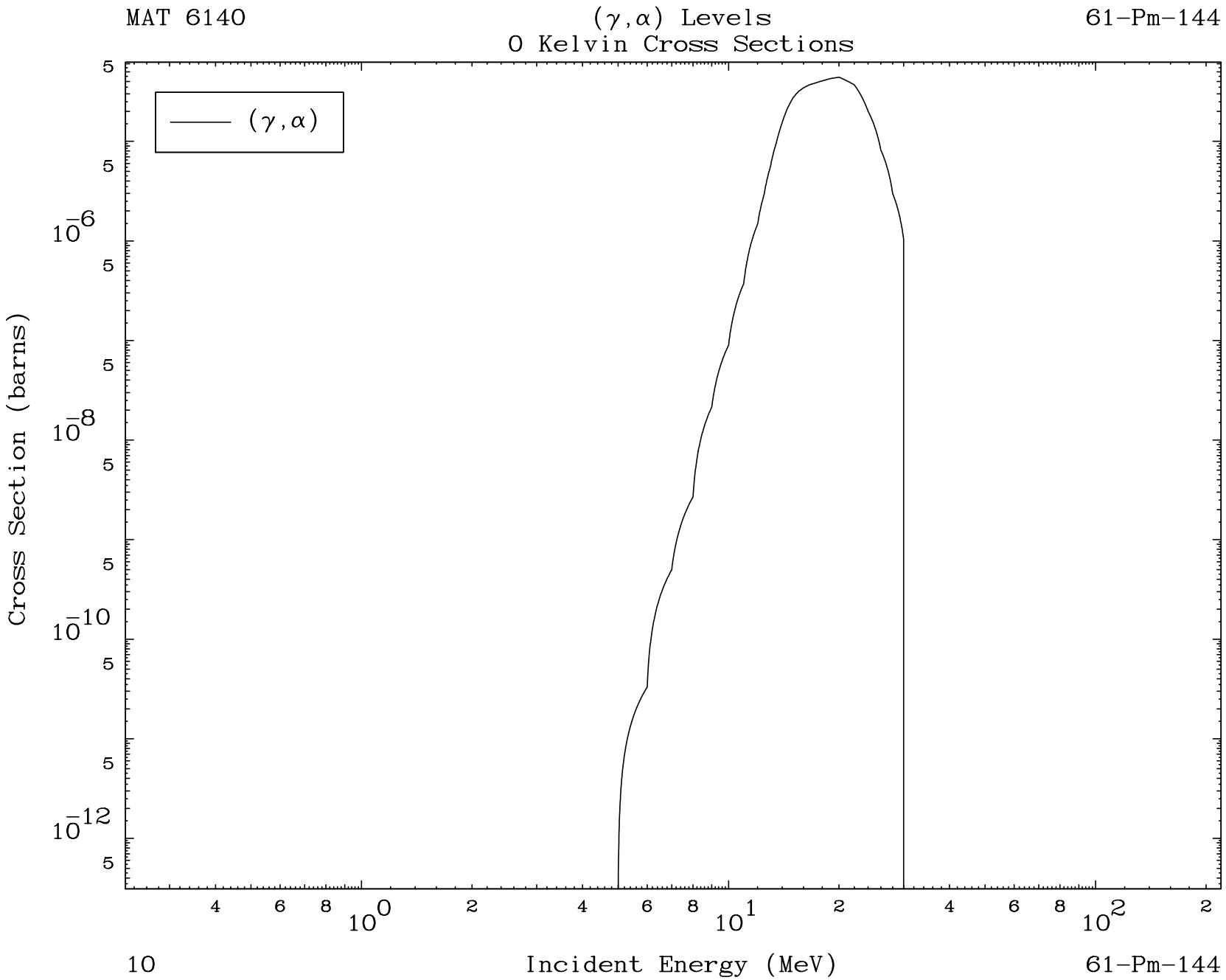

MAT 6140
(γ,n') Level
61-Pm-144
0 Kelvin Cross Sections
Photon Inelastic
(γ,n') Ground
MT= 51 (γ,n') Level
(γ,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
61-Pm-144

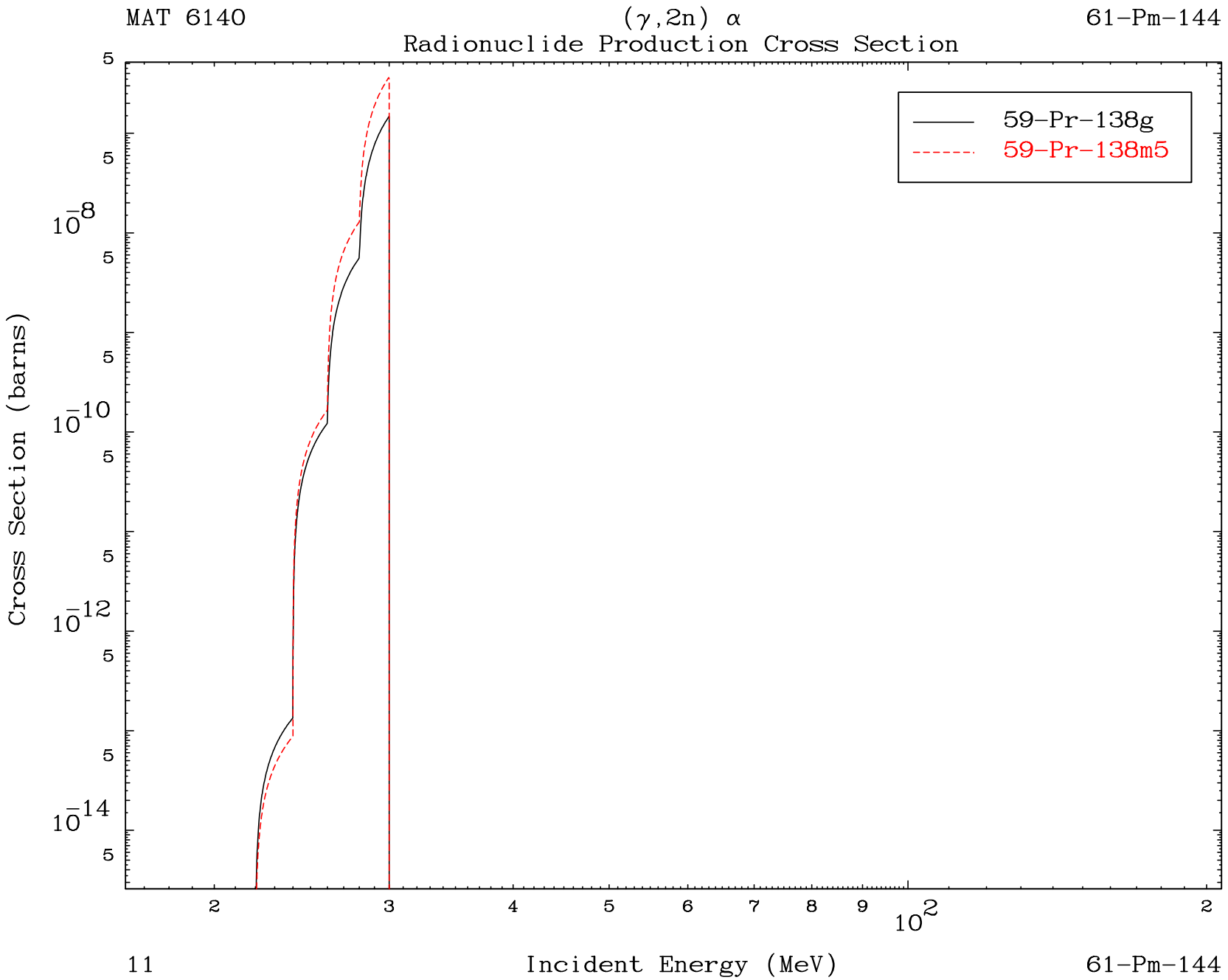

MAT 6140
(γ,p) Levels
61-Pm-144
0 Kelvin Cross Sections
(γ,p)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10^1
2
3
4
10^2
Incident Energy (MeV)
6
61-Pm-144

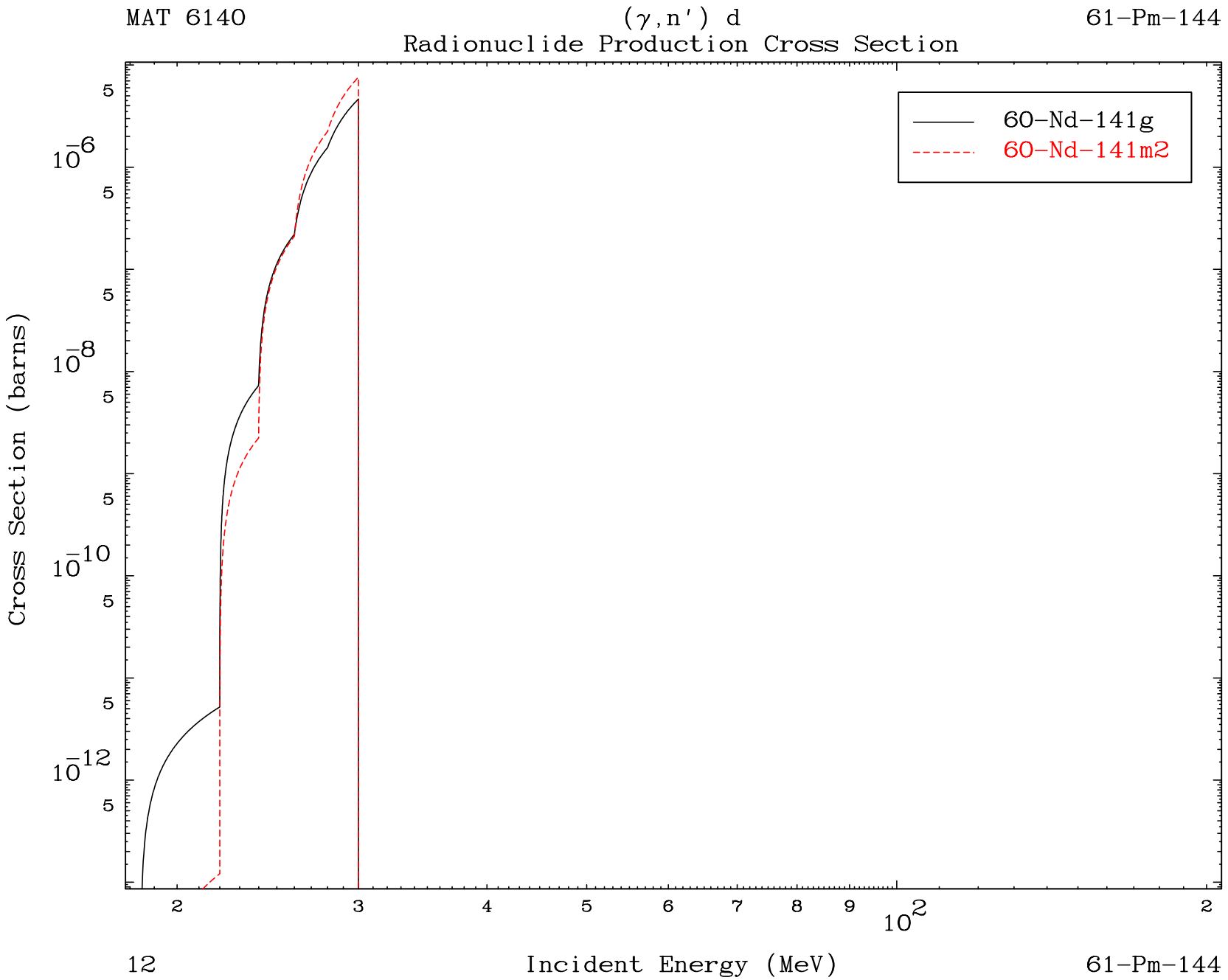

MAT 6140
(γ,d) Levels
61-Pm-144
0 Kelvin Cross Sections
(γ,d)
Cross Section (barns)
Incident Energy (MeV)
61-Pm-144
7

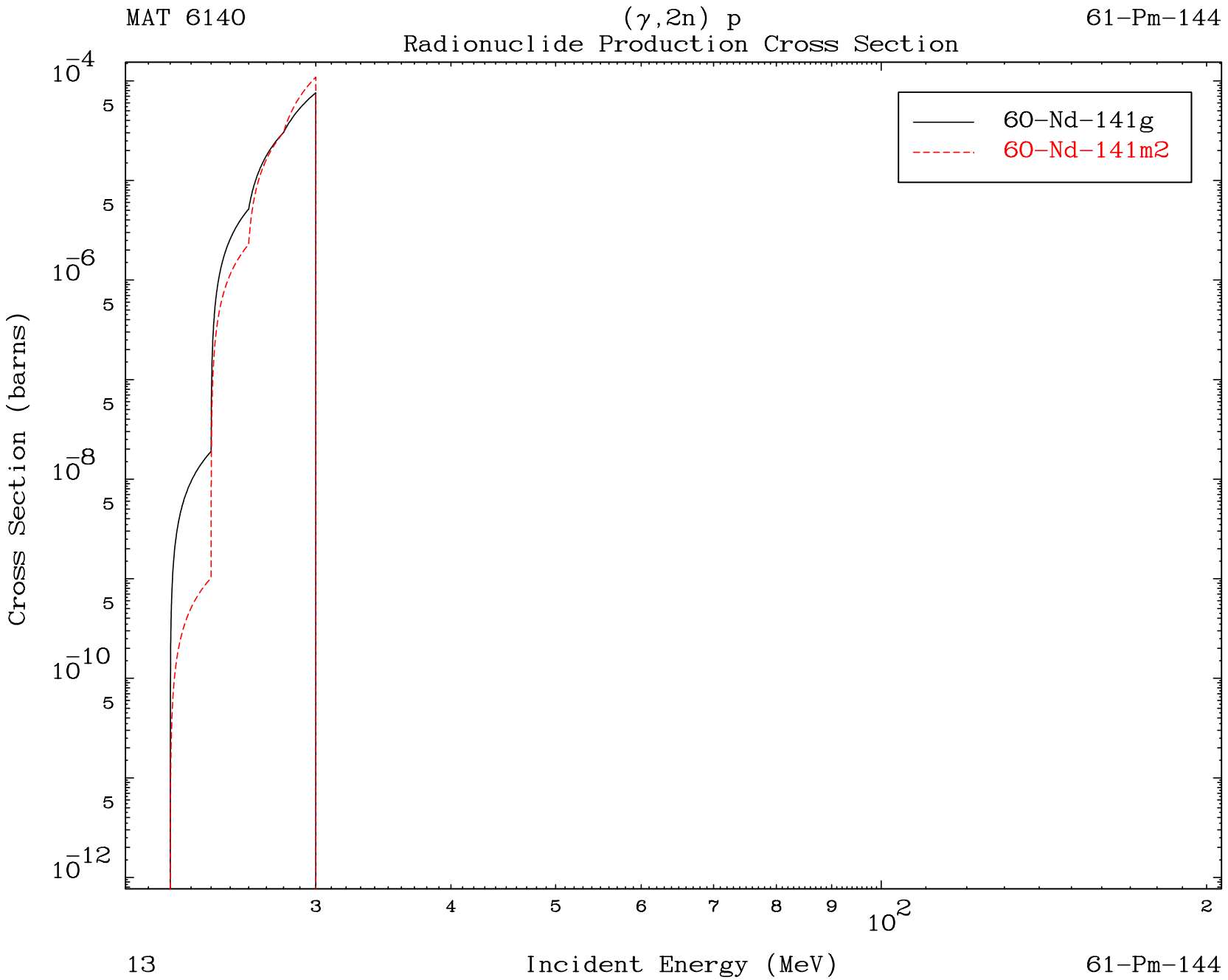

0 Kelvin Cross Sections
(γ,t)
Cross Section (barns)
10^-6
5
10^-8
5
10^-10
5
10^-12
5
10^-14
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)

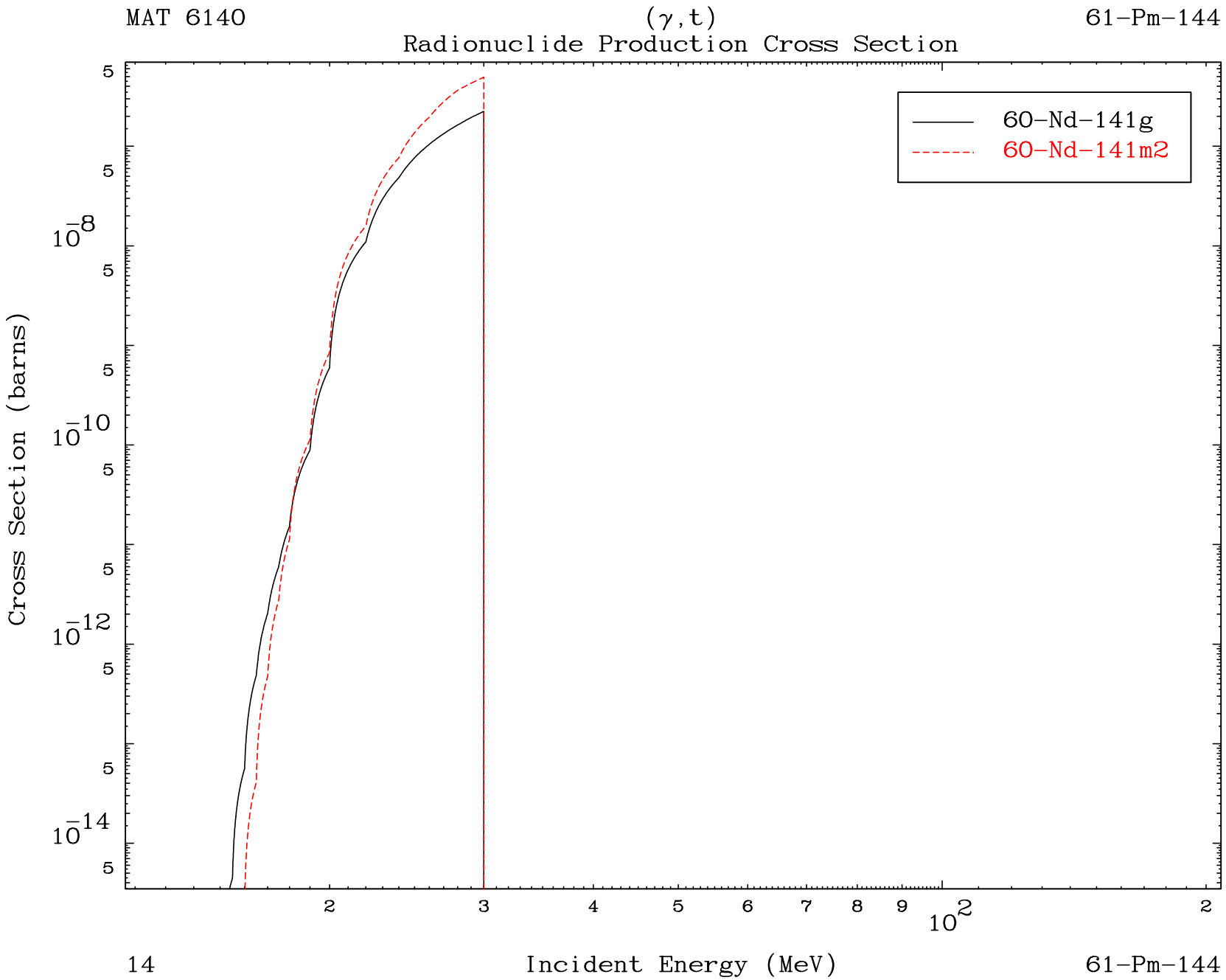

0 Kelvin Cross Sections
(γ,He-3)
Cross Section (barns)
5
5
10^-10
5
5
10^-12
5
5
10^-14
5
5
10^-16
5
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)

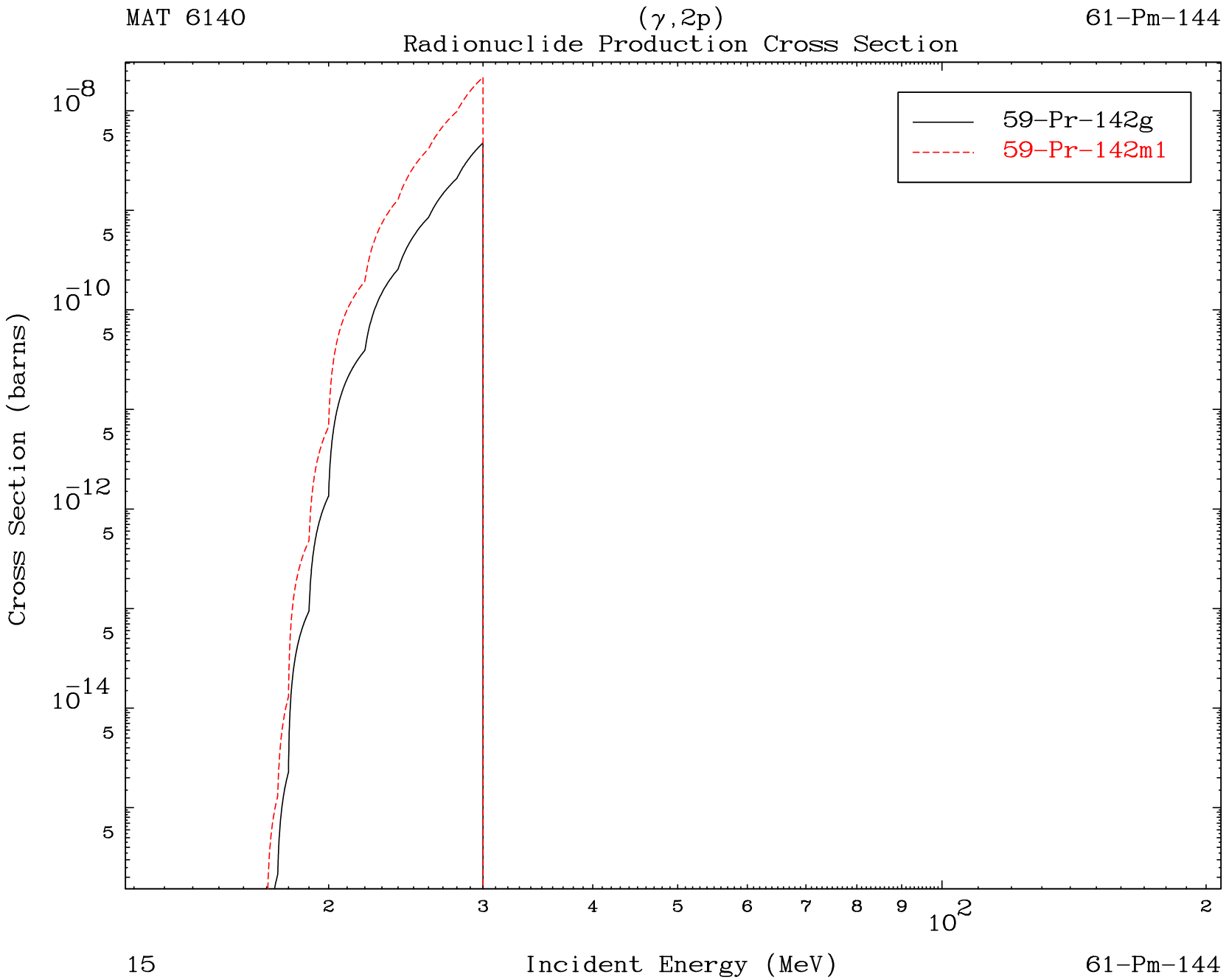

MAT 6140
(γ,α) Levels
61-Pm-144
0 Kelvin Cross Sections
(γ,α)
Cross Section (barns)
Incident Energy (MeV)
61-Pm-144

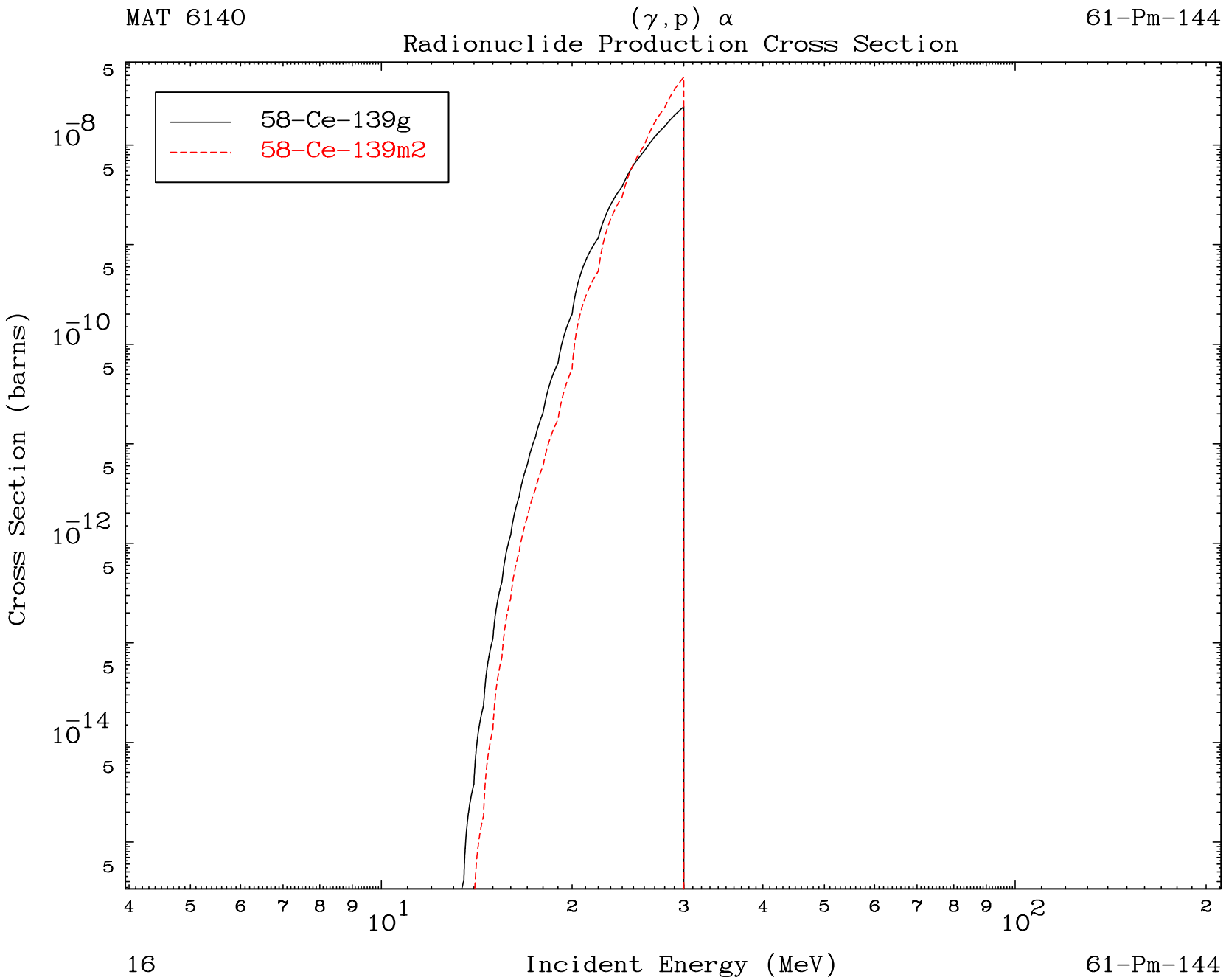

MAT 6140
(γ,2n) α
61-Pm-144
Radionuclide Production Cross Section
59-Pr-138g
59-Pr-138m5
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
2
3
4
5
6
7
8
9
10^2
2
11
Incident Energy (MeV)
61-Pm-144


MAT 6140
(γ,n') d
61-Pm-144
Radionuclide Production Cross Section
60-Nd-141g
60-Nd-141m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
2
3
4
6
7
8
9
10^2
Incident Energy (MeV)
12
61-Pm-144


MAT 6140
(γ,2n) p
61-Pm-144
Radionuclide Production Cross Section
60-Nd-141g
60-Nd-141m2
Cross Section (barns)
10-4
10-6
10-8
10-10
10-12
5
3
4
5
6
7
8
9
10 2
2
13
Incident Energy (MeV)
61-Pm-144


MAT 6140
(γ,t)
61-Pm-144
Radionuclide Production Cross Section
60-Nd-141g
60-Nd-141m2
Cross Section (barns)
Incident Energy (MeV)
14
61-Pm-144


MAT 6140
(γ,2p)
61-Pm-144
Radionuclide Production Cross Section
59-Pr-142g
59-Pr-142m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
15
Incident Energy (MeV)
61-Pm-144


MAT 6140
(γ,p) α
61-Pm-144
Radionuclide Production Cross Section
58-Ce-139g
58-Ce-139m2
Cross Section (barns)
Incident Energy (MeV)
16
61-Pm-144