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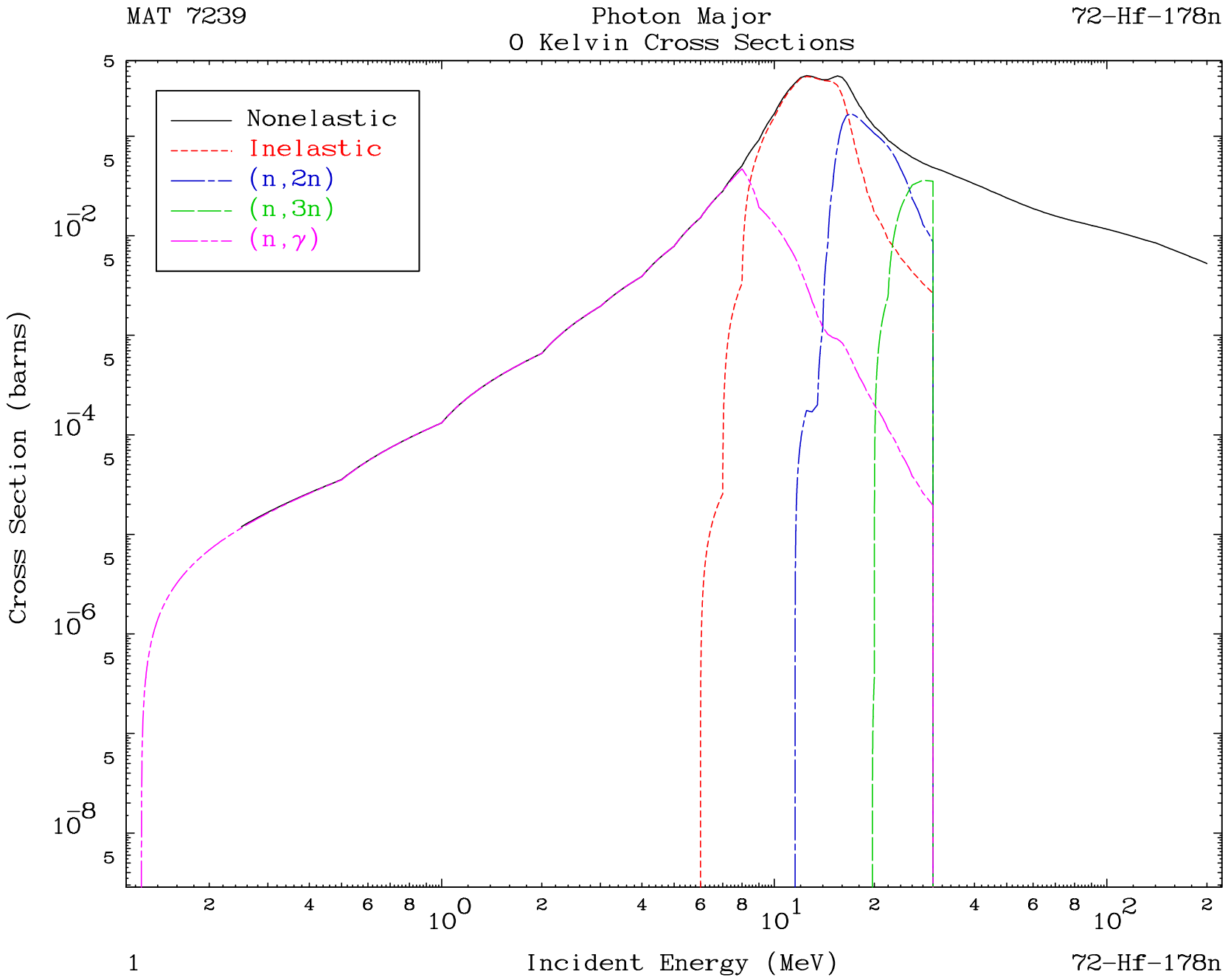
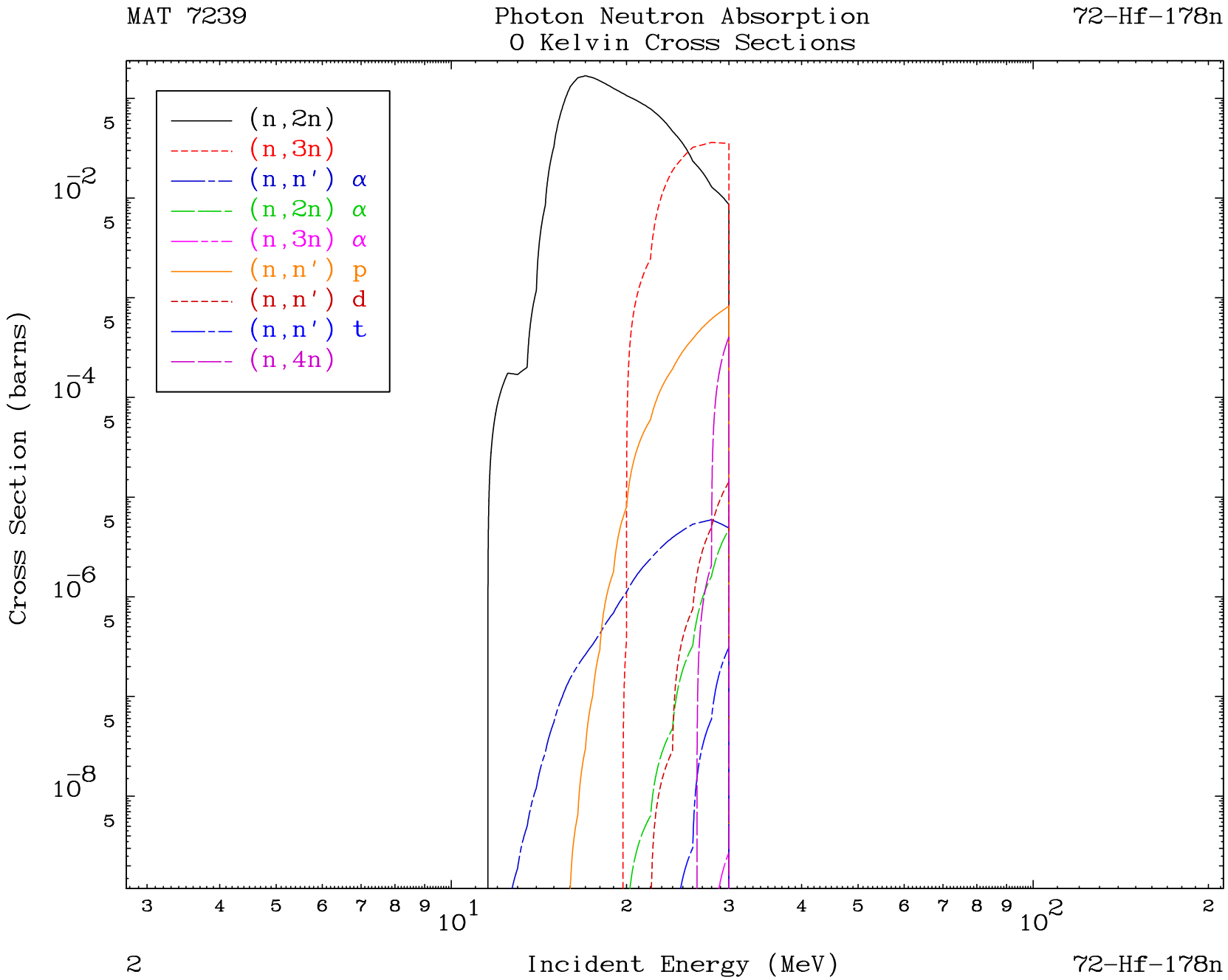
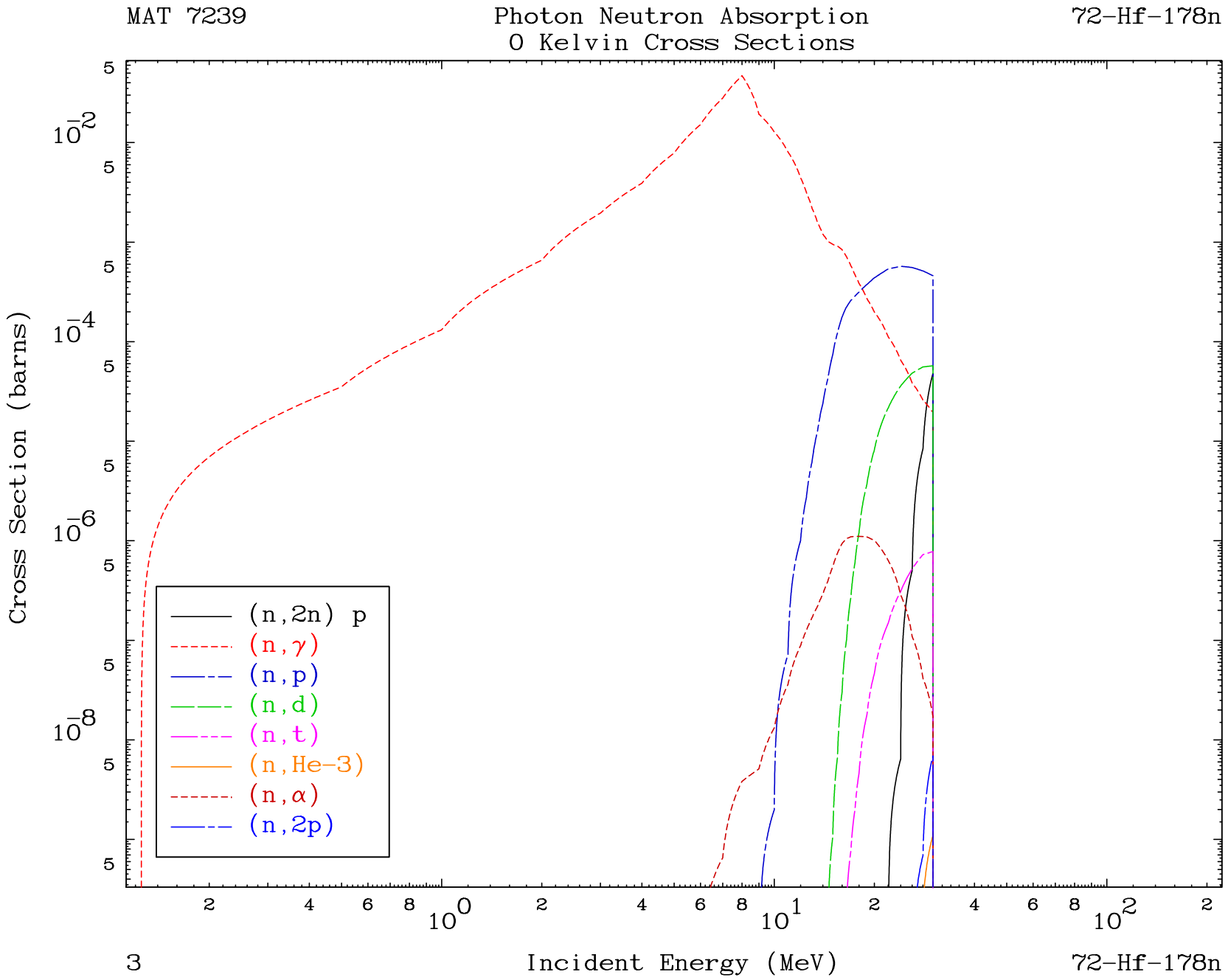
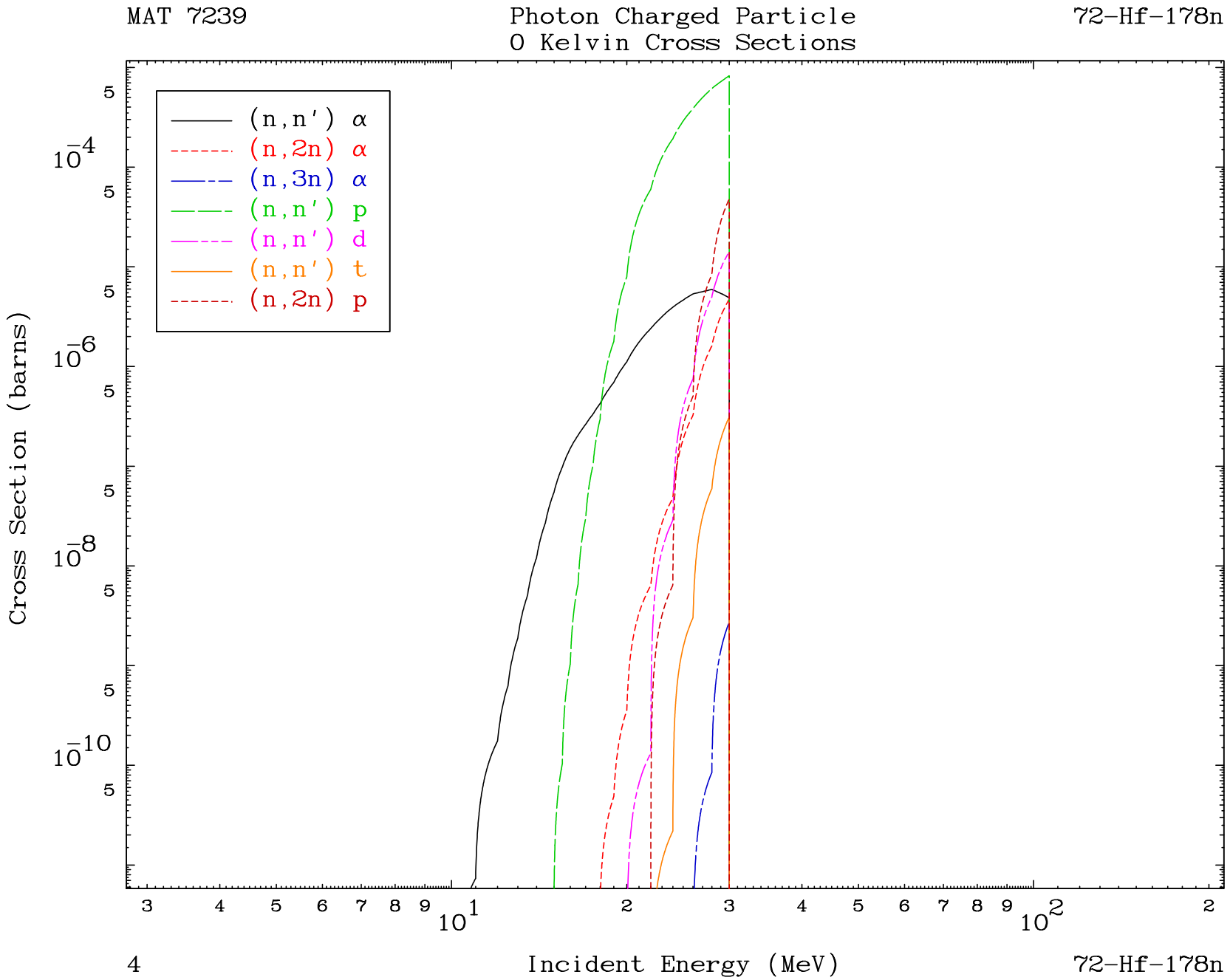
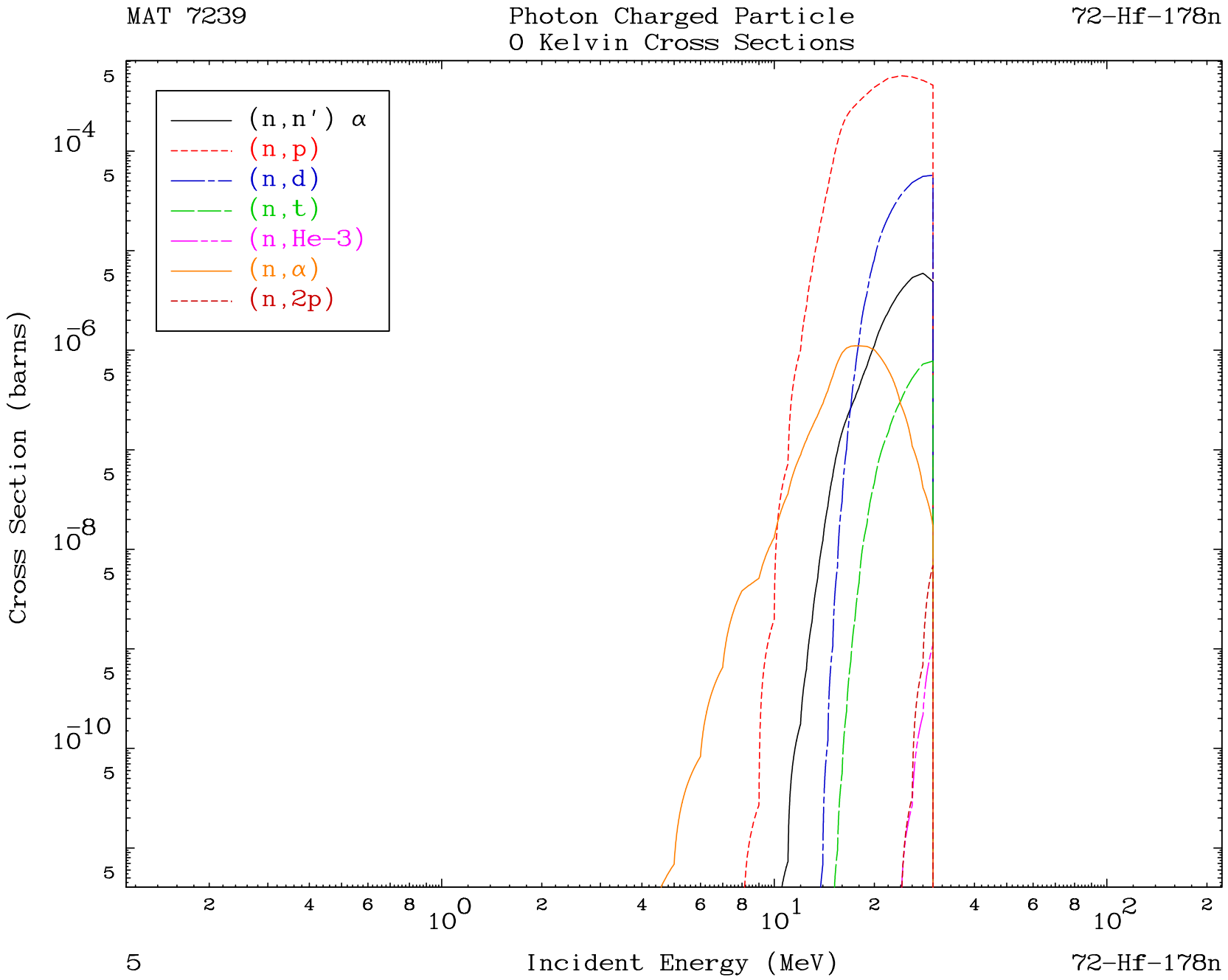
Press Mouse Button to Start

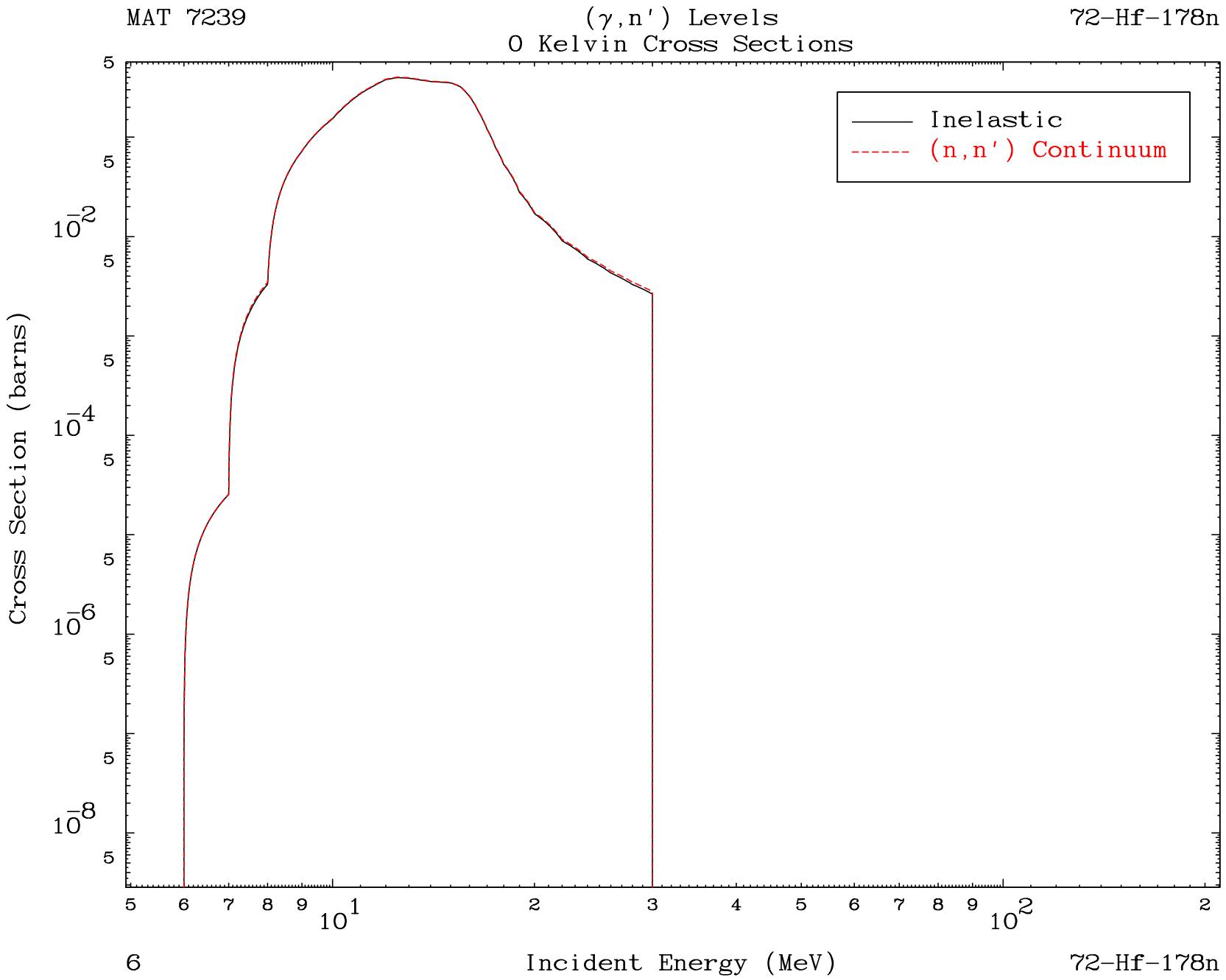

MAT 7239
Photon Major
72-Hf-178n
0 Kelvin Cross Sections
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
Cross Section (barns)
Incident Energy (MeV)
72-Hf-178n

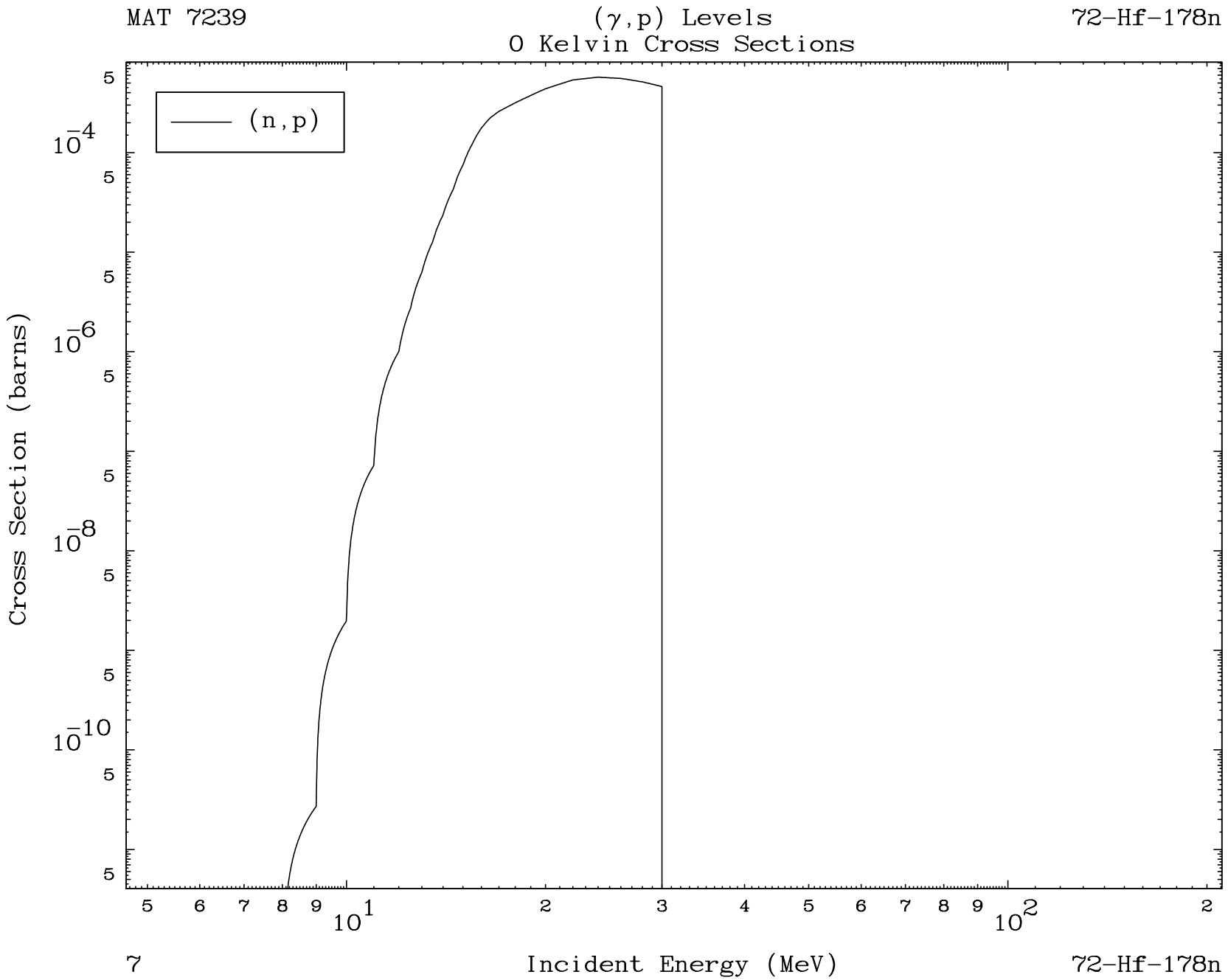

MAT 7239
Photon Neutron Absorption
0 Kelvin Cross Sections
72-Hf-178n
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,4n)
Cross Section (barns)
Incident Energy (MeV)
72-Hf-178n

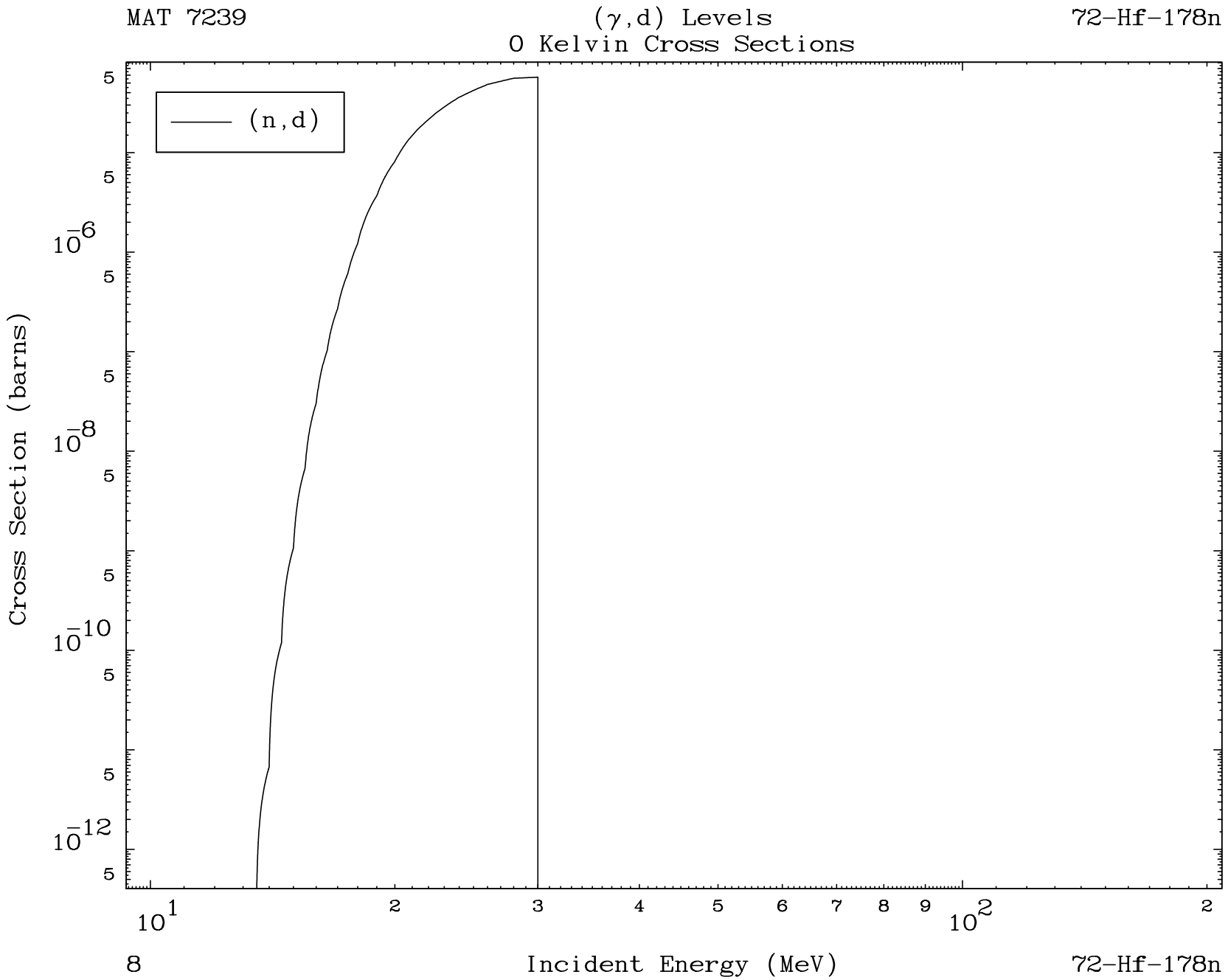

MAT 7239
Photon Neutron Absorption
0 Kelvin Cross Sections
72-Hf-178n
Cross Section (barns)
Incident Energy (MeV)
(n,2n) p
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
3
72-Hf-178n

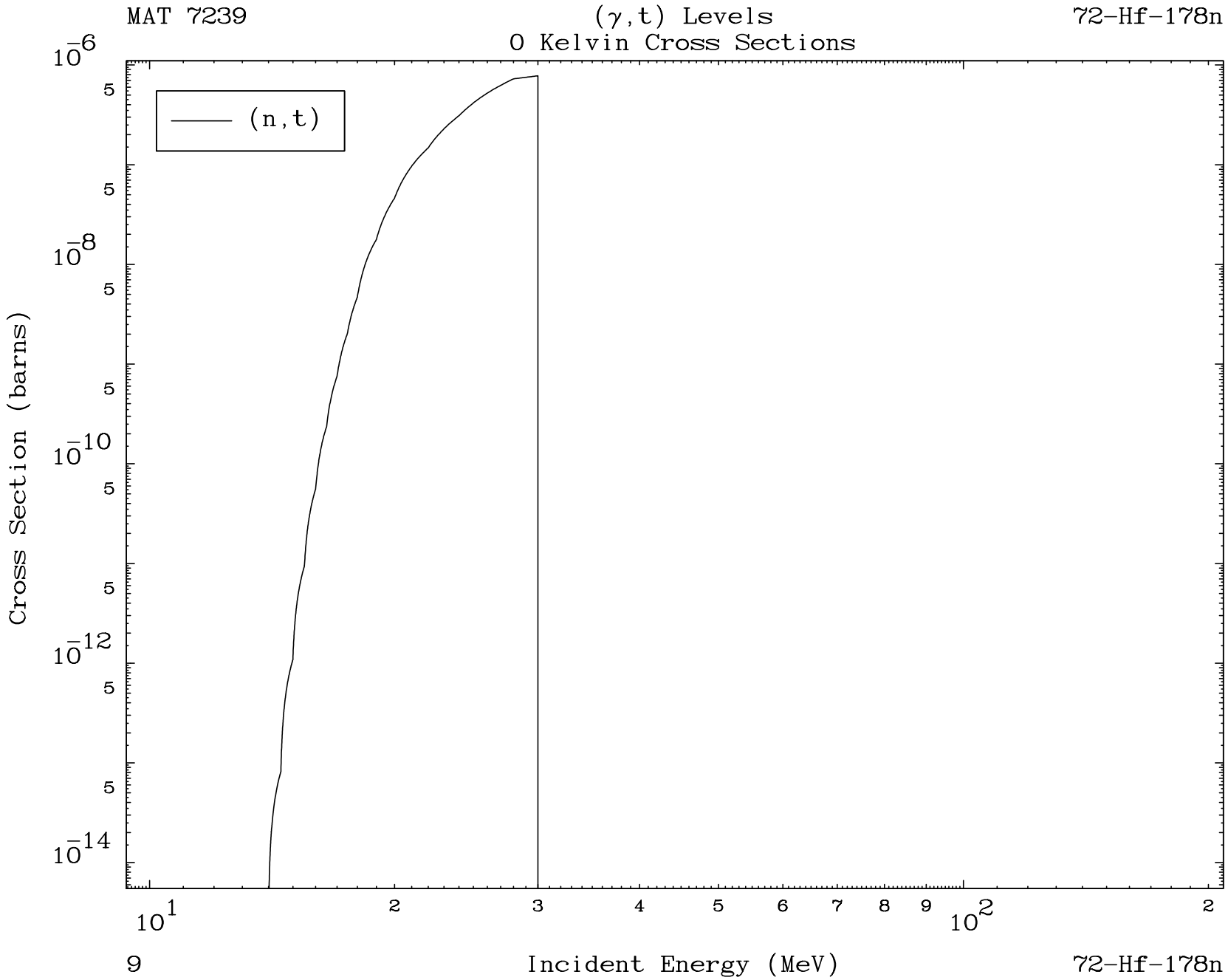

MAT 7239
Photon Charged Particle
0 Kelvin Cross Sections
72-Hf-178n
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,2n) p
Cross Section (barns)
Incident Energy (MeV)
4
72-Hf-178n

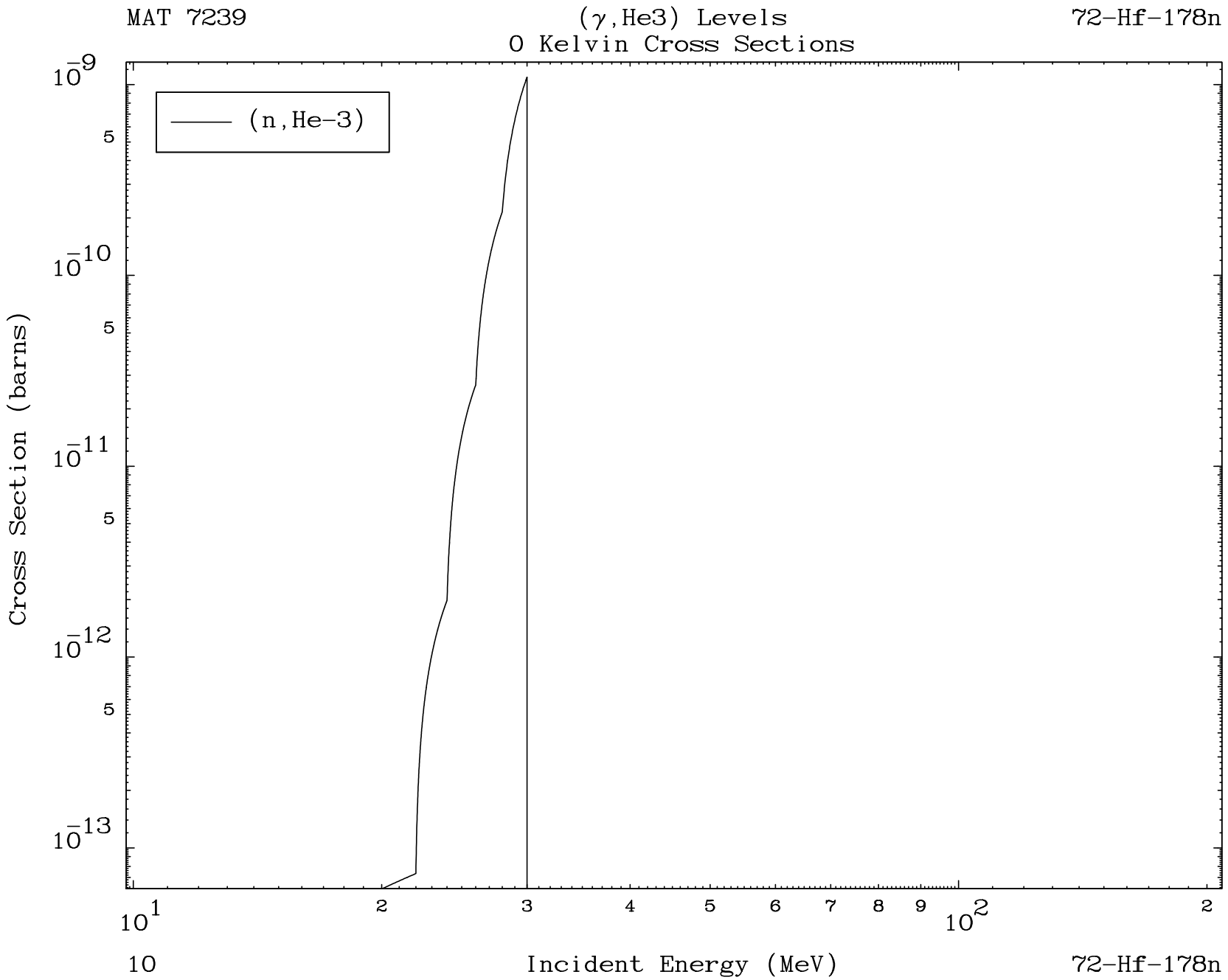

MAT 7239
Photon Charged Particle
0 Kelvin Cross Sections
72-Hf-178n
(n,n') α
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
Cross Section (barns)
Incident Energy (MeV)
72-Hf-178n

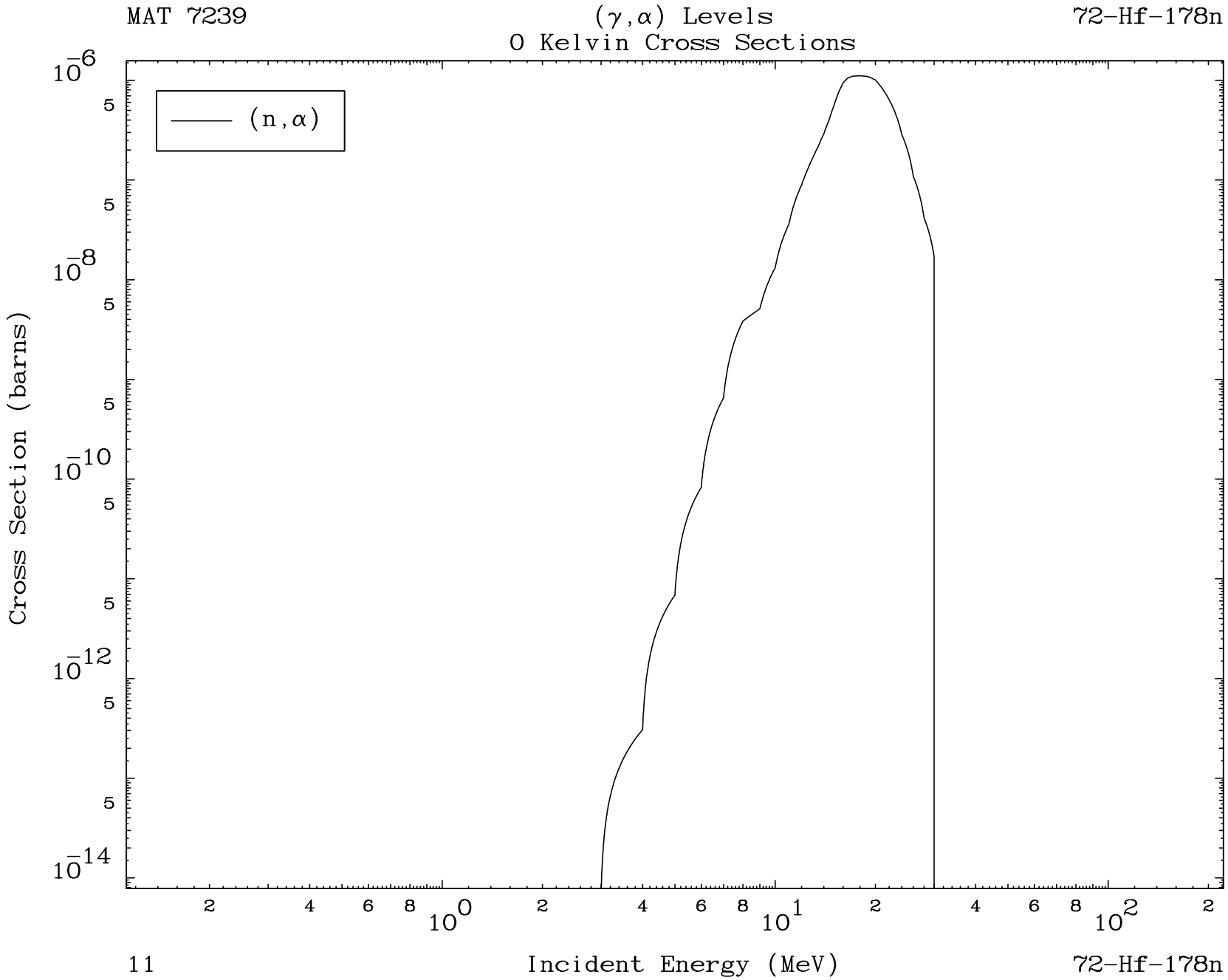

MAT 7239
(γ,n') Levels
0 Kelvin Cross Sections
72-Hf-178n
Inelastic
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
72-Hf-178n
6


MAT 7239
(γ,p) Levels
72-Hf-178n
0 Kelvin Cross Sections
(n,p)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
5 6 7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
7
72-Hf-178n

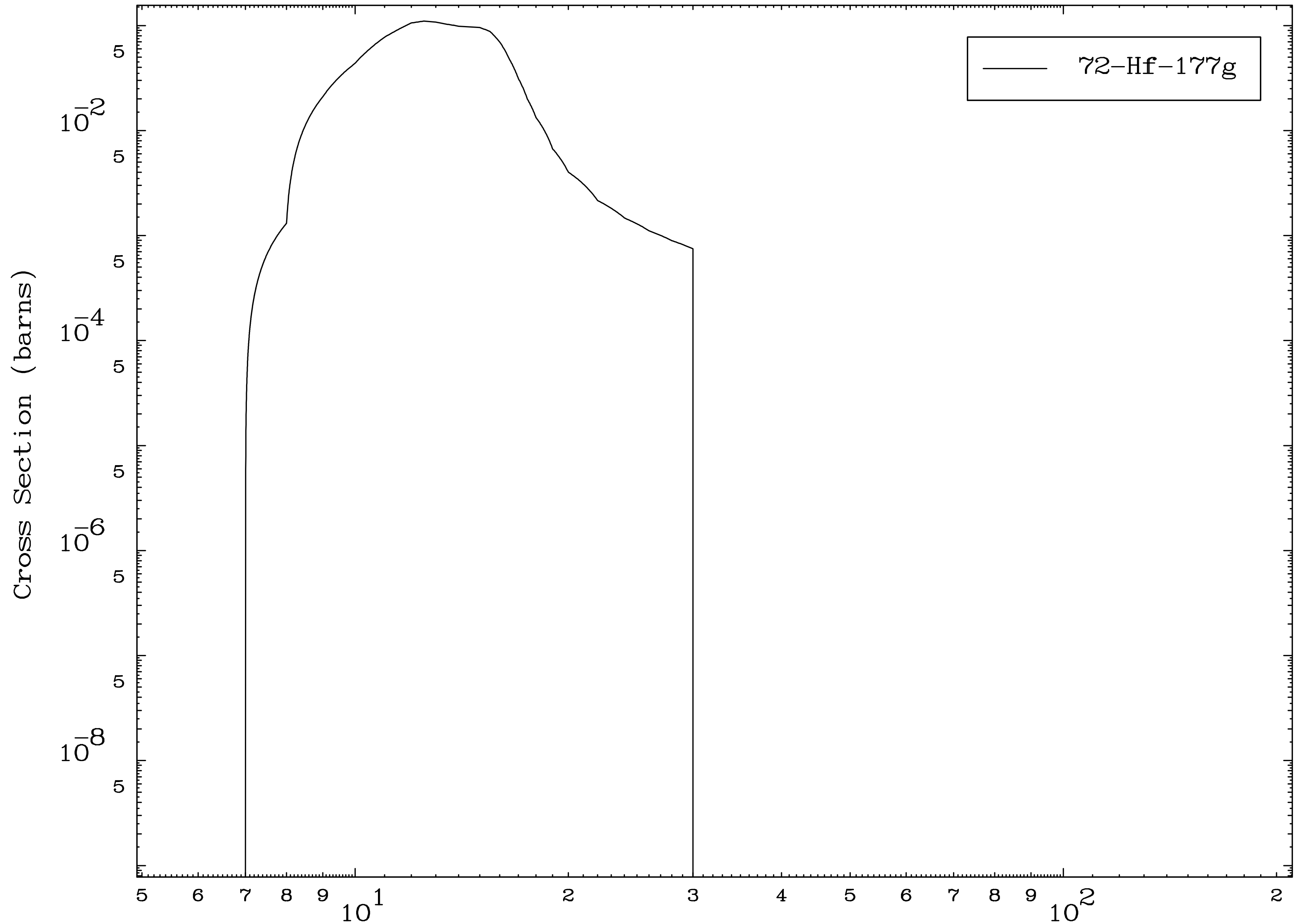

MAT 7239
(γ,d) Levels
72-Hf-178n
0 Kelvin Cross Sections
(n,d)
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
10^1
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
72-Hf-178n

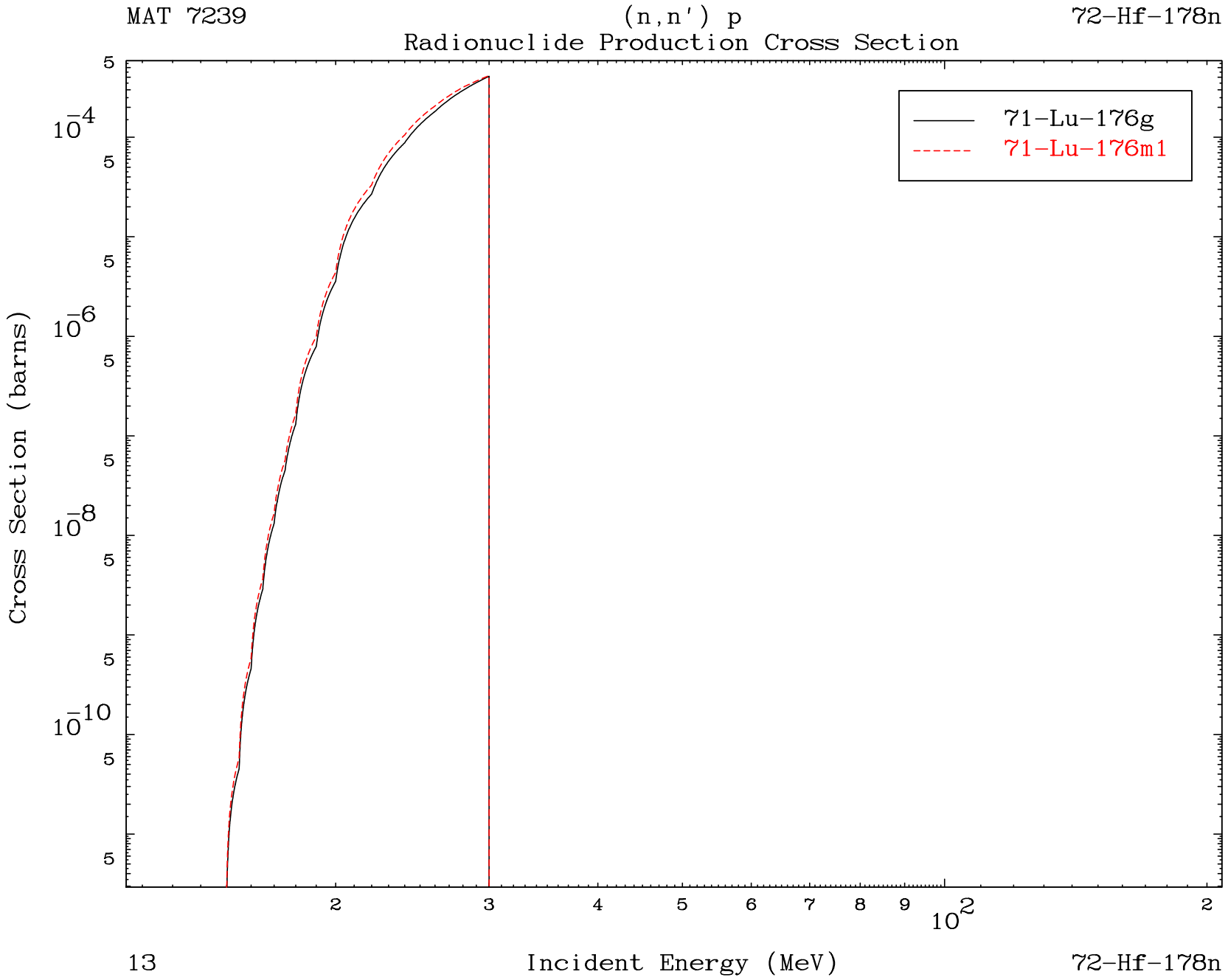

MAT 7239
(γ,t) Levels
72-Hf-178n
0 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
10^-14
5
10^1
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
9
72-Hf-178n

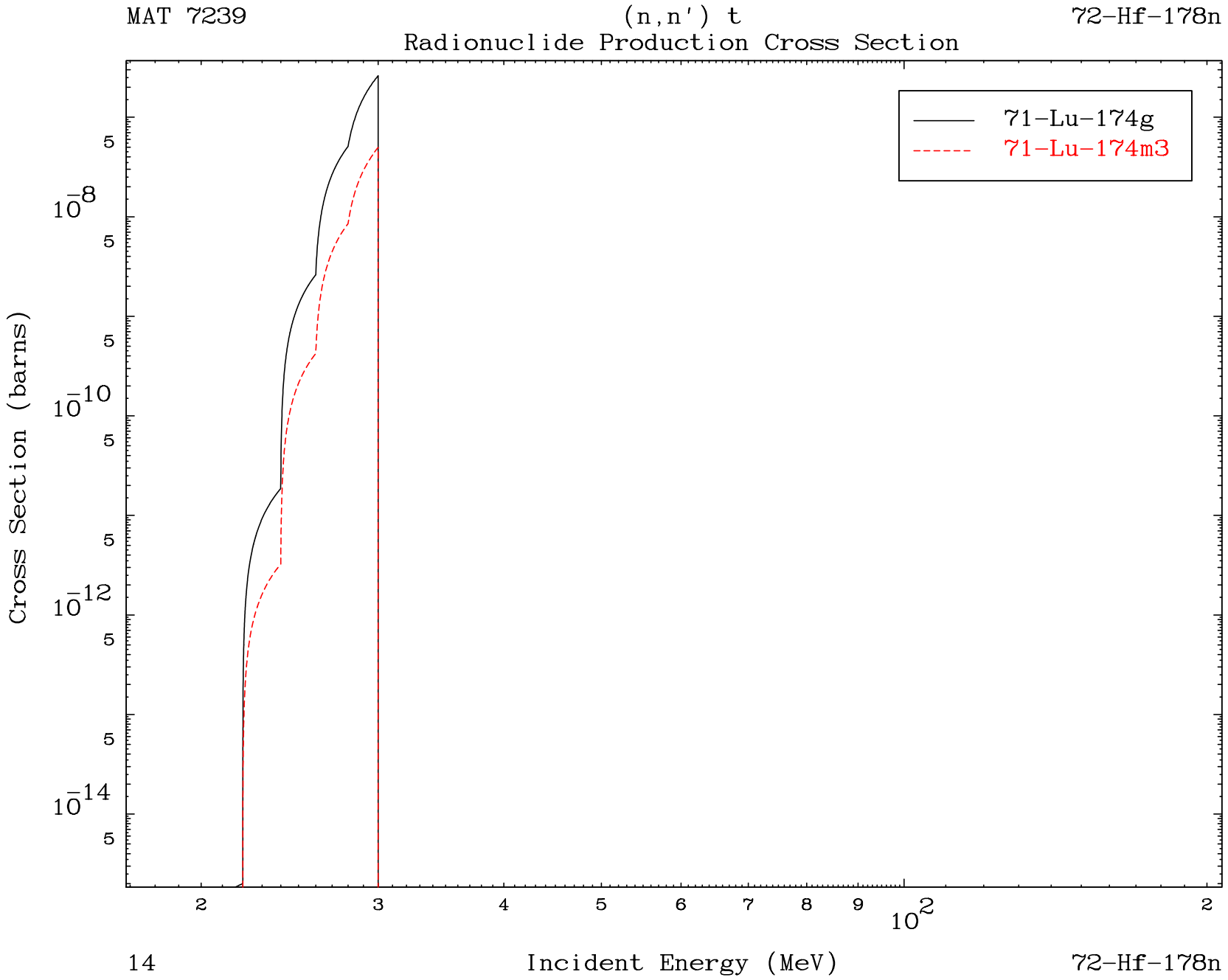

MAT 7239
(γ,He3) Levels
72-Hf-178n
0 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-9
5
10^-10
5
10^-11
5
10^-12
5
10^-13
10^1
10
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
72-Hf-178n

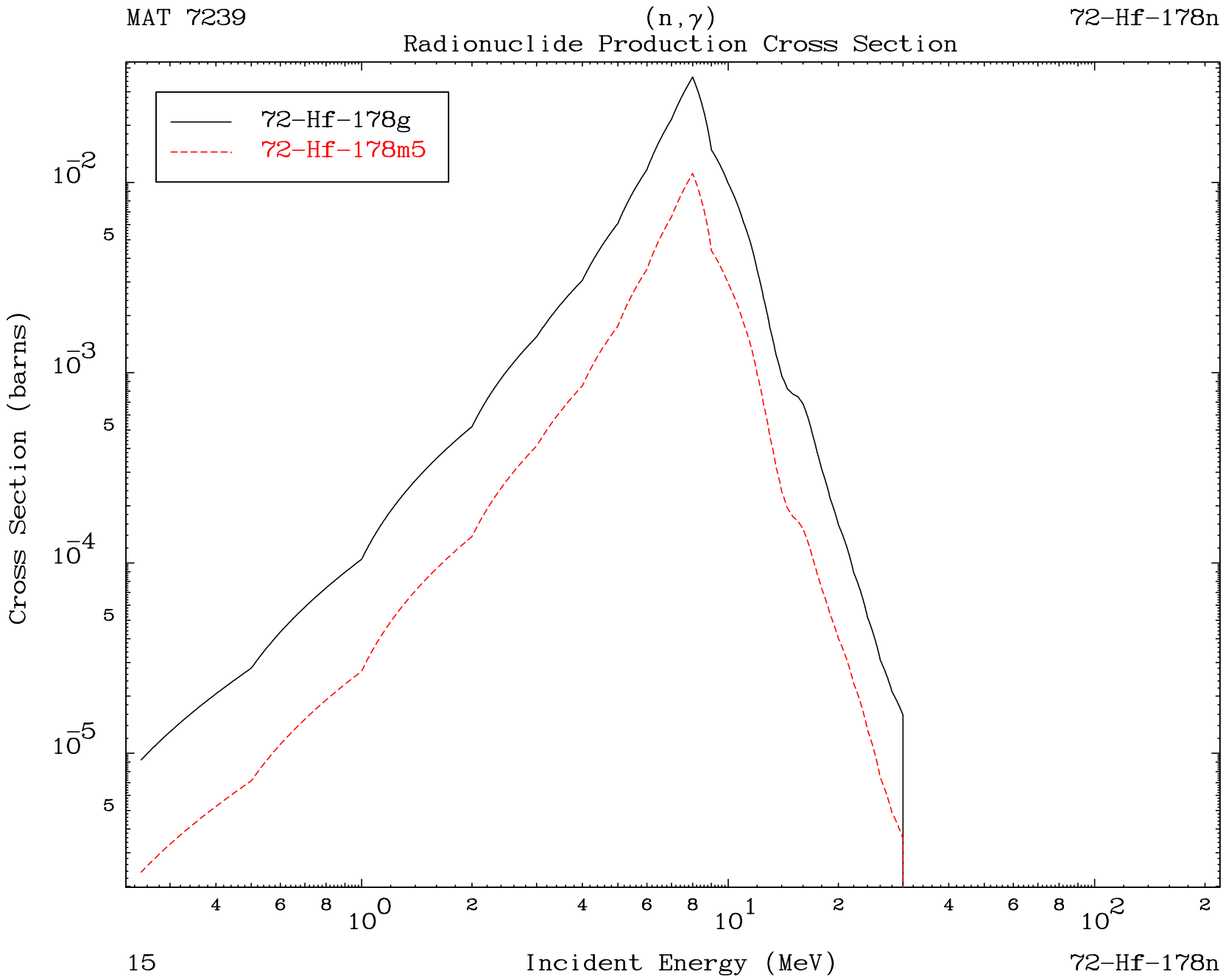

MAT 7239
(γ,α) Levels
72-Hf-178n
0 Kelvin Cross Sections
(n,α)
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
10^-14
10^0
10^1
10^2
Incident Energy (MeV)
11
72-Hf-178n

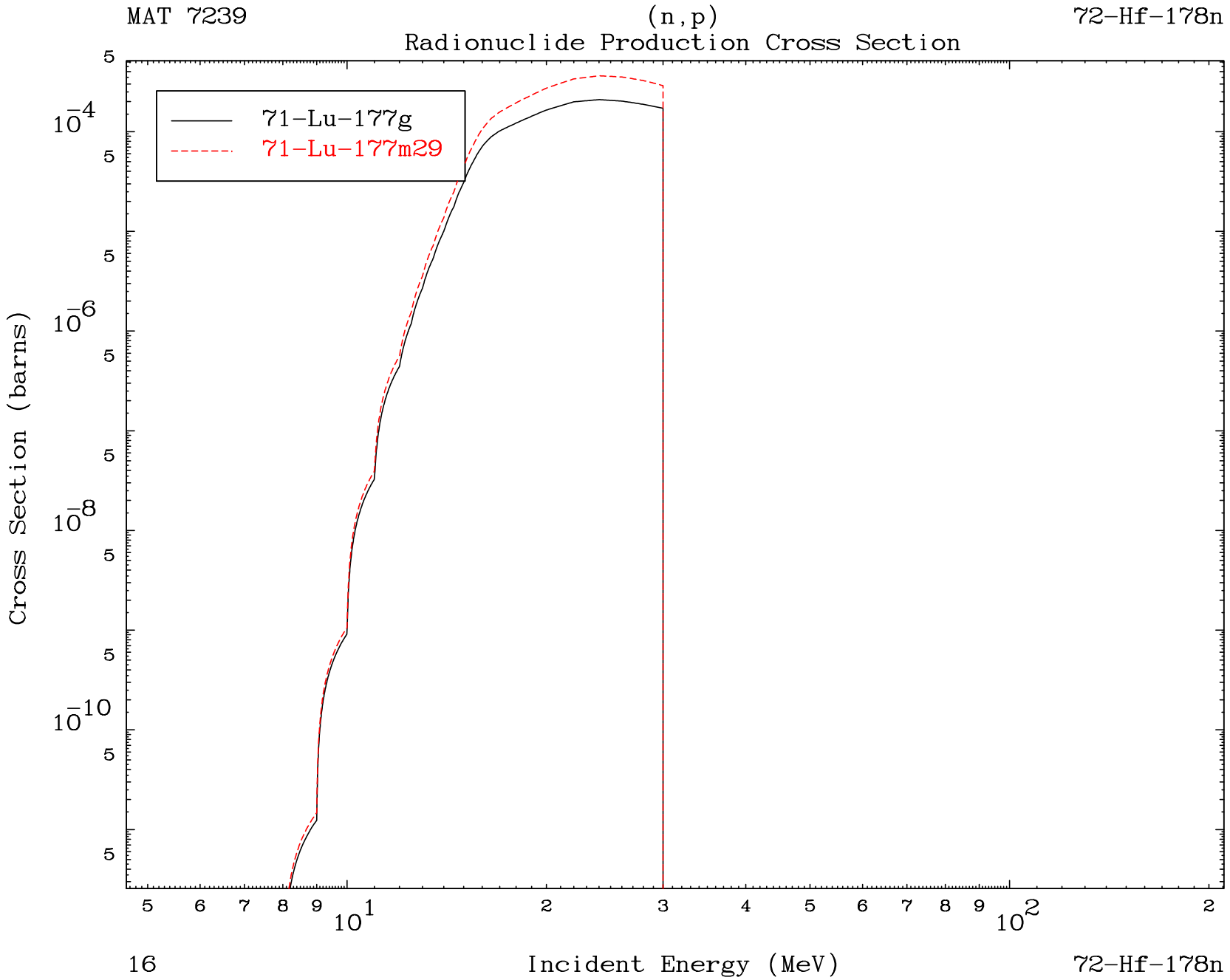
Inelastic
Radionuclide Production Cross Section

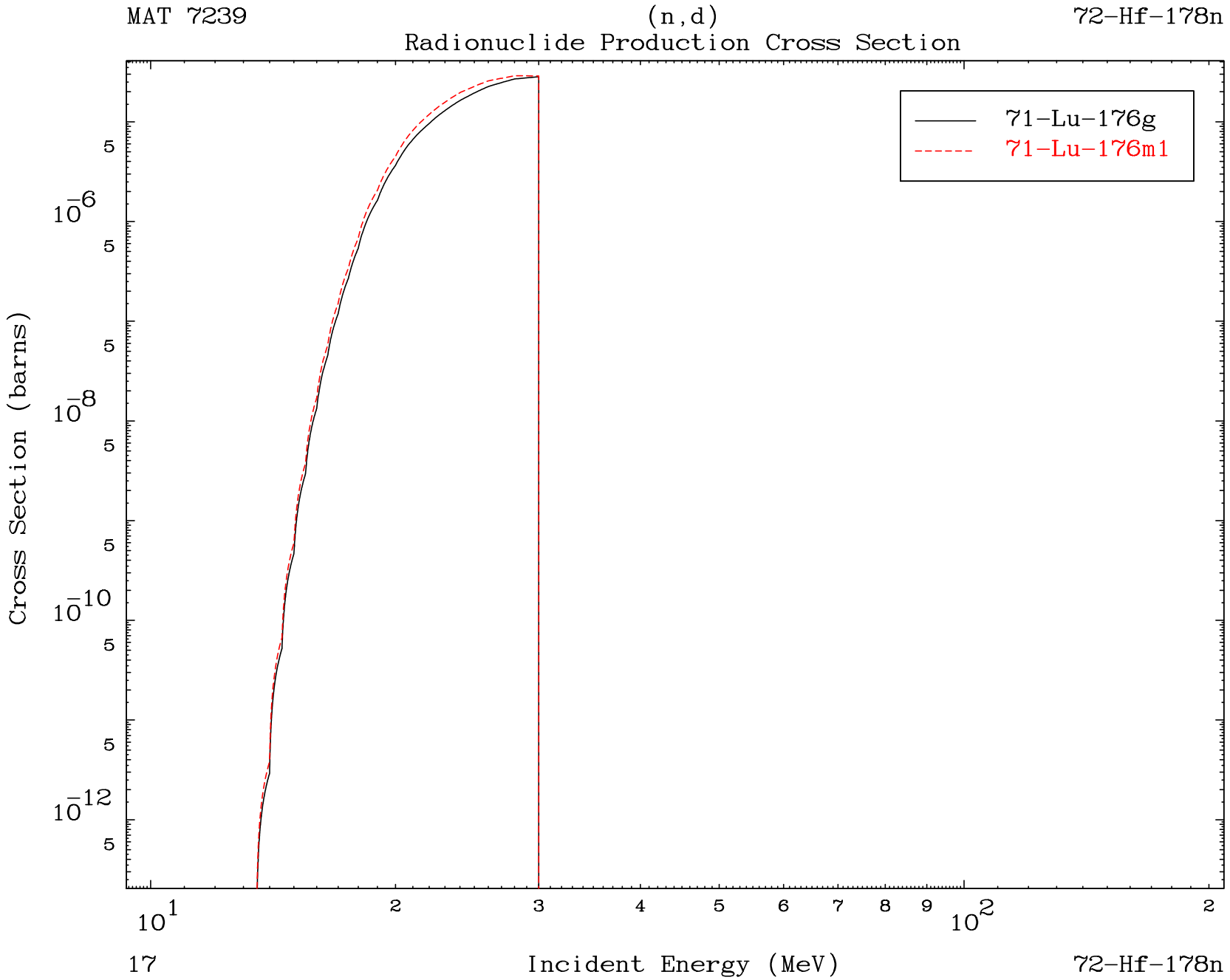


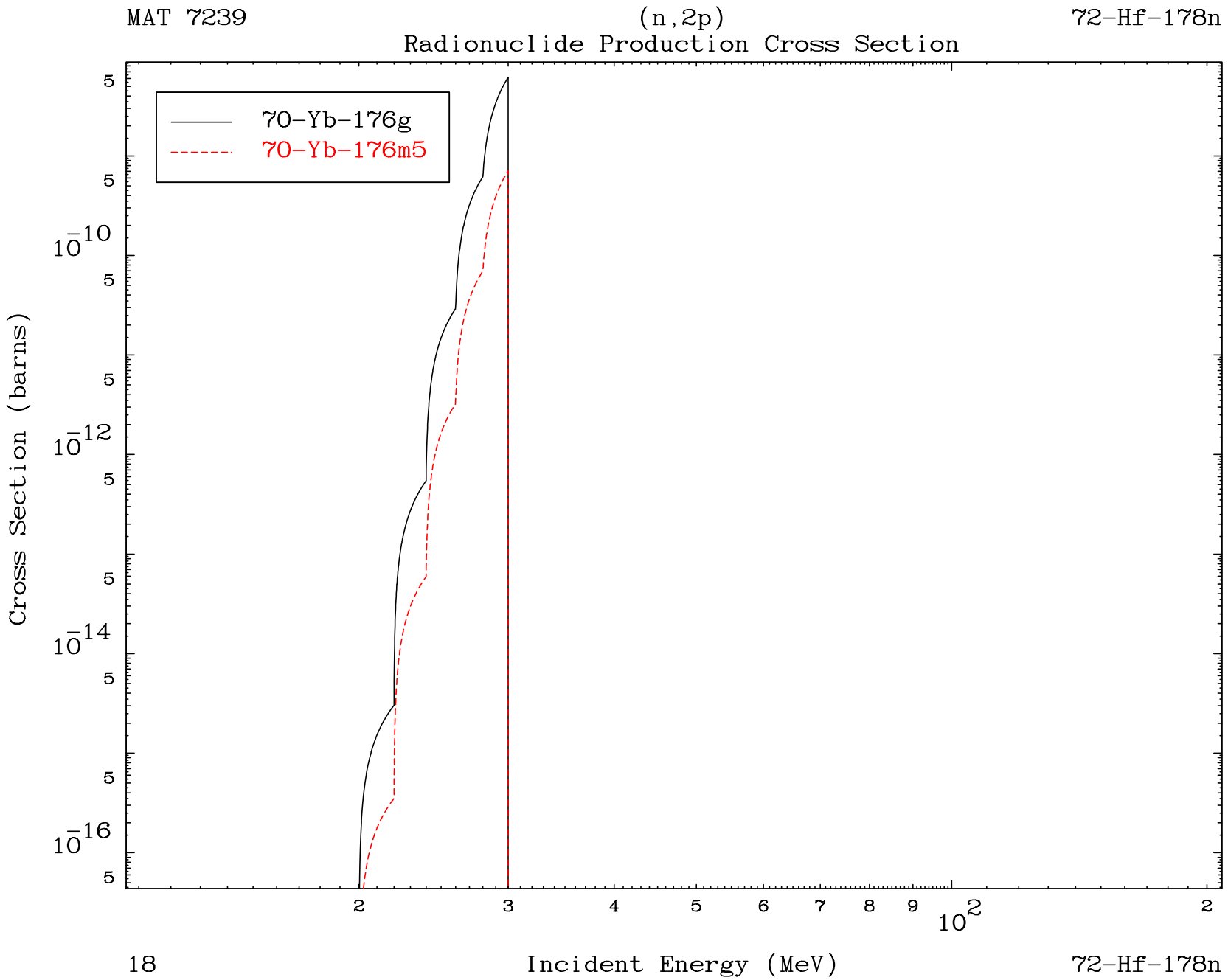

MAT 7239
(n,n') p
72-Hf-178n
Radionuclide Production Cross Section
71-Lu-176g
71-Lu-176m1
Cross Section (barns)
10-4
10-6
10-8
10-10
Incident Energy (MeV)
13
72-Hf-178n


MAT 7239
(n,n') t
72-Hf-178n
Radionuclide Production Cross Section
71-Lu-174g
71-Lu-174m3
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
14
Incident Energy (MeV)
72-Hf-178n


MAT 7239
(n,γ)
72-Hf-178n
Radionuclide Production Cross Section
72-Hf-178g
72-Hf-178m5
Cross Section (barns)
10-2
5
10-3
5
10-4
5
10-5
5
4
6
8
100
2
4
6
8
101
2
4
6
8
102
2
15
Incident Energy (MeV)
72-Hf-178n


MAT 7239
(n,p)
72-Hf-178n
Radionuclide Production Cross Section
71-Lu-177g
71-Lu-177m29
Cross Section (barns)
Incident Energy (MeV)
16
72-Hf-178n


MAT 7239
(n,d)
72-Hf-178n
Radionuclide Production Cross Section
71-Lu-176g
71-Lu-176m1
Cross Section (barns)
Incident Energy (MeV)
72-Hf-178n
17


MAT 7239
(n,2p)
72-Hf-178n
Radionuclide Production Cross Section
70-Yb-176g
70-Yb-176m5
Cross Section (barns)
Incident Energy (MeV)
18
72-Hf-178n