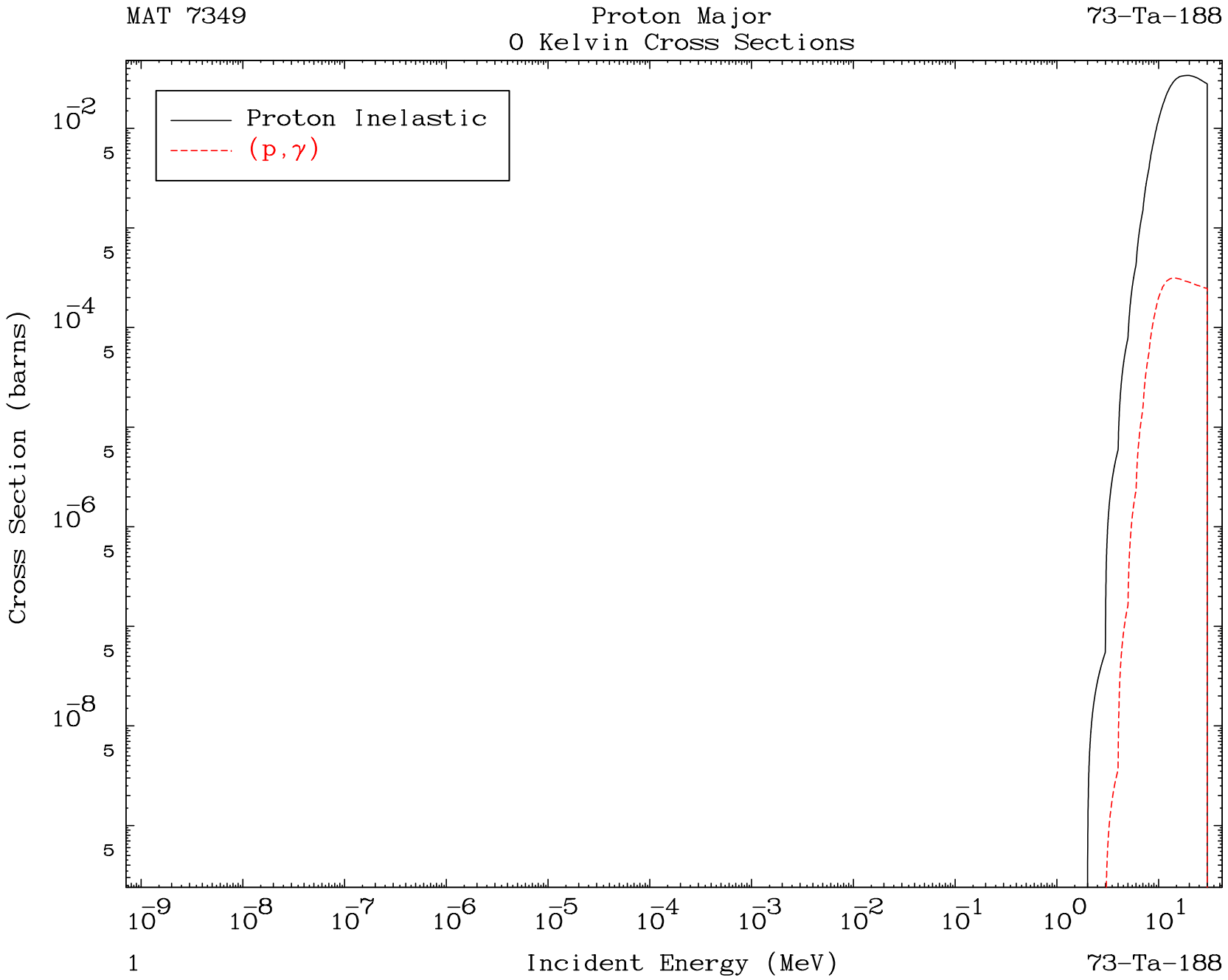
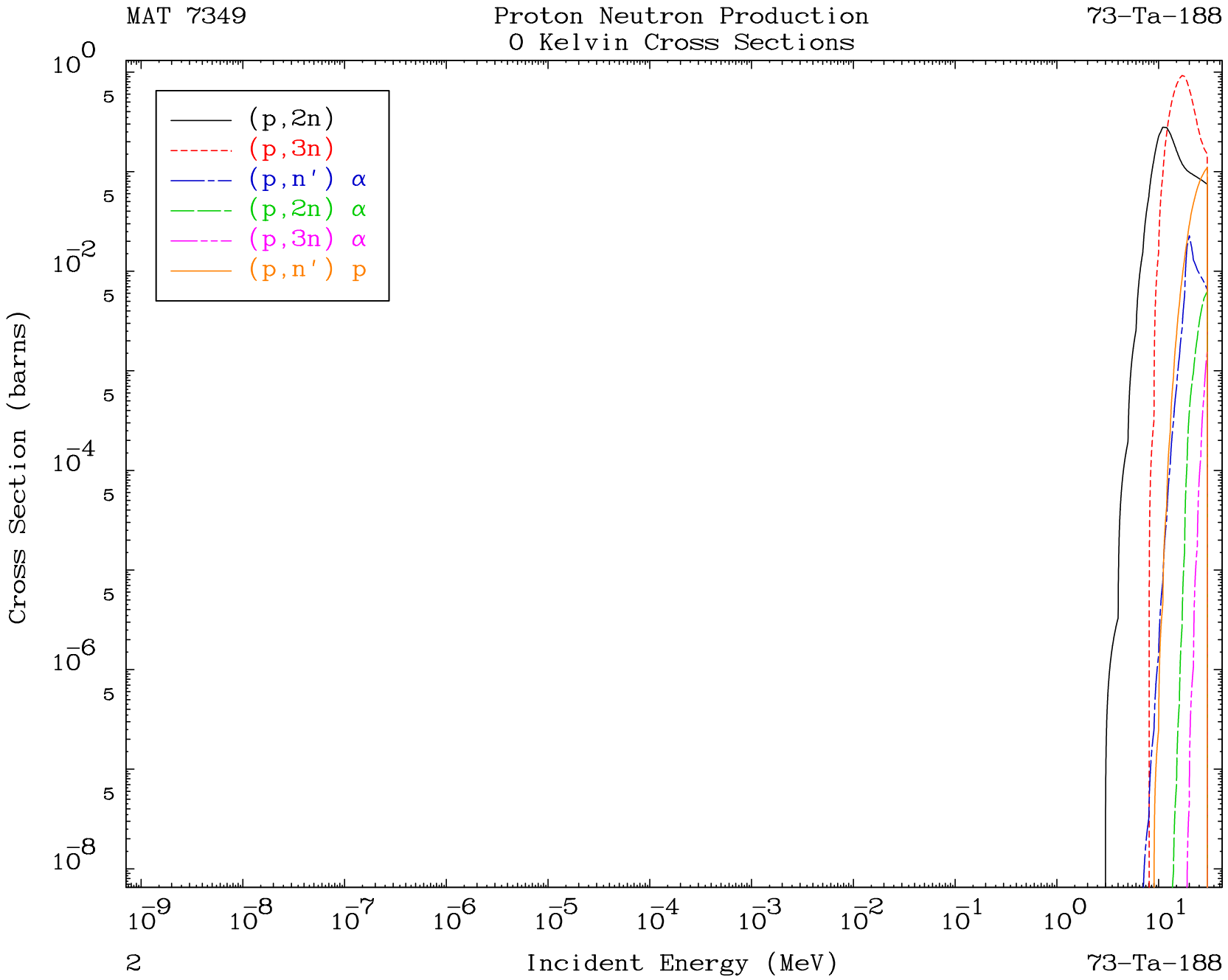
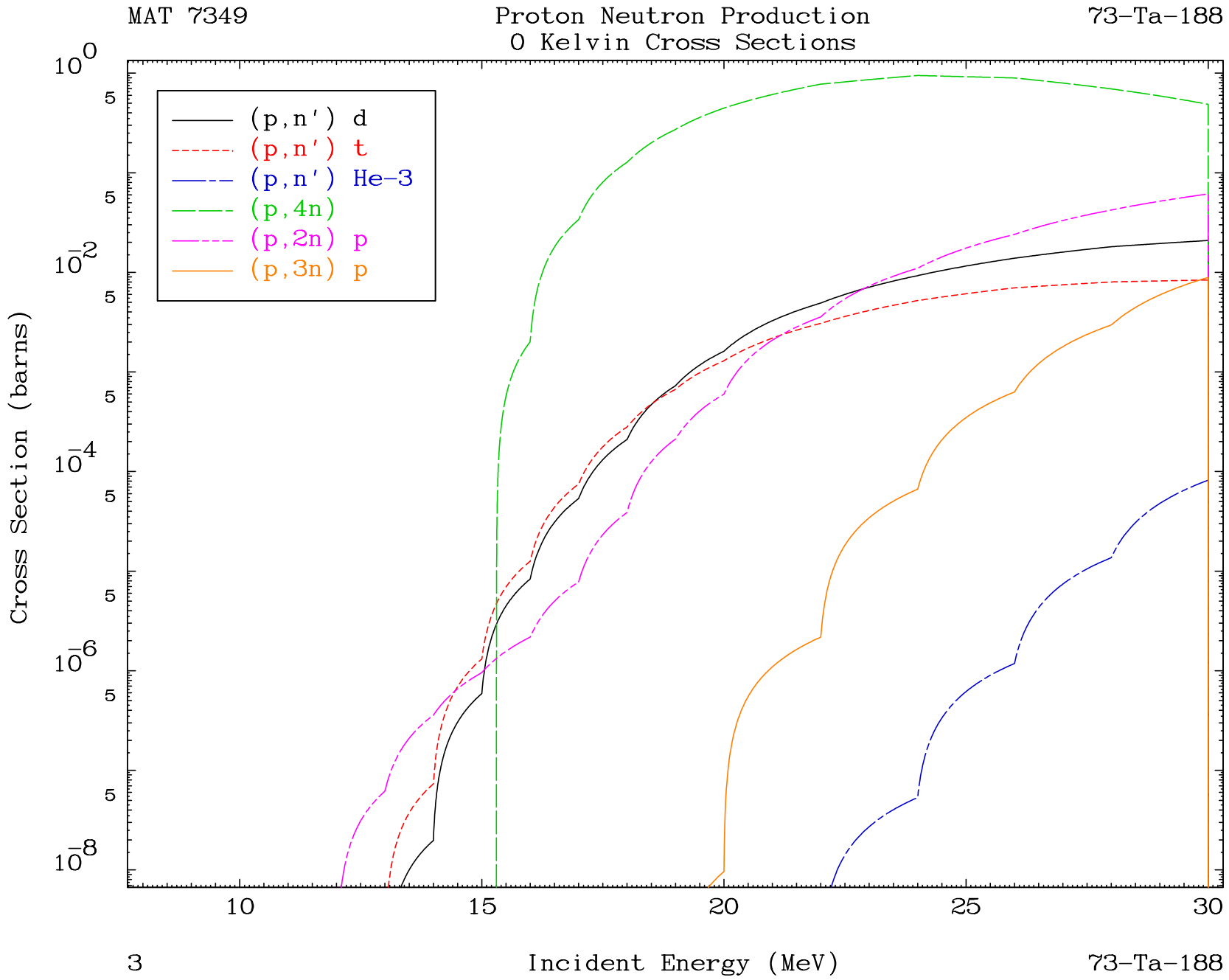
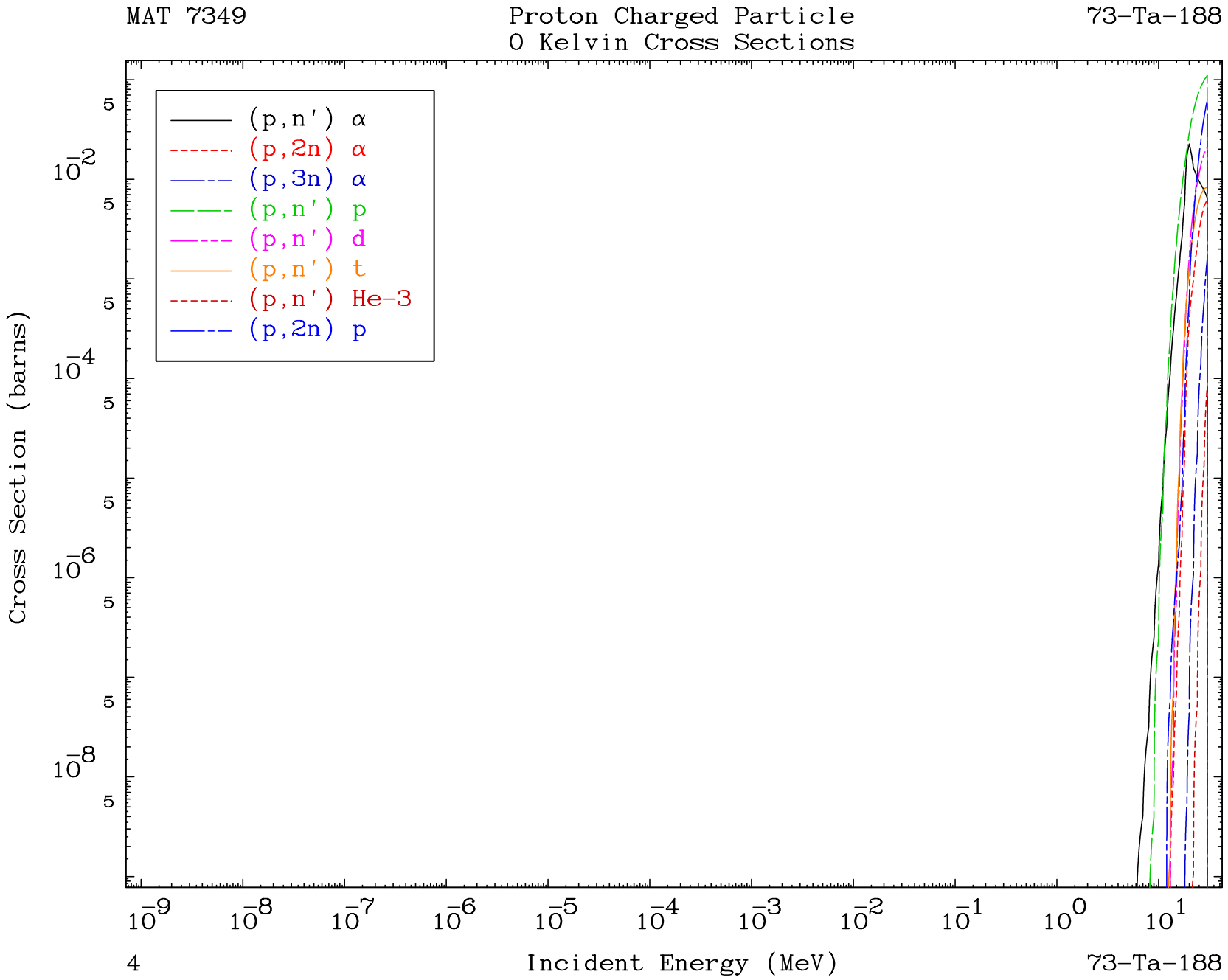
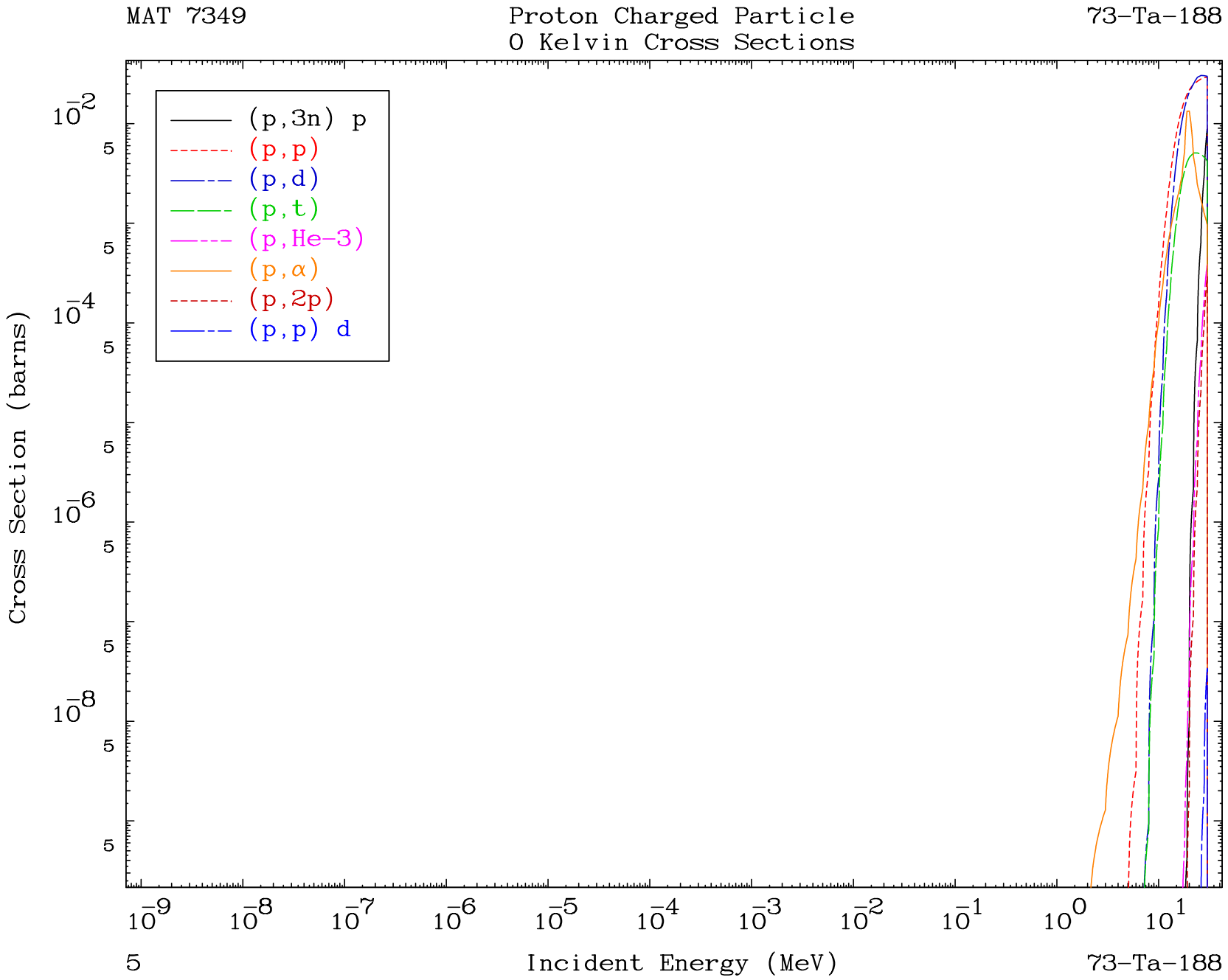
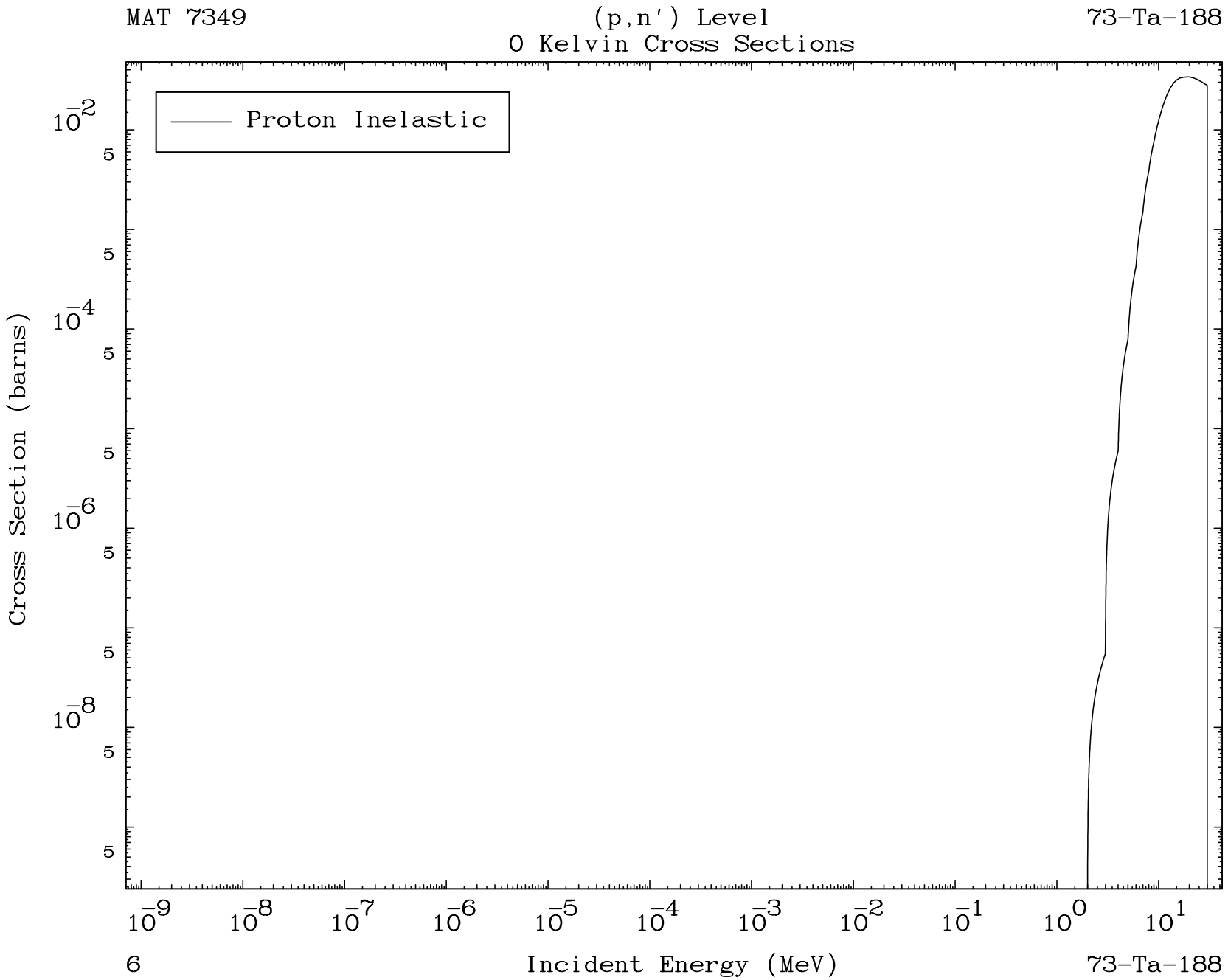

MAT 7349
Proton Major
73-Ta-188
0 Kelvin Cross Sections
Proton Inelastic
(p,γ)
Cross Section (barns)
Incident Energy (MeV)
73-Ta-188

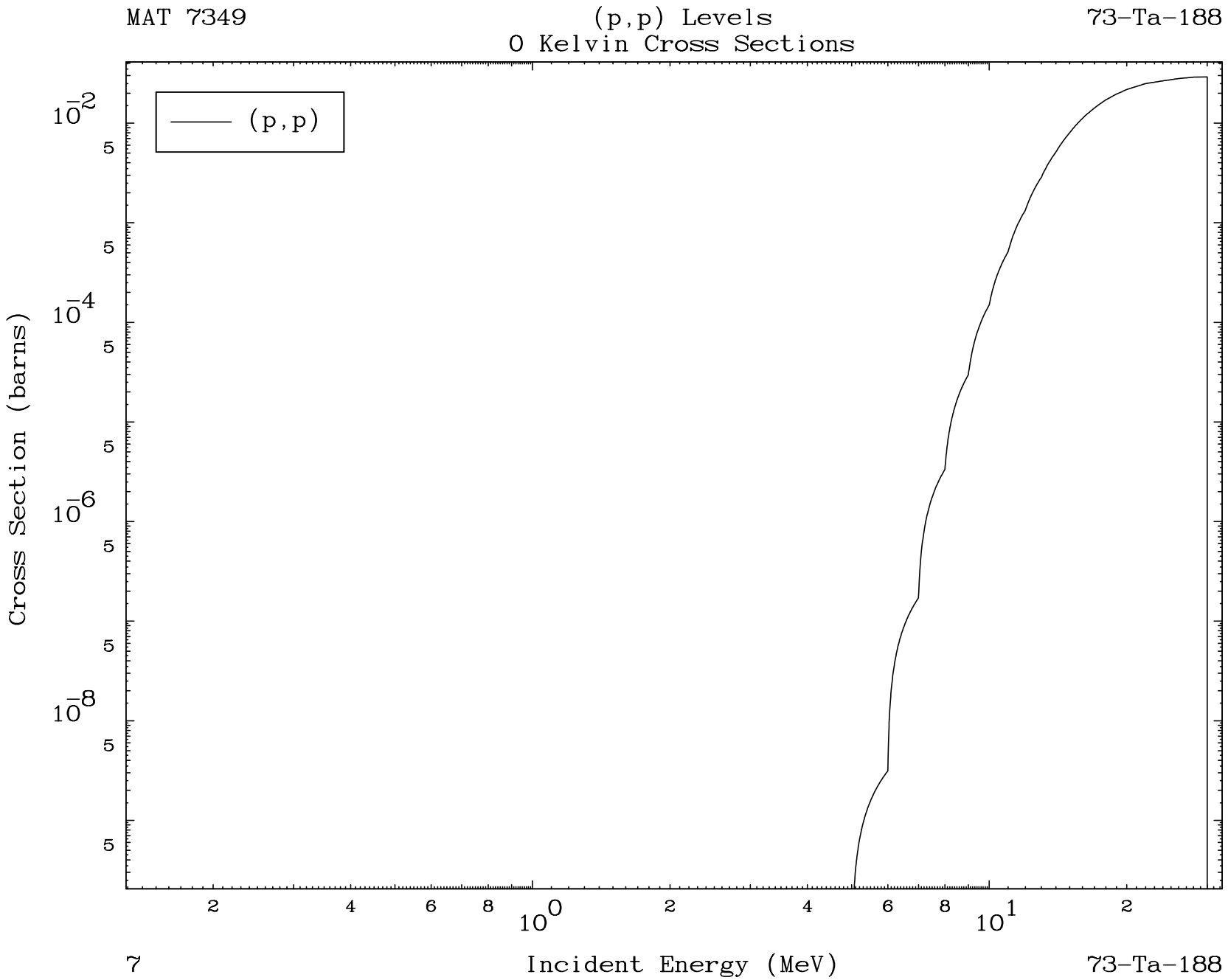

MAT 7349
Proton Neutron Production
0 Kelvin Cross Sections
73-Ta-188
(p,2n)
(p,3n)
(p,n') α
(p,2n) α
(p,3n) α
(p,n') p
Cross Section (barns)
Incident Energy (MeV)
73-Ta-188
2


MAT 7349
Proton Neutron Production
0 Kelvin Cross Sections
73-Ta-188
(p,n') d
(p,n') t
(p,n') He-3
(p,4n)
(p,2n) p
(p,3n) p
Cross Section (barns)
Incident Energy (MeV)
73-Ta-188
3

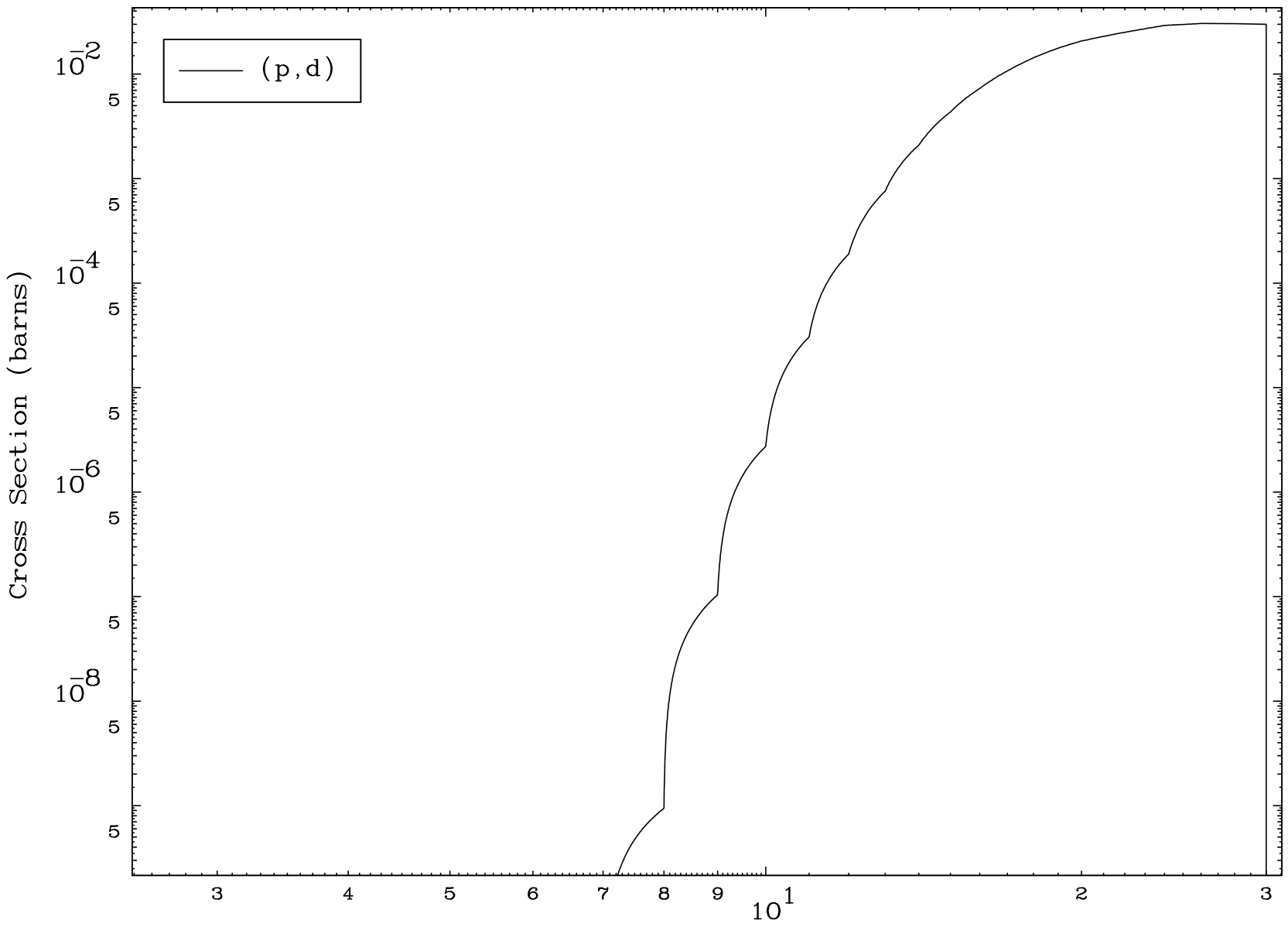

MAT 7349
Proton Charged Particle
0 Kelvin Cross Sections
73-Ta-188
(p,n') α
(p,2n) α
(p,3n) α
(p,n') p
(p,n') d
(p,n') t
(p,n') He-3
(p,2n) p
Cross Section (barns)
Incident Energy (MeV)
4
73-Ta-188

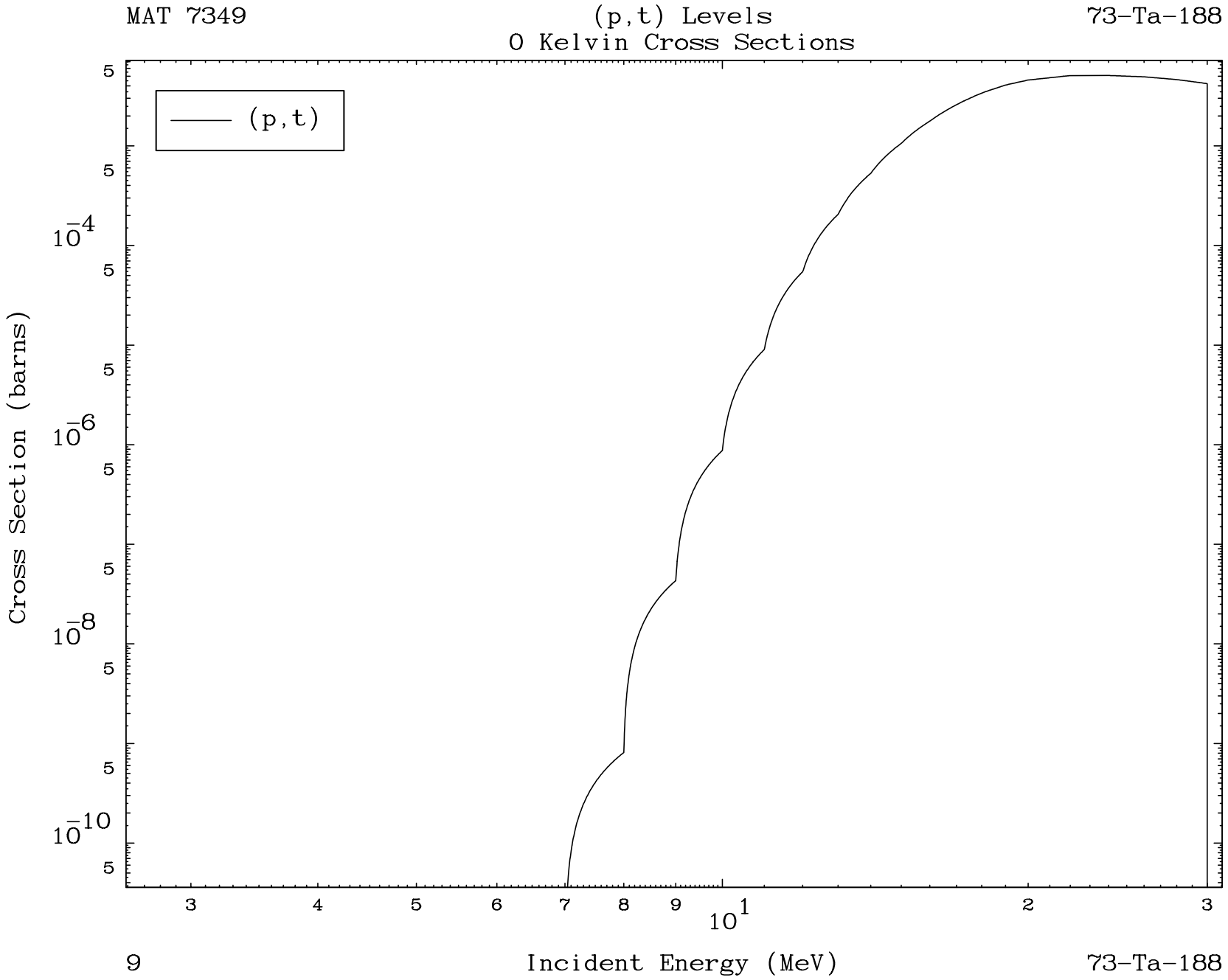

MAT 7349
Proton Charged Particle
0 Kelvin Cross Sections
73-Ta-188
(p,3n) p
(p,p)
(p,d)
(p,t)
(p,He-3)
(p,α)
(p,2p)
(p,p) d
Cross Section (barns)
Incident Energy (MeV)
73-Ta-188

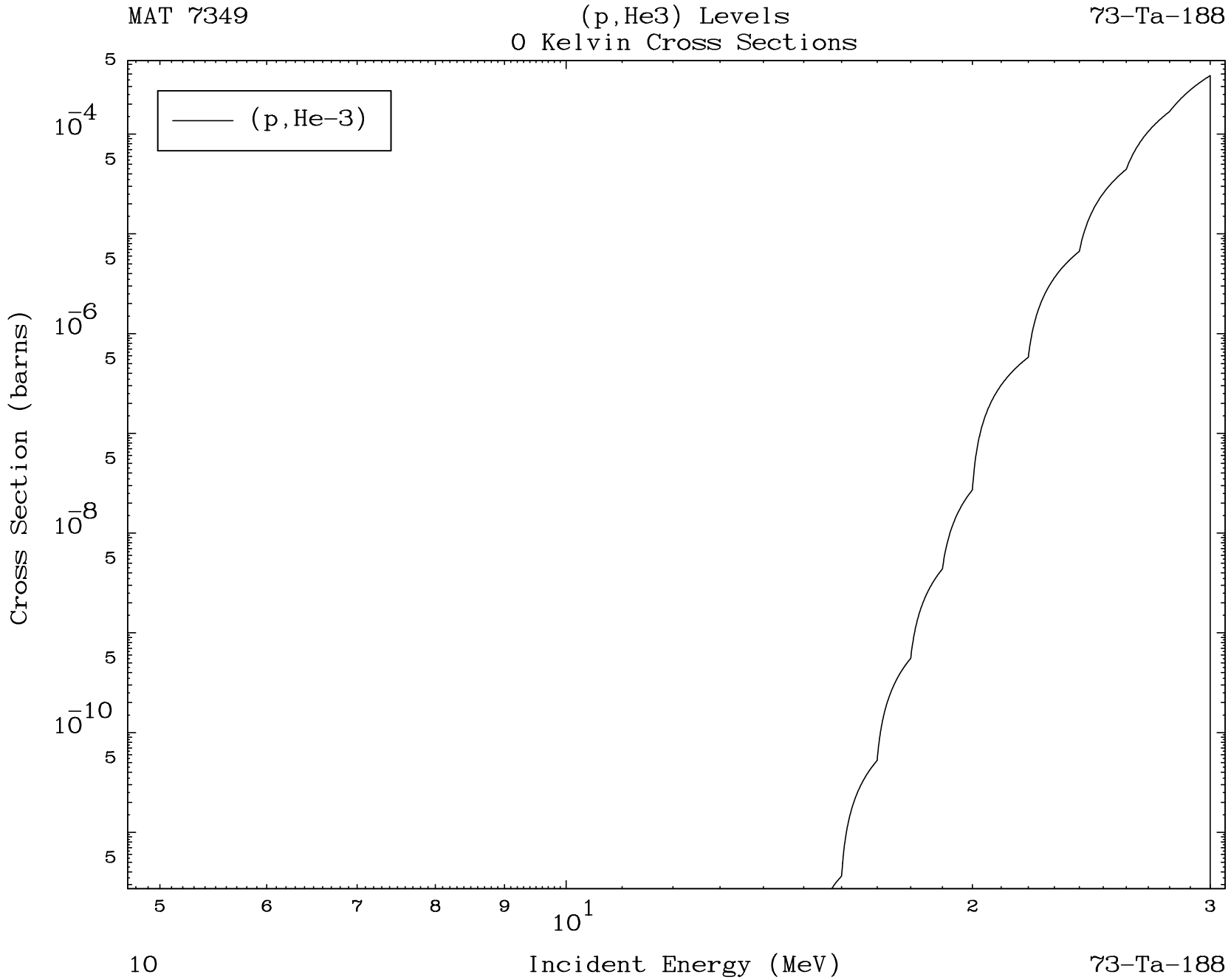

MAT 7349
(p,n') Level
73-Ta-188
0 Kelvin Cross Sections
Proton Inelastic
Cross Section (barns)
Incident Energy (MeV)
73-Ta-188
6

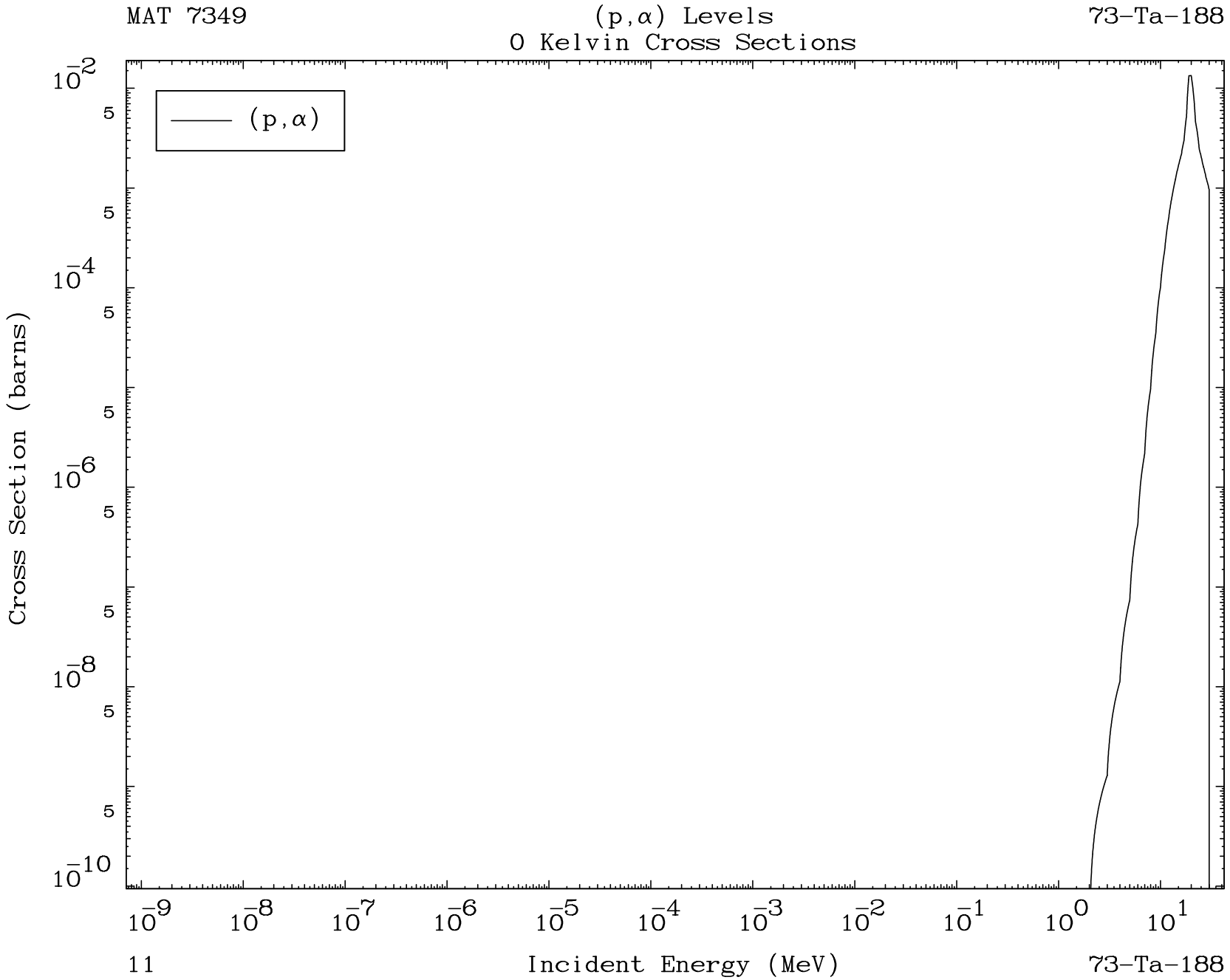

MAT 7349
(p,p) Levels
73-Ta-188
0 Kelvin Cross Sections
(p,p)
Cross Section (barns)
Incident Energy (MeV)
7
73-Ta-188

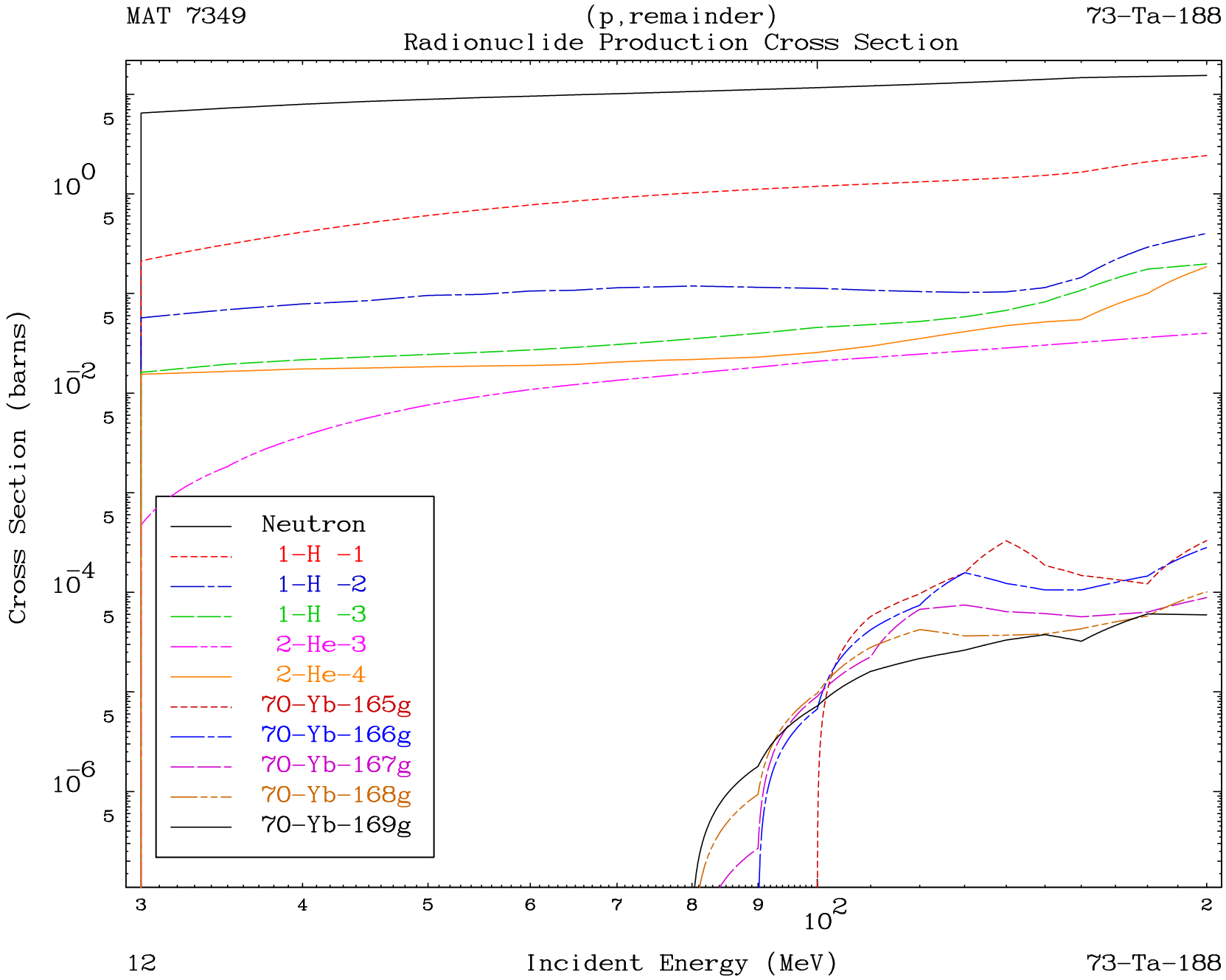
0 Kelvin Cross Sections

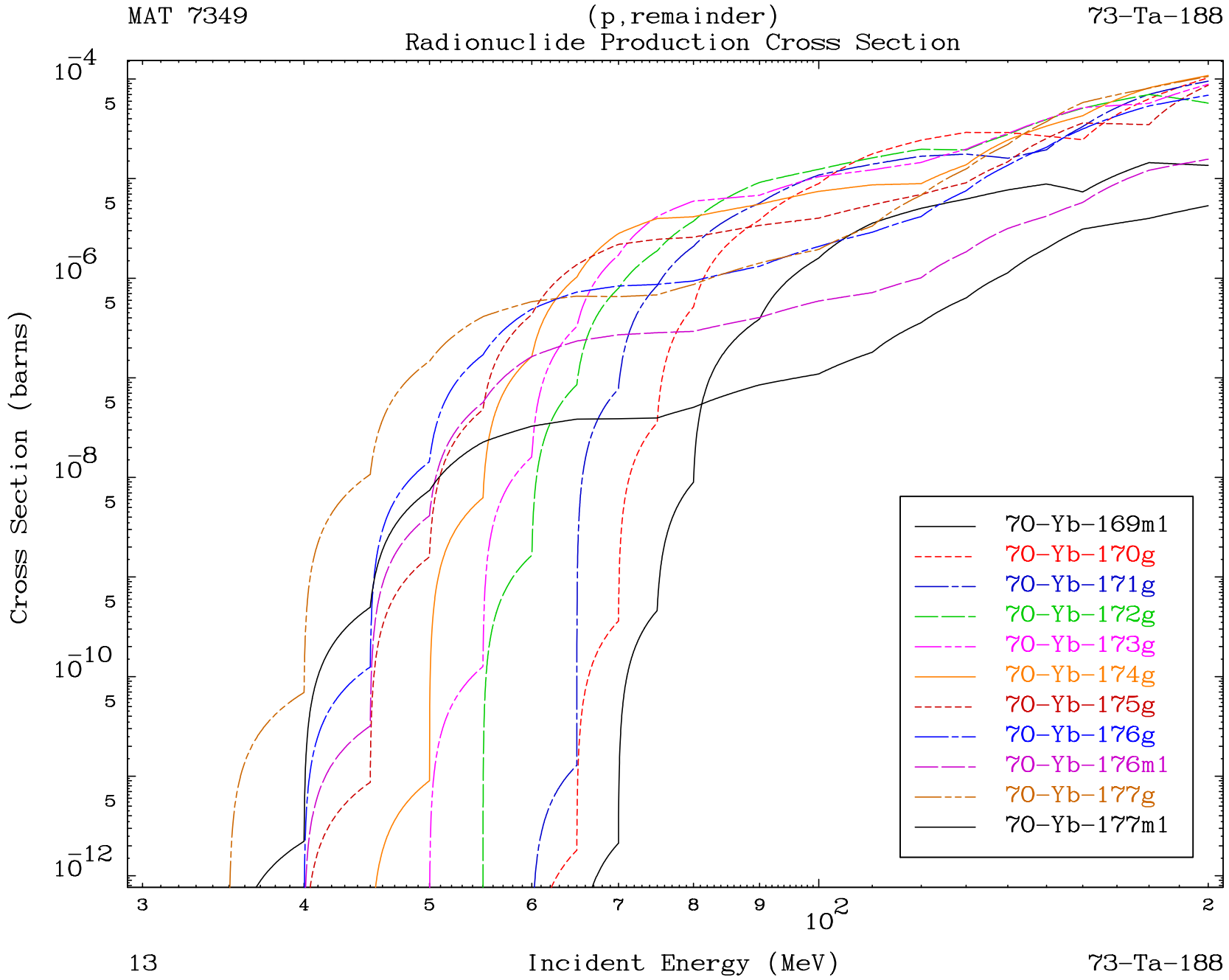


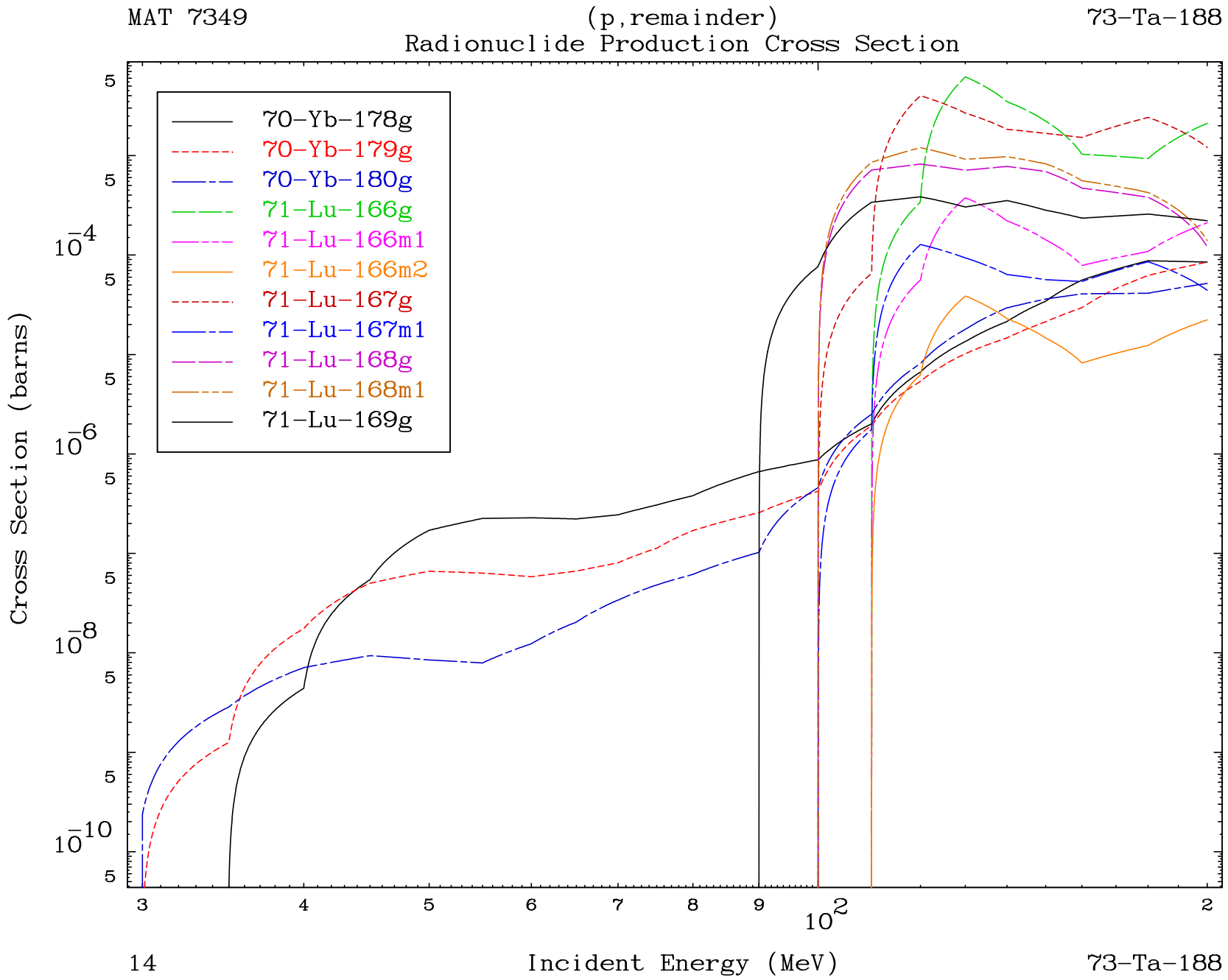

MAT 7349
(p,t) Levels
73-Ta-188
0 Kelvin Cross Sections
(p,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
Incident Energy (MeV)
10^1
9
73-Ta-188

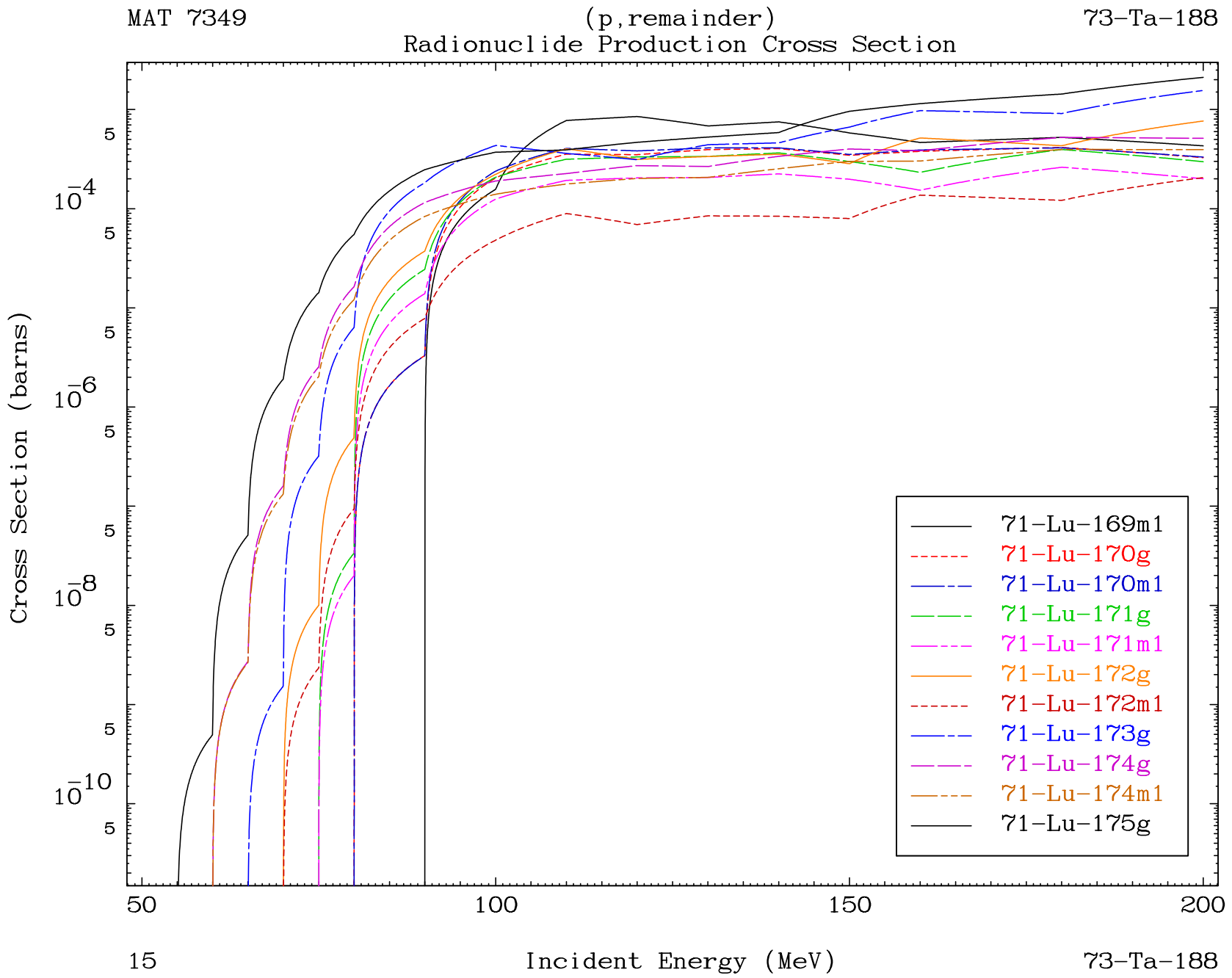

MAT 7349
(p,He3) Levels
73-Ta-188
0 Kelvin Cross Sections
(p,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
Incident Energy (MeV)
10
10^1
2
3
73-Ta-188

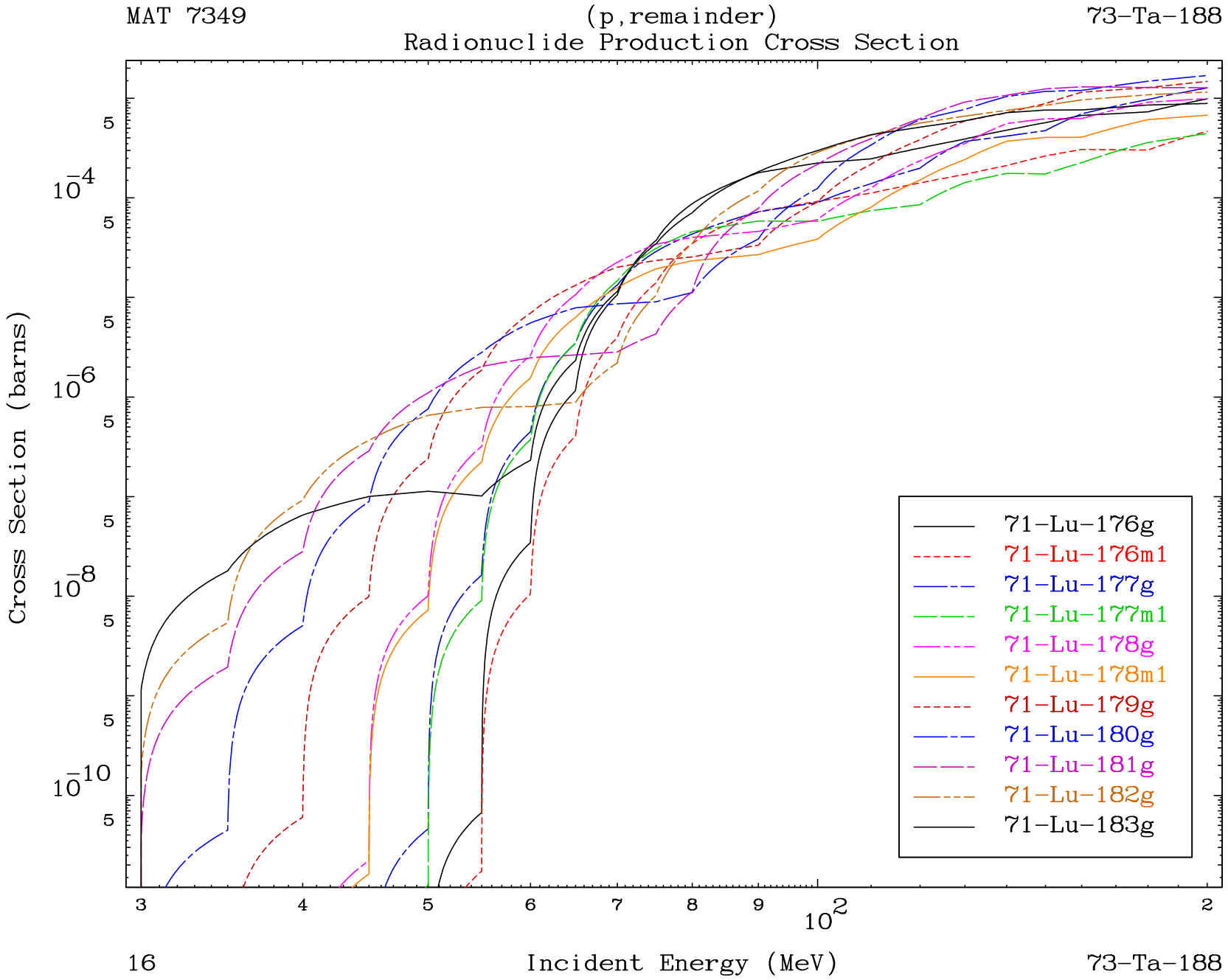

MAT 7349
(p,α) Levels
73-Ta-188
0 Kelvin Cross Sections
(p,α)
Cross Section (barns)
Incident Energy (MeV)
11
73-Ta-188

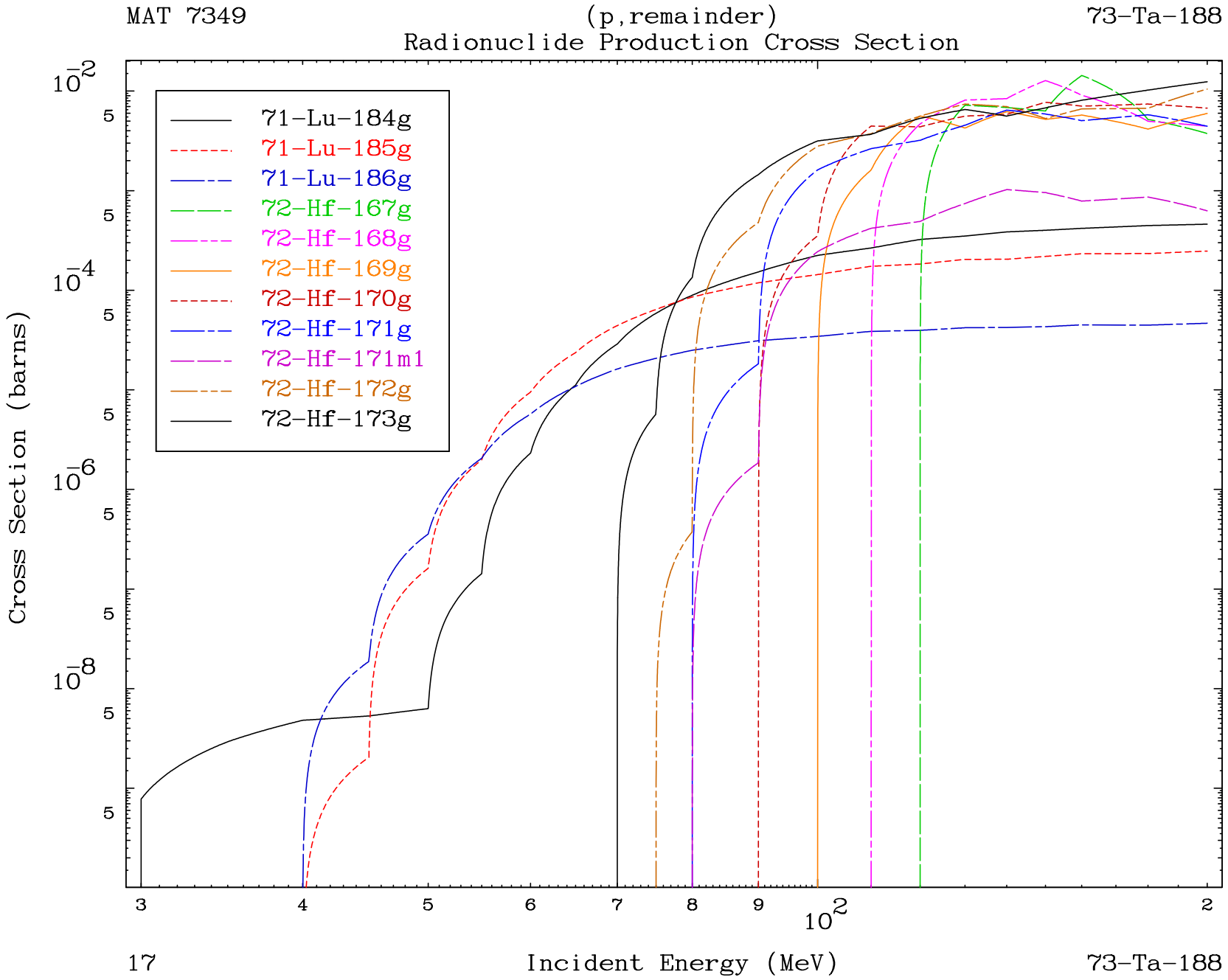

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
70-Yb-165g
70-Yb-166g
70-Yb-167g
70-Yb-168g
70-Yb-169g
3
4
5
6
7
8
9
10^2
2
12
Incident Energy (MeV)
73-Ta-188

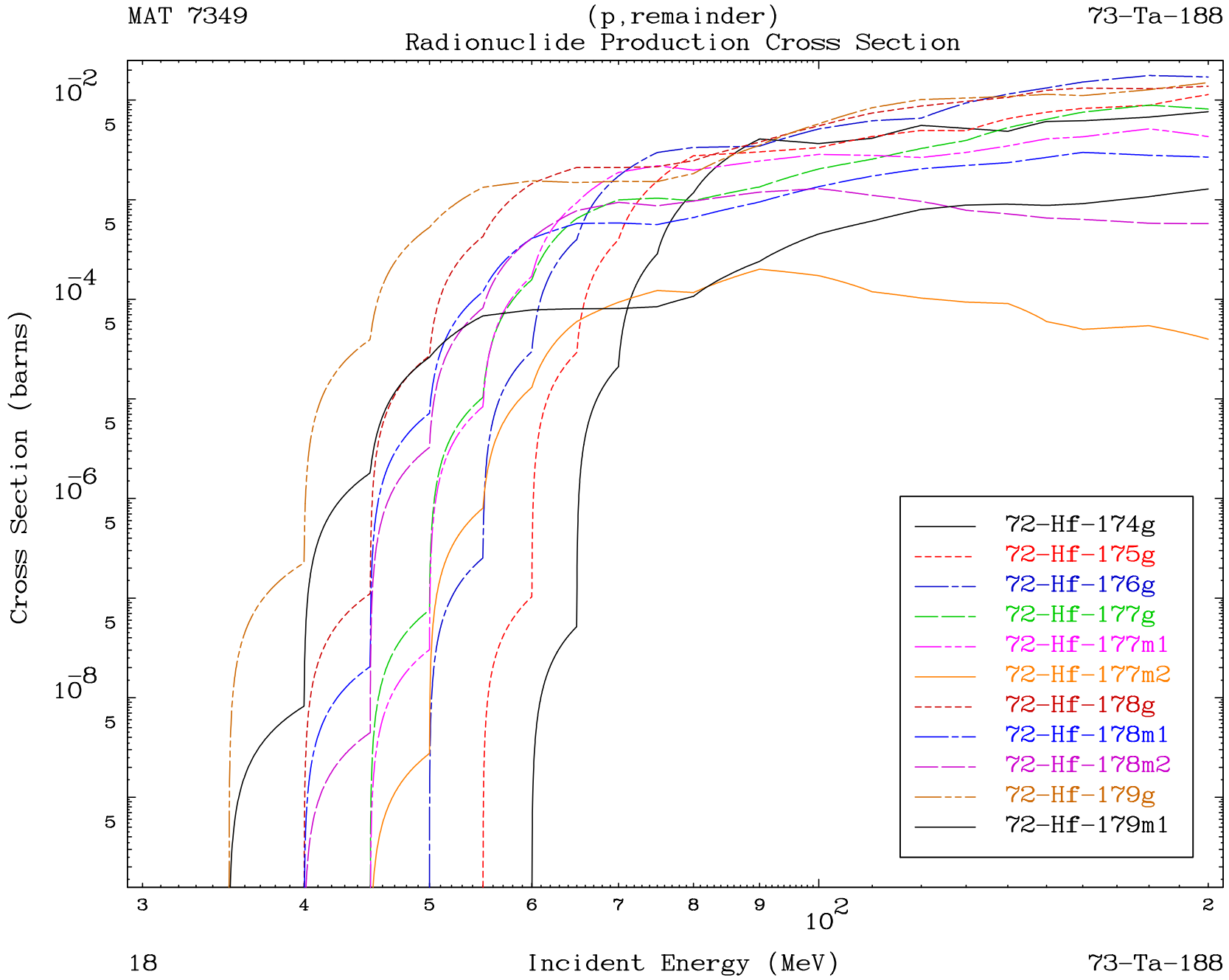

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
13
73-Ta-188
70-Yb-169m1
70-Yb-170g
70-Yb-171g
70-Yb-172g
70-Yb-173g
70-Yb-174g
70-Yb-175g
70-Yb-176g
70-Yb-176m1
70-Yb-177g
70-Yb-177m1


MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
70-Yb-178g
70-Yb-179g
70-Yb-180g
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
71-Lu-167g
71-Lu-167m1
71-Lu-168g
71-Lu-168m1
71-Lu-169g
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10 2
2
14
Incident Energy (MeV)
73-Ta-188

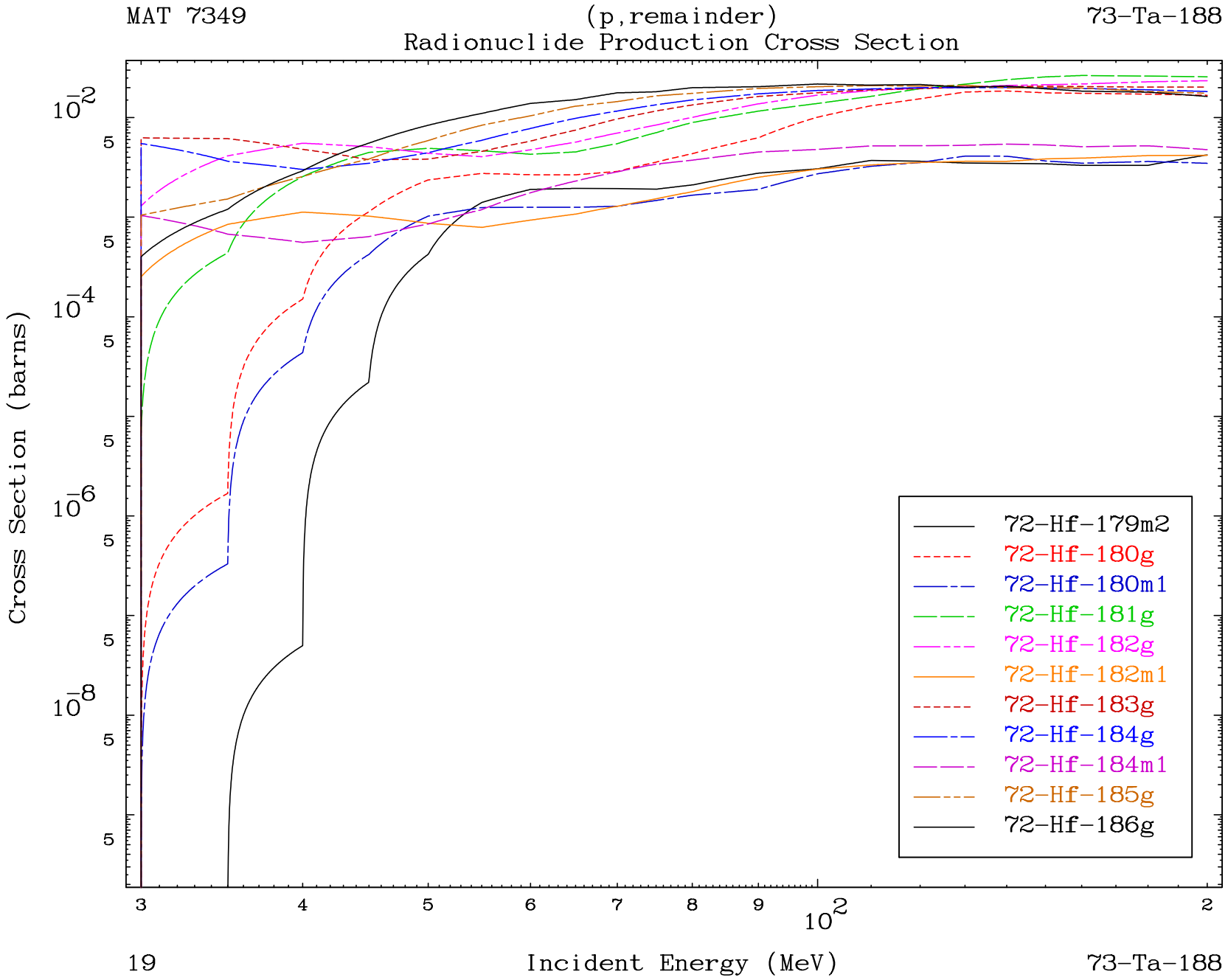

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
50
100
150
200
15
Incident Energy (MeV)
73-Ta-188
71-Lu-169m1
71-Lu-170g
71-Lu-170m1
71-Lu-171g
71-Lu-171m1
71-Lu-172g
71-Lu-172m1
71-Lu-173g
71-Lu-174g
71-Lu-174m1
71-Lu-175g


MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
71-Lu-176g
71-Lu-176m1
71-Lu-177g
71-Lu-177m1
71-Lu-178g
71-Lu-178m1
71-Lu-179g
71-Lu-180g
71-Lu-181g
71-Lu-182g
71-Lu-183g

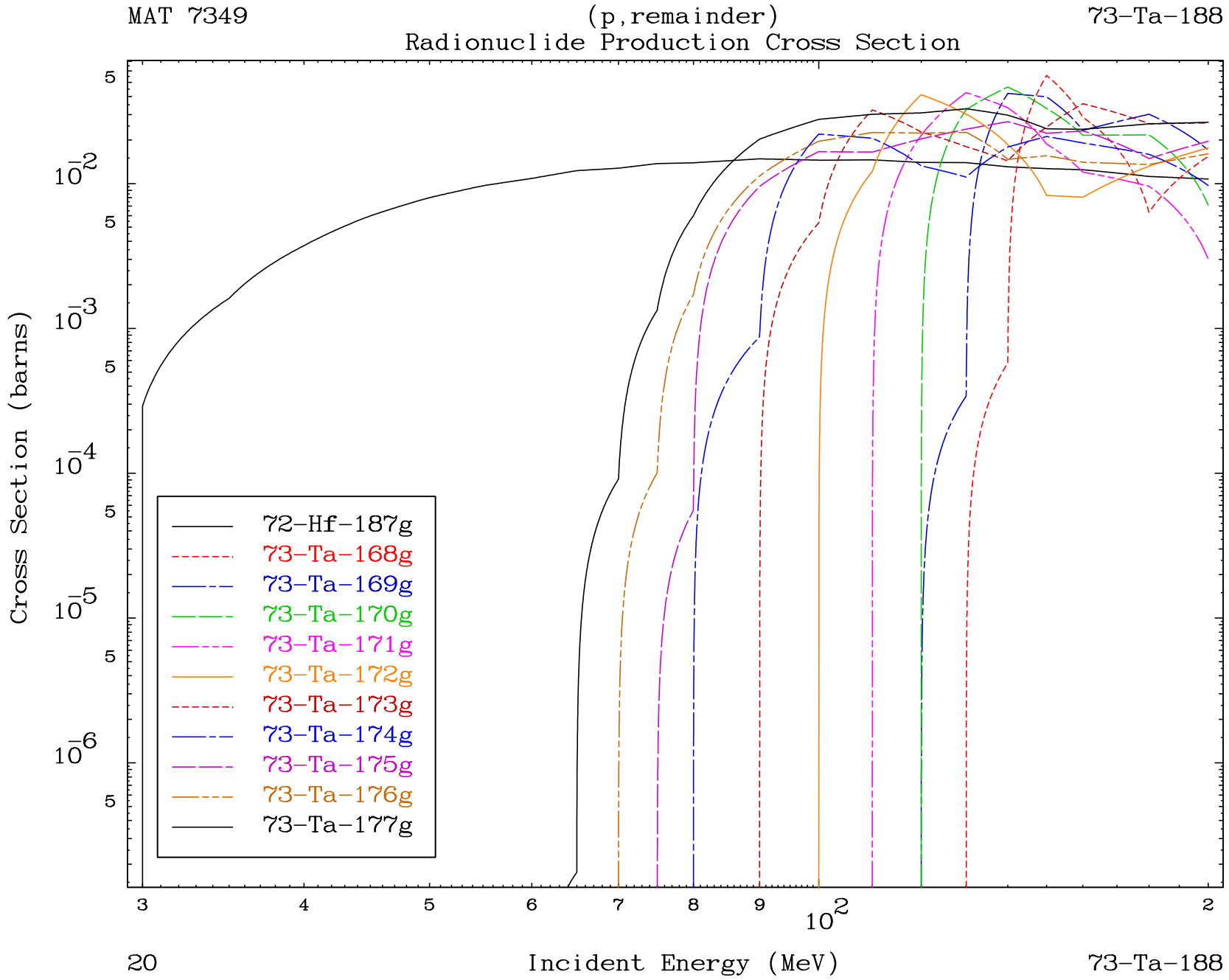

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
71-Lu-184g
71-Lu-185g
71-Lu-186g
72-Hf-167g
72-Hf-168g
72-Hf-169g
72-Hf-170g
72-Hf-171g
72-Hf-171m1
72-Hf-172g
72-Hf-173g
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
17
Incident Energy (MeV)
73-Ta-188

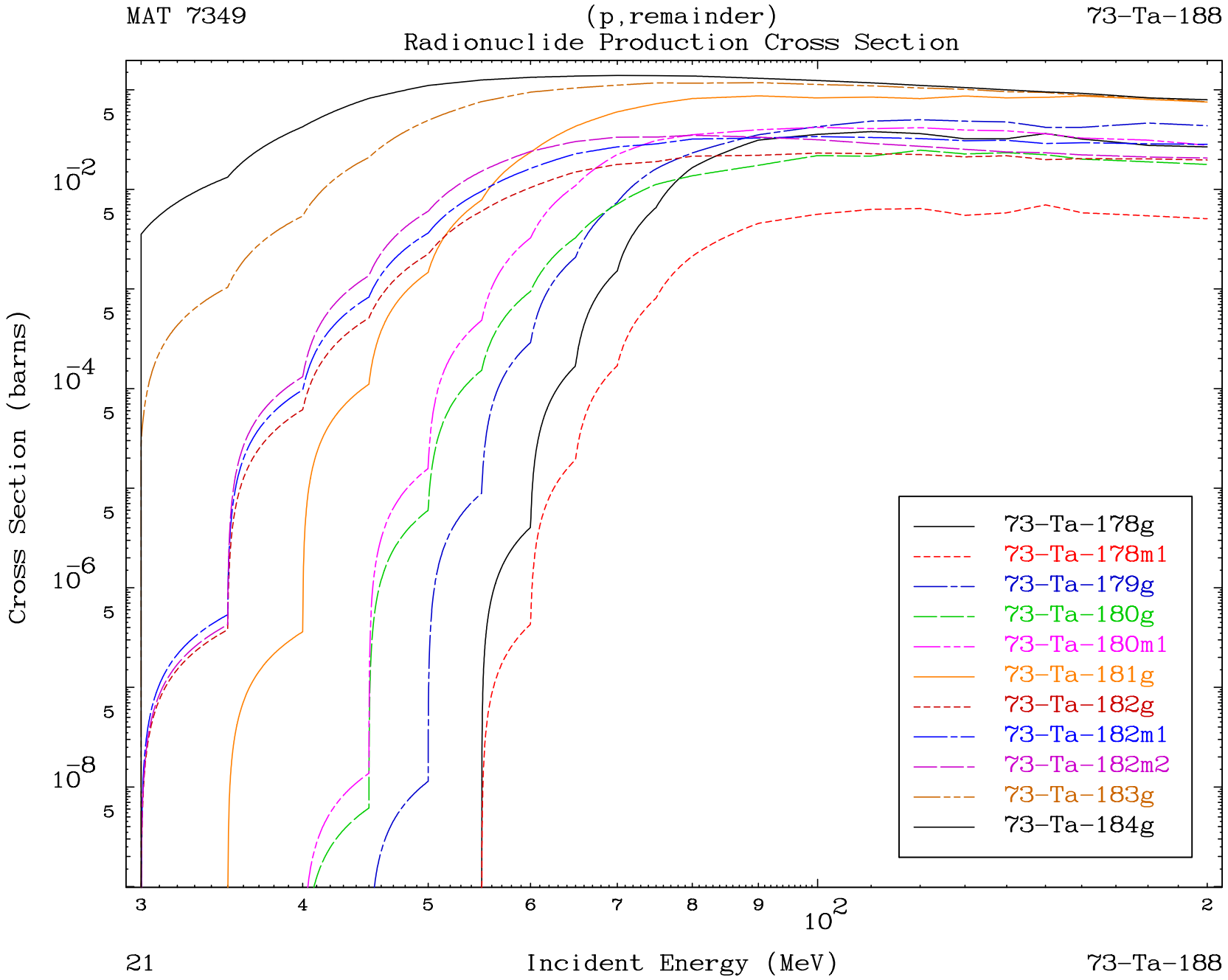

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
72-Hf-174g
72-Hf-175g
72-Hf-176g
72-Hf-177g
72-Hf-177m1
72-Hf-177m2
72-Hf-178g
72-Hf-178m1
72-Hf-178m2
72-Hf-179g
72-Hf-179m1

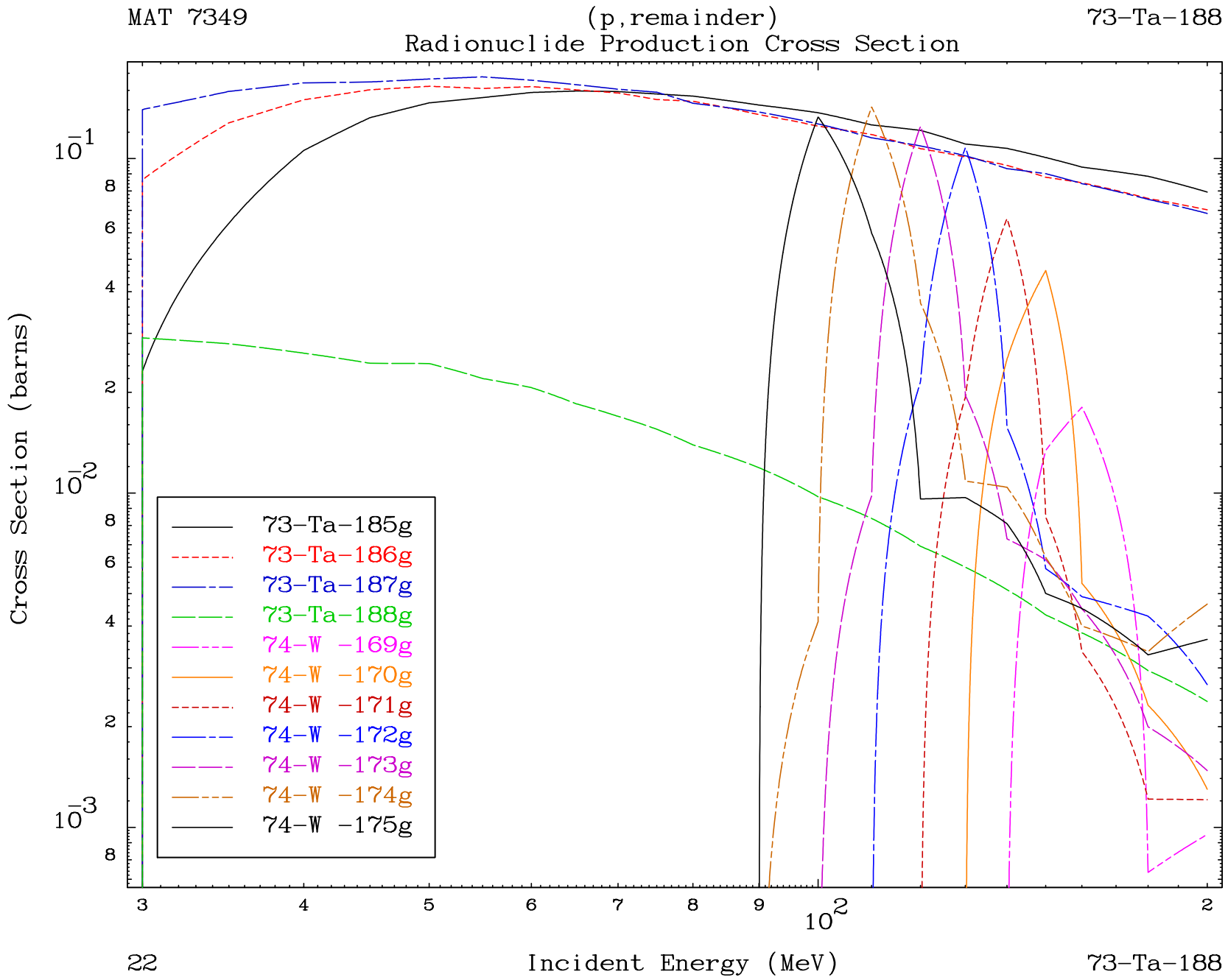
73-Ta-188

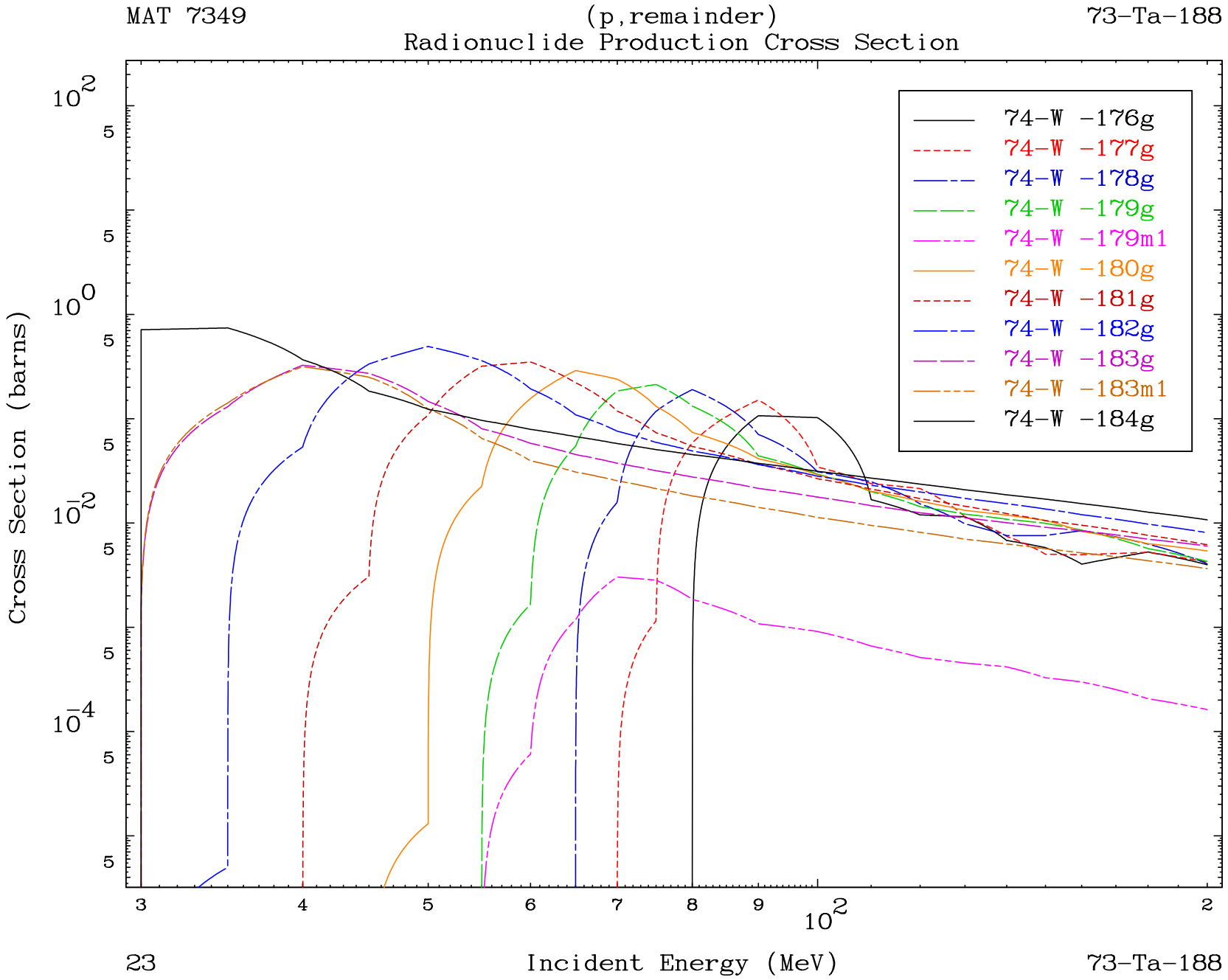

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
72-Hf-179m2
72-Hf-180g
72-Hf-180m1
72-Hf-181g
72-Hf-182g
72-Hf-182m1
72-Hf-183g
72-Hf-184g
72-Hf-184m1
72-Hf-185g
72-Hf-186g

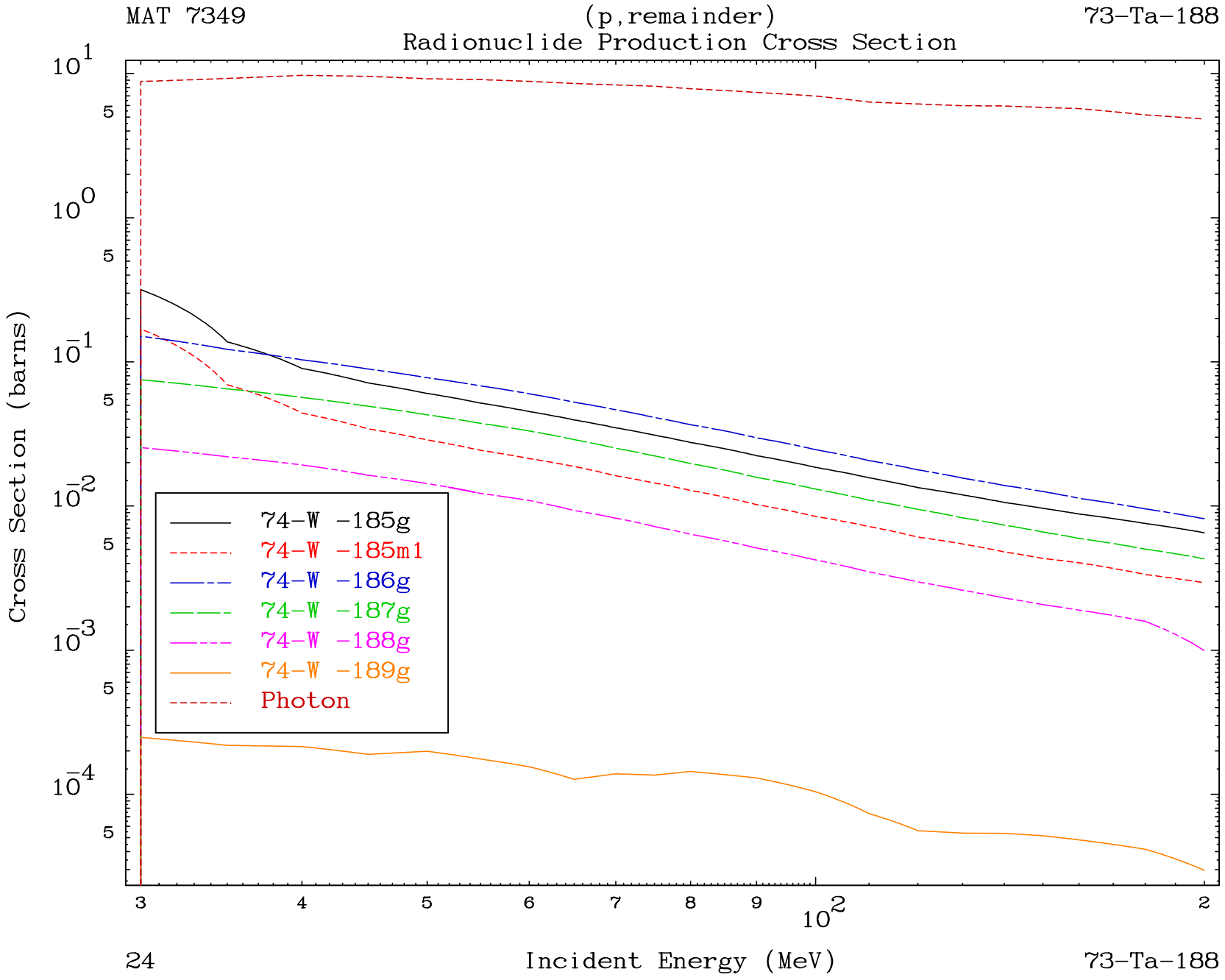
73-Ta-188

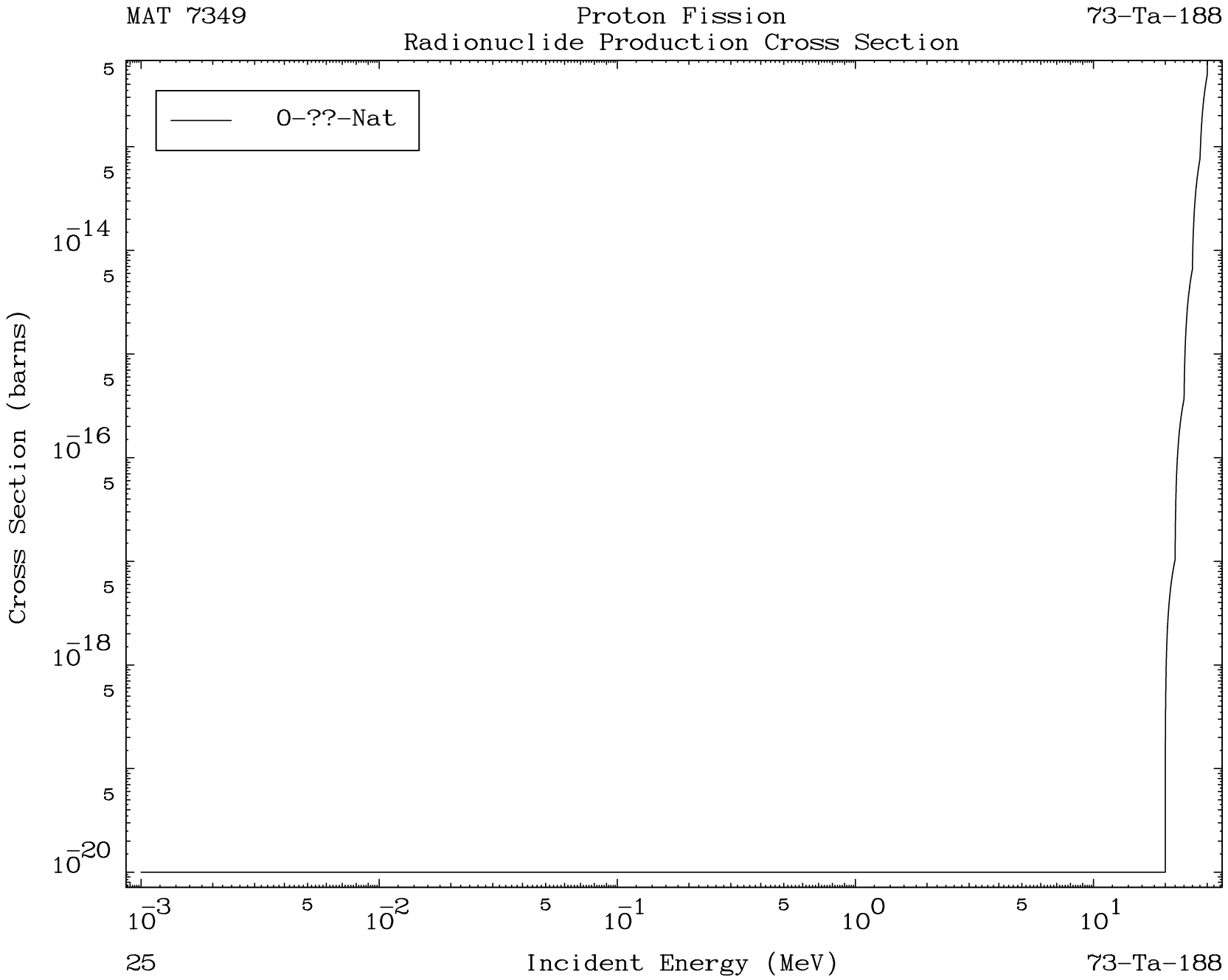

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-3
10-4
10-5
10-6
72-Hf-187g
73-Ta-168g
73-Ta-169g
73-Ta-170g
73-Ta-171g
73-Ta-172g
73-Ta-173g
73-Ta-174g
73-Ta-175g
73-Ta-176g
73-Ta-177g
3
4
5
6
7
8
9
10 2
2
20
Incident Energy (MeV)
73-Ta-188

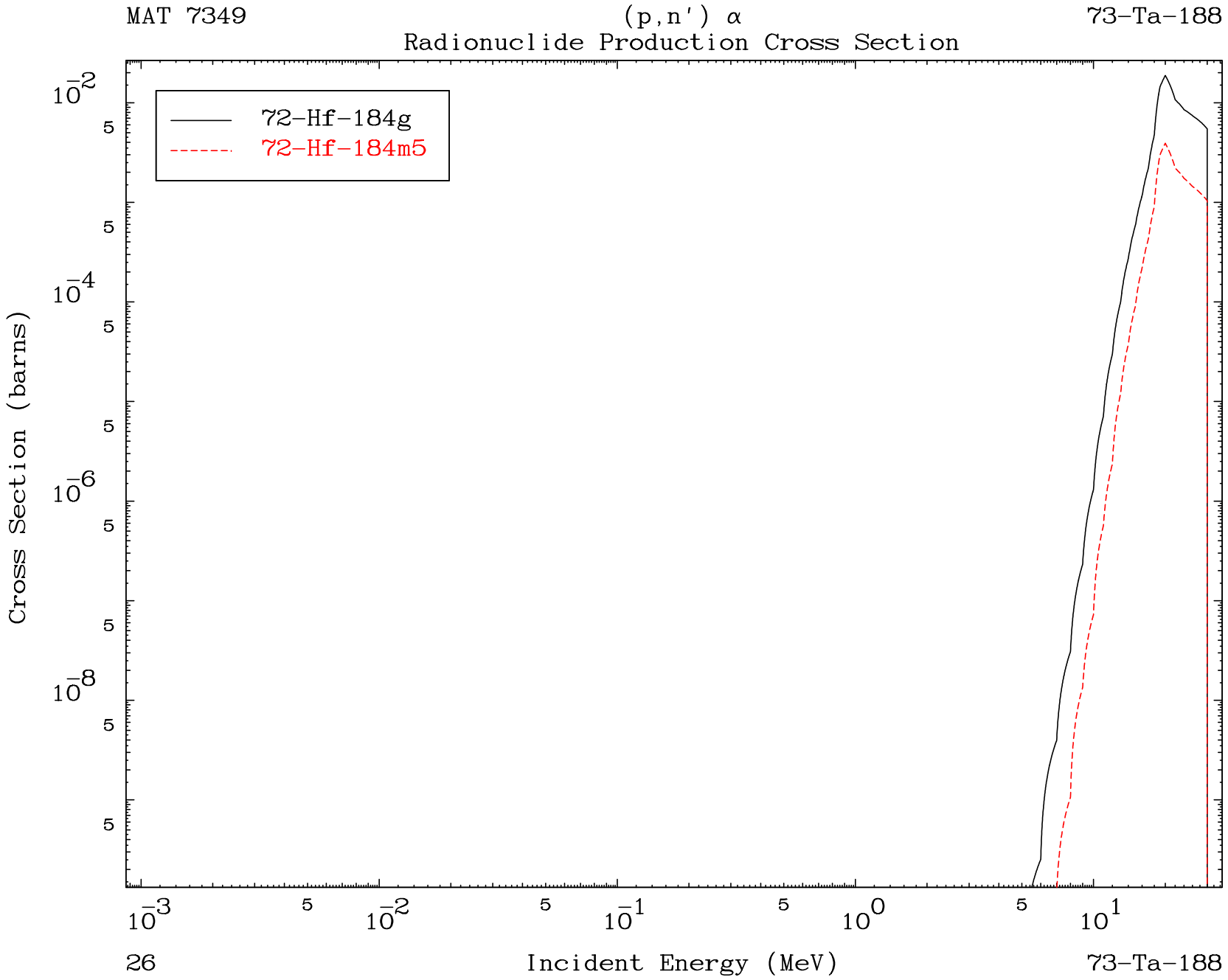

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
21
73-Ta-188
73-Ta-178g
73-Ta-178m1
73-Ta-179g
73-Ta-180g
73-Ta-180m1
73-Ta-181g
73-Ta-182g
73-Ta-182m1
73-Ta-182m2
73-Ta-183g
73-Ta-184g

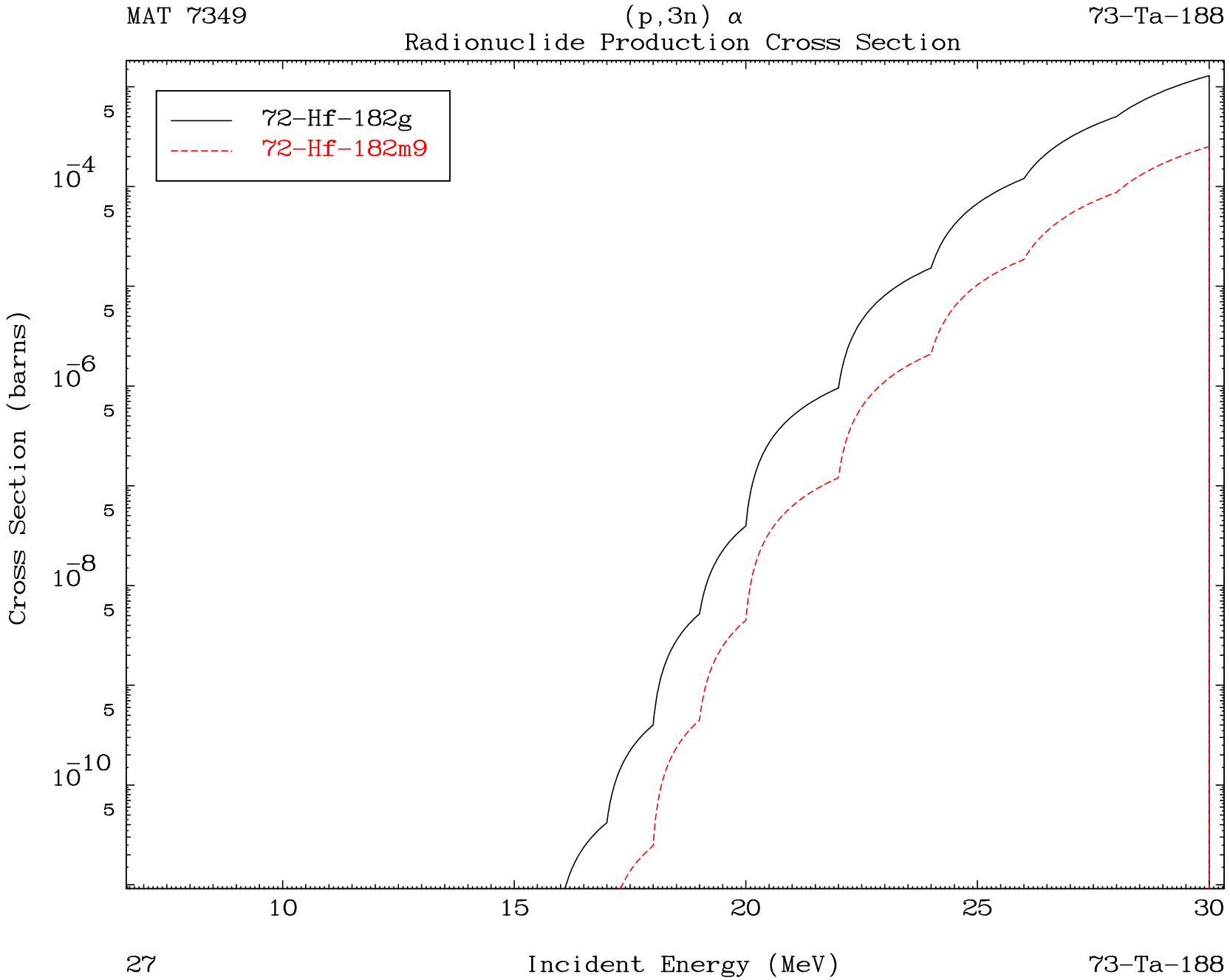

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
10-1
8
6
4
2
10-2
8
6
4
2
10-3
8
3
4
5
6
7
8
9
10 2
2
22
Incident Energy (MeV)
73-Ta-188
73-Ta-185g
73-Ta-186g
73-Ta-187g
73-Ta-188g
74-W -169g
74-W -170g
74-W -171g
74-W -172g
74-W -173g
74-W -174g
74-W -175g

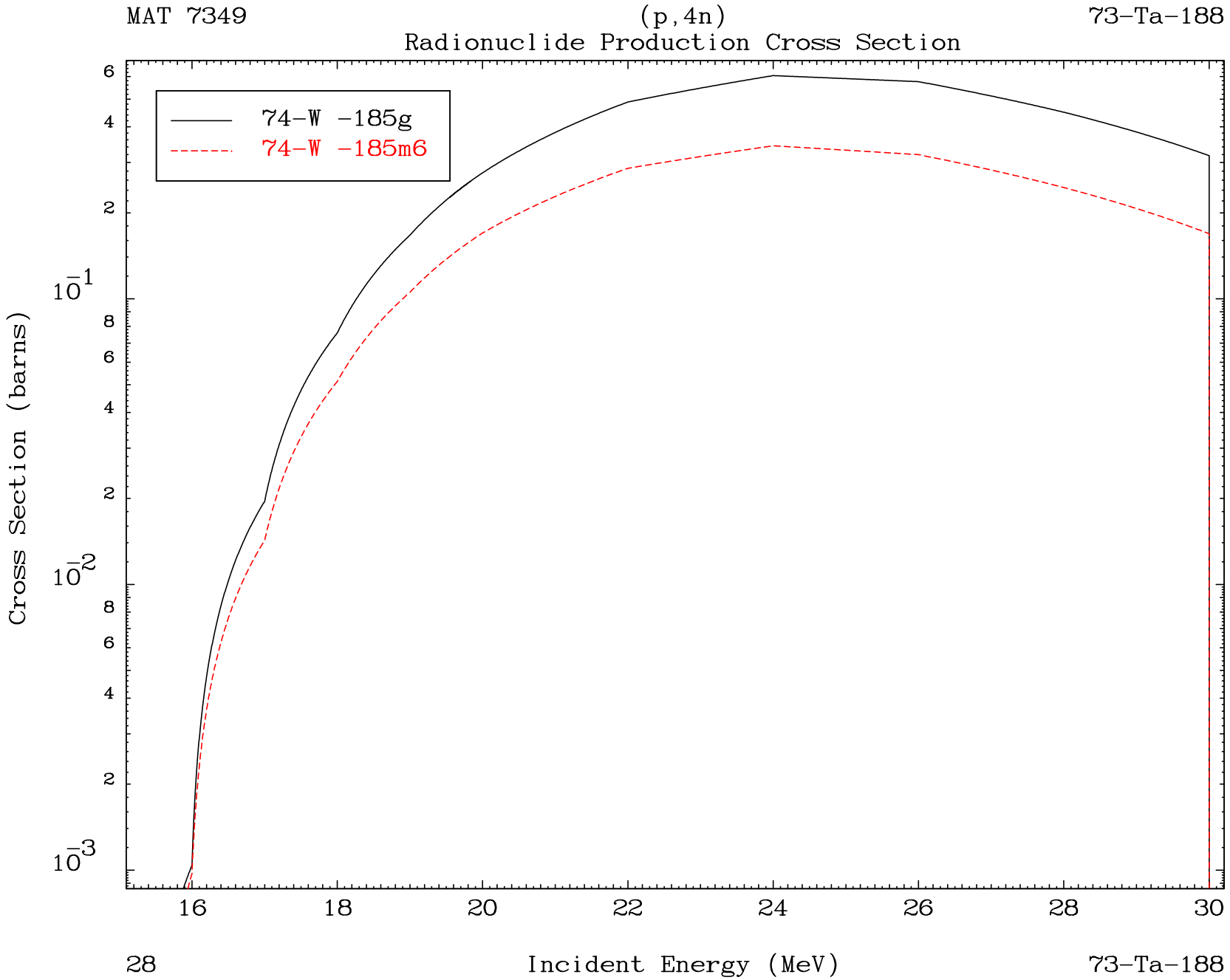

MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
23
73-Ta-188
74-W -176g
74-W -177g
74-W -178g
74-W -179g
74-W -179m1
74-W -180g
74-W -181g
74-W -182g
74-W -183g
74-W -183m1
74-W -184g


MAT 7349
(p,remainder)
73-Ta-188
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
74-W -185g
74-W -185m1
74-W -186g
74-W -187g
74-W -188g
74-W -189g
Photon
24
73-Ta-188


MAT 7349
Proton Fission
73-Ta-188
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
25
73-Ta-188


MAT 7349
(p,n') α
73-Ta-188
Radionuclide Production Cross Section
72-Hf-184g
72-Hf-184m5
Cross Section (barns)
Incident Energy (MeV)
26
73-Ta-188


MAT 7349
(p,3n) α
73-Ta-188
Radionuclide Production Cross Section
72-Hf-182g
72-Hf-182m9
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10
15
20
25
30
Incident Energy (MeV)
27
73-Ta-188


MAT 7349
(p,4n)
73-Ta-188
Radionuclide Production Cross Section
74-W -185g
74-W -185m6
Cross Section (barns)
6
4
2
10-1
8
6
4
2
10-2
8
6
4
2
10-3
16
18
20
22
24
26
28
30
28
Incident Energy (MeV)
73-Ta-188