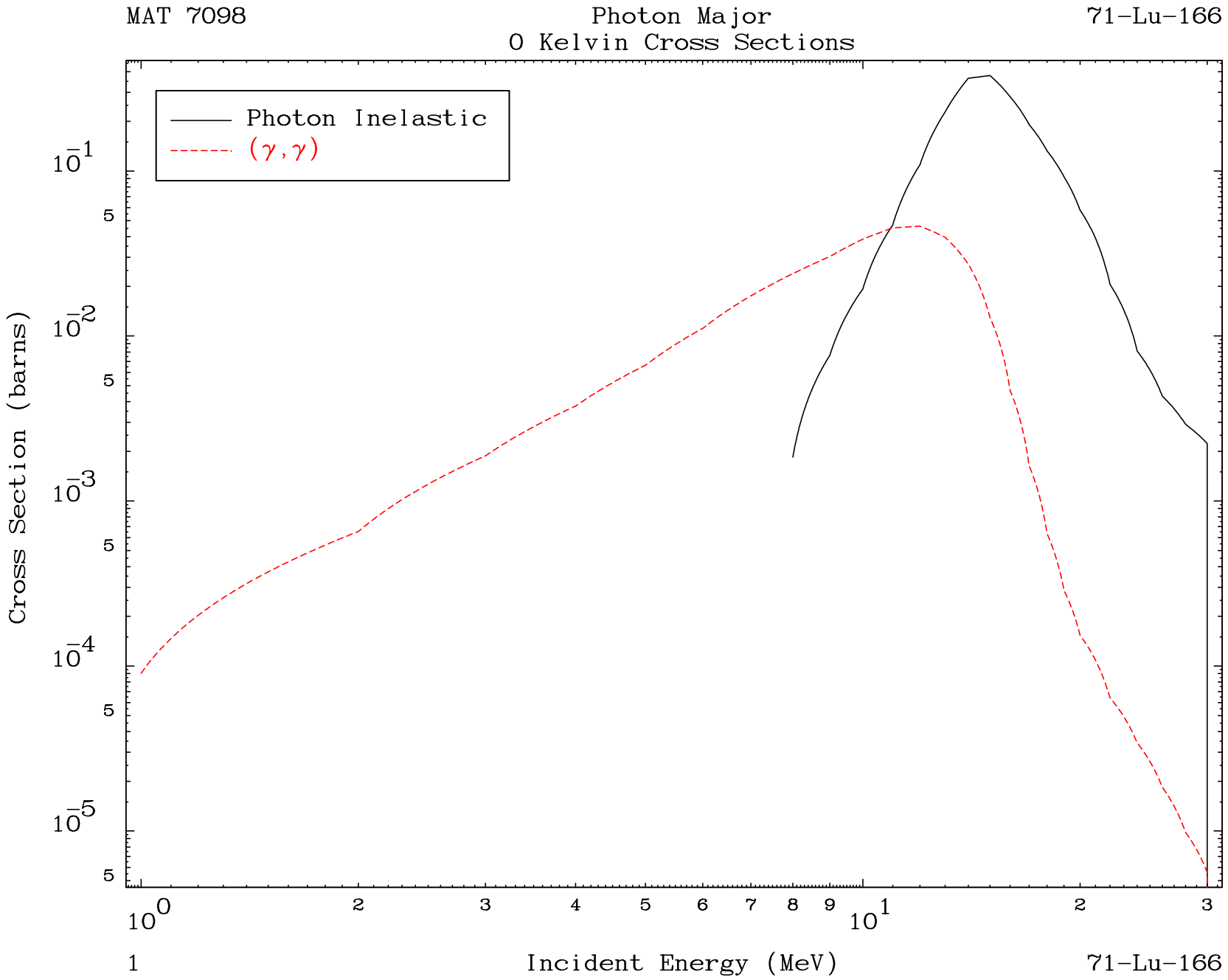
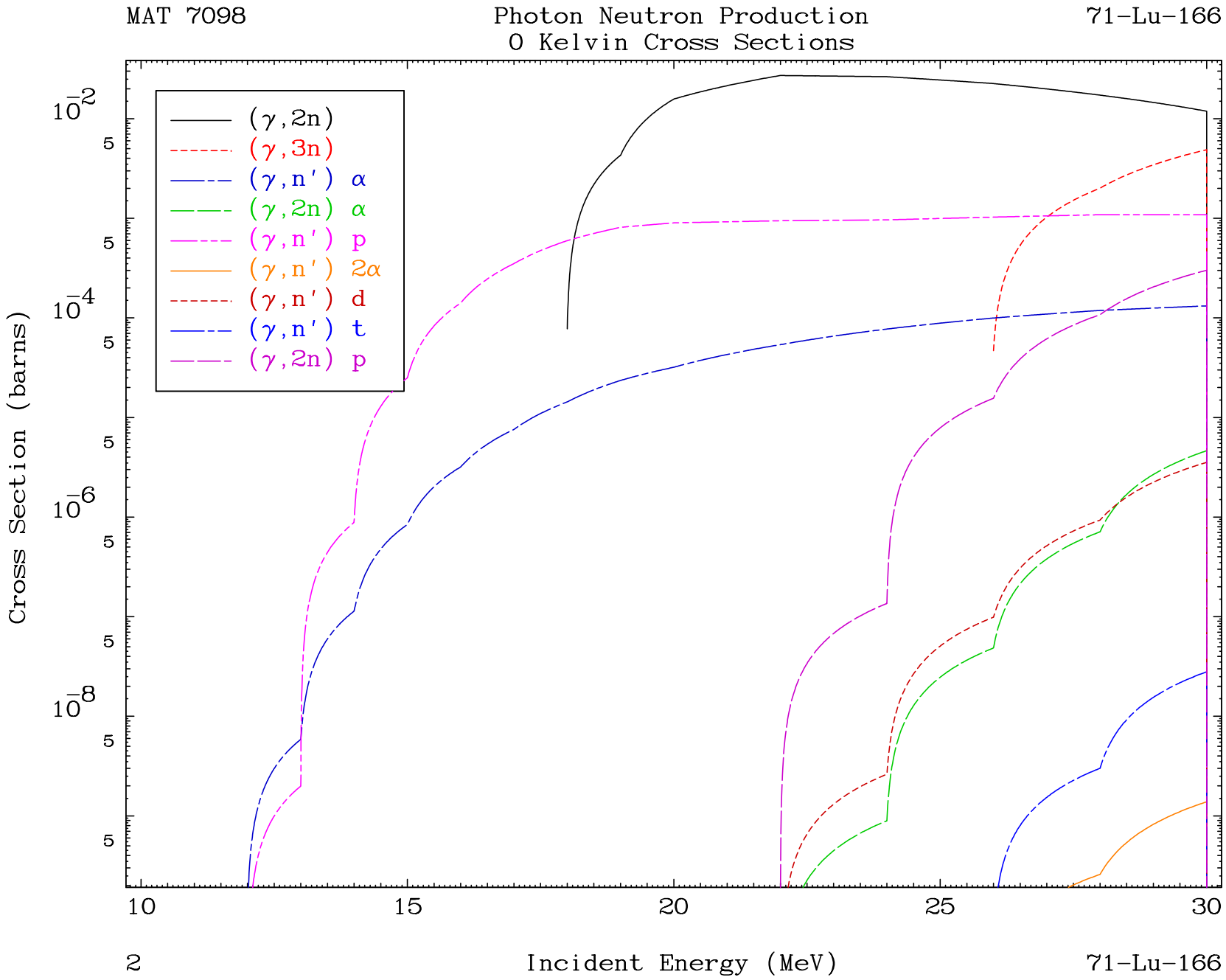
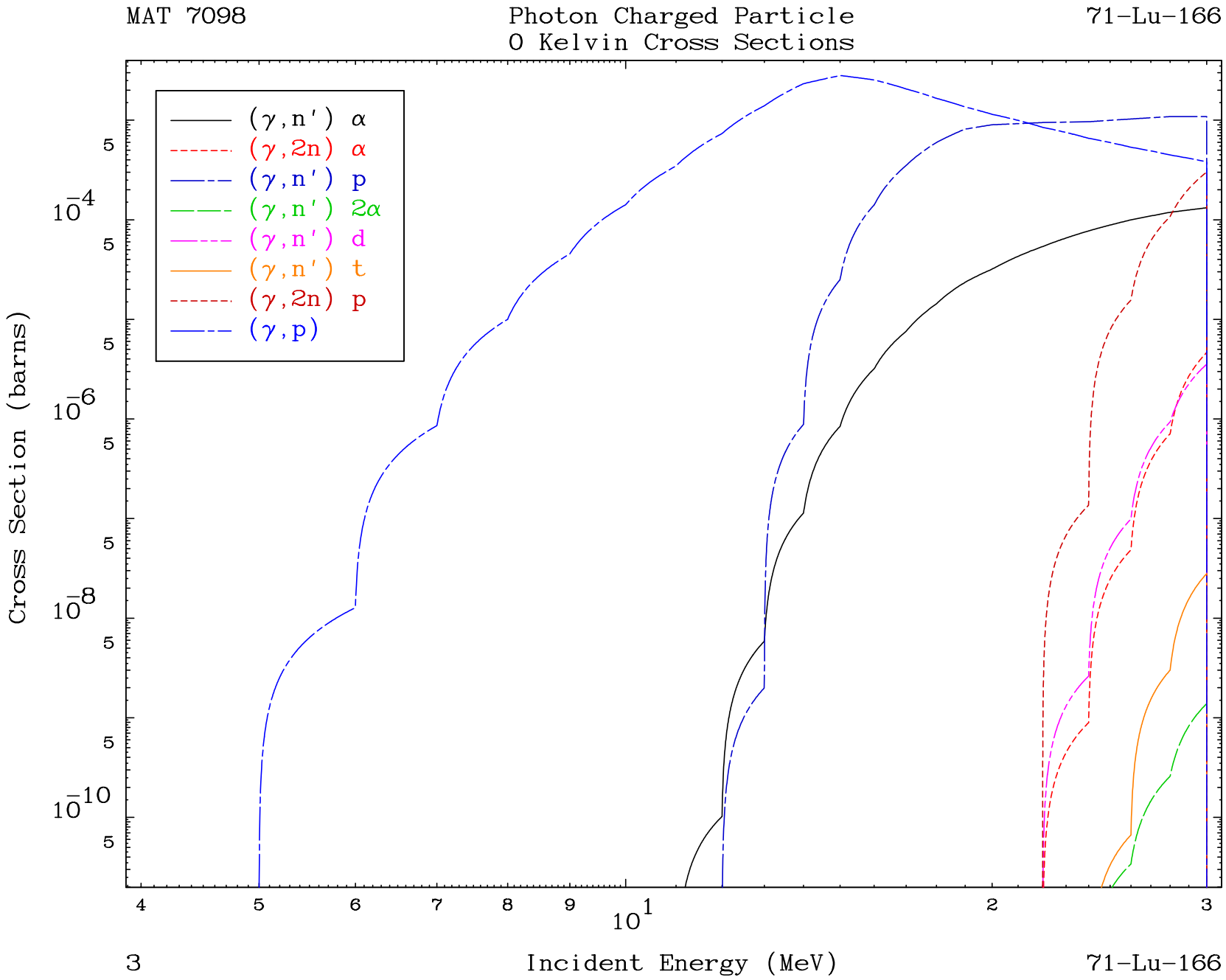
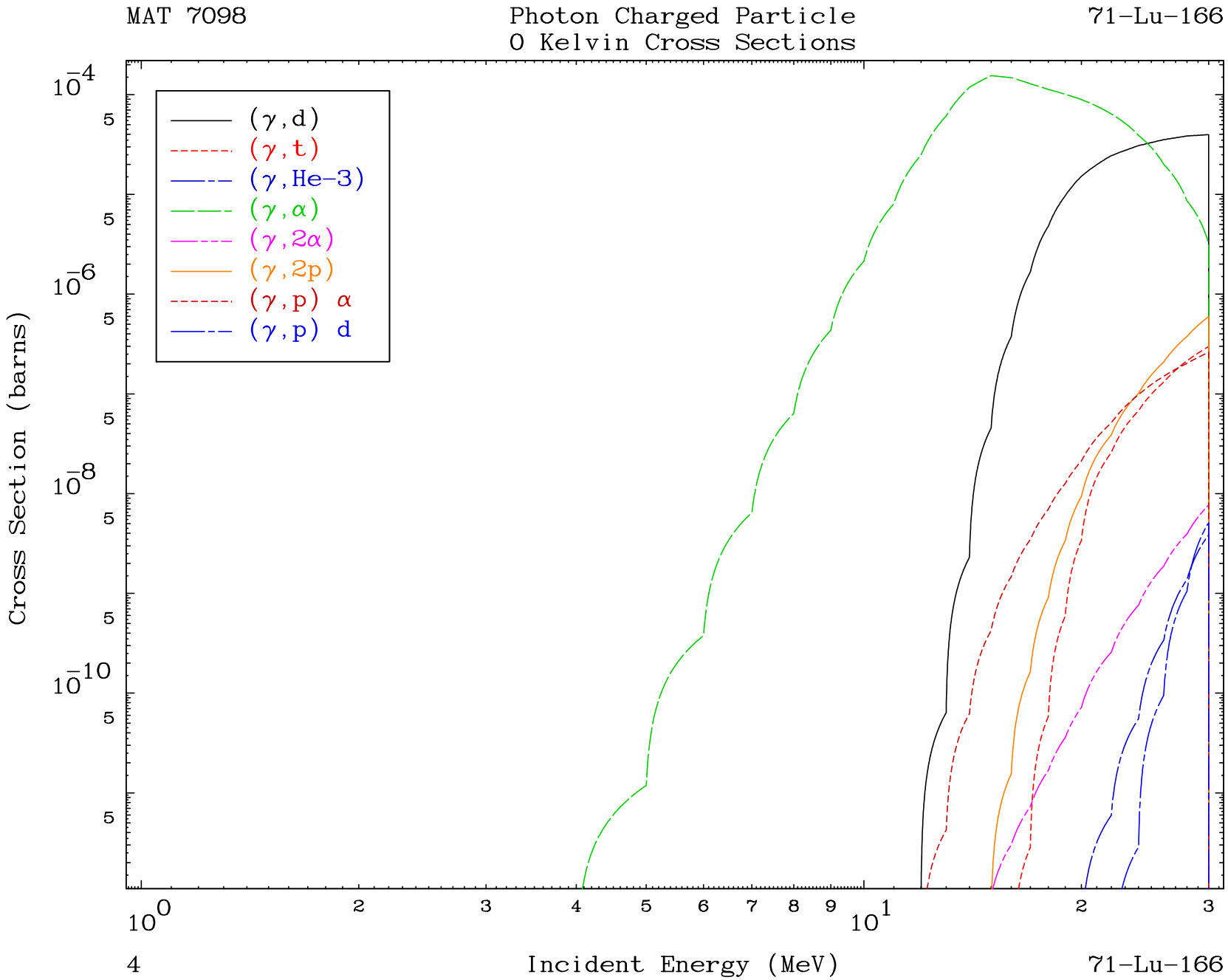
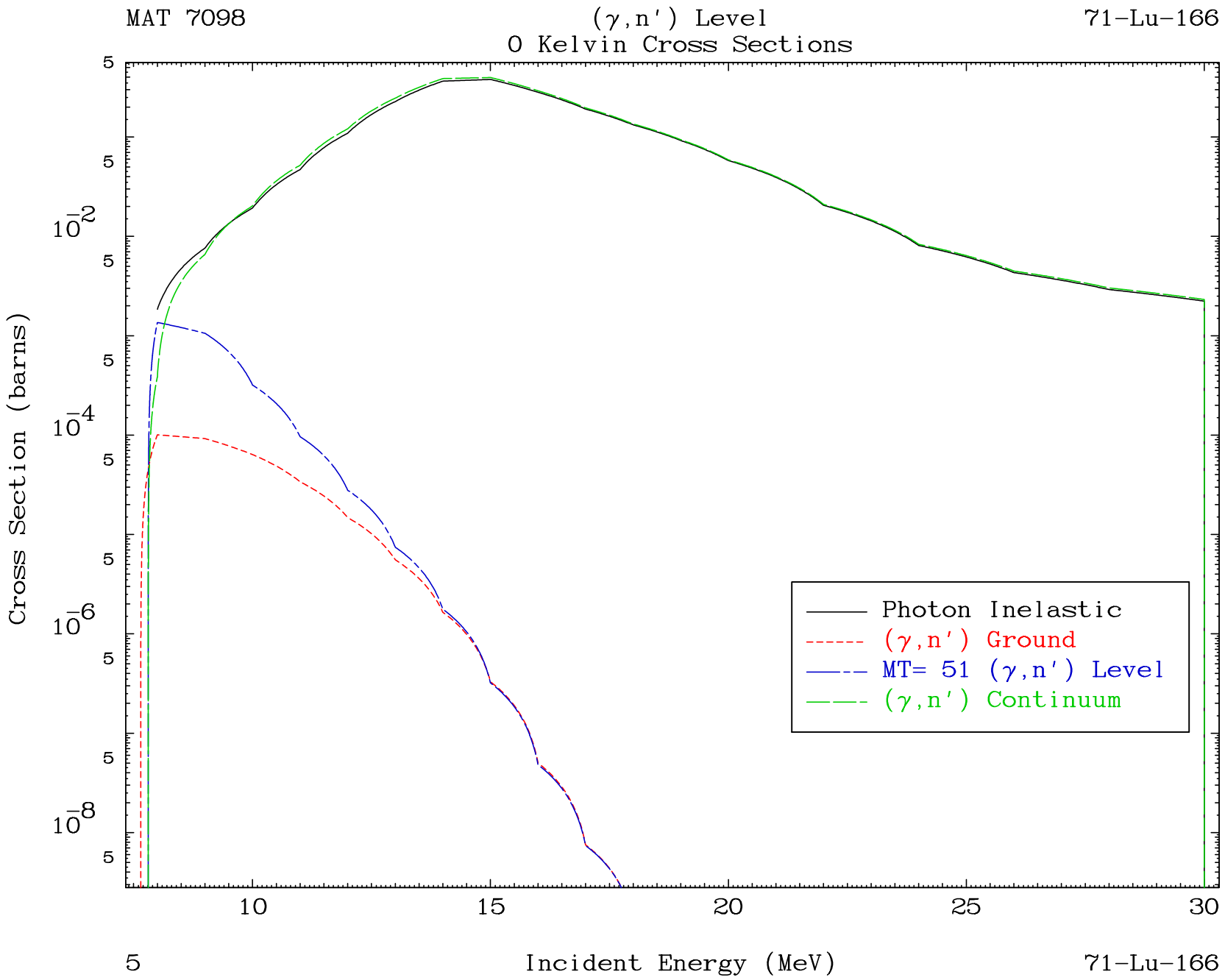
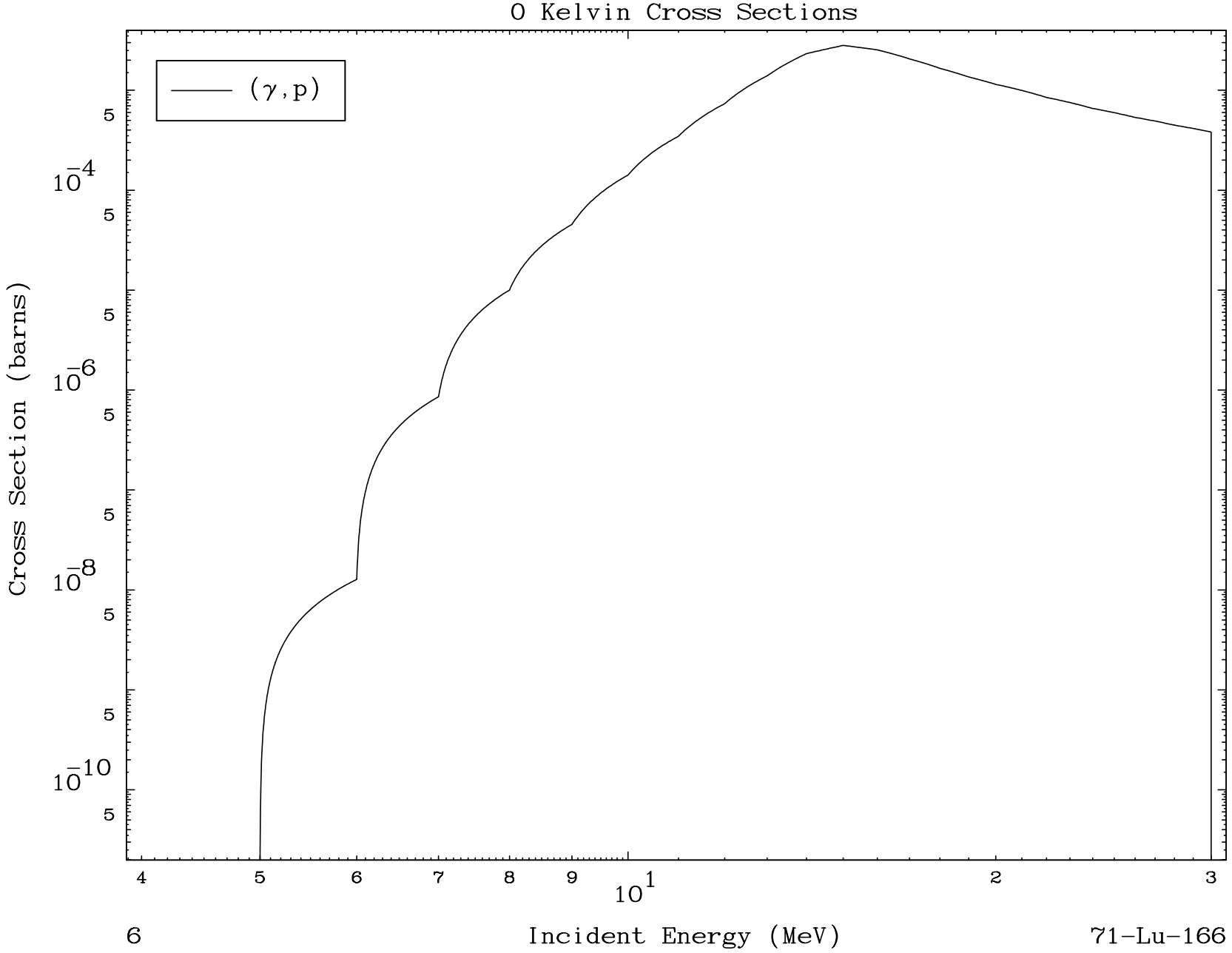

MAT 7098
Photon Major
71-Lu-166
0 Kelvin Cross Sections
Photon Inelastic
(γ,γ)
Cross Section (barns)
10-1
10-2
10-3
10-4
10-5
5
100
101
1
2
3
4
5
6
7
8
9
Incident Energy (MeV)
71-Lu-166

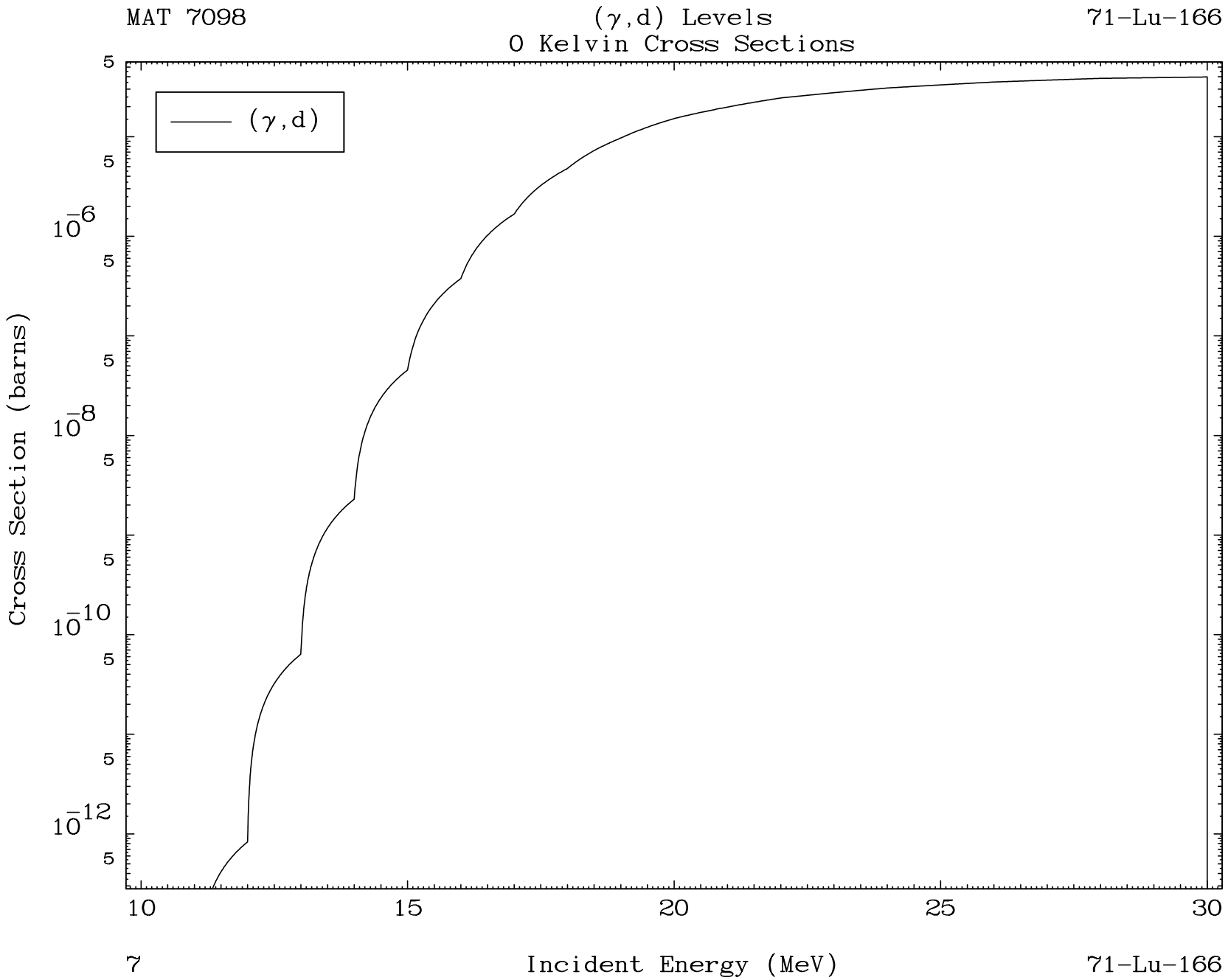

MAT 7098
Photon Neutron Production
0 Kelvin Cross Sections
71-Lu-166
(γ,2n)
(γ,3n)
(γ,n') α
(γ,2n) α
(γ,n') p
(γ,n') 2α
(γ,n') d
(γ,n') t
(γ,2n) p
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
2
Incident Energy (MeV)
71-Lu-166

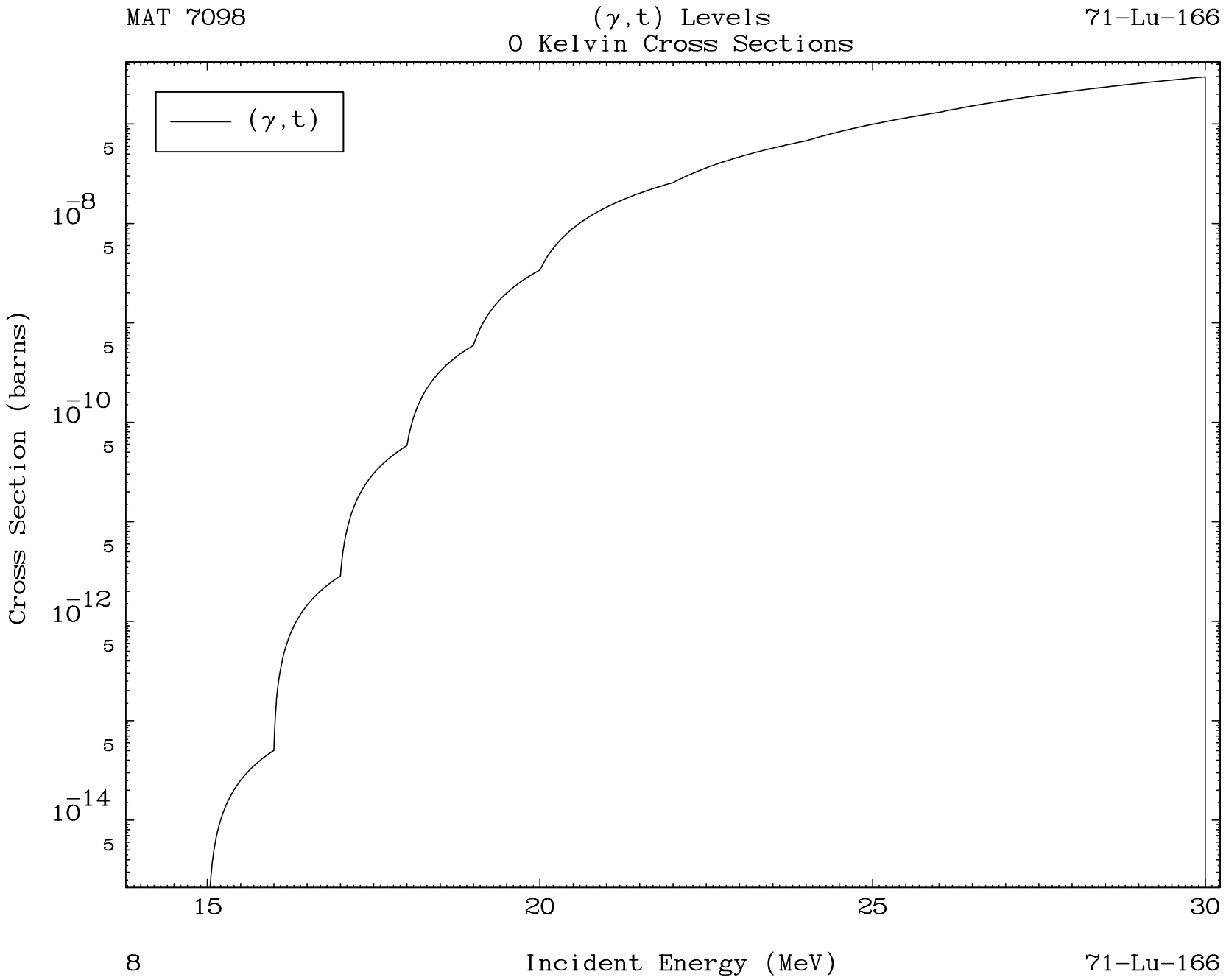

MAT 7098
Photon Charged Particle
0 Kelvin Cross Sections
71-Lu-166
(γ,n') α
(γ,2n) α
(γ,n') p
(γ,n') 2α
(γ,n') d
(γ,n') t
(γ,2n) p
(γ,p)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
4 5 6 7 8 9 10^1 2 3
Incident Energy (MeV)
3
71-Lu-166

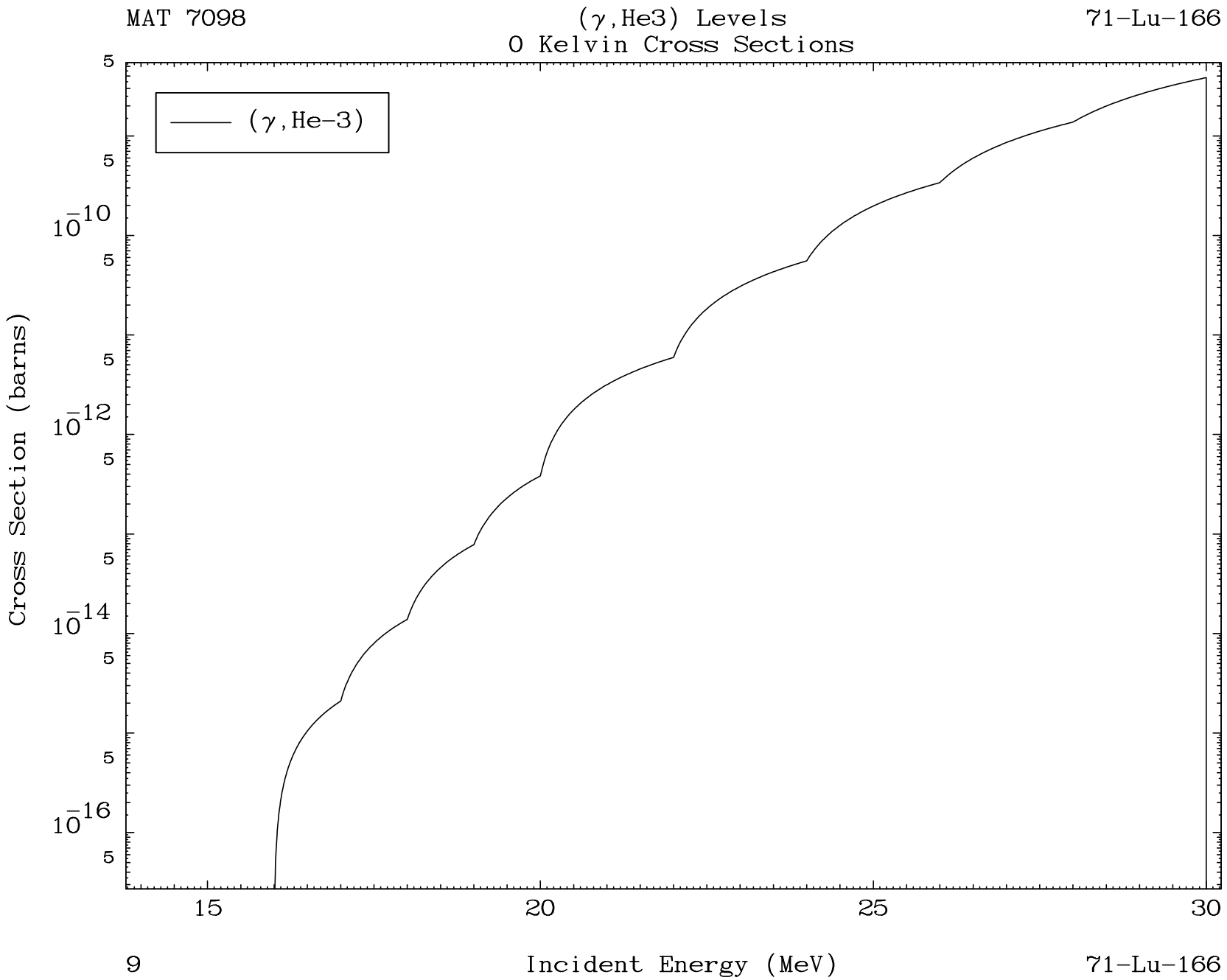

MAT 7098
Photon Charged Particle
0 Kelvin Cross Sections
71-Lu-166
(γ,d)
(γ,t)
(γ,He-3)
(γ,α)
(γ,2α)
(γ,2p)
(γ,p) α
(γ,p) d
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^0
10^1
Incident Energy (MeV)
71-Lu-166

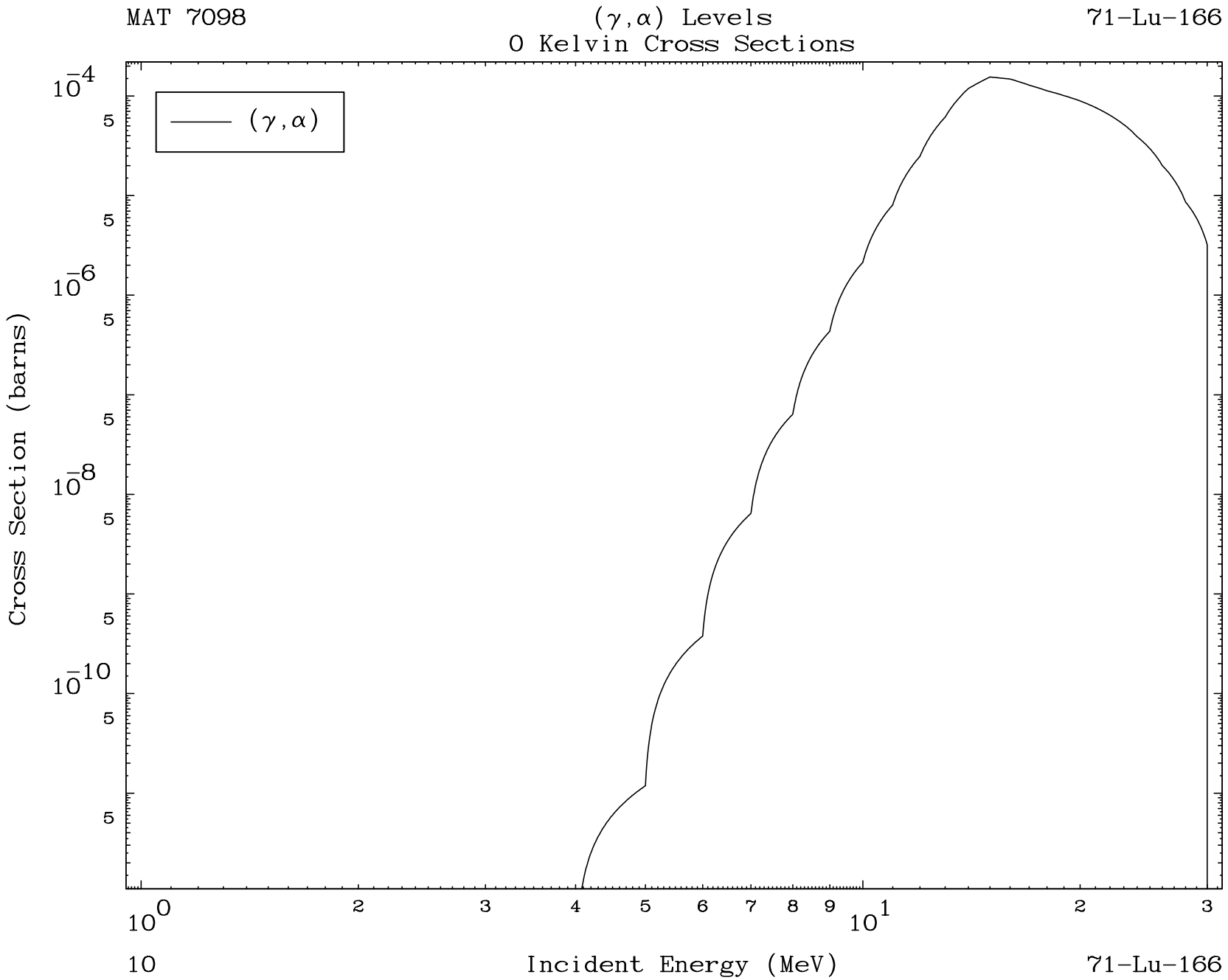

MAT 7098
(γ,n') Level
71-Lu-166
0 Kelvin Cross Sections
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
Incident Energy (MeV)
71-Lu-166
Photon Inelastic
(γ,n') Ground
MT= 51 (γ,n') Level
(γ,n') Continuum

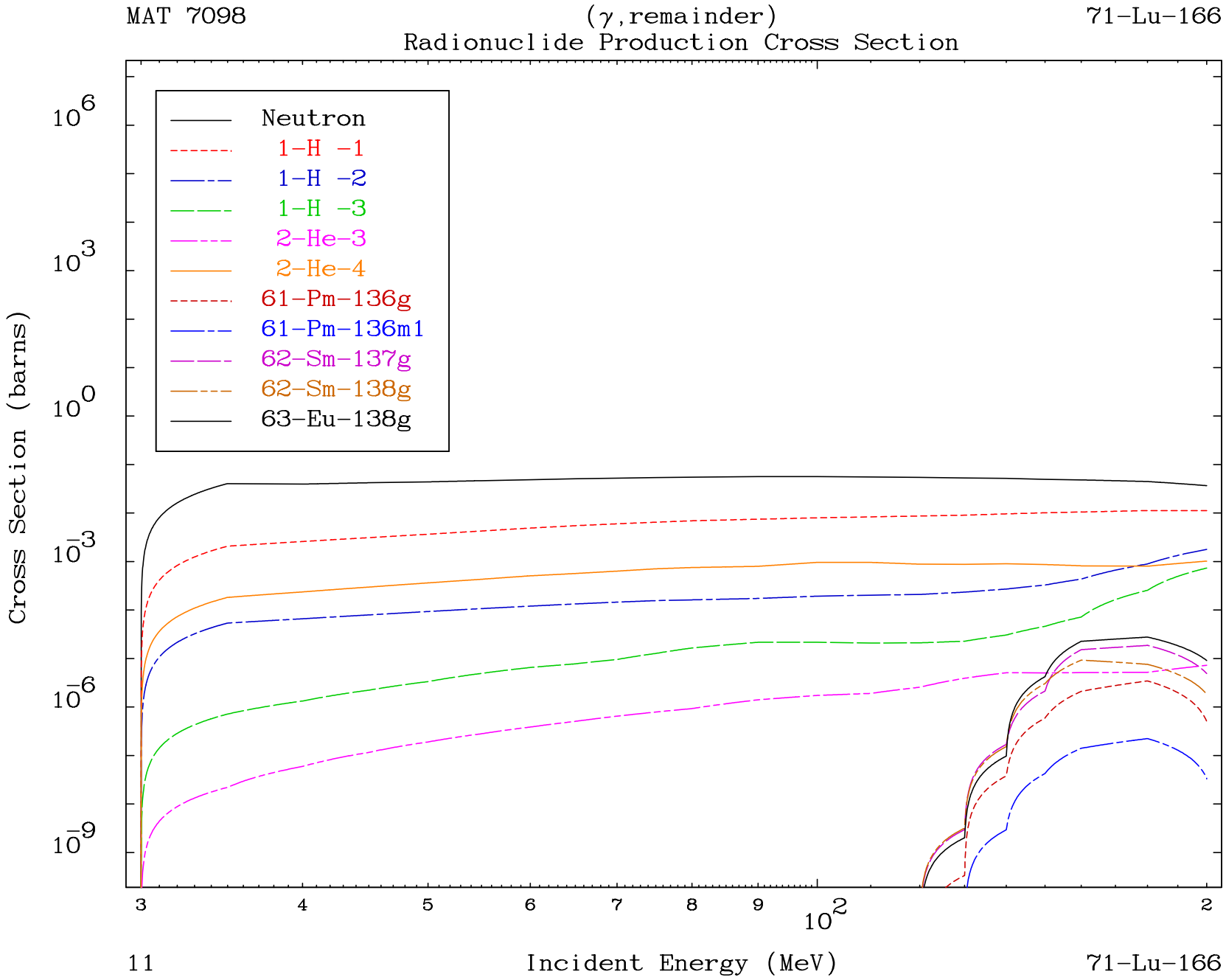

0 Kelvin Cross Sections
(γ,p)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
4
5
6
7
8
9
10^1
2
3
Incident Energy (MeV)

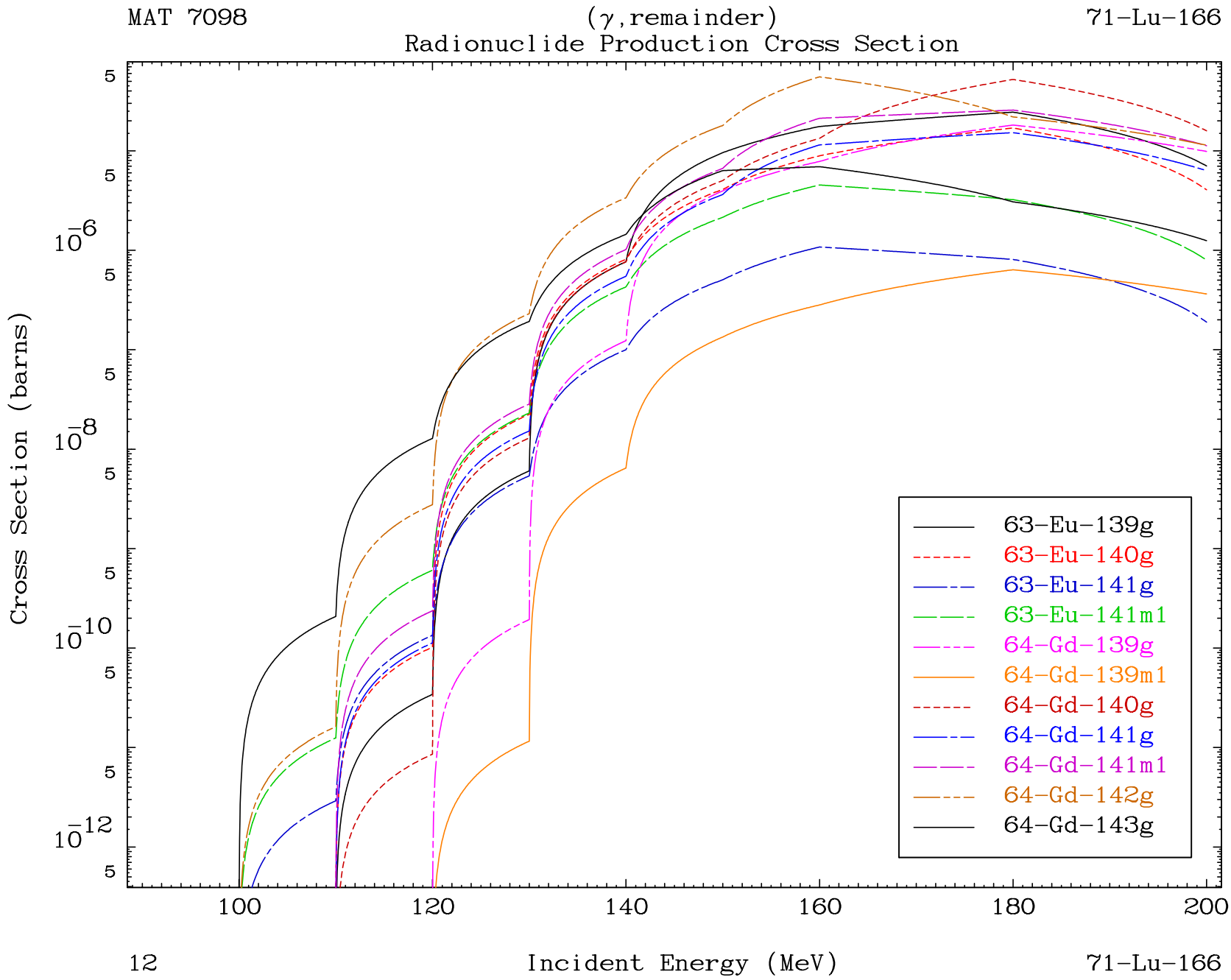

MAT 7098
(γ,d) Levels
71-Lu-166
0 Kelvin Cross Sections
(γ,d)
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
10
15
20
25
30
Incident Energy (MeV)
7
71-Lu-166

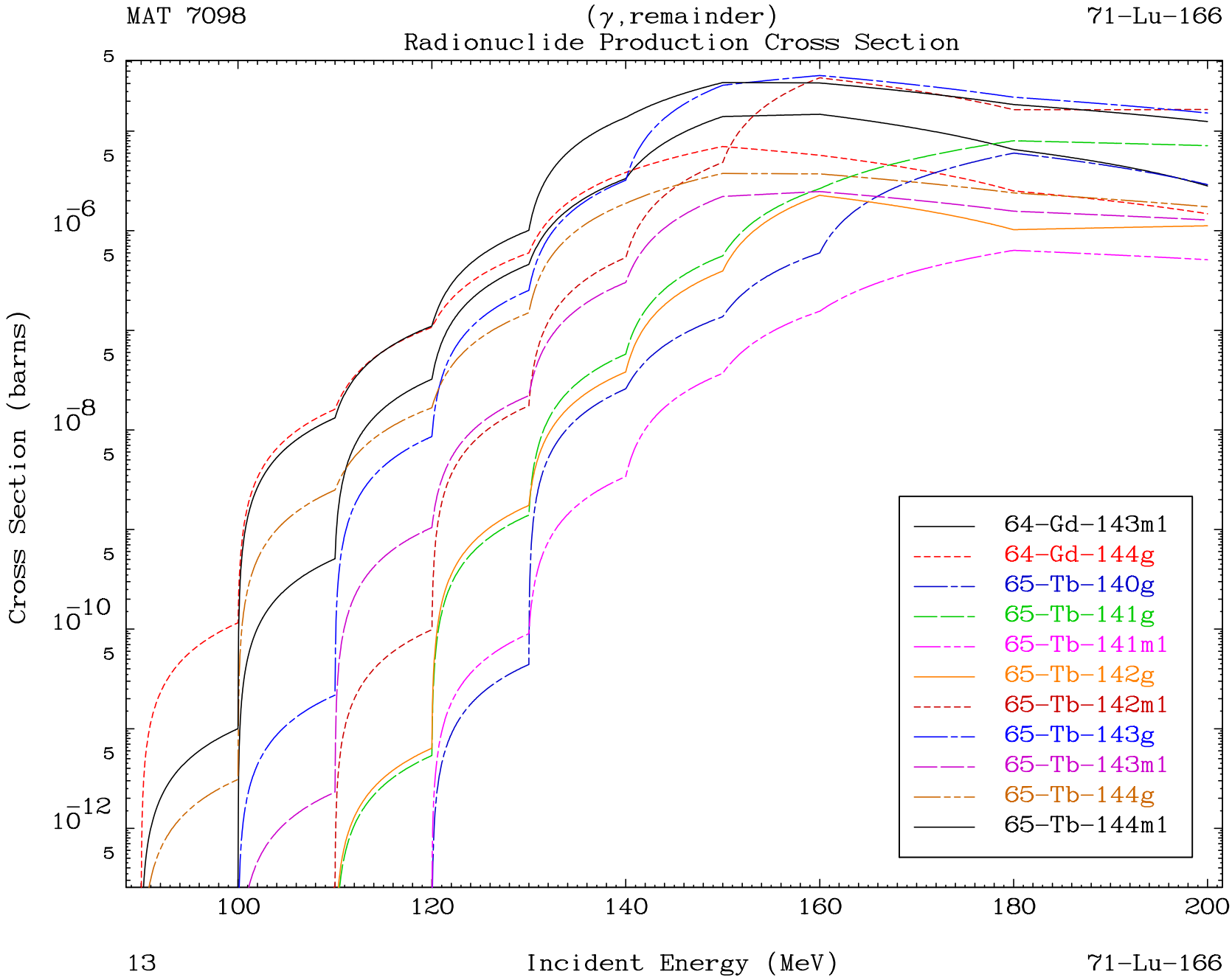

MAT 7098
(γ,t) Levels
71-Lu-166
0 Kelvin Cross Sections
(γ,t)
Cross Section (barns)
10-8
10-10
10-12
10-14
5
15
20
25
30
Incident Energy (MeV)
8
71-Lu-166

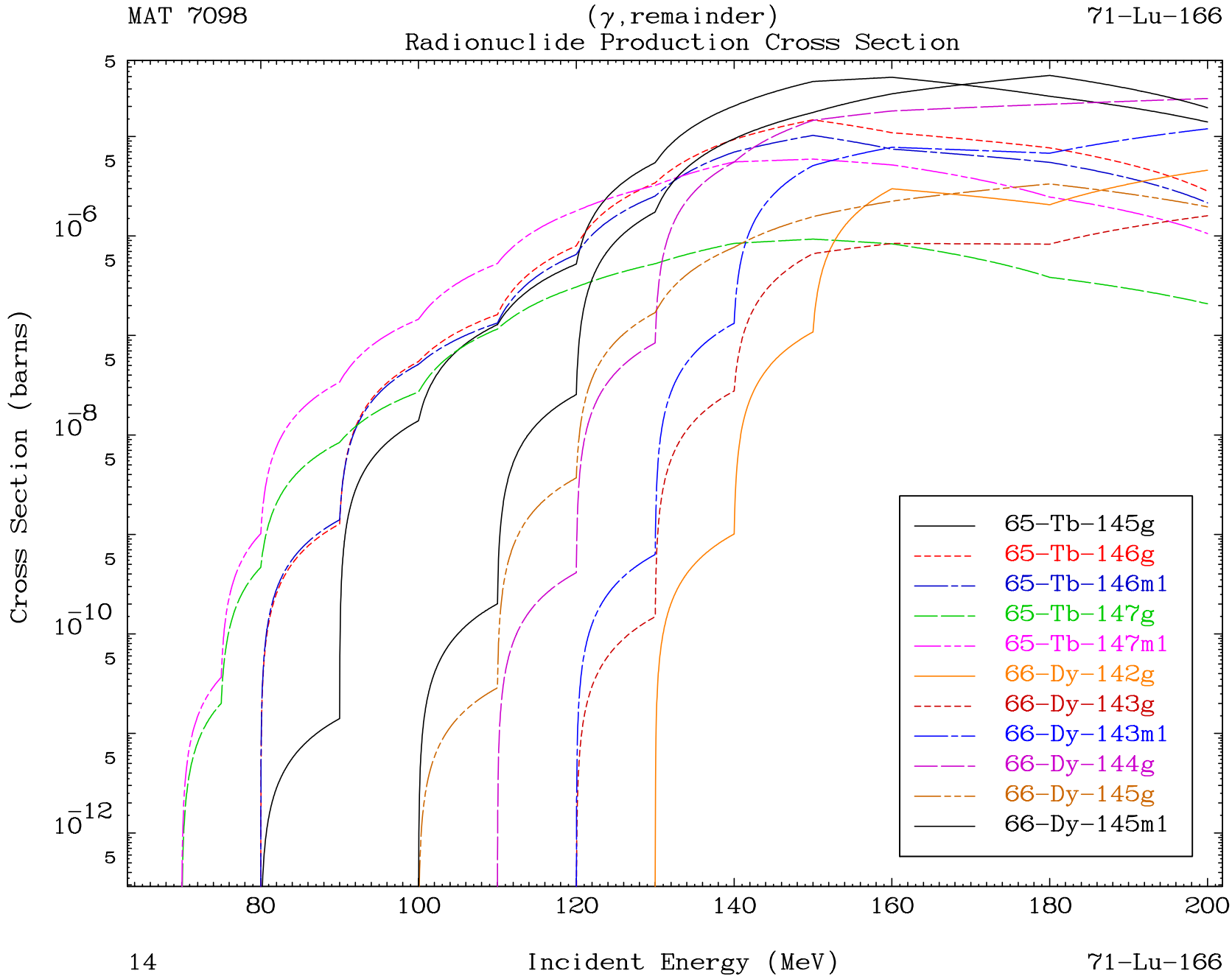

MAT 7098
(γ,He3) Levels
71-Lu-166
0 Kelvin Cross Sections
(γ,He-3)
Cross Section (barns)
10-10
10-12
10-14
10-16
5
15
20
25
30
9
Incident Energy (MeV)
71-Lu-166

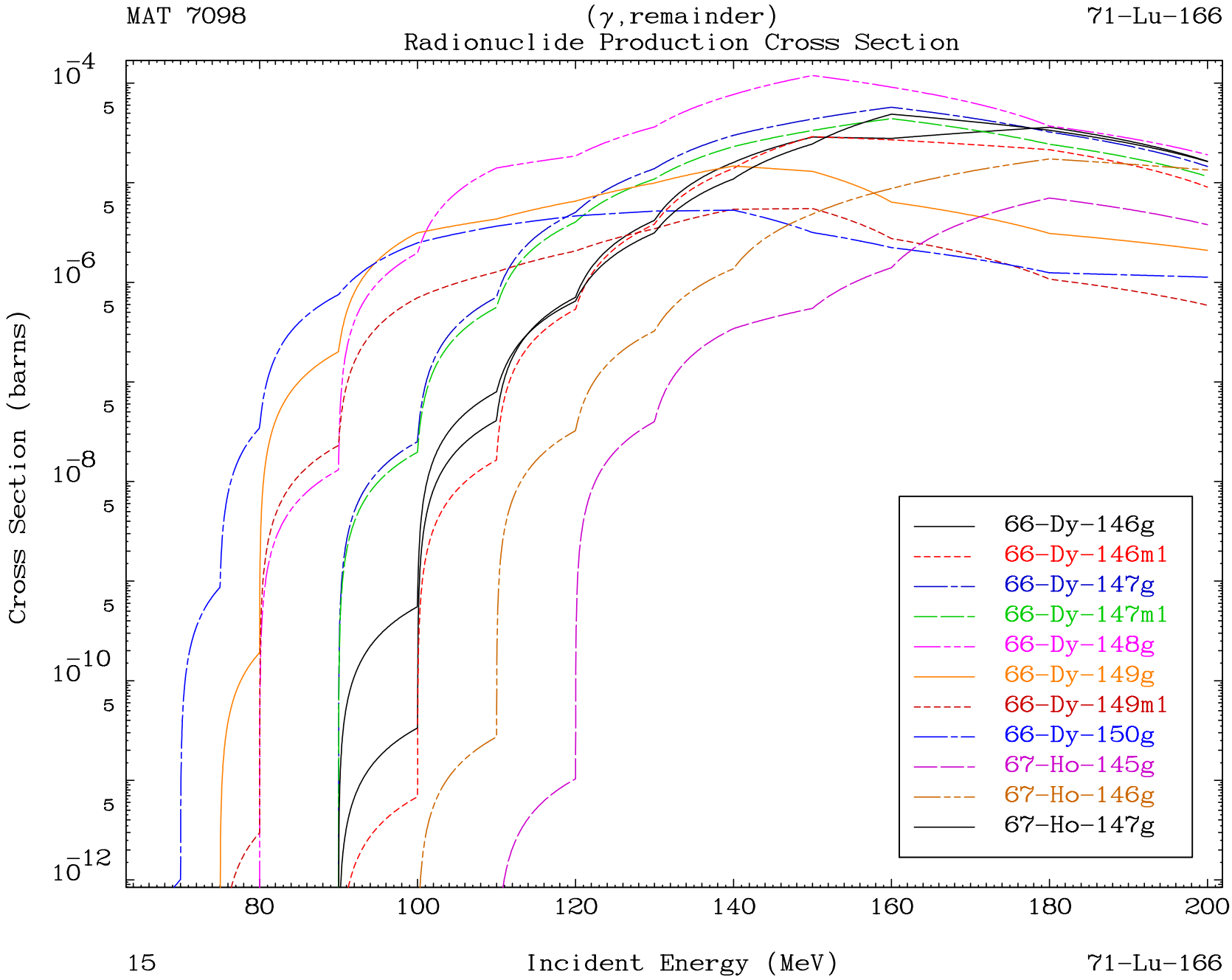

MAT 7098
(γ,α) Levels
71-Lu-166
0 Kelvin Cross Sections
(γ,α)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^0
10^1
Incident Energy (MeV)
71-Lu-166

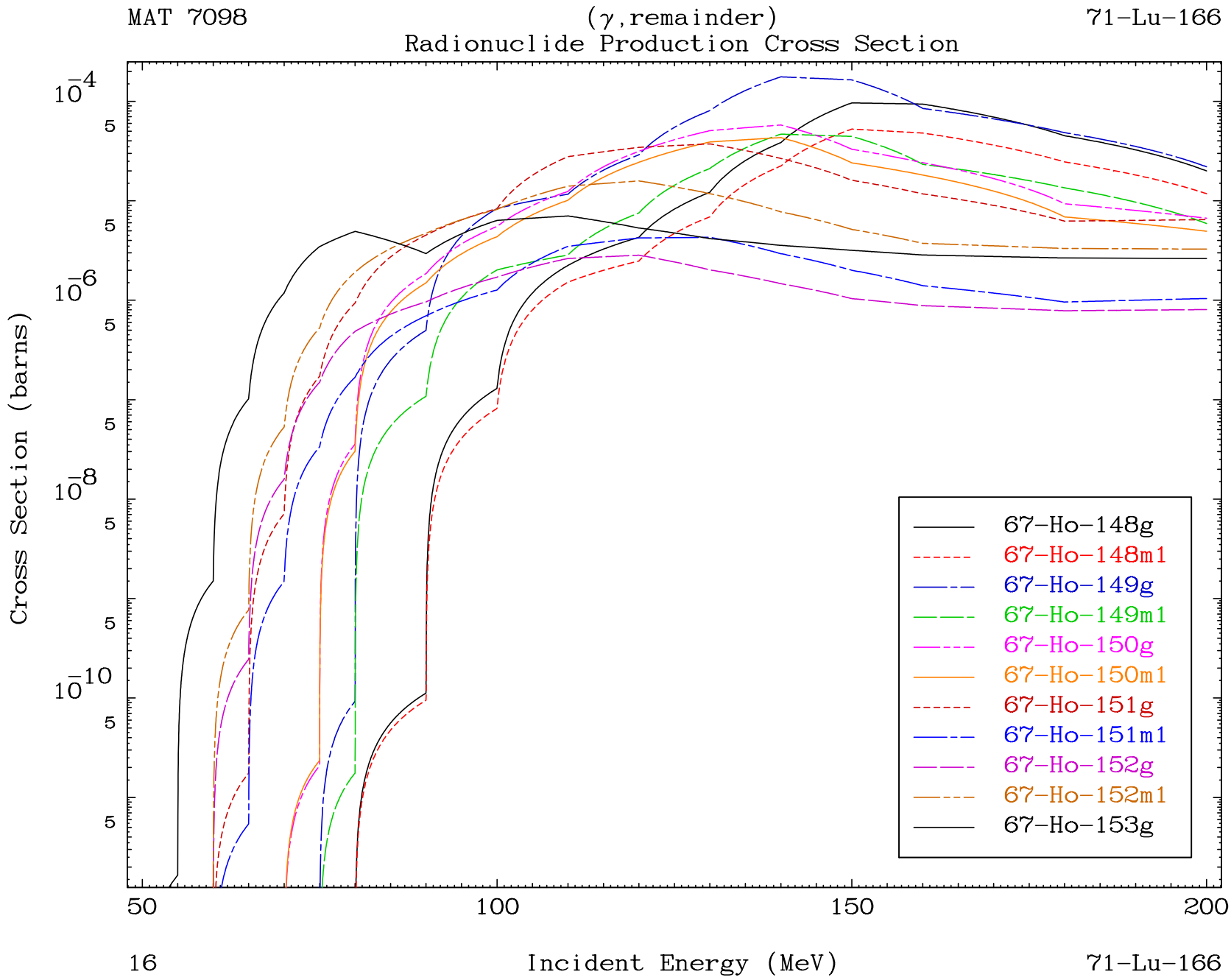

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
61-Pm-136g
61-Pm-136m1
62-Sm-137g
62-Sm-138g
63-Eu-138g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
11
Incident Energy (MeV)
71-Lu-166

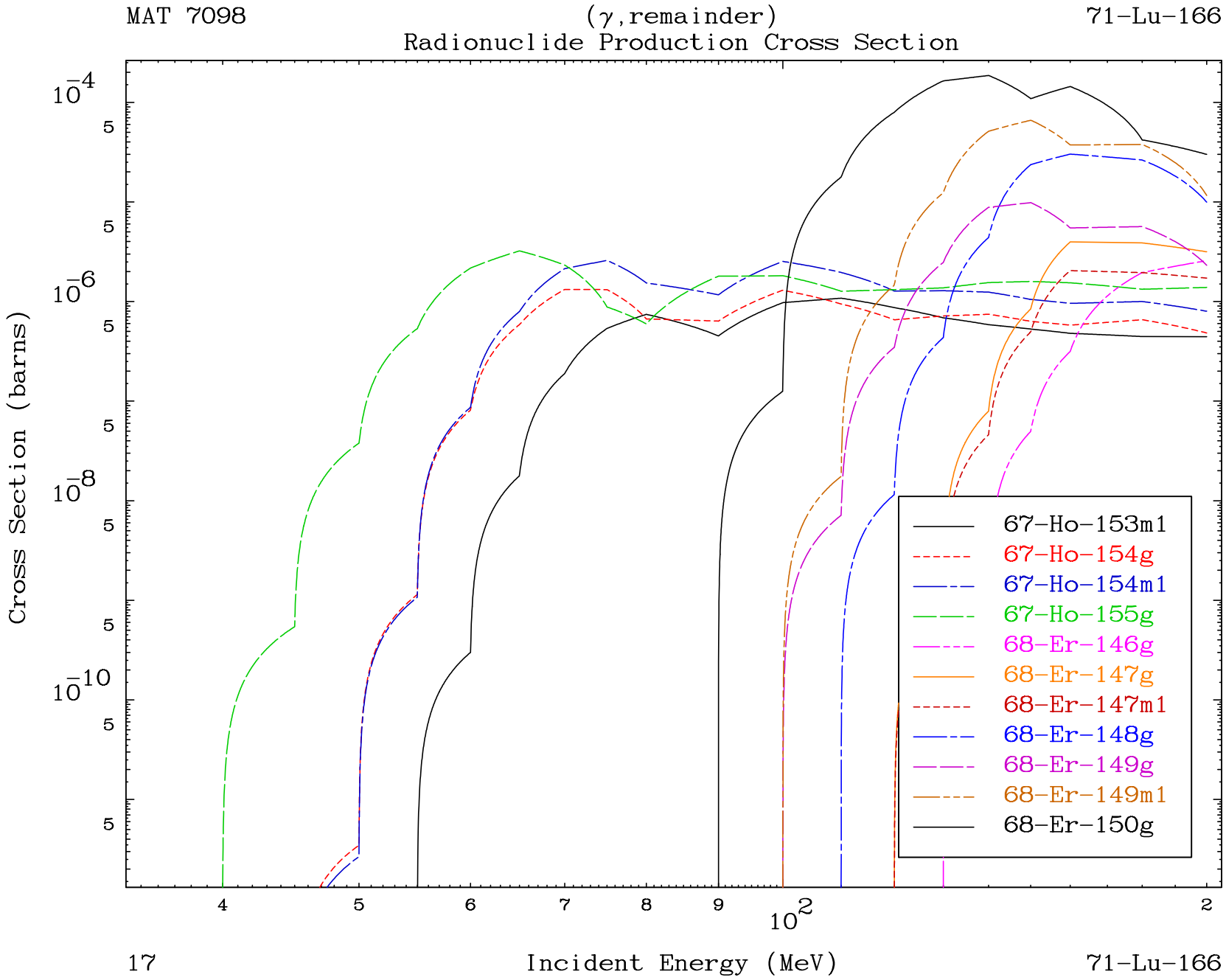

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
100
120
140
160
180
200
Incident Energy (MeV)
63-Eu-139g
63-Eu-140g
63-Eu-141g
63-Eu-141m1
64-Gd-139g
64-Gd-139m1
64-Gd-140g
64-Gd-141g
64-Gd-141m1
64-Gd-142g
64-Gd-143g
12
71-Lu-166


MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-6
10-8
10-10
10-12
100
120
140
160
180
200
Incident Energy (MeV)
64-Gd-143m1
64-Gd-144g
65-Tb-140g
65-Tb-141g
65-Tb-141m1
65-Tb-142g
65-Tb-142m1
65-Tb-143g
65-Tb-143m1
65-Tb-144g
65-Tb-144m1

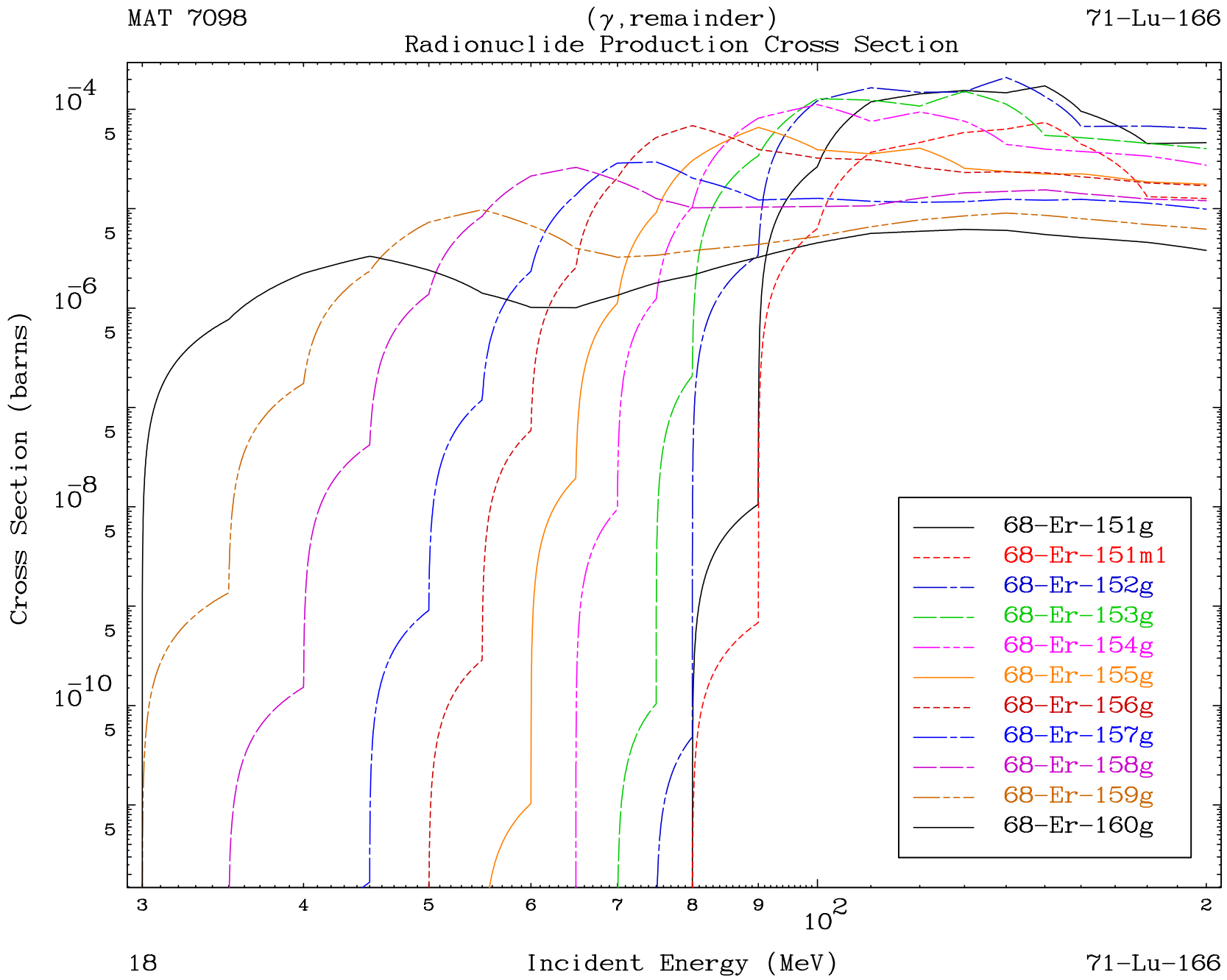

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-6
10-8
10-10
10-12
80
100
120
140
160
180
200
Incident Energy (MeV)
65-Tb-145g
65-Tb-146g
65-Tb-146m1
65-Tb-147g
65-Tb-147m1
66-Dy-142g
66-Dy-143g
66-Dy-143m1
66-Dy-144g
66-Dy-145g
66-Dy-145m1


MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
10-12
5
80
100
120
140
160
180
200
15
Incident Energy (MeV)
71-Lu-166
66-Dy-146g
66-Dy-146m1
66-Dy-147g
66-Dy-147m1
66-Dy-148g
66-Dy-149g
66-Dy-149m1
66-Dy-150g
67-Ho-145g
67-Ho-146g
67-Ho-147g

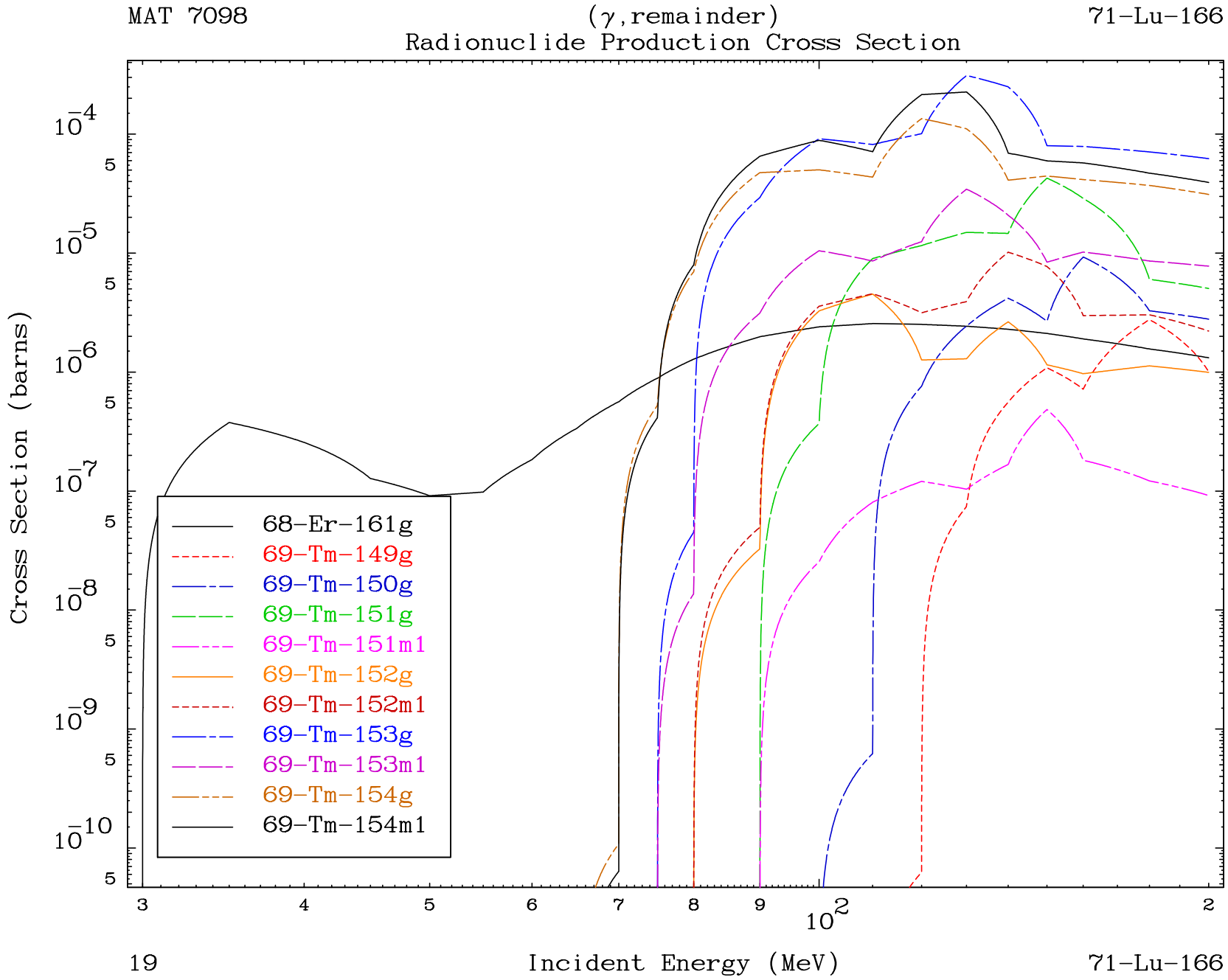

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
5
10-6
5
10-8
5
10-10
5
5
50
100
150
200
16
Incident Energy (MeV)
71-Lu-166
67-Ho-148g
67-Ho-148m1
67-Ho-149g
67-Ho-149m1
67-Ho-150g
67-Ho-150m1
67-Ho-151g
67-Ho-151m1
67-Ho-152g
67-Ho-152m1
67-Ho-153g

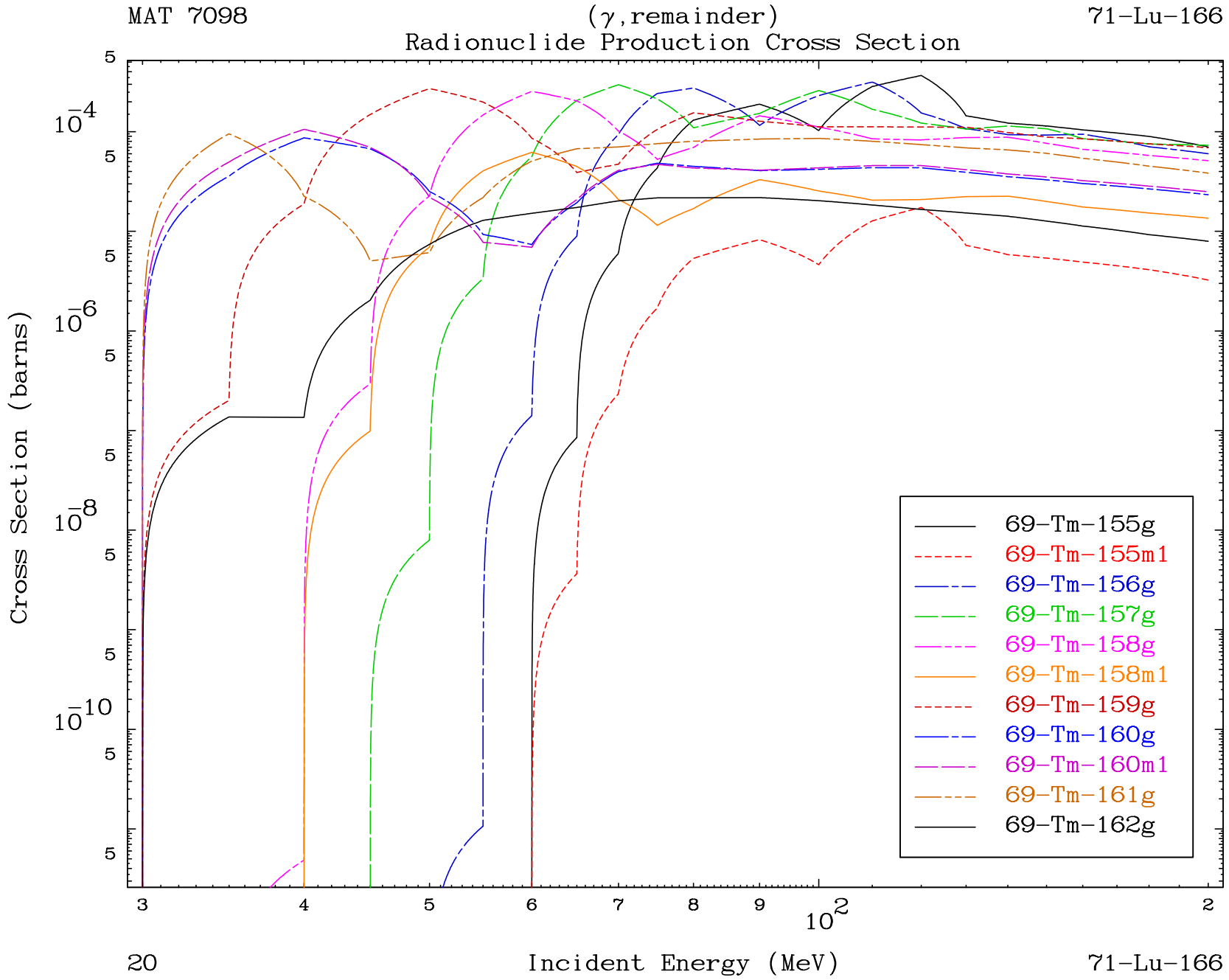

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
5
4
6
7
8
9
10 2
2
Incident Energy (MeV)
67-Ho-153m1
67-Ho-154g
67-Ho-154m1
67-Ho-155g
68-Er-146g
68-Er-147g
68-Er-147m1
68-Er-148g
68-Er-149g
68-Er-149m1
68-Er-150g

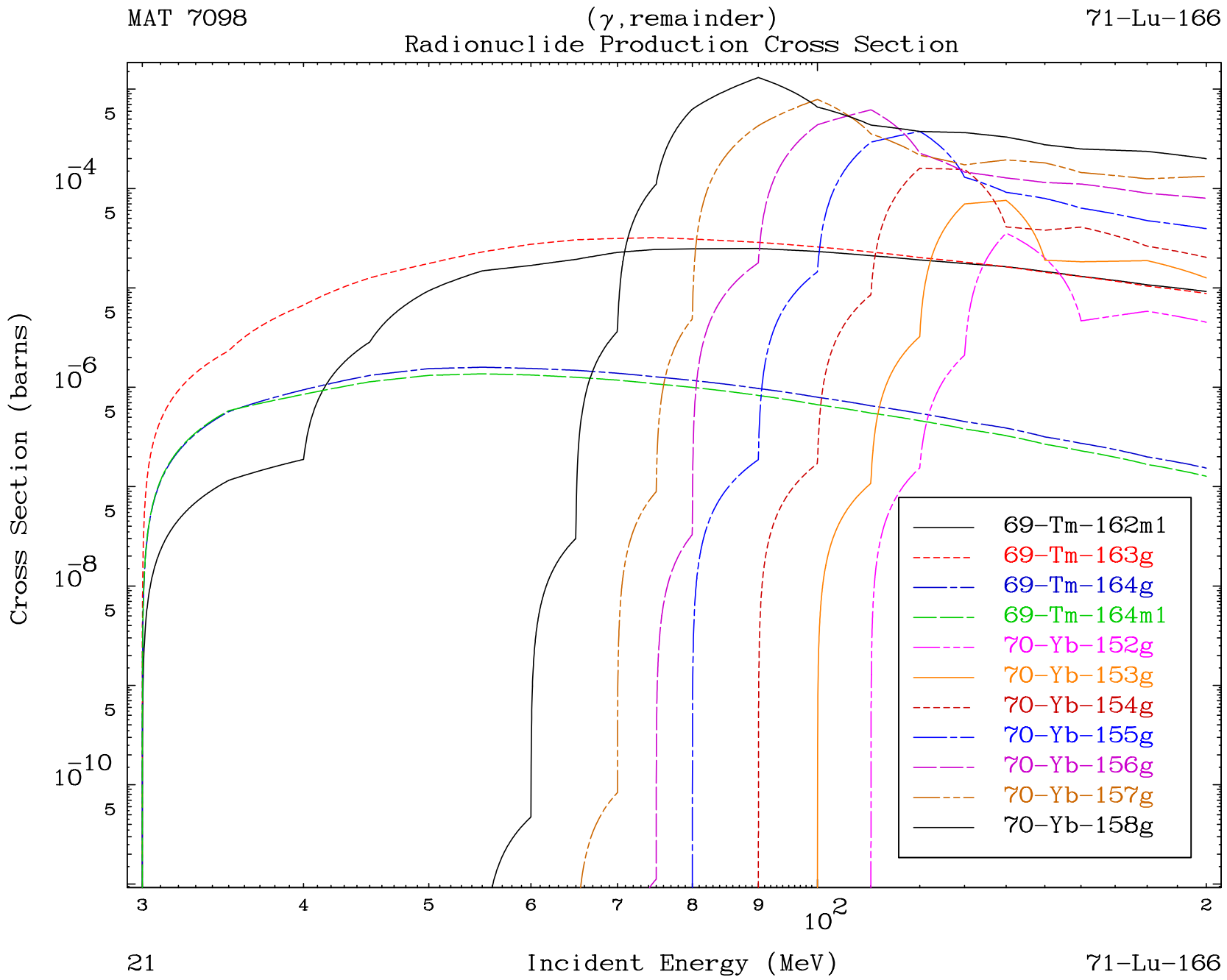
71-Lu-166

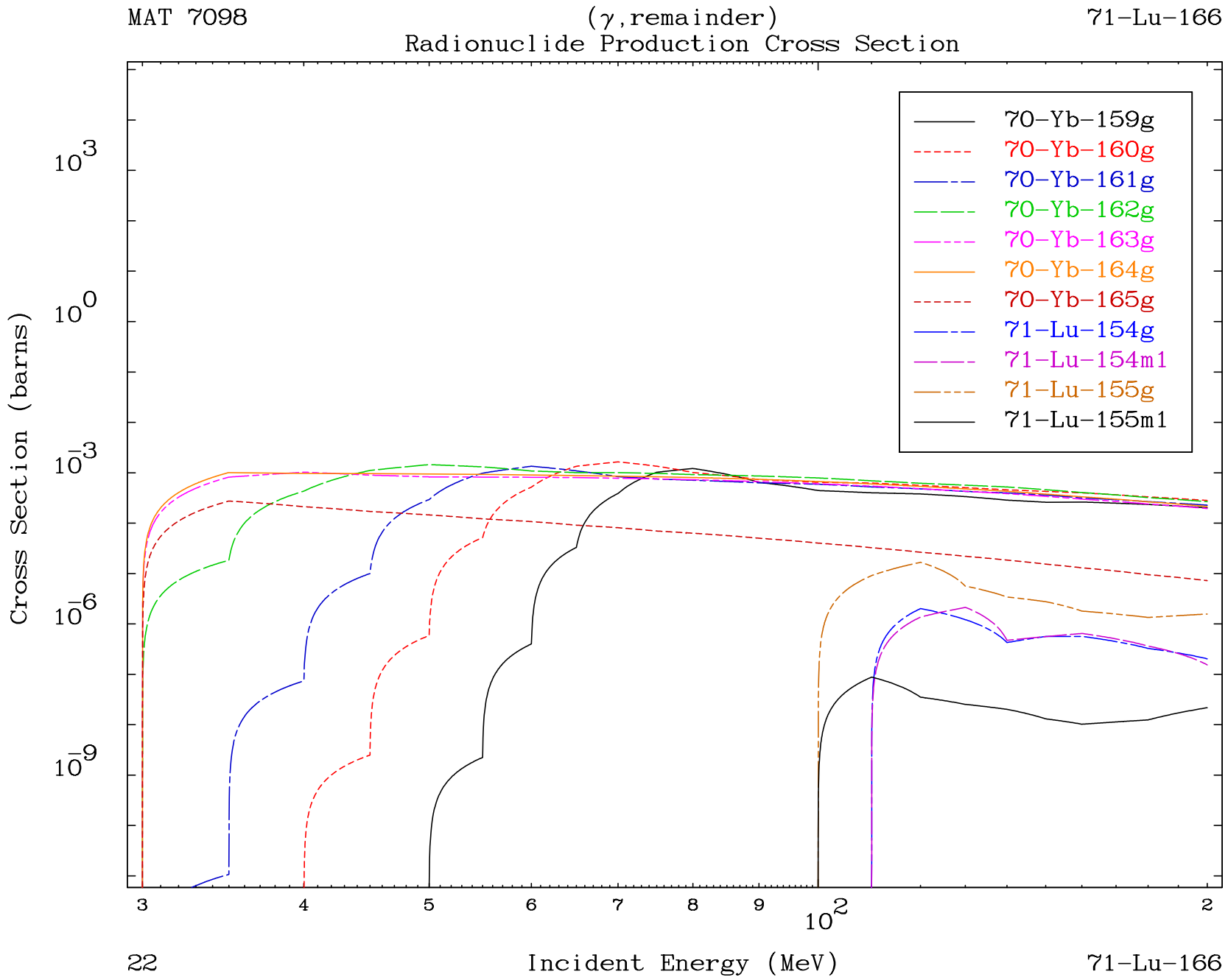

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
68-Er-151g
68-Er-151m1
68-Er-152g
68-Er-153g
68-Er-154g
68-Er-155g
68-Er-156g
68-Er-157g
68-Er-158g
68-Er-159g
68-Er-160g

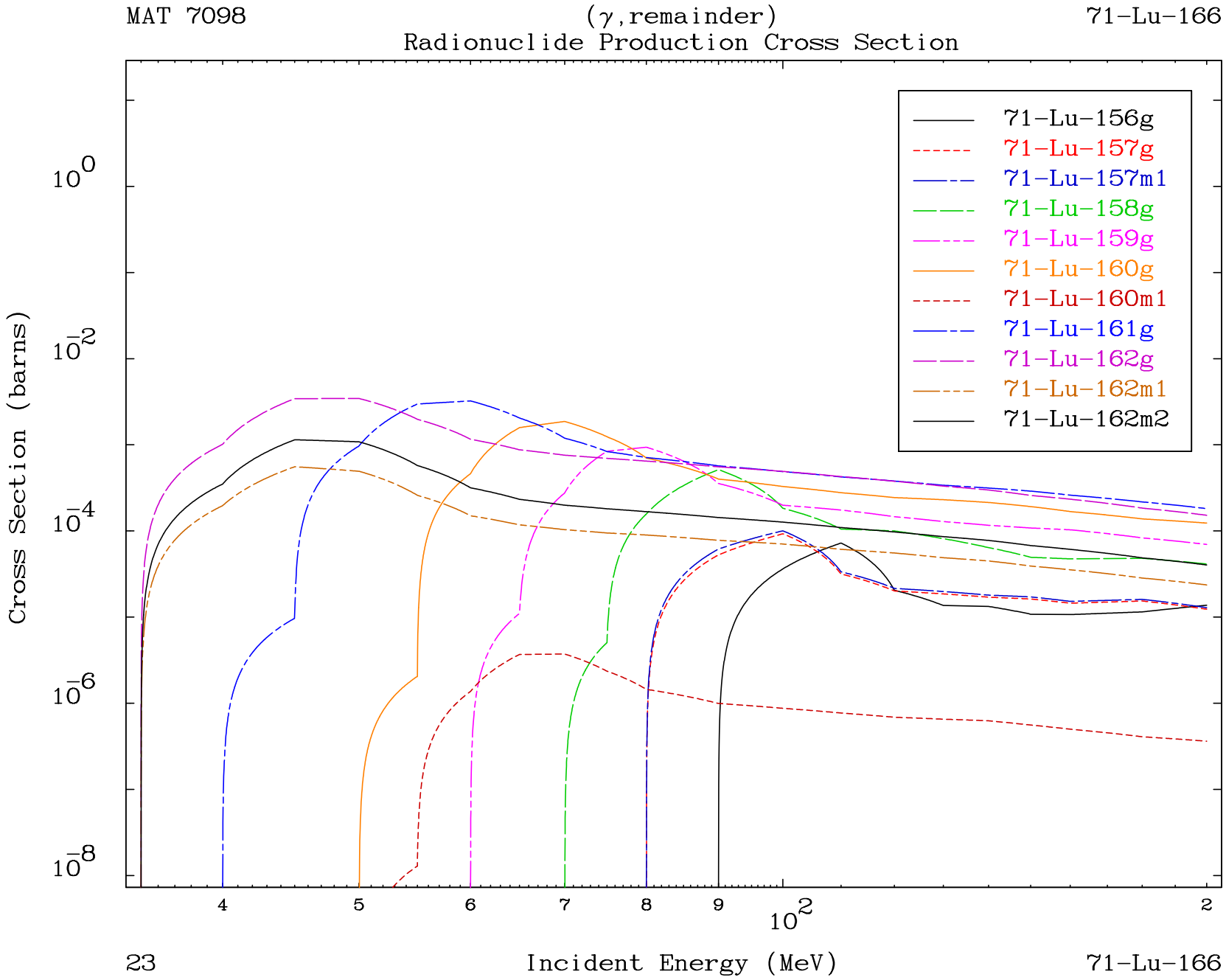
71-Lu-166

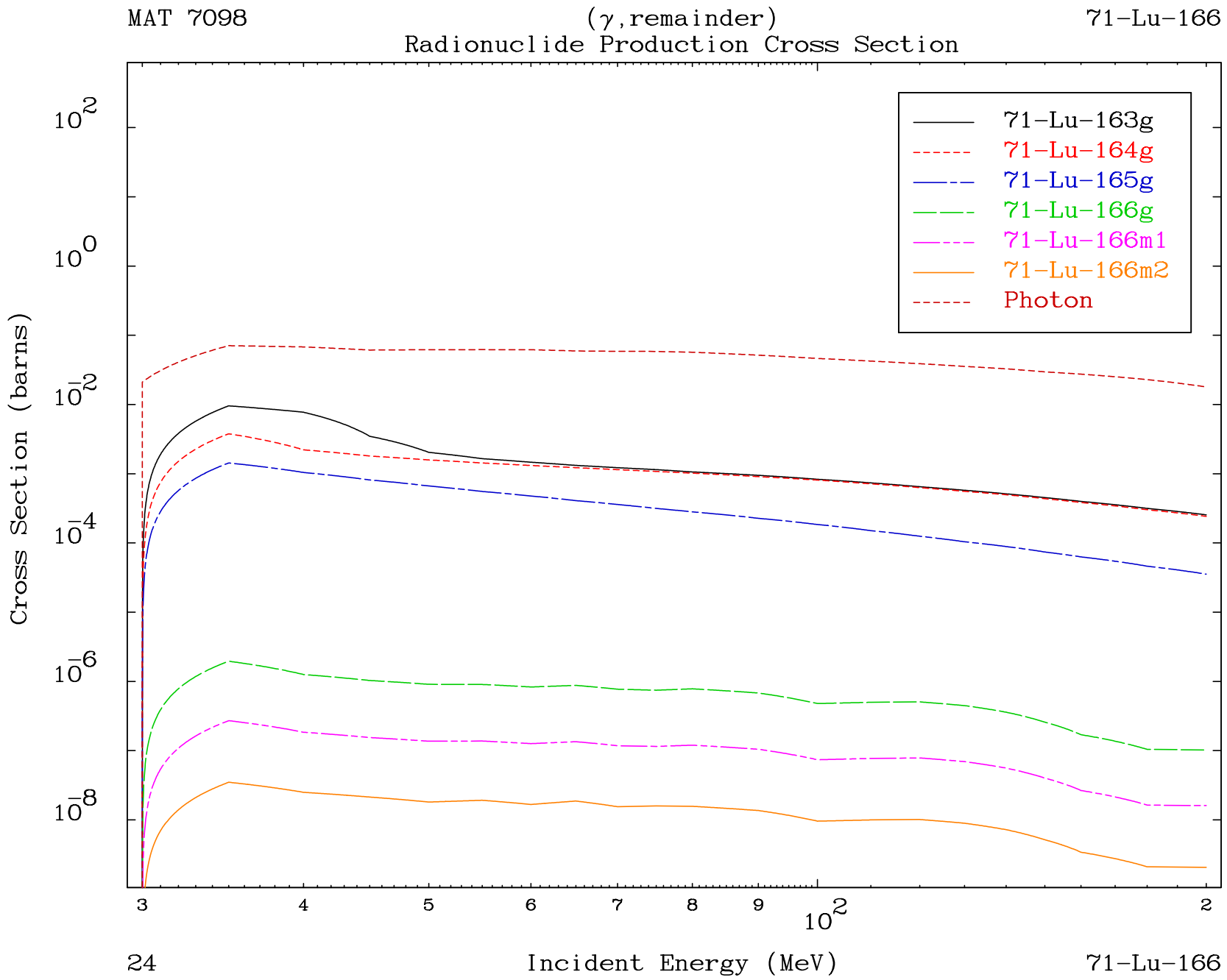

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-5
10-6
10-7
10-8
10-9
10-10
5
3
4
5
6
7
8
9
10 2
2
68-Er-161g
69-Tm-149g
69-Tm-150g
69-Tm-151g
69-Tm-151m1
69-Tm-152g
69-Tm-152m1
69-Tm-153g
69-Tm-153m1
69-Tm-154g
69-Tm-154m1
19
Incident Energy (MeV)
71-Lu-166

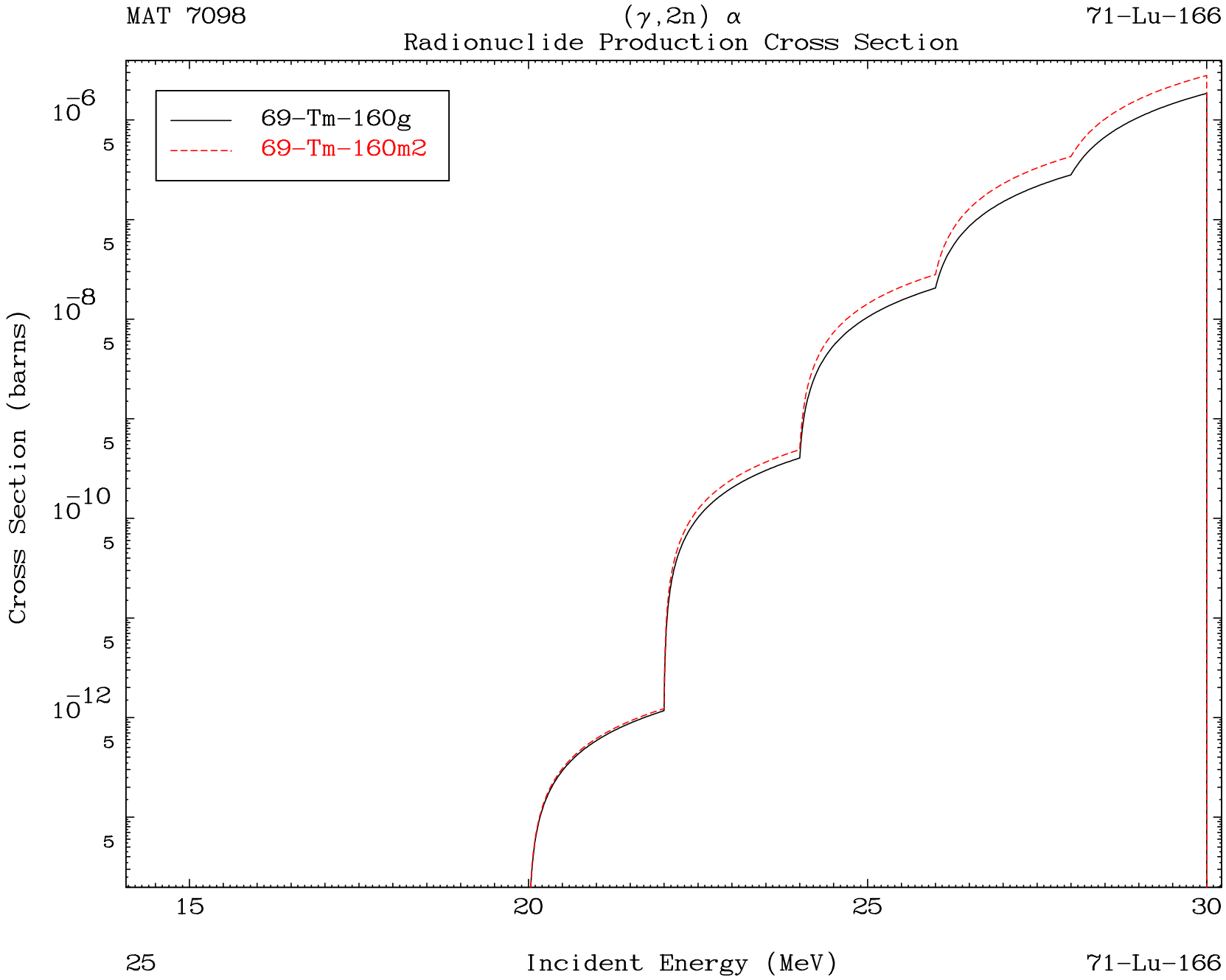

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
20
71-Lu-166
69-Tm-155g
69-Tm-155m1
69-Tm-156g
69-Tm-157g
69-Tm-158g
69-Tm-158m1
69-Tm-159g
69-Tm-160g
69-Tm-160m1
69-Tm-161g
69-Tm-162g

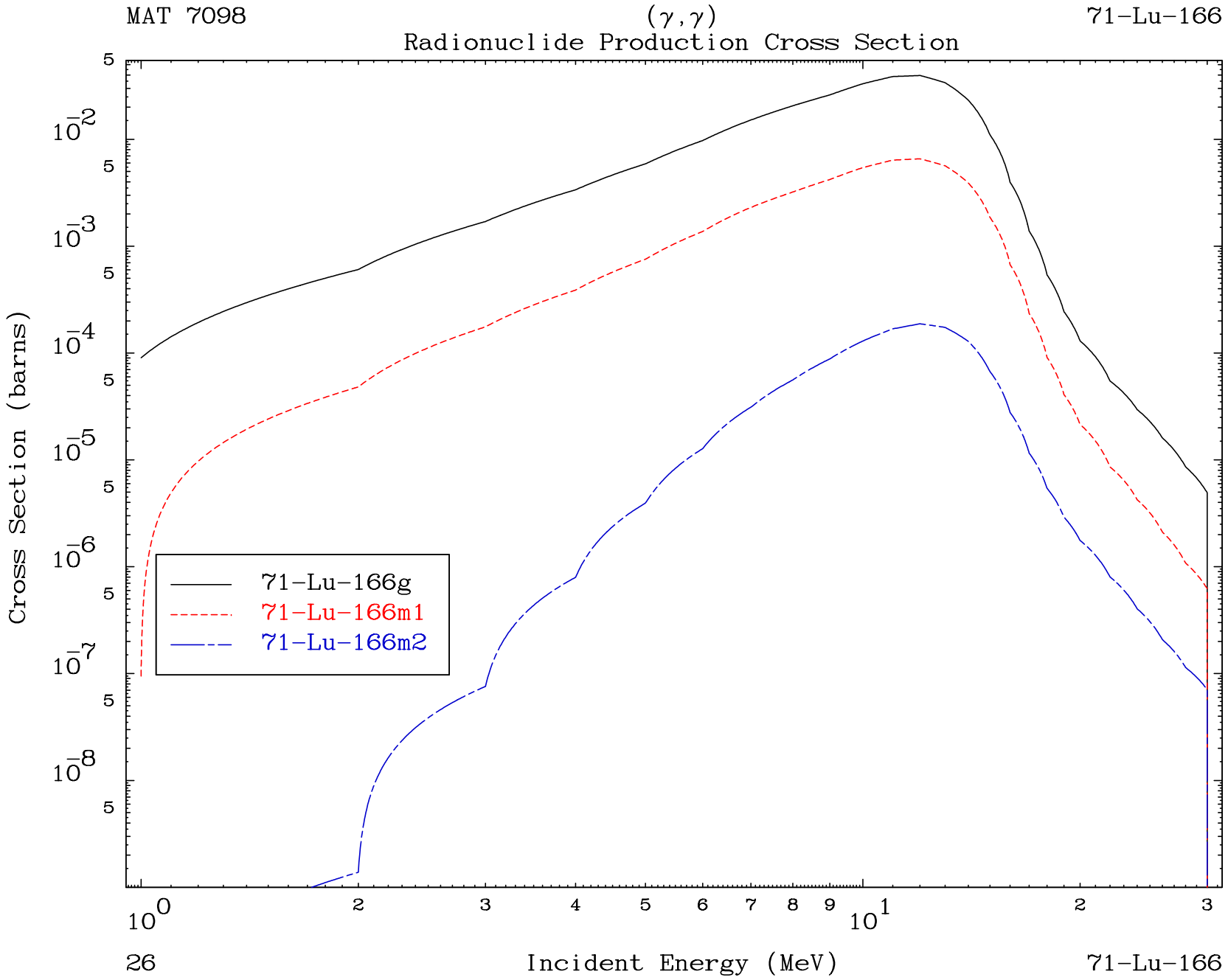

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
69-Tm-162m1
69-Tm-163g
69-Tm-164g
69-Tm-164m1
70-Yb-152g
70-Yb-153g
70-Yb-154g
70-Yb-155g
70-Yb-156g
70-Yb-157g
70-Yb-158g
21
71-Lu-166

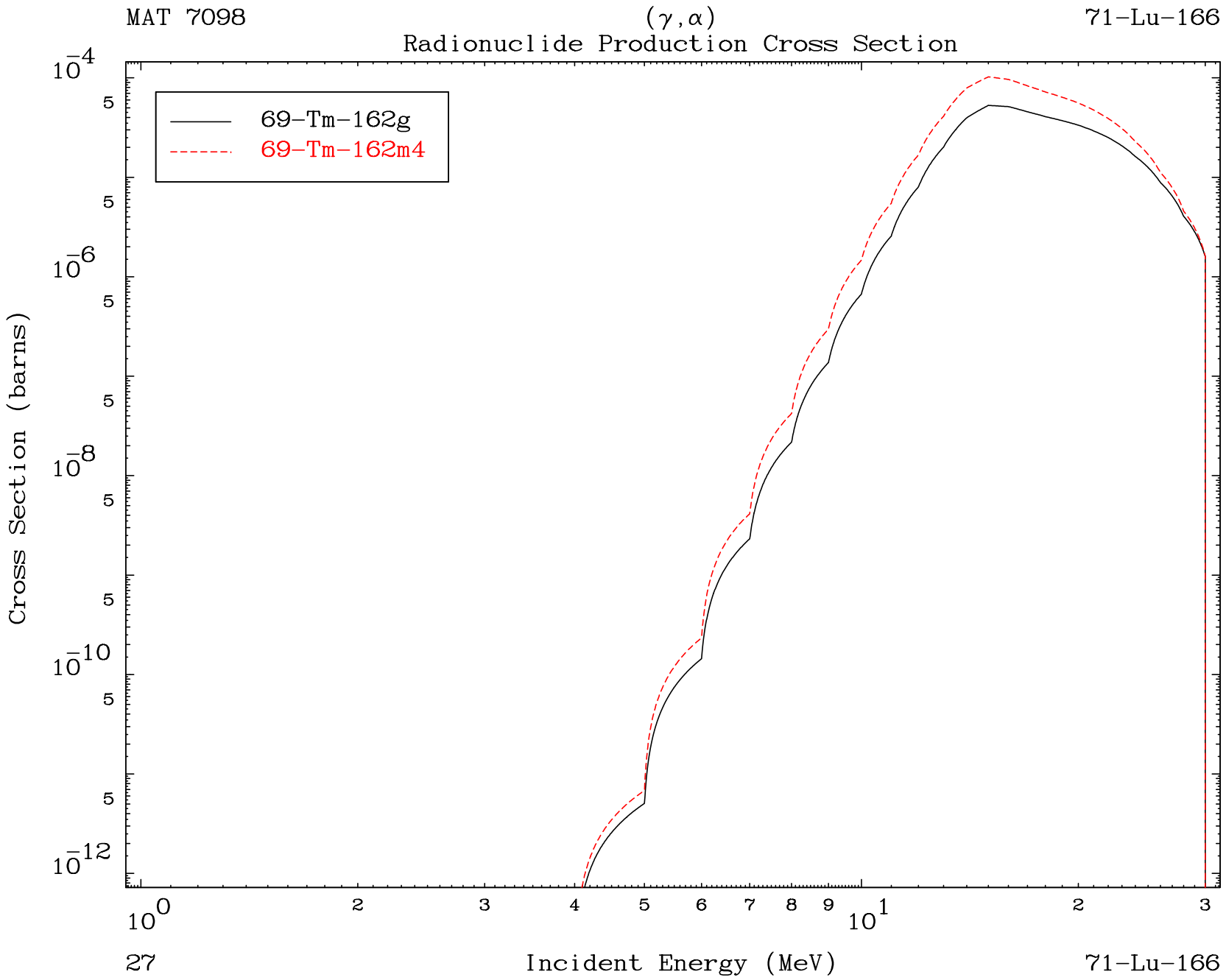

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
70-Yb-159g
70-Yb-160g
70-Yb-161g
70-Yb-162g
70-Yb-163g
70-Yb-164g
70-Yb-165g
71-Lu-154g
71-Lu-154m1
71-Lu-155g
71-Lu-155m1
Cross Section (barns)
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
71-Lu-166

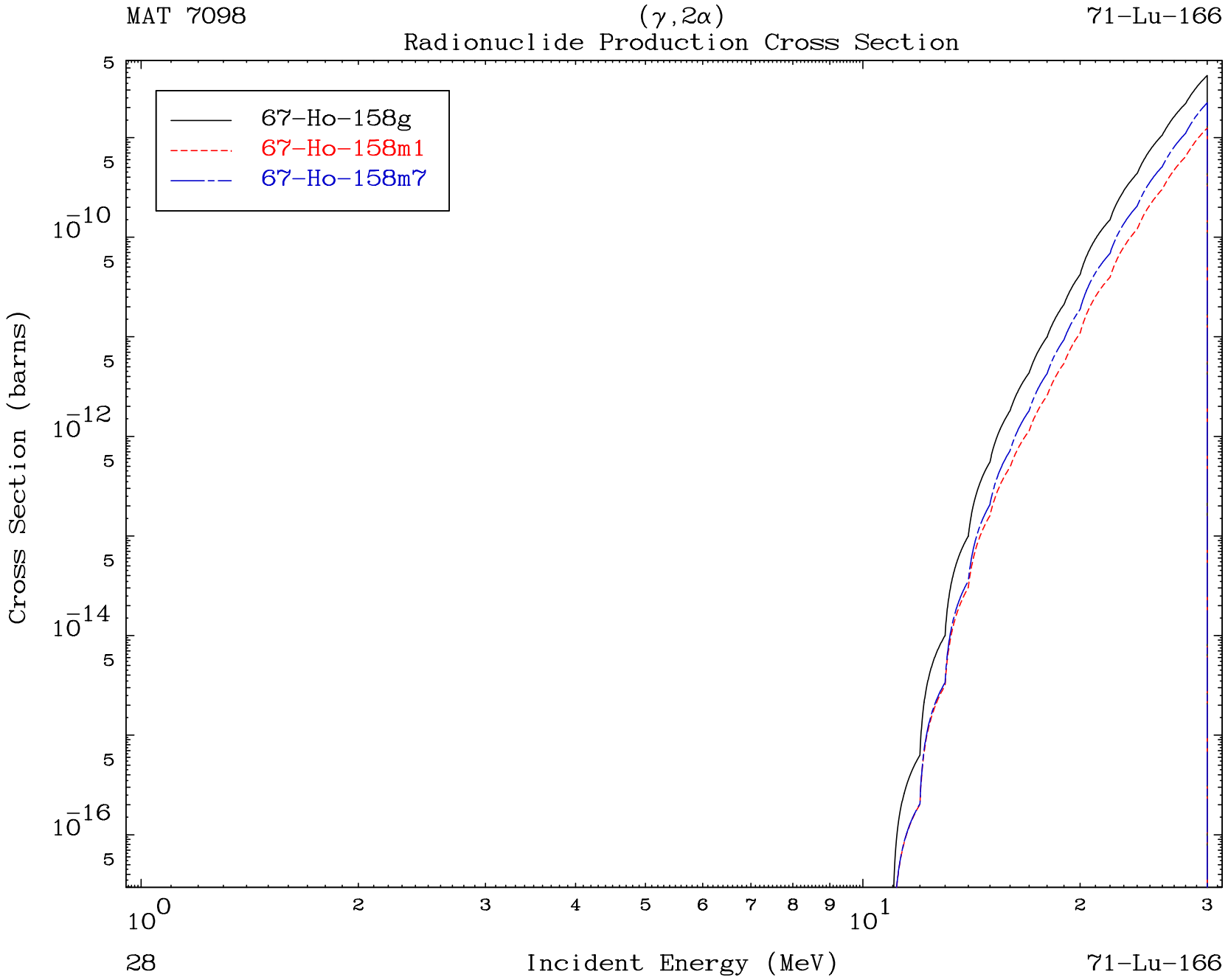

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
71-Lu-156g
71-Lu-157g
71-Lu-157m1
71-Lu-158g
71-Lu-159g
71-Lu-160g
71-Lu-160m1
71-Lu-161g
71-Lu-162g
71-Lu-162m1
71-Lu-162m2
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
4
5
6
7
8
9
10^2
2
23
Incident Energy (MeV)
71-Lu-166

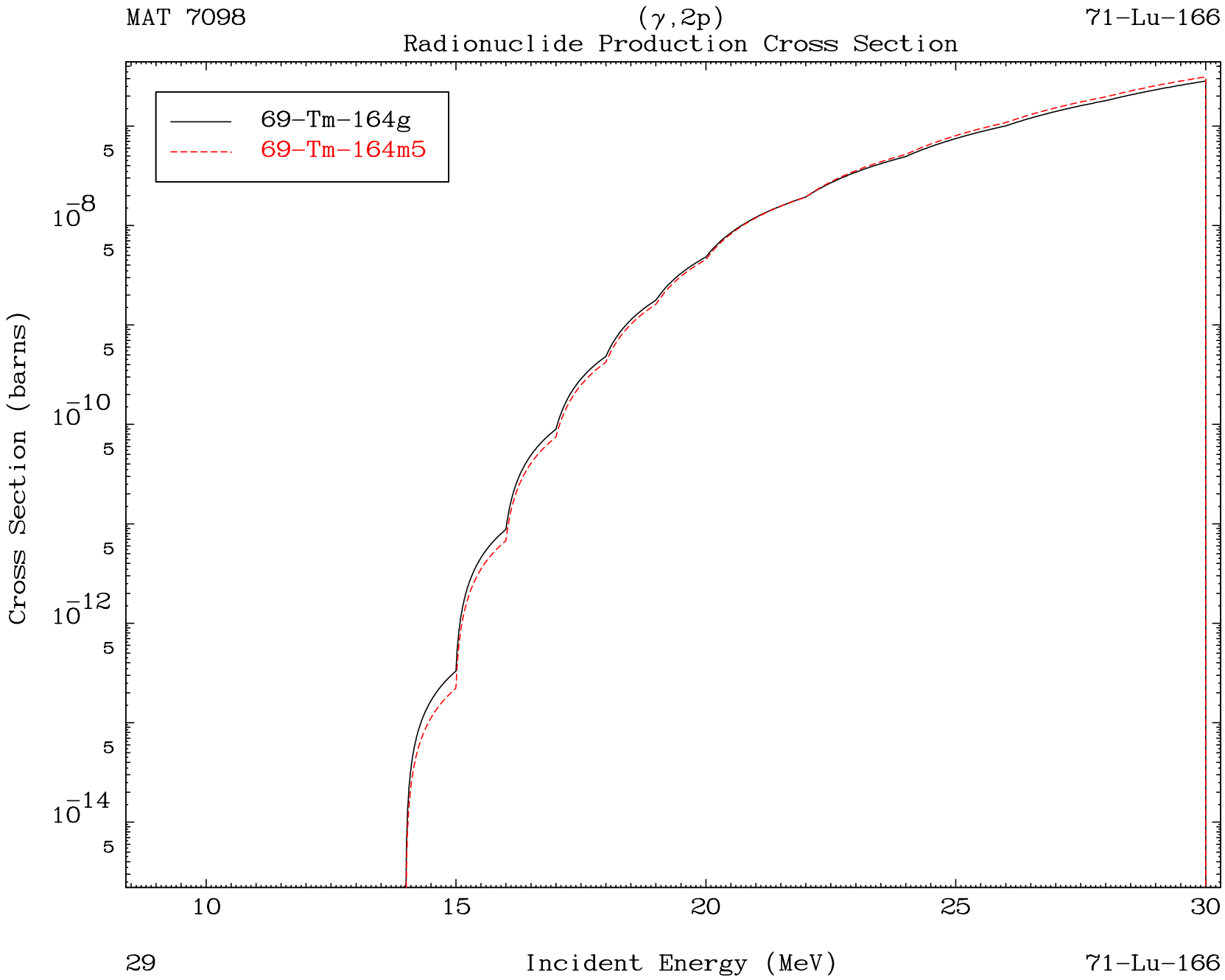

MAT 7098
(γ,remainder)
71-Lu-166
Radionuclide Production Cross Section
71-Lu-163g
71-Lu-164g
71-Lu-165g
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
Photon
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
71-Lu-166


MAT 7098
(γ,2n) α
71-Lu-166
Radionuclide Production Cross Section
69-Tm-160g
69-Tm-160m2
Cross Section (barns)
10-6
10-8
10-10
10-12
5
15
20
25
30
25
Incident Energy (MeV)
71-Lu-166


MAT 7098
(γ,γ)
71-Lu-166
Radionuclide Production Cross Section
Cross Section (barns)
71-Lu-166g
71-Lu-166m1
71-Lu-166m2
Incident Energy (MeV)
26
71-Lu-166


MAT 7098
(γ,α)
71-Lu-166
Radionuclide Production Cross Section
69-Tm-162g
69-Tm-162m4
Cross Section (barns)
Incident Energy (MeV)
27
71-Lu-166


MAT 7098
(γ,2α)
71-Lu-166
Radionuclide Production Cross Section
67-Ho-158g
67-Ho-158m1
67-Ho-158m7
Cross Section (barns)
Incident Energy (MeV)
28
71-Lu-166


MAT 7098
(γ,2p)
71-Lu-166
Radionuclide Production Cross Section
69-Tm-164g
69-Tm-164m5
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
10
15
20
25
30
29
Incident Energy (MeV)
71-Lu-166