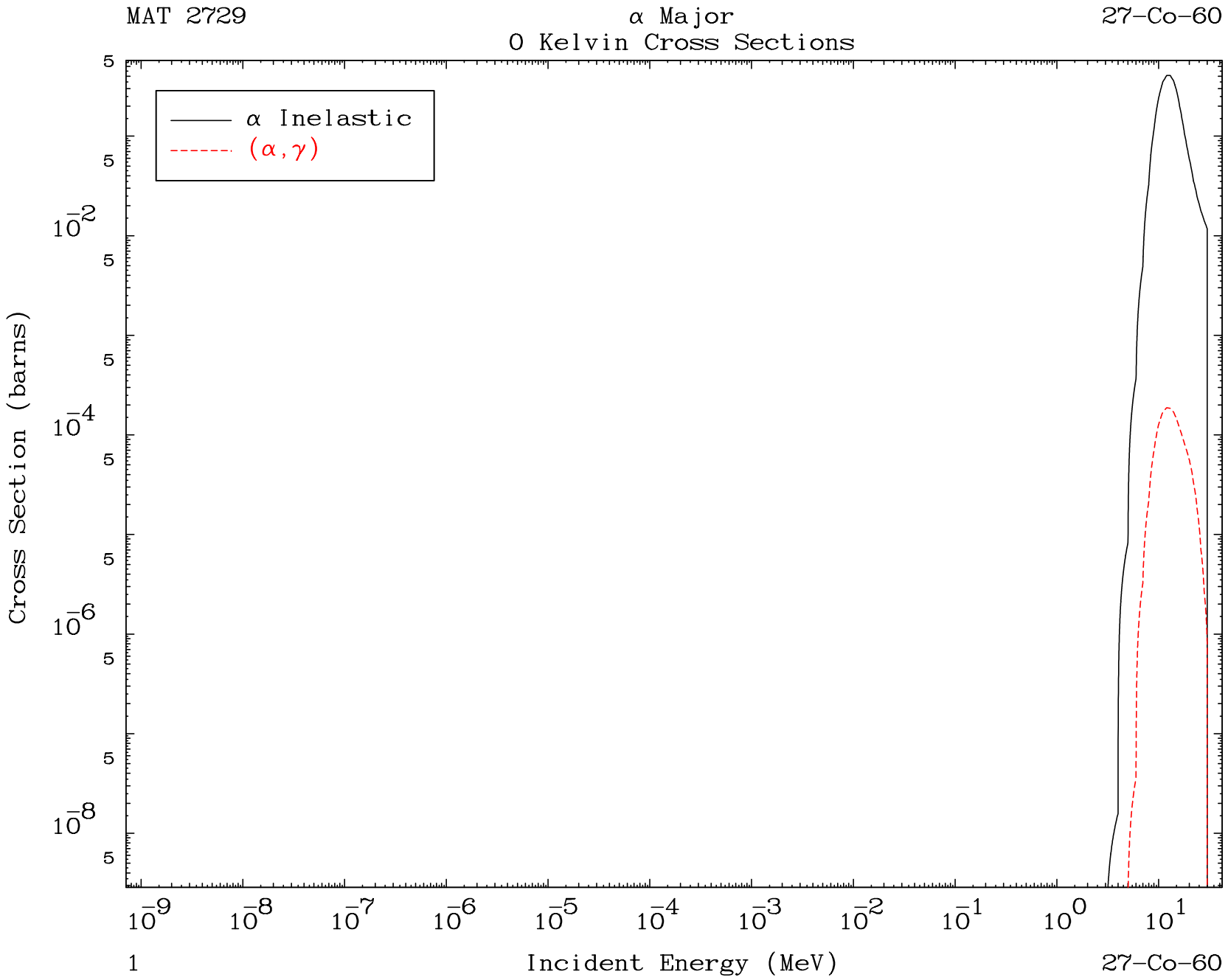
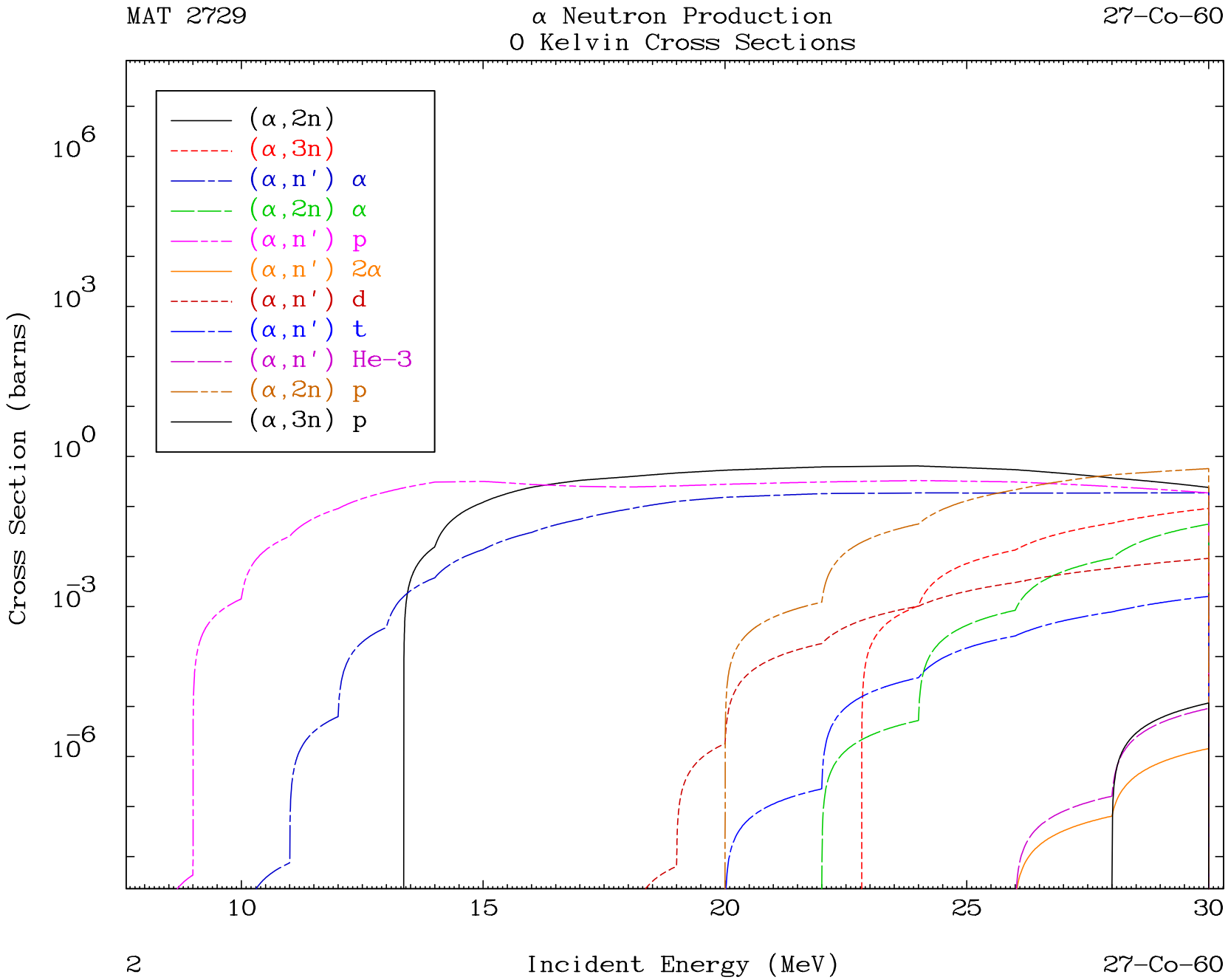
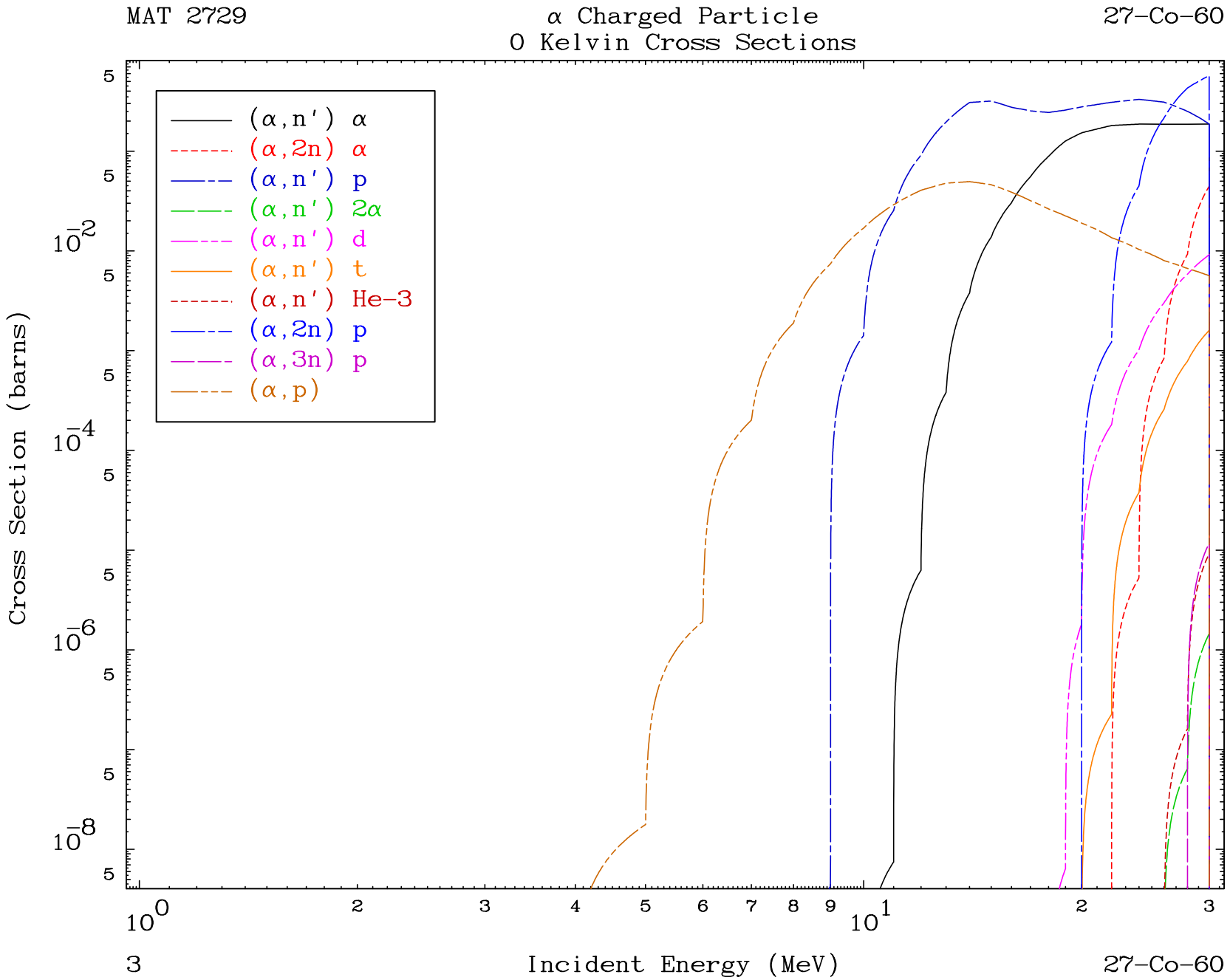
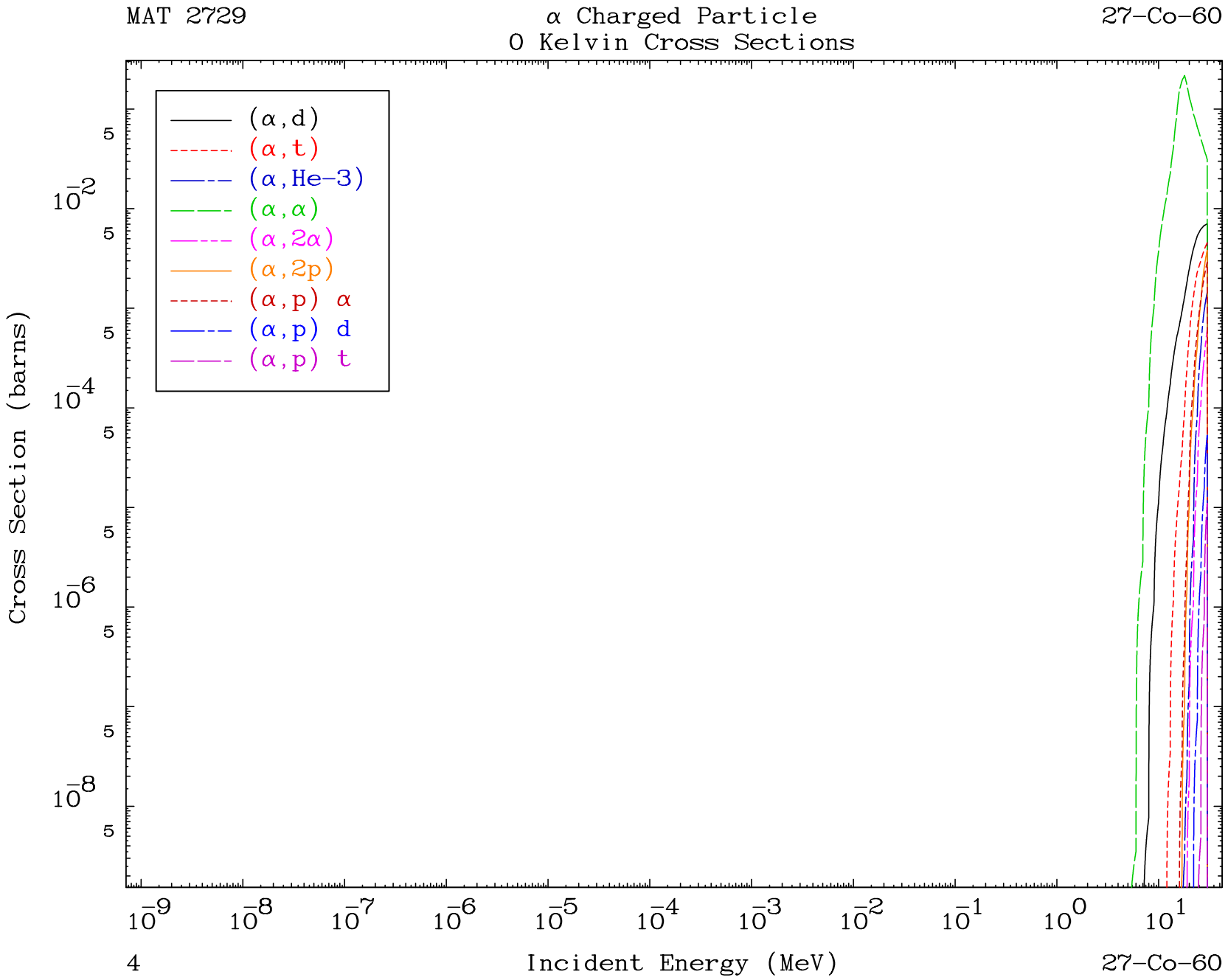
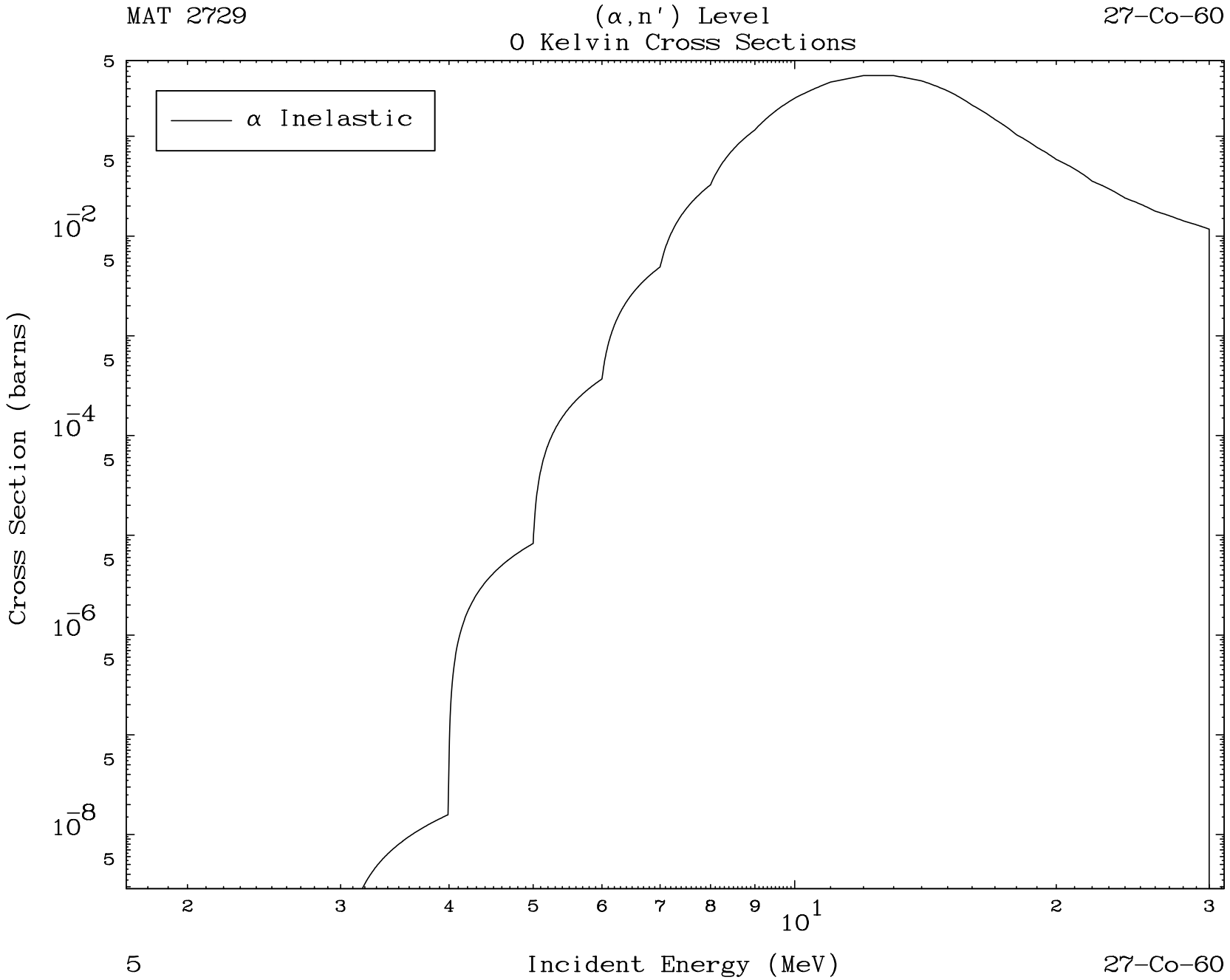
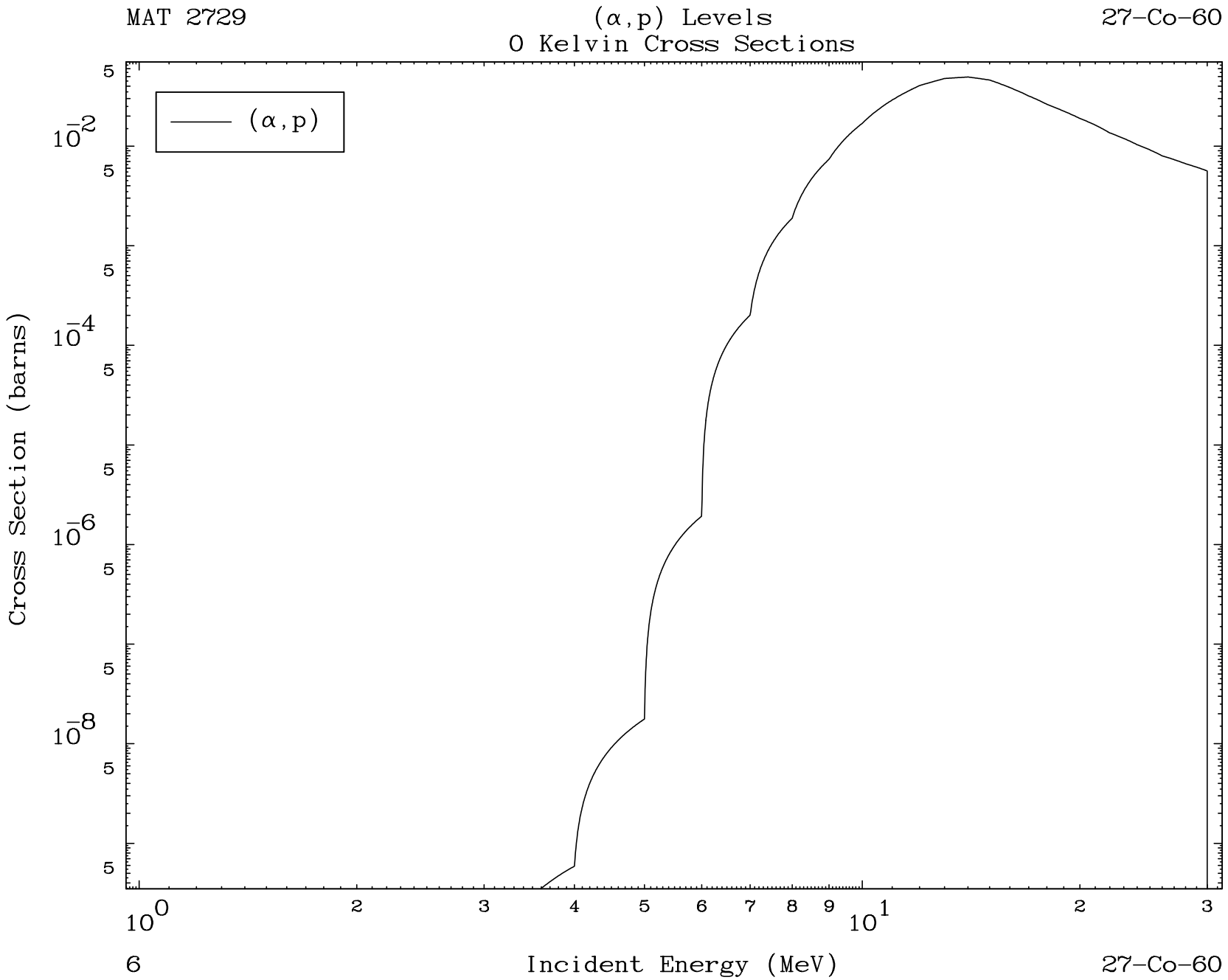

MAT 2729
α Major
27-Co-60
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
27-Co-60

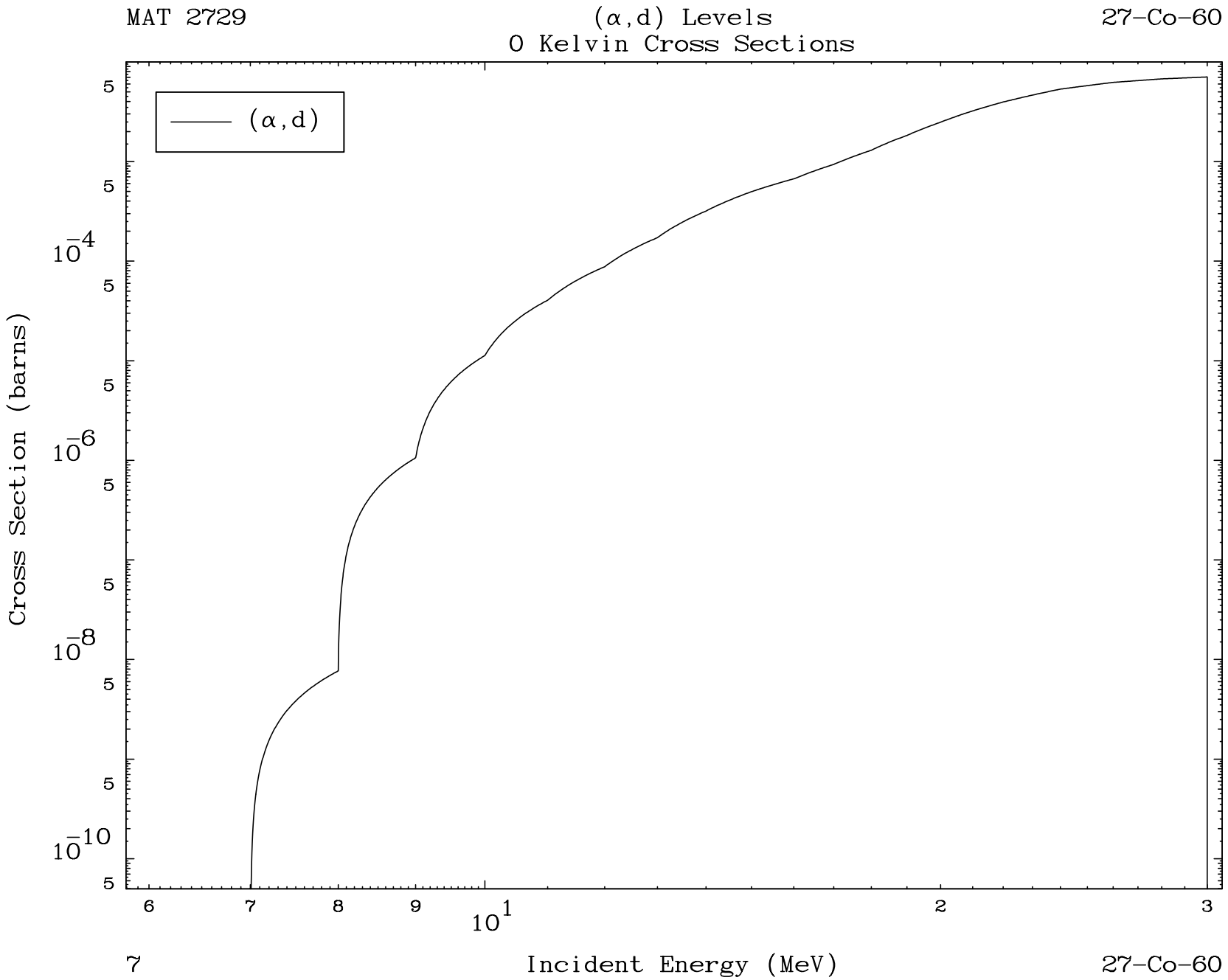

MAT 2729
α Neutron Production
0 Kelvin Cross Sections
27-Co-60
(α,2n)
(α,3n)
(α,n') α
(α,2n) α
(α,n') p
(α,n') 2α
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
(α,3n) p
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10
15
20
25
30
2
Incident Energy (MeV)
27-Co-60

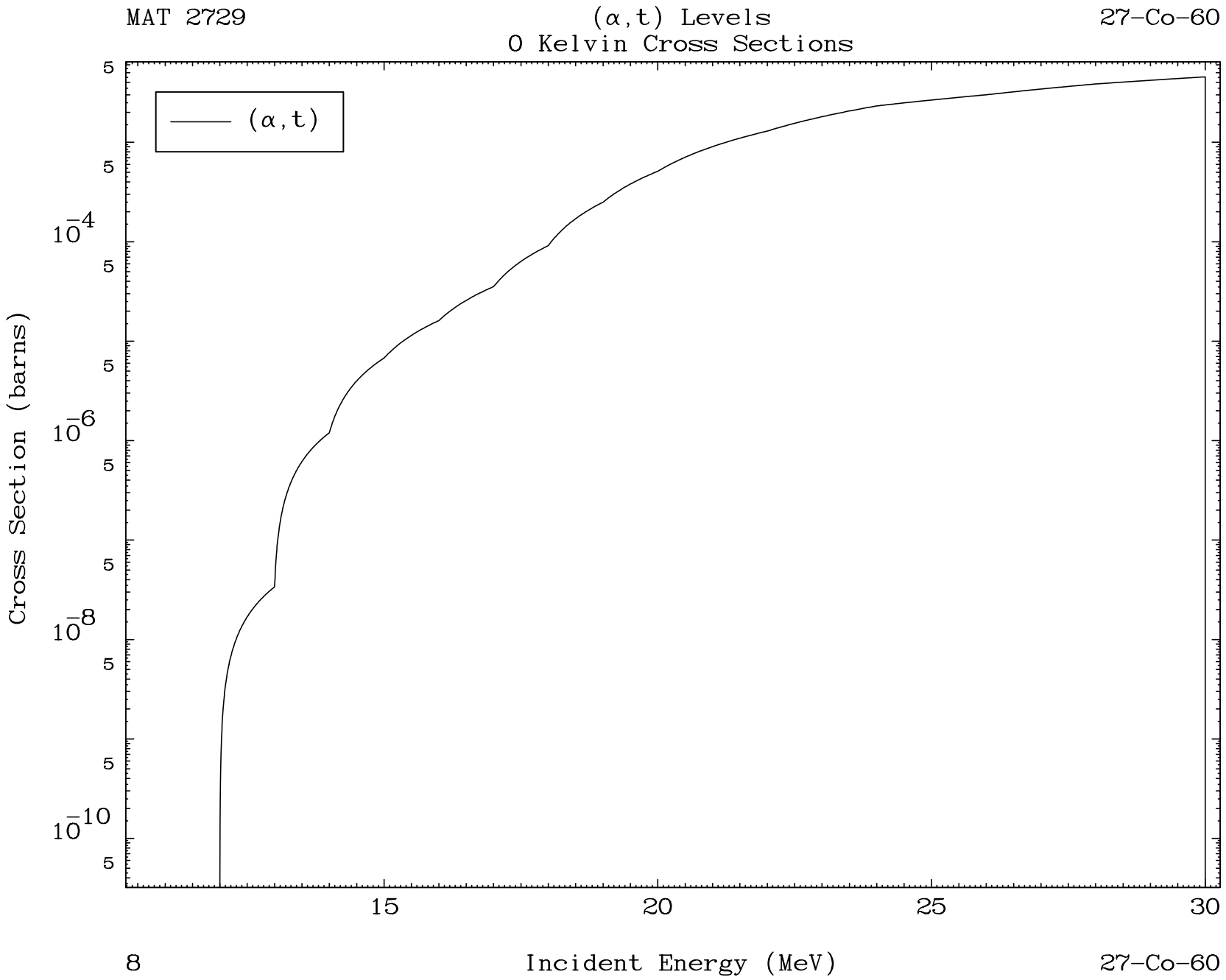

MAT 2729
α Charged Particle
0 Kelvin Cross Sections
27-Co-60
(α,n') α
(α,2n) α
(α,n') p
(α,n') 2α
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
(α,3n) p
(α,p)
Cross Section (barns)
Incident Energy (MeV)
27-Co-60

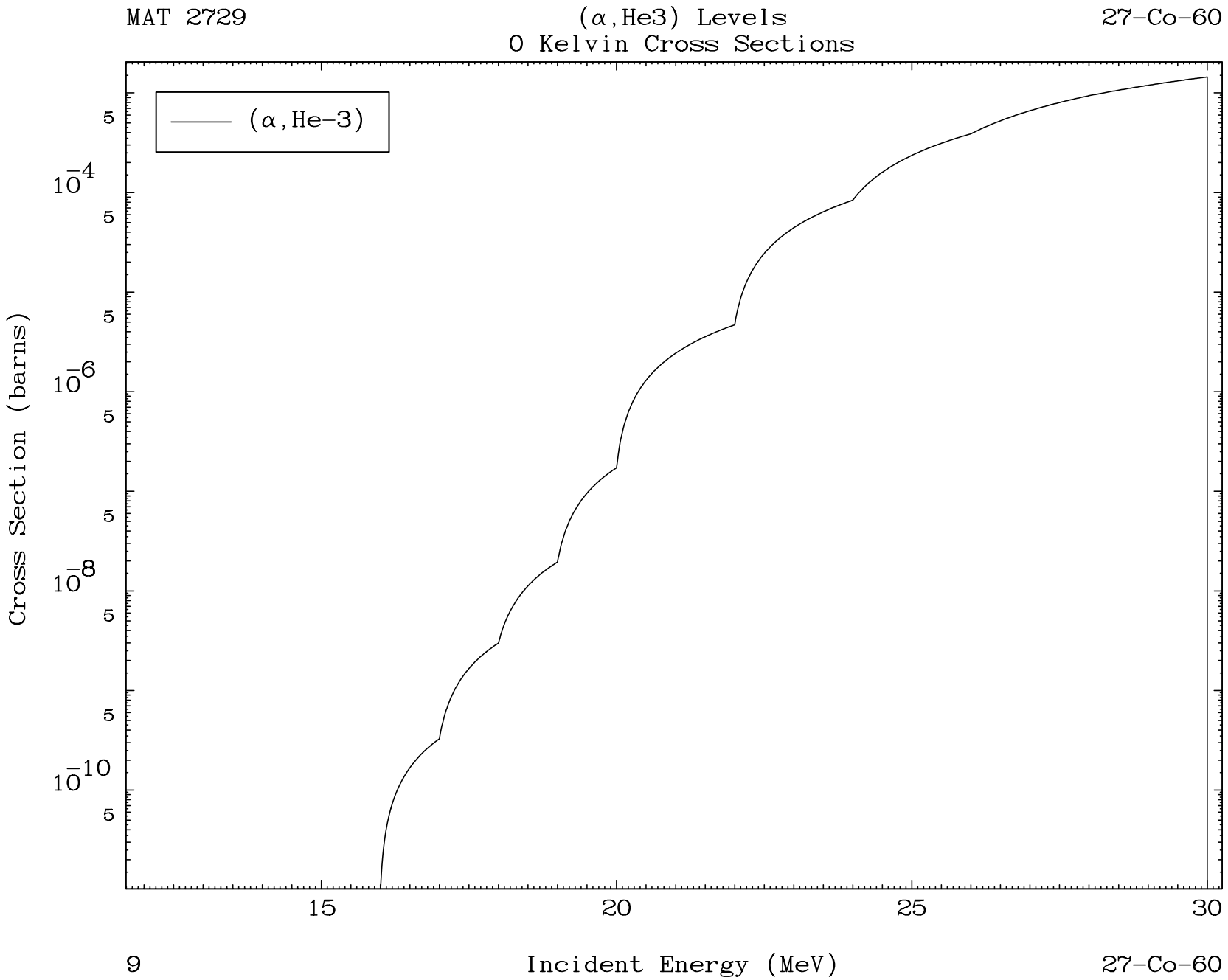

MAT 2729
α Charged Particle
0 Kelvin Cross Sections
27-Co-60
(α,d)
(α,t)
(α,He-3)
(α,α)
(α,2α)
(α,2p)
(α,p) α
(α,p) d
(α,p) t
Cross Section (barns)
Incident Energy (MeV)
4
27-Co-60

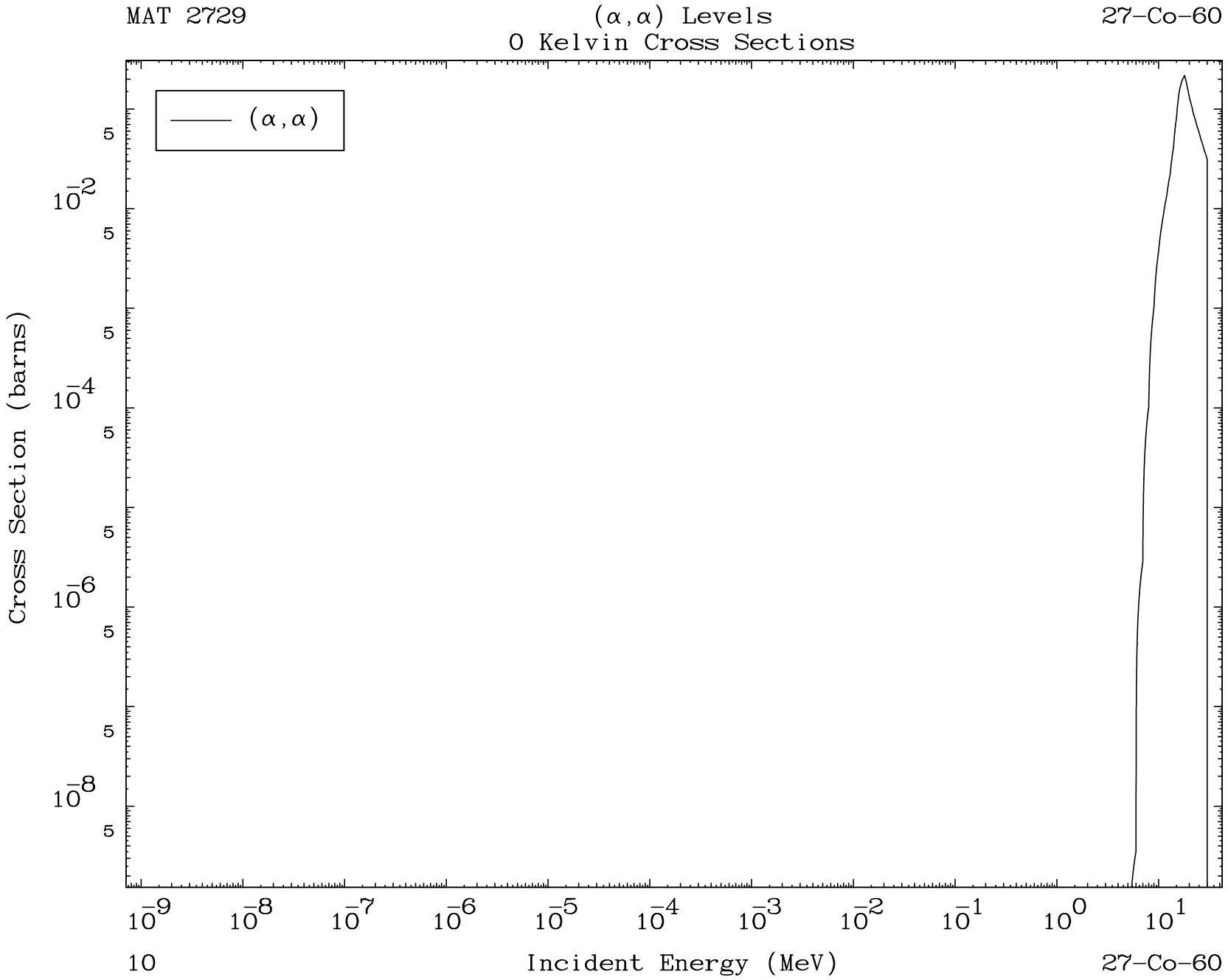

MAT 2729
(α,n') Level
27-Co-60
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
2
3
4
5
6
7
8
9
10 1
2
3
5
Incident Energy (MeV)
27-Co-60

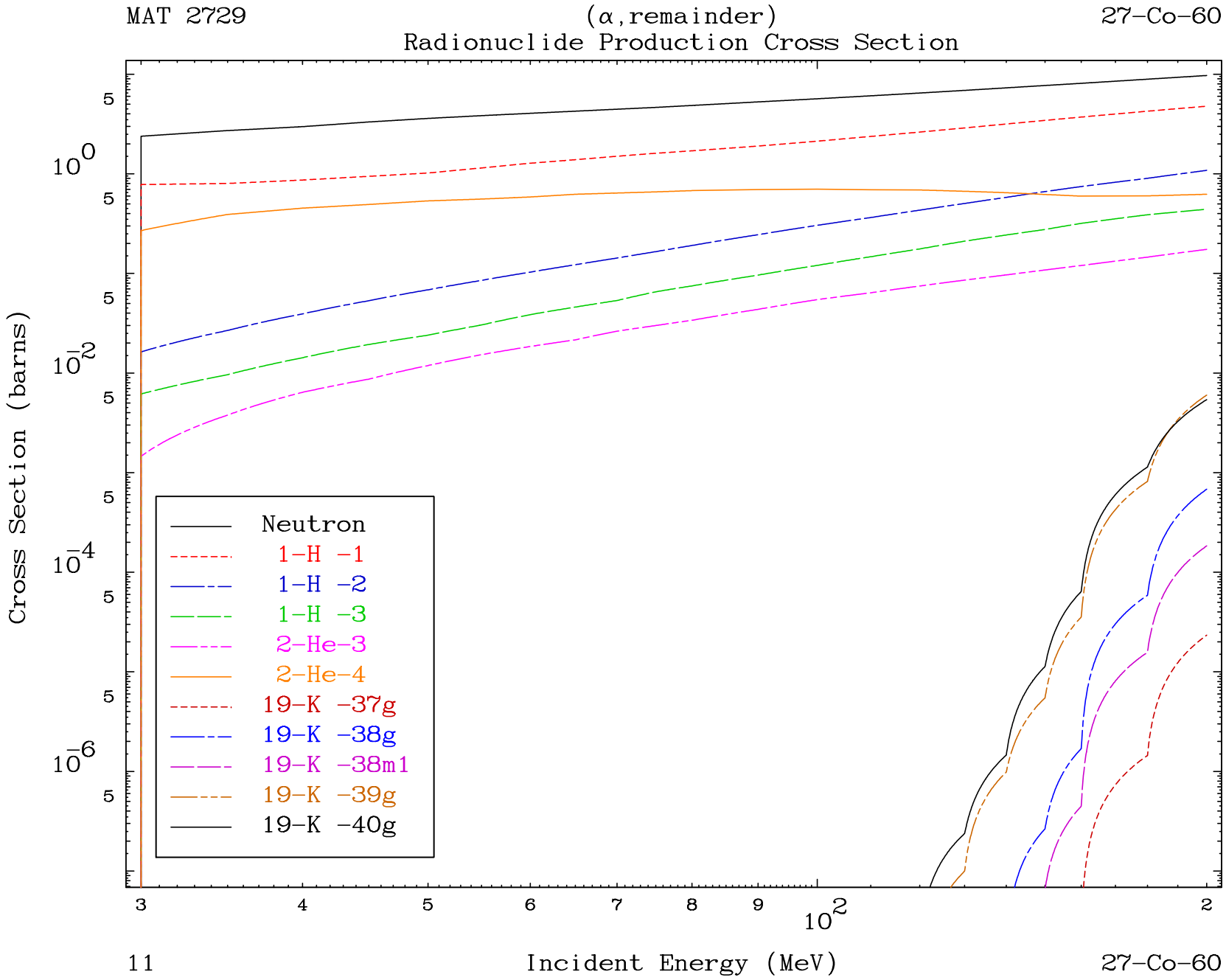

MAT 2729
(α,p) Levels
27-Co-60
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
10-2
10-4
10-6
10-8
100
101
Incident Energy (MeV)
27-Co-60

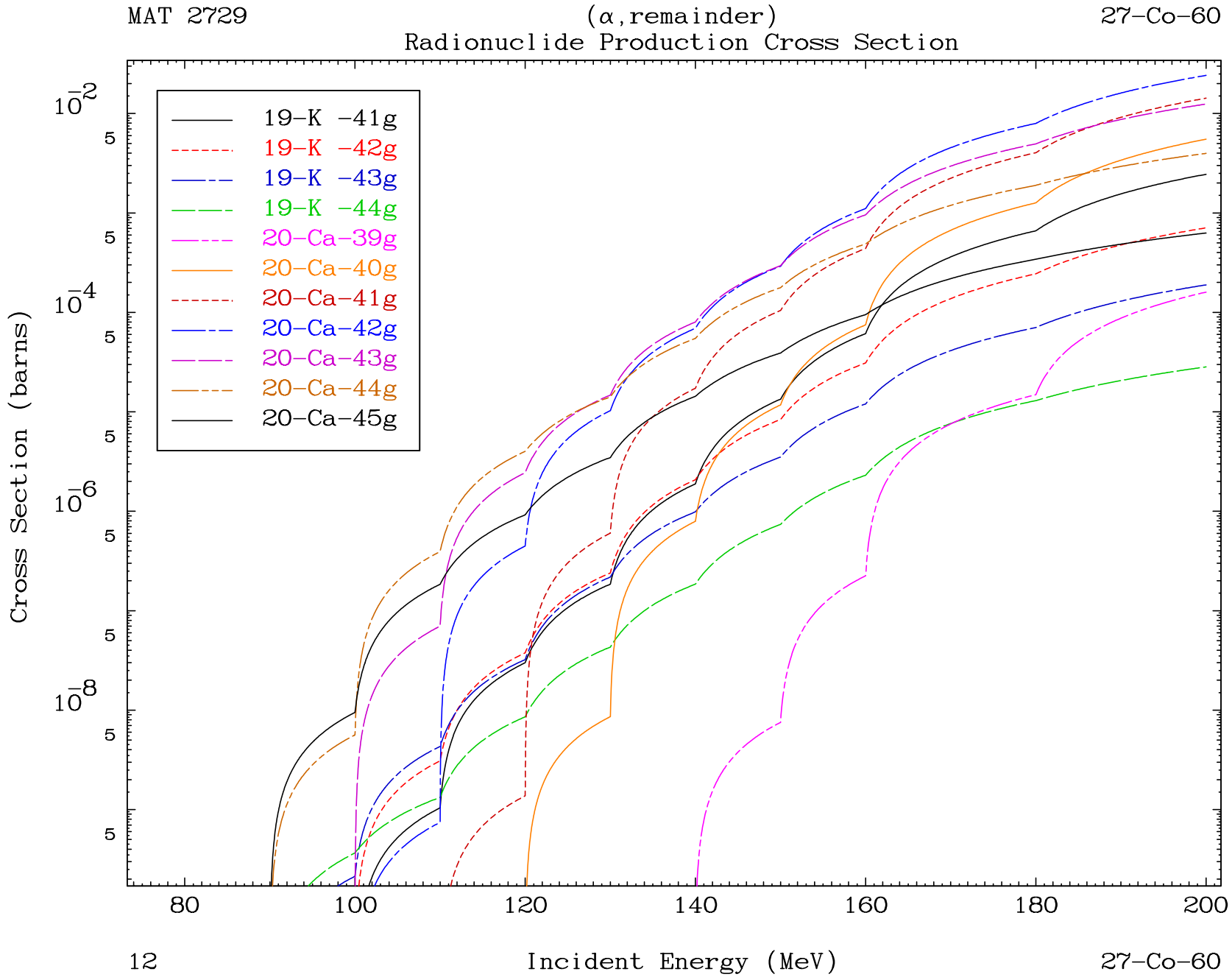

MAT 2729
(α,d) Levels
27-Co-60
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10-4
10-6
10-8
10-10
6
7
8
9
10 1
2
3
7
Incident Energy (MeV)
27-Co-60

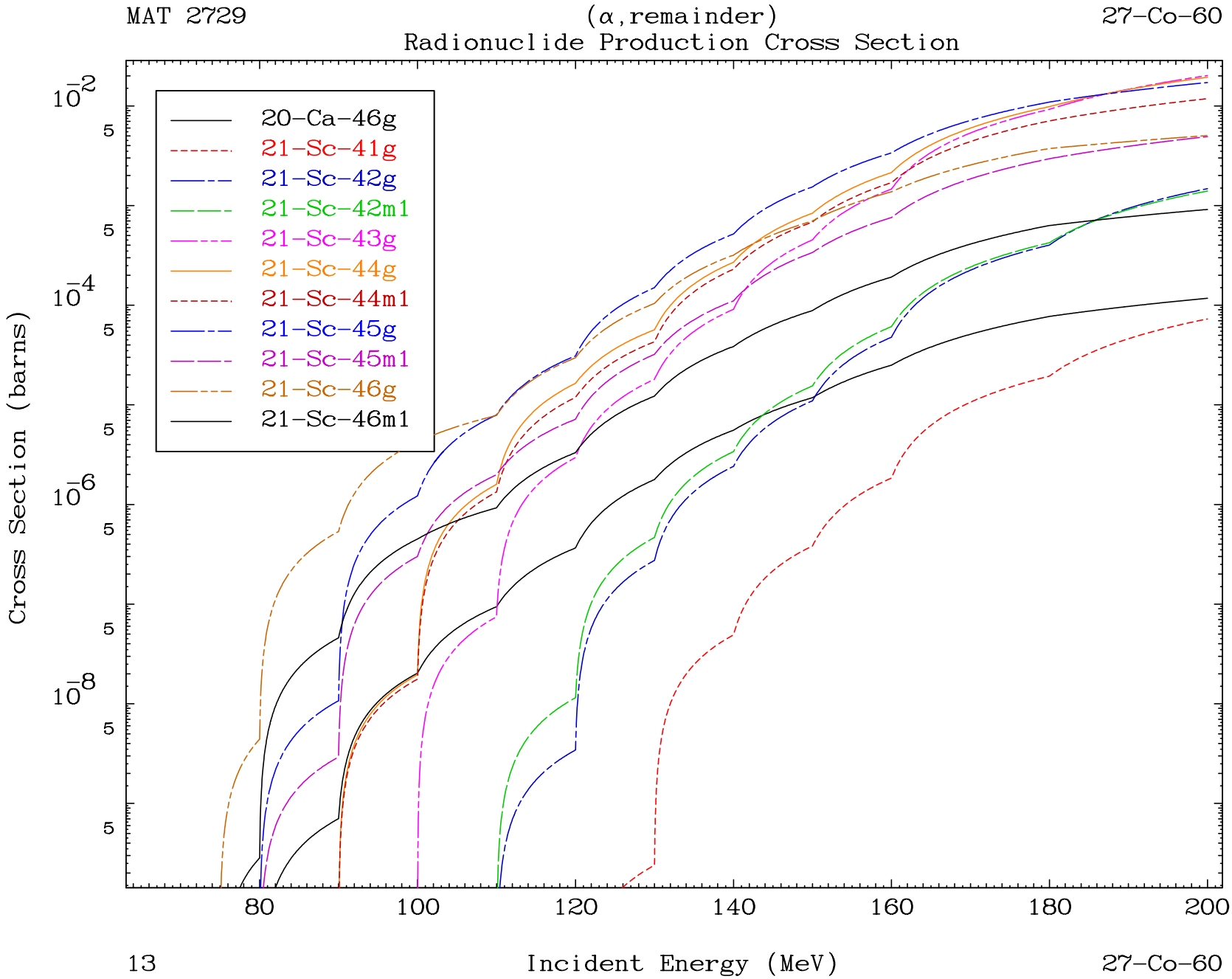

MAT 2729
(α,t) Levels
27-Co-60
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
8
Incident Energy (MeV)
27-Co-60

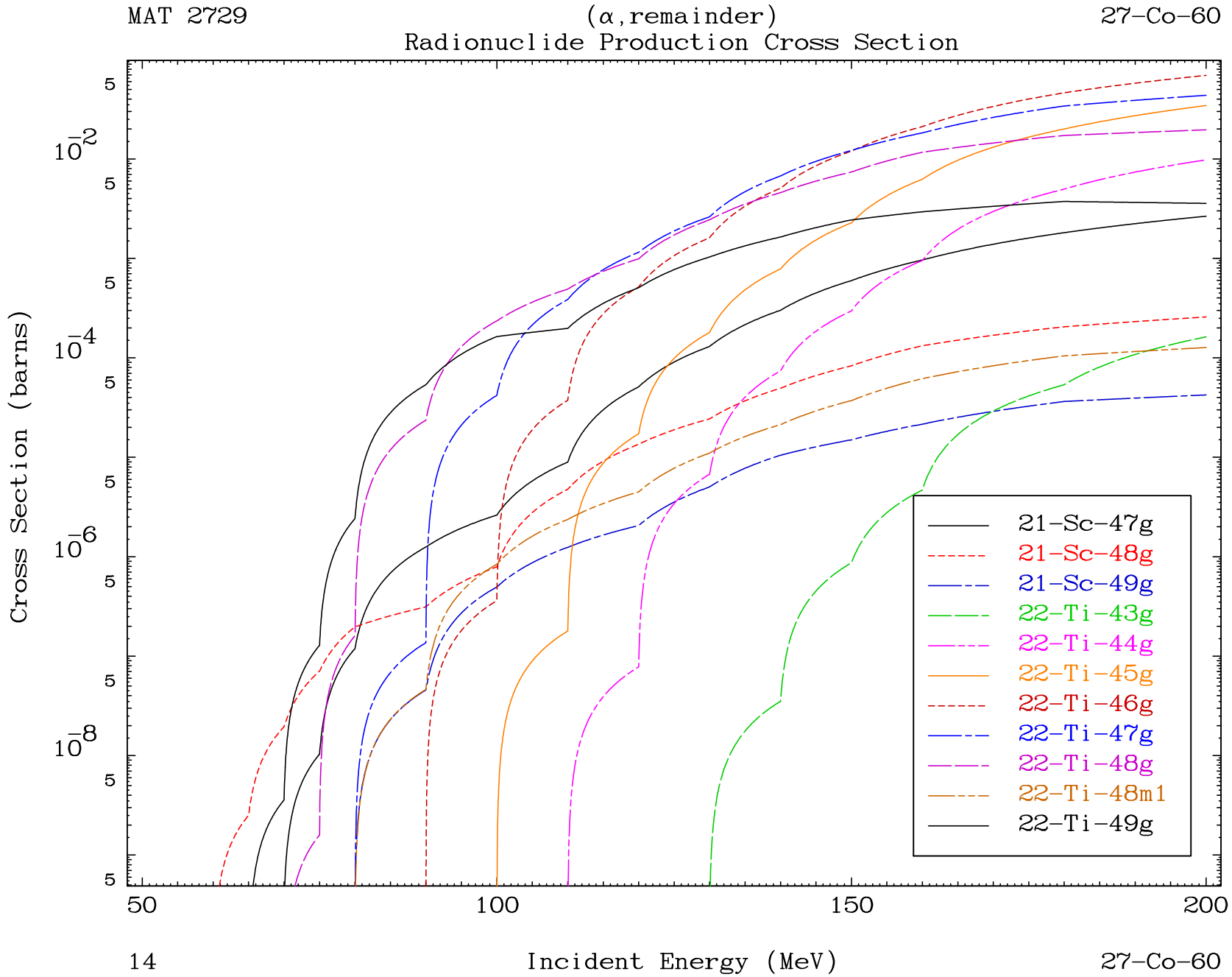

MAT 2729
(α,He3) Levels
27-Co-60
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
15
20
25
30
9
Incident Energy (MeV)
27-Co-60

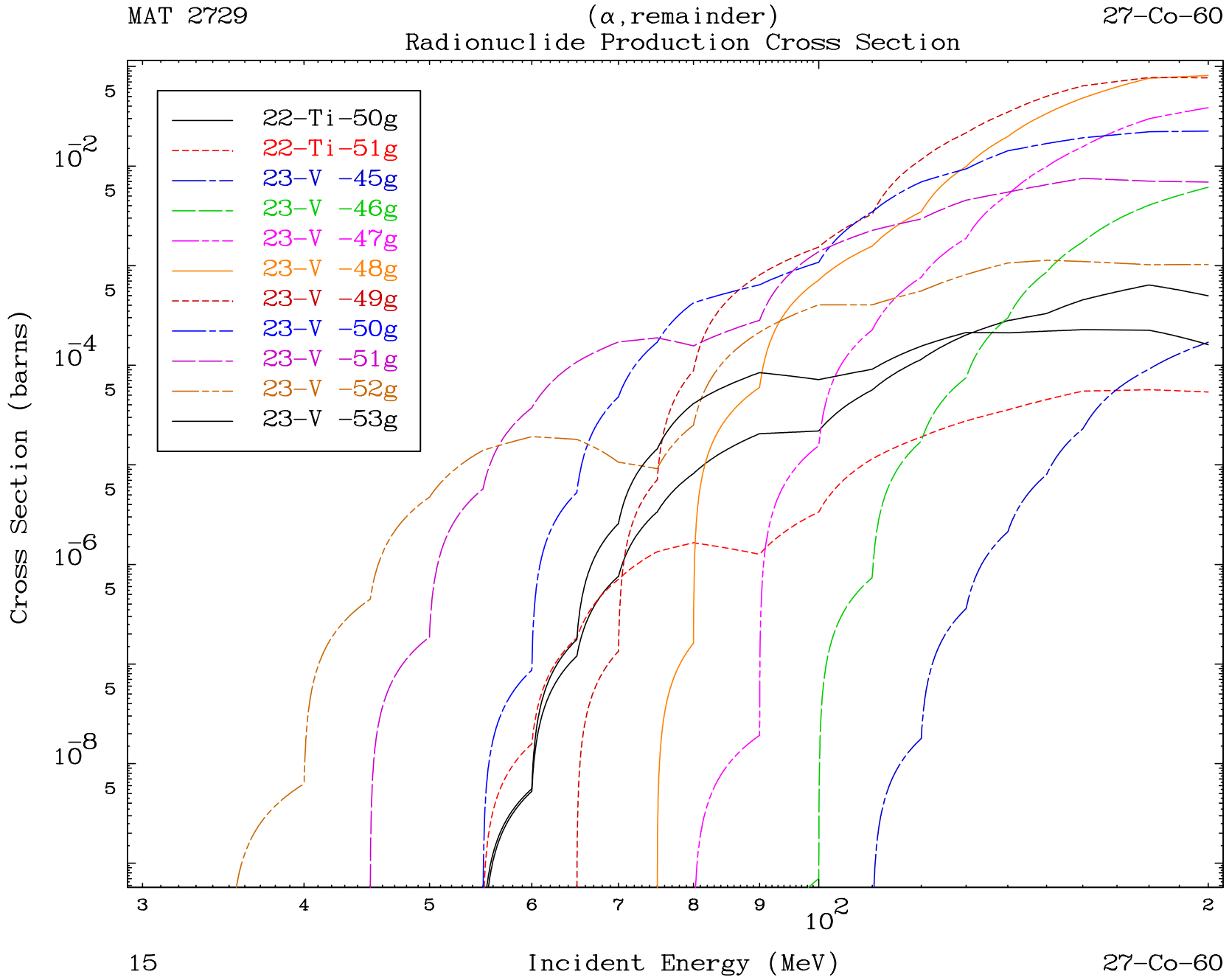

MAT 2729
(α,α) Levels
27-Co-60
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
Incident Energy (MeV)
27-Co-60

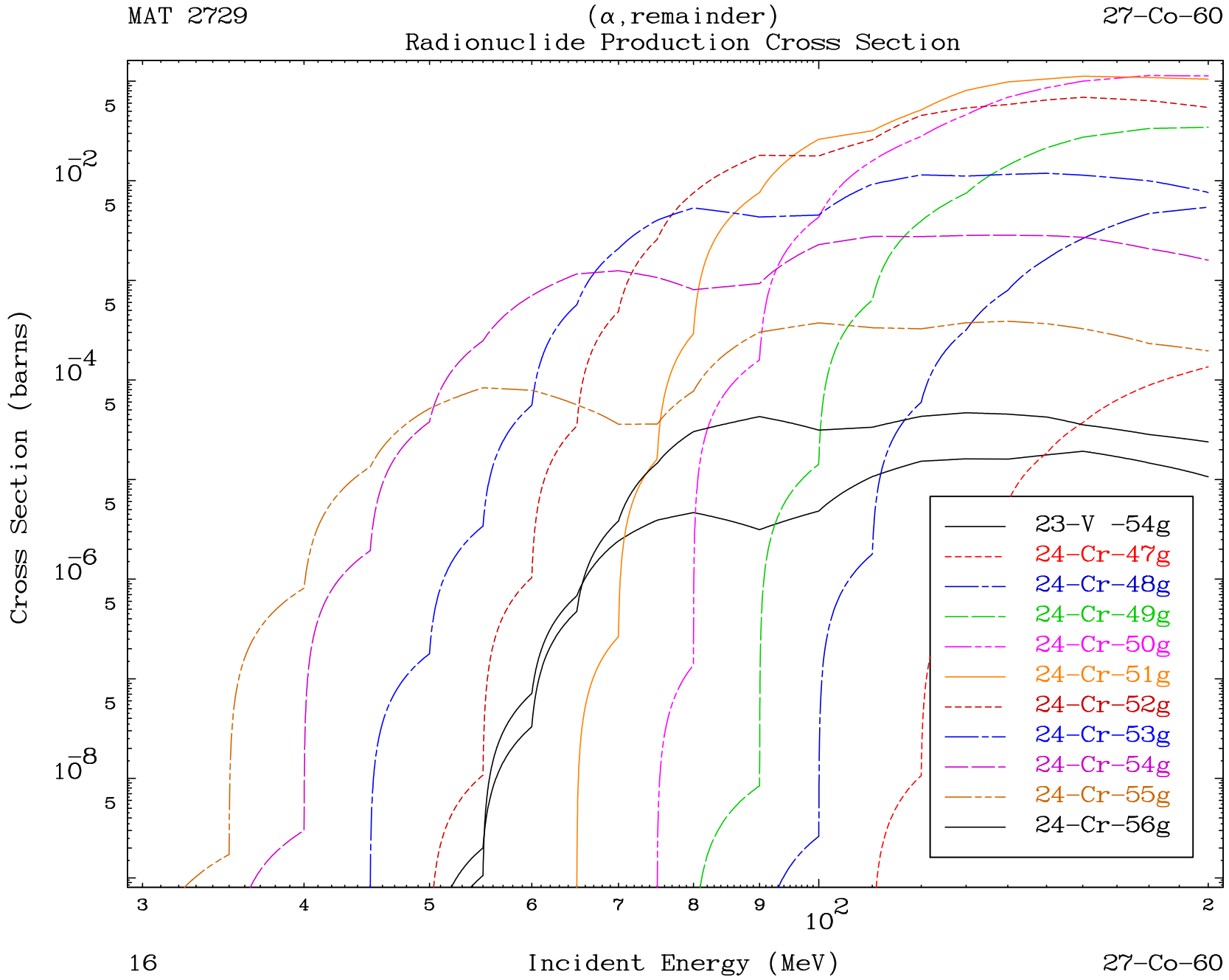

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
19-K -37g
19-K -38g
19-K -38m1
19-K -39g
19-K -40g
3
4
5
6
7
8
9
10^2
2
11
Incident Energy (MeV)
27-Co-60

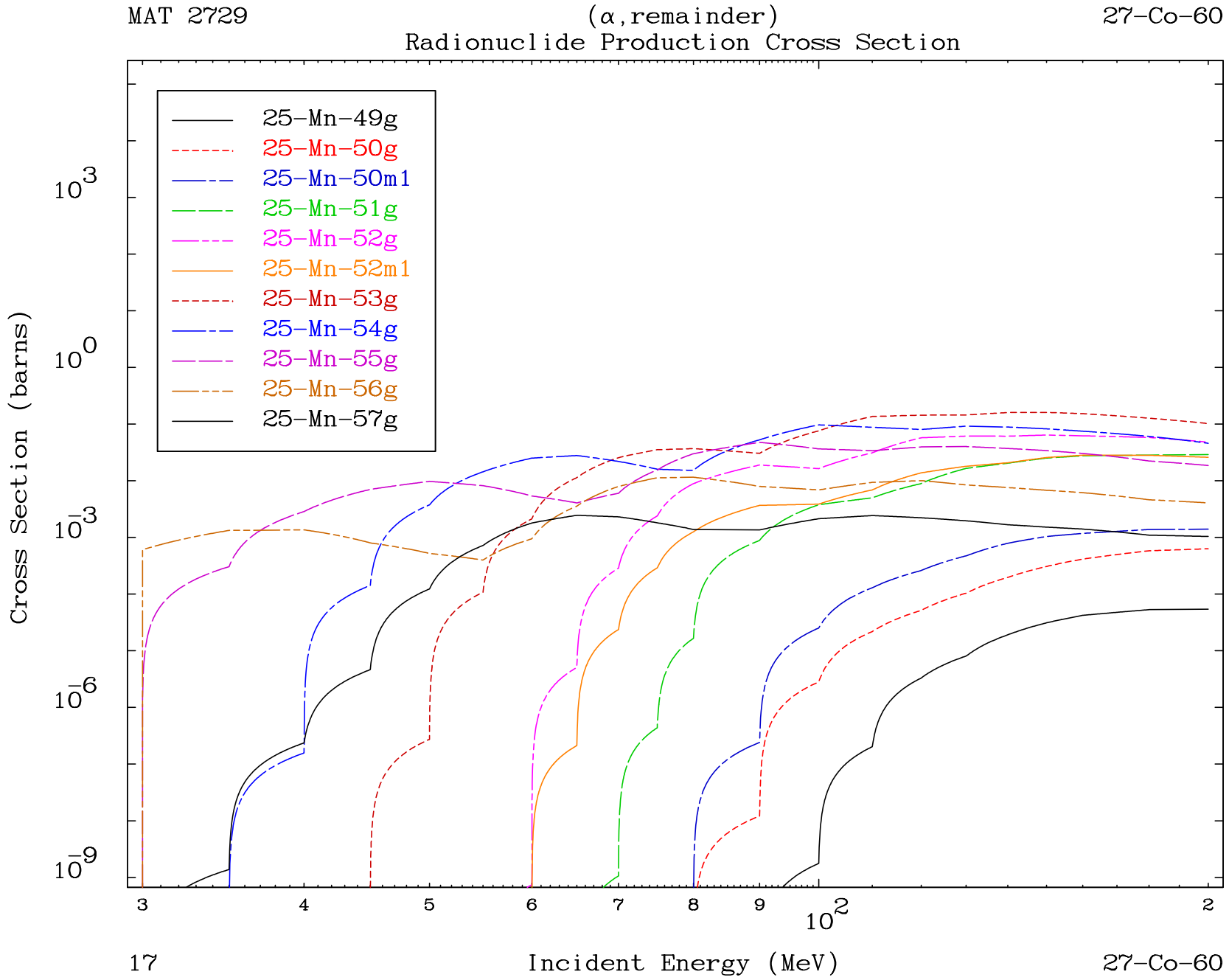

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
19-K -41g
19-K -42g
19-K -43g
19-K -44g
20-Ca-39g
20-Ca-40g
20-Ca-41g
20-Ca-42g
20-Ca-43g
20-Ca-44g
20-Ca-45g
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
12
Incident Energy (MeV)
27-Co-60

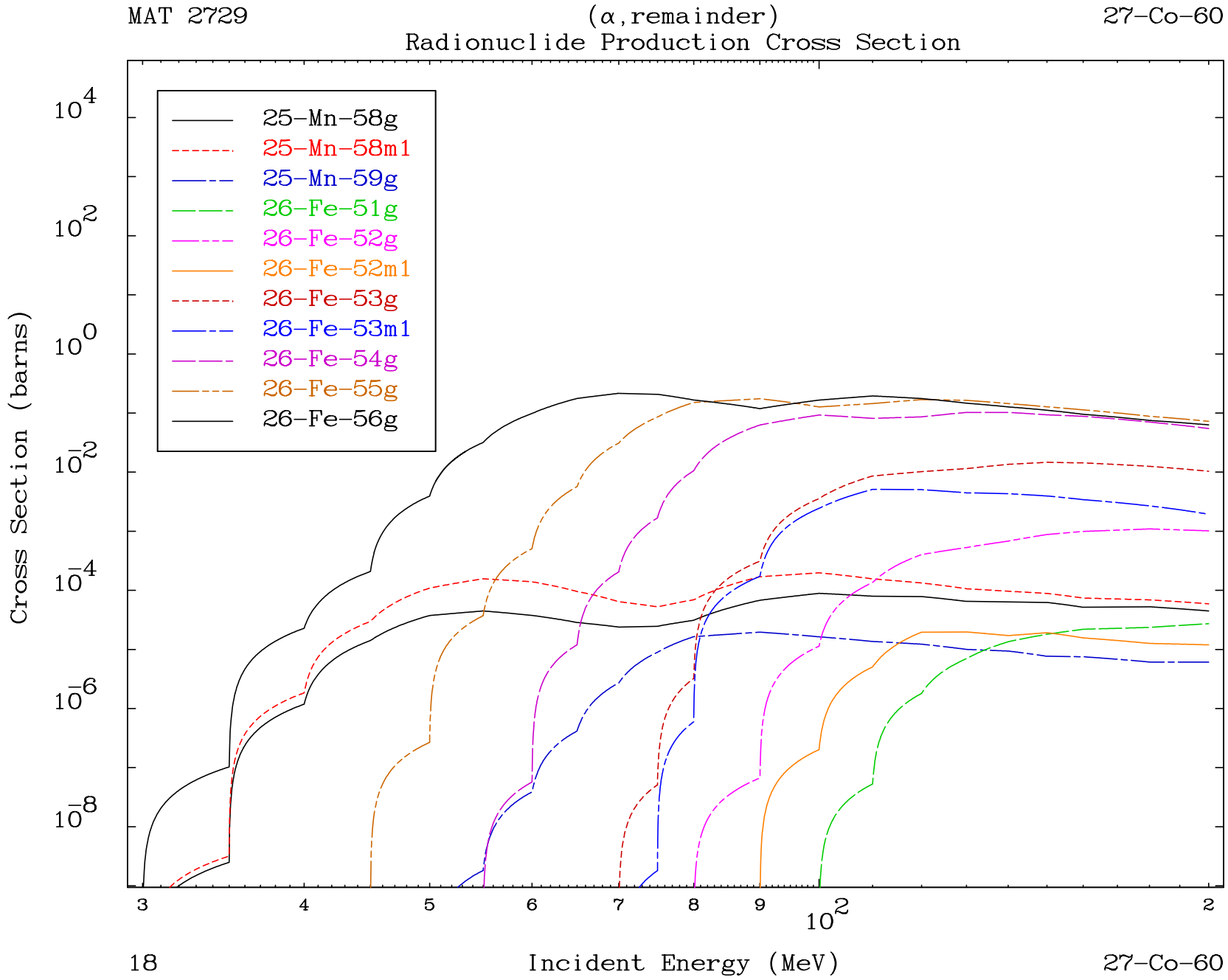

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
20-Ca-46g
21-Sc-41g
21-Sc-42g
21-Sc-42m1
21-Sc-43g
21-Sc-44g
21-Sc-44m1
21-Sc-45g
21-Sc-45m1
21-Sc-46g
21-Sc-46m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
Incident Energy (MeV)
13
27-Co-60

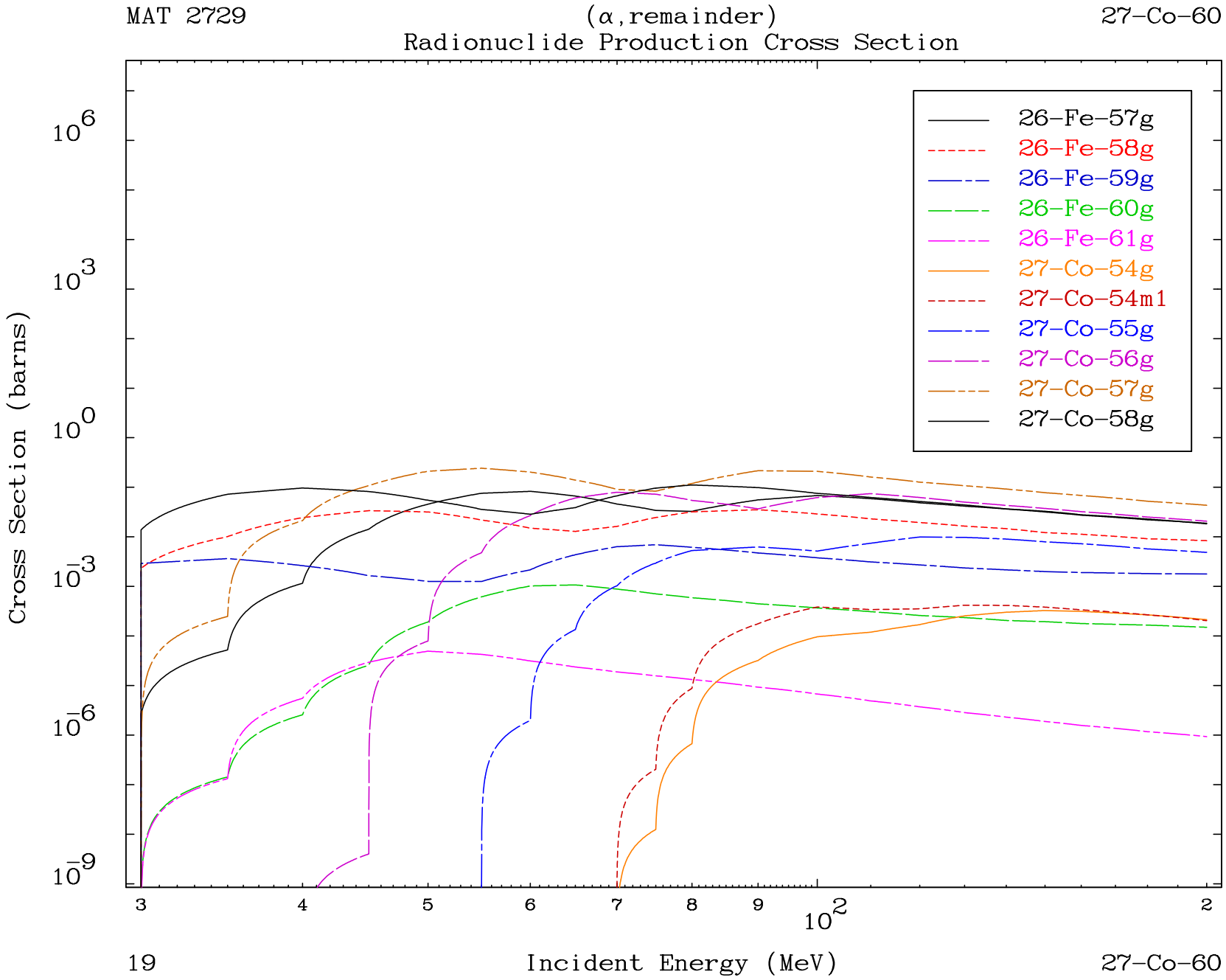

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
50
100
150
200
14
Incident Energy (MeV)
27-Co-60
21-Sc-47g
21-Sc-48g
21-Sc-49g
22-Ti-43g
22-Ti-44g
22-Ti-45g
22-Ti-46g
22-Ti-47g
22-Ti-48g
22-Ti-48m1
22-Ti-49g


MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
22-Ti-50g
22-Ti-51g
23-V -45g
23-V -46g
23-V -47g
23-V -48g
23-V -49g
23-V -50g
23-V -51g
23-V -52g
23-V -53g
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
15
Incident Energy (MeV)
27-Co-60

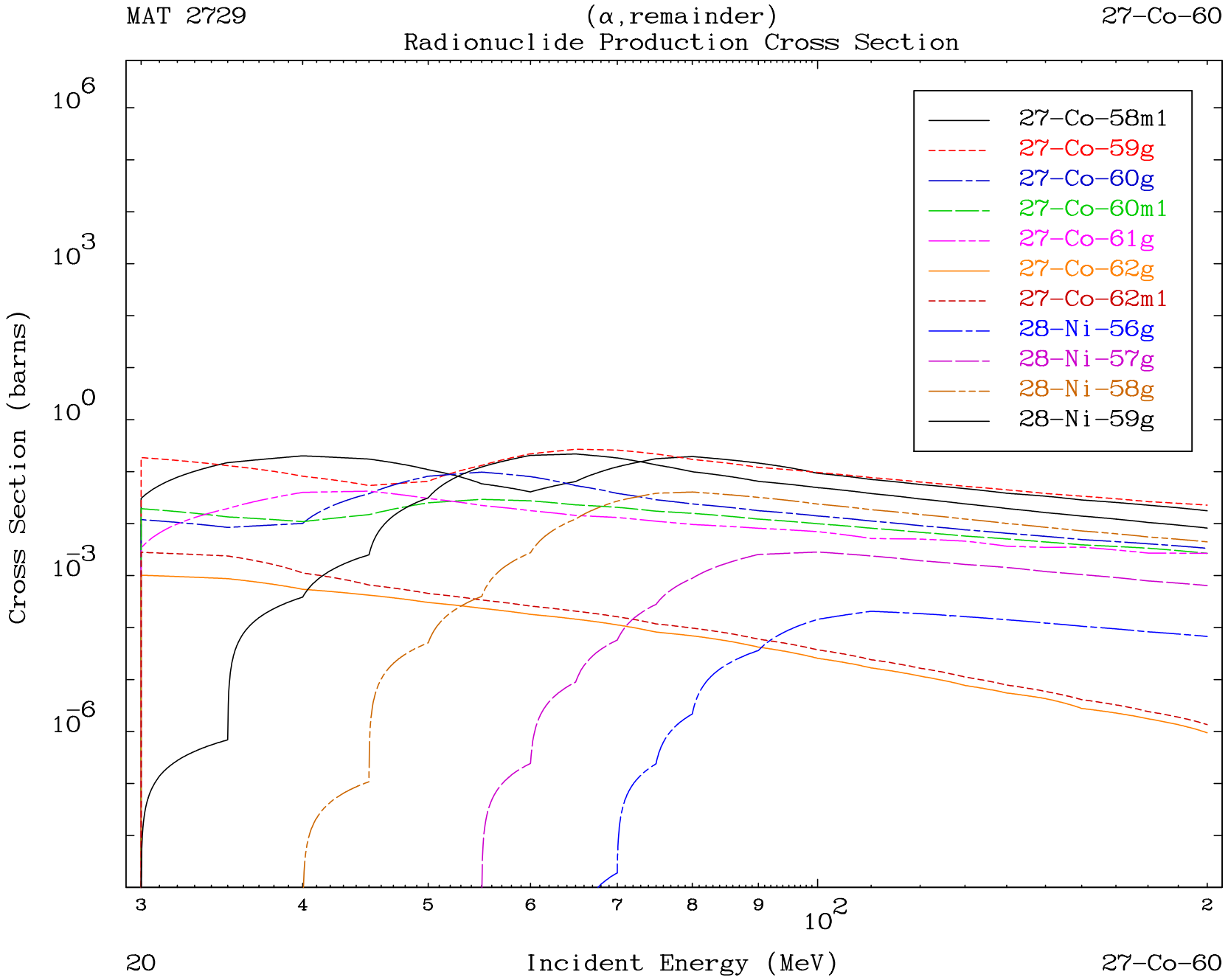

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
23-V -54g
24-Cr-47g
24-Cr-48g
24-Cr-49g
24-Cr-50g
24-Cr-51g
24-Cr-52g
24-Cr-53g
24-Cr-54g
24-Cr-55g
24-Cr-56g
16
27-Co-60

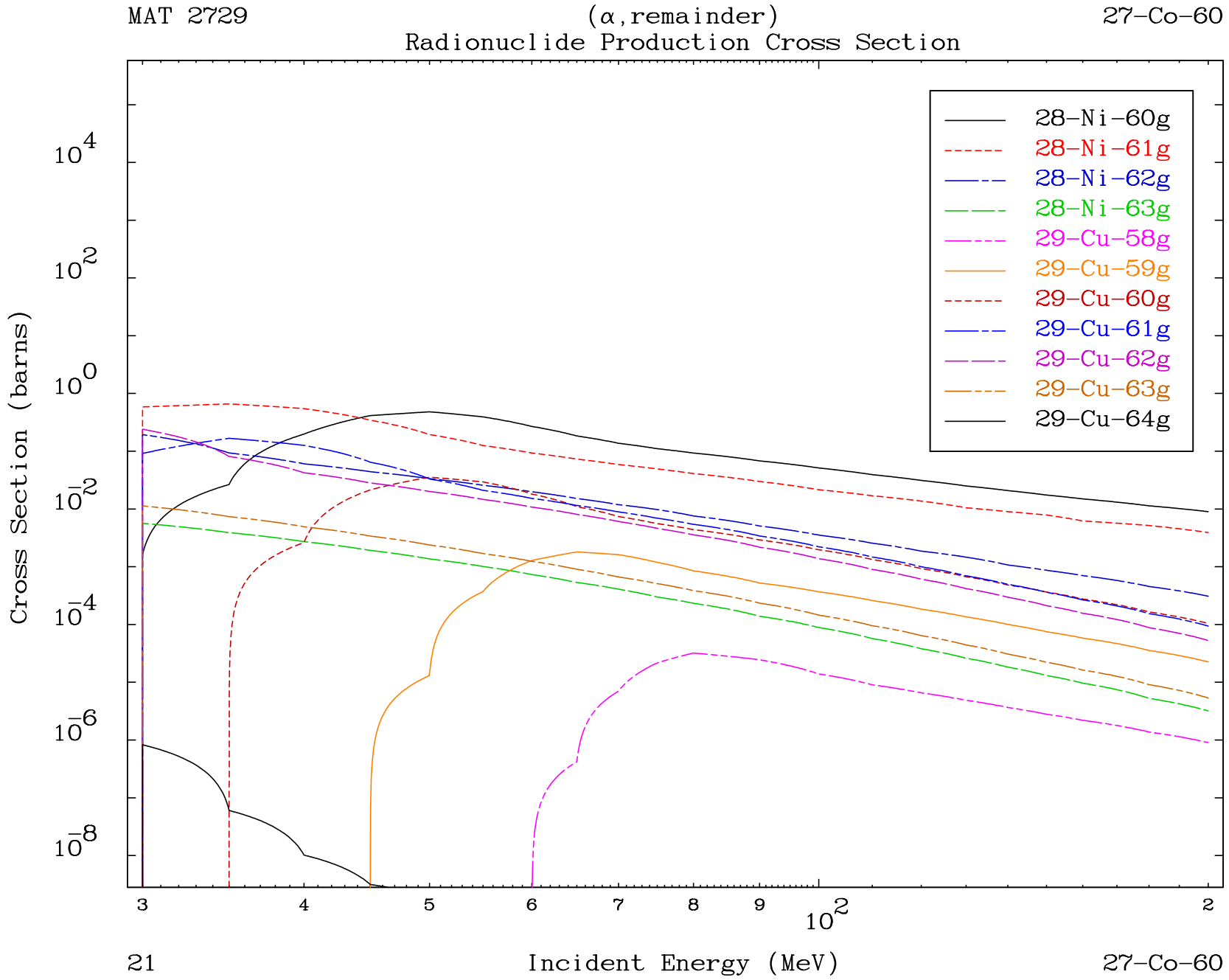

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
25-Mn-49g
25-Mn-50g
25-Mn-50m1
25-Mn-51g
25-Mn-52g
25-Mn-52m1
25-Mn-53g
25-Mn-54g
25-Mn-55g
25-Mn-56g
25-Mn-57g
Cross Section (barns)
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
17
Incident Energy (MeV)
27-Co-60

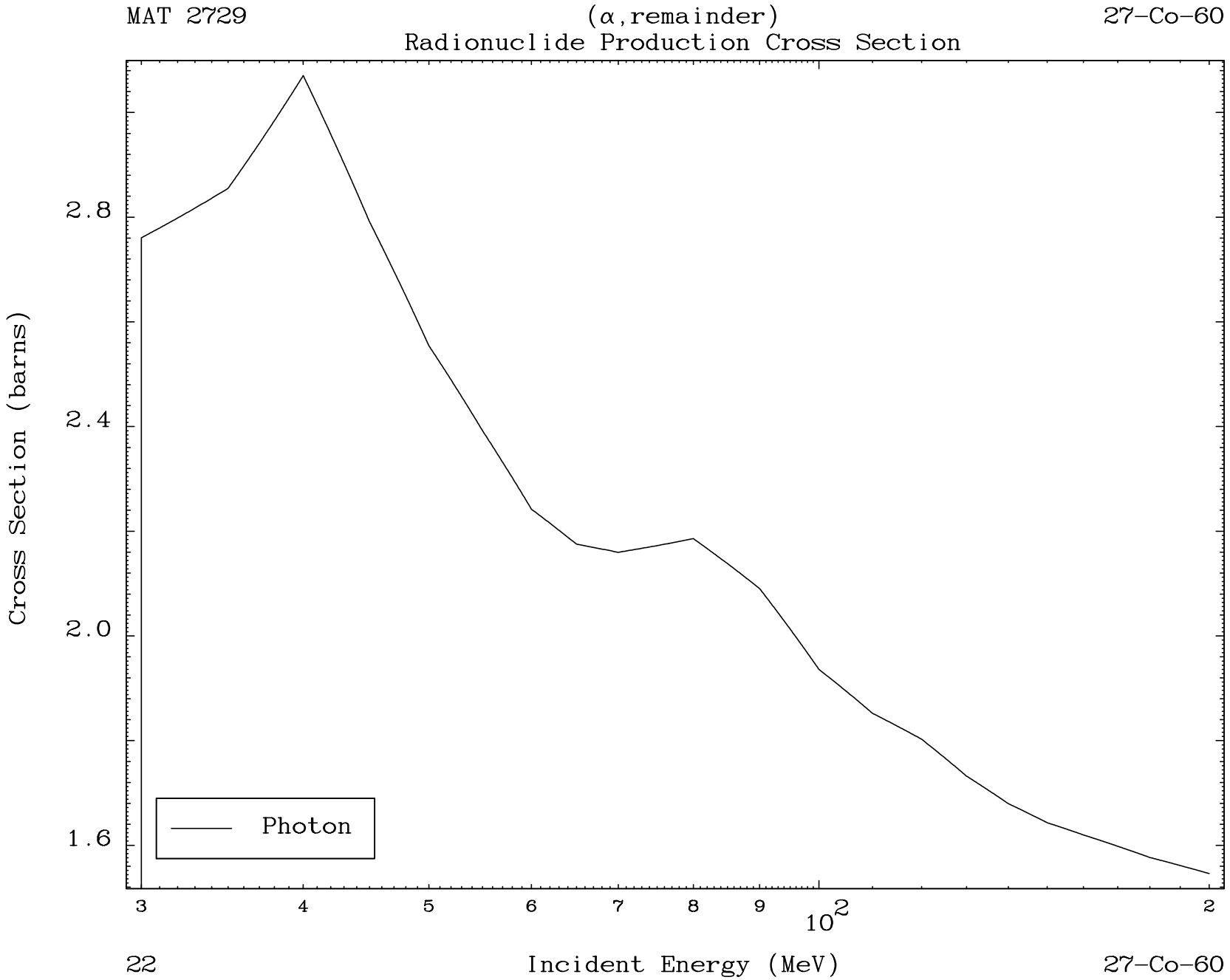

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
25-Mn-58g
25-Mn-58m1
25-Mn-59g
26-Fe-51g
26-Fe-52g
26-Fe-52m1
26-Fe-53g
26-Fe-53m1
26-Fe-54g
26-Fe-55g
26-Fe-56g
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
18
Incident Energy (MeV)
27-Co-60

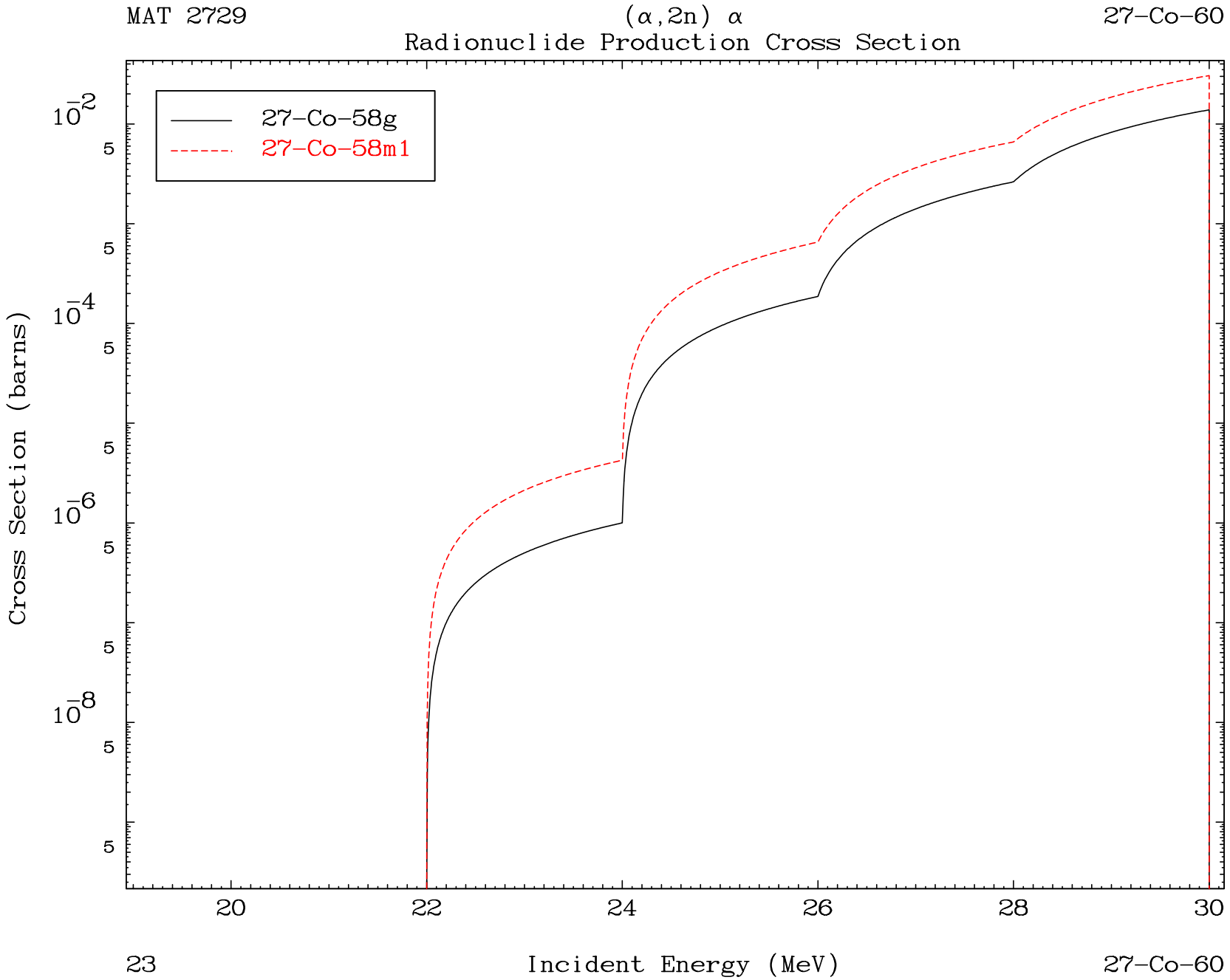

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
26-Fe-57g
26-Fe-58g
26-Fe-59g
26-Fe-60g
26-Fe-61g
27-Co-54g
27-Co-54m1
27-Co-55g
27-Co-56g
27-Co-57g
27-Co-58g

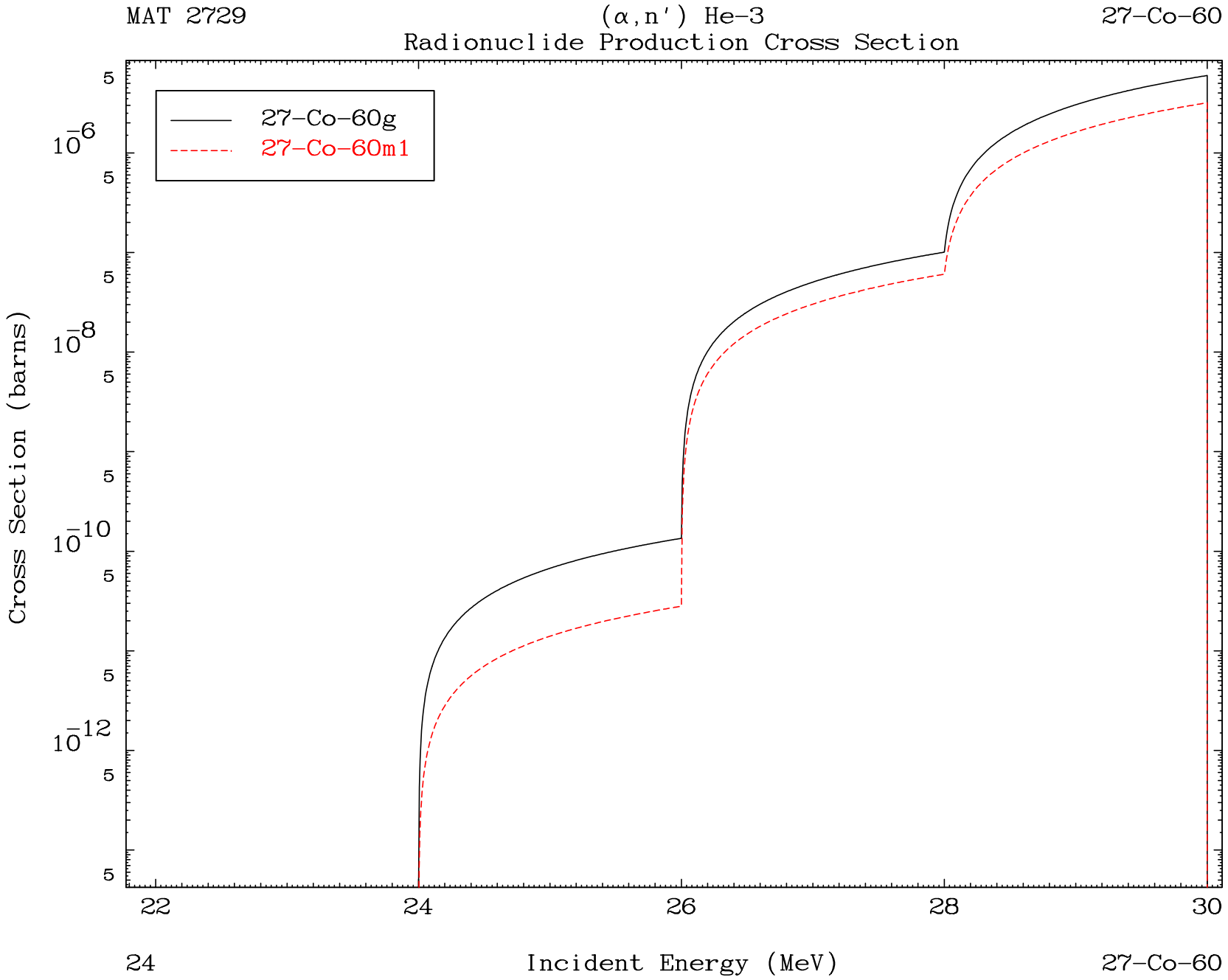
27-Co-60

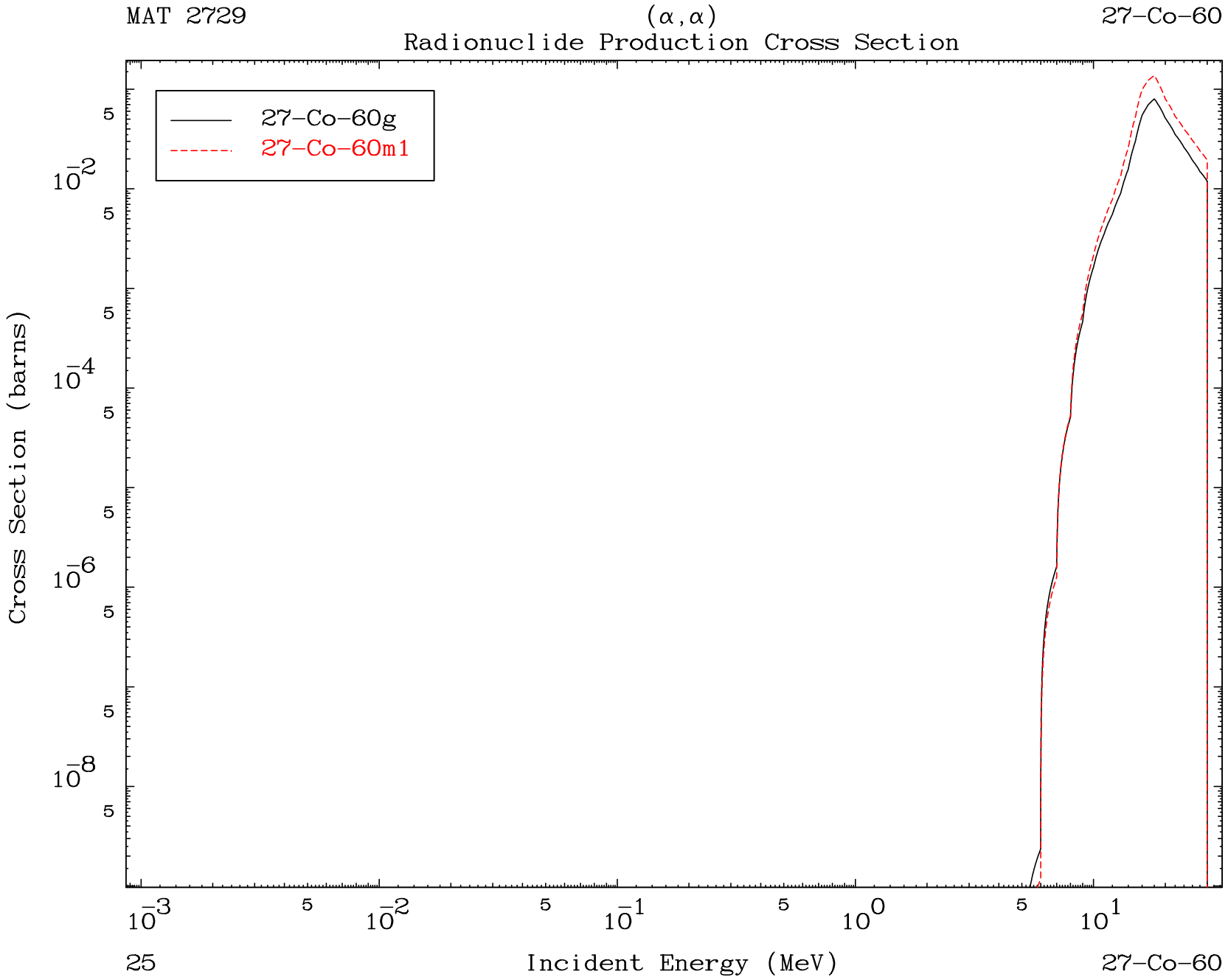

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
27-Co-58m1
27-Co-59g
27-Co-60g
27-Co-60m1
27-Co-61g
27-Co-62g
27-Co-62m1
28-Ni-56g
28-Ni-57g
28-Ni-58g
28-Ni-59g
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
27-Co-60

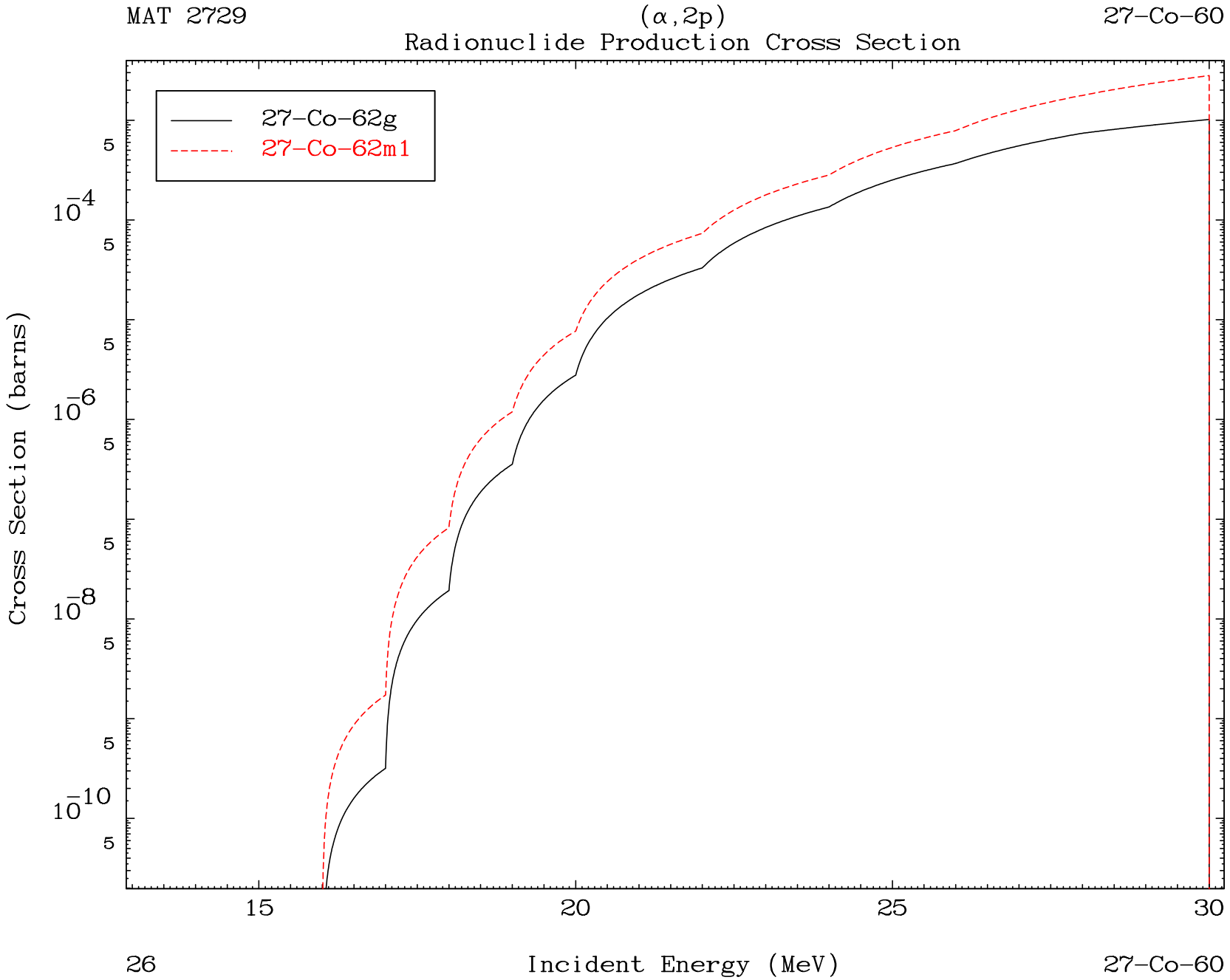

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
28-Ni-60g
28-Ni-61g
28-Ni-62g
28-Ni-63g
29-Cu-58g
29-Cu-59g
29-Cu-60g
29-Cu-61g
29-Cu-62g
29-Cu-63g
29-Cu-64g
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
21
Incident Energy (MeV)
27-Co-60

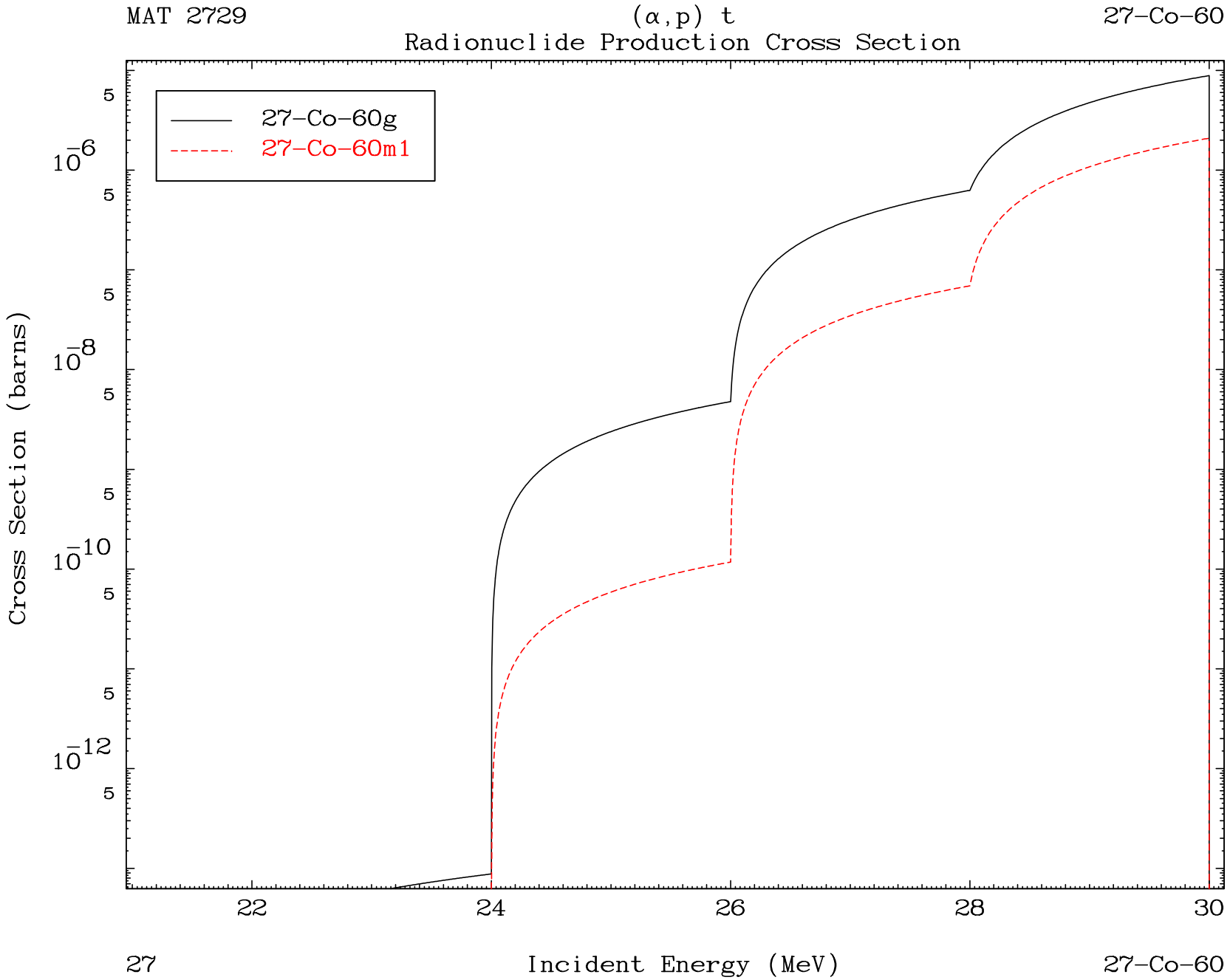

MAT 2729
(α,remainder)
27-Co-60
Radionuclide Production Cross Section
Cross Section (barns)
2.8
2.4
2.0
1.6
Photon
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
27-Co-60


MAT 2729
(α,2n) α
27-Co-60
Radionuclide Production Cross Section
27-Co-58g
27-Co-58m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
20
22
24
26
28
30
23
Incident Energy (MeV)
27-Co-60


MAT 2729
(α,n') He-3
27-Co-60
Radionuclide Production Cross Section
27-Co-60g
27-Co-60m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
22
24
26
28
30
24
Incident Energy (MeV)
27-Co-60


MAT 2729
(α,α)
27-Co-60
Radionuclide Production Cross Section
27-Co-60g
27-Co-60m1
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
10^-3
10^-2
10^-1
10^0
10^1
5
Incident Energy (MeV)
25
27-Co-60


MAT 2729
(α,2p)
27-Co-60
Radionuclide Production Cross Section
27-Co-62g
27-Co-62m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
15
20
25
30
26
Incident Energy (MeV)
27-Co-60


MAT 2729
(α,p) t
27-Co-60
Radionuclide Production Cross Section
27-Co-60g
27-Co-60m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
22
24
26
28
30
27
Incident Energy (MeV)
27-Co-60