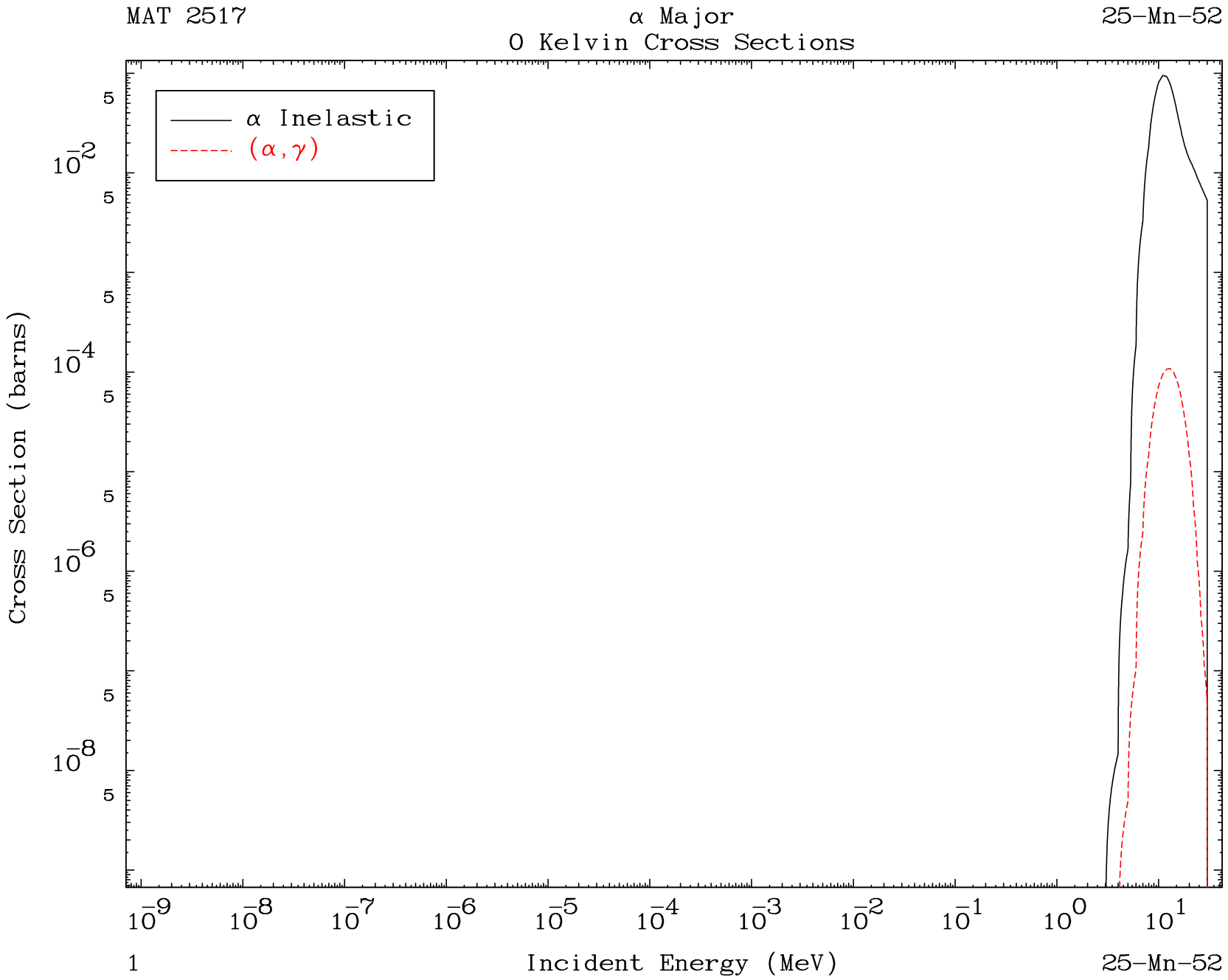
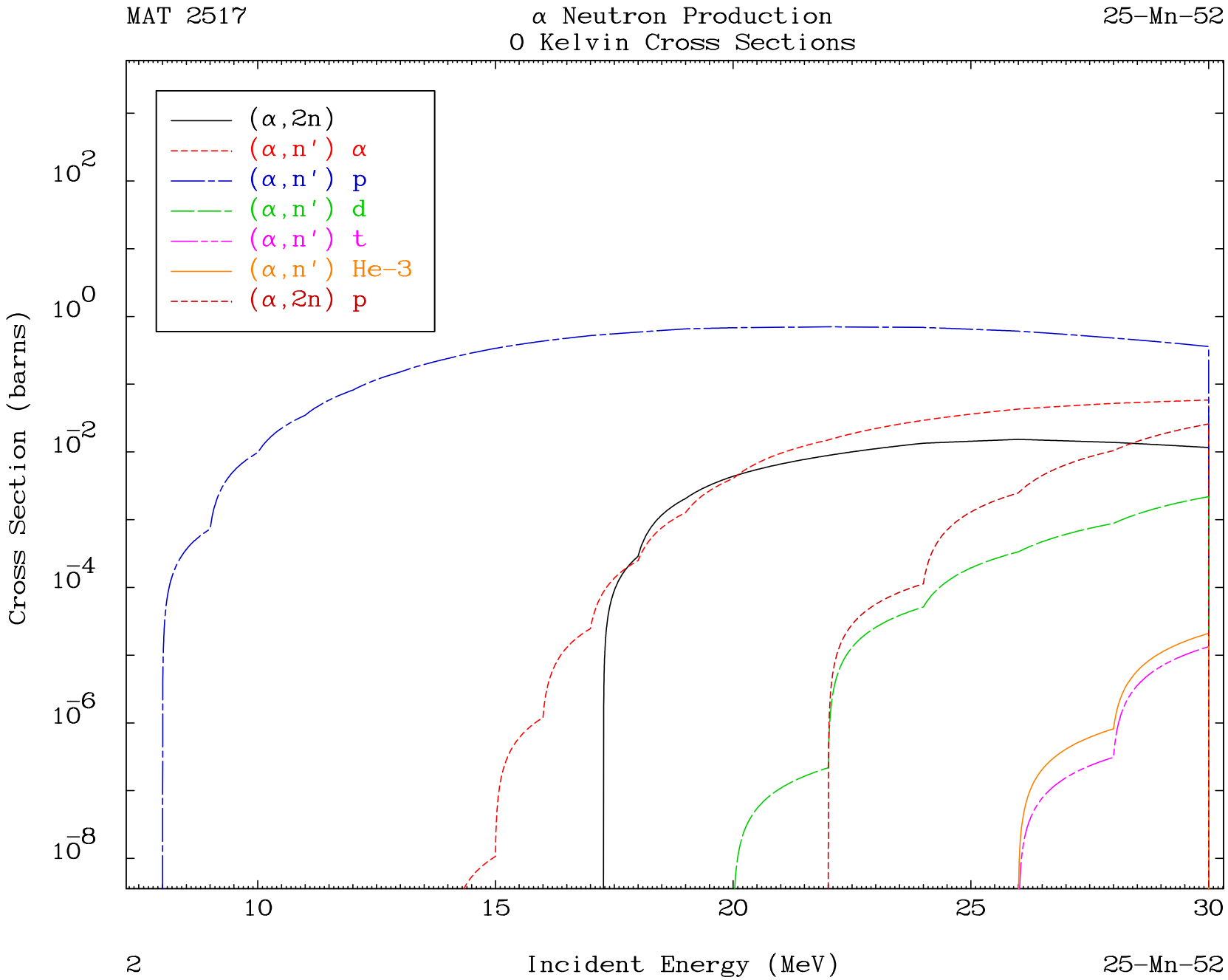
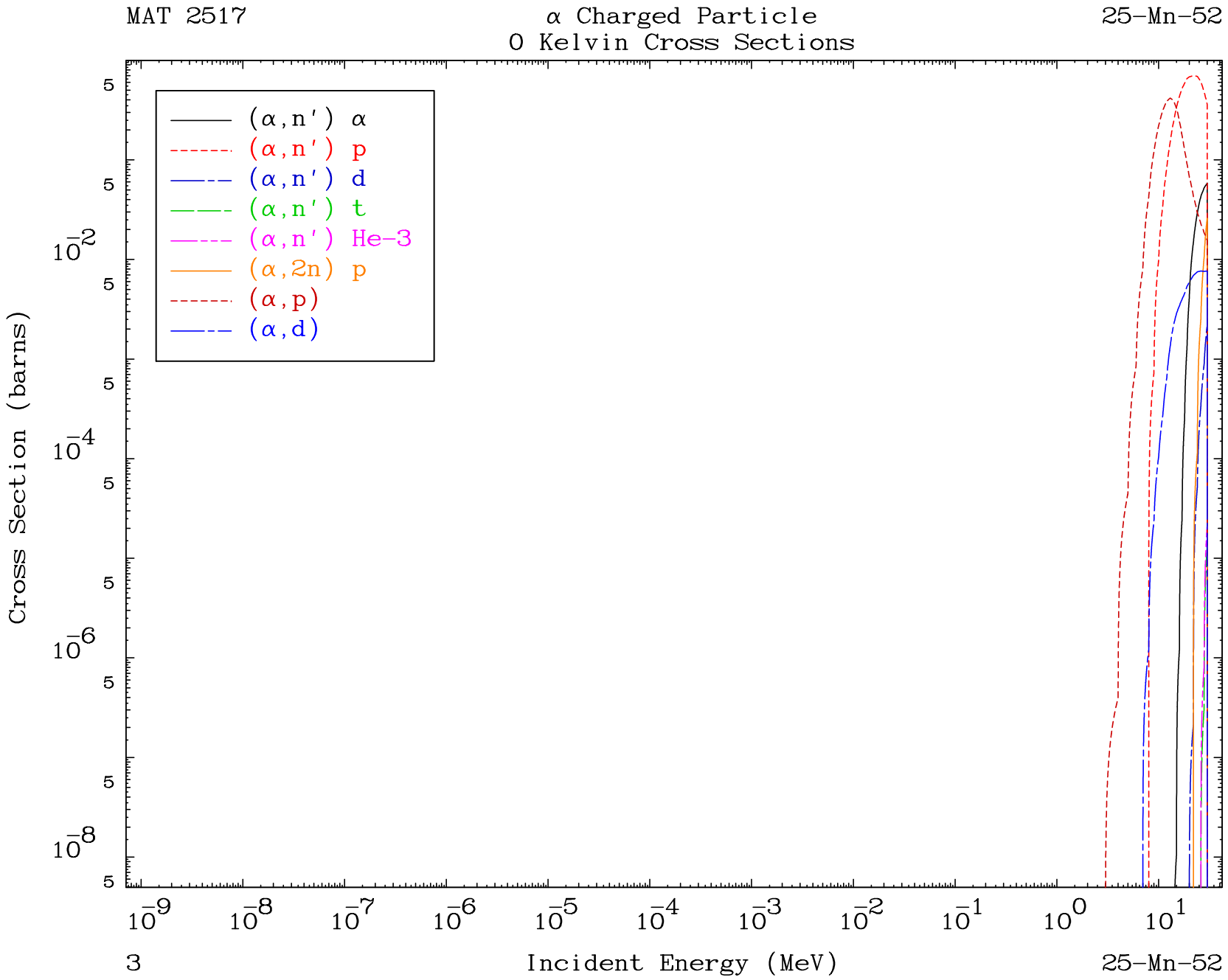
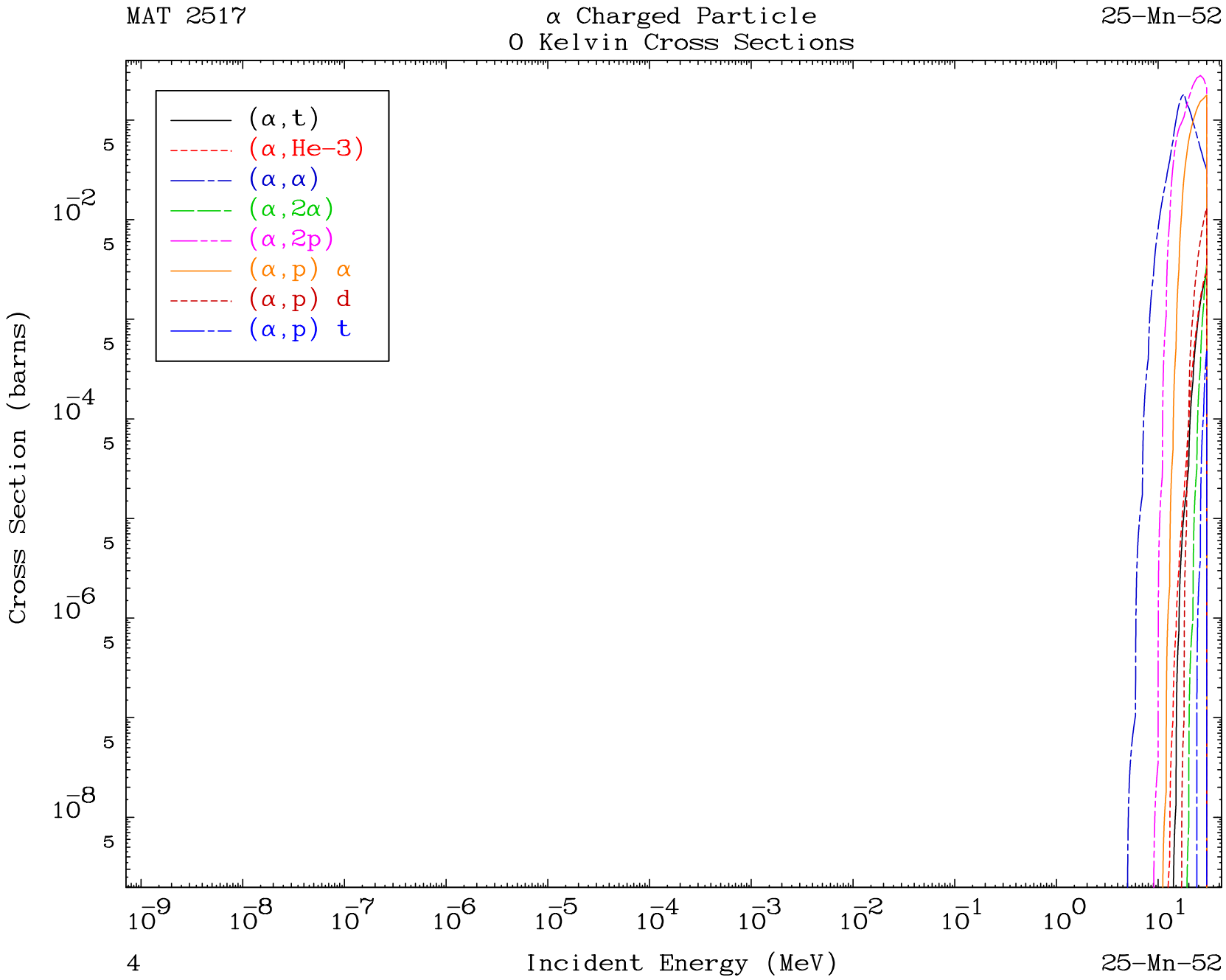
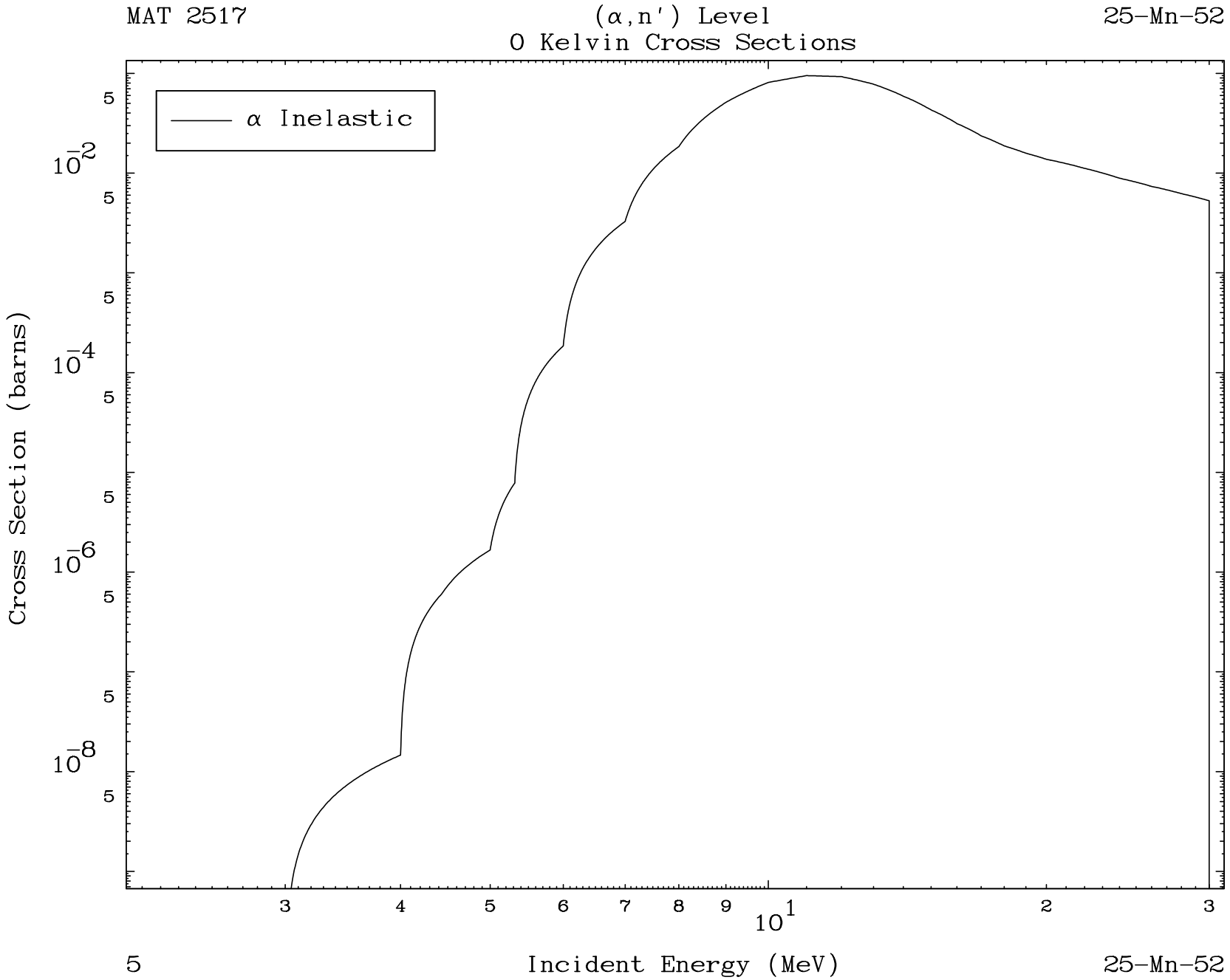
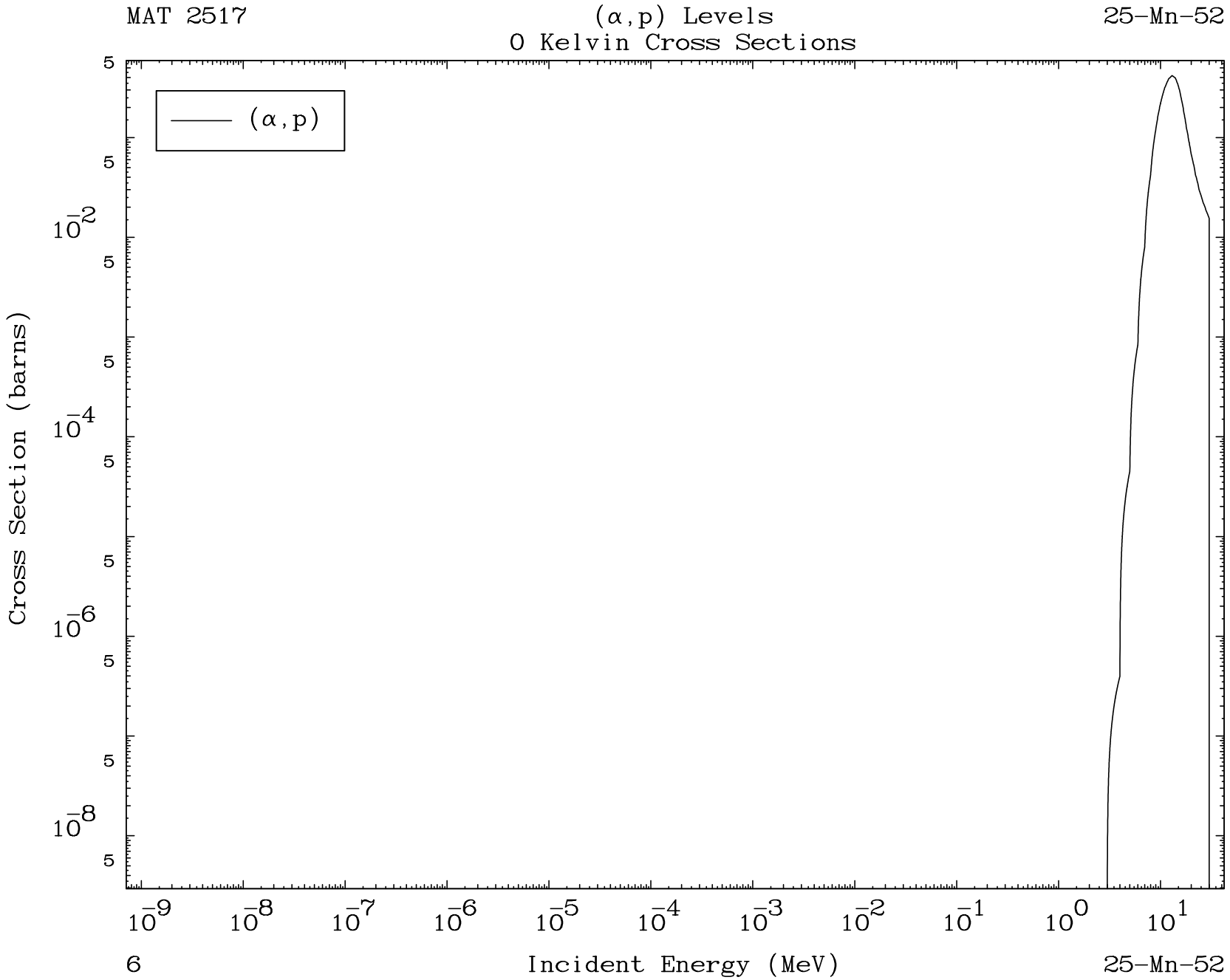

MAT 2517
α Major
25-Mn-52
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
25-Mn-52

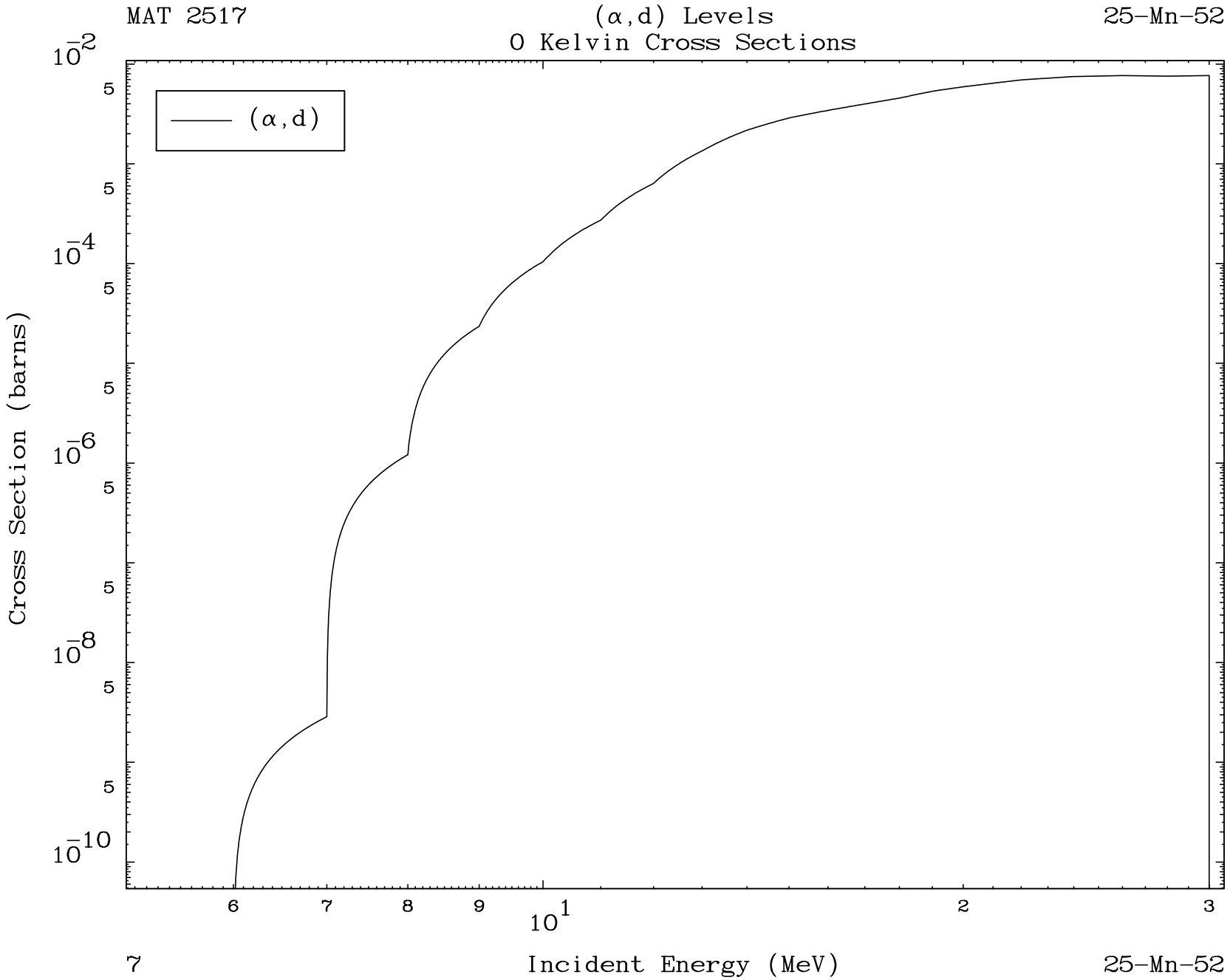

MAT 2517
α Neutron Production
0 Kelvin Cross Sections
25-Mn-52
(α,2n)
(α,n') α
(α,n') p
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
10
15
20
25
30
2
Incident Energy (MeV)
25-Mn-52

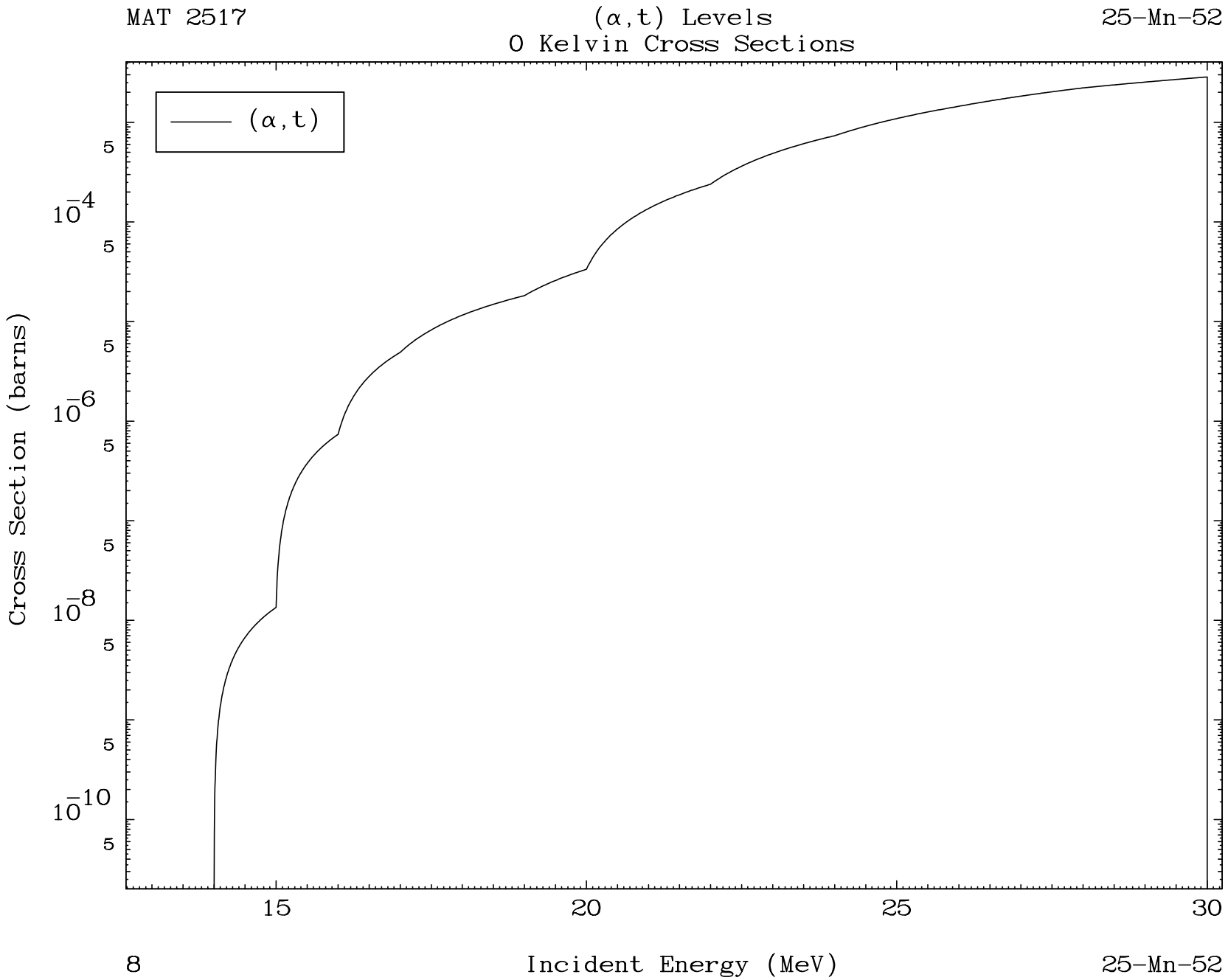

MAT 2517
α Charged Particle
0 Kelvin Cross Sections
25-Mn-52
(α,n') α
(α,n') p
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
(α,p)
(α,d)
Cross Section (barns)
Incident Energy (MeV)
3
25-Mn-52

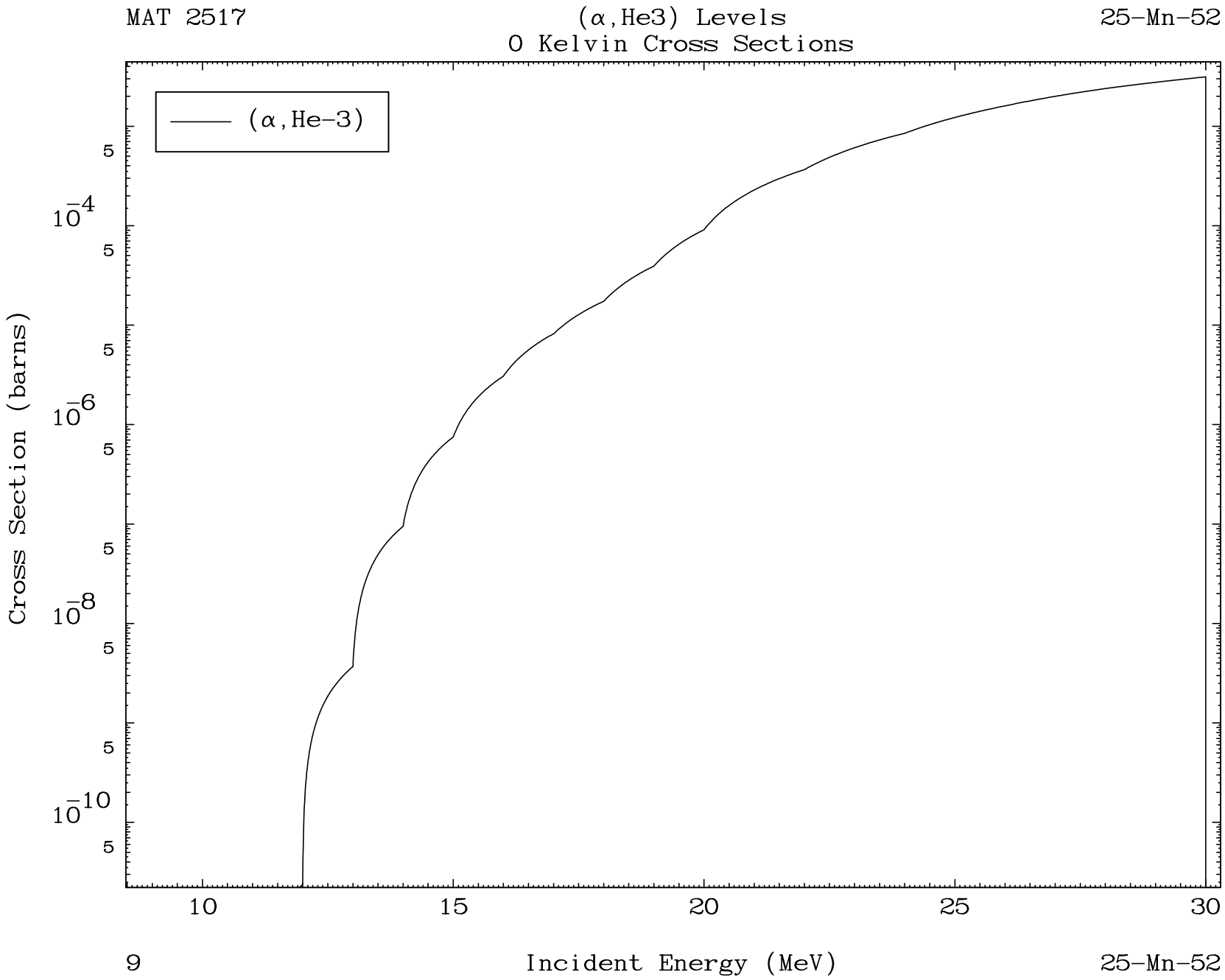

MAT 2517
α Charged Particle
0 Kelvin Cross Sections
25-Mn-52
(α,t)
(α,He-3)
(α,α)
(α,2α)
(α,2p)
(α,p) α
(α,p) d
(α,p) t
Cross Section (barns)
Incident Energy (MeV)
4
25-Mn-52

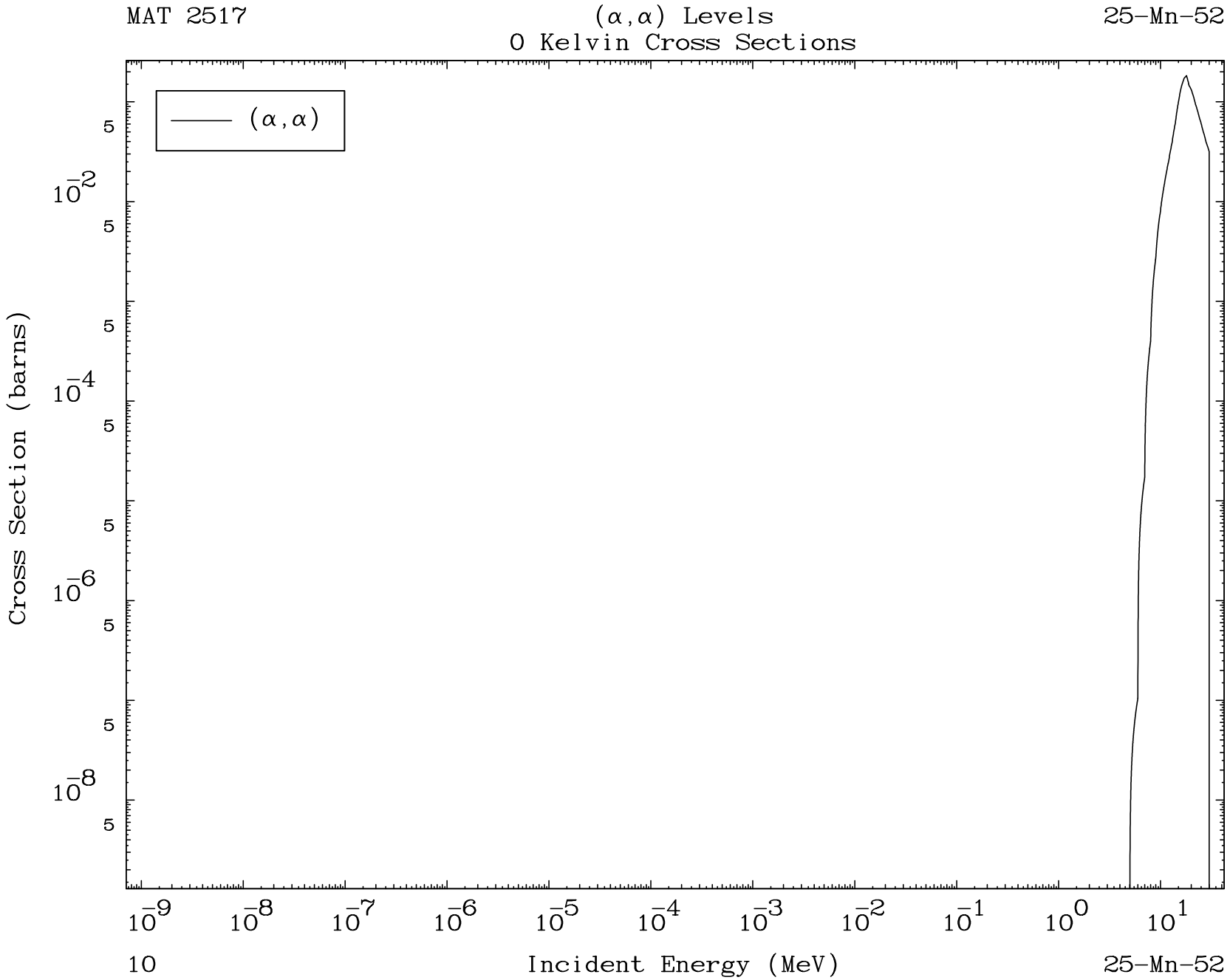

MAT 2517
(α,n') Level
25-Mn-52
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 1
2
3
Incident Energy (MeV)
5
25-Mn-52

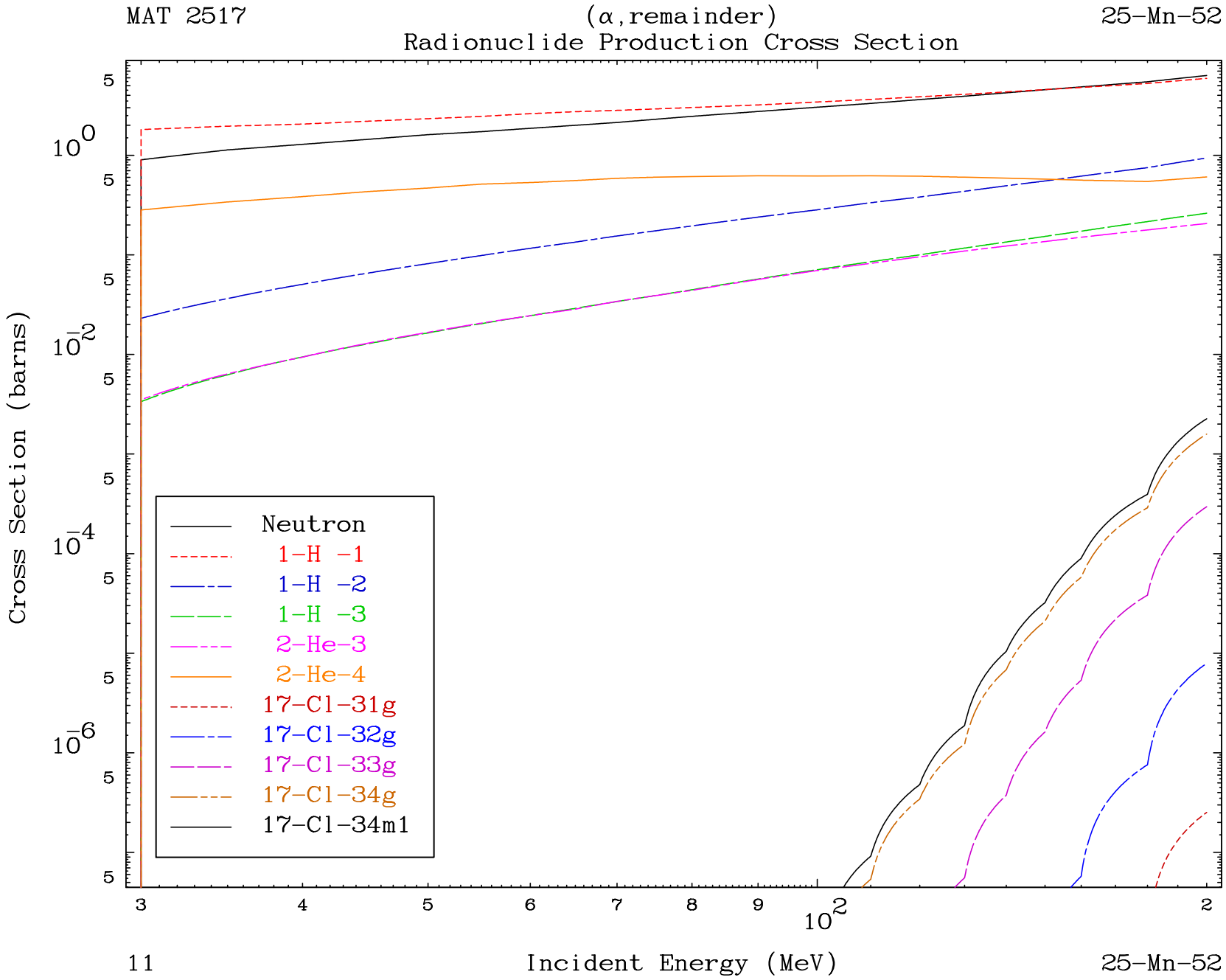

MAT 2517
(α,p) Levels
25-Mn-52
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
Incident Energy (MeV)
25-Mn-52

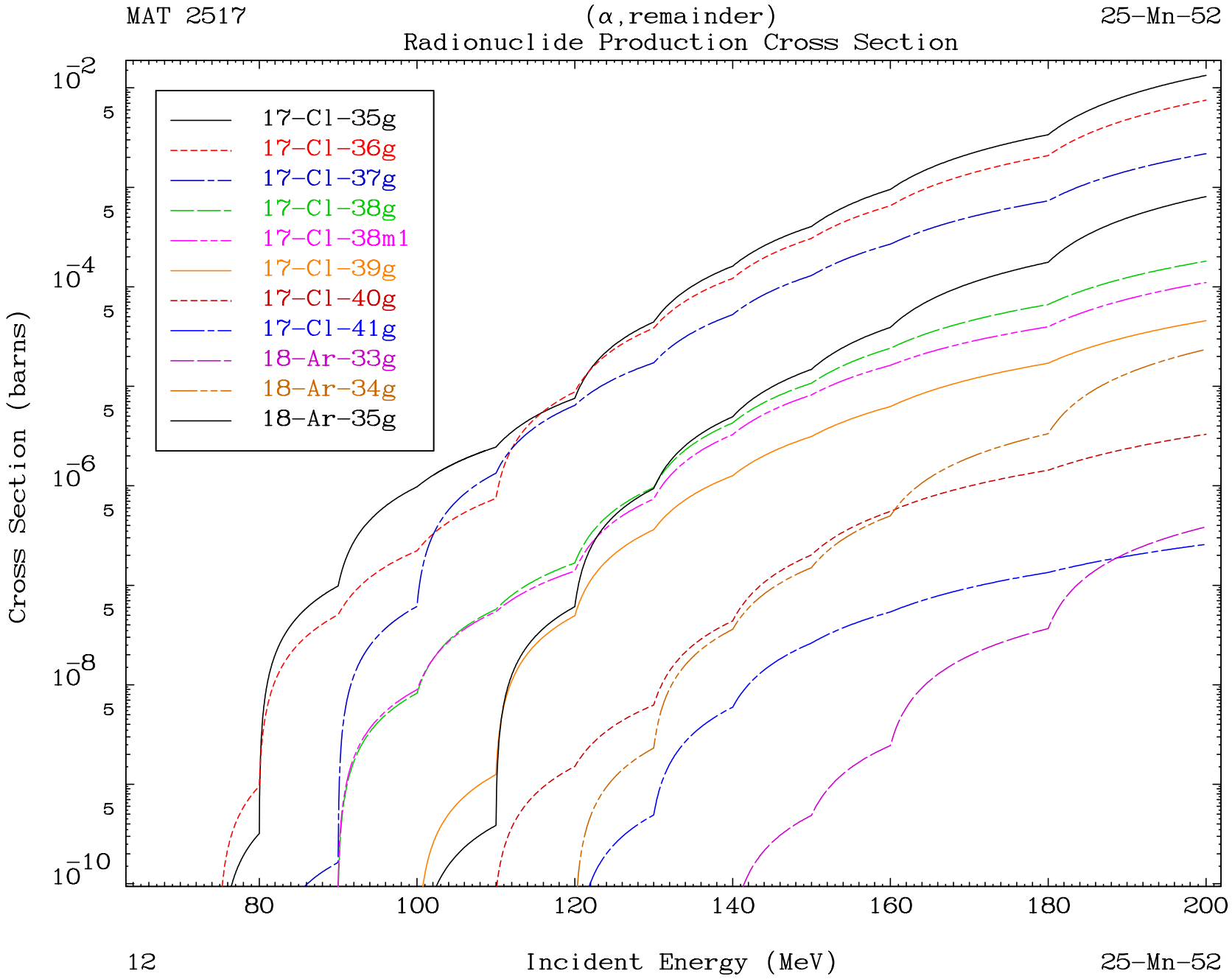

MAT 2517
(α,d) Levels
25-Mn-52
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
10-10
6
7
8
9
101
2
3
Incident Energy (MeV)
7
25-Mn-52

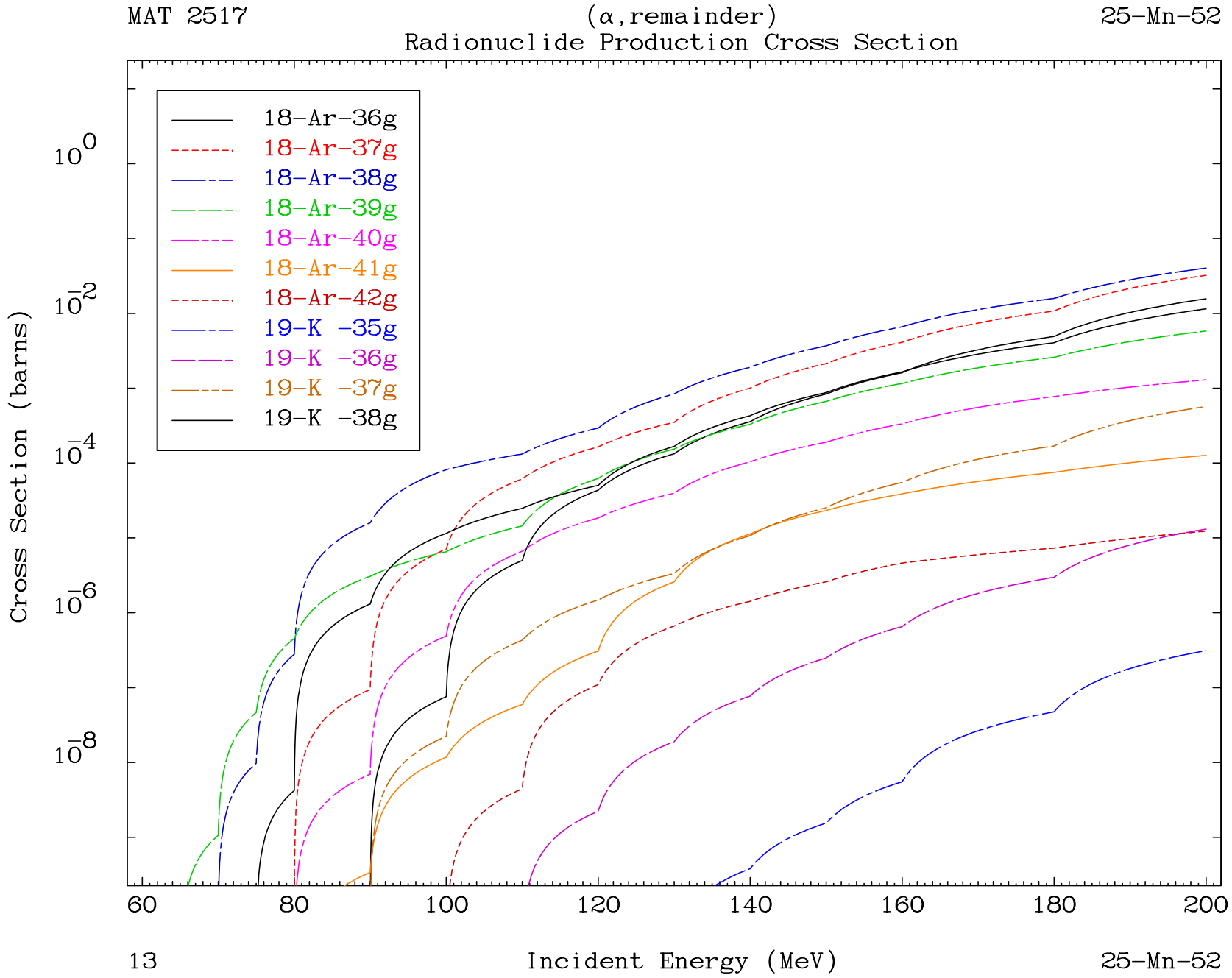

MAT 2517
(α,t) Levels
25-Mn-52
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
15
20
25
30
Incident Energy (MeV)
8
25-Mn-52

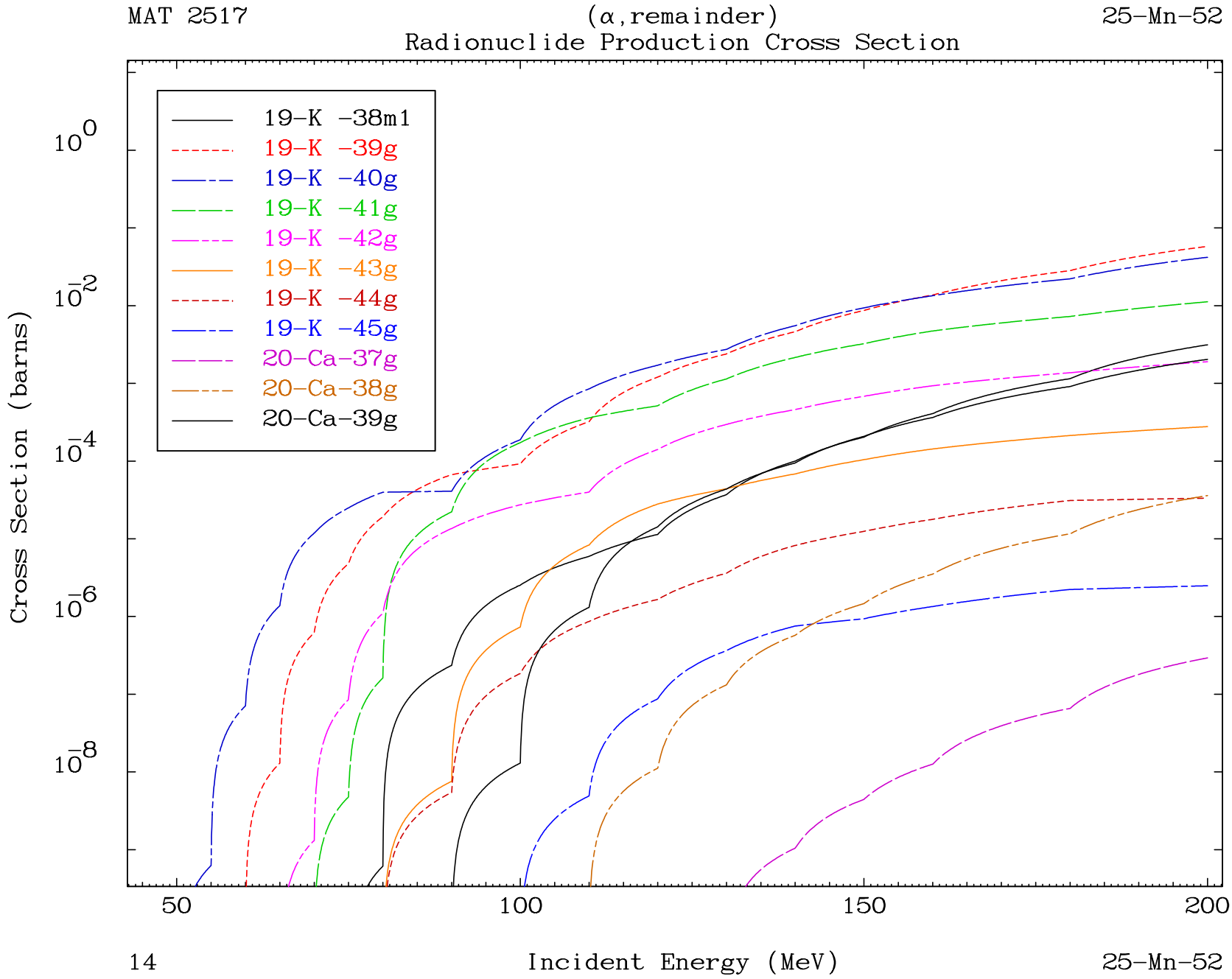

MAT 2517
(α,He3) Levels
25-Mn-52
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
9
Incident Energy (MeV)
25-Mn-52

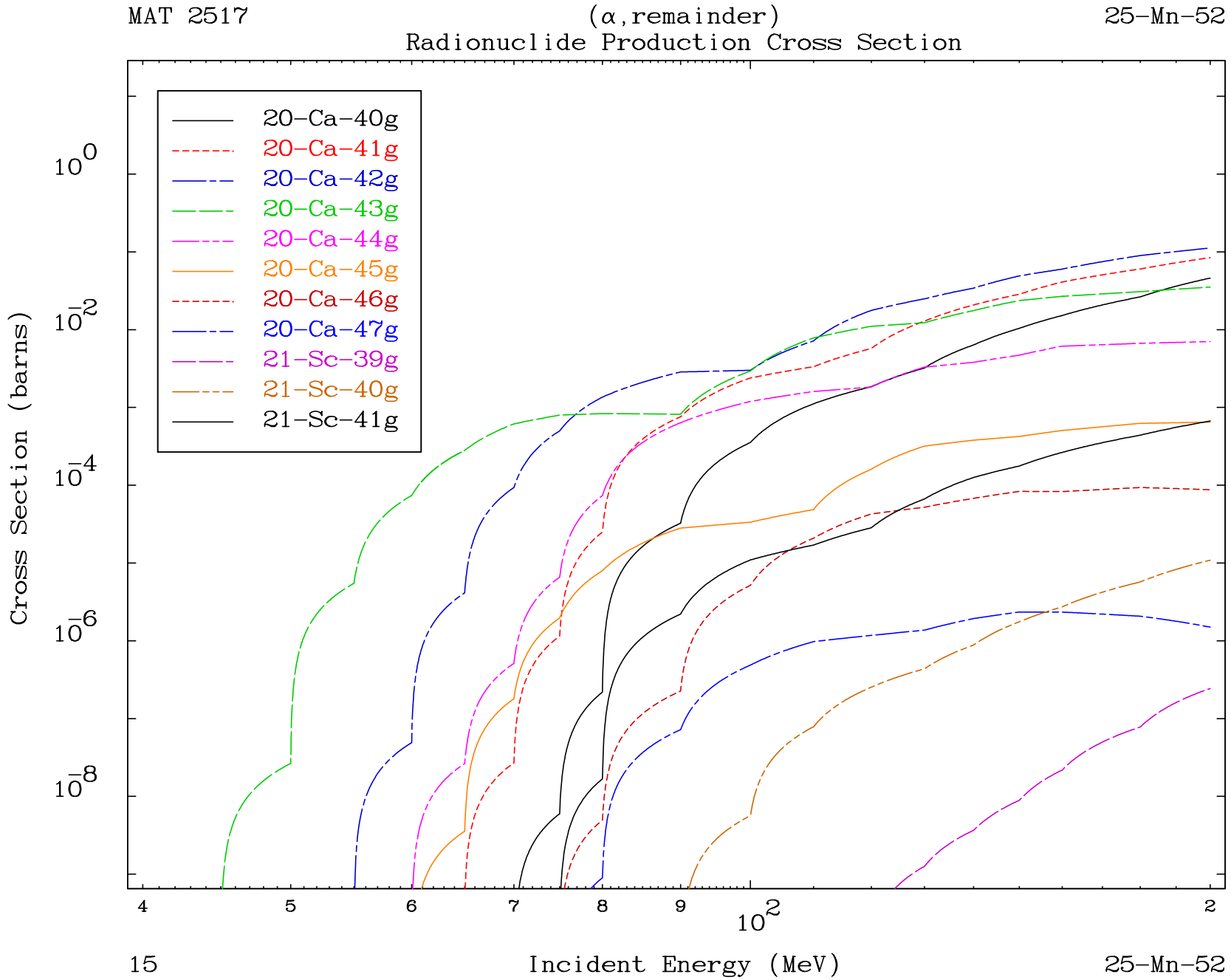

MAT 2517
(α,α) Levels
25-Mn-52
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
Incident Energy (MeV)
25-Mn-52

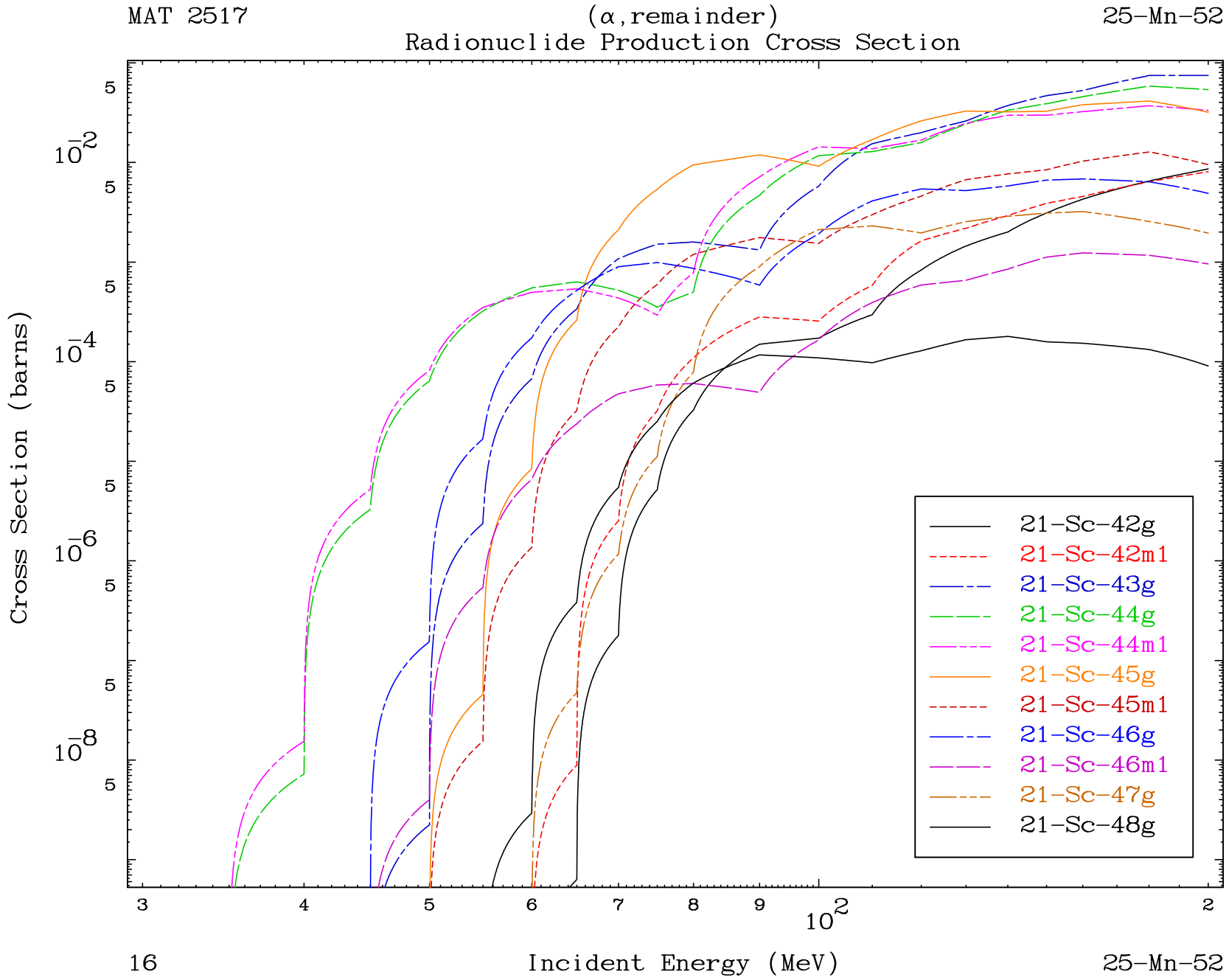

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
17-Cl-31g
17-Cl-32g
17-Cl-33g
17-Cl-34g
17-Cl-34m1
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
11
25-Mn-52


MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
17-Cl-35g
17-Cl-36g
17-Cl-37g
17-Cl-38g
17-Cl-38m1
17-Cl-39g
17-Cl-40g
17-Cl-41g
18-Ar-33g
18-Ar-34g
18-Ar-35g
Cross Section (barns)
10-2
10-4
10-6
10-8
10-10
80
100
120
140
160
180
200
12
Incident Energy (MeV)
25-Mn-52

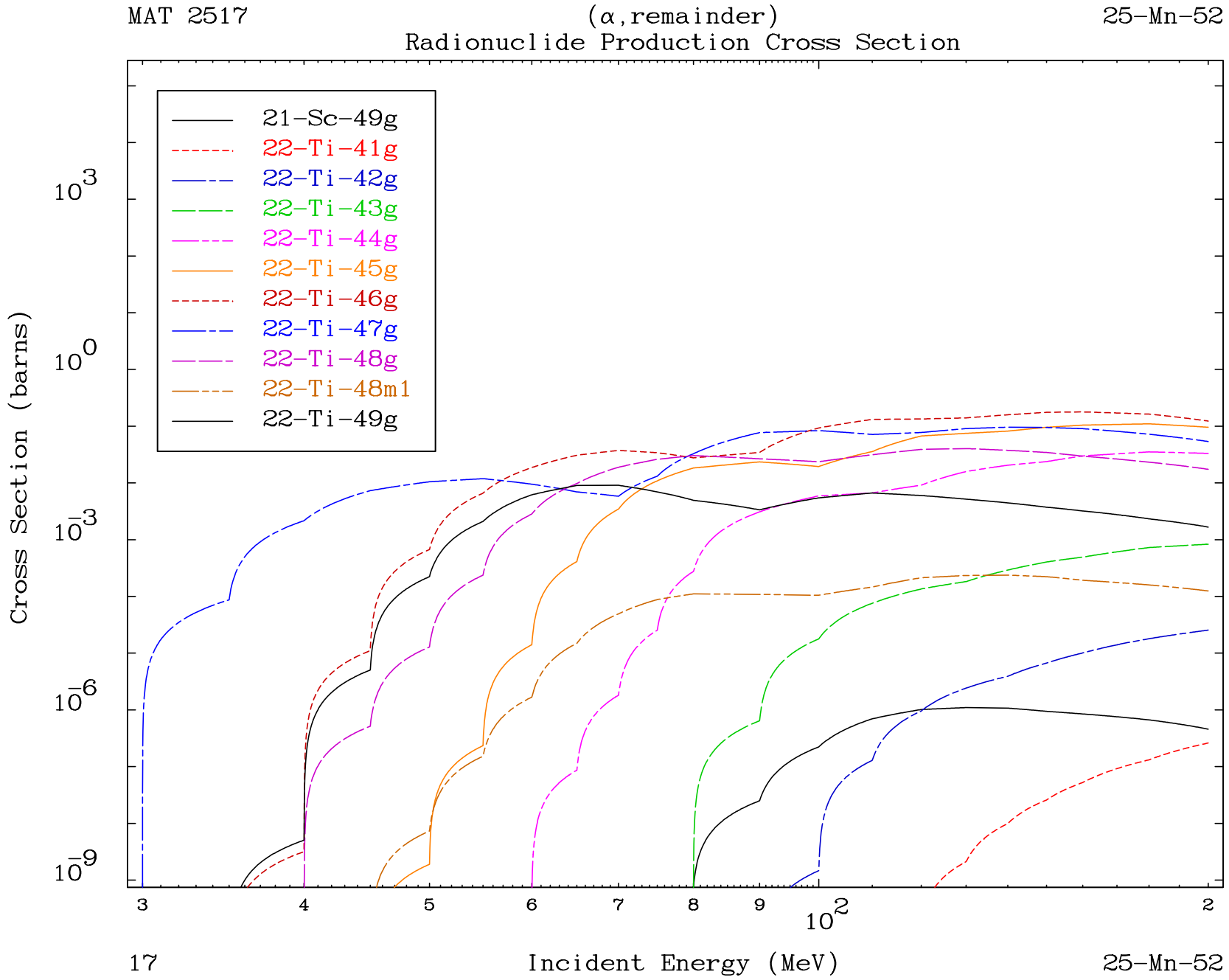

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
18-Ar-36g
18-Ar-37g
18-Ar-38g
18-Ar-39g
18-Ar-40g
18-Ar-41g
18-Ar-42g
19-K -35g
19-K -36g
19-K -37g
19-K -38g
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
60
80
100
120
140
160
180
200
13
Incident Energy (MeV)
25-Mn-52

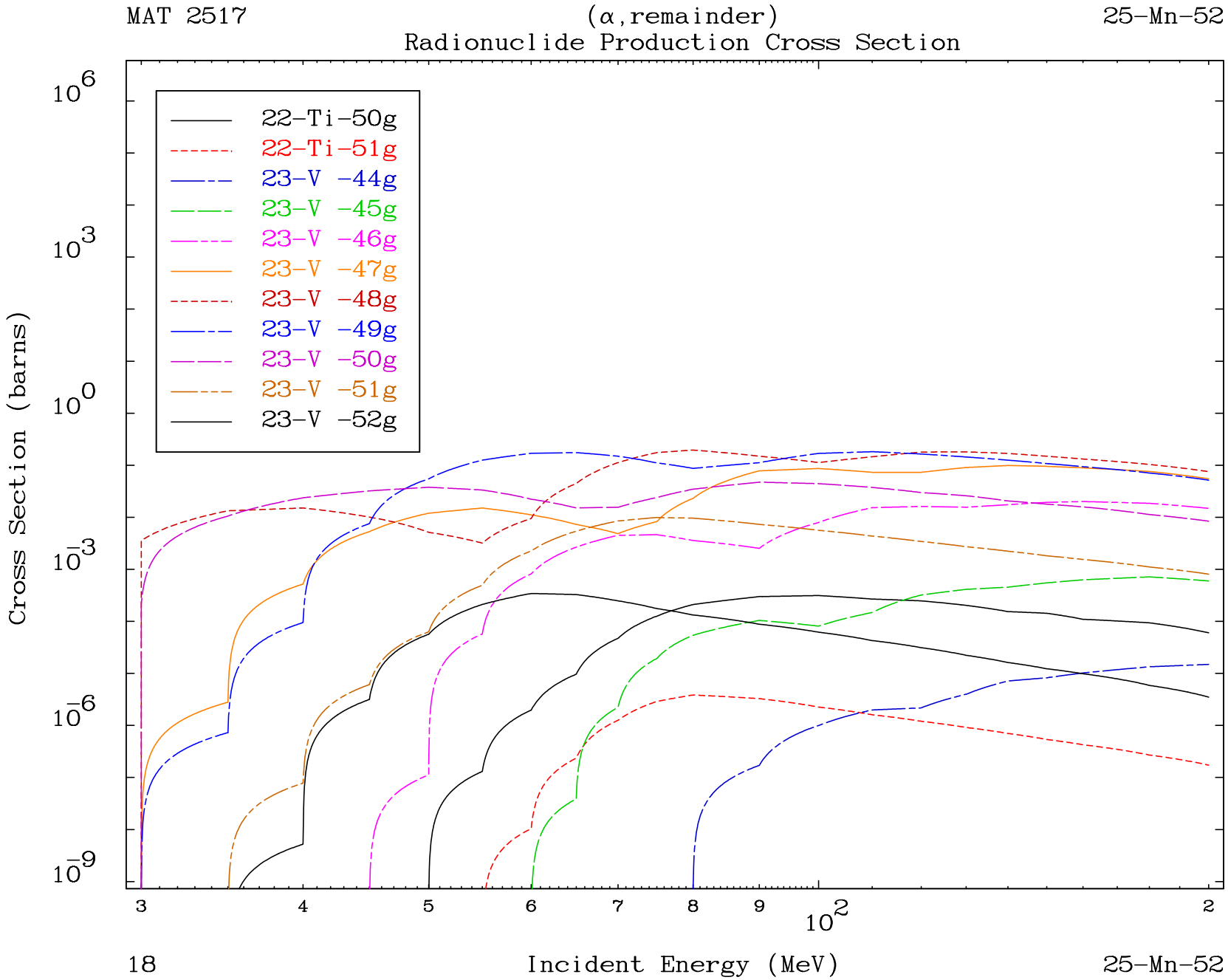

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
19-K -38m1
19-K -39g
19-K -40g
19-K -41g
19-K -42g
19-K -43g
19-K -44g
19-K -45g
20-Ca-37g
20-Ca-38g
20-Ca-39g
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
50
100
150
200
14
Incident Energy (MeV)
25-Mn-52

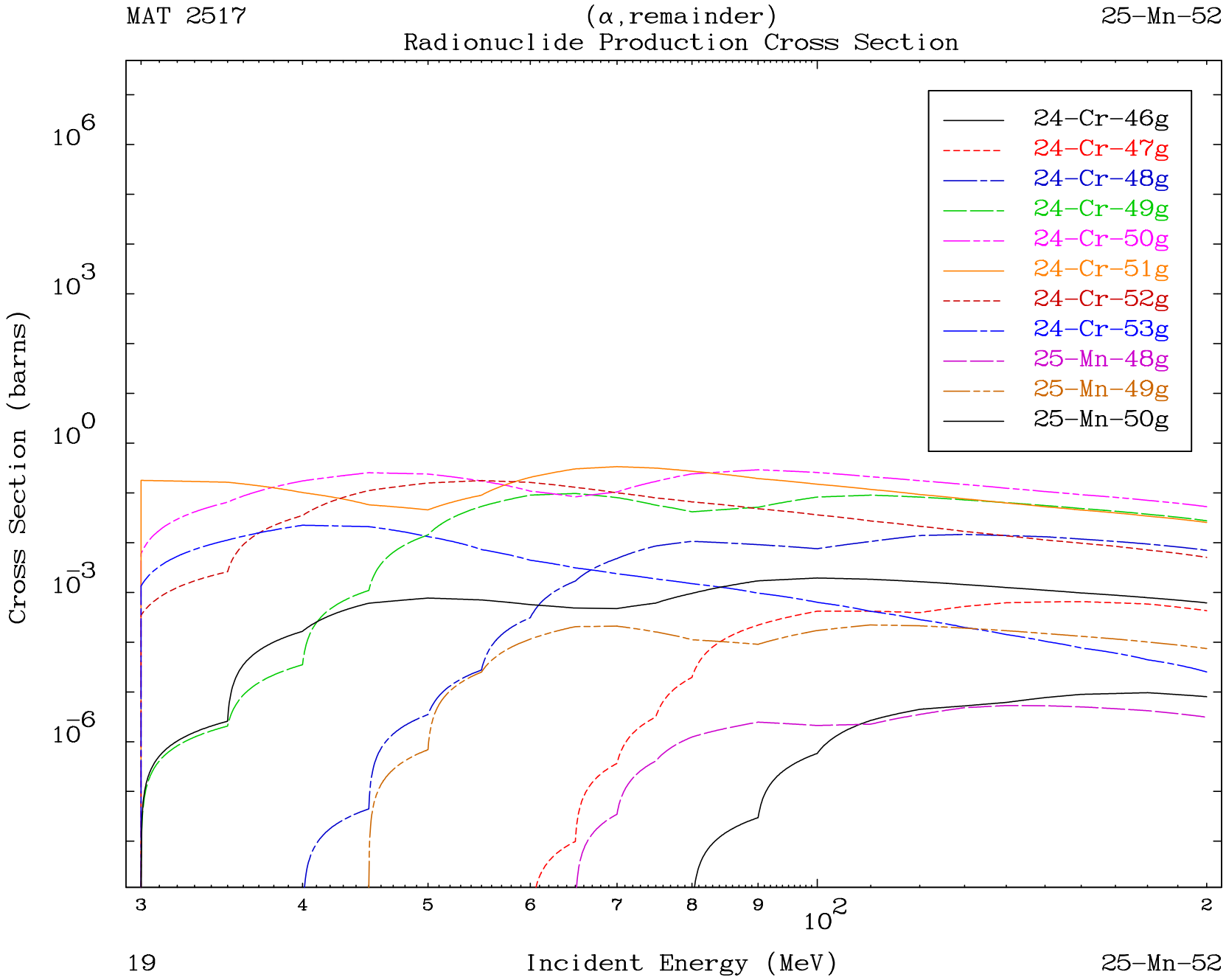

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
20-Ca-40g
20-Ca-41g
20-Ca-42g
20-Ca-43g
20-Ca-44g
20-Ca-45g
20-Ca-46g
20-Ca-47g
21-Sc-39g
21-Sc-40g
21-Sc-41g
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
4
5
6
7
8
9
10^2
2
15
Incident Energy (MeV)
25-Mn-52

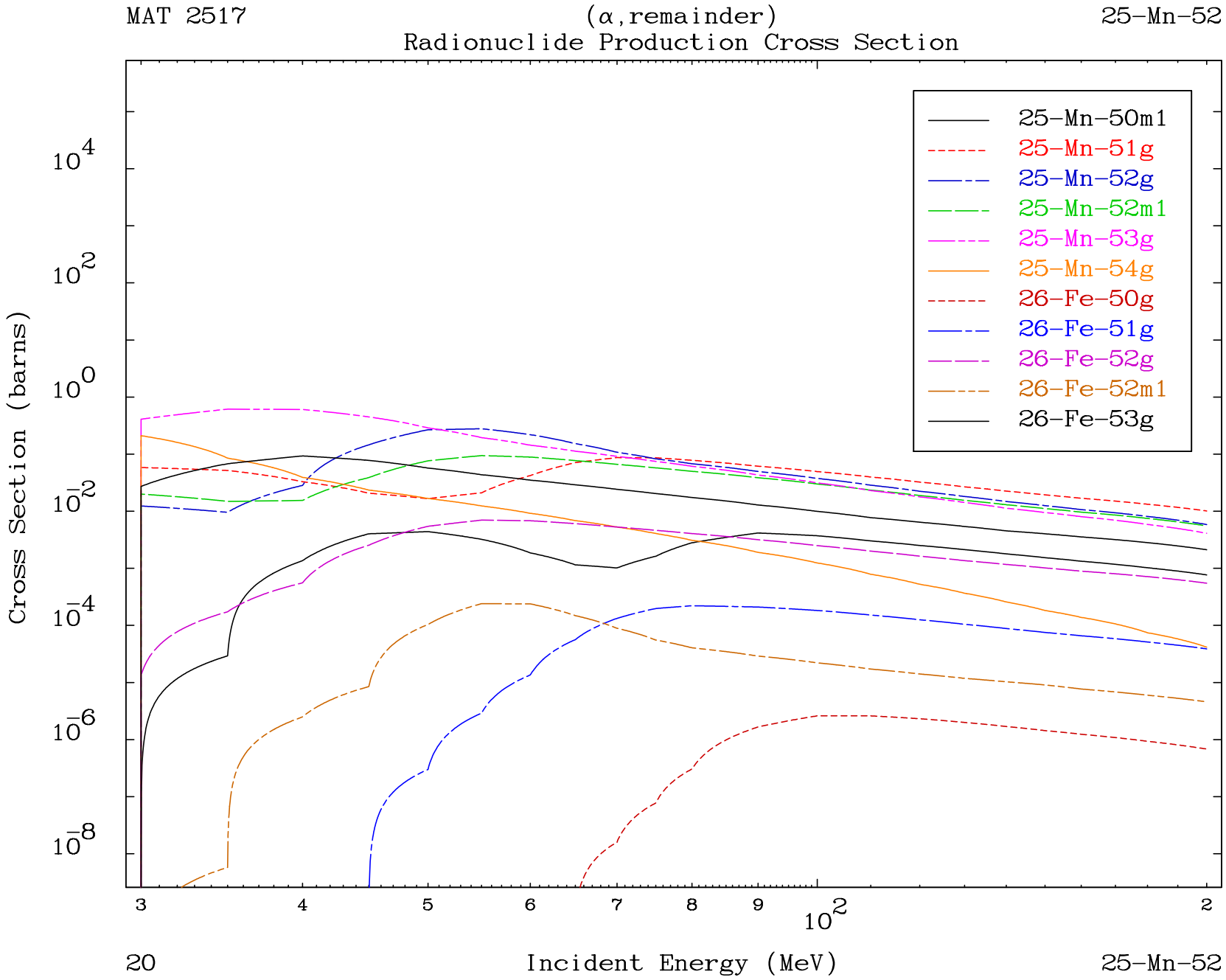

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
21-Sc-42g
21-Sc-42m1
21-Sc-43g
21-Sc-44g
21-Sc-44m1
21-Sc-45g
21-Sc-45m1
21-Sc-46g
21-Sc-46m1
21-Sc-47g
21-Sc-48g

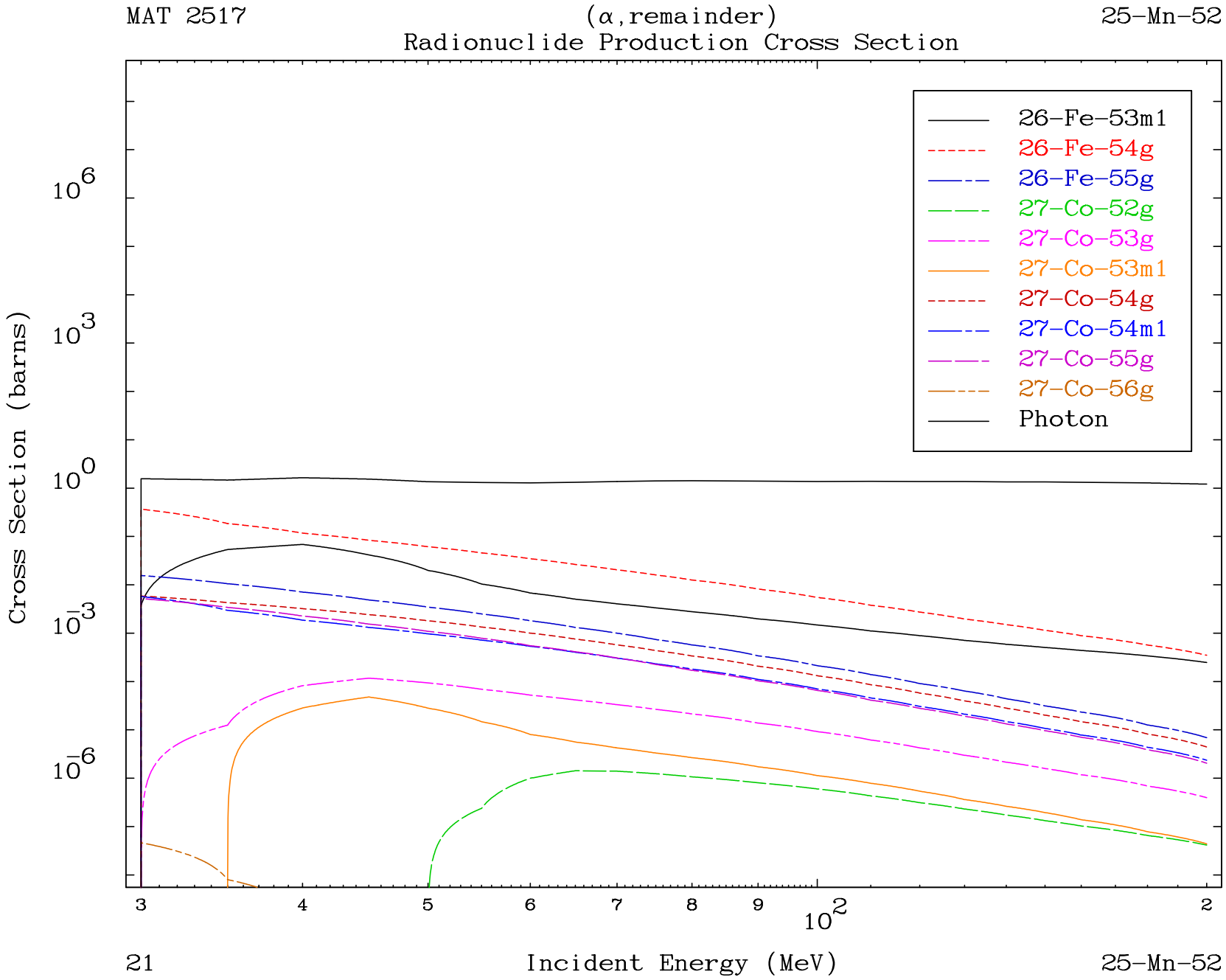
25-Mn-52

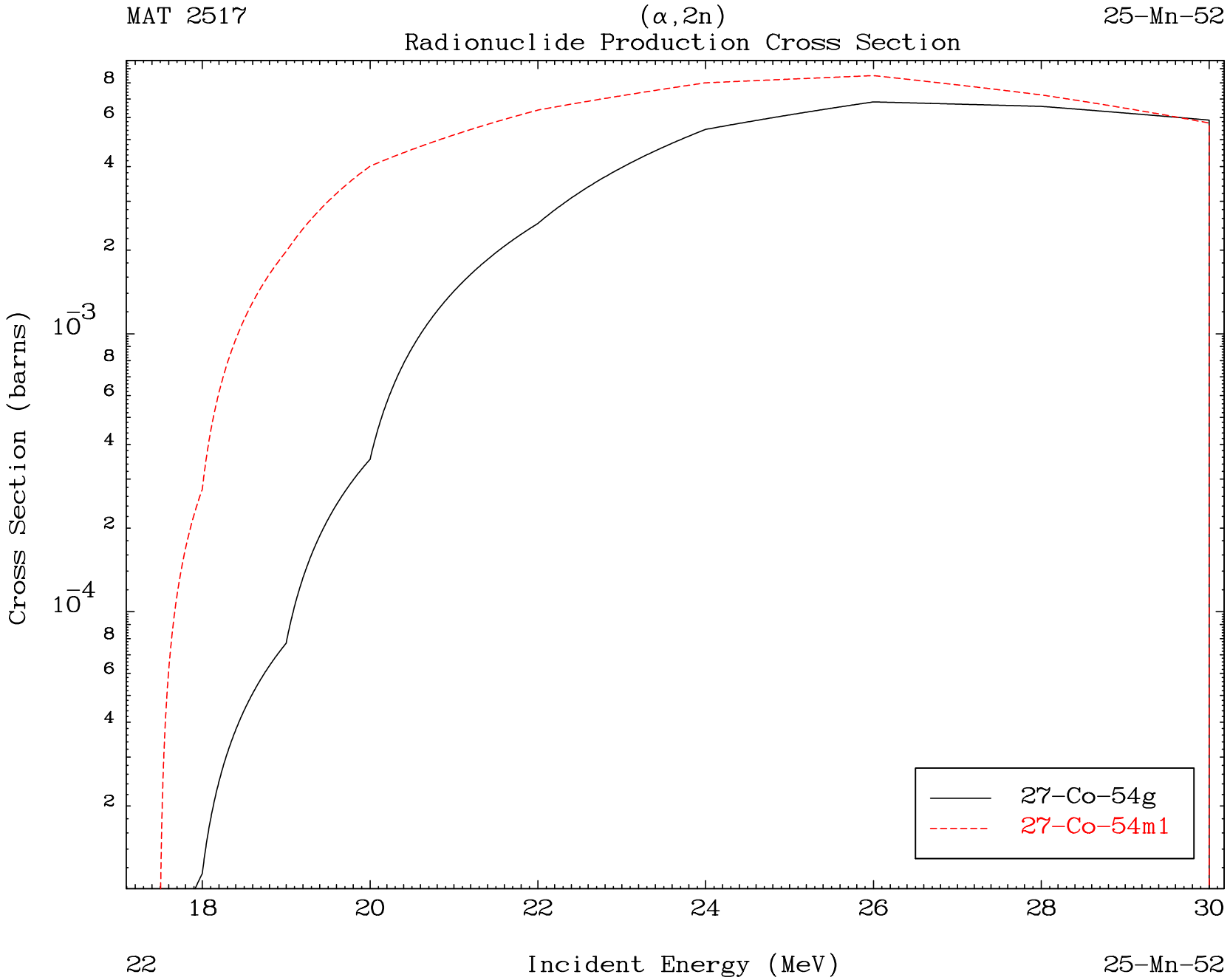

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
21-Sc-49g
22-Ti-41g
22-Ti-42g
22-Ti-43g
22-Ti-44g
22-Ti-45g
22-Ti-46g
22-Ti-47g
22-Ti-48g
22-Ti-48m1
22-Ti-49g
Cross Section (barns)
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
17
Incident Energy (MeV)
25-Mn-52

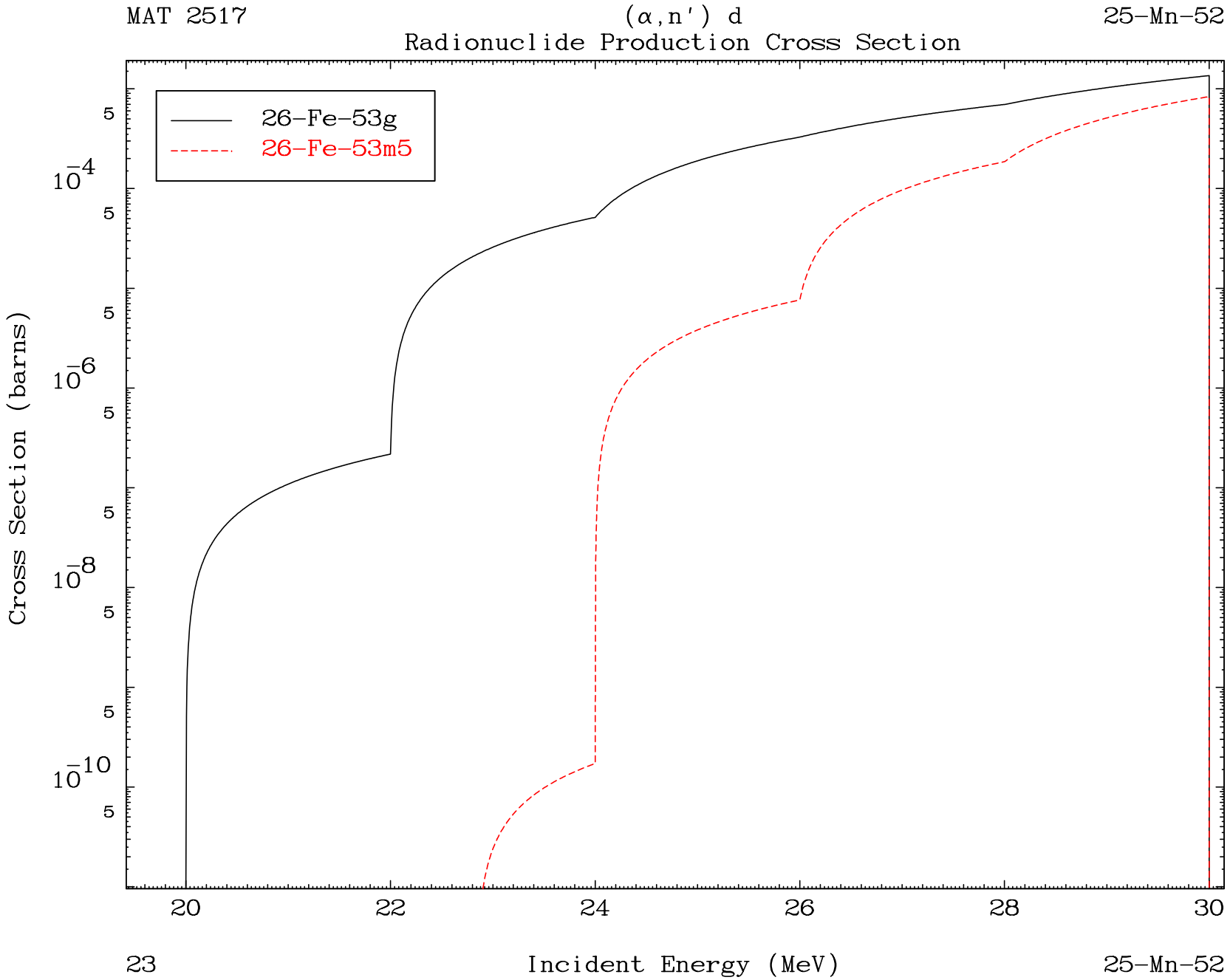

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
22-Ti-50g
22-Ti-51g
23-V -44g
23-V -45g
23-V -46g
23-V -47g
23-V -48g
23-V -49g
23-V -50g
23-V -51g
23-V -52g
Cross Section (barns)
Incident Energy (MeV)
18
25-Mn-52

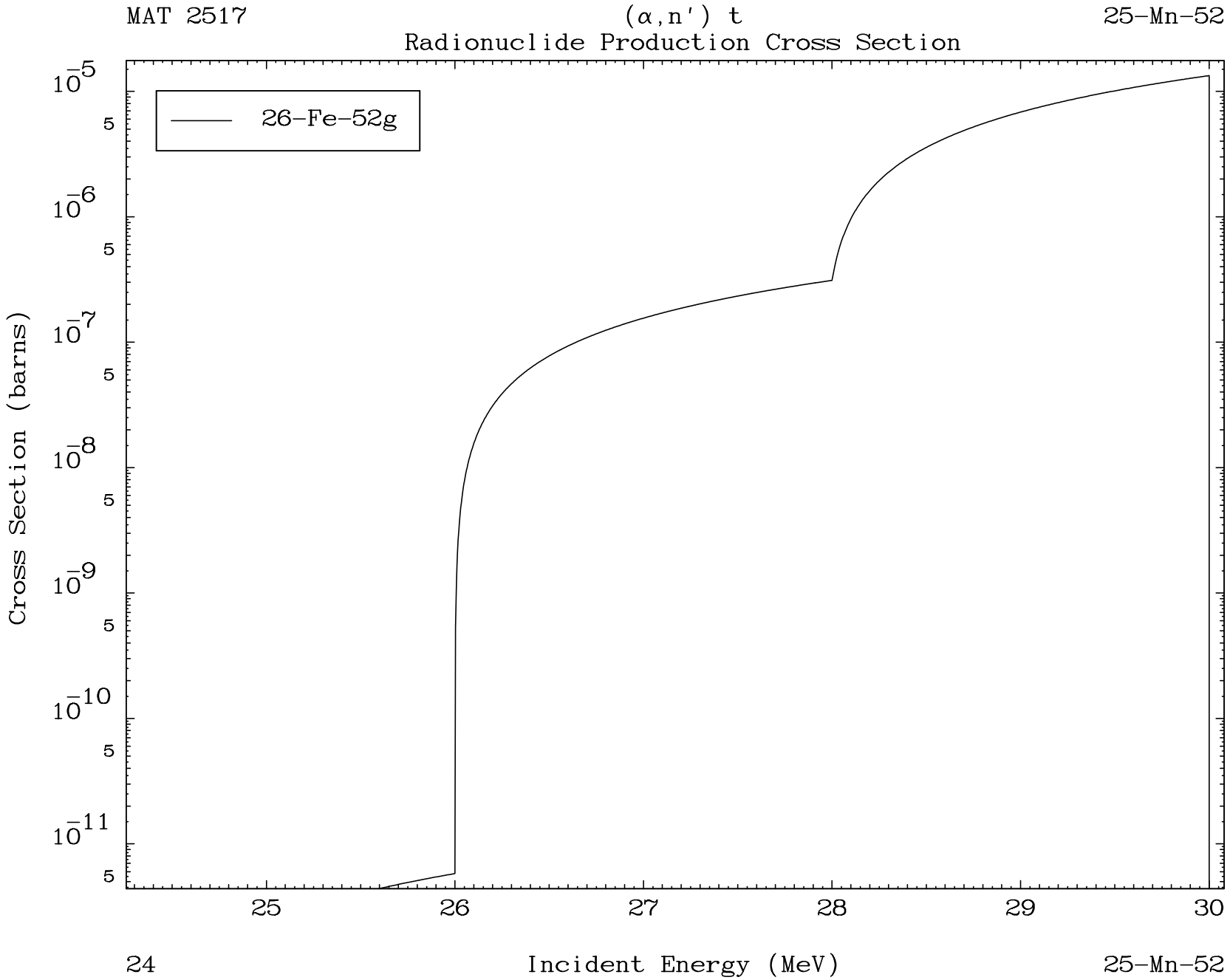

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
24-Cr-46g
24-Cr-47g
24-Cr-48g
24-Cr-49g
24-Cr-50g
24-Cr-51g
24-Cr-52g
24-Cr-53g
25-Mn-48g
25-Mn-49g
25-Mn-50g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
19
Incident Energy (MeV)
25-Mn-52

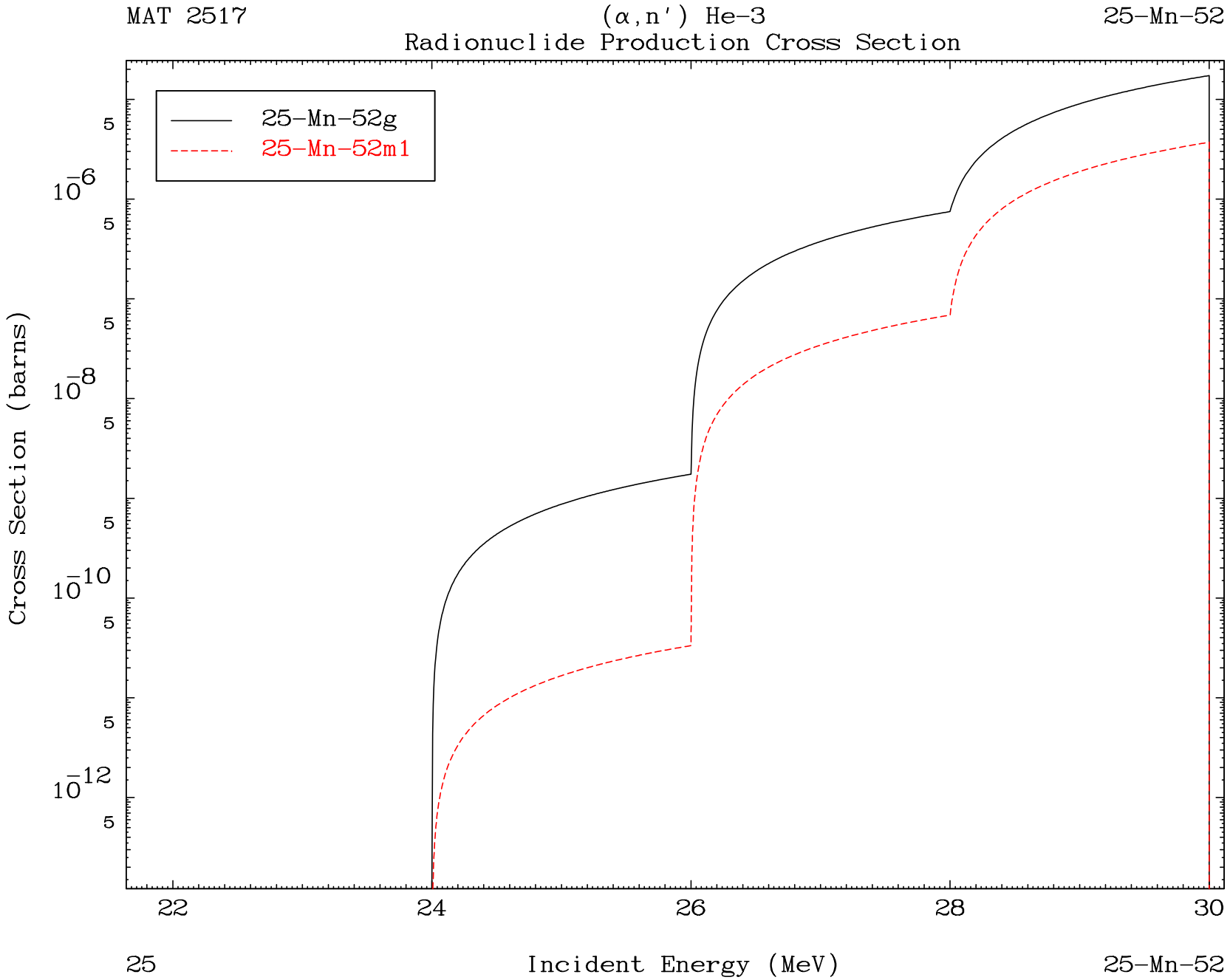

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
25-Mn-50m1
25-Mn-51g
25-Mn-52g
25-Mn-52m1
25-Mn-53g
25-Mn-54g
26-Fe-50g
26-Fe-51g
26-Fe-52g
26-Fe-52m1
26-Fe-53g
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
25-Mn-52

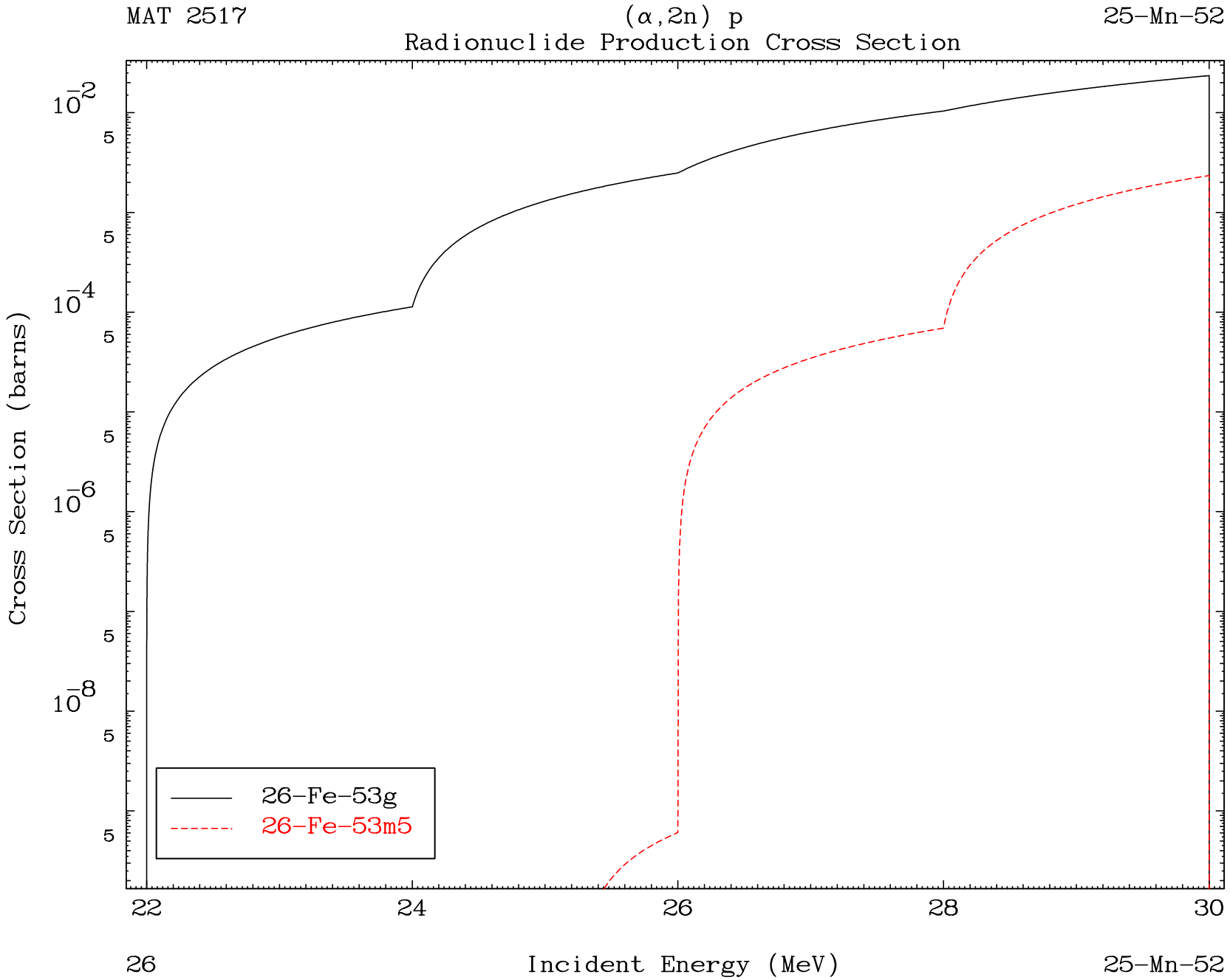

MAT 2517
(α,remainder)
25-Mn-52
Radionuclide Production Cross Section
26-Fe-53m1
26-Fe-54g
26-Fe-55g
27-Co-52g
27-Co-53g
27-Co-53m1
27-Co-54g
27-Co-54m1
27-Co-55g
27-Co-56g
Photon
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
21
Incident Energy (MeV)
25-Mn-52

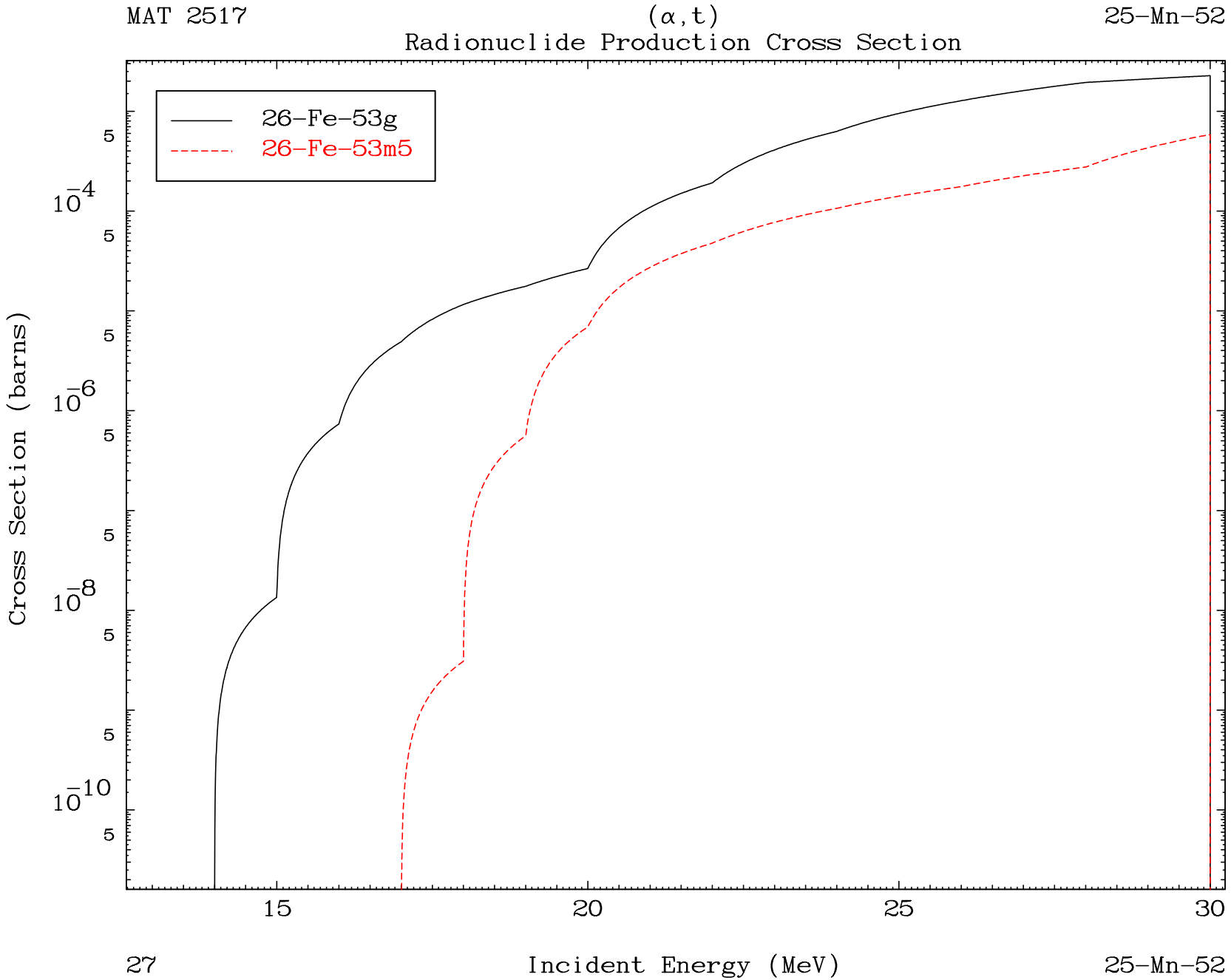

MAT 2517
(α,2n)
25-Mn-52
Radionuclide Production Cross Section
Cross Section (barns)
10-3
10-4
8
6
4
2
18
20
22
24
26
28
30
22
Incident Energy (MeV)
25-Mn-52
27-Co-54g
27-Co-54m1

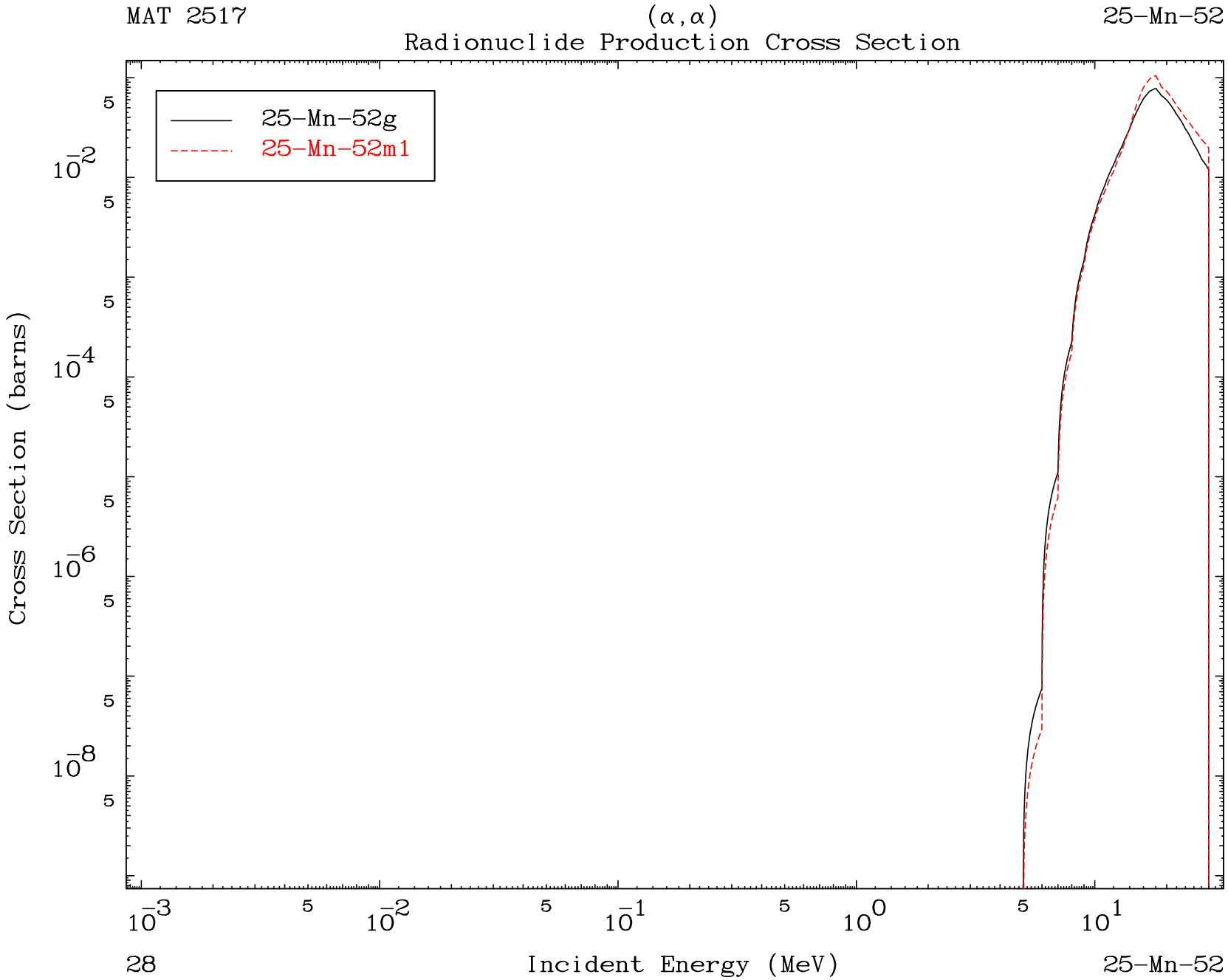

MAT 2517
(α,n') d
25-Mn-52
Radionuclide Production Cross Section
26-Fe-53g
26-Fe-53m5
Cross Section (barns)
10-4
10-6
10-8
10-10
5
20
22
24
26
28
30
23
Incident Energy (MeV)
25-Mn-52

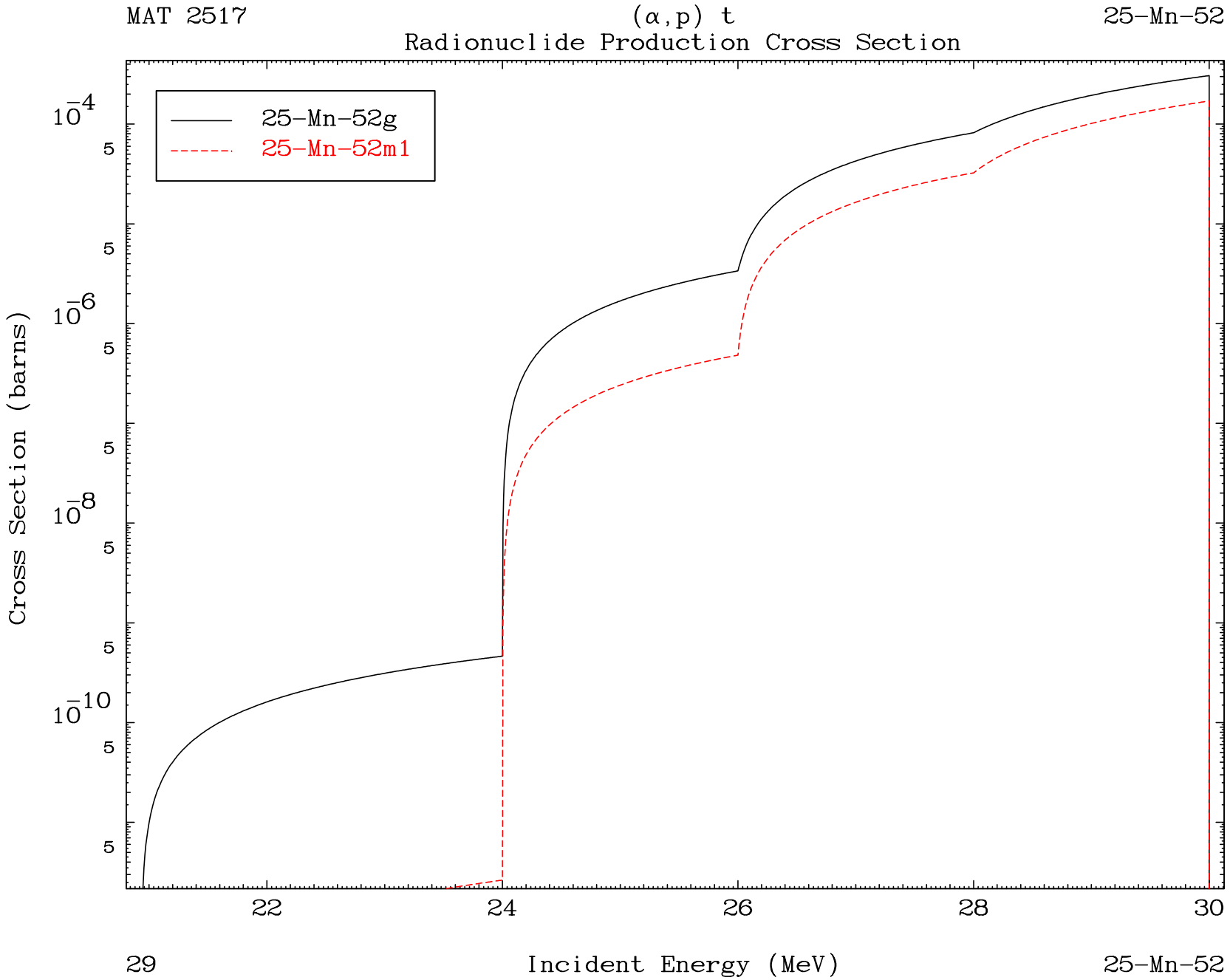

MAT 2517
(α,n') t
25-Mn-52
Radionuclide Production Cross Section
26-Fe-52g
Cross Section (barns)
10-5
10-6
10-7
10-8
10-9
10-10
10-11
5
25
26
27
28
29
30
24
Incident Energy (MeV)
25-Mn-52


MAT 2517
(α,n') He-3
25-Mn-52
Radionuclide Production Cross Section
25-Mn-52g
25-Mn-52m1
Cross Section (barns)
10-6
10-8
10-10
10-12
5
22
24
26
28
30
25
Incident Energy (MeV)
25-Mn-52


MAT 2517
(α,2n) p
25-Mn-52
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
22
24
26
28
30
26
Incident Energy (MeV)
25-Mn-52
26-Fe-53g
26-Fe-53m5


MAT 2517
(α,t)
25-Mn-52
Radionuclide Production Cross Section
26-Fe-53g
26-Fe-53m5
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
27
Incident Energy (MeV)
25-Mn-52


MAT 2517
(α,α)
25-Mn-52
Radionuclide Production Cross Section
25-Mn-52g
25-Mn-52m1
Cross Section (barns)
10-2
10-4
10-6
10-8
10-3
10-2
10-1
100
101
Incident Energy (MeV)
28
25-Mn-52


MAT 2517
(α,p) t
25-Mn-52
Radionuclide Production Cross Section
25-Mn-52g
25-Mn-52m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
22
24
26
28
30
29
Incident Energy (MeV)
25-Mn-52