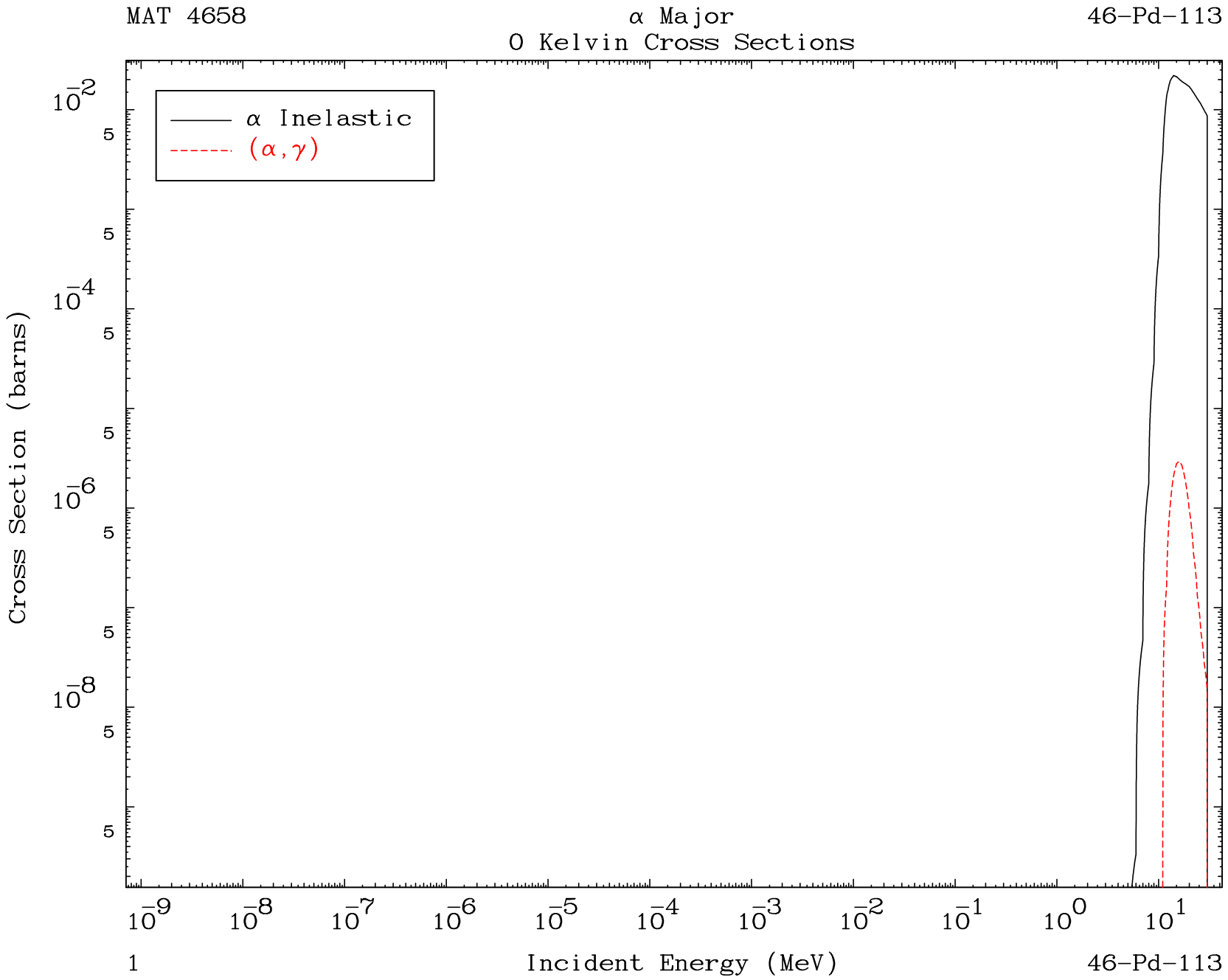
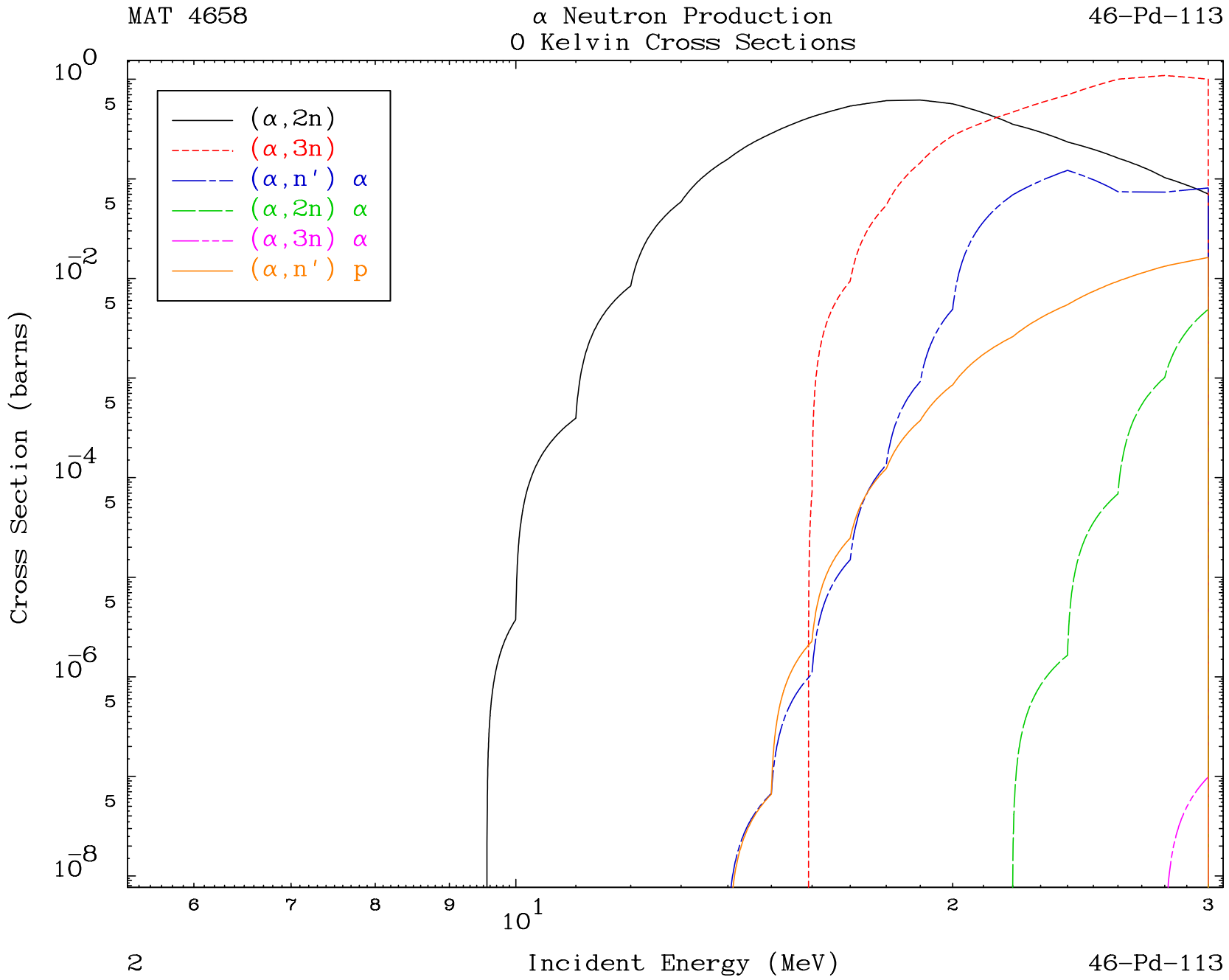
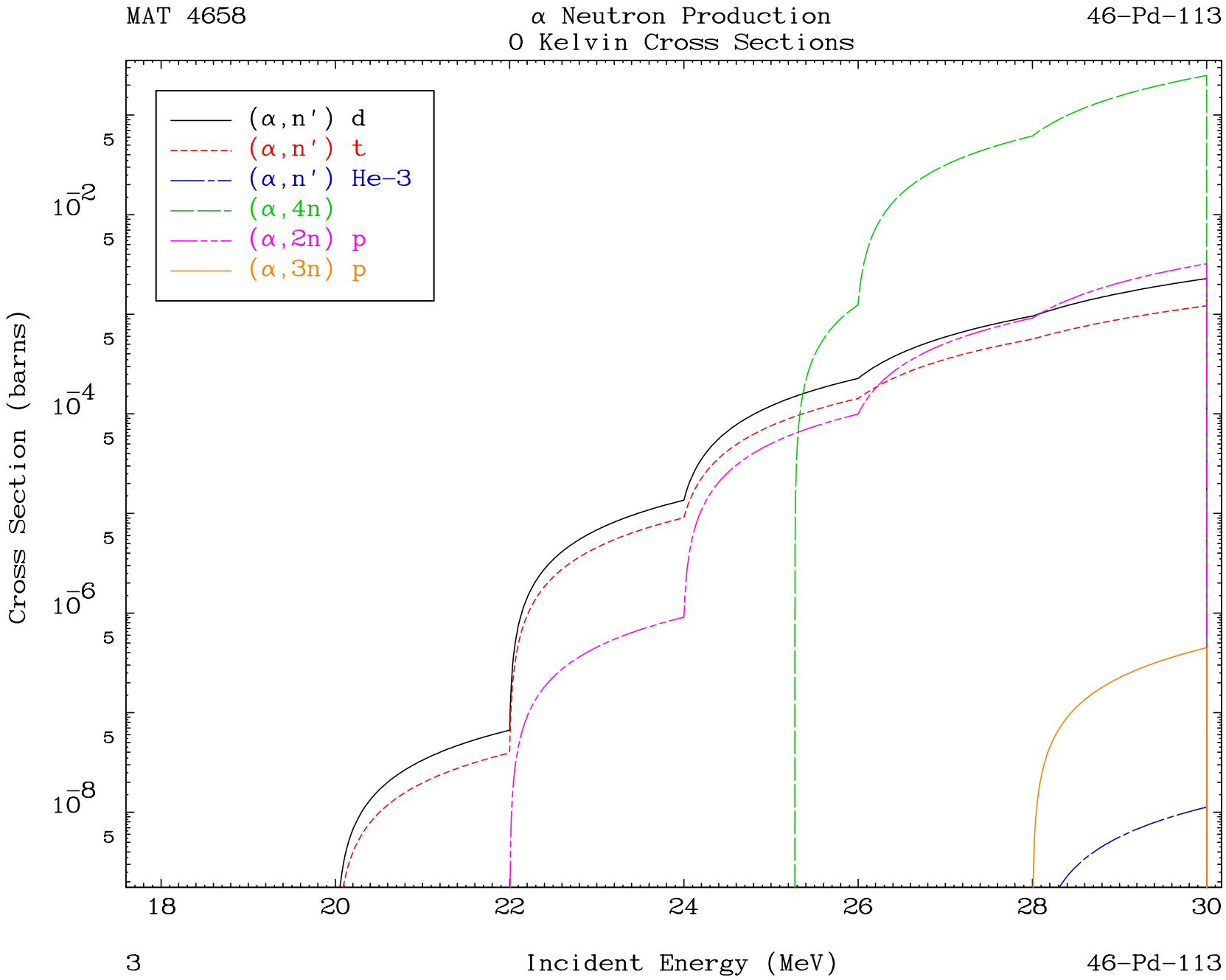
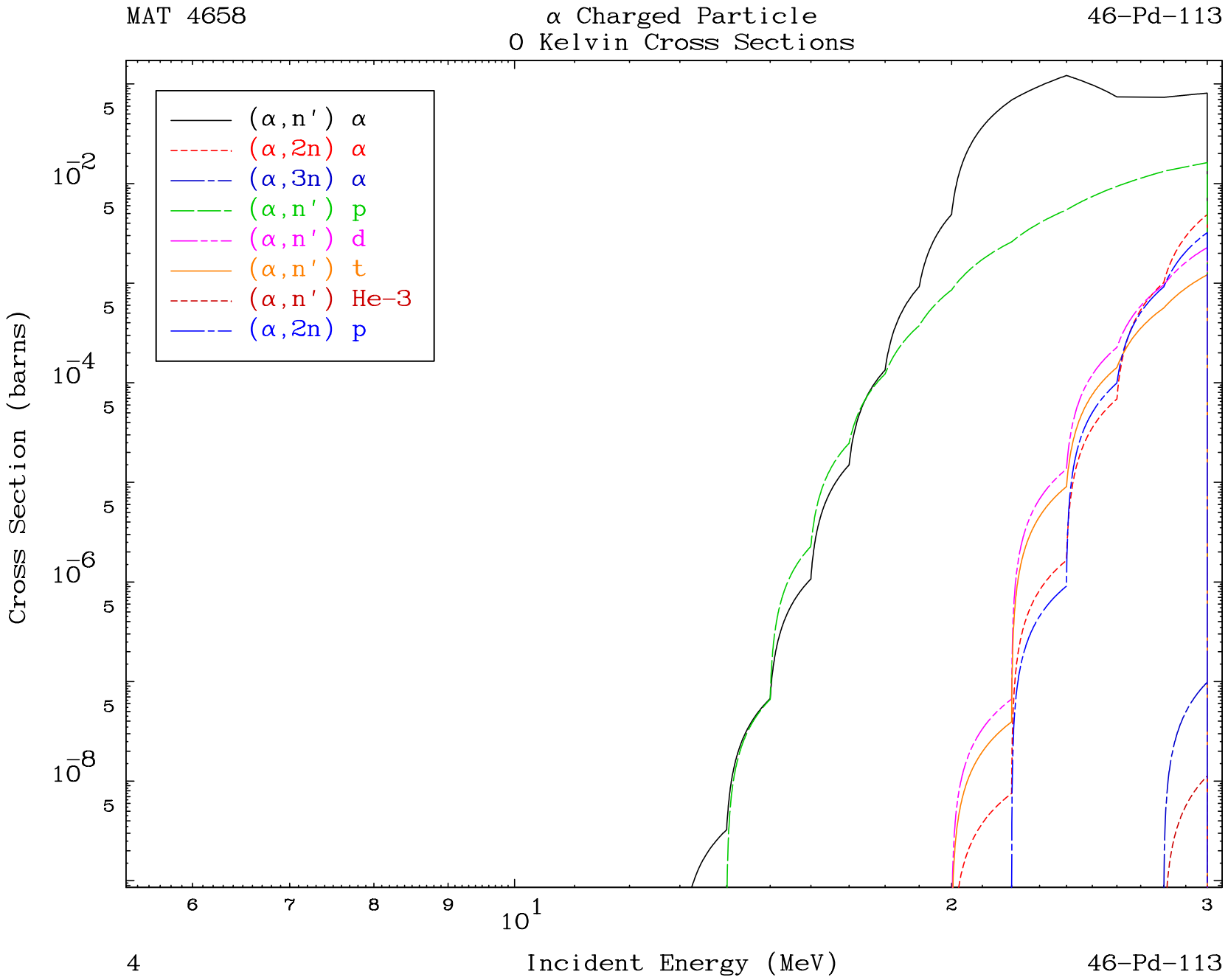
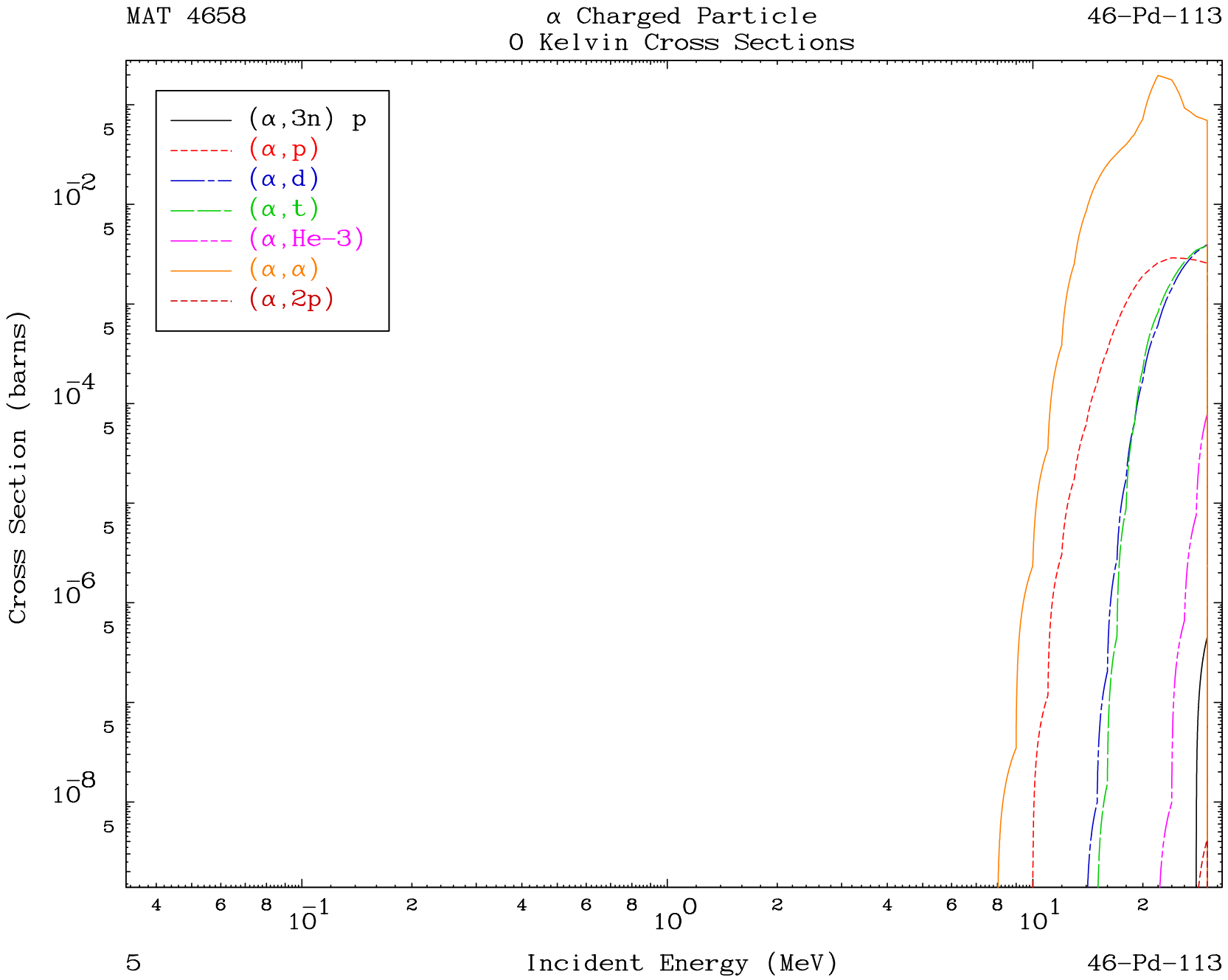
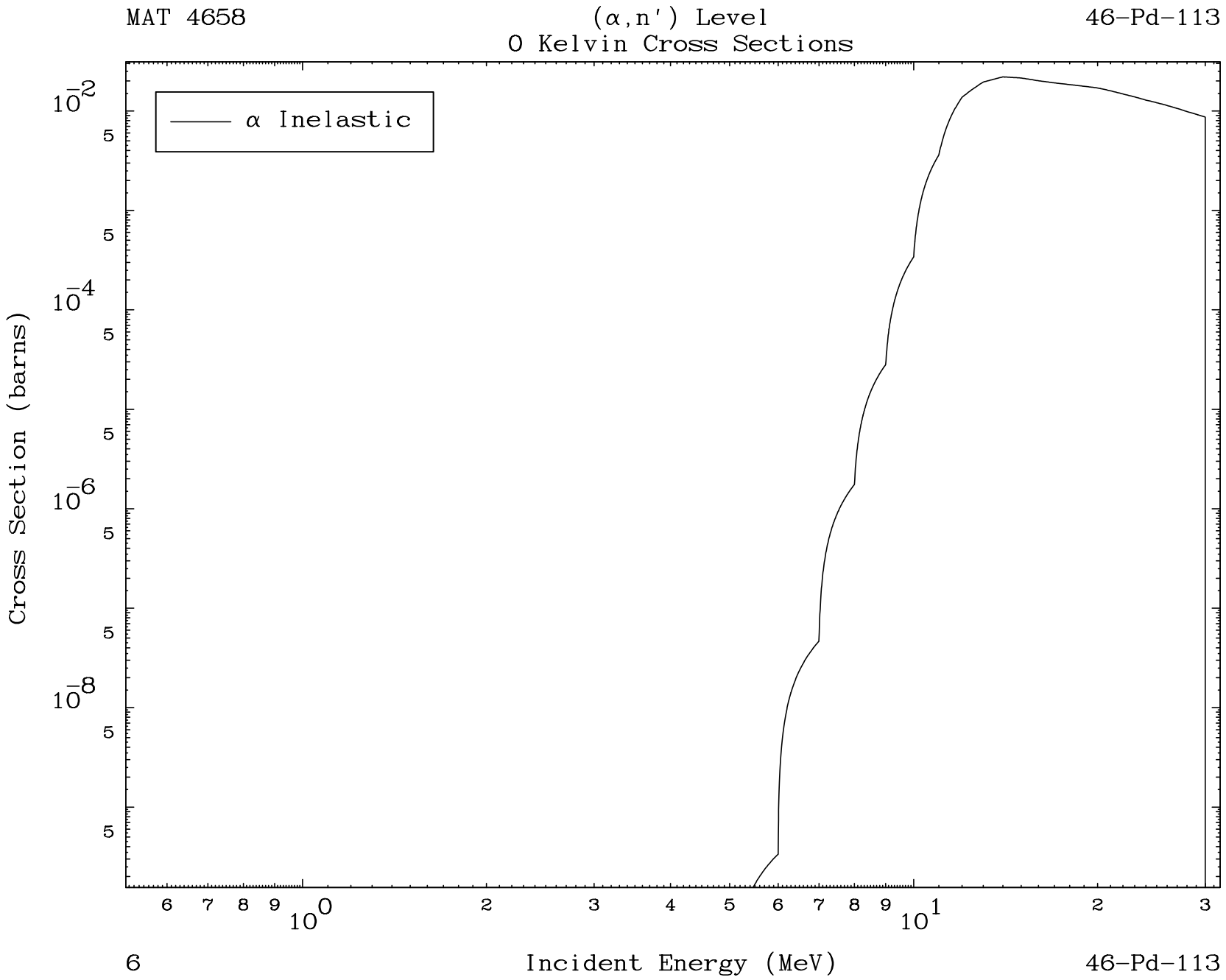

MAT 4658
α Major
46-Pd-113
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
46-Pd-113

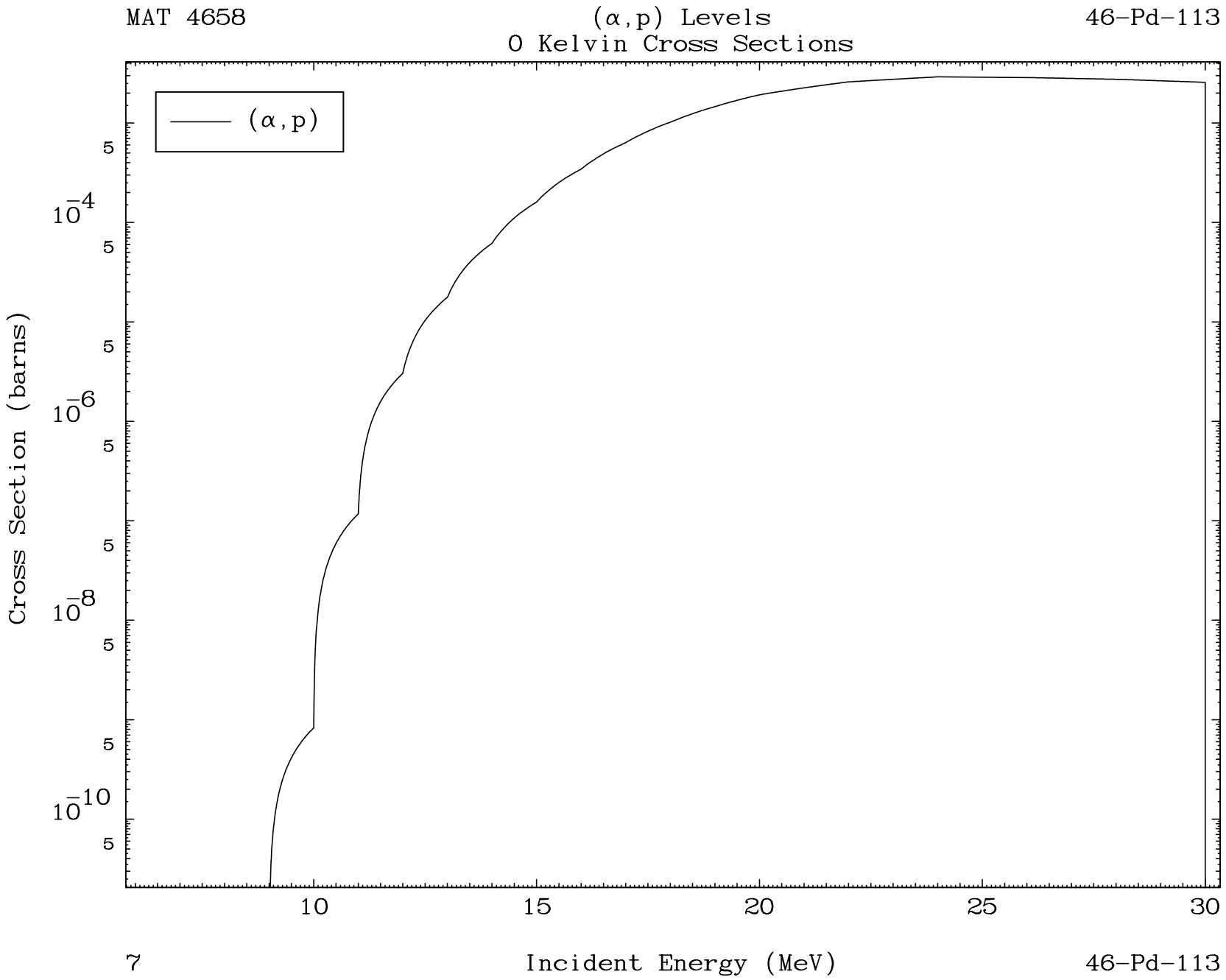

MAT 4658
α Neutron Production
0 Kelvin Cross Sections
46-Pd-113
(α,2n)
(α,3n)
(α,n') α
(α,2n) α
(α,3n) α
(α,n') p
Cross Section (barns)
Incident Energy (MeV)
46-Pd-113

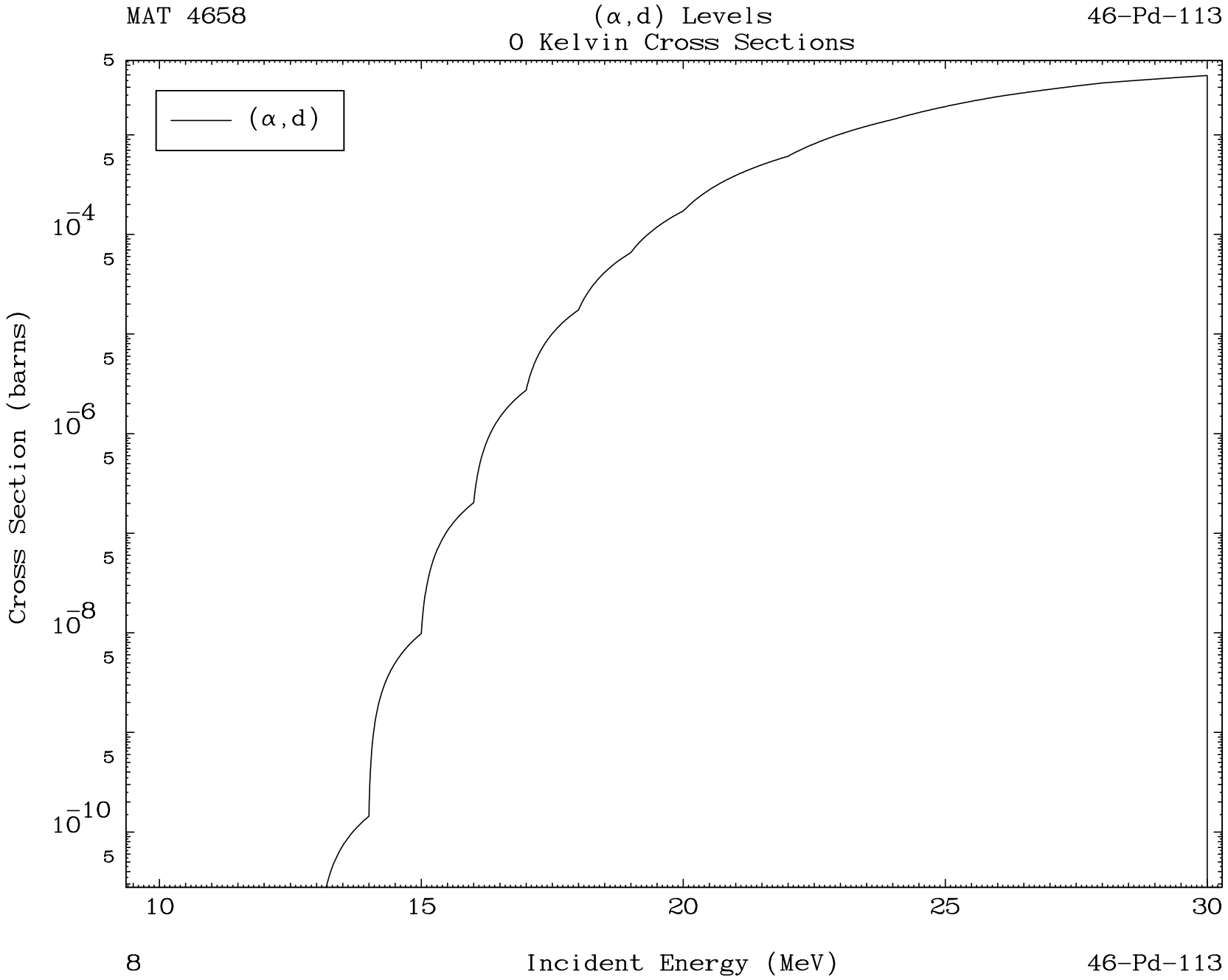

MAT 4658
α Neutron Production
0 Kelvin Cross Sections
46-Pd-113
(α,n') d
(α,n') t
(α,n') He-3
(α,4n)
(α,2n) p
(α,3n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
5
18
20
22
24
26
28
30
3
Incident Energy (MeV)
46-Pd-113

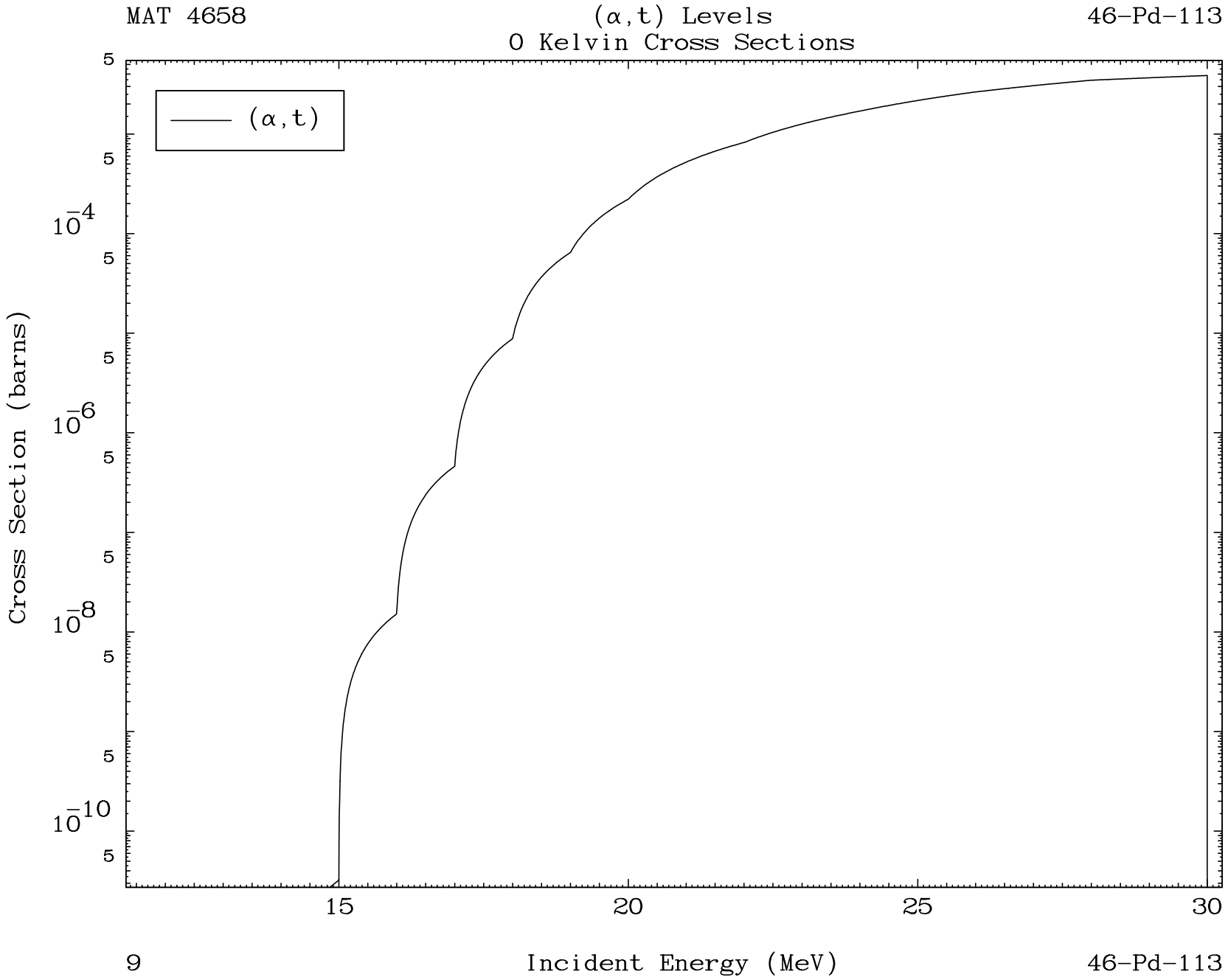

MAT 4658
α Charged Particle
0 Kelvin Cross Sections
46-Pd-113
(α,n') α
(α,2n) α
(α,3n) α
(α,n') p
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6
7
8
9
10 1
2
3
4
Incident Energy (MeV)
46-Pd-113

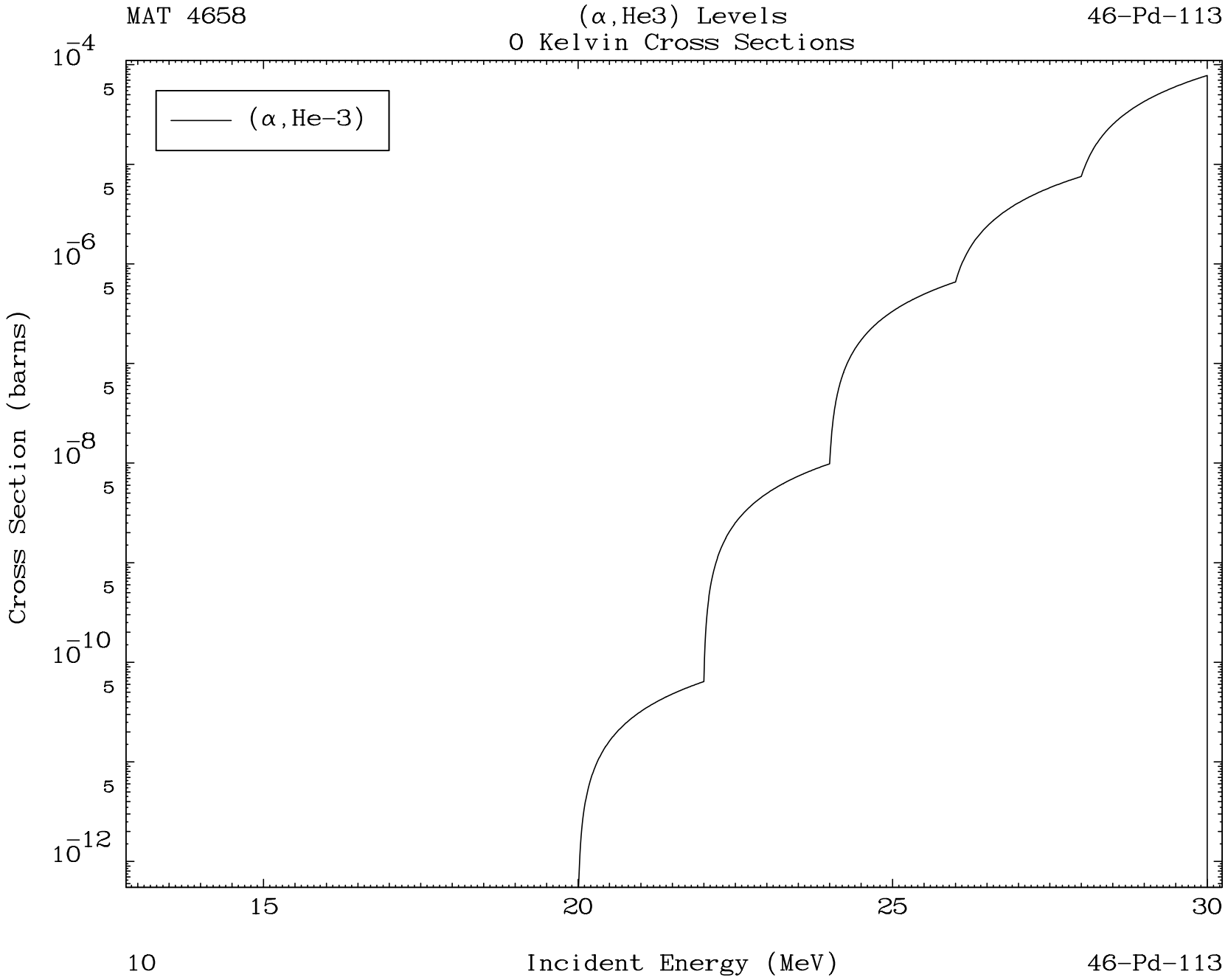

MAT 4658
α Charged Particle
0 Kelvin Cross Sections
46-Pd-113
(α,3n) p
(α,p)
(α,d)
(α,t)
(α,He-3)
(α,α)
(α,2p)
Cross Section (barns)
Incident Energy (MeV)
46-Pd-113

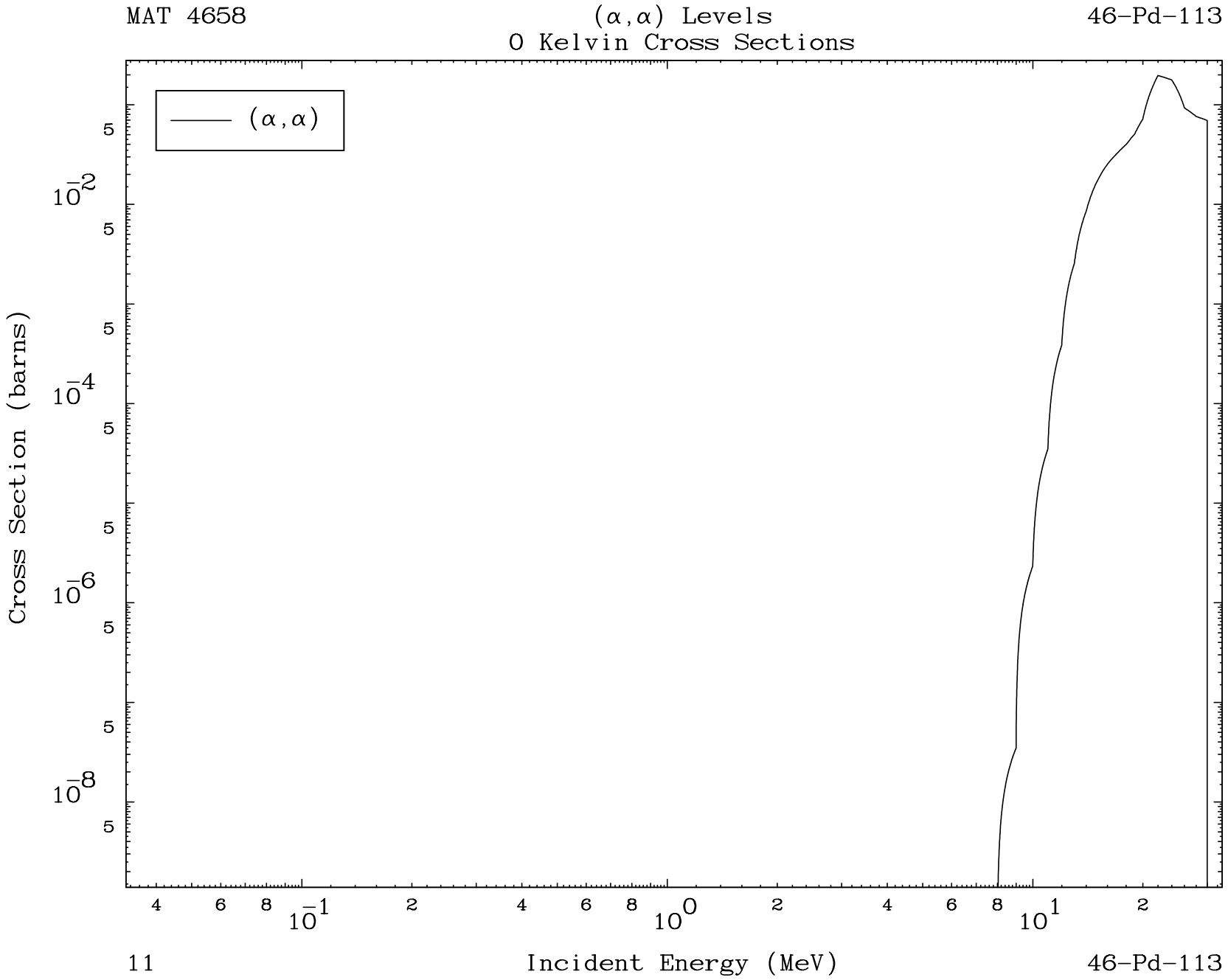

MAT 4658
(α,n') Level
46-Pd-113
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
Incident Energy (MeV)
100
101
46-Pd-113

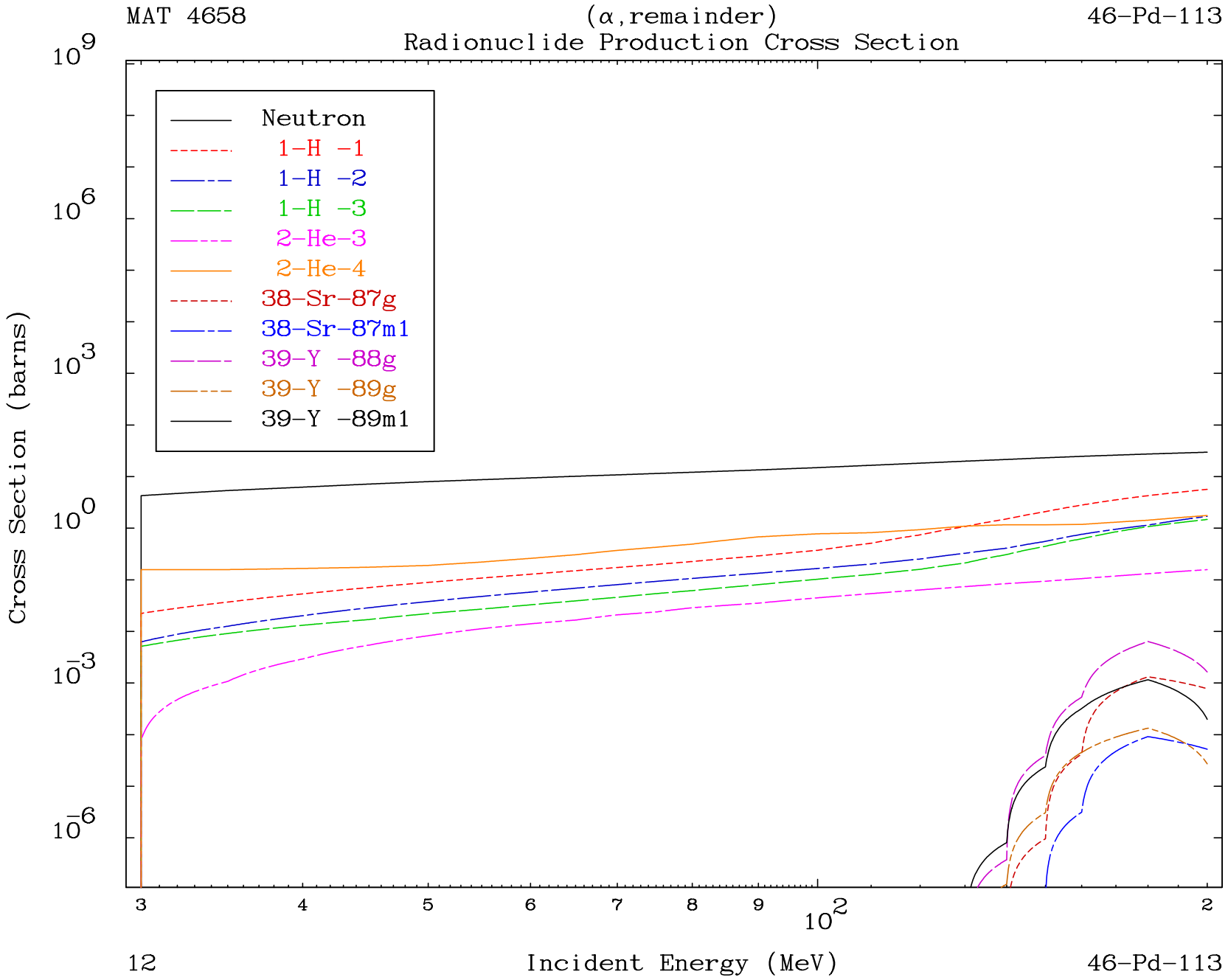

MAT 4658
(α,p) Levels
46-Pd-113
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
7
Incident Energy (MeV)
46-Pd-113

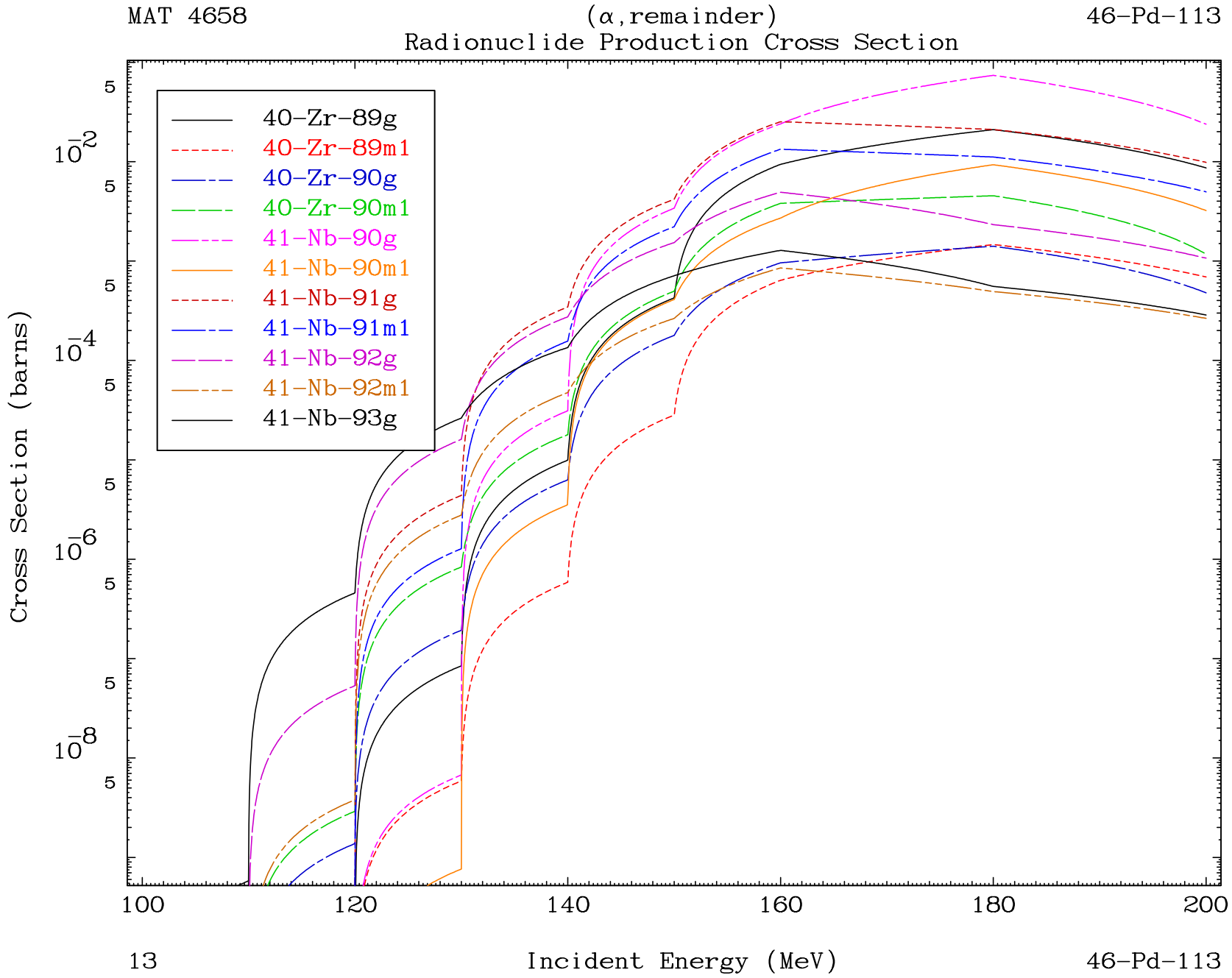

MAT 4658
(α,d) Levels
46-Pd-113
0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10
15
20
25
30
Incident Energy (MeV)
8
46-Pd-113

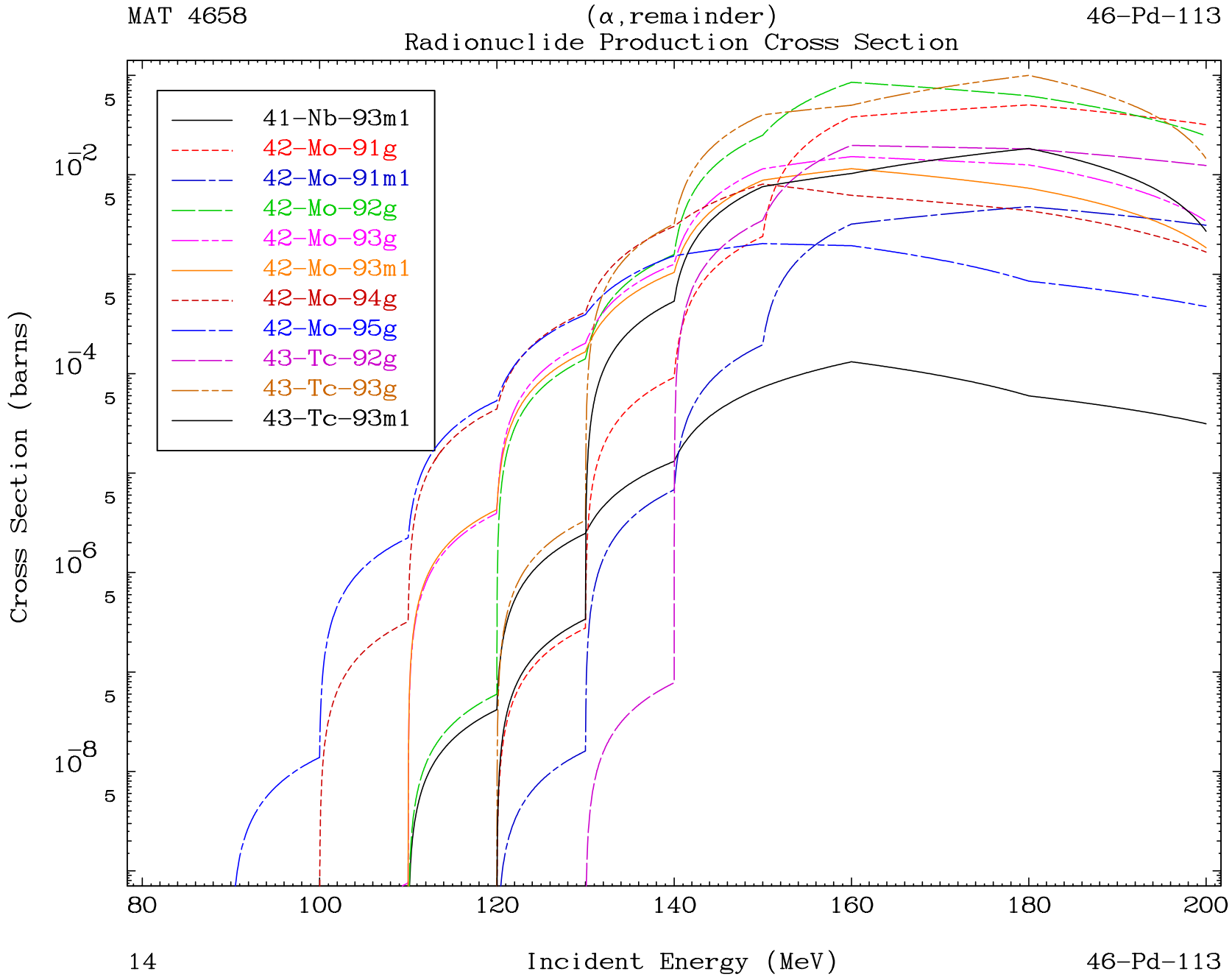

MAT 4658
(α,t) Levels
46-Pd-113
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10-4
10-6
10-8
10-10
15
20
25
30
Incident Energy (MeV)
9
46-Pd-113

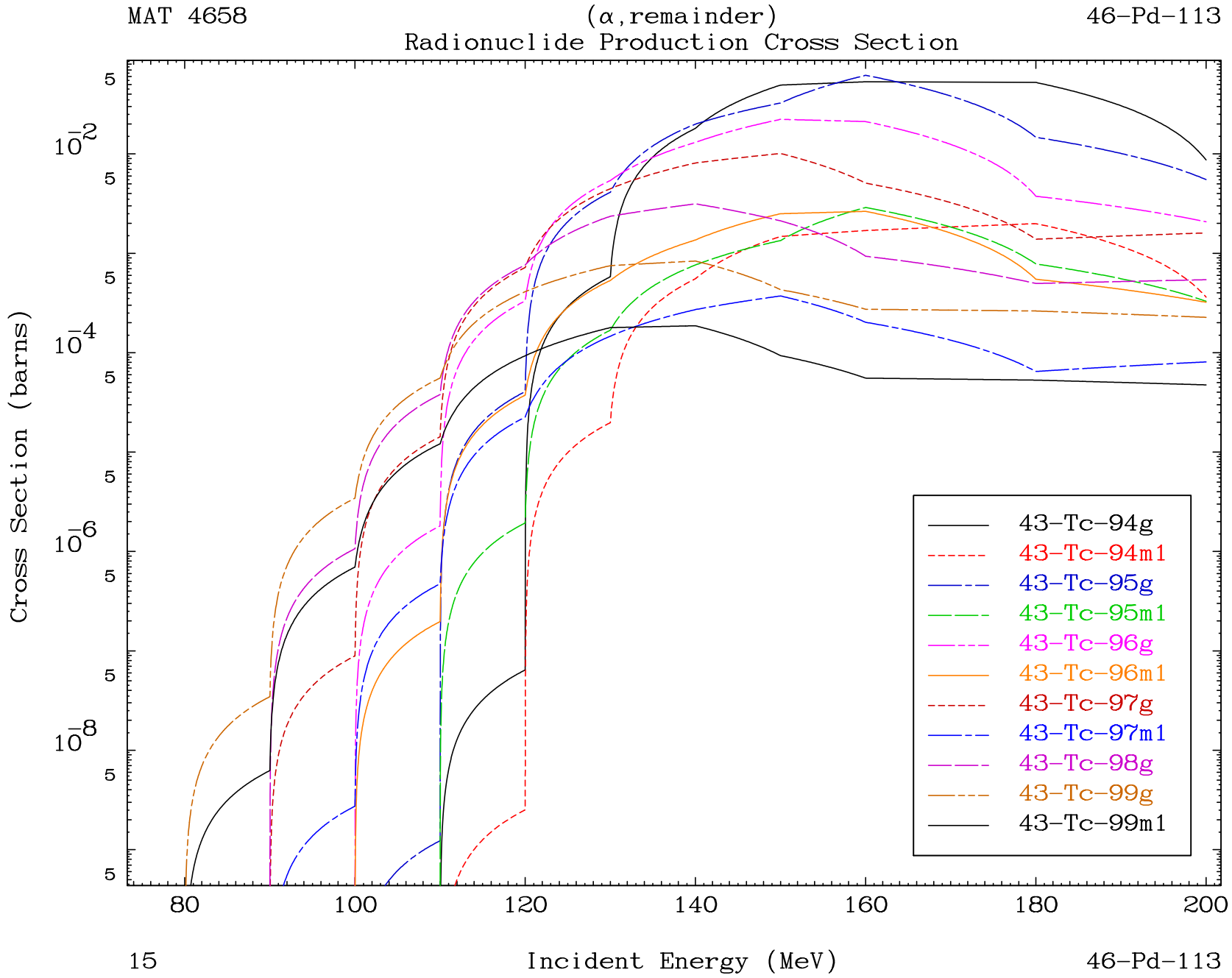

MAT 4658
(α,He3) Levels
46-Pd-113
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10^-4
5
10^-6
5
10^-8
5
10^-10
5
10^-12
5
15
20
25
30
10
Incident Energy (MeV)
46-Pd-113

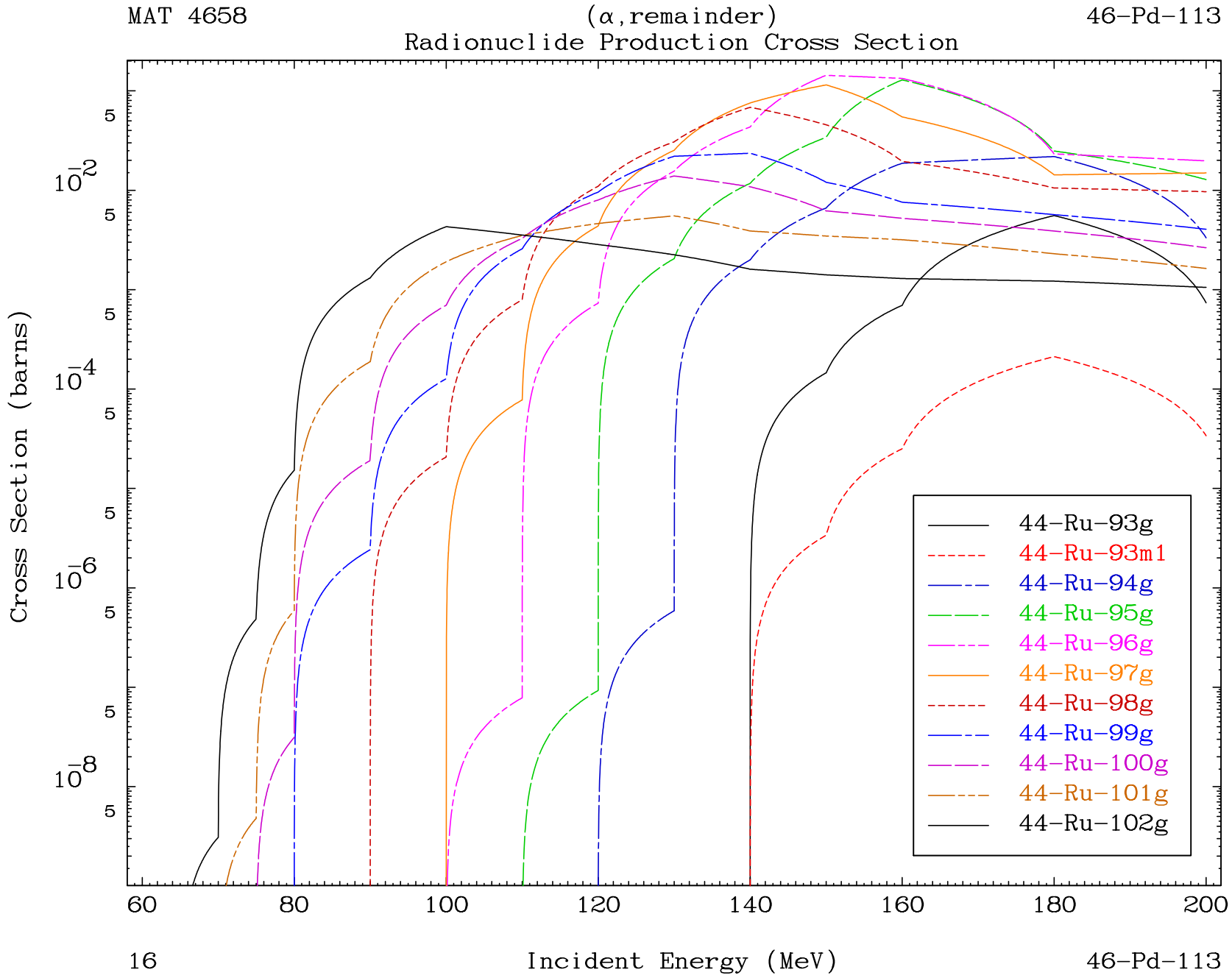

MAT 4658
(α,α) Levels
46-Pd-113
0 Kelvin Cross Sections
(α,α)
Cross Section (barns)
10-2
10-4
10-6
10-8
10-1
100
101
Incident Energy (MeV)
11
46-Pd-113

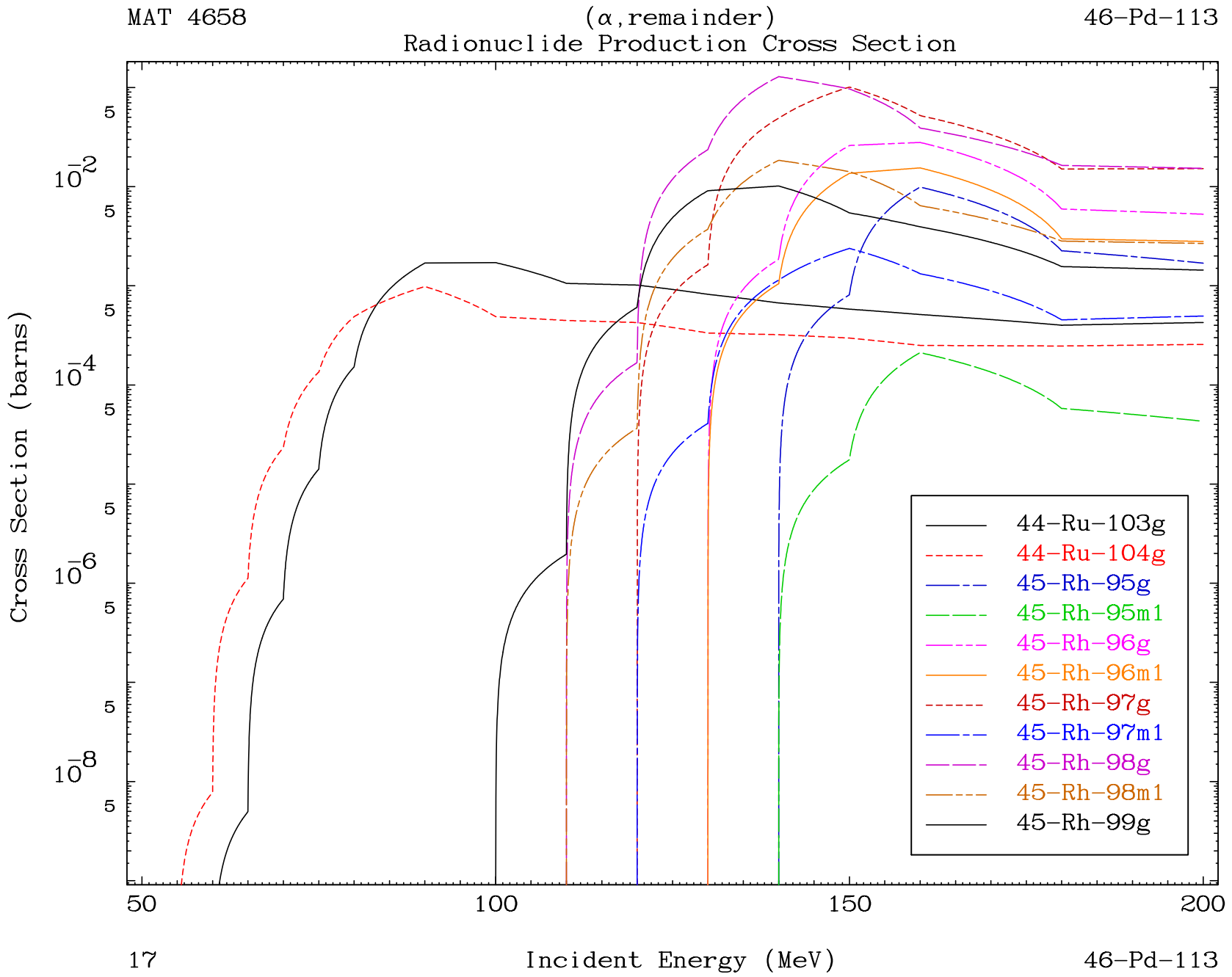

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
38-Sr-87g
38-Sr-87m1
39-Y -88g
39-Y -89g
39-Y -89m1
Cross Section (barns)
10^9
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
12
Incident Energy (MeV)
46-Pd-113

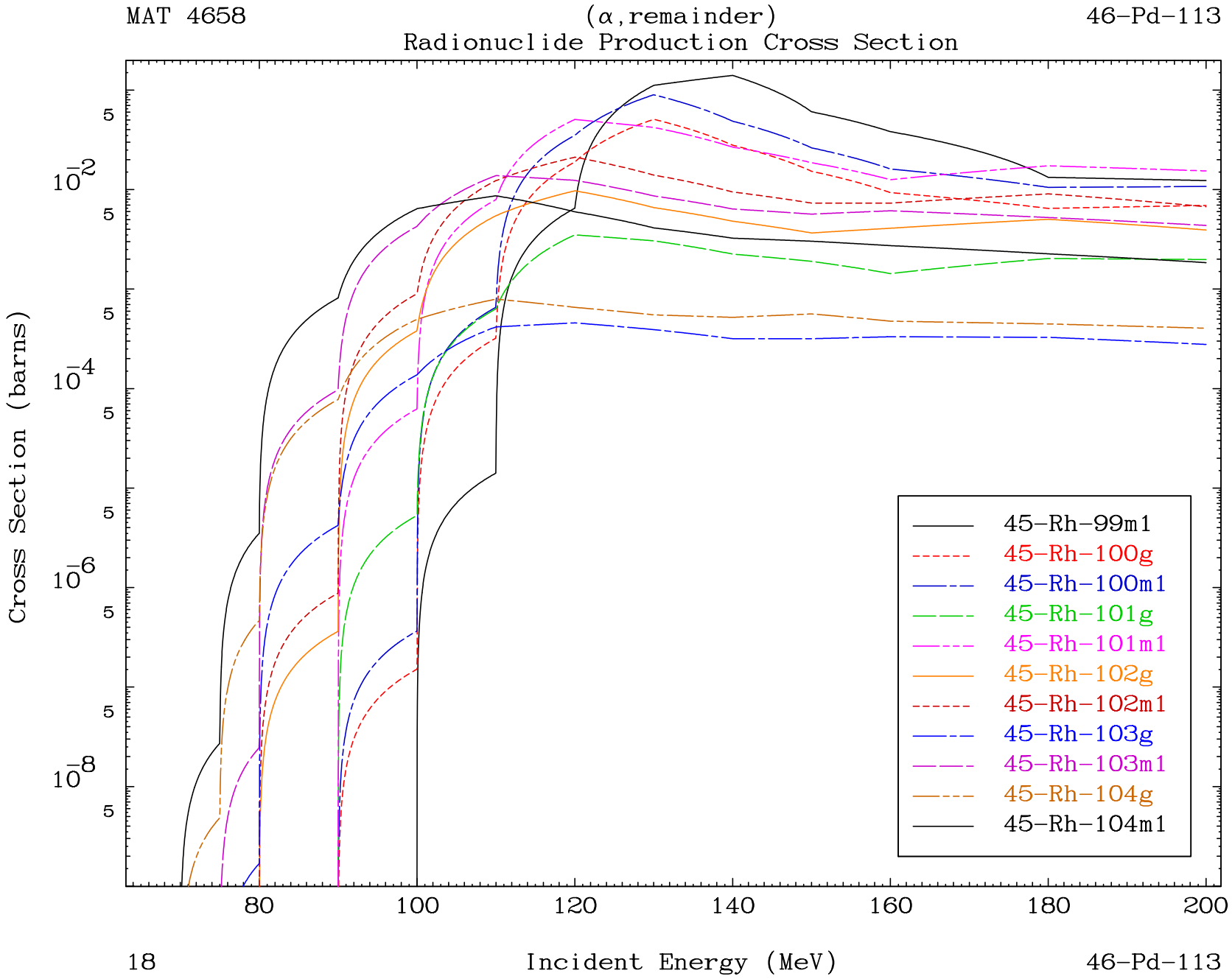

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
40-Zr-89g
40-Zr-89m1
40-Zr-90g
40-Zr-90m1
41-Nb-90g
41-Nb-90m1
41-Nb-91g
41-Nb-91m1
41-Nb-92g
41-Nb-92m1
41-Nb-93g
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
100
120
140
160
180
200
13
Incident Energy (MeV)
46-Pd-113


MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
41-Nb-93m1
42-Mo-91g
42-Mo-91m1
42-Mo-92g
42-Mo-93g
42-Mo-93m1
42-Mo-94g
42-Mo-95g
43-Tc-92g
43-Tc-93g
43-Tc-93m1
Cross Section (barns)
10-2
10-4
10-6
10-8
80
100
120
140
160
180
200
14
Incident Energy (MeV)
46-Pd-113

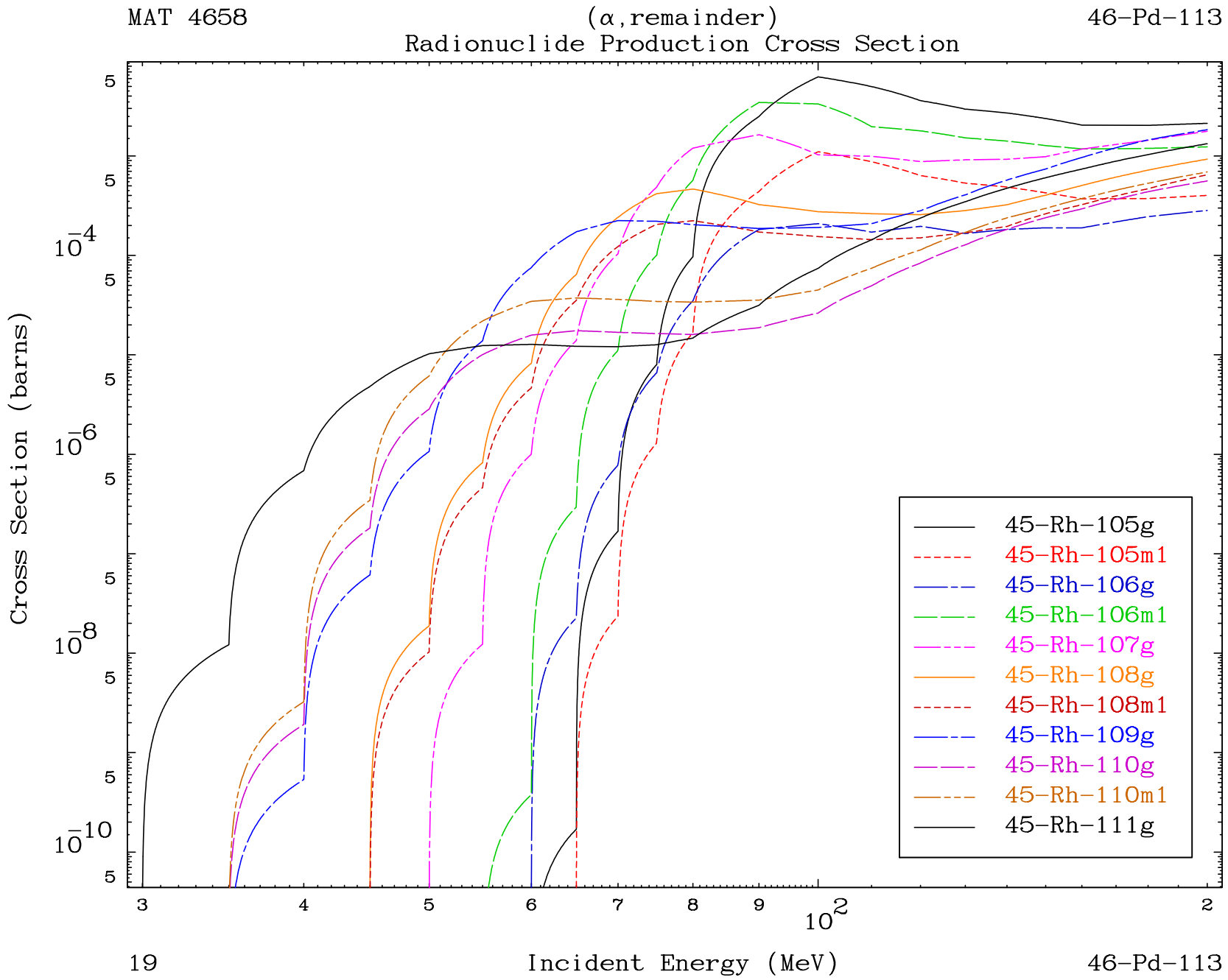

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
80
100
120
140
160
180
200
Incident Energy (MeV)
43-Tc-94g
43-Tc-94m1
43-Tc-95g
43-Tc-95m1
43-Tc-96g
43-Tc-96m1
43-Tc-97g
43-Tc-97m1
43-Tc-98g
43-Tc-99g
43-Tc-99m1

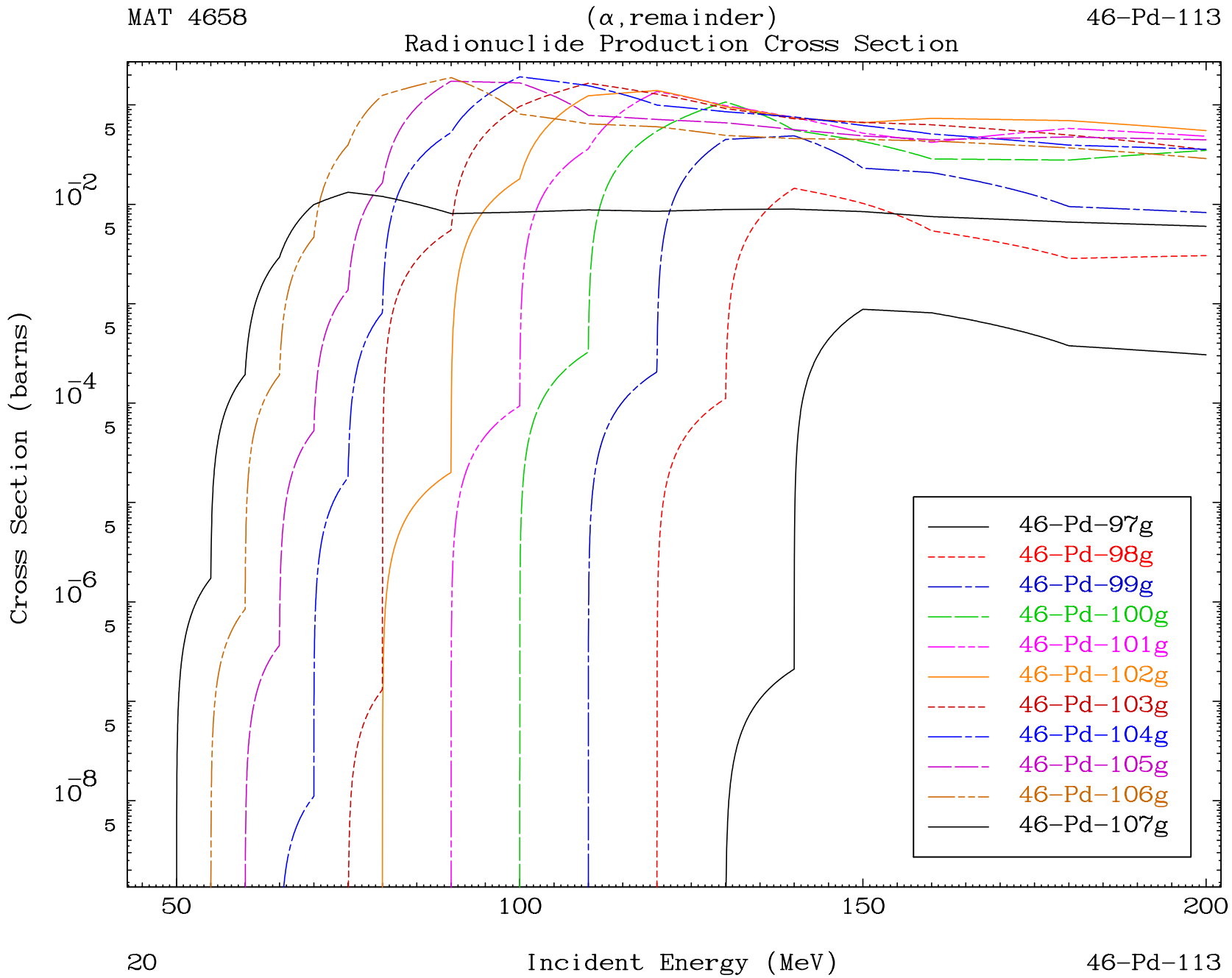

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
46-Pd-113
44-Ru-93g
44-Ru-93m1
44-Ru-94g
44-Ru-95g
44-Ru-96g
44-Ru-97g
44-Ru-98g
44-Ru-99g
44-Ru-100g
44-Ru-101g
44-Ru-102g

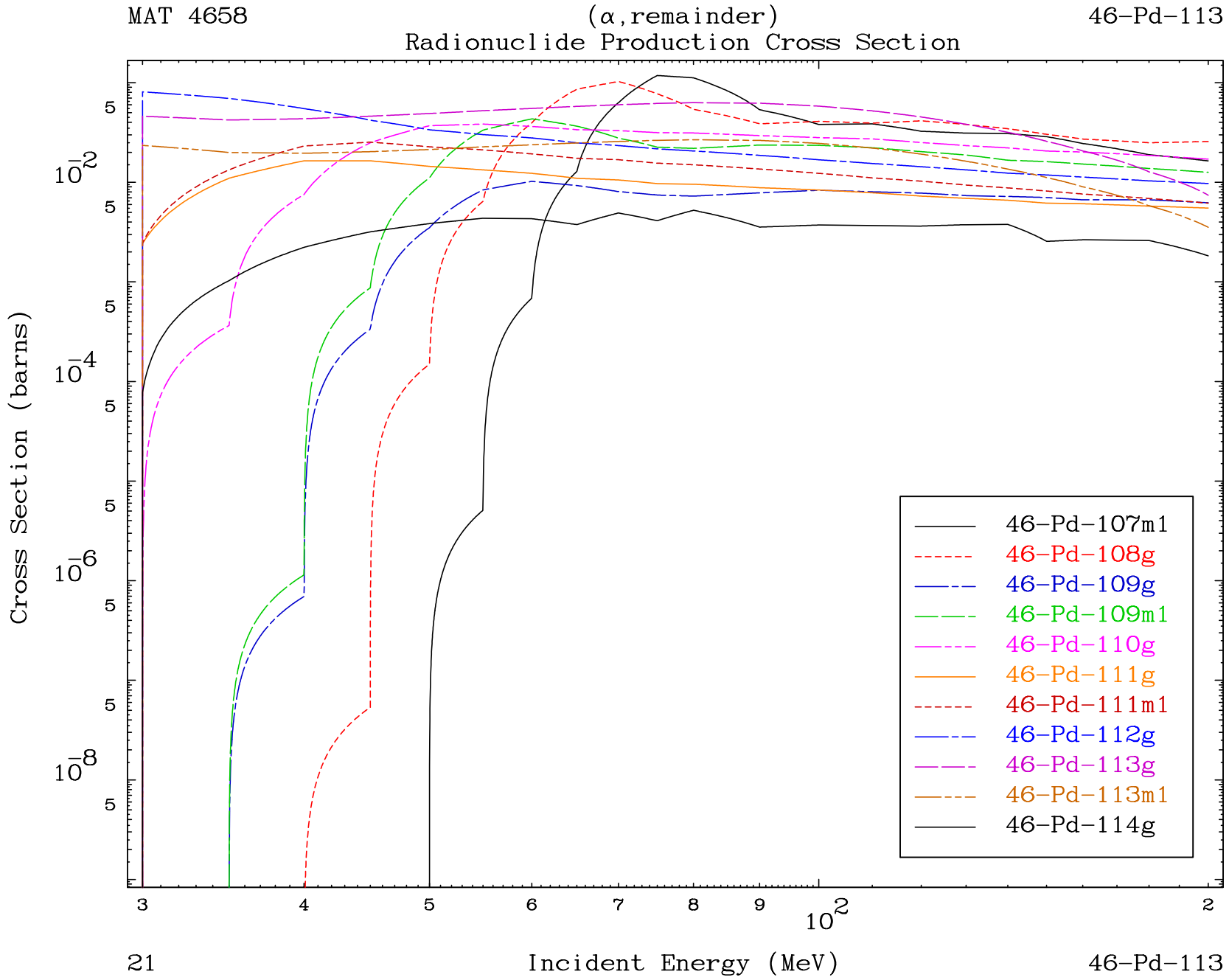

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
50
100
150
200
17
Incident Energy (MeV)
46-Pd-113
44-Ru-103g
44-Ru-104g
45-Rh-95g
45-Rh-95m1
45-Rh-96g
45-Rh-96m1
45-Rh-97g
45-Rh-97m1
45-Rh-98g
45-Rh-98m1
45-Rh-99g

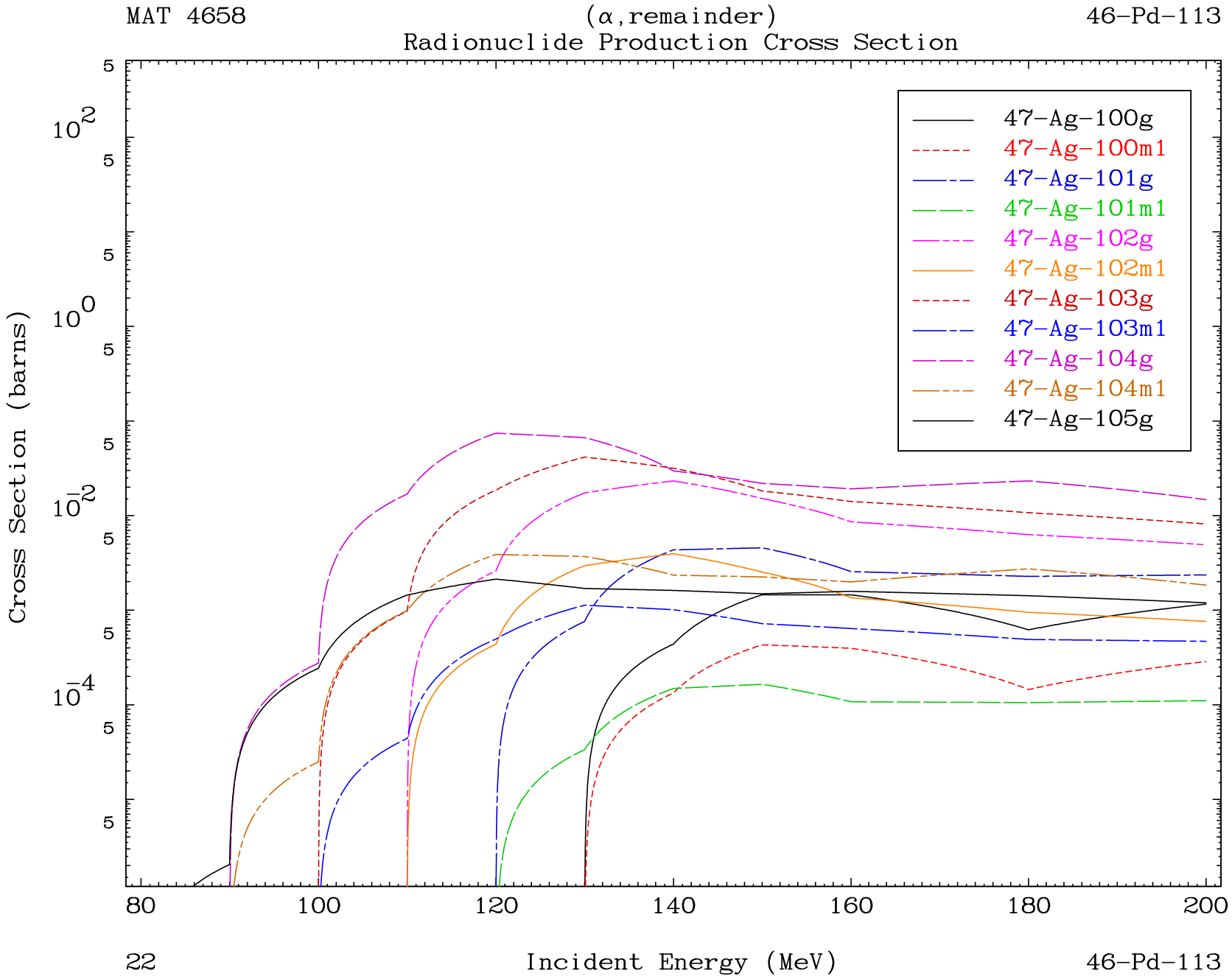

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
80
100
120
140
160
180
200
Incident Energy (MeV)
45-Rh-99m1
45-Rh-100g
45-Rh-100m1
45-Rh-101g
45-Rh-101m1
45-Rh-102g
45-Rh-102m1
45-Rh-103g
45-Rh-103m1
45-Rh-104g
45-Rh-104m1

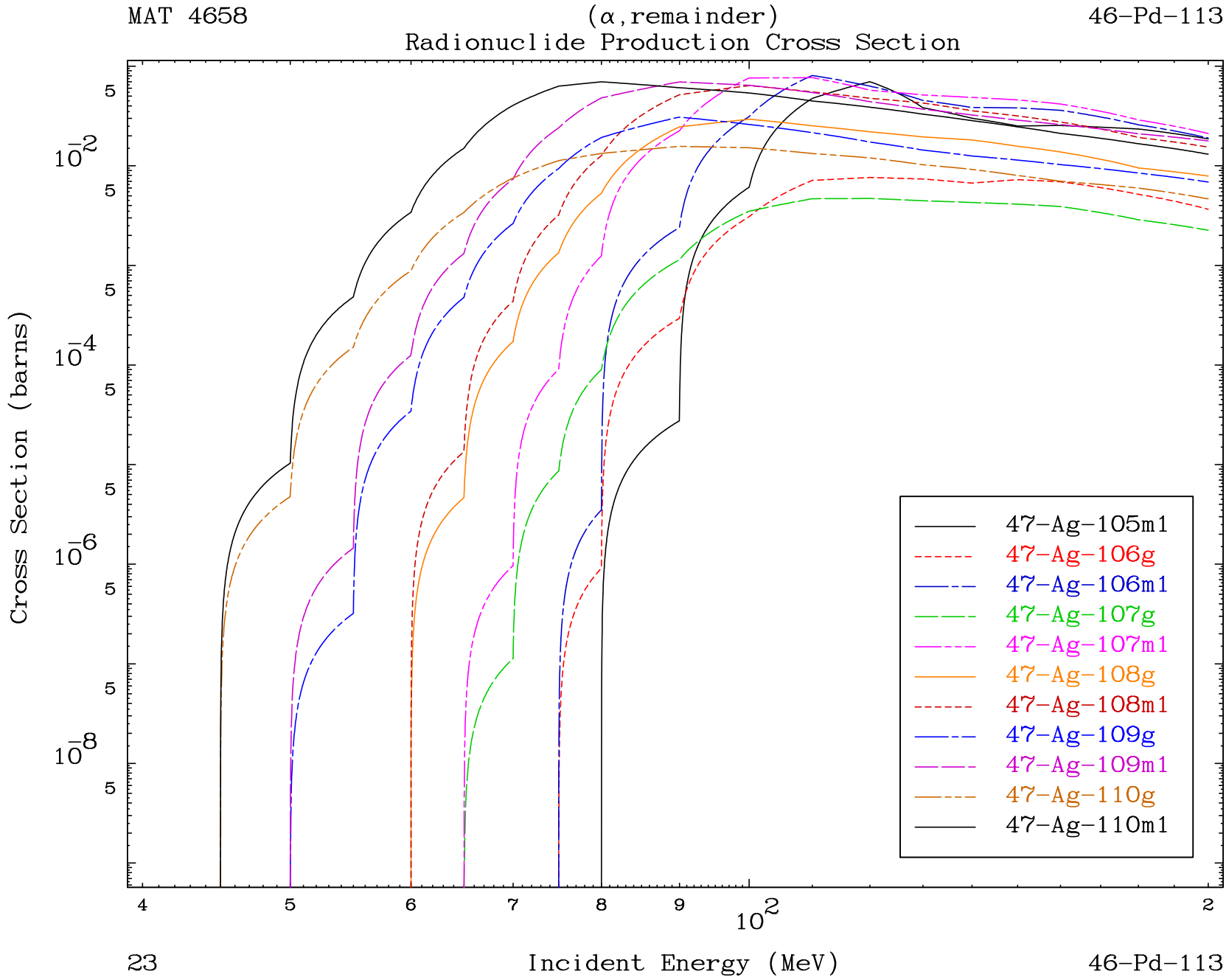
46-Pd-113

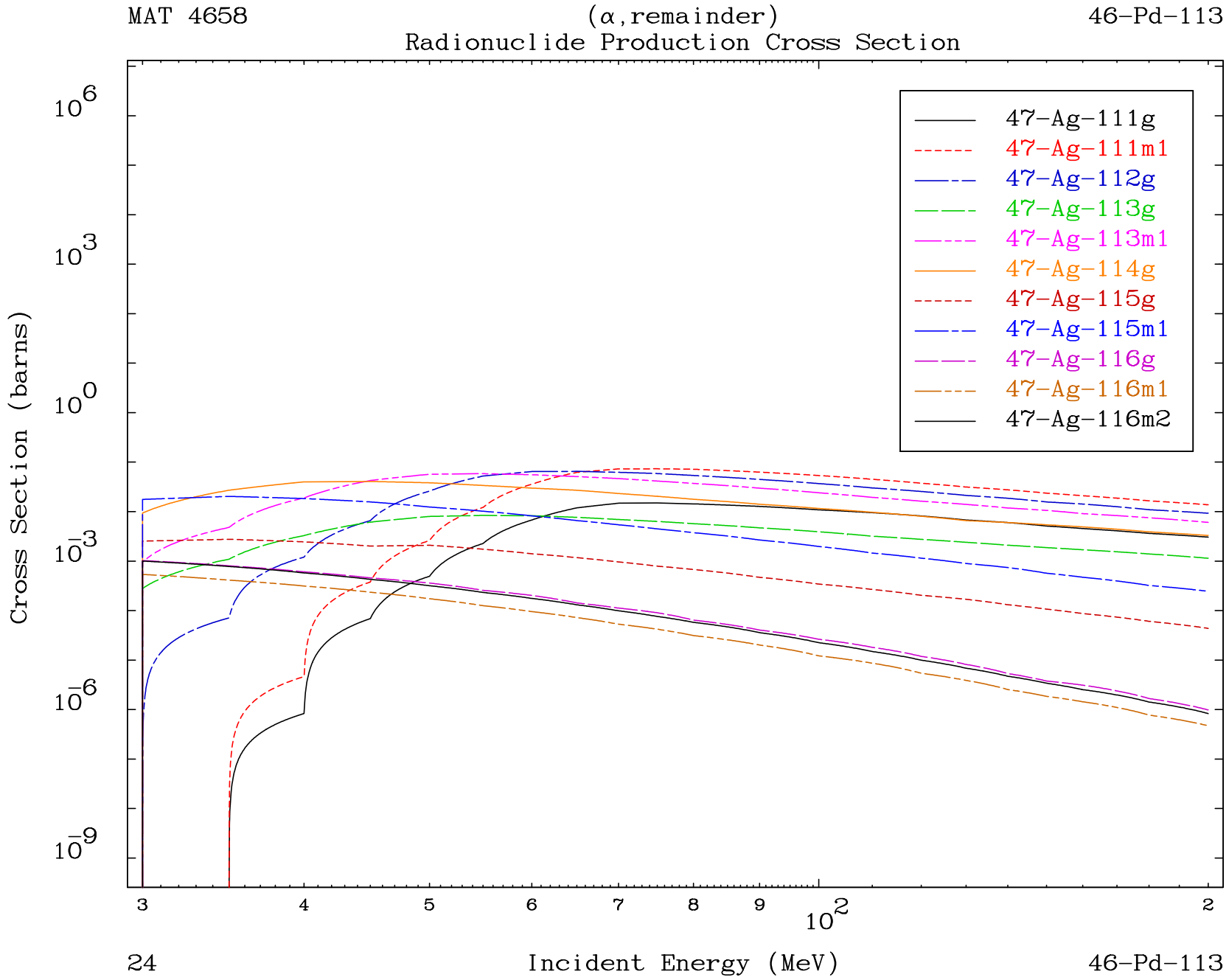

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
19
46-Pd-113
45-Rh-105g
45-Rh-105m1
45-Rh-106g
45-Rh-106m1
45-Rh-107g
45-Rh-108g
45-Rh-108m1
45-Rh-109g
45-Rh-110g
45-Rh-110m1
45-Rh-111g

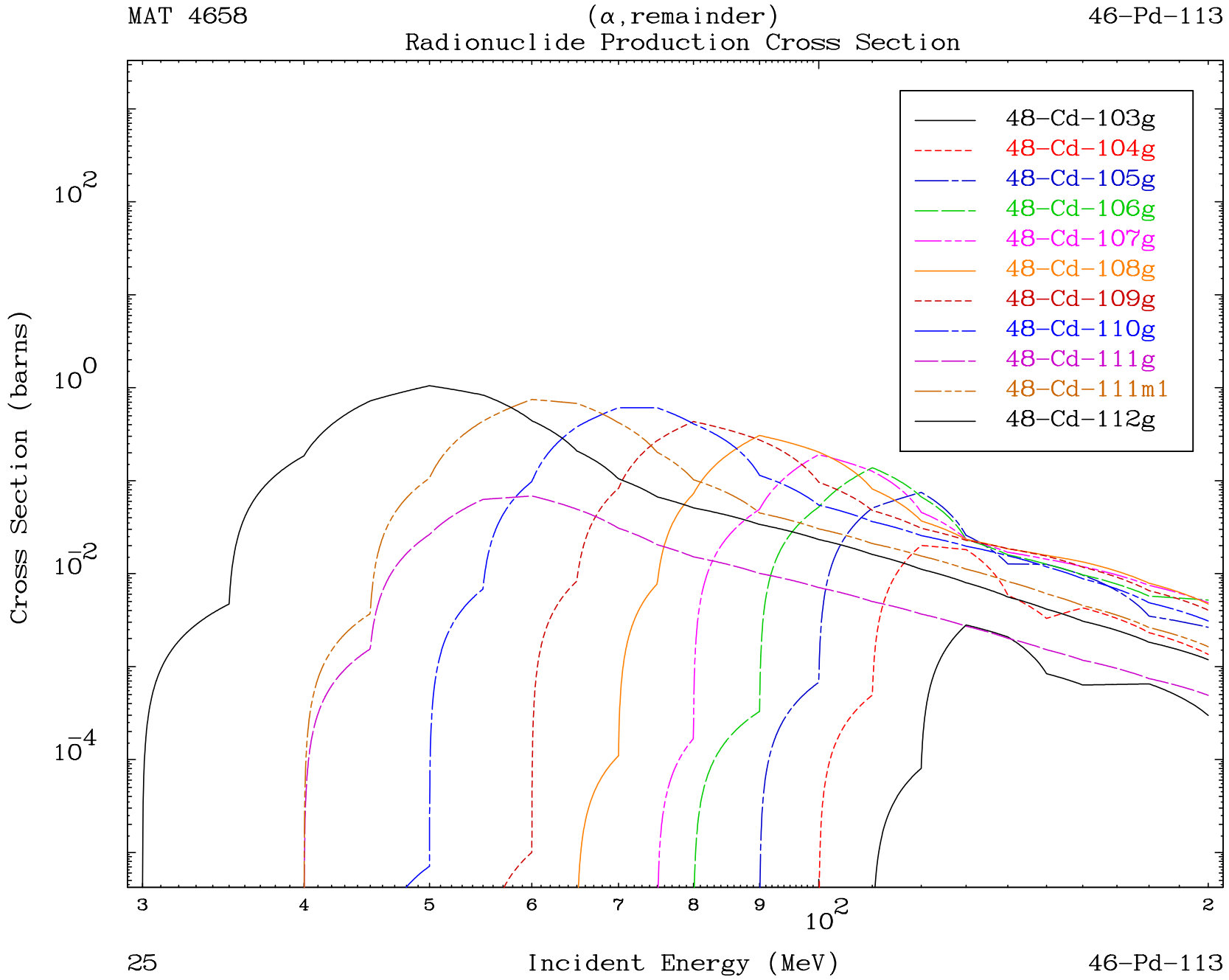

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
50
100
150
200
20
Incident Energy (MeV)
46-Pd-113
46-Pd-97g
46-Pd-98g
46-Pd-99g
46-Pd-100g
46-Pd-101g
46-Pd-102g
46-Pd-103g
46-Pd-104g
46-Pd-105g
46-Pd-106g
46-Pd-107g

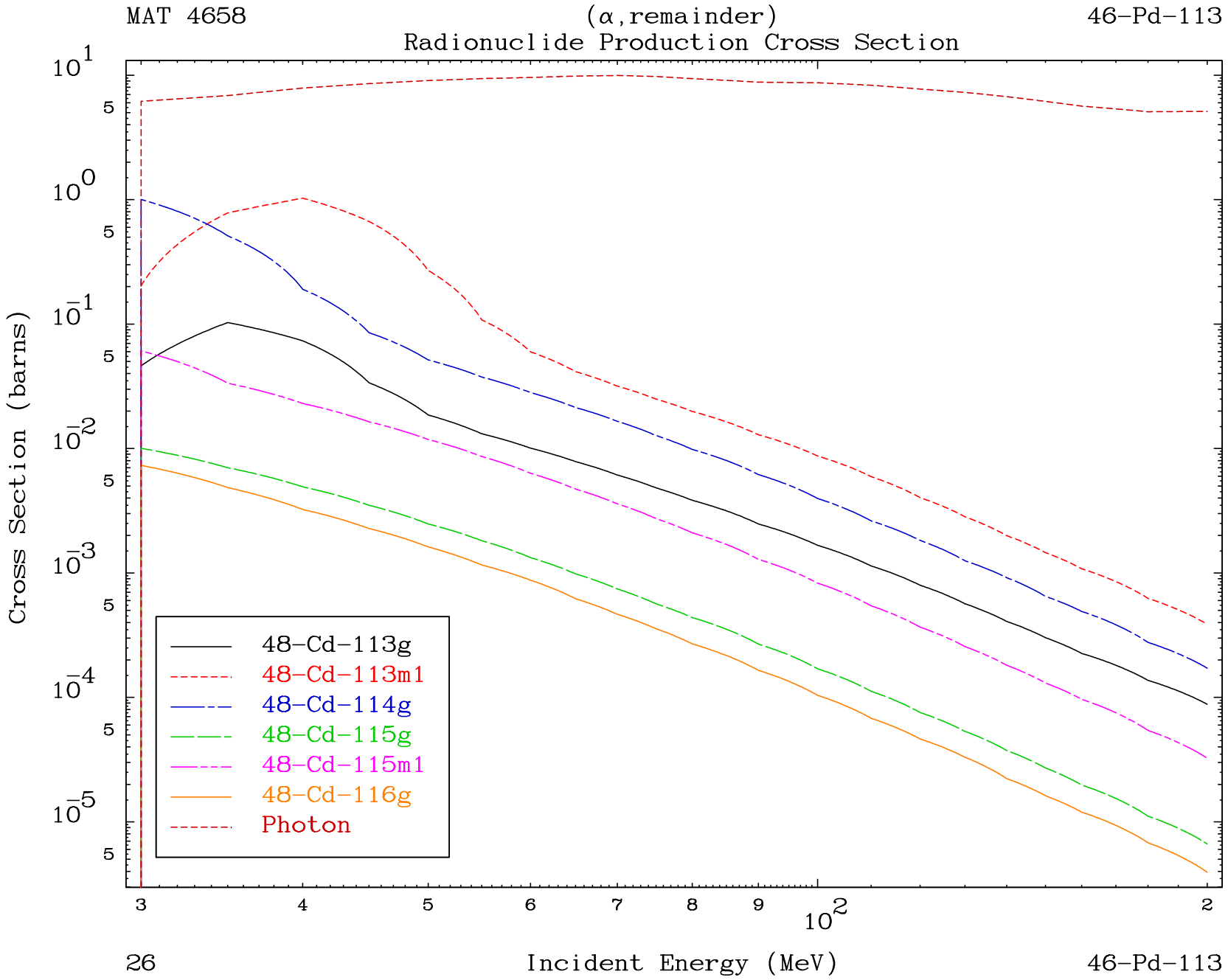

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
46-Pd-107m1
46-Pd-108g
46-Pd-109g
46-Pd-109m1
46-Pd-110g
46-Pd-111g
46-Pd-111m1
46-Pd-112g
46-Pd-113g
46-Pd-113m1
46-Pd-114g
21
46-Pd-113

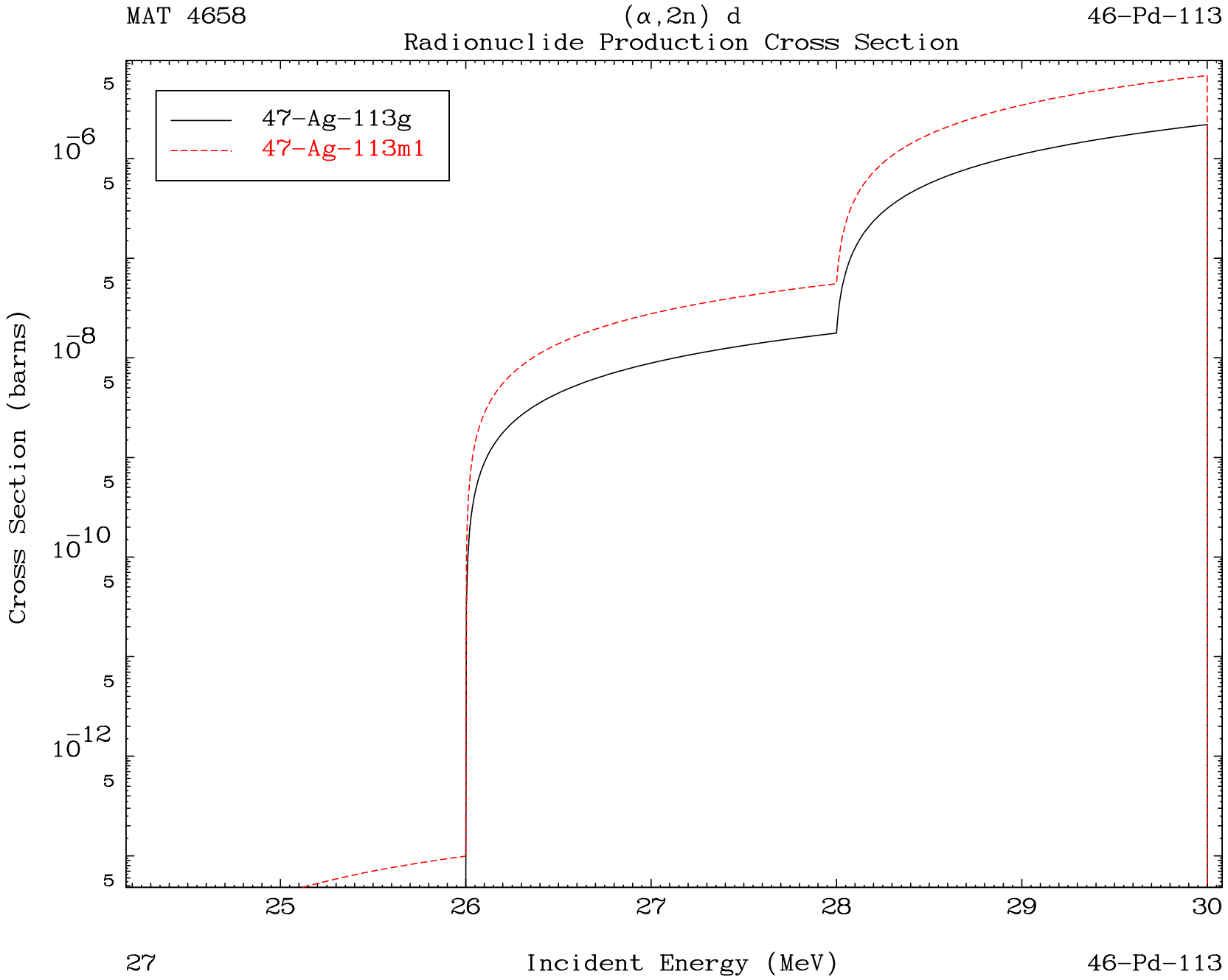

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
47-Ag-100g
47-Ag-100m1
47-Ag-101g
47-Ag-101m1
47-Ag-102g
47-Ag-102m1
47-Ag-103g
47-Ag-103m1
47-Ag-104g
47-Ag-104m1
47-Ag-105g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
80
100
120
140
160
180
200
Incident Energy (MeV)
22
46-Pd-113

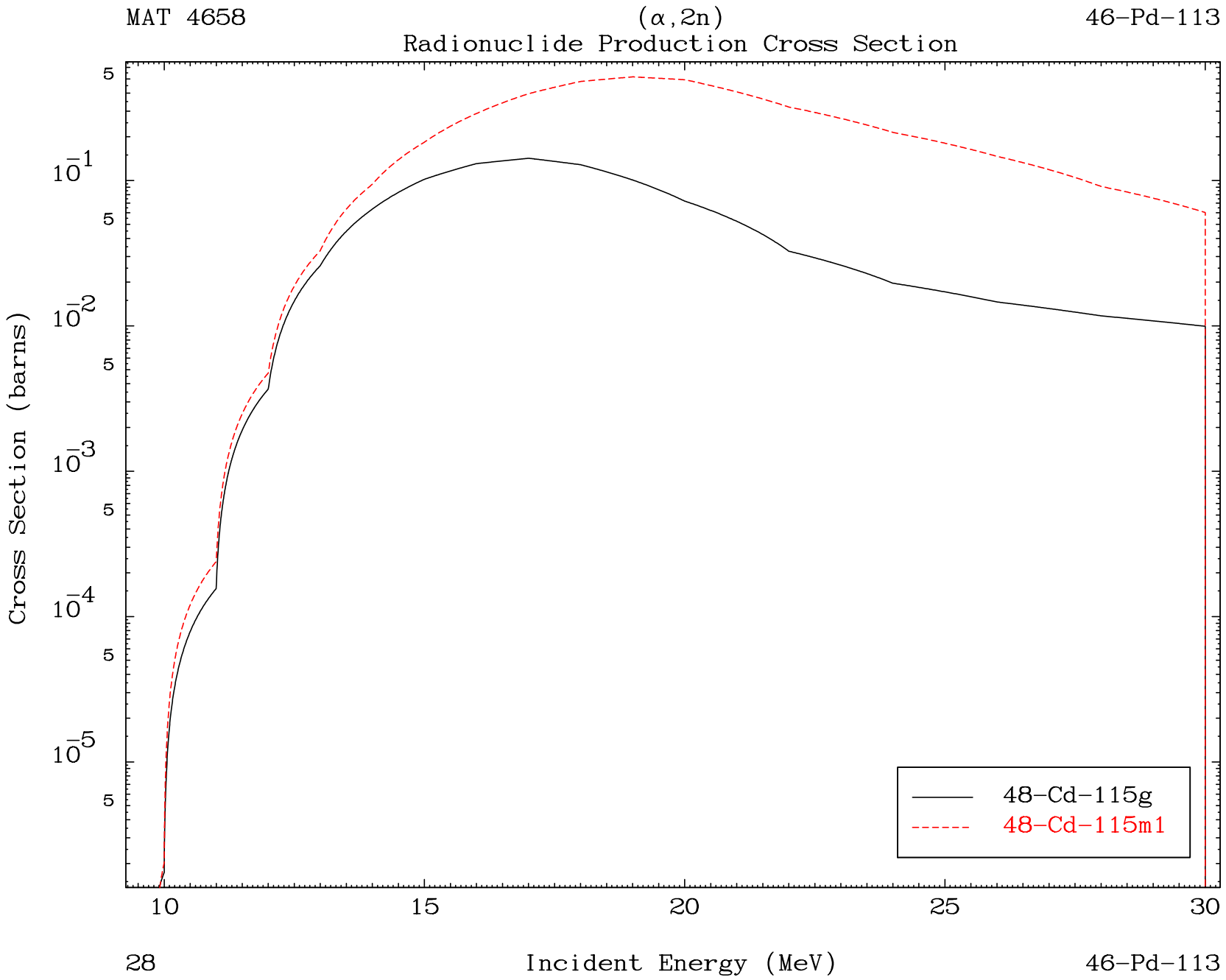

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
4
5
6
7
8
9
10^2
2
47-Ag-105m1
47-Ag-106g
47-Ag-106m1
47-Ag-107g
47-Ag-107m1
47-Ag-108g
47-Ag-108m1
47-Ag-109g
47-Ag-109m1
47-Ag-110g
47-Ag-110m1
23
Incident Energy (MeV)
46-Pd-113

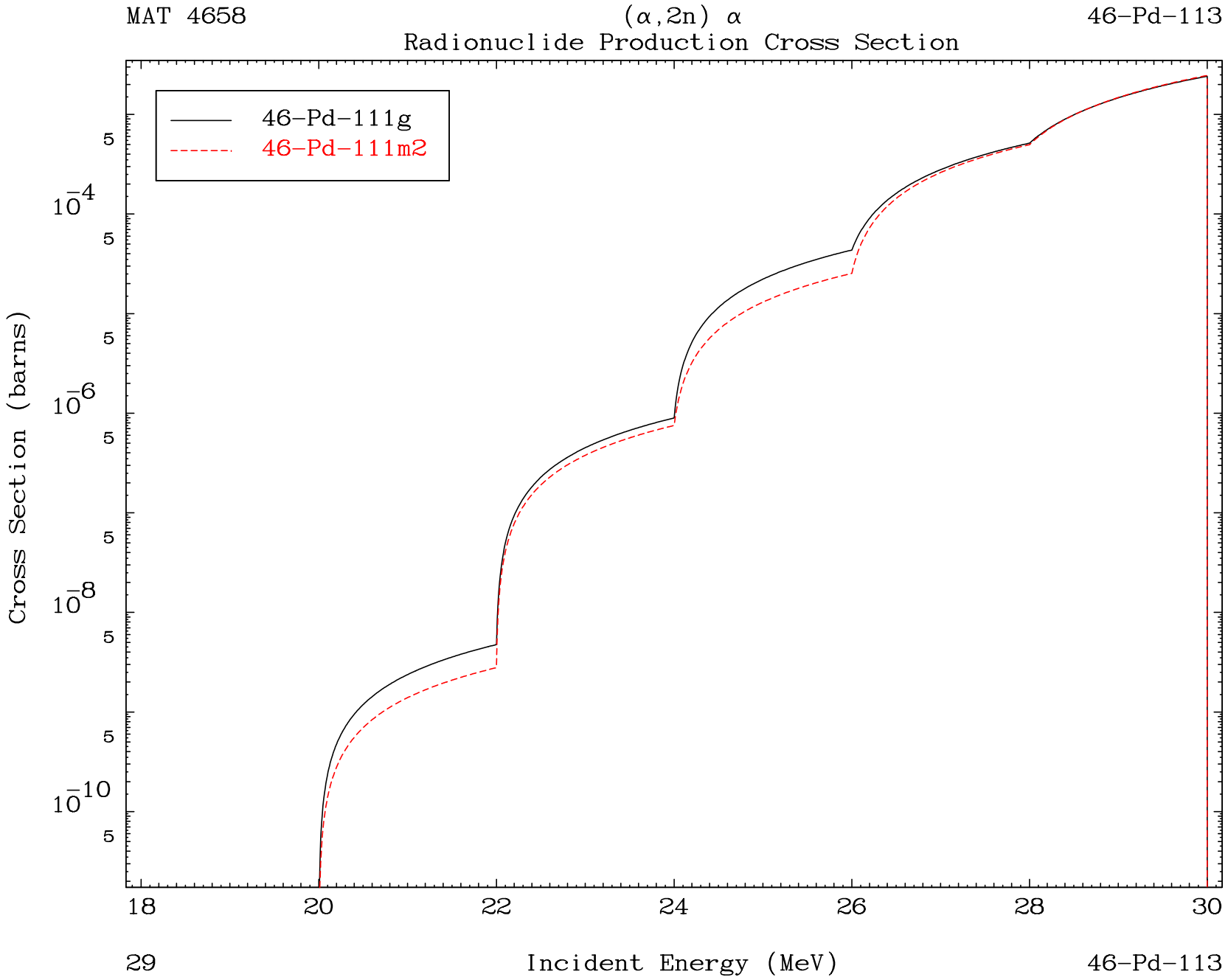

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
47-Ag-111g
47-Ag-111m1
47-Ag-112g
47-Ag-113g
47-Ag-113m1
47-Ag-114g
47-Ag-115g
47-Ag-115m1
47-Ag-116g
47-Ag-116m1
47-Ag-116m2
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
46-Pd-113

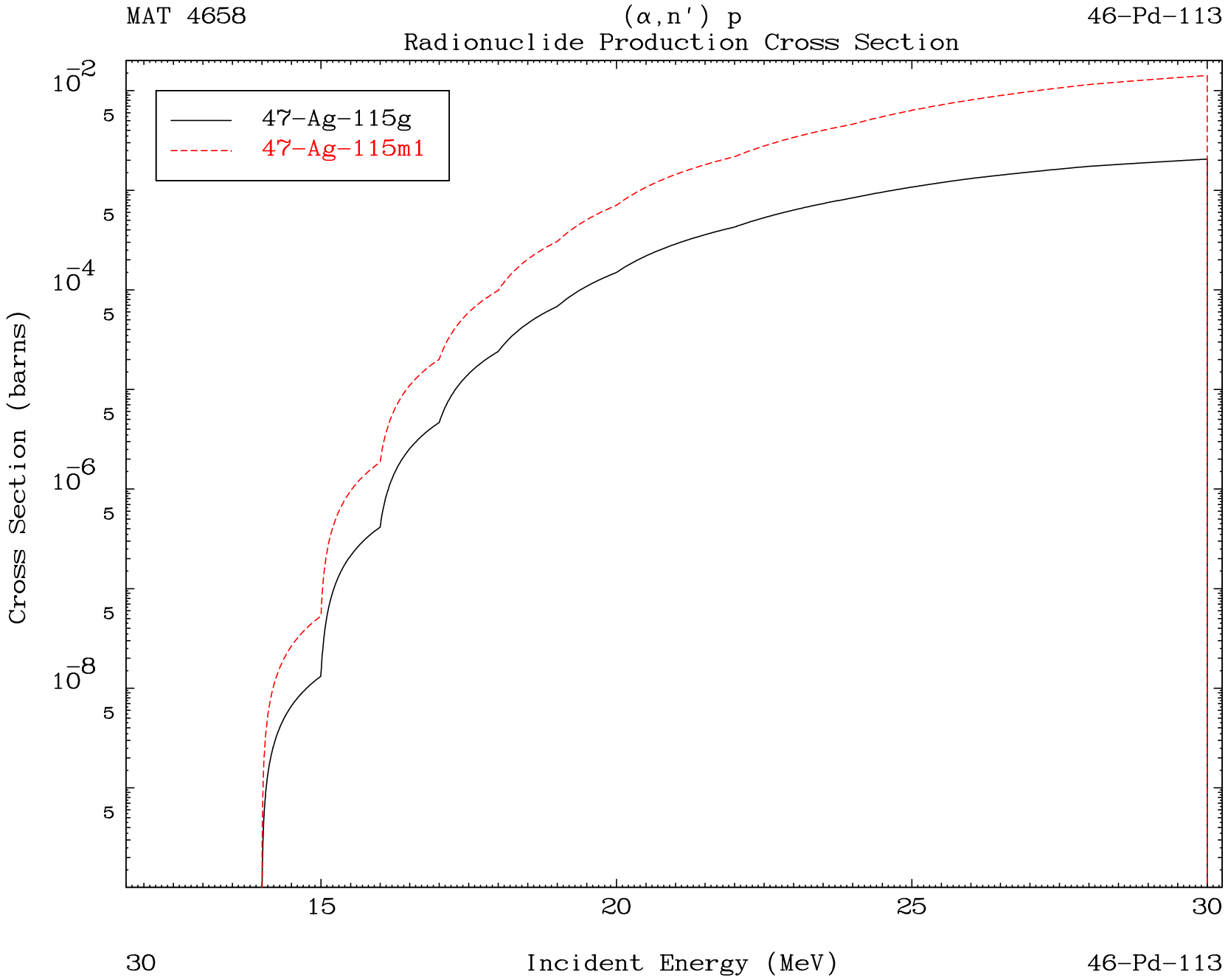

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
48-Cd-103g
48-Cd-104g
48-Cd-105g
48-Cd-106g
48-Cd-107g
48-Cd-108g
48-Cd-109g
48-Cd-110g
48-Cd-111g
48-Cd-111m1
48-Cd-112g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
3
4
5
6
7
8
9
10^2
2
25
Incident Energy (MeV)
46-Pd-113

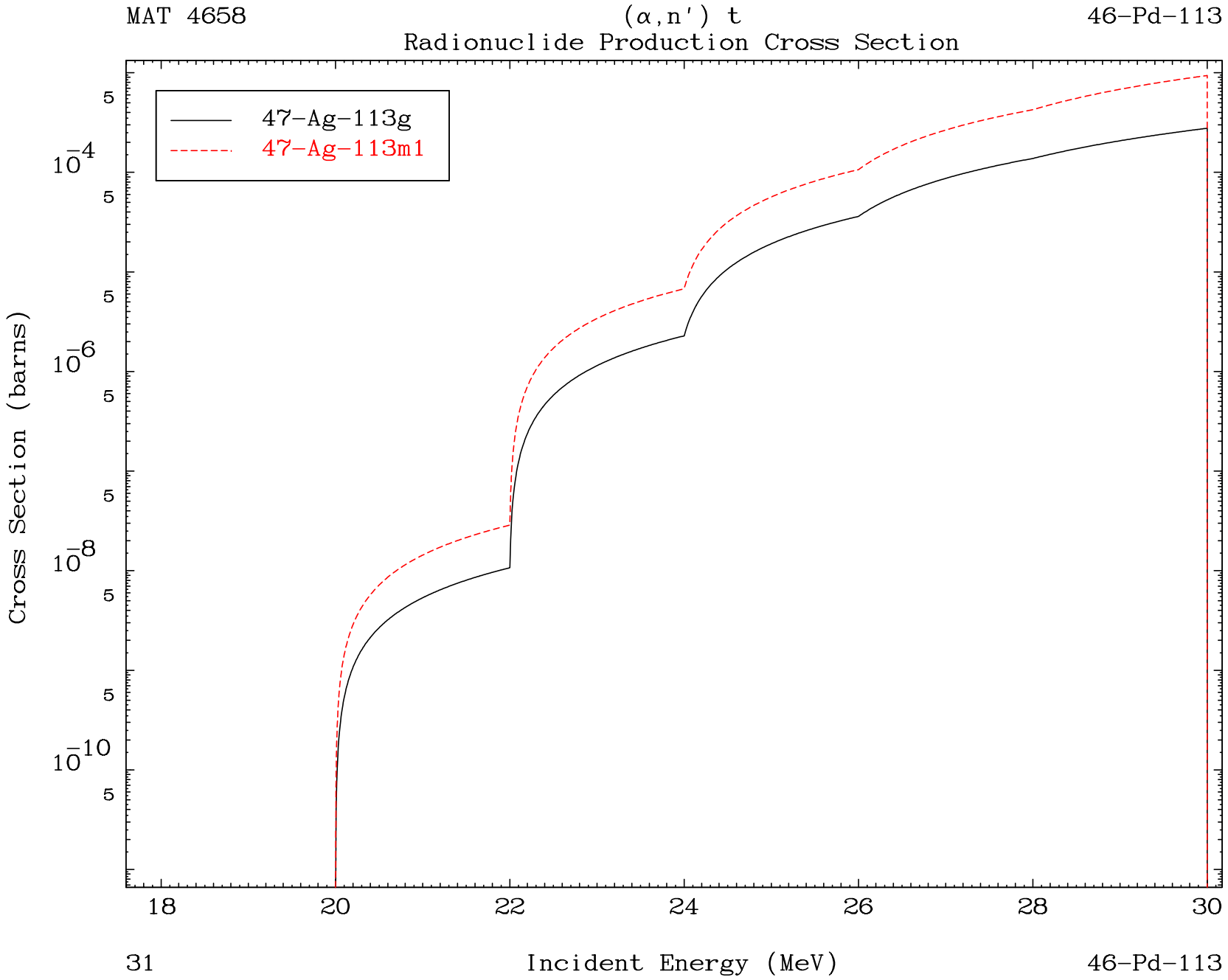

MAT 4658
(α,remainder)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
26
46-Pd-113
48-Cd-113g
48-Cd-113m1
48-Cd-114g
48-Cd-115g
48-Cd-115m1
48-Cd-116g
Photon

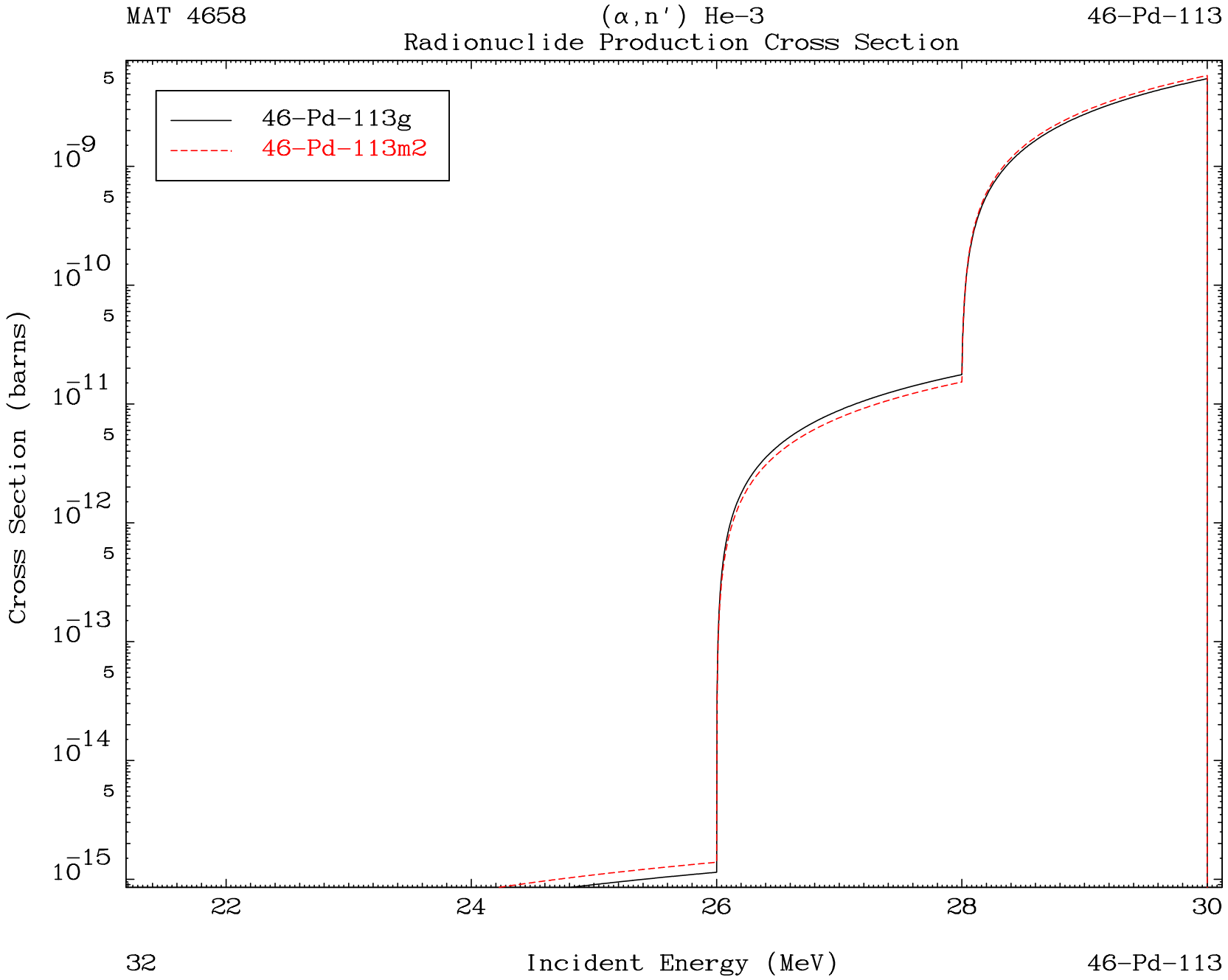

MAT 4658
(α,2n) d
46-Pd-113
Radionuclide Production Cross Section
47-Ag-113g
47-Ag-113m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
25
26
27
28
29
30
27
Incident Energy (MeV)
46-Pd-113

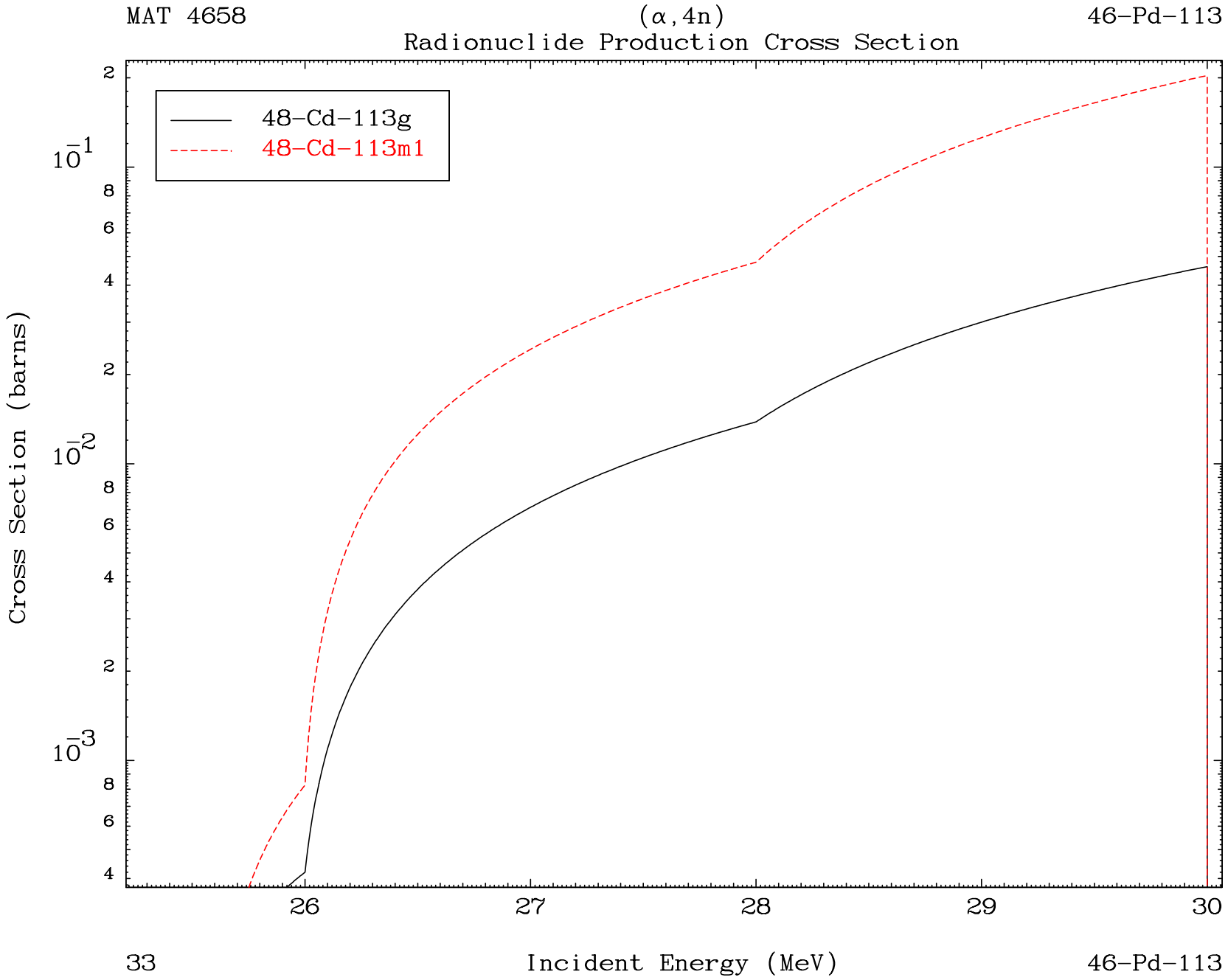

MAT 4658
(α,2n)
46-Pd-113
Radionuclide Production Cross Section
Cross Section (barns)
10^-1
10^-2
10^-3
10^-4
10^-5
5
10
15
20
25
30
48-Cd-115g
48-Cd-115m1
28
Incident Energy (MeV)
46-Pd-113

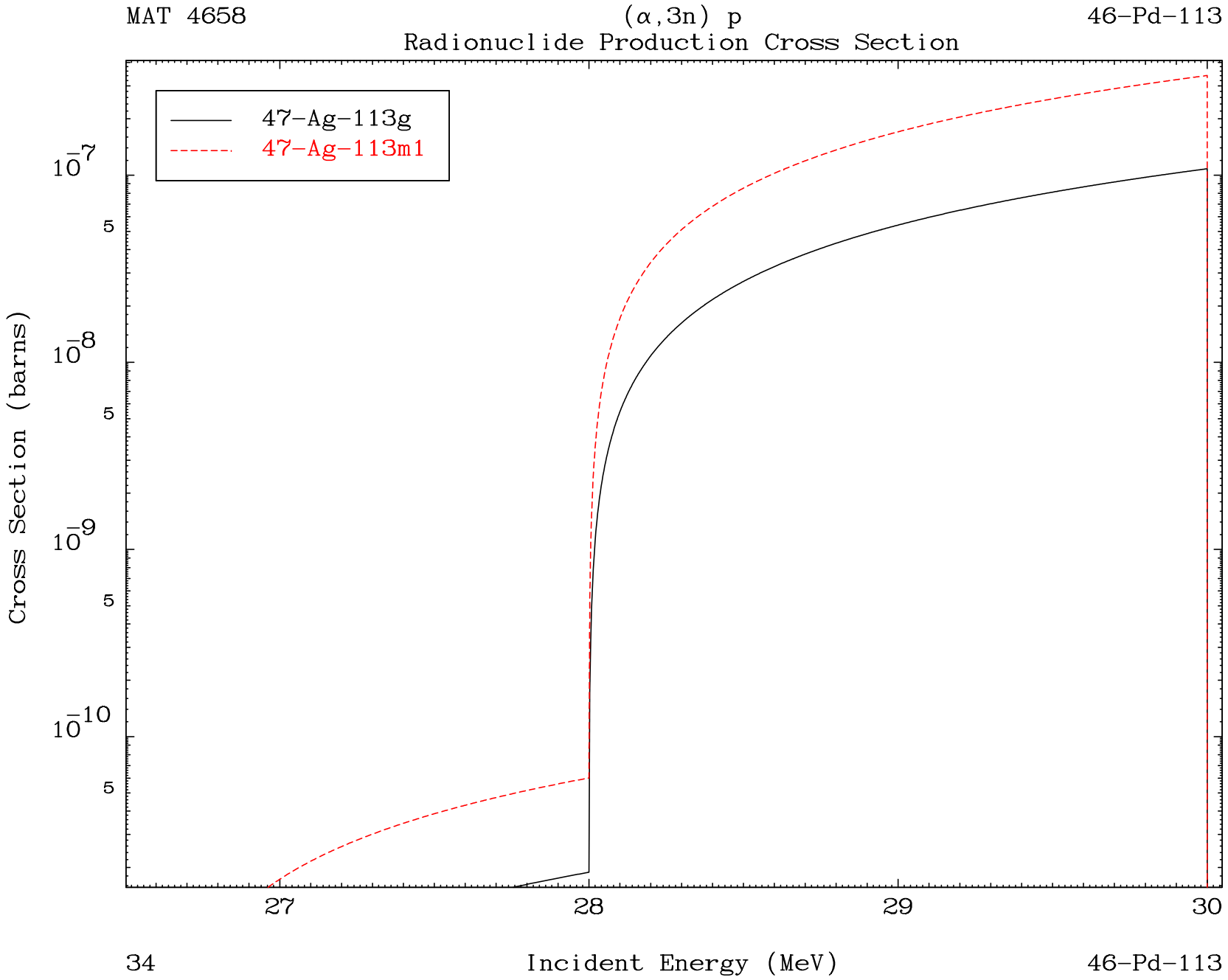

MAT 4658
(α,2n) α
46-Pd-113
Radionuclide Production Cross Section
46-Pd-111g
46-Pd-111m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
18
20
22
24
26
28
30
29
Incident Energy (MeV)
46-Pd-113

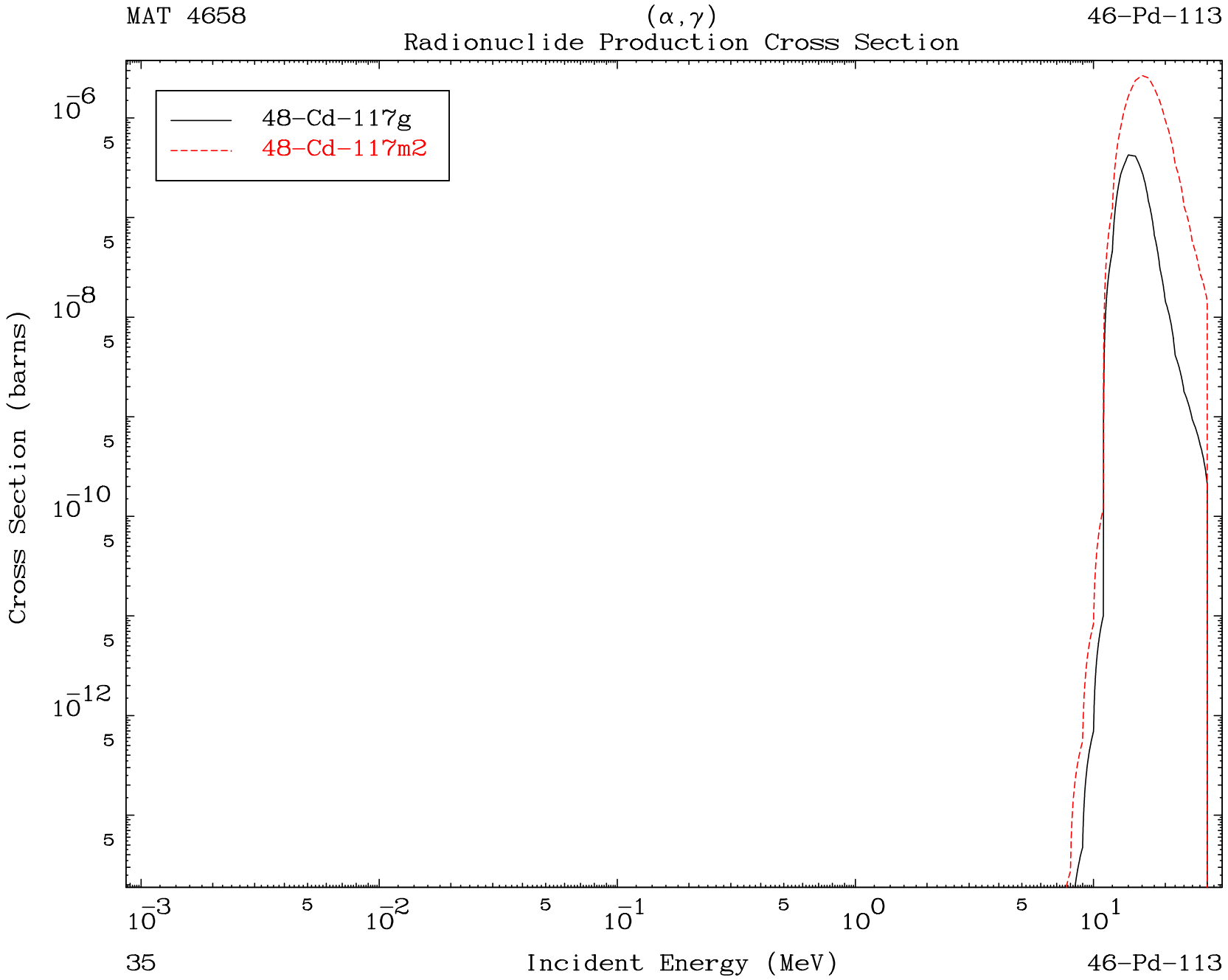

MAT 4658
(α,n') p
46-Pd-113
Radionuclide Production Cross Section
47-Ag-115g
47-Ag-115m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
15
20
25
30
Incident Energy (MeV)
30
46-Pd-113

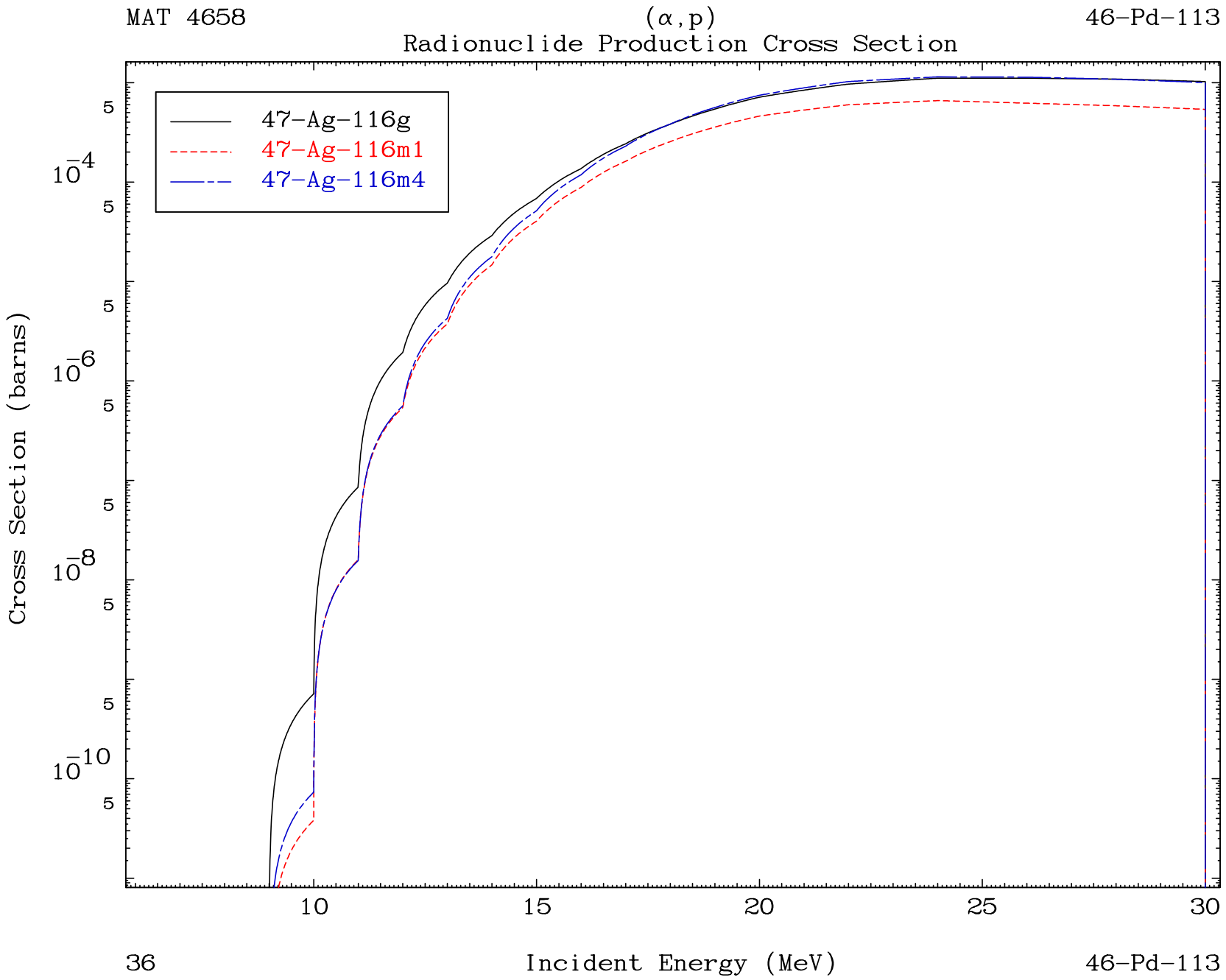

MAT 4658
(α,n') t
46-Pd-113
Radionuclide Production Cross Section
47-Ag-113g
47-Ag-113m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
18
20
22
24
26
28
30
31
Incident Energy (MeV)
46-Pd-113

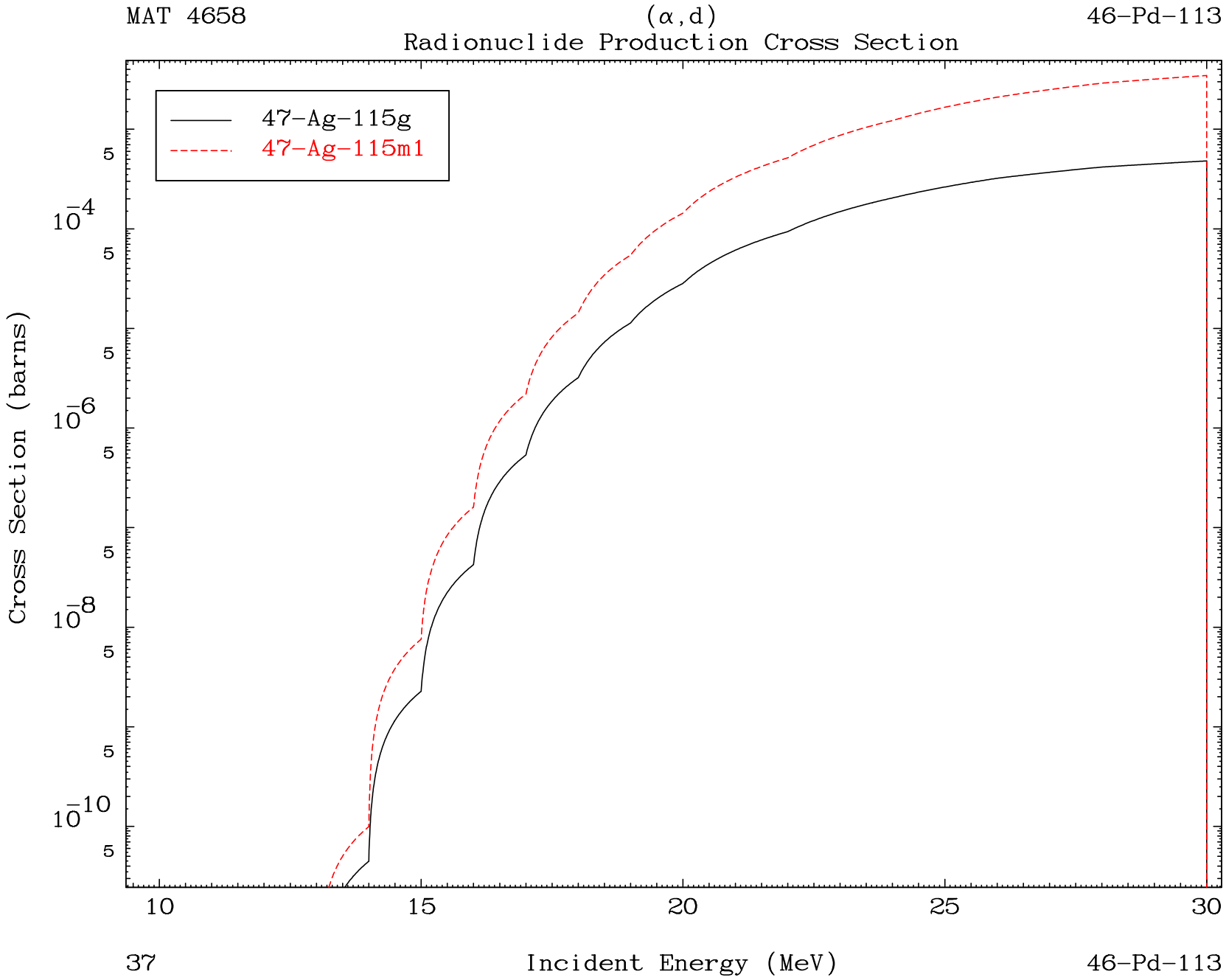

MAT 4658
(α,n') He-3
46-Pd-113
Radionuclide Production Cross Section
46-Pd-113g
46-Pd-113m2
Cross Section (barns)
10^-9
10^-10
10^-11
10^-12
10^-13
10^-14
10^-15
5
22
24
26
28
30
32
Incident Energy (MeV)
46-Pd-113

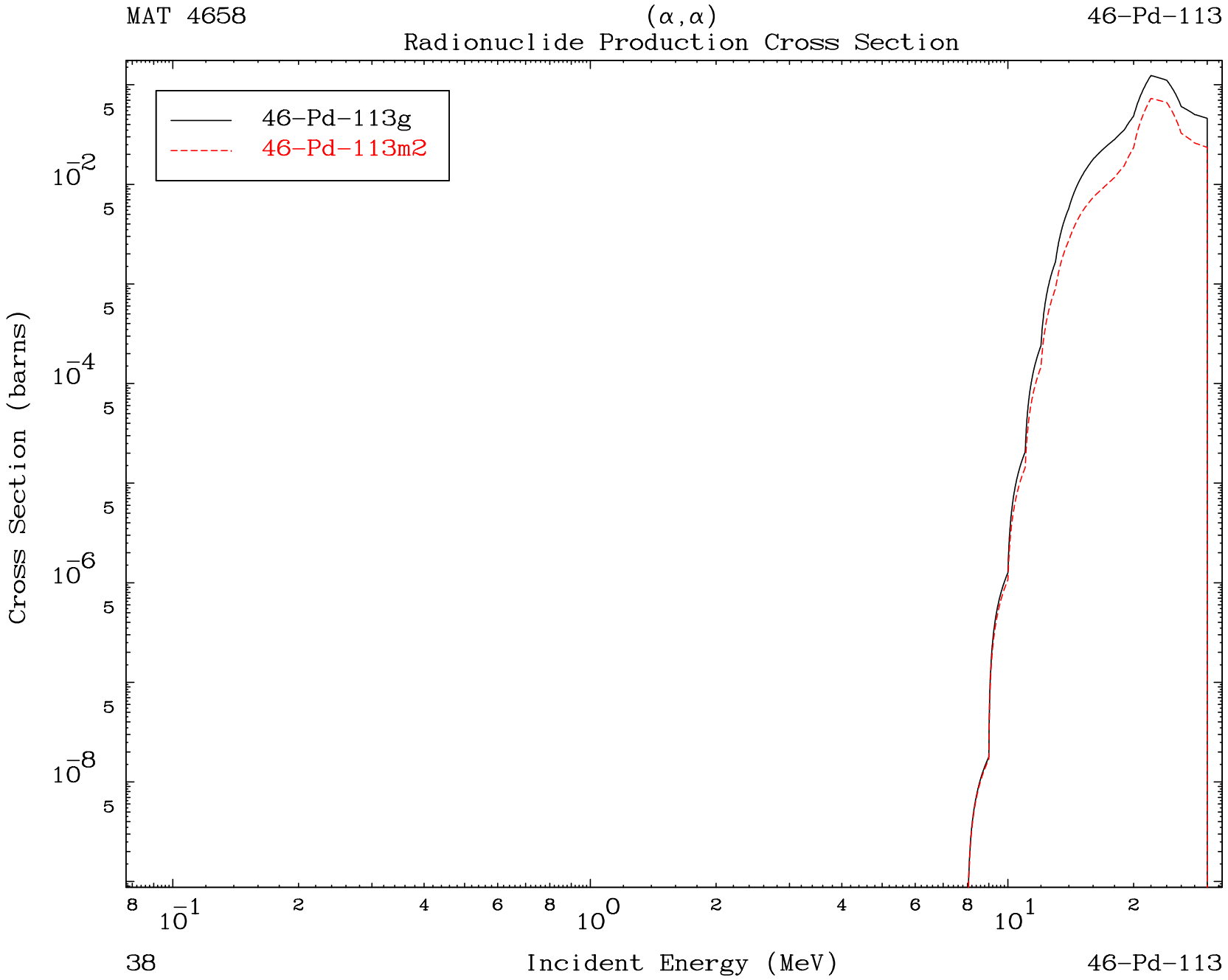

MAT 4658
(α,4n)
46-Pd-113
Radionuclide Production Cross Section
48-Cd-113g
48-Cd-113m1
Cross Section (barns)
10-1
10-2
10-3
26
27
28
29
30
33
Incident Energy (MeV)
46-Pd-113

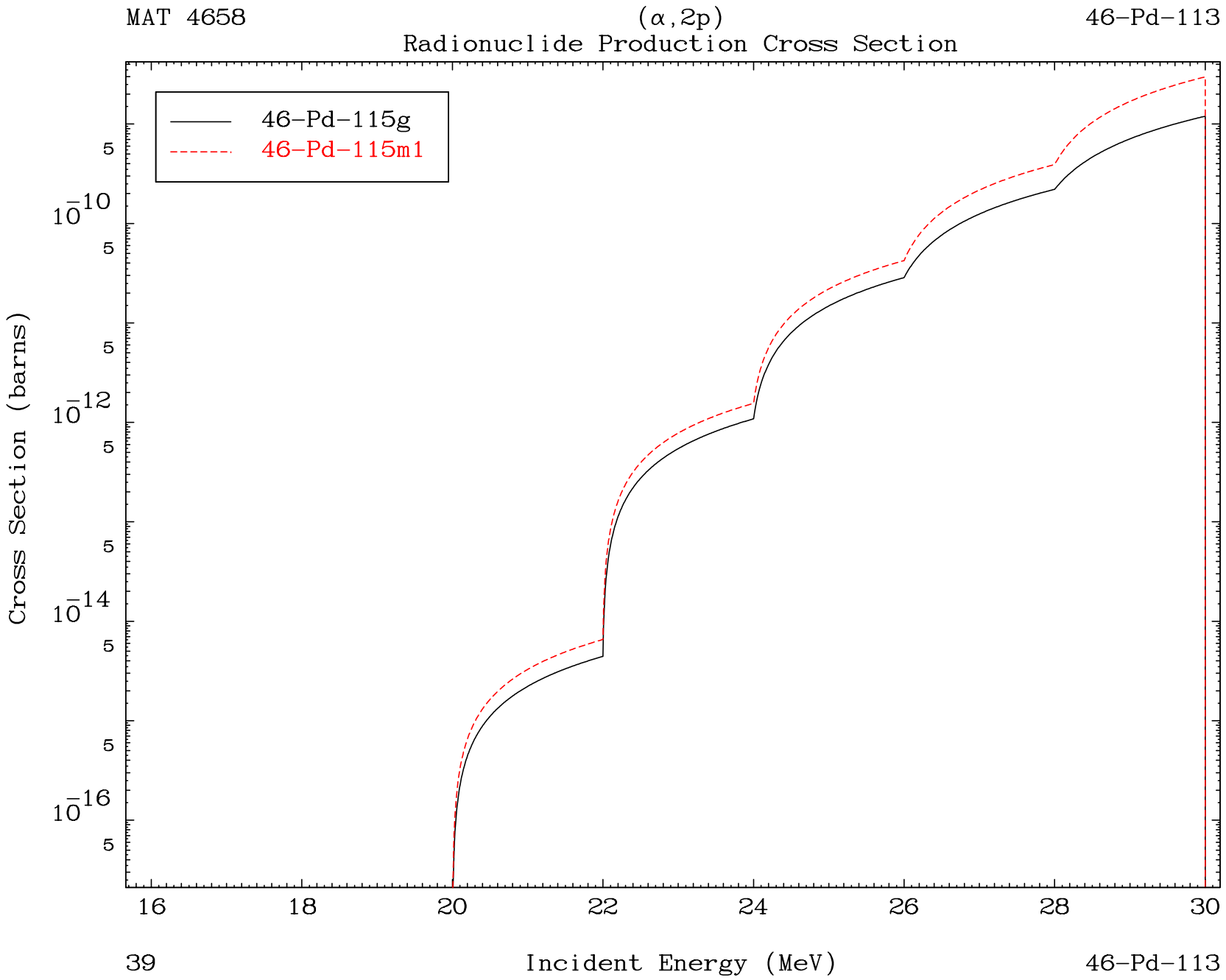

MAT 4658
(α,3n) p
46-Pd-113
Radionuclide Production Cross Section
47-Ag-113g
47-Ag-113m1
Cross Section (barns)
10-7
5
10-8
5
10-9
5
10-10
5
27
28
29
30
34
Incident Energy (MeV)
46-Pd-113

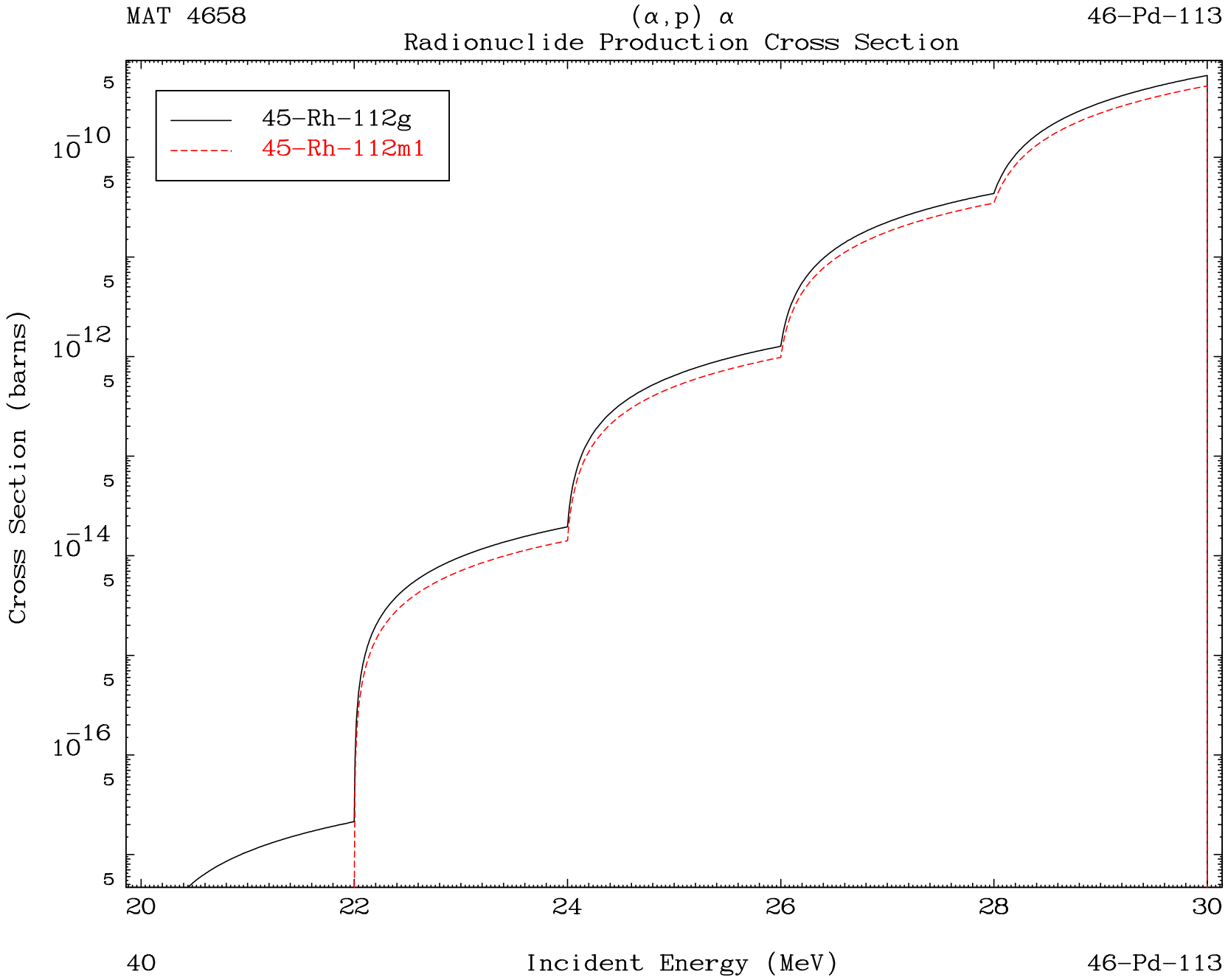

MAT 4658
(α,γ)
46-Pd-113
Radionuclide Production Cross Section
48-Cd-117g
48-Cd-117m2
Cross Section (barns)
Incident Energy (MeV)
35
46-Pd-113


MAT 4658
(α,p)
46-Pd-113
Radionuclide Production Cross Section
47-Ag-116g
47-Ag-116m1
47-Ag-116m4
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
36
Incident Energy (MeV)
46-Pd-113


MAT 4658
(α,d)
46-Pd-113
Radionuclide Production Cross Section
47-Ag-115g
47-Ag-115m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
37
Incident Energy (MeV)
46-Pd-113


MAT 4658
(α,α)
46-Pd-113
Radionuclide Production Cross Section
46-Pd-113g
46-Pd-113m2
Cross Section (barns)
10-2
10-4
10-6
10-8
10-1
100
101
Incident Energy (MeV)
38
46-Pd-113


MAT 4658
(α,2p)
46-Pd-113
Radionuclide Production Cross Section
46-Pd-115g
46-Pd-115m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
16
18
20
22
24
26
28
30
39
Incident Energy (MeV)
46-Pd-113


MAT 4658
(α,p) α
46-Pd-113
Radionuclide Production Cross Section
45-Rh-112g
45-Rh-112m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
20
22
24
26
28
30
40
Incident Energy (MeV)
46-Pd-113