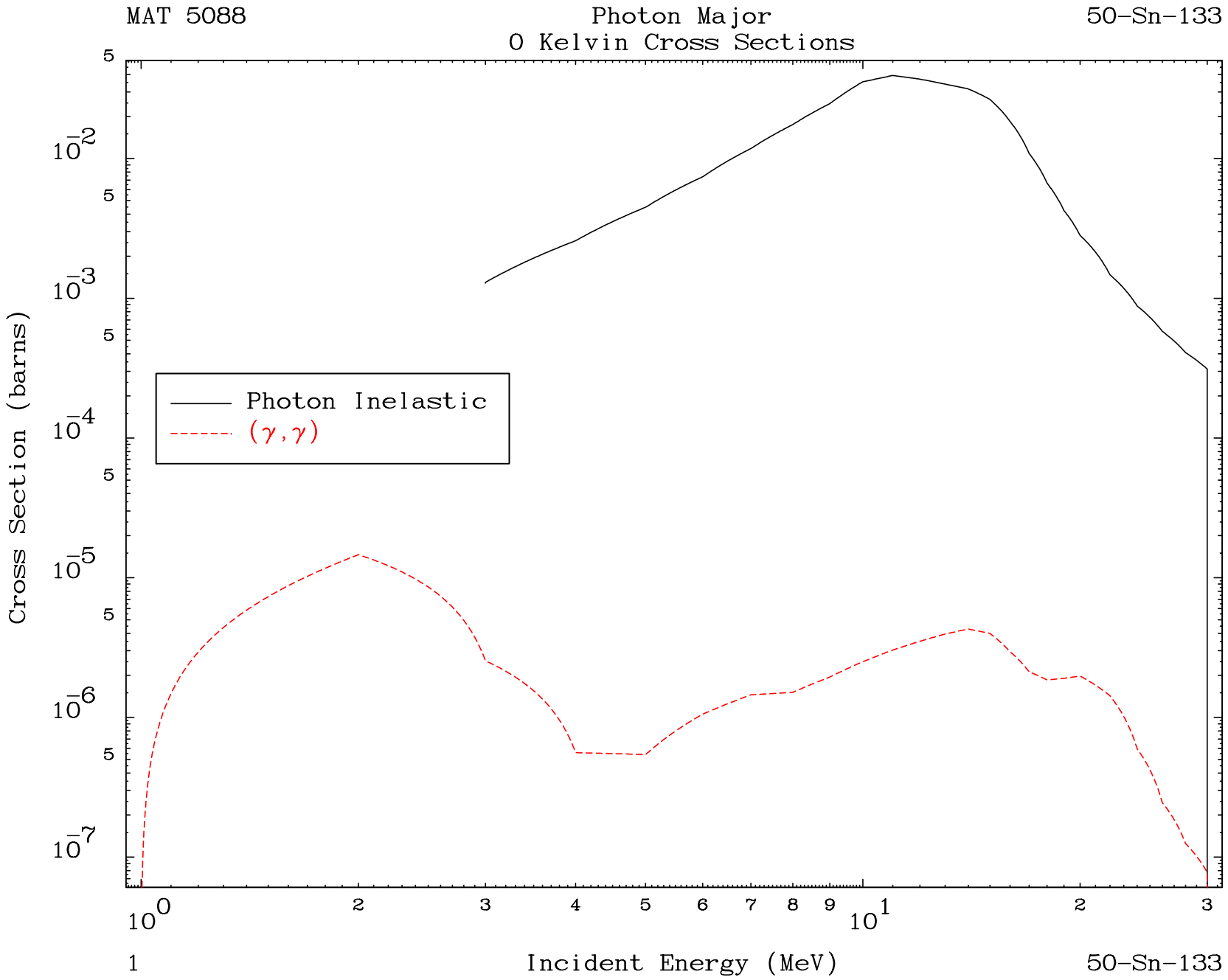
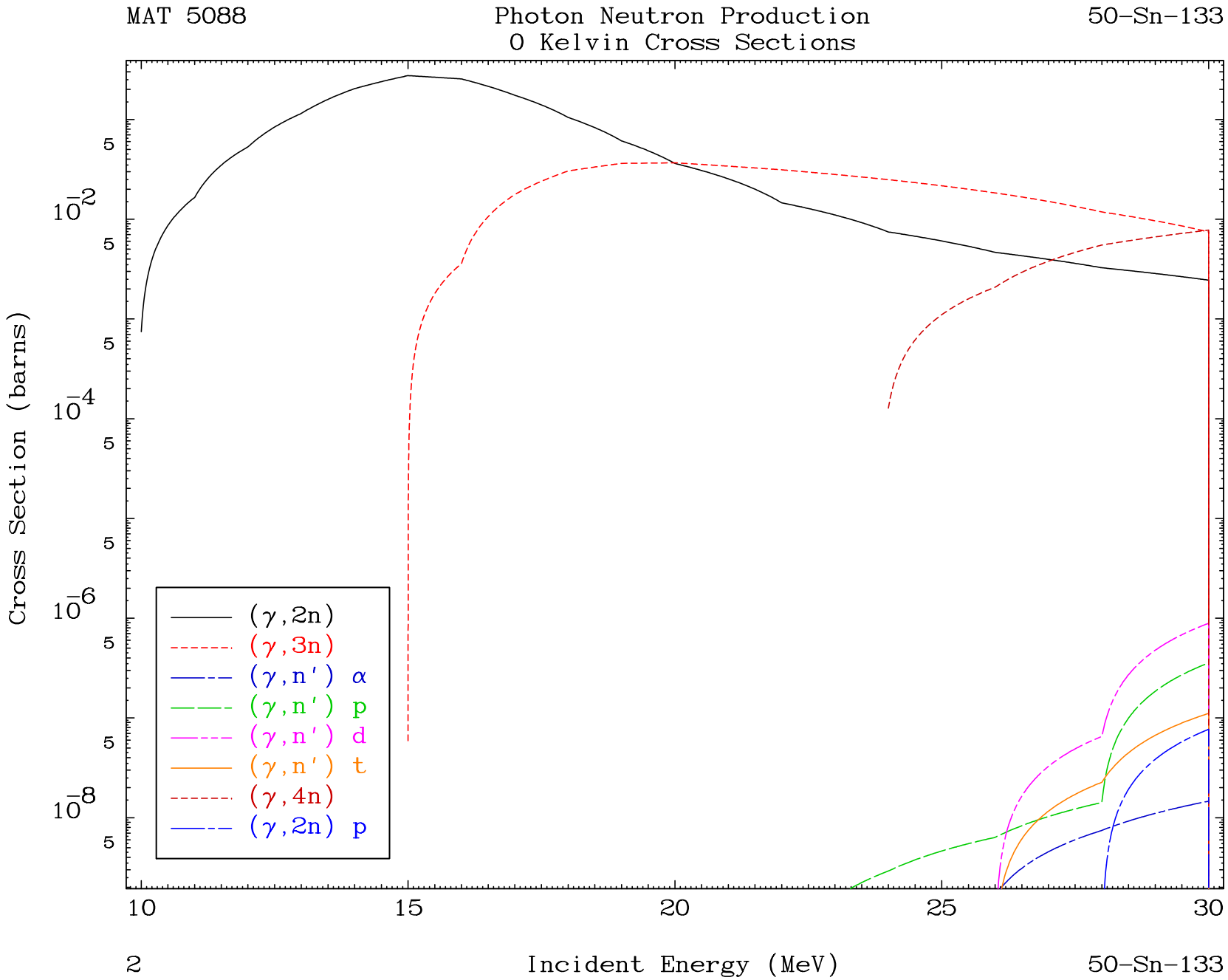
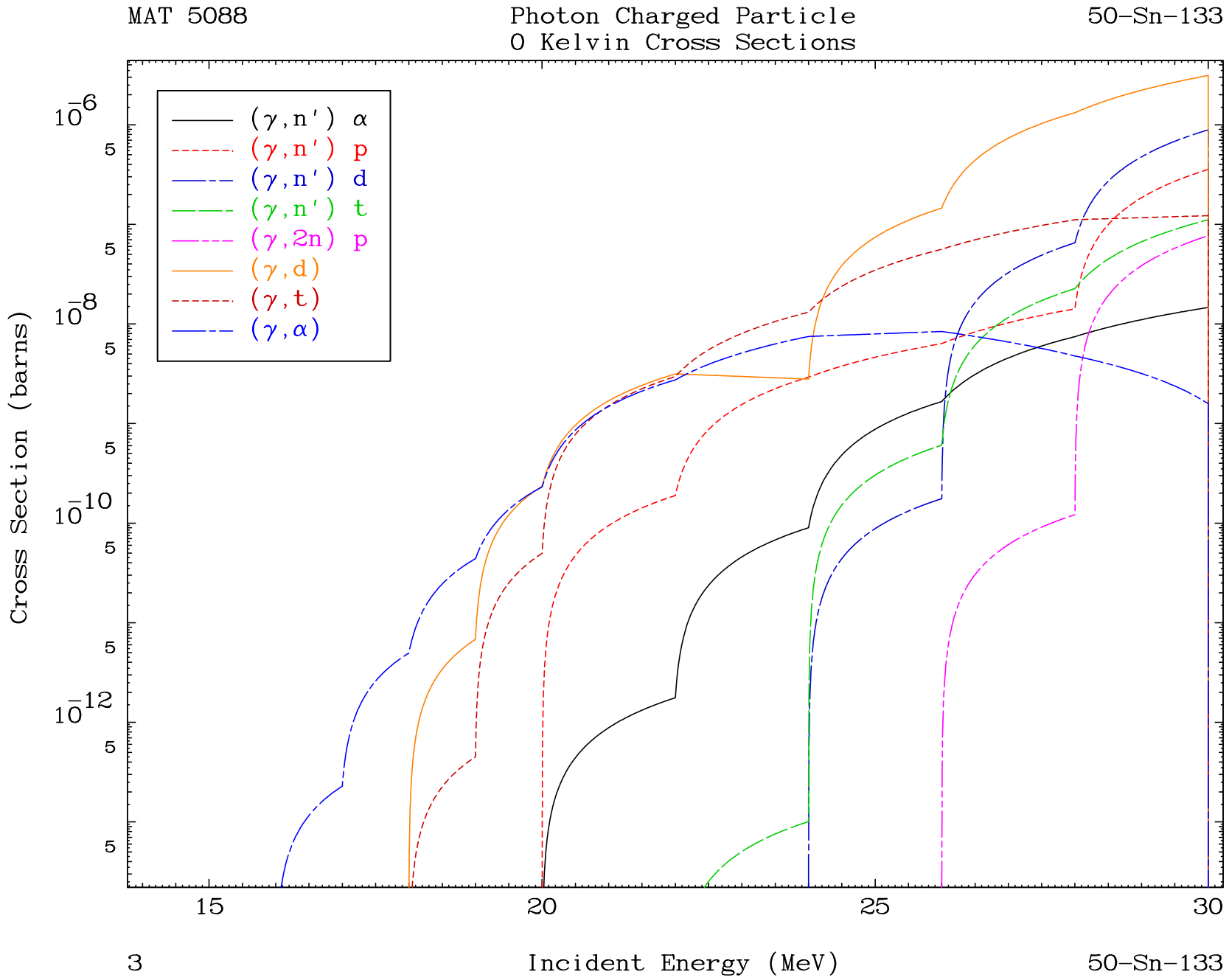
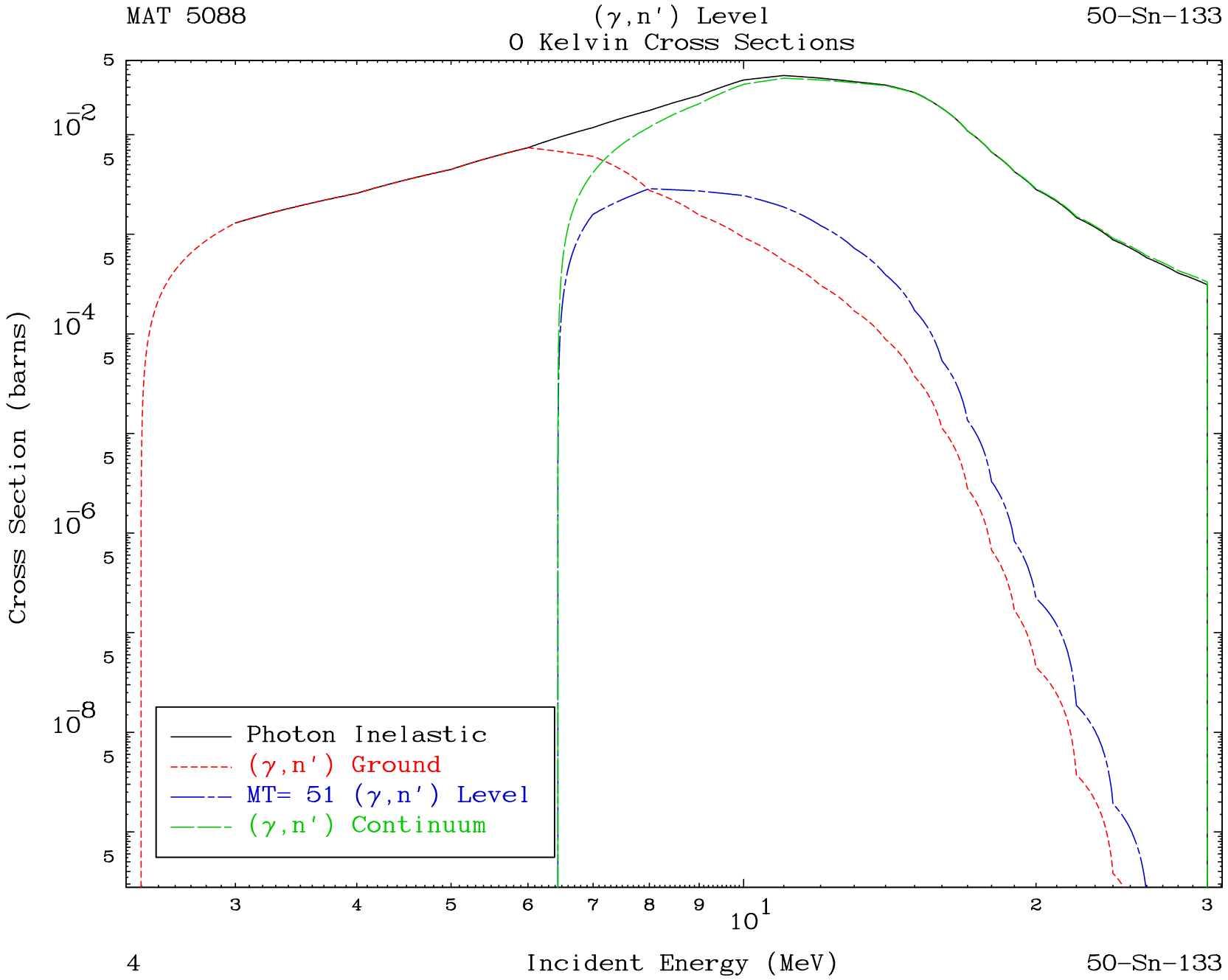
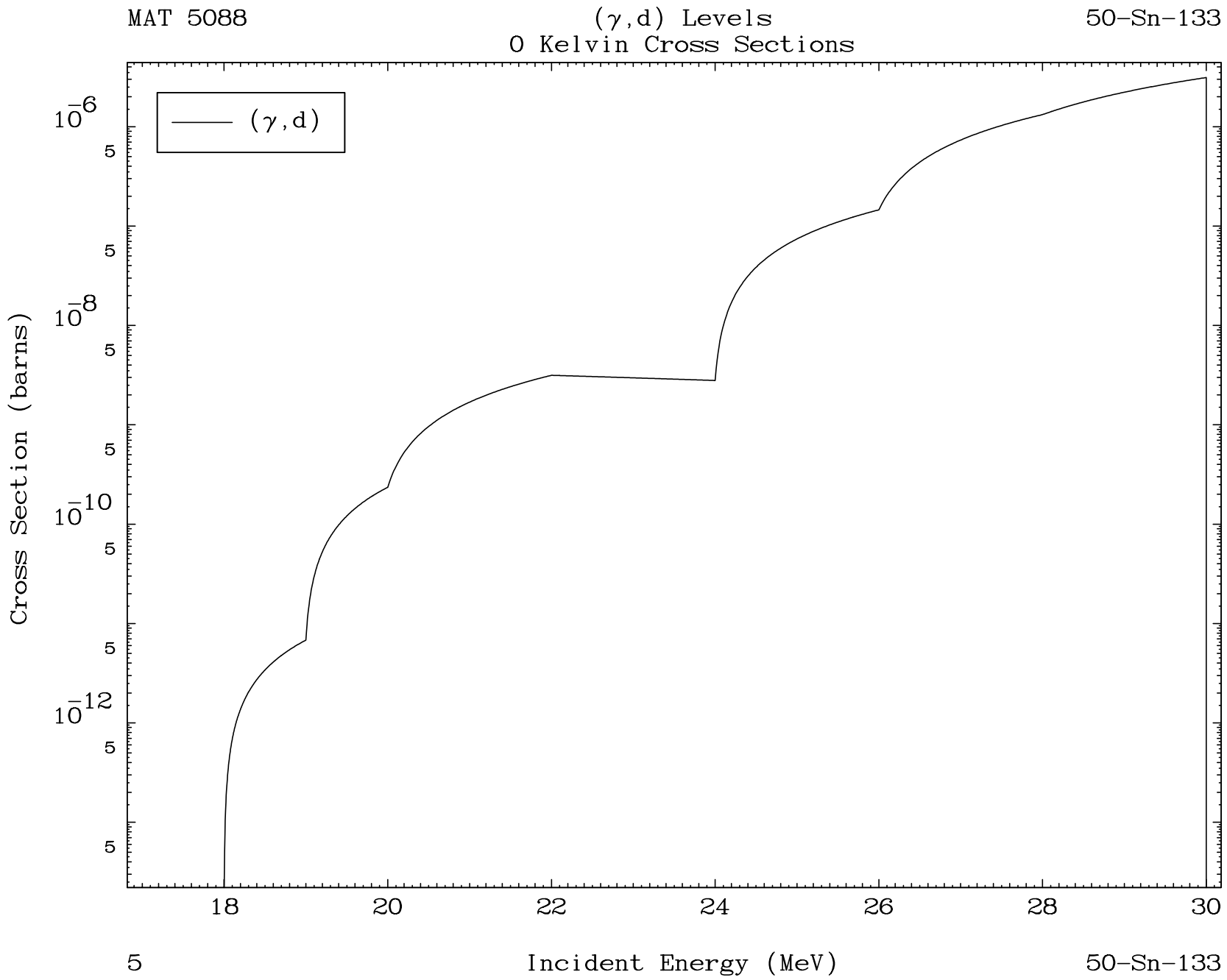
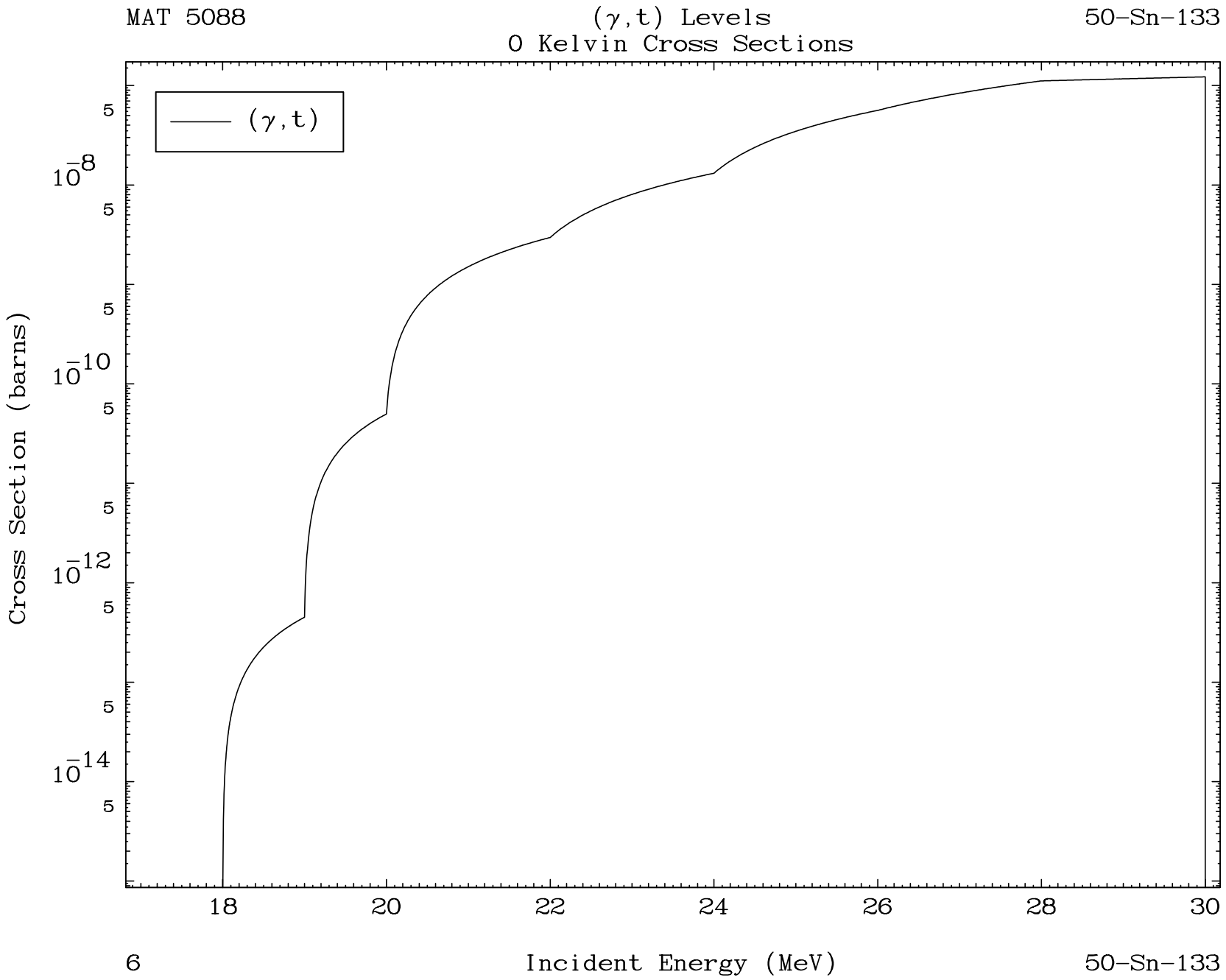

MAT 5088
Photon Major
50-Sn-133
0 Kelvin Cross Sections
Cross Section (barns)
Photon Inelastic
(γ,γ)
Incident Energy (MeV)
50-Sn-133

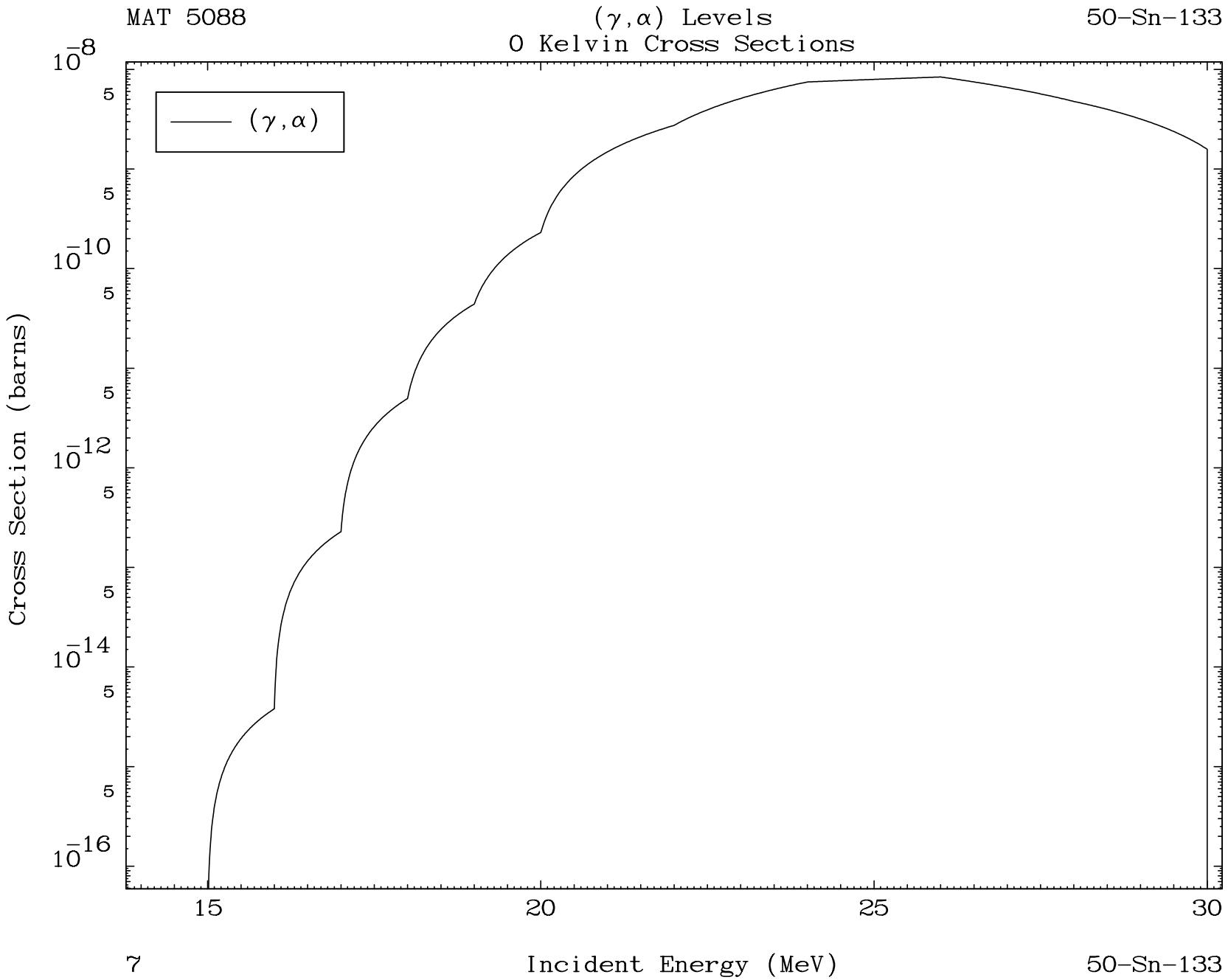

MAT 5088
Photon Neutron Production
0 Kelvin Cross Sections
50-Sn-133
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
Incident Energy (MeV)
2
50-Sn-133
(γ,2n)
(γ,3n)
(γ,n') α
(γ,n') p
(γ,n') d
(γ,n') t
(γ,4n)
(γ,2n) p

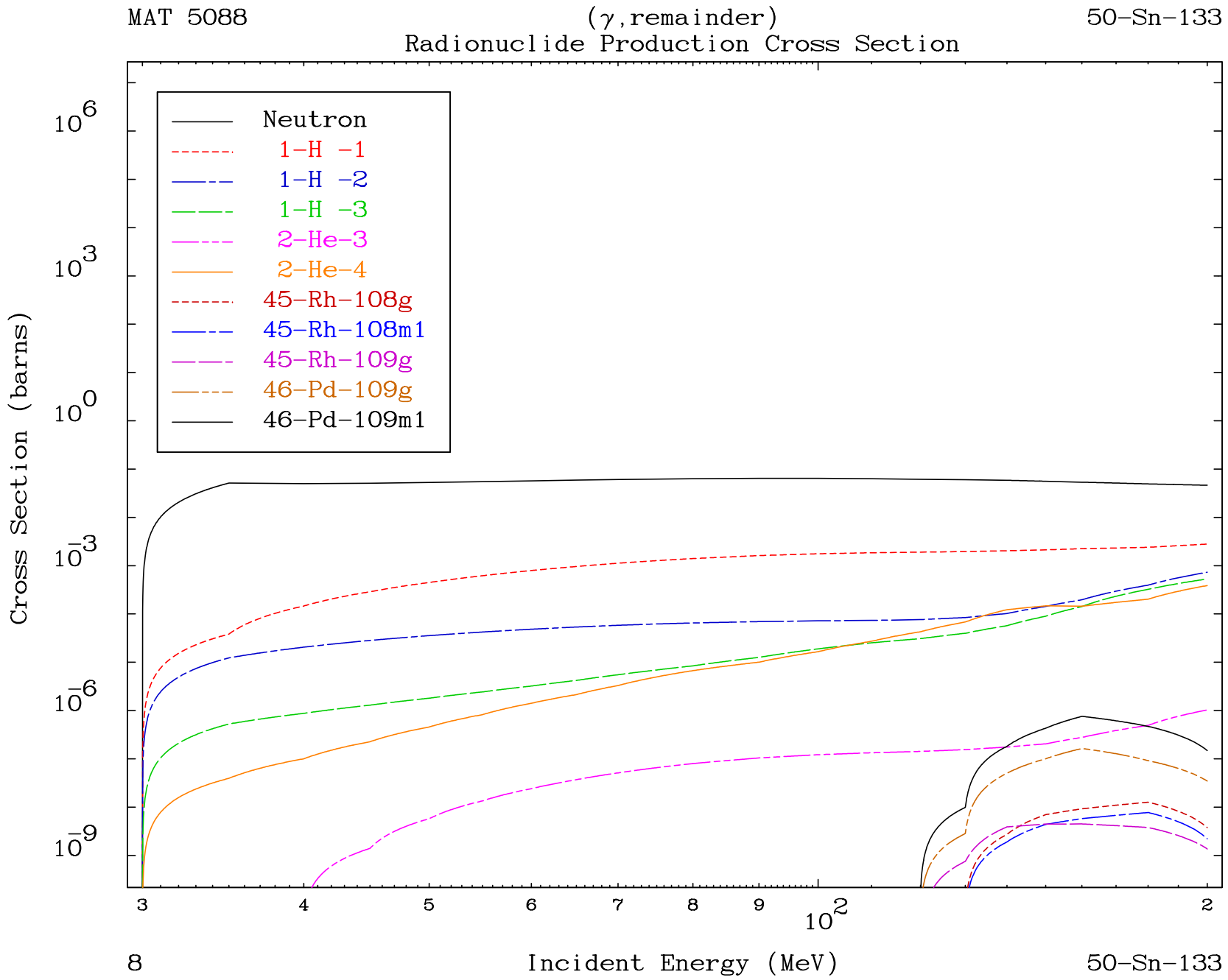

MAT 5088
Photon Charged Particle
0 Kelvin Cross Sections
50-Sn-133
(γ,n') α
(γ,n') p
(γ,n') d
(γ,n') t
(γ,2n) p
(γ,d)
(γ,t)
(γ,α)
Cross Section (barns)
10-6
10-8
10-10
10-12
5
15
20
25
30
3
Incident Energy (MeV)
50-Sn-133

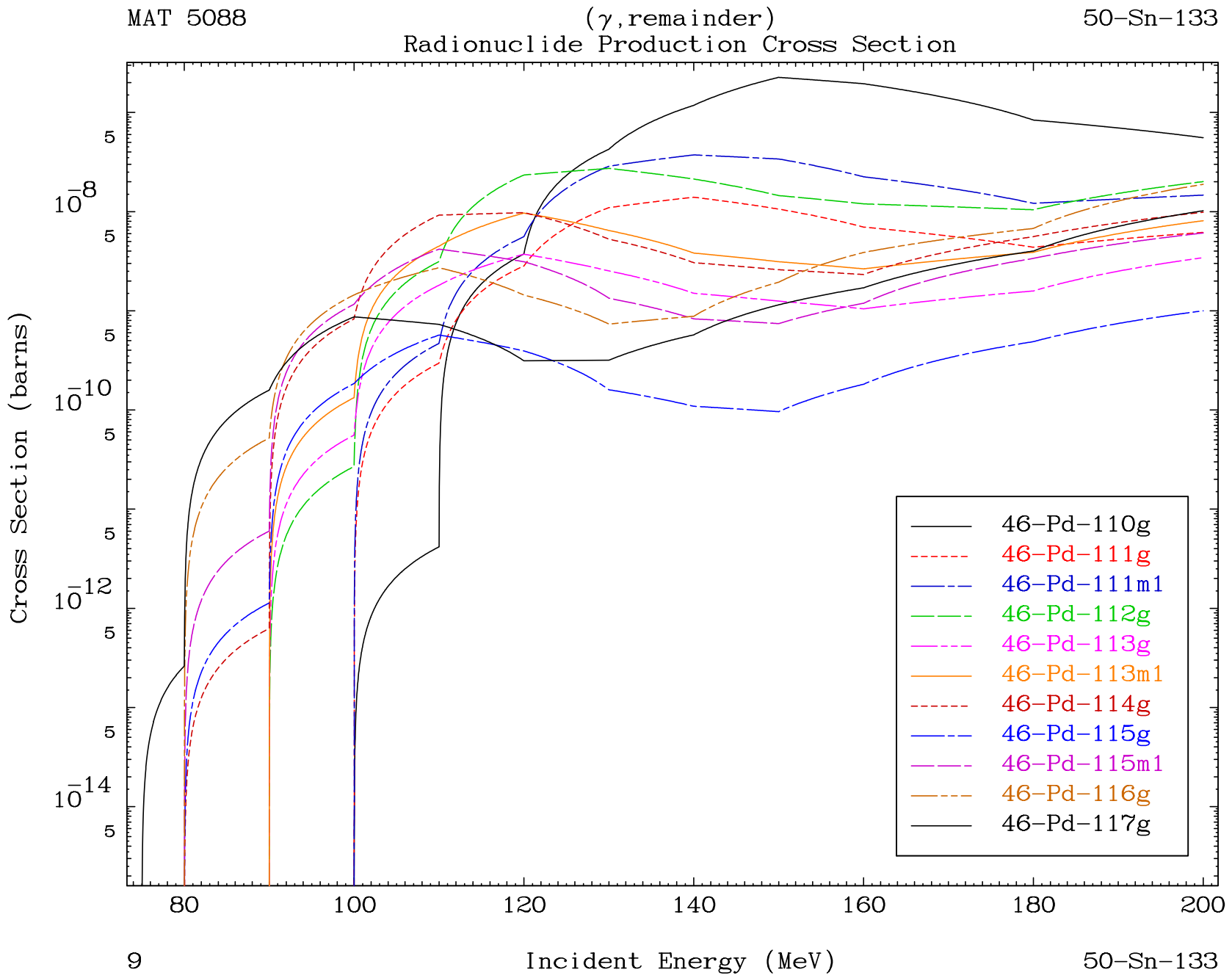

MAT 5088
(γ,n') Level
50-Sn-133
0 Kelvin Cross Sections
Cross Section (barns)
10-2
10-4
10-6
10-8
Photon Inelastic
(γ,n') Ground
MT= 51 (γ,n') Level
(γ,n') Continuum
3
4
5
6
7
8
9
10 1
2
3
4
Incident Energy (MeV)
50-Sn-133

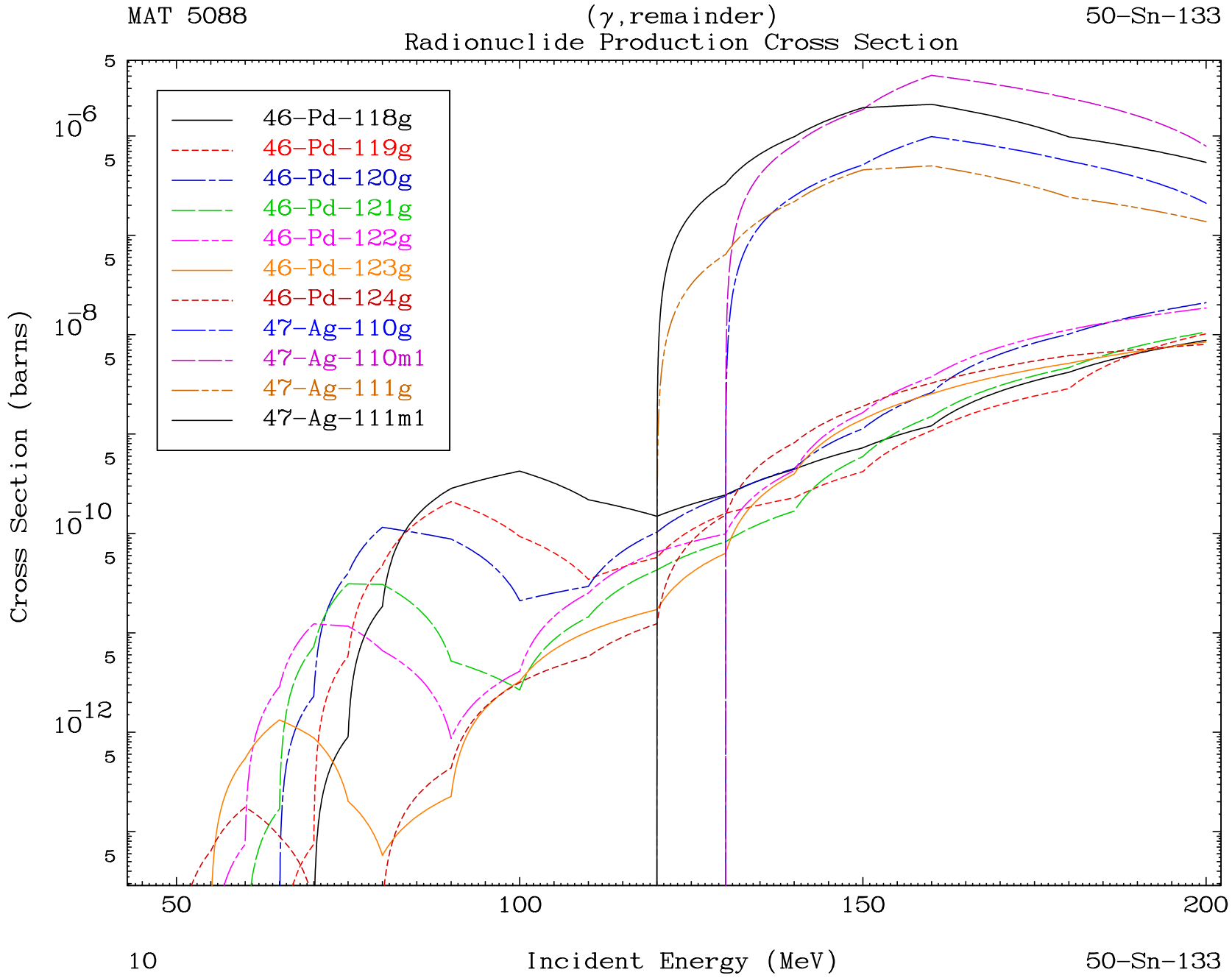

MAT 5088
(γ,d) Levels
50-Sn-133
0 Kelvin Cross Sections
(γ,d)
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
18
20
22
24
26
28
30
Incident Energy (MeV)
50-Sn-133

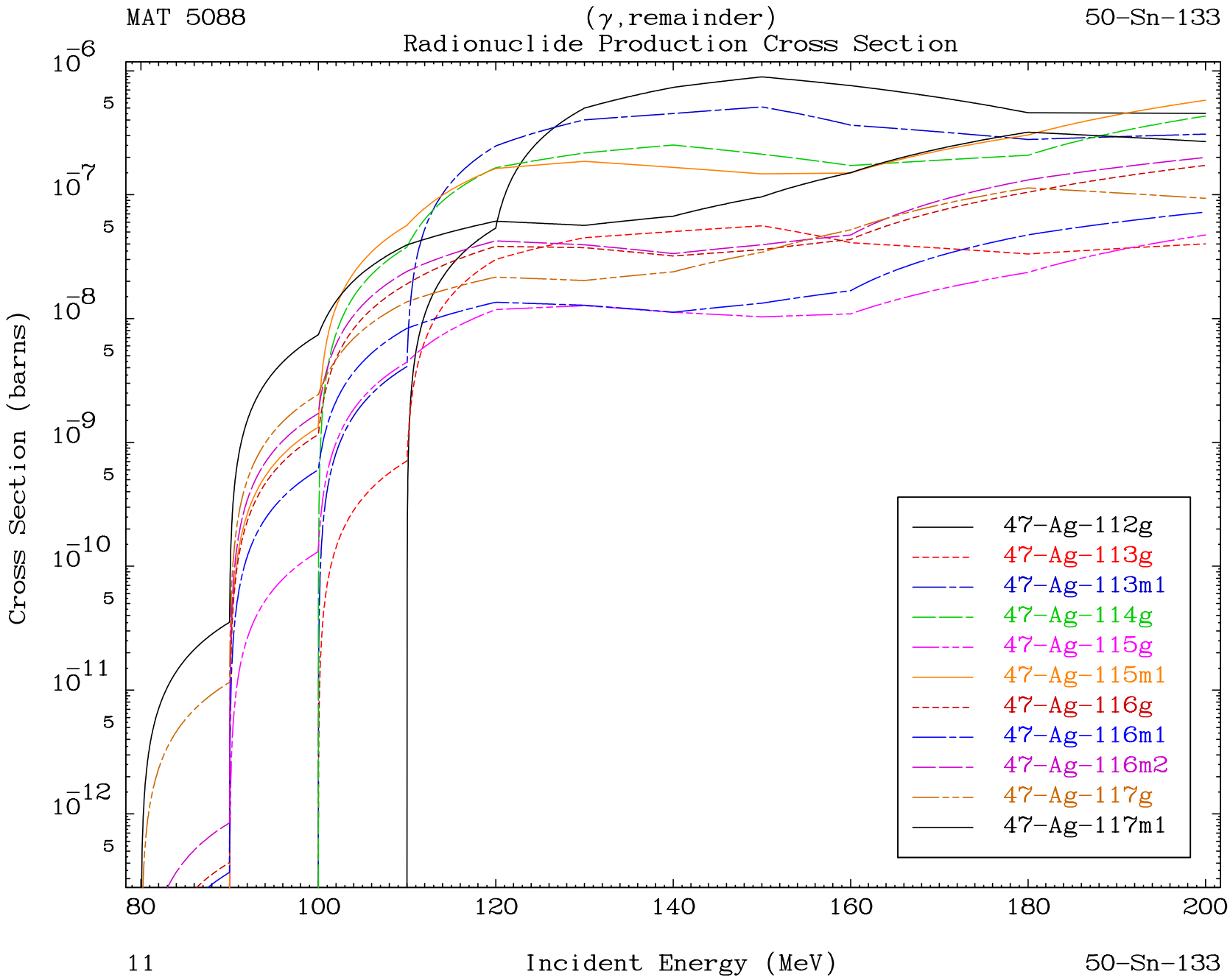

MAT 5088
(γ,t) Levels
50-Sn-133
0 Kelvin Cross Sections
(γ,t)
Cross Section (barns)
10-8
10-10
10-12
10-14
5
18
20
22
24
26
28
30
Incident Energy (MeV)
6
50-Sn-133

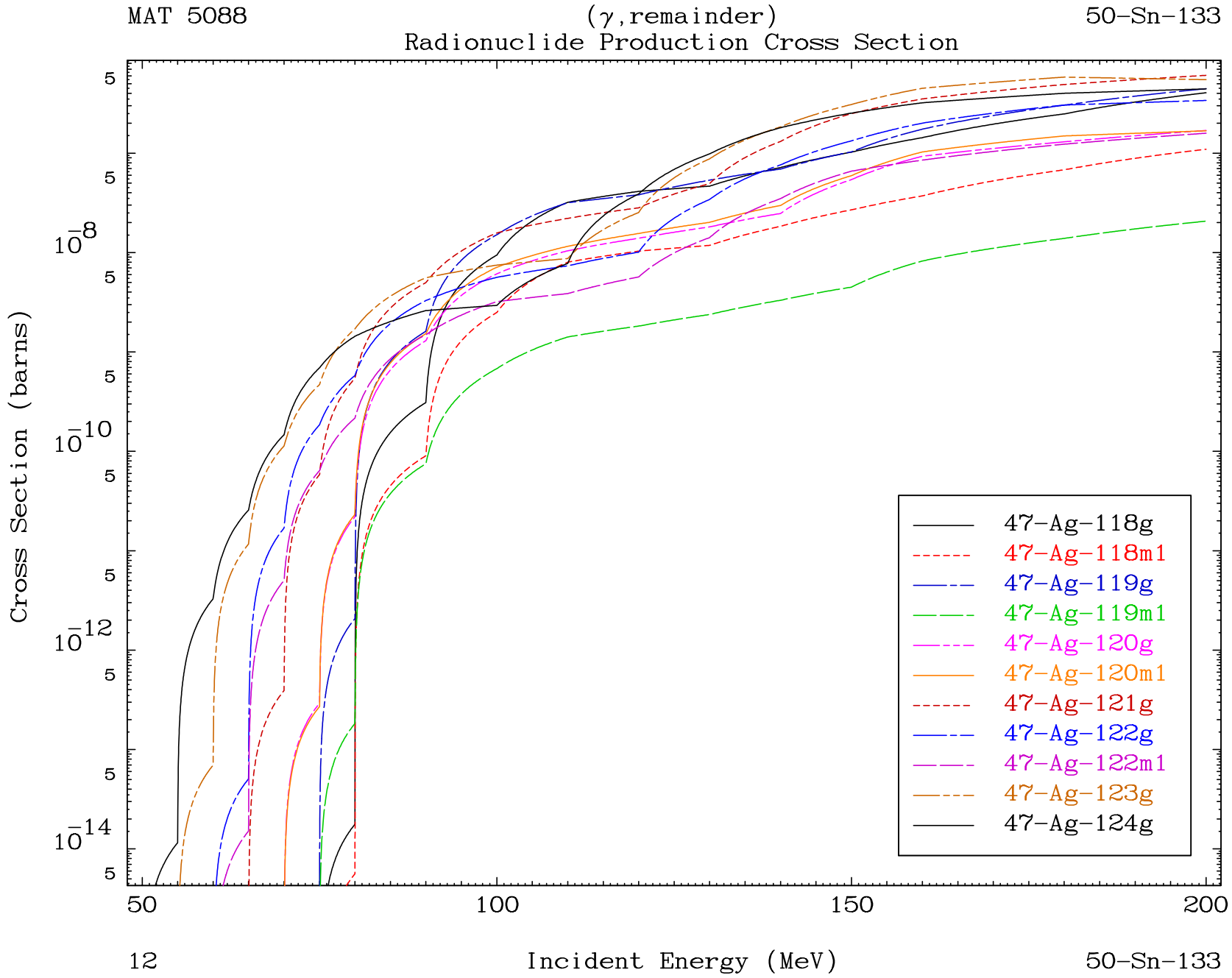

MAT 5088
(γ,α) Levels
50-Sn-133
0 Kelvin Cross Sections
(γ,α)
Cross Section (barns)
10-8
5
10-10
5
10-12
5
10-14
5
10-16
5
15
20
25
30
Incident Energy (MeV)
7
50-Sn-133

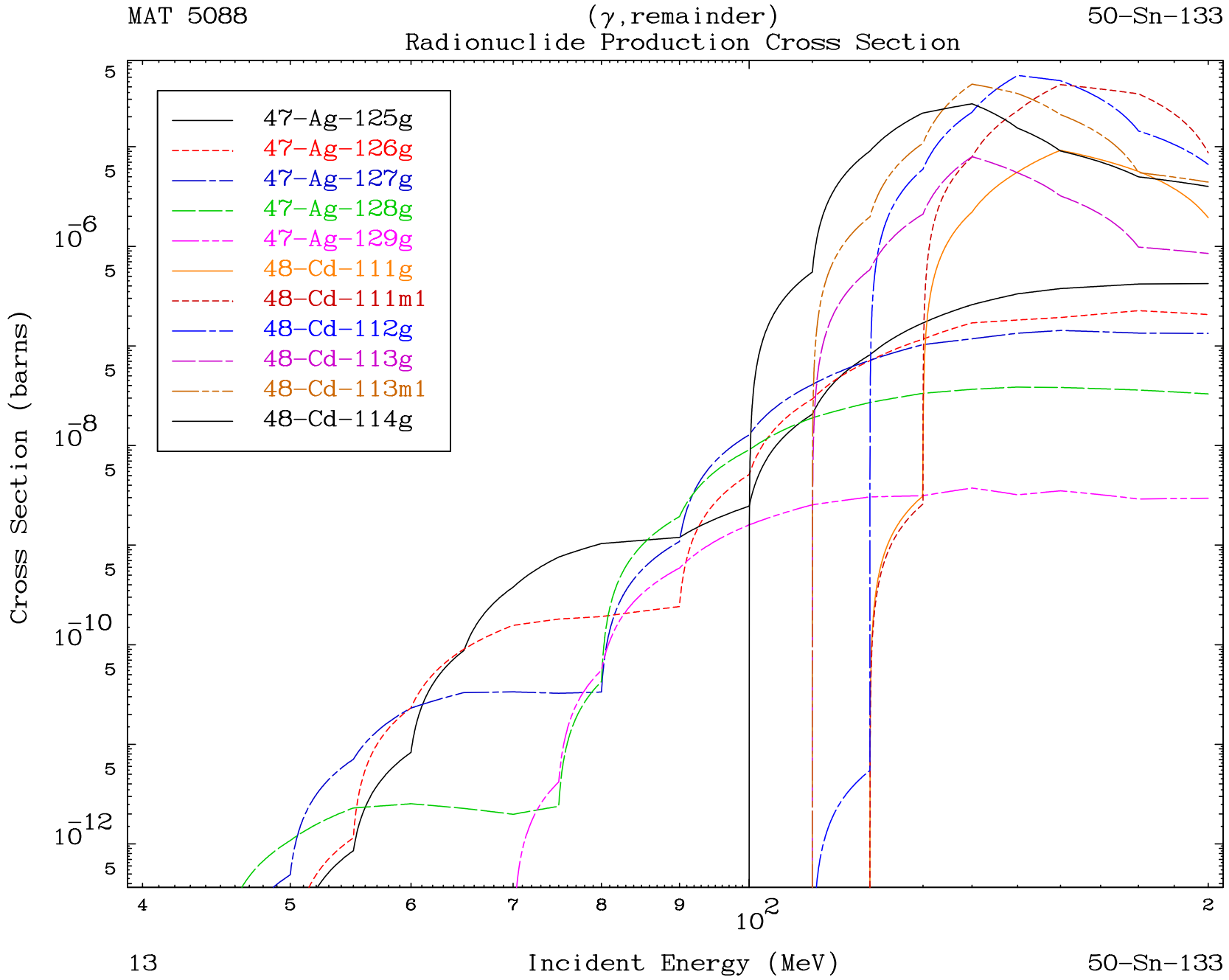

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
45-Rh-108g
45-Rh-108m1
45-Rh-109g
46-Pd-109g
46-Pd-109m1
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
8
Incident Energy (MeV)
50-Sn-133

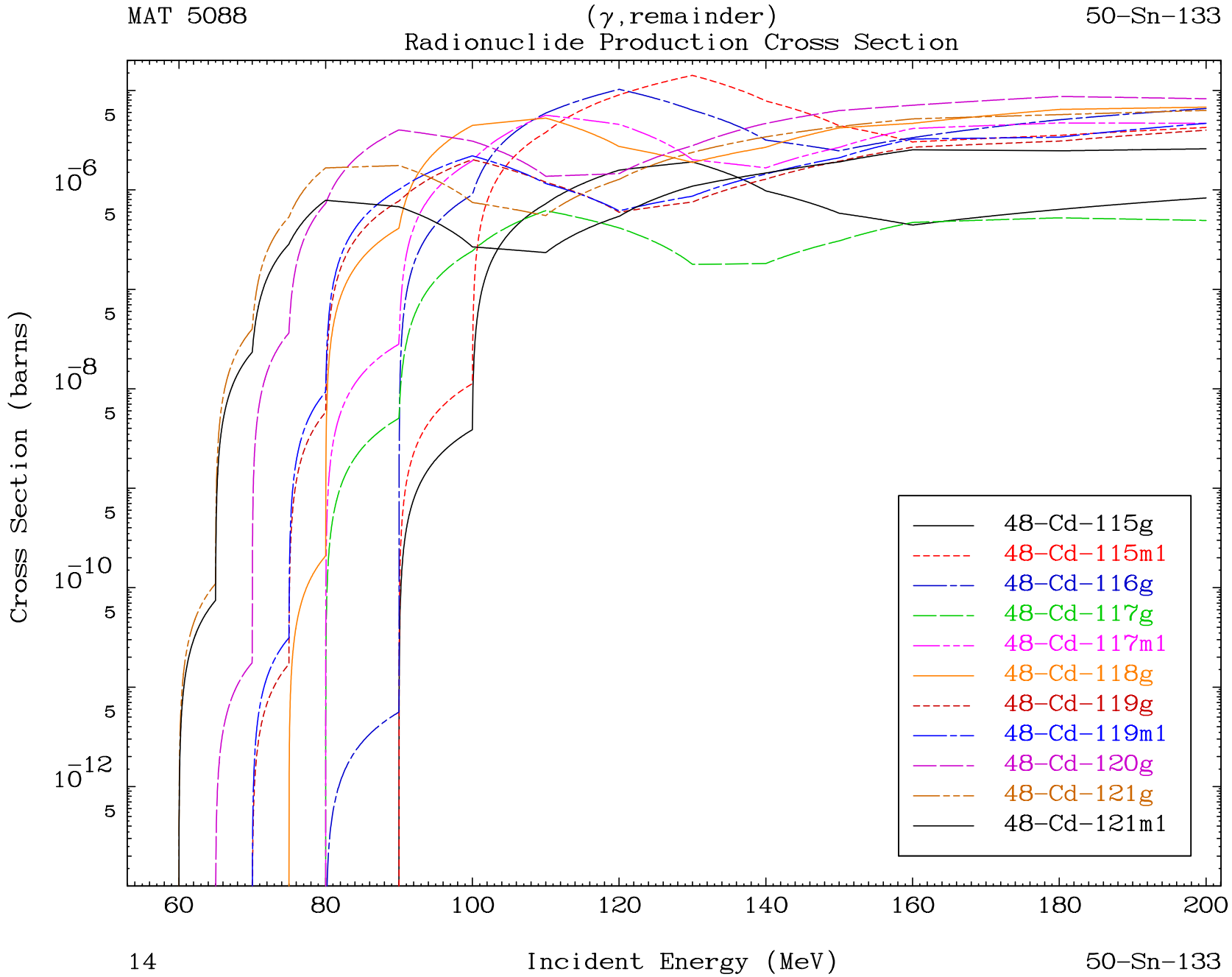

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-8
10-10
10-12
10-14
5
80
100
120
140
160
180
200
Incident Energy (MeV)
9
50-Sn-133
46-Pd-110g
46-Pd-111g
46-Pd-111m1
46-Pd-112g
46-Pd-113g
46-Pd-113m1
46-Pd-114g
46-Pd-115g
46-Pd-115m1
46-Pd-116g
46-Pd-117g

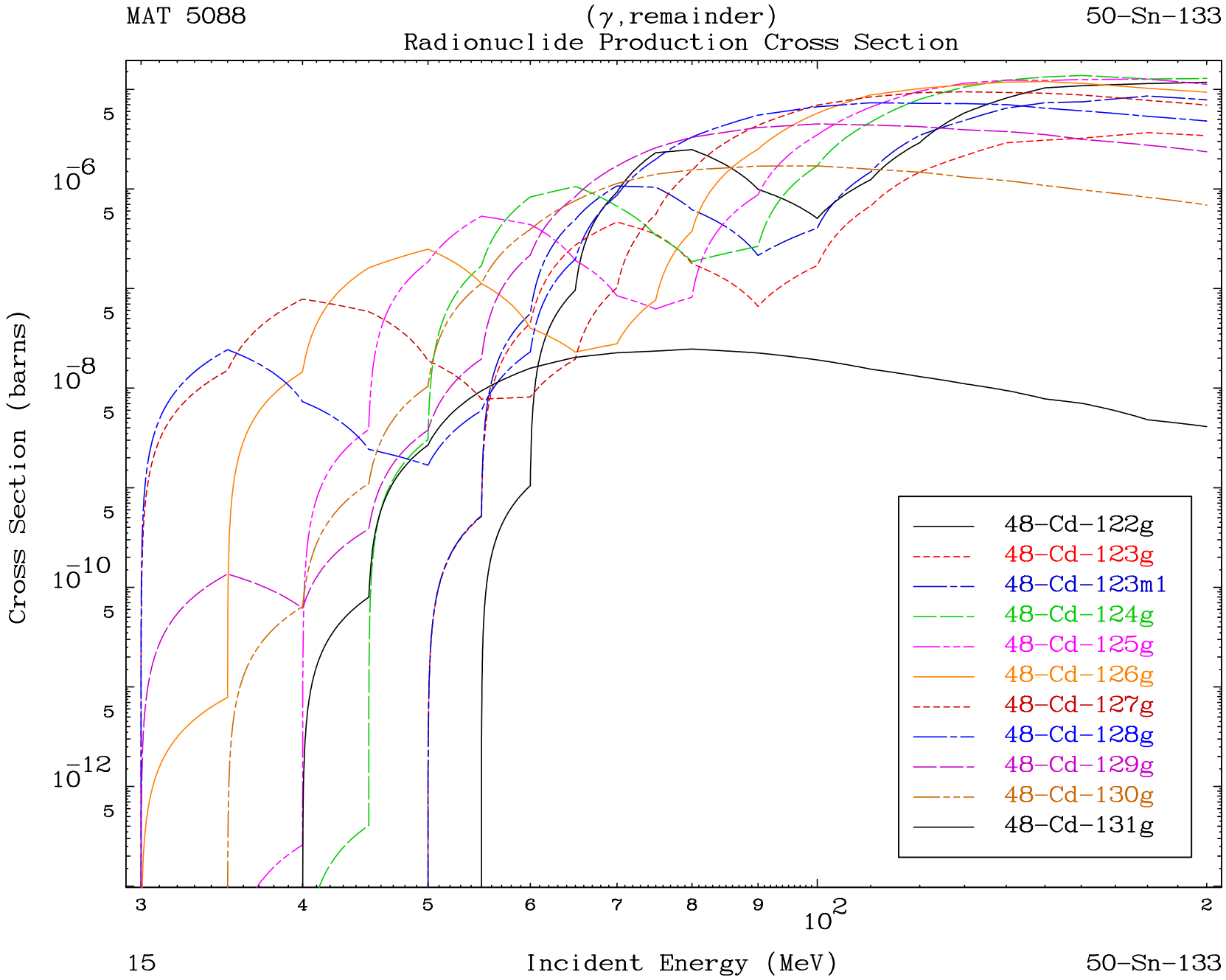

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
46-Pd-118g
46-Pd-119g
46-Pd-120g
46-Pd-121g
46-Pd-122g
46-Pd-123g
46-Pd-124g
47-Ag-110g
47-Ag-110m1
47-Ag-111g
47-Ag-111m1
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
50
100
150
200
10
Incident Energy (MeV)
50-Sn-133

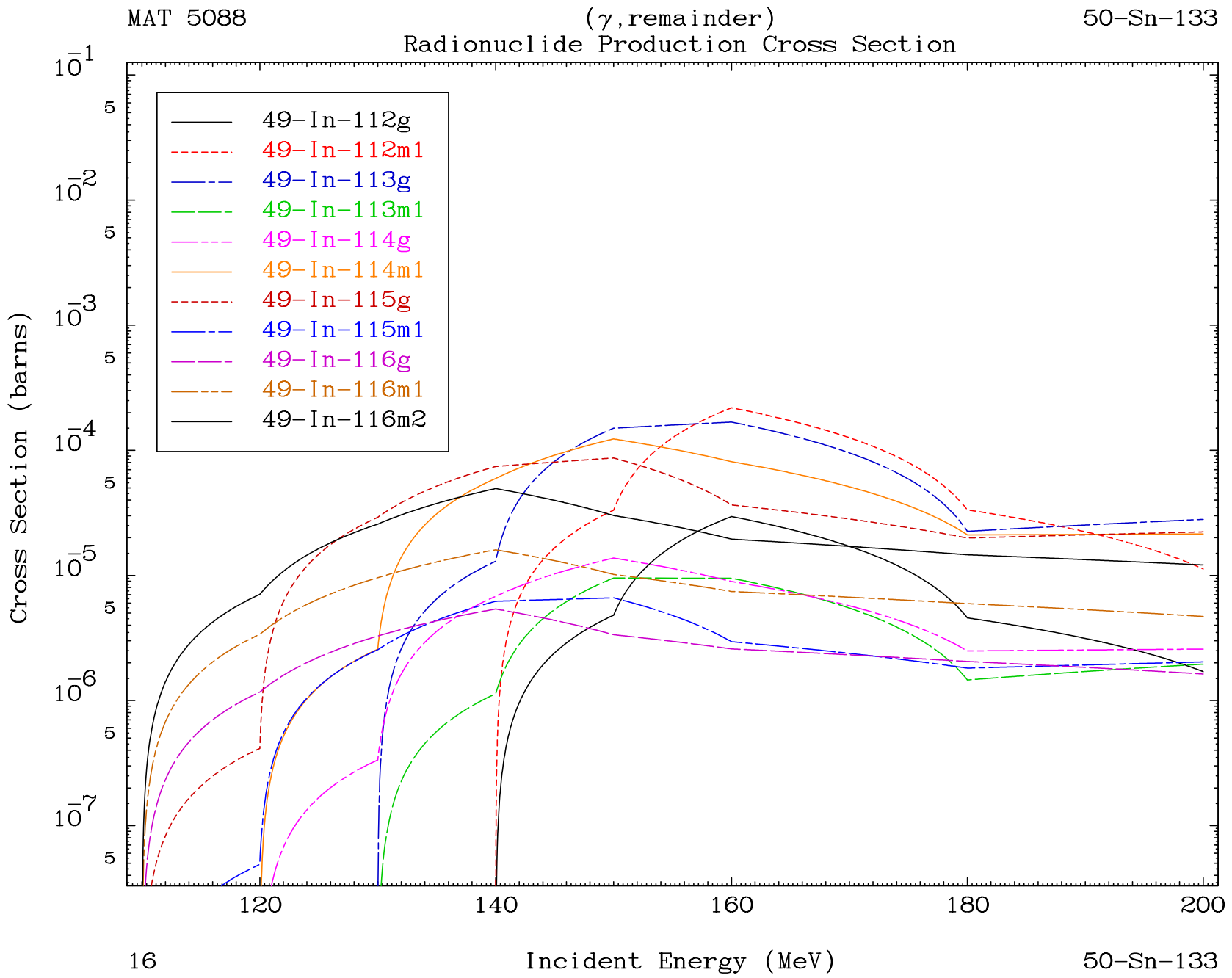

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10^-6
10^-7
10^-8
10^-9
10^-10
10^-11
10^-12
80
100
120
140
160
180
200
Incident Energy (MeV)
11
50-Sn-133
47-Ag-112g
47-Ag-113g
47-Ag-113m1
47-Ag-114g
47-Ag-115g
47-Ag-115m1
47-Ag-116g
47-Ag-116m1
47-Ag-116m2
47-Ag-117g
47-Ag-117m1

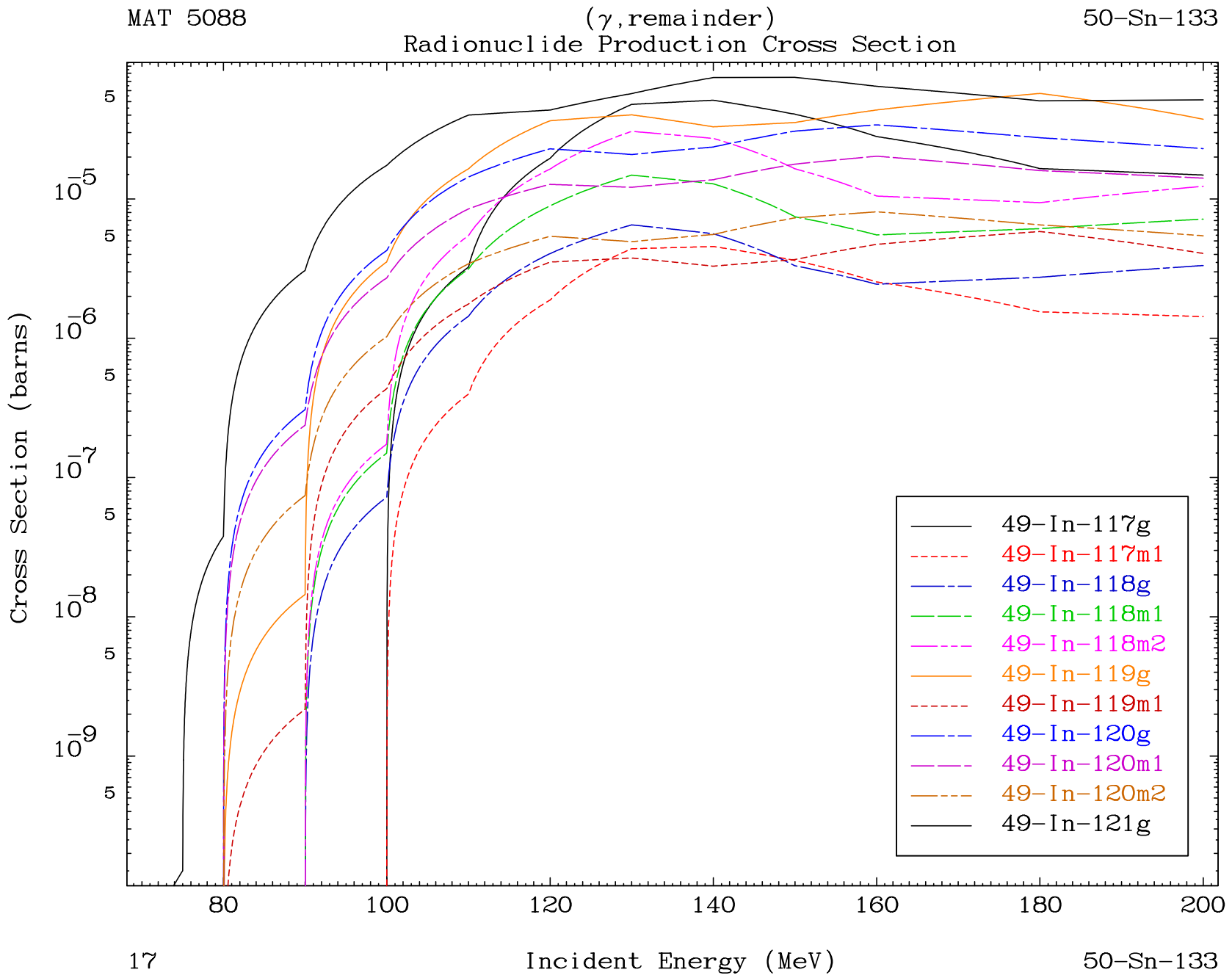

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-8
10-10
10-12
10-14
5
50
100
150
200
Incident Energy (MeV)
12
50-Sn-133
47-Ag-118g
47-Ag-118m1
47-Ag-119g
47-Ag-119m1
47-Ag-120g
47-Ag-120m1
47-Ag-121g
47-Ag-122g
47-Ag-122m1
47-Ag-123g
47-Ag-124g


MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
47-Ag-125g
47-Ag-126g
47-Ag-127g
47-Ag-128g
47-Ag-129g
48-Cd-111g
48-Cd-111m1
48-Cd-112g
48-Cd-113g
48-Cd-113m1
48-Cd-114g
Cross Section (barns)
10-6
10-8
10-10
10-12
4
5
6
7
8
9
10^2
2
13
Incident Energy (MeV)
50-Sn-133

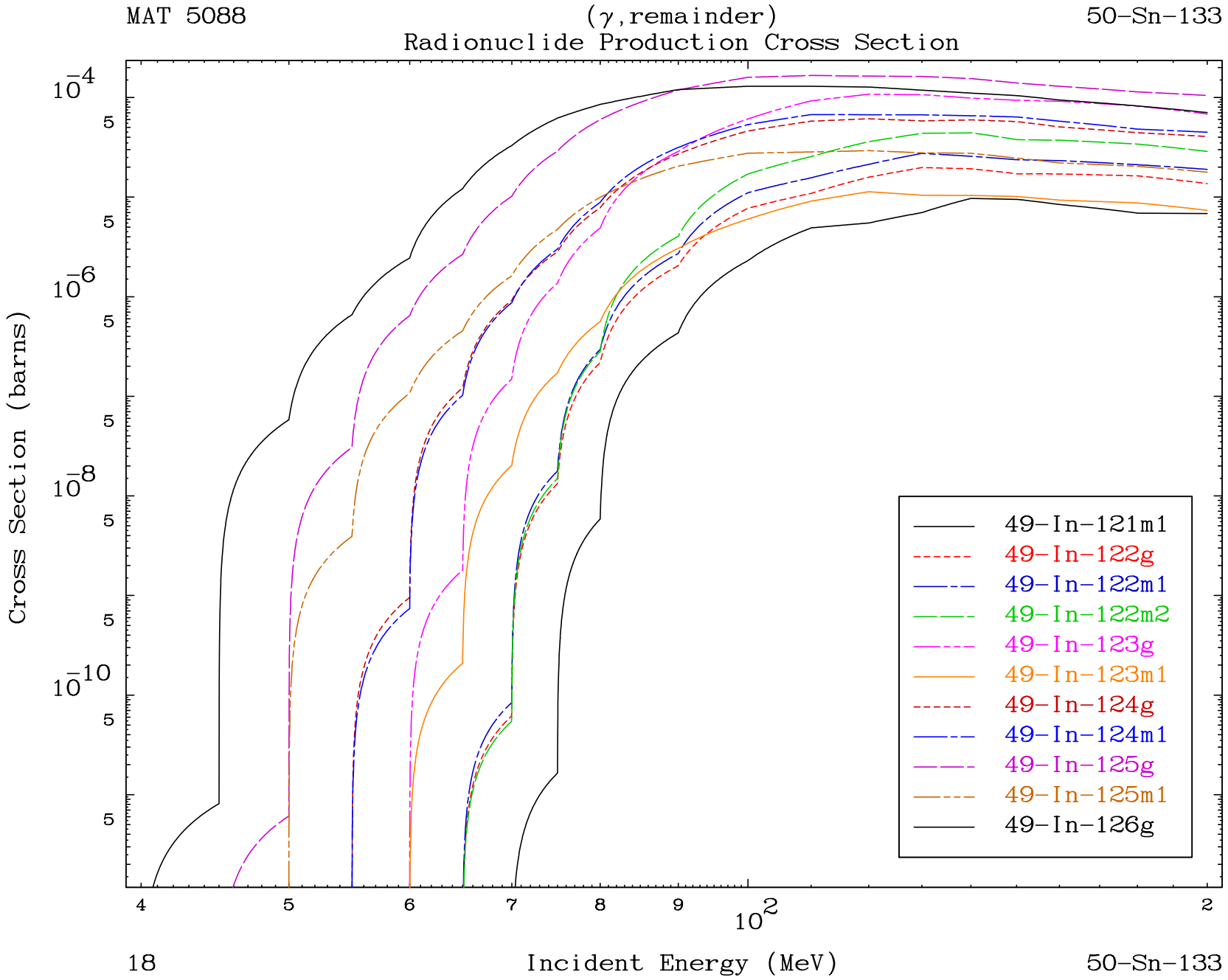

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-6
10-8
10-10
10-12
60
80
100
120
140
160
180
200
Incident Energy (MeV)
48-Cd-115g
48-Cd-115m1
48-Cd-116g
48-Cd-117g
48-Cd-117m1
48-Cd-118g
48-Cd-119g
48-Cd-119m1
48-Cd-120g
48-Cd-121g
48-Cd-121m1


MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-6
10-8
10-10
10-12
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
48-Cd-122g
48-Cd-123g
48-Cd-123m1
48-Cd-124g
48-Cd-125g
48-Cd-126g
48-Cd-127g
48-Cd-128g
48-Cd-129g
48-Cd-130g
48-Cd-131g
15
50-Sn-133

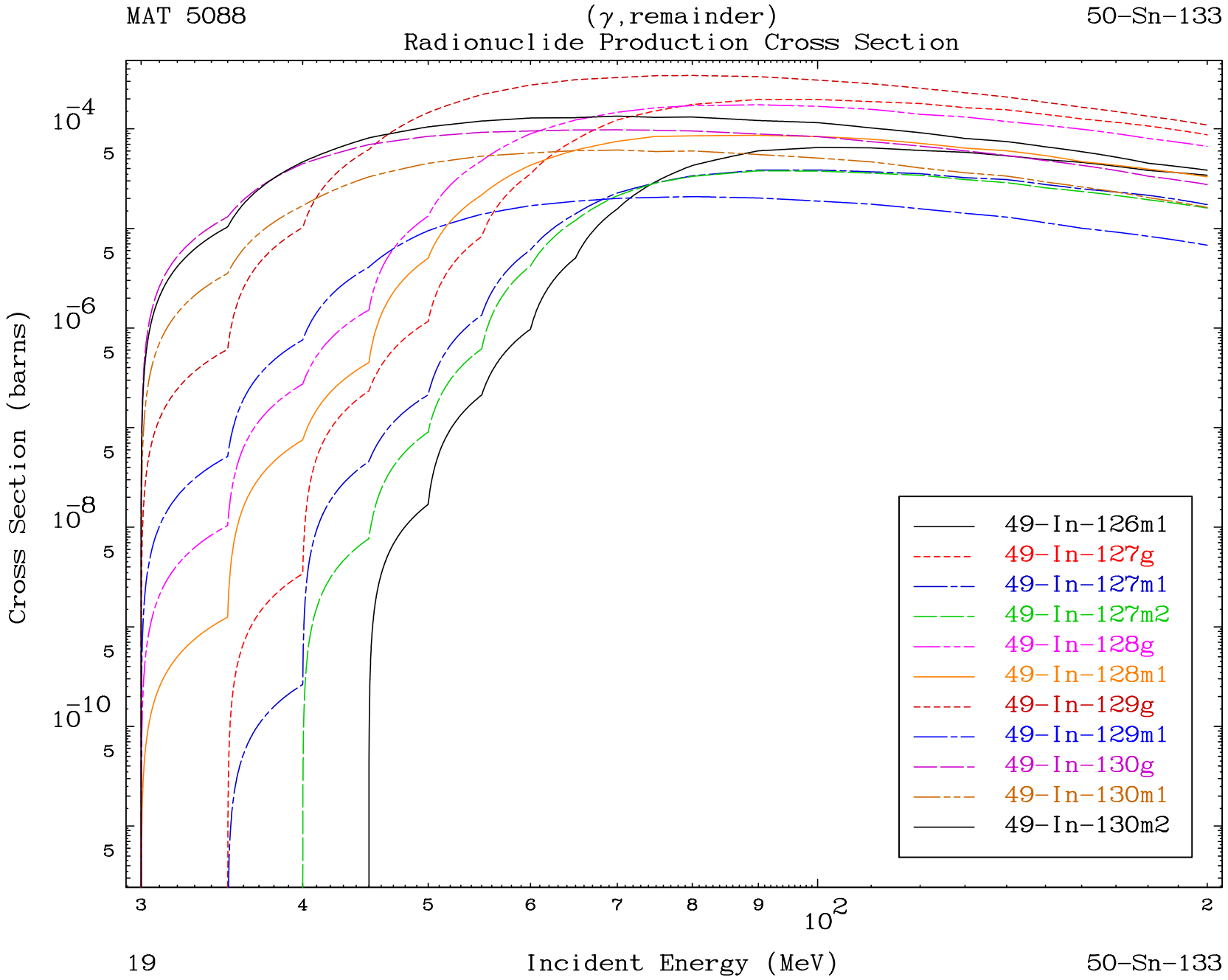

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
49-In-112g
49-In-112m1
49-In-113g
49-In-113m1
49-In-114g
49-In-114m1
49-In-115g
49-In-115m1
49-In-116g
49-In-116m1
49-In-116m2
Cross Section (barns)
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
10^-7
5
120
140
160
180
200
16
Incident Energy (MeV)
50-Sn-133


MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-5
10-6
10-7
10-8
10-9
80
100
120
140
160
180
200
Incident Energy (MeV)
49-In-117g
49-In-117m1
49-In-118g
49-In-118m1
49-In-118m2
49-In-119g
49-In-119m1
49-In-120g
49-In-120m1
49-In-120m2
49-In-121g

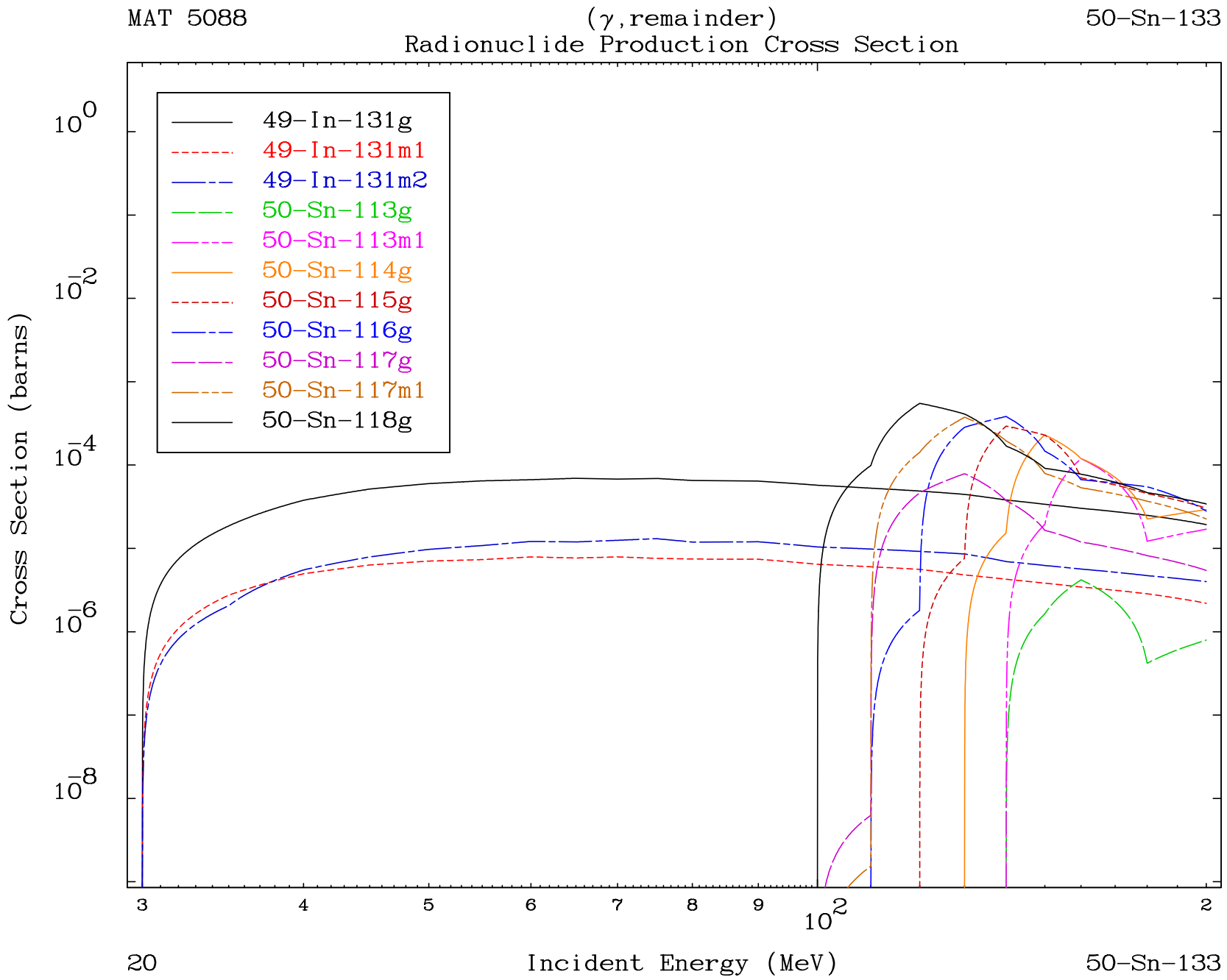
50-Sn-133

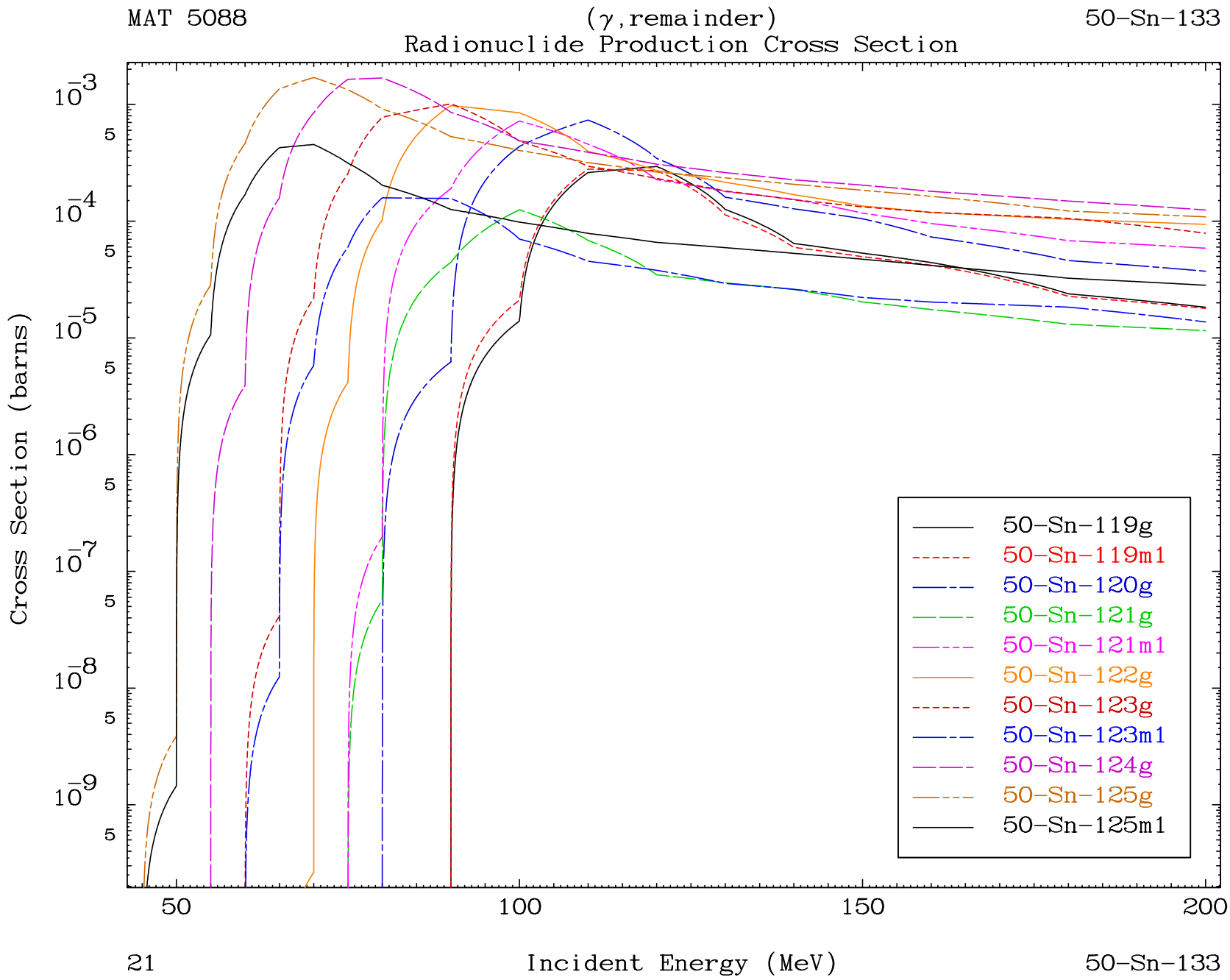

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
49-In-121m1
49-In-122g
49-In-122m1
49-In-122m2
49-In-123g
49-In-123m1
49-In-124g
49-In-124m1
49-In-125g
49-In-125m1
49-In-126g

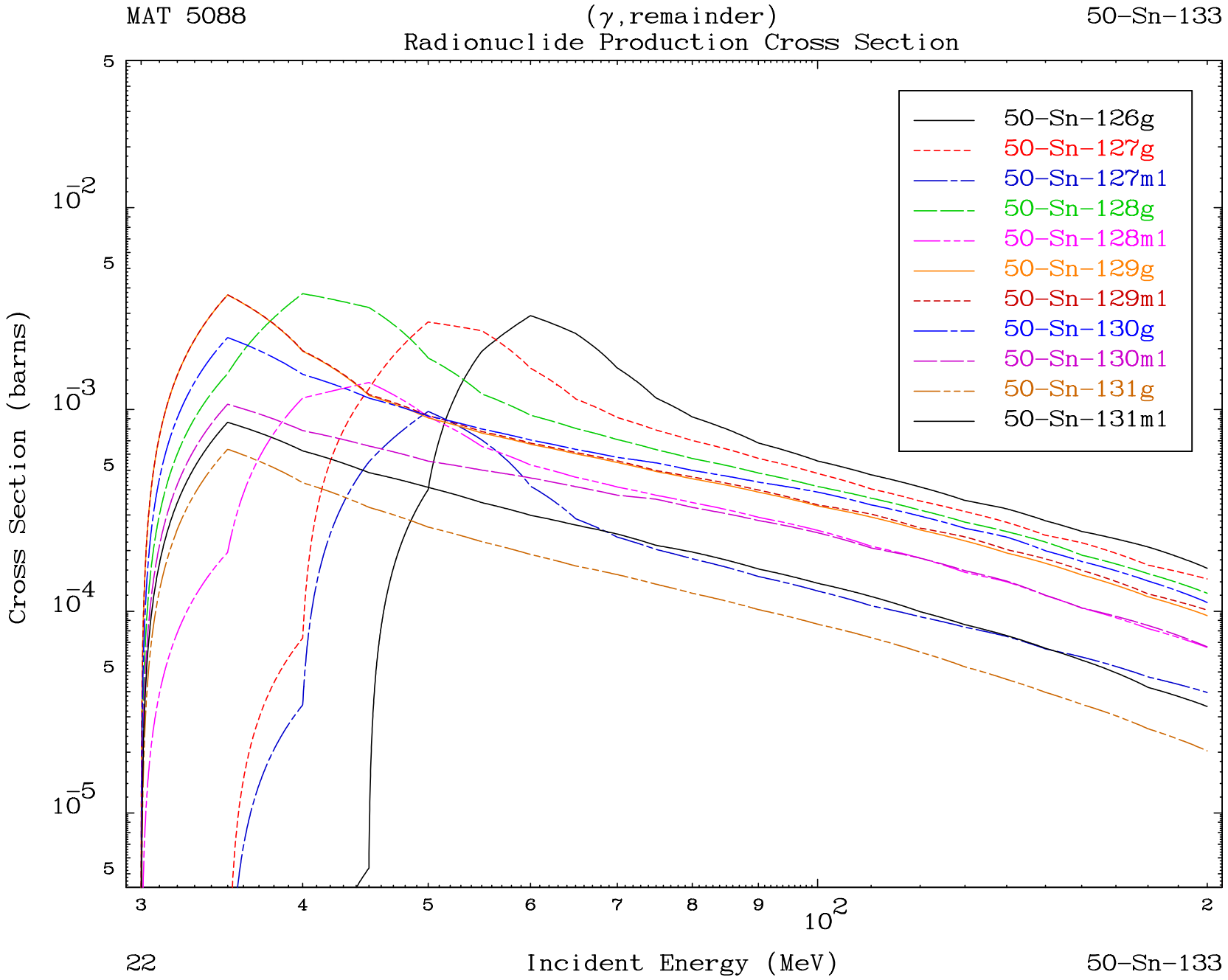
50-Sn-133

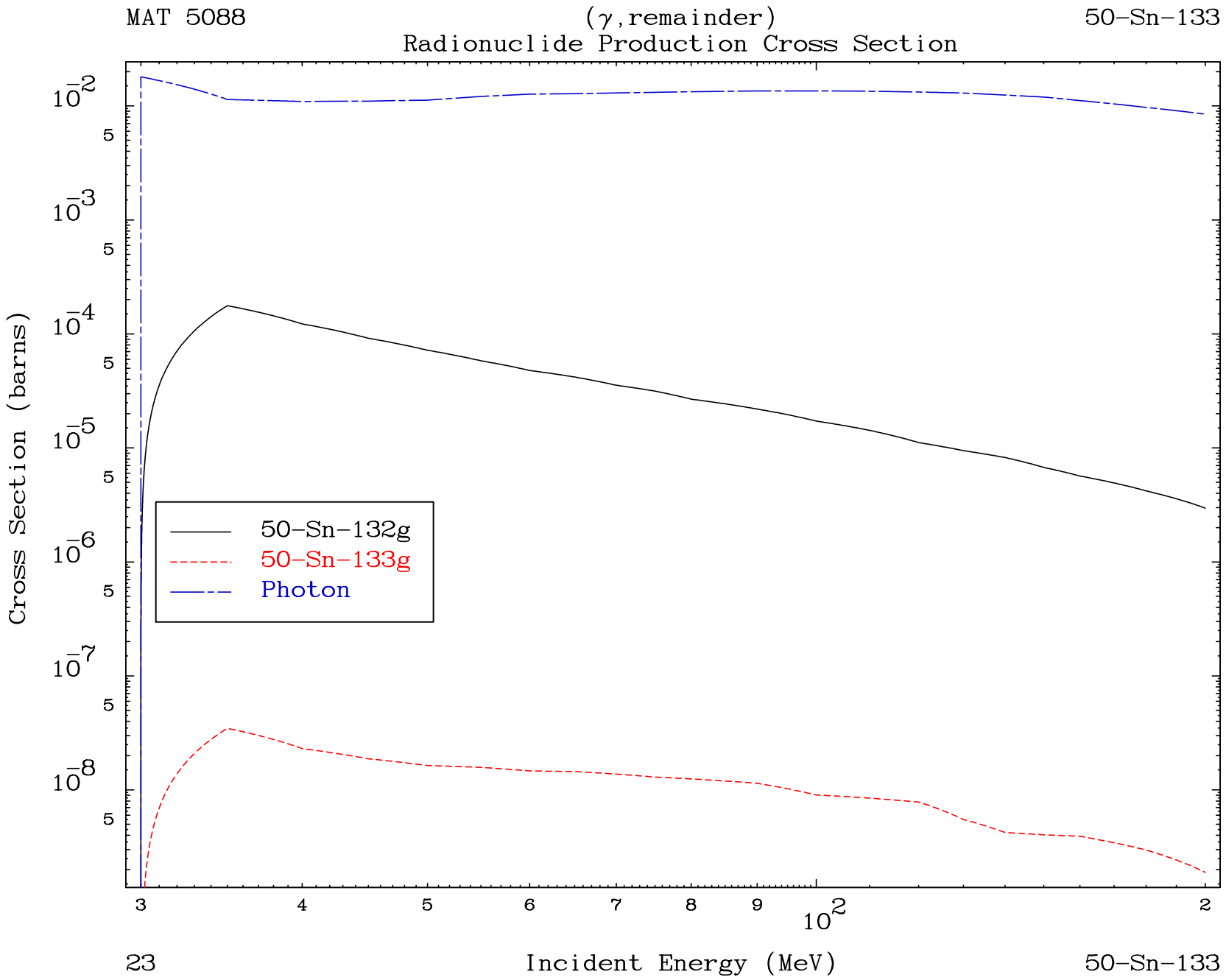

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-4
10-6
10-8
10-10
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
49-In-126m1
49-In-127g
49-In-127m1
49-In-127m2
49-In-128g
49-In-128m1
49-In-129g
49-In-129m1
49-In-130g
49-In-130m1
49-In-130m2

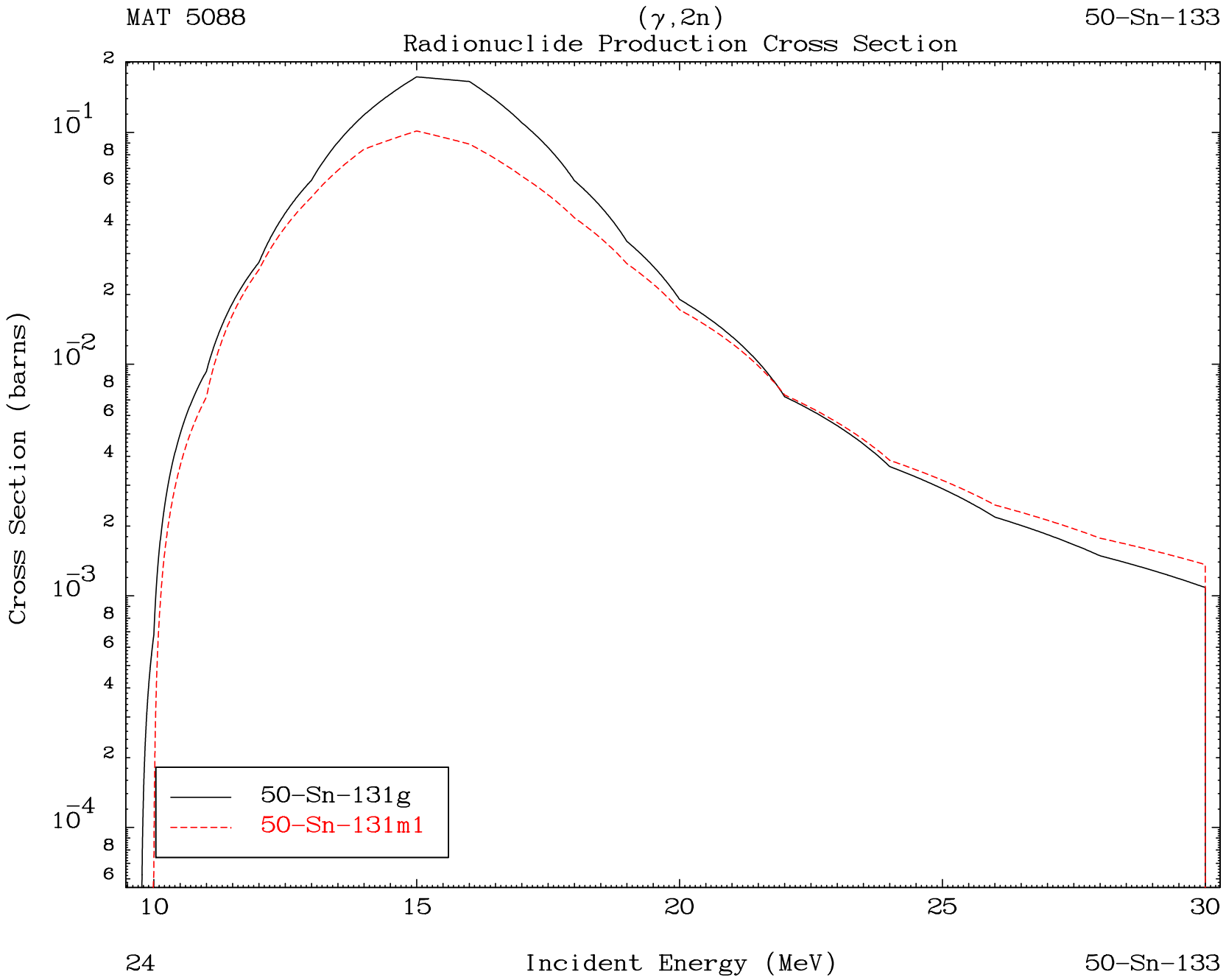
50-Sn-133

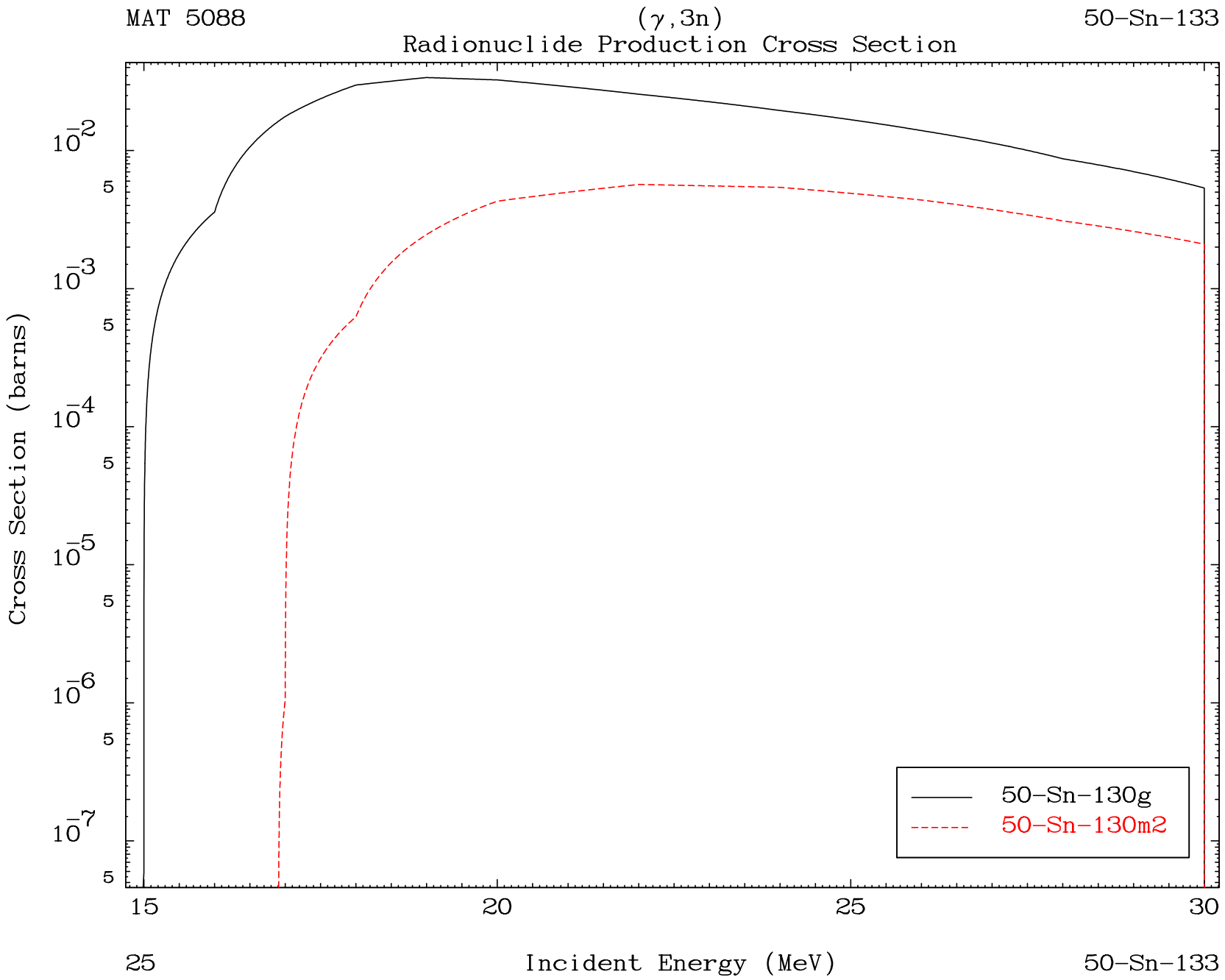

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
49-In-131g
49-In-131m1
49-In-131m2
50-Sn-113g
50-Sn-113m1
50-Sn-114g
50-Sn-115g
50-Sn-116g
50-Sn-117g
50-Sn-117m1
50-Sn-118g
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
50-Sn-133

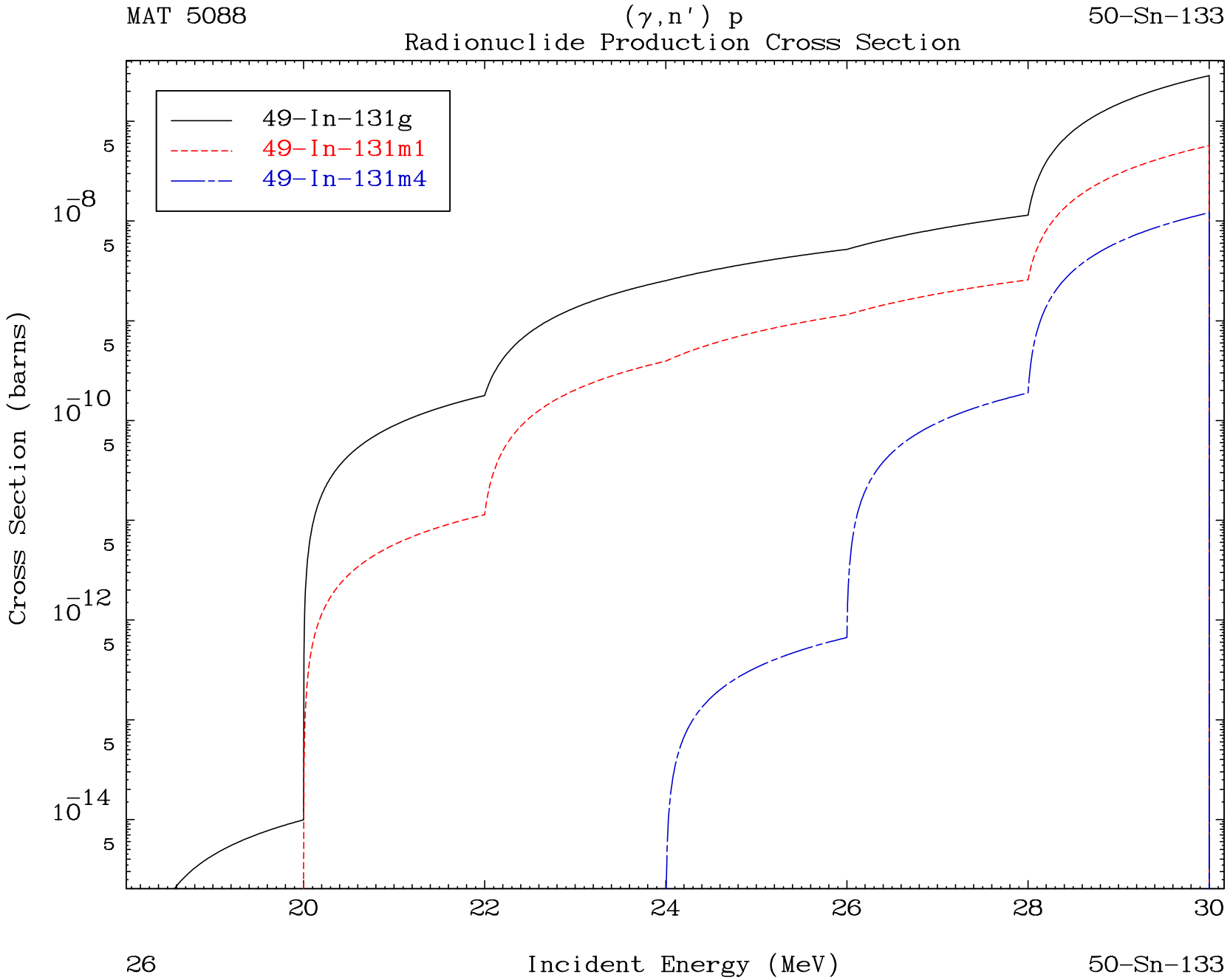

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-3
10-4
10-5
10-6
10-7
10-8
10-9
50
100
150
200
21
Incident Energy (MeV)
50-Sn-133
50-Sn-119g
50-Sn-119m1
50-Sn-120g
50-Sn-121g
50-Sn-121m1
50-Sn-122g
50-Sn-123g
50-Sn-123m1
50-Sn-124g
50-Sn-125g
50-Sn-125m1

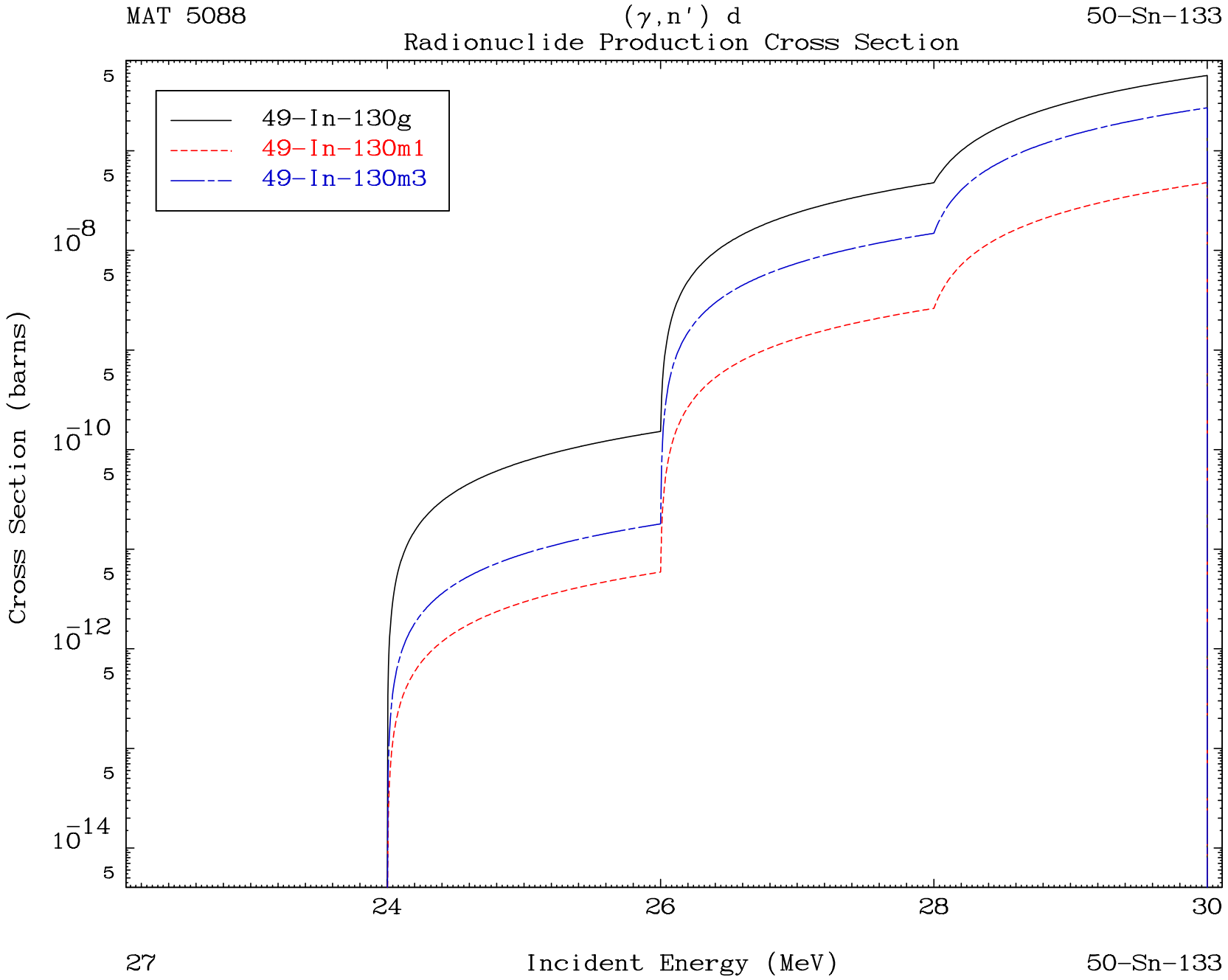

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
50-Sn-126g
50-Sn-127g
50-Sn-127m1
50-Sn-128g
50-Sn-128m1
50-Sn-129g
50-Sn-129m1
50-Sn-130g
50-Sn-130m1
50-Sn-131g
50-Sn-131m1
Cross Section (barns)
Incident Energy (MeV)
22
50-Sn-133

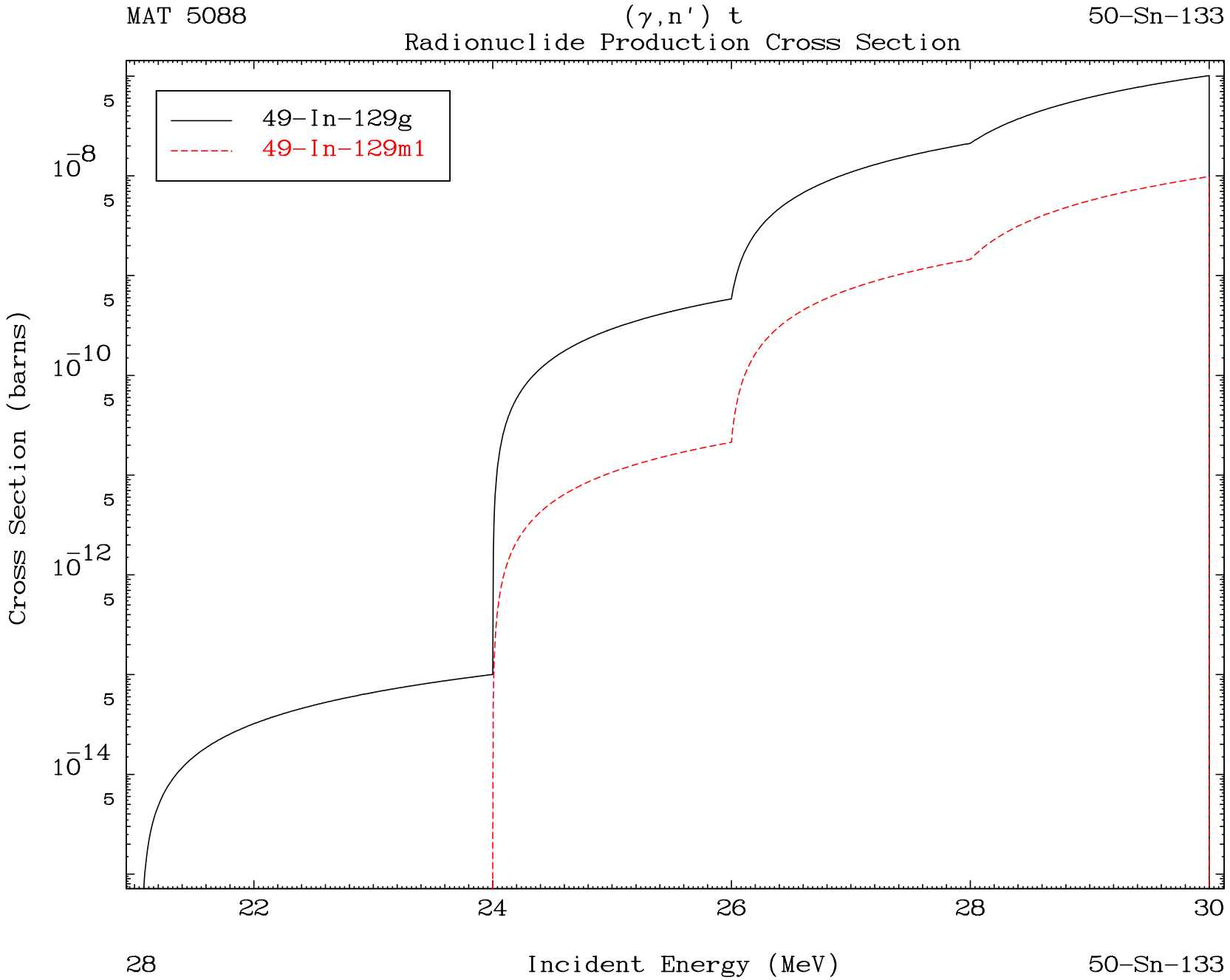

MAT 5088
(γ,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-3
10-4
10-5
10-6
10-7
10-8
50-Sn-132g
50-Sn-133g
Photon
3
4
5
6
7
8
9
10 2
2
23
Incident Energy (MeV)
50-Sn-133

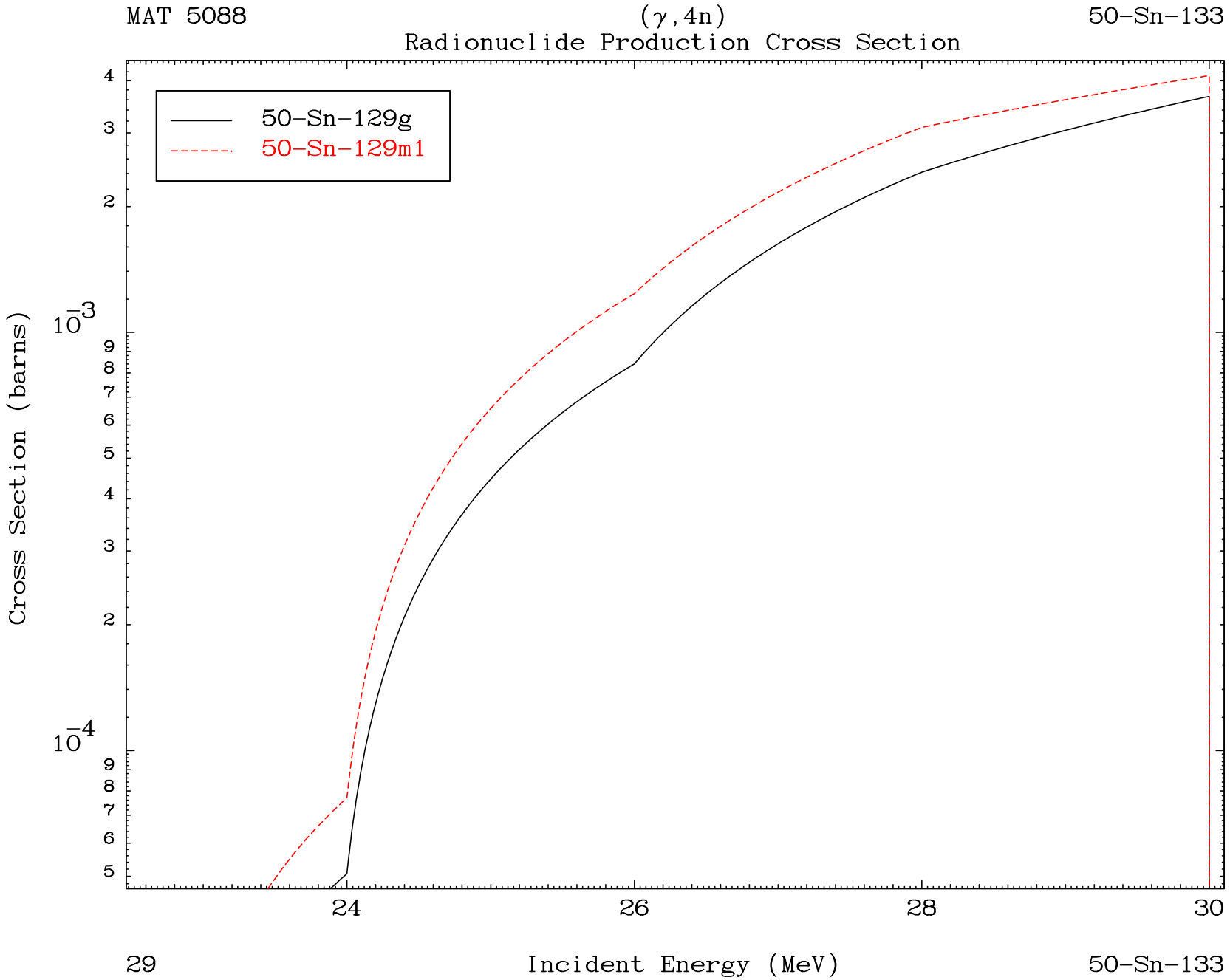

MAT 5088
(γ,2n)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10^-1
10^-2
10^-3
10^-4
2
8
6
4
10
15
20
25
30
50-Sn-131g
50-Sn-131m1
24
Incident Energy (MeV)
50-Sn-133

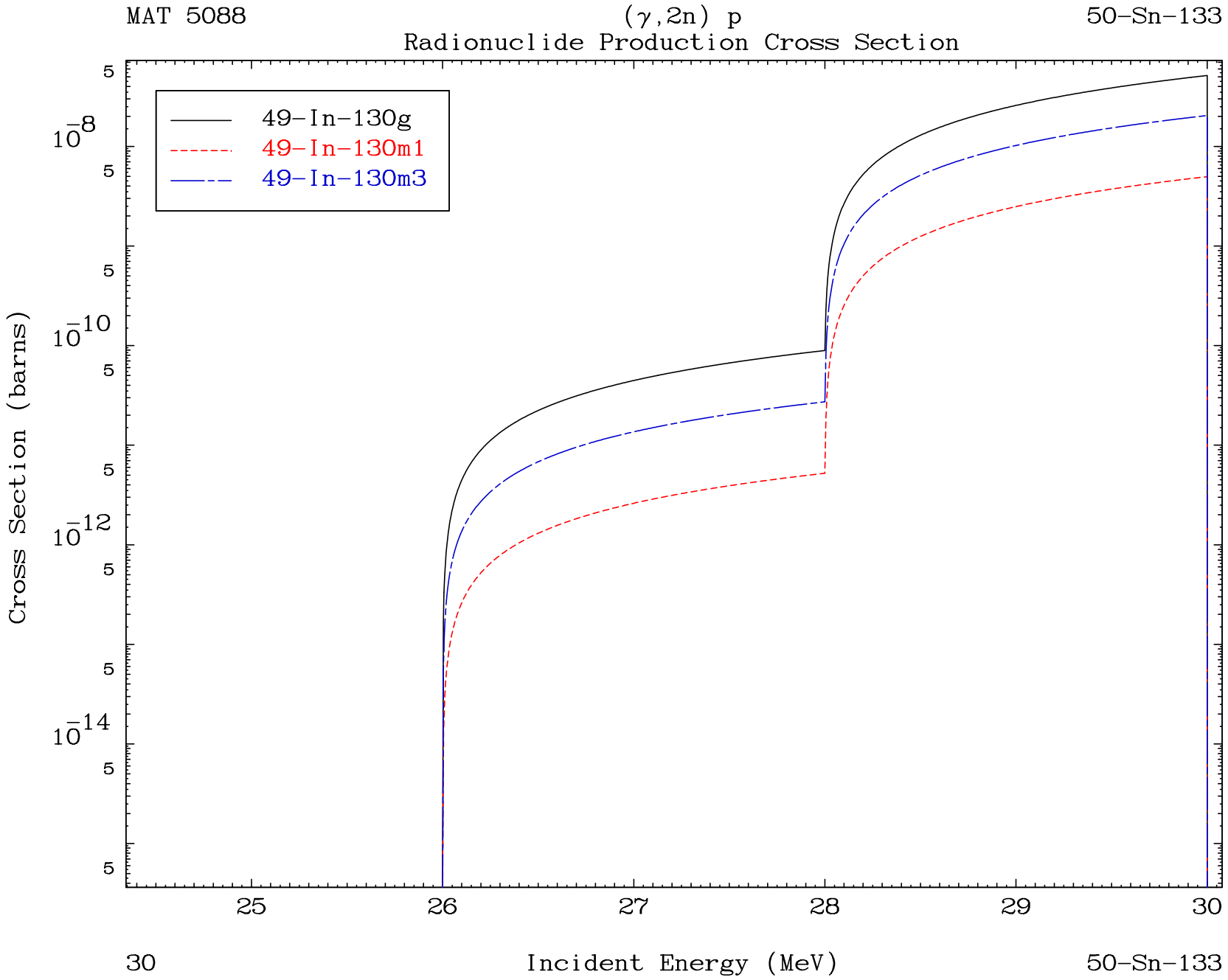

MAT 5088
(γ,3n)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-2
5
10-3
5
10-4
5
10-5
5
10-6
5
10-7
5
15
20
25
30
50-Sn-130g
50-Sn-130m2
25
Incident Energy (MeV)
50-Sn-133

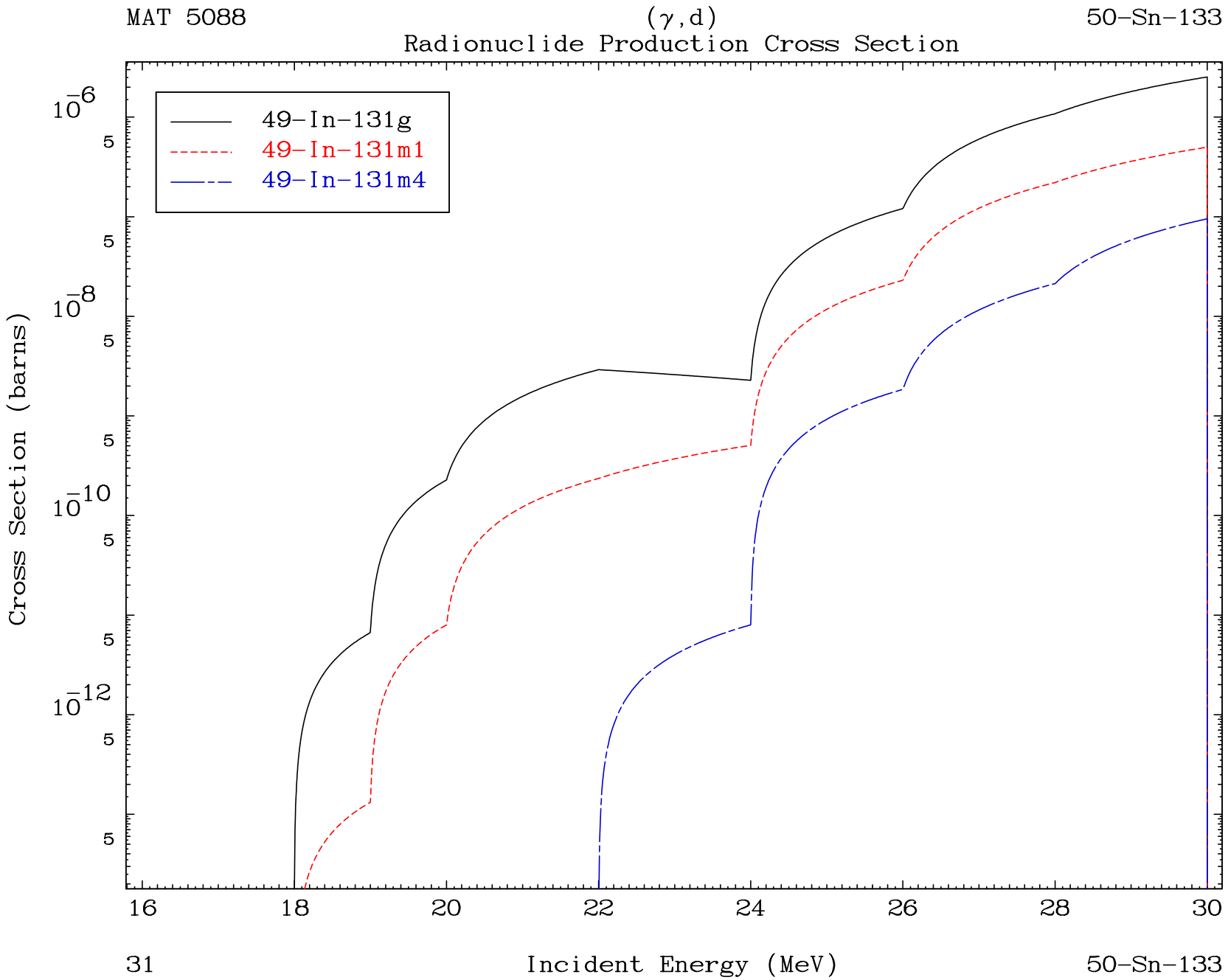

MAT 5088
(γ,n') p
50-Sn-133
Radionuclide Production Cross Section
49-In-131g
49-In-131m1
49-In-131m4
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
20
22
24
26
28
30
26
Incident Energy (MeV)
50-Sn-133

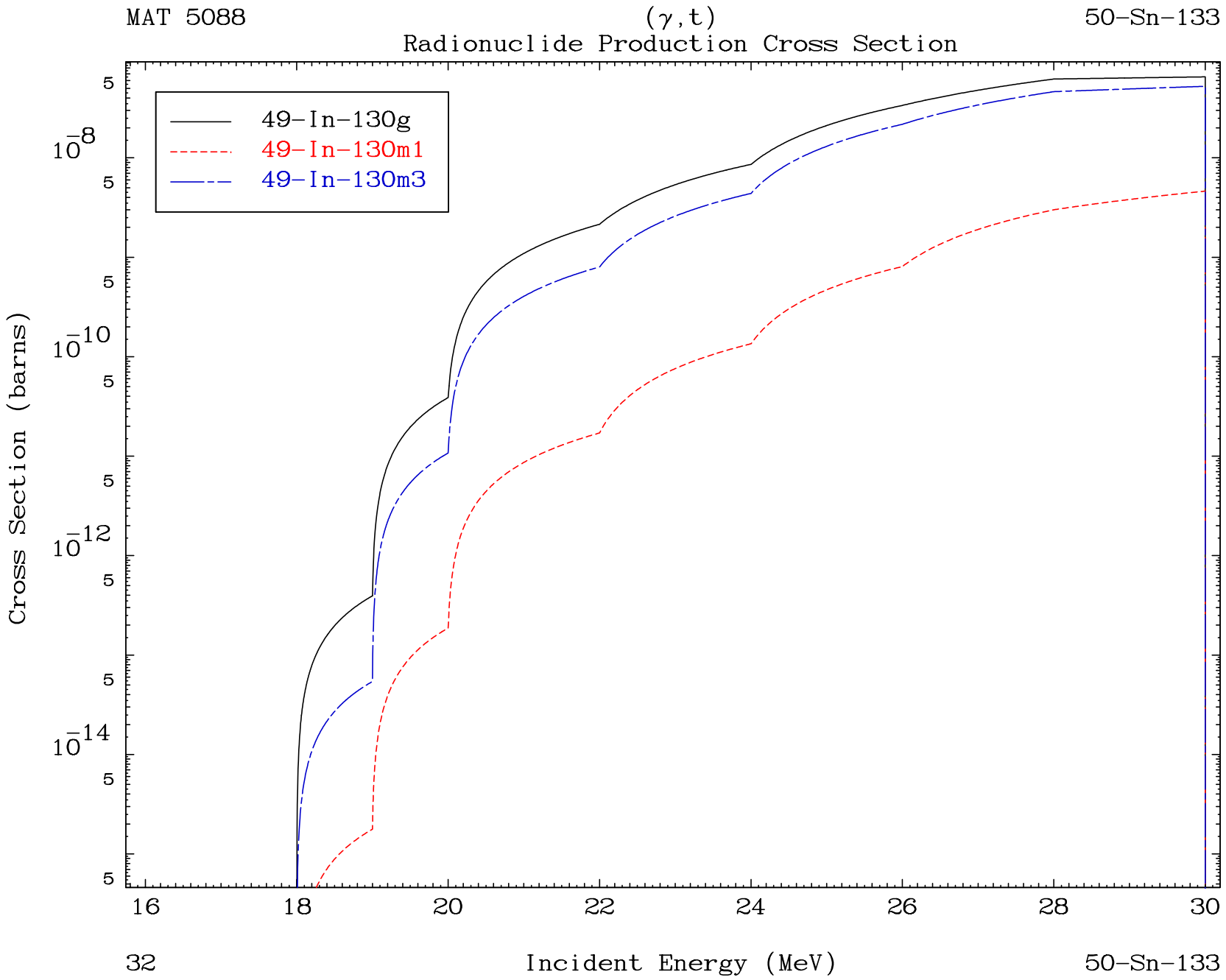

MAT 5088
(γ,n') d
50-Sn-133
Radionuclide Production Cross Section
49-In-130g
49-In-130m1
49-In-130m3
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
24
26
28
30
27
Incident Energy (MeV)
50-Sn-133


MAT 5088
(γ,n') t
50-Sn-133
Radionuclide Production Cross Section
49-In-129g
49-In-129m1
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
22
24
26
28
30
28
Incident Energy (MeV)
50-Sn-133


MAT 5088
(γ,4n)
50-Sn-133
Radionuclide Production Cross Section
50-Sn-129g
50-Sn-129m1
Cross Section (barns)
10-3
10-4
24
26
28
30
29
Incident Energy (MeV)
50-Sn-133


MAT 5088
(γ,2n) p
50-Sn-133
Radionuclide Production Cross Section
49-In-130g
49-In-130m1
49-In-130m3
Cross Section (barns)
10-8
10-10
10-12
10-14
5
25
26
27
28
29
30
Incident Energy (MeV)
30
50-Sn-133


MAT 5088
(γ,d)
50-Sn-133
Radionuclide Production Cross Section
49-In-131g
49-In-131m1
49-In-131m4
Cross Section (barns)
10-6
10-8
10-10
10-12
5
16
18
20
22
24
26
28
30
31
Incident Energy (MeV)
50-Sn-133


MAT 5088
(γ,t)
50-Sn-133
Radionuclide Production Cross Section
49-In-130g
49-In-130m1
49-In-130m3
Cross Section (barns)
10-8
10-10
10-12
10-14
5
16
18
20
22
24
26
28
30
32
Incident Energy (MeV)
50-Sn-133