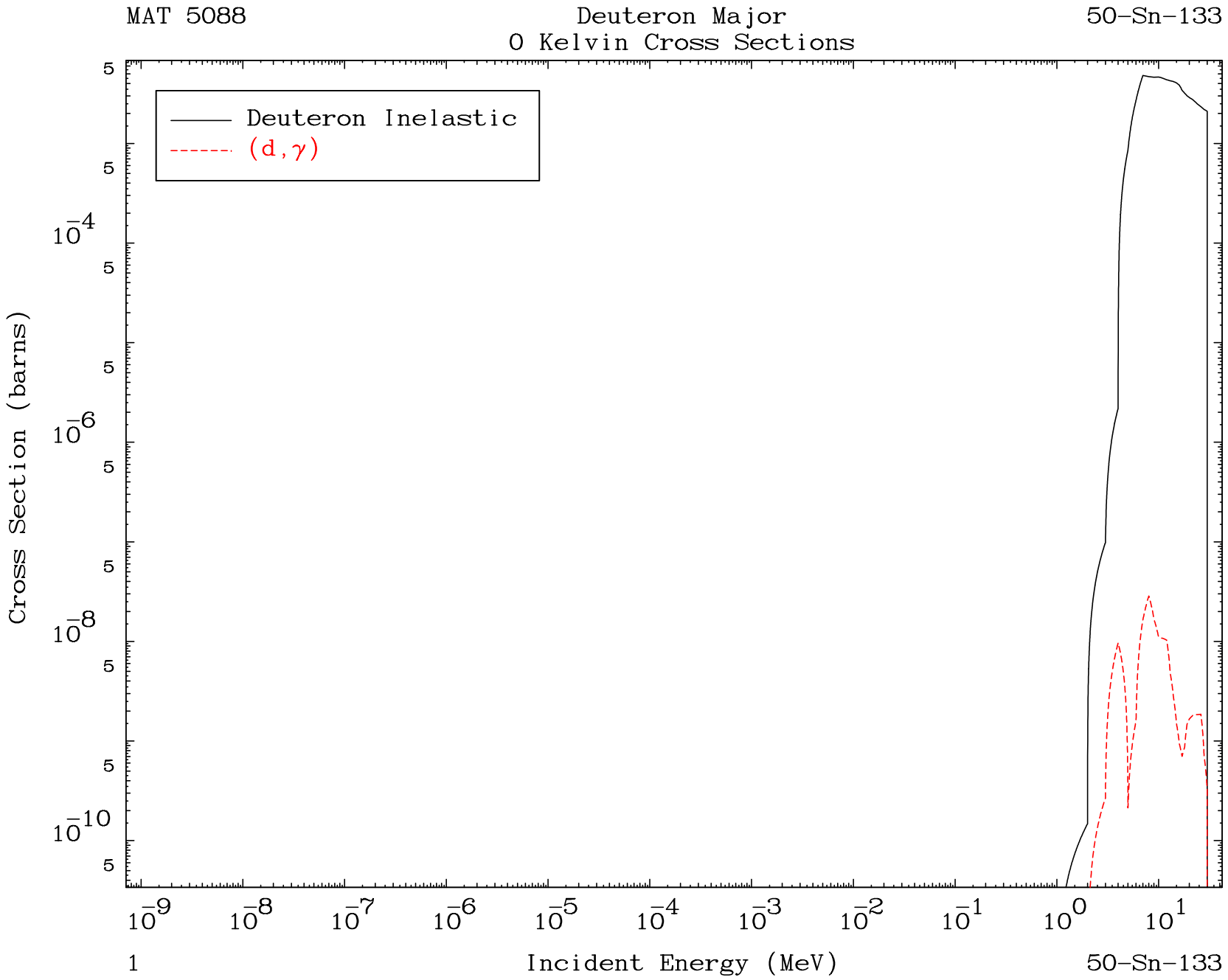
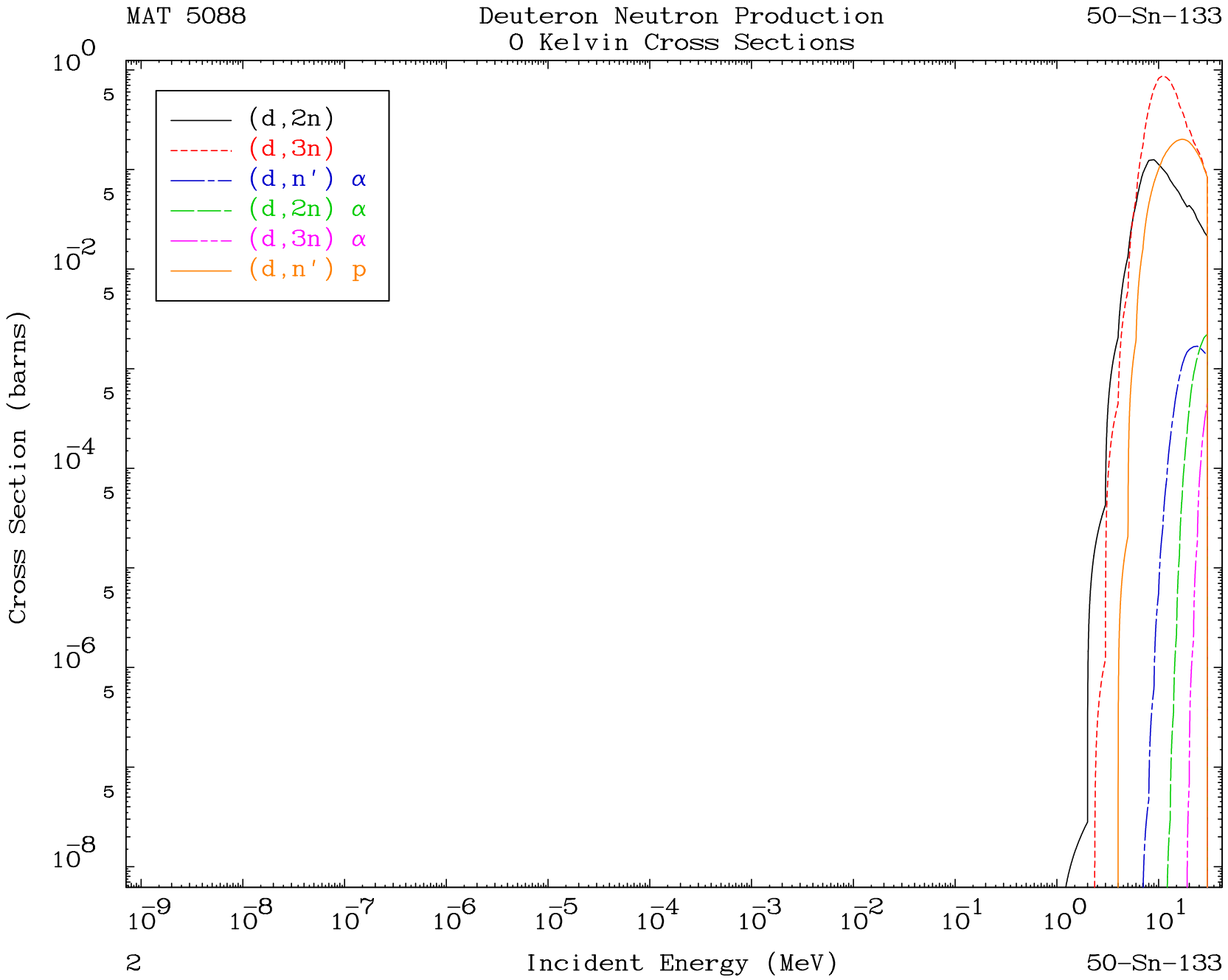
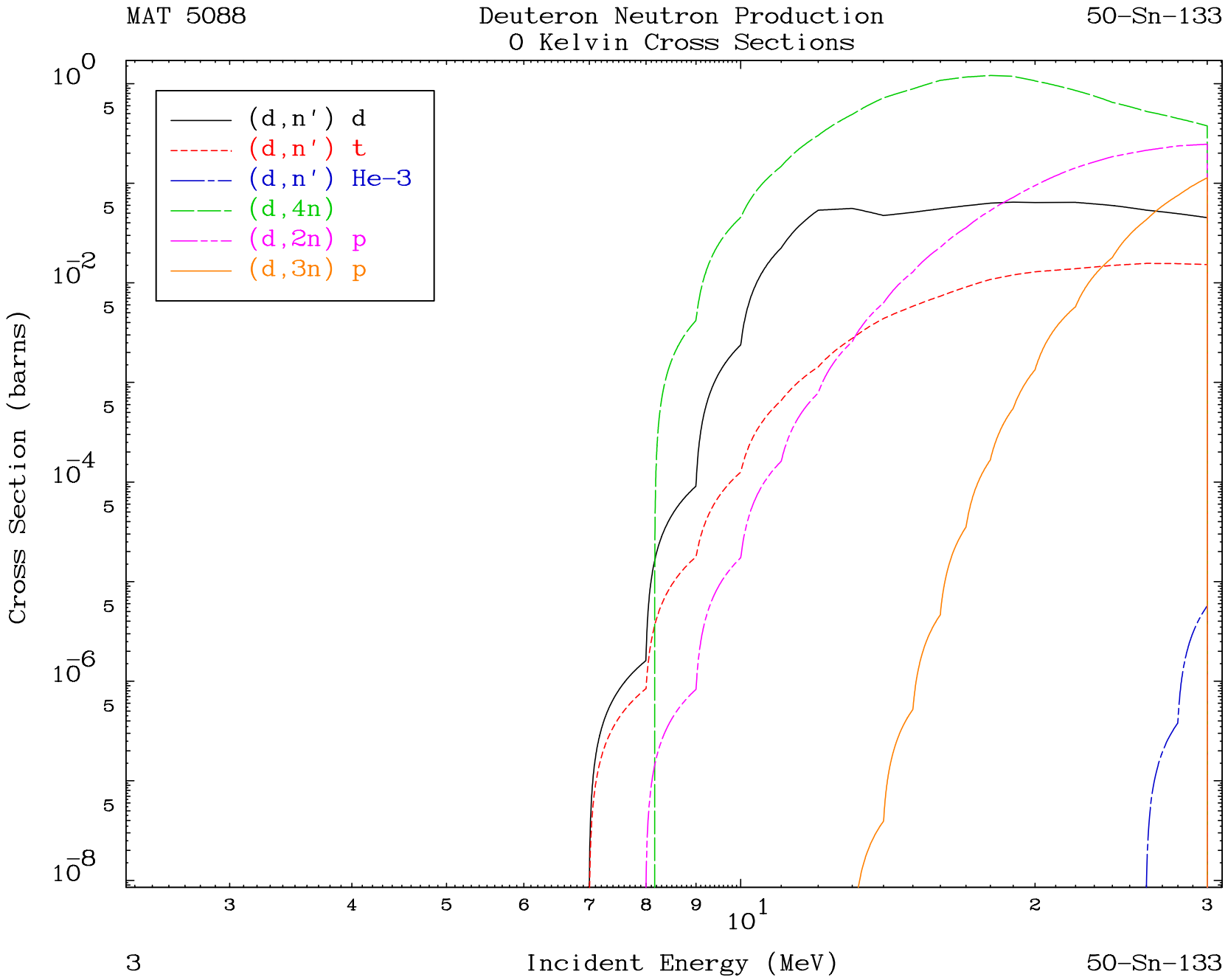
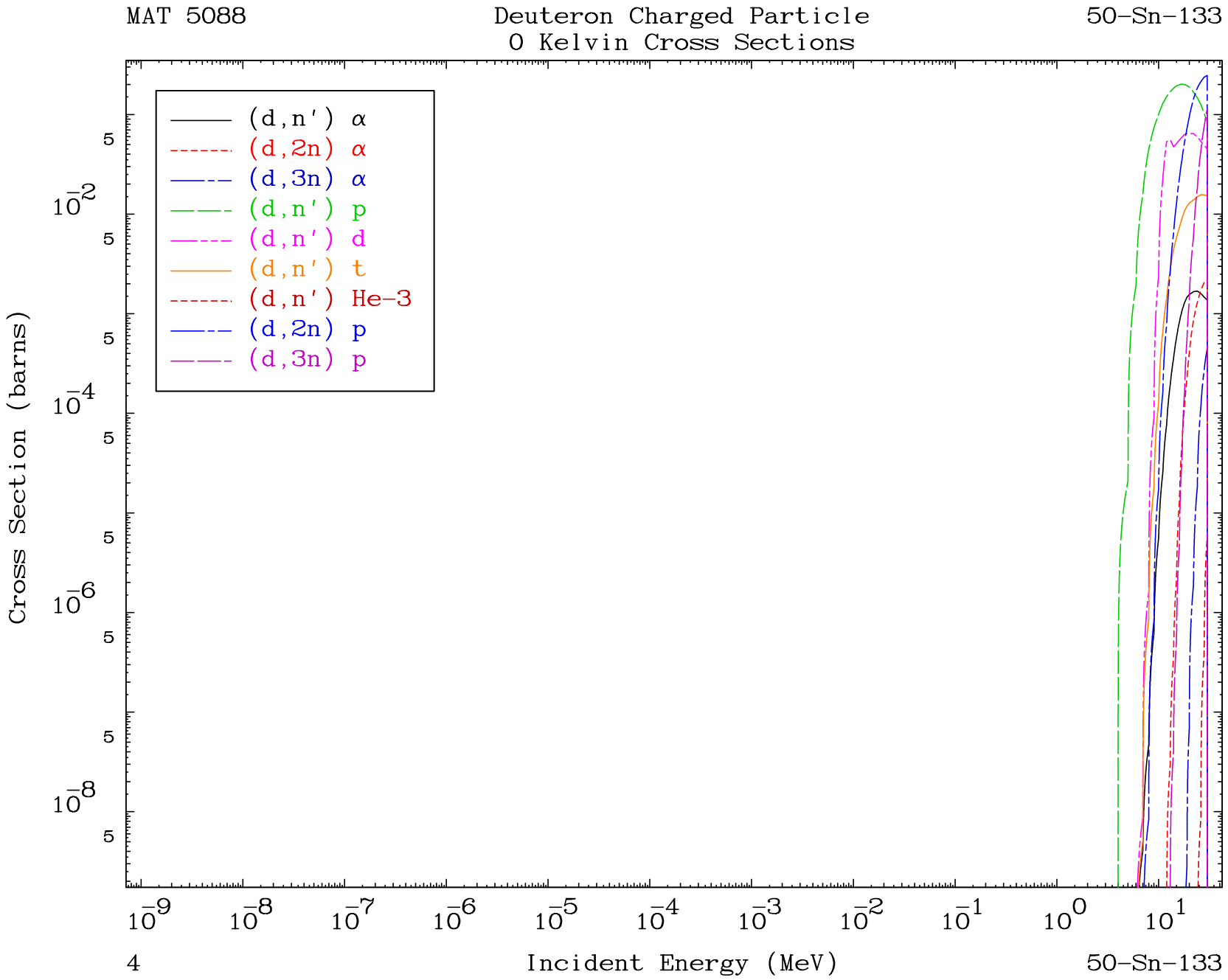
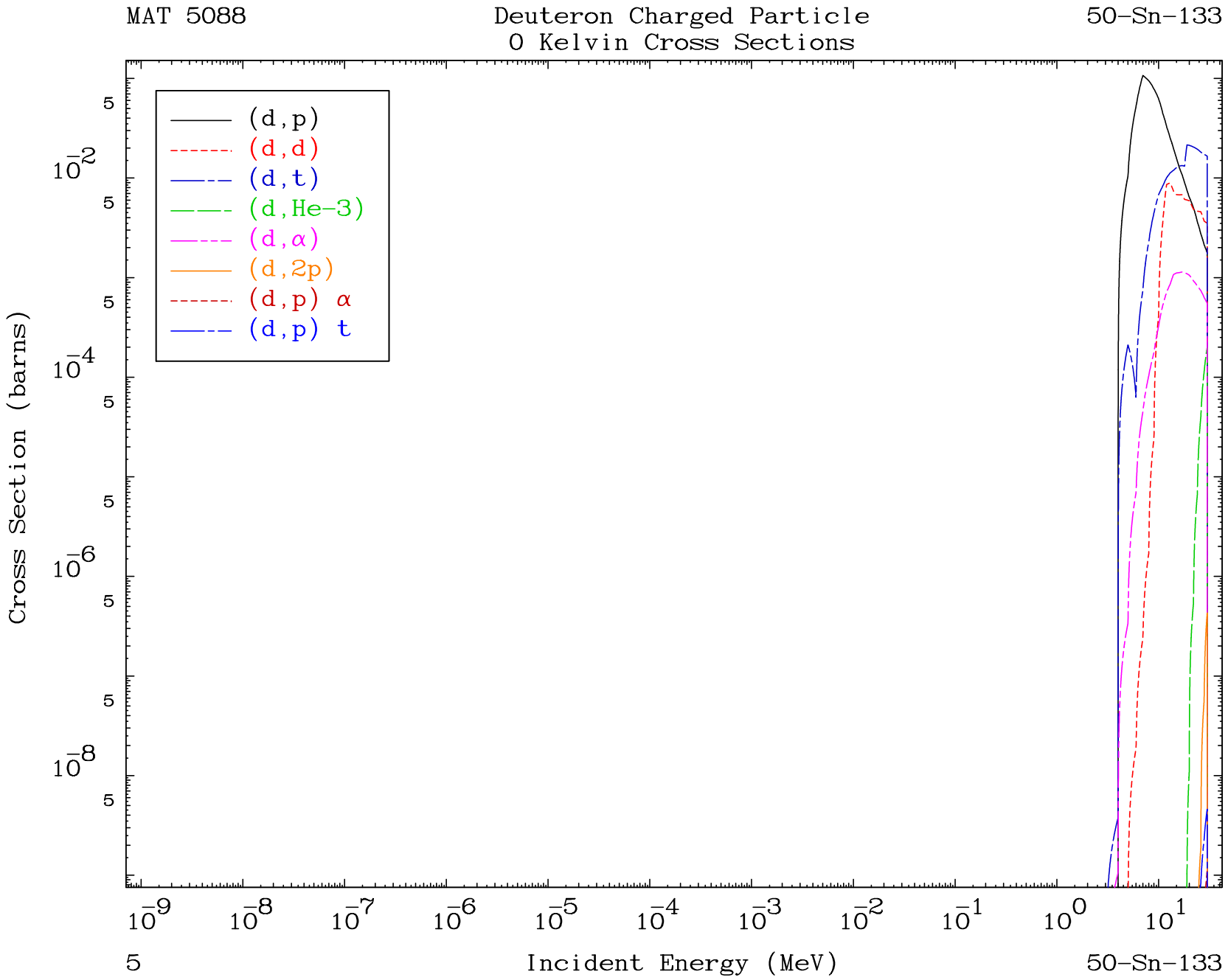
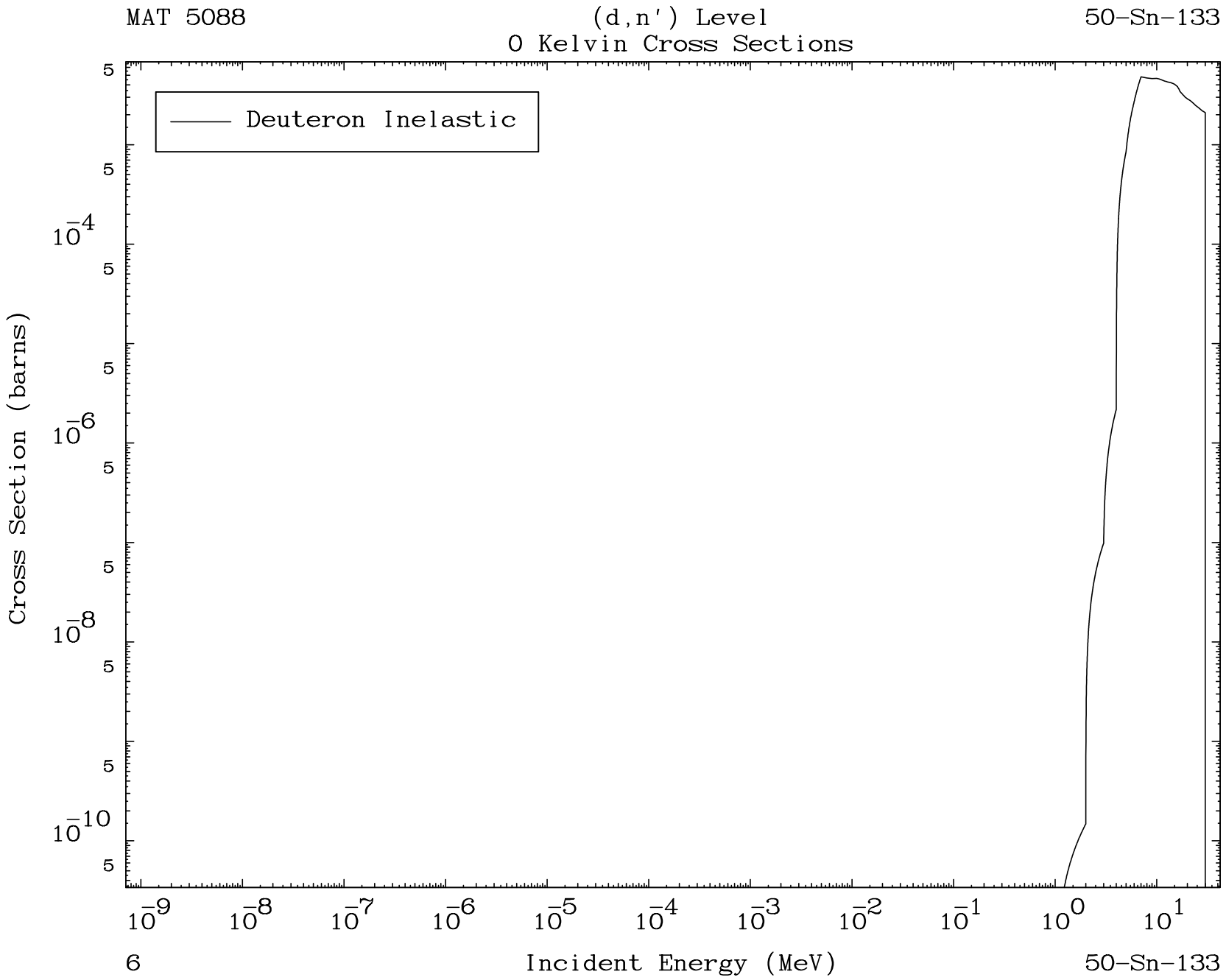

MAT 5088
Deuteron Major
0 Kelvin Cross Sections
50-Sn-133
Deuteron Inelastic
(d,γ)
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133

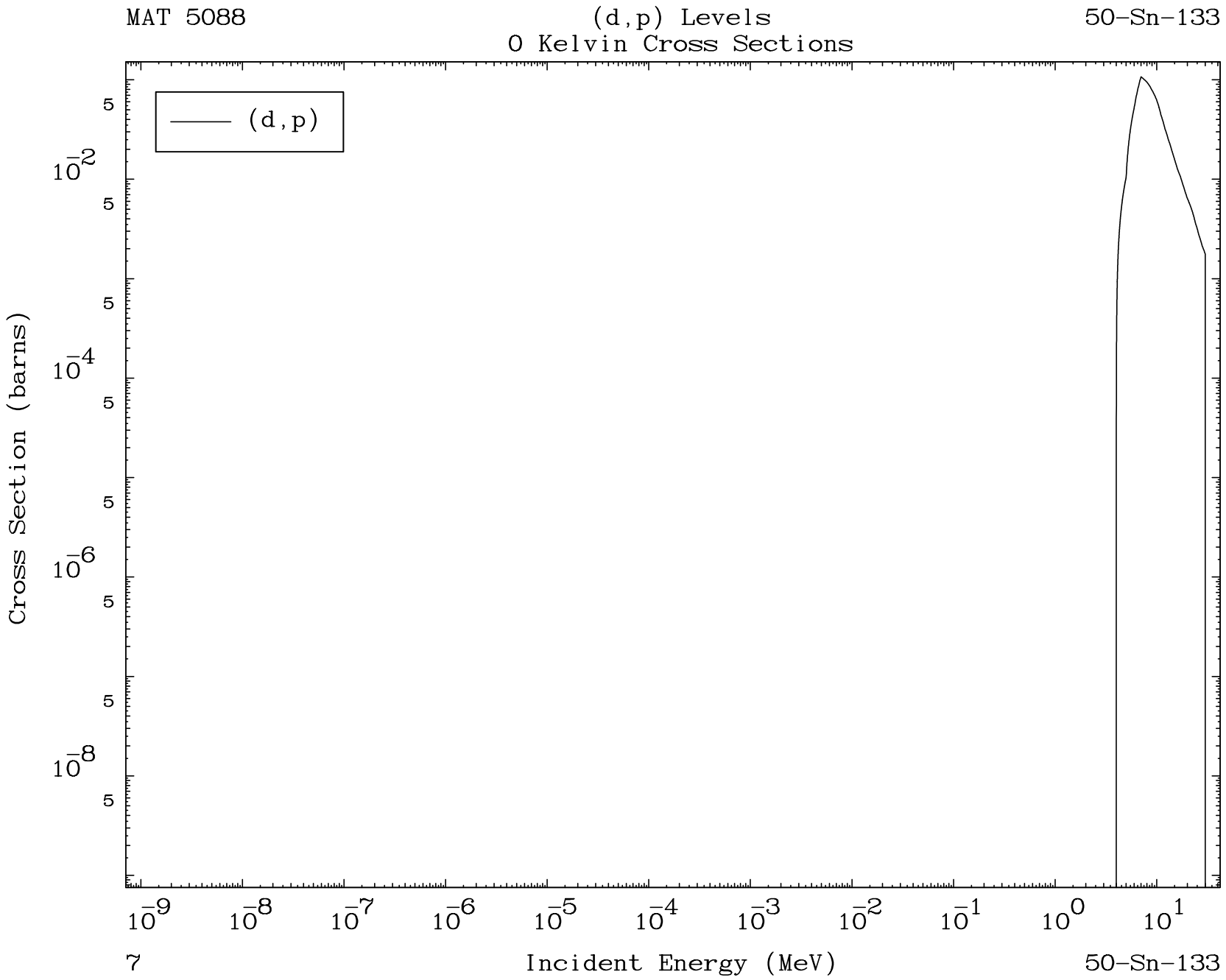

MAT 5088
Deuteron Neutron Production
0 Kelvin Cross Sections
50-Sn-133
(d,2n)
(d,3n)
(d,n') α
(d,2n) α
(d,3n) α
(d,n') p
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133
2

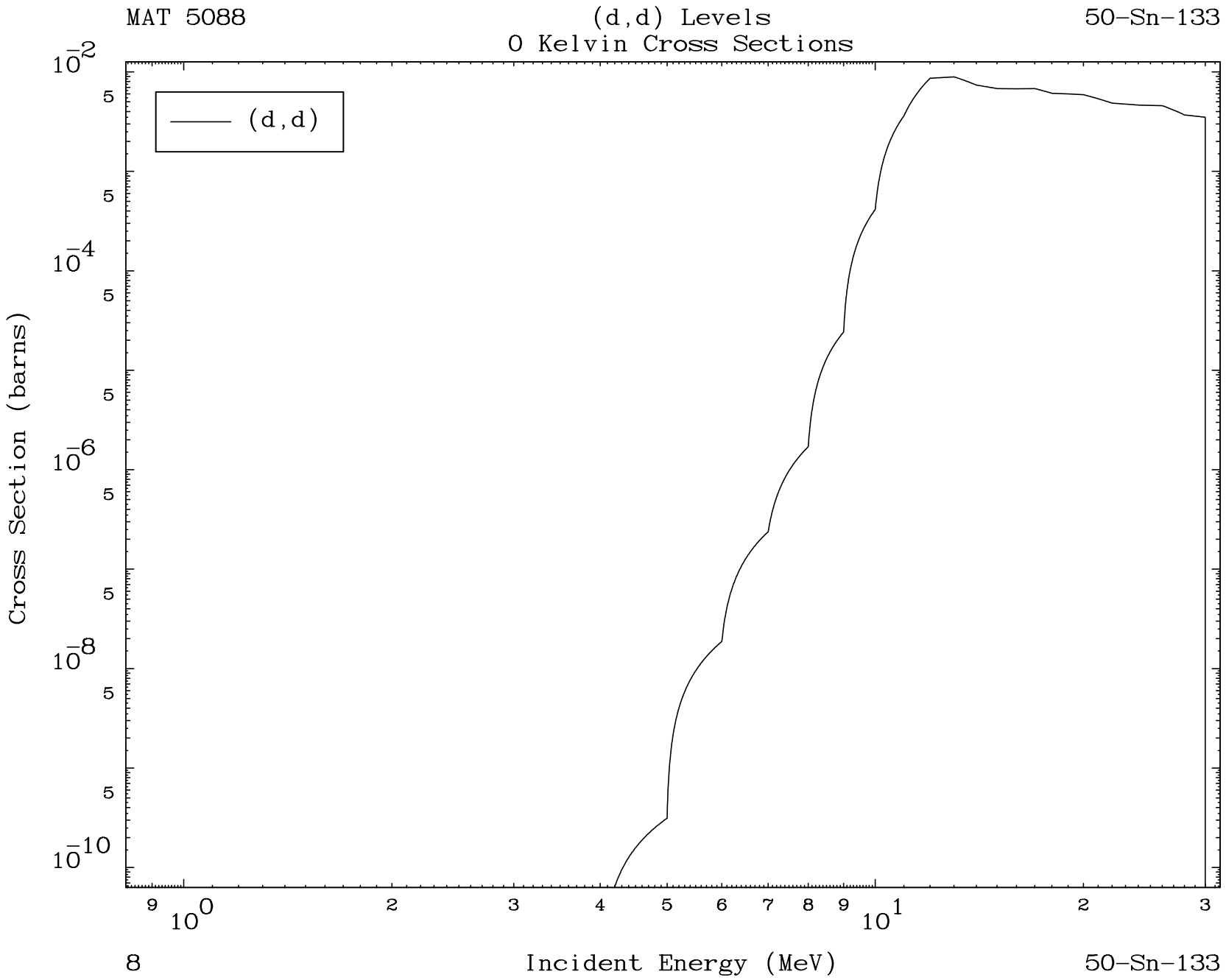

MAT 5088
Deuteron Neutron Production
0 Kelvin Cross Sections
50-Sn-133
(d,n') d
(d,n') t
(d,n') He-3
(d,4n)
(d,2n) p
(d,3n) p
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133
3

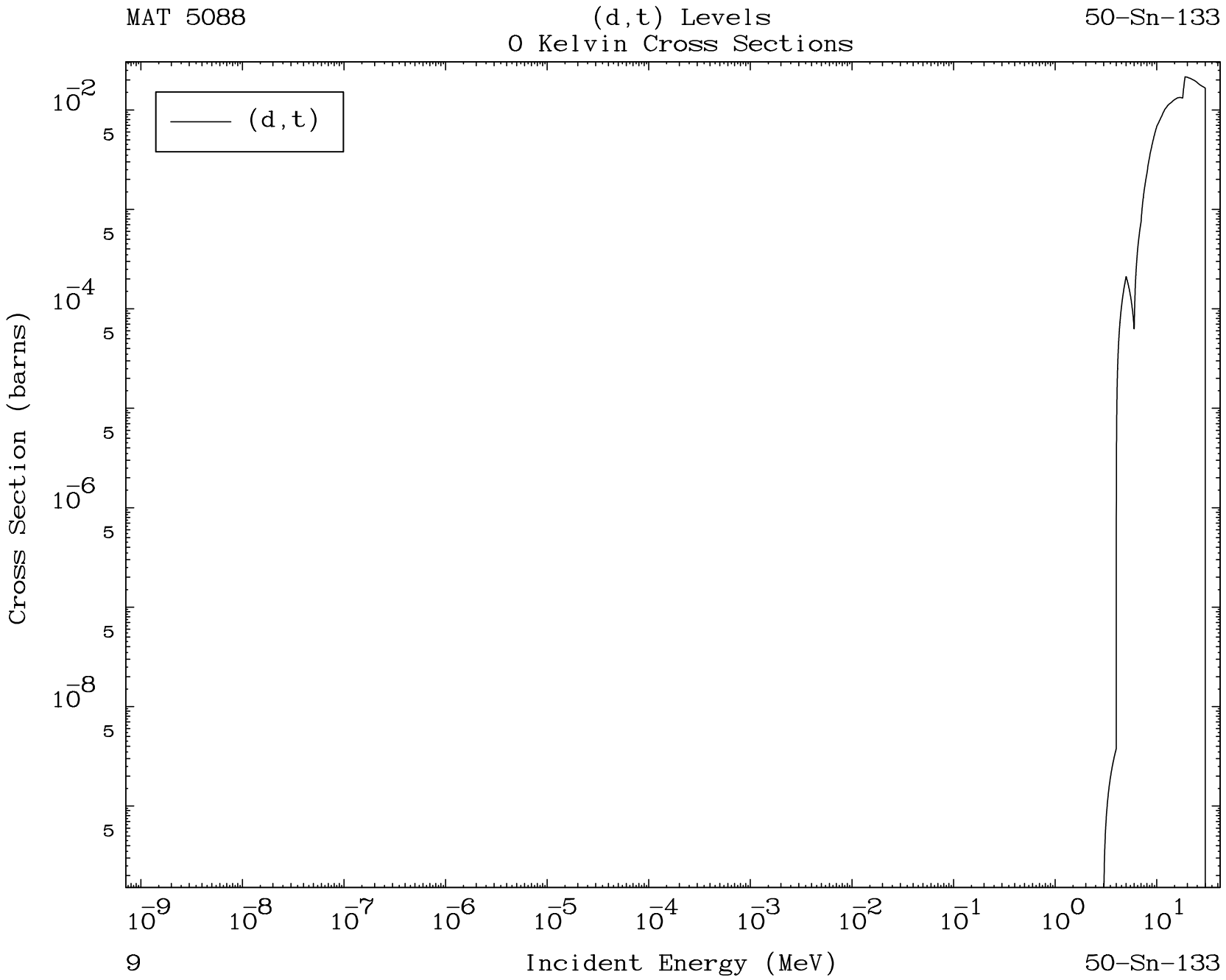

MAT 5088
Deuteron Charged Particle
0 Kelvin Cross Sections
50-Sn-133
(d,n') α
(d,2n) α
(d,3n) α
(d,n') p
(d,n') d
(d,n') t
(d,n') He-3
(d,2n) p
(d,3n) p
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133
4

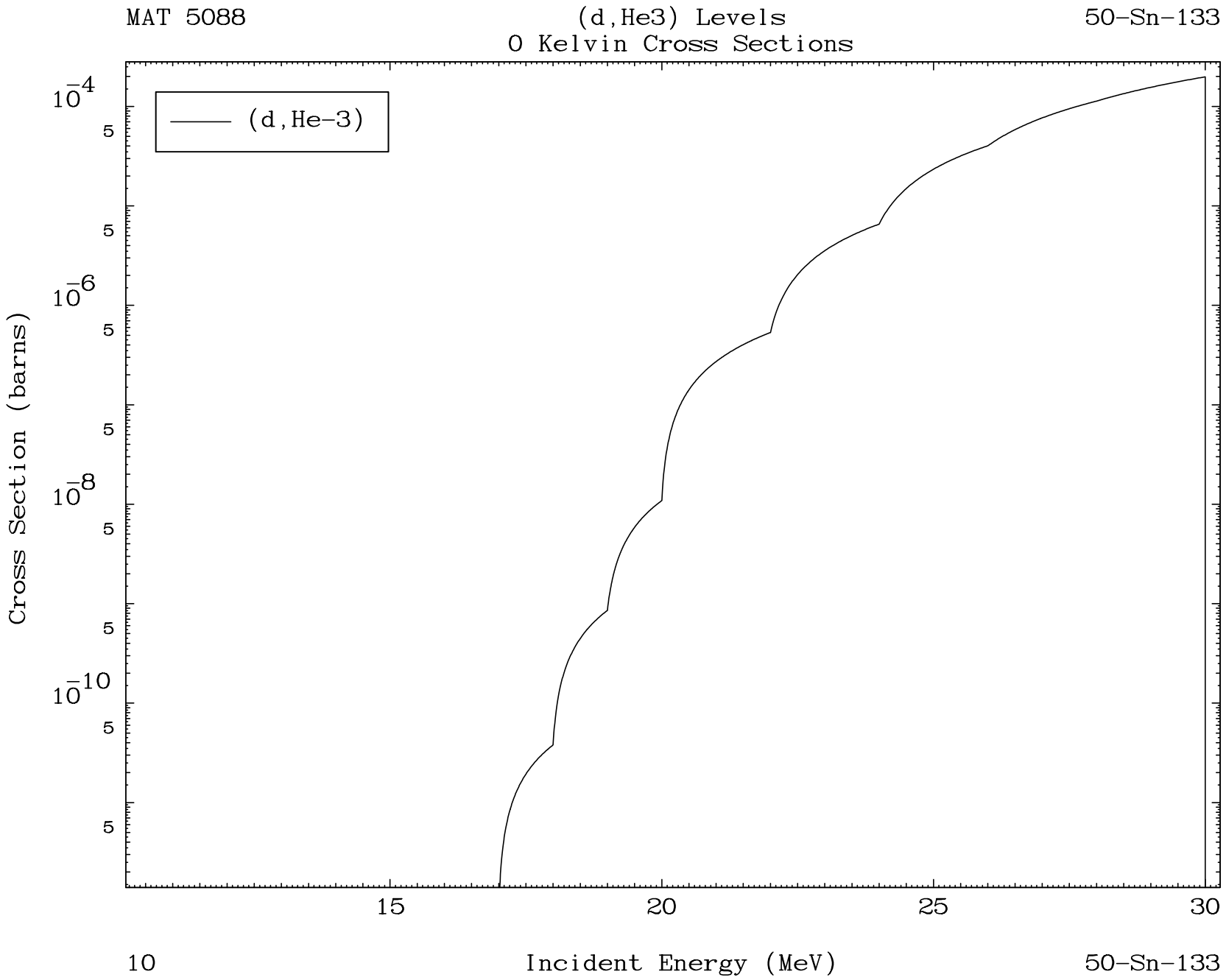

MAT 5088
Deuteron Charged Particle
0 Kelvin Cross Sections
50-Sn-133
(d,p)
(d,d)
(d,t)
(d,He-3)
(d,α)
(d,2p)
(d,p) α
(d,p) t
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133

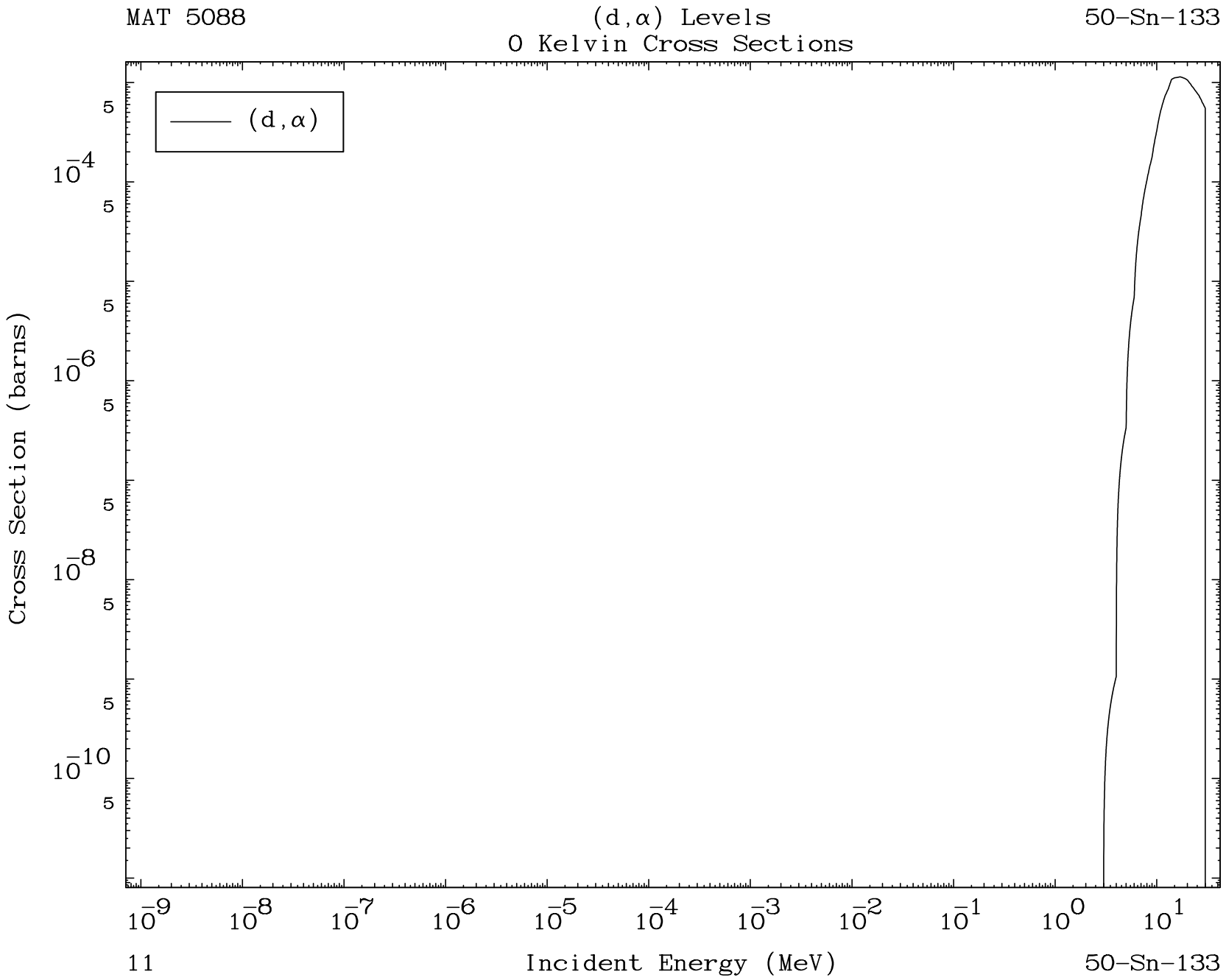

MAT 5088
(d,n') Level
50-Sn-133
0 Kelvin Cross Sections
Deuteron Inelastic
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133
6

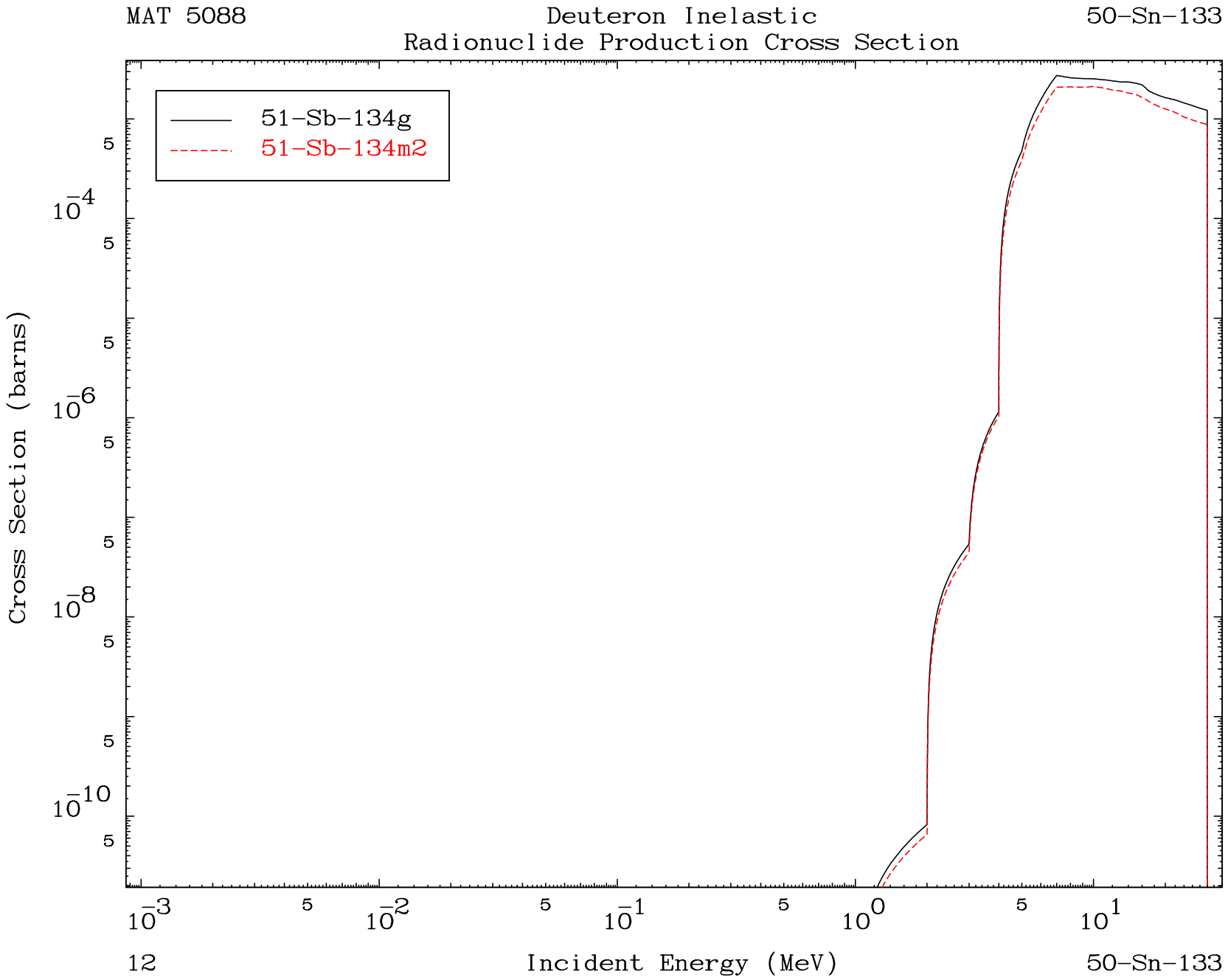

MAT 5088
(d,p) Levels
50-Sn-133
0 Kelvin Cross Sections
(d,p)
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133
7

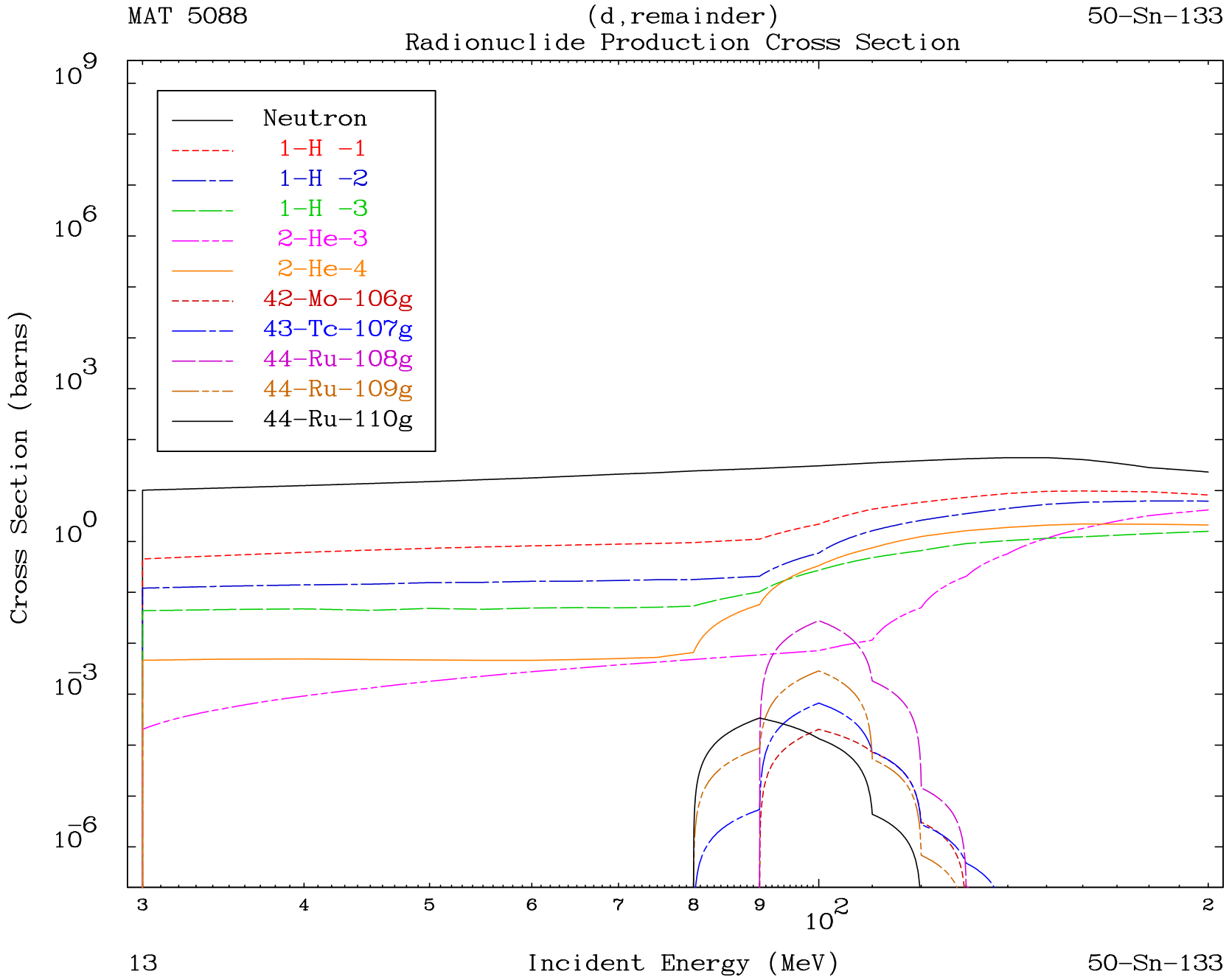

MAT 5088
(d,d) Levels
50-Sn-133
0 Kelvin Cross Sections
(d,d)
Cross Section (barns)
Incident Energy (MeV)
50-Sn-133

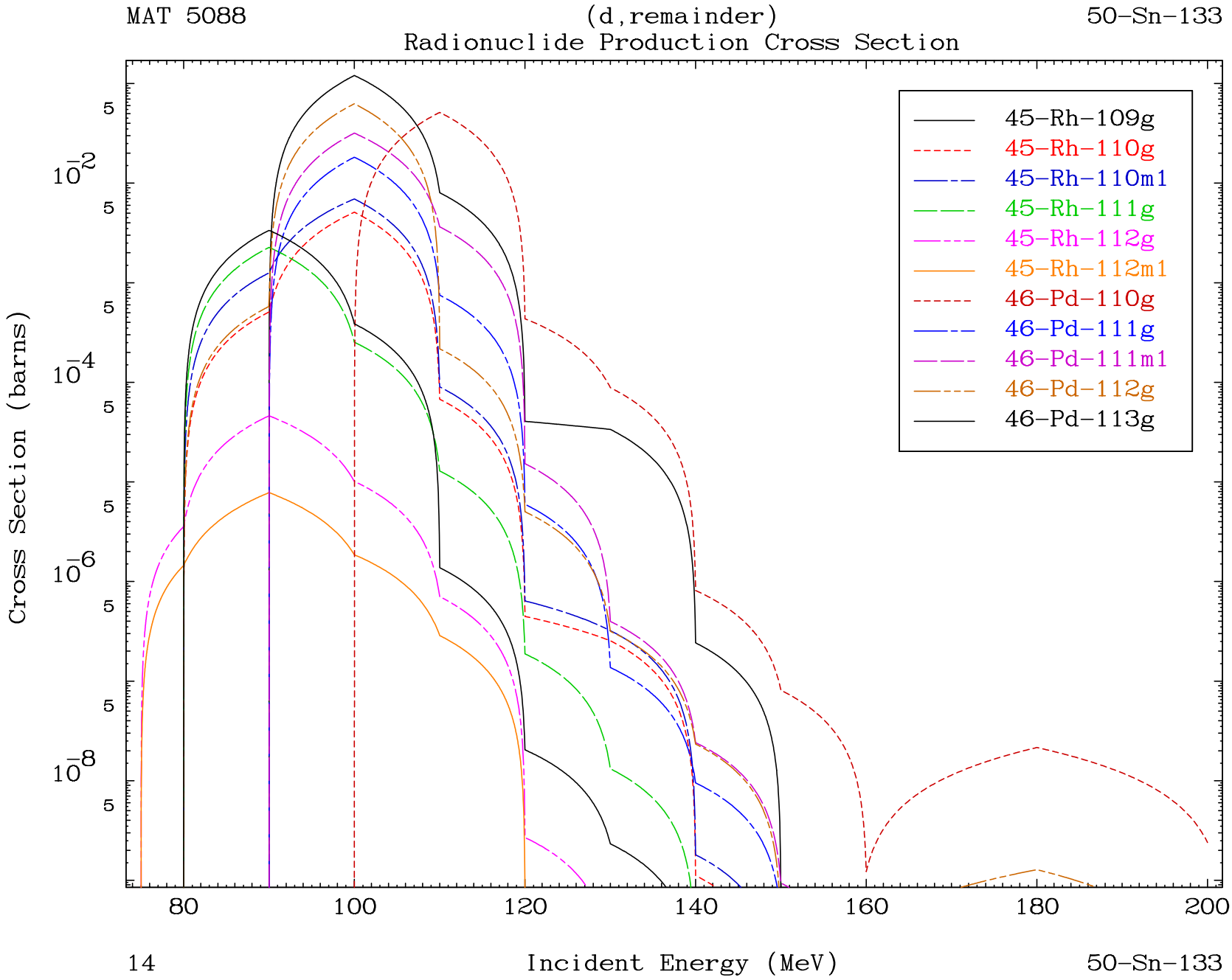

MAT 5088
(d,t) Levels
50-Sn-133
0 Kelvin Cross Sections
(d,t)
Cross Section (barns)
Incident Energy (MeV)
9
50-Sn-133

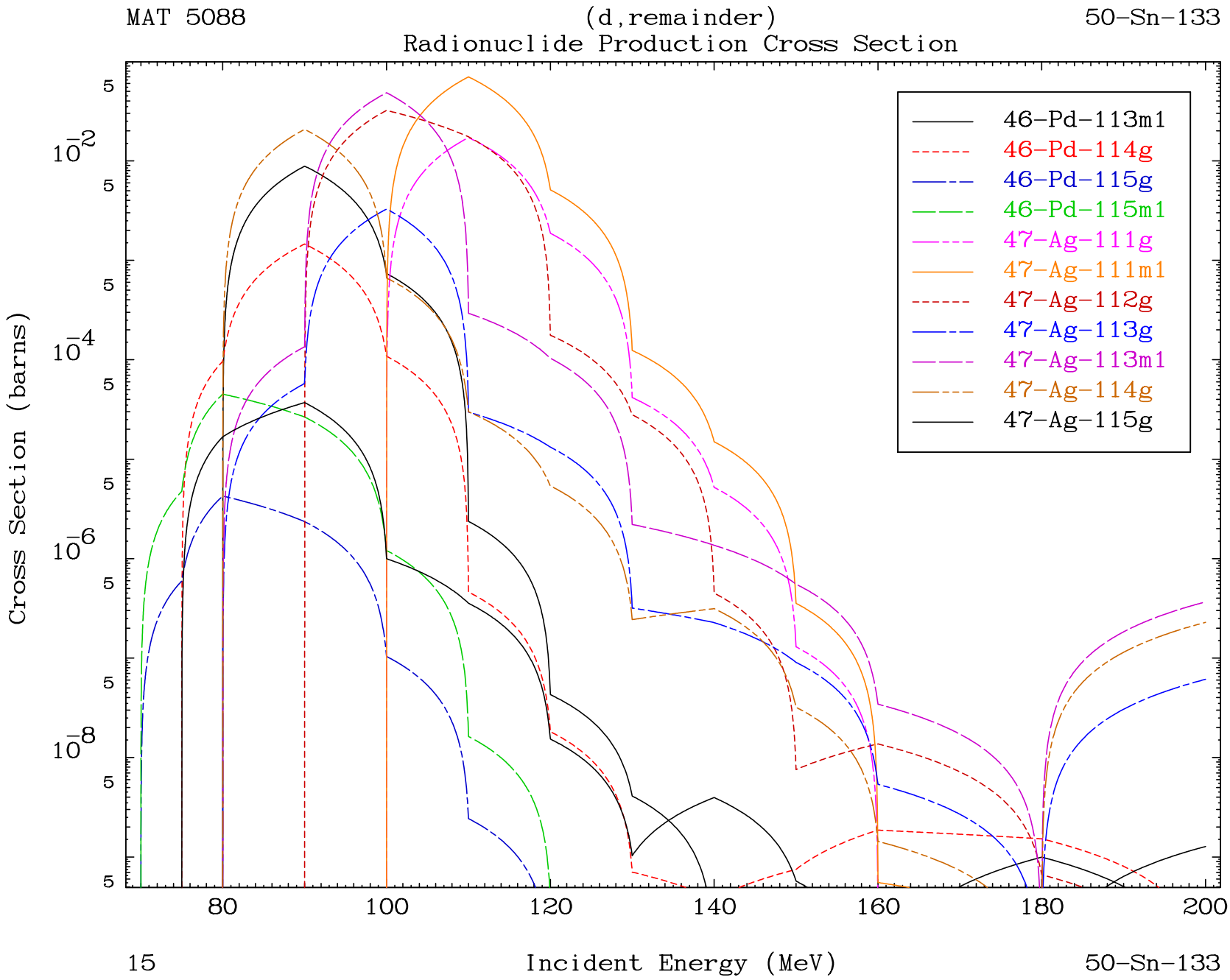

MAT 5088
(d,He3) Levels
50-Sn-133
0 Kelvin Cross Sections
(d,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
15
20
25
30
10
Incident Energy (MeV)
50-Sn-133

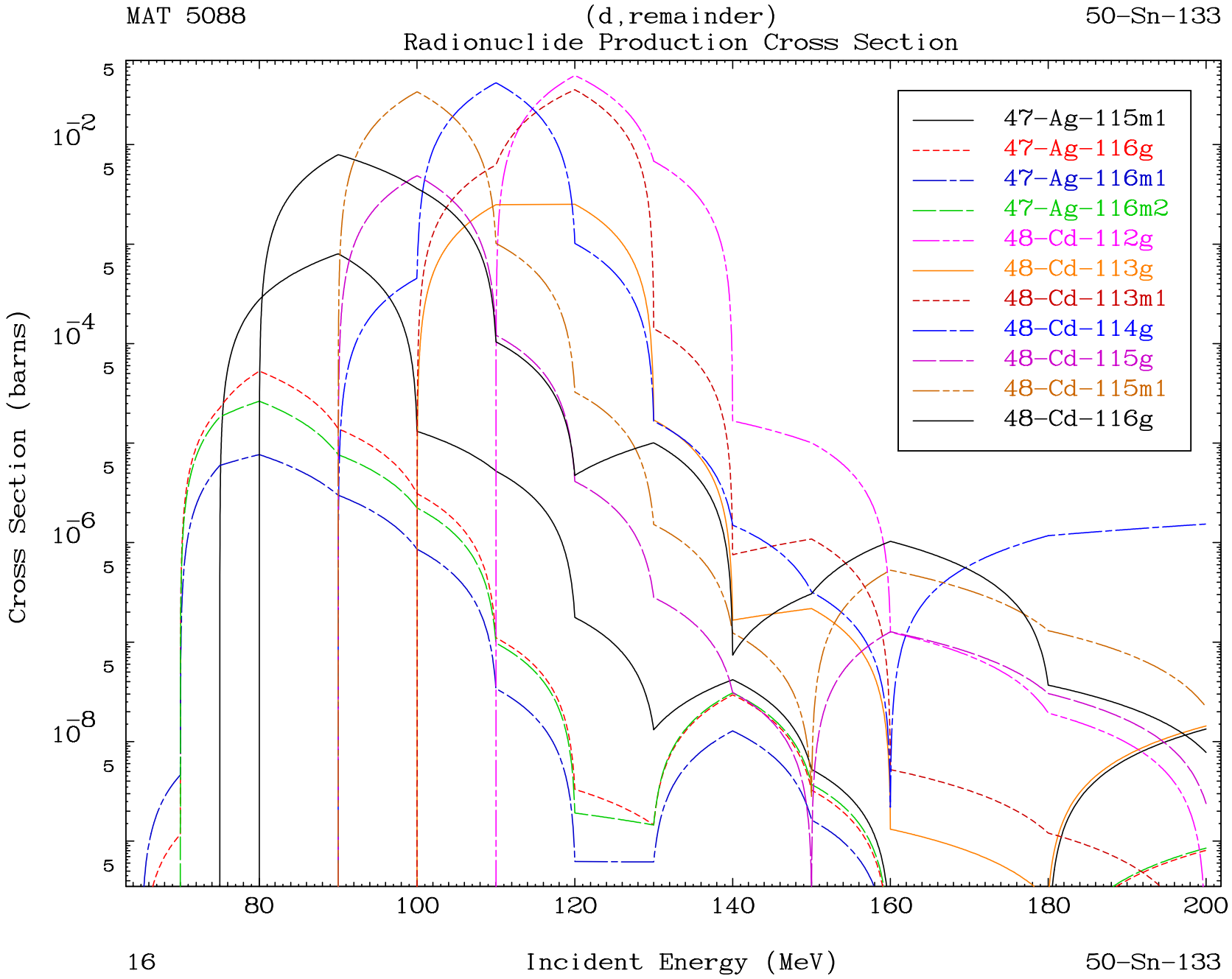

MAT 5088
(d,α) Levels
50-Sn-133
0 Kelvin Cross Sections
(d,α)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-9
10^-8
10^-7
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
Incident Energy (MeV)
11
50-Sn-133

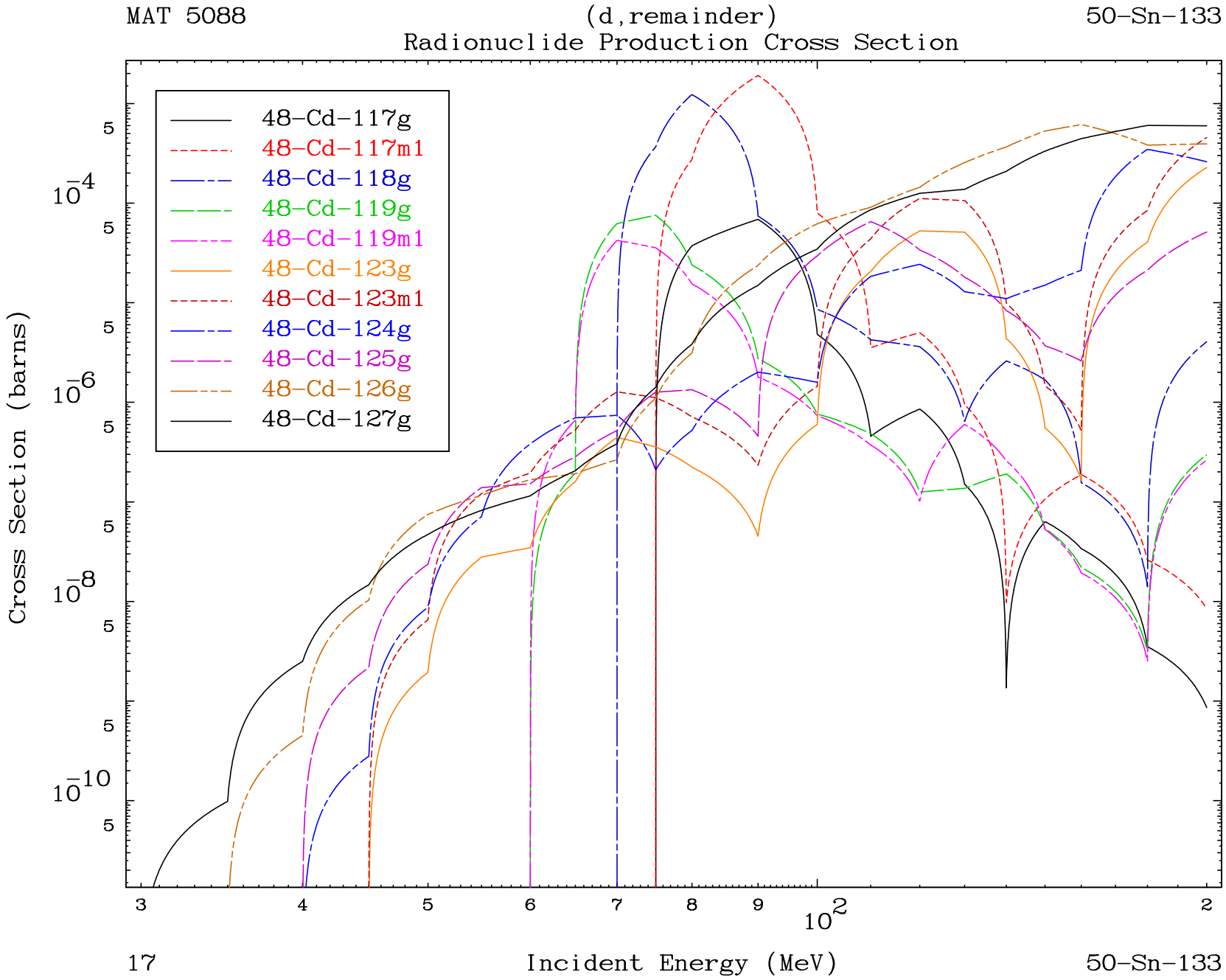

MAT 5088
Deuteron Inelastic
50-Sn-133
Radionuclide Production Cross Section
51-Sb-134g
51-Sb-134m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^-3
10^-2
10^-1
10^0
10^1
Incident Energy (MeV)
12
50-Sn-133

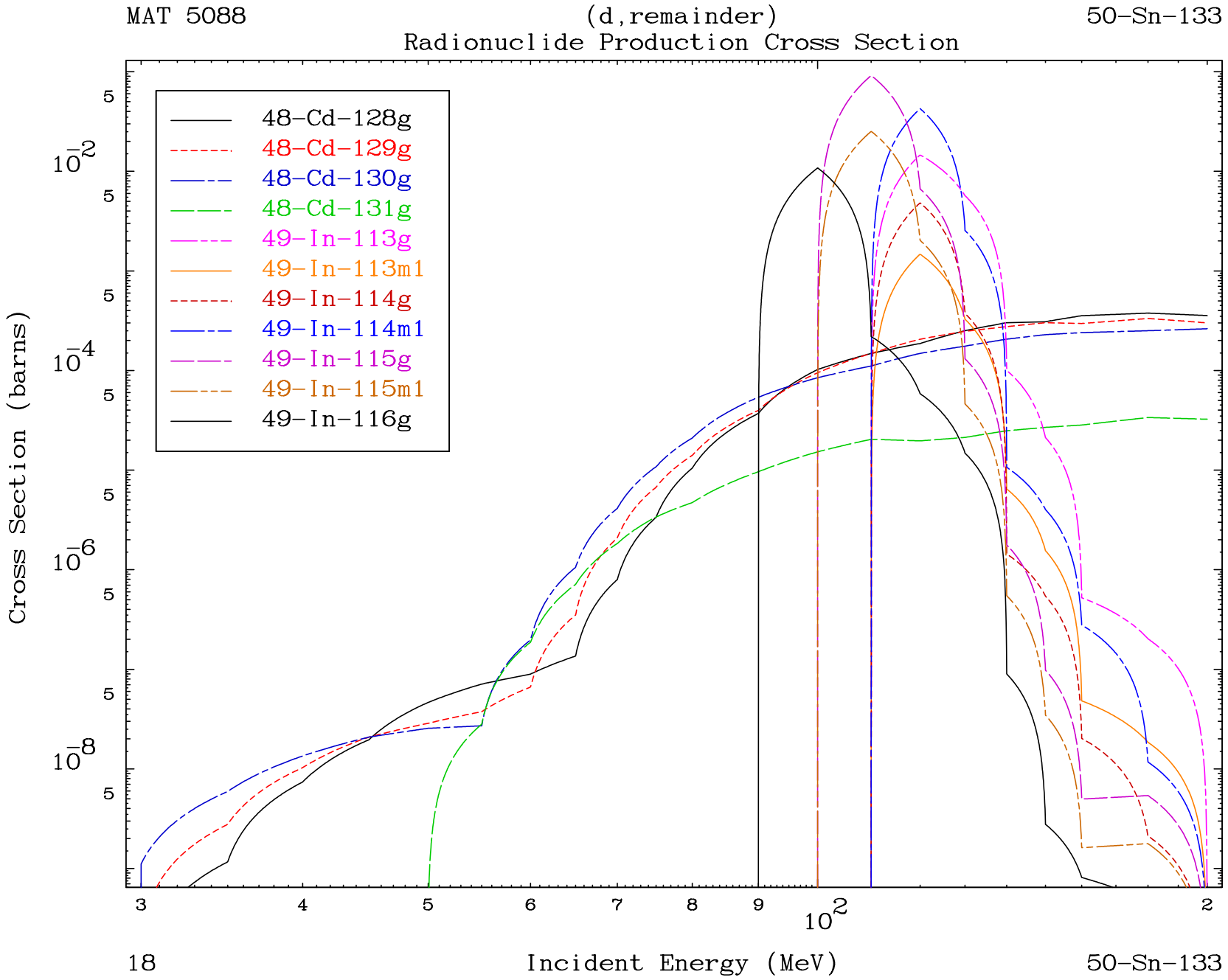

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
42-Mo-106g
43-Tc-107g
44-Ru-108g
44-Ru-109g
44-Ru-110g
Cross Section (barns)
10^9
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
13
Incident Energy (MeV)
50-Sn-133

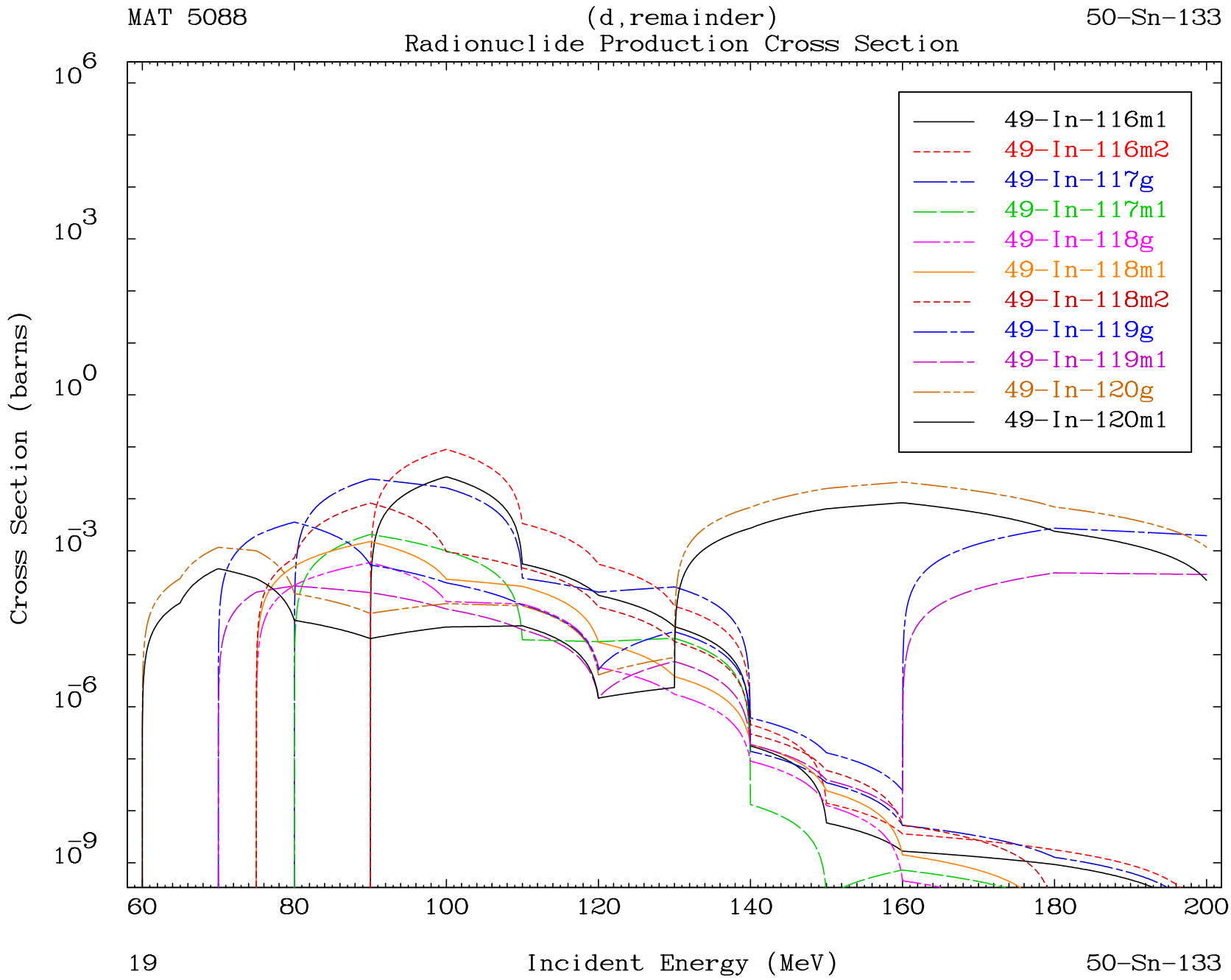

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
14
Incident Energy (MeV)
50-Sn-133
45-Rh-109g
45-Rh-110g
45-Rh-110m1
45-Rh-111g
45-Rh-112g
45-Rh-112m1
46-Pd-110g
46-Pd-111g
46-Pd-111m1
46-Pd-112g
46-Pd-113g

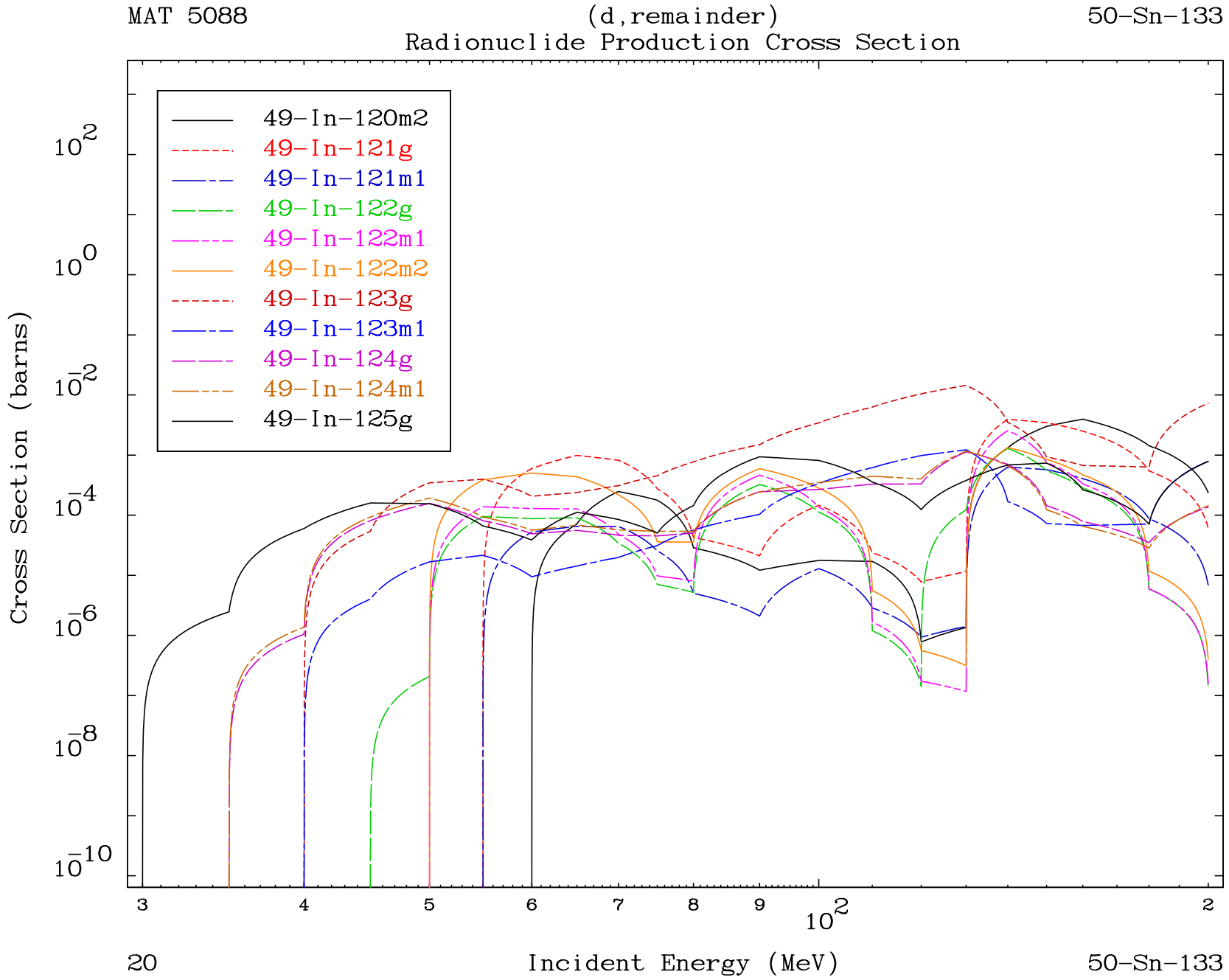

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
Incident Energy (MeV)
15
50-Sn-133
46-Pd-113m1
46-Pd-114g
46-Pd-115g
46-Pd-115m1
47-Ag-111g
47-Ag-111m1
47-Ag-112g
47-Ag-113g
47-Ag-113m1
47-Ag-114g
47-Ag-115g

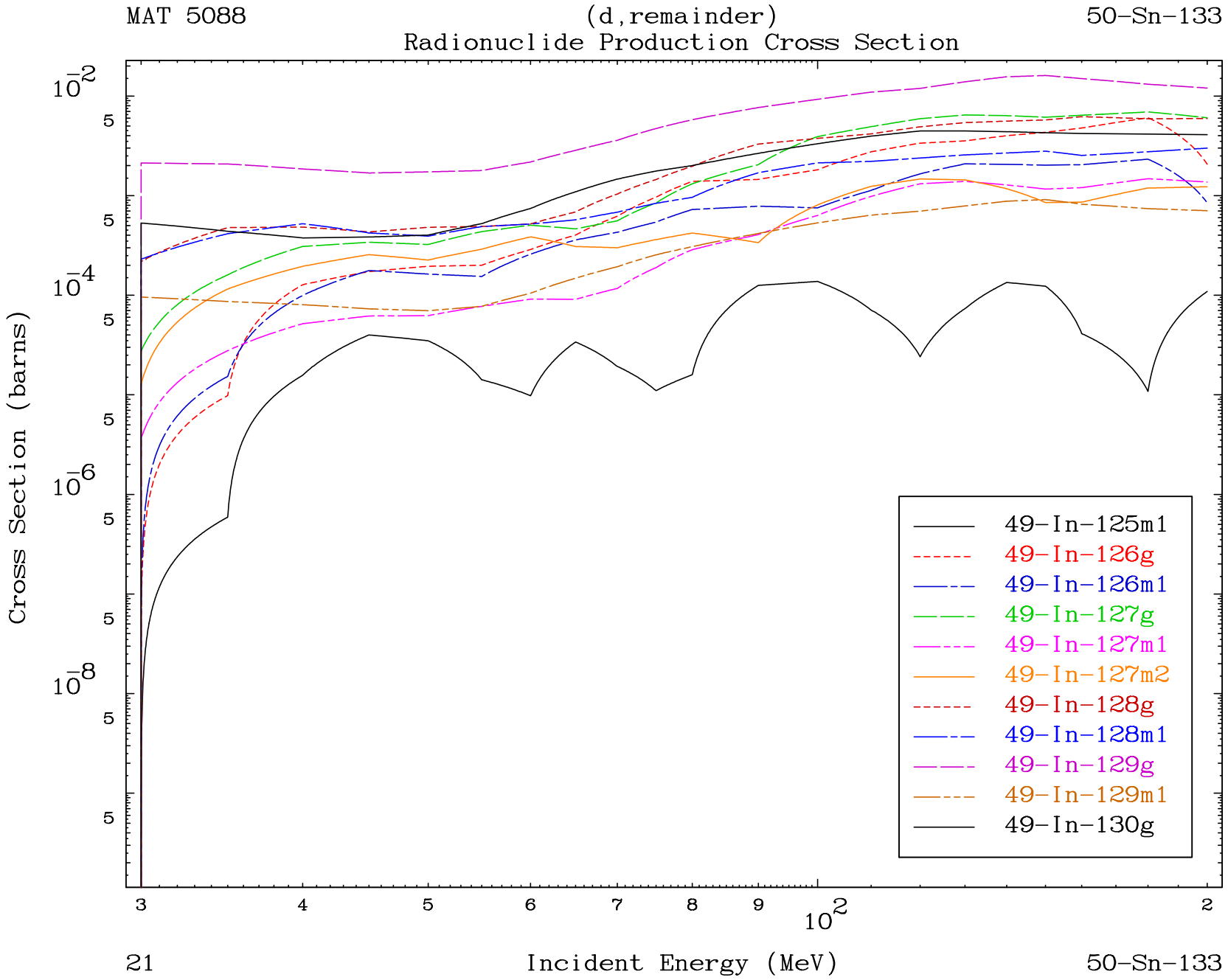

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
16
50-Sn-133
47-Ag-115m1
47-Ag-116g
47-Ag-116m1
47-Ag-116m2
48-Cd-112g
48-Cd-113g
48-Cd-113m1
48-Cd-114g
48-Cd-115g
48-Cd-115m1
48-Cd-116g

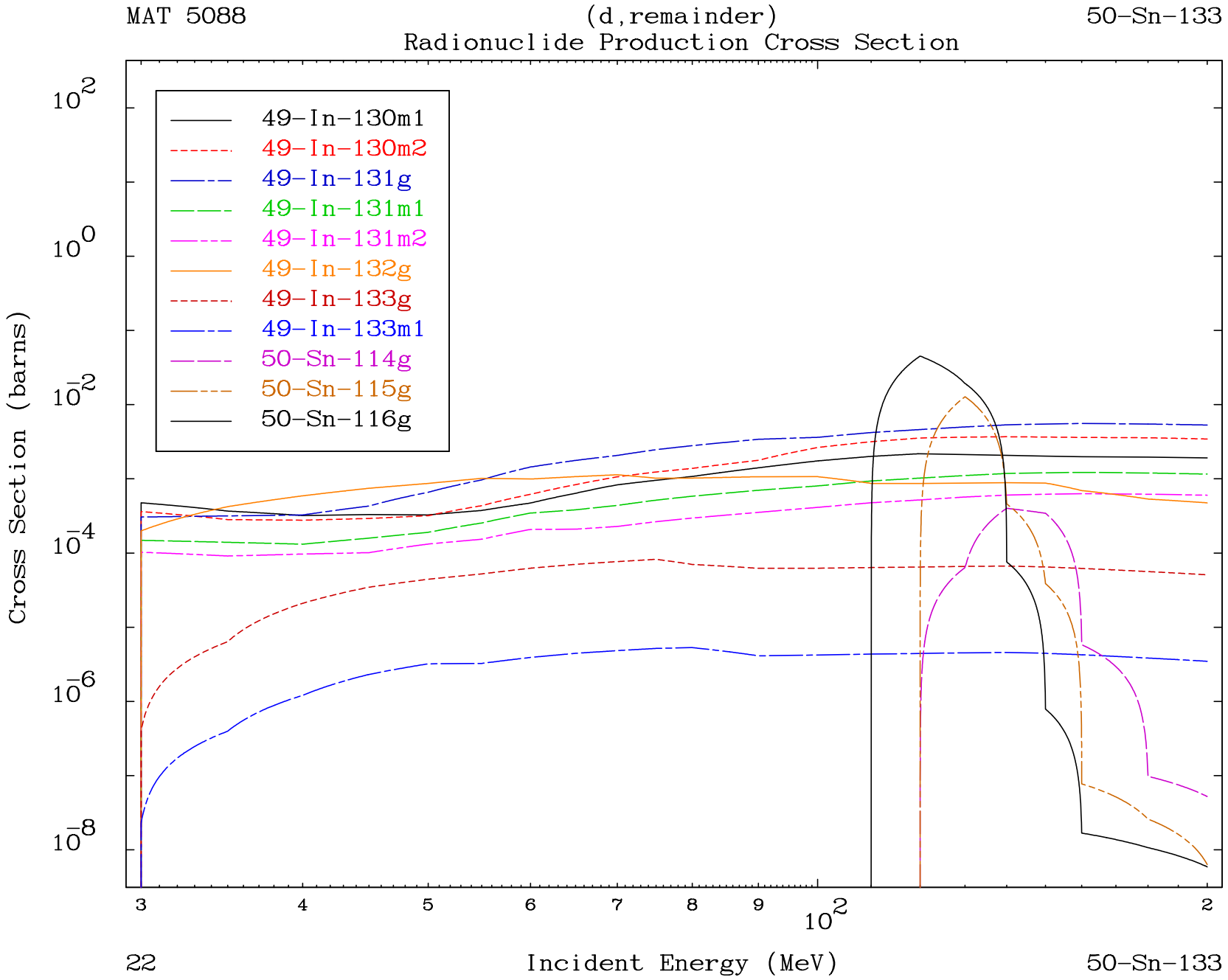

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
48-Cd-117g
48-Cd-117m1
48-Cd-118g
48-Cd-119g
48-Cd-119m1
48-Cd-123g
48-Cd-123m1
48-Cd-124g
48-Cd-125g
48-Cd-126g
48-Cd-127g
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
3
4
5
6
7
8
9
10^2
2
17
Incident Energy (MeV)
50-Sn-133

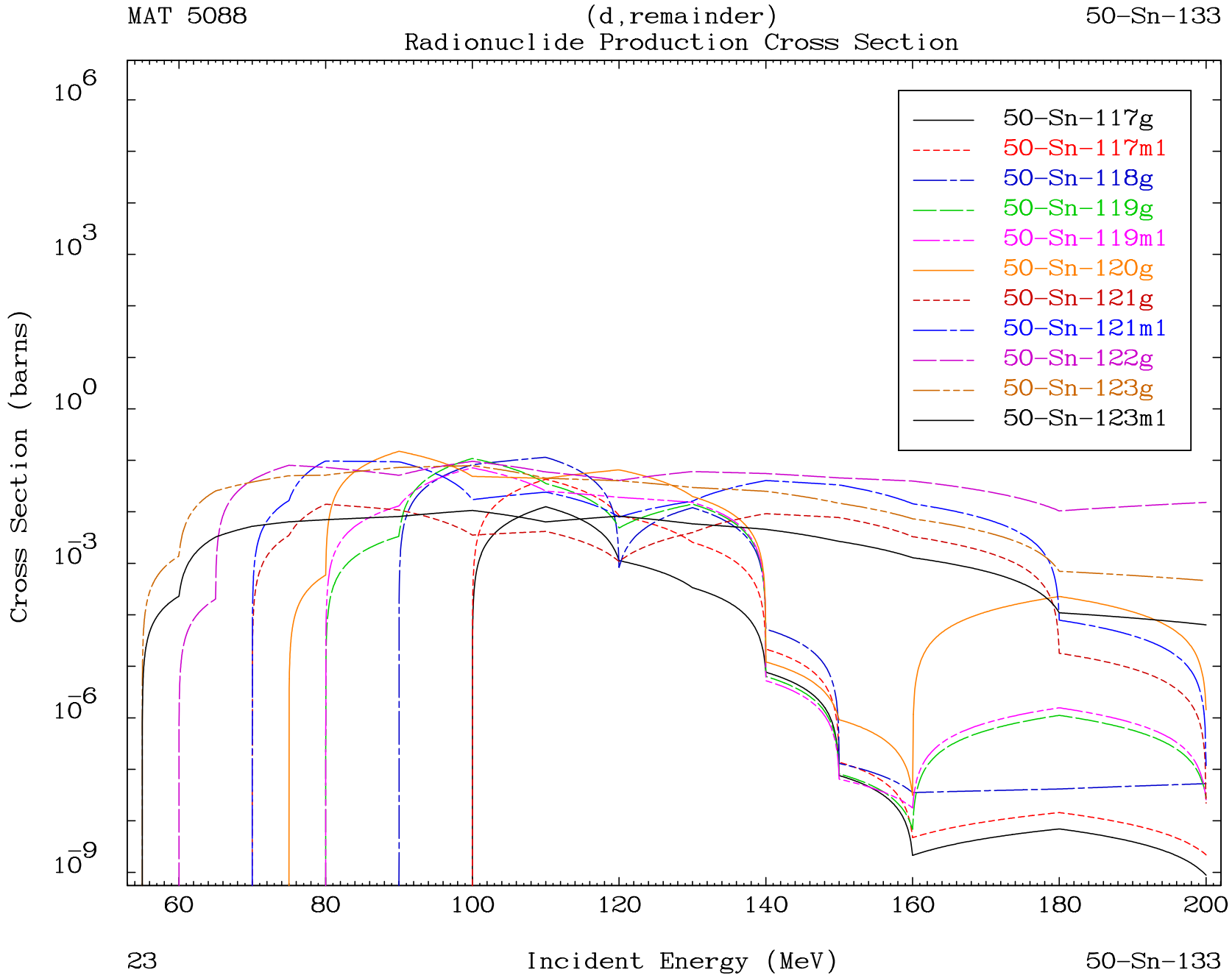

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
48-Cd-128g
48-Cd-129g
48-Cd-130g
48-Cd-131g
49-In-113g
49-In-113m1
49-In-114g
49-In-114m1
49-In-115g
49-In-115m1
49-In-116g
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
18
Incident Energy (MeV)
50-Sn-133

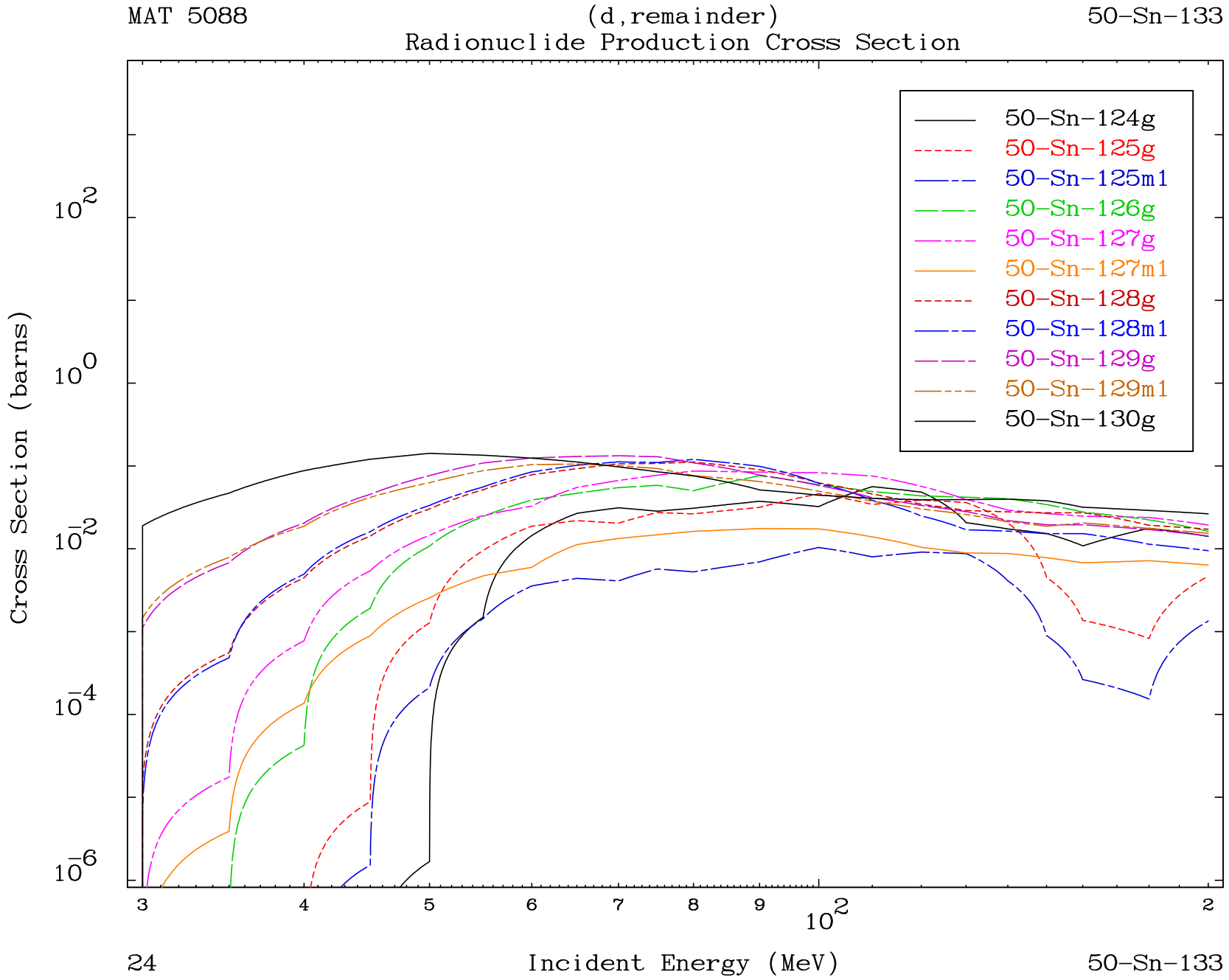

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
60
80
100
120
140
160
180
200
19
Incident Energy (MeV)
50-Sn-133
49-In-116m1
49-In-116m2
49-In-117g
49-In-117m1
49-In-118g
49-In-118m1
49-In-118m2
49-In-119g
49-In-119m1
49-In-120g
49-In-120m1

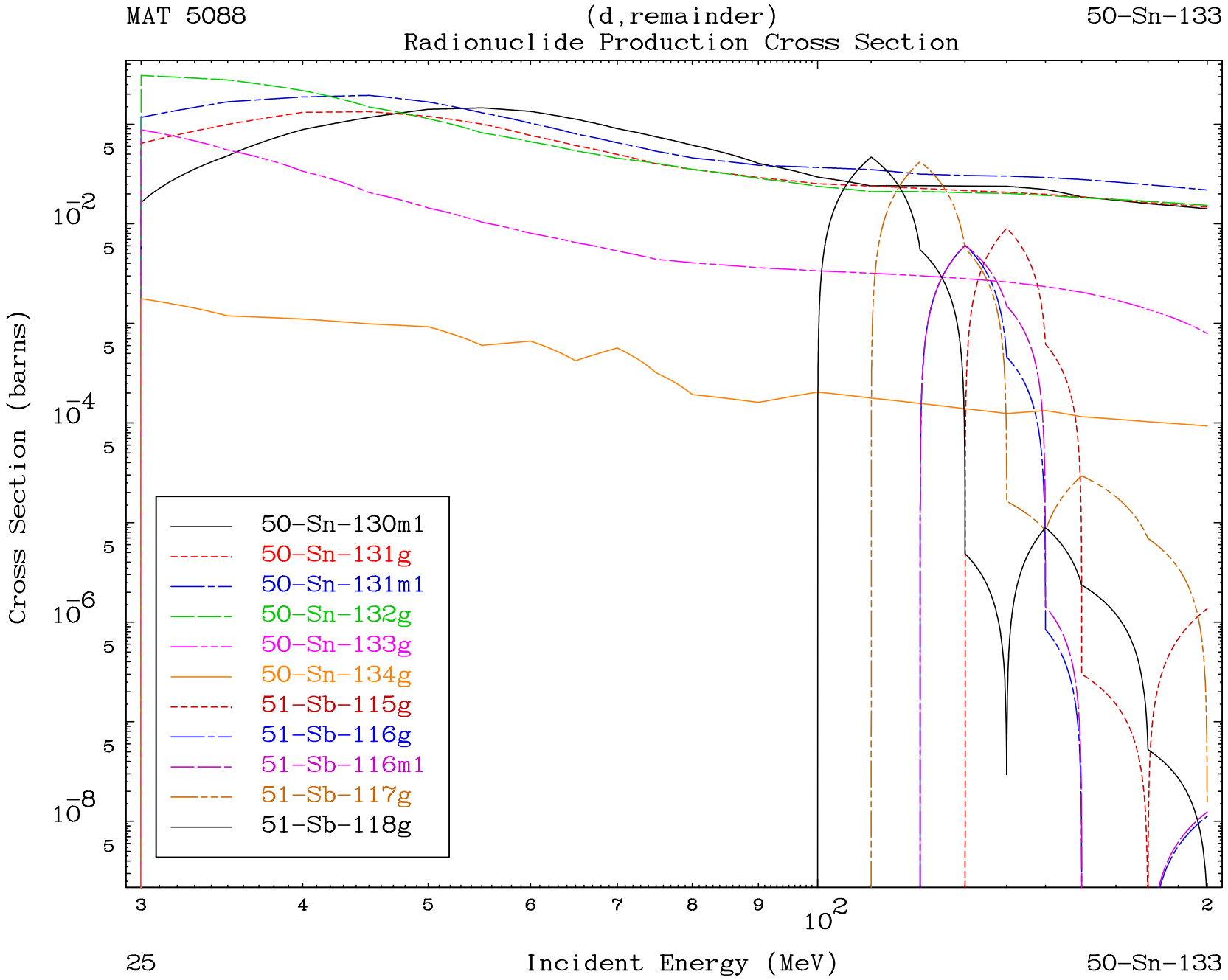

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
49-In-120m2
49-In-121g
49-In-121m1
49-In-122g
49-In-122m1
49-In-122m2
49-In-123g
49-In-123m1
49-In-124g
49-In-124m1
49-In-125g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
3
4
5
6
7
8
9
10^2
2
20
Incident Energy (MeV)
50-Sn-133

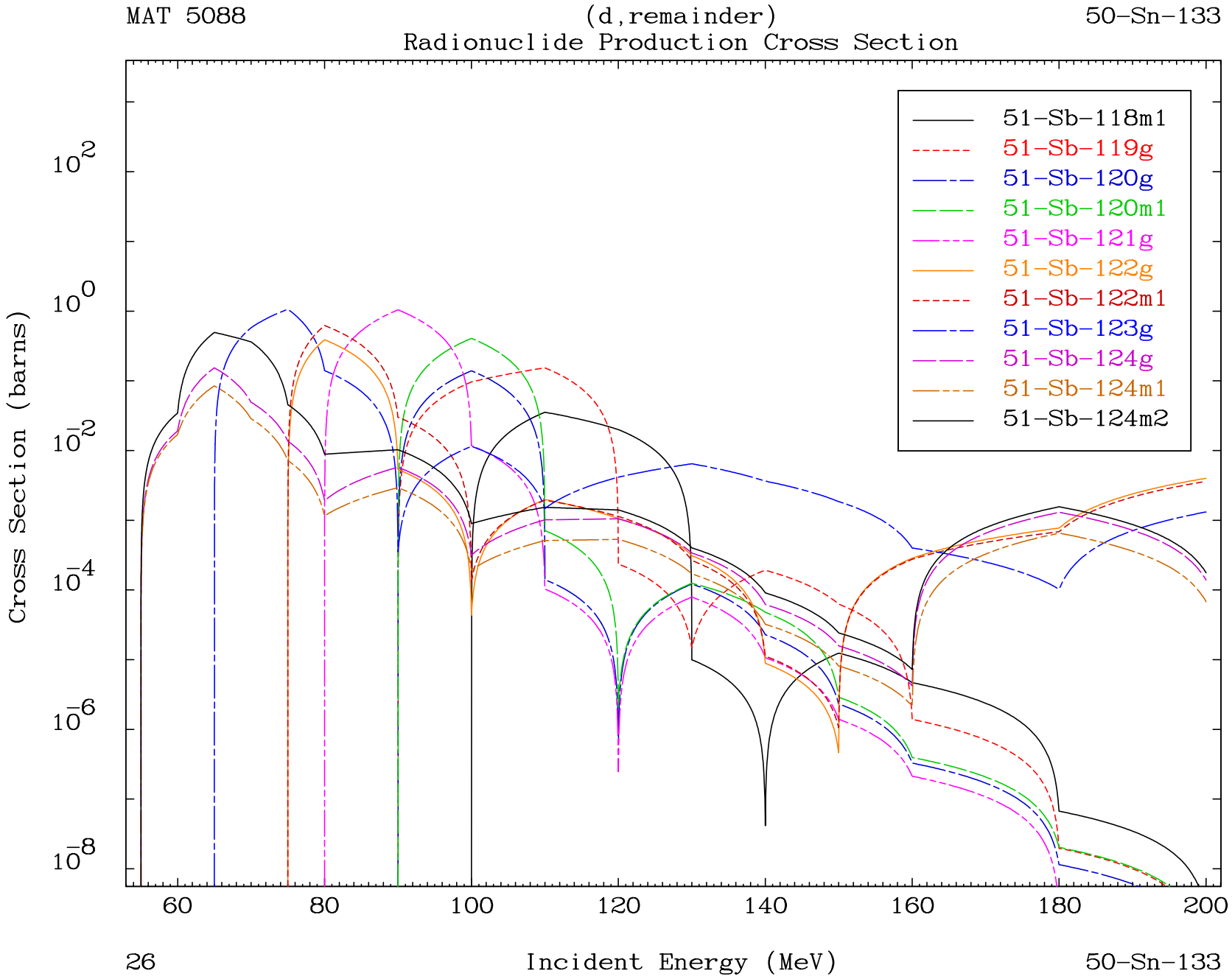

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
21
50-Sn-133
49-In-125m1
49-In-126g
49-In-126m1
49-In-127g
49-In-127m1
49-In-127m2
49-In-128g
49-In-128m1
49-In-129g
49-In-129m1
49-In-130g

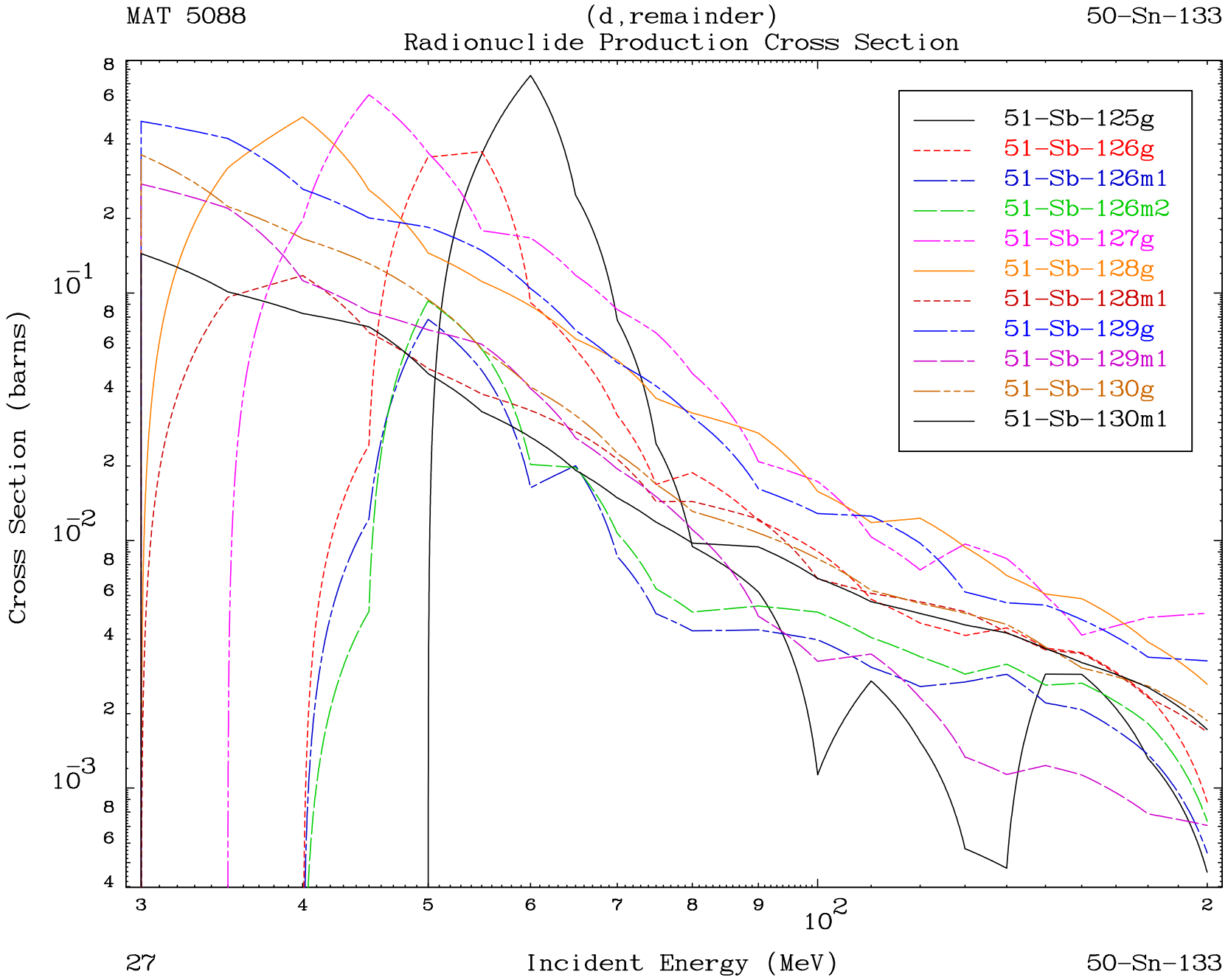

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
49-In-130m1
49-In-130m2
49-In-131g
49-In-131m1
49-In-131m2
49-In-132g
49-In-133g
49-In-133m1
50-Sn-114g
50-Sn-115g
50-Sn-116g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
50-Sn-133

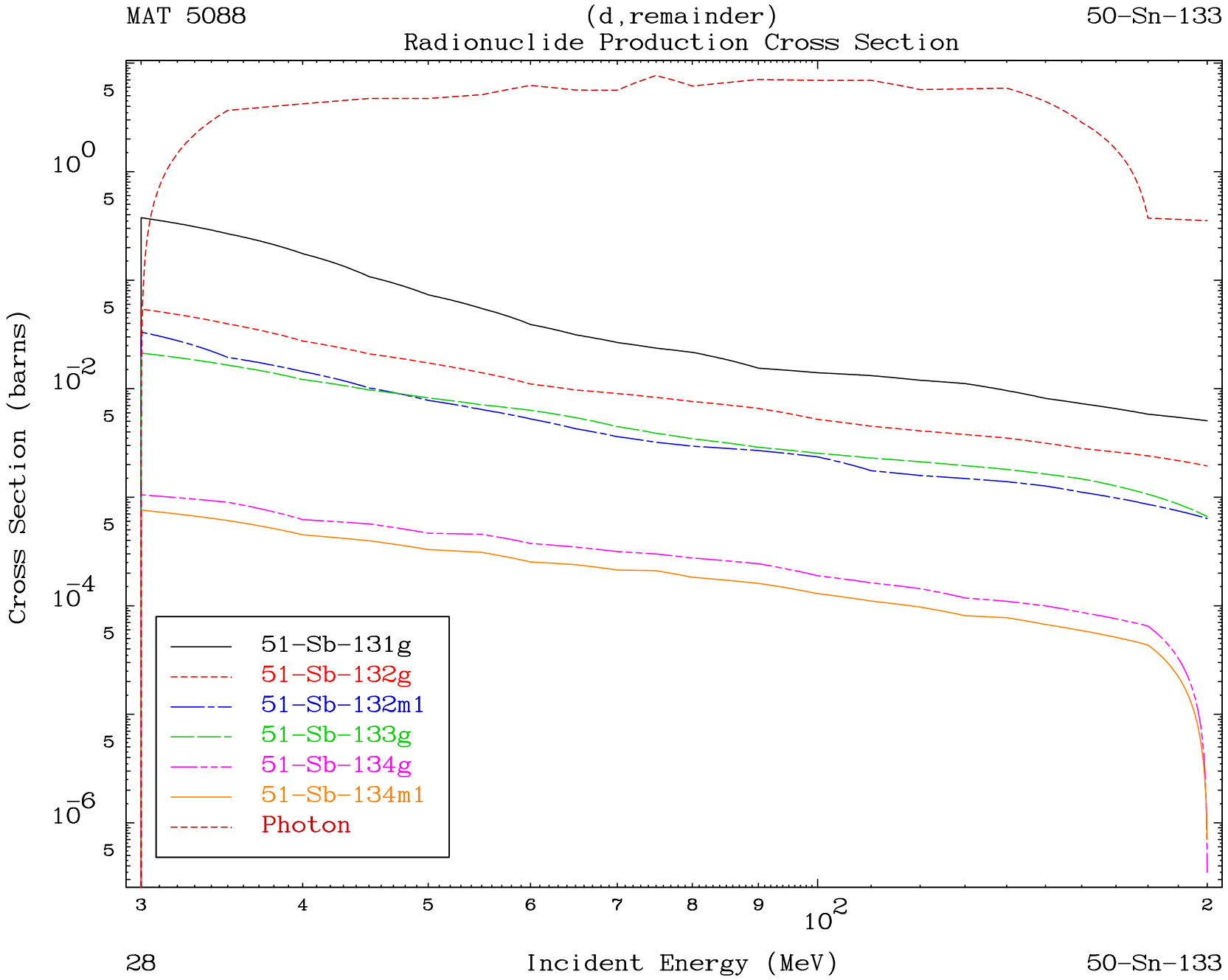

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
60
80
100
120
140
160
180
200
23
Incident Energy (MeV)
50-Sn-133
50-Sn-117g
50-Sn-117m1
50-Sn-118g
50-Sn-119g
50-Sn-119m1
50-Sn-120g
50-Sn-121g
50-Sn-121m1
50-Sn-122g
50-Sn-123g
50-Sn-123m1

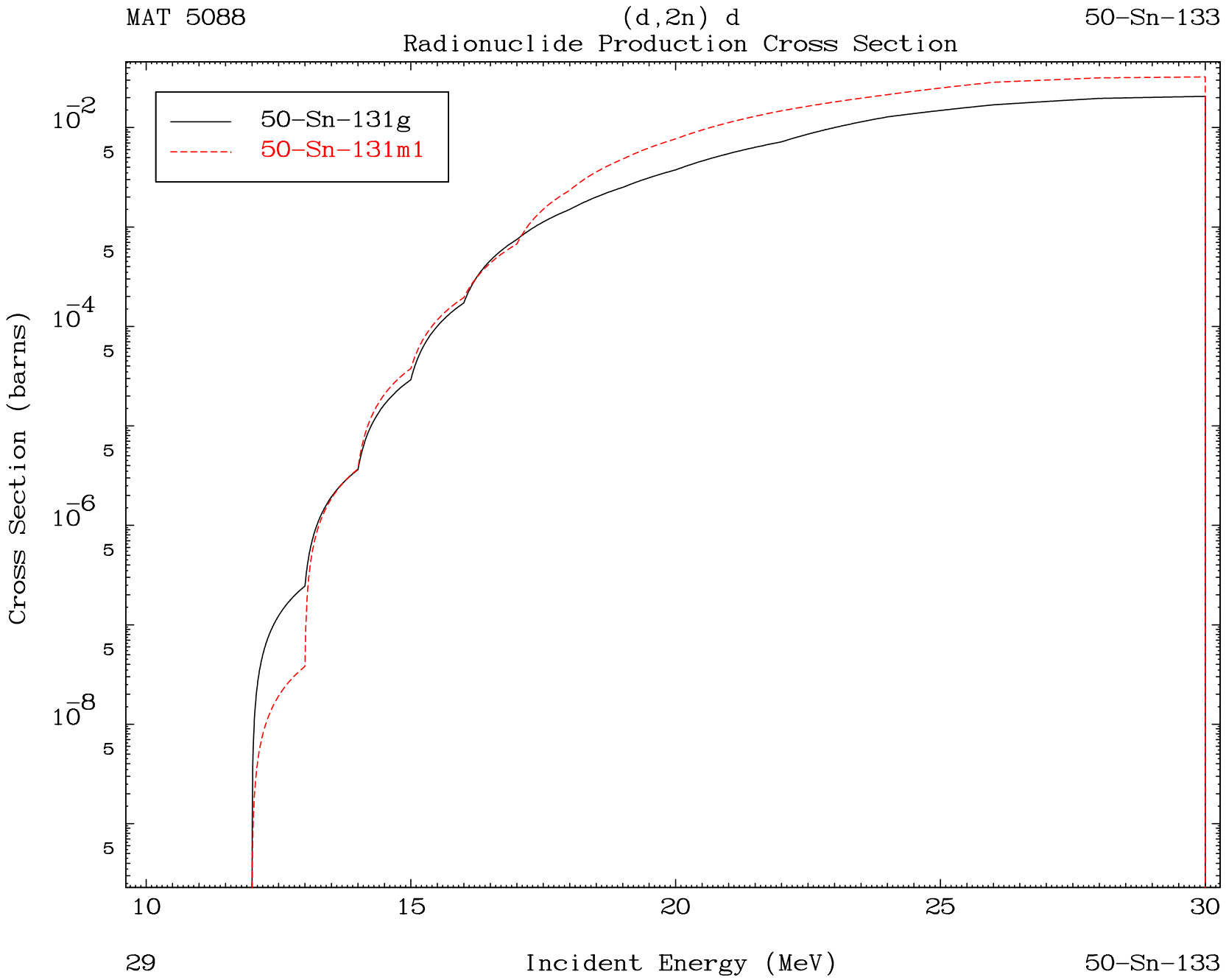

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
50-Sn-124g
50-Sn-125g
50-Sn-125m1
50-Sn-126g
50-Sn-127g
50-Sn-127m1
50-Sn-128g
50-Sn-128m1
50-Sn-129g
50-Sn-129m1
50-Sn-130g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
50-Sn-133

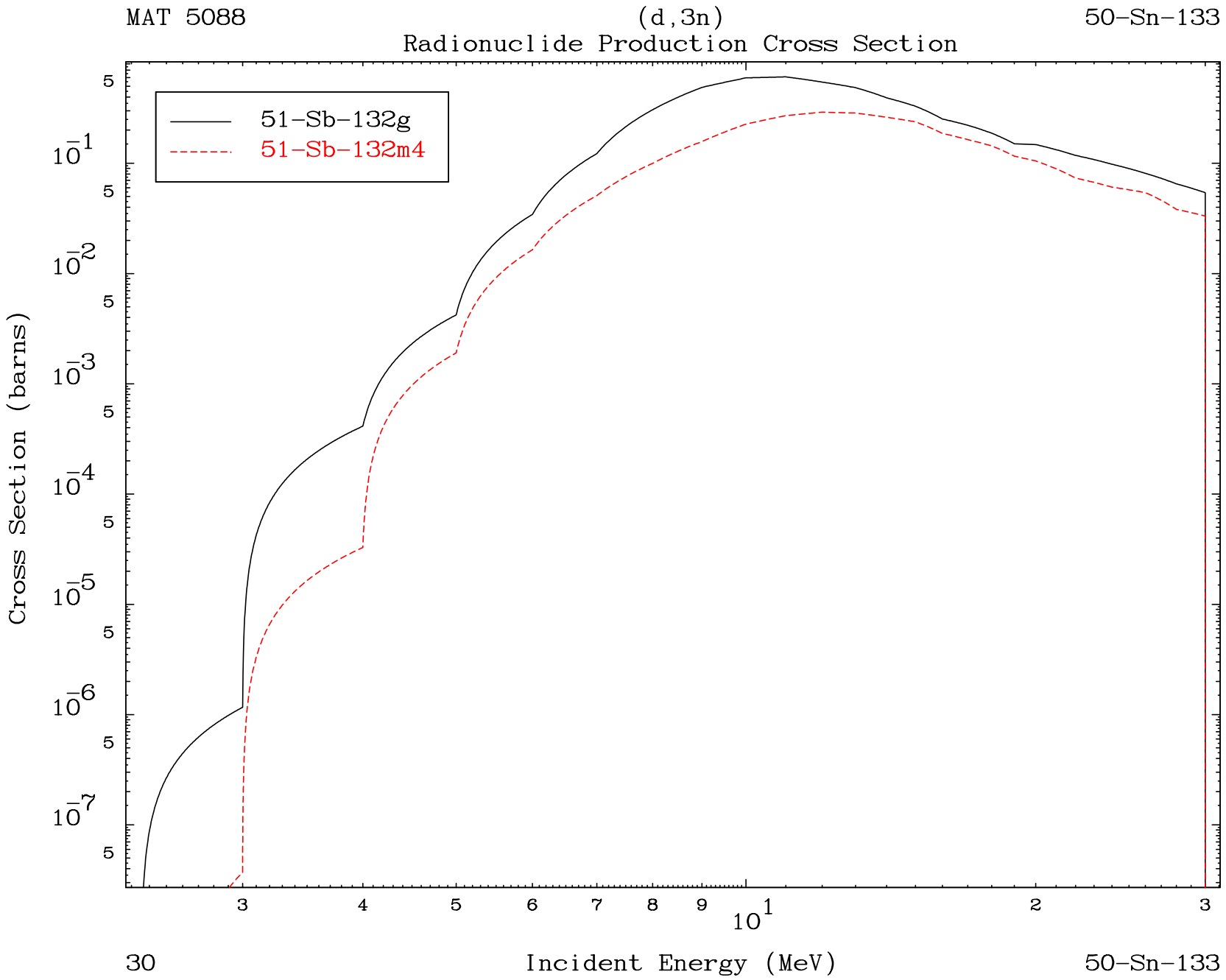

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
50-Sn-130m1
50-Sn-131g
50-Sn-131m1
50-Sn-132g
50-Sn-133g
50-Sn-134g
51-Sb-115g
51-Sb-116g
51-Sb-116m1
51-Sb-117g
51-Sb-118g
25
Incident Energy (MeV)
50-Sn-133

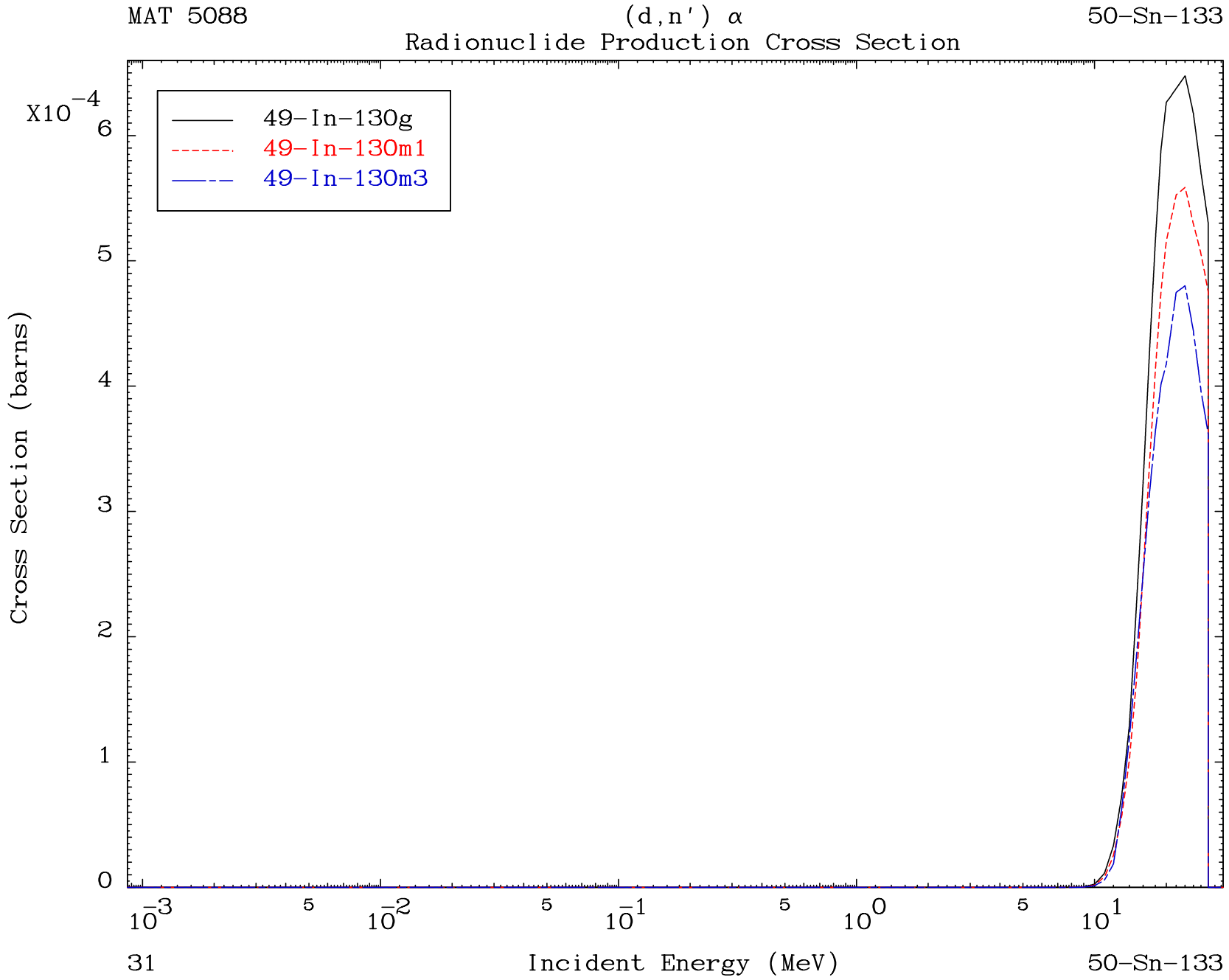

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
51-Sb-118m1
51-Sb-119g
51-Sb-120g
51-Sb-120m1
51-Sb-121g
51-Sb-122g
51-Sb-122m1
51-Sb-123g
51-Sb-124g
51-Sb-124m1
51-Sb-124m2
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
60
80
100
120
140
160
180
200
26
Incident Energy (MeV)
50-Sn-133

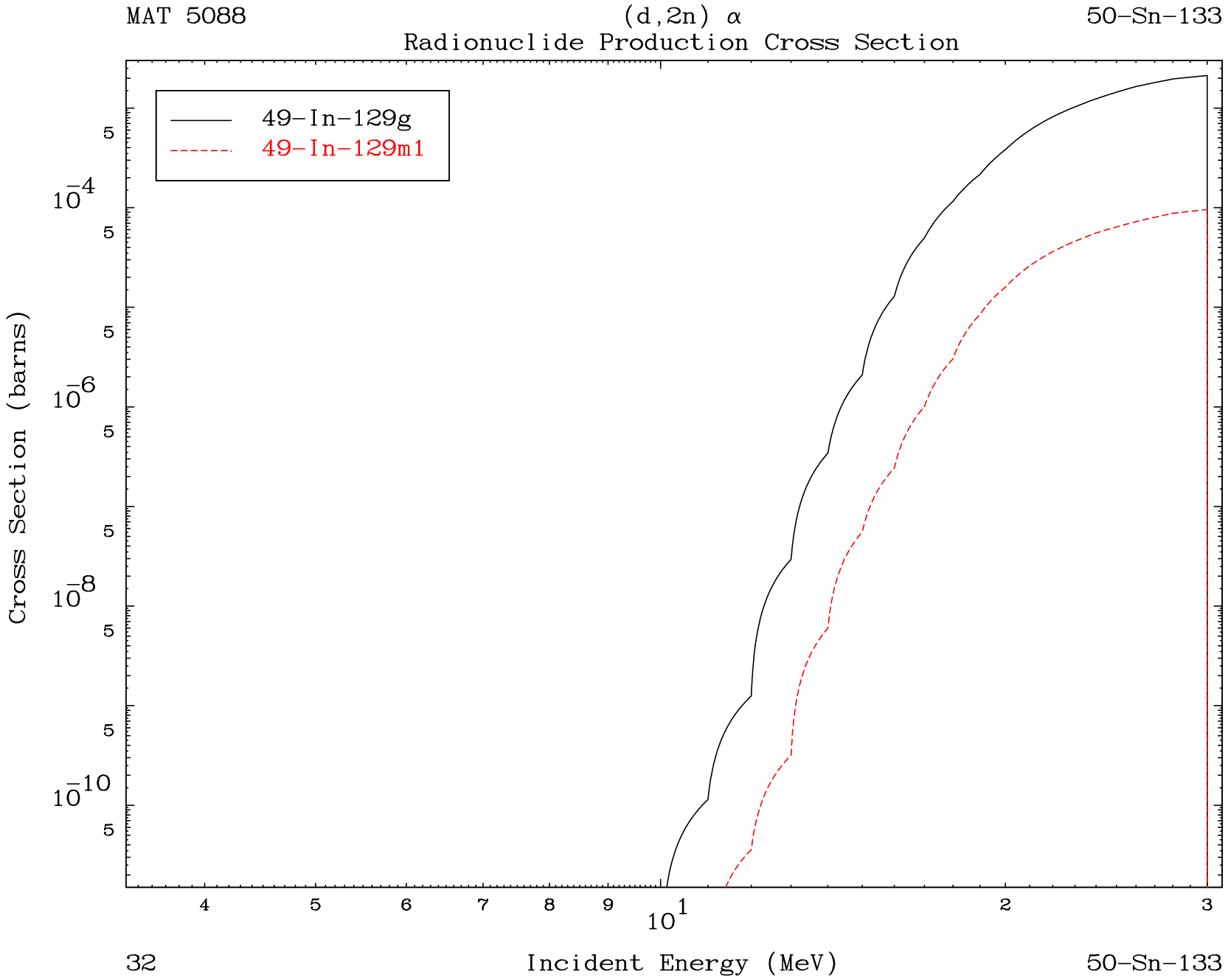

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
51-Sb-125g
51-Sb-126g
51-Sb-126m1
51-Sb-126m2
51-Sb-127g
51-Sb-128g
51-Sb-128m1
51-Sb-129g
51-Sb-129m1
51-Sb-130g
51-Sb-130m1

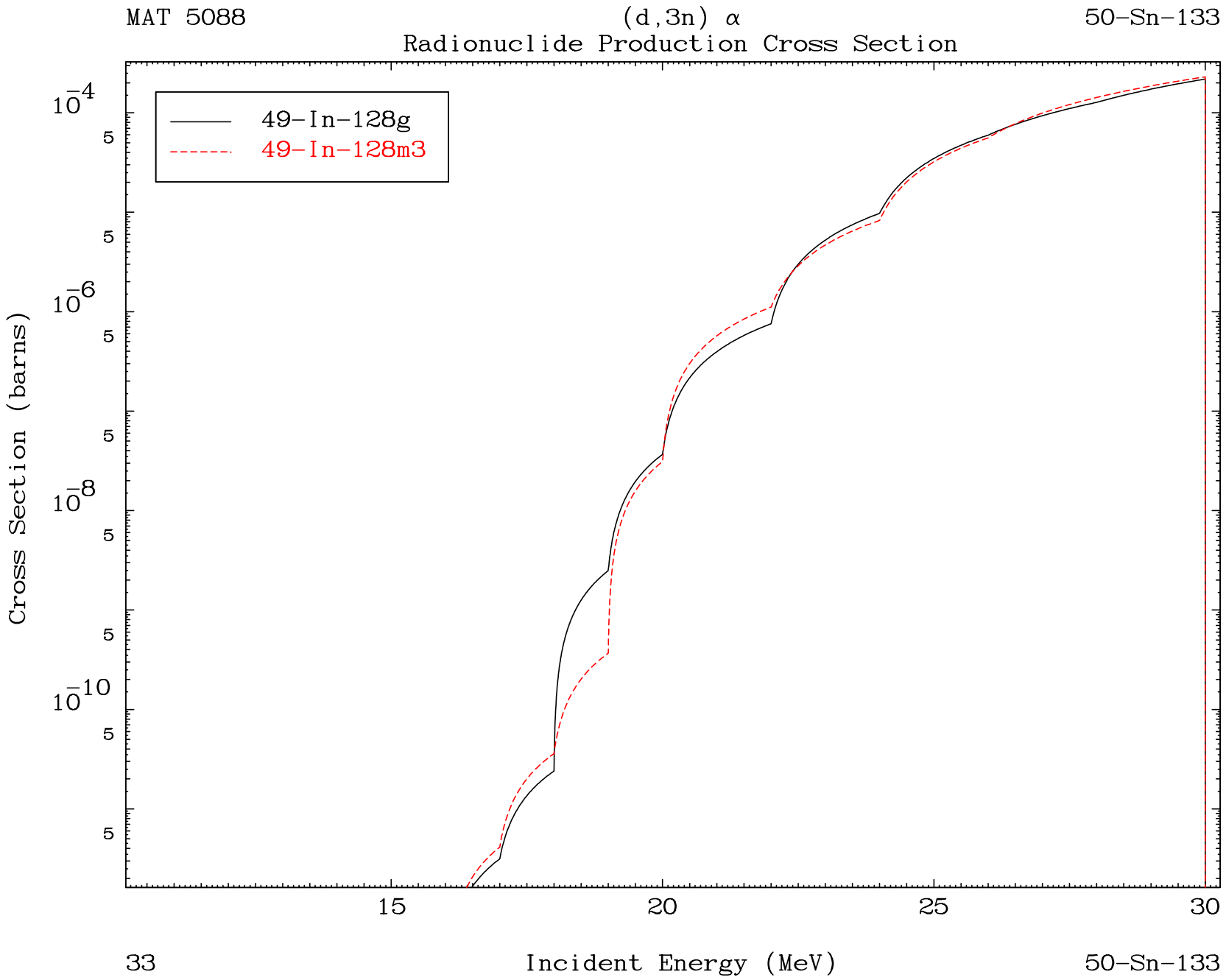

MAT 5088
(d,remainder)
50-Sn-133
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
3
4
5
6
7
8
9
10^2
2
51-Sb-131g
51-Sb-132g
51-Sb-132m1
51-Sb-133g
51-Sb-134g
51-Sb-134m1
Photon
28
Incident Energy (MeV)
50-Sn-133

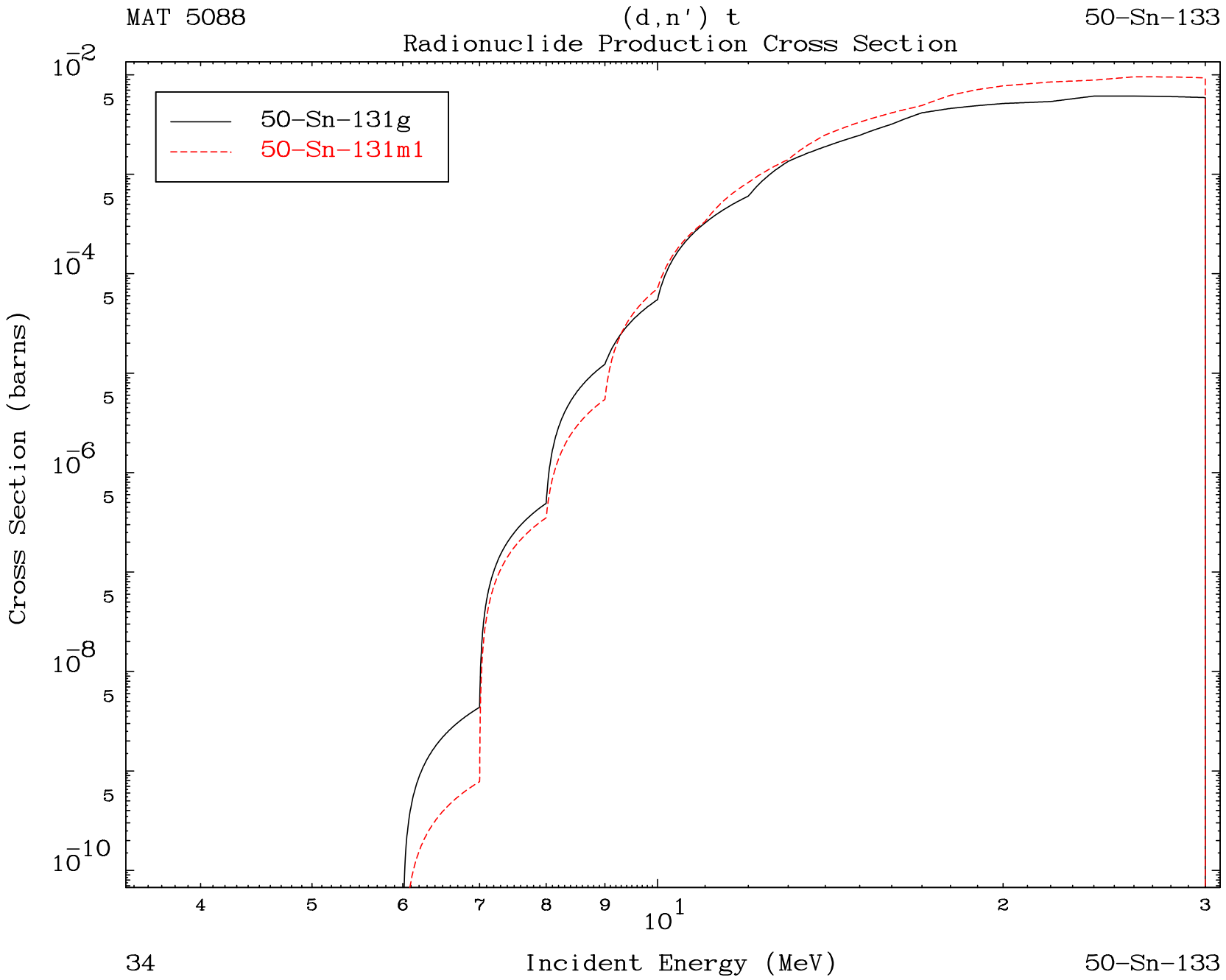

MAT 5088
(d,2n) d
50-Sn-133
Radionuclide Production Cross Section
50-Sn-131g
50-Sn-131m1
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
29
Incident Energy (MeV)
50-Sn-133

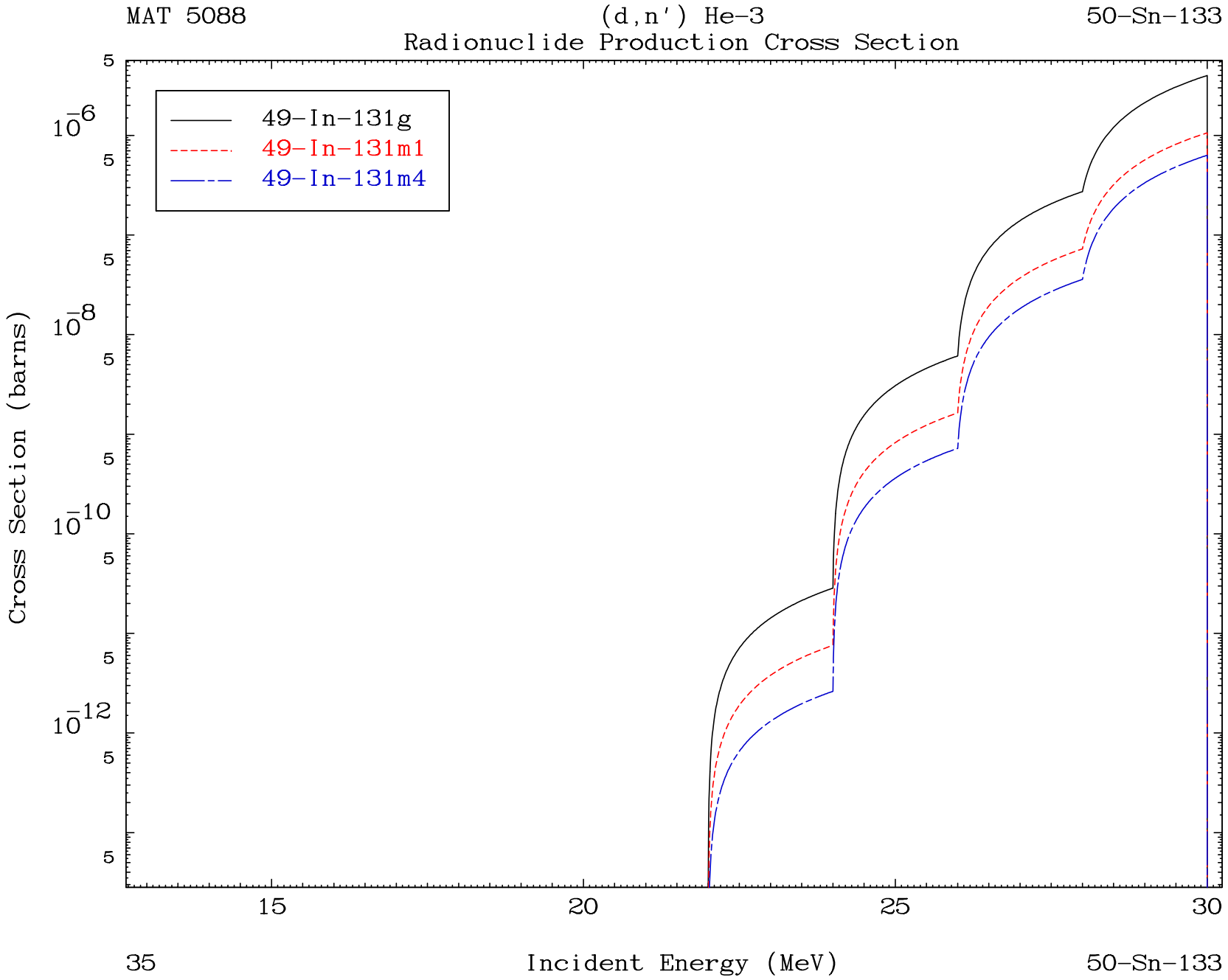

MAT 5088
(d,3n)
50-Sn-133
Radionuclide Production Cross Section
51-Sb-132g
51-Sb-132m4
Cross Section (barns)
Incident Energy (MeV)
30
50-Sn-133

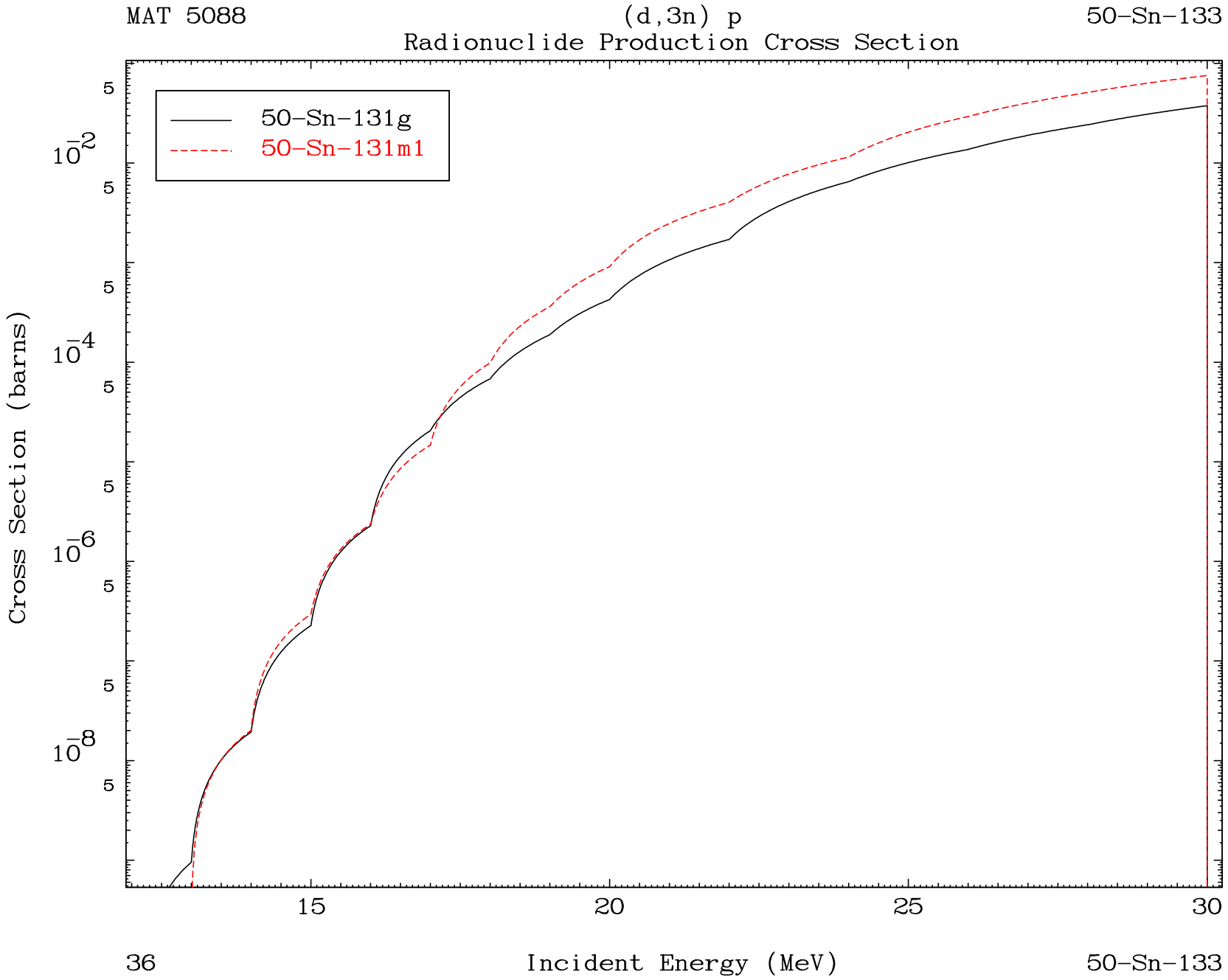

MAT 5088
(d,n') α
50-Sn-133
Radionuclide Production Cross Section
X10^-4
6
5
4
3
2
1
0
Cross Section (barns)
49-In-130g
49-In-130m1
49-In-130m3
10^-3
5
10^-2
5
10^-1
5
10^0
5
10^1
31
Incident Energy (MeV)
50-Sn-133

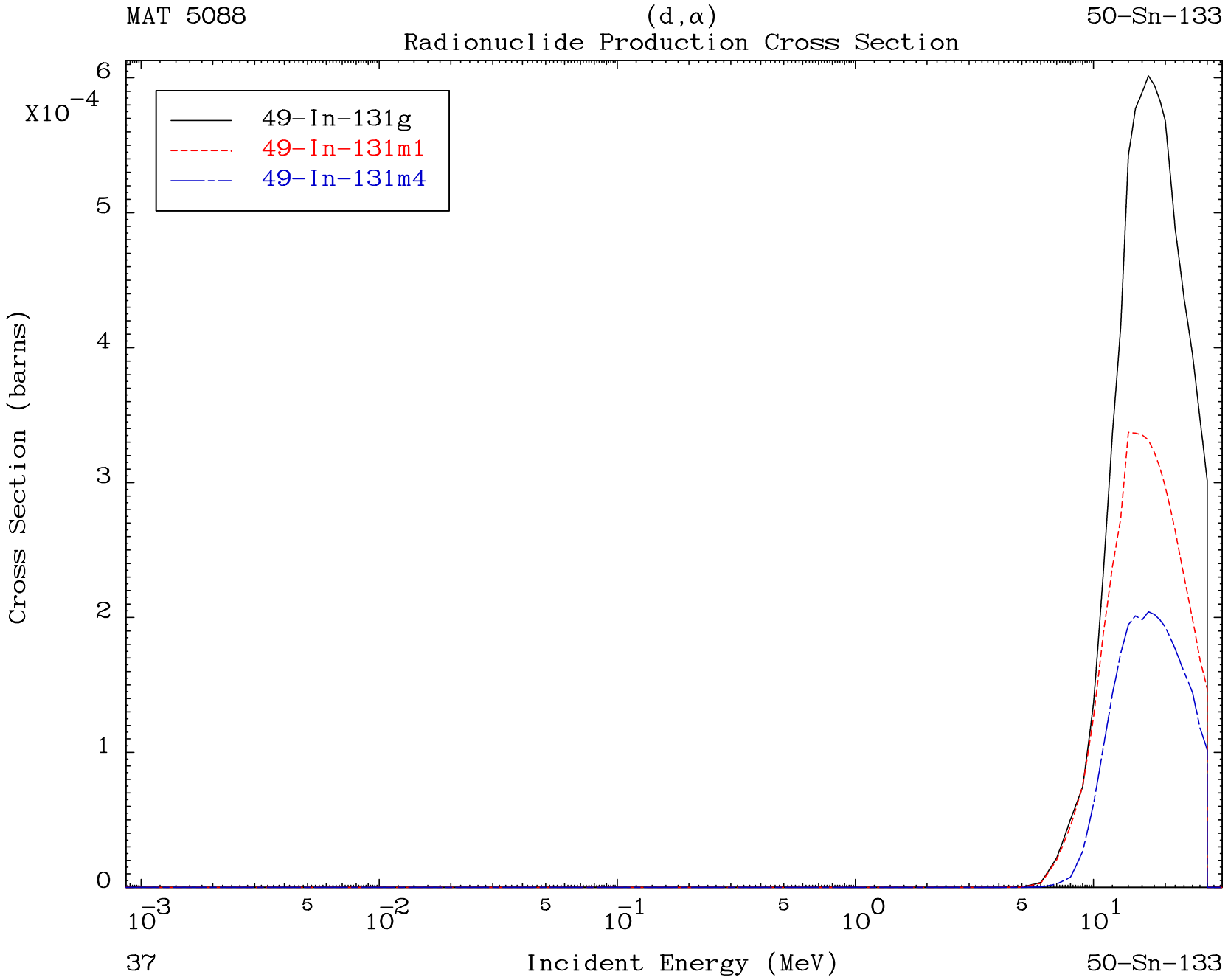

MAT 5088
(d,2n) α
50-Sn-133
Radionuclide Production Cross Section
49-In-129g
49-In-129m1
Cross Section (barns)
10-4
10-6
10-8
10-10
4
5
6
7
8
9
10 1
2
3
32
Incident Energy (MeV)
50-Sn-133

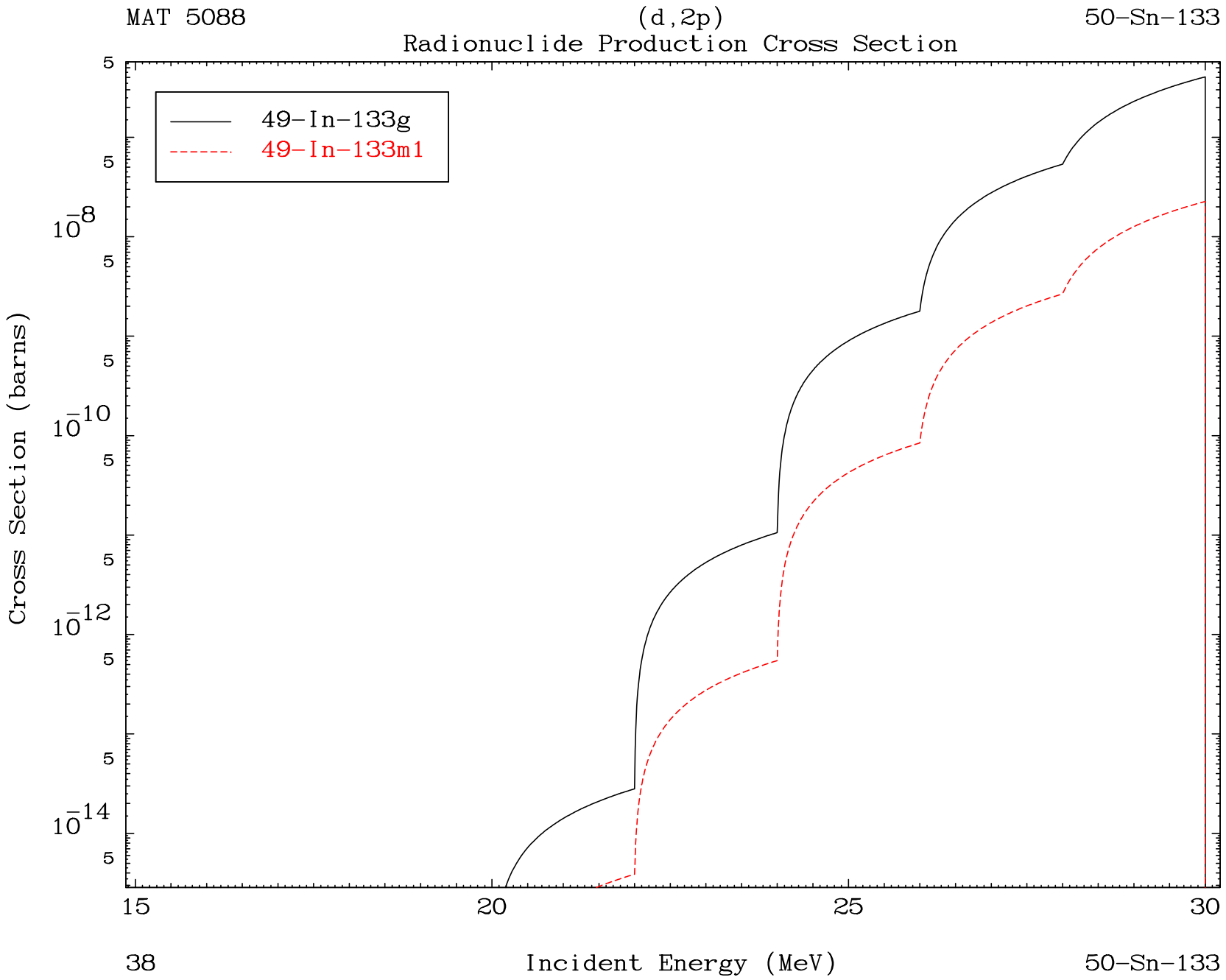

MAT 5088
(d,3n) α
50-Sn-133
Radionuclide Production Cross Section
49-In-128g
49-In-128m3
Cross Section (barns)
10-4
10-6
10-8
10-10
5
15
20
25
30
33
Incident Energy (MeV)
50-Sn-133

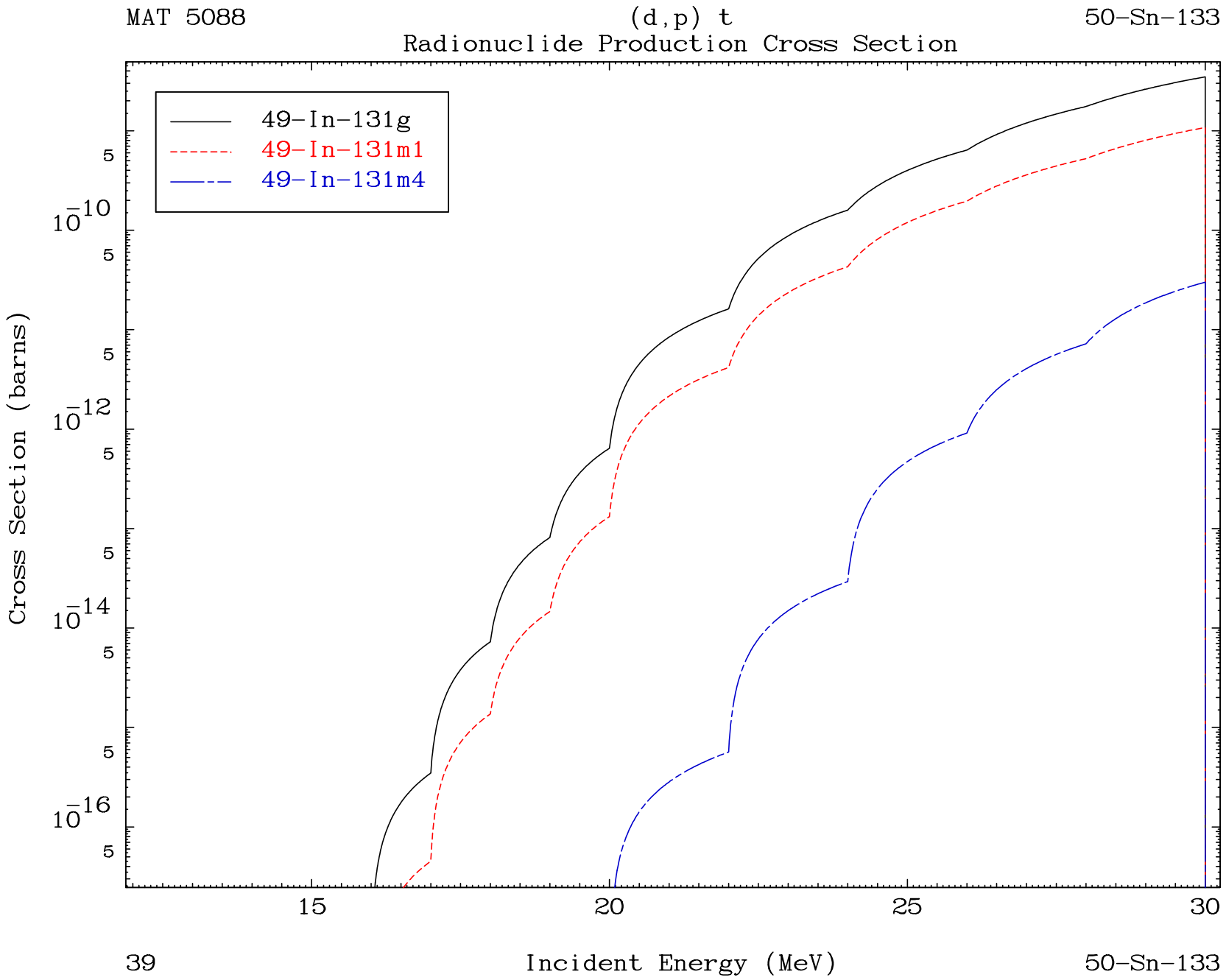

MAT 5088
(d,n') t
50-Sn-133
Radionuclide Production Cross Section
50-Sn-131g
50-Sn-131m1
Cross Section (barns)
Incident Energy (MeV)
34
50-Sn-133


MAT 5088
(d,n') He-3
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
15
20
25
30
35
Incident Energy (MeV)
50-Sn-133


MAT 5088
(d,3n) p
50-Sn-133
Radionuclide Production Cross Section
50-Sn-131g
50-Sn-131m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
15
20
25
30
36
Incident Energy (MeV)
50-Sn-133


MAT 5088
(d,α)
50-Sn-133
Radionuclide Production Cross Section
X10-4
6
5
4
3
2
1
0
49-In-131g
49-In-131m1
49-In-131m4
Cross Section (barns)
10-3
5
10-2
5
10-1
5
100
5
101
37
Incident Energy (MeV)
50-Sn-133


MAT 5088
(d,2p)
50-Sn-133
Radionuclide Production Cross Section
49-In-133g
49-In-133m1
Cross Section (barns)
10-8
10-10
10-12
10-14
5
15
20
25
30
38
Incident Energy (MeV)
50-Sn-133


MAT 5088
(d,p) t
50-Sn-133
Radionuclide Production Cross Section
49-In-131g
49-In-131m1
49-In-131m4
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
15
20
25
30
39
Incident Energy (MeV)
50-Sn-133