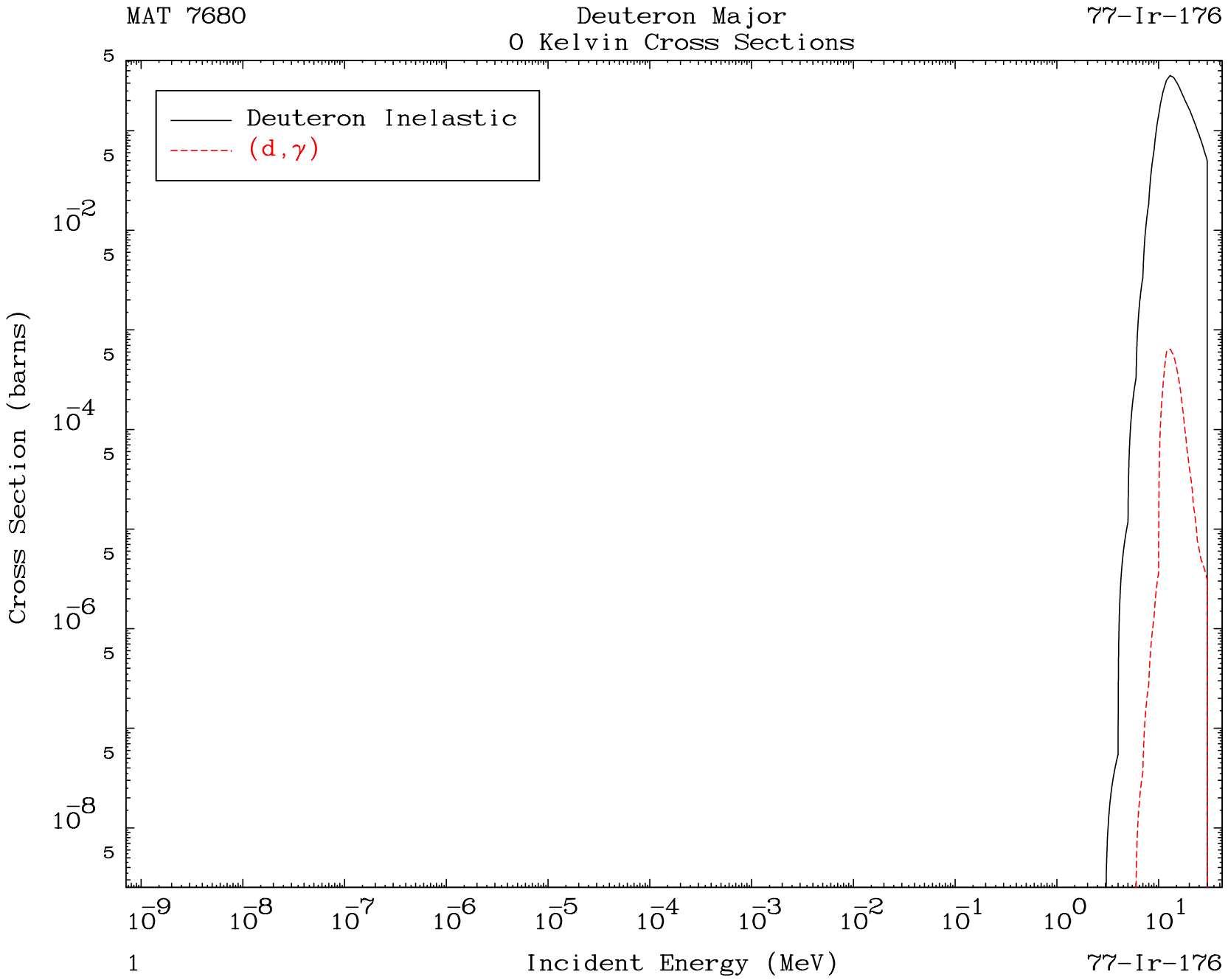
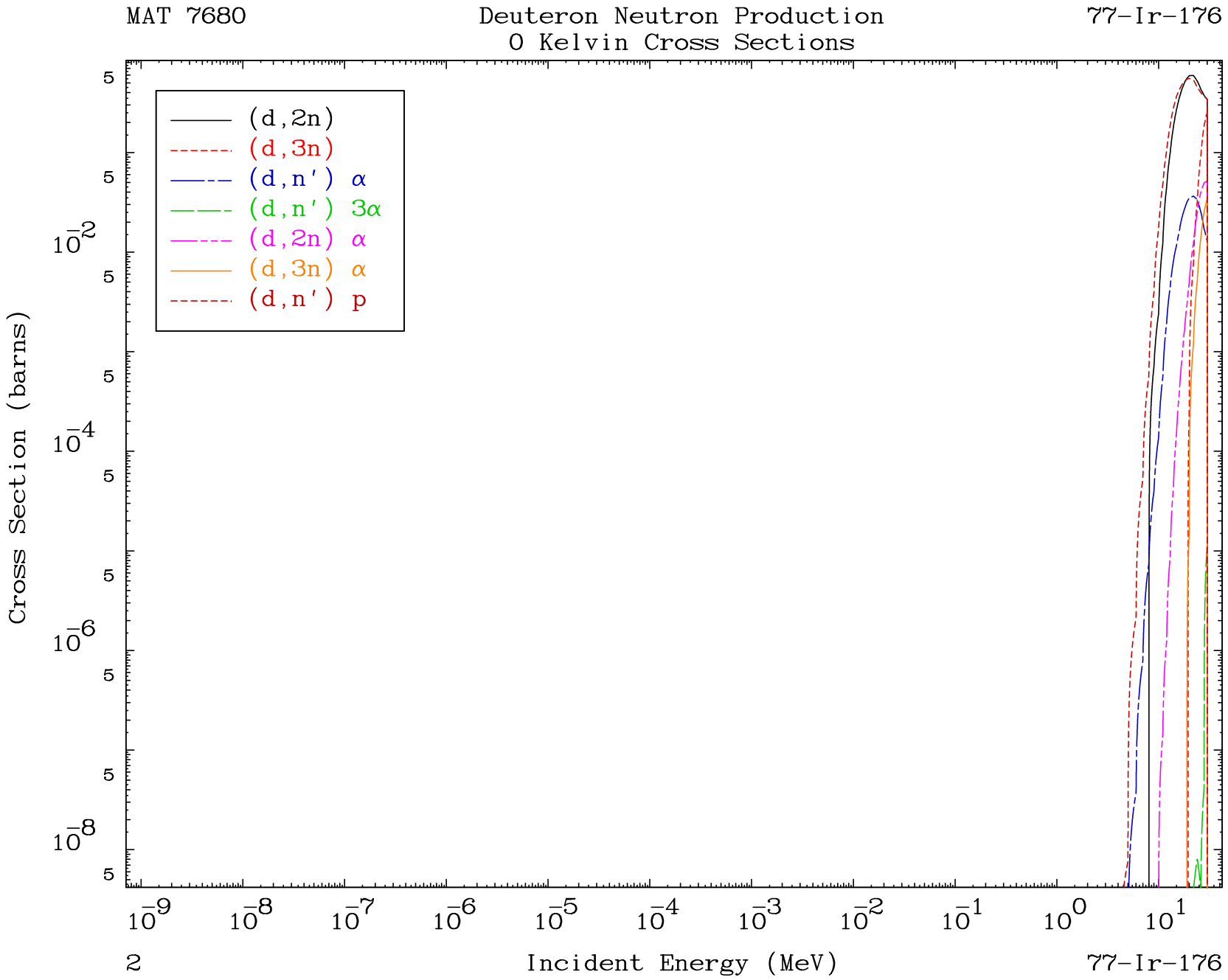
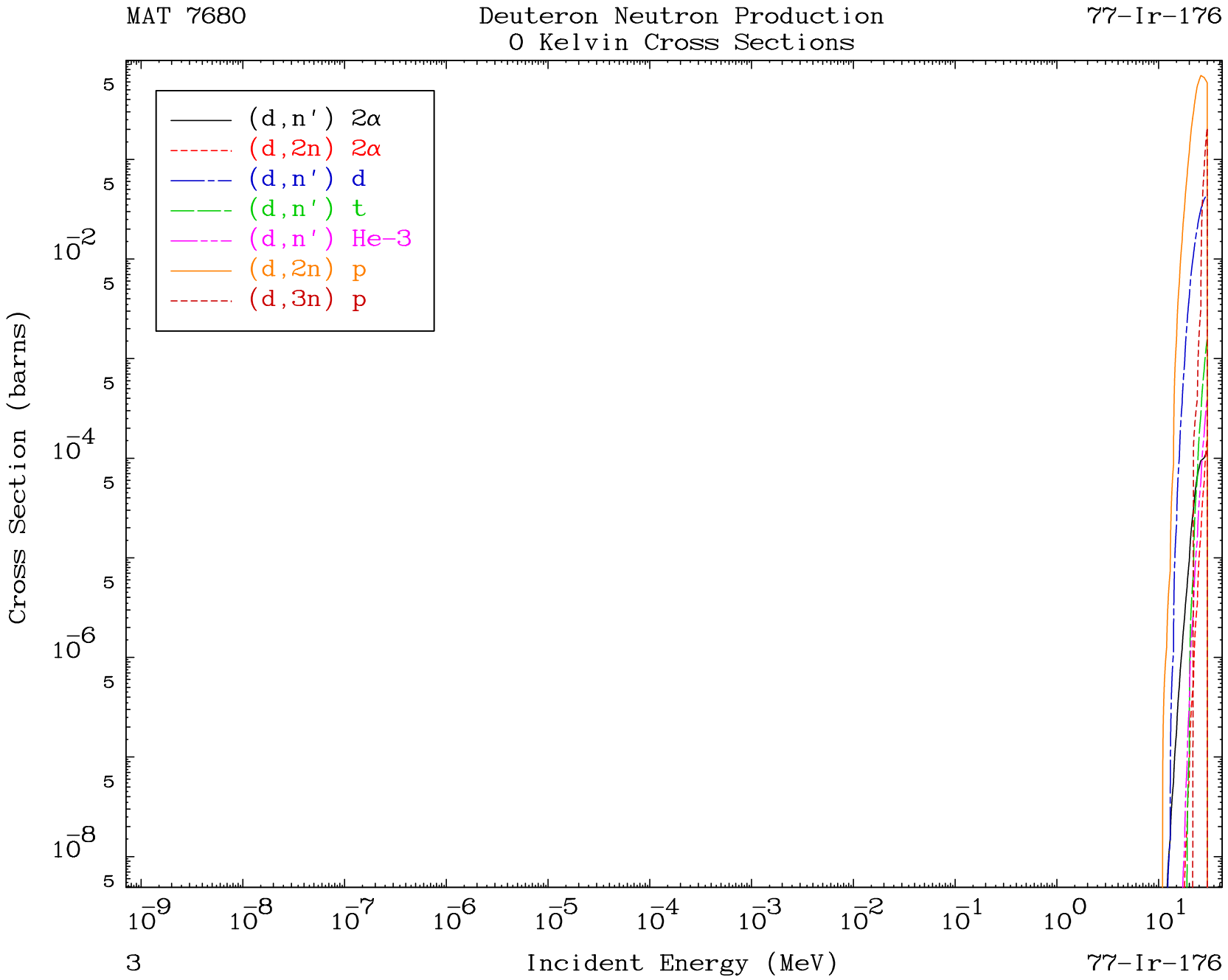
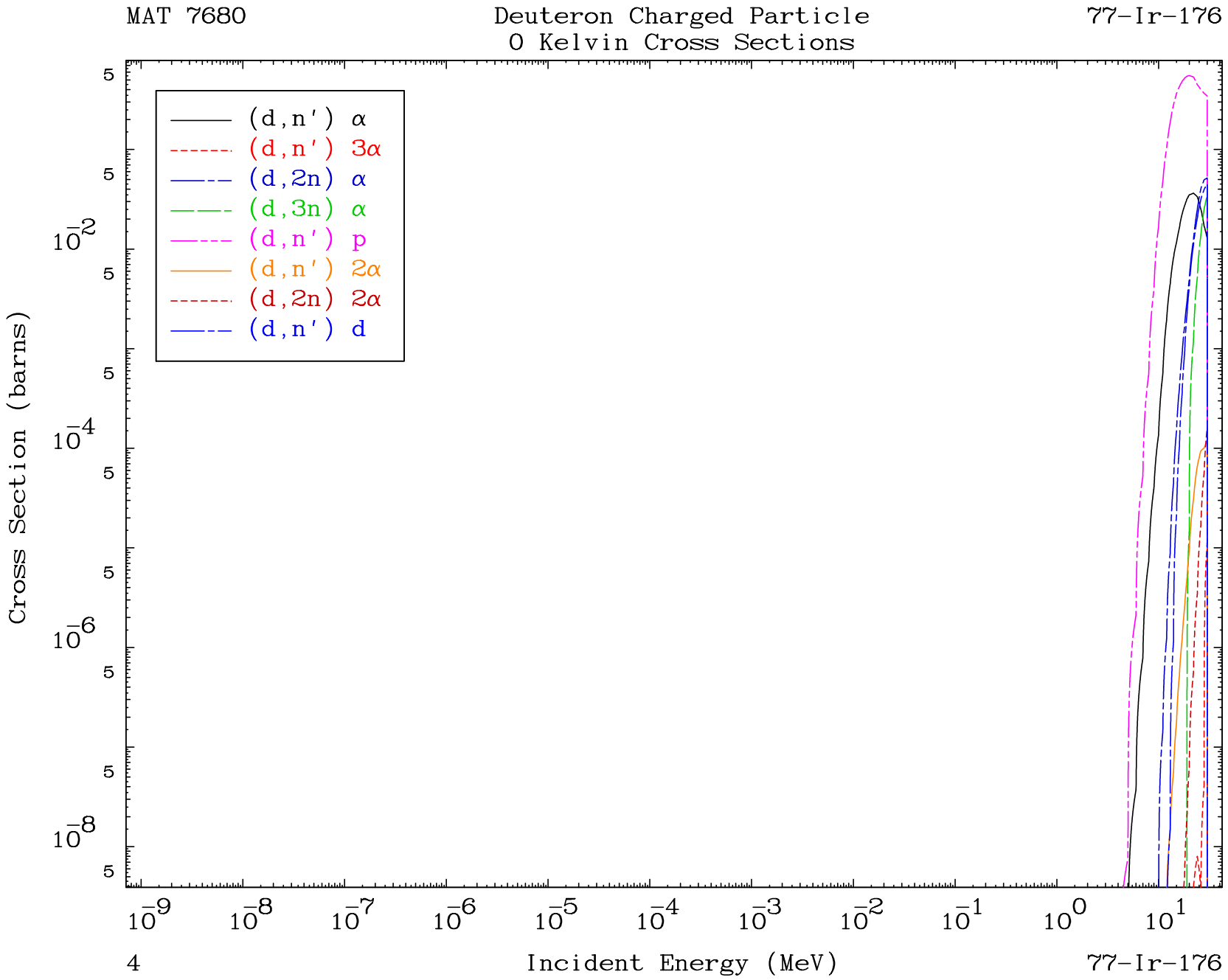
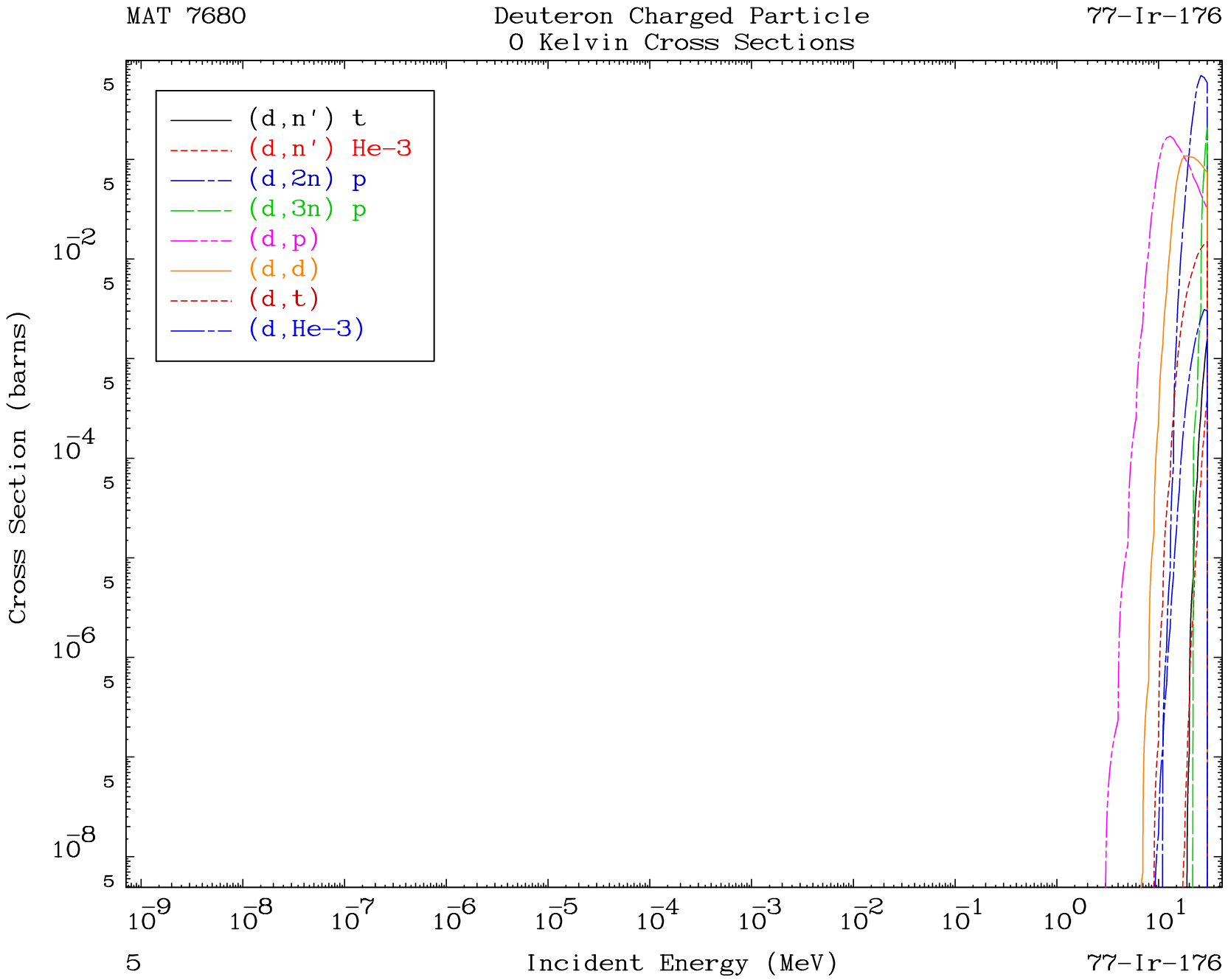
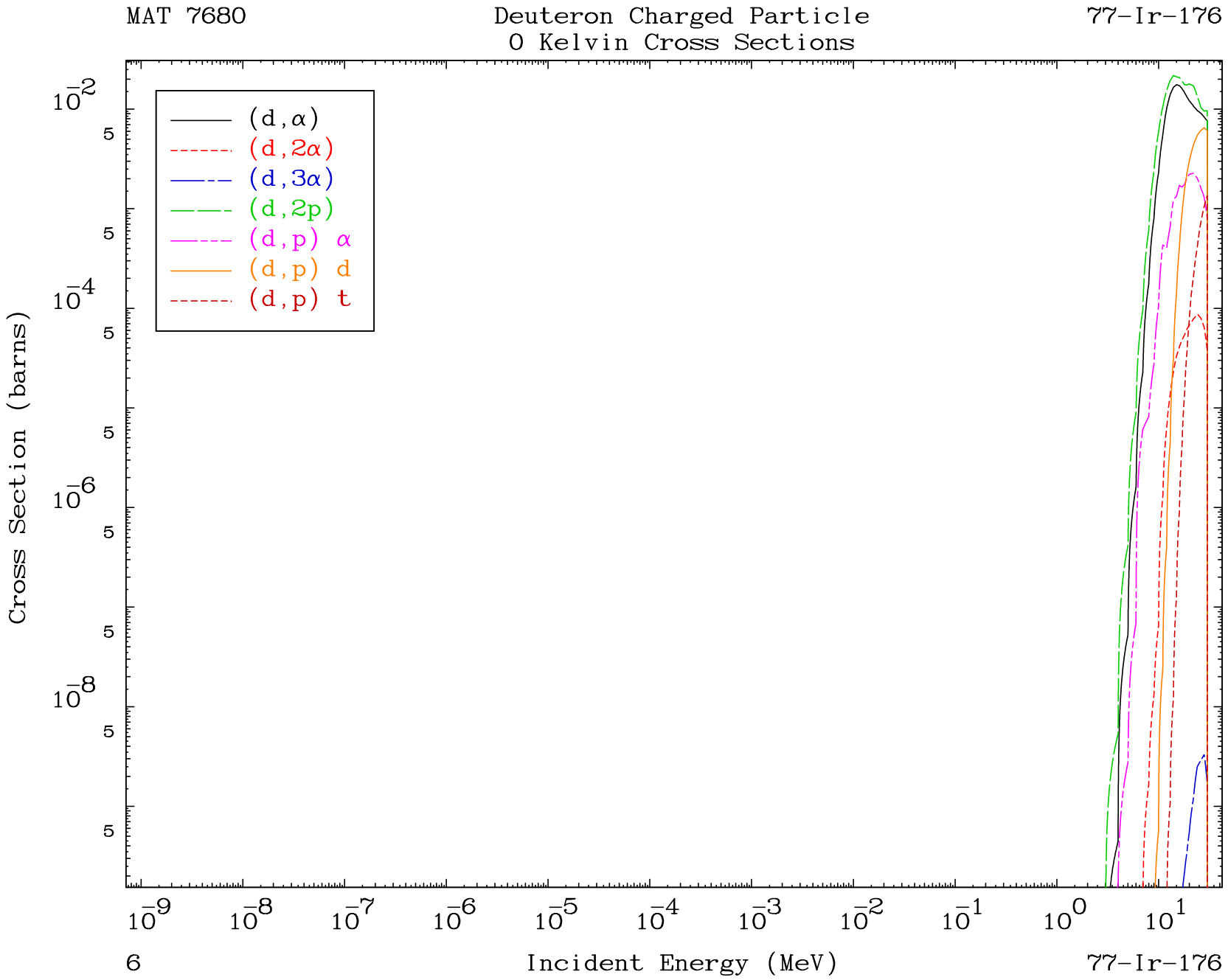

MAT 7680
Deuteron Major
77-Ir-176
0 Kelvin Cross Sections
Deuteron Inelastic
(d,γ)
Cross Section (barns)
Incident Energy (MeV)
77-Ir-176

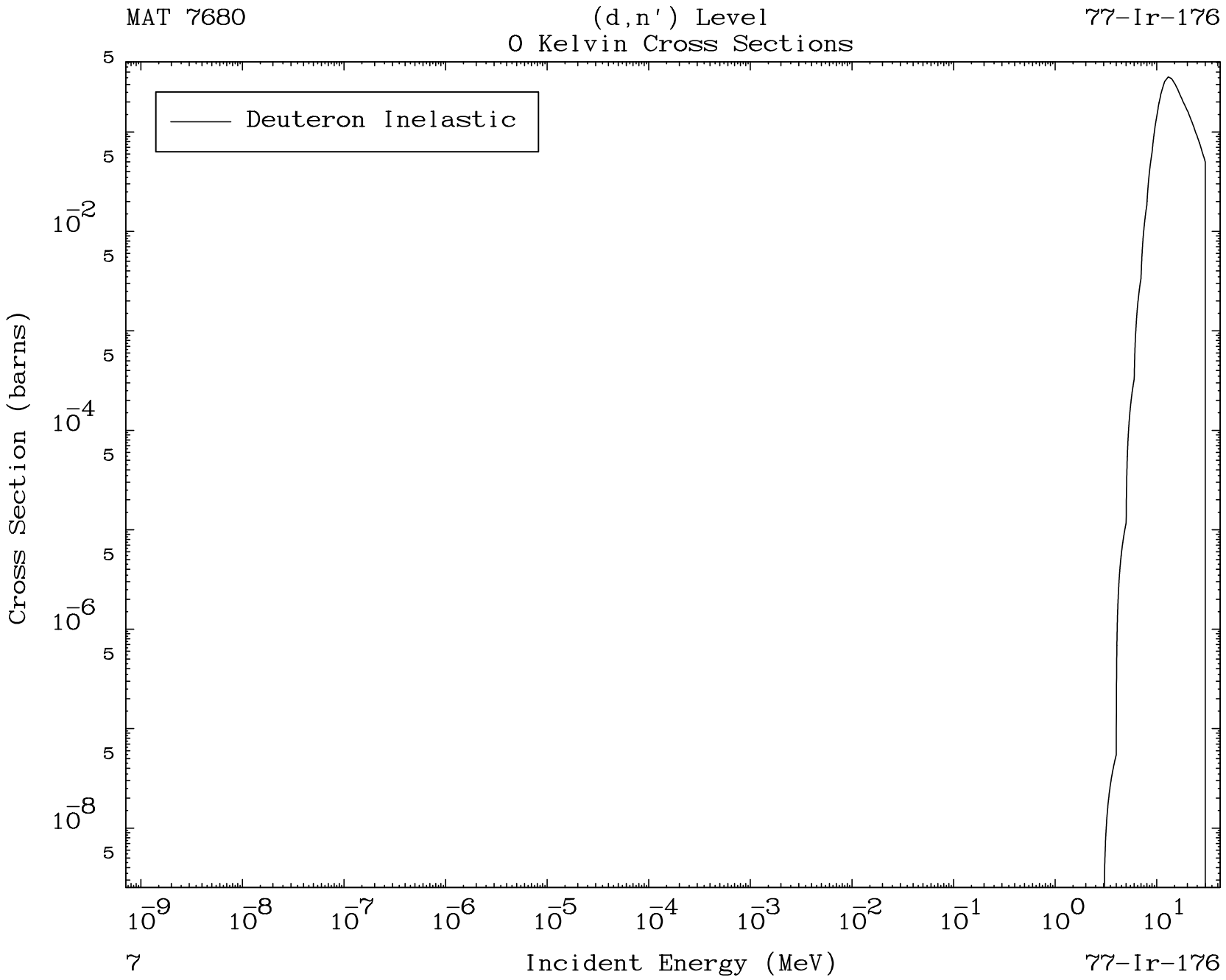

MAT 7680
Deuteron Neutron Production
0 Kelvin Cross Sections
77-Ir-176
(d,2n)
(d,3n)
(d,n') α
(d,n') 3α
(d,2n) α
(d,3n) α
(d,n') p
Cross Section (barns)
Incident Energy (MeV)
77-Ir-176
2

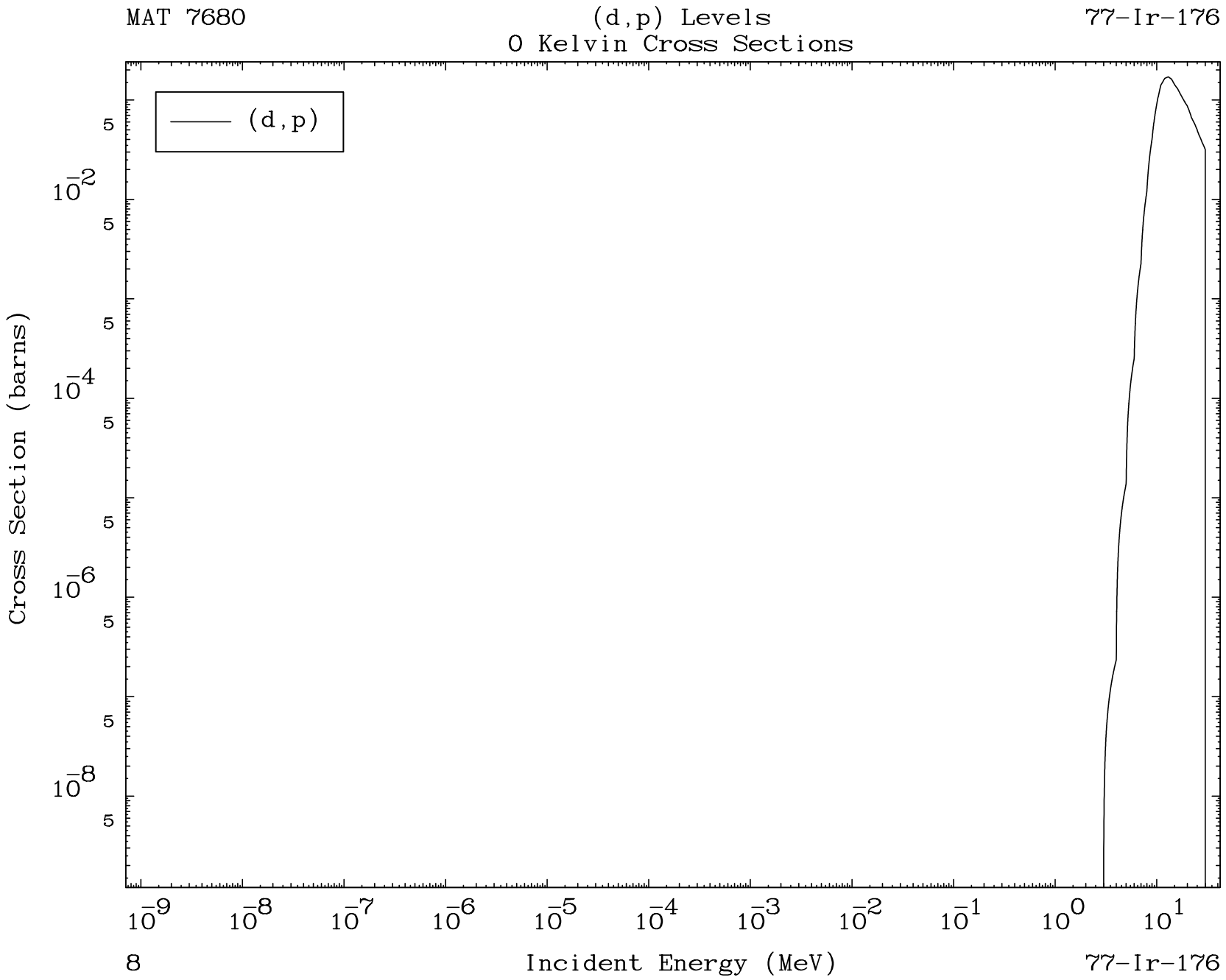

MAT 7680
Deuteron Neutron Production
0 Kelvin Cross Sections
77-Ir-176
(d,n') 2α
(d,2n) 2α
(d,n') d
(d,n') t
(d,n') He-3
(d,2n) p
(d,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
77-Ir-176

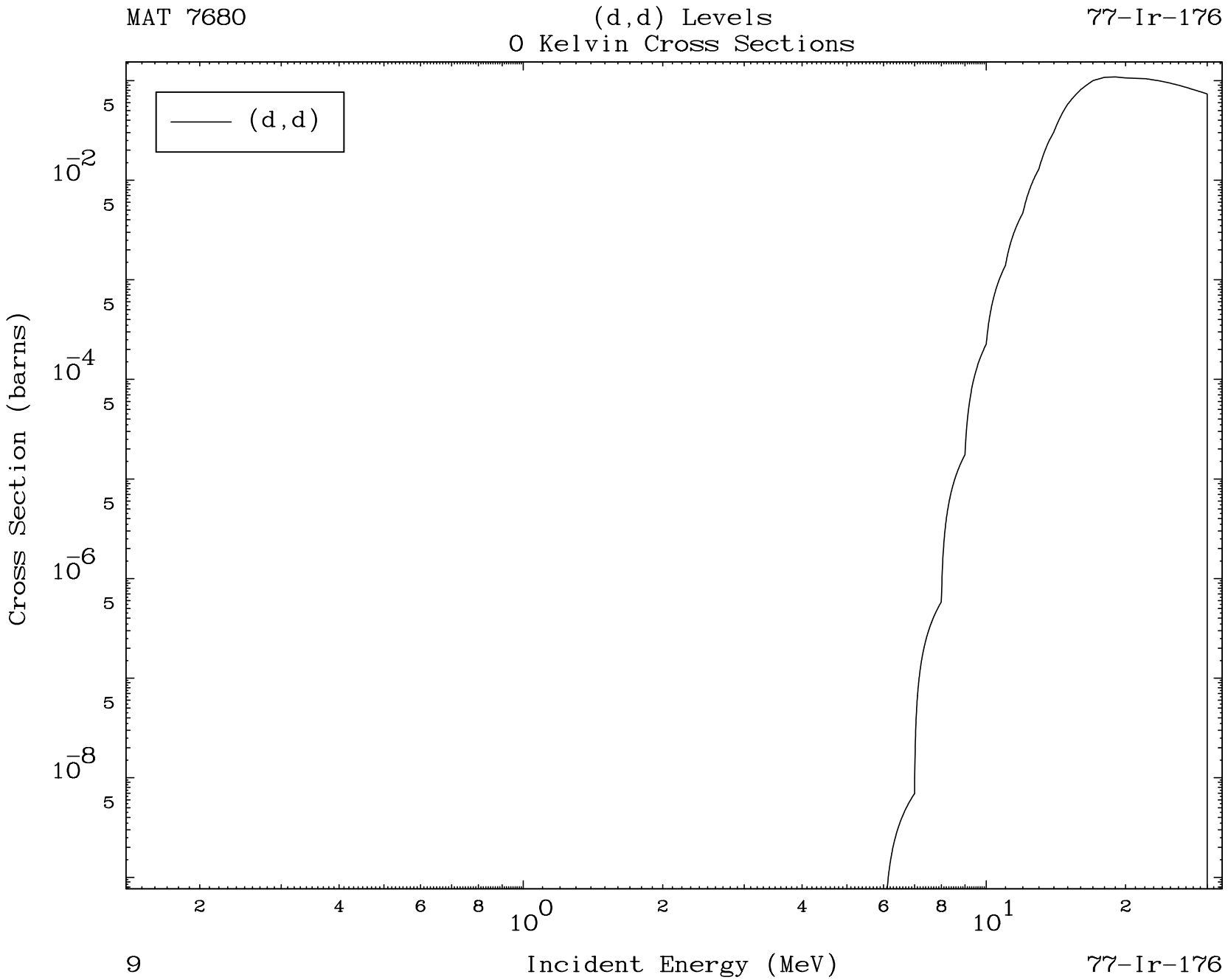

MAT 7680
Deuteron Charged Particle
0 Kelvin Cross Sections
77-Ir-176
(d,n') α
(d,n') 3α
(d,2n) α
(d,3n) α
(d,n') p
(d,n') 2α
(d,2n) 2α
(d,n') d
Cross Section (barns)
Incident Energy (MeV)
4
77-Ir-176

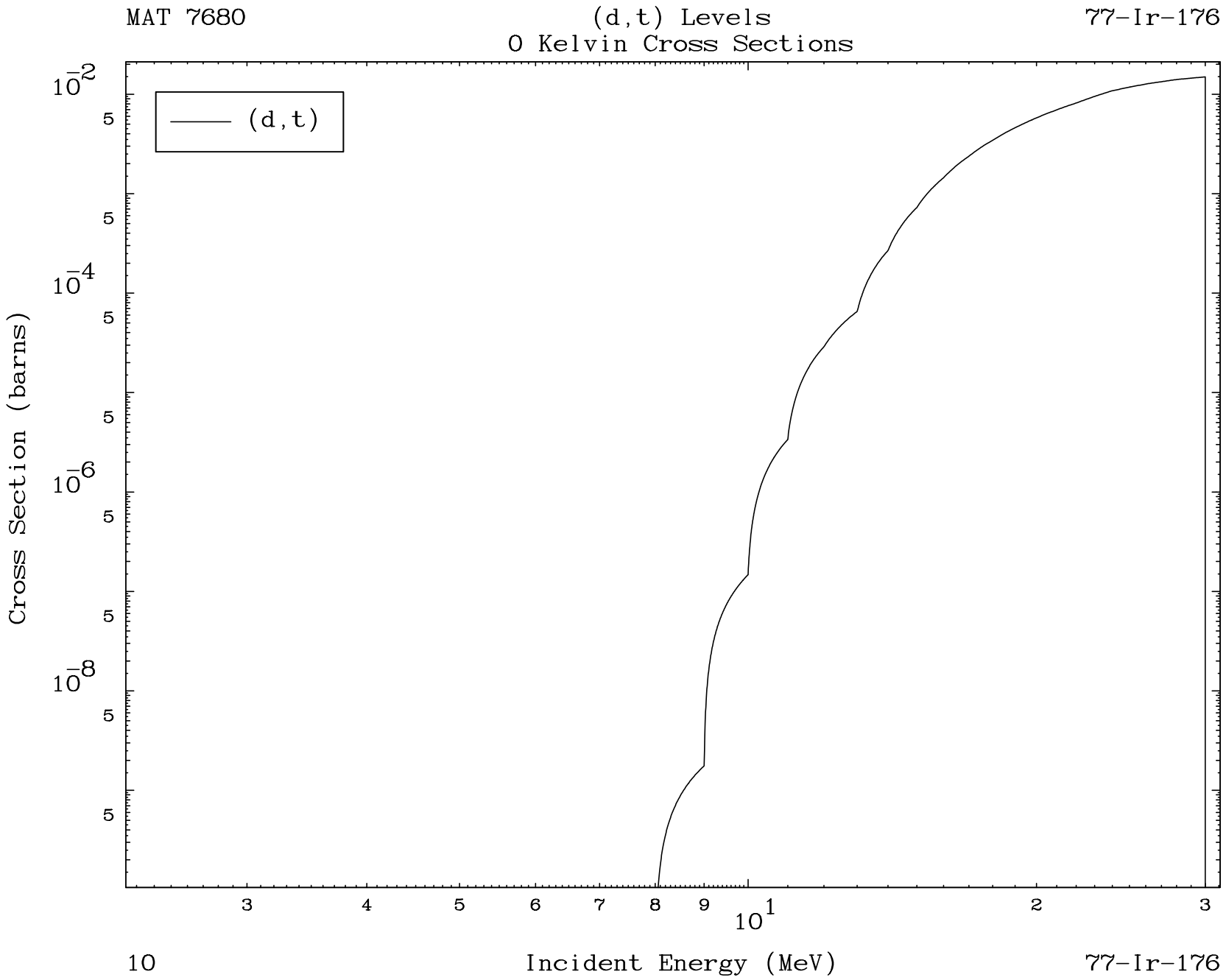

MAT 7680
Deuteron Charged Particle
0 Kelvin Cross Sections
77-Ir-176
(d,n') t
(d,n') He-3
(d,2n) p
(d,3n) p
(d,p)
(d,d)
(d,t)
(d,He-3)
Cross Section (barns)
Incident Energy (MeV)
77-Ir-176

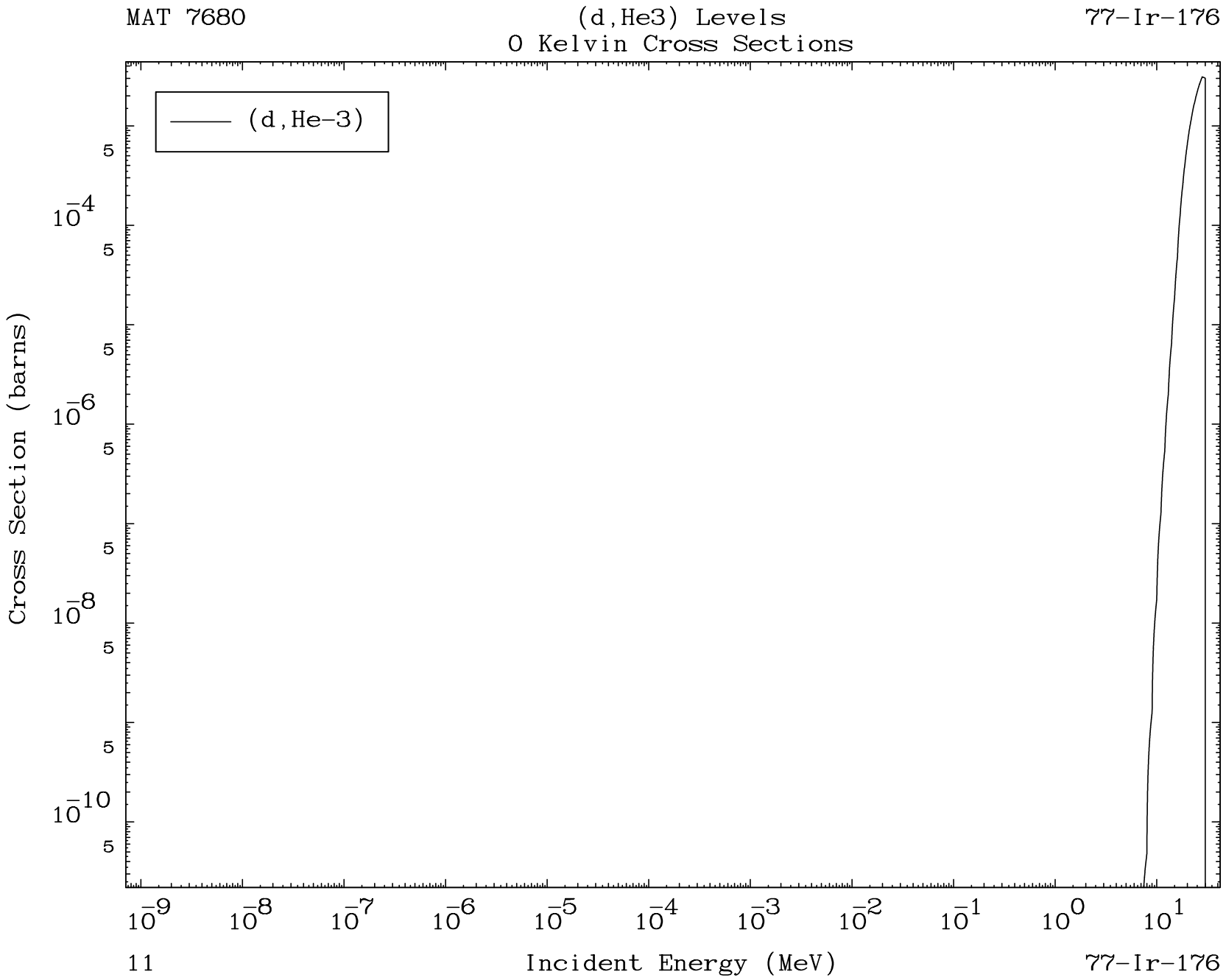

MAT 7680
Deuteron Charged Particle
0 Kelvin Cross Sections
77-Ir-176
(d,α)
(d,2α)
(d,3α)
(d,2p)
(d,p) α
(d,p) d
(d,p) t
Cross Section (barns)
Incident Energy (MeV)
6
77-Ir-176

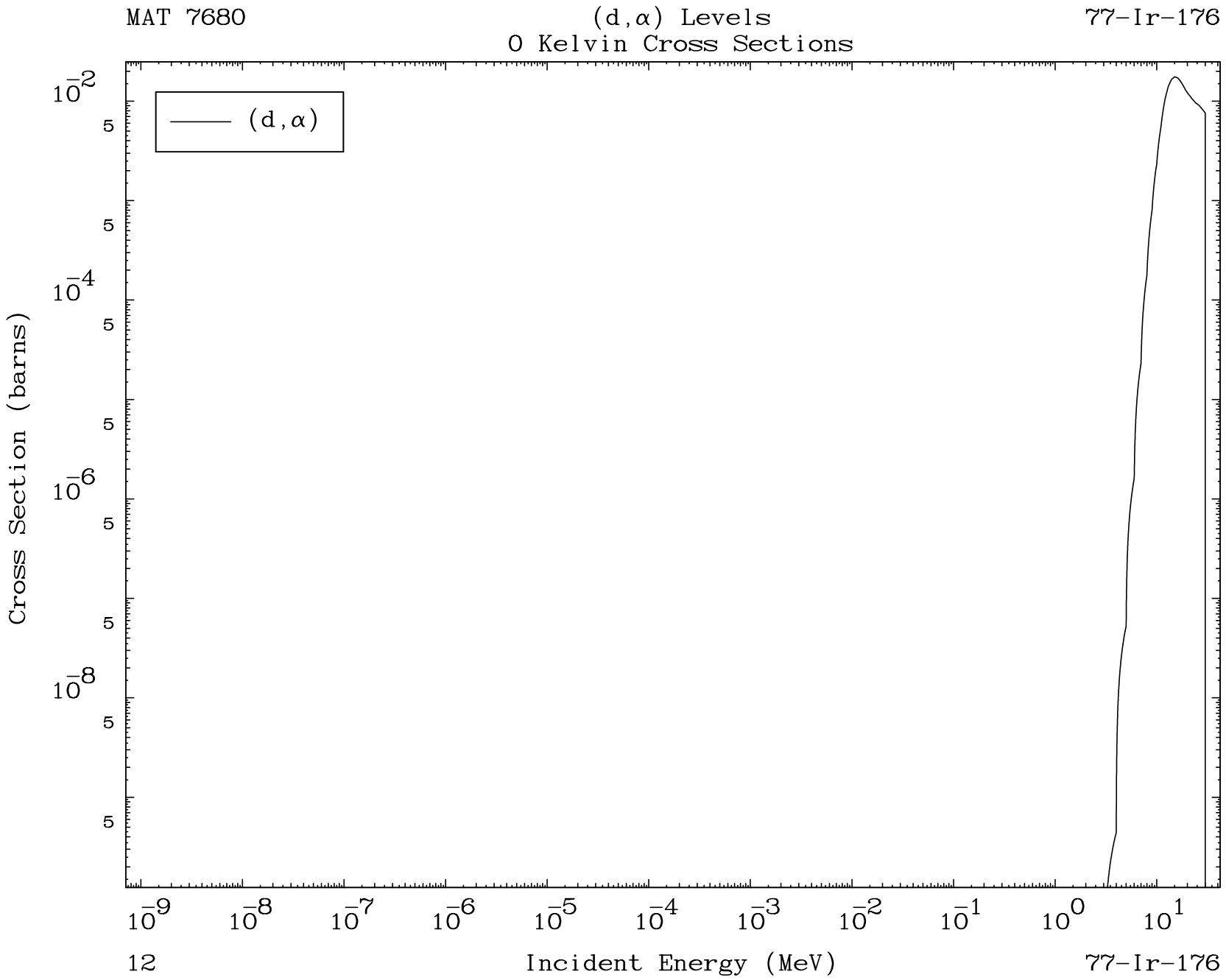

MAT 7680
(d,n') Level
77-Ir-176
0 Kelvin Cross Sections
Deuteron Inelastic
Cross Section (barns)
Incident Energy (MeV)
7
77-Ir-176

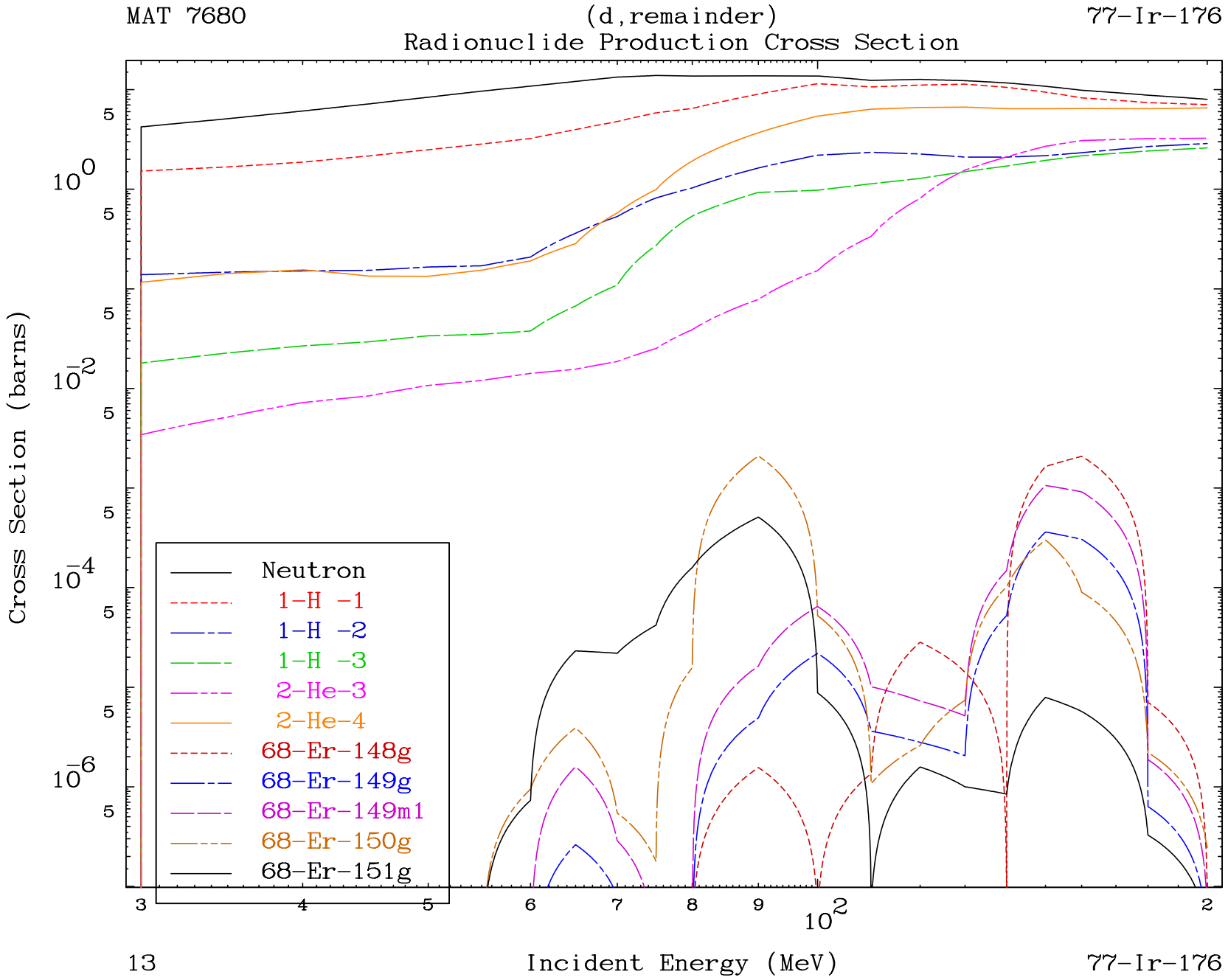

MAT 7680
(d,p) Levels
77-Ir-176
0 Kelvin Cross Sections
(d,p)
Cross Section (barns)
Incident Energy (MeV)
77-Ir-176
8

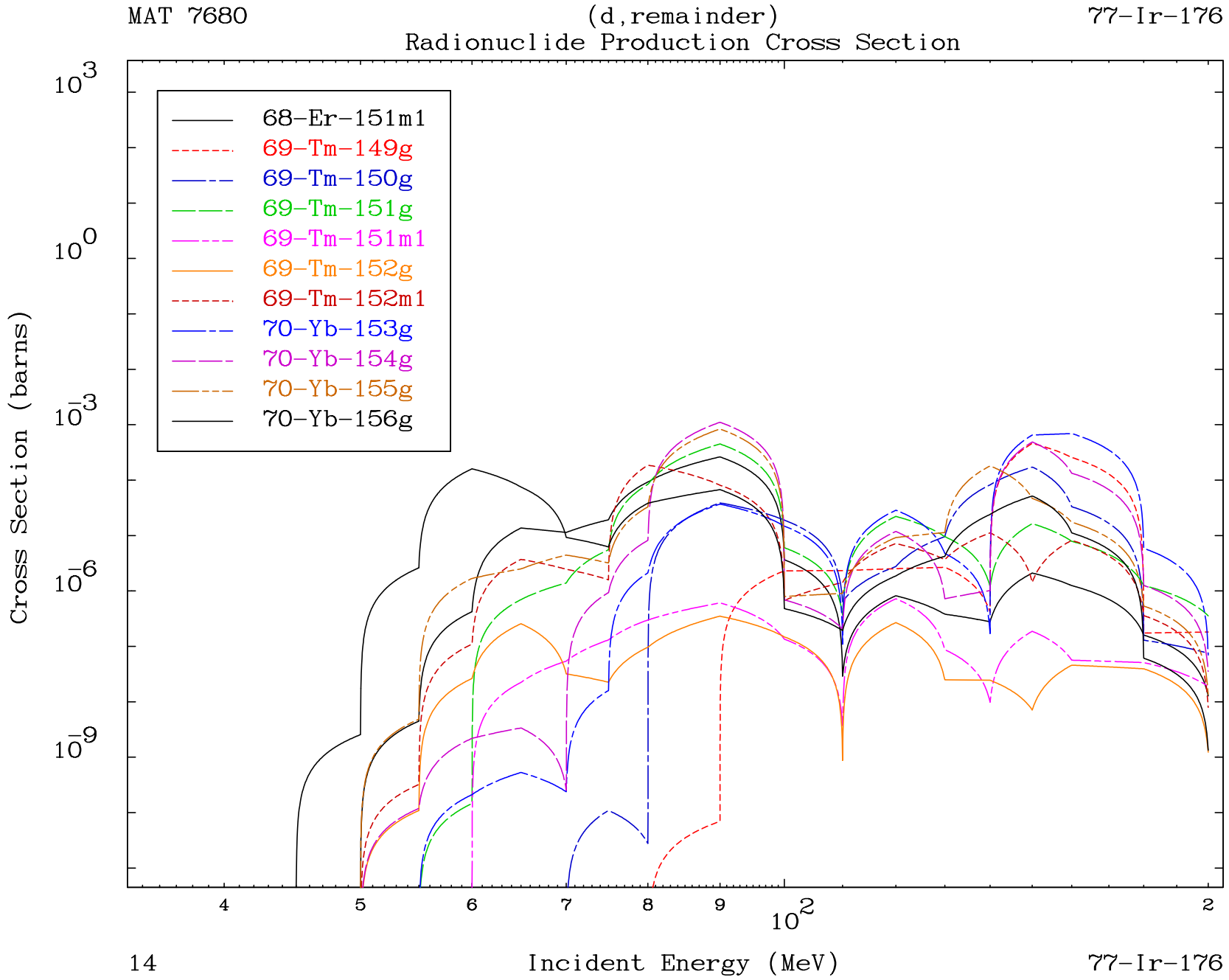

MAT 7680
(d,d) Levels
77-Ir-176
0 Kelvin Cross Sections
(d,d)
Cross Section (barns)
10-2
10-4
10-6
10-8
100
101
Incident Energy (MeV)
9
77-Ir-176

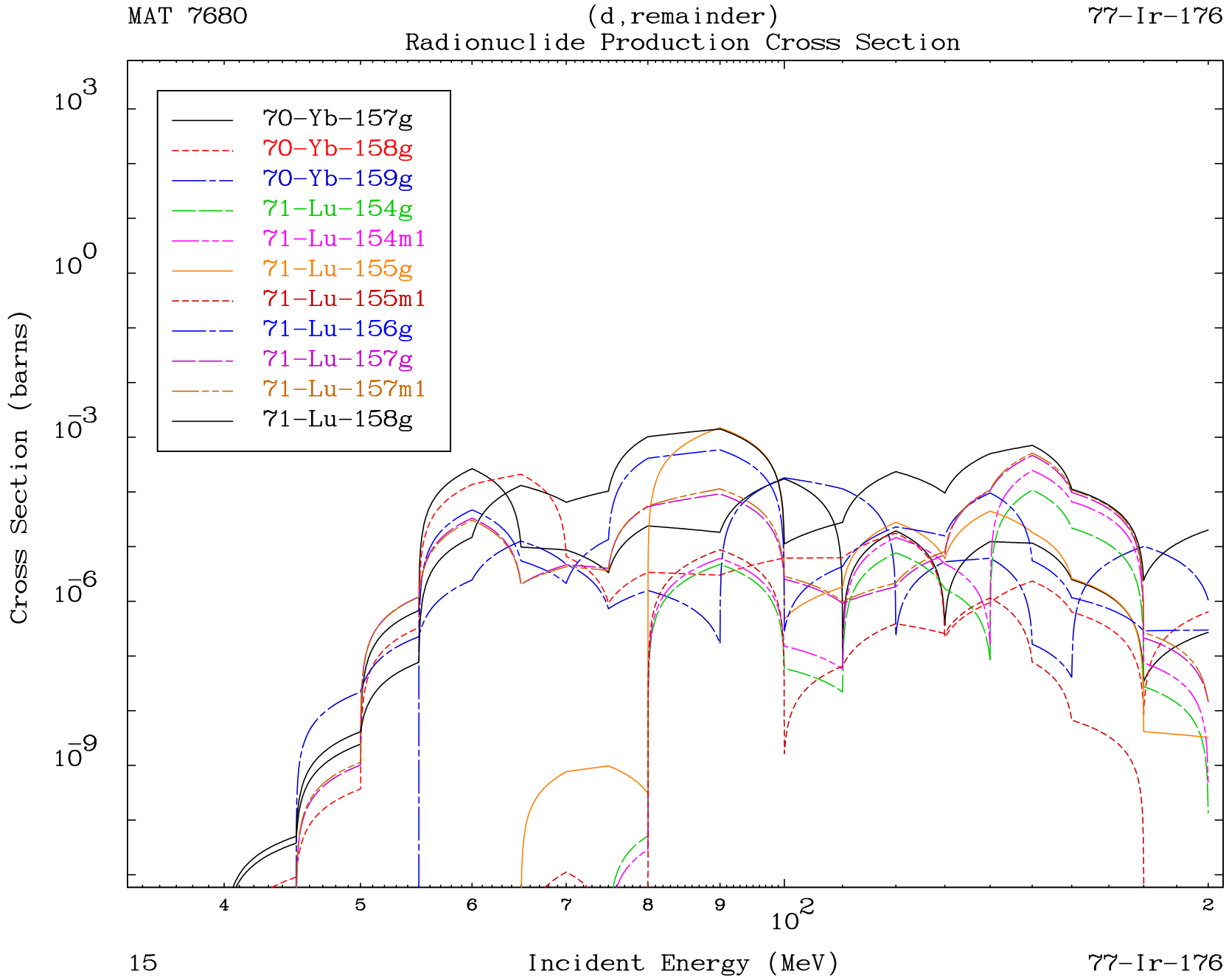

MAT 7680
(d,t) Levels
77-Ir-176
0 Kelvin Cross Sections
(d,t)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
5
3
4
5
6
7
8
9
10^1
2
3
10
Incident Energy (MeV)
77-Ir-176

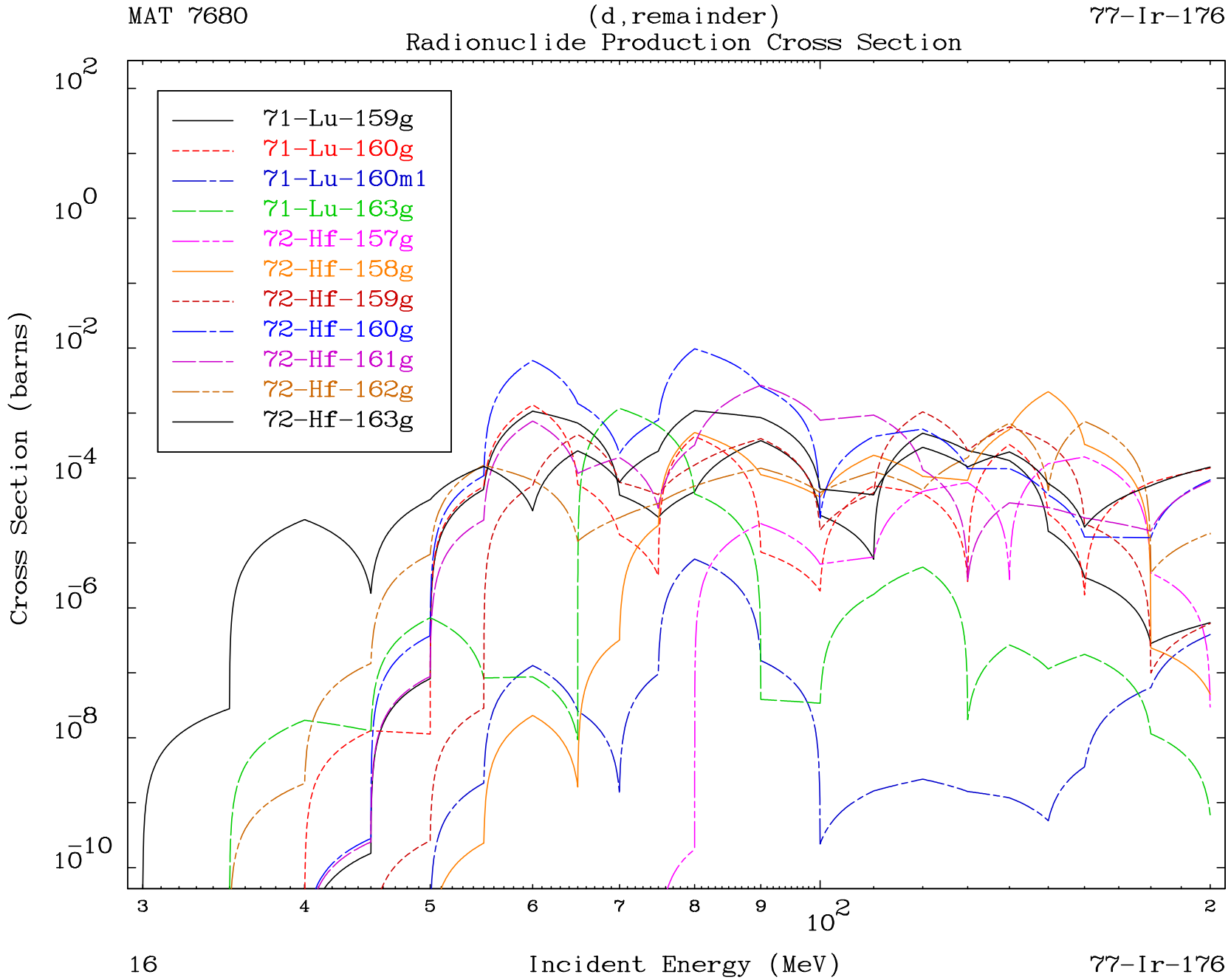

MAT 7680
(d,He3) Levels
77-Ir-176
0 Kelvin Cross Sections
(d,He-3)
Cross Section (barns)
Incident Energy (MeV)
11
77-Ir-176

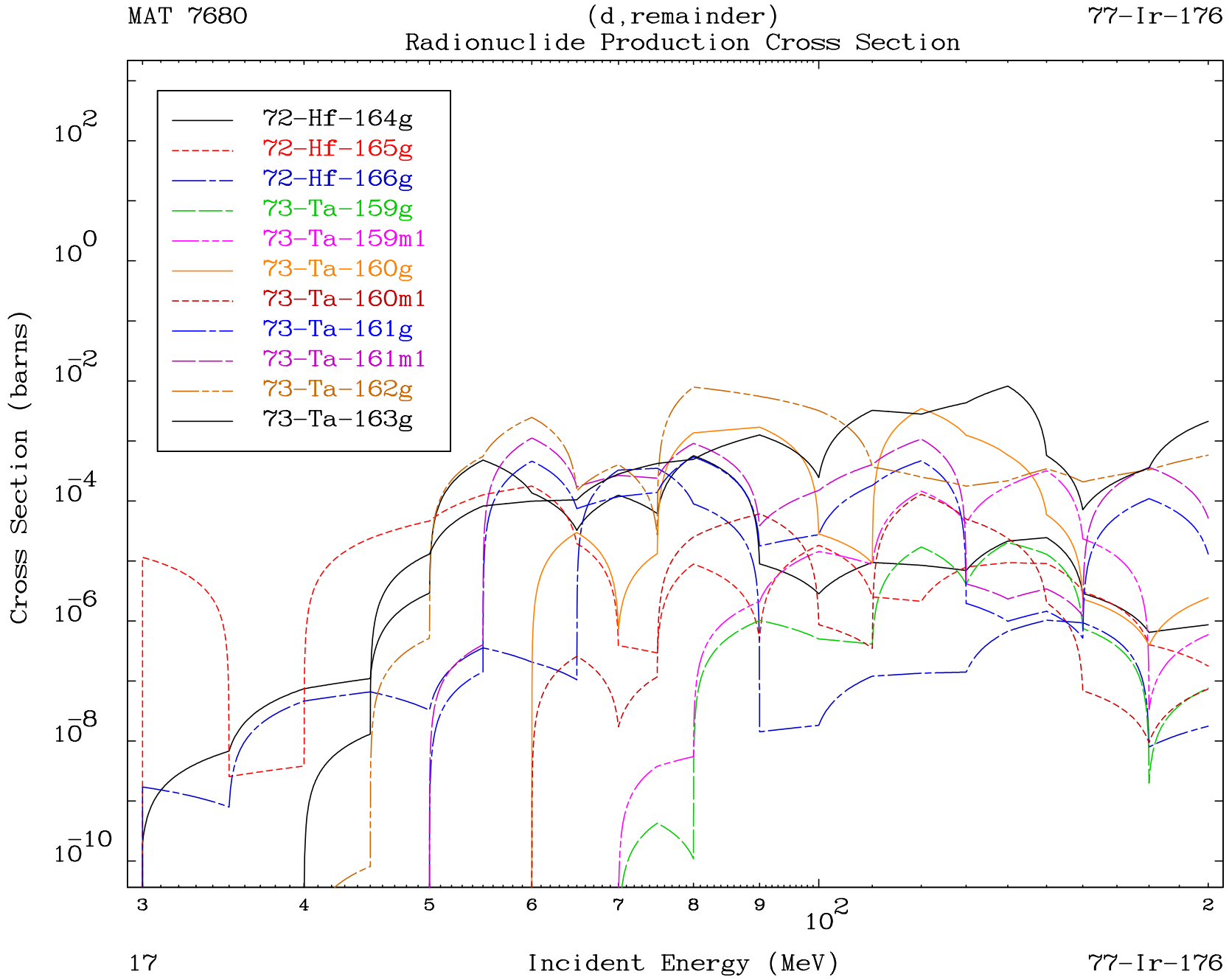

MAT 7680
(d,α) Levels
77-Ir-176
0 Kelvin Cross Sections
(d,α)
Cross Section (barns)
Incident Energy (MeV)
12
77-Ir-176

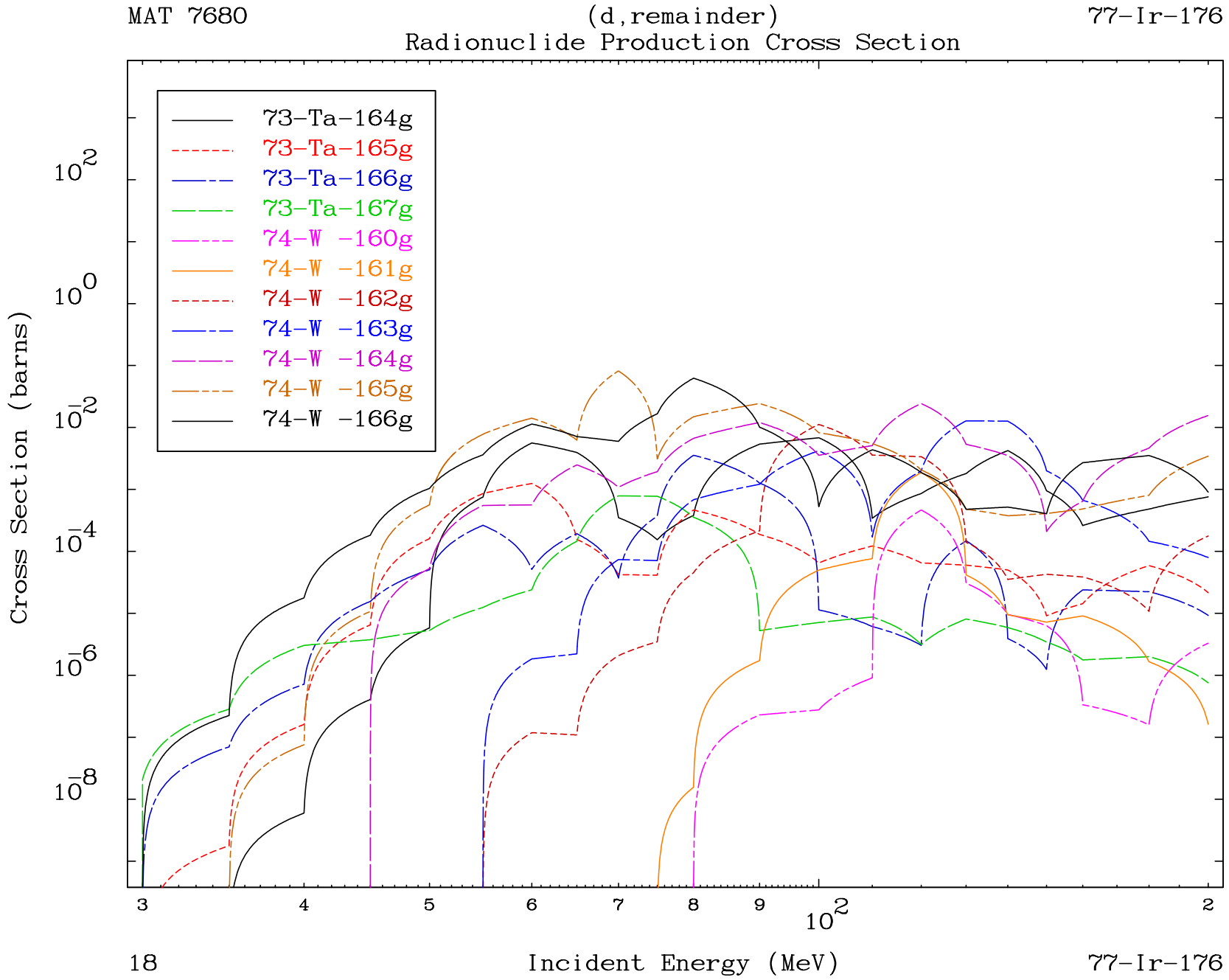

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
68-Er-148g
68-Er-149g
68-Er-149m1
68-Er-150g
68-Er-151g
3
4
5
6
7
8
9
10^2
2
13
Incident Energy (MeV)
77-Ir-176

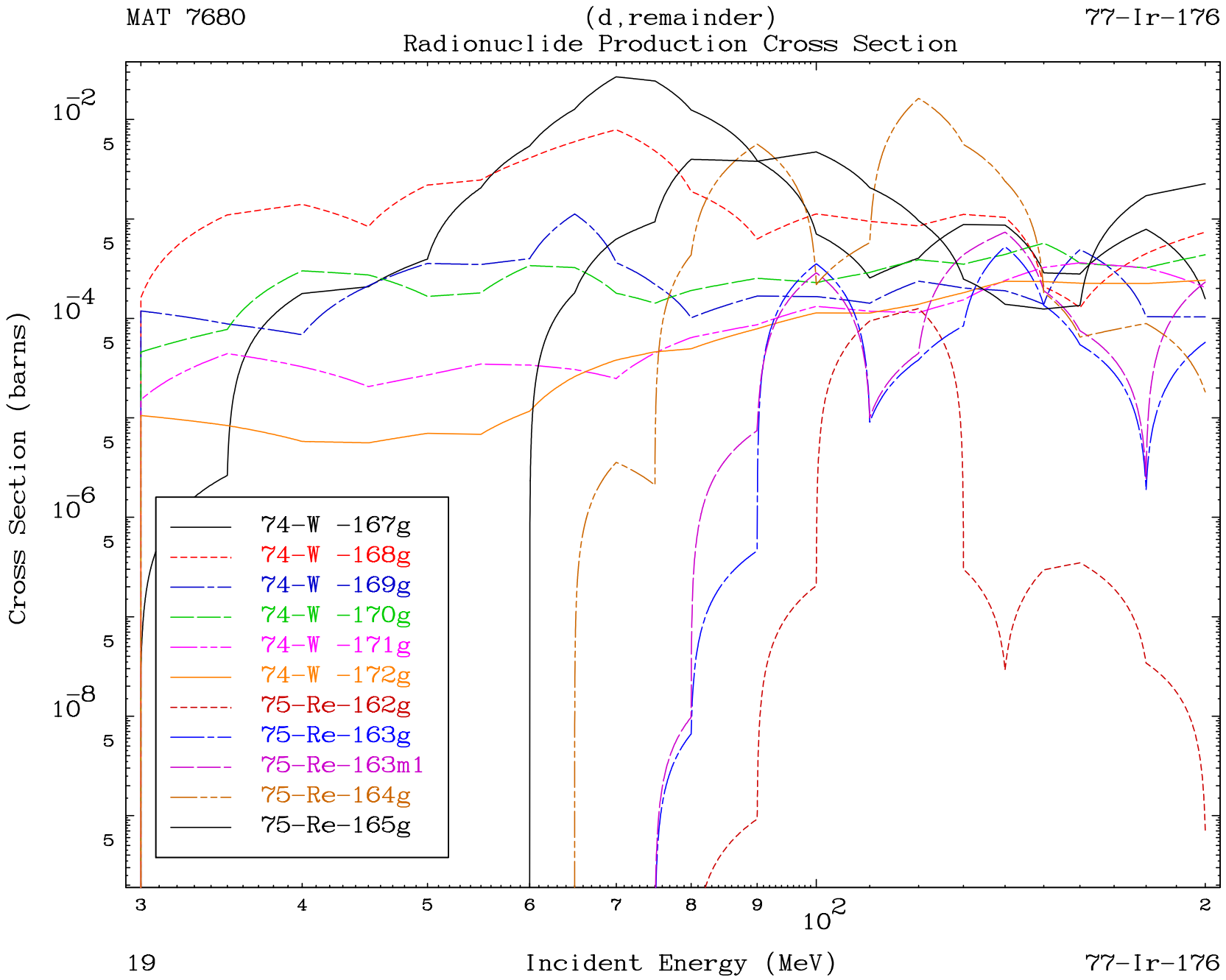

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
68-Er-151m1
69-Tm-149g
69-Tm-150g
69-Tm-151g
69-Tm-151m1
69-Tm-152g
69-Tm-152m1
70-Yb-153g
70-Yb-154g
70-Yb-155g
70-Yb-156g
Cross Section (barns)
10^3
10^0
10^-3
10^-6
10^-9
4
5
6
7
8
9
10^2
2
14
Incident Energy (MeV)
77-Ir-176

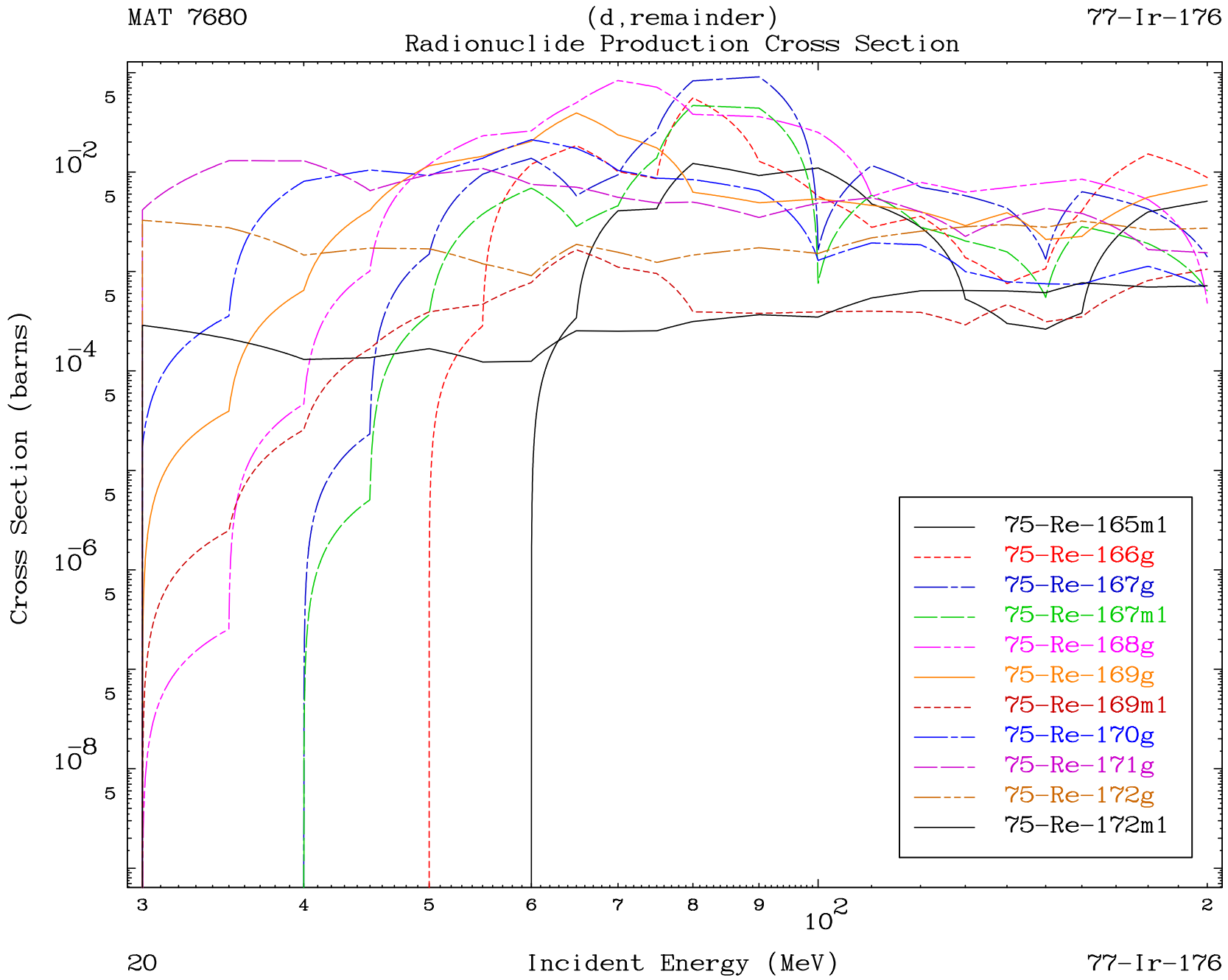

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
70-Yb-157g
70-Yb-158g
70-Yb-159g
71-Lu-154g
71-Lu-154m1
71-Lu-155g
71-Lu-155m1
71-Lu-156g
71-Lu-157g
71-Lu-157m1
71-Lu-158g
Cross Section (barns)
10^3
10^0
10^-3
10^-6
10^-9
4
5
6
7
8
9
10^2
2
15
Incident Energy (MeV)
77-Ir-176

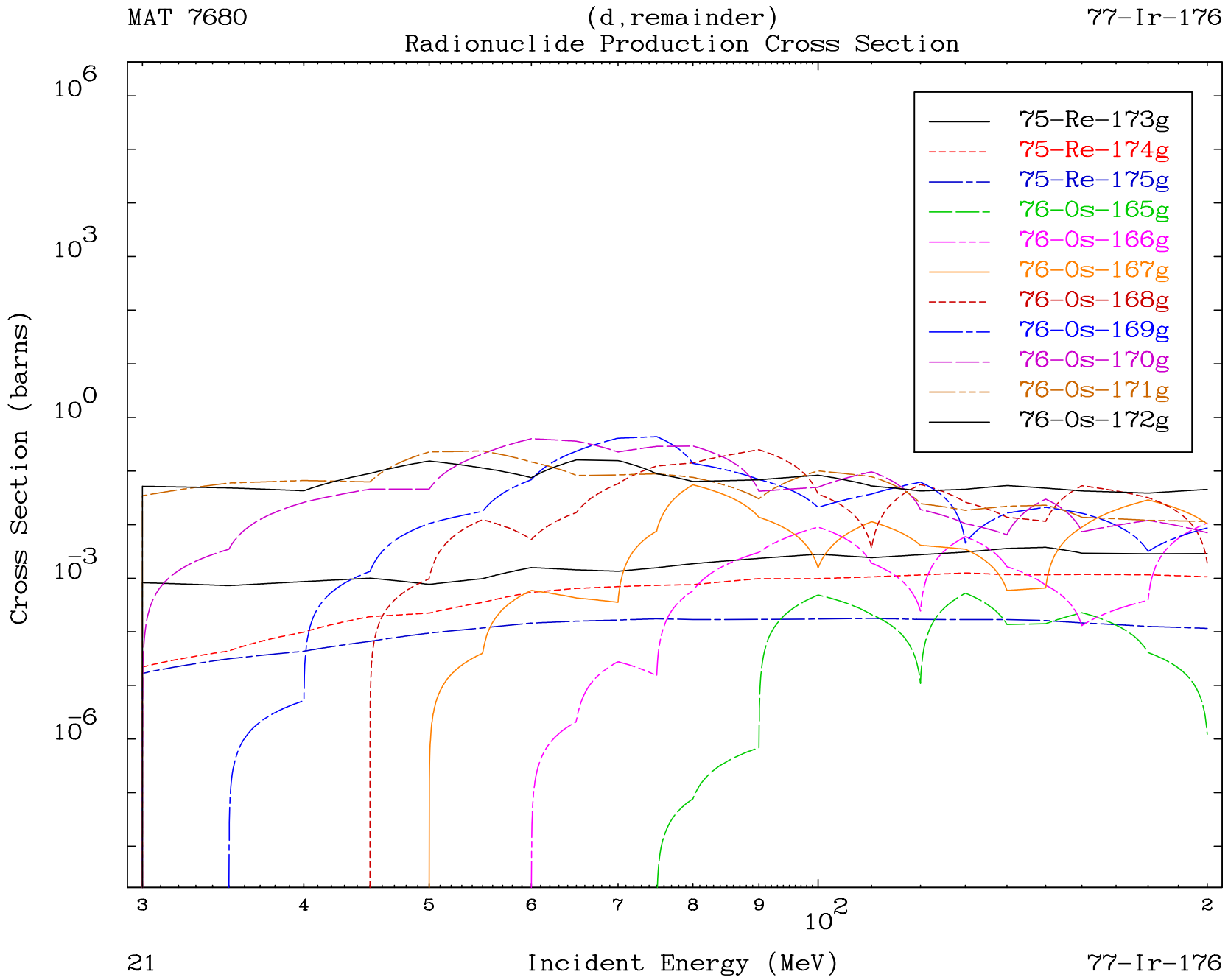

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
71-Lu-159g
71-Lu-160g
71-Lu-160m1
71-Lu-163g
72-Hf-157g
72-Hf-158g
72-Hf-159g
72-Hf-160g
72-Hf-161g
72-Hf-162g
72-Hf-163g
Cross Section (barns)
Incident Energy (MeV)
16
77-Ir-176

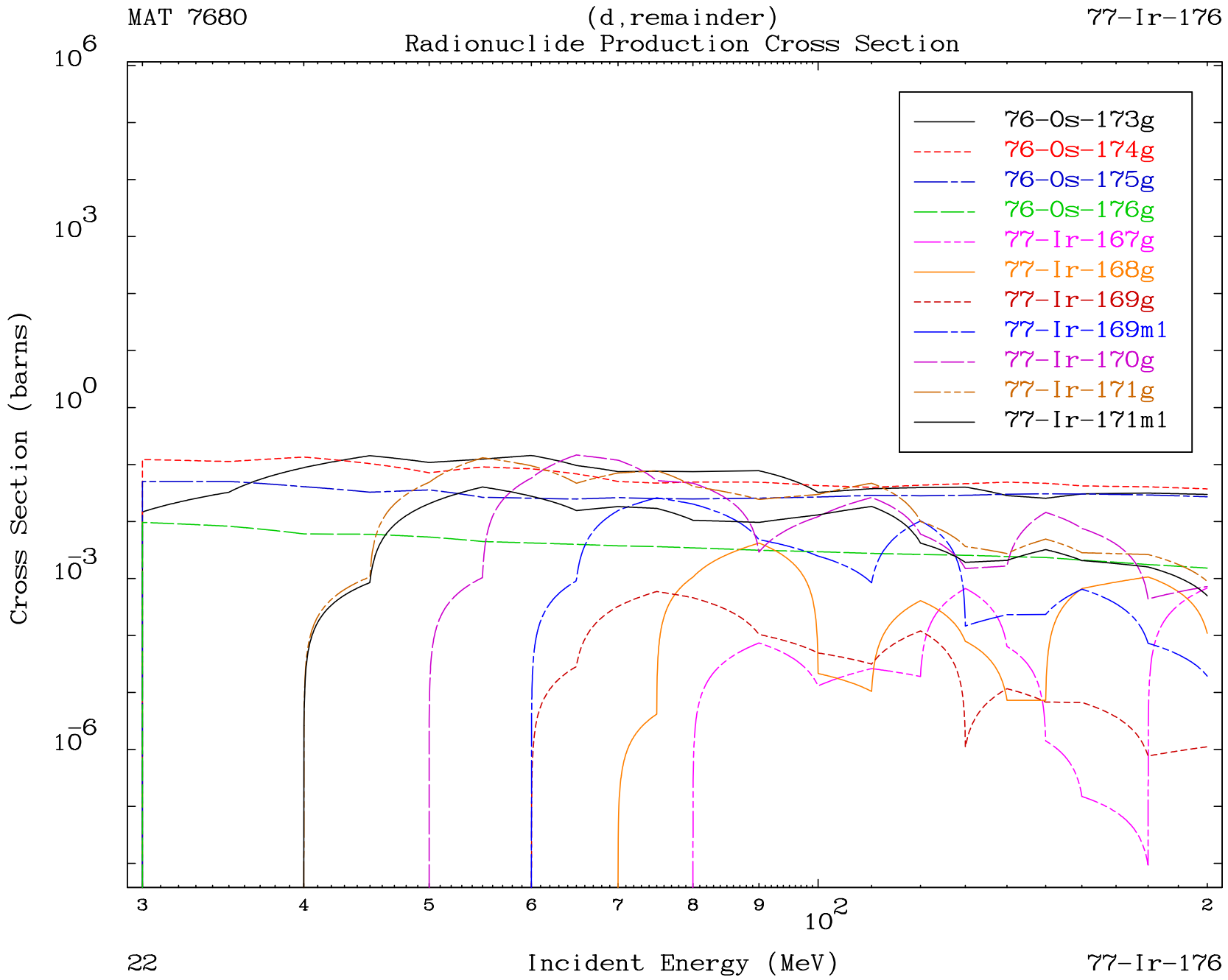

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
72-Hf-164g
72-Hf-165g
72-Hf-166g
73-Ta-159g
73-Ta-159m1
73-Ta-160g
73-Ta-160m1
73-Ta-161g
73-Ta-161m1
73-Ta-162g
73-Ta-163g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
10^-10
3
4
5
6
7
8
9
10^2
2
17
Incident Energy (MeV)
77-Ir-176

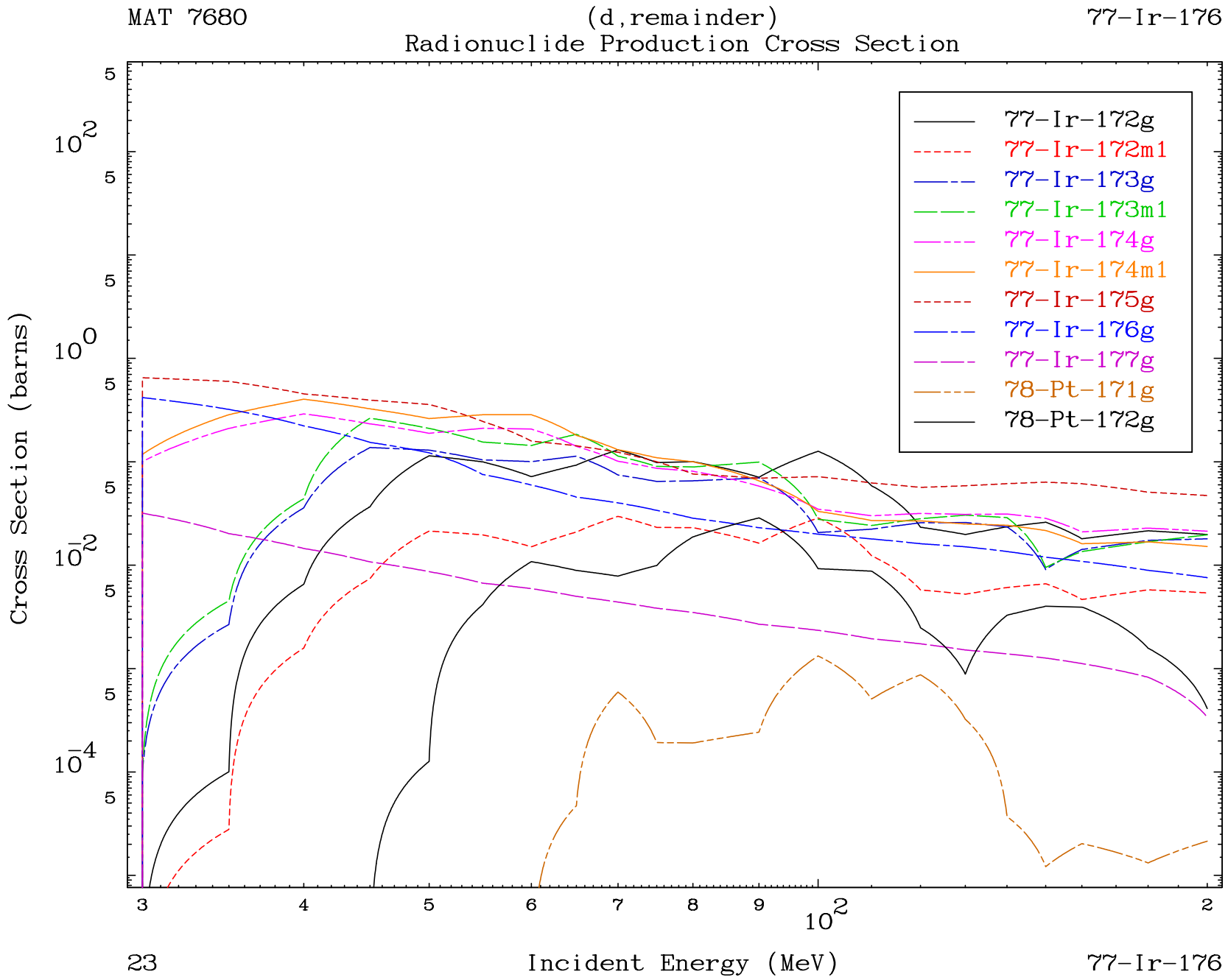

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
73-Ta-164g
73-Ta-165g
73-Ta-166g
73-Ta-167g
74-W -160g
74-W -161g
74-W -162g
74-W -163g
74-W -164g
74-W -165g
74-W -166g
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
10^-8
3
4
5
6
7
8
9
10^2
2
18
Incident Energy (MeV)
77-Ir-176

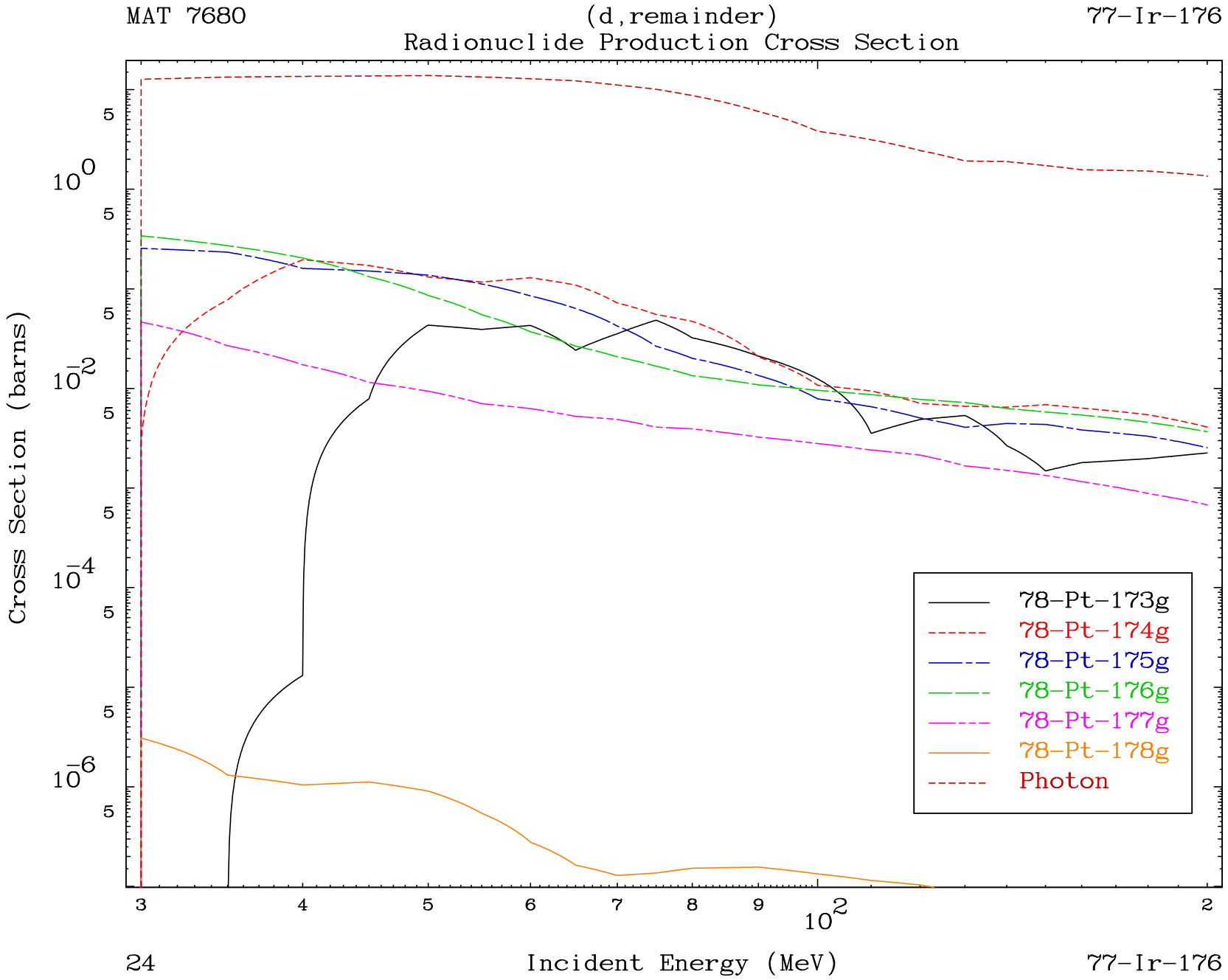

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
74-W -167g
74-W -168g
74-W -169g
74-W -170g
74-W -171g
74-W -172g
75-Re-162g
75-Re-163g
75-Re-163m1
75-Re-164g
75-Re-165g
19
Incident Energy (MeV)
77-Ir-176

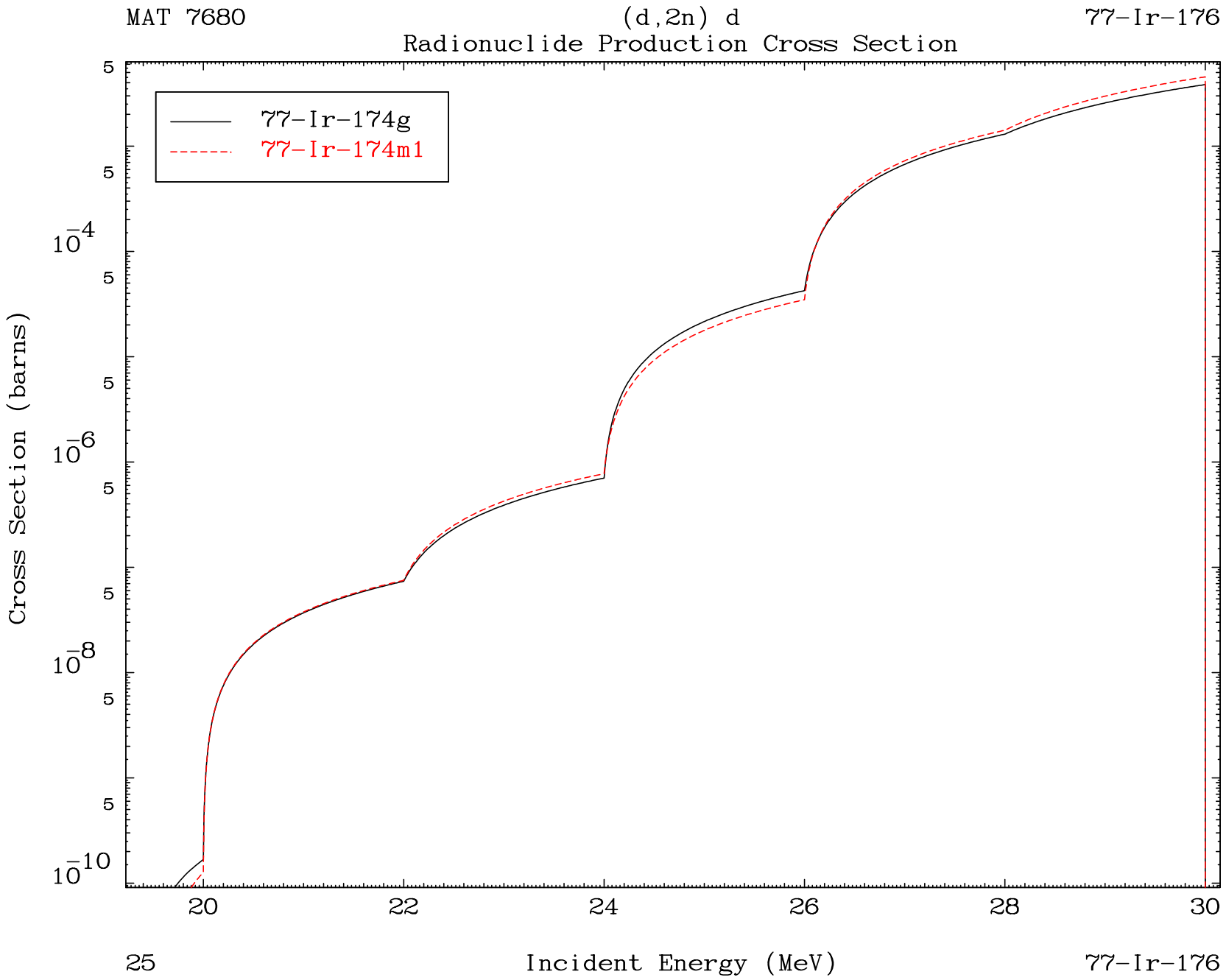

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
20
77-Ir-176
75-Re-165m1
75-Re-166g
75-Re-167g
75-Re-167m1
75-Re-168g
75-Re-169g
75-Re-169m1
75-Re-170g
75-Re-171g
75-Re-172g
75-Re-172m1

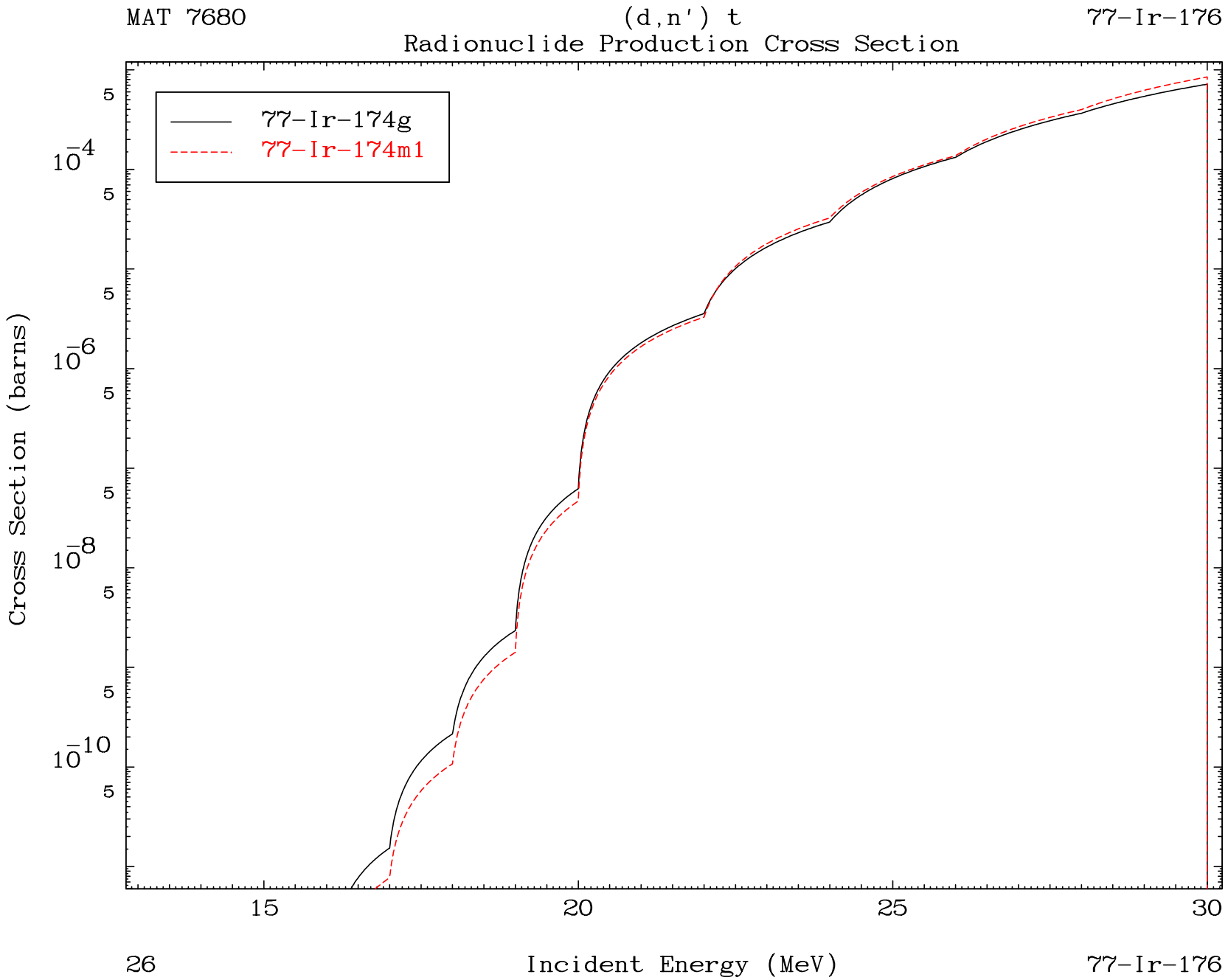

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
75-Re-173g
75-Re-174g
75-Re-175g
76-Os-165g
76-Os-166g
76-Os-167g
76-Os-168g
76-Os-169g
76-Os-170g
76-Os-171g
76-Os-172g
3
4
5
6
7
8
9
10^2
2
21
Incident Energy (MeV)
77-Ir-176

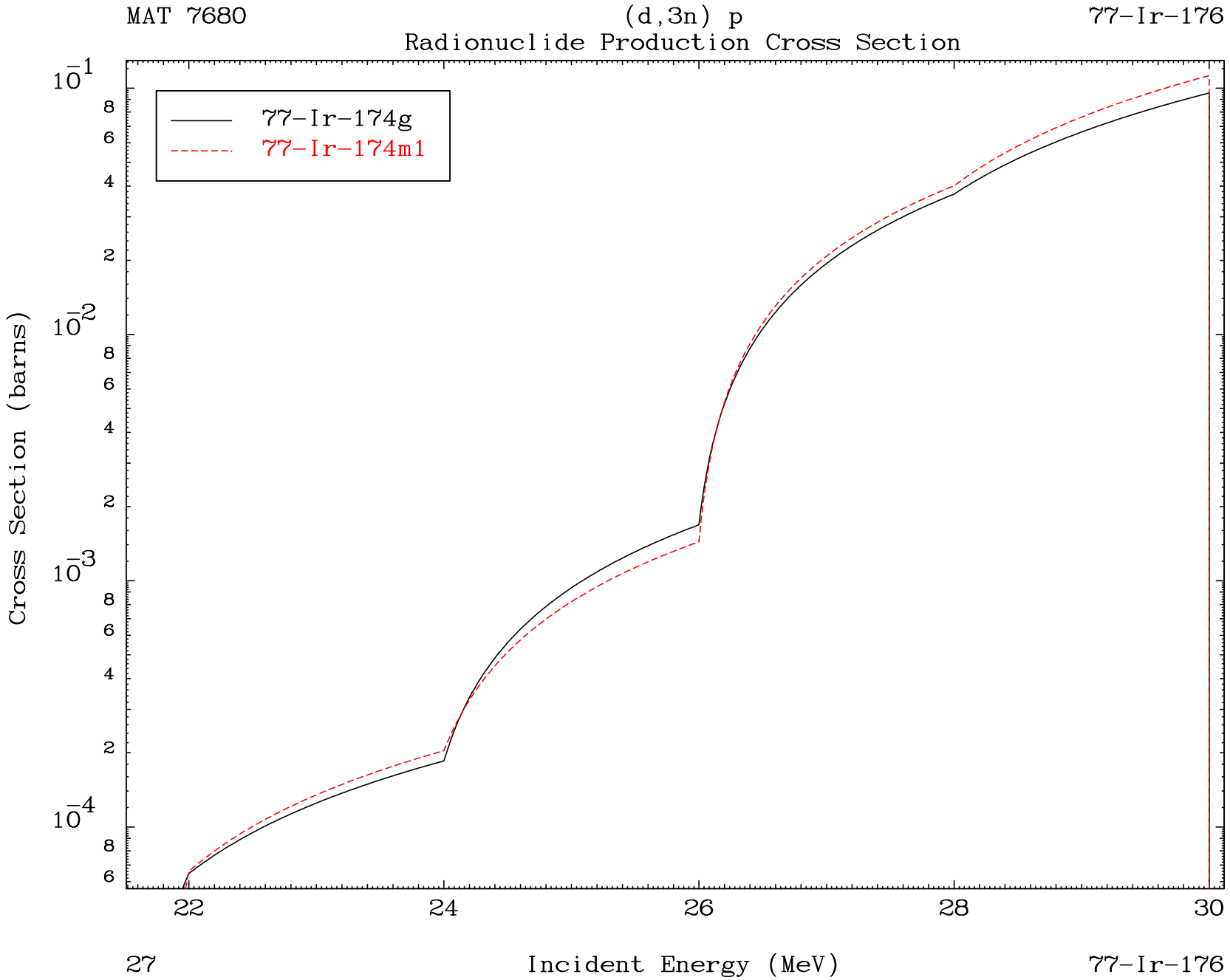

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
76-Os-173g
76-Os-174g
76-Os-175g
76-Os-176g
77-Ir-167g
77-Ir-168g
77-Ir-169g
77-Ir-169m1
77-Ir-170g
77-Ir-171g
77-Ir-171m1
3
4
5
6
7
8
9
10^2
2
22
Incident Energy (MeV)
77-Ir-176

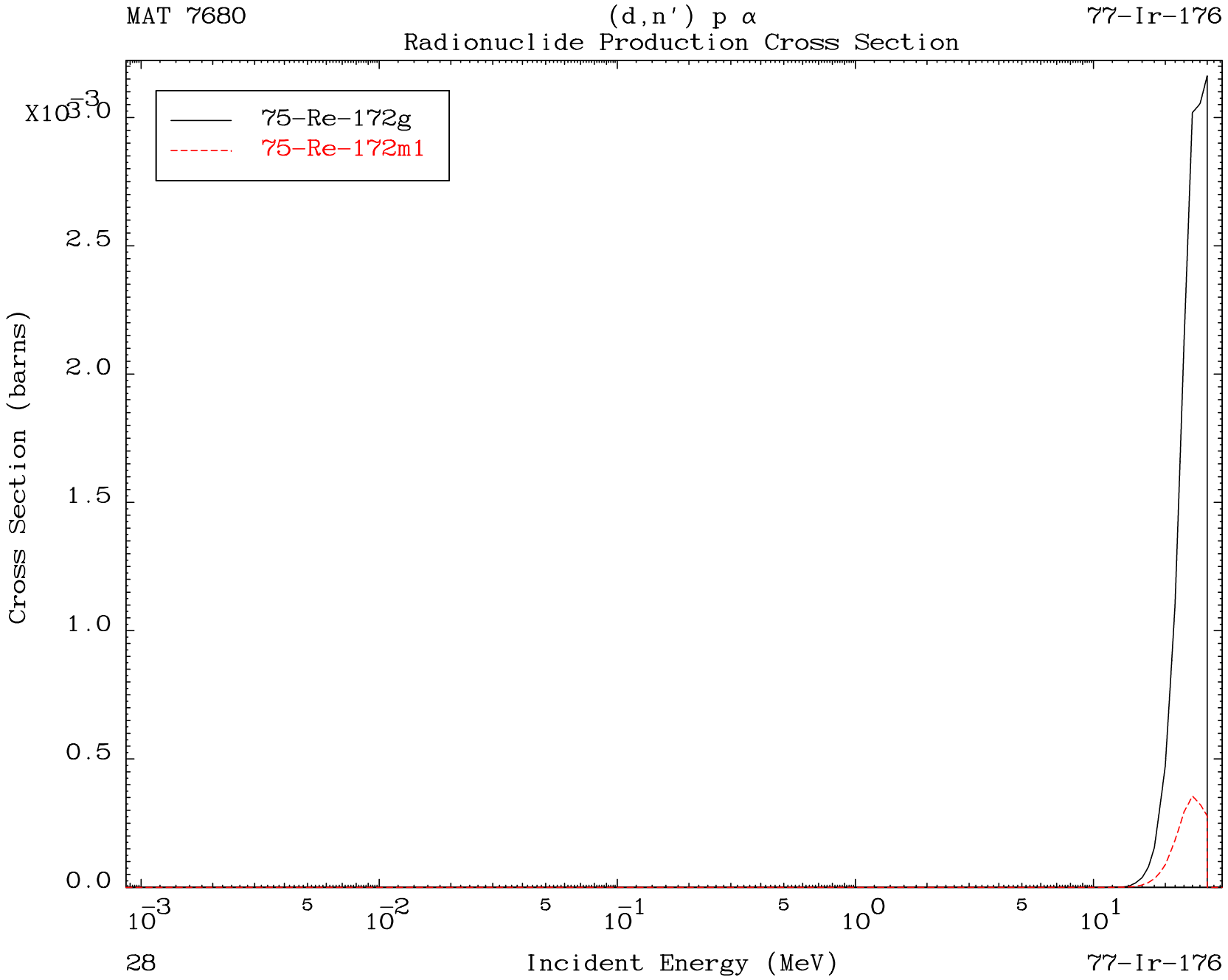

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
77-Ir-172g
77-Ir-172m1
77-Ir-173g
77-Ir-173m1
77-Ir-174g
77-Ir-174m1
77-Ir-175g
77-Ir-176g
77-Ir-177g
78-Pt-171g
78-Pt-172g
23
77-Ir-176

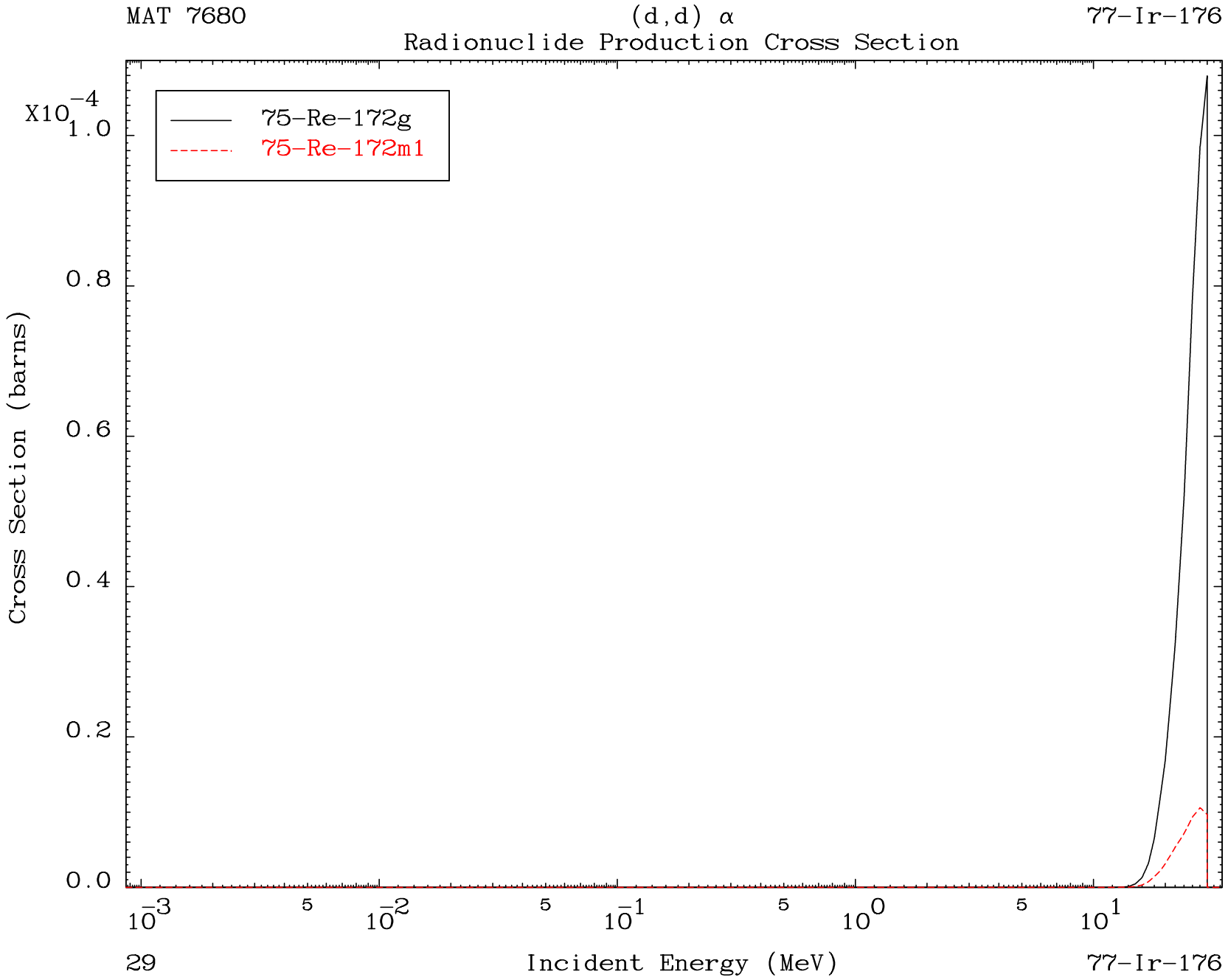

MAT 7680
(d,remainder)
77-Ir-176
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
3
4
5
6
7
8
9
10^2
2
78-Pt-173g
78-Pt-174g
78-Pt-175g
78-Pt-176g
78-Pt-177g
78-Pt-178g
Photon
24
Incident Energy (MeV)
77-Ir-176


MAT 7680
(d,2n) d
77-Ir-176
Radionuclide Production Cross Section
77-Ir-174g
77-Ir-174m1
Cross Section (barns)
10-4
10-6
10-8
10-10
20
22
24
26
28
30
25
Incident Energy (MeV)
77-Ir-176


MAT 7680
(d,n') t
77-Ir-176
Radionuclide Production Cross Section
77-Ir-174g
77-Ir-174m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
15
20
25
30
26
Incident Energy (MeV)
77-Ir-176


MAT 7680
(d,3n) p
77-Ir-176
Radionuclide Production Cross Section
77-Ir-174g
77-Ir-174m1
Cross Section (barns)
Incident Energy (MeV)
77-Ir-176
27
22
24
26
28
30


MAT 7680
(d,n') p α
77-Ir-176
Radionuclide Production Cross Section
75-Re-172g
75-Re-172m1
X10-3
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Cross Section (barns)
10-3
5
10-2
5
10-1
5
100
5
101
28
Incident Energy (MeV)
77-Ir-176


MAT 7680
(d,d) α
77-Ir-176
Radionuclide Production Cross Section
X10-4
1.0
0.8
0.6
0.4
0.2
0.0
Cross Section (barns)
75-Re-172g
75-Re-172m1
10-3
5
10-2
5
10-1
5
100
5
101
29
Incident Energy (MeV)
77-Ir-176