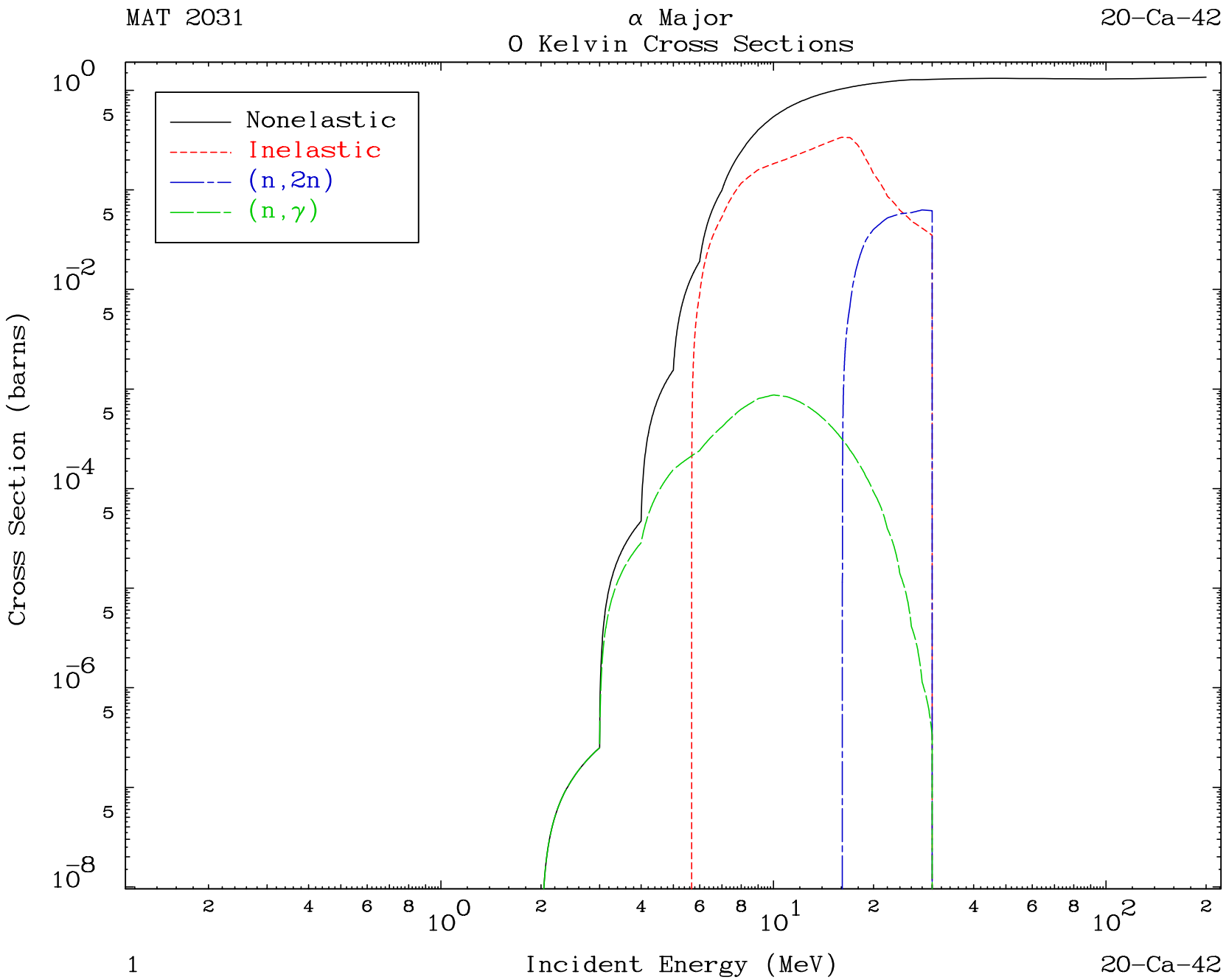
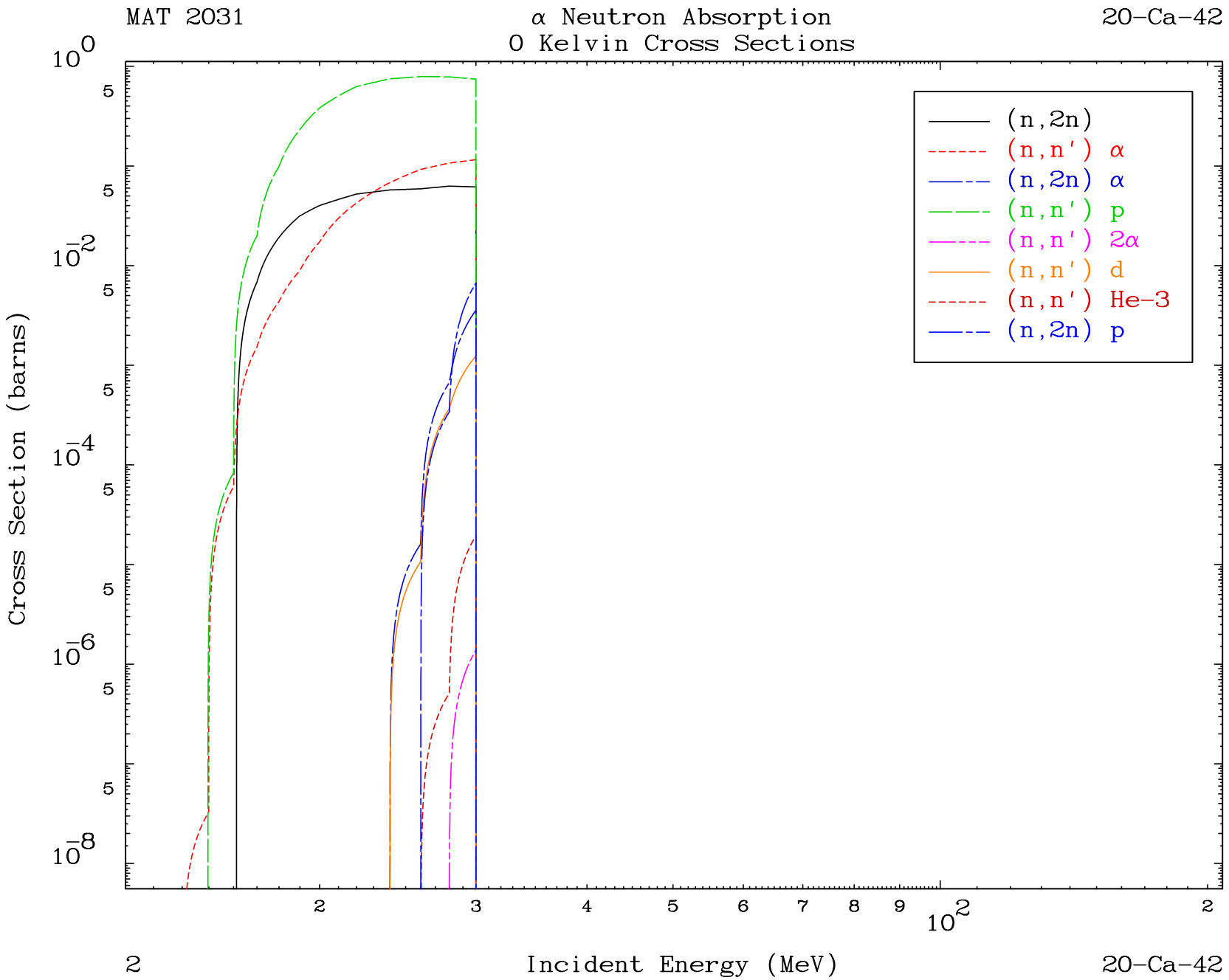
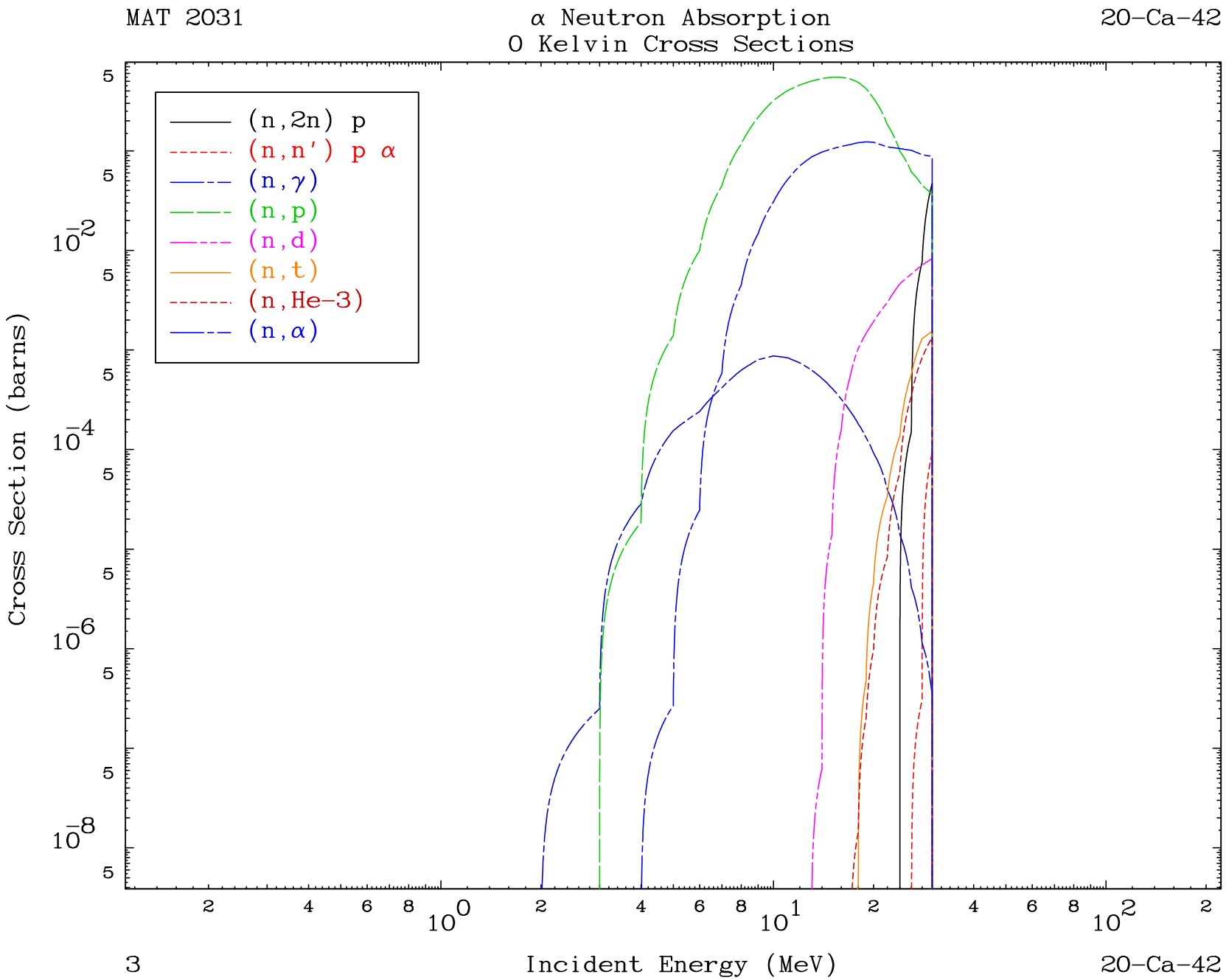
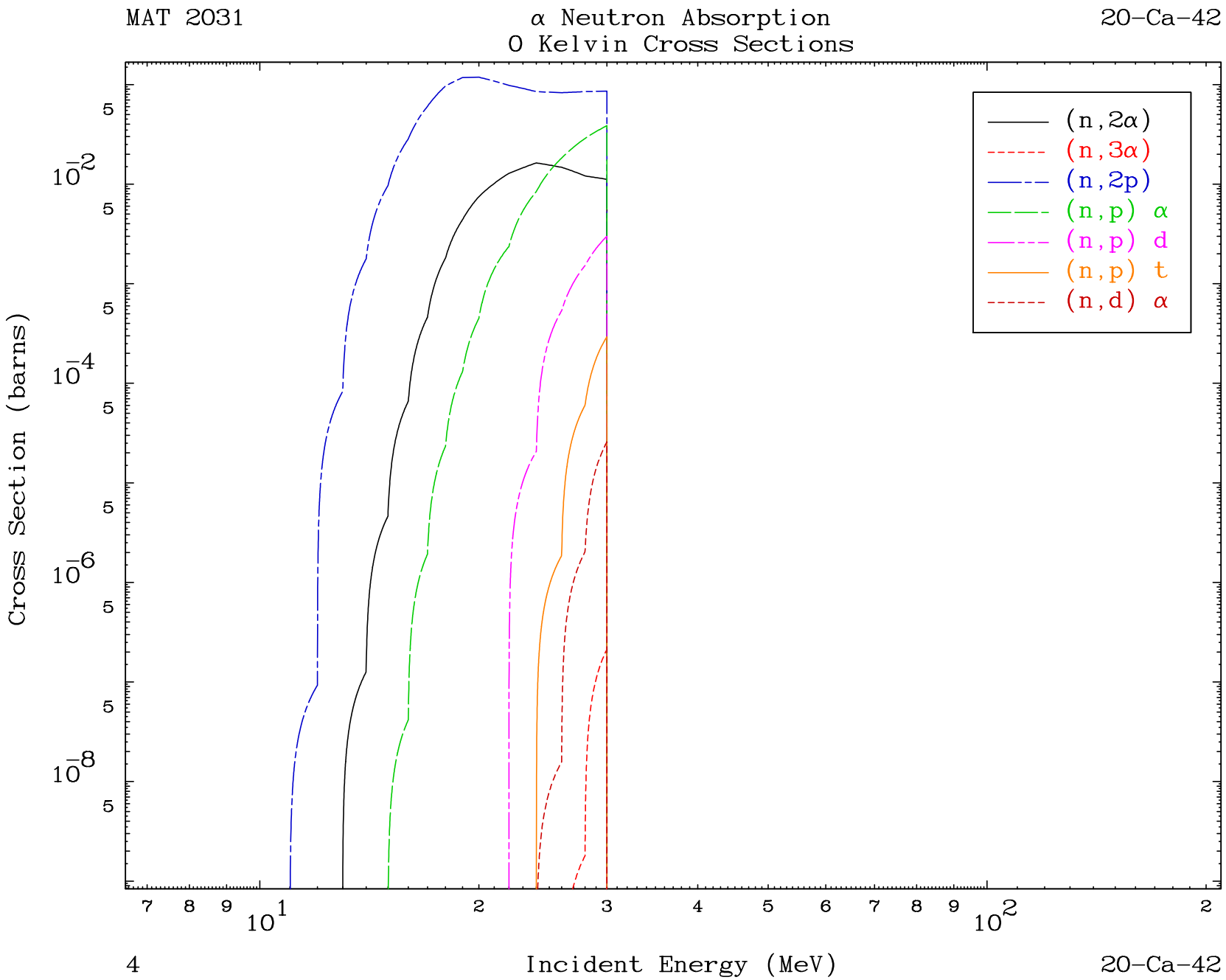
Program EVALPLOT
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

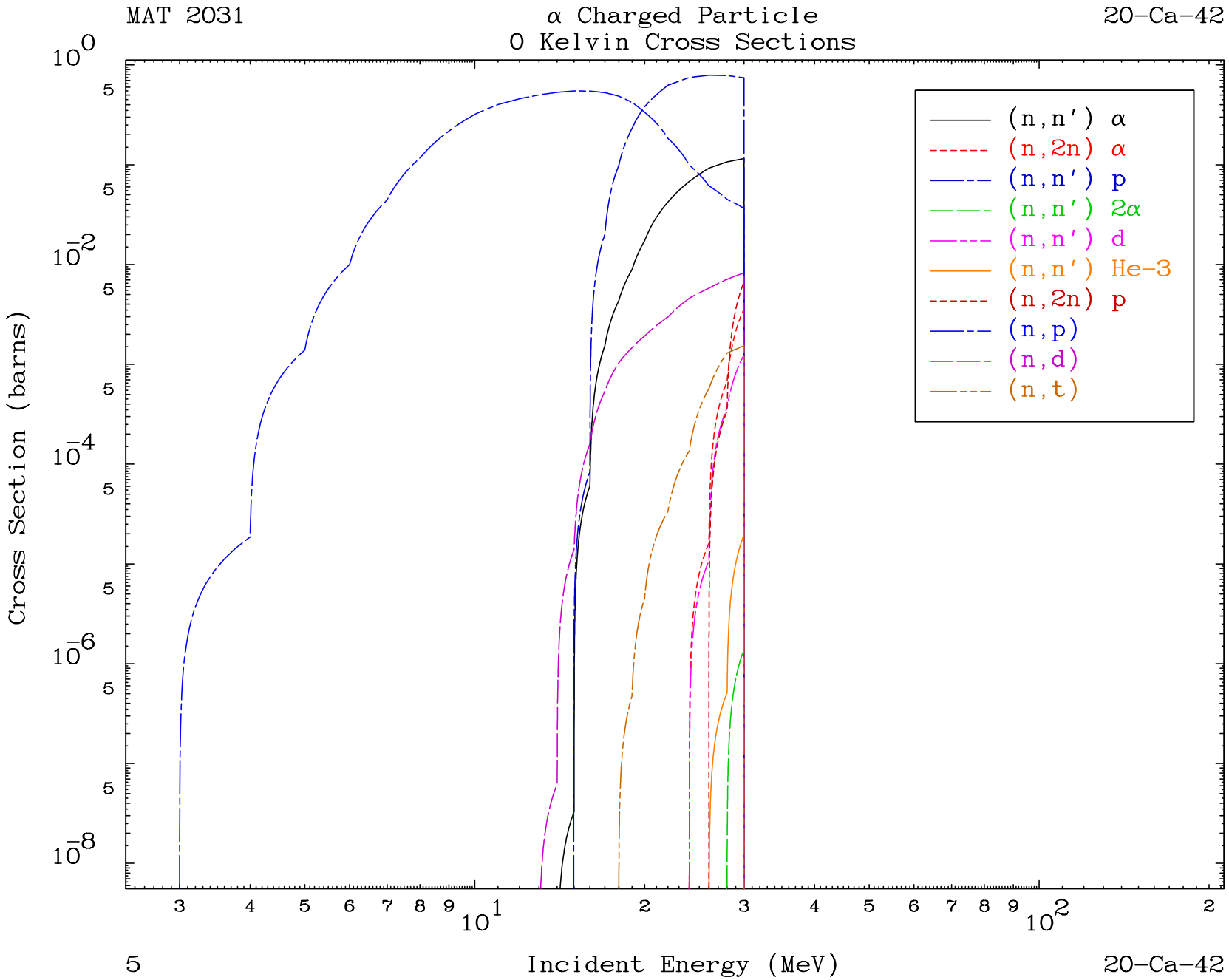
Press Mouse Button to Start

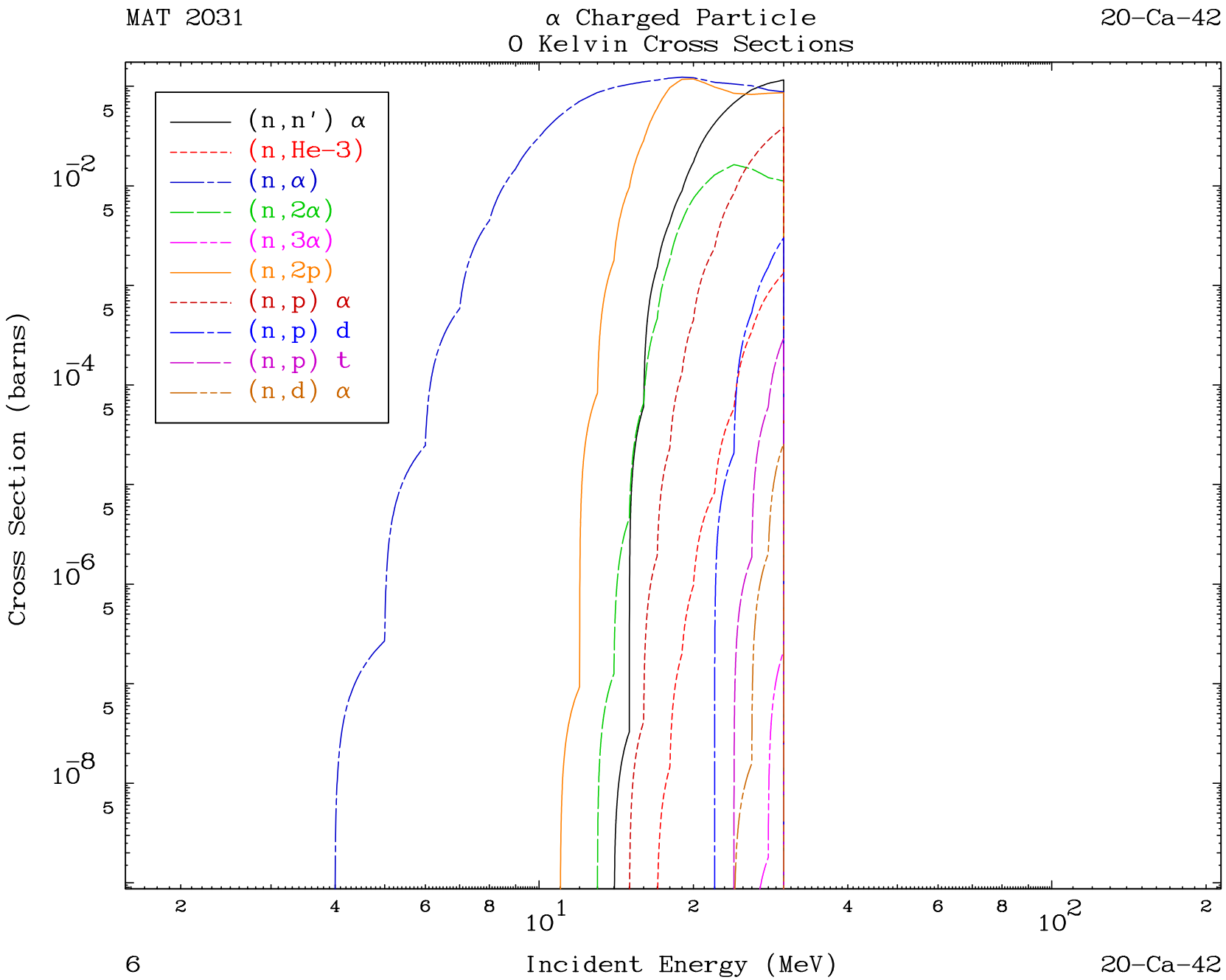

MAT 2031
α Major
20-Ca-42
0 Kelvin Cross Sections
Nonelastic
Inelastic
(n,2n)
(n,γ)
Cross Section (barns)
Incident Energy (MeV)
20-Ca-42
1

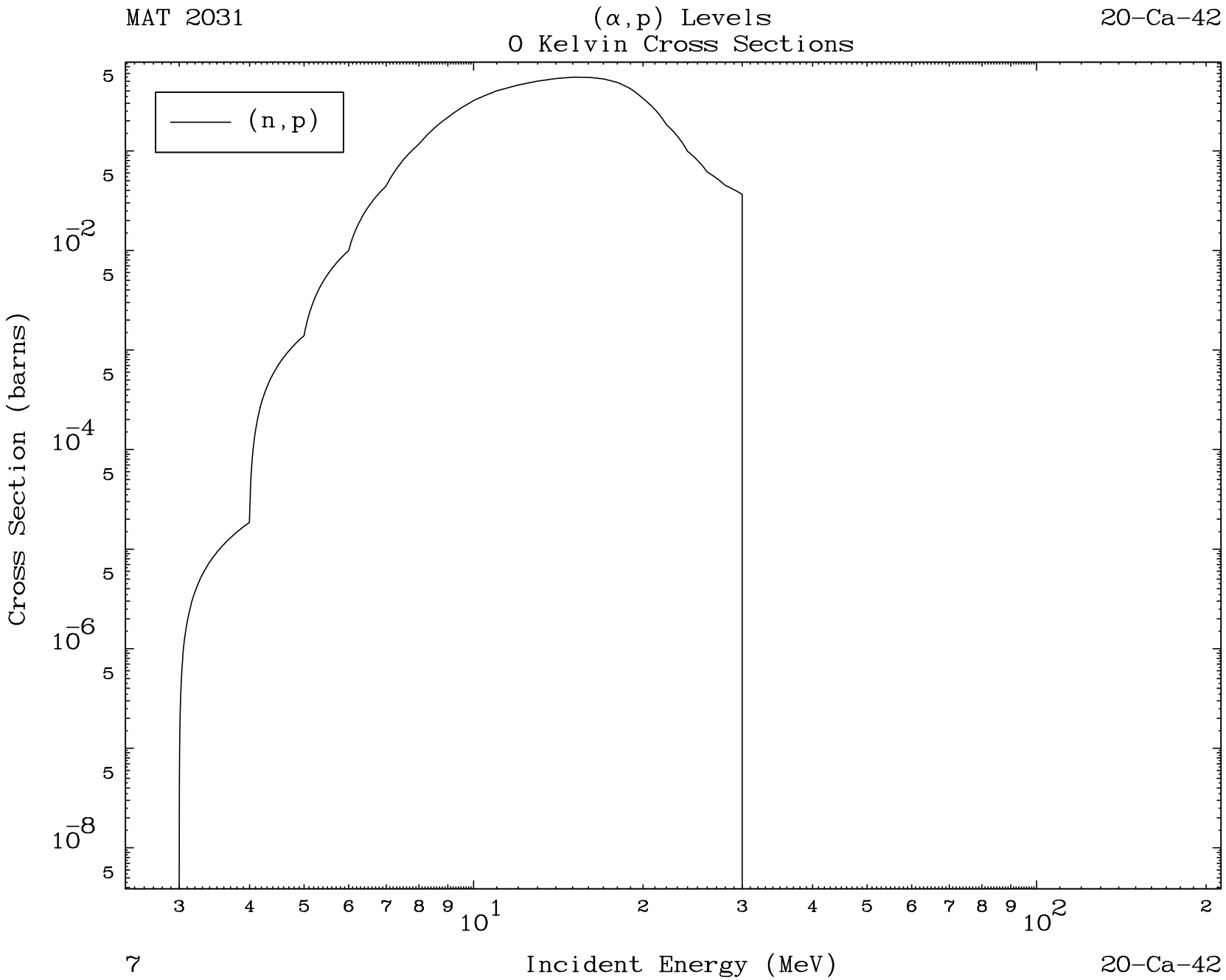

MAT 2031
α Neutron Absorption
0 Kelvin Cross Sections
20-Ca-42
Cross Section (barns)
Incident Energy (MeV)
20-Ca-42
(n,2n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') He-3
(n,2n) p

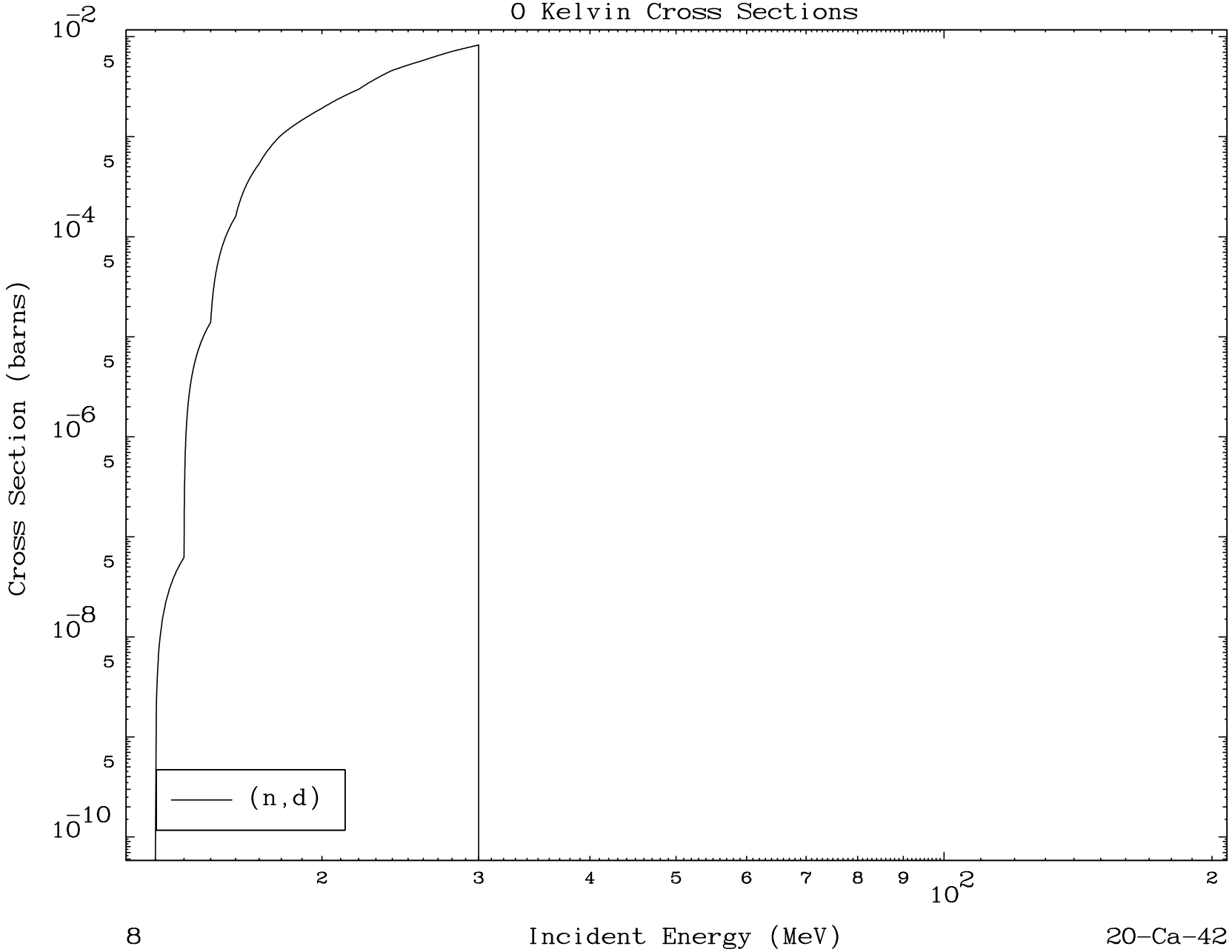

MAT 2031
α Neutron Absorption
0 Kelvin Cross Sections
20-Ca-42
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
Cross Section (barns)
Incident Energy (MeV)
3
20-Ca-42


MAT 2031
α Neutron Absorption
0 Kelvin Cross Sections
20-Ca-42
Cross Section (barns)
10-2
10-4
10-6
10-8
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
4
20-Ca-42

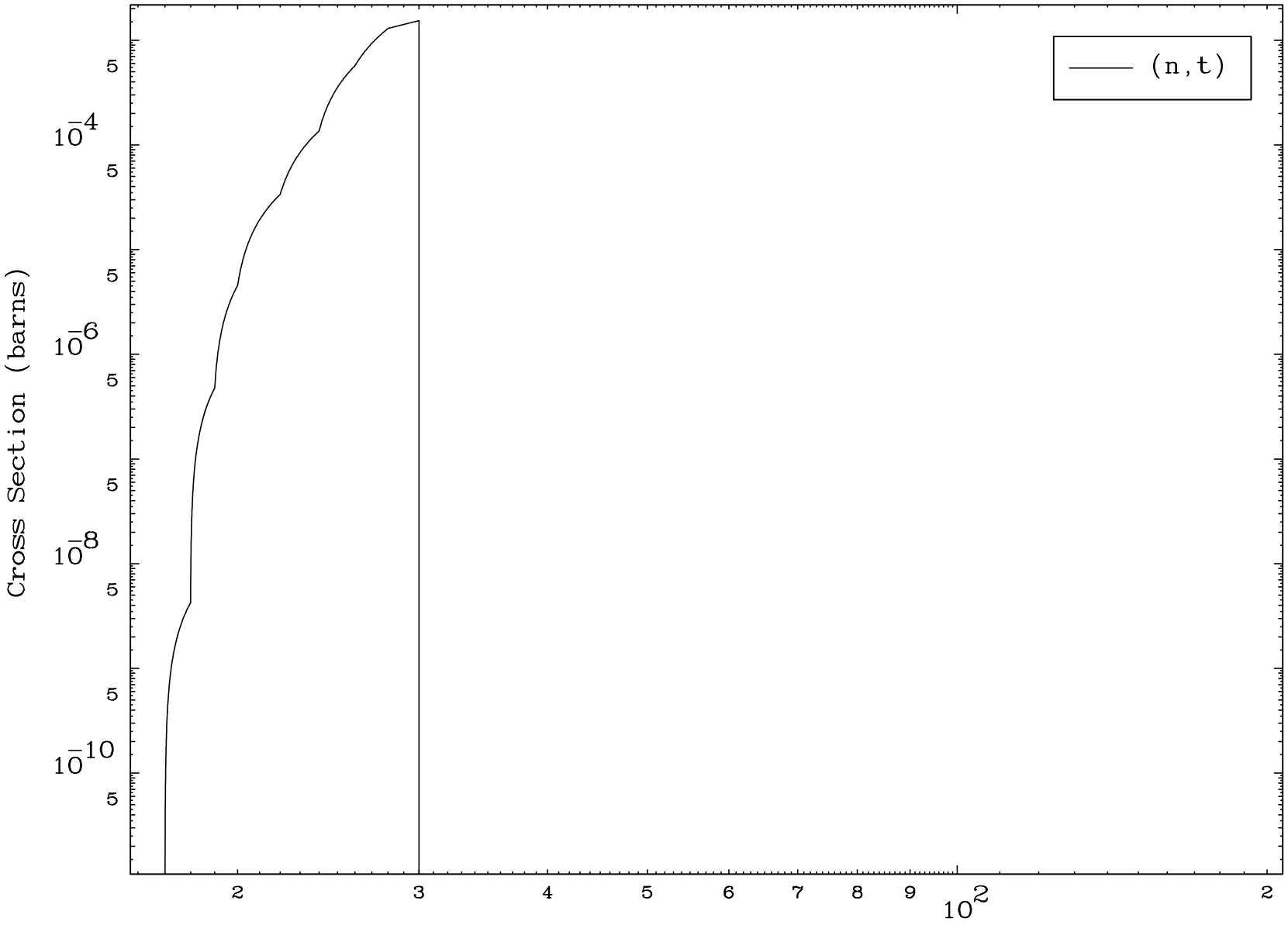

MAT 2031
α Charged Particle
0 Kelvin Cross Sections
20-Ca-42
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') He-3
(n,2n) p
(n,p)
(n,d)
(n,t)

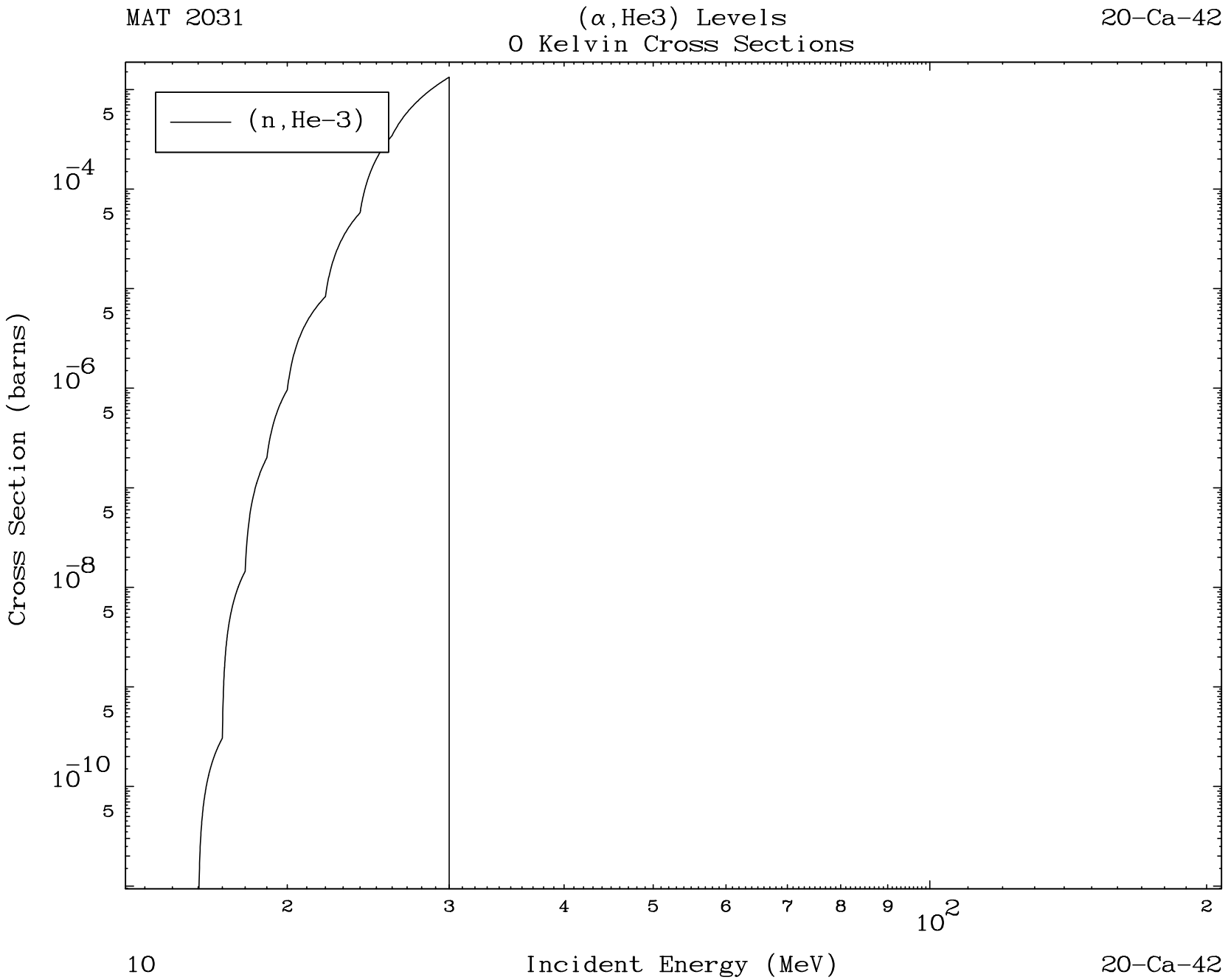

MAT 2031
α Charged Particle
0 Kelvin Cross Sections
20-Ca-42
(n,n') α
(n,He-3)
(n,α)
(n,2α)
(n,3α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Cross Section (barns)
10-2
10-4
10-6
10-8
2
4
6
8
10 1
2
4
6
8
10 2
2
Incident Energy (MeV)
6
20-Ca-42

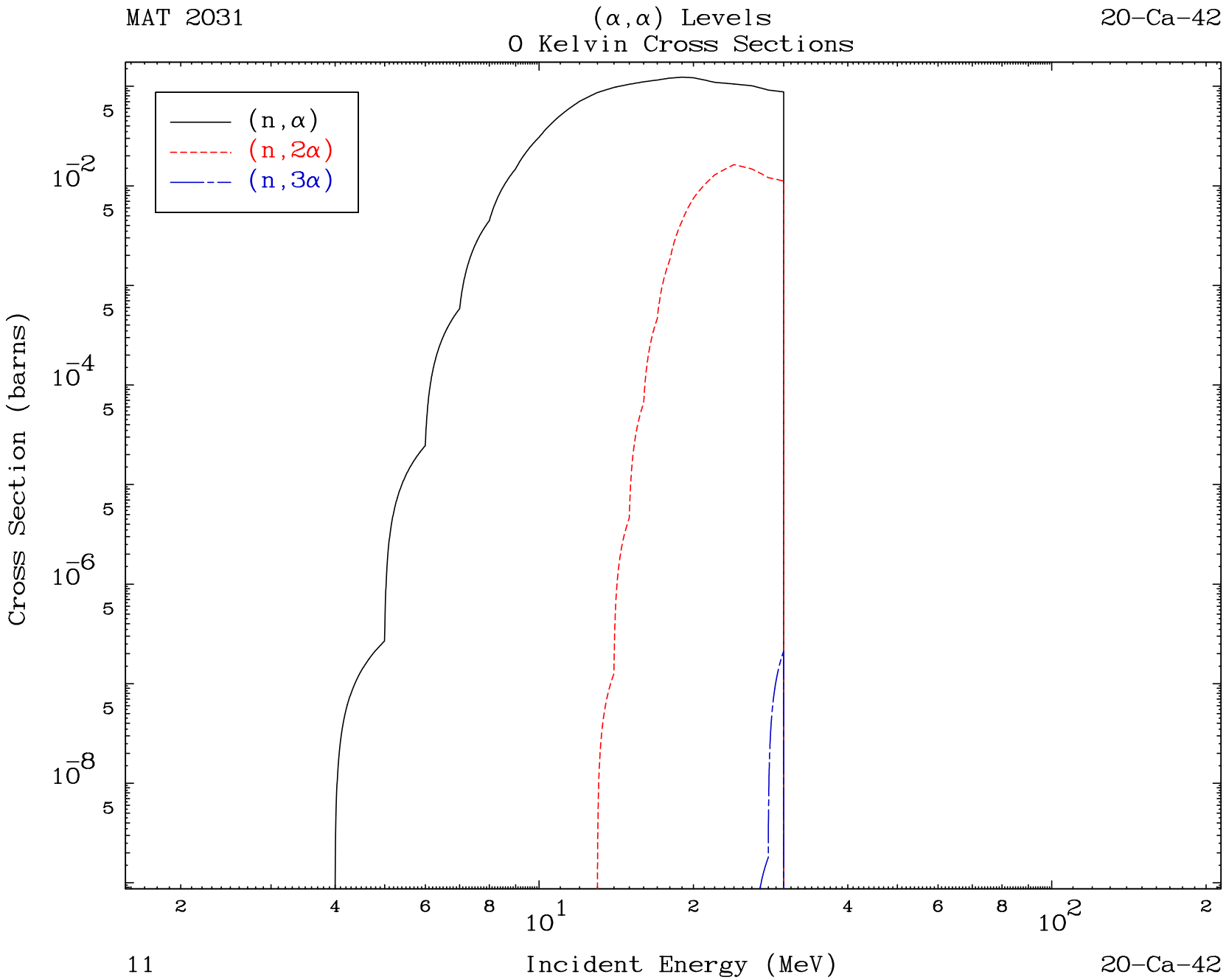

MAT 2031
(α,p) Levels
20-Ca-42
0 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
7
20-Ca-42

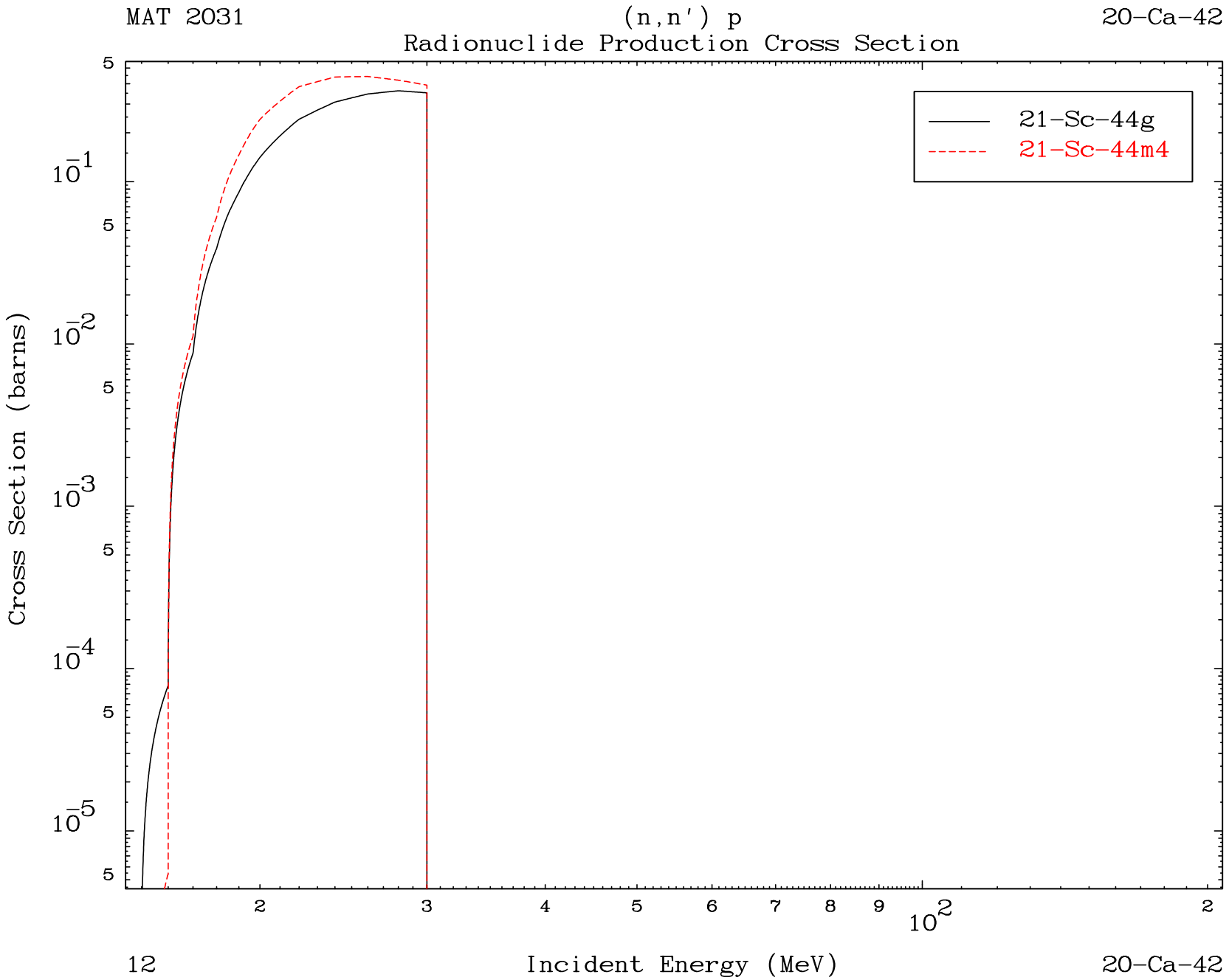

0 Kelvin Cross Sections
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
10^-10
5
(n,d)
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)

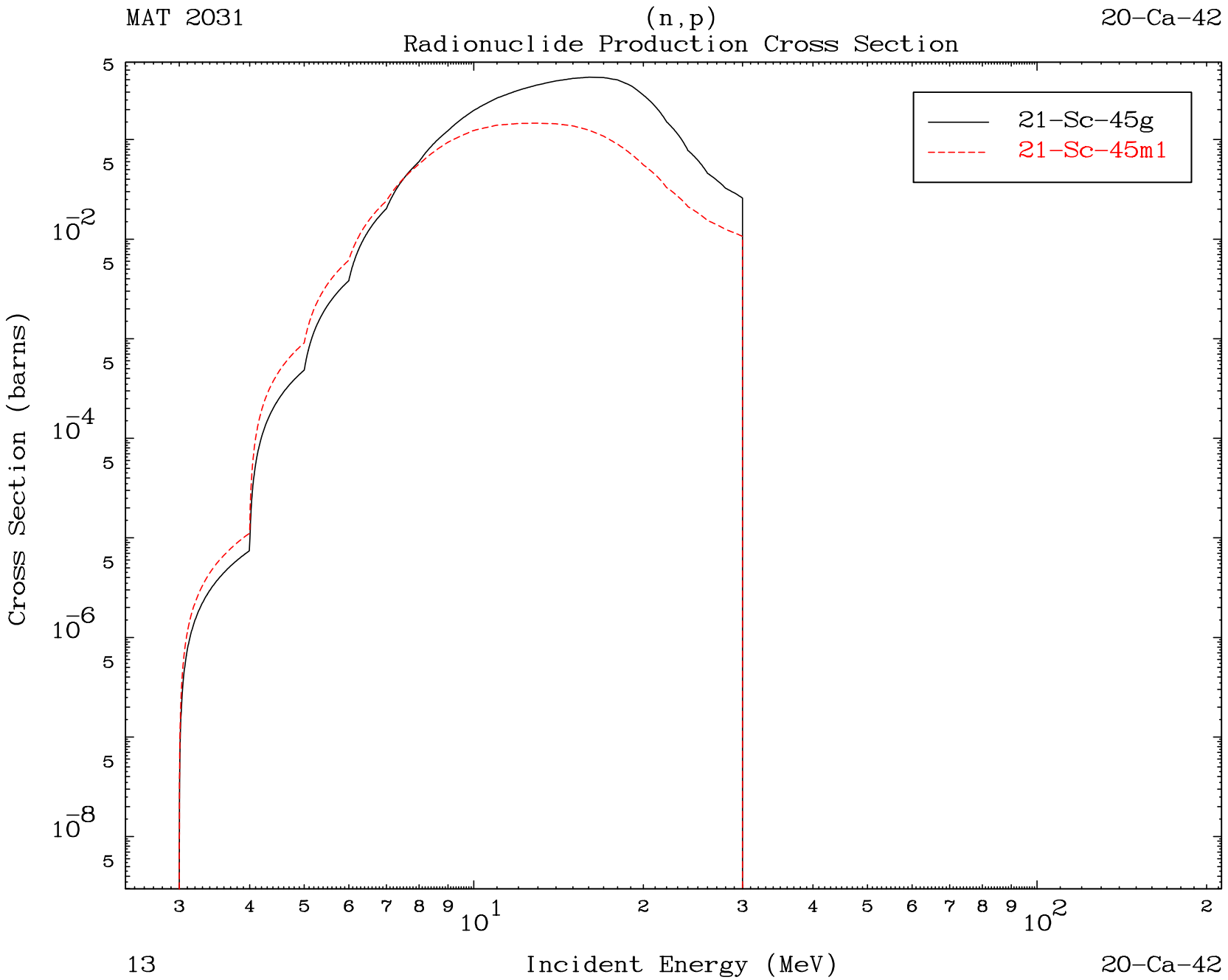
0 Kelvin Cross Sections

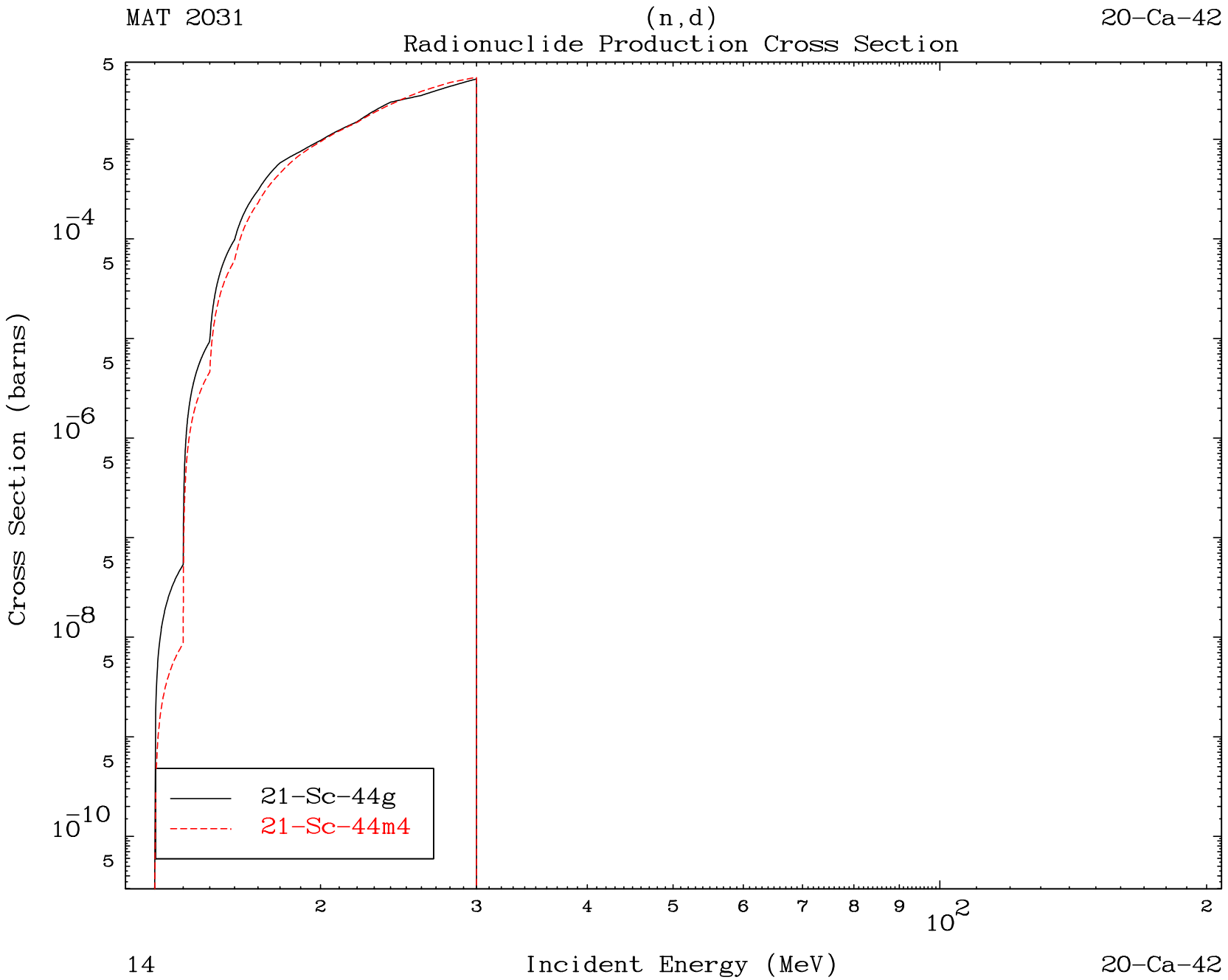



MAT 2031
(α,He3) Levels
20-Ca-42
0 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
10
Incident Energy (MeV)
20-Ca-42


MAT 2031
(α,α) Levels
20-Ca-42
0 Kelvin Cross Sections
(n,α)
(n,2α)
(n,3α)
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
4
6
8
101
102
11
Incident Energy (MeV)
20-Ca-42


MAT 2031
(n,n') p
20-Ca-42
Radionuclide Production Cross Section
21-Sc-44g
21-Sc-44m4
Cross Section (barns)
Incident Energy (MeV)
12
20-Ca-42


MAT 2031
(n,p)
20-Ca-42
Radionuclide Production Cross Section
21-Sc-45g
21-Sc-45m1
Cross Section (barns)
Incident Energy (MeV)
13
20-Ca-42


MAT 2031
(n,d)
20-Ca-42
Radionuclide Production Cross Section
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
2
3
4
5
6
7
8
9
10^2
2
21-Sc-44g
21-Sc-44m4
14
Incident Energy (MeV)
20-Ca-42