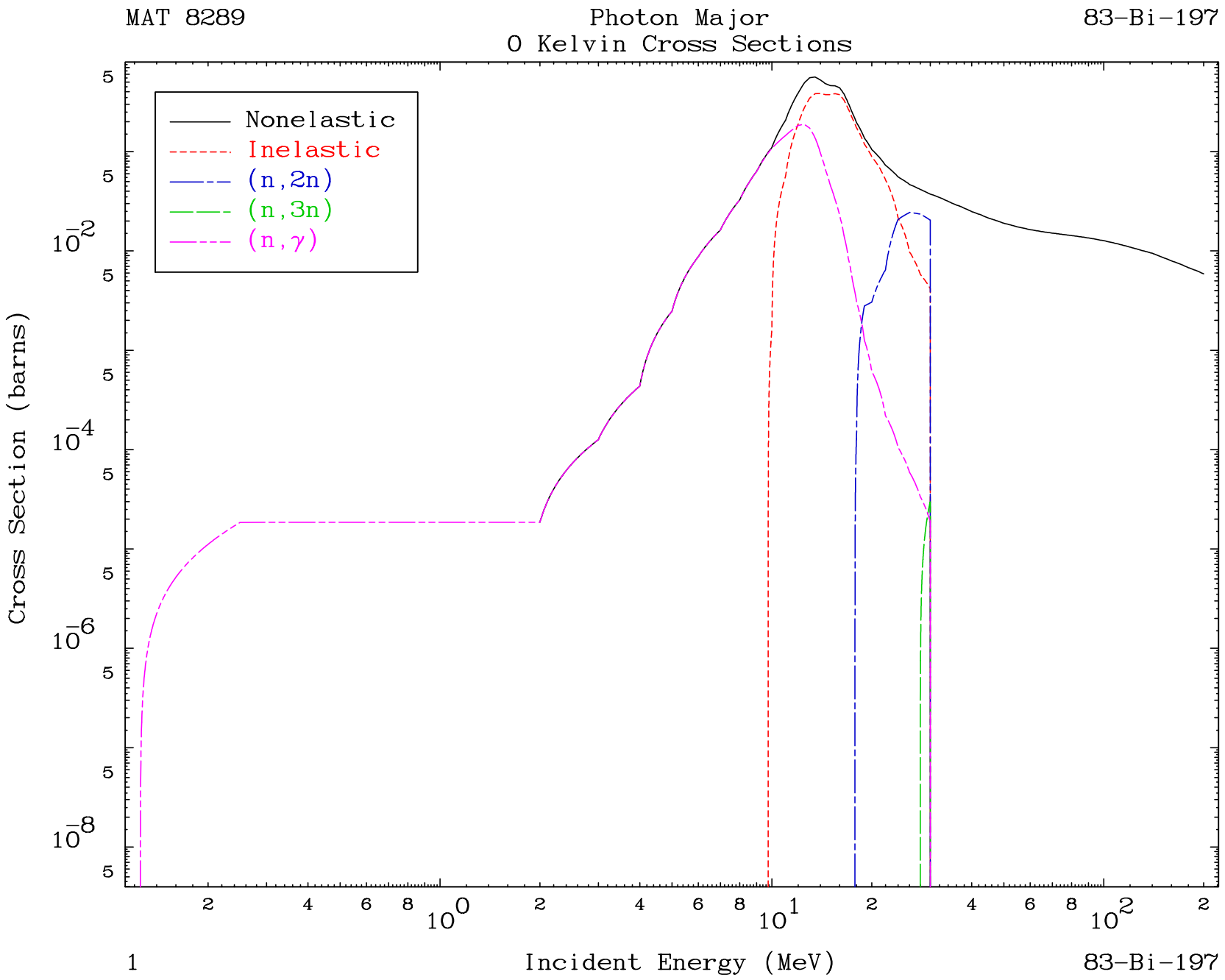
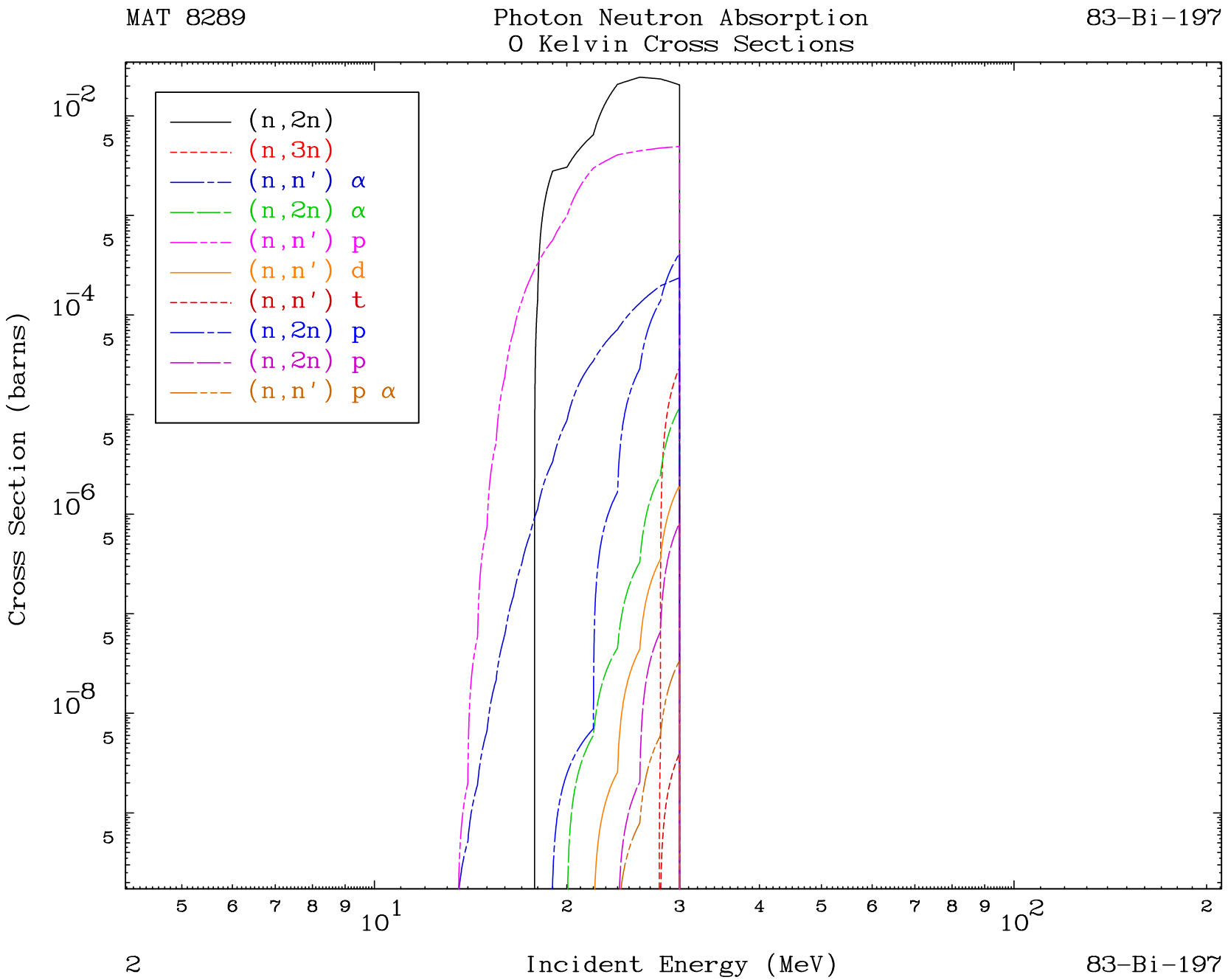
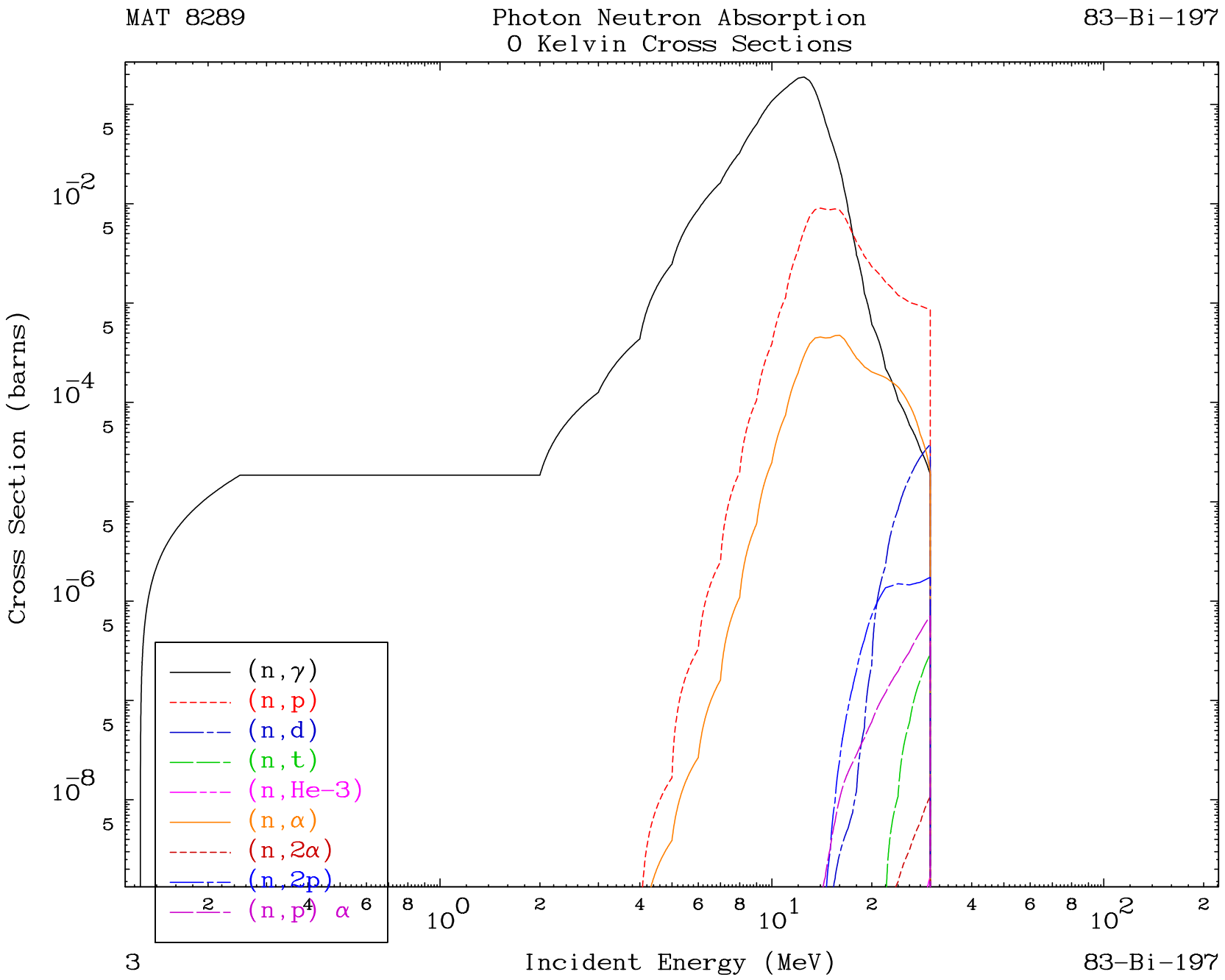
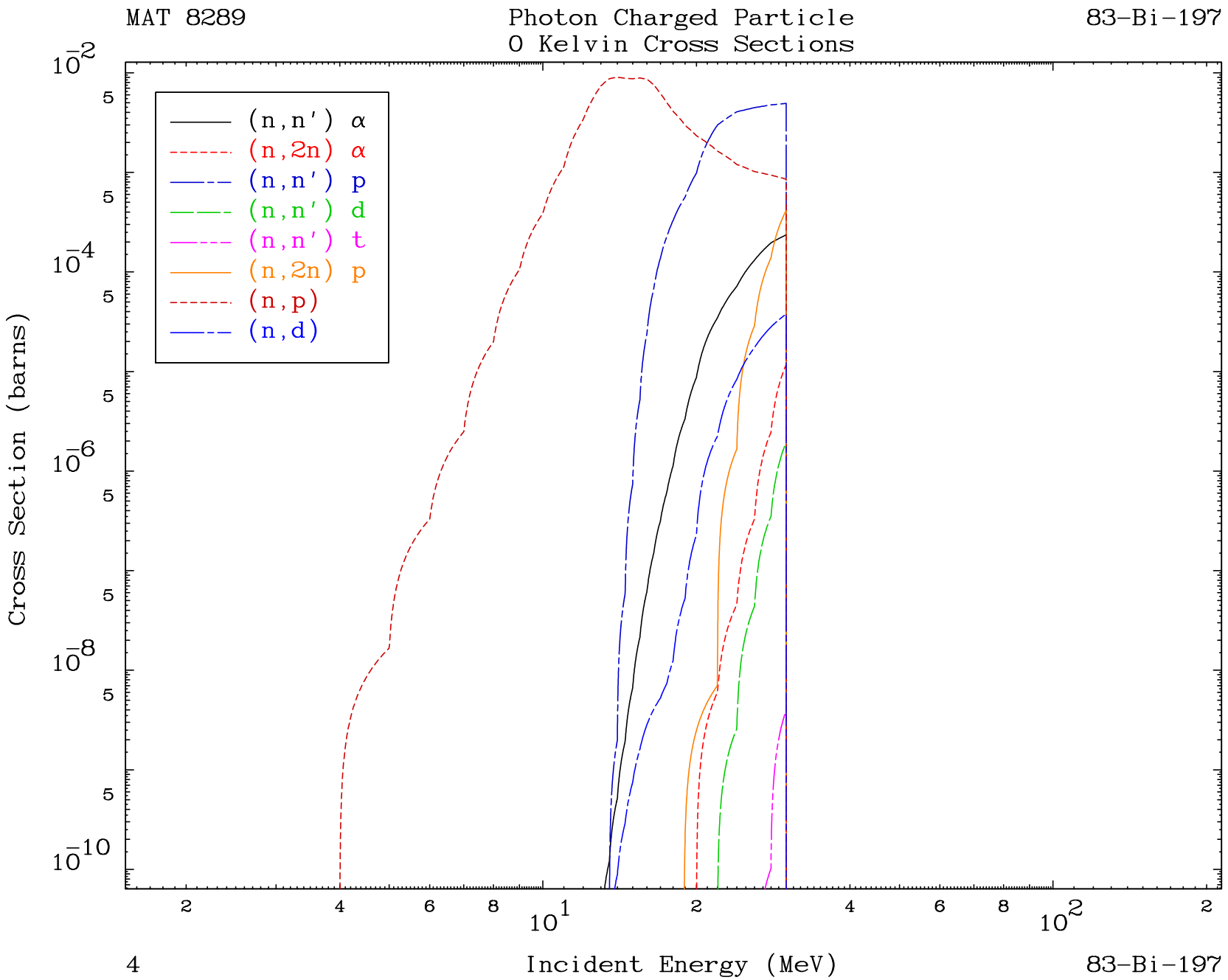
Program EVALPLOT
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

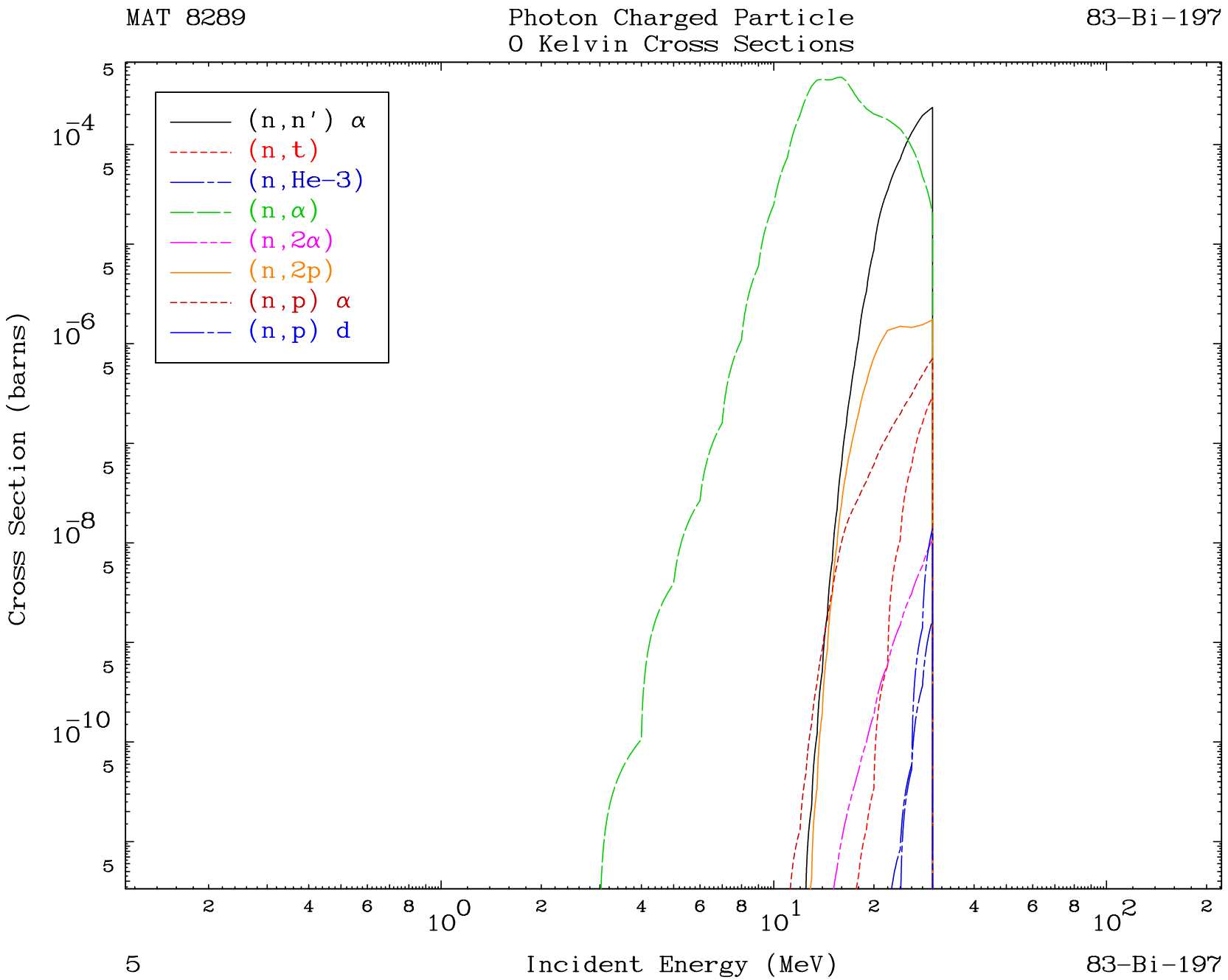
Press Mouse Button to Start

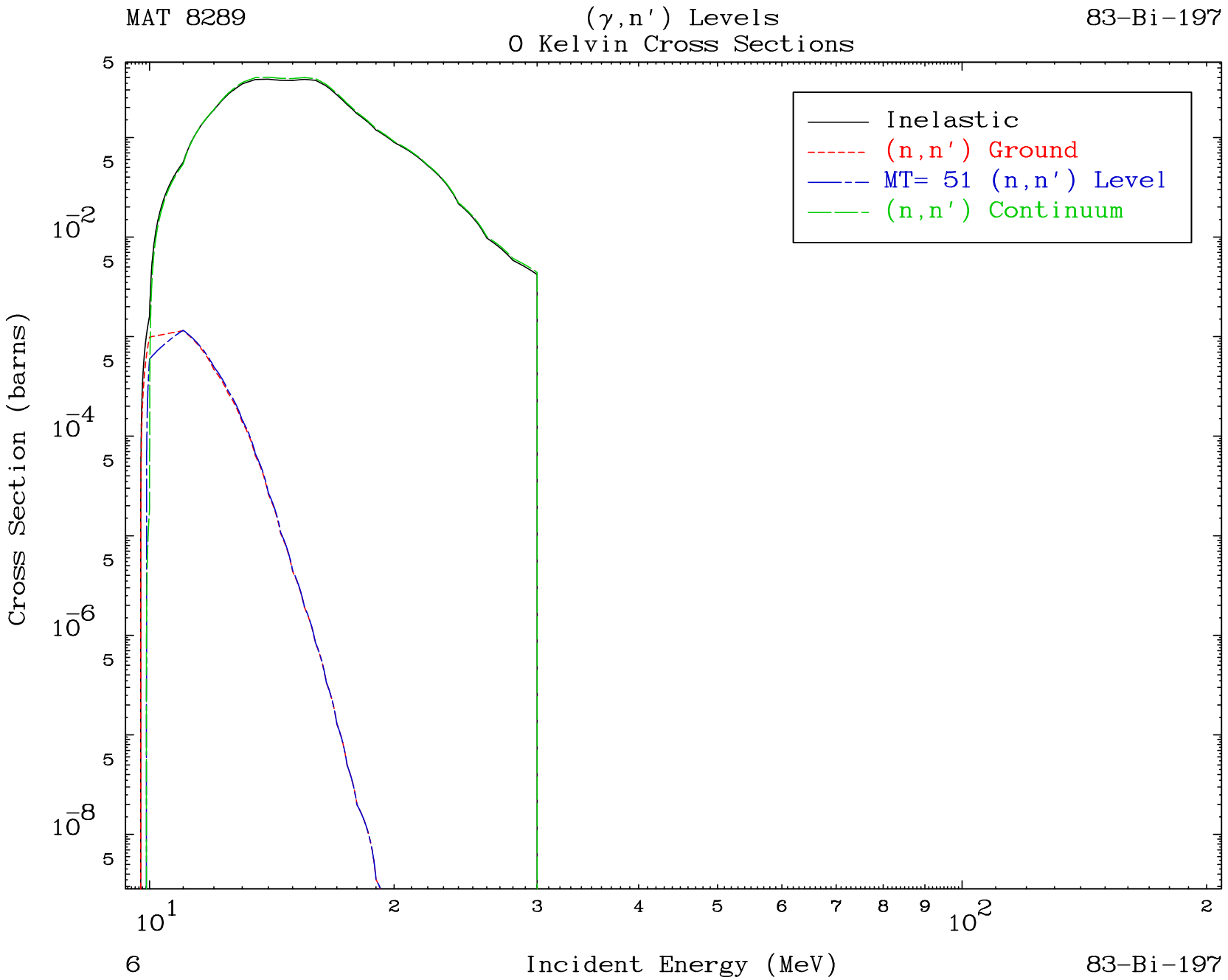

MAT 8289
Photon Major
83-Bi-197
0 Kelvin Cross Sections
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
Cross Section (barns)
Incident Energy (MeV)
83-Bi-197

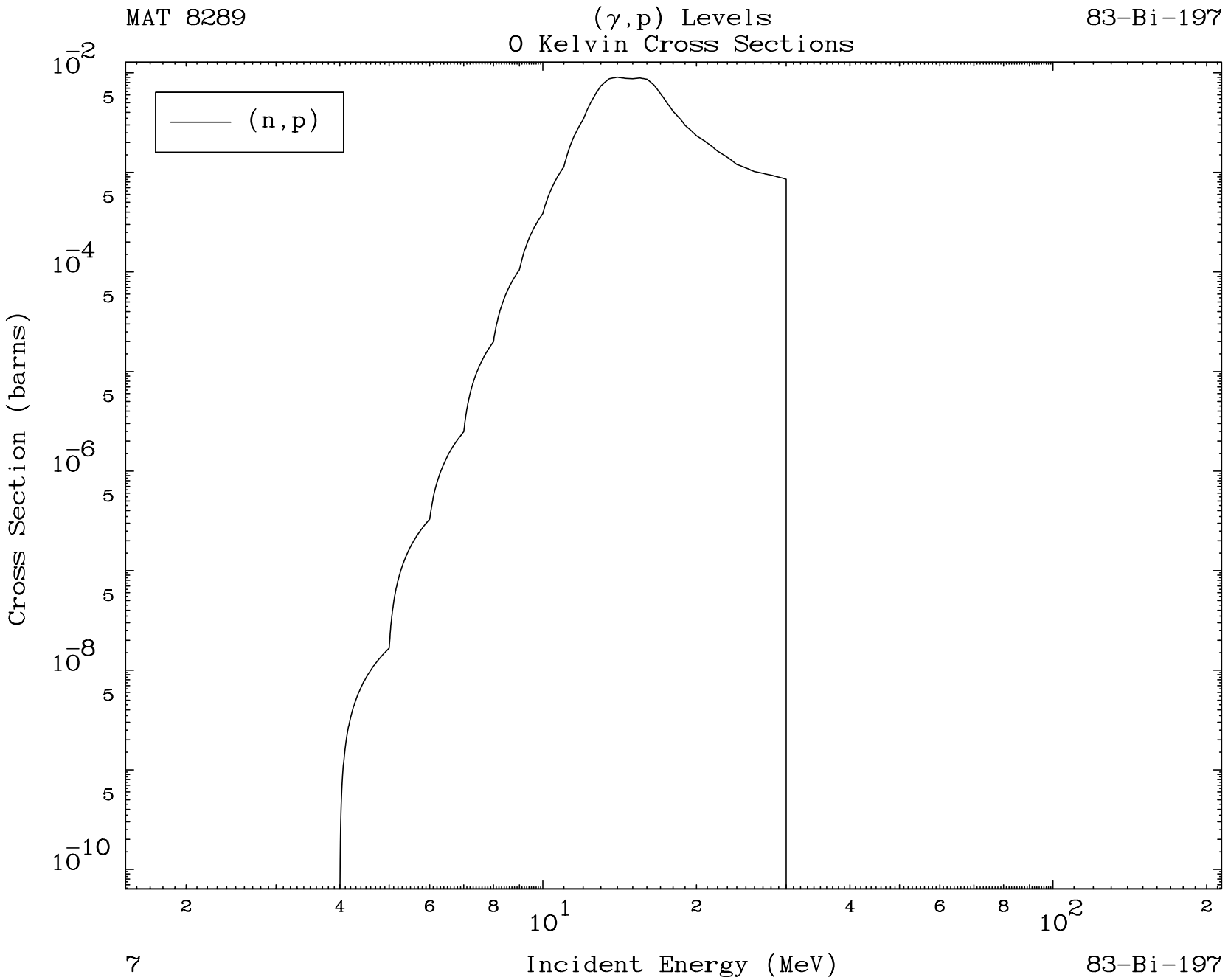

MAT 8289
Photon Neutron Absorption
0 Kelvin Cross Sections
83-Bi-197
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') d
(n,n') t
(n,2n) p
(n,2n) p
(n,n') p α
Cross Section (barns)
Incident Energy (MeV)
83-Bi-197
2

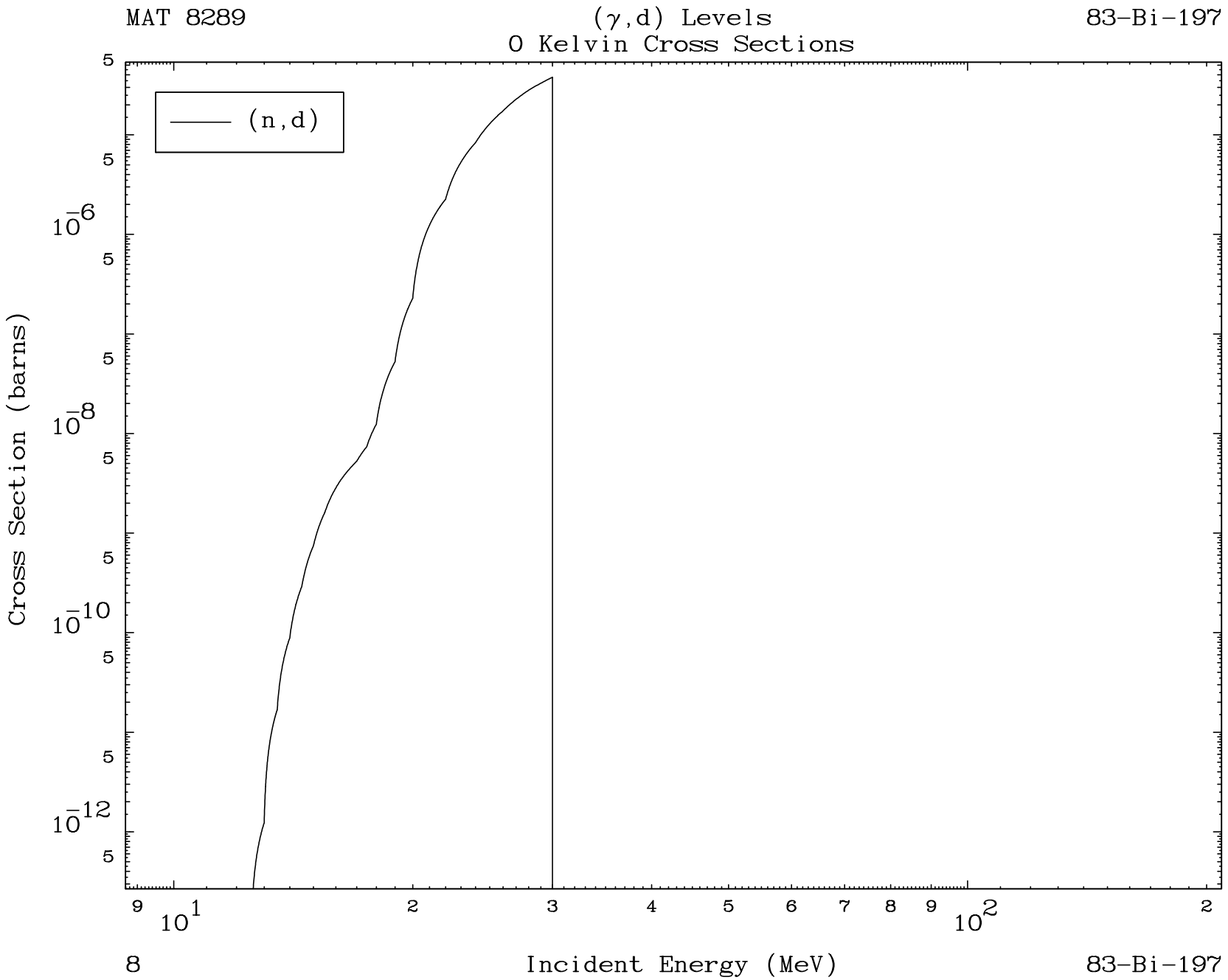

MAT 8289
Photon Neutron Absorption
0 Kelvin Cross Sections
83-Bi-197
Cross Section (barns)
Incident Energy (MeV)
83-Bi-197
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α

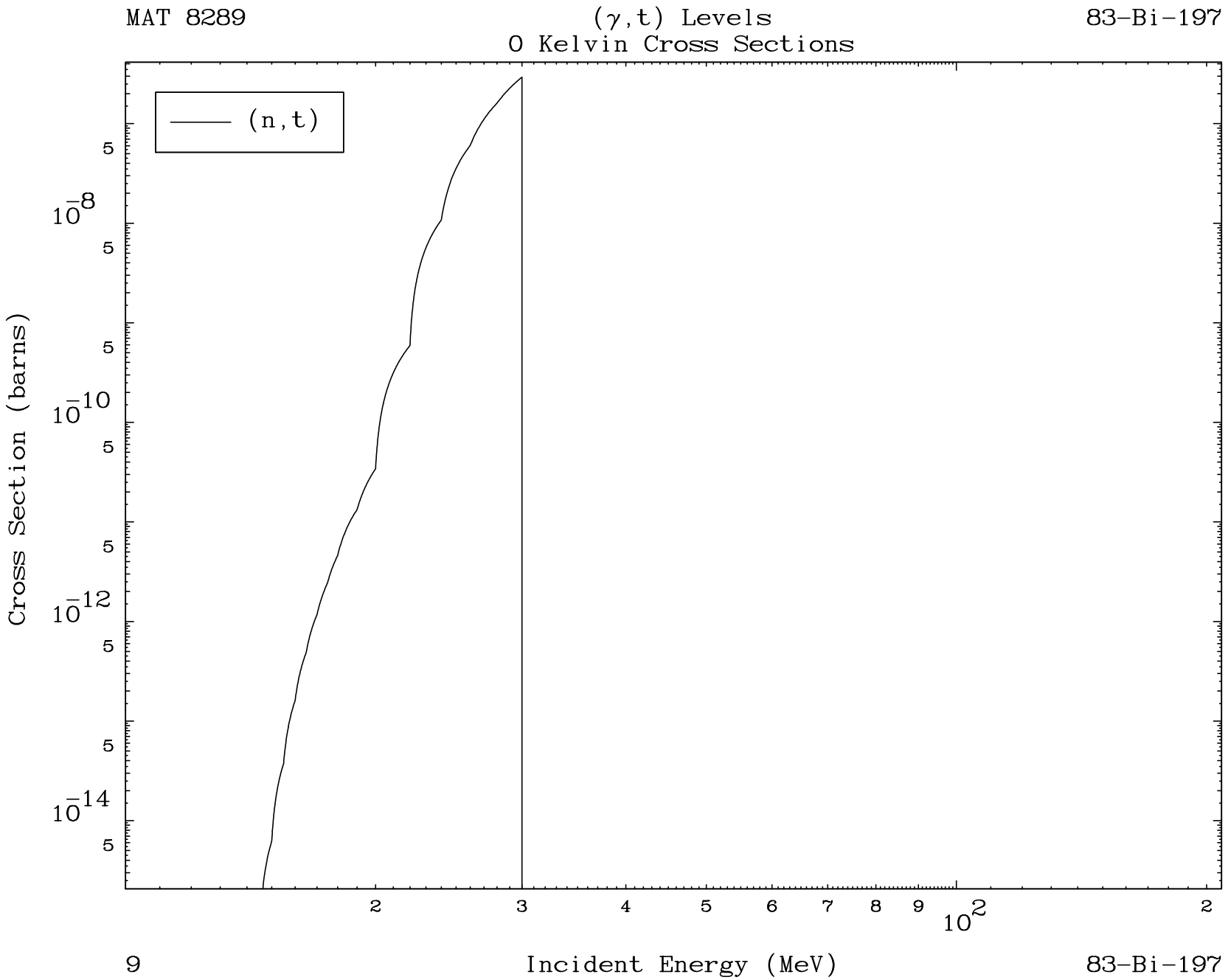

MAT 8289
Photon Charged Particle
0 Kelvin Cross Sections
83-Bi-197
(n,n') α
(n,2n) α
(n,n') p
(n,n') d
(n,n') t
(n,2n) p
(n,p)
(n,d)
Cross Section (barns)
Incident Energy (MeV)
4
83-Bi-197

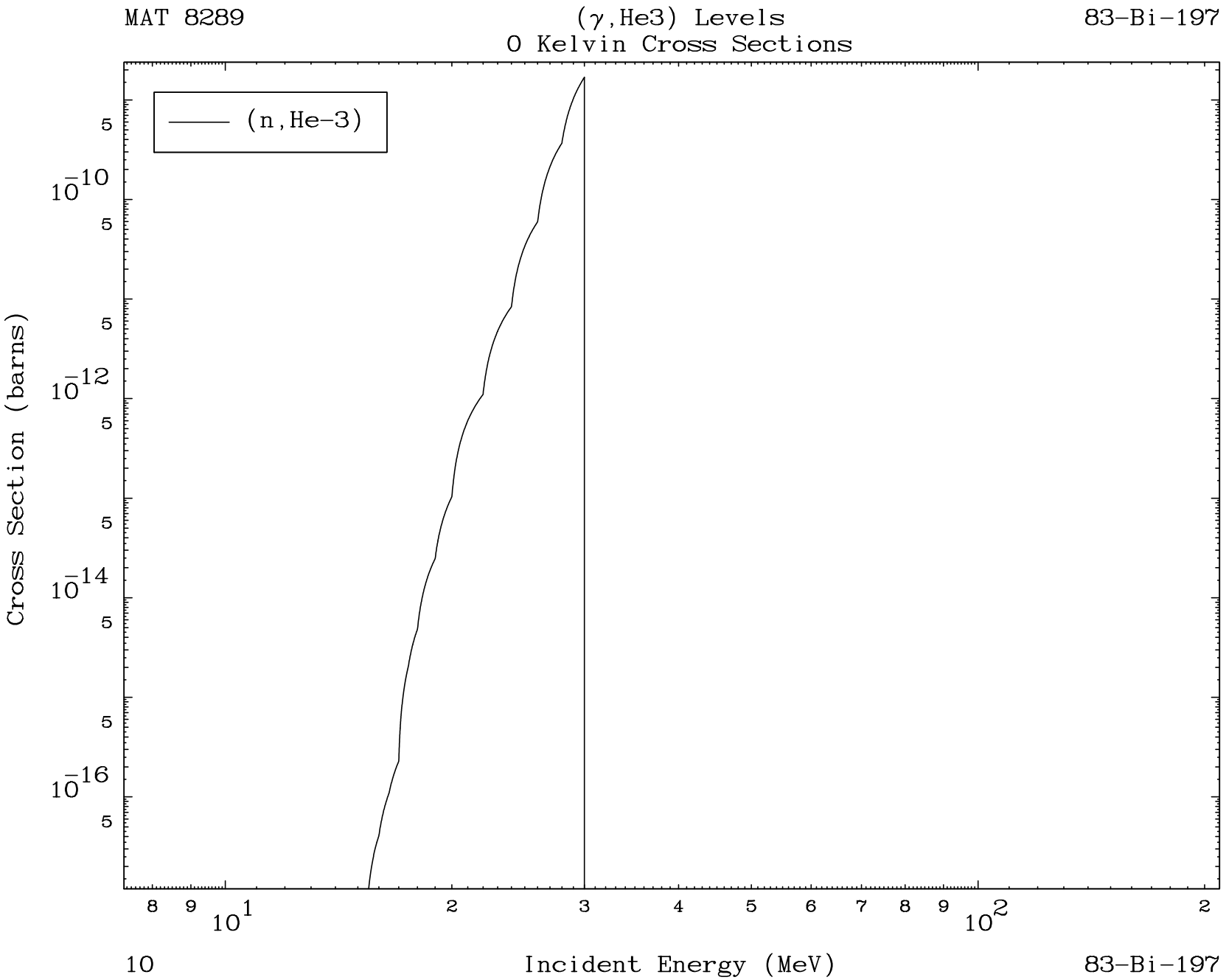

MAT 8289
Photon Charged Particle
0 Kelvin Cross Sections
83-Bi-197
(n,n') α
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
Cross Section (barns)
Incident Energy (MeV)
83-Bi-197

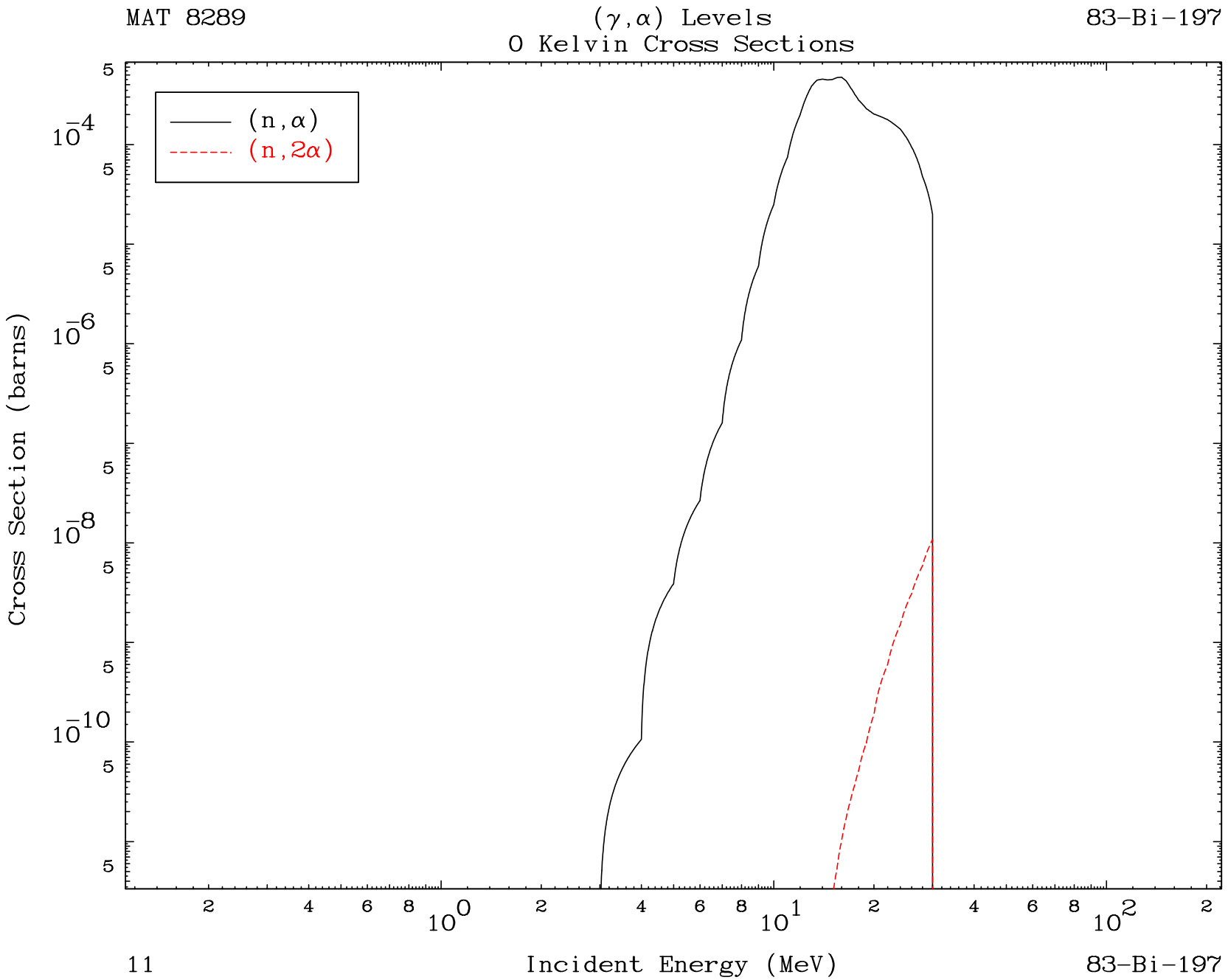

MAT 8289
(γ,n') Levels
0 Kelvin Cross Sections
83-Bi-197
Inelastic
(n,n') Ground
MT= 51 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
83-Bi-197
6

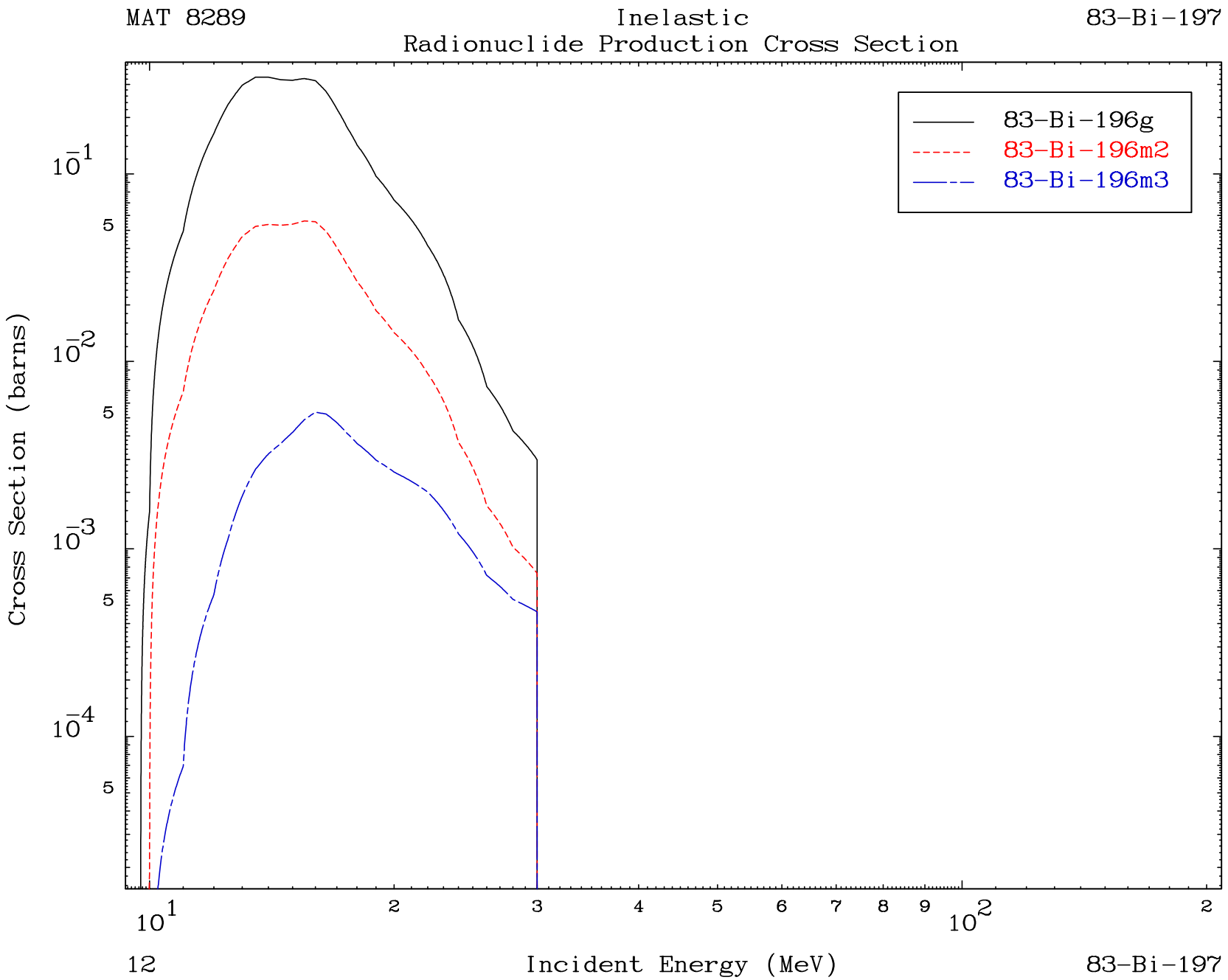

MAT 8289
(γ,p) Levels
83-Bi-197
0 Kelvin Cross Sections
(n,p)
Cross Section (barns)
10^-2
5
10^-4
5
10^-6
5
10^-8
5
10^-10
2
4
6
8
10^1
2
4
6
8
10^2
2
Incident Energy (MeV)
7
83-Bi-197

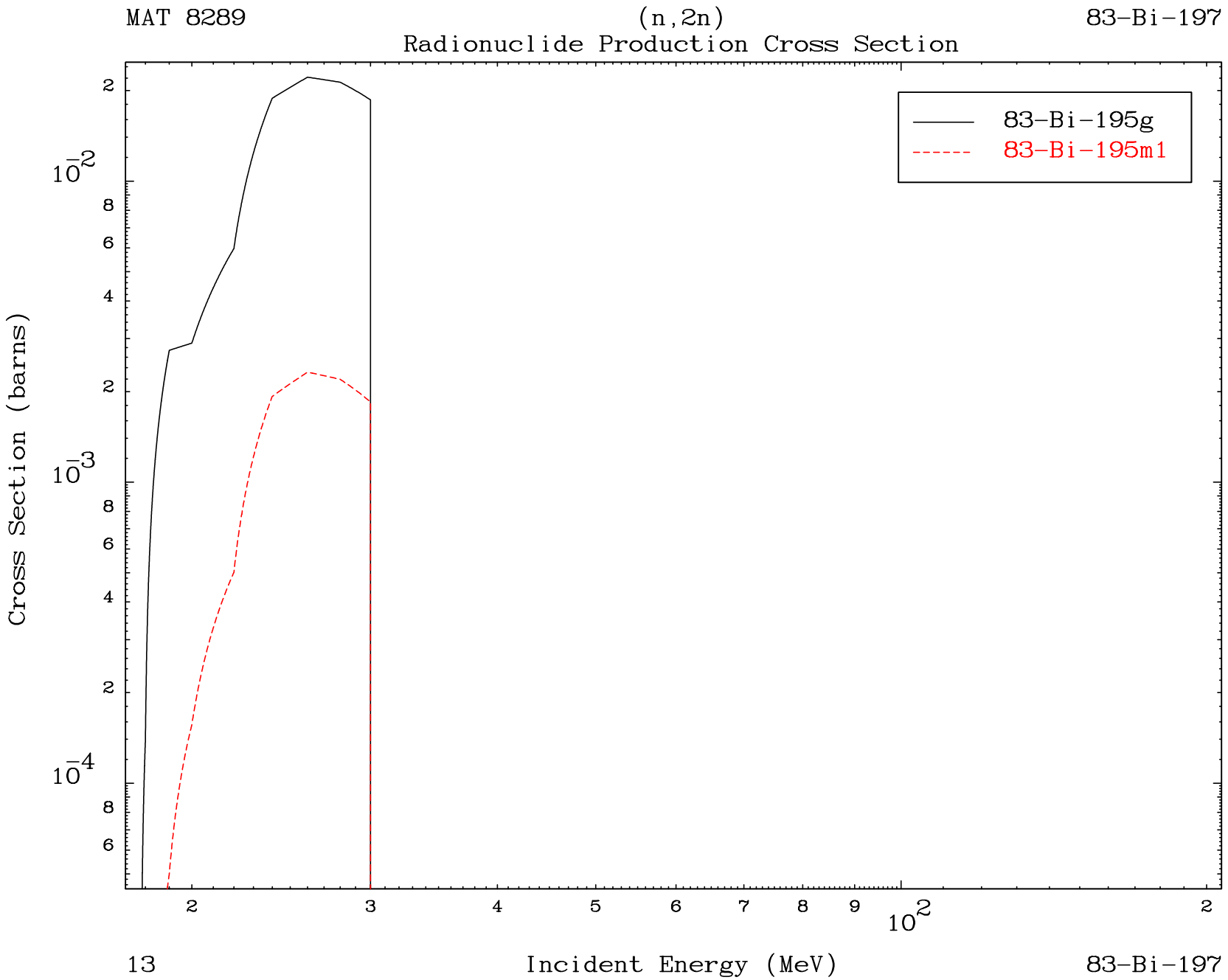

MAT 8289
(γ,d) Levels
83-Bi-197
0 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
8
83-Bi-197

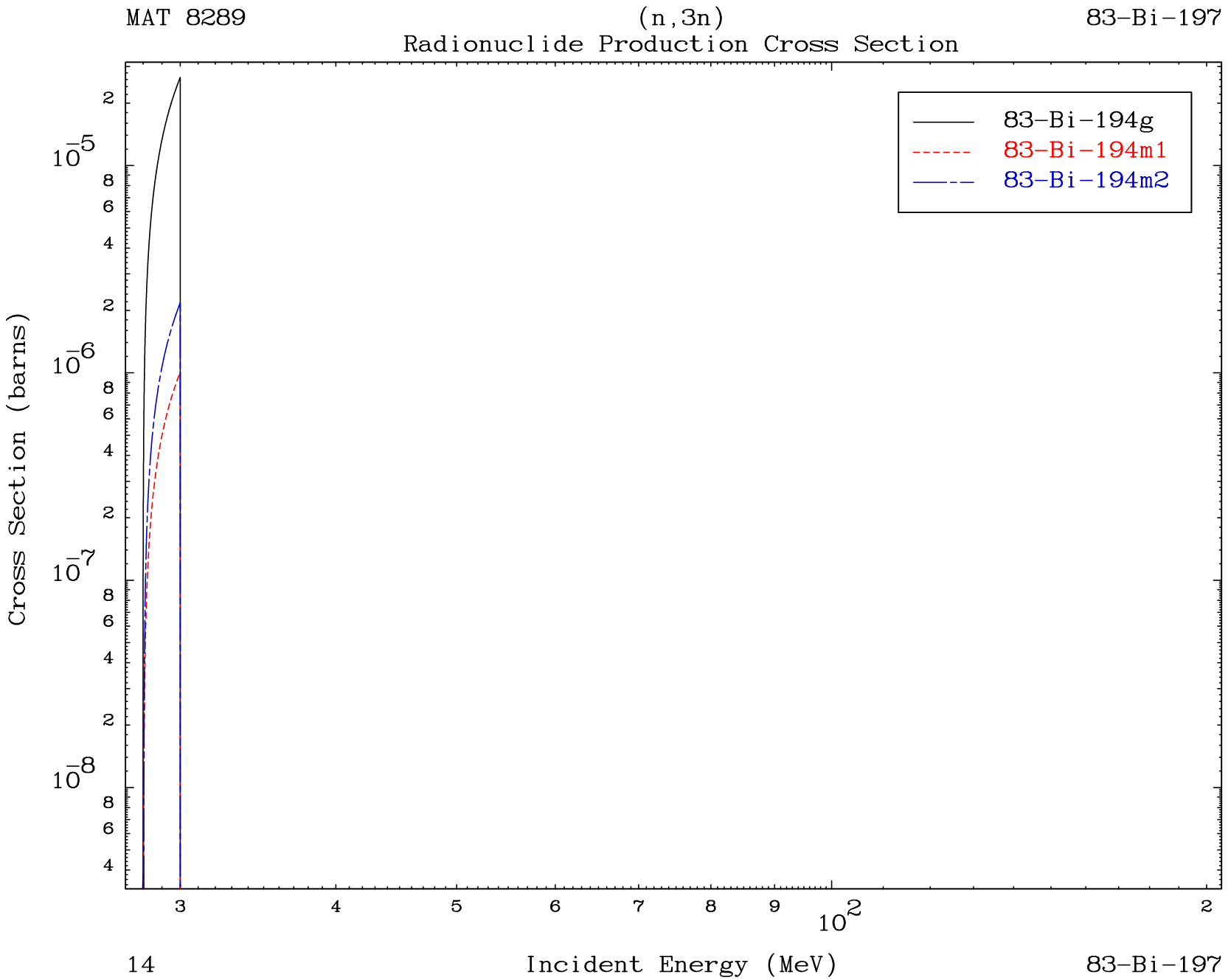

MAT 8289
(γ,t) Levels
83-Bi-197
0 Kelvin Cross Sections
(n,t)
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
2
3
4
5
6
7
8
9
10^2
2
9
Incident Energy (MeV)
83-Bi-197

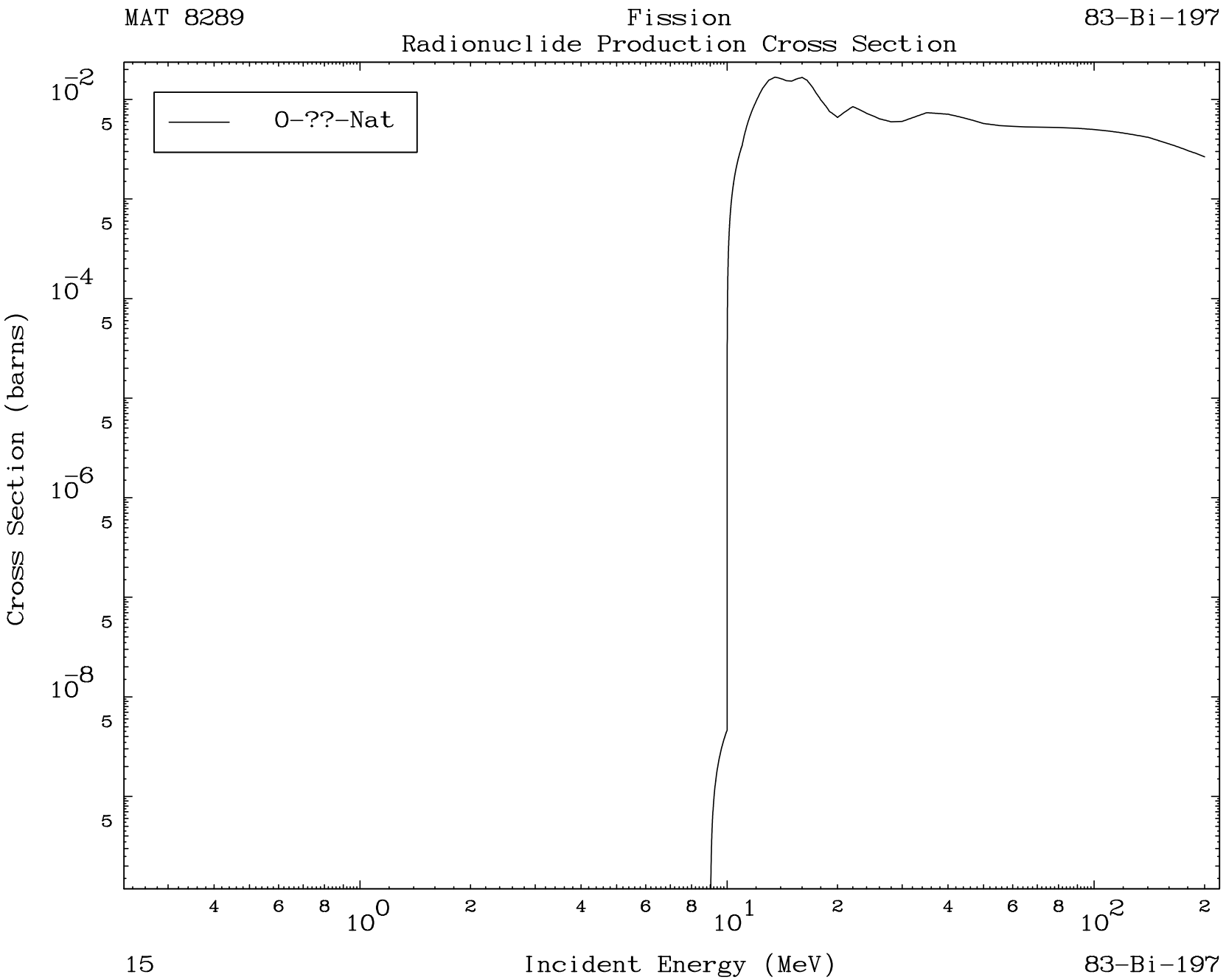

MAT 8289
(γ,He3) Levels
83-Bi-197
0 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
Incident Energy (MeV)
10
10^1
10^2
83-Bi-197

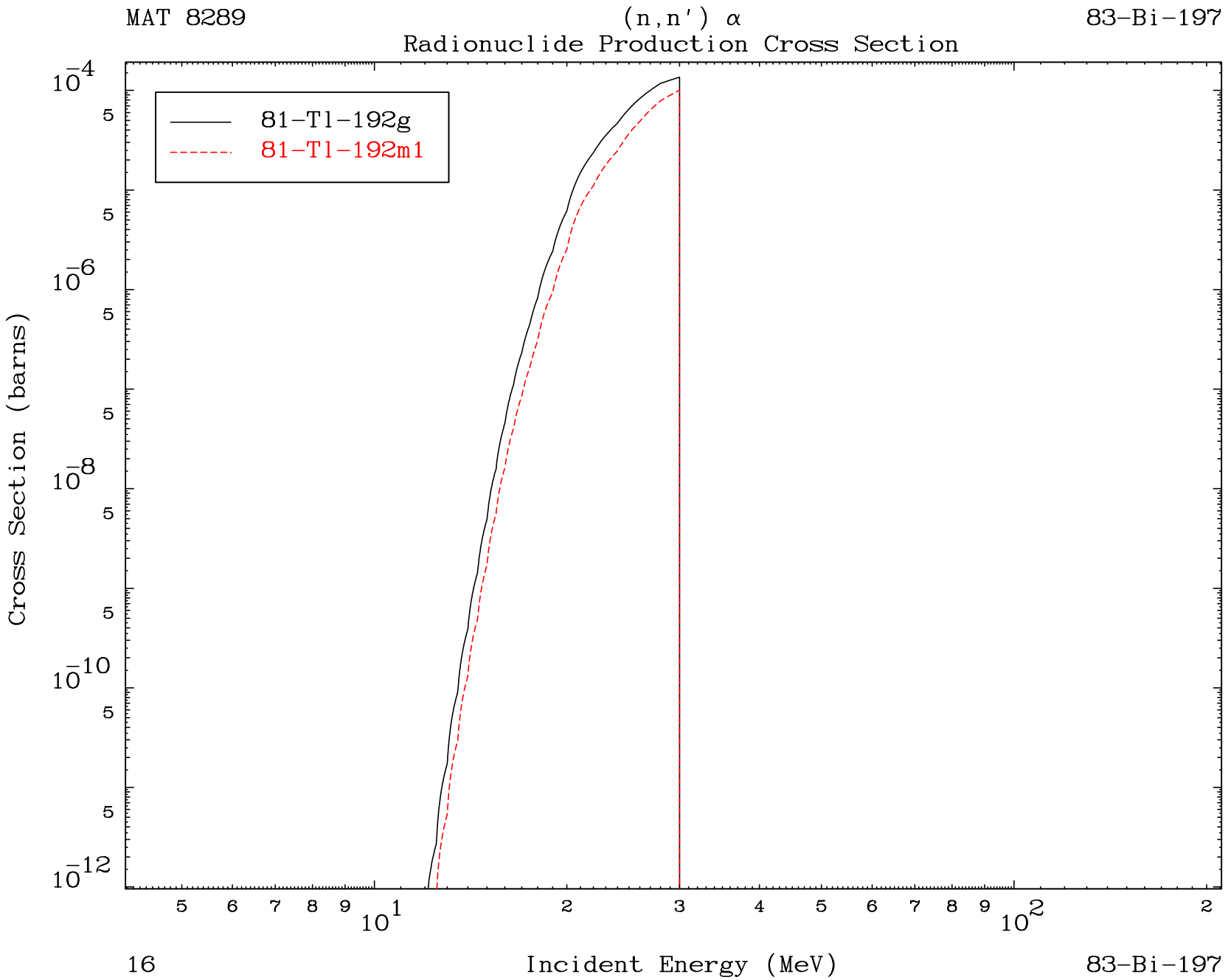

MAT 8289
(γ,α) Levels
83-Bi-197
0 Kelvin Cross Sections
(n,α)
(n,2α)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^0
10^1
10^2
Incident Energy (MeV)
11
83-Bi-197

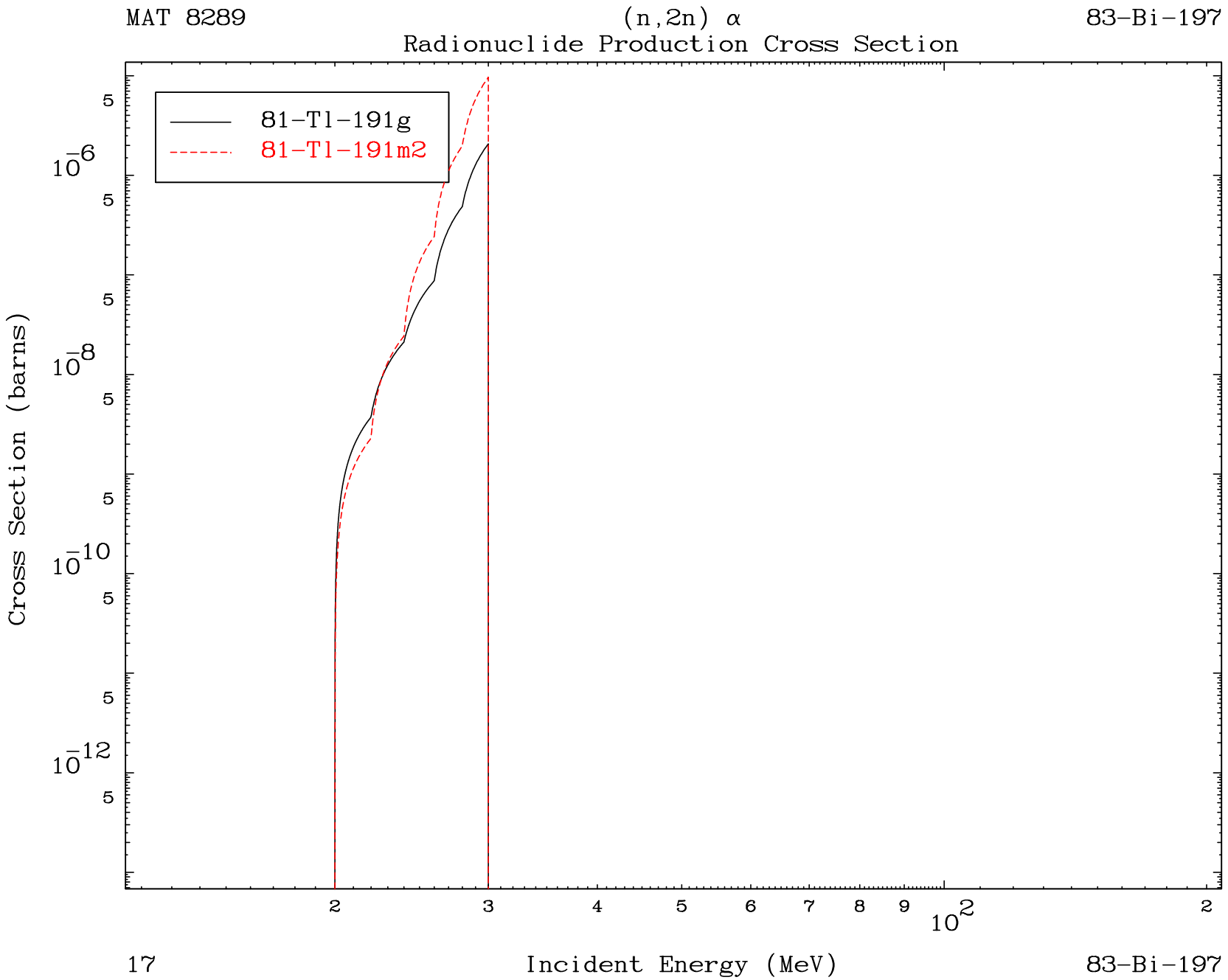

MAT 8289
Inelastic
83-Bi-197
Radionuclide Production Cross Section
83-Bi-196g
83-Bi-196m2
83-Bi-196m3
Cross Section (barns)
10^-1
5
10^-2
5
10^-3
5
10^-4
5
10^1
2
3
4
5
6
7
8
9
10^2
2
Incident Energy (MeV)
12
83-Bi-197

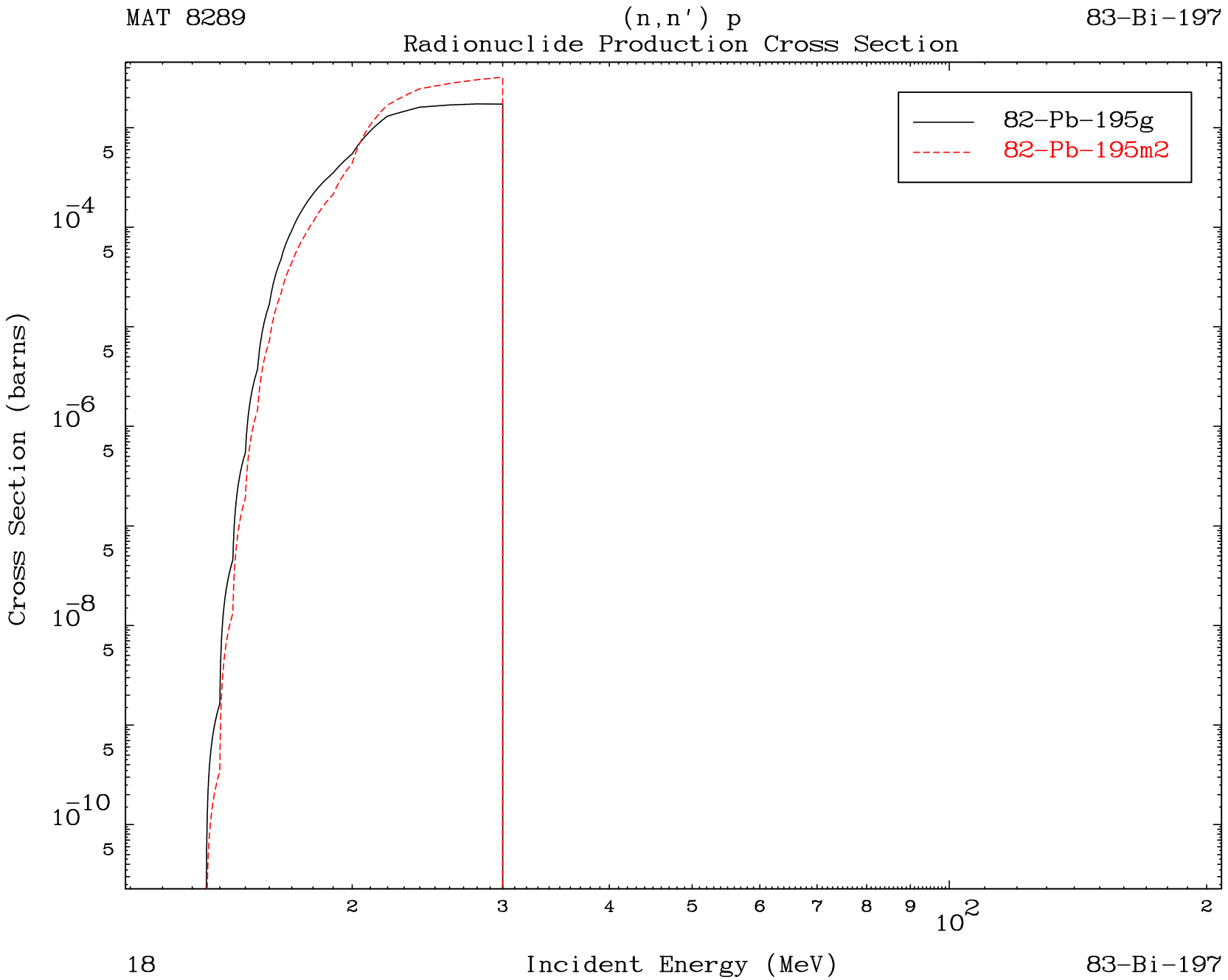

MAT 8289
(n,2n)
83-Bi-197
Radionuclide Production Cross Section
83-Bi-195g
83-Bi-195m1
Cross Section (barns)
Incident Energy (MeV)
13
83-Bi-197

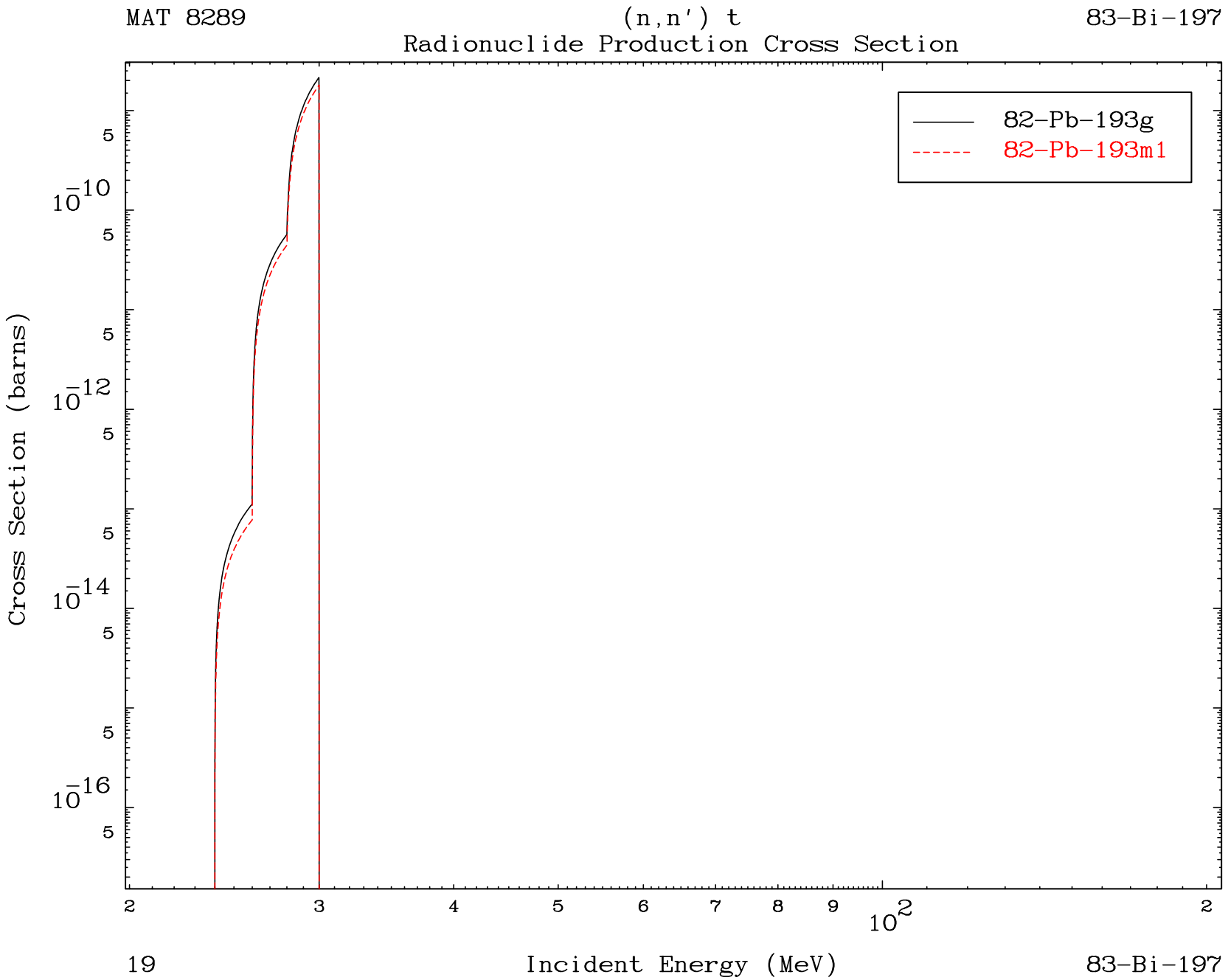

MAT 8289
(n,3n)
83-Bi-197
Radionuclide Production Cross Section
83-Bi-194g
83-Bi-194m1
83-Bi-194m2
Cross Section (barns)
Incident Energy (MeV)
14
83-Bi-197

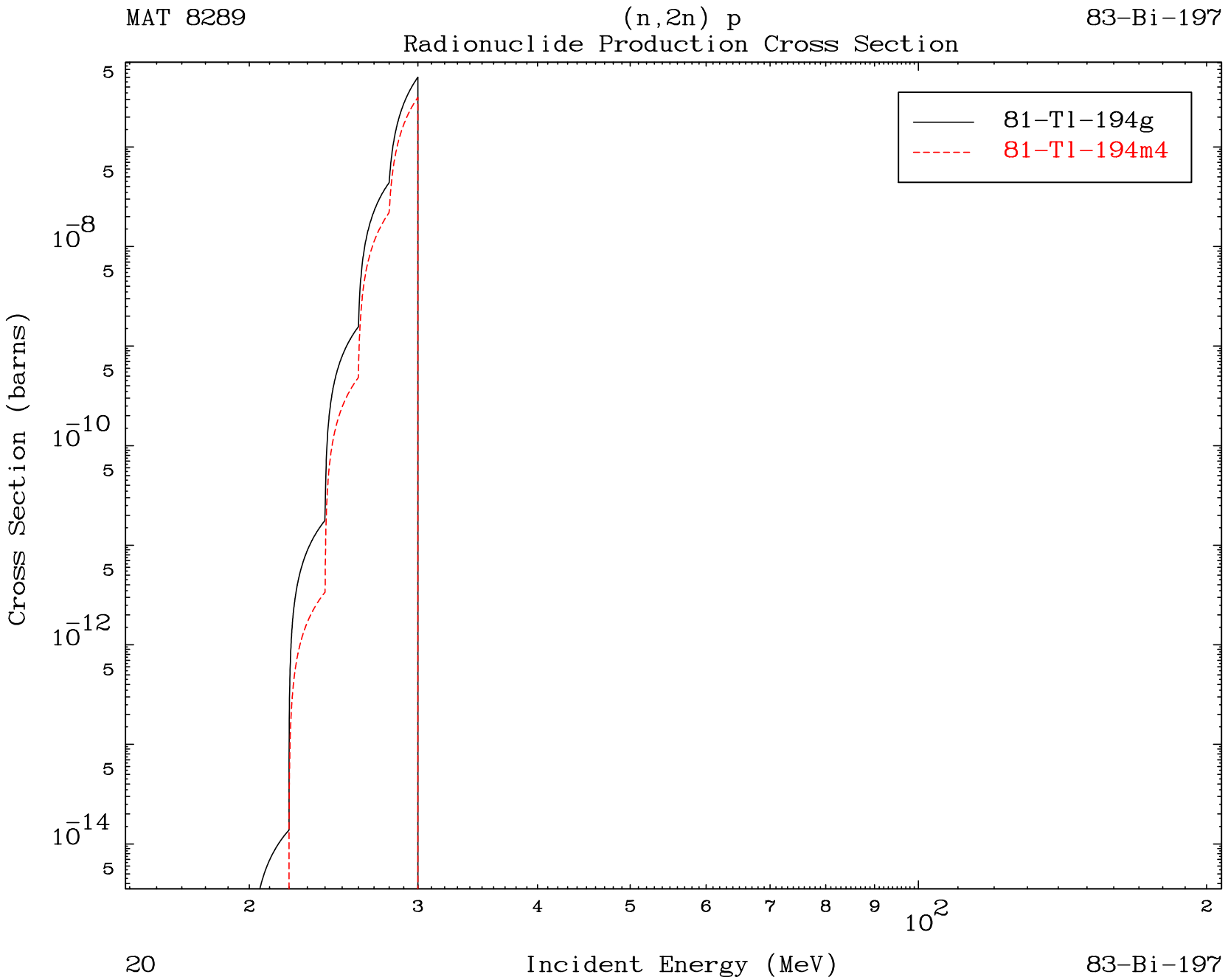

MAT 8289
Fission
83-Bi-197
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
10-2
10-4
10-6
10-8
5
4
6
8
100
2
101
102
15
Incident Energy (MeV)
83-Bi-197

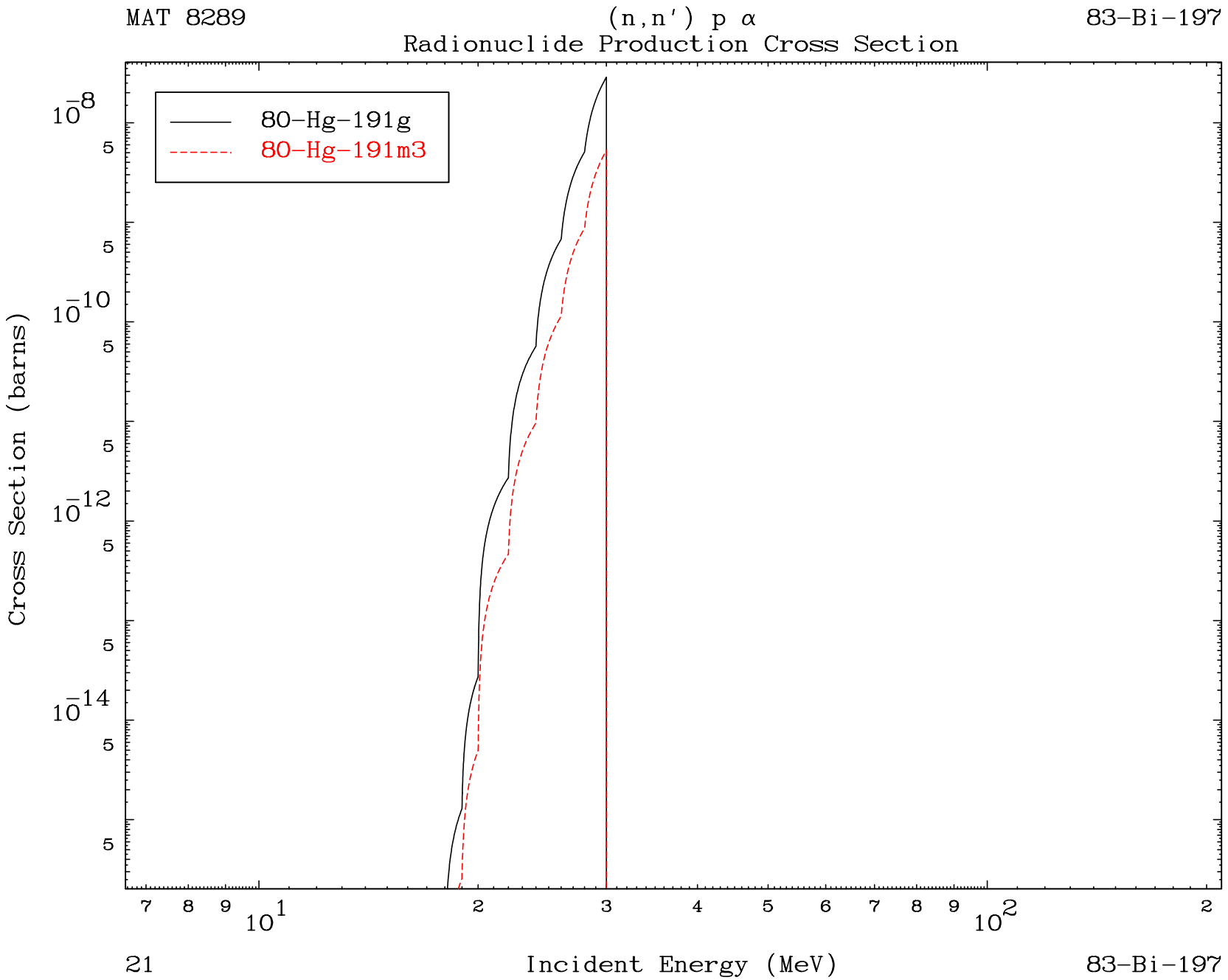

MAT 8289
(n,n') α
83-Bi-197
Radionuclide Production Cross Section
81-Tl-192g
81-Tl-192m1
Cross Section (barns)
Incident Energy (MeV)
16
83-Bi-197

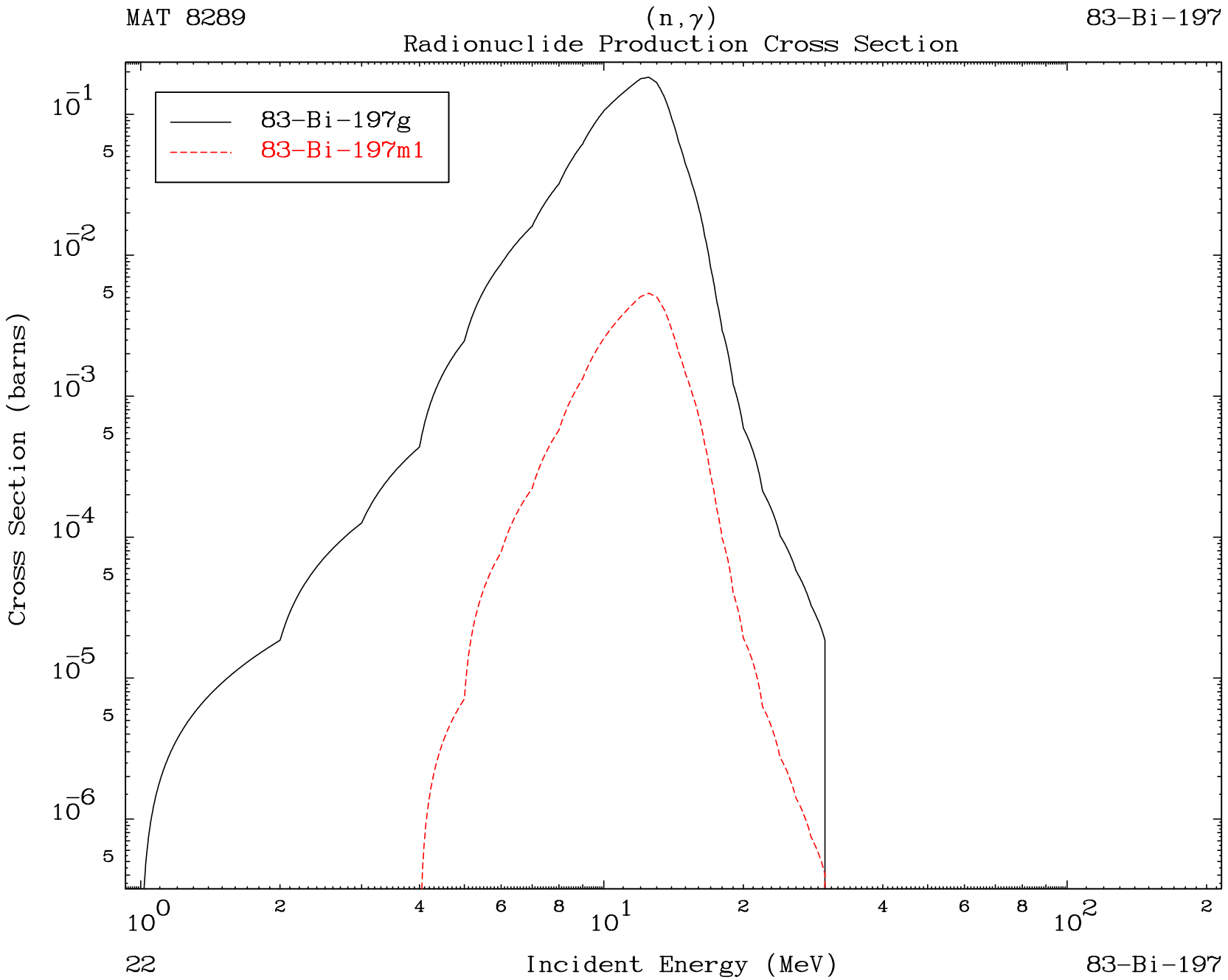

MAT 8289
(n,2n) α
83-Bi-197
Radionuclide Production Cross Section
81-Tl-191g
81-Tl-191m2
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
17
Incident Energy (MeV)
83-Bi-197

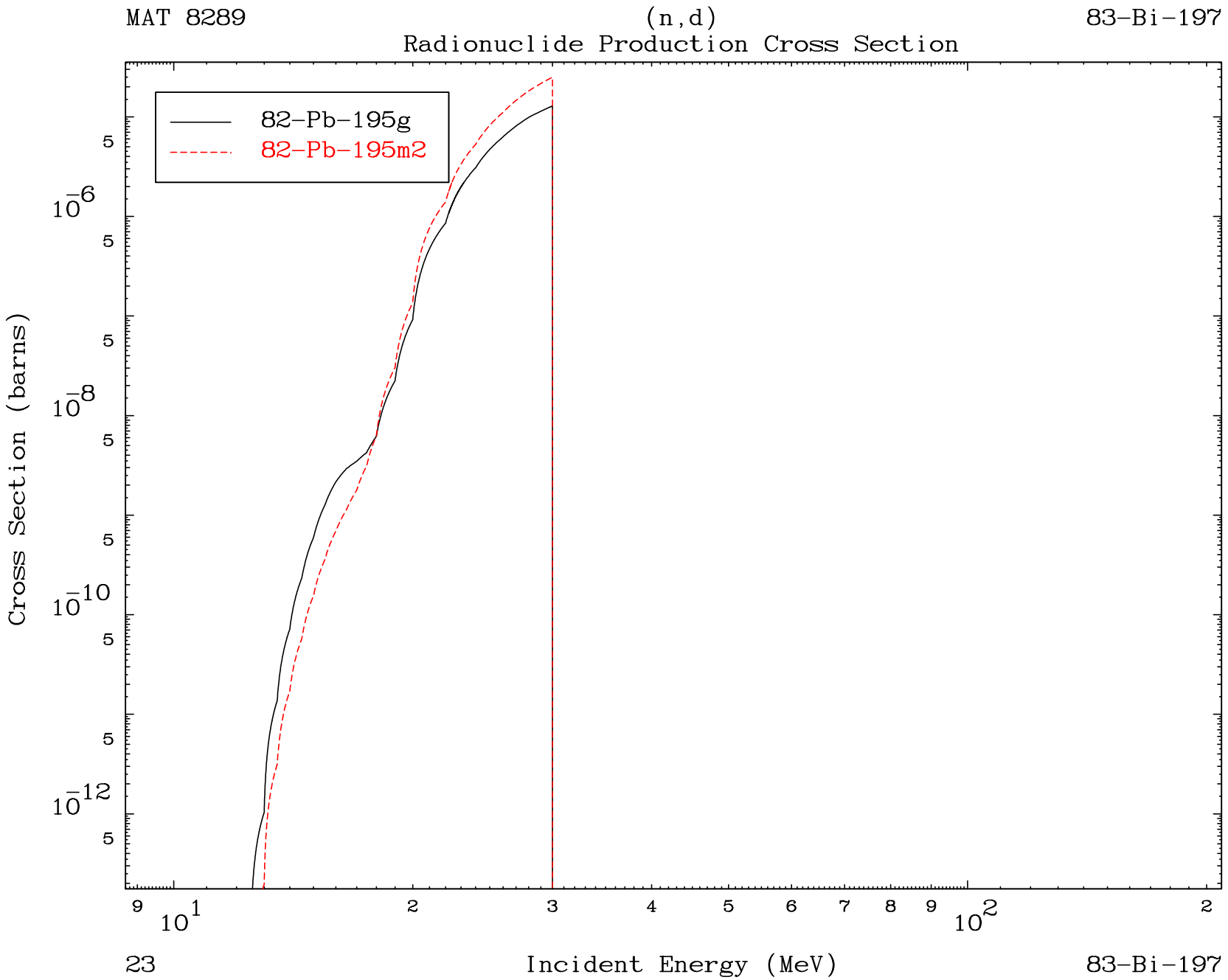

MAT 8289
(n,n') p
83-Bi-197
Radionuclide Production Cross Section
82-Pb-195g
82-Pb-195m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
18
Incident Energy (MeV)
83-Bi-197

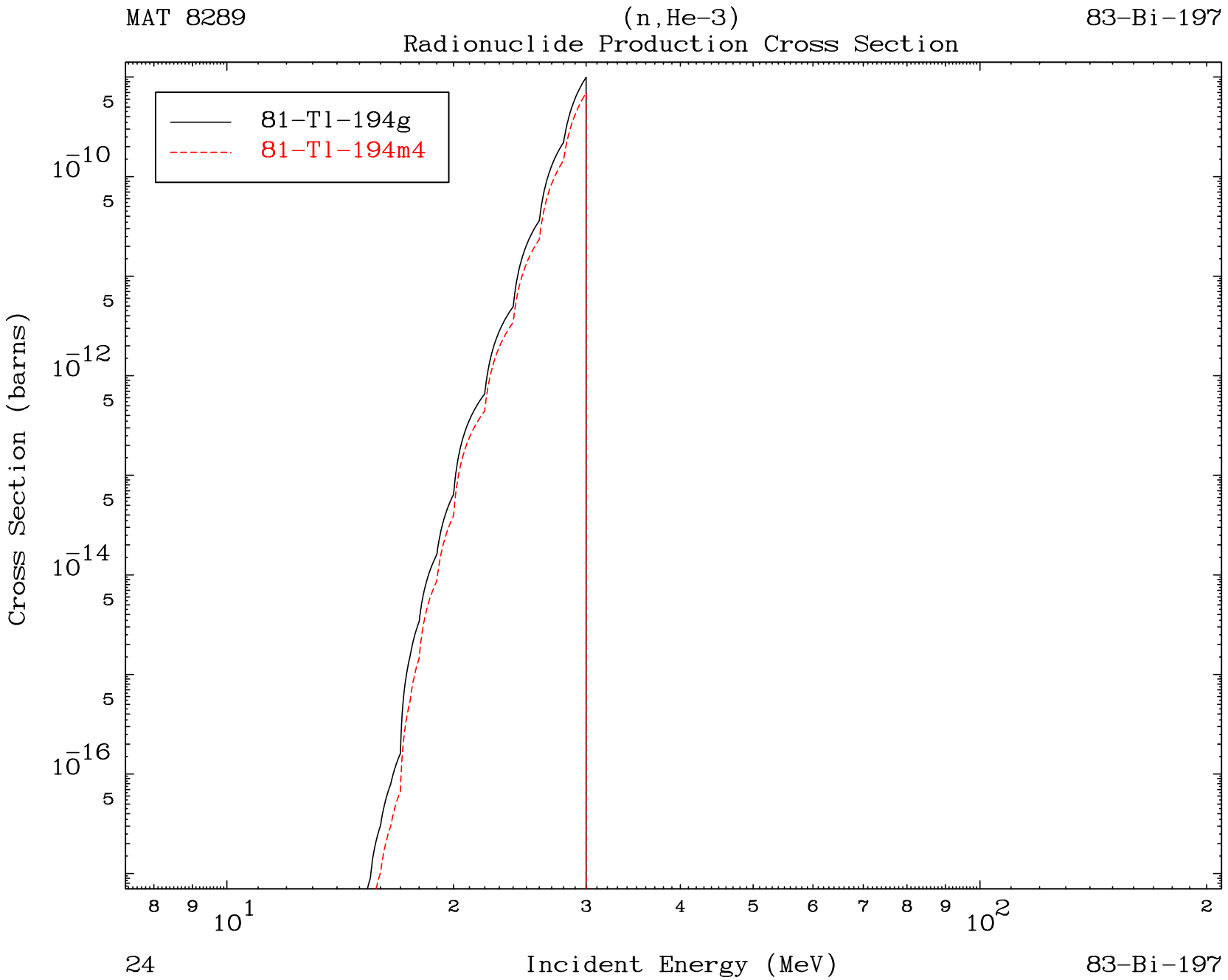

MAT 8289
(n,n') t
83-Bi-197
Radionuclide Production Cross Section
82-Pb-193g
82-Pb-193m1
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
5
2
3
4
6
7
8
9
10^2
Incident Energy (MeV)
19
83-Bi-197

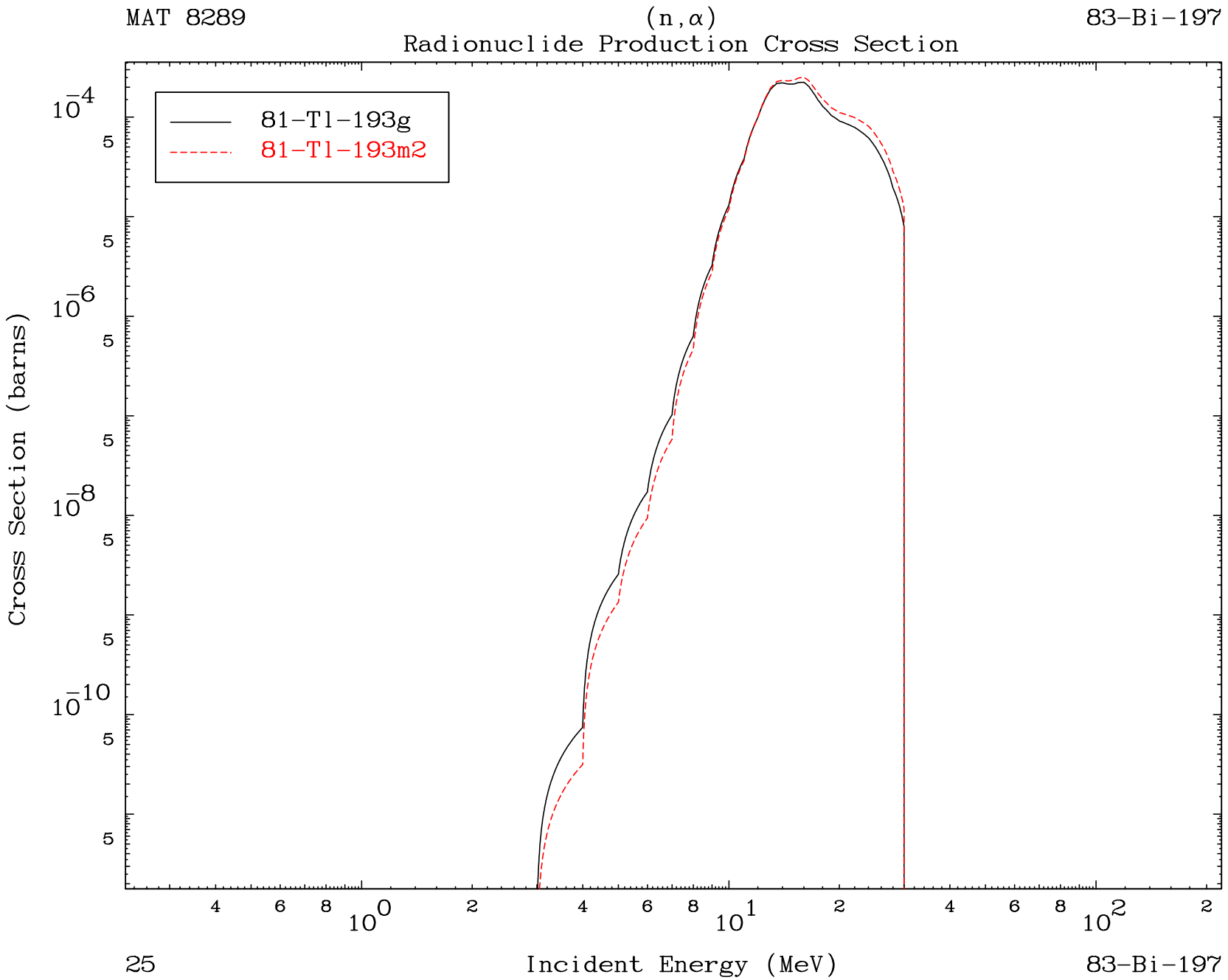

MAT 8289
(n,2n) p
83-Bi-197
Radionuclide Production Cross Section
81-Tl-194g
81-Tl-194m4
Cross Section (barns)
Incident Energy (MeV)
20
83-Bi-197

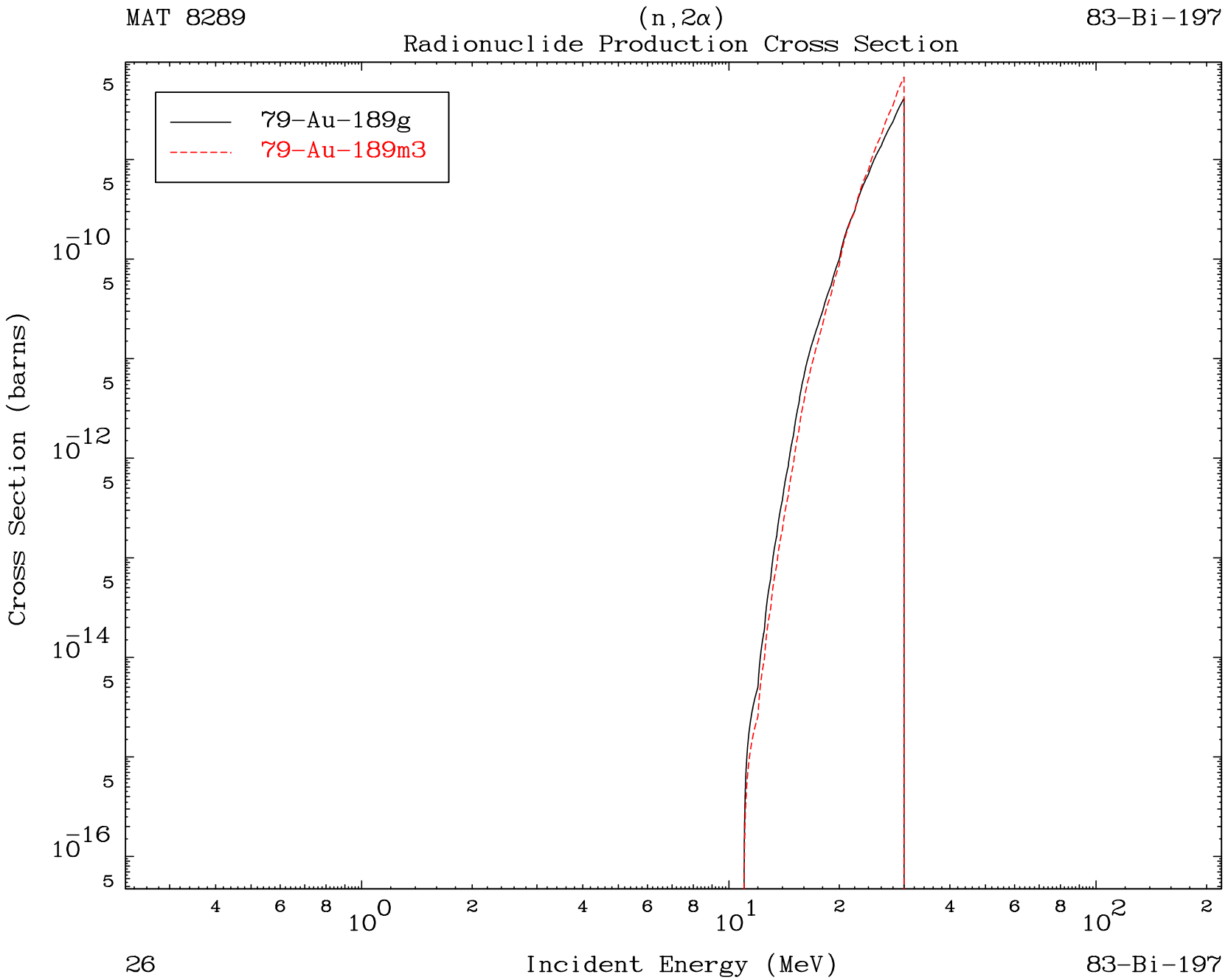

MAT 8289
(n,n') p α
83-Bi-197
Radionuclide Production Cross Section
80-Hg-191g
80-Hg-191m3
Cross Section (barns)
10^-8
10^-10
10^-12
10^-14
5
7 8 9
10^1
2 3 4 5 6 7 8 9
10^2
2
21
Incident Energy (MeV)
83-Bi-197

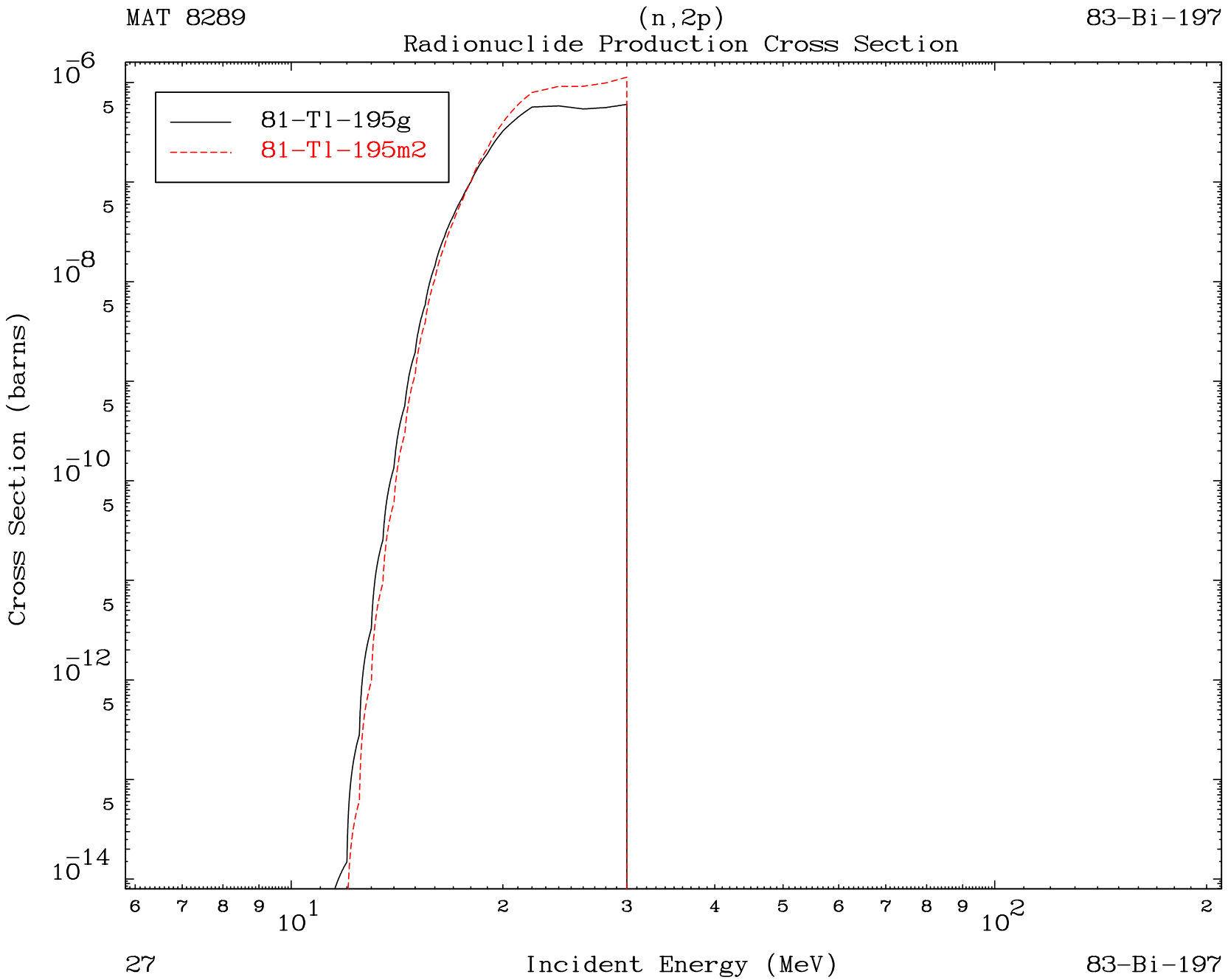

MAT 8289
(n,γ)
83-Bi-197
Radionuclide Production Cross Section
83-Bi-197g
83-Bi-197m1
Cross Section (barns)
Incident Energy (MeV)
22
83-Bi-197

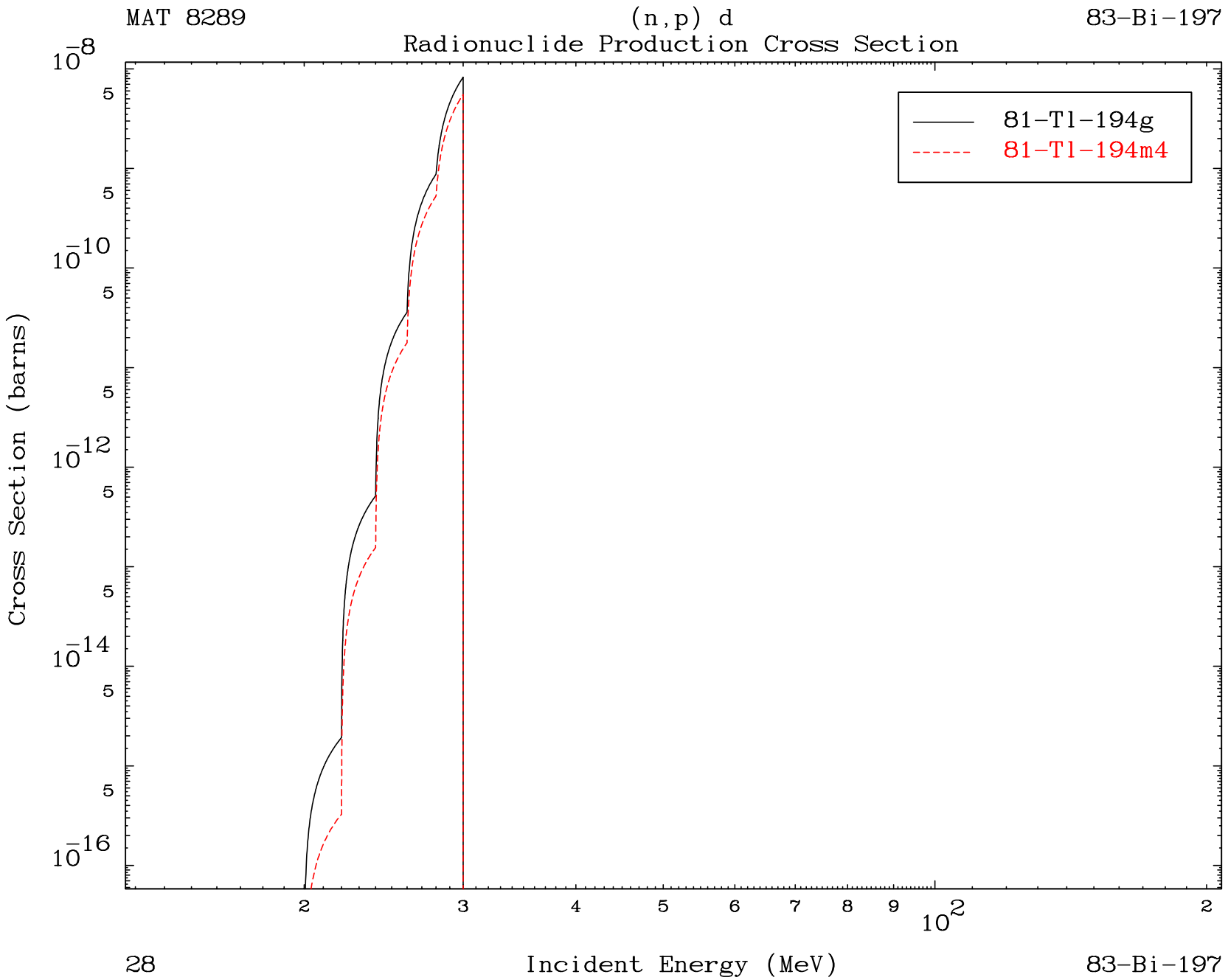

MAT 8289
(n,d)
83-Bi-197
Radionuclide Production Cross Section
82-Pb-195g
82-Pb-195m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
9
10^1
2
3
4
5
6
7
8
9
10^2
2
23
Incident Energy (MeV)
83-Bi-197


MAT 8289
(n,He-3)
83-Bi-197
Radionuclide Production Cross Section
81-Tl-194g
81-Tl-194m4
Cross Section (barns)
Incident Energy (MeV)
24
83-Bi-197


MAT 8289
(n,α)
83-Bi-197
Radionuclide Production Cross Section
81-Tl-193g
81-Tl-193m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
10^0
10^1
10^2
Incident Energy (MeV)
25
83-Bi-197


MAT 8289
(n,2α)
83-Bi-197
Radionuclide Production Cross Section
79-Au-189g
79-Au-189m3
Cross Section (barns)
10^-10
10^-12
10^-14
10^-16
10^0
10^1
10^2
Incident Energy (MeV)
26
83-Bi-197


MAT 8289
(n,2p)
83-Bi-197
Radionuclide Production Cross Section
81-Tl-195g
81-Tl-195m2
Cross Section (barns)
Incident Energy (MeV)
27
83-Bi-197


MAT 8289
(n,p) d
83-Bi-197
Radionuclide Production Cross Section
81-Tl-194g
81-Tl-194m4
Cross Section (barns)
Incident Energy (MeV)
28
83-Bi-197