Program EVALPLOT
(Version 2021-1)
by
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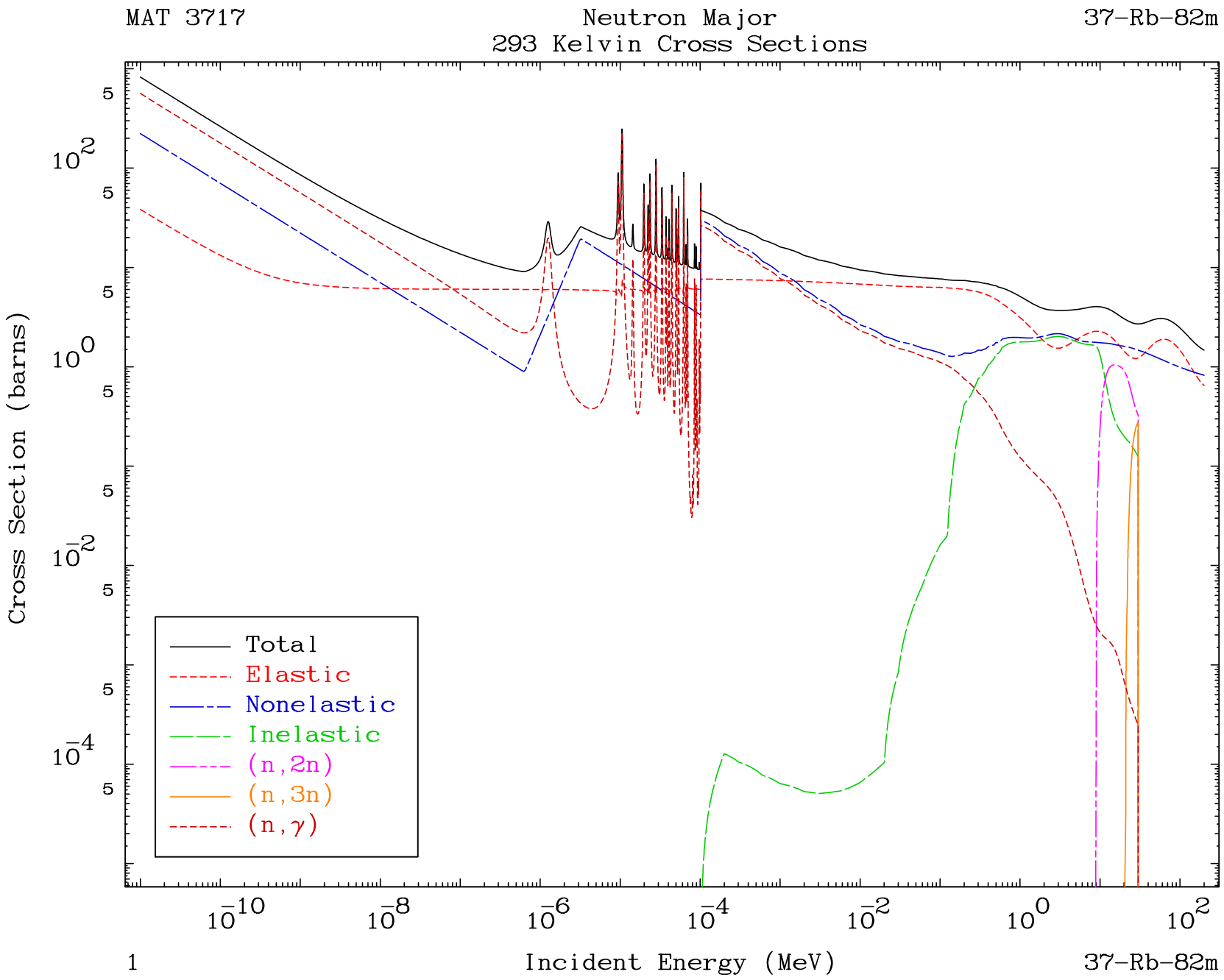
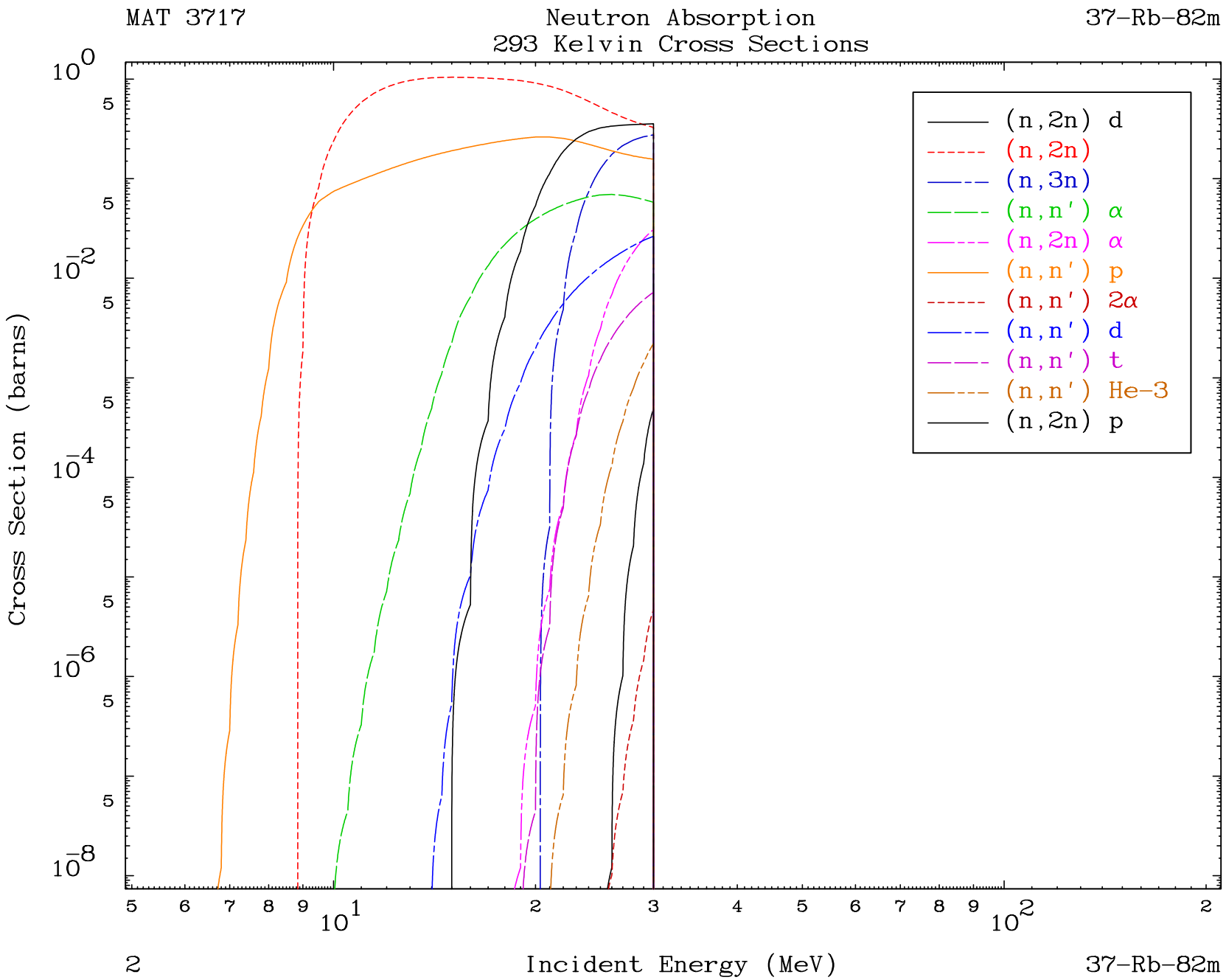
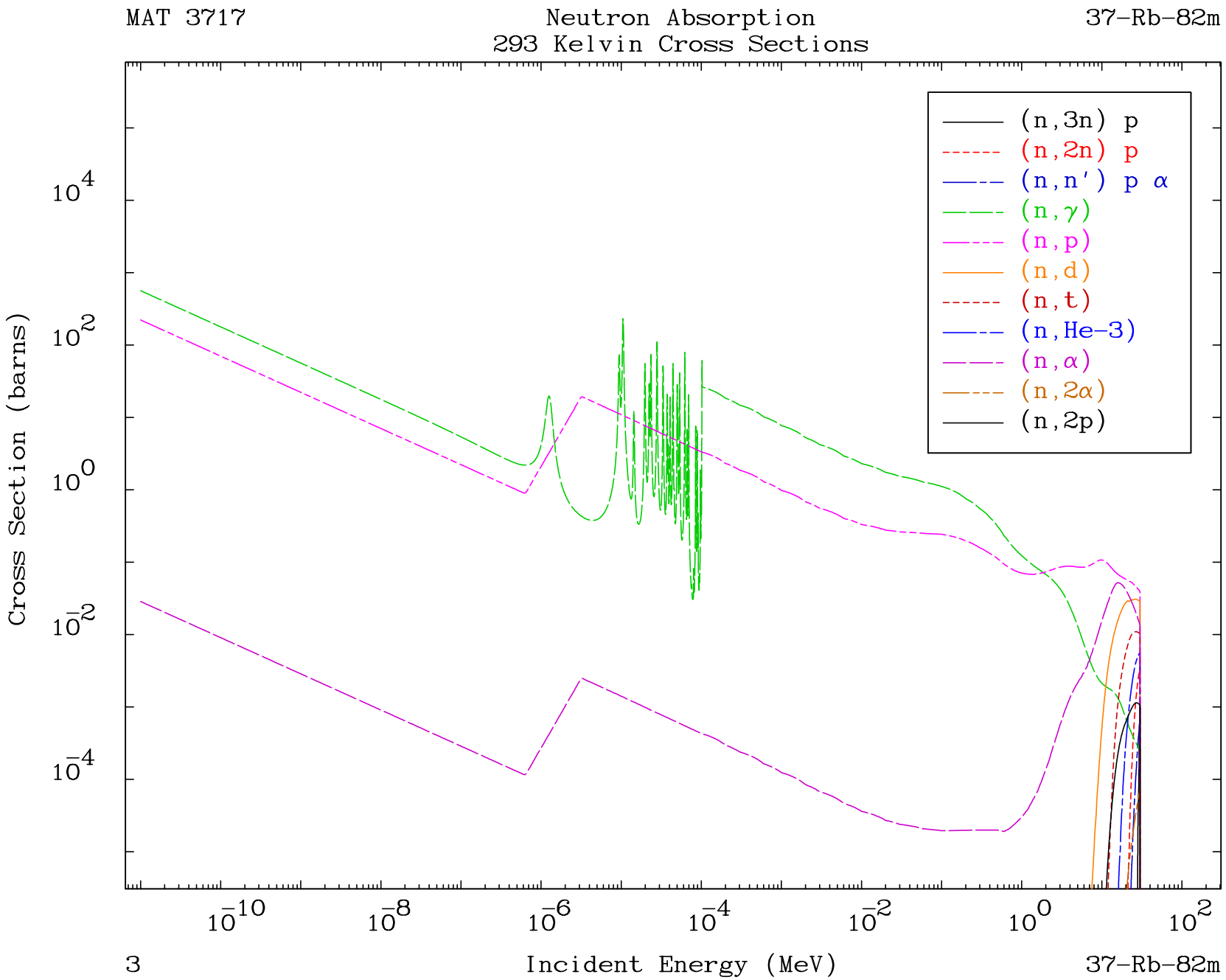
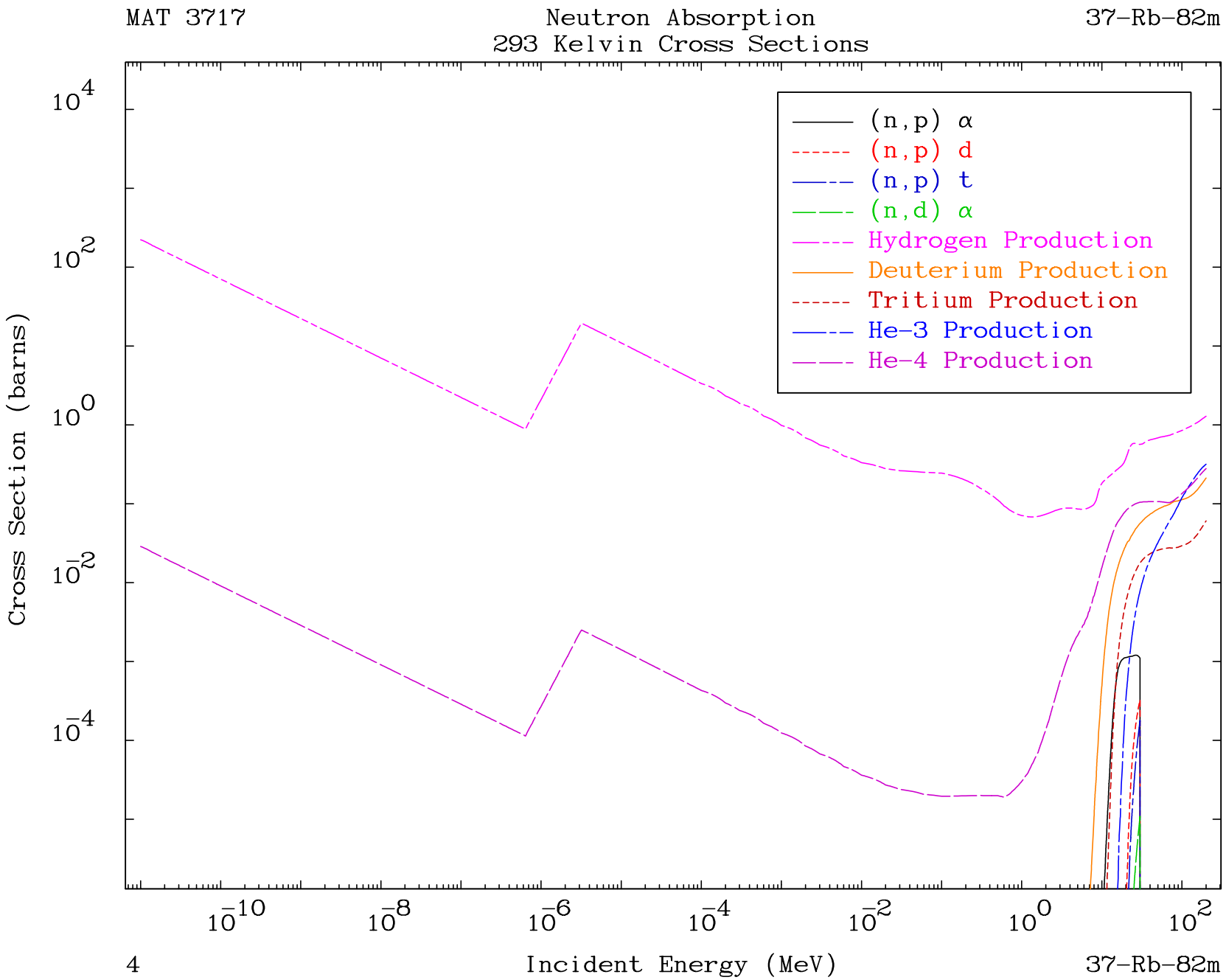
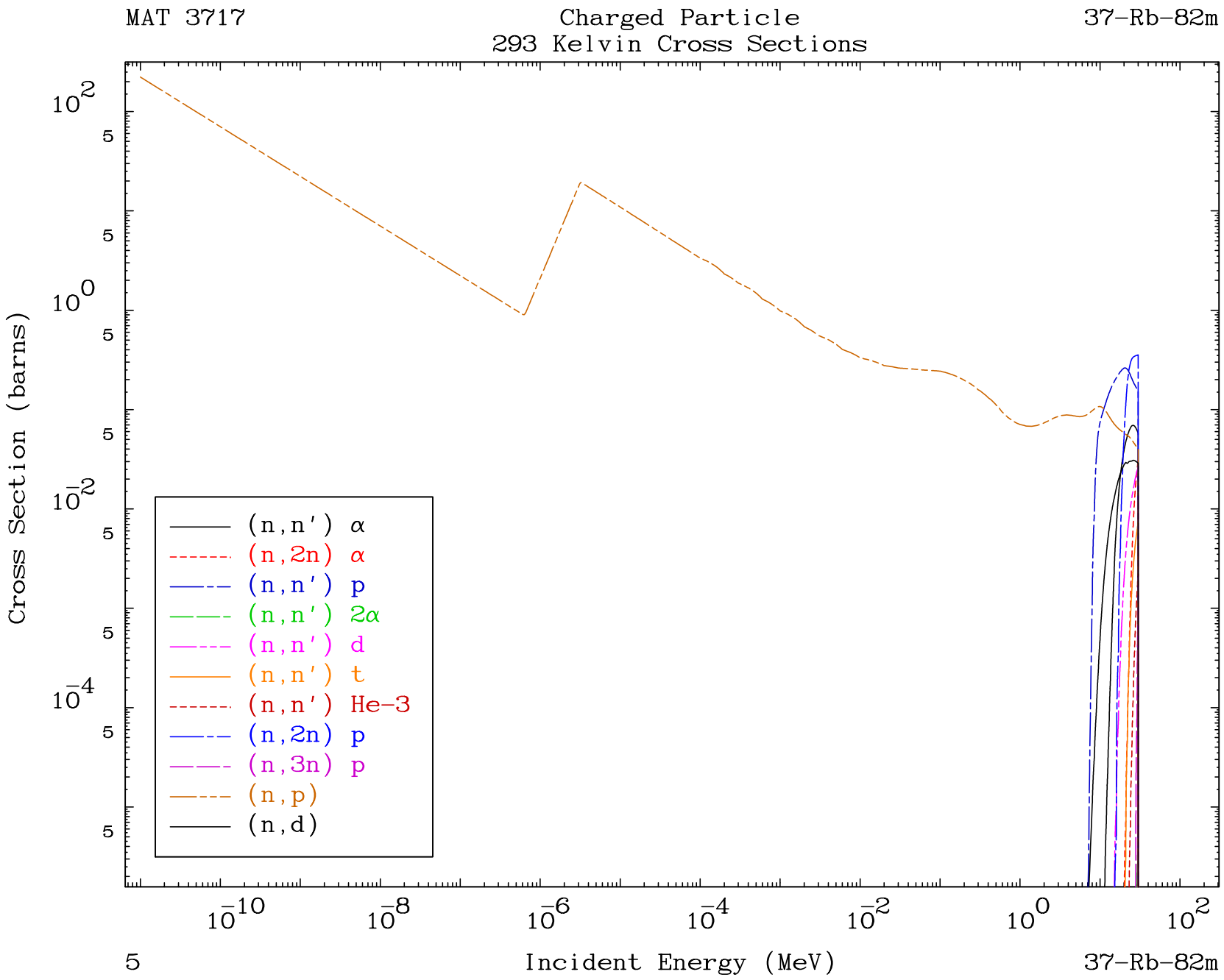
Press Mouse Button to Start

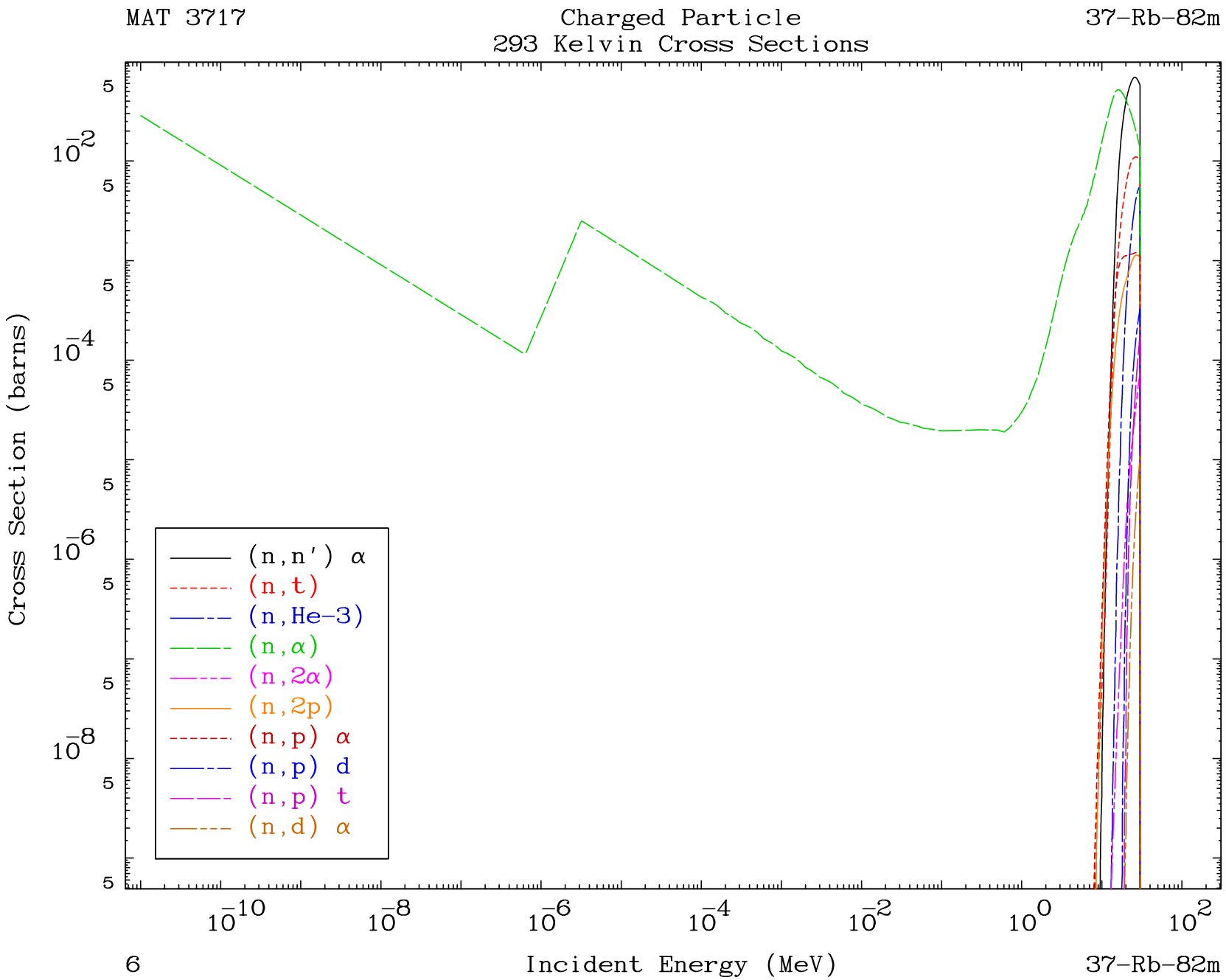

MAT 3717
Neutron Major
293 Kelvin Cross Sections
37-Rb-82m
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Nonelastic
Inelastic
(n,2n)
(n,3n)
(n,γ)
1
37-Rb-82m

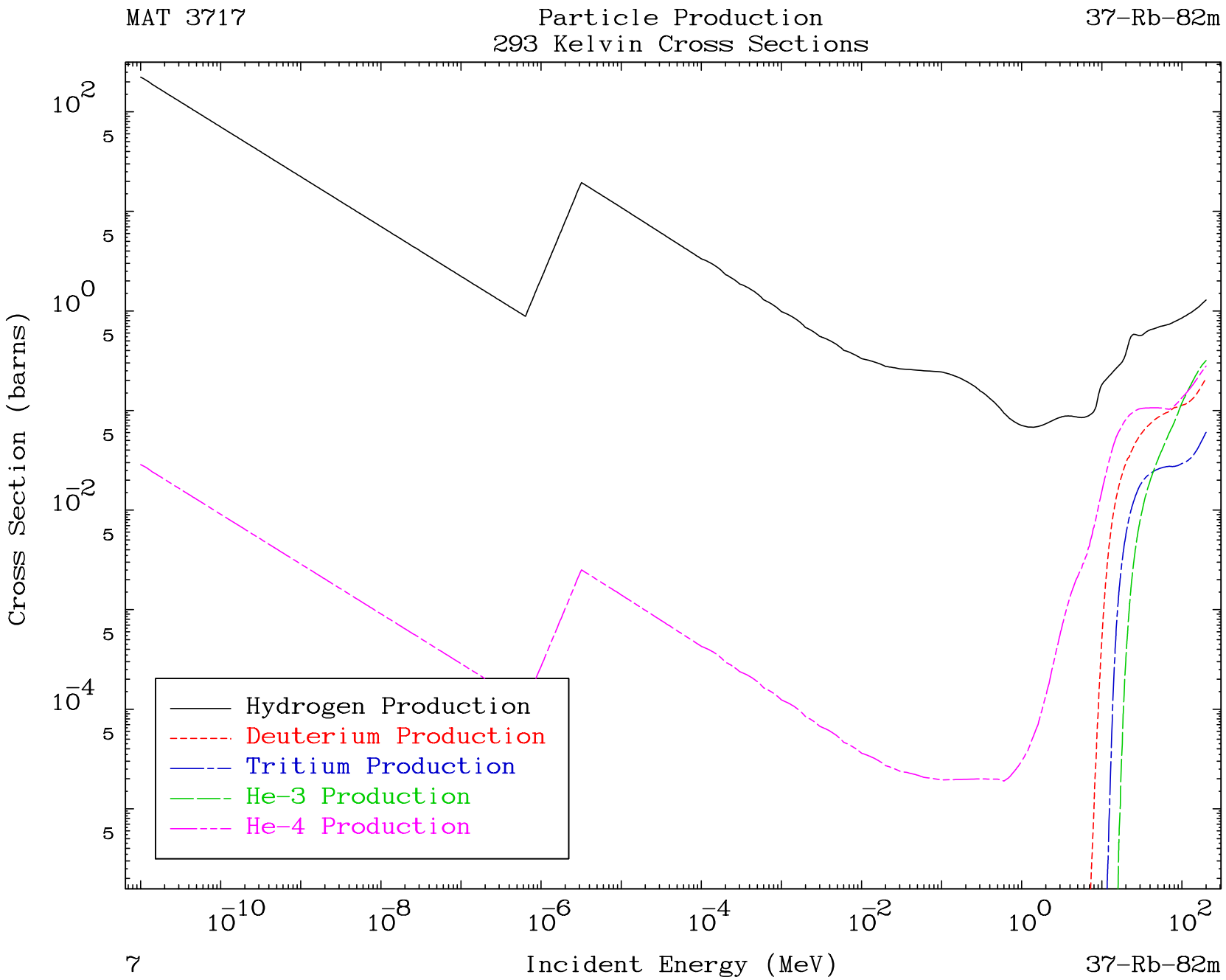

MAT 3717
Neutron Absorption
293 Kelvin Cross Sections
37-Rb-82m
Cross Section (barns)
Incident Energy (MeV)
37-Rb-82m
(n,2n) d
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p

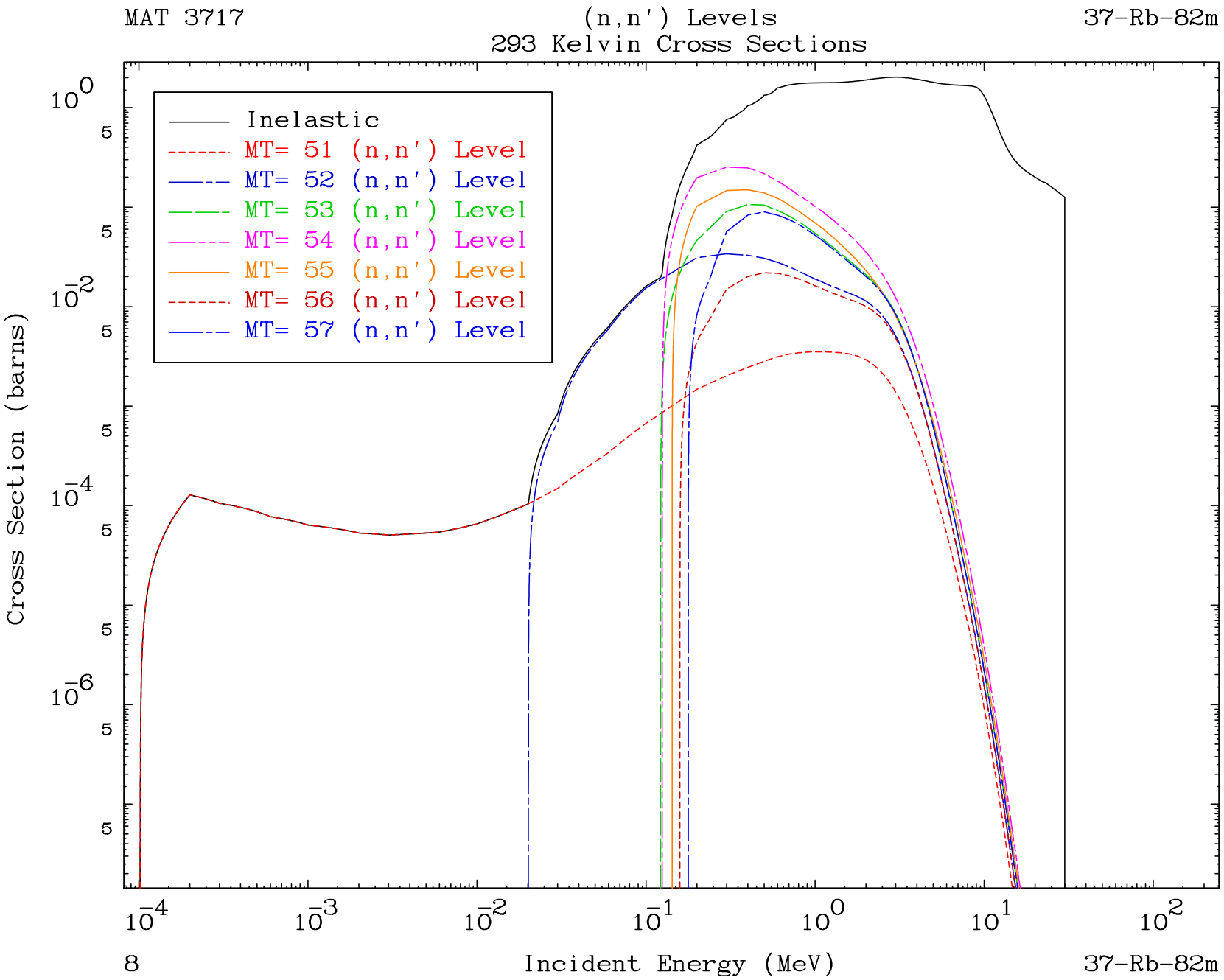

MAT 3717
Neutron Absorption
293 Kelvin Cross Sections
37-Rb-82m
(n,3n) p
(n,2n) p
(n,n') p α
(n,γ)
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
Cross Section (barns)
10^4
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
3
37-Rb-82m

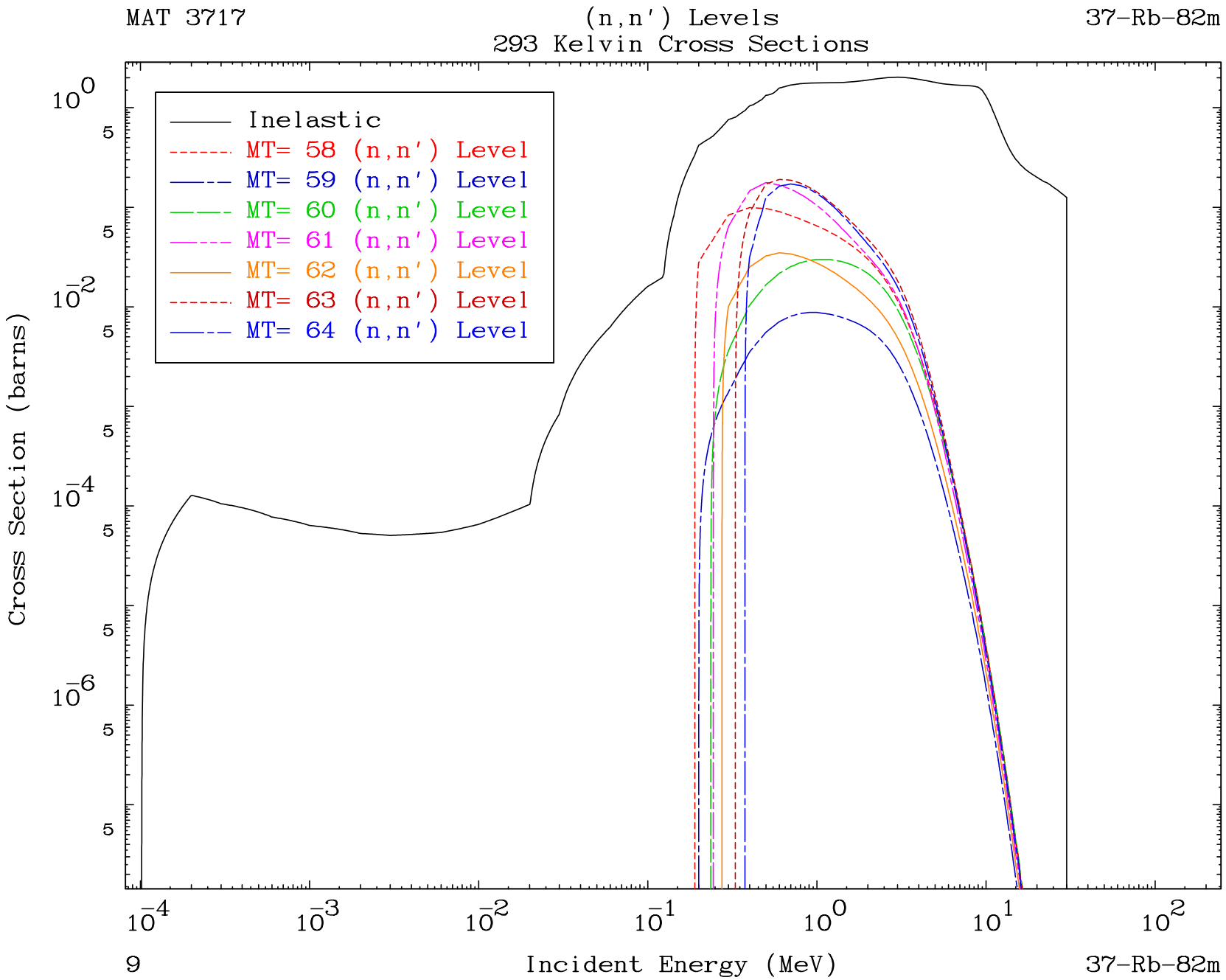

MAT 3717
Neutron Absorption
293 Kelvin Cross Sections
37-Rb-82m
(n,p) α
(n,p) d
(n,p) t
(n,d) α
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
4
37-Rb-82m

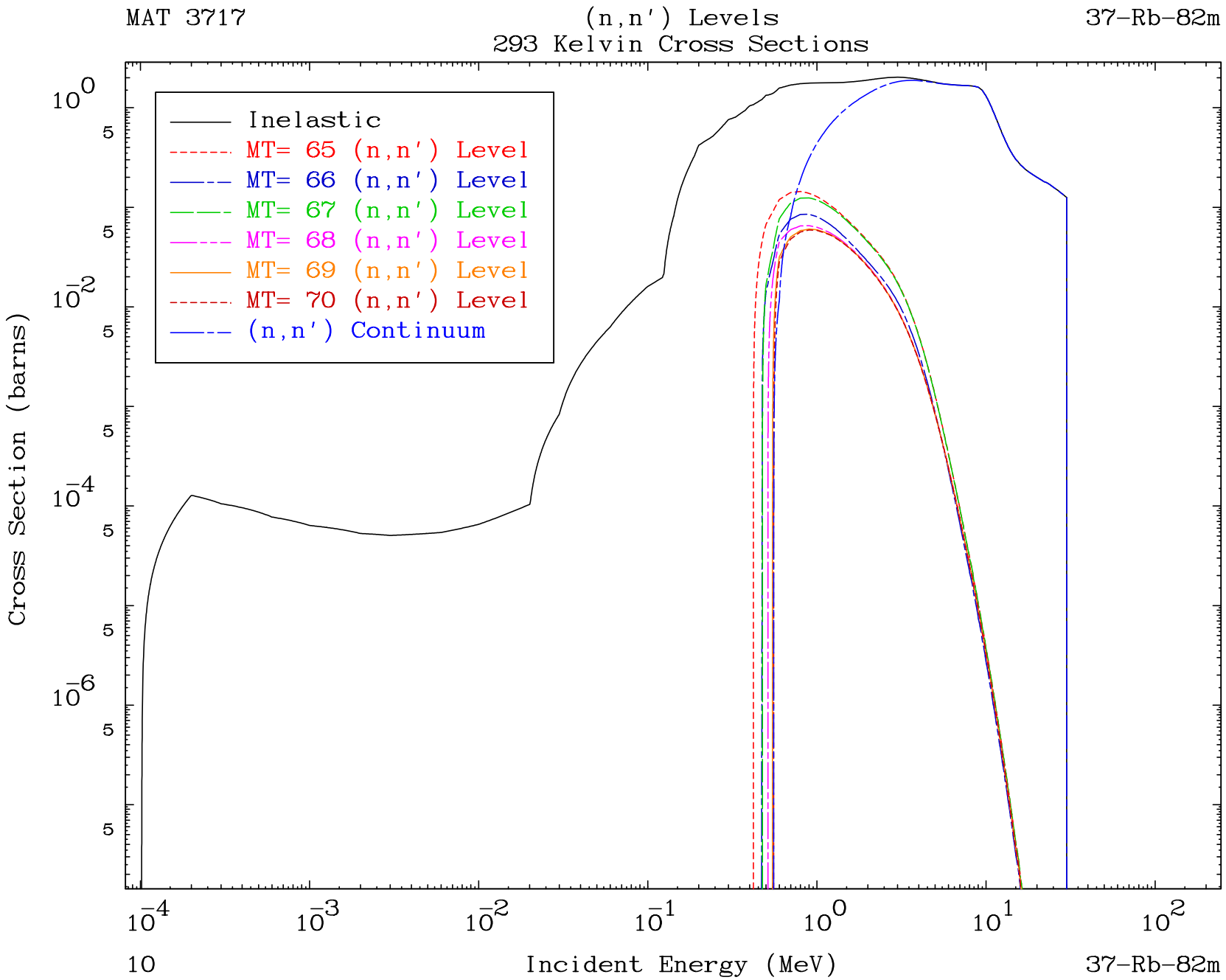

MAT 3717
Charged Particle
293 Kelvin Cross Sections
37-Rb-82m
Cross Section (barns)
Incident Energy (MeV)
37-Rb-82m
(n,n') α
(n,2n) α
(n,n') p
(n,n') 2α
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
(n,p)
(n,d)

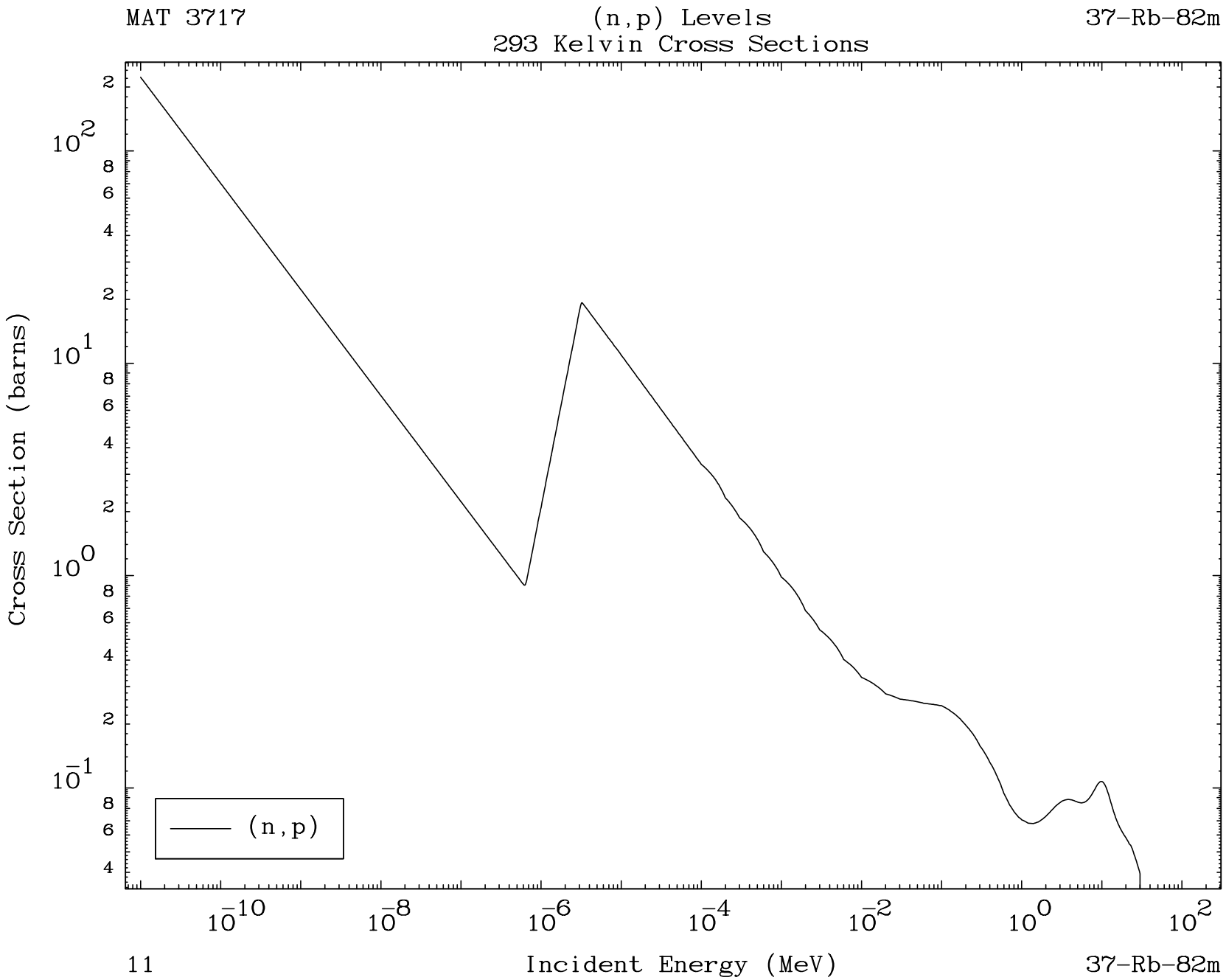

MAT 3717
Charged Particle
293 Kelvin Cross Sections
37-Rb-82m
Cross Section (barns)
Incident Energy (MeV)
(n,n') α
(n,t)
(n,He-3)
(n,α)
(n,2α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
(n,d) α
6
37-Rb-82m

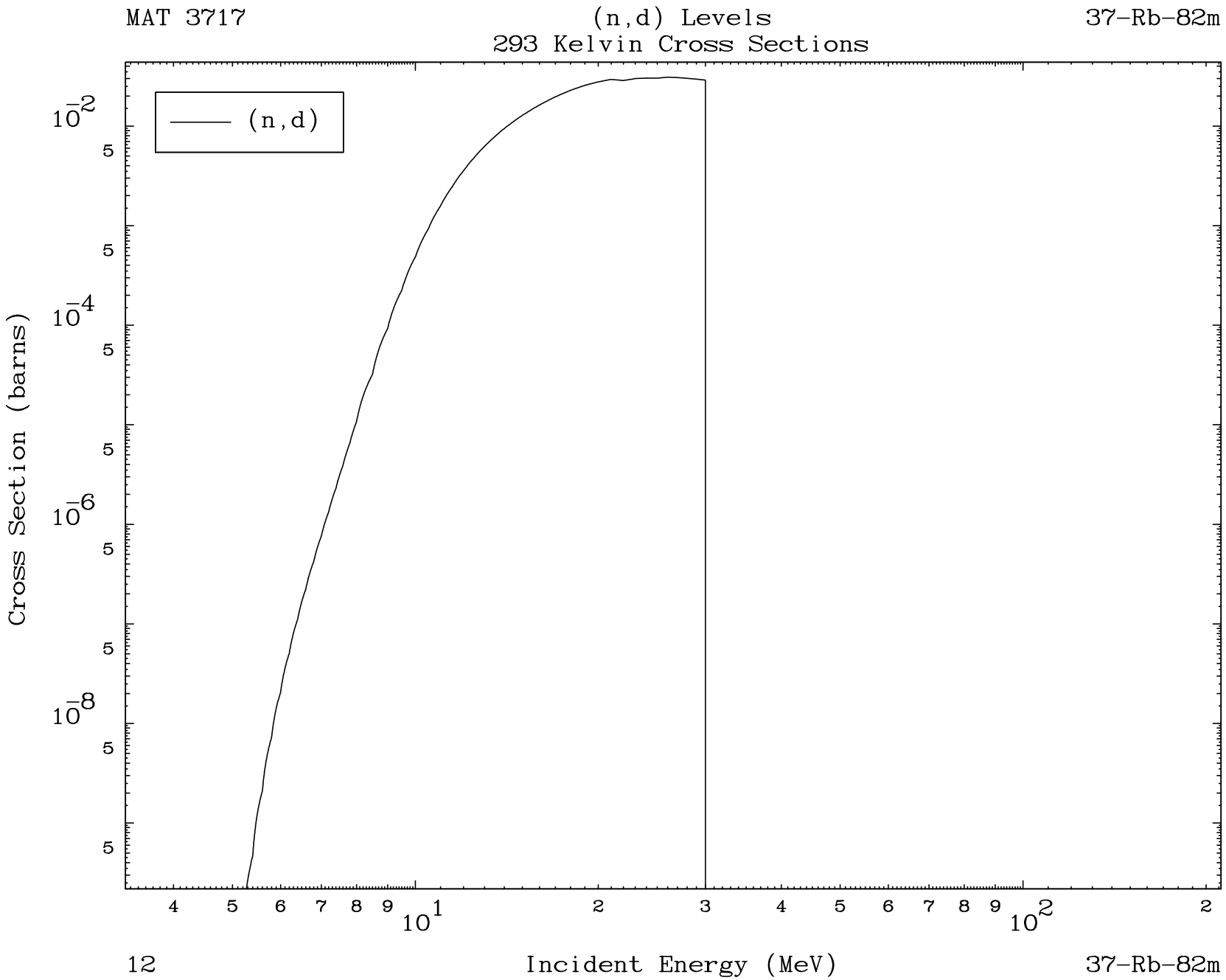

MAT 3717
Particle Production
293 Kelvin Cross Sections
37-Rb-82m
Cross Section (barns)
10^2
5
10^0
5
10^-2
5
10^-4
5
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
7
37-Rb-82m

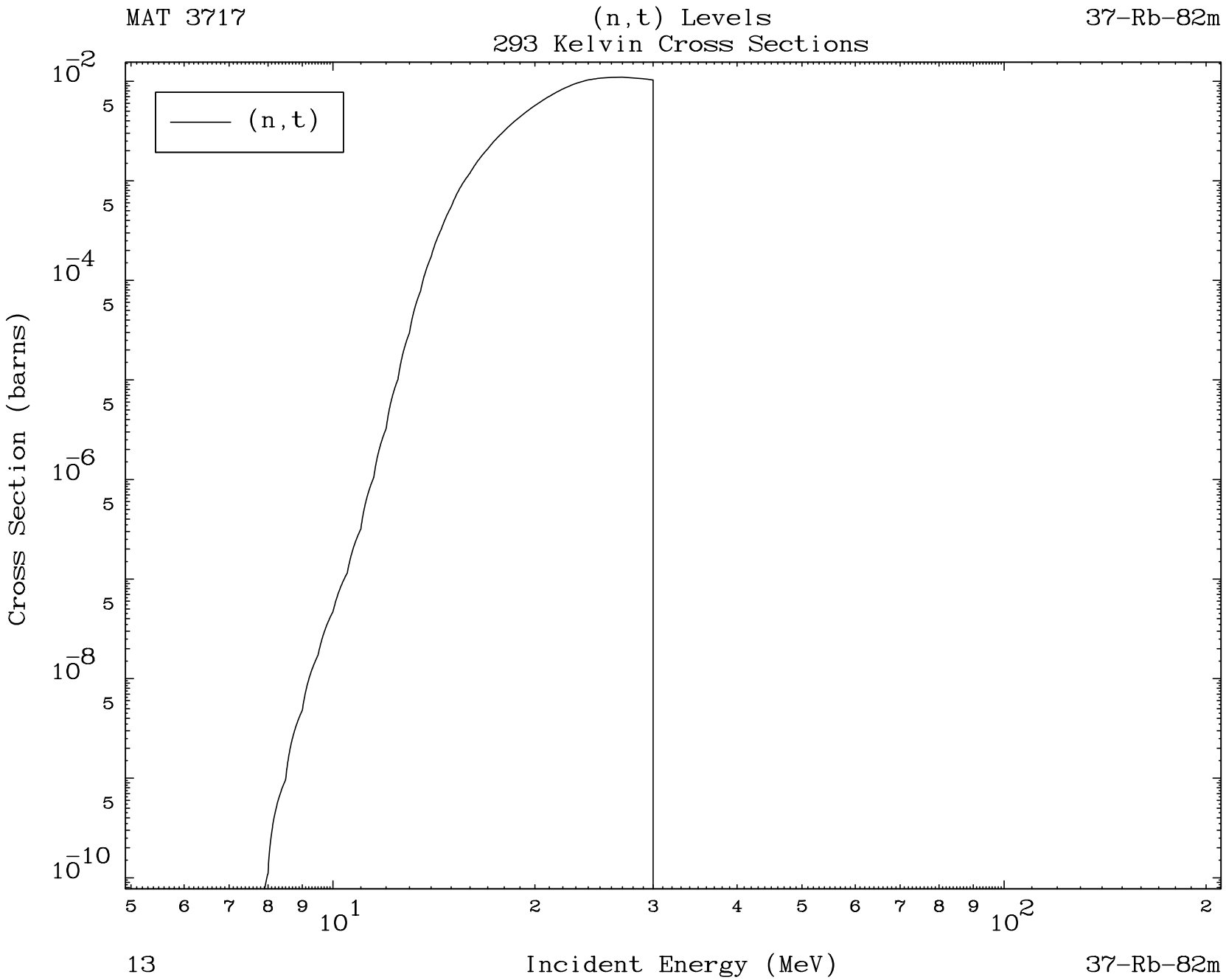

MAT 3717
(n,n') Levels
293 Kelvin Cross Sections
37-Rb-82m
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 53 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
37-Rb-82m


MAT 3717
(n,n') Levels
293 Kelvin Cross Sections
37-Rb-82m
Inelastic
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
9
37-Rb-82m


MAT 3717
(n,n') Levels
293 Kelvin Cross Sections
37-Rb-82m
Inelastic
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
37-Rb-82m


MAT 3717
(n,p) Levels
37-Rb-82m
293 Kelvin Cross Sections
Cross Section (barns)
(n,p)
Incident Energy (MeV)
11
37-Rb-82m


MAT 3717
(n,d) Levels
37-Rb-82m
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
12
37-Rb-82m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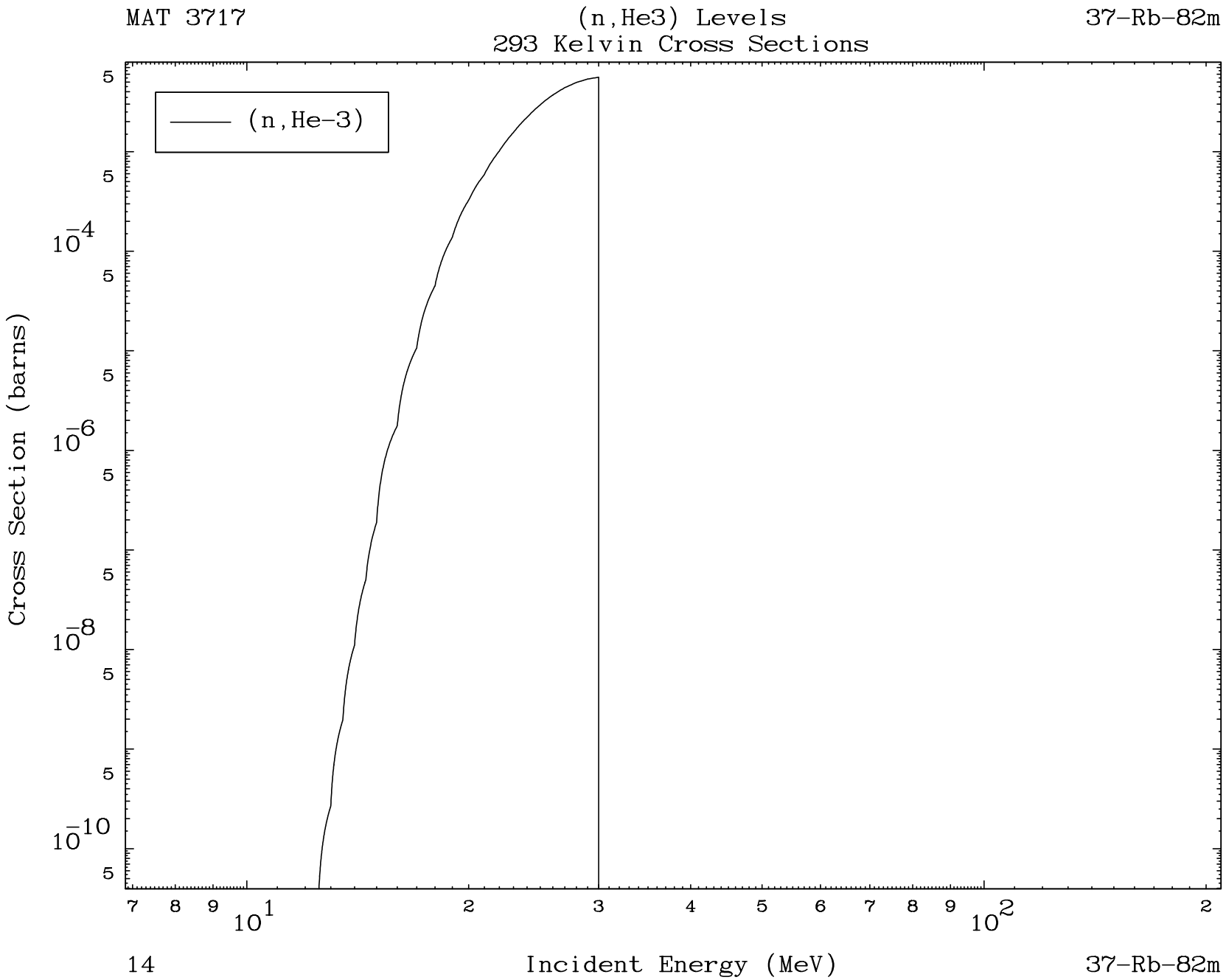
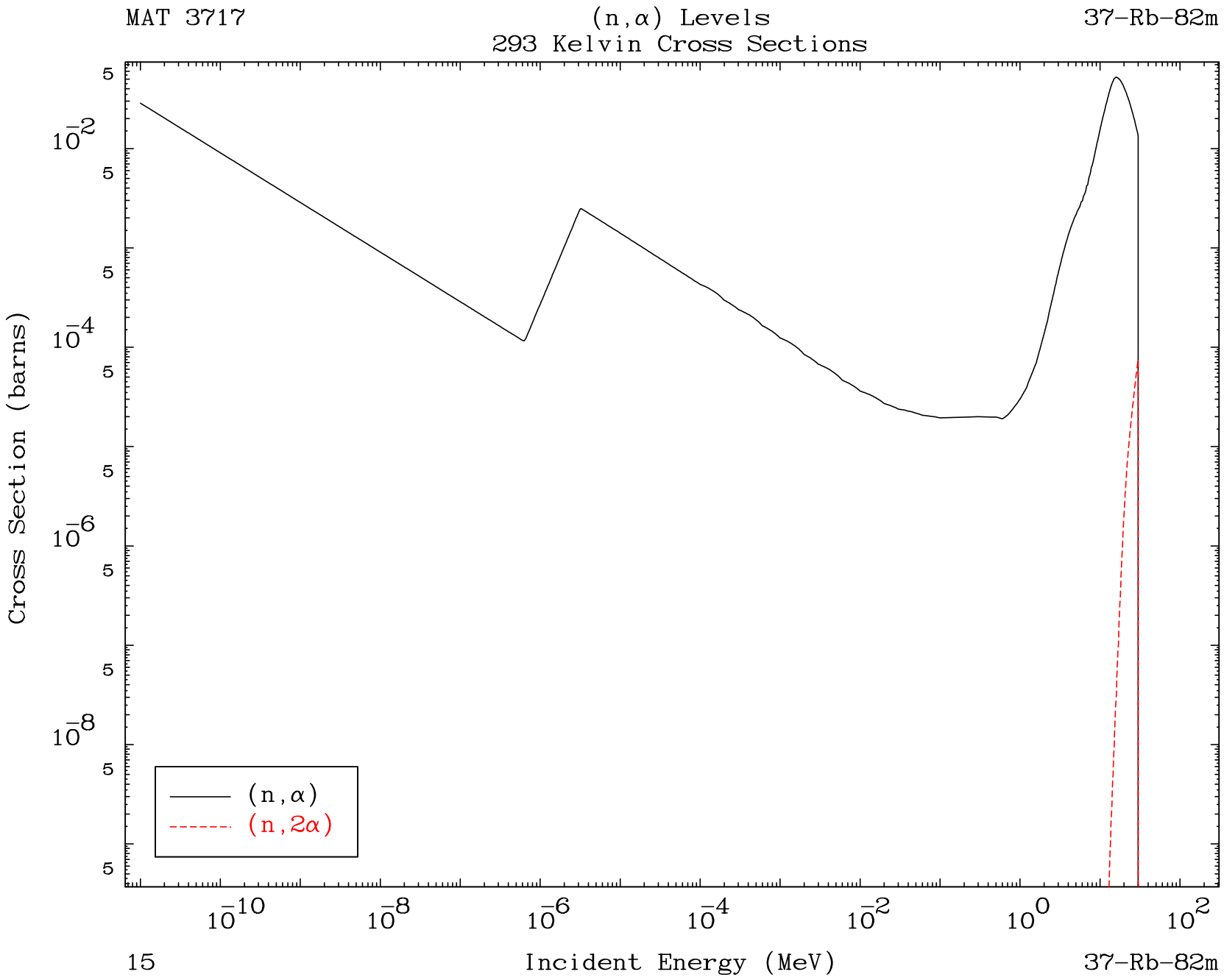
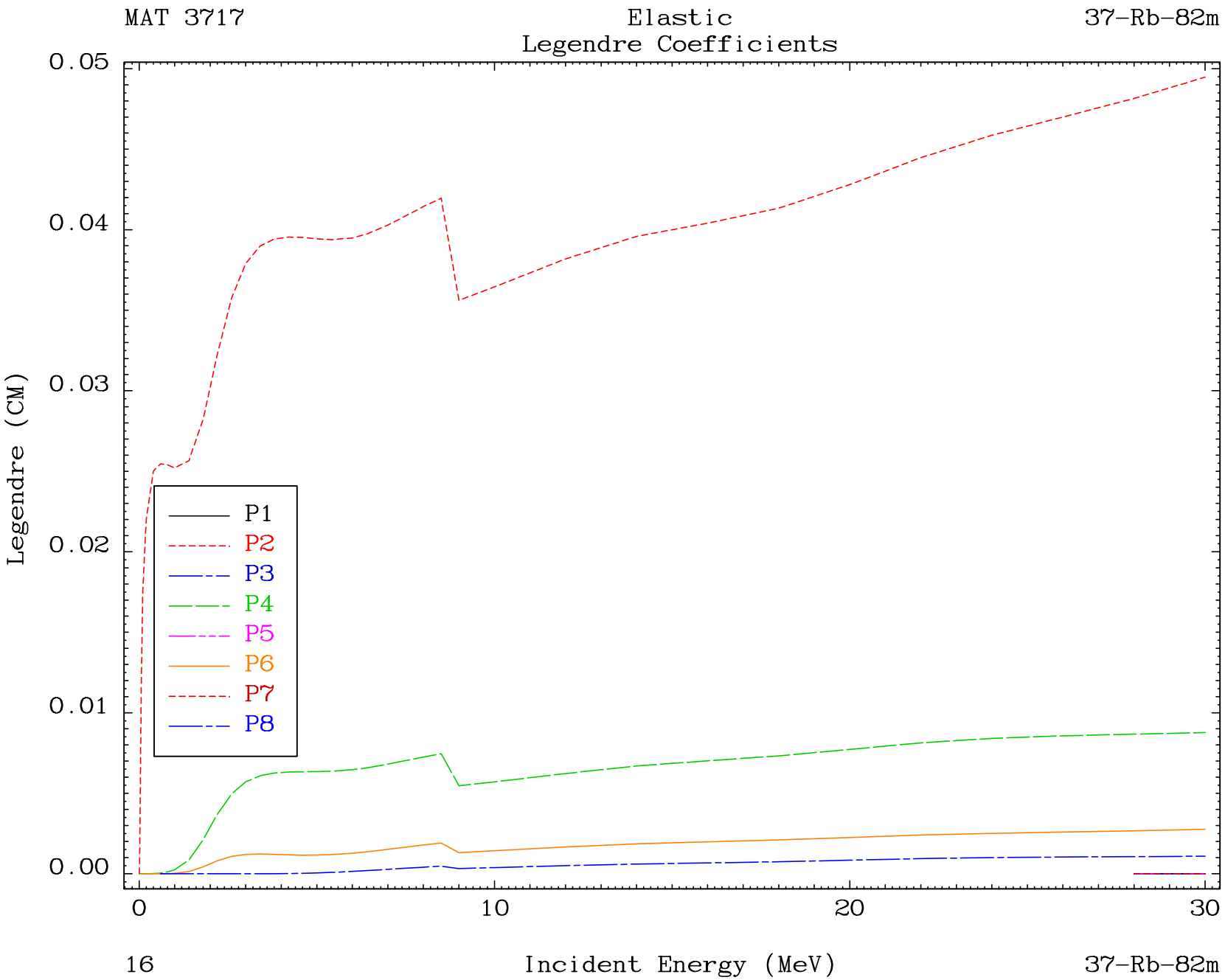
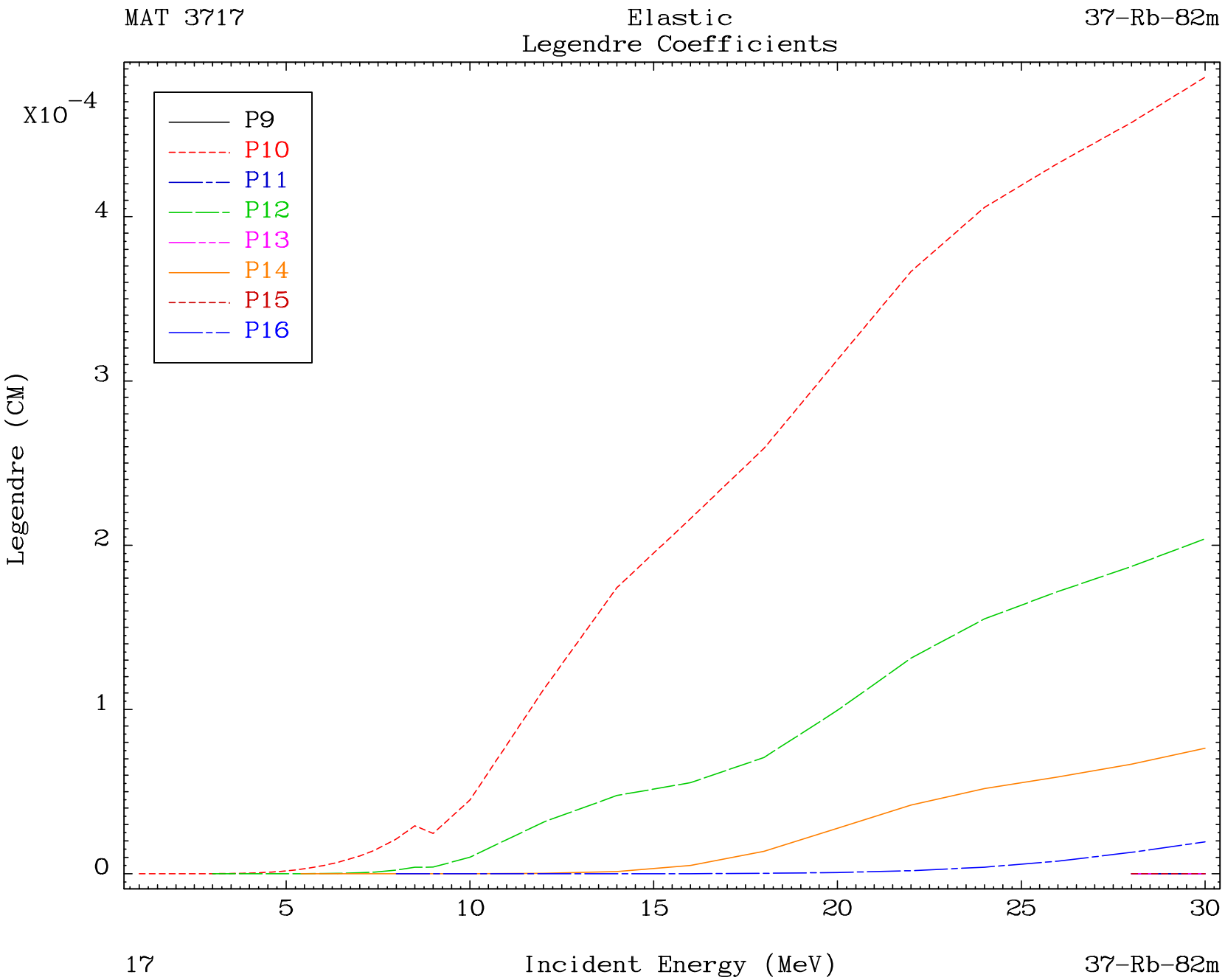
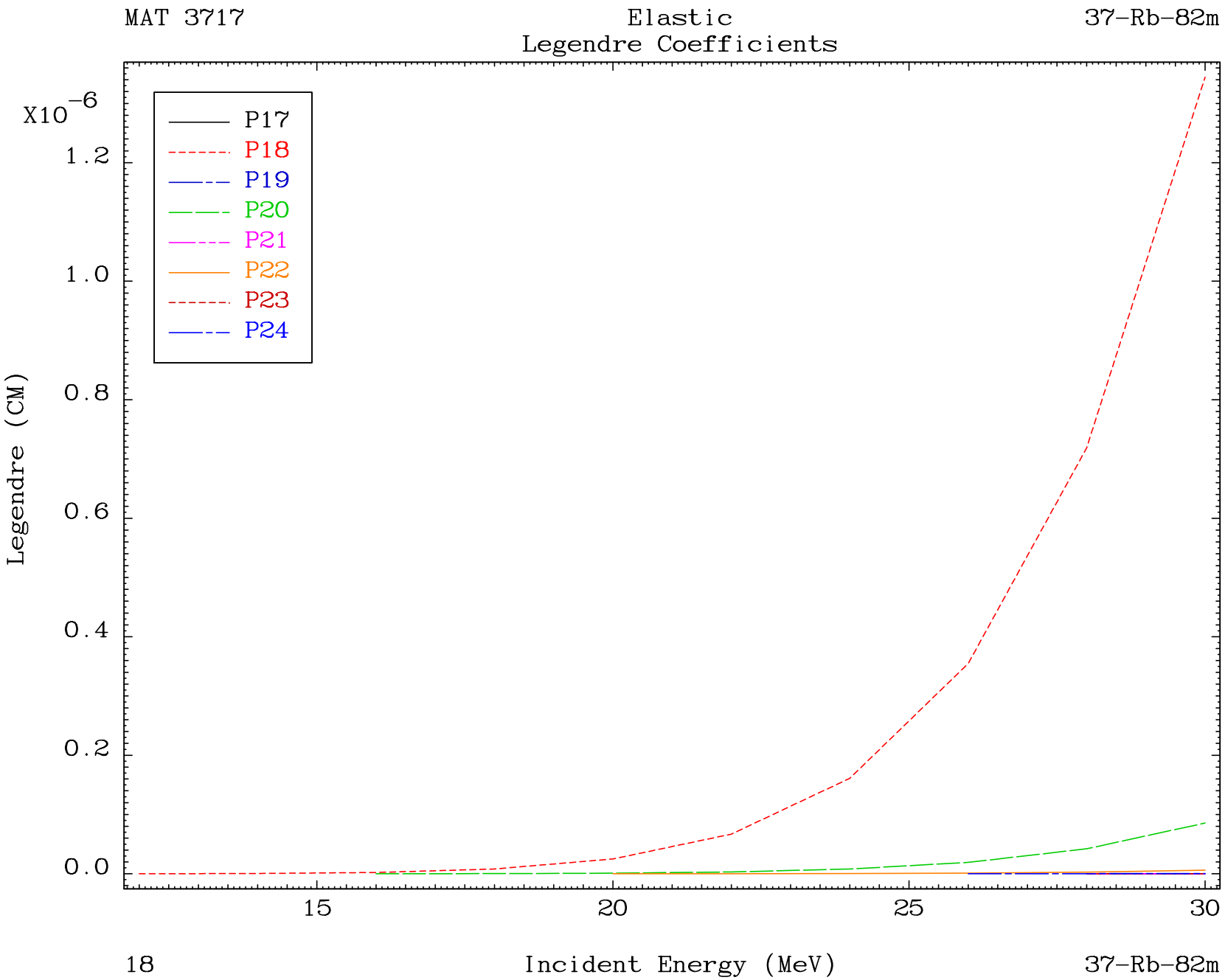
(n,t) Levels
37-Rb-82m
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
13
37-Rb-82m

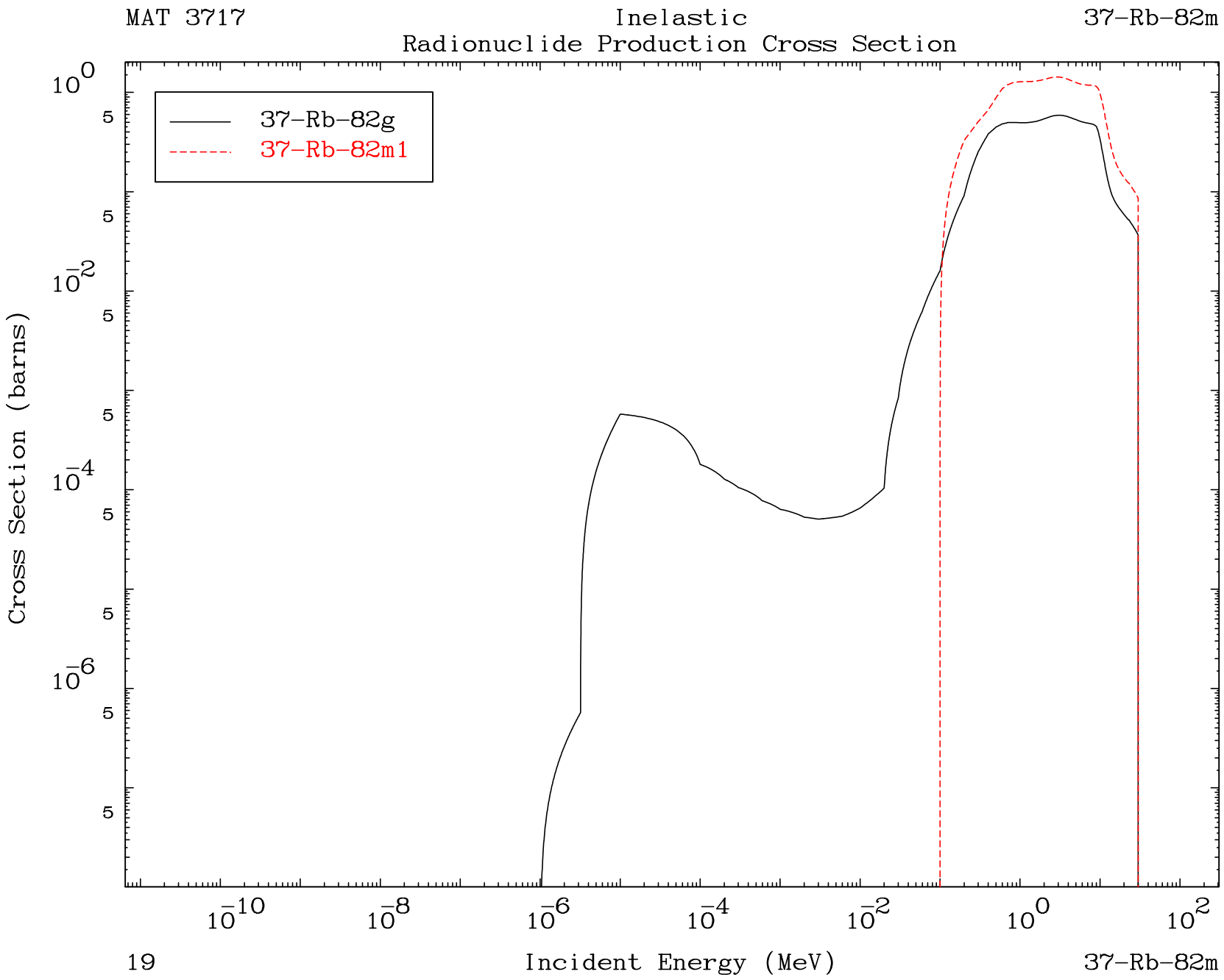

MAT 3717
(n,He3) Levels
37-Rb-82m
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
Incident Energy (MeV)
14
37-Rb-82m

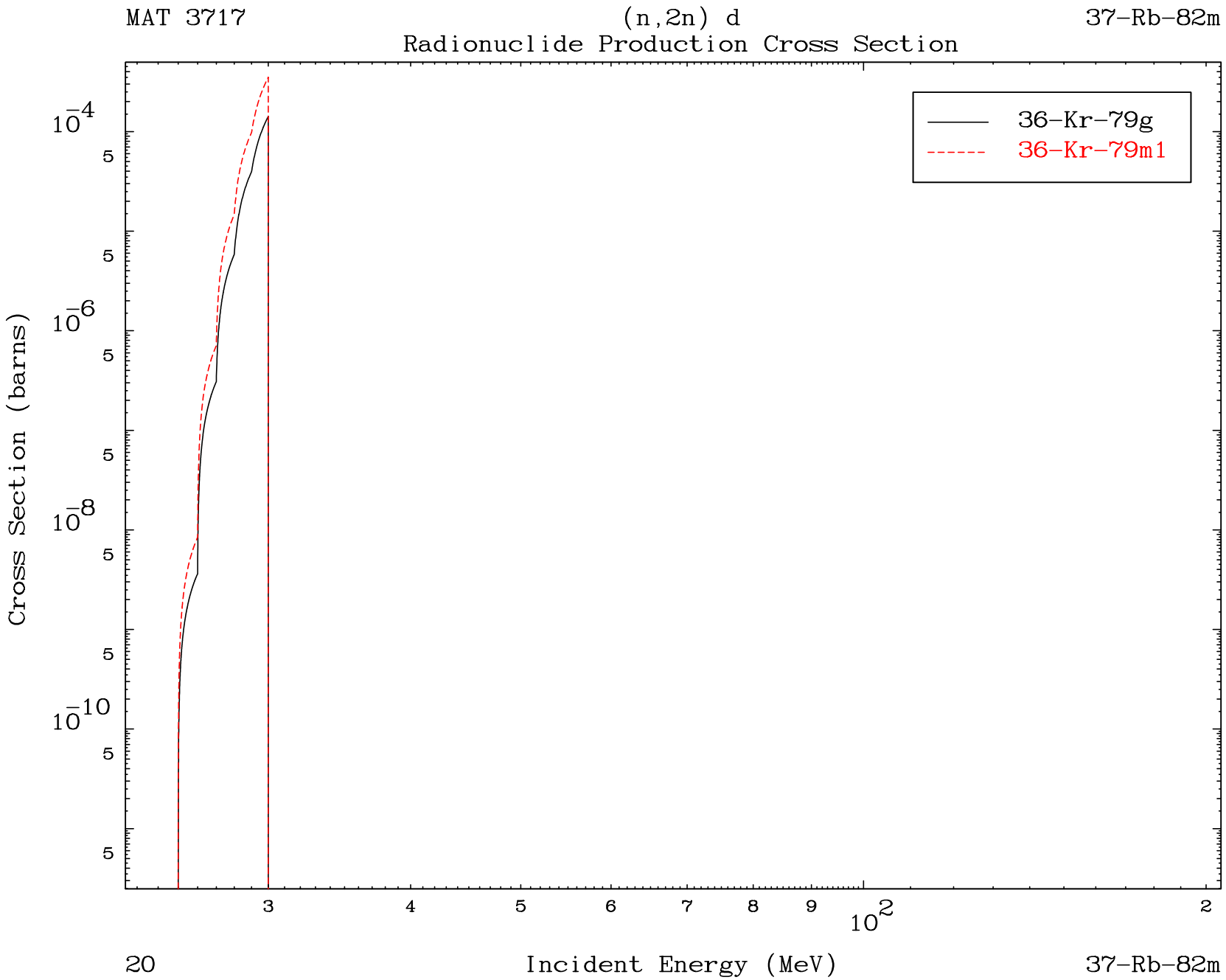

MAT 3717
(n,α) Levels
37-Rb-82m
293 Kelvin Cross Sections
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
(n,α)
(n,2α)
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
Incident Energy (MeV)
15
37-Rb-82m

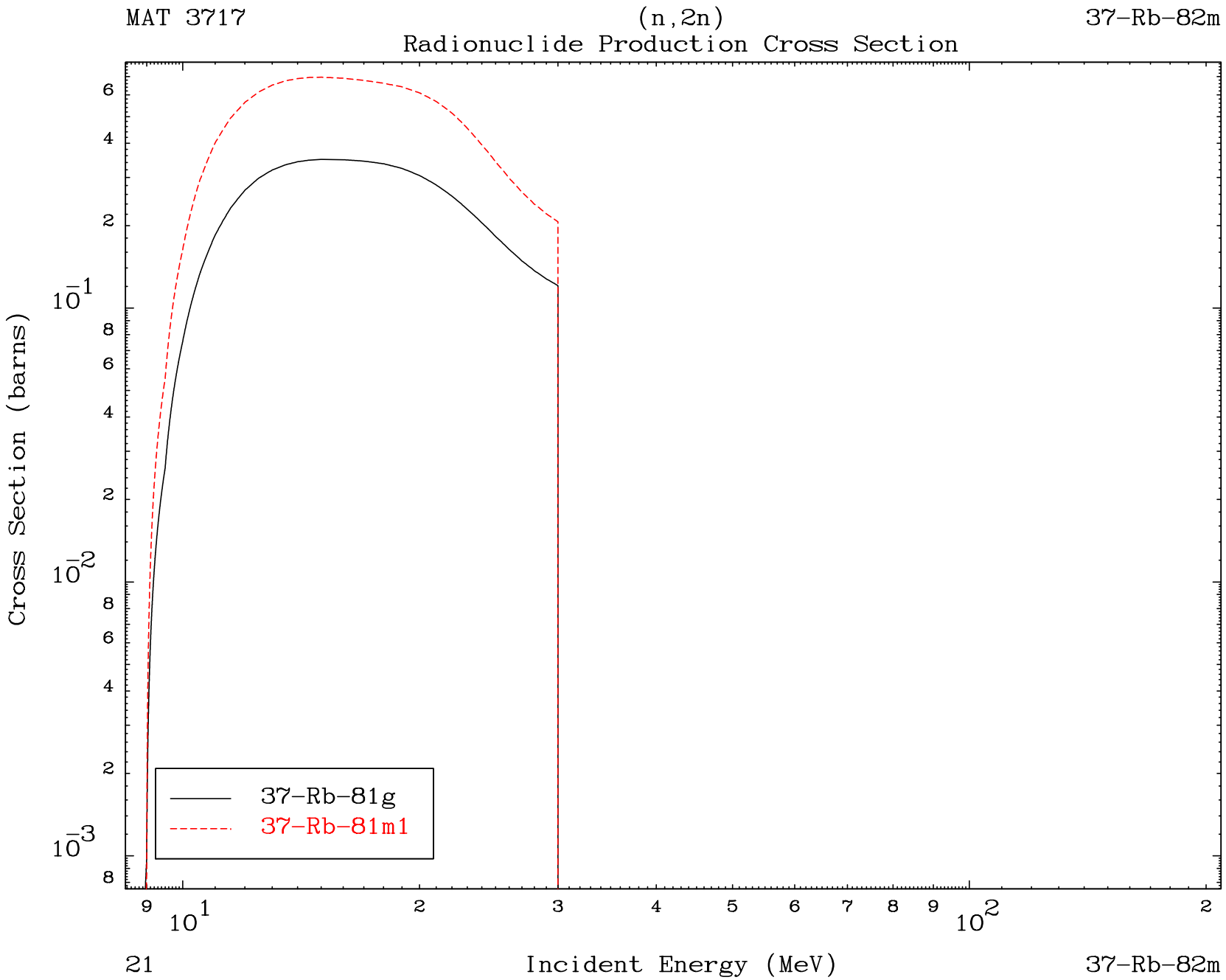

MAT 3717
Elastic
Legendre Coefficients
37-Rb-82m
0.05
0.04
0.03
0.02
0.01
0.00
Legendre (CM)
P1
P2
P3
P4
P5
P6
P7
P8
0
10
20
30
16
Incident Energy (MeV)
37-Rb-82m

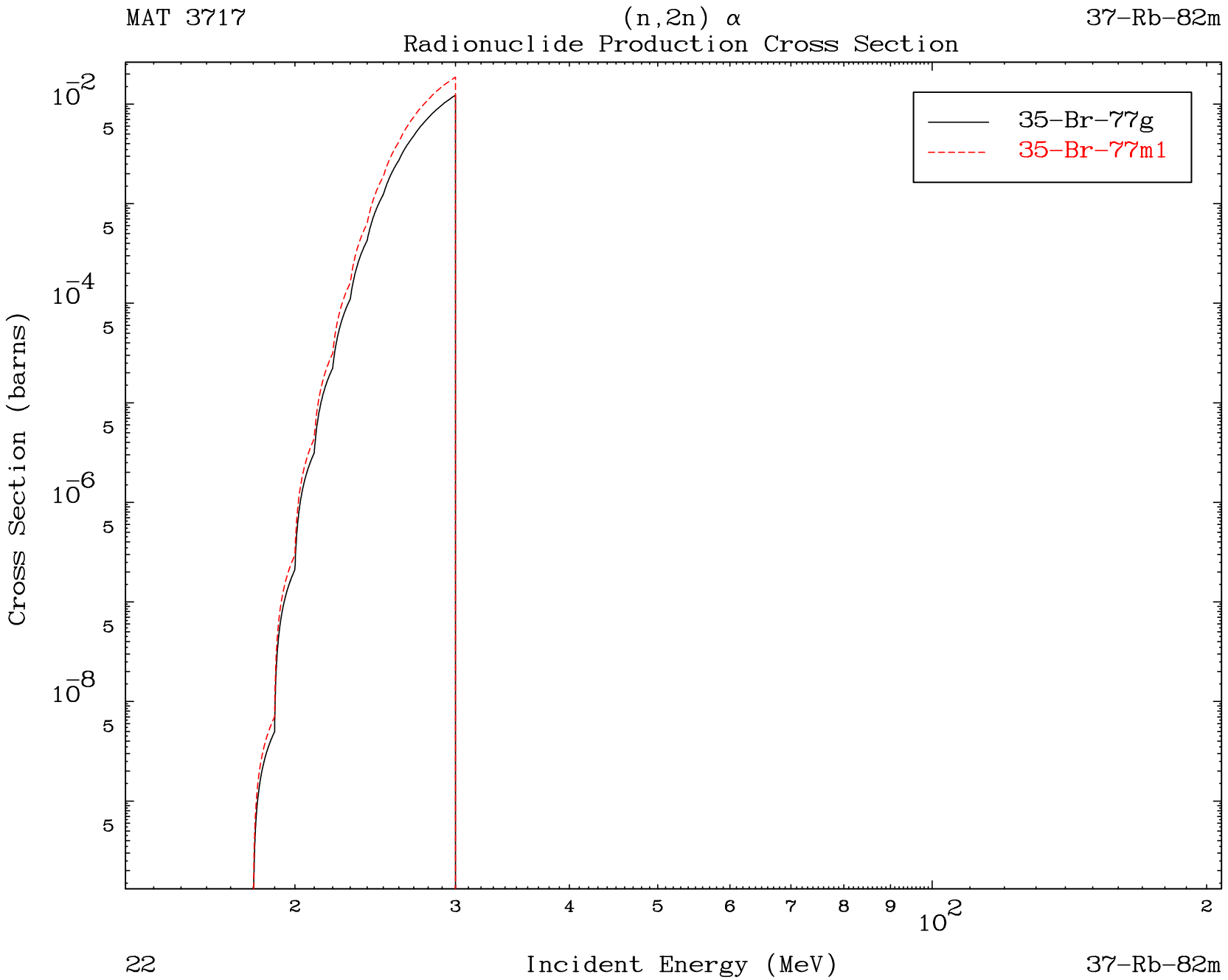

MAT 3717
Elastic
Legendre Coefficients
37-Rb-82m
X10 −4
P9
P10
P11
P12
P13
P14
P15
P16
Legendre (CM)
0
1
2
3
4
5
10
15
20
25
30
17
Incident Energy (MeV)
37-Rb-82m

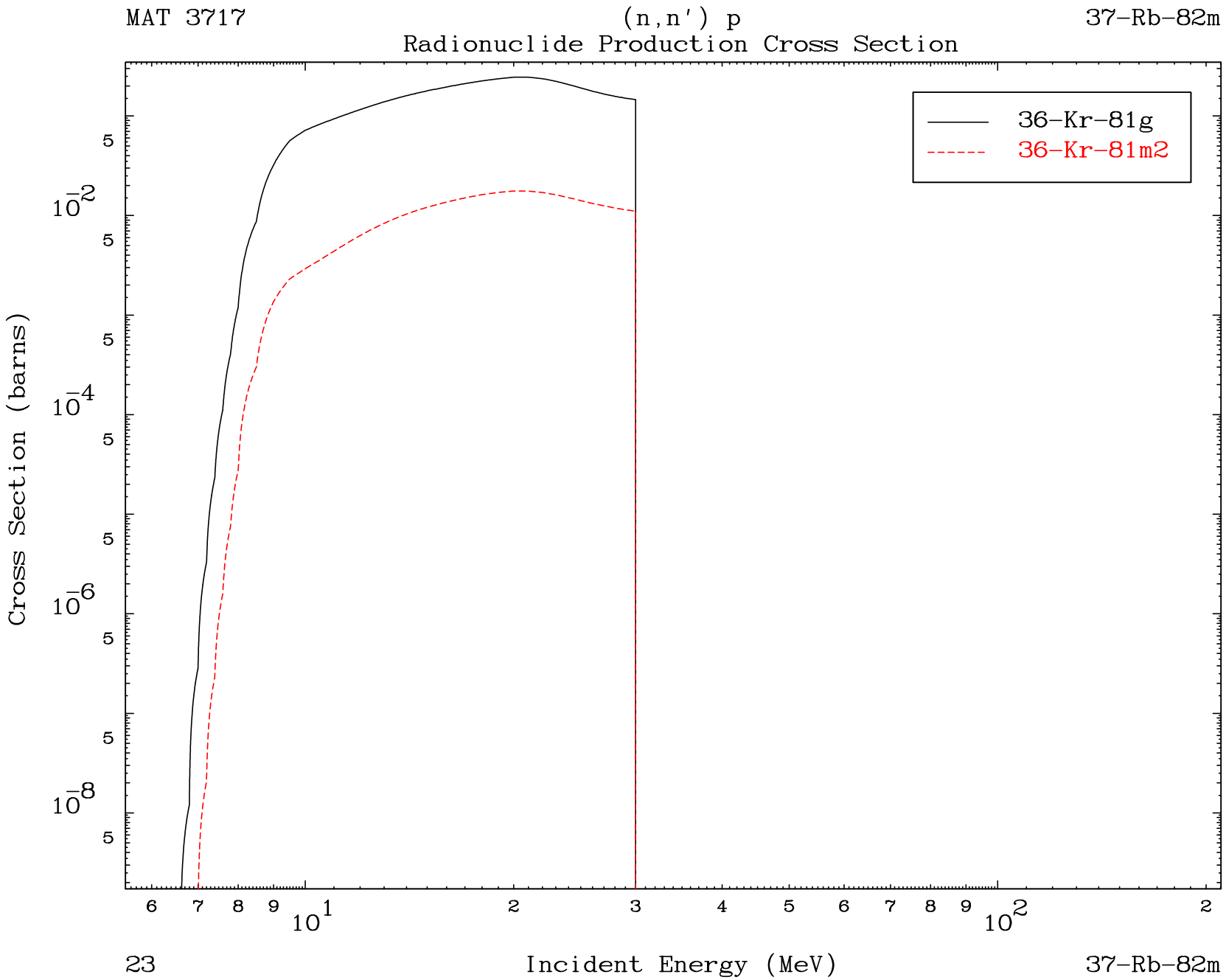

MAT 3717
Elastic
Legendre Coefficients
37-Rb-82m
X10 −6
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Legendre (CM)
P17
P18
P19
P20
P21
P22
P23
P24
15
20
25
30
18
Incident Energy (MeV)
37-Rb-82m

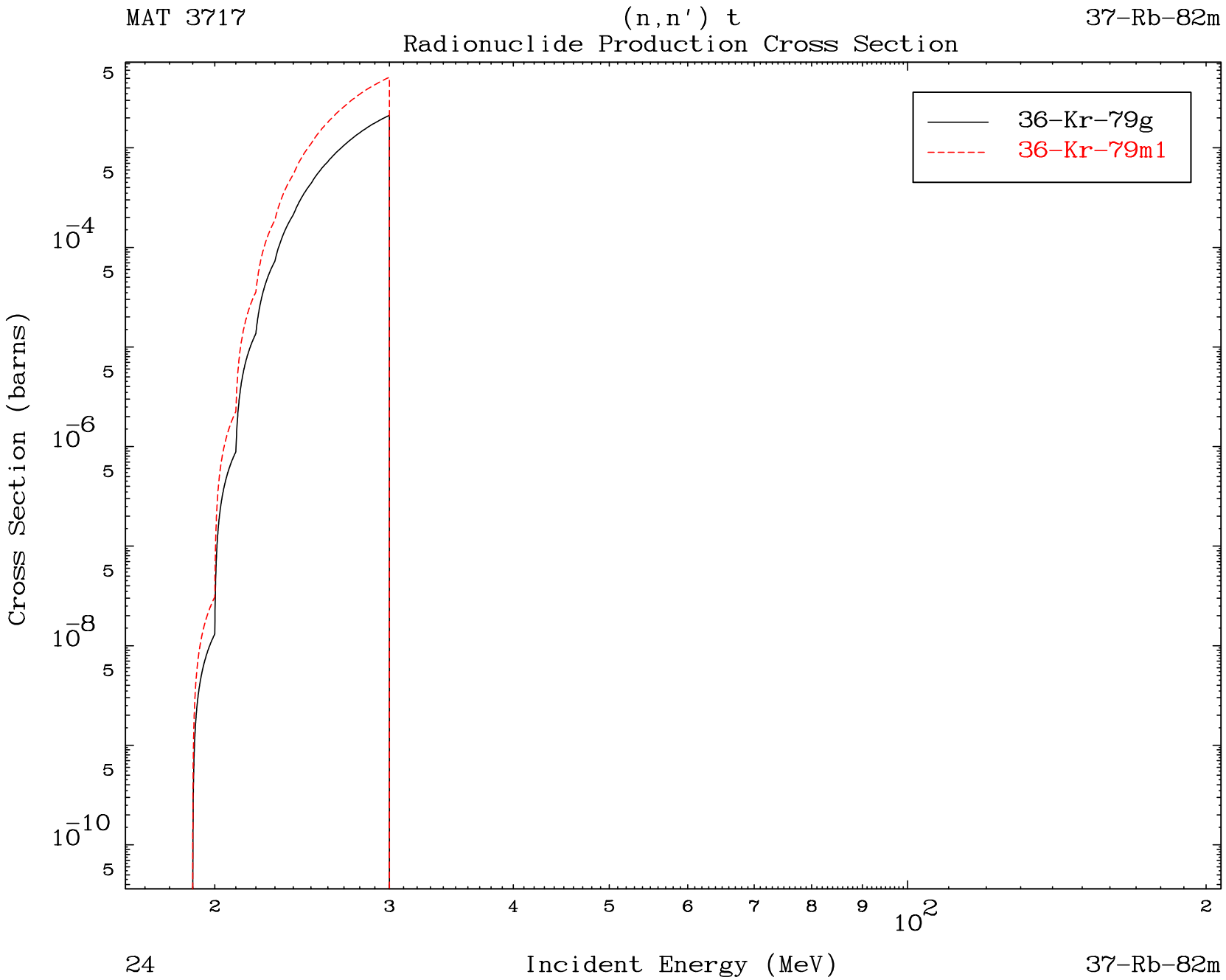

MAT 3717
Inelastic
37-Rb-82m
Radionuclide Production Cross Section
37-Rb-82g
37-Rb-82m1
Cross Section (barns)
Incident Energy (MeV)
19
37-Rb-82m

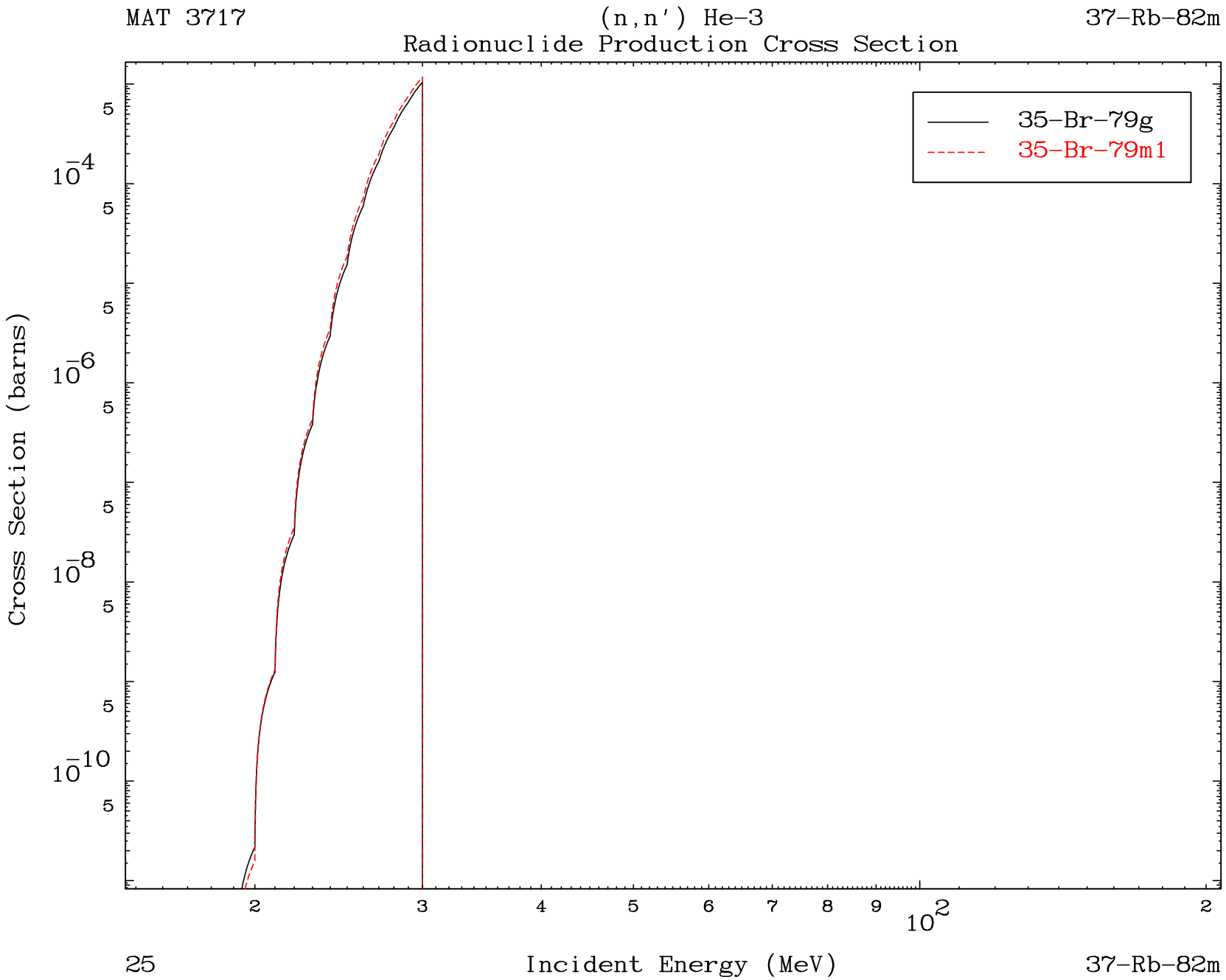

MAT 3717
(n,2n) d
37-Rb-82m
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
10-4
10-6
10-8
10-10
5
3
4
5
6
7
8
9
10 2
2
20
Incident Energy (MeV)
37-Rb-82m

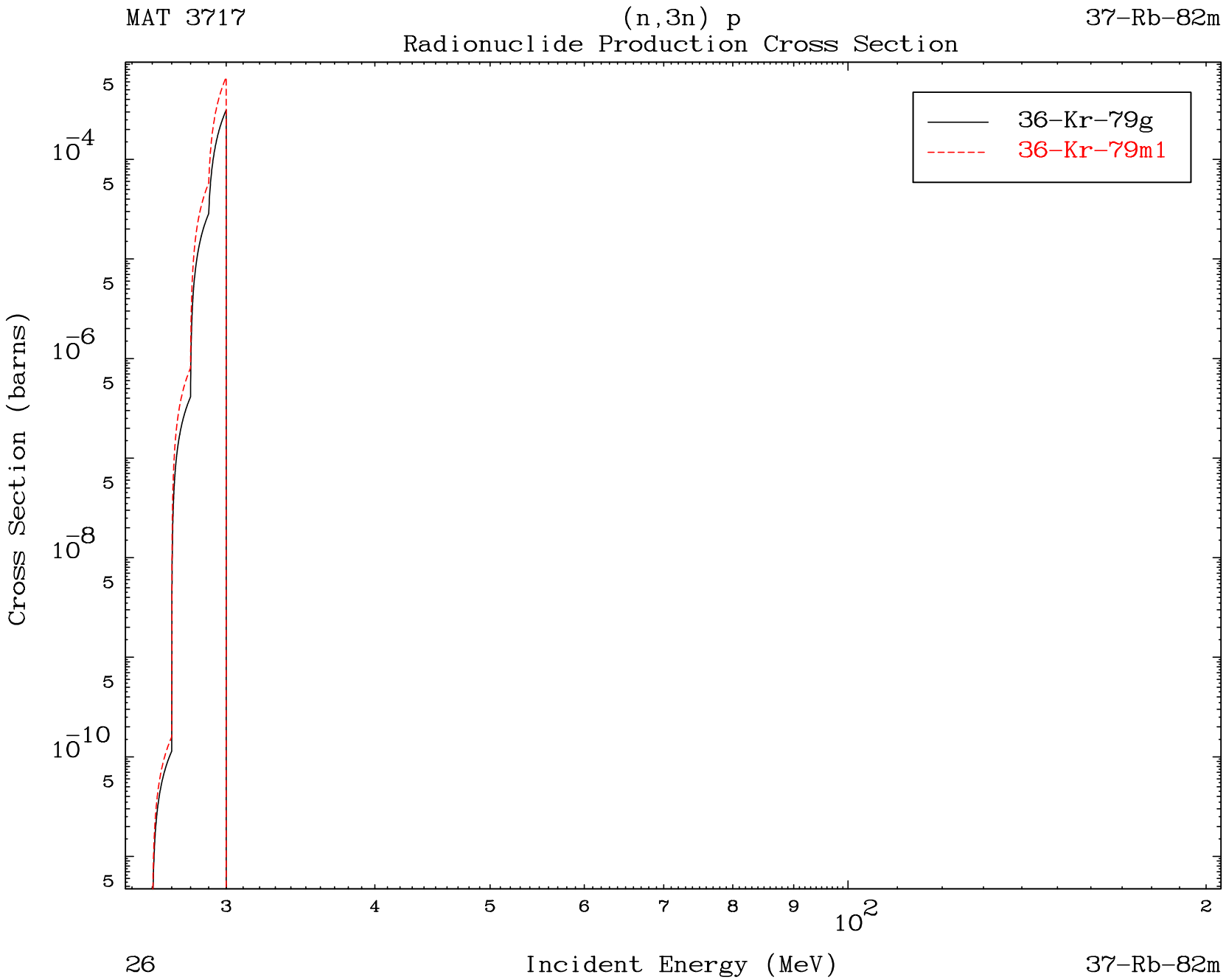

MAT 3717
(n,2n)
37-Rb-82m
Radionuclide Production Cross Section
Cross Section (barns)
Incident Energy (MeV)
37-Rb-81g
37-Rb-81m1
21
37-Rb-82m

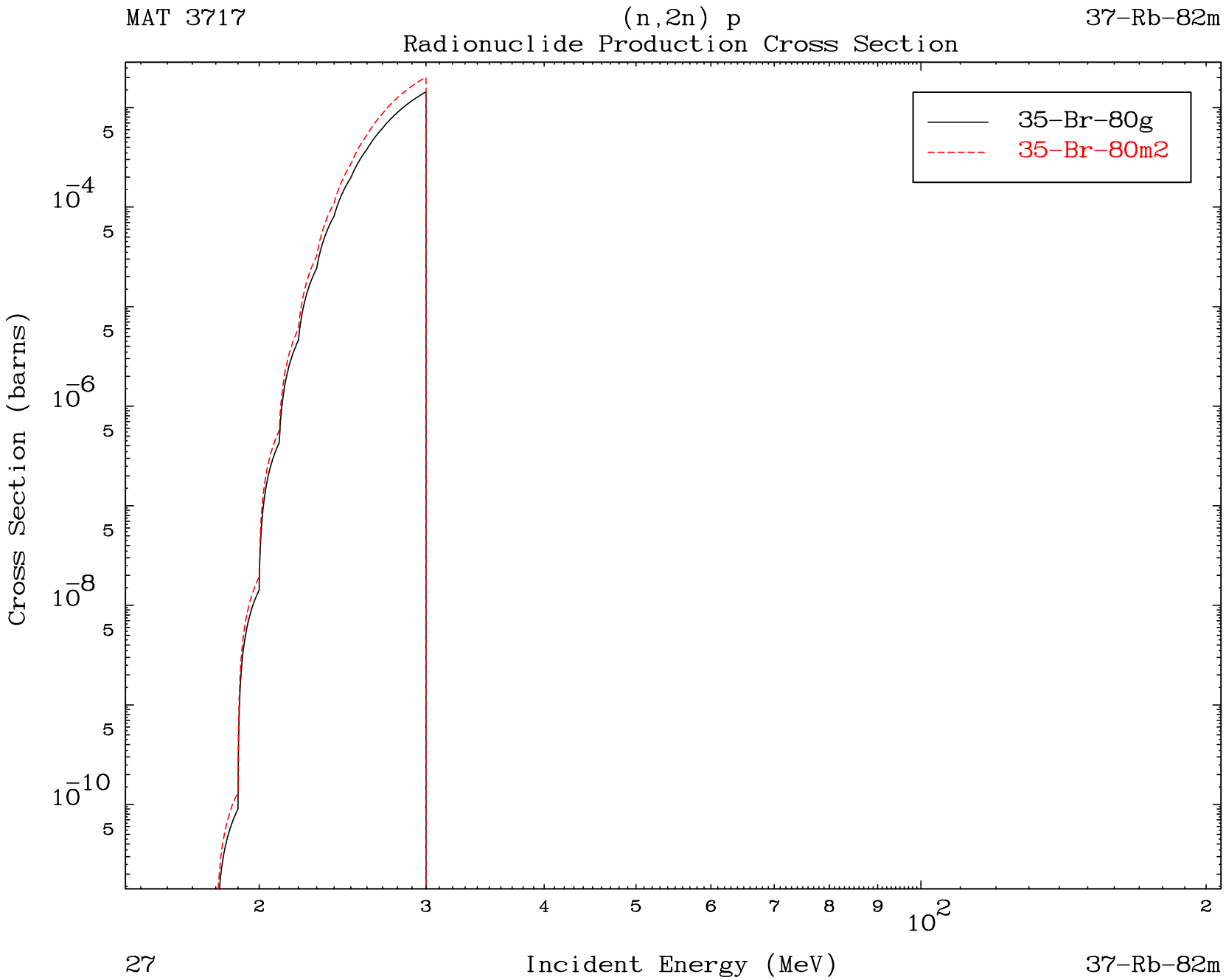

MAT 3717
(n,2n) α
37-Rb-82m
Radionuclide Production Cross Section
35-Br-77g
35-Br-77m1
Cross Section (barns)
10-2
10-4
10-6
10-8
5
2
3
4
5
6
7
8
9
10 2
2
22
Incident Energy (MeV)
37-Rb-82m

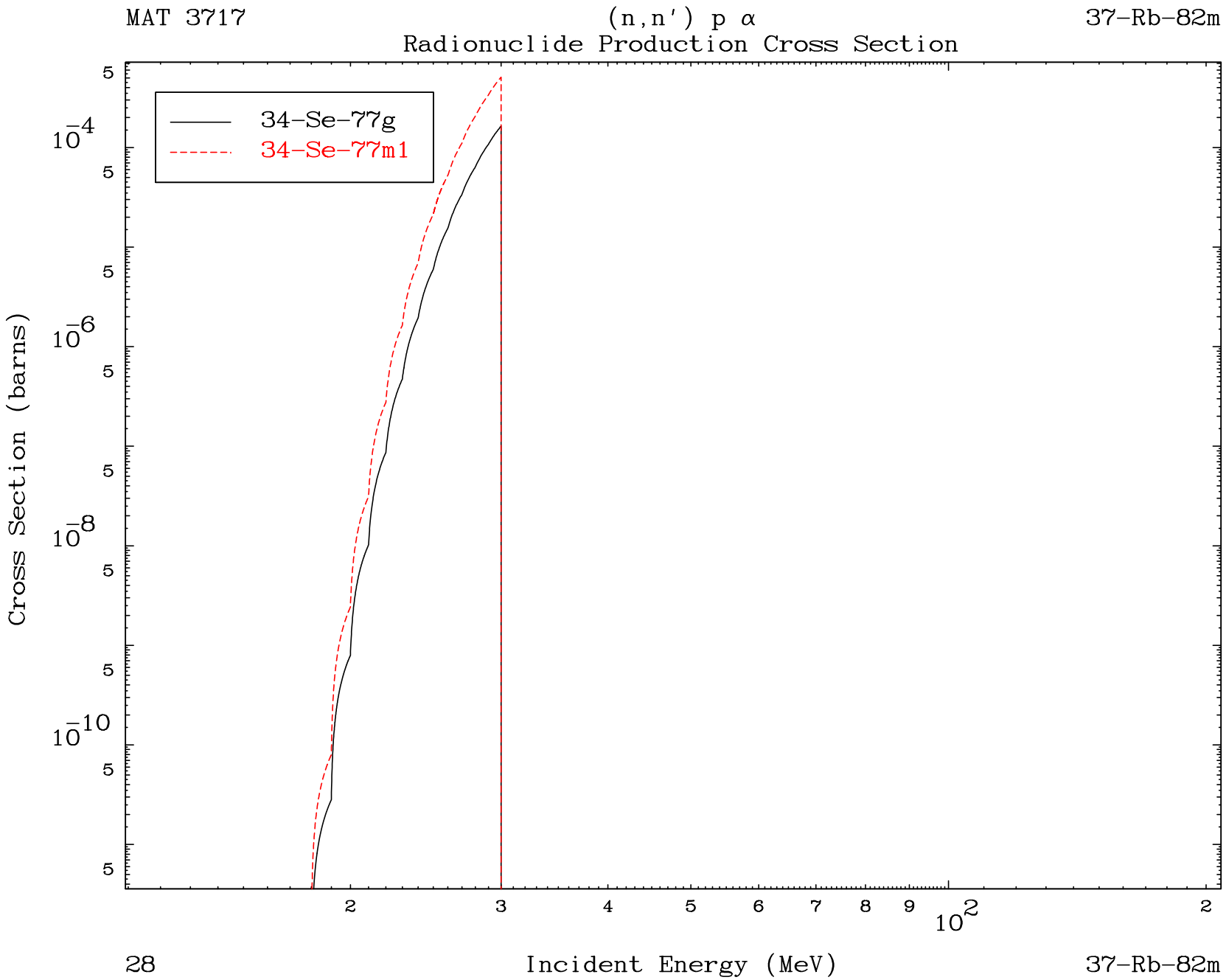

MAT 3717
(n,n') p
37-Rb-82m
Radionuclide Production Cross Section
36-Kr-81g
36-Kr-81m2
Cross Section (barns)
10-2
10-4
10-6
10-8
5
6 7 8 9 10 1 2 3 4 5 6 7 8 9 10 2 2
Incident Energy (MeV)
23
37-Rb-82m

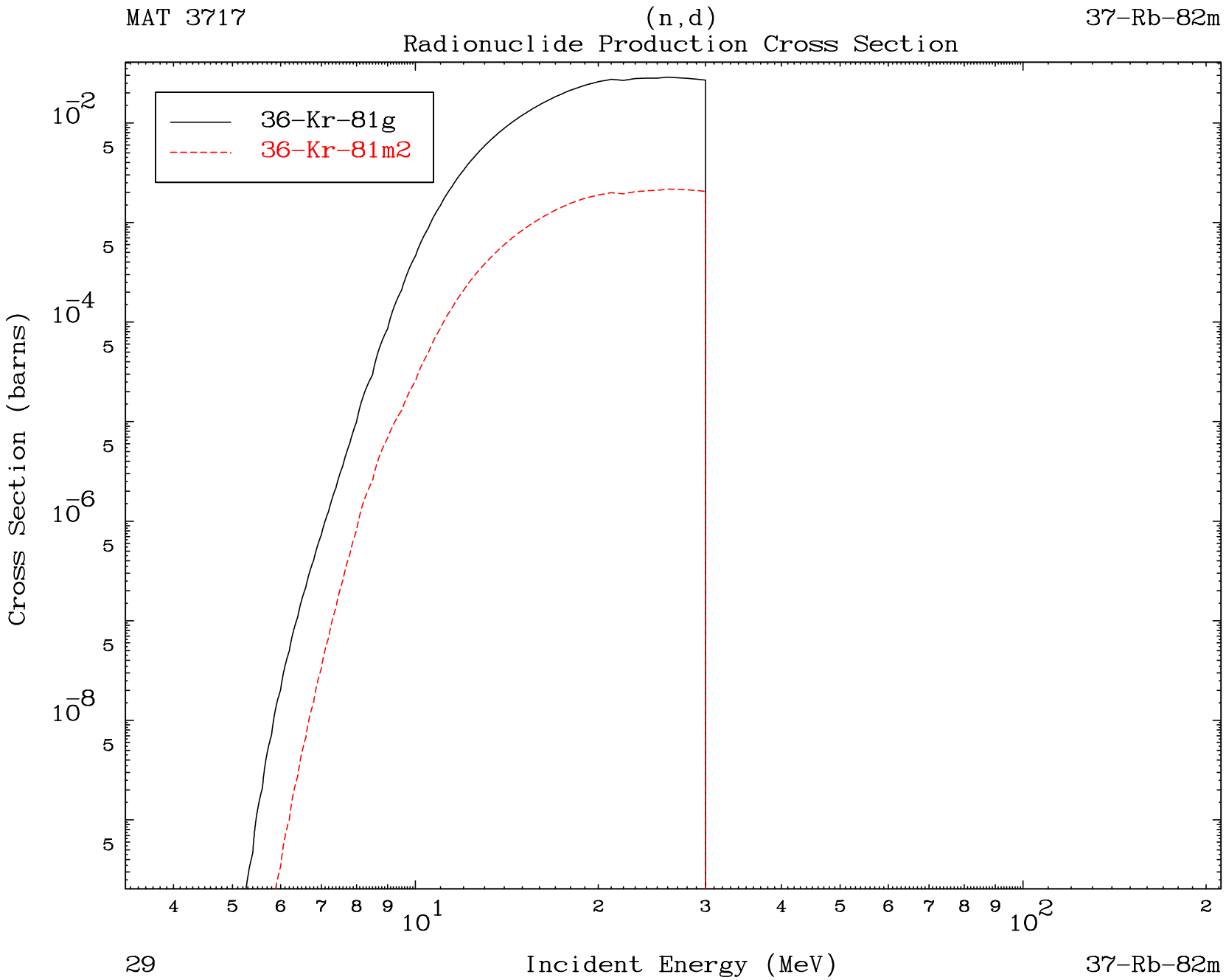

MAT 3717
(n,n') t
37-Rb-82m
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
Incident Energy (MeV)
24
37-Rb-82m

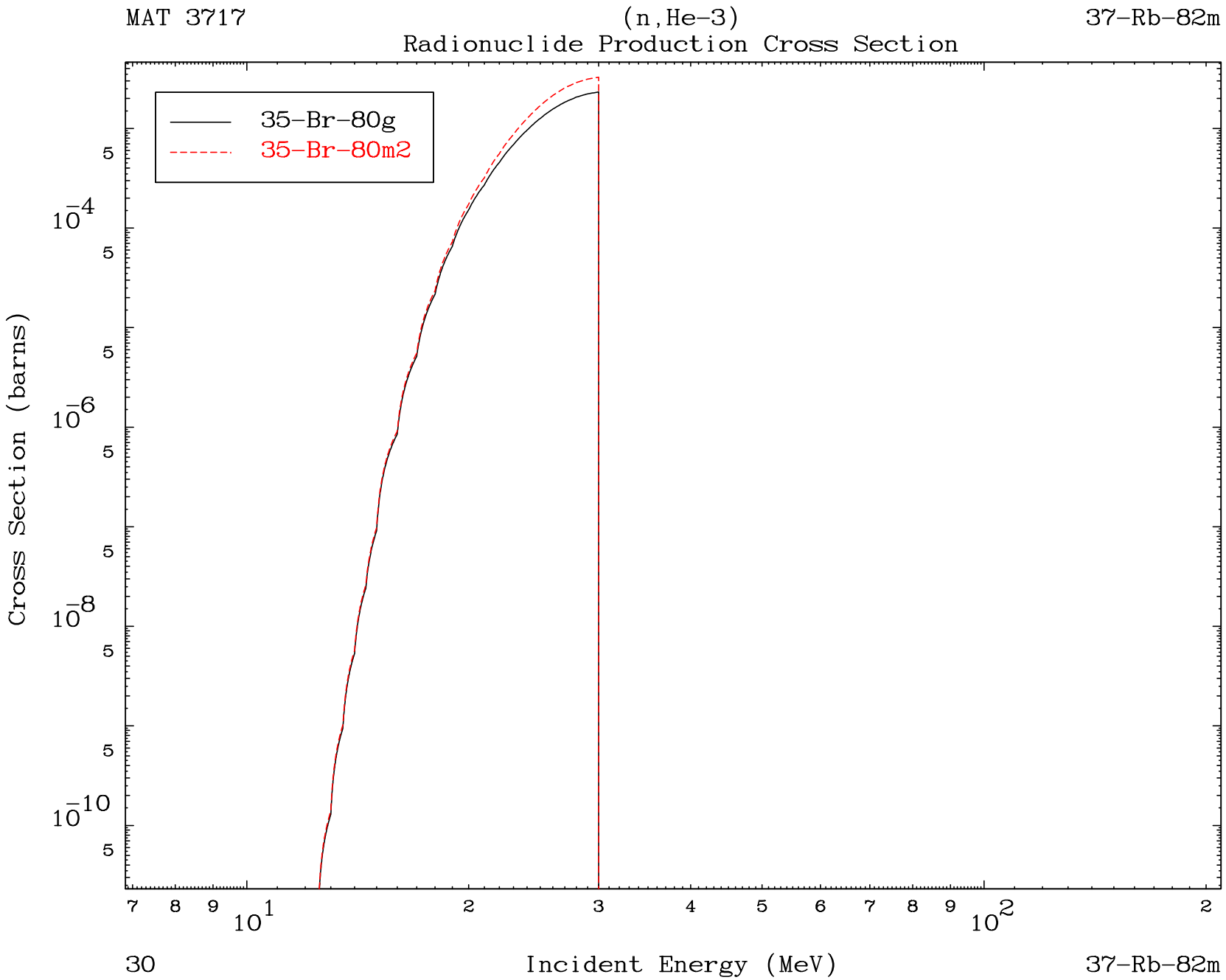

MAT 3717
(n,n') He-3
37-Rb-82m
Radionuclide Production Cross Section
35-Br-79g
35-Br-79m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
2
3
4
5
6
7
8
9
10^2
2
25
Incident Energy (MeV)
37-Rb-82m

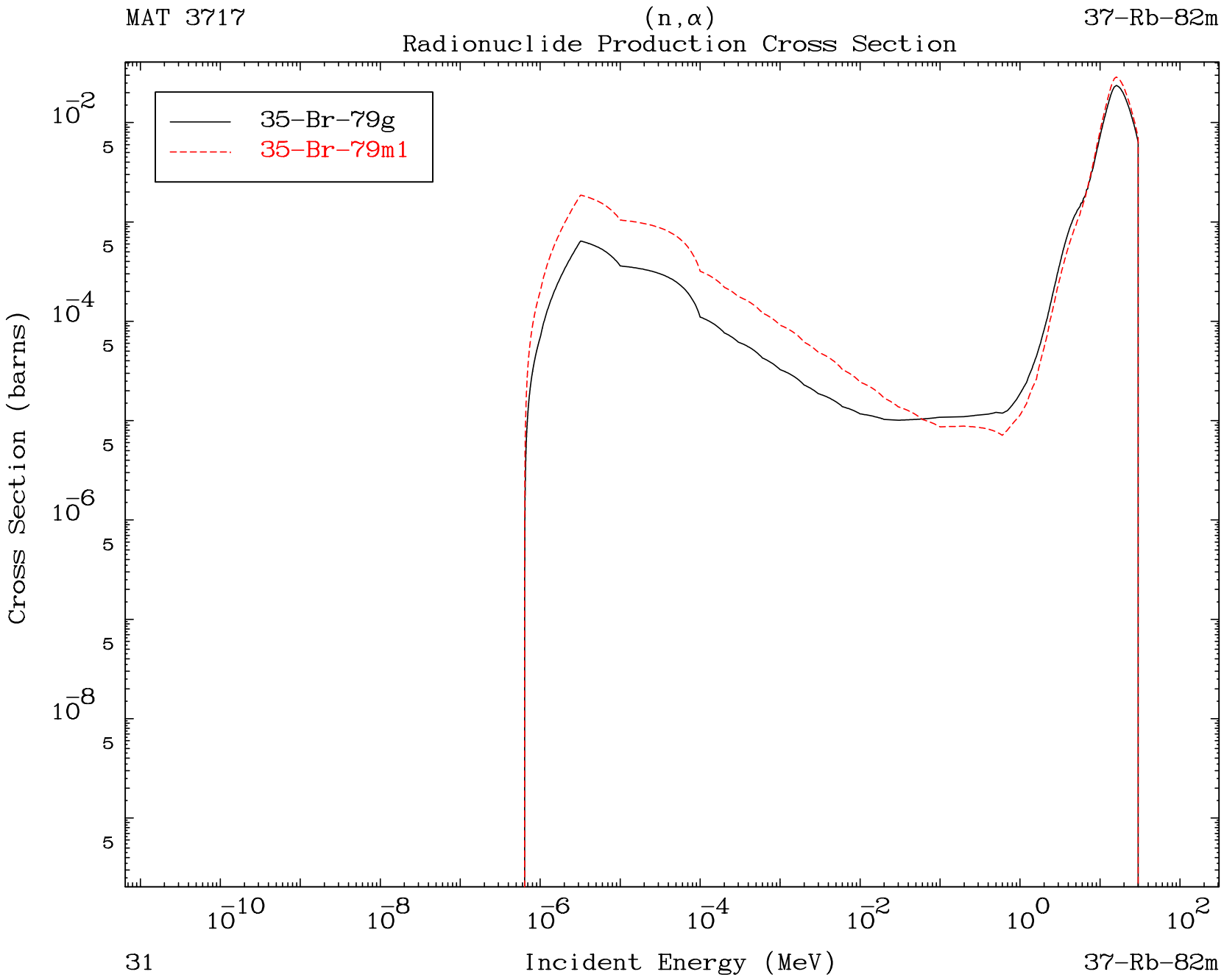

MAT 3717
(n,3n) p
37-Rb-82m
Radionuclide Production Cross Section
36-Kr-79g
36-Kr-79m1
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
3
4
5
6
7
8
9
10^2
2
26
Incident Energy (MeV)
37-Rb-82m

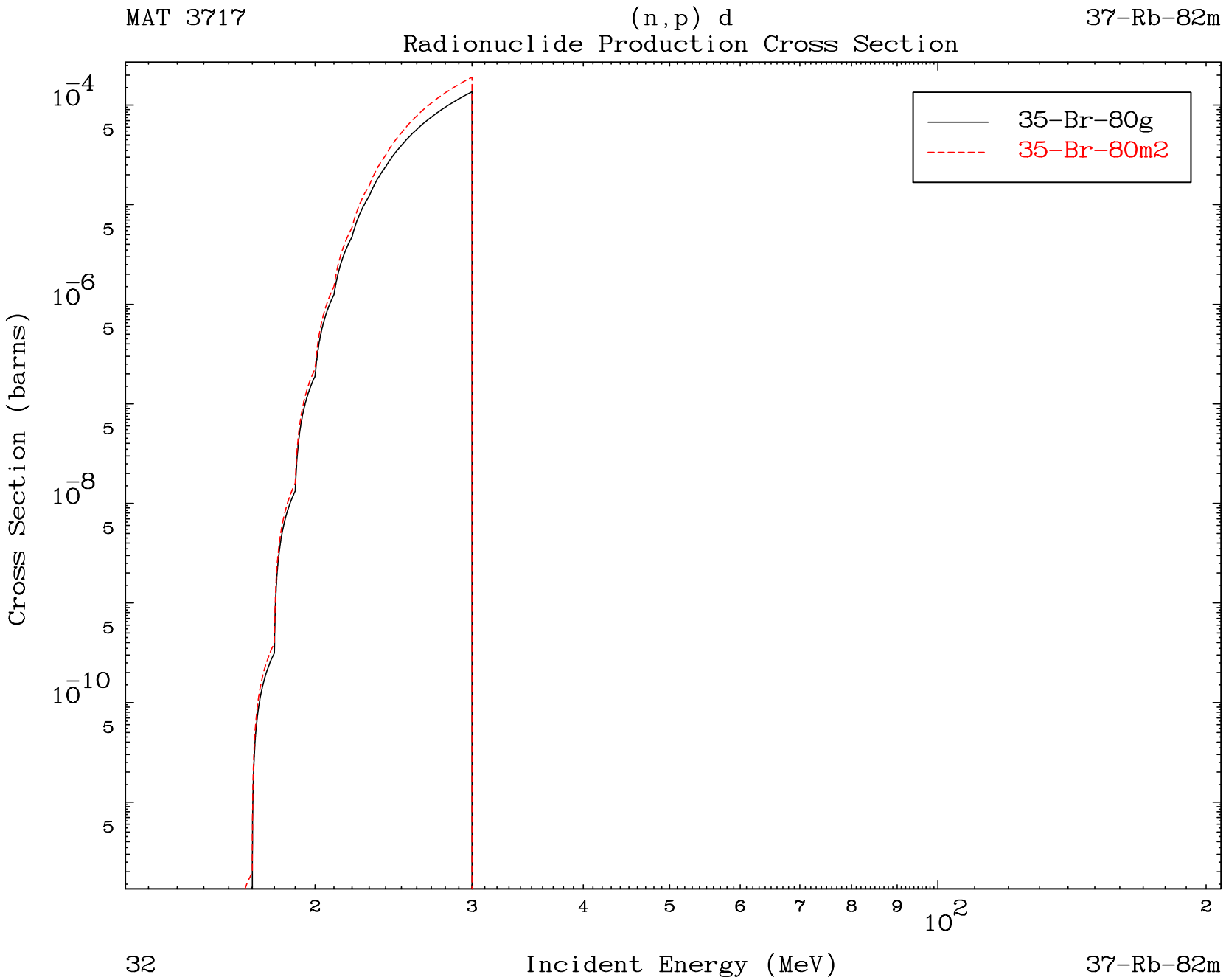

MAT 3717
(n,2n) p
37-Rb-82m
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
27
Incident Energy (MeV)
37-Rb-82m

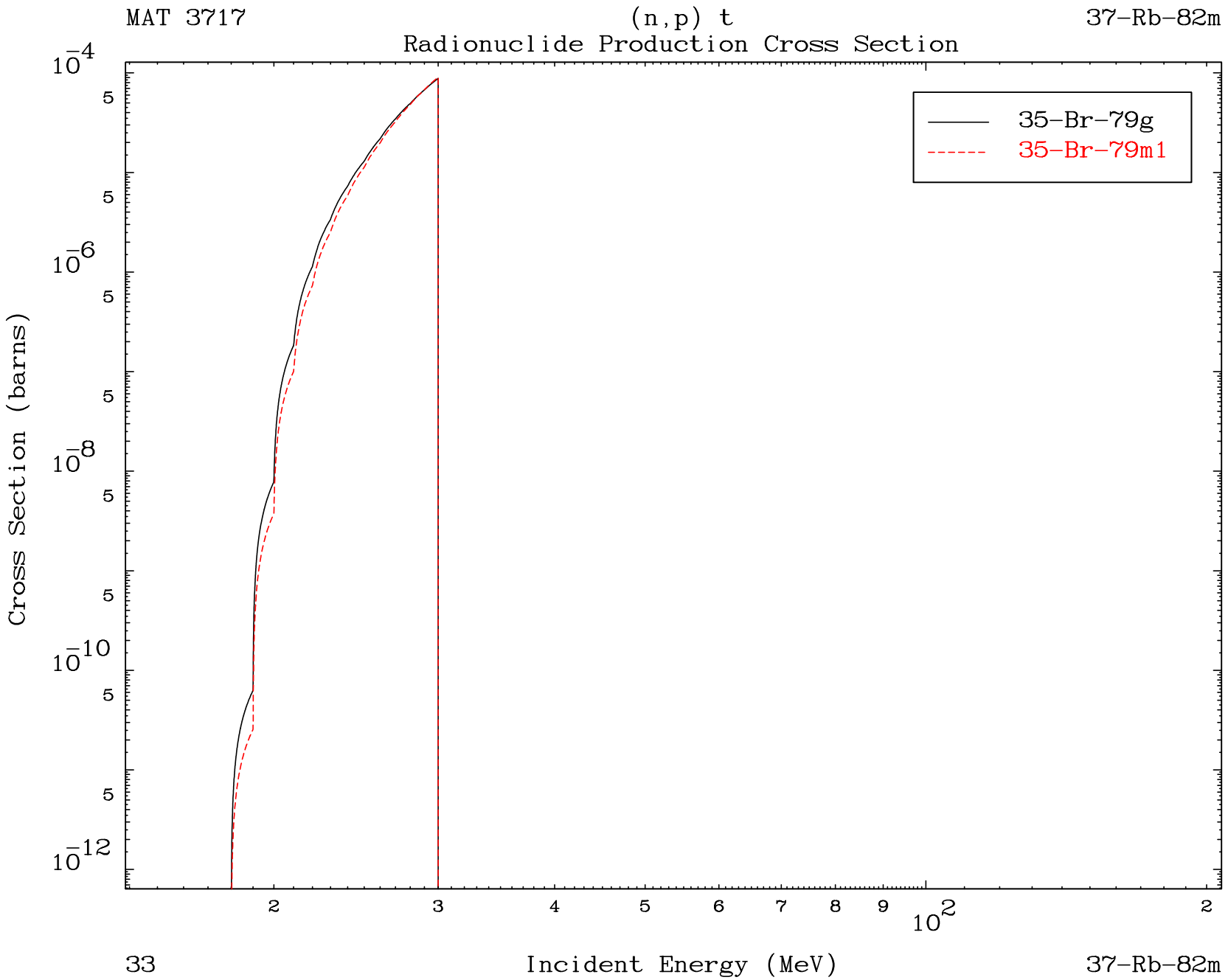

MAT 3717
(n,n') p α
37-Rb-82m
Radionuclide Production Cross Section
34-Se-77g
34-Se-77m1
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
Incident Energy (MeV)
28
37-Rb-82m

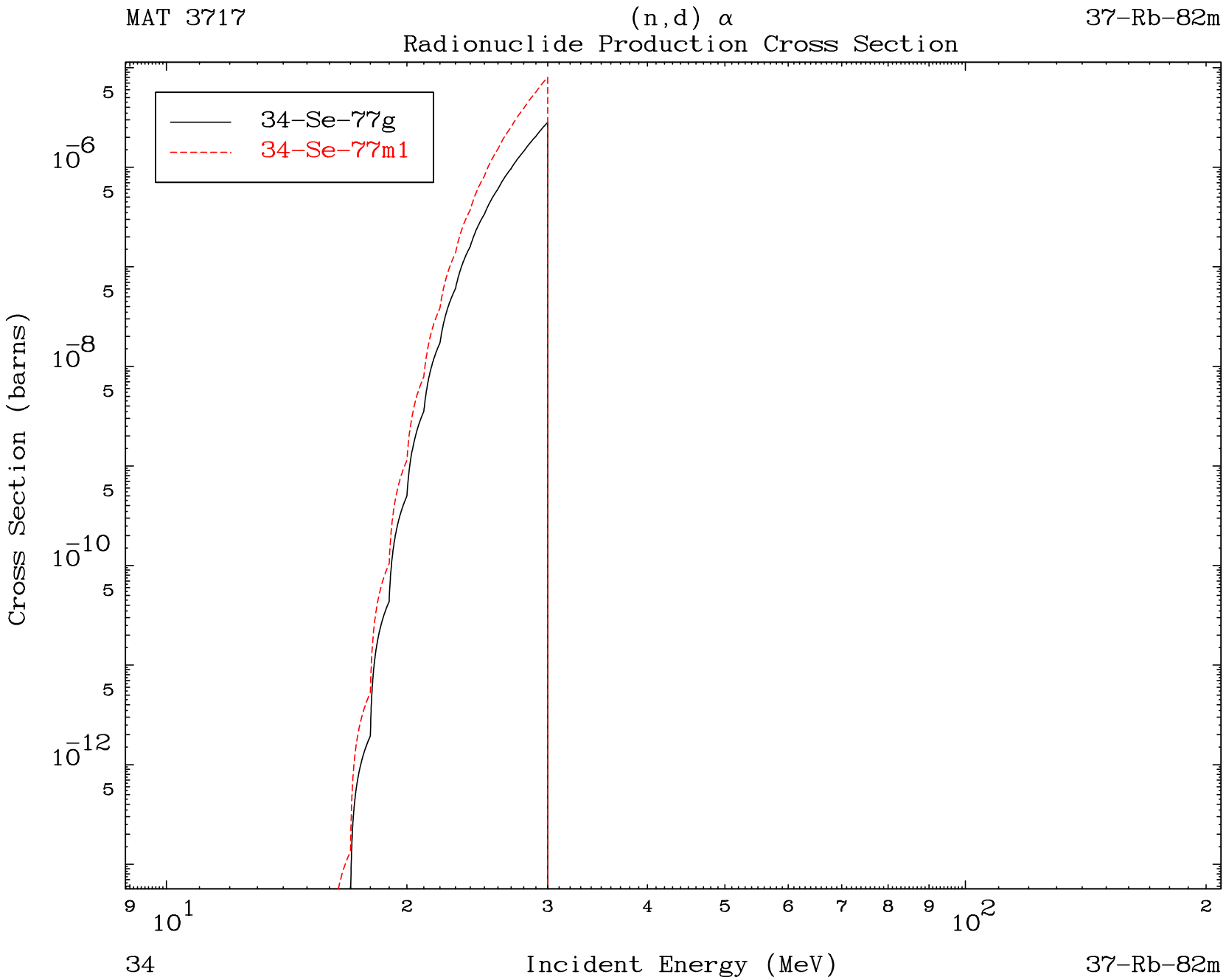

MAT 3717
(n,d)
37-Rb-82m
Radionuclide Production Cross Section
36-Kr-81g
36-Kr-81m2
Cross Section (barns)
Incident Energy (MeV)
29
37-Rb-82m


MAT 3717
(n,He-3)
37-Rb-82m
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
7 8 9 10^1 2 3 4 5 6 7 8 9 10^2 2
30
Incident Energy (MeV)
37-Rb-82m


MAT 3717
(n,α)
37-Rb-82m
Radionuclide Production Cross Section
35-Br-79g
35-Br-79m1
Cross Section (barns)
Incident Energy (MeV)
31
37-Rb-82m


MAT 3717
(n,p) d
37-Rb-82m
Radionuclide Production Cross Section
35-Br-80g
35-Br-80m2
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
32
Incident Energy (MeV)
37-Rb-82m


MAT 3717
(n,p) t
37-Rb-82m
Radionuclide Production Cross Section
35-Br-79g
35-Br-79m1
Cross Section (barns)
Incident Energy (MeV)
33
37-Rb-82m


MAT 3717
(n,d) α
37-Rb-82m
Radionuclide Production Cross Section
34-Se-77g
34-Se-77m1
Cross Section (barns)
Incident Energy (MeV)
34
37-Rb-82m