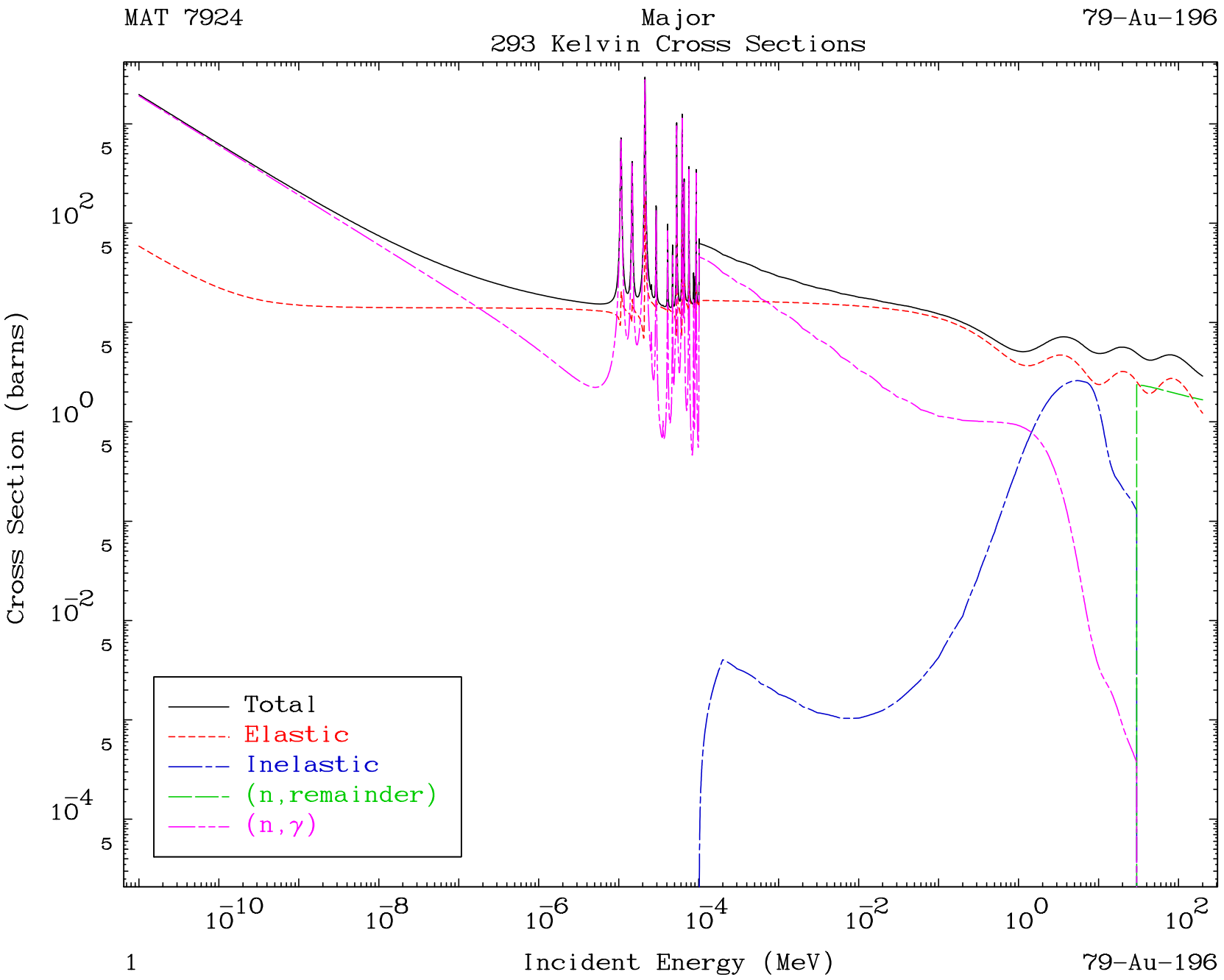
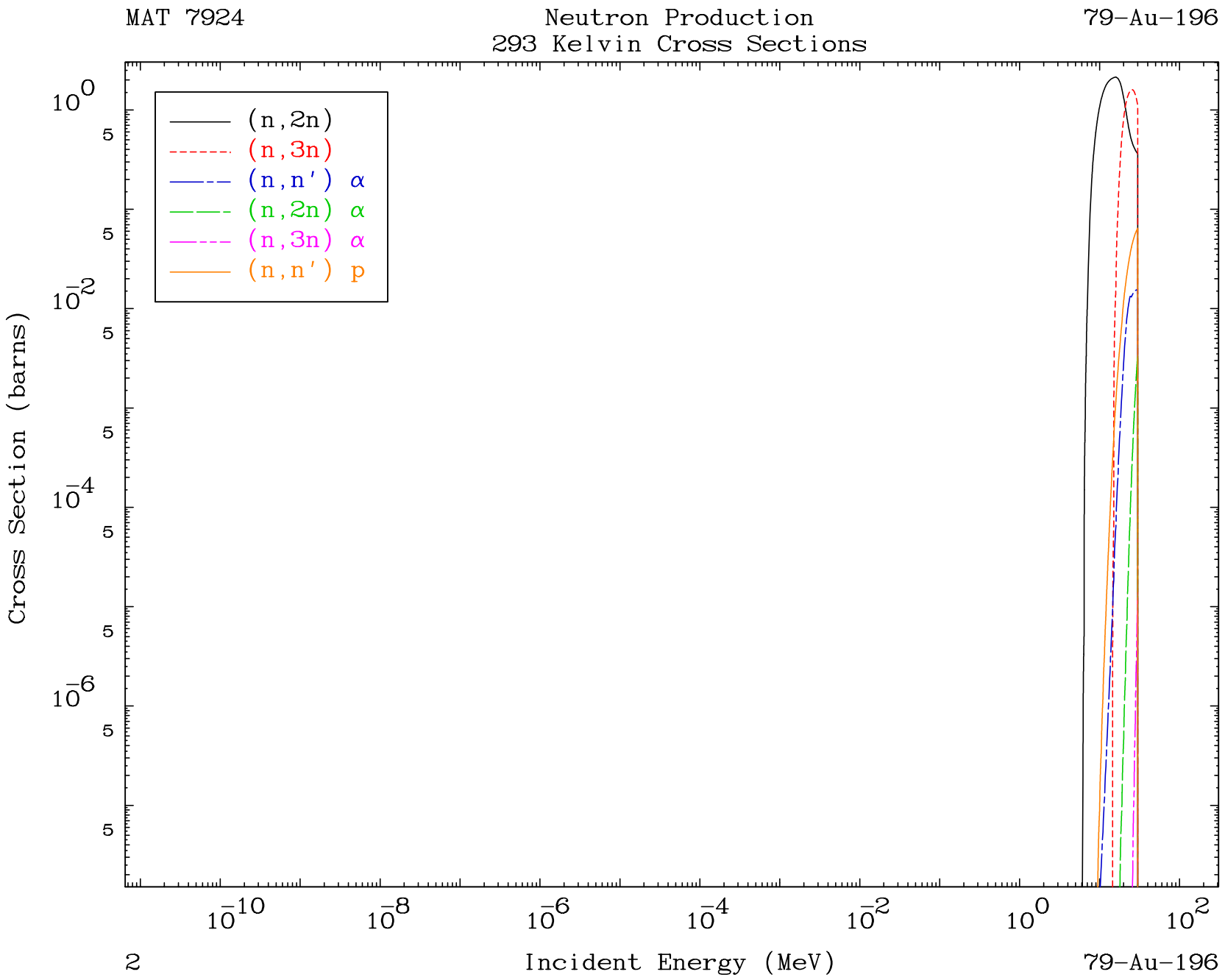
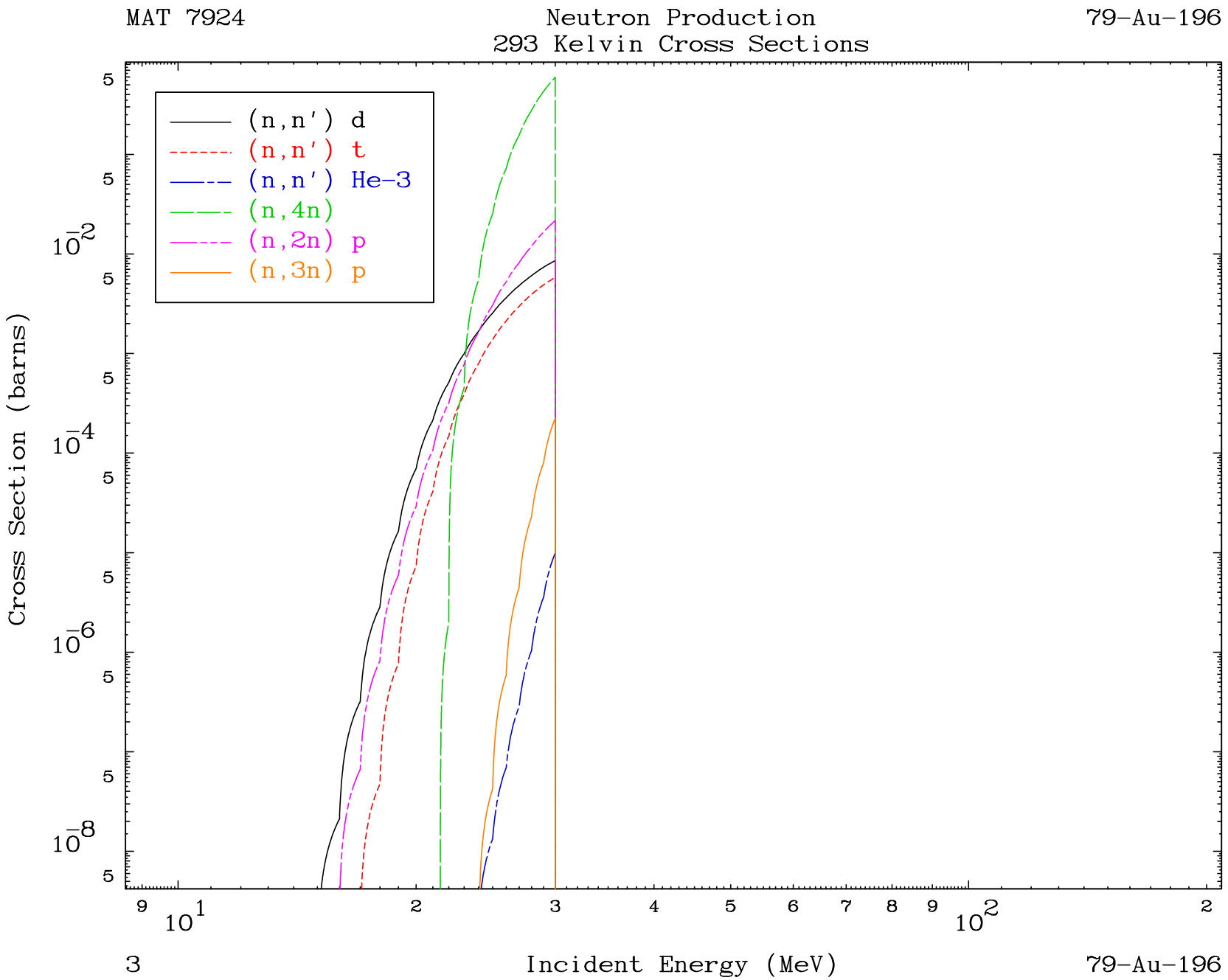
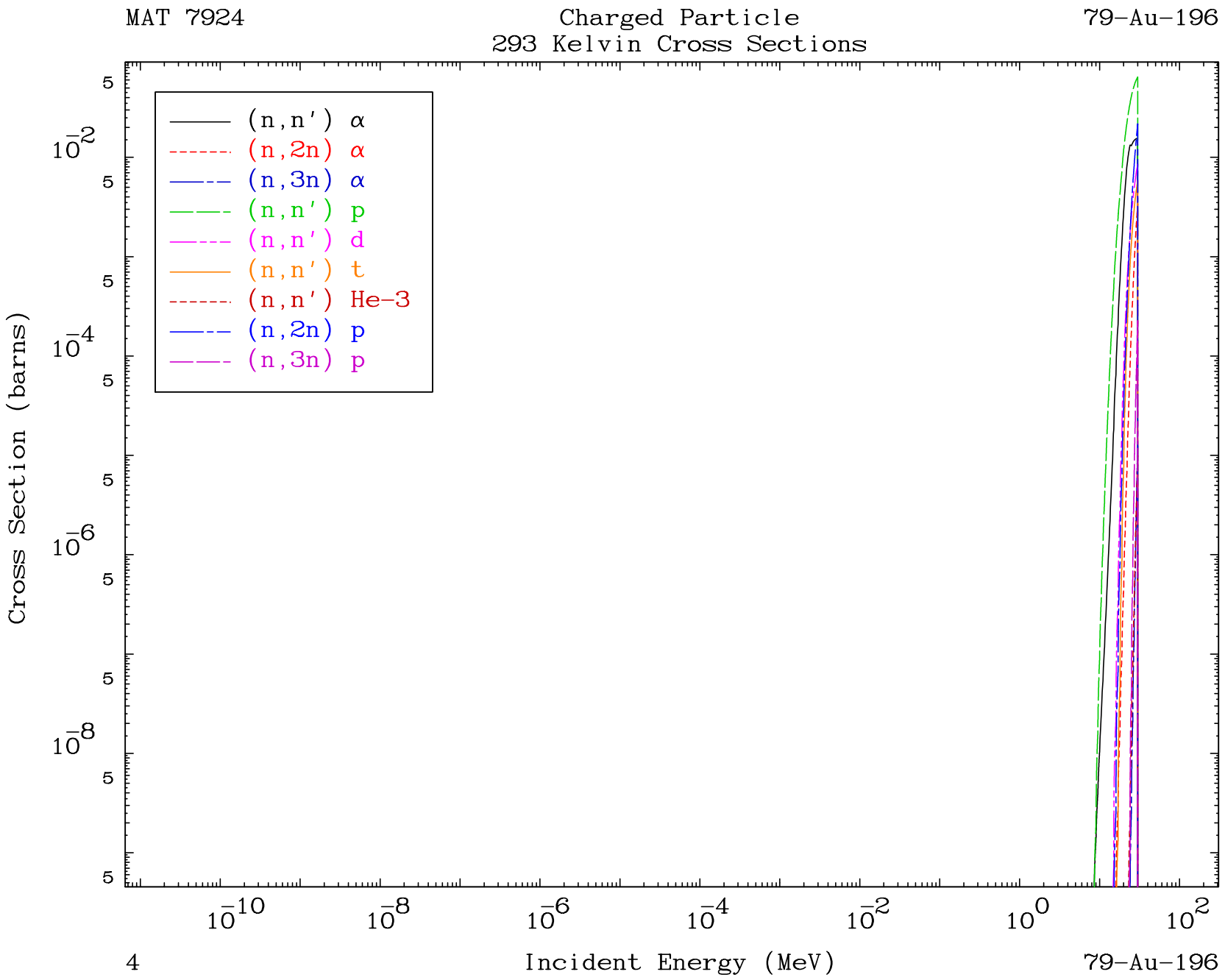
Program EVALPLOT
(Version 2018-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

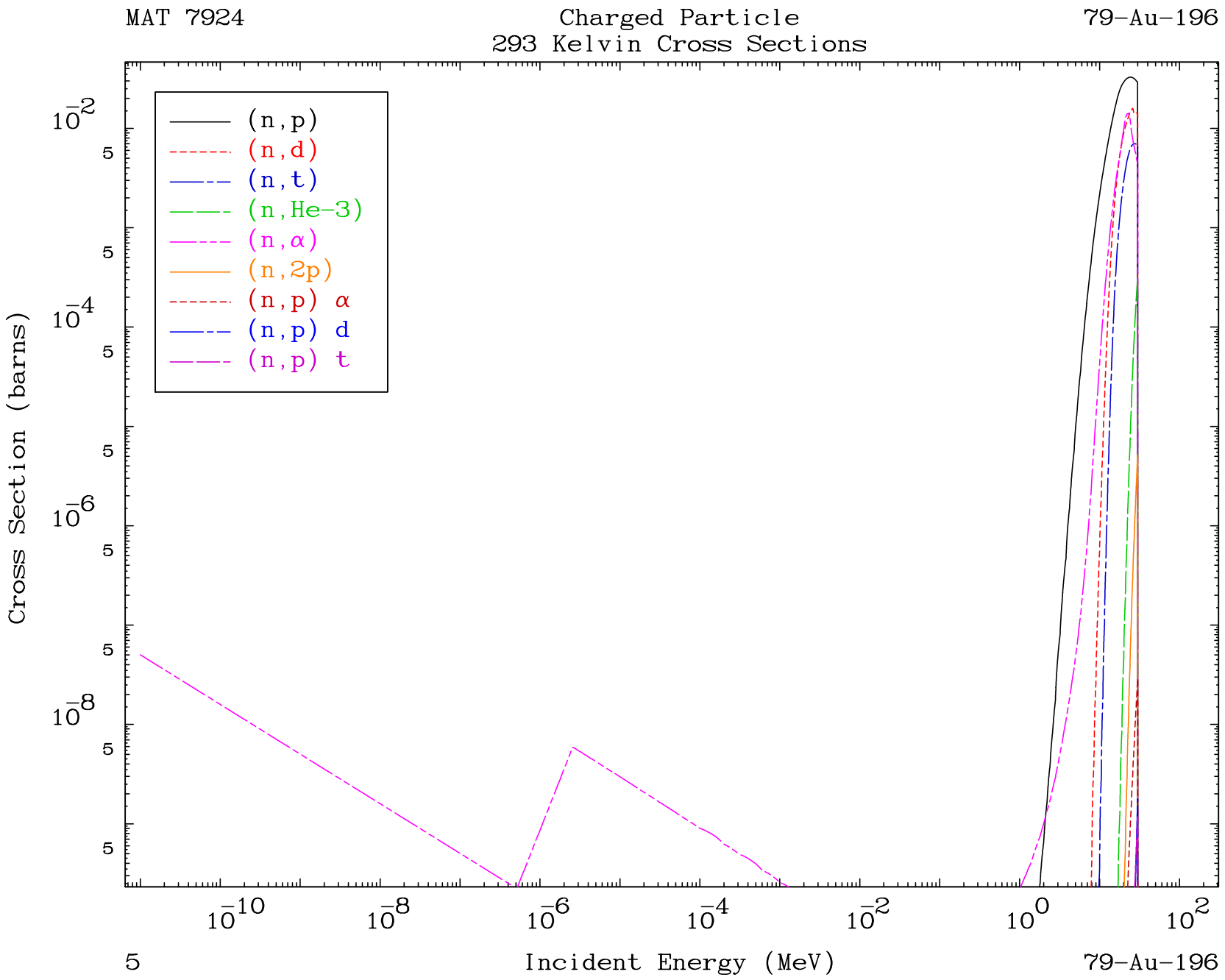
Press Mouse Button to Start

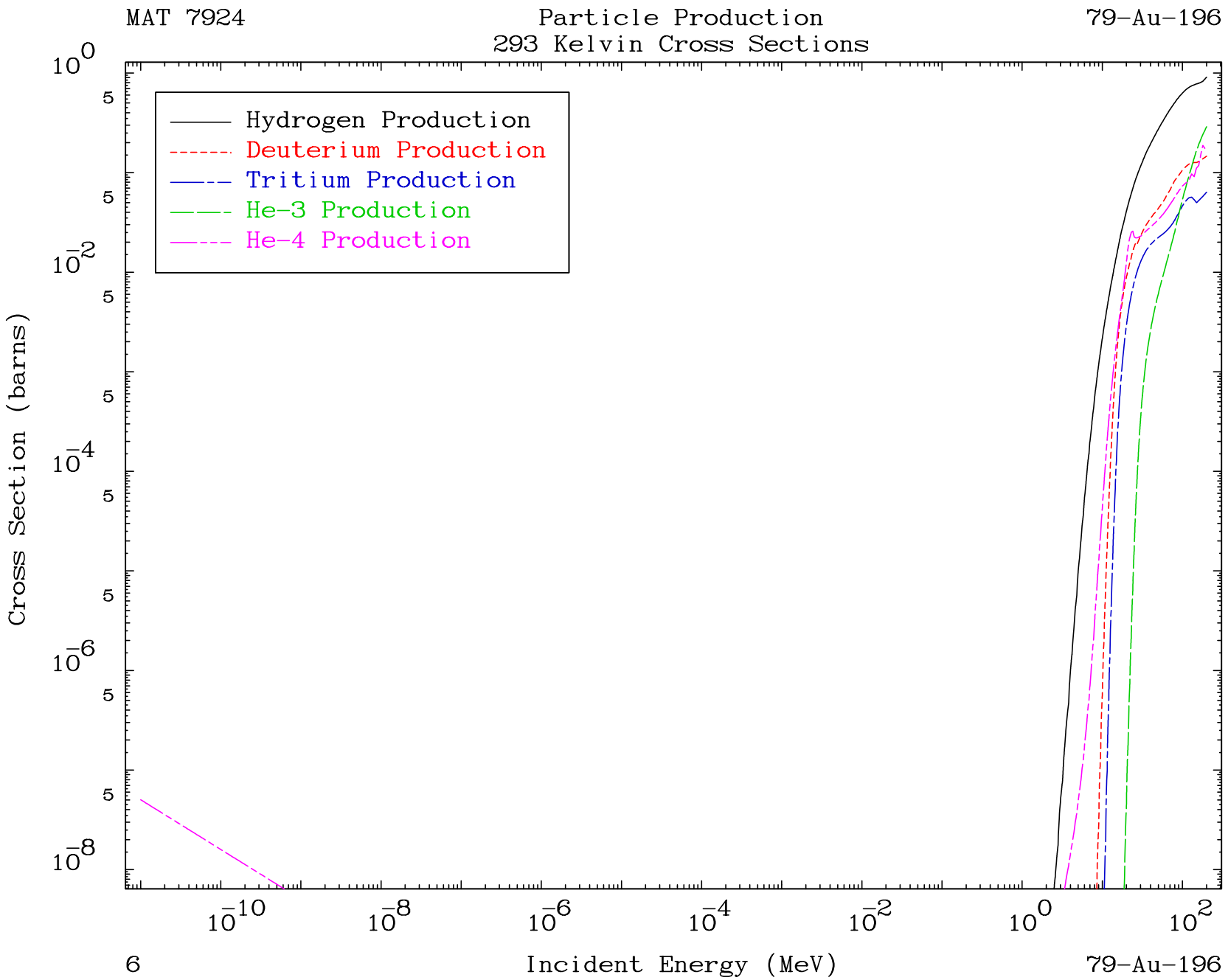

MAT 7924
Major
79-Au-196
293 Kelvin Cross Sections
Cross Section (barns)
Incident Energy (MeV)
Total
Elastic
Inelastic
(n,remainder)
(n,γ)
1
79-Au-196

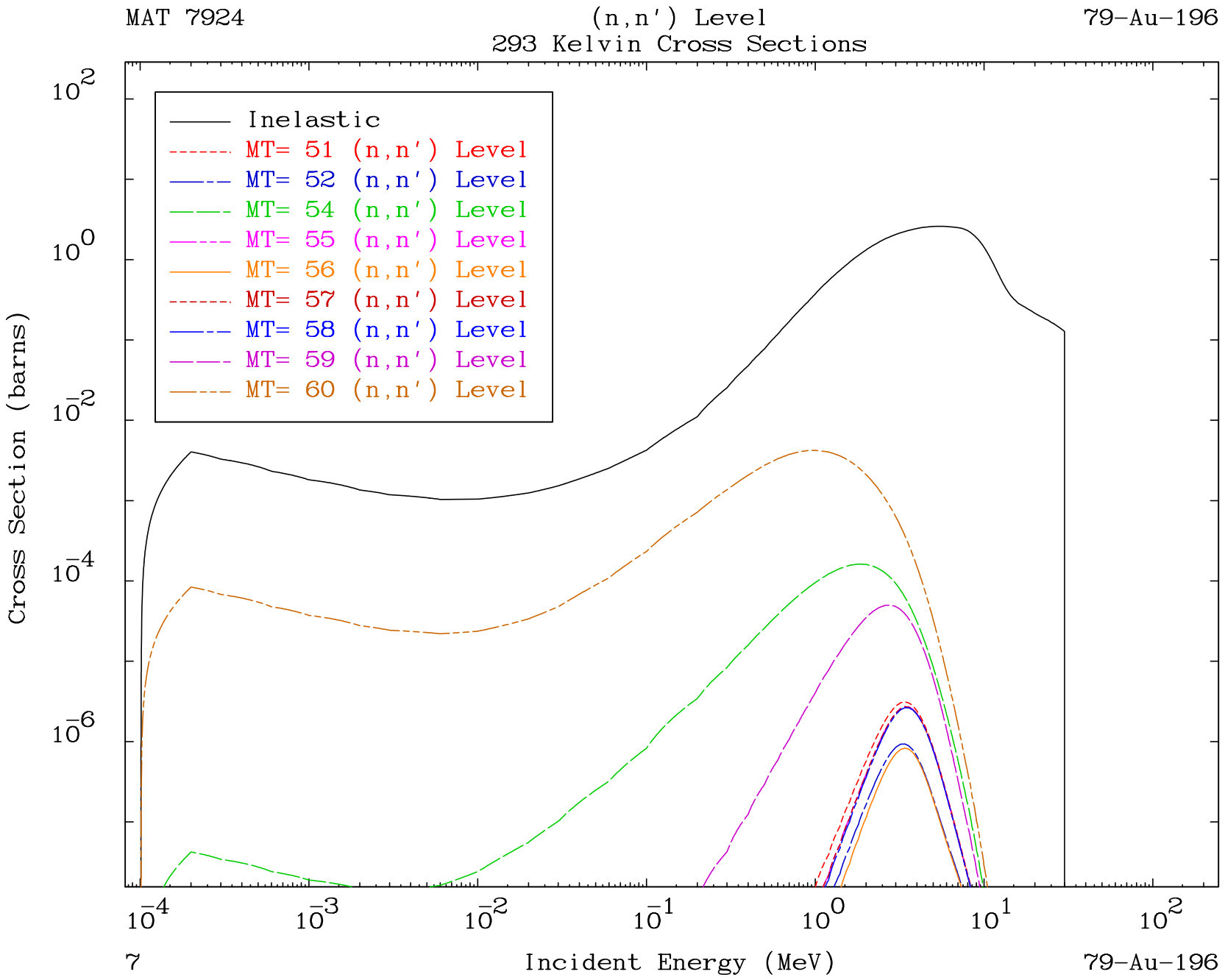

MAT 7924
Neutron Production
293 Kelvin Cross Sections
79-Au-196
(n,2n)
(n,3n)
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
Cross Section (barns)
Incident Energy (MeV)
2
79-Au-196

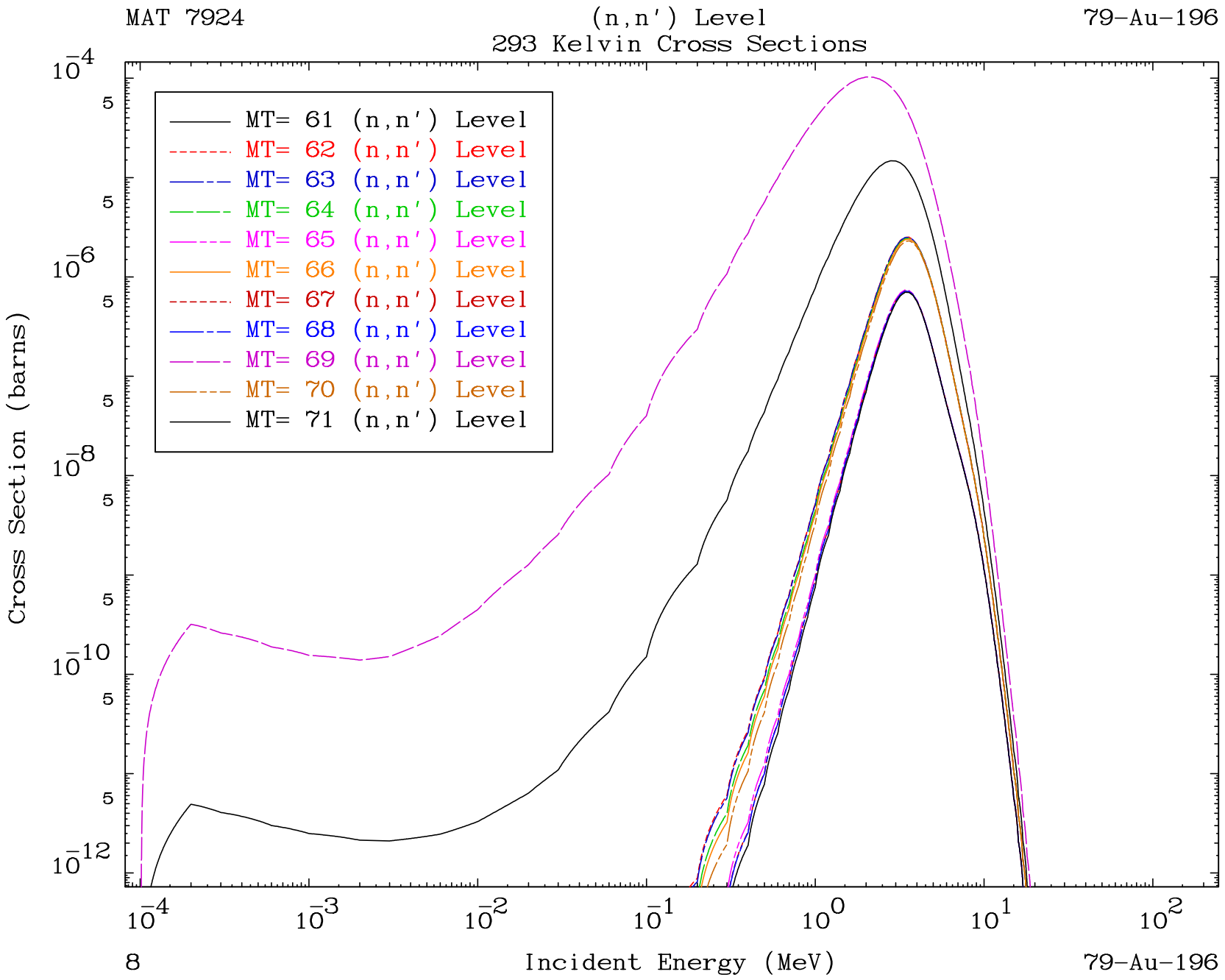

MAT 7924
Neutron Production
293 Kelvin Cross Sections
79-Au-196
(n,n') d
(n,n') t
(n,n') He-3
(n,4n)
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
3
79-Au-196

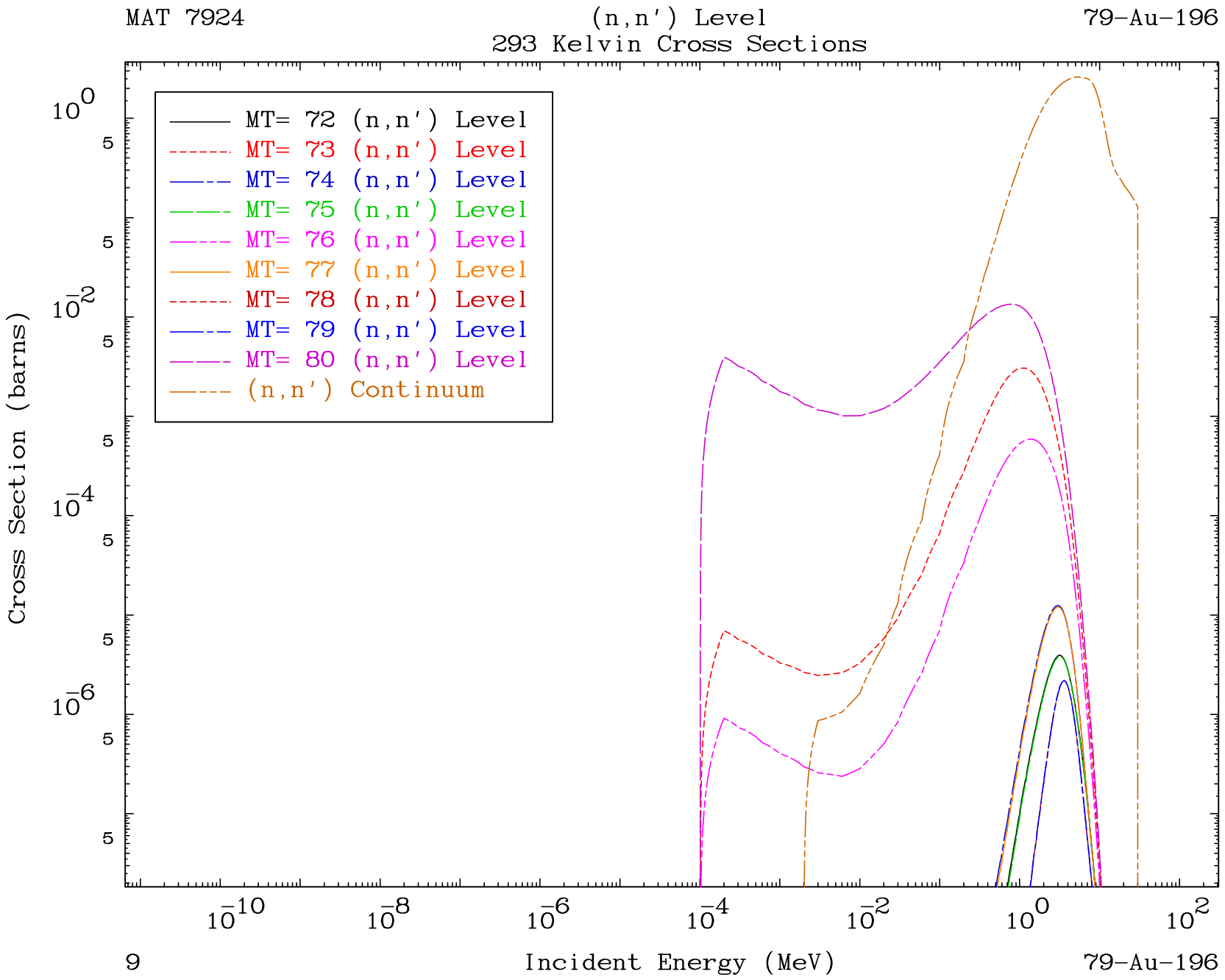

MAT 7924
Charged Particle
79-Au-196
293 Kelvin Cross Sections
(n,n') α
(n,2n) α
(n,3n) α
(n,n') p
(n,n') d
(n,n') t
(n,n') He-3
(n,2n) p
(n,3n) p
Cross Section (barns)
Incident Energy (MeV)
4
79-Au-196

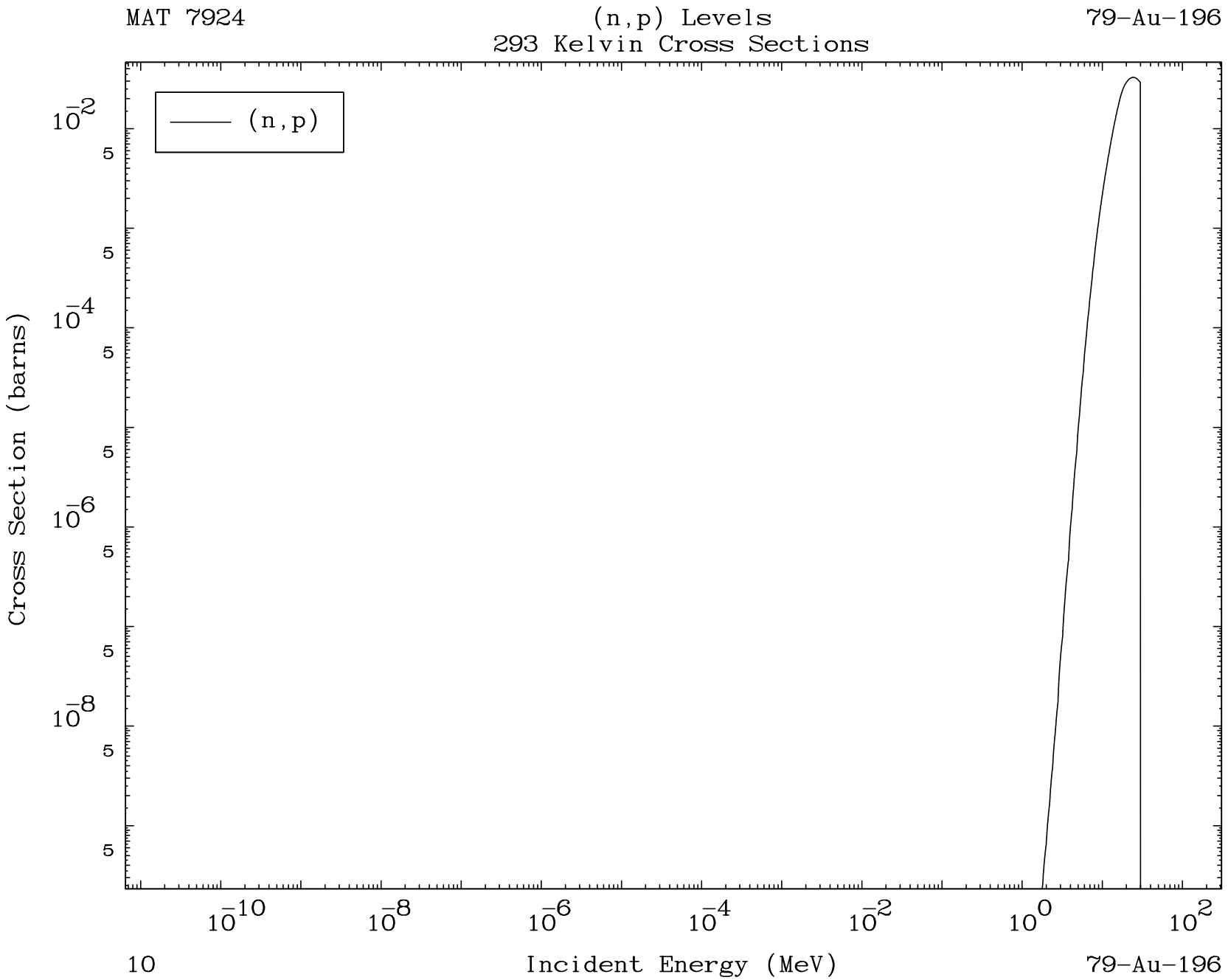

MAT 7924
Charged Particle
293 Kelvin Cross Sections
79-Au-196
(n,p)
(n,d)
(n,t)
(n,He-3)
(n,α)
(n,2p)
(n,p) α
(n,p) d
(n,p) t
Cross Section (barns)
Incident Energy (MeV)
79-Au-196

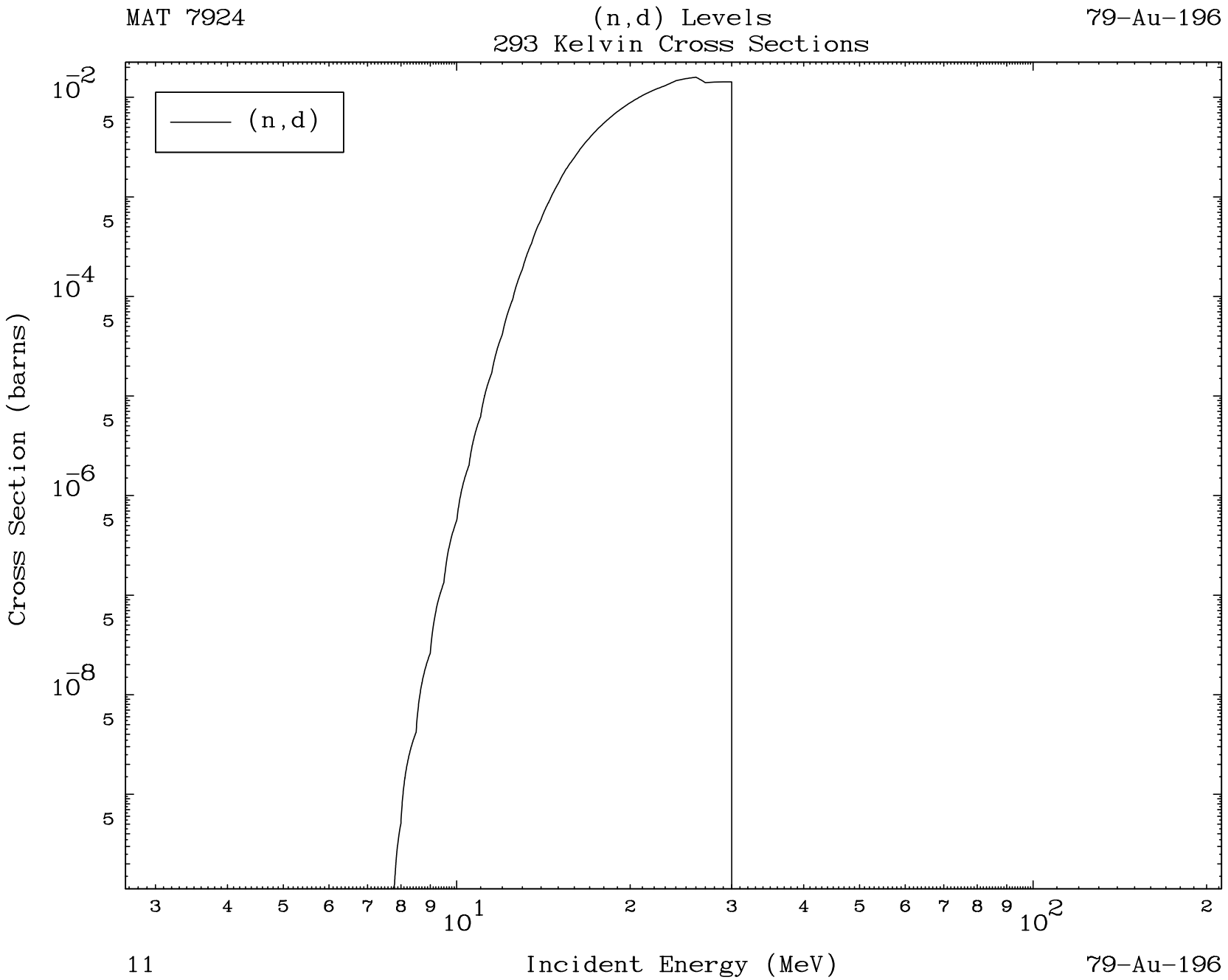

MAT 7924
Particle Production
293 Kelvin Cross Sections
79-Au-196
Hydrogen Production
Deuterium Production
Tritium Production
He-3 Production
He-4 Production
Cross Section (barns)
Incident Energy (MeV)
79-Au-196
6

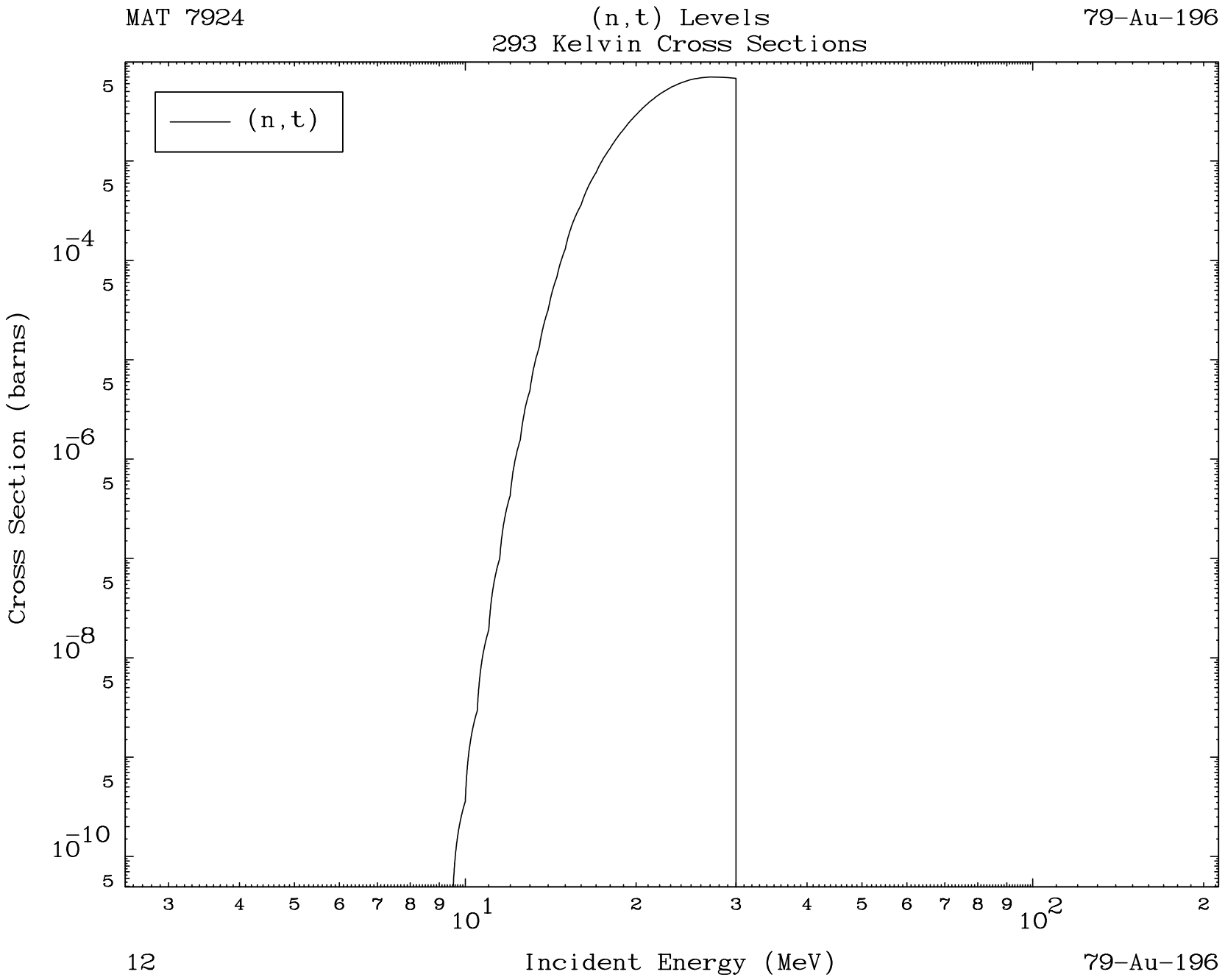

MAT 7924
(n,n') Level
79-Au-196
293 Kelvin Cross Sections
Inelastic
MT= 51 (n,n') Level
MT= 52 (n,n') Level
MT= 54 (n,n') Level
MT= 55 (n,n') Level
MT= 56 (n,n') Level
MT= 57 (n,n') Level
MT= 58 (n,n') Level
MT= 59 (n,n') Level
MT= 60 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
7
79-Au-196

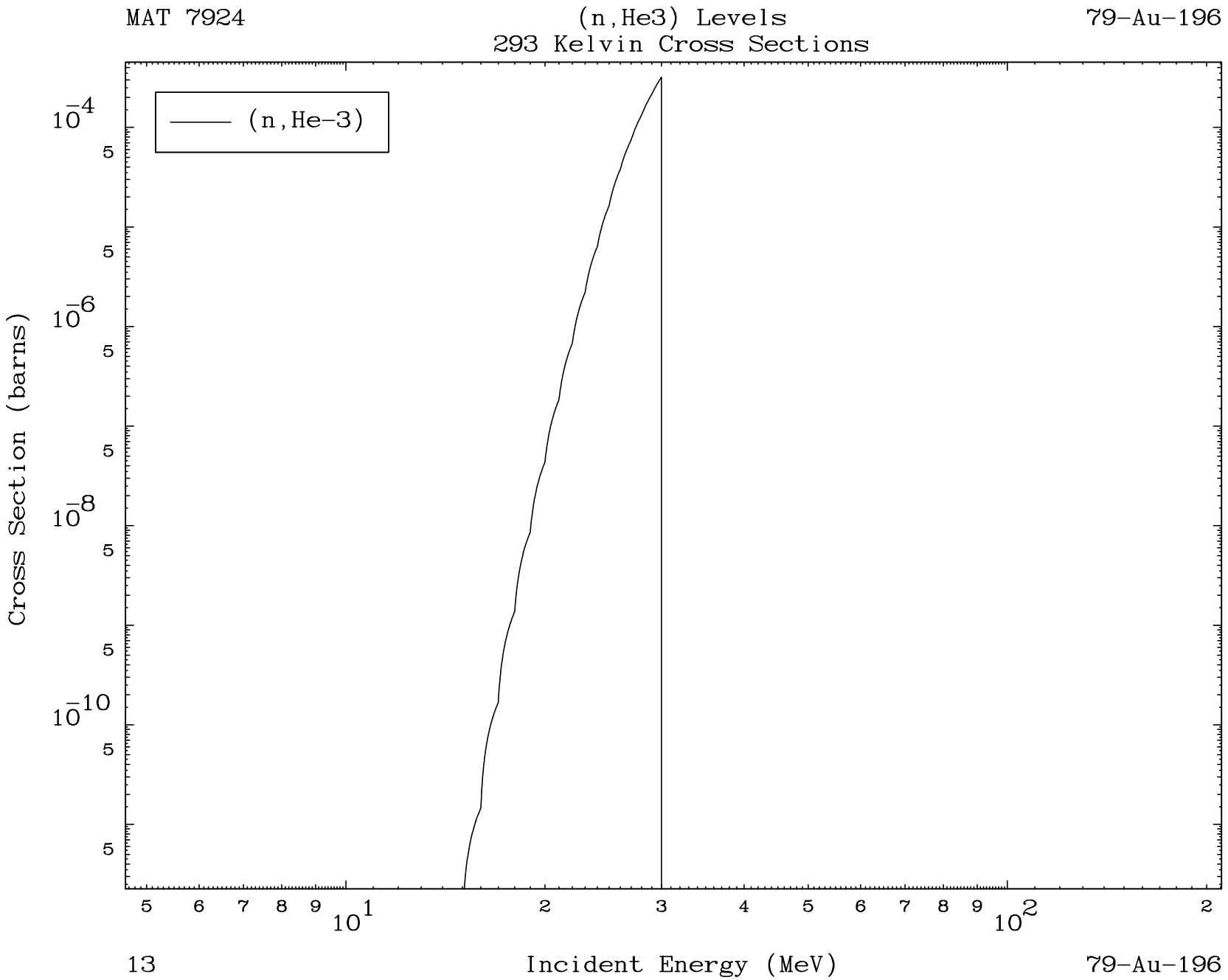

MAT 7924
(n,n') Level
79-Au-196
293 Kelvin Cross Sections
MT= 61 (n,n') Level
MT= 62 (n,n') Level
MT= 63 (n,n') Level
MT= 64 (n,n') Level
MT= 65 (n,n') Level
MT= 66 (n,n') Level
MT= 67 (n,n') Level
MT= 68 (n,n') Level
MT= 69 (n,n') Level
MT= 70 (n,n') Level
MT= 71 (n,n') Level
Cross Section (barns)
Incident Energy (MeV)
8
79-Au-196

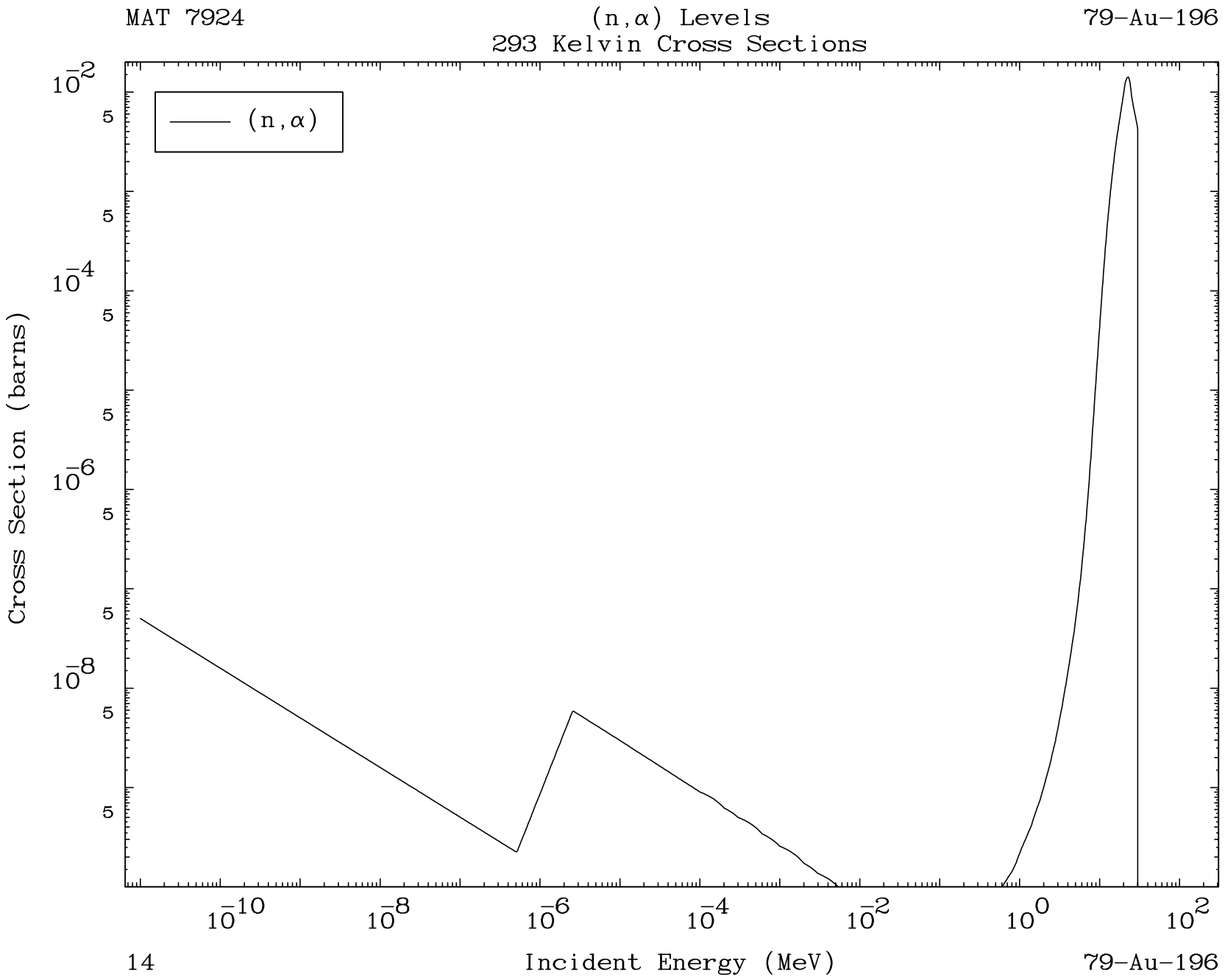

MAT 7924
(n,n') Level
79-Au-196
293 Kelvin Cross Sections
MT= 72 (n,n') Level
MT= 73 (n,n') Level
MT= 74 (n,n') Level
MT= 75 (n,n') Level
MT= 76 (n,n') Level
MT= 77 (n,n') Level
MT= 78 (n,n') Level
MT= 79 (n,n') Level
MT= 80 (n,n') Level
(n,n') Continuum
Cross Section (barns)
Incident Energy (MeV)
9
79-Au-196

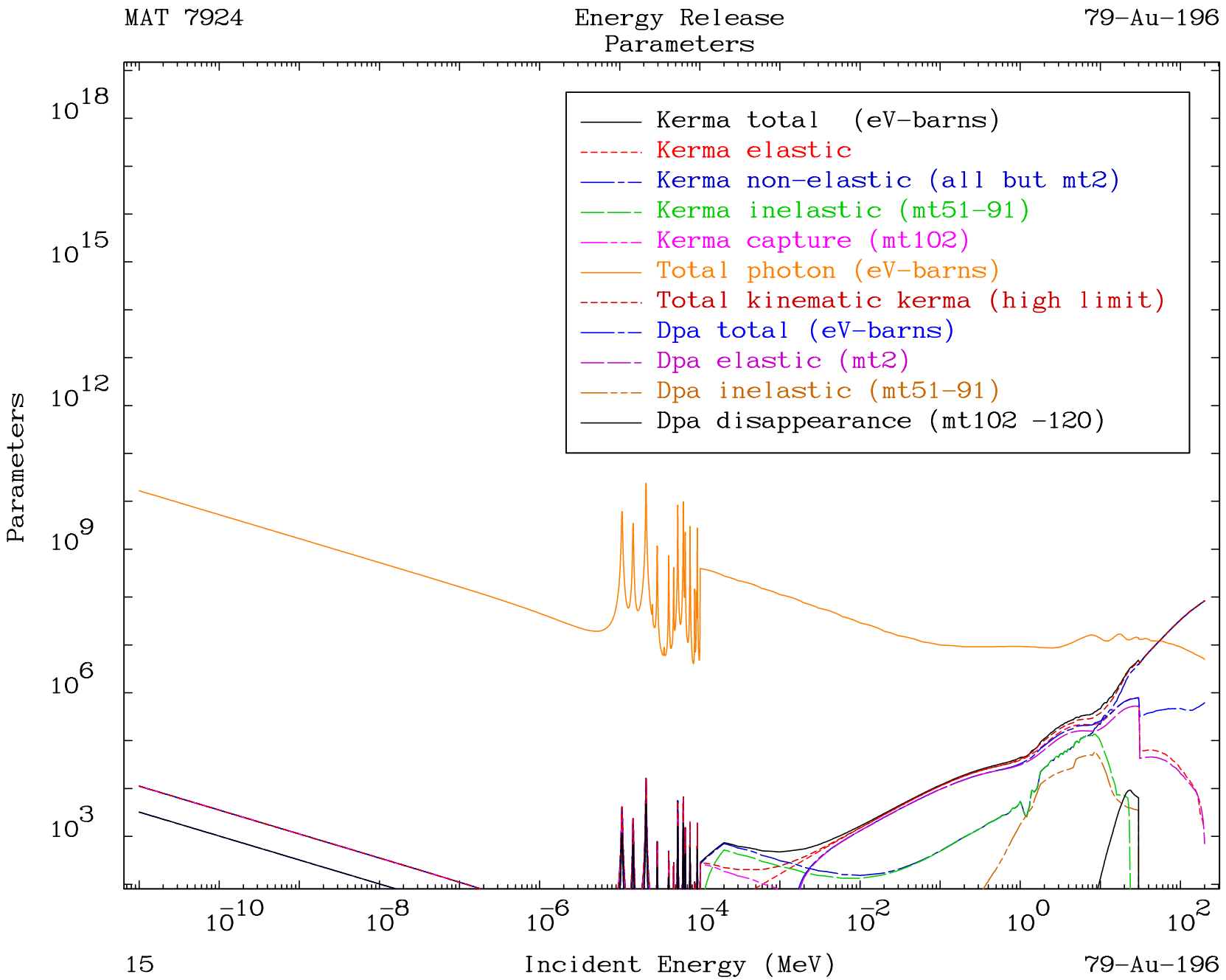

MAT 7924
(n,p) Levels
79-Au-196
293 Kelvin Cross Sections
(n,p)
Cross Section (barns)
Incident Energy (MeV)
10
79-Au-196

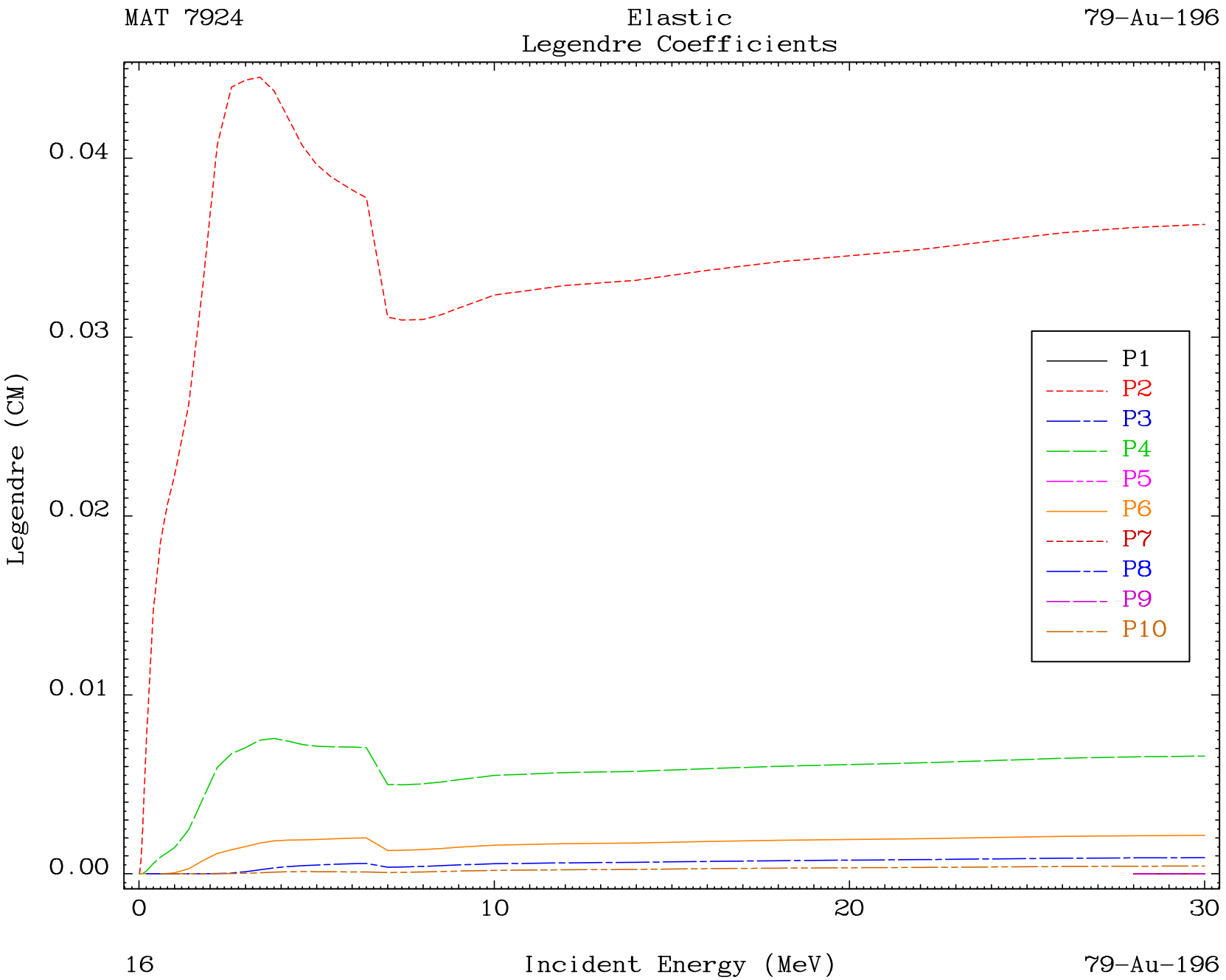

MAT 7924
(n,d) Levels
79-Au-196
293 Kelvin Cross Sections
(n,d)
Cross Section (barns)
Incident Energy (MeV)
11
79-Au-196

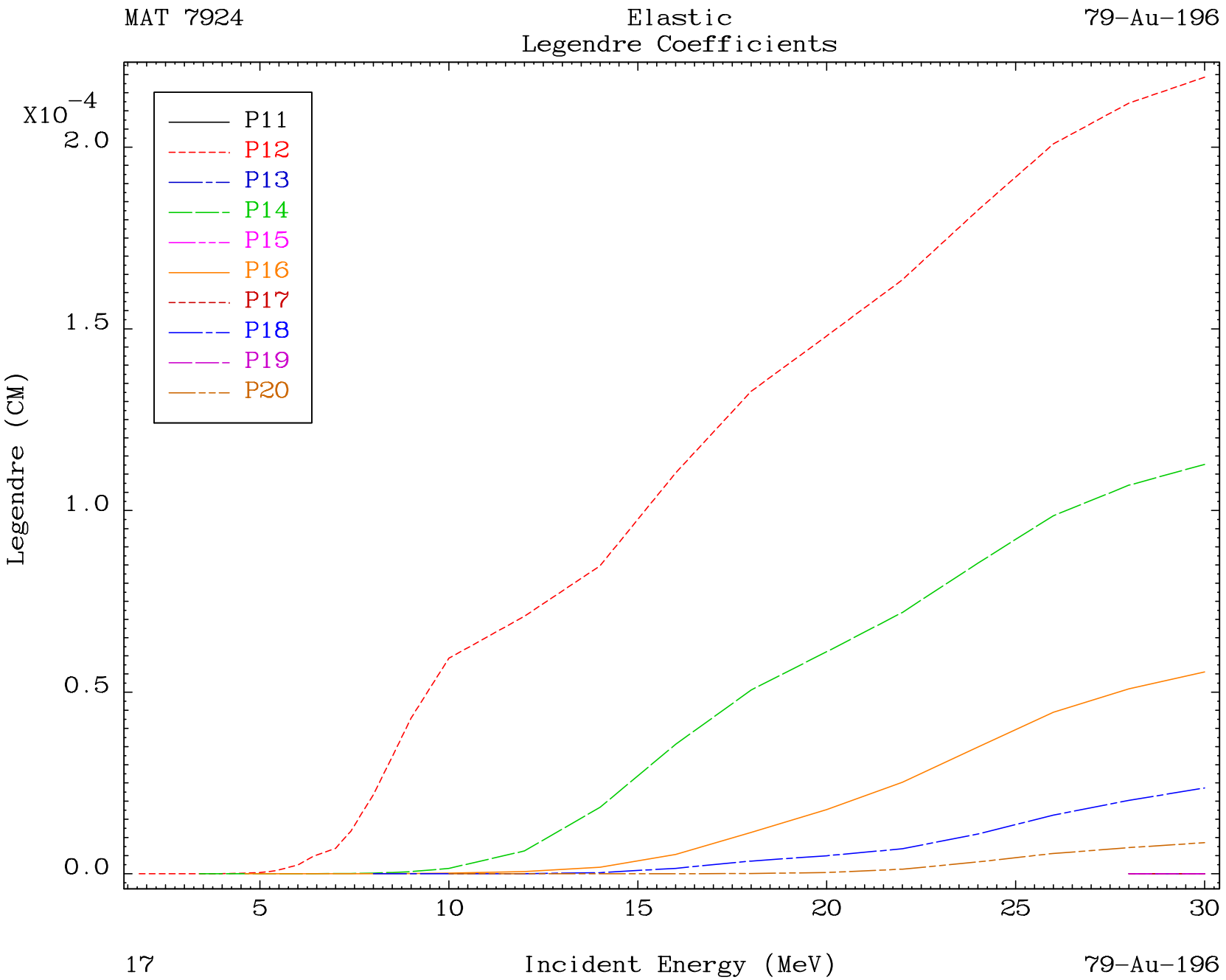

MAT 7924
(n,t) Levels
79-Au-196
293 Kelvin Cross Sections
(n,t)
Cross Section (barns)
Incident Energy (MeV)
12
79-Au-196

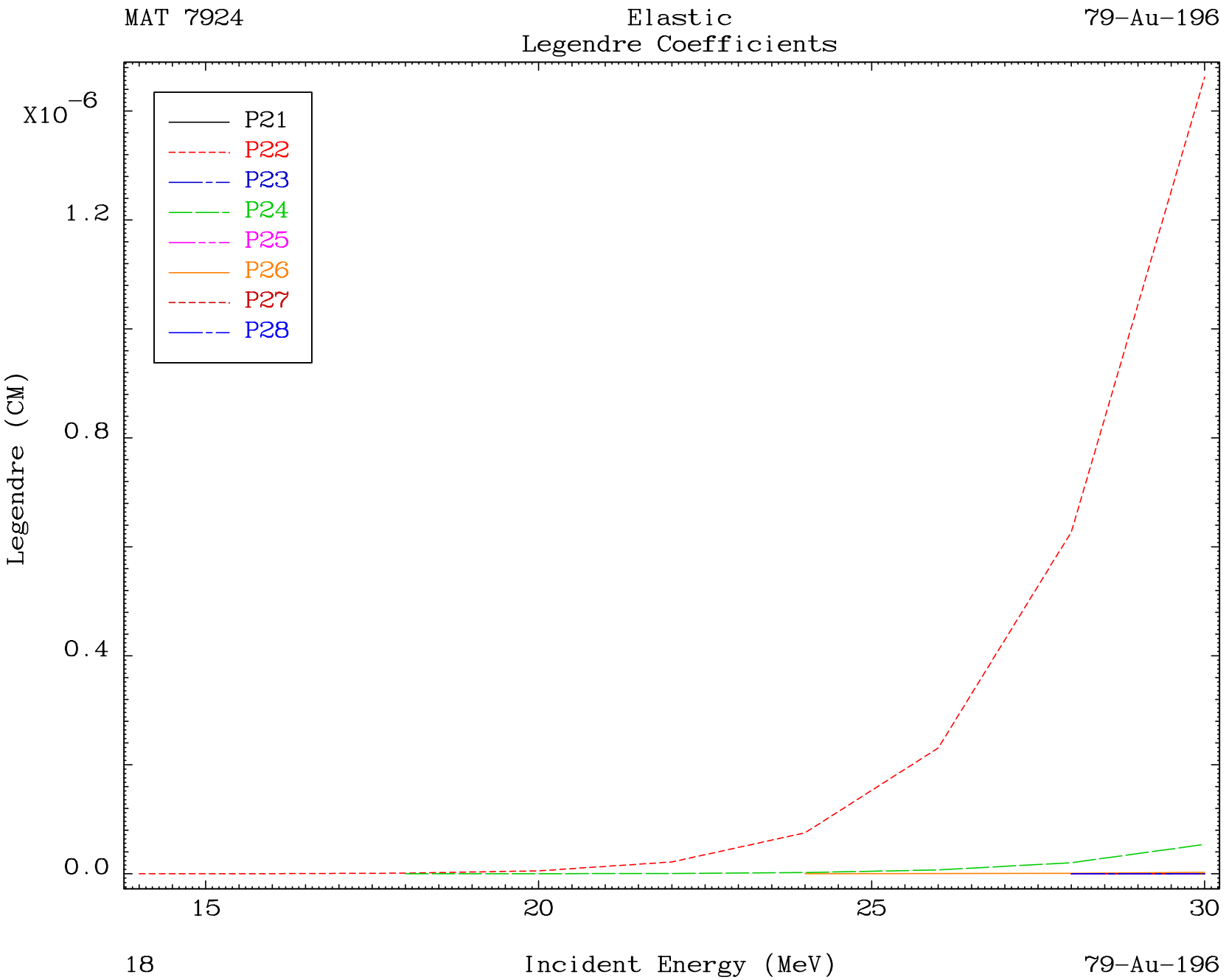

MAT 7924
(n,He3) Levels
79-Au-196
293 Kelvin Cross Sections
(n,He-3)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
5
5
5
5
5
5
5 6 7 8 9 101 2 3 4 5 6 7 8 9 102 2
13
Incident Energy (MeV)
79-Au-196

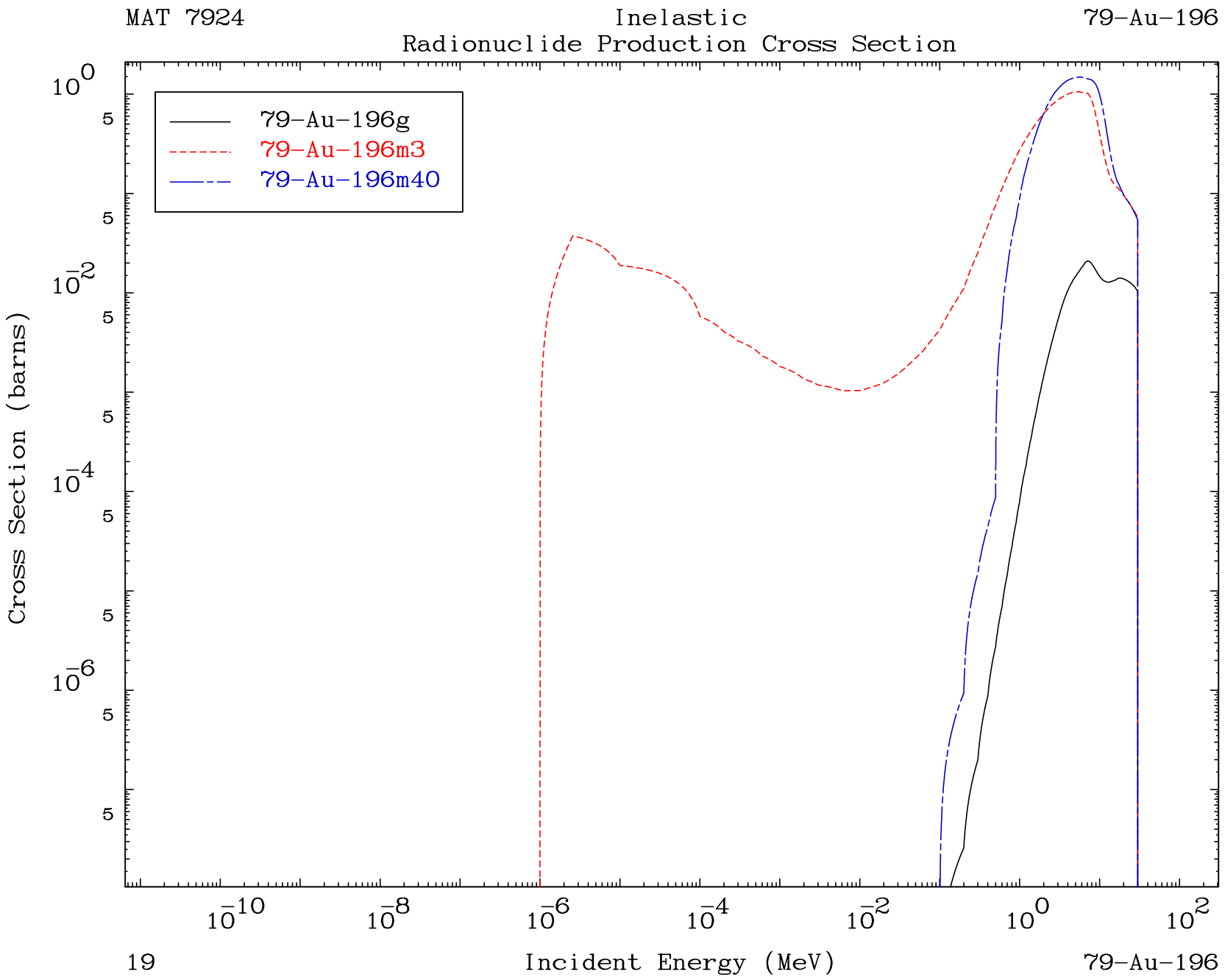

MAT 7924
(n,α) Levels
293 Kelvin Cross Sections
79-Au-196
(n,α)
Cross Section (barns)
10-2
5
10-4
5
10-6
5
10-8
5
10-10
10-8
10-6
10-4
10-2
100
102
14
Incident Energy (MeV)
79-Au-196

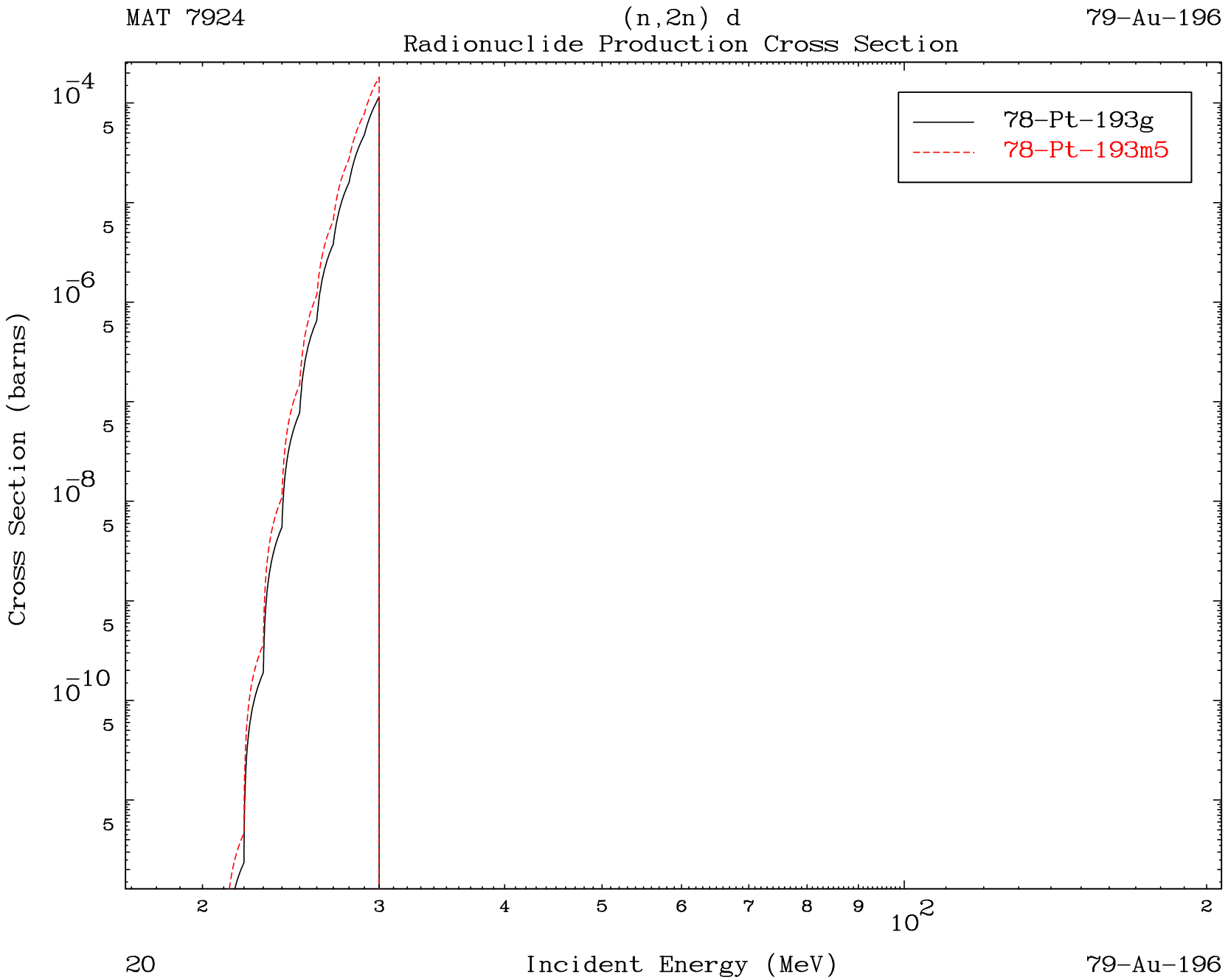

MAT 7924
Energy Release
Parameters
79-Au-196
Kerma total (eV-barns)
Kerma elastic
Kerma non-elastic (all but mt2)
Kerma inelastic (mt51-91)
Kerma capture (mt102)
Total photon (eV-barns)
Total kinematic kerma (high limit)
Dpa total (eV-barns)
Dpa elastic (mt2)
Dpa inelastic (mt51-91)
Dpa disappearance (mt102 -120)
Parameters
10^{18}
10^{15}
10^{12}
10^{9}
10^{6}
10^{3}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
15
Incident Energy (MeV)
79-Au-196

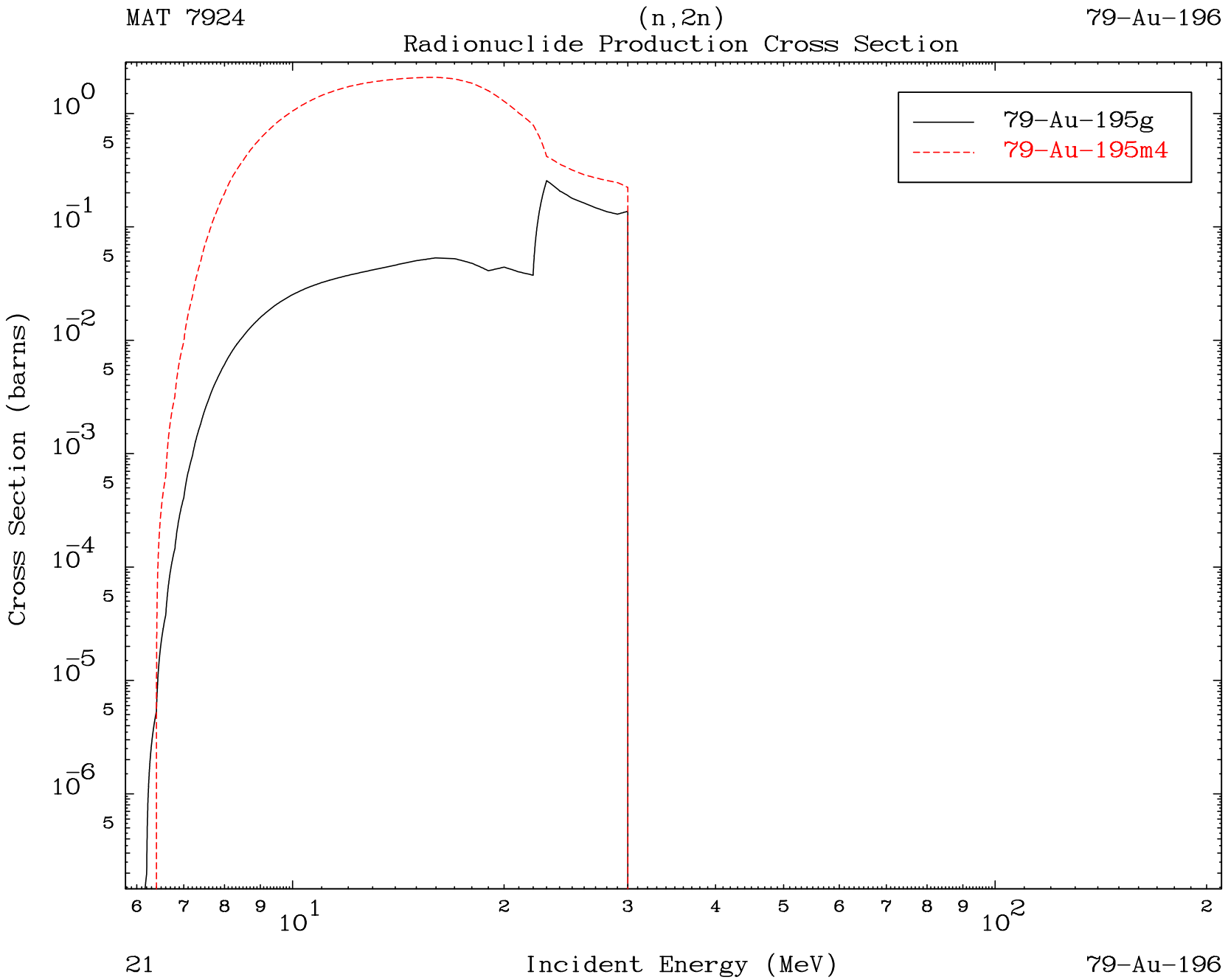

MAT 7924
Elastic
Legendre Coefficients
79-Au-196
Legendre (CM)
0.04
0.03
0.02
0.01
0.00
0
10
20
30
16
Incident Energy (MeV)
79-Au-196
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10

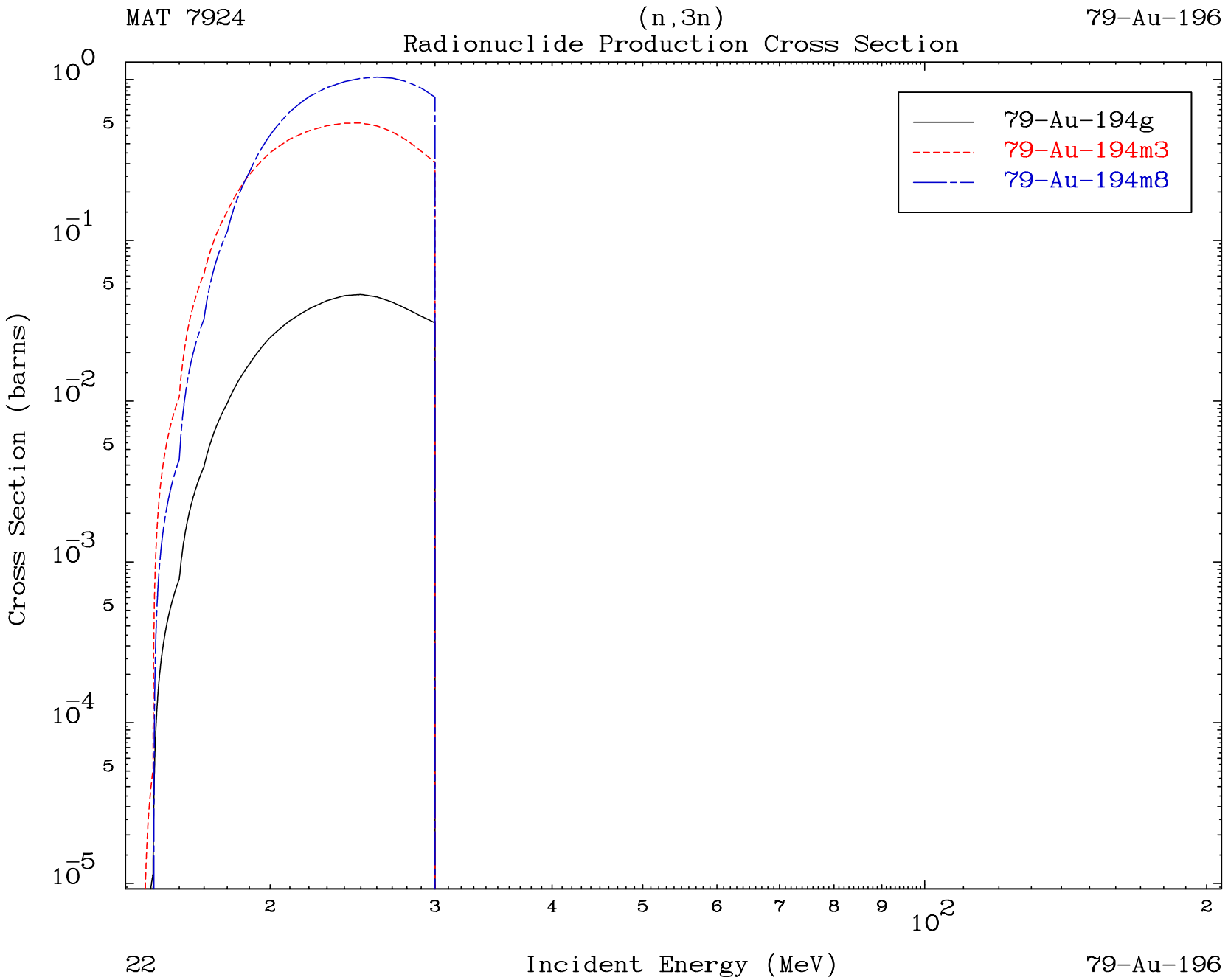

MAT 7924
Elastic
Legendre Coefficients
79-Au-196
X10 -4
2.0
1.5
1.0
0.5
0.0
Legendre (CM)
P11
P12
P13
P14
P15
P16
P17
P18
P19
P20
5
10
15
20
25
30
17
Incident Energy (MeV)
79-Au-196

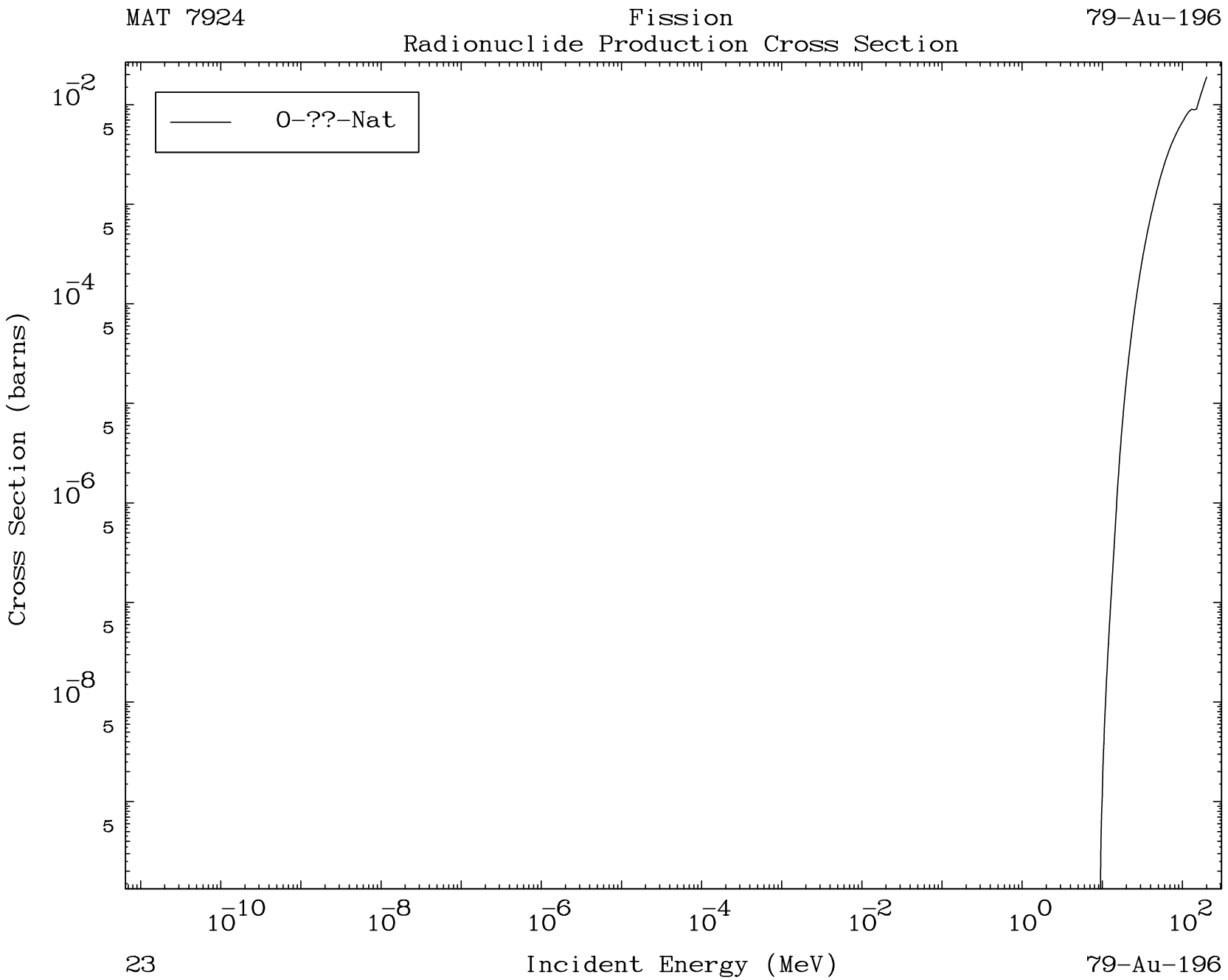

MAT 7924
Elastic
Legendre Coefficients
79-Au-196
X10^-6
1.2
0.8
0.4
0.0
Legendre (CM)
P21
P22
P23
P24
P25
P26
P27
P28
15
20
25
30
18
Incident Energy (MeV)
79-Au-196

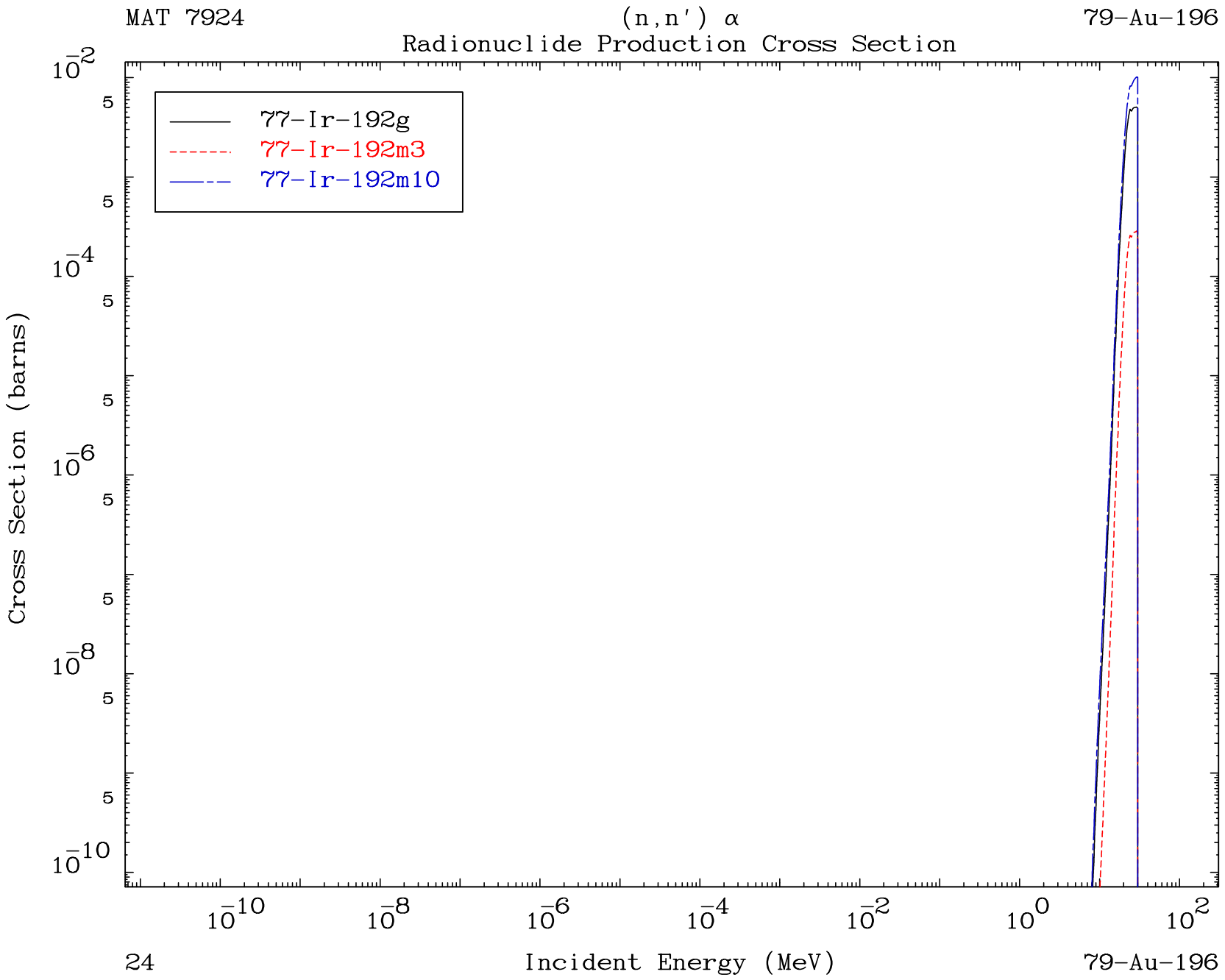

MAT 7924
Inelastic
79-Au-196
Radionuclide Production Cross Section
79-Au-196g
79-Au-196m3
79-Au-196m40
Cross Section (barns)
Incident Energy (MeV)
19
79-Au-196

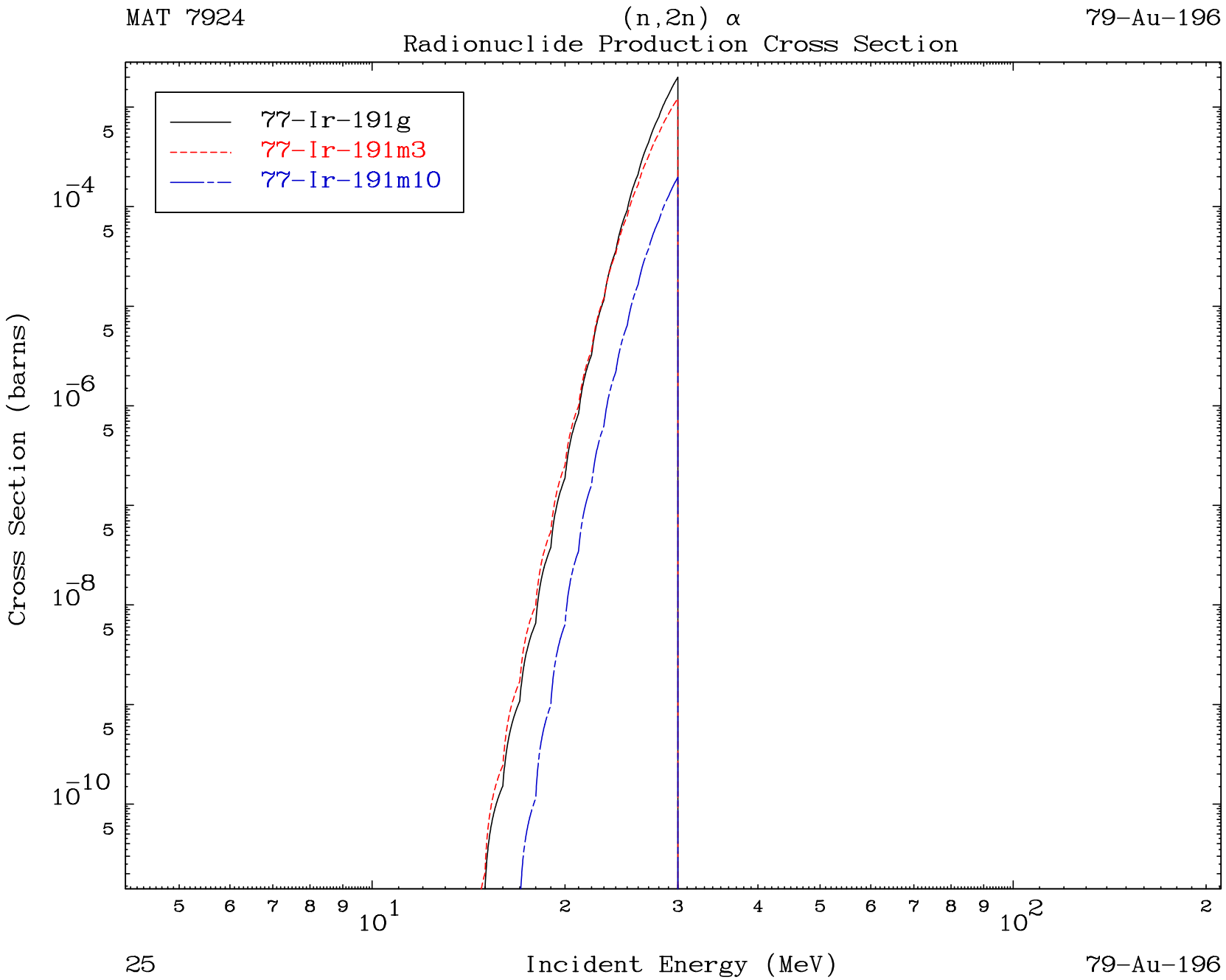

MAT 7924
(n,2n) d
79-Au-196
Radionuclide Production Cross Section
78-Pt-193g
78-Pt-193m5
Cross Section (barns)
Incident Energy (MeV)
20
79-Au-196

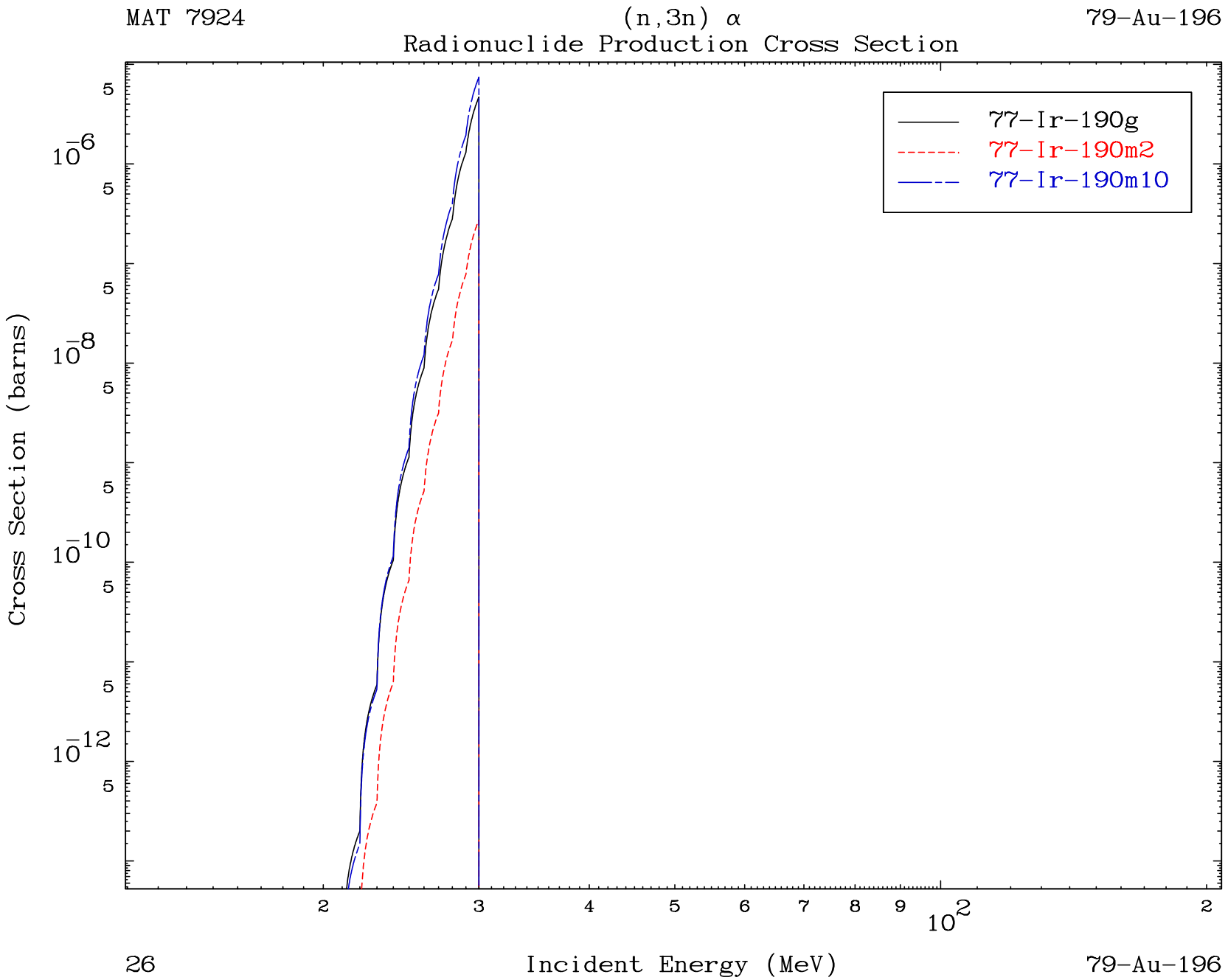

MAT 7924
(n,2n)
79-Au-196
Radionuclide Production Cross Section
79-Au-195g
79-Au-195m4
Cross Section (barns)
Incident Energy (MeV)
21
79-Au-196

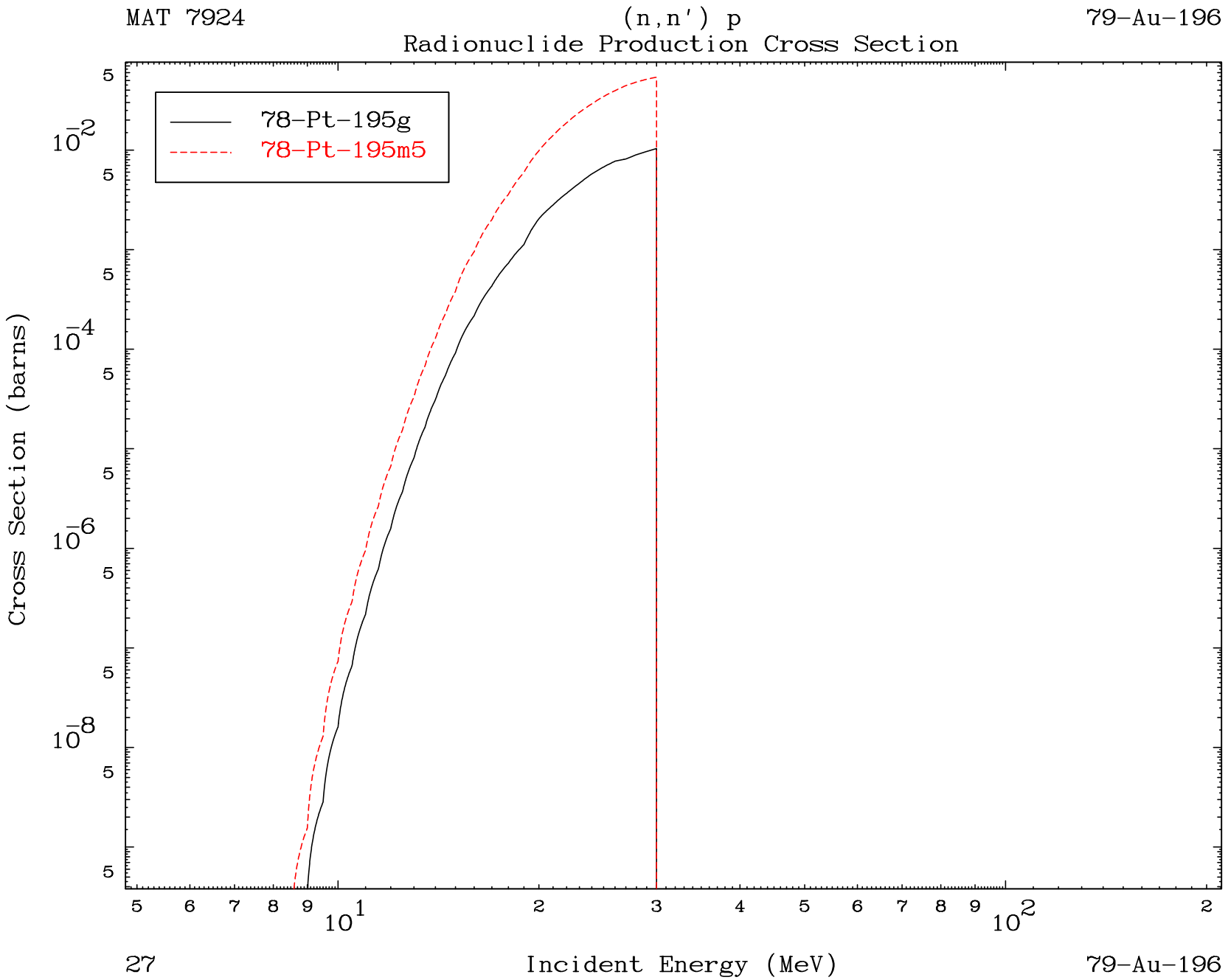

MAT 7924
(n,3n)
79-Au-196
Radionuclide Production Cross Section
79-Au-194g
79-Au-194m3
79-Au-194m8
Cross Section (barns)
Incident Energy (MeV)
22
79-Au-196

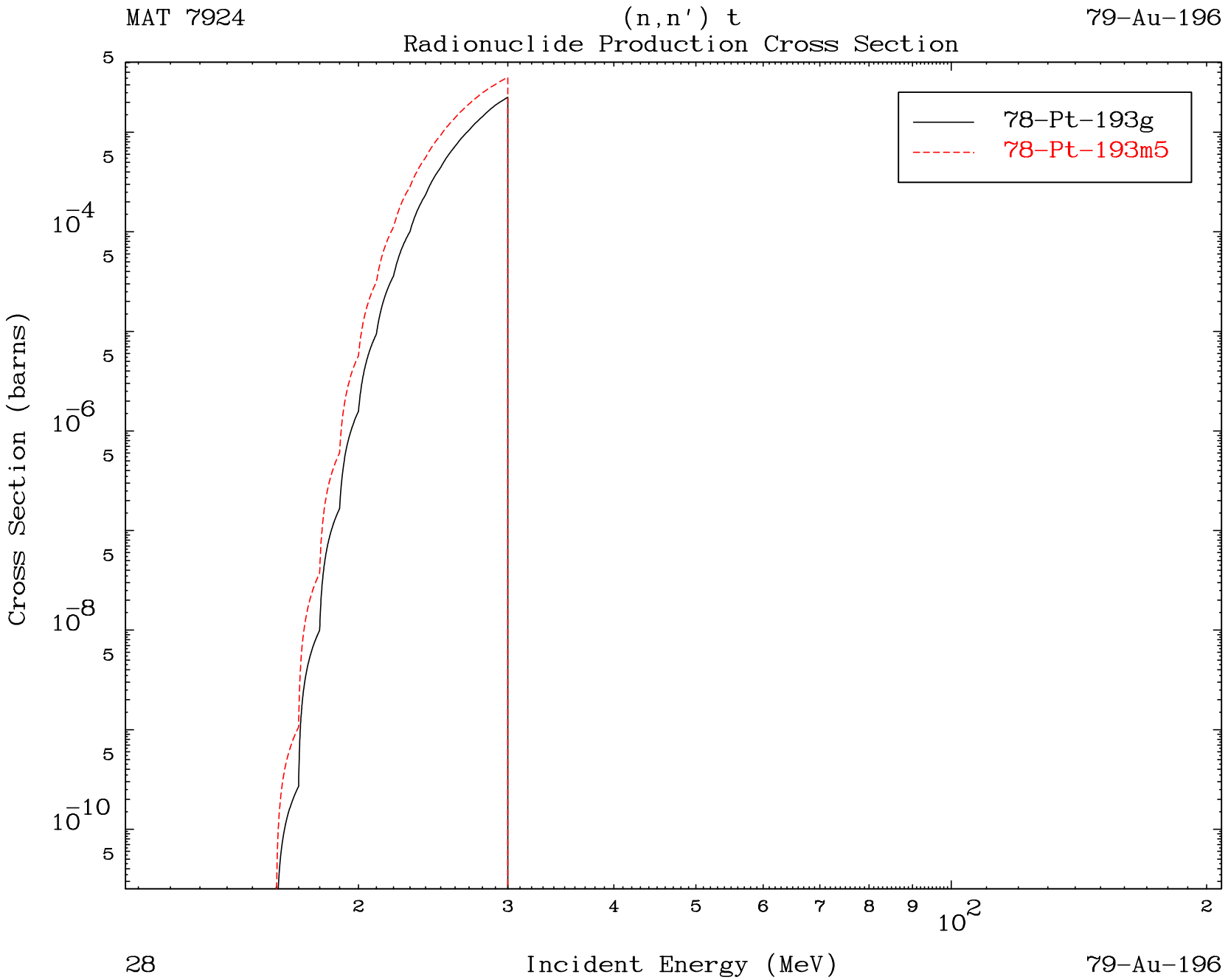

MAT 7924
Fission
79-Au-196
Radionuclide Production Cross Section
0-??-Nat
Cross Section (barns)
Incident Energy (MeV)
23
79-Au-196

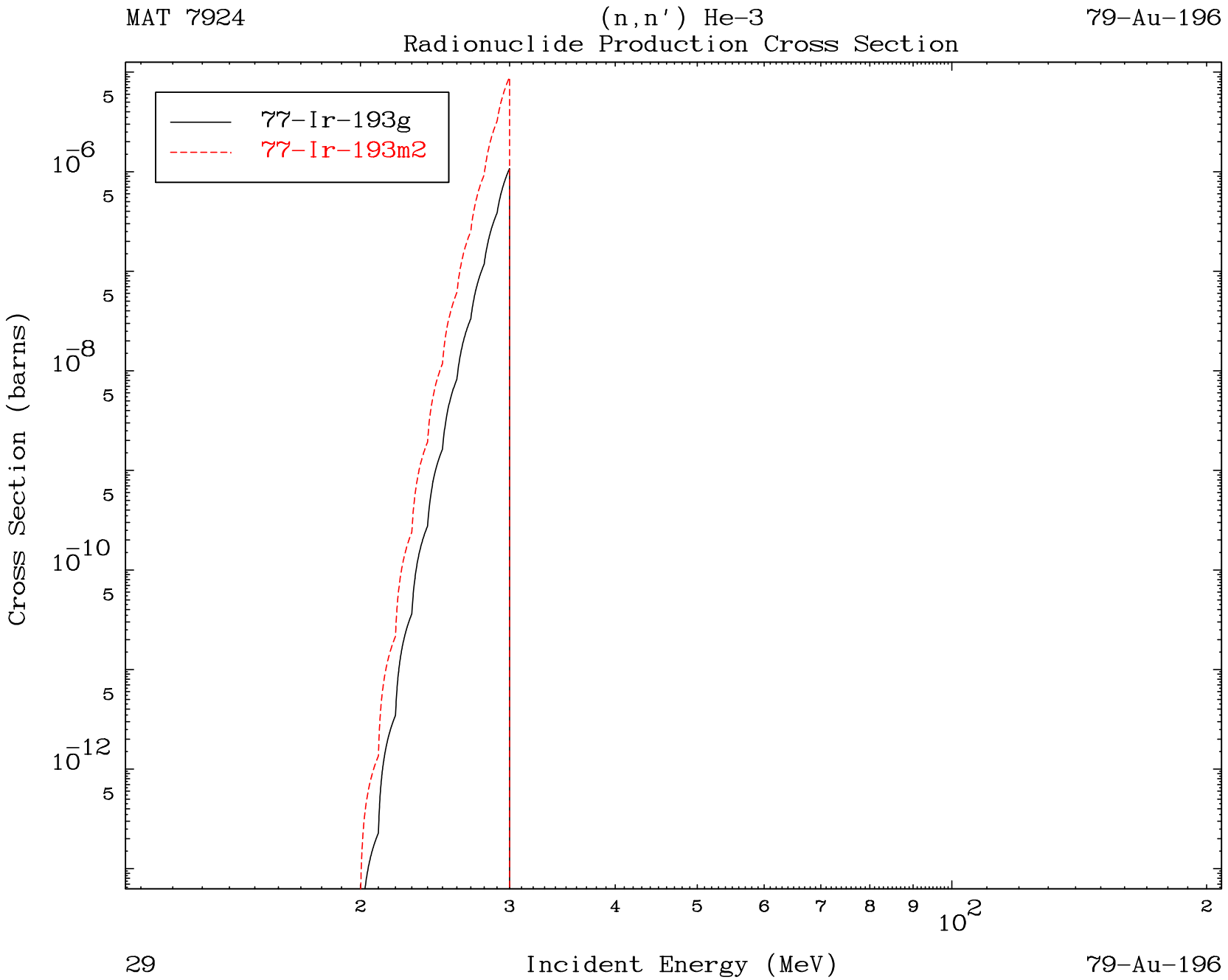

MAT 7924
(n,n') α
79-Au-196
Radionuclide Production Cross Section
77-Ir-192g
77-Ir-192m3
77-Ir-192m10
Cross Section (barns)
Incident Energy (MeV)
24
79-Au-196

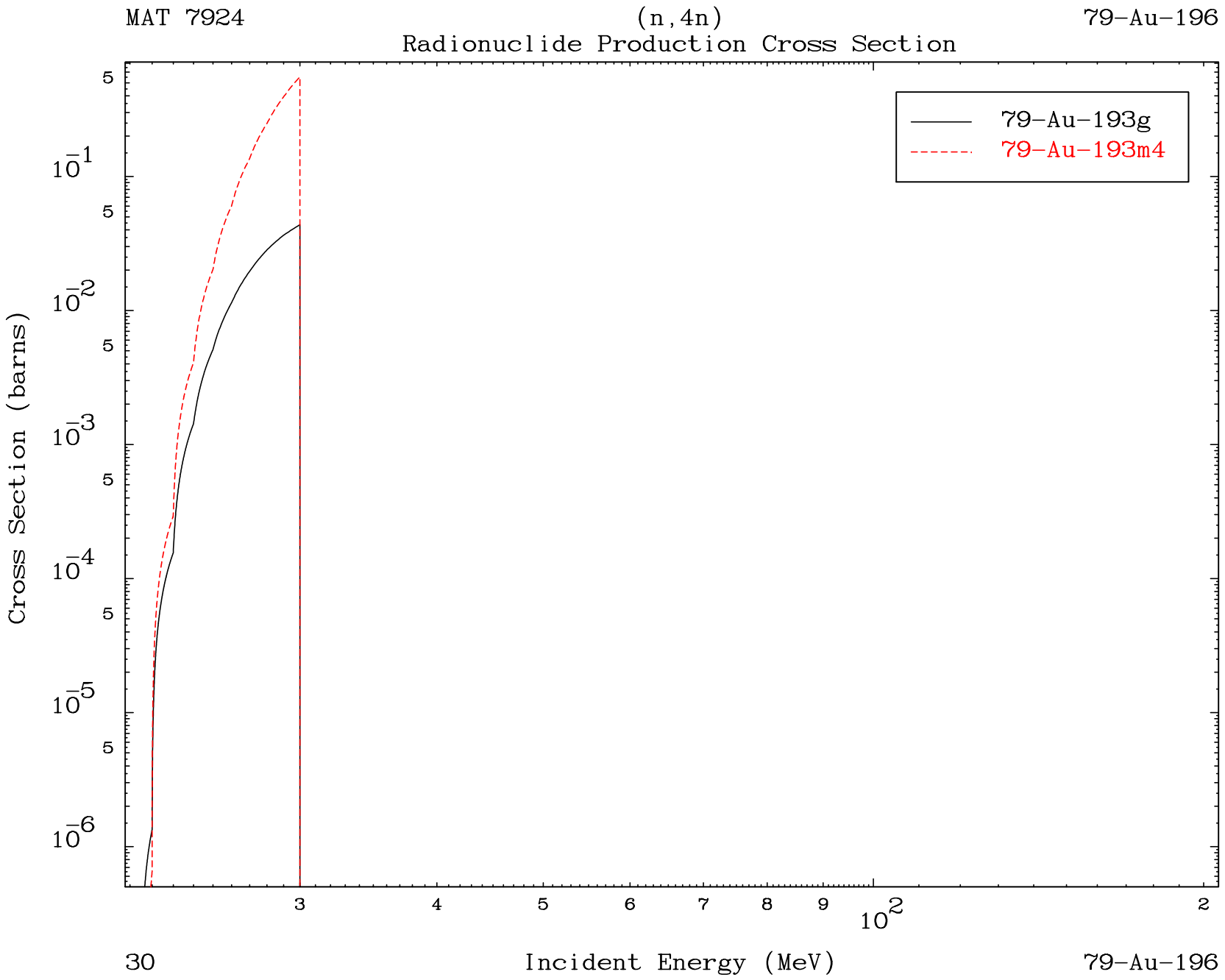

MAT 7924
(n,2n) α
79-Au-196
Radionuclide Production Cross Section
77-Ir-191g
77-Ir-191m3
77-Ir-191m10
Cross Section (barns)
Incident Energy (MeV)
25
79-Au-196

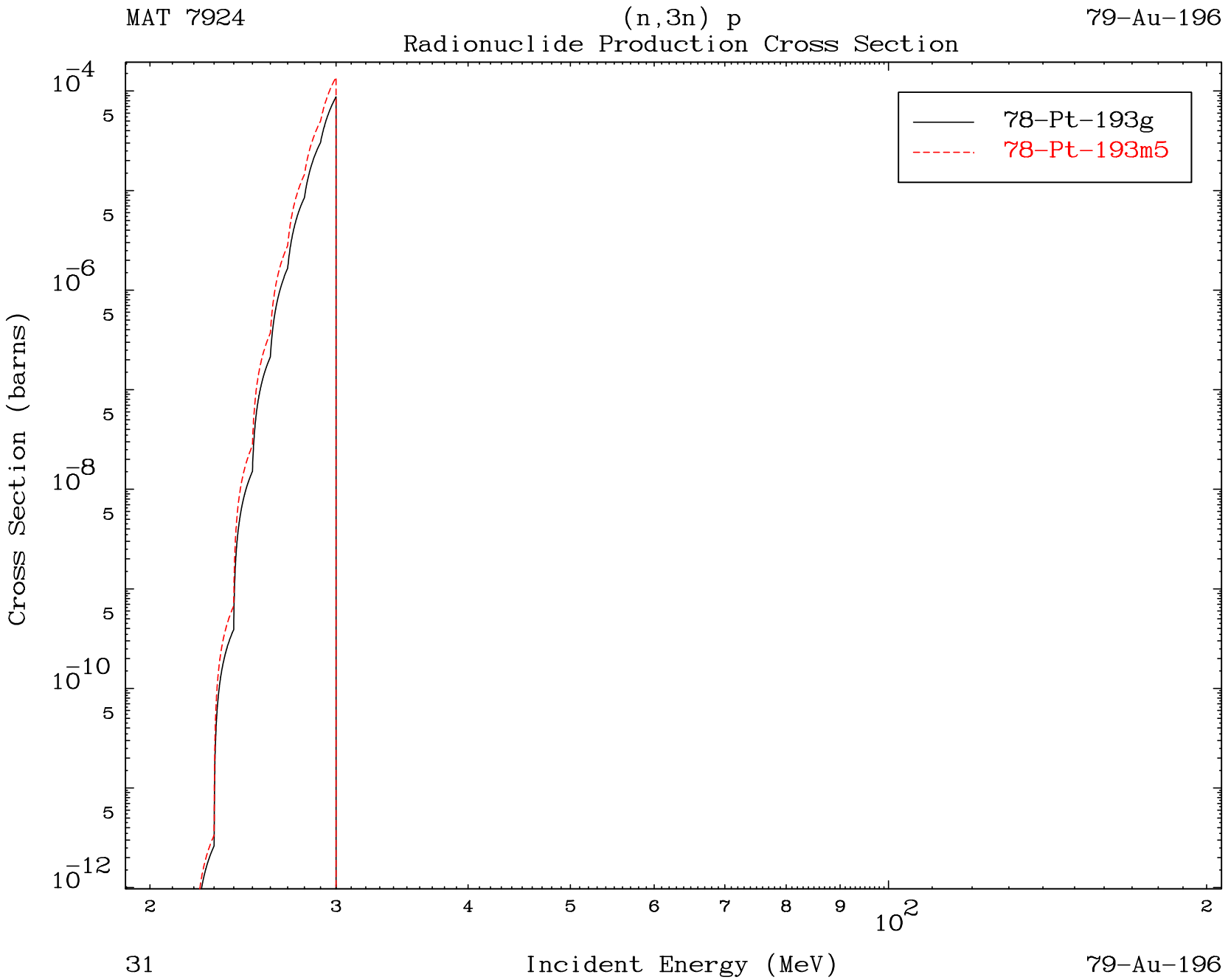

MAT 7924
(n,3n) α
79-Au-196
Radionuclide Production Cross Section
77-Ir-190g
77-Ir-190m2
77-Ir-190m10
Cross Section (barns)
10-6
10-8
10-10
10-12
5
2
3
4
5
6
7
8
9
10 2
2
26
Incident Energy (MeV)
79-Au-196

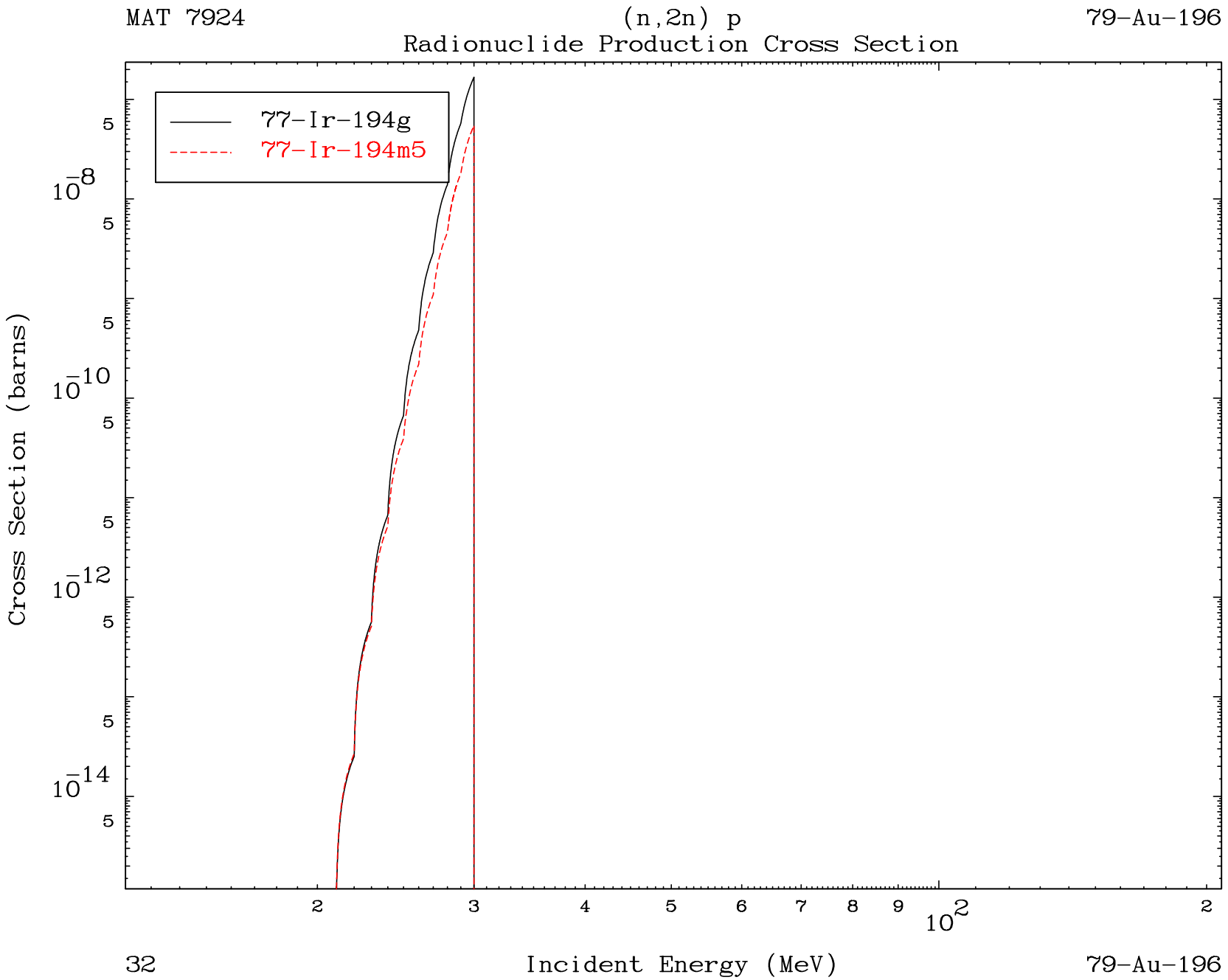

MAT 7924
(n,n') p
79-Au-196
Radionuclide Production Cross Section
78-Pt-195g
78-Pt-195m5
Cross Section (barns)
Incident Energy (MeV)
27
79-Au-196

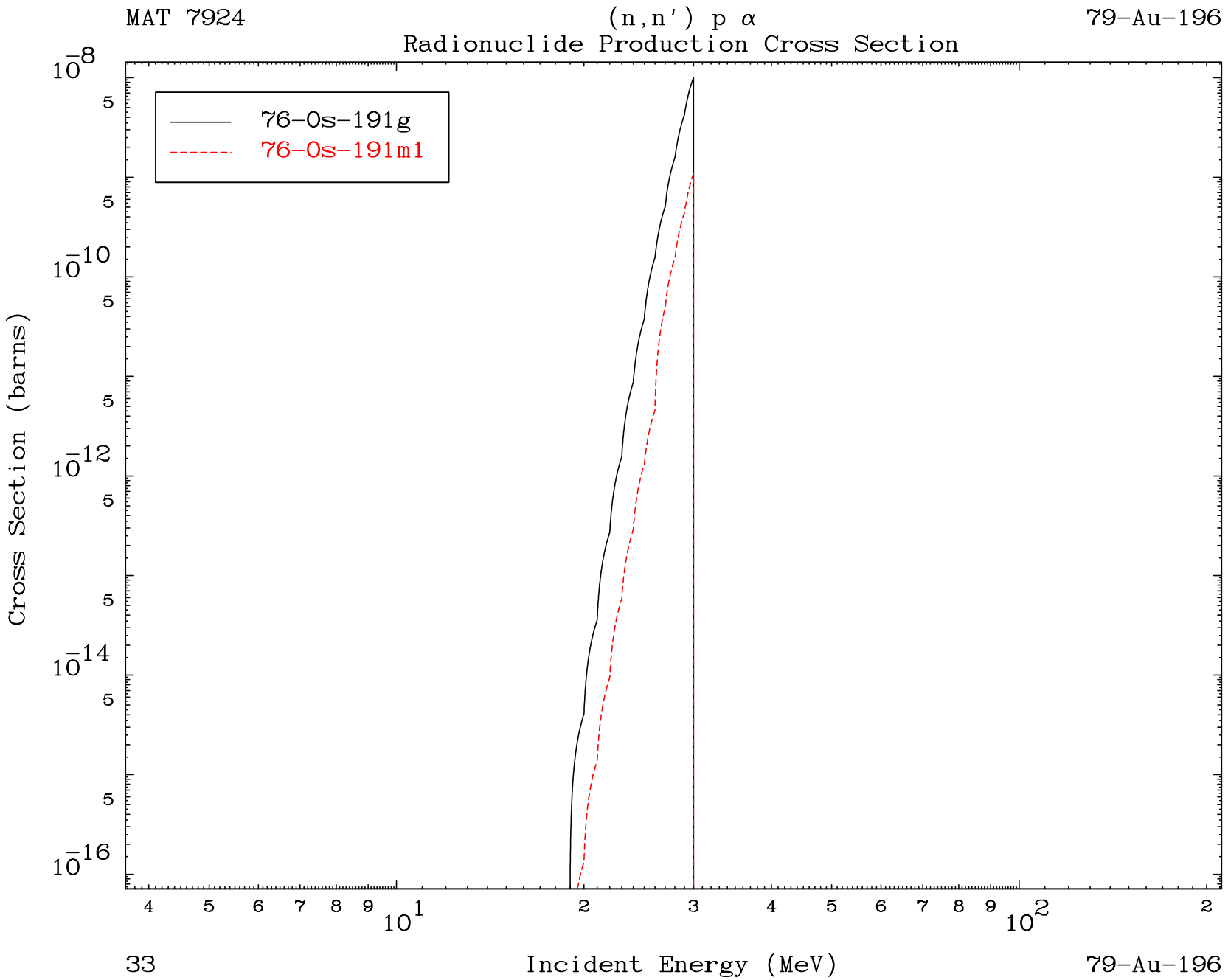

MAT 7924
(n,n') t
79-Au-196
Radionuclide Production Cross Section
78-Pt-193g
78-Pt-193m5
Cross Section (barns)
10-4
10-6
10-8
10-10
2
3
4
5
6
7
8
9
10 2
2
28
Incident Energy (MeV)
79-Au-196

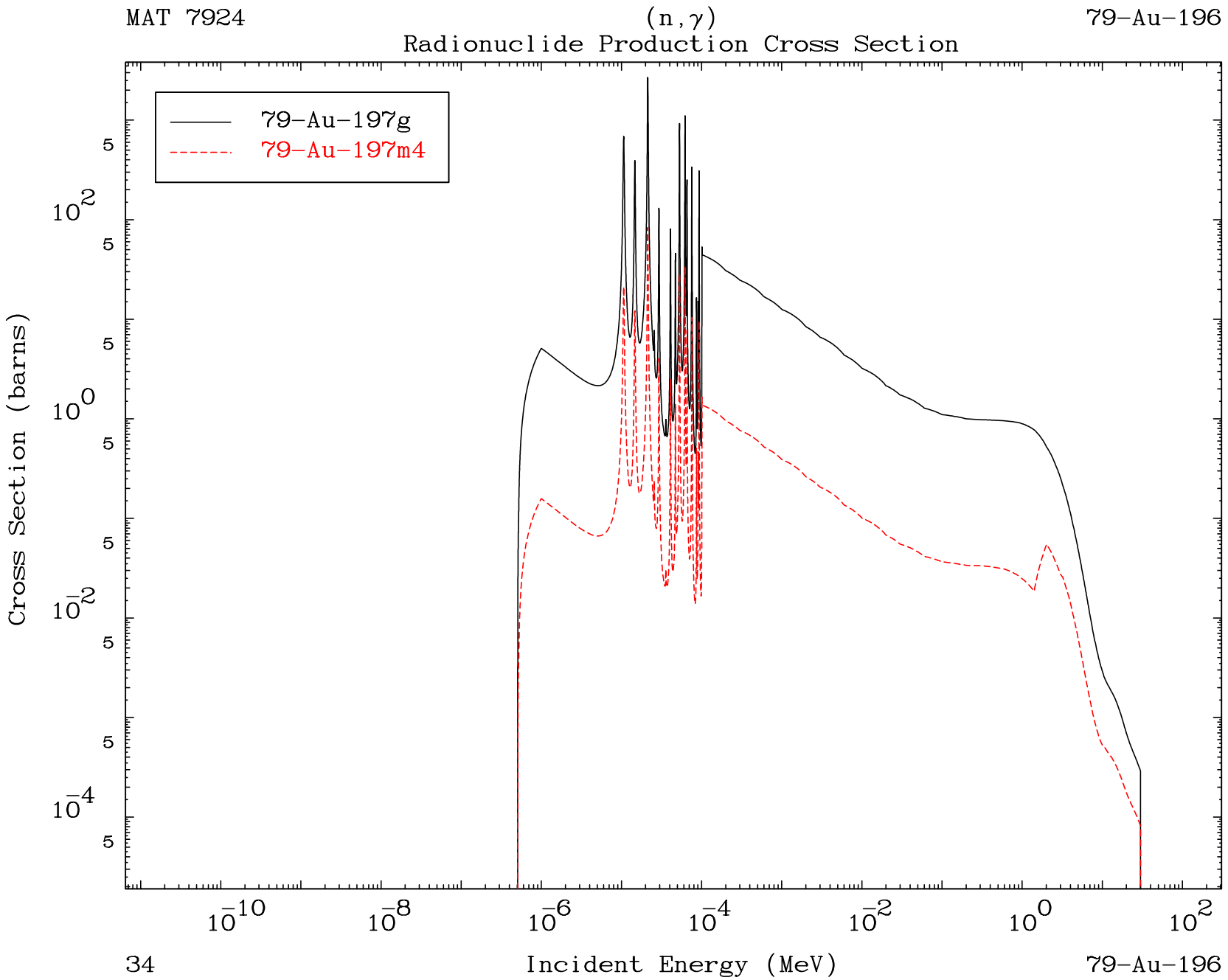

MAT 7924
(n,n') He-3
79-Au-196
Radionuclide Production Cross Section
77-Ir-193g
77-Ir-193m2
Cross Section (barns)
10^-6
10^-8
10^-10
10^-12
5
2
3
4
5
6
7
8
9
10^2
2
29
Incident Energy (MeV)
79-Au-196

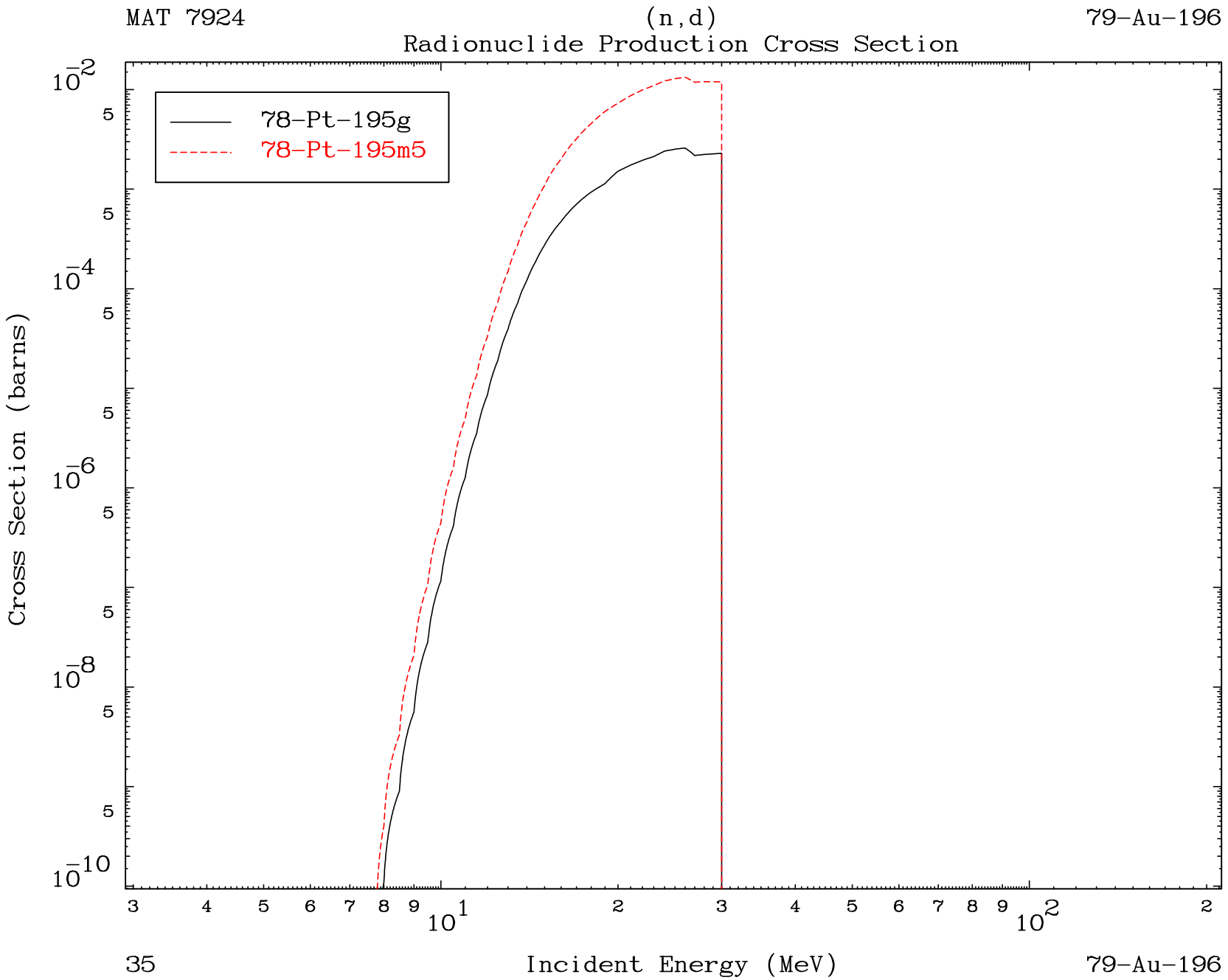

MAT 7924
(n,4n)
79-Au-196
Radionuclide Production Cross Section
79-Au-193g
79-Au-193m4
Cross Section (barns)
Incident Energy (MeV)
30
79-Au-196

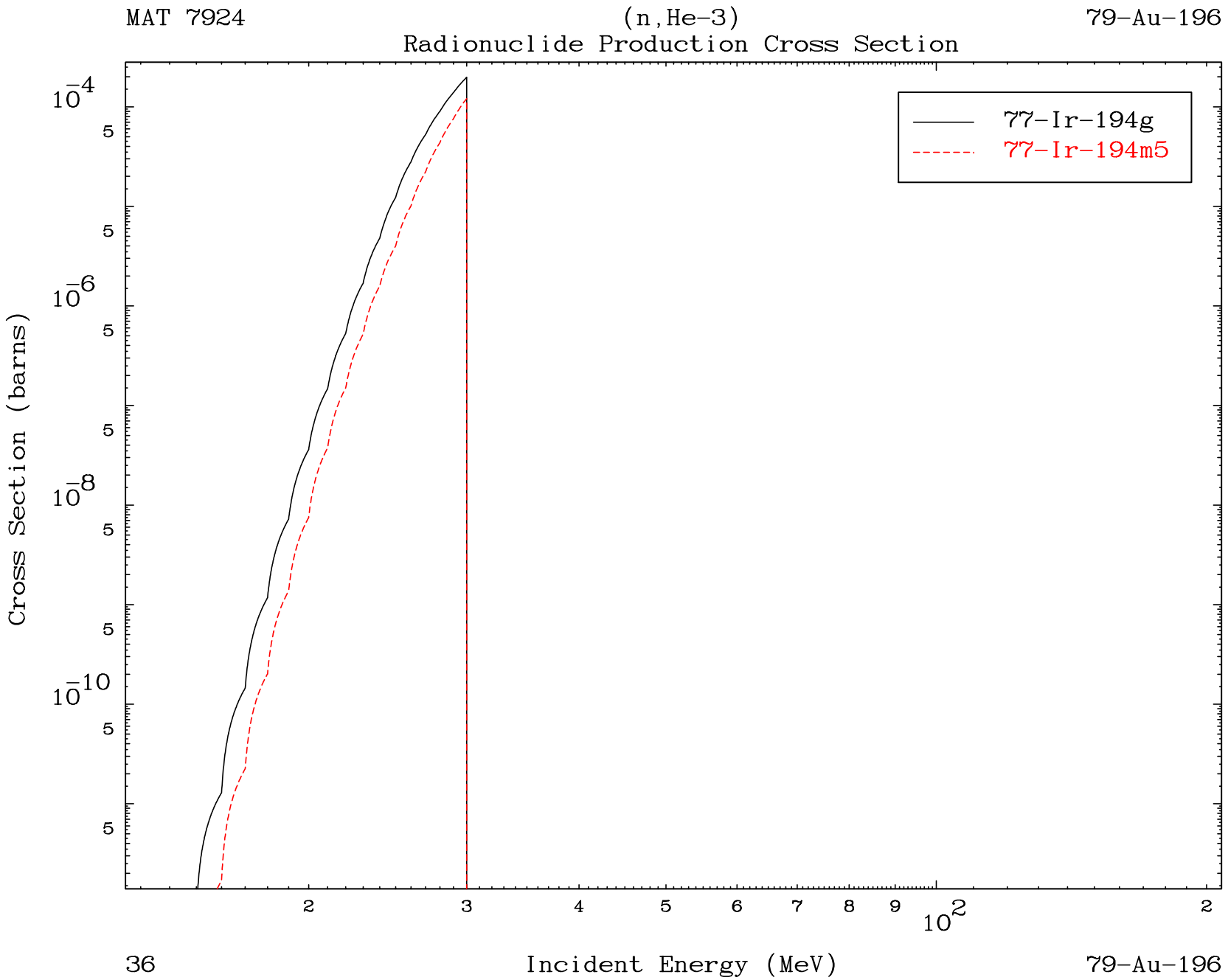

MAT 7924
(n,3n) p
79-Au-196
Radionuclide Production Cross Section
78-Pt-193g
78-Pt-193m5
Cross Section (barns)
Incident Energy (MeV)
31
79-Au-196

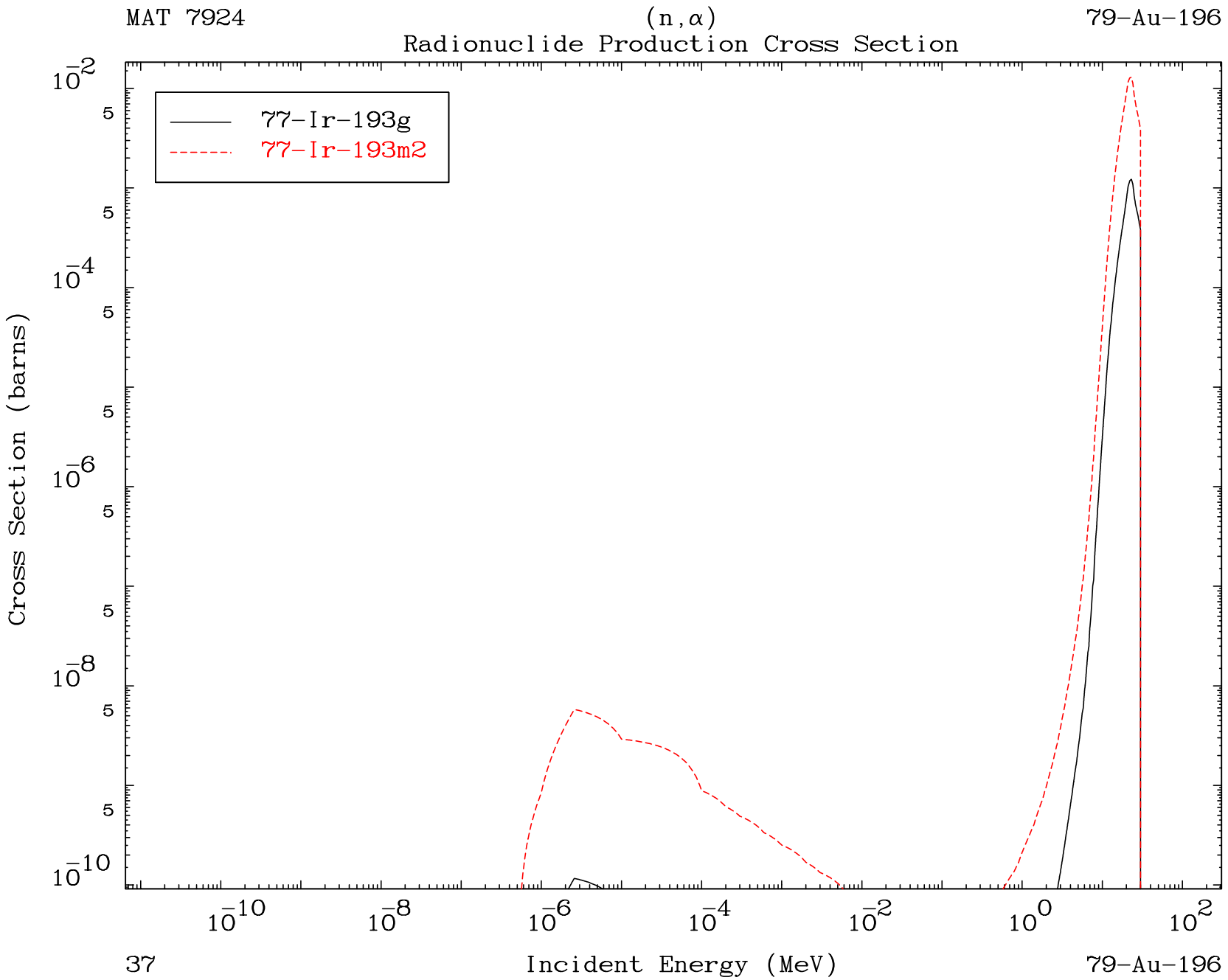

MAT 7924
(n,2n) p
79-Au-196
Radionuclide Production Cross Section
77-Ir-194g
77-Ir-194m5
Cross Section (barns)
10-8
10-10
10-12
10-14
5
2
3
4
5
6
7
8
9
10 2
2
32
Incident Energy (MeV)
79-Au-196

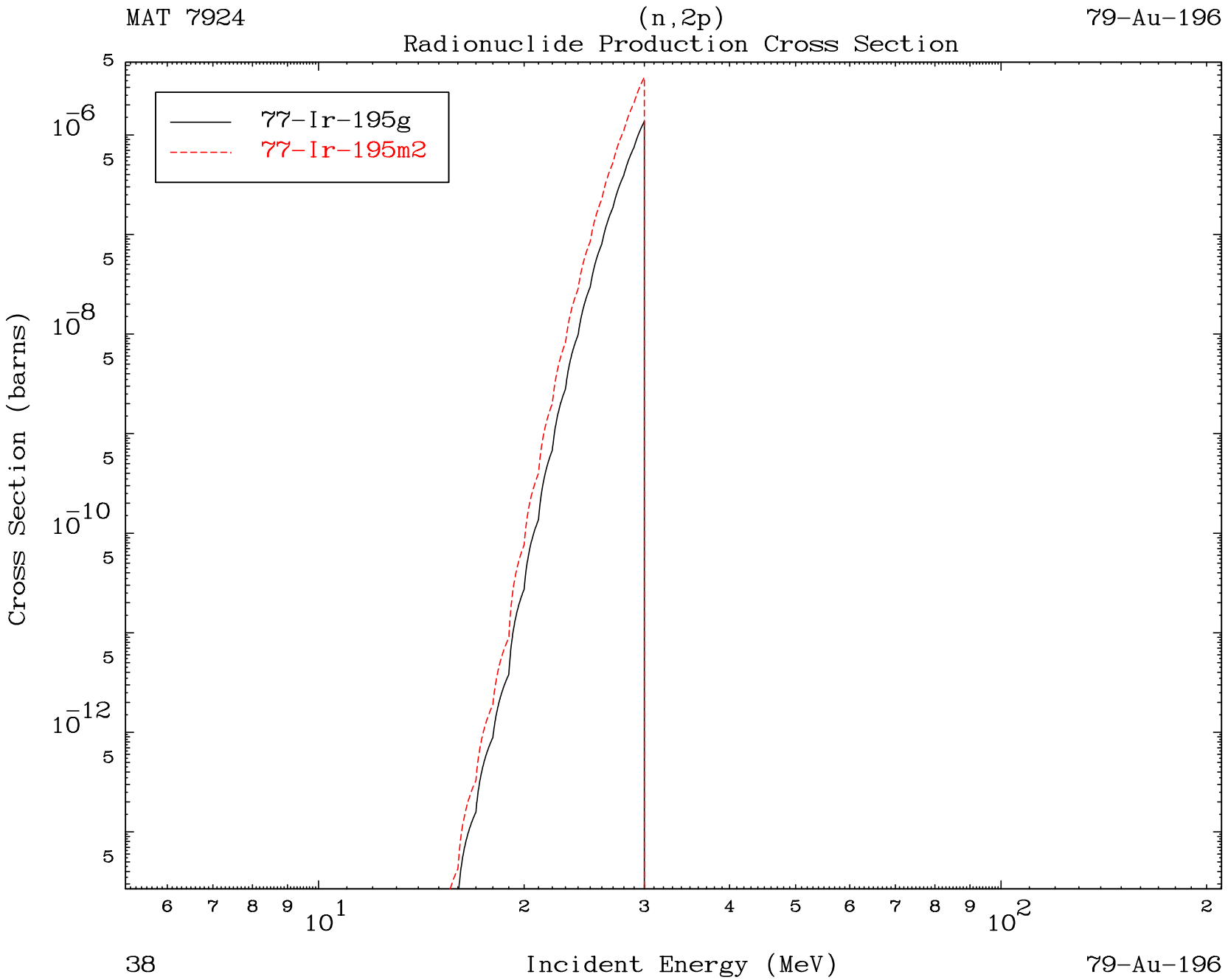

MAT 7924
(n,n') p α
79-Au-196
Radionuclide Production Cross Section
76-Os-191g
76-Os-191m1
Cross Section (barns)
Incident Energy (MeV)
33
79-Au-196

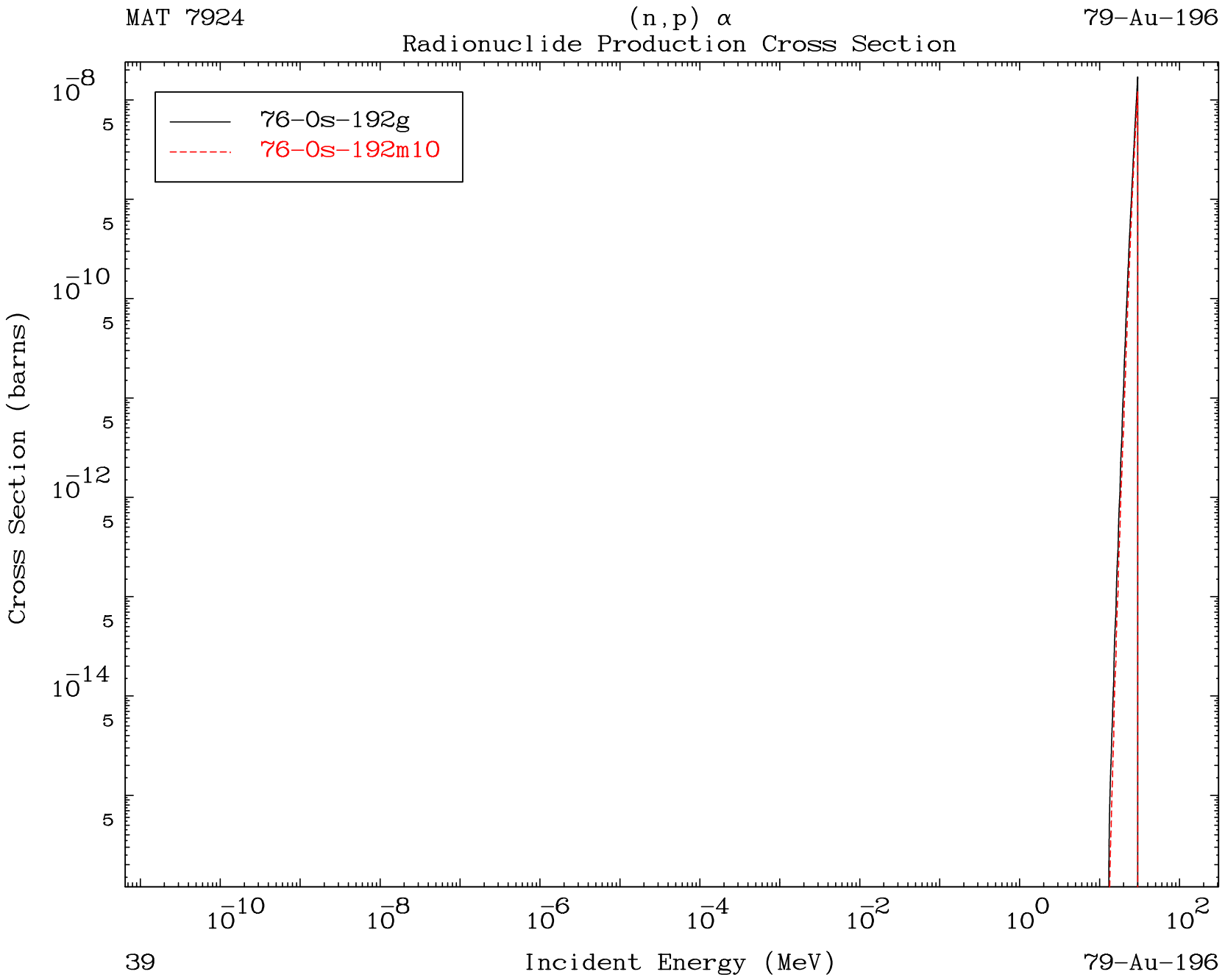

MAT 7924
(n,γ)
79-Au-196
Radionuclide Production Cross Section
79-Au-197g
79-Au-197m4
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-10
10^-8
10^-6
10^-4
10^-2
10^0
10^2
34
Incident Energy (MeV)
79-Au-196

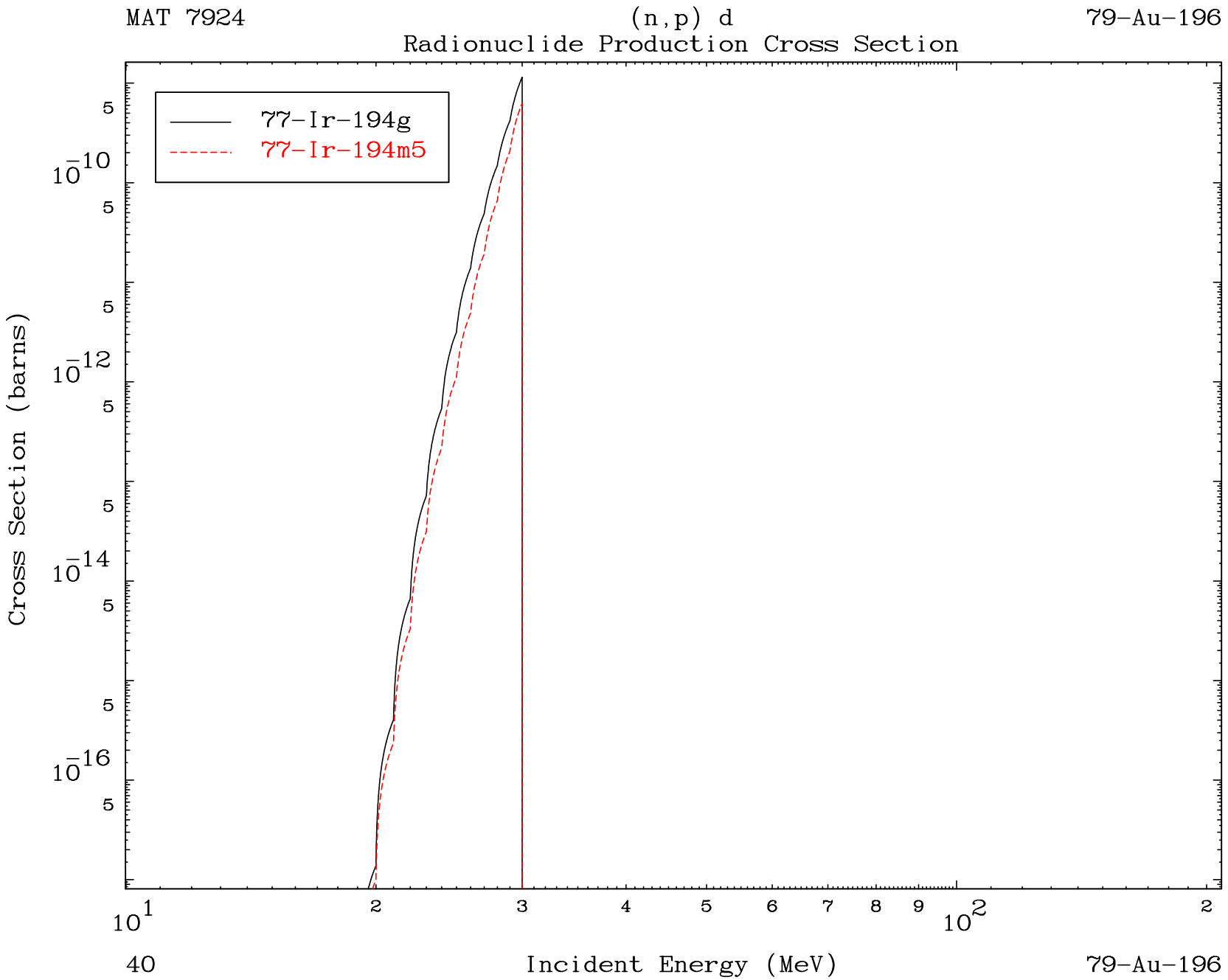

MAT 7924
(n,d)
79-Au-196
Radionuclide Production Cross Section
78-Pt-195g
78-Pt-195m5
Cross Section (barns)
Incident Energy (MeV)
35
79-Au-196

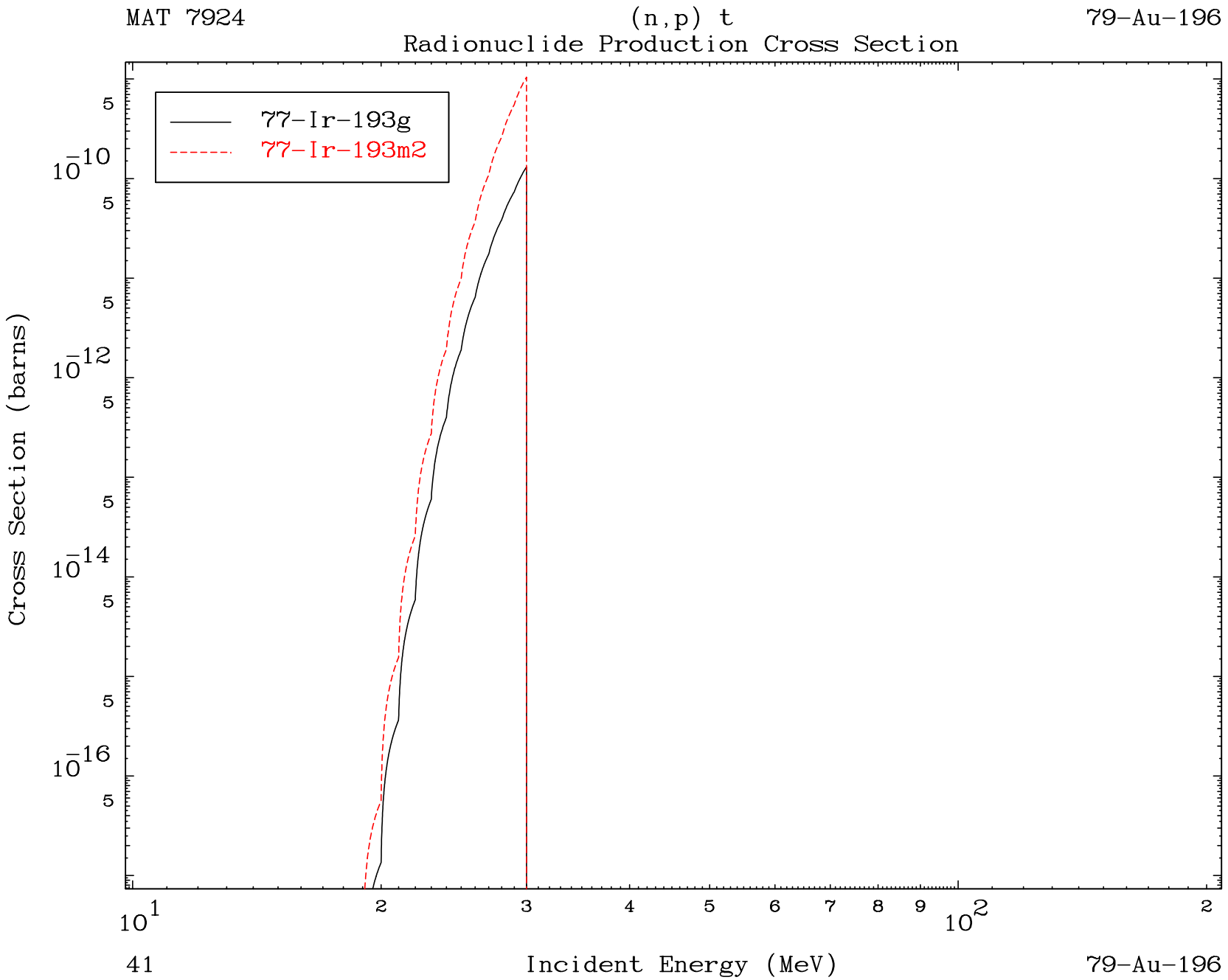

MAT 7924
(n,He-3)
79-Au-196
Radionuclide Production Cross Section
77-Ir-194g
77-Ir-194m5
Cross Section (barns)
10-4
10-6
10-8
10-10
5
2
3
4
5
6
7
8
9
10 2
2
36
Incident Energy (MeV)
79-Au-196


MAT 7924
(n,α)
79-Au-196
Radionuclide Production Cross Section
77-Ir-193g
77-Ir-193m2
Cross Section (barns)
Incident Energy (MeV)
37
79-Au-196


MAT 7924
(n,2p)
79-Au-196
Radionuclide Production Cross Section
77-Ir-195g
77-Ir-195m2
Cross Section (barns)
Incident Energy (MeV)
38
79-Au-196


MAT 7924
(n,p) α
79-Au-196
Radionuclide Production Cross Section
76-0s-192g
76-0s-192m10
Cross Section (barns)
Incident Energy (MeV)
39
79-Au-196


MAT 7924
(n,p) d
79-Au-196
Radionuclide Production Cross Section
77-Ir-194g
77-Ir-194m5
Cross Section (barns)
10-10
10-12
10-14
10-16
5
10 1
2
3
4
5
6
7
8
9
10 2
2
40
Incident Energy (MeV)
79-Au-196


MAT 7924
(n,p) t
79-Au-196
Radionuclide Production Cross Section
77-Ir-193g
77-Ir-193m2
Cross Section (barns)
Incident Energy (MeV)
41
79-Au-196