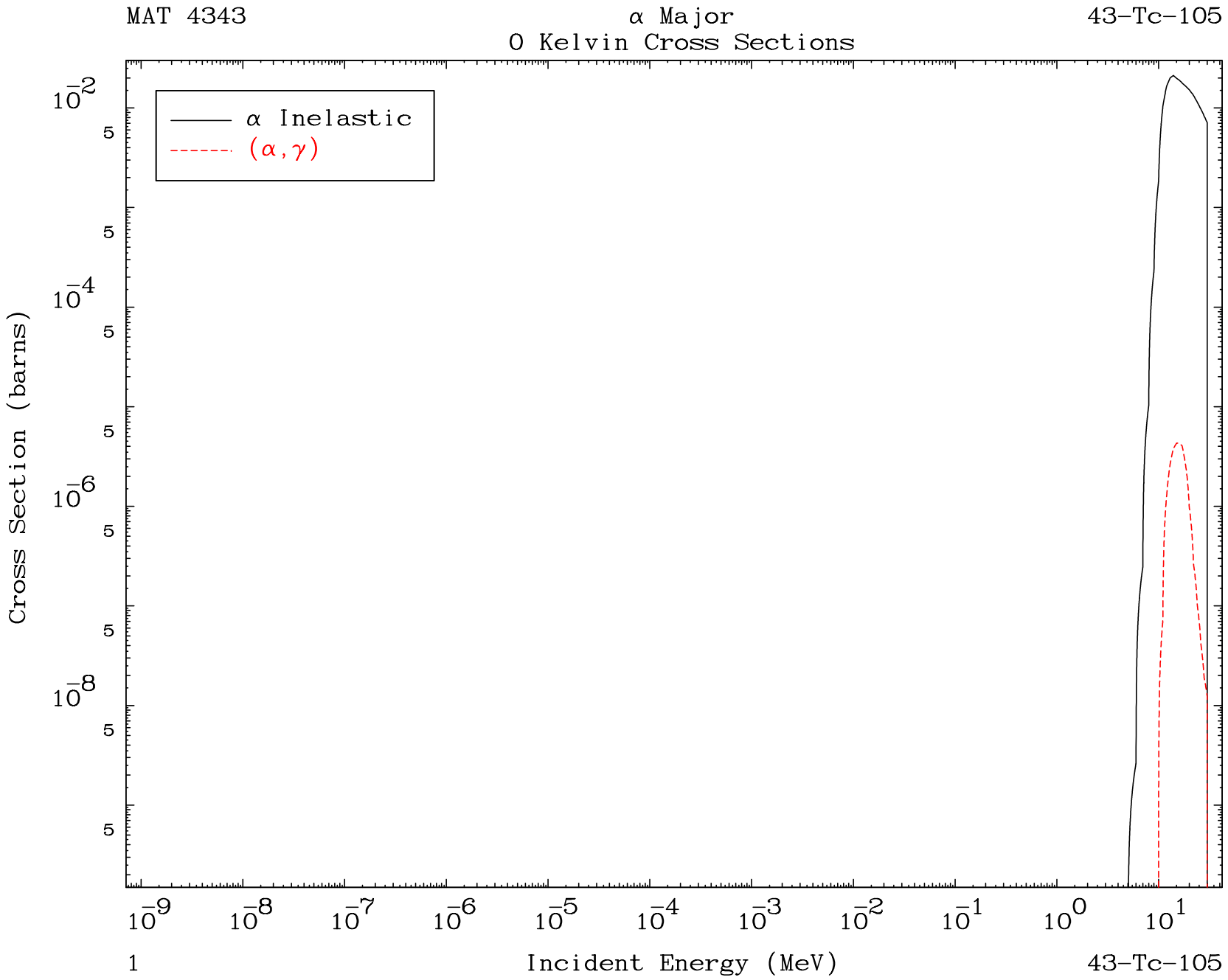
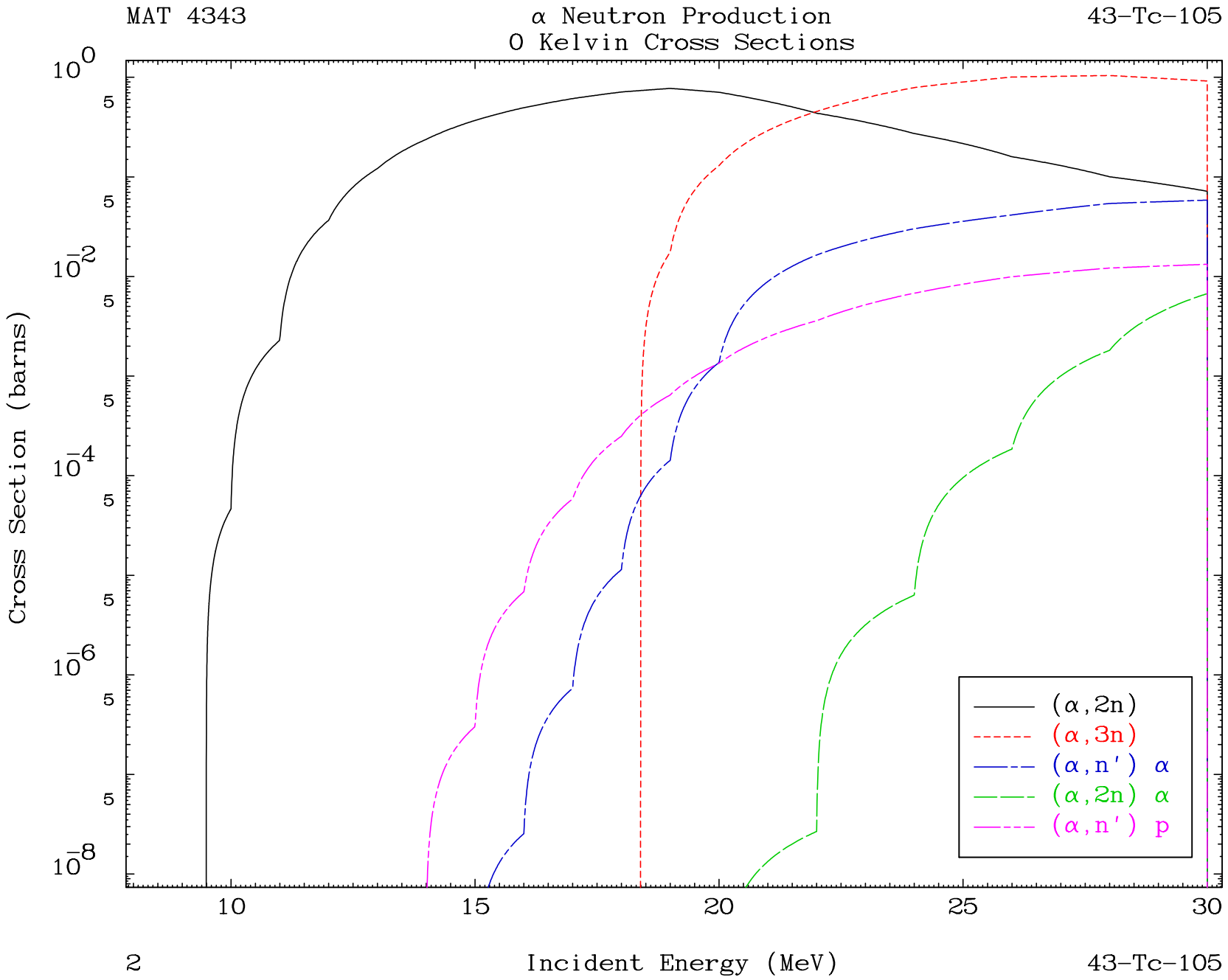
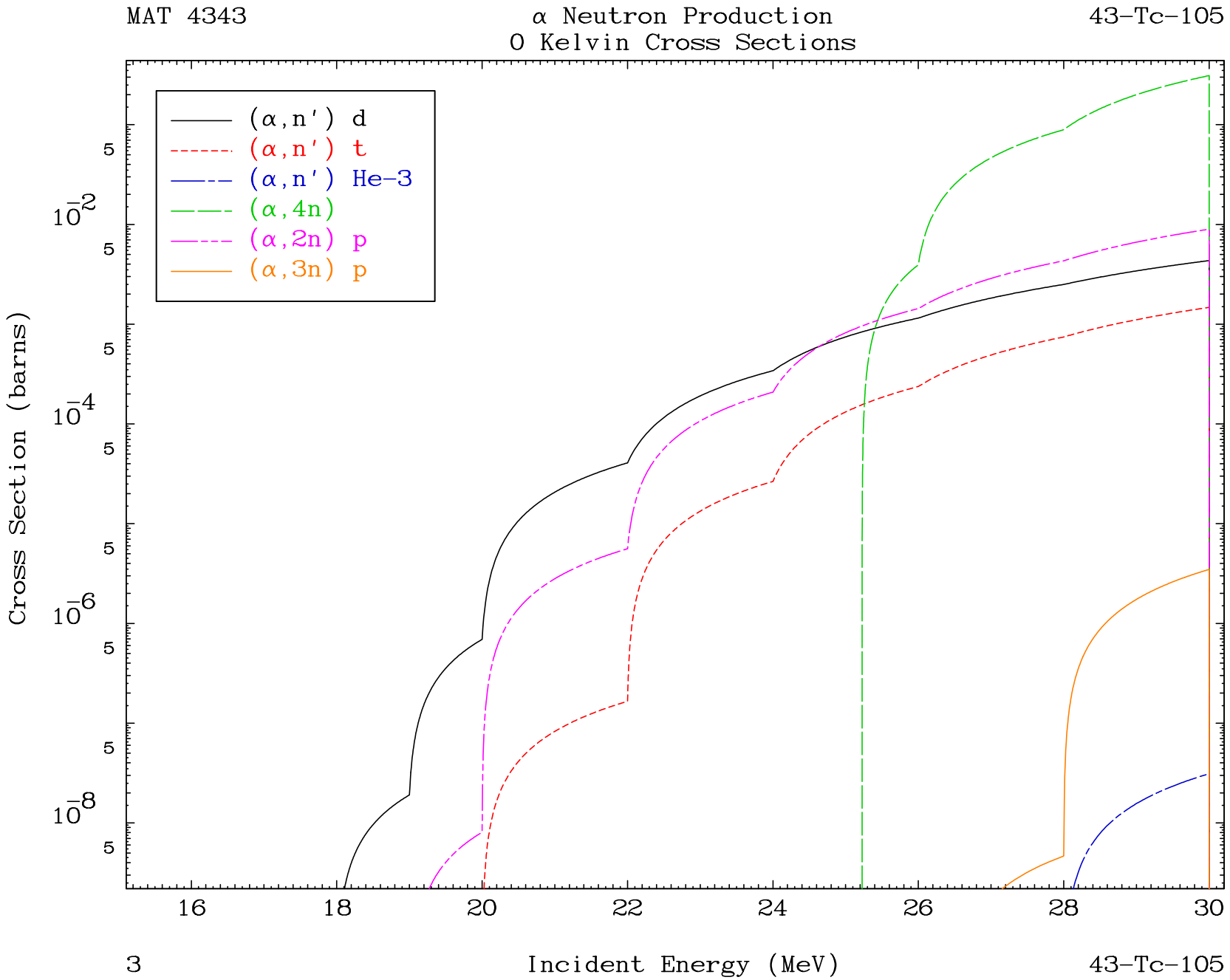
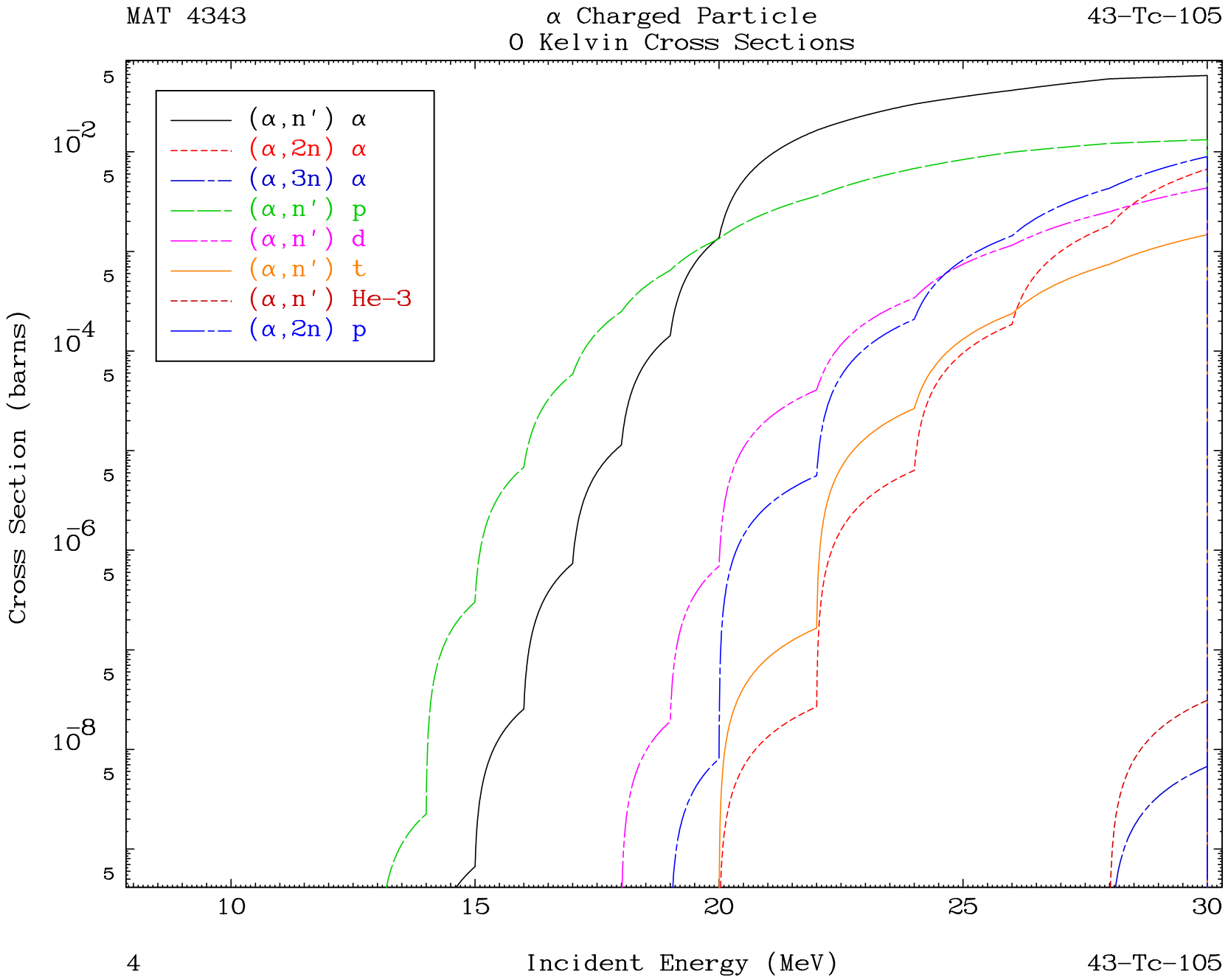
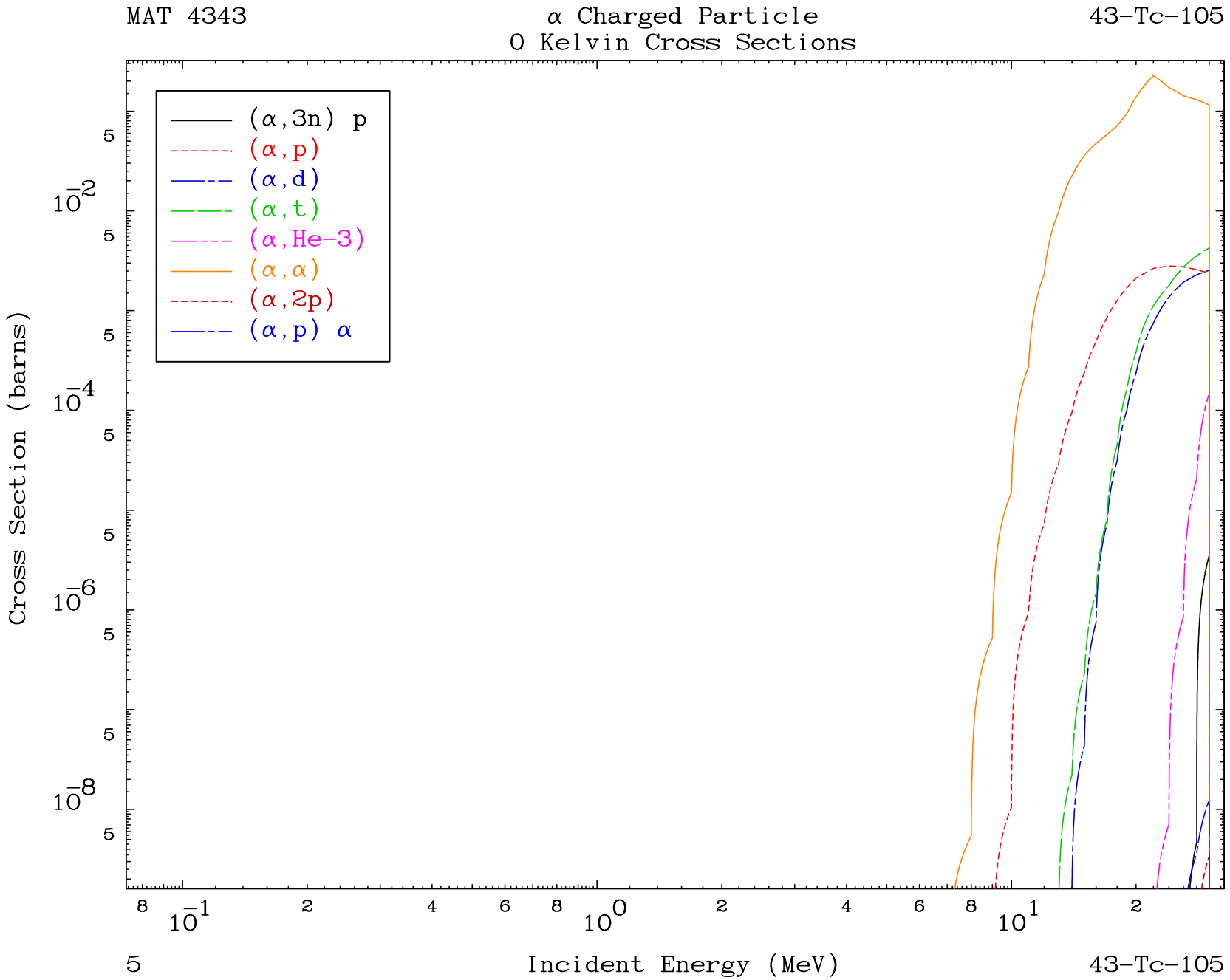
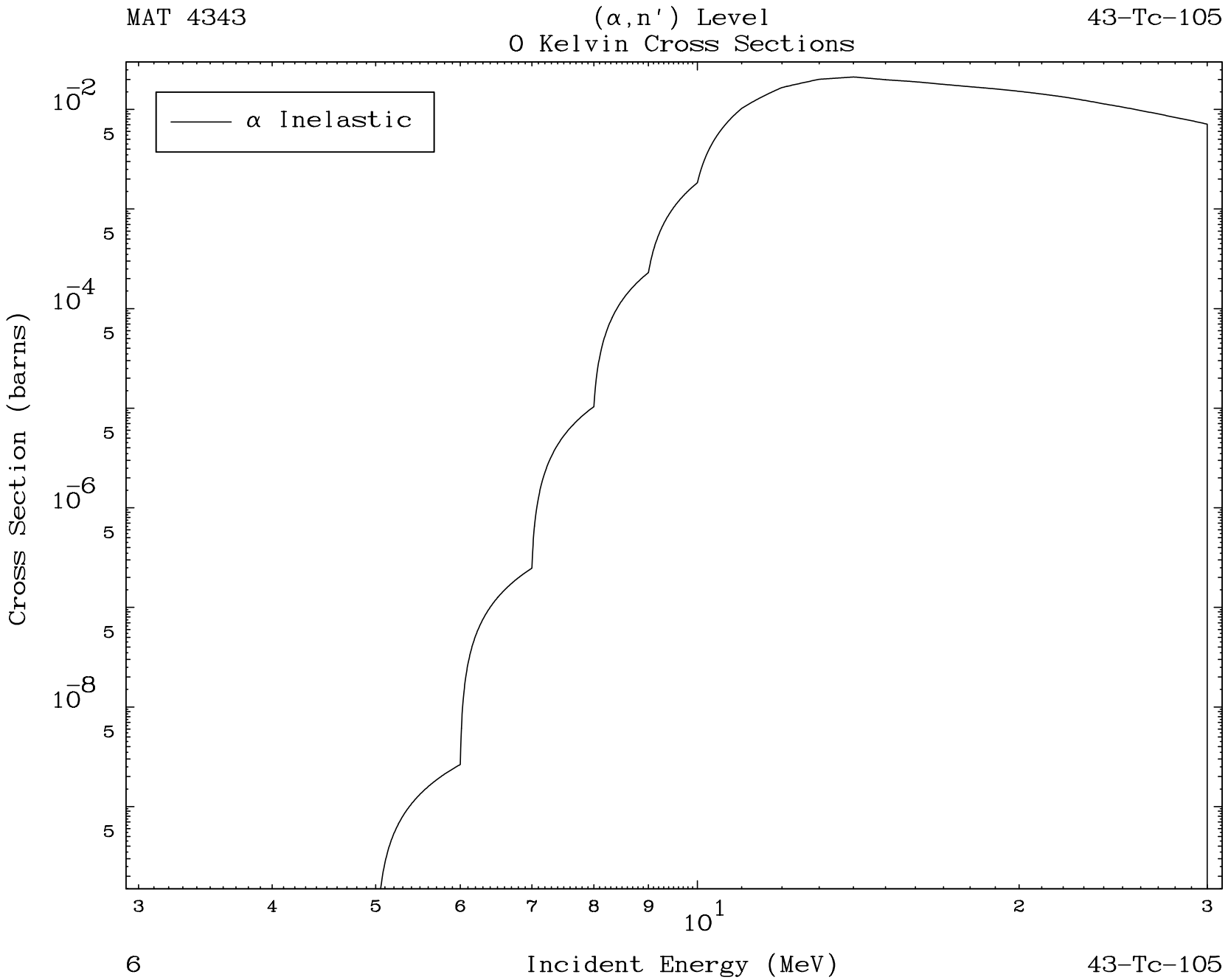

MAT 4343
α Major
43-Tc-105
0 Kelvin Cross Sections
α Inelastic
(α,γ)
Cross Section (barns)
Incident Energy (MeV)
43-Tc-105
1

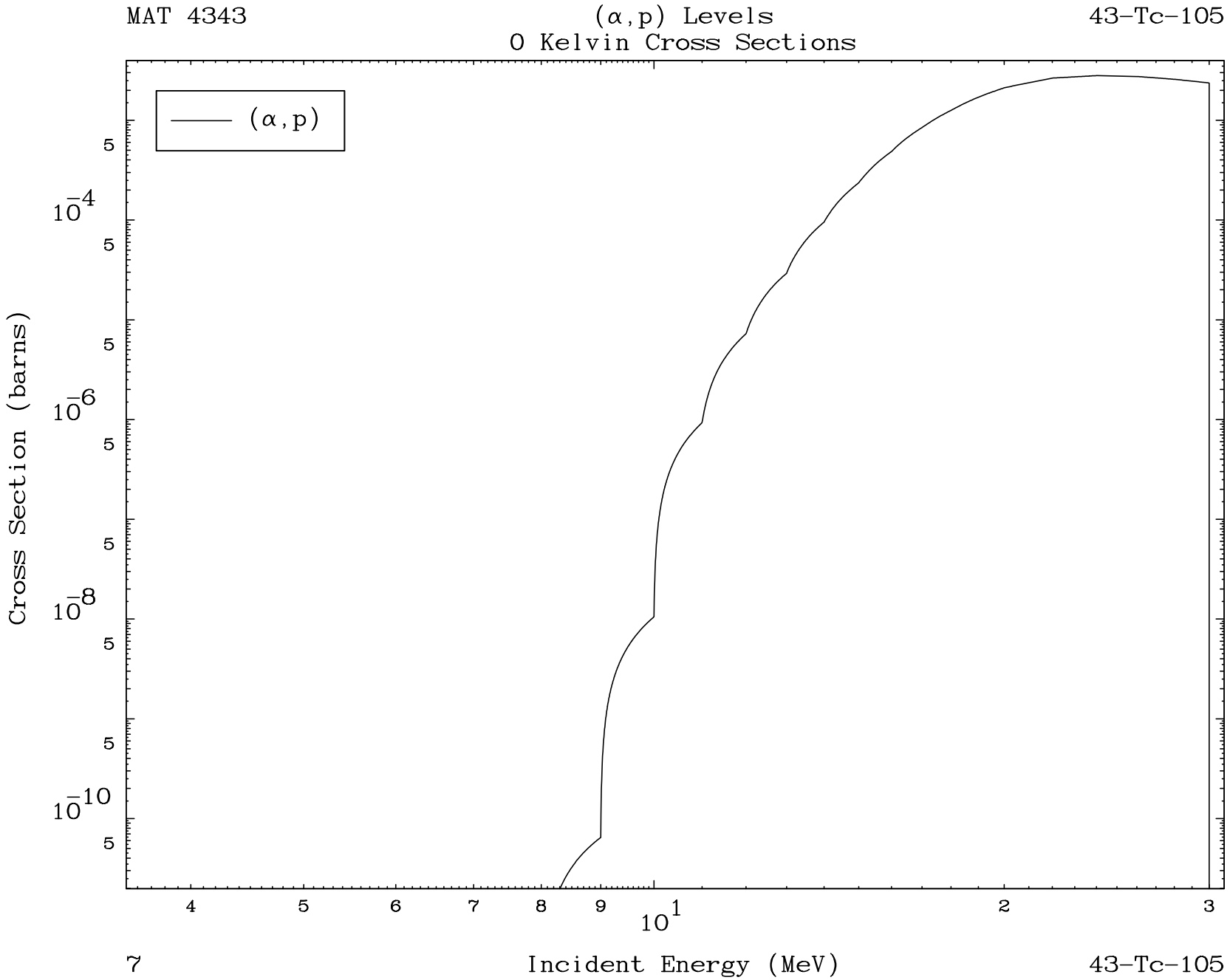

MAT 4343
α Neutron Production
0 Kelvin Cross Sections
43-Tc-105
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
10^-8
10
15
20
25
30
Incident Energy (MeV)
(α,2n)
(α,3n)
(α,n') α
(α,2n) α
(α,n') p
2
43-Tc-105

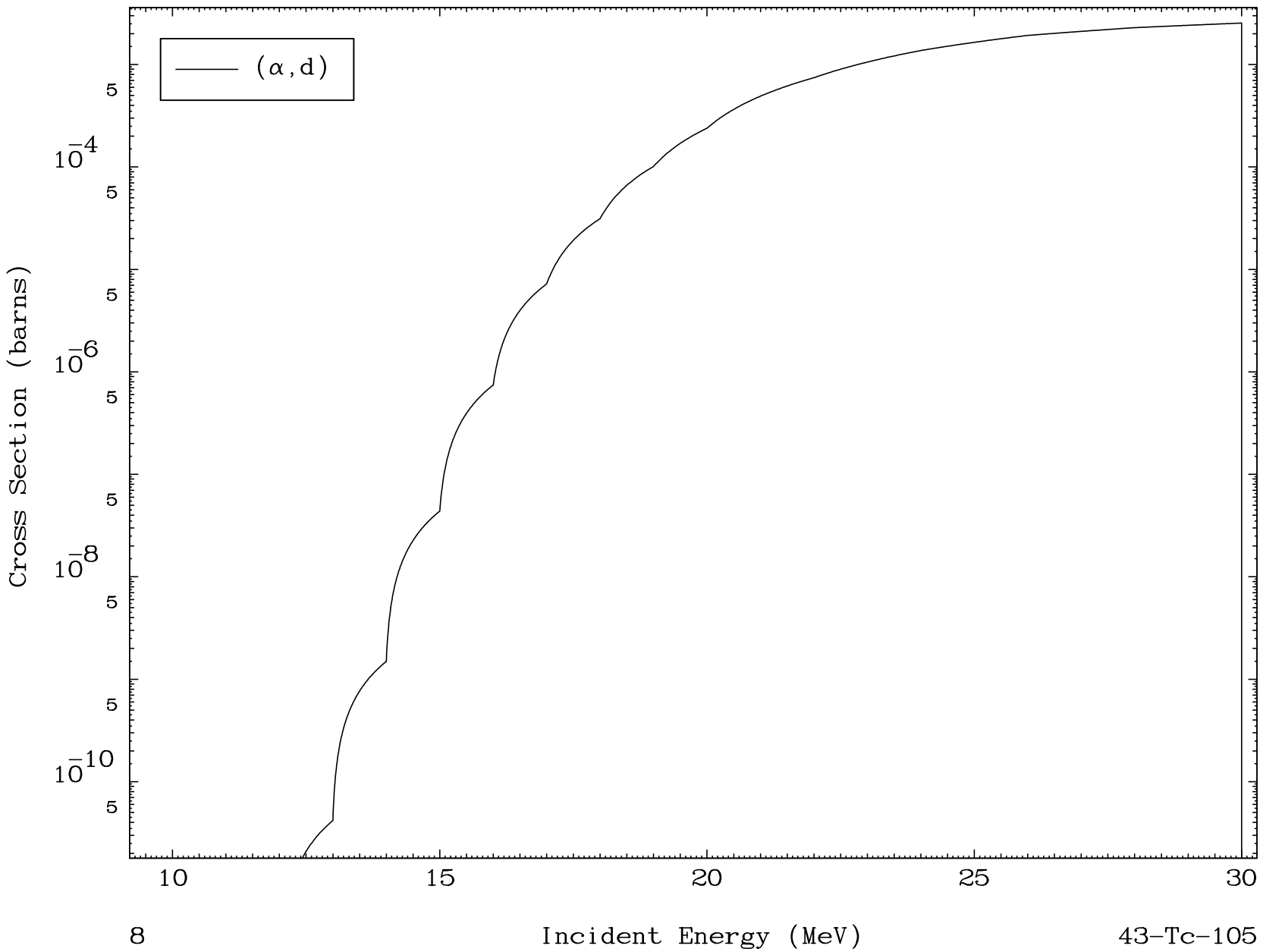

MAT 4343
α Neutron Production
0 Kelvin Cross Sections
43-Tc-105
(α,n') d
(α,n') t
(α,n') He-3
(α,4n)
(α,2n) p
(α,3n) p
Cross Section (barns)
10-2
10-4
10-6
10-8
5
16
18
20
22
24
26
28
30
Incident Energy (MeV)
3
43-Tc-105

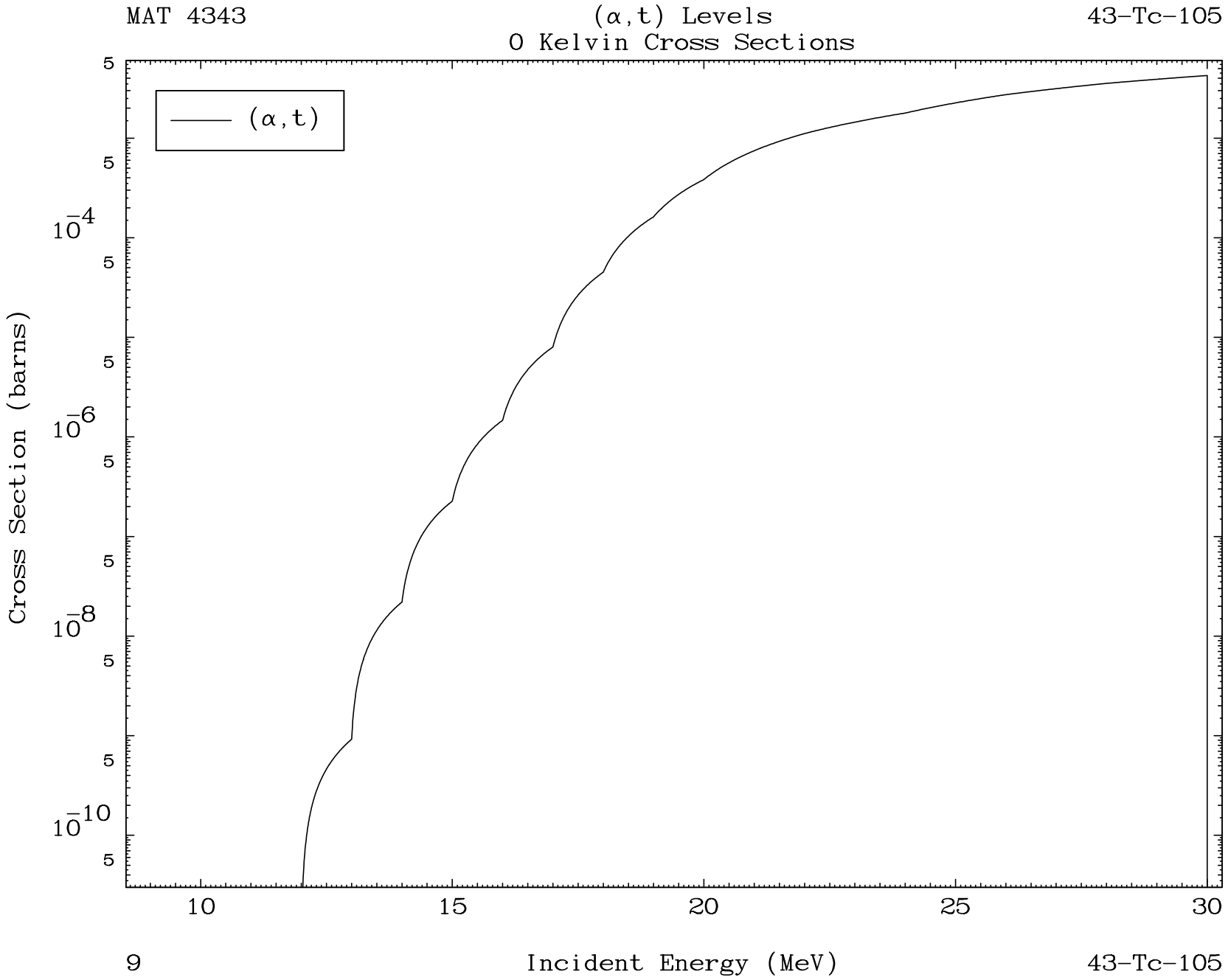

MAT 4343
α Charged Particle
0 Kelvin Cross Sections
43-Tc-105
(α,n') α
(α,2n) α
(α,3n) α
(α,n') p
(α,n') d
(α,n') t
(α,n') He-3
(α,2n) p
Cross Section (barns)
10^-2
10^-4
10^-6
10^-8
5
10
15
20
25
30
4
Incident Energy (MeV)
43-Tc-105

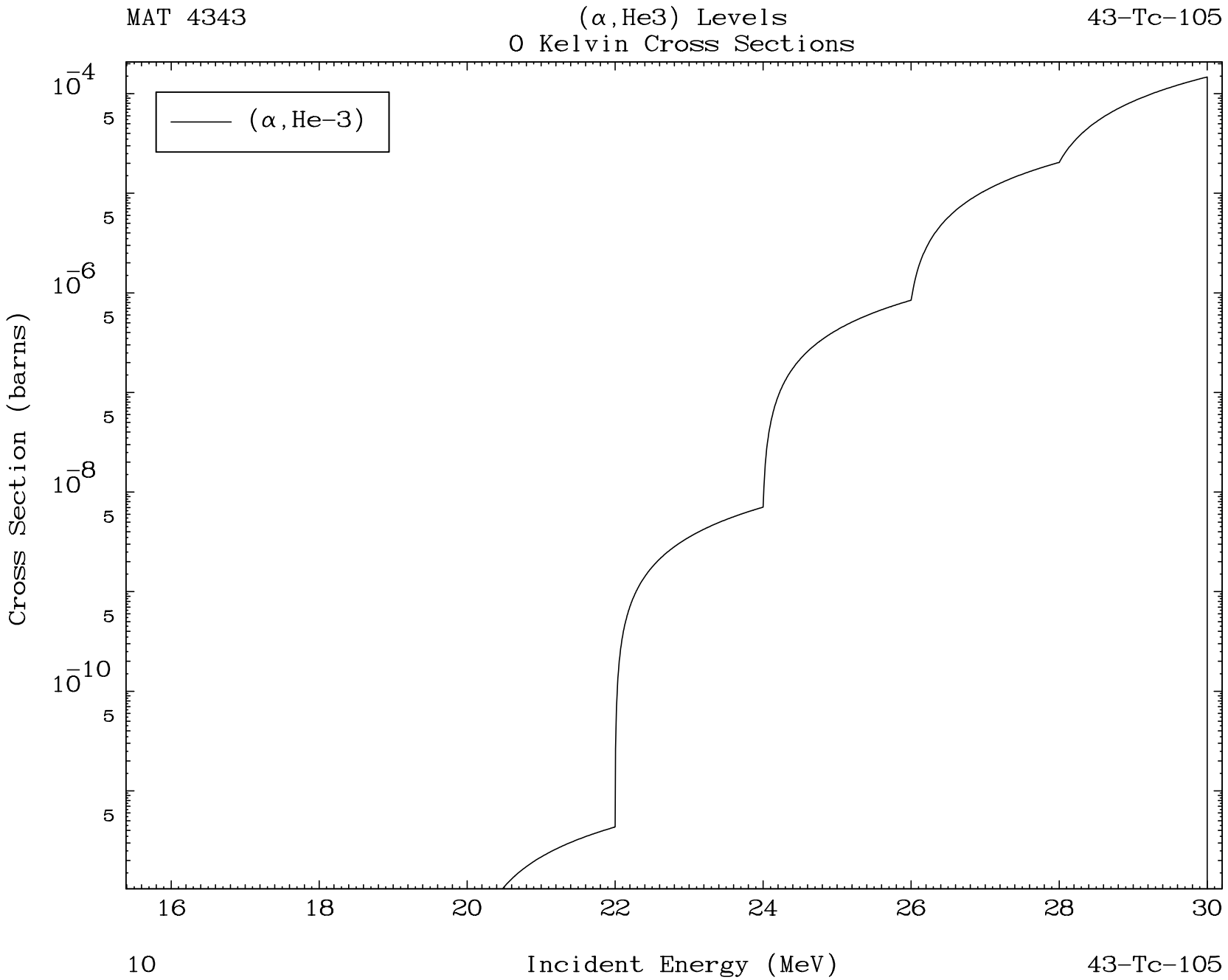

MAT 4343
α Charged Particle
0 Kelvin Cross Sections
43-Tc-105
(α,3n) p
(α,p)
(α,d)
(α,t)
(α,He-3)
(α,α)
(α,2p)
(α,p) α
Cross Section (barns)
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,n') Level
43-Tc-105
0 Kelvin Cross Sections
α Inelastic
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 1
2
3
Incident Energy (MeV)

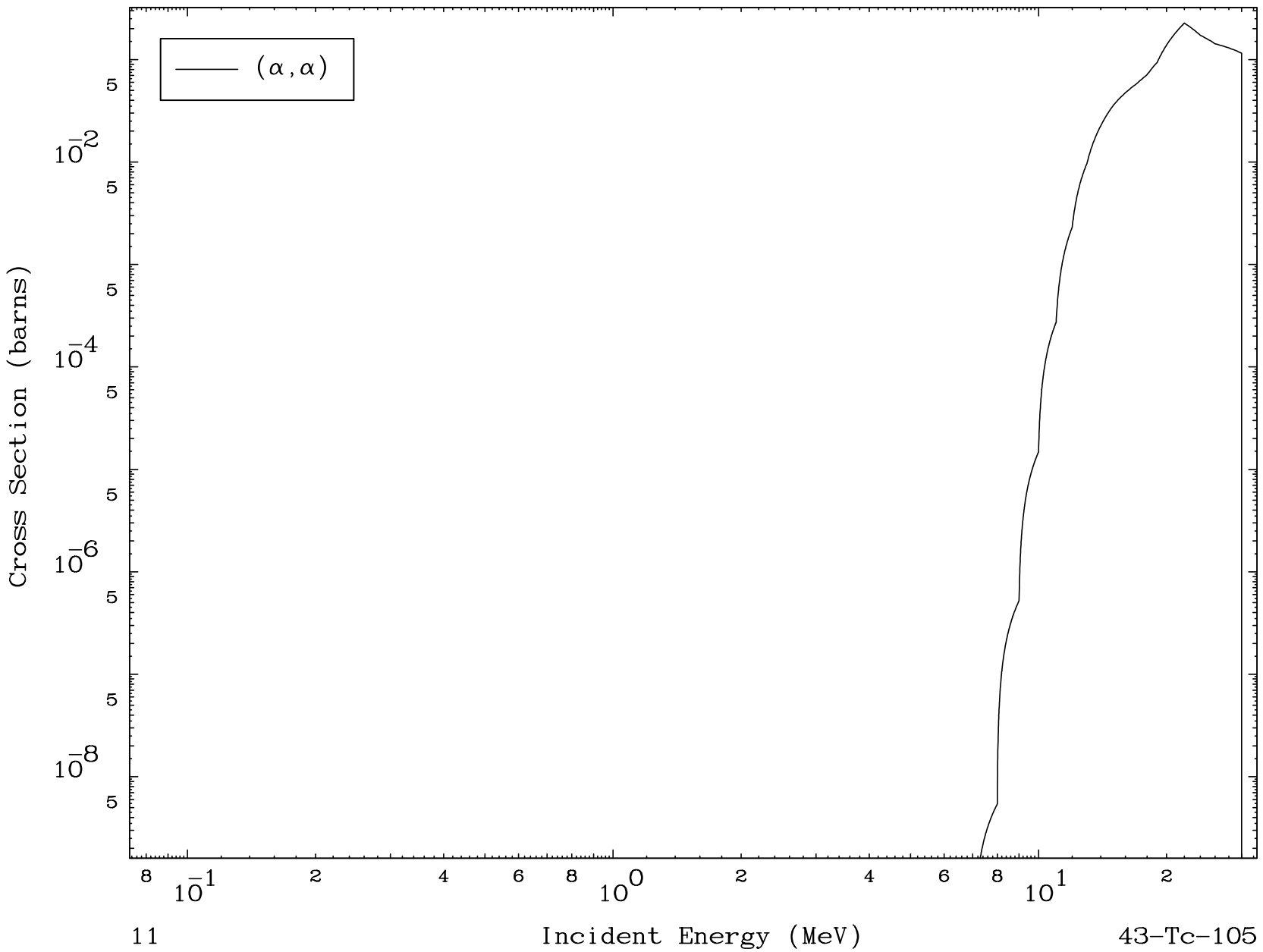

MAT 4343
(α,p) Levels
43-Tc-105
0 Kelvin Cross Sections
(α,p)
Cross Section (barns)
10-4
10-6
10-8
10-10
5
4
6
7
8
9
10 1
2
3
Incident Energy (MeV)
7
43-Tc-105

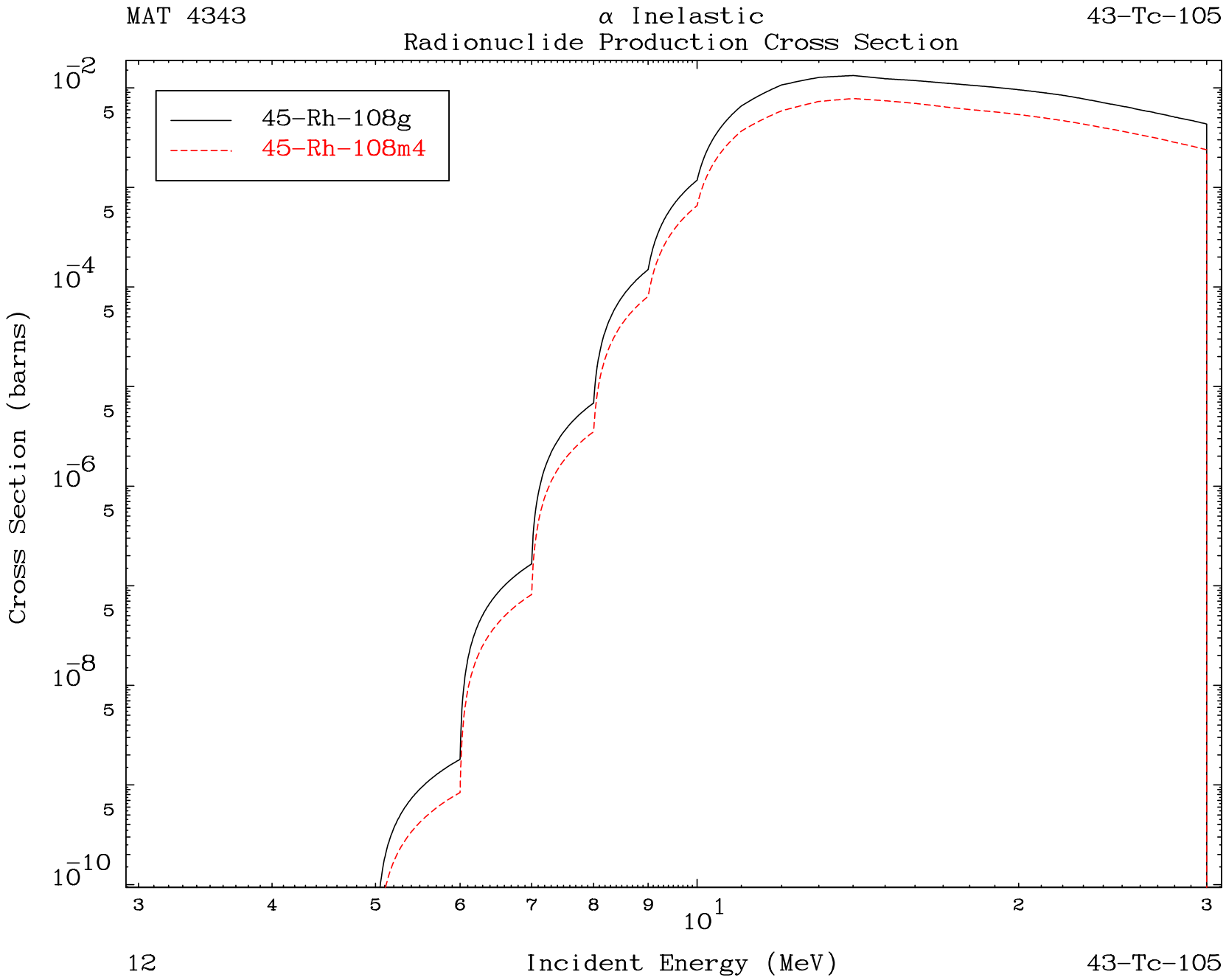

0 Kelvin Cross Sections
(α,d)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
Incident Energy (MeV)

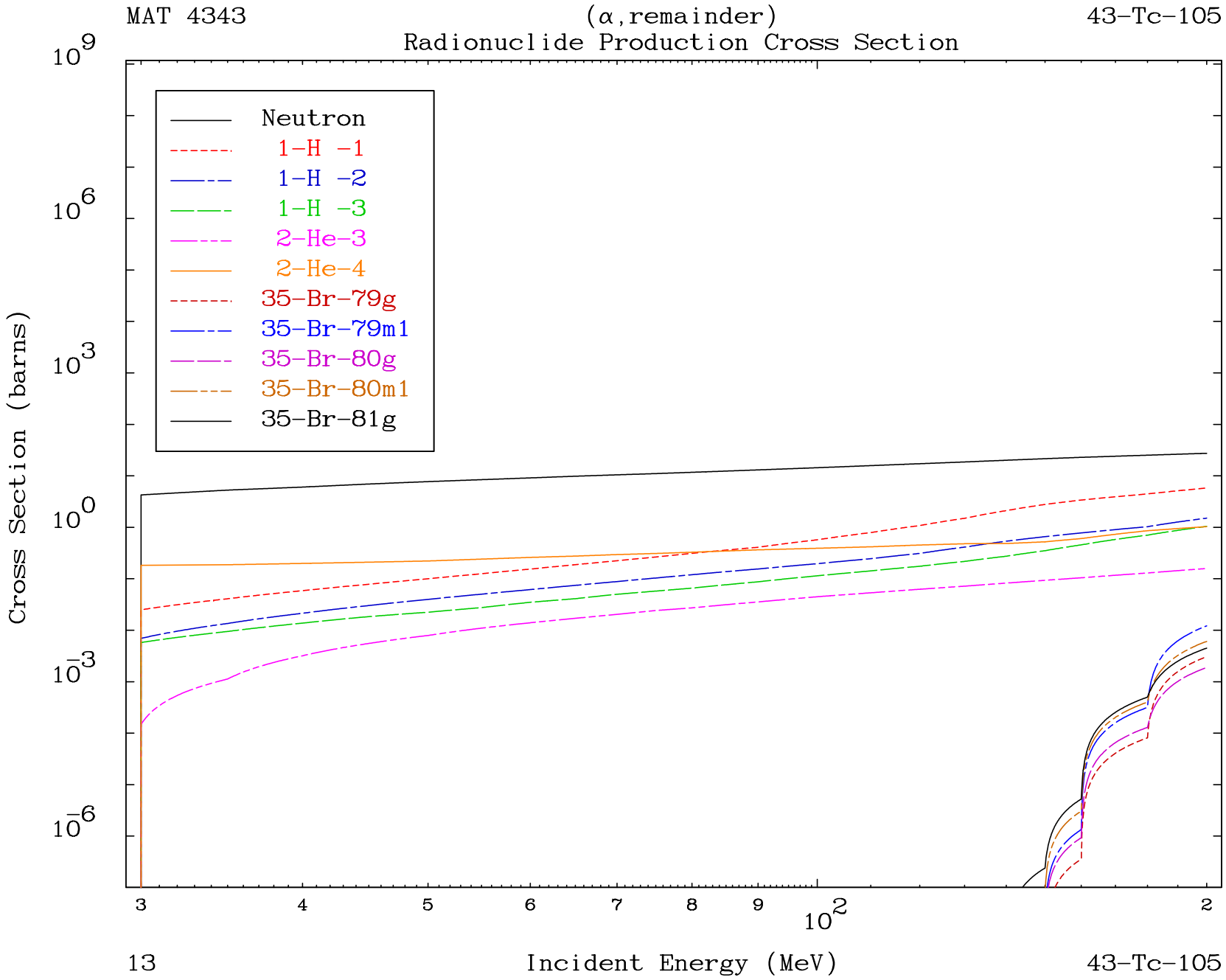

MAT 4343
(α,t) Levels
43-Tc-105
0 Kelvin Cross Sections
(α,t)
Cross Section (barns)
10^-4
10^-6
10^-8
10^-10
5
10
15
20
25
30
9
Incident Energy (MeV)
43-Tc-105

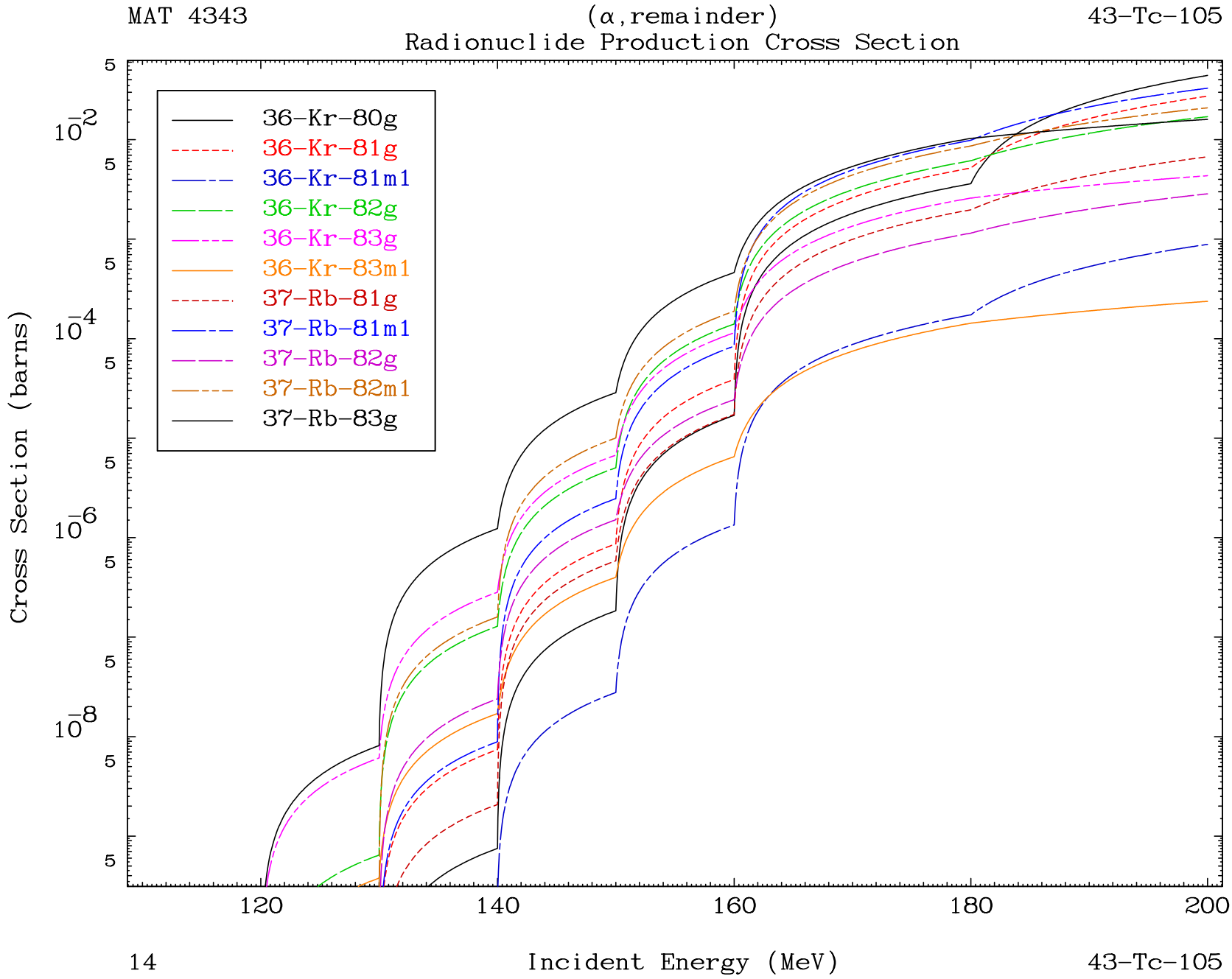

MAT 4343
(α,He3) Levels
43-Tc-105
0 Kelvin Cross Sections
(α,He-3)
Cross Section (barns)
10^-4
5
10^-6
5
10^-8
5
10^-10
5
5
16
18
20
22
24
26
28
30
10
Incident Energy (MeV)
43-Tc-105

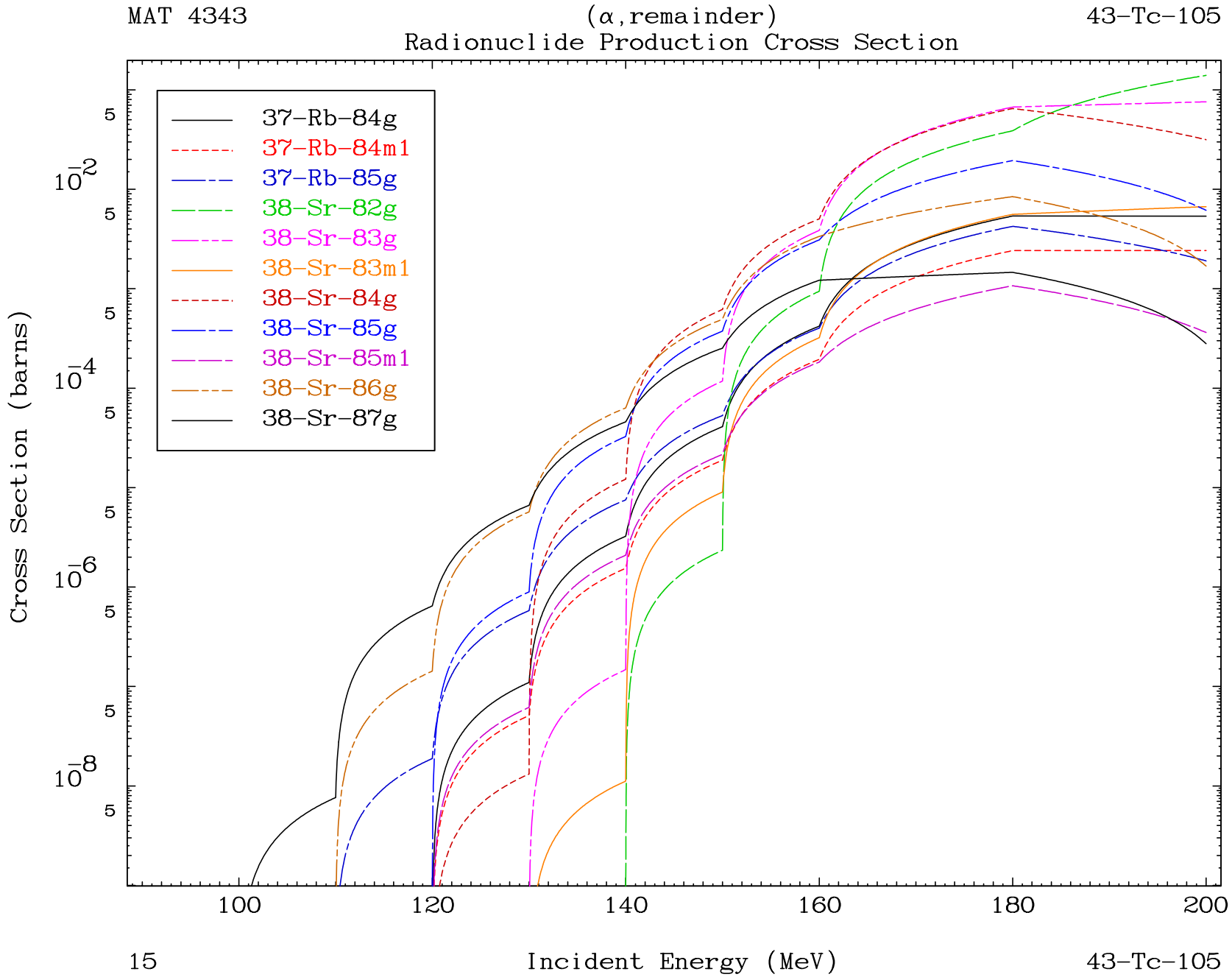
0 Kelvin Cross Sections

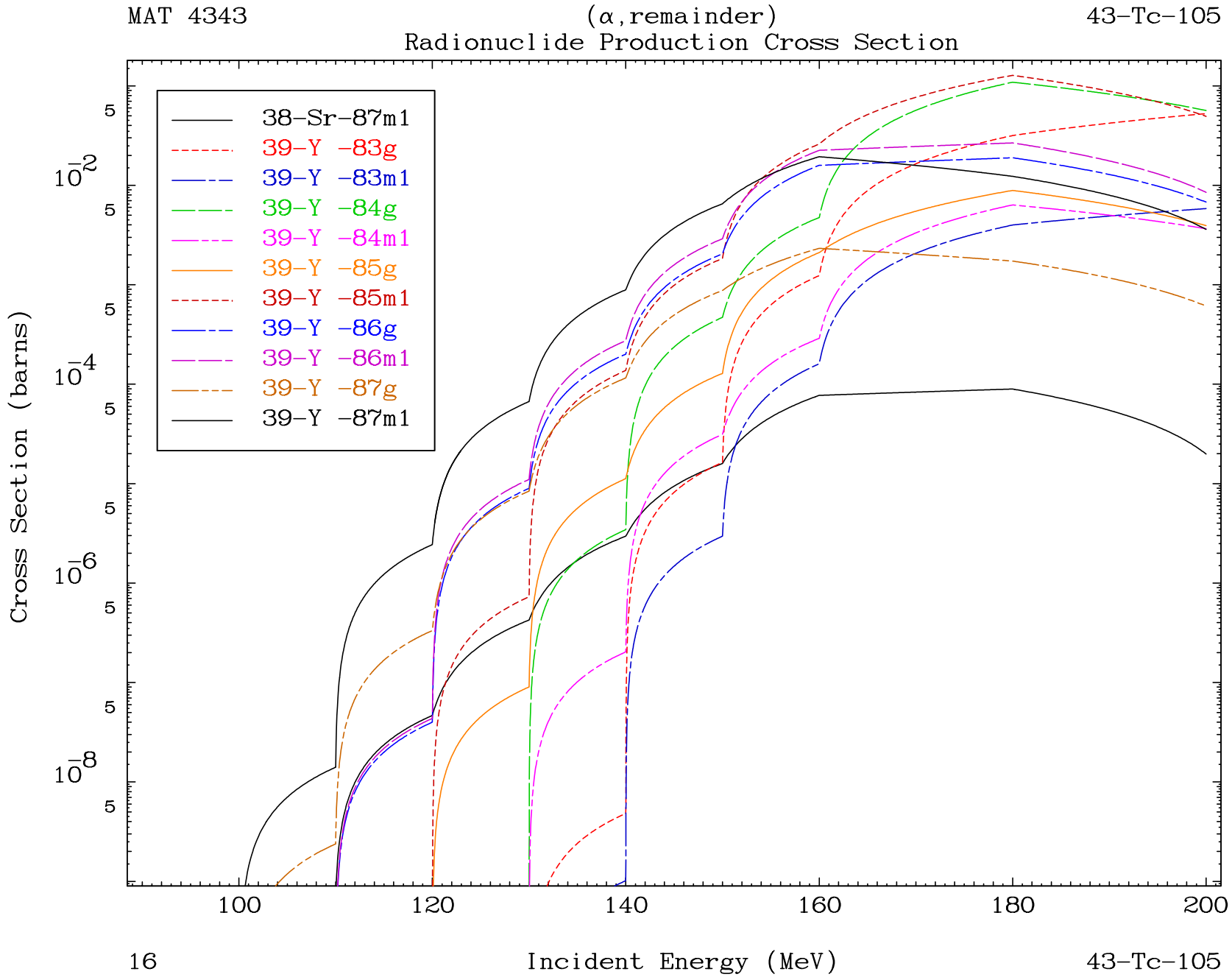


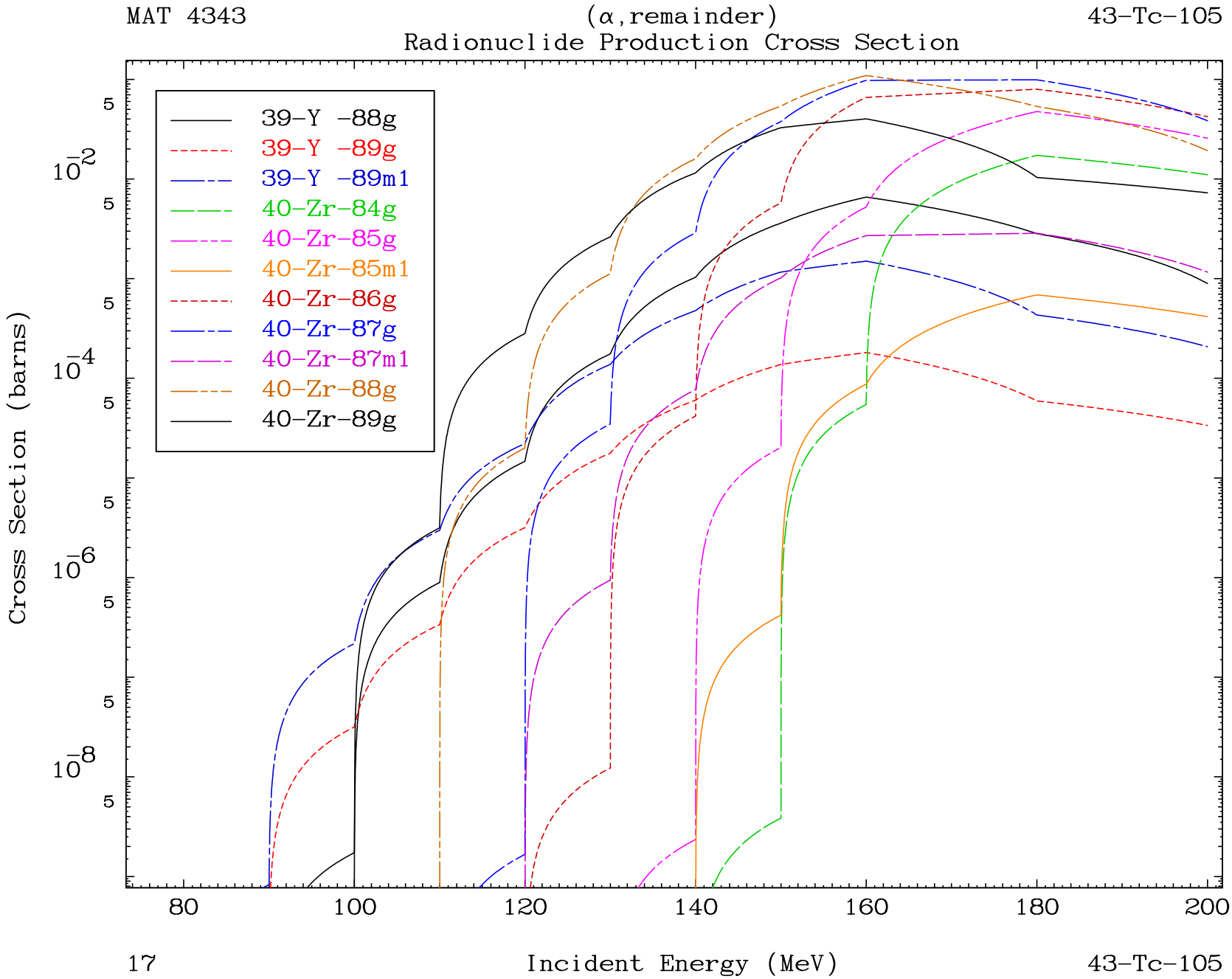

MAT 4343
α Inelastic
43-Tc-105
Radionuclide Production Cross Section
45-Rh-108g
45-Rh-108m4
Cross Section (barns)
Incident Energy (MeV)
12
43-Tc-105

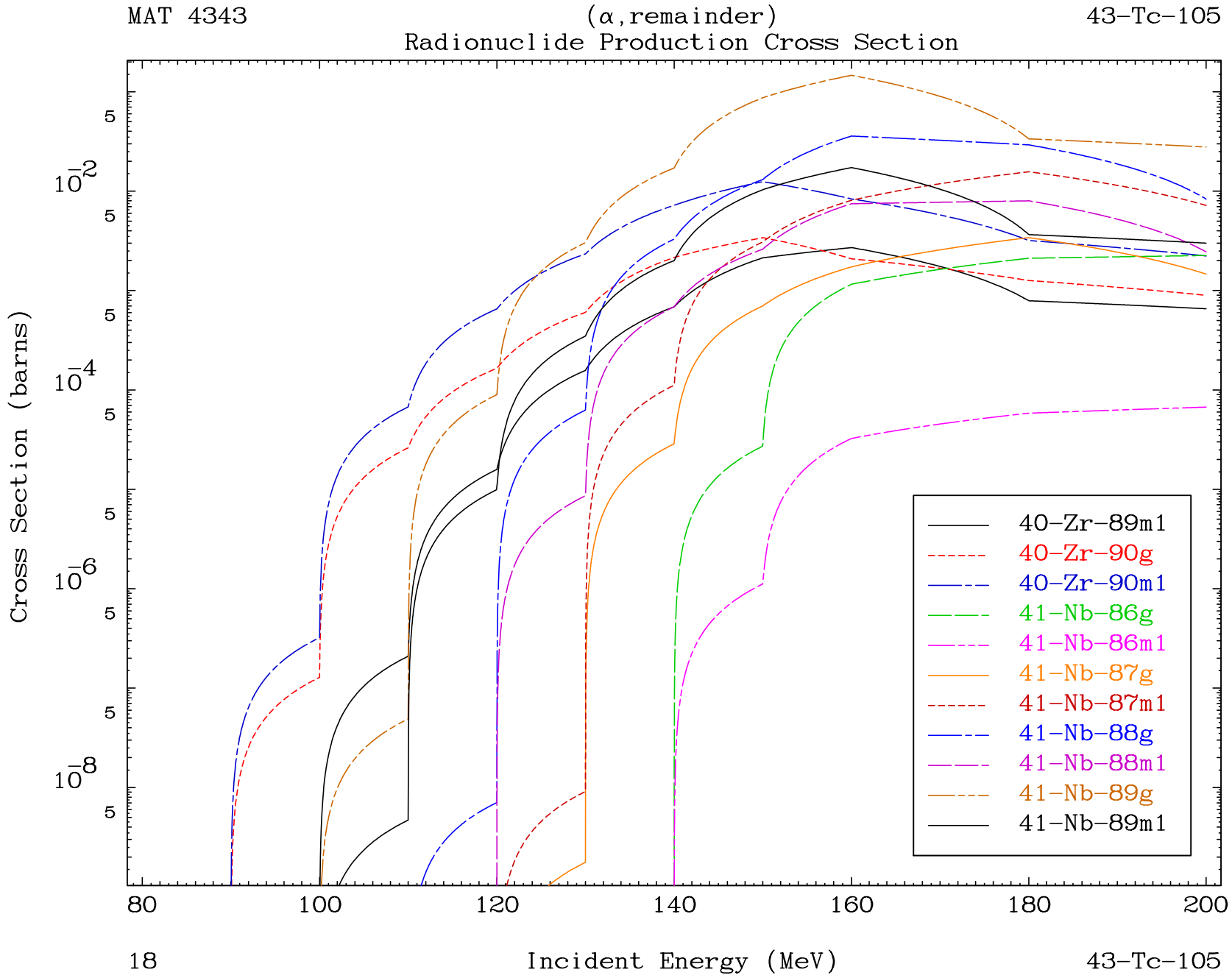

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Neutron
1-H -1
1-H -2
1-H -3
2-He-3
2-He-4
35-Br-79g
35-Br-79m1
35-Br-80g
35-Br-80m1
35-Br-81g
Cross Section (barns)
10^9
10^6
10^3
10^0
10^-3
10^-6
3
4
5
6
7
8
9
10^2
2
13
Incident Energy (MeV)
43-Tc-105

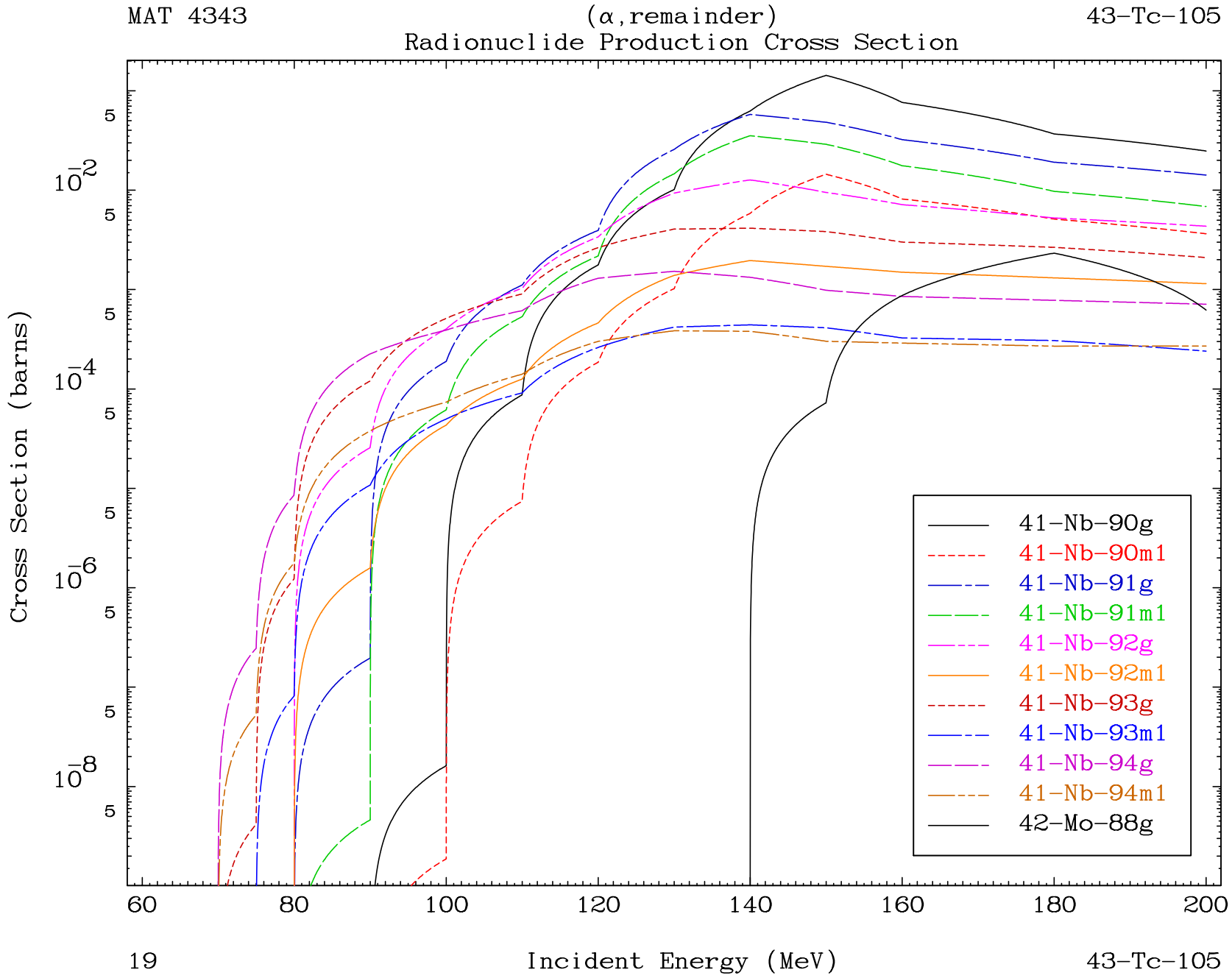

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
36-Kr-80g
36-Kr-81g
36-Kr-81m1
36-Kr-82g
36-Kr-83g
36-Kr-83m1
37-Rb-81g
37-Rb-81m1
37-Rb-82g
37-Rb-82m1
37-Rb-83g
Cross Section (barns)
10-2
10-4
10-6
10-8
120
140
160
180
200
Incident Energy (MeV)
14
43-Tc-105

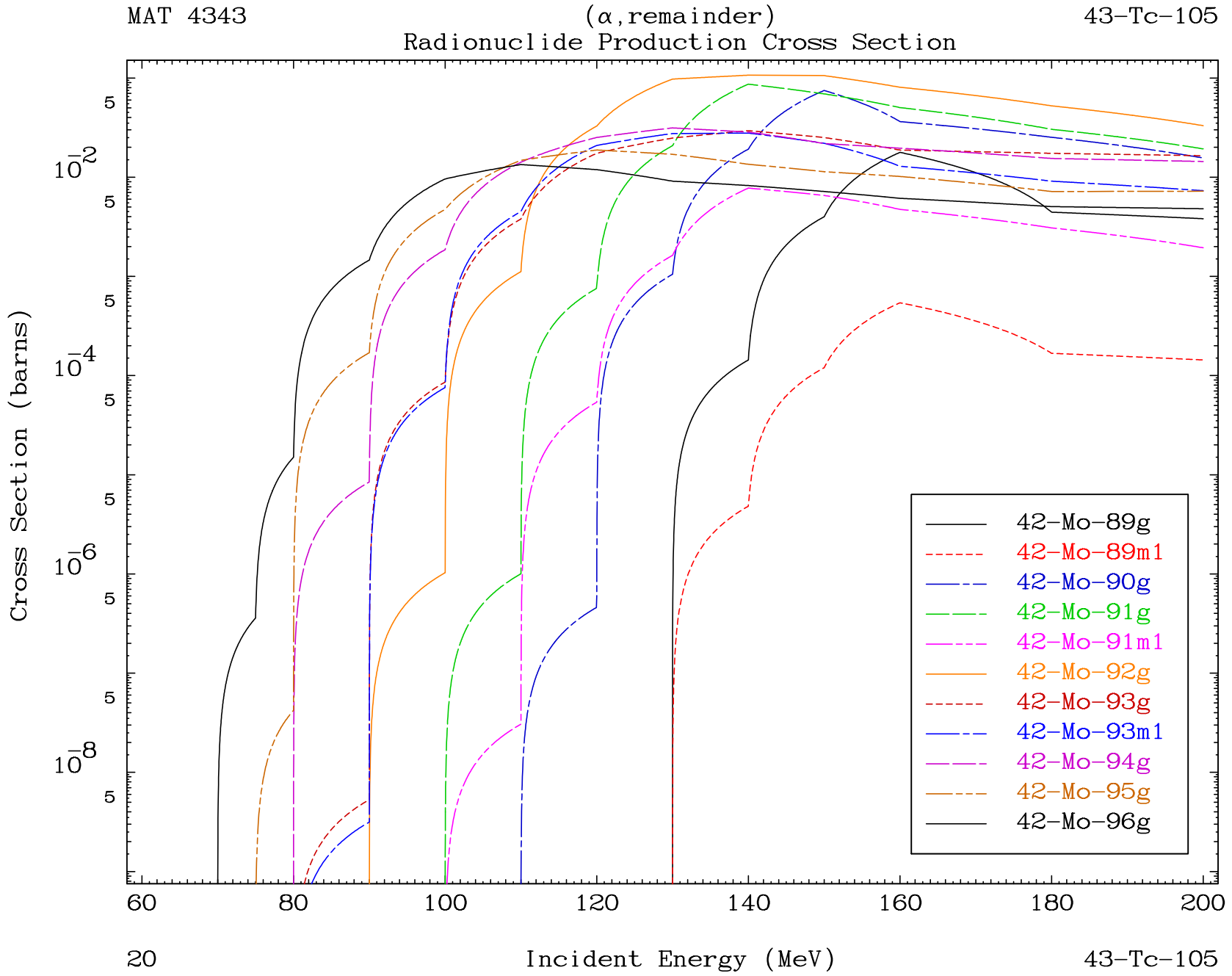

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
37-Rb-84g
37-Rb-84m1
37-Rb-85g
38-Sr-82g
38-Sr-83g
38-Sr-83m1
38-Sr-84g
38-Sr-85g
38-Sr-85m1
38-Sr-86g
38-Sr-87g
Cross Section (barns)
10-2
10-4
10-6
10-8
100
120
140
160
180
200
15
Incident Energy (MeV)
43-Tc-105

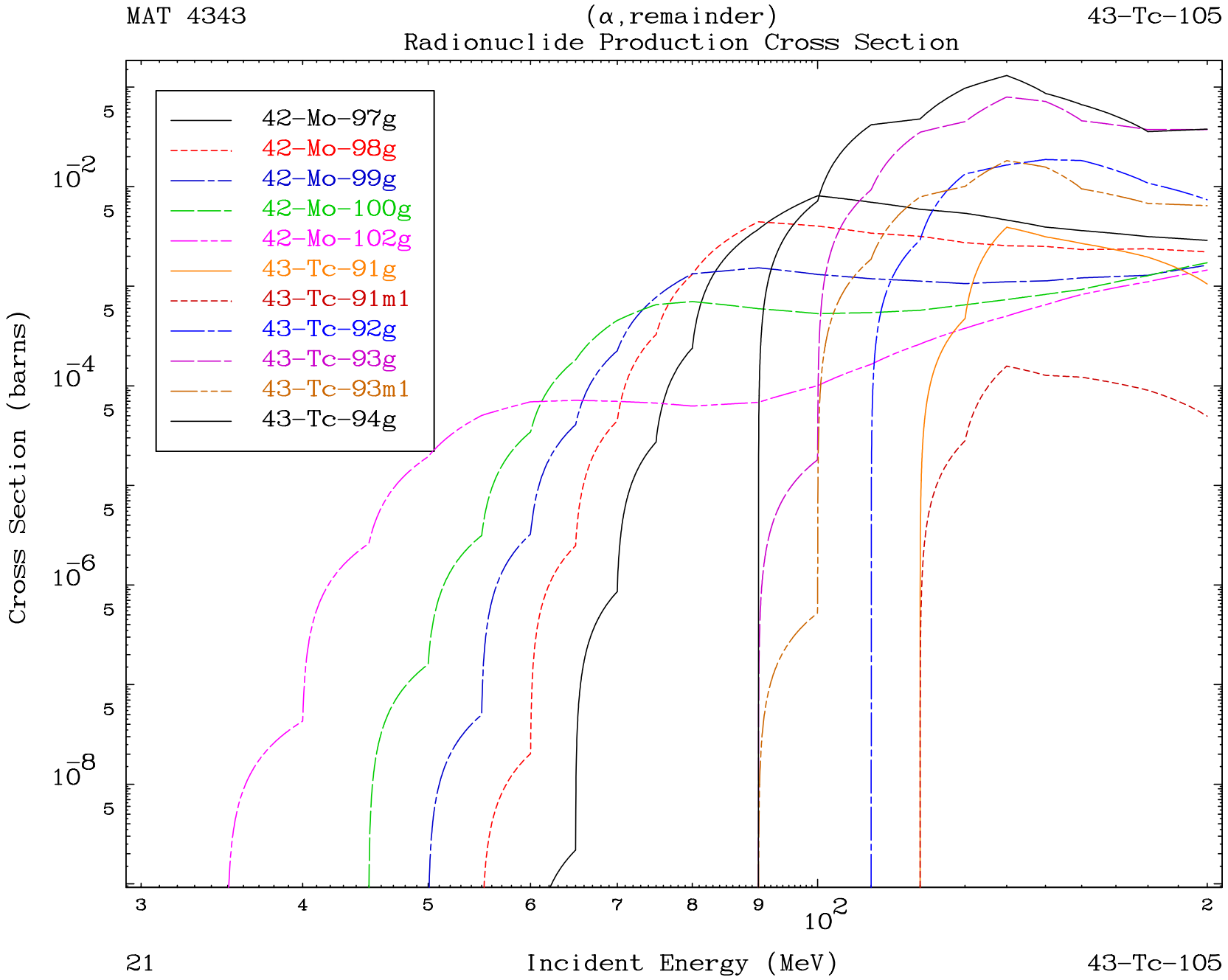

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
38-Sr-87m1
39-Y -83g
39-Y -83m1
39-Y -84g
39-Y -84m1
39-Y -85g
39-Y -85m1
39-Y -86g
39-Y -86m1
39-Y -87g
39-Y -87m1
Cross Section (barns)
10-2
10-4
10-6
10-8
100
120
140
160
180
200
16
Incident Energy (MeV)
43-Tc-105

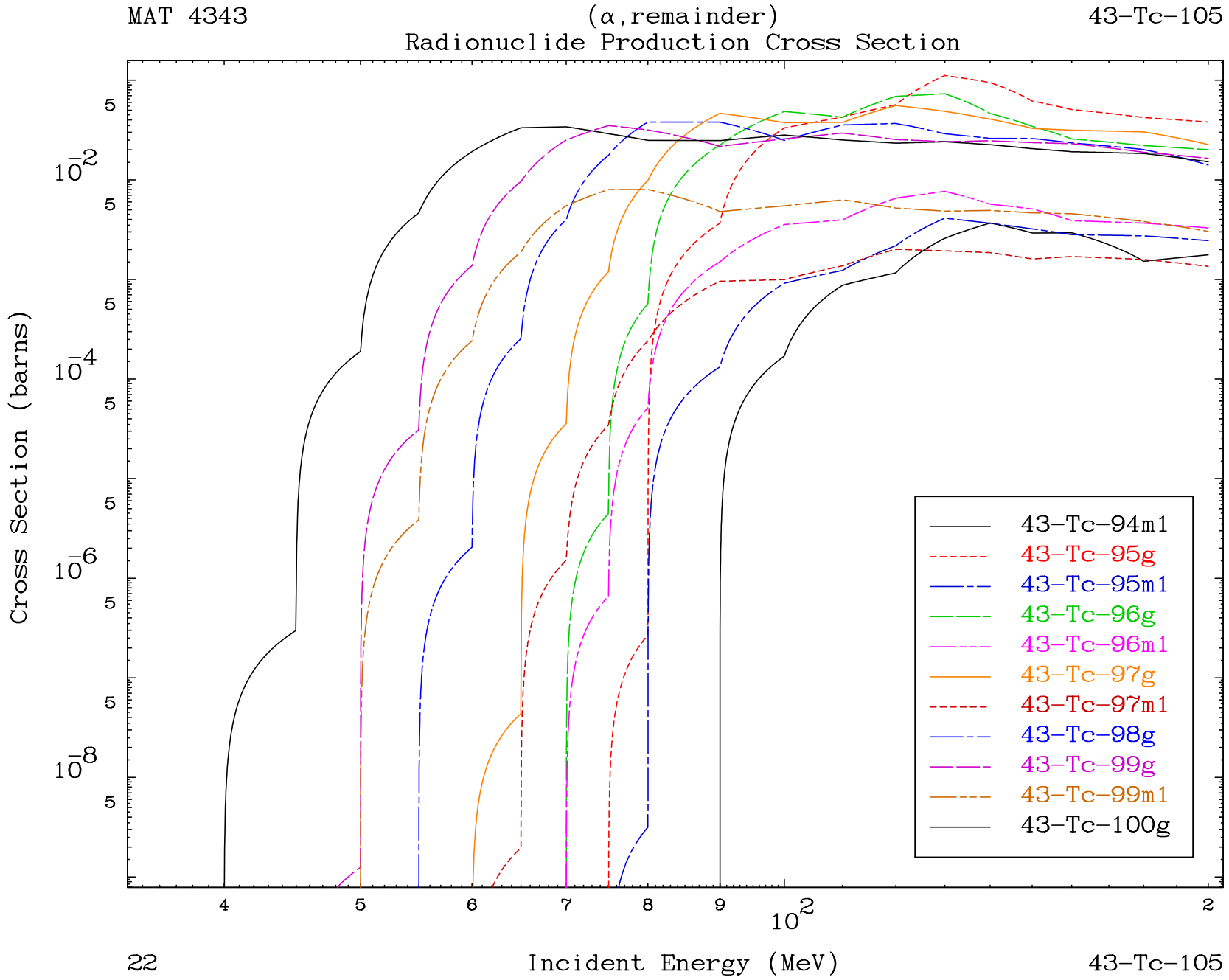

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
39-Y -88g
39-Y -89g
39-Y -89m1
40-Zr-84g
40-Zr-85g
40-Zr-85m1
40-Zr-86g
40-Zr-87g
40-Zr-87m1
40-Zr-88g
40-Zr-89g
Cross Section (barns)
10-2
10-4
10-6
10-8
80
100
120
140
160
180
200
17
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
80
100
120
140
160
180
200
18
Incident Energy (MeV)
43-Tc-105
40-Zr-89m1
40-Zr-90g
40-Zr-90m1
41-Nb-86g
41-Nb-86m1
41-Nb-87g
41-Nb-87m1
41-Nb-88g
41-Nb-88m1
41-Nb-89g
41-Nb-89m1

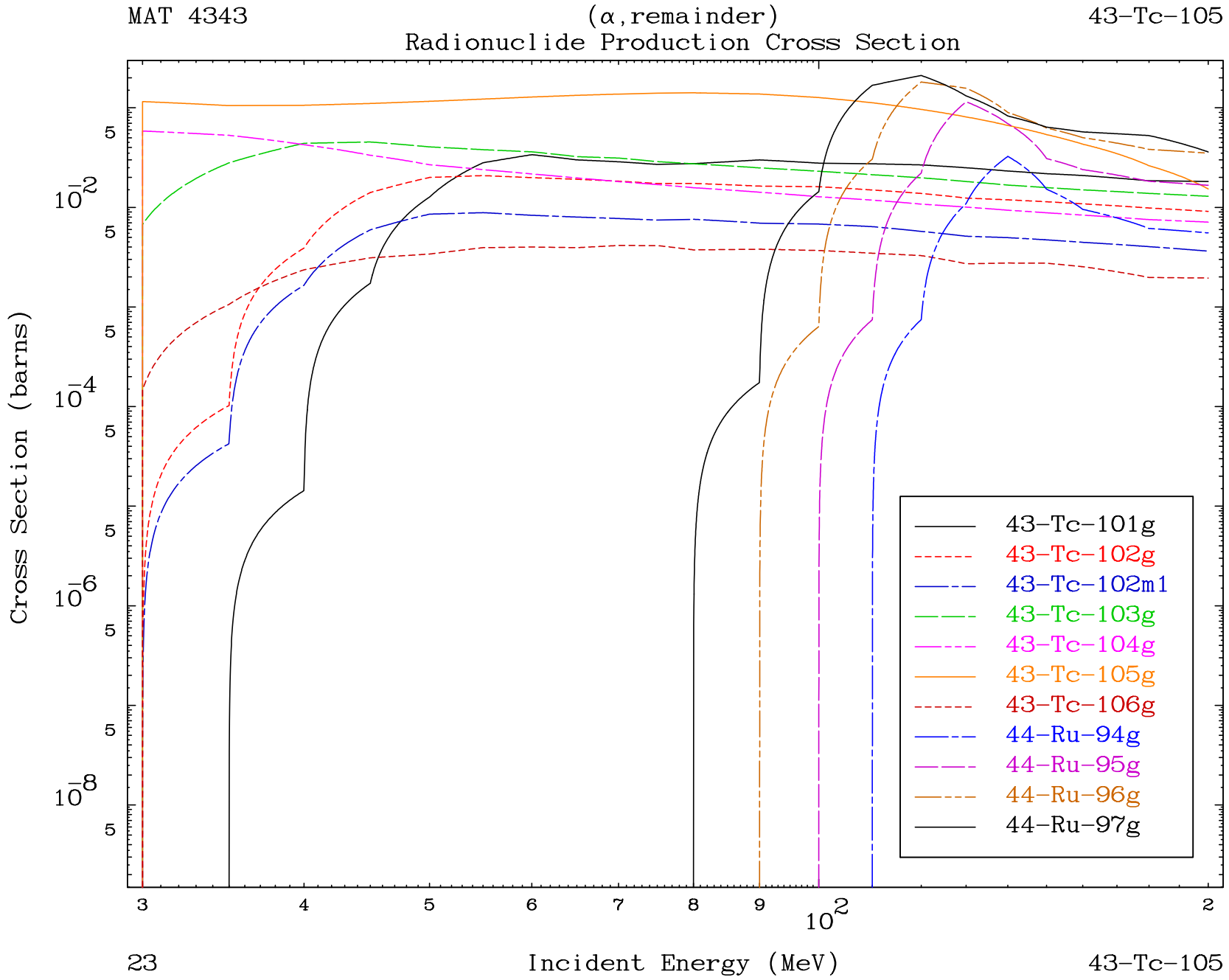

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
60
80
100
120
140
160
180
200
19
Incident Energy (MeV)
43-Tc-105
41-Nb-90g
41-Nb-90m1
41-Nb-91g
41-Nb-91m1
41-Nb-92g
41-Nb-92m1
41-Nb-93g
41-Nb-93m1
41-Nb-94g
41-Nb-94m1
42-Mo-88g


MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
5
60
80
100
120
140
160
180
200
20
Incident Energy (MeV)
43-Tc-105
42-Mo-89g
42-Mo-89m1
42-Mo-90g
42-Mo-91g
42-Mo-91m1
42-Mo-92g
42-Mo-93g
42-Mo-93m1
42-Mo-94g
42-Mo-95g
42-Mo-96g

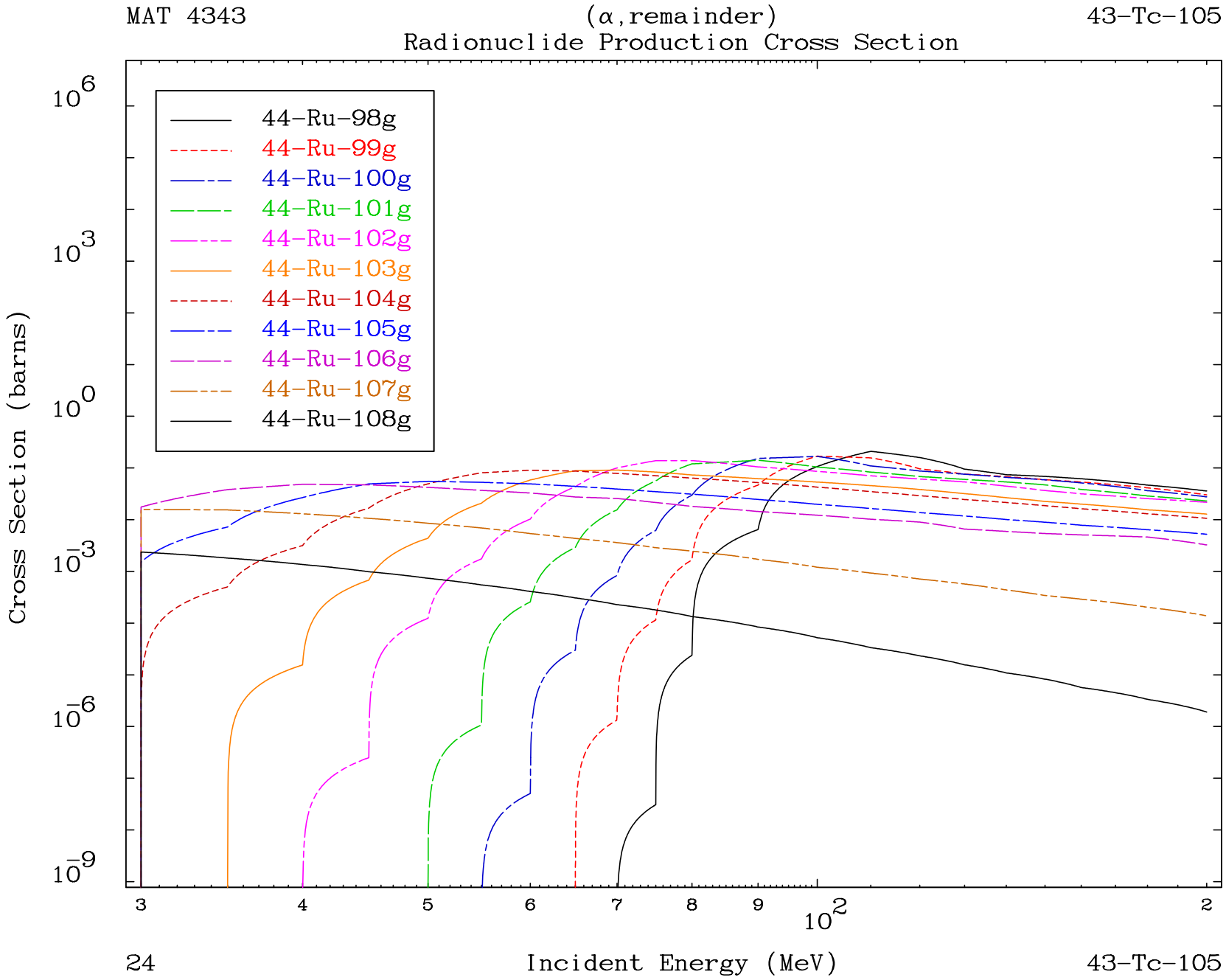

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
42-Mo-97g
42-Mo-98g
42-Mo-99g
42-Mo-100g
42-Mo-102g
43-Tc-91g
43-Tc-91m1
43-Tc-92g
43-Tc-93g
43-Tc-93m1
43-Tc-94g
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
21
Incident Energy (MeV)
43-Tc-105

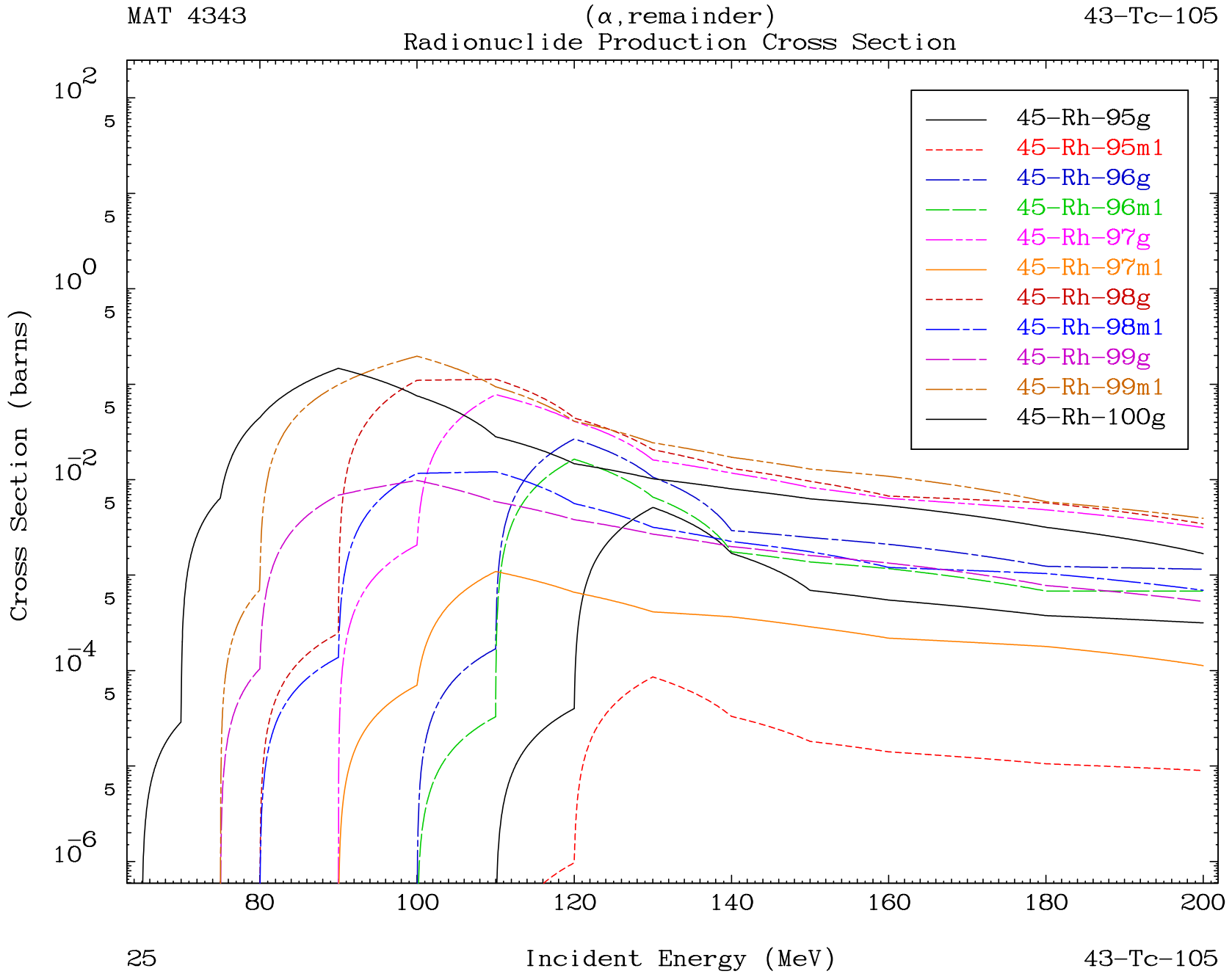

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
43-Tc-94m1
43-Tc-95g
43-Tc-95m1
43-Tc-96g
43-Tc-96m1
43-Tc-97g
43-Tc-97m1
43-Tc-98g
43-Tc-99g
43-Tc-99m1
43-Tc-100g

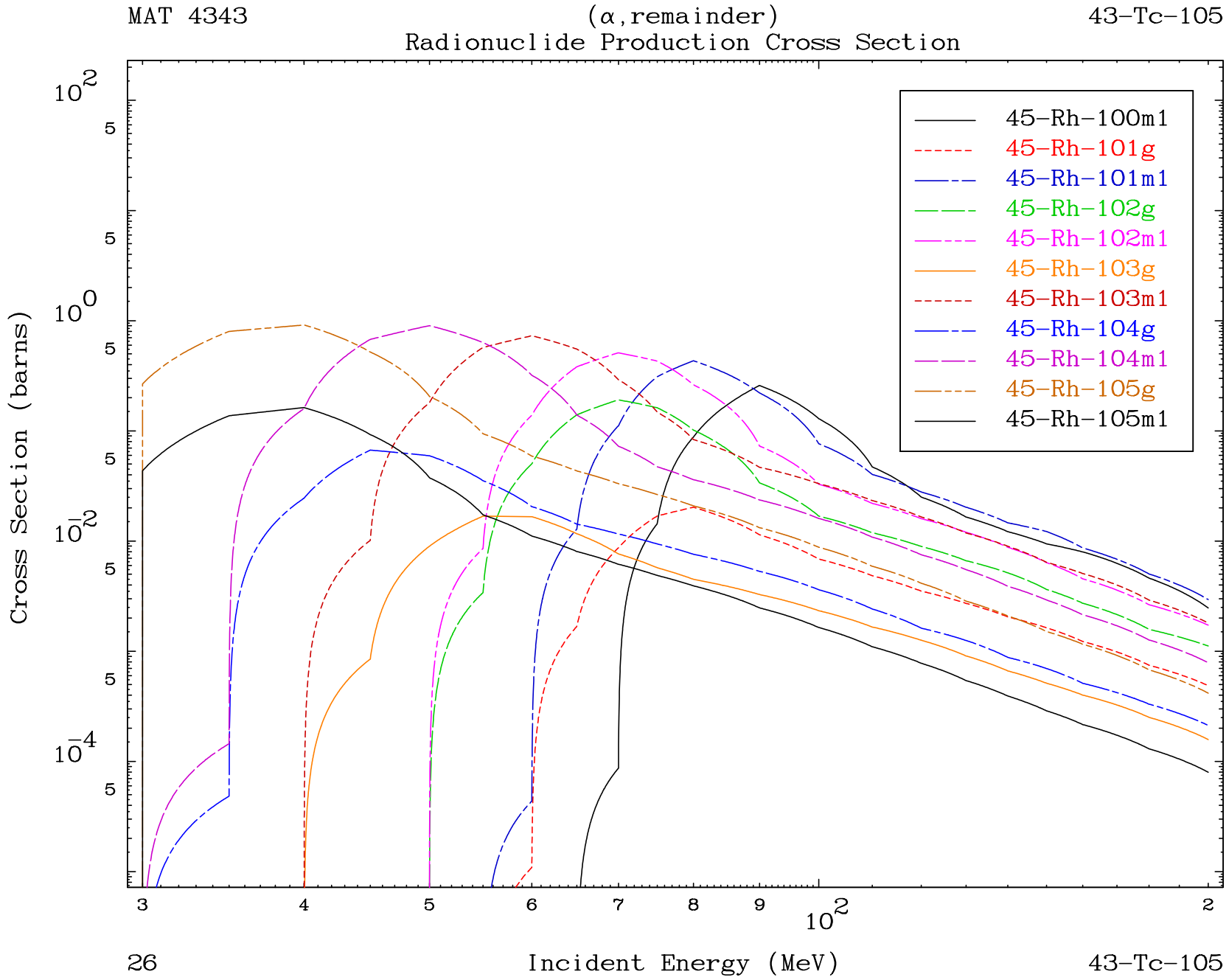
43-Tc-105

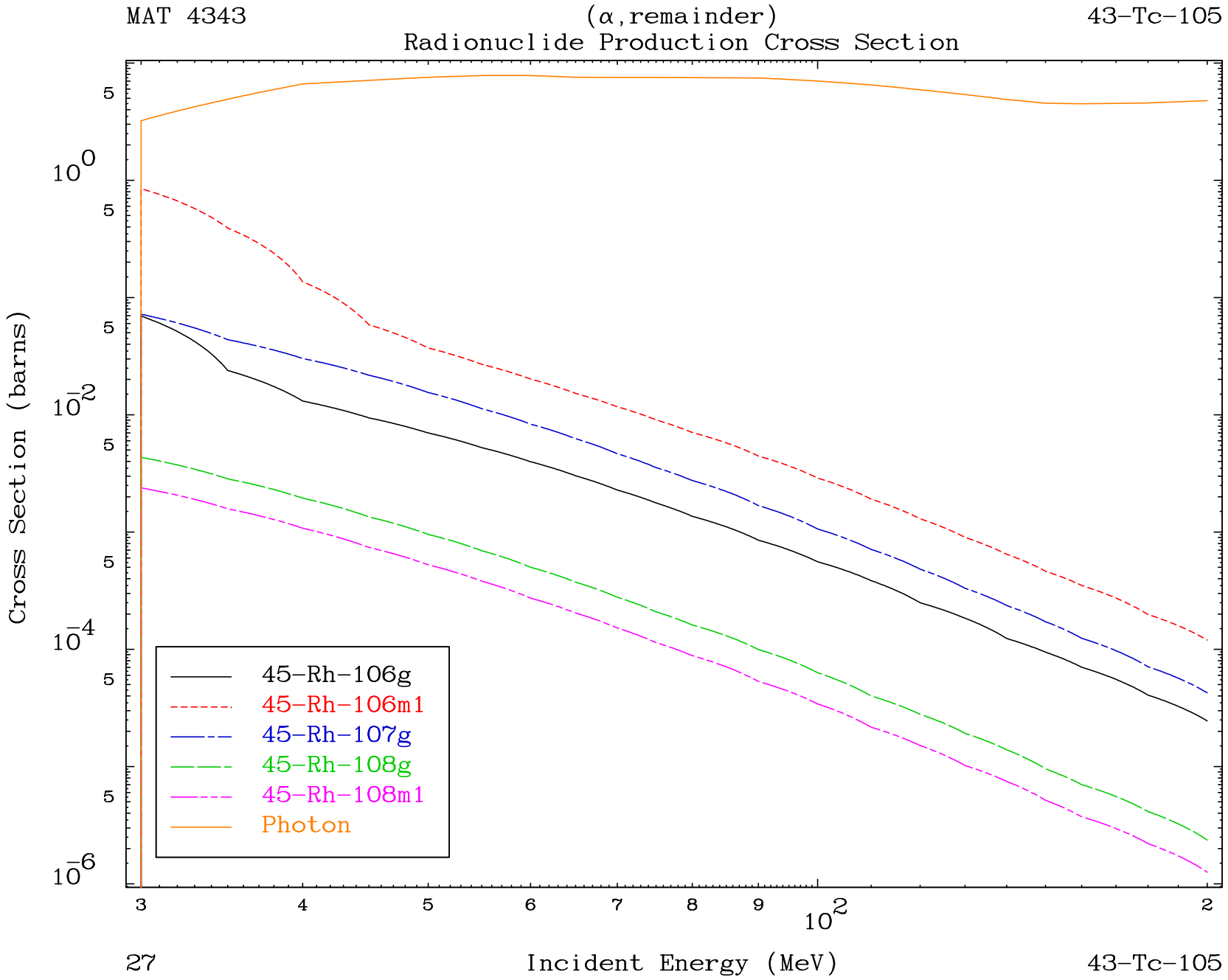

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10-2
10-4
10-6
10-8
3
4
5
6
7
8
9
10 2
2
Incident Energy (MeV)
43-Tc-101g
43-Tc-102g
43-Tc-102m1
43-Tc-103g
43-Tc-104g
43-Tc-105g
43-Tc-106g
44-Ru-94g
44-Ru-95g
44-Ru-96g
44-Ru-97g

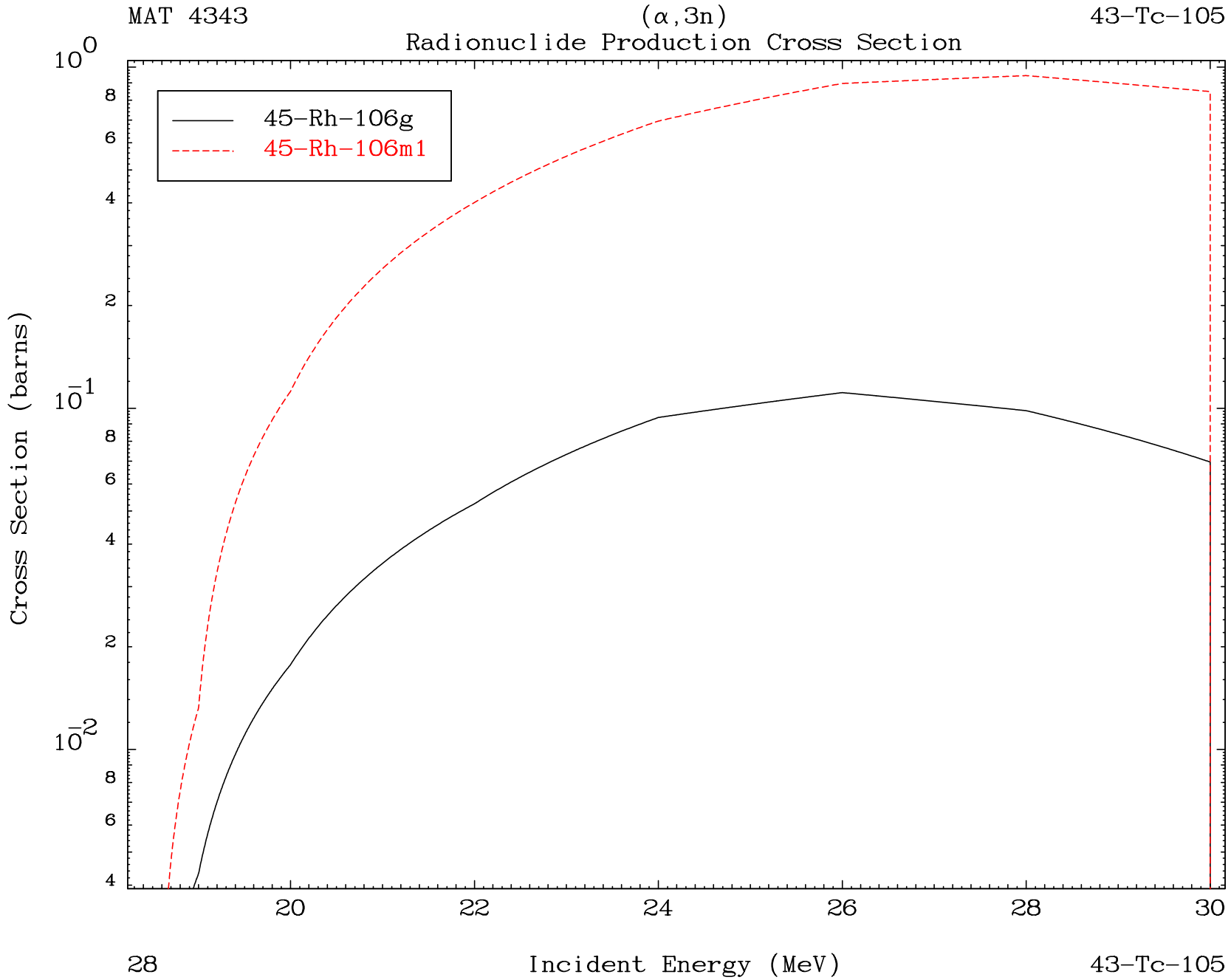
43-Tc-105

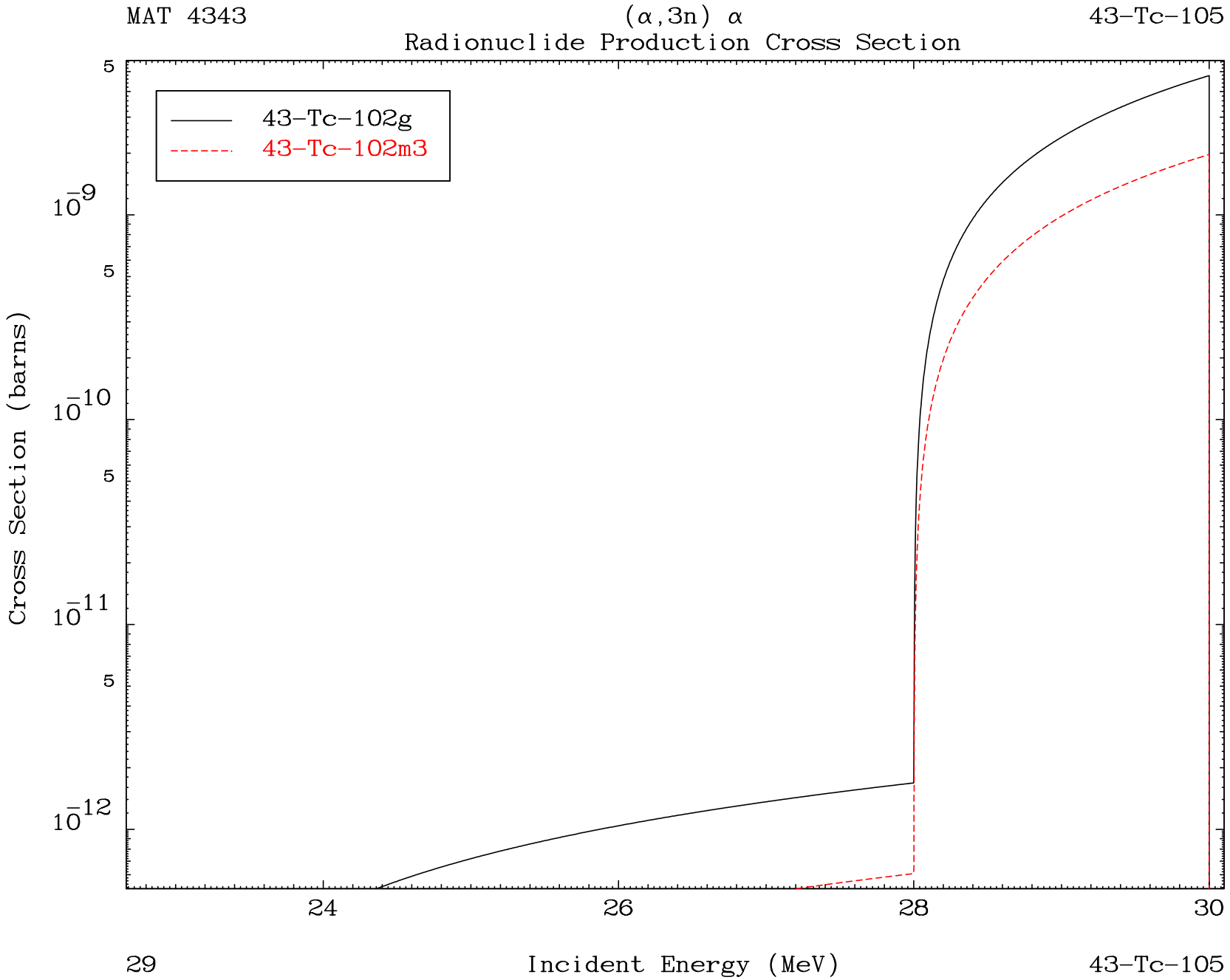

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
44-Ru-98g
44-Ru-99g
44-Ru-100g
44-Ru-101g
44-Ru-102g
44-Ru-103g
44-Ru-104g
44-Ru-105g
44-Ru-106g
44-Ru-107g
44-Ru-108g
Cross Section (barns)
10^6
10^3
10^0
10^-3
10^-6
10^-9
3
4
5
6
7
8
9
10^2
2
24
Incident Energy (MeV)
43-Tc-105

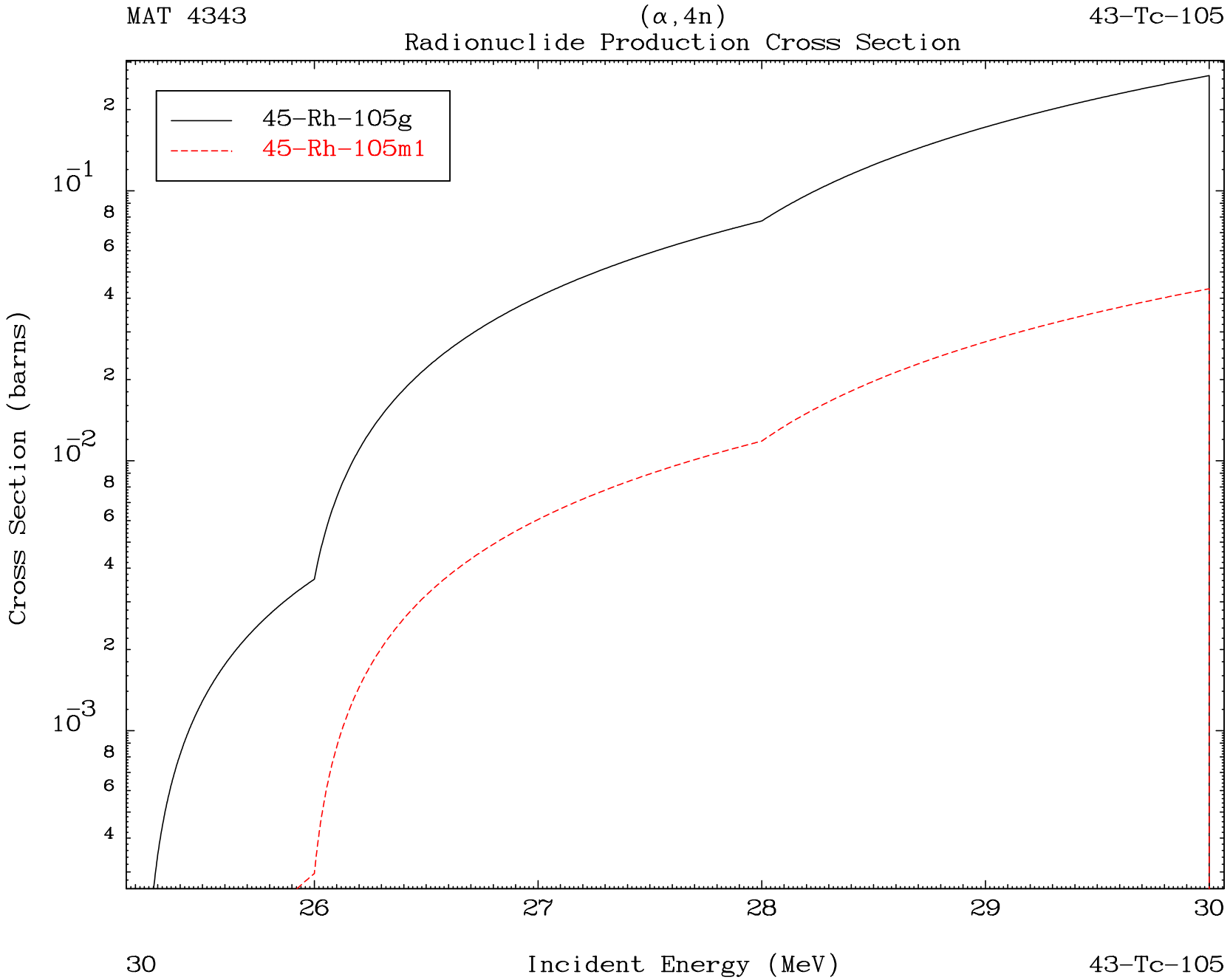

MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
10^-6
5
80
100
120
140
160
180
200
45-Rh-95g
45-Rh-95m1
45-Rh-96g
45-Rh-96m1
45-Rh-97g
45-Rh-97m1
45-Rh-98g
45-Rh-98m1
45-Rh-99g
45-Rh-99m1
45-Rh-100g
25
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10^2
10^0
10^-2
10^-4
5
3
4
5
6
7
8
9
10^2
2
45-Rh-100m1
45-Rh-101g
45-Rh-101m1
45-Rh-102g
45-Rh-102m1
45-Rh-103g
45-Rh-103m1
45-Rh-104g
45-Rh-104m1
45-Rh-105g
45-Rh-105m1
26
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,remainder)
43-Tc-105
Radionuclide Production Cross Section
Cross Section (barns)
10^0
10^-2
10^-4
10^-6
5
3
4
5
6
7
8
9
10^2
2
45-Rh-106g
45-Rh-106m1
45-Rh-107g
45-Rh-108g
45-Rh-108m1
Photon
27
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,3n)
43-Tc-105
Radionuclide Production Cross Section
45-Rh-106g
45-Rh-106m1
Cross Section (barns)
10^0
10^-1
10^-2
8
6
4
2
20
22
24
26
28
30
28
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,3n) α
43-Tc-105
Radionuclide Production Cross Section
43-Tc-102g
43-Tc-102m3
Cross Section (barns)
10-9
10-10
10-11
10-12
5
24
26
28
30
29
Incident Energy (MeV)
43-Tc-105


MAT 4343
(α,4n)
43-Tc-105
Radionuclide Production Cross Section
45-Rh-105g
45-Rh-105m1
Cross Section (barns)
10-1
10-2
10-3
2
8
6
4
26
27
28
29
30
30
Incident Energy (MeV)
43-Tc-105