

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

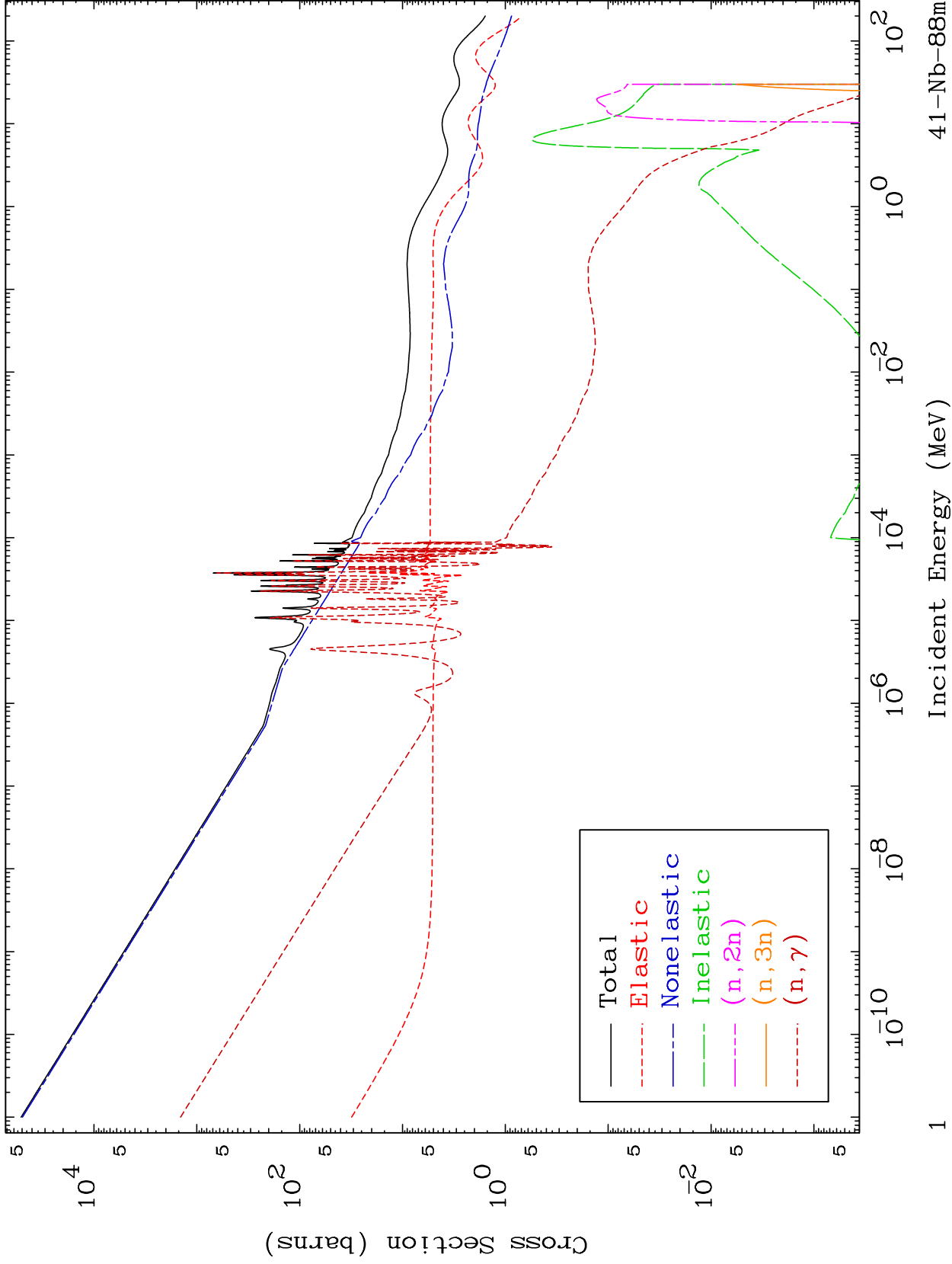
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 4111

Neutron Major  
293 Kelvin Cross Sections

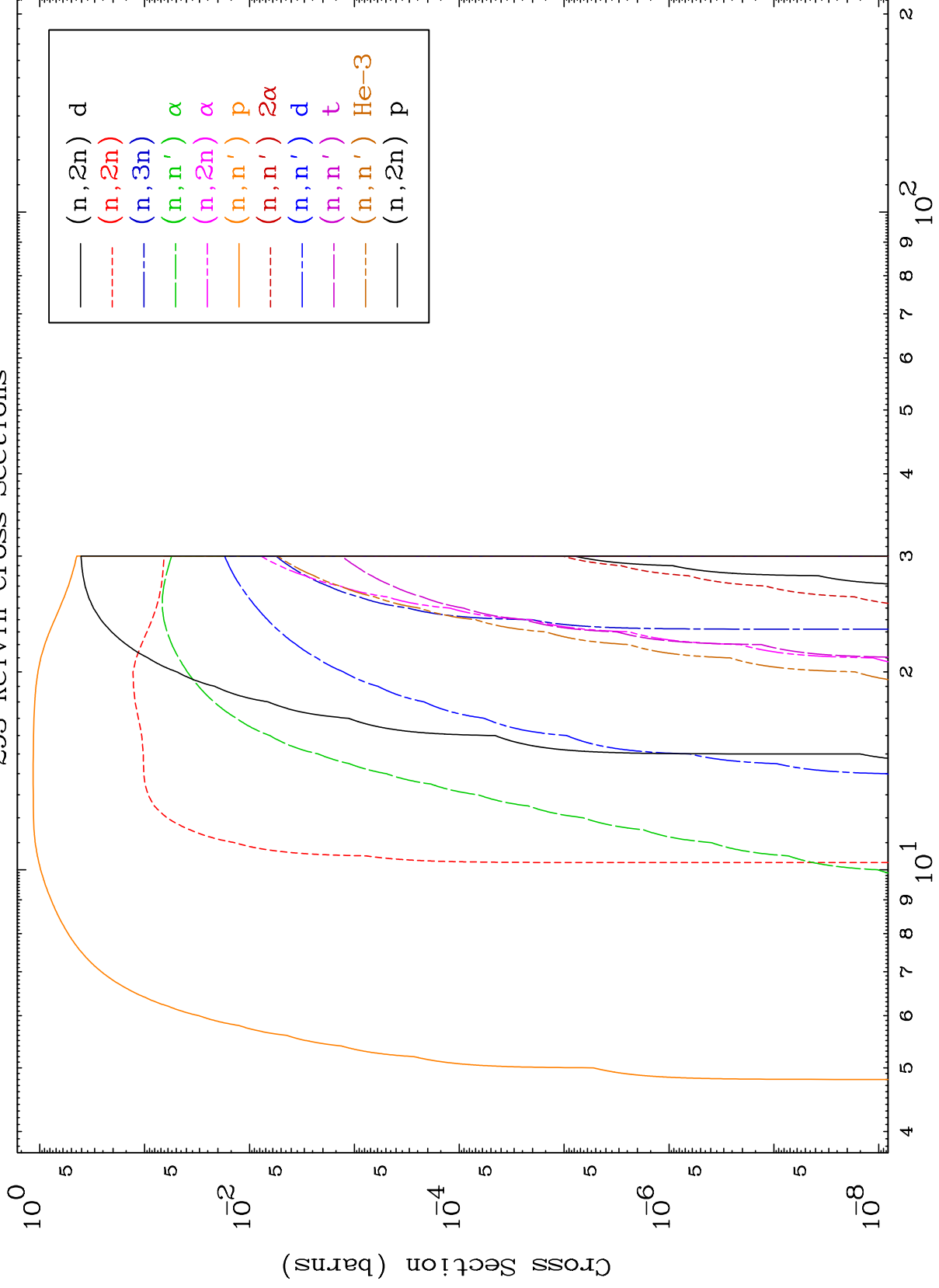
41-Nb-88m



MAT 4111

Neutron Absorption  
293 Kelvin Cross Sections

41-Nb-88m



2

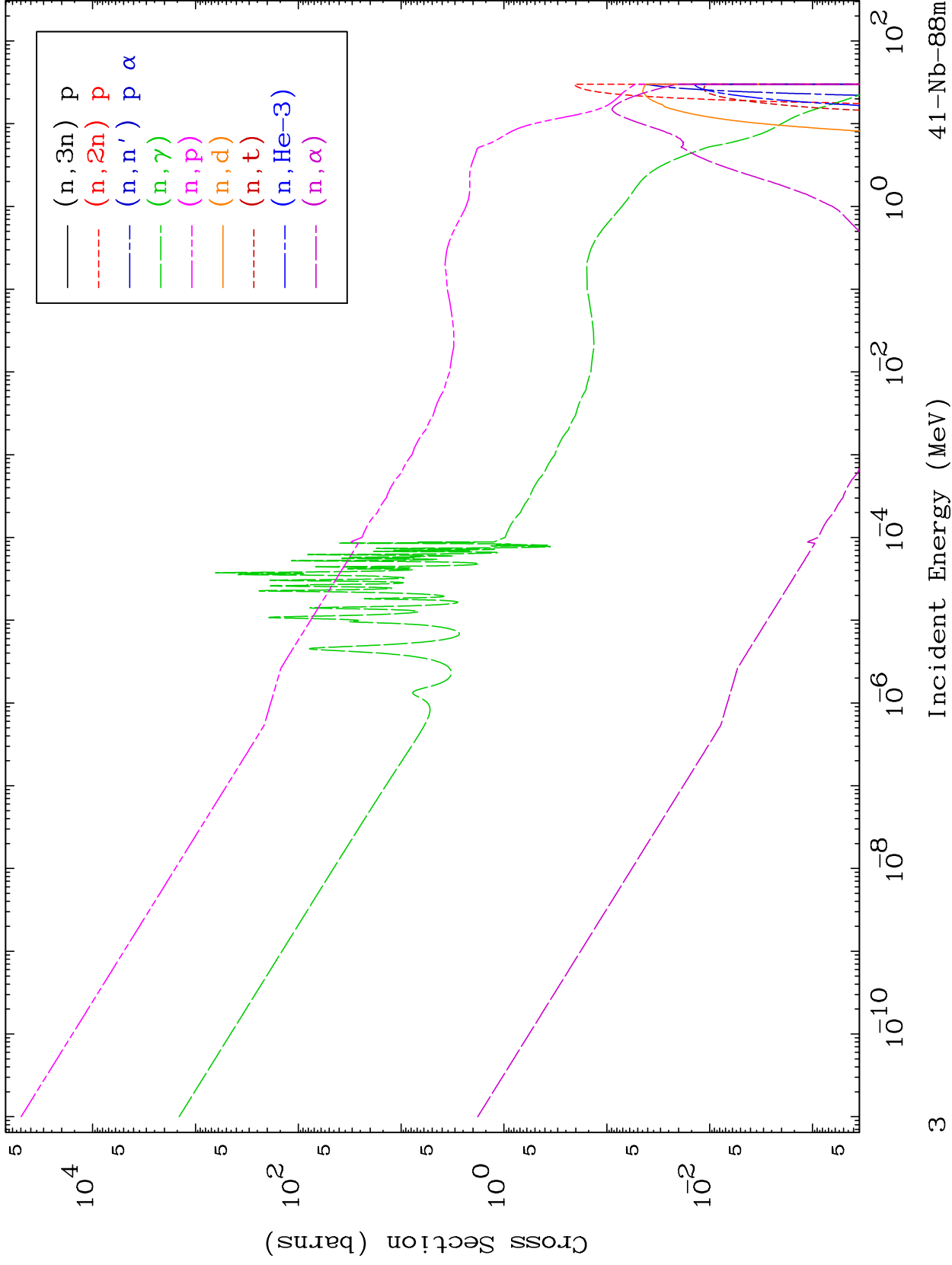
Incident Energy (MeV)

41-Nb-88m

MAT 4111

Neutron Absorption  
293 Kelvin Cross Sections

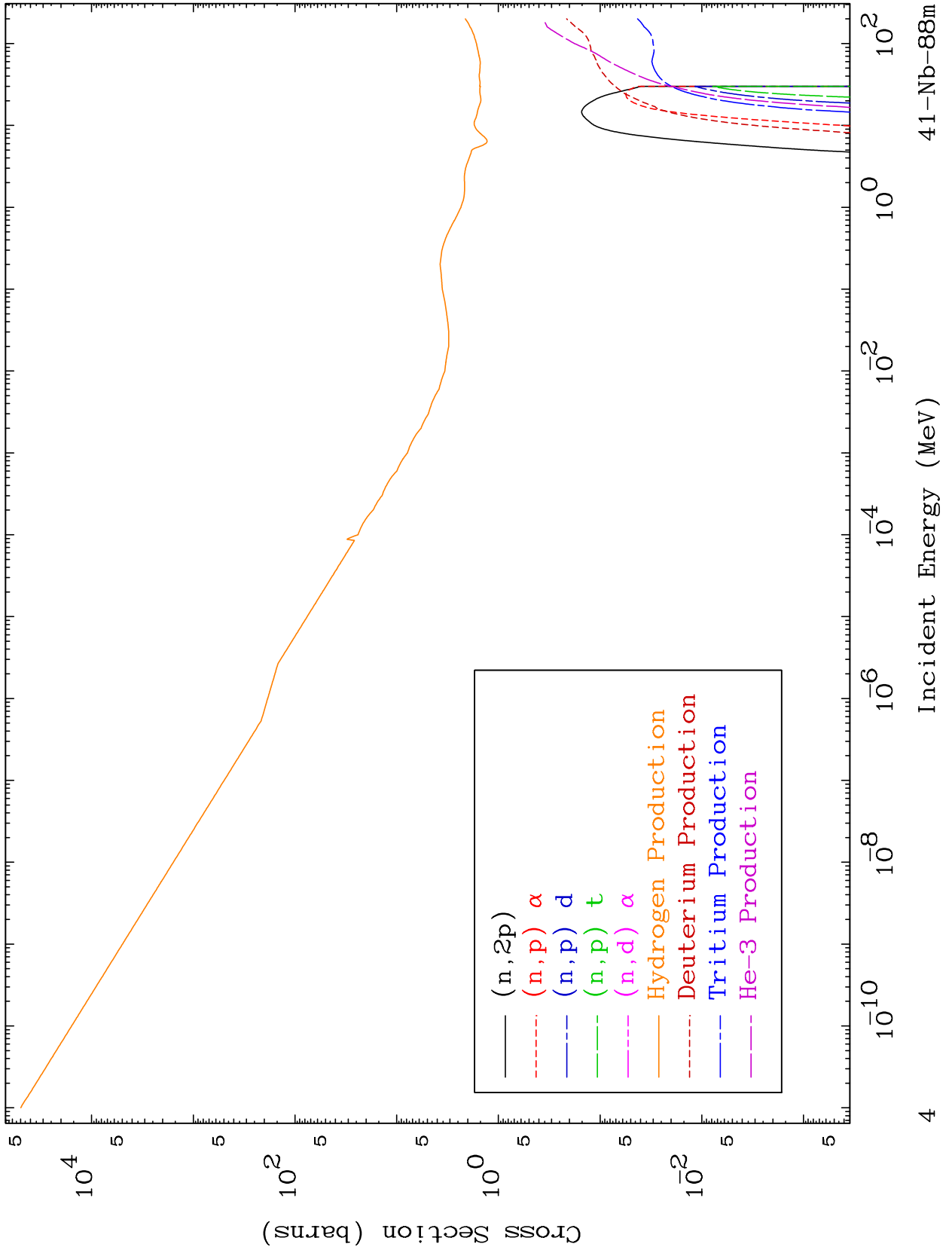
41-Nb-88m



MAT 4111

Neutron Absorption  
293 Kelvin Cross Sections

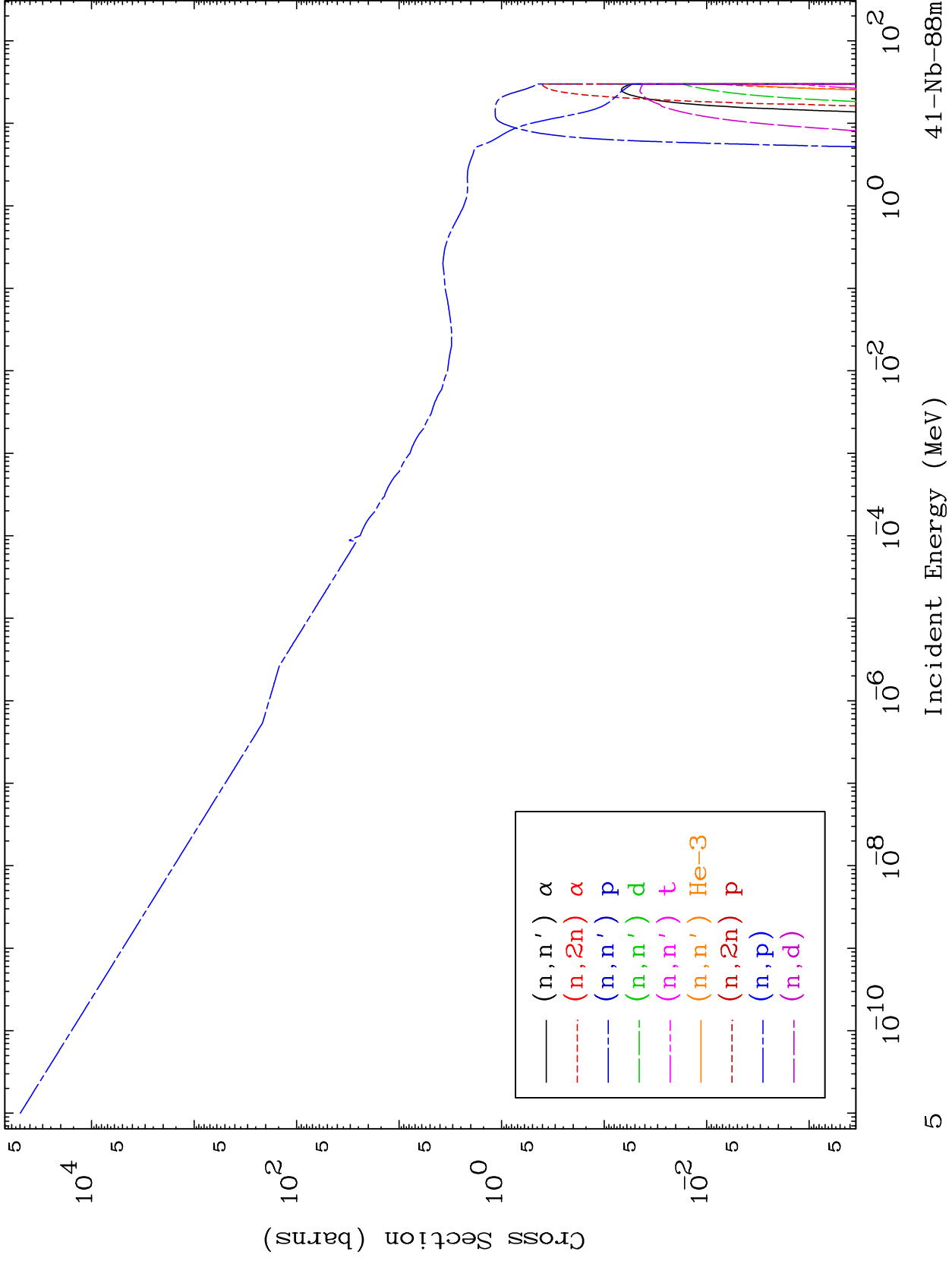
41-Nb-88m



MAT 4111

Charged Particle  
293 Kelvin Cross Sections

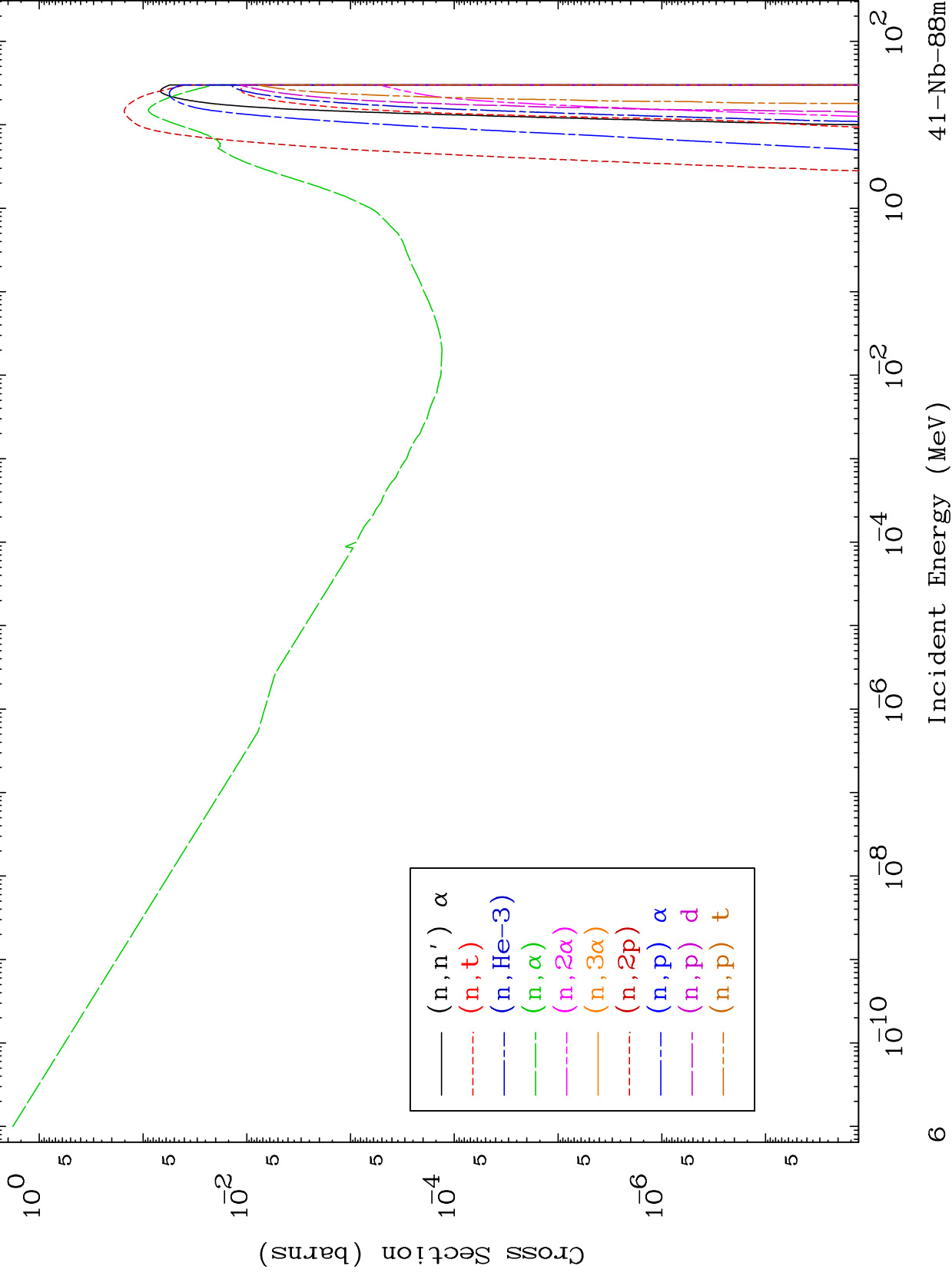
41-Nb-88m



MAT 4111

Charged Particle  
293 Kelvin Cross Sections

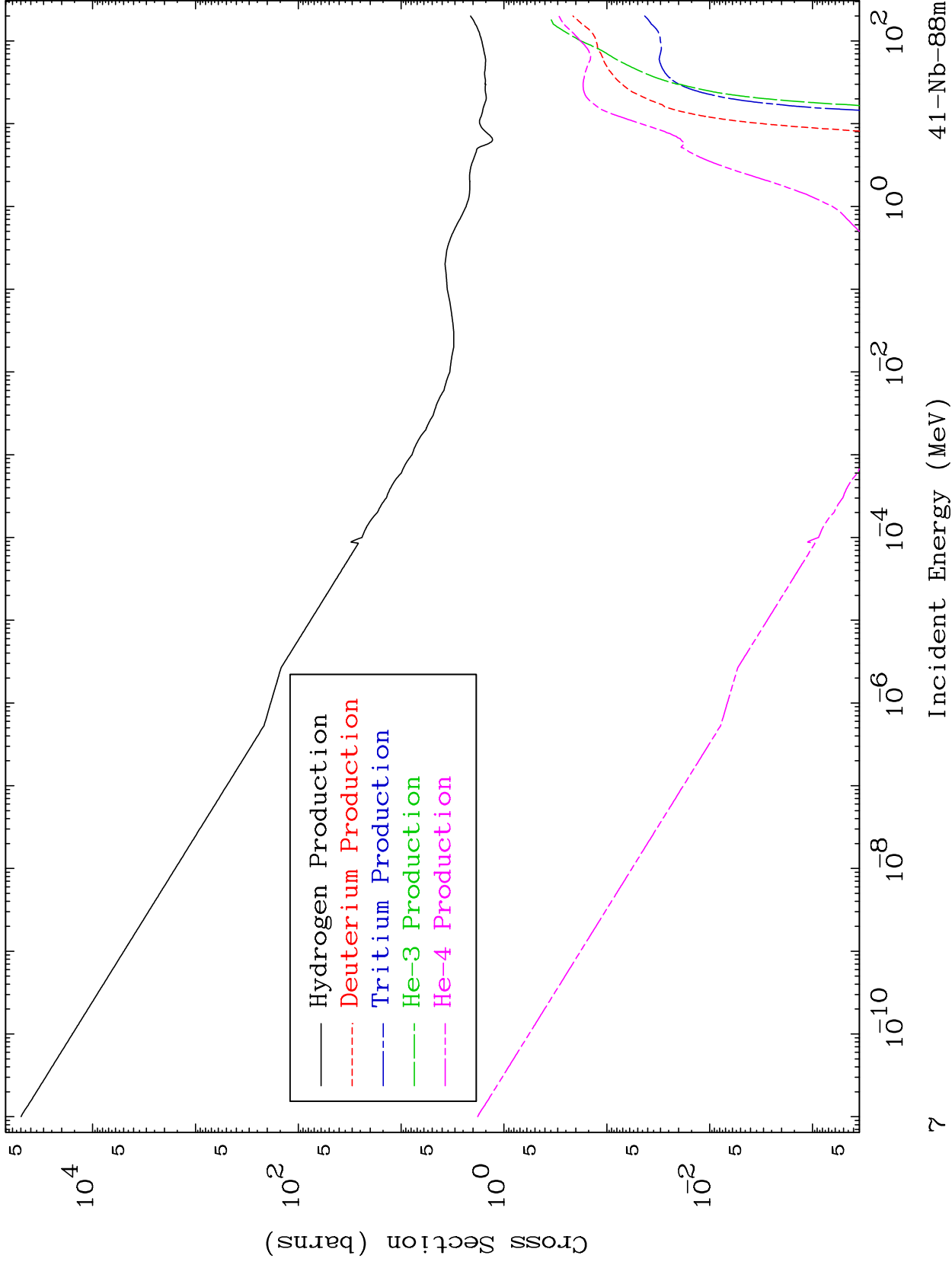
41-Nb-88m



MAT 4111

Particle Production  
293 Kelvin Cross Sections

41-Nb-88m

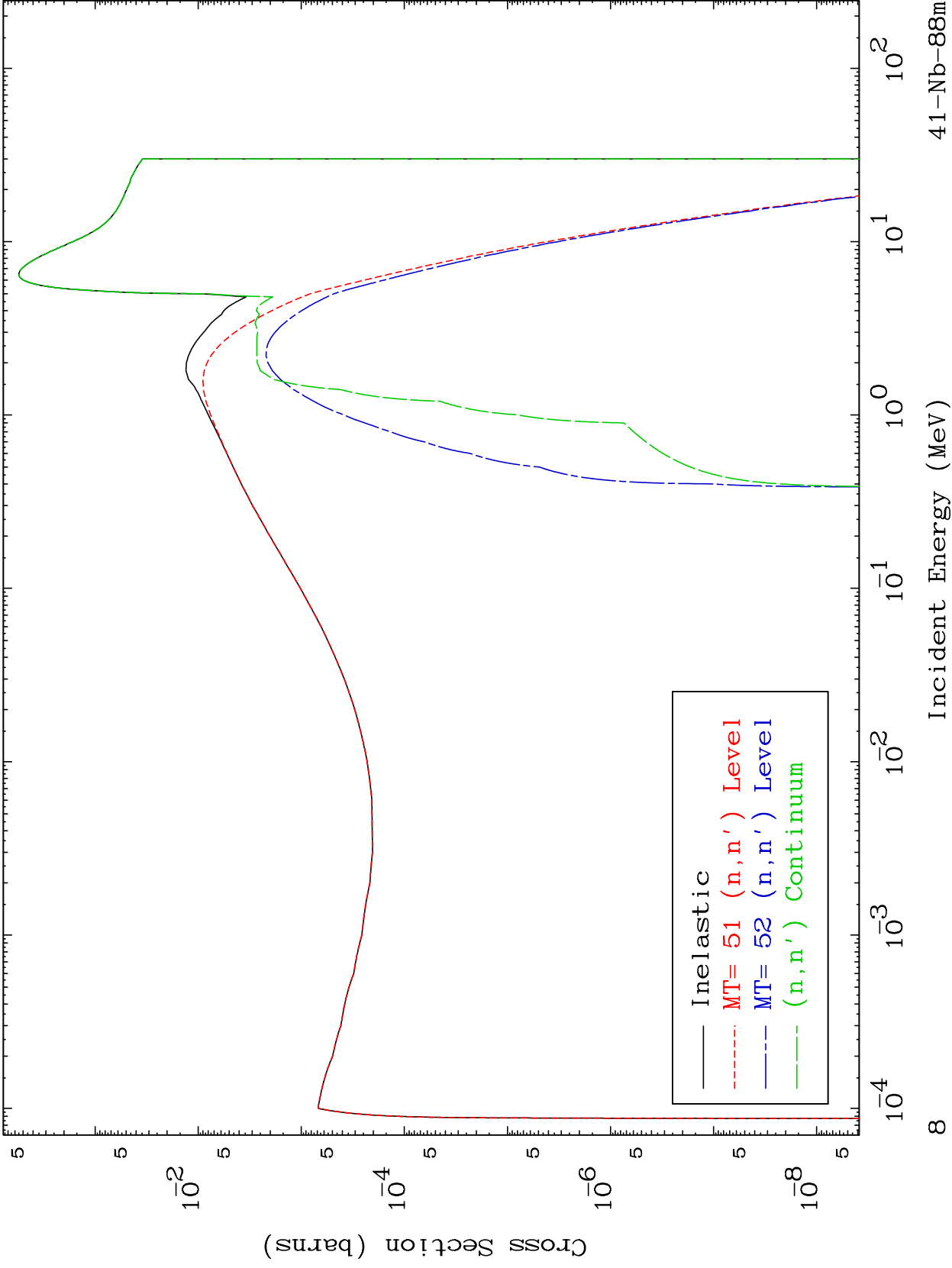




MAT 4111

(n,n') Levels  
293 Kelvin Cross Sections

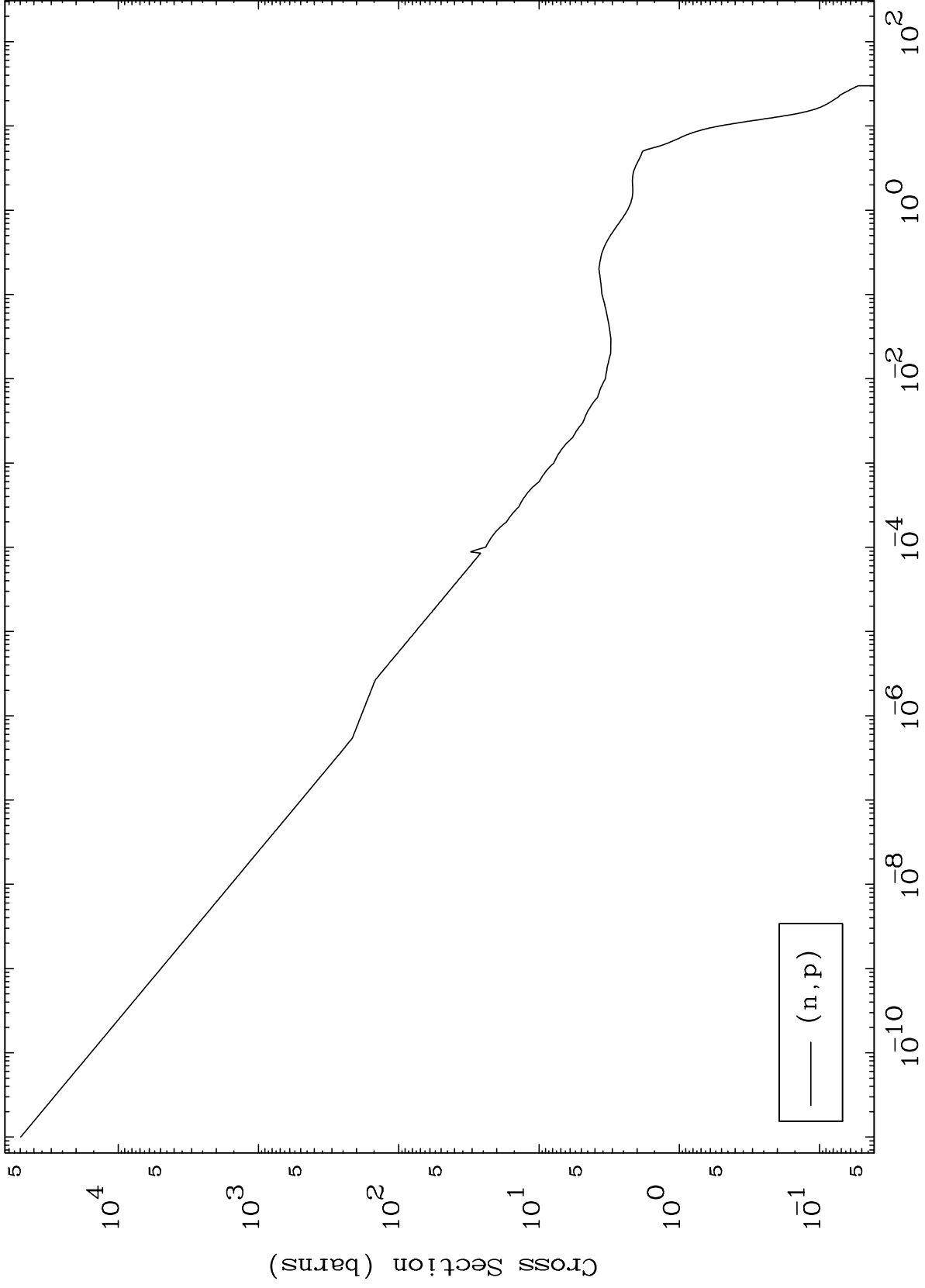
41-Nb-88m



MAT 4111

(n,p) Levels  
293 Kelvin Cross Sections

41-Nb-88m

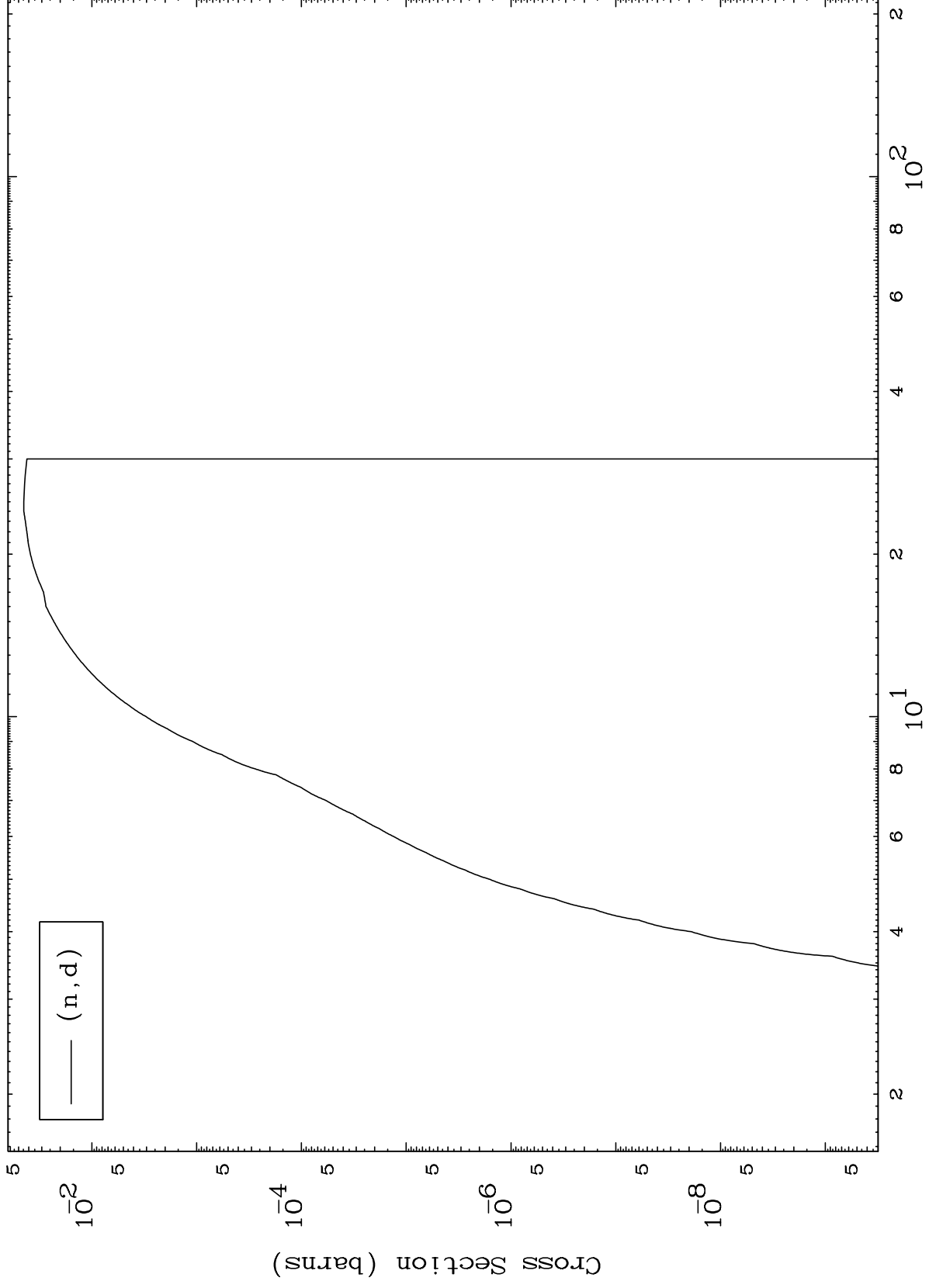


(n,p)

MAT 41111

(n,d) Levels  
293 Kelvin Cross Sections

41-Nb-88m



10

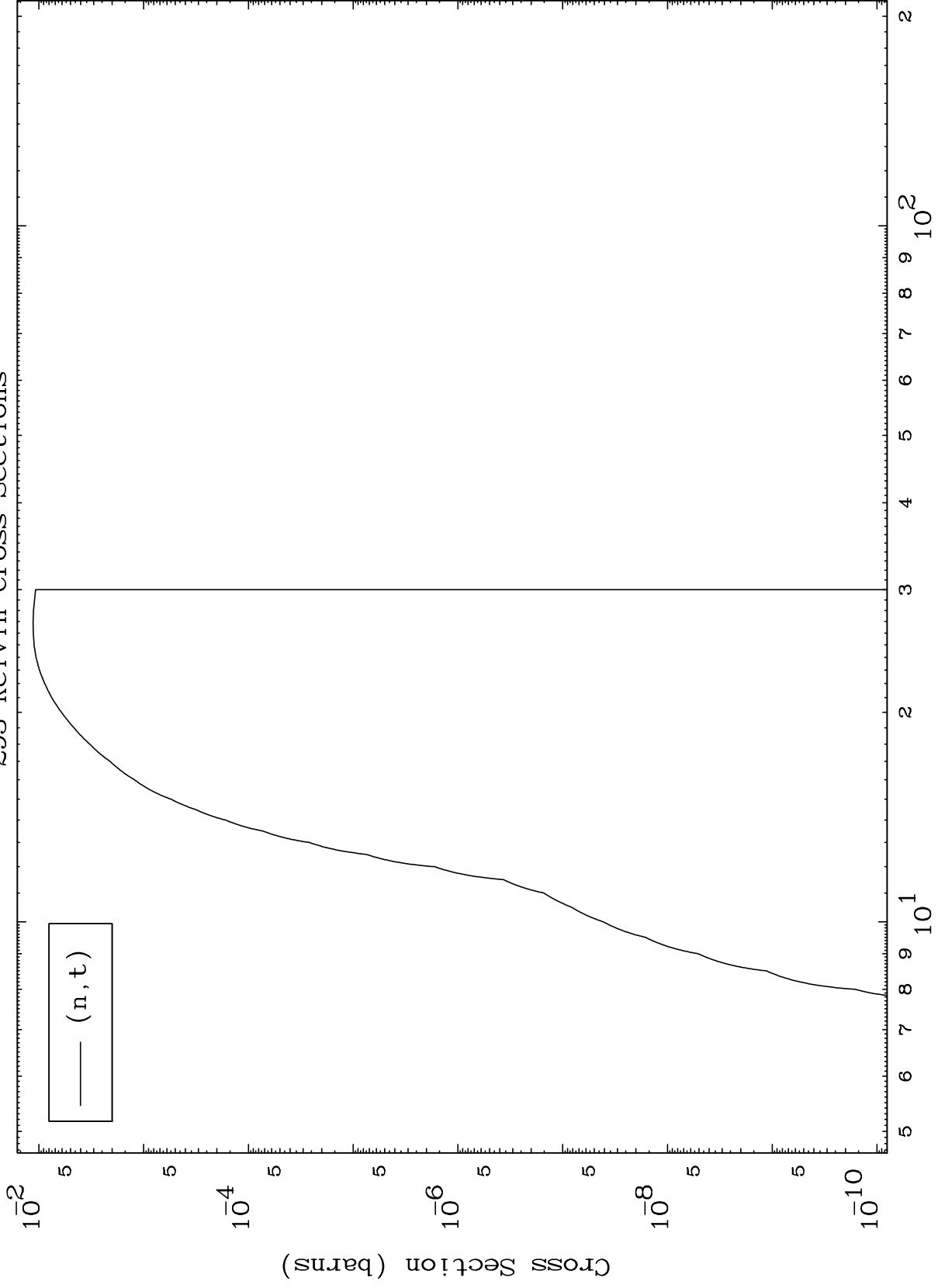
Incident Energy (MeV)

41-Nb-88m

MAT 41111

(n,t) Levels  
293 Kelvin Cross Sections

41-Nb-88m



11

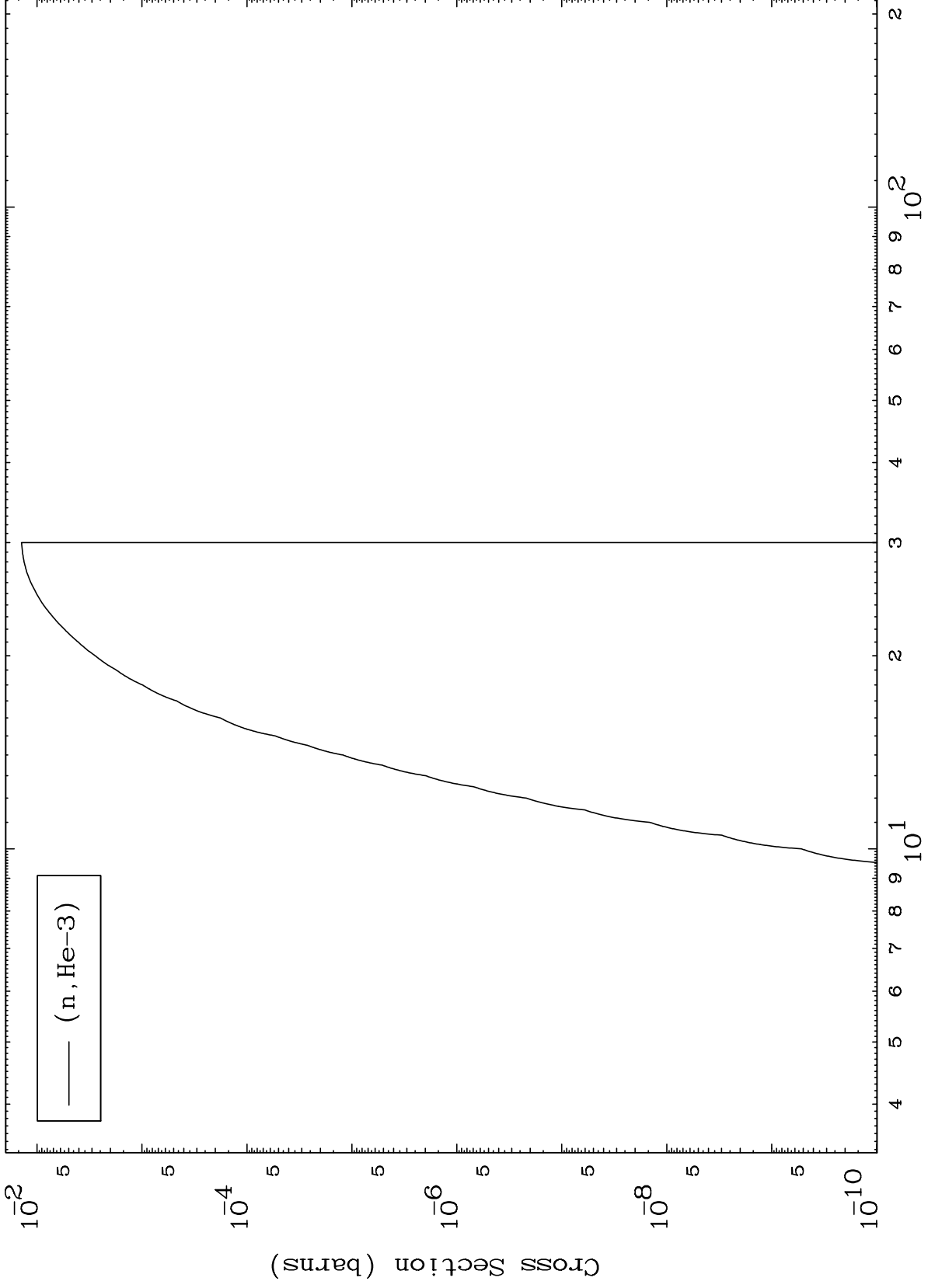
Incident Energy (MeV)

41-Nb-88m

MAT 4111

(n,He3) Levels  
293 Kelvin Cross Sections

41-Nb-88m



12

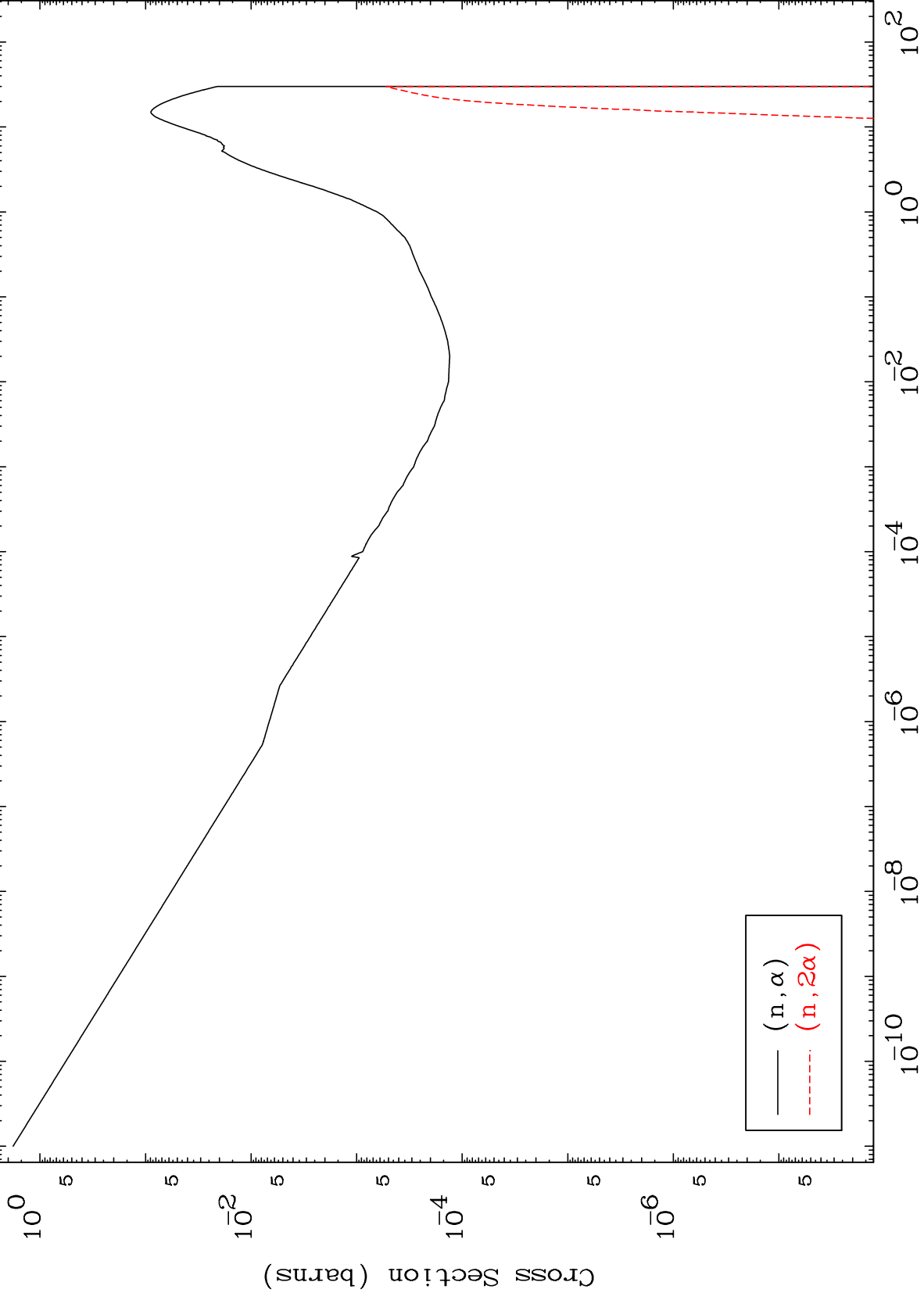
Incident Energy (MeV)

41-Nb-88m

MAT 4111

(n,α) Levels  
293 Kelvin Cross Sections

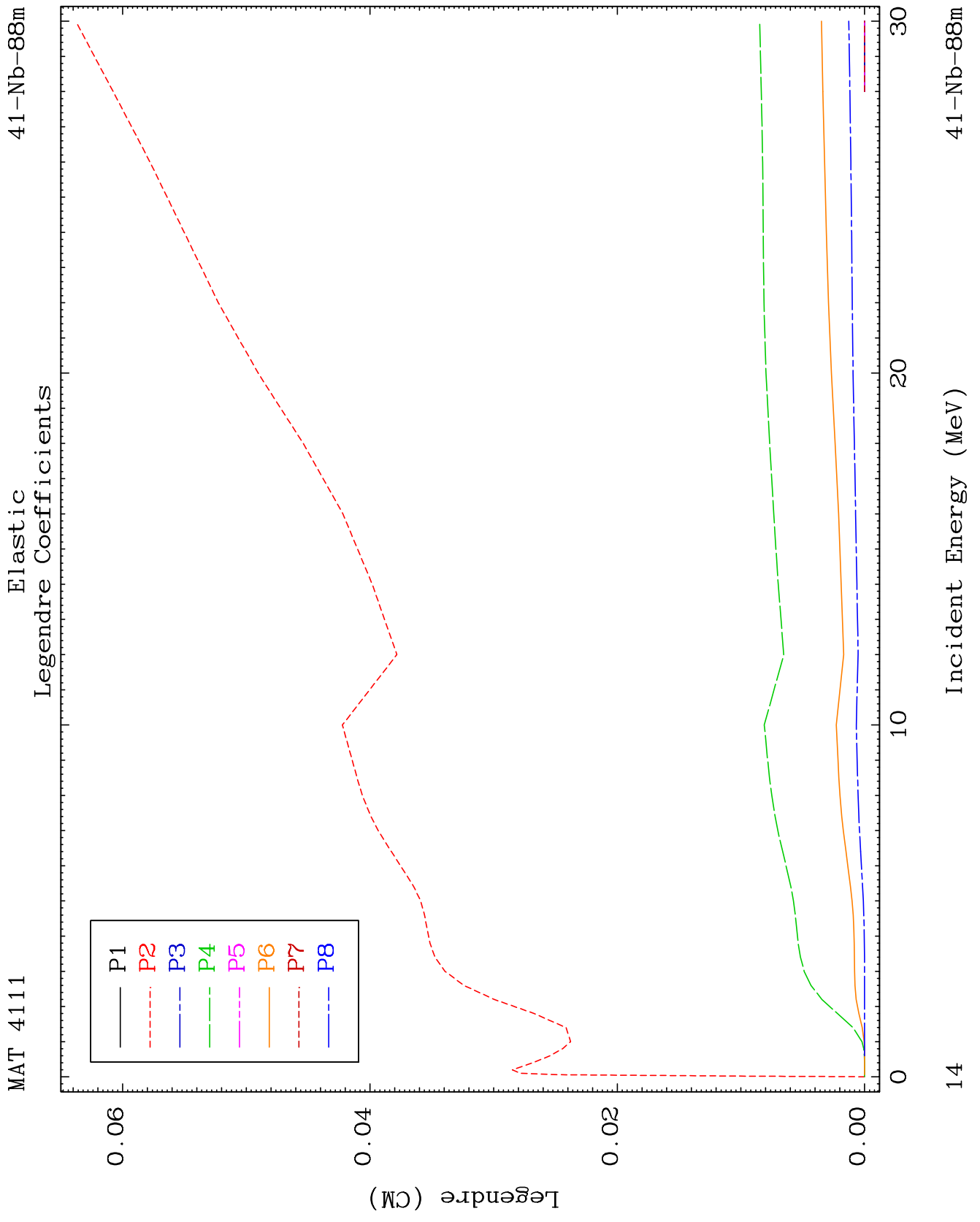
41-Nb-88m



41-Nb-88m

Incident Energy (MeV)

13



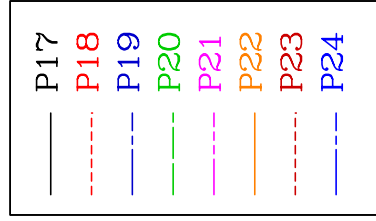




MAT 4111

Elastic Legendre Coefficients

41-Nb-88m



$\times 10^{-6}$

2.0

1.5

Legendre (CM)

1.0

0.5

0.0

15

20

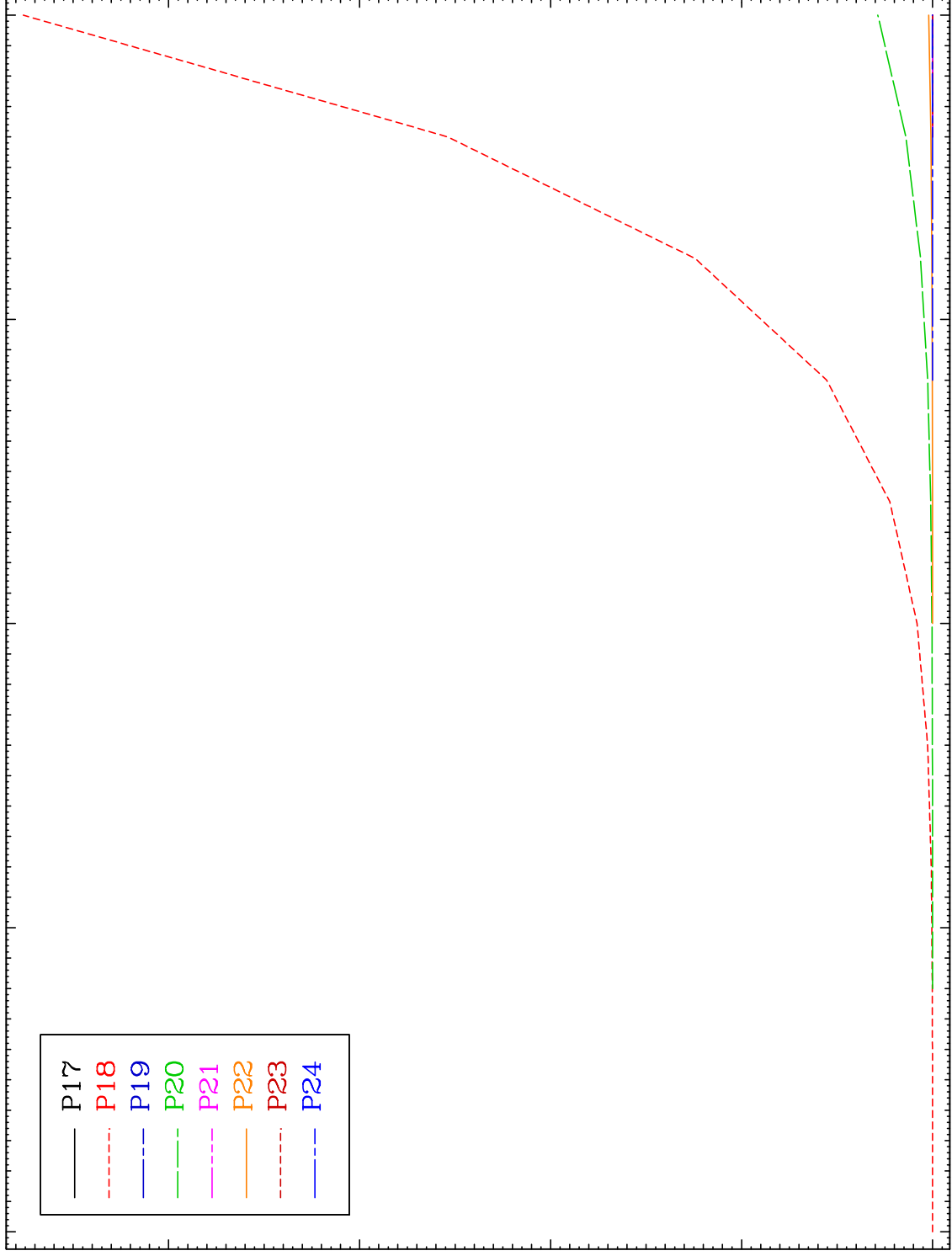
25

30

16

Incident Energy (MeV)

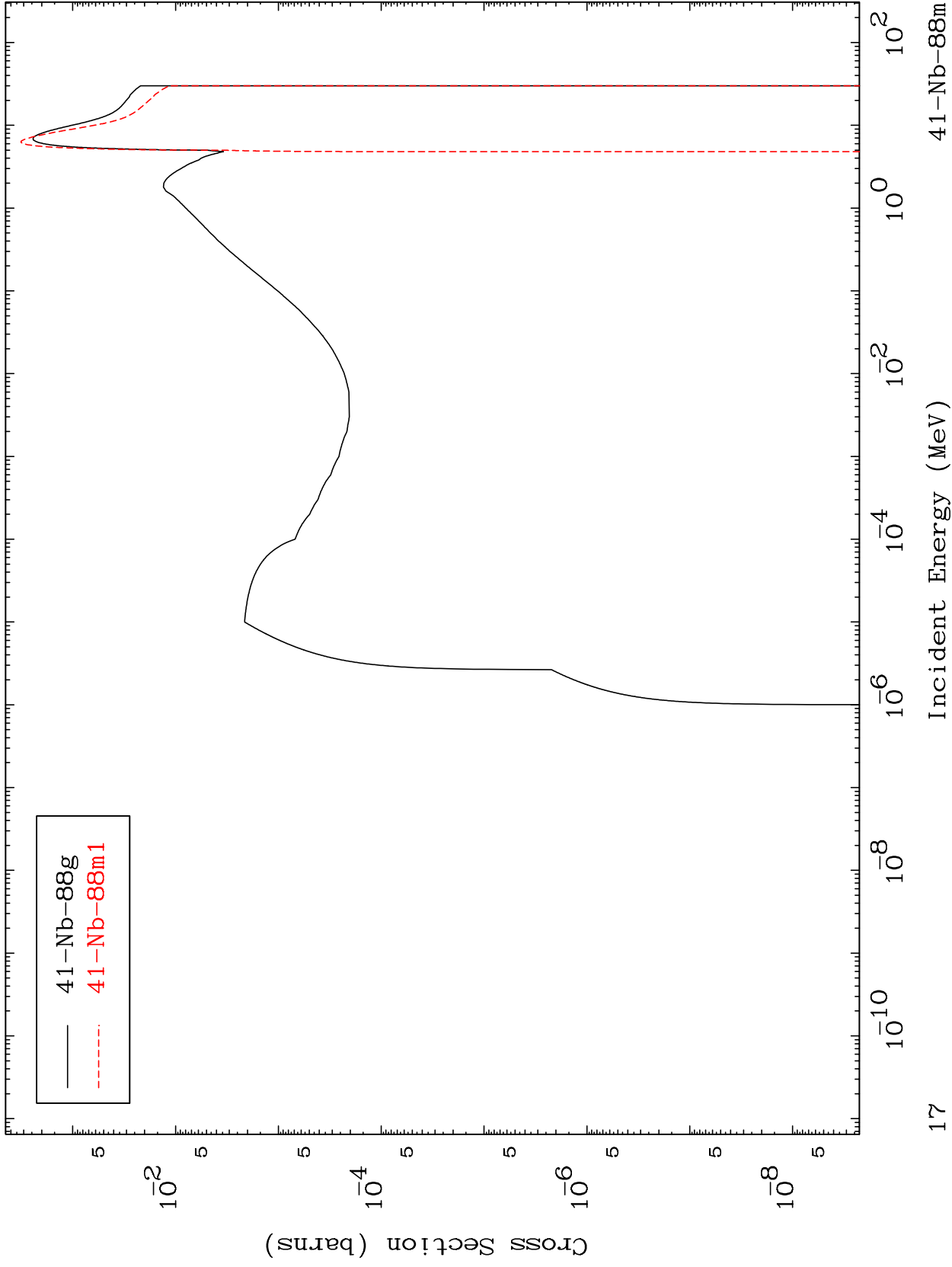
41-Nb-88m



MAT 4111

Inelastic  
Radionuclide Production Cross Section

41-Nb-88m

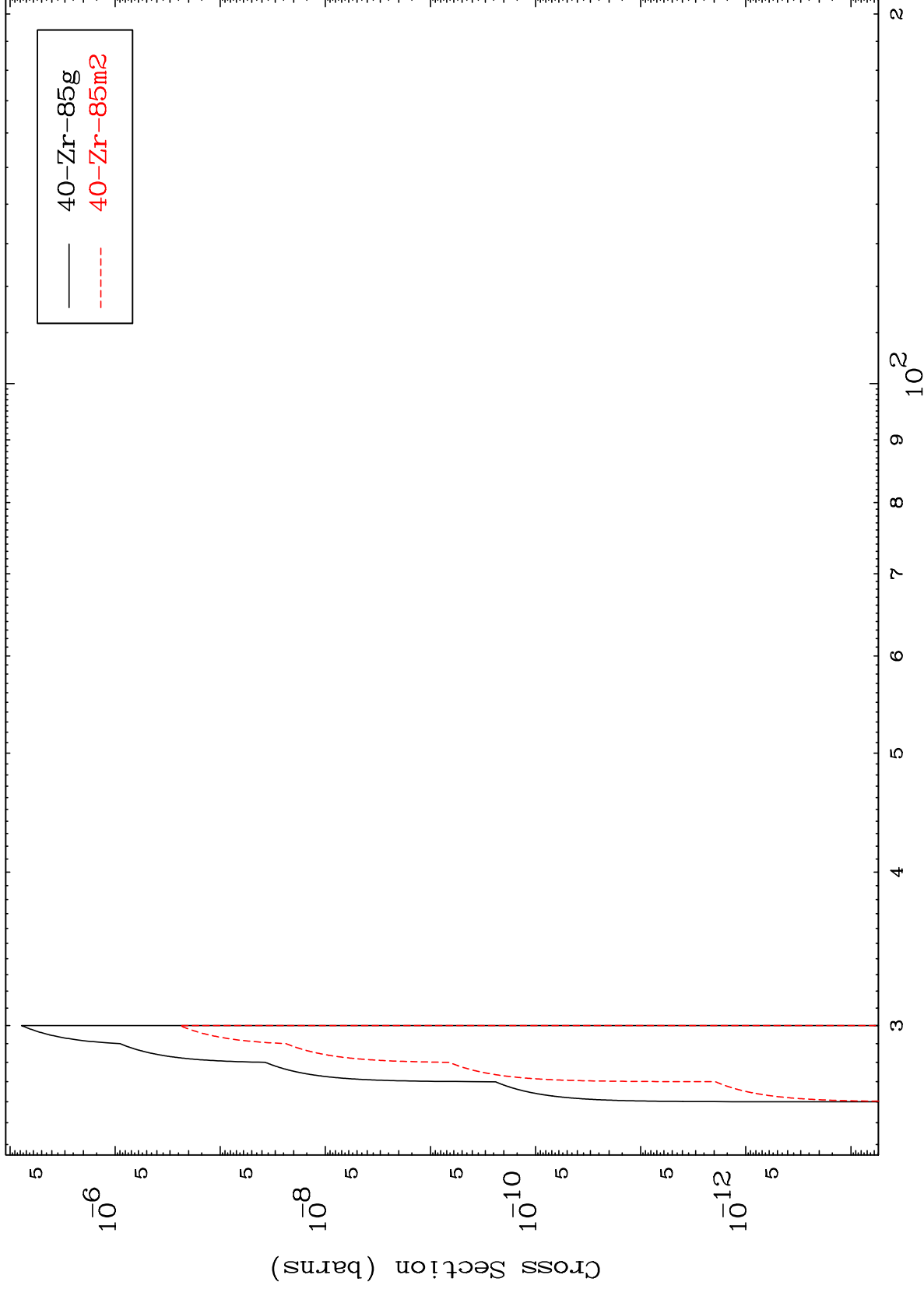


MAT 4111

(n,2n) d

41-Nb-88m

Radionuclide Production Cross Section



18

Incident Energy (MeV)

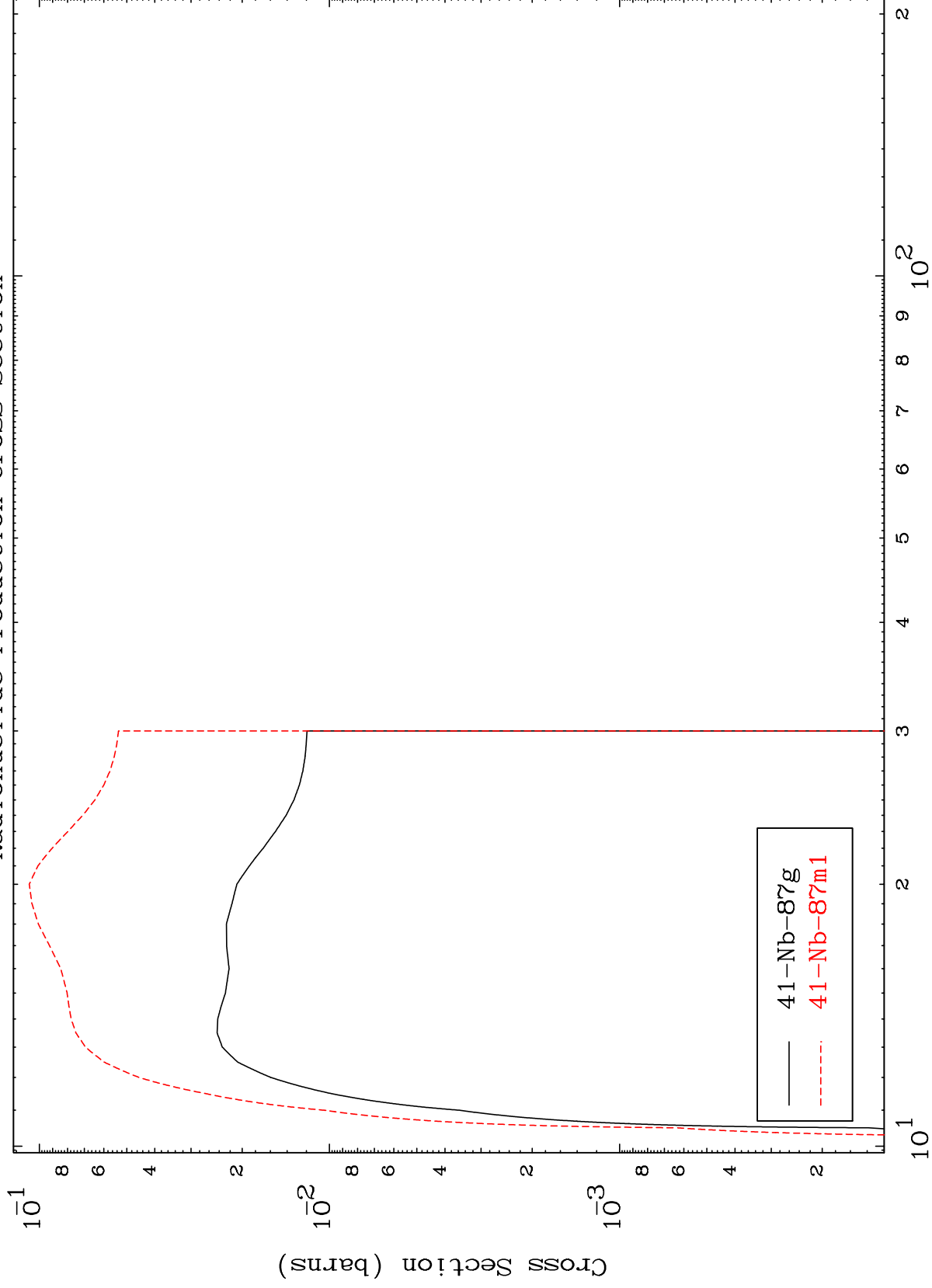
41-Nb-88m

MAT 41111

(n,2n)

41-Nb-88m

Radionuclide Production Cross Section



41-Nb-87g  
41-Nb-87m1

19

Incident Energy (MeV)

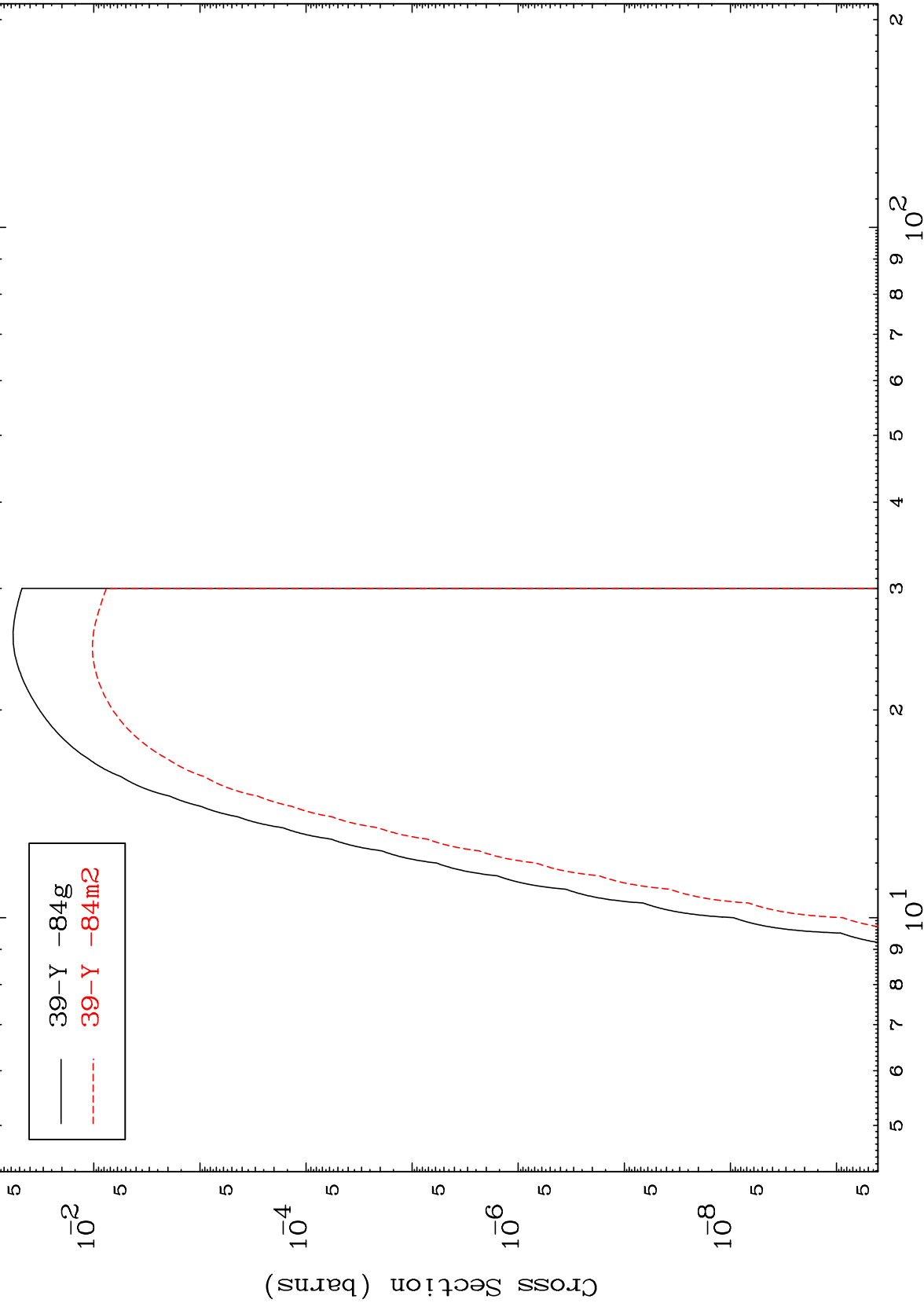
41-Nb-88m

MAT 4111

$(n, n') \alpha$

41-Nb-88m

Radionuclide Production Cross Section



— 39-Y -84g  
- - - 39-Y -84m2

Incident Energy (MeV)

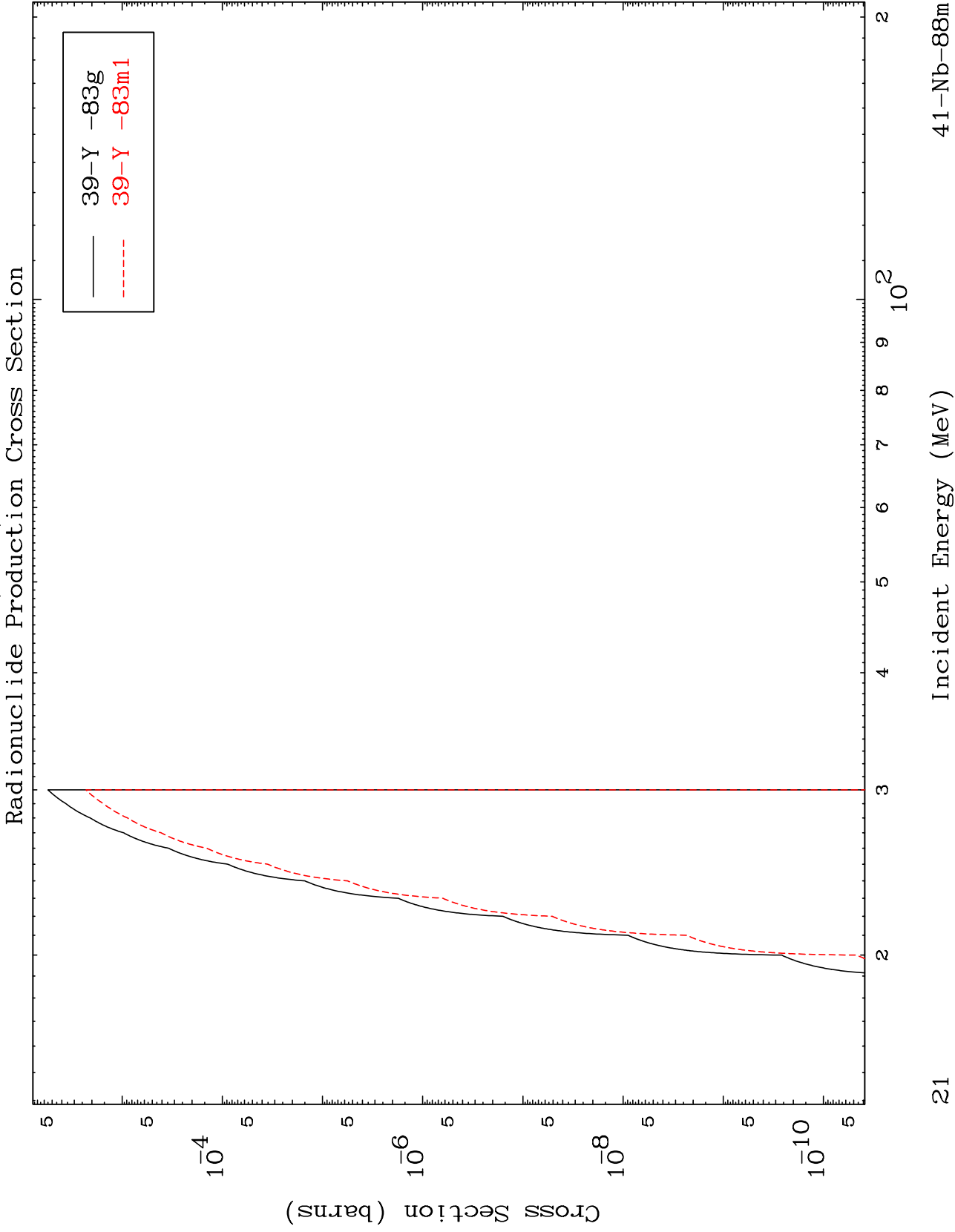
41-Nb-88m

20

MAT 4111

(n,2n)  $\alpha$

41-Nb-88m



21

Incident Energy (MeV)

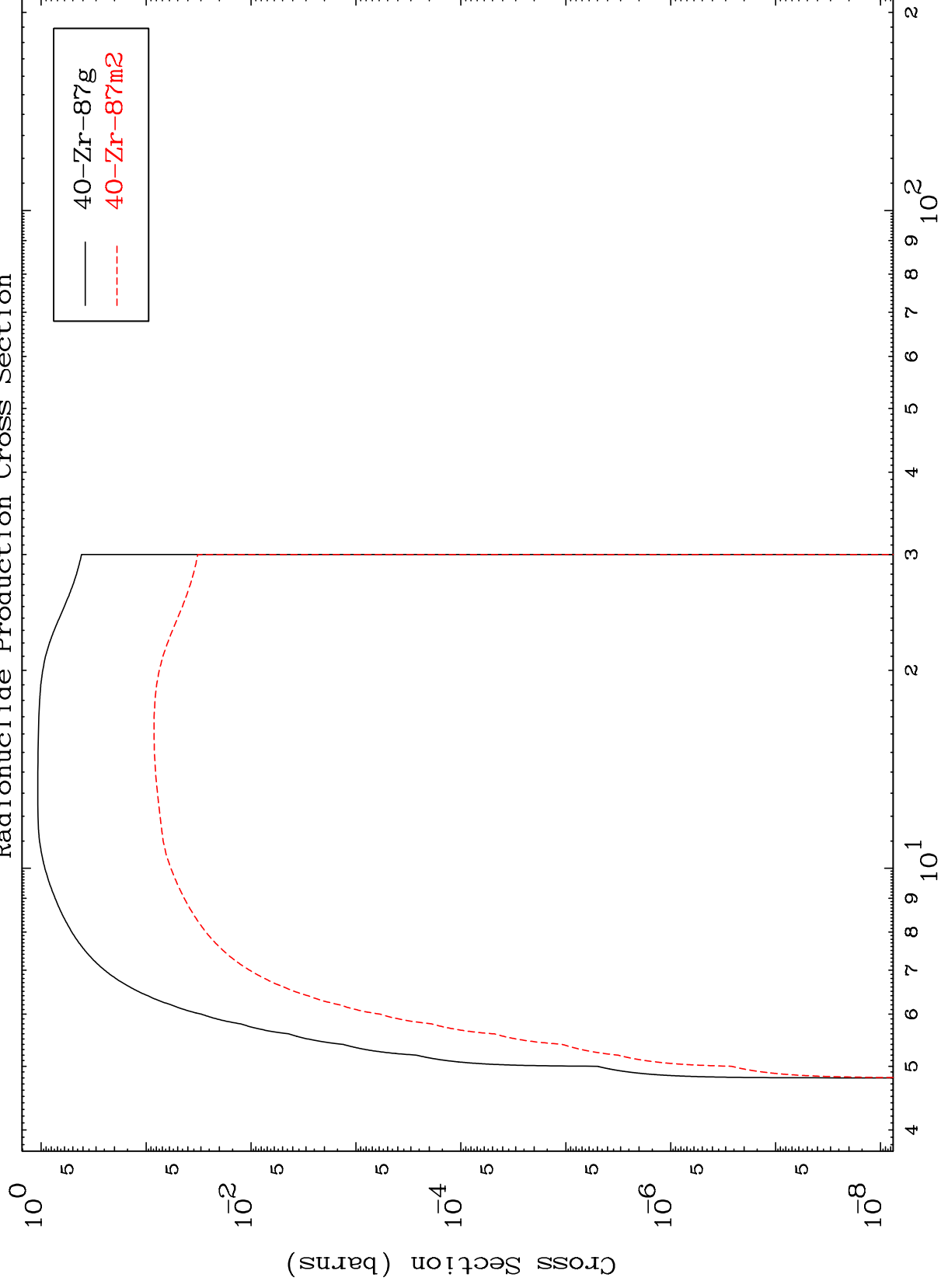
41-Nb-88m

MAT 4111

(n,n') p

41-Nb-88m

Radionuclide Production Cross Section



22

Incident Energy (MeV)

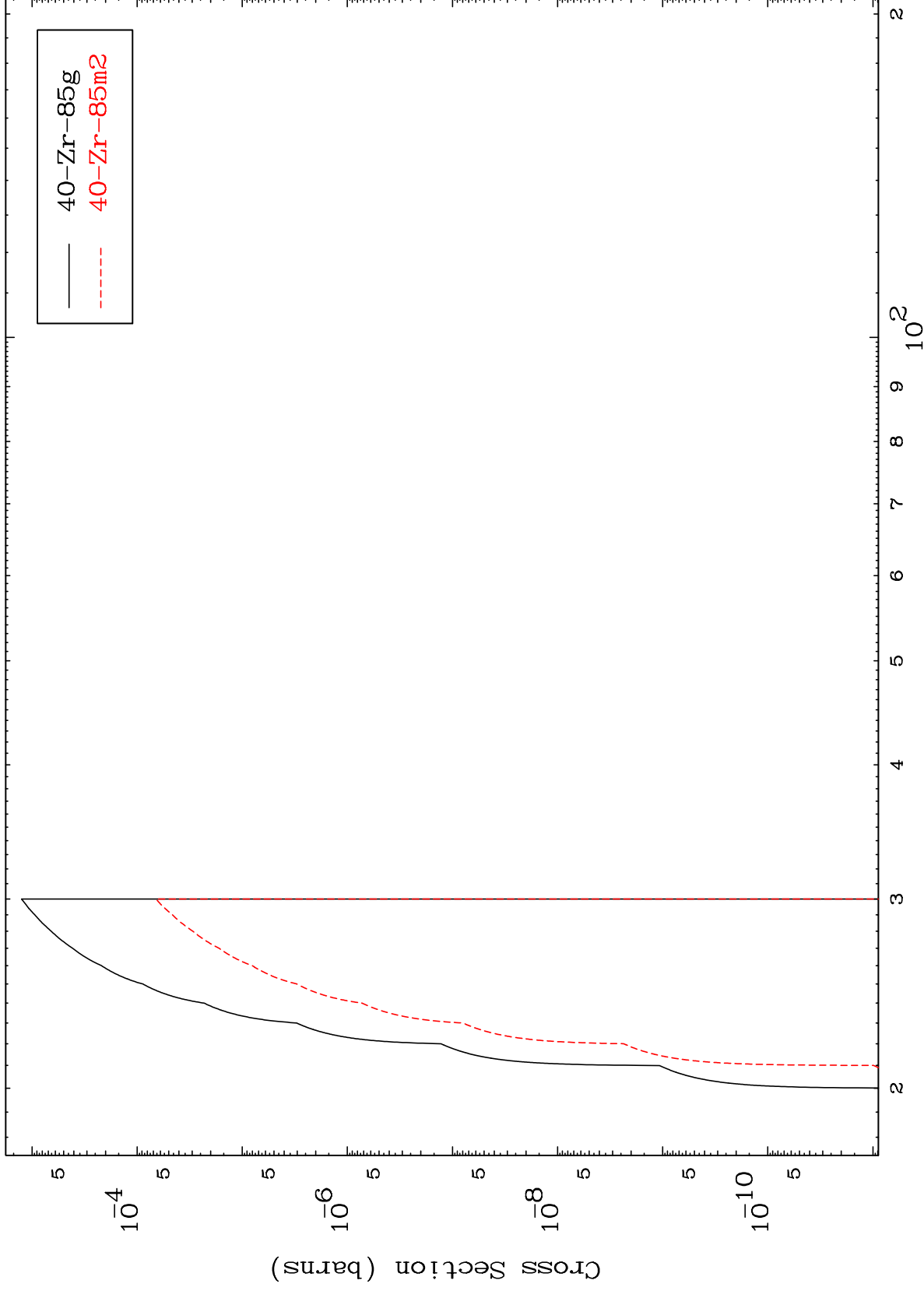
41-Nb-88m

MAT 4111

(n,n') t

41-Nb-88m

Radionuclide Production Cross Section



23

Incident Energy (MeV)

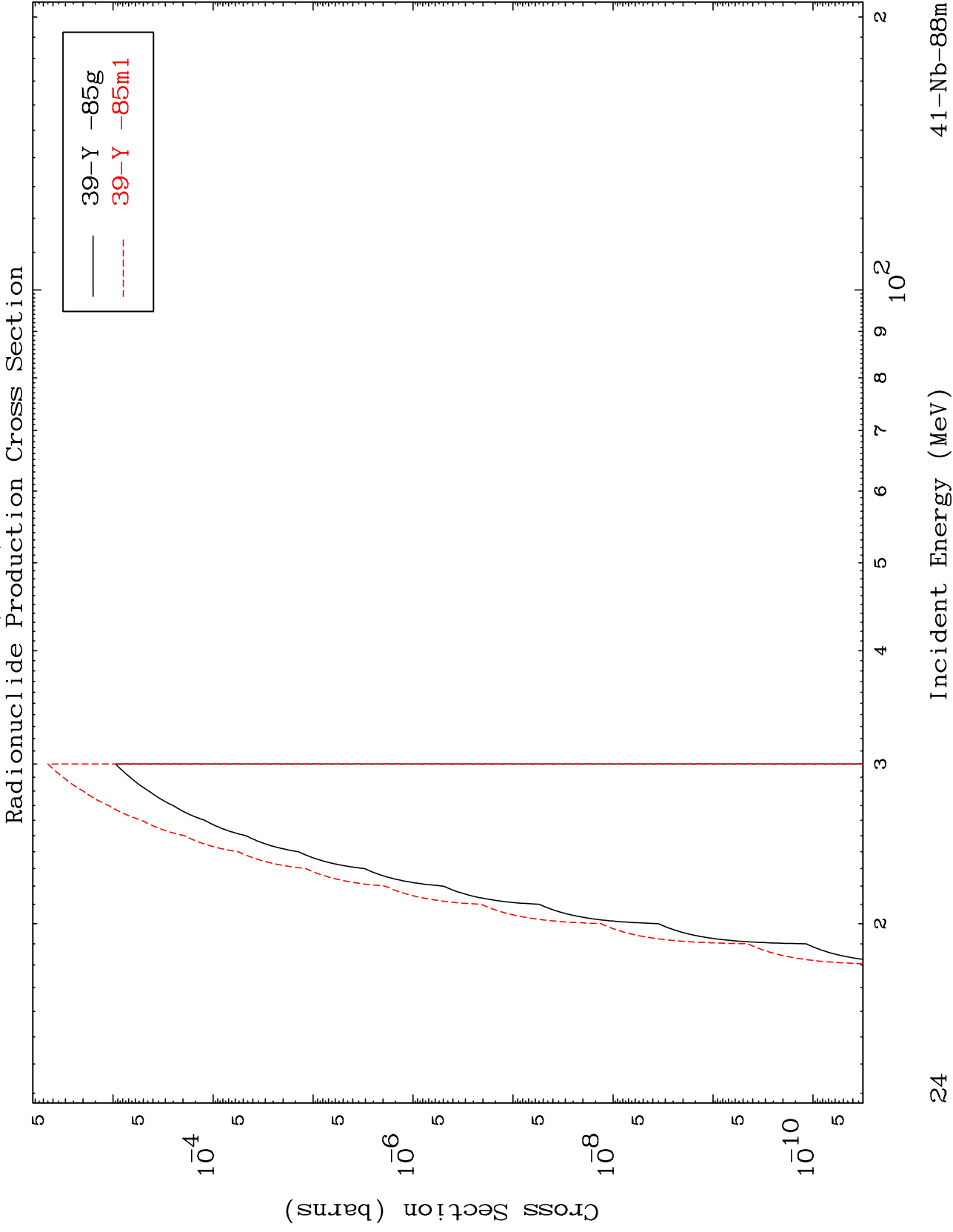
41-Nb-88m



MAT 4111

(n,n') He-3

41-Nb-88m



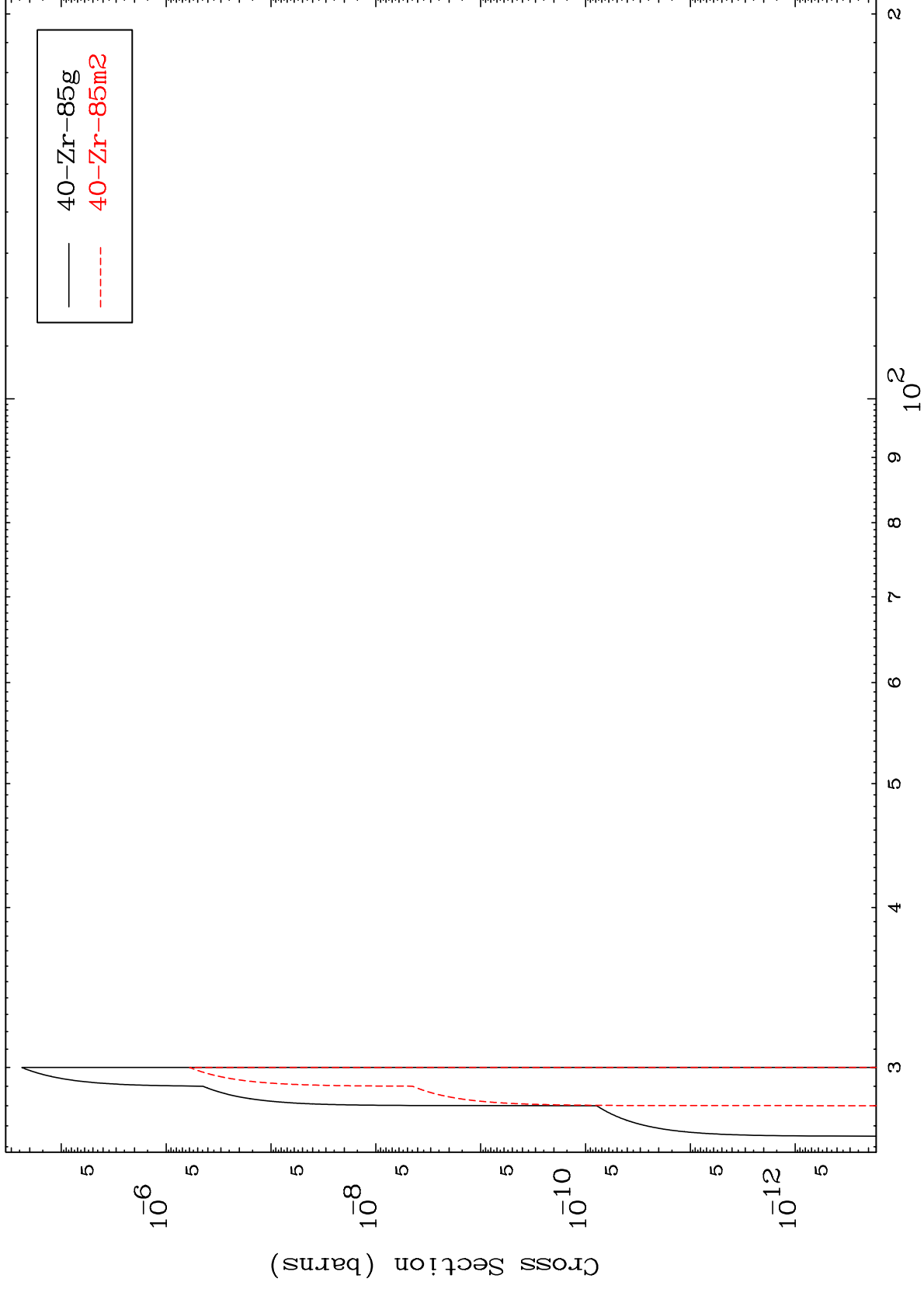
24

MAT 4111

(n,3n) p

41-Nb-88m

Radionuclide Production Cross Section



25

Incident Energy (MeV)

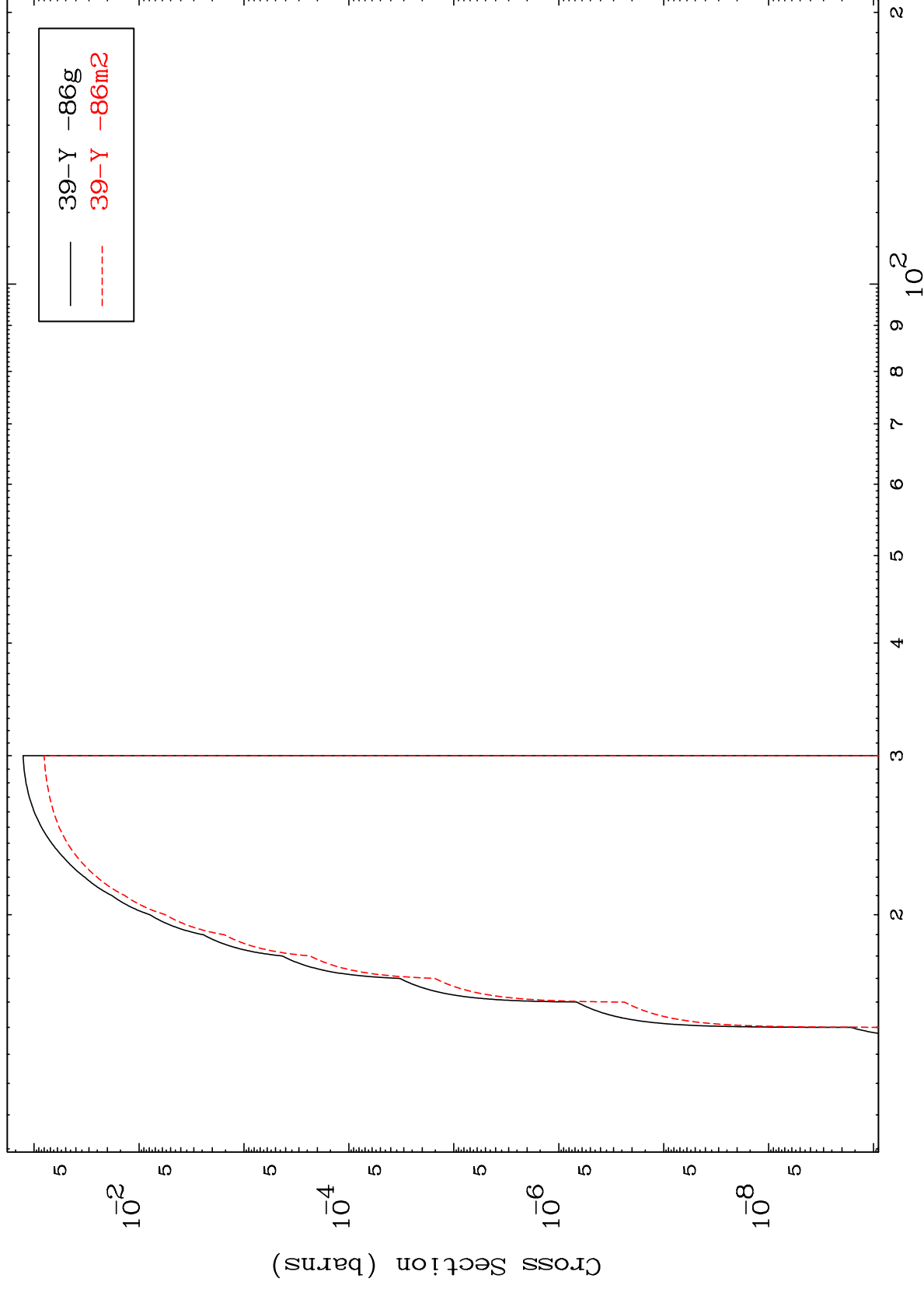
41-Nb-88m

MAT 4111

(n,2n) p

41-Nb-88m

Radionuclide Production Cross Section



26

Incident Energy (MeV)

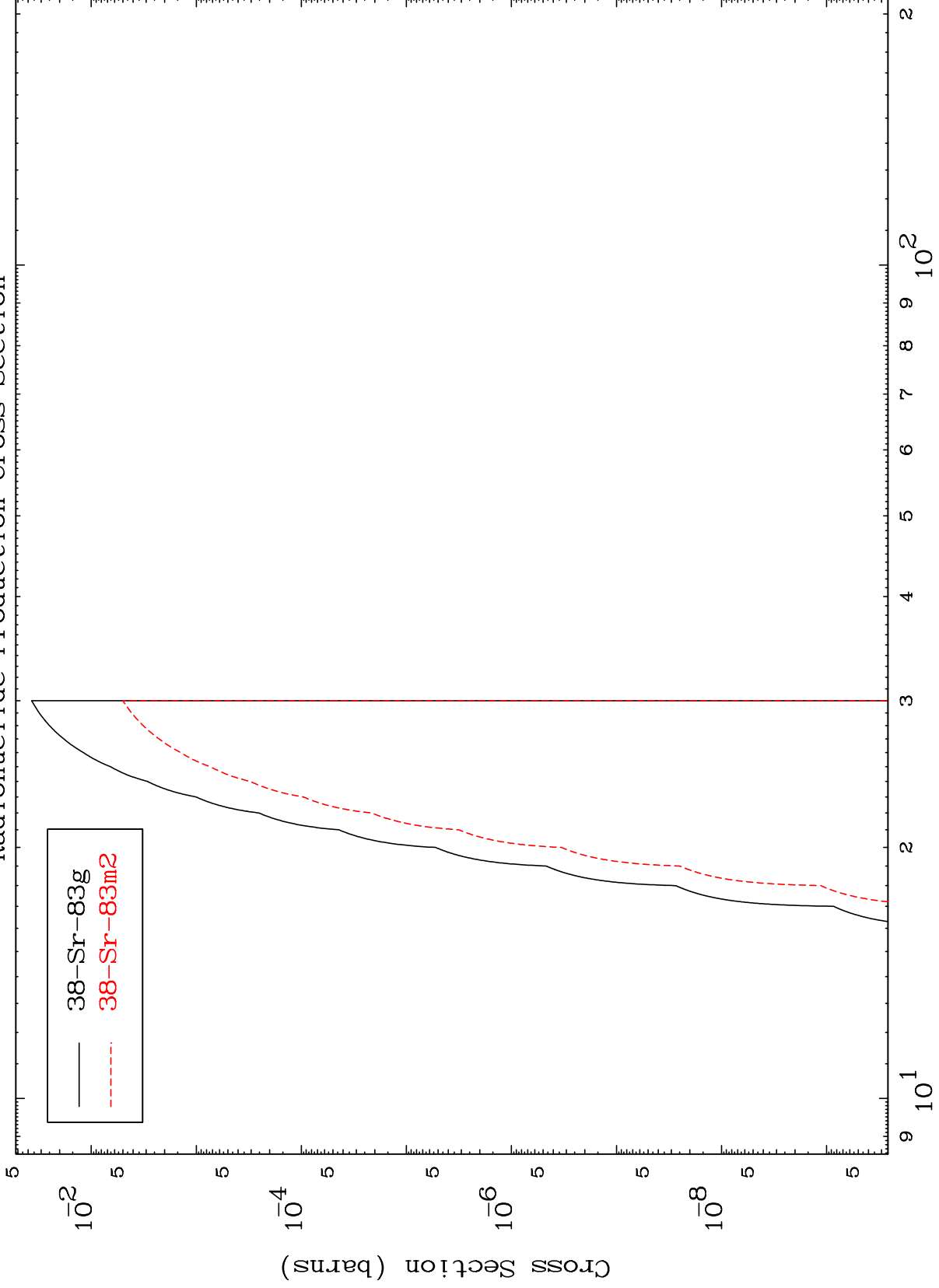
41-Nb-88m

MAT 4111

(n,n') p  $\alpha$

41-Nb-88m

Radionuclide Production Cross Section



38-Sr-83g  
38-Sr-83m2

27

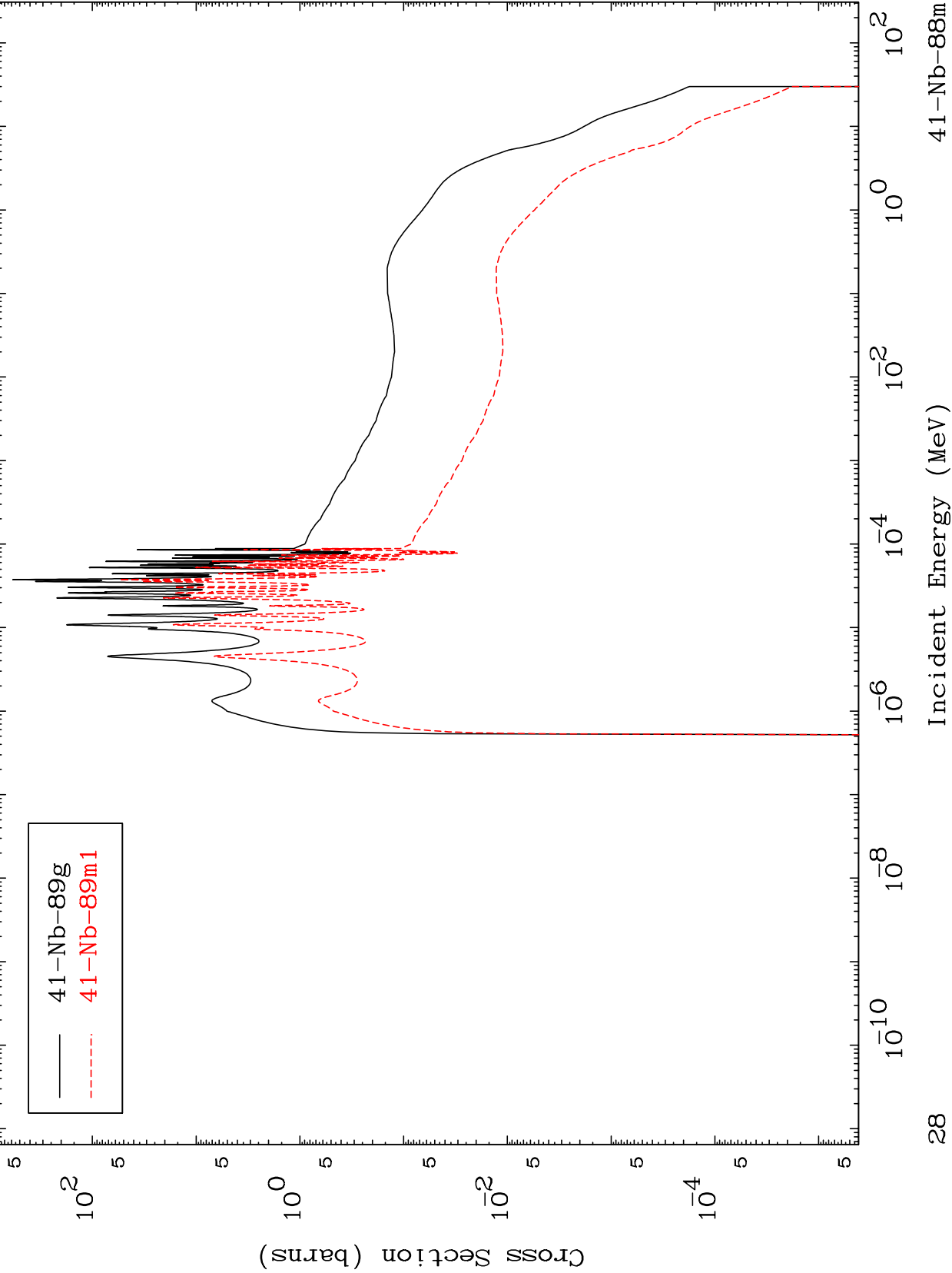
Incident Energy (MeV)

41-Nb-88m

MAT 4111

41-Nb-88m

(n,  $\gamma$ )  
Radionuclide Production Cross Section



28

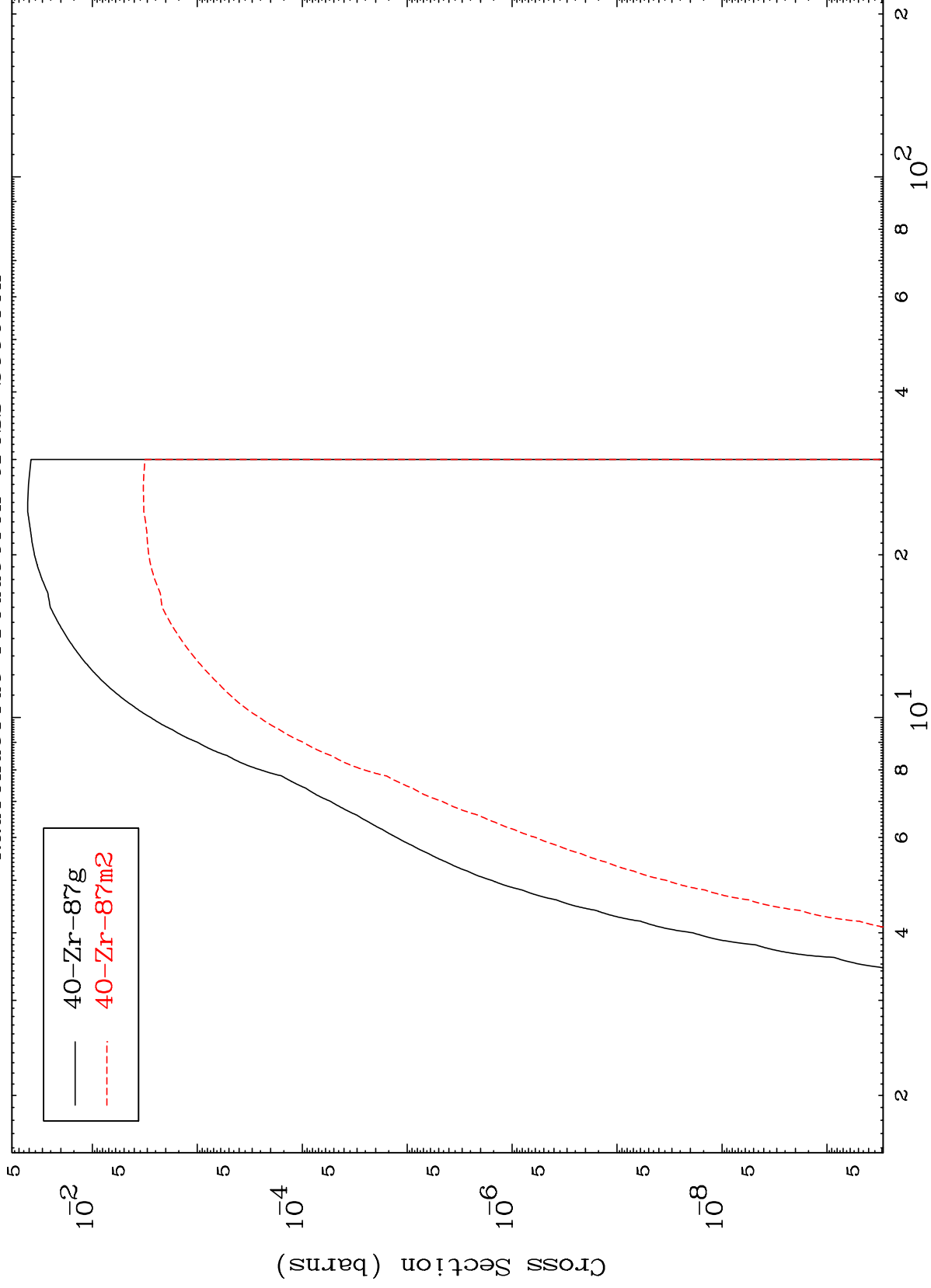
41-Nb-88m

MAT 4111

(n,d)

41-Nb-88m

Radionuclide Production Cross Section



— 40-Zr-87g  
- - - 40-Zr-87m2

29

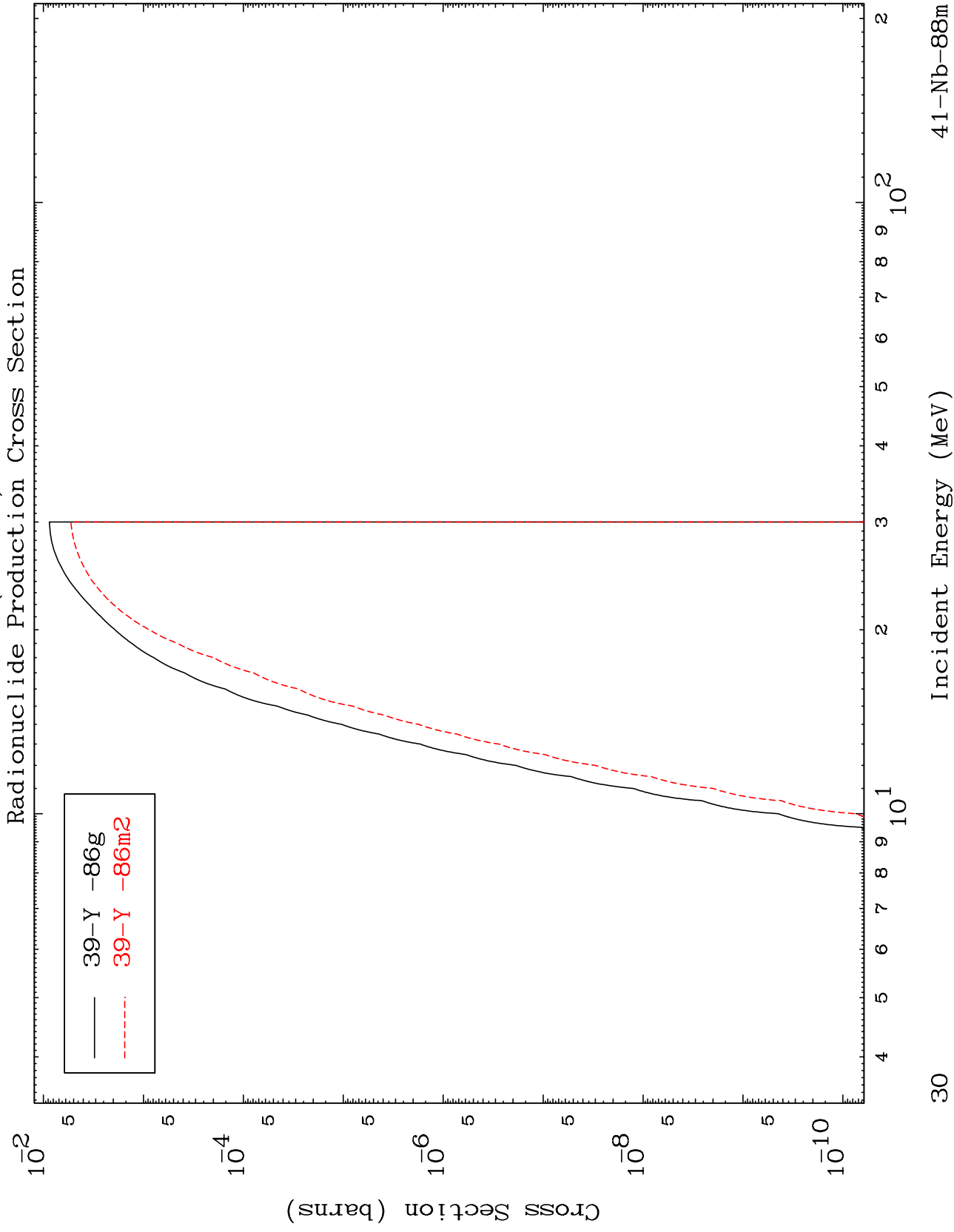
Incident Energy (MeV)

41-Nb-88m

MAT 4111

(n,He-3)

41-Nb-88m



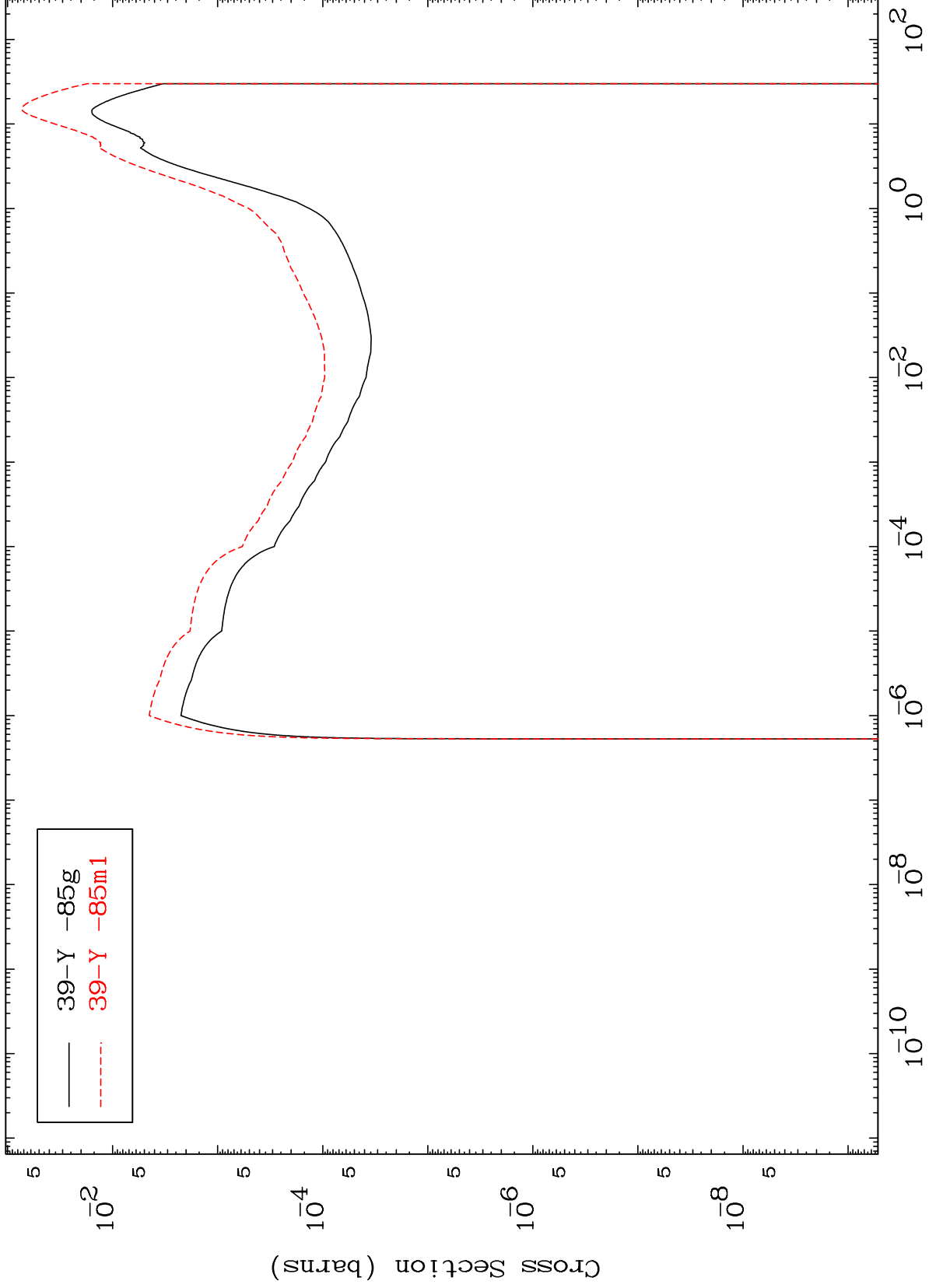
30

MAT 4111

(n,  $\alpha$ )

41-Nb-88m

Radionuclide Production Cross Section



31

Incident Energy (MeV)

41-Nb-88m

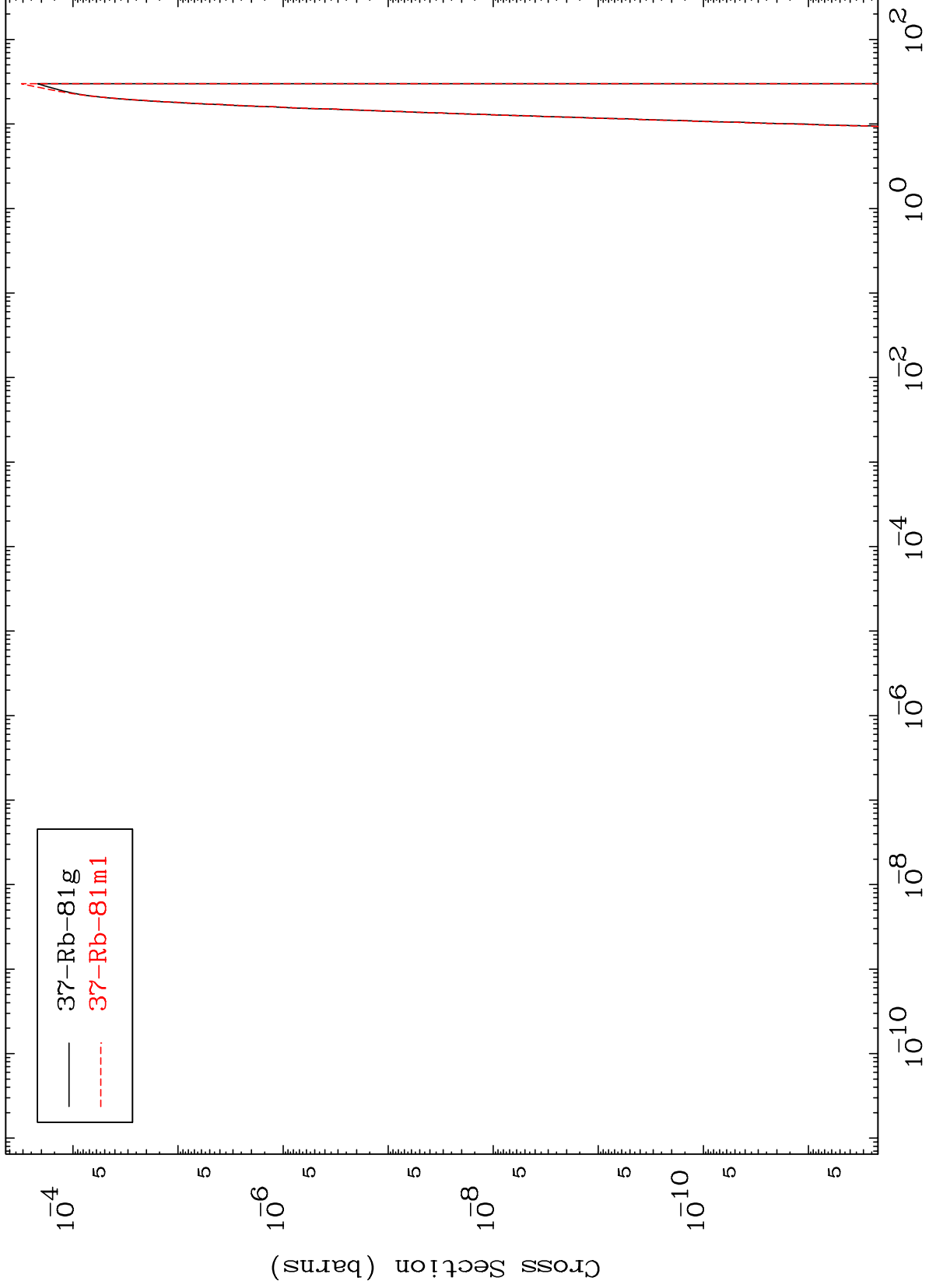


MAT 4111

(n,2α)

41-Nb-88m

Radionuclide Production Cross Section



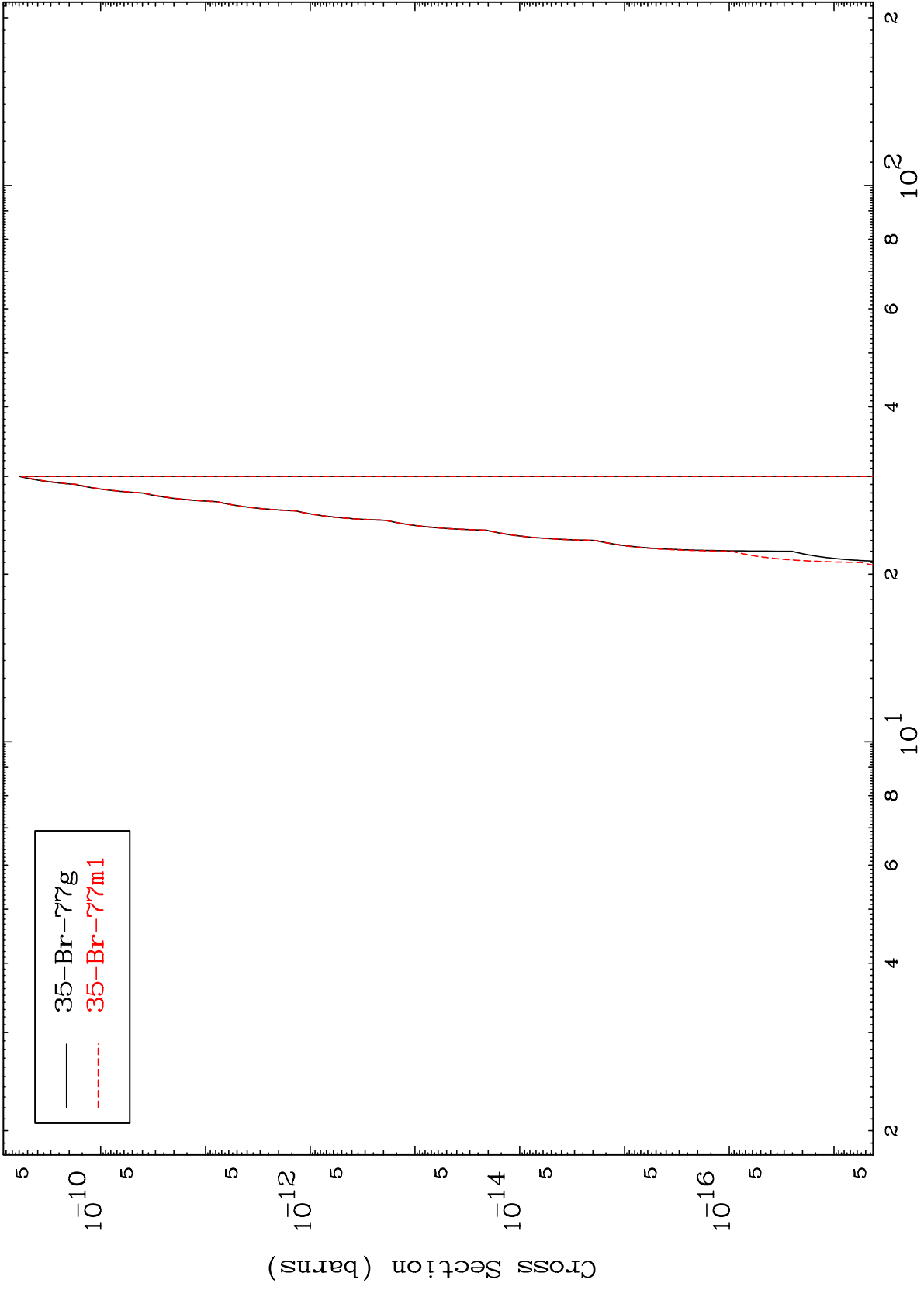
— 37-Rb-81g  
- - - 37-Rb-81m1

MAT 4111

(n, 3α)

41-Nb-88m

Radionuclide Production Cross Section



33

Incident Energy (MeV)

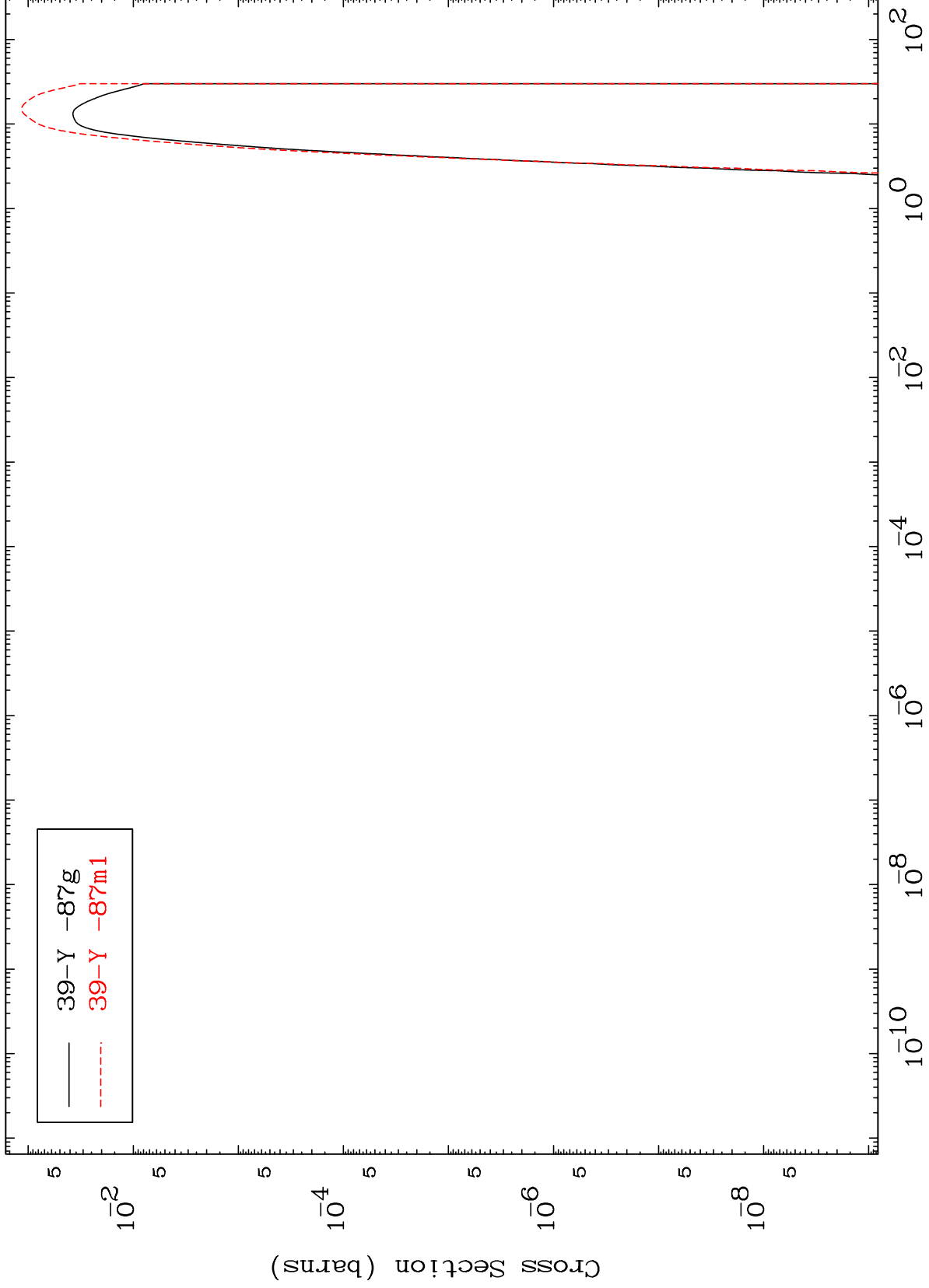
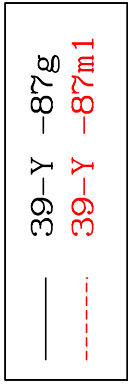
41-Nb-88m

MAT 4111

(n,2p)

41-Nb-88m

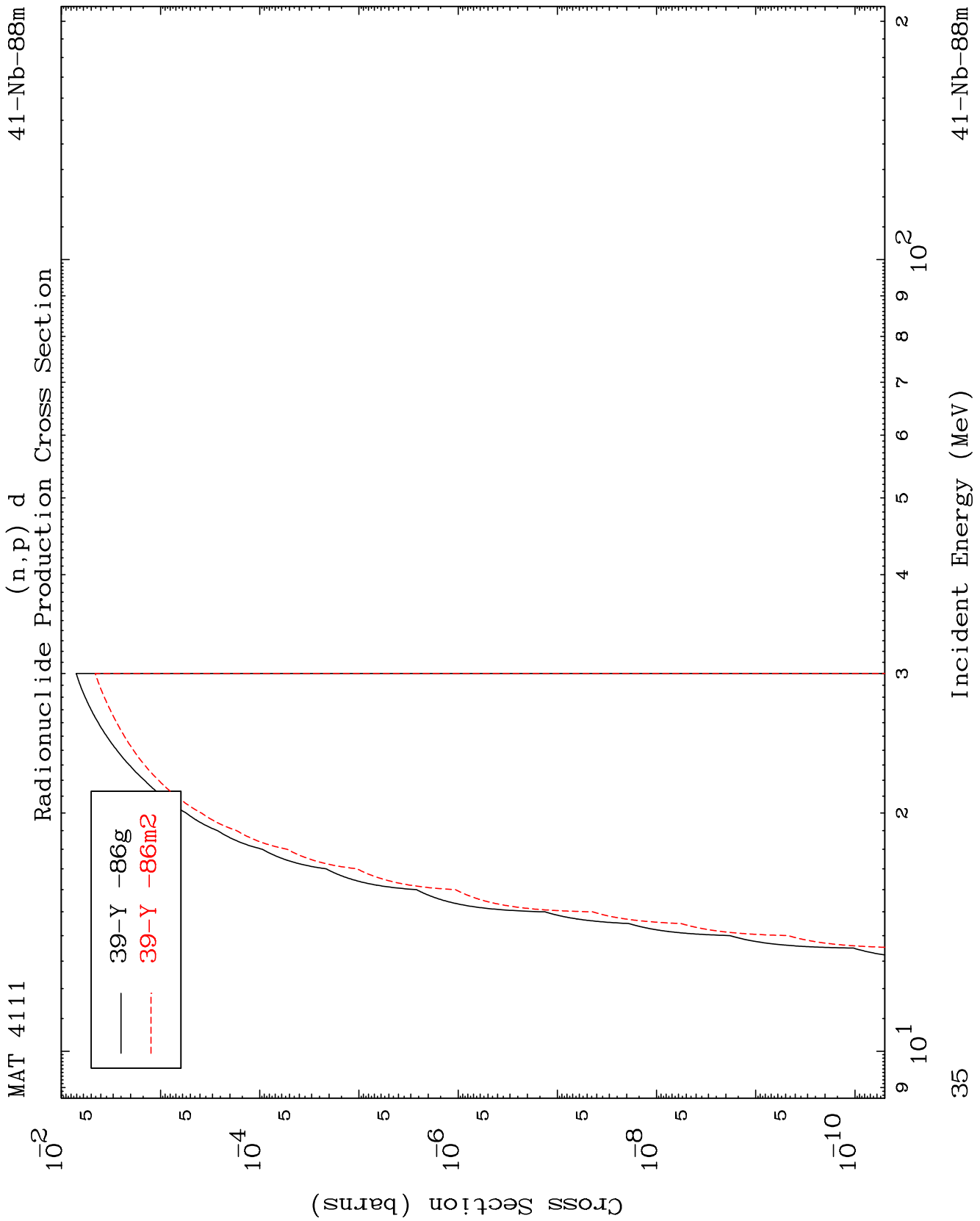
Radionuclide Production Cross Section



34

Incident Energy (MeV)

41-Nb-88m

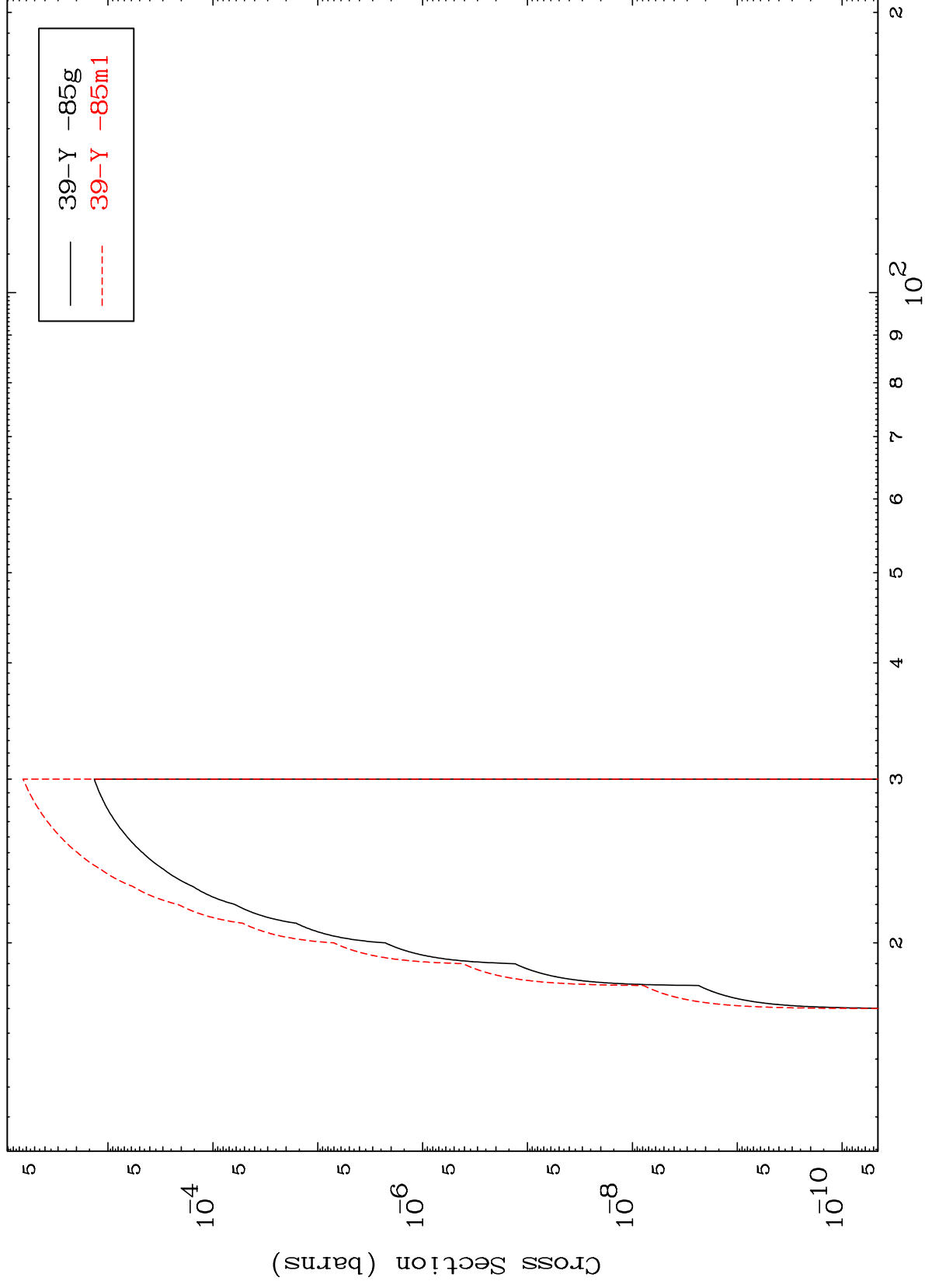


MAT 4111

(n,p) t

41-Nb-88m

Radionuclide Production Cross Section



36

Incident Energy (MeV)

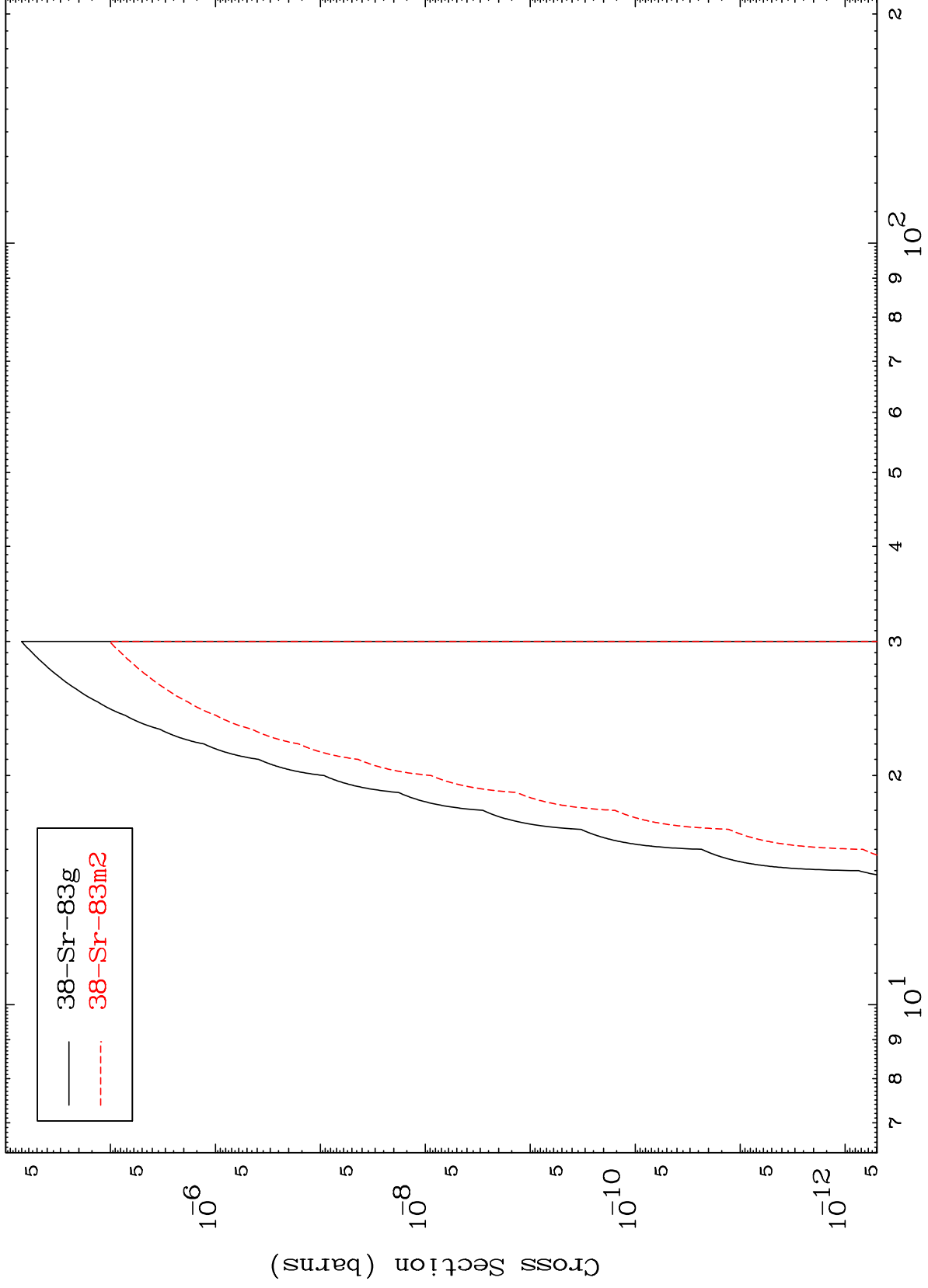
41-Nb-88m

MAT 4111

(n,d)  $\alpha$

41-Nb-88m

Radionuclide Production Cross Section



37

Incident Energy (MeV)

41-Nb-88m