

Program EVALPLOT
(Version 2018-1)

by

Dermott E. Cullen
(Present Contact Information)

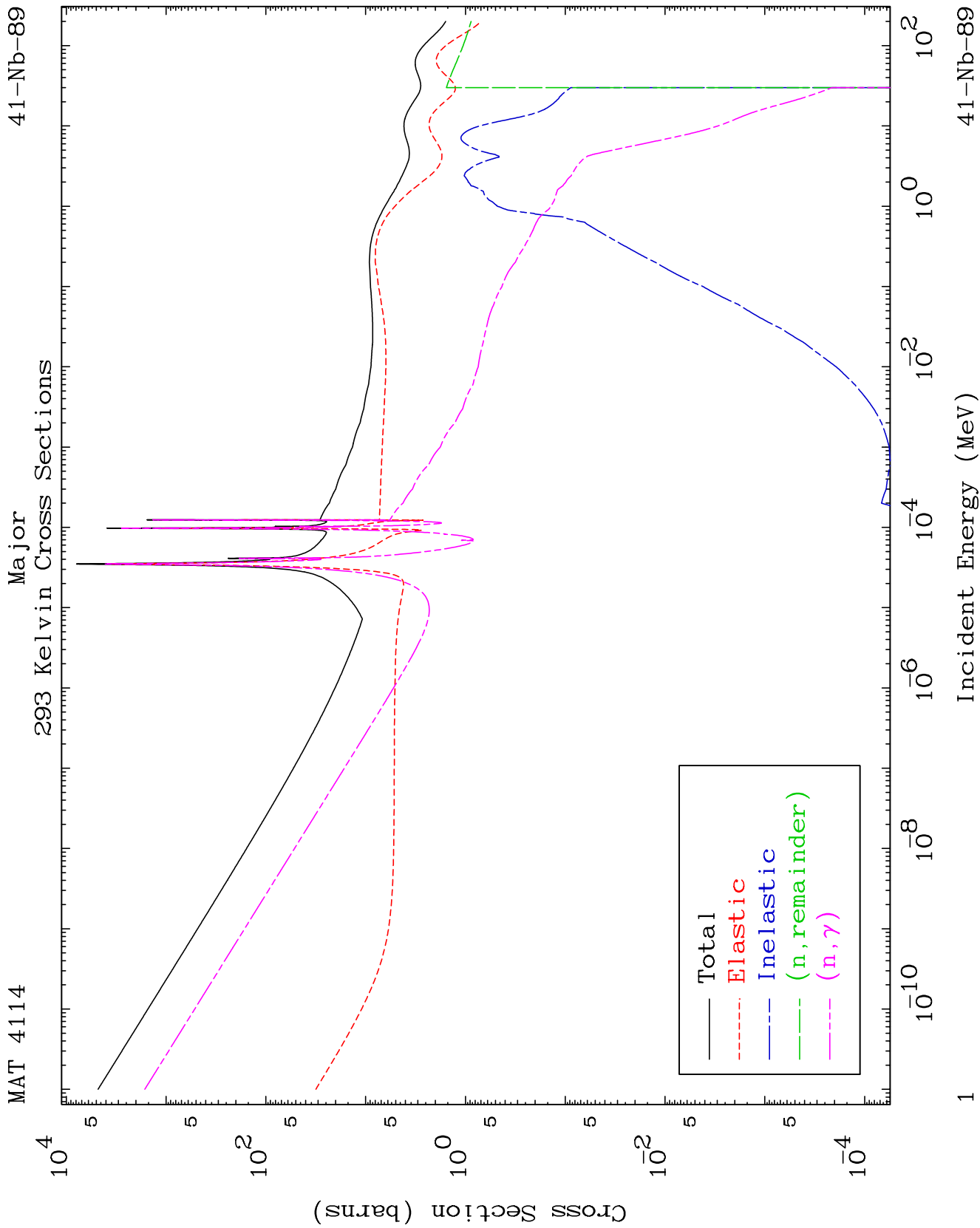
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.

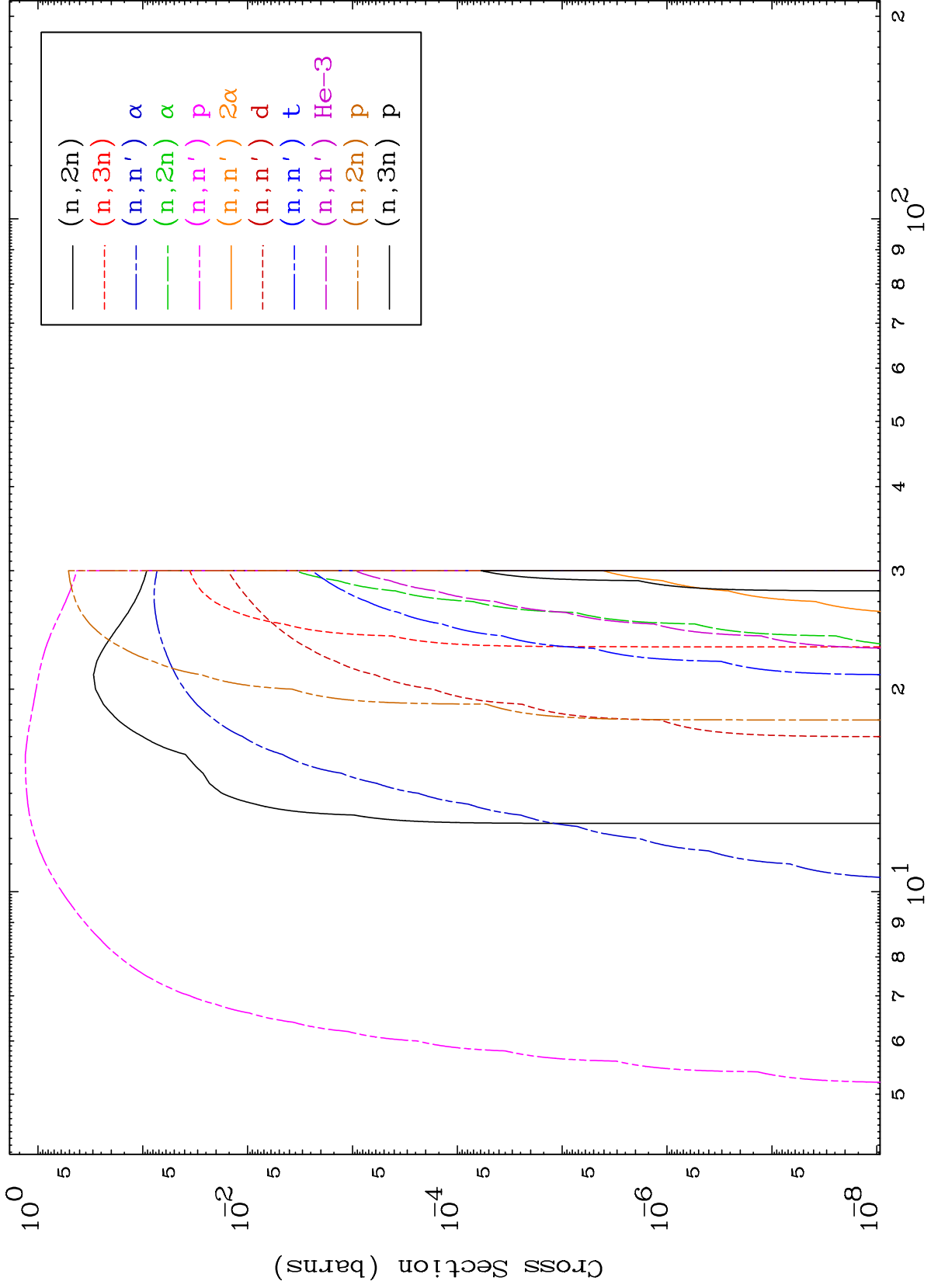
Tele: 925-443-1911

E.Mail:redcullen1@comcast.net

Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

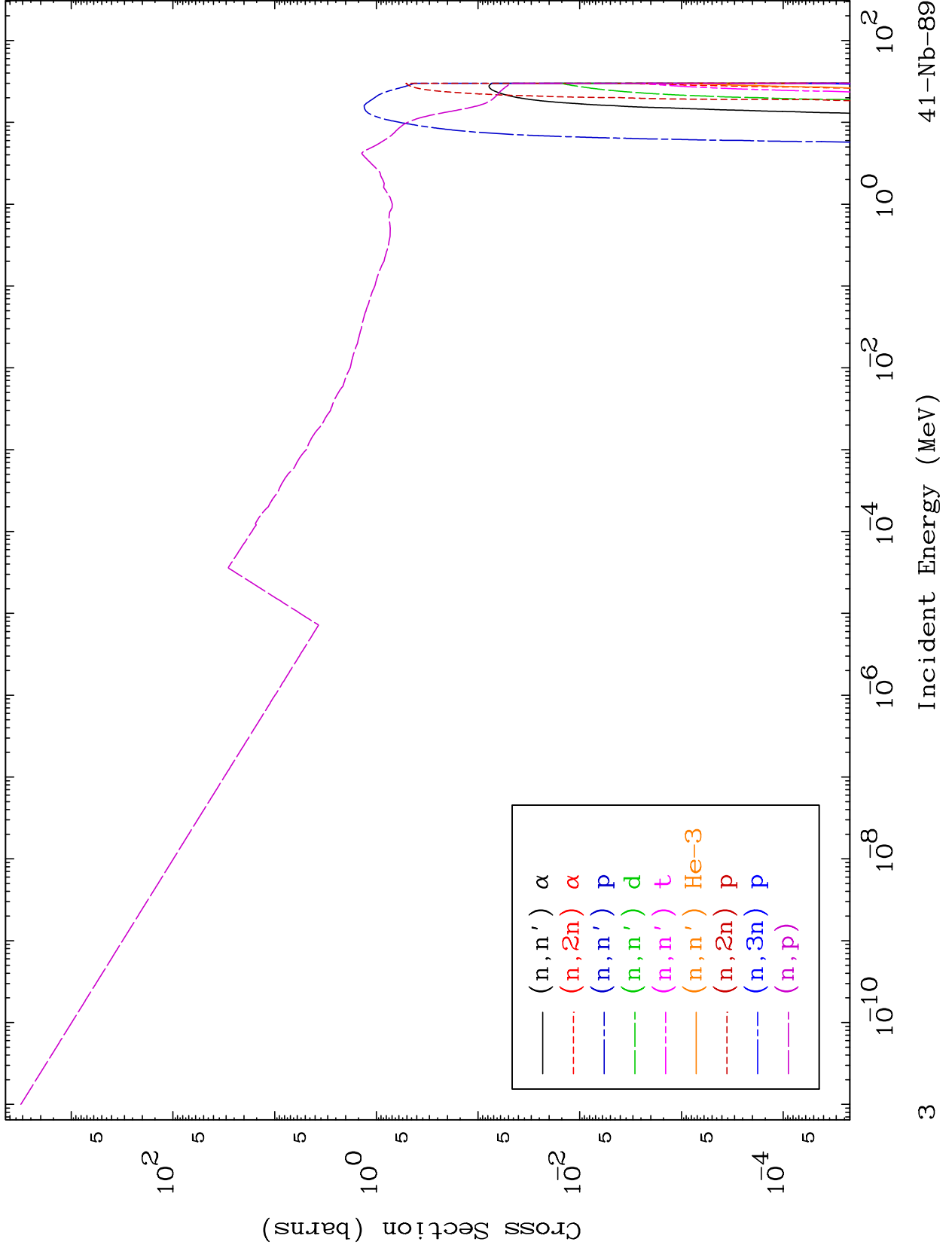




MAT 4114

Charged Particle
293 Kelvin Cross Sections

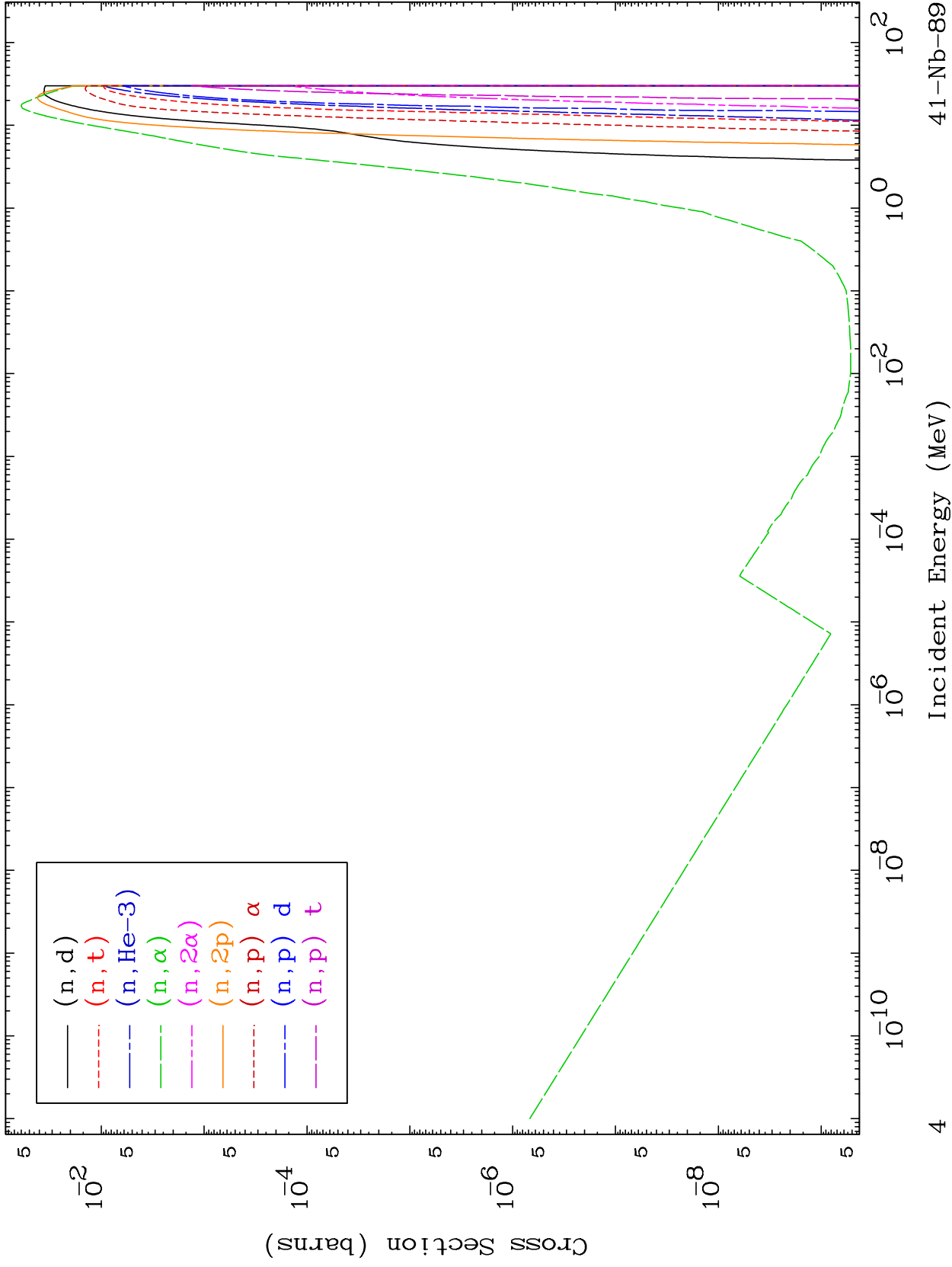
41-Nb-89



MAT 4114

Charged Particle
293 Kelvin Cross Sections

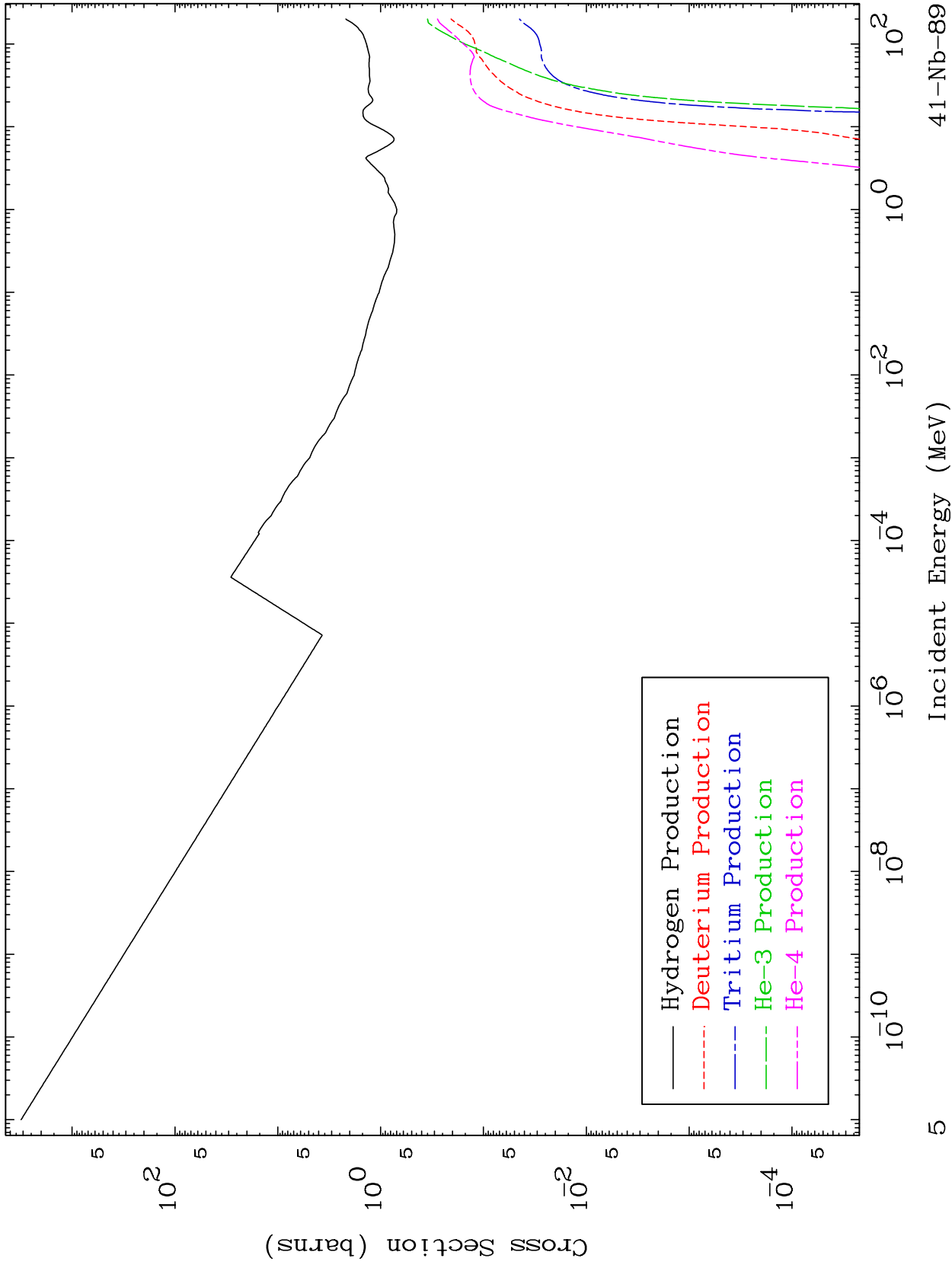
41-Nb-89



MAT 4114

Particle Production
293 Kelvin Cross Sections

41-Nb-89

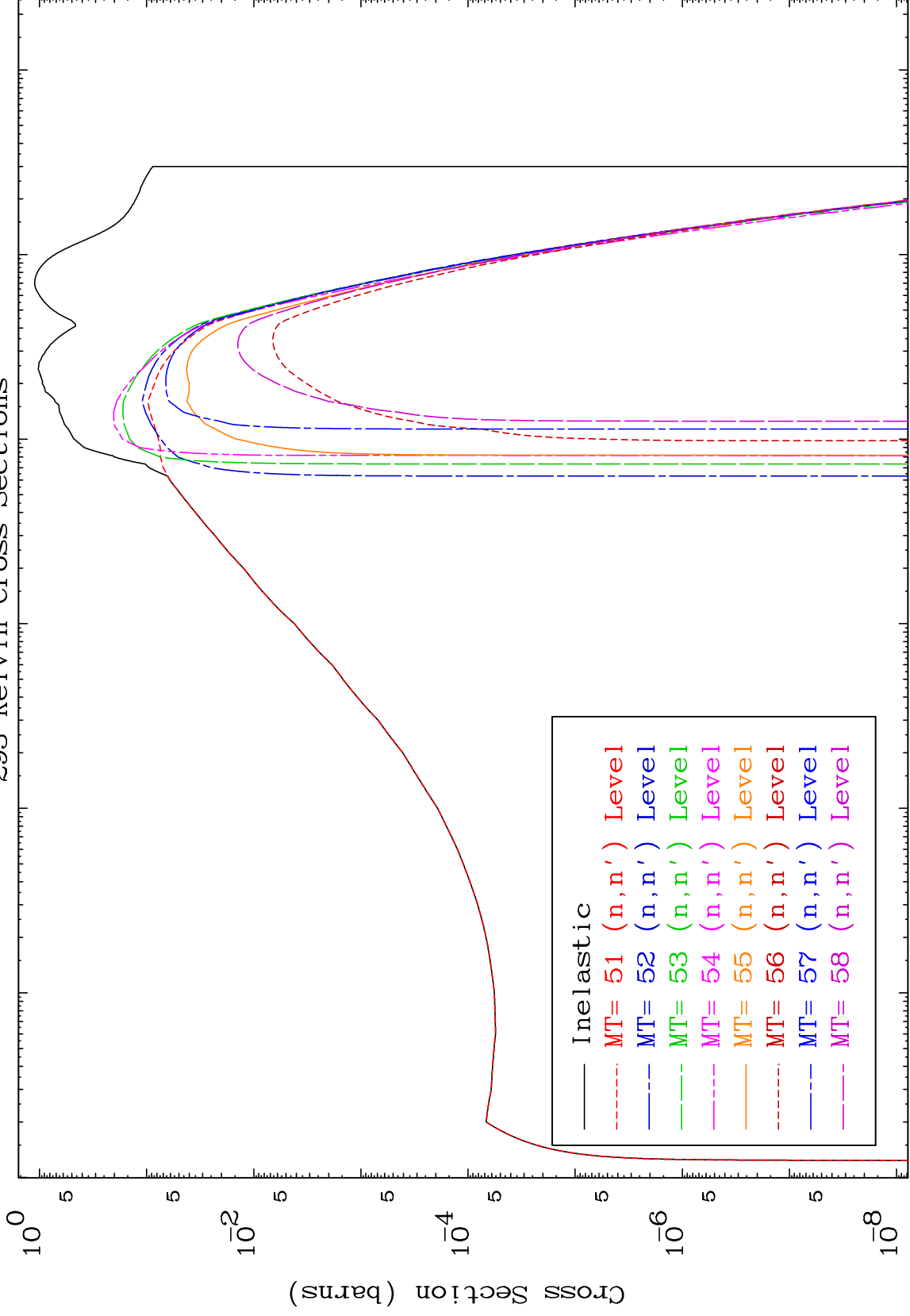


MAT 4114

(n,n') Level

41-Nb-89

293 Kelvin Cross Sections



10⁰
10⁻²
10⁻⁴
10⁻⁶
10⁻⁸
Cross Section (barns)

10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10²
Incident Energy (MeV)

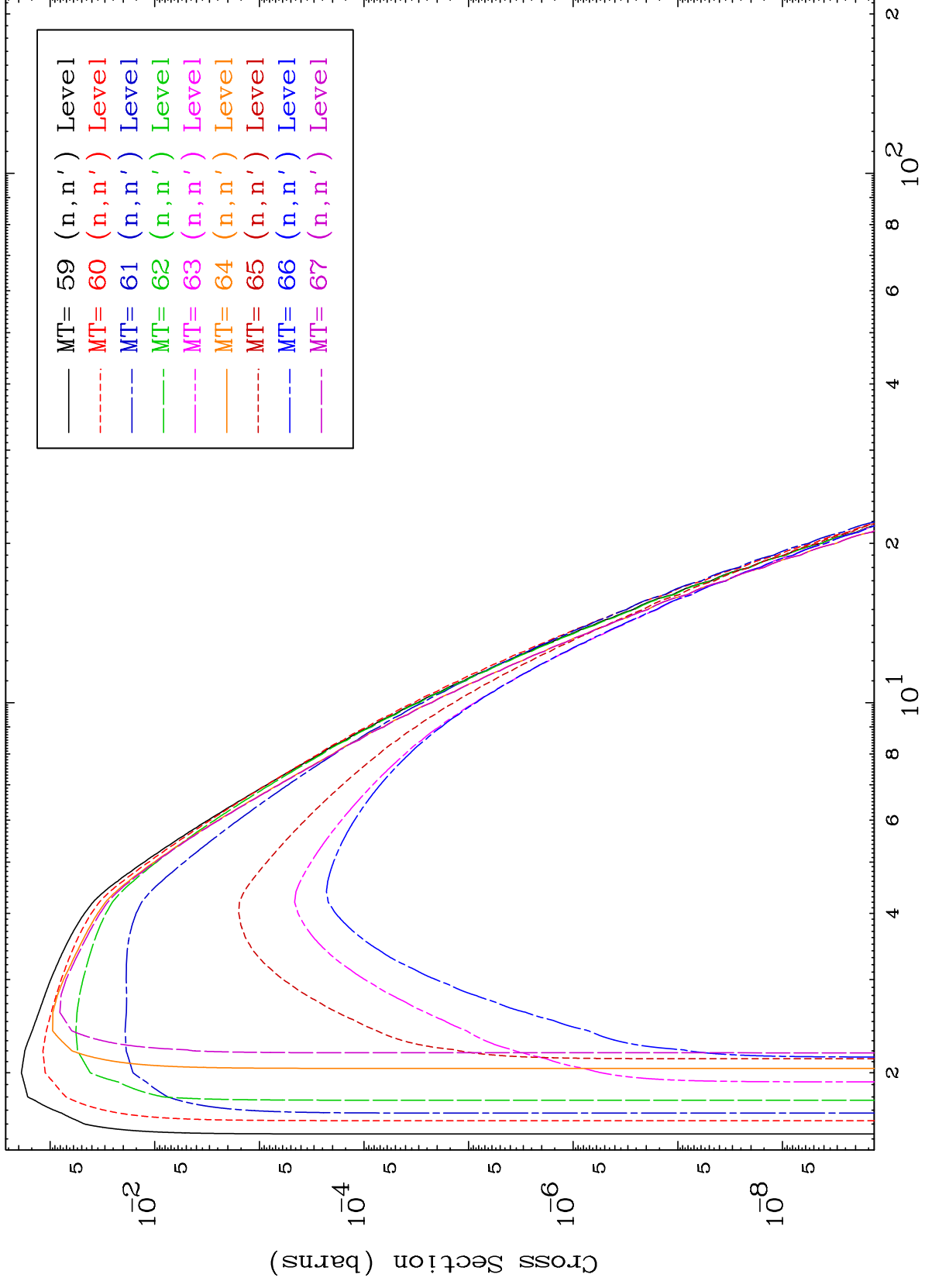
41-Nb-89

MAT 4114

(n,n') Level

41-Nb-89

293 Kelvin Cross Sections



7

Incident Energy (MeV)

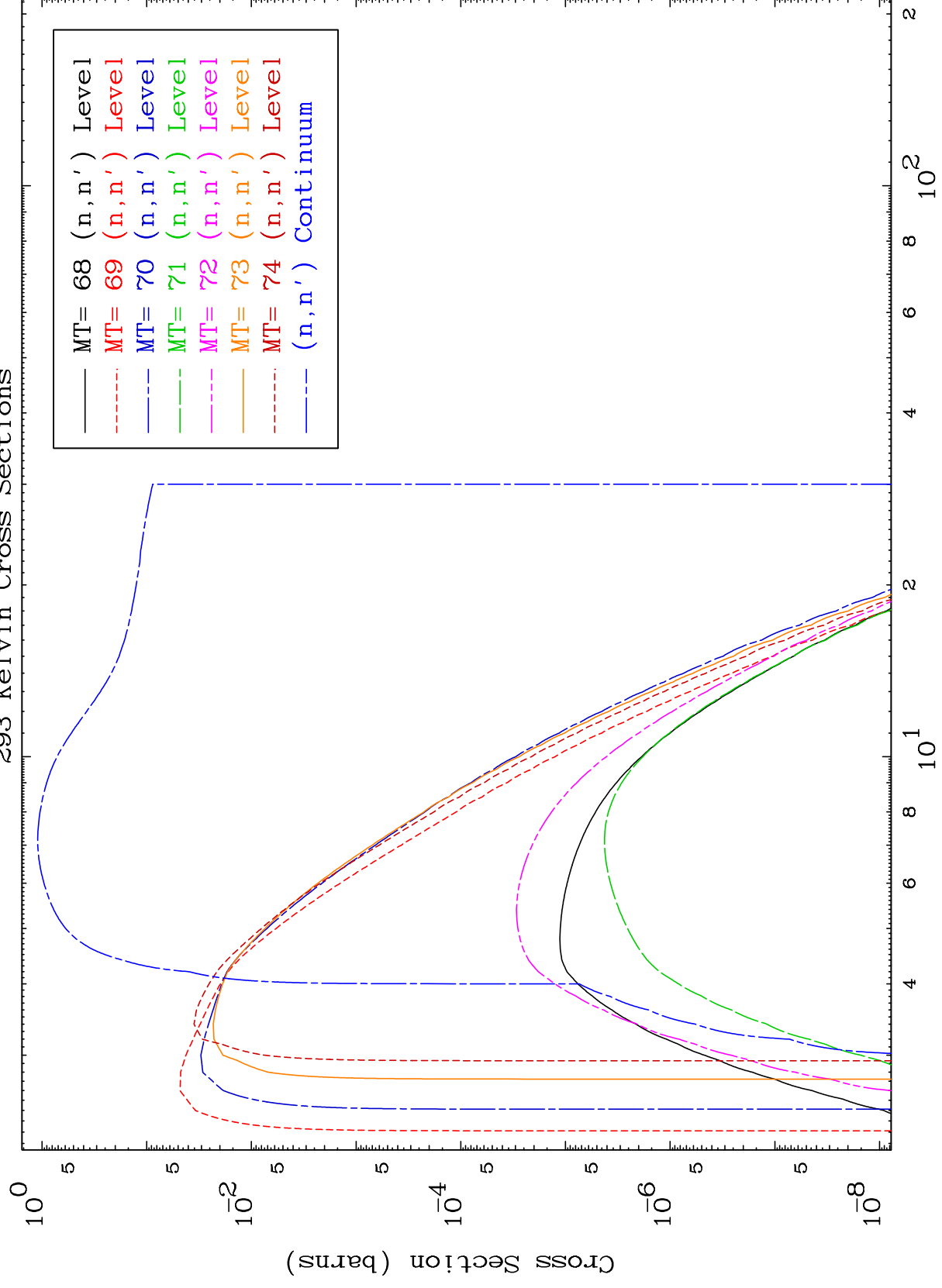
41-Nb-89

MAT 4114

(n,n') Level

41-Nb-89

293 Kelvin Cross Sections



8

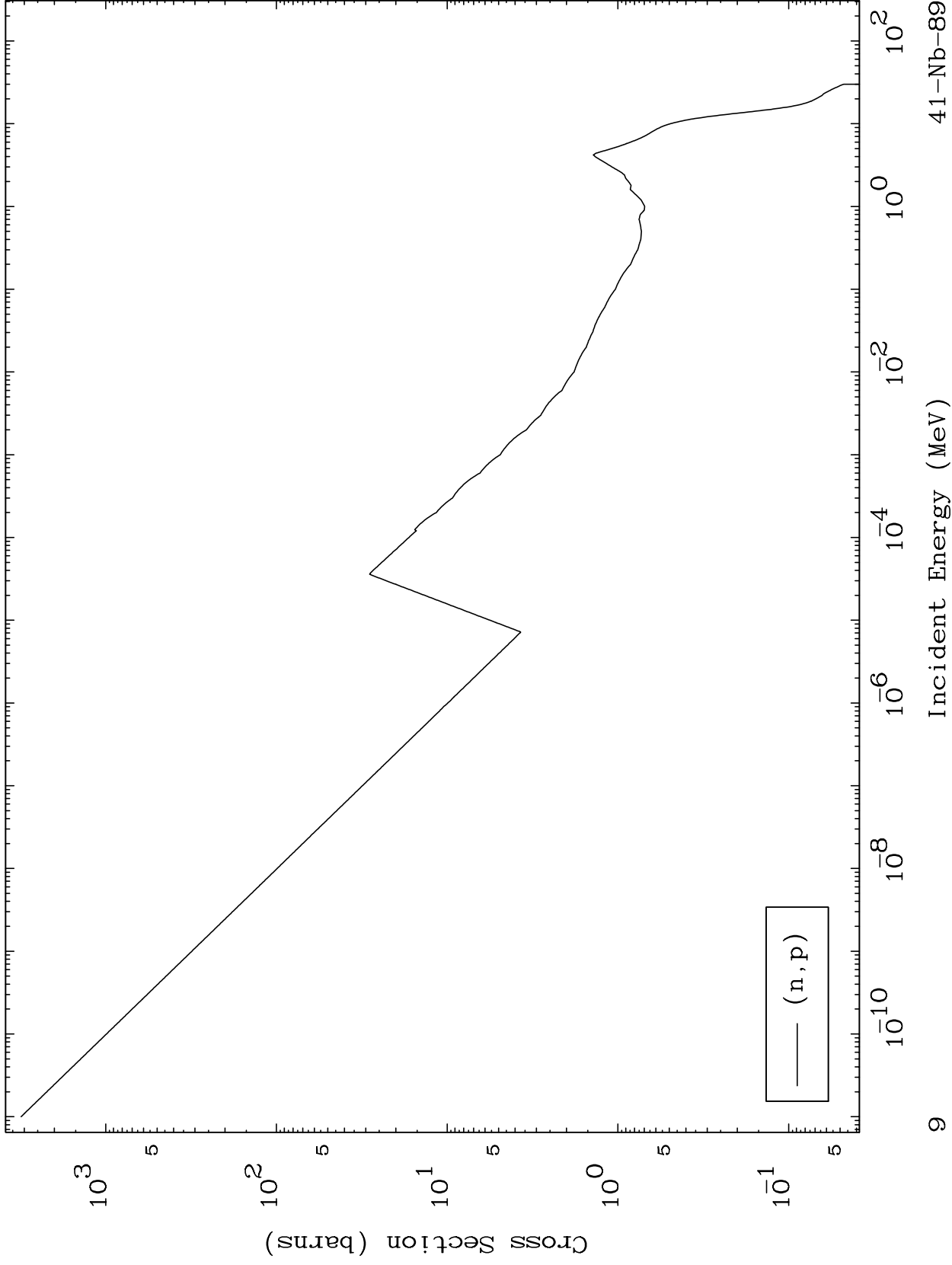
Incident Energy (MeV)

41-Nb-89

MAT 4114

(n,p) Levels
293 Kelvin Cross Sections

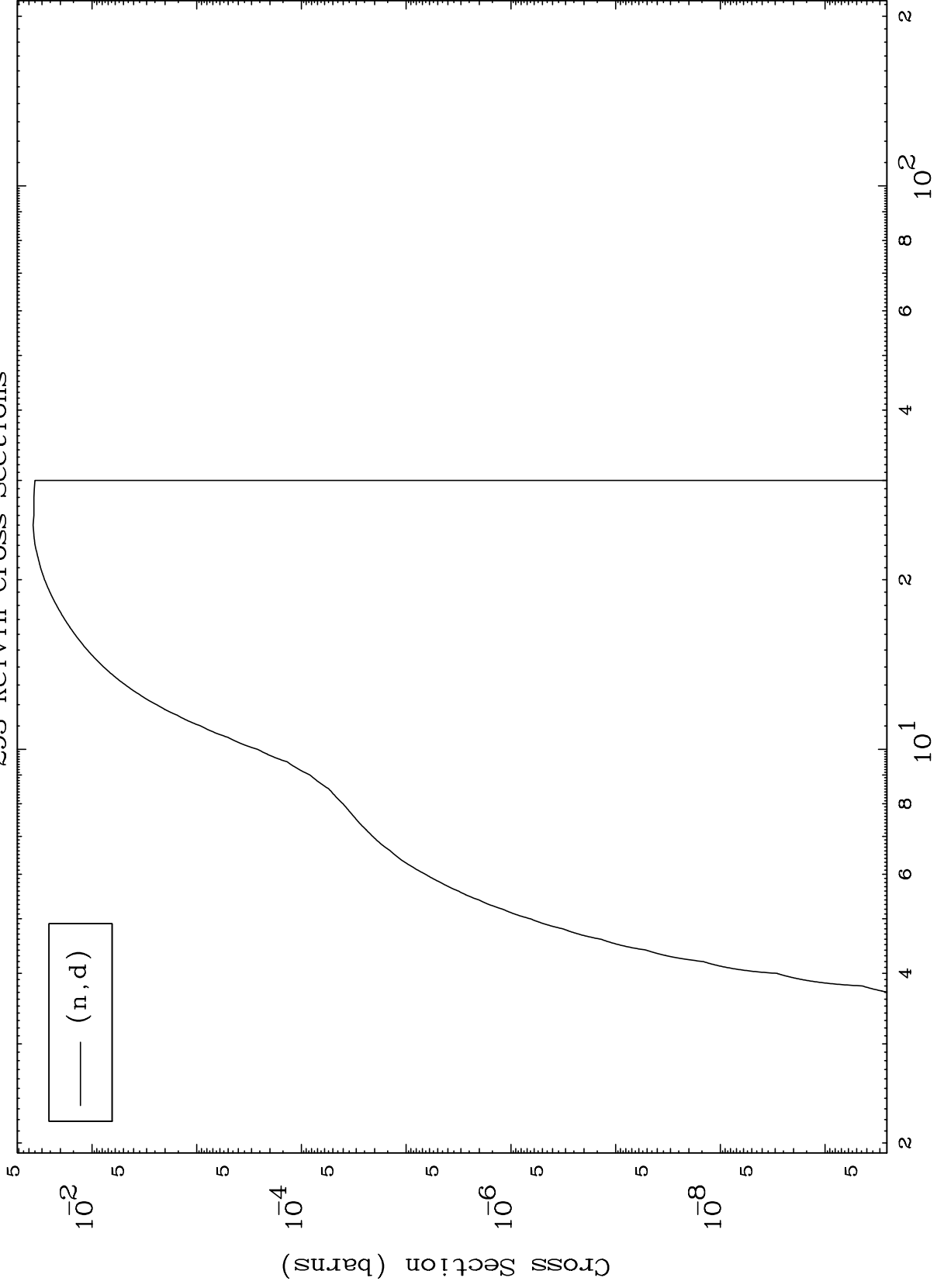
41-Nb-89



MAT 4114

(n,d) Levels
293 Kelvin Cross Sections

41-Nb-89



— (n,d)

10

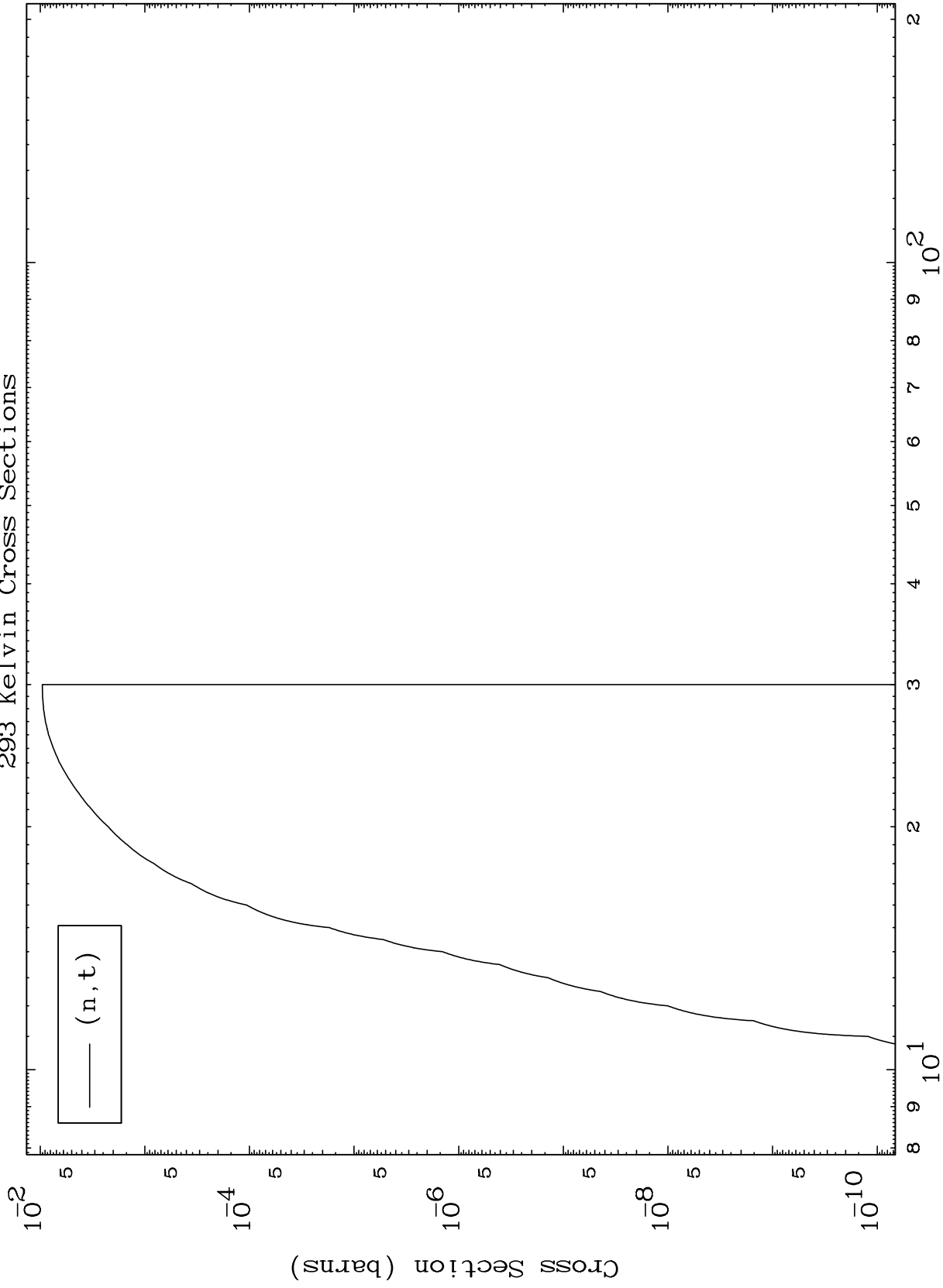
Incident Energy (MeV)

41-Nb-89

MAT 4114

(n,t) Levels
293 Kelvin Cross Sections

41-Nb-89



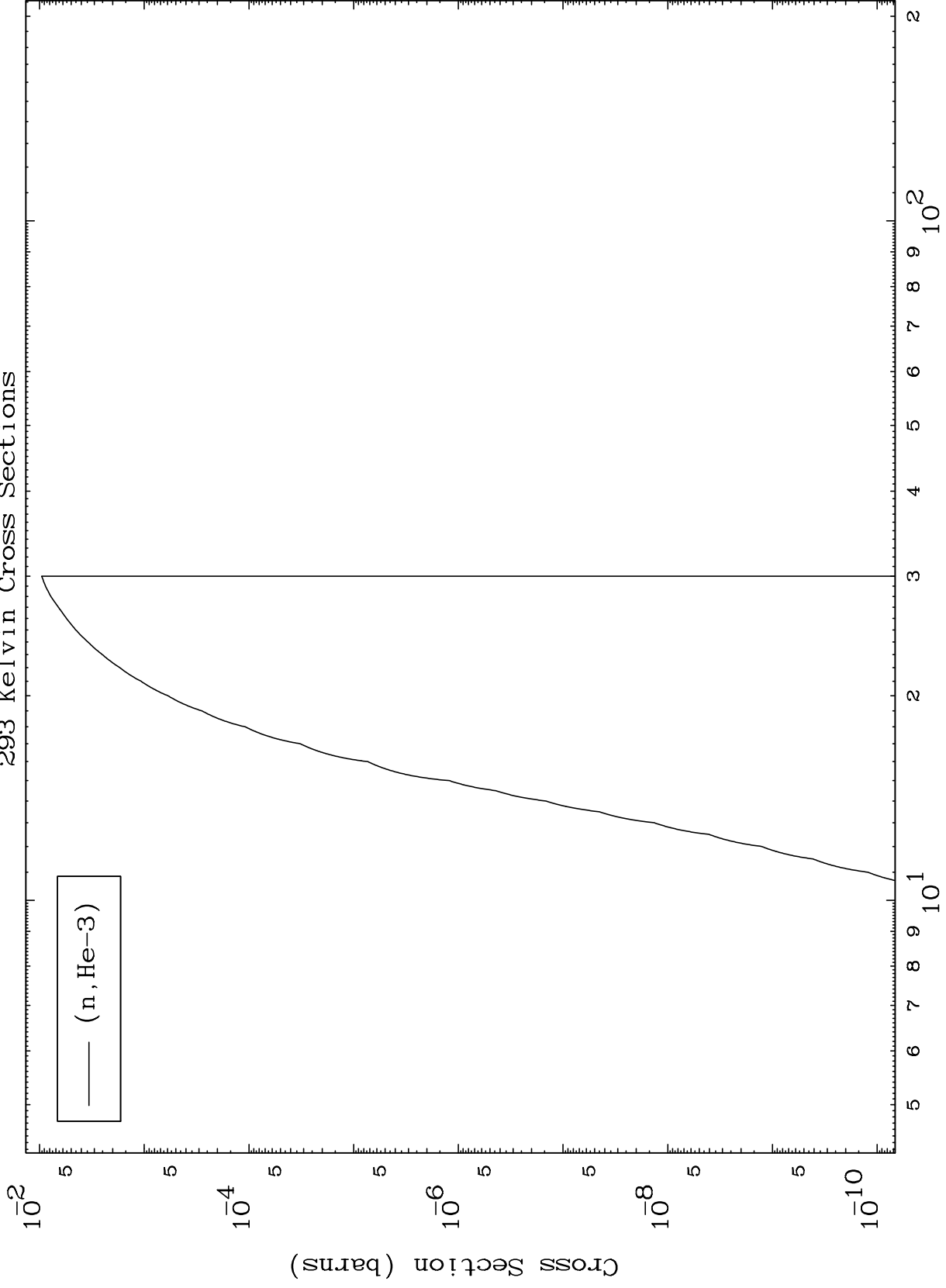
11

41-Nb-89

MAT 4114

(n,He3) Levels
293 Kelvin Cross Sections

41-Nb-89



12

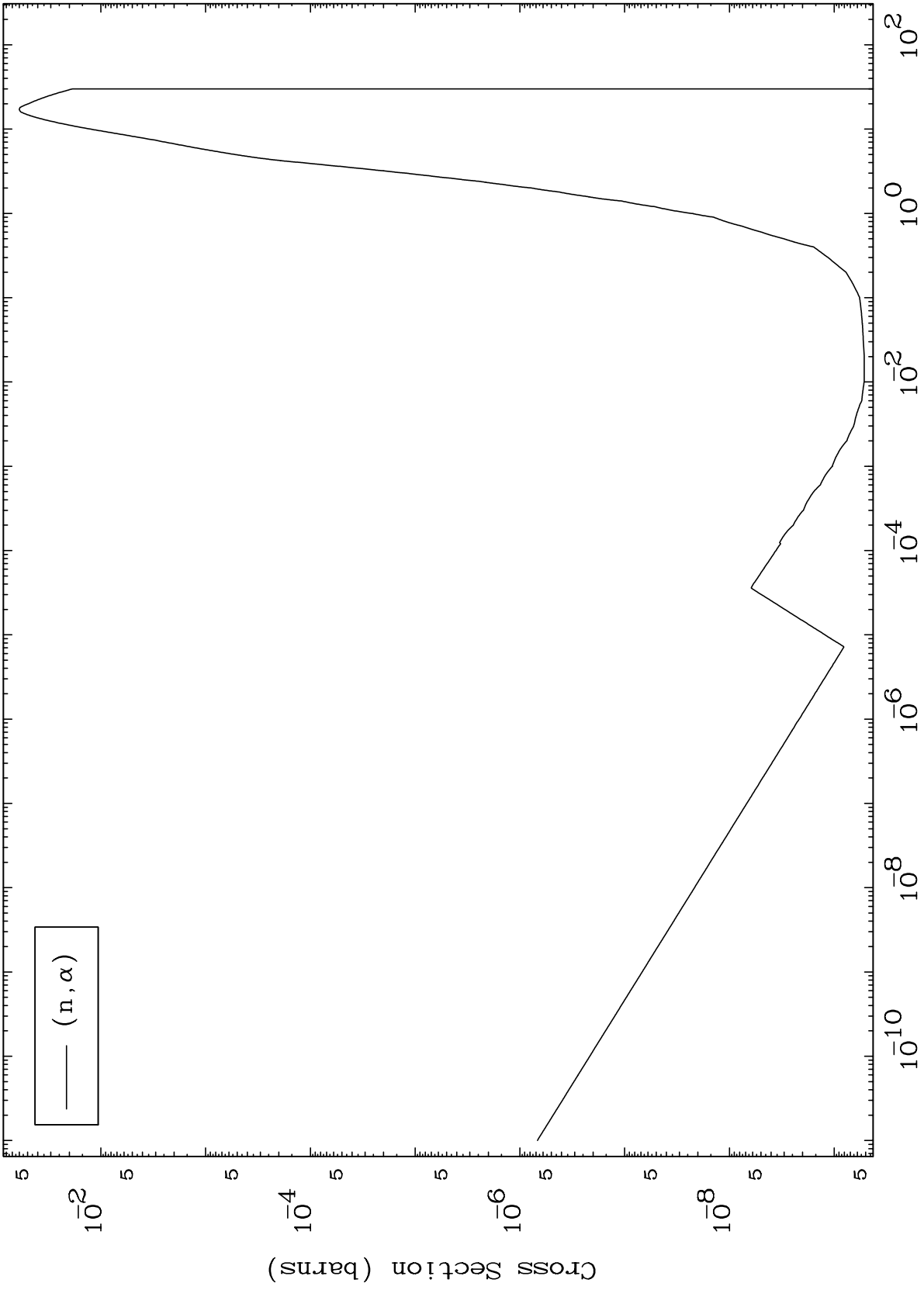
Incident Energy (MeV)

41-Nb-89

MAT 4114

(n, α) Levels
293 Kelvin Cross Sections

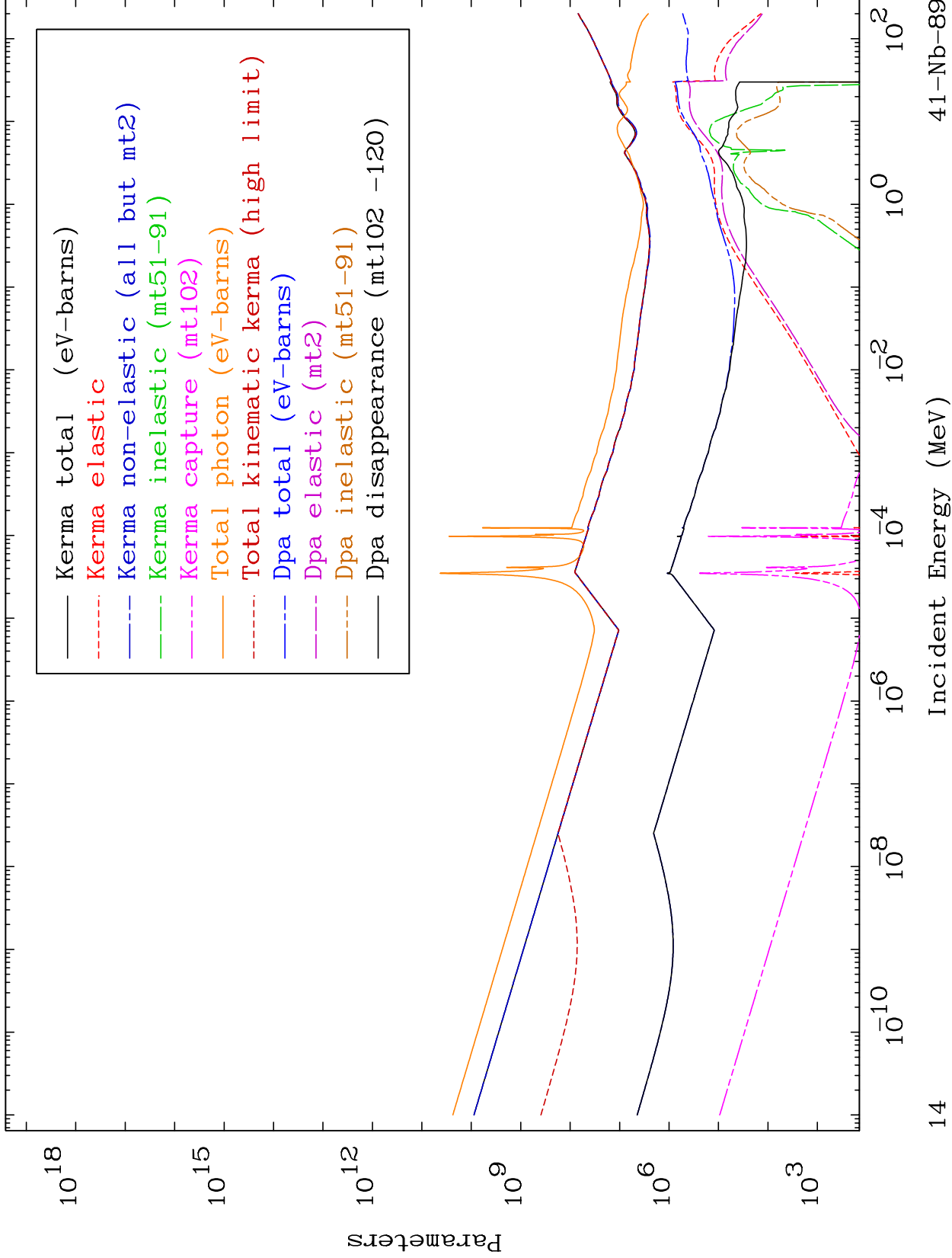
41-Nb-89

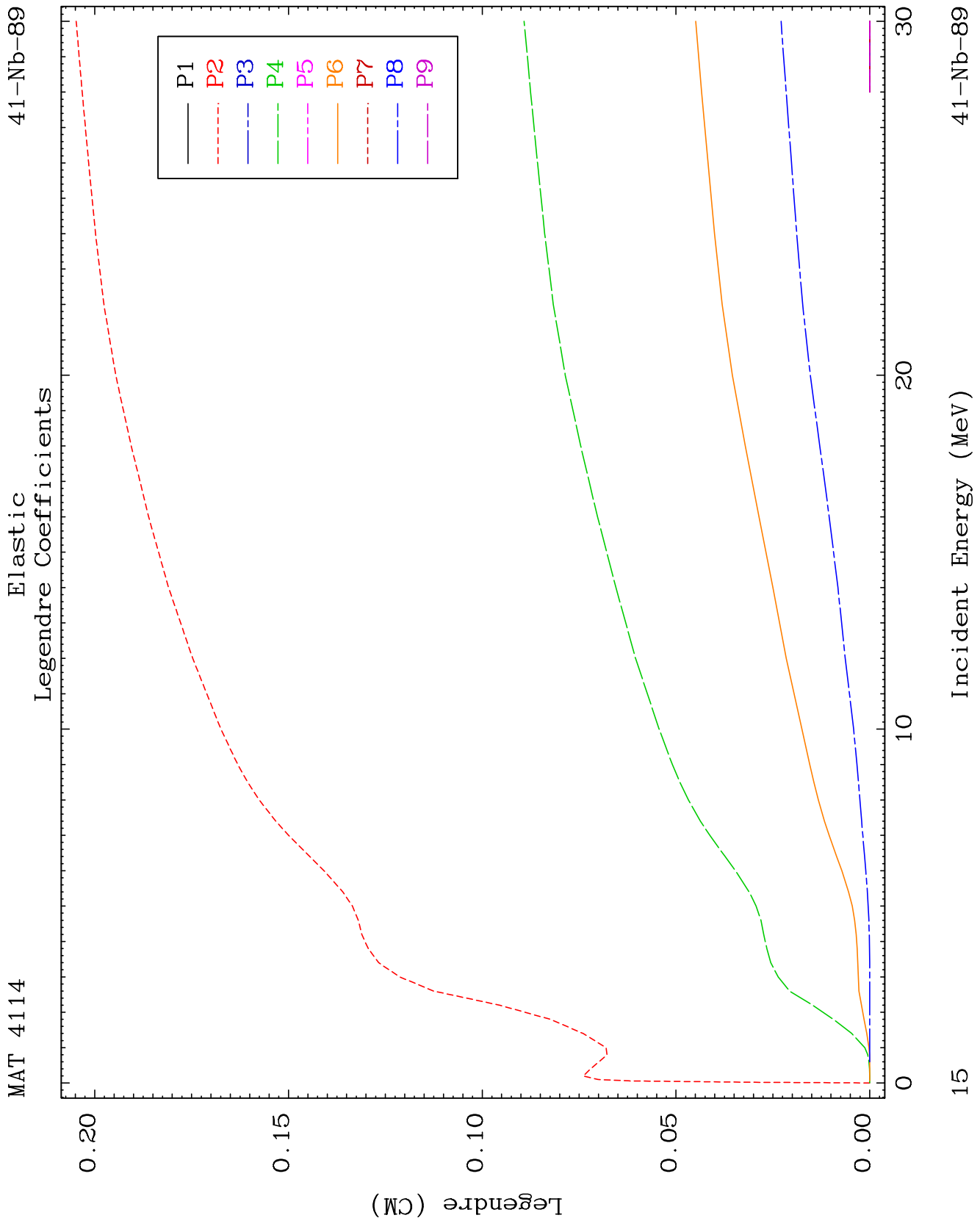


13

Incident Energy (MeV)

41-Nb-89

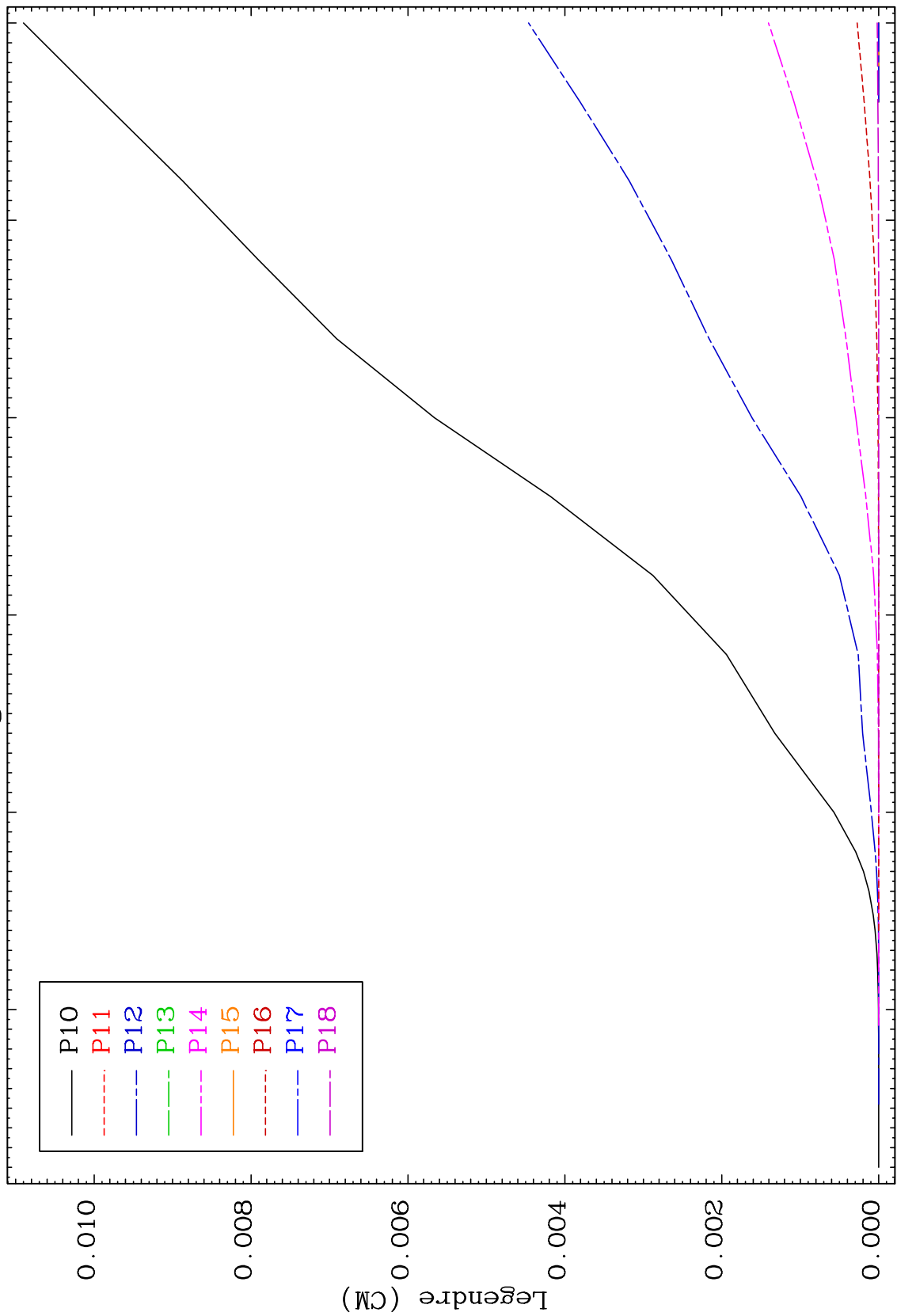




MAT 4114

Elastic
Legendre Coefficients

41-Nb-89



16

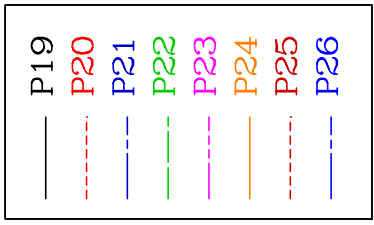
41-Nb-89

Incident Energy (MeV)

MAT 4114

Elastic Legendre Coefficients

41-Nb-89



$\times 10^{-6}$
1.0
0.8
0.6
0.4
0.2
0.0

Legendre (CM)

15

20

25

30

17

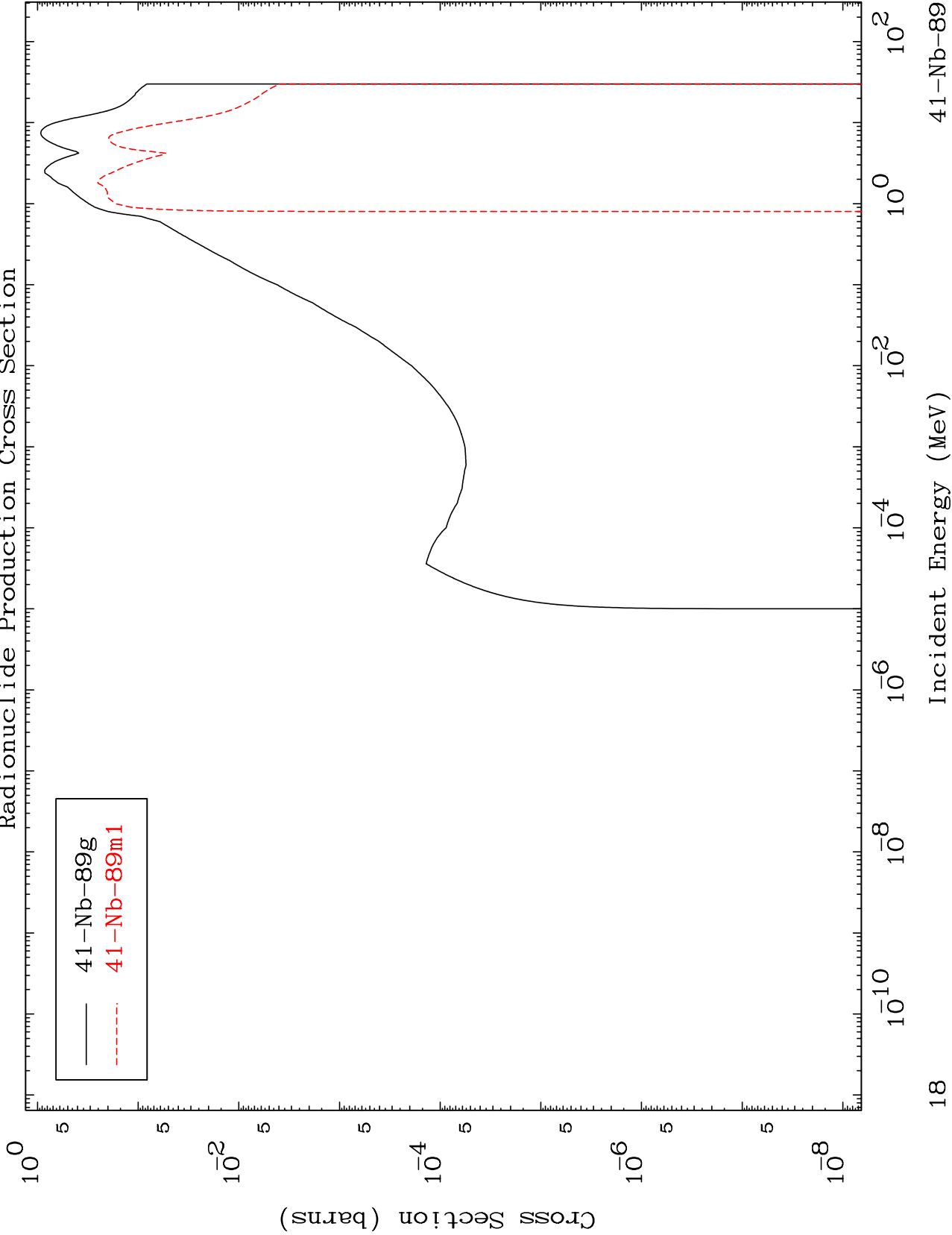
Incident Energy (MeV)

41-Nb-89

MAT 4114

Inelastic
Radionuclide Production Cross Section

41-Nb-89

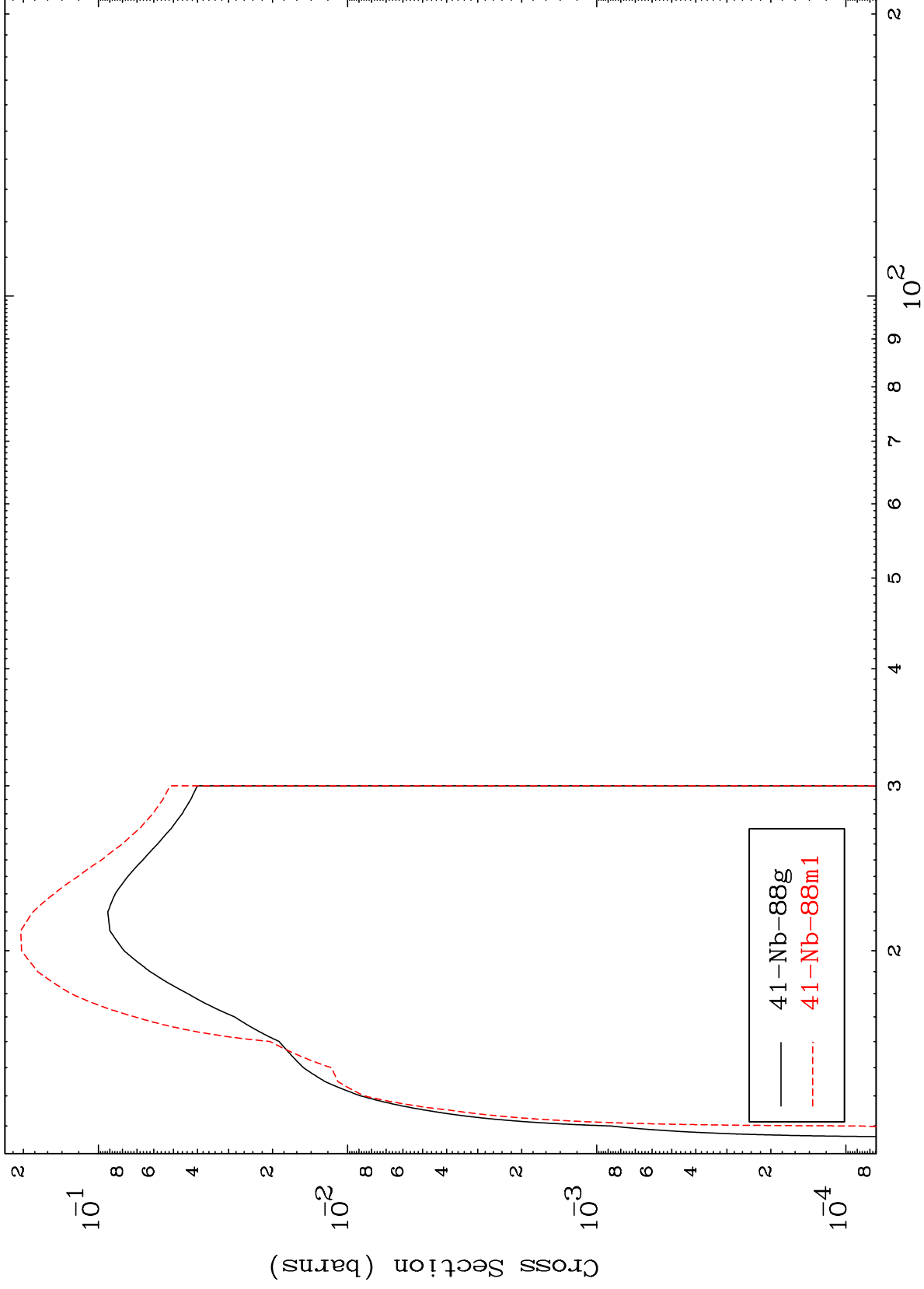


MAT 4114

(n,2n)

41-Nb-89

Radionuclide Production Cross Section



19

Incident Energy (MeV)

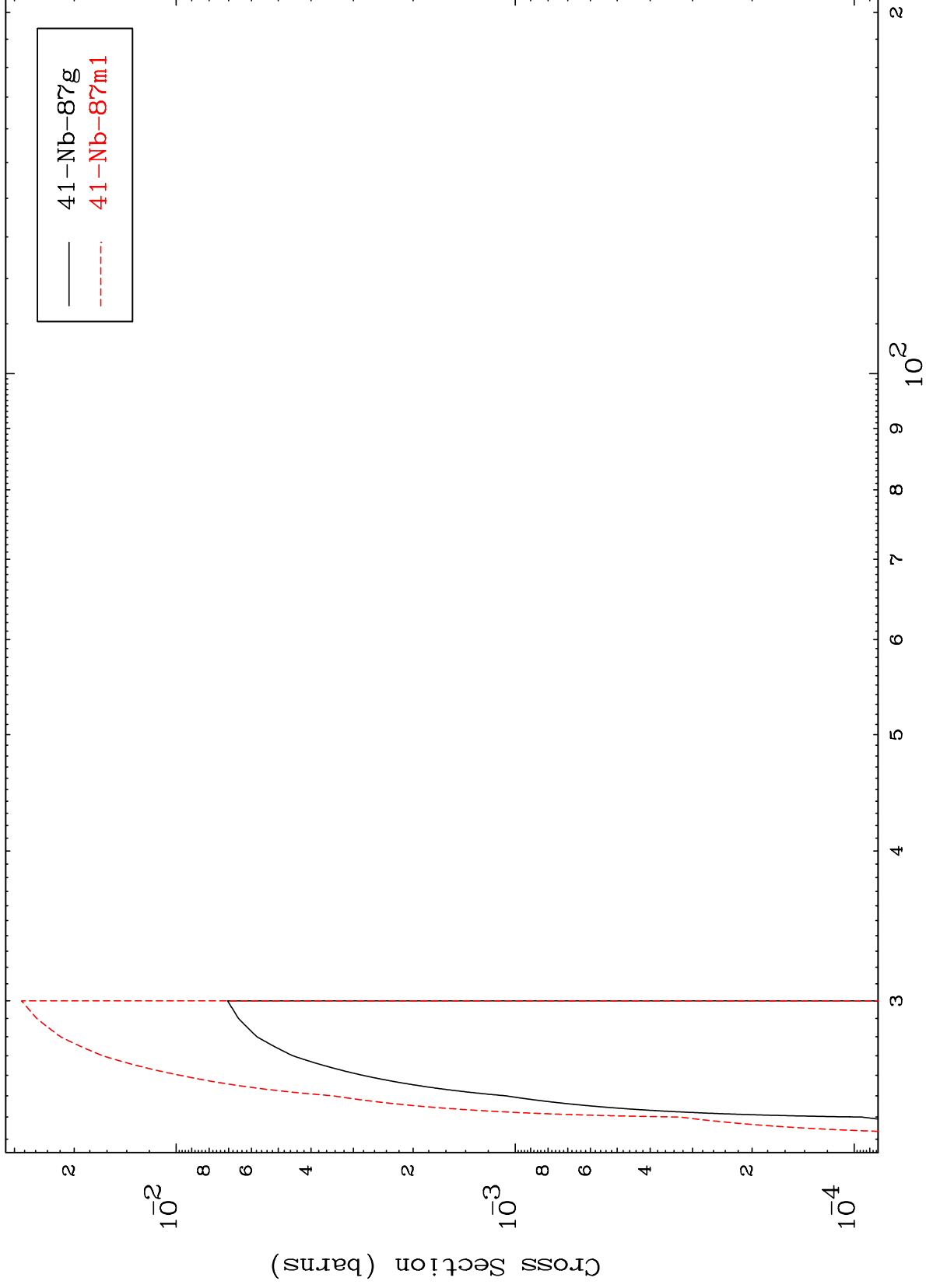
41-Nb-89

MAT 4114

(n,3n)

41-Nb-89

Radionuclide Production Cross Section



20

Incident Energy (MeV)

10²

2

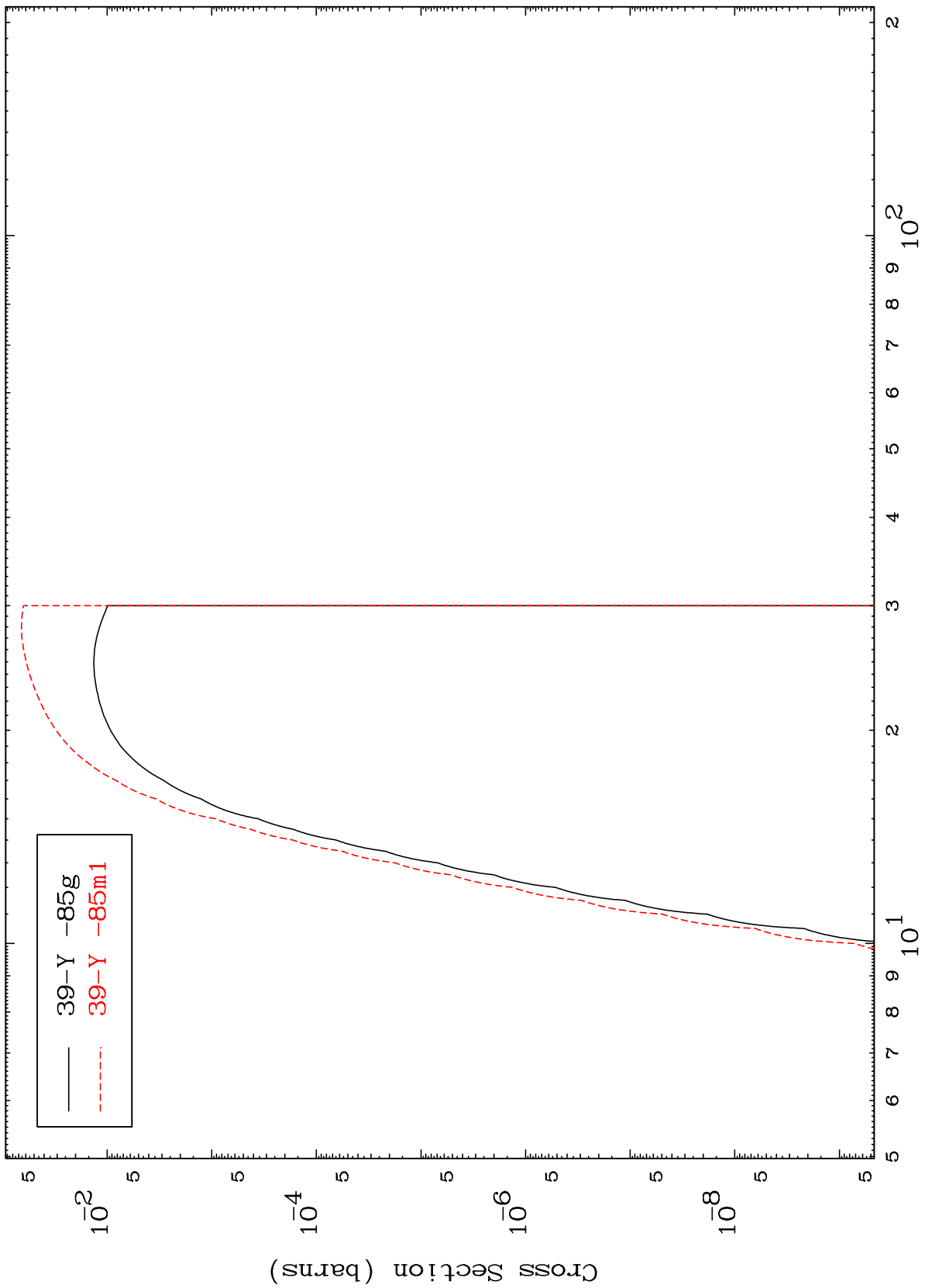
41-Nb-89

MAT 4114

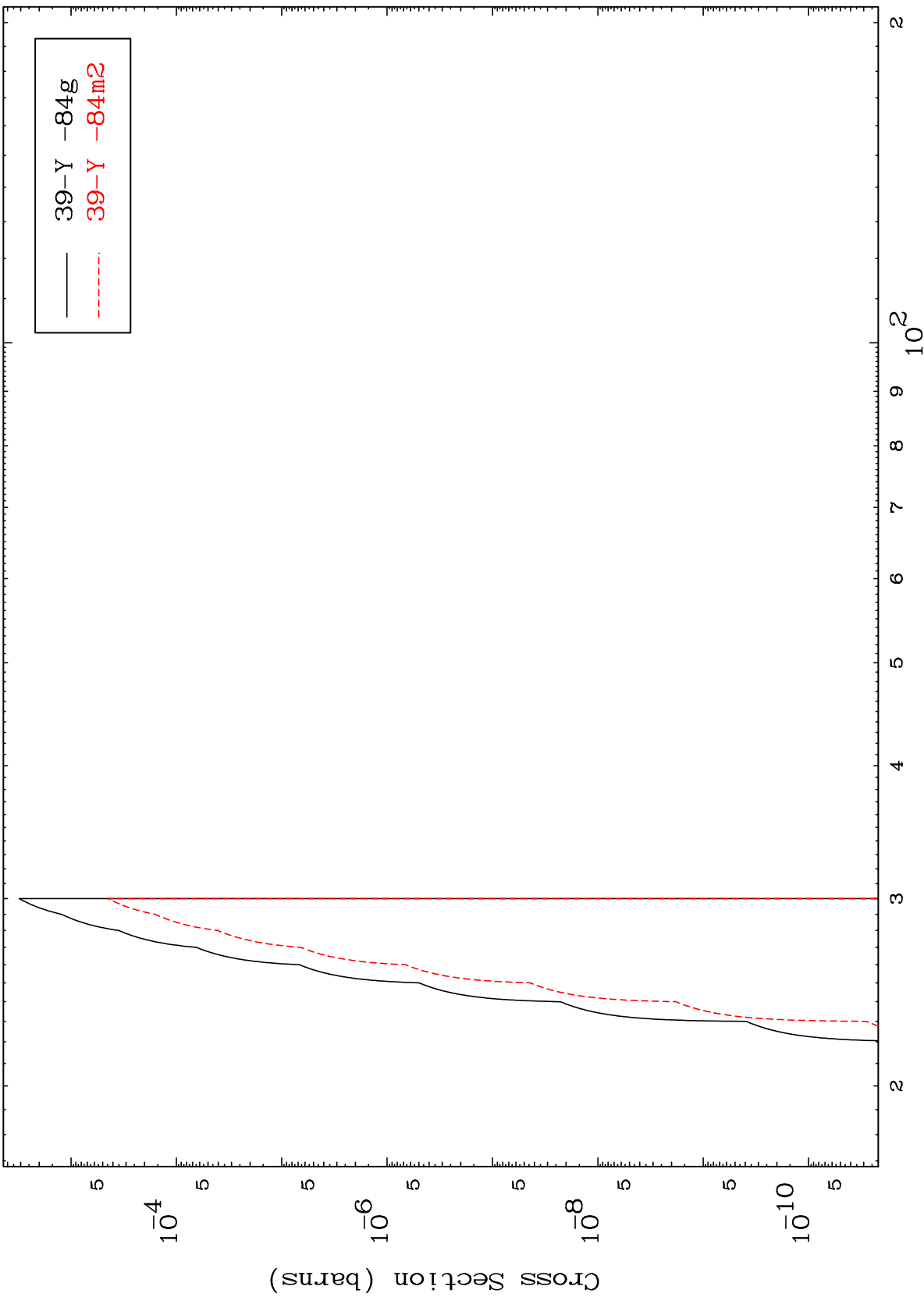
$(n, n') \alpha$

41-Nb-89

Radionuclide Production Cross Section



Radionuclide Production Cross Section



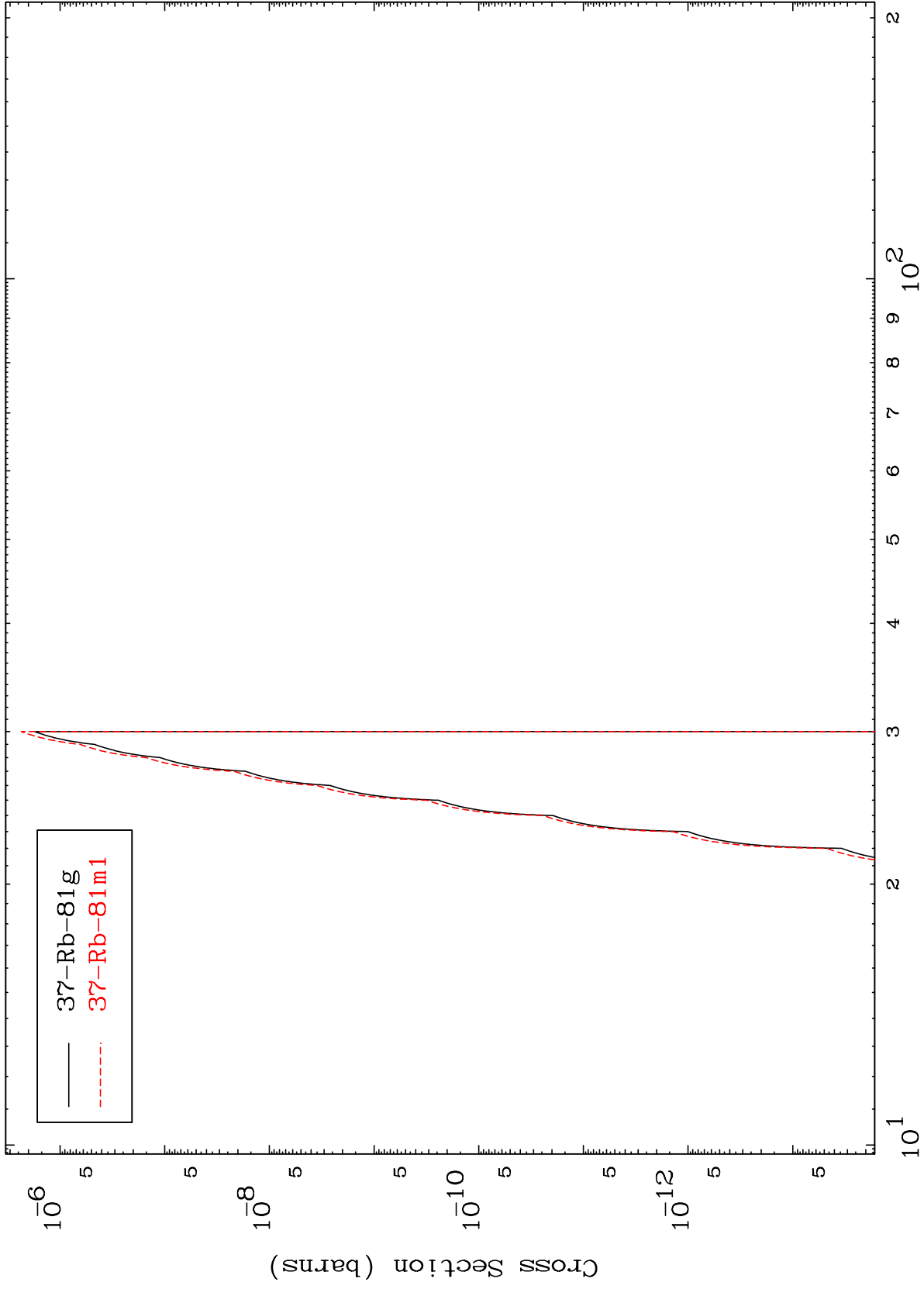
39-Y -84g
39-Y -84m2

MAT 4114

(n,n') 2α

41-Nb-89

Radionuclide Production Cross Section



Incident Energy (MeV)

41-Nb-89

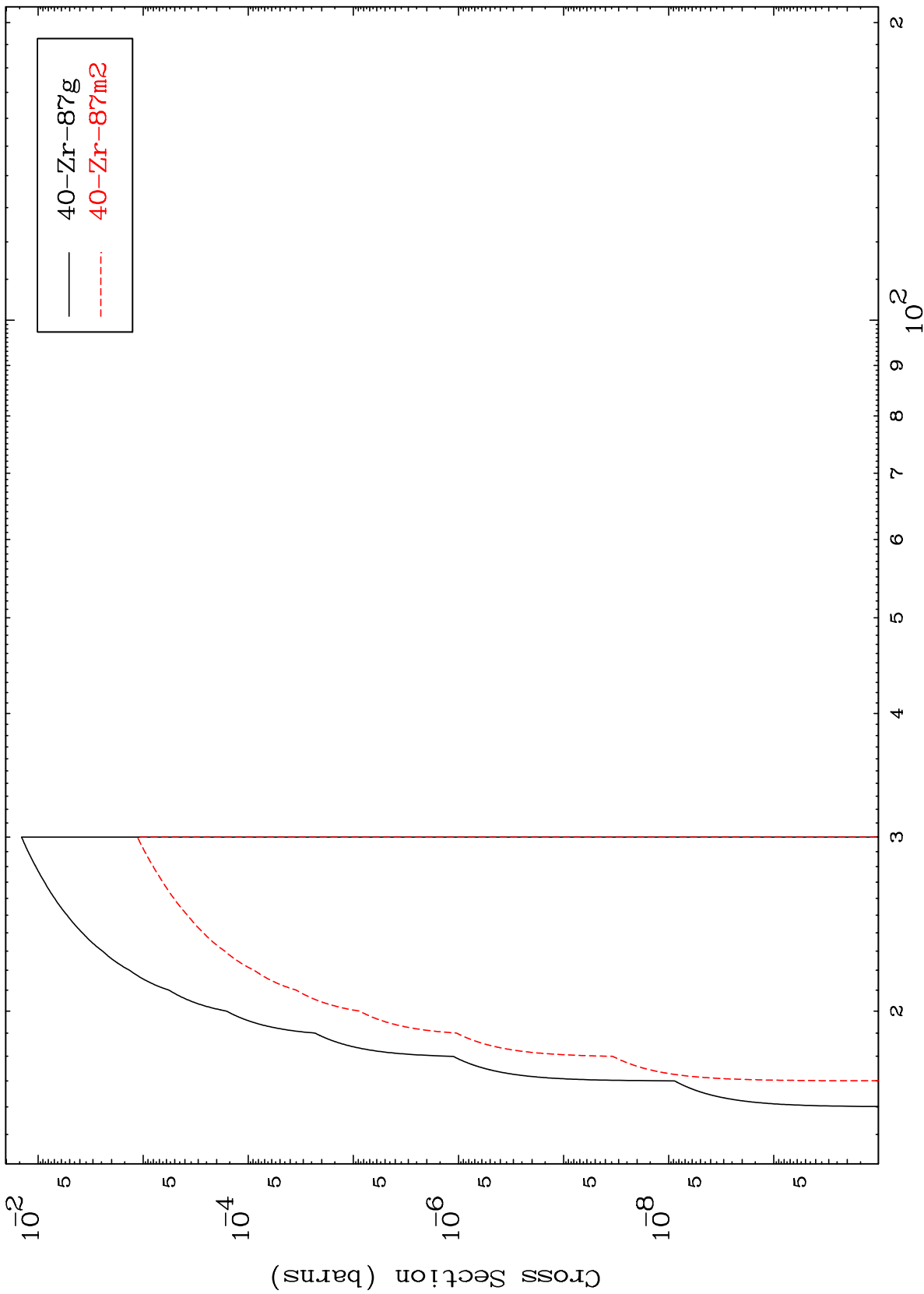
23

MAT 4114

(n,n') d

41-Nb-89

Radionuclide Production Cross Section

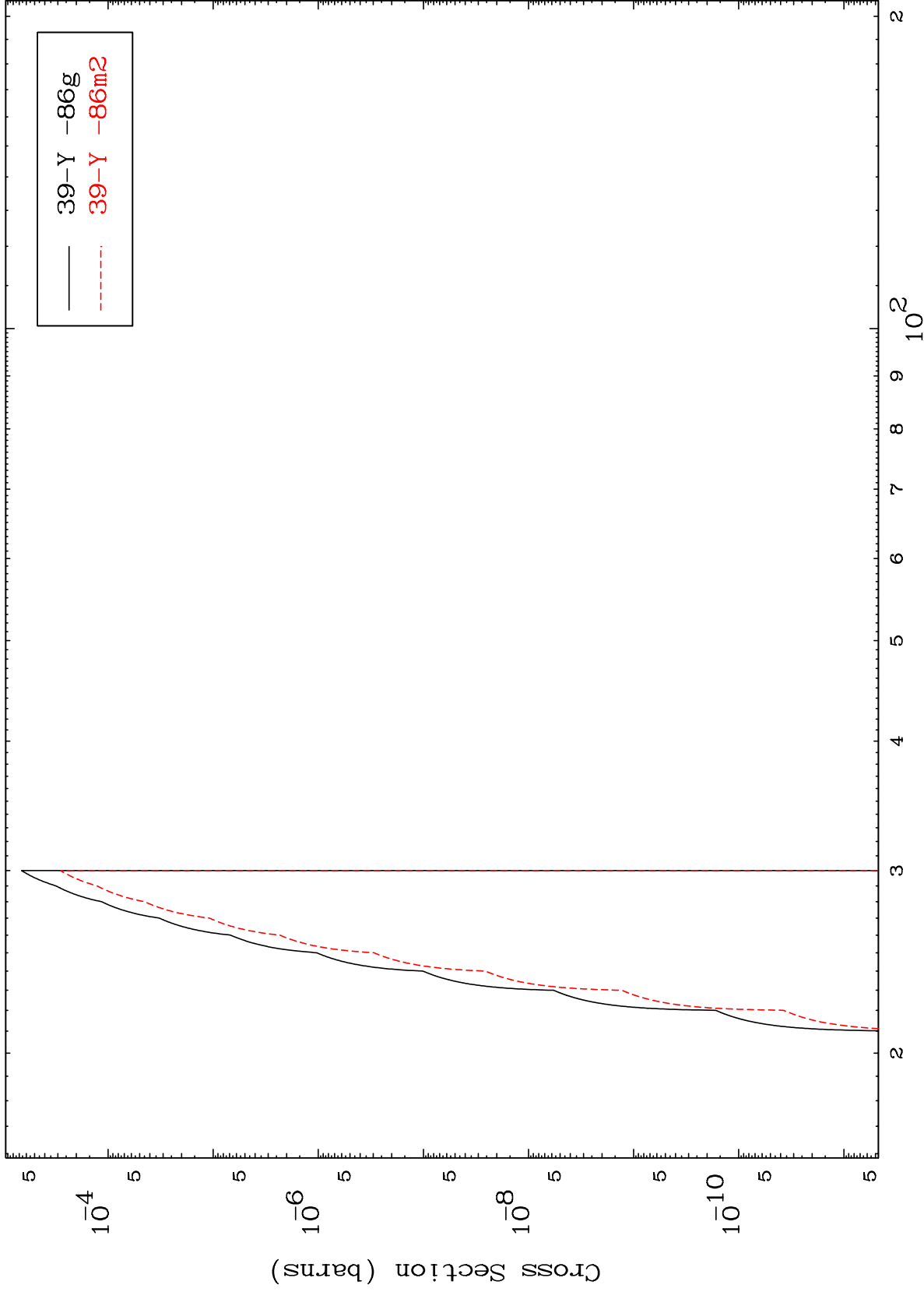


24

Incident Energy (MeV)

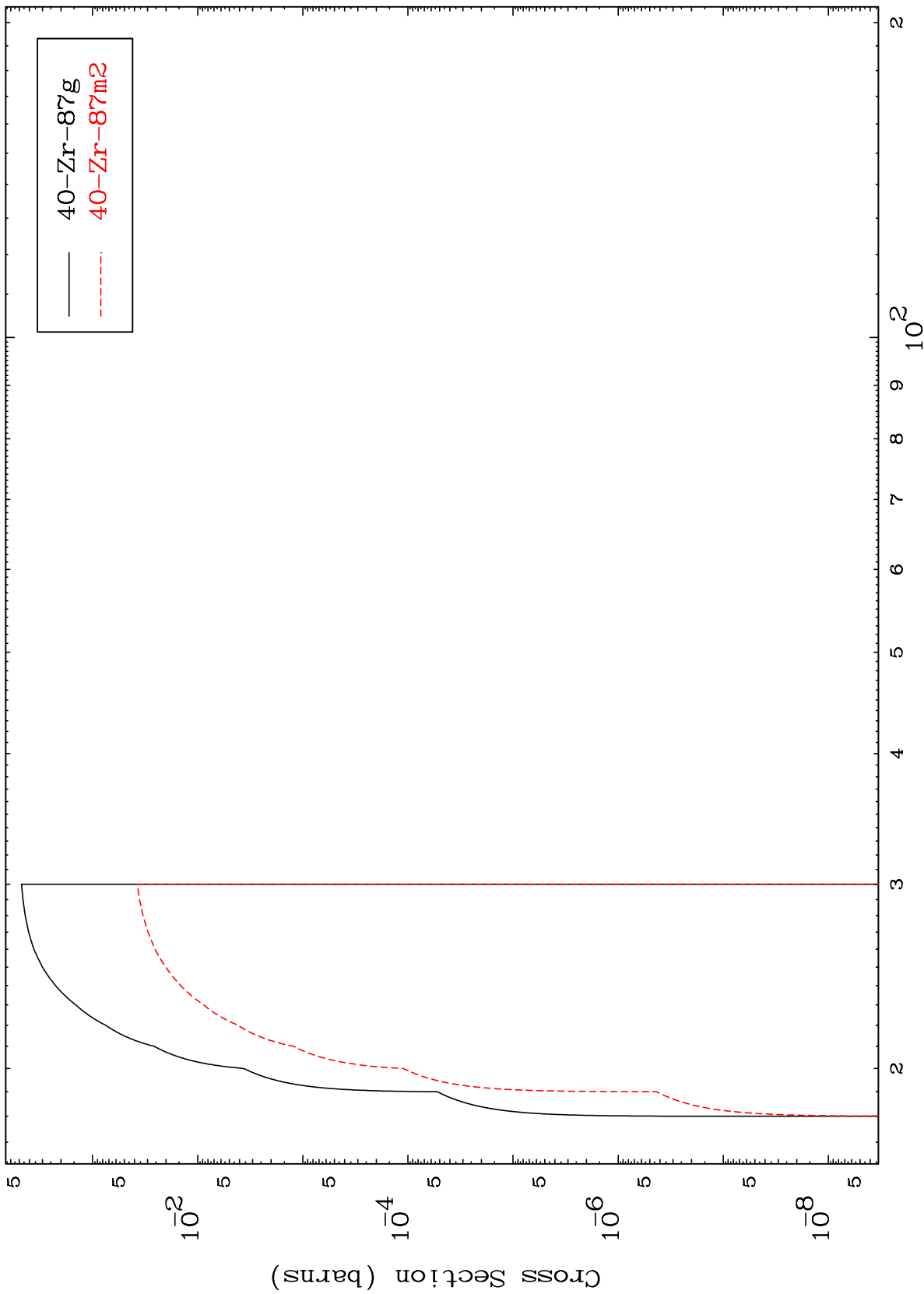
41-Nb-89

Radionuclide Production Cross Section



39-Y -86g
39-Y -86m2

Radionuclide Production Cross Section

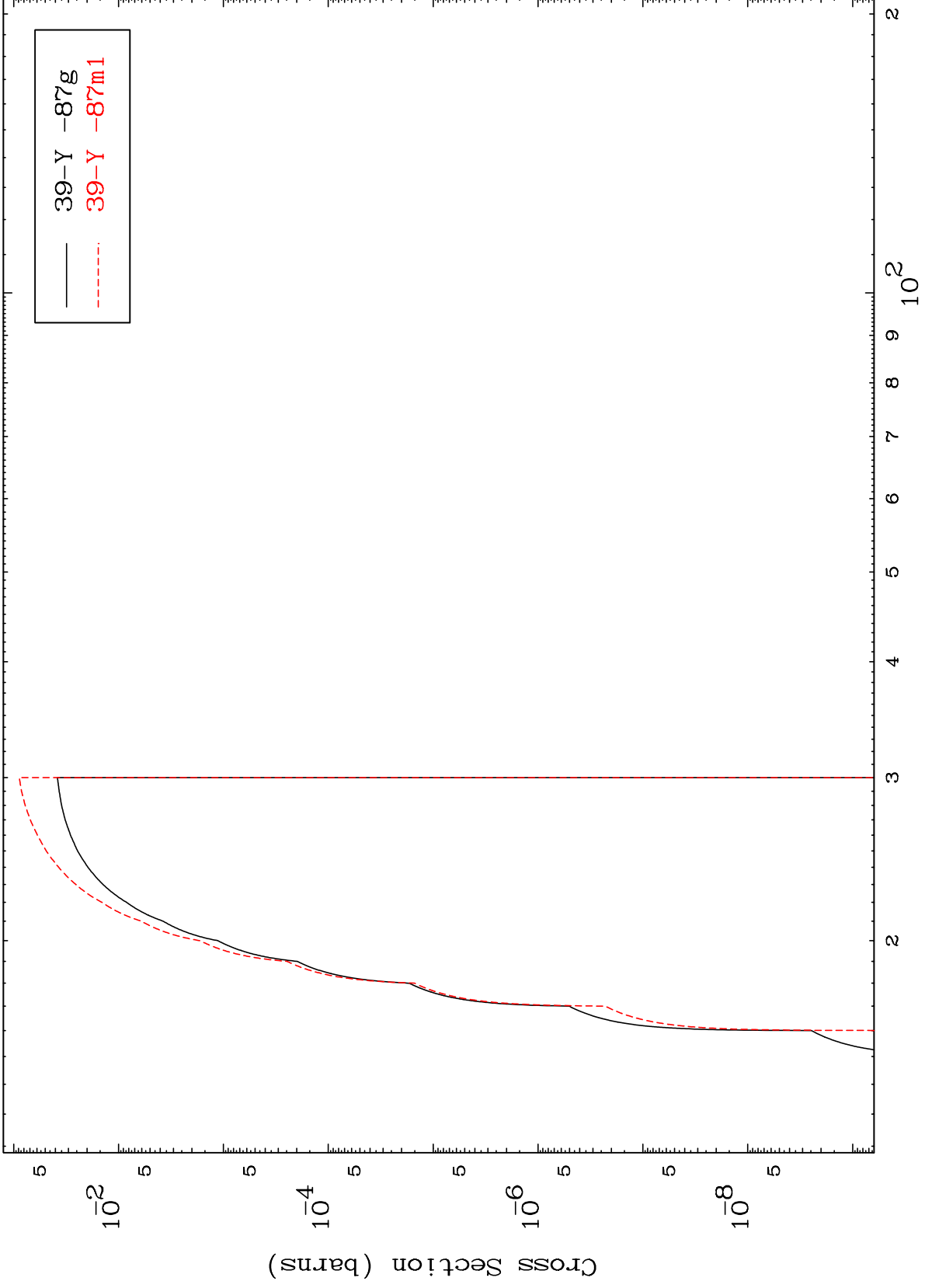


MAT 4114

(n,2n) p

41-Nb-89

Radionuclide Production Cross Section



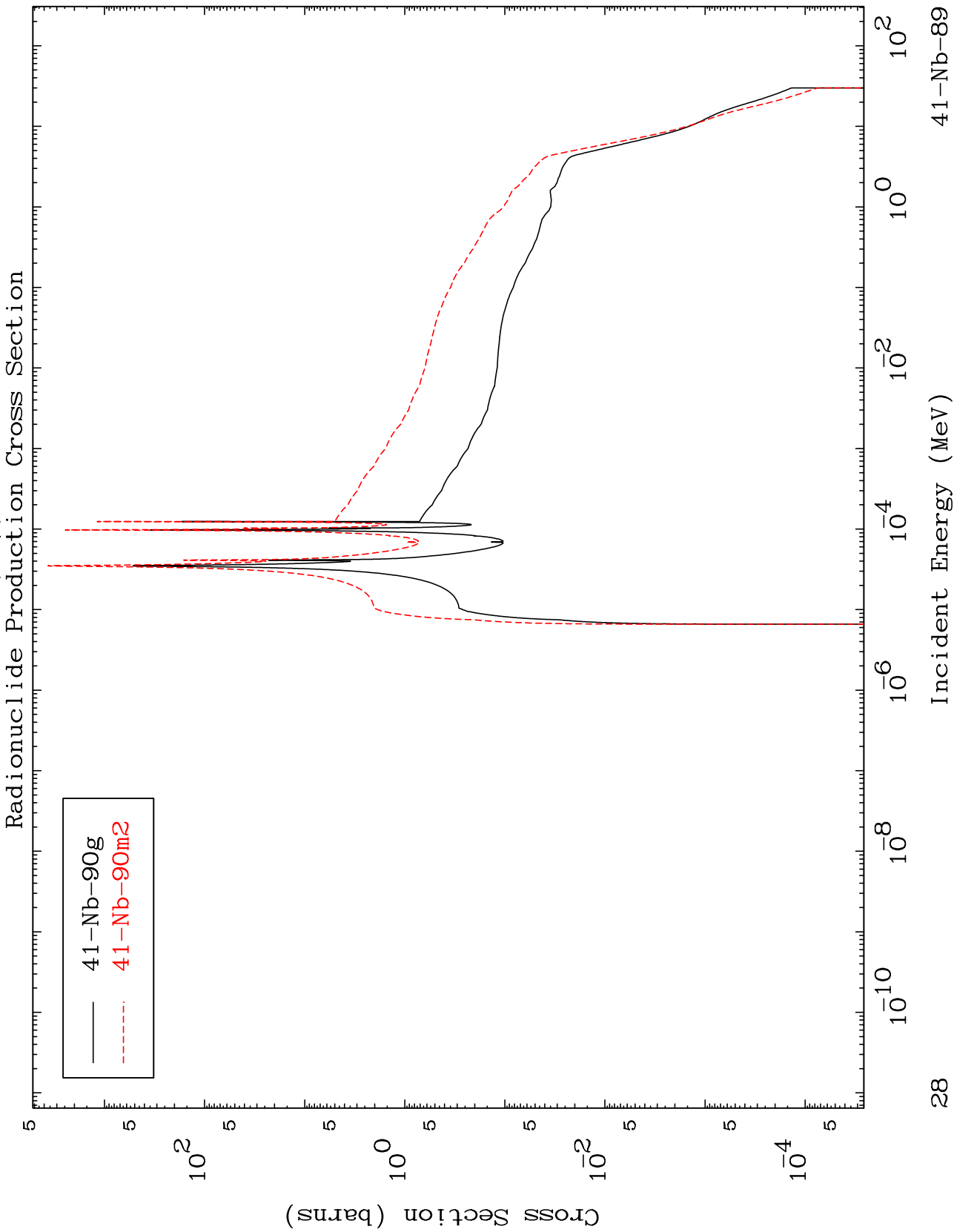
27

Incident Energy (MeV)

41-Nb-89

MAT 4114

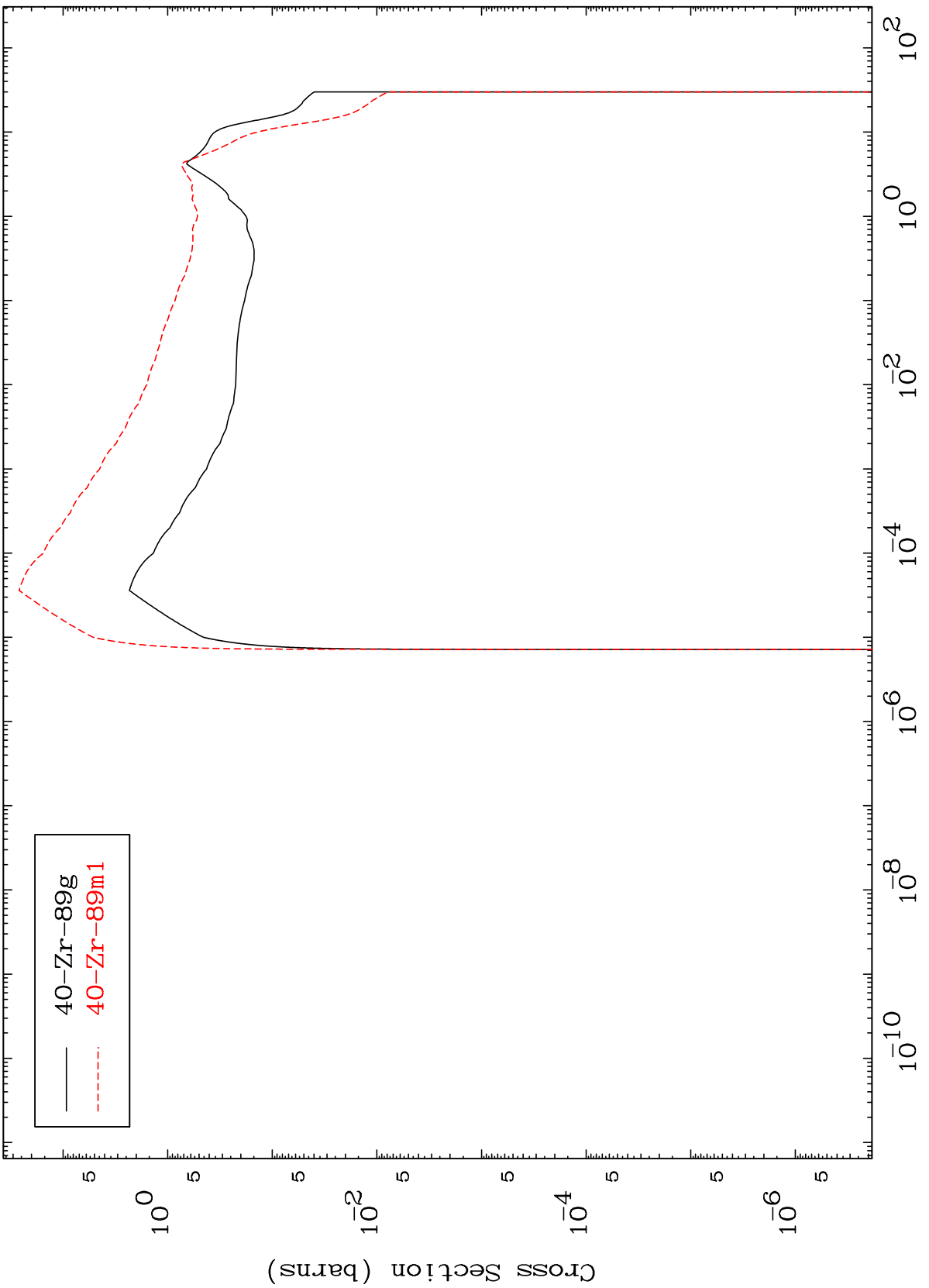
41-Nb-89



MAT 4114

41-Nb-89

(n,p)
Radionuclide Production Cross Section



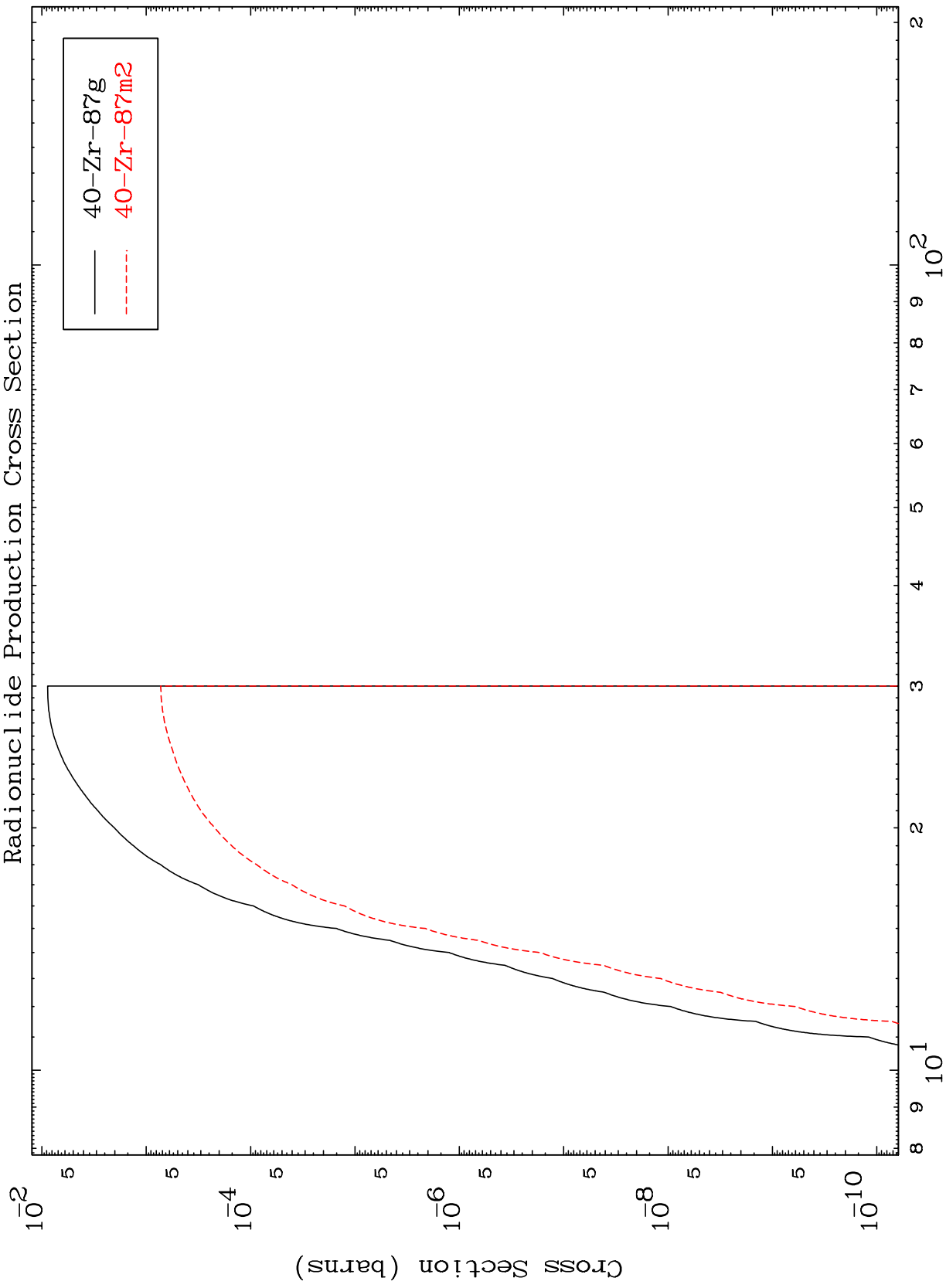
— 40-Zr-89g
- - - 40-Zr-89m1

MAT 4114

(n, t)

41-Nb-89

Radionuclide Production Cross Section



Incident Energy (MeV)

41-Nb-89

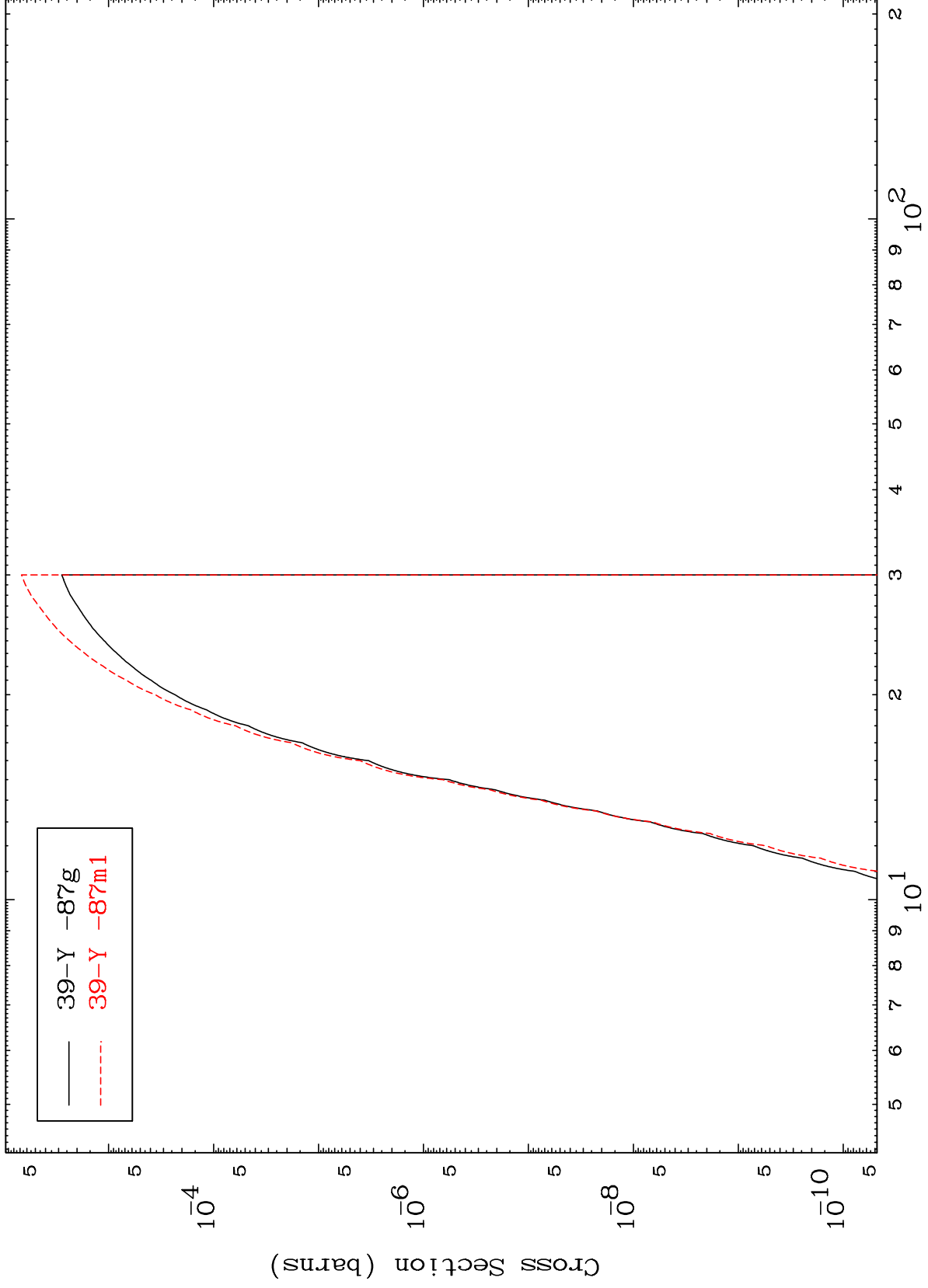
30

MAT 4114

(n,He-3)

41-Nb-89

Radionuclide Production Cross Section



31

Incident Energy (MeV)

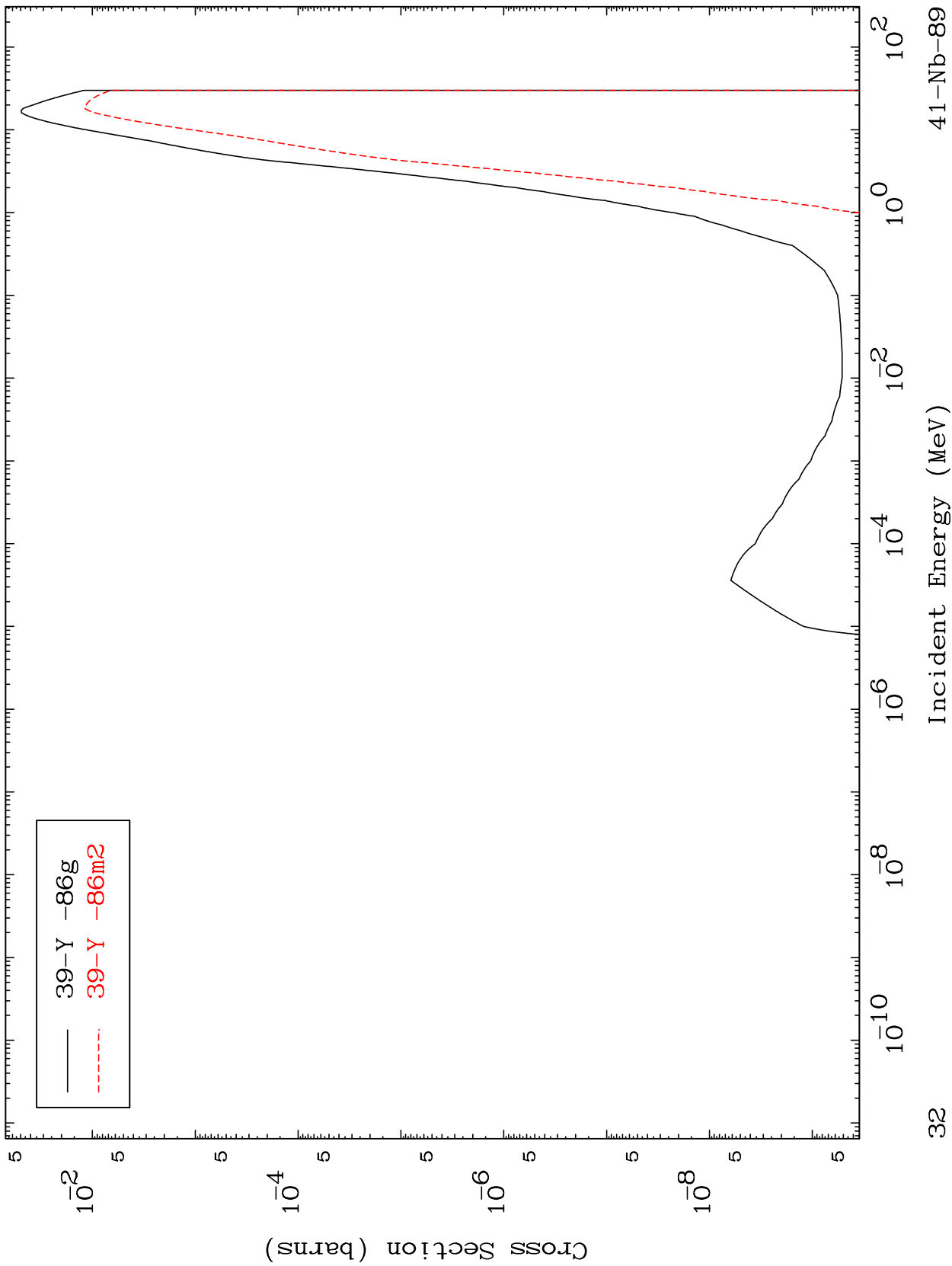
41-Nb-89

MAT 4114

(n, α)

41-Nb-89

Radionuclide Production Cross Section



32

Incident Energy (MeV)

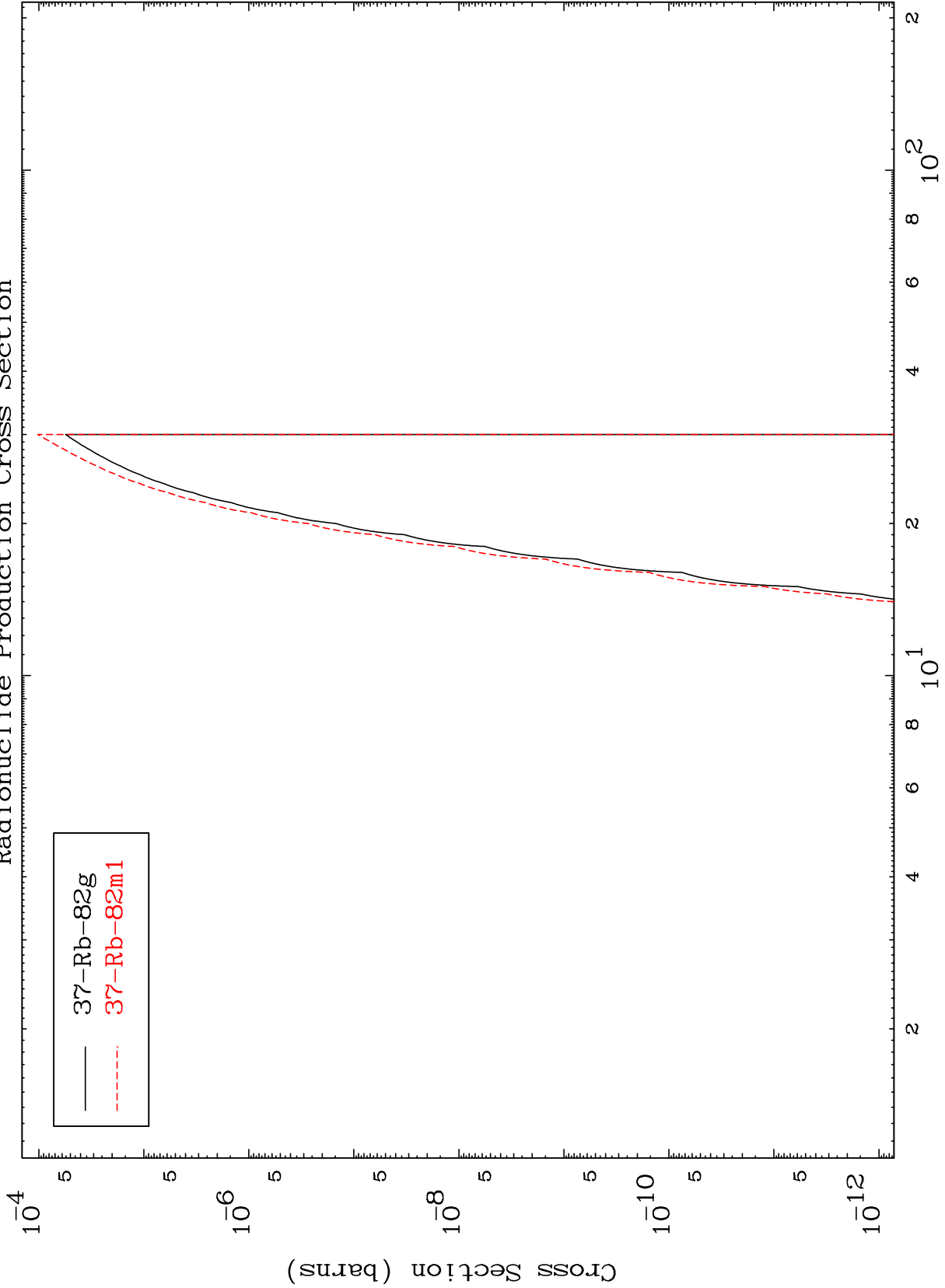
41-Nb-89

MAT 4114

(n,2α)

41-Nb-89

Radionuclide Production Cross Section

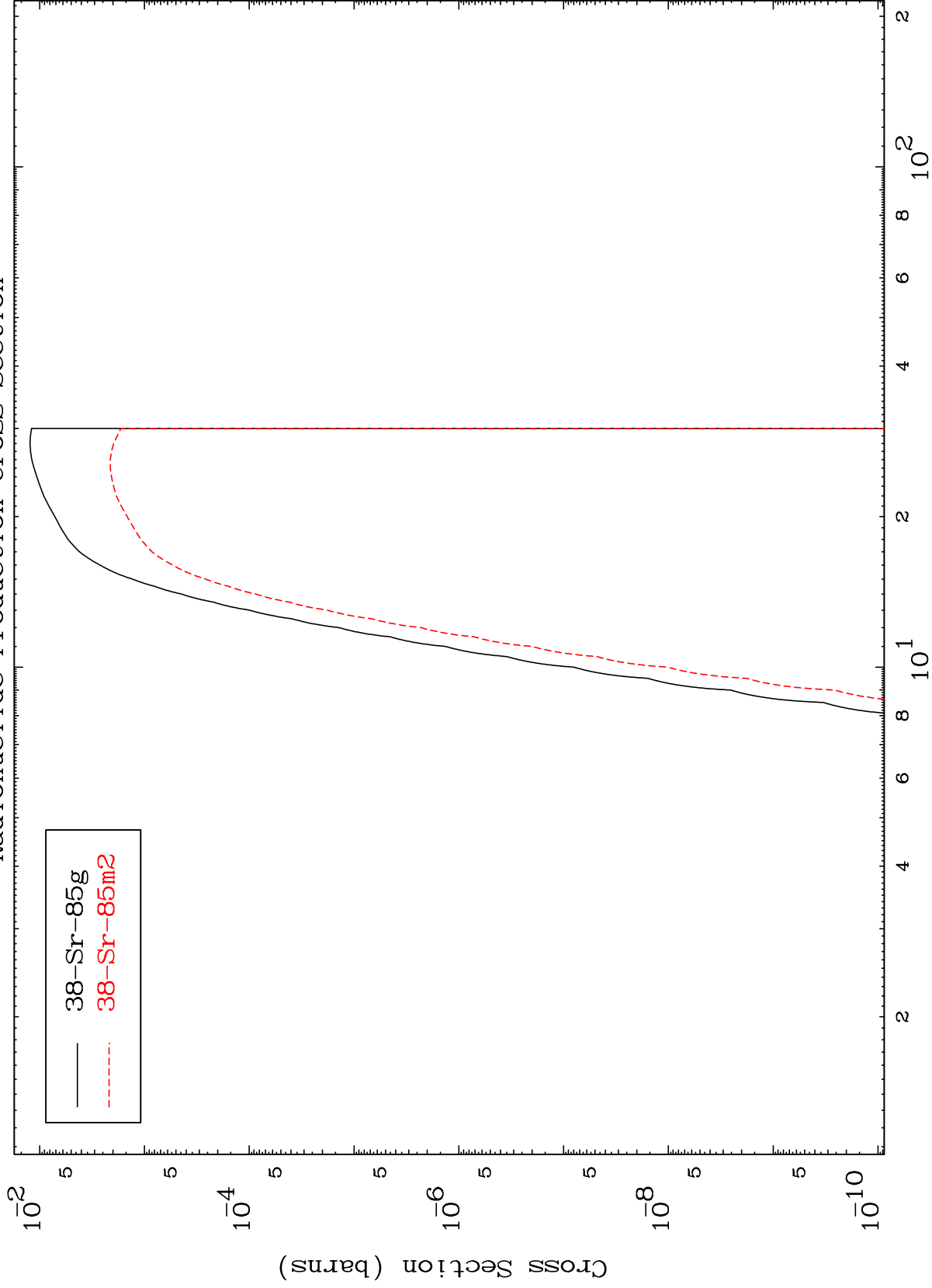


MAT 4114

(n,p) α

41-Nb-89

Radionuclide Production Cross Section



34

Incident Energy (MeV)

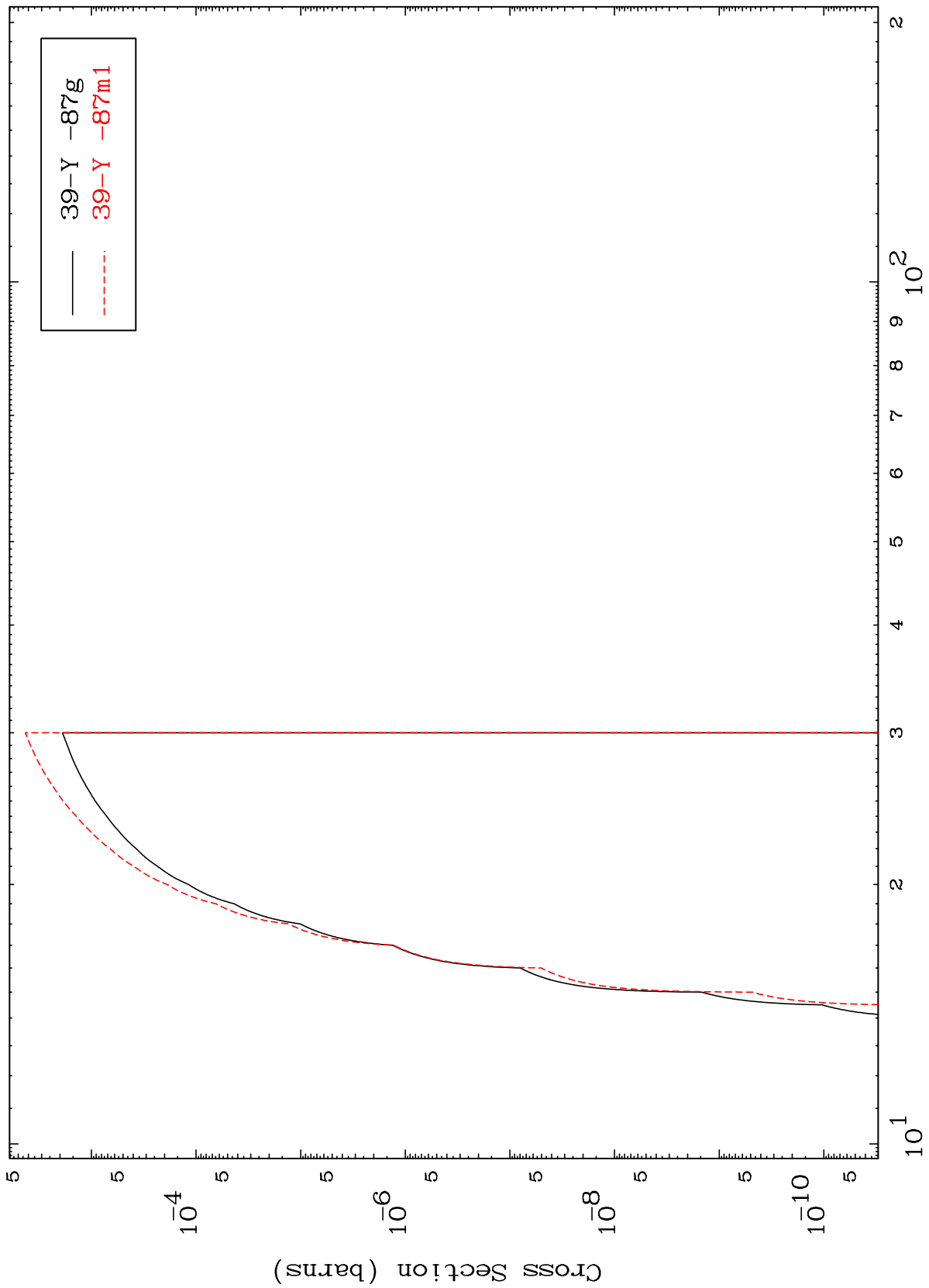
41-Nb-89

MAT 4114

(n,p) d

41-Nb-89

Radionuclide Production Cross Section



35

Incident Energy (MeV)

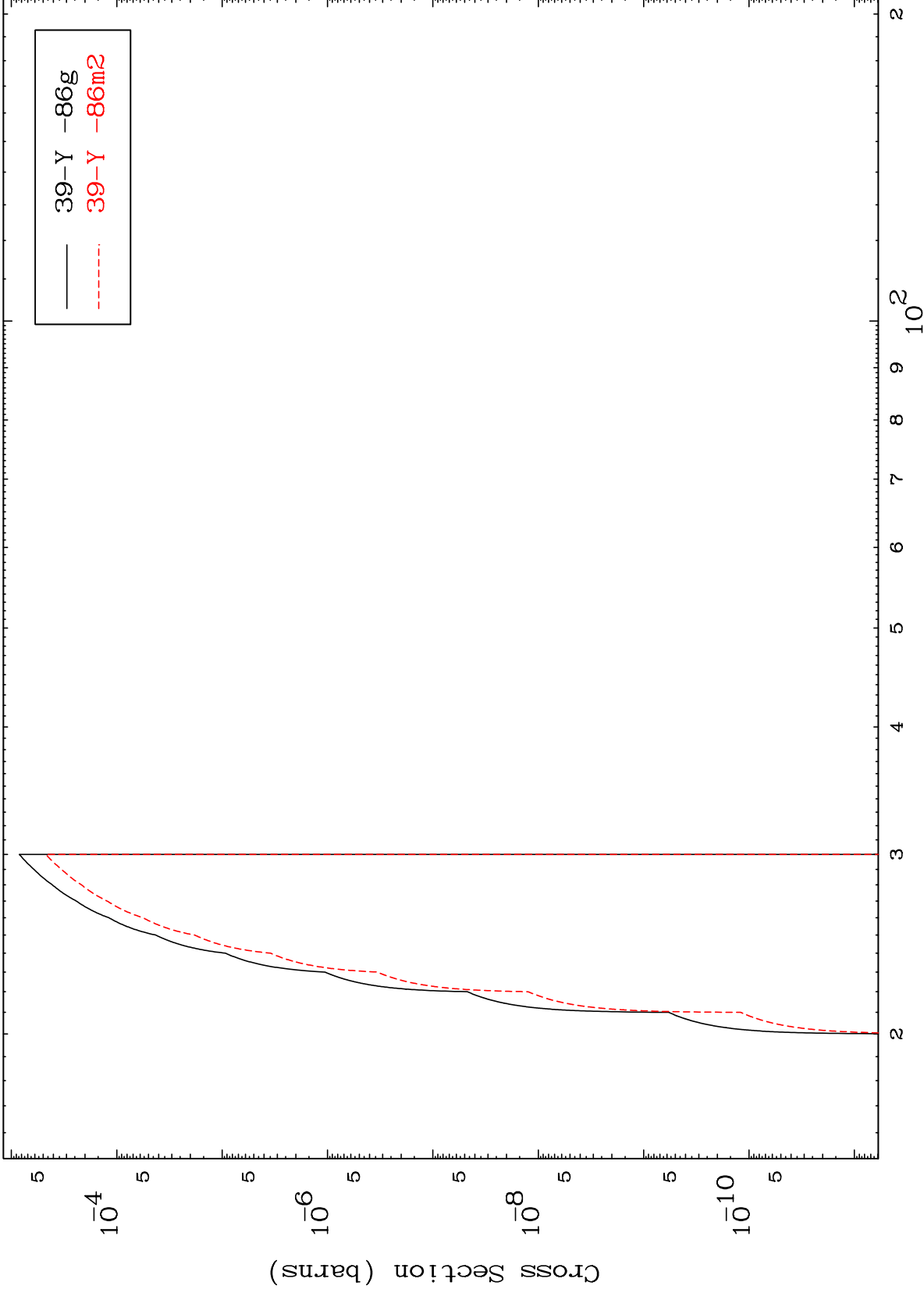
41-Nb-89

MAT 4114

(n,p) t

41-Nb-89

Radionuclide Production Cross Section



36

Incident Energy (MeV)

41-Nb-89