22-Ti-47 (n, p) 21-Sc-47

Abundance (%) = 7.44 ± 0.02
Q = 0.18226 MeV E_{thr} = 0.0
$T_{1/2}$ = 3.345 d 3
E_γ = 159.381 ± 0.015 keV I_γ = 67.90 ± 0.15 β^-

IRDF-90 - eval. - Jan 1977 C. Rhilis, O. Bersillon, D. Smith et al.
D-99 (JENDL/D-99) - eval. - Jan 1996 K. Kobayashi, N. Odano.
ENDF/B-VI - eval. - Jan 1977 C. Rhilis, O. Bersillon, D. Smith et al.
JENDL-3.2 - eval. - Sep 1988 K. Kobayashi, H. Hashikura.

Tabl. 1

U-235				
	IRDF-90	**D-99**	**ENDF/B-VI**	**JENDL-3**
10%	2.00	2.00	2.10	2.30
50%	3.70	3.60	3.75	3.90
90%	6.60	6.60	6.40	6.20
ACS	**1.73E-02**	**1.66E-02**	**2.16E-02**	**2.41E-02**

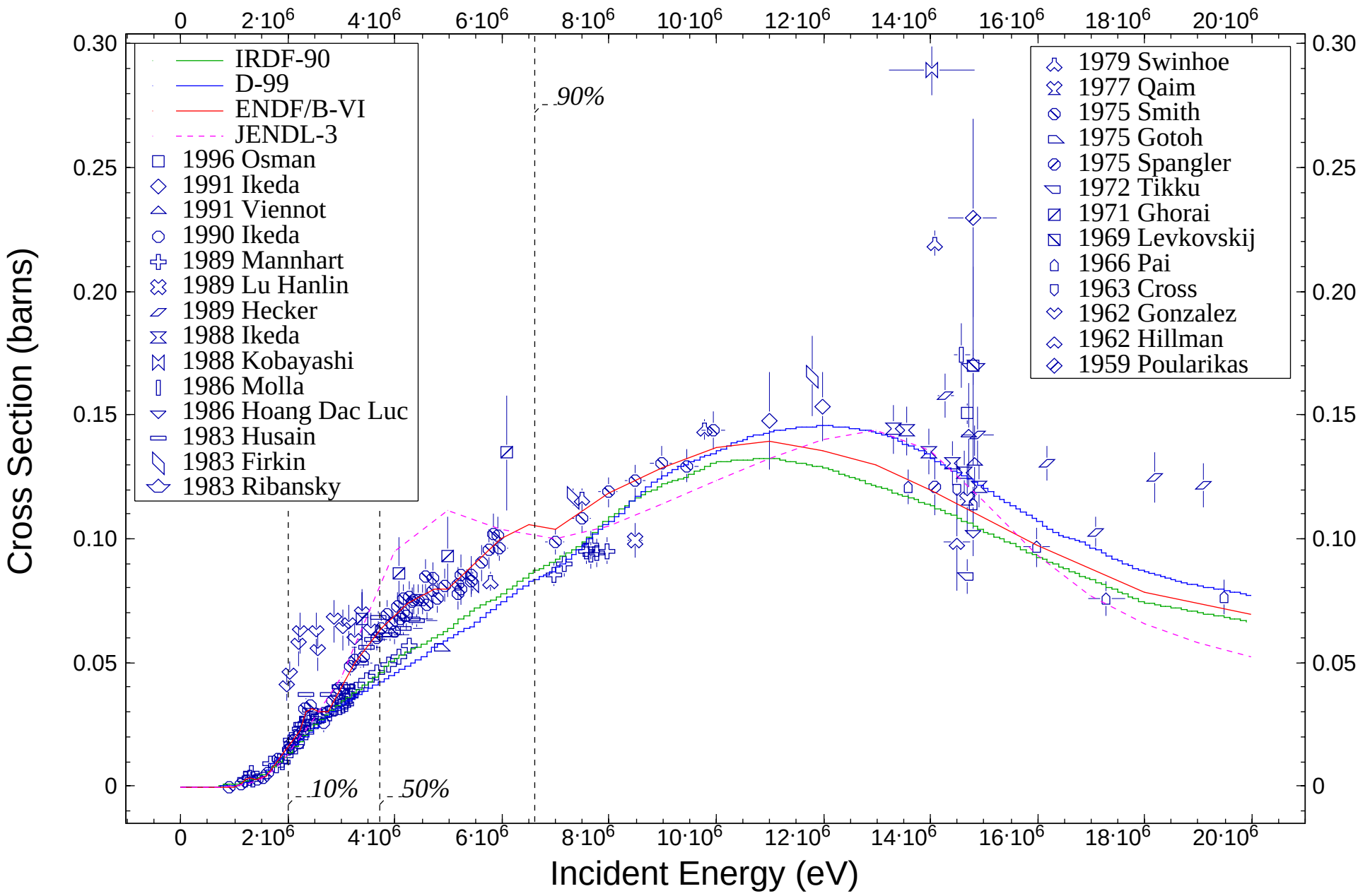
Tabl. 2

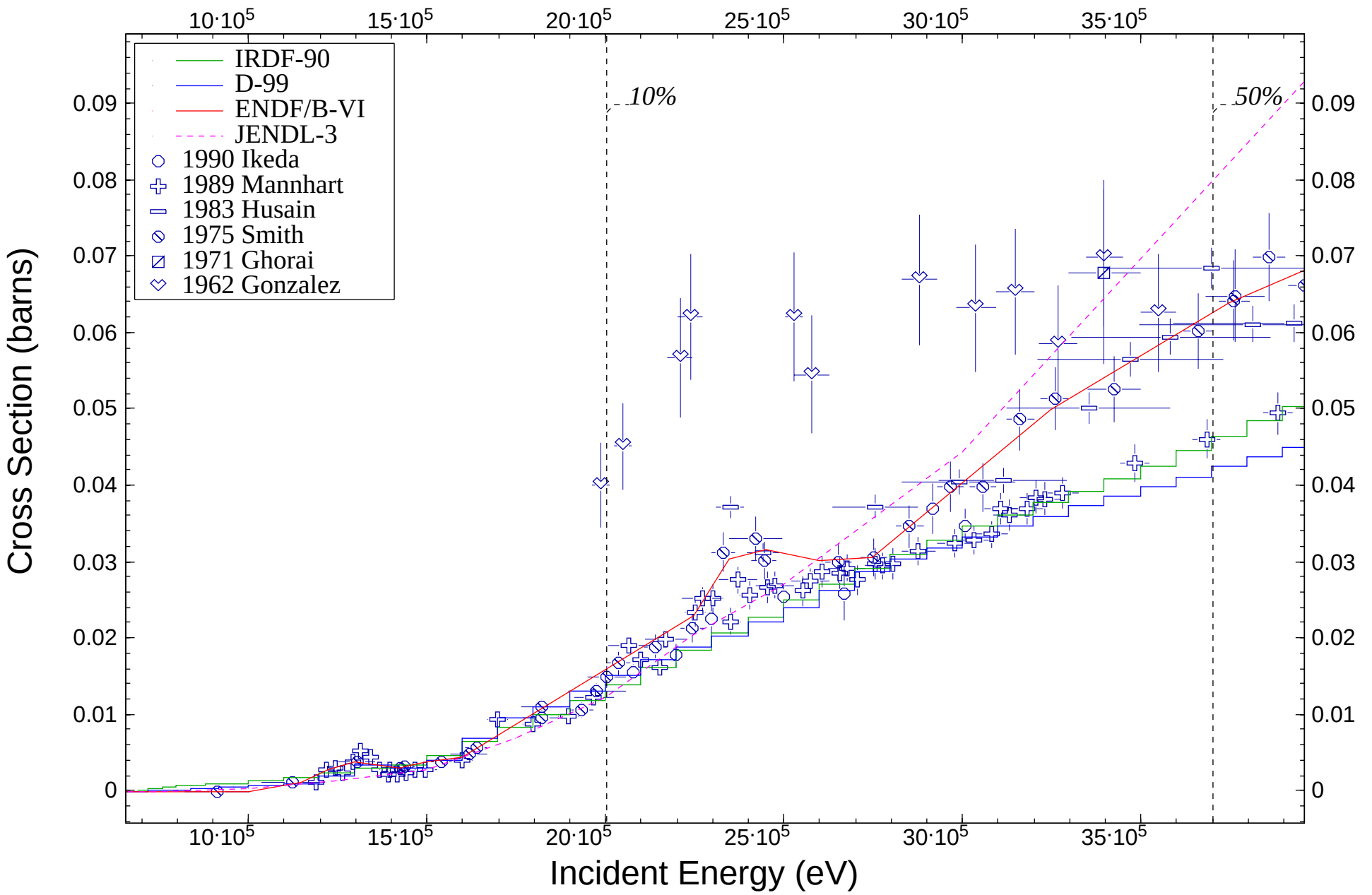
Cf-252				
	IRDF-90	**D-99**	**ENDF/B-VI**	**JENDL-3**
10%	2.10	2.10	2.20	2.30
50%	3.80	3.80	3.90	4.00
90%	7.00	7.10	6.80	6.50
ACS	**1.94E-02**	**1.85E-02**	**2.41E-02**	**2.69E-02**

Tabl. 3

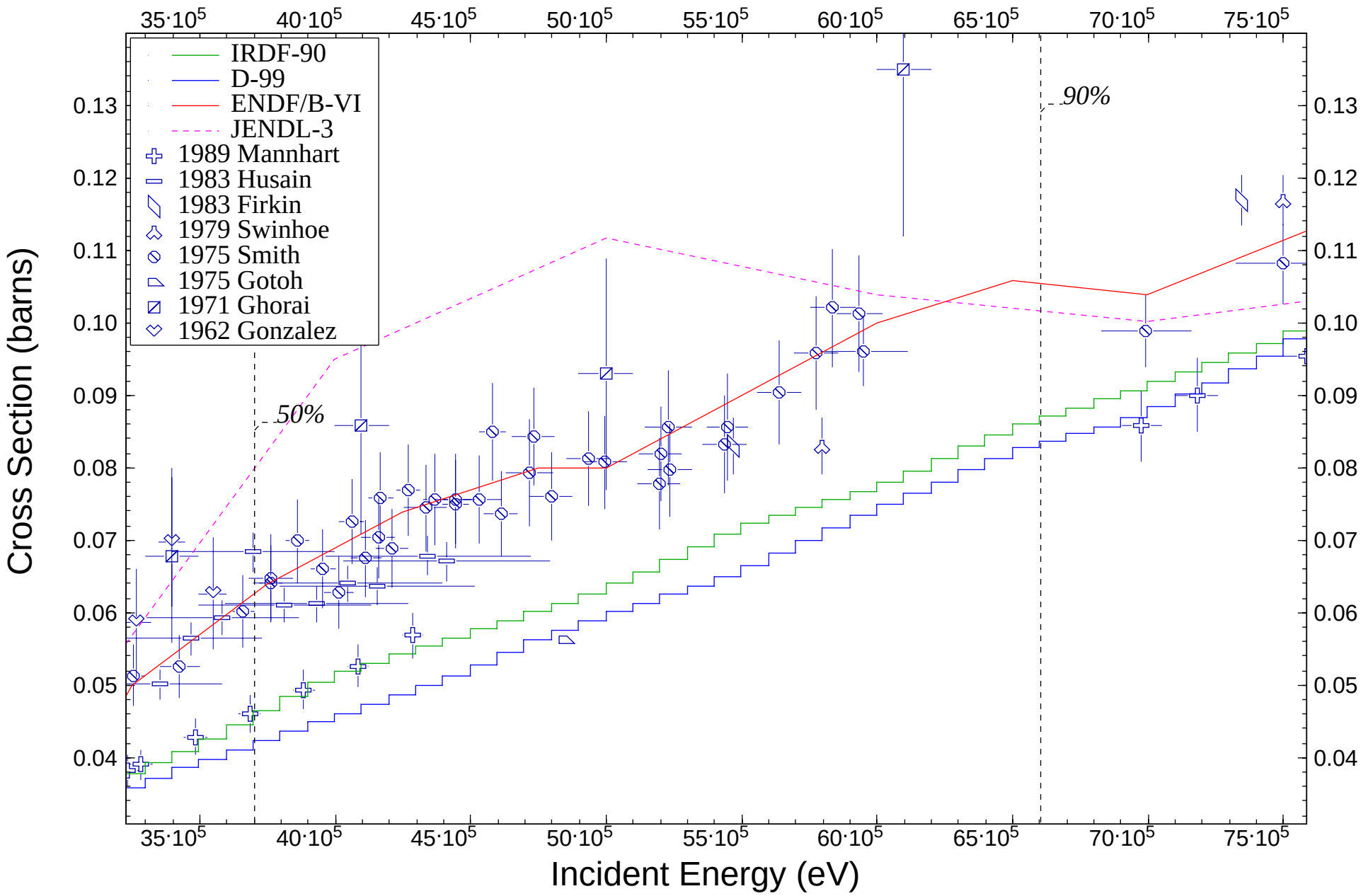
3.4+06 6.1+06	4	1USAAUB	J,JNE,25,319	7108 S.K.GHORAI,	10180003
9.1+05 4.0+06	35	1USAANL	J,NSE,58,314	7511 D.L.SMITH,	10238026
4.0+06 5.9+06	30	1USAANL	J,NSE,58,314	7511 D.L.SMITH,	10238027
5.9+06 1.0+07	8	1USAANL	J,NSE,58,314	7511 D.L.SMITH,	10238028
1.5+07 1.5+07	1	1USAARK	J,PR,115,989	59 A.POULARIKAS,	11484006
1.4+07 1.5+07	1	1USABNL	J,NP,37,78	62 M.HILLMAN	11610003
1.4+07 2.0+07	5	1CANTOR	J,CJP,44,2337	66 H.L.PAI	11630004
1.4+07 1.5+07	1	1CANCRC	P,EANDC(CAN)-16,1	6301 W.G.CROSS,	11631003
1.4+07 1.4+07	1	1USATEX	J,ANS,22,818	7511 R.SPANGLER,	12956009
1.4+07 1.9+07	6	1USAAUB 1USAALS	J,NIM/B,40/41,478	8904 W.V.HECKER,	13133002
1.2+06 1.9+06	20	1USAANL 2GERPTB	S,NEANDC-259,121	8909 W.MANNHART,	13176002
2.0+06 4.3+06	40	1USAANL 2GERPTB	S,NEANDC-259,121	8909 W.MANNHART,	13176003
7.0+06 8.0+06	7	1USAANL 2GERPTB	S,NEANDC-259,121	8909 W.MANNHART,	13176004
1.5+07 1.5+07	1	2GERJUL	J,NP/A,283,269	7706 S.M.QAIM,	20721004
5.8+06 9.8+06	3	2UK HAR	P,AERE-PR/NP-26,39	7903 M.T.SWINHOE,	20986004
1.4+07 1.4+07	1	2UK HAR	P,AERE-PR/NP-26,39	7903 M.T.SWINHOE,	20986007
4.8+06 4.9+06	1	2JPNJAE	P,JAERI-6320,165	7511 H.GOTOH,	20990002
2.3+06 4.4+06	15	2UK BIA	J,ARI,34,(4),731	83 H.A.HUSAIN,	21879003
5.5+06 1.2+07	4	2UK HAR	R,AERE-M-3350	8309 S.FIRKIN	21941002
1.3+07 1.5+07	6	2JPNJAE	R,JAERI-1312	88 Y.IKEDA,	22089027
1.4+07 1.4+07	1	2JPNKTO	C,88MITO,261	88 K.KOBAYASHI,	22093006
2.1+06 3.0+06	8	2JPNJAE	P,NEANDC(J)-155,11	9008 Y.IKEDA,	22191002
1.1+07 1.2+07	2	2JPNJAE	S,JAERI-M-91-032,281	9103 Y.IKEDA,	22209003

1.5+07 1.5+07	1	3INDSAH	C,72CHANDG,2,115	7212 V.K.TIKKU,	30394002
1.5+07 1.5+07	1	3CSRSLO	J,JP/G,9,1537	8312 I.RIBANSKY,	30660004
8.5+06 8.5+06	1	3CPRAEP	R,INDC(CPR)-16	8909 LU HANLIN,	30733005
1.5+07 1.5+07	1	3VN IPH	P,INDC(VN)-5	8609 HOANG DAC LUC,	30810009
1.5+07 1.5+07	1	3BANSAV	R,INDC(BAN)-003	8609 N.I.MOLLA,	30825004
1.5+07 1.5+07	2	3MORRAB	J,NSE,108,289	9107 M.VIENNOT,	30979003
2.0+06 3.6+06	12	3CHLCHL	J,PR,126,271	62 L.GONZALEZ,	31165002
1.5+07 1.5+07	1	3SUDKHA	R,INDC(SUD)-001	9610 K.T.OSMAN,	31464007
1.5+07 1.5+07	1	4CCPKAZ	J,YF,10,(1),44	6907 V.N.LEVKOVSKIJ,	40226003


^{47}Ti(n,p)^{47}Sc
IRDF-90
D-99
ENDF/B-VI
JENDL-3
1996 Osman
1991 Ikeda
1991 Viennot
1990 Ikeda
1989 Mannhart
1989 Lu Hanlin
1989 Hecker
1988 Ikeda
1988 Kobayashi
1986 Molla
1986 Hoang Dac Luc
1983 Husain
1983 Firkin
1983 Ribansky
1979 Swinhoe
1977 Qaim
1975 Smith
1975 Gotoh
1975 Spangler
1972 Tikku
1971 Ghorai
1969 Levkovskij
1966 Pai
1963 Cross
1962 Gonzalez
1962 Hillman
1959 Poularikas
10%
50%
90%
Cross Section (barns)
Incident Energy (eV)
0
0.05
0.10
0.15
0.20
0.25
0.30
0
2·10^6
4·10^6
6·10^6
8·10^6
10·10^6
12·10^6
14·10^6
16·10^6
18·10^6
20·10^6


47Ti(n,p)47Sc
IRDF-90
D-99
ENDF/B-VI
JENDL-3
1990 Ikeda
1989 Mannhart
1983 Husain
1975 Smith
1971 Ghorai
1962 Gonzalez
10%
50%
Cross Section (barns)
Incident Energy (eV)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
10·10^5
15·10^5
20·10^5
25·10^5
30·10^5
35·10^5

$^{47}Ti(n,p)^{47}Sc$


IRDF-90
D-99
ENDF/B-VI
JENDL-3
1989 Mannhart
1983 Husain
1983 Firkin
1979 Swinhoe
1975 Smith
1975 Gotoh
1971 Ghorai
1962 Gonzalez
50%
90%
Cross Section (barns)
Incident Energy (eV)
35·10^5
40·10^5
45·10^5
50·10^5
55·10^5
60·10^5
65·10^5
70·10^5
75·10^5
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.11
0.12
0.13