

## 79-Au-197 (n, $\gamma$ ) 79-Au-198

Abundance (%)	=	100		
Q	=	6.51239 MeV	$E_{thr}$	= 0.0
$T_{1/2}$	=	2.69517 d		
$E_{\gamma}$	=	411.8044 $\pm$ 0.0011 keV	$I_{\gamma}$	= 95.58 $\pm$ 0.12      EC+ $\beta^+$

IRDF-90	- eval. - Apr 1990 P. Young, A. Vonach et al.
D-99 (JENDL/D-99)	- eval. - Mar 1990 N. Yamamuro, K. Kobayashi.
ENDF/B-VI	- eval. - Jan 1984 P. Young.
JEF-2	- eval. - Jun 1982 JEF SCG.
BROND-2	- eval. - Jan 1984 P. Young.
CENDL-2	- eval. - Jan 1991 Y. Hanrong, W. Shunuan.

**Tabl. 1**

U-235						
	IRDF-90	D-99	ENDF/B-VI	JEF-2	BROND-2	CENDL-2
10%	1.15E-01	1.15E-01	1.18E-01	1.20E-01	1.18E-01	1.15E-01
50%	6.60E-01	6.90E-01	6.60E-01	6.78E-01	6.60E-01	6.60E-01
90%	2.10	2.20	2.10	2.20	2.10	2.10
<b>ACS</b>	<b>7.89E-02</b>	<b>7.96E-02</b>	<b>7.89E-02</b>	<b>7.96E-02</b>	<b>7.89E-02</b>	<b>7.89E-02</b>

**Tabl. 2**

Cf-252						
	IRDF-90	D-99	ENDF/B-VI	JEF-2	BROND-2	CENDL-2
10%	1.28E-01	1.28E-01	1.33E-01	1.36E-01	1.33E-01	1.30E-01
50%	6.90E-01	7.20E-01	7.00E-01	7.28E-01	7.00E-01	7.00E-01
90%	2.20	2.30	2.20	2.30	2.20	2.20
<b>ACS</b>	<b>7.42E-02</b>	<b>7.49E-02</b>	<b>7.42E-02</b>	<b>7.50E-02</b>	<b>7.42E-02</b>	<b>7.42E-02</b>

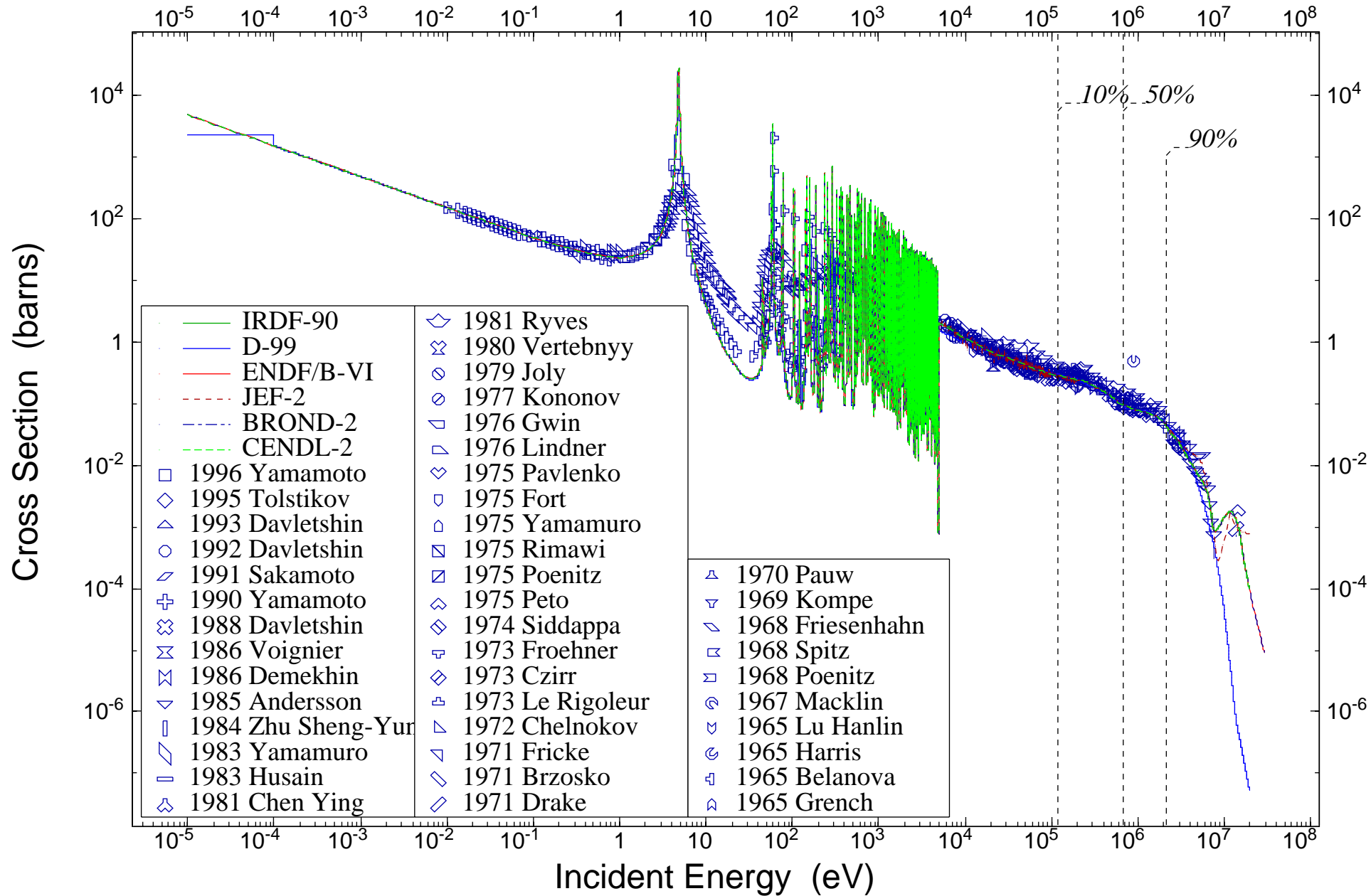
**Tabl. 3**

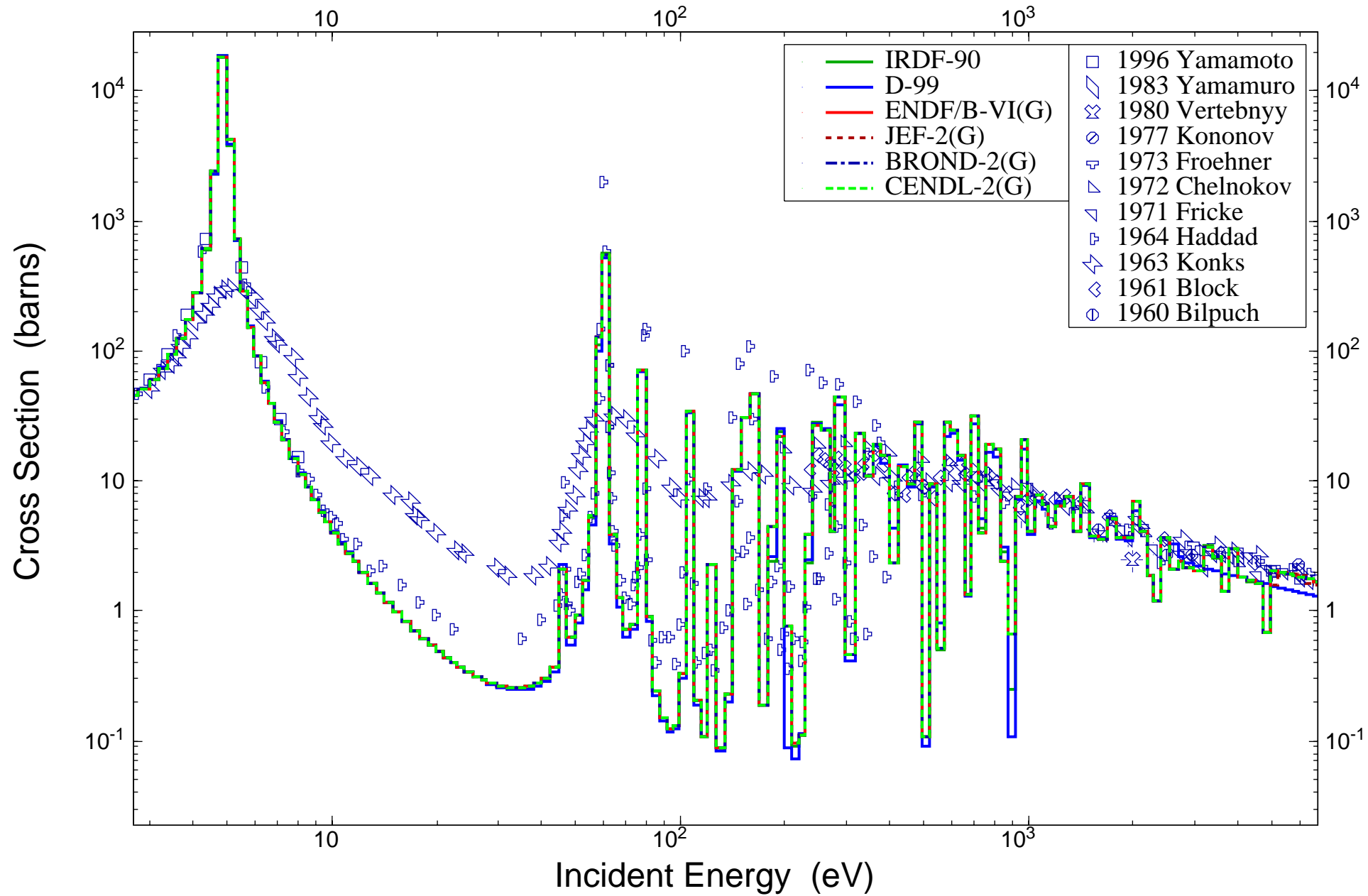
9.6+02	1.1+06	95	1USAGRT	C,71KNOX,1,252,197103	7103 M.P.Fricke,	10049007
1.4+07	1.4+07	1	1USALAS	J,PL/B,36,557,7110	7110 D.Drake,	10193005
1.2+05	9.4+05	8	1USALRL	J,NSE,59,381,7604	7604 M.Lindner,	10221055
3.0+05	1.7+06	7	1USALRL	J,NSE,59,381,7604	7604 M.Lindner,	10221056
6.0+05	2.7+06	8	1USALRL	J,NSE,59,381,7604	7604 M.Lindner,	10221057
3.0+04	3.0+04	1	1USAORL	J,NSE,59,79,7602	7602 R.Gwin,	10267043
6.9+03	4.1+04	8	1USAORL	J,NSE,59,79,7602	7602 R.Gwin,	10267045
6.9+03	2.5+05	15	1USALRL	J,NSE,52,299,7311	7311 J.B.Czirr,	10305003
4.0+05	3.5+06	18	1USAANL	J,NSE,57,300,7508	7508 W.P.Poenitz	10421004
2.4+04	2.4+04	1	1USABNL	C,75WASH,2,920,7503	7503 K.Rimawi,	10434002
2.5-02	2.5-02	1	1USAANL	J,NSE,9,132,6102	6102 J.W.Meadows,	11028024
1.6+03	2.0+05	13	1USADKE	J,AP,10,455,60	6001 E.G.Bilpuch,	11187004
2.5-02	2.5-02	1	1USACOL	J,NSE,8,453,6009	6009 F.T.Gould,	11198004
2.5-02	2.5-02	1	1USABNL	J,PR,92,716,5311	5311 R.S.Carter,	11211005
3.0+04	1.7+05	3	1USAORL	J,PR,122,182,61	6101 J.H.Gibbons,	11329066
9.4+03	1.6+05	52	1USAORL	J,PR,122,182,61	6101 J.H.Gibbons,	11329067
3.0+04	3.0+04	1	1USAORL	J,NP,43,353,63	6301 R.L.Macklin,	11380013
1.8+05	1.8+05	1	1USALAS	J,PR,113,256,59	5901 S.J.Bame Jr,	11405004
2.0+05	2.0+05	1	1USAORL	J,PR,114,1619,59	5901 W.S.Lyon,	11407032
2.4+04	2.4+04	1	1USALRL	J,PR,112,226,58	5801 R.Booth,	11429031
1.8+05	1.0+06	7	1USALAS	J,PR,120,556,6010	6010 B.C.Diven,	11616027
1.5+05	5.4+06	21	1USAWIS	J,PR,116,927,59	5901 A.E.Johnsrud,	11675026
1.3+05	1.8+05	3	1USAORL	J,PR,159,1007,67	6701 R.L.Macklin,	11679023
2.5-02	2.5-02	1	1USAORL	J,PR,96,1297,5412	5412 R.G.Allen,	11762006

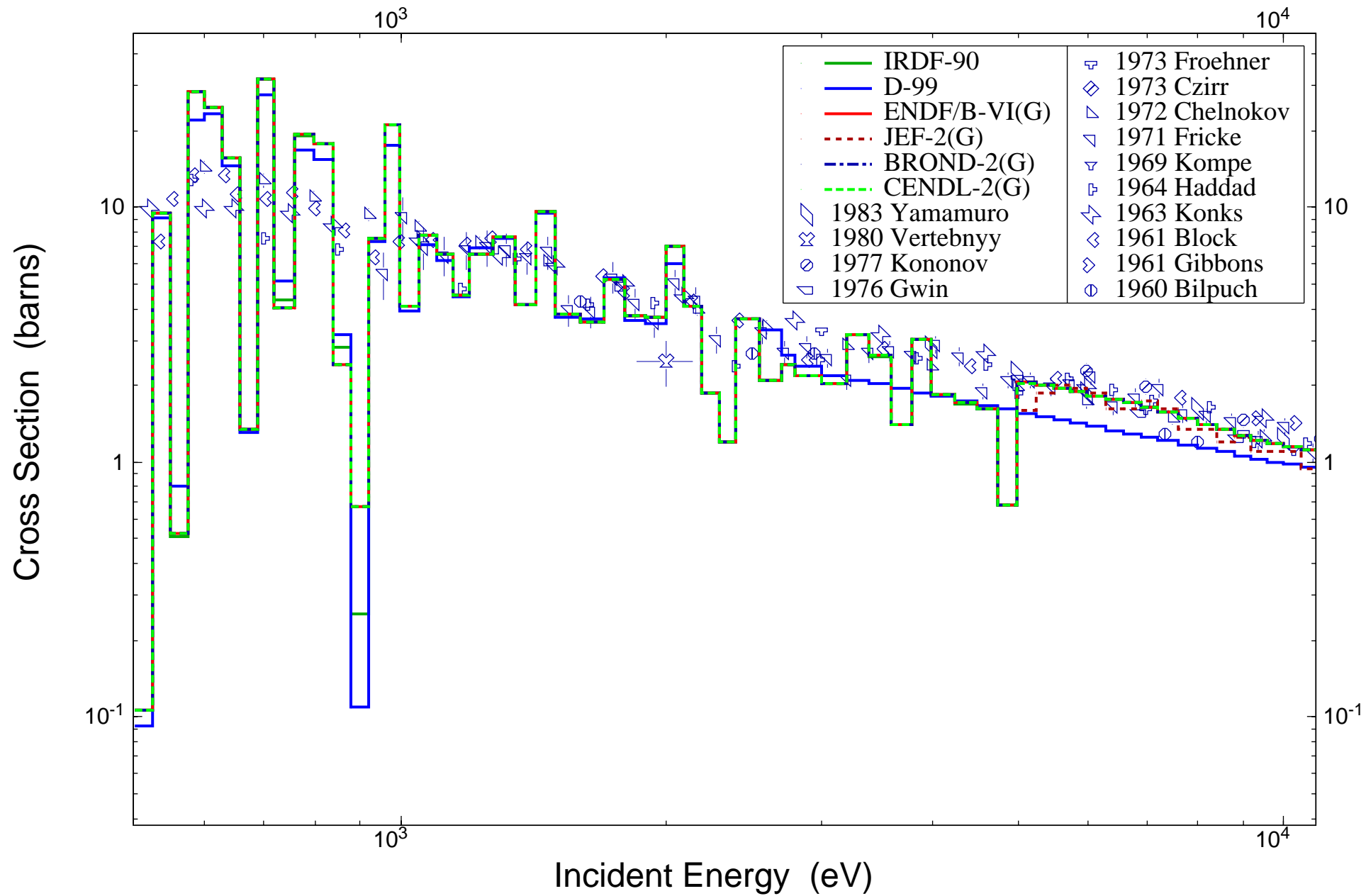
2.4+04 2.4+04	1	1USAORL	J,NP,20,202,60	6001 H.W.Schmitt,	11778013
2.3+02 7.6+03	42	1USAORL	C,61SACLAY,,203,6107	6107 R.C.Block,	11935026
6.9+04 4.0+06	20	1USALRL	J,PR,128,2717,62	6201 J.A.Miskel,	12115007
3.2+04 1.8+05	6	1USALRL	J,PR,128,2717,62	6201 J.A.Miskel,	12115008
2.5-02 2.5-02	1	1USAGA	J,JNE,22,191,68	6801 S.J.Friesenhahn,	12163012
1.4+05 1.2+06	12	1USALOK	R,EANDC(US)-79,72,65	6501 H.A.Grench,	12192002
8.6+00 3.5+04	139	1USAGA	J,NIM,31,125,64	6401 E.Haddad,	12196002
1.0-02 8.0+00	34	1USAGA	J,NIM,31,125,64	6401 E.Haddad,	12196003
1.3+04 6.9+05	14	1USALOK	J,NP,69,37,6507	6507 K.K.Harris,	12197002
4.2+04 4.2+04	1	1USALOK	J,NP,69,37,6507	6507 K.K.Harris,	12197003
3.0+04 1.5+06	21	1USAANL	J,PR,122,1280,61	6101 S.A.Cox	12213002
3.0+04 6.4+04	2	1USAORL	J,PR,123,948,61	6101 L.W.Weston,	12214002
2.5-02 2.5-02	1	1USACOL	R,CR-1765,5609	5609 W.W.Havens Jr,	12674002
2.3+04 2.3+04	1	1USAMHG	J,NSE,109,215,9110	9110 S.Sakamoto,	13519002
9.7+05 9.7+05	1	1USAMHG	J,NSE,109,215,9110	9110 S.Sakamoto,	13519003
1.8+04 3.0+05	8	2SWDFOA	J,AF,23,425,6303	6303 I.Bergqvist	20024005
2.5-02 2.5-02	1	2DENRIS	J,PR/B,133,925,6402	6402 J.Als-Nielsen,	20105006
1.0+04 1.6+05	72	2GERKFK	J,NP/A,133,513,6908	6908 D.Kompe	20358035
2.4+04 2.4+04	1	2JPNKTO	C,75WASH,HB-22,7503	7503 N.Yamamuro,	20432006
7.5+04 5.4+05	285	2FRCAD	R,CEA-N-1662,,7308	7308 C.Le Rigoleur,	20558002
1.2+04 1.6+05	402	2FRCAD	C,75WASH,2,957,7503	7503 E.Fort,	20573002
2.5-02 2.5-02	1	2UKHAR	J,JNE/A,12,32,6005	6005 R.B.Tattersall,	20638062
5.2+05 3.0+06	5	2FRBRC	J,NSE,70,(1),53,7904	7904 S.Joly,	20787005
2.1+04 2.2+04	4	2NEDAMS	T,PAUW,7011	7011 H.Pauw	20868012
3.0+03 2.3+05	80	2GERKFK	W,FROEHNER,7311	7311 F.Froehner	21020002
1.4+07 1.4+07	1	2UKNPL	J,JP/G,7,(1),115,8101	8101 T.B.Ryves,	21847004
2.5+04 4.7+05	22	2GERKFK	J,JNE,22,505,6808	6808 W.P.Poenitz,	21848002
2.1+06 3.6+06	7	2UKBIA	J,ARI,34,(4),731,83	8301 H.A.Husain,	21879007
4.0+03 2.7+05	22	2JPNKIT	J,NST,20,(10),797,8310	8310 N.Yamamuro,	21911003
2.0+06 7.6+06	22	2SWDLND	J,NP/A,443,404,85	8501 P.Andersson,	21962003
5.0+05 3.0+06	6	2FRBRC	J,NSE,93,43,86	8601 J.Voignier,	22006031
1.3-02 8.9-01	37	2JPNKTO	P,NEANDC(J)-155,59,900	9008 S.Yamamoto,	22196003
1.3-02 8.0+00	54	2JPNKTO	J,NST,33,(11),815,1996	9611 S.Yamamoto,	22370004
1.5+04 5.6+04	18	3SAFPEL	J,NP/A,121,655,6812	6812 L.M.Spitz,	30114007
4.0+05 4.0+05	1	3POLWWA	J,APP/B,2,489,71	7101 J.S.Brzosko,	30159023
1.5+07 1.5+07	1	3HUNKOS	J,ASL,25,185,75	7501 G.Peto,	30310004
2.3+04 2.3+04	1	3INDAUW	J,AP,83,355,74	7401 K.Siddappa,	30502012
4.6+05 1.5+06	4	3CPRAEP	J,CNP,3,(1),52,8102	8102 Chen Ying,	30607002
1.3+05 9.0+05	6	3CPRAEP	J,CNP,3,(1),52,8102	8102 Chen Ying,	30607003
3.0+04 3.0+04	1	3CPRAEP	J,CNP,6,(1),23,8402	8402 Zhu Sheng-Yun,	30689002
2.5-02 2.5-02	1	3CPRAEP	J,CST,1965,(10),848,65	6510 Lu Hanlin,	30914002
2.4+04 2.4+04	1	4RUSFEI	J,AE,19,(1),3,6507	6507 T.S.Belanova,	40072014
2.0+02 3.5+04	26	4CCPFEI	R,YFI-13,6,72	7201 V.B.Chelnokov,	40105006
2.0+05 2.0+05	1	4RUSFEI	C,58GENEVA,15,50(2219)	5809 A.I.Leipunskij,	40244125
2.4+04 2.4+04	1	4CCPFEI	J,AE,5,564,58	5801 V.N.Kononov,	40421021
2.1-02 1.0-01	15	4CCPIJI	C,75KIEV,3,171,7506	7506 E.A.Pavlenko,	40464002
6.0+03 3.5+05	75	4RUSFEI	R,YK-22,29,1977	7701 V.N.Kononov,	40520002
2.0+03 2.0+03	1	4UKRIJI	J,YK,1/36,32,198003	8003 V.P.Vertebnyy,	40729035
1.8-01 4.1+04	99	4CCPLEB	J,ZET,46,(1),80,63	6301 V.A.Konks,	40799004
2.7+06 2.7+06	1	4CCPKGU	C,86KHARKO,,94,8604	8604 V.L.Demekhin,	40944003
6.2+05 7.8+05	11	4CCPFEI	J,AE,65,(5),343,8810	8810 A.N.Davletshin,	40968002
1.6+05 1.4+06	40	4CCPFEI	J,AE,65,(5),343,8810	8810 A.N.Davletshin,	40968003
8.1+05 2.4+06	5	4RUSFEI	J,YK,,(1),41,92	9201 A.N.Davletshin,	41121003
3.7+05 1.0+06	5	4RUSFEI	J,YK,1993,(1),13,9303	9303 A.N.Davletshin,	41183002

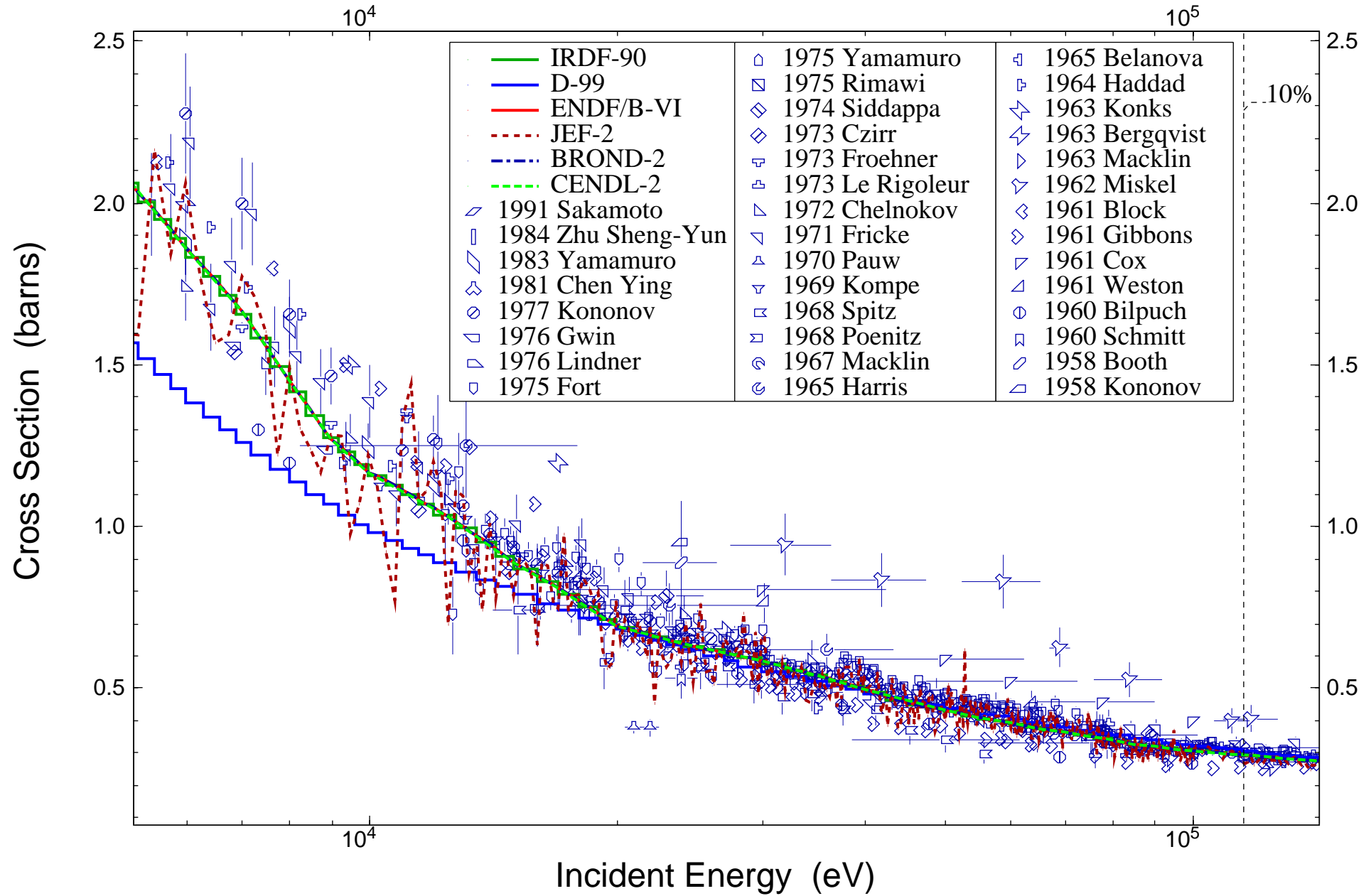
4.9+05 6.9+05	5	4RUSFEI	J,YK,1994,(4),46,9505	9505 V.A.Tolstikov,	41190002
9.0+05 9.0+05	1	2UKOXF	J,NAT,163,366,4903	4903 L.E.Beghian,	62500016

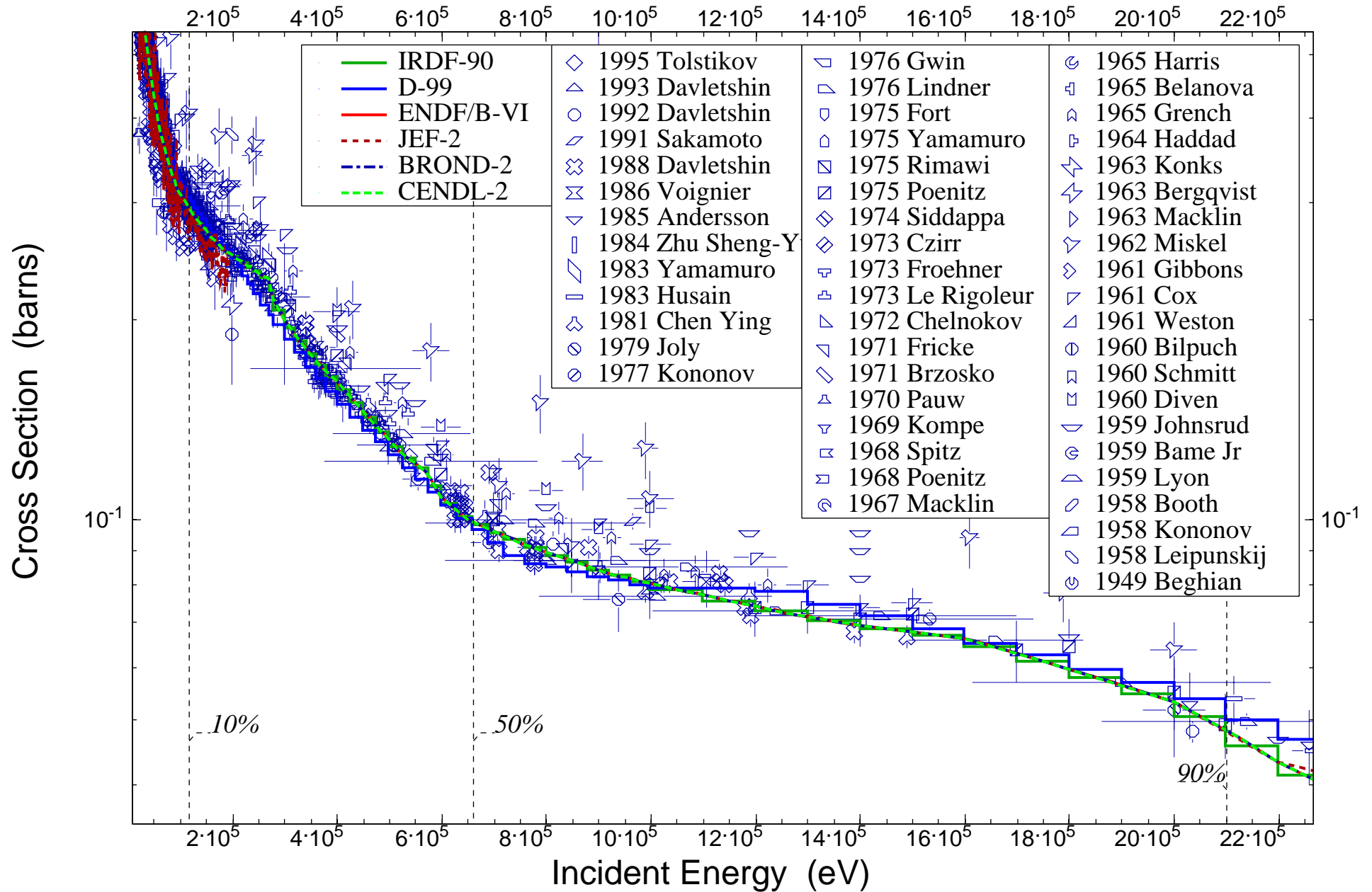
# $^{197}\text{Au}(n,\gamma)^{198}\text{Au}$

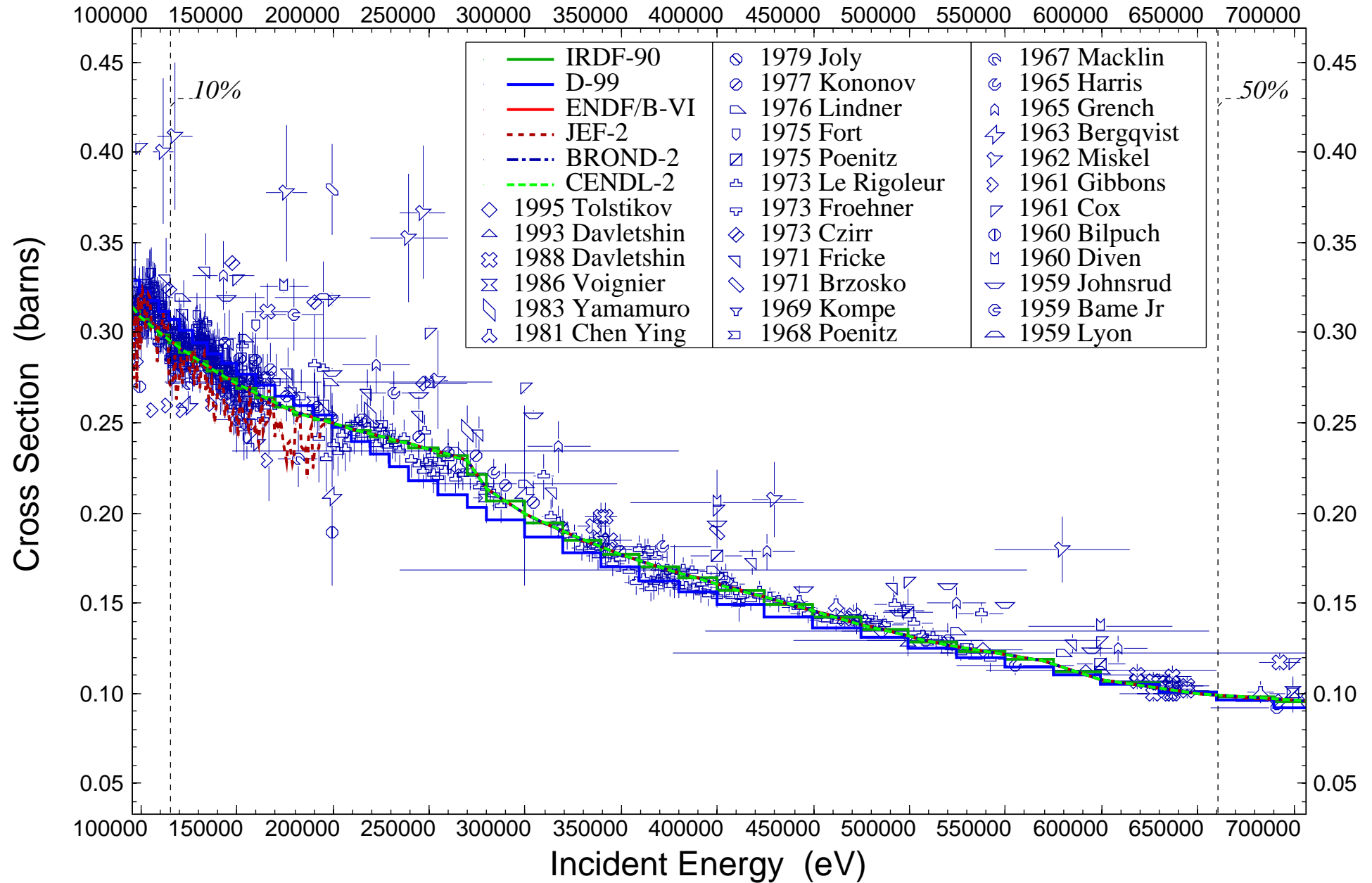


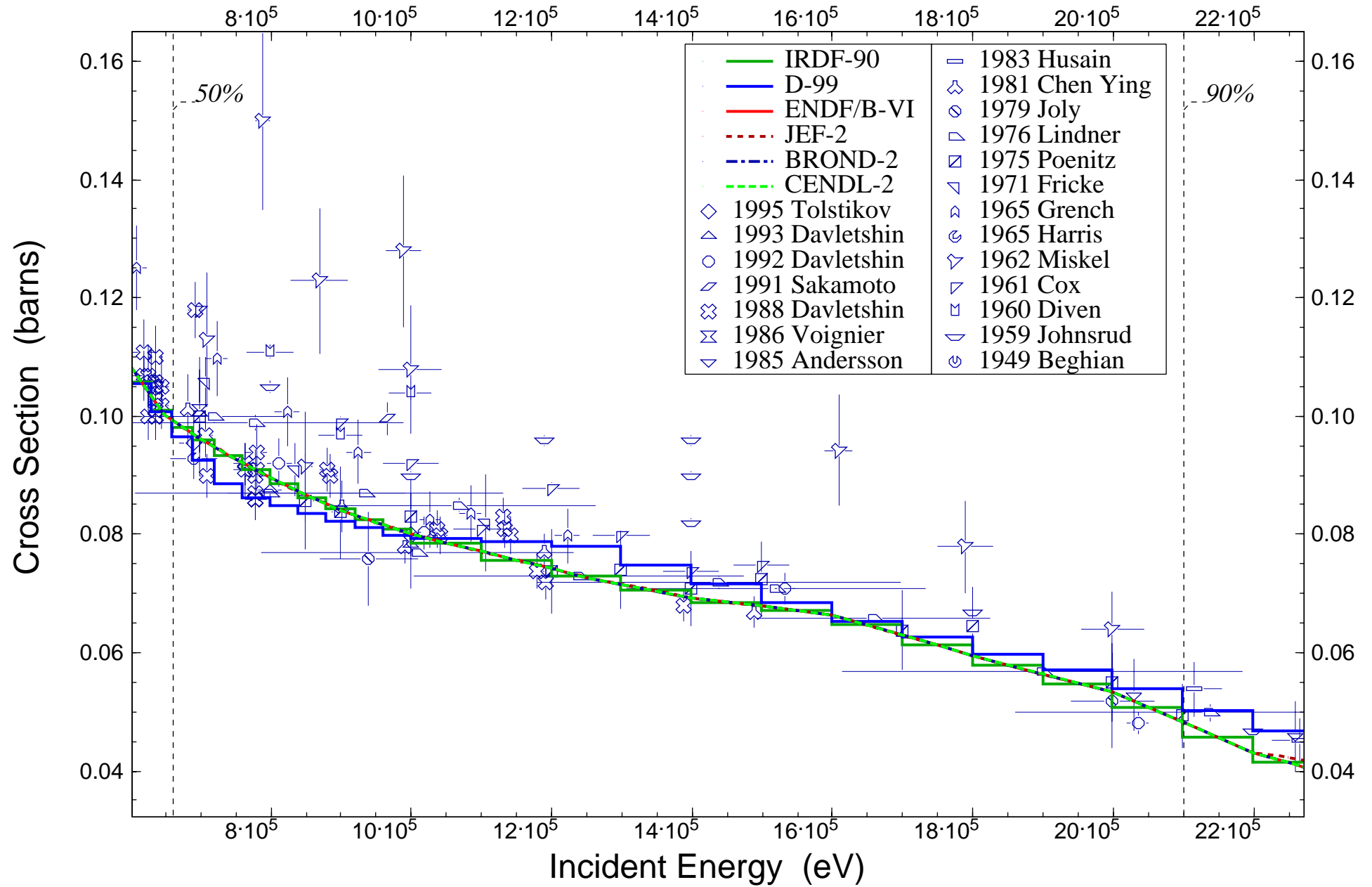
$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 

$^{197}\text{Au}(n,\gamma)^{198}\text{Au}$ 