Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Ir
Ba66	0.6-2.6	Ellips	300-2400			x	Heat	n,k	filaments at various temperatures
HJH67	6.2-24.8	m-θ		x			Ex	R,n,k	various substrate temperatures
SPS67	∿7.7-41	Trans, Refl		x			Ex	R,T	laser-evaporated films
HRS69	35-300	Trans		x			Ex	μ	optical absorption measurements with synchrotron radiation
Hu71	∿6.3-41	Refl		x			Ex	R	
KNN72	0.08-4.08	Ellips	77, 295			x	Ex	$n,k,\varepsilon_1,\varepsilon_2,\sigma$	MP and annealing at ∿925 K $\sim 10^{-6}$ Torr
We75									discussion paper
WOL77	0.2-40	Refl	4.2 for $h\nu < 4.4$ eV 300 for $h\nu > 4.4$ eV			x	Ex	R; KK: $\varepsilon_1,\varepsilon_2,\sigma$, $\mathrm{Im}(\varepsilon^{-1}),\mathrm{Im}(\varepsilon+1)^{-1}$	absorptivity measured by calorimetry for $h\nu < 4.4$ eV, reflectivity measured for $h\nu > 4.4$ eV with synchrotron radiation, sample boiled in aqua regia, heated in vacuo $\sim 10^{-7}$ Torr
Gi Unpl	∿1-25	m-θ				x	Heat	$R,\varepsilon_1,\varepsilon_2,n,k,\mathrm{Im}(\varepsilon^{-1})$, $\mathrm{Im}(\varepsilon+1)^{-1}$	studies done at 2×10^{-9} Torr

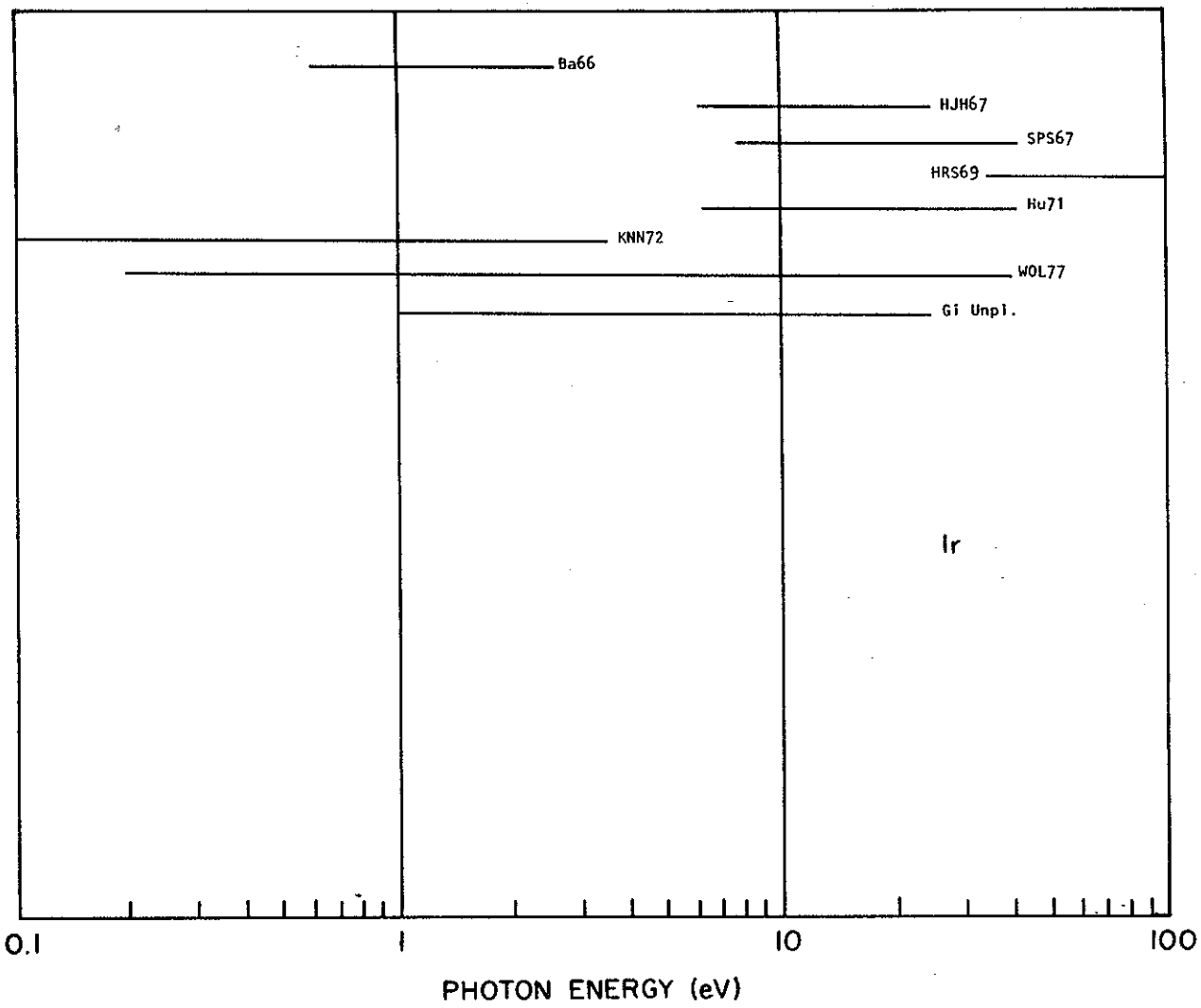

Fig. 94 Survey of available data for Ir

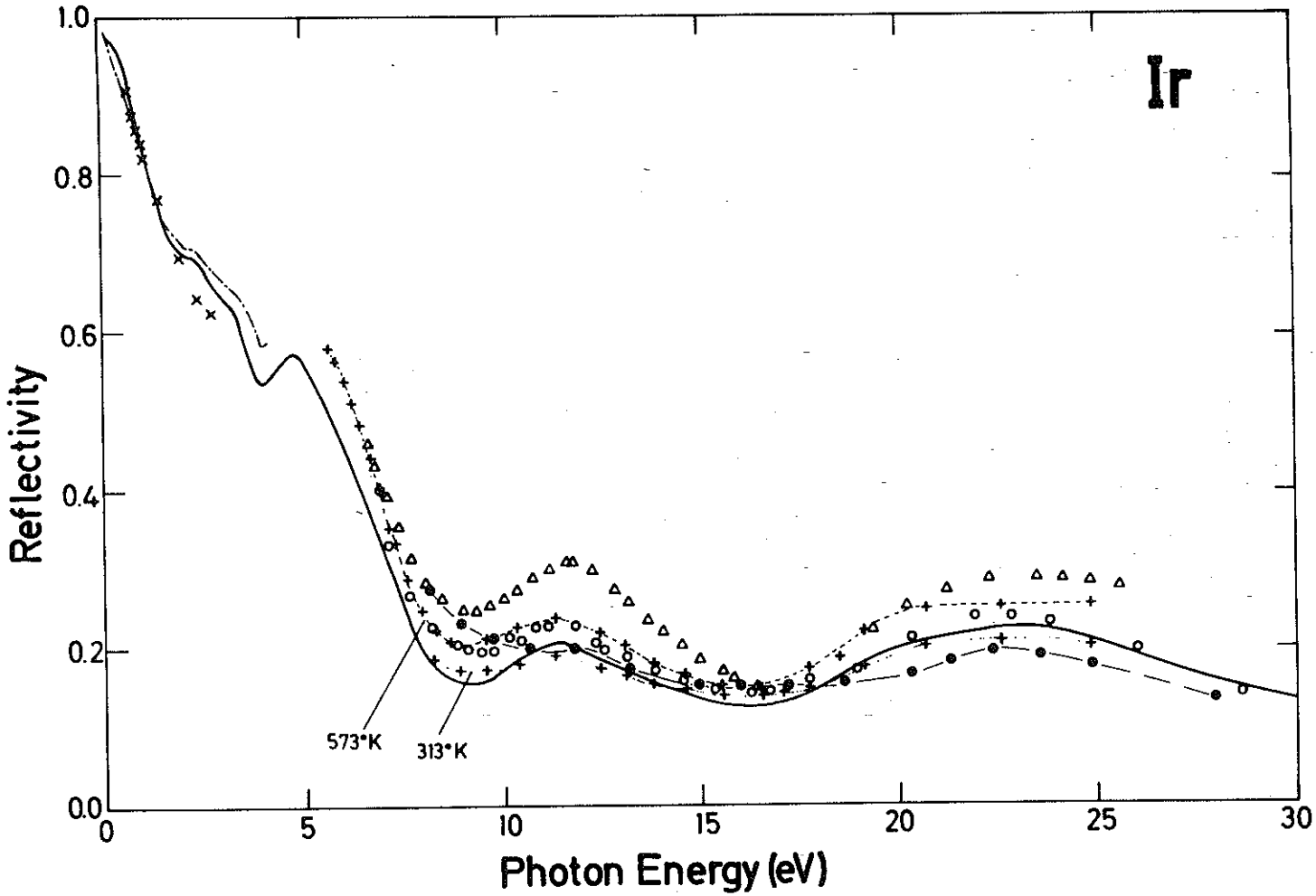

Fig. 95. Reflectivity of Ir. —— WOL77; +++ HJH67; ooo Hu71; ΔΔΔ Gi (unpub); ●●● SPS67; xxx Ba66; — - — MNN72; The results of HJH67 show the effect of substrate temperature on the vuv reflectivity.

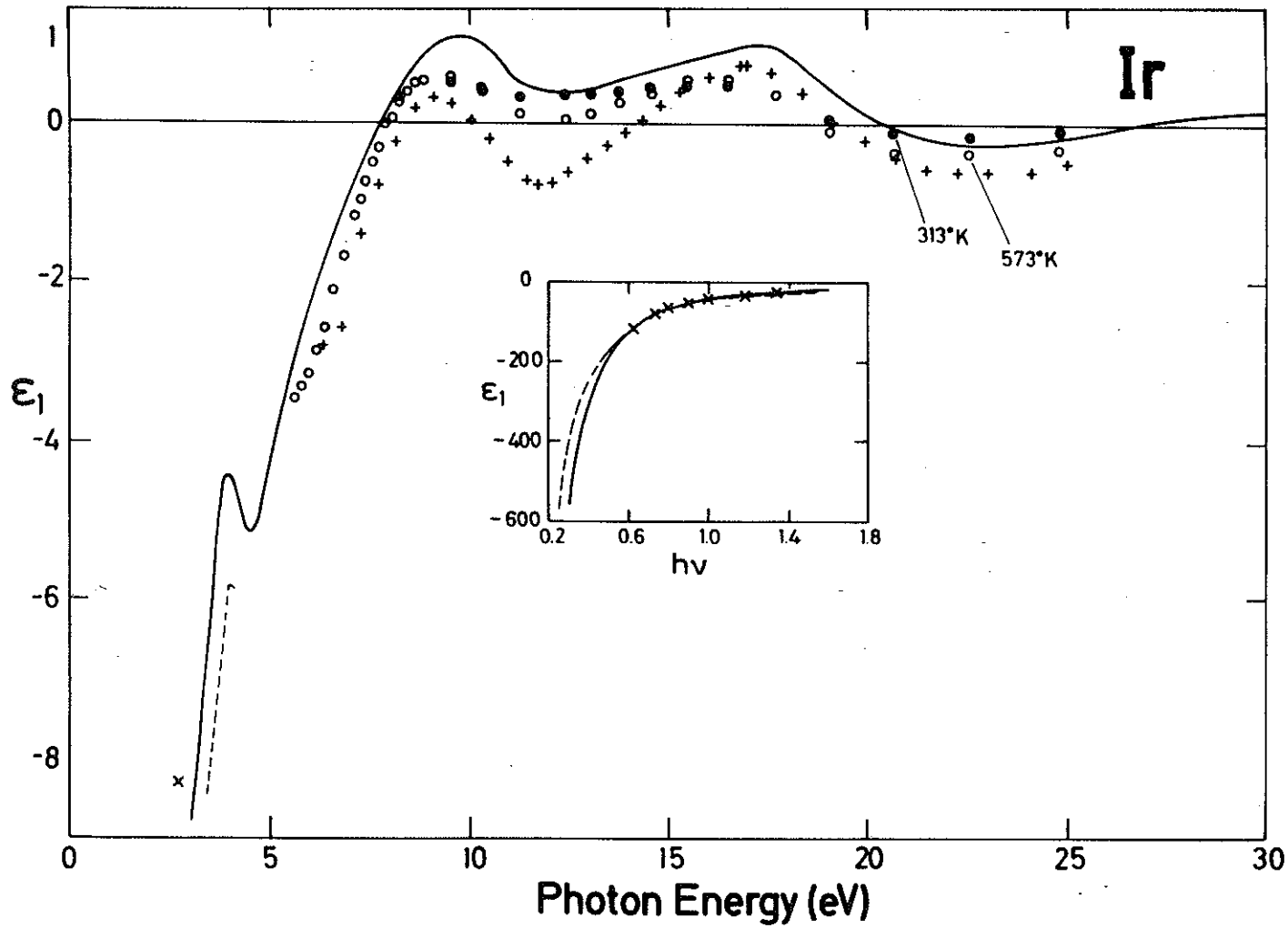

Fig. 96 ε_1 for Ir. —— WOL77; --- KNN72; +++ Gi (unpub); xxx Ba66; ●●● and ooo HJH67.

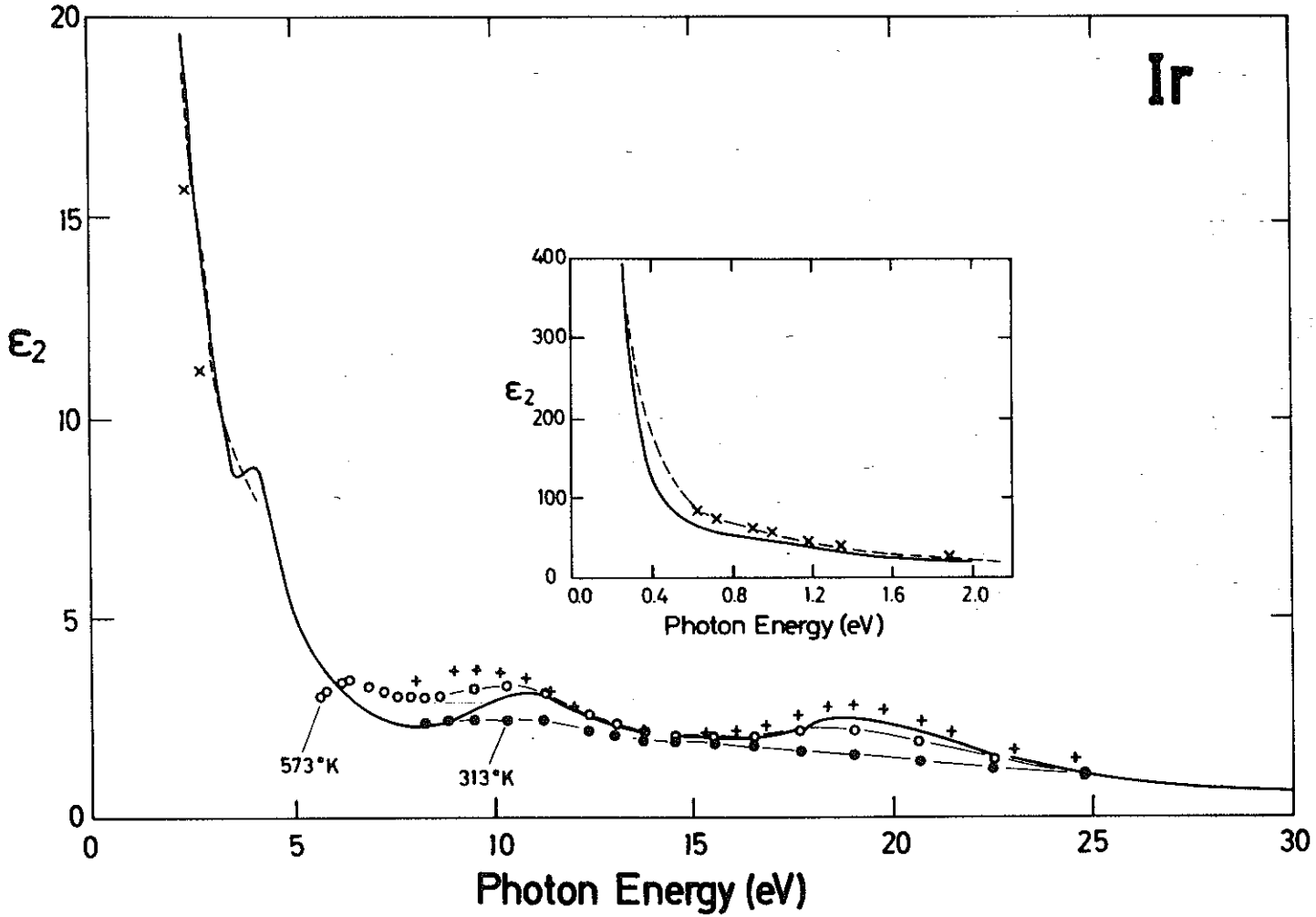

Fig. 97 ε_2 for Ir. —— WOL77; +++ Gi (unpub); xxx Ba66; --- KNN72; ●●● and ooo HJH67.

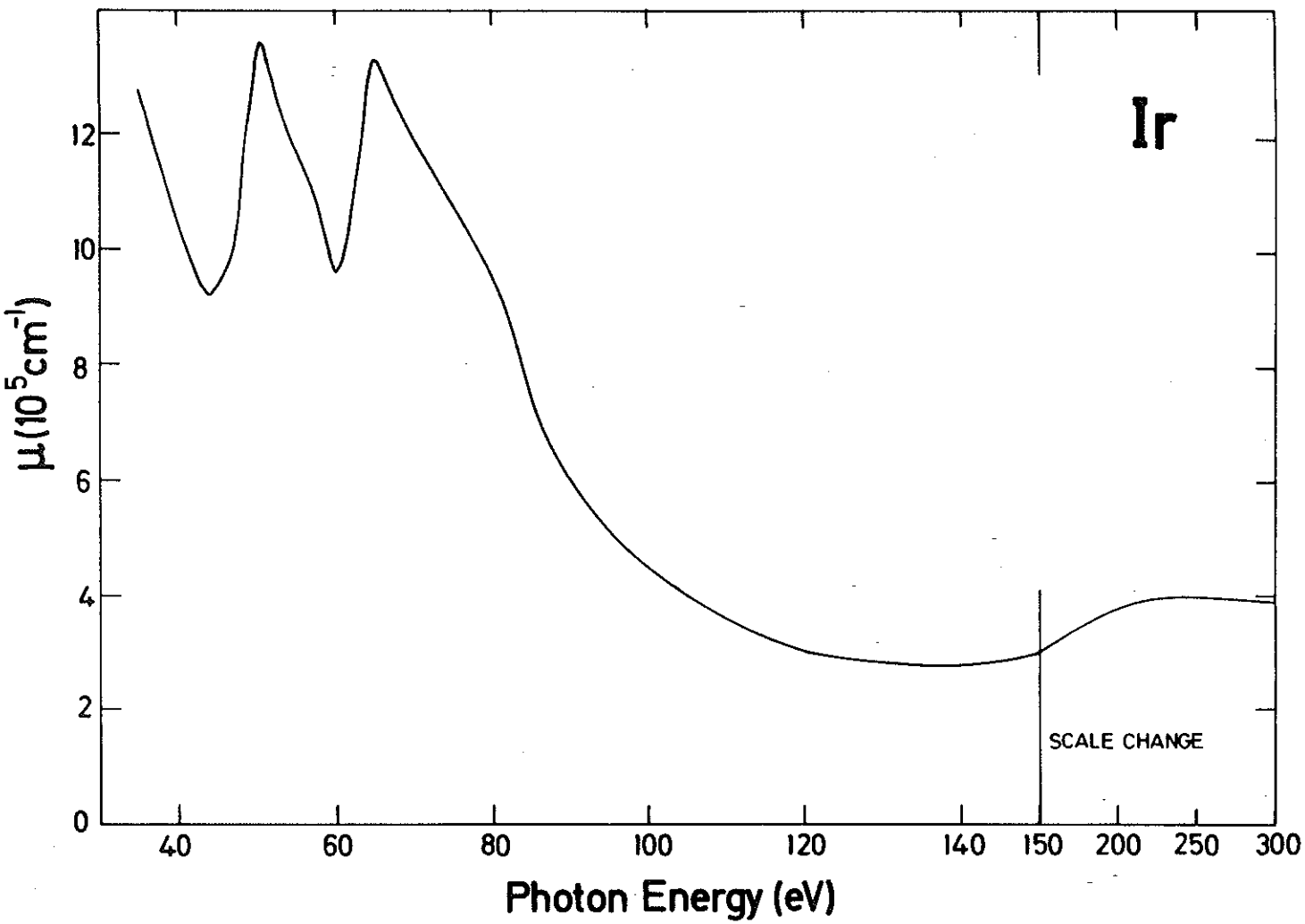

Fig. 98 Absorption coefficient for Ir by HRS69.

Iridium

publication by J.H. Weaver, C.G. Olson, and D.W. Lynch in Phys. Rev. B 4115 (1977) based on the following tabulation

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
0.10	-2863.28	3454.30	28.49	60.62	0.00	.975
0.15	-1803.22	1383.59	15.32	45.15	0.00	.973
0.20	-1154.96	684.50	9.69	35.34	0.00	.972
0.25	-784.80	394.84	6.85	28.84	0.00	.969
0.30	-561.50	250.49	5.16	24.25	0.00	.967
0.35	-415.50	170.77	4.11	20.79	0.00	.964
0.40	-314.40	123.53	3.42	18.06	0.00	.960
0.45	-241.09	96.36	3.05	15.82	0.00	.954
0.50	-188.67	83.67	2.98	14.06	0.00	.944
0.60	-126.33	64.50	2.79	11.58	0.00	.925
0.70	-87.00	57.20	2.93	9.78	0.01	.895
0.80	-64.17	54.12	3.14	8.61	0.01	.862
0.90	-51.92	50.21	3.19	7.88	0.01	.840
1.00	-43.51	46.03	3.15	7.31	0.01	.822
1.10	-37.61	41.59	3.04	6.84	0.01	.808
1.20	-32.32	37.96	2.96	6.41	0.02	.791
1.30	-28.72	34.63	2.85	6.07	0.02	.779
1.40	-25.51	31.26	2.72	5.74	0.02	.767
1.50	-22.05	28.53	2.65	5.39	0.02	.750
1.60	-18.66	27.21	2.68	5.08	0.02	.728
1.70	-17.00	26.46	2.69	4.92	0.03	.716
1.80	-16.15	25.36	2.64	4.81	0.03	.710
1.90	-15.34	24.06	2.57	4.68	0.03	.704
2.00	-14.68	22.84	2.50	4.57	0.03	.699
2.10	-14.33	21.53	2.40	4.48	0.03	.697
2.20	-13.93	20.06	2.29	4.38	0.03	.695
2.30	-13.42	18.60	2.18	4.26	0.04	.692
2.40	-12.88	17.11	2.07	4.14	0.04	.689
2.50	-12.07	15.78	1.98	4.00	0.04	.682
2.60	-11.23	14.74	1.91	3.86	0.04	.673
2.70	-10.53	13.82	1.85	3.73	0.05	.665
2.80	-9.79	13.07	1.81	3.61	0.05	.655
2.90	-9.19	12.47	1.77	3.51	0.05	.646
3.00	-8.76	11.88	1.73	3.43	0.05	.640
3.10	-8.39	11.23	1.68	3.35	0.06	.635
3.20	-7.97	10.56	1.62	3.26	0.06	.629
3.30	-7.49	9.90	1.57	3.15	0.06	.621
3.40	-6.94	9.31	1.53	3.05	0.07	.610
3.50	-6.31	8.81	1.50	2.93	0.07	.595
3.60	-5.57	8.55	1.52	2.81	0.08	.573
3.70	-4.97	8.54	1.57	2.72	0.09	.553
3.80	-4.64	8.62	1.61	2.69	0.09	.541
3.90	-4.43	8.73	1.64	2.67	0.09	.535
4.00	-4.46	8.81	1.64	2.68	0.09	.535
4.10	-4.64	8.75	1.62	2.70	0.09	.541
4.20	-4.84	8.52	1.58	2.71	0.09	.549
4.30	-5.02	8.17	1.51	2.70	0.09	.556
4.40	-5.10	7.77	1.45	2.68	0.09	.561
4.50	-5.16	7.28	1.37	2.65	0.09	.567

Ir

Energy (eV)	ϵ_1	ϵ_2	n	k	Im(-1/$\tilde{\epsilon}$)	R(ϕ=0)
4.60	-5.06	6.84	1.31	2.60	0.09	.567
4.70	-5.04	6.36	1.24	2.56	0.10	.572
4.80	-4.83	5.87	1.18	2.49	0.10	.570
4.90	-4.57	5.49	1.13	2.42	0.11	.564
5.00	-4.34	5.16	1.10	2.35	0.11	.559
5.10	-4.09	4.87	1.07	2.29	0.12	.551
5.20	-3.85	4.61	1.04	2.22	0.13	.543
5.30	-3.61	4.38	1.02	2.15	0.14	.533
5.40	-3.37	4.18	1.00	2.09	0.14	.522
5.50	-3.14	4.02	0.99	2.03	0.15	.510
5.60	-2.94	3.86	0.98	1.98	0.16	.499
5.70	-2.74	3.71	0.97	1.92	0.17	.488
5.80	-2.54	3.60	0.96	1.86	0.19	.474
5.90	-2.37	3.52	0.97	1.82	0.20	.461
6.00	-2.26	3.39	0.95	1.78	0.20	.454
6.10	-2.09	3.27	0.94	1.73	0.22	.441
6.20	-1.92	3.17	0.94	1.68	0.23	.427
6.30	-1.78	3.08	0.94	1.63	0.24	.414
6.40	-1.64	2.99	0.94	1.59	0.26	.401
6.50	-1.49	2.92	0.95	1.54	0.27	.387
6.60	-1.37	2.84	0.94	1.50	0.29	.375
6.70	-1.23	2.77	0.95	1.46	0.30	.360
6.80	-1.10	2.71	0.95	1.42	0.32	.345
6.90	-0.97	2.66	0.96	1.38	0.33	.330
7.00	-0.87	2.61	0.97	1.34	0.35	.318
7.10	-0.74	2.56	0.98	1.30	0.36	.302
7.20	-0.64	2.52	0.99	1.27	0.37	.290
7.30	-0.52	2.47	1.00	1.23	0.39	.275
7.40	-0.41	2.45	1.02	1.20	0.40	.262
7.50	-0.33	2.42	1.03	1.18	0.41	.252
7.60	-0.25	2.37	1.03	1.14	0.42	.241
7.70	-0.12	2.31	1.05	1.10	0.43	.225
7.80	0.04	2.30	1.08	1.06	0.44	.208
7.90	0.13	2.32	1.11	1.05	0.43	.201
8.00	0.22	2.32	1.13	1.03	0.43	.191
8.10	0.31	2.34	1.15	1.01	0.42	.185
8.20	0.39	2.35	1.18	1.00	0.41	.179
8.30	0.46	2.37	1.20	0.99	0.41	.175
8.40	0.52	2.38	1.22	0.98	0.40	.171
8.50	0.60	2.39	1.24	0.97	0.39	.167
8.60	0.65	2.41	1.26	0.96	0.39	.164
8.70	0.71	2.43	1.27	0.95	0.38	.162
8.80	0.76	2.45	1.29	0.95	0.37	.160
8.90	0.82	2.47	1.31	0.94	0.36	.158
9.00	0.89	2.50	1.33	0.94	0.36	.157
9.10	0.93	2.54	1.35	0.94	0.35	.158
9.20	0.96	2.58	1.36	0.95	0.34	.159
9.30	0.99	2.62	1.38	0.95	0.33	.160
9.40	1.02	2.65	1.39	0.95	0.33	.161
9.50	1.05	2.69	1.40	0.96	0.32	.161
9.60	1.06	2.74	1.42	0.97	0.32	.163
9.70	1.09	2.80	1.43	0.98	0.31	.166
9.80	1.09	2.85	1.44	0.99	0.31	.169
9.90	1.08	2.89	1.44	1.00	0.30	.172
10.00	1.07	2.94	1.45	1.01	0.30	.175
10.20	1.01	3.03	1.45	1.04	0.30	.182
10.40	0.95	3.07	1.44	1.07	0.30	.187

Ir

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
10.60	0.87	3.12	1.43	1.09	0.30	.193
10.80	0.75	3.15	1.41	1.12	0.30	.200
11.00	0.62	3.12	1.38	1.13	0.31	.206
11.20	0.51	3.05	1.34	1.14	0.32	.208
11.40	0.43	2.96	1.31	1.13	0.33	.208
11.60	0.38	2.86	1.28	1.12	0.34	.206
11.80	0.36	2.76	1.25	1.10	0.36	.203
12.00	0.36	2.67	1.24	1.08	0.37	.199
12.40	0.36	2.53	1.21	1.05	0.39	.191
12.80	0.40	2.39	1.19	1.01	0.41	.181
13.20	0.43	2.30	1.18	0.96	0.42	.173
13.60	0.46	2.21	1.17	0.95	0.43	.165
14.00	0.53	2.12	1.16	0.91	0.44	.155
14.40	0.59	2.07	1.17	0.88	0.45	.147
14.80	0.64	2.04	1.18	0.87	0.45	.142
15.20	0.70	2.01	1.19	0.84	0.44	.136
15.60	0.75	2.00	1.20	0.83	0.44	.133
16.00	0.79	2.01	1.21	0.83	0.43	.131
16.40	0.83	2.01	1.23	0.82	0.42	.129
16.80	0.89	2.04	1.25	0.82	0.41	.127
17.20	0.94	2.13	1.28	0.83	0.39	.131
17.60	0.93	2.26	1.30	0.87	0.38	.140
18.00	0.83	2.40	1.30	0.93	0.37	.154
18.40	0.67	2.47	1.27	0.97	0.38	.166
18.80	0.54	2.48	1.24	1.00	0.39	.176
19.20	0.38	2.47	1.20	1.03	0.40	.187
19.60	0.21	2.42	1.15	1.05	0.41	.197
20.00	0.08	2.32	1.10	1.06	0.43	.205
20.50	-0.03	2.18	1.04	1.05	0.46	.210
21.00	-0.11	2.05	0.99	1.04	0.49	.215
21.50	-0.17	1.92	0.94	1.02	0.52	.220
22.00	-0.21	1.79	0.89	1.00	0.55	.222
22.50	-0.26	1.66	0.84	0.99	0.59	.228
23.00	-0.28	1.52	0.79	0.96	0.64	.232
23.50	-0.26	1.38	0.76	0.92	0.70	.228
24.00	-0.23	1.27	0.73	0.87	0.76	.223
24.50	-0.20	1.17	0.70	0.83	0.83	.218
25.00	-0.16	1.09	0.69	0.79	0.90	.209
25.50	-0.12	1.02	0.68	0.76	0.96	.200
26.00	-0.08	0.96	0.67	0.72	1.03	.192
26.50	-0.03	0.92	0.67	0.69	1.09	.181
27.00	-0.01	0.87	0.66	0.66	1.15	.174
27.50	0.03	0.83	0.66	0.63	1.20	.166
28.00	0.06	0.80	0.66	0.61	1.24	.158
28.50	0.08	0.77	0.66	0.59	1.28	.151
29.00	0.09	0.75	0.65	0.57	1.32	.148
29.50	0.11	0.71	0.64	0.55	1.38	.145
30.00	0.12	0.68	0.64	0.53	1.43	.140
32.00	0.19	0.55	0.62	0.44	1.62	.119
34.00	0.28	0.44	0.64	0.35	1.60	.091
36.00	0.40	0.38	0.69	0.27	1.26	.059
38.00	0.47	0.35	0.73	0.24	1.02	.044
40.00	0.53	0.33	0.76	0.22	0.85	.034