Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Ti
Sa39	2.6-27.6	Refl		x			Ex	R	
HB57	0.12-12.4	Ellips		x			Ex	R,n,k	
BVK62	0.12-0.62	Ellips				x	MP	n,k,ε_1,ε_2,R	
KC63	0.06-0.5	Ellips				x	MP	n,k	
KCh63	0.31-2.61	Ellips				x	MP	n,k,σ	
LSE64	109-539	Trans		x			Ex	μ	
KC65	0.05-5	Ellips				x	MP	n,k,σ,R,ε_1,ε_2,Im(ε^{-1})	
LT66	0.06-0.25	Ellips				x	MP	ε_2/λ,$-\varepsilon_1$	
VAK67	3-14.4					x	MP	R	technique: polarimetry for $3 < h\nu < 5$ eV reflectance for $4 < h\nu < 7$ eV photoyield for $7.5 < h\nu < 14$.
KNB68	5-12	Ellips				x	MP	R; KK: σ,Im(ε^{-1}), Im$(\varepsilon+1)^{-1}$,ε_1	data taken from VAK67, then KK analyzed
SHK69	40-300	Trans		x			Ex	μ	optical absorption measurements with synchrotron radiation
AB71			1000-1700			x		ε at λ = 6500 Å	emissivity
PD71			1200-2200			x		ε_H	emissivity
MM72	0.12-3.1	Trans, Ellips				x	EP	n,k,σ	
Sm72	1.96, 2.27	Ellips	~280-2100		x		In	n,k	sputtered, annealed, AES

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Ti
SS72	~0-30			x				$Im(\varepsilon^{-1})$	technique: energy loss spectroscopy, AES
BaB74			1100-1800			x		ε_N at λ = 6450 Å	emissivity
CM74	2.27	Ellips		x	x		uhv	R,n,k	ultra high vacuum, LEED, single crystal
JC74	0.5-6.5	Trans, Refl		x			Ex	n,k,σ	
WeG74	2-130	Trans		x			Ex	KK: μ	technique: energy loss spectroscopy
WGa74	2-120	Trans		x			Ex	μ, $Im(\varepsilon^{-1})$; KK: $\varepsilon_1,\varepsilon_2$	technique: energy loss spectroscopy
LOW75	0.15-30	Refl	4.2 K for $h\nu$ < 4.4 eV RT for $h\nu$ > 4.4 eV			x	EP	A,R; KK: $\varepsilon_1,\varepsilon_2,\sigma$, $Im(\varepsilon^{-1}), Im(\varepsilon+1)^{-1}$	technique: absorption measured by calorime for $h\nu$ < 4.4 eV, reflectivity measured for $h\nu$ > 4.4 eV with synchrotron radiation
BFF76	0.5-5	Refl		x				R,n,k	
BDL77	0.03-3.1	Refl				x		R	also emittance 400 ≤ T ≤ 850 K
CM77			1945			x		ε_N at λ = 6530 Å	emissivity
WRS80	2-25	Refl				x	Sput	R; KK: $\varepsilon_1,\varepsilon_2$	AES used to characterize Ti and TiO_x

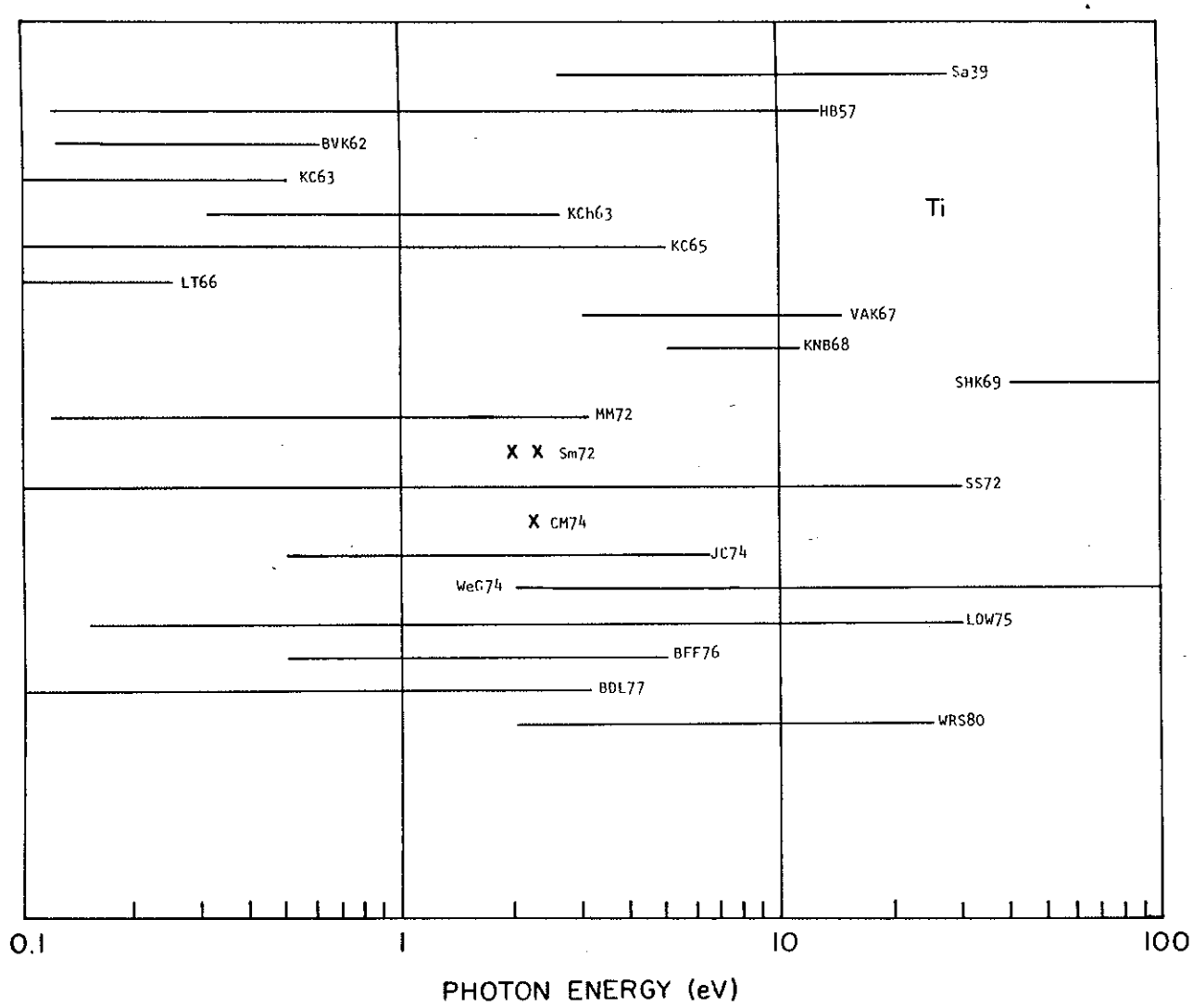

Fig. 2 Survey of available data for Ti

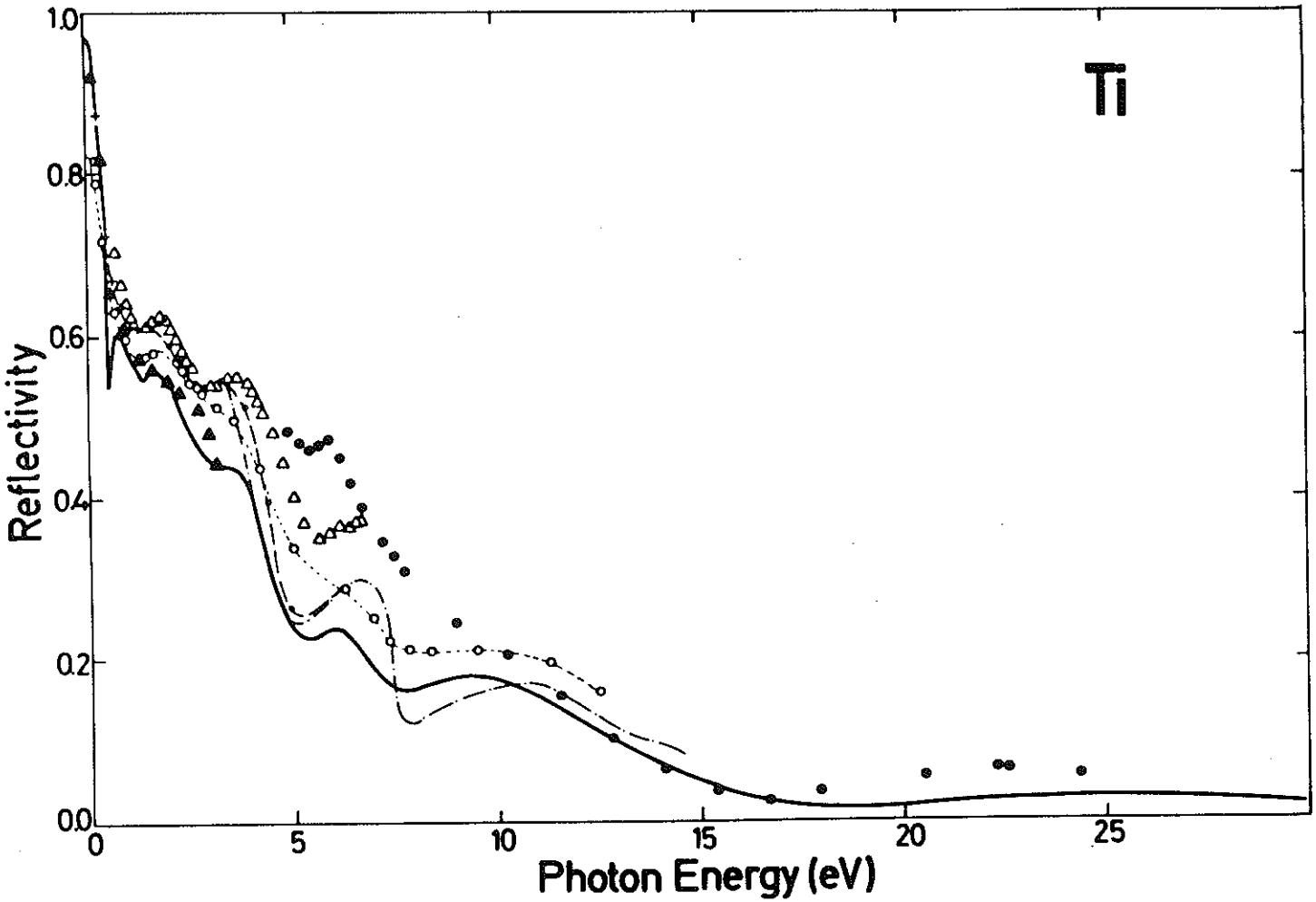

Fig. 3a Reflectivity of Ti. All spectra are for polycrystalline samples. ——— LOW75; ---- KC65; -o-o- HB57; -·-·- VAK67; ···· WRS80; ▲▲▲ MM72; ΔΔΔ JC74.

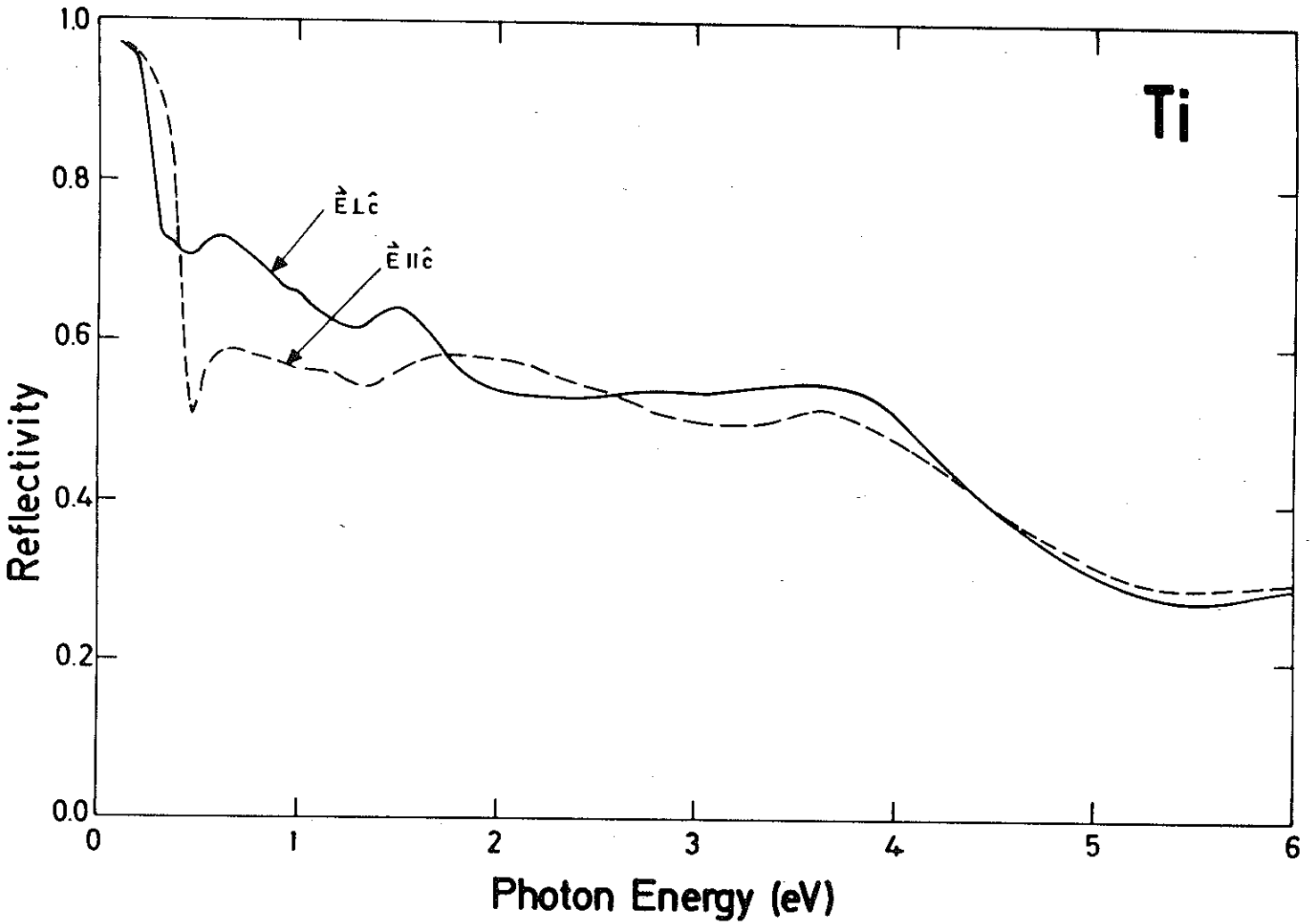

Fig. 3b Reflectivity of single crystal Ti for $\vec{E} \parallel \hat{c}$ (dashed line) and $\vec{E} \perp \hat{c}$ (solid line) by LOW (unpub).

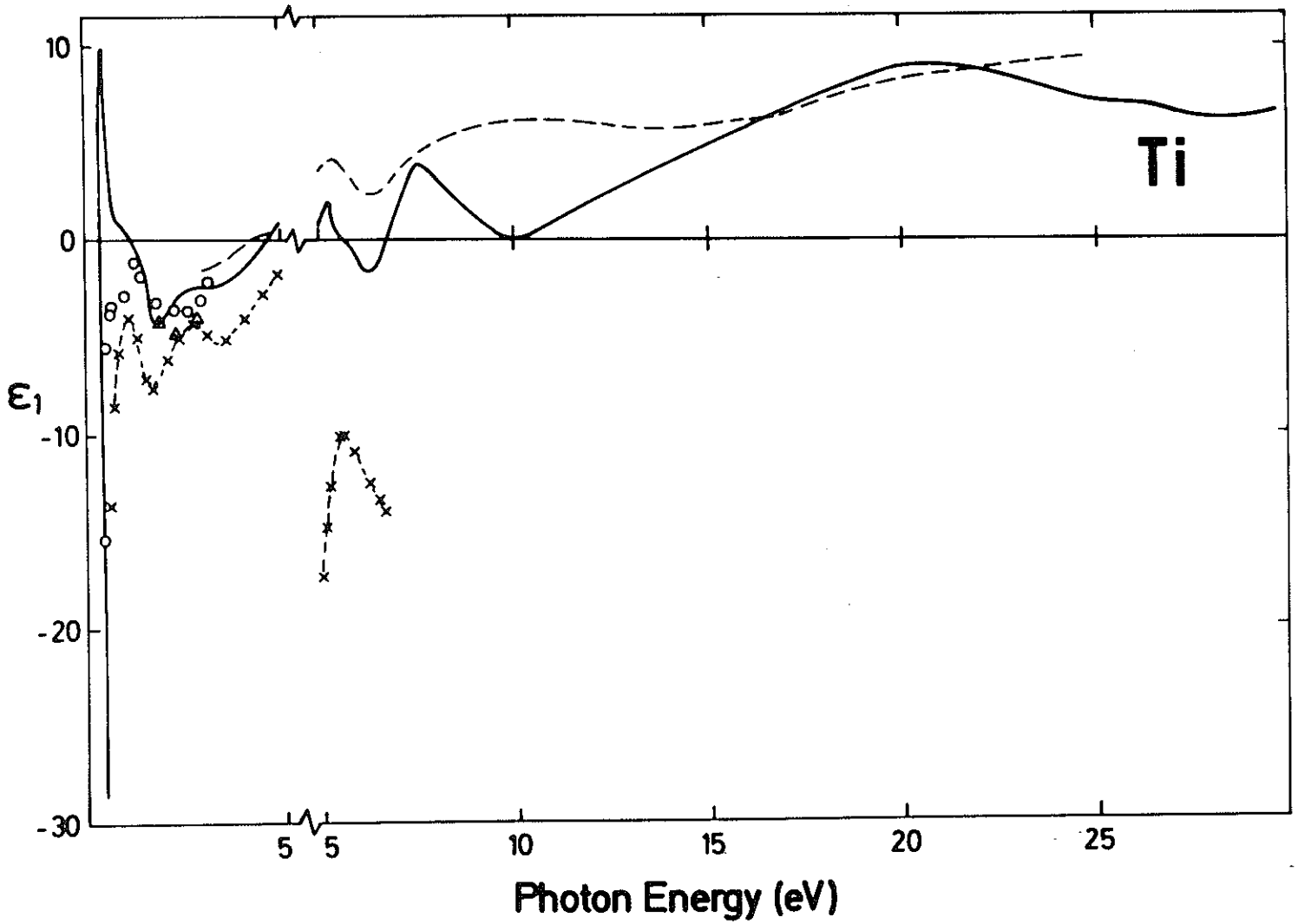

Fig. 4a ε_1 for polycrystalline Ti. —— LOW75; xxx JC74; ---WRS80; ooo MM72; ΔΔΔ HB57.

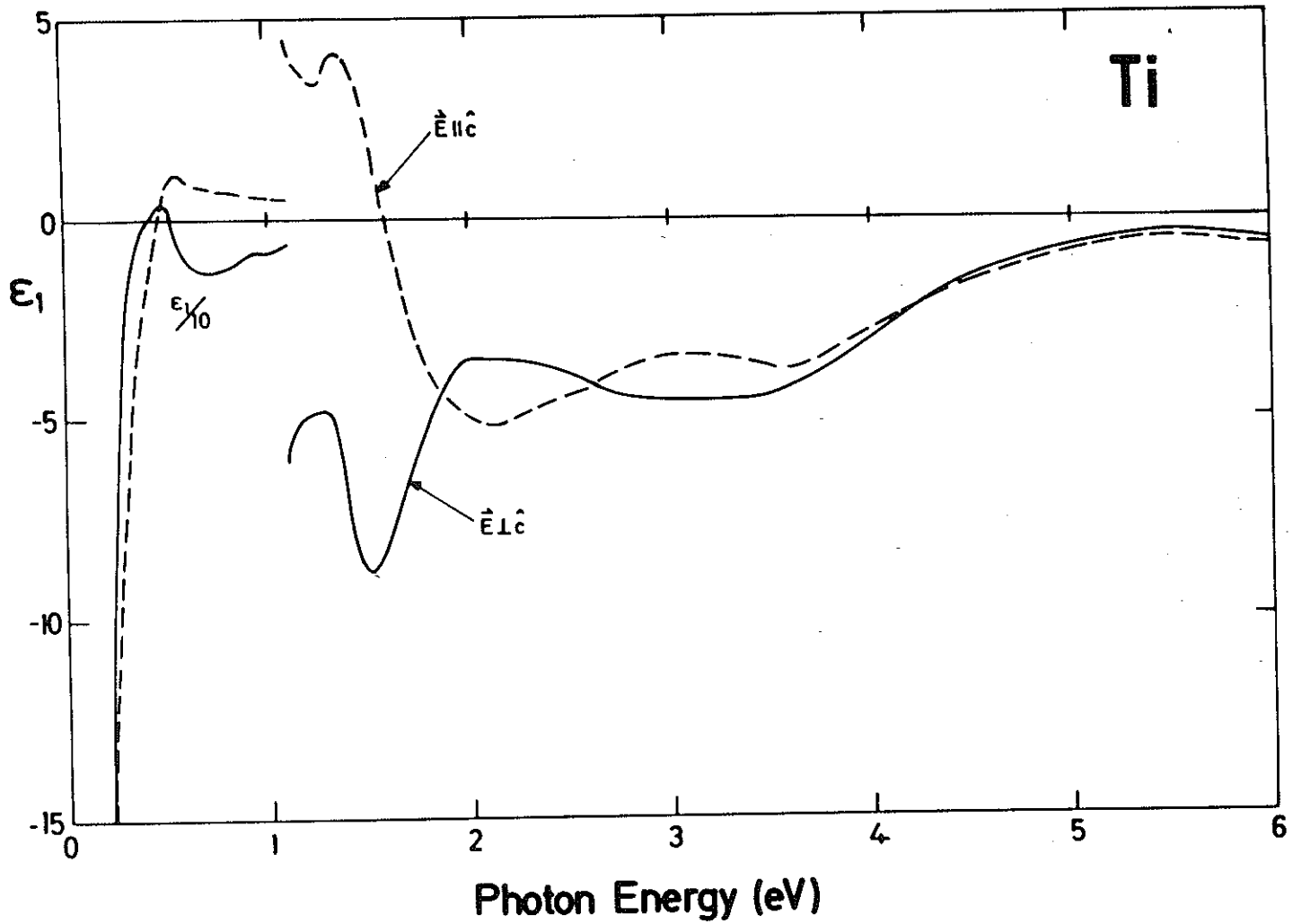

Fig. 4b ε_1 for single crystal Ti for $\vec{E} \parallel \hat{c}$ (dashed line) and $\vec{E} \perp \hat{c}$ (solid line) by LOW (unpub).

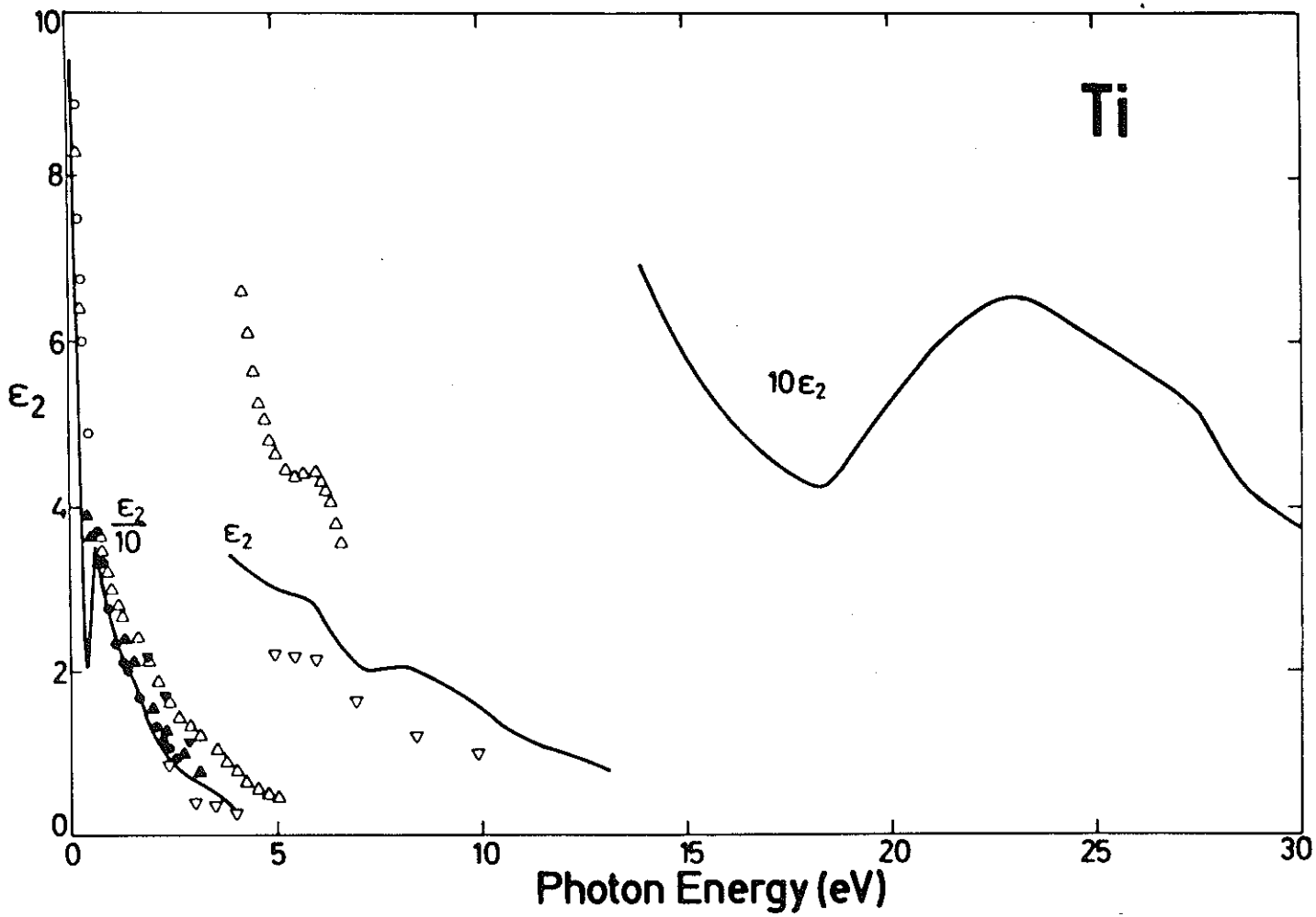

Fig. 5a ε_2 for polycrystalline Ti. —— LOW75; ▼▼▼ HB57; ▽▽▽ WRS80; ▲▲▲ MM72; ooo KC65; ●●● KC63; ΔΔΔ JC74.

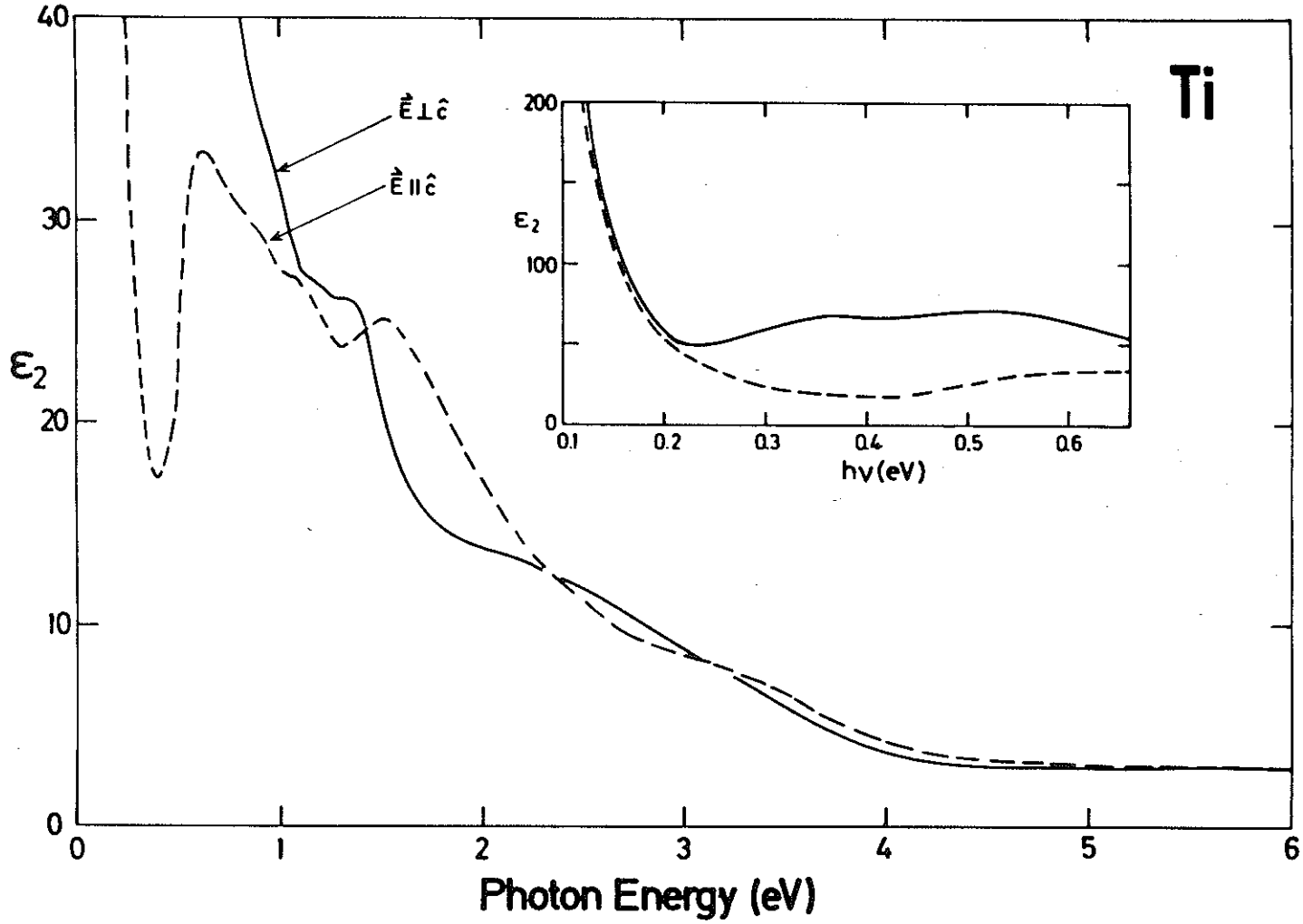

Fig. 5b ε_2 for single crystal Ti for $\vec{E} \parallel \hat{c}$ (dashed line) and $\vec{E} \perp \hat{c}$ (solid line) by LOW (unpub).

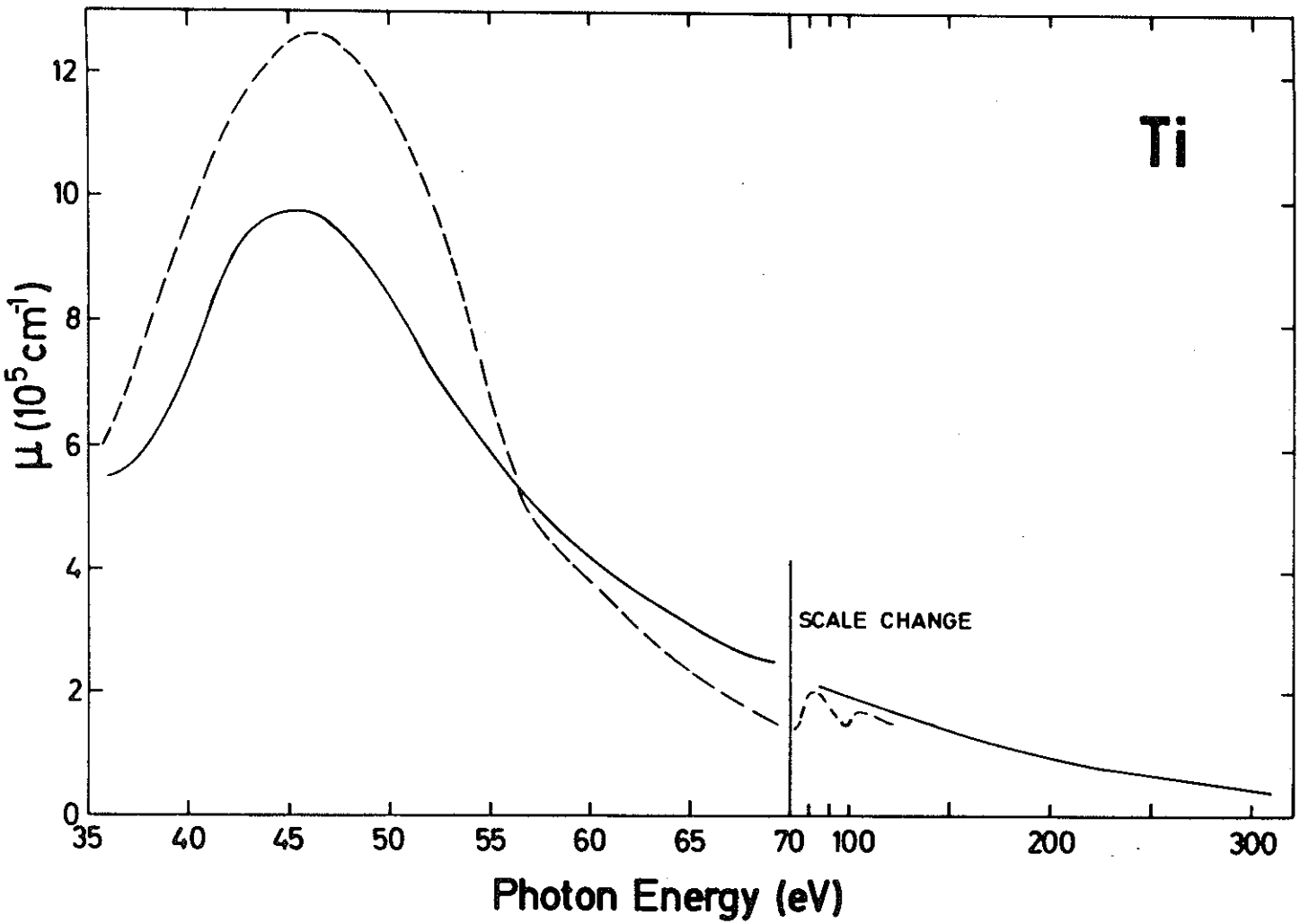

Fig. 6 Absorption coefficient for Ti. —— SHK69; --- WeG74.

Polycrystalline Titanium

publication by D.W. Lynch, C.G. Olson, and J.H. Weaver in Phys. Rev. B 11, 3617 (1975) based on the following tabulation

Energy (eV)	ϵ_1	ϵ_2	n	k	Im(-1/$\tilde{\epsilon}$)	R(ϕ=0)
0.10	-1825.31	1161.84	13.21	44.72	0.00	.976
0.13	-1250.94	726.16	9.91	36.73	0.00	.973
0.10	-521.17	235.09	5.03	23.38	0.00	.965
0.11	-440.25	192.20	4.48	21.45	0.00	.964
0.12	-376.28	154.38	3.90	19.79	0.00	.962
0.13	-320.15	127.16	3.49	18.23	0.00	.960
0.14	-274.29	108.78	3.22	16.87	0.00	.957
0.15	-237.95	94.37	3.00	15.72	0.00	.954
0.16	-208.28	82.60	2.81	14.70	0.00	.951
0.17	-183.46	71.65	2.60	13.79	0.00	.949
0.18	-161.49	62.34	2.41	12.94	0.00	.946
0.19	-141.90	54.18	2.23	12.12	0.00	.943
0.20	-124.05	48.02	2.12	11.34	0.00	.939
0.21	-108.32	43.28	2.04	10.61	0.00	.933
0.22	-94.41	39.66	2.00	9.92	0.00	.926
0.23	-82.05	36.75	1.98	9.27	0.00	.916
0.24	-70.97	34.85	2.01	8.66	0.01	.904
0.25	-61.37	33.23	2.05	8.10	0.01	.890
0.26	-52.80	31.51	2.08	7.56	0.01	.875
0.27	-44.65	27.94	2.00	6.98	0.01	.861
0.28	-29.92	16.14	1.43	5.65	0.01	.849
0.29	7.91	25.37	4.15	3.06	0.04	.537
0.30	-57.91	127.04	6.39	9.94	0.01	.833
0.31	-48.99	56.67	3.60	7.87	0.01	.827
0.32	-43.10	46.19	3.17	7.29	0.01	.820
0.33	-38.61	40.54	2.95	6.88	0.01	.813
0.34	-34.56	36.81	2.82	6.52	0.01	.802
0.35	-31.10	33.99	2.74	6.21	0.02	.792
0.36	-28.00	31.62	2.67	5.93	0.02	.780
0.37	-25.26	29.25	2.59	5.65	0.02	.769
0.38	-22.28	26.92	2.52	5.35	0.02	.754
0.39	-19.02	24.92	2.48	5.02	0.03	.734
0.40	-15.69	23.26	2.49	4.68	0.03	.708
0.41	-12.12	22.09	2.56	4.32	0.03	.673
0.42	-8.64	21.43	2.69	3.98	0.04	.635
0.43	-5.30	21.19	2.88	3.68	0.04	.598
0.44	-2.23	21.32	3.10	3.44	0.05	.567
0.45	0.67	21.75	3.35	3.25	0.05	.545
0.46	3.37	22.59	3.62	3.12	0.04	.534
0.47	5.62	23.94	3.89	3.08	0.04	.534
0.48	7.31	25.53	4.11	3.10	0.04	.540
0.49	8.49	27.08	4.29	3.15	0.03	.548
0.50	9.27	28.50	4.43	3.22	0.03	.555
0.52	10.16	30.95	4.62	3.35	0.03	.568
0.54	10.08	33.09	4.73	3.50	0.03	.580
0.56	9.47	34.37	4.75	3.62	0.03	.588
0.58	8.67	35.13	4.74	3.71	0.03	.594
0.60	7.94	35.47	4.71	3.77	0.03	.597
0.62	7.07	35.74	4.66	3.83	0.03	.601

Ti

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
0.64	6.09	35.65	4.60	3.88	0.03	.603
0.66	5.21	35.23	4.52	3.90	0.03	.604
0.68	4.57	34.64	4.44	3.90	0.03	.603
0.70	4.06	34.09	4.38	3.89	0.03	.603
0.72	3.53	33.60	4.32	3.89	0.03	.602
0.74	2.97	33.01	4.25	3.88	0.03	.601
0.76	2.46	32.33	4.18	3.87	0.03	.600
0.78	2.07	31.59	4.11	3.85	0.03	.598
0.80	1.70	30.87	4.04	3.82	0.03	.596
0.82	1.13	29.96	3.94	3.80	0.03	.594
0.84	2.19	28.72	3.94	3.65	0.03	.582
0.86	1.52	29.39	3.93	3.73	0.03	.589
0.88	1.20	28.43	3.85	3.69	0.04	.586
0.90	1.11	27.80	3.80	3.65	0.04	.582
0.92	1.08	27.27	3.77	3.62	0.04	.579
0.94	0.99	26.83	3.73	3.60	0.04	.577
0.96	0.88	26.38	3.69	3.57	0.04	.575
0.98	0.78	25.91	3.65	3.55	0.04	.573
1.00	0.74	25.46	3.62	3.52	0.04	.570
1.05	0.57	24.50	3.54	3.46	0.04	.565
1.10	0.44	23.61	3.47	3.40	0.04	.560
1.15	0.34	22.78	3.40	3.35	0.04	.555
1.20	0.34	22.08	3.35	3.30	0.05	.550
1.25	0.31	21.60	3.31	3.26	0.05	.547
1.30	0.16	21.31	3.28	3.25	0.05	.546
1.35	-0.23	21.07	3.23	3.26	0.05	.547
1.40	-0.73	20.76	3.17	3.28	0.05	.549
1.45	-1.44	20.41	3.08	3.31	0.05	.553
1.50	-2.15	19.81	2.98	3.32	0.05	.557
1.55	-2.85	19.05	2.87	3.33	0.05	.559
1.60	-3.36	18.09	2.74	3.30	0.05	.559
1.65	-3.52	17.19	2.65	3.24	0.06	.556
1.70	-3.95	16.43	2.54	3.23	0.06	.557
1.75	-4.08	15.48	2.44	3.17	0.06	.554
1.80	-4.11	14.68	2.36	3.11	0.06	.550
1.85	-4.07	13.94	2.29	3.05	0.07	.545
1.90	-4.00	13.27	2.22	2.99	0.07	.540
1.95	-3.92	12.68	2.16	2.93	0.07	.535
2.00	-3.86	12.13	2.11	2.88	0.07	.530
2.10	-3.65	11.13	2.01	2.77	0.08	.520
2.20	-3.41	10.26	1.92	2.67	0.09	.509
2.30	-3.09	9.54	1.86	2.56	0.09	.495
2.40	-2.83	8.97	1.81	2.47	0.10	.483
2.50	-2.57	8.51	1.78	2.39	0.11	.471
2.60	-2.39	8.16	1.75	2.34	0.11	.462
2.70	-2.30	7.84	1.71	2.29	0.12	.456
2.80	-2.24	7.53	1.68	2.25	0.12	.451
2.90	-2.21	7.23	1.63	2.21	0.13	.447
3.00	-2.19	6.93	1.59	2.17	0.13	.444
3.10	-2.21	6.65	1.55	2.15	0.14	.442
3.20	-2.25	6.34	1.50	2.12	0.14	.442
3.30	-2.29	6.02	1.44	2.09	0.15	.442
3.40	-2.35	5.66	1.37	2.06	0.15	.443
3.50	-2.35	5.26	1.30	2.01	0.16	.443
3.60	-2.31	4.85	1.24	1.96	0.17	.441
3.70	-2.22	4.45	1.17	1.90	0.18	.436
3.80	-2.11	4.04	1.11	1.83	0.19	.430

Ti

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
3.85	-1.99	3.83	1.08	1.78	0.21	.423
3.87	-1.93	3.73	1.07	1.75	0.21	.419
3.90	-1.86	3.65	1.06	1.73	0.22	.413
3.92	-1.81	3.57	1.05	1.71	0.22	.410
3.95	-1.72	3.47	1.04	1.67	0.23	.403
3.97	-1.63	3.41	1.04	1.64	0.24	.395
3.99	-1.56	3.37	1.04	1.62	0.24	.389
4.03	-1.47	3.30	1.03	1.59	0.25	.380
4.05	-1.39	3.23	1.03	1.57	0.26	.373
4.08	-1.29	3.19	1.04	1.54	0.27	.363
4.11	-1.23	3.15	1.04	1.52	0.28	.357
4.13	-1.13	3.11	1.04	1.49	0.28	.347
4.16	-1.06	3.09	1.05	1.47	0.29	.340
4.19	-0.99	3.05	1.05	1.45	0.30	.333
4.22	-0.90	3.02	1.06	1.42	0.30	.323
4.25	-0.81	3.01	1.07	1.40	0.31	.314
4.28	-0.73	3.00	1.09	1.38	0.31	.306
4.30	-0.66	3.01	1.10	1.37	0.32	.299
4.34	-0.61	3.01	1.11	1.36	0.32	.294
4.36	-0.54	3.01	1.12	1.34	0.32	.288
4.40	-0.50	3.02	1.13	1.33	0.32	.284
4.43	-0.45	3.02	1.14	1.33	0.32	.280
4.46	-0.43	3.02	1.14	1.32	0.32	.278
4.49	-0.38	3.01	1.15	1.31	0.33	.273
4.53	-0.34	3.01	1.16	1.30	0.33	.269
4.56	-0.30	3.01	1.17	1.29	0.33	.266
4.59	-0.28	3.02	1.17	1.29	0.33	.265
4.66	-0.26	2.96	1.16	1.27	0.34	.260
4.66	-0.22	2.94	1.17	1.26	0.34	.257
4.73	-0.12	2.96	1.19	1.24	0.34	.249
4.77	-0.08	2.97	1.20	1.23	0.34	.245
4.80	-0.05	2.98	1.21	1.23	0.34	.244
4.84	-0.03	2.99	1.22	1.23	0.33	.243
4.88	-0.01	2.99	1.22	1.22	0.33	.241
4.92	0.00	2.99	1.22	1.22	0.33	.240
4.96	0.05	2.98	1.23	1.21	0.33	.236
5.00	0.05	3.00	1.24	1.21	0.33	.236
5.08	0.09	3.00	1.24	1.21	0.33	.234
5.12	0.11	3.01	1.25	1.20	0.33	.232
5.17	0.14	3.01	1.25	1.20	0.33	.230
5.21	0.17	3.03	1.27	1.20	0.33	.228
5.25	0.21	3.07	1.28	1.20	0.32	.228
5.30	0.35	3.25	1.35	1.21	0.30	.227
5.34	-0.59	3.31	1.18	1.41	0.29	.299
5.39	0.02	2.73	1.17	1.16	0.37	.228
5.44	0.08	2.92	1.23	1.19	0.34	.231
5.49	0.10	2.95	1.24	1.19	0.34	.230
5.53	0.09	2.97	1.24	1.20	0.34	.233
5.59	0.08	2.98	1.24	1.21	0.34	.234
5.64	0.06	2.98	1.23	1.21	0.34	.235
5.69	0.04	2.98	1.23	1.21	0.34	.237
5.74	0.01	2.97	1.22	1.22	0.34	.239
5.79	-0.03	2.95	1.21	1.22	0.34	.241
5.85	-0.07	2.92	1.19	1.22	0.34	.243
5.90	-0.09	2.87	1.18	1.22	0.35	.243
6.02	-0.15	2.78	1.15	1.21	0.36	.244
6.08	-0.15	2.71	1.13	1.20	0.37	.242

Ti

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
6.14	-0.16	2.66	1.12	1.19	0.37	.241
6.20	-0.16	2.60	1.11	1.18	0.38	.240
6.26	-0.16	2.54	1.09	1.16	0.39	.237
6.36	-0.14	2.44	1.08	1.14	0.41	.232
6.46	-0.09	2.37	1.07	1.11	0.42	.224
6.53	-0.12	2.32	1.05	1.10	0.43	.225
6.55	-0.07	2.28	1.05	1.08	0.44	.219
6.67	-0.03	2.21	1.04	1.06	0.45	.212
6.74	0.02	2.16	1.04	1.03	0.46	.204
6.81	0.06	2.13	1.05	1.02	0.47	.198
6.86	0.09	2.10	1.05	1.00	0.47	.194
6.93	0.12	2.08	1.05	0.99	0.48	.189
6.97	0.15	2.07	1.05	0.98	0.48	.186
7.01	0.19	2.06	1.06	0.97	0.48	.182
7.04	0.19	2.07	1.07	0.97	0.48	.182
7.09	0.19	2.06	1.07	0.97	0.48	.181
7.13	0.22	2.05	1.07	0.96	0.48	.178
7.17	0.24	2.04	1.07	0.95	0.48	.175
7.21	0.26	2.04	1.08	0.95	0.48	.174
7.25	0.28	2.04	1.08	0.94	0.48	.172
7.29	0.30	2.04	1.09	0.94	0.48	.170
7.34	0.31	2.05	1.09	0.94	0.48	.169
7.42	0.33	2.06	1.10	0.94	0.47	.168
7.47	0.35	2.07	1.11	0.94	0.47	.167
7.51	0.41	2.12	1.13	0.94	0.45	.165
7.56	0.13	2.17	1.08	1.01	0.46	.193
7.61	0.32	1.95	1.07	0.91	0.50	.163
7.65	0.34	2.02	1.09	0.92	0.48	.165
7.70	0.35	2.03	1.10	0.93	0.48	.165
7.75	0.36	2.03	1.10	0.92	0.48	.163
7.80	0.37	2.05	1.11	0.93	0.47	.164
7.85	0.37	2.06	1.11	0.93	0.47	.165
7.90	0.35	2.07	1.11	0.93	0.47	.167
7.95	0.36	2.07	1.11	0.93	0.47	.165
7.99	0.35	2.08	1.11	0.94	0.47	.168
8.05	0.33	2.08	1.10	0.94	0.47	.169
8.10	0.32	2.08	1.10	0.94	0.47	.170
8.16	0.31	2.08	1.10	0.95	0.47	.171
8.21	0.30	2.07	1.09	0.95	0.47	.172
8.27	0.29	2.07	1.09	0.95	0.47	.173
8.32	0.27	2.06	1.09	0.95	0.48	.174
8.38	0.25	2.06	1.08	0.95	0.48	.175
8.49	0.23	2.04	1.07	0.95	0.48	.177
8.55	0.21	2.03	1.06	0.96	0.49	.178
8.61	0.20	2.01	1.05	0.95	0.49	.178
8.67	0.17	2.00	1.04	0.96	0.50	.181
8.73	0.16	1.97	1.03	0.95	0.50	.181
8.79	0.15	1.95	1.02	0.95	0.51	.181
8.86	0.15	1.93	1.02	0.94	0.52	.180
8.98	0.11	1.90	1.00	0.94	0.53	.182
9.05	0.10	1.87	0.99	0.94	0.53	.182
9.11	0.11	1.84	0.99	0.93	0.54	.180
9.18	0.09	1.83	0.98	0.93	0.54	.181
9.25	0.08	1.81	0.97	0.93	0.55	.182
9.32	0.06	1.77	0.96	0.93	0.56	.184
9.39	0.07	1.74	0.95	0.91	0.57	.181
9.46	0.07	1.72	0.95	0.91	0.58	.180

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
9.54	0.06	1.70	0.94	0.90	0.59	.179
9.61	0.06	1.68	0.93	0.90	0.59	.180
9.69	0.05	1.65	0.92	0.90	0.60	.180
9.76	0.04	1.63	0.91	0.89	0.61	.180
9.84	0.04	1.60	0.91	0.88	0.62	.179
9.92	0.03	1.58	0.90	0.88	0.63	.180
9.99	0.02	1.55	0.89	0.88	0.65	.180
10.08	0.02	1.51	0.87	0.86	0.66	.179
10.16	0.02	1.48	0.86	0.85	0.68	.178
10.25	0.02	1.44	0.86	0.84	0.69	.176
10.33	0.02	1.42	0.85	0.83	0.71	.175
10.42	0.02	1.38	0.84	0.82	0.72	.174
10.50	0.03	1.35	0.83	0.81	0.74	.172
10.59	0.03	1.32	0.82	0.80	0.76	.170
10.68	0.05	1.28	0.81	0.79	0.78	.167
10.76	0.05	1.25	0.81	0.78	0.80	.166
10.87	0.06	1.21	0.80	0.76	0.82	.162
10.97	0.08	1.18	0.79	0.74	0.85	.156
11.07	0.10	1.14	0.79	0.72	0.87	.152
11.17	0.14	1.12	0.80	0.70	0.88	.145
11.27	0.17	1.12	0.81	0.69	0.88	.139
11.37	0.18	1.12	0.81	0.69	0.87	.137
11.48	0.17	1.12	0.81	0.69	0.87	.139
11.58	0.16	1.10	0.80	0.69	0.89	.140
11.69	0.16	1.07	0.79	0.68	0.92	.139
11.80	0.16	1.04	0.78	0.67	0.94	.137
11.92	0.18	1.01	0.77	0.65	0.96	.132
12.03	0.19	0.99	0.77	0.64	0.98	.130
12.09	0.20	0.97	0.77	0.63	0.99	.127
12.15	0.20	0.96	0.77	0.63	0.99	.127
12.21	0.20	0.95	0.77	0.62	1.01	.125
12.27	0.21	0.94	0.76	0.61	1.02	.124
12.33	0.22	0.93	0.76	0.61	1.03	.122
12.39	0.22	0.92	0.76	0.60	1.03	.120
12.45	0.23	0.90	0.76	0.59	1.04	.119
12.50	0.23	0.89	0.76	0.59	1.05	.117
12.58	0.24	0.88	0.76	0.58	1.06	.115
12.65	0.25	0.87	0.76	0.57	1.07	.113
12.71	0.26	0.85	0.76	0.56	1.07	.110
12.78	0.26	0.84	0.76	0.56	1.08	.109
12.84	0.27	0.83	0.76	0.55	1.08	.106
12.91	0.28	0.82	0.76	0.54	1.09	.104
12.98	0.29	0.82	0.76	0.54	1.09	.102
13.12	0.30	0.80	0.76	0.52	1.10	.099
13.18	0.31	0.79	0.76	0.52	1.10	.097
13.25	0.32	0.78	0.76	0.51	1.10	.095
13.33	0.32	0.77	0.76	0.50	1.10	.093
13.40	0.33	0.76	0.76	0.50	1.10	.091
13.47	0.34	0.76	0.76	0.50	1.10	.090
13.54	0.34	0.75	0.76	0.49	1.11	.089
13.62	0.34	0.73	0.76	0.48	1.12	.087
13.77	0.37	0.71	0.76	0.47	1.11	.082
13.85	0.37	0.70	0.76	0.46	1.12	.081
13.92	0.38	0.69	0.77	0.45	1.11	.078
14.00	0.39	0.69	0.77	0.45	1.10	.077
14.08	0.39	0.68	0.77	0.44	1.10	.075
14.16	0.40	0.67	0.77	0.44	1.10	.074

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
14.25	0.41	0.66	0.77	0.43	1.09	.071
14.33	0.42	0.65	0.77	0.42	1.08	.069
14.41	0.43	0.64	0.77	0.42	1.08	.068
14.50	0.43	0.63	0.77	0.41	1.07	.065
14.58	0.44	0.62	0.78	0.40	1.07	.063
14.67	0.45	0.62	0.78	0.40	1.05	.061
14.75	0.46	0.61	0.78	0.39	1.05	.060
14.84	0.47	0.60	0.79	0.38	1.03	.058
14.93	0.47	0.60	0.79	0.38	1.03	.057
15.02	0.47	0.59	0.78	0.38	1.03	.056
15.10	0.49	0.57	0.79	0.36	1.01	.053
15.21	0.50	0.57	0.79	0.36	1.00	.052
15.30	0.50	0.56	0.79	0.35	0.99	.050
15.40	0.51	0.54	0.79	0.34	0.97	.048
15.49	0.52	0.53	0.80	0.33	0.95	.046
15.59	0.52	0.51	0.79	0.32	0.96	.045
15.69	0.60	0.49	0.83	0.29	0.81	.034
15.79	0.58	0.54	0.83	0.33	0.86	.040
15.89	0.58	0.52	0.83	0.32	0.85	.038
15.99	0.59	0.52	0.83	0.31	0.84	.037
16.10	0.60	0.51	0.83	0.31	0.83	.036
16.20	0.60	0.50	0.83	0.30	0.82	.035
16.30	0.61	0.49	0.83	0.29	0.80	.033
16.40	0.63	0.48	0.84	0.28	0.77	.030
16.53	0.65	0.48	0.86	0.28	0.73	.028
16.64	0.66	0.48	0.86	0.28	0.72	.028
16.75	0.67	0.47	0.86	0.27	0.71	.027
16.86	0.68	0.46	0.87	0.27	0.68	.025
16.98	0.70	0.46	0.88	0.26	0.66	.023
17.10	0.72	0.46	0.89	0.26	0.63	.022
17.21	0.73	0.46	0.89	0.26	0.62	.022
17.33	0.75	0.45	0.90	0.25	0.59	.020
17.46	0.77	0.46	0.91	0.25	0.57	.019
17.58	0.81	0.46	0.93	0.25	0.53	.017
17.71	0.84	0.48	0.95	0.25	0.51	.017
17.83	0.90	0.50	0.98	0.25	0.47	.016
17.90	1.02	0.52	1.04	0.25	0.40	.015
18.09	0.04	0.77	0.63	0.61	1.30	.165
18.23	0.65	0.30	0.83	0.18	0.58	.019
18.36	0.74	0.40	0.89	0.22	0.57	.017
18.50	0.77	0.42	0.91	0.23	0.54	.017
18.64	0.79	0.44	0.92	0.24	0.53	.017
18.78	0.81	0.44	0.93	0.24	0.52	.016
18.92	0.83	0.46	0.94	0.24	0.51	.016
19.07	0.84	0.46	0.95	0.24	0.50	.016
19.22	0.85	0.48	0.96	0.25	0.50	.016
19.37	0.86	0.48	0.96	0.25	0.49	.016
19.52	0.87	0.49	0.97	0.25	0.49	.017
19.67	0.88	0.50	0.97	0.26	0.49	.017
19.83	0.89	0.51	0.98	0.26	0.49	.017
19.99	0.89	0.52	0.98	0.27	0.49	.018
20.32	0.89	0.54	0.98	0.27	0.49	.019
20.49	0.90	0.54	0.99	0.28	0.49	.019
20.66	0.91	0.56	0.99	0.28	0.49	.019
20.83	0.91	0.57	1.00	0.29	0.50	.020
21.19	0.89	0.61	0.99	0.31	0.52	.023
21.37	0.88	0.61	0.99	0.31	0.53	.023

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Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
21.56	0.86	0.61	0.99	0.31	0.53	.024
21.75	0.87	0.62	0.99	0.31	0.54	.025
21.94	0.87	0.63	0.98	0.32	0.55	.025
22.13	0.86	0.63	0.98	0.32	0.55	.026
22.33	0.85	0.64	0.98	0.33	0.57	.027
22.54	0.84	0.64	0.98	0.33	0.57	.027
22.74	0.84	0.65	0.97	0.33	0.58	.028
22.95	0.82	0.65	0.97	0.34	0.59	.029
23.17	0.81	0.66	0.96	0.34	0.61	.030
23.39	0.79	0.66	0.95	0.34	0.62	.031
23.61	0.78	0.66	0.95	0.35	0.63	.031
23.84	0.75	0.66	0.94	0.35	0.63	.033
24.07	0.73	0.64	0.92	0.35	0.68	.033
24.30	0.72	0.62	0.92	0.34	0.68	.032
24.54	0.72	0.61	0.91	0.34	0.68	.032
25.04	0.71	0.60	0.91	0.33	0.69	.032
25.56	0.69	0.59	0.89	0.33	0.71	.032
25.82	0.68	0.58	0.89	0.33	0.72	.032
26.10	0.67	0.57	0.88	0.32	0.74	.033
26.37	0.67	0.55	0.88	0.32	0.74	.032
26.66	0.66	0.55	0.87	0.31	0.75	.032
26.95	0.65	0.53	0.86	0.31	0.75	.032
27.55	0.63	0.51	0.85	0.30	0.78	.033
27.86	0.61	0.49	0.84	0.29	0.80	.033
28.17	0.61	0.46	0.83	0.28	0.79	.031
28.50	0.61	0.43	0.82	0.26	0.77	.029
28.83	0.63	0.41	0.83	0.25	0.73	.027
30.00	0.65	0.37	0.84	0.22	0.66	.022