Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Au-1
Sa39	2.6-27.6	Refl		x			Ex	R	
JK54	∿2.07-4.43	Ellips		x				$\mu, -\varepsilon_1$	
Sc54	0.41-1.24	Trans, Refl		x				$n/\lambda, k/\lambda$	
Sch54	1.31-2.76	Refl;Ellips		x				K	
ST54	1.31-3.1	Refl		x				KK: n	R measured at 45° angle of incidence
Ho55	0.08-1.24	Ellips		x				log $nk\nu$, log $(1-\varepsilon_1)$, σ	
Sch57	1.31-3.1	Trans		x				n,k	
Ott61	1.88-2.82	Ellips			x			$\varepsilon_1, \varepsilon_2$	
BVK62	0.12-0.62	Ellips				x		$n, k, \varepsilon_1, \varepsilon_2, R$	
Wes63	1.8-5.0	Refl				x	EP	R	Au-Ag alloys
CHH64	6.2-41.3	m-θ		x			In	R	10^{-6} Torr
DH64	0.03-5.64	Refl		x				R	
LSE64	109-539	Trans		x			Ex	μ	
Bea65	2.7-27	m-θ				x	EP	$\varepsilon_1, \varepsilon_2$, and KK:$\varepsilon_1, \varepsilon_2$	
CEP65	∿1-60							R; KK: $\varepsilon_1, \varepsilon_2, \mathrm{Im}(\varepsilon^{-1})$	KK analysis of data from Has63 and CHH64

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks Au-2
				Film	X-tal	Bulk	Prep		
DoM65	0.09-0.99	Ellips		x				n,k	
BB66	0.04-2.5	Refl		x			Ex	R	uhv films on fused quartz (rms roughness ~3Å)
FS66	~2.2-4.3	m-θ		x				R,n,k,ε_1,ε_2	
JM66	103-477	Trans		x			Ex	μ	absorption measurements with synchrotron radiation
MFK67	2.1-4.7	Ellips		x				n,k,ε_1,ε_2	
Sco67	2-10	Refl		x			Ex	R, $\Delta R/R$	temperature modulated reflectance, $\Delta R/R$ measured
HKS68	35-250	Trans		x				μ	absorption measurements with synchrotron radiation
Ho68	0.5-6.0	Refl		x				KK: $-\varepsilon_1$,ε_2	gold-silica interface
PS69	0.5-5.9	Refl	295-770			x	Heat	ε_2/λ	temperature dependent absorption measurements
DFR70	25-90							μ	energy loss spectroscopy
Th70	0.6-6	Trans, Refl		x			Ex	ε_2/λ,$-\varepsilon_1$,ε_2	uhv films annealed and characterized
Hu71	0.62-60	Refl		x			Ex	R	
IHW71	2-11	Refl		x			In	KK: n,k	uhv films and Au-Al alloys
IHW72	1.1-11.5	Refl	300, 100	x			In	R; KK: ε_1,ε_2,n,k, $Im(\varepsilon^{-1})$	uhv films

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks Au-3
				Film	X-tal	Bulk	Prep		
JC72	0.5-6.5	Trans, Refl		x			Ex	$n,k,\varepsilon_1,\varepsilon_2$	
Li72	6.2-31	m-θ		x				R,n,k	
Sch72	2-40	Trans		x				$Im(\varepsilon^{-1})$; KK: $\varepsilon_1,\varepsilon_2$	energy loss spectroscopy
Aks74	0.12-1.24		373-673					ε_N	emissivity
HGK74	13-150	Trans		x			Ex	KK: $\varepsilon_1,\varepsilon_2$,n,k,μ,R, $Im(\varepsilon^{-1})$	absorption measurements with synchrotron radiation
WeG74	2-120	Refl		x				μ	energy loss spectroscopy
FLS75	0.08-4.1	Refl		x				R; KK: n,k	Au-Cr alloys RF sputtered on 150°C glass
HGK75	13-150	Trans		x			Ex	KK: μ	absorption measurements with synchrotron radiation
GH76	0.5-4.13	Trans		x				T	ultra fine gold particles
MR76	0.4-0.8		10-310	x		x	EP	A	absorptivity measured by calorimetry
WKL76	0.5-5.4	Ellips	40-840			x	EP	ε_2	plotted figure is at T = 295°K
BT77	18-35	m-θ		x			In	log R	R measured at 30° angle of incidence with synchrotron radiation
HKL77	1.85-2.43	Ellips	1.5, 300	x				$-\varepsilon_1,\varepsilon_2$	plotted data is at T = 300°K
MHS77	∿2-2.6	Trans		x			Ex	n,k	

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Au-4
BCT79	18-35	m-θ		x			In	$\varepsilon_1,\varepsilon_2,\mu$	
SJ79	0.31		300-430	x				A	absorptivity measured by calorimetry at different temperatures
AKB80	1.5-5.8	Ellips		x				$\varepsilon_1,\varepsilon_2$	studied sample effects
Hun Unpl	1.31-4.13		4.2, 300	x			Ex	A	absorptivity measured by calorimetry
Th Pvt	0.6-6	Trans, Refl		x			Ex	R	uhv films annealed and characterized
We Unpl	0.26-4.2	Refl	4.2		x		EP	A	absorptivity measured by calorimetry

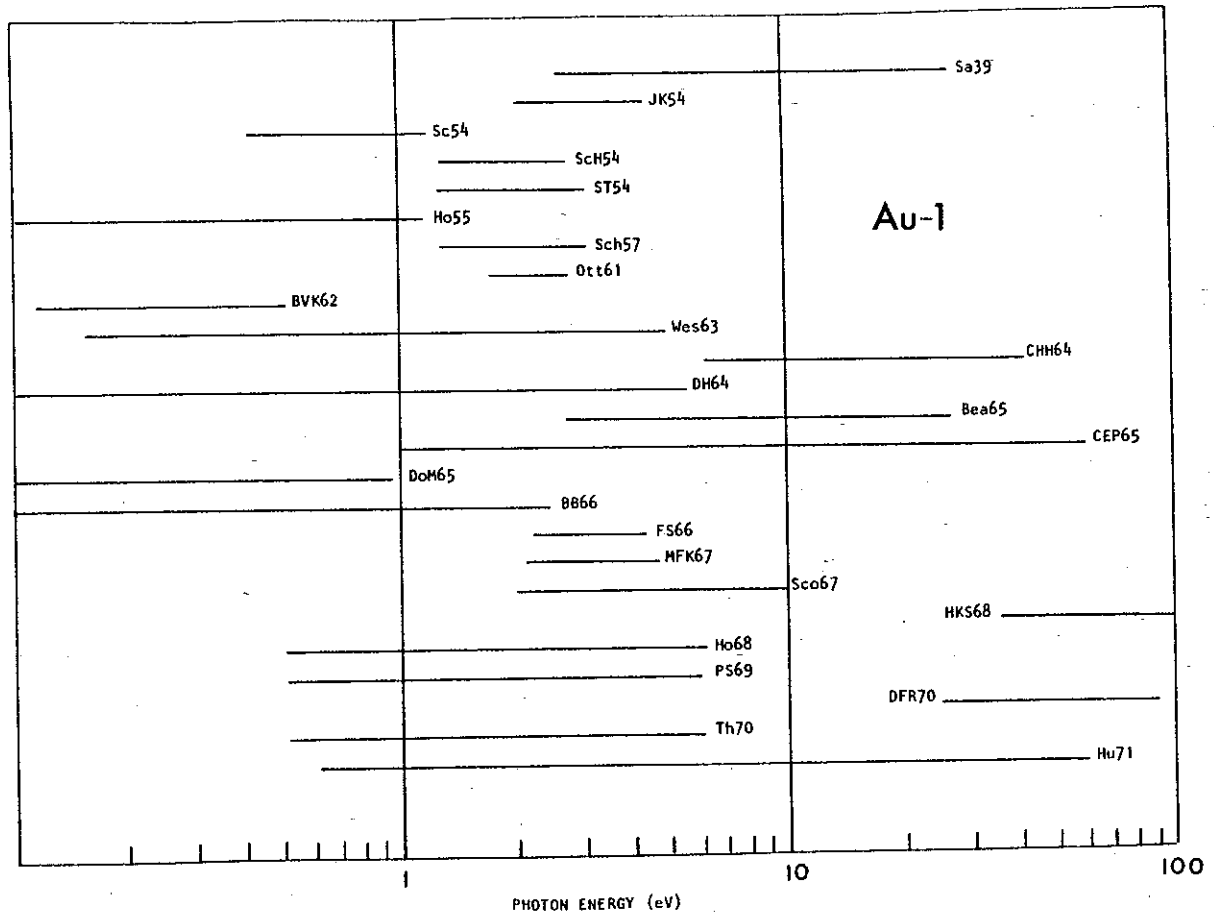

Fig. 12 Survey of available data on Au.

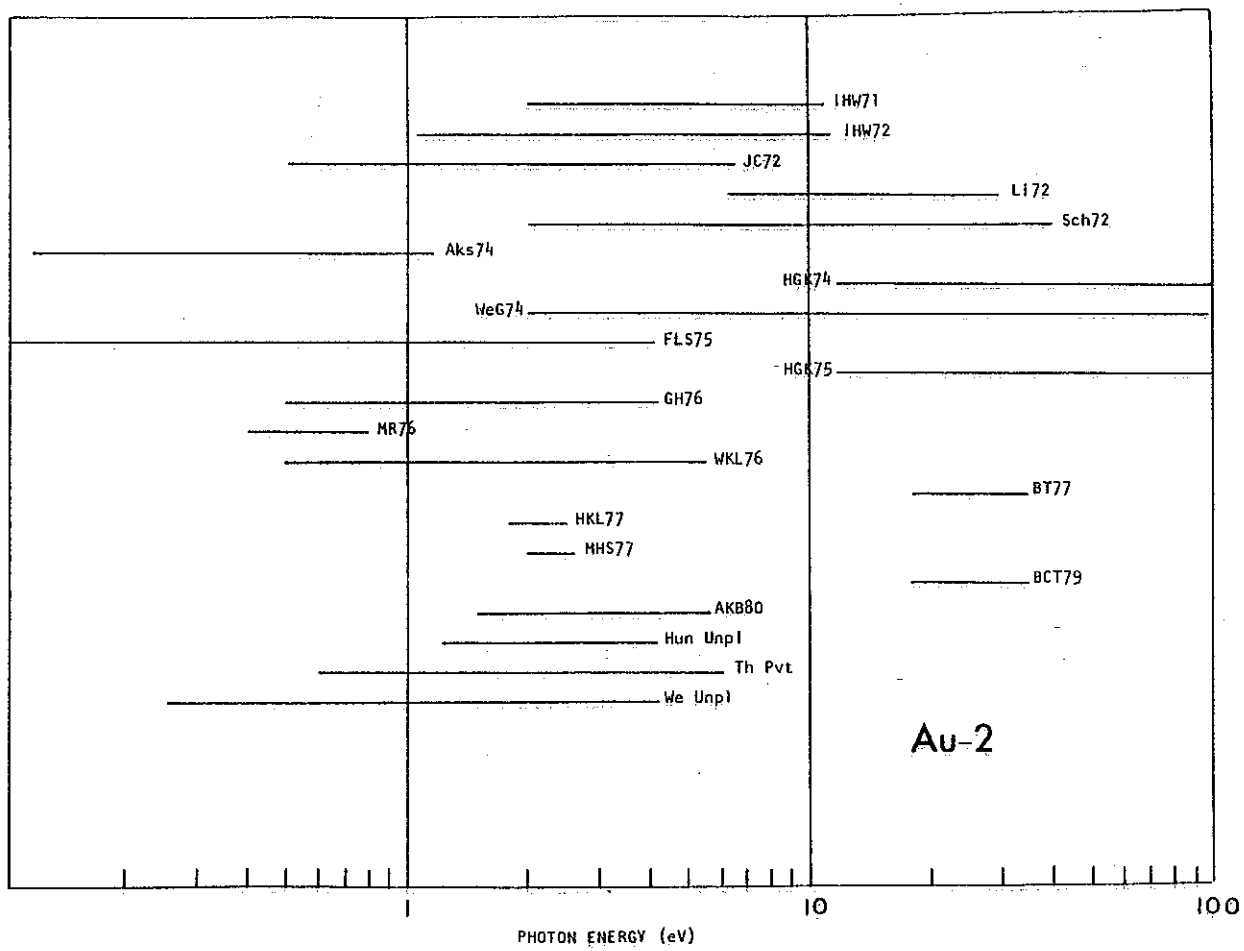

Fig. 12 Survey of available data on Au.

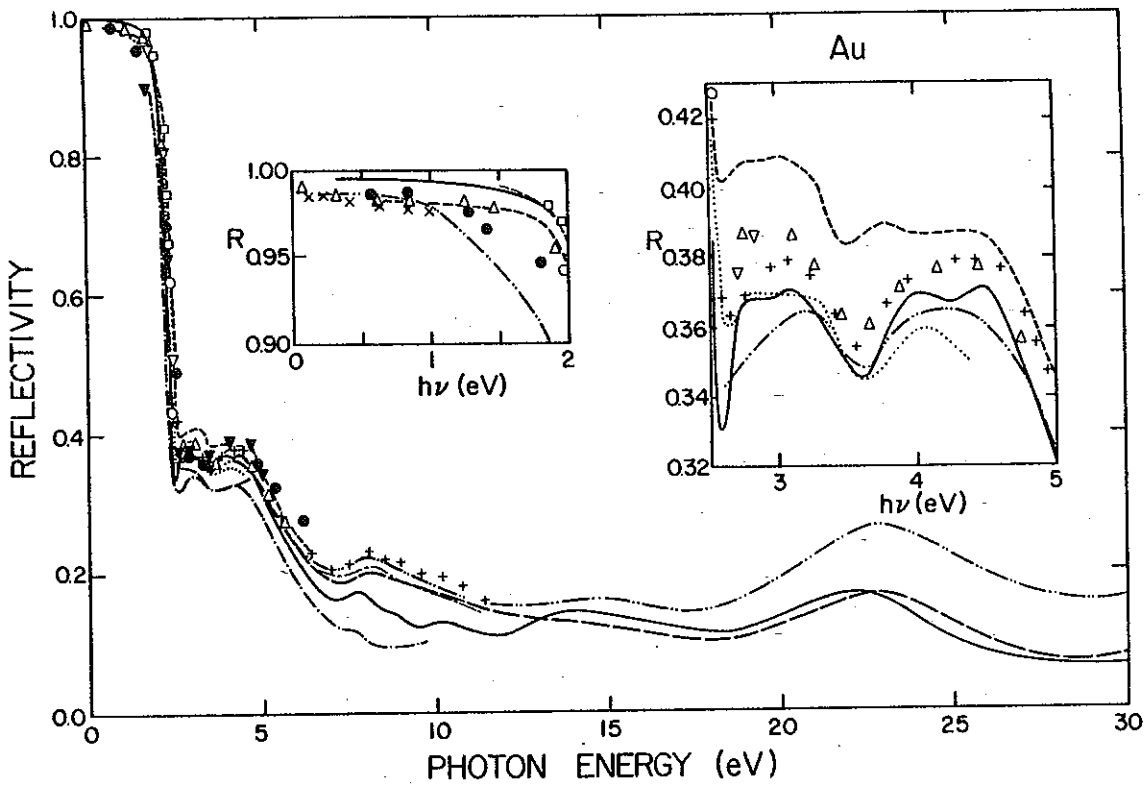

Fig. 13 Reflectivity of Au. Results by We Unpub (~0.2-4 eV) and OL Unpub (~4-30 eV) (——); HGK75 (—·—); MHS77 (ooo); Hu71 (···); Li72 (– – –); CHH74 (long dashes > 6 eV); Sco67 (—·—); DH64 (ΔΔΔ); Wes63 (▼▼▼); FS66 (long dashes < 5 eV); IHW71 (+++); DoM65 (xxx); Ott61 (▽▽▽); AKB80 (medium dashes ~1.5-6 eV); JC72 (short dashes ~6-6.4 eV); FLS75 (●●●); HKL77 (□□□).

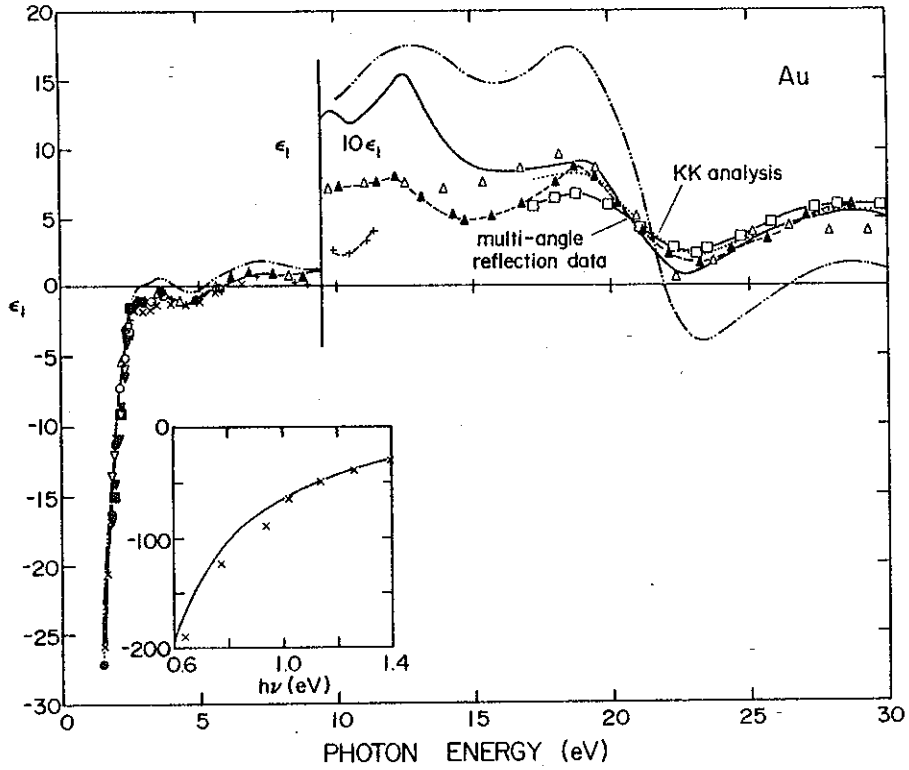

Fig. 14 ε_1 for Au. Results by We Unpub (~0.2-4 eV) and OL Unpub (~4-30 eV) (——); IHW71 (+++); CHH64 (▲▲▲); JC72 (xxx); BCT79 (... is KK analysis, □□□ is multiangle reflection); Ho68 (■■■); Ott61 (▽▽▽); HKL77 (▼▼▼); AKB80 (•••); HGK75 (—·—); CEP65 (ooo); MFK67 (ΔΔΔ).

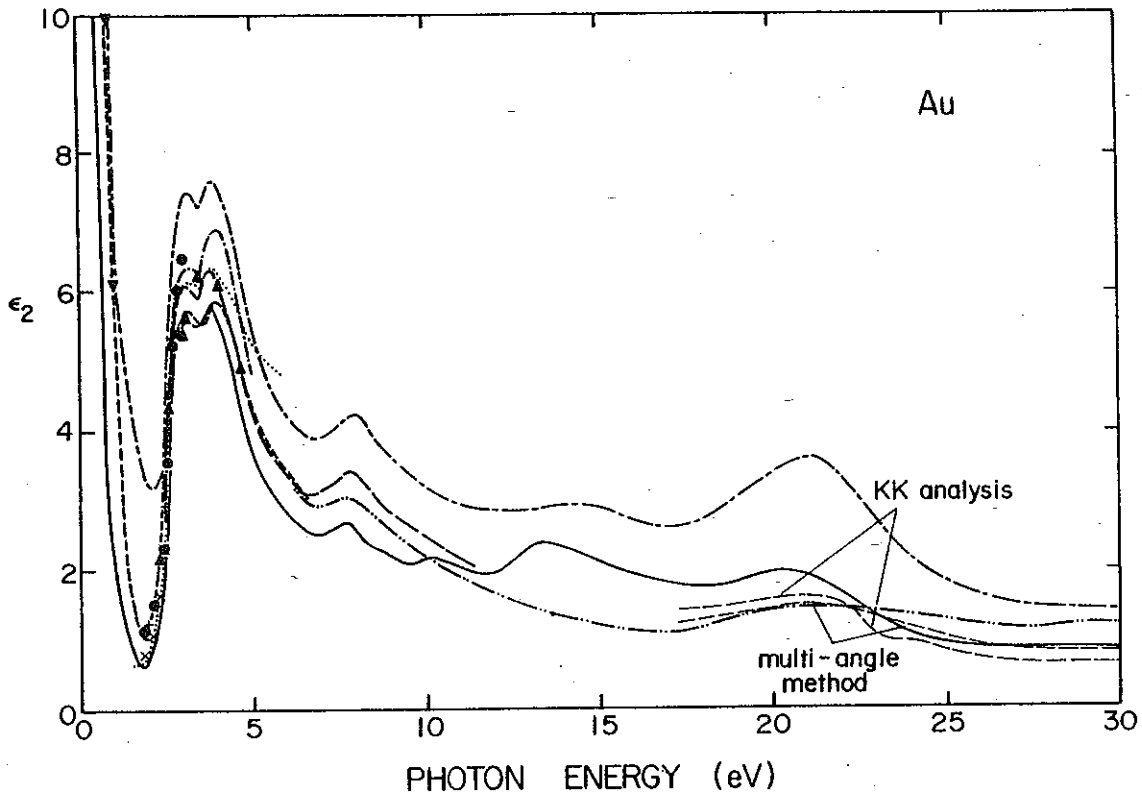

Fig. 15 ϵ_2 of Au. Results by We Unpub (~0.2-4 eV) and OL Unpub (~4-30 eV) (——); JC72 (---); AKB80 (...); CHH64 (—·—); IHW71 (— —); HGK75 (— - —); Th70 (—·—); Ho68 (•••); MFK67 (▲▲▲); Ott61 (+++); DoM65 (▼▼▼); HKL77 (xxx); Bea65 (— —, ~17-30 eV).

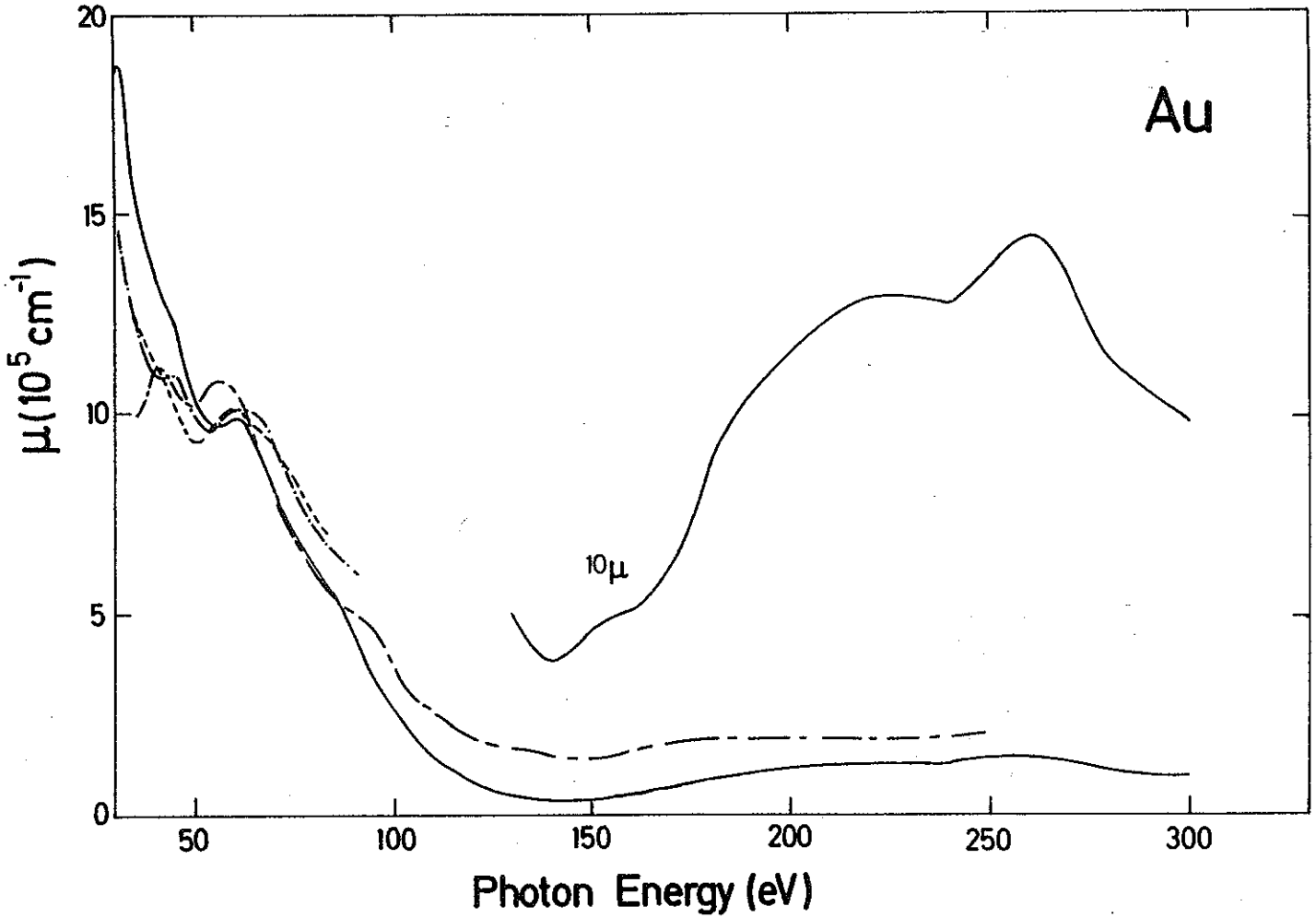

Fig. 16 Absorption coefficient for Au. Results by HGK75 (——); HKS68 (— - —); DFR70 (---); WG74 (—·—).

Gold

Unpublished reflectance data for electropolished Au(110) by J.H. Weaver ($0.2 \leq h\nu \leq 4$ eV) and C.G. Olson and D.W. Lynch ($\sim 4 \leq h\nu \leq 30$ eV). Optical constants determined by Kramers-Kronig analysis.

Energy (eV)	ε_1	ε_2	n	k	$Im(-1/\tilde{\varepsilon})$	$R(\phi=0)$
0.10	-6794.55	1353.43	8.17	82.83	0.00	.995
0.15	-3071.68	411.93	3.71	55.55	0.00	.995
0.20	-1737.03	178.14	2.13	41.73	0.00	.995
0.25	-1113.45	93.15	1.39	33.40	0.00	.995
0.30	-773.09	55.32	0.99	27.82	0.00	.995
0.35	-567.39	35.69	0.75	23.83	0.00	.995
0.40	-433.63	24.47	0.59	20.83	0.00	.995
0.45	-341.72	17.44	0.47	18.49	0.00	.994
0.50	-275.84	12.97	0.39	16.61	0.00	.994
0.55	-227.06	9.92	0.33	15.07	0.00	.994
0.60	-189.92	7.78	0.28	13.78	0.00	.994
0.65	-160.96	6.21	0.24	12.69	0.00	.994
0.70	-137.95	5.07	0.22	11.75	0.00	.994
0.75	-119.39	4.24	0.19	10.93	0.00	.994
0.80	-104.21	3.59	0.18	10.21	0.00	.993
0.85	-91.62	3.09	0.16	9.57	0.00	.993
0.90	-81.07	2.66	0.15	9.01	0.00	.993
0.95	-72.13	2.31	0.14	8.49	0.00	.993
1.00	-64.47	2.03	0.13	8.03	0.00	.992
1.10	-52.16	1.61	0.11	7.22	0.00	.992
1.20	-42.77	1.31	0.10	6.54	0.00	.991
1.30	-35.43	1.09	0.09	5.95	0.00	.990
1.40	-29.57	0.92	0.08	5.44	0.00	.989
1.50	-24.79	0.79	0.08	4.98	0.00	.988
1.60	-20.82	0.70	0.08	4.56	0.00	.986
1.70	-17.46	0.64	0.08	4.18	0.00	.984
1.80	-14.58	0.65	0.09	3.82	0.00	.979
1.90	-12.11	0.75	0.11	3.48	0.01	.968
2.00	-9.98	0.85	0.13	3.16	0.01	.953
2.05	-8.98	0.91	0.15	3.00	0.01	.942
2.10	-8.05	1.01	0.18	2.84	0.02	.925
2.15	-7.19	1.12	0.21	2.69	0.02	.905
2.20	-6.37	1.22	0.24	2.54	0.03	.880
2.25	-5.58	1.32	0.28	2.38	0.04	.849
2.30	-4.80	1.43	0.32	2.22	0.06	.807
2.33	-4.39	1.48	0.35	2.13	0.07	.780
2.35	-3.97	1.58	0.39	2.03	0.09	.743
2.38	-3.57	1.72	0.44	1.94	0.11	.697
2.40	-3.19	1.87	0.50	1.86	0.14	.647
2.42	-2.83	2.05	0.58	1.78	0.17	.592
2.45	-2.49	2.22	0.65	1.71	0.20	.538
2.47	-2.16	2.42	0.74	1.64	0.23	.485
2.50	-1.96	2.62	0.82	1.59	0.25	.438
2.53	-1.53	2.85	0.92	1.54	0.27	.393
2.55	-1.22	3.13	1.03	1.51	0.28	.358
2.58	-0.97	3.47	1.15	1.51	0.27	.336
2.60	-0.84	3.84	1.24	1.54	0.25	.331
2.63	-0.78	4.17	1.32	1.58	0.23	.334
2.65	-0.77	4.47	1.37	1.63	0.22	.340

Au

Energy (eV)	ε_1	ε_2	n	k	$Im(-1/\tilde{\varepsilon})$	$R(\phi=0)$
2.67	-0.82	4.72	1.41	1.68	0.21	.348
2.70	-0.90	4.90	1.43	1.72	0.20	.356
2.72	-0.97	5.01	1.44	1.74	0.19	.363
2.75	-1.00	5.07	1.44	1.76	0.19	.366
2.78	-1.01	5.13	1.45	1.77	0.19	.367
2.80	-1.00	5.18	1.46	1.77	0.19	.368
2.83	-0.99	5.23	1.47	1.78	0.18	.368
2.85	-0.98	5.28	1.48	1.78	0.18	.368
2.88	-0.96	5.33	1.49	1.78	0.18	.368
2.90	-0.94	5.38	1.50	1.79	0.18	.368
2.92	-0.92	5.42	1.51	1.79	0.18	.368
2.95	-0.91	5.47	1.52	1.80	0.18	.368
2.97	-0.90	5.51	1.53	1.80	0.18	.369
3.00	-0.90	5.54	1.54	1.80	0.18	.369
3.05	-0.91	5.59	1.54	1.81	0.17	.370
3.10	-0.91	5.60	1.54	1.81	0.17	.371
3.15	-0.90	5.58	1.54	1.81	0.17	.370
3.20	-0.87	5.56	1.54	1.80	0.18	.368
3.25	-0.82	5.54	1.55	1.79	0.18	.365
3.30	-0.77	5.52	1.55	1.78	0.18	.362
3.35	-0.71	5.50	1.55	1.77	0.18	.359
3.40	-0.65	5.49	1.56	1.76	0.18	.356
3.45	-0.58	5.48	1.57	1.75	0.18	.353
3.50	-0.50	5.49	1.58	1.73	0.18	.349
3.55	-0.43	5.52	1.60	1.73	0.18	.347
3.60	-0.37	5.59	1.62	1.73	0.18	.346
3.65	-0.35	5.67	1.63	1.74	0.18	.347
3.70	-0.39	5.76	1.64	1.75	0.17	.351
3.75	-0.47	5.82	1.64	1.77	0.17	.355
3.80	-0.56	5.83	1.63	1.79	0.17	.360
3.85	-0.66	5.81	1.61	1.80	0.17	.364
3.90	-0.75	5.75	1.59	1.81	0.17	.366
3.95	-0.82	5.68	1.57	1.81	0.17	.368
4.00	-0.87	5.59	1.55	1.81	0.17	.369
4.05	-0.91	5.50	1.53	1.80	0.18	.369
4.10	-0.94	5.42	1.51	1.79	0.18	.368
4.15	-0.95	5.33	1.49	1.78	0.18	.368
4.20	-0.97	5.26	1.48	1.78	0.18	.367
4.25	-0.99	5.20	1.47	1.77	0.19	.367
4.30	-1.03	5.13	1.45	1.77	0.19	.368
4.35	-1.07	5.05	1.43	1.76	0.19	.369
4.40	-1.12	4.95	1.41	1.76	0.19	.370
4.45	-1.16	4.83	1.38	1.75	0.20	.370
4.50	-1.18	4.69	1.35	1.74	0.20	.370
4.55	-1.19	4.55	1.33	1.72	0.21	.368
4.60	-1.16	4.41	1.30	1.69	0.21	.364
4.65	-1.12	4.28	1.28	1.66	0.22	.359
4.70	-1.07	4.16	1.27	1.64	0.23	.354
4.75	-1.02	4.06	1.26	1.61	0.23	.349
4.80	-0.97	3.96	1.25	1.59	0.24	.344
4.85	-0.92	3.86	1.24	1.56	0.25	.338
4.90	-0.86	3.78	1.23	1.54	0.25	.332
4.95	-0.80	3.70	1.22	1.51	0.26	.326
5.00	-0.73	3.62	1.22	1.49	0.27	.319
5.10	-0.62	3.50	1.21	1.44	0.28	.307
5.20	-0.50	3.40	1.21	1.40	0.29	.295
5.30	-0.41	3.30	1.21	1.37	0.30	.285

Au

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
5.40	-0.32	3.22	1.21	1.33	0.31	.275
5.50	-0.23	3.13	1.21	1.30	0.32	.265
5.60	-0.15	3.05	1.21	1.27	0.33	.256
5.70	-0.07	2.98	1.21	1.23	0.34	.246
5.80	0.02	2.90	1.21	1.20	0.34	.236
5.90	0.10	2.84	1.21	1.17	0.35	.227
6.00	0.19	2.79	1.22	1.14	0.36	.218
6.10	0.26	2.74	1.23	1.12	0.36	.210
6.20	0.34	2.70	1.24	1.09	0.36	.203
6.30	0.41	2.66	1.24	1.07	0.37	.196
6.40	0.47	2.63	1.25	1.05	0.37	.190
6.50	0.54	2.59	1.26	1.03	0.37	.184
6.60	0.61	2.56	1.27	1.01	0.37	.177
6.70	0.68	2.53	1.29	0.99	0.37	.172
6.80	0.75	2.52	1.30	0.97	0.36	.167
6.90	0.82	2.53	1.32	0.96	0.36	.164
7.00	0.88	2.54	1.34	0.95	0.35	.162
7.10	0.92	2.56	1.35	0.95	0.35	.161
7.20	0.96	2.58	1.36	0.95	0.34	.161
7.30	0.98	2.61	1.37	0.95	0.34	.162
7.40	0.99	2.64	1.38	0.96	0.33	.164
7.50	0.97	2.67	1.38	0.97	0.33	.166
7.60	0.94	2.69	1.38	0.98	0.33	.169
7.70	0.89	2.69	1.36	0.99	0.34	.171
7.80	0.84	2.65	1.35	0.99	0.34	.171
7.90	0.81	2.59	1.33	0.98	0.35	.169
8.00	0.80	2.52	1.31	0.96	0.36	.165
8.10	0.81	2.46	1.30	0.94	0.37	.160
8.20	0.83	2.40	1.30	0.92	0.37	.155
8.30	0.87	2.36	1.30	0.91	0.37	.151
8.40	0.90	2.33	1.30	0.89	0.37	.147
8.40	0.90	2.33	1.30	0.89	0.37	.147
8.50	0.93	2.31	1.31	0.88	0.37	.145
8.60	0.95	2.29	1.31	0.88	0.37	.144
8.70	0.96	2.28	1.31	0.87	0.37	.142
8.80	0.96	2.25	1.31	0.86	0.38	.140
8.90	0.98	2.21	1.30	0.85	0.38	.137
9.00	1.00	2.17	1.30	0.83	0.38	.133
9.10	1.03	2.14	1.30	0.82	0.38	.130
9.20	1.07	2.11	1.31	0.81	0.38	.126
9.30	1.11	2.09	1.32	0.79	0.37	.124
9.40	1.16	2.09	1.33	0.78	0.37	.122
9.50	1.20	2.09	1.34	0.78	0.36	.121
9.60	1.23	2.11	1.36	0.78	0.35	.121
9.70	1.25	2.14	1.37	0.78	0.35	.123
9.80	1.25	2.16	1.37	0.79	0.35	.124
9.90	1.25	2.17	1.37	0.79	0.35	.125
10.00	1.24	2.18	1.37	0.80	0.35	.126
10.10	1.23	2.18	1.37	0.80	0.35	.126
10.20	1.22	2.18	1.36	0.80	0.35	.127
10.30	1.20	2.17	1.36	0.80	0.35	.126
10.40	1.19	2.15	1.35	0.80	0.36	.125
10.50	1.19	2.13	1.35	0.79	0.36	.124
10.60	1.19	2.11	1.34	0.79	0.36	.123
10.70	1.19	2.09	1.34	0.78	0.36	.122
10.80	1.19	2.07	1.34	0.77	0.36	.120
10.90	1.20	2.05	1.34	0.77	0.36	.118

Au

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
11.00	1.22	2.03	1.34	0.76	0.36	.116
11.10	1.24	2.01	1.34	0.75	0.36	.115
11.20	1.25	2.00	1.34	0.74	0.36	.113
11.30	1.27	1.99	1.35	0.74	0.36	.112
11.40	1.29	1.98	1.35	0.73	0.35	.111
11.50	1.31	1.97	1.36	0.73	0.35	.110
11.60	1.33	1.96	1.36	0.72	0.35	.109
11.70	1.36	1.96	1.37	0.72	0.34	.109
11.80	1.39	1.97	1.38	0.71	0.34	.108
11.90	1.41	1.97	1.39	0.71	0.34	.109
12.00	1.44	1.98	1.39	0.71	0.33	.109
12.10	1.47	2.00	1.40	0.71	0.33	.110
12.20	1.49	2.03	1.42	0.72	0.32	.111
12.30	1.51	2.06	1.43	0.72	0.32	.113
12.40	1.53	2.10	1.44	0.73	0.31	.115
12.50	1.53	2.15	1.44	0.74	0.31	.118
12.60	1.52	2.20	1.45	0.76	0.31	.121
12.70	1.51	2.24	1.45	0.77	0.31	.124
12.80	1.48	2.29	1.45	0.79	0.31	.127
12.90	1.44	2.32	1.44	0.80	0.31	.130
13.00	1.40	2.34	1.44	0.82	0.31	.133
13.10	1.36	2.36	1.43	0.83	0.32	.135
13.20	1.31	2.37	1.42	0.84	0.32	.137
13.30	1.27	2.37	1.41	0.84	0.33	.138
13.40	1.23	2.37	1.40	0.85	0.33	.139
13.50	1.19	2.37	1.38	0.85	0.34	.139
13.60	1.15	2.36	1.37	0.86	0.34	.140
13.70	1.12	2.34	1.36	0.86	0.35	.140
13.80	1.09	2.33	1.35	0.86	0.35	.140
13.90	1.06	2.31	1.34	0.86	0.36	.140
14.00	1.04	2.30	1.33	0.86	0.36	.140
14.10	1.01	2.28	1.32	0.86	0.37	.140
14.20	0.99	2.26	1.31	0.86	0.37	.140
14.30	0.96	2.24	1.30	0.86	0.38	.139
14.40	0.94	2.22	1.29	0.86	0.38	.139
14.50	0.92	2.20	1.29	0.85	0.39	.138
14.60	0.91	2.18	1.28	0.85	0.39	.137
14.70	0.90	2.15	1.27	0.85	0.40	.136
14.80	0.88	2.13	1.26	0.84	0.40	.135
14.90	0.87	2.11	1.26	0.84	0.40	.134
15.00	0.87	2.09	1.25	0.84	0.41	.134
15.10	0.86	2.07	1.24	0.83	0.41	.133
15.20	0.85	2.05	1.24	0.83	0.42	.132
15.30	0.84	2.03	1.23	0.82	0.42	.131
15.40	0.84	2.01	1.23	0.82	0.42	.130
15.50	0.83	2.00	1.22	0.81	0.43	.129
15.60	0.83	1.98	1.22	0.81	0.43	.127
15.70	0.83	1.96	1.22	0.81	0.43	.126
15.80	0.83	1.94	1.21	0.80	0.44	.125
15.90	0.83	1.93	1.21	0.80	0.44	.124
16.00	0.83	1.91	1.21	0.79	0.44	.123
16.20	0.83	1.89	1.20	0.78	0.44	.121
16.40	0.83	1.86	1.20	0.78	0.45	.119
16.60	0.83	1.84	1.19	0.77	0.45	.118
16.80	0.83	1.82	1.19	0.76	0.45	.116
17.00	0.84	1.80	1.19	0.76	0.46	.115
17.20	0.84	1.79	1.19	0.75	0.46	.114

Au

Energy (eV)	ϵ_1	ϵ_2	n	k	Im(-1/$\tilde{\epsilon}$)	R(ϕ=0)
17.40	0.85	1.78	1.19	0.75	0.46	.112
17.60	0.85	1.76	1.19	0.74	0.46	.111
17.80	0.86	1.76	1.19	0.74	0.46	.110
18.00	0.87	1.75	1.19	0.74	0.46	.109
18.20	0.88	1.75	1.19	0.73	0.46	.109
18.40	0.89	1.75	1.19	0.73	0.45	.109
18.60	0.89	1.77	1.20	0.74	0.45	.109
18.80	0.90	1.78	1.20	0.74	0.45	.110
19.00	0.90	1.81	1.21	0.75	0.44	.112
19.20	0.89	1.85	1.21	0.76	0.44	.116
19.40	0.86	1.89	1.21	0.78	0.44	.120
19.60	0.82	1.93	1.21	0.80	0.44	.125
19.80	0.76	1.95	1.19	0.82	0.45	.129
20.00	0.70	1.96	1.18	0.83	0.45	.133
20.20	0.64	1.96	1.16	0.84	0.46	.138
20.40	0.58	1.96	1.14	0.85	0.47	.141
20.60	0.52	1.94	1.12	0.86	0.48	.145
20.80	0.46	1.92	1.10	0.87	0.49	.149
21.00	0.39	1.90	1.08	0.88	0.51	.153
21.20	0.33	1.86	1.05	0.88	0.52	.156
21.40	0.27	1.81	1.03	0.88	0.54	.159
21.60	0.22	1.76	1.00	0.88	0.56	.162
21.80	0.17	1.69	0.97	0.87	0.58	.163
22.00	0.14	1.63	0.94	0.86	0.61	.164
22.20	0.11	1.56	0.91	0.85	0.64	.164
22.40	0.10	1.48	0.89	0.83	0.67	.163
22.60	0.09	1.42	0.87	0.81	0.70	.161
22.80	0.09	1.35	0.85	0.79	0.74	.157
23.00	0.10	1.29	0.84	0.77	0.77	.153
23.20	0.12	1.23	0.82	0.75	0.80	.149
23.40	0.13	1.18	0.81	0.73	0.84	.143
23.60	0.15	1.13	0.80	0.70	0.87	.138
23.80	0.17	1.09	0.80	0.68	0.89	.132
24.00	0.20	1.05	0.80	0.66	0.92	.125
24.20	0.22	1.02	0.80	0.64	0.94	.119
24.40	0.25	0.99	0.80	0.62	0.95	.113
24.60	0.28	0.96	0.80	0.60	0.96	.107
24.80	0.30	0.94	0.80	0.58	0.96	.101
25.00	0.33	0.92	0.81	0.57	0.96	.096
25.20	0.36	0.91	0.82	0.56	0.95	.090
25.40	0.38	0.90	0.82	0.55	0.94	.087
25.60	0.40	0.89	0.83	0.54	0.94	.084
25.80	0.41	0.89	0.83	0.53	0.93	.081
26.00	0.43	0.88	0.84	0.52	0.92	.079
26.20	0.44	0.87	0.84	0.52	0.91	.076
26.40	0.45	0.87	0.85	0.51	0.91	.074
26.50	0.46	0.86	0.85	0.51	0.90	.072
26.80	0.47	0.86	0.85	0.50	0.89	.071
27.00	0.48	0.85	0.86	0.50	0.89	.069
27.20	0.49	0.85	0.86	0.49	0.88	.068
27.40	0.50	0.84	0.86	0.49	0.87	.066
27.60	0.51	0.84	0.86	0.49	0.87	.065
27.80	0.52	0.84	0.87	0.48	0.86	.064
28.00	0.53	0.84	0.87	0.48	0.85	.063
28.20	0.53	0.84	0.87	0.48	0.85	.063
28.40	0.54	0.84	0.88	0.48	0.84	.062
28.60	0.54	0.84	0.88	0.48	0.84	.062

Au

Energy (eV)	ε_1	ε_2	n	k	$Im(-1/\tilde{\varepsilon})$	$R(\phi=0)$
28.80	0.54	0.85	0.88	0.48	0.84	.062
29.00	0.54	0.85	0.88	0.48	0.84	.063
29.20	0.53	0.85	0.88	0.48	0.84	.063
29.40	0.53	0.85	0.87	0.48	0.85	.064
29.60	0.52	0.84	0.87	0.48	0.86	.064
29.80	0.52	0.84	0.87	0.48	0.86	.064
30.00	0.51	0.83	0.86	0.48	0.87	.064