Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks Ag-1
				Film	X-tal	Bulk	Prep		
Sa39	2.6-27.6	Refl		x			Ex	R	
JK54	∿2.7-4.5	Ellips	20, 428	x				$\mu, -\varepsilon_1$	
Sc54	0.41-1.24	Trans, Refl		x			Ex	$n/\lambda, k/\lambda$	
Sch54	1.31-2.76	Refl,Ellips		x			Ex	k	
ST54	1.31-3.1	Refl		x			Ex	KK: n	R measured at 45° angle of incidence
Ho55	0.08-1.24	Ellips		x				log nkν, $\log(i-\varepsilon_1), \sigma$	
Bio56	0.38-4.13	Refl	4.2			x	EP	A	absorptivity measured by calorimetry
Bea57	0.01-0.25	Ellips			x			$k/\lambda, n/\lambda^2$	
Sch57	1.31-3.1	Trans		x				n,k	
Ott61	1.88-2.82	Ellips			x		Ex	$\varepsilon_1, \varepsilon_2$	
Wes63	1.8-5.0	Refl				x	EP	R	Au-Ag alloys
DH64	0.03-5.64	Refl		x				R	
HAM64	3.35-4.96	m-θ		x			In	$R, n, k, \varepsilon_1, \varepsilon_2, \mathrm{Im}(\varepsilon^{-1})$	10^{-6} Torr
LSE64	109-539	Trans		x			Ex	μ	

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Ag-2
DoM65	0.09-0.99	Ellips		x			Ex	n,k	
YS65	0.89-4.64	Ellips		x				n,μ	
BB66	0.04-2.5	Refl		x			Ex	R	uhv films on fused quartz (rms roughness ∿3 Å)
FS66	∿2.2-4.3	m-θ		x				R,n,k,ε_1,ε_2	
Ro66	3-60	Refl		x			Ex	R,ε_1,ε_2,Im(ε^{-1})	plotted R at = 18°; plotted ε_1,ε_2 from two-angles of incidence technique
Dan67		Trans		x				Im(ε^{-1}),Im(ε+1)$^{-1}$	energy loss spectroscopy
MFK67	2.1-4.7	Ellips		x			Ex	n,k,ε_1,ε_2	
BBA68	0.05-0.31	Refl		x				R	
HKS68	35-250	Trans		x				μ	absorption measurements with synchrotron radiation
Dan69	5-75	Trans		x			Ex	Im(ε^{-1}), KK: ε_1,ε_2	energy loss spectroscopy
IHW71	2-11	Refl		x			In	KK: n,k	uhv films measured in situ
IrH71	1.1-11.5	Refl	300	x			In	R; KK: ε_1,ε_2,Im(ε^{-1})	uhv films measured in situ; Ag and Ag alloys
JC72	0.5-6.5	Trans, Refl		x			Ex	n,k,ε_1,ε_2	

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Ag-3
Sch72	2-40	Trans		x				$Im(\varepsilon^{-1})$; KK: $\varepsilon_1,\varepsilon_2$	energy loss spectroscopy
HGK74	13-150	Trans		x			Ex	KK: $\varepsilon_1,\varepsilon_2$,n,k,$\mu$,R, $Im(\varepsilon^{-1})$	absorption measurements with synchrotron radiation
WeG74	~25-100	Trans		x			Ex	μ	energy loss spectroscopy
FS75	1.4-5.25	Ellips		x			Ex	$\varepsilon_1,\varepsilon_2$	substrate T ≈ 100°C
HGK75	13-150	Trans		x			Ex	KK: μ	absorption measurements with synchrotron radiation
RT75	2-6	Trans, Refl		x				ε_2	
MR76	0.4-0.8	Refl	10-310			x	EP	A	absorptivity measured by calorimetry
WKL76	0.5-5.4	Ellips	40-840		x	x	EP	ε_2	
RYE77			150-1000					ε_H	emissivity
We Unpl	0.165-3.0	Refl	4.2		x		CP	A	absorptivity measured by calorimetry

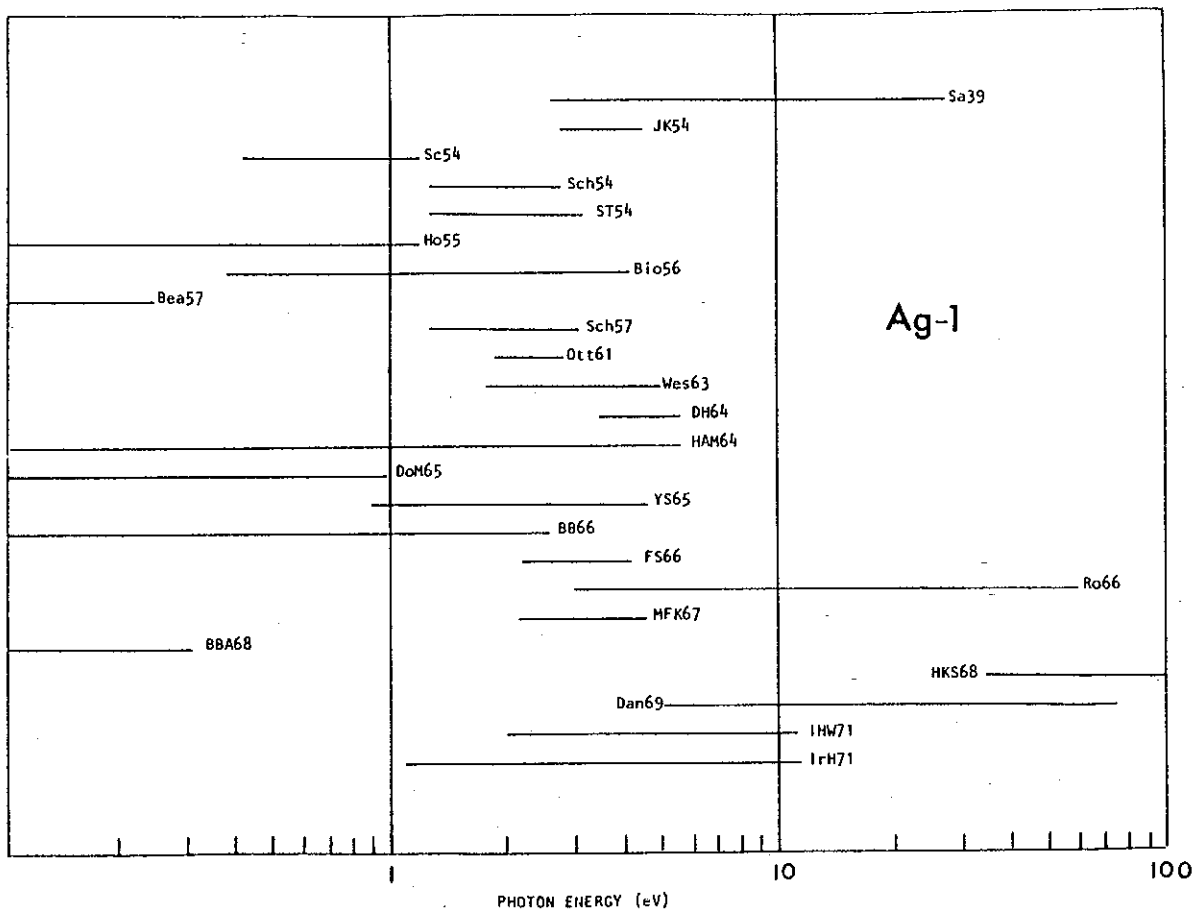

Fig. 7 Survey of available data on Ag.

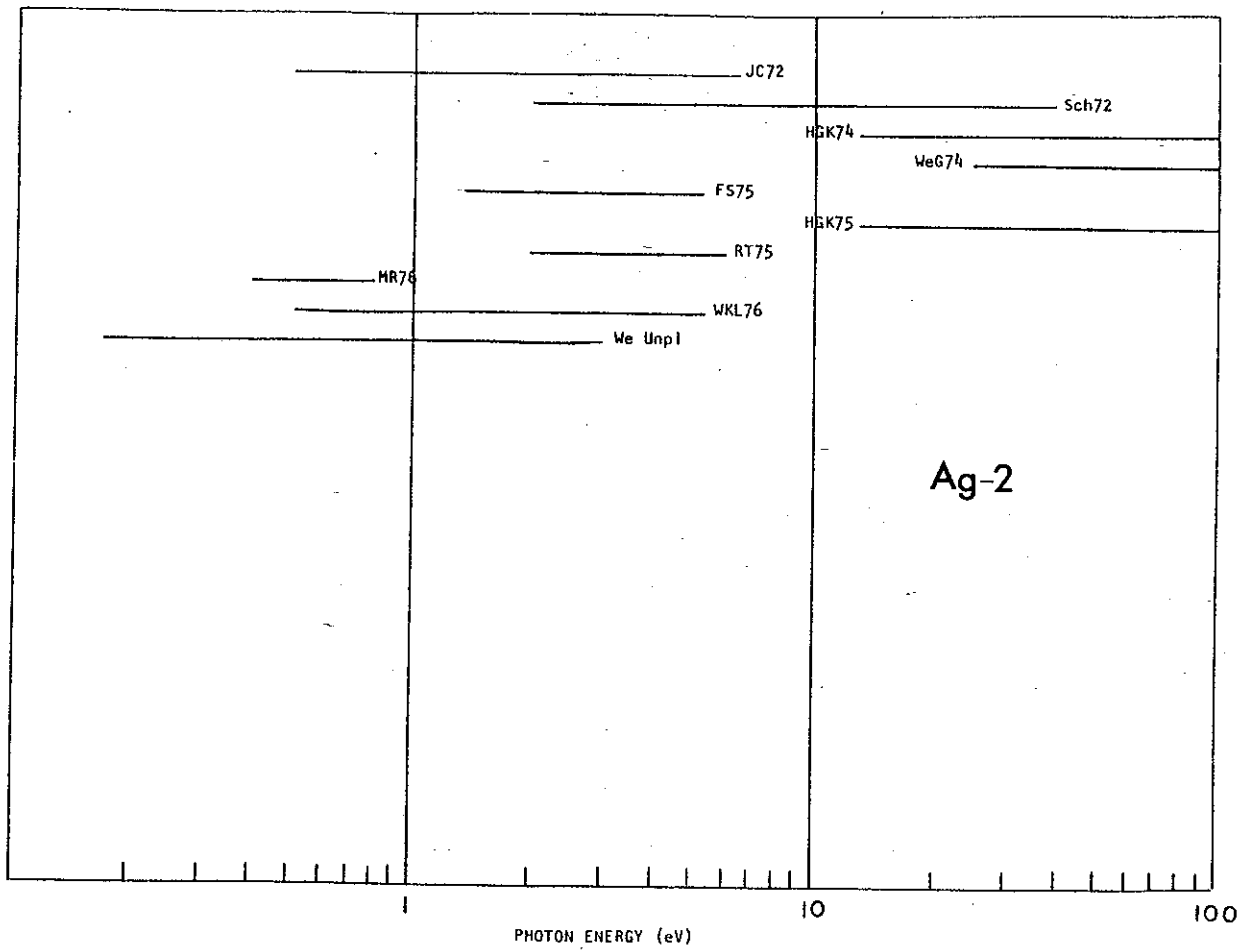

Fig. 7 Survey of available data on Ag.

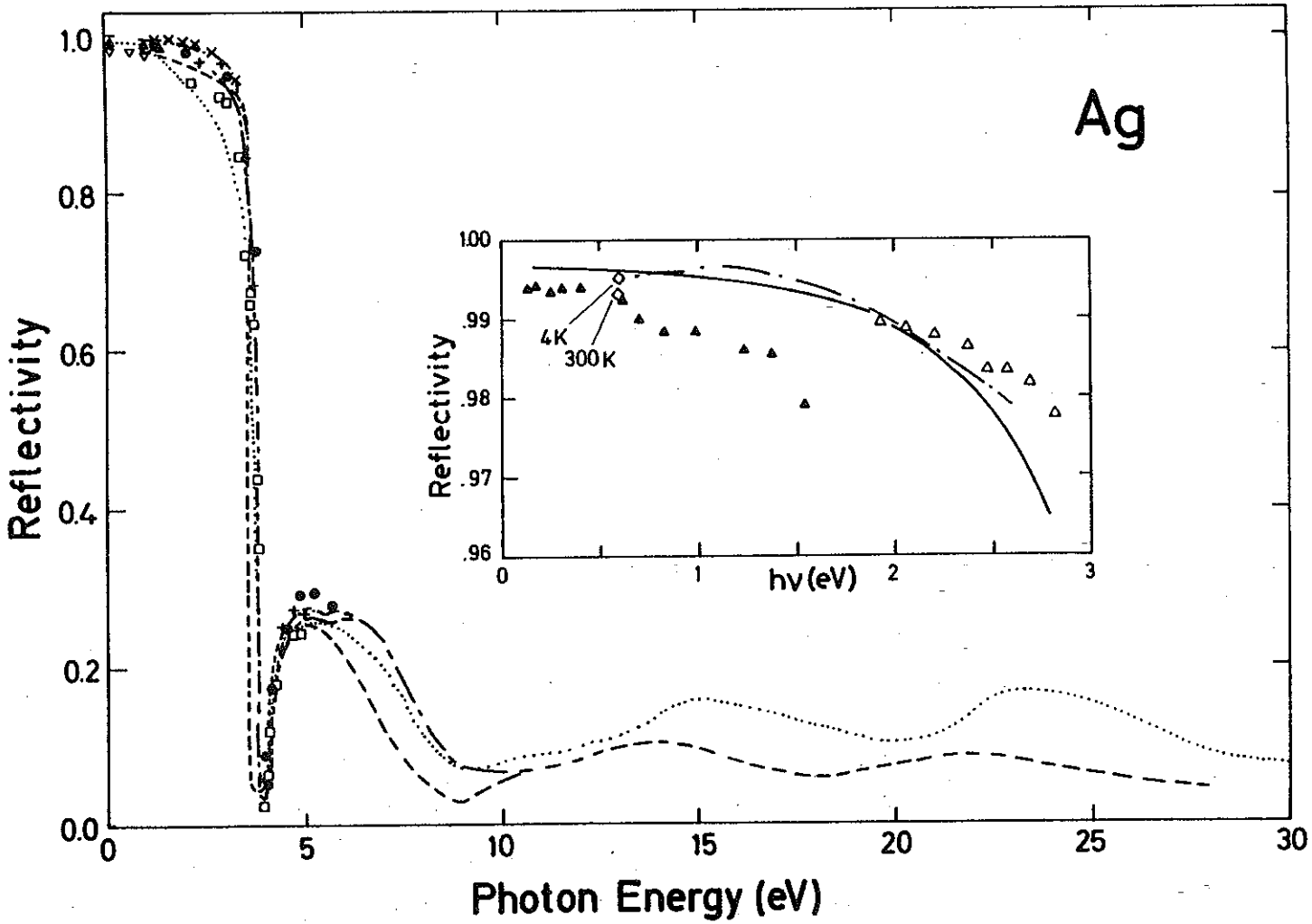

Fig. 8 Reflectivity for Ag. Results by Wea Unpub. (——); MR76 (◇◇◇); Ott61 (ΔΔΔ); JC72 (—·—); IHW71 (— - —); Ro66 (---); FS66 (▫▫▫); BB66 (▲▲▲); DH64 (●●●); Bio56 (xxx); Wes63 (+++); DoM65 (▽▽▽); HGK75 (···).

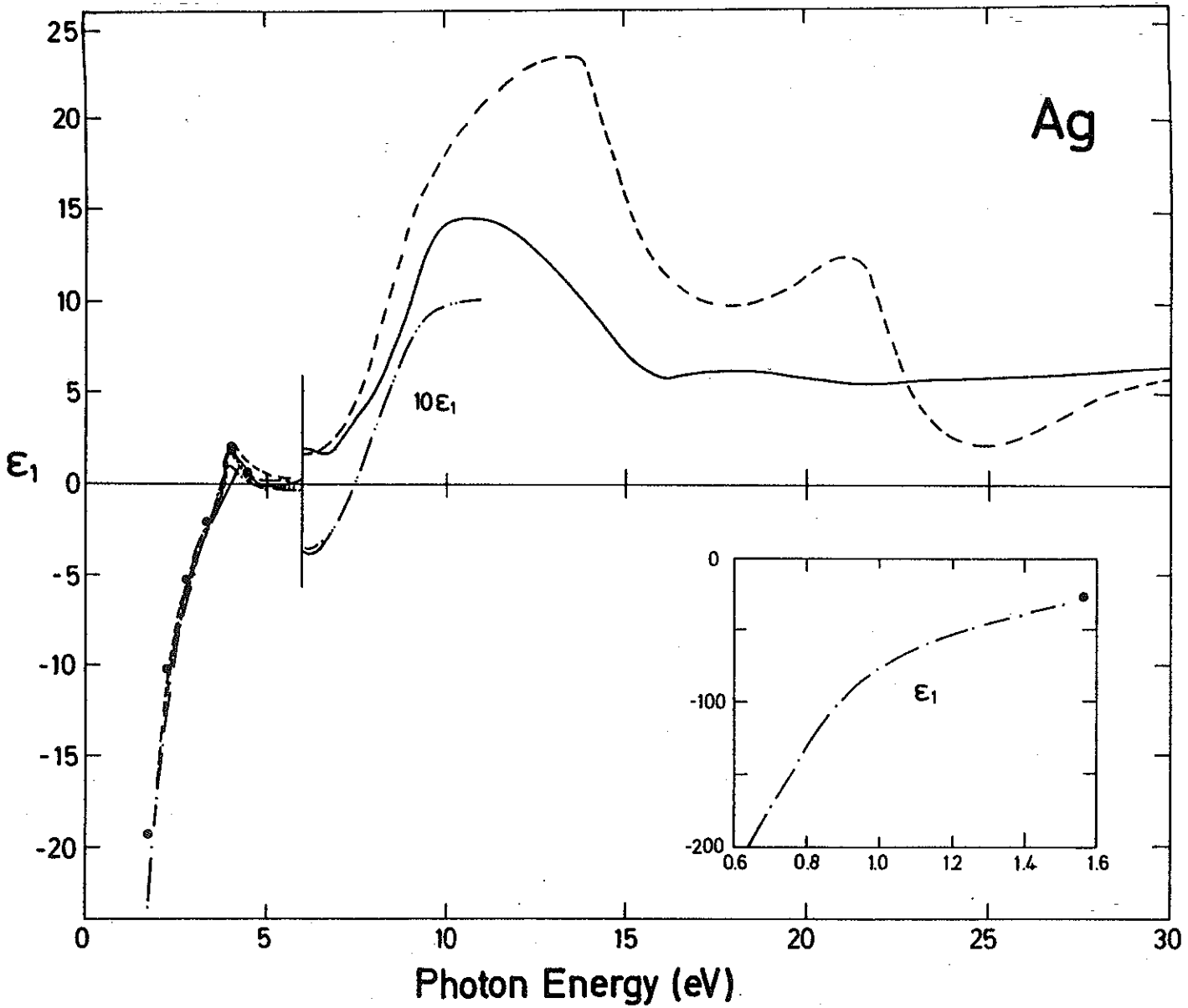

Fig. 9 ε_1 for Ag. Results by MFK67 (---); HAM64 (···); FS75 (•••); Ro66 (——); IHW71 (—·—); JC72 (—·—); HGK75 (— — —).

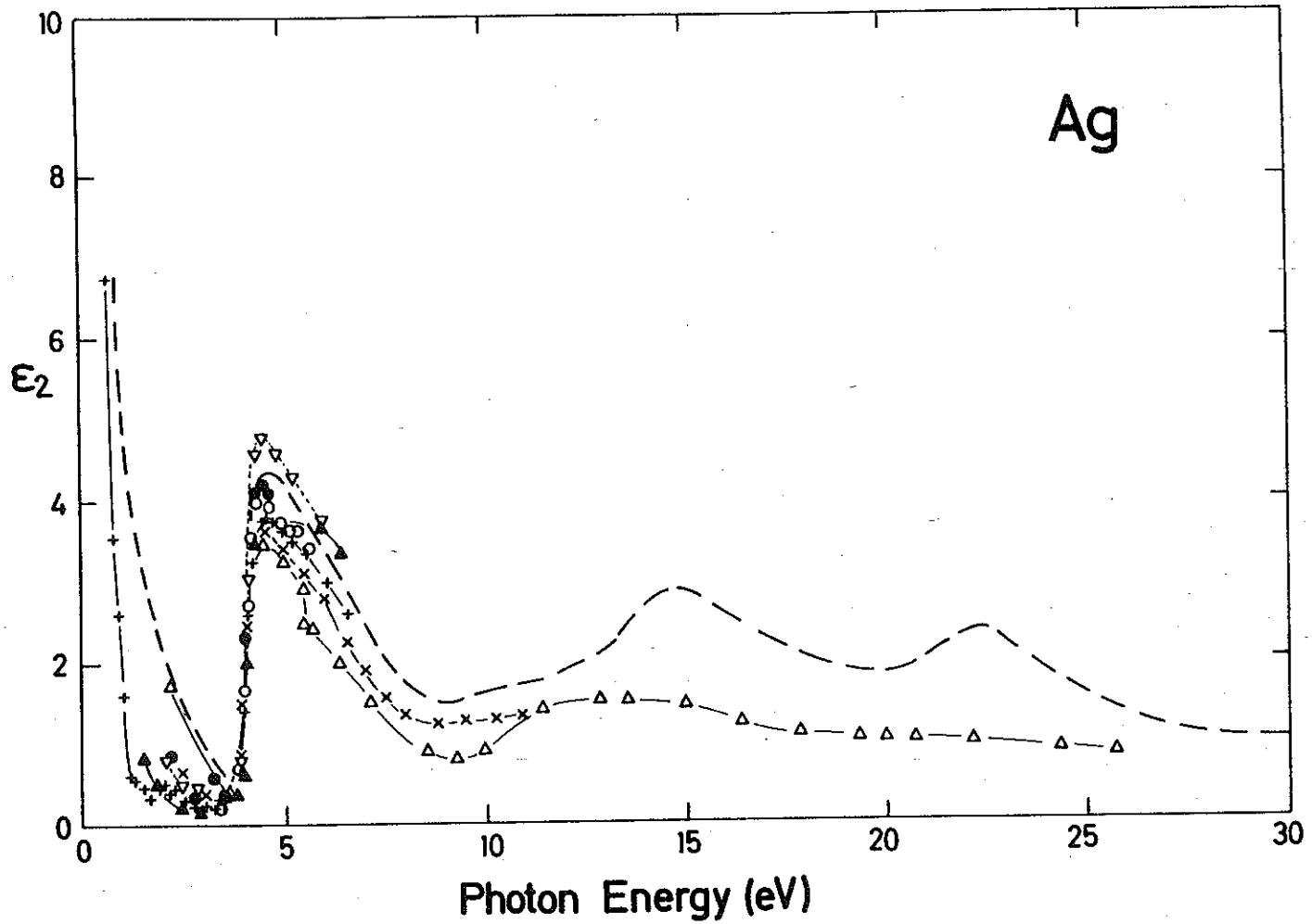

Fig. 10 ε_2 for Ag. Results by JC72 (+++); IHW71 (xxx); Ro66 (ΔΔΔ); FS75 (▲▲▲); RT75 (▽▽▽); HAM64 (ooo); MFK67 (•••); HGK75 (— —).

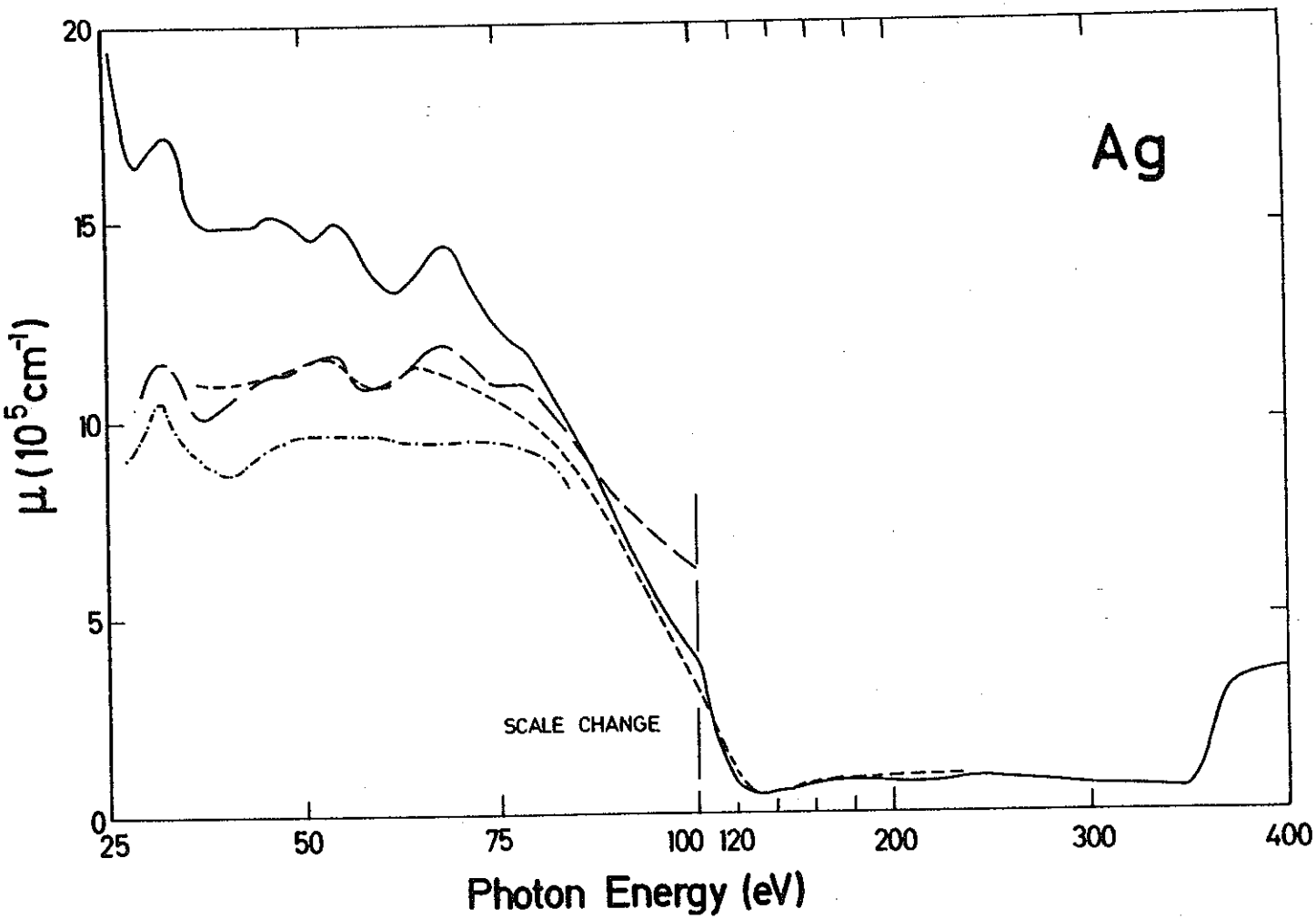

Fig. 11 Absorption coefficient for Ag. Results by HGK75 (——): WG74 (– –); HKS68 (---); Dan69 (—·—).

Silver

publication by H.J. Hagemann, W. Gudat, and C. Kunz in J. Opt. Soc. Am. 65, 742 (1975) based on the following tabulation

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
0.10	-8050.00	1790.00	9.91	90.27	0.00	.995
0.20	-2080.00	200.00	2.84	45.70	0.00	.995
0.30	-929.00	86.10	1.41	30.51	0.00	.994
0.40	-523.00	41.60	0.91	22.89	0.00	.993
0.50	-335.00	24.50	0.67	18.32	0.00	.992
1.00	-81.50	5.04	0.28	9.03	0.00	.987
1.50	-33.50	3.14	0.27	5.79	0.00	.969
2.00	-17.40	2.25	0.27	4.18	0.01	.944
2.50	-9.51	1.47	0.24	3.09	0.02	.914
3.00	-5.12	1.03	0.23	2.27	0.04	.864
3.25	-3.42	0.85	0.23	1.86	0.07	.816
3.50	-1.96	0.60	0.21	1.42	0.14	.756
3.60	-1.22	0.52	0.23	1.13	0.29	.671
3.70	-0.50	0.46	0.30	0.77	1.00	.475
3.77	0.12	0.42	0.53	0.40	2.20	.154
3.80	0.44	0.44	0.73	0.30	1.14	.053
3.90	1.55	0.94	1.30	0.36	0.29	.040
4.00	2.25	1.94	1.61	0.60	0.22	.103
4.10	2.26	2.92	1.73	0.85	0.21	.153
4.20	1.94	3.72	1.75	1.06	0.21	.194
4.30	1.70	3.92	1.73	1.13	0.21	.208
4.50	1.23	4.33	1.69	1.28	0.21	.238
4.75	0.80	4.32	1.61	1.34	0.22	.252
5.00	0.56	4.20	1.55	1.36	0.23	.257
5.50	0.29	3.88	1.45	1.34	0.26	.257
6.00	0.16	3.42	1.34	1.28	0.29	.246
6.50	0.18	2.96	1.25	1.18	0.34	.225
7.00	0.27	2.49	1.18	1.06	0.40	.196
7.50	0.47	2.08	1.14	0.91	0.46	.157
8.00	0.78	1.75	1.16	0.75	0.48	.114
9.00	1.44	1.49	1.33	0.56	0.35	.074
10.00	1.83	1.63	1.46	0.56	0.27	.082
11.00	2.00	1.71	1.52	0.56	0.25	.088
12.00	2.24	1.89	1.61	0.59	0.22	.100
13.00	2.33	2.12	1.66	0.64	0.21	.112
14.00	2.35	2.69	1.72	0.78	0.21	.141
14.50	1.94	2.88	1.64	0.88	0.24	.152
15.00	1.59	2.86	1.56	0.92	0.27	.156
16.00	1.19	2.59	1.42	0.91	0.32	.151
17.00	1.02	2.30	1.33	0.86	0.36	.139
18.00	0.99	2.06	1.28	0.80	0.39	.124
19.00	1.04	1.90	1.27	0.75	0.41	.111
20.00	1.15	1.84	1.29	0.71	0.39	.103
21.00	1.26	2.01	1.35	0.75	0.36	.112
21.50	1.23	2.19	1.37	0.80	0.35	.124
22.00	1.02	2.34	1.34	0.87	0.36	.141
22.50	0.73	2.36	1.26	0.93	0.39	.157
23.00	0.49	2.21	1.17	0.94	0.43	.163
23.50	0.35	2.05	1.10	0.93	0.47	.165

Ag

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
24.00	0.26	1.88	1.04	0.90	0.52	.165
24.50	0.22	1.72	0.99	0.87	0.57	.160
25.00	0.21	1.57	0.95	0.83	0.63	.154
25.50	0.23	1.42	0.91	0.78	0.69	.144
26.00	0.27	1.32	0.90	0.74	0.73	.133
26.50	0.31	1.23	0.89	0.69	0.76	.121
27.00	0.36	1.15	0.89	0.65	0.79	.109
27.50	0.42	1.10	0.89	0.62	0.80	.099
28.00	0.47	1.06	0.90	0.59	0.79	.090
28.50	0.50	1.04	0.91	0.57	0.78	.084
29.00	0.54	1.02	0.92	0.56	0.77	.079
30.00	0.57	1.01	0.93	0.54	0.75	.074
31.00	0.58	1.00	0.93	0.53	0.75	.072
32.00	0.57	0.97	0.92	0.53	0.77	.072
33.00	0.54	0.93	0.90	0.51	0.80	.071
34.00	0.53	0.86	0.88	0.49	0.84	.067
35.00	0.54	0.79	0.86	0.45	0.86	.061
36.00	0.59	0.78	0.89	0.44	0.81	.055
38.00	0.64	0.69	0.89	0.39	0.77	.043
40.00	0.67	0.66	0.90	0.37	0.75	.039
42.00	0.68	0.63	0.90	0.35	0.73	.036
44.00	0.70	0.60	0.90	0.33	0.71	.033
46.00	0.70	0.58	0.90	0.32	0.70	.031
48.00	0.69	0.55	0.89	0.31	0.70	.030
50.00	0.70	0.51	0.88	0.29	0.68	.027
52.00	0.71	0.49	0.89	0.28	0.65	.024
54.00	0.71	0.49	0.88	0.27	0.66	.024
56.00	0.69	0.45	0.87	0.26	0.66	.024
58.00	0.70	0.41	0.87	0.24	0.63	.021
60.00	0.71	0.38	0.87	0.22	0.59	.018
62.00	0.73	0.37	0.88	0.21	0.55	.016
64.00	0.74	0.37	0.88	0.21	0.54	.016
66.00	0.74	0.37	0.88	0.21	0.55	.016
68.00	0.71	0.36	0.87	0.21	0.56	.017
70.00	0.65	0.34	0.83	0.20	0.63	.021
72.00	0.69	0.31	0.85	0.18	0.54	.016
74.00	0.70	0.28	0.85	0.17	0.50	.014
76.00	0.70	0.27	0.85	0.16	0.47	.013
78.00	0.70	0.25	0.85	0.15	0.46	.013
80.00	0.70	0.23	0.85	0.14	0.43	.012
85.00	0.70	0.19	0.85	0.11	0.36	.011
90.00	0.72	0.14	0.85	0.08	0.26	.009
95.00	0.74	0.10	0.86	0.06	0.18	.007
100.00	0.76	0.07	0.87	0.04	0.11	.005