Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks Mo
				Film	X-tal	Bulk	Prep		
Sa39	2.6-27.6	Refl		x			Ex	R	
LFJ64	7.1-23.6	Refl				x	Heat	R	MP rolled samples, vacuum annealed
WJ64	2.14-5	m-θ				x	In	R,n,k	heated ∿1800 K in situ, uhv
KC65	0.05-5	Ellips				x	MP	n,k,σ,ε_1,ε_2,Im(ε^{-1}), R	
AU66	2.5-55	Refl	∿2000			x	Heat	Im(ε^{-1})	energy loss spectroscopy at several temperatures
Ba66	0.6-2.6	Ellips				x	Heat	n,k	filaments at various T
LT66	0.06-0.25	Ellips				x	MP	ε_2/λ,ε_1	
LTA66	0.1-3.5	Ellips				x	MP	ε_2/λ,ε_1	
KBM67	0.07-12	Refl,Ellips				x	MP	A,n,k,ε_1,σ,Im(ε^{-1}); KK: ε_1,σ,Im(ε^{-1})	
JLM68	2.1-23.1	m-θ				x	Heat	R,n,k,ε_1,ε_2	heated ∿2200 K in situ, ∿10^{-9} Torr
Le67	0.1-4	Ellips					MP	ε_2/λ	data from LT66 and LTA66
KUS69	1.4-11	Refl			x			R; KK: ε_1,$\varepsilon_2(h\nu)^2$, Im(ε^{-1})	
CMB70			1900-2800					ε_N,ε_H	emissivity
KL70	0.5-14	Refl		x		x	In	R; KK: ε_1,ε_2,Im(ε^{-1}) Im$(\varepsilon+1)^{-1}$	in situ film and EP bulk

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Mo
Hu71	9.9-24.8	Refl		x			Ex	R	
KNN71	0.06-4.9	Ellips			x		EP	R,n,k,ε_1,ε_2,σ	see also KN78
UKK71	1-12	Refl			x		Heat	R; KK: ε_1,$\varepsilon_2(h\nu)^2$	heated ∿1700 K
Gr72	1.65-4	Trans, Refl		x			Ex	σ	
Vuj72			1000-2000					ε	emissivity
BKB73			1000-2400					ε_N at λ = 6450 Å	emissivity
VP74	0.5-6	Refl			x		EP	R; KK: ε_1,ε_2	EP and sputtered in glow discharge of Ar in situ
WL074	0.1-35	Refl	4.2 for $h\nu$ < 4.88 eV RT for $h\nu$ > 4.88 eV			x	EP	A,R; KK: ε_1,ε_2, $Im(\varepsilon^{-1})$,$Im(\varepsilon+1)^{-1}$	absorptivity measured by calorimetry for $h\nu$ < 5 eV, reflectivity measured for $h\nu$ > 4 eV with synchrotron radiation, see also We075
BLR76	∿0-50	Trans			x			$Im(\varepsilon^{-1})$	energy loss spectroscopy
CGS76	0.32-5.5	Trans, Refl		x			In	σ	uhv evaporation in situ
W076	20-250	Trans		x			Ex	μ	optical absorption measurements with synchrotron radiation
BL077	0.1-25	Refl	4.2 for $h\nu$ < 5 eV 300 K for $h\nu$ > 5 eV			x	EP	A,R; KK: σ	Nb, Mo of WL074; Nb-Mo alloy study with synchrotron radiation

Authors	Energy Range (eV)	Technique	Temperature (K) RT unless specified	Sample				Data Presentation	Remarks
				Film	X-tal	Bulk	Prep		Mo
GSS77			773					ε	emissivity
ST77	0.05-0.1	Ellips			x		MP	$-\varepsilon_1, \varepsilon_2/\lambda$	
NC78	0.5-6.2	Trans, Refl		x			Ex	R	examined dependence of R on substrate temperature; x-ray diffraction and TEM
GCS79	0.32-5.6	Trans, Refl		x			In	σ	uhv evaporation in situ
Man80	1.5-38	Trans		x			Ex	$\mathrm{Im}(\varepsilon^{-1})$; KK: $\varepsilon_1, \varepsilon_2, R$	energy loss spectroscopy
NC80	0.5-6.5	Trans, Refl		x			Ex	n, k, σ	see also NC78
NCC80	0.5-6.5	Trans, Refl		x			Ex	σ	examined dependence of R on substrate temperature
CS79	0.08-0.41			x			Ex	R	chem-vapor deposited Mo

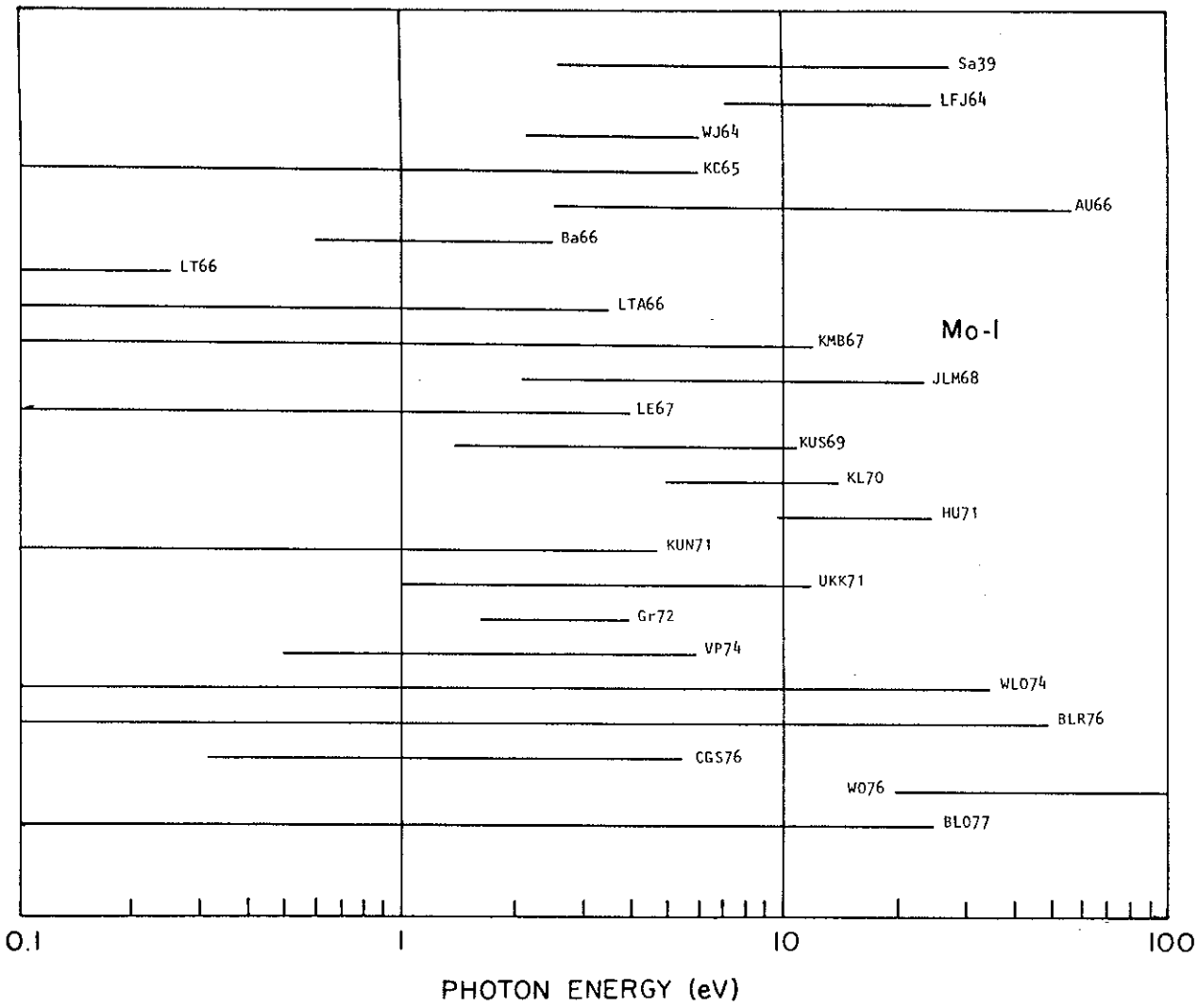

Fig. 48 Survey of available data for Mo

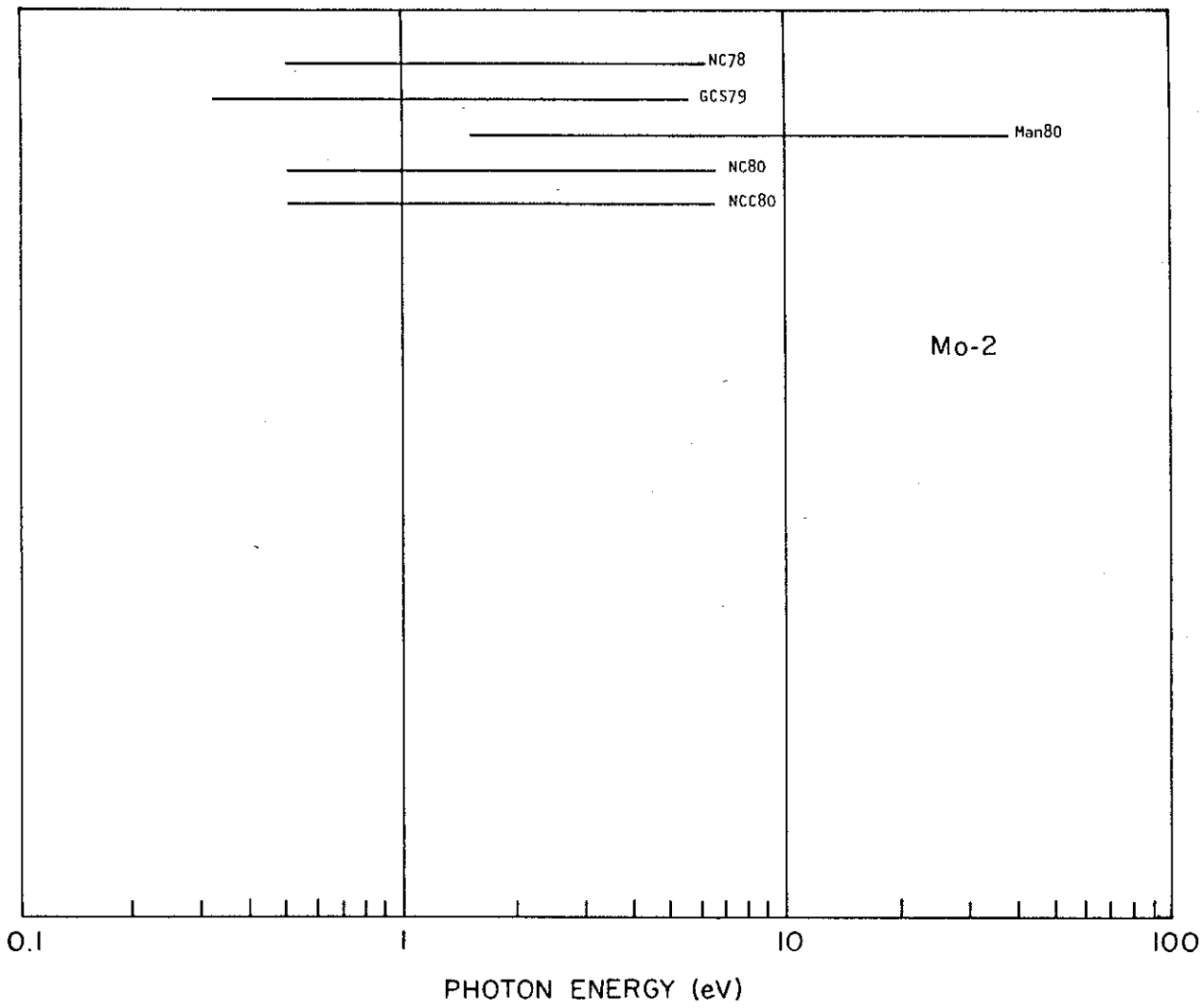

Fig. 48 Survey of available data for Mo

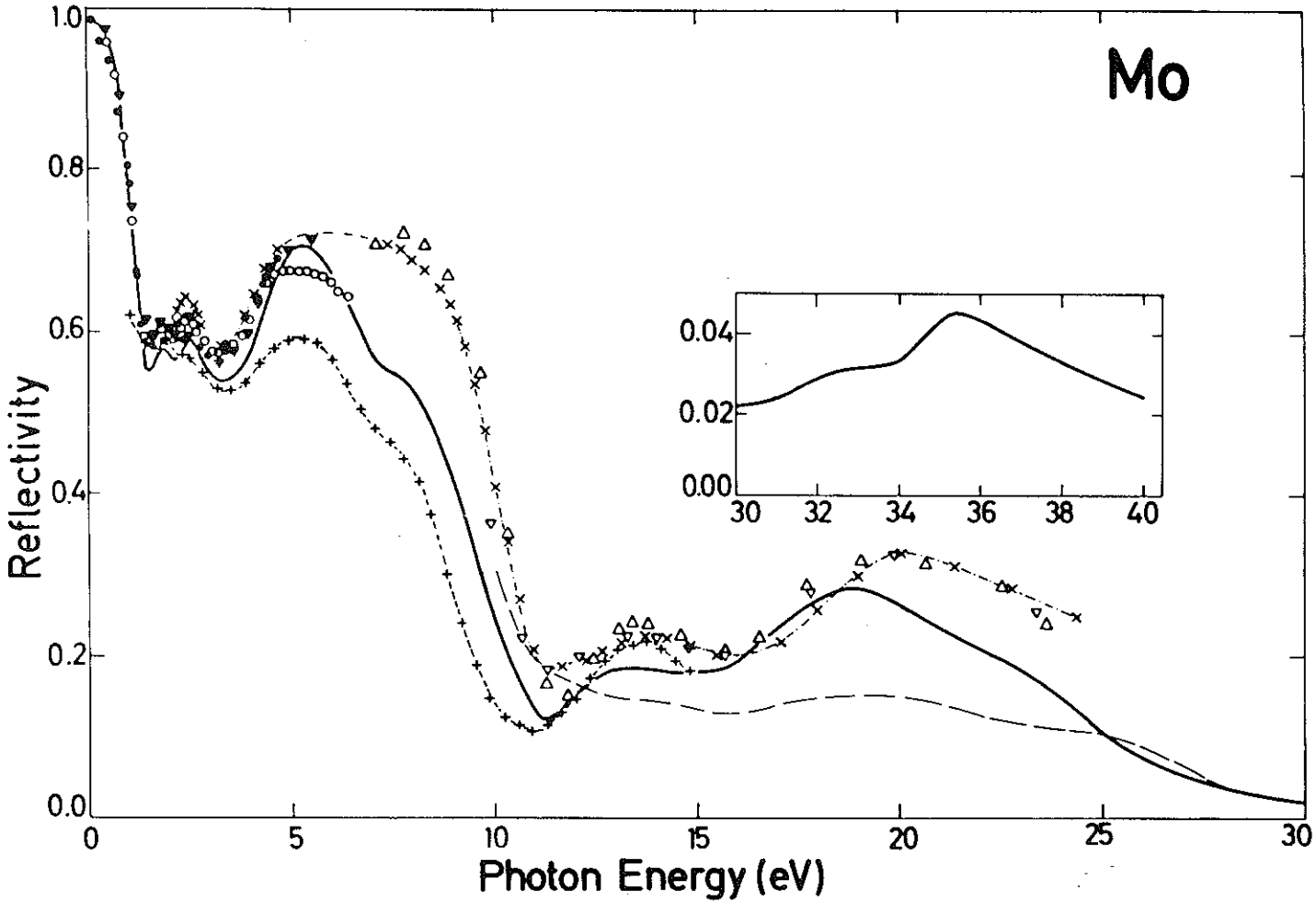

Fig. 49 Reflectivity for Mo. —— WL075; xxx JLM68; ●●● KNN71; +++ UKK71; ΔΔΔ LFJ64; ooo NC80; ▽▽▽ Hu71; ▼▼▼ VP74; — — Man80.

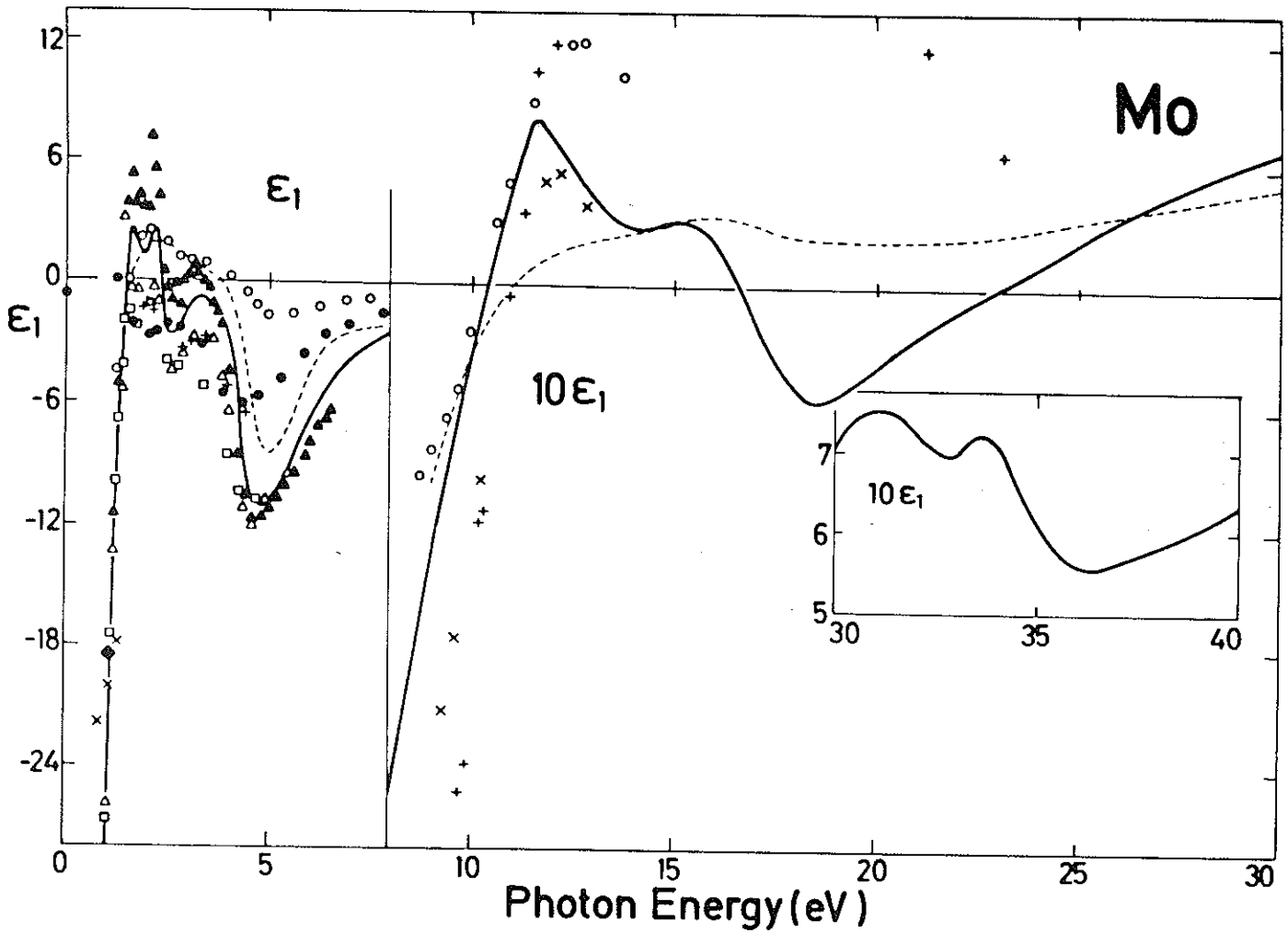

Fig. 50 ε_1 for Mo. —— WL075; +++ JLM68; ΔΔΔ VP74; ▲▲▲NC80; ●●● UKK71; ooo KL70; □□□ KNN71; ◆◆◆KC65; xxx KBM67; --- Man80.

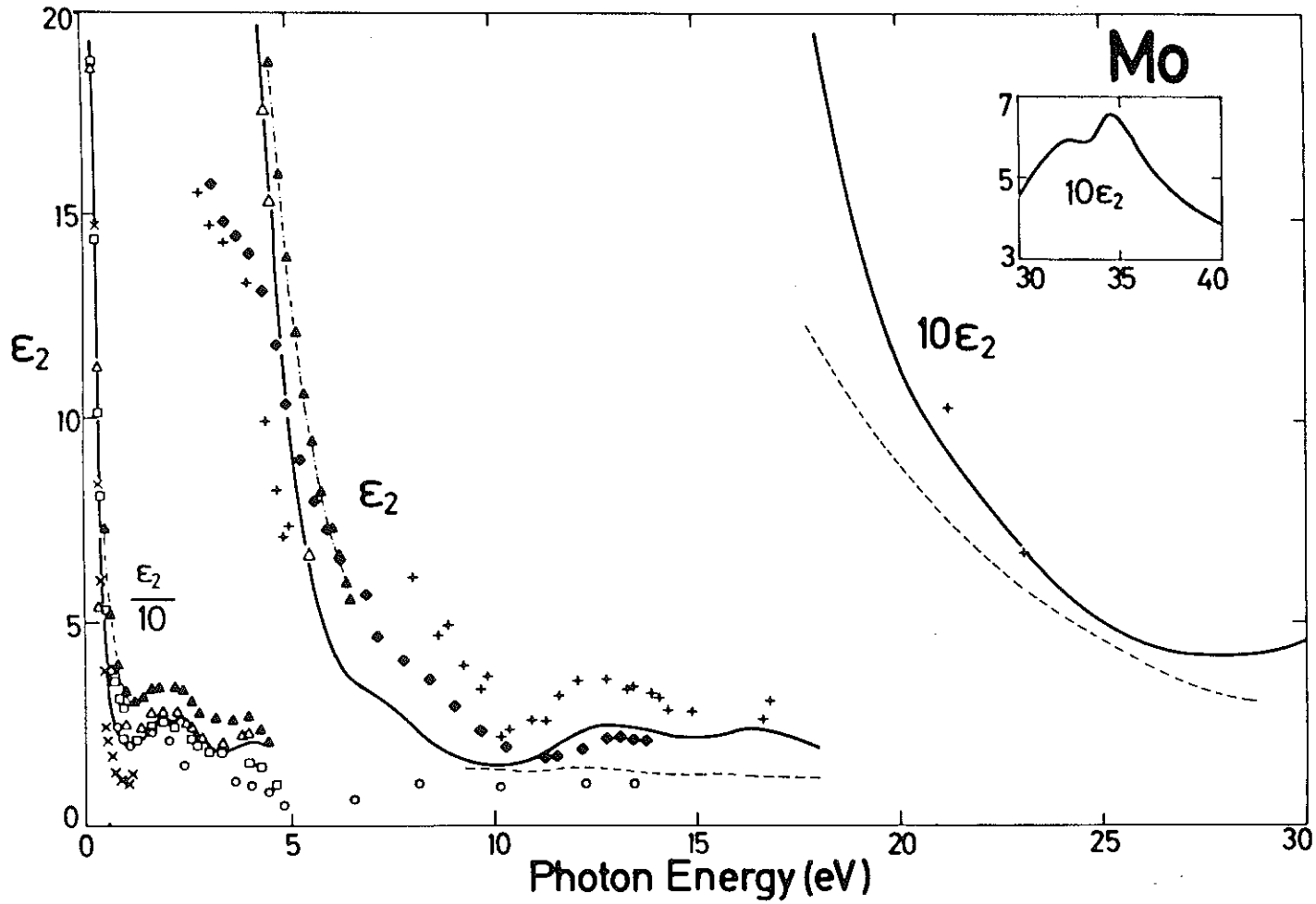

Fig. 51 ε_2 for Mo. —— WL075; ◆◆◆ KL70; xxx KBM67; +++ JLM68; □□□ KNN71; ▲▲▲ NC80; ΔΔΔVP74; ooo KC65; --- Man80.

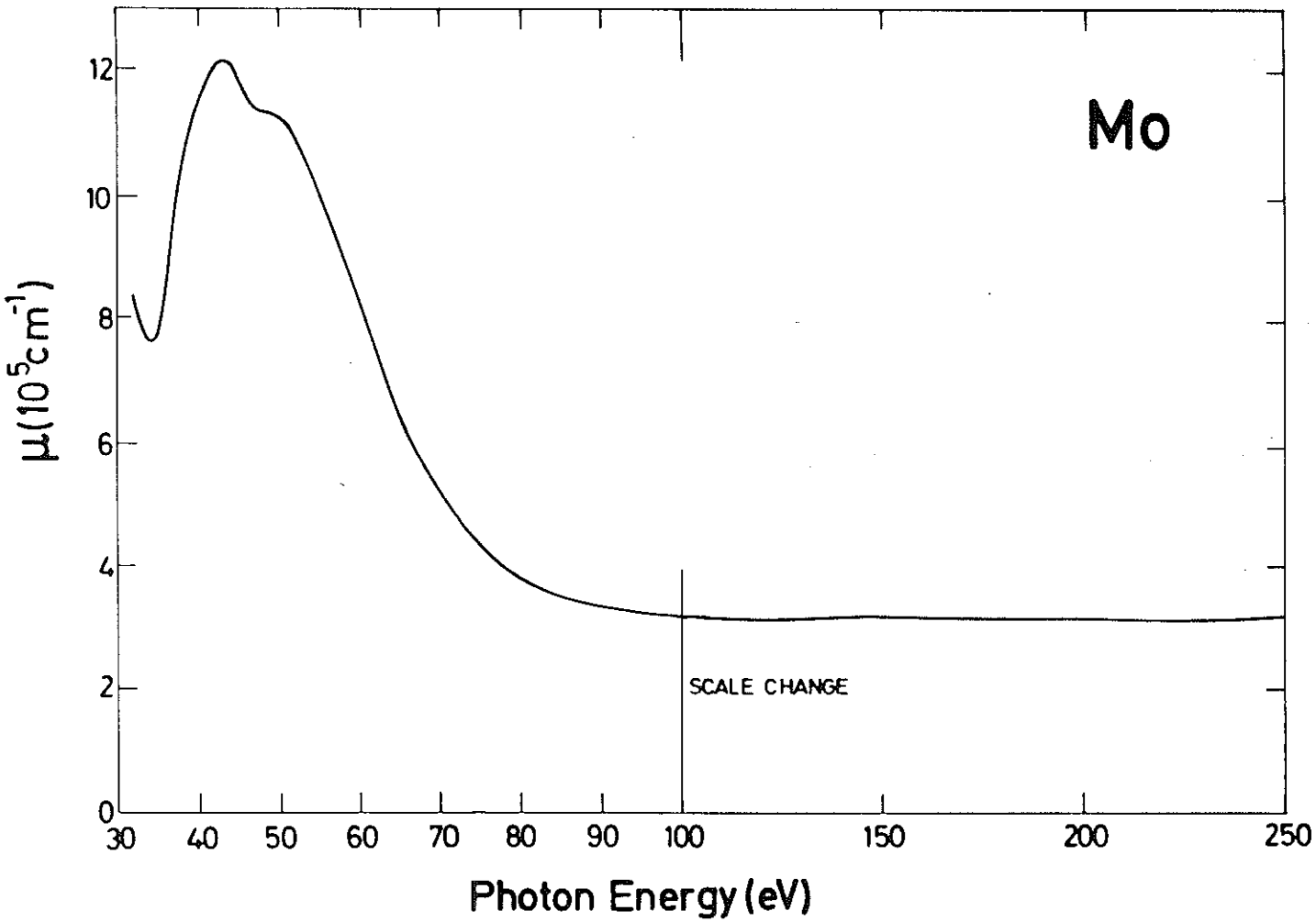

Fig. 52 Absorption coefficient for Mo reported by W076.

Molybdenum

publication by J.H. Weaver, D.W. Lynch, and C.G. Olson in Phys. Rev. B 10, 501 (1973) based on the following tabulation

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
0.10	-4350.67	2538.73	18.53	68.51	0.00	.985
0.11	-3733.07	1972.43	15.64	63.07	0.00	.985
0.12	-3233.44	1565.27	13.40	58.42	0.00	.985
0.13	-2825.68	1243.51	11.44	54.37	0.00	.985
0.14	-2472.64	1010.43	9.96	50.71	0.00	.985
0.15	-2182.97	834.39	8.78	47.54	0.00	.985
0.16	-1940.24	691.92	7.74	44.72	0.00	.985
0.17	-1730.85	582.39	6.91	42.17	0.00	.985
0.18	-1553.25	495.19	6.21	39.90	0.00	.985
0.19	-1400.80	424.58	5.61	37.85	0.00	.985
0.20	-1268.94	366.75	5.10	35.99	0.00	.985
0.21	-1154.12	318.90	4.65	34.29	0.00	.985
0.22	-1053.49	278.94	4.26	32.74	0.00	.984
0.23	-964.76	245.28	3.92	31.31	0.00	.984
0.24	-885.78	216.57	3.61	29.98	0.00	.984
0.25	-815.34	193.33	3.36	28.75	0.00	.984
0.26	-753.33	173.57	3.14	27.63	0.00	.984
0.27	-697.80	155.40	2.92	26.58	0.00	.984
0.28	-647.23	140.34	2.74	25.59	0.00	.984
0.29	-601.63	127.15	2.58	24.66	0.00	.983
0.30	-560.32	116.27	2.44	23.80	0.00	.983
0.34	-430.24	83.13	2.00	20.84	0.00	.982
0.38	-337.29	62.82	1.70	18.44	0.00	.980
0.42	-269.84	51.78	1.57	16.50	0.00	.978
0.46	-220.21	43.42	1.46	14.91	0.00	.975
0.50	-181.59	37.14	1.37	13.55	0.00	.971
0.54	-151.03	33.29	1.35	12.36	0.00	.966
0.58	-126.76	30.40	1.34	11.34	0.00	.960
0.62	-107.13	28.74	1.38	10.44	0.00	.952
0.66	-91.40	27.61	1.43	9.67	0.00	.942
0.70	-78.64	26.59	1.48	8.99	0.00	.932
0.74	-67.90	25.40	1.51	8.38	0.00	.921
0.78	-58.72	25.03	1.60	7.83	0.01	.906
0.82	-51.33	24.10	1.64	7.35	0.01	.892
0.86	-44.66	23.45	1.70	6.89	0.01	.876
0.90	-38.90	22.59	1.74	6.48	0.01	.859
1.00	-27.41	21.69	1.94	5.58	0.02	.805
1.10	-18.87	20.90	2.15	4.85	0.03	.743
1.20	-11.88	20.63	2.44	4.22	0.04	.671
1.30	-6.34	20.74	2.77	3.74	0.04	.608
1.40	-1.60	21.42	3.15	3.40	0.05	.562
1.50	1.56	23.29	3.53	3.30	0.04	.550
1.60	2.57	25.71	3.77	3.41	0.04	.562
1.70	2.43	26.91	3.84	3.51	0.04	.570
1.80	1.72	27.27	3.81	3.58	0.04	.576
1.90	1.17	26.76	3.74	3.58	0.04	.576
2.00	1.17	25.95	3.68	3.52	0.04	.571
2.10	1.61	25.43	3.68	3.45	0.04	.565
2.20	2.49	25.65	3.76	3.41	0.04	.562

Mo

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
2.30	1.34	27.34	3.79	3.61	0.04	.578
2.40	-1.39	27.17	3.59	3.78	0.04	.594
2.50	-2.61	25.03	3.36	3.73	0.04	.591
2.60	-2.68	23.23	3.22	3.61	0.04	.582
2.70	-2.47	21.99	3.13	3.51	0.04	.573
2.80	-2.19	21.03	3.08	3.42	0.05	.565
2.90	-1.76	20.31	3.05	3.33	0.05	.556
3.00	-1.47	19.87	3.04	3.27	0.05	.550
3.10	-1.13	19.51	3.03	3.21	0.05	.544
3.20	-0.82	19.39	3.05	3.18	0.05	.540
3.30	-0.76	19.47	3.06	3.18	0.05	.540
3.40	-0.82	19.52	3.06	3.19	0.05	.541
3.50	-0.96	19.60	3.06	3.21	0.05	.543
3.60	-1.17	19.72	3.05	3.23	0.05	.546
3.70	-1.47	19.87	3.04	3.27	0.05	.550
3.80	-1.70	20.11	3.04	3.31	0.05	.554
3.90	-2.35	20.64	3.04	3.40	0.05	.564
4.00	-3.26	21.11	3.01	3.51	0.05	.576
4.10	-4.97	21.36	2.91	3.67	0.04	.595
4.20	-6.52	20.88	2.77	3.77	0.04	.610
4.30	-8.22	19.96	2.59	3.86	0.04	.627
4.40	-9.35	18.55	2.39	3.88	0.04	.640
4.50	-10.07	17.10	2.21	3.87	0.04	.650
4.60	-10.48	15.77	2.06	3.84	0.04	.658
4.70	-10.87	14.48	1.90	3.81	0.04	.668
4.80	-11.07	13.14	1.75	3.76	0.04	.678
4.90	-11.08	11.86	1.61	3.70	0.05	.686
5.00	-10.98	10.61	1.46	3.62	0.05	.695
5.10	-10.69	9.40	1.33	3.53	0.05	.702
5.20	-10.20	8.36	1.22	3.42	0.05	.706
5.30	-9.66	7.50	1.13	3.31	0.05	.707
5.40	-9.09	6.81	1.07	3.20	0.05	.706
5.50	-8.56	6.22	1.01	3.09	0.06	.704
5.60	-8.02	5.73	0.96	2.99	0.06	.700
5.70	-7.52	5.34	0.92	2.89	0.06	.694
5.80	-7.06	5.02	0.89	2.80	0.07	.688
5.90	-6.64	4.75	0.87	2.72	0.07	.680
6.00	-6.27	4.50	0.85	2.64	0.08	.674
6.10	-5.91	4.30	0.84	2.57	0.08	.665
6.20	-5.61	4.07	0.81	2.50	0.08	.660
6.30	-5.28	3.88	0.80	2.43	0.09	.651
6.40	-4.96	3.73	0.79	2.36	0.10	.641
6.50	-4.67	3.60	0.78	2.30	0.10	.630
6.60	-4.41	3.49	0.78	2.24	0.11	.619
6.70	-4.15	3.39	0.78	2.18	0.12	.607
6.80	-3.90	3.33	0.78	2.13	0.13	.592
6.90	-3.70	3.29	0.79	2.08	0.13	.580
7.00	-3.52	3.25	0.80	2.04	0.14	.568
7.10	-3.36	3.24	0.81	2.00	0.15	.556
7.20	-3.25	3.22	0.81	1.98	0.15	.548
7.30	-3.16	3.19	0.82	1.96	0.16	.542
7.40	-3.13	3.14	0.81	1.95	0.16	.542
7.50	-3.12	3.02	0.78	1.93	0.16	.547
7.60	-3.06	2.83	0.75	1.90	0.16	.552
7.70	-2.91	2.69	0.73	1.85	0.17	.547
7.80	-2.78	2.58	0.71	1.81	0.18	.542
7.90	-2.65	2.47	0.70	1.77	0.19	.537

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
8.00	-2.52	2.37	0.69	1.73	0.20	.530
8.20	-2.27	2.21	0.67	1.65	0.22	.512
8.40	-2.03	2.07	0.66	1.57	0.25	.495
8.60	-1.80	1.94	0.65	1.49	0.28	.475
8.80	-1.57	1.82	0.65	1.41	0.31	.450
9.00	-1.34	1.74	0.65	1.33	0.36	.420
9.20	-1.12	1.68	0.67	1.25	0.41	.385
9.40	-0.94	1.63	0.69	1.19	0.46	.355
9.60	-0.75	1.58	0.71	1.12	0.52	.320
9.80	-0.56	1.54	0.74	1.05	0.57	.285
10.00	-0.38	1.52	0.77	0.99	0.62	.250
10.20	-0.20	1.51	0.81	0.93	0.65	.217
10.40	-0.04	1.51	0.86	0.88	0.66	.188
10.60	0.13	1.52	0.91	0.83	0.65	.162
10.80	0.33	1.54	0.98	0.79	0.62	.138
11.00	0.51	1.63	1.05	0.77	0.56	.125
11.20	0.65	1.75	1.12	0.78	0.50	.123
11.40	0.76	1.90	1.18	0.80	0.45	.125
11.60	0.79	2.08	1.23	0.85	0.42	.135
11.80	0.77	2.21	1.25	0.89	0.40	.145
12.00	0.73	2.32	1.26	0.92	0.39	.154
12.20	0.67	2.39	1.26	0.95	0.39	.162
12.40	0.61	2.43	1.25	0.98	0.39	.168
12.60	0.55	2.46	1.24	0.99	0.39	.174
12.80	0.50	2.47	1.23	1.00	0.39	.178
13.00	0.43	2.47	1.21	1.02	0.39	.182
13.20	0.38	2.45	1.20	1.02	0.40	.185
13.40	0.34	2.42	1.18	1.02	0.41	.186
13.60	0.31	2.39	1.17	1.02	0.41	.187
13.80	0.30	2.35	1.15	1.02	0.42	.186
14.00	0.29	2.32	1.15	1.01	0.42	.185
14.20	0.28	2.29	1.14	1.00	0.43	.184
14.40	0.29	2.26	1.13	1.00	0.44	.182
14.60	0.31	2.24	1.13	0.99	0.44	.180
14.80	0.31	2.24	1.13	0.99	0.44	.179
15.00	0.32	2.25	1.14	0.99	0.44	.179
15.20	0.32	2.26	1.14	0.99	0.43	.179
15.40	0.32	2.28	1.15	0.99	0.43	.180
15.60	0.31	2.31	1.15	1.01	0.43	.184
15.80	0.27	2.34	1.15	1.02	0.42	.188
16.00	0.22	2.37	1.14	1.04	0.42	.194
16.20	0.17	2.39	1.13	1.05	0.42	.200
16.40	0.09	2.40	1.12	1.08	0.42	.207
16.60	0.00	2.40	1.10	1.10	0.42	.216
16.80	-0.09	2.38	1.07	1.11	0.42	.225
17.00	-0.18	2.34	1.04	1.12	0.43	.233
17.20	-0.26	2.28	1.01	1.13	0.43	.241
17.40	-0.33	2.22	0.98	1.13	0.44	.248
17.60	-0.42	2.14	0.94	1.14	0.45	.257
17.80	-0.47	2.05	0.90	1.13	0.46	.264
18.00	-0.51	1.95	0.87	1.12	0.48	.270
18.20	-0.54	1.85	0.83	1.11	0.50	.275
18.40	-0.56	1.75	0.80	1.10	0.52	.280
18.60	-0.57	1.65	0.77	1.08	0.54	.283
18.80	-0.56	1.55	0.74	1.05	0.57	.285
19.00	-0.54	1.46	0.71	1.02	0.60	.284
19.20	-0.51	1.38	0.69	1.00	0.64	.282

Mo

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
19.40	-0.48	1.30	0.67	0.97	0.67	.279
19.60	-0.45	1.24	0.66	0.94	0.71	.275
19.80	-0.41	1.18	0.65	0.91	0.75	.270
20.00	-0.38	1.13	0.64	0.89	0.79	.264
20.20	-0.34	1.09	0.63	0.86	0.83	.258
20.40	-0.31	1.05	0.63	0.84	0.88	.252
20.60	-0.28	1.01	0.62	0.81	0.92	.245
20.80	-0.25	0.98	0.62	0.79	0.96	.240
21.00	-0.22	0.95	0.61	0.77	1.00	.234
21.20	-0.19	0.92	0.61	0.75	1.04	.227
21.40	-0.17	0.89	0.61	0.73	1.08	.221
21.60	-0.14	0.87	0.61	0.71	1.12	.215
21.80	-0.12	0.85	0.61	0.70	1.15	.210
22.00	-0.11	0.82	0.60	0.69	1.19	.207
22.20	-0.09	0.80	0.60	0.67	1.24	.203
22.40	-0.07	0.77	0.59	0.65	1.29	.198
22.60	-0.05	0.75	0.59	0.63	1.33	.195
22.80	-0.03	0.72	0.58	0.61	1.39	.190
23.00	-0.01	0.69	0.58	0.60	1.44	.185
23.20	0.00	0.67	0.58	0.57	1.50	.180
23.40	0.03	0.64	0.58	0.55	1.56	.173
23.60	0.05	0.62	0.58	0.53	1.61	.166
23.80	0.08	0.59	0.58	0.51	1.66	.158
24.00	0.10	0.57	0.58	0.49	1.70	.151
24.20	0.13	0.55	0.59	0.47	1.72	.142
24.40	0.16	0.53	0.60	0.45	1.73	.132
24.60	0.18	0.52	0.60	0.43	1.73	.124
24.80	0.21	0.50	0.61	0.41	1.70	.115
25.00	0.23	0.49	0.62	0.39	1.66	.106
25.20	0.26	0.48	0.64	0.38	1.60	.098
25.40	0.28	0.47	0.64	0.37	1.56	.092
25.60	0.31	0.46	0.66	0.35	1.51	.085
25.80	0.33	0.45	0.67	0.34	1.45	.079
26.00	0.35	0.45	0.68	0.33	1.37	.072
26.25	0.38	0.44	0.69	0.32	1.30	.066
26.50	0.40	0.44	0.71	0.31	1.24	.060
26.75	0.43	0.43	0.72	0.30	1.16	.055
27.00	0.46	0.42	0.73	0.29	1.10	.050
27.25	0.48	0.42	0.75	0.28	1.03	.045
27.50	0.51	0.42	0.76	0.28	0.97	.041
27.75	0.53	0.42	0.78	0.27	0.92	.038
28.00	0.55	0.42	0.79	0.27	0.88	.036
28.25	0.57	0.42	0.80	0.26	0.84	.034
28.50	0.59	0.43	0.81	0.26	0.81	.031
28.75	0.61	0.43	0.82	0.26	0.78	.030
29.00	0.63	0.43	0.83	0.26	0.75	.028
29.25	0.65	0.43	0.84	0.26	0.71	.026
29.50	0.67	0.44	0.86	0.26	0.69	.025
29.75	0.69	0.44	0.87	0.26	0.66	.023
30.00	0.71	0.46	0.88	0.26	0.65	.023
30.25	0.73	0.47	0.89	0.26	0.63	.022
30.50	0.74	0.49	0.90	0.27	0.62	.023
30.75	0.75	0.51	0.91	0.28	0.62	.023
31.00	0.75	0.53	0.92	0.29	0.62	.024
31.25	0.75	0.55	0.92	0.30	0.63	.025
31.50	0.75	0.56	0.92	0.31	0.64	.027
31.75	0.74	0.58	0.92	0.31	0.65	.028

Mo

Energy (eV)	ε_1	ε_2	n	k	Im(-1/$\tilde{\varepsilon}$)	R(ϕ=0)
32.00	0.73	0.59	0.92	0.32	0.67	.030
32.20	0.73	0.60	0.91	0.33	0.68	.031
32.40	0.71	0.60	0.91	0.33	0.69	.032
32.60	0.70	0.60	0.90	0.33	0.70	.032
32.80	0.70	0.59	0.90	0.33	0.71	.032
33.00	0.70	0.59	0.90	0.33	0.71	.032
33.20	0.70	0.58	0.90	0.32	0.70	.031
33.40	0.71	0.58	0.90	0.32	0.69	.030
33.50	0.72	0.58	0.91	0.32	0.68	.030
33.60	0.72	0.59	0.91	0.33	0.68	.031
33.80	0.72	0.61	0.91	0.33	0.68	.032
34.00	0.71	0.63	0.91	0.34	0.70	.034
34.20	0.70	0.64	0.91	0.35	0.71	.035
34.40	0.68	0.65	0.90	0.36	0.73	.037
34.60	0.66	0.66	0.89	0.37	0.76	.040
34.80	0.64	0.66	0.88	0.37	0.79	.042
35.00	0.61	0.65	0.87	0.37	0.82	.043
35.20	0.59	0.64	0.85	0.37	0.85	.045
35.40	0.57	0.62	0.84	0.37	0.87	.045
35.60	0.56	0.60	0.83	0.36	0.89	.045
35.80	0.56	0.58	0.82	0.35	0.90	.044
36.00	0.56	0.56	0.82	0.34	0.90	.043
36.25	0.56	0.54	0.81	0.33	0.90	.042
36.50	0.56	0.52	0.81	0.32	0.90	.041
36.75	0.56	0.51	0.81	0.31	0.89	.040
37.00	0.56	0.49	0.81	0.30	0.88	.038
37.25	0.57	0.48	0.81	0.30	0.87	.037
37.50	0.57	0.47	0.81	0.29	0.86	.036
37.75	0.57	0.45	0.81	0.28	0.85	.034
38.00	0.58	0.44	0.81	0.27	0.83	.033
38.50	0.59	0.43	0.81	0.26	0.80	.031
39.00	0.61	0.41	0.82	0.25	0.77	.029
39.50	0.62	0.40	0.82	0.24	0.73	.026
40.00	0.63	0.39	0.83	0.23	0.71	.025