

The data below was taken from books/papers. It only indicates the values I have been using in my calculations. Actual refractive index parameters will depend on the preparation procedure. Reflectivity of Ca, Silver, Al tend to degrade in air (Ca fastest, Al slowest). In the visible range it seems that one can use the parameters for Silver as a good enough approximation for Ca.

Silver

Wavelength (μm)	Real Index	Imaginary Index
0.2033	1.098	1.26
0.2138	1.173	1.29
0.2296	1.238	1.31
0.2480	1.298	1.35
0.2583	1.343	1.35
0.2695	1.404	1.33
0.2755	1.441	1.31
0.2883	1.502	1.19
0.2988	1.522	0.992
0.3061	1.432	0.766
0.3115	1.246	0.586
0.3155	1.044	0.514
0.3195	0.815	0.526
0.3237	0.616	0.609
0.3306	0.371	0.813
0.3351	0.294	0.986
0.3444	0.238	1.24
0.3647	0.186	1.61
0.3875	0.192	1.81
0.4133	0.173	2.11
0.4428	0.157	2.40
0.4769	0.132	2.72
0.5166	0.130	3.07
0.5391	0.129	3.25
0.5636	0.120	3.45
0.5904	0.121	3.66
0.6199	0.131	3.88
0.6526	0.140	4.15
0.6888	0.140	4.44
0.7293	0.148	4.74
0.7749	0.143	5.09
0.8266	0.145	5.50
0.8856	0.163	5.95
0.9537	0.198	6.43
1.033	0.226	6.99

Gold

Wavelength (μm)	Real Index	Imaginary Index
0.2883	1.742	1.9
0.2952	1.770	1.918
0.3024	1.812	1.920
0.3100	1.830	1.916
0.3179	1.840	1.904
0.3263	1.824	1.878
0.3351	1.798	1.860
0.3444	1.766	1.846
0.3542	1.740	1.848
0.3647	1.716	1.862
0.3757	1.696	1.906
0.3875	1.674	1.936
0.400	1.658	1.956
0.4133	1.636	1.958
0.4275	1.616	1.940
0.4428	1.562	1.904
0.4592	1.426	1.846
0.4769	1.242	1.796
0.4959	0.916	1.840
0.5166	0.608	2.120
0.5391	0.402	2.540
0.5636	0.306	2.88
0.6526	0.166	3.15
0.6888	0.16	3.8
0.7293	0.164	4.35
0.7749	0.174	4.86
0.8266	0.188	5.39
0.8856	0.210	5.88
0.9537	0.236	6.47
1.033	0.272	7.07

Aluminium

Wavelength (μm)	Real Index	Imaginary Index
0.2066	0.13	2.39
0.2156	0.141	2.51
0.2254	0.155	2.64
0.2362	0.172	2.79
0.248	0.19	2.94
0.261	0.209	3.11
0.2755	0.233	3.3
0.2917	0.261	3.51
0.3	0.276	3.61
0.31	0.294	3.74
0.3179	0.31	3.84
0.3263	0.326	3.95
0.3444	0.364	4.17
0.3542	0.385	4.3
0.3647	0.407	4.43
0.3757	0.432	4.56
0.3875	0.46	4.71
0.400	0.49	4.86
0.4275	0.558	5.2
0.4428	0.598	5.38
0.45	0.618	5.47
0.4769	0.695	5.8
0.5	0.769	6.08
0.5166	0.826	6.28
0.5276	0.867	6.42
0.55	0.958	6.69
0.5636	1.02	6.85
0.59	1.15	7.15
0.6048	1.22	7.31
0.6358	1.39	7.65
0.6526	1.49	7.82
0.67	1.6	8.01
0.7	1.83	8.31
0.7085	1.91	8.39
0.7293	2.14	8.57
0.75	2.4	8.62
0.775	2.63	8.6
0.80	2.8	8.45
0.85	2.61	8.22
0.875	2.38	8.18
0.9	2.0	8.3

PPV (after full conversion)=

Wavelength (μm)	Real Index	Imaginary Index
0.3	1.5	?
0.400	2.18	?
0.45	2.55	?
0.50	3.3	0
0.525	2.87	0
0.55	2.6	0
0.575	2.38	0
0.6	2.3	0
0.7	2.18	0
0.8	2.12	0
0.9	2.08	0