# Refractive index and extinction coefficient of materials

**Note**: The exctinction coefficient is related to the absorption coefficient by  $\alpha=4\,\pi\,\overline{k}\,/\,\lambda_0$ , where  $\alpha$  is the absorption coefficient,  $\overline{k}$  is the extinction coefficient, and  $\lambda_0$  is the wavelength in vacuum.

Acrylic	
Wavelength λ (nm)	Refractive index n (-)
370	1.51259
380	1.51066
390	1.50891
400	1.50731
410	1.50584
420	1.50449
430	1.50324
440	1.50209
450	1.50102
460	1.50004
470	1.49911
480	1.49826
490	1.49746
500	1.49671
510	1.496
520	1.49534
530	1.49472
540 550	1.49413
550	1.49358
560	1.49306
570	1.49256
580	1.4921
590	1.49165
600	1.49123
610	1.49083
620	1.49044
630	1.49008
640	1.48973
650	1.4894
660	1.48908
670	1.48878
680	1.48849
690	1.48821
700	
710	1.48795
-	1.48769
720	1.48745
730	1.48721
740	1.48699
750	1.48677
760	1.48656
770	1.48636
780	1.48617
790	1.48598
800	1.4858
810	1.48563
820	1.48546
830	1.4853
840	1.48515
850	1.485
850	1.700

1.48485

860

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870	1.48471
880	1.48457
890	1.48444
900	1.48432
910	1.48419
920	1.48407
930	1.48396
940	1.48385
950	1.48374
960	1.48363
970	1.48353
980	1.48343
990	1.48333
1000	1.48324
1010	1.48315
1020	1.48306
1030	1.48298
1040	1.48289
1050	1.48281
1060	1.48273
1070	1.48266
1080	1.48258
1090	1.48251
1100	1.48244

# Ag (Silver) (note that there are two consecutive sets of data) Wavelength $\lambda$ (nm) Refractive index n (-)

Wavelength λ (nm) 210.1356 213.7586 217.5088 221.3929 225.4182 229.5926 233.9245 238.4231 243.098 247.96 253.0204 258.2917 263.7872 269.5217 275.5111 281.7727 288.3256 295.1905 302.3902 309.95 317.8974 326.2632 335.0811 344.3889 354.2285 364.6471 375.697 387.4375 399.9355 413.2667 427.5172	Refractive index n ( 1.19 1.21 1.23 1.25 1.26 1.27 1.28 1.28 1.3 1.31 1.32 1.34 1.36 1.38 1.41 1.41 1.4 1.41 1.4 1.38 1.32 1.15 .91 .44 .13 .13 .1 .08 .06 .05 .05 .05 .05 .05
427.5172 442.7857 459.1852	.04 .04 .04

476.8461 495.92 516.5833 539.0435 563.5454 590.3809 619.9 652.5263 688.7778 729.2941 774.875 826.5333 885.5714 953.6923 1033.167 1127.091 1239.8	.05 .05 .05 .06 .06 .05 .06 .05 .04 .03 .03 .04 .04 .04
Wavelength λ (nm) 206.63333 210.13559 213.75862 217.50877 221.39285 225.41818 229.59259 233.92452 238.42307 243.09803 247.96 253.0204 258.29166 263.78723 269.52173 275.51111 281.77272 288.32558 295.19047 302.39024 309.94999 317.89743 326.26315 335.08107 344.38888 354.22856 364.64705 375.69696 387.43749 399.93548 413.26666 427.51723 442.78571 459.18518 476.84614 495.91999 516.58332 539.04347 563.54544 590.38094 619.89999	Extinction coefficient <i>k</i> (-) 1.31 1.32 1.33 1.338 1.342 1.343 1.352 1.362 1.37 1.379 1.388 1.393 1.391 1.384 1.37 1.335 1.289 1.221 1.107 0.913 0.642 0.412 0.591 0.94 1.191 1.419 1.605 1.78 1.944 2.104 2.275 2.432 2.58 2.744 2.92 3.093 3.284 3.498 3.709 3.929 4.177

652.5263	4.43
688.77776	4.714
729.2941	5.034
774.87499	5.381
826.53332	5.772
885.57141	6.26
953.69229	6.769
1033.16665	7.369
1127.09089	8.118
1239.79998	9.001

### Ag (Silver)

Data from "Handbook of Optical Constant of Solids" by Edward Palik (1985)

Measurements of the reflectivity of evaporated Ag films by Hong Luo and Yun-Li Li revealed that the Palik data gave the best agreement with experimental results.

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Wavelength $\lambda$ (nm)	Refractive Index n (-
206.6	1.125
213.8	1.173
221.4	1.208
229.6	1.238
238.4	1.265
248.0	1.298
253.0	1.320
258.3	1.343
263.8	1.372
269.5	1.404
275.5	1.441
281.8	1.476
288.3	1.502
295.2	1.519
298.8	1.522
302.4	1.496
306.1	1.432
310.0	1.323
311.5	1.246
313.9	1.149
315.5	1.044
317.9	0.932
319.5	0.815
322.0	0.708
323.7	0.616
326.3	0.526
330.6	0.371
332.4	0.321
335.1	0.294
339.7	0.259
344.4	0.238
354.2	0.209
364.7	0.186
375.7	0.200
387.5	0.192
400.0	0.173
413.3	0.173
427.5	0.160
442.8	0.157
459.2	0.144
476.9	0.132
495.9	0.130
516.6	0.130
539.1	0.129

563.6 590.4 619.6 652.6 688.8 729.3 774.9 826.6 885.6 953.7 1033 1127 1240	0.120 0.121 0.131 0.140 0.148 0.143 0.145 0.163 0.198 0.226 0.251 0.329
Wavelength λ (nm) 206.6 213.8 221.4 229.6 238.4 248.0 253.0 258.3 263.8 269.5 275.5 281.8 288.3 295.2 298.8 302.4 306.1 310.0 311.5 313.9 315.5 317.9 319.5 322.0 323.7 326.3 330.6 332.4 335.1 339.7 344.4 354.2 364.7 375.7 387.5 400.0 413.3 427.5 442.8 459.2 476.9 495.9 516.6 539.1 563.6	Refractive Index k (-) 1.27 1.29 1.30 1.31 1.33 1.35 1.35 1.35 1.35 1.35 1.33 1.31 1.26 1.19 1.08 0.992 0.882 0.766 0.647 0.586 0.540 0.514 0.504 0.514 0.504 0.526 0.565 0.609 0.663 0.813 0.902 0.986 1.12 1.24 1.44 1.61 1.67 1.81 1.95 2.11 2.26 2.40 2.56 2.72 2.88 3.07 3.25 3.45

590.4 619.6 652.6 688.8 729.3 774.9 826.6 885.6 953.7 1033 1127 1240	3.66 3.88 4.15 4.44 1.74 5.09 5.50 5.95 6.43 6.99 7.67 8.49
Al (Aluminum) Wavelength $\lambda$ (nm) $364.6471$ $375.697$ $387.4375$ $399.9355$ $413.2667$ $427.5172$ $442.7857$ $459.1852$ $476.8461$ $495.92$ $516.5833$ $539.0435$ $563.5454$ $590.3809$ $619.9$ $652.5263$ $688.7778$ $729.2941$ $774.875$ $826.5333$ $885.5714$ $953.6923$ $1033.167$ $1127.091$ $1239.8$ $1377.556$ $1549.75$ $1771.143$	Refractive index <i>n</i> (-) .407 .432 .46 .49 .523 .558 .598 .644 .695 .755 .826 .912 1.02 1.15 1.3 1.49 1.74 2.14 2.63 2.74 2.24 1.47 1.26 1.2 1.21 1.26 1.44 1.77
Wavelength λ (nm) 364.65 375.70 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38	Extinction coefficient <i>k</i> (-) 4.43 4.56 4.71 4.86 5.02 5.2 5.38 5.28 5.8 6.03 6.28 6.55 6.85 7.15

619.90	7.48
652.53	7.82
688.78	8.21
729.29	8.57
774.87	8.6
826.53	8.31
885.57	8.21
953.69	8.95
1033.17	12
1127.09	11.2
1239.80	12.5
1377.56	14
1549.75	16
1771.14	18.3

### Al10Ga90As (AlGaAs)

Al10Ga90As (AlGaAs)	
Wavelength $\lambda$ (nm)	Refractive index n (-)
206.7	1.311
210.2	1.318
213.8	1.330
217.5	1.345
221.4	1.371
225.5	1.408
229.6	1.459
234.0	1.531
238.5	1.634
243.1	1.819
248.0	2.207
253.1	2.772
258.3	3.267
263.8	3.611
270.0	3.829
275.6	4.010
281.8	4.017
288.4	3.922
295.2	3.801
302.4	3.697
310	3.618
317.9	3.566
326.3	3.537
335.1	3.532
344.4	3.552
354.3	3.601
364.7	3.690
375.8	3.864
387.5	4.253
400	4.460
413.3	4.838
427.6	4.968
442.9	4.725
459.3	4.518
476.9	4.353
496	4.220
516.7	4.111
539.1	4.018
563.6	3.940
590.5	3.876
620.0	3.820
652.6	3.775
688.9	3.716
333.3	3

729.4	3.678
775.0	3.661
826.7	3.572
885.7	3.530
953.8	3.484
1033.3	3.452
1127.3	3.428
1240	3.410
1377.8	3.395
1550	3.383
1771.4	3.374
2066.7	3.366
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7	Extinction coefficient <i>k</i> (-) 2.457 2.538 2.608 2.698 2.800 2.921 3.059 3.223 3.433 3.704 3.983 4.036 3.846 3.536 3.229 2.876 2.507 2.240 2.074 1.983 1.937 1.920 1.924 1.945 1.979 2.030 2.100 2.203 2.187 1.949 1.836 1.126 0.763 0.575 0.462 0.382 0.320 0.276 0.237 0.199 0.171 0.127 0.099 0.082 0.059 0

885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0
1377.8	0
1550	0
1771.4	0
2066.7	0

### Al20Ga80As (AlGaAs)

Al20Ga80As (AlGaAs)	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.7	1.333
210.2	1.339
213.8	1.349
217.5	1.366
221.4	1.393
225.5	1.433
229.6	1.490
234.0	1.567
238.5	1.677
243.1	1.860
248.0	2.210
253.1	2.734
258.3	3.238
263.8	3.638
270.0	3.924
275.6	4.053
281.8	4.018
288.4	3.911
295.2	3.795
302.4	3.701
310	3.633
317.9	3.588
326.3	3.568
335.1	3.572
344.4	3.602
354.3	3.668
364.7	3.792
375.8	4.084
387.5	4.379
400	4.607
413.3	4.943
427.6	4.757
442.9	4.547
459.3	4.375
476.9	4.235
496	4.118
516.7	4.022
539.1	3.940
563.6	3.871
590.5	3.815
620.0	3.759
652.6	3.700
688.9	3.662
729.4	3.635
775.0	3.536
826.7	3.457
885.7	3.465
000.1	U.TUU

953.8	3.429
1033.3	3.401
1127.3	3.379
1240	3.361
1377.8	3.346
1550	3.334
1771.4	3.324
2066.7	3.316
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 885.7 953.8 1033.3 1127.3	Extinction coefficient k (-) 2.457 2.531 2.600 2.688 2.794 2.912 3.049 3.208 3.407 3.654 3.914 3.997 3.867 3.575 3.223 2.803 2.449 2.206 2.059 1.976 1.933 1.917 1.922 1.942 1.979 2.034 2.115 2.180 1.978 1.857 1.322 0.865 0.636 0.500 0.409 0.341 0.288 0.242 0.202 0.165 0.118 0.094 0.082 0.002 0 0 0 0 0 0

1240 1377.8 1550 1771.4 2066.7	0 0 0 0
Al2O3 (Alumina) Wavelength λ (nm) 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 1033	Refractive index <i>n</i> (-) 1.824 1.815 1.808 1.802 1.797 1.793 1.789 1.786 1.784 1.777 1.775 1.775 1.777 1.775 1.774 1.772 1.771 1.77 1.768 1.765 1.765 1.764 1.763 1.762 1.762 1.761 1.76 1.76 1.759 1.758 1.758 1.758
Wavelength λ (nm) 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540	Extinction coefficient <i>k</i> (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

560	0
580	0
600	0
620	0
640	0
660	0
680	0
700	0
720	0
740	0
760	0
780	0
800	0
820	0
840	0
860	0
880	0
900	0
1033	0

## Al30Ga70N (AlGaN)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
310.0	2.557
354.29	2.36
413.33	2.27
496.0	2.22
620.0	2.18
826.67	2.156
1240.0	2.14

Wavelength $\lambda$ (nm) 225.45 248.0 275.56 310.0 354.29 413.33 496.0 620.0	Extinction coefficient <i>k</i> (-) 0.4126 0.345 0.289 0.007 0 0 0
496.0	0
620.0 826.67 1240.0	0 0 0

# Al32Ga68As (AlGaAs)

Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.7	1.347
210.2	1.338
213.8	1.352
217.5	1.367
221.4	1.393
225.5	1.437
229.6	1.497
234.0	1.581
238.5	1.696
243.1	1.878
248.0	2.198
253.1	2.684
258.3	3.196
263.8	3.669

270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 885.7 953.8 1033.3 1127.3 1240 1377.8 1550 1771.4 2066.7	3.982 4.062 3.999 3.883 3.772 3.686 3.625 3.588 3.575 3.589 3.633 3.724 3.922 4.246 4.456 4.825 4.781 4.582 4.404 4.258 4.135 4.032 3.945 3.872 3.815 3.750 3.690 3.650 3.592 3.509 3.456 3.404 3.394 3.363 3.317 3.300 3.285 3.273 3.263 3.254
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8	Extinction coefficient <i>k</i> (-) 2.443 2.502 2.577 2.669 2.776 2.893 3.030 3.187 3.376 3.604 3.845 3.957 3.881 3.617 3.177 2.733 2.393

288.4	2.172
295.2	2.040
302.4	1.966
310	1.927
317.9	1.914
326.3	1.921
335.1	1.946
344.4	1.988
354.3	2.054
364.7	2.134
375.8	2.041
387.5	1.879
400	1.558
413.3	1.012
427.6	0.722
442.9	0.556
459.3	0.446
476.9	0.367
496	0.305
516.7	0.258
539.1	0.227
563.6	0.202
590.5	0.167
620.0	0.145
652.6	0.111
688.9	0.008
729.4	0
775.0	0
826.7	0
885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0
1377.8	0
1550	0
1771.4	0
2066.7	0

## Al42Ga58As (AlGaAs)

, = • a. • a. (, • a., • )			
Wavelength $\lambda$ (nm)	Refractive index	n	(-)
206.7	1.353		
210.2	1.350		
213.8	1.357		
217.5	1.377		
221.4	1.406		
225.5	1.456		
229.6	1.523		
234.0	1.613		
238.5	1.740		
243.1	1.926		
248.0	2.234		
253.1	2.695		
258.3	3.200		
263.8	3.733		
270.0	4.054		
275.6	4.103		
281.8	4.014		
288.4	3.897		
295.2	3.794		

302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 885.7 953.8 1033.3 1127.3 1240 1377.8 1550 1771.4 2066.7	3.719 3.667 3.640 3.640 3.668 3.736 3.887 4.172 4.401 4.706 4.778 4.605 4.430 4.280 4.154 4.047 3.957 3.881 3.820 3.747 3.686 3.664 3.559 3.479 3.422 3.378 3.341 3.332 3.304 3.280 3.243 3.229 3.216 3.206 3.198
Wavelength $\lambda$ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9	Extinction coefficient <i>k</i> (-) 2.440 2.507 2.574 2.675 2.783 2.908 3.047 3.201 3.384 3.598 3.822 3.937 3.909 3.646 3.157 2.691 2.363 2.161 2.040 1.971 1.936 1.924

326.3	1.931
335.1	1.958
344.4	2.005
354.3	2.071
364.7	2.042
375.8	1.870
387.5	1.640
400	1.119
413.3	0.786
427.6	0.596
442.9	0.472
459.3	0.385
476.9	0.319
496	0.268
516.7	0.219
539.1	0.178
563.6	0.134
590.5	0.100
620.0	0.059
652.6	0.003
688.9	0
729.4	0
775.0	0
826.7	0
885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0
1377.8	0
1550	0
1771.4	0
2066.7	0

Al49Ga51As (AlGaAs)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.7	1.366
210.2	1.363
213.8	1.364
217.5	1.379
221.4	1.412
225.5	1.462
229.6	1.532
234.0	1.632
238.5	1.763
243.1	1.951
248.0	2.250
253.1	2.686
258.3	3.187
263.8	3.731
270.0	4.072
275.6	4.107
281.8	4.009
288.4	3.894
295.2	3.798
302.4	3.730
310	3.688
317.9	3.671
326.3	3.680
335.1	3.724

344.4	3.822
354.3	4.034
364.7	4.294
375.8	4.525
387.5	4.753
400	4.654
413.3	4.483
427.6	4.328
442.9	4.195
459.3	4.081
476.9	3.985
496	3.903
516.7	3.838
539.1	3.761
563.6	3.696
590.5	3.665
620.0	3.558
652.6	3.477
688.9	3.417
729.4	3.368
775.0	3.329
826.7	3.283
885.7	3.288
953.8	3.261
1033.3	3.238
1127.3	3.219
1240	3.202
1377.8	3.188
1550	3.176
1771.4	3.166
2066.7	3.157
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234 238.5 243.1 248 253.1 258.3 263.8 270 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7	Extinction coefficient <i>k</i> (-) 2.418 2.49 2.572 2.666 2.78 2.903 3.045 3.199 3.378 3.579 3.787 3.904 3.899 3.645 3.147 2.668 2.351 2.159 2.046 1.98 1.945 1.933 1.942 1.969 2.017 2.049 1.922

375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620 652.6 688.9 729.4 775 826.7 885.7 953.8 1033.3 1127.3 1240 1377.8 1550 1771.4	1.748 1.34 .926 .684 .534 .429 .355 .292 .245 .205 .164 .133 .088 .002 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1771.4 2066.7	

Al59Ga41As (AlGaAs)	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.7	1.385
210.2	1.370
213.8	1.370
217.5	1.389
221.4	1.422
225.5	1.475
229.6	1.553
234.0	1.661
238.5	1.805
243.1	2.007
248.0	2.304
253.1	2.740
258.3	3.221
263.8	3.762
270.0	4.120
275.6	4.127
281.8	4.015
288.4	3.903
295.2	3.815
302.4	3.758
310	3.729
317.9	3.725
326.3	3.750
335.1	3.822
344.4	3.977
354.3	4.224
364.7	4.429
375.8	4.665
387.5	4.649

400	4.497
413.3	4.343
427.6	4.208
442.9	4.092
459.3	3.992
476.9	3.909
496	3.837
516.7	3.758
539.1	3.690
563.6	3.658
590.5	3.546
620.0	3.467
652.6	3.405
688.9	3.354
729.4	3.313
775.0	3.274
826.7	3.237
885.7	3.227
953.8	3.203
1033.3	3.182
1127.3	3.163
1240	3.147
1377.8	3.133
1550	3.122
1771.4	3.112
2066.7	3.103
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6	Extinction coefficient <i>k</i> (-) 2.420 2.485 2.565 2.669 2.785 2.915 3.059 3.217 3.392 3.581 3.772 3.881 3.866 3.617 3.107 2.616 2.318 2.142 2.038 1.978 1.947 1.935 1.944 1.973 2.002 1.924 1.754 1.450 1.028 0.754 0.584 0.468

442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0	0.384 0.317 0.262 0.205 0.157 0.126 0.063 0.005 0 0
-	
775.0 826.7	0
885.7	0
953.8	0
1033.3 1127.3	0 0
1240	Ő
1377.8	0
1550 1771.4	0 0
2066.7	0

Al70Ga30As (AlGaAs)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.7	1.377
210.2	1.366
213.8	1.365
217.5	1.375
221.4	1.407
225.5	1.462
229.6	1.545
234.0	1.662
238.5	1.829
243.1	2.049
248.0	2.354
253.1	2.777
258.3	3.214
263.8	3.758
270.0	4.144
275.6	4.142
281.8	4.028
288.4	3.932
295.2	3.868
302.4	3.835
310	3.836
317.9	3.868
326.3	3.947
335.1	4.103
344.4	4.319
354.3	4.502
364.7	4.665
375.8	4.615
387.5	4.471
400	4.325
413.3	4.196
427.6	4.084
442.9	3.987

20

459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 885.7 953.8 1033.3 1127.3 1240 1377.8 1550 1771.4 2066.7	3.906 3.823 3.746 3.696 3.595 3.500 3.425 3.361 3.306 3.261 3.225 3.188 3.153 3.162 3.139 3.120 3.103 3.088 3.075 3.064 3.054 3.046
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9	Extinction coefficient <i>k</i> (-) 2.426 2.493 2.581 2.688 2.809 2.946 3.098 3.269 3.445 3.620 3.788 3.873 3.853 3.637 3.150 2.645 2.365 2.206 2.111 2.055 2.023 2.009 2.006 1.993 1.877 1.678 1.357 0.980 0.735 0.574 0.460 0.374 0.307 0.245 0.184 0.129

516.7	0.069
539.1	0.002
563.6	0
590.5	0
620.0	0
652.6	0
688.9	0
729.4	0
775.0	0
826.7	0
885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0
1377.8	0
1550	0
1771.4	0
2066.7	0
	•

# Al80Ga20As (AlGaAs)

Wavelength $\lambda$ (nm) 206.7 210.2 213.8 217.5	Refractive index <i>n</i> (-) 1.368 1.360 1.354 1.370
221.4	1.399
225.5	1.447
229.6	1.528
234.0	1.661
238.5	1.857
243.1	2.110
248.0	2.426
253.1	2.833
258.3	3.233
263.8	3.751
270.0	4.107
275.6	4.112
281.8	4.004
288.4	3.928
295.2	3.893
302.4	3.904
310	3.962
317.9	4.078
326.3	4.267
335.1	4.462
344.4	4.613
354.3	4.667
364.7	4.562
375.8	4.413
387.5	4.277
400	4.155
413.3	4.050
427.6	3.961
442.9	3.872
459.3	3.787
476.9	3.738
496	3.635
516.7	3.519
539.1	3.440

563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 885.7 953.8 1033.3 1127.3 1240 1377.8 1550 1771.4 2066.7	3.378 3.322 3.277 3.236 3.202 3.173 3.147 3.124 3.103 3.083 3.065 3.049 3.035 3.022 3.012 3.003 2.995
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0	Extinction coefficient <i>k</i> (-) 2.409 2.473 2.560 2.667 2.792 2.935 3.104 3.293 3.475 3.635 3.765 3.582 3.128 2.639 2.389 2.256 2.183 2.144 2.119 2.092 2.013 1.820 1.561 1.199 0.890 0.685 0.541 0.437 0.353 0.276 0.205 0.161 0.104 0.013 0.004 0.003 0 0 0 0

652.6	0
688.9	0
729.4	0
775.0	0
826.7	0
885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0
1377.8	0
1550	0
1771.4	0
2066.7	0

### Al90Ga10As (AlGaAs)

Alboou lons (Albuns)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
459.3	3.807
476.9	3.637
496	3.524
516.7	3.438
539.1	3.369
563.6	3.312
590.5	3.263
620.0	3.221
652.6	3.183
688.9	3.151
729.4	3.122
775.0	3.096
826.7	3.073
885.7	3.052
953.8	3.033
1033.3	3.017
1127.3	3.002
1240	2.989
1377.8	2.977
1550	2.967
1771.4	2.959
2066.7	2.951

Wavelength λ (nm)	Extinction coefficient <i>k</i> (-)
459.3	0
476.9	0
496	0
516.7	0
539.1	0
563.6	0
590.5	0
620.0	0
652.6	0
688.9	0
729.4	0
775.0	0
826.7	0
885.7	0
953.8	0
1033.3	0
1127.3	0
1240	0

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1377.8 1550 1771.4 2066.7	0 0 0 0
AlAs (AlAs) Wavelength $\lambda$ (nm) 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100	Refractive index <i>n</i> (-) 3.644 3.383 3.252 3.171 3.116 3.075 3.045 3.021 3.002 2.987 2.974 2.964 2.955 2.947
Wavelength λ (nm) 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100	Extinction coefficient <i>k</i> (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlCu (AlCu) Wavelength λ (nm) 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410	Refractive index <i>n</i> (-) .156 .169 .178 .184 .198 .212 .22 .234 .253 .26 .278 .284 .31 .319 .336 .371 .378 39

.39

410 420

430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680	.427 .443 .483 .496 .523 .546 .564 .604 .627 .659 .676 .697 .738 .778 .804 .846 .88 .912 .936 .992 1.054 1.087 1.145 1.176 1.209 1.292
690 700	1.355 1.408
710	1.459
720	1.529
730 740	1.609 1.677
7 <del>4</del> 0 750	1.755
760	1.844
770	1.892
780	1.974
790	2.048
800 810	2.114 2.152
820	2.157
830	2.137
840	2.08
850	2.002
860 870	1.88 1.774
880	1.678
890	1.588
900	1.357
Wavelength λ (nm) 250 260 270 280 290 300 310 320	Extinction coefficient <i>k</i> (-) 2.296 2.360 2.487 2.585 2.697 2.808 2.915 3.022
330 340	3.135 3.243

350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 870 870 870 870 870 870 87	3.349 3.458 3.561 3.672 3.780 3.885 3.996 4.122 4.221 4.342 4.446 4.533 4.656 4.751 4.859 4.969 5.086 5.172 5.270 5.348 5.430 5.532 5.626 5.735 5.857 5.953 6.022 6.093 6.202 6.266 6.352 6.352 6.430 6.508 6.583 6.656 6.727 6.805 6.896 6.955 7.002 7.037 7.050 7.056 7.047 7.020 6.974 6.949 6.864 6.789 6.702 6.694 6.676 6.736

AlGaAs (AlGaAs) Wavelength  $\lambda$  (nm) Refractive index n (-) 1.25457489490509 200.82

209.02 217.22 225.42 233.62 241.82 250.02 258.22 266.42 274.62 282.82 291.02 299.22 307.42 315.62 323.82 332.02 340.22 348.42	1.28545248508453 1.32032263278961 1.37323021888733 1.48570561408997 1.7694000005722 2.46587252616882 3.389075756073 3.75496292114258 3.88819861412048 3.88765478134155 3.8235764503479 3.73733401298523 3.6508104801178 3.57570695877075 3.51893854141235 3.48516845703125 3.47775650024414 3.49891829490662
356.62	3.54958248138428
364.82	3.62924456596375
373.02 381.22	3.73598432540894 3.86674070358276
389.42	4.01790714263916
397.62	4.18640422821045
405.82 414.02	4.3716778755188 4.58073616027832
422.22	4.85699796676636
430.42	5.14157819747925
438.62	5.07710933685303
446.82	4.90418386459351
455.02 463.22	4.70998764038086 4.63189315795898
471.42	4.5785083770752
479.62	4.51574468612671
487.82	4.44697952270508
496.02 504.22	4.37857627868652 4.31417560577393
512.42	4.25516319274902
520.62	4.20172548294067
528.82	4.15352725982666
537.02	4.1100492477417
545.22 553.42	4.07074499130249 4.03510236740112
561.62	4.00266599655151
569.82	3.97304058074951
578.02	3.94588613510132
586.22	3.92091226577759
594.42 602.62	3.89786958694458 3.87654495239258
610.82	3.85675501823425
619.02	3.83834028244019
627.22	3.82116413116455
635.42 643.62	3.80510592460632 3.79006147384644
651.82	3.77593874931335
660.02	3.76265645027161
668.22	3.7501425743103
676.42 684.62	3.73833394050598 3.7271728515625
692.82	3.71660923957825
<del></del>	

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701.02	3.70659685134888
709.22	3.69709539413452
717.42	3.68806672096252
725.62	3.67947816848755
733.82	3.67129898071289
742.02	3.66350150108337
750.22	3.65606021881104
758.42	3.64895272254944
766.62	3.64215731620789
774.82	3.63565516471863
783.02	3.62942814826965
791.22	3.623459815979
799.42	3.61773538589478
807.62	3.61224031448364
815.82	3.60696196556091
824.02	3.60188865661621
832.22	3.59700894355774
840.42	3.5923125743866
848.62	3.5877902507782
856.82	3.58343267440796
865.02	3.57923102378845
873.22	3.57517838478088
881.42	3.57126688957214
889.62	3.56748986244202
897.82	3.56384110450745
906.02	3.56031394004822
914.22	3.55690360069275
922.42	3.55360388755798
930.62	3.5504105091095
938.82	3.54731845855713
947.02	3.54432320594788
955.22	3.54142069816589
963.42	3.53860712051392
971.62	3.53587818145752
979.82	3.53323078155518
988.02	3.53066158294678
996.22	3.52816724777222
1004.42	3.52574515342712
1012.62	3.52374319342712
1012.02	3.32339190203139
Wavelength λ (nm)	Extinction coefficient k (-)
200.82	1.66781806945801
209.02	1.85217201709747
217.22	
	2.0677502155304 2.33885884284973
225.42	
233.62	2.69836187362671
241.82	3.16800260543823
250.02	3.60006952285767
258.22	3.32953214645386
266.42	2.82239437103271
274.62	2.3909318447113
282.82	2.05908346176147
291.02	1.82610464096069
299.22	1.67490649223328
307.42	1.58738803863525
315.62	1.54888486862183
323.82	1.54801416397095
332.02	1.57547581195831
340.22	1.62297177314758
348.42	1.68255186080933

356.62 364.82 373.02 381.22 389.42 397.62 405.82 414.02 422.22 430.42 438.62 446.82 455.02 463.22 471.42 479.62 487.82 496.02 504.22	1.74640214443207 1.8069748878479 1.85733163356781 1.89154934883118 1.90506625175476 1.89482223987579 1.85895752906799 1.79536104202271 1.69268214702606 1.28904664516449 .868514239788055 .620086073875427 .502179682254791 .469512969255447 .398350775241852 .32428365945816 .261832118034363 .213070780038834 .175852552056313
512.42	.147426322102547
520.62	.125486433506012
528.82	.108311600983143
537.02	9.46637615561485E-02
545.22 553.42	8.36590230464935E-02 7.46630877256393E-02
561.62	6.72161430120468E-02
569.82	6.09802231192589E-02
578.02	5.57035394012928E-02
586.22	5.11960536241531E-02
594.42	4.73123639822006E-02
602.62	4.39398363232613E-02
610.82	4.09902334213257E-02
619.02	3.83936129510403E-02
627.22	3.60940173268318E-02 3.40462736785412E-02
635.42 643.62	3.22135426104069E-02
651.82	3.05655729025602E-02
660.02	2.90773082524538E-02
668.22	2.77278702706099E-02
676.42	2.64997463673353E-02
684.62	2.53781229257584E-02
692.82	.024350443854928
701.02	2.34059747308493E-02
709.22	2.25355010479689E-02
717.42 725.62	2.17310786247253E-02 2.09858249872923E-02
733.82	2.09636249672923E-02 2.02937498688698E-02
742.02	1.96496229618788E-02
750.22	1.90488547086716E-02
758.42	1.84874013066292E-02
766.62	1.79616939276457E-02
774.82	1.74685791134834E-02
783.02	1.70052405446768E-02
791.22	1.65691804140806E-02
799.42 807.62	1.61581467837095E-02 1.57701410353184E-02
815.82	1.54033545404673E-02
824.02	1.50561612099409E-02
832.22	1.47270923480392E-02
840.42	1.44148217514157E-02

848.62 856.82 865.02 873.22 881.42 889.62 897.82 906.02 914.22 922.42 930.62 938.82 947.02 955.22 963.42 971.62 979.82 988.02 996.22 1004.42 1012.62	1.41181424260139E-02 1.38359572738409E-02 1.35672688484192E-02 1.33111644536257E-02 1.30668161436915E-02 1.28334555774927E-02 1.26103842630982E-02 1.23969642445445E-02 1.21925948187709E-02 1.19967386126518E-02 1.18088880553842E-02 1.16285802796483E-02 1.12888952717185E-02 1.1287469044328E-02 1.09745962545276E-02 1.08261201530695E-02 1.06830215081573E-02 .010545021854341 1.04118594899774E-02 1.02832932025194E-02
AIN (AIN) Wavelength $\lambda$ (nm) 225.45 248.0 275.56 310.0 354.29 413.33 496.0 620.0 826.67 1240.0	Refractive index <i>n</i> (-) 2.31 2.22 2.16 2.11 2.078 2.05 2.02 2.005 1.99 1.977
Wavelength λ (nm) 206.0 225.45 248.0 275.56 310.0 354.29 413.33 496.0 620.0 826.67 1240.0	Extinction coefficient <i>k</i> (-) 0.0656 0.0269 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AION (AION) Wavelength $\lambda$ (nm) 404.66 435.83 546.01 589.3 852.11 1000 1020.4 1041.7 1063.8	Refractive index <i>n</i> (-) 1.812 1.806 1.792 1.793 1.778 1.776 1.776 1.775

1087 1111.1 1136.4 1219.5	1.774 1.773 1.772 1.771
Wavelength λ (nm) 404.66 435.83 546.01 589.3 852.11 1000 1020.4 1041.7 1063.8 1087 1111.1 1136.4 1219.5	Extinction coefficient <i>k</i> (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AISb (AISb) Wavelength $\lambda$ (nm) 354.23 364.65 375.7 387.44 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 399.94 826.53 885.57 953.69 1033.17	Refractive index n (-) 3.95 3.97 4.14 4.51 4.52 4.66 5.27 5.08 4.81 4.61 4.44 4.31 4.2 4.01 3.9036 3.8143 3.7343 3.6626 3.5985 4.57 3.5412 3.4901 3.4447 3.4044
Wavelength $\lambda$ (nm) 354.23 364.65 375.70 387.44 413.27 427.52 442.79 459.19 476.85 495.92	Extinction coefficient <i>k</i> (-) 2.6900 2.6400 2.6900 2.4700 1.9700 2.0600 1.5800 0.9200 0.6300 0.4600

516.58	0.3300
539.04	0.2400
563.55	0.0100
590.38	0.0060
619.90	0.0040
652.53	0.0030
688.78	0.0020
729.29	0.0010
774.87	0.0003
399.94	2.1200
826.53	0.0002
885.57	0.0001
953.69	0.0000
1033.17	0.0000

### **APEXE**

APEXE	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	1.945277384
240	1.870849594
260	1.812948502
280	1.767018981
300	1.729973914
320	1.699660907
340	1.674542093
360	1.653494981
380	1.635684734
400	1.620480027
420	1.607396292
440	1.596056593
460	1.586164165
480	1.577482787
500	1.569822539
520	1.563029326
540	1.556977061
560	1.551561773
580	1.546697109
600	1.54231087
620	1.538342312
640	1.534740037
660	1.531460317
680	1.528465758
700	1.525724234
720	1.52320802
740	1.520893083
760	1.518758516
780	1.516786054
800	1.514959689
820	1.513265341
840	1.511690585
860	1.510224425
880	1.508857101
900	1.507579925
920	1.506385142
940	1.505265815
960	1.504215721
980	1.503229266
1000	1.502301409
1020	1.501427599
1040	1.500603719
1060	1.499826036

Wavelength λ (nm) 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 825 850	Extinction coefficient <i>k</i> (-) 1.5736 1.5206 1.4883 1.4675 1.4534 1.4435 1.4363 1.4309 1.4267 1.4234 1.4209 1.4187 1.417 1.4156 1.4144 1.4133 1.4125 1.4117 1.4105 1.41 1.4095 1.4091 1.4088 1.4084 1.4082 1.4079
	1.41
	1.4095
875	1.4077
900	1.4074
925	1.4072
950	1.4071
975	1.4069
1000	1.4068
1025	1.4066
1050 1075	1.4065 1.4064
1100	1.4062
1125	1.4061
1150	1.406
1175	1.406
1200	1.4059

## AR2600DUV

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	2.087951916
240	1.938048997
260	1.837967298
280	1.768880258
300	1.719802469
320	1.684060425
340	1.657456496
360	1.637268938
380	1.621685101
400	1.60946875
420	1.59975866
440	1.591943276
460	1.585580755

480 500 520 540 560 580 600 620	1.580346812 1.576 1.572358163 1.569282204 1.56666471 1.564421869 1.562487654 1.56080958
640 660	1.559345573 1.558061645
680	1.556930131
700	1.555928363
720	1.555037642
740	1.55424245
760	1.553529834
780	1.552888923
800	1.552310547
820	1.551786929
840	1.551311447
860	1.550878435
880	1.550483025
900	1.550121018
920	1.549788778
940	1.549483145
960	1.549201363
980 1000	1.548941021 1.5487
1020	1.548476438
1040	1.548476438
1040	1.548268687
1000	1.04007029

# Au (Gold)

Au (Golu)	
Wavelength $\lambda$ (nm	) Refractive index <i>n</i> (-)
189.9785	1.427
194.9984	1.424
200	1.427
206.6333	1.422
210.1356	1.43
213.7586	1.432
217.5088	1.438
221.3929	1.442
225.4182	1.452
229.5926	1.454
233.9245	1.462
238.4231	1.47
243.098	1.478
247.96	1.484
253.0204	1.49
258.2917	1.504
263.7872	1.546
269.5217	1.598
275.5111	1.648
281.7727	1.69
288.3256	1.742
295.1905	1.776
302.3902	1.812
309.95	1.83
317.8974	1.84

326.2632 335.0811 344.3889 354.2285 364.6471 375.697 387.4375 399.9355 413.2667 427.5172 442.7857 459.1852 476.8461 495.92 516.5833 539.0435 563.5454 652.5263 688.7778 729.2941 774.875 826.5333 885.5714 953.6923 1033.167 1127.091 1239.8 1265.102 1291.458 1318.936 1347.609 1377.556 1408.864 1441.628 1475.952 1511.951 1549.75 1589.487 1631.316 1675.405 1721.944 1771.143 1823.235 1878.485 1937.188 1999.677 2066.333 2108.545 2149.818 2191.091 2232.364 2273.636 2314.909 2356.182 2397.455 2438.727 2480	1.824 1.798 1.766 1.74 1.716 1.696 1.674 1.658 1.636 1.616 1.562 1.426 1.242 .916 .608 .402 .306 .166 .164 .174 .188 .21 .236 .272 .312 .372 .389 .403 .419 .436 .454 .473 .493 .515 .537 .559 .583 .609 .636 .665 .696 .73 .767 .807 .85 .896 .92633 .95607 .98614 1.01652 1.04721 1.0782 1.10948 1.14104 1.17289 1.205
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Wavelength  $\lambda$  (nm) Extinction coefficient k (-) 189.97854 1.135

194.99842 200 206.63333 210.13559 213.75862 217.50877 221.39285 225.41818 229.59259 233.92452 238.42307 243.09803 247.96 253.0204 258.29166 263.78723 269.52173 275.51111 281.77272 288.32558 295.19047 302.39024 309.94999 317.89743 326.26315 335.08107 344.38888 354.22856 364.64705 375.69696 387.43749 399.93548 413.26666 427.51723 442.78571 459.18518 476.84614 495.91999 516.58332 539.04347 563.54544 652.5263 688.77776 729.2941 774.87499 826.53332 885.57141 953.69229 1033.16665 1127.09089 1239.79998 1265.10202 1291.45831 1318.93615 1347.60867 1377.55553 1408.86361	1.17 1.215 1.306 1.334 1.364 1.388 1.418 1.478 1.55 1.636 1.698 1.748 1.784 1.852 1.882 1.918 1.928 1.918 1.928 1.918 1.848 1.862 1.906 1.936 1.958 1.948 1.848 1.862 1.906 1.958 1.948 1.848 1.896 1.958 1.948 1.848 1.896 1.958 1.948 1.948 1.848 1.896 1.958 1.948 1.848 1.858 1.948 1.848 1.858 1.948 1.848 1.858 1.968 1.978 1.848 1.858 1.858 1.968 1.978 1.877 1.878 1.888 1.888 1.888 1.888 1.888 1.888 1.888 1.888 1.888 1.888 1.888 1.
1318.93615 1347.60867	8.42 8.59

1549.74997	9.81
1589.48715	10.1
1631.31576	10.3
1675.40537	10.6
1721.94441	10.9
1771.14282	11.2
1823.23526	11.5
1878.48481	11.9
1937.18746	12.2
1999.67738	12.6
2066.33329	13
2108.54545	13.25677
2149.81818	13.50552
2191.09091	13.7541
2232.36364	14.00263
2273.63636	14.2513
2314.90909	14.50012
2356.18182	14.74927
2397.45455	14.99887
2438.72727	15.24911
2480	15.5

1075	1.6025
1100	1.6021
1125	1.6017
1150	1.6013
1175	1.6009
1200	1.6006

250       1.9072         275       1.8322         300       1.7808         325       1.7442         350       1.7172         375       1.6968         400       1.6811         425       1.6686         450       1.6586         475       1.6505         500       1.6437         525       1.6381         550       1.6333         575       1.6293         600       1.6258         625       1.6293         600       1.6258         625       1.6228         650       1.6178         700       1.6158         725       1.6139         750       1.6123         775       1.6109         800       1.6096         825       1.6084         850       1.6073         875       1.6064         900       1.6055         925       1.6047         950       1.6039         975       1.6032         1000       1.6026         1025       1.602         1050       1.6015		
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#### AZ6210B

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
200	2.1581
225	1.9996
250	1.8992
275	1.832

300	1.7848
325	1.7505
350	1.7248
375 400	1.705
400 435	1.6894
425 450	1.6769 1.6668
475	1.6584
500	1.6514
525	1.6455
550	1.6405
575	1.6361
600	1.6324
625	1.6291
650	1.6263
675	1.6237
700	1.6215
725	1.6195
750	1.6177
775	1.6161
800	1.6146
825	1.6133
850	1.6121
875	1.611
900	1.6101
925	1.6091
950	1.6083
975	1.6075
1000	1.6068
1025	1.6062
1050 1075	1.6055 1.605
1100	1.6045
1125	1.6043
1150	1.6035
1175	1.6033
1200	1.6027
	1.0021

Wavelength 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575	λ <b>(nm)</b>	Refractive index 2.3277 2.0864 1.9422 1.8508 1.7899 1.7477 1.7175 1.6952 1.6783 1.6653 1.655 1.6468 1.6402 1.6347 1.6301 1.6263	n	(-)
575		1.6263		
600		1.623		
625		1.6202		
650		1.6178		

675	1.6157
700	1.6138
725	1.6122
750	1.6108
775	1.6095
800	1.6084
825	1.6074
850	1.6065
875	1.6056
900	1.6049
925	1.6042
950	1.6036
975	1.603
1000	1.6025
1025	1.602
1050	1.6016
1075	1.6012
1100	1.6008
1125	1.6004
1150	1.6001
1175	1.5998
1200	1.5995

1075	1.5996
1100	1.5991
1125	1.5987
1150	1.5983
1175	1.598
1200	1.5977

Wavelength 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 825 850 875 900 925 950 975 1000 1025 1050 1075	λ	(nm)	Refractive index 2.2718 2.0625 1.9348 1.8522 1.7961 1.7564 1.7275 1.7058 1.6891 1.676 1.6655 1.657 1.65 1.6442 1.6393 1.6351 1.6316 1.6285 1.6258 1.6258 1.6258 1.6258 1.6258 1.614 1.6196 1.6179 1.6165 1.6152 1.614 1.6129 1.612 1.6111 1.6103 1.6095 1.6088 1.6082 1.6076 1.6071 1.6066	n	(-)
1000 1025 1050			1.6082 1.6076 1.6071		
1100 1125 1150 1175			1.6062 1.6057 1.6053 1.605		
1200			1.6046		

#### **AZEL2015**

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
200	2.1325
225	1.9731
250	1.8741
275	1.8088

300	1.7637
325	1.7314
350	1.7074
375	1.6892
400	1.6749
425	1.6637
450	1.6546
475	1.6471
500	1.6409
525	1.6357
550	1.6313
575	1.6276
600	1.6243
625	1.6215
650	1.619
675	1.6169
700	1.615
725	1.6132
750	1.6117
775	1.6104
800	1.6091
825	1.608
850	1.607
875	1.6061
900	1.6052
925	1.6045
950	1.6038
975	1.6031
1000	1.6025
1025	1.602
1050	1.6015
1075	1.601
1100	1.6006
1125	1.6001
1150	1.5998
1175	1.5994
1200	1.5991

# AZNOVA2071

Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
200	2.1884
225	2.0026
250	1.8888
275	1.8149
300	1.7645
325	1.7288
350	1.7026
375	1.6829
400	1.6677
425	1.6558
450	1.6462
475	1.6384
500	1.632
525	1.6266
550	1.6221
575	1.6183
600	1.615
625	1.6121
650	1.6096
675	1.6074

700	1.6055
725	1.6038
750	1.6023
775	1.601
800	1.5997
825	1.5986
850	1.5976
875	1.5967
900	1.5959
925	1.5952
950	1.5945
975	1.5938
1000	1.5932
1025	1.5927
1050	1.5922
1075	1.5917
1100	1.5913
1125	1.5909
1150	1.5905
1175	1.5902
1200	1.5899

### AZOFPR-800

AZOI FIX-000	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
200	2.0329
225	1.9275
250	1.8569
275	1.8072
300	1.771
325	1.7436
350	1.7224
375	1.7057
400	1.6923
425	1.6813
450	1.6722
475	1.6646
500	1.6582
525	1.6527
550	1.6479
575	1.6438
600	1.6403
625	1.6371
650	1.6343
675	1.6319
700	1.6297
725	1.6277
750	1.6259
775	1.6243
800	1.6229
825	1.6215
850	1.6203
875	1.6192
900	1.6182
925	1.6173
950	1.6165
975	1.6157
1000	1.6149
1025	1.6143
1050	1.6136
1075	1.6131

1100	1.6125
1125	1.612
1150	1.6115
1175	1.6111
1200	1.6107

AZP4110	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
400	1.6648
410	1.6609
420	1.6574
430	1.6541
440	1.651
450	1.6481
460	1.6454
470	1.6429
480	1.6406
490	1.6384
500	1.6363
510	1.6344
520	1.6325
530	1.6308
540	1.6292
550	1.6276
560	1.6262
570	1.6248
580	1.6235
590	1.6223
600 610	1.6211 1.62
620	1.6189
630	1.6179
640	1.6169
650	1.616
660	1.6151
670	1.6143
680	1.6135
690	1.6127
700	1.612
710	1.6113
720	1.6106
730	1.61
740	1.6093
750	1.6087
760	1.6082
770 780	1.6076 1.6071
790 790	1.6066
800	1.6061
810	1.6056
820	1.6052
830	1.6047
840	1.6043
850	1.6039
860	1.6035
870	1.6032
880	1.6028
890	1.6024
900	1.6021
910	1.6018

920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1110 1110 1120 1130 1140 1150 1160 1170 1180 1190 1200	1.6014 1.6008 1.6005 1.6003 1.6 1.5997 1.5995 1.5992 1.599 1.5988 1.5983 1.5981 1.5977 1.5979 1.5977 1.5975 1.5971 1.5969 1.5968 1.5968 1.5966 1.5964 1.5963 1.5961 1.5959 1.5955
Wavelength λ (nm) 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680	Extinction coefficient k (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

#### **BARLi**

Refractive index <i>n</i> (-)
5.6235
4.134
3.2808
2.7635

300	2.4349
325	2.2179
350	2.07
375	1.9662
400	1.8915
425	1.8368
450	1.7958
475	1.7646
500	1.7406
525	1.7218
550	1.7069
575	1.6949
600	1.6853
625	1.6774
650	1.6709
675	1.6655
700	1.661
725	1.6572
750	1.6539
775	1.6512
800	1.6488
825	1.6468
850	1.6451
875	1.6435
900	1.6422
925	1.641
950	1.64
975	1.6391
1000	1.6383
1025	1.6376
1050	1.6369
1075	1.6363
1100	1.6358
1125	1.6353
1150	1.6349
1175	1.6345
1200	1.6342

# BaTiO3 (Barium titanate)

413.3       2.04         422       2.645         450       2.578         475       2.534         495.9       2.51         500       2.5         525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366         800       2.361	Wavelength $\lambda$ (nm) 413.3	Refractive index $n$ (-) 2.64
450       2.578         475       2.534         495.9       2.51         500       2.5         525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366		
475       2.534         495.9       2.51         500       2.5         525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366		
495.9       2.51         500       2.5         525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366		
500       2.5         525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	4/5	2.534
525       2.478         550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	495.9	2.51
550       2.459         575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	500	2.5
575       2.442         600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	525	2.478
600       2.43         619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	550	2.459
619.9       2.42         625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	575	2.442
625       2.416         650       2.405         675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	600	2.43
650 2.405 675 2.396 690 2.39 725 2.379 750 2.372 775 2.366	619.9	2.42
675       2.396         690       2.39         725       2.379         750       2.372         775       2.366	625	2.416
690 2.39 725 2.379 750 2.372 775 2.366	650	2.405
725 2.379 750 2.372 775 2.366	675	2.396
750 2.372 775 2.366	690	2.39
775 2.366	725	2.379
	750	2.372
800 2.361	775	2.366
	800	2.361

825	2.356
850	2.352
875	2.348
900	2.344
950	2.338
1000	2.332
1050	2.328
1100	2.324
1150	2.32
1200	2.317
1240	2.32
1250	2.314
BK7	
Wavelength $\lambda$ (nm)	Refra

Wavelength $\lambda$ (nm) Refractive index $n$ (-) 210.1356	BK7	
210.1356       1.63056         213.7586       1.62349         217.5088       1.61689         221.3929       1.61074         225.4182       1.60499         229.5926       1.59961         233.9245       1.59457         233.9245       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         269.5217       1.56693         269.5217       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55246         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52755         442.7857       1.526         459.1852       1.52169 <td></td> <td>Refractive index n (-)</td>		Refractive index n (-)
213.7586       1.62349         217.5088       1.61689         221.3929       1.61074         225.4182       1.60499         229.5926       1.59961         233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.5693         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.526         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036		. ,
217.5088       1.61689         221.3929       1.61074         225.4182       1.60499         229.5926       1.59961         233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307		
221.3929       1.61074         225.4182       1.60499         229.5926       1.59961         233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.5261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169		
225.4182       1.60499         229.5926       1.59961         233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.51909         563.5454       1.51786		
229.5926       1.59457         233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.5109		
233.9245       1.59457         238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.5168         590.3809       1.51668         619.9       1.51554      <		
238.4231       1.58983         243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554		
243.098       1.58538         247.96       1.58119         253.0204       1.57723         258.2917       1.57348         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554		
247.96       1.58119         253.0204       1.57723         258.2917       1.57348         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.5109         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444		
253.0204       1.57723         258.2917       1.57348         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444		
258.2917       1.57348         263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337		
263.7872       1.56993         269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.5129    <		
269.5217       1.56657         275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
275.5111       1.56337         281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
281.7727       1.56033         288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
288.3256       1.55743         295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
295.1905       1.55466         302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
302.3902       1.55201         309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
309.95       1.54948         317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
317.8974       1.54705         326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
326.2632       1.54473         335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
335.0811       1.5425         344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
344.3889       1.54036         354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
354.2285       1.5383         364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
364.6471       1.53633         375.697       1.53443         387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
375.6971.53443387.43751.53261399.93551.53085413.26671.52917427.51721.52755442.78571.526459.18521.5245476.84611.52307495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
387.4375       1.53261         399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
399.9355       1.53085         413.2667       1.52917         427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
413.26671.52917427.51721.52755442.78571.526459.18521.5245476.84611.52307495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
427.5172       1.52755         442.7857       1.526         459.1852       1.5245         476.8461       1.52307         495.92       1.52169         516.5833       1.52036         539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
442.78571.526459.18521.5245476.84611.52307495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
459.18521.5245476.84611.52307495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
476.84611.52307495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
495.921.52169516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
516.58331.52036539.04351.51909563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
539.0435       1.51909         563.5454       1.51786         590.3809       1.51668         619.9       1.51554         652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
563.54541.51786590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
590.38091.51668619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
619.91.51554652.52631.51444688.77781.51337729.29411.51232774.8751.51129		
652.5263       1.51444         688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
688.7778       1.51337         729.2941       1.51232         774.875       1.51129		
729.2941 1.51232 774.875 1.51129		
774.875 1.51129		
826.5333 1.51027		
	826.5333	1.51027

885.5714	1.50924
953.6923	1.50817
1033.167	1.50705
1127.091	1.50583
1239.8	1.50444

Wavelength λ (nm) 210.13559 213.75862	Extinction coefficient <i>k</i> (-) 0 0
217.50877 221.39285	0
225.41818 229.59259	0
233.92452 238.42307	0
243.09803 247.96	0
253.0204 258.29166	0
263.78723 269.52173	0
275.51111 281.77272	0
288.32558	0
295.19047 302.39024	0
309.94999 317.89743	0
326.26315 335.08107	0
344.38888 354.22856	0
364.64705 375.69696	0
387.43749 399.93548	0
413.26666 427.51723	0
442.78571 459.18518	0
476.84614 495.91999	0
516.58332 539.04347	0
563.54544 590.38094	0
619.89999 652.5263	0
688.77776 729.2941	0
774.87499 826.53332	0
885.57141 953.69229	0
1033.16665 1127.09089	0
1239.79998	0

# BSG (Boron silica glass)

`	•
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
370	1.535
400	1.53
430	1.525
520	1.52
630	1.515
840	1.51

#### CaF2 (Calcium fluoride)

CaF2 (Calcium fluoride	e)
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.6333	1.48989
210.1356	1.48738
213.7586	1.48494
217.5088	1.48258
221.3929	1.4803
225.4182	1.47809
229.5926	1.47595
233.9245	1.47388
238.4231	1.47187
243.098	1.46993
247.96	1.46804
253.0204	1.46622
258.2917	1.46445
263.7872	1.46274
269.5217	1.46109
275.5111	1.45948
281.7727	1.45793
288.3256	1.45643
295.1905	1.45498
302.3902	1.45357
309.95	1.45221
317.8974	1.45089
326.2632	1.44962
335.0811	1.44839
344.3889	1.4472
354.2285	1.44606
364.6471	1.44495
375.697	1.44388
387.4375	1.44285
	1.44186
399.9355	
413.2667	1.4409
427.5172	1.43998
442.7857	1.43909
459.1852	1.43824
476.8461	1.43742
495.92	1.43663
516.5833	1.43588
539.0435	1.43515
563.5454	1.43445
590.3809	1.43378
619.9	1.43314
652.5263	1.43252
688.7778	1.43193
729.2941	1.43136
774.875	1.4308
826.5333	1.43026
885.5714	1.42973
953.6923	1.4292
300.0323	1. <del>4</del> 282

1033.167	1.42867
1127.091	1.42811
1239.8	1.42751
Wavelength λ (nm) 206.63333 210.13559 213.75862 217.50877 221.39285 225.41818 229.59259 233.92452 238.42307 243.09803 247.96 253.0204 258.29166 263.78723 269.52173 275.51111 281.77272 288.32558 295.19047 302.39024 309.94999 317.89743 326.26315 335.08107 344.38888 354.22856 364.64705 375.69696 387.43749 399.93548 413.26666 427.51723 442.78571 459.18518 476.84614 495.91999 516.58332 539.04347 563.54544 590.38094 619.89999 652.5263 688.77776 729.2941 774.87499 826.53332 885.57141 953.69229 1033.16665 1127.09089 1239.79998	Extinction coefficient k (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

# Carbon-Alpha (Amorphous carbon)

Wavelength λ (nm) 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840	Refractive index <i>n</i> (-) 2.04101 2.08178 2.11693 2.14159 2.15249 2.14879 2.13231 2.10679 2.07667 2.04575 2.01651 1.99016 1.96692 1.94654 1.92858 1.91272 1.89882 1.87714 1.86945 1.86358 1.85902 1.85512 1.85129 1.84709 1.84235 1.83709 1.83153
Wavelength λ (nm) 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840	Extinction coefficient k (-) .48002 .4295 .37535 .31604 .25315 .19073 .13359 .08549 .04801 .02071 .001940102601760213502245021560191101526010033 .00475 .01373 .02284 .03116 .03786 .04256 .04548

CDdye	
14/	41-

Срауе	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
499.07	1.0736
503.87	1.0796
508.66	1.0871
513.45	1.0962
518.22	1.1066
522.98	1.1185
527.74	1.1318
532.49	1.1464
537.23	1.1623
541.96	1.1793
546.68	1.1974
551.4	1.2166
556.1	1.2367
560.8	1.2577
565.49	1.2796
570.17	1.3022
574.84	1.3256
579.51	1.3496
584.16	1.3742
588.81	1.3995
593.45	1.4253
598.08	1.4516
602.7	1.4785
607.31	1.5061
611.92	1.5345
616.52	1.5637
621.1	1.5939
625.68	1.6257
630.26	1.6594
634.82	1.6958
639.37	1.7364
643.92	1.7849
648.46	1.8486
652.99	1.8874
657.51	1.8889
662.02	1.8686
666.52	1.8448
671.02	1.8337
675.5	1.8504
679.98	1.9078
684.45	2.006
688.92	2.1143
	2.1143
693.37	
697.81	2.2486
702.25	2.2848
706.68	2.3104
711.1	2.3328
715.51	2.3565
719.91	2.3841
724.31	2.4165
728.69	2.4538
733.07	2.4961
737.44	2.5435
741.8	2.5962
746.15	2.6562
750.5	2.7291
1 00.0	Z.1 Z J I

754.83 759.16 763.48 767.79 772.09 776.38 780.67 784.94 789.21 793.47 797.72 801.96 806.2 810.42 814.64 818.85 823.05 827.24 831.43 835.6 839.77 843.93 848.08 852.22 856.35 860.48 864.59	2.8262 2.8941 2.9157 2.9022 2.8686 2.8257 2.7798 2.7346 2.6915 2.6511 2.6138 2.5793 2.5474 2.518 2.4908 2.4657 2.4423 2.4205 2.4002 2.3812 2.3634 2.3634 2.3467 2.3309 2.3161 2.302 2.2887 2.2761
Wavelength λ (nm) 499.07 503.87 508.66 513.45 518.22 522.98 527.74 532.49 537.23 541.96 546.68 551.4 556.1 560.8 565.49 570.17 574.84 579.51 584.16 588.81 593.45 598.08 602.7 607.31 611.92 616.52 621.1 625.68 630.26 634.82 639.37	Extinction coefficient <i>k</i> (-) 0.6417 0.6700 0.6981 0.7260 0.7535 0.7806 0.8073 0.8333 0.8587 0.8834 0.9073 0.9305 0.9528 0.9743 0.9949 1.0146 1.0336 1.0517 1.0689 1.0855 1.1013 1.1164 1.1309 1.1448 1.1583 1.1713 1.1839 1.1960 1.2078 1.2188 1.2285

643.92 648.46 652.99 657.51 662.02 666.52 671.02 675.5 679.98 684.45 688.92 693.37 697.81 702.25 706.68 711.1 715.51 719.91 724.31 728.69 733.07 737.44 741.8 746.15 750.5 754.83 759.16 763.48 767.79 772.09 776.38 780.67 784.94 789.21 793.47 797.72 801.96 806.2	1.2353 1.2222 1.1762 1.1345 1.1180 1.1325 1.1759 1.2401 1.3080 1.3498 1.3391 1.2983 1.2506 1.2065 1.1717 1.1464 1.1282 1.1144 1.1024 1.0902 1.0763 1.0596 1.0393 1.0145 0.9831 0.9178 0.8020 0.6752 0.5606 0.4658 0.3902 0.3305 0.2836 0.2461 0.2160 0.1914 0.1712 0.1543
784.94	0.2836
789.21	0.2461
793.47	0.2160
797.72	0.1914

### CdS (Cadmium sulphide)

•	•
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
350	2.58
400	2.55
500	2.72
600	2.4

700	2.35
800	2.32
900	2.3
1000	2.28
1100	2.28
1200	2.27
1300	2.27
1400	2.26
1500	2.25
1600	2.25
Wavelength λ (nm) 350 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600	Extinction coefficient <i>k</i> (-) 0.7 0.7 0.7 0.54 0.47 0.43 0.4 0.37 0.33 0.28 0.15 0.04 0

# CdTe (Cadmium telluride) Wavelength $\lambda$ (nm) Refractive index n (-)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
247.96	2.48
250.46	2.4769
253.02	2.48
255.63	2.4856
258.29	2.49
261.01	2.4875
263.79	2.48
266.62	2.4656
269.52	2.45
272.48	2.4394
275.51	2.43
278.61	2.4206
281.77	2.41
285.01	2.395
288.33	2.38
291.72	2.37
295.19	2.36
298.75	2.34
302.39	2.33
306.12	2.3469
309.95	2.39
313.87	2.4694
317.9	2.57
322.03	2.6887
326.26	2.8
330.61	2.8738
335.08	2.92
339.67	2.935
344.39	2.93

349.24 354.23 359.36 364.65 370.09 375.7 381.48 387.44 393.59 399.94 406.49 413.27 420.27 427.52 435.02 442.79 450.84 459.19 467.85 476.85 486.2 495.92 506.04 516.58 527.57 539.04 551.02 563.55 576.65 590.38 604.78 619.9 635.79 652.53 670.16 688.78 708.46 729.29 751.39 774.87 799.87 826.53 855.03 885.57 918.37 953.69 991.84 1033.17 1078.09 1127.09 1180.76 1239.8	2.9094 2.89 2.8731 2.91 3.0975 3.3 3.395 3.44 3.4475 3.43 3.4041 3.37 3.3401 3.3109 3.2825 3.2554 3.23 3.2096 3.1908 3.1732 3.1564 3.14 3.121 3.1023 3.0841 3.0666 3.05 3.0359 3.023 3.011 3.0001 2.99 2.9788 2.9688 2.9604 2.954 2.95 2.9642 2.9777 2.9872 2.9891 2.98 2.9565 2.9205 2.894 2.872 2.8527 2.8353 2.8195 2.805 2.7917 2.7793
Wavelength λ (nm) 247.96 250.46 253.02 255.63 258.29 261.01	Extinction coefficient <i>k</i> (-) 2.2 2.1219 2.04 1.9606 1.89 1.84

263.79 266.62 269.52 272.48 275.51 278.61 281.77 285.01 288.33 291.72 295.19 298.75 302.39 306.12 309.95 313.87 317.9 322.03 326.26 330.61 335.08 339.67 344.39 349.24 354.23 359.36 364.65 370.09 375.7 381.48 387.44 393.59 399.94 406.49 413.27 420.27 427.52	1.8 1.7631 1.73 1.6975 1.67 1.6538 1.64 1.62 1.6 1.5813 1.57 1.5706 1.59 1.6394 1.71 1.8206 1.9 1.8569 1.77 1.6862 1.61 1.5663 1.54 1.5163 1.52 1.5938 1.67 1.7112 1.67 1.4237 1.16 1.0681 1.02 .9404 .861 .7989 .7467
339.67	1.5663
344.39	1.54
349.24	1.5163
359.36	1.5938
364.65	1.67
375.7	1.67
381.48	1.4237
393.59	1.0681
399.94	1.02
413.27	.861
420.27	.7989
435.02	.703
442.79	.6666
450.84	.636
459.19	.6084
467.85	.5845
476.85	.5632
486.2	.5437
495.92	.525
506.04	.5006
516.58	.4766
527.57	.4533
539.04	.4313
551.02 563.55	.4313 .411 .3949 .3809
576.65 590.38 604.78	.369 .359
619.9	.351
635.79	.3463
652.53	.3431
670.16	.341
688.78	.3394
708.46	.338

729.29	.335
751.39	.331
774.87	.327
799.87	.323
826.53	.319
855.03	0
885.57	0
918.37	0
953.69	0
991.84	0
1033.17	0
1078.09	0
1127.09	0
1180.76	0
1239.8	0

# Co (Cobalt)

Co (Cobail)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
250	1.22378
260.8333	1.22444
271.6667	1.2186
282.5	1.20818
293.3333	1.21127
304.1667	1.22202
315	1.23059
325.8333	1.25163
336.6667	1.27019
347.5	1.29099
358.3333	1.31009
369.1667	1.32374
380	1.35443
390.8333	1.41395
401.6667	1.46262
412.5	1.51688
423.3333	1.5762
434.1667	1.63528
445	1.69694
455.8333	1.76687
466.6667	1.82169
477.5	1.88369
488.3333	1.95074
499.1667	2.02024
510	2.08588
520.8333	2.14652
531.6667	2.20599
542.5	2.27806
553.3333	2.33163
564.1667	2.40157
575	2.46132
585.8333	2.53099
596.6667	2.59219
607.5	2.66478
618.3333	2.7365
629.1667	2.7956
640	2.85942
650.8333	2.91605
661.6667	2.96934
672.5	3.02992
683.3333	3.09791
000.0000	0.00701

694.1667	3.151
705	3.19828
715.8333	3.2544
726.6667	3.30756
737.5	3.35247
748.3333	3.39635
759.1667	3.44314
770	3.49113
780.8333	3.54242
791.6667	3.58499
802.5	3.62793
813.3333	3.66963
824.1667	3.72571
835	3.74871
845.8333	3.78695
856.6667	3.80287
867.5	3.85296
878.3333	3.85296
889.1667	3.89955
900	3.84993
Wavelength λ (nm) 250 260.83333 271.66667 282.5 293.33333 304.16667 315 325.83333 336.66667 347.5 358.33333 369.16667 380 390.83333 401.66667 412.5 423.33333 434.16667 445 455.83333 466.66667 477.5 488.33333 499.16667 510 520.83333 531.66667 542.5 553.33333 564.16667 575 585.83333 596.66667 607.5 618.33333 629.16667 640 650.83333	Extinction coefficient <i>k</i> (-) 1.74458 1.80525 1.87655 1.95868 2.04777 2.14214 2.23188 2.32421 2.41984 2.5128 2.59916 2.69626 2.81353 2.91802 3.01671 3.10369 3.19261 3.27925 3.36265 3.4387 3.50897 3.57948 3.64353 3.71538 3.7772 3.84409 3.89227 3.94865 3.99648 4.05014 4.10136 4.14518 4.18769 4.23552 4.26807 4.29734 4.33555 4.36993

661.66667 672.5 683.33333	4.39899 4.4196 4.45171
694.16667	4.4619
705	4.49482
715.83333	4.52069
726.66667	4.5614
737.5	4.56462
748.33333	4.58974
759.16667	4.60937
770	4.64335
780.83333	4.66472
791.66667	4.69161
802.5	4.71813
813.33333	4.73961
824.16667	4.7706
835	4.77868
845.83333	4.81696
856.66667	4.83248
867.5	4.86283
878.33333 889.16667	4.87317 4.89205
900	4.69205
900	4.70009

Cr (Chromium)	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.6333	1.46
210.1356	1.46
213.7586	1.47
217.5088	1.47
221.3929	1.45
225.4182	1.43
229.5926	1.41
233.9245	1.39
238.4231	1.37
243.098	1.36
247.96	1.36
253.0204	1.37
258.2917	1.38
263.7872	1.38
269.5217	1.39
275.5111	1.43
281.7727	1.44
288.3256	1.46
295.1905	1.5
302.3902	1.54
309.95	1.58
317.8974	1.63
326.2632	1.67
335.0811	1.71
344.3889	1.77
354.2285	1.84
364.6471	1.86
375.697	1.9
387.4375	1.95
399.9355	2.01
413.2667	2.08
427.5172	2.17
442.7857	2.27

459.1852	2.4
476.8461	2.56
495.92	2.75
516.5833	2.91
539.0435	3.11
563.5454	3.22
590.3809	3.21
619.9	3.16
652.5263	3.1
688.7778	3.06
729.2941	3.06
774.875	3.11
826.5333	3.21
885.5714	3.29
953.6923	3.37
1033.167	3.5
1127.091	3.62
1239.8	3.68
Wavelength λ (nm) 206.63333 210.13559 213.75862 217.50877 221.39285 225.41818 229.59259 233.92452 238.42307 243.09803 247.96 253.0204 258.29166 263.78723 269.52173 275.51111 281.77272 288.32558 295.19047 302.39024 309.94999 317.89743 326.26315 335.08107 344.38888 354.22856 364.64705 375.69696 387.43749 399.93548 413.26666 427.51723 442.78571 459.18518 476.84614 495.91999 516.58332 539.04347 563.54544 590.38094	Extinction coefficient <i>k</i> (-) 1.71 1.72 1.72 1.72 1.73 1.74 1.76 1.78 1.81 1.85 1.9 1.95 2 2.05 2.09 2.14 2.19 2.24 2.3 2.35 2.4 2.45 2.5 2.55 2.59 2.64 2.68 2.72 2.77 2.85 2.93 3.02 3.1 3.18 3.26 3.3 3.33 3.33 3.33 3.33 3.33 3.33

619.89999 652.5263 688.77776 729.2941 774.87499 826.53332 885.57141 953.69229 1033.16665 1127.09089 1239.79998	3.3 3.33 3.37 3.4 3.44 3.48 3.52 3.56 3.58 3.58 3.62
Cu (Copper) Wavelength $λ$ (nm) 206.6333 213.7586 221.3929 229.5926 238.4231 247.96 258.2917 269.5217 281.7727 295.1905 309.95 326.2632 344.3889 364.6471 387.4375 413.2667 442.7857 476.8461 516.5833 539.0435 563.5454 590.3809 619.9 652.5263 670.1622 688.7778 708.4572 729.2941 826.5333 1239.8 2479.6	Refractive index <i>n</i> (-) 1.03647 1.10319 1.18408 1.27608 1.3776 1.46912 1.53346 1.52015 1.48705 1.41939 1.34368 1.33456 1.30895 1.27004 1.23088 1.18458 1.16797 1.15235 1.11997 1.0379 .82616 .46818 .27191 .21408 .21541 .21272 .21422 .22333 .25951 .43549 1.71267
Wavelength λ (nm) 206.63333 213.75862 221.39285 229.59259 238.42307 247.96 258.29166 269.52173 281.77272 295.19047 309.94999	Extinction coefficient <i>k</i> (-) 1.59194 1.67243 1.73552 1.7828 1.7966 1.77998 1.71508 1.66759 1.63747 1.64155 1.71915

326.26315	1.80584
344.38888	1.87173
364.64705	1.95269
387.43749	2.06762
413.26666	2.20754
442.78571	2.36308
476.84614	2.50358
516.58332	2.60275
539.04347	2.59176
563.54544	2.60241
590.38094	2.80877
619.89999	3.23635
652.5263	3.66686
670.16215	3.8531
688.77776	4.04293
708.45713	4.24805
729.2941	4.43282
826.53332	5.25998
1239.79998	8.48467
2479.59995	17.6333

#### Diamond

Diamond	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
213.76	2.78
217.31	2.77
220.98	2.743
224.77	2.712
228.7	2.692
232.77	2.684
236.98	2.671
241.35	2.657
245.89	2.644
250.6	2.633
255.49	2.623
260.57	2.612
265.87	2.599
271.38	2.586
277.13	2.575
283.12	2.566
289.38	2.558
295.93	2.549
302.77	2.539
309.94	2.529
317.46	2.521
325.35	2.513
333.65	2.505
342.38	2.498
351.57	2.491
361.28	2.484
371.54	2.477
382.39	2.471
393.9	2.465
406.12	2.459
419.13	2.454
433	2.449
447.81	2.444
463.68	2.439
480.71	2.434
499.04	2.43
518.82	2.426

540.24 563.5 588.85 616.6 647.08 680.74 718.09 759.78 806.61 859.59 920.01 989.58 1070.52 1165.89 1279.91 1418.65 1591.13 1811.34 2102.31 2504.65	2.422 2.418 2.414 2.411 2.408 2.405 2.402 2.399 2.397 2.395 2.392 2.39 2.389 2.389 2.387 2.385 2.384 2.382 2.381 2.38
Wavelength λ (nm) 213.76 217.31 220.98 224.77 228.70 232.77 236.98 241.35 245.89 250.60 255.49 260.57 265.87 271.38 277.13 283.12 289.38 295.93 302.77 309.94 317.46 325.35 333.65 342.38 351.57 361.28 371.54 382.39 393.90 406.12 419.13 433.00	Extinction coefficient k (-) 0.005 0.003 0.001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
447.81 463.68 480.71 499.04 518.82 540.24	0 0 0 0 0

563.50	0
588.85	0
616.60	0
647.08	0
680.74	0
718.09	0
759.78	0
806.61	0
859.59	0
920.01	0
989.58	0
1070.52	0
1165.89	0
1279.91	0
1418.65	0
1591.13	0
1811.34	0
2102.31	0
2504.65	0

# Dicarbon (Diamond containing some non-diamond crystallized carbon) Wavelength $\lambda$ (nm) Refractive index n (-)

Wavelength λ (nm 206.6333 215.6174 225.4182 236.1524 247.96 261.0105 275.5111 291.7177 309.95 354.2285	2.541 2.464 2.393 2.331 2.278 2.234 2.198 2.167 2.141 2.099
275.5111	2.198
291.7177	2.167
309.95	2.141
354.2285	2.099
413.2667	2.066
495.92	2.041
619.9	2.022
826.5333	2.008
1239.8	1.998

Wavelength  $\lambda$  (nm) Extinction coefficient k (-) 206.63333 0.01 1239.79998 0.01

# GaAs (GaAs)

` ,	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.63	1.264
210.14	1.288
213.76	1.311
217.51	1.325
221.39	1.349
225.42	1.383
229.59	1.43
233.92	1.499
238.42	1.599
243.1	1.802
247.96	2.273
253.02	2.89
258.29	3.342
263.79	3.598
269.52	3.769

275.51 281.77 288.33 295.19 302.39 309.95 317.9 326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8 1377.56 1549.75 1771.14	3.913 4.015 3.939 3.81 3.692 3.601 3.538 3.501 3.485 3.495 3.531 3.596 3.709 3.938 4.373 4.509 5.052 4.959 4.694 4.492 4.333 4.205 4.1 4.013 3.94 3.878 3.826 3.785 3.742 3.7 3.666 3.614 3.5388 3.492 3.4546 3.4232 3.3965 3.3737 3.3543
2066.33  Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33	3.3378  Extinction coefficient <i>k</i> (-) 2.4720 2.5570 2.6250 2.7100 2.8150 2.9360 3.0790 3.2550 3.4840 3.7950 4.0840 4.0470 3.7700 3.4520 3.1690 2.9190 2.5630 2.2600

295.19 302.39 309.95	2.0690 1.9690 1.9200
317.90	1.9040
326.26	1.9090
335.08	1.9310
344.39	1.9650
354.23	2.0130
364.65	2.0760
375.70	2.1620
387.44	2.2880
399.94	2.1460
413.27	1.9480
427.52	1.7210
442.79 450.40	0.9910
459.19 476.85	0.6960 0.5390
476.85 495.92	0.5390
495.92 516.58	0.3710
539.04	0.3200
563.55	0.2760
590.38	0.2400
619.90	0.2110
652.53	0.1790
688.78	0.1510
729.29	0.1120
774.87	0.0910
826.53	0.0800
885.57	0.0017
953.69	0.0000
1033.17	0.0000
1127.09	0.0000
1239.80	0.0000
1377.56	0.0000
1549.75 1771.14	0.0000 0.0000
2066.33	0.0000
2000.00	0.0000

# Ga0.5ln0.5P (GalnP)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
650	3.69
675	3.57
700	3.47
725	3.43
750	3.39
775	3.37
800	3.35
825	3.33
850	3.32

# GalnP (exact composition unknown)

Wavelength $\lambda$ (nm)	Refractive index n (-)
206.7	1.22
210.2	1.22
213.8	1.24
217.5	1.24
221.4	1.25
225.5	1.26
229.6	1.30

234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 1000 1020.6 1200.4 1301.2 1401.1 1501.2 1600 1701 1800 1901.8	1.33 1.41 1.50 1.64 1.83 2.08 2.47 2.82 3.16 3.37 3.44 3.45 3.41 3.32 3.28 3.21 3.20 3.20 3.20 3.23 3.24 3.30 3.38 3.51 3.72 3.89 4.08 4.30 4.48 4.44 4.33 4.21 4.10 4.02 3.94 3.87 3.81 3.75 3.71 3.66 3.635 3.62 3.615 3.6 3.59 3.58 3.51 3.27
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5	Extinction coefficient <i>k</i> (-) 2.13 2.16 2.20 2.26 2.33 2.43 2.52 2.60 2.73

	243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 1000 1020.6 1200.4 1301.2 1401.1 1501.2 1600 1701 1800 1901.8	2.87 3.02 3.18 3.31 3.39 3.29 3.05 2.83 2.54 2.34 2.16 2.02 1.95 1.91 1.87 1.87 1.88 1.91 1.95 2.00 2.06 2.09 2.01 1.85 1.67 1.22 0.89 0.71 0.61 0.55 0.48 0.44 0.41 0.40 0.38 0.36 0.28 0.26 0.22 0.19 0.17 0.08 0.07 0.05 0 0
GaN         Wavelength $\lambda$ (nm)       Refractive index $n$ (-)         354.29       2.66         413.33       2.49         496.0       2.38         620.0       2.32         826.67       2.29         1240.0       2.262	<b>GaN</b> Wavelength λ (nm) 354.29 413.33 496.0 620.0 826.67	Refractive index <i>n</i> (-) 2.66 2.49 2.38 2.32 2.29

Wavelength  $\lambda$  (nm)

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Extinction coefficient *k* (-)

248.0	0.418
275.56	0.373
310.0	0.323
354.29	0.268
413.33	0.007
496.0	0
620.0	0
826.67	0
1240.0	0
GaP	
Wavelength $\lambda$ (nm) 206 63	Refrac 91

GaP	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.63	.91
207.48	1.17
208.33	1.3
209.19	1.34
210.06	1.33
210.93	1.33
211.82	1.34
212.71	1.34
213.6	1.35
214.51	1.36
215.42	1.36
216.34	1.37
217.27	1.39
218.2	1.4
219.14	1.41
220.1	1.42
221.06	1.44
222.03	1.45
223	1.47
223.99	1.5
224.98	1.52
225.99	1.56
227	1.61
228.02	1.67
229.05	1.74
230.09	1.82
231.14	1.92
232.2	2.03
233.27	2.16
234.35	2.31
235.44	2.45
236.54 237.65	2.6 2.74
238.76	2.87
239.9	3
241.04	3.12
242.19	3.25
243.35	3.36
244.53	3.46
245.71	3.54
246.91	3.61
248.12	3.67
249.34	3.72
250.57	3.76
251.82	3.81
253.08	3.84
254.35	3.89
255.63	3.94

256.92 258.23 259.56 260.89 262.24 263.61 264.99 266.38 267.79 269.21 270.65 272.1 273.57 275.06 276.56 278.07 279.61 281.16 282.73 284.32 285.92 287.54 289.18 290.84 292.52 294.22 295.94 297.68 299.44 301.22 303.02	4.01 4.06 4.11 4.14 4.17 4.18 4.18 4.17 4.15 4.02 3.99 3.96 3.93 3.9 3.88 3.86 3.84 3.82 3.8 3.78 3.78 3.75 3.75 3.75 3.75
314.3 316.26 318.24 320.26 322.29 324.36 326.45 328.56 330.71 332.88 335.08 337.31 339.57 341.86 344.18 346.54 348.92 351.34 353.8 356.29 358.81 361.37 363.96 366.6	3.84 3.86 3.9 3.94 4 4.08 4.21 4.38 4.61 4.88 5.15 5.36 5.46 5.42 5.33 5.24 5.15 5.06 4.98 4.91 4.84 4.77

369.27 371.98 374.73 377.52 380.36 383.23 395.19 395.19 395.19 395.19 395.19 404.66 407.91 411.22 414.59 418.01 421.49 425.02 428.62 432.27 435.99 439.78 443.63 447.54 451.53 455.59 459.73 468.22 472.59 477.04 481.57 486.19 490.9 495.71 505.6 510.69 515.89 521.2 526.62 537.8 543.57 549.46 555.48 561.64 567.94 574.37 580.96 587.7 594.59 601.65 608.88	4.64 4.59 4.44 4.36 4.32 4.28 4.25 4.21 4.09 4.07 4.05 4.01 3.97 4.05 4.01 3.97 3.94 3.91 3.85 3.66 3.63 3.54 3.55 3.56 3.66 3.66 3.66 3.66 3.66 3.66
580.96 587.7 594.59 601.65	3.37 3.36 3.36 3.35

656.19 664.8 673.64 682.72 692.04 701.63 711.48 721.61 732.03 742.77 753.82 765.2 776.93 789.03 801.51 814.39 827.7 841.44 855.65 870.35 885.56 901.31 917.63 934.56 952.12 970.35 989.3 1009 1029.5 1050.85 1073.1 1096.32 1120.57 1145.91 1172.42 1200.19	3.29 3.27 3.27 3.27 3.24 3.25 3.24 3.23 3.22 3.22 3.22 3.22 3.21 3.18 3.19 3.18 3.19 3.16 3.16 3.15 3.14 3.13 3.13 3.13 3.13 3.13 3.13 3.13
Wavelength λ (nm) 206.63 207.48 208.33 209.19 210.06 210.93 211.82 212.71 213.60 214.51 215.42 216.34 217.27 218.20 219.14 220.10 221.06 222.03 223.00 223.99 224.98 225.99	Extinction coefficient <i>k</i> (-) 2.28 2.58 2.73 2.79 2.8 2.83 2.86 2.89 2.92 2.96 3 3.05 3.09 3.13 3.18 3.23 3.28 3.34 3.39 3.45 3.53 3.6

227.00 228.02 229.05 230.09 231.14 232.20 233.27 234.35 235.44 236.54 237.65 238.76 239.90 241.04 242.19 243.35 245.71 246.91 248.12 249.34 250.57 251.82 253.08 254.35 255.63 256.92 258.23 259.56 260.89 262.24 263.61 264.99 266.38 267.79 272.10 273.57 275.06 276.56 278.07 279.61 282.73 284.32 285.92 287.54 289.18 290.84 292.52 294.22 295.94	3.68 3.76 3.84 3.93 4.01 4.08 4.14 4.18 4.2 4.19 4.16 4.13 4.1 4.04 3.88 3.77 3.62 3.37 3.62 3.31 3.01 2.92 2.63 2.19 2.16 2.10 2.06 2.06 2.06 2.06 2.06 2.06 2.06
289.18 290.84 292.52 294.22	2.06 2.06 2.06 2.06

310.44       2.18         312.36       2.2         314.30       2.23         316.26       2.27         318.24       2.31         320.26       2.36         322.29       2.42         324.36       2.49         328.56       2.63         330.71       2.66         332.88       2.61         335.08       2.45         337.31       2.2         339.57       1.9         341.86       1.62         344.18       1.32         345.34       0.93         351.34       0.93         353.80       0.83         358.81       0.67         358.81       0.67         363.96       0.58         366.60       0.53         369.27       0.5         371.98       0.47         374.73       0.44         377.52       0.41         389.12       0.33         398.19       0.3         398.29       0.28         401.45       0.27         414.59       0.24         415.99       0.24         416.99<
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490.90 495.71 500.60 510.69 515.89 521.62 532.15 537.80 549.49 551.80 561.64 567.94 574.37 580.96 601.65 601.63	000000000000000000000000000000000000000
1120.57 1145.91	0

(	3	aSt	)

221.39

GaSb	
Wavelength $\lambda$ (nm) 206.63	Refractive index <i>n</i> (-) .93543
210.14	.98494
213.76	1.02243
217.51	1.06221
221.39	1.12741
225.42	1.21177
229.59	1.29847
233.92	1.34534
238.42	1.35606
243.1	1.35764
247.96	1.36859
253.02	1.3868
258.29	1.40761
263.79	1.44395
269.52	1.50292
275.51	1.5865
281.77	1.72264
288.33	1.98907
295.19	2.5218
302.39	3.09948
309.95	3.44975
317.9	3.61959
326.26	3.70134
335.08	3.74767
344.39	3.77447
354.23	3.78534
364.65	3.79411
375.7	3.80759
387.44	3.80026
399.94	3.76573
413.27	3.7317
427.52	3.72772
442.79	3.75964
459.19	3.83634
476.85	3.98447
495.92	4.3115
516.58	4.51326
539.04 563.55	4.49211 4.52077
563.55	4.52077
590.38	4.70459
619.9	5.23879
652.53	5.052
688.78	4.81661
729.29	4.64297
774.87	4.50669
826.53	4.3879
Wavelength $\lambda$ (nm)	Extinction coefficient k (-)
206.63	2.416
210.14	2.44379
213.76	2.47939
217.51	2.53481
221.31	2.60155

2.60155

225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.90 326.26 335.08 344.39 354.23 364.65 375.70 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.90 652.53 688.78 729.29 774.87 826.53	2.64488 2.65312 2.63836 2.64479 2.68481 2.75064 2.82882 2.92837 3.05516 3.20776 3.39205 3.62815 3.92319 4.13019 3.97615 3.64345 3.32317 3.06902 2.86218 2.68991 2.54495 2.43008 2.31879 2.20998 2.13372 2.10869 2.1206 2.15659 2.21122 2.28035 2.28517 1.96177 1.78858 1.74682 1.80281 1.37837 0.82868 0.61132 0.48493 0.41627 0.34447
Ge (Germanium) Wavelength $\lambda$ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.1 247.96 253.02 258.29 263.79 269.52 275.51	Refractive index <i>n</i> (-) 1.023 1.108 1.209 1.31 1.36 1.38 1.383 1.371 1.364 1.37 1.394 1.435 1.498 1.586 1.72 1.953

281.77 288.33 295.19 302.39 309.95 317.9 326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8 1377.56 1549.75 1771.14 2066.33	2.516 3.338 3.745 3.869 3.905 3.92 3.936 3.958 3.985 4.02 4.07 4.128 4.157 4.141 4.082 4.037 4.035 4.082 4.18 4.34 4.61 5.062 5.283 5.748 5.588 5.294 5.067 4.897 4.763 4.653 4.56 4.495 4.42 4.385 4.325 4.285 4.275 4.18 4.104
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19	Extinction coefficient <i>k</i> (-) 2.774 2.831 2.873 2.866 2.846 2.842 2.854 2.897 2.973 3.073 3.197 3.342 3.509 3.709 3.96 4.297 4.669 4.507 4.009

302.39	3.614
309.95	3.336
317.90	3.137
326.26	2.986
335.08	2.863
344.39	2.759
354.23	2.667
364.65	2.579
375.70	2.469
387.44	2.34
399.94	2.215
413.27	2.145
427.52	2.14
442.79	2.181
459.19	2.24
476.85	2.309
495.92	2.384
516.58	2.455
539.04	2.318
563.55	2.049
590.38	1.634
619.90	0.933
652.53	0.638
688.78	0.5
729.29	0.401
774.87	0.345
826.53	0.298
885.57	0.19
953.69	0.167
1033.17	0.123
1127.09	0.103
1239.80	0.0809
1377.56	0.0745
1549.75	0.00567
1771.14	0.00028
2066.33	0

### HfO2 (Hafnium dioxide)

THOE (Hallmann aloxic	.0,
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
250	2.1222
275	2.0887
300	2.06
325	2.0357
350	2.0151
375	1.9978
400	1.983
425	1.9705
450	1.9597
475	1.9504
500	1.9423
525	1.9353
550	1.9291
575	1.9237
600	1.9189
625	1.9146
650	1.9108
675	1.9073
700	1.9043
725	1.9015
750	1.899

775 800 825 850 875 900	1.8967 1.8946 1.8927 1.8909 1.8894 1.8879
Wavelength λ (nm) 250.00 275.00 300.00 325.00 350.00 375.00 400.00 425.00 450.00 475.00 500.00 525.00 550.00 675.00 600.00 675.00 700.00 725.00 750.00 775.00 800.00 825.00 850.00 875.00 900.00	Extinction coefficient k (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
InAs Wavelength $\lambda$ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.1 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95	Refractive index <i>n</i> (-) 1.43377 1.38298 1.33262 1.29333 1.27631 1.28165 1.31167 1.36572 1.43588 1.48359 1.52395 1.60819 1.80331 2.20447 2.70473 3.19419 3.64398 3.76054 3.61489 3.44906 3.31344

317.9	3.20835
326.26	3.12868
335.08	3.06922
344.39	3.03021
354.23	3.00803
364.65	3.00391
375.7	3.0177
387.44	3.05147
399.94	3.10794
413.27	3.19676
427.52	3.33715
442.79	3.62619
459.19	3.91057
476.85	4.02061
495.92	4.36428
516.58	4.46584
539.04	4.33101
563.55	4.19693
590.38	4.088
619.9	3.99492
652.53	3.91691
688.78	3.85047
729.29	3.79789
774.87	3.7548
826.53	3.71371
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.90 326.26 335.08 344.39 354.23 364.65 375.70 387.44 399.94 413.27 427.52 442.79	Extinction coefficient <i>k</i> (-) 2.11156 2.0839 2.10187 2.16303 2.24788 2.34385 2.44918 2.55542 2.64646 2.73222 2.87148 3.08079 3.34857 3.57501 3.58114 3.44469 3.04214 2.47824 2.09868 1.90342 1.79858 1.74342 1.71862 1.71526 1.72777 1.75364 1.78983 1.83617 1.89089 1.9566 2.03378 2.12921 2.20755

459.19	2.01582
476.85	1.88529
495.92	1.78632
516.58	1.28285
539.04	0.99076
563.55	0.81071
590.38	0.71184
619.90	0.63355
652.53	0.57201
688.78	0.5302
729.29	0.49291
774.87	0.46314
826.53	0.43205

#### InGaAs (Gallium indium arsenide)

InGaAs (Gallium indium arsenide)			
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)		
206.7	1.22		
210.2	1.22		
213.8	1.24		
217.5	1.24		
221.4	1.25		
225.5	1.26		
229.6	1.30		
234.0	1.33		
238.5	1.41		
243.1	1.50		
248.0	1.64		
253.1	1.83		
258.3	2.08		
263.8	2.47		
270.0	2.82		
275.6	3.16		
281.8	3.37		
288.4	3.44		
295.2	3.45		
302.4	3.41		
310	3.32		
317.9	3.28		
326.3	3.23		
335.1	3.21		
	3.20		
344.4	3.20		
354.3			
364.7	3.23		
375.8	3.24		
387.5	3.30		
400	3.38		
413.3	3.51		
427.6	3.72		
442.9	3.89		
459.3	4.08		
476.9	4.30		
496	4.48		
516.7	4.44		
539.1	4.33		
563.6	4.21		
590.5	4.10		
620.0	4.02		
652.6	3.94		
688.9	3.87		
729.4	3.81		

775.0	3.75
826.7	3.71
1000	3.66
1020.6	3.65
1200.4	3.635
1301.2	3.62
1401.1	3.615
1501.2	3.6
1600	3.59
1701	3.58
1800	3.51
1901.8	3.27
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7	Extinction coefficient <i>k</i> (-) 2.13 2.16 2.20 2.26 2.33 2.43 2.52 2.60 2.73 2.87 3.02 3.18 3.31 3.39 3.29 3.05 2.83 2.54 2.34 2.16 2.02 1.95 1.91 1.87 1.87 1.87 1.87 1.88 1.91 1.95 2.00 2.06 2.09 2.01 1.85 1.67 1.22 0.89 0.71 0.61 0.55 0.48 0.44 0.41 0.40 0.38 0.36

1000	0.28
1020.6	0.26
1200.4	0.22
1301.2	0.19
1401.1	0.17
1501.2	0.08
1600	0.07
1701	0.05
1800	0
1901.8	0

### InGaAs24P76 (Gallium indium phosphide arsenide)

InGaAs24P76 (Gallium	ı indium phosphide ars
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.7	1.24
210.2	1.25
213.8	1.28
217.5	1.28
221.4	1.33
225.5	1.36
229.6	1.38
234.0	1.43
238.5	1.50
243.1	1.75
248.0	2.01
253.1	2.33
258.3	2.70
263.8	3.03
270.0	3.47
275.6	3.57
281.8	3.49
288.4	3.38
295.2	3.28
302.4	3.21
310	3.17
317.9	3.13
326.3	3.12
335.1	3.12
344.4	3.11
354.3	3.16
364.7	3.25
375.8	3.41
387.5	3.61
400	3.89
413.3	4.23
427.6	4.37
442.9	4.32
459.3	4.22
476.9	4.11
496	4.00
516.7	3.91
539.1	3.84
563.6	3.76
590.5	3.71
620.0	3.66
652.6	3.61
688.9	3.59
729.4	3.54
775.0	3.54
826.7	3.52
020.1	3.32

Wavelength λ (nm)       Ex         206.7       2.1         210.2       2.1         213.8       2.2         217.5       2.2         221.4       2.3         225.5       2.4         229.6       2.5         234.0       2.6         238.5       2.8         243.1       3.1         248.0       3.2         253.1       3.3         258.3       3.3         263.8       3.2         270.0       2.9         275.6       2.5         281.8       2.2         288.4       2.0         295.2       1.9         302.4       1.8         317.9       1.8         326.3       1.8         335.1       1.8         344.4       1.8         354.3       1.8         364.7       1.9         375.8       2.0         387.5       2.1         400       2.0         413.3       1.8         427.6       1.4         442.9       1.0         459.3       0.2 <td< th=""><th>5 20 28 339 48 58 59 57 29 56 51 50 60 60 60 60 60 60 60 60 60 6</th></td<>	5 20 28 339 48 58 59 57 29 56 51 50 60 60 60 60 60 60 60 60 60 6
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# InGaAs42P58 (Gallium indium phosphide arsenide) Wavelength $\lambda$ (nm) Refractive index n (-)

206.7	1.31	
210.2	1.32	
213.8	1.31	
217.5	1.33	
221.4	1.34	
225.5	1.37	
229.6	1.42	
234.0	1.48	
238.5	1.57	

243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7	1.65 1.83 2.13 2.52 2.94 3.34 3.50 3.49 3.45 3.40 3.33 3.27 3.24 3.22 3.20 3.21 3.23 3.29 3.35 3.48 3.71 4.01 4.23 4.39 4.35 4.24 4.12 4.02 3.93 3.85 3.78 3.71 3.65 3.60 3.59 3.56 3.55
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310	Extinction coefficient <i>k</i> (-) 2.14 2.20 2.25 2.33 2.40 2.49 2.59 2.69 2.84 3.01 3.18 3.31 3.37 3.23 3.00 2.69 2.39 2.16 2.01 1.92 1.86

317.9	1.83
326.3	1.81
335.1	1.81
344.4	1.82
354.3	1.87
364.7	1.91
375.8	1.97
387.5	2.03
400	1.99
413.3	1.88
427.6	1.70
442.9	1.34
459.3	1.03
476.9	0.80
496	0.64
516.7	0.56
539.1	0.48
563.6	0.41
590.5	0.37
620.0	0.34
652.6	0.33
688.9	0.30
729.4	0.28
775.0	0.26
826.7	0.25

## InGaAs55P45 (Gallium indium phosphide arsenide) Wavelength $\lambda$ (nm) Refractive index n (-)

wavelength λ (nm)	Refractive index <i>n</i> (-
206.7	1.31
210.2	1.31
213.8	1.31
217.5	1.32
221.4	1.34
225.5	1.36
229.6	1.38
234.0	1.44
238.5	1.52
243.1	1.65
248.0	1.78
253.1	2.03
258.3	2.39
263.8	2.78
270.0	3.15
275.6	3.43
281.8	3.48
288.4	3.47
295.2	3.43
302.4	3.36
310	3.31
317.9	3.27
326.3	3.25
335.1	3.23
344.4	3.22
354.3	3.23
364.7	3.27
375.8	3.33
387.5	3.44
400	3.62
413.3	3.84

427.6	4.11
442.9	4.32
459.3	4.41
476.9	4.35
496	4.25
516.7	4.14
539.1	4.03
563.6	3.94
590.5	3.86
620.0	3.80
652.6	3.73
688.9	3.68
729.4	3.64
775.0	3.60
826.7	3.59
Wavelength λ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9	Extinction coefficient <i>k</i> (-) 2.14 2.20 2.25 2.33 2.39 2.48 2.56 2.67 2.82 3.01 3.15 3.24 3.27 3.25 3.09 2.86 2.56 2.33 2.15 2.02 1.94 1.89 1.87 1.86 1.85 1.86 1.89 1.93 1.97 1.99 1.95 1.82 1.60 1.25 0.92 0.73 0.61 0.52 0.47 0.42 0.39 0.37 0.33

729.4	0.32
775.0	0.30
826.7	0.29
InGaAs82P18 (Galliun Wavelength $\lambda$ (nm) 206.7 210.2 213.8 217.5 221.4 225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8 288.4 295.2 302.4 310 317.9 326.3 335.1 344.4 354.3 364.7 375.8 387.5 400 413.3 427.6 442.9 459.3 476.9 496 516.7 539.1 563.6 590.5 620.0 652.6 688.9 729.4 775.0 826.7 Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-) 1.26 1.26 1.27 1.28 1.30 1.35 1.35 1.41 1.47 1.57 1.73 2.00 2.30 2.66 3.00 3.29 3.46 3.48 3.44 3.38 3.32 3.21 3.21 3.21 3.21 3.21 3.21 3.21
206.7	2.17
210.2	2.19
213.8	2.25
217.5	2.32
221.4	2.40

225.5 229.6 234.0 238.5 243.1 248.0 253.1 258.3 263.8 270.0 275.6 281.8	2.51 2.61 2.72 2.85 2.98 3.11 3.26 3.37 3.32 3.17 2.94 2.71
288.4	2.45
295.2	2.25
302.4	2.09
310 317.9	2.00 1.93
326.3	1.91
335.1	1.87
344.4	1.87
354.3	1.88
364.7	1.90
375.8 387.5	1.94 1.97
400	2.02
413.3	2.07
427.6	1.99
442.9	1.85
459.3	1.67
476.9	1.36
496 516.7	1.01
539.1	0.77 0.63
563.6	0.55
590.5	0.48
620.0	0.43
652.6	0.40
688.9 729.4	0.37 0.34
775.0	0.34
826.7	0.32
<del></del>	J.J_

### InP (Indium phosphide)

/ · · · I· · · · · · ·	•	
Wavelength $\lambda$ (nm)	Refractive index n (-	)
206.63	1.336	
210.14	1.301	
213.76	1.299	
217.51	1.325	
221.39	1.375	
225.42	1.426	
229.59	1.455	
233.92	1.482	
238.42	1.558	
243.1	1.745	
247.96	2.131	
253.02	2.546	
258.29	2.984	
263.79	3.56	
269.52	3.8	
275.51	3.697	

281.77 288.33 295.19 302.39 309.95 317.9 326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8 1377.56 1549.75 1771.14 2066.33	3.527 3.384 3.275 3.196 3.141 3.108 3.095 3.103 3.133 3.193 3.299 3.576 3.976 4.415 4.395 4.256 4.121 4.004 3.903 3.818 3.745 3.682 3.629 3.585 3.549 3.517 3.492 3.476 3.467 3.456 3.4186 3.362 3.297 3.254 3.22 3.191 3.167 3.146 3.129
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19	Extinction coefficient <i>k</i> (-) 2.113 2.183 2.28 2.383 2.484 2.562 2.652 2.802 3.016 3.291 3.495 3.514 3.517 3.223 2.637 2.186 1.948 1.826 1.762

### InSb (Indium antimonide)

	,
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.63	1.23
208.04	.941
209.47	.9
210.92	.933
212.39	.952
213.88	.97
215.39	.987
216.92	.997
218.47	1.007
220.05	1.017
221.65	1.027
223.27	1.038
224.92	1.052
226.59	1.07
228.29	1.094
230.01	1.123
231.76	1.153
233.53	1.187
235.33	1.22
237.16	1.251
239.02	1.278

457.94 464.92 472.12 479.55 487.21 495.11 503.29 511.73 520.46 529.5 538.85 548.54 558.59 569.01 579.83 591.07 602.75 614.9 627.55 640.74 654.49 668.84 683.84 699.52 715.94 733.15 751.21 770.18 790.13 811.15 833.31 856.72 881.48 907.71 935.55 965.16 996.7 1030.37 1066.4 1105.04 1146.58	3.373 3.395 3.424 3.461 3.506 3.563 3.639 3.743 3.892 4.036 4.11 4.133 4.136 4.134 4.132 4.137 4.151 4.178 4.224 4.302 4.467 4.766 4.906 4.885 4.815 4.735 4.657 4.585 4.657 4.585 4.516 4.455 4.408 4.393 4.398 4.398 4.398 4.398 4.398 4.398 4.315 4.279 4.243 4.209 4.181 4.16
1191.37 1239.8	4.149 4.15
Wavelength λ (nm) 206.63 208.04 209.47 210.92 212.39 213.88 215.39 216.92 218.47 220.05 221.65 223.27 224.92 226.59 228.29	Extinction coefficient <i>k</i> (-) 1.91 2.141 2.191 2.192 2.204 2.211 2.222 2.232 2.243 2.259 2.278 2.3 2.325 2.35 2.375

#### ITO (Indium tin oxide)

TIO (III alaini tili oxiao)	<i>!</i>
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
201.4	1.36581897735596
202.8	1.34253096580505
204.2	1.31741166114807
205.6	1.29023230075836
207	1.26072239875793
208.4	1.2285635471344
209.8	1.19337594509125

211.2	1.154709815979
212.6	1.11202681064606
214	1.0646915435791
215.4	1.01197385787964
216.8	.953088164329529
218.2	.887361526489258
219.6	.814700961112976
221	.736759185791016
222.4	.658925354480743
223.8	.590873897075653
225.2	.541329085826874
226.6	.512162446975708
228	.500448226928711
229.4	.502888679504395
230.8	.51750922203064
232.2	.543749332427979
233.6	.582300782203674
235	.635081708431244
236.4	.705440938472748
237.8	.798613548278809
239.2	.922500133514404
240.6	1.08881652355194
242	1.31442320346832
243.4	1.62162089347839
244.8	2.03304624557495
246.2	2.55083060264587
247.6	3.11509251594543
249	3.59118580818176
250.4	3.86518788337708
251.8	3.94043159484863
253.2	3.89202046394348
254.6	3.78798055648804
256	3.6673219203949
257.4	3.54809856414795
258.8	3.43740749359131
260.2	3.6673219203949 3.54809856414795 3.43740749359131 3.33732175827026 3.2477912902832 3.16794800758362
261.6	3.2477912902832
200	3.1073400073030Z
264.4	3.09669637680054
265.8	3.03294563293457
267.2	2.97570490837097
268.6	2.92410802841187
270	2.8774106502533
271.4	2.83497881889343
272.8	2.7962760925293
274.2	2.7608437538147
275.6	2.72829413414001
277	2.69829368591309
278.4	2.67055773735046
279.8	2.64484047889709
281.2	2.62093067169189
282.6	2.59864401817322
284 285.4	2.57782077789307
285.4 286.8	2.55832099914551
286.8 288.2	2.54002046585083 2.52281165122986
289.6	2.52281165122986
29.0	2.49129462242126
292.4	2.47682595252991
293.8	2.46312379837036
200.0	2.70312313031030

349.8 351.2 352.6 354 355.4 356.8 358.2 359.6 361 362.4 363.8	2.45012831687927 2.43778467178345 2.42604374885559 2.41486144065857 2.40419721603394 2.3940155506134 2.38428211212158 2.3749680519104 2.36604523658752 2.35748863220215 2.3492751121521 2.34138369560242 2.33379435539246 2.32648968696594 2.31945300102234 2.312668800354 2.30612254142761 2.2980158805847 2.29369401931763 2.28778791427612 2.28207278251648 2.27653884887695 2.27117681503296 2.26597809791565 2.26093459129334 2.25603914260864 2.2512845993042 2.24666380882263 2.24217128753662 2.23780059814453 2.2335467338562 2.22940421104431 2.2253680229187 2.22143387794495 2.21759724617004 2.21385383605957 2.21020030975342 2.20663237571716 2.20314693450928 2.19974040985107 2.2102030975342 2.20663237571716 2.20314693450928 2.19974040985107 2.19641017913818 2.19315242767334 2.18996500968933 2.18684506416321 2.18378973007202 2.18079733848572 2.17786478996277 2.17499017715454 2.17217135429382 2.1694061756134
354	2.18996500968933
355.4	2.18684506416321
356.8	2.18378973007202
359.6	2.17786478996277
361	2.17499017715454
370.8	2.1563241481781
372.2	2.15384435653687
373.6	2.15140676498413
375	2.14900970458984
376.4	2.14665198326111
377.8	2.14433264732361

435.2 436.6 438 439.4 440.8 442.2 443.6 445 446.4 447.8 449.2 450.6 452 453.4 454.8	2.14204955101013 2.1398024559021 2.13758945465088 2.13540983200073 2.13326287269592 2.1311469078064 2.129061460495 2.12700533866882 2.12497735023499 2.1229772567749 2.12100410461426 2.11905670166016 2.11713457107544 2.11523699760437 2.11336302757263 2.11151218414307 2.10968399047852 2.10787725448608 2.10609173774719 2.1043267250061 2.10258173942566 2.10085582733154 2.09914898872375 2.09746050834656 2.09578967094421 2.09413623809814 2.09249973297119 2.09087944030762 2.08927512168884 2.09748630027771 2.08611249923706 2.08927512168884 2.08768630027771 2.08611249923706 2.08455348014832 2.08300876617432 2.08147788047791 2.0799605846405 2.07845664024353 2.07696533203125 2.07548642158508 2.07112169265747 2.06968975067139 2.06406831741333 2.07256507873535 2.07112169265747 2.06968975067139 2.06406831741333 2.06268858909607 2.06131792068481 2.0599570274353 2.05965051940918 2.05726218223572 2.05592799186707 2.0546019077301 2.05328440666199 2.05197737306588
450.6	2.05592799186707
_	
454.8 456.2	2.05197477340698 2.05067300796509
457.6	2.04937887191772
459 460.4	2.04809212684631 2.04681277275085
461.8	2.04554033279419

460.0	0.04407400607600
463.2	2.04427480697632
464.6	2.04301619529724
466	2.04176378250122
467.4	2.04051780700684
468.8	2.03927803039551
470.2	2.03804445266724
471.6	2.03681683540344
473	2.03559470176697
474.4	2.03437852859497
475.8	2.03316736221313
477.2	2.03196215629578
478.6	2.03076171875
480	2.02956628799438
481.4	2.02837586402893
482.8	2.02719020843506
484.2	2.02600932121277
485.6	2.02483296394348
487	2.02366089820862
488.4	2.02249336242676
489.8	2.02132987976074
491.2	2.02017045021057
-	
492.6	2.01901507377625
494	
-	2.01786351203918
495.4	2.01671600341797
406.0	2.04557402265606
496.8	2.01557183265686
498.2	2.01443147659302
499.6	2.01329445838928
501	2.01216101646423
502.4	2.01103043556213
503.8	2.00990343093872
505.2	2.00877952575684
506.6	2.00765824317932
508	2.00654029846191
509.4	2.00542497634888
510.8	2.00431251525879
512.2	2.00320291519165
-	
513.6	2.0020956993103
515	2.00099110603333
516.4	1.99988889694214
517.8	1.99878919124603
519.2	1.99769175052643
520.6	1.99659657478333
522	1.99550342559814
523.4	1.99441254138947
524.8	1.99332356452942
526.2	1.99223661422729
527.6	1.9911515712738
529	1.99006831645966
530.4	1.98898684978485
531.8	1.98790693283081
533.2	1.98682904243469
534.6	1.98575258255005
536	1.98467767238617
537.4	1.98360419273376
538.8	1.98253214359283
540.2	1.98146152496338
541.6	1.98039209842682
543	1.97932398319244
544.4	1.97825741767883
545.8	1.97719156742096
	1.5.1.10.1007 12000

547.2 548.6 550 551.4 552.8 554.2 555.6 557 558.4 559.8 561.2 562.6 564 565.4 566.8 568.2 569.6 571 572.4 573.8 575.2 576.6 578 579.4 580.8 582.2 583.6 585 586.4 589.8 599.4 580.8 582.2 583.6 585 586.4 587.8 589.2 590.6 592 593.4	1.97612690925598 1.9750634431839 1.97400104999542 1.97293949127197 1.97187876701355 1.97081911563873 1.96976017951965 1.9687020778656 1.96764469146729 1.96658802032471 1.96553218364716 1.96447670459747 1.96342194080353 1.96236765384674 1.96131384372711 1.96026062965393 1.9581550359726 1.95710277557373 1.95605099201202 1.9549994468689 1.95394814014435 1.95289695262909 1.95184588432312 1.95079505443573 1.94869375228882 1.94764304161072 1.94659245014191 1.94554173946381 1.94449102878571 1.9433818149567
593.4	1.94133818149567
594.8	1.94028699398041
596.2	1.93923556804657
597.6	1.93818390369415
599	1.93713200092316
600.4	1.93607974052429
601.8	1.93502712249756
603.2	1.93397426605225
604.6	1.93292105197906
606	1.93186736106873
607.4	1.93081343173981
608.8	1.92975890636444
610.2	1.92870390415192
611.6	1.92764854431152
613	1.92659246921539
614.4	1.92553603649139
615.8	1.92447900772095
617.2	1.92342126369476
618.6	1.92236292362213
620	1.92130410671234
621.4	1.92024445533752
622.8	1.91918432712555
624.2	1.91812324523926
625.6	1.91706156730652
627	1.91706156730652
628.4	1.91493594646454
629.8	1.9138720035553

631.2	1.91280722618103
632.6	1.91174173355103
634	1.91067516803741
635.4	1.90960788726807
636.8	1.9085396528244
638.2	1.90747058391571
639.6	1.90640044212341
641	1.90532958507538
642.4	1.90425765514374
643.8	1.90318477153778
645.2	1.90211069583893
646.6	1.90103590488434
648	1.89995980262756
649.4	1.89888286590576
650.8	1.89780473709106
652.2	1.89672553539276
653.6	1.89564526081085
655	1.89456379413605
656.4	1.89348125457764
657.8	1.89239764213562
659.2	1.89131259918213
660.6	1.89022660255432
662	1.88913917541504
663.4	1.88805079460144
664.8	1.88696098327637
666.2	1.88587009906769
667.6	1.88477778434753
669	1.88368427753448
670.4	1.88258934020996
671.8	1.88149333000183
673.2	1.88039565086365
674.6	1.87929701805115
676	1.87819671630859
677.4	1.87709522247314
678.8	1.87599217891693
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Wavelength λ (nm) 201.4 202.8 204.2 205.6 207 208.4 209.8 211.2 212.6 214 215.4 216.8 218.2 219.6 221 222.4 223.8 225.2 226.6 228 229.4 230.8 232.2 233.6 235	Extinction coefficient <i>k</i> (-) 5.50407581031322E-02 .060247827321291 6.61738216876984E-02 7.29600116610527E-02 8.07860717177391E-02 8.98831784725189E-02 .100554630160332 .113204590976238 .128384754061699 .146865576505661 .169750198721886 .198661774396896 .236030355095863 .285485655069351 .352063089609146 .441064149141312 .553943514823914 .684831500053406 .824997842311859 .969071865081787 1.11556482315063 1.26506614685059 1.41903257369995 1.57928681373596 1.74780452251434

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1555.2

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244.0	
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	6 642050207027425 02
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200 /	
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299.4 300.8	
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300.8 302.2 303.6	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02
300.8 302.2 303.6 305	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02
300.8 302.2 303.6 305	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02
300.8 302.2 303.6 305 306.4	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02
300.8 302.2 303.6 305	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02
300.8 302.2 303.6 305 306.4 307.8	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678
300.8 302.2 303.6 305 306.4 307.8 309.2	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02
300.8 302.2 303.6 305 306.4 307.8 309.2	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02
300.8 302.2 303.6 305 306.4 307.8 309.2 310.6	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02
300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02
300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02
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300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02
300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312 313.4 314.8	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02 .041734367609024 4.05394956469536E-02
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300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312 313.4 314.8 316.2	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02 .041734367609024 4.05394956469536E-02 3.94090861082077E-02
300.8 302.2 303.6 305 306.4 307.8 309.2 310.6 312 313.4 314.8 316.2 317.6	5.86740374565125E-02 5.64395748078823E-02 5.43549694120884E-02 5.24068549275398E-02 5.05833327770233E-02 4.88737002015114E-02 .047268521040678 4.57592979073524E-02 4.43383418023586E-02 4.29987795650959E-02 .041734367609024 4.05394956469536E-02 3.94090861082077E-02 3.83384637534618E-02
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1535.6	.601257741451263
1537	.605625927448273
1538.4	.610003471374512
1539.8	.614388704299927
1541.2	.618782520294189
1542.6	.62318342924118
1544	.6275914311409
1545.4	.632005274295807
1546.8	.636425137519836
1548.2	.640849947929382
1549.6	.645279884338379
1551	.64971399307251
1552.4	.654151558876038
1553.8	.658592224121094
1555.2	.663036406040192
1556.6	.667481958866119
1558	.671930432319641
1559.4	.676379323005676
1560.8	.680829882621765
1562.2	.685280740261078
1563.6	.68973183631897
1565	.694182932376862
1566.4	.698633253574371
1567.8	.703082919120789
1569.2	.70753026008606
1570.6	.711977243423462
1572	.716421365737915
1573.4	.72086364030838
1574.8	.725303173065186
1576.2	.729740083217621
1577.6	.734173119068146
1579	.738603174686432

1580.4	.743028998374939
1581.8	.74745124578476
1583.2	.751868724822998
1584.6	.756282508373261
1586	.760691046714783
1587.4	.765094578266144
1588.8	.769493281841278
1590.2	.773885905742645
1591.6	.778273701667786
1593	.782655596733093
1594.4	.787031292915344
1595.8	.791400849819183
1597.2	.795764446258545
1598.6	.800121068954468
1600	.804471969604492

## KCI (Potassium chloride)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.63	1.69512
209.59	1.67736
212.64	1.66432
215.78	1.6547
219.01	1.64718
222.33	1.63921
225.77	1.63119
229.3	1.62362
232.96	1.61646
236.73	1.60969
240.62	1.60326
244.64	1.59714
248.8	1.59132
253.11	1.58576
257.56	1.58044
262.18	1.57539
266.96	1.57057
271.93	1.56597
277.08	1.56155
282.43	1.55734
287.99	1.5533
293.77	1.54942
299.79	1.54569
306.06	1.54215
312.6	1.53874
319.42	1.53546
326.55	1.5323
334.01	1.52927
341.81	1.52639
349.99	1.52359
358.57	1.52072
367.58	1.51843
377.05	1.51586
387.03	1.51349
397.54	1.51121
408.65	1.50903
420.39	1.50694 1.50493
432.83 446.03	1.50493
460.05	1.50115
474.99	1.4998
490.93	1.49749
430.33	1. <del>43/43</del>

507.97	1.49605
526.25	1.4945
545.88	1.49301
567.04	1.49159
589.9	1.49024
614.69	1.48894
641.65	1.48772
671.08	1.48655
703.35	1.48544
738.87	1.4834
778.17	1.4834
821.89	1.48246
870.81	1.48158
925.93	1.48073
988.49	1.47996
1060.12	1.47922
1142.94	1.47852
1239.8	1.4779
Wavelength λ (nm) 206.63 209.59 212.64 215.78 219.01 222.33 225.77 229.30 232.96 236.73 240.62 244.64 248.80 253.11 257.56 262.18 266.96 271.93 277.08 282.43 287.99 293.77 299.79 306.06 312.60 319.42 326.55 334.01 341.81 349.99 358.57 367.58 377.05 387.05 387.03 397.54 408.65 420.39	Extinction coefficient k (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
432.83	0
446.03	0
460.05	0

474.99	0
490.93	0
507.97	0
526.25	0
545.88	0
567.04	0
589.90	0
614.69	0
641.65	0
671.08	0
703.35	0
738.87	0
778.17	0
821.89	0
870.81	0
925.93	0
988.49	0
1060.12	0
1142.94	0
1239.80	0

## MgF2 (Magnesium fluoride)

3 ( ) 3.1001011111111	
Wavelength $\lambda$ (nm)	
250	1.4117
275	1.4044
300	1.3996
325	1.3961
350	1.3935
375	1.3915
400	1.3899
425	1.3886
450	1.3875
475	1.3865
500	1.3857
525	1.385
550	1.3844
575	1.3839
600	1.3834
625	1.383
650	1.3826
675	1.3823
700	1.3819
725	1.3816
750	1.3814
775	1.3811
800	1.3809
825	1.3807
850	1.3805
875	1.3803
900	1.3802

Wavelength λ (nm)	Extinction coefficient <i>k</i> (-)
250.00	0
275.00	0
300.00	0
325.00	0
350.00	0
375.00	0
400.00	0

425.00 450.00 475.00 500.00 525.00 550.00 575.00 600.00 625.00 650.00 675.00 700.00 725.00 750.00 775.00 800.00 825.00 850.00 875.00 900.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MgO (Magnesium oxi	de)
Wavelength λ (nm) 382.1 404.7 500 589.3 706.5 767.9 1000 1128.7 1367.3 1550 1709.2	Refractive index <i>n</i> (-) 1.769 1.761 1.745 1.737 1.731 1.729 1.723 1.721 1.717 1.715 1.713
Wavelength λ (nm) 382.1 404.7 500 589.3 706.5 767.9 1000 1128.7 1367.3 1550 1709.2	Extinction coefficient k (-) 0 0 0 0 0 0 0 0 0 0 0 0 0
Mo (Molybdenum) Wavelength $\lambda$ (nm) 206.63 210.14 213.76 217.51	Refractive index <i>n</i> (-) .85 .873 .895 .924

.959

1.06

1.13

1.22

1

221.39

225.42

229.59

233.92

238.42

243.1 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.9 326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8	1.33 1.46 1.61 1.75 1.9 2.06 2.21 2.39 2.59 2.77 2.91 3.01 3.04 3.04 3.04 3.05 3.06 3.06 3.06 3.05 3.08 3.13 3.22 3.36 3.59 3.79 3.76 3.68 3.68 3.74 3.81 3.84 3.77 3.53 3.15 2.77 2.44 2.16 1.94
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51	Extinction coefficient <i>k</i> (-) 2.64 2.72 2.8 2.89 2.99 3.09 3.2 3.31 3.42 3.53 3.62 3.7 3.76 3.81 3.84 3.87

281.77 288.33 295.19 302.39 309.95 317.90 326.26 335.08 344.39 354.23 364.65 375.70 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.90 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.80	3.88 3.86 3.77 3.67 3.51 3.4 3.31 3.27 3.24 3.21 3.19 3.18 3.18 3.22 3.27 3.33 3.42 3.51 3.61 3.73 3.78 3.61 3.41 3.45 3.52 3.58 3.58 3.51 3.41 3.3 3.4 3.74 4.22 4.85 5.58
Ni (Nickel) Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.1 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.9	Refractive index <i>n</i> (-) 1.01 1.02 1.04 1.06 1.09 1.12 1.16 1.21 1.27 1.33 1.4 1.47 1.53 1.59 1.63 1.67 1.71 1.73 1.74 1.73 1.74

326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8	1.69 1.66 1.64 1.63 1.62 1.61 1.61 1.61 1.62 1.63 1.64 1.65 1.67 1.71 1.75 1.8 1.85 1.92 2.02 2.14 2.28 2.43 2.53 2.65 2.74 2.85 2.97 3.06
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.90 326.26 335.08 344.39 354.23 364.65 375.70 387.44	Extinction coefficient <i>k</i> (-) 1.63 1.67 1.73 1.78 1.83 1.88 1.94 1.99 2.04 2.07 2.1 2.11 2.11 2.11 2.09 2.07 2.06 2.03 2.01 2 1.98 1.98 1.99 2.02 2.07 2.11 2.17 2.23 2.3

399.94	2.36
413.27	2.44
427.52	2.52
442.79	2.61
459.19	2.71
476.85	2.81
495.92	2.93
516.58	3.06
539.04	3.19
563.55	3.33
590.38	3.48
619.90	3.65
652.53	3.82
688.78	4.01
729.29	4.18
774.87	4.31
826.53	4.47
885.57	4.63
953.69	4.85
1033.17	5.1
1127.09	5.38
1239.80	5.74

## NiP (Nickel phosphide)

Wavelength $\lambda$ (nm)	Refractive index n (-	-)
190 191	1.600539 1.605479	
192	1.611022	
193	1.617136	
194	1.623775	
195	1.630875	
196	1.638357	
197	1.64613	
198	1.65409	
199	1.662129	
200	1.670133	
201	1.677993	
202	1.685603	
203	1.69287	
204	1.699713	
205	1.706064	
206	1.711874	
207	1.717109	
208 209	1.721752 1.725797	
210	1.729253	
211	1.732138	
212	1.734479	
213	1.736308	
214	1.73766	
215	1.738575	
216	1.739092	
217	1.73925	
218	1.739088	
219	1.738642	
220	1.737947	
221	1.737034	
222	1.735935	
223	1.734677	
224	1.733283	

225 226 227	1.731776 1.730177 1.728504
228	1.726773
229	1.724997
230	1.72319
231 232	1.721363 1.719525
233	1.717687
234	1.715854
235	1.714035
236 237	1.712235
238	1.710459 1.708712
239	1.706998
240	1.70532
241	1.703682
242 243	1.702087 1.700537
244	1.699033
245	1.697579
246	1.696176
247	1.694824
248 249	1.693526 1.692283
250	1.691096
251	1.689966
252	1.688894
253 254	1.68788 1.686925
255	1.686031
256	1.685198
257	1.684426
258	1.683716
259 260	1.683068 1.682483
261	1.681962
262	1.681506
263	1.681113
264 265	1.680786 1.680524
266	1.680328
267	1.680198
268	1.680134
269	1.680138
270 271	1.680209 1.680348
272	1.680555
273	1.68083
274	1.681174
275 276	1.681587 1.68207
277	1.682622
278	1.683243
279	1.683935
280	1.684696
281 282	1.685528 1.686431
283	1.687404
284	1.688448

	405 406 407 408 409 410 411 412 413 414 415 416 417 418 420 421 423 424 425 427 428 429 430 431 432 433 434 445 446 447 448 449 456 456 456 456 456 456 456 456 456 456	2.016053 2.017661 2.019244 2.020803 2.022339 2.023853 2.025344 2.026815 2.028265 2.029696 2.031108 2.032502 2.033879 2.035238 2.036582 2.03791 2.039224 2.040523 2.041809 2.043083 2.044344 2.045594 2.046833 2.046833 2.048062 2.049281 2.050491 2.051693 2.052887 2.054075 2.055254 2.054075 2.055254 2.056428 2.057597 2.05876 2.059918 2.061073 2.062224 2.063372 2.064517 2.06566 2.06908 2.070218 2.071357 2.072496 2.073635 2.074776 2.075918 2.077062 2.078208 2.079357 2.080508	
459       2.083983         460       2.085149         461       2.086319         462       2.087494         463       2.088674	450 451 452 453 454 455 456 457 458 459 460 461 462 463	2.073635 2.074776 2.075918 2.077062 2.078208 2.079357	

465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506	2.091049 2.092246 2.093447 2.094655 2.09587 2.097091 2.098319 2.099553 2.100795 2.102044 2.1033 2.104565 2.105836 2.107117 2.108405 2.109701 2.111006 2.112319 2.113641 2.114972 2.116311 2.11766 2.119018 2.120385 2.121761 2.123147 2.124542 2.125947 2.125947 2.127362 2.128785 2.13022 2.131663 2.133117 2.134581 2.13654 2.137538 2.139032 2.140536 2.14205 2.143574 2.145109 2.146654
496	2.131663
499	2.136054
501 502	2.139032
504	2.143574
506	2.146654
507	2.148209
508	2.149775
509	2.15135
510	2.152936
511	2.154533
512	2.15614
513	2.157757
514	2.159385
515	2.161023
516	2.162671
517	2.16433
518	2.165999
519	2.167679
520	2.169369
521	2.171069
522	2.172779
523	2.1745
524	2.176231

571 2.268561 572 2.270742	572 573 574	2.270742 2.272931 2.275129
	568 569	2.262068 2.264224
	574 575	2.275129 2.277335
574       2.275129         575       2.277335	577 578	2.281771 2.284001
574       2.275129         575       2.277335         576       2.279549         577       2.281771         578       2.284001	580 581	2.288486 2.29074
5742.2751295752.2773355762.2795495772.2817715782.2840015792.2862395802.284865812.29074	582 583 584	2.293001 2.295271 2.297549
5742.2751295752.2773355762.2795495772.2817715782.2840015792.2862395802.284865812.290745822.2930015832.295271		

585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627	2.299835 2.302129 2.30443 2.306739 2.309055 2.311379 2.313711 2.316051 2.318398 2.320752 2.323114 2.325484 2.327862 2.330246 2.332638 2.337445 2.339859 2.342281 2.344711 2.347147 2.349591 2.352043 2.354502 2.356968 2.359441 2.366906 2.369409 2.37192 2.36441 2.366906 2.369409 2.37192 2.374438 2.376963 2.379496 2.382036 2.382036 2.382036 2.384584 2.387139 2.38272 2.39485 2.397436 2.400029 2.40263
607	2.352043
608	2.354502
610	2.359441
611	2.361922
612	2.36441
614	2.369409
615	2.37192
617	2.376963
618	2.379496
619	2.382036
621	2.387139
622	2.389702
625	2.397436
626	2.400029
628	2.405238
629	2.407854
630	2.410478
631	2.41311
632	2.41575
633	2.418397
634	2.421052
635	2.423716
636	2.426387
637	2.429067
638	2.431755
639	2.43445
640	2.437155
641	2.439867
642	2.442589
643	2.445318
644	2.448056

705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761	2.635445 2.638945 2.642462 2.645998 2.649551 2.653121 2.656711 2.66032 2.663947 2.667594 2.671259 2.674945 2.68865 2.682375 2.686121 2.689886 2.693673 2.697481 2.701309 2.705159 2.709032 2.712925 2.716841 2.72078 2.724741 2.728725 2.732732 2.736763 2.740817 2.744895 2.748998 2.753124 2.757276 2.761452 2.765654 2.76988 2.774133 2.778412 2.782717 2.787048 2.791406 2.795791 2.800203 2.804643 2.809111 2.813606 2.81813 2.822682 2.827264 2.831874 2.836514 2.845882 2.850611 2.855371 2.860161 2.864982
759	2.855371
760	2.860161

885 886 887 888 889 890 891 892 893 894 895 896 897 898 899	3.762905 3.772696 3.782523 3.792384 3.802279 3.812208 3.82217 3.832165 3.842191 3.852251 3.862342 3.872463 3.882616 3.892798 3.903011 3.913252
Wavelength λ (nm) 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231	Extinction coefficient <i>k</i> (-) 1.51E+00 1.52E+00 1.53E+00 1.54E+00 1.55E+00 1.55E+00 1.57E+00 1.57E+00 1.58E+00 1.58E+00 1.59E+00 1.59E+00 1.59E+00 1.59E+00 1.58E+00 1.57E+00 1.57E+00 1.57E+00 1.57E+00 1.57E+00 1.57E+00 1.57E+00 1.57E+00 1.58E+00

232	1.59E+00
233	1.59E+00
234	1.60E+00
235	1.60E+00
236	1.60E+00
237	1.61E+00
238	1.61E+00
239	1.61E+00
240	1.62E+00
241	1.62E+00
242	1.62E+00
243	1.63E+00
244	1.63E+00
245	1.64E+00
246	1.64E+00
247	1.64E+00
248	1.65E+00
249	1.65E+00
250	1.66E+00
251	1.66E+00
252	1.67E+00
253	1.67E+00
254	1.68E+00
255	1.68E+00
256	1.69E+00
257	1.69E+00
258	1.70E+00
259	1.70E+00
260	1.71E+00
261	1.71E+00
262	1.72E+00
263	1.72E+00
264	1.73E+00
265	1.73E+00
266	1.74E+00
267	1.75E+00
268	1.75E+00
269	1.76E+00
270	1.76E+00
271	1.77E+00
272	1.77E+00
273	1.78E+00
274	1.78E+00
275	1.79E+00
276	1.80E+00
277	1.80E+00
278	1.81E+00
279	1.81E+00
280	1.82E+00
281	1.82E+00
282	1.83E+00 1.84E+00
283 284	1.84E+00
285	1.85E+00
286	1.85E+00
287	1.86E+00
288	1.86E+00
289	1.87E+00
290	1.88E+00
291	1.88E+00

292	1.89E+00
293	1.89E+00
294	1.90E+00
295	1.90E+00
296	1.91E+00
297	1.92E+00
298	1.92E+00 1.92E+00
299	1.93E+00
300	1.93E+00
301	1.94E+00
302	1.94E+00
303	1.95E+00
304	1.95E+00
305	1.96E+00
306	1.97E+00
307	1.97E+00
308	1.98E+00
309	1.98E+00
310	1.99E+00
311	1.99E+00
312	2.00E+00
313	2.00E+00
314	2.01E+00
315	2.01E+00
316	2.02E+00
317	2.02E+00
318	2.03E+00
319	2.03E+00
320	2.04E+00
321	2.04E+00
322	2.05E+00
323	2.05E+00
324	2.05E+00
325	2.06E+00
326	2.06E+00
327	2.07E+00
328	2.07E+00
329	2.08E+00
330	2.08E+00
331	2.08E+00
332	2.09E+00
333	2.09E+00
334	2.10E+00
335	2.10E+00
336	2.10E+00
337	2.11E+00
338	2.11E+00
339	2.11E+00
340	2.12E+00
341	2.12E+00
342	2.12E+00
343	2.13E+00
344	2.13E+00
345	2.13E+00
346	2.14E+00
347	2.14E+00
348	2.14E+00
349	2.15E+00
350	2.15E+00
351	2.15E+00

352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 404 404 404 404	2.15E+00 2.16E+00 2.16E+00 2.16E+00 2.17E+00 2.17E+00 2.17E+00 2.17E+00 2.18E+00 2.18E+00 2.18E+00 2.19E+00 2.19E+00 2.19E+00 2.20E+00 2.20E+00 2.20E+00 2.21E+00 2.22E+00 2.22E+00 2.23E+00 2.23E+00 2.23E+00 2.23E+00 2.23E+00 2.23E+00 2.23E+00 2.24E+00 2.24E+00 2.24E+00 2.24E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00 2.25E+00
400 401 402 403	2.25E+00 2.25E+00 2.25E+00 2.26E+00
411	2.27E+00

412	2.27E+00
413	2.28E+00
414	2.28E+00
415	2.28E+00
416	2.28E+00
417	2.28E+00
418	2.29E+00
419	2.29E+00
420	2.29E+00
421	2.29E+00
	2.29E+00
422	
423	2.30E+00
424	2.30E+00
425	2.30E+00
426	2.30E+00
427	2.31E+00
428	2.31E+00
429	2.31E+00
430	2.31E+00
431	2.31E+00
432	2.32E+00
433	2.32E+00
434	2.32E+00
435	2.32E+00
436	2.33E+00
437	2.33E+00
438	2.33E+00
439	2.33E+00
440	2.34E+00
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442	2.34E+00
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446	2.35E+00
447	2.35E+00
448	2.36E+00
449	2.36E+00
450	2.36E+00
451	2.36E+00
452	2.37E+00
453	2.37E+00
454	2.37E+00
455	2.38E+00
456	2.38E+00
457	2.38E+00
458	2.38E+00
459	2.39E+00
460	2.39E+00
461	2.39E+00
462	2.40E+00
463	2.40E+00
464	2.40E+00
465	2.40E+00
466	2.41E+00
467	2.41E+00
468	2.41E+00
469	2.42E+00
470	2.42E+00
471	2.42E+00

472 473	2.43E+00 2.43E+00
474	2.43E+00
475	2.43E+00
476	2.44E+00
477	2.44E+00
478	2.44E+00 2.44E+00
479	2.44E+00 2.45E+00
480	2.45E+00 2.45E+00
481	2.45E+00
482	2.46E+00
483	2.46E+00
484	2.46E+00
485	2.47E+00
486	2.47E+00
487	2.47E+00
488	2.47E+00
489	2.48E+00
490	2.48E+00
491	2.48E+00
492	2.49E+00
493	2.49E+00
494	2.49E+00
495	2.50E+00
496	2.50E+00
497	2.50E+00
498	2.51E+00
499	2.51E+00
500	2.51E+00
501	2.52E+00
502	2.52E+00
503	2.52E+00
504	2.53E+00
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518	2.57E+00
519	2.58E+00
520	2.58E+00
521	2.58E+00
522	2.59E+00
523	2.59E+00
524	2.60E+00
525	2.60E+00
526	2.60E+00
527	2.61E+00
528	2.61E+00
529 530	2.61E+00
531	2.62E+00 2.62E+00
JJ 1	2.02⊑₹00

532	2.62E+00
533	2.63E+00
534	2.63E+00
535	2.63E+00
536	2.64E+00
537	2.64E+00
538	2.64E+00
539	2.65E+00
540	2.65E+00
541	2.65E+00
542	2.66E+00
543	2.66E+00
544	2.66E+00
545	2.67E+00
546	2.67E+00
547	2.68E+00
548	2.68E+00
549	2.68E+00
550	2.69E+00
551	2.69E+00
552	2.69E+00
553	2.70E+00
554	2.70E+00
555	2.70E+00
556	2.71E+00
557	2.71E+00
558	2.71E+00
559	2.72E+00
560	2.72E+00
561	2.72E+00
562	2.73E+00
563	2.73E+00
564	2.74E+00
565	2.74E+00
566	2.74E+00
567	2.75E+00
568	2.75E+00
569	2.75E+00
570	2.76E+00
571	2.76E+00
572	2.76E+00
573	2.77E+00
574	2.77E+00
575	2.77E+00
576	2.78E+00
577	2.78E+00
578	2.79E+00
579	2.79E+00
580	2.79E+00
581	2.80E+00
582	2.80E+00
583	2.80E+00
584	2.81E+00
585	2.81E+00
586	2.81E+00
587	2.82E+00
588	2.82E+00
589	2.82E+00
590	2.83E+00
591	2.83E+00
Jel	∠.03⊑+00

592	2.84E+00
593	2.84E+00
594	2.84E+00
595	2.85E+00
596	2.85E+00
597	2.85E+00
598	2.86E+00
599	2.86E+00
600	2.86E+00
601	2.87E+00
602	2.87E+00
603	2.88E+00
604	2.88E+00
605	2.88E+00
606	2.89E+00
607	2.89E+00
608	2.89E+00
609	2.90E+00
610	2.90E+00
611	2.90E+00
612	2.91E+00
613	2.91E+00
614	2.92E+00
615	2.92E+00
616	2.92E+00
617	2.93E+00
618	2.93E+00
619	2.93E+00
620	2.94E+00
621	2.94E+00
622	2.95E+00
623	2.95E+00
624	2.95E+00
625	2.96E+00
626	2.96E+00
627	2.96E+00
628	2.97E+00 2.97E+00
629 630	2.98E+00
631	2.98E+00
632	2.98E+00
633	2.99E+00
634	2.99E+00
635	2.99E+00
636	3.00E+00
637	3.00E+00
638	3.01E+00
639	3.01E+00
640	3.01E+00
641	3.02E+00
642	3.02E+00
643	3.02E+00
644	3.03E+00
645	3.03E+00
646	3.04E+00
647	3.04E+00
648	3.04E+00
649	3.05E+00
650	3.05E+00
651	3.05E+00

652	3.06E+00
653	3.06E+00
654	3.07E+00
655	3.07E+00
656	3.07E+00
657	3.08E+00
658	3.08E+00
659	3.09E+00
660	3.09E+00
661	3.09E+00
662	3.10E+00
663	3.10E+00
664	3.11E+00
665	3.11E+00
666	3.11E+00
667	3.12E+00
668	3.12E+00
669	3.12E+00
670	3.13E+00
671	3.13E+00
672	3.14E+00
673	3.14E+00
674	3.14E+00
675	3.15E+00
676	3.15E+00
677	3.16E+00
678	3.16E+00
679	3.17E+00
680	3.17E+00
681	3.17E+00
682	3.18E+00
683	3.18E+00
684	3.19E+00
685	3.19E+00
686	3.19E+00
687	3.20E+00
688	3.20E+00
689	3.21E+00
690	3.21E+00
691	3.21E+00
692	3.22E+00
693	3.22E+00
694	3.23E+00
695	3.23E+00
696	3.24E+00
697	3.24E+00
698	3.24E+00
699	3.25E+00
700	3.25E+00
701	3.26E+00
702	3.26E+00
703	3.26E+00
704	3.27E+00
705	3.27E+00
706	3.28E+00
707	3.28E+00
708	3.29E+00
709	3.29E+00
710	3.29E+00
711	3.30E+00

772	3.58E+00
773	3.58E+00
774	3.59E+00
775	3.59E+00
776	3.60E+00
777	3.60E+00
778	3.61E+00
779	3.61E+00
780	3.62E+00
781	3.62E+00
782	3.63E+00
783	3.63E+00
784	3.64E+00
785	3.64E+00
786	3.64E+00
787	3.65E+00
788	3.65E+00
789	3.66E+00
790	3.66E+00
791	3.67E+00
792	3.67E+00
793	3.68E+00
794	3.68E+00
795	3.69E+00
796	3.69E+00
797	3.70E+00
798	3.70E+00
799	3.71E+00
800	3.71E+00
801	3.72E+00
802	3.72E+00
803	3.72E+00
804	3.73E+00
805	3.73E+00
806	3.74E+00
807	3.74E+00
808	3.75E+00
809	3.75E+00
810	3.76E+00
811	3.76E+00
812	3.77E+00
813	3.77E+00
814	3.78E+00
815	3.78E+00
816	3.78E+00
817	3.79E+00
818	3.79E+00
819	3.80E+00
820	3.80E+00
821	3.81E+00
822	3.81E+00
823	3.82E+00
824	3.82E+00
825	3.82E+00
826	3.83E+00
827	3.83E+00
828	3.84E+00
829	3.84E+00
830	3.85E+00
831	3.85E+00

832 833 834 835 836 837 838 839 840	3.85E+00 3.86E+00 3.86E+00 3.87E+00 3.87E+00 3.88E+00 3.88E+00 3.88E+00
841	3.89E+00
842	3.90E+00
843	3.90E+00
844	3.90E+00
845	3.91E+00
846	3.91E+00
847	3.92E+00
848	3.92E+00
849	3.92E+00
850	3.93E+00
851	3.93E+00
852	3.93E+00
853	3.94E+00
854	3.94E+00
855	3.94E+00
856	3.95E+00
857	3.95E+00
858	3.96E+00
859	3.96E+00
860	3.96E+00
861	3.97E+00
862	3.97E+00
863	3.97E+00
864	3.98E+00
865	3.98E+00
866	3.98E+00
867	3.99E+00
868	3.99E+00
869	3.99E+00
870	4.00E+00
871 872 873 874 875	4.00E+00 4.00E+00 4.00E+00 4.01E+00 4.01E+00 4.01E+00
876 877 878 879 880 881	4.01E+00 4.02E+00 4.02E+00 4.02E+00 4.03E+00
882	4.03E+00
883	4.03E+00
884	4.03E+00
885	4.04E+00
886	4.04E+00
887	4.04E+00
888	4.04E+00
889	4.05E+00
890	4.05E+00
891	4.05E+00

892 893 894 895 896 897 898 899	4.05E+00 4.05E+00 4.06E+00 4.06E+00 4.06E+00 4.06E+00 4.06E+00 4.06E+00 4.07E+00
PbS (Lead sulphide) Wavelength $\lambda$ (nm) 199.97 204.92 210.13 215.61 221.38 227.47 233.9 240.71 247.93 255.59 263.74 272.43 281.71 291.64 302.3 313.77 326.15 339.54 354.07 369.91 387.23 406.25 427.24 450.51 476.47 505.6 538.52 576.03 619.16 669.26 728.19 798.5 883.84 989.6 1124.11 1300.94	Refractive index n (-) 1.13 1.2 1.22 1.22 1.24 1.3 1.37 1.43 1.5 1.53 1.54 1.54 1.6 1.69 1.77 1.97 2.33 2.78 3.17 3.46 3.79 4.12 4.25 4.33 4.35 4.32 4.29 4.47 4.6 4.6 4.6 4.5 4.44 4.34 4.28
Wavelength λ (nm) 199.97 204.92 210.13 215.61 221.38 227.47 233.90 240.71 247.93	Extinction coefficient <i>k</i> (-) 1.7 1.74 1.78 1.82 1.87 1.93 1.99 2.05 2.09

255.59 263.74 272.43 281.71 291.64 302.30 313.77 326.15 339.54 354.07 369.91 387.23 406.25 427.24 450.51 476.47 505.60 538.52 576.03 619.16 669.26 728.19 798.50 883.84 989.60 1124.11 1300.94	2.14 2.23 2.35 2.48 2.58 2.74 2.88 3.08 3.32 3.37 3.24 3.08 2.71 2.33 2.08 1.83 1.62 1.53 1.48 1.36 1.12 0.92 0.83 0.6 0.49 0.4
PbSe (Lead selenide) Wavelength $\lambda$ (nm) 206.63 216.11 226.5 237.94 250.6 264.68 280.43 298.18 318.33 341.39 368.07 399.26 436.23 480.74 535.37 604.01 692.83 812.28 981.51 1239.8	Refractive index <i>n</i> (-) .64 .61 .58 .55 .54 .55 .57 .61 .65 .69 .83 1.11 1.55 2.14 2.81 3.51 4.24 4.63 4.64 4.65
Wavelength λ (nm) 206.63 216.11 226.50 237.94 250.60 264.68 280.43	Extinction coefficient <i>k</i> (-) 0.86 0.92 1.01 1.12 1.2 1.2 1.38

604.01 2.9 692.83 2.7	-
692.83 2.7	4 7
812.28       2.6         981.51       1.6         1239.80       1.1	•

## PET

PET	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
399.78	1.7004
400.76	1.6985
401.73	1.6966
402.71	1.6947
403.69	1.6929
404.66	1.6911
405.64	1.6893
406.61	1.6875
407.59	1.6857
408.56	1.684
409.53	1.6823
410.51	1.6806
411.48	1.6789
412.45	1.6773
413.43	1.6756
414.4	1.674
415.37	1.6724
416.34	1.6709
417.31	1.6693
418.28	1.6678
419.25	1.6663
420.22	1.6648
421.19	1.6633
422.16	1.6619
423.13	1.6605
424.1	1.659
425.07	1.6576
426.04	1.6562
427	1.6549
427.97	1.6535
428.94	1.6522
429.9	1.6509
430.87	1.6496
431.84	1.6483
432.8	1.647
433.77	1.6458
434.73	1.6446
435.7	1.6433
436.66	1.6421
437.62	1.6409
438.59	1.6397
439.55	1.6386
440.51	1.6374

554.44 555.36 556.28 557.2 558.12 559.04 559.96 560.88 561.8 562.71 563.63 564.55 565.46 566.38 567.3 568.21 569.13 570.04 570.96 571.87 572.78 573.7 574.61 575.52 576.44 577.35 578.26 579.17 580.08 581.9 582.81 583.72 584.63 585.54 587.36 585.54 587.36 588.27 589.18 590.99 591.9 592.8 593.71 595.52 596.42 597.33 598.23 599.14 600.04 601.85 602.75 603.65	1.5613 1.5607 1.5604 1.5601 1.5598 1.5595 1.5592 1.5589 1.5586 1.5583 1.5575 1.5572 1.5566 1.5564 1.5561 1.5558 1.5553 1.5553 1.5554 1.5553 1.5538 1.5533 1.5531 1.5538 1.5533 1.5531 1.5524 1.5533 1.5524 1.5524 1.55517 1.5512 1.5512 1.5506 1.55497 1.5499 1.5497 1.5495 1.5483 1.5481 1.5489
600.94	1.5485
601.85	1.5483
602.75	1.5481

609.06 609.96 610.85 611.75 612.65 613.55 614.45 615.35 616.24 617.14 618.04 619.83 620.72 621.62 622.51 623.41 624.3 625.2 626.09 626.98 627.88 630.55 631.44 632.33 634.12 635.01 635.9 636.78 640.34 641.23 642.11 643.89 644.77 645.66 646.54 647.43 648.31 649.2 650.08 650.97 651.85 652.73 653.61 654.5 655.38 655.26 657.14	1.5468 1.5464 1.5464 1.5463 1.5461 1.5459 1.5457 1.5456 1.5454 1.5452 1.5454 1.5445 1.5444 1.5443 1.5439 1.5431 1.5433 1.5431 1.5438 1.5424 1.5424 1.5425 1.5424 1.5425 1.5424 1.5421 1.5421 1.5421 1.5421 1.5421 1.5438 1.5431 1.5433 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5433 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5433 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5431 1.5433 1.5339
653.61 654.5 655.38 656.26	1.5394 1.5392 1.5391

714.54 715.4 716.26 717.12 717.97 718.83 719.69 720.54 721.4 722.26 723.11 723.96 724.82 725.67 726.53 727.38 728.23 729.09 729.94 730.79 731.64 732.49 733.34 734.19 735.04 735.89 736.74 737.59 738.44 739.29 740.14 740.99 741.83 742.68 743.53 744.37 745.22 746.06 746.91 747.75 748.6 749.44 750.29 751.13 751.97 752.82 753.66 754.5 755.34 766.19 757.03 757.87 758.71 759.55 760.39 761.23 762.07 762.91 763.74 764.58	1.533 1.5329 1.5328 1.5328 1.5327 1.5326 1.5326 1.5325 1.5324 1.5322 1.5322 1.5321 1.5321 1.5321 1.5319 1.5319 1.5318 1.5318 1.5316 1.5315 1.5316 1.5315 1.5311 1.5311 1.5311 1.5311 1.5311 1.5311 1.5311 1.5311 1.5311 1.5309 1.5309 1.5308 1.5309 1.5308 1.5309 1.5309 1.5309 1.5309 1.5301 1.5301 1.5301 1.5301 1.5302 1.5301 1.5302 1.5301 1.5302 1.5301 1.5302 1.5301 1.5302 1.5302 1.5303 1.5303 1.5303 1.5303 1.5303 1.5304 1.5303 1.5304 1.5304 1.5305 1.5305 1.5306 1.5307 1.5307 1.5308 1.5309 1.5
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769.6 770.44 771.27 772.11 772.94 773.78 774.61 775.44 776.28 777.11 777.94 778.78 779.61 780.44 781.27 782.1 782.93 783.76 784.59 785.42 786.25 787.08 787.91 788.73 789.56 790.39 791.22 792.04 792.87 793.7 794.52 795.35 796.17 797 797.82 798.64 799.47 800.29 801.11 801.94 802.76 803.58 804.4 805.22 806.04 806.86 807.68 808.5 809.32 810.14 810.96	1.5295 1.5294 1.5294 1.5294 1.5294 1.5293 1.5292 1.5292 1.5292 1.5292 1.5299 1.5299 1.5289 1.5289 1.5288 1.5287 1.5288 1.5288 1.5287 1.5287 1.5287 1.5287 1.5287 1.5287 1.5277 1.5277
808.5 809.32 810.14 810.96 811.78 812.6 813.41	1.5278 1.5277 1.5277

815.86 816.68 817.5 818.31 819.13 819.94 820.76 821.57 822.38 823.2 824.01 824.82 825.64 826.45 827.26 828.07 828.88 829.69 830.5 831.31 832.12 832.93 833.74 834.55 835.36 836.17 836.97 837.78 838.59 839.39 840.2 841.01 841.81 842.62 843.42 844.23 845.03 845.83 845.03 845.83 846.64 847.44 848.24 849.05 849.85	1.5275 1.5275 1.5275 1.5274 1.5274 1.5274 1.5273 1.5273 1.5273 1.5273 1.5272 1.5272 1.5272 1.5272 1.5271 1.5271 1.5271 1.5271 1.5271 1.527 1.527 1.5269 1.5269 1.5269 1.5268 1.5268 1.5268 1.5268 1.5268 1.5267 1.5267 1.5267 1.5267 1.5267 1.5267 1.5266 1.5266 1.5266 1.5266 1.5265 1.5265 1.5265
Polycarb Wavelength λ (nm) 370 380 390 400 410 420 430 440 450 460 470 480	Refractive index <i>n</i> (-) 1.64002 1.63417 1.629 1.62441 1.62031 1.61663 1.61331 1.6103 1.60756 1.60506 1.60276 1.60065

1.5987

1.5275

1.5275

815.05

815.86

490

## Polyolef

Polyolei			
Wavelength	λ	(nm)	Refractive index n (-)
370			1.55405
380			1.54996
390			1.54664
400			1.5439
410			1.54163
420			1.53971
430			1.53806
440			1.53663
450			1.53538
460			1.53426
470			1.53325
480			1.53232
490			1.53147
500			1.53069
510			1.52995
520			1.52925
530			1.5286
540			1.52797
550			1.52738
560			1.52682
570			1.52628
580			1.52576
590			1.52526
600			1.52479
610			1.52433
620			1.5239
630			1.52348
640			1.52308
650			1.5227
660			1.52234
670			1.52199
680			1.52166
690			1.52135
700			1.52105
710			1.52077
720			1.5205
730			1.52025
740			1.52002
750			1.51979
760			1.51959
770			1.51939
780			1.51921
790			1.51905
			1.51889
800			
810			1.51875
820			1.51863
830			1.51851
840			1.51841
850			1.51832
860			1.51825
870			1.51818
			1.51812
880			
890			1.51808
900			1.51805
910			1.51803
920			1.51802
			-

930	1.51802
940	1.51803
950	1.51805
960	1.51808
970	1.51812
980	1.51817
990	1.51823
1000	1.51829
1010	1.51837
1020	1.51846
1030	1.51855
1040	1.51865
1050	1.51876
1060	1.51888
1070	1.51901
1080	1.51915
1090	1.51929
1100	1.51944

## Polystyrene

Polystyrene	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
370	1.64046
380	1.63553
390	1.63109
400	1.62708
410	1.62344
420	1.62012
430	1.6171
440	1.61432
450	1.61177
460	1.60942
470	1.60725
480	1.60524
490	1.60337
500	1.60164
510	1.60002
520	1.59851
530	1.5971
540	1.59577
550	1.59453
560	1.59336
570	1.59226
580	1.59123
590	1.59025
600	1.58932
610	1.58845
620	1.58762
630	1.58683
640	1.58609
650	1.58538
660	1.5847
670	1.58406
680	1.58345
690	1.58286
700	1.5823
710	1.58177
720	1.58126
730	1.58077
740	1.58031
750	1.57986

760	1.57943
770	1.57902
780	1.57863
790	1.57825
800	1.57788
810	1.57753
820	1.5772
830	1.57687
840	1.57656
850	1.57626
860	1.57597
870	1.57569
880	1.57542
890	1.57516
900	1.57491
910	1.57466
920	1.57443
930	1.5742
940	1.57398
950	1.57377
960	1.57356
970	1.57336
980	1.57317
990	1.57298
1000	1.5728
1010	1.57262
1020	1.57245
1030	1.57228
1040	1.57212
1050	1.57197
1060	1.57182
1070	1.57167
1080	1.57152
1090	1.57139
1100	1.57125

Pt (Platinum) Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.63 210.72	1.38 1.37
214.97	1.36
219.39	1.36
224	1.36
228.8	1.36
233.82	1.36
239.06	1.36
244.55	1.36
250.29	1.36
256.3	1.38
262.62	1.38
269.25	1.39
276.22	1.41 1.43
283.57 291.32	1.43 1.44
299.5	1.46
308.16	1.49
317.33	1.51
327.06	1.53
337.41	1.57
348.44	1.59

360.21	1.61
372.81	1.64
386.31	1.68
400.84	1.72
416.5	1.76
433.43	1.81
451.79	1.85
471.78	1.9
493.62	1.95
517.59	2.03
543.99	2.11
573.24	2.19
605.81	2.27
642.31	2.35
683.48	2.49
730.29	2.63
783.99	2.79
846.21	2.98
919.16	3.19
1005.88	3.46
1110.65	3.81
1239.8	4.25
Wavelength λ (nm) 206.63 210.72 214.97 219.39 224 228.8 233.82 239.06 244.55 250.29 256.3 262.62 269.25 276.22 283.57 291.32 299.5 308.16 317.33 327.06 337.41 348.44 360.21 372.81 386.31 400.84 416.5 433.43 451.79 471.78 493.62 517.59 543.99 573.24 605.81 642.31	Extinction coefficient <i>k</i> (-) 1.4 1.44 1.48 1.52 1.56 1.6 1.64 1.68 1.73 1.78 1.83 1.89 1.95 2 2.05 2.11 2.17 2.24 2.32 2.37 2.43 2.51 2.59 2.67 2.75 2.85 2.94 3.05 3.16 3.27 3.41 3.55 3.69 3.82 4 4.2

683.48 730.29 783.99 846.21 919.16 1005.88 1110.65 1239.8	4.41 4.63 4.88 5.15 5.46 5.82 6.19 6.62
PZT Wavelength $\lambda$ (nm) 593.14 600.89 610.54 620.16 630.69 640.23 650.68 660.14 670.5 680.82 690.16 700.39 710.58 720.72 730.82 740.87 750.88 760.85 770.76 780.64 790.47 800.25 810.88 820.57 830.21 840.68 850.24 860.61 870.07 880.33 890.55 900.71 910.82 920.03 930.04 940.82 950.71 960.55 970.34 980.08 990.56 1000.19 1010.55 1020.06 1030.31 1040.49	Refractive index <i>n</i> (-) 2.3994 2.3989 2.3983 2.3978 2.3974 2.3971 2.3969 2.3969 2.3969 2.3972 2.3976 2.3981 2.3989 2.3998 2.401 2.4023 2.4039 2.4056 2.4075 2.4095 2.4118 2.4142 2.4169 2.4195 2.4223 2.4253 2.4282 2.4313 2.4282 2.4313 2.4343 2.4374 2.4406 2.4437 2.4467 2.4494 2.4523 2.4553 2.458 2.4606 2.463 2.4677 2.4698 2.4719 2.4737 2.4756 2.4773  Extinction coefficient <i>k</i> (-)
3 ( )	( )

593.14 600.89 610.54 620.16 630.69 640.23 650.68 660.14 670.5 680.82 690.16 700.39 710.58 720.72 730.82 740.87 750.88 760.85 770.76 780.64 790.47 800.25 810.88 820.57 830.21 840.68 850.24 860.61 870.07 880.33 890.55 900.71 910.82 920.03 930.04 940.82 950.71 960.55 970.34 980.08 990.56 1000.19 1010.55 1020.06 1030.31 1040.49	0.0023 0.0023 0.0023 0.0024 0.0024 0.0025 0.0025 0.0025 0.0026 0.0026 0.0027 0.0027 0.0027 0.0027 0.0028 0.0028 0.0028 0.0029 0.0029 0.0029 0.0030 0.0031 0.0031 0.0031 0.0031 0.0031 0.0031 0.0032 0.0032 0.0032 0.0032 0.0032 0.0032 0.0032 0.0032 0.0033 0.0033 0.0033 0.0033 0.0034 0.0034 0.0034 0.0035 0.0035 0.0035 0.0035 0.0036
1040.49 <b>Quartz</b>	0.0036

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
200	1.655
210	1.645
220	1.635
230	1.625
240	1.615
250	1.605
270	1.595
310	1.585
330	1.575
380	1.565
490	1.555

1030 2050	1.535 1.525
Rh (Rhenium) Wavelength λ (nm) 206.63 210.36 214.23 218.24 222.41 226.73 231.23 235.91 240.79 245.87 251.17 256.7 262.48 268.53 274.86 281.5 288.47 295.79 303.49 311.61 320.17 329.21 338.78 348.93 359.7 371.15 383.36 396.4 410.36 425.33 441.44 458.82 477.63 498.04 520.27 544.59 571.28 600.73 633.38 669.78 710.62 756.76 809.31 869.71 939.85 1022.29 1120.59 1239.8	Refractive index <i>n</i> (-) .76 .78 .79 .8 .8 .8 .8 .79 .79 .79 .79 .79 .79 .79 .79 .79 .79
Wavelength λ (nm) 206.63 210.36 214.23	Extinction coefficient <i>k</i> (-) 1.93 1.97

1.545

770

222.41 226.73 231.23 235.91 240.79 245.87 251.17 256.7 262.48 268.53 274.86 281.5 288.47 295.79 303.49 311.61 320.17 329.21 338.78 348.93 359.7 371.15 383.36 396.4 410.36 425.33 441.44 458.82 477.63 498.04 520.27 544.59 571.28 600.73 633.38 669.78 710.62 756.76 809.31 869.71	2.07 2.11 2.16 2.2 2.26 2.32 2.37 2.44 2.51 2.59 2.67 2.76 2.85 2.95 3.04 3.14 3.26 3.38 3.5 3.64 3.78 3.92 4.05 4.17 4.27 4.35 4.42 4.49 4.55 4.66 4.81 4.98 5.16 5.37 5.61 5.88 6.19 6.52 6.86 7.22
1120.59 1239.8	8.24 8.67
RTC Wavelength λ (nm) 220 240 260 280 300 320 340 360 380 400 420 440	Refractive index <i>n</i> (-) 1.617859538 1.59341563 1.57582863 1.562768287 1.552808642 1.545040688 1.538864256 1.533870851 1.529774952 1.526372266 1.523513564 1.521087812

1.521087812

2.04

2.07

218.24

222.41

440

460	1.519011015
480	1.517218685
500	1.51566064
520	1.514297352
540	1.513097336
560	1.512035263
580	1.511090559
600	1.510246373
620	1.509488795
640	1.508806254
660	1.508189063
680	1.507629059
700	1.507119325
720	1.506653965
740	1.506227929
760	1.505836869
780	1.505477028
800	1.505145142
820	1.504838364
840	1.504554207
860	1.504290481
880	1.504045261
900	1.503816842
920	1.503603713
940	1.50340453
960	1.503218095
980	1.503043335
1000	1.50287929
1020	1.502725096
1040	1.502579975
1060	1.502443225

# Si (Silicon)

Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.6333	1.01008
210.1356	1.08306
213.7586	1.13279
217.5088	1.18606
221.3929	1.2473
225.4182	1.33965
229.5926	1.47142
233.9245	1.57857
238.4231	1.58853
243.098	1.5712
247.96	1.57023
248.4569	1.5729
248.9558	1.57507
249.4567	1.5769
249.9597	1.57966
250.4646	1.58222
250.9717	1.58416
251.4807	1.58695
251.9919	1.59092
252.5051	1.5943
253.0204	1.5969
253.5378	1.60174
254.0574	1.60842
254.5791	1.61276
255.1029	1.61758
255.6289	1.62288

340.6044 341.5427 342.4862 343.4349 344.3889 345.3482 346.3128 347.2829 348.2584 349.2394 350.226 351.2181 352.2159 353.2194 354.2285 355.2436 356.2644 357.291 358.3237 359.3623 360.407 361.4577 362.5146 363.5777 364.6471 365.7227 366.8047 367.8932 368.9881 370.0895 371.1976 372.3123 373.4337 374.5619 375.697 376.8389 377.9878 379.1437 380.3067 382.6543 387.4375 389.8742 392.3418 394.8408 397.3718 399.9355 402.5325 405.1634 407.8289 410.5298 411.5298 411.5298 411.5298 411.5298	5.23113 5.24614 5.26126 5.27784 5.29553 5.31486 5.33551 5.35843 5.38336 5.41074 5.47546 5.51484 5.55928 5.61024 5.66668 5.7334 5.80893 5.89392 5.98673 6.08857 6.19445 6.30814 6.41547 6.52193 6.61324 6.69477 6.75434 6.79629 6.82012 6.8284 6.8219 6.79905 6.75779 6.70892 6.6486 6.58516 6.51996 6.45206 6.31568 6.18523 6.06249 5.94818 5.84181 5.74366 5.65387 5.56999 5.49252 5.42025 5.3491 5.28373 5.22209 5.16412 5.10914
407.8289	5.3491
410.5298	5.28373
413.2667	5.22209
416.0403	5.16412

626.1616 3.893 629.3401 3.88721 632.551 3.88154 635.7949 3.87587 639.0721 3.87031 642.3834 3.86449 645.7291 3.85827 649.1099 3.85244 652.5263 3.84672 655.9788 3.84152 659.4681 3.8367 662.9946 3.83122 666.5591 3.82573 670.1622 3.82037 673.8043 3.81513 677.4863 3.81001 681.2088 3.80528
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684.9724 688.7778 692.6257 696.5168 700.452 704.4318 708.4572 712.5287 716.6474 720.814 725.0292 729.2941 733.6094 737.9762 742.3952 746.8674 751.3939 755.9756 760.6135 765.3087 770.0621 774.875 779.7484 784.6835 789.6815 794.7436 799.871 805.0649 810.3268 815.6579 821.0596 826.5333 1200.194 1371.915 1399.955 1531.941 1599.948 1696.033 1799.942 2000	3.80094 3.79647 3.79199 3.78737 3.78261 3.77798 3.77335 3.76831 3.76406 3.76047 3.75648 3.75221 3.74835 3.74488 3.74073 3.73632 3.73163 3.72761 3.72412 3.72076 3.7178 3.7139 3.70932 3.70527 3.70109 3.69717 3.6927 3.68755 3.68375 3.68104 3.6771 3.6726 3.51923 3.5007 3.4876 3.4784 3.471 3.4644 3.4578 3.449
Wavelength λ (nm) 206.63333 210.13559 213.75862 217.50877 221.39285 225.41818 229.59259 233.92452 238.42307 243.09803 247.96 248.45691 248.95582 249.45674 249.95967 250.46464 250.97166 251.48073	Extinction coefficient <i>k</i> (-) 2.90917 2.98228 3.0447 3.11957 3.20652 3.30161 3.36647 3.35304 3.35372 3.42924 3.56477 3.58064 3.59762 3.61533 3.63212 3.65026 3.67009 3.68977

## Si-alpha (Amorphous silicon)

	/
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
200.82	1.12580180168152
209.02	1.2279657125473
217.22	1.33721137046814
225.42	1.45370733737946
233.62	1.57753443717957
241.82	1.70865297317505
250.02	1.84686601161957
258.22	1.99178290367126
266.42	2.14278316497803

274.62	2.29899024963379
282.82	2.45925211906433
291.02	2.62214541435242
299.22	2.78599977493286
307.42	2.94895100593567
315.62	3.10901713371277
323.82	3.26419806480408
332.02	3.41258502006531
340.22	3.55246448516846
348.42	3.68241238594055
356.62	3.80135679244995
364.82	3.90860939025879
373.02	4.0038628578186
381.22	4.08716297149658
389.42	4.158851146698
397.62	4.21950483322144
405.82	4.26986932754517
414.02	4.31079578399658
422.22	4.34318733215332
430.42	4.36795282363892
438.62	4.38597917556763
446.82	4.3981032371521
455.02	4.40510034561157
463.22	4.4076771736145
471.42	4.40646743774414
479.62	4.40203475952148
487.82	4.39487457275391
496.02	4.38542127609253
504.22	4.37405157089233
512.42	4.36109066009521
520.62	4.34682083129883
528.82	4.33148241043091
537.02	4.31528186798096
545.22	4.29839611053467
553.42	4.28097534179688
561.62	4.26314830780029
569.82	4.24502372741699
578.02	4.22669363021851
586.22	4.20823621749878
594.42	4.18971824645996
602.62	4.17119550704956
610.82	4.15271472930908
619.02	4.13431644439697
627.22	4.11603307723999
635.42	4.09789228439331
643.62	4.07991790771484
651.82	4.06212949752808
660.02	4.04454231262207
668.22	4.02716970443726
676.42	4.01002264022827
684.62	3.99311017990112
692.82	3.97643852233887
701.02	3.96001434326172
709.22	3.94384145736694
717.42	3.92792344093323
725.62	3.91226315498352
733.82	3.89686298370361
742.02	3.88172364234924
750.22	3.86684656143188
758.42	3.85223317146301

774.82 783.02 791.22 799.42 807.62 815.82 824.02 832.22 840.42 848.62 856.82 865.02 873.22 881.42 889.62 897.82	3.82379674911499 3.80997467041016 3.7964174747467 3.78312492370605 3.77009749412537 3.75733542442322 3.74483942985535 3.73261070251465 3.72064971923828 3.70895838737488 3.69753861427307 3.68639206886292 3.67552208900452 3.6649317741394 3.65462589263916 3.64460945129395
906.02	3.6348888874054
914.22	3.62547278404236
922.42	3.61637163162231
930.62	3.60759973526001
938.82	3.59917759895325
947.02	3.59113717079163
955.22	3.5835542678833
963.42	3.57650351524353
971.62	3.56984543800354
979.82	3.56351613998413
988.02	3.55747604370117
996.22	3.55169677734375
1004.42 1012.62 Wavelength $\lambda$ (nm) 200.82 209.02 217.22 225.42 233.62 241.82 250.02 258.22 266.42 274.62 282.82 291.02 299.22 307.42 315.62	3.54615569114685 3.5408341884613  Extinction coefficient <i>k</i> (-) 2.267911195755 2.36514282226563 2.45803999900818 2.54589581489563 2.62788081169128 2.70304918289185 2.77035427093506 2.82867550849915 2.87685441970825 2.91374850273132 2.93829464912415 2.94958448410034 2.94694447517395 2.93000936508179 2.89878392219543
315.62	2.89878392219543
323.82	2.85367703437805
332.02	2.79550433158875
340.22	2.72545719146729
348.42	2.64503359794617
356.62	2.55595088005066
364.82	2.46004199981689
373.02	2.35915374755859
381.22	2.25505495071411
389.42	2.14936828613281
397.62	2.04352235794067
405.82	1.93872439861298
414.02	1.83595824241638

3.83788275718689

766.62

400.00	4 70500004745400
422.22	1.73599004745483
430.42	1.63939106464386
438.62	1.54655838012695
446.82	1.45774614810944
455.02	1.37308883666992
463.22	1.29262721538544
471.42	1.21632957458496
479.62	1.14411067962646
487.82	1.07584524154663
496.02	1.01138234138489
504.22	.950553953647614
512.42	.89318311214447
520.62	.839088559150696
528.82	.788090169429779
537.02	.74001133441925
545.22	.69468104839325
553.42	.651935577392578
561.62	.611619293689728
569.82	.573585152626038
578.02	.537694215774536
586.22	.503816783428192
	.471831411123276
594.42	
602.62	.441624611616135
610.82	.413090914487839
619.02	.386131793260574
627.22	.360655903816223
	.336578279733658
635.42	
643.62	.313819795846939
651.82	.292307108640671
660.02	.271972000598907
668.22	.252751111984253
676.42	.234585583209991
684.62	.217420309782028
692.82	.201204434037209
701.02	185890391469002
709.22	.171433925628662
717.42	.157793775200844
725.62	.144931375980377
733.82	.13281075656414
742.02	.121398314833641
750.22	.110662586987019
758.42	.100574120879173
766.62	9.11053568124771E-02
774.82	8.22304040193558E-02
783.02	7.39250034093857E-02
791.22	.066166378557682
799.42	5.89329823851585E-02
807.62	.052204679697752
815.82	4.59624454379082E-02
824.02	4.01883460581303E-02
832.22	3.48654352128506E-02
840.42	2.99777239561081E-02
848.62	.025510061532259
856.82	2.14481130242348E-02
865.02	1.77782885730267E-02
873.22	1.44876856356859E-02
881.42	1.15640461444855E-02
889.62	8.99570342153311E-03
897.82	6.77155982702971E-03
906.02	4.88098664209247E-03

914.22	3.31387226469815E-03
922.42	2.06052814610302E-03
930.62	1.11166713759303E-03
938.82	4.58370777778327E-04
947.02	9.20553575269878E-05
955.22	0
963.42	0
971.62	0
979.82	0
988.02	0
996.22	0
1004.42	0
1012.62	0

# Si-poly (Polycrystalline silicon)

Si-poly (Folycrystalli	-
Wavelength $\lambda$ (nm)	
200.82	.963995397090912
209.02	1.09218037128448
217.22	1.22769057750702
225.42	1.36170780658722
233.62	1.48908364772797
241.82	1.58198118209839
250.02	1.6181948184967
258.22	1.69850432872772
266.42	1.88037991523743
274.62	2.23525309562683
282.82	2.9053738117218
291.02	3.86724972724915
299.22	4.34491920471191
307.42	4.35047817230225
315.62	4.34600162506104
323.82	4.40645694732666
332.02	4.53823089599609
340.22	4.72492456436157
348.42	4.95296335220337
356.62	5.22372388839722
364.82	5.61768579483032
373.02	5.78224086761475
381.22	5.55178594589233
389.42	5.30713796615601
397.62	5.11498785018921
405.82	4.96753740310669
414.02	4.85168361663818
422.22	4.75779724121094
430.42	4.67946481704712
438.62	4.61243963241577
446.82	4.55386734008789
455.02	4.50178575515747
463.22	4.45481824874878
471.42	4.41197395324707
479.62	4.37252855300903
487.82	4.33593940734863
496.02	4.30179119110107
504.22	4.26976299285889
512.42	4.23959875106812
520.62	4.21109247207642
528.82	4.1840763092041
537.02	4.15840816497803
545.22	4.13397026062012
553.42	4.11066055297852

561.62	4.08839225769043
569.82	4.06708812713623
578.02	4.04667854309082
586.22	4.02710485458374
594.42	4.0083122253418
602.62	3.99025225639343
610.82	3.97288036346436
619.02	3.95615696907043
627.22	3.94004392623901
635.42	3.92450881004334
643.62	3.9095196723938
651.82	3.89504861831665
660.02	3.88106846809387
668.22	3.86755537986755
676.42	3.85448598861694
684.62	3.84183955192566
692.82	3.82959628105164
701.02	3.81773781776428
709.22	3.80624747276306
717.42	3.79510879516602
725.62	3.78430724143982
733.82	3.77382898330688
742.02	3.7636604309082
750.22	3.75379014015198
758.42	3.74420642852783
766.62	3.73489856719971
774.82	3.72585654258728
783.02	3.71707153320313
791.22	3.70853447914124
799.42	3.70023679733276
807.62	3.69217133522034
815.82	3.68433117866516
824.02	3.67670941352844
832.22	3.6693000793457
840.42	3.66209721565247
848.62	3.65509605407715
856.82	3.64829158782959
865.02	3.64167928695679
873.22	3.63525533676147
881.42	3.62901616096497
889.62	3.62295913696289
897.82	3.61708188056946
906.02 914.22	3.6113817691803 3.60585856437683
914.22	3.60051155090332
930.62	3.59534192085266 3.5903525352478
938.82 947.02	3.58555030822754
955.22	3.58095502853394
963.42	3.57658624649048
971.62	3.57239890098572
971.62	3.56837201118469
988.02	3.56449127197266
996.22	3.56074571609497
1004.42	3.55712628364563
1012.62	3.55362558364868
1012.02	3.0000200000000
Wavelength λ (nm)	Extinction coefficient k (-)
200.82	2.64001083374023
200.02	2.04001063374023

209.02

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2.78805255889893

684.62 5.40459416806698E-02 692.82 5.17004802823067E-02 701.02 4.94520515203476E-02
701.02 4.94520515203476E-02

#### Si-Poly-Brugg

SI-Poly-brugg	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
200.82	1.04627084732056
209.02	1.15856468677521
217.22	1.27822661399841
225.42	1.40139949321747
233.62	1.52561569213867
241.82	1.63878285884857
250.02	1.72531259059906
258.22	1.82709193229675
266.42	1.96926879882813
274.62	2.18288993835449
282.82	2.54046583175659
291.02	3.08931255340576
299.22	3.38034677505493
307.42	3.36878752708435
315.62	3.53973197937012
323.82	3.68833756446838
332.02	3.84539937973022
340.22	4.01026058197021
348.42	4.17989158630371

356.62 364.82 373.02 381.22	4.35446262359619 4.55594921112061 4.62465715408325 4.56124639511108
389.42	4.5073037147522
397.62 405.82	4.47538566589355 4.45704555511475
414.02	4.44546270370483
422.22	4.43662786483765
430.42	4.42835283279419 4.41950559616089
438.62 446.82	4.4095516204834
455.02	4.39829206466675
463.22	4.38571548461914
471.42 479.62	4.37191009521484 4.35701322555542
487.82	4.34118175506592
496.02	4.32457447052002
504.22 512.42	4.30734205245972 4.28962326049805
520.62	4.27154397964478
528.82	4.25321292877197
537.02 545.22	4.23472452163696 4.21616172790527
553.42	4.19759321212769
561.62	4.17907810211182
569.82 578.02	4.16066598892212 4.14239645004272
586.22	4.12430381774902
594.42	4.10641574859619
602.62 610.82	4.08875465393066 4.07133674621582
619.02	4.05417776107788
627.22	4.03728771209717
635.42 643.62	4.02067375183105 4.00434303283691
651.82	3.98829865455627
660.02	3.97254252433777
668.22 676.42	3.95707654953003 3.94190001487732
684.62	3.92701268196106
692.82	3.91241192817688
701.02 709.22	3.89809703826904
709.22 717.42	3.88406467437744 3.87031173706055
725.62	3.85683608055115
733.82	3.84363436698914
742.02 750.22	3.83070254325867 3.81803798675537
758.42	3.8056378364563
766.62	3.79349780082703
774.82 783.02	3.78161573410034 3.76998829841614
791.22	3.75861287117004
799.42	3.74748659133911
807.62 815.82	3.73660707473755 3.72597169876099
824.02	3.71557927131653
832.22	3.70542788505554
840.42	3.69551563262939

848.62	3.68584179878235
856.82	3.6764063835144
865.02	3.66720795631409
873.22	3.65824723243713
881.42	3.6495246887207
889.62	3.64104199409485
897.82	3.63280129432678
906.02	3.62480521202087
914.22	3.61705875396729
922.42	3.60956764221191
930.62	3.60234045982361
938.82	3.59539008140564
947.02	3.58873796463013
955.22	3.58243584632874
963.42	3.57653474807739
971.62	3.57093572616577
979.82	3.56559300422668
988.02	3.56047797203064
996.22	3.55557012557983
1004.42	3.55085206031799
1012.62	3.54631066322327
Wavelength λ (nm) 200.82 209.02 217.22 225.42 233.62 241.82 250.02 258.22 266.42 274.62 282.82 291.02 299.22 307.42 315.62 323.82 332.02 340.22 348.42 356.62 364.82 373.02 381.22 389.42 397.62 405.82 414.02 422.22 430.42 438.62 446.82 455.02 463.22 471.42 479.62 487.82 496.02	Extinction coefficient <i>k</i> (-) 2.43691825866699 2.5584077835083 2.66935992240906 2.77019262313843 2.86383366584778 2.9452006816864 3.06429100036621 3.23395252227783 3.44280743598938 3.67116284370422 3.81143188476563 3.59830689430237 3.34515285491943 3.27855968475342 3.09634733200073 3.00317430496216 2.93245220184326 2.85844898223877 2.76933622360229 2.65955066680908 2.50913310050964 2.13678598403931 1.79753816127777 1.56636798381805 1.40464890003204 1.28265058994293 1.1841299533844 1.1004204750061 1.02676546573639 .960444629192352 .899832010269165 .843905746936798 .791987419128418 .743599712848663 .698385834693909 .656063258647919 .616398513317108

504.22	.579190731048584
512.42	.54426234960556
520.62	.511453568935394
528.82	.4806187748909
537.02	.451624482870102
545.22 553.42	.424347460269928 .398673892021179
561.62	.374498575925827
569.82	.351723849773407
578.02	.33025923371315
586.22	.310021132230759
594.42	.290931940078735
602.62	.272919893264771
610.82	.255918592214584
619.02	.23986628651619
627.22	.22470586001873 .210384473204613
635.42 643.62	.196852937340736
651.82	.184065788984299
660.02	.17198072373867
668.22	.160558432340622
676.42	.149762496352196
684.62	.139558747410774
692.82	.129915609955788
701.02	.120803527534008
709.22	.112194940447807
717.42 725.62	.104064106941223 9.63868722319603E-02
733.82	8.91406461596489E-02
742.02	8.23042169213295E-02
750.22	7.58576393127441E-02
758.42	6.97821229696274E-02
766.62	6.40599653124809E-02
774.82	5.86744137108326E-02
783.02	5.36096133291721E-02
791.22	4.88505400717258E-02
799.42 807.62	4.43828292191029E-02 4.01928722858429E-02
815.82	3.62676307559013E-02
824.02	3.25946137309074E-02
832.22	2.91618425399065E-02
840.42	2.59577855467796E-02
848.62	2.29713171720505E-02
856.82	2.01916880905628E-02
865.02	1.76085010170937E-02
873.22 881.42	1.52116632089019E-02 1.29913929849863E-02
889.62	1.09381899237633E-02
897.82	9.04286373406649E-03
906.02	7.29650352150202E-03
914.22	5.69060910493135E-03
922.42	4.21722372993827E-03
930.62	.002869465155527
938.82	1.64372567087412E-03
947.02	5.56046608835459E-04
955.22 963.42	6.42462645583652E-12 -1.45069954313182E-11
963.42 971.62	1.01814199432448E-11
979.82	8.86827243584687E-12
988.02	-5.48668098801497E-12
re e	

996.22	6.35098744428131E-12
1004.42	-7.96997277202616E-12
1012.62	-9.16093242930849E-12

## Si3N4 (k=0) (Silicon nitride)

Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
206.6333	2.541
215.6174	2.464
225.4182	2.393
236.1524	2.331
247.96	2.278
261.0105	2.234
275.5111	2.198
291.7177	2.167
309.95	2.141
354.2285	2.099
413.2667	2.066
495.92	2.041
619.9	2.022
826.5333	2.008
1239.8	1.998

Wavelength λ (nm) 206.6333 215.6174 225.4182 236.1524 247.96 261.0105 275.5111 291.7177 309.95 354.2285 413.2667 495.92	Extinction coefficient <i>k</i> (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
413.2667	0
619.9 826.5333	0
1239.8	0

### Si3N4 (Silicon nitride)

Olona (Ollicon Illunac)	
Wavelength $\lambda$ (nm)	Refractive index $n$ (-)
219.5	2.5474
220.51	2.5788
221.53	2.6077
222.54	2.634
223.55	2.6577
224.56	2.6789
225.57	2.6976
226.59	2.7141
227.6	2.7283
228.61	2.7404
229.62	2.7506
230.63	2.759
231.63	2.7657
232.64	2.7708
233.65	2.7745
234.66	2.777
235.67	2.7783
236.68	2.7786

297.48       2.4797         298.47       2.4762         299.46       2.4727         300.44       2.4659         302.41       2.4626         303.4       2.4594         304.38       2.4562         305.36       2.453         306.35       2.4499         307.33       2.4409         308.31       2.4439         309.3       2.4409         310.28       2.438         311.26       2.4351         312.24       2.4323         313.22       2.4295         314.2       2.4268         315.18       2.4241         316.16       2.4214         317.14       2.4188         318.12       2.4162         319.1       2.4137         320.08       2.4112         321.06       2.4087         322.04       2.4063         323.02       2.4039         323.99       2.4015         324.97       2.3924         328.87       2.3902         329.85       2.388         330.82       2.3755         336.69       2.3755         336.69
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469.5 470.43 471.35 472.28 473.2 474.13 475.05 475.97 476.89 477.82 478.74 479.66 480.58 481.5 482.42 483.34 484.26 485.18 486.1 487.02 487.93 488.85 489.77 490.69 491.6 492.52 493.44 494.35 495.27 496.18 497.1 498.01 498.93 499.84 500.75 501.67 502.58 503.49 504.4 505.32 506.23 507.14 508.05 508.96 509.87 510.78 511.69 512.6 513.51 514.42 515.32 516.23 517.14 517.14	2.2329 2.2314 2.231 2.2305 2.23 2.2295 2.229 2.2285 2.2281 2.2267 2.2262 2.2258 2.2258 2.2253 2.2249 2.2244 2.224 2.2235 2.2218 2.2214 2.2209 2.2222 2.2218 2.2218 2.214 2.2209 2.2218 2.214 2.2209 2.2218 2.214 2.2209 2.2218 2.214 2.2209 2.2218 2.214 2.2201 2.2153 2.2181 2.2177 2.2173 2.2169 2.2165 2.2161 2.2157 2.2153 2.2142 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138 2.2142 2.2138
512.6 513.51 514.42 515.32 516.23	2.2127 2.2123 2.212 2.2116 2.2112
523.48	2.2085

524.38 525.29 526.19 527.1 528 528.9 529.8 530.71 531.61 532.51 533.41 535.21 536.11 537.01 537.91 538.81 539.71 540.61 541.51 542.4 543.3 544.2 545.1 546.89 547.78 548.68 549.57 550.47 551.36 552.26 553.15 554.04 555.83 556.72 557.61 558.51 559.4 560.29 561.18 562.07 562.96 563.85 564.74 565.63 566.51 567.4 568.29 569.18 570.06 570.95 571.84 572.72	2.2081 2.2078 2.2075 2.2071 2.2068 2.2065 2.2061 2.2058 2.2055 2.2052 2.2049 2.2045 2.2039 2.2036 2.2033 2.2027 2.2024 2.2021 2.2018 2.2015 2.2012 2.2009 2.2006 2.2003 2.2001 2.1998 2.1995 2.1998 2.1995 2.1989 2.1987 2.1984 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1979 2.1989 2.1989 2.1987 2.1984 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1978 2.1979 2.1949 2.1947 2.1944 2.1942 2.1939 2.1937 2.1935 2.1932 2.1932 2.1932
569.18	2.1937
570.06	2.1935
570.95	2.1932

736.21       2.1662         737.11       2.1661         738       2.166         738.89       2.166         739.79       2.1659         740.68       2.1658         741.57       2.1657
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846.68 2.1577 847.52 2.1576 848.37 2.1576 849.21 2.1575 850.05 2.1575 850.9 2.1574 851.74 2.1573 853.42 2.1573 853.42 2.1573 854.27 2.1572 855.11 2.1572 855.95 2.1571 856.79 2.1571 857.63 2.157 857.63 2.157 858.47 2.157 859.31 2.1569 860.15 2.1568 861.82 2.1568 861.82 2.1568 862.66 2.1568 863.5 2.1568 863.5 2.1567 866.01 2.1568 866.01 2.1566 866.01 2.1566 866.01 2.1566 866.01 2.1566 866.01 2.1566 876.01 2.1566 870.18 2.1563 871.01 2.1566 873.51 2.15562 873.51 2.15562 873.51 2.15564 875.18 2.15564 876.01 2.1556 877.07 2.1559 878.5 2.15558 880.99 2.1557 883.47 2.15568 880.99 2.1557 883.47 2.15568 880.99 2.1557 883.47 2.15568 885.13 2.15558 885.95 2.15558 885.95 2.15558 885.95 2.15558 885.95 2.15558 885.95 2.15558 887.91 3.15558 889.90 2.1553 890.91 2.1552 893.38 2.1551 894.2 2.1551 895.02 2.155	2.1563 2.1563 2.1562 2.1562 2.1562 2.1561 2.1561 2.156 2.1559 2.1559 2.1558 2.1558 2.1557 2.1557 2.1557 2.1557 2.1555 2.1555 2.1555 2.1555 2.1555 2.1555 2.1555 2.1555 2.1554 2.1554 2.1553 2.1553 2.1553
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223.55       1.128         224.56       1.094         225.57       1.060         226.59       1.026         227.6       .9929         228.61       .9598         229.62       .9273         230.63       .8955         231.63       .8644         232.64       .8341         233.65       .8047         234.66       .7763         235.67       .7488         236.68       .7222         237.68       .6967         238.69       .6721         239.7       .6484         240.7       .6257         241.71       .6039         242.71       .583         243.72       .5629         244.72       .5437         245.73       .5253         246.73       .5077         247.73       .4908         248.74       .4746         249.74       .4591         250.74       .4443         251.75       .4164         253.75       .404         254.75       .3564         256.75       .3674         257.75       .3564
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.0085 .0084 .0082 .0081 .0079 .0078 .0077 .0075 .0074 .0072 .0071 .007 .0069 .0067 .0066 .0065 .0064 .0063 .0061 .006 .0059 .0058 .0057 .0056 .0055 .0054 .0053 .0052 .0051 .005 .0049 .0048 .0047 .0046 .0045 .0047 .0046 .0045 .0041 .004 .0043 .0042 .0041 .004 .0039 .0039 .0039 .0038 .0037 .0036 .0035 .0035 .0035 .0035 .0036 .0035 .0036 .0035 .0036
.0032 .0032 .0031

565.63	.0002
566.51	.0002
567.4 568.29	.0002 .0002
569.18	.0002
570.06 570.95	.0002 .0001
571.84	.0001
572.72 573.61	.0001 .0001
574.5	.0001
575.38 576.26	.0001 .0001
577.15	.0001
578.03 578.92	0 0
579.8	0
580.68 581.57	0 0
582.45	0
583.33 584.21	0 0
585.09	0
585.97 586.86	0 0
587.74	0
588.62 589.5	0 0
590.37	0
591.25 592.13	0 0
593.01	0
593.89 594.77	0 0
595.64	0
596.52 597.4	0 0
598.27	0
598.85 599.76	0 0
600.67	0
601.59 602.5	0 0
603.41	0
604.33 605.24	0 0
606.59	0
607.5 608.41	0 0
609.32	0
610.23 611.14	0 0
612.05	0
612.96 613.87	0 0
614.77	0
615.68 616.59	0 0
617.93	0
618.84	0

675.56 676.44 677.32 678.21 679.09 680.39 681.27 683.03 684.79 685.57 686.55 687.43 689.48 690.98 691.9 692.81 693.73 694.64 695.55 696.46 697.38 699.2 701.02 701.02 701.03 702.84 705.56 706.47 707.38 709.19 710.1 711.91 712.82 713.72 714.62 715.53 716.43 717.34 718.24 719.14 720.94 721.85 722.75 723.65 724.55 725.45 726.35 727.24 728.14	000000000000000000000000000000000000000
729.04	0

729.94 730.84 731.73 732.63 733.52 734.42 735.32 736.21 737.11 738 738.89 739.79 740.68 741.57 742.46 743.36 744.25 745.14 746.03 746.92 747.81 749.59 750.48 751.36 752.25 753.14 754.03 754.91 755.8 757.57 758.46 759.34 760.23 761.11 761.99 762.88 763.76 764.64 765.52 766.4 777.83 770.81 771.69 772.56 773.44 774.32 775.2 776.08 777.83	000000000000000000000000000000000000000
775.2 776.08	0

783.08 783.95 784.83 785.7 786.57 787.44 788.32 789.19 790.06 790.93 791.8 792.67 793.54 794.41 797.01 797.88 796.14 797.01 797.88 798.75 799.61 800.48 801.35 802.21 803.08 803.94 804.81 805.67 806.53 807.4 808.26 809.12 809.98 810.84 811.71 812.57 813.43 814.29 815.15 816.01 816.86 817.72 818.58 819.44 820.3 821.15 822.87 823.72 824.58 825.43 826.29 827.14	000000000000000000000000000000000000000
823.72 824.58 825.43 826.29	0 0 0

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834.81 835.66 836.51 837.36 838.21 839.06 839.91 840.75 841.6 842.45 843.29 844.14 844.99 845.83 846.68 847.52 849.21 850.05 850.9 851.74 852.58 853.42 855.11 855.95 856.79 857.63 858.47 859.31 860.15 860.98 861.82 862.66 863.5 864.33 865.17 866.84 867.68 868.51 869.35 870.18 871.01 871.85 875.18 876.01 876.84 877.67 875.18 876.01 876.84 877.67 878.5 879.33 880.16	000000000000000000000000000000000000000
877.67 878.5 879.33	0 0 0

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885.13 885.95 886.78 887.61 888.43 889.26 890.08 890.91 891.73 892.55 893.38 894.2 895.02 895.84 896.67 897.49 898.31 899.95 900.77 901.59 902.41 903.22 904.04 904.86 905.68 906.49 907.31 908.13 908.94 907.31 908.13 908.94 907.31 908.13 908.94 907.31 908.13 908.94 907.31 908.13 909.76 910.57 911.39 912.2 913.01 913.83 914.64 915.45 916.27 917.08 917.89 918.7 919.51 920.32 921.13 921.94 922.75 923.56 924.37 925.98 927.59 927.59 927.59 928.4 929.21	000000000000000000000000000000000000
926.79 927.59 928.4	0 0 0

934.03 934.84 935.64 936.44 937.24 938.05 938.85 939.65 940.45 941.25 942.85 942.85 942.85 943.65 944.44 946.04 946.84 947.63 948.43 949.23 950.02 951.61 952.41 953.2 953.99 954.79 955.58 966.37 957.17 957.96 958.75 959.54 960.33 961.12 961.91 962.7 963.49 964.28 965.07 965.85 966.64 967.43 969.79 970.57 971.36 972.14 972.93 973.71 974.49 975.28 976.84	000000000000000000000000000000000000000
974.49 975.28 976.06	0 0 0

981.53 982.31 983.09 983.87 984.64 985.42 986.2 986.98 987.75 988.53 989.31 990.08 990.86 991.63 992.41 993.18 993.95 994.73 995.5 996.27 997.05 997.82 998.59 999.36 1000.13 1000.9 1001.67 1002.44 1003.21 1003.98 1004.75 1005.51 1006.28 1007.05 1007.81 1008.58 1007.05 1007.81 1010.88 1011.64 1012.41 1013.17 1013.93 1014.7 1015.46 1016.22 1016.98 1017.75 1018.51 1019.27 1020.03 1020.79 1021.55 1022.31 1023.07	000000000000000000000000000000000000000
1020.79 1021.55	0 0 0

1027.61 1028.37 1029.12 1029.88 1030.63 1031.39 1032.14	0 0 0 0 0
1032.14	0
	-

## SiC (Silicon carbide)

SiC (Silicon carbide)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
250	3.132
270	3.015
290	2.974
310	2.933
330	2.896
350	2.844
370	2.807
390	2.778
410	2.754
430	2.735
450	2.72
470	2.705
490	2.692
510	2.681
530	2.671
550	2.663
570	2.655
590	2.647
610 630	2.641 2.636
650	2.631
670	2.626
690	2.622
710	2.618
730	2.614
750	2.61
770	2.607
790	2.603
810	2.6
830	2.598
850	2.595
870	2.593
890	2.59
910	2.588
930	2.587
950	2.585
970	2.584
990	2.582
1010	2.581
1030	2.58
1050	2.579
1070	2.578
1090	2.577
1110	2.576
1130	2.576
1150	2.575
1170	2.575
1190	2.574
1210	2.574

1230	2.573
1250	2.573
Wavelength λ (nm) 250.00 270.00 290.00 310.00 330.00 350.00 370.00 390.00 410.00 430.00 450.00 470.00 490.00 510.00 530.00 570.00 590.00 610.00 630.00 670.00 690.00 710.00 730.00 750.00 770.00 790.00 810.00 830.00 850.00 870.00 890.00 910.00 930.00 910.00 930.00 910.00 930.00 1010.00 1030.00 1050.00 1070.00 1090.00 1110.00 1130.00 1150.00 1170.00 1190.00 1230.00 1250.00	Extinction coefficient k (-) 0.205 0.046 0.01 0.009 0.006 0.002 0.001 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

SiO (Silicon monoxide) Wavelength  $\lambda$  (nm) R 206.63 1 Refractive index *n* (-) 1.829

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215.62 225.42 236.15 247.96 258.29 269.52 281.77 295.19 309.95 326.26 344.39 364.65 387.44 413.27 442.79 476.85 516.58 563.55 619.9 688.78 774.87 885.57 999.84 2000	1.871 1.914 1.957 2.001 2.034 2.066 2.094 2.119 2.141 2.157 2.162 2.16 2.144 2.116 2.085 2.053 2.021 1.994 1.969 1.948 1.929 1.913 1.87 1.84
Wavelength λ (nm) 206.63 215.62 225.42 236.15 247.96 258.29 269.52 281.77 295.19 309.95 326.26 344.39 364.65 387.44 413.27 442.79 476.85 516.58 563.55 619.90 688.78 774.87 885.57 999.84 2000.00	Extinction coefficient k (-) 0.7084 0.689 0.6663 0.6383 0.6052 0.5723 0.5364 0.4948 0.4499 0.4006 0.3453 0.2872 0.2287 0.1706 0.1211 0.08374 0.05544 0.03533 0.02153 0.01175 0.00523 0.00151 0 0
SiO2 (silicon dioxide) Wavelength $\lambda$ (nm) 206.6 226.7 248.3 265.2	Refractive index <i>n</i> (-) 1.543 1.52276 1.50841 1.50004 1.49404

1.49404

280.3

302.2 330.3 361.1 404.7 435.8 467.8 508.6 546.1 577 589.3 643.8 667.8 706.5 852.1 894.4 1014 1128.6 1362.2 1469.5 1660.6	1.48719 1.48053 1.47512 1.46961 1.46669 1.46429 1.46187 1.46008 1.45885 1.45841 1.45671 1.45608 1.45515 1.45548 1.45515 1.45248 1.45185 1.45025 1.44888 1.44621 1.44497 1.44267
Wavelength λ (nm) 361.1 404.7 435.8 467.8 508.6 546.1 577 589.3 643.8 667.8 706.5 852.1 894.4 1014 1128.6 1362.2 1469.5 1660.6	Extinction coefficient <i>k</i> (-) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SPR2FX13 Wavelength λ (nm) 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520	Refractive index <i>n</i> (-) 1.946741006 1.89103692 1.847674069 1.813259516 1.785490802 1.762760949 1.743920823 1.728131093 1.71476716 1.703356465 1.693536145 1.685023844 1.677597189 1.67107913 1.665327288 1.660226116

540	1.655681054
560	1.651614115
580	1.647960518
600	1.644666092
620	1.641685258
640	1.638979444
660	1.636515831
680	1.634266353
700	1.632206895
720	1.630316642
740	1.628577555
760	1.626973934
780	1.625492068
800	1.624119935
820	1.622846964
840	1.621663824
860	1.620562258
880	1.619534935
900	1.618575332
920	1.617677624
940	1.616836601
960	1.616047589
980	1.615306386
1000	1.614609206
1020	1.61395263
1040	1.613333566
1060	1.61274921

SPR2FX13JL Wavelength λ (nm) "Material" 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660	Refractive index <i>n</i> (-) 6  1.959982436 1.901868121 1.856597978 1.820650389 1.791632222 1.767871358 1.748171009 1.731656391 1.717676129 1.705737148 1.695460671 1.686551846 1.678778388 1.671955299 1.665933776 1.660593032 1.6558342 1.651575726 1.6447749857 1.644299931 1.641178263 1.638344499 1.635764297
620	1.641178263
660	1.635764297
680	1.633408288
700	1.631251233
720	1.629271349
740	1.627449752
760	1.625770011
780	1.62421777

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800	1.622780447
820	1 621446971
840	1.620207576
860	1.620207676
	1.01000010
880	1.617977414
900	1.61697214
920	1.616031695
940	1.615150623
960	1.614324029
980	1.613547513
1000	1.612817111
1020	1.612129242
1040	1.611480667
1060	1.610868449

### SPR2FX13JM

260       1.83728857         280       1.804201813         300       1.777492963         320       1.755622999         340       1.73749039         360       1.722289979         380       1.709422233         400       1.688974609         440       1.680774712         460       1.67361983         480       1.66733969         500       1.661797328         520       1.656881571         540       1.652501419         560       1.64858181         580       1.64506038         600       1.64184977         620       1.639011712         640       1.636403439         660       1.634028552         680       1.631860018         700       1.628052267         740       1.628052267         740       1.628052267         740       1.628052267         740       1.628052267         740       1.62805266         80       1.616731738         90       1.616731738         920       1.615866126         940       1.615866126         940
---

31 13000					
Wavelength 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 660 660 660 660 660 660 670 720 740 760 780 800 820 840 860 880 900 920 940 960	λ	(nm)	Refractive index 1.935062281 1.880443376 1.837873984 1.804057212 1.776750247 1.754384672 1.735837153 1.72028614 1.707119611 1.695874102 1.686193463 1.6740476331 1.664047242 1.658373072 1.653340127 1.648855333 1.644841905 1.641236045 1.63798439 1.635042035 1.632370966 1.629938836 1.627717979 1.625684619 1.623818231 1.622101025 1.620517517 1.619054182 1.617699163 1.616442027 1.615273571 1.614185647 1.613171021 1.612223254 1.6113366 1.610505914 1.609726585 1.608994465	n	(-)
900 920 940 960			1.612223254 1.6113366 1.610505914 1.609726585		
980 1000 1020 1040 1060			1.608994465 1.608305817 1.607657266 1.607045759 1.606468527		

### SPR3500

Wavelength $\lambda$ (nm) 220	Refractive index <i>n</i> (-) 1.923219702 1.870458992
240 260	1.829378091
280	1.796768785
300	1.770452963
320	1.748909876
340	1.731051731
360	1.716083806
380	1.703414581

400 420	1.692596445 1.683285646
440	1.675214661
460	1.668172783
480	1.661992229
500	1.656538064
520	1.651700776
540	1.647390735
560	1.643534018
580	1.640069217
600	1.636944977
620	1.634118089
640	1.631551984
660	1.629215548
680	1.627082169
700	1.625128984
720	1.623336256
740	1.621686882
760	1.620165974
780	1.61876053
800	1.617459153
820	1.616251816
840	1.615129673
860	1.614084892
880	1.613110524
900	1.61220038
920	1.611348937
940	1.610551254
960	1.6098029
980	1.609099888
1000	1.608438629
1020	1.607815881
1040	1.60722871
1060	1.606674457

## SPR500A

• • • • • • • • • • • • • • • • • • • •	
Wavelength $\lambda$ (nr	n) Refractive index n (-)
220	1.857725801
240	1.819920064
260	1.790421465
280	1.766967369
300	1.748014938
320	1.732483253
340	1.719596981
360	1.708788394
380	1.69963413
400	1.69181332
420	1.685079218
440	1.679239577
460	1.674142829
480	1.669668181
500	1.665718416
520	1.662214581
540	1.659092022
560	1.656297387
580	1.653786333
600	1.651521767
620	1.649472464
640	1.64761199
660	1.645917847

680	1.644370789
700	1.642954273
720	1.64165402
740	1.640457649
760	1.639354384
780	1.638334811
800	1.637390676
820	1.636514718
840	1.635700529
860	1.634942436
880	1.634235402
900	1.633574944
920	1.63295706
940	1.632378168
960	1.631835056
980	1.631324834
1000	1.630844901
1020	1.630392906
1040	1.629966721
1060	1.62956442

3FK/00	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	1.907767693
240	1.859228289
260	1.821492343
280	1.791574391
300	1.767453827
320	1.747723355
340	1.731378346
360	1.717686041
380	1.706101786
400	1.696213906
420	1.687706556
440	1.680334138
460	1.673903348
480	1.668260362
500	1.663281536
520	1.65886657
540	1.654933411
560	1.651414407
580	1.64825338
600	1.645403364
620	1.642824853
640	1.640484419
660	1.638353626
680	1.636408162
700	1.634627139
720	1.63299253
740	1.631488716
760	1.630102103
780	1.62882082
800	1.627634463
820	1.62653388
840	1.625510997
860	1.624558667
880	1.623670548
900	1.622840994
920	1.622064966
940	1.621337956

960	1.620655921
980	1.620015226
1000	1.619412596
1020	1.618845074
1040	1.618309985
1060	1.617804904

#### **SPR900**

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	1.907767693
240	1.859228289
260	1.821492343
280	1.791574391

300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940	1.767453827 1.747723355 1.731378346 1.717686041 1.706101786 1.696213906 1.687706556 1.680334138 1.673903348 1.668260362 1.663281536 1.65886657 1.654933411 1.651414407 1.64825338 1.645403364 1.642824853 1.640484419 1.638353626 1.634627139 1.63299253 1.631488716 1.630102103 1.6282082 1.627634463 1.62653388 1.625510997 1.624558667 1.623670548 1.622840994 1.622064966 1.621337956
840 860	1.625510997 1.624558667
960	1.620655921
980	1.620015226
1000 1020	1.619412596 1.618845074
1040	1.618309985
1060	1.617804904

Marrial are orthogonal	Defeative index of ()
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	2.097209275
240	1.981859375
260	1.901584713
280	1.843802478
300	1.801
320	1.768503357
340	1.743299541
360	1.723385117
380	1.707391142
400	1.694359375
420	1.68360447
440	1.674626716
460	1.667055367
480	1.660611003
500	1.65508
520	1.6502969
540	1.646132009
560	1.642482553

580	1.639266262
600	1.636416667
620	1.633879599
640	1.631610561
660	1.62957273
680	1.627735417
700	1.626072886
720	1.624563422
740	1.623188595
760	1.621932687
780	1.620782221
800	1.619725586
820	1.61875274
840	1.617854956
860	1.617024624
880	1.616255079
900	1.615540466
920	1.614875625
940	1.614255989
960	1.613677511
980	1.613136585
1000	1.61263
1020	1.612154879
1040	1.611708645
1060	1.61128898

### SPR955CM

Wavelength 220 240 260 280 300 320 340 360 380 400 420 440 460	λ	(nm)	Refractive index 3.889996469 3.168119059 2.701950713 2.391613411 2.179653086 2.03169978 1.926488695 1.850472763 1.794797633 1.75354375 1.722673322 1.699382269 1.681691669	n	(-)
480			1.668184524		
500			1.6578328		
520			1.64988172		
540			1.643771102		
560			1.639081068		
580			1.635494054		
600			1.632767901		
620			1.630716554		
640			1.62919608		
660			1.628094437		
680			1.627323904		
700			1.626815452		
720			1.626514501		
740			1.62637772		
760			1.626370576		
780			1.626465459		
800			1.626640234		
820			1.626877112		
840			1.627161768		

860	1.627482654
880	1.627830452
900	1.628197638
920	1.628578142
940	1.628967072
960	1.629360491
980	1.629755242
1000	1.6301488
1020	1.630539162
1040	1.630924745
1060	1.631304316

#### SYSTEM8

Wavelength λ (nm) 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760	Refractive index <i>n</i> (-) 2.01739121 1.928015345 1.865240317 1.819653066 1.785598765 1.759537448 1.739172911 1.722968909 1.709869328 1.699130469 1.662250412 1.6763984 1.670978173 1.6663064 1.662250412 1.658705717 1.655589127 1.652833757 1.65038534 1.648199468 1.646239523 1.644475088 1.642880725 1.640119874 1.638919841 1.637821733
780	1.636814202
800	1.635887451
820	1.63503298
840	1.634243386
860 880	1.633512198 1.632833737
900	1.632203003
920	1.631615578
940	1.63106755
960	1.630555439
980	1.630076146
1000	1.6296269
1020	1.629205219
1040	1.628808874
1060	1.628435857

# Ta (Tantalum)

ra (rantaium)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
180	1.20774
190	1.316755
200	1.48
210	1.720912
220	2.016951
230	2.321471
240	2.54161
	2.572579
250	
260	2.480464
270	2.414541
280	2.372254
290	2.351044
300	2.348354
310	2.361625
320	2.388301
330	2.425822
340	2.471636
350	2.52297
360	2.576122
370	2.630314
380	2.68343
390	2.733411
400	2.776369
410	2.805519
420	2.827264
430	2.841735
440	2.848885
450	2.848305
460	2.839252
470	2.823172
480	2.80048
490	2.771415
500	2.737603
510	2.700764
520	2.657433
530	2.6069
540	2.548706
550	2.47794
	2.391179
560	
570	2.298247
580	2.201368
590	2.102607
600	2.006822
610	1.91713
620	1.830121
630	1.746458
640	1.666745
650	1.591944
660	1.522716
670	1.459061
680	1.401485
690	1.350147
700	1.308842
710	1.277696
720	1.251963
730	1.230646
740	1.212715
750	1.19474

760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1110 1110 1120 1130 1140 1150 1160 1170 1180 1190 1200 1210 1220 1230 1240 1250 1260 1270 1280 1290	1.176222 1.159275 1.143788 1.129663 1.117038 1.105745 1.095448 1.085986 1.077196 1.068523 1.06003 1.051964 1.04432 1.037069 1.030223 1.023604 1.017208 1.011101 1.005343 1 0.99644 0.993438 0.990878 0.988645 0.986624 0.984698 0.982751 0.980669 0.976805 0.971979 0.966894 0.961601 0.956152 0.950599 0.944993 0.939386 0.933831 0.928819 0.924996 0.921325 0.917773 0.914312 0.910909 0.924996 0.921325 0.917773 0.914312 0.910909 0.944993 0.939386 0.933831 0.928819 0.924996 0.921325 0.917773 0.914312 0.910909 0.907535 0.90746 0.89727 0.893698 0.887927 0.893698 0.8879494
1250 1260 1270	0.885982 0.881984 0.878062

1850       0.988823         1860       0.992601         1870       0.996455	1860	0.992601
	1820 1830 1840	0.977805 0.98144 0.985108
1950 1.033165	. 300	1.000100

1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2110 2120 2130 2140 2150 2160 2170 2180 2190 2200 2210 2220 2230 2240 2250 2260 2270 2280 2290 2300 2310 2320 2330 2340 2350 2360 2370 2380 2390 2400 2410 2420 2430 2440 2450 2460	1.038297 1.043546 1.048912 1.054396 1.06 1.066018 1.072153 1.078394 1.084733 1.091159 1.097664 1.104237 1.110869 1.11755 1.12427 1.131021 1.137792 1.144574 1.151275 1.157642 1.163998 1.170342 1.176678 1.183005 1.189327 1.195644 1.201958 1.20827 1.214582 1.220896 1.227212 1.233533 1.23986 1.246195 1.252539 1.258893 1.265259 1.271639 1.278034 1.284446 1.290875 1.397325 1.303795 1.310289 1.316806 1.323349 1.32992 1.336519 1.343149 1.34981 1.356505
2460 2470 2480	1.356505 1.363234 1.37
Wavelength λ (nm) 180 190 200 210 220	Extinction coefficient <i>k</i> (-) 2.065205 2.260065 2.45 2.598338 2.66775

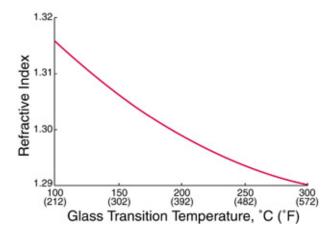
230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780	2.604213 2.400758 2.154195 2.088274 2.052975 2.04366 2.055692 2.084435 2.125252 2.173506 2.224561 2.273829 2.313705 2.323725 2.323869 2.31562 2.300048 2.27817 2.250694 2.219278 2.185115 2.149456 2.114728 2.084477 2.054883 2.025856 1.997324 1.967574 1.934722 1.903712 1.875862 1.875862 1.852421 1.834908 1.824749 1.822568 1.829451 1.846289 1.877807 1.926347 1.926347 1.926347 1.926347 1.985327 2.053735 2.130431 2.215719 2.308684 2.405752 2.505086 2.605323 2.70028 2.788593 2.875185 2.96012 3.043608 3.12641 3.208536 3.289673 3.369617
750 760 770	3.12641 3.208536 3.289673

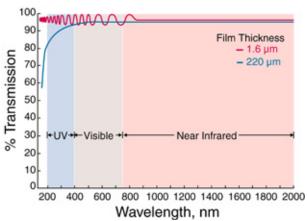
1340       7.127992         1350       7.194033         1360       7.260278         1370       7.326716         1380       7.393406         1390       7.460529         1400       7.527765         1410       7.595052         1420       7.66233
--

0000	44 50004
2030	11.58081
2040	11.63997
2050	11.69863
2060	11.75685
2070	11.81465
2080	11.87209
2090	11.92919
2100	11.98601
2110	12.04258
2120	12.09894
2130	12.15514
2140	12.21125
2150	12.26744
2160	12.32359
2170	12.37972
2180	12.43587
2190	12.49207
2200	12.54836
2210	12.60477
2220	12.66134
2230	12.71811
2240	12.77509
2250	12.83234
2260	12.88988
2270	12.94775
2280	13.00598
2290	13.06462
2300	
	13.12368
2310	13.18321
2320	13.24324
2330	13.30381
2340	13.36495
2350	13.42669
2360	13.48907
2370	13.55212
2380	13.61588
2390	13.68039
2400	13.74567
2410	13.81176
2420	13.8787
2430	13.94651
2440	14.01524
2450	14.08492
2460	14.15559
2470	14.22727
2480	14.3

#### **Teflon**

Dupont Corporation: "The high-performance Teflon® AF amorphous fluoropolymer family of products offers a unique combination of superior properties for demanding, high-performance applications."





#### Ti (Titanium)

i i (Titanium)	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.63	1.16
210.14	1.18
213.76	1.21
217.51	1.23
221.39	1.24
225.42	1.24
229.59	1.18
233.92	1.35
238.42	1.26
243.1	1.25
247.96	1.24
253.02	1.22
258.29	1.21
263.79	1.18
269.52	1.17
275.51	1.15
281.77	1.13
288.33	1.1
295.19	1.05
302.39	1.04
309.95	1.04
317.9	1.06
326.26	1.11
335.08	1.17
344.39	1.24
354.23	1.3
364.65	1.37
375.7	1.44
387.44	1.5
399.94	1.55
413.27	1.59
427.52	1.63
442.79	1.68
459.19	1.71
476.85	1.75
495.92	1.78
516.58	1.81

539.04	1.86
563.55	1.92
590.38	2.01
619.9	2.11
652.53	2.22
688.78	2.36
729.29	2.54
774.87	2.74
826.53	2.98
885.57	3.17
953.69	3.28
1033.17	3.35
1127.09	3.47
1239.8	3.62
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.10 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.90 326.26 335.08 344.39 354.23 364.65 375.70 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.90 652.53 688.78 729.29	Extinction coefficient k (-) 1.21 1.22 1.22 1.21 1.19 1.15 1.21 1.2 1.2 1.2 1.22 1.23 1.25 1.28 1.31 1.33 1.37 1.44 1.53 1.61 1.73 1.83 1.9 1.96 2.01 2.06 2.09 2.12 2.15 2.17 2.21 2.25 2.29 2.34 2.39 2.47 2.56 2.67 2.77 2.88 2.99 3.11 3.23

774.87	3.3
826.53	3.32
885.57	3.28
953.69	3.25
1033.17	3.3
1127.09	3.4
1239.80	3.52

## TiN (Titanium nitride)

TiN (Titanium nitride)			
Wavelength $\lambda$ (nm)	Refractive index	n	(-)
250	2.42976		
260	2.48595		
270	2.46735		
280	2.44445		
290	2.41597		
300	2.3922		
310	2.36362		
320	2.33198		
330	2.30868		
340	2.2791		
350	2.2502		
360	2.21286		
370	2.16345		
380	2.11559		
390 400	2.06668 2.00678		
410	1.92486		
420	1.82294		
430	1.70969		
440	1.5978		
450	1.48845		
460	1.39151		
470	1.30869		
480	1.23589		
490	1.17794		
500	1.13308		
510	1.08869		
520	1.0526		
530	1.02392		
540	.9975		
550	.97193		
560	.95359		
570	.92849		
580	.91411		
590	.90375		
600	.87995		
610	.87039		
620	.86266		
630	.85795		
640	.84818 .84533		
650 660	.83805		
670	.82799		
680	.83332		
690	.83654		
700	.83099		
710	.83961		
720	.83674		
730	.84234		
740	.84172		

750	.84815
760	.85508
770	.86263
780	.85505
790	.86922
800	.87239
810	.88956
820	.88248
830	.90089
840	.90986
850	.91135
860	.91248
870	.92696
880	.9386
890	.93796
Wavelength λ (nm) 250.00 260.00 270.00 280.00 290.00 300.00 310.00 320.00 330.00 340.00 350.00 360.00 370.00 380.00 400.00 410.00 420.00 430.00 440.00 450.00 460.00 470.00 520.00 530.00 540.00 550.00 550.00 560.00 570.00 580.00 590.00 600.00 610.00 620.00 630.00 640.00 650.00 660.00	Extinction coefficient <i>k</i> (-) 1.50788 1.40654 1.31625 1.25898 1.21784 1.17733 1.15391 1.13275 1.11245 1.08929 1.06255 1.03597 1.01573 0.99914 0.97984 0.95555 0.92983 0.91516 0.92606 0.96309 1.01311 1.09293 1.16947 1.26014 1.34971 1.44033 1.53012 1.61716 1.71145 1.79846 1.88527 1.97303 2.05191 2.13518 2.21513 2.30056 2.37818 2.45375 2.53882 2.61162 2.68866 2.77202

670.00	2.84814
680.00	2.91858
690.00	2.99869
700.00	3.07618
710.00	3.14639
720.00	3.21804
730.00	3.28737
740.00	3.35051
750.00	3.42523
760.00	3.49341
770.00	3.57155
780.00	3.63646
790.00	3.69387
800.00	3.76286
810.00	3.83744
820.00	3.90615
830.00	3.9749
840.00	4.0315
850.00	4.07859
860.00	4.12929
870.00	4.19353
880.00	4.25453
890.00	4.25381
900.00	4.18083

# TiO2 (Titania or Titanium dioxide) Wavelength $\lambda$ (nm) Refractive index n (-)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
210	1.46
241.82	1.853
273.64	2.61
305.45	4.47
337.27	3.9
369.09	3.578
400.91	3.413
432.73	3.054
464.55	2.949
496.36	2.881
528.18	2.829
560	2.792
591.82	2.759
623.64	2.732
655.45	2.712
687.27	2.696
719.09	2.683
750.91	2.67
782.73	2.66
814.55 846.36	2.656 2.649
878.18	2.64
910	2.632
941.82	2.625
973.64	2.621
1005.45	2.617
1037.27	2.613
1069.09	2.61
1100.91	2.61
1132.73	2.602
1164.55	2.601
1196.36	2.6
1228.18	2.599

2.59
Extinction coefficient <i>k</i> (-) 1.665 2.343 2.573 2.665 .8 .12 .1 .067 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
0 0
0
0 0
0
0
0

#### **UV2HSDUV**

1260

0.12020.	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	1.933080623
240	1.821823708
260	1.747251196
280	1.695560923
300	1.658683951
320	1.631708624
340	1.611538959
360	1.596163051
380	1.584237885
400	1.574845313
420	1.567344108
440	1.561277766
460	1.556315599
480	1.552214242
500	1.548792
520	1.54591141
540	1.543467202
560	1.541377851
580	1.539579558

0

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600	1.538021914
620	1.536664727
640	1.535475686
660	1.534428605
680	1.533502111
700	1.532678634
720	1.53194364
740	1.531285029
760	1.530692673
780	1.530158043
800	1.529673926
820	1.529234186
840	1.528833582
860	1.528467617
880	1.528132417
900	1.52782463
920	1.527541346
940	1.527280027
960	1.527038455
980	1.526814684
1000	1.526607
1020	1.52641389
1040	1.526234016
1060	1.526066187

## UV3DUV

880	1.533153538
900	1.532850785
920	1.53257025
940	1.532309789
960	1.53206751
980	1.531841741
1000	1.531631
1020	1.531433967
1040	1.531249464
1060	1.53107644
UV5DUV	
Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
220	1.990477467
240	1.876145718
260	1.799014481
280	1.745190691
300	1.706525926
320	1.678043176
340	1 656504013

1.656594013 340 360 1.640124806 380 1.627259372 400 1.617053125 420 1.608843664 440 1.602157424 460 1.596649885 480 1.592066399 500 1.588216 520 1.584953568 540 1.582167467 560 1.579770847 580 1.577695434 600 1.575887037 620 1.57430225 640 1.572906019 660 1.571669807

680 1.570570214 700 1.569587922 720 1.568706874 740 1.567913649 760 1.567196959 780 1.56654726 800 1.565956445 820 1.565417589 840 1.564924753 860 1.564472819 880 1.56405736 900 1.563674531 920 1.563320982 940 1.562993779 960 1.562690348 980 1.562408423 1000 1.562146 1.561901306 1020 1040 1.561672764 1060 1.561458969

#### UV6DUV

Wavelength  $\lambda$  (nm) Refractive index n (-)

220 240 260 280 300 320 340 360 380 400 420 440 460 480 500 520 540 560 580 600 620 640 660 680 700 720 740 760 780 800 820 840 860 880 900 920 940 960 980 1000	2.201252985 2.010264815 1.884978991 1.800109491 1.741018148 1.698887561 1.668221489 1.645490152 1.628366426 1.61528 1.605149053 1.597214288 1.590933748 1.585914663 1.5818684 1.57858014 1.575888125 1.573669232 1.571828811 1.570293426 1.569005611 1.567920036 1.567920036 1.566218698 1.565550883 1.564978406 1.564485925 1.56309513 1.562852322 1.56309513 1.562852322 1.562639894 1.562453637 1.562289991 1.562145936 1.562018902 1.561906694 1.561807432 1.5617195 1.5616441506
1020 1040 1060	1.561641506 1.561572247 1.561510682
W (Tungsten) Wavelength λ (nm) 206.63 208.81 211.03 213.3 215.62 217.99 220.41 222.89 225.42 228.01 230.66	Refractive index <i>n</i> (-) 1.7 1.78 1.87 1.98 2.1 2.23 2.37 2.52 2.68 2.83 2.97 3.09

3.09

3.2

3.29

233.37 236.15

239

901.67 944.61 991.84 1044.04 1102.04 1166.87 1239.8	3.24 3.14 3.05 3 3.03 3.1 3.14
Wavelength λ (nm) 206.63 208.81 211.03 213.30 215.62 217.99 220.41 222.89 225.42 228.01 230.66 233.37 236.15 239.00 241.91 244.90 247.96 251.10 254.32 257.62 261.01 264.49 268.06 271.74 275.51 279.39 283.38 287.49 291.72 296.07 300.56 305.18 309.95 314.87 319.95 325.19 330.61 336.22 342.01 348.01 354.23 360.67 367.35 374.28 381.48 388.96 396.74 404.83 413.27 422.06	Extinction coefficient <i>k</i> (-) 3.42 3.48 3.54 3.6 3.64 3.68 3.7 3.7 3.68 3.62 3.55 3.45 3.35 3.24 3.11 2.97 2.85 2.74 2.65 2.58 2.52 2.47 2.43 2.39 2.35 2.33 2.32 2.31 2.32 2.31 2.32 2.31 2.32 2.31 2.32 2.33 2.66 2.69 2.7 2.69 2.63 2.66 2.69 2.7 2.69 2.63 2.56 2.44 2.42 2.42 2.42 2.42 2.42 2.42 2.4
431.23	2.46

440.82 450.84 461.32 472.30 483.82 495.92 508.64 522.02	2.48 2.53 2.56 2.61 2.63 2.68 2.71 2.72
536.13	2.72
551.02	2.73
566.77	2.76
583.44	2.83
601.12	2.85
619.90 639.90	2.89 2.93
661.23	2.95
684.03	2.92
708.46	2.86
734.70	2.76
762.95	2.69
793.47	2.71
826.53	2.79
862.47	2.87
901.67	3.01
944.61	3.2
991.84 1044.04	3.39 3.69
1102.04	3.94
1166.87	4.16
1239.80	4.32

## ZnS (Zinc sulfide)

375.7 387.44 399.94 413.27 427.52 442.79 459.19 476.85 495.92 516.58 539.04 563.55 590.38 619.9 652.53 688.78 729.29 774.87 826.53 885.57 953.69 1033.17 1127.09 1239.8 1377.56 1549.75 1771.14 2066.33	2.66168 2.62867 2.59898 2.55855 2.71913 2.63766 2.44836 2.44093 2.4253 2.40922 2.39492 2.38004 2.36978 2.36147 2.34558 2.33728 2.32771 2.31886 2.3106 2.303 2.29562 2.29009 2.28446 2.28 2.2748 2.2706 2.2669 2.2634
Wavelength λ (nm) 206.63 210.14 213.76 217.51 221.39 225.42 229.59 233.92 238.42 243.1 247.96 253.02 258.29 263.79 269.52 275.51 281.77 288.33 295.19 302.39 309.95 317.9 326.26 335.08 344.39 354.23 364.65 375.7 387.44 399.94	Extinction coefficient <i>k</i> (-) 1.648 1.76668 1.7594 1.6604 1.49732 1.30035 1.10734 .92477 .80141 .73052 .67942 .61846 .5633 .51965 .48566 .46018 .43821 .42228 .42659 .43958 .43702 .39282 .31902 .31195 .28242 .1005 .00492 .039 .0567 .04986

413.27	.04036
427.52	.03367
442.79	.03073
459.19	.03018
476.85	.02964
495.92	.02778
516.58	.01684
539.04	.01
563.55	.01
590.38	.0098
619.9	.00823
652.53	.00072
688.78	0
729.29	0
774.87	0
826.53	0
885.57	0
953.69	0
1033.17	0
1127.09	0
1239.8	0
1377.56	0
1549.75	0
1771.14	0
2066.33	0

## **ZnS-cub (Zinc sulfide of cubic phase)** Wavelength $\lambda$ (nm) Refractive index n (-)

Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
206.63	2.24
208.37	2.351
210.14	2.4651
211.93	2.5797
213.76	2.6922
215.62	2.8
217.51	2.9006
219.43	2.9915
221.39	3.0701
223.39	3.1338
225.42	3.18
227.49	3.179
229.59	3.1623
231.74	3.1341
233.92	3.0986
236.15	3.06
238.42	3.0399
240.74	3.021
243.1	3.003
245.5	2.9861
247.96	2.97
250.46	2.9557
253.02	2.9418
255.63	2.9282
258.29	2.9143
261.01	2.9
263.79	2.8823
266.62	2.8642
269.52	2.8458
272.48	2.8277
275.51	2.81
278.61	2.7941

281.77 285.01 288.33 291.72 295.19 298.75 302.39 306.12 309.95 313.87 317.9 322.03 326.26 330.61 335.08 339.67 344.39 349.24 354.23 359.36 364.65 370.09 375.7 381.48 387.44 393.59 399.94 406.49 413.27 420.27 427.52 435.02 442.79 450.84 459.19 467.85 476.	2.779 2.765 2.7519 2.74 2.7248 2.712 2.7028 2.6984 2.7 2.7254 2.7551 2.7861 2.8154 2.84 2.8423 2.8378 2.827 2.8109 2.79 2.7632 2.7336 2.7024 2.6708 2.64 2.6167 2.5952 2.5754 2.557 2.54 2.529 2.5771 2.4927 2.4799 2.4687 2.4593 2.4502 2.4414 2.433 2.4248 2.417 2.4094 2.4021 2.395 2.3882 2.3816 2.3753 2.3692 2.3633 2.3576 2.352 2.3467 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753 2.3692 2.3416 2.3753

885.57 918.37 953.69 991.84 1033.17 1078.09 1127.09 1180.76 1239.8	2.3033 2.2998 2.2965 2.2933 2.2903 2.2874 2.2846 2.282 2.2795
Wavelength λ (nm) 206.63 208.37 210.14 211.93 213.76 215.62 217.51 219.43 221.39 223.39 225.42 227.49 229.59 231.74 233.92 236.15 238.42 240.74 243.10 245.50 247.96 250.46 253.02 255.63 258.29 261.01 263.79 266.62 269.52 272.48 275.51 278.61 281.77 285.01 288.33 291.72 295.19 298.75 302.39 306.12 309.95 313.87 317.90 322.03 326.26 330.61 335.08 339.67 344.39	Extinction coefficient <i>k</i> (-) 1.65 1.72528 1.76624 1.77656 1.75992 1.72 1.66048 1.58504 1.49736 1.40112 1.3 1.20248 1.10624 1.01376 0.92752 0.85 0.8016 0.7624 0.7304 0.7036 0.68 0.64864 0.61872 0.59048 0.56416 0.54 0.51984 0.50192 0.48608 0.47216 0.46 0.44816 0.43808 0.42992 0.42384 0.42 0.42624 0.43312 0.43888 0.42992 0.42384 0.44 0.42 0.42660 0.3976 0.3688 0.336 0.3 0.25776 0.21488 0.17312

349.24 354.23 359.36 364.65 370.09 375.70 381.48 387.44 393.59 399.94 406.49 413.27 420.27 427.52 435.02 442.79 450.84 459.19 467.85 476.85 476.85 476.85 476.85 476.85 527.57 539.04 551.02 563.55 576.65 590.38 604.78 619.90 635.79 652.53 670.16 688.78 708.46 729.29 751.39 774.87 799.87 826.53 855.03 885.57 918.37 953.69 991.84 1033.17 1078.09 1127.09 1180.76 1239.80	0.13424 0.1 0.08368 0.07264 0.06576 0.06192 0.06 0.05568 0.05184 0.04432 0.04 0.02982 0.01979 0.01084 0.00393 0.00001 0.00001 0.00001 0.00001 0 0 0 0
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### ZrO2 (Ziconuim dioxide or zirconia)

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Wavelength $\lambda$ (nm)	Refractive index <i>n</i> (-)
250	2.64599
260	2.60254
270	2.56035
280	2.52052
290	2.48387

300	2.45089
310	2.42171
320	2.39616
330	2.37387
340	2.35437
350	2.33718
360	2.32186
370	2.30807
380	2.29561
390	2.28431
400	2.27413
410	2.26501
420	2.25695
430	2.24993
440	2.24391
450	2.23884
460	2.23465
470	2.23125
480	2.22853
490	2.22637
500	2.22467
510	2.2233
520	2.22216
530	2.22117
540	2.22022
550	2.21927
560	2.21825
570	2.21713
580	2.2159
590	2.21454
600	2.21306
610	2.21148
620	2.20982
630	2.20809
640	2.20633
650	2.20455
660	2.20277
670	2.20102
680	2.19929
690	2.1976
700	2.19594
710	2.19433
720	2.19276
730	2.19123
740	2.18975
750	2.1883
760	2.1869
770	2.18553
780	2.18419
790	2.18287
800	2.18156
810	2.18024
820	2.17891
830	2.17756
840	2.1762
850	2.17482
Wavelength $\lambda$ (nm) 250 260	Extinction coefficient <i>k</i> (-) 0 0

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270 280 290 300 310 320 330 340 350 360 370 380 390 400	0 0 0 0 0 0 0 0
410 420	0 0
430	0
440 450	0
460	0
470	0
480	0
490	0
500	0
510 520	0
530	0
540	0
550	0
560	0
570	0
580	0
590 600	0
610	ő
620	0
630	0
640	0
650 660	0
670	0
680	0
690	0
700	0
710	0
720 730	0
740	0
750	0
760	0
770 700	0
780 790	0
790 800	0
810	ő
820	0
830	0
840	0
850	0

**Note**: Data provided for educational purposes. Most data after *Filmetrics Corporation* of San Diego, California (2002). Teflon data after *Dupont Corporation* of Wilmington, Delaware (2003).