

Supplementary information

Table 1 provides the calibrated complex refractive index for the Transparent Conductive Oxide (TCO) layer. This data is interpolated at specific wavelength values for data integrity.

Table 1 Interpolated complex refractive index for TCO at specific wavelengths

wavelength (μm)	n	ik
0.3	2.154767	0.175205
0.6	1.88984	0.00239
0.9	1.618321	0.014275
1.2	1.402621	0.0356749999999999