

Supplementary Material

Table S1. Precursor amounts to produce mixtures for viscosity measurement, and reaction mixtures for ATO coating deposition. Samples in bold are also bold in Table 1.

Sample ID	Butanol	Water	ECH	PEG SS	CB	Stock Paste	SbCl ₃	SnCl ₄ ·5H ₂ O
CB0-PEG6	9.00	0	4.50	2.05	0	0	0	0
CB0-PEG10	8.00	0	4.00	3.38	0	0	0	0
CB0-PEG14	7.05	0	3.51	4.70	0	0	0	0
CB3-PEG6	7.15	1.10	2.20	0	0	3.20	0	0
CB3-PEG10	8.20	0.61	2.35	1.35	0	4.00	0	0
CB3-PEG14	4.00	0.51	4.00	2.50	0	3.50	0	0
CB5-PEG6	7.69	1.20	2.32	0	0.32	3.50	0	0
CB5-PEG10	7.82	1.21	0	0	0.03	5.77	0	0
CB5-PEG14	7.05	0.25	0.52	1.48	0.07	5.40	0	0
CB7-PEG6	6.50	1.00	2.24	0	0.55	3.15	0	0
CB7-PEG10	7.53	1.16	0	0	0.32	5.75	0	0
CB7-PEG14	7.42	0.28	0.53	1.60	0.40	5.95	0	0
CB5-PEG10-ATO	6.50	1.00	0	0	0	5.70	0.05	1.00
CB6.5-PEG5.6-ATO	6.50	1.00	2.24	0	0.55	3.15	0.05	1.00
CB7-PEG6-ATO	6.50	1.00	2.24	0	0.61	3.50	0.05	1.00
CB7-PEG10-ATO	6.50	1.00	0	0	0.31	5.50	0.05	1.00

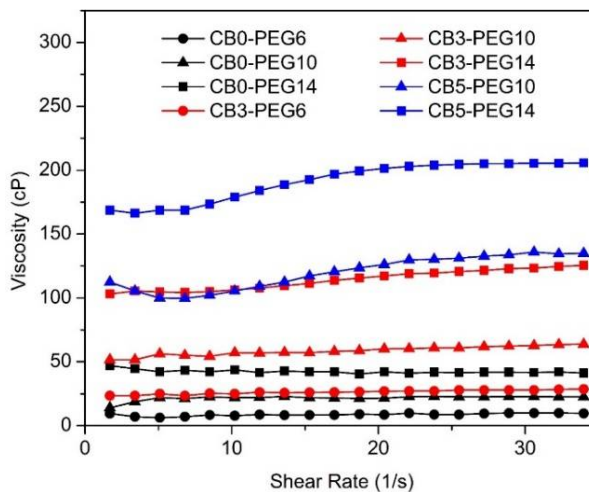


Figure S1. Viscosity profiles of the template mixtures vs. shear rate.

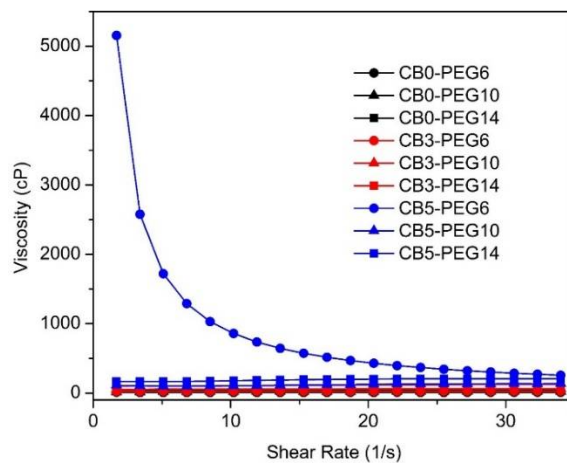


Figure S2. Viscosity profiles of the template mixtures vs. shear rate (Figure S1), and including the viscosity profile of the non-Newtonian sample CB5-PEG6, which also shows the instrument's limit.

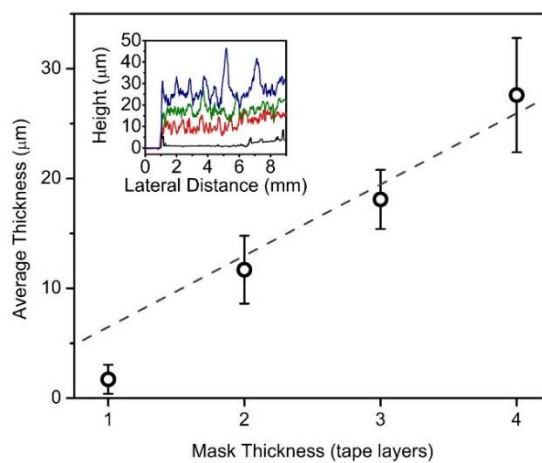


Figure S3. Stylus profilometry measurements of meso-macroporous ATO coatings with tape layers of 1× (black), 2× (red), 3× (green) and 4× (blue).

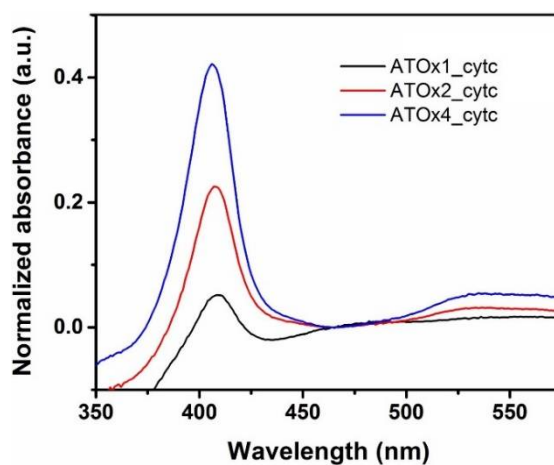


Figure S4. Absorbance spectra of cyt c soaked ATO coatings with tape layers of 1× (black), 2× (red), and 4× (blue).

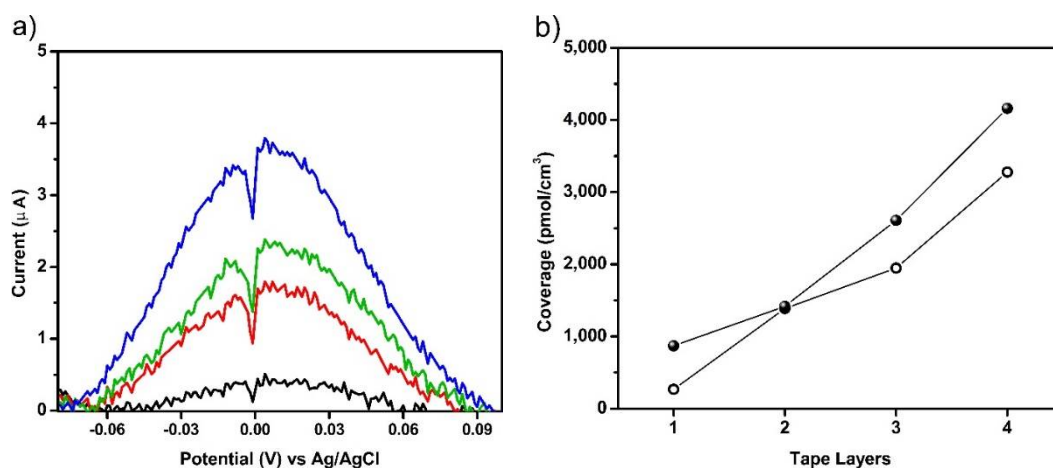


Figure S5. (a) Cyclic voltammograms from which the approximated ATO signal has been subtracted, and (b) Coverage of *cyt c* on the meso-macroporous electrodes calculated from cyclic voltammograms (circles) and by absorbance measurements (spheres).

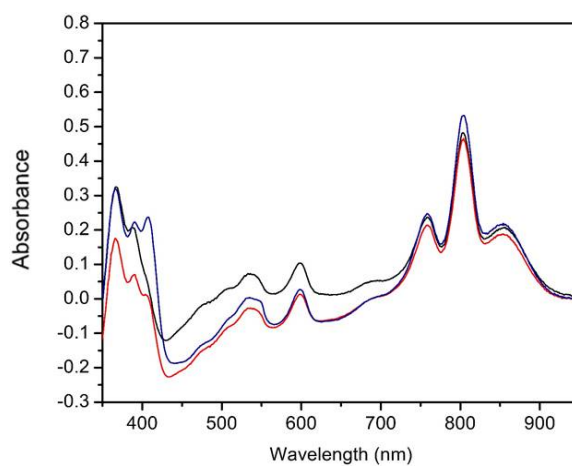


Figure S6. Absorbance spectra of the RC-treated ATO coatings, with tape layers of 1 \times (black), 2 \times (red), and 4 \times (blue).

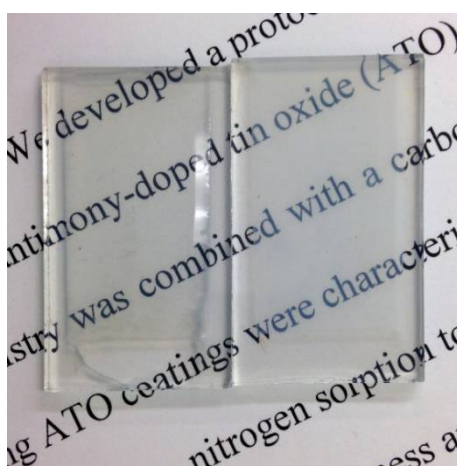


Figure S7. Photograph of 2 \times thick CB5-PEG10-ATO coatings on FTO glass, and onto the left coating has been dropped enough water to saturate the coating.