

Supporting Information

A panchromatic electrochromic device composed of Ru(II)/Fe(II)-based heterometallo- supramolecular polymer

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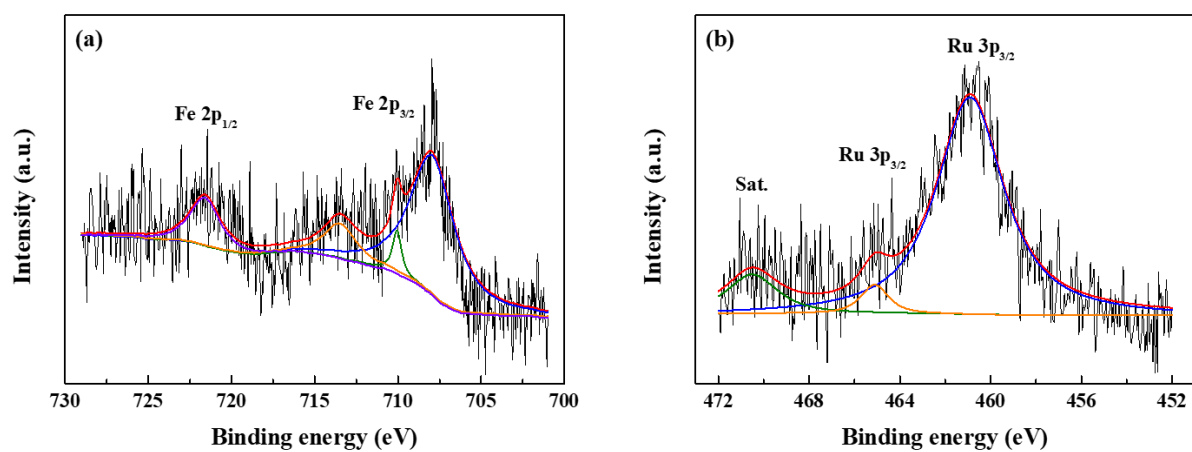


Figure S1. The XPS spectra of the PolyRuFe for (a) Fe 2p and (b) Ru 3p.

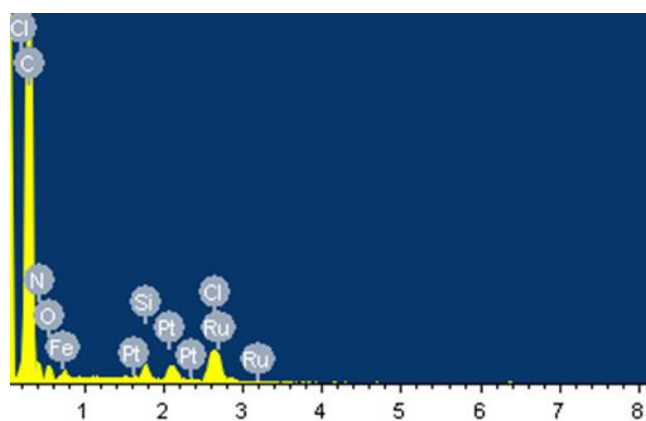


Figure S2. The EDS spectrum of the PolyRuFe.

Element	Weight (%)	Atomic (%)
C K	67.10	78.93
N K	13.20	13.32
O K	4.55	4.02
Cl K	4.35	1.73
Fe L	4.32	1.09
Ru L	6.48	0.91
Totals	100.00	

Table S1. The atomic composition of PolyRuFe.

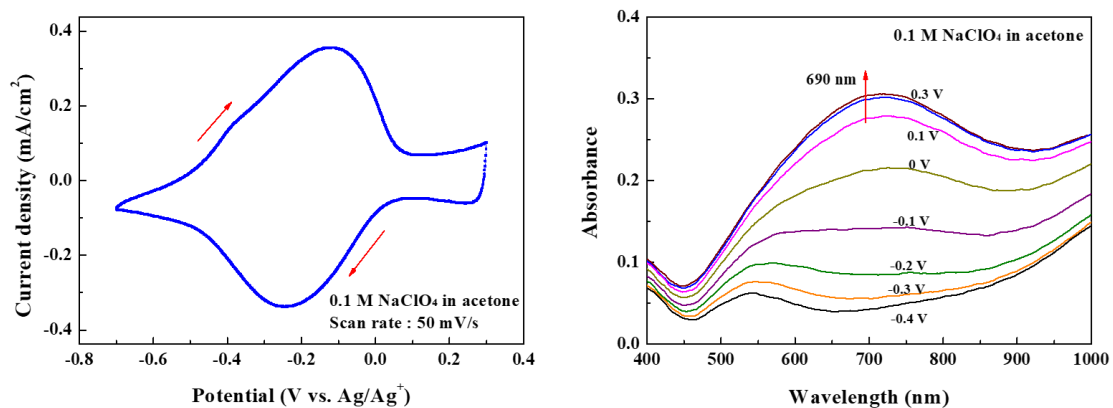


Figure S3. (a) The CV of water-dispersible PB thin film cycled in 0.1 M NaClO₄/acetone at 50 mV/s. (b) The UV-vis absorbance spectra of water-dispersible PB thin film collected in 0.1 M NaClO₄/acetone at different potential biases from -0.4 to 0.3 V (vs. Ag/Ag⁺).

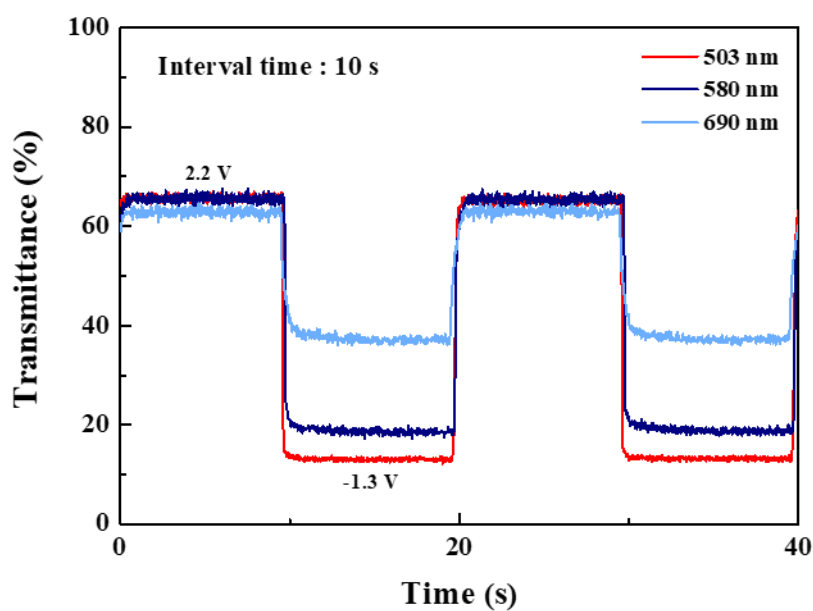


Figure S4. Enlarged view of dynamic transmittance response of the PolyRuFe/PB ECD at 503, 580 and 690 nm.

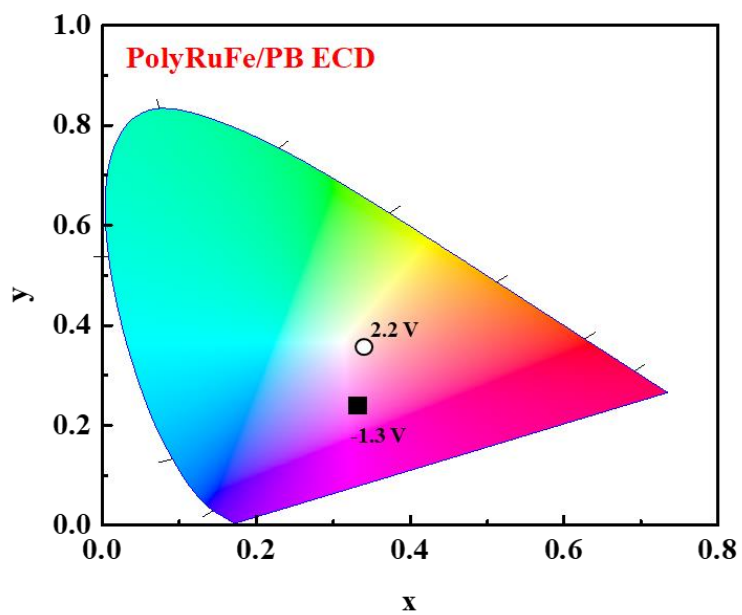


Figure S5. Colorimetry (x-y diagram) of the PolyRuFe/PB ECD at the bleached state (2.2 V) and colored state (-1.3 V).

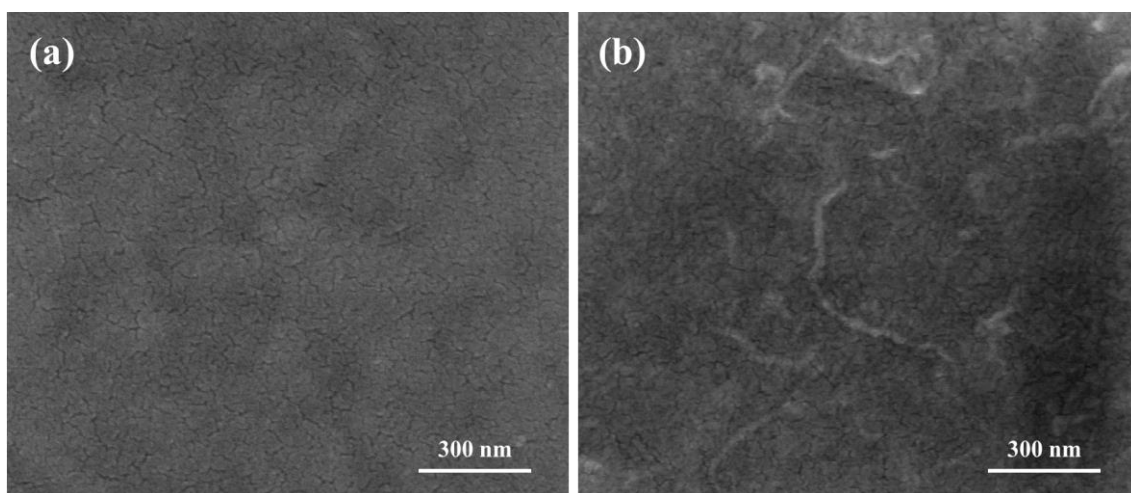


Figure S6. SEM images of (a) PolyRuFe and (b) PolyRuFe-MWCNT thin films.

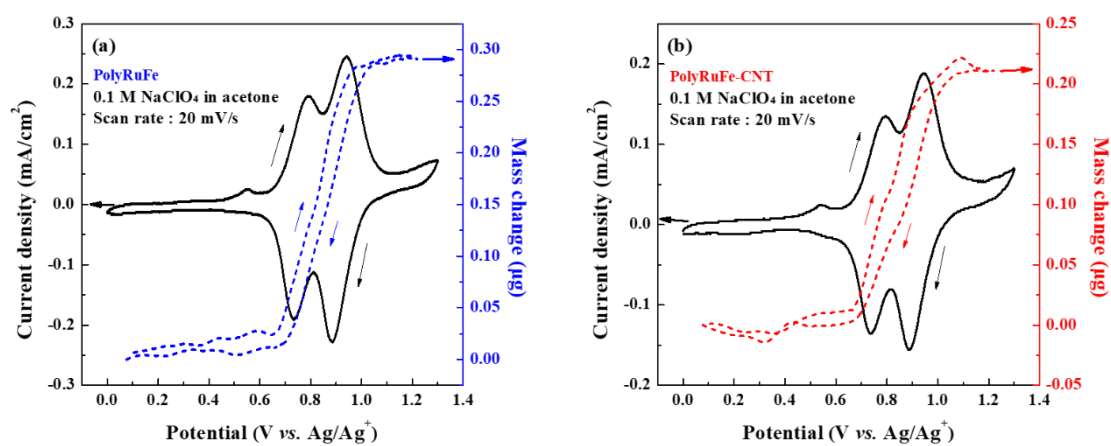


Figure S7. CVs and accumulated mass changes of (a) PolyRuFe and (b) PolyRuFe-MWCNT thin films coated on the gold-disk electrode. The data were obtained in 0.1 M NaClO₄/acetone at a scan rate of 20 mV/s.