

Supporting information

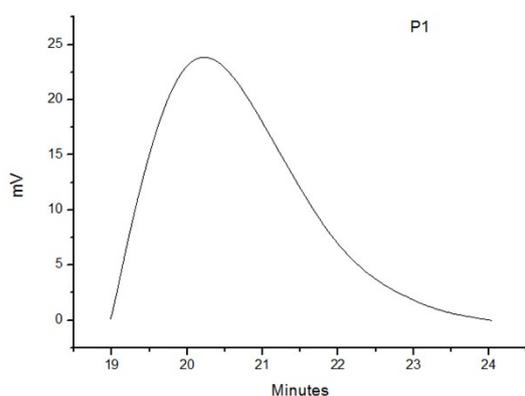
Visible and Near-Infrared Electrochromic Thiophene- Diketopyrrolopyrrole Polymers

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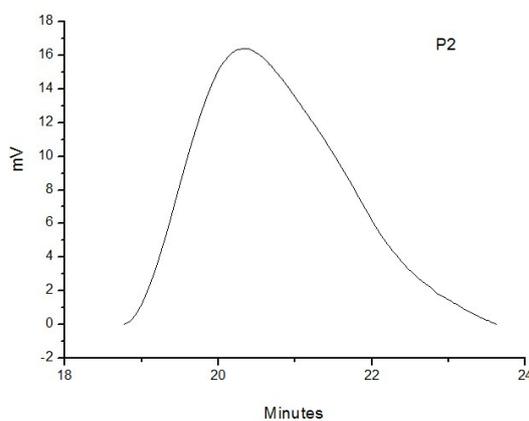
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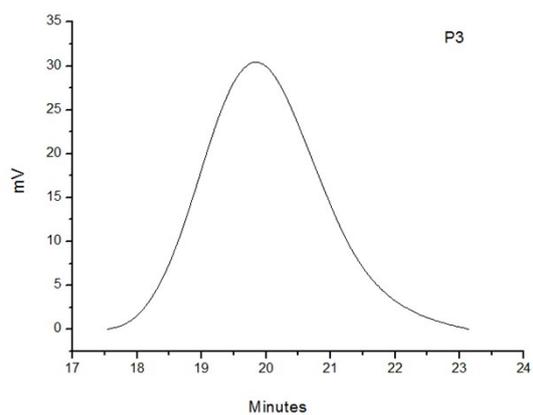
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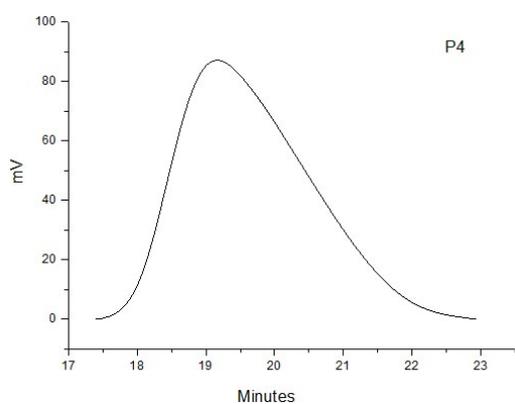
Peak No	Mp	Mn	Mw	Mz	Mz+1	Mv	PDI
P1	45154	18684	41225	63531	80598	37584	2.20643



Peak No	Mp	Mn	Mw	Mz	Mz+1	Mv	PDI
P2	40926	17574	37853	61094	80911	34283	2.153923

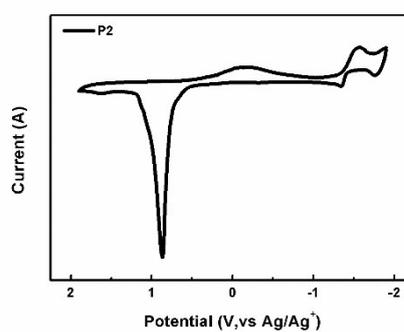
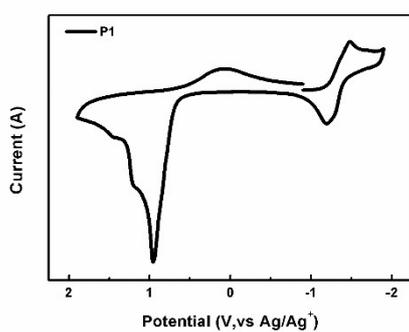


Peak No	Mp	Mn	Mw	Mz	Mz+1	Mv	PDI
P3	128869	50674	112333	183819	248925	101509	2.21678



Peak No	Mp	Mn	Mw	Mz	Mz+1	Mv	PDI
P4	66910	37135	80467	141400	210680	72288	2.16688

Figure S1. The GPC traces of polymers **P1-P4**



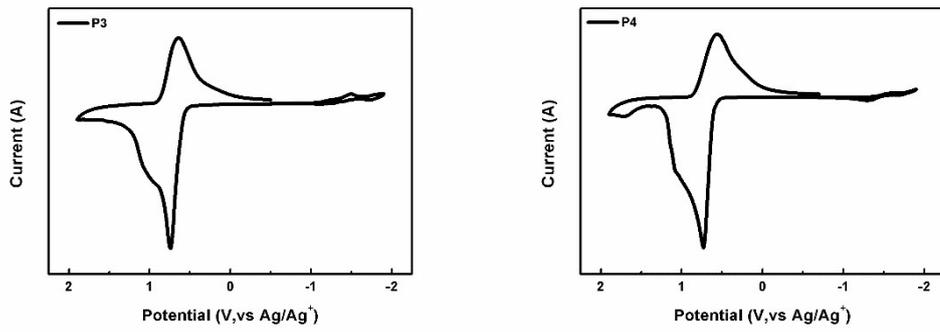


Figure S2. Cyclic voltammograms of polymers **P1-P4** films on Platinum disk electrode in 0.1 M n-Bu₄NPF₆ solution in dry acetonitrile with a scan rate of 50mV/s.

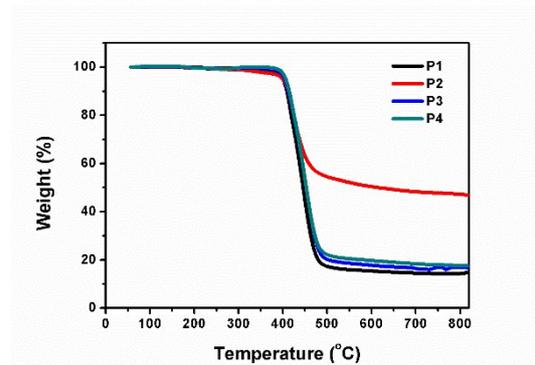
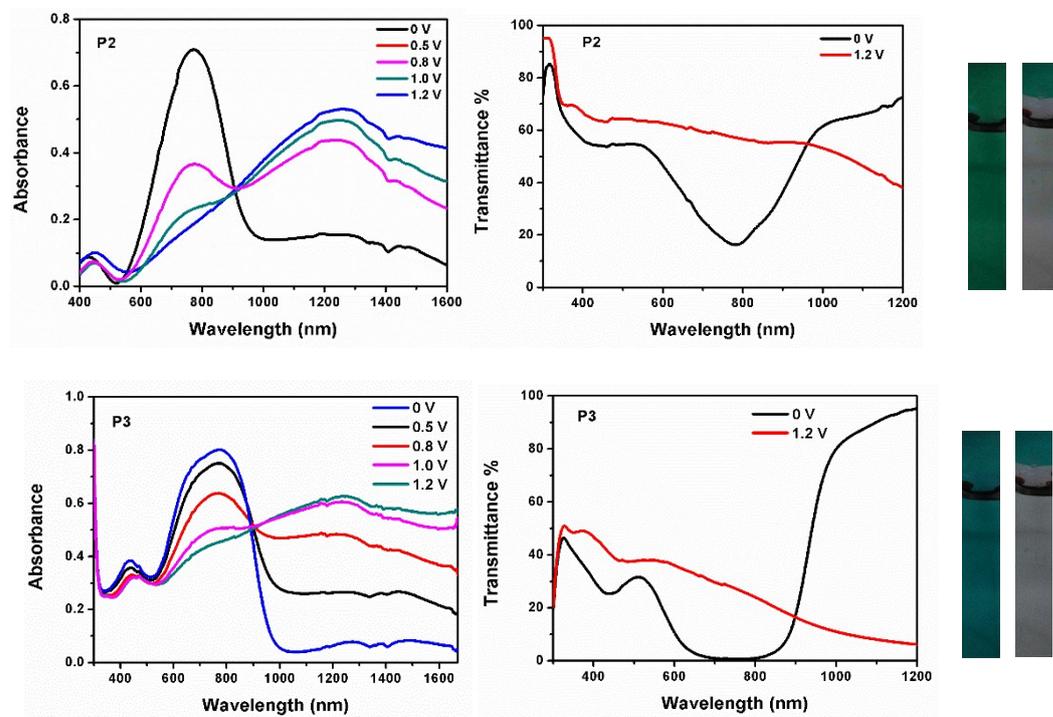


Figure S3. TGA traces of polymers **P1-P4**.



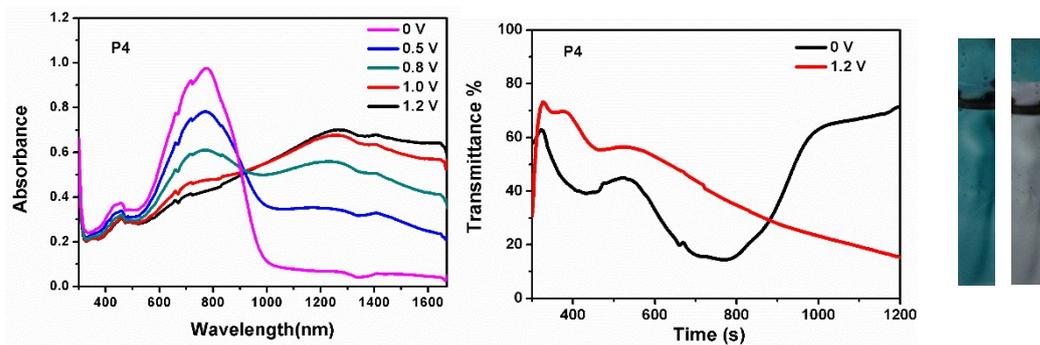


Figure S4. The spectroelectrochemistry, transmittance spectra and the photographs of **P2**, **P3** and **P4** at the neutral state (left, under 0 V) and oxidation state (right, under 1.2 V) under the applied potentials.

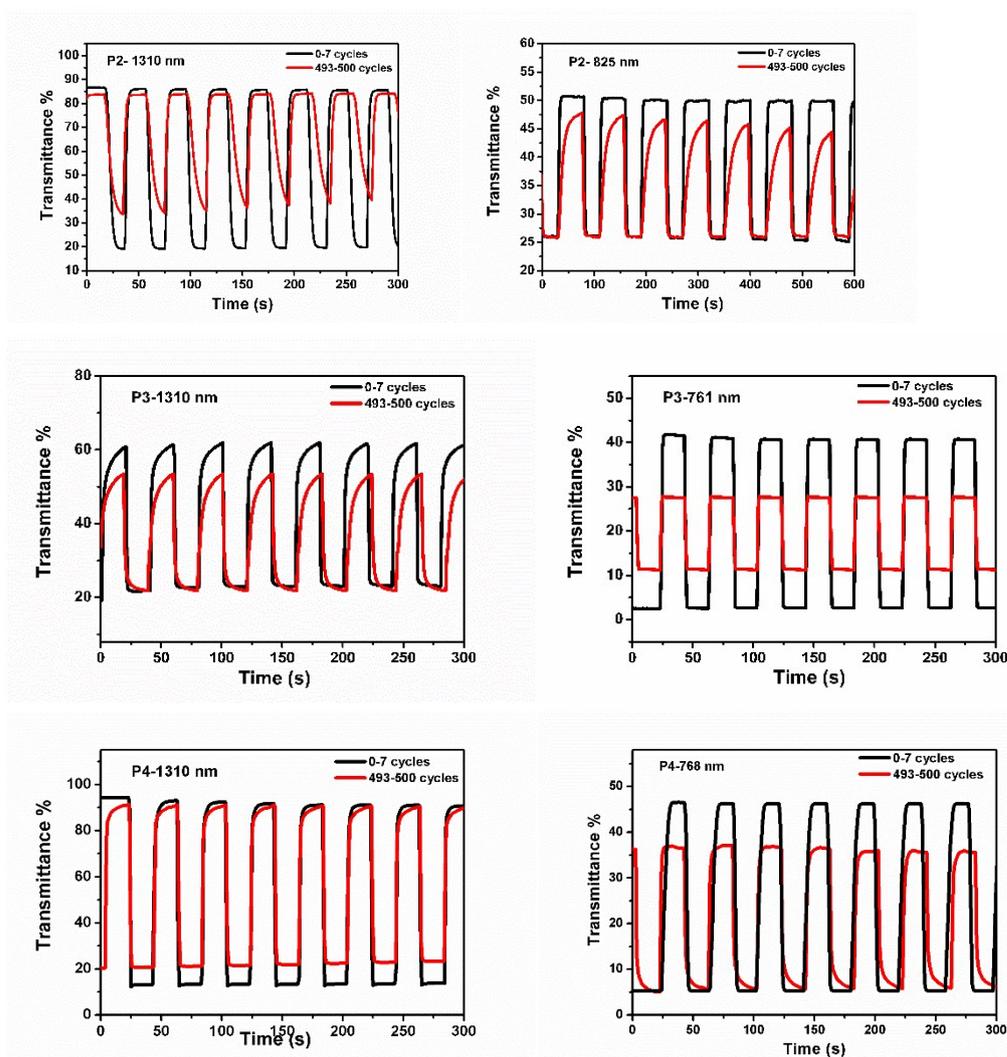


Figure S5. Chronoamperometric spectra of polymers at a given wavelength.