Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting Information

Synthesis and electrochemical polymerization of Diketopyrrolopyrrole Based Donor-Acceptor-Donor monomers containing 3,6 and 2,7 linked carbazoles

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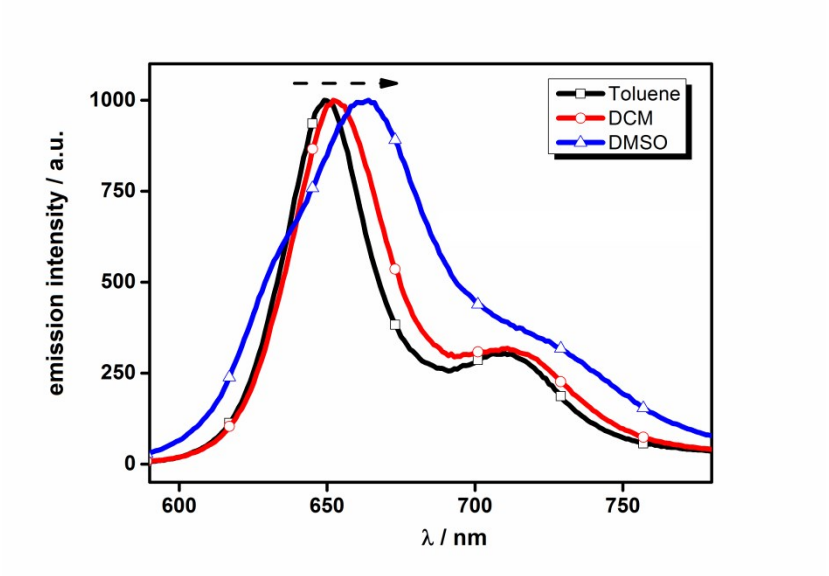

Figure S1. Fluorescence emission spectra of **36CzEtDPP** in toluene, DCM and DMSO (Excitation at 550 nm).

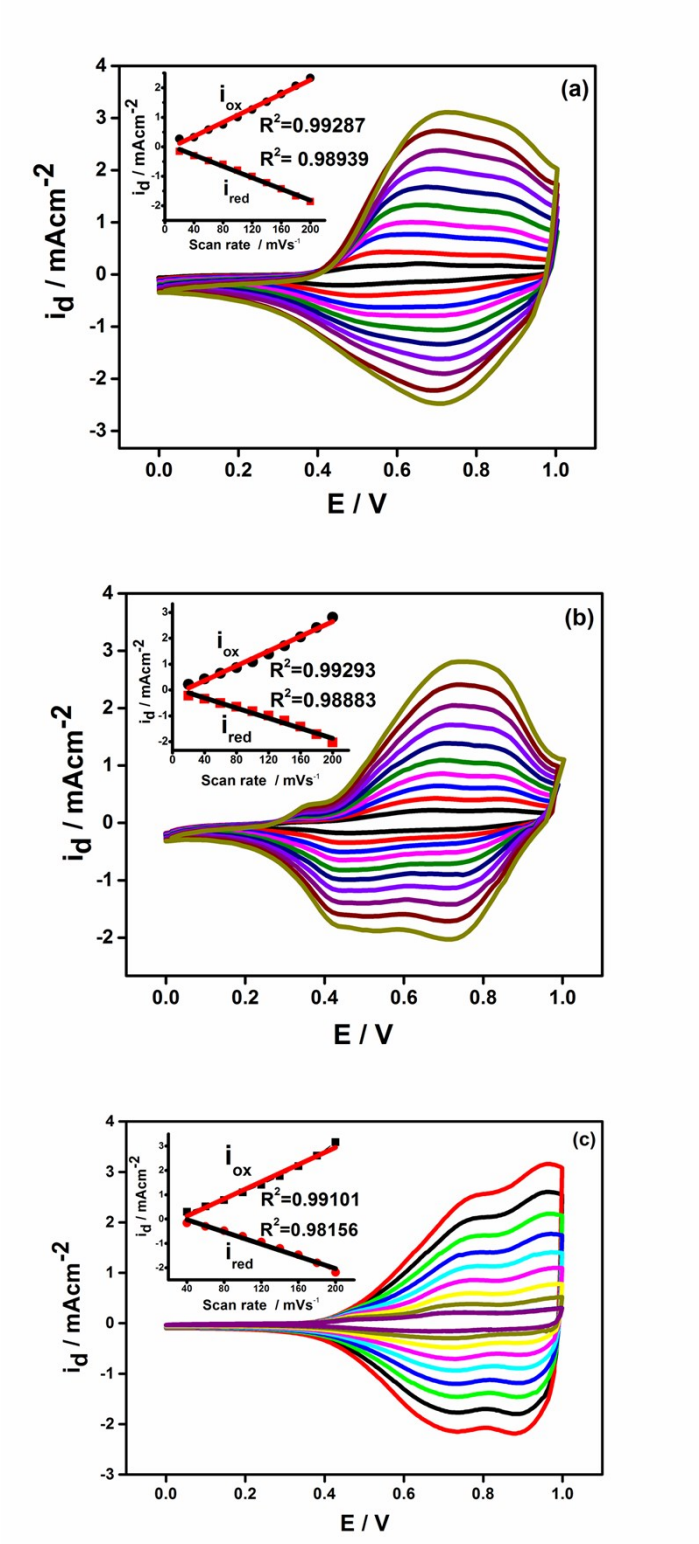

Figure S2. Scan rate dependencies of electrochemically synthesized (a) **36CzMeDPP**, (b) **36CzEtDPP** and (c) **27CzDPP** in 0.1 M $TBABF_4$/ACN at scan rates of 20-200 mV/s (Insets: Relationship of anodic and cathodic currents with respect to scan rate).

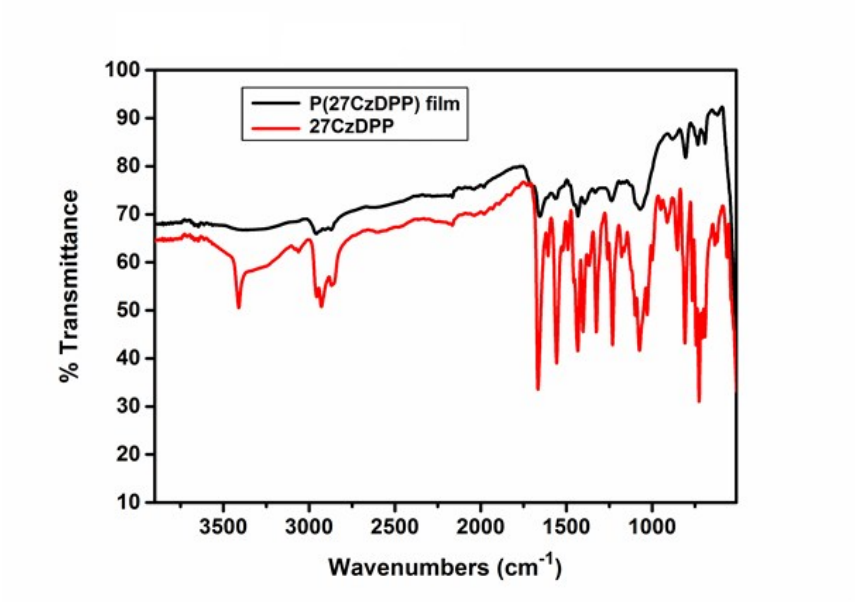

Figure S3. FTIR spectra of **27CzDPP** and **P(27CzDPP)**

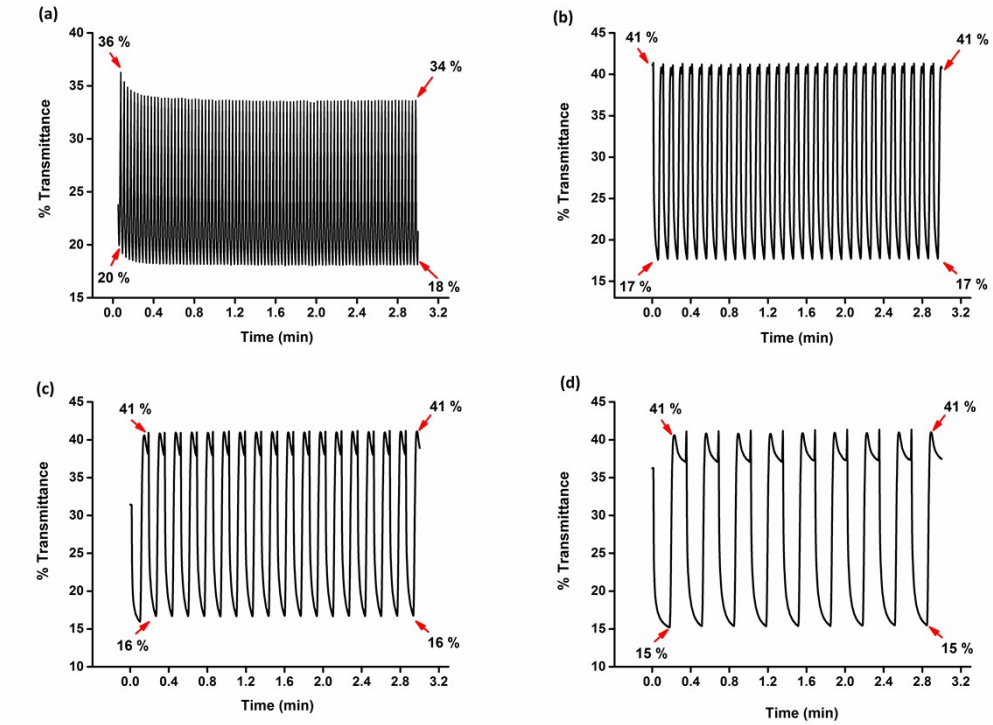

Figure S4. Kinetic study of **P(36CzMeDPP)** on ITO for (a) 1 s, (b) 3 s, (c) 5 s and (d) 10 s interval at 650 nm in 0.1 M $TBABF_4$/ACN applied potential -0.5 V – 1.0 V.

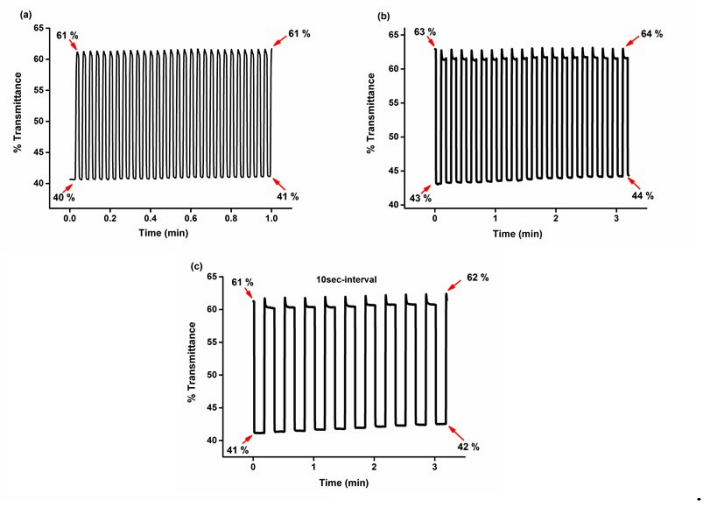

Figure S5. Kinetic study of **P(27CzDPP)** on ITO for (a) 1 s, (b) 5 s and (c) 10 s interval at 595 nm in 0.1 M $TBABF_4$/ACN applied potential -0.5 V – 1.0 V.

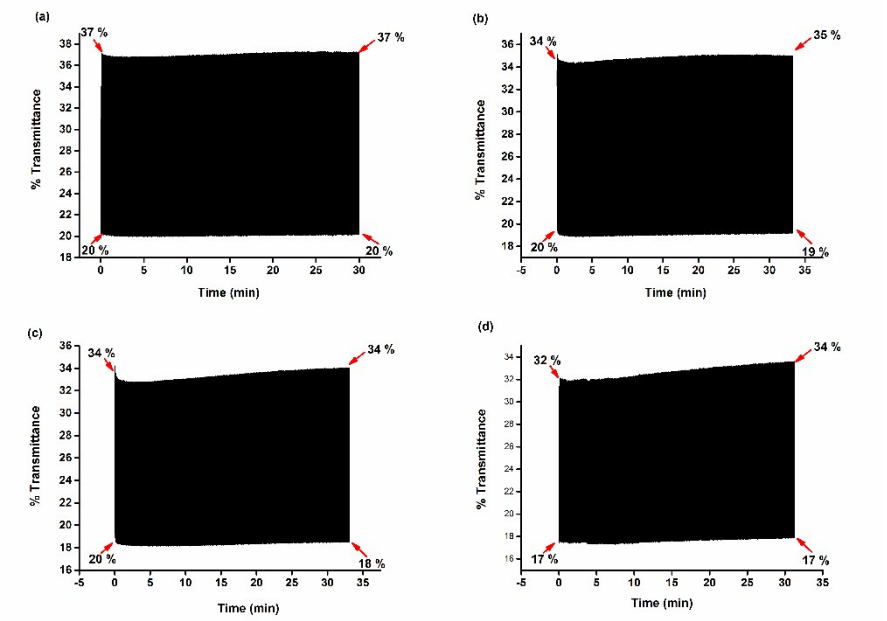

Figure S6. Stability study of **P(36CzEtDPP)** on ITO for 1 s interval (a) first, (b) second and (c) third and (d) fourt thousand cycle at 595 nm in 0.1 M $TBABF_4$/ACN applied potential -0.5 V – 1.0 V.