Supporting information

Electrosynthesis and electrochemical capacitive behavior of a new nitrogen PEDOT analogue-based polymer electrode

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**Fig. S1** SEM images of PMDTO obtained potentiostatically at 0.7 V (vs Ag/AgCl) on ITO electrode for 30 s. Magnification: (A) 1 000 ×, (B) 10 000 ×.
Fig. S2 SEM image of cross-section of PEDOT (A) and PMDTO (B) films.
Fig. S3 FT-IR spectra of the MDTO monomer (a) and the doped PMDTO film (b) obtained potentiostatically at 0.7 V vs Ag/AgCl.
Fig. S4 TG and DTG curves of PMDTO obtained potentiostatically at 0.7 V vs Ag/AgCl.
Fig. S5  Galvanostatic charge/discharge curves of PMDTO (A) and PEDOT (B) in 0.1 mol L⁻¹ CH₃CN-Bu₄NBF₄ at different current densities; (C) Specific capacitance as a function of current density.
Fig. S6 Cyclic voltammograms of a symmetric supercapacitor based on two PMDTO electrodes in the potential voltage of 0-1.0 V.