**Supplementary Information**

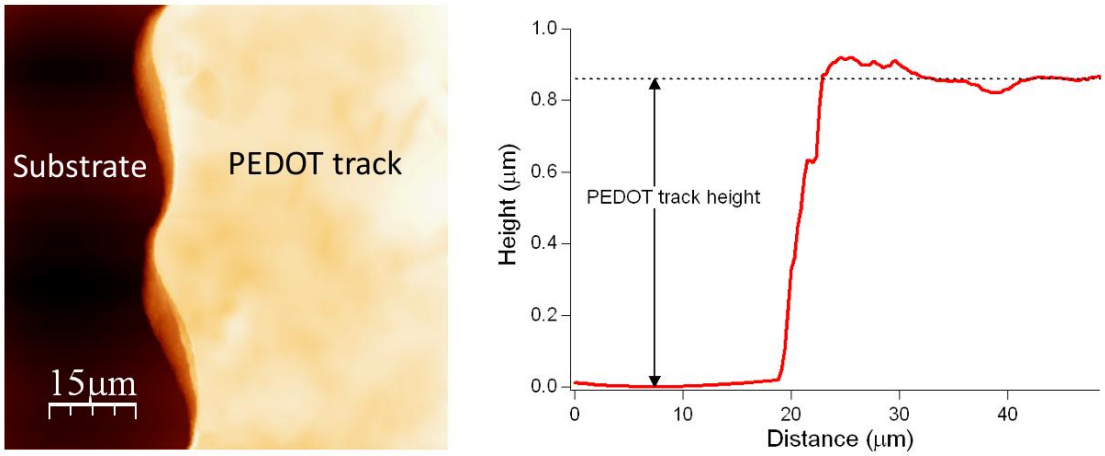


**Figure S1.** The thickness of a PEDOT track as measured from Atomic Force Microscopy images (left) of the scratched PEDOT track. A line profile is taken across the step (right), and the height calculated.

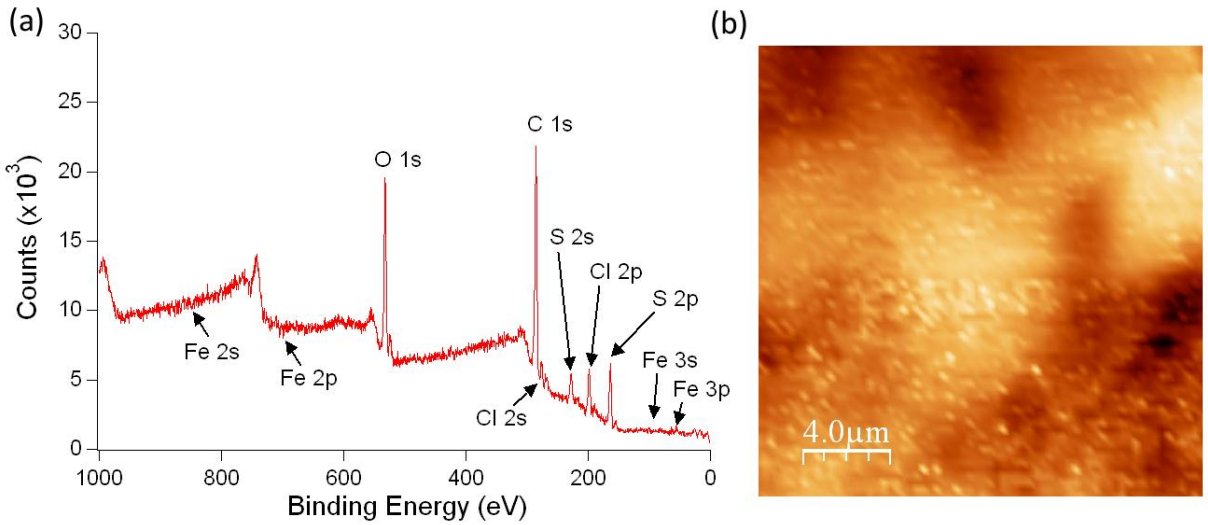


**Figure S2.** (a) The X-ray Photoelectron Spectroscopy survey scan of the uniform thin PEDOT film, using $Cl^-$ as the anion to differentiate it from PEDOT. The peak positions expected for

Fe are marked, with the spectra indicating no Fe being present in the washed film. (b) The surface morphology of the PEDOT tracks achieved with the inkjet printing-VPP process.

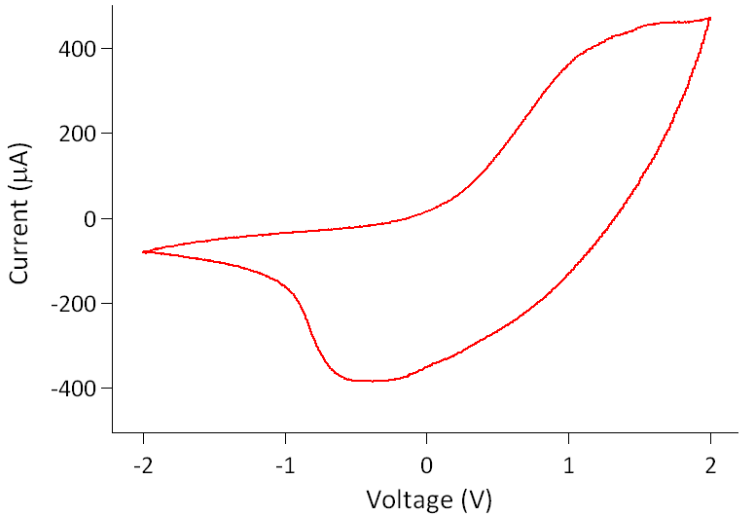


**Figure S3.** Cyclic voltammetry of the VPP PEDOT film prepared from spin coating the oxidant solution. The scan rate was 10 mV/s in the ionic liquid. Oxidation and reduction occur at the voltages of +1.4 V and -0.7 V respectively.