

Electrochemical and spectroscopic (FTIR) evidence of conducting polymer-Cu ions interaction

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Table of contents

Figure S1. SWASV of 0.5 ppm Cu^{2+} in a 0.1 M LiClO_4 acetate buffer (pH 4), obtained with a GC electrode. For all the experiments, $E_d = -1.0$ V, $t_d = 60$ s, $f = 15$ Hz, $\Delta E_s = 4$ mV, $E_{SW} = 50$ mV as analytical parameters. The accumulation of the metal ion was carried out under stirring.

Figure S2. Potentiodynamic electropolymerization of PEDOT (bottom) and PXDOT (top) obtained in an Au/carbon sheet electrode dipped in a 0.1 M $\text{LiClO}_4/\text{ACN}$ solution, $v = 25$ mV/s, monomer concentration 20 mM.

Figure S3. FTIR spectra of (a) PEDOT and (b) PXDOT films obtained before (black line) and after (green line) dipping the samples for 24 hr in a 0.1 M CuSO_4 solution.

Additional Data

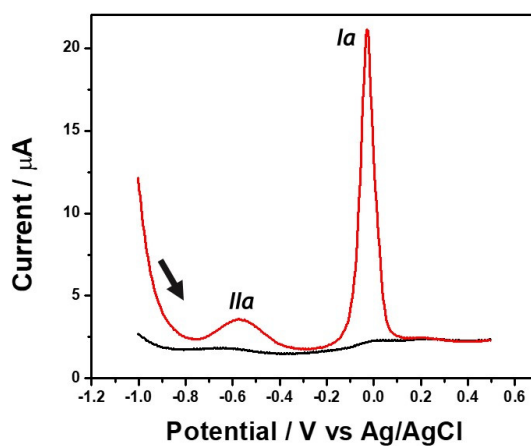


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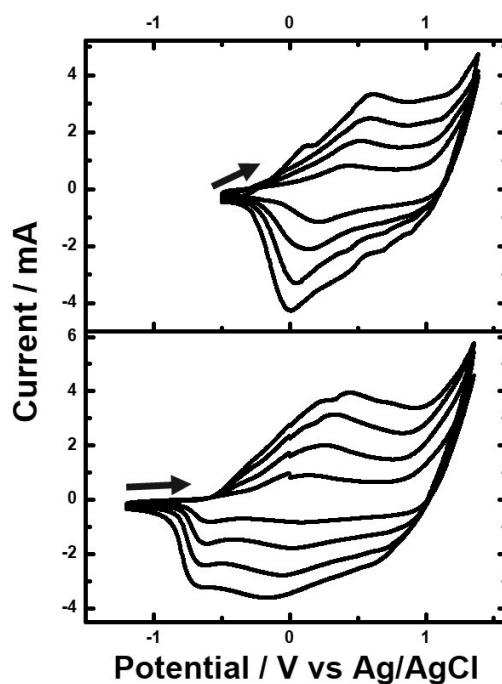


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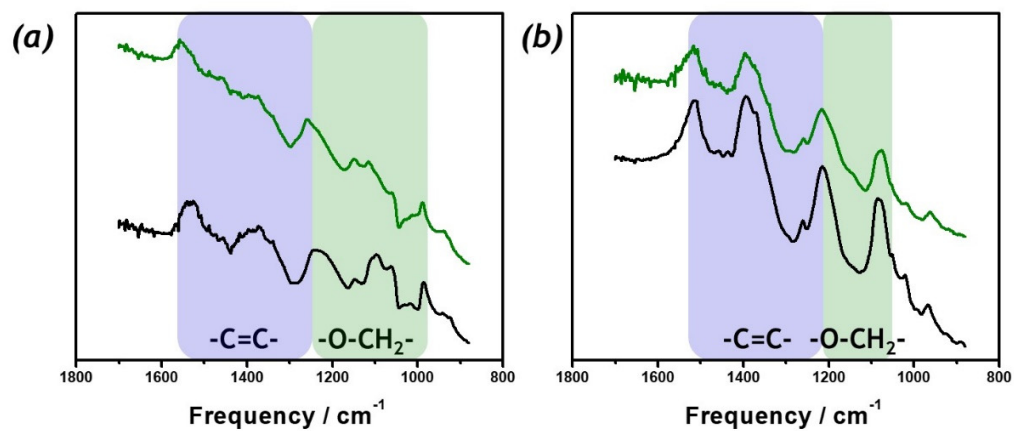


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