

Supporting Information

Post-polymerization functionalization of poly(3,4-propylenedioxythiophene) (PProDOT) *via* thiol-ene “click” chemistry

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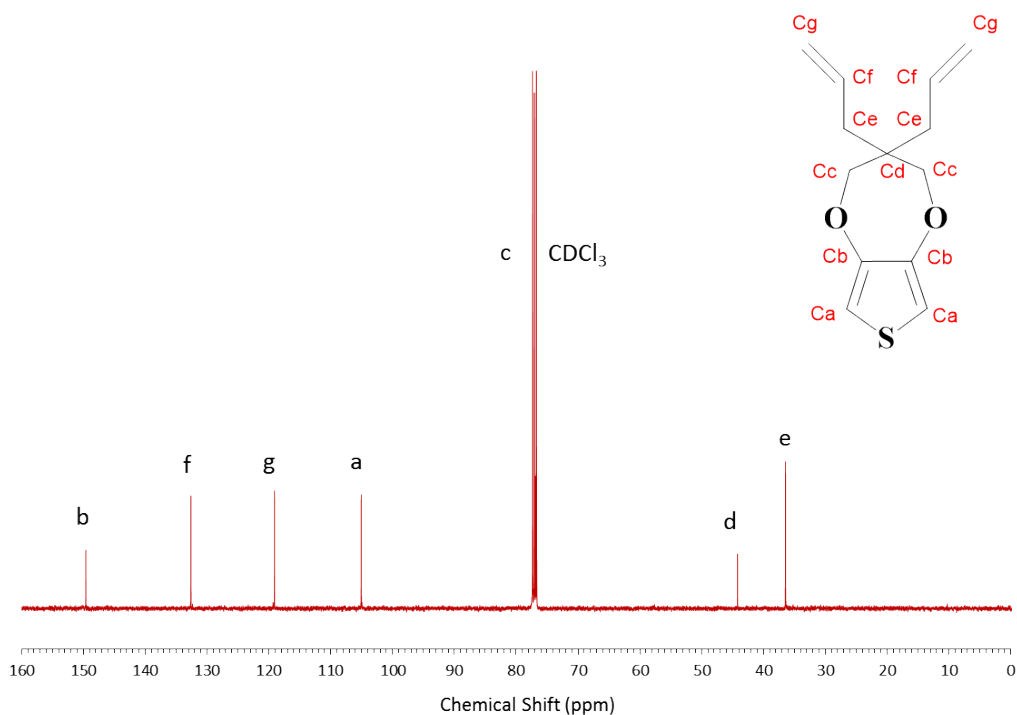


Figure S1. ^{13}C NMR spectra of ProDOT-diene in CDCl_3

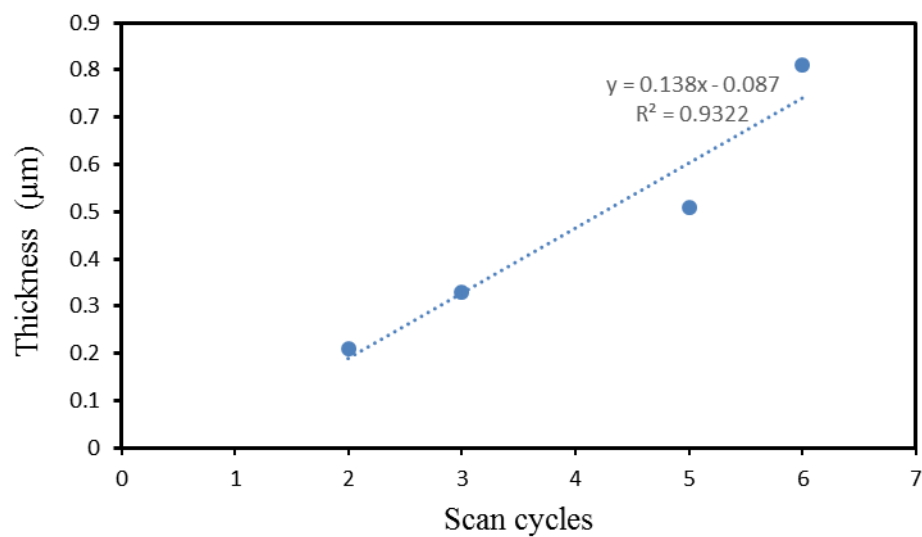


Figure S2. Relationship between scan cycles and film thickness

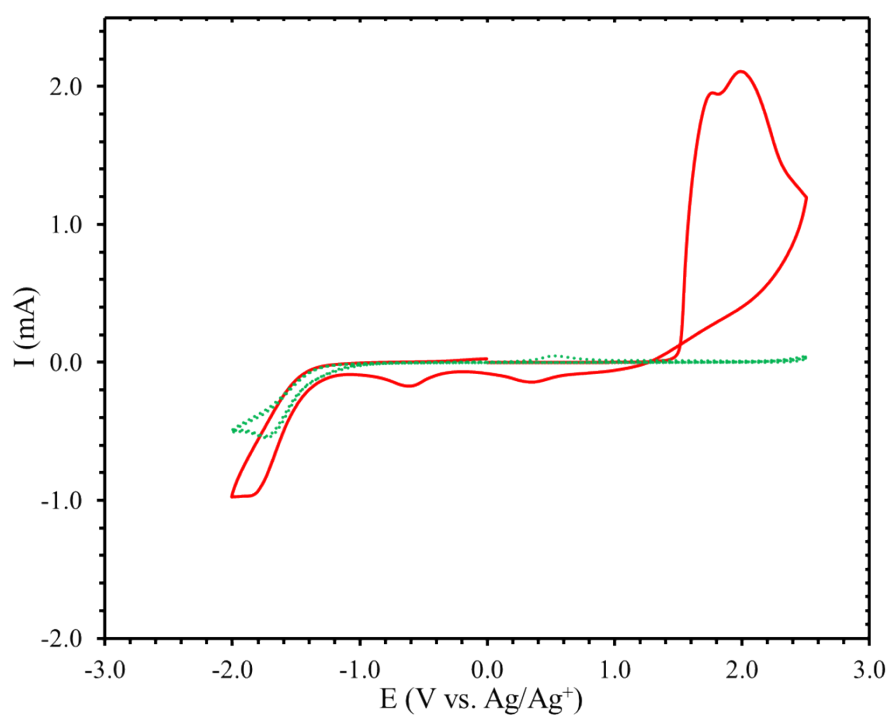
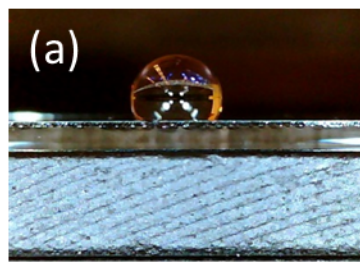
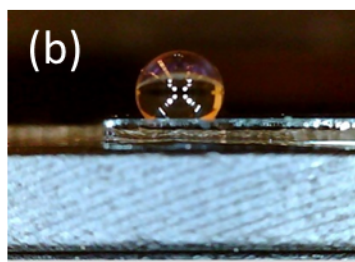


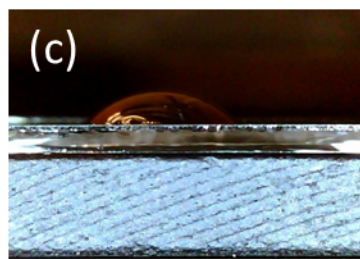
Figure S3. Cyclic voltammograms obtained in ProDOT-diene (5 mM) in ACN/TBAP (0.1 M) (solid red line) and in the background electrolyte (dashed green line) using a 0.5 cm^2 ITO coated glass electrode.



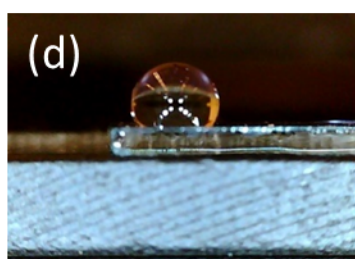
P(ProDOT-diene)
130 °



Ethylhexane thiol
modified, 130 °



PEO₆ thiol
modified, 50 °



Ferrocene thiol
modified, 131 °

Figure S4. Contact angle measurement of P(ProDOT-diene) film (a), Ethylhexane thiol modified film (b), PEO₆ thiol modified film (c) and Ferrocene thiol modified film (d).

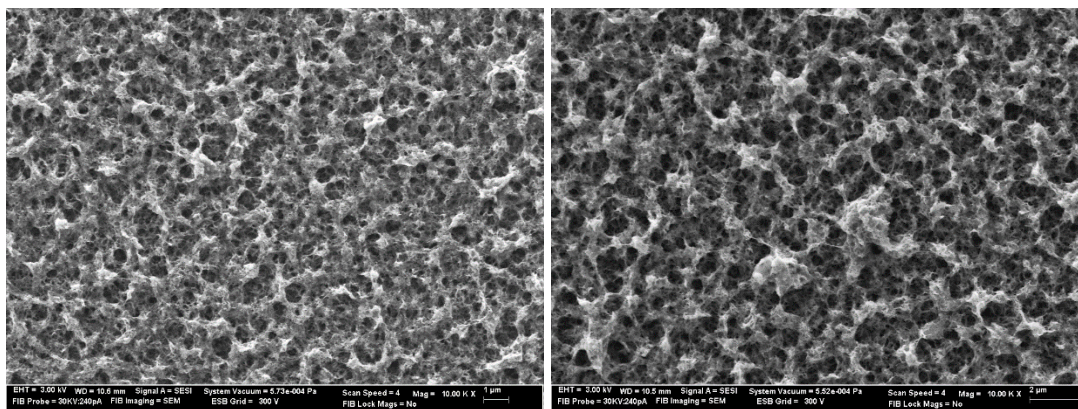


Figure S5. SEM images of PProDOT *via* CV deposition with different scan cycles. (4 cycles on the left, 6 cycles on the right)

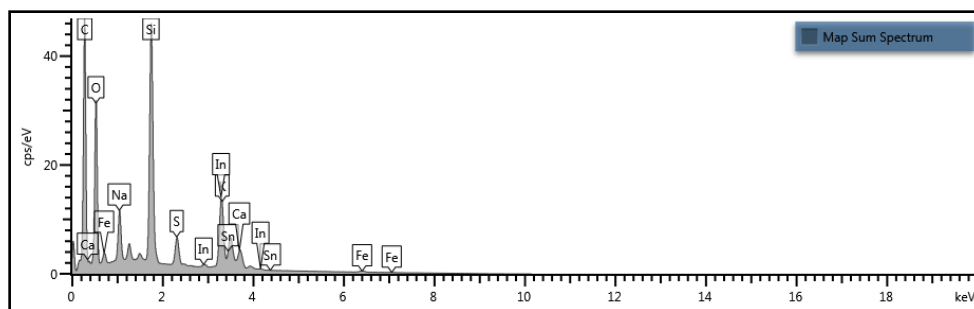


Figure S6. EDS analysis of ferrocene thiol modified P(ProDOT-diene)