

Supporting Information
for
**Functionalized branched EDOT-terthiophene
copolymer films by electropolymerization and post-
polymerization “click”-reactions**

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Additional Raman data of PEDOT, P3T, copolymers and blends;

¹H NMR and IR spectra of EDOT-ClickSO₃Na; contact angles of

P3T; PEDOT-N₃, PEDOT-clickHex and PEDOT-clickSO₃Na.

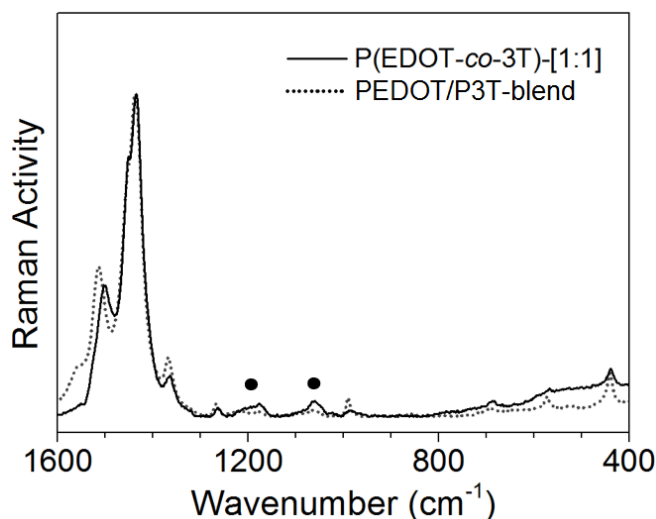


Figure S1: Raman spectra of a blend PEDOT/P3T-blend and copolymer P(EDOT-co-3T)-[1:1], recorded at 532 nm.

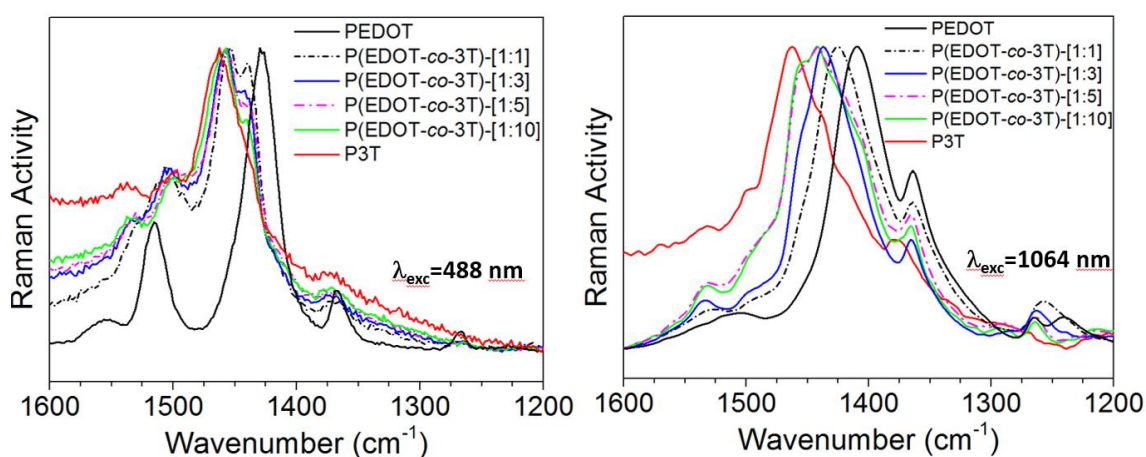


Figure S2: Raman spectra of electrochemically deposited copolymers (potentiostatic control, 0.9-1.1 V) P(EDOT-co-3T)-[1:1], -[1:3], -[1:5], and -[1:10] and homopolymers P3T and PEDOT, recorded at 488 and 1064 nm. Note that the spectra recorded at 488 and 1064 nm are in resonance and out-of-resonance Raman conditions, respectively, with the lowest energy absorption band of the neutral polymers. However, the excitation laser excitation at 1064 nm can be in resonance with the absorption band of the charged species what explains the broadening of the spectra, especially in the case of the PEDOT polymer.

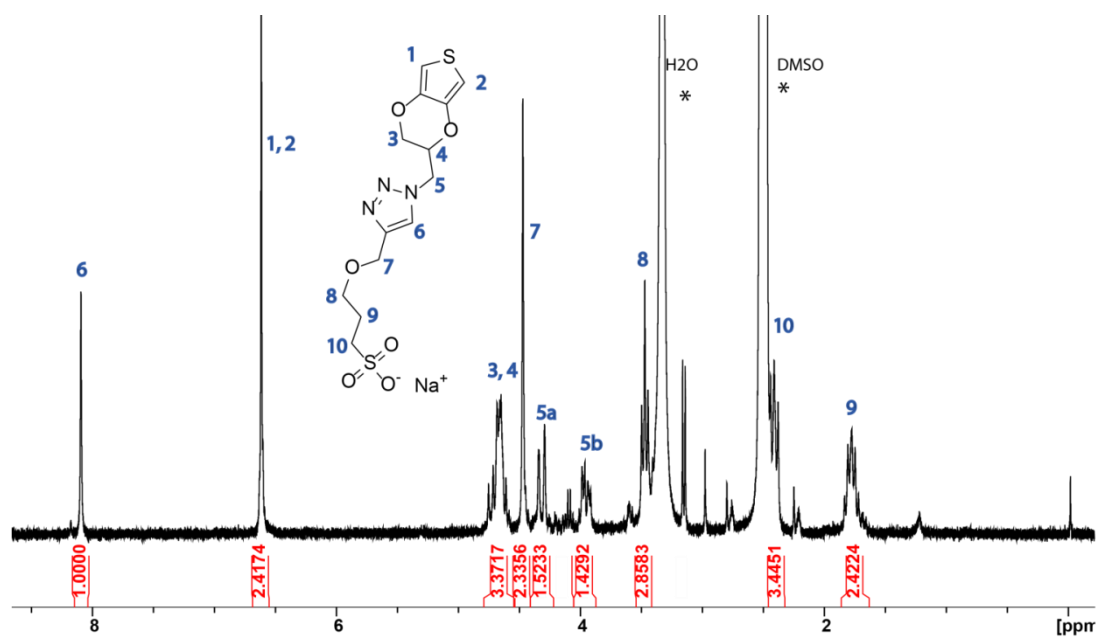


Figure S3: ¹H NMR of EDOT-clickSO₃Na, DMSO-*d*₆

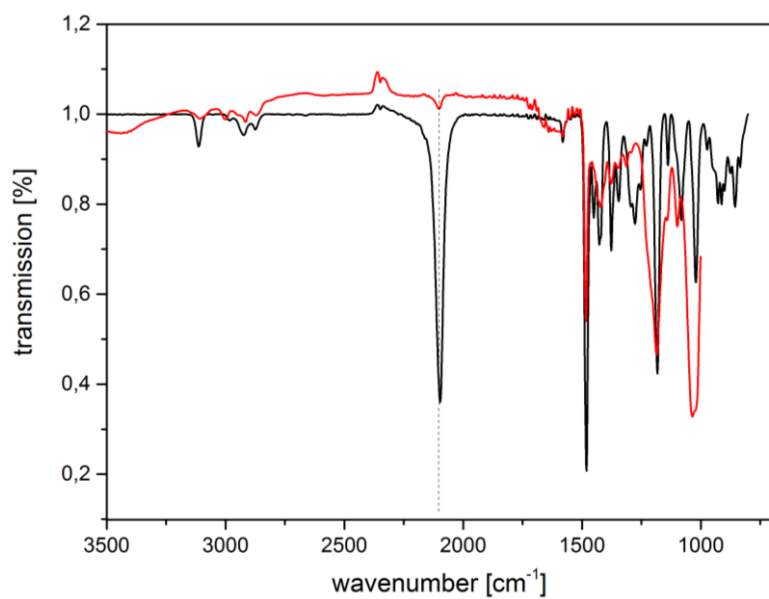


Figure S4: IR spectra of EDOT-N₃ (black) and EDOT-clickSO₃Na (red). Dotted line indicates the position of the azide-band.

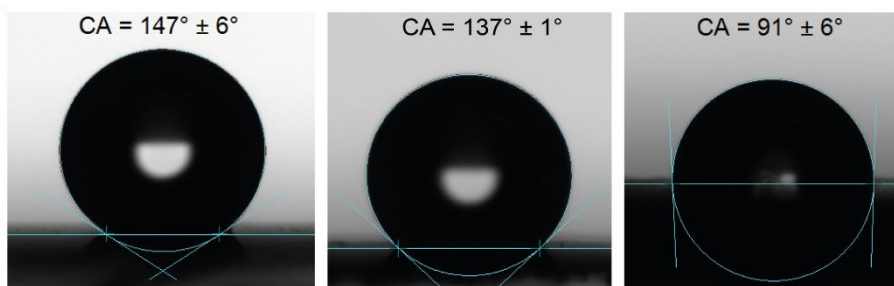


Figure S5: Water contact angles of P3T (left) P(EDOT-co-3T)-1:1 (middle), and PEDOT-N₃ (right)

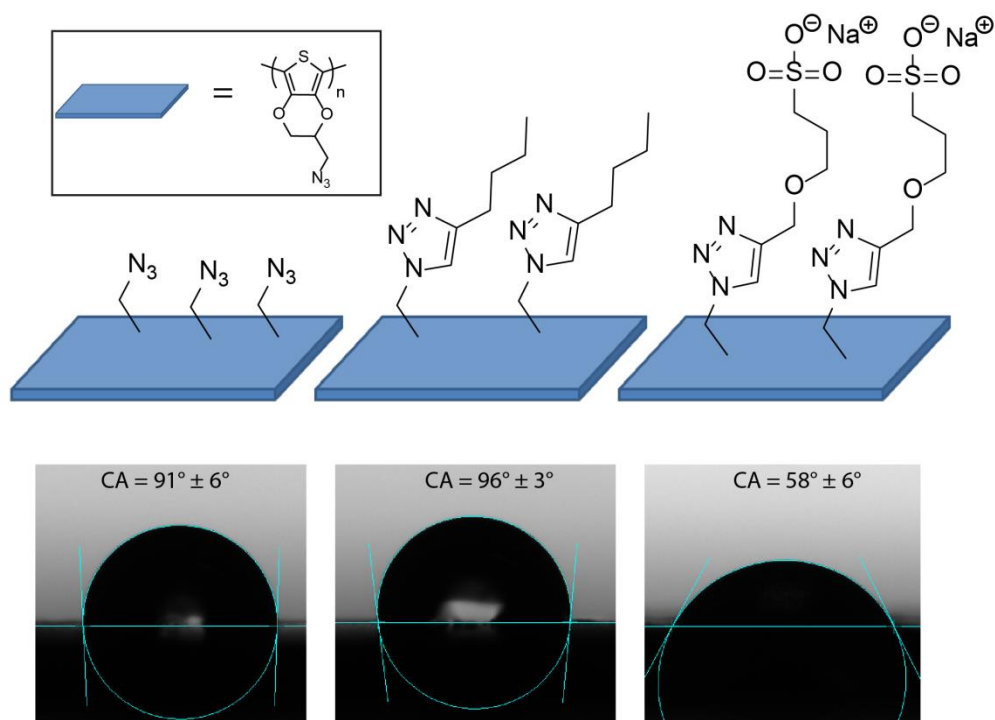


Figure S6: Water contact angle of the films of P(EDOT-N₃) (left), P(EDOT-clickHex) (middle) and P(EDOT-clickSO₃Na) (right).