

Electronic Supplementary Information

Large in-plane/out-of-plane anisotropic conduction in PEDOT-based hybrid films: Lamellar assemblies structured by mono-layered nano-sheets

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1. UV-vis-NIR spectra

2. FTIR spectra

3. IV characteristics

1. UV-vis-NIR spectra

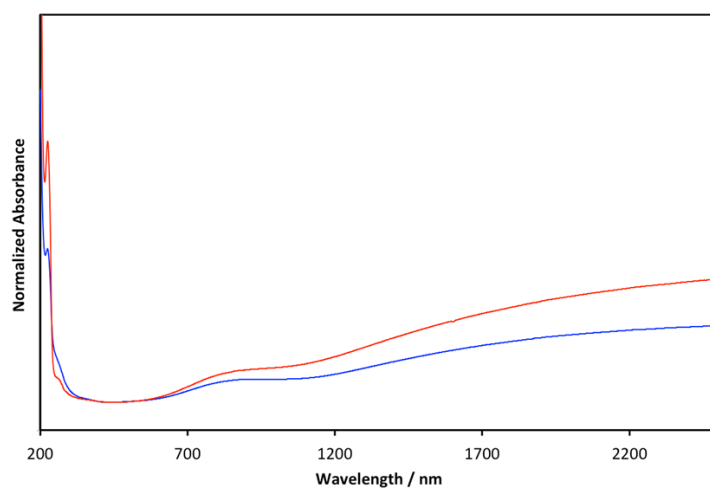


Figure S1. UV-vis-NIR spectra of pristine PEDOT:PSS spin coat film (red) and hybrid film (blue; $S = 65\%$).

2. FTIR

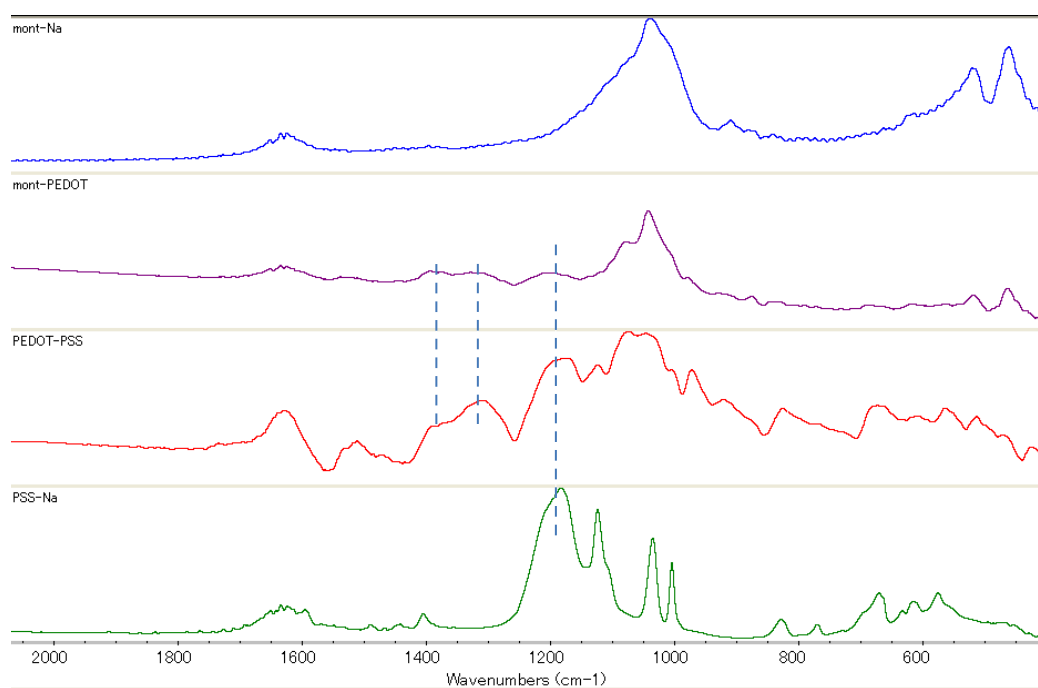
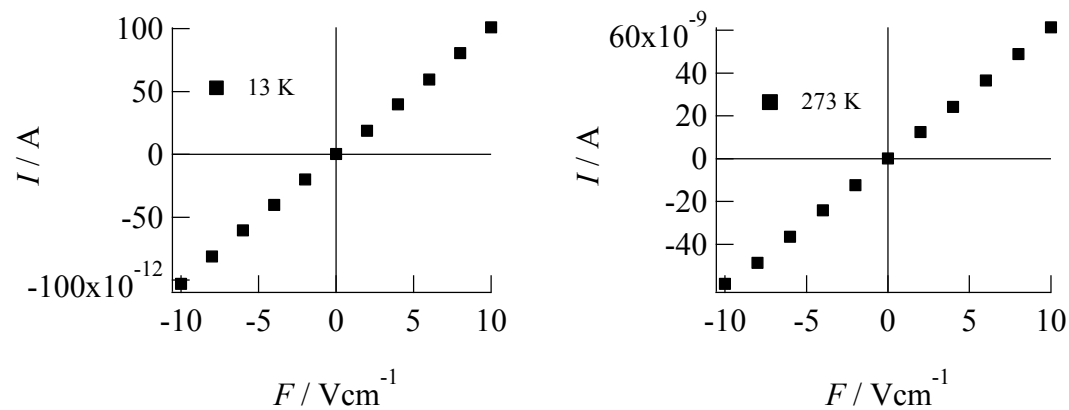


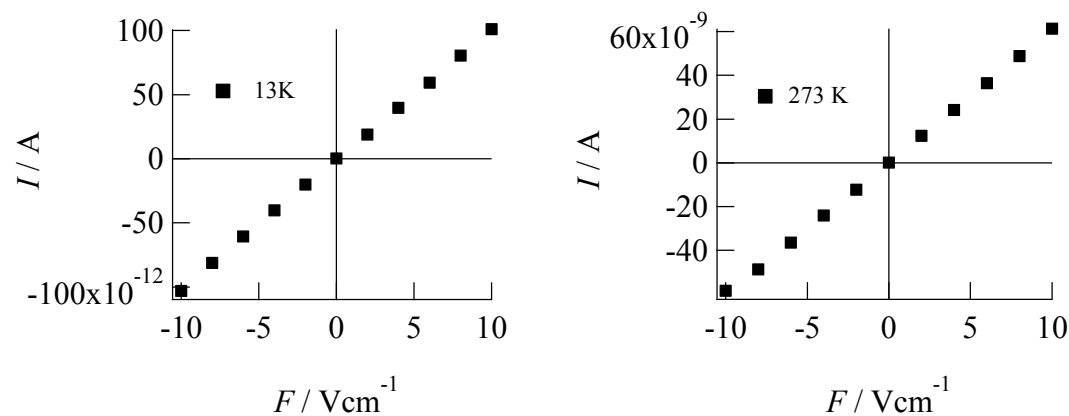
Figure S2. FTIR of pristine MMT (blue), hybrid film (purple; $S = 65\%$), PEDOT:PSS (red) and Na salt of PSS (green).

3. Current-voltage characteristics

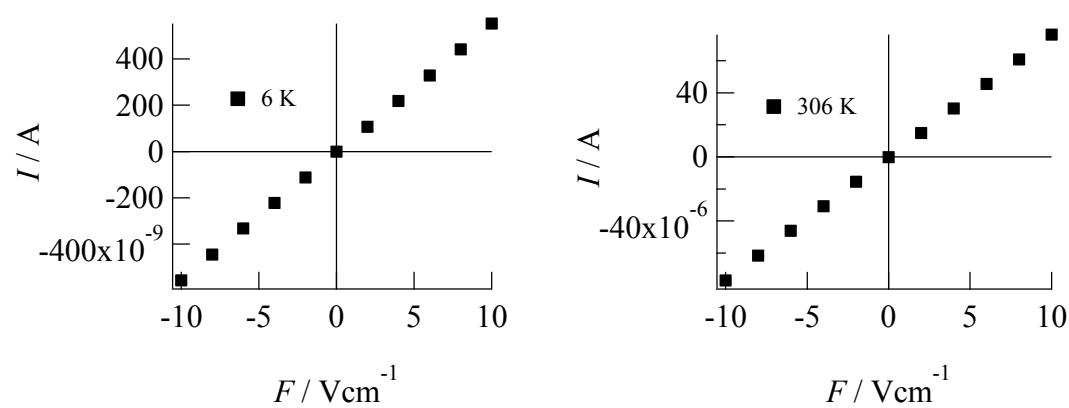
(1) Spin coat film



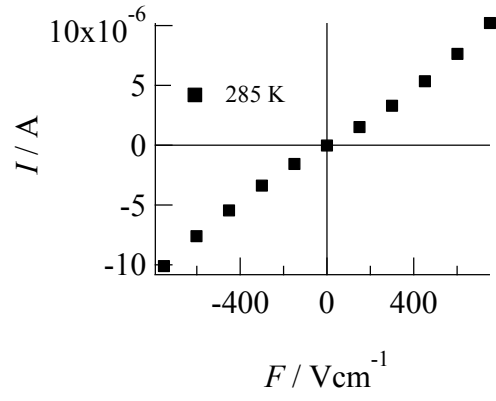
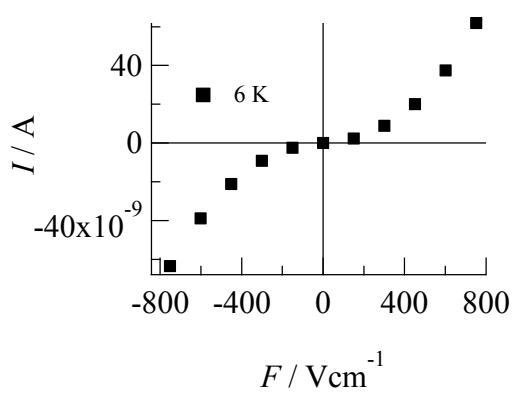
(2) Hybrid film at 33%



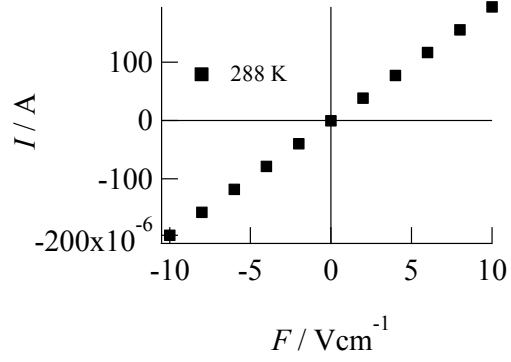
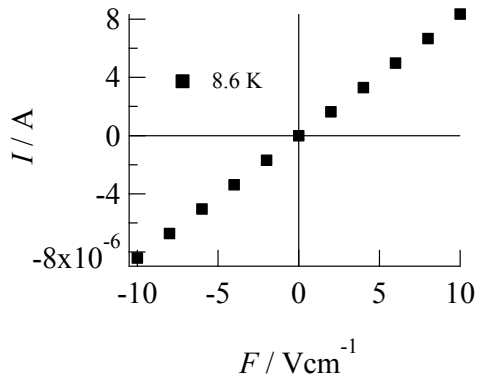
(3) Hybrid film at 65 % (in-plane)



(4) Hybrid film at 65 % (out-of-plane)



Hybrid film at 217 % (in-plane)



Hybrid film at 217 % (out-of-plane)

