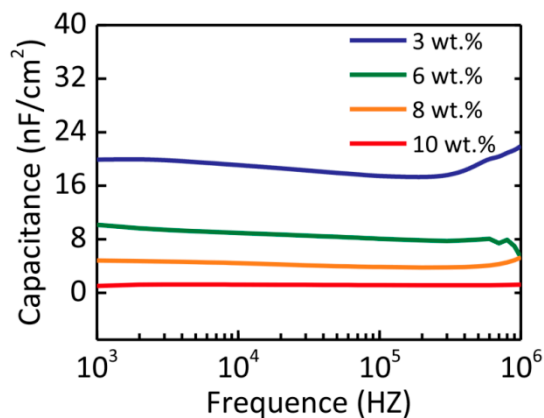
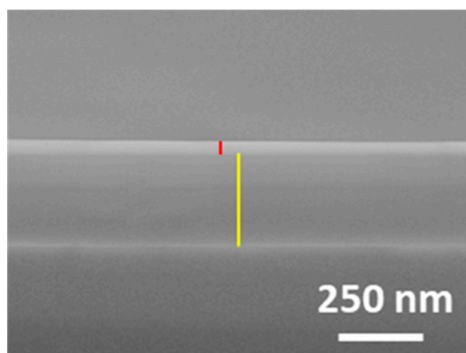


# Supplementary Materials: 320-nm Flexible Solution-Processed 2,7-dioctyl[1]benzothieno[3,2-b]benzothiophene Transistors

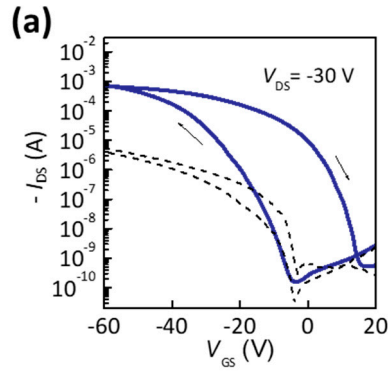
Hang Ren, Qingxin Tang, Yanhong Tong and Yichun Liu



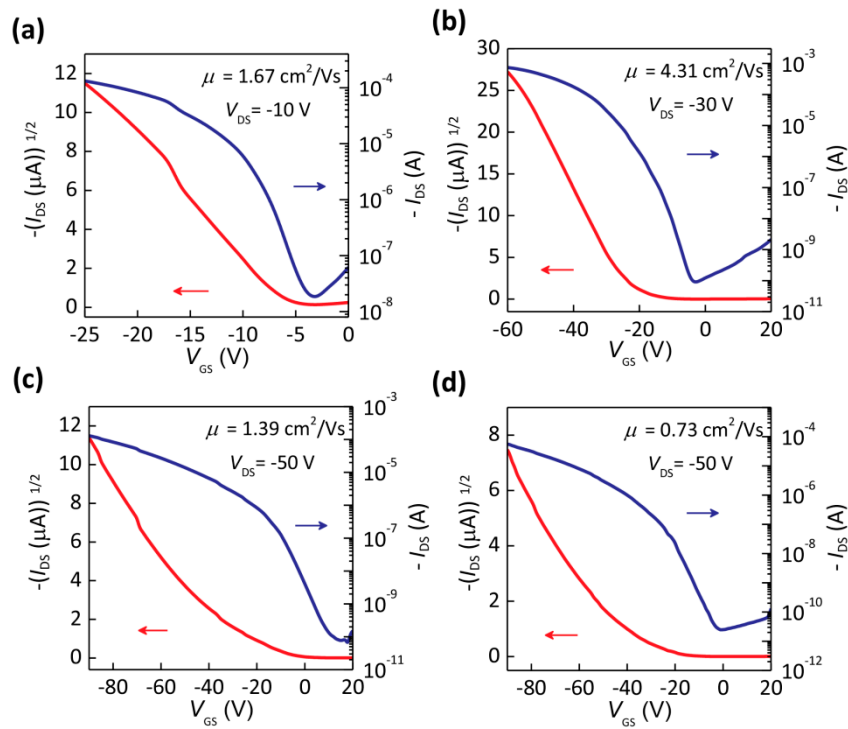
**Figure S1.** Dependence of the capacitance with frequency of the PVA dielectric layer spun from solution of different concentrations (3 wt %, 6 wt %, 8 wt % and 10 wt %).



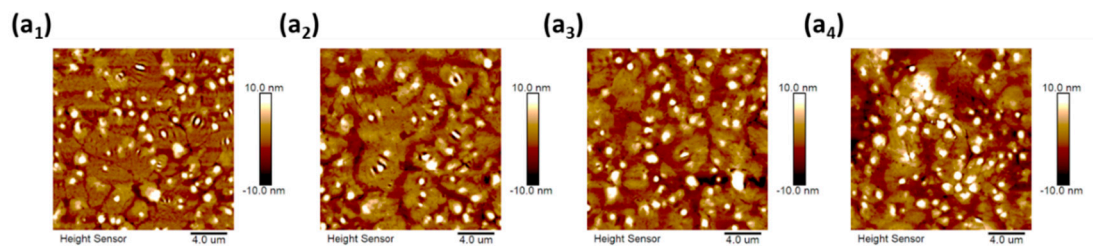
**Figure S2.** The cross-sectional SEM image of the device. The red line indicates "S/D electrode (20 nm) + C8-BTBT (~20 nm)" layer and the yellow line indicates the PVA layer (~280 nm) with gate electrode embed in it.



**Figure S3.** (a) Transfer curves swept in backward and forward directions of the C8-BTBT OTFT with PVA dielectric layer.



**Figure S4.** (a–d) The transfer characteristics of C8-BTBT OTFTs with PVA dielectric layer spun from solution of different concentrations (3 wt %, 6 wt %, 8 wt % and 10 wt %).



**Figure S5.** (a1–a4) AFM images of the C8-BTBT films on the corresponding PVA films spun from different concentrations (3 wt %, 6 wt %, 8 wt % and 10 wt %).