Electronic Supplementary Material (ESI) for Polymer Chemistry

Supporting Information

Nonvolatile Organic Field-Effect Transistor Memory Devices Using Polymer Electrets with Different Thiophene Chain Lengths

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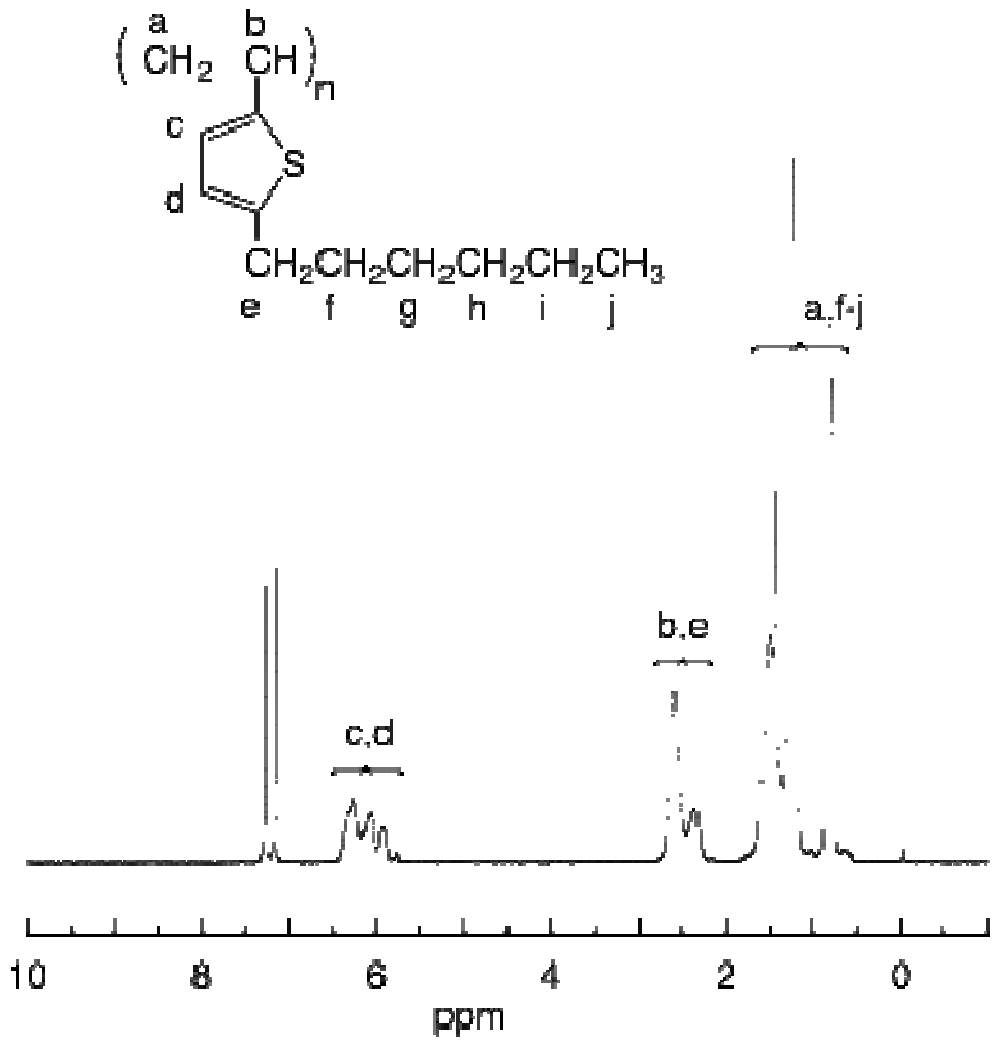

Figure S1. ^{1}H NMR spectra of PVT in $CDCl_3$.

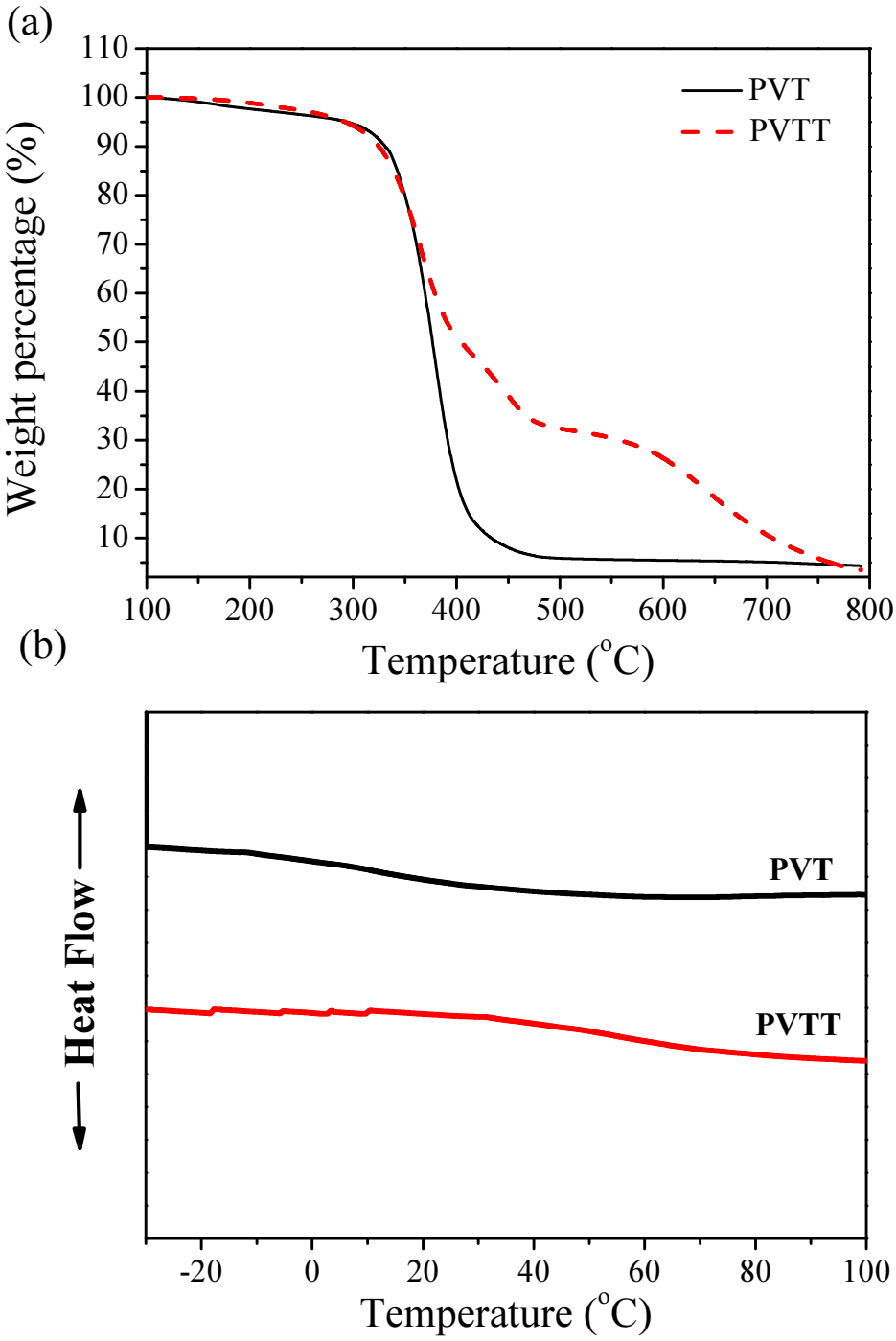

Figure S2. (a)TGA curves of PVT and PVTT at a heating rate of 10°C/min under nitrogen atmosphere.(b)DSC curve of PVT and PVTT in nitrogen atmosphere.

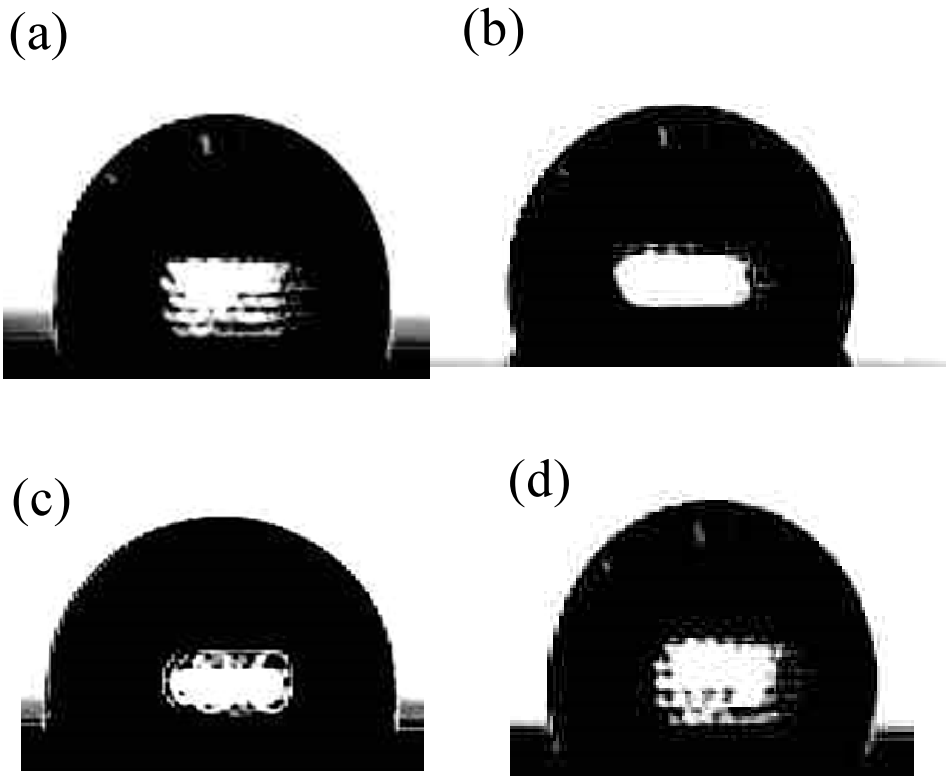

Figure S3. Contact angles of various polymer electrets:
(a) PVT, (b) PVTT, (c) PStFl and (d)PS.

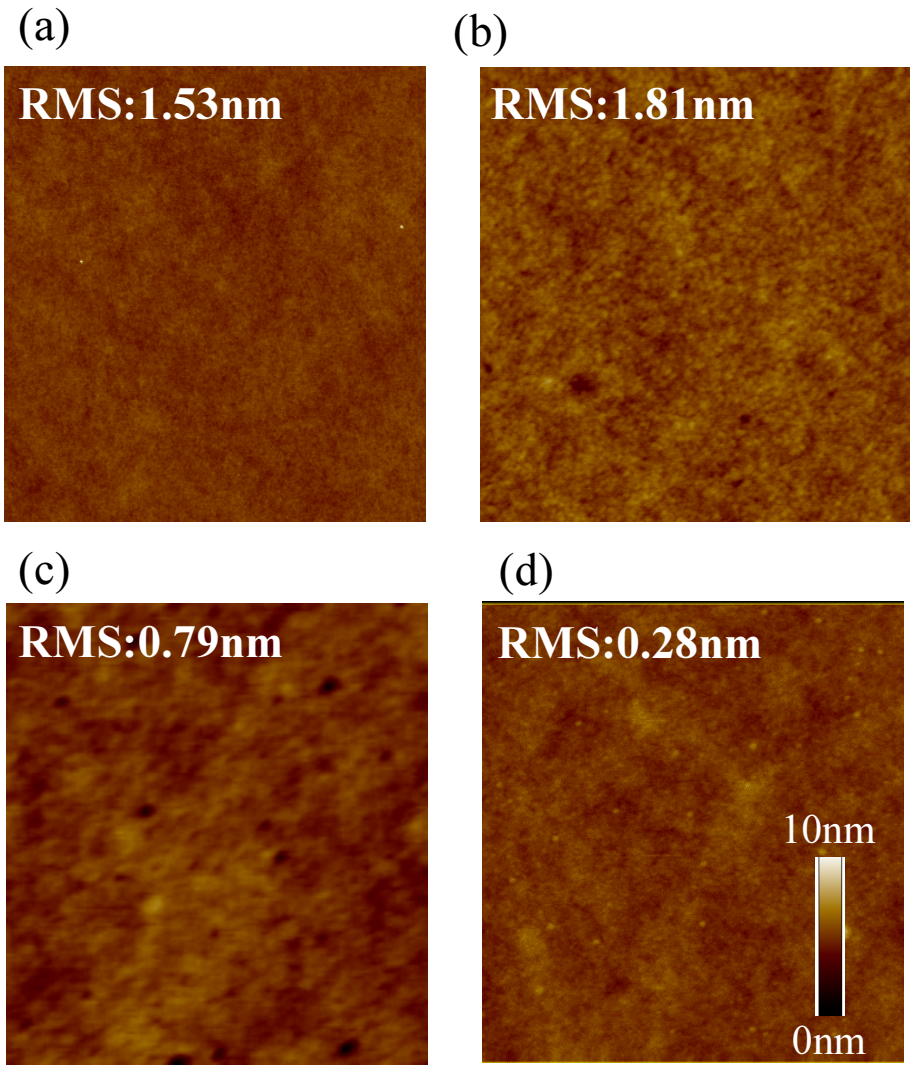

Figure S4. Atomic force microscopy (AFM) topographies of (a) PVT, (b) PVTT, (c) PStFl, and (d) PS spin-coated on bare SiO_2 substrates on 1 μm x 1 μm areas.

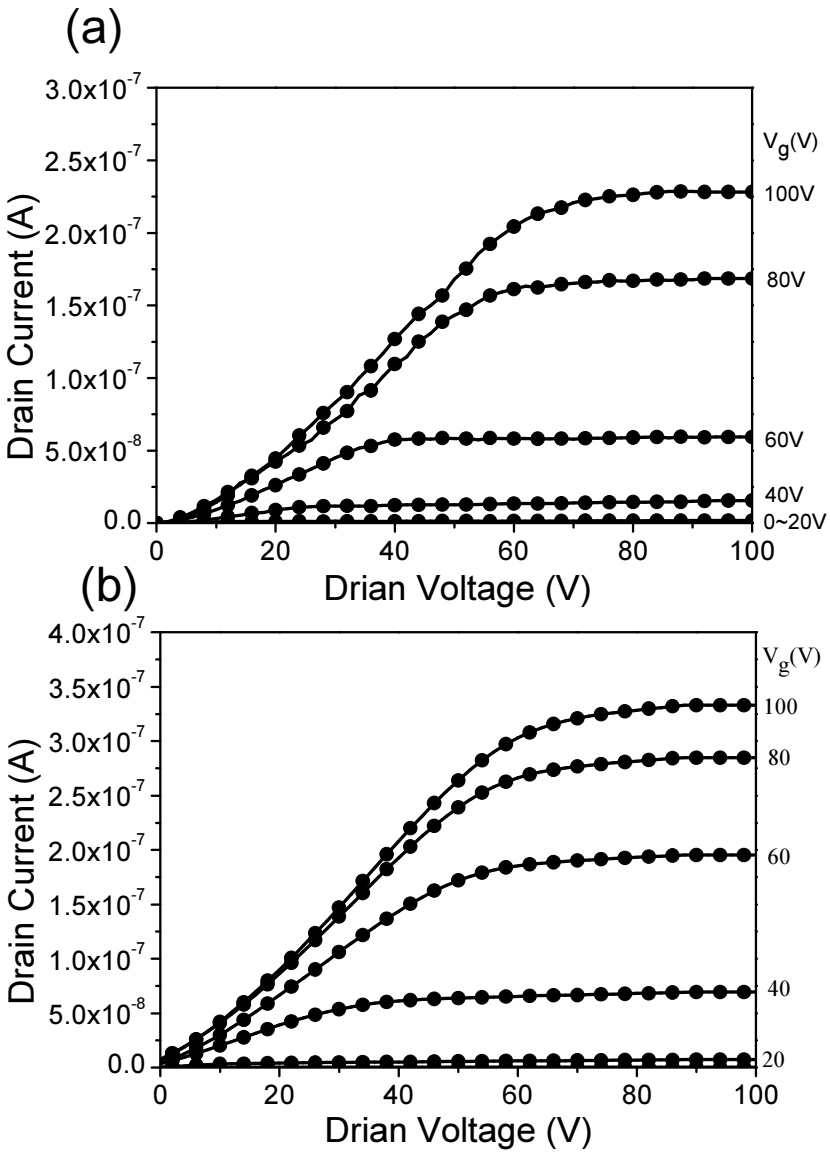

Figure S5. Output characteristics of the OFET device with (a) PVT and (b) PVTT as electret.

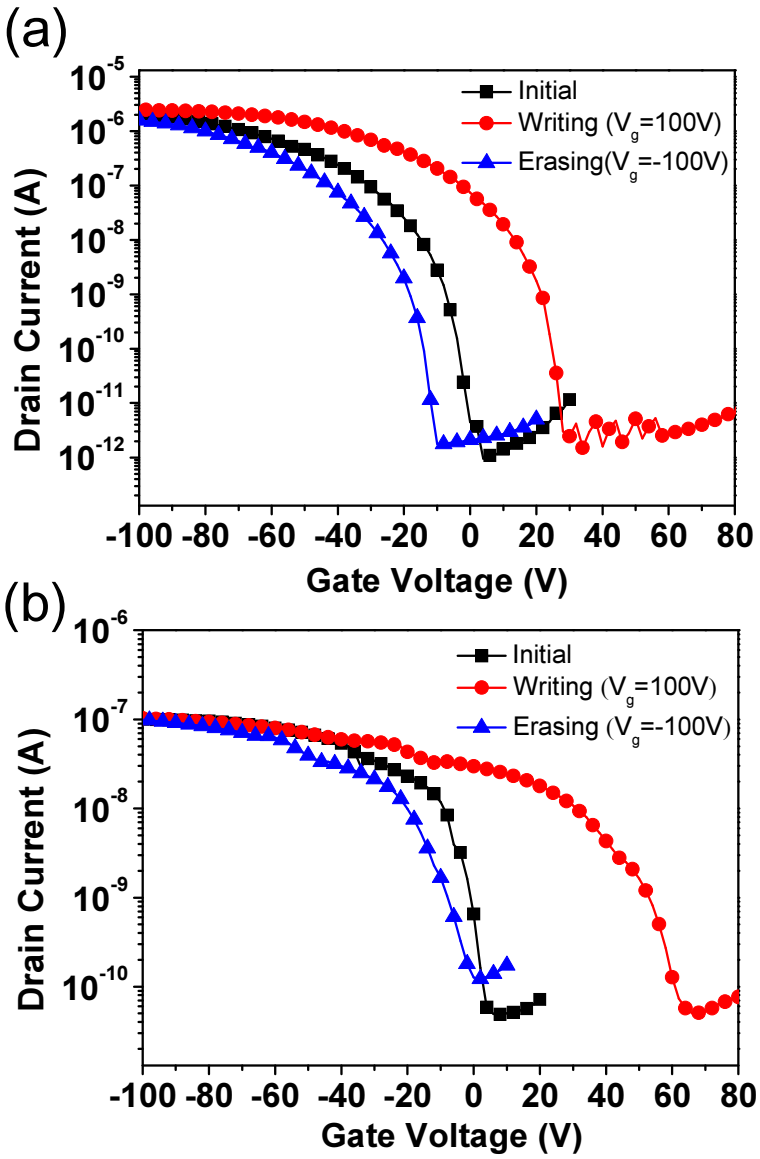

Figure S6. Shifts in transfer curves for pentacene OFET memory device with (a) PVT and (b) PVTT as polymer electrets.