

Supporting Information for Characterization of [1]Ben- zothieno[3,2-*b*]benzothiophene (BTBT)-Derivatives with End- Capping Group as Solution-Processable Organic Semiconduc- tors for Organic Field-Effect Transistors

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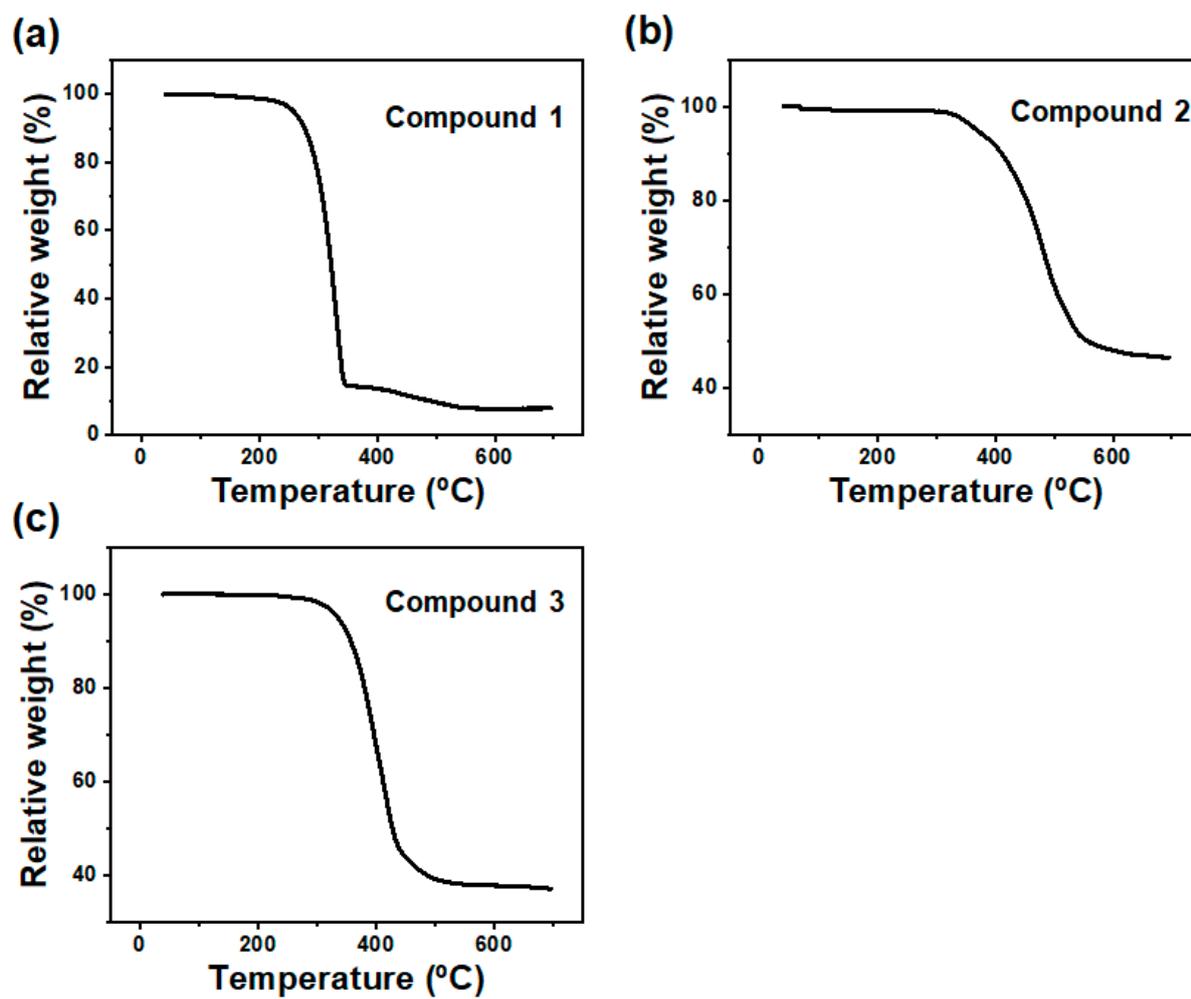


Figure S1. Thermogravimetric analysis (TGA) of BTBT-derivatives, (a) compound 1, (b) compound 2, and (c) compound 3.

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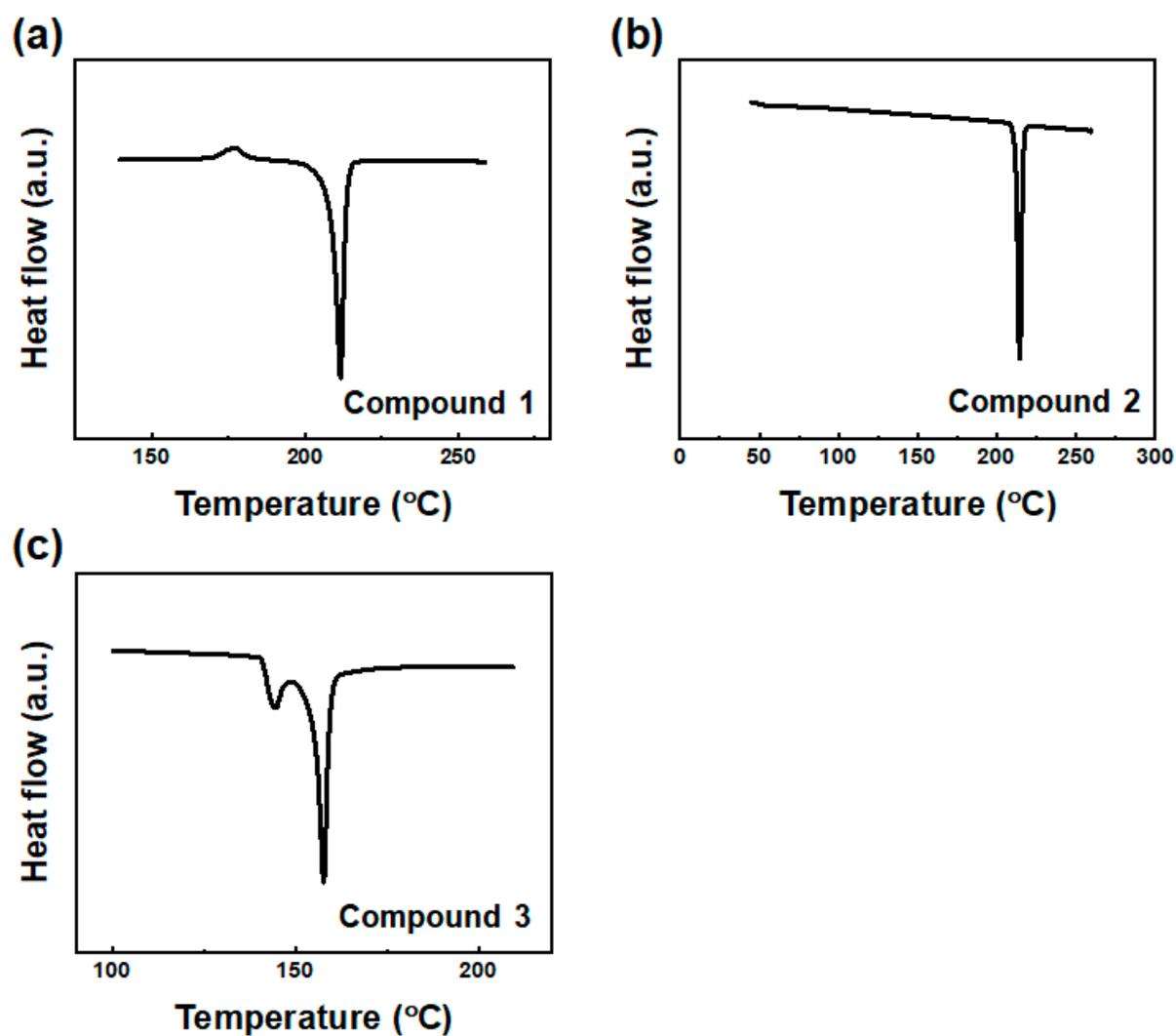


Figure S2. Differential scanning calorimetry (DSC) analysis of BTBT-derivatives, (a) compound 1, (b) compound 2, and (c) compound 3.

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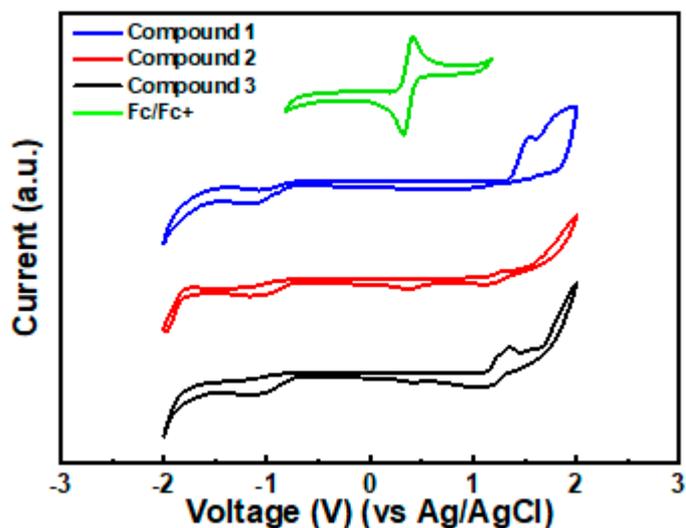


Figure S3. Cyclic voltammograms of compounds 1 – 3.

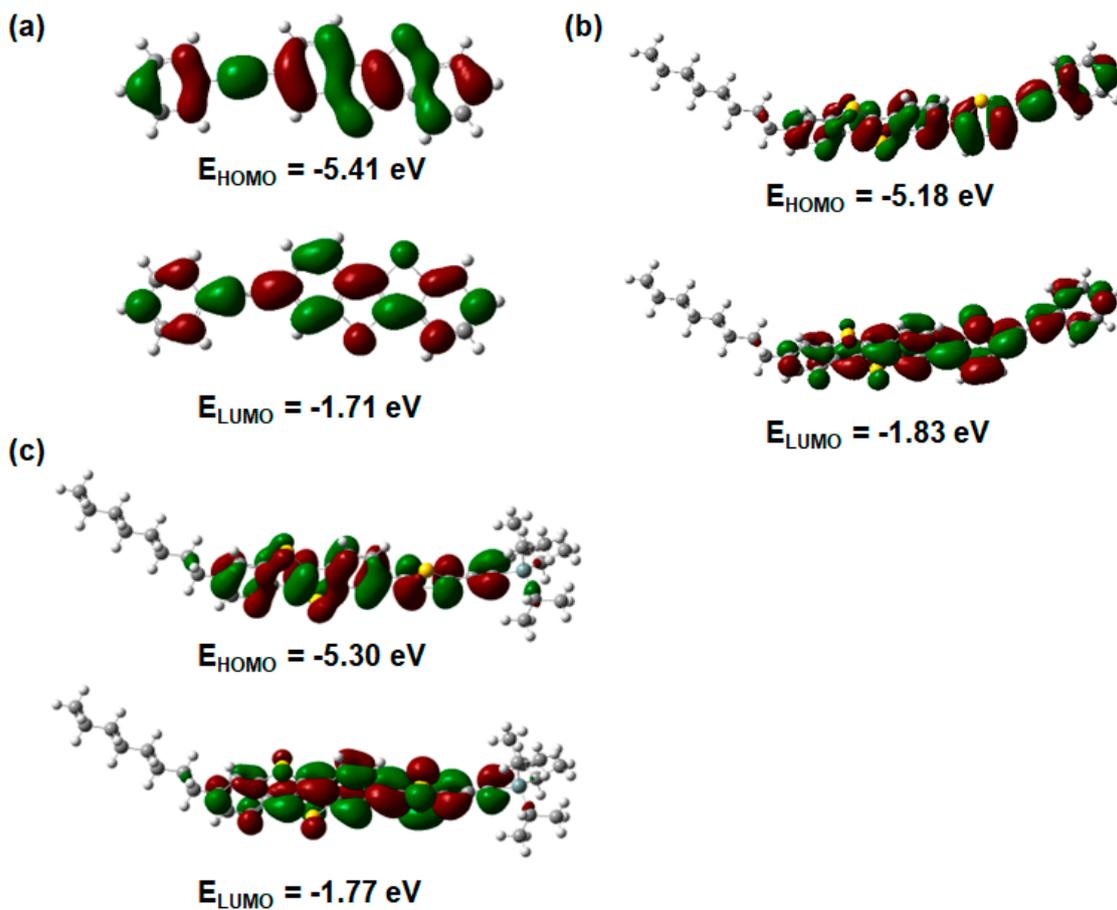


Figure S4. Molecular orbital surfaces of HOMO and LUMO by DFT calculation of compounds (a) 1, (b) 2, and (c) 3.

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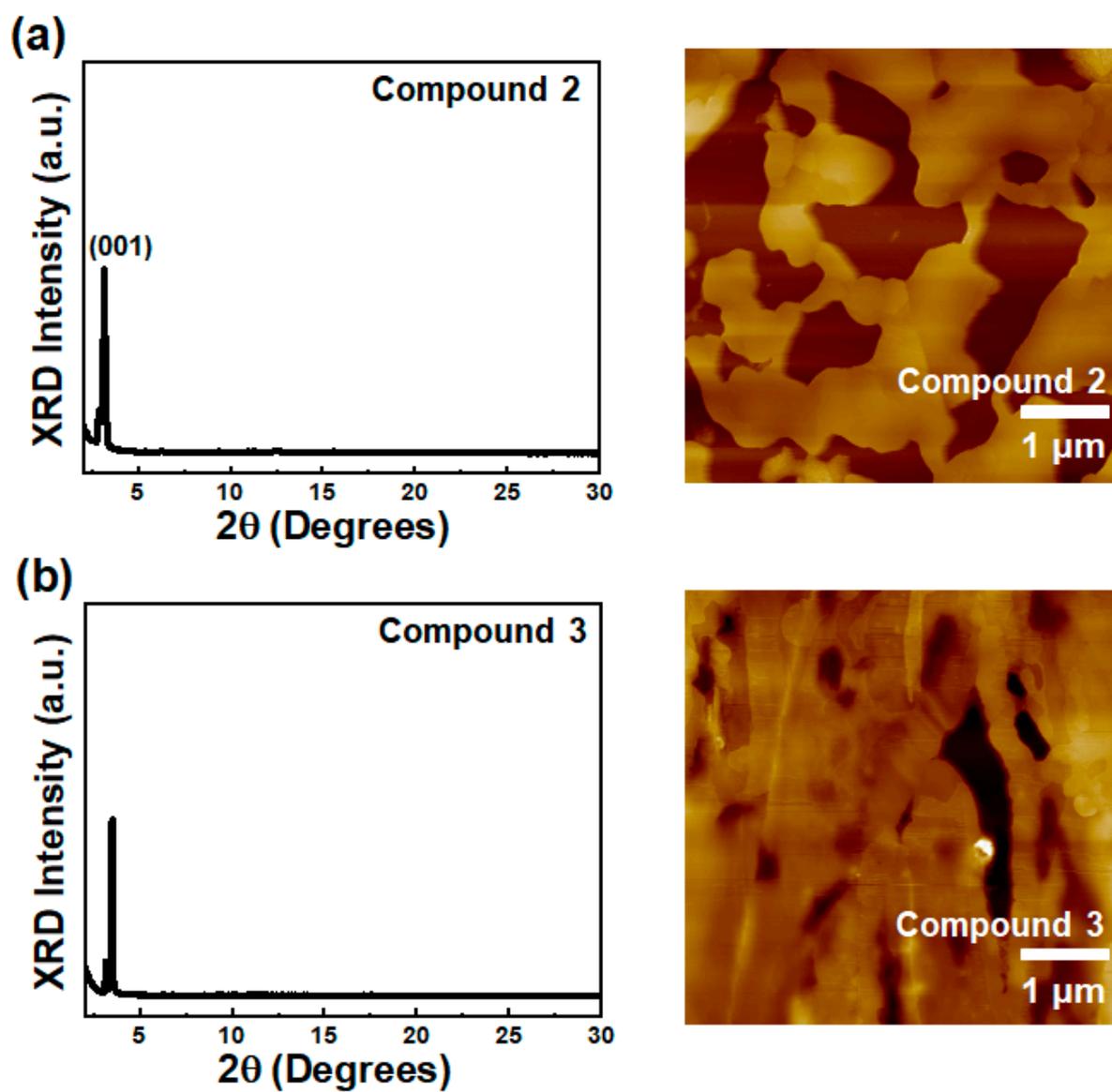


Figure S5. XRD profiles and AFM topographic images of solution-sheared film for (a) compound 2 and (b) compound 3.

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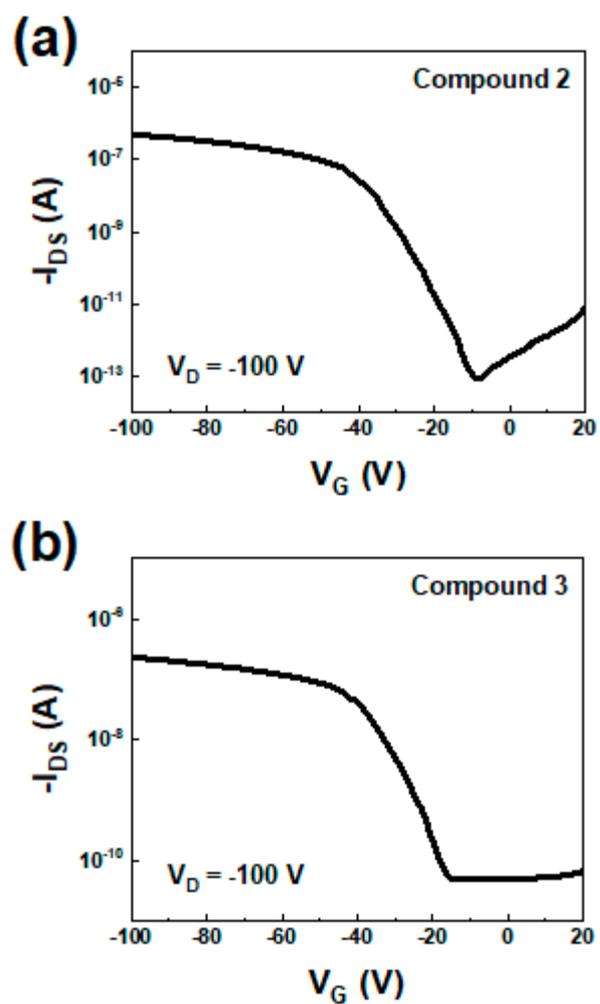


Figure S6. Representative transfer characteristics of OFETs based on (a) compound 2 and (b) compound 3.

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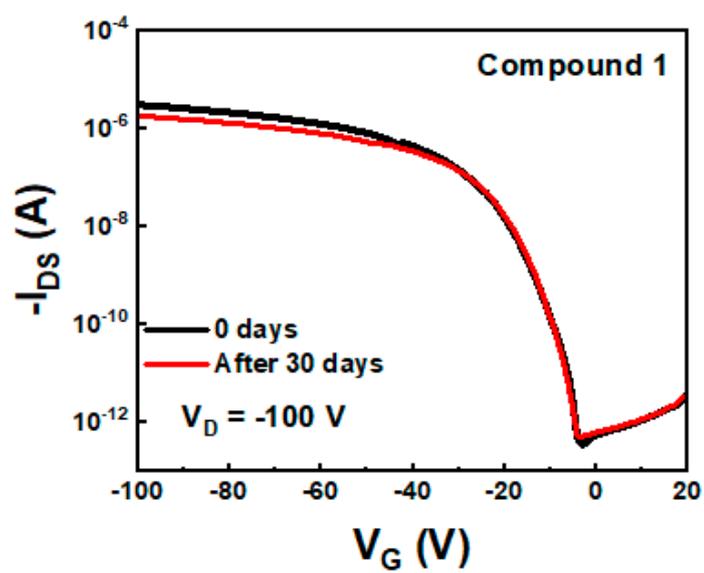


Figure S7. Transfer curve of OFETs based on compound 1 after 30 days of device fabrication.