

Supplementary Materials: Solution-Processable Benzo[*b*]thieno [2,3-*d*]thiophene Derivatives as Organic Semiconductors for Organic Thin-Film Transistors

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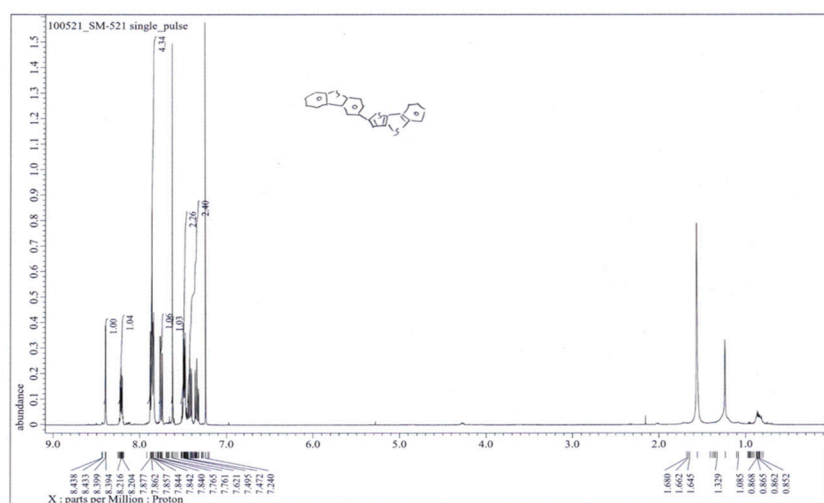
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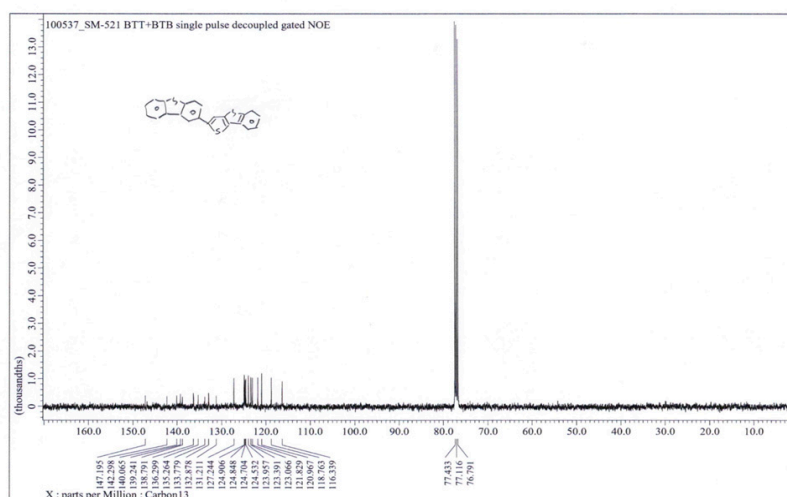
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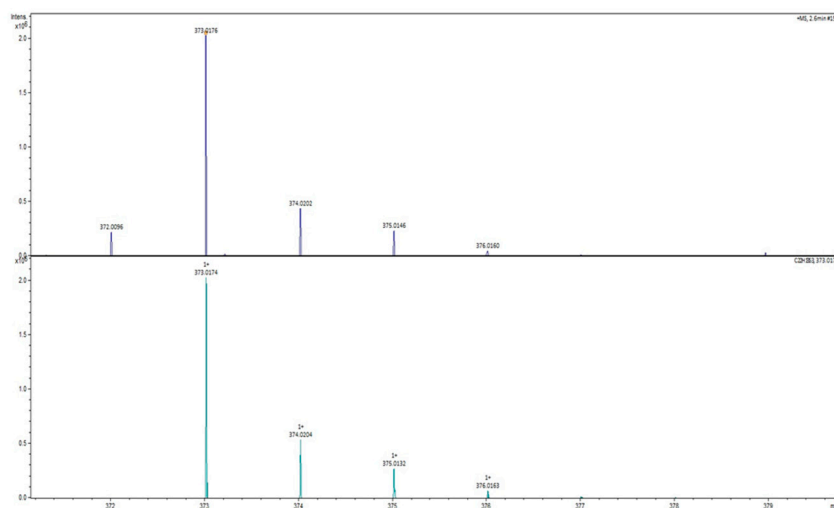
(a)



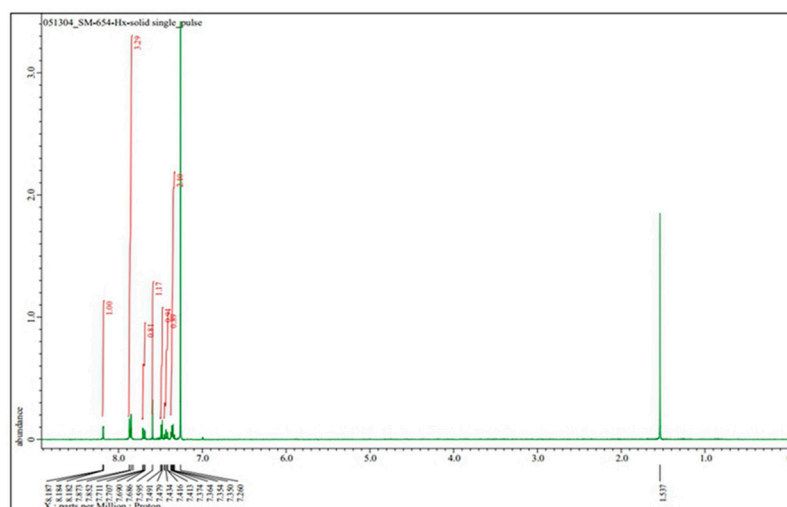
(b)



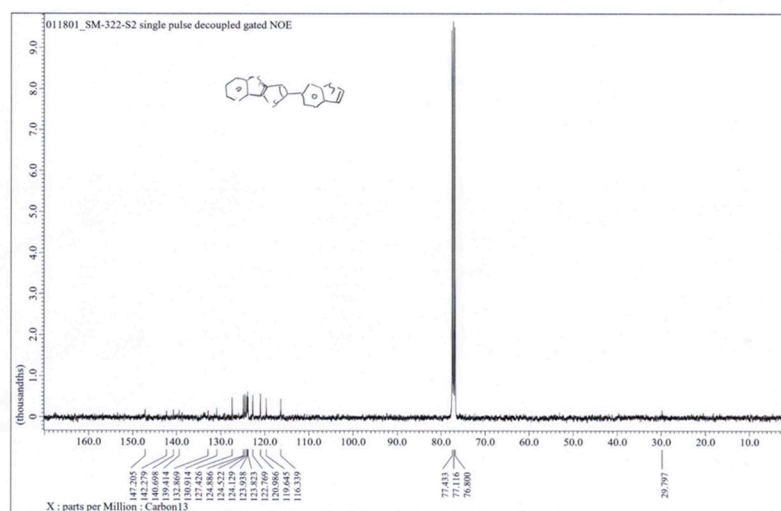
(c)



(d)



(e)



(f)

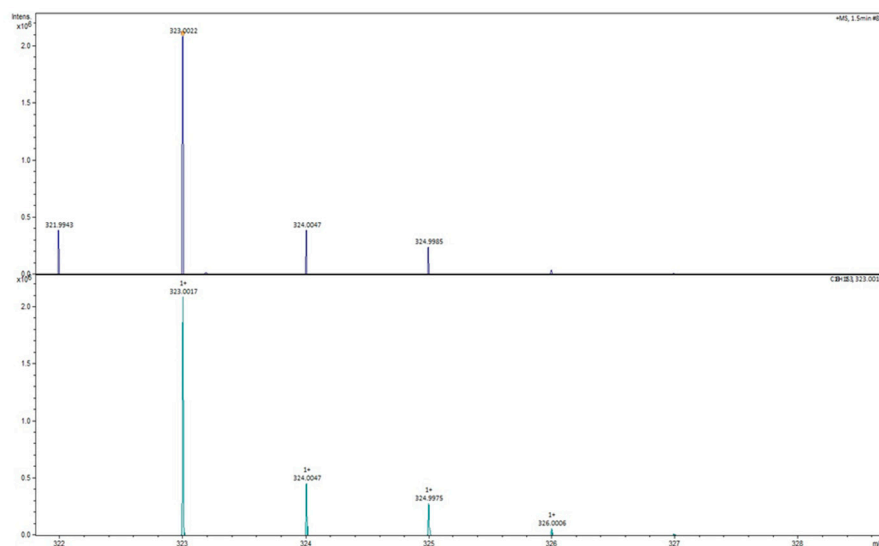


Figure S1. (a) H NMR, (b) C NMR, (c) Q-TOF MS spectra of compound 2, (d) H NMR, (e) C NMR, (c) Q-TOF MS spectra of compound 3.

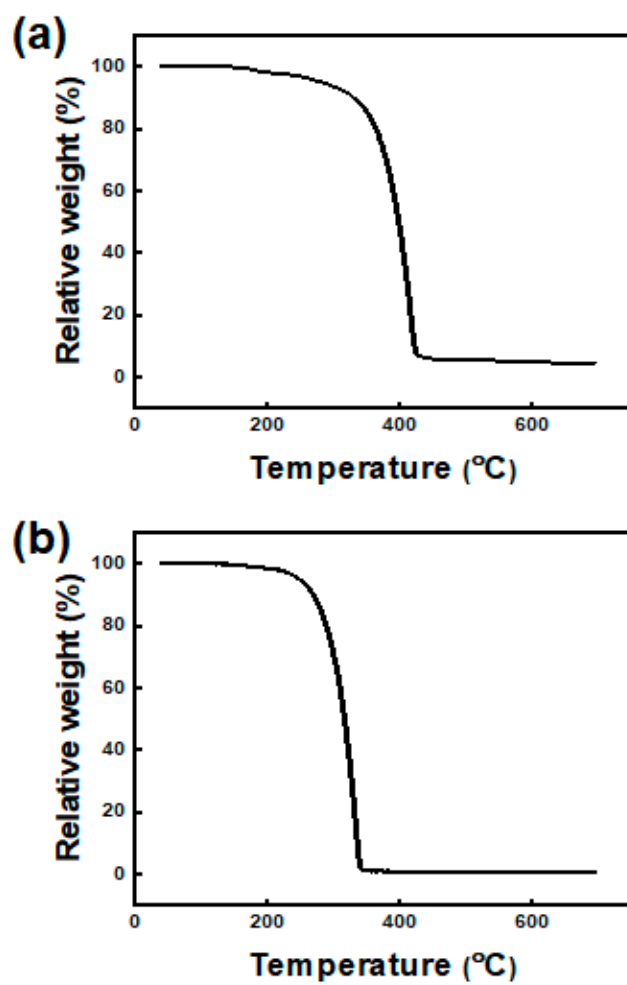


Figure S2. Thermogravimetric analysis of (a) compound 2 and (b) compound 3.

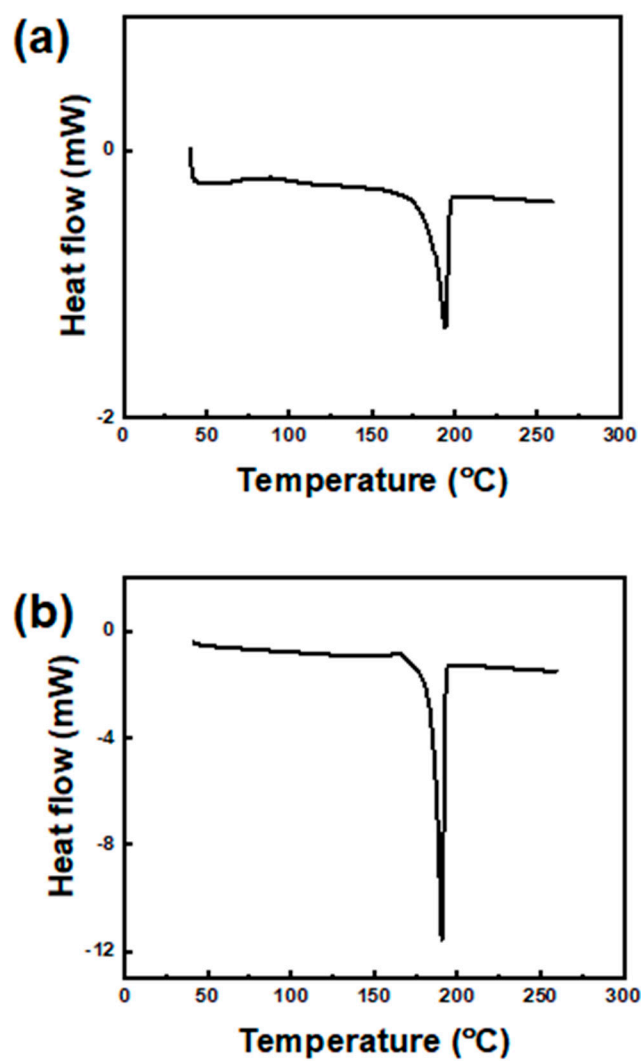


Figure S3. Differential scanning calorimetry of (a) compound 2 and (b) compound 3.

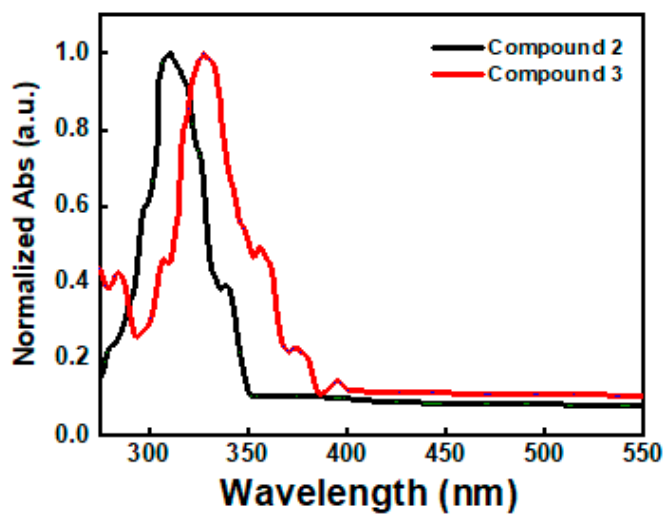


Figure S4. UV-vis absorption spectra of compounds 2 – 3 as thin films on glass substrate.

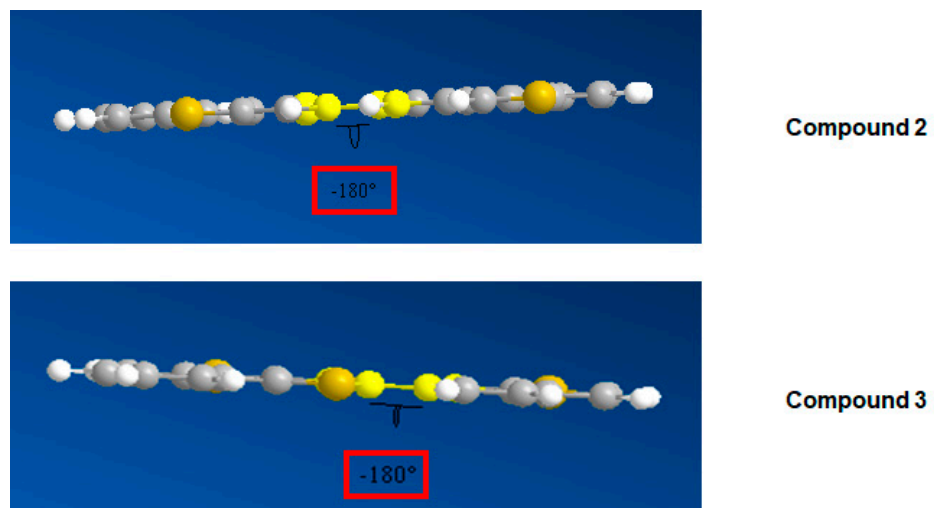


Figure S5. Optimized conjugated backbone planarity of compounds 2 – 3 obtained by DFT calculation (dihedral angle = -180°).

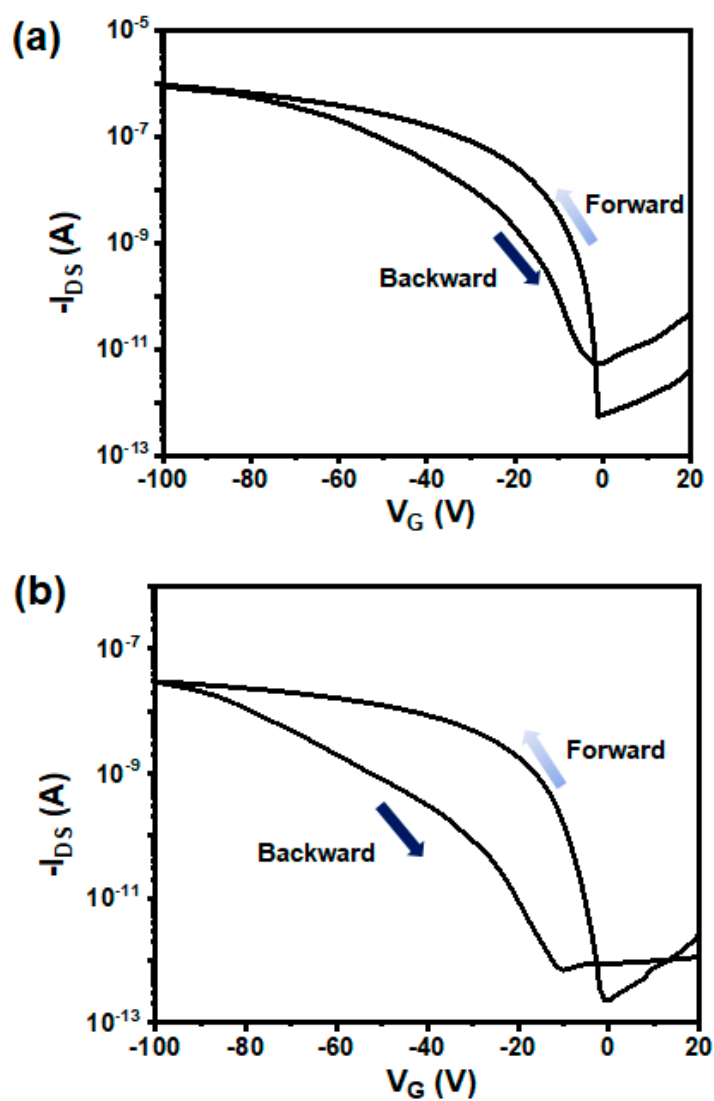


Figure S6. Transfer curve including the hysteresis of scanning of the OFETs based on (a) compound 3 (b) compound 2.