Electronic Supplementary Information

Controlling Dominant Polarity and Ambipolarity of Thieno-Benzo-Isoindigo Polymers-Based Transistors: The Role of Face-on and Edge-on Population

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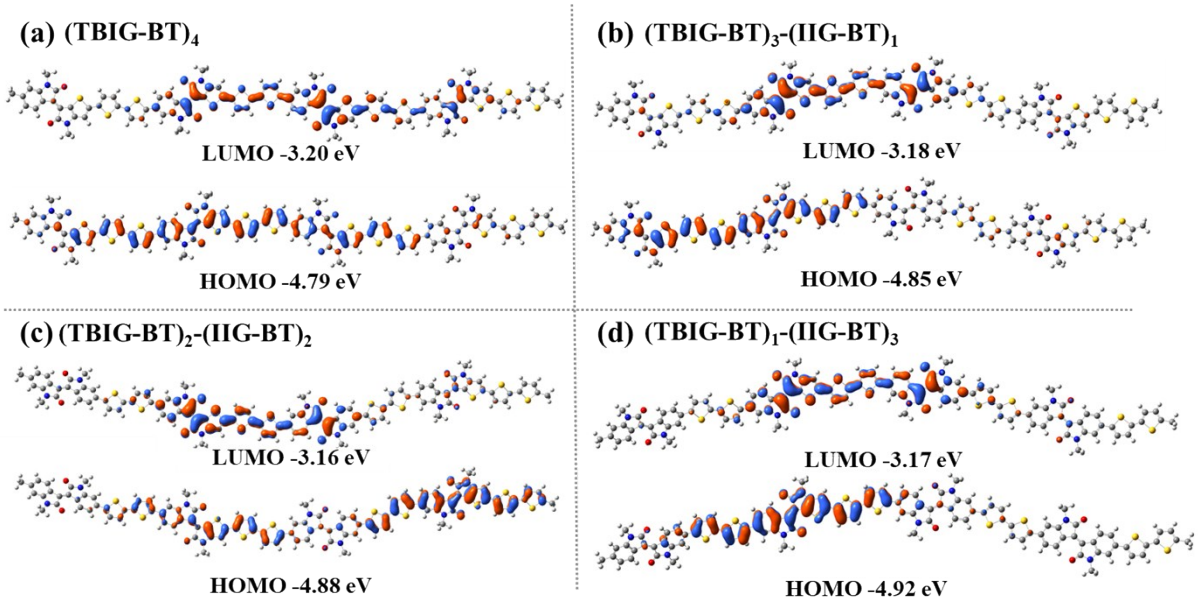

Fig. S1 Optimized molecular geometries of tetramers of TBIG and IIG segments with calculated LUMOs and HOMOs of (a) $(TBIG\text{-}BT)_4$, (b) $(TBIG\text{-}BT)_3\text{-}(IIG\text{-}BT)_1$, (c) $(TBIG\text{-}BT)_2\text{-}(IIG\text{-}BT)_2$, and (d) $(TBIG\text{-}BT)_1\text{-}(IIG\text{-}BT)_3$.

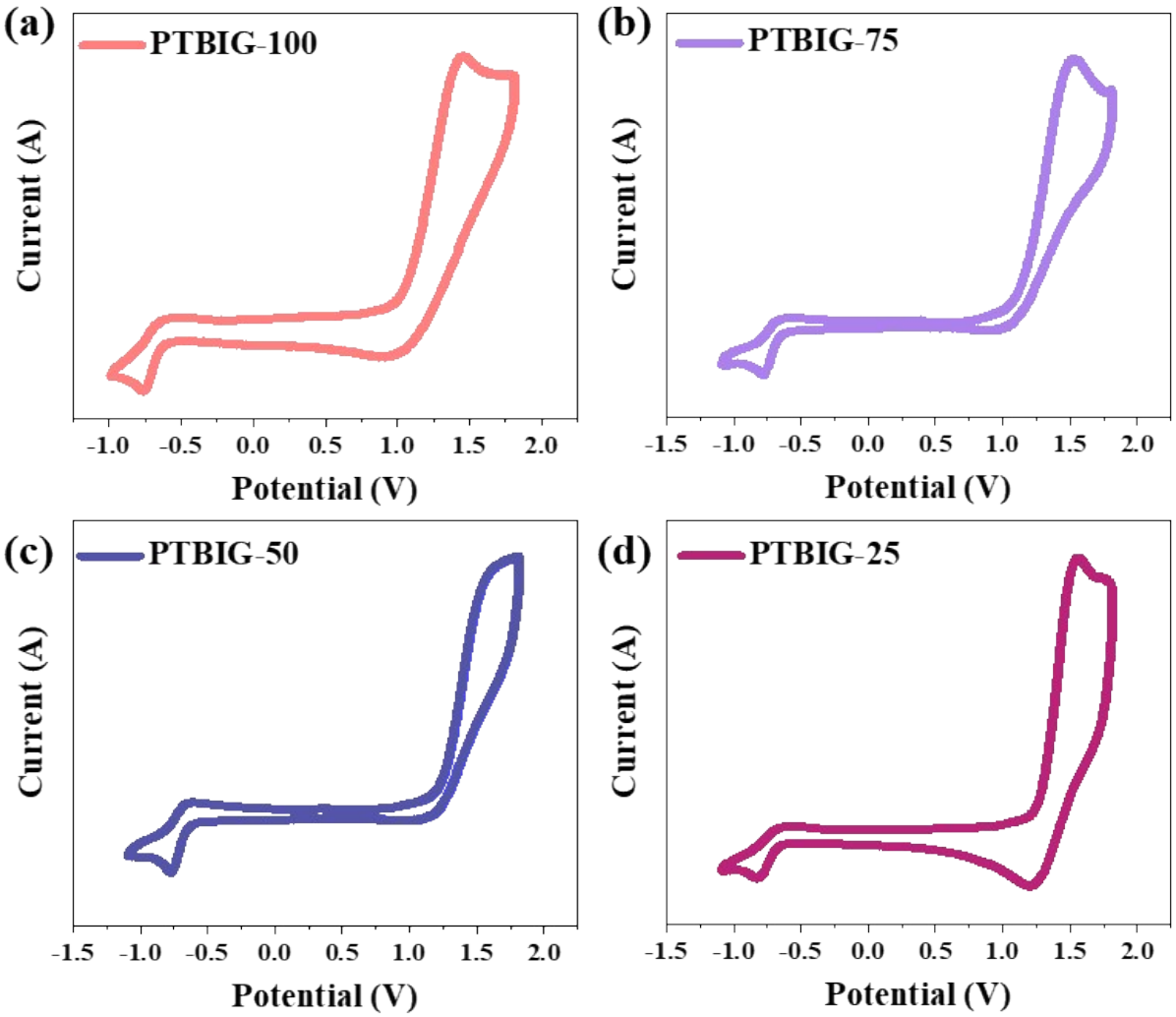

Fig. S2 Cyclic voltammograms of (a) PTBIG-100, (b) PTBIG-75, (c) PTBIG-50, and (d) PTBIG-25.

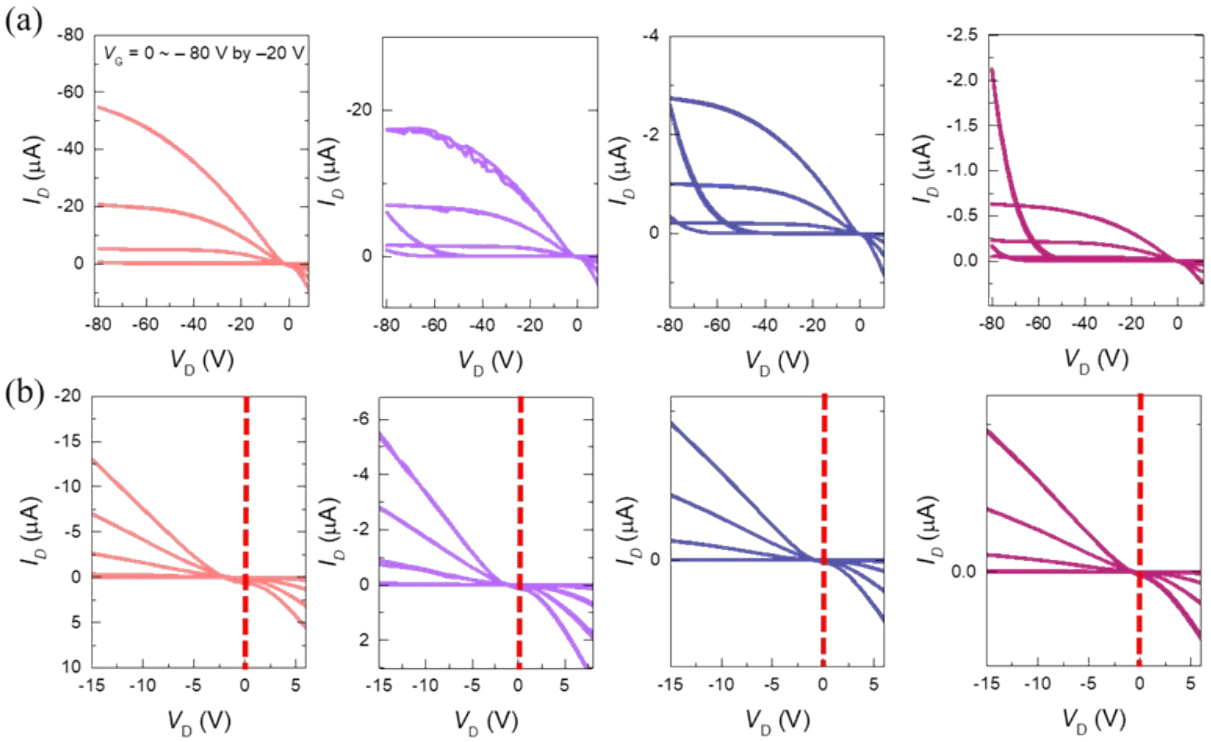

Fig. S3 (a) Output characteristics for TBIG:IIG OFETs with 100:0, 75:25, 50:50, and 25:75; (b) Enlarged figure of output curves in linear regime.

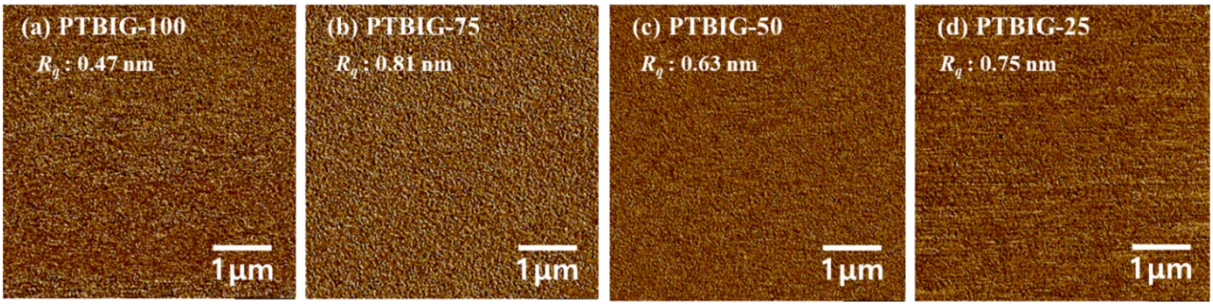

Fig. S4 The AFM height images of (a) PTBIG-100, (b) PTBIG-75, (c) PTBIG-50, and (d) PTBIG-25.

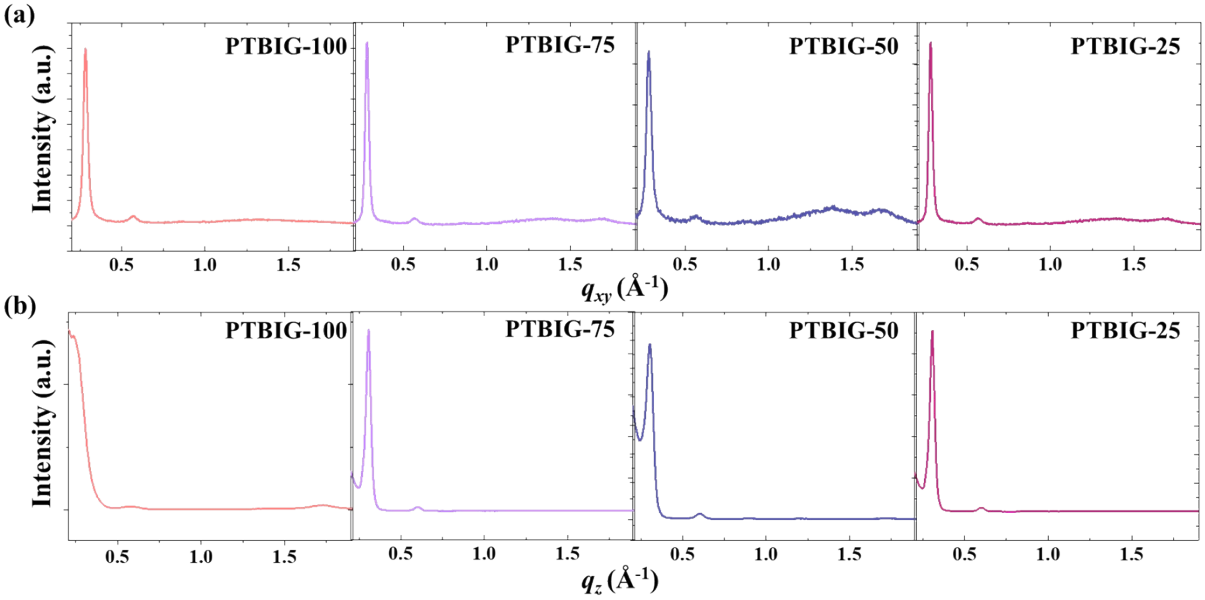

Fig. S5 1-D profile for TBIG-based polymers films (a) in plane and (b) out of plane.