

Supporting Information

Approaching high charge carrier mobility by alkylating both donor and acceptor units at optimized position in conjugated polymers

Dong Gao,^{†ab} Kui Tian,^{†ab} Weifeng Zhang,^{†a} Jianyao Huang,^a Zhihui Chen,^{ab} Zupan Mao,^{ab} and Gui Yu^{*ab}

^a Beijing National Laboratory for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China

^b University of Chinese Academy of Sciences, Beijing 100049, P. R. China

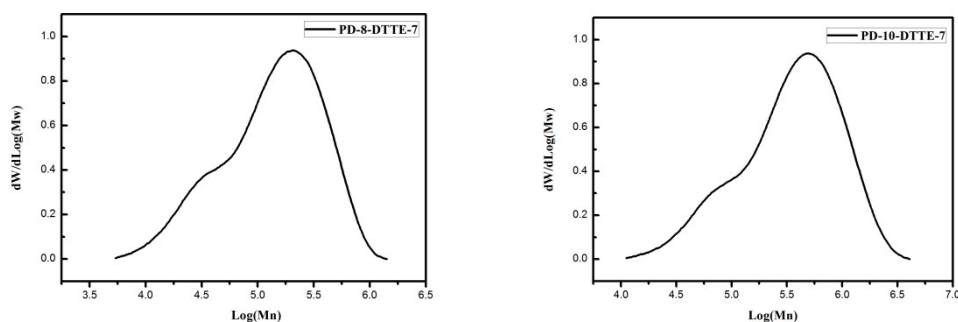


Fig. S1. GPC chromatograms of PD-n-DTTE-7.

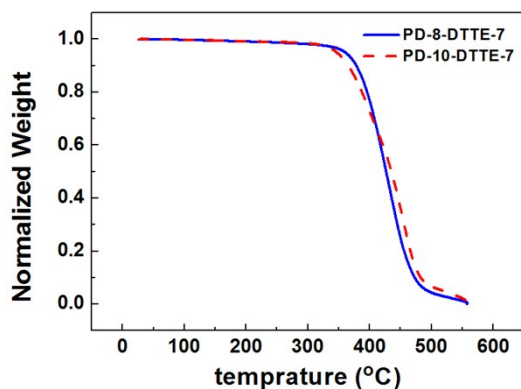


Fig. S2. TGA of PD-n-DTTE-7.

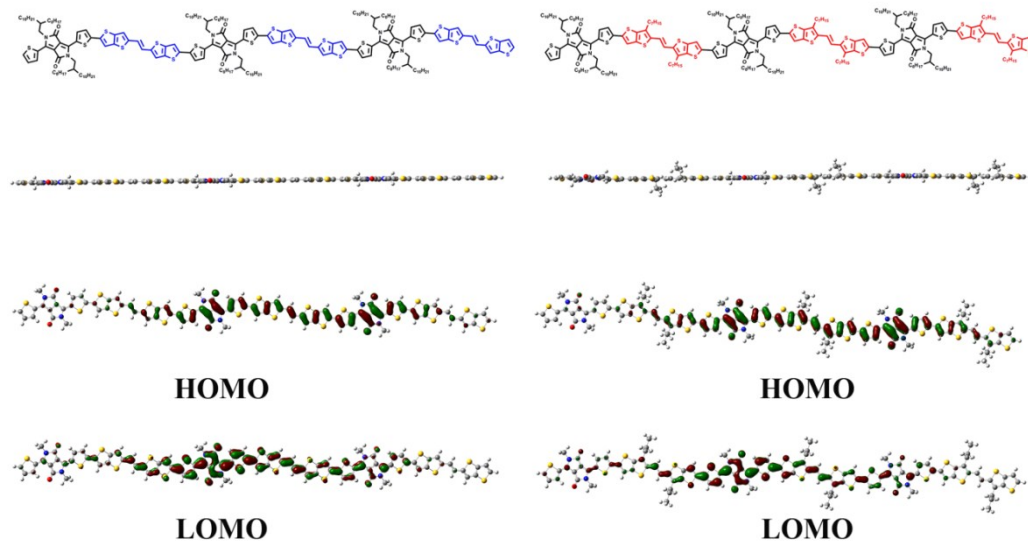


Fig. S3. Surface plots of HOMO (top) and LUMO (bottom) of the unalkylated trimers (left) and alkylated trimers (right).

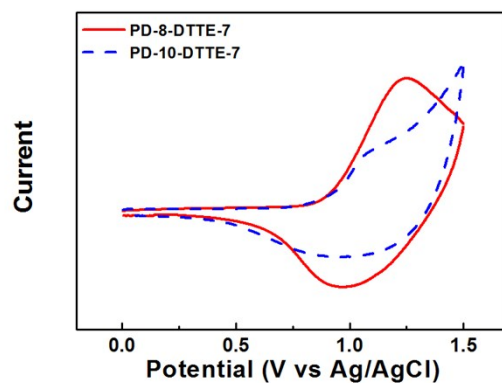


Fig. S4. Cyclic voltammogram of PD-n-DTTE-7 thin films.

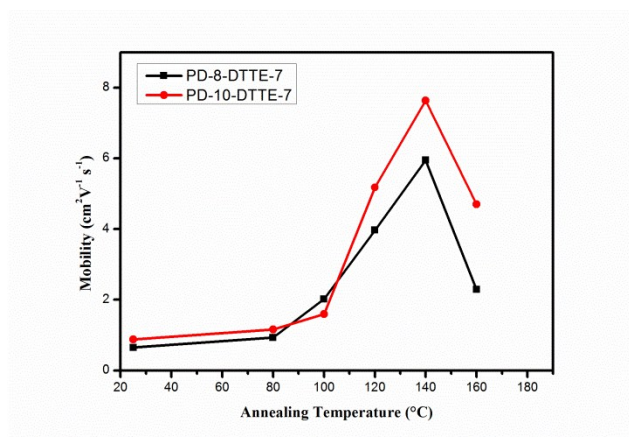
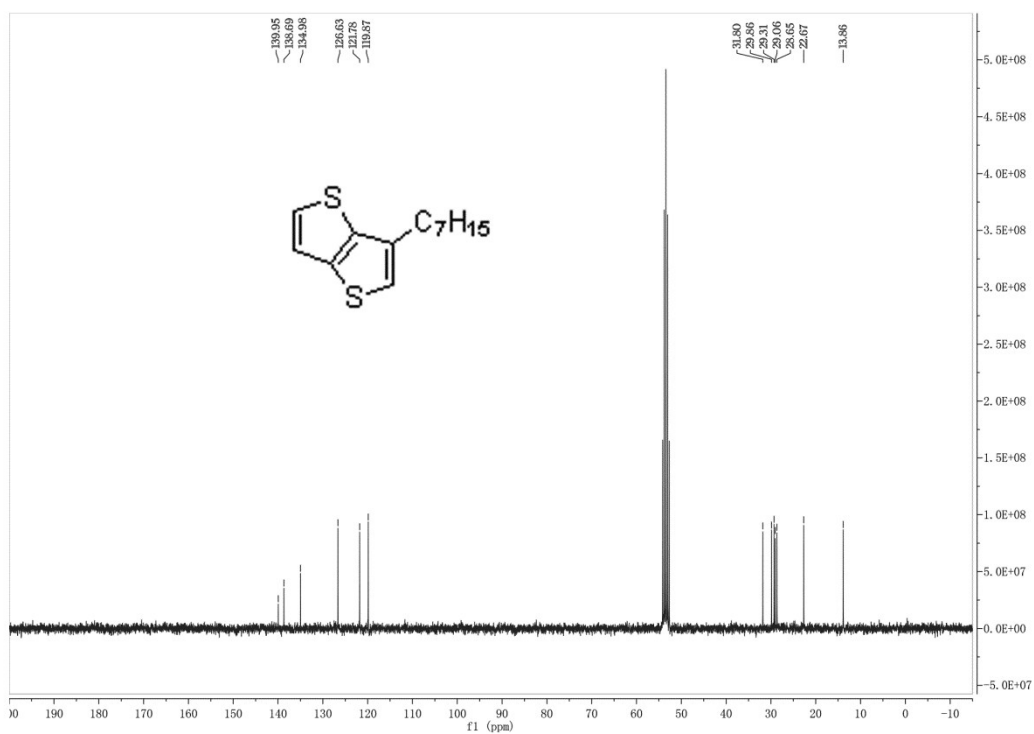
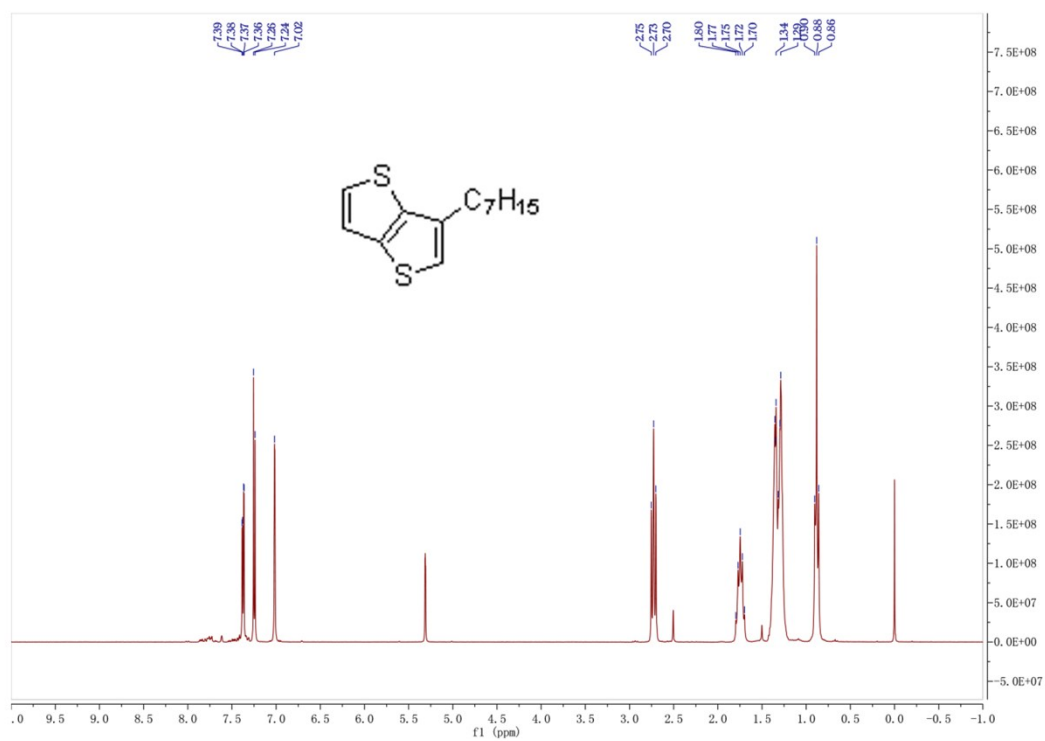
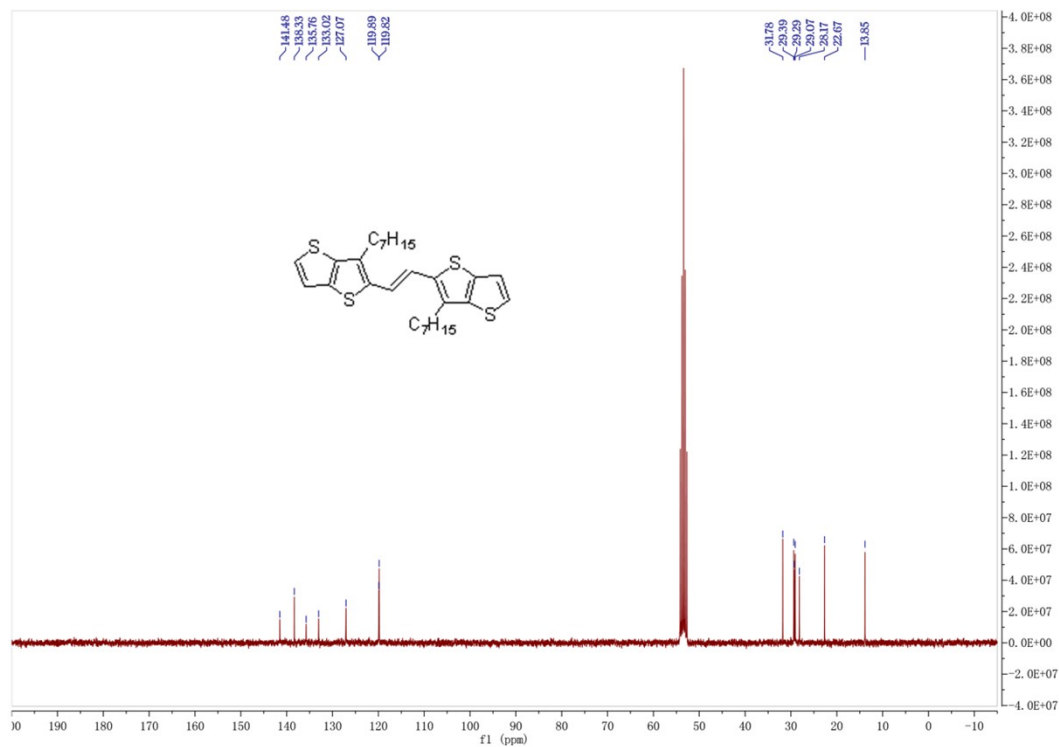
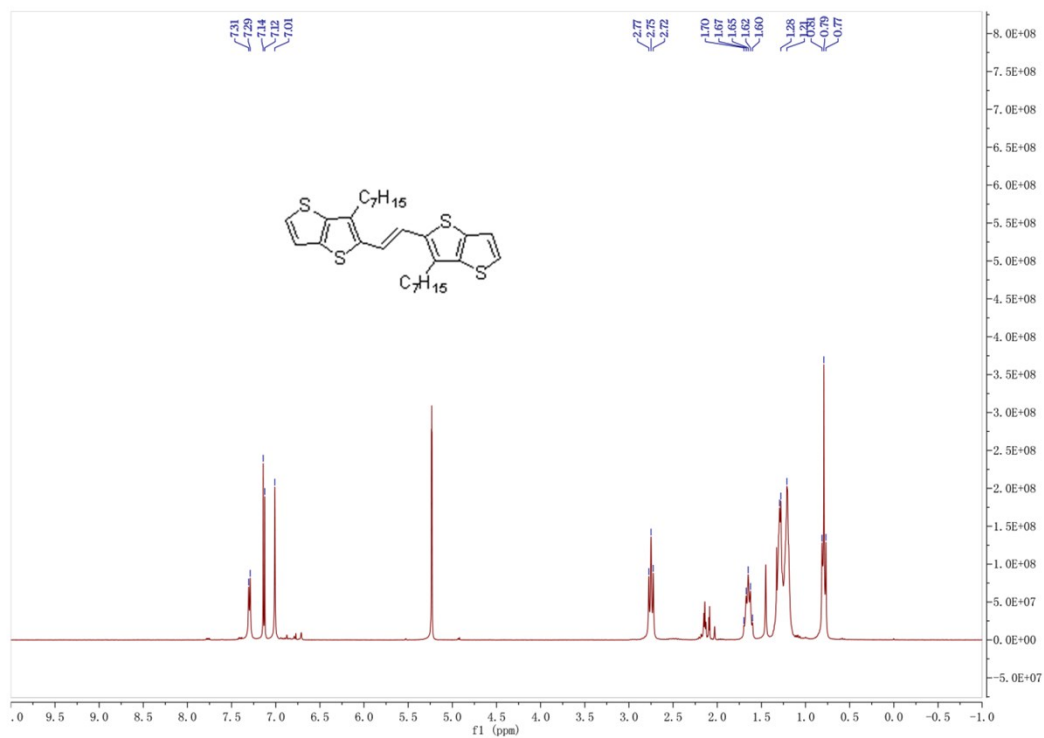
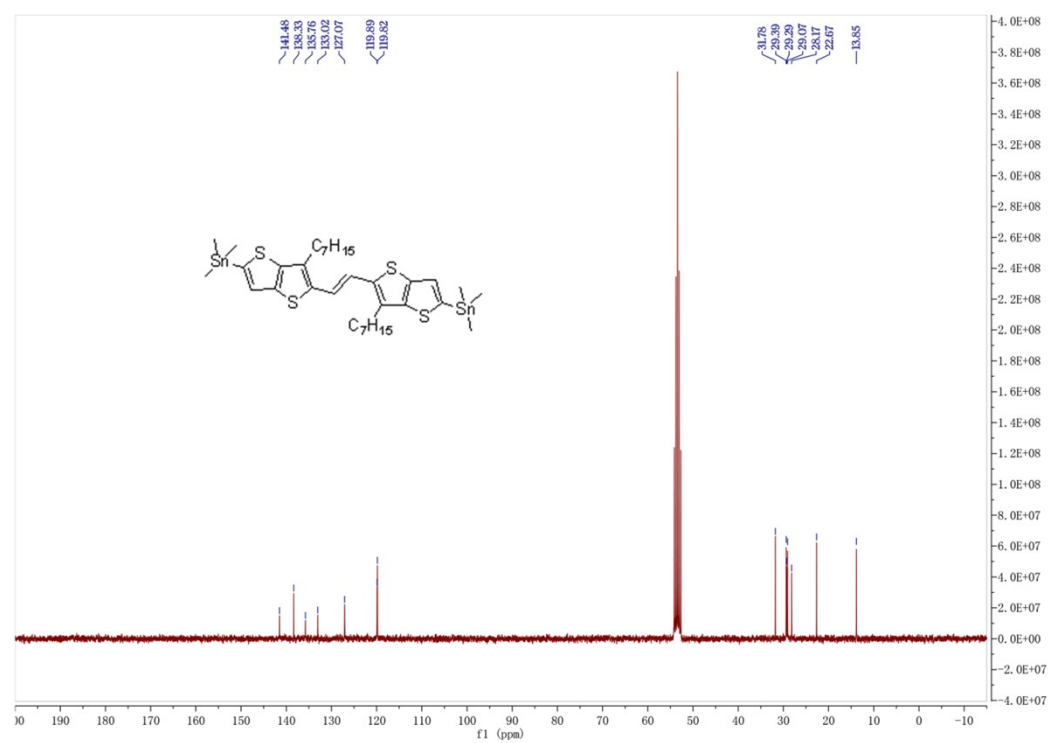
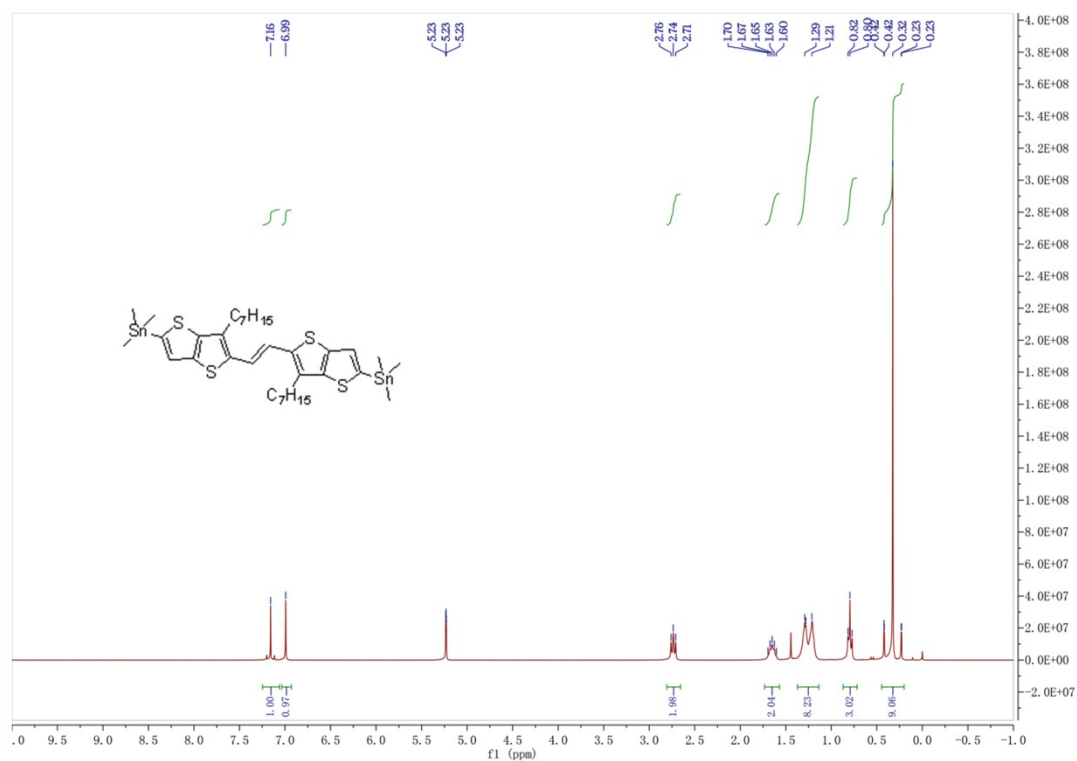


Fig. S5. OFET performances without annealing (25 °C) and with annealing at different temperatures.

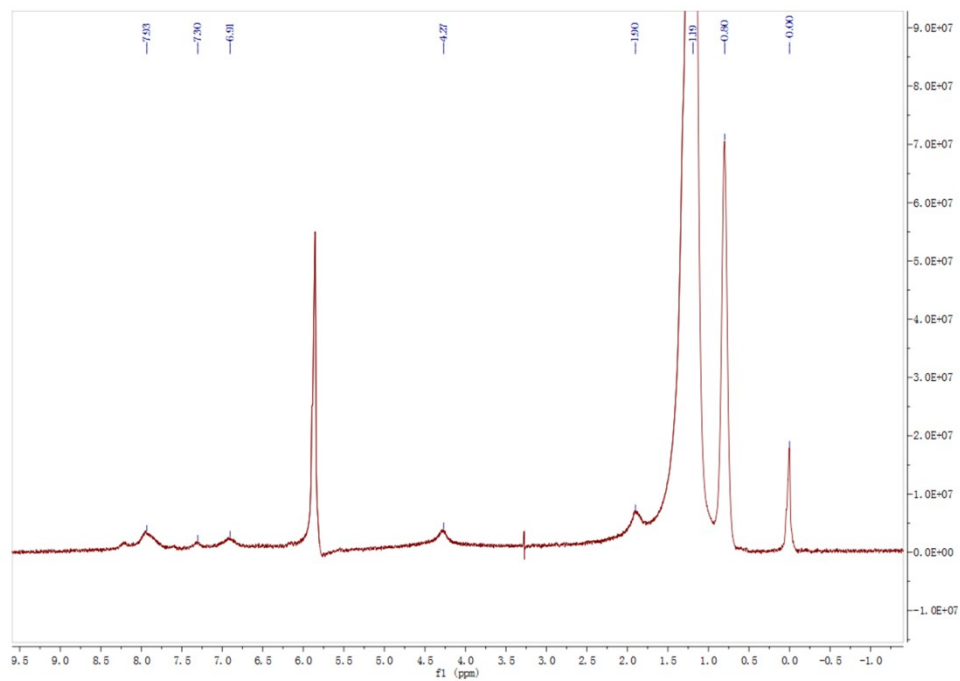
^1H and ^{13}C NMR spectra







PD-8-DTTE-7.



PD-10-DTTE-7

