

Supporting Information

Facile Synthesis of Arylthiophenyl-Functionalized Diketopyrrolopyrrole Derivatives via Direct C-H Arylation: Characterization and Utilization in Organic Electronic Devices

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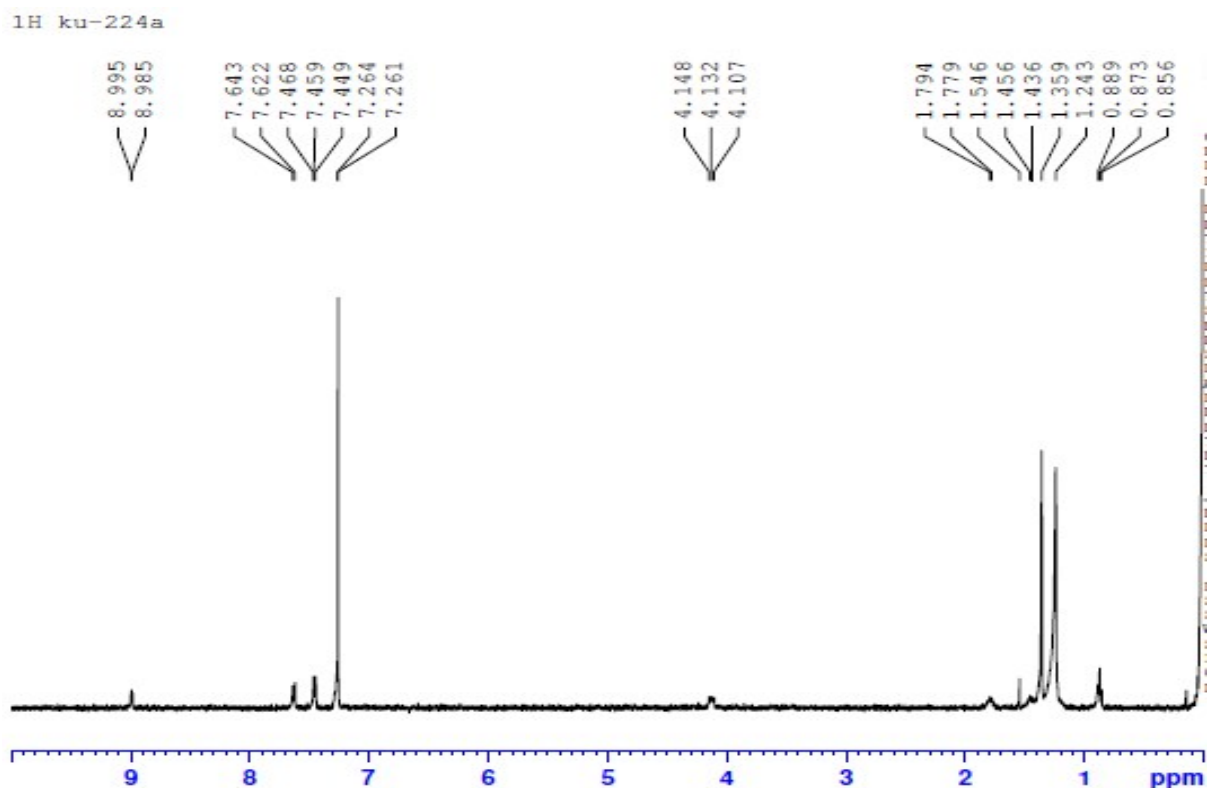


Figure S1a. ^1H NMR spectrum of DPPa

KU-224a_131002212118 #15-43 RT: 0.12-0.36 AV: 29 NL: 7.34E6
F: FTMS + p ESI sid=30.00 Full ms [500.00-]

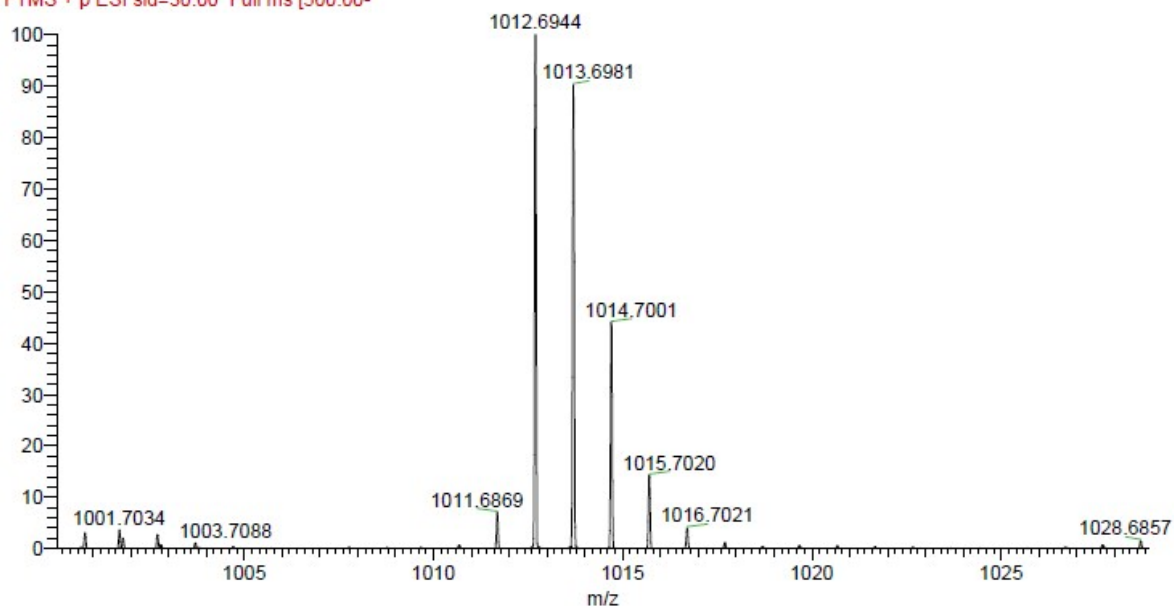


Figure S1b. HRMS spectrum of DPPa

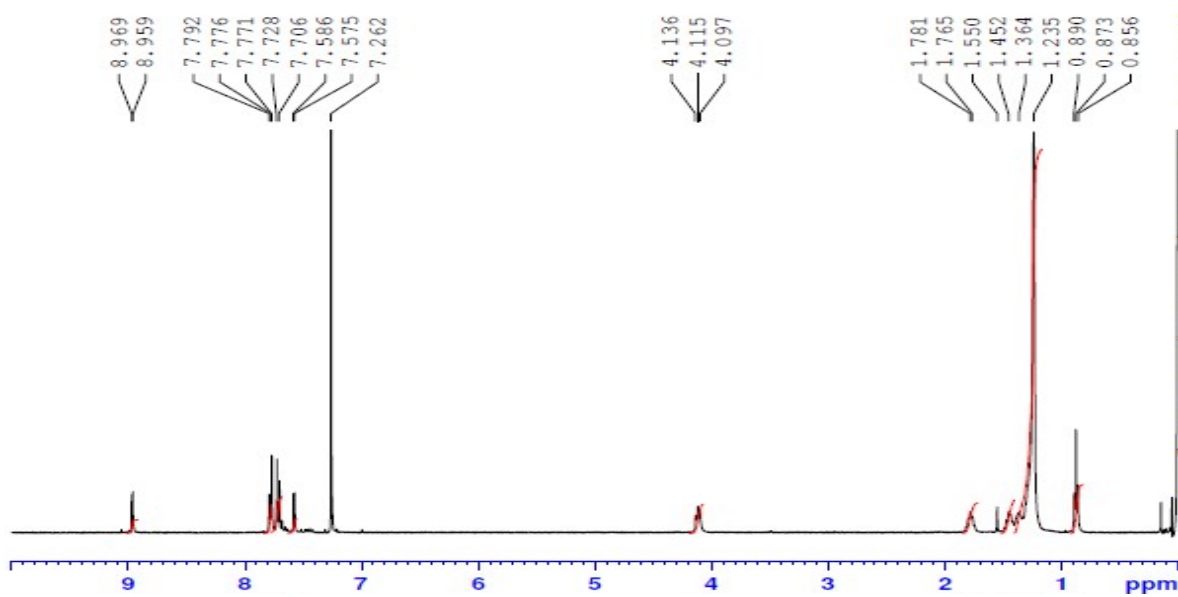


Figure S2a. ¹H NMR spectrum of DPPb

KU-238-1 #20-21 RT: 0.32-0.34 AV: 2 NL: 1.20E6
F: FTMS + p ESI Full ms [200.00-1800.00]

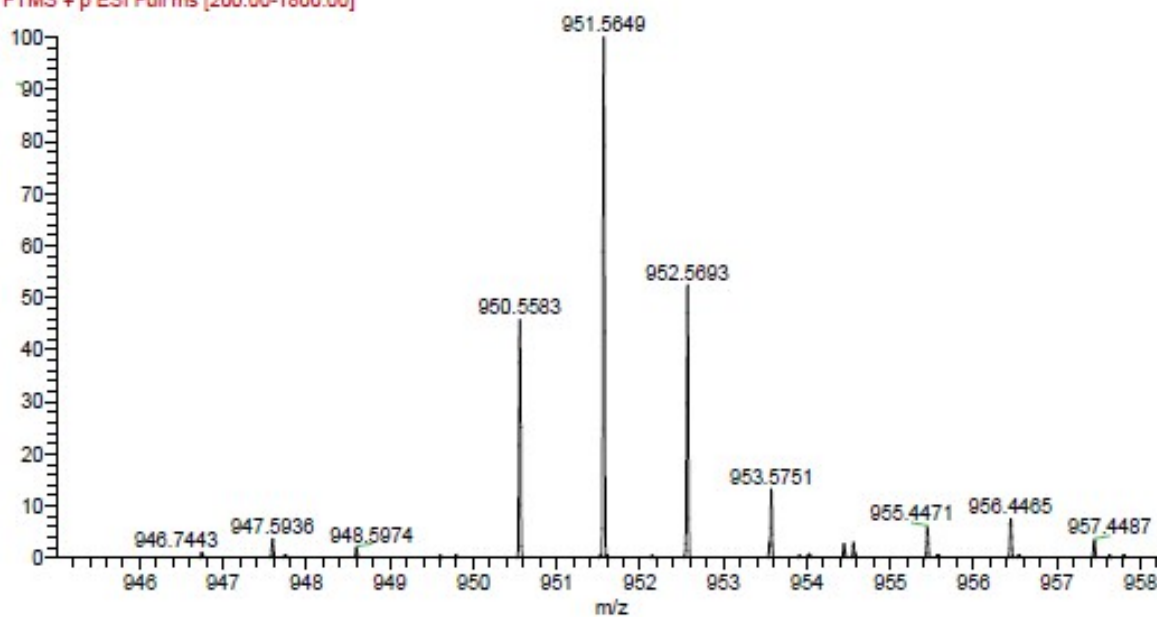


Figure S2b. HRMS spectrum of DPPb

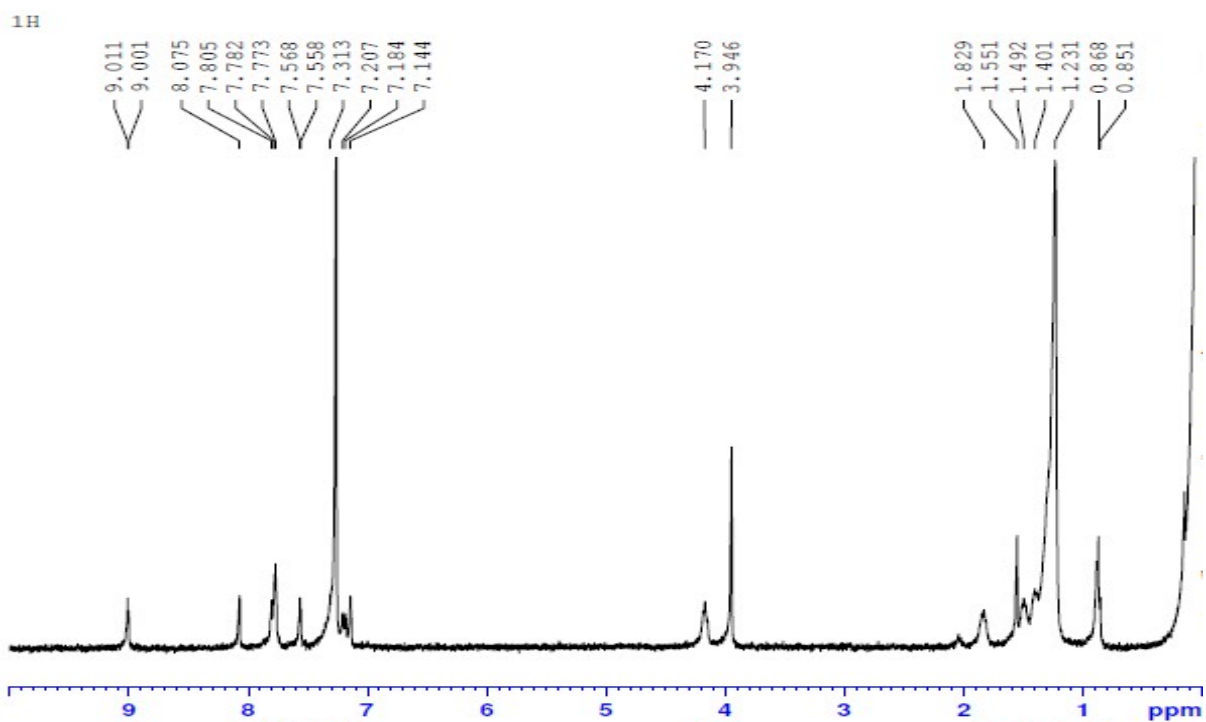


Figure S3a. ¹H NMR spectrum of DPPc

KU-240-1 #8-20 RT: 0.16-0.34 AV: 13 SM: 5G NL: 1.45E6
F: FTMS + p ESI Full ms [200.00-1800.00]

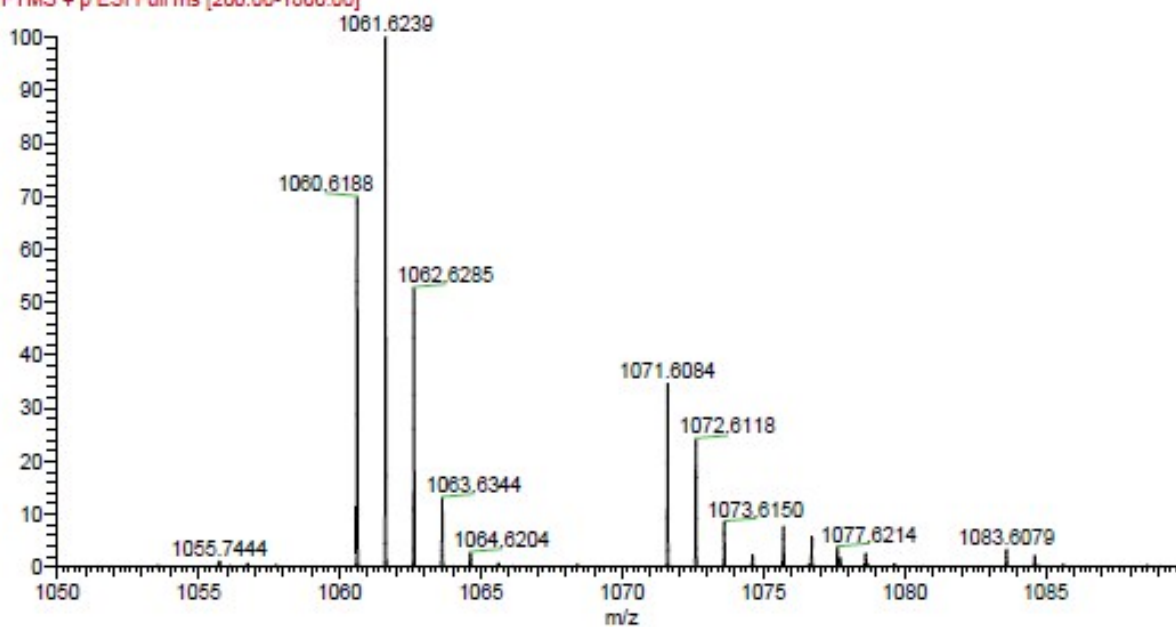


Figure S3b. HRMS spectrum of DPPc

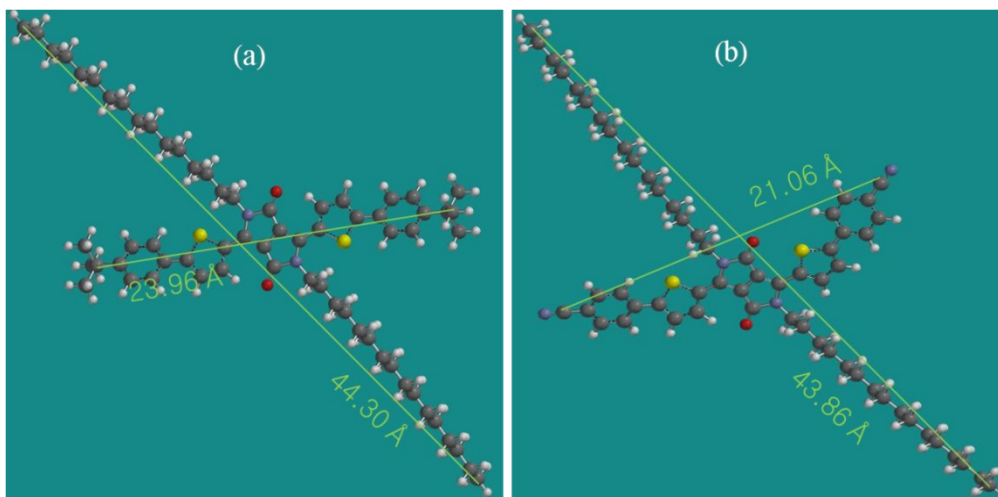


Figure S4. Optimized geometry of (a) **DPPa** and (b) **DPPb** showing the bond distance of the respective molecules from DFT calculations

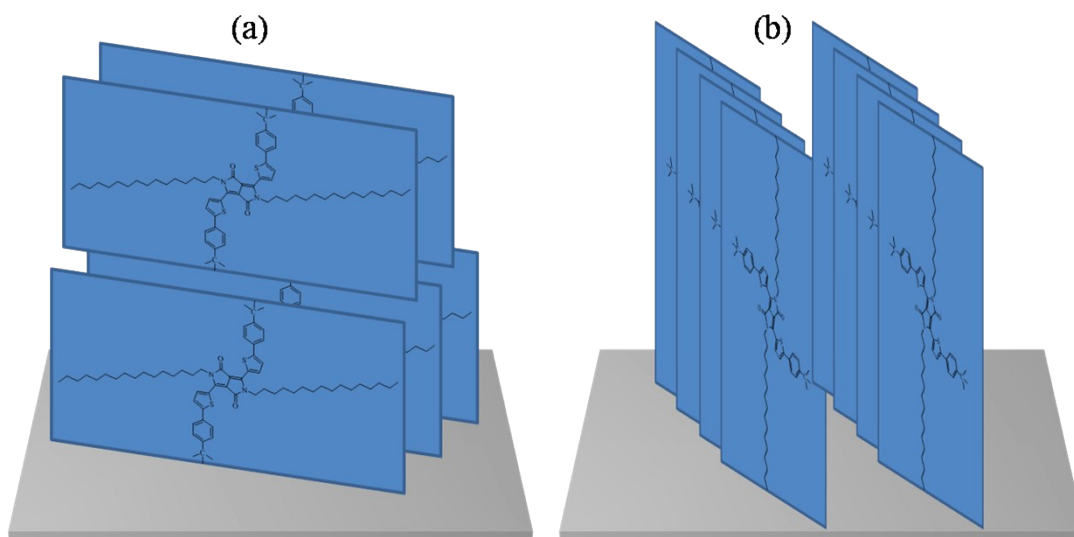


Figure S5. Schematic diagram of the molecular arrangement of (a) **DPPa** and (b) **DPPb** film on the ITO surface.

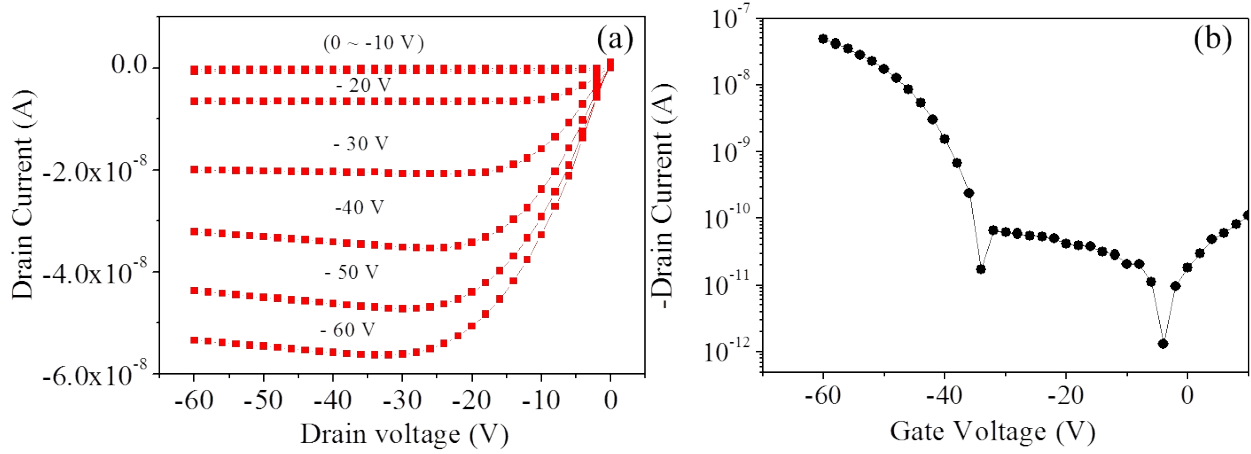


Figure S6. Output (a) and transfer (b) characteristic curves of OFET device based on **DPPa** measured after 100 days storage in ambient conditions.