

Supplementary Material: The Influence of Fluorination on Nano-Scale Phase Separation and Photovoltaic Performance of Small Molecular/PC₇₁BM Blends

Zhen Lu, Wen Liu, Jingjing Li, Tao Fang, Wanning Li, Jicheng Zhang, Feng Feng and Wenhua Li

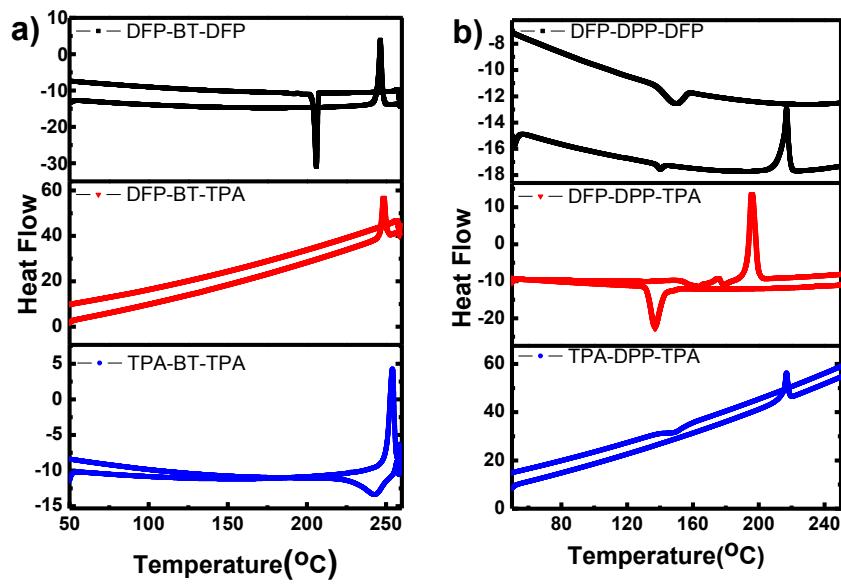


Figure S1. Differential scanning calorimetry (DSC) of small molecules (a) (DFP-BT-DFP, DFP-BT-TPA, TPA-BT-TPA); (b) (DFP-DPP-DFP, DFP-DPP-TPA, TPA-DPP-TPA) with a heating rate of 20 °C/min. DFP: fluorinated phenyl; BT: 2,1,3-benzothiadiazole; DPP: diketopyrrolopyrrole; TPA: triphenyl amine.

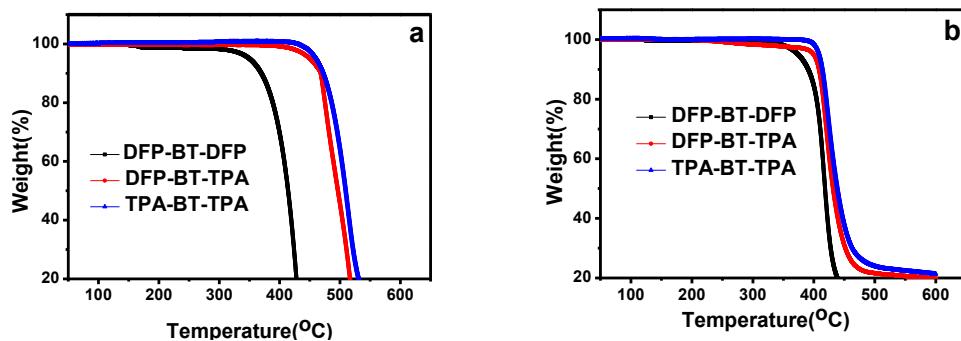


Figure S2. Thermal gravimetric analysis (TGA) curves of (a) DFP-BT-DFP, DFP-BT-TPA, TPA-BT-TPA and (b) DFP-DPP-DFP, DFP-DPP-TPA, TPA-DPP-TPA.

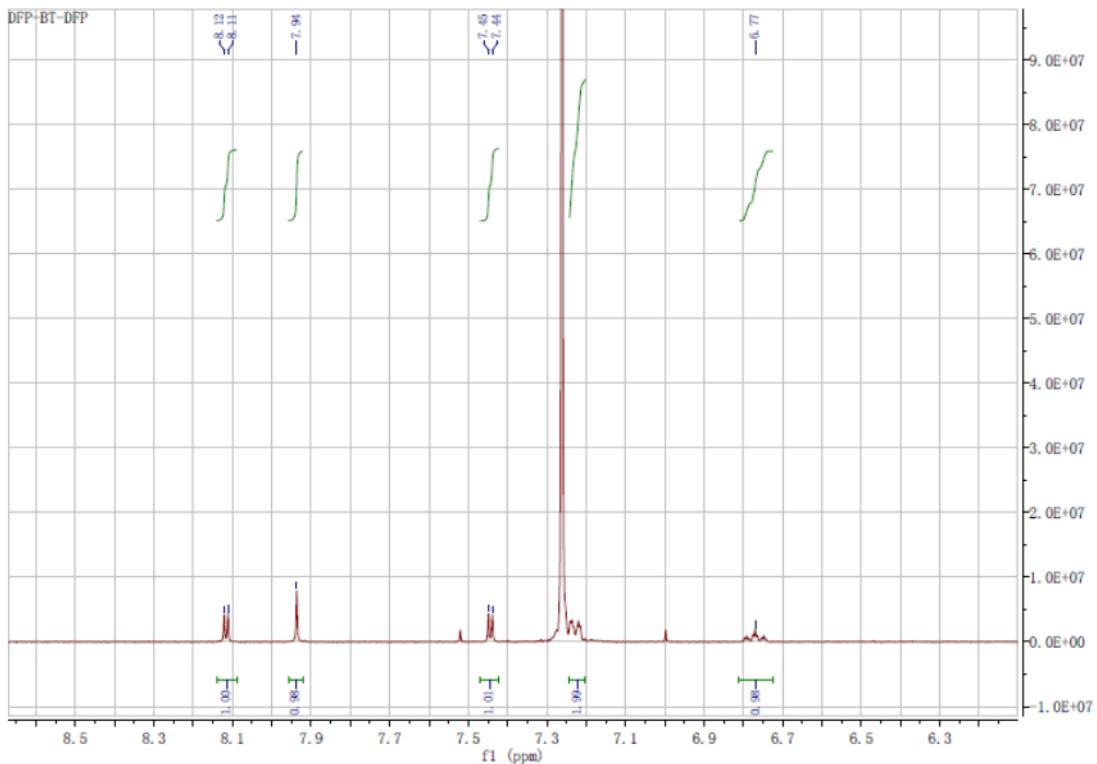


Figure S3. ^1H NMR spectrum of DFP-BT-DFP (measured in CDCl_3).

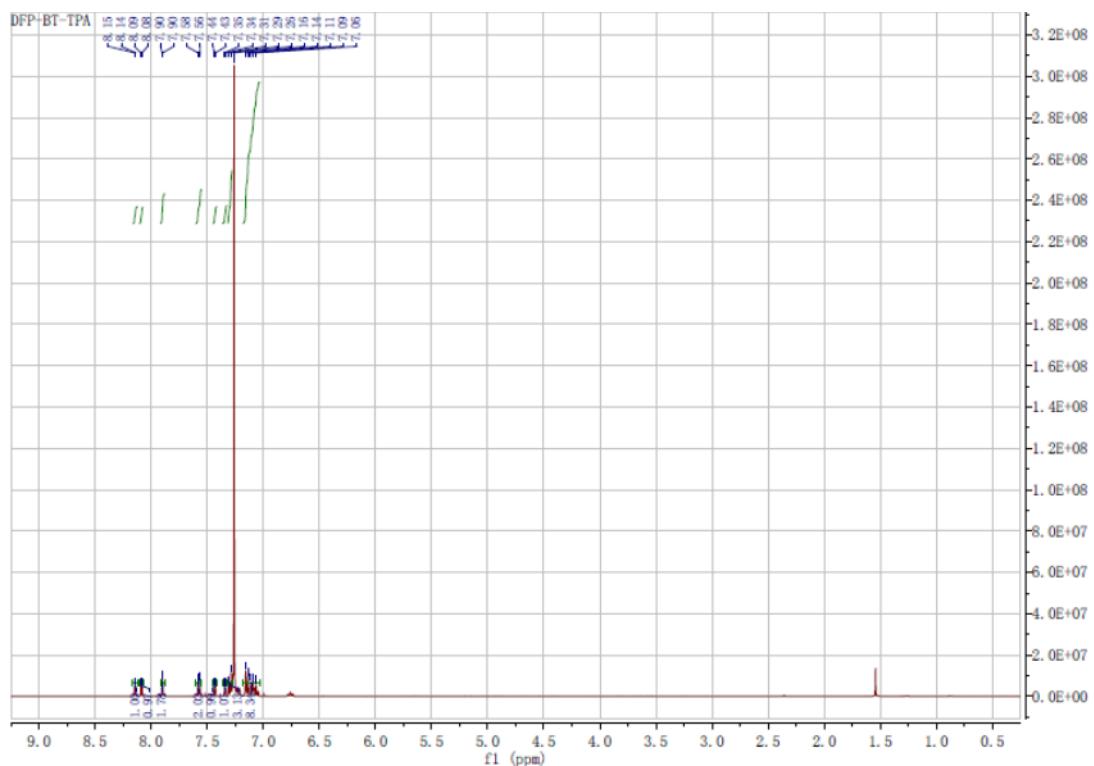


Figure S4. ^1H NMR spectrum of DFP-BT-TPA (measured in CDCl_3).

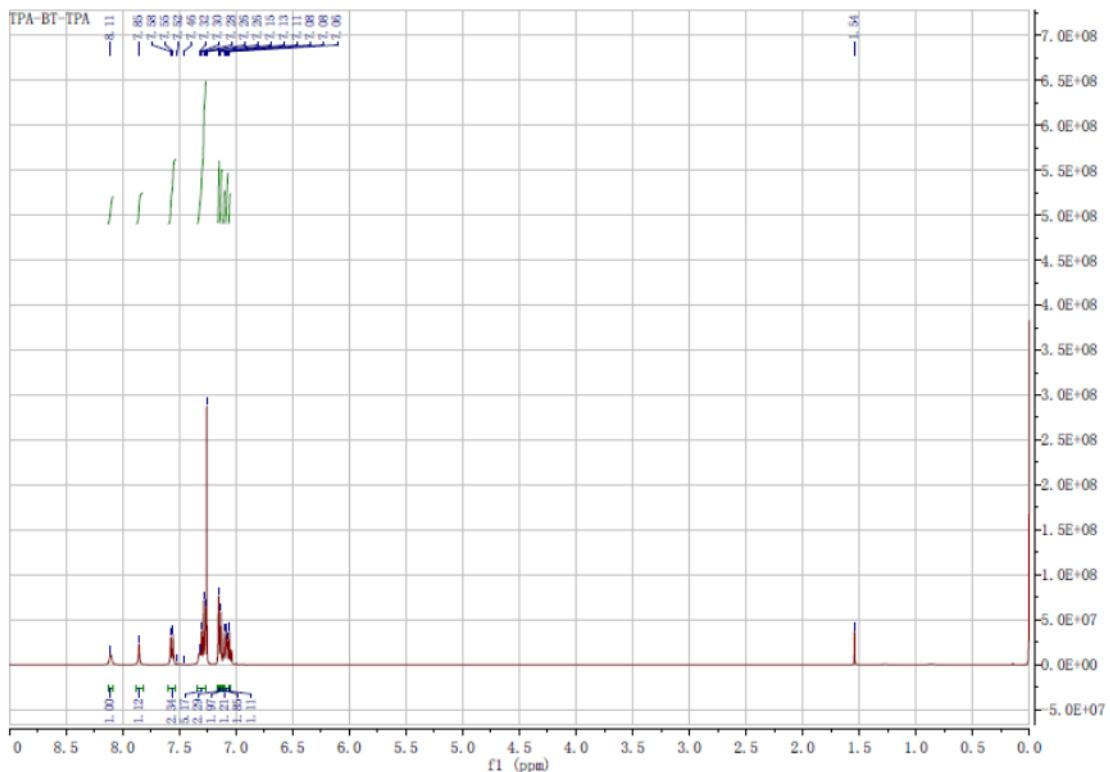


Figure S5. ^1H NMR spectrum of TPA-BT-TPA (measured in CDCl_3).

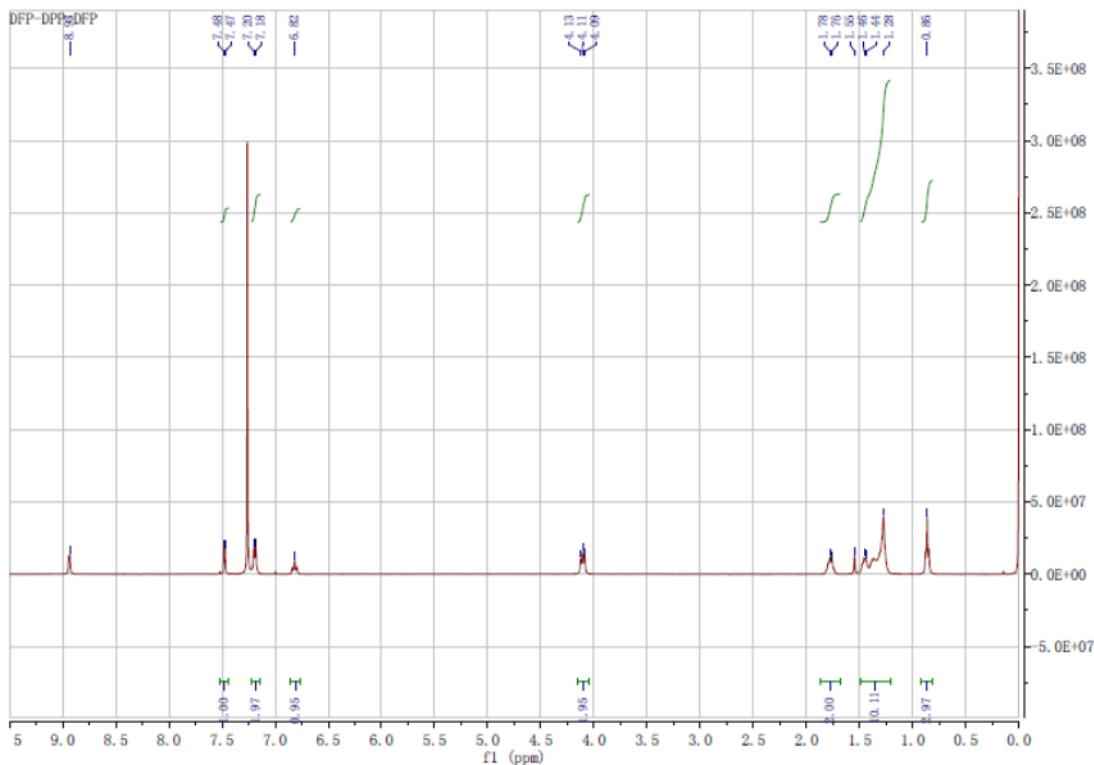


Figure S6. ^1H NMR spectrum of DFP-DPP-DFP (measured in CDCl_3).

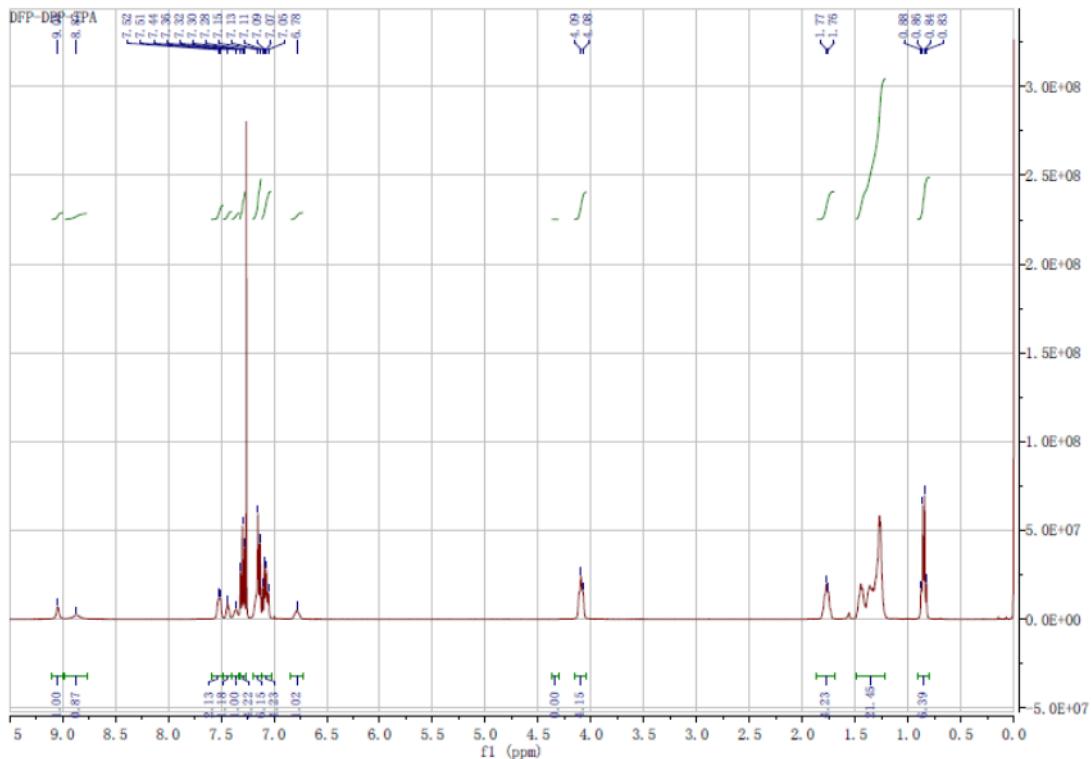


Figure S7. ¹H NMR spectrum of DFP-DPP-TPA (measured in CDCl₃).

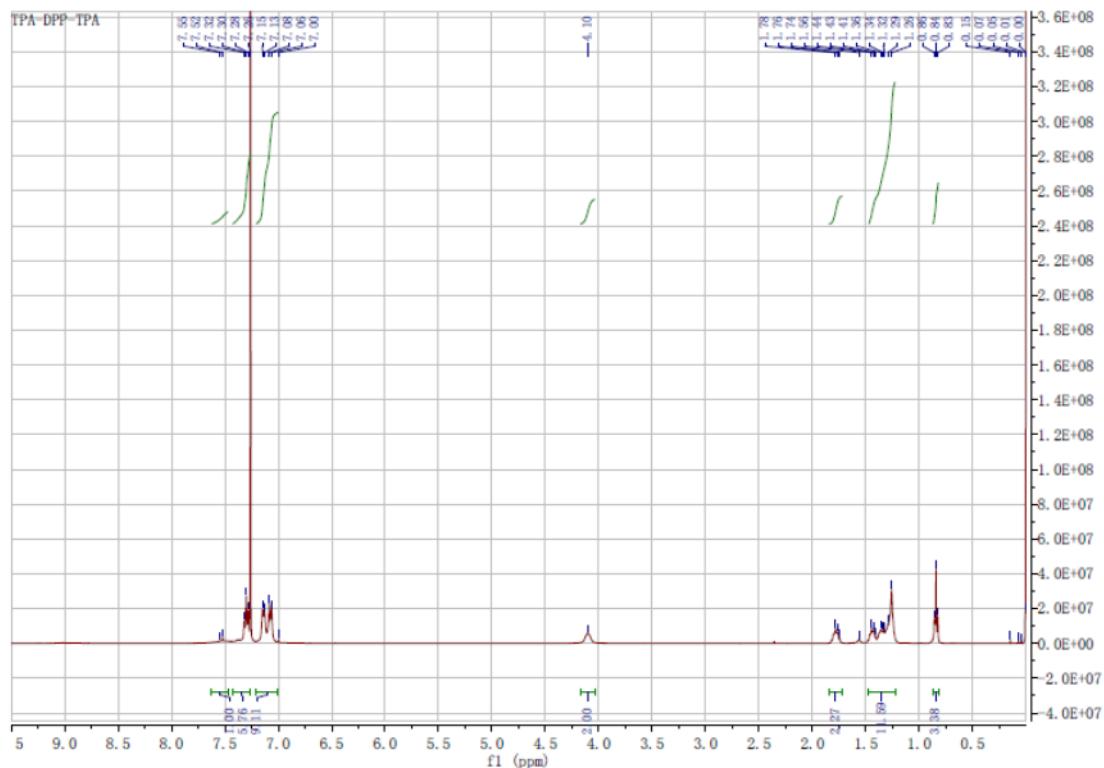


Figure S8. ¹H NMR spectrum of TPA-DPP-TPA (measured in CDCl₃).



© 2016 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons by Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).