Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

Stable and Efficient Deep-Blue Terfluorenes Functionalized with Carbazole Dendrons for Solution-Processed Organic Light-Emitting Diodes

Lei Zhao,[†,‡] Shumeng Wang,[†,‡] Shiyang Shao,[†] Junqiao Ding,[*,†] Lixiang Wang,[*,†] Xiabin Jing,[†] and Fosong Wang[†]

[†]*State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, P. R. China*

[‡]*University of Chinese Academy of Sciences, Beijing, 100049, P. R. China*

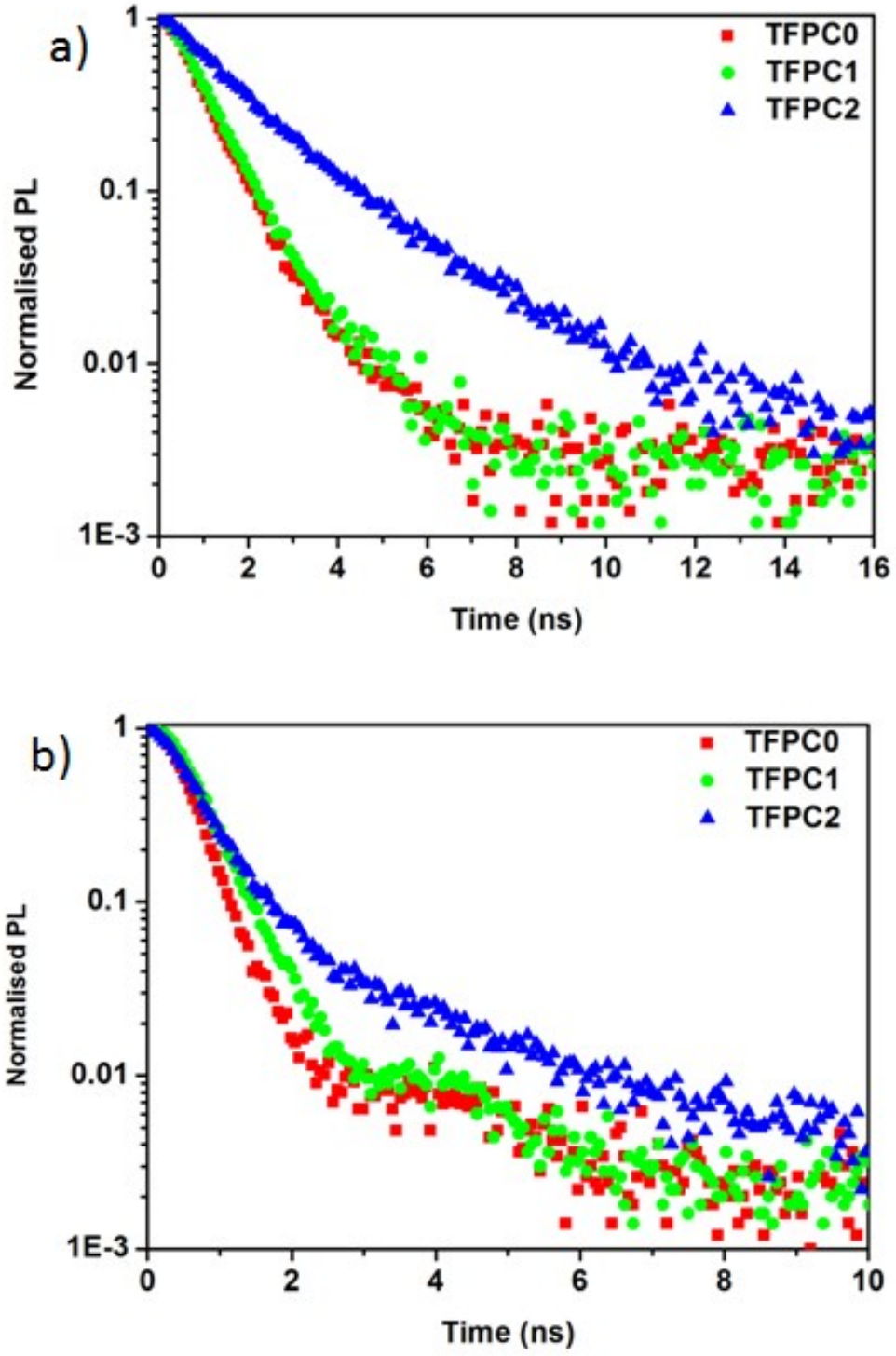

Figure S1. Photoluminescence intensity as a function of time for TFPC0~TFPC2 in solution (a) and in film state (b) at room temperature.

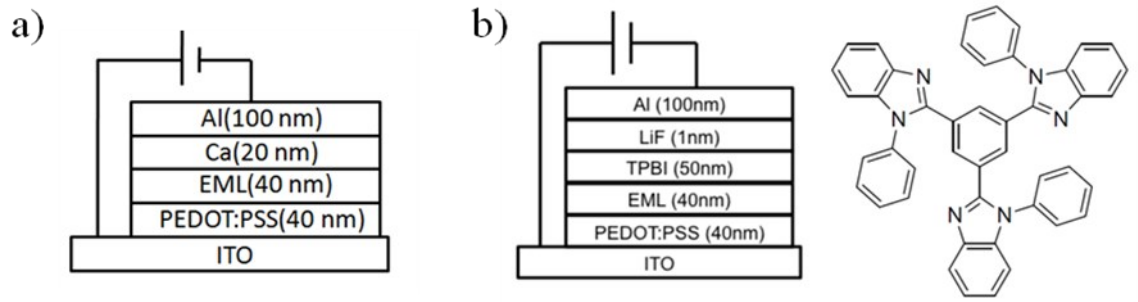

Figure S2. The architecture of single-layer (a) and double-layer devices (b).

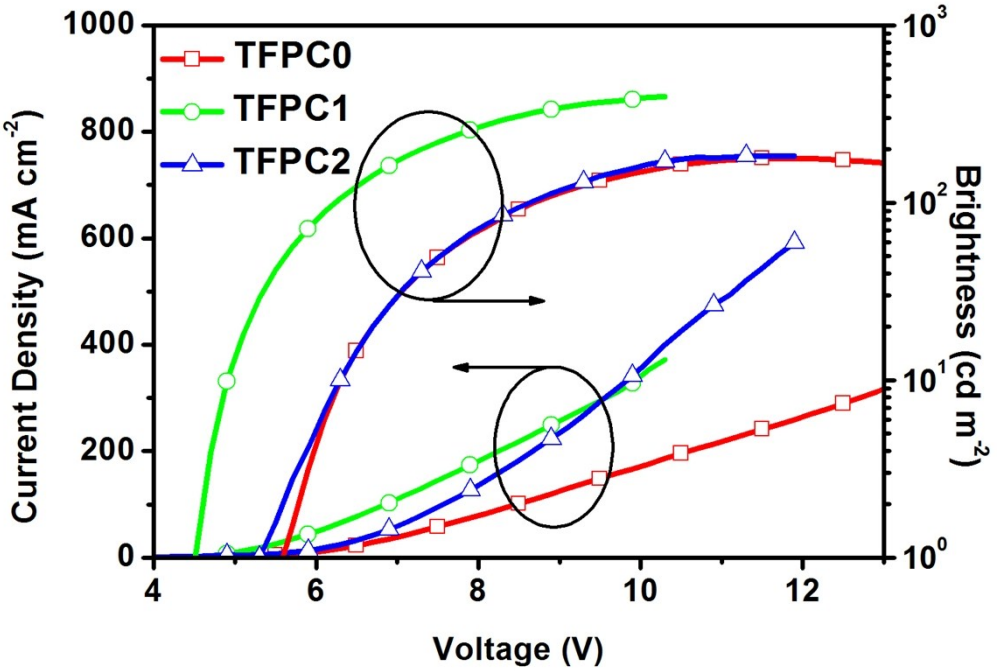

Figure S3. The current density-voltage-brightness characteristics of the single-layer devices.

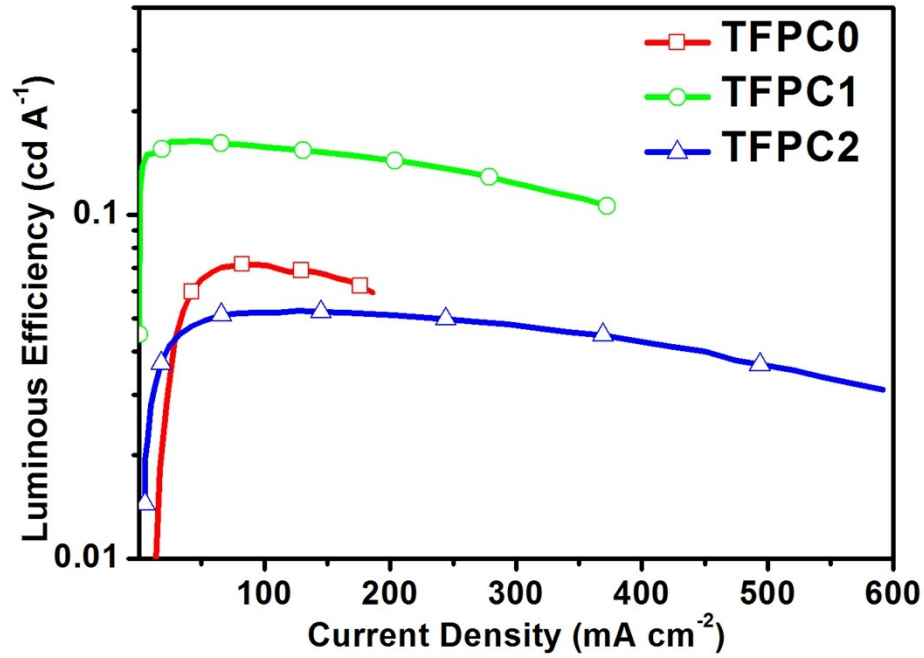

Figure S4. The luminous efficiency as a function of current density for the single-layer devices.

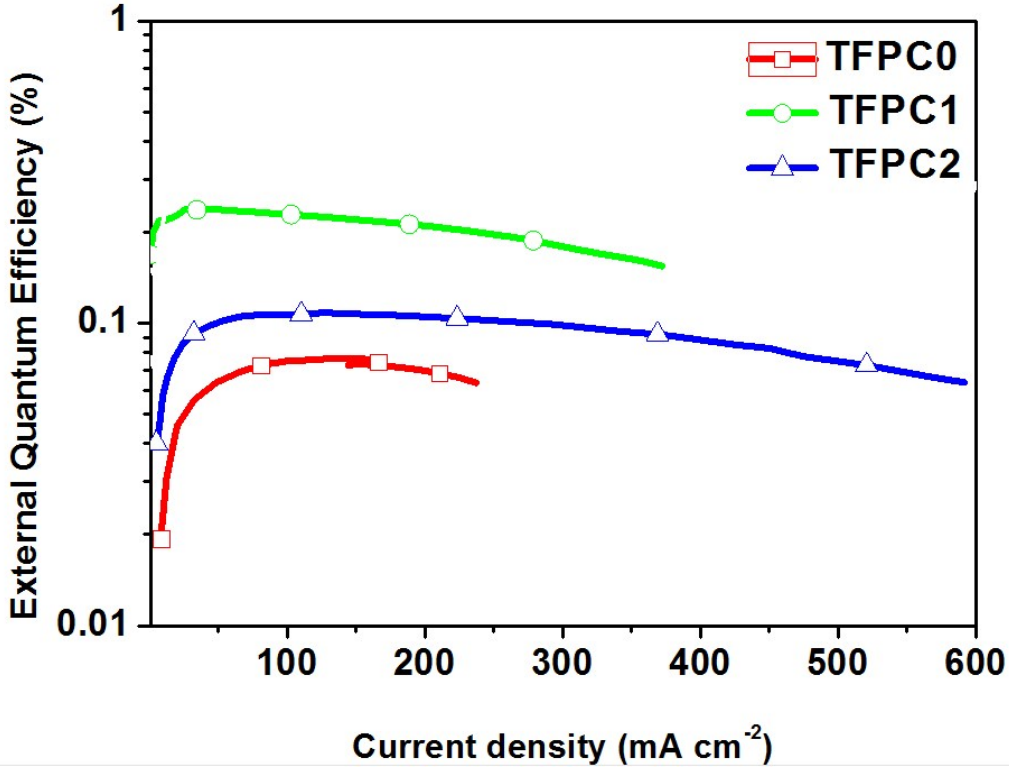

Figure S5. The external quantum efficiency as a function of current density for the single-layer devices.

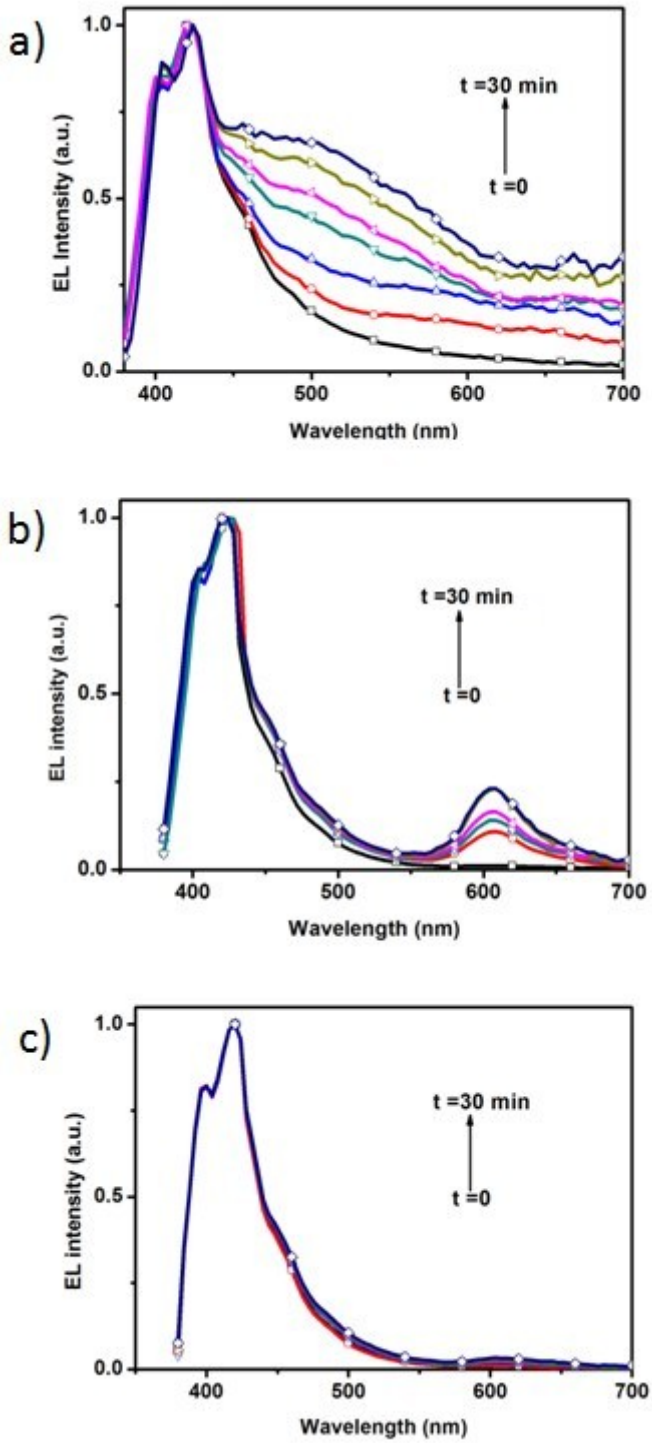

Figure S6. The temporal EL spectra of single-layer devices for TFPC0 (a), TFPC1 (b) and TFPC2 (c) driven at a constant current density (300 mA/cm^2) during 30 minutes. Spectra are recorded every 5 min.

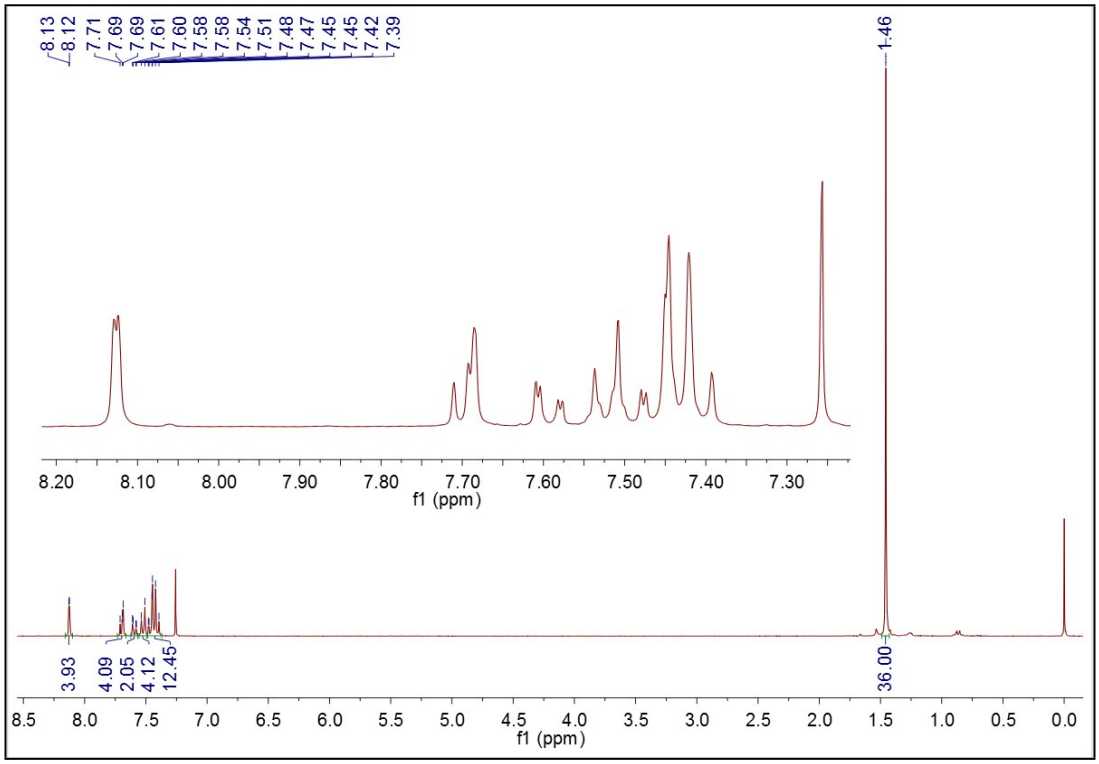

Figure S7. ^{1}H NMR spectrum of a1

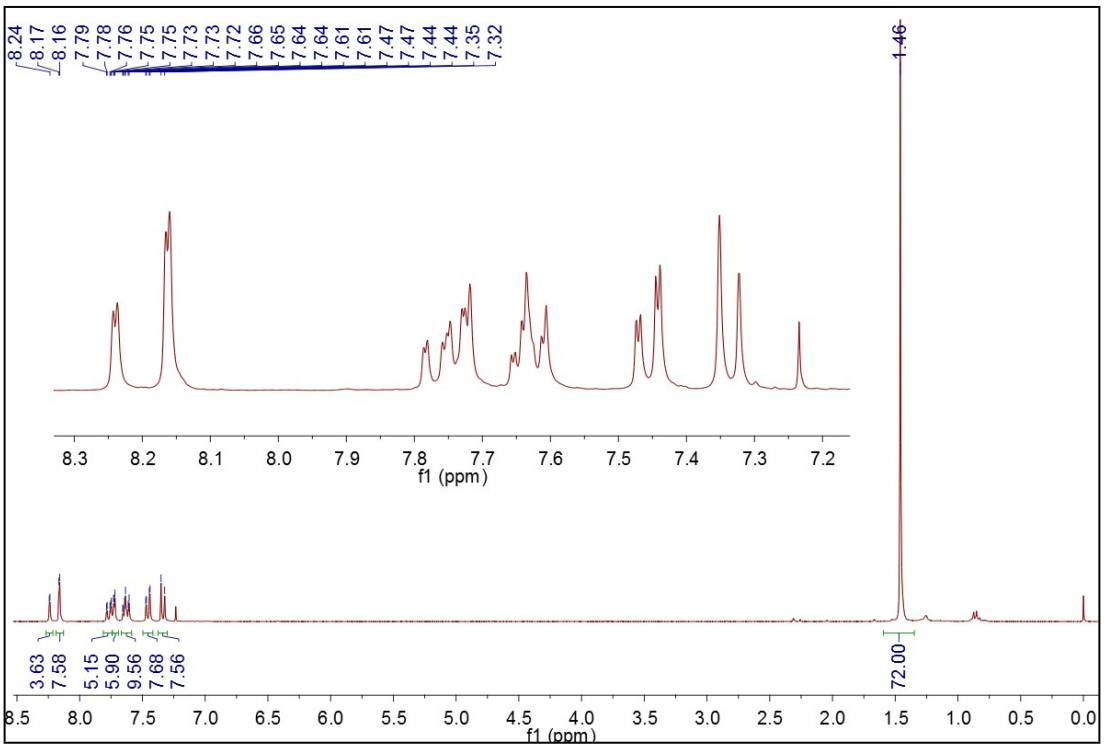

Figure S8. ^{1}H NMR spectrum of a2.

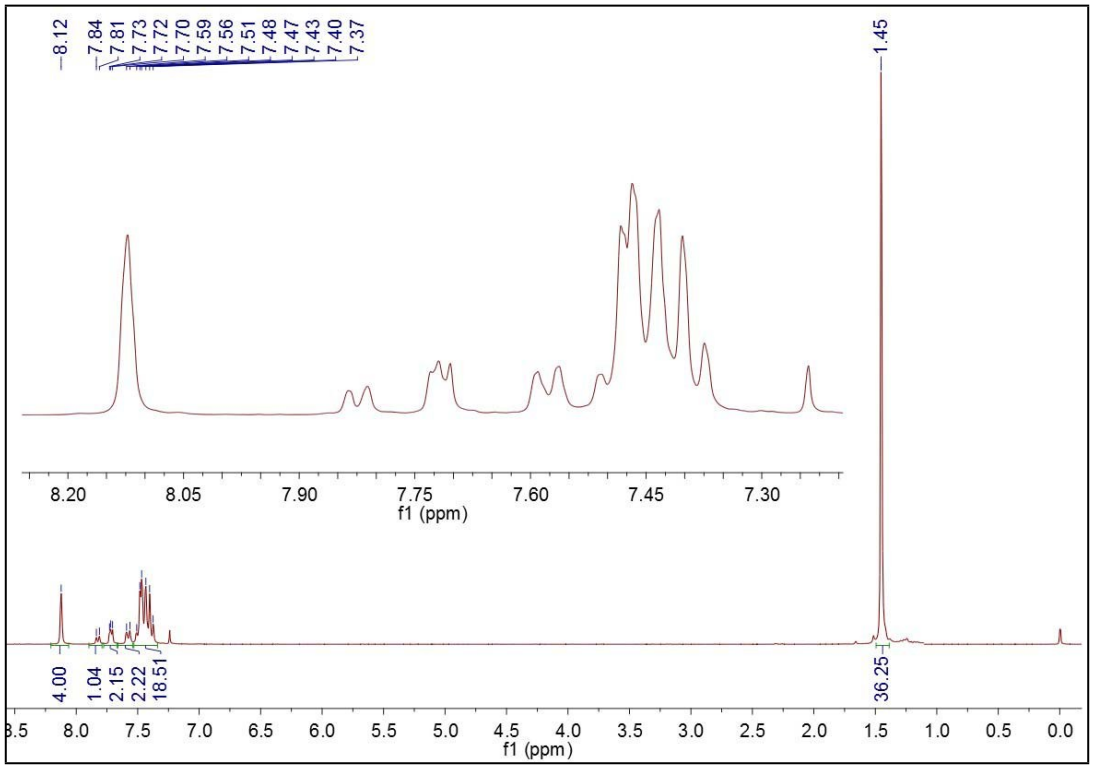

Figure S9. ^{1}H NMR spectrum of b1

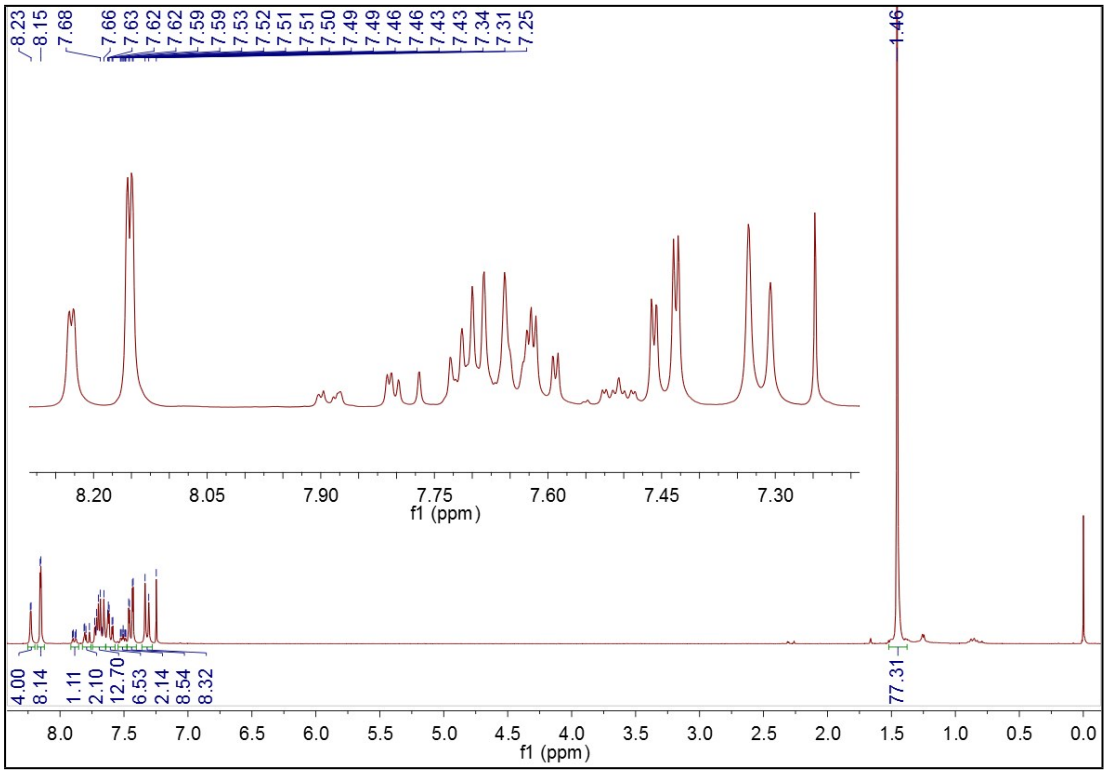

Figure S10. ^{1}H NMR spectrum of b2

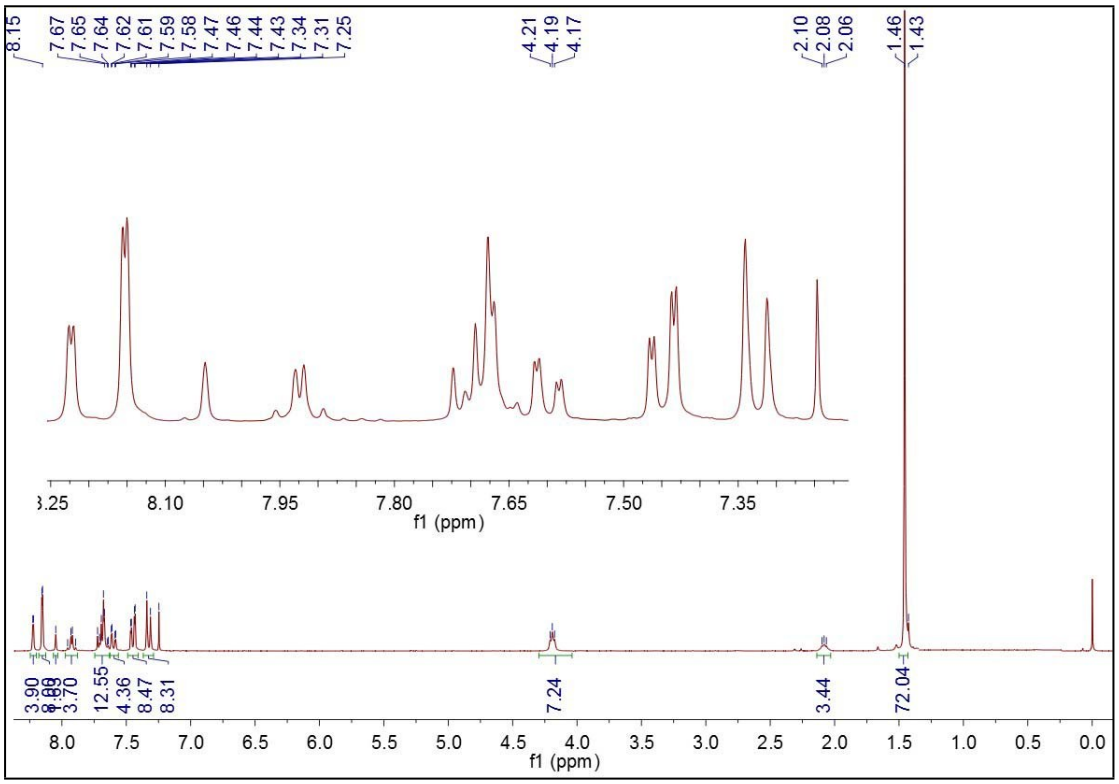

Figure S11. ^{1}H NMR spectrum of c1

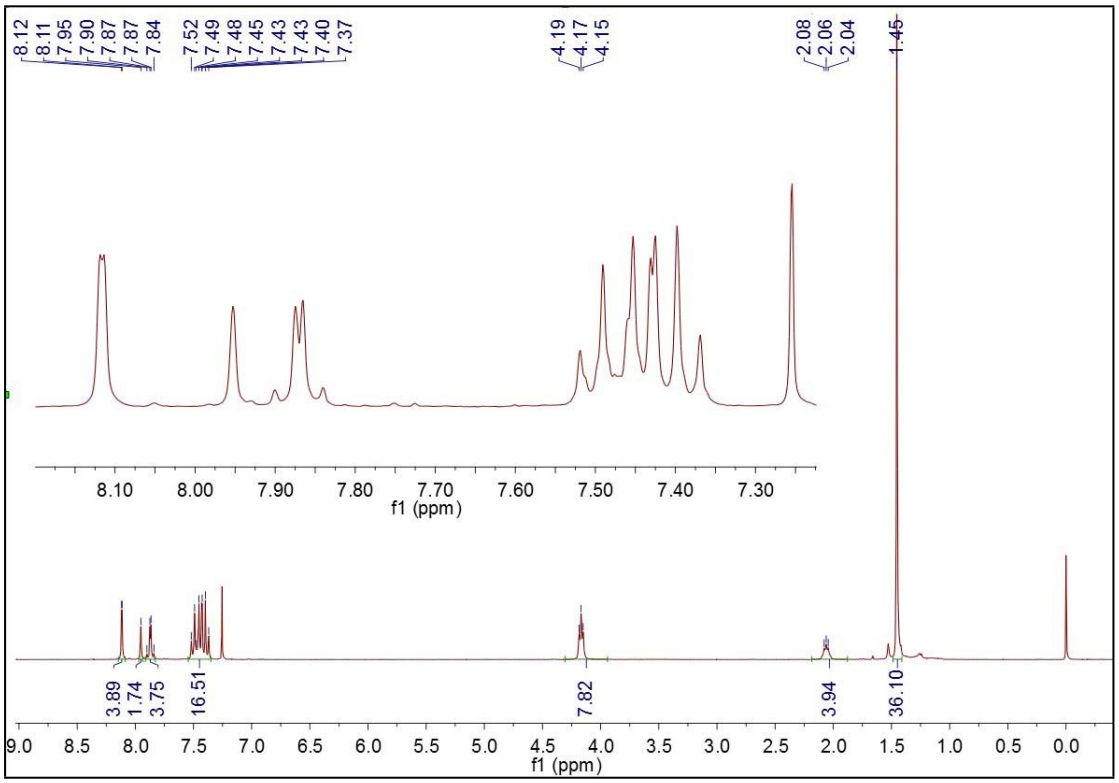

Figure S12. ^{1}H NMR spectrum of c2

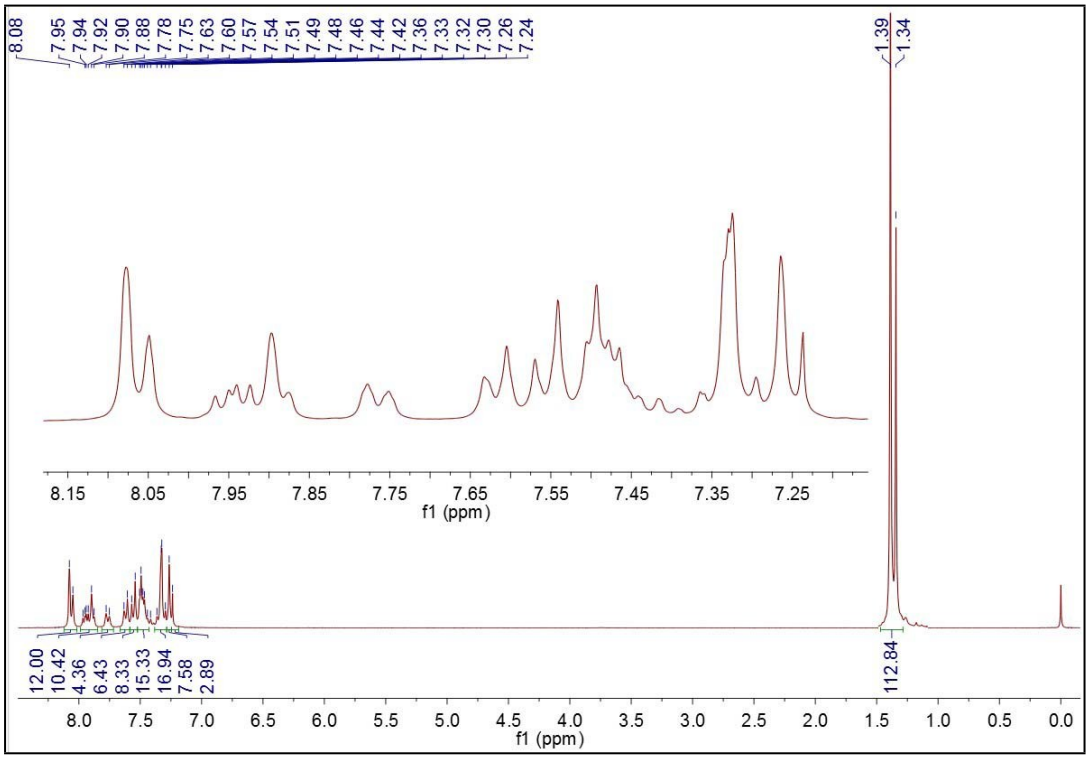

Figure S13. ^{1}H NMR spectrum of TFPC1

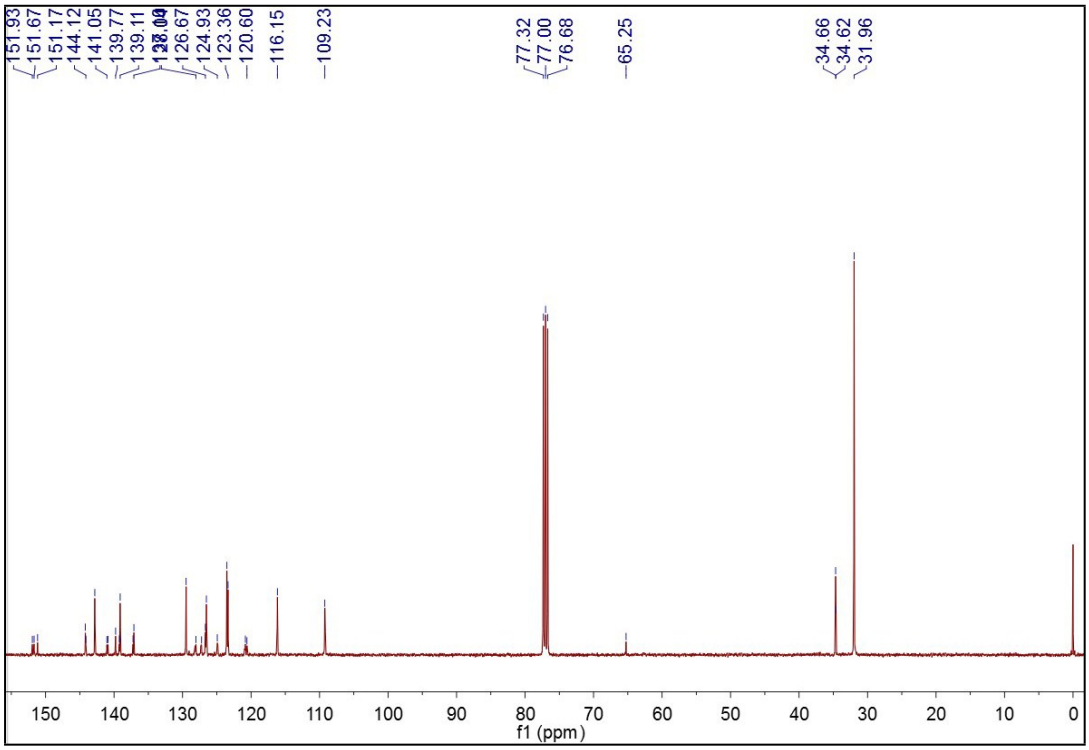

Figure S14. ^{13}C NMR spectrum of TFPC1

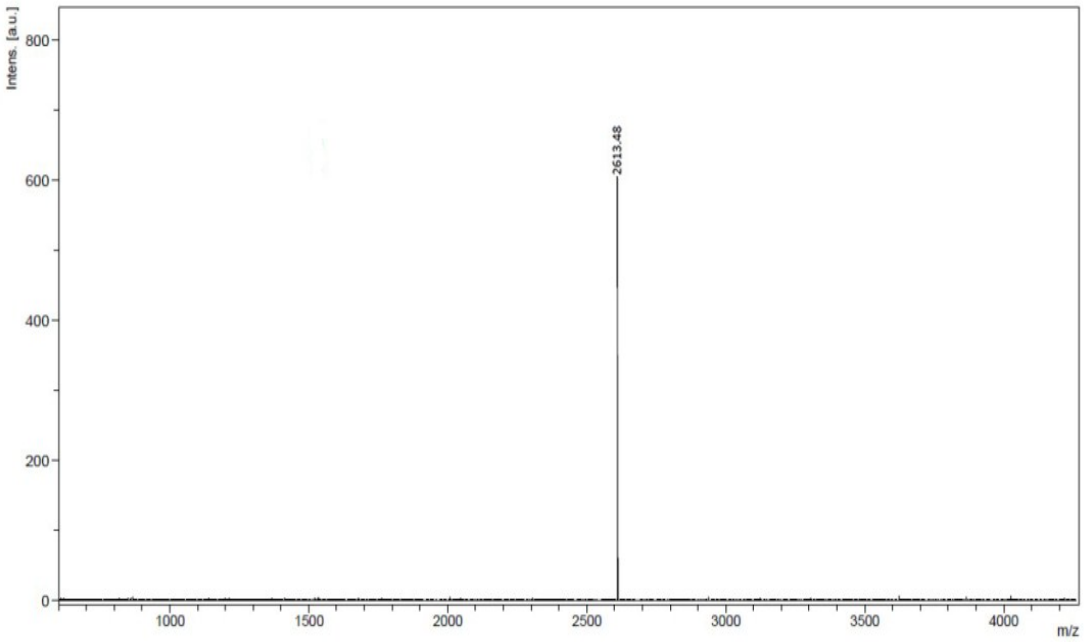

Figure S15. MALDI Mass spectrum of TFPC1

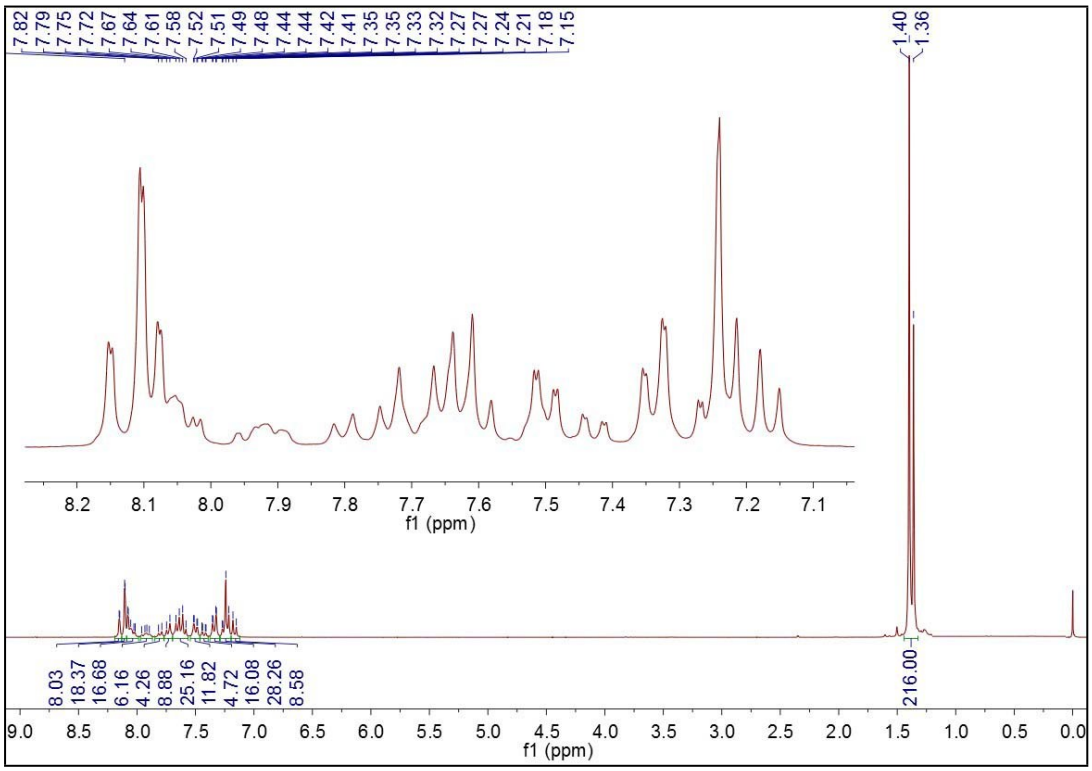

Figure S16. ^{1}H NMR spectrum of TFPC2

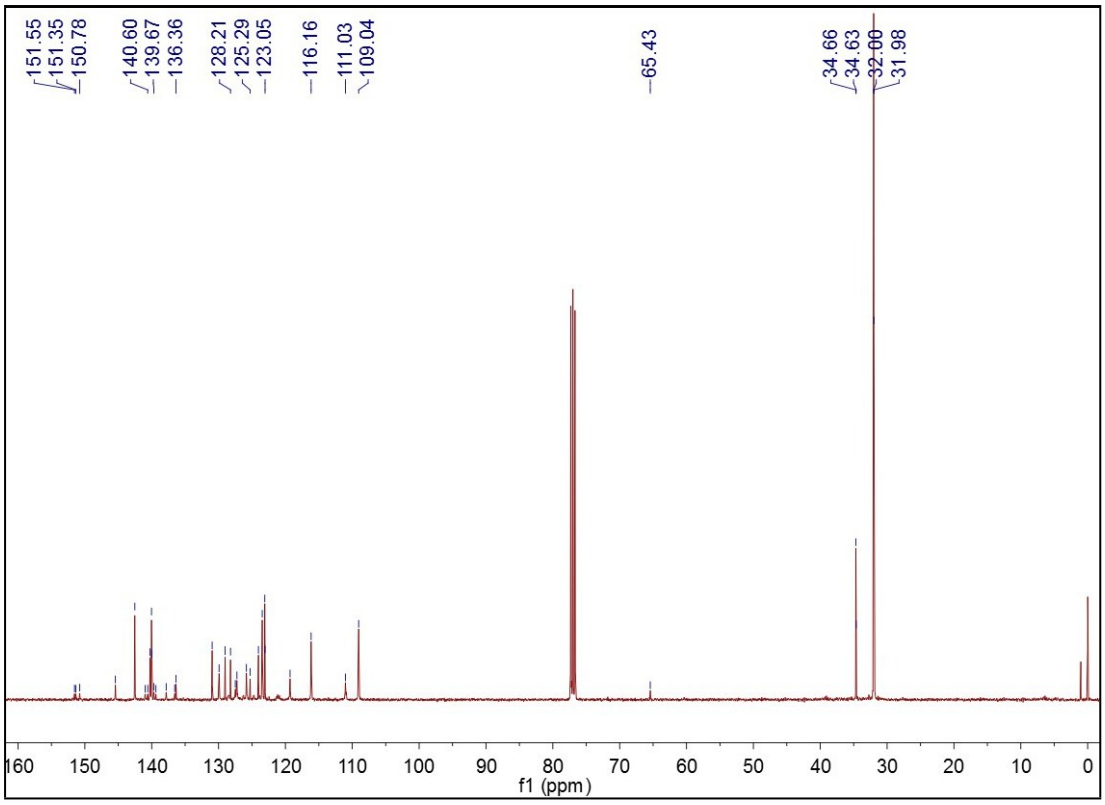

Figure S17. ^{13}C NMR spectrum of TFPC2

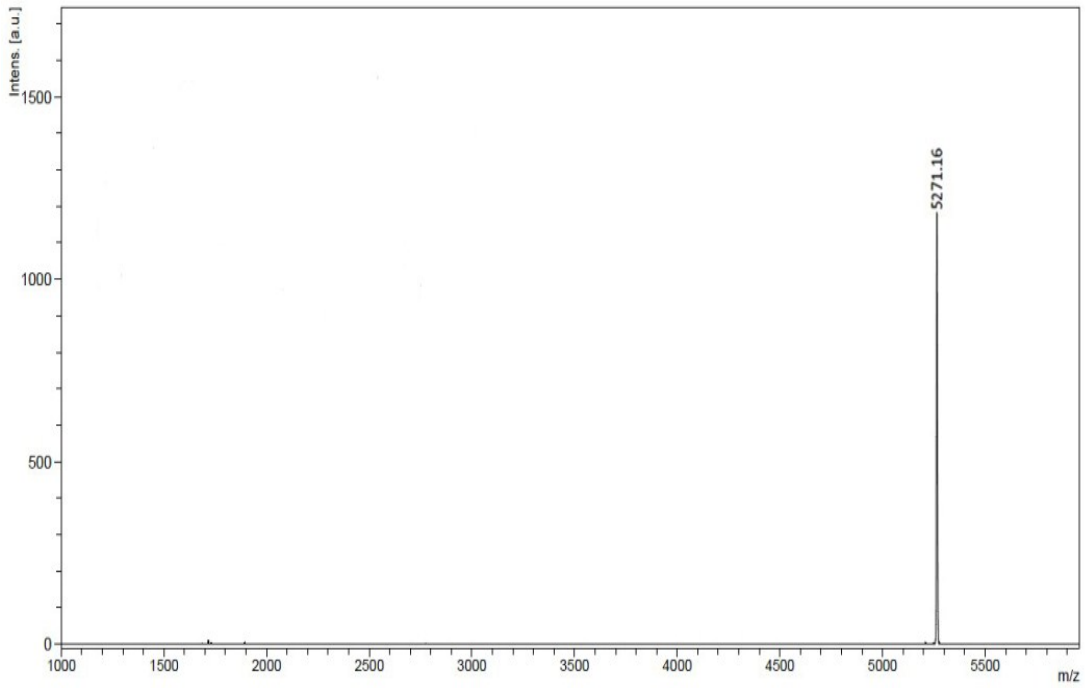

Figure S18. MALDI Mass spectrum of TFPC2