

## Supporting Information

# Synthesis and Photophysical Properties of Hyperbranched Polyfluorenes Containing 2,4,6-tris(thiophen-2-yl)-1,3,5-triazine as the Core

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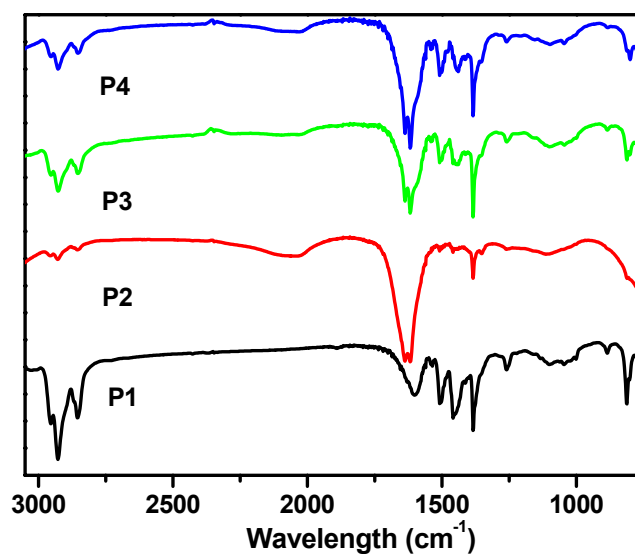
**Figure S2.** TG thermograms of **P1-P4**

**Figure S3:** Ratio of absorption and emission intensity as a function of the triazien-tiophen core

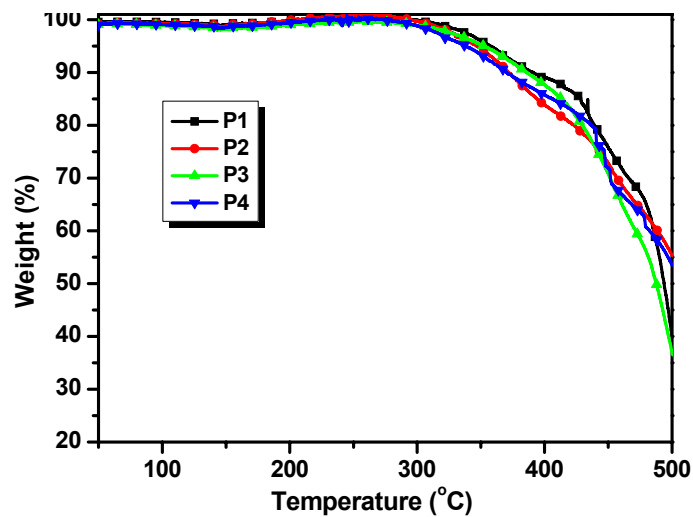
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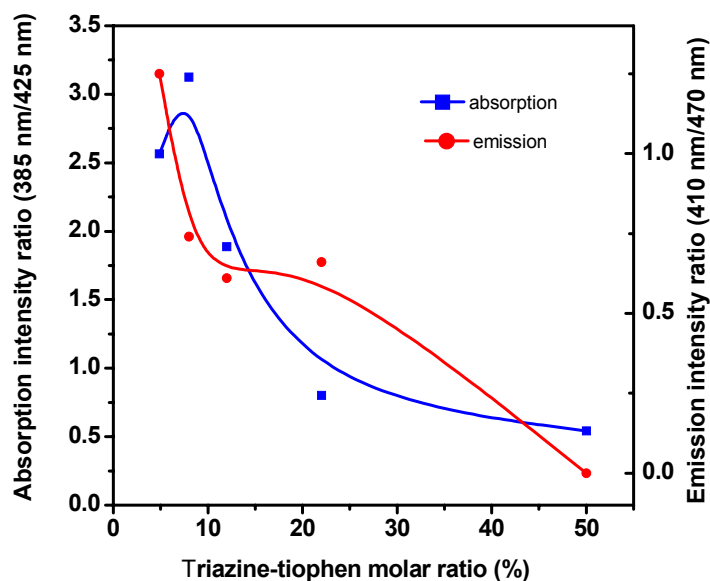
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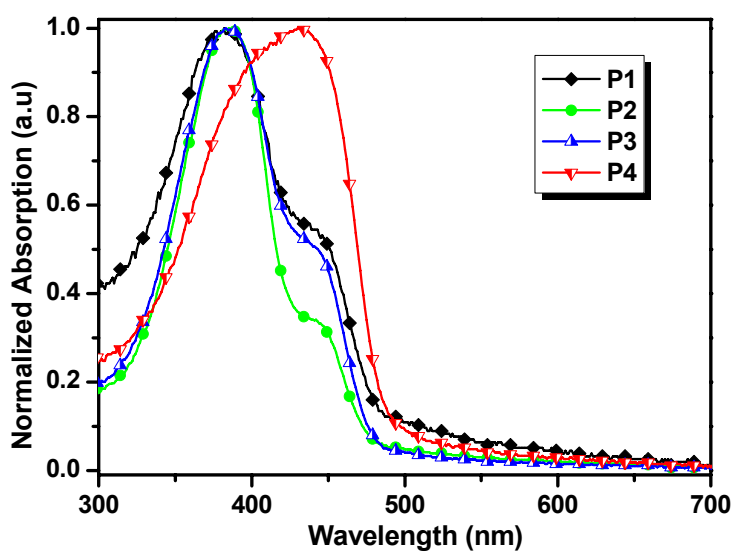
**Figure S1.** The IR spectra of **P1-P4**



**Figure S2.** TG thermograms of **P1-P4**



**Figure S3.** Absorption and emission intensity of the fluorine arm relative to that of the charge transfer state plotted as a function of the molar ratio of the triazine-thiophen core in the hyperbranched and linear polymers ( P1 : P2 : P3 : P4 : Linear  $\approx$  5 : 8 : 12 : 22 : 50 %).



**Figure S4.** The UV-vis absorption spectra of **P1-P4** in thin film

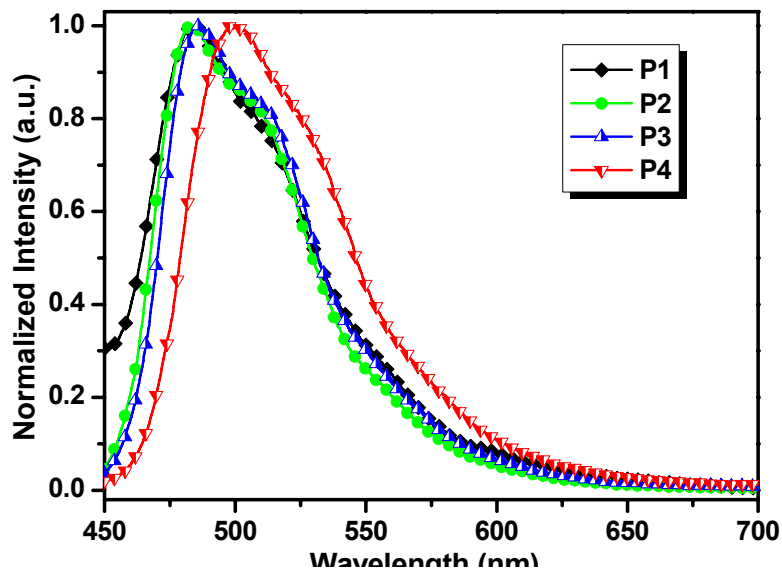


Figure S5. The PL spectra of P1-P4 in thin film

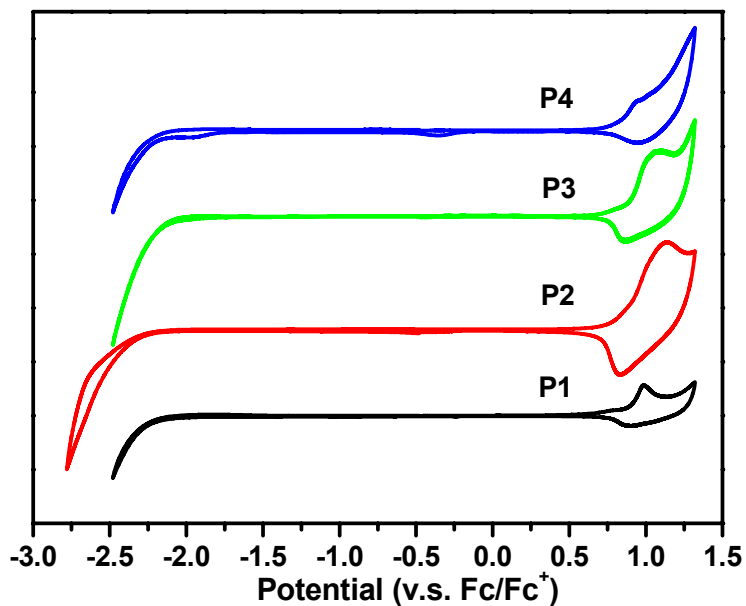


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