

Supplementary Information:

**Wide Bandgap Materials Design toward Tunable Bandgap and Increased Carries Injection Property: Silane Interrupting  $\pi$ -conjugation Together with Peripheralcarbazolyl Substituents**

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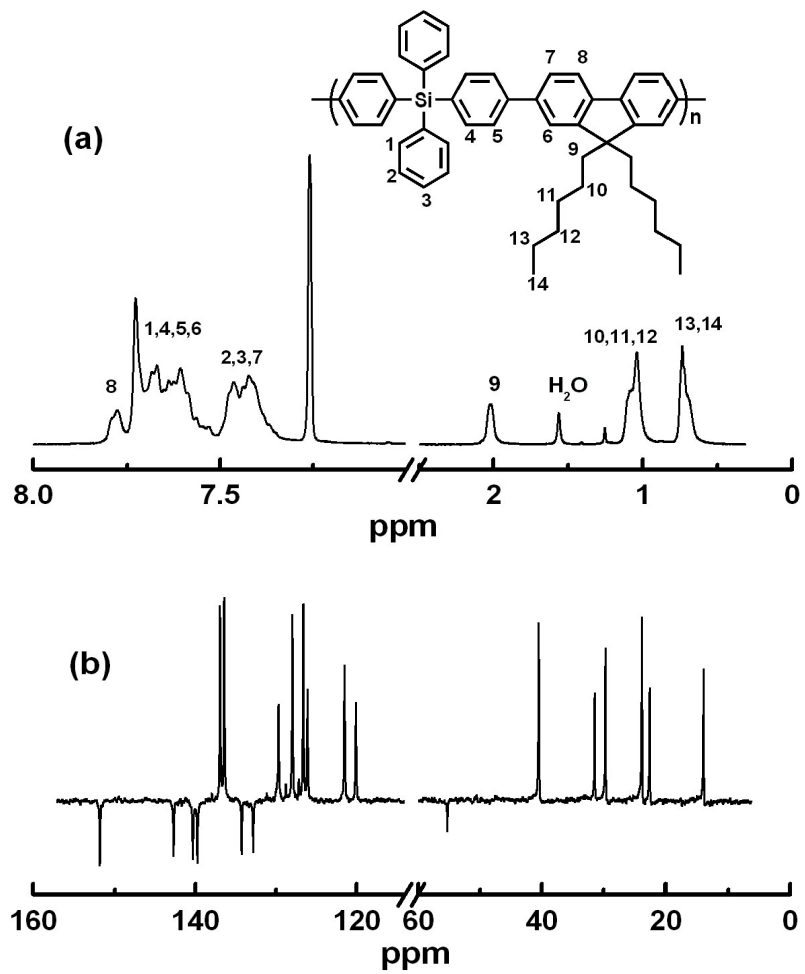
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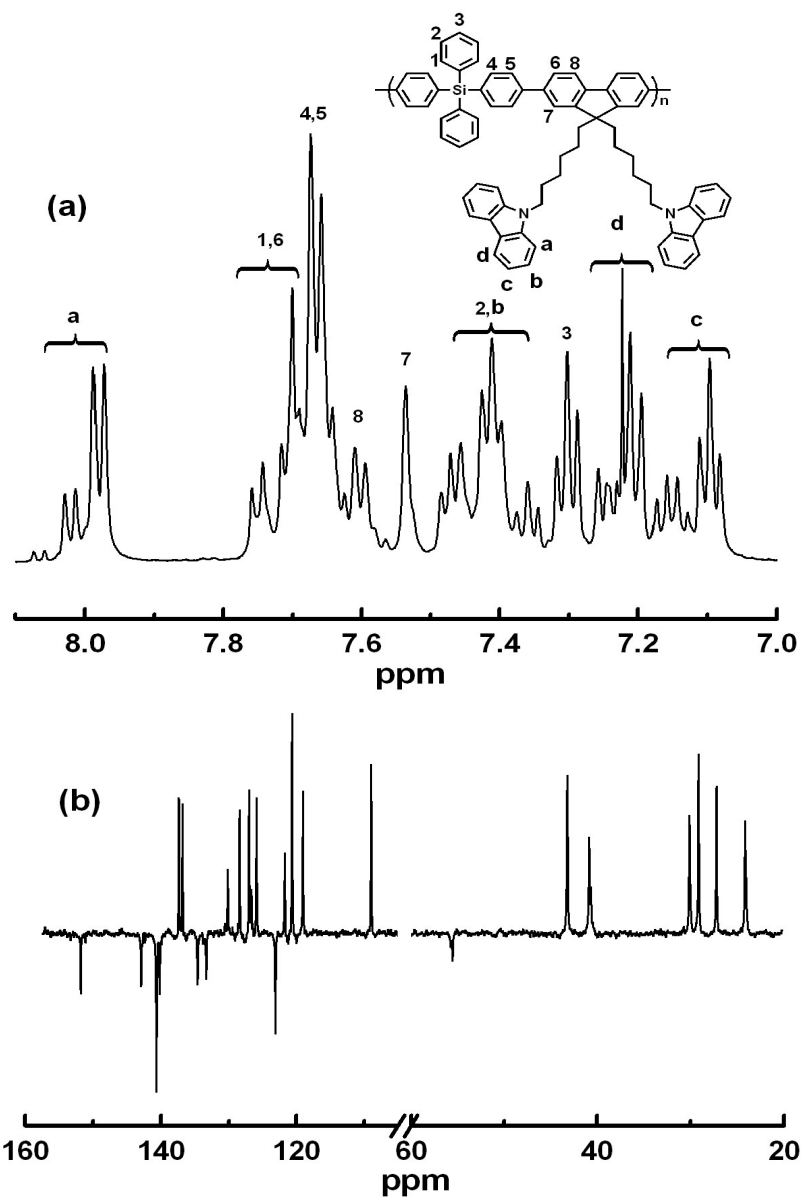
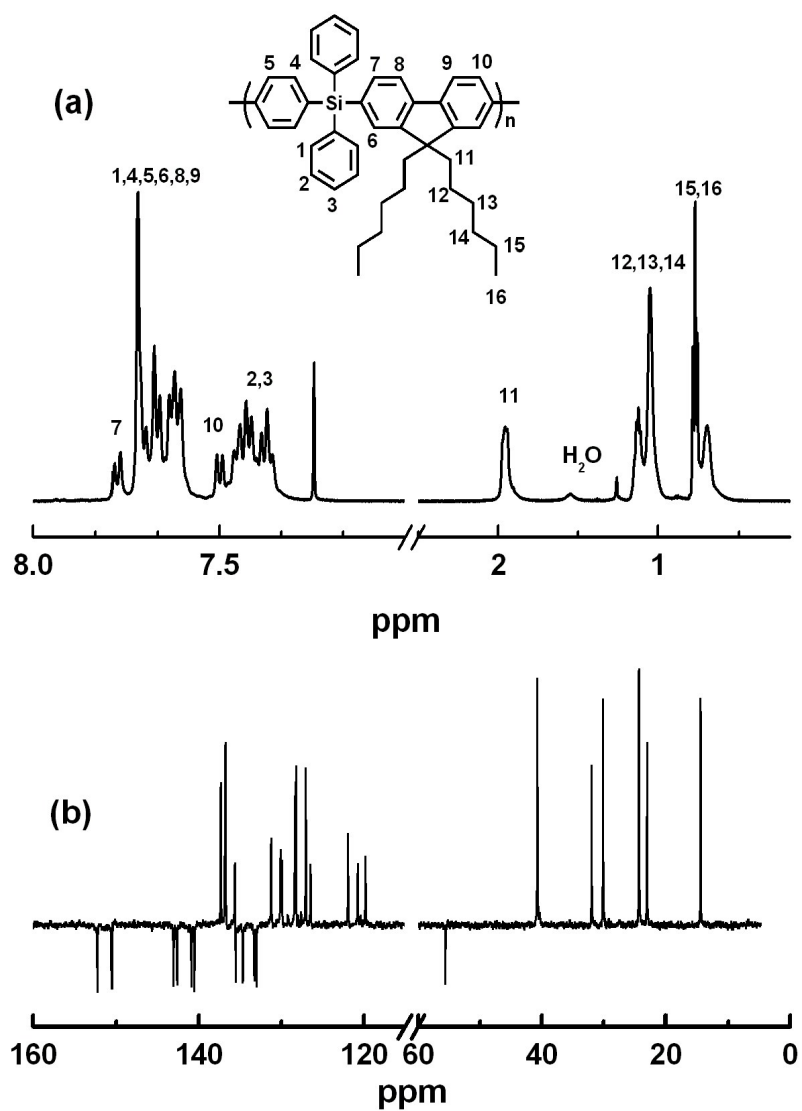


Figure S2. (a)  $^1\text{H}$  NMR and (b)  $^{13}\text{C}$  NMR spectra of SiPPFCz.



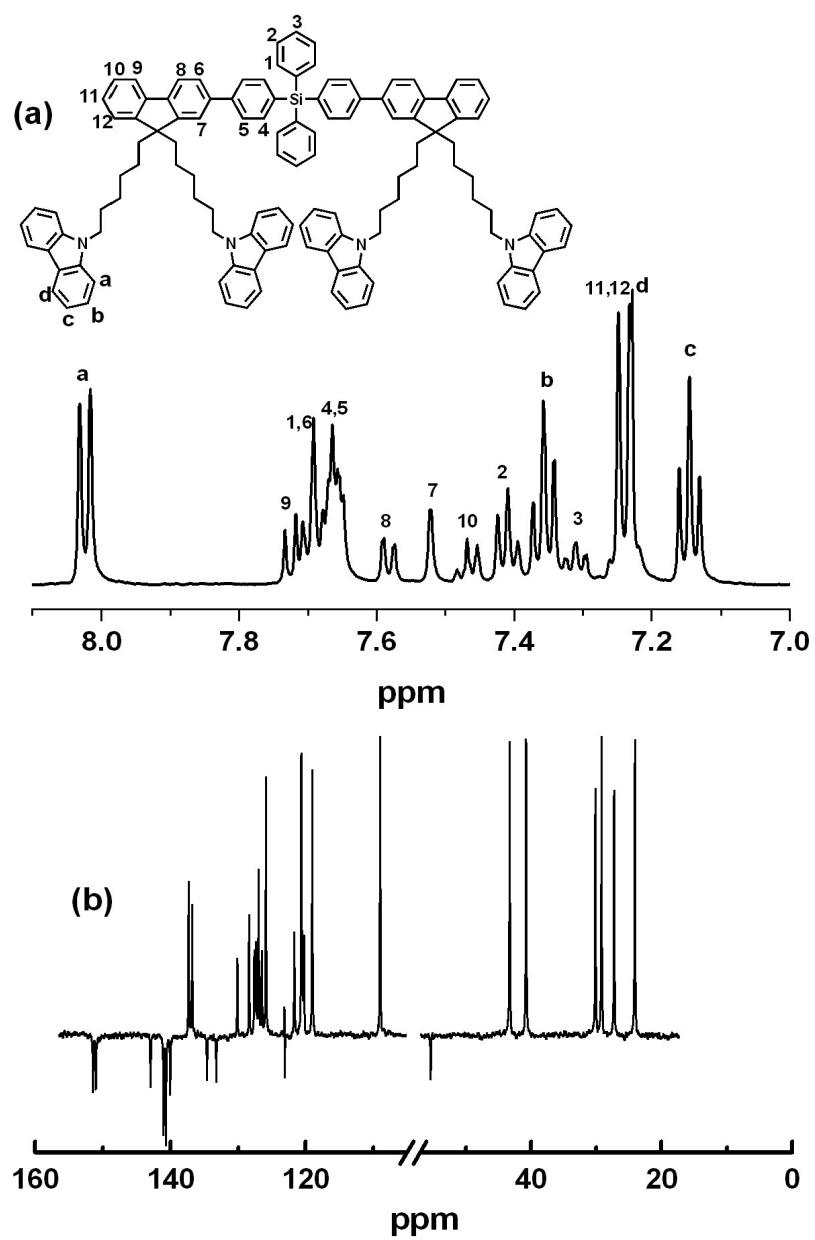


Figure S4. (a) <sup>1</sup>H NMR and (b) <sup>13</sup>C NMR (b) spectra of SiPFCz.

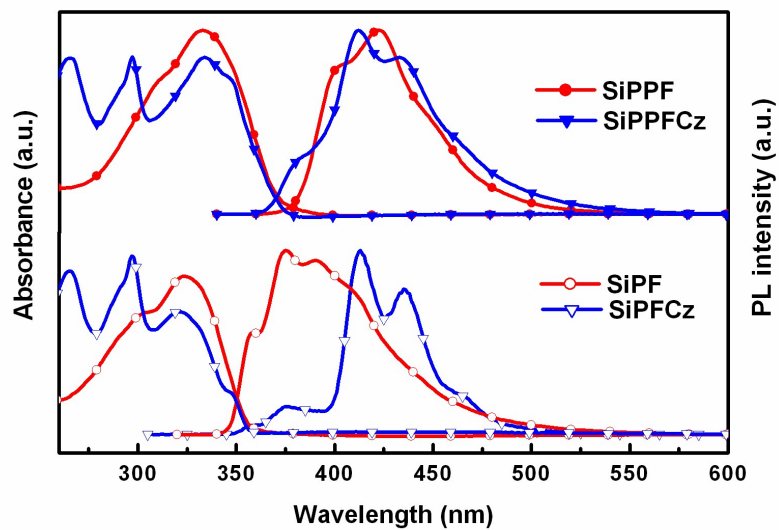


Figure S5. The PL spectra of polymers and oligomer in films.