

Supporting Information

Sky-blue fluorescent small-molecules with high quantum efficiency: synthesis, structures, AIE properties, and applications in solution-processed non-doped OLEDs

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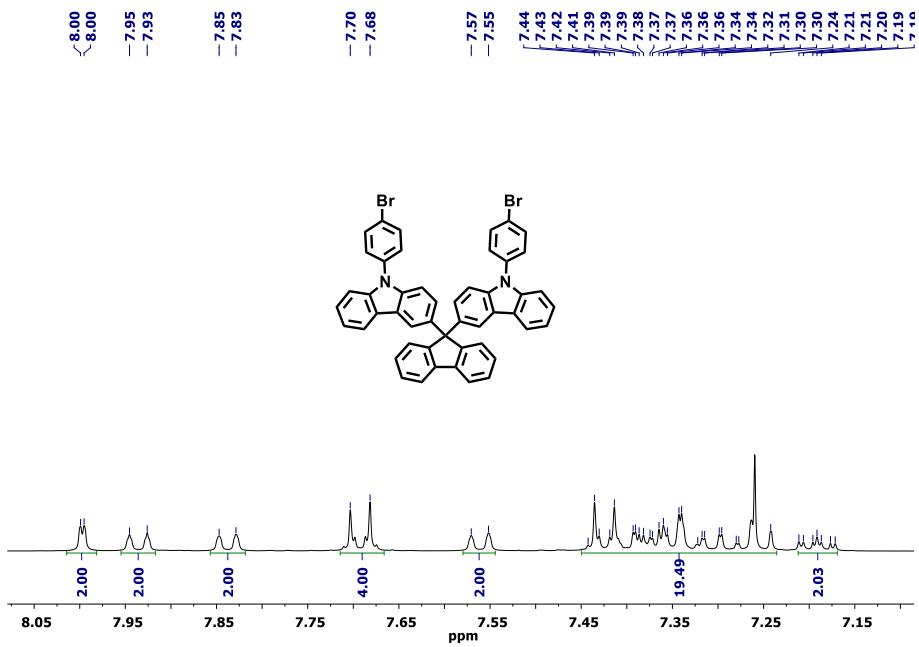


Fig.S1 ^1H NMR spectrum of compound **1** in CDCl_3 .

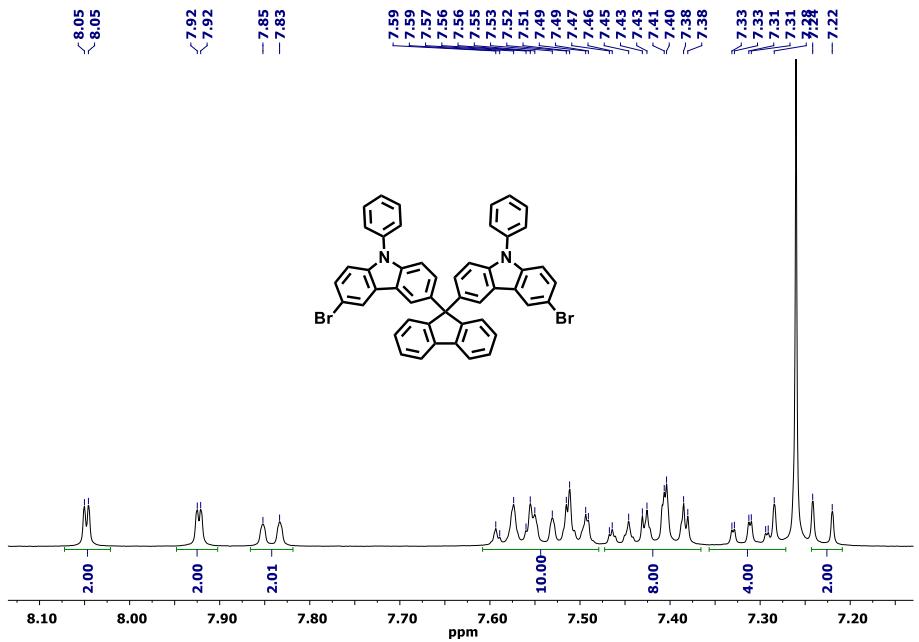


Fig.S2 ^1H NMR spectrum of compound **2** in CDCl_3 .

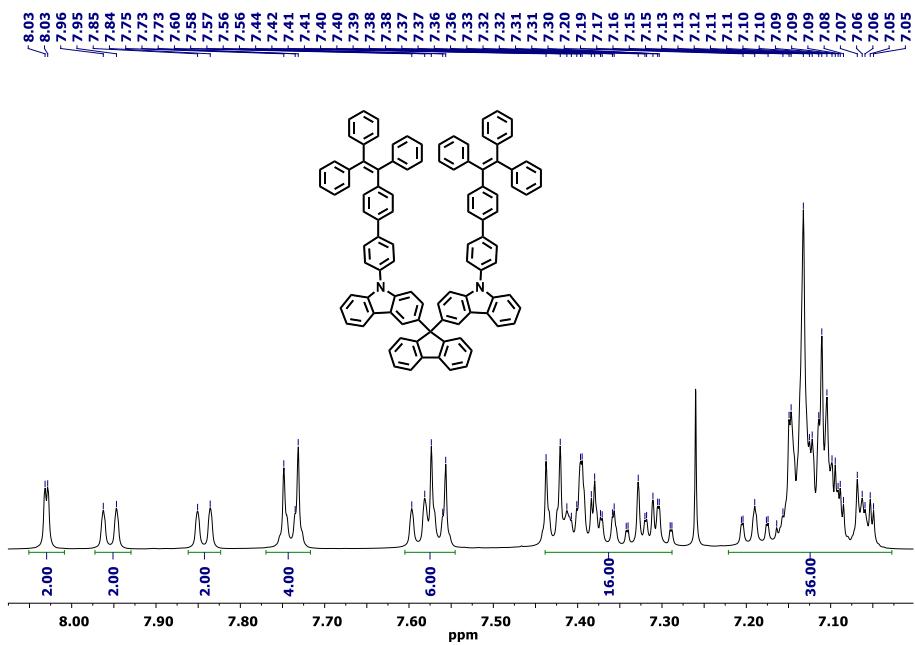


Fig.S3 ^1H NMR spectrum of **9CzTPE** in CDCl_3 .

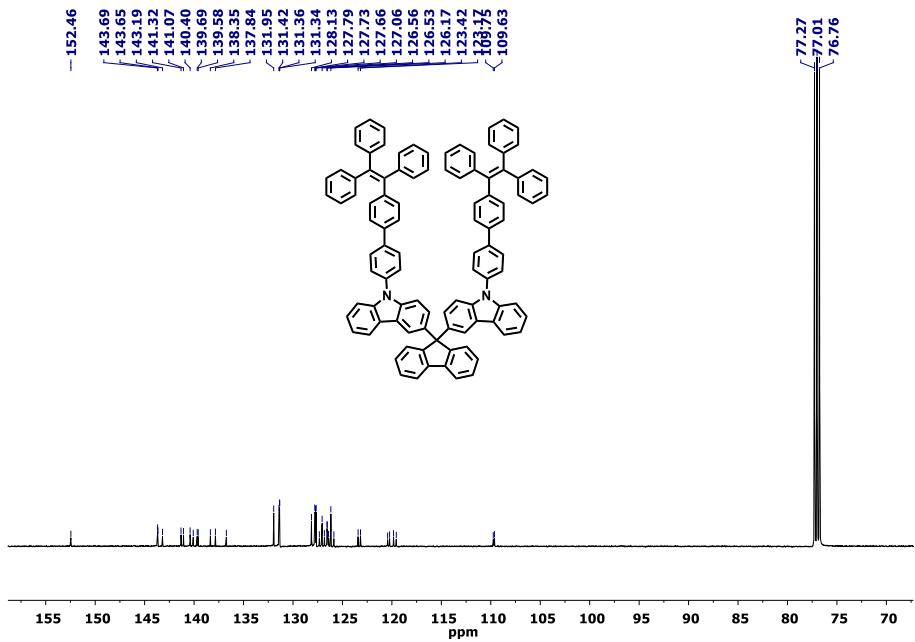


Fig.S4 ^{13}C NMR spectrum of **9CzTPE** in CDCl_3 .

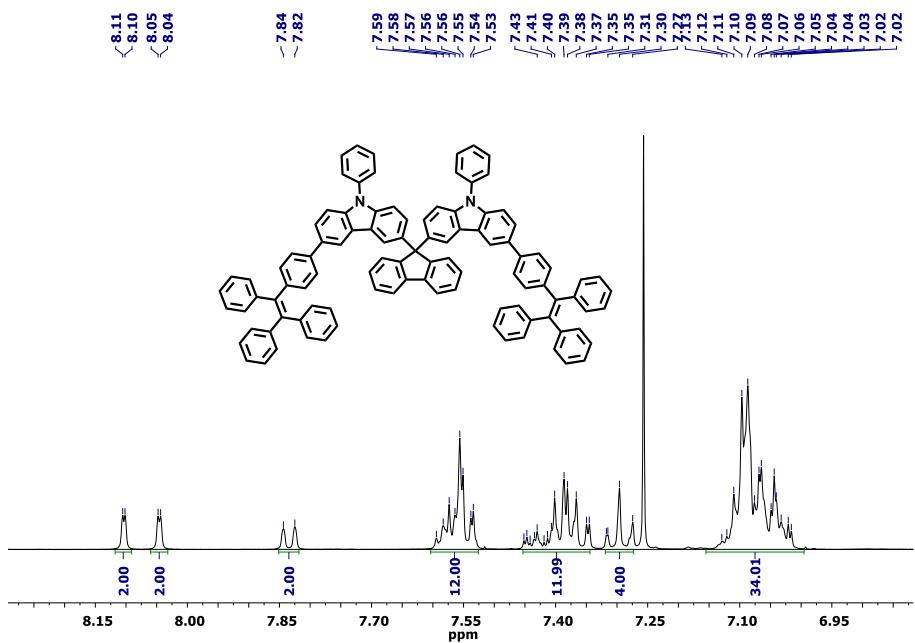


Fig.S5 ^1H NMR spectrum of **3CzTPE** in CDCl_3 .

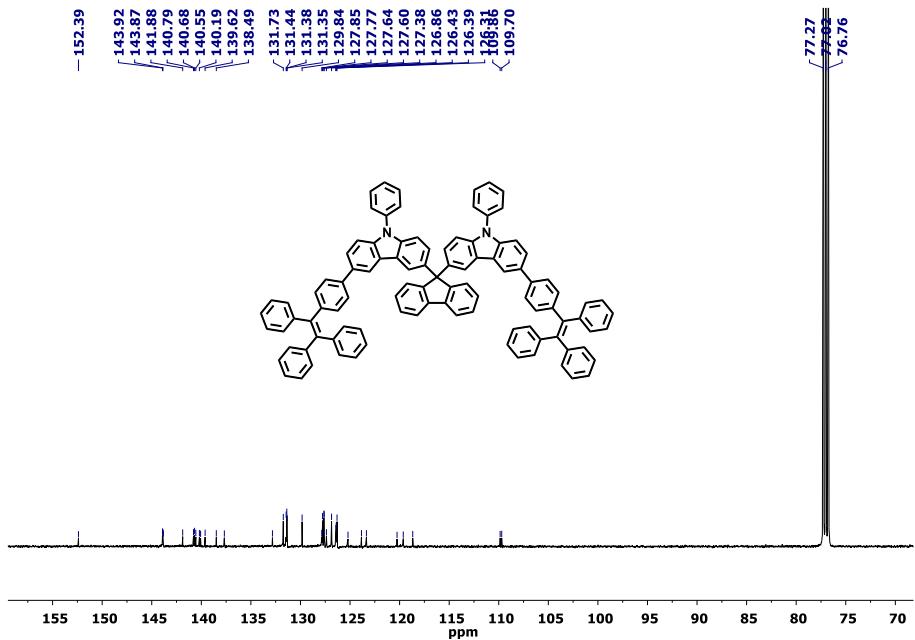


Fig.S6 ^{13}C NMR spectrum of **3CzTPE** in CDCl_3 .

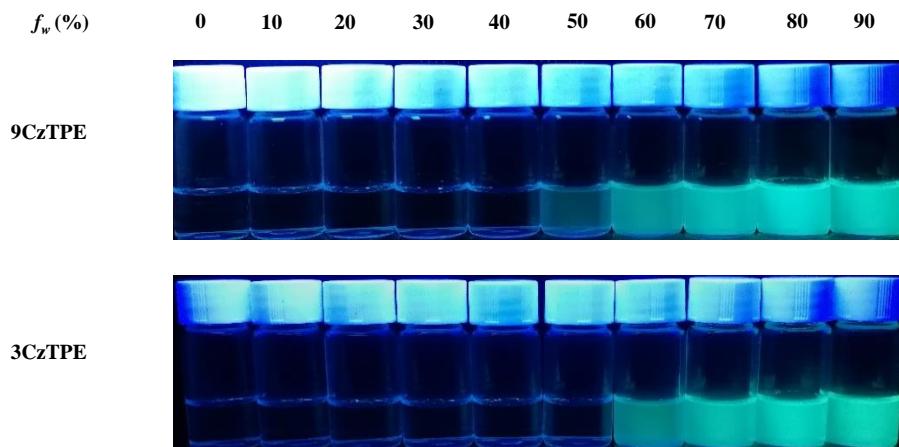


Fig. S7 Photos of fluorophores in THF/water mixtures (f_w = 0% to 90%), taken under 365 nm excitation of a UV lamp.

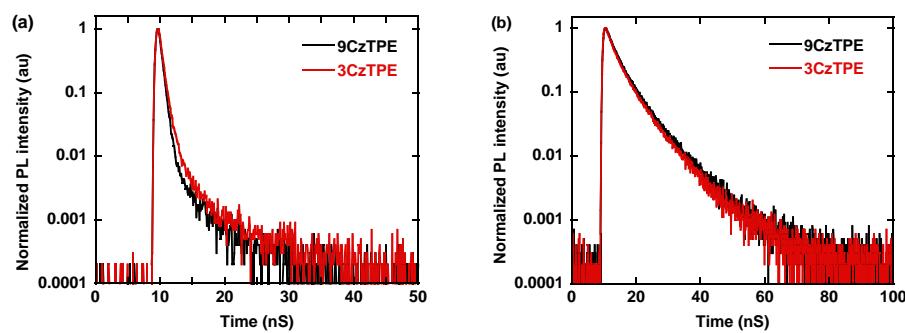


Fig. S8 PL decay spectra of (a) THF solutions (10^{-5} M) and (B) solid of **9CzTPE** and **3CzTPE**.

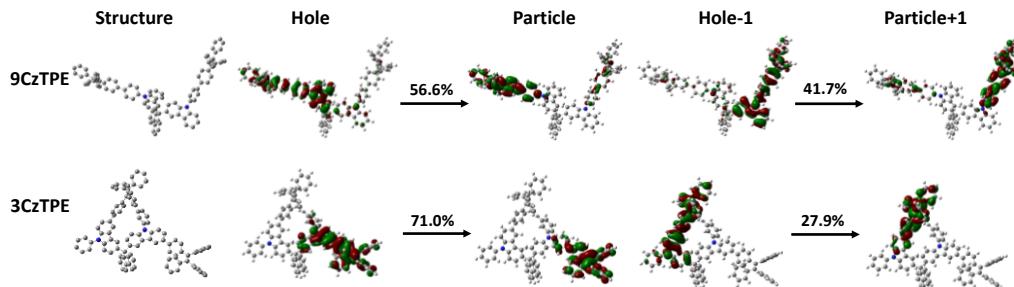


Fig. S9 Optimized structures and natural transition orbitals (NTOs) of $S_0 \rightarrow S_1$ of **9CzTPE** and **3CzTPE**.

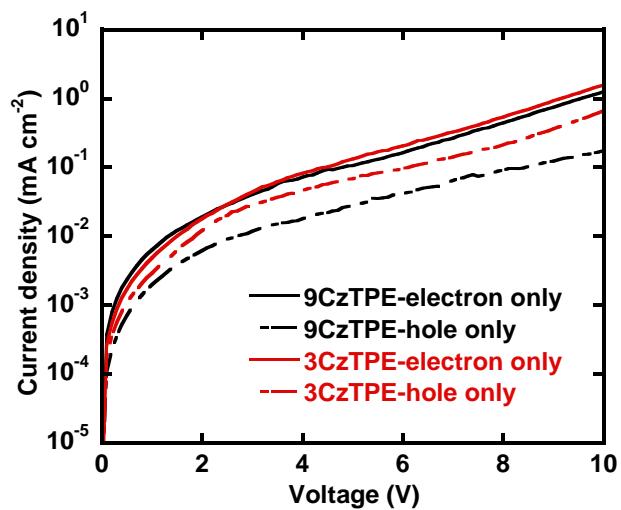


Fig. S10 J-V curves of single charge carrier devices based on **9CzTPE** and **3CzTPE**. Electron-only device: ITO/ZnO/EML/TPBi/LiF/Al; hole-only device: ITO/PEDOT:PSS/EML/TPBi/MoO₃/Ag.