

**Thermally activated delayed fluorescence material with aggregation-induced  
emission properties for highly efficient organic light-emitting diodes**

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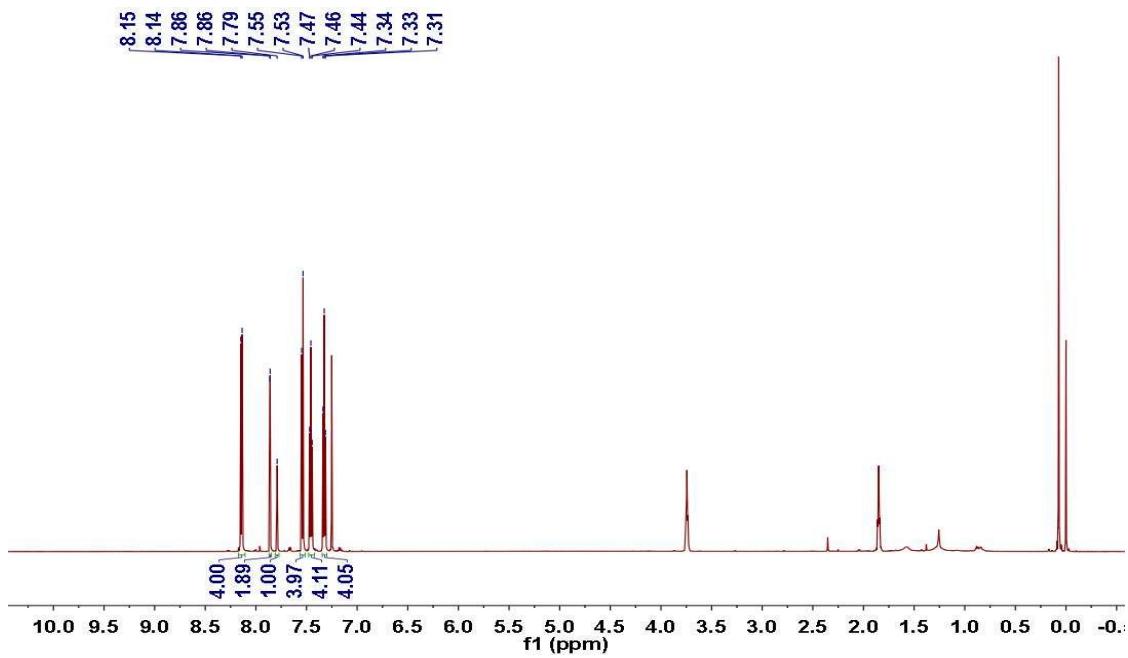
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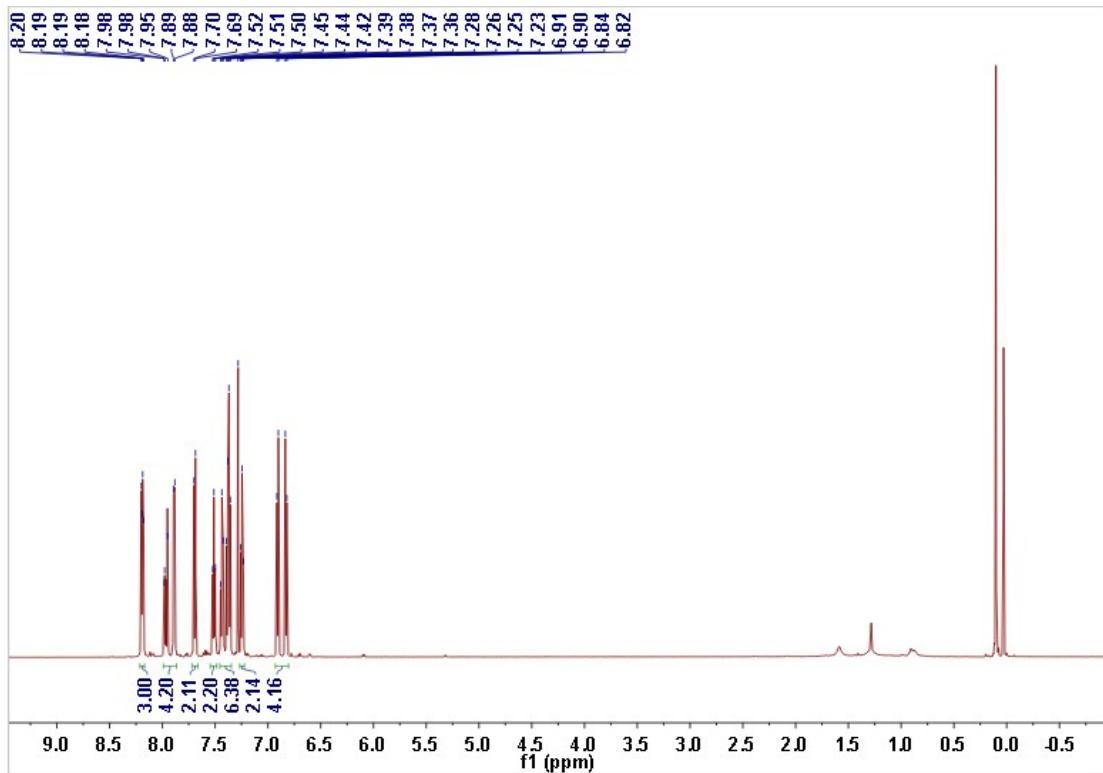
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Yaodong Zhao<sup>#</sup> and Weigao Wang<sup>#</sup> have equal contribution

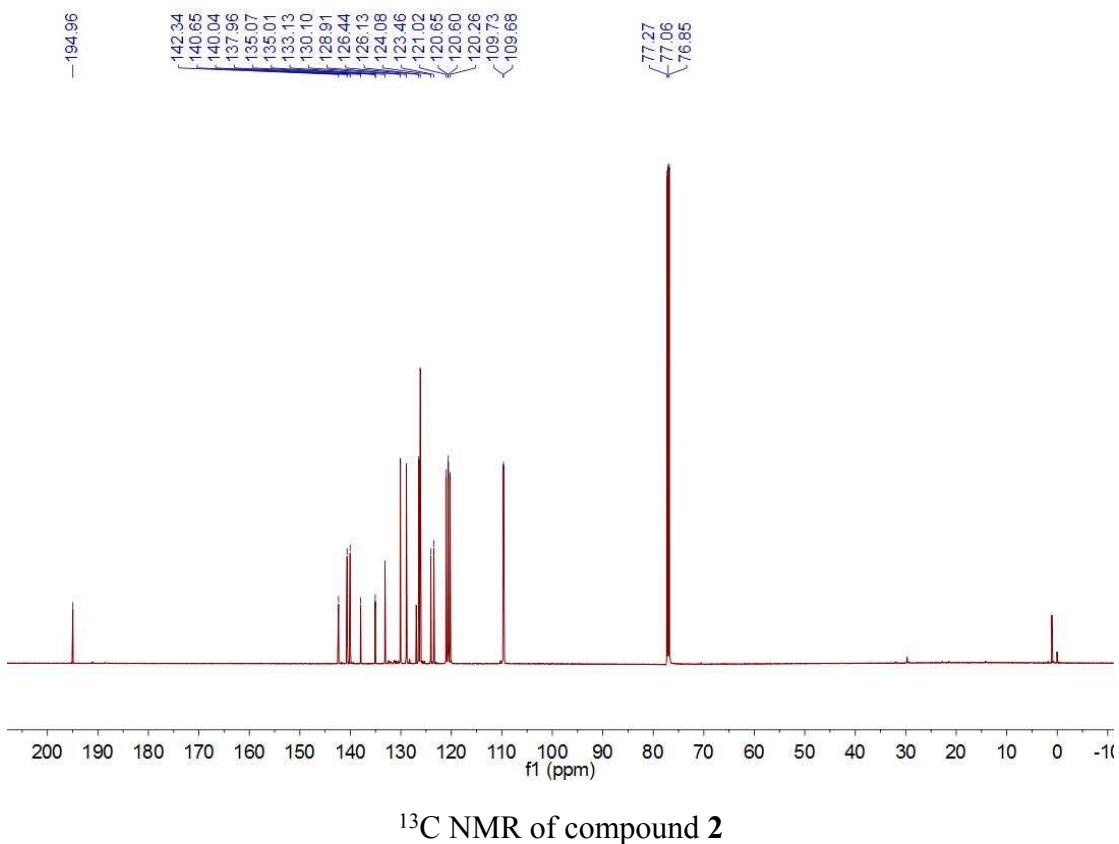
**Electronic Supplementary Information (ESI)**



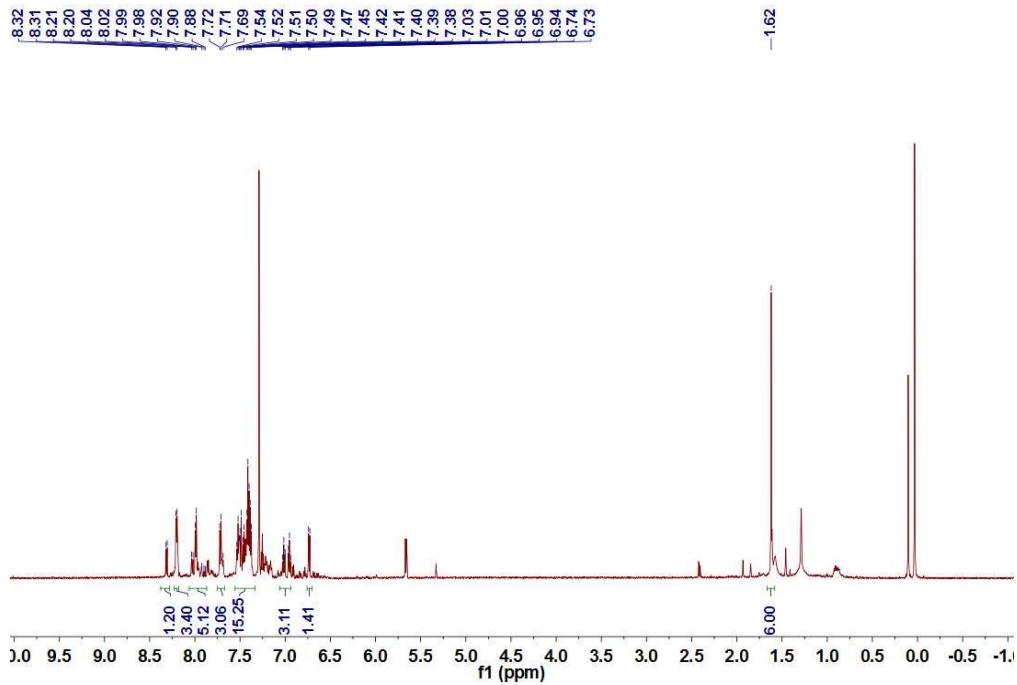
<sup>1</sup>H NMR of compound 1



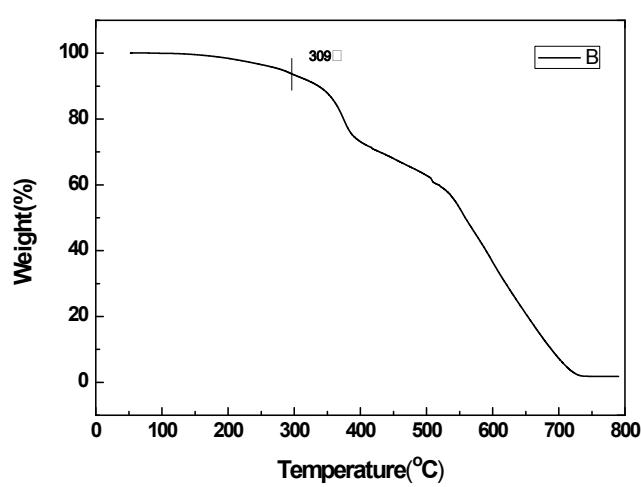
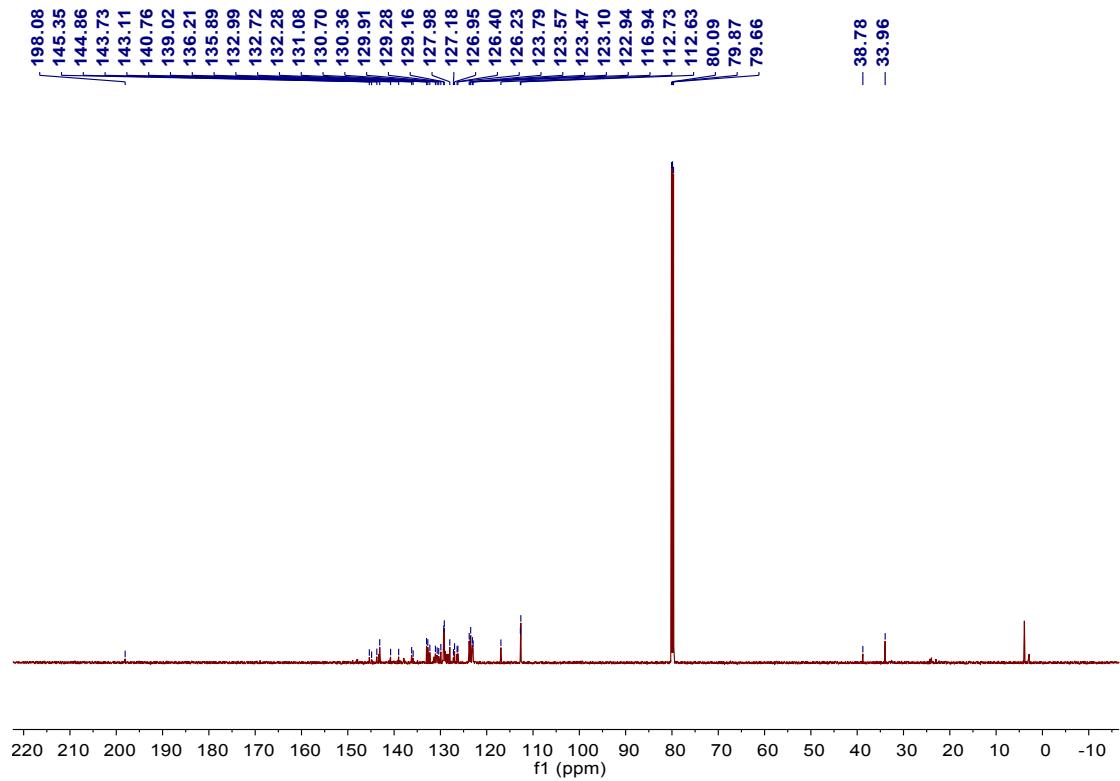
<sup>1</sup>H NMR of compound 2

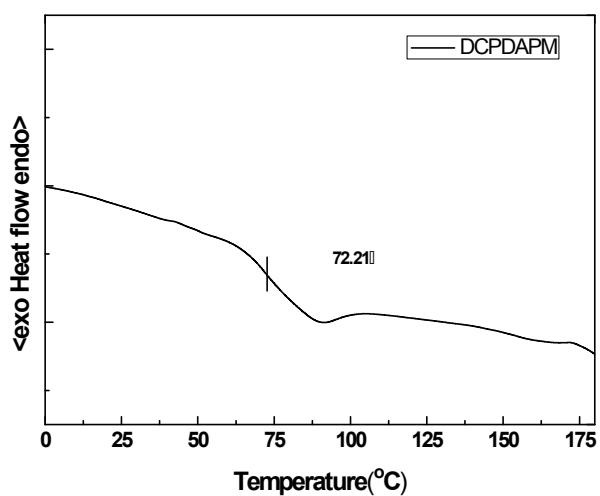


$^{13}\text{C}$  NMR of compound 2

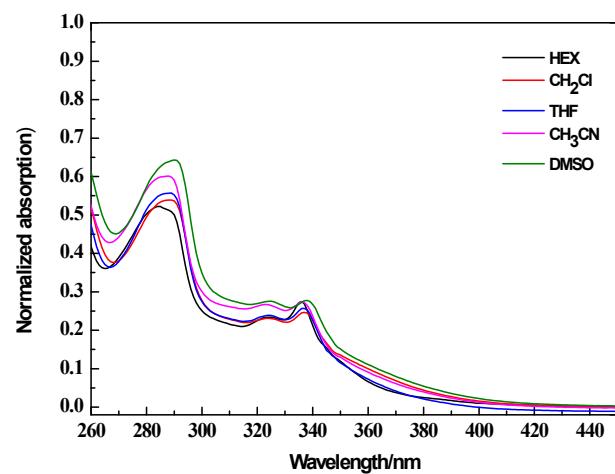


$^1\text{H}$  NMR of compound DCPDAPM

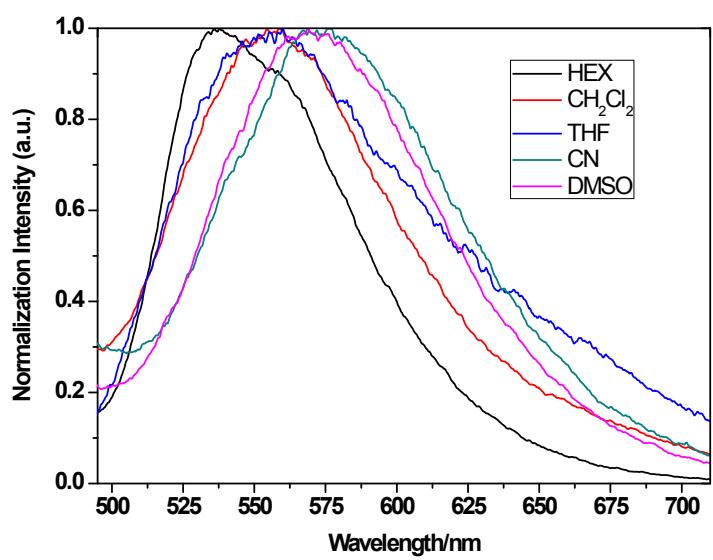




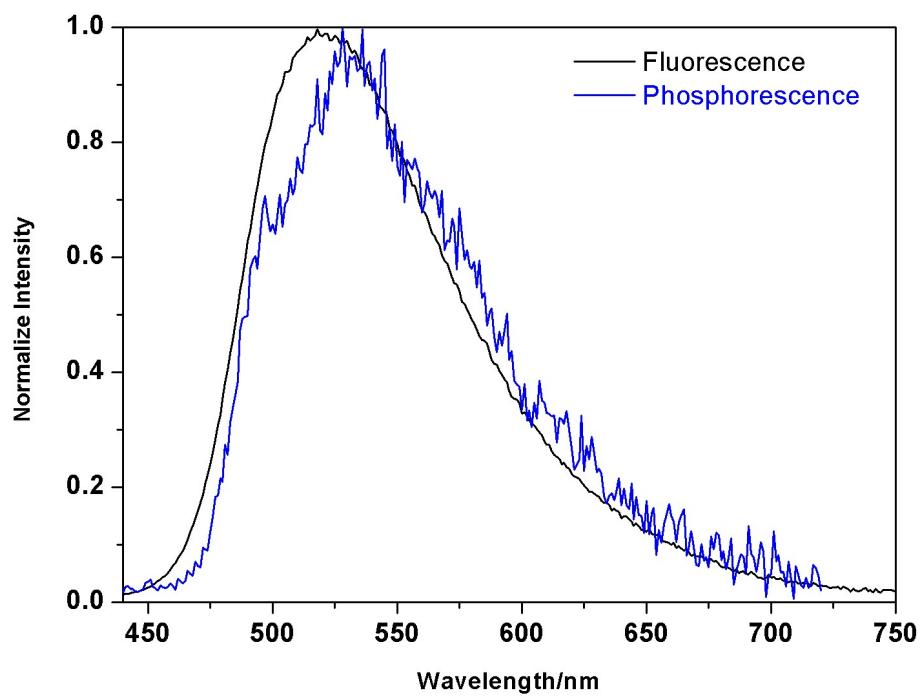
**Fig. S1.** TGA and DSC of **DCPDAPM**



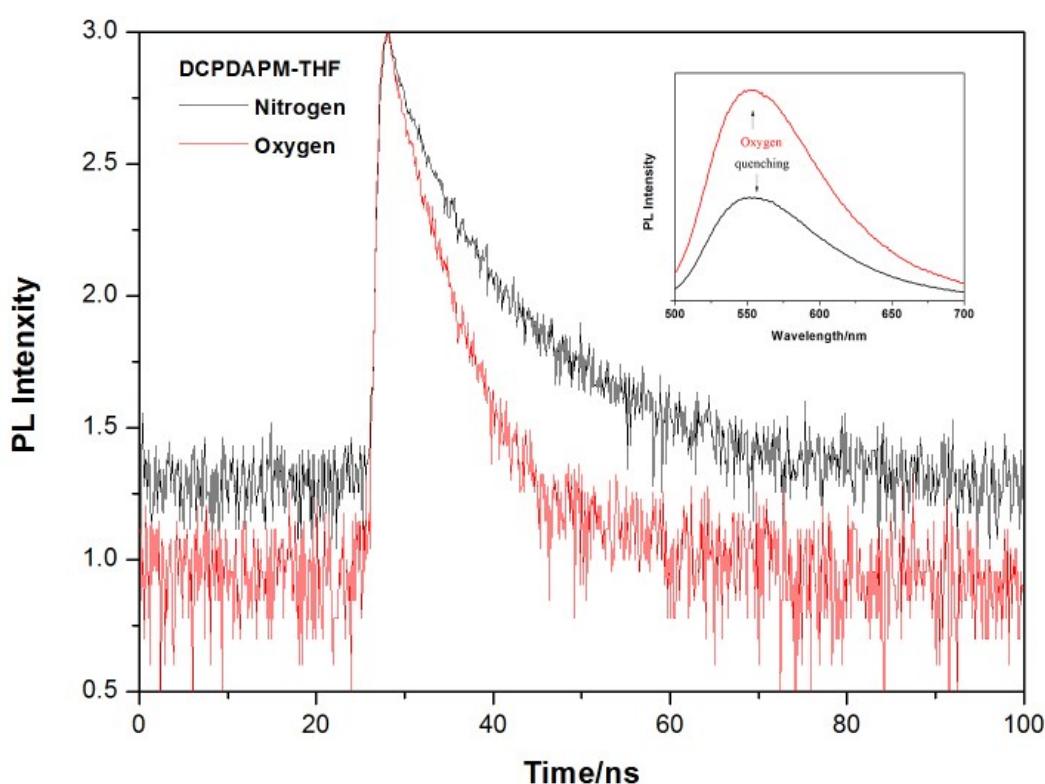
**Fig. S2.** UV-vis absorption spectra of **DCPDAPM** in various solvents ( $10^{-5}$  mol L<sup>-1</sup>)



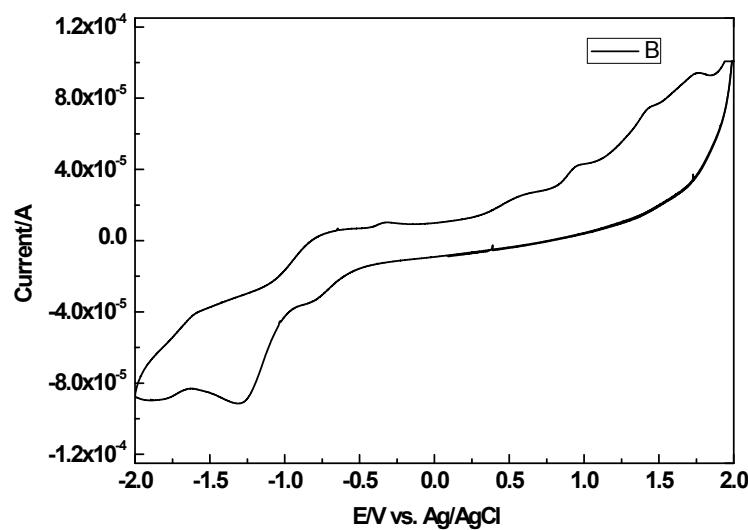
**Fig. S3.** Fluorescence spectra of **DCPDAPM** in various solvents ( $10^{-5}$  mol L $^{-1}$ )



**Fig. S4.** Fluorescence and phosphorescence spectra of **DCPDAPM** in solid film



**Fig.S5** Transient PL decay curves of **DCPDAPM** in THF solution (10.0  $\mu$ M). Insets depict PL spectra of nitrogen/oxygen in THF solution.



**Fig. S6.** The cyclic voltammogram curves of **DCPDAPM** in THF solvents (10<sup>-3</sup> mol L<sup>-1</sup>)