Supporting Information for:

Pyrene functionalized triphenylamine-based dyes: synthesis, photophysical properties and applications in OLEDs

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Fig. S1 Concentration-dependent fluorescent emission spectra of (a) TP, (b) TCP, and (c) TCCP in THF ($\lambda_{ex} = 400$ nm).
**Fig. S2** The optimized configurations for compounds TP, TCP and TCCP calculated by the TDDFT/B3LYP/6-31G (d) level method on Gaussian 03 software.
Fig. S3 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 1.

Fig. S4 The MALDI/TOF MS spectrum of compound 1.
Fig. S5 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 2.

Fig. S6 The MALDI/TOF MS spectrum of compound 2.
Fig. S7 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 3.
Fig. S8 The MALDI/TOF MS spectrum of compound 3.

Fig. S9 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 4.
Fig. S10 The MALDI/TOF MS spectrum of compound 4.

Fig. S11 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 5.
Fig. S12 The MALDI/TOF MS spectrum of compound 5.
Fig. S13 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound 6.
Fig. S14 The MALDI/TOF MS spectrum of compound 6.

Fig. S15 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound TP.
Fig. S16 $^{13}$C-NMR (125 MHz, CDCl$_3$) spectrum of compound TP.

Fig. S17 The MALDI/TOF MS spectrum of compound TP.
Fig. S18 ¹H-NMR (500 MHz, CDCl₃) spectrum of compound TCP.
Fig. S19 $^{13}$C-NMR (125 MHz, CDCl$_3$) spectrum of compound TCP.

Fig. S20 The MALDI/TOF MS spectrum of compound TCP.
Fig. S21 $^1$H-NMR (500 MHz, CDCl$_3$) spectrum of compound TCCP.
Fig. S22 $^{13}$C-NMR (125 MHz, CDCl$_3$) spectrum of compound TCCP.

Fig. S23 The MALDI/TOF MS spectrum of compound TCCP.