

Electronic Supplementary Information

Efficient Deep-Blue OLEDs Based on Phenanthro[9,10-*d*]imidazole-Containing Emitters with AIE and Bipolar Transporting Properties

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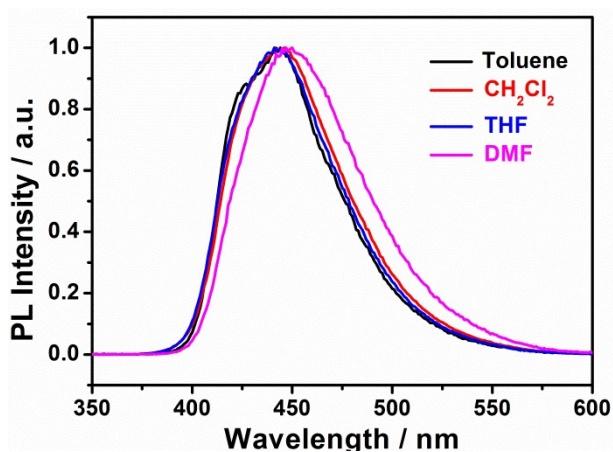


Fig. S1 Emission spectra of mTPE-DPI measured in different solvents.

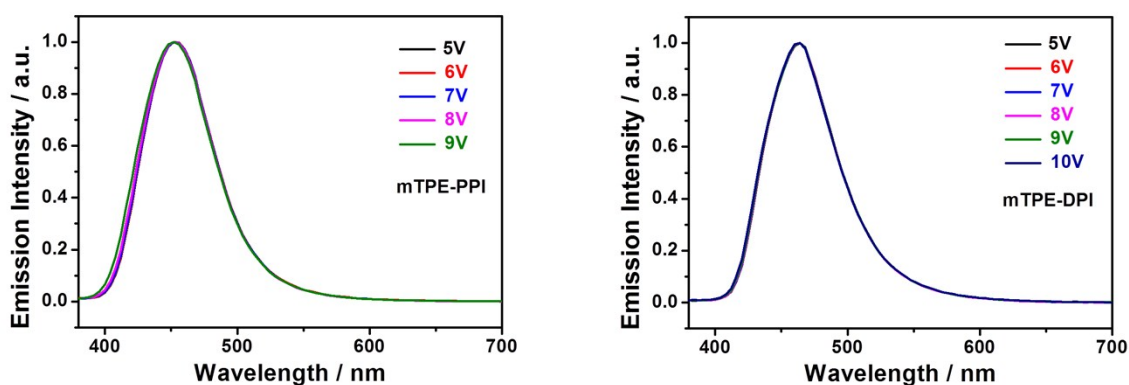


Fig. S2 Emission spectra of the non-doped OLED devices of mTPE-PPI and mTPE-DPI measured at different driving voltages.

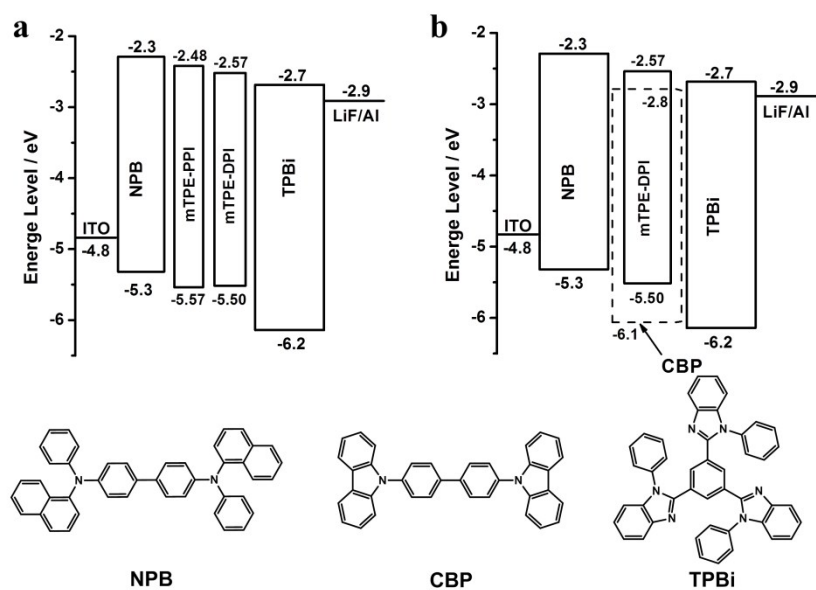


Fig. S3 Energy-level diagrams of the non-doped (a) and doped (b) OLEDs.

Single-crystal X-ray diffraction data of mTPE-PPI:

$C_{47}H_{32}N_2$, $M = 624.75$, monoclinic, $P2_1$, $a = 12.390(3) \text{ \AA}$, $b = 5.9175(12) \text{ \AA}$, $c = 23.356(5) \text{ \AA}$,
 $\alpha = 90^\circ$, $\beta = 95.62(3)^\circ$, $\gamma = 90^\circ$, $V = 1704.2(6) \text{ \AA}^3$, $Z = 2$, $T = 293 \text{ K}$, 16200 reflections
 measured, 7374 unique; The final wR_2 was 0.1839 (all data) and R_1 was 0.0699 ($I \geq 2\sigma(I)$).