

Supporting Information

Structurally simple phenanthroimidazole-based bipolar hosts for high-performance green and red electroluminescent devices

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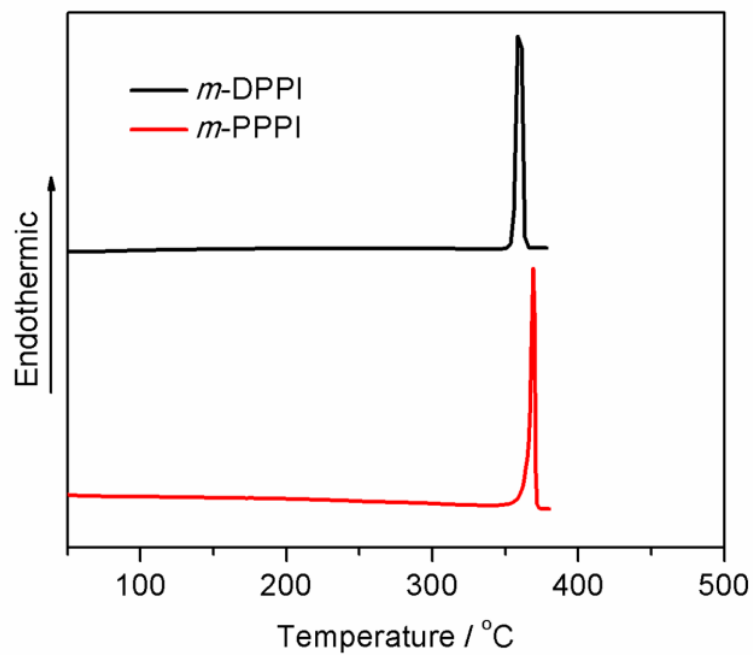


Fig. S1 DSC curves of *m*-DPPI and *m*-PPPI.

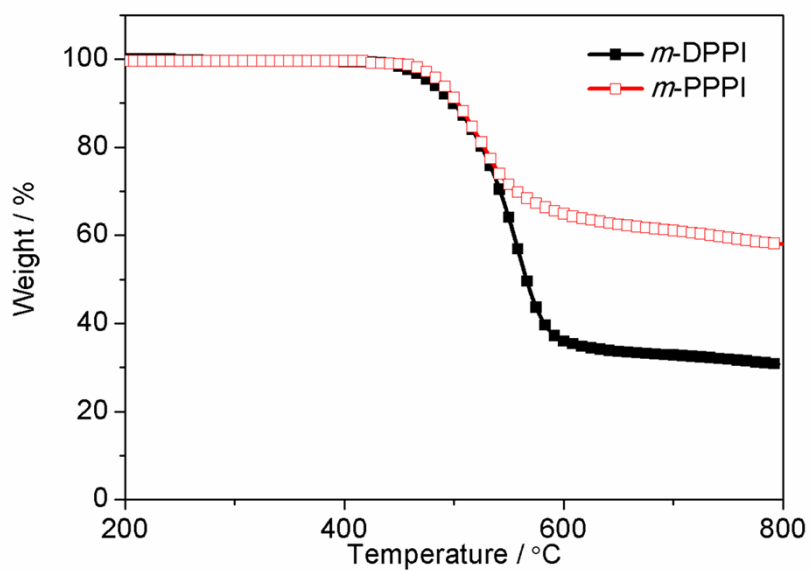


Fig. S2 TGA curves of *m*-DPPI and *m*-PPPI.

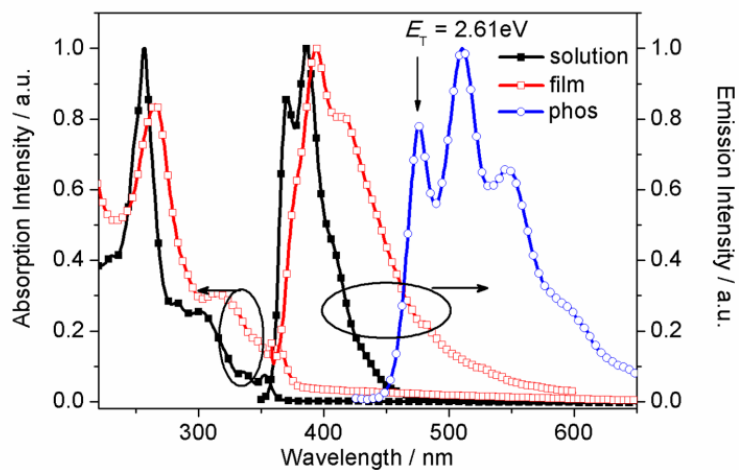


Fig. S3 Room-temperature UV-vis absorption and emission spectra of PPI in CH_2Cl_2 and in neat films, as well as the phosphorescence spectra of PPI in 2-MeTHF (10^{-5} M) at 77K.

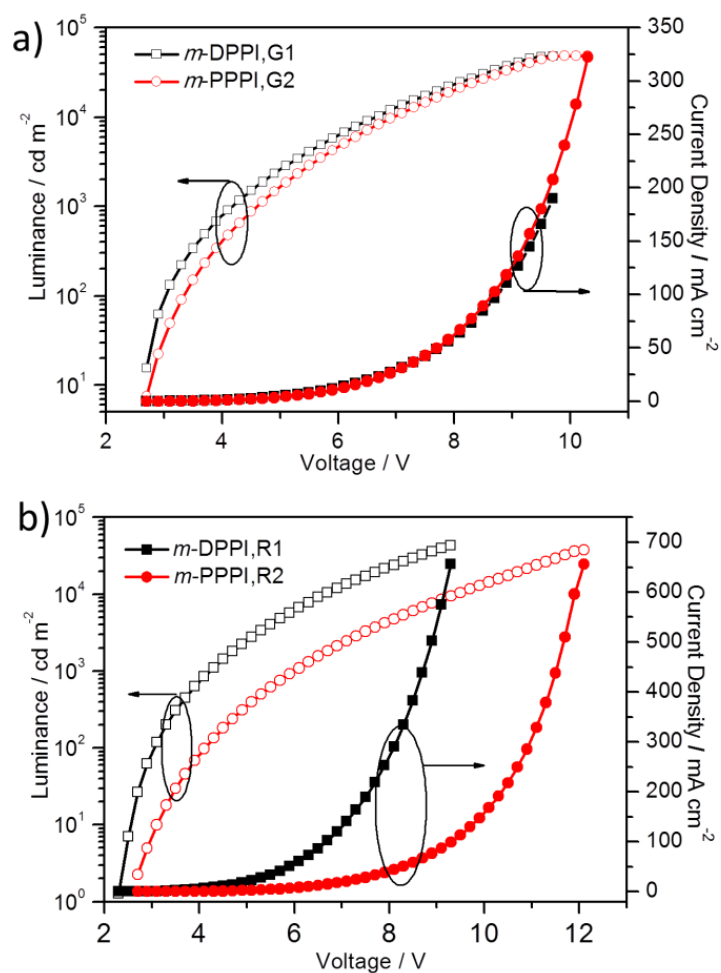


Fig. S4 Current density–voltage–luminance (J–V–L) characteristics of the green (a) and red (b) OLEDs.

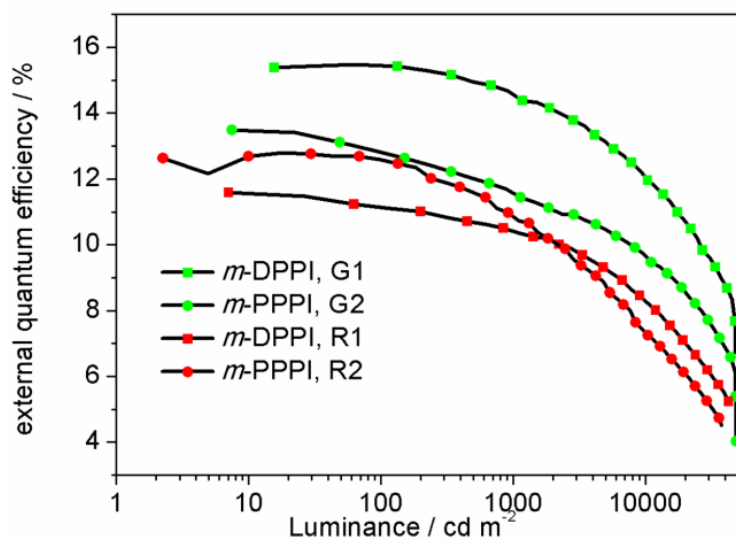
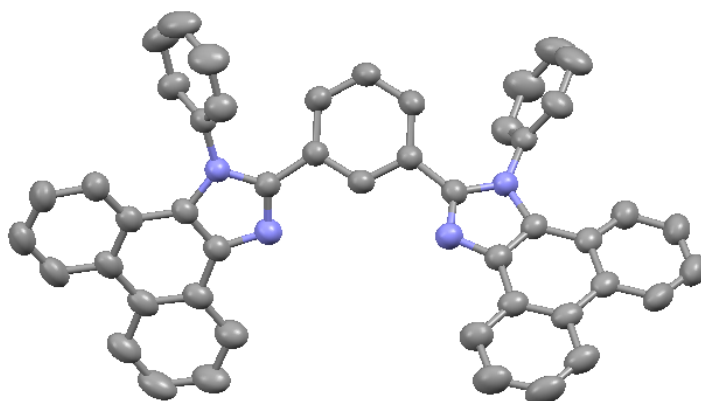


Fig. S5 External quantum efficiency versus luminance curves of the devices.

Crystal Data of *m*-DPPI



$C_{48}H_{30}N_4$, $M = 662.76$, Orthorhombic, $Pbcn$, $a = 24.996(5) \text{ \AA}$, $b = 9.4441(19) \text{ \AA}$, $c = 14.619(3) \text{ \AA}$, $\alpha = 90^\circ$, $\beta = 90^\circ$, $\gamma = 90^\circ$, $V = 3450.9(12) \text{ \AA}^3$, $T = 293(2) \text{ K}$, $Z = 4$, $\mu (\text{Mo K}\alpha) = 0.075 \text{ mm}^{-1}$, 29007 reflections measured, 3915 unique.

The final wR_2 was 0.1213 (all data) and R_1 was 0.0462 ($I \geq 2\sigma(I)$).