

Fig. SI 1 (a) Cyclic Voltammetry (CV) diagram of orange dopant in dichloromethane. CV of N,N'-diphenyl-N,N'-bis(1,1'-biphenyl)-4,4'-diamine (NPB) is also shown for the calibration. (b) Absorption spectrum of the orange dopant.

References

1. HOMO level of NPB (5.4 eV) was also directly measured by CV method with ferrocene as a reference.
2. J.-W. Kang *et al.*, *Org. Electron.*, 2008, **8**, 452.
3. Y. Tao *et al.*, *Angew. Chem. Int. Ed.*, 2008, **47**, 8104.

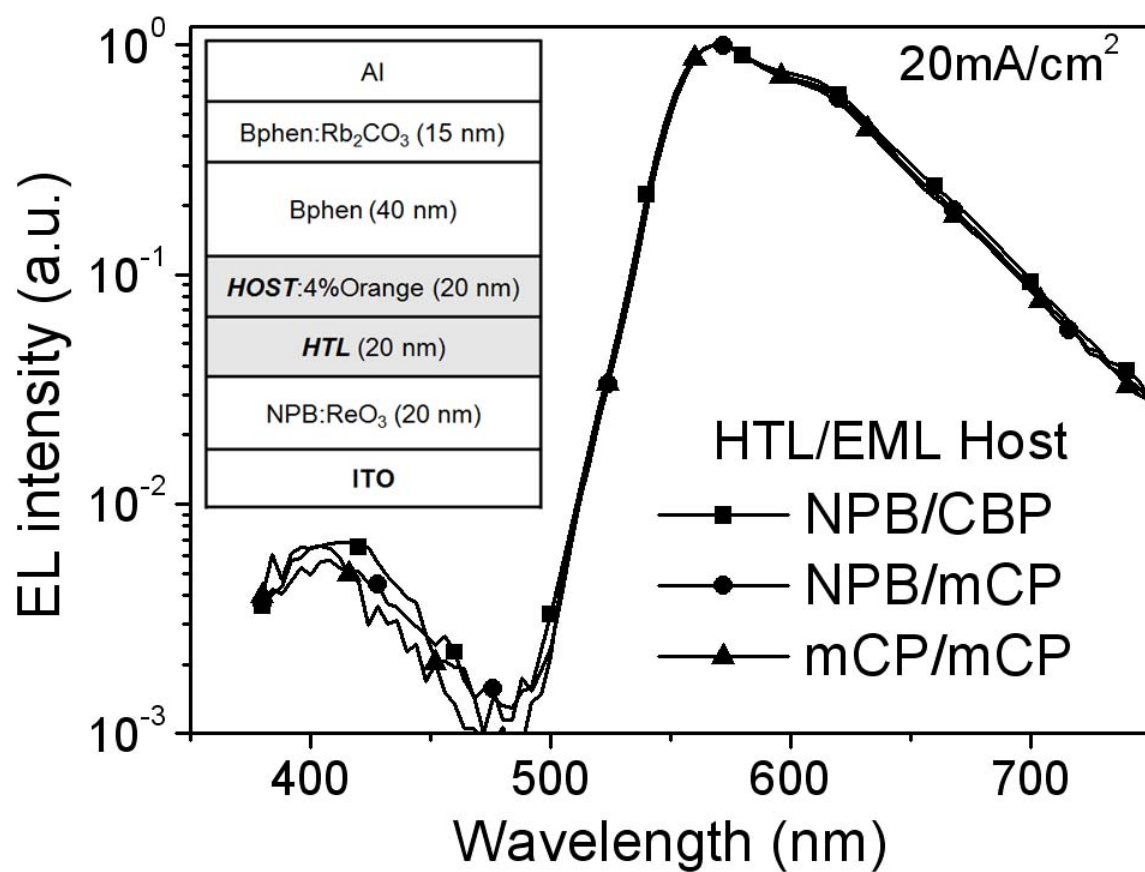


Fig. SI 2 Normalized EL spectra of the orange devices with different HTL and EML host. Inset shows the detailed device structures.

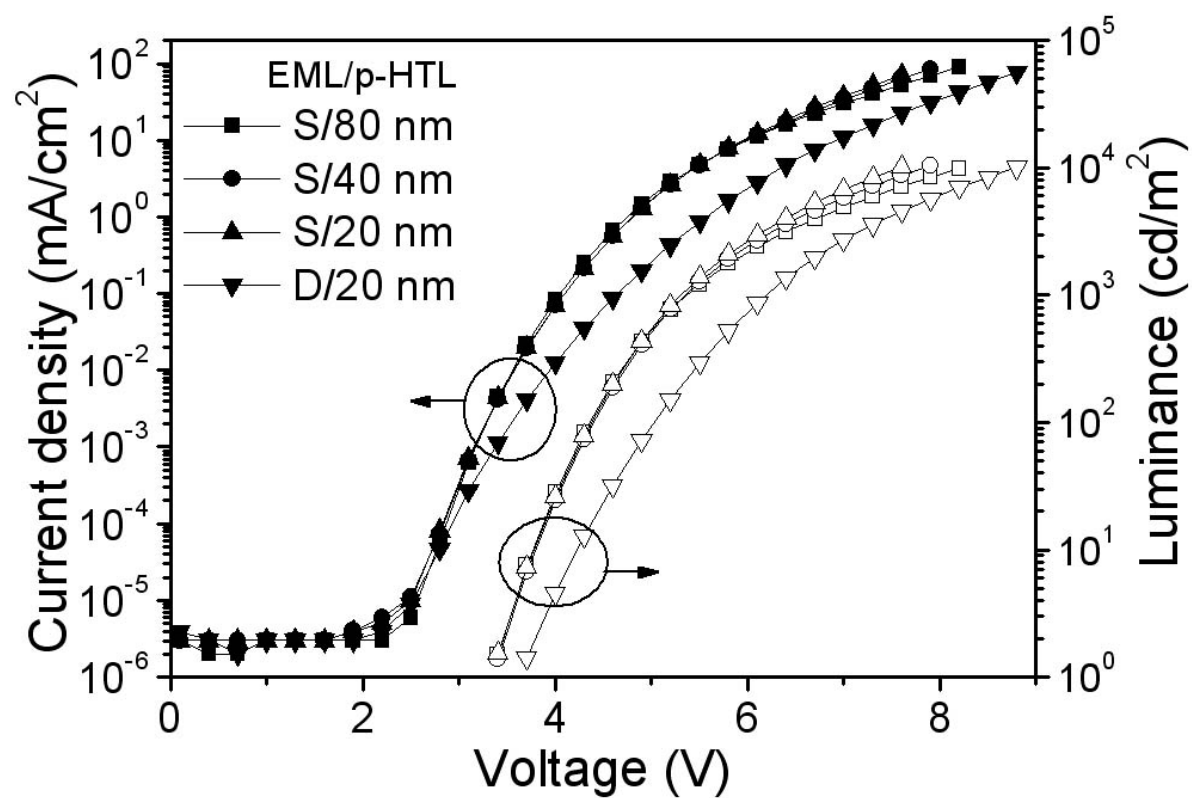


Fig. SI 3 The current density-voltage-luminance characteristics of the orange OLEDs by changing the thickness of p-HTL and EML structures.

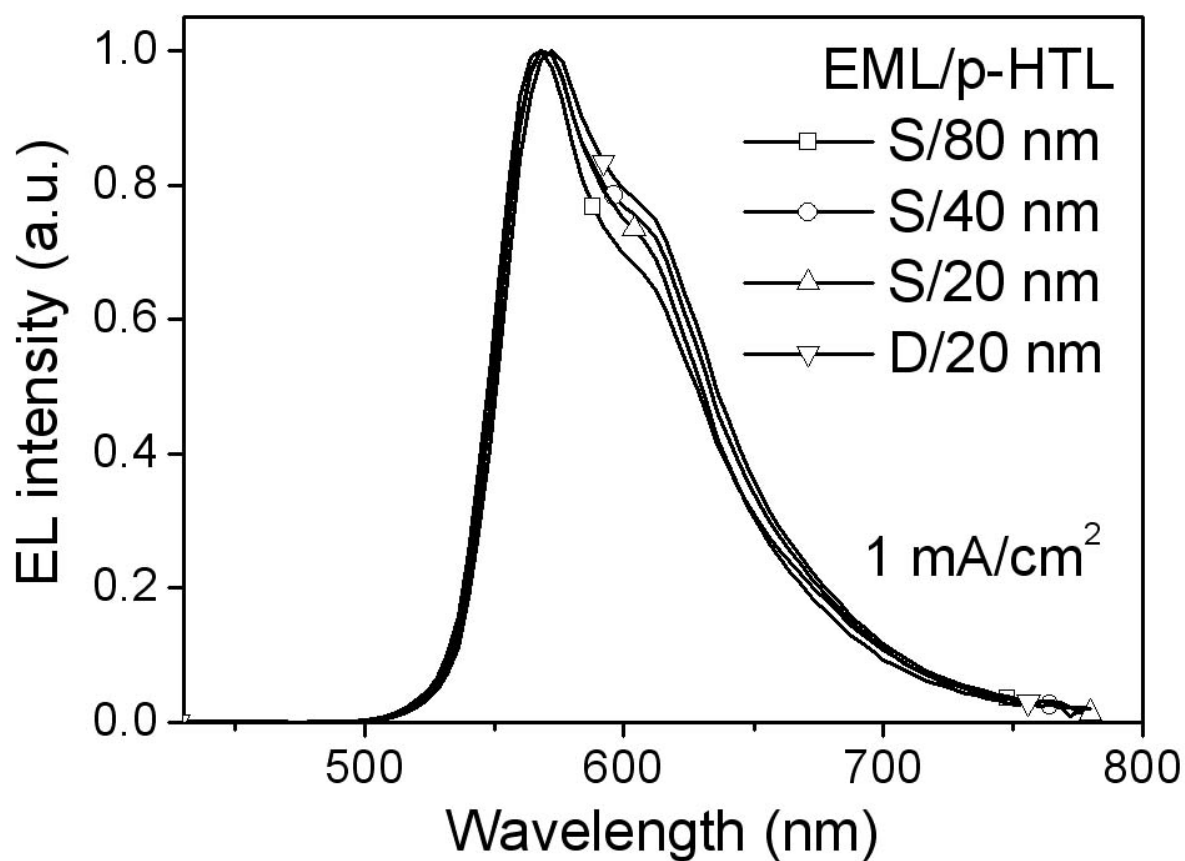


Fig. SI 4 Normalized EL spectra of the orange devices with different p-HTL thicknesses and EML structures.