Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Solution-Processed Oxadiazole-Based Electron-Transporting Layer for White Organic Light-Emitting Diodes

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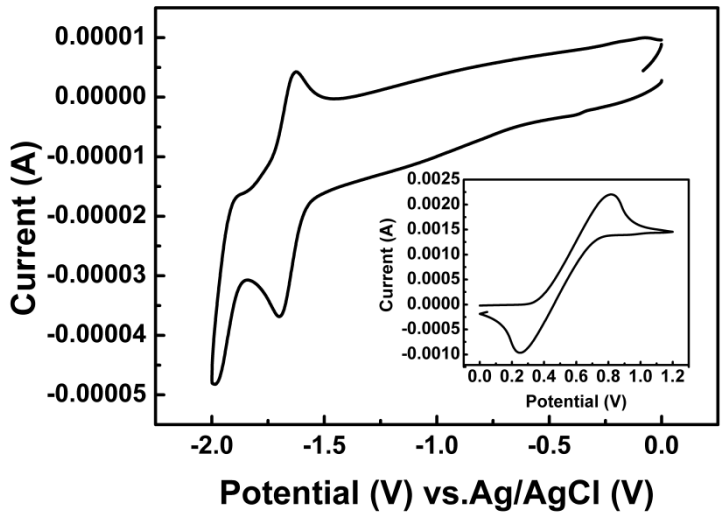
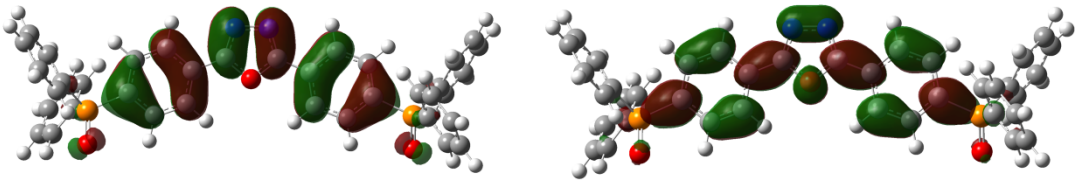


Figure S1. Cyclic voltammogram of OXDPPO in acetonitrile solution with 0.1 M Bu_4NPF_6 as the electrolyte at a potential scan rate of 10 mV s^{-1}. The inset shows the redox curve of ferrocene. The first reduction peak was used to calculate the LUMO level of OXDPPO.



HOMO: −6.59 eV　　LUMO: − 2.63 eV

Figure S2. HOMO and LUMO orbital distributions and energy levels obtained from molecular simulation of OXDPPO.

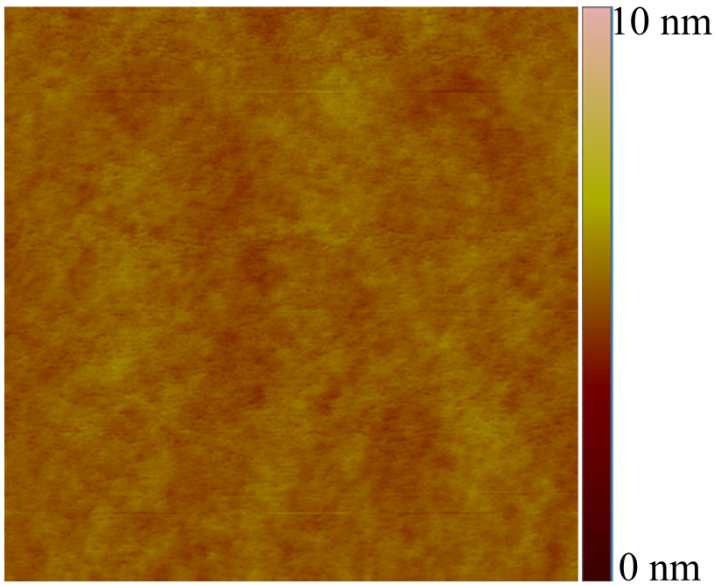


Figure S3. AFM image (2 μm × 2 μm scale) of the surface morphology of solution-deposited OXDPPO film with a root-mean-square (RMS) surface roughness value of 0.25 nm (in device with a ITO/PEDOT:PSS (40 nm)/PVK:OXD-7:FIrpic:Ir(bt)$_2$(acac) (80nm)/OXDPPO (20 nm) structure).

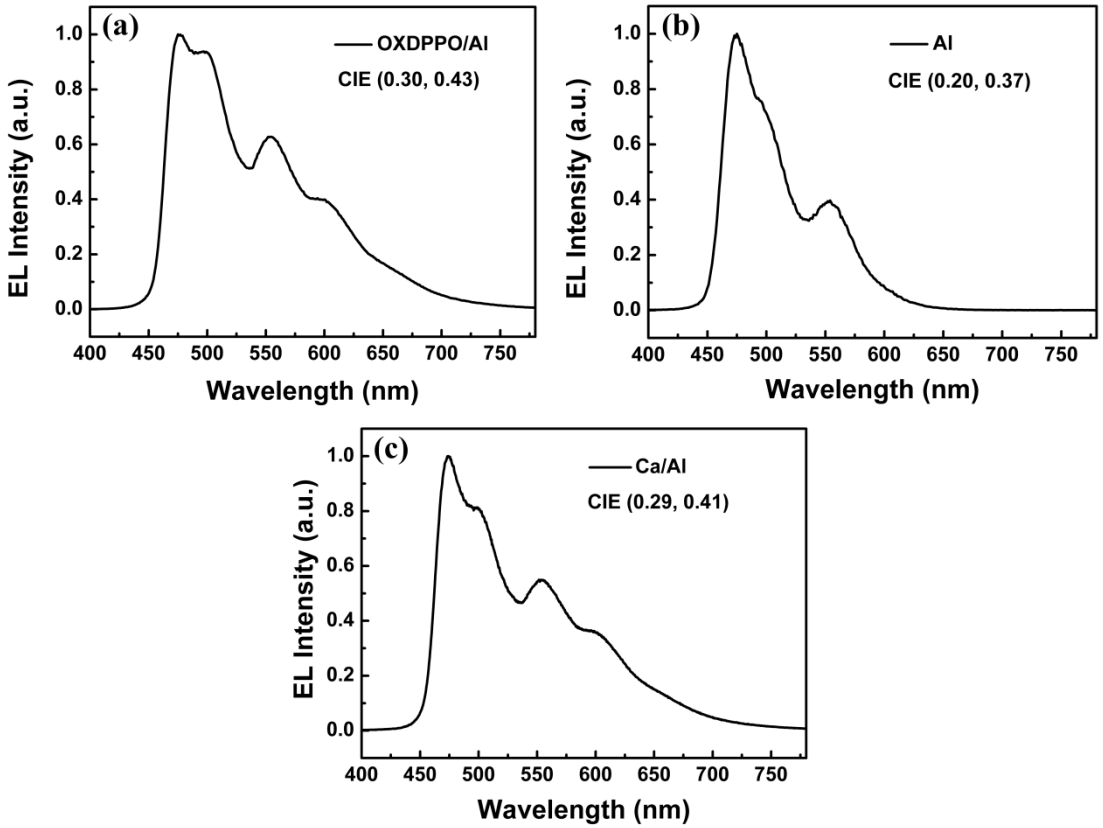


Figure S4. (a) The EL spectrum of device with the OXDPPO/Al structure at 12 V; (b) the EL spectrum of device using the bare Al cathode at 12 V; (c) the EL spectrum of device with the Ca/Al configuration at 12 V.