Supplementary Information

All-solution-processed fluorene/dibenzothiophene-S,S-dioxide blue

co-oligomer light-emitting diodes with an electron transporting

PEI/ultrafine-ZnO-nanoparticle bilayer

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Fig. S1. (a) Photographs of PL emission of as-prepared ZnO NP solutions synthesized at different conditions. (b) Absorption and PL spectra of blue emitting ZnO NP solution before and after storing for 24 hours.



Fig. S2. XRD patterns of NSNPs, UFNPs, and standard ZnO wurtzite structure with peak indexed (JCPDS card No. 36-1451).



Fig. S3. UPS of normal-sized and ultrafine ZnO NPs.



Fig. S4. UPS of the HFSO film.