



Supporting Information

Top-Emitting Active-Matrix Quantum Dot Light-Emitting Diode Array with Optical Microcavity for Micro QLED Display

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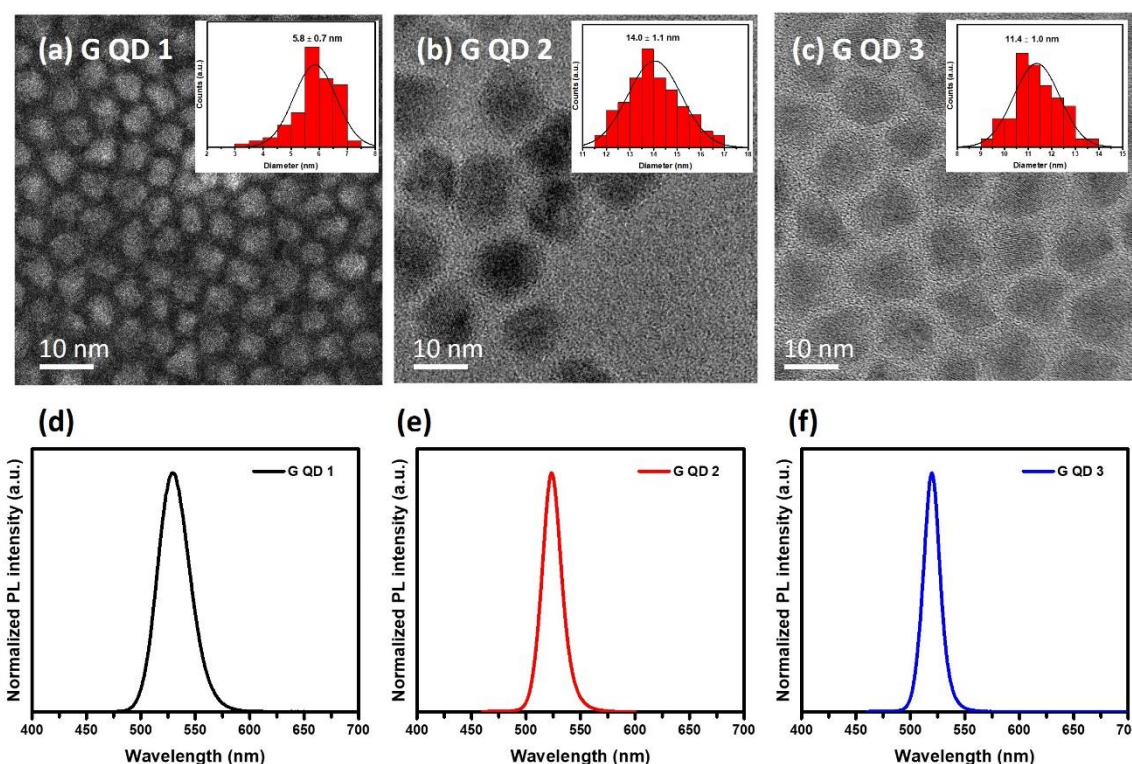


Figure S1. TEM image of dried ZnCdSe QD film with different shell thickness (a) 0.5 nm, (b) 1.0 nm and (c) 1.6 nm. The size distribution are shown in the insets, they are about 5.8, 14.0, and 11.4 nm for G-QD-1, G-QD-2, and G-QD-3 respectively. (d)–(f) show the optical properties for three kinds of QDs. All of QDs are treated with the same OA ligand for fairly comparison.

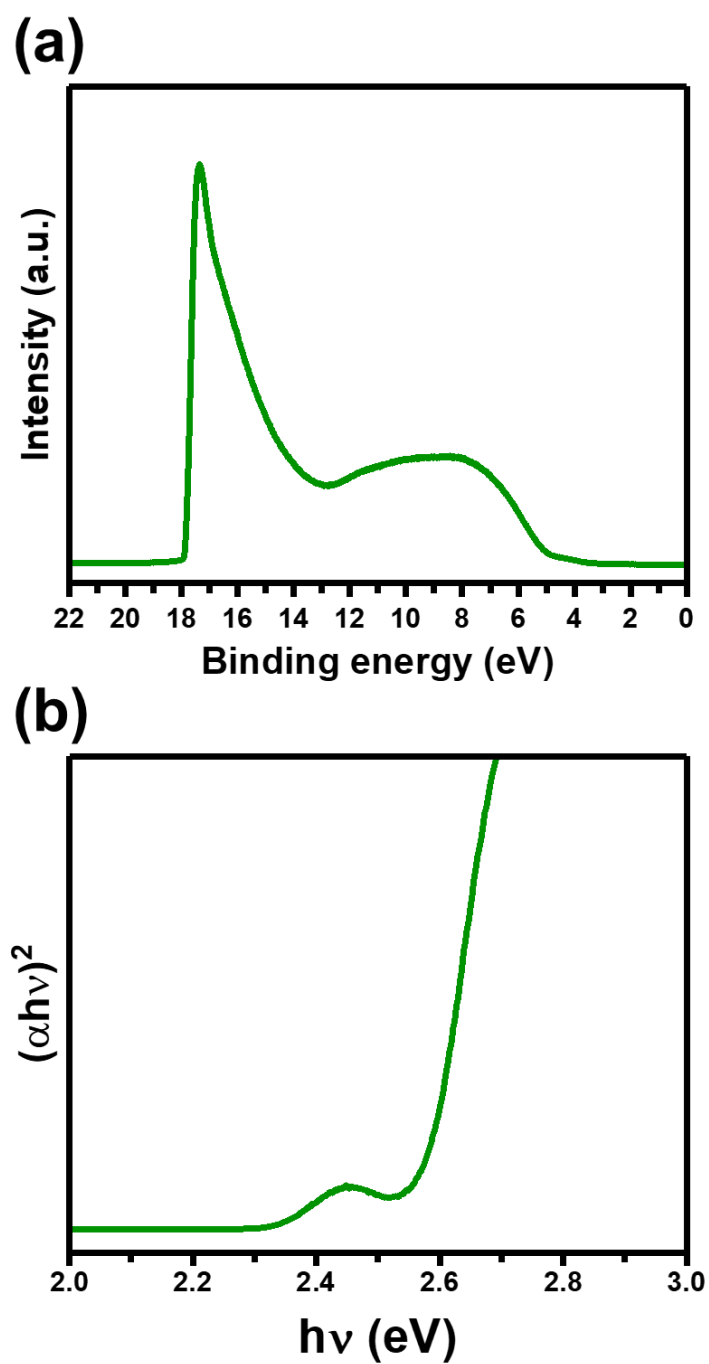


Figure S2. (a) UPS spectrum and (b) Tauc plot of the green QDs used in this work.

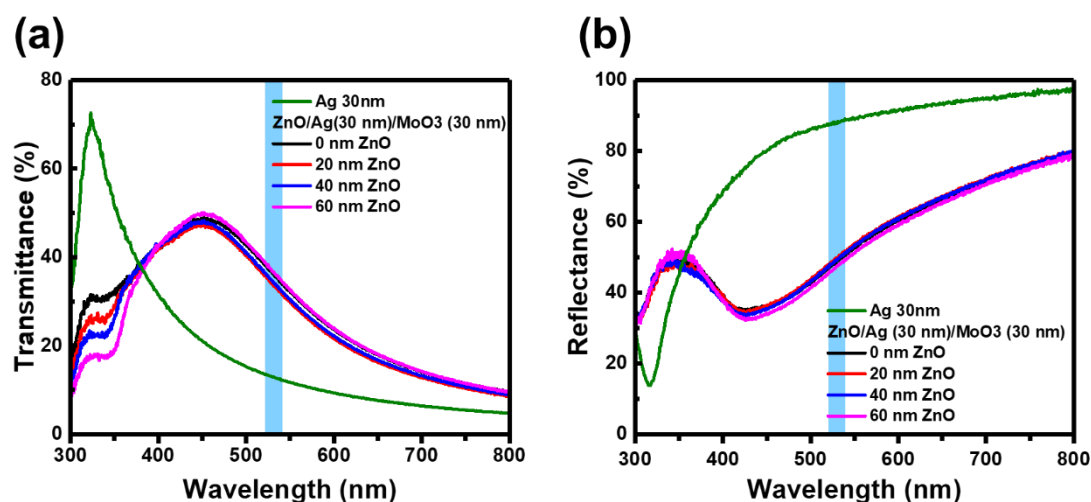


Figure S3. (a) The transmittance spectra and (b) the reflectance spectra of Ag and Ag/capping layer with different ZnO NPs thickness.

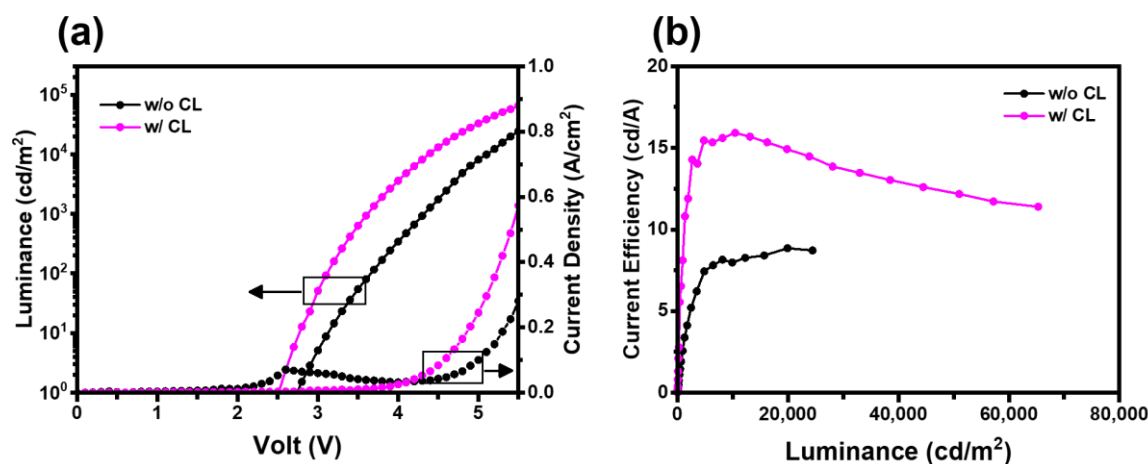


Figure S4. (a) Current density-voltage-luminance (J - V - L) characteristics and (b) Luminance-current efficiency characteristics for the TEQLED devices with or without a capping layer (thickness ~ 30 nm).

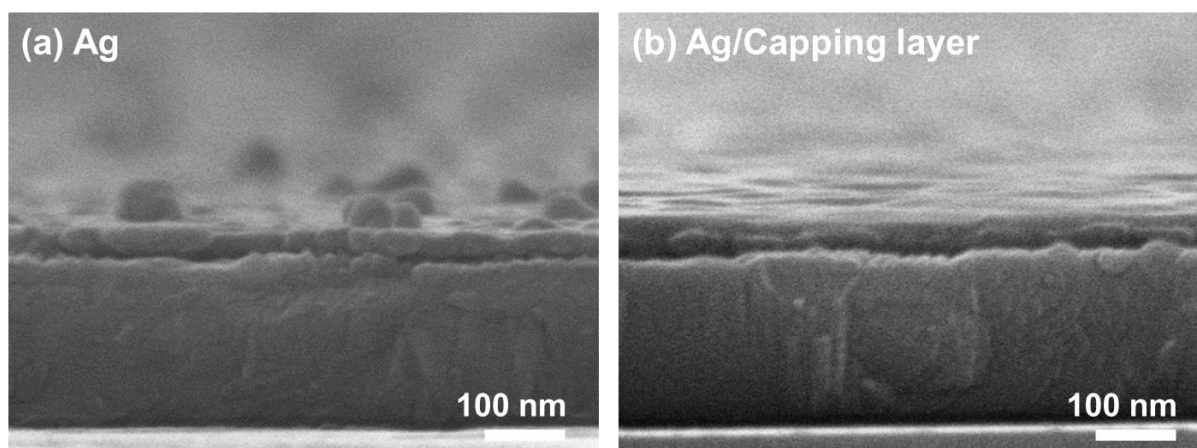


Figure S5. The cross-sectional SEM images of (a) Ag and (b) Ag/capping layer. The films are deposited on an ITO-coated glass substrate.