Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Improved Photoelectric Performance of All-Inorganic Perovskite through Different Additives for Green Light-Emitting Diodes

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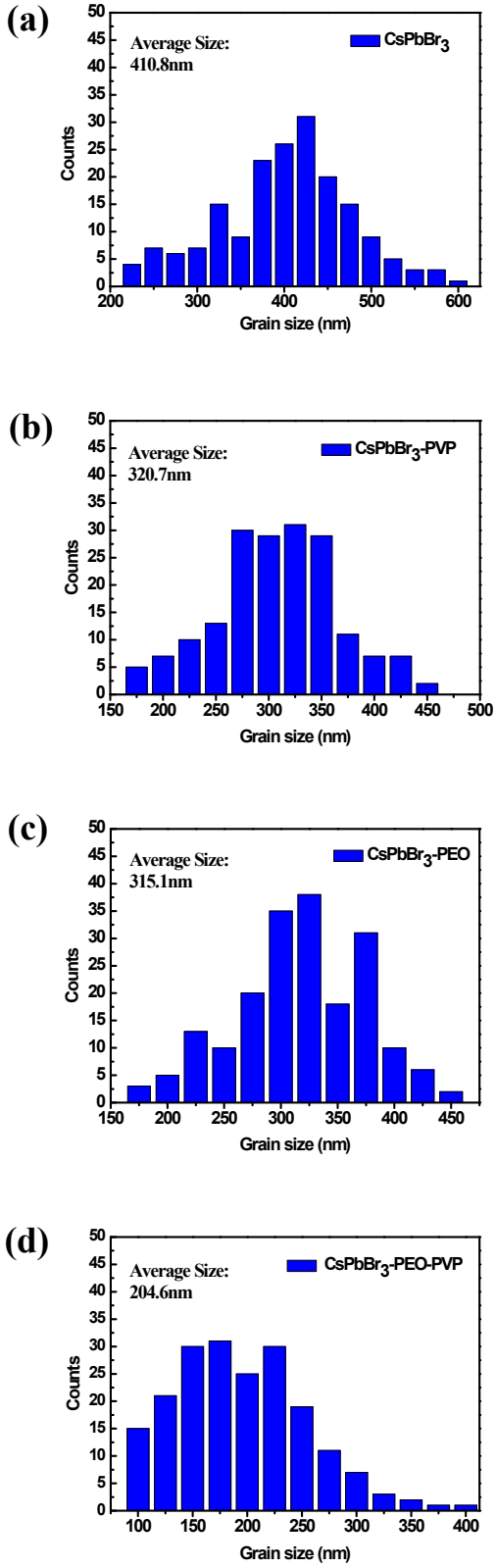

Figure S1. Grain size distribution of (a) the pure $CsPbBr_3$, (b) $CsPbBr_3$-PVP, (c) $CsPbBr_3$-PEO and (d) $CsPbBr_3$-PEO-PVP films.

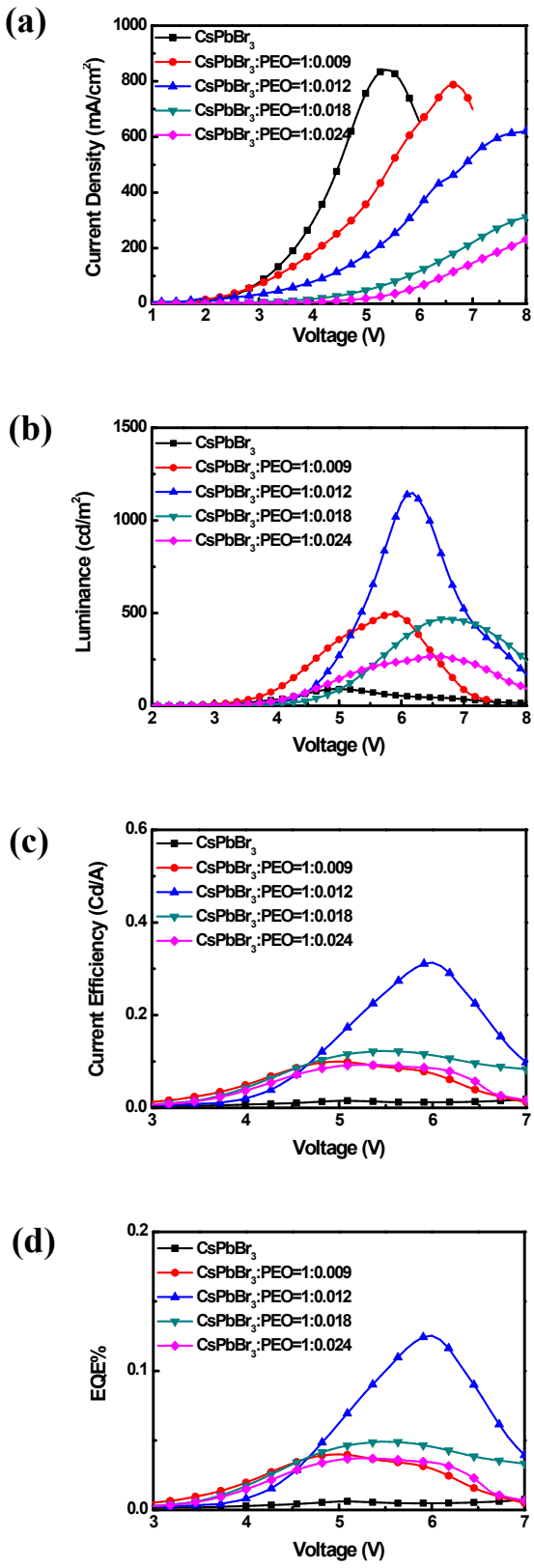

Figure S2. (a) current density, (b) luminance, (c) CE, and (d) EQE versus voltage characteristics of the $CsPbBr_3$-PEO device with different PEO blending ratios.

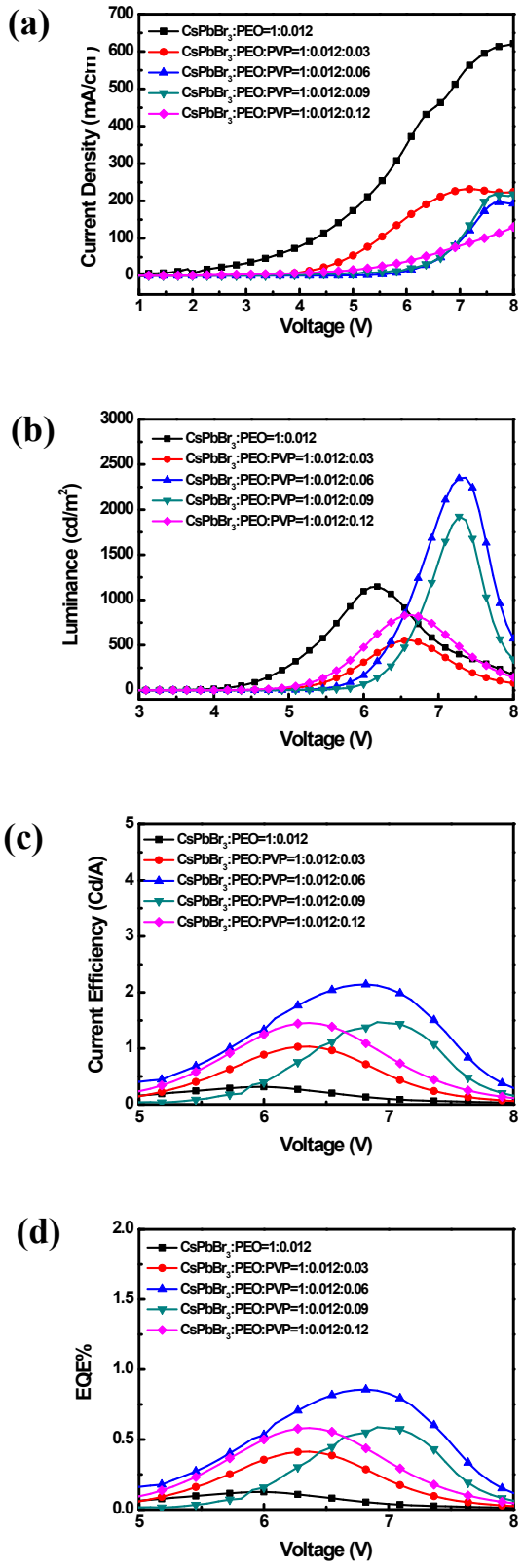

Figure S3. (a) current density, (b) luminance, (c) CE, and (d) EQE versus voltage characteristics of the $CsPbBr_3$-PEO-PVP device with different PVP blending ratios.

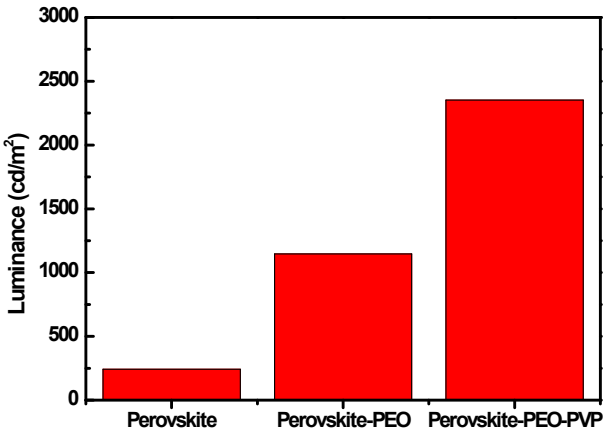

Figure S4. The optimal brightness observed in the device fabricated with three different types of emissive layers.

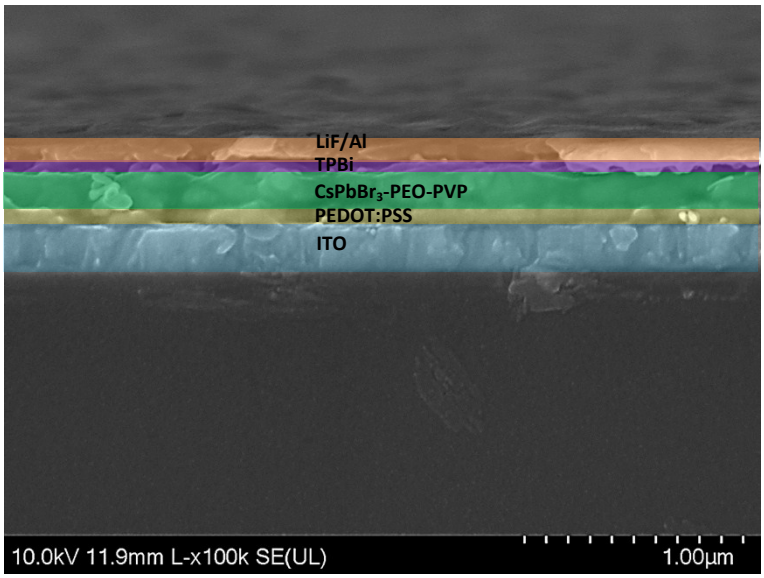

Figure S5. Cross-sectional SEM image of $CsPbBr_3$-PEO-PVP (1:0.012:0.06) Perovskite LED device.

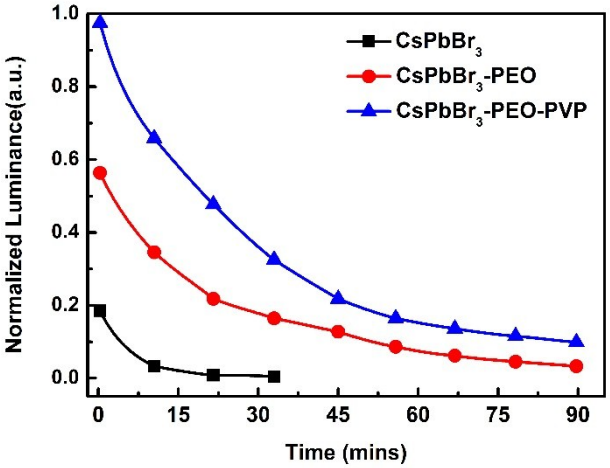

Figure S6. Stability of the Perovskite LED based on pure $CsPbBr_3$, $CsPbBr_3$-PEO (1:0.012), and $CsPbBr_3$-PEO-PVP (1:0.012:0.06) films at a bias of 7V.

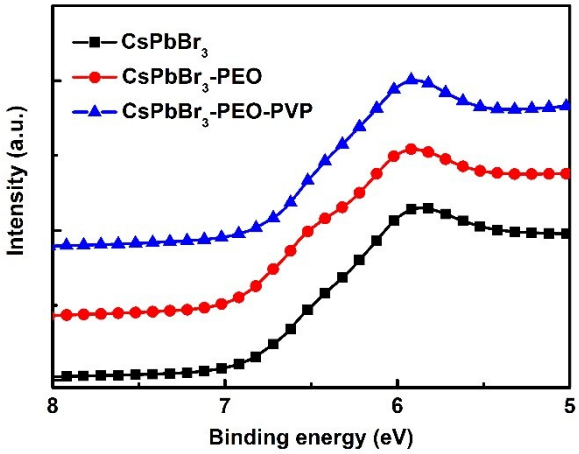

Figure S7. The UPS results of the pure $CsPbBr_3$, $CsPbBr_3$-PEO (1:0.012), and $CsPbBr_3$-PEO-PVP (1:0.012:0.06) perovskite films.