Supplementary Information

A simple method to improve the performance of perovskite light-emitting diodes via layer-by-layer spin-coating $CsPbBr_3$ quantum dots

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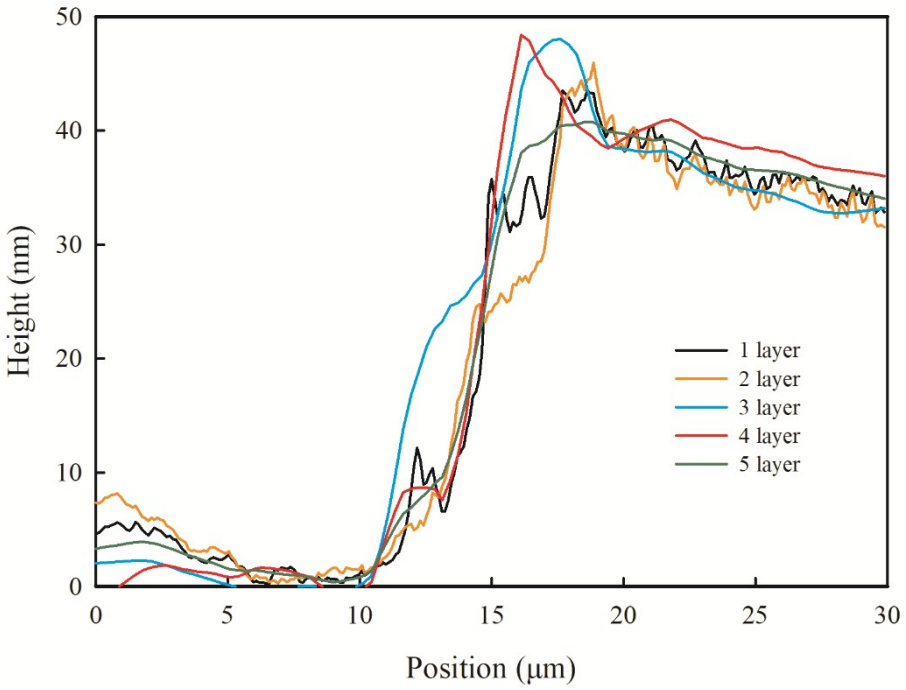

Fig. S1 Thickness of perovskite QDs films with different layers (1~5 layers) obtained from AFM measurements.

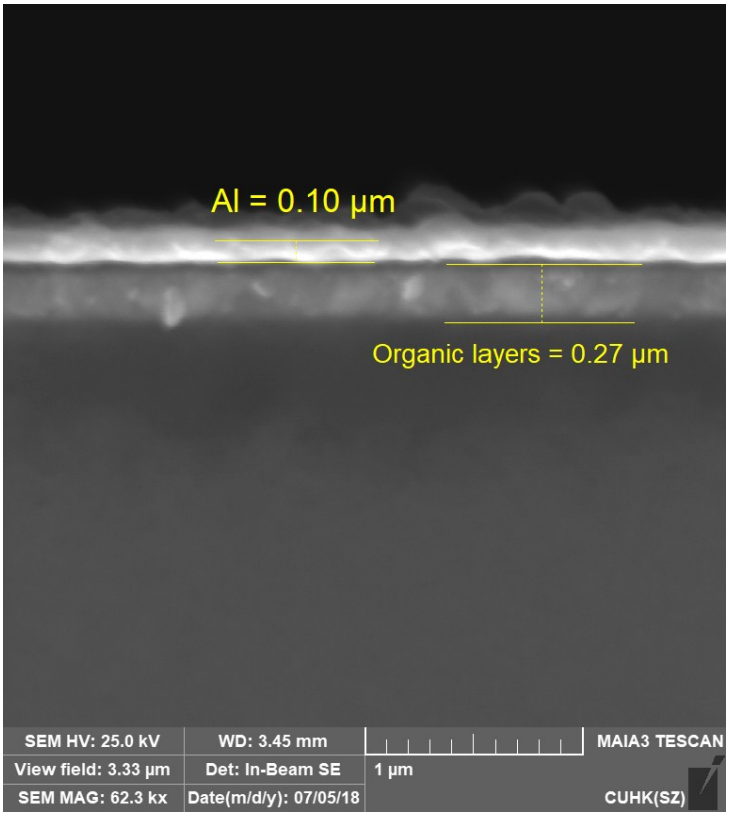

Fig. S2 SEM cross-sectional-view of perovskite device based on 4 layers of $CsPbBr_3$ QDs. Organic layers include the multilayers of ITO, PEDOT:PSS, multilayers of perovskite QDs, TPBI and LiF.

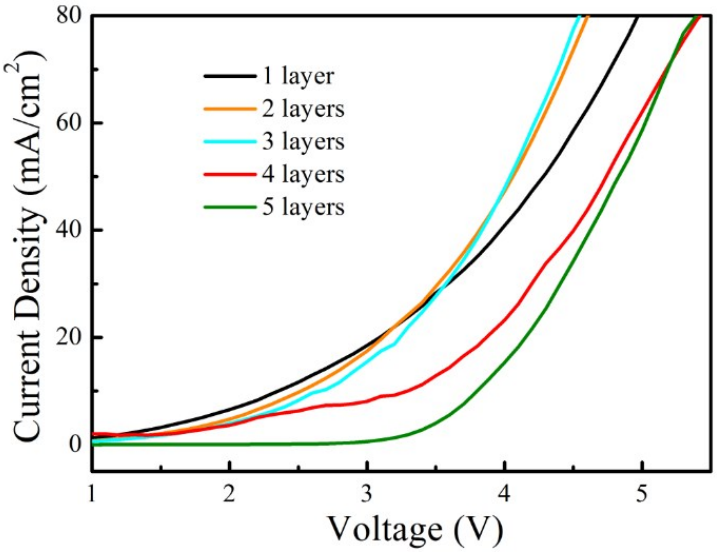

Fig. S3 J-V curves of the devices with different layers of $CsPbBr_3$ QDs.

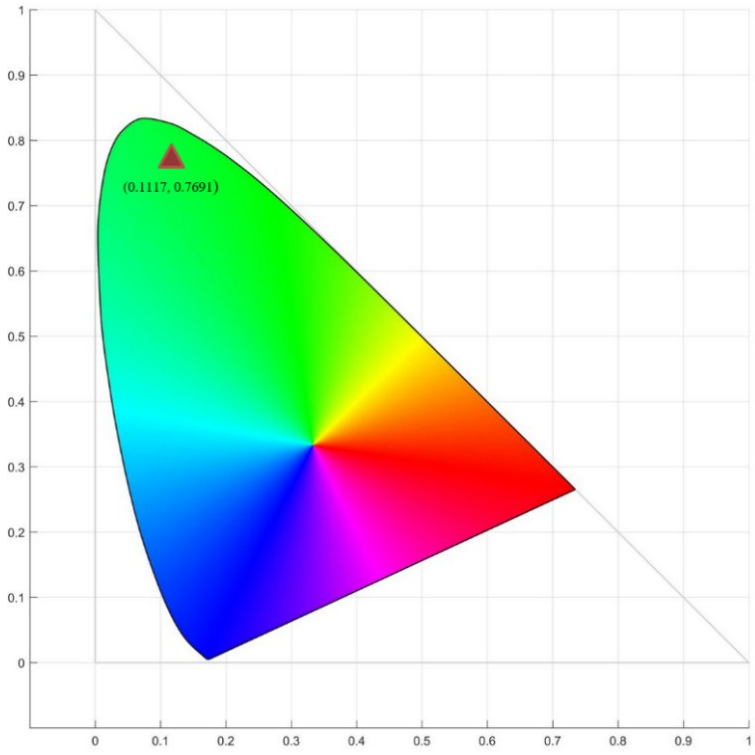

Fig. S4 CIE color coordinates (red triangle) of the green emission spectrum.