## Supporting Information

## Morphology control towards bright and stable inorganic halide perovskite light-emitting diodes

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**Fig. S1** XRD spectrum measured for the CsPbBr<sub>3</sub> powders synthesized in this work. Inset shows the photo picture taken for the CsPbBr<sub>3</sub> powders.



**Fig. S2** Photo pictures taken for different precursor solutions of (a) Precursor-A, (b) Precursor-B and (c) Precursor-C.



**Fig. S3** SEM images showing the cross-sectional view of the CsPbBr<sub>3</sub> perovskite films formed on the surface of PEDOT:PSS hole transporting layer, prepared by different solutions of (a) Precursor-A, (b) Precursor-B and (c) Precursor-C.



**Fig. S4** XRD spectra measured for the CsPbBr<sub>3</sub> perovskite films prepared by different solutions of Precursor-A, Precursor-B and Precursor-C.



**Fig. S5** The absorption and PL spectra measured for the CsPbBr<sub>3</sub> perovskite films prepared by different solutions of Precursor-B and Precursor-C.