

Supporting Information

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

Fangming Jin,^a Bo Zhao,^{b,d*} Bei Chu,^a Haifeng Zhao,^a Zisheng Su,^{a,c*} Wenlian Li^a and Furong Zhu^{d*}

^aState Key Laboratory of Luminescence and Applications, Changchun Institute of Optics, Fine Mechanics, and Physics, Chinese Academy of Sciences, Changchun 130033, China

^bResearch Center of Advanced Materials Science and Technology, Taiyuan University of Technology, Taiyuan 030024, China

^cCollege of Physics and Information Engineering, Quanzhou Normal University, Quanzhou 362000, China

^dDepartment of Physics, Institute of Advance Materials, and Institute of Research and Continuing Education (Shenzhen), Hong Kong Baptist University, Hong Kong, China

*E-mail: zhaobo01@tyut.edu.cn, suzs@ciomp.ac.cn, frzhu@hkbu.edu.hk

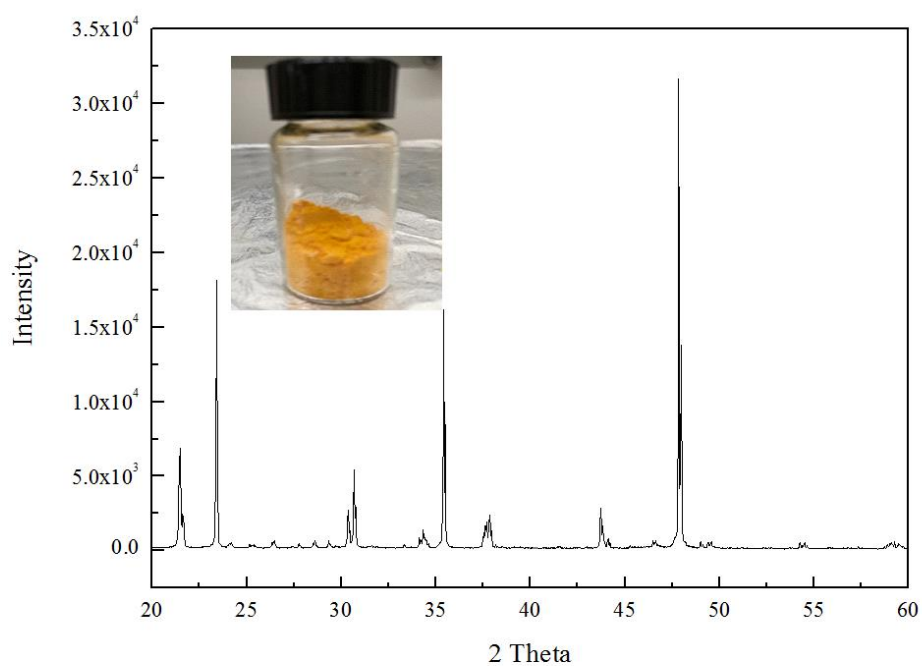


Fig. S1 XRD spectrum measured for the CsPbBr₃ powders synthesized in this work. Inset shows the photo picture taken for the CsPbBr₃ powders.

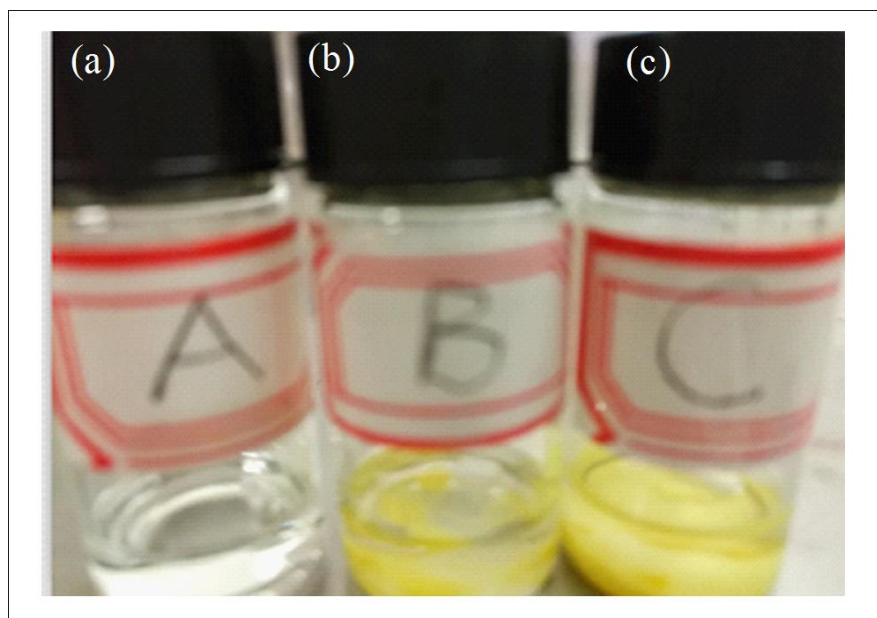


Fig. S2 Photo pictures taken for different precursor solutions of (a) Precursor-A, (b) Precursor-B and (c) Precursor-C.

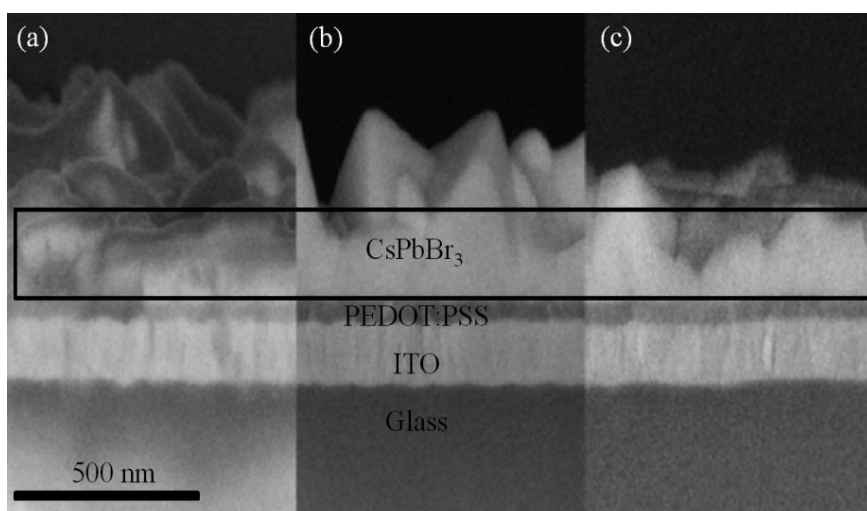


Fig. S3 SEM images showing the cross-sectional view of the CsPbBr₃ perovskite films formed on the surface of PEDOT:PSS hole transporting layer, prepared by different solutions of (a) Precursor-A, (b) Precursor-B and (c) Precursor-C.

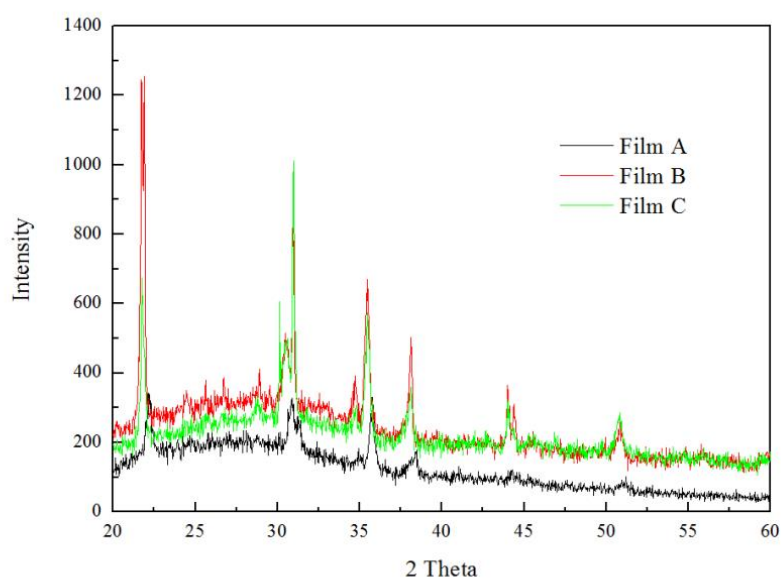


Fig. S4 XRD spectra measured for the CsPbBr₃ perovskite films prepared by different solutions of Precursor-A, Precursor-B and Precursor-C.

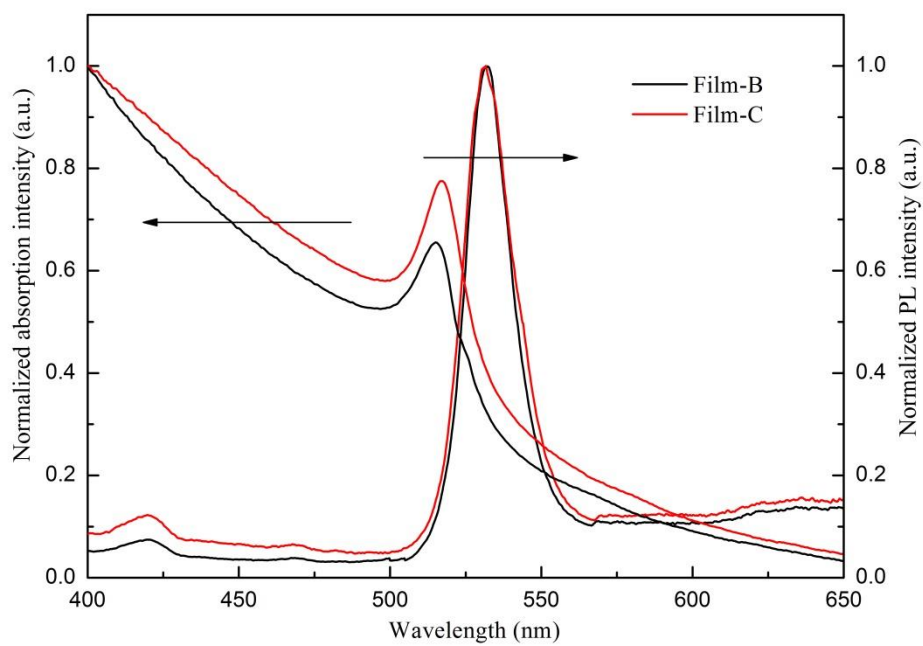


Fig. S5 The absorption and PL spectra measured for the CsPbBr₃ perovskite films prepared by different solutions of Precursor-B and Precursor-C.