

Supplementary Information

A Novel and Facile Synthesis Strategy for Highly Stable Cesium Lead Halide Nanowires

Ranran Zhou, ^a Chi-An Cheng, ^c Siying Qiu, ^a Jiayi Chen, ^a Kun Nie, * ^a Mengyun Wu, ^a Panlong Lin, ^a Hua Wang, * ^a Luoxin Wang, ^a and Lefu Mei ^b

^a School of Materials Science and Engineering, Key Laboratory of Polyphenylene Sulfide Fiber and Application in Textile Industry, State Key Laboratory of New Textile Materials & Advanced Processing Technology and Key Laboratory of Textile Fiber and Products (Ministry of Education), Wuhan Textile University, 430200 Wuhan, P. R. China.

^b Beijing Key Laboratory of Materials Utilization of Nonmetallic Minerals and Solid Wastes, National Laboratory of Mineral Materials, School of Materials Science and Technology, China University of Geosciences (Beijing), 100083 Beijing, P. R. China.

^c Department of Bioengineering, University of California Los Angeles, Los Angeles, California, USA.

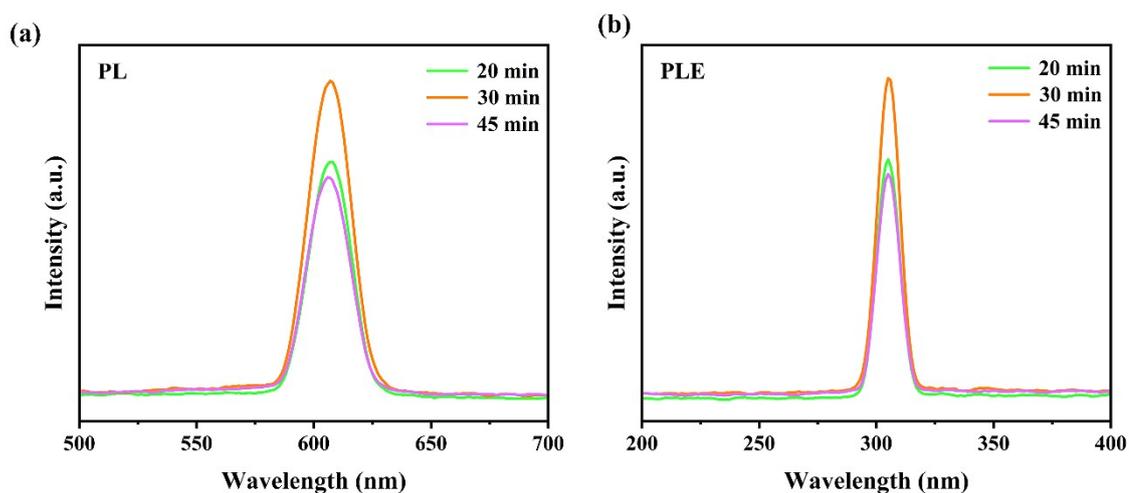


Fig. S1 Photoluminescence spectra of CsPbI₃ NWs (a) PL (λ_{ex} = 305 nm) spectra and (b) PLE (λ_{em} = 606 nm) spectra. Both are researches on CsPbI₃ NWs products that have reacted for 20 min, 30 min and 45 min.

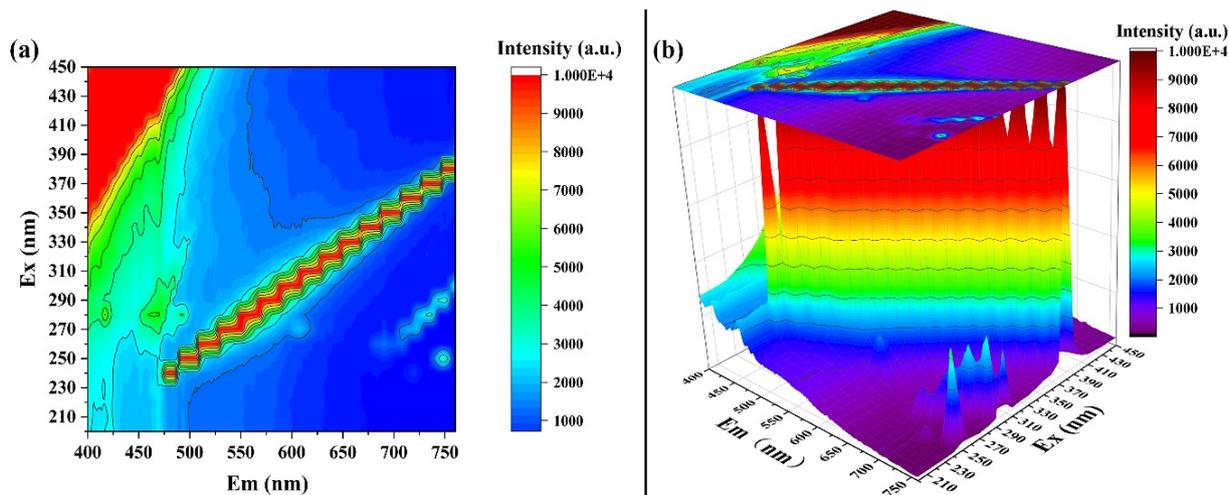


Fig. S2 Fluorescence spectra of CsPbI₃ NWs. (a) Two-dimensional fluorescence spectra and (b) Three-dimensional fluorescence spectra.

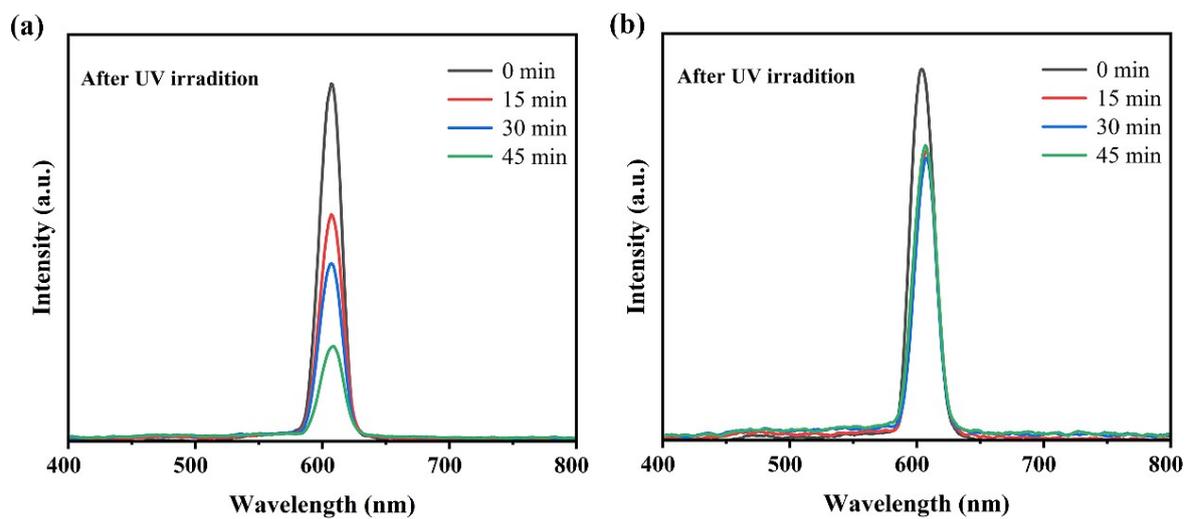


Fig. S3 (a) Fluorescence intensity of CsPbI₃ NWs irradiated by different UV irradiation (b) Fluorescence intensity of modified CsPbI₃ NWs under UV irradiation.

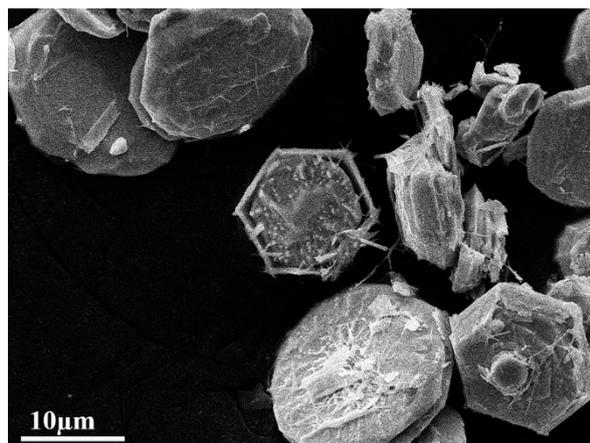


Fig. S4 The SEM image of nanocrystals.

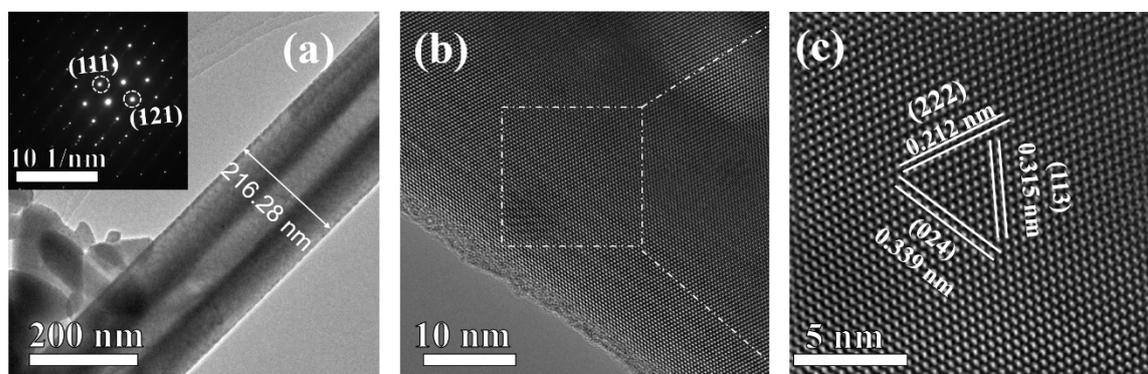


Fig. S5 Structural characterization of CsPbI₃ nanowires. (a) Transition electron microscopy (TEM) image and (b and c) high-resolution TEM (HR-TEM) images of synthesized CsPbX₃ sample. Inset: selective area electron diffraction (SAED) pattern.