

Supporting Information

Microwave-Assisted Synthesis of High-Quality All-Inorganic CsPbX₃ (X = Cl, Br, I)

Perovskite Nanocrystals and the Application in Light Emitting Diode

Qi Pan, Huicheng Hu, Yatao Zou, Min Chen, Linzhong Wu, Xiaolei Yuan, Di Yang, Jian Fan, Baoquan Sun,* and Qiao Zhang**

Institute of Functional Nano and Soft Materials (FUNSOM), Jiangsu Key Laboratory for Carbon-Based Functional Materials and Devices, Soochow University, 199 Ren'ai Road, Suzhou, 215123, Jiangsu, People's Republic of China

*E-mail: jfan@suda.edu.cn (J.F.); bqsun@suda.edu.cn (B.S.); qiaozhang@suda.edu.cn (Q.Z.)

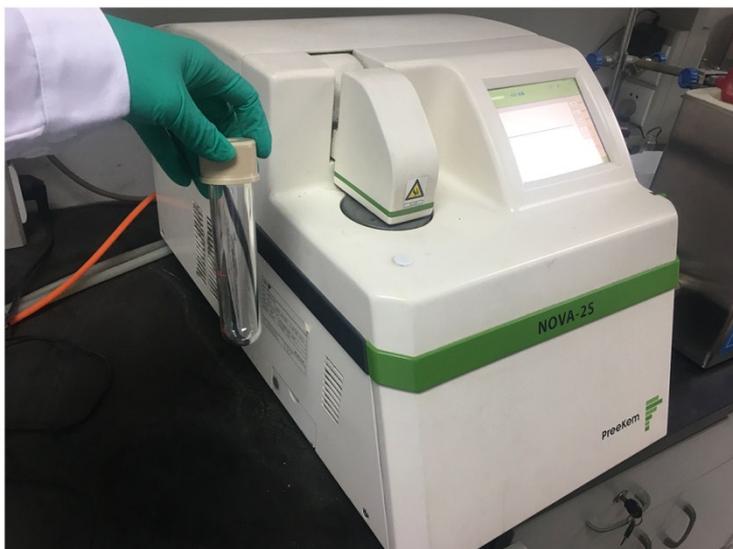


Figure S1. Photograph of microwave reactor used in this work.

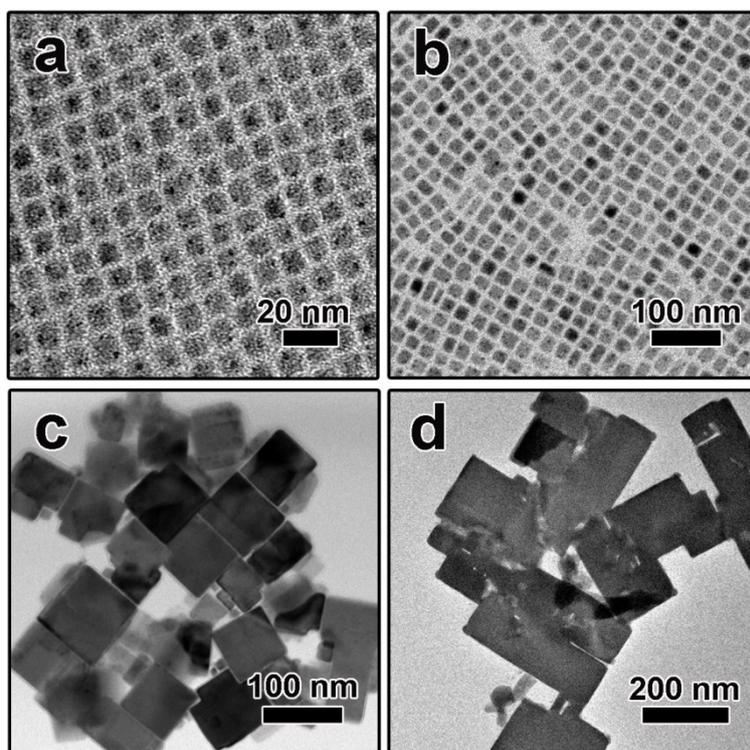


Figure S2. TEM images of (a) $\text{CsPb}(\text{Cl}/\text{Br})_3$, (b) $\text{CsPb}(\text{Br}/\text{I})_3$, (c) CsPbCl_3 , (d) CsPbI_3 NCs synthesized at 160 °C.

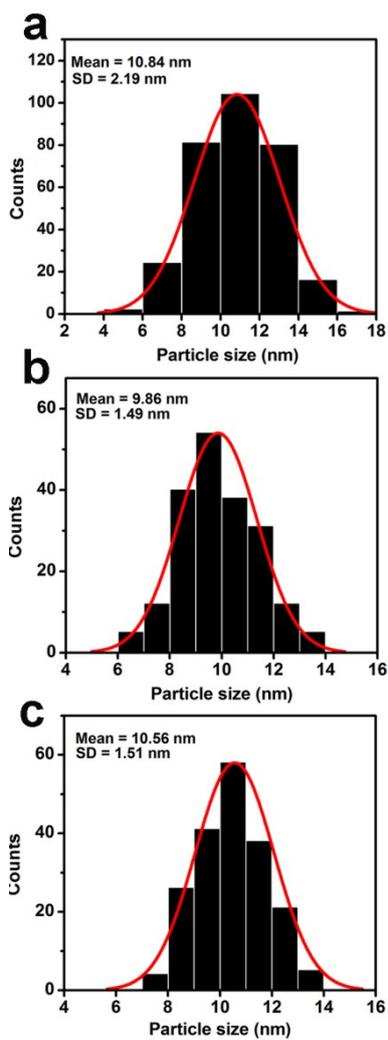


Figure S3. Size distribution histograms of (a) CsPbBr₃, (b) CsPb(Cl/Br)₃, and (c) CsPb(Br/I)₃.

TEM images are shown in Figure S2.

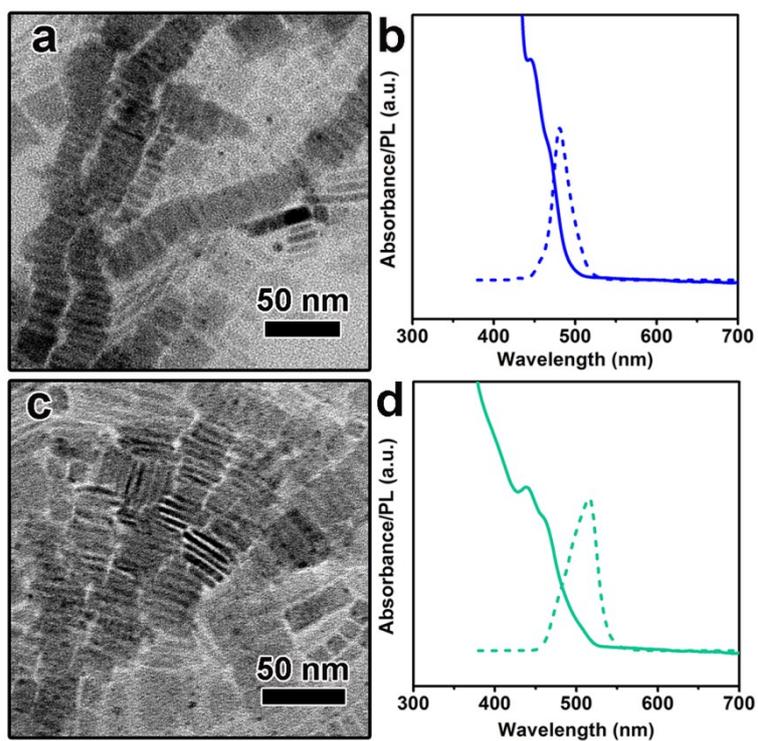


Figure S4. (a, c) TEM images of (a) CsPb(Cl/Br)₃ and (c) CsPb(Br/I)₃ nanoplates. (b, d) UV-vis absorption and PL emission spectra of (b) CsPb(Cl/Br)₃ and (d) CsPb(Br/I)₃ nanoplates.

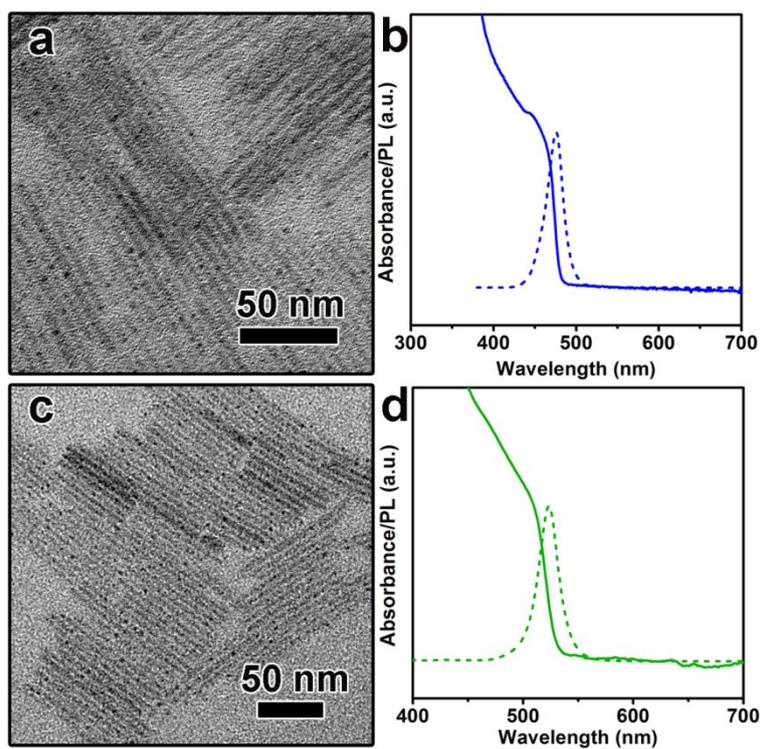


Figure S5. (a, c) TEM image of (a) CsPb(Cl/Br)₃ and (c) CsPb(Br/I)₃ nanorods. (b, d) UV-vis absorption and PL emission spectra of (b) CsPb(Cl/Br)₃ and (d) CsPb(Br/I)₃ nanorods.

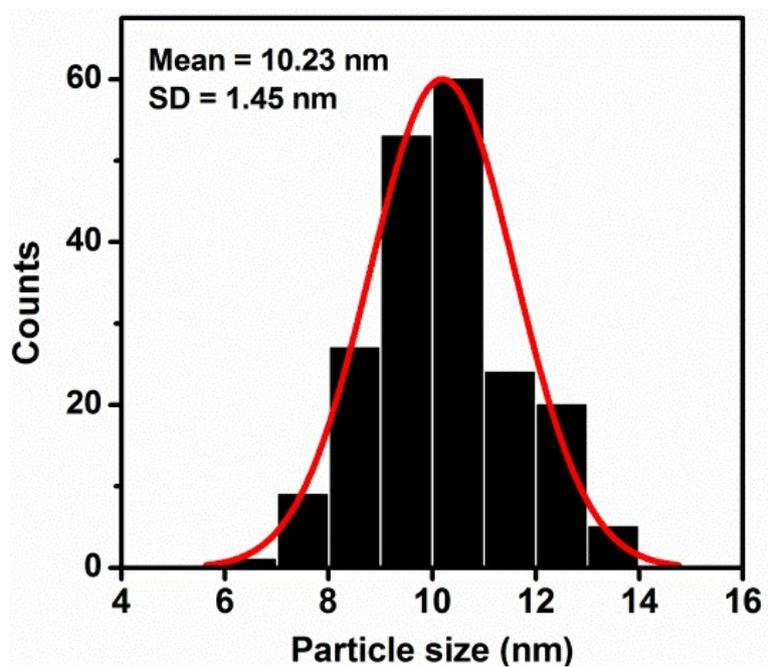


Figure S6. Size distribution histogram of CsPbBr₃ nanocrystals obtained at 140 °C. TEM image is shown in Figure 4b.

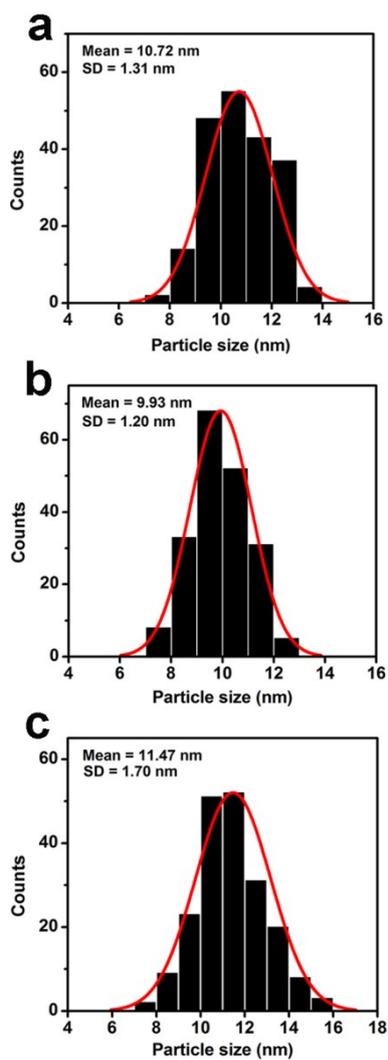


Figure S7. Size distribution histograms of (a) CsPbBr₃, (b) CsPb(Cl/Br)₃, and (c) CsPb(Br/I)₃ NCs synthesized by using Cs₂CO₃ as the cesium source. TEM images are shown in Figure 5.