

Room Temperature In-Situ Synthesis of Inorganic Lead Halide Perovskite Nanocrystals Sol Using Ultraviolet Polymerized Acrylic Monomers as Solvent and Their Composites with High Stability

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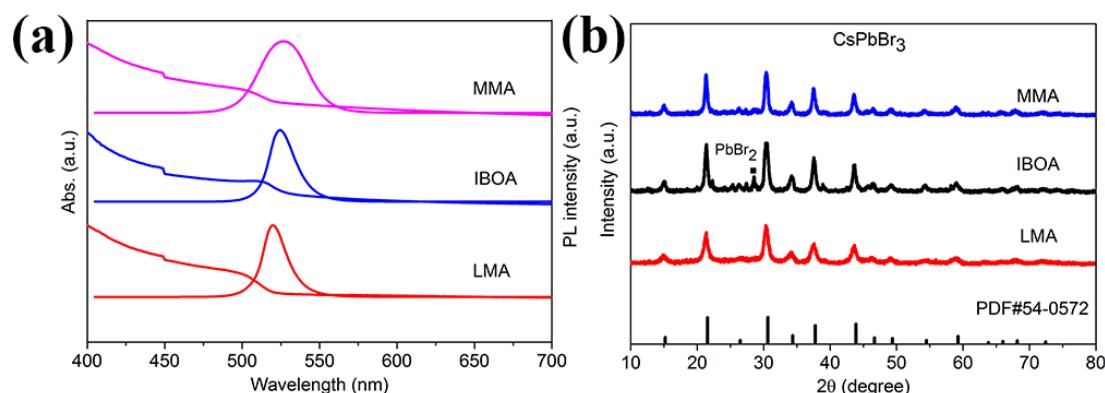


Figure S1. (a) PL and Abs spectra and (b) XRD patterns of CsPbBr₃ nanocrystals synthesized in different organic solvents.

Table S1. Photoluminescence quantum yield of CsPbBr₃ in different solvents.

Solvents	Photoluminescence quantum yield
IBOMA	87.5%
MMA	7.2%
IBOA	32.9%
LMA	25.9%

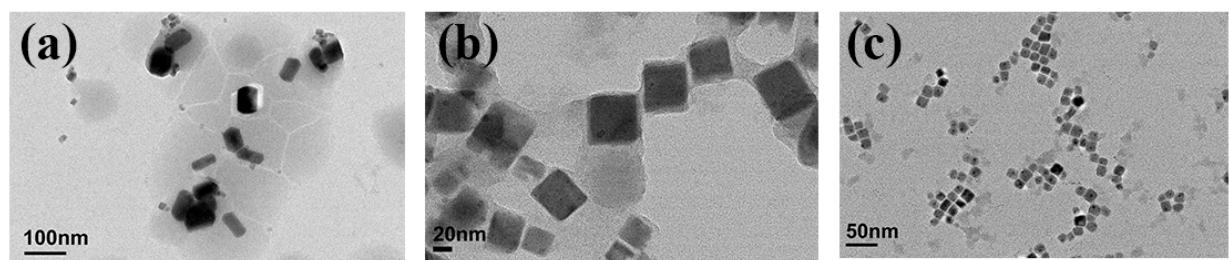


Figure S2. TEM images of nanocrystals synthesized (a) in IBOA (61.5 ± 5.8 nm), (b) in MMA (40.5 ± 8.6 nm), (c) in LMA (15.2 ± 1.8 nm).

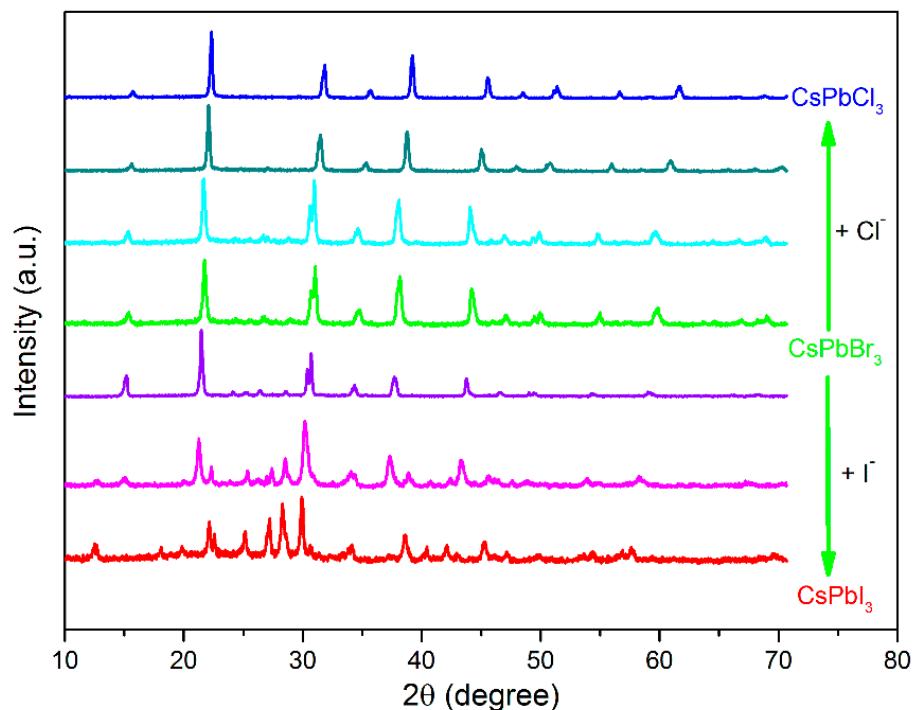


Figure S3. XRD patterns of the CsPbBr_3 nanocrystals and anion-exchanged samples.

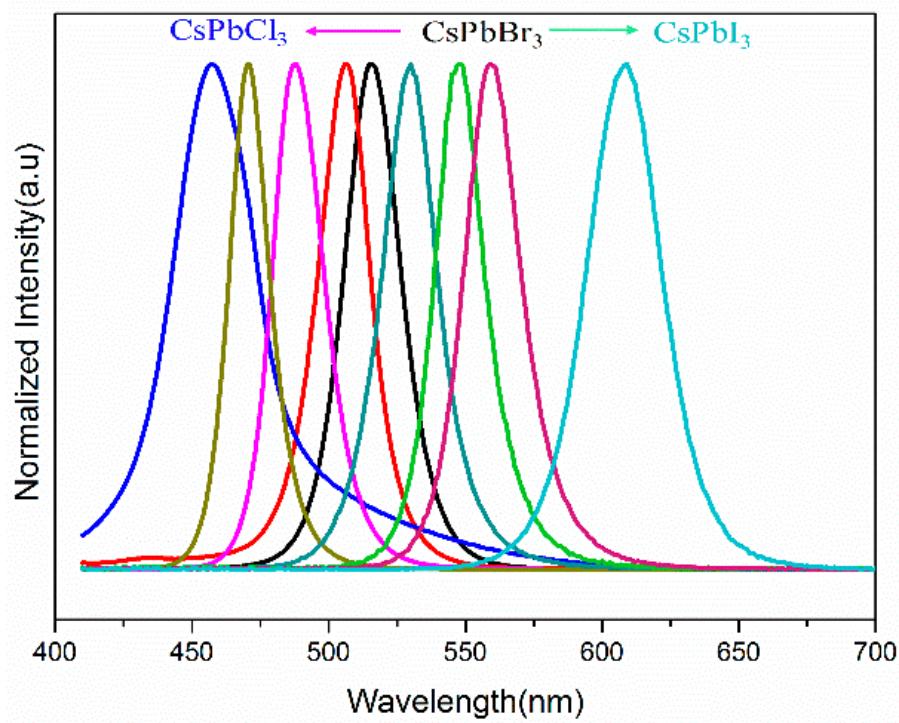


Figure S4. Emission spectra of CsPbX_3 ($\text{X}=\text{Cl}, \text{Br}, \text{I}$) nanocrystals.

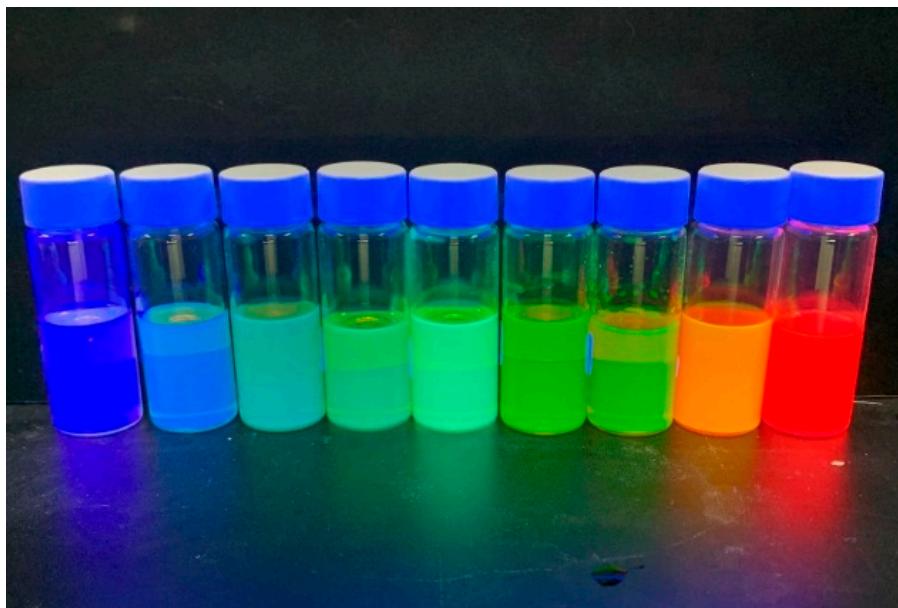


Figure S5. photograph of perovskite CsPbX_3 ($\text{X}=\text{Cl}, \text{Br}, \text{I}$) nanocrystals.