

Supporting Information

Synthesis of All-Inorganic Halide Perovskite Nanocrystals for Potential Photoelectric Catalysis Applications

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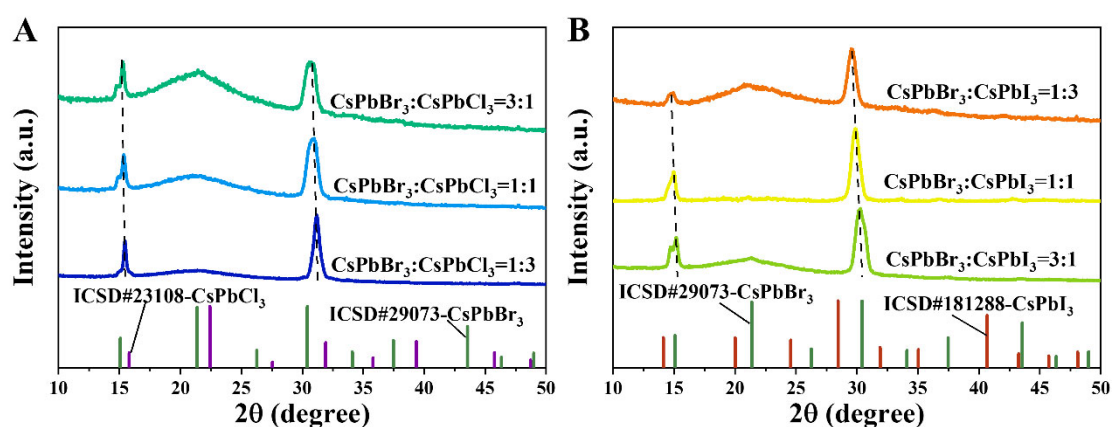


Figure S1. (A,B) XRD patterns of halide perovskite nanocrystals with different halogen composition.

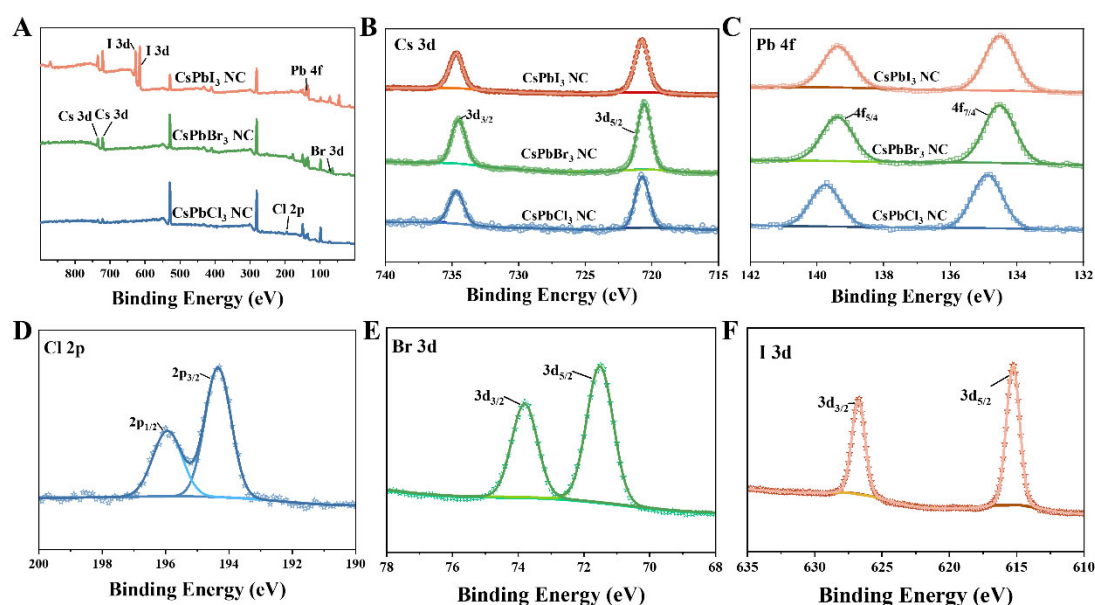


Figure S2. XPS spectra of CsPbX₃ (X = Cl, Br, I) nanocrystals. (A) Full spectra, (B) Cs 3d, (C) Pb 4f, (D) Cl 2p, (E) Br 3d, (F) I 3d.

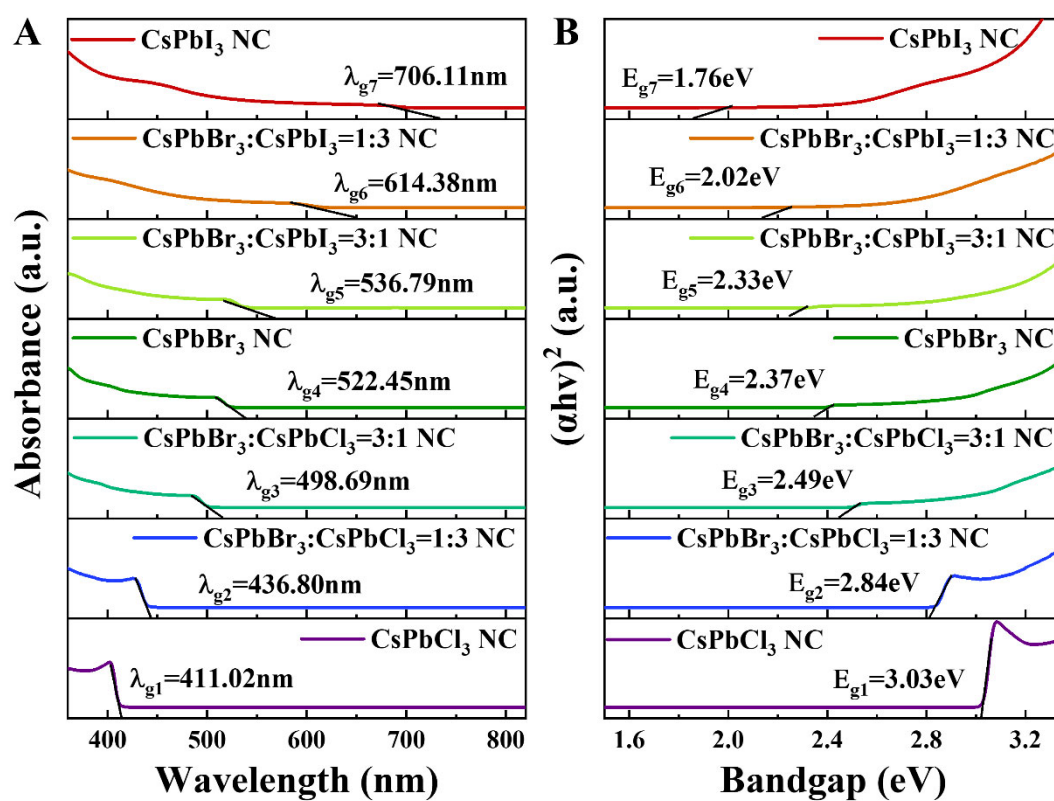


Figure S3. (A) UV-vis absorption spectra and (B) Absorbance versus photon energy and the determined bandgap E_g of halide perovskite nanocrystals with different halogen components.

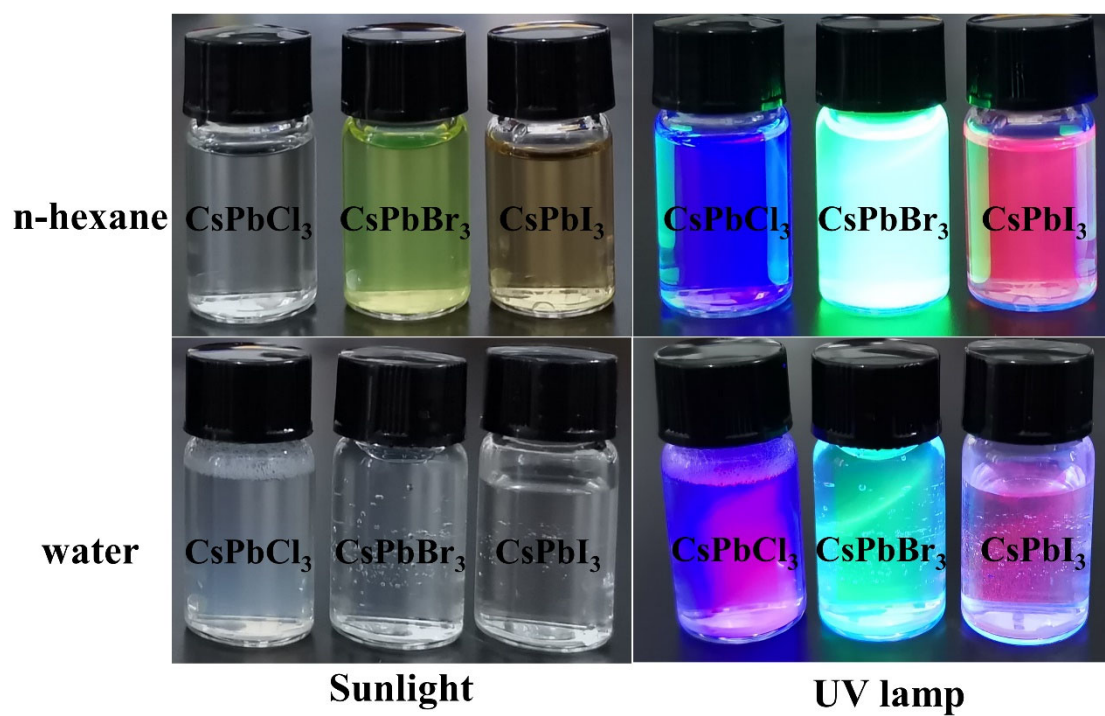


Figure S4. Images of CsPbX_3 (X = Cl, Br, I) nanocrystals in different solvent (water and n-hexane) under sunlight and 365 nm UV lamp, respectively.

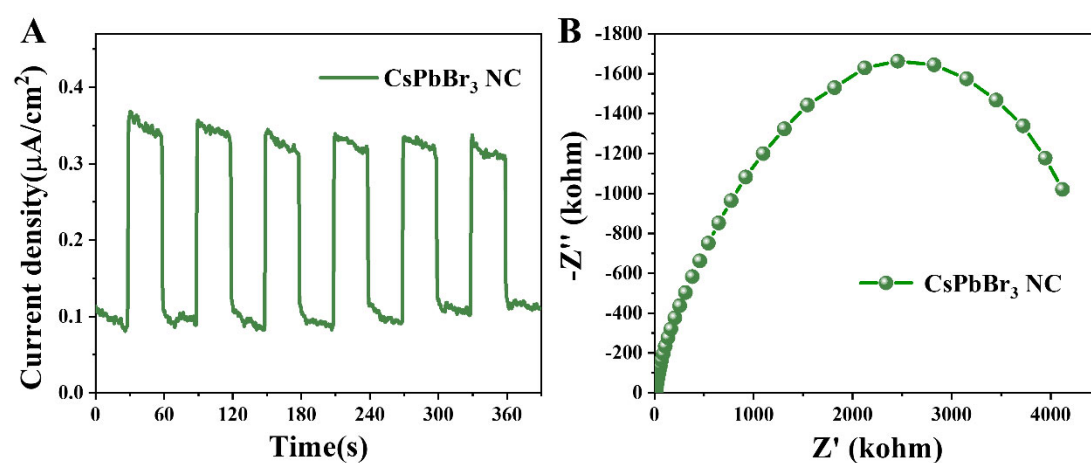


Figure S5. (A) Transient photocurrent responses to on-off illumination of CsPbBr₃ nanocrystals electrodes at -0.1 V versus NHE in neutral water (0.5 M Na₂SO₄). (B) Electrochemical impedance spectra (Nyquist plot) of CsPbBr₃ nanocrystals.