Enhanced photocatalytic CO₂ conversion over 0D/2D CsPbBr₃/BiOCl S-scheme heterojunction via boosting charge separation

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Figure Captions

- Fig. S1. TEM images (a) and size distribution statistics (b) of BiOCl NSs.
- Fig. S2. EDS microanalysis spectrum of the CsPbBr₃/BiOCl heterojunction.
- Fig. S3. Survey XPS spectra of CsPbBr₃ QDs, BiOCl NSs and the CsPbBr₃/BiOCl heterojunction.
- **Fig. S4.** PL spectra of CsPbBr₃ and CsPbBr₃/BiOCl heterojunction. Insert: photographs of CsPbBr₃ and CsPbBr₃/BiOCl heterojunction under light and UV light.
- Fig. S5. Photocurrent responses of CsPbBr₃, BiOCl, and CsPbBr₃/BiOCl heterojunction.
- Fig. S6. Time courses of (a) CO and (b) CH₄ evolution by the as-prepared samples.
- Fig. S7. XRD pattern of the recycled CsPbBr₃/BiOCl heterojunction.
- Fig. S8. TEM image of the recycled CsPbBr₃/BiOCl heterojunction.

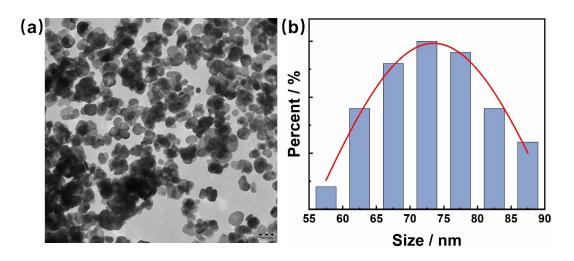
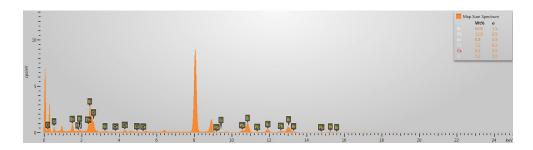


Fig. S1. TEM images (a) and size distribution statistics (b) of BiOCl NSs.



 $\textbf{Fig. S2.} \ EDS \ microanalysis \ spectrum \ of the \ CsPbBr_3/BiOCl \ heterojunction.$

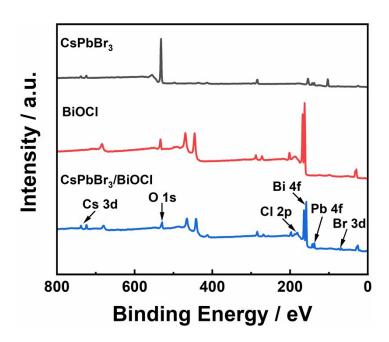


Figure S3. Survey XPS spectra of CsPbBr₃ QDs, BiOCl NSs and the CsPbBr₃/BiOCl heterojunction.

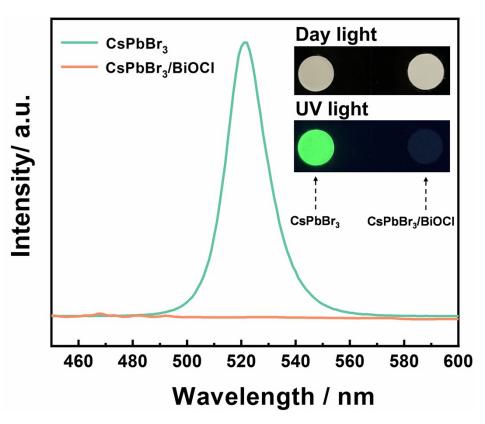


Fig. S4. PL spectra of CsPbBr₃ and CsPbBr₃/BiOCl heterojunction. Insert: photographs of CsPbBr₃ and CsPbBr₃/BiOCl heterojunction under light and UV light.

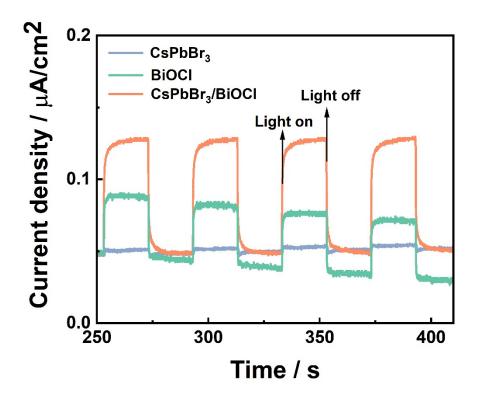


Figure S5. Photocurrent responses of CsPbBr₃, BiOCl, and CsPbBr₃/BiOCl heterojunction.

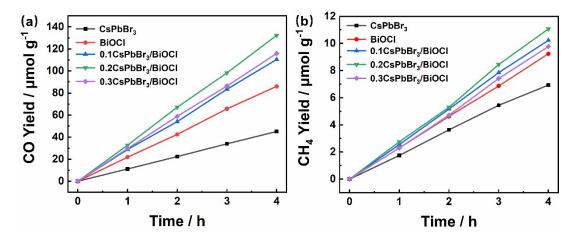


Figure S6. Time courses of (a) CO and (b) CH₄ evolution by the as-prepared samples.

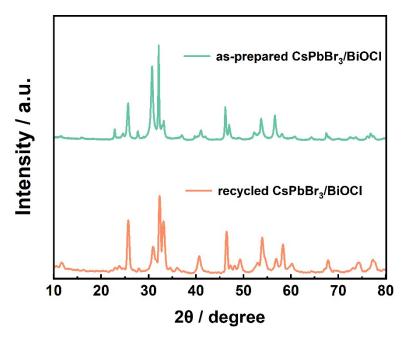


Figure S7. XRD pattern of the recycled CsPbBr₃/BiOCl heterojunction.

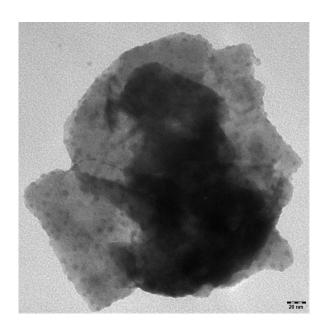


Figure S8. TEM image of the recycled CsPbBr₃/BiOCl heterojunction.