

Supplementary Information

Enhancement mechanism of a novel heterojunction Z-scheme-type composite BiOBr/ZnIn₂S₄ to degrade Congo Red

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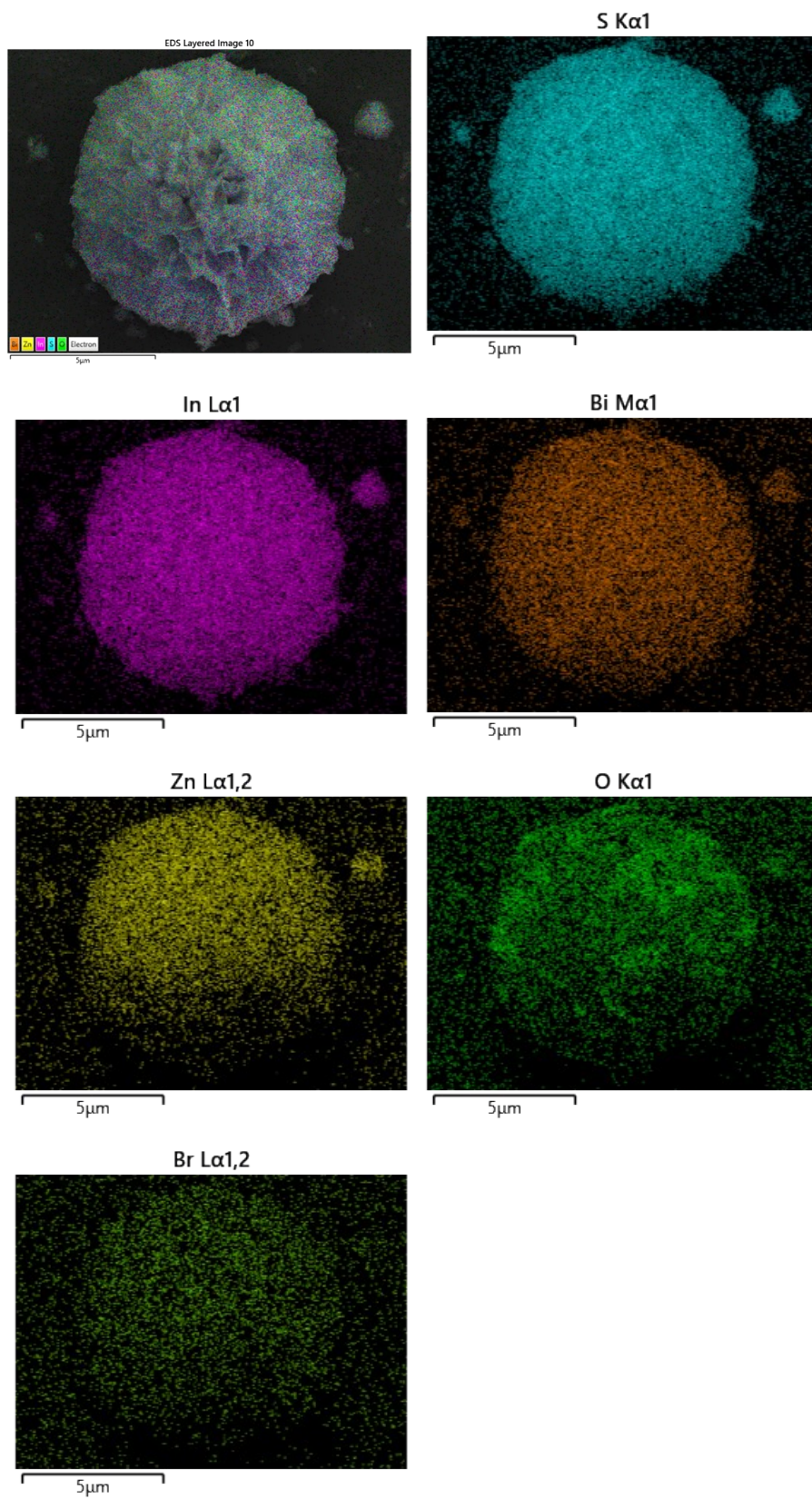


Fig. S1. Energy-dispersive X-Ray spectrometry mapping of BiOBr/ZIS-7

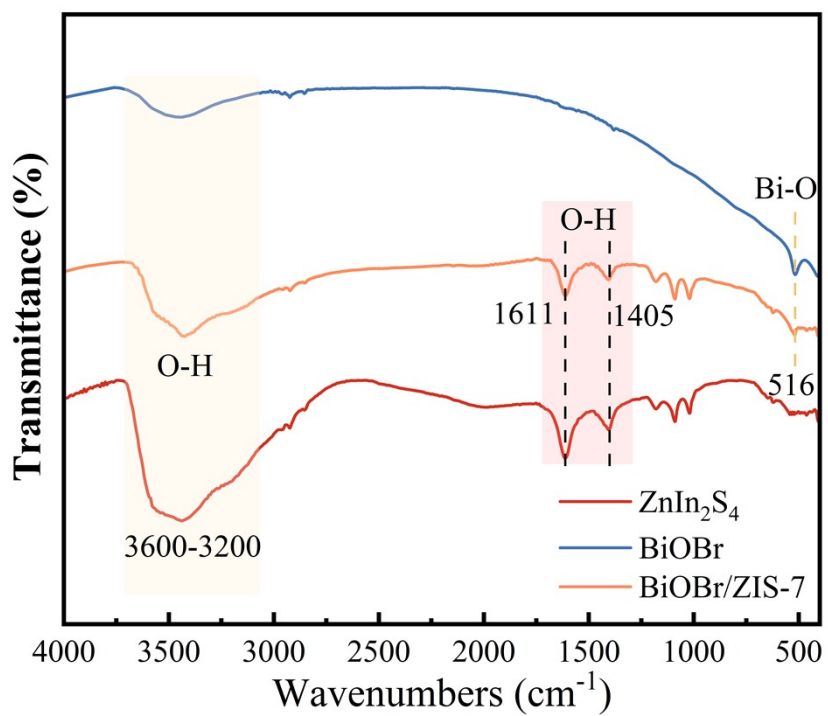


Fig. S2. FT-IR spectrum of synthesized BiOBr, ZnIn₂S₄, and BiOBr/ZIS-7 samples for the region of 400-4000 cm⁻¹.

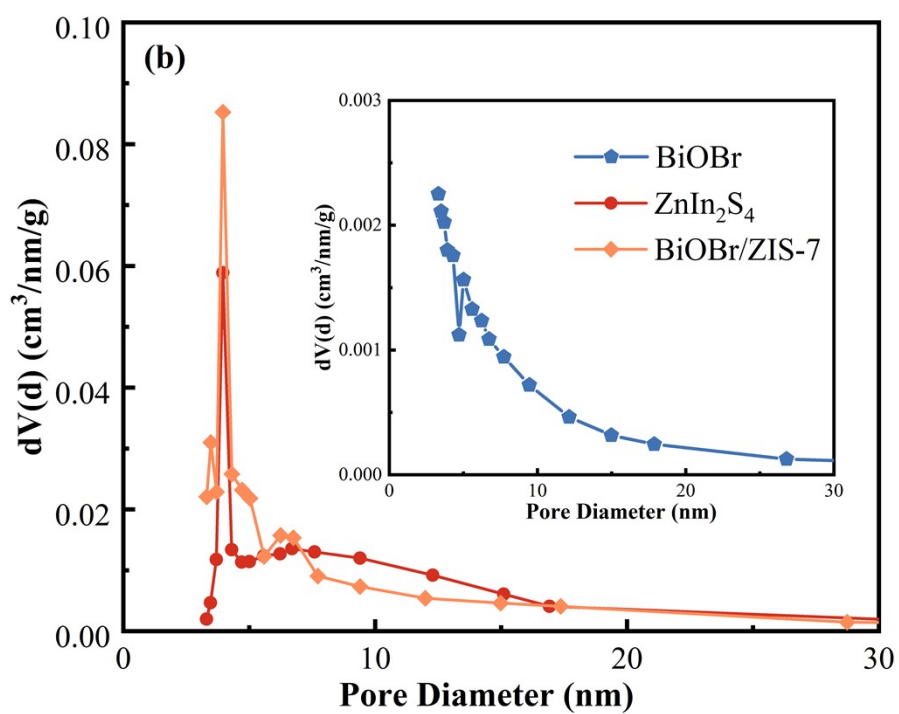
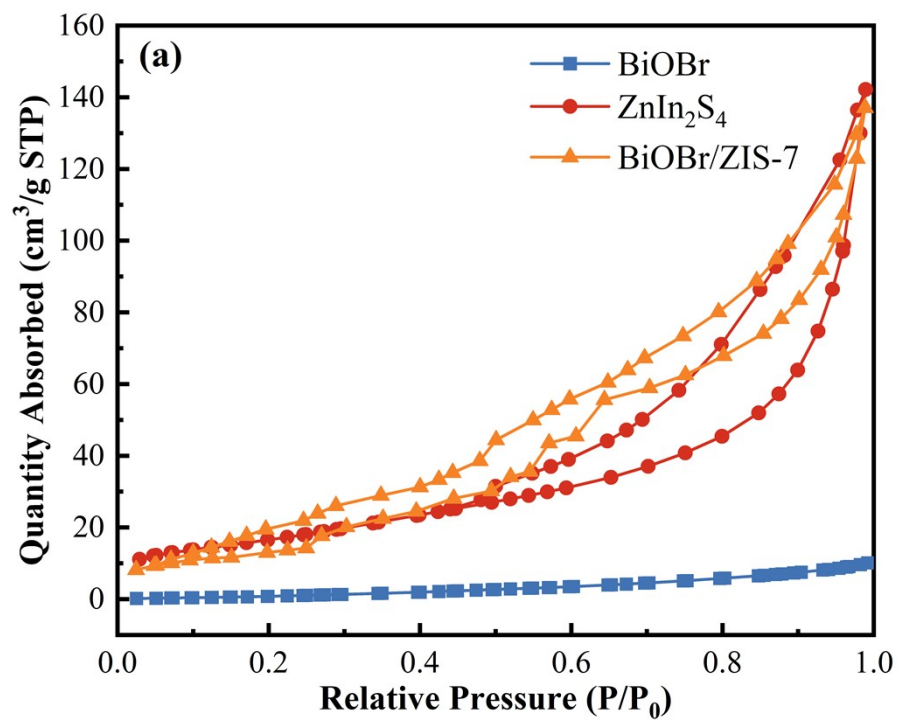


Fig. S3. N_2 adsorption-desorption curves (a) and pore size distributions (b) of the as-prepared samples.

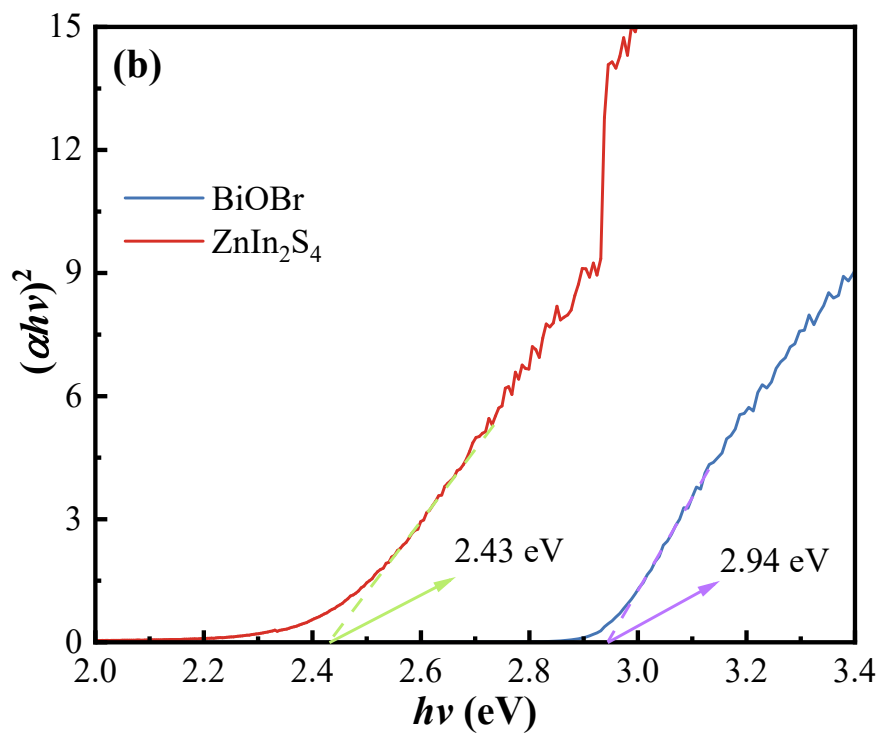
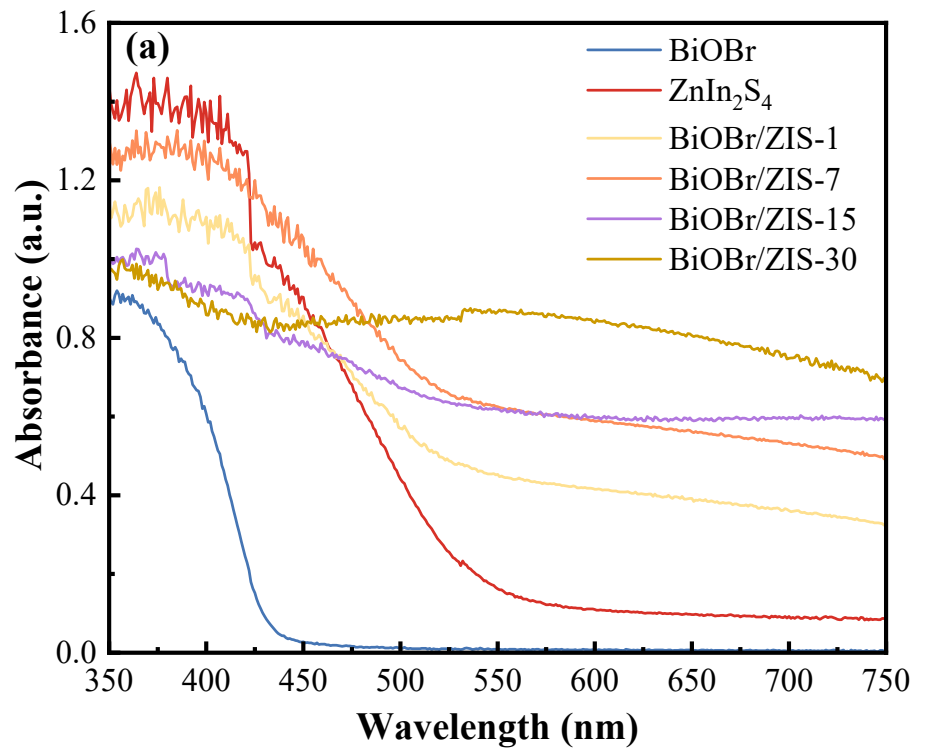


Fig. S4. UV-Vis diffuse reflectance spectra of samples (a); Plots of $(\alpha h\nu)^2$ versus $h\nu$ obtained from BiOBr and ZnIn₂S₄ (b).

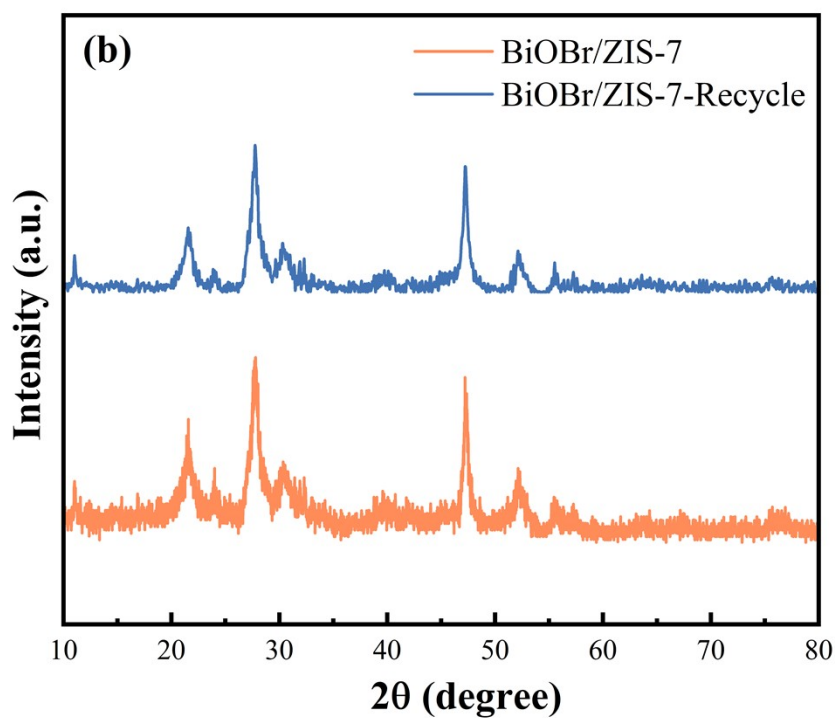
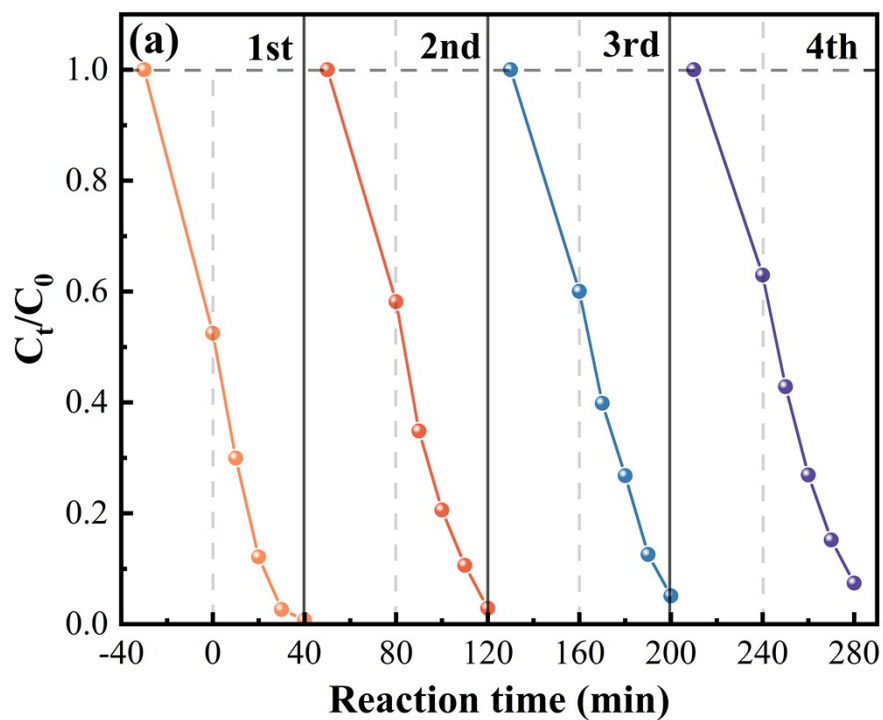


Fig. S5. Cycling experiments of Congo red degradation by BiOBr/ZIS-7 under visible light irradiation (a); XRD of reused composites (BiOBr/ZIS-7-Recycle) and original composites (BiOBr/ZIS-7) (b).

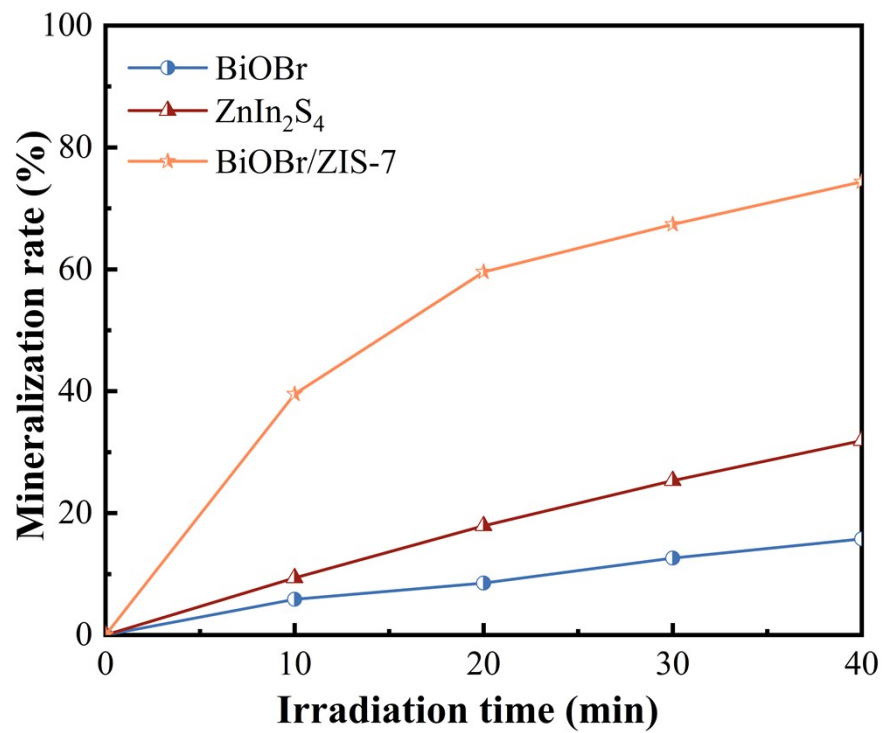


Fig. S6. Mineralization rates of Congo red decomposed by catalysts under visible light.