

Electronic Supplementary Information

**Controllable in-situ synthesis of $\text{BiOBr}_x\text{I}_{1-x}$ solid solution on
reduced graphene oxide with enhanced visible light
photocatalytic performance**

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The measurement of photoluminescence (PL) spectra.

The photoluminescence (PL) spectra were surveyed by Edinburgh FL/FS900 spectrophotometer.

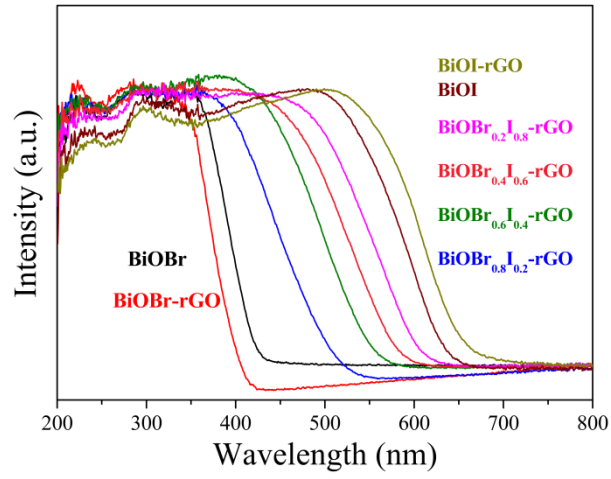


Fig. S1 UV-vis diffuse reflectance spectra of BiOBr_xI_{1-x}-rGO samples, as well as pure BiOBr and BiOI.

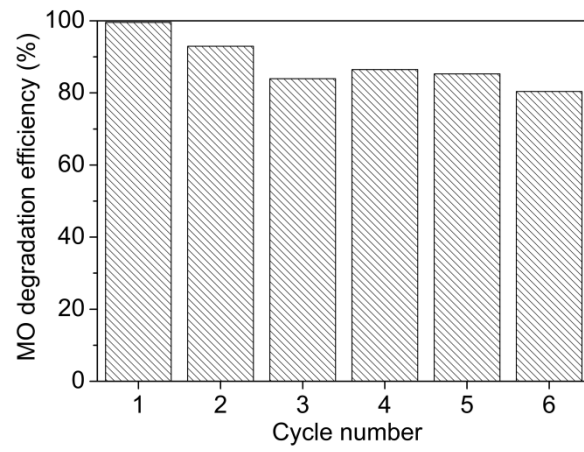


Fig. S2 Cycling runs for the photocatalytic degradation of MO by $\text{BiOBr}_{0.6}\text{I}_{0.4}\text{-rGO}$ sample under visible light irradiation.

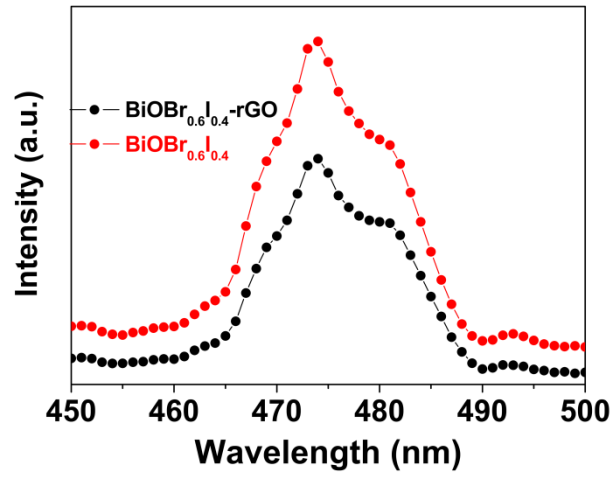


Fig. S3 PL spectra of BiOBr_{0.6}I_{0.4} and BiOBr_{0.6}I_{0.4}-rGO at an excitation wavelength of 325 nm.