

Supporting information

Boosting visible light photo-/Fenton-catalytic synergetic activity of BiOIO₃ by coupling with Fe₂O₃

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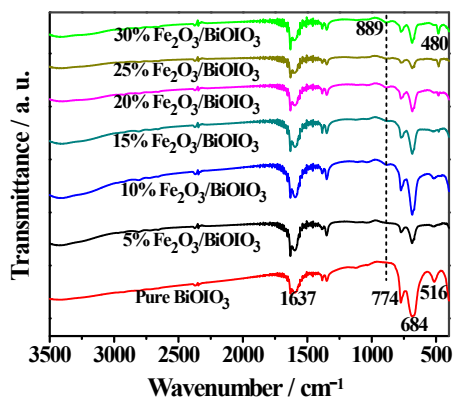


Figure S1. FT-IR spectra of pure BiOIO₃ and x% Fe₂O₃/BiOIO₃.

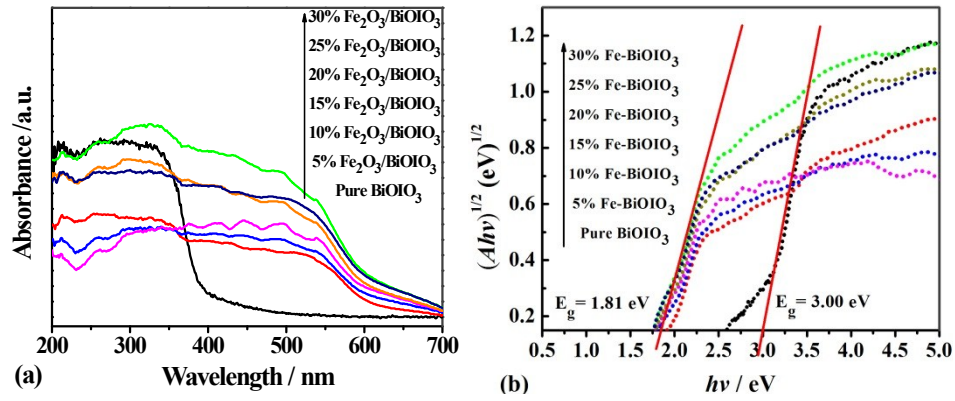


Figure S2. (a) UV-vis absorption spectra and (b) band gaps of pure BiOIO₃ and x% Fe₂O₃/BiOIO₃.

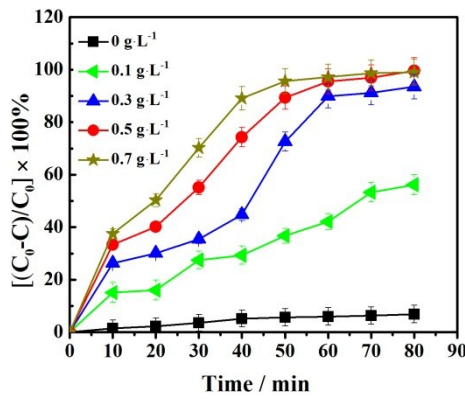


Figure S3. Catalyst dosage

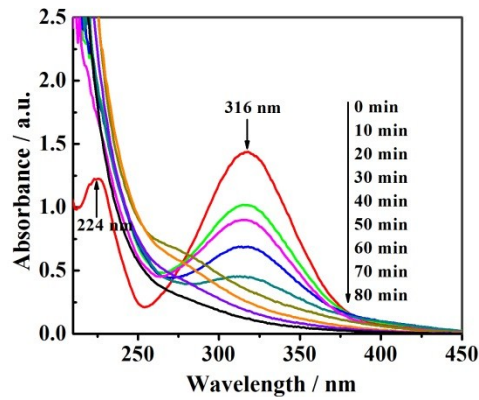


Figure S4. The absorption variation of PNP over the 15% Fe₂O₃/BiOIO₃.

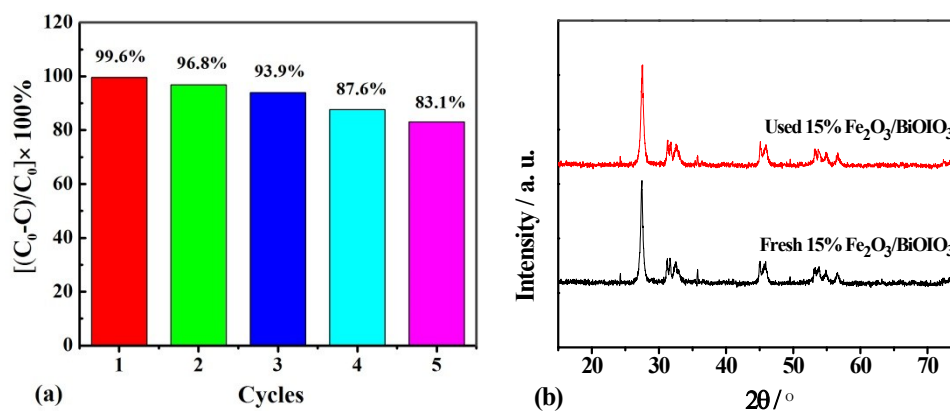


Figure S5. (a) Recycling tests of 15% Fe₂O₃/BiOIO₃ under irradiation and (b) the XRD patterns of 15% Fe₂O₃/BiOIO₃ before and after irradiation.

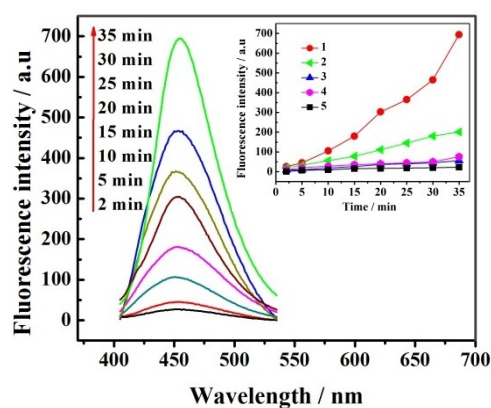


Figure S6. Emission spectra of the solution in 15% Fe₂O₃/BiOIO₃/H₂O₂/coumarin system, the inset shows the reaction time dependence of the emission intensity in the systems of: (1) 15% Fe₂O₃/BiOIO₃/H₂O₂/coumarin, (2) 15% Fe₂O₃/BiOIO₃/H₂O₂/coumarin-in dark, (3) 15% Fe₂O₃/BiOIO₃/coumarin, (4) H₂O₂/coumarin, (5) 15% Fe₂O₃/BiOIO₃/H₂O₂/coumarin-IPA. (Excited at 346 nm, and detected at 456 nm).