

Supplementary Information

Bismuth MOFs derived BiOBr/Bi₂₄O₃₁Br₁₀ heterojunctions with enhanced visible-light photocatalytic performance

Ganghong Huang^{ab}, Zishun Li^{ab}, Kun Liu^{*ab}, Xuekun Tang^{ab}, Jing Huang^{ab} and Guofan Zhang^{*a}

a. School of Minerals Processing and Bioengineering, Central South University, Changsha 410083, China. E-mail: kliu@csu.edu.cn, csuzhangguofan01@163.com

b. Hunan Key Laboratory of Mineral Materials and Application, Central South University, Changsha 410083, China.

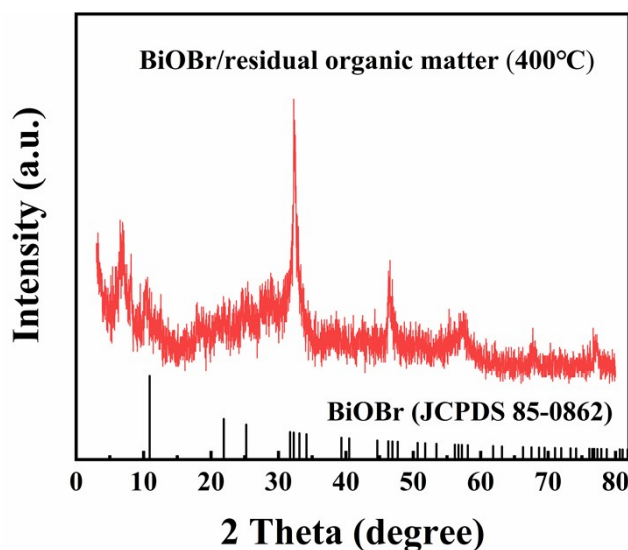


Fig. S1 XRD patterns of 400°C sample

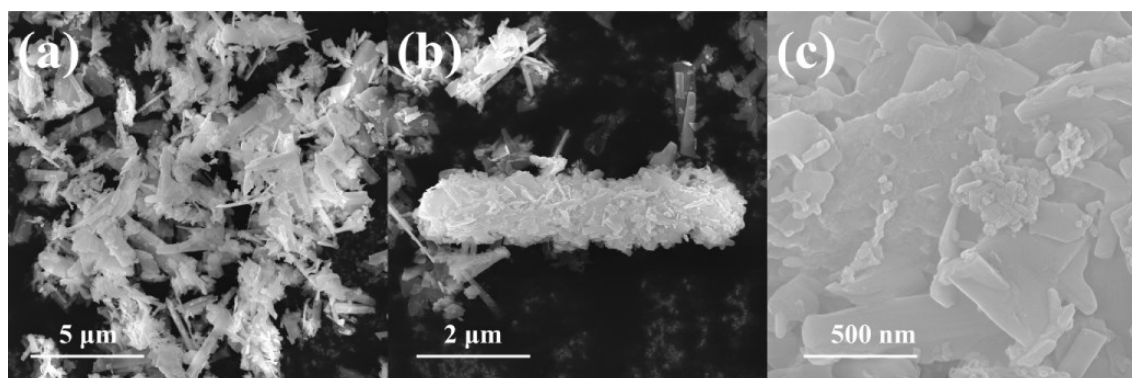


Fig. S2 SEM images of BiOBr/Bi₂₄O₃₁Br₁₀ (500°C)

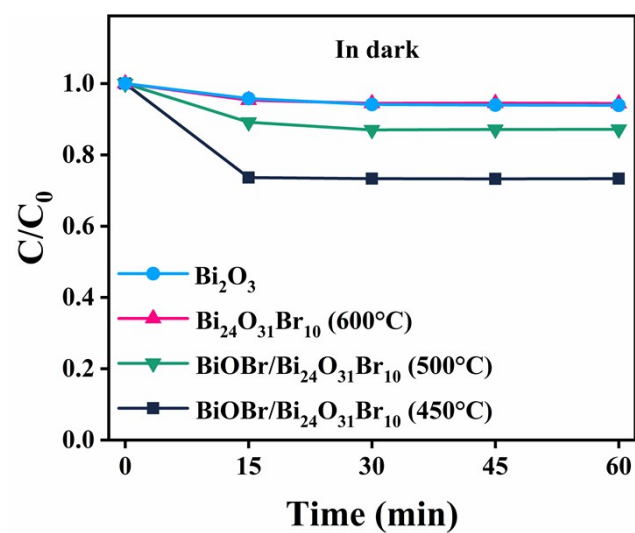


Fig. S3 The adsorption curve of RhB in the dark over different samples.

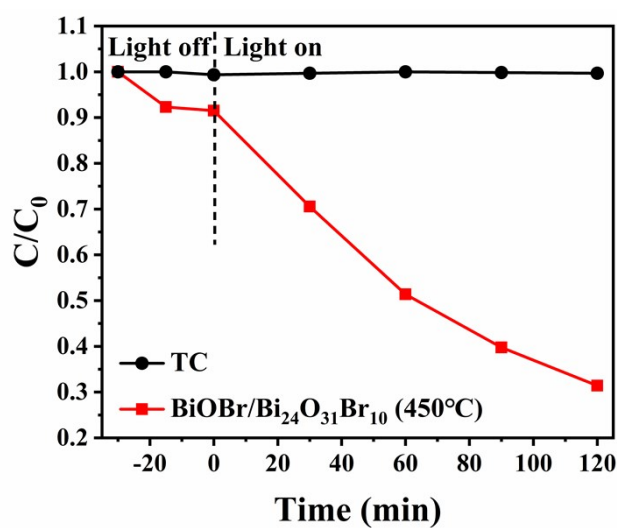


Fig. S4 Photocatalytic degradation of TC (TC: 20 mg/L, catalyst dosage: 50 mg) over $\text{BiOBr/Bi}_{24}\text{O}_{31}\text{Br}_{10}$ (450°C) under visible light.

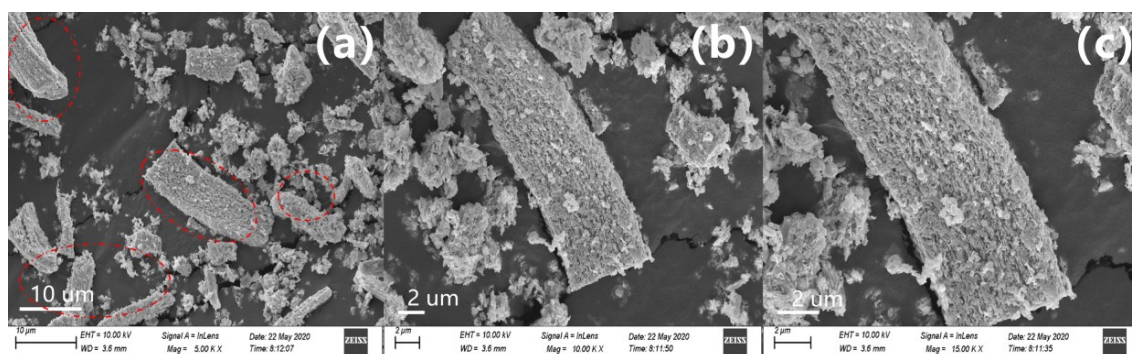


Fig. S5 SEM images of $\text{BiOBr/Bi}_{24}\text{O}_{31}\text{Br}_{10}$ (450°C) after 4 reuse cycles (the magnification of (a, b, c) is 5 KX, 10 KX, and 15KX respectively).

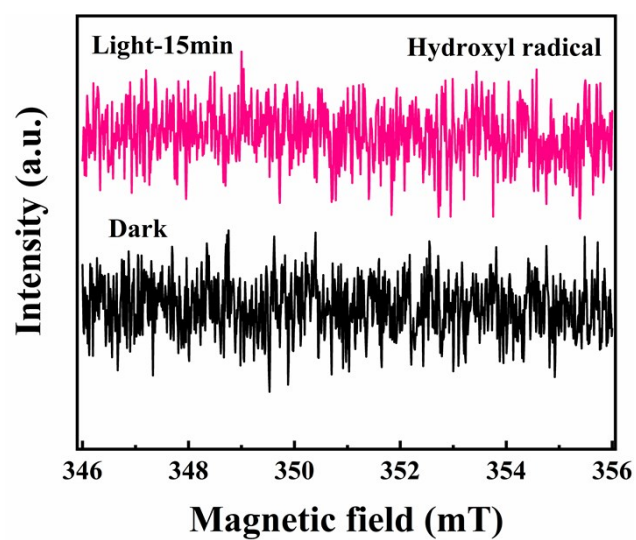


Fig. S6 The ESR spectra of DMPO-•OH adducts over BiOBr/Bi₂₄O₃₁Br₁₀ (450°C) in the dark and under visible-light irradiation.