

Supporting information for

Synthesis of BiOBr/WO₃ *p-n* heterojunction with enhanced visible light photocatalytic activity

Junlei Zhang, Lisha Zhang,* Xiaofeng Shen, Pengfei Xu and Jianshe Liu*

State Environmental Protection Engineering Center for Pollution Treatment and Control in Textile Industry, College of Environmental Science and Engineering, Donghua University, Shanghai 201620, China

*Corresponding authors. E-mail: lszhang@dhu.edu.cn (L.S. Zhang); liujianshe@dhu.edu.cn (J.S. Liu).
Tel.: +86-21-67792548; Fax: +86-21-67792522.

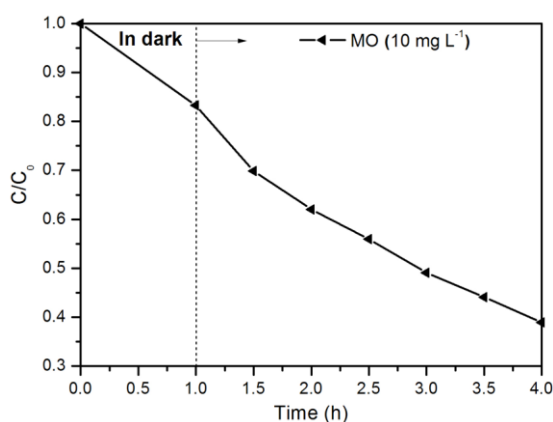


Figure S1 The adsorption and degradation efficiency of MO (10 mg L⁻¹, 50 mL, pH =7.93) in the presence of BiOBr/WO₃-1/1.

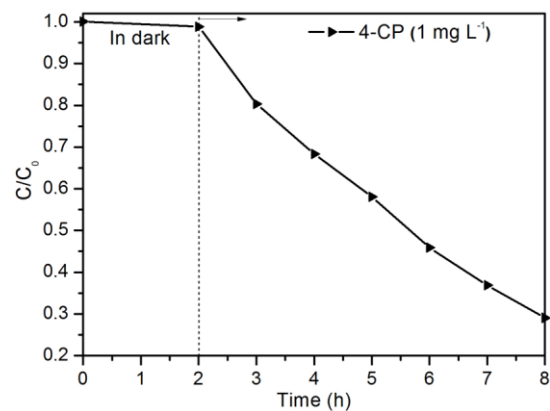


Figure S2 The adsorption and degradation efficiency of 4-CP (1 mg L^{-1} , 50 mL , $\text{pH} = 6.34$) versus the exposure time under visible-light irradiation ($\lambda > 400 \text{ nm}$) in the presence of the BiOBr/WO_3 -1/1 (25 mg).

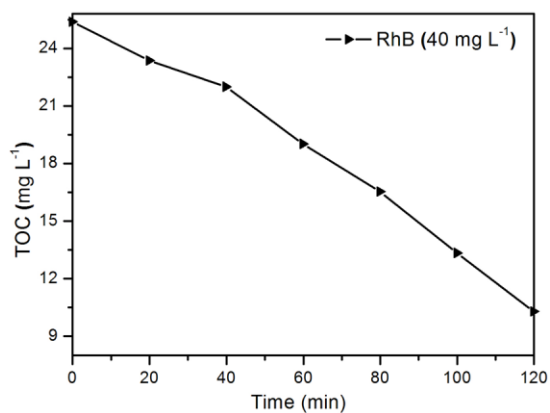


Figure S3 TOC removal during RhB (40 mg L^{-1} , 100 mL) photocatalytic degradation process in the presence of the BiOBr/WO_3 -1/1 (60 mg).

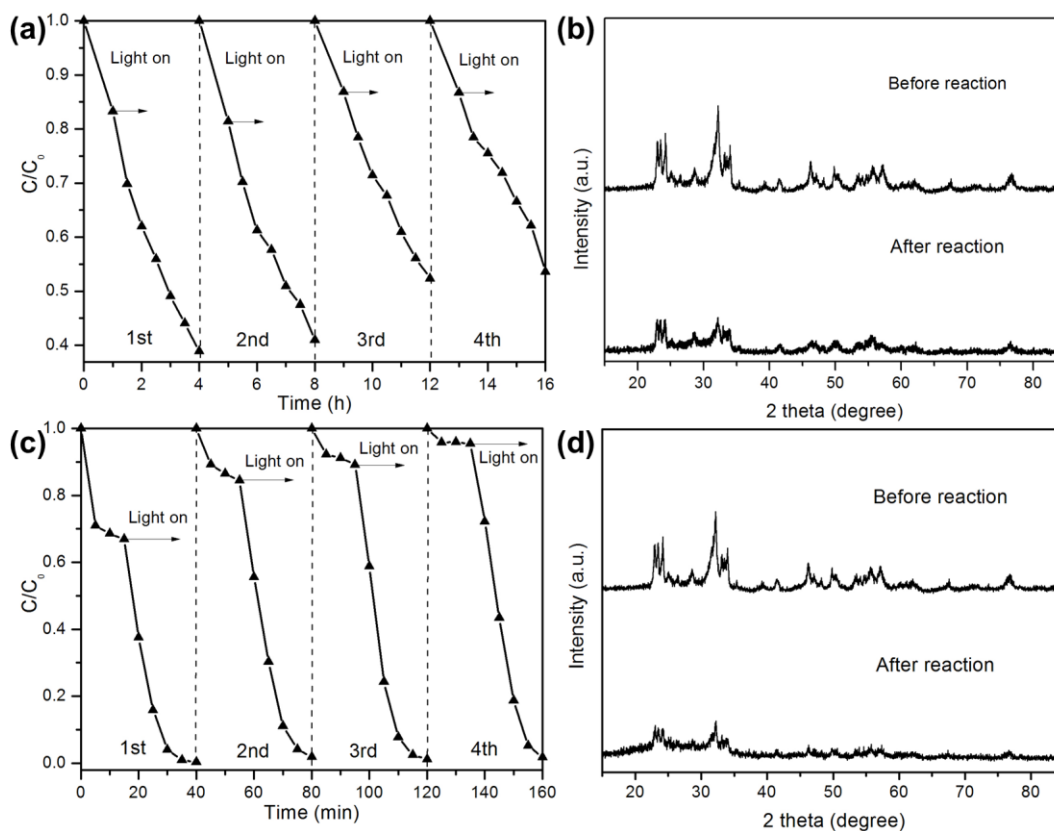


Figure S4 Cycling runs in photocatalytic degradation of (a) RhB and (c) MO over BiOBr/WO₃-1/1, respectively; XRD patterns of BiOBr/WO₃-1/1 before and after photocatalytic reaction of (b) RhB and (d) MO, respectively.

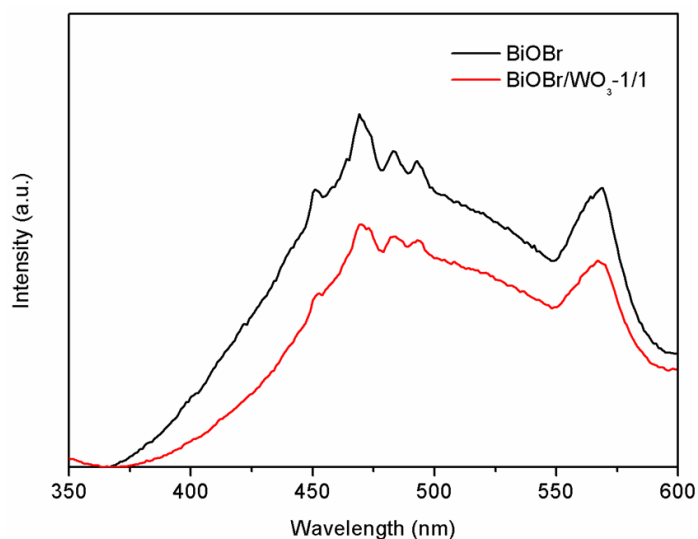


Figure S5 Photoluminescence spectra (PL) of the BiOBr and BiOBr/WO₃-1/1 samples.