

Supporting Information for

Facile synthesis of a direct Z-scheme BiOCl-phosphotungstic acid heterojunction for the improved photodegradation of tetracycline

Haijuan Tong,^a Bingfang Shi,^{a,*} and Shulin Zhao^{b,*}

^a Key Laboratory of Regional Ecological Environment Analysis and Pollution Control of West Guangxi, College of Chemistry and Environmental Engineering, Baise University, Baise 533000, China.

^b State Key Laboratory for the Chemistry and Molecular Engineering of Medicinal Resources, College of Chemistry and Pharmacy, Guangxi Normal University, Guilin 541004, China.

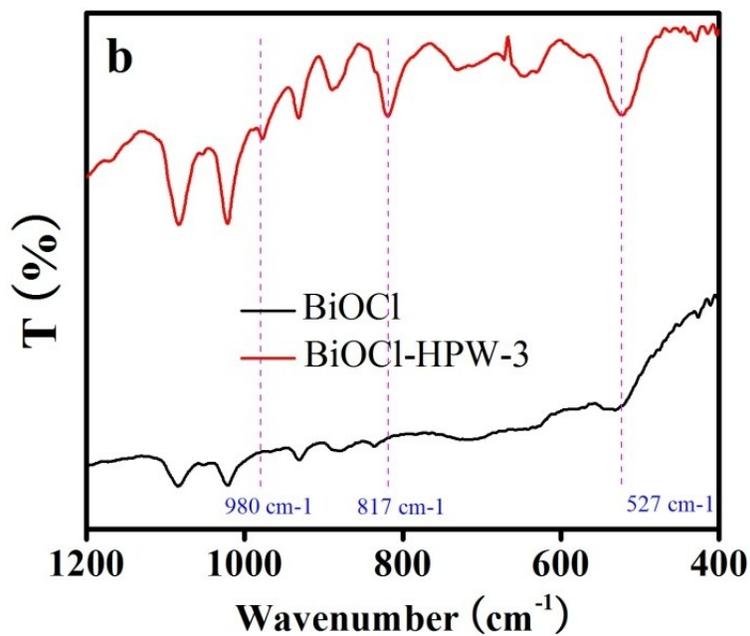
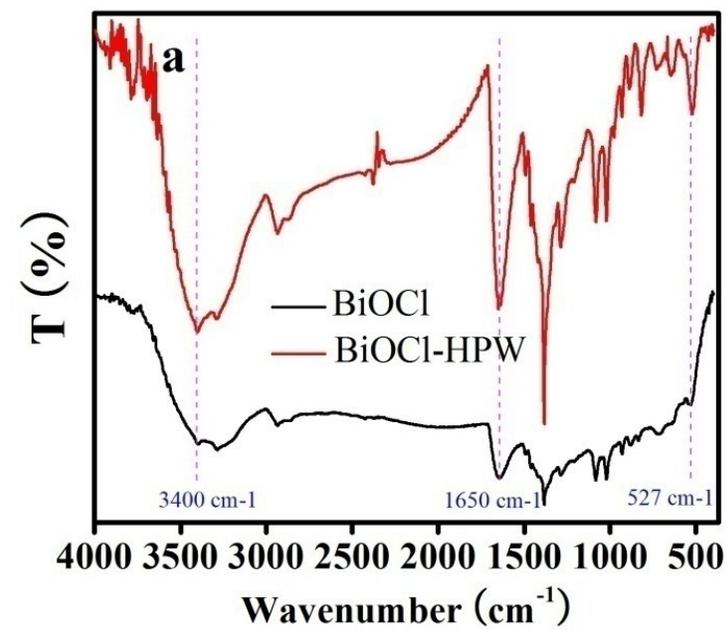


Figure S1 FTIR spectra of as-prepared BiOCl and BiOCl-HPW-3. Wavenumber (cm^{-1}) range: a. 500-4000, b. 400-1200.

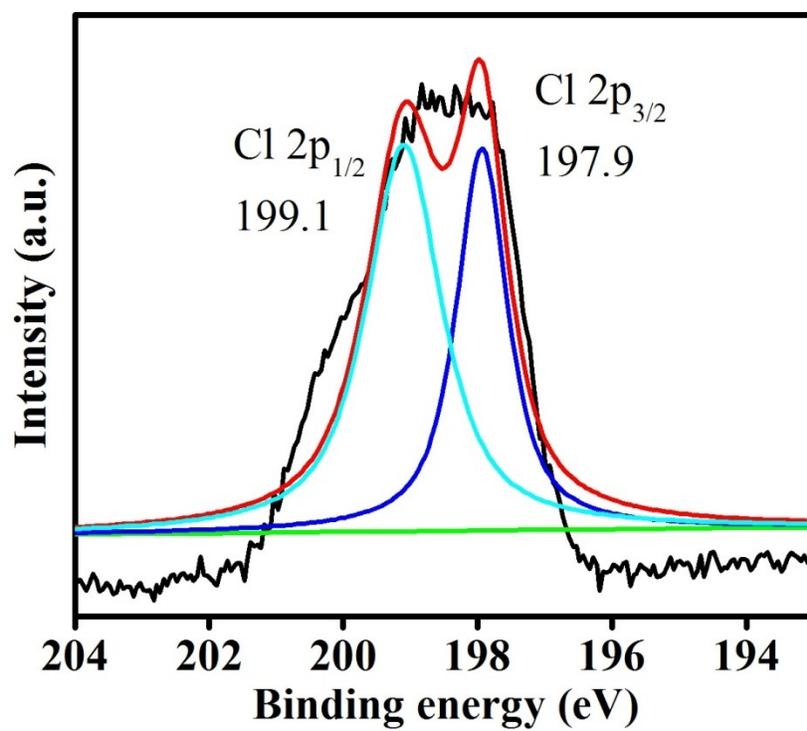


Figure S2 Cl 2p XPS spectra of the as-prepared BiOCl-HPWs.

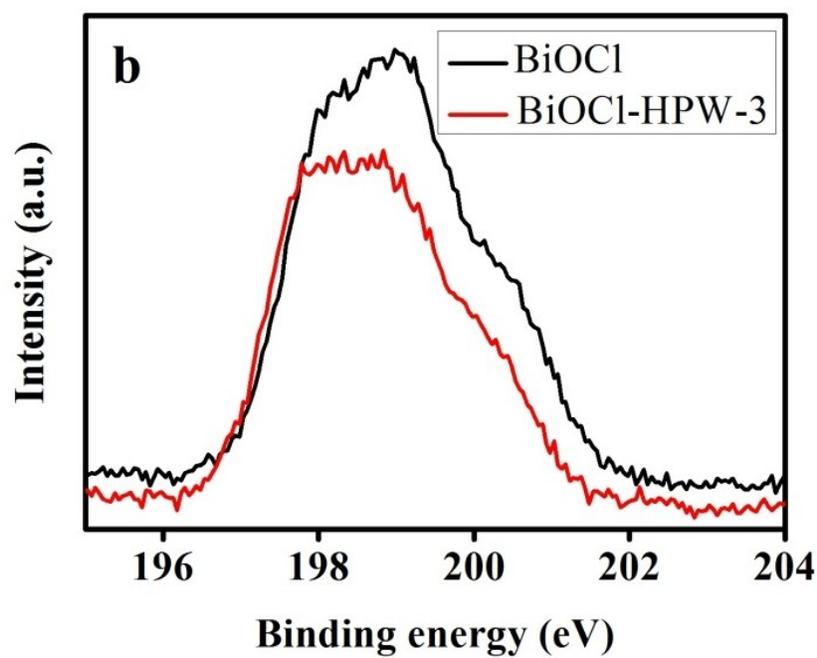
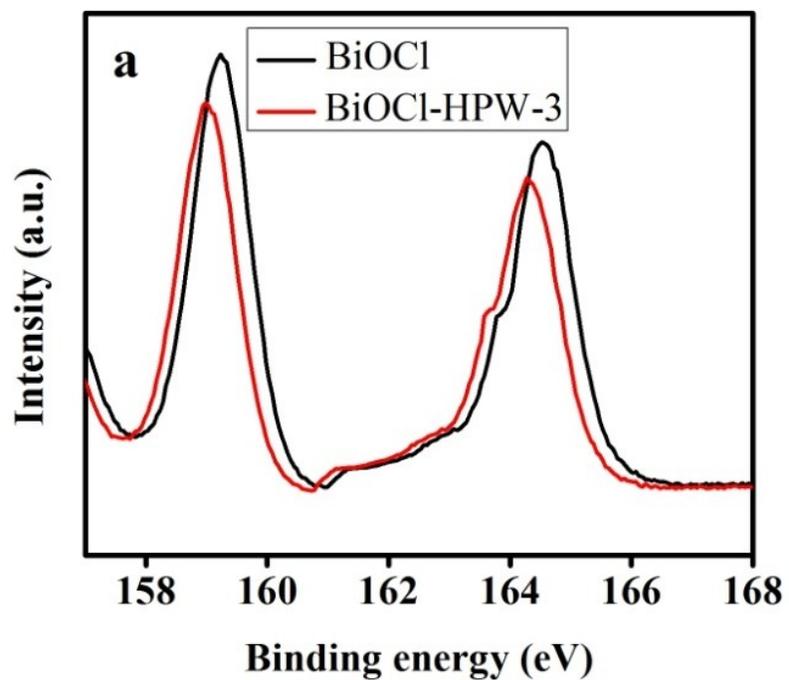


Figure S3. Bi 4f (a) and Cl 2p (b) XPS spectra of the as-prepared BiOCl and BiOCl-HPW-3.

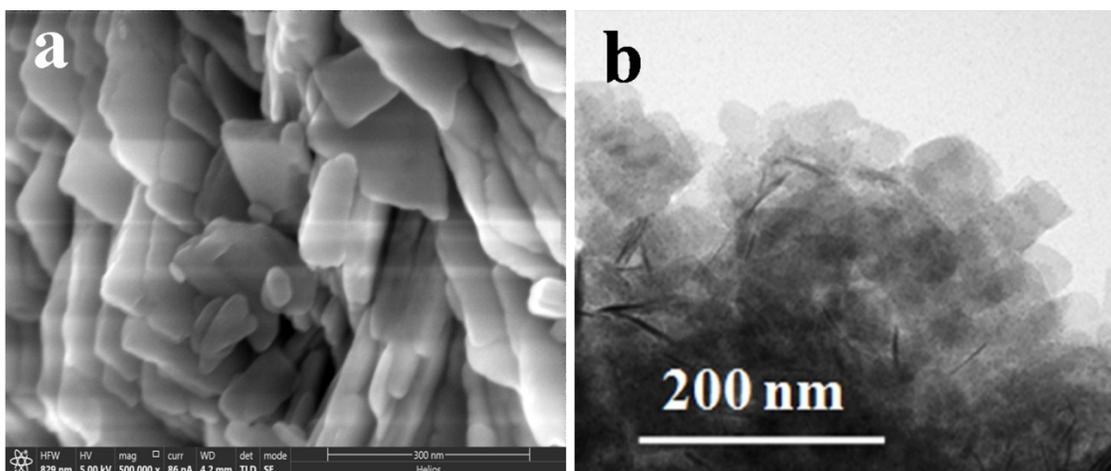


Figure S4. SEM (a) and TEM (b) of as-prepared BiOCl.

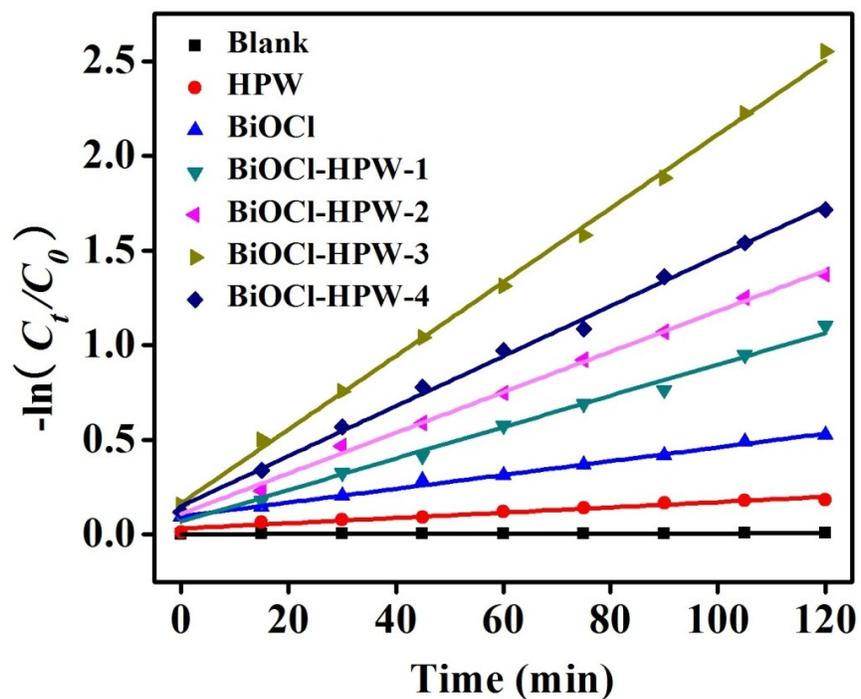


Figure S5. The corresponding kinetic linear simulation curves of photocatalysts.

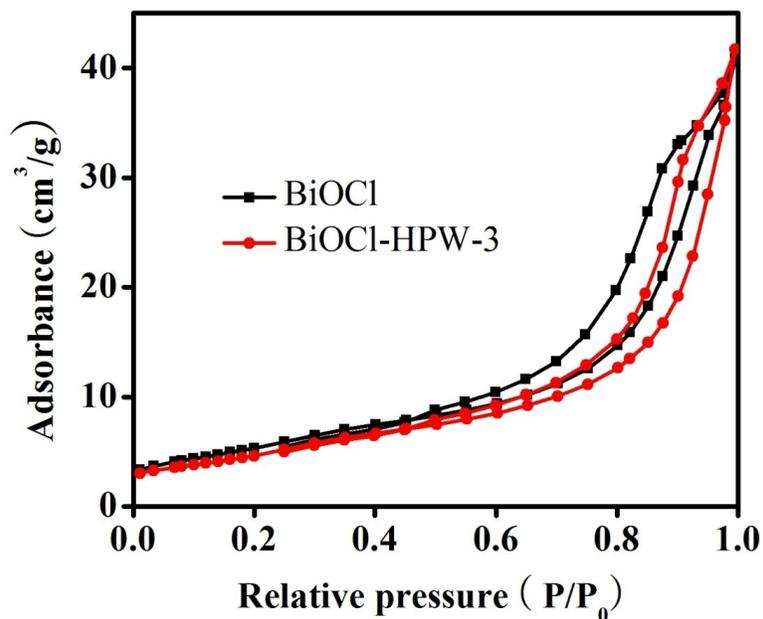


Figure S6. N₂ adsorption-desorption isotherms of as-prepared BiOCl and BiOCl-HPW-3.

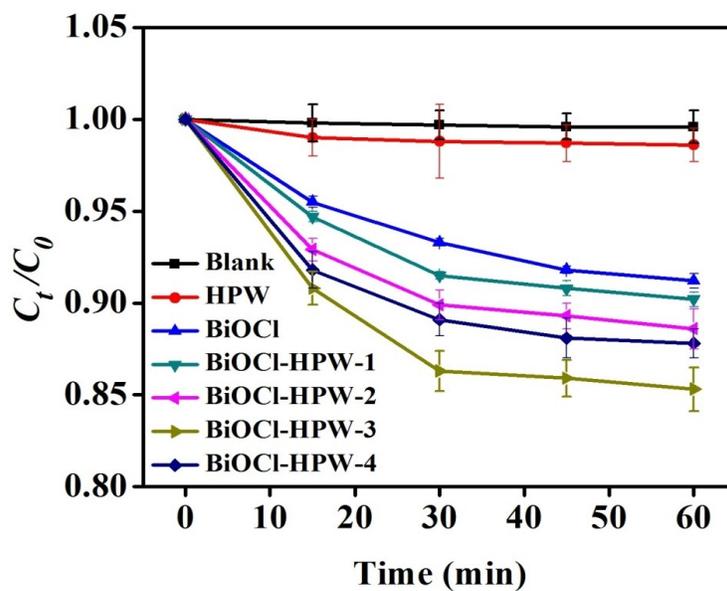


Figure S7. The adsorption of TC on as-prepared BiOCl, HPW and BiOCl-HPWs.

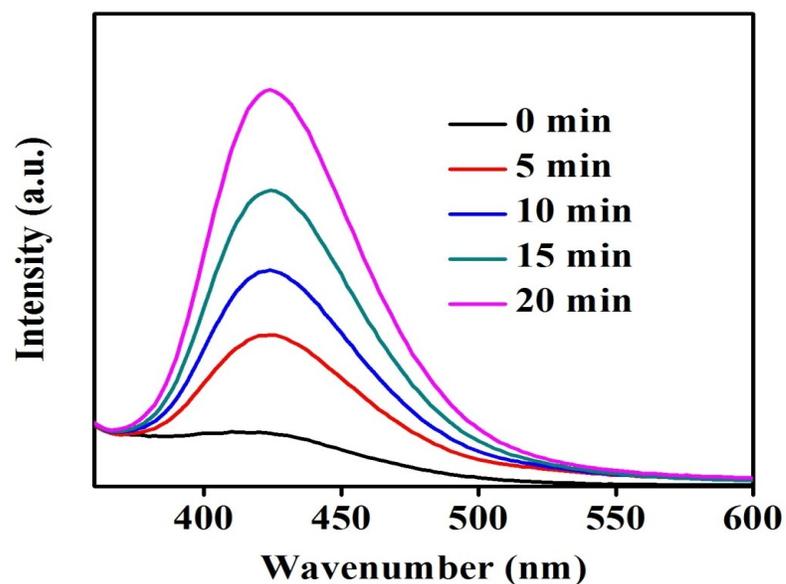


Figure S8. PL spectra of $\cdot\text{OH}$ generated in the BiOCl-HPW-3 aqueous reaction system.

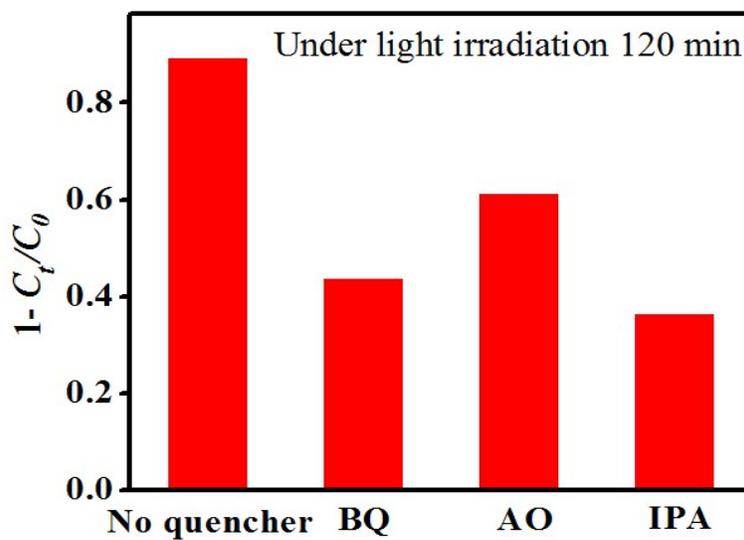


Figure S9. Effects of different scavengers to photocatalytic degradation of TC by BiOCl-HPW-3.