

Supplementary Information

Tunable photocatalytic and photoelectric properties of I-doped BiOBr photocatalyst: dramatic pH effect

Changjiang Bi^a, Jing Cao^{a, b*}, Haili Lin^a, Yunjian Wang^{a, **}, Shifu Chen^{a, c}

^a College of Chemistry and Materials Science, Huaibei Normal University, Huaibei, 235000, Anhui, PR China

^b Anhui Collaborative Innovation Center of Advanced Functional Composite, Huaibei, 235000, Anhui, PR China

^c College of Chemistry and Materials Engineering, Anhui Science and Technology University, Fengyang, 233100, Anhui, PR China

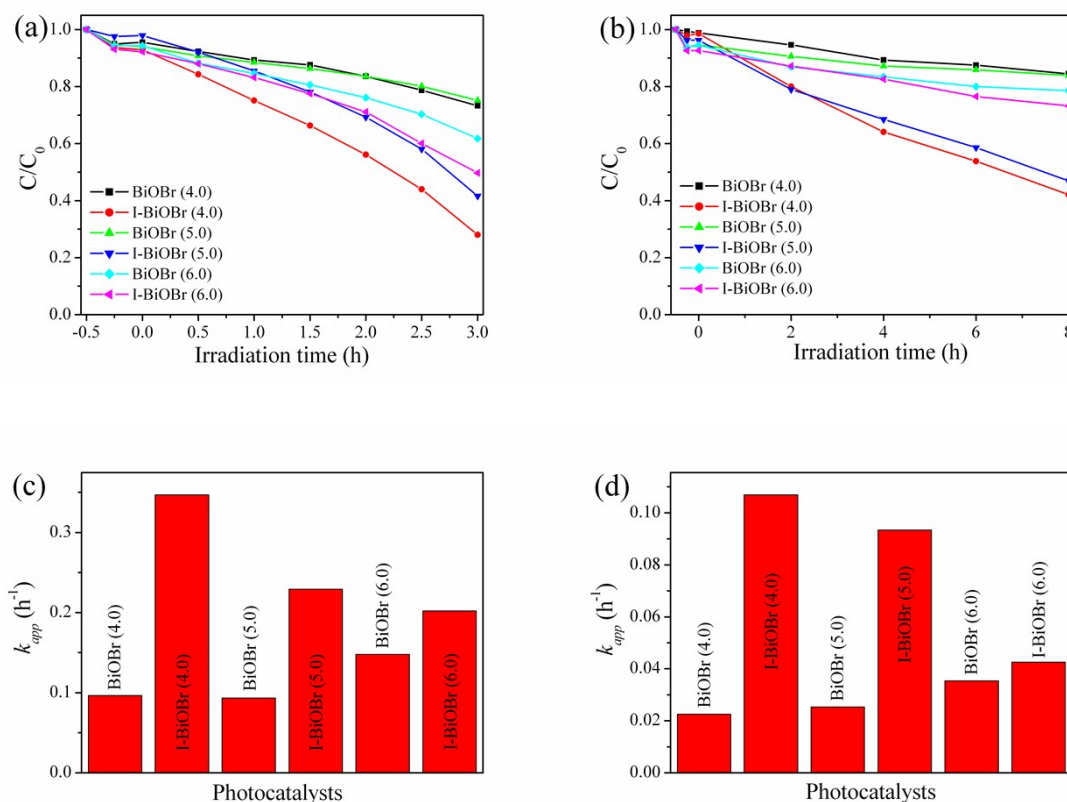


Fig. S1. Photocatalytic elimination of (a) MO and (b) phenol over different BiOBr and I-BiOBr samples prepared at different pH values (4.0-6.0) under visible light ($\lambda > 400$ nm). Effects of synthesis pH values on the k_{app} values in the degradation process of (c) MO and (d) phenol.

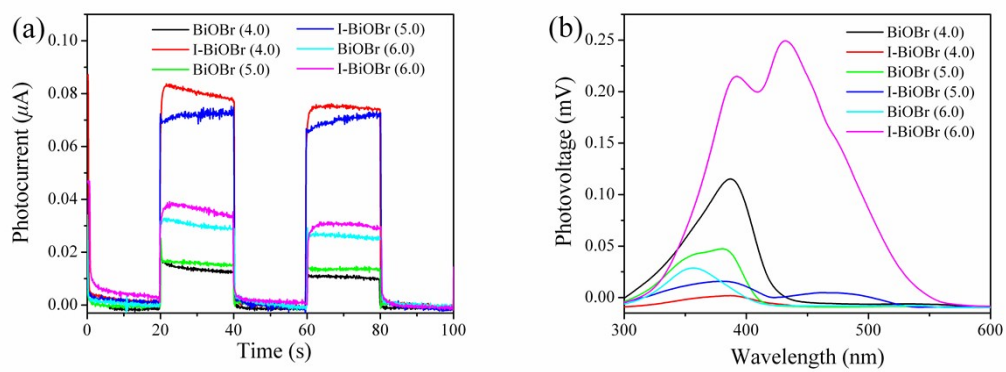


Fig. S2. (a) Transient photocurrent of the samples prepared at different pH values (4.0-6.0) under visible light ($\lambda > 400$ nm) and (b) surface photovoltage properties.