Supplementary Information

Controllable Synthesis of $Bi_4O_5Br_2$ Ultrathin Nanosheets for Photocatalytic Removal of Ciprofloxacin and Mechanism Insight

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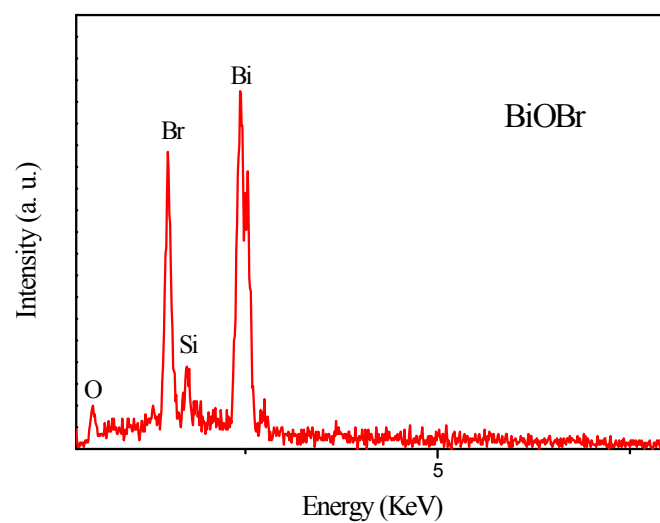
E-mail address: xjx@ujs.edu.cn; lhm@ujs.edu.cn

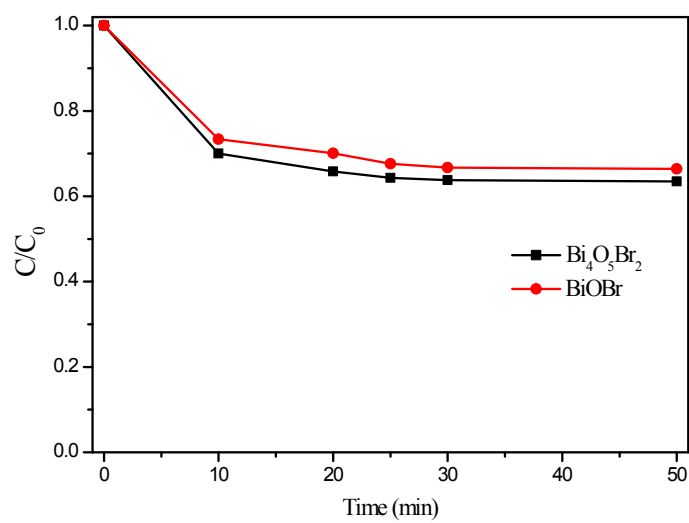**Figure S1.** EDS analysis of the as-prepared BiOBr materials.

Figure S2 Time profiles of adsorption of CIP over $Bi_4O_5Br_2$ and BiOBr materials.
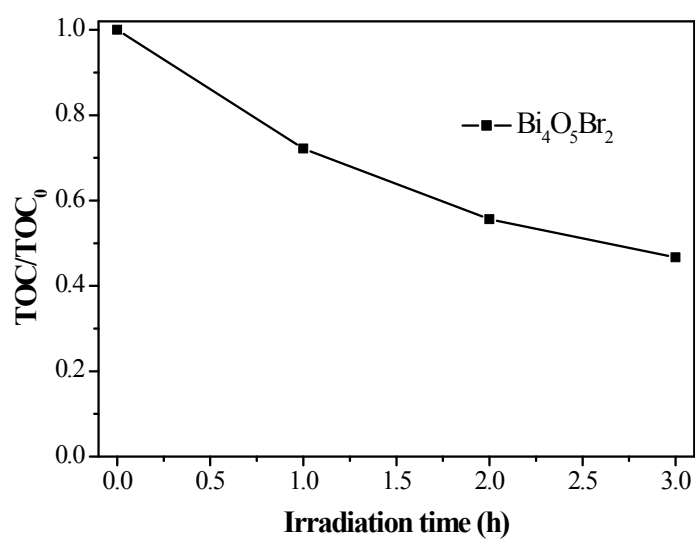
Figure S3 The decrease of TOC during photocatalytic degradation of CIP on $Bi_4O_5Br_2$ ultrathin nanosheets under visible light irradiation.
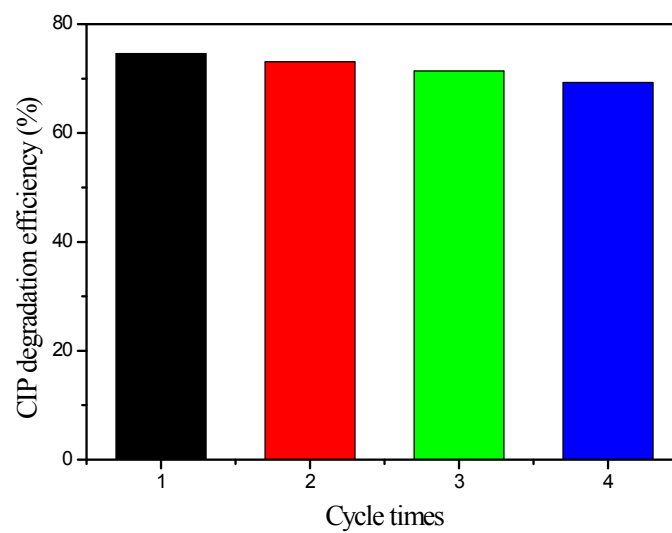

Figure S4 Cycling runs for the photodegradation of CIP in the presence of $Bi_4O_5Br_2$ ultrathin nanosheets under visible light irradiation.
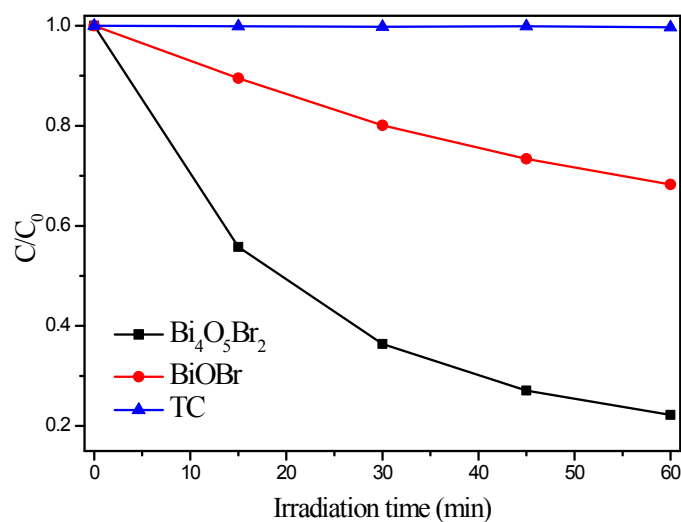
Figure S5 Photocatalytic degradation of TC in the presence of $Bi_4O_5Br_2$ ultrathin nanosheets and BiOBr materials under visible light irradiation.

Table S1 Pseudo-first-order rate constant for CIP photocatalytic oxidation under different photocatalysts

Series	Photocatalyst	The first order kinetic equation	k (min^{-1})	R^2
1	BiOBr	$-\ln(C/C_0) = 0.0059t$	0.0059	0.9998
2	$Bi_4O_5Br_2$	$-\ln(C/C_0) = 0.0113t$	0.0113	0.9993