

## Supporting Information

### Structural engineering of ultrathin BiOBr nanosheets for boosted photodegradation performance toward Rhodamine B

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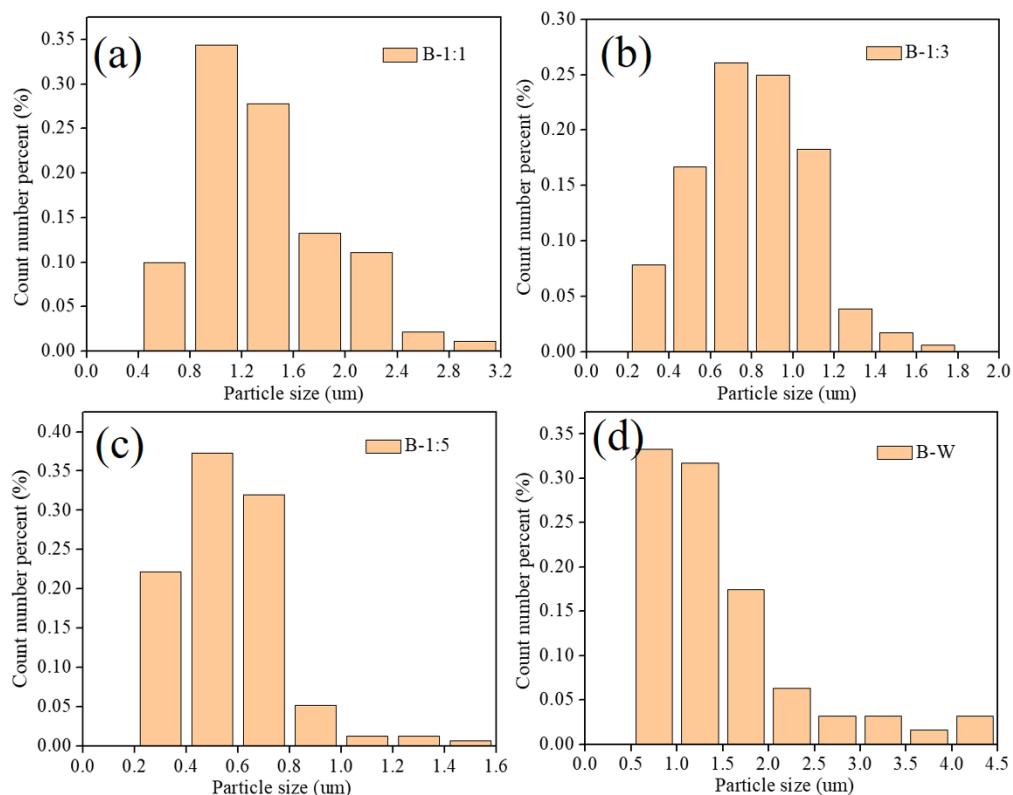


Fig. S1. The particle size distribution of the as-prepared BiOBr samples.

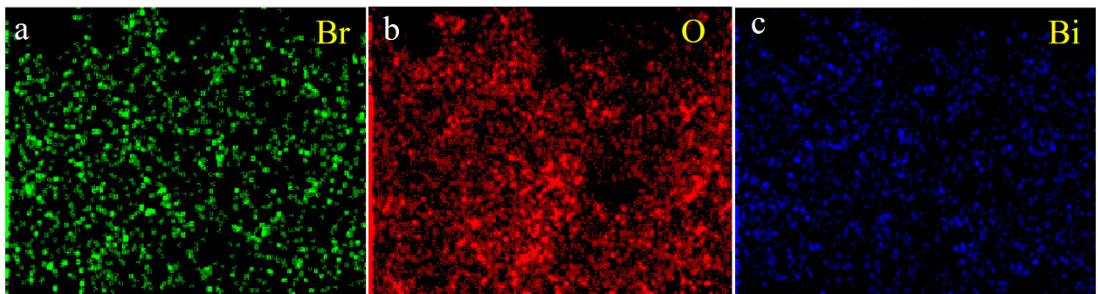


Fig. S2 EDS elemental mapping of different elements in B-1:3 sample.

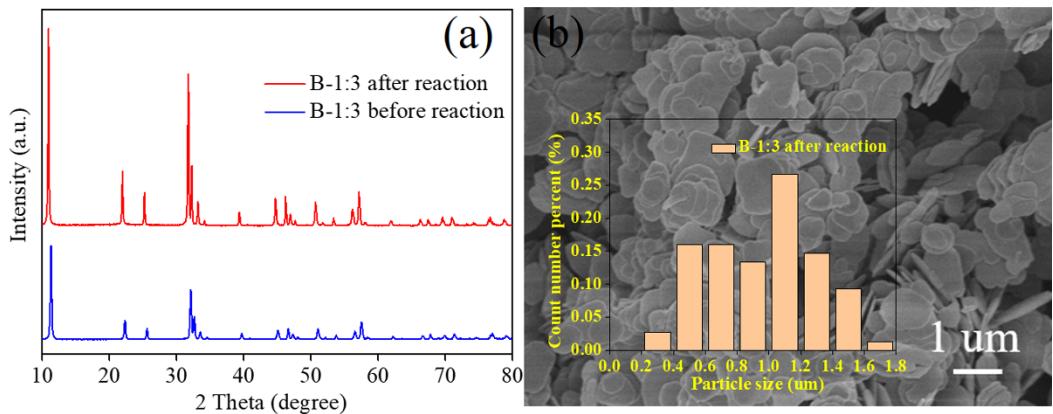


Fig. S3 The XRD patterns of B-1:3 before and after reaction (a), the SEM image (b) and particle size distribution (inserted in Fig. S3b) of B-1:3 after reaction.

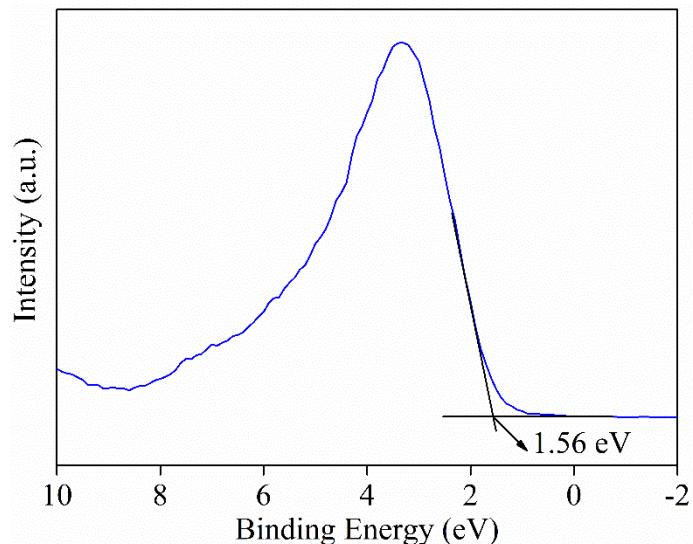


Fig. S4 The valence band XPS spectrum for B-1:3.

Table S1 The photoactivity comparisons toward RhB about BiOBr and BiOBr-based photocatalysts

Catalysts	Light source	Concentration (mg/L)	Volume (mL)	Quality (mg)	Irradiation time (min)	Degradation rate (%)	Ref.
7%BiSbO <sub>4</sub> /	Visible	10	100	30	45	96	[1]

BiOBr	light							
BiOBr/BiO Ac <sub>1-0.8</sub> Br <sub>0.8</sub>	Visible light	20	50	20	120	99.4		[2]
BiOBr <sub>x</sub> I <sub>1-x</sub> / BiOBr	Visible light	20	100	50	120	80		[3]
BiOBr/Bi <sub>24</sub> O <sub>31</sub> Br <sub>10</sub>	Visible light	10	100	50	60	92.4		[4]
Bi@BiOBr	Visible light	10	50	10	120	98.2		[5]
S-doped BiOBr	Visible light	20	100	50	50	100		[6]
BiOBr	Visible light	20	100	40	30	97		This work

## References

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