Supplementary material

(001)-TiO_2 nanosheets loaded on BiOI improve carrier separation and enhance the photocatalytic activity

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This supporting information contains the following information:

Fig. S1 TIC images of RhB after degradation reaction.

Table. S1 Summary of the results for various photocatalysts based on TiO_2 for degradations of RhB.

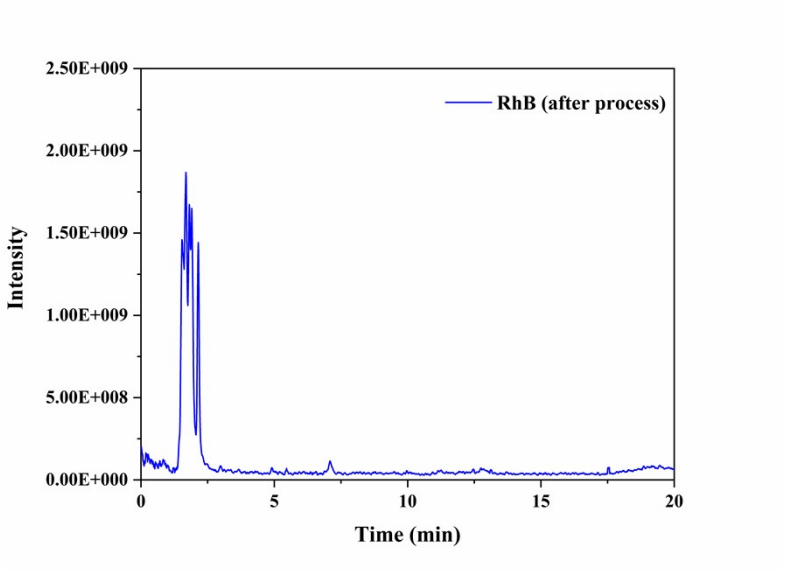

Fig. S1 TIC images of RhB after degradation reaction.

Table. S1

Summary of the results for various photocatalysts based on TiO_2 for degradations of RhB.

Photocatalyst	Light source	Experimental conditions	Degradation efficiency	Ref.
(001)-TiO_2/BiOI	300W Xe-lamp	Catalyst = 50 mg [RhB] = 10 mg L 1	95% in 60 min	This work
Ag@AgI/TiO_2	Xe 1000 W	Catalyst = 50 mg [RhB] = 10 mg 1	91% in 90 min	[S1]
Fe_2O_3/TiO_2/Graphene oxide	Wolfram 300 W	Catalyst = 20 mg [RhB] = 10 mg 1	92.98% in 80 min	[S2]
TiO_2 NTs/BiOI	500W Xe-lamp	Catalyst = 50 mg [RhB] = 10 mg L 1	62% in 180 min	[S3]
Bi/Bi_2MoO_6/TiO_2NTs	500W Xe-lamp	Catalyst = 20 mg [RhB] = 10 mg L 1	73.21% in 120 min	[S4]

References

S1. W. Liu, C. Wei, G. Wang, X. Cao, Y. Tan and S. Hu, *Ceramics International*, 2019, **45**, 17884-17889.

S2. Y. P. Putra, S. Wahyuningsih, A. H. Ramelan and R. Hidayat, *Materials Research Express*, 2019, **6**.

S3. Z. Liu, Q. Wang, X. Tan, Y. Wang, R. Jin and S. Gao, *Separation and Purification Technology*, 2019, **215**, 565-572.

S4. D. Cao, Q. Wang, Y. Wu, S. Zhu, Y. Jia and R. Wang, *Separation and Purification Technology*, 2020, **250**.