Electronic supplementary information (ESI)

Ultrasound-assisted synthesis rGO/$Sb_4O_5Cl_2$/Sb_2S_3 for high photo-catalytic rate

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The doses of catalysts, the concentrations of dyes and the catalysis procedure durations from the papers already published are listed in Table S1, Ref S1-S5, it can be clearly seen that the dose of as-prepared 30rGO-$Sb_4O_5Cl_2$-Sb_2S_3 was the smallest, while the concentration of dye degraded was the highest and the catalysis duration was the shortest. In the present work, the catalyst dose was merely one-tenth of the other reports, and the duration was about one-fifth.

Table S1 The comparisons of different photo-catalysts for MO dye degradation under visible-light irradiation.

Reference					
	S^1	S^2	S^3	S^4	S^5	This work
g-C_3N_4-$Sb_4O_5Cl_2$-Sb_2S_3	20	15	10	20	0.1
$Sb_4O_5Cl_2$-Sb_2S_3	1	1	1	0.1	
Carbon-Sb_2S_3	60	60	90	16	
30rGO-$Sb_4O_5Cl_2$-Sb_2S_3	95.0	82.9	98.0	87.4	

References

S1 F. Li, L. Zhang, C. Hu, X. Xing, B. Yan, Y. Gao and L. Zhou, *Applied Catalysis B: Environmental*, 2019, **240**, 132-140.

S2 H. Wang, X. Yuan, H. Wang, X. Chen, Z. Wu, L. Jiang, W. Xiong and G. Zeng, *Applied Catalysis B: Environmental*, 2016, **193**, 36-46.

S3 Y. Liu, X. Yuan, H. Wang, X. Chen, S. Gu, Q. Jiang, Z. Wu, L. Jiang, Y. Wu and G. Zeng, *Catalysis Communications*, 2015, **70**, 17-20.

S4 Q. Jiang, X. Yuan, H. Wang, X. Chen, S. Gu, Y. Liu, Z. Wu and G. Zeng, *RSC Advances*, 2015, **5**, 53019-53024.

S5 J. Tang, J. Li, Y. Cheng, P. Huang and Q. Deng, *Vacuum*, 2015, **120**, 96-100.