

Supplementary Materials

Construction of $g\text{-C}_3\text{N}_4\text{-}m\text{Nb}_2\text{O}_5$ Composites with Enhanced Visible Light Photocatalytic Activity

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Table S1. The elements content of 4% $g\text{-C}_3\text{N}_4\text{-}m\text{Nb}_2\text{O}_5$ by EDS analysis.

Element	Peak Area	Area Sigma	k Factor	Weight %	Weight% Sigma	Atomic %
C K	1607	113	2.208	43.54	2.20	72.06
N K	127	63	2.965	4.61	2.21	6.54
O K	313	41	1.810	6.95	0.90	8.64
Cu K	1896	71	1.366	31.79	1.56	9.95
Nb K	384	43	2.779	13.11	1.40	2.81
Totals				100.00		

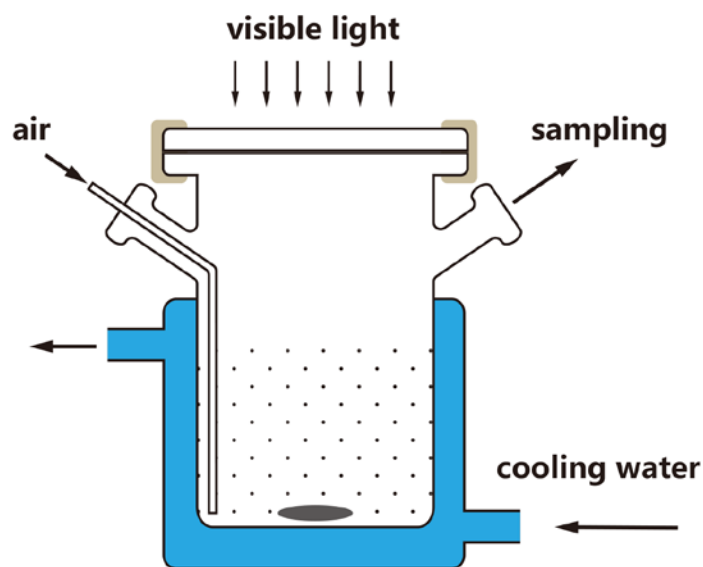


Figure S1. A schematic diagram of photocatalytic equipment.

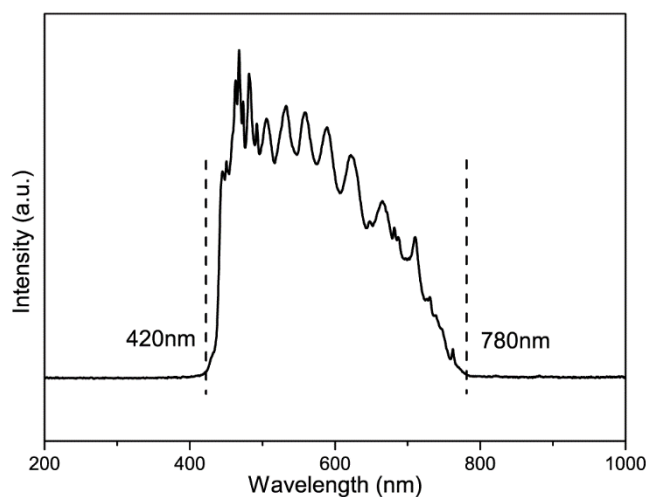


Figure S2. Emission spectrum of Xe lamp with 420 nm filter.

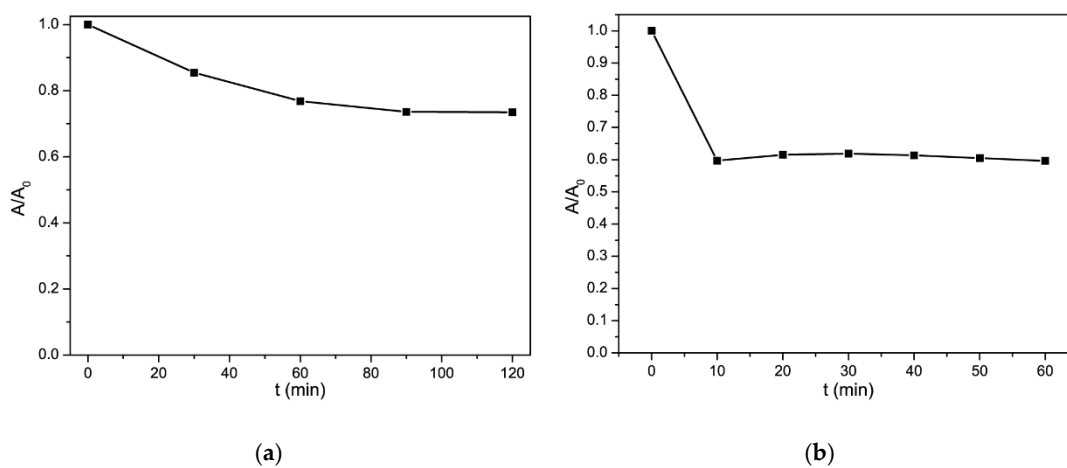


Figure S3. Influence of adsorption process on: (a) RhB solution (15 mg/L, 70 mL); and (b) TC-HCl solution (40 mg/L, 100 mL) containing 30 mg 4% g-C₃N₄-mNb₂O₅ powder under dark.

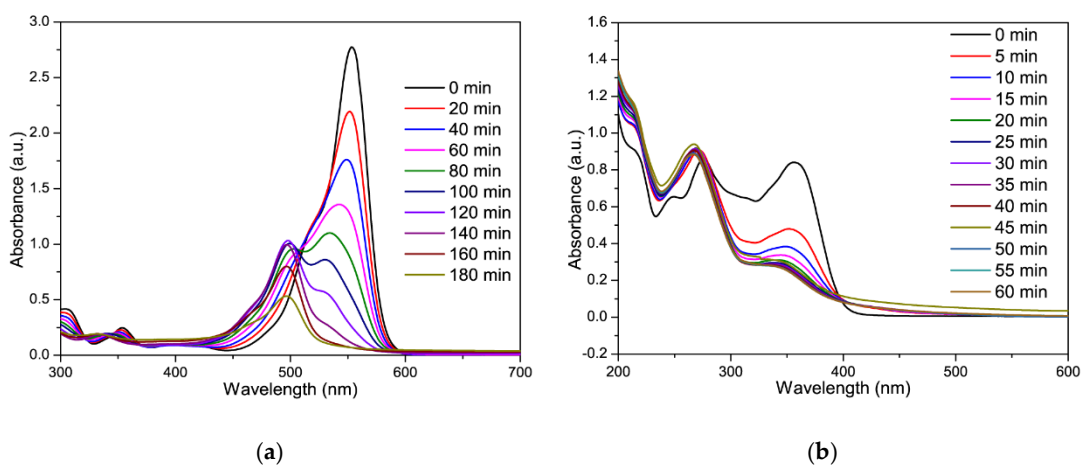
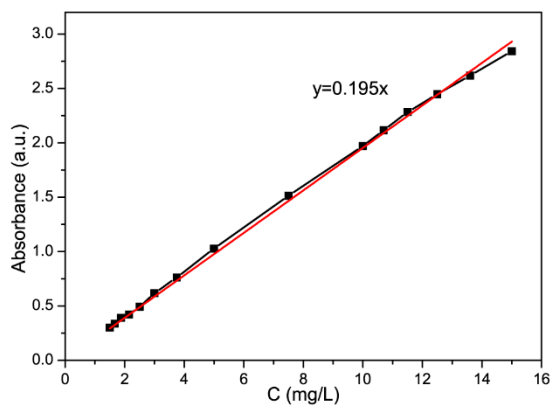
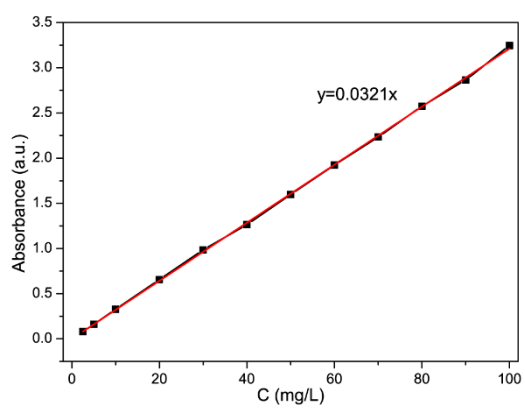


Figure S4. Absorption changes of: (a) RhB solution (15 mg/L, 70 mL); and (b) TC-HCl solution (40 mg/L, 100 mL) containing 30 mg 4% g-C₃N₄-mNb₂O₅ powder under visible light irradiation.



(a)



(b)

Figure S5. Standard curves of absorbance intensity vs. concentration of: (a) RhB solution; and (b) TC-HCl solution.