

Supplementary Information

A Facile Method of Activating Graphitic Carbon Nitride for Enhanced Photocatalytic Activity

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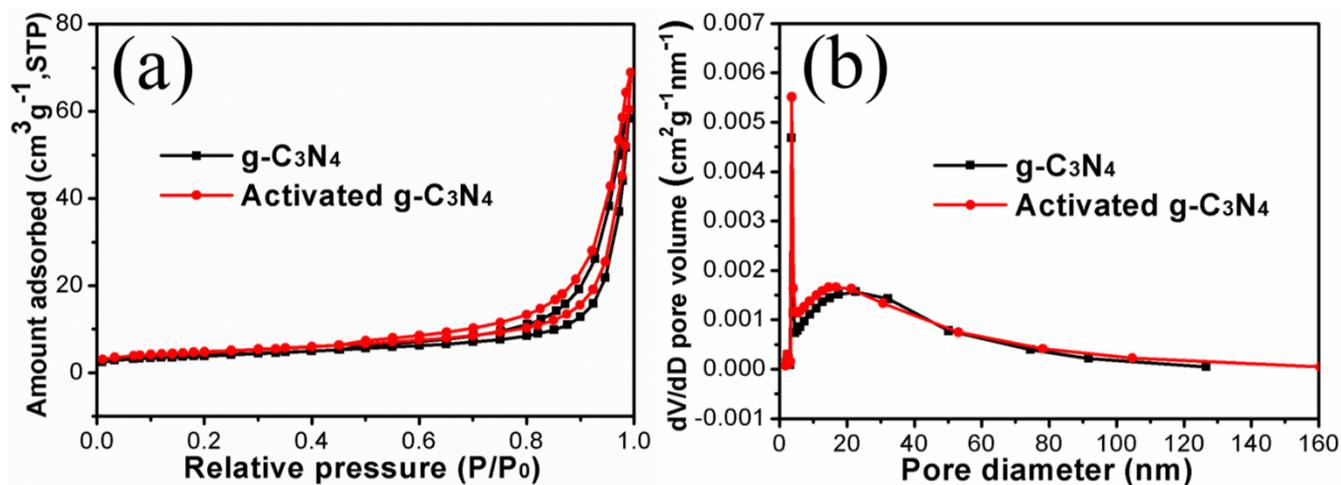


Figure S1. (a) N₂ adsorption–desorption isotherms and (b) pore size distributions of g-C₃N₄ and activated g-C₃N₄.

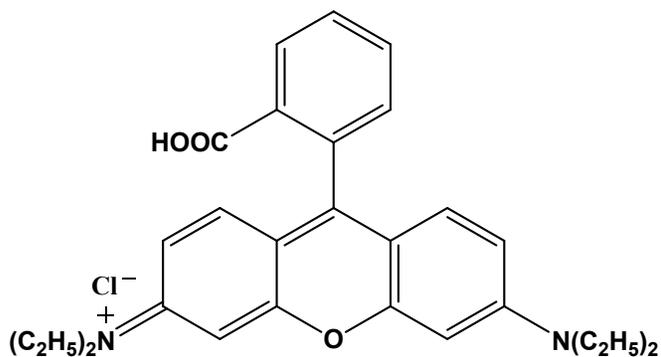


Figure S2. Molecular formula of Rhodamine B.

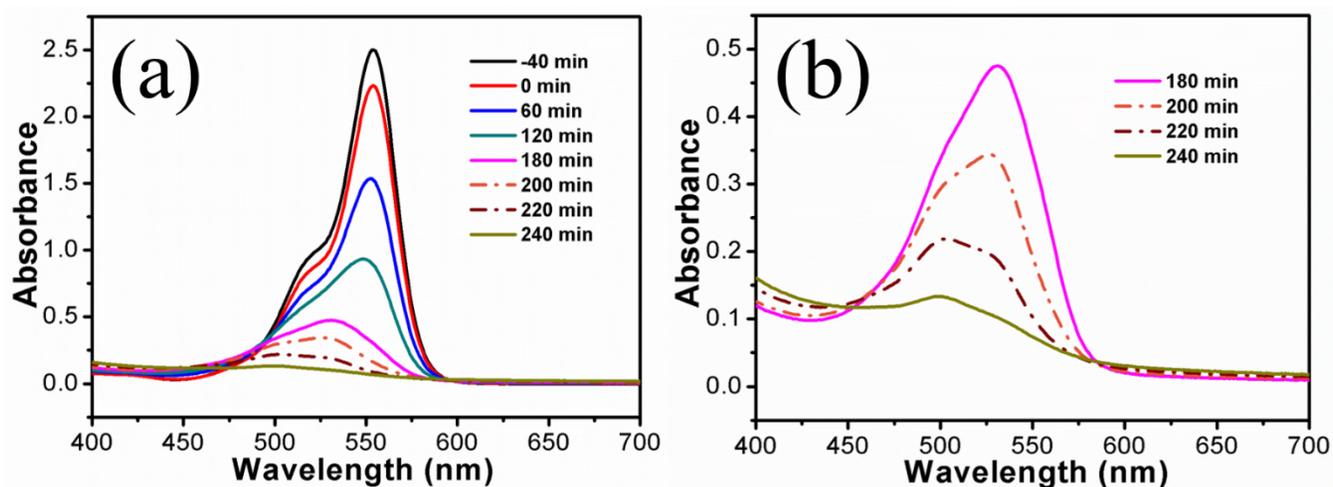


Figure S3. Temporal UV-visible adsorption spectral changes for the RhB solution during the photocatalytic degradation reactions of g-C₃N₄ during (a) -40-240 min and (b) 180-240 min.

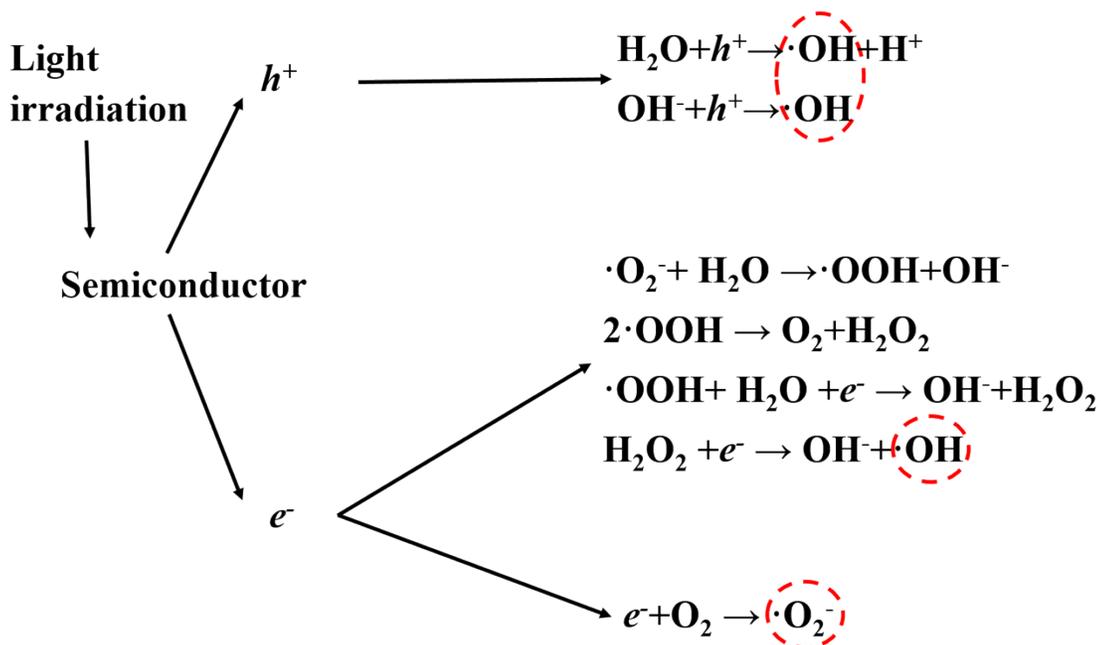


Figure S4. Summary of photocatalytic mechanism.

Table S1. Commonly used scavengers for different species.

Species	Commonly used scavengers
h^+	Triethanolamine (TEOA), Ammonium oxalate, EDTA-Na
e^-	Dimethyl sulfoxide (DMSO)
$\cdot\text{OH}$ radical	Isopropanol, n-butyl alcohol
$\cdot\text{O}_2^-$ radical	Nitrogen (N_2), Benzoquinone

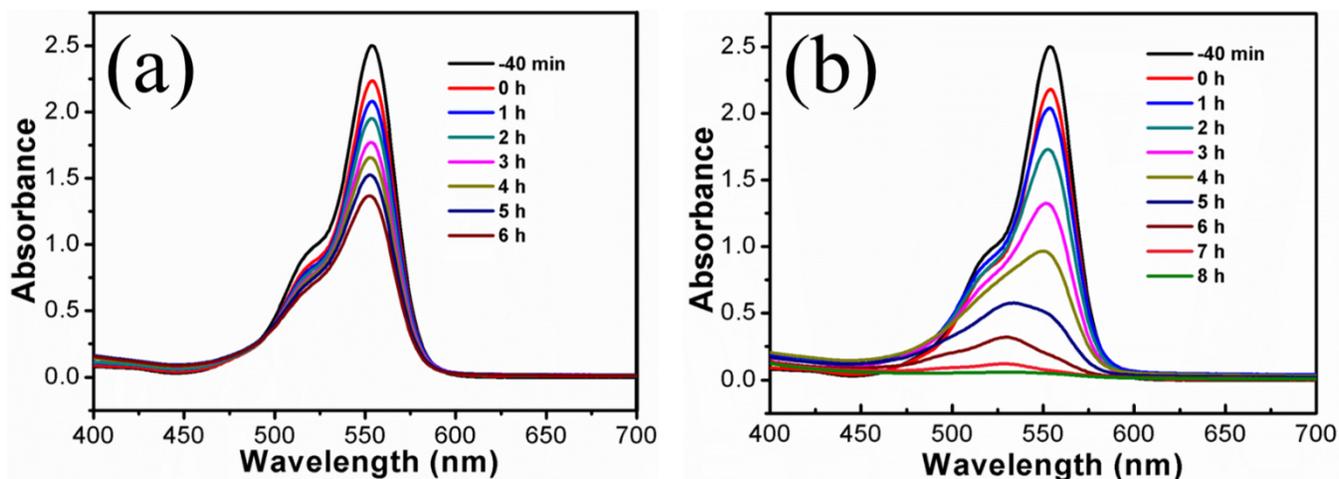


Figure S5. Temporal UV-visible adsorption spectral changes for the RhB solution during the photocatalytic degradation reactions via the activated $\text{g-C}_3\text{N}_4$ including (a) 2 mmol of TEOA (b) 0.5 mmol of TEOA.

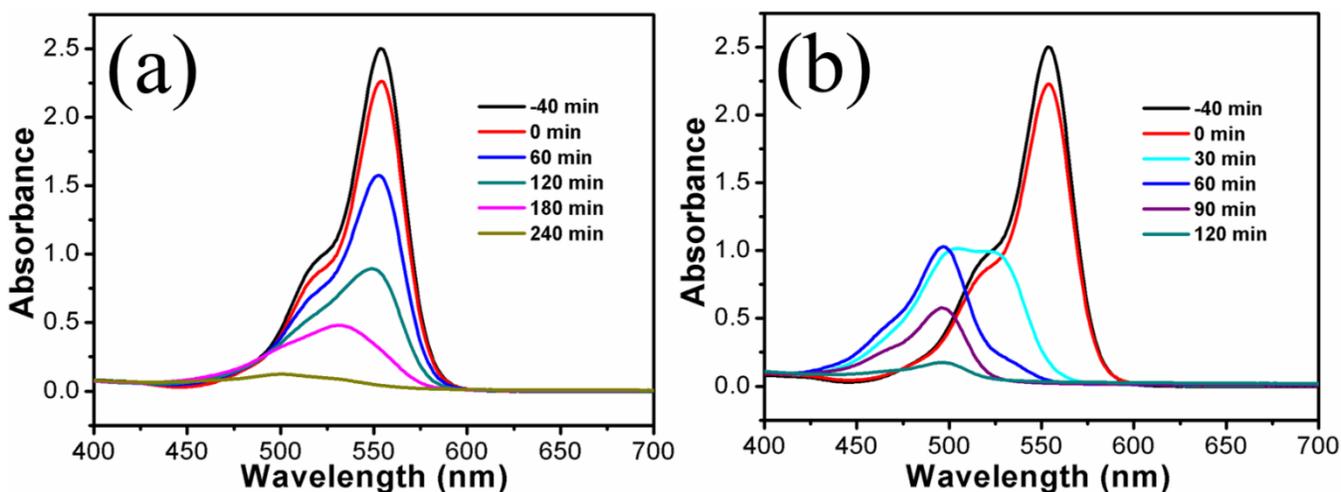


Figure S6. Temporal UV-visible adsorption spectral changes for the RhB solution including 2 mmol n-butanol during the photocatalytic degradation reactions of (a) $\text{g-C}_3\text{N}_4$ and (b) activated $\text{g-C}_3\text{N}_4$.

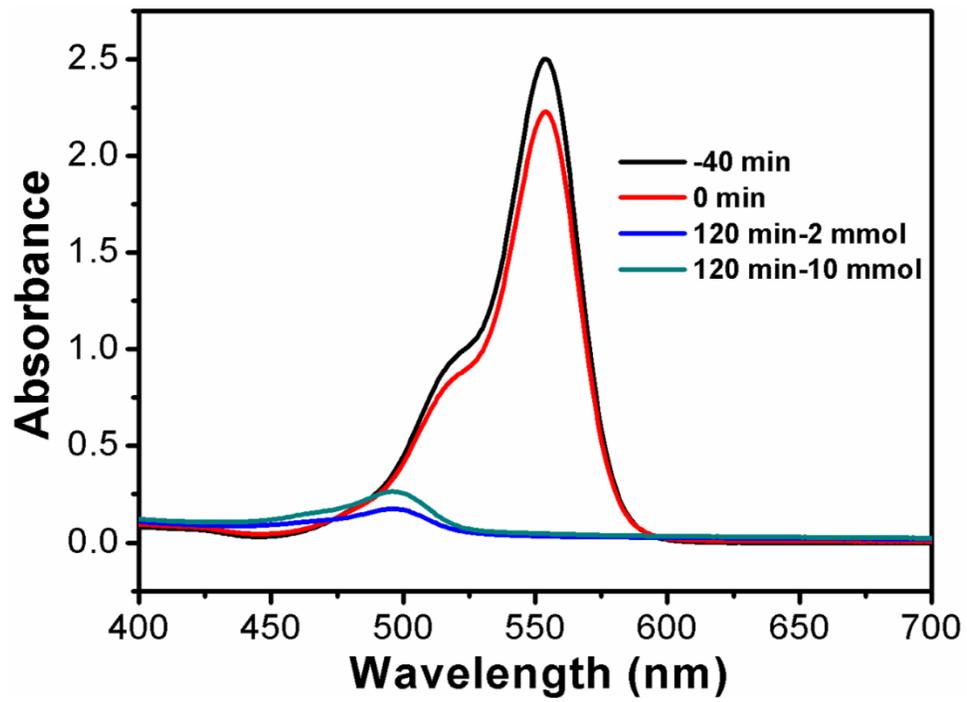


Figure S7. Temporal UV-visible adsorption spectral changes for the RhB solution during the photocatalytic degradation reactions of activated g-C₃N₄ including different content n-butanol.