

SUPPLEMENTARY MATERIALS

Photoreactive Carbon Dots Modified $\text{g-C}_3\text{N}_4$ for Effective Photooxidation of Bisphenol-A Under Visible Light Irradiation

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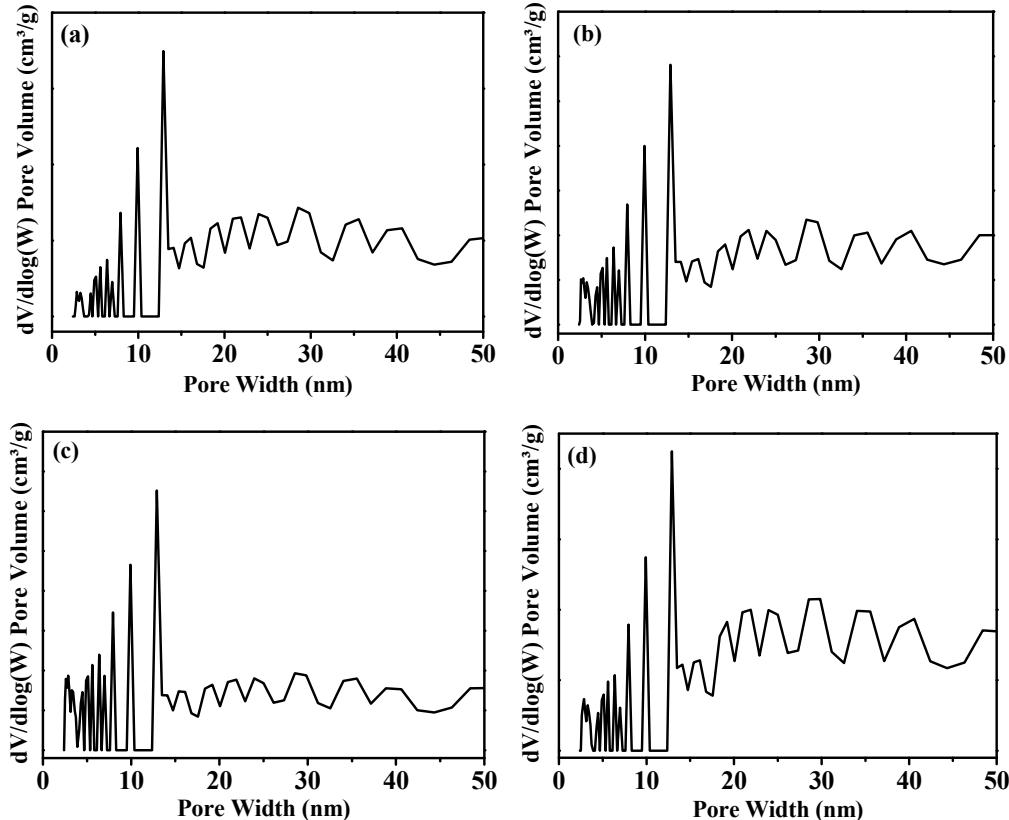


Figure S1. The DFT pore size distribution of (a) pure $\text{g-C}_3\text{N}_4$, (b) 0.5CDs/ $\text{g-C}_3\text{N}_4$, (c) 1.0CDs/ $\text{g-C}_3\text{N}_4$ and (d) 1.5CDs/ $\text{g-C}_3\text{N}_4$.

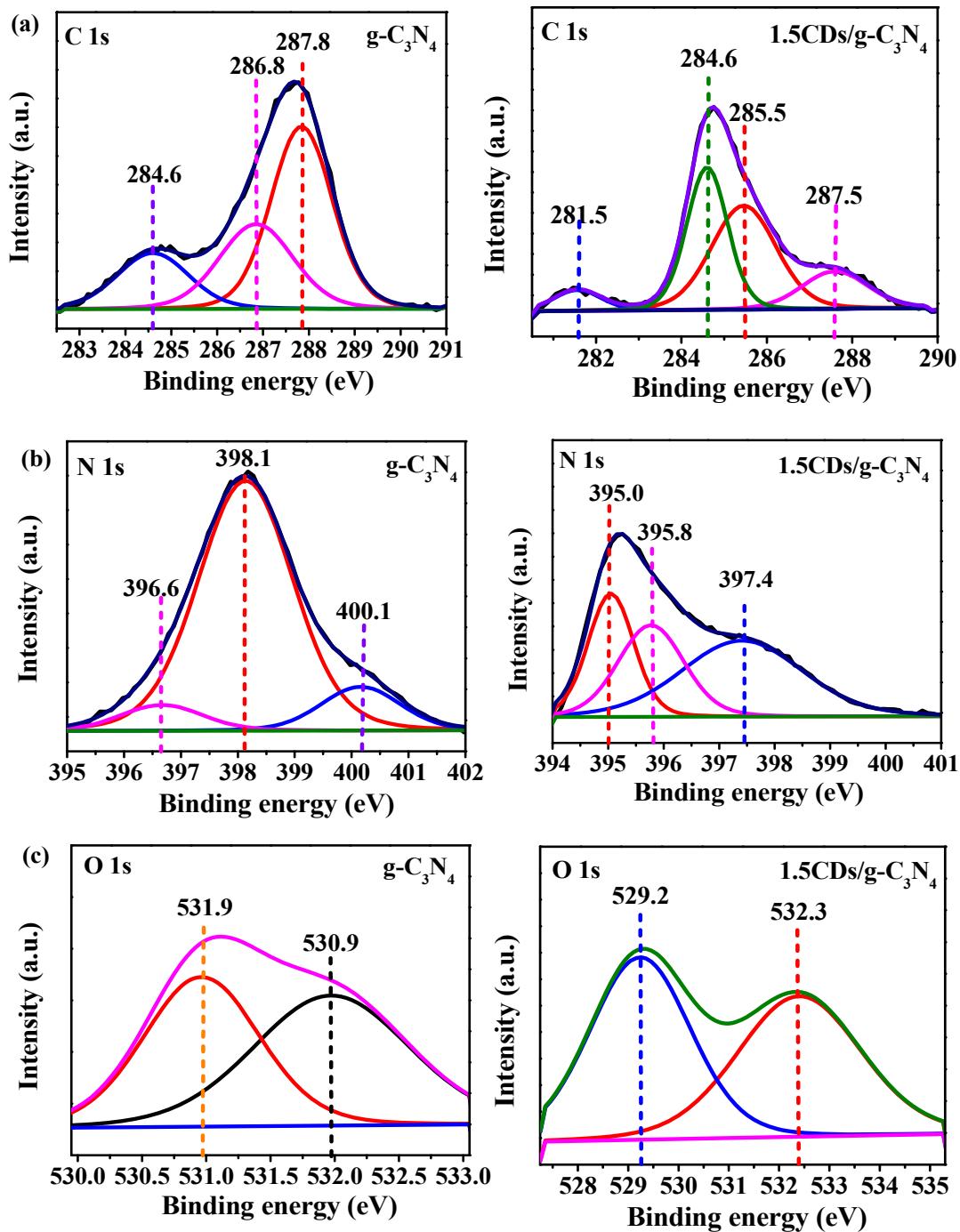


Figure S2. The deconvoluted (a) C 1s (b) N 1 s and (c) O 1s XPS spectra of $1.5\text{CDs/g-C}_3\text{N}_4$.

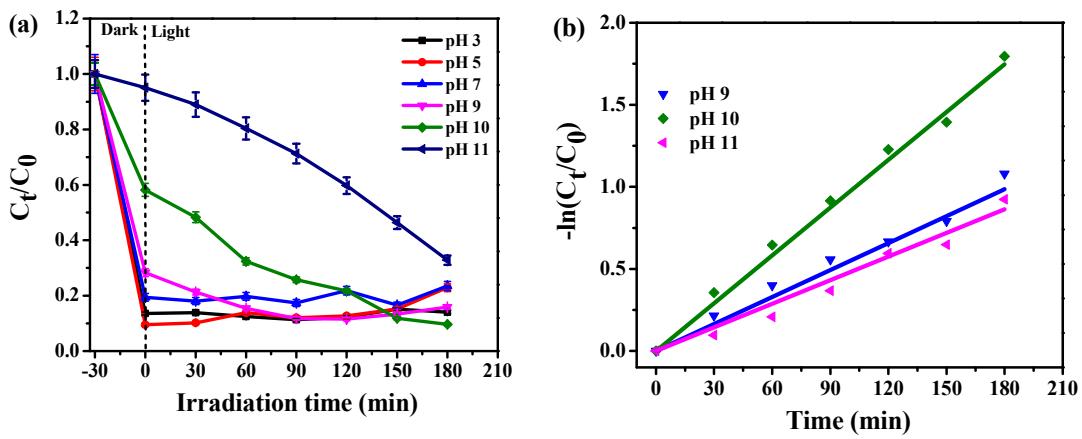


Figure S3. The (a) effect of different pH and (b) pseudo first-order kinetic fitting curves under visible light irradiation of BPA on the degradation of BPA. Reaction conditions: 1.5CDs/g- C_3N_4 dosage = 30 mg L⁻¹, BPA concentration = 10 mg L⁻¹ and solution volume = 100 mL.

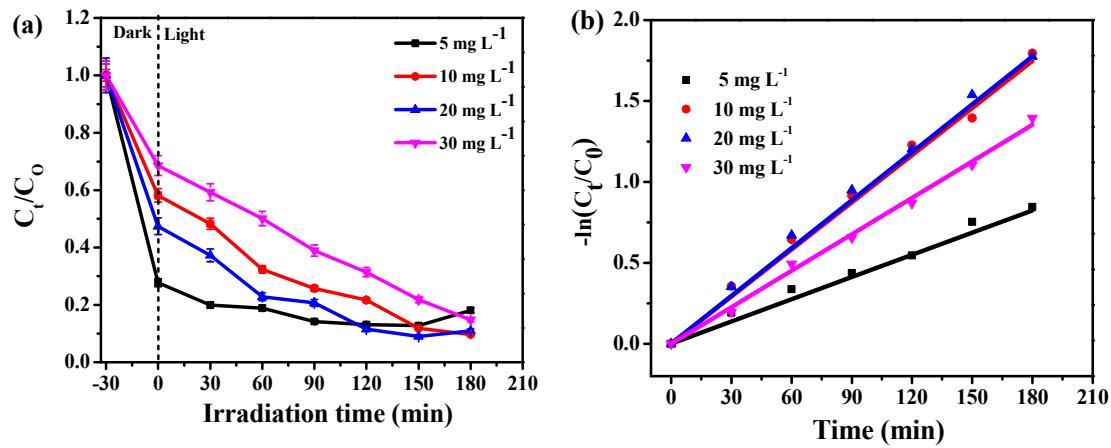


Figure S4. The (a) effect of initial concentration of BPA and (b) pseudo first-order kinetic fitting curves under visible light irradiation of BPA on the degradation of BPA. Reaction conditions: 1.5CDs/g- C_3N_4 dosage = 30 mg L⁻¹, solution volume = 100 mL and pH= 10.

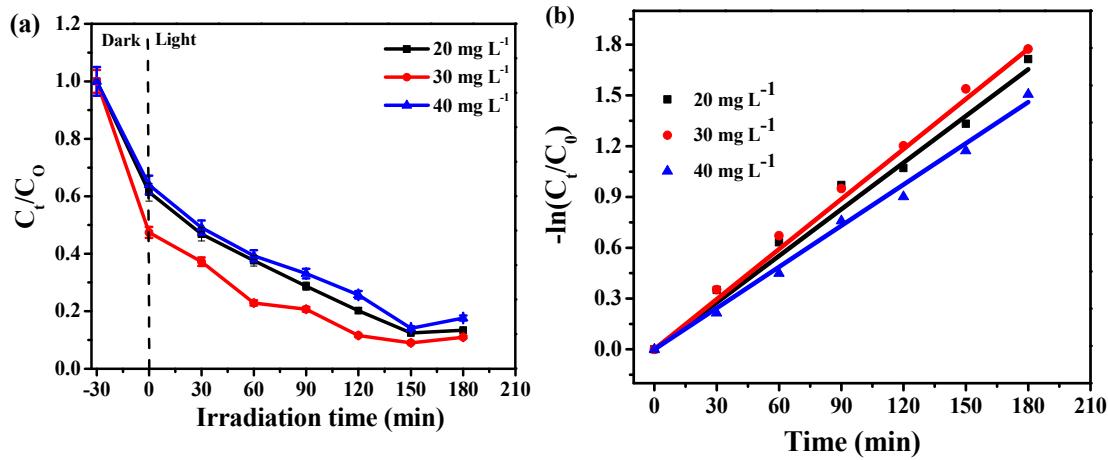


Figure S5. The (a) effect of catalyst dosage and (b) pseudo first-order kinetic fitting curves under visible light irradiation of BPA on the degradation of BPA. Reaction conditions: BPA concentration = 20 mg L⁻¹, solution volume = 100 mL and pH= 10.

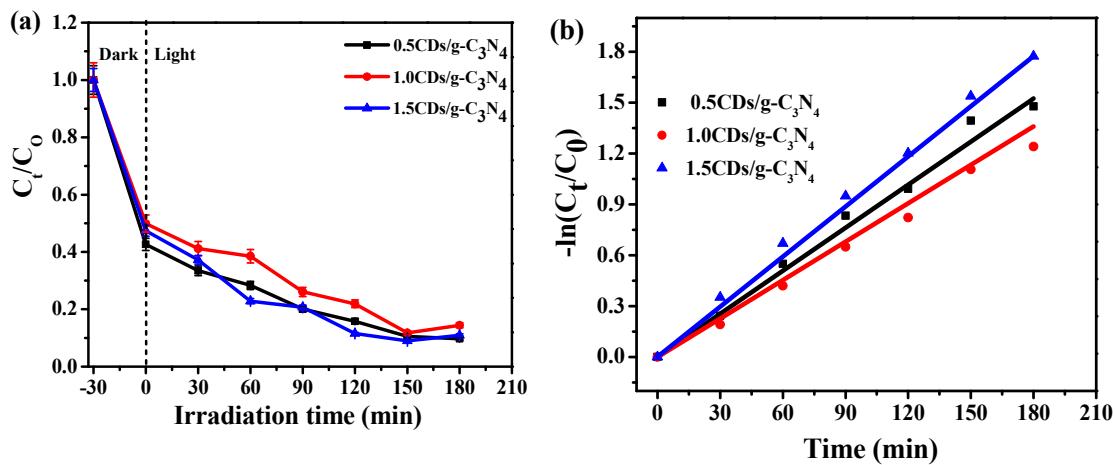


Figure S6. The (a) effect of CDs loading and (b) pseudo first-order kinetic fitting curves under visible light irradiation of BPA on the degradation of BPA. Reaction conditions: catalyst dosage = 30 mg L⁻¹, BPA concentration = 20 mg L⁻¹, solution volume = 100 mL and pH= 10.

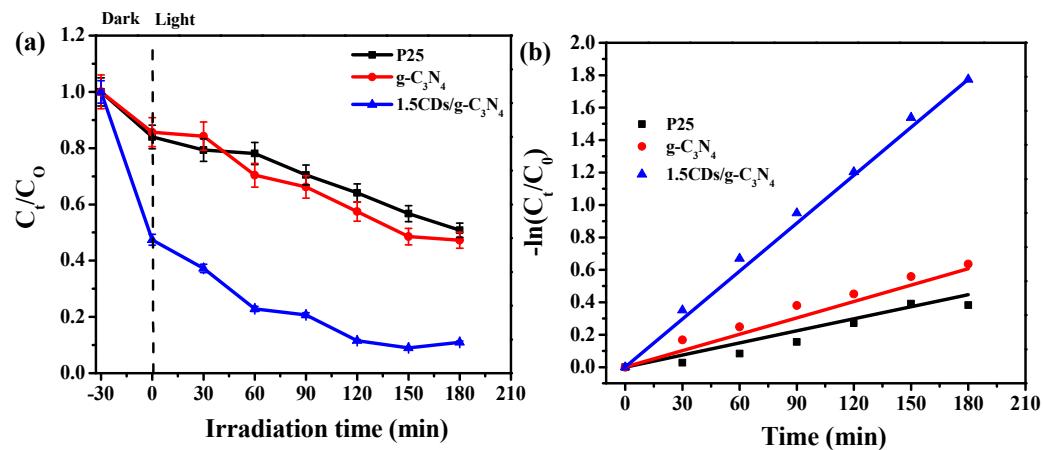


Figure S7. The (a) effect of different photocatalysts and (b) pseudo first-order kinetic fitting curves under visible light irradiation of BPA on the degradation of BPA. Reaction conditions: catalyst amounts = 30 mg L⁻¹, BPA concentration = 20 mg L⁻¹, solution volume = 100 mL and pH= 10.