Supporting Information

Controllable Synthesis of Nanotube-type Graphitic C₃N₄ and

Their Visible-light Photocatalytic and Fluorescent Properties

Shengping Wang, Changjiang Li, Tuo Wang, Peng Zhang, Ang Li, and Jinlong Gong*

Key Laboratory for Green Chemical Technology of Ministry of Education, School of

Chemical Engineering and Technology, Tianjin University; Collaborative Innovation

Center of Chemical Science and Engineering, Tianjin 300072, China.

*E-mail: jlgong@tju.edu.cn; FAX: +86-22-87401818

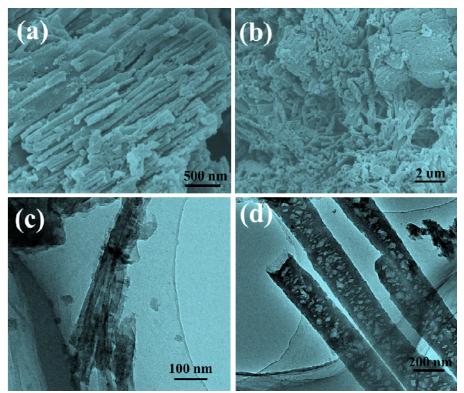


Figure S1. Panorama view of nanotube-type $g-C_3N_4$: (a) bulk phase; (b) surface parts; TEM images of nanotube-type $g-C_3N_4$: (c) formed in bulk phase; (d) formed on the surface.

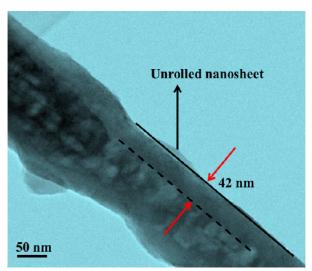


Figure S2. A magnified view of tube-like formed on the surfaces

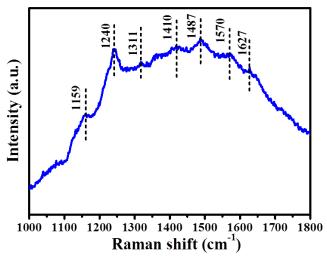


Figure S3. Raman spectrum of as-synthesized nanotube-type g-C₃N₄.

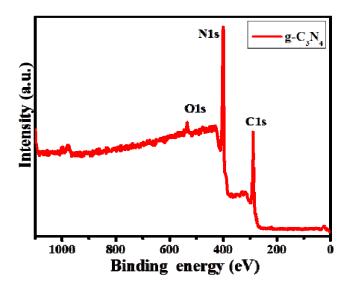


Figure S4. XPS spectrum of nanotube-type g-C₃N₄.

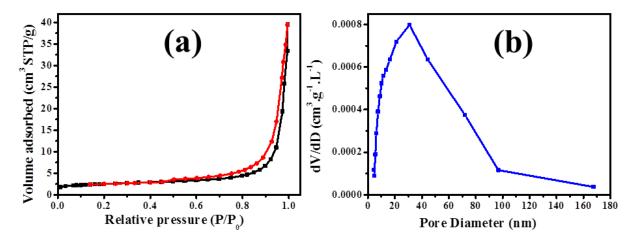


Figure S5. (a) Nitrogen adsorption-desorption isotherm; (b) the corresponding pore size distribution curve.

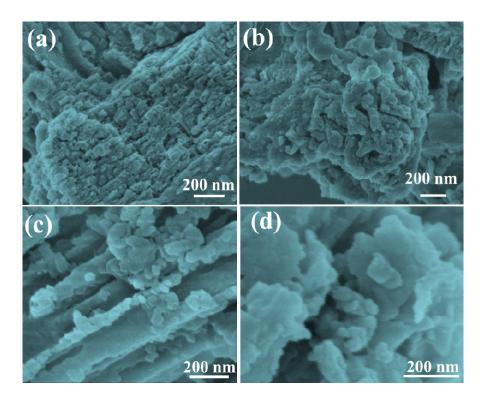


Figure S6. SEM images of $g-C_3N_4$ samples with different packing compact degree: (a-b) loosely packed; (c-d) tightly packed

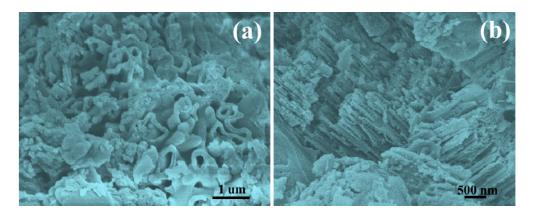


Figure S7. FE-SEM images of as-synthesized nanotube-type g- C_3N_4 ultrasonic treated with water (a) surface parts; (b) bulk phase

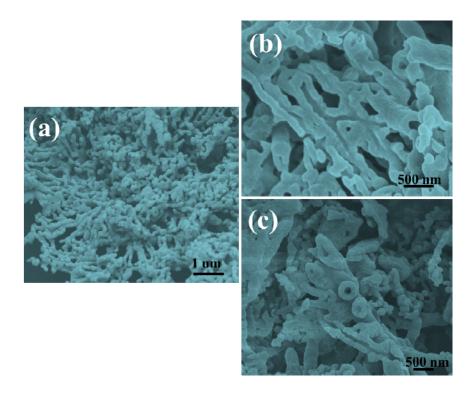


Figure S8. FE-SEM images of as-synthesized nanotube-type g-C₃N₄ by pasting melamine syrup on the wall of crucible: (a) an overall view; (b-c) magnified views

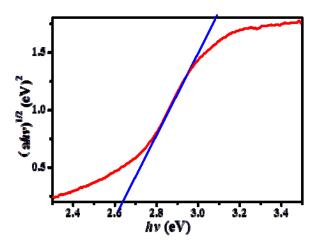


Figure S9. Tauc plot of as-synthesized nanotube-type g-C₃N₄.