Construction of well-dispersed Ag/graphene-like g-C₃N₄

photocatalyst and enhanced visible light photocatalytic activity

Hao Li^a, Yue Jing^a,Xinlong Ma^a,Tongyao Liu^a, Linfeng Yang^a, Bin Liu^a, Shu Yin^b, Zhiyong Wei^aand Yuhua Wang^a.*

¹ Department of Materials Science, School of Physical Science and Technology, Lanzhou University, Lanzhou, 730000, China

² Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2-1-1

Katahira, Aoba-ku, Sendai, Japan

^{1,*}Corresponding author: Yuhua Wang, Ph. D, Professor.

Tel: +86-931-8912772; Fax: +86-931-8913554

E-mail address: wyh@lzu.edu.cn.

Supplementary Information

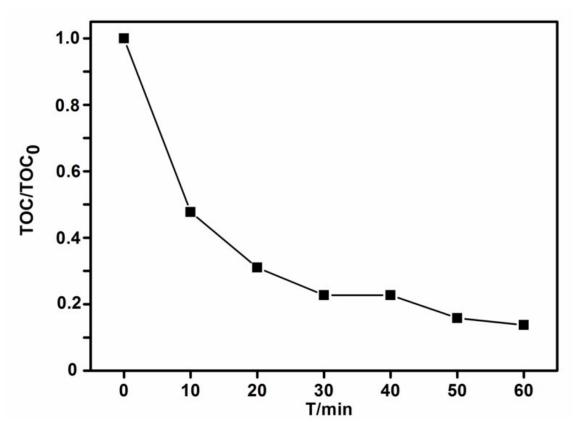


Fig.S1 TOC removal of MB in the presence of Ag-G-g-C₃N₄ composite.

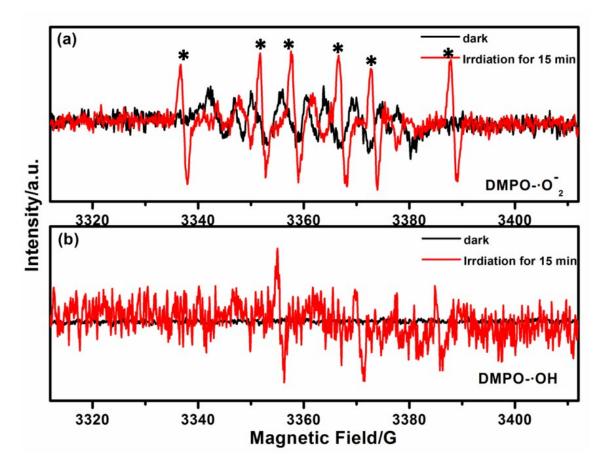


Fig.S2 DMPO spin-trapping ESR spectra of Ag/G-g- C_3N_4 composite (a) in methanol dispersion for DMPO- O_2 -and (b) in aqueous dispersion for DMPO-OH under light irradiation.

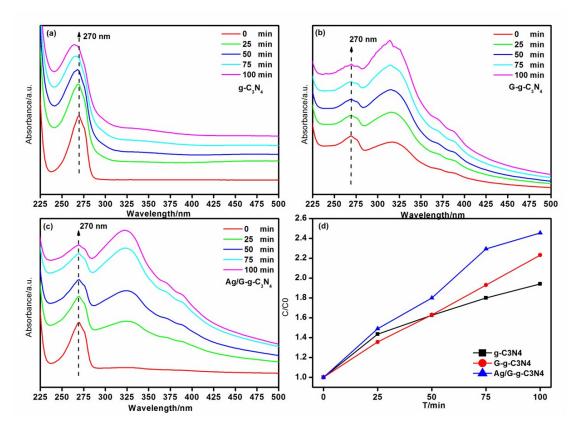


Fig.S3 Time-dependent absorption spectra of phenol solution degraded by $g-C_3N_4$ (a), $G-g-C_3N_4$ (b) and Ag/G-g-C₃N₄ (c) under visible light irradiation. Correspondingly degradation dynamics curves of phenol over above samples under visible light irradiation (d).