

Supporting Information

Porous g-C₃N₄/TiO₂ foam photocatalytic filter for treating NO indoor gas

Mingwen Xiong, ‡^a Ying Tao, ‡^b Zhishu Zhao, ^c Qiong Zhu, ^b Xiaoqi Jin, ^a Shengqiang Zhang, ^a*

*Ming Chen^e and Guisheng Li *^{bcd}*

^a*School of Materials and Chemical Engineering, Bengbu University, Bengbu 233030, PR China, E-mail: xiongmingwen@163.com*

^b*School of Environmental and Geographical Sciences, Wetland ecosystem observation and research field station, Shanghai Normal University, Shanghai, 200234, P. R. China.*

^c*The Education Ministry Key Lab of Resource Chemistry, Shanghai Key Laboratory of Rare Earth Functional Materials, Shanghai, 200234, P. R. China*

^d*School of Materials Science and Engineering, University of Shanghai for Science and Technology, Shanghai 200093, China*

^e*School of Chemistry and Chemical Engineering, Yangzhou University, Yangzhou 225002, P. R. China*

[‡]*These authors have contributed equally.*

*Corresponding author: Prof. Mingwen Xiong, Prof. Guisheng Li

E-mail address: xiongmingwen@163.com, liguisheng@shnu.edu.cn

Tel: +86-021-64321673

Supporting Information consists of 5 pages containing 6 figures.

CONTENTS

CONTENTS

Fig. S1. SEM images of TiO₂ foam.	S3
Fig. S2. SEM images of TiO₂ foam after magnification.	S3
Fig. S3. SEM images of TiO₂ foam and 1.0-C₃N₄/TiO₂ foam after magnification.	S4
Fig. S4. Infrared spectra and Raman spectra of as-formed photocatalysts.	S4
Fig. S5. Dependence of ln(C/C₀) on irradiation time of g-C₃N₄, TiO₂ foam, 1.0-C₃N₄/TiO₂ foam under visible-light ($\lambda \geq 400$ nm) irradiation.	S4
Fig. S6. The inhibition ratio of KI, TBA, and PBQ as scavengers on the photocatalytic NO oxidation process by using 1.0-C₃N₄/TiO₂ foam as photocatalyst.	S5

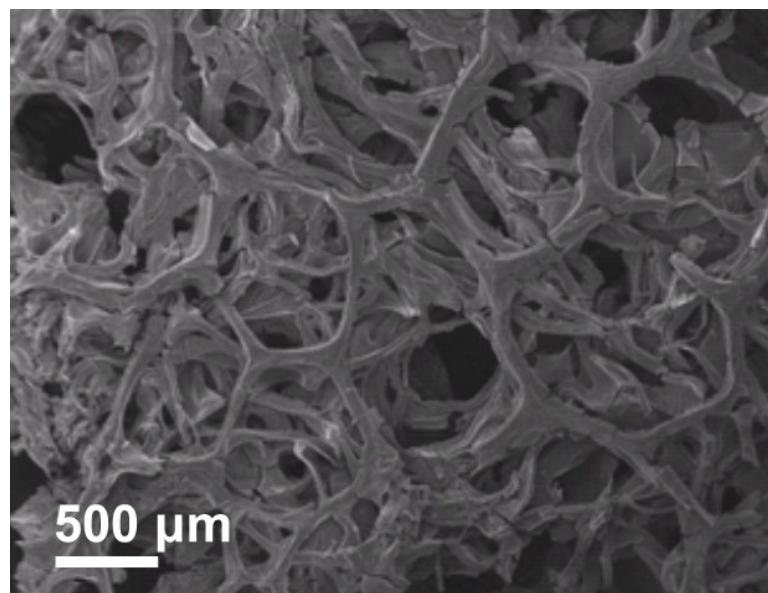


Fig. S1. SEM images of TiO_2 foam.

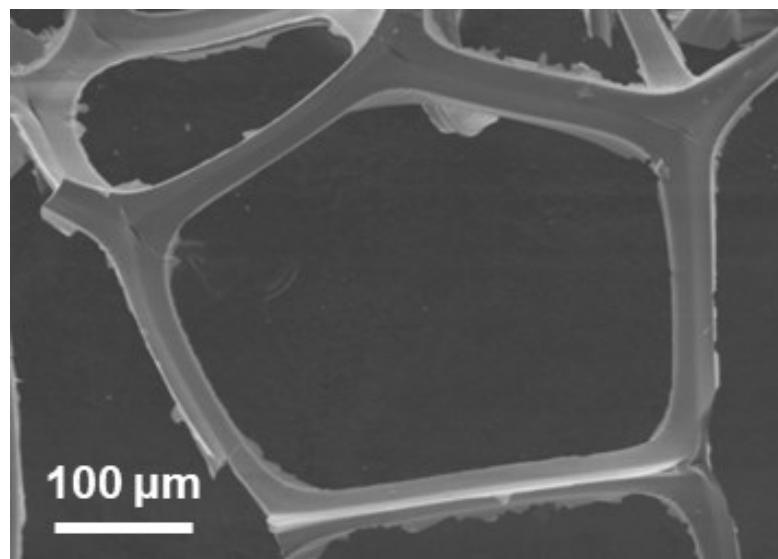


Fig. S2. SEM images of TiO_2 foam after magnification.

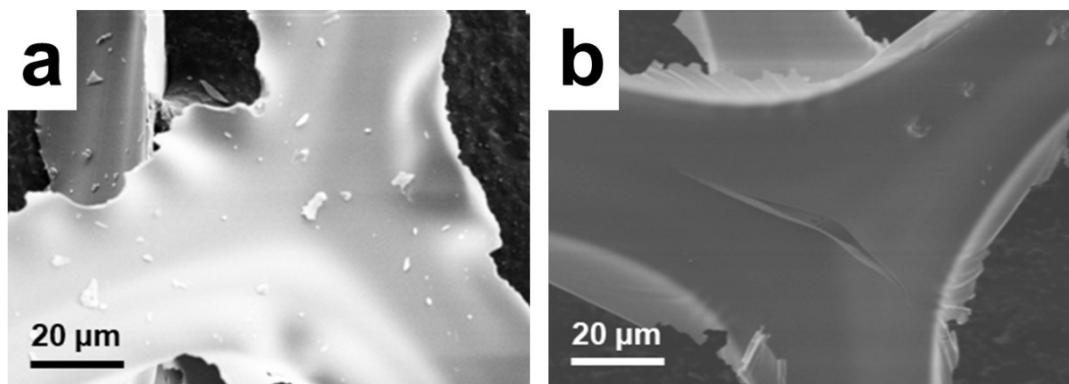


Fig. S3. SEM images of TiO₂ foam and 1.0-C₃N₄/TiO₂ foam after magnification.

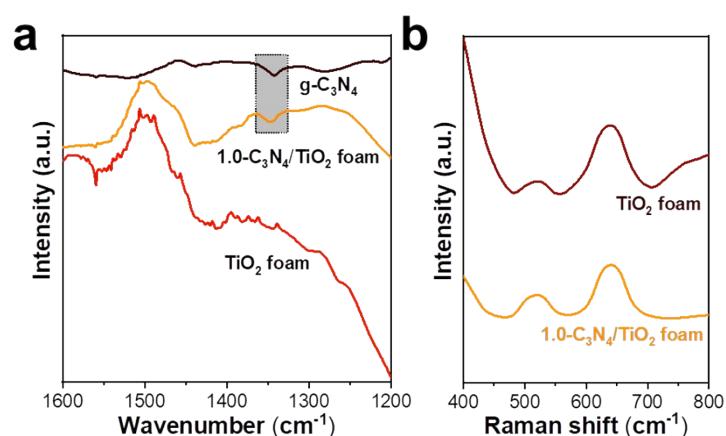


Fig. S4. (a, b) Infrared spectra and (c) Raman spectra of as-formed photocatalysts.

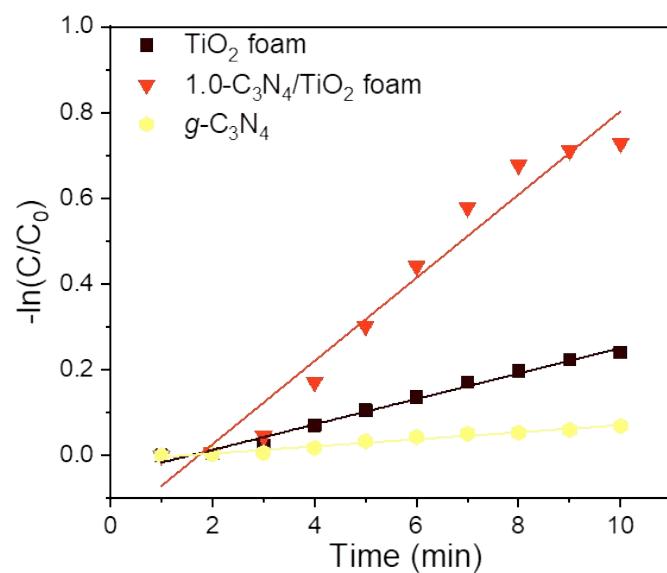


Fig. S5. Dependence of $\ln(C/C_0)$ on irradiation time of g-C₃N₄, TiO₂ foam, 1.0-C₃N₄/TiO₂ foam under visible-light ($\lambda \geq 400$ nm) irradiation.

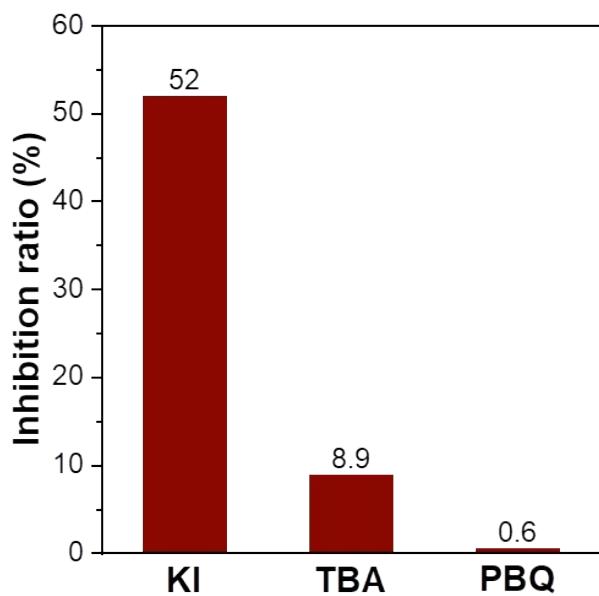


Fig. S6. The inhibition ratio of KI, TBA, and PBQ as scavengers on the photocatalytic NO oxidation process by using 1.0-C₃N₄/TiO₂ foam as photocatalyst.