

## Accepted Manuscript

Title: Chemical vs Thermal Exfoliation of g-C<sub>3</sub>N<sub>4</sub> for NO<sub>x</sub> Removal under Visible Light Irradiation

Authors: Ilias Papailias, Nadia Todorova, Tatiana Giannakopoulou, Nikolaos Ioannidis, Nikos Boukos, Chrysoula P. Athanasekou, Dimitra Dimotikali, Christos Trapalis



PII: S0926-3373(18)30721-5  
DOI: <https://doi.org/10.1016/j.apcatb.2018.07.078>  
Reference: APCATB 16900

To appear in: *Applied Catalysis B: Environmental*

Received date: 25-5-2018  
Revised date: 26-7-2018  
Accepted date: 30-7-2018

Please cite this article as: Papailias I, Todorova N, Giannakopoulou T, Ioannidis N, Boukos N, Athanasekou CP, Dimotikali D, Trapalis C, Chemical vs Thermal Exfoliation of g-C<sub>3</sub>N<sub>4</sub> for NO<sub>x</sub> Removal under Visible Light Irradiation, *Applied Catalysis B: Environmental* (2018), <https://doi.org/10.1016/j.apcatb.2018.07.078>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Chemical vs Thermal Exfoliation of g-C<sub>3</sub>N<sub>4</sub> for NO<sub>x</sub> Removal under Visible Light Irradiation

Ilias Papailias<sup>a,b</sup>, Nadia Todorova<sup>a\*</sup>, Tatiana Giannakopoulou<sup>a</sup>, Nikolaos Ioannidis<sup>a</sup>, Nikos Boukos<sup>a</sup>, Chrysoula P. Athanasekou<sup>a</sup>, Dimitra Dimotikali<sup>b</sup>, Christos Trapalis<sup>a,\*\*</sup>

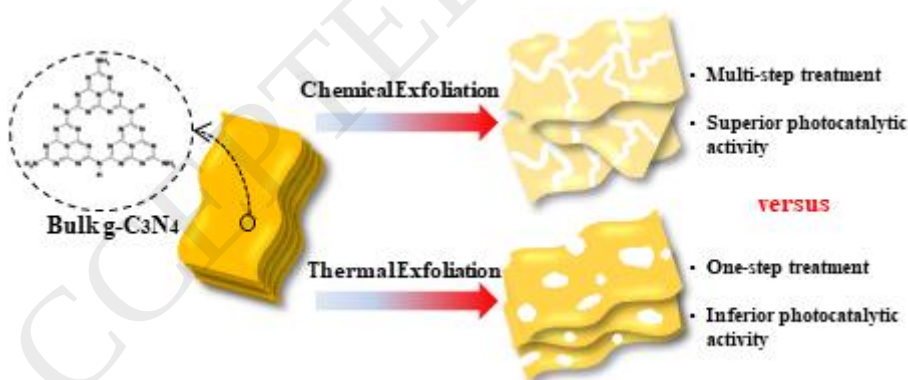
<sup>a</sup> Institute of Nanoscience and Nanotechnology, NCSR “Demokritos”, Athens, 15341, Greece

<sup>b</sup> Department of Chemical Engineering, National Technical University of Athens, Athens, 15780, Greece

<sup>\*\*</sup> Corresponding author at: Institute of Nanoscience and Nanotechnology, NCSR Demokritos, Athens, 15341, Greece. Tel.: +30 210 650 3343; fax: +30 210 651 9430. E-mail address: c.trapalis@inn.demokritos.gr (Christos Trapalis).

<sup>\*</sup> Co-corresponding author at: Institute of Nanoscience and Nanotechnology, NCSR Demokritos, Athens, 15341, Greece. Tel.: +30 210 650 3347; fax: +30 210 651 9430. E-mail address: n.todorova@inn.demokritos.gr (Nadia Todorova).

### Graphical abstract



### Highlights

- High surface area g-C<sub>3</sub>N<sub>4</sub> was synthesized by chemical and thermal exfoliation.
- Comparative investigation of the two methods was conducted.
- EPR study revealed enhanced superoxide radical formation after exfoliation.

Download English Version:

<https://daneshyari.com/en/article/6497994>

Download Persian Version:

<https://daneshyari.com/article/6497994>

[Daneshyari.com](https://daneshyari.com)