

Accepted Manuscript

Synthesis, characterization, and photocatalytic performances of electrospun cadmium titanate nanofibers immobilized into the reduced graphene oxide sheets

Bishweshwar Pant, Mira Park, Soo-Jin Park

PII: S0167-577X(18)30922-4
DOI: <https://doi.org/10.1016/j.matlet.2018.06.036>
Reference: MLBLUE 24476

To appear in: *Materials Letters*

Received Date: 17 April 2018
Revised Date: 28 May 2018
Accepted Date: 7 June 2018

Please cite this article as: B. Pant, M. Park, S-J. Park, Synthesis, characterization, and photocatalytic performances of electrospun cadmium titanate nanofibers immobilized into the reduced graphene oxide sheets, *Materials Letters* (2018), doi: <https://doi.org/10.1016/j.matlet.2018.06.036>

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.



**Synthesis, characterization, and photocatalytic performances of
electrospun cadmium titanate nanofibers immobilized into the reduced
graphene oxide sheets**

Bishweshwar Pant^a, Mira Park^{b,*}, Soo-Jin Park^{a,*}

^aDepartment of Chemistry, Inha University, Incheon, South Korea

*^bDepartment of Bioenvironmental Chemistry, College of Agriculture & Life Science, Chonbuk
National University, Jeonju, South Korea*

Corresponding authors:

*Mira Park, E-mail: wonderfulmira@jbnu.a.kr

*Soo-Jin Park, Tel.: +82328767234; Fax: +82328675604, E-mail: sjpark@inha.ac.kr

Abstract

A simple and effective route was employed to fabricate cadmium titanate nanofibers (CdTiO₃ NFs) immobilized into the reduced graphene oxide (RGO) sheets using electrospinning and calcination processes. Here, graphene oxide (GO) served as a supporting material for the deposition of CdTiO₃ precursor along with the scarifying polymer nanofibers and upon the thermal treatment, it led to the formation of CdTiO₃ NFs immobilized reduced graphene oxide (CdTiO₃/RGO) composite. The as-synthesized CdTiO₃/RGO composite was used for photocatalytic removal of methylene blue (MB) from the aqueous solution and

Download English Version:

<https://daneshyari.com/en/article/8012691>

Download Persian Version:

<https://daneshyari.com/article/8012691>

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