

# Author's Accepted Manuscript

Electrospinning based all-nano composite materials:  
recent achievements and perspectives

Rui Zhao, Xiaofeng Lu, Ce Wang



PII: S2452-2139(18)30129-3  
DOI: <https://doi.org/10.1016/j.coco.2018.09.005>  
Reference: COCO134

To appear in: *Composites Communications*

Received date: 27 July 2018  
Revised date: 1 September 2018  
Accepted date: 16 September 2018

Cite this article as: Rui Zhao, Xiaofeng Lu and Ce Wang, Electrospinning based all-nano composite materials: recent achievements and perspectives, *Composites Communications*, <https://doi.org/10.1016/j.coco.2018.09.005>

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 galley proof before it is published in its final citable 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.

# Electrospinning based all-nano composite materials: recent achievements and perspectives

Rui Zhao<sup>b</sup>, Xiaofeng Lu<sup>a</sup> and Ce Wang<sup>a,\*</sup>

<sup>a</sup>*Alan G. MacDiarmid Institute, College of Chemistry, Jilin University, Changchun 130012, PR China*

<sup>b</sup>*Key Laboratory of Polyoxometalate Science of the Ministry of Education, Faculty of Chemistry, Northeast Normal University, Changchun 130024, PR China*

\*Corresponding authors:

Tel.: +86-431-85168292; Fax: +86-431-85168292.

Email address: cwang@jlu.edu.cn (C. Wang).

## Abstract

Nanoscale composite materials have received more and more attention in recent years. All-nano composite material produced by electrospinning is a rising field, which is in the basic research and primary development stage. Due to the multifunctional properties of these composite materials, they are expected to be applied in many fields. This review focuses on recent progress in reported electrospinning based all-nano composite materials for various applications, such as membrane filtration, adsorption of harmful substances, photo/chemical/electro catalysis, biological medicine, electronic nanodevices, energy storage and conversion, and electromagnetic interference shielding and stealth materials. Finally, we propose our personal insights into future research opportunities and challenges in the hope of stimulating more researchers to engage in this novel field of electrospinning based all-nano composite materials for innovative applications.

Download English Version:

<https://daneshyari.com/en/article/11006693>

Download Persian Version:

<https://daneshyari.com/article/11006693>

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