## Accepted Manuscript

Title: Highly water-soluble and surface charge-tunable fluorescent fullerene nanoparticles: Facile fabrication and cellular imaging

Author: Rongbin Xie Zifei Wang Hongtao Yu Zetan Fan Fanglong Yuan Yunchao Li Xiaohong Li Louzhen Fan Hong

Fanb

PII: S0013-4686(16)30781-2

DOI: http://dx.doi.org/doi:10.1016/j.electacta.2016.03.198

Reference: EA 27028

To appear in: Electrochimica Acta

Received date: 1-2-2016 Revised date: 22-3-2016 Accepted date: 31-3-2016

Please cite this article as: Rongbin Xie, Zifei Wang, Hongtao Yu, Zetan Fan, Fanglong Yuan, Yunchao Li, Xiaohong Li, Louzhen Fan, Hong Fanb, Highly water-soluble and surface charge-tunable fluorescent fullerene nanoparticles: Facile fabrication and cellular imaging, Electrochimica Acta http://dx.doi.org/10.1016/j.electacta.2016.03.198

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.



### ACCEPTED MANUSCRIPT

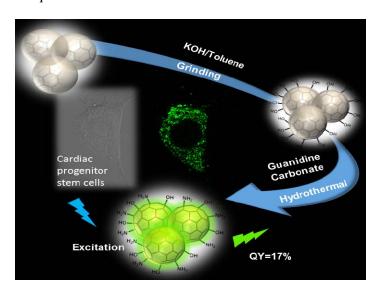
Highly Water-Soluble and Surface Charge-Tunable Fluorescent Fullerene

Nanoparticles: Facile Fabrication and Cellular Imaging

Rongbin Xie, a Zifei Wang, a Hongtao Yu, a Zetan Fan, a Fanglong Yuan, a Yunchao Li, a Xiaohong Li, a Louzhen Fan \*, Hong Fan \*

<sup>a</sup>Department of Chemistry, Beijing Normal University, Beijing, China, 100875 <sup>b</sup>Shanxi Provincial People's Hospital, Taiyuan, Shanxi, China, 030012

#### Graphical abstract



**Abstract:** Water-soluble and surface charge-tunable amine-functionalized polyhydroxylated fullerene nanoparticles with a strong green emission were synthesized by grinding and hydrothermal treatment. The quantum yield of the nanoparticles was as high as 17%, which is the highest value recorded for fluorescent fullerene materials. The amine-functionalized polyhydroxylated fullerene

#### Download English Version:

# https://daneshyari.com/en/article/6607598

Download Persian Version:

https://daneshyari.com/article/6607598

<u>Daneshyari.com</u>