#### Accepted Manuscript

Title: Atomic platinum layer coated titanium copper nitride supported on carbon nanotubes for the methanol oxidation reaction

Authors: Yuying Zheng, Hengtong Zhan, Haibo Tang, Junming Luo, Dai Dang, Ting Shu, Jianwei Ren, Xinlong Tian, Shijun Liao



PII:	S0013-4686(17)31483-4
DOI:	http://dx.doi.org/doi:10.1016/j.electacta.2017.07.065
Reference:	EA 29882
To appear in:	Electrochimica Acta
Received date:	11-5-2017
Revised date:	10-7-2017
Accepted date:	10-7-2017

Please cite this article as: Yuying Zheng, Hengtong Zhan, Haibo Tang, Junming Luo, Dai Dang, Ting Shu, Jianwei Ren, Xinlong Tian, Shijun Liao, Atomic platinum layer coated titanium copper nitride supported on carbon nanotubes for the methanol oxidation reaction, Electrochimica Actahttp://dx.doi.org/10.1016/j.electacta.2017.07.065

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

### Atomic platinum layer coated titanium copper nitride supported on carbon

#### nanotubes for the methanol oxidation reaction

Yuying Zheng<sup>a</sup>, Hengtong Zhan<sup>a</sup>, Haibo Tang<sup>b</sup>, Junming Luo<sup>b</sup>, Dai Dang<sup>b</sup>, Ting Shu<sup>b</sup>, Jianwei Ren<sup>c</sup>, Xinlong Tian<sup>b\*</sup>, Shijun Liao<sup>b\*</sup>

<sup>a</sup>School of Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou, Guangdong, 510006, China

<sup>b</sup>The Key Laboratory of Fuel Cell Technology of Guangdong Province & the Key Laboratory of New Energy Technology of Guangdong Universities, School of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510641, China

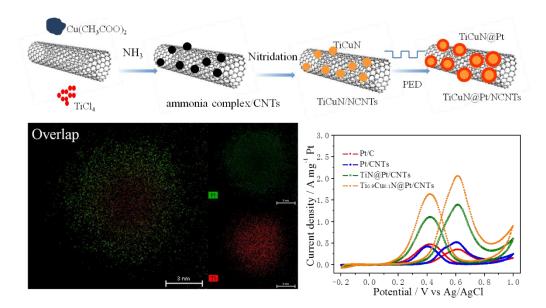
<sup>c</sup>HySA Infrastructure Centre of Competence, Materials Science and Manufacturing, Council for Scientific and Industrial Research (CSIR). PO Box 395, Pretoria 0001, South Africa

\*Corresponding author:

Shijun Liao, chsjliao@scut.edu.cn

Xinlong Tian, tianxinlong2010@163.com

#### **Graphical Abstract**



The novel core-shell Ti<sub>0.9</sub>Cu<sub>0.1</sub>N@Pt/CNTs catalyst exhibits high methanol oxidation reaction activity and durability.

#### Highlights

• • A novel catalyst with atomic Pt layers covered on carbon nanotubes supported nitride NPs was synthesized

Download English Version:

# https://daneshyari.com/en/article/4766917

Download Persian Version:

https://daneshyari.com/article/4766917

Daneshyari.com