Accepted Manuscript

Title: Fabrication of graphene and ZnO nanocones hybrid structure for transparent field emission device

Author: Zurita Zulkifli Sachin M. Shinde Takatoshi Suguira

Golap Kalita Masaki Tanemura

PII: S0169-4332(15)01970-4

DOI: http://dx.doi.org/doi:10.1016/j.apsusc.2015.08.157

Reference: APSUSC 31104

To appear in: APSUSC

Received date: 21-5-2015 Revised date: 11-8-2015 Accepted date: 18-8-2015

Please cite this article as: Z. Zulkifli, S.M. Shinde, T. Suguira, G. Kalita, M. Tanemura, Fabrication of graphene and ZnO nanocones hybrid structure for transparent field emission device, *Applied Surface Science* (2015), http://dx.doi.org/10.1016/j.apsusc.2015.08.157

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

Fabrication of graphene and ZnO nanocones hybrid structure for transparent field emission device

Zurita Zulkifli^{1,2}, Sachin M. Shinde¹, Takatoshi Suguira¹, Golap Kalita^{1,3,*} and Masaki Tanemura¹

¹ Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

² Faculty of Electrical Engineering, Universiti Teknologi Mara, Malaysia

³Center for Fostering Young and Innovative Researchers, Nagoya Institute of Technology, Gokiso-cho, Showa-ku, Nagoya, 466-8555, Japan

 $\label{lem:correspondence} Correspondence should be addressed to Golap Kalita (GK); \\ \underline{kalita.golap@nitech.ac.jp} \\ \textbf{Highlight}$

- Demonstrated transparent field emission device with CVD graphene and ZnO nanocones.
- 2. Graphene film was coated on carbon doped ZnO nanocone prepared by ion irradiation.
- 3. Low turn-on field for the graphene/C:ZnO nanocones hybrid structure is achieved.
- 4. Graphene/C:ZnO heterostructure is promising for transparent field emission devices.

Download English Version:

https://daneshyari.com/en/article/5348974

Download Persian Version:

https://daneshyari.com/article/5348974

<u>Daneshyari.com</u>