A Hendi, J Material Sci Eng 2015, 4:5
http://dx.doi.org/10.4172/2169-0022.C1.029

OMICS International
conferenceseries.com

4th International Conference and Exhibition on
Materials Science & Engineering
September 14-16, 2015 Orlando, USA

Graphene based solar light sensitive photodiode

A Hendi
King Abdulaziz University, Saudi Arabia

In the present study, graphene oxide : zinc oxide nanocomposites will be synthesized by hydrothermal or sol-gel method. X-ray diffraction results confirm the nanostrcture of, graphene oxide: zinc oxide nanocomposites. Graphene based solar light sensitive photodiode was fabricated. The photo-response properties of the diode were investigated by I-V and C-V measurements. The reverse current of the diode increases with solar light intensity. This suggests that the prepared device exhibits a photodiode behavior. The photo-response mechanism of the diode was analyzed by transient photo-capacitance measurements. The obtained electrical and photocurrent measurements suggest that graphene based solar light sensitive photodiode can be used as a sensor in optoelectronic applications.

Biography

A Hendi has completed her PhD from King Abdulaziz University (KAAU) and Postdoctoral studies from same University. She is the Director of Physics, a premier Bio-Soft service organization. She has published more than 22 papers in reputed journals and has been serving as a lecturer and member of several physics associations in Saudi Arabia.

dr.asmahendi@hotmail.com

Notes: