

Accepted Manuscript

Title: Label-free Glucose Detection over a Wide Dynamic Range by Mesoporous Si Nanowires Based on Anomalous Photoluminescence Enhancement

Authors: Ramesh Ghosh, Ruma Das, P.K. Giri



PII: S0925-4005(18)30100-X
DOI: <https://doi.org/10.1016/j.snb.2018.01.099>
Reference: SNB 23948

To appear in: *Sensors and Actuators B*

Received date: 11-9-2017
Revised date: 7-1-2018
Accepted date: 8-1-2018

Please cite this article as: Ramesh Ghosh, Ruma Das, P.K.Giri, Label-free Glucose Detection over a Wide Dynamic Range by Mesoporous Si Nanowires Based on Anomalous Photoluminescence Enhancement, *Sensors and Actuators B: Chemical* <https://doi.org/10.1016/j.snb.2018.01.099>

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.

Label-free Glucose Detection over a Wide Dynamic Range by Mesoporous Si Nanowires Based on Anomalous Photoluminescence Enhancement

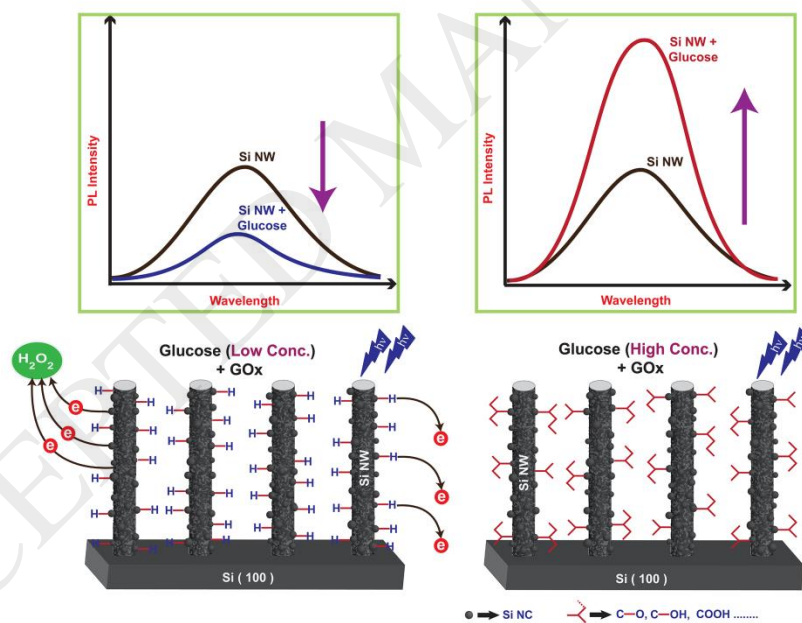
Ramesh Ghosh^{a, b}, Ruma Das^a, and P. K. Giri^{a, b*}

^aDepartment of Physics, Indian Institute of Technology Guwahati, Guwahati -781039, India

^bCentre for Nanotechnology, Indian Institute of Technology Guwahati, Guwahati -781039, India

* Corresponding author, email: giri@iitg.ernet.in

Graphical Abstract:



Highlights:

- Level free glucose detection at μM level by mesoporous Si nanowire arrays.
- Glucose mediated photoluminescence quenching and anomalous photoluminescence enhancement observed from the same Si NWs.

Download English Version:

<https://daneshyari.com/en/article/7141048>

Download Persian Version:

<https://daneshyari.com/article/7141048>

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