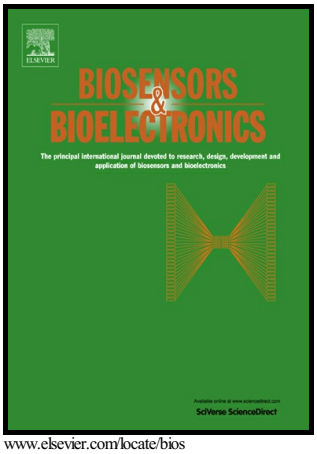
Silver nanoflower–reduced graphene oxide composite based micro-disk electrode for insulin detection in serum

Ajay Kumar Yagati, Yonghyun Choi, Jinsoo Park, Jeong-Woo Choi, Hee-Sook Jun, Sungbo Cho



www.elsevier.com/locate/bios

PII: S0956-5663(16)30099-9
DOI: http://dx.doi.org/10.1016/j.bios.2016.01.086
Reference: BIOS8426

To appear in: *Biosensors and Bioelectronic*

Received date: 19 November 2015
Revised date: 29 January 2016
Accepted date: 30 January 2016

Cite this article as: Ajay Kumar Yagati, Yonghyun Choi, Jinsoo Park, Jeong-Woo Choi, Hee-Sook Jun and Sungbo Cho, Silver nanoflower–reduced graphene oxide composite based micro-disk electrode for insulin detection in serum *Biosensors and Bioelectronic,* http://dx.doi.org/10.1016/j.bios.2016.01.086

Silver nanoflower–reduced graphene oxide composite based micro-disk electrode for insulin detection in serum

Ajay Kumar Yagati[a], Yonghyun Choi[a], Jinsoo Park[a], Jeong-Woo Choi[b], Hee-Sook Jun[c], Sungbo Cho[a,*]

[a]*Department of Biomedical Engineering, Gachon University, 191 Hambakmoero, Yeonsu-gu, Incheon, 21936, Republic of Korea*

[b]*Department of Chemical and Biomolecular Engineering, Sogang University, 35 Baekbeom-ro (Sinsu-dong), Mapo-gu, Seoul, 04107, Republic of Korea*

[c]*Lee Gil Ya Cancer and Diabetes Institute, Gachon University, 155 Get-Pearl-ro, Yeonsu-gu, Incheon, 21999, Republic of Korea*

***Corresponding Author**

Prof. Sungbo Cho
Department of Biomedical Engineering
Gachon University
Incheon, 21936, Republic of Korea
Tel.: +82 32 820 4433; fax: +82 32 820 4449
E-mail: *sbcho@gachon.ac.kr* (S. Cho)

Abstract

Sensitive and selective determination of protein biomarkers remains a significant challenge due to the existence of various biomarkers in human body at a low concentration level. Therefore,