Author's Accepted Manuscript

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PII: S0039-9140(18)30908-1
DOI: https://doi.org/10.1016/j.talanta.2018.08.093
Reference: TAL19014

To appear in: *Talanta*

Received date: 15 June 2018
Revised date: 27 August 2018
Accepted date: 31 August 2018

Cite this article as: Shaogui He, Ying Ma, Jieyi Zhou, Jun Zeng, Xiaofen Liu, Zhiyong Huang, Xiaomei Chen and Xi Chen, A direct "touch" approach for gold nanoflowers decoration on graphene/ionic liquid composite modified electrode with good properties for sensing bisphenol A, *Talanta,* https://doi.org/10.1016/j.talanta.2018.08.093

A direct "touch" approach for gold nanoflowers decoration on graphene/ionic liquid composite modified electrode with good properties for sensing bisphenol A

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Abstract

In the present work, a direct "touch" method was developed for attaching AuNPs with clean surface on the graphene-ionic liquid modified glassy carbon electrode (G-IL GCE). The morphology and composition of the thus-prepared AuNPs on G-IL GCE were characterized by scanning electron microscopy, energy-dispersive X-ray spectroscopy and X-ray photoelectron spectroscopy. The results showed that AuNPs with interesting flower-like shapes are well dispersed on the G-IL film. Significantly, as it is a surfactant-free synthesis, the AuNPs are very clean and can be directly modified on a G-IL GCE without any pre-treatments. Comparing with the bare or

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