

Author's Accepted Manuscript

Molecularly imprinted electrochemical sensor based on amine group modified graphene covalently linked electrode for 4-nonylphenol detection

Hong-Jun Chen, Zhao-Hui Zhang, Rong Cai, Xing Chen, Yu-Nan Liu, Wei Rao, Shou-Zhuo Yao



www.elsevier.com/locate/talanta

PII: S0039-9140(13)00384-6
DOI: <http://dx.doi.org/10.1016/j.talanta.2013.04.069>
Reference: TAL13862

To appear in: *Talanta*

Received date: 25 February 2013
Revised date: 22 April 2013
Accepted date: 24 April 2013

Cite this article as: Hong-Jun Chen, Zhao-Hui Zhang, Rong Cai, Xing Chen, Yu-Nan Liu, Wei Rao, Shou-Zhuo Yao, Molecularly imprinted electrochemical sensor based on amine group modified graphene covalently linked electrode for 4-nonylphenol detection, *Talanta*, <http://dx.doi.org/10.1016/j.talanta.2013.04.069>

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 galley proof before it is published in its final citable 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.

**Molecularly imprinted electrochemical sensor based on amine group
modified graphene covalently linked electrode for 4-nonylphenol
detection**

Hong-Jun Chen ^{a,b}, Zhao-Hui Zhang* ^{a,b,c}, Rong Cai ^b, Xing Chen ^b, Yu-Nan Liu ^b, Wei Rao ^b,

Shou-Zhuo Yao ^c

^aKey laboratory of Hunan Forest Products and Chemical Industry Engineering, Jishou University,
Hunan 427000, PR China

^bCollege of Chemistry and Chemical Engineering, Jishou University, Hunan 416000, PR China

^cState Key Laboratory of Chemo/Biosensing and Chemometrics, Hunan 410082, PR China

Tel: +86-743-8563911; Fax: +86-743-8563911

* E-mail: zhaohuizhang77@163.com

Abbreviations

4-nonylphenol (NP); Fourier transform infrared spectroscopy (FT-IR); differential pulse voltammetry (DPV); electrochemical impedance spectroscopy (EIS); molecularly imprinted polymers (MIPs); graphene (GP); graphene oxide (GO); N, N'-dicyclohexylcarbodiimide (DCC); N-hydroxysuccinimide (NHS); polyoxyethylene(2) nonylphenyl ether (NP-2); octylphenol (OP); carbon electrode (CE); amide group terminated graphene oxide (GO-NH₂); pyrrole polymer (PPy); recovery standard deviation (RSD)

Download English Version:

<https://daneshyari.com/en/article/7681913>

Download Persian Version:

<https://daneshyari.com/article/7681913>

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