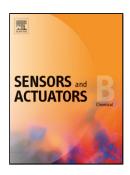
Accepted Manuscript

Title: Reduced graphene oxide/polyethylenimine based immunosensor for the selective and sensitive electrochemical detection of uropathogenic *Escherichia coli*

Authors: Roxana Jijie, Karima Kahlouche, Alexandre Barras, Nao Yamakawa, Julie Bouckaert, Tijani Gharbi, Sabine Szunerits, Rabah Boukherroub



PII:	S0925-4005(17)32505-4
DOI:	https://doi.org/10.1016/j.snb.2017.12.169
Reference:	SNB 23857
To appear in:	Sensors and Actuators B
Received date:	16-10-2017
Revised date:	14-12-2017
Accepted date:	27-12-2017

Please cite this article as: Roxana Jijie, Karima Kahlouche, Alexandre Barras, Nao Yamakawa, Julie Bouckaert, Tijani Gharbi, Sabine Szunerits, Rabah Boukherroub, Reduced graphene oxide/polyethylenimine based immunosensor for the selective and sensitive electrochemical detection of uropathogenic Escherichia coli, Sensors and Actuators B: Chemical https://doi.org/10.1016/j.snb.2017.12.169

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.

ACCEPTED MANUSCRIPT

Reduced graphene oxide/polyethylenimine based immunosensor for the selective and sensitive electrochemical detection of uropathogenic *Escherichia coli*

Roxana Jijie,¹ Karima Kahlouche,^{1,2,3} Alexandre Barras,¹ Nao Yamakawa,⁴ Julie Bouckaert,⁴ Tijani Gharbi,² Sabine Szunerits^{1*} and Rabah Boukherroub^{1*}

¹ Univ. Lille, CNRS, Central Lille, ISEN, Univ. Valenciennes, UMR 8520, IEMN, F-59000 Lille, France

² Laboratoire de Nanomédecine, imagerie et thérapeutique, EA 4662, Université de Franche-Comté, 16 Route de Gray, 25030 Besançon, France

³ Centre for Development of Advanced Technologies (CDTA), Baba Hassen, Algeria

⁴ Unité de Glycobiologie Structurale et Fonctionnelle (UGSF), Univ. Lille, CNRS, UMR 8576, 59655 Villeneuve d'Ascq, France

^{*}To whom correspondence should be addressed: <u>sabine.szunerits@univ-lille1.fr;</u> <u>rabah.boukherroub@univ-lille1.fr</u>

Graphical abstract

A new sensing platform based on gold electrodes modified with reduced graphene oxide/polyethylenimine functionalized with anti-fimbrial *E. coli* antibodies is proposed for sensitive and selective electrochemical detection of uropathogenic *E. coli* in serum samples.

Download English Version:

https://daneshyari.com/en/article/7140812

Download Persian Version:

https://daneshyari.com/article/7140812

Daneshyari.com