Accepted Manuscript

Prospects of ionic liquids application in electronic and bioelectronic nose instruments

Tomasz Wasilewski, Jacek Gębicki, Wojciech Kamysz

PII: S0165-9936(17)30052-3

DOI: 10.1016/j.trac.2017.05.010

Reference: TRAC 14929

To appear in: Trends in Analytical Chemistry

Received Date: 14 February 2017

Revised Date: 22 May 2017 Accepted Date: 22 May 2017

Please cite this article as: T. Wasilewski, J. Gębicki, W. Kamysz, Prospects of ionic liquids application in electronic and bioelectronic nose instruments, *Trends in Analytical Chemistry* (2017), doi: 10.1016/j.trac.2017.05.010.

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

Prospects of ionic liquids application in electronic and bioelectronic nose instruments

Tomasz Wasilewski¹*, Jacek Gębicki²**, Wojciech Kamysz¹

* e-mail: tomwasil@gumed.edu.pl, ** jacgebic@pg.gda.pl

Abs	tract	2
1.	Introduction	2
2.	Comparison of design and principle of operation of electronic and bioelectronic noses	5
3. T	echniques of immobilization of ionic liquids on the surface of sensors	9
4.	Ionic liquids-based sensors	13
	Mass sensing	transducers
•••••		13
4.2.	Multi-transduction systems	16
5.	Ionic liquids-based biosensors	17
	Application of ionic liquids in bioelectronic nos	e instruments
6.	Development prospects of electronic nose instruments based on ionic liquids	
0.	Development prospects of electronic hose instruments based on folic liquids	20
7. S	ummary	24
Refe	prences	25

¹ Medical University of Gdansk, Department of Inorganic Chemistry, Faculty of Pharmacy, Medical University of Gdansk, Poland, Al. Hallera 107, 80-416 Gdansk, Poland

² Gdańsk University of Technology, Department of Chemical and Process Engineering, Chemical Faculty, Gdańsk University of Technology, Gabriela Narutowicza 11/12 Str., 80-233 Gdańsk, Poland

Download English Version:

https://daneshyari.com/en/article/5141595

Download Persian Version:

https://daneshyari.com/article/5141595

<u>Daneshyari.com</u>