



Potentiometric miniaturized pH sensors based on polypyrrole films

Submitted by Olivier Segut on Fri, 11/07/2014 - 16:35

Titre	Potentiometric miniaturized pH sensors based on polypyrrole films
Type de publication	Article de revue
Auteur	Lakard, Boris [1], Segut, Olivier [2], Lakard, Sophie [3], Herlem, Guillaume [4], Gharbi, Tijani [5]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2007
Langue	Anglais
Date	Jan-03-2007
Numéro	1
Pagination	101-8
Volume	122
Titre de la revue	Sensors and Actuators B: Chemical
ISSN	09254005
Mots-clés	electrochemistry [6], microsystem technology [7], Polypyrrole [8], potentiometric pH sensors [9]
Résumé en anglais	Potentiometric pH miniaturized sensors based on electrosynthesized polypyrrole films were developed. These pH sensors consist in two interdigitated microarray electrodes which were fabricated using photolithography process. One electrode of the sensor is coated by a polypyrrole film while the other one is coated by a silver film used as reference electrode. The potentiometric responses of these sensors were generally linear to pH changes in the range from 2 to 11. More, some sensors appeared to be stable in time during 30 days. The effect of the thickness of polymer film to potentiometric responses was also studied. It appeared that thinner polypyrrole films gave better potentiometric responses than thicker ones.
URL de la notice	http://okina.univ-angers.fr/publications/ua5324 [10]
DOI	10.1016/j.snb.2006.04.112 [11]
Lien vers le document	http://linkinghub.elsevier.com/retrieve/pii/S092540050600390X [12]
Titre abrégé	Sensors and Actuators B: Chemical

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- [10] <http://okina.univ-angers.fr/publications/ua5324>
- [11] <http://dx.doi.org/10.1016/j.snb.2006.04.112>
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