

ПЧ  
780/e



ELSEVIER

Volume 709

15 November 2013

ISSN 1572-6657

# Journal of Electroanalytical Chemistry

An International Journal  
also devoted to  
All Physicochemical Aspects of  
Fundamental and Applied Electrochemistry

Editors:  
J.M. Feliu  
T. Kakiuchi  
P. Unwin  
X.H. Xia

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

In collaboration with  
the International Society  
of Electrochemistry





## Contents

Abstracts and/or contents lists of this journal are published in: Analytical Abstracts, Metals Abstracts, World Aluminum Abstracts, Chemical Abstracts, Current Contents (Physical, Chemical & Earth Sciences), Engineering Index, INSPEC. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®.

- Electrochemical behavior of sophoridine at a new amperometric sensor based on L-Theanine modified electrode and its sensitive determination

Y. Li, L. Zou, G. Song, K. Li and B. Ye 1

- Influence of indoline dye and coadsorbate molecules on photovoltaic performance and recombination in dye-sensitized solar cells based on electrodeposited ZnO

M. Rudolph, T. Yoshida and D. Schlettwein 10

- Amperometric determination of ascorbic acid using multiwalled carbon nanotube-thiolated polyaniline composite modified glassy carbon electrode

Y. Liu, Z. Su, Y. Zhang, L. Chen, T. Gu, S. Huang, Y. Liu, L. Sun, Q. Xie and S. Yao 19

- Oxygen reduction with tetrathiafulvalene at liquid/liquid interfaces catalyzed by 5,10,15,20-tetraphenylporphyrin

X. Liu, S. Wu and B. Su 26

- Influence of several additives on stability and electrochemical behavior of V(V) electrolyte for vanadium redox flow battery

G. Wang, J. Chen, X. Wang, J. Tian, H. Kang, X. Zhu, Y. Zhang, X. Liu and R. Wang 31

- New and low cost plastic membrane electrode with low detection limits for sulfadimethoxine determination in aquaculture waters

S.A.A. Almeida, M.C.B.S.M. Montenegro and M.G.F. Sales 39

- Influence of the electrode potential and *in situ* STM scanning conditions on the phase boundary structure of the single crystal Bi(1 1 1)|1-butyl-4-methylpyridinium tetrafluoroborate interface

E. Anderson, V. Grozovski, L. Siinor, C. Siimenson, V. Ivaniščev, K. Lust, S. Kallip and E. Lust 46

- Interdigitated ring electrodes: Theory and experiment

E.O. Barnes, A. Fernández-la-Villa, D.F. Pozo-Ayuso, M. Castaño-Alvarez, G.E.M. Lewis, S.E.C. Dale, F. Marken and R.G. Compton 57

- Electrochemical behavior of metal-organic framework MIL-101 modified carbon paste electrode: An excellent candidate for electroanalysis

Y. Li, C. Huangfu, H. Du, W. Liu, Y. Li and J. Ye 65

- Characterisation of screen-printed gold and gold nanoparticle-modified carbon sensors by electrochemical impedance spectroscopy

E. Bernalte, C. Marín-Sánchez, E. Pinilla-Gil and C.M.A. Brett 70

- Insights into the electrooxidation of glycolaldehyde on platinum in acidic media

R.B. de Lima, H.R. Araujo and G.A. Camara 77

(Contents continued on inside back cover)



1572-6657(20131115)709:C;1-U

*(Contents continued from outside back cover)*

Electrochemical nucleation and growth of Sn onto double reduction steel substrate from a stannous fluoborate acid bath X. Huang, Y. Chen, J. Zhou, Z. Zhang and J. Zhang	83
Corrosion prevention of graphite collector in vanadium redox flow battery S. Rudolph, U. Schröder, I.M. Bayanov and G. Pfeiffer	93
Electrochemical behavior of propranolol hydrochloride in neutral solution on calixarene/multi-walled carbon nanotubes modified glassy carbon electrode Z. Kun, Y. Shuai, T. Dongmei and Z. Yuyang	99
Supramolecular assembly of perylene derivatives on Au functionalized graphene for sensitivity enhancement of electro-chemiluminescent immunosensor Y. Zhuo, M. Zhao, W.-J. Qiu, G.-F. Gui, Y.-Q. Chai and R. Yuan	106
Electrochemical advanced oxidation of 2-chlorobenzoic acid using BDD or Pt anode and carbon felt cathode A. Mhemdi, M.A. Oturan, N. Oturan, R. Abdelhédi and S. Ammar	111
All solid state chronopotentiometric ion-selective electrodes based on ferrocene functionalized PVC Z. Jarolímová, G.A. Crespo, M.G. Afshar, M. Pawlak and E. Bakker	118