

IN
J 80/ae

Journal of **Applied Electrochemistry**

VOLUME 43 NUMBER 2 FEBRUARY 2013

ISSN 0021-891X

Special Issue: GEI-ERA 2012

Guest Editors: Massimiliano Lo Faro · Vincenzo Baglio

Journal of Applied Electrochemistry

Volume 43 · Number 2 · February 2013

Федеральное государственное
бюджетное учреждение науки
Центральная научная библиотека
Уральского отделения
Российской академии наук (ЦНБ УрО РАН)

Special Issue: GEI-ERA 2012

Guest Editors: Massimiliano Lo Faro · Vincenzo Baglio

FOREWORD

Foreword

M. Lo Faro · V. Baglio 99

SHORT COMMUNICATION

On the co-adsorption process of sodium dodecyl sulfate and sodium dodecylbenzenesulfonate on a 1-decanethiol-functionalized Au electrode, as a corrosion inhibiting mimic process

C. Fontanesi · G. Camurri · F. Tassinari 101

REVIEW PAPERS

Polymer electrolyte membrane water electrolysis: status of technologies and potential applications in combination with renewable power sources

A.S. Aricò · S. Siracusano · N. Briguglio · V. Baglio · A. Di Blasi · V. Antonucci 107

PEMFCs and AEMFCs directly fed with ethanol: a current status comparative review

A. Brouzgou · A. Podias · P. Tsiakaras 119

ORIGINAL PAPERS

Novel multiphase electrode/electrolyte composites for next generation of flexible polymeric Li-ion cells

J.R. Nair · M. Destro · C. Gerbaldi · R. Bongiovanni · N. Penazzi 137

Ethanol oxidation on a high temperature PBI-based DEFC using Pt/C, PtRu/C and Pt₃Sn/C as catalysts

J.J. Linares · S.C. Zignani · T.A. Rocha · E.R. Gonzalez 147

Mesoporous carbons supported non-noble metal Fe–N_x electrocatalysts for PEM fuel cell oxygen reduction reaction

A.H.A. Monteverde Videla · L. Zhang · J. Kim · J. Zeng · C. Francia · J. Zhang · S. Specchia 159

IrO₂–SnO₂ mixtures as electrocatalysts for the oxygen reduction reaction in alkaline media

C. Locatelli · A. Minguzzi · A. Vertova · S. Rondinini 171

Development of glucose oxidase-based bioanodes for enzyme fuel cell applications

B. Mecheri · A. D'Epifanio · A. Geracitano · P. Targon Campana · S. Licoccia 181

Spray-deposited NiO_x films on ITO substrates as photoactive electrodes for p-type dye-sensitized solar cells

M. Awais · D.D. Dowling · M. Rahman · J.G. Vos · F. Decker · D. Dini 191

Growth and photoelectrochemical behaviour of electrodeposited ZnO thin films for solar cells

R. Inguanta · C. Garlisi · T. Spanò · S. Piazza · C. Sunseri 199

Emission spectra and transient photovoltage in dye-sensitized solar cells under stress tests

M. Giustini · D. Angelone · M. Parente · D. Dini · F. Decker · A. Lanuti · A. Reale · T. Brown · A. di Carlo 209

Investigation and optimization of photocurrent transient measurements on nano-TiO₂

F. Spadavecchia · S. Ardizzone · G. Cappelletti · L. Falciola · M. Ceotto · D. Lotti 217

Electrocatalytic dechlorination of polychloroethylenes at silver cathode

C. Durante · A.A. Isse · A. Gennaro 227

Biocides electrogeneration for a zero-reagent on board disinfection of ballast water

E. Petrucci · L. Di Palma · E. De Luca · G. Massini 237

Further articles can be found at www.springerlink.com

Indexed/abstracted in Science Citation Index, Science Citation Index Expanded (SciSearch), SCOPUS, Chemical Abstracts Service (CAS), Google Scholar, EBSCO, CSA, ProQuest, Academic OneFile, Academic Search, ASFA, CEABA-VtB, Chemistry Citation Index, ChemWeb, Current Abstracts, Current Contents/Physical, Chemical and Earth Sciences, Earthquake Engineering Abstracts, EI-Compendex, Engineered Materials Abstracts, Gale, GeoRef, HW Wilson, INIS Atomindex, Journal Citation Reports/Science Edition, Mass Spectrometry Bulletin, Materials Science Citation Index, OCLC, OmniFile, Science Select, SCImago, Summon by Serial Solutions, VINITI - Russian Academy of Science

Instructions for Authors for *J Appl Electrochem* are available at <http://www.springer.com/10800>