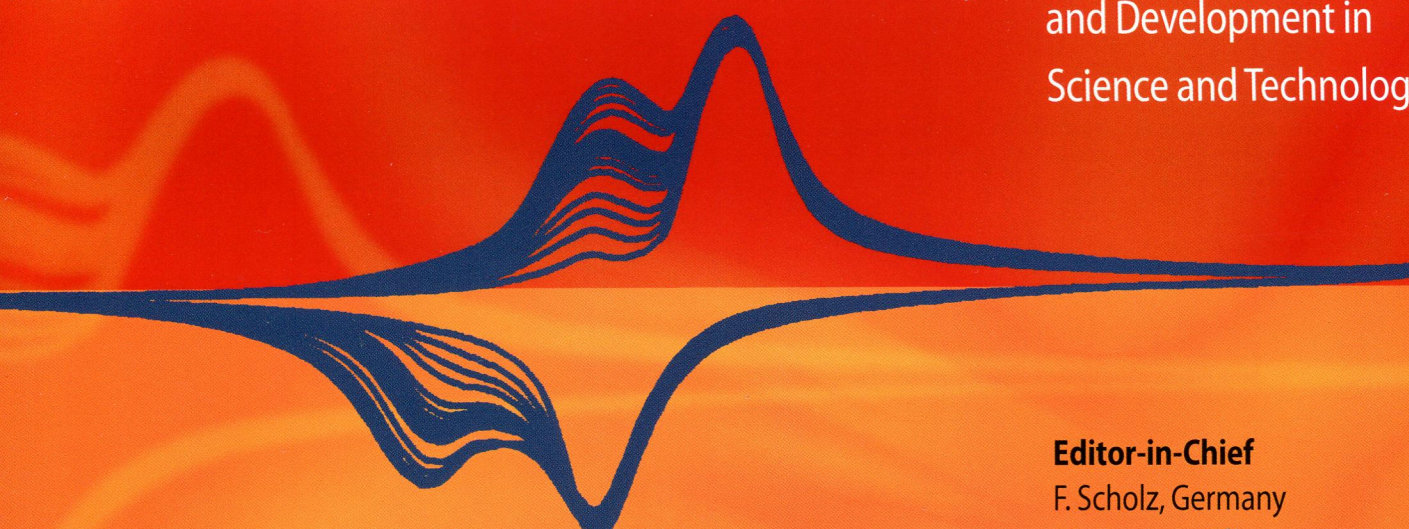


FLU
J80/s2e

Volume 17 • Number 10 • October 2013

Journal of Solid State Electrochemistry

Current Research
and Development in
Science and Technology



Editor-in-Chief

F. Scholz, Germany

Managing Editor

M. Hermes, Germany

Topical Editors

D. Aurbach, Israel

P. Balaya, Singapore

A. Doménech-Carbó, Spain

I.A. Hümmelgen, Brazil

G. Inzelt, Hungary

V.V. Kharton, Portugal

D. Mandler, Israel

S.-I. Pyun, Republic of Korea

G.A. Tsirlina, Russia

Original Papers

All-solid-state batteries with $\text{Li}_2\text{O-Li}_2\text{S-P}_2\text{S}_5$ glass electrolytes synthesized by two-step mechanical milling

T. Ohtomo · A. Hayashi · M. Tatsumisago · K. Kawamoto 2551

Multistep sintering preparation and electrochemical performances of $\text{LiFe}_{0.7}\text{V}_{0.2}\text{PO}_4/\text{C}$ cathode material for lithium-ion batteries

J. Zou · Y. Zhang · F. Wang · B. Chen · C. Lu · Z. Wang 2559

Nitrogen-doped ordered porous carbon catalyst for oxygen reduction reaction in proton exchange membrane fuel cells

A. Dorjgotov · J. Ok · Y. Jeon · S.-H. Yoon · Y.G. Shul 2567

Facile fabrication of mesoporous manganese oxides as advanced electrode materials for supercapacitors

L. Chen · N. Gu · R. Ding · L. Qi · H. Wang 2579

Electrochemical performance of LiMn_2O_4 microcubes prepared by a self-templating route

J. Xie · C.-Y. Sun · T.-J. Zhu · G.-S. Cao · X.-B. Zhao · S.-C. Zhang 2589

Facile method to synthesize graphene-ZnS nanocomposites: preparation and application in bioelectrochemistry of hemoglobin

L. Wang · W. Qi · R. Su · Z. He 2595

Highly sensitive label-free electrochemical aptasensor for thrombin detection with cobalt hexacyanoferrate as the electrochemical probe

S. Yang · H. Li · W. Zha · Q. Sun · L. Zheng · A. Chen 2603

Hydrolysis lignin-based organic electrode material for primary lithium batteries

S.V. Gnedenkov · D.P. Opra · S.L. Sinebryukhov · A.K. Tsvetnikov · A.Y. Ustinov · V.I. Sergienko 2611

A sensitive sensor for determination of L-tryptophan based on gold nanoparticles/poly(alizarin red S)-modified glassy carbon electrode

H. Liu · Y. Chen · Y. Liu · Z. Yang 2623

Structural and photoelectrochemical characterization of MWCNT-TiO₂ matrices sensitized with Bi₂S₃

J.C. Calva-Yáñez · M.E. Rincón · M. Solís de la Fuente · G. Alvarado-Tenorio 2633

Kinetics of electrochromic process in thin films of cathodically deposited nickel hydroxide

S.S. Fomanyuk · Y.S. Krasnov · G.Y. Kolbasov 2643

Excellent electrochemical performance of nitrogen-enriched hierarchical porous carbon electrodes prepared using nano-CaCO₃ as template

T. Li · G. Yang · J. Wang · Y. Zhou · H. Han 2651

Cathodic etching for fabrication of super-hydrophobic aluminum coating with micro/nano-hierarchical structure

C. Zhilei · S. Maobing · W. Lida 2661

Electrodeposition of magnesium–lithium–dysprosium ternary alloys with controlled components from dysprosium oxide assisted by magnesium chloride in molten chlorides

M. Zhang · Y. Yang · W. Han · M. Li · K. Ye · Y. Sun · Y. Yan 2671

Electrochemical reduction and quantification of menadione in sodium dodecyl sulfate micellar media

G. Ziyatdinova · E. Ziganshina · H. Budnikov 2679

Anodic dissolution of iron microparticles in chloride-containing acetate buffer electrolytes studied by elimination voltammetry

L. Pikna · Z. Kovacova · M. Hezelova · L. Trnkova 2687

Electrochemical properties of all-solid-state lithium batteries with amorphous titanium sulfide electrodes prepared by mechanical milling

T. Matsuyama · A. Sakuda · A. Hayashi · Y. Togawa · S. Mori · M. Tatsumisago 2697

Preparation and electrochemical characterization of Ruddlesden–Popper oxide $\text{La}_4\text{Ni}_3\text{O}_{10}$ cathode for IT-SOFCs by sol–gel method

Z. Lou · N. Dai · Z. Wang · Y. Dai · Y. Yan · J. Qiao · J. Peng · J. Wang · K. Sun 2703

The electrochemical activities of anthraquinone monosulfonate adsorbed on the basal plane of reduced graphene oxide by π – π stacking interaction

G. Yuan · G. Zhang · J. Chen · L. Fu · L. Xu · F. Yang 2711

Magnetic field-assisted electroforming of complex geometries

M. Weinmann · A. Jung · H. Natter 2721

Dual template method to prepare hierarchical porous carbon nanofibers for high-power supercapacitors

Q. Wang · Q. Cao · X. Wang · B. Jing · H. Kuang · L. Zhou 2731

Electrocatalytic performance of poly(*o*-phenylenediamine)-Pt–Ru nanocomposite for methanol oxidation

P. Gajendran · R. Saraswathi 2741

Abstracted/Indexed in *Science Citation Index Expanded (SciSearch)*, *Journal Citation Reports/Science Edition*, *SCOPUS*, *INSPEC*, *Chemical Abstracts Service (CAS)*, *Google Scholar*, *EBSCO*, *Academic OneFile*, *CEABA-VtB*, *Chemistry Citation Index*, *ChemWeb*, *Current Abstracts*, *Current Contents/Physical, Chemical and Earth Sciences*, *EI-Compendex*, *Gale*, *Materials Science Citation Index*, *OCLC*, *SCImago*, *Summon by Serial Solutions*, *VINITI - Russian Academy of Science*.

Instructions for Authors for *J Solid State Electrochem* are available at <http://www.springer.com/10008>.