SYMPOSIUM R

Solid state ionics:
advanced functional materials for solid state devices

Symposium Organizers:
Albert TARACON, IREC, Barcelona, Spain
David S. MEBANE, West Virginia University, USA
Mónica BURRIEL, LMEP, CNRS, Grenoble-INP, France
Regina DITTMANN, Forschungszentrum Juelich, Germany

To be published in Solid State Ionics, Elsevier
14:00 ZnO nanospheres for photocatalytic degradation of para-aminobenzoic acid under UV and Visible illumination
Chrysanthi Patriarcheia1,2, M. Moschoglouannaki1,2, M. Charalampakis1,2, Sophia Tsoumarchidou4, Ioannis Poulios4, G. Kiriakidist, V. Vinet1,2
1. Institute of Electronic Structure and Laser, Foundation for Research and Technology Hellas, 100 N. Plastira Ave., Vassilikou Vouton, 70013 Heraklion, Crete, Greece 2. University of Crete, Department of Physics, 710 03 Heraklion, Crete, Greece 3. Crete Center for Quantum Complexity and Nanotechnology, Department of Physics, University of Crete, 71003 Heraklion, Greece 4. Laboratory of Physical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece *present author **corresponding author: biniasbil@mail.auth.gr

14:00 Interfacial dynamics of BaTaO2N nanoparticles during sintering: an MD study based on bond-valence derived interatomic-potentials
Kousika Anbalagan, Tiju Thomas
Department of Metallurgical and Materials Engineering, IIT Madras.

14:00 Thiol-Akene Click Chemistry for Enhanced Energy Density Required for Sustainable Aquaculture (SEA FARM)
Brend Subedi 1, Josh Shipman 1, Brian Riggs 1, Zhe Wang 2, Christopher Green 3, Greg Lutz 3, Bryan Blythe 2, Scott M. Graydon 4, Douglas B. Chrisey 1
1. Department of Physics and Engineering Physics, Tulane University, New Orleans, LA 2. Xavier University, New Orleans, LA 3. Louisiana State University, Baton Rouge, LA 4. Department of Chemistry, Tulane University, New Orleans, LA

14:00 Deep levels in ZnO by admittance spectroscopy on bicrystals and capacitance spectroscopy on single crystalline photoanodes
Thi Lan Tran, Hung Tai Nguyen, Dang Thanh Nguyen, Eui-Chol Shin, J. Meier, Jang-Sook Lee
Chonnam National University, Chonnam National University, Chonnam National University, Chonnam National University, Max Planck Institute for Solid State Research, Chonnam National University

14:00 Kinetic Monte Carlo in solid state ionic
S. Greninger, J. Kettgen, R. J. I. Hoholzlotz-Institut Münster, Forschungszentrum Jülich GmbH, Institute of Physical Chemistry, RWTH Aachen University,

14:00 Long-term stability of oxygen surface exchange kinetics of Pr0.8Ca0.2FeO3-d against SO2-poisoning
Edith Bachar (1), Christian Berger (1), Christian Gsponer (2), Alexander Menzel (3), Werner Sittig (1)
(1) Technische Universität München, Chair of Physical Chemistry, Franz-Josef-Straße 18, München, Austria, (2) Institute for Electronic Microscopy (FELMI), Graz University of Technology & Graz Center for Electron Microscopy (ZFE), Austrian Cooperative Research (AQR), Steyrgasse 17, Graz, Austria, (3) University of Innsbruck, Institute of Physical Chemistry, Innrain 50-52, Innsbruck, Austria

14:00 Is ReO3 a mixed ionic/elctronic conductor? A DFT study of defect formation and migration in a Re0.95O3 perovskite-type oxide
Jana P. Párras
RWTH Aachen University, Institute of Physical Chemistry, Landoltweg 2, 52074 Aachen, Germany

14:00 How to get mechanistic information from partial pressure dependent I-V curves of oxygen exchange on mixed conducting electrodes
Alexander Schmid, Ghislaine M. Rupp, Jürgen Fleig
Institute of Chemical Technologies and Analytics, Vienna University of Technology, Geislmarkt 9, Vienna, 1080, Austria

14:00 Electrical conductivity relaxation in GDC:LSCF composites for dual-phase oxygen transport membranes
Thuy Linh Pham, Hung Tai Nguyen, Thi Lan Tran, Ji-Haeng Yu, Jong-Sook Lee
Chonnam National University, Chonnam National University, Korea Institute of Energy Research, Chonnam National University

14:00 Nonstoichiometric BaTiO3: ferroelectricity, phase transitions, and chemical diffusivity
Hung Tai Nguyen, Dang Thanh Nguyen, Thuy Linh Pham, Jong-Sook Lee
Chonnam National University

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