SYMPOSIUM R

Solid state ionics:
advanced functional materials for solid state devices

Symposium Organizers:

Albert TIRACON, IREC, Barcelona, Spain

David S. MEBANE, West Virginia University, USA

Monica BURRIEL, LMGP, CNRS, Grenoble-INP, France

Regina DITTMANN, Forschungszentrum Juelich, Germany

To be published in Solid State Ionics, Elsevier
Wednesday 30 June 2016
Interface & Surface Phenomena (9) • Felix Gunter and Roland Markle

06:30 11. Chemo-mechanical couplings in constrained dense and porous mixed conductors and at interfaces
William C. Croft
Department of Materials Science & Engineering, Stanford University

09:00 12. The Role of Humidity for Tracer and Electrochemical Oxygen Exchange Kinetics in Mixed Conducting Electrodes
Markus Kolbe, Jochen Ravinger, Andreas Reining, Steffen Sibit, Herbert Hutter, Jürgen Pferfer
Institute of Technical, Chemical and Geophysical Analysis, TU Wien, Getreidemarkt 9, 1060, Austria

09:15 13. Influence of oxygen and CO2 on oxygen transport kinetics and surface chemistry of LSCF
Vincenzo Toeves, R. Maex, John Cordele, Tatsuro Watanabe, Jörg Kibbel
(a) WPI-International Institute for Carbon Neutral Energy Research (iCNER), Fukuoka, Japan. (b) Department of Materials, Imperial College London, London, UK

09:30 14. Ion hopping on solid-state ionic materials: Hydrometric behavior of the polarization resistance of PEO/PEO blend electrolytes
Alexander Millet, Jörg Pferfer, Alexander K. Ogilby, TU Wien, Institute of Chemical Technologies and Analytical Chemistry, Getreidemarkt 9/16-Ec, 1060 Vienna, Austria, TU Wien, Institute of Chemical Technologies and Analytical Chemistry, Getreidemarkt 9/16-Ec, 1060 Vienna, Austria, TU Wien, Institute of Chemical Technologies and Analytical Chemistry, Getreidemarkt 9/16-Ec, 1060 Vienna, Austria

09:45 15. Effect of the cathode surface termination on the oxygen reduction reaction rate
Kiyosumi, Yu. A. Markelov, R. Markle, M.-B. Kruicll, J. Mauer
Max Plank Institute for Solid State Research, Stuttgart, Germany, Institute for Solid State Physics, University of Maryland, USA

10:00 16. Coffee Break

10:20 17. Electric double layers in complex oxide epitaxial thin films
Jave Spindt, 1 Ana Bauglioli, 2 Bryan D. Espey, 2 Robert A. Williams, 2 Dave W. McDonnell, 1 Zdena Kononenko, 1 Lisa Sator, 1 and Felix Sudbø 1, 2
1 Catalysis Institute of Nanoscience and Nanotechnology, Ruhr-University Bochum, 19051 Germany, 2 CEC II, Institute of Chemical Technologies and Analytical Chemistry, Getreidemarkt 9/16 Ec, 1060 Vienna, Austria, 2 Center of Structural Chemistry, Institute of Solid State Physics and New Materials, University of Belgrade, University of Belgrade, 11000 Belgrade, Serbia, Stockholm, Sweden

10:50 18. Tailoring mixed-electronic conductivity in PCONTest heterostructures
George F. Herrington, 1(b,c), Nicola H. Pennycook, 1(b,c), Kazunori Sawaki, 1(b,c), Page Yooliddle, 1(b,c), and Harry L. Tuller 2(b,c)

11:05 19. Dynamic of Doped Redistribution at SrTiO3-Based Heterostructures: Simulations based on Space-Charge Theory
A. F. Zunzunegui 1,2, R. Waser 1,2, I. Blume 1,2, F. Gunter 1,2
1 Institute of Electronics, Technische Universität München, 85748 Garching, Germany, 2 PTW Essen GmbH, 85748 Garching, Germany

R-14