

Monday, July 27, 2015

C—Low-Temperature Fuel Cells, Electrolyzers, and Redox Flow Cells

- Abst# 605 Direct Ethanol Fuel Cells: Cleavage of the C-C Bond on Different Pt-M Catalysts Using Reactivity Descriptors through Density Functional Theory by Rafael Ribadeneira Paz, Universidad Nacional de Colombia - Sede Medellín; Alejandro Pérez Mendoza, Universidad Nacional de Colombia - Sede Medellín; Sebastián Moreno, Universidad Nacional de Colombia - Sede Medellín
- Abst# 611 Finite Thickness Effects on Nafion Properties in the PEMFC Catalyst Layer, Probed By *in Situ* Neutron Reflectometry by Steven DeCaluwe, Center for Neutron Research, NIST; Steven DeCaluwe, Dept of Mechanical Engineering, Colorado School of Mines; Joseph Dura, Center for Neutron Research, NIST

A—Solid Oxide Fuel Cells XIV (SOFC-XIV)

- Abst# 48 Thermal Performance of Brazed Plate Heat Exchanger in High Temperature Applications by Huai Lo, National Chiao Tung University
- Abst# 64 Electrochemical Characterization of Ag-Y<sub>0.5</sub>Bi<sub>1.5</sub>O<sub>3</sub> Composite Cathode on 8YSZ-Ce<sub>0.78</sub>Gd<sub>0.2</sub>Sr<sub>0.02</sub>O<sub>2-δ</sub> Electrolyte Using AC Impedance Spectroscopy by Ching-Han Hua, National Taiwan University of Science and Technology; Chen-Chia Chou, National Taiwan University of Science and Technology
- Abst# 79 Transmission Electron Microscopy Study of Cr Poisoning of Lscf Cathodes by Na Ni, Imperial College London; Stephen Skinner, Imperial College London, London, UK
- Abst# 101 Long Term Stability Investigation of Solid Oxide Electrolysis Cell with Infiltrated Porous YSZ Air Electrode Under High Current by Sune Veltzé, Technical University of Denmark; Rainer Küngas, Haldor Topsøe A/S; Simona Ovtar, Technical University of Denmark; Søren Simonsen, Technical University of Denmark; Kar Thydén, Technical University of Denmark; Wolff-Ragnar Kiebach, Technical University of Denmark
- Abst# 104 Low Temperature Electrochemical Reduction of NO and O<sub>2</sub> on Pt Electrode Using YSZ, GDC and Lsgm Electrolyte by Xi Wang, Department of Thermal Engineering, Tsinghua University
- Abst# 105 Effects of Ba Adsorption Layer on NO Electrochemical Reduction Reaction Mechanism by Xi Wang, Department of Thermal Engineering, Tsinghua University; Yixiang Shi, Department of Thermal Engineering, Tsinghua University; Ningsheng Cai, Department of Thermal Engineering, Tsinghua University

Tuesday, July 28, 2015

B—Batteries

- Abst# 541 Gallium Arsenide As a New Alloying Anode for Lithium Ion Batteries by Kevin Hays, The George Washington University; Michael Wagner, The George Washington University; Nathan Banek, The George Washington University

Abst# 542 Monitoring of the SEI-Evolution of Uncoated and Carbon-Coated Si Nanoparticles By Transmission Electron Microscopy and Electrochemical Impedance Spectroscopy by Kristof Van Havenbergh, EMAT, University of Antwerp; Stuart Turner, EMAT, University of Antwerp; Jean-Sébastien Bridel, Umicore Research; Stijn Put, Umicore Research; Gustaaf Van Tendeloo, EMAT, University of Antwerp

#### A—Solid Oxide Fuel Cells XIV (SOFC-XIV)

Abst# 175 Infiltrated  $\text{La}_{0.8}\text{Sr}_{0.2}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-\delta}$  Based Cells Fed with Biogas by Elisabetta Di Bartolomeo, University of Rome Tor Vergata; Igor Luisetto, University of Roma Tre; Francesco Basoli, University of Rome Tor Vergata; Francesca Zurlo, University of Rome Tor Vergata; Zahra Salehi, University of Rome Tor Vergata; Silvia Licoccia, University of Rome Tor Vergata

Abst# 222 High Fuel Utilization Operation of Solid Oxide Fuel Cells - a Modeling Study by Dayadeep Monder, Indian Institute of Technology Bombay; Vishal Pawar, Indian Institute of Technology Hyderabad; Sanjay Kumar, Indian Institute of Technology Hyderabad; Rustam Shekhar, Indian Institute of Technology Bombay

Wednesday, July 29, 2015

#### B—Batteries

Abst# 561 Determining Performance-Limiting Mechanisms in Fluorophosphate Sodium-Ion Battery Cathodes Via Transition-Metal Mixing by Ian Matts, Massachusetts Institute of Technology; Stephen Dacek, Massachusetts Institute of Technology; Tomasz Pietrzak, Warsaw University of Technology; Rahul Malik, Massachusetts Institute of Technology; Gerbrand Ceder, Massachusetts Institute of Technology

#### C—Low-Temperature Fuel Cells, Electrolyzers, and Redox Flow Cells

Abst# 692 Start-up Effects in Alkaline Fuel Cell Stacks by Naveed Akhtar, AFC Energy plc.

Thursday, July 30, 2015

#### B—Batteries

Abst# 578  $\text{Na}_x(\text{Fe},\text{Mn})\text{O}_2$  Layered Oxides Used in Sodium Batteries : Structural Transformations Induced By the Electrochemical Process by Marie Guignard, CNRS, Université de Bordeaux, ICMCB; Benoit Mortemard, CNRS, Université de Bordeaux, ICMCB; Dany Carlier, CNRS, Université de Bordeaux, ICMCB; Alain Wattiaux, CNRS, Université de Bordeaux, ICMCB; Claude Delmas, CNRS, Université de Bordeaux, ICMCB

#### C—Low-Temperature Fuel Cells, Electrolyzers, and Redox Flow Cells

Abst# 711 Synthesis and Characterisation of Pd-Ni-Sn Electrocatalyst for Use in Direct Ethanol Fuel Cells by Sompocho Jongsomjit, Kasetsart University; Paweena Prapainainar, Kasetsart University; Korakot Sombatmankhong, National Metal and Materials Technology Center

[A—Solid Oxide Fuel Cells XIV \(SOFC-XIV\)](#)

Abst# Intermediate Temperature - SOFCs: Nanoparticles Synthesis through Coprecipitation  
368 By Nitrate Route and By Oxide Route by Rafael Ribadeneira Paz, Universidad Nacional de Colombia - Sede Medellín; Javier González Ocampo, Universidad Nacional de Colombia - Sede Medellín

Friday, July 31, 2015

[A—Solid Oxide Fuel Cells XIV \(SOFC-XIV\)](#)

Abst# LSGM-based Cells for IT-SOFC Applications by Elisa Mercadelli, ISTECCNR;  
376 Alessandra Sanson, ISTECCNR; Angela Gondolini, ISTECCNR; Paola Pinasco, ISTECCNR; Francesco Basoli, University of Rome Tor Vergata; Elisabetta Di Bartolomeo, University of Rome Tor Vergata

Abst# Low Temperature Synthesis of Sub-micrometer Yttria-doped Barium Zirconate Thin  
414 Films by Modified Chemical Solution Deposition Technique by Mridula Biswas, Nanyang Technological University; Hanlin Xie, Nanyang Technological University; Pei-Chen Su, Nanyang Technological University