

IMLB Cancelled Papers as of June 5, 2014

Tuesday, June 10, 2014

P1—Tuesday Poster Session

- Abst# 225 Exploring New Storage Mechanisms to Improve Capacity Performance of Na-Based Batteries by Chilin Li, State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, 200050, China; Pengfei Yu, State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, 200050, China; Ning Zhao, State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, 200050, China; Xiangxin Guo, State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, 200050, China
- Abst# 226 Open Framework Fluorides As Insertion/Conversion Cathodes for Li and Na Batteries by Chilin Li, State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, 200050, China
- Abst# 237 Synthesis and Characterization of LiFeBO₃/C Composite By Spray Pyrolysis with Heat Treatment by Izumi Taniguchi, Tokyo Institute of Technology; Kenichi Suto, Tokyo Institute of Technology
- Abst# 239 Sn-Doped Hard Carbon As a Practical Anode for Sodium-Ion Batteries by Yunxiao Wang, Institute for Superconducting and Electronic Materials, University of Wollongong; Shulei Chou, University of Wollongong; Hua Liu, University of Wollongong; Shi Dou, University of Wollongong
- Abst# 245 Ternary Metal Fluorides As New Cathodes of Rechargeable Lithium Batteries with Ultrahigh Energy Density by Feng Wang, Brookhaven National Lab; Sung-Wook Kim, Brookhaven National Lab; Jason Graetz, Brookhaven National Lab
- Abst# 250 Cobalt Oxide Modified Porous Carbon Anode Enhancing Electrochemical Performance for Lithium-Ion Batteries by Yan Han, Center of Energy and Material, Tianjin Normal University; Lei Dong, Tianjin Normal University; Xifei Li, Center of Energy and Material, Tianjin Normal University; Dejun Li, Tianjin Normal University
- Abst# 251 A Zero-Strain P2-Layered Na_{0.66}[Li_{0.22}Ti_{0.78}]O₂ As New Anode Material for Room-Temperature Sodium-Ion Batteries by Yuesheng Wang, Institute of Physics, Chinese Academy of Sciences; Xiqian Yu, Brookhaven National Laboratory; Shuyin Xu, Institute of Physics, Chinese Academy of Sciences;

Jianming Bai, Brookhaven National Laboratory; Ruijuan Xiao, Institute of Physics, Chinese Academy of Sciences; Yong-Sheng Hu, Institute of Physics, Chinese Academy of Sciences; Hong Li, Institute of Physics, Chinese Academy of Sciences; Xiaoqing Yang, Brookhaven National Laboratory; Liquan Chen, Institute of Physics, Chinese Academy of Sciences; Xuejie Huang, Institute of Physics, Chinese Academy of Sciences

Abst# Significant Effect of Graphene Coating on Cathode Performance for Lithium-
265 ion Batteries by Jiesheng Zeng, College of Physics and Materials Science, Tianjin Normal University, Tianjin 300387, China; Xifei Li, Center of Energy and Material, Tianjin Normal University; Chen Chen, College of Physics and Materials Science, Tianjin Normal University, Tianjin 300387, China; Dejun Li, College of Physics and Materials Science, Tianjin Normal University, Tianjin 300387, China

Abst# Performance and Mechanism of Negative Electrodes Based on p-Group
286 Elements for Na Batteries by Laure Monconduit, RS2E; Laure Monconduit, ICG-Montpellier; Ali Darwiche, RS2E; Ali Darwiche, ICG-Montpellier; Moulay-Tahar Sougrati, ALISTORE-ERI; Moulay-Tahar Sougrati, ICG-Montpellier; Lorenzo Stievano, ALISTORE-ERI; Lorenzo Stievano, ICG-Montpellier; Julien Fullenwarth, ICG-Montpellier; Bernard Fraisse, ICG-Montpellier; Bruno Donnadiou, ICG-Montpellier

Abst# Why Na Batteries Could Outperform Li Ones by Joël Gaubicher, Réseau sur le
296 Stockage Electrochimique de l'Energie (RS2E); Joël Gaubicher, Institut des Matériaux Jean Rouxel (IMN), University of Nantes, CNRS, Nantes, France. Réseau sur le Stockage Electrochimique de l'Energie (RS2E), FR CNRS 3459, France; Philippe Moreau, Réseau sur le Stockage Electrochimique de l'Energie (RS2E); Philippe Moreau, Institut des Matériaux Jean Rouxel (IMN), University of Nantes, CNRS, Nantes, France. Réseau sur le Stockage Electrochimique de l'Energie (RS2E), FR CNRS 3459, France; Marine Cuisinier, Réseau sur le Stockage Electrochimique de l'Energie (RS2E); Marine Cuisinier, Institut des Matériaux Jean Rouxel; Patrick Soudan, Réseau sur le Stockage Electrochimique de l'Energie (RS2E); Patrick Soudan, Institut des Matériaux Jean Rouxel (IMN) CNRS; Erik Elkaïm, Synchrotron SOLEIL, Saint Aubin 91190, France; Dominique Guyomard, Institut des Matériaux Jean Rouxel (IMN), University of Nantes, CNRS, Nantes, France. Réseau sur le Stockage Electrochimique de l'Energie (RS2E), FR CN

Abst# Solvothermal Synthesis of Co_3S_4 /Graphene Nanoassemblies As Anode
310 Materials for Lithium-Ion Batteries by Xiuqiang Xie, University of Technology, Sydney; Dawei Su, Institute for Superconducting & Electronic Materials University of Wollongong Wollongong, NSW 2522, Australia; Xiaodan Huang, University of Technology, Sydney; Shi Dou, University of Wollongong; Guoxiu Wang, University of Technology, Sydney

Abst# Stable Charge/Discharge Cycle Performance of LiFePO_4 Cathode Prepared
337 with Carboxymethyl Cellulose Binder by Shingo Kaneko, Research Institute for Engineering, Kanagawa University; Toshiyuki Wakao, Kanagawa University; Yasumasa Mochizuki, Kanagawa University; Mitsuhiro Watanabe, Japan

- Surface Treatment Institute Co., Ltd.; Kunihiro Baba, Japan Surface Treatment Institute Co., Ltd.; Yusuke Kanda, DAICEL CORPORATION; Masaya Omura, DAICEL (U.S.A.), INC.; Koh Murakami, Daicel FineChem Ltd.; Futoshi Matsumoto, Kanagawa University
- Abst# Nanostructured Iron Trifluoride from the Fluorination of Iron Silicide by Katia
367 Guerin, Blaise Pascal University; Nicolas Louvain, Blaise Pascal University; Andre Hamwi, Blaise Pascal University; Barbara Laik, Paris-Est Créteil University; Jean-Pierre Pereira-Ramos, ICMPE-CNRS; moulay-Tahar Sougrati, ICG - Montpellier; Jean-Claude Jumas, ICG Montpellier; Patrick Willmann, CNES - Toulouse
- Abst# *In Operando* XRD/Electrochemistry Investigation of Lithium Insertion into
368 Anatase-Derived Titanium Oxyfluoride $TiOF_2$ by Nicolas Louvain, Blaise Pascal University; Zouina Karkar, Blaise Pascal University; Malika El-GHOZZI, Blaise Pascal University; Joel Cellier, CNRS; Claire Fonquernie, Blaise Pascal University; Pierre Bonnet, Blaise Pascal University; Katia Guerin, Blaise Pascal University; Patrick Willmann, CNES - Toulouse
- Abst# Amorphous $FeVO_4$ /Mesoporous Carbon Composite: A Novel Cathode Material
371 of Lithium-Ion batteries by Zhongbao Yu, Research Institute of Chemical Defense; Jingyi Qiu, Research Institute of Chemical Defense; Meng Li, Research Institute of Chemical Defense; Yuchang Si, Research Institute of Chemical Defense
- Abst# Study on the Cathode Material Composed of $LiCo_{1/3}Ni_{1/3}Mn_{1/3}O_2$ and $LiMn_2O_4$
372 by Jingyi Qiu, Research Institute of Chemical Defense; Zhongbao Yu, Research Institute of Chemical Defense; Meng Li, Research Institute of Chemical Defense; Shang Zhan, Research Institute of Chemical Defense
- Abst# Microstructure and Composition Tuning: Enhancing Reversibility of SnO_2 Based
386 Anodes and Reducing Their Initial Capacity Loss by Renzong Hu, South China University of Technology; Wei Sun, South China University of Technology; Min Zhu, South China University of Technology
- Abst# New Benzimidazole Nitronyl Nitroxides As Electro-Active Compounds for
391 Battery Electrodes by Sevda Akay, Fatih University; Burak Esat, Fatih University; Ismail Fidan, Gebze Institute of Technology; Catherine Hirel, Gebze Institute of Technology; Natia Frank, University of Victoria
- Abst# Preparation of Ni-Sn Alloy Nanorods with Composition Gradient, and Its Effect
399 on Li-Ion Battery Anode Performance by Ridwanur Chowdhury, Department of Chemical Engineering, University of Rochester; Lance Hoffman, Department of Chemical Engineering, University of Rochester; Joseph Kaule, Department of Chemical Engineering, University of Rochester; Hitomi Mukaibo, Department of Chemical Engineering, University of Rochester
- Abst# Influences of Dopants on the Properties of $LiMnO_2$ and Li_2MnO_3 in OLO Cathode for Li Ion Batt
427 by Fantai Kong, Materials Science & Engineering Dept., The University of Texas at Dallas, Richardson, 75080 Texas, USA; Roberto Longo, Materials Science & Engineering Dept., The University of Texas at Dallas, Richardson, 75080 Texas, USA; Min-Sik Park, Energy Lab., SAIT, Samsung Electronics, Suwon 443-803, Republic of Korea; Jaegu Yoon, Energy Lab., SAIT,

Samsung Electronics, Suwon 443-803, Republic of Korea; Dong-Hee Yeon, Energy Lab., SAIT, Samsung Electronics, Suwon 443-803, Republic of Korea; Jin-Hwan Park, Energy Lab., SAIT, Samsung Electronics, Suwon 443-803, Republic of Korea; Weihua Wang, Materials Science & Engineering Dept., The University of Texas at Dallas, Richardson, 75080 Texas, USA; Santosh Materials Science & Engineering Dept., The University of Texas at Dallas, Richardson, 75080 Texas, USA; Seok-Kwang Doo, Energy Lab., SAIT, Samsung Electronics, Suwon 443-803, Republic of Korea; Kyeongjae Cho, Materials Science & Engineering Dept., The University of Texas at Dallas, Richardson, 75080 Texas,

Abst# 443 Microwave (MW) Assisted Electro-Active Tempo Functionalized Single Walled Carbon Nanotube (SWNT) Electrodes for Li-Ion Batteries by Sumeyye Bahceci, Fatih University; Burak Esat, Fatih University

Abst# 447 Self-Healing in Li-Ion Battery Electrodes by Oya Okman, Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign; Sen Kang, Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign; Elizabeth Jones, Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign; Scott White, Department of Aerospace Engineering, University of Illinois at Urbana-Champaign; Scott White, Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign; Nancy Sottos, Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign; Nancy Sottos, Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign

Abst# 449 Template-Free Electrochemical Synthesis of Cuprous Oxide and Its Application to Anode of Lithium Ion Batteries by Jeong Ho Shin, Korea Research Institute of Standards and Science; Sun Hwa Park, Korea Research Institute of Standards and Science; Seungmin Hyun, Korea Institute of Machinery & Materials; Hyun Min Park, Korea Research Institute of Standards and Science; Jae Yong Song, Korea Research Institute of Standards and Science

Abst# 452 Self-Discharge Phenomena in LiCoPO₄ Electrodes by Sergio Brutti, Dipartimento di Scienze, Università della Basilicata; Jessica Manzi, Dipartimento di Scienze, Università della Basilicata; Francesco Vitucci, ISC-CNR UOS Sapienza; Francesco Trequattrini, Dipartimento di Fisica, Sapienza Università di Roma; Annalisa Paolone, ISC-CNR UOS Sapienza; Daniele Di Lecce, Sapienza University of Rome; Stefania Panero, Dipartimento di Chimica, Sapienza Università di Roma

Wednesday, June 11, 2014

P2—Wednesday Poster Session

Abst# 523 Size Effect of Sulfur Nanoparticles in Lithium Sulfur Batteries by Wei Lu, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Sciences; Changhong Wang, Suzhou Institute of Nanotech and Nanobionics, Chinese

Academy of Science; Xiaodong Wu, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Science; Liwei Chen, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Sciences

Abst# 546 Advanced Cathode, Electrolyte and Separator materials to Improve the Energy Density and Cycle Stability of Soft-Package Lithium-Sulfur Battery by Hongzhang Zhang, Dalian Institute of Chemical Physics, Chinese Academy of Science; Huamin Zhang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences; Yining Zhang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences

Abst# 583 a Novel Sulfur Electrode for the Lithium Ion/Sulfur Battery by Emanuel Peled, Tel Aviv University; Meital Alon, Tel Aviv University; Diana Golodnitsky, Tel Aviv University

Friday, June 13, 2014

P3—Friday Poster Session

Abst# 601 Physics-Based Modeling for Quantitative Assessment of Rechargeable Batteries for Electric Vehicles by Rajeswari Chandrasekaran, Research and Advanced Engineering, Ford Motor Company

Abst# 641 Stresses Due to Intercalation in Layered and Non-Spherical Lithium Storage Particles by Rajlakshmi Purkayastha, Cambridge University; Robert McMeeking, University of California, Santa Barbara

Abst# 642 Ion Transport Numbers of Gel Polymer Electrolytes Based on Block Copolymers Containing Ethylene Oxide Sidechains by Moritz Schaefer, MEET, WWU Münster; Alexandra Lex-Balducci, MEET Battery Research Center/Institute of Physical Chemistry

Abst# 663 Estimating Thermal Parameters of Large-Format Laminated Lithium-Ion Batteries Using Thermal Impedance Spectroscopy by Bin Wu, State Key Laboratory of Automotive Safety and Energy, Tsinghua University; Jianbo Zhang, State Key Laboratory of Automotive Safety and Energy, Tsinghua University; Jun Zhou, State Key Laboratory of Automotive Safety and Energy, Tsinghua University; Zhe Li, State Key Laboratory of Automotive Safety and Energy, Tsinghua University

Abst# 712 In-Situ Observation of Solid Electrolyte Interphase on LiCoO₂ during Cycling to 4.5 V By AFM by Wei Lu, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Sciences; Jiansheng Zhang, Suzhou Institute of Nano-Sci. & Nano-Bionics, CAS; Liwei Chen, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Sciences; Xiaodong Wu, Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Science

Abst# 713 Excellent Cycle Performance of Pouch Cells at a High Rate Investigated By a Combination of Synchrotron Based X-Ray Diffraction and Absorption

Spectroscopy by George Ting Kuo Fey, Department of Chemical and Materials Engineering, National Central University, Taiwan (R.O.C.); Yi-Chuan Lin, Department of Chemical and Materials Engineering, National Central University, Chung-Li, 32054 Taiwan (R.O.C.); Pin Jiun Wu, National Synchrotron Radiation Research Center, Taiwan (R.O.C.); Kai Pin Huang, Department of Chemical and Materials Engineering, National Central University, Taiwan (R.O.C.); Chih Tung Pai, Bettery Energy Technology, Inc., Taiwan (R.O.C.)

Abst# Far- and Near-Field Spectroscopy and Imaging of the SEI Layer on a Tin
750 Electrode. by Maurice Ayache, Lawrence Berkeley National Laboratory; Ivan Lucas, Universite Pierre et Marie Curie; Jaroslaw Syzdek, Lawrence Berkeley National Laboratory; Robert KostECKI, Lawrence Berkeley National Laboratory

Abst# Advanced 3D Imaging and Analysis of Lithium-Ion Battery Electrodes by
764 Moshiel Biton, Imperial College; Farid Tariq, Imperial College London; Vladimir Yufit, Imperial College London; Paul Shearing, University College London; Masashi Kishimoto, Imperial College London; Jeff Gelb, Carl Zeiss X-ray Microscopy; Diana Golodnitsky, Tel Aviv University; Emanuel Peled, Tel Aviv University; Nigel Brandon, Imperial College London