

14:45 I-10_11/O

Iron doping in $\text{NdBa}_{1-x}\text{Co}_2\text{O}_{5+x}$ layered perovskite cathodes: a structural and electrochemical investigation

Renato Pelosato^(a), Alessandro Donazzi^(a), Giulio Cordaro^(a), Isabella Natali-Sorci^(a), Cinzia Cristiani^(a), Giovanni Dotelli^(a)

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15:05 I-10_12/O

An investigation into the stability and oxygen cycling of non-stoichiometric $\text{YBaCo}_4\text{O}_{7+x}$

S.R.W. Johnston, B. Ray, L.S. Metcalfe

Newcastle University, School of Chemical Engineering and Advanced Materials, Newcastle University, Newcastle upon Tyne NE1 7RU, United Kingdom.

15:25 BREAK

I-10/4

Chairman: Jordi Arbiol

16:15 I-10_13/O

Magnetite Nanoparticles decorated with Human Ferritin: a smart platform for Magnetic Fluid Hyperthermia Cancer Treatment

A. Guerrini^(a), B. Tenci^(b), C. Innocenti^(a), M. Mannini^(a), L. di Cesare Mannelli^(b), T. Mello^(a), P. Ceci^(c), E. Falvo^(a), M. Basini^(a), A. Lasciari^(a), C. Sangregorio^(a).

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16:35 I-10_14/O

Effects of organic coating on hyperthermia efficiencies

M. Cobianchi¹, A. Lasciari^{2,1}, V. Knisger³, A. Mrakovic⁴, N. Knezovic⁴, D. Peddis^{3,5} and E. Illes^{5,6}

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16:55 I-10_15/O

The interplay between pore size and wettability in solid-templated silica films

Luca Rimoldi^(a,b), Valentina Pifferi^(a,b), Francesco Segrado^(a), Guido Soliveri^(c), Luigi Falciola^(a,b), Silvia Ardicione^(a,b), Daniela Meroni^(a,b)

^(a) Università degli Studi di Milano, Department of Chemistry, Via Golgi 19 20133, Milano, Italy. ^(b) Consorzio Interuniversitario Nazionale per la Scienza e la Tecnologia dei Materiali (INSTM), Via Giusti 9 50121 Firenze, Italy. ^(c) Polytechnique Montréal, Department of Engineering Physics, H3T 1J4 Montréal, Canada.

17:15 I-10_16/O

Amide Bond Formation Catalyzed by Amorphous Silica: the Key is the Distance Between Surface Silanols (SiOH) pairs

Albert Rimola¹, Marco Fabbiani², Mariona Sodupe³, Piero Ugliengo⁴, Gianmaria Martha⁵

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17:35 I-10_17/O

Biomaterialization of Doped Cerias

Christopher Curran, Bryan W. Berger, Steven McIntosh

Department of Chemical and Biomolecular Engineering, Lehigh University, 111 Research Drive, Bethlehem PA 18015, USA.

I-12 – DEFECT CHEMISTRY, TRANSPORT AND REACTIVITY AT GAS/ELECTRODE INTERFACES

B. Fiore di Botta

Room B10

I-12/1

Chairman: Bilge Yildiz

9:00 I-12_1/I

Nanoscale Structure and Dynamics of Rare-Earth Oxide Films and Nanostructures Under Reaction Conditions

Jan Ingo Flöge^(a, b)

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9:25 I-12_2/O

Control of metal-oxide interfaces for ceria-based nanocatalysts

Siwon Lee, Jongsu Seo, and WooChul Jung

Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology (KAIST), 291, Daejeon-ro, Yuseong-gu, 34141 Daejeon, Republic of Korea.

9:45 I-12_3/O

On the reduction behavior of CeO_2 (100) and (111) surfaces

J. Hackl^(a), T. Duchon^(b), D. N. Mueller^(a), C. Mouts^(c), M.I. Khan^(a), S. Cramm^(a), S. Nemšák^(a), C.M. Schneider^(a)

^(a) Peter Grünberg Institut PGI-6, Forschungszentrum Jülich, Jülich, Germany. ^(b) Department of Surface and Plasma Science, Charles University in Prague, Prague, Czech Republic. ^(c) Universidade Estadual de Campinas, Campinas, Brazil.

10:05 I-12_4/O

The Influence of Surface Atomic Structure on Solid State Electrochemistry: Oxygen Exchange on SrTiO_3 (110) Surfaces

Michèle Riva^(a), Markus Kubicek^(b), Xianfeng Hao^(c, d), Stefan Gerhold^(a), Giada Franceschi^(a), Michael Schmid^(a), Herbert Hutter^(b), Juergen Fleig^(b), Cesare Franchini^(a), Bilge Yildiz^(e), Ulrike Diebold^(a)

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10:25 I-12_5/O

Revealing inherent reactivity of metal nanoparticles supported on a mixed conducting oxide electrode for high-temperature electrocatalysis

Yoonsuk Choi, Seung Keun Cha, Siwon Lee, Sang Ouk Kim, and WooChul Jung

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10:45 BREAK

I-12/2

Chairman: Jan Ingo Flöge

11:00 I-12_6/I

Oxygen Nonstoichiometry and Electrical Conductivity of Mn and Fe doped CeO_2

Tatsuomi Ishihara^(a, b), Kobei Hosoi^(a), and Hackho Kim^(a)

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