The Electrochemical Society

210th ECS Meeting Abstracts 2006

October 29 – November 3, 2006
Cancun, Mexico

Volume 1 of 4

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com

ISBN: 978-1-60423-687-3

The Electrochemical Society
210th ECS Meeting Abstracts
2006

TABLE OF CONTENTS

A1 – General Society Student Poster Session
All Divisions

Volume 1

A2 – Nanotechnology General Session
Nanotechnology / Sensor

B1 – Electrochemical Capacitors and High Power Batteries
Battery / Energy Technology / Physical and Analytical Electrochemistry

B2 – Intercalation Compounds for Batteries and Hybrid Supercapacitors
Energy Technology / Battery

B3 – Lithium-Ion Batteries
Battery / Energy Technology

B4 – Metal/Air and Metal/Water Batteries
Battery / Energy Technology

B5 – Organic Photovoltaics
New Technology / Energy Technology / Fullereness, Nanotubes, and Carbon Nanostructures

B6 – Proton Exchange Membrane Fuel Cells 6
Energy Technology / Physical and Analytical Electrochemistry / Battery / Industrial Electrolysis and Electrochemical Engineering

Volume 2

B7 – Solid-State and Solid-Electrolyte Batteries
Battery / Energy Technology

C1 – Biological Nanostructures, Materials, and Applications
Nanotechnology / Organic and Biological Electrochemistry / Physical and Analytical Electrochemistry / Sensor

C2 – Molecular Electrochemistry
Organic and Biological Electrochemistry / Physical and Analytical Electrochemistry

C3 – Nanoparticles, Electrons, and Photons
Organic and Biological Electrochemistry / Physical and Analytical Electrochemistry

C4 – Pharmaco-Electrochemistry
New Technology

D1 – Corrosion General Poster Session
Corrosion

D2 – Corrosion of Electronic Materials and Devices
Corrosion / Electronics and Photonics

D3 – Corrosion of Infrastructure
Corrosion

D4 – Critical Factors in Localized Corrosion 5, a Symposium in Honor of Hugh S. Isaacs Corrosion

D5 – High Temperature Corrosion and Materials Chemistry 6
High Temperature Materials / Corrosion

E1 – Solid-State Joint General Session
Dielectric Science and Technology / Electronics and Photonics

E2 – Advanced Gate Stack, Source/Drain, and Channel Engineering for Si-Based CMOS 2: New Materials, Processes, and Equipment

Electronics and Photonics / Dielectric Science and technology / High Temperature Materials

E3 – Atomic Layer Deposition Applications 2
Dielectric Science and Technology

E4 – High Dielectric Constant Gate Stacks 4
Dielectric Science and Technology / Electronics and Photonics

Volume 3

E5 – Chemical mechanical Polishing 8
Dielectric Science and Technology

E6 – Bioelectronics, Biointerfaces, and Biomedical Applications 2
Dielectric Science and Technology / Sensor

E7 – High Purity Silicon 9
Electronics and Photonics

E8 – Integrated Optoelectronics 3
Electronics and Photonics / Dielectric Science and Technology

E9 – Multifunctional Carbon Materials for Electrochemical and Electronic Applications

Physical and Analytical Electrochemistry / Fullerenes, Nanotubes, and Carbon Nanostructures / Dielectric Science and Technology / Energy Technology / Battery / Industrial Electrolysis and Electrochemical Engineering

E10 – Wide Bandgap Semiconductor Materials and Devices 7
Electronics and Photonics / Sensor

E11 – Science and Technology of Dielectrics for Active and Passive Devices
Dielectric Science and Technology

E12 – Semiconductor Wafer Bonding 9: Science, Technology, and Applications
Electronics and Photonics

E13 – SiGe and Germanium: Materials, Processing, and Devices
Electronics and Photonics

E14 – State-of-the-Art Program on Compound Semiconductors 45 (SOTAPOCS 45)
Electronics And Photonics

E15 – Thin Film Transistors 8 (TFT8)
Electronics and Photonics

F1 – Electrochemical Deposition onto Non-Metallic Surfaces
Electrodeposition

F2 – Electronics Packaging 2
Electrodeposition

Volume 4

F3 – Magnetic Materials, Processes, and Devices 9
Electrodeposition

F4 – Molecular Structure of the Solid-Liquid Interface And Its Relationship to Electrodeposition 5
Electrodeposition

F5 – Nanostructured Metal Oxides: Processing and Applications
Nanotechnology / High Temperature Materials / Electrdeposition / Physical and Analytical Electrochemistry / Sensor

G1 – Industrial and Environmental Electrochemistry
Industrial Electrolysis and Electrochemical Engineering

H1 – Carbon Nanotubes: General Session
Fullerenes, Nanotubes, and Carbon Nanostructures

H2 – Recent Advances in Fullerene Science
Fullerenes, Nanotubes, and Carbon Nanostructures

I1 – Physical and Analytical Electrochemistry General Session
Physical and Analytical Electrochemistry

I2 – Electrochemistry at Liquid-Liquid Interfaces
Physical and Analytical Electrochemistry

I3 – Electrochemical Surface Science: Recent Advances in the Study of the Electrode-Electrolyte Interface
Physical and Analytical Electrochemistry

I4 – Molten Salts 15, in Memory of Robert Osteryoung
Physical and Analytical Electrochemistry / Electrodeposition / High Temperature Materials / Battery / Energy Technology

I5 – Supramolecular Electrochemistry
Physical and Analytical Electrochemistry / Fullerenes, Nanotubes, and Carbon Nanostructures

J1 – Biomedical and Clinical Sensors
Sensor

J2 – Chemical Sensors 7: Chemical and Biological Sensors and Analytical Systems
Sensor

J3 – Microfabricated and Nanofabricated Systems MEMS/NEMS 7
Sensor / Dielectric Science and Technology / Electronics and Photonics

J4 – Physics and Chemistry of Luminescent Materials 15
Luminescence and Display materials