

2014 **MRS**

SPRING MEETING & EXHIBIT

April 21-25, San Francisco, CA



CALL FOR PAPERS

Abstract Deadline • November 1, 2013
Abstract Submission Site Opens • October 1, 2013

ENERGY

- A Film-Silicon Science and Technology
- B Organic and Inorganic Materials for Dye-Sensitized Solar Cells
- C Synthesis and Processing of Organic and Polymeric Materials for Semiconductor Applications
- D Materials for Photoelectrochemical and Photocatalytic Solar-Energy Harvesting and Storage
- E Earth-Abundant Inorganic Solar-Energy Conversion
- F Controlling the Interaction between Light and Semiconductor Nanostructures for Energy Applications
- G Photoactivated Chemical and Biochemical Processes on Semiconductor Surfaces
- H Defect Engineering in Thin-Film Photovoltaic Materials
- I Materials for Carbon Capture
- J Physics of Oxide Thin Films and Heterostructures
- K Nanostructures, Thin Films and Bulk Oxides—Synthesis, Characterization and Applications
- L Materials and Interfaces in Solid Oxide Fuel Cells
- M Fuel Cells, Electrolyzers and Other Electrochemical Energy Systems
- N Research Frontiers on Electrochemical Energy Storage Materials—Design, Synthesis, Characterization and Modeling
- O Novel Energy-Storage Technologies beyond Li-ion Batteries—From Materials Design to System Integration
- P Mechanics of Energy Storage and Conversion—Batteries, Thermoelectrics and Fuel Cells
- Q Materials, Technologies and Sensor Concepts for Advanced Battery Management Systems
- R Materials Challenges and Integration Strategies for Flexible Energy Devices and Systems
- S Actinides—Basic Science, Applications and Technology
- T Superconductor Materials—From Basic Science to Novel Technology

SOFT AND BIOMATERIALS

- U Soft Nanomaterials
- V Micro- and Nanofluidic Systems for Materials Synthesis, Device Assembly and Bioanalysis
- W Functional Biomaterials for Regenerative Engineering
- Y Biomaterials for Biomolecule Delivery and Understanding Cell-Niche Interactions
- Z Bioelectronics—Materials, Processes and Applications
- AA Advanced Multifunctional Biomaterials for Neuroprosthetic Interfaces

ELECTRONICS AND PHOTONICS

- BB Materials for End-of-Roadmap Devices in Logic, Power and Memory
- CC New Materials and Processes for Interconnects, Novel Memory and Advanced Display Technologies
- DD Silicon Carbide—Materials, Processing and Devices
- EE Advances in Inorganic Semiconductor Nanoparticles and Their Applications
- FF The Grand Challenges in Organic Electronics
- GG Few-Dopant Semiconductor Optoelectronics
- HH Phase-Change Materials for Memory, Reconfigurable Electronics and Cognitive Applications
- II Emerging Nanophotonic Materials and Devices
- JJ Materials and Processes for Nonlinear Optics
- KK Resonant Optics—Fundamentals and Applications
- LL Transparent Electrodes

NANOMATERIALS

- MM Nanotubes and Related Nanostructures
- NN 2D Materials and Devices beyond Graphene
- OO *De Novo* Graphene
- PP Nanodiamonds—Fundamentals and Applications
- QQ Computationally Enabled Discoveries in Synthesis, Structure and Properties of Nanoscale Materials
- RR Solution Synthesis of Inorganic Functional Materials
- SS Nanocrystal Growth via Oriented Attachment and Mesocrystal Formation
- TT Mesoscale Self-Assembly of Nanoparticles—Manufacturing, Functionalization, Assembly and Integration
- UU Semiconductor Nanowires—Synthesis, Properties and Applications
- VV Magnetic Nanomaterials and Nanostructures

GENERAL—THEORY AND CHARACTERIZATION

- WW Materials by Design—Merging Advanced *In-situ* Characterization with Predictive Simulation
- XX Shape Programmable Materials
- YY Meeting the Challenges of Understanding and Visualizing Mesoscale Phenomena
- ZZ Advanced Characterization Techniques for Ion-Beam-Induced Effects in Materials
- AAA Applications of *In-situ* Synchrotron Radiation Techniques in Nanomaterials Research
- BBB Advances in Scanning Probe Microscopy for Material Properties
- CCC *In-situ* Characterization of Material Synthesis and Properties at the Nanoscale with TEM
- DDD Atomic-Resolution Analytical Electron Microscopy of Disruptive and Energy-Related Materials
- EEE Materials Behavior under Extreme Irradiation, Stress or Temperature

SPECIAL SYMPOSIUM

- FFF Educating and Mentoring Young Materials Scientists for Career Development

www.mrs.org/spring2014

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The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-discipline professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors three major international annual meetings encompassing many topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts tutorials, and fosters technical exchange in various local geographical regions through Section activities and Student Chapters on university campuses.

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