



# 2011 MRS FALL MEETING & EXHIBIT

November 28-December 2 · Boston, MA



## SYMPOSIA

### ENERGY AND THE ENVIRONMENT

- A Material Challenges in Current and Future Nuclear Technologies
- B Advanced Materials for Fuel Cells
- C *In Situ* Studies of Solid-Oxide Fuel-Cell Materials
- D Sustainable Synthesis of Nanomaterials
- E Advanced Materials for Solar-Fuel Generation
- F Mobile Energy
- G Applications of Hierarchical 3D Structures
- H Organic Photovoltaic Devices and Processing
- I Fundamental Processes of Solar Harvesting in Excitonic Solar Cells
- J Photonic and Plasmonic Materials for Enhanced Photovoltaic Performance
- K Materials for High-Performance Photonics

### FUNCTIONAL MATERIALS

- L Topological Insulator Materials
- M Oxide Semiconductors—Defects, Growth, and Device Fabrication
- N Diamond Electronics and Biotechnology—Fundamentals to Applications V
- O Compound Semiconductors for Generating, Emitting, and Manipulating Energy
- P Ferroelectric and Multiferroic Materials
- Q Magnetoelectric Composites
- R Compliant Electronics and Photonics
- S Solution Processing of Inorganic and Hybrid Materials for Electronics and Photonics
- T Large-Area Processing and Patterning for Active Optical and Electronic Devices III
- U Charge Generation/Transport in Organic Semiconductor Materials
- V Multifunctional Polymer-based Materials
- W Phonons in Nanomaterials—Theory, Experiments, and Applications
- Y Advances in Energetic Materials Research

### NANOMATERIALS

- Z Functional Metal-Oxide Nanostructures
- AA Carbon Nanotubes, Graphene, and Related Nanostructures
- BB Functional Nanowires and Nanotubes
- CC Functional Semiconductor Nanocrystals and Metal-Hybrid Structures
- DD Transport Properties in Polymer Nanocomposites II
- EE Self Organization and Nanoscale Pattern Formation
- FF Mechanical Nanofabrication, Nanopatterning, and Nanoassembly
- GG Safety and Toxicity Control of Nanomaterials

### BIOMATERIALS

- HH Bioelectronics—Materials, Properties, and Applications
- II BioMEMS—Materials and Devices
- JJ Nanofunctional Materials, Nanostructures, and Nanodevices for Cancer Applications
- KK Biomaterials for Tissue Regeneration
- LL Synthetic and Biological Gels
- MM Micro- and Nanoscale Processing of Biomedical Materials
- NN Nucleation and Growth of Biological and Biomimetic Materials
- OO Multiscale Mechanics of Hierarchical Materials

### MATERIALS EXPLORATION

- PP Three-Dimensional Tomography of Materials
- QQ Functional Imaging of Materials—Advances in Multifrequency and Multispectral Scanning Probe Microscopy and Analysis
- RR Dynamics in Confined Systems and Functional Interfaces
- SS Properties and Processes at the Nanoscale—Nanomechanics of Material Behavior
- TT Microelectromechanical Systems—Materials and Devices V
- UU Combinatorial and High-throughput Methods in Materials Science

### 2011 MRS Fall Meeting Chairs

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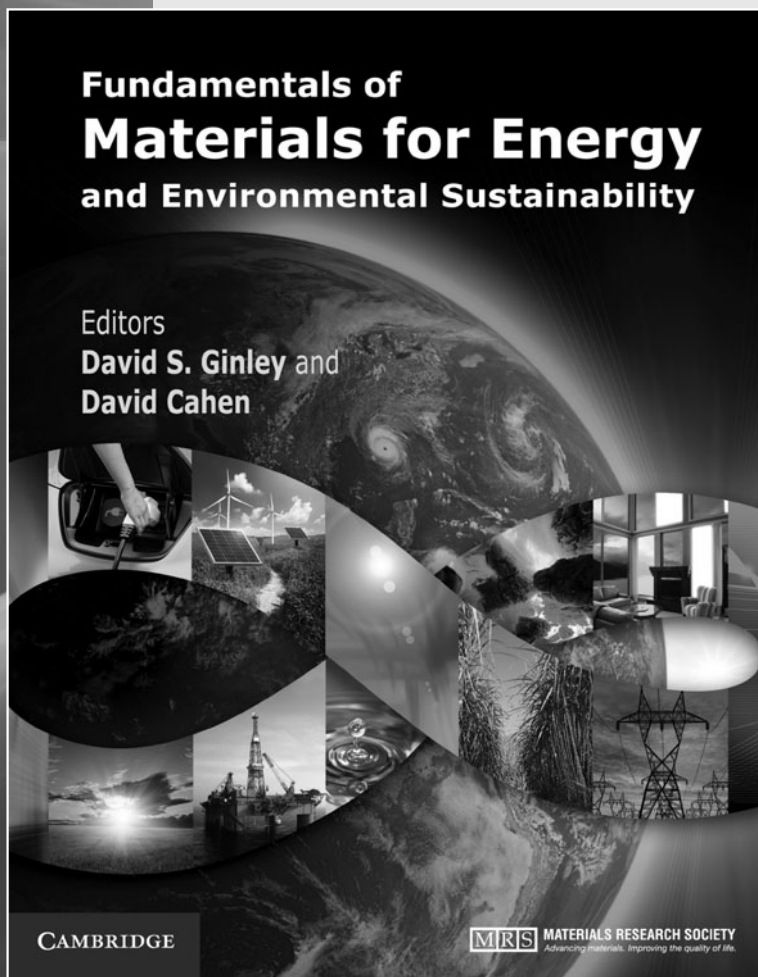
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- Carbon-based materials
- Complex oxides and their interfaces
- Materials for energy storage, conversion and environmental remediation
- Materials for nanophotonics and plasmonic devices
- Materials theory and computation
- Mechanical behavior at the nanoscale
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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 two 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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