

# MEETING SYMPOSIA



2014 **MRS**<sup>®</sup>

FALL MEETING & EXHIBIT

November 30 - December 5, 2014 | Boston, Massachusetts

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## BIOMATERIALS AND SOFT MATERIALS

- A Organic Bioelectronics
- B Multifunctional Polymeric and Hybrid Materials
- C Medical Applications of Noble Metal Nanoparticles (NMNPs)
- D Materials and Concepts for Biomedical Sensing
- E Hard-Soft Interfaces in Biological and Bioinspired Materials—Bridging the Gap between Theory and Experiment
- F Reverse Engineering of Bioinspired Nanomaterials
- G Plasma Processing and Diagnostics for Life Sciences
- H Micro/Nano Engineering and Devices for Molecular and Cellular Manipulation, Stimulation and Analysis
- I Emerging 1D and 2D Nanomaterials in Health Care

## ELECTRONICS AND PHOTONICS

- J Emerging Non-Graphene 2D Atomic Layers and van der Waals Solids
- K Graphene and Graphene Nanocomposites
- L Optical Metamaterials and Novel Optical Phenomena Based on Nanofabricated Structures
- M Materials and Technology for Nonvolatile Memories
- N Frontiers in Complex Oxides
- O Oxide Semiconductors
- P Hybrid Oxide/Organic Interfaces in Organic Electronics
- Q Fundamentals of Organic Semiconductors—Synthesis, Morphology, Devices and Theory
- R Diamond Electronics and Biotechnology—Fundamentals to Applications

## ENERGY AND SUSTAINABILITY

- S Advances in Materials Science, Processing and Engineering for Fuel Cells and Electrolyzers
- T Wide-Bandgap Materials for Solid-State Lighting and Power Electronics
- U Organic Photovoltaics—Fundamentals, Materials and Devices
- V Sustainable Solar-Energy Conversion Using Earth-Abundant Materials
- W Perovskite-Based and Related Novel Material Solar Cells
- Y Technologies for Grid-Scale Energy Storage
- Z Materials Challenges for Energy Storage across Multiple Scales
- AA Synthesis, Processing and Mechanical Properties of Functional Hexagonal Materials for Energy Applications
- BB Molecular, Polymer and Hybrid Materials for Thermoelectrics
- CC Advanced Materials and Devices for Thermoelectric Energy Conversion
- DD Materials for Advanced Nuclear Technologies
- EE Scientific Basis for Nuclear Waste Management XXXVIII
- FF Materials as Tools for Sustainability

## NANOMATERIALS AND SYNTHESIS

- GG Nanomaterials for Harsh Environment Sensors and Related Electronic and Structural Components—Design, Synthesis, Characterization and Utilization
- HH Flame and High-Temperature Synthesis of Functional Nanomaterials—Fundamentals and Applications
- II Semiconductor Nanocrystals, Plasmonic Metal Nanoparticles, and Metal-Hybrid Structures
- JJ 3D Mesoscale Architectures—Synthesis, Assembly, Properties and Applications
- KK Directed Self-Assembly for Nanopatterning
- LL Semiconductor Nanowires—Growth, Physics, Devices, and Applications

## THEORY, CHARACTERIZATION AND MODELING

- MM Carbon Nanotubes—Synthesis, Properties, Functionalization and Applications
- NN Mathematical and Computational Aspects of Materials Science
- OO *In Situ* Characterization of Dynamic Processes during Materials Synthesis and Transformation
- PP Advances in Scanning Probe Microscopy for Multimodal Imaging at the Nanoscale
- QQ Advances in Nanoscale Subsurface, Chemical and Time-Resolved Studies of Soft Matter
- RR Scaling Effects in Plasticity—Synergy between Simulations and Experiments
- SS Informatics and Genomics for Materials Development
- TT Advanced Materials Exploration with Neutrons and X-Rays—The State-of-the-Art in the International Year of Crystallography

## GENERAL

- UU Structure-Property Relations in Amorphous Solids
- VV Recent Advances in Reactive Materials
- WW Defects and Radiation Effects in Advanced Materials
- XX Bridging Scales in Heterogeneous Materials
- YY Advanced Structural and Functional Intermetallic-Based Alloys
- ZZ Hierarchical, High-Rate, Hybrid and Roll-to-Roll Manufacturing
- AAA Undergraduate Research in Materials Science—Impacts and Benefits

## Meeting Chairs

- Husam N. Alshareef** King Abdullah University of Science and Technology
- Amit Goyal** Oak Ridge National Laboratory
- Gerardo Morell** University of Puerto Rico
- José A. Varela** University of São Paulo State - UNESP
- In Kyeong Yoo** Samsung Advanced Institute of Technology

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