



2015 **MRS**® SPRING MEETING & EXHIBIT  
April 6–10, 2015 | San Francisco, California

# 2015 MRS SPRING MEETING SYMPOSIA REGISTER BY MARCH 20<sup>TH</sup> AND SAVE!

## Energy

- A Emerging Silicon Science and Technology
- B Thin-Film Compound Semiconductor Photovoltaics
- C Perovskite Solar Cells
- D Organic-Based Photovoltaics
- E Advanced Solar Cells—Components to Systems
- F Biohybrid Solar Cells—Photosynthesis-Based Photovoltaics and Photocatalytic Solar Cells
- G Next-Generation Electrochemical Energy Storage and Conversion Systems—Synthesis, Processing, Characterization and Manufacturing
- H Mechanics of Energy Storage and Conversion—Batteries, Thermoelectrics and Fuel Cells
- I High Capacity Anode Materials for Lithium Ion Batteries
- J Latest Advances in Solar Water Splitting
- K The Development of Oxygen Reduction Reaction (ORR) and Oxygen Evolution Reaction (OER) Materials in Energy Storage and Conversion Systems

## Nanomaterials

- L Bioinspired Micro- and Nano-Machines—Challenges and Perspectives
- M Nanoscale Heat Transport—From Fundamentals to Devices
- N From Molecules to Colloidal Compound Semiconductor Nanocrystals—Advances in Mechanism-Enabled Design and Syntheses
- O Emerging Non-Graphene 2D Materials
- P Nanogenerators and Piezotronics
- Q Externally Actuated Responsive Nanomaterials—Design, Synthesis, Applications and Challenges
- R Photoactive Nanoparticles and Nanostructures
- S Semiconductor Nanowires and Devices for Advanced Applications
- T Graphene and Carbon Nanotubes

## Electronics and Photonics

- U The Interplay of Structure and Carrier Dynamics in Energy-Relevant Nanomaterials
- V Resonant Optics—Fundamentals and Applications
- W Light-Matter Processes in Molecular Systems and Devices
- Y Phase-Change Materials for Data Storage, Cognitive Processing and Photonics Applications
- Z Plasmonics and Metamaterials—Synthesis, Characterization and Integration
- AA Materials for Beyond the Roadmap Devices in Logic, Power and Memory
- BB Innovative Interconnects/Electrodes for Advanced Devices, Flexible and Green-Energy Electronics
- CC Reliability and Materials Issues of Semiconductors—Optical and Electron Devices and Materials
- DD Tailored Disorder—Novel Materials for Advanced Optics and Photonics
- EE Quantum Photonics, Information Technology and Sensing
- FF Defects in Semiconductors—Relationship to Optoelectronic Properties

## Soft and Biomaterials

- GG Foundations of Bio/Nano Interfaces—Synthesis, Modeling, Design Principles and Applications
- HH Supramolecular Materials—Assembly and Dynamics
- II Organic Bioelectronics—Materials, Processes and Applications
- JJ Exploiting Bioinspired Self-Assembly for the Design of Functional and Responsive Materials

- KK Nanomaterials in Translational Medicine
- LL Soft Electronics—From Electronic Skin to Reliable Neural Interfaces
- MM Crystal Engineering—Design, New Materials and Applications

## General—Fabrication and Characterization

- NN Adaptive Architecture and Programmable Matter—Next-Generation Building Skins and Systems from Nano to Macro
- OO Metal-Assisted Chemical Etching of Silicon and Other Semiconductors
- PP Gold-Based Materials and Applications
- QQ Plasma-Based Materials Science and Engineering
- RR Solution Syntheses of Inorganic Functional/Multifunctional Materials
- SS Oxide Thin Films and Nanostructures for Advanced Electrical, Optical and Magnetic Applications
- TT Metal Oxides—From Advanced Fabrication and Interfaces to Energy and Sensing Applications
- UU Titanium Oxides—From Fundamental Understanding to Applications
- VV Science and Technology of Superconducting Materials
- WW Ultrafast Dynamics in Complex Functional Materials
- XX Multiscale Modeling and Experiments on Microstructural Evolution in Nuclear Materials
- YY Insights for Energy Materials Using *In Situ* Characterization
- ZZ Materials Information Using Novel Techniques in Electron Microscopy

[www.mrs.org/spring2015](http://www.mrs.org/spring2015)

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- Hongyou Fan** Sandia National Laboratories
- Ken Haenen** Hasselt University and IMEC vzw
- Lia Stanciu** Purdue University
- Jeremy A. Theil** Quanticum, Inc.

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Hynes Convention Center & Sheraton Boston Hotel  
Boston, Massachusetts

**2016 MRS Spring Meeting & Exhibit**  
March 28 – April 1, 2016

Phoenix Convention Center  
Phoenix, Arizona



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The Materials Research Society (MRS®) is a not-for-profit scientific association founded in 1973 to promote interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes over 16,000 scientists from industrial, government, and university research laboratories in the United States and abroad.

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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