

2017 MRS FALL MEETING & EXHIBIT

November 26–December 1, 2017 | Boston, Massachusetts

CALL FOR PAPERS

BROADER IMPACT

- RI1 Community College and University Partnerships as Catalysts for Promoting Materials Science Education
- BI2 Materials Innovation for Sustainable Agriculture and Energy

BIOMATERIALS AND SOFT MATERIALS

- BM1 Multiscale Mechanobiology and Biomechanics-Theory, Experiments, Computations
- BM2 Multiphase Fluids for Materials Science-Droplets, Bubbles and Emulsions
- BM3 Biological and Bioinspired Materials for Photonics and Electronics-From Living Organisms to Devices
- BM4 Biomaterials for Regenerative Engineering
- Polymer Gels in Materials Science-BM5 3D/4D Printing, Fundamentals and Applications
- BM6 2D Nanomaterials in Health Care
- BM7 Emerging Materials and Devices for Engineering Biological Function and Dynamics
- BM8 Materials Design for Neural Interfaces
- BM9 Stretchable Bioelectronics-From Sensor Skins to Implants and Soft Robots
- BM10 Bioinspired Interfacial Materials with Superwettability
- BM11 Modeling, Characterization, Fabrication and Applications of Advanced Biopolymers-Where Form Meets Function
- BM12 Biomolecular Self-Assembly for Materials Design

ELECTRONICS, MAGNETICS AND PHOTONICS

- EM1 Organic Semiconductors—Surface, Interface, Bulk Doping and Charge Transport
- EM2 Multiferroics and Magnetoelectrics
- EM3 Novel Materials and Architectures for Plasmonics-From the Ultraviolet to the Terahertz
- EM4 Wide- and Ultra-Wide-Bandgap Materials and Devices
- EM5 Oxide Interfaces—Lattice and Electronic Defect Interactions
- EM6 Diamond Electronics, Sensors and Biotechnology-Fundamentals to Applications
- EM7 Materials, Devices and Architectures for Neuromorphic Engineering and Brain-Inspired Computing
- EM8 Emerging Materials for Quantum Information
- EM9 Electronic and Ionic Dynamics at Solid-Liquid Interfaces
- EM10 Solution-Processed Inorganics for Electronic and Photonic Device Applications

ENERGY AND SUSTAINABILITY

- ES1 Perovskite Materials and Devices—Progress and Challenges
- ES2 On the Way to Sustainable Solar Fuels-New Concepts, Materials and System Integration
- ES3 Earth Abundant Metal Oxides, Sulphides and Selenides for Energy Systems and Devices
- Interfaces in Electrochemical Energy Storage ES4
- ES5 Materials and Design for Resilient Energy Storage
- FS6 Alkali Solid Electrolytes and Solid-State Batteries
- ES7 Chromogenic Materials and Devices
- ES8 Advanced Nuclear Materials—Design, Development and Deployment
- ES9 Thermal Energy—Transfer, Conversion and Storage
- ES10 Materials Efficiency to Enable a Circular Materials Economy
- ES11 Silicon for Photovoltaics



Abstract Submission Opens May 15, 2017

Abstract Submission Deadline June 15 2017

NANOMATERIALS

- NM1 Carbon Quantum Dots—Emerging Science and Technology
- Anisotropic Carbon Nanomaterials-Frontiers in Basic and Applied Research NM2
- NM3 Progress in Developing and Applications of Functional One-Dimensional Nanostructures
- Atomically Thin, Layered and 2D Non-Carbon Materials and Systems NM4
- NM5 Nanomaterials, Nanoparticles and Nanostructures Produced by Plasmas-Synthesis, Characterization and Applications
- Semiconductor Nanocrystals, Plasmonic Nanoparticles NM6 and Metal-Hybrid Structures
- NM7 Nanostructure-Based Optical Bioprobes-Advances, Trends and Challenges in Optical and Multimodular Bioimaging and Sensing
- NM8 Defect-Induced Phenomena and New States of Matter at the Nanoscale

PROCESSING AND MANUFACTURING

- Explore New Frontiers in Materials Design Using Plasmas-PM1 Synthesis, Processing and Characterization
- PM2 Advances and Upcoming Research Strategies in Reactive Materials
- PM3 Interfaces and Interface Engineering in Inorganic Materials
 - PM4 Micro-Assembly Technologies—Fundamentals to Applications

THEORY, CHARACTERIZATION AND MODELING

- TC1 Multifunctional and Multifrequency Scanning Probe Microscopy
- TC2 In Situ Studies of Materials Transformations
- TC3 Emerging Prospect and Capabilities in Ion Beam Technology and Applications
- TC4 Advanced Atomistic Algorithms in Materials Science
- TC5 Uncertainty Quantification in Multiscale Materials Simulation
- Mechanical Behavior at the Micro and Nanoscale-TC6 Bridging Between Computer Simulations and Experiments
- Design, Control and Advanced Characterization of Functional Defects TC7 in Materials

Meeting Chairs

Ilke Arsian Pacific Northwest National Laboratory Jason A. Burdick University of Pennsylvania Tao Deng Shanghai Jiao Tong University James B. Hannon IBM T.J. Watson Research Center Sanjay Mathur University of Cologne

www.mrs.org/fall2017

2017 iMatSci Innovator Showcase **CALL FOR EARLY-STAGE STARTUPS**

Submission Site Opens: June 1, 2017

www.mrs.org/imatsci

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