

NEW LATE BREAKING ABSTRACTS

ACCEPTED DECEMBER 1, 2017 - JANUARY 11, 2018

CHARACTERIZATION, MODELING AND THEORY

CM01 Exploring Nanoscale Physical Properties of Materials via Local Probes

CM02 In Situ TEM Characterization of Dynamic Processes During Materials Synthesis and Processing

CM03 Investigating Nanostructures with X-Rays—Fundamentals and Applications

CM04 In Situ and Operando Characterization of Materials and Devices by X-Ray

CM05 Strain Localization, Avalanches and Intermittent Deformation Mechanisms

CM06 Frontiers in Functional Imaging in Aberration-Corrected Electron Microscopy

ELECTRONIC AND PHOTONIC MATERIALS

EP01 Materials for Beyond the Roadmap Devices in Logic, Memory and Power

EP02 Excitonic Materials—Physics, Characterization and Devices

EP03 Materials and Processes for Nonlinear Optics and Nonlinear Photonics

EP04 Reliability and Materials Issues of Semiconductor Optical and Electron **Devices and Materials**

EP05 Emerging Light-Emitting Materials and Devices-Halide Perovskite and Low-Dimensional Nanoscale Emitters

EP06 Materials, Devices and Systems for Machine Learning and Neuromorphic Computing

EP07 Phase-Change Materials and Their Applications-

Memories, Photonics, Displays and Non-von Neumann Computing

EP08 Advanced Polymer Semiconductors-

Key Properties and High-Performance Electronics

ENERGY MATERIALS AND TECHNOLOGIES

EN01 Solid-Solid Interfaces in Batteries, Energy Storage and Conversion— Diagnostic and Modeling

EN02 Advances in Perovskite Solar Cell Devices and Applications

EN03 Superconducting Materials—From Basic Science to Applications

EN04 Advanced Materials for Carbon Capture and Other Important Gas Separations

EN05 Field-Responsive Composites for Sustainable Energy

EN06 Safer and More Energy-Dense Rechargeable Batteries

EN07 Issues, Challenges and Opportunities in Actinide Materials

EN08 Low-Cost Tandem Photovoltaic Cells

EN09 Materials and Systems for Grid Energy Storage—Redox Flow Batteries

EN10 Thermoelectric Materials, Devices and Applications

EN11 Nanomaterials for the Water and Energy Nexus

EN12 Hierarchical Materials for Nuclear Waste Management

EN13 Capacitive Energy Storage—Fundamentals, Materials and Devices

EN14 Materials Science and Device Engineering for Safe and Long-Life Electrochemical Energy Storage

EN15 Novel Materials Physics of Perovskite Semiconductors

EN16 Combining Materials, Technologies and Societal Awareness to Harvest Natural and Human-Made Energy Sources

EN17 Fundamental Materials Science to Enable the Performance and Safety of Nuclear Technologies

EN18 Multiscale Designing and Constructing Photocatalytic Materials for Solar Fuels

EN19 Novel Inorganic Semiconductors for Optoelectronics and Solar Energy

EN20 Deposition, Transformation and Reaction at Functional Interfaces for Electrochemical Energy Systems

EN21 Next-Generation Solid-State Super Ion Conductors

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MANUFACTURING

MA01 Advanced Materials for Analog and Digital Functional Printing

MA02 Organic Electronics—Processing, Microstructure and Multifunctioning

MA03 Directed Matter-

Atom-by-Atom Assembly with Electron Beams and Scanning Probes

MA04 Advances in Additive Manufacturing—Materials, Processes and Devices

MA05 Dynamic Materials and Textiles for Next-Generation Clothing

NANOMATERIALS

NM01 Nanomaterials and Devices by Cluster Beam Deposition

NM02 Active Colloids with Order

NM03 Rational Designed Hierarchical Nanostructures for Photocatalytic Systems

NM04 Porous Materials and Nanocomposites for Catalysis

NM05 Colloidal Nanoparticles—From Synthesis to Applications

NM06 Nanodiamonds-

Synthesis, Characterization, Surface Chemistry and Applications

NM07 Nanoscale Magnetic Structures and Materials

NM08 Graphene Oxide Liquid Crystals and 2D Soft Material Systems

NM09 Novel Approaches and Material Platforms for Plasmonics and Metamaterials

NM10 Nanometallic Materials by Design

NM11 Deformable Atomically Thin Materials—Mechanics, Materials and Devices

NM12 Transitioning Quantum Dots from Benchtop to Industry

NM13 Functionalization of Topological Materials

SOFT MATERIALS AND BIOMATERIALS

SM01 Soft Materials, Sensors, Electronics, Displays and Actuators-Functional Components for Soft Machines and Robots

SM02 Immune Modulatory Materials—From Design to Translational Applications

SM03 Engineered Functional Biointerfaces—

From Electronics and Nanomaterials to Biocircuits and Bionanomaterials

SM04 Understanding and Controlling the Structure and Function of Biomolecules at Material Interfaces

SM05 Biomaterials for Tissue Interface Regeneration

SM06 The Future of Neuroengineering—Relevant In Vivo Technology

SM07 Functional (Bio)polymers in Energy and Environment Applications

SM08 Smart Hydrogels and Living Materials

Meeting Chairs

Edward Botchwey Georgia Institute of Technology/Emory University Catherine Dubourdieu Helmholtz-Zentrum Berlin

Quanxi Jia University at Buffalo, The State University of New York/ Los Alamos National Laboratory

Shane Kennett Exponent Failure Analysis Associates Cheolmin Park Yonsei University

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2019 MRS Spring Meeting & Exhibit April 22-26, 2019, Phoenix, Arizona

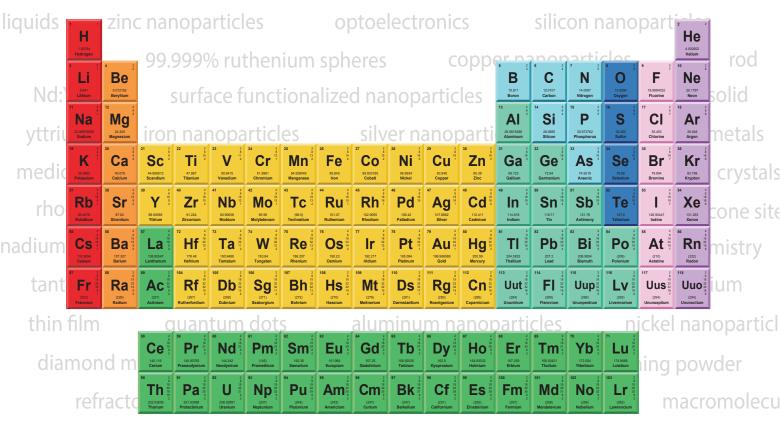


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