AIP Publishing Editors' Activities and Sessions at MRS Fall

BOOTH EVENTS

Celebrating Early Career Researchers

Tuesday, December 3rd
5:00-6:00 PM EST
Booth 818

APL Electronic Devices Meet the Editor

Wednesday, December 4th
4:00-5:00 PM EST
Booth 818

SPONSORSHIPS

Symposium SB13

Soft Materials for Harsh Environments

Co-organized by *APL Energy* Associate Editor, Ahmad Kirmani

sponsored by

APL Energy

Symposium EL04

Recent Advances in Hybrid Perovskites

Co-organized by *APL Materials* Associate Editor, Marina Leite

sponsored by

APL Materials

Symposium EL07

Emerging Material Platforms and Fundamental Approaches for Plasmonics, Nanophotonics, and Metasurfaces

Co-Organized by *APL Quantum* Associate Editor, Yu-Jung Lu

sponsored by

APL Quantum

AIP Publishing Editors' Activities and Sessions at MRS Fall

SESSIONS

MONDAY, DECEMBER 2

Integrating Experiments and Machine Learning for Measuring Topological and Quantum Materials
10:30 AM EST
Speaker: Mingda Li, *APL Materials* Editorial Advisory Board
Sheraton, Fifth Floor, The Fens

MORE INFO

Attosecond Optical Switching by Controlling the Electron Motion of Dielectric Material
11:00 AM EST
Speaker: Mohammed Hassan, *APL Photonics* Associate Editor
Sheraton, Second Floor, Constitution B

MORE INFO

2D Van der Waals Layers for Spintronics
3:30 PM EST
Speaker: Stuart Parkin, *APL Materials* Editorial Advisory Board
Sheraton, Fifth Floor, Public Garden

MORE INFO

Hole Transporter Reinforcement for Deployable Perovskite Solar Cells
4:00 PM EST
Speaker: Ahmad Kirmani, *APL Energy* Associate Editor
Hynes, Level 3, Room 308

MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

TUESDAY, DECEMBER 3

Advanced Materials for Ultra-High-Temperature Photonic Devices
8:15 AM EST
Speaker: Marina Leite, *APL Materials* Associate Editor
Sheraton, Second Floor, Back Bay D
MORE INFO

Merging High-Throughput Autonomous Experiments and Machine Learning Supercharge Discovery of Two-Dimensional Halide Perovskites
8:15 AM EST
Speaker: Mahshid Ahmadi, *APL Machine Learning* Guest Editor
Hynes, Level 2, Room 209
MORE INFO

Nanostructured Piezoelectric Polymers as Soft Electromechanical Interfaces for Biology
8:30 AM EST
Speaker: Sohini Kar-Narayan, *APL Electronic Devices* Editor-in-Chief
Hynes, Level 3, Room 309
MORE INFO

Molecular Control via Dynamic Chemical Bonding Enables Material-level Responsiveness in Additively Manufactured Metallo Polyelectrolytes (MPEC)
8:45 AM EST
Speaker: Julia Greer, *Journal of Applied Physics* Editor-in-Chief
Sheraton, Second Floor, Constitution A
MORE INFO

Biomimetic Conducting Polymer Devices to Study the Gut-Brain Axis
9:00 AM EST
Speaker: Roisin Owens, *APL Bioengineering* Editorial Advisory Board
Hynes, Level 1, Room 102
MORE INFO

Growth and Characterization of In Vitro Vascular Tissues
10:30 AM EST
Speaker: Roger Kamm, *APL Bioengineering* Editorial Advisory Board
Hynes, Level 3, Room 312
MORE INFO

Attomicroscopy—Attosecond Electron Microscopy
10:45 AM EST
Speaker: Mohammed Hassan, *APL Photonics* Associate Editor
Sheraton, Third Floor, Fairfax A
MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

TUESDAY, DECEMBER 3 *(cont)*

Silk's Contemporary Shapes and Functions Across Technology and Design
11:30 AM EST
Speaker: Fiorenzo Omenetto, *APL Photonics* Editorial Advisory Board
Hynes, Level 3, Room 313
MORE INFO

Neuromorphic Biomaterials for Cell Interfacing
11:30 AM EST
Speaker: Francesca Santoro, *APL Bioengineering* Editorial Advisory Board
Hynes, Level 3, Room 309
MORE INFO

Probing Interfacial Defects and Stability Challenges in Metal Halide Perovskites
2:00 PM EST
Speaker: Laura Herz, *Applied Physics Reviews* and *Chemical Physics Reviews* Associate Editor
Sheraton, Second Floor, Republic B
MORE INFO

Hypothesis-Driven Autonomous Experimentation for Accelerated Research
3:30 PM EST
Speaker: Benji Maruyama, *APL Machine Learning* Guest Editor
Hynes, Level 2, Room 209
MORE INFO

WEDNESDAY, DECEMBER 4

Toward AI-Ready Microscopy and Spectroscopy Data
8:15AM EST
Speaker: Maria Chan, *APL Machine Learning* Editorial Advisory Board
Sheraton, Second Floor, Constitution B
MORE INFO

Immunomodulatory Polymeric Elastomers for Biofabrication of Organotypic Structures
8:45 AM EST
Speaker: Milica Radisic, *APL Bioengineering* Editorial Advisory Board
Hynes, Level 3, Room 312
MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

WEDNESDAY, DECEMBER 4 *(cont)*

Recapitulating Transport Properties of the Human Blood Brain Barrier in an Isogenic Microphysiological Model

9:00 AM EST

Speaker: Roger Kamm, *APL Bioengineering* Editorial Advisory Board

Hynes, Level 1, Room 101

MORE INFO

Rethinking Machine Learning for Small Data to Enable Automous Experiments

9:15 AM EST

Speaker: Qian Yang, *APL Machine Learning* Editorial Advisory Board

Hynes, Level 2, Room 209

MORE INFO

Quantum Nanoplasmonic Coherent Perfect Absorption

10:15 AM EST

Speaker: Ortwin Hess, *APL Quantum* Editor-in-Chief

Sheraton, Second Floor, Back Bay D

MORE INFO

Stability Assessment of Perovskite Solar Cells via In-Situ Characterization

11:45 AM EST

Speaker: Monica Lira-Cantu, *APL Energy* Editor-in-Chief

Hynes, Level 3, Room 308

MORE INFO

Stability Analysis and *In Situ* Characterization of Perovskite Solar Cells

3:30 PM EST

Speaker: Monica Lira-Cantu, *APL Energy* Editor-in-Chief

Sheraton, Second Floor, Republic B

MORE INFO

Practical Materials AI for Improving Electrochemical Stability

3:30 PM EST

Speaker: Joseph Montoya, *APL Energy* Industrial Advisory Board

Hynes, Level 3, Ballroom B

MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

WEDNESDAY, DECEMBER 4 *(cont)*

"Accelerating Materials Solutions to Meet National and Global Challenges" Summary of the 2024 Workshop in Support of the Materials Genome Initiative (MGI) 2021 Strategic Plan

4:30 PM EST

Speaker: Speaker: Benji Maruyama, *APL Machine Learning* Guest Editor

Hynes, Level 2, Room 210

MORE INFO

Impact of Grain Boundary Structure on Defect Evolution of Polycrystal Aluminum Under Irradiation Through Molecular Dynamics Simulations

5:15 PM EST

Speaker: Simon Phillpot, *Journal of Applied Physics* Deputy Editor

Hynes, Level 2, Room 206

MORE INFO

THURSDAY, DECEMBER 5

Discovering Magnetoelasticity in Soft Matter for Self-Powered Bioelectronics

8:00 AM EST

Speaker: Jun Chen, *APL Electronic Devices* Editorial Advisory Board

Hynes, Level 3, Ballroom A

MORE INFO

Ultrathin Chalcogenide Light Harvesters—Charge-Carrier Transport and Fast NIR Photodetectors

8:00 AM EST

Speaker: Robert Hoye, *APL Electronic Devices* Editorial Advisory Board

Hynes, Level 1, Room 107

MORE INFO

Optical Probes of Emergent Low-Dimensional Semiconductors

8:30 AM EST

Speaker: Laura Herz, *Applied Physics Reviews* and *Chemical Physics Reviews* Associate Editor

Sheraton, Second Floor, Back Bay B

MORE INFO

Synthesis and Properties of Single Domain BiFeO3 Thin Films and Free-Standing Membranes

8:45 AM EST

Speaker: Chang-Beom Eom, *APL Materials Editorial* Advisory Board

Hynes, Level 1, Room 110 Sheraton, Second Floor, Back Bay B

MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

THURSDAY, DECEMBER 5 *(cont)*

Photo & Electro Catalysis for Sustainable Fuel Production
9:30 AM EST
Speaker: Jingshan Luo, *Chemical Physics Reviews* Associate Editor
Hynes, Level 3, Room 300
MORE INFO

Leveraging Memristive Technologies for Advanced Cognitive Systems
10:00 AM EST
Speaker: Erika Covi, *APL Machine Learning* Editorial Advisory Board
Sheraton, Second Floor, Independence West
MORE INFO

Machine Learning Generation of Actinide Materials
10:15 AM EST
Speaker: Mingda Li, *APL Machine Learning* Editorial Advisory Board
Sheraton, Third Floor, Huntington
MORE INFO

***In Situ*/*Operando* Probe of Charge Transfer and Energetics at Semiconductor Photoelectrode/Electrolyte Interfaces**
10:30 AM EST
Speaker: Tianquan Lian, *The Journal of Chemical Physics* Editor-in-Chief
Hynes, Level 3, Room 300
MORE INFO

Molecular Building Blocks for Artificial Intelligence
1:30PM EST
Speaker: Sreetosh Goswami, *APL Electronic Devices* Early Career Editorial Advisory Board
Sheraton, Second Floor, Independence West
MORE INFO

Organic Semiconductors for Neuromorphic Biosensing
1:30 PM EST
Speaker: Francesca Santoro, *APL Bioengineering* Editorial Advisory Board
Hynes, Level 3, Ballroom A
MORE INFO

Emerging Oxide-Based Light Harvesters for Bias-Free Water and CO_2 Splitting
1:30PM EST
Speaker: Robert Hoye, *APL Electronic Devices* Editorial Advisory Board
Hynes, Level 3, Room 300
MORE INFO

AIP Publishing Editors' Activities and Sessions at MRS Fall

THURSDAY, DECEMBER 5 *(cont)*

Reshaping Silk Proteins at the Micro- and Nanoscale for High Technology
1:30 PM EST
Speaker: Fiorenzo Omenetto, *APL Photonics* Editorial Advisory Board
Hynes, Level 1, Room 103
MORE INFO

Property Directed Generative Design of Inorganic Materials
3:30 PM EST
Speaker: Kedar Hippalgaonkar, *APL Machine Learning* Editorial Advisory Board
Hynes, Level 2, Room 209
MORE INFO

Active Learning for the Hybrid Perovskite Discovery—Co-Navigating the Literature and Experimental Synthesis
8:00 PM EST
Speaker: Mahshid Ahmadi, *APL Machine Learning* Guest Editor
Hynes, Level 1, Hall A
MORE INFO

Tuning the Structure and Dynamics of 2D Hybrid Perovskites Through the Structure of the Organic Cation
8:00 PM EST
Speaker: Ferdinand Grozema, *Chemical Physics Reviews* Associate Editor
Hynes, Level 1, Hall A
MORE INFO

FRIDAY, DECEMBER 6

Active Learning of Microstructure-Property Relations in Hybrid Materials
9:00 AM EST
Speaker: Milica Todorović, *APL Machine Learning* Editorial Advisory Board
Hynes, Level 2, Room 206
MORE INFO