

SAVE THE DATE JAN. 19–21, 2022

ELECTRONIC MATERIALS AND APPLICATIONS 2022

DoubleTree by Hilton | Orlando, Fla., USA | ceramics.org/ema2022

ORGANIZED BY THE ACERs ELECTRONICS AND BASIC SCIENCE DIVISIONS

ACerS is pleased to announce the addition of a hybrid option for EMA '22 to allow participation by individuals who cannot attend in-person due to travel restrictions. We plan to provide a hybrid solution that will incorporate prerecorded talks from virtual attendees into the live onsite programming. All live sessions will be recorded for all attendees to view at the conclusion of the live conference, available until March 31, 2022.

Electronic Materials and Applications 2022 (EMA 2022) is an international conference focused on electroceramic materials and their applications in electronic, electrochemical, electromechanical, magnetic, dielectric, biological, and optical components, devices, and systems. Jointly programmed by the Electronics Division and Basic Science Division of The American Ceramic Society, EMA 2022 will take place at the DoubleTree by Hilton Orlando at Sea World, Jan. 19–21, 2022.

EMA 2022 is designed for scientists, engineers, technologists, and students interested in basic science, engineering, and applications of electroceramic materials. Participants from across the world in academia, industry, and national laboratories exchange information and ideas on the latest developments in theory, experimental investigation, and applications of electroceramic materials.

Students are highly encouraged to participate in the meeting. Prizes will be awarded for the best oral and poster student presentations.

The technical program includes plenary talks, invited lectures, contributed papers, poster presentations, and open discussions. EMA 2022 features symposia focused on dielectric, piezoelectric, pyroelectric, magnetoelectronic, (multi)ferroic, quantum, relaxor, optoelectronic, and photonic ceramics; complex oxide thin films, heterostructures, and nanocomposites; semiconductors; superconductors; ion-conducting ceramics; 5G materials for millimeter-wave technology; and functional biological materials. Other symposia emphasize broader themes covering processing, microstructure evolution, and integration; effects of surfaces and interfaces on processing, transport, and properties; point defects, dislocations, and grain boundaries; meso-scale phenomena; and advanced characterization and computational design of electronic materials.

EMA includes several networking opportunities to facilitate collaborations for scientific and technical advances related to materials, components, devices, and systems. The Basic Science Division will again host a tutorial session in addition to the regular conference programming.

The grand finale of the meeting will again be Failure: The Greatest Teacher. We invite anyone interested to submit a brief abstract for this educational and engaging event that concludes the meeting.

Please join us in Orlando, Fla., to participate in this unique experience!

ORGANIZING COMMITTEE



Andrew

Jennifer Andrew,
(Electronics Division)
University of Florida,
USA
jandrew@mse.ufl.edu



Krause

Amanda Krause,
(Basic Science Division)
University of
Florida, USA
a.krause@ufl.edu



Gorzowski

**Edward
Gorzowski,**
(Electronics Division)
Naval Research
Laboratory, USA
edward.gorzowski@nrl.navy.mil



Dillon

Shen Dillon,
(Basic Science Division)
University of Illinois
Urbana-Champaign,
USA
sdillon@illinois.edu

TECHNICAL PROGRAM

- S1 – Characterization of Structure–Property Relationships in Functional Ceramics**
- S2 – Advanced Electronic Materials: Processing Structures, Properties, and Applications**
- S3 – Frontiers in Ferroic Oxides: Synthesis, Structure, Properties, and Applications**
- S4 – Complex Oxide Thin Films and Heterostructures: From Synthesis to Strain/Interface-engineered Emergent Properties**
- S5 – Mesoscale Phenomena in Ferroic Nanostructures: From Patterns to Functionalities**
- S6 – Emerging Semiconductor Materials and Interfaces**
- S7 – Superconducting and Related Materials: From Basic Science to Applications**
- S8 – Structure–Property Relationships in Relaxor Ceramics**
- S9 – Ion-conducting Ceramics**
- S10 – Point Defects and Transport in Ceramics**
- S11 – Evolution of Structure and Chemistry of Grain Boundaries and Their Networks as a Function of Material Processing**
- S12 – 5G Materials and Applications Telecommunications**
- S13 – Agile Design of Electronic Materials: Aligned Computational and Experimental Approaches and Materials Informatics**
- S14 – Functional Materials for Biological Applications**
- S15 – Advanced Microelectronics**