

2019

Best Posters:

First place - Shuehi Nakayama, Sophia University; "Ferroelectric HfO₂ thin films with abundant dopants"

Second place - Kevin Ferri, Pennsylvania State University; "Investigating the Roles of Grain Size, Dopant Choice, and Orientation of ZnO Thin Film Varistor Prototypes"

Third place - Halee Lester, University of Florida; "Property and Structure Analysis of Novel 2D Group-III Oxides Predicted by Evolutionary Algorithm"

Best Oral Presentations:

First place - Nives Strkalj, ETH Zurich, Switzerland; "Design of ferroelectric polarization states during epitaxial growth"

Second place – Shelby Fields, University of Virginia; "Polarization and permittivity dependence on electrode stress for ferroelectric Hf_{0.5}Zr_{0.4}O₂ films"

Third place (tie) – William Huddleston, Case Western Reserve University; "Li₄Ti₅O₁₂–Li_{0.45}La_{0.52}TiO₃–Ni all-solid-state lithium-ion battery anode composites"

Third place (tie) – Joshua Paul, University of Florida; "Symmetry-Based Identification of 2D Materials for Piezoelectric Applications"

2018

Best Posters:

First place - William Huddleston; Case Western Reserve University; "Freeze casting of LAGP for 3D textured solid-state structural electrolytes"

Second place - Krishna Chaitanya Pitike; University of Connecticut; "Shape and size dependent phase transformations and field-induced behavior in ferroelectric nanoparticles"

Third place - Lukasz Kuna; University of Connecticut; "Mesoscale modeling of stress induced band-gap attenuation in ZnO Nanowires"

2018

Best Oral Presentations:

First place - Richard Veazey; University of Sheffield; "The Influence of Electrode Geometry on the Average and Local Electrical Responses of Electroceramics"

Second place - Kassiopeia Smith; Boise State University; "Understanding Electrochemical and Structural Behaviors of Irradiation Induced Defects in TiO₂"

Third place - Todd Surta; Oregon State University; "Exploring the rich defect chemistry of amorphous carbon using a combination of experiments and theory"

2017

Best posters:

First place - Tassie Andersen, Northwestern University, "Evolution of Brownmillerite Structure in SrCoO_{2.5} Under Varying Molecular Beam Epitaxy Growth Conditions"

Second place - William Huddleston, Case Western Reserve University, "Sintered Cathodes for All-Solid-State Structural Lithium-Ion Batteries"

Third place - Kevin Pachuta, Case Western Reserve University, "Characterization of Solution-Based Exfoliated Nanosheets"

Best oral presentations:

First place - Ching-Yen Tang, University of Illinois at Urbana Champaign, "In situ X-ray Photoelectron and Auger Electron Spectroscopic Characterization of Reaction Mechanisms during Li-ion Cycling of CuO Electrodes"

Second place - Ran Gao, University of California, Berkeley, "Ferroelectricity in Epitaxial Pb_{1+δ}ZrO₃ Thin Films"

Third place - Xiaorui Tong, West Virginia University, "Kinetic Poisson-Cahn Model of Defect Segregation Near Grain Boundaries During Thermal Annealing in Oxygen-Conducting Solid Electrolytes"

2016

Best posters:

First place - Daniel M. Long,(1) Andreas Klein,(2) Elizabeth Dickey (1)

(1) North Carolina State University

(2) Technische Universität Darmstadt

"Band Alignment Characterization of Barium Titanate"

Second place - Gerardo Rodriguez-Hernandez, Peiman Hosseini, Harish Bhaskaran,
University of Oxford

“Study of Ge₂Sb₂Te₅ Properties for Opto-Electronic Applications

3rd Place - Dong Hou,(1) Tedi-Marie Usher,(1) Natthaphon Raengthon,(2,3) Narit
Triamnak,(2) David P. Cann,(2) and Jacob L. Jones(1)

(1) North Carolina State University

(2) Oregon State University

(3) Chulalongkorn University

“Temperature-induced Average and Local Structural Changes of BaTiO₃-Bi(Zn_{0.5}Ti_{0.5})O₃”

Best oral presentations:

First place - Kyle Kelley, Edward Sachet, Kniang Kham, Stefan Franzen, and Jon-Paul Maria,

North Carolina State University

"Doping control in epitaxial thin films via reactive RF co-sputtering”

Second place - Jeffrey Braun,(1) Mirza Elahi,(2) John Gaskins,(1) Thomas E. Beechem III,(3)
Zayd C. Leseman,(2) Hiroyuki Fujiwara,(4) Sean King,(5) and Patrick E. Hopkins(1)

(1) University of Virginia

2) University of New Mexico

(3) Sandia National Laboratories

(4) Gifu University

(5) Intel Corporation

Third place - Steven Brewer,(1) McKinley Paul,(2) Kenzie Fisher,(3) Jonathon Guerrier,(4)
Jacob L. Jones,(4) Ryan Rudy,(5) Ronald G. Polcawich,(5) Evan Glaser,(6) Cory Cress,(6) and
Nazanin Bassiri-Gharb(1)

(1) Georgia Institute of Technology

(2) Woodward Academy

(3) Riverwood International Charter School

(4) North Carolina State University

(5) U.S. Army Research Laboratory

(6) Naval Research Laboratory

2015

Best posters:

First place - Gye Hyun Kim, MIT "Effect of surface energy anisotropy on Rayleigh-like solid-
state dewetting and nanowire stability"

Second place - Youngho Jin, Georgia Institute of Technology "Microstructure and electrical
properties in PMMA/ATO conductive composites with phase segregated microstructures"

Third place - Jun-Young Cho, Seoul National University "The effect of nano-structure on the thermoelectric properties of bulk copper selenide"

Best oral presentations:

First place - Christina Rost, North Carolina State University "Entropy Driven Oxides: configurationally disordered solid solutions and their structure-property"

Second place - Edward Sacht, North Carolina State University "Extreme electron mobility in cadmium oxide through defect equilibrium engineering"

Third place - Jon Mackey, University of Akron "Analytic thermoelectric couple modeling: variable material properties and transient operation"

2014

Best posters:

First place - Shin ik Kim, Korea Institute of Science and Technology
"Non volatile control of 2DEG Conductance at oxide interfaces"

Second place - Dhruv Seshadri, Case Western University
"Lithium titanate as Anode Material in Lithium-Ion Batteries"

Third place - Lisheng Gao, The Pennsylvania State University
"Co-fired Multilayer ceramic batteries for safe electrochemical energy storage"

Best oral presentations:

First place - Brian Foley, University of Virginia "Glass-like Thermal Conductivity of (010)-Textured Lanthanum doped dStrontium Niobate Synthesized with Wet Chemical Deposition"

Second place - Brian Donovan, University of Virginia "Temperature Dependent Thermal Conductivity of nano-Grained Barium Titanate"

Third place - Russell Maier, Penn State University "Investigation of Defect Dipole Kinetics in the Ferroelectric and Paraelectric Phases of Acceptor Doped BaTiO₃ Single Crystals"

2013

Best posters:

First place - Jonathan Mackey, Case Western Reserve University, for "Analytic Thermoelectric Device Optimization"

Second place - Ali Henriques, University of Florida, for “Structural changes in Lead Zirconate Titanate due to High Neutron Radiation Exposure”

Third place - Michelle Nolan, University of Florida, for “Phase equilibria, crystallographic structure, and piezoelectric properties of tetragonal $\text{Pb}_{(1-1.5x)}\text{Sm}_x\text{Zr}_{(1-y)}\text{TiyO}_3$ ”

Best oral presentations:

First place - Chris Shelton, North Carolina State University, for “Control of ZnO thin film polarity through interface chemistry”

Second place - Tedi-Marie Usher, University of Florida, for “Domain wall motion and electric-field-induced strains in NBT-xBT solid solutions from in situ neutron diffraction”

Third place - Jon Bock, the Pennsylvania State University, for “The Influence, Role, and Property Variations in Ferroelectricity at the Edge of the Metal-Insulator Transition and Its Influence on Thermoelectric Properties”

2012

Best poster: Elena Aksel, University of Florida, for “Crystal Structure and Phase Transitions in Chemically Modified Sodium Bismuth Titanate”

Best oral presentation: Cassandra Llano, University of Florida, for “Development and Implementation of a Polarization and Strain Measurement System”

2011

Best poster: not awarded in 2011

Best oral presentation: Elena Aksel, University of Florida, for “Sodium Bismuth Titanate - Resolving Structural Contradictions”

2010

Best poster: Jin Woo Jung, Hoseo University, South Korea, for “Development of AZO-based Transparent, Thin Film Transistors on Transparent Structures”

Best oral presentation: Beverly B. Hinojosa, University of Florida, for “Developing the Link Between Atomic Structure and Macroscopic Properties of Cubic Pyrochlores”

2009

Best poster: not awarded in 2009

Best oral presentation: Anderson Prewitt, University of Florida for “Effects of Field & Temperature During Poling on the Ferroelectric Properties of Lead Zirconate Titanate”

2008

Best poster: Christopher T. Shelton, Oregon State University for “Epitaxial Piezoelectric Thin Films on Flexible Substrates”

Best oral presentation: Vivek Tomer, Penn State University for “Induced Anisotropy in Electrically Modified Polymer/Ceramic Nano-composites”

2007

Best oral presentation: Mark D. Losego, North Carolina State University, for “Engineering Oxide Interfaces to Gallium Nitride by Molecular Beam Epitaxy”

2006

Best poster: Weiqun Chen, University of California, Davis, for “Energetics of Cerium-Zirconium Substitution in the $x\text{Ce}_{0.8}\text{Y}_{0.2}\text{O}_{1.9}-(1-x)\text{Zr}_{0.8}\text{Y}_{0.2}\text{O}_{1.9}$ System”

Best oral presentation: Meagen A. Gillispie, Iowa State University, for “Crystal Chemistry and Electrical Properties of Delafossite Compounds”

2005

Best poster: Yusuke Tohdo, Nagoya Institute of Technology, for “Crystal Structure analysis of Homologous Compounds $\text{Ala}_4\text{Ti}_4\text{O}_{15}$ and its Microwave Dielectric Properties”

Best oral presentation: Niall J. Donnelly, Pennsylvania State University, for “Investigation of Nonlinear and Relaxation Phenomena in PMN-0.07PT Films Under Large AC Field”