Invited Speaker	TITLE
Amalia Ballarino, CERN	HTS for use in Accelerator Facilities
Wei Bao, Renmin University of China	High-pressure single-crystal neutron scattering study of the 245 superconductor
Richard Beanland, University of Warwick	Measuring symmetry, structure and bonding in functional ceramics using ‘Digital’ Electron Diffraction
Scott Beckman, Iowa State University	Special Quasirandom Structures of K0.5Na0.5NbO3
Nicole Benedek, The University of Texas at Austin	In search of simple design principles for the transport properties of complex oxides
Jerry Bernholc, NC State University	Electronic Structure and Electron Transport in Carbon-Based Nanosystems
Saad Binomran, King Saud University	First-principles-Based Investigation of physical properties of BST Nanodot
Volker Blum, Duke University	First-Principles, All-Electron Approach to Electronic Interfaces: Challenges and Opportunities
Sören Boyn, Unité Mixte de Physique CNRS/Thales	Ferroelectric Memristors for Neuromorphic Computing
Sergey Bud'ko, Ames Laboratory/Iowa State University	Combined effects of transition metal (Co, Ni, Rh) substitution, annealing/quenching and hydrostatic pressure on superconductivity and phase diagrams of CaFe2As2
David Cann, Oregon State University	BaTiO3 – Bi(Zn1/2Ti1/2)O3 Relaxors for High Temperature and High Energy Capacitor Applications
Emily Carter, Princeton University	First-Principles-Derived Strategy to Stabilize Kesterite Phase CZTS for High Performance Solar Cells
Eric Chason, Brown University	A kinetic picture for understanding residual stress in thin films: real-time experiments and modeling
Dominique Chatain, CNRS - Aix-Marseille University	A new mechanism of hetero-epitaxy and orientation relationships
Paul C. W. Chu, University of Houston	The Meissner and Mesoscopic Superconducting States in the Ultrathin FeSe-Films
Kazimierz Conder, Paul Scherrer Institute	Superconductivity in alkali metal intercalated iron chalcogenides
Alastair Cormack, Alfred University	Correlated Sodium Transport in β-alumina"

Invited Speaker	TITLE
Shane Cybart, UC San Diego	Josephson and Quasi-particle Tunneling in High-Transition-Temperature Superconductor Josephson Junctions from Ion Beam Irradiation
John Daniels, UNSW Australia	Experimental observations of grain-scale interactions in electroceramics: The difficult length scale
Gerhard Dehm, Max Planck Institut für Eisenforschung	Probing deformation mechanisms of metallic structures relevant for electronic applications
Alex Demkov, University of Texas, Austin	Designing Integrated Ferroelectrics
Satoshi Demura, Tokyo University of Science	Superconductivity and the magnetism in BiS 2 -based superconductors
Claudia Draxl, Humboldt-Universität zu Berlin	From molecules to their condensed phases: challenges, concepts, and control of their properties
Roman Engel-Herbert, The Pennsylvania State University	Epitaxial integration of functional perovskite oxides on Si
Daniel Feezell, University of New Mexico	Light-Emitting Diodes Based on Ordered Arrays of III-Nitride Core-Shell Nanostructures
Peter Finkel, NRL	Giant magnetoelectric effect in nonlinear multiferroic heterostructure
Michael Foster, Sandia National Laboratories	Computational Design of Near-IR Absorbing Organic Materials for Light Harvesting Applications
Julia Glaum, UNSW Australia	Relaxor-ferroelectric transition in BNT-based piezoceramics
Giovanni Grasso, Columbus Superconductors SpA	Progress in industrial manufacturing of ex-situ MgB2 superconducting wires
Benjamin Griffin, Sandia National Laboratories	Piezoelectric MEMS Based on Aluminum Nitride
Alexei Gruverman, University of Nebraska-Lincoln	Electromechanical coupling and interface control of resistive switching in ferroelectric heterostructures
Hongsoo Ha, Korea Electrotechnology Research Institute	Recent progress of ReBCO coated conductor made by RCE-DR process
Hanns-Ulrich Habermeier, MPI-FKF	Thermoelectric Properties of PLD Grown Ca3Co4O9 Thin Films
Seungbum Hong, Argonne National Laboratory	Enhancement of Local Piezoresponse in Polymer Ferroelectrics via Nanoscale Control of Microstructure

Invited Speaker	TITLE
Seungbum Hong, Argonne National Laboratory	Charge Gradient Microscopy: Electromechanical Charge Scraping at the Nanoscale
Bryan Huey, University of Connecticut	Ferroelectric Domain Switching in BiFeO3 Multiferroics
Jon Ihlefeld, Sandia National Laboratories	Room Temperature Voltage Tuning of Thermal Conductivity in Ferroelectric Thin Films
Akira Iyo, National Institute of Advanced Industrial Science and Technology (AIST)	Recent discovery of new superconductors containing pnictogen atoms
Bharat Jalan, University of Minnesota	MBE Growth, Heterostructure Engineering and Electronic Transport Properties of Complex Oxides via Stoichiometry Control
Dirk Johrendt, Ludwig-Maximilians-Universität München	Coexistence of 3d-ferromagnetism and superconductivity in [(Li0.8Fe0.2)OH]FeSe
Daisuke Kan, Kyoto University	Phase control of a transition metal oxide through interface engineering of oxygen displacement
Maarit Karppinen, Aalto University	Nanostructuring of Oxide Thermoelectrics by Atomic/Molecular Layer Deposition
Mehmet Kesim, University of Connecticut	Electrothermal Properties of Ferroelectric Multilayers
Dong Jik Kim, University of Nebraska-Lincoln	Room-Temperature Ferroelectricity of Epitaxially Stabilized Hexagonal TbMnO3 Films
Suk Jun Kim, KOREATECH	Novel application of metallic glass: Ag paste for solar cell
Masahiko Kimura, Murata Manufacturing Co., Ltd.	Study of Textured Piezoelectric Ceramics Fabricated by Magnetic Alignment
Emmanouil Kioupakis, University of Michigan	Predictive calculations of nitride nanostructures for visible and ultraviolet light emitters
Ho-Yong Lee, Sunmoon University	Lead-free Piezoelectric Single Crystals [(Ba,Ca)(Zr,Ti)O3] of k33 > 0.85
Jing-Feng Li, Tsinghua University	Synthesis and Piezoelectricity of Lead-free (K, Na)NbO3 Nanoscale Single Crystals
Fei Li, Xi'an Jiaotong University	Piezoelectric Activity in Perovskite Ferroelectric Crystals
Feng Liu, University of Utah	Epitaxial Growth of Graphene-Like Overlayer on Semiconductor Surface towards Room-Temperature Topological Quantum States

Invited Speaker	TITLE
Turab Lookman, Los Alamos National Laboratory	Information-driven approach to materials design
Mark Losego, Georgia Institute of Technology	Sub-Nanometer Oxide Coatings for Improved Stability of Molecularly Sensitized Devices
Jian Luo, UCSD	Stabilization of Nanometer-Thick Surficial Films and Their Applications in Battery Materials
Joseph Luther, NREL	CdTe Nanocrystals in Ink-Based Photovoltaics: A Study of Grain Growth and Device Architecture
M. Brian Maple, University of California, San Diego	Superconductivity in BiS2-based compounds
Jon-Paul Maria, North Carolina State University	Chemical pathways to advance the synthesis science of ferroelectric thin films
Lane Martin, University of California, Berkeley	New Horizons in Strain Control of Ferroelectrics: Manipulating Chemistry and Domain Structures for New Phenomena
Steven May, Drexel University	Electronic and optical properties of epitaxial La1-xSrxFeO3 and La1-xEuxFeO3 films
Steven Milne, University of Leeds	Alternative lead-free piezoelectrics based on Bi0.5K0.5TiO3
Vojislav Mitic, Institute of Technical Sciences of SASA	Contribution to Heywang fractal nature model generalization on the way to electronics circuits intergranular relations
Xavier Moya, University of Cambridge	Multicaloric perovskite oxides
Hajime Nagata, Tokyo University of Science	Silver Diffusion behavior into (Bi1/2K1/2)TiO3 Lead-Free Ferroelectric Ceramics
Serge Nakhmanson, University of Connecticut	Complex-oxide multilayers by design: a treasure trove of unusual ferroic functionalities
George Nolas, University of South Florida	Inorganic Clathrates and Other Open-Framework Low Thermal Conductivity Materials
Mark Nowakowski, University of California, Berkeley	Reversible electrically-driven magnetic domain wall rotation in multiferroic heterostructures to manipulate suspended on-chip magnetic particles
Hiromichi Ohta, Hokkaido University	Thermopower enhancement of two-dimensional electron gas in oxide semiconductors
Murat Okandan, Sandia National Laboratories	Microsystems Enabled PV

Invited Speaker	TITLE
Vidvuds Ozolin, University of California, Los Angeles	Computational design of earth-abundant thermoelectrics
Changwon Park, Oak Ridge National Laboratory	Electronic properties of bilayer graphenes strongly coupled to interlayer stacking and the external field
Joseph Perry, Georgia Tech	Organically Modified Silica Hybrid Sol-gel Capacitors with High Energy Density and Efficiency
Krishna Rajan, Iowa State University	Harnessing Big Data for Computational Design of Ceramics
Gregory Rohrer, Carnegie Mellon University	Combinatorial substrate epitaxy: a high throughput method to determine orientation relationships for electronic ceramics
Jeff Sakamoto, University of Michigan	Superionic conducting ceramic electrolyte enabling Li metal anodes and solid state batteries
Paul Salvador, Carnegie Mellon University	Combinatorial Substrate Epitaxy: A New Route for Stabilizing Metastable Electronic Ceramics
Athena Sefat, Oak Ridge National Laboratory	Tuning of Crystals on Atomic Scales
Ali Shakouri, Purdue University	Electronic and lattice thermal conductivity in nanostructured thermoelectric matrerials
Yang Shen, Tsinghua University	High Energy Density of Polymer Nanocomposites via Interface-Engineering
Hiroyuki Shimizu, Taiyo Yuden Co., Ltd.	Antiferroelectric - Ferroelectric Phase Switching in NaNbO3-Based Ceramics
Derek Sinclair, University of Sheffield	The Defect Chemistry of Na1/2Bi1/2TiO3: a bipolar perovskite
Henry Sodano, University of Florida	High Energy Density Polymer Nanocomposite Capacitors using Nanowires
Neil Sorensen, Sandia National Laboratories	Reliability Issues Associated With Photovoltaics
Carl Thompson, Massachusetts Institute of Technology	The Stability of Retracting Film Edges During Solid-State Dewetting
Tedi-Marie Usher, North Carolina State University	Doped HfO2: Ferroelectricity and non-equilibrium structures in thin films and bulk ceramics
Tedi-Marie Usher, North Carolina State University	Insights into the local structure of ferroelectrics via pair distribution function studies

Invited Speaker	TITLE
Bala Vaidhyanathan, Loughborough University	Flash Sintering of Electroceramic Devices
Peter van Aken, Max Planck Institute	Interfacial Chemistry and Atomic Arrangement of ZrO2/LSMO Pillar-Matrix Structures
Ruiping Wang, National Institute of Advanced Industrial Science and Technology	Niobate lead-free piezoelectric ceramics exhibiting the MPB and their application to AE sensor
Gang Wang, Institute of Physics, Chinese Academy of Sciences	Cobalt vacancies and related properties in LaCo2-xAs2
Gang Wang, Institute of Physics, Chinese Academy of Sciences	Structural evolution in KxFe2-ySe2: Unstable phase, superconducting phases, and vacancy phases
Ming-Jye Wang, Academia Sinica	Fe-vacancy in FeSe-based superconductors
Jian Wang, Peking University	Direct evidence of the thinnest high temperature superconductor
Kyle Webber, Technische Universität Darmstadt	Tailoring Lead-Free Ferroelectric Composites
Jiagang Wu, Sichuan University	High Strain and Large Piezoelectricity in Potassium-Sodium Niobate Lead-free Ceramics
Bin Xu, University of Arkansas	Finite-temperature Properties of Rare-Earth-Substituted BiFeO3 Multiferroic Solid Solutions
Boris Yakobson, Rice University	2D materials canvas: carbon, h-BN, metal-disulfides, and topological defects therein
Zuo-Guang Ye, Simon Fraser University	Synthesis, Structure and Properties of Novel Antiferro-/Ferroelectric Complex Perovskite Solid Solutions
Yu Zhong, Florida International University	In Situ Phase Transformation of Scandia-Zirconia by High Temperature X-ray Diffraction
Yu Zhong, Florida International University	Application of Computational Thermodynamics on Long Term Degradation of Solid Oxide Fuel Cell
Xingjiang Zhou, Institute of Physics, Chinese Academy of Sciences	Electronic Structure and High Temperature Superconductivity of FeSe/SrTiO3 Films
Jianguo Zhu, Sichuan University	High Piezoelectric Properties of KNN-based Piezoelectric Ceramics