

## 2017 iWOE Poster Schedule

Updated 19 September 2017

### Poster Session 1: Monday, September 25

P1	<b>Atomic structure of the interface of superconducting monolayer FeSe on SrTiO<sub>3</sub></b> Stephen Albright ( <i>Yale Univ., USA</i> )
P2	<b>X-ray structure analysis software for perovskite-type oxide thin films</b> Masato Anada ( <i>Osaka Univ., Japan</i> )
P3	<b>Microscopic band structure of functional oxides</b> Nicholas Barrett ( <i>CEA Saclay, France</i> )
P4	<b>Electronic transport in nanowires confined at the LaAlO<sub>3</sub>/SrTiO<sub>3</sub> interface</b> Margherita Boselli ( <i>Univ. Geneva, Switzerland</i> )
P5	<b>Anisotropic transport and anomalous Hall effect in epitaxial spinel NiCo<sub>2</sub>O<sub>4</sub> films</b> Xuegang Chen ( <i>Univ. Nebraska, USA</i> )
P6	<b>Novel Two-Dimensional Silica Ferroelectric</b> Andrey Chibisov ( <i>Russian Academy of Sciences, Russia</i> )
P7	<b>Characterization of polar substrate surfaces using lateral force microscopy</b> John Connell ( <i>Univ. Kentucky, USA</i> )
P8	<b>Tunable metal-to-insulator transition in La<sub>1-x</sub>Nd<sub>x</sub>NiO<sub>3</sub> thin films</b> Ryan Desautels ( <i>Oak Ridge, USA</i> )
P9	<b>Correlation physics of high mobility MgZnO/ZnO heterostructures</b> Joseph Falson ( <i>Max Planck Institute for Solid State Research, Germany</i> )
P10	<b>Exploring the phase diagram of La<sub>1-x</sub>Nd<sub>x</sub>NiO<sub>3</sub> thin films</b> Jennifer Fowlie ( <i>Univ. Geneva, Switzerland</i> )
P11	<b>Anisotropic electronic transport of two-dimensional electron systems in Al<sub>2</sub>O<sub>3</sub>/SrTiO<sub>3</sub> heterostructures</b> Dirk Fuchs ( <i>Karlsruher Institut für Technologie, Germany</i> )
P12	<b>Mobility Optimization and Electronic Transport in High Pressure Oxygen Sputter-Deposited BaSnO<sub>3</sub> Thin Films</b> Koustav Ganguly ( <i>Univ. Minnesota, USA</i> )
P13	<b>Strain Effects on Ionic Transport in Perovskite Oxides</b> Ran Gao ( <i>Univ. California, Berkeley, USA</i> )
P14	<b>Engineering magnetism and polarization domain structures in BiFeO<sub>3</sub> containing thin films through superlattice structuring</b> Colin Heikes ( <i>NIST, USA</i> )
P15	<b>Low-Temperature Dielectric Anisotropy Driven by an Antiferroelectric Mode in SrTiO<sub>3</sub></b> Gervasi Herranz ( <i>ICMAB-CSIC, Spain</i> )
P16	<b>Flexoelectricity induced large tunable self-bias by a PZT interfacial layer of epitaxial PMN-PT ferroelectric capacitors</b> Evert Houwman ( <i>Univ. Twente, Netherlands</i> )
P17	<b>Search for superconductivity in the infinite-layer CaCuO<sub>2</sub> system</b> Ai Ikeda ( <i>NTT Basic Research Laboratories, Japan</i> )
P18	<b>Charge confinement in epitaxially grown LaTiO<sub>3</sub>/SrTiO<sub>3</sub> films on Si by multi-band Hall measurements</b> Eric Jin ( <i>Yale Univ., USA</i> )
P19	<b>Peculiar oxygen and copper isotope effects on the pseudogap formation temperature in</b>

	<b>underdoped to overdoped cuprates</b> Zafar Khudayberdiev ( <i>National University of Uzbekistan</i> )
P20	<b>Atomic Structure Evolution of <math>\text{Sm}_{1-x}\text{Sr}_x\text{TiO}_3</math> at Mott transition</b> Honggyu Kim ( <i>Univ. California, Santa Barbara, USA</i> )
P21	<b>Epitaxial ferroelectric varactors for low-voltage microwave applications</b> Philipp Kommissinskiy ( <i>Technische Universität Darmstadt, Germany</i> )
P22	<b>Structural characterization of the <math>\text{LaInO}_3/\text{BaSnO}_3</math> interface via synchrotron scattering</b> Claudia Lau ( <i>Yale Univ., USA</i> )
P23	<b>Observation of metallic-like ferroelectricity in <math>\sim 1</math> nm thick deficient <math>\text{BaTiO}_3</math> at room temperature</b> Seungran Lee ( <i>Max Planck POSTECH/Korea Research Initiative, Korea</i> )
P24	<b>Strain control of oxygen kinetics in epitaxial Ruddlesden-Popper oxides</b> Dongkyu Lee ( <i>Oak Ridge, USA</i> )
P25	<b>Modification of Magnetocrystalline Anisotropy via Ion-Implantation</b> Michael Lee ( <i>Univ. California, Davis, USA</i> )
P26	<b>Dimensionality control of a novel electron gas based on <math>\text{KtaO}_3</math> (001) interface</b> Qi Li ( <i>Penn State Univ.</i> )
P27	<b>Optical visualization of oxygen vacancies migration in Ca doped bismuth ferrite</b> Ji Soo Lim ( <i>KAIST, Korea</i> )
P28	<b>Emergent chirality in <math>\text{PbTiO}_3/\text{SrTiO}_3</math> superlattices</b> Margaret McCarter ( <i>Univ. California, Berkeley, USA</i> )
P29	<b>Strain Engineering of Phonon Modes in (111)-Oriented Perovskites</b> Magnus Moreau ( <i>NTNU Norwegian University of Science and Technology, Norway</i> )
P30	<b>Reversible Modulation of Magnetic Anisotropy in <math>\text{Pb}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3/\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3</math> Multiferroic Heterostructures</b> Anil Rajapitamahuni ( <i>Univ. Nebraska, USA</i> )
P31	<b>Orbital Polarization in Negative Charge Transfer Ferrate Perovskites</b> Paul Rogge ( <i>Drexel Univ., USA</i> )
P32	<b>Electrochemical and Mechanical Control of Metal-Insulator Transition in Epitaxial Vanadium Dioxides</b> Yogesh Sharma ( <i>Oak Ridge, USA</i> )
P33	<b>Tunable Band Gaps in Digital Oxides with Layered Crystal Habits</b> Yongjin Shin ( <i>Northwestern Univ., USA</i> )
P34	<b>Dimensionality-Driven Semimetal-Insulator Transition in Ultrathin Films of Spin-Orbit Coupled <math>\text{SrIrO}_3</math></b> Michael Sing ( <i>Univ. Wuerzburg, Germany</i> )
P35	<b>Strain control of cationic distribution in multiferroic <math>\text{Bi}_5\text{Ti}_3\text{FeO}_{15}</math> films</b> Changhee Sohn ( <i>Oak Ridge, USA</i> )
P36	<b>MBE grown Lutetium deficient <math>(\text{Lu}_{1-x}\text{FeO}_3)_m/(\text{Lu}_{1-y}\text{Mn}(1/3)\text{Fe}(2/3)\text{O}_3)_n</math> Superlattices</b> Rachel Steinhart ( <i>Cornell Univ., USA</i> )
P37	<b>High-Throughput Screening of Transparent Conducting Oxides</b> Christopher Sutton ( <i>Fritz Haber Institute of the Max Planck Society, Germany</i> )
P38	<b>Observation of Topological Hall Effect in Highly-Conductive <math>\text{SrRuO}_3</math> Thin Films</b> Justin Thompson ( <i>Univ. Kentucky, USA</i> )
P39	<b>On the Universality of Electron Mobility in <math>\text{LaAlO}_3/\text{SrTiO}_3</math> and bulk <math>\text{SrTiO}_3</math></b> Felix Trier ( <i>Unité Mixte de Physique CNRS/Thales, Université Paris-Saclay, France</i> )
P40	<b>Tuning ferromagnetism at the <math>\text{LaNiO}_3/\text{CaMnO}_3</math> interface via crystallographic symmetry mismatch</b>

	Arturas Vailionis ( <i>Stanford Univ., USA</i> )
P41	<b>Giant topological Hall effect from magnetic skyrmion bubbles in correlated manganite thin films</b> Lorenzo Vistoli ( <i>Unité Mixte de Physique CNRS/Thales, Université Paris-Saclay, France</i> )
P42	<b>Activating and stabilizing oxides in electrochemical devices: creating new Oxide-Electrolyte/Oxygen Interfaces in SrIrO<sub>3</sub>/DyScO<sub>3</sub> films</b> Gang Wan ( <i>Argonne, USA</i> )
P43	<b>Origin of interface ferromagnetism in LaMnO<sub>3</sub>/SrTiO<sub>3</sub> heterostructures</b> Xuefeng Wang ( <i>Nanjing Univ., China</i> )
P44	<b>Stoichiometry, Strain Relaxation and Electronic Disorder in Hybrid MBE Grown La-doped SrSnO<sub>3</sub> Films</b> Tianqi Wang ( <i>Univ. Minnesota, USA</i> )
P45	<b>Digital modulation of nickel valence in cuprate-nickelate heterostructures</b> Friederike Wrobel ( <i>Argonne, USA</i> )
P46	<b>Magnetic Anisotropy of NiCo<sub>2</sub>O<sub>4</sub> thin films</b> Xiaoshan Xu ( <i>Univ. Nebraska, USA</i> )
P47	<b>Enhanced water oxidation activities of <math>\alpha</math>-Fe<sub>2</sub>O<sub>3</sub> photoanode by introducing Co and P dopants</b> Yu Youxing ( <i>Beihang Univ., China</i> )
P48	<b>MOSFETs based on Epitaxial SrTiO<sub>3</sub>/BaSnO<sub>3</sub> Heterostructures</b> Jin Yue ( <i>Univ. Minnesota, USA</i> )
P49	<b>Two-dimensional electron liquid states at the K-adsorbed anatase-TiO<sub>2</sub> (001) surface</b> Ryu Yukawa ( <i>High Energy Accelerator Research Organization, Japan</i> )
P50	<b>Conductivity and Microstructure of LaCoO<sub>3-d</sub> Thin Films</b> Hongrui Zhang ( <i>Chinese Academy of Sciences, China</i> )
P51	<b>First-Principles study of the Metallicity of ZnO Surface</b> Xiao Zhang ( <i>Univ. Illinois, Champaign-Urbana, USA</i> )
P52	<b>Understanding Structural Basis of Ionic Electrolyte Gating on Oxide Heterostructures</b> Hua Zhou ( <i>Argonne, USA</i> )

## Poster Session 2: Tuesday, September 26

P1	<b>Electron Doping of the Parent Cuprate <math>\text{La}_2\text{CuO}_4</math> without Cation Substitution</b> Carolina Adamo ( <i>Stanford Univ., USA</i> )
P2	<b>Control of Switching Modes and Conductance Quantization in Oxygen Engineered <math>\text{HfO}_x</math> based Memristive Devices</b> Lambert Alff ( <i>TU Darmstadt, Germany</i> )
P3	<b>Ferromagnetism and spin-dependent transport at a complex oxide interface</b> Yilikal Ayino ( <i>Univ. Minnesota, USA</i> )
P4	<b>Metal-insulator transition in <math>\text{CaVO}_3</math> thin films from DFT+DMFT</b> Sophie Beck ( <i>ETH Zurich, Switzerland</i> )
P5	<b>In-gap features in superconducting <math>\text{LaAlO}_3</math> - <math>\text{SrTiO}_3</math> - interfaces observed by tunneling spectroscopy</b> Hans Boschker ( <i>MPI Solid State Research, Germany</i> )
P6	<b>Electron Accumulation and Emergent Magnetism at the <math>\text{LaMnO}_3/\text{SrTiO}_3</math> Heterointerface</b> Zuhuang Chen ( <i>Univ. California, Berkeley, USA</i> )
P7	<b>Room-temperature blue luminescence from highly electron-doped <math>\text{TiO}_x</math> nanostructures on the surface of <math>\text{SrTiO}_{3-d}</math> (001)</b> Seyong Cook ( <i>Northwestern Univ., USA</i> )
P8	<b>Dielectric characteristics of <math>\text{La}_{0.5}\text{Cr}_{0.5}\text{TiO}_{3+\delta}</math> and visible light modulation</b> Yimin Cui ( <i>Beihang Univ., China</i> )
P9	<b><math>\text{SmNiO}_3/\text{NdNiO}_3</math> superlattices</b> Claribel Dominguez Ordonez ( <i>Univ. Geneva, Switzerland</i> )
P10	<b>Interfacial Electrical Conductance Behavior in Thin Film Epitaxial (001) <math>\text{In}_2\text{O}_3</math> / <math>\text{SrTiO}_3</math> Heterostructures</b> Jeff Eastman ( <i>Argonne, USA</i> )
P11	<b>Superconductivity at <math>\text{LaAlO}_3/\text{Sr}_{1-x}\text{Ca}_x\text{TiO}_3</math> interfaces</b> Ritsuko Eguchi ( <i>Okayama University, Japan</i> )
P12	<b>Insulating magnetic oxides in spintronics. The key role of interfaces</b> Josep Fontcuberta ( <i>ICMAB-CSIC, Spain</i> )
P13	<b>Run-away tail (RAT) in <math>\text{SrTiO}_3</math> accumulation layers</b> Han Fu ( <i>Univ. Minnesota, USA</i> )
P14	<b>Applications of Electron microscopy imaging and spectroscopy to understand structure-properties relationships in complex functional materials</b> Nicolas Gauquelin ( <i>Univ. Antwerp, Belgium</i> )
P15	<b>Competition of Orbital Polarization Sources in a Nickelate/Aluminate Superlattice</b> Alexandru Georgescu ( <i>Columbia Univ., USA</i> )
P16	<b>Effective Correlation Tuning via Mixed-Phase Pyrochlore Iridate Thin-Films</b> John Gruenewald ( <i>Univ. Kentucky, USA</i> )
P17	<b>Solution-processed metal-oxide semiconductors for neuromorphic electronics</b> Tae-Jun Ha ( <i>Kwangwoon Univ., Korea</i> )
P18	<b>Synchrotron operando measurements: Combined X-ray absorption spectroscopy and magnetotransport measurements with magnetic tunnel junctions</b> Ufuk Halisdemir ( <i>Univ. Twente, The Netherlands</i> )
P19	<b>Tailoring the switching performance of resistive switching <math>\text{SrTiO}_3</math> devices by <math>\text{SrO}</math></b>

	<b>interlayer engineering</b> Felix Hensling ( <i>PGI-7, Forschungszentrum Jülich, Germany</i> )
P20	<b>In-situ X-ray Studies of In<sub>2</sub>O<sub>3</sub>:CeO<sub>2</sub> Thin Films and Nanostructures</b> Matt Highland ( <i>Argonne, USA</i> )
P21	<b>Epitaxial growth of high quality SrFeO<sub>3</sub> films on (001) oriented (LaAlO<sub>3</sub>)<sub>0.3</sub>(Sr<sub>2</sub>TaAlO<sub>6</sub>)<sub>0.7</sub></b> Deshun Hong ( <i>Argonne, USA</i> )
P22	<b>Vertical Transport in Epitaxial BaTiO<sub>3</sub>-Germanium Heterostructures</b> Yichen Jia ( <i>Yale Univ., USA</i> )
P23	<b>Tuning magnetic anisotropy by interfacially engineering the oxygen coordination environment in a transition-metal oxide</b> Daisuke Kan ( <i>Kyoto Univ., Japan</i> )
P24	<b>Spin-orbit coupling and electronic correlations in Hund's metal : Sr<sub>2</sub>RuO<sub>4</sub></b> Minjae Kim ( <i>Ecole Polytechnique, France</i> )
P25	<b>Tuning Magnetic, Structural and Electronic Interactions at Polar Manganite Interfaces</b> Divine Kumah ( <i>North Carolina State Univ., USA</i> )
P26	<b>Large enhancement of ionic conduction in vertically aligned single crystalline oxide nanosuperlattices</b> Dongkyu Lee ( <i>Oak Ridge, USA</i> )
P27	<b>Spin States Control in LaCoO<sub>3</sub>-based Heterostructures</b> Sangjae Lee ( <i>Yale Univ., USA</i> )
P28	<b>Oxygen defect engineering triggered by temperature cycling in La<sub>0.7</sub>Sr<sub>0.3</sub>CoO<sub>3</sub> film</b> Jia Li ( <i>Chinese Academy of Sciences, China</i> )
P29	<b>Orbital control by interfacial oxygen engineering in nickelate heterostructures</b> Zhaoliang Liao ( <i>Oak Ridge, USA</i> )
P30	<b>Probing short-ranged magnetic order in a geometrically frustrated magnet by spin Seebeck effect</b> Changjiang Liu ( <i>Argonne, USA</i> )
P31	<b>Eliminating Surface Steps to Create Flat Heteroepitaxial Interfaces between Oxides and III-V semiconductors</b> Jon-Paul Maria ( <i>North Carolina State University, USA</i> )
P32	<b>Flexoelectric and Electronic Structure Studies of Lanthanide Scandates</b> Christopher Mizzi ( <i>Northwestern Univ., USA</i> )
P33	<b>Electric field induced surface conduction in ferroelectric PbTiO<sub>3</sub></b> Ryutaro Nishino ( <i>Univ. Tokyo, Japan</i> )
P34	<b>Spin-Hall Magnetoresistance in Collinear and Canted Magnetic Insulators</b> Matthias Opel ( <i>Walther-Meissner-Institut, Germany</i> )
P35	<b>Structure, Stoichiometry Effect and Electronic and Thermal Transport in MBE-Grown BaSnO<sub>3</sub> Films and Heterostructures</b> Abhinav Prakash ( <i>Univ. Minnesota, USA</i> )
P36	<b>Control of the metal-insulator transition in VO<sub>2</sub> thin films by K deposition</b> Daisuke Shiga ( <i>Tohoku Univ., Japan</i> )
P37	<b>Role of Growth Oxygen Partial Pressure on Atomic Termination Sequence at SrRuO<sub>3</sub>/BaTiO<sub>3</sub> Interface</b> Yeong Jae Shin ( <i>Seoul National Univ., Korea</i> )
P38	<b>Catalytically Active High-Energy Surfaces by Rapid-Anneal Solid Phase Epitaxy</b> Paul Snijders ( <i>Oak Ridge, USA</i> )
P39	<b>Electronic Properties of Layered Iridate Epitaxial Thin-Films</b>

	Maryam Souri ( <i>Univ. Kentucky, USA</i> )
P40	<b>TwinBeam PLD - new possibilities for advanced functional films</b> Wolfgang Stein ( <i>SURFACE systems+technology GmbH+Co KG, Germany</i> )
P41	<b>Reversible spin texture in ferroelectric HfO<sub>2</sub></b> Lingling Tao ( <i>Univ. Nebraska, USA</i> )
P42	<b>Internal charge transfer and hopping conduction in MBE-grown SrTiO<sub>3</sub>/Nd<sub>x</sub>Ti<sub>1-x</sub>O<sub>3</sub>/SrTiO<sub>3</sub> heterostructures</b> Laxman Raju Thoutam ( <i>Univ. Minnesota, USA</i> )
P43	<b>Electronic Reconstruction Enhanced Tunneling Conductance at Terrace edges of Ultrathin Oxide Films</b> Lingfei Wang ( <i>Institute for Basic Science, Korea</i> )
P44	<b>Growth of High Quality Epitaxial LaAlO<sub>3</sub> on SrTiO<sub>3</sub> on (001) Si via Molecular-Beam Epitaxy</b> Zhe Wang ( <i>Cornell Univ., USA</i> )
P45	<b>Carrier Density Modulation over an Exceptional Voltage Window in BaSnO<sub>3</sub> Films via Ion Gel Gating</b> Helin Wang ( <i>Univ. Minnesota, USA</i> )
P46	<b>The Effect of Fluorination Conditions on the Physical Properties of SrMn(O,F)<sub>x</sub> Films</b> Jiayi Wang ( <i>Drexel Univ., USA</i> )
P47	<b>Visualizing ballistic phonon transport in ferroelectric BaTiO<sub>3</sub> upon localized terahertz field excitation</b> Haidan Wen ( <i>Argonne, USA</i> )
P48	<b>Transport in Dual-gated Nb:SrTiO<sub>3</sub> Quantum Wells</b> Hyeok Yoon ( <i>Stanford Univ., USA</i> )
P49	<b>Tuning Spin Relaxations in Ultrathin Epitaxial SrIrO<sub>3</sub> Thin Films via Ferroelectric Gating</b> Le Zhang ( <i>Univ. Nebraska, USA</i> )
P50	<b>Lithium Intercalation into La<sub>2/3</sub>TiO<sub>3</sub> and La<sub>1/3</sub>NbO<sub>3</sub> thin film</b> Yisi Zhu ( <i>Argonne, USA</i> )