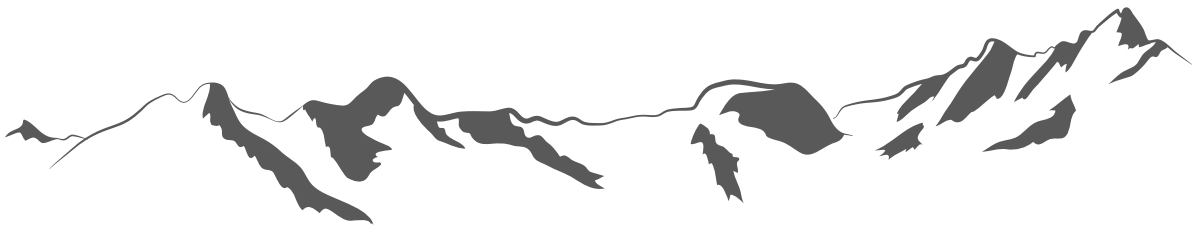
iWOE25

25th International Workshop on Oxide Electronics

1st – 3rd October 2018

Les Diablerets, Switzerland



Workshop Program

Full booklet of abstracts available at www.iwoe25.org

25th International Workshop on Oxide Electronics

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Les Diablerets, Switzerland

International committee

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Workshop Program

Sunday 30th September 2018

17h00	Registration at the Eurotel Victoria
19h30	Dinner

Monday 1st October 2018

08h00	Registration at the Congress Center
08h45	Welcome and opening remarks

Detection of Symmetry Breaking

Chair: Philippe Ghosez (*Université de Liège)*

9h00	Patrick Maletinsky (University of Basel) *Single spin magnetic sensing of mesoscopic condensed matter systems*
9h30	Tobia Nova (MPI Hamburg) *Light-induced symmetry breaking in $SrTiO_3$*
9h45	Gustau Catalan (ICREA -ICN2) *Breaking not-so-bad: fracture flexoelectricity*
10h00	Woo Seok Choi (Sungkyunkwan University) *Ferroelectricity in 1D tetrahedral chain network via combined polar distortion*
10h30	Coffee break

Collective States in Transition Metal Oxides

Chair: Charles Ahn (*Yale University)*

11h00	Nicola Spaldin (ETH Zürich) *Connecting ferroelectricity and superconductivity in $SrTiO_3$*
11h30	Nicolas Bergeal (Université Pierre and Marie Curie) *Superfluid stiffness in oxide interfaces*
11h45	Diogo Vaz (CNRS, Thales) *Enhanced spin-to-charge conversion through topological states in $SrTiO_3$-based two-dimensional electron gases*
12h00	Rui Peng (Fudan University) *Revealing the role of the interface in the high-temperature superconductivity of single-layer FeSe/$SrTiO_3$*
12h30	Lunch

Poster Session A

Chair: Jean-Marc Triscone (*Université de Genève)*

14h00	Poster session

Ruthenates

Chair: Ralph Claessen (*Universität Würzburg)*

15h30	Antoine Georges (The Flatiron Institute - Collège de France) *Sr_2RuO_4: a precision laboratory for electronic correlations*
16h00	Sara Ricco (University of Geneva) *In-situ strain-tuning of the metal-insulator-transition of Ca_2RuO_4 in angle-resolved photoemission experiments*
16h15	Andrew Millis (The Flatiron Institute - Columbia University) *Electron-lattice coupling in correlated electron materials: Ca_2RuO_4 and beyond*
16h30	25 anniversary of the iWOE
18h00	Hideomi Koinuma (University of Tokyo) *Smart Combinatorial Drone for exploring a new frontier of oxide and molecular electronics*
18h15	iWOE prize award ceremony
18h30	Drinks reception
20h00	Dinner

Tuesday 2nd October 2018

Complex Oxide Interfaces

Chair: Darrell Schlom (*Cornell University)*

8h45	Karin Rabe (Rutgers University) *Charge transfer and charge order in functional perovskite superlattices from first principles*
9h15	Gabriele De Luca (University of Zürich -ETH Zürich) *Real-time observation of polarization emergence in ultrathin ferroelectric oxide heterostructures*
9h30	Nagarajan Valanoor (University of New South Wales) *Topological transitions in ultrathin ferroelectric films*
9h45	Nicolas Gauquelin (EMAT - Antwerp) *Electron microscopy study of the Metal-Insulator Transition in nickelate superlattices*
10h00	Naoya Shibata (University of Tokyo) *Direct electromagnetic field imaging of interfaces by advanced STEM*
10h30	Coffee break

Spin-Orbit Coupling at Polar Surfaces and Interfaces

Chair: Manuel Bibes (*CNRS - Thales)*

11h00	Phil King (University of St Andrews) *Maximal Rashba-like spin splittings and intrinsic Stoner instabilities at polar surfaces of delafossite oxides*
11h30	Alexander Demkov (University of Texas) *A theoretical investigation of graphene on a polar $SrTiO_3$ (111) surface*
11h45	Marco Salluzzo (CNR-SPIN) *Orbital reconstruction and spin polarization in (100) and (111) $LaAlO_3/SrTiO_3$ and $LaAlO_3/EuTiO_3/SrTiO_3$ q2DEG*
12h00	Karsten Held (TU Wien) *Ferromagnetism and quantum anomalous Hall state in $SrRuO_3$ (111)*
12h30	Lunch

Oxides and Their Functionalities

Chair: Guus Rijnders (*University of Twente)*

14h00 Nazanin Bassiri-Gharb (Georgia Institute of Technology)
Antiferroelectric $PbZrO_3$ thin films with multiple phase transitions

14h30 Taro Hitosugi (Tokyo Institute of Technology)
A high Li-ion conductivity at solid-electrolyte and electrode interfaces: introducing oxide epitaxial thin-film technology to battery research

14h45 Jon-Paul Maria (Pennsylvania State University)
All-oxide IR devices based on high-mobility CdO thin films

15h00 Amalia Ballarino (CERN)
Superconducting materials for accelerators: an overview of state-of the art performance and future needs

15h30 Coffee break and group photo

Metal-Insulator Transitions and Mott Physics

Chair: Chang-Beom Eom (*University of Wisconsin-Madison)*

16h00 Xiaoxing Xi (Temple University)
Nature of the metal-insulator transition in few-unit-cell-thick $LaNiO_3$ films

16h30 Philipp Scheiderer (Universität Würzburg)
Tailoring materials for Mottronics: excess oxygen doping of a prototypical Mott insulator

16h45 Sophie Beck (ETH Zürich)
Metal-Insulator Transition in thin films and multilayers of early transition metal oxides from DFT+DMFT

Poster Session B

Chair: Stefano Gariglio (*Université de Genève)*

17h00 Poster session

20h00 Conference dinner

Wednesday 3rd October 2018

Complex Oxide Materials Design

Chair: Chris Leighton (*University of Minnesota)*

8h45	James Rondinelli (Northwestern University) *Valence precision and transparent band conductors in complex oxides*
9h15	Jaap Geessinck (University of Twente) *Charge transfer at the $LaCoO_3$-$LaTiO_3$ interface*
9h30	Hari Nair (Cornell University) *Growth of superconducting Sr_2RuO_4 thin films*
9h45	Gervasi Herranz (ICMAB-CSIC) *In-situ imaging of electric field-induced ferroelastic domain motion in $SrTiO_3$*
10h00	Yoshinori Tokura (RIKEN - University of Tokyo) *Emergent properties of Dirac and Weyl semimetals of iridates*
10h30	Coffee break

Topological Textures in Oxides

Chair: Marc Gabay (*Université Paris-Sud)*

11h00	Andrea Caviglia (Delft University of Technology) *Berry phase engineering at oxide interfaces*
11h30	Kei Takahashi (RIKEN) *Quantum transport in the films of a magnetic semiconductor $EuTiO_3$*
11h45	Lingfei Wang (Seoul National University) *Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures*
12h00	Xiaoqing Pan (University of California) *Effects of ferroelectric polarization at oxide interfaces*
12h30	Poster prize award ceremony
12h40	Closing remarks
12h45	Lunch

Presentations:

Invited Speakers	25 mins + 5 mins Q&A
Oral Contributions	12 mins + 3 mins Q&A
Posters	Poster boards: 116 cm x 116 cm

Poster index: Session A

Monday 1st October 2018, 14h

A1	Bharathi Rajeswaran (*Indian Institute of Science, India*) Unraveling the enhanced transition characteristics of thermochromic VO_2 thin films for energy efficient smart windows
A2	Chadol Oh (*Pohang University of Science and Technology, Republic of Korea*) All inorganic electrochemical transistor with correlated oxides for low power and thermally stable artificial synapses
A3	Iwao Kawayama (*Osaka University, Japan*) Characteristics of laser-induced terahertz emissions from gallium oxide surfaces
A4	Jongyoon Park (*University of Tokyo, Japan*) Selective gas sensing using WO_3 nanoparticles and zeolites hybrid structure for human cutaneous gas sensors
A5	Nicola Manca (*Università degli studi di Genova, Italy*) Micro-mechanical resonators powered by oxides' solid state phase transitions: a VO_2-based micro-engine
A6	Yonggang Zhao (*Tsinghua University, China*) Magnetoresistance behaviors of conducting filaments in resistive-switching NiO with different resistance states
A7	A. P. Nono Tchiomo (*MPI Stuttgart, Germany*) Growth and characterization of epitaxial La-doped $BaSnO_3$ thin films grown by pulsed laser deposition
A8	Alexander A. Demkov (*University of Texas, USA*) Monolithic integration of patterned $BaTiO_3$ thin films on Ge wafers
A9	Andreas Klein (*Technische Universität Darmstadt, Germany*) The Fermi energy in oxides: Assessing and understanding the limits using XPS
A10	Céline Lichtensteiger (*University of Geneva, Switzerland*) *InteractiveXRDFit*: a new tool to simulate and fit X-ray diffractograms of oxide thin films and heterostructures
A11	Daniel Putzky (*MPI Stuttgart, Germany*) Epitaxial growth of high quality $DyBa_2Cu_3O_7$ using atomic layer by layer molecular beam epitaxy
A12	F. Gunkel (*RWTH Aachen University, Germany*) Epitaxially stabilized phase and oxygen vacancy-ordering in cobaltite (double-)perovskite thin films
A13	R. de Andrés Prada (*University of Fribourg, Switzerland*) Deposition and nanofabrication of All Perovskite $YBa_2Cu_3O_{7-y}$/Ferromagnetic/ $YBa_2Cu_3O_{7-y}$ Josephson junctions
A14	Hugo Meley (*University of Geneva, Switzerland*) $LaVO_3$ thin films under epitaxial strain
A15	Jegon Lee (*Sungkyunkwan University, Republic of Korea*) Stoichiometry and epitaxial strain control of electrocatalytic activity in Ruthenate thin films
A16	Jos E. Boschker (*Leibniz-Institut für Kristallzüchtung, Germany*) Effect of symmetry mismatch on the heteroepitaxial growth of T-Nb_2O_5 on $SrTiO_3$
A17	M. E. Bernal (*ICMAB-CSIC, Spain*) Epitaxial growth of La_2NiMnO_6 thin films on $SrTiO_3$ by RF Sputtering
A18	M. Zapf (*Universität Würzburg, Germany*) Domain matching epitaxy and modified interfacial layer in $BaBiO_3$ thin films on $SrTiO_3$
A19	Patrick Salg (*Technische Universität Darmstadt, Germany*) Oxygen diffusion in epitaxial oxide heterostructures with $SrMoO_3$ thin films
A20	Tornike Gagnidze (*EMPA, Switzerland*) Study of structural properties of ultrathin SrO films deposited on $SrTiO_3$
A21	Wolfgang Braun (*MPI Stuttgart, Germany*) Substrate preparation and high-temperature stoichiometry control of oxide surfaces
A22	Woo Jin Kim (*Institute for Basic Science, Republic of Korea*) The fine phase control of pyrochlore iridates epitaxial films using sequential pulsed annealing epitaxy

A23	Yeaju Jang (*Seoul National University, Republic of Korea*) Transparent thin film transistors of polycrystalline SnO_{2-x} and epitaxial SnO_{2-x}
A24	A. Vailionis (*Stanford University, USA*) Tuning interfacial ferromagnetism via crystallographic symmetry mismatch
A25	B. Kim (*Seoul National University, Republic of Korea*) Robust 2D skyrmions in ultra-thin $SrRuO_3$ film
A26	Changan Wang (*Helmholtz-Zentrum Dresden-Rossendorf, Germany*) Defect-induced exchange bias in a single $SrRuO_3$ layer
A27	Deepak Kumar (*University of Normandie, France*) Mechanical strain engineering of magnetism in $PrVO_3$ thin films
A28	G. Araizi-Kanoutas (*University of Amsterdam, The Netherlands*) What does and does not lie behind emergent thickness- dependent ferromagnetism in $LaMnO_3$ films
A29	Gennadii Laskin (*MPI Stuttgart, Germany*) $SrRuO_3$ as a model system for quantum dots of correlated materials
A30	J.R. Hortensius (*Delft University of Technology, The Netherlands*) Ultrafast control of the Morin phase transition in the magnetic oxide $DyFeO_3$ by phonon pumping
A31	June Hyuk Lee (*Korea Atomic Energy Research Institute, Republic of Korea*) Polarised neutron reflectivity study of magnetic oxides thin films using HANARO reflectometers
A32	Lim Zhi Shiuh (*National University of Singapore, Singapore*) Ferrimagnetic Skyrmion in a Charge-transfer Superlattice
A33	Martina Müller (*University Duisburg-Essen, Germany*) Tailoring magnetic oxide quantum wells
A34	R. Aeschlimann (*CNRS, Thales, France*) Non-collinear magnetism and “living-dead” layer in rare earth titanate thin films
A35	Sergi Martín Rio (*ICMAB-CSIC, Spain*) Oxide heterostructures for spin electronics
A36	Xiaofang Zhai (*University of Science and Technology of China, China*) Strain-induced high-temperature perovskite ferromagnetic insulator
A37	Yingfen Wei (*University of Groningen, The Netherlands*) Magnetic tunnel junctions based on ferroelectric $Hf_{0.5}Zr_{0.5}0_2$ tunnel barriers
A38	Zhenping Wu (*Beijing University of Posts and Telecommunications, China*) Anomalous negative electroresistance and giant resistance modulation in epitaxial manganite/piezoelectric heterostructures
A39	Alla Chikina (*PSI, Switzerland*) Orbital ordering of the mobile and localized electrons at oxygen-deficient $LaAlO_3/SrTiO_3$ interfaces.
A40	Binbin Chen (*University of Twente, The Netherlands*) Interfacial octahedral coupling and dimensionality controlled electronic transitions in $NdNiO_3/SrTiO_3$ superlattices
A41	Jennifer Fowlie (*University of Geneva, Switzerland*) Exploring the phase diagram of $Nd_{1-x}La_xNiO_3$ thin films
A42	L.R. Viannie (*Indian Institute of Science, India*) Phase transition induced micromechanical actuation in VO_2 coated cantilever
A43	M. Souri (*University of Kentucky, USA*) Mott variable-range hopping transport in Sr_2IrO_4 epitaxial thin films
A44	Q. Guo (*University of Groningen, The Netherlands*) Bad-metalicity and microstructure in rare-earth nickelates
A45	C. W. Schneider (*PSI, Switzerland*) Multiferroic properties of coherently grown orthorhombic $RMnO_3$ (R = Gd-Lu) thin films
A46	Daniele Preziosi (*University of Strasbourg, France*) Tailoring ’trapped’ electrons in ferroelectric field effect devices
A47	Hahoon Lee (*Seoul National University, Republic of Korea*) Ferroelectric field effect transistor based on $BaSnO_3$
A48	Iaroslav Gaponenko (*University of Geneva, Switzerland*) Local and correlated studies of humidity-mediated ferroelectric thin film surface charge dynamics
A49	M. Viret (*CEA, France*) Imaging and modifying antiferromagnetic configurations in $BiFeO_3$

A50	Minh Thanh Do (*University of Twente, The Netherlands*) Ferroelectric fatigue of $PbZr_{0.52}Ti_{0.48}O_3$ epitaxial thin films: from cause and mechanism to strategies to avoid
A51	P. J. Ryan (*Argonne National Laboratory, USA*) Employing in-situ frequency dependent x-ray scattering to explore the microscopic response of electrically driven epitaxial strained and free membrane PMN-30PT thin films at the morphotropic phase boundary.
A52	Pablo Vales (*ICN2, Spain*) Antiferroelectrics: flexoelectric and electrocaloric response
A53	Saúl Estandía (*ICMAB-CSIC, Spain*) Imaging polarization topologies in $BaTiO_3/SrTiO_3$ Superlattices
A54	Sungmin Park (*Seoul National University, Korea*) Selective control of multiple ferroelectric switching pathways using trailing flexoelectric field and its implications
A55	Vikas Shabadi (*Radiant Technologies, USA*) Advanced functional testing of oxide electronic systems
A56	A.E.M Smink (*University of Twente, The Netherlands*) Direct tunneling and capacitance spectroscopy in Au - $(LaAlO_3)_4$ - $SrTiO_3$ tunnel junctions
A57	C. Weymann (*University of Geneva, Switzerland*) Controlling defect distribution and intrinsic polarization state ultrathin ferroelectric films
A58	J. Khmaladze (*University of Fribourg, Switzerland*) Coupled Cu- and Mn charge and orbital orders in cuprate/manganite
A59	Daseob Yoon (*Pohang University of Science and Technology, Republic of Korea*) Oxygen-vacancy-assisted recovery process for increasing electron mobility in n-type $BaSnO_3$ epitaxial thin films
A60	Eric N. Jin (*Yale University, USA*) 2-dimensional electron gas oxide remote doping of Si(001)
A61	F.Y. Bruno (*University of Geneva, Switzerland*) Two-dimensional electron gases at the (111) - Surfaces of $KTaO_3$ and $SrTiO_3$
A62	Gervasi Herranz (*ICMAB-CSIC, Spain*) Photoresponse dynamics and photoconductivity mapping in $LaAlO_3/SrTiO_3$ interfaces
A63	Giordano Mattoni (*Delft University of Technology, The Netherlands*) Charge doping and large lattice expansion in oxygen-deficient heteroepitaxial WO_3
A64	J. Tornos (*Universidad Complutense de Madrid, Spain*) Ionic liquid gating of $SrIrO_3$ ultra-thin films
A65	Jinkwon Kim (*Seoul National University, Republic of Korea*) The fabrication of *s*-wave/*p*-wave superconducting oxide heterojunctions
A66	Judith Gabel (*Universität Würzburg, Germany*) Interface band engineering in $LaAlO_3/SrTiO_3$ heterostructures
A67	M. Mirjolet (*ICMAB-CSIC, Spain*) Misfit controlled electrical conductivity and simultaneous optimization of carrier density and mobility in transparent metallic 3*d* oxide films
A68	M. von Soosten (*Technical University of Denmark, Denmark*) Seeing the birth of conductivity at oxide interfaces - an in-situ transport study
A69	N. Lebedev (*Leiden University, The Netherlands*) Inducing magnetism in the electron gas at $LaAlO_3/GdTiO_3/SrTiO_3$ interfaces
A70	Omar Ganesh Ji (*National University of Singapore*) The effect of $LaFeO_3$ spacer layer on electrical properties of $LaAlO_3/SrTiO_3$ interfaces
A71	P. Zhang (*University of Groningen, The Netherlands*) Unconventional anomalous Hall effect in $SrRuO_3$ thin films
A72	Ritsuko Eguchi (*University of Geneva, Switzerland*) Superconductivity at $LaAlO_3$/Ca doped $SrTiO_3$ interfaces
A73	S. W. Zeng (*National University of Singapore, Singapore*) Electrolyte gating on high-T_c cuprates: superconductor-insulator phase transition and mechanism investigation
A74	Sizhao Huang (*University of Twente, The Netherlands*) Strain induced polar metal in $(LaTiO_3)_n/(LaVO_3)_n$ superlattices
A75	T. Harada (*Tohoku University, Japan*) Nonlinear Hall effect originated from the surface of $PdCoO_2$ ultrathin films

A76	V.N. Strocov (*PSI, Switzerland*) k-resolved electronic structure of buried oxide and semiconductor interfaces explored by soft-X-ray ARPES
A77	Weiwei Luo (*University of Geneva, Switzerland*) Temperature dependent scanning near-field optical microscopy of $LaAlO_3/SrTiO_3$ interfaces
A78	Y. Z. Chen (*Technical University of Denmark, Denmark*) Scavenging of oxygen vacancies at modulation-doped oxide interfaces: Evidence from oxygen isotope tracing
A79	Yildiz Gozde Saglam (*Delft University of Technology, The Netherlands*) Probing the superconducting state of $SrTiO_3/LaAlO_3$ by superconducting coplanar waveguide resonators
A80	Yu Zhang (*Chinese Academy of Sciences, China*) Metallic conduction and ferromagnetism in $MAl_2O_4/SrTiO_3$ spinel/perovskite Heterostructures (M = Fe, Co, Ni)
A81	Alain Mercy (*University of Liège, Belgium*) Charge- versus orbital-order in perovskites
A82	Claude Ederer (*ETH Zurich, Switzerland*) The coupled structural and electronic metal-insulator transition in rare earth nickelates from DFT+DMFT
A83	Eric Bousquet (*University of Liège, Belgium*) First-principles study of ferroelectricity, antiferroelectricity and polarons in WO_3
A84	Philippe Ghosez (*University of Liège, Belgium*) Engineering large and reversible Rashba spin splitting in ferroelectric perovskite oxides and related compounds
A85	Sébastien Lemal (*University of Liège, Belgium*) First-principles study of $SrTiO_3$(001)/$LaAlO_3/SrTiO_3$ heterostructures
A86	Sohrab Ismail-Beigi (*Yale University, USA*) BoSS your oxide
A87	Xu He (*University of Liège, Belgium*) Toward a unified view on the metal-insulator transition in nickelates

Poster index: Session B

Tuesday 2nd October 2018, 17h

B1	C. Frontera (*ICMAB-CSIC, Spain*) Ferromagnetic insulating perovskite for nonvolatile memory device and anisotropic sensor
B2	Daniel M. Cunha (*University of Twente, The Netherlands*) Mapping electrochemical activity at the nanoscale for enhanced solid-state battery electrodes
B3	J. G. Connell (*University of Kentucky, USA*) Hydrogen plasma induced Mott-insulating and transparent-conducting states in epitaxial $Ba_{0.5}Sr_{0.5}TiO_3$ thin-films
B4	L. Alff (*Technische Universität Darmstadt, Germany*) Atomically interface engineered micrometer-thick oxide electrodes for thin dielectrics tunable at ion battery voltage
B5	Y. Uzun (*University of Twente, The Netherlands*) Generation and detection of surface acoustic waves on strain-induced piezoelectric $SrTiO_3$
B6	Yunkyu Park (*Pohang University of Science and Technology, Republic of Korea*) Low-temperature fabrication of NbO_x selector device with steep switching, low off-current and high I_{on}/I_{off} by pulsed laser annealing
B7	Adrian David (*University of Normandie, France*) Polycrystalline ceramics: a new generation of substrates using combinatorial epitaxy
B8	Amit Khare (*Indian Institute of Science, India*) Real-time observation of reversible topotactic phase transition in epitaxial $SrFeO_x$ thin films
B9	C.A.J. de Hond (*University of Twente, The Netherlands*) Atomic control of disorder in PZT and epitaxial integration on GaN for high-power devices
B10	Claudia Cancellieri (*EMPA, Switzerland*) Complex oxidation behavior of $WxTi_{1-x}O_y$ alloys
B11	Dirk Fuchs (*Karlsruher Institut für Technologie, Germany*) Electronic transport in (110) $SrIrO_3$ heterostructures
B12	F.V.E. Hensling (*Forschungszentrum Juelich, Germany*) UV radiation enhanced oxygen vacancy formation caused by the PLD plasma plume
B13	Huan Ma (*EMPA, Switzerland*) Single-crystal Strontium Aluminate thin films by pulsed laser deposition
B14	Hyeongmin Cho (*Seoul National University, Republic of Korea*) Effect of $Ba_xSr_{1-x}HfO_3$ buffer layer on La-doped $BaSnO_3$
B15	Jeong Rae Kim (*Seoul National University, Republic of Korea*) Preparation of atomically flat, single terminated $LaAlO_3$ (001) substrate surfaces through thermal annealing and deionized water leaching
B16	Lukas Zeinar (*Technische Universität Darmstadt, Germany*) Effect of Ti stoichiometry on crystal and electronic structure of single crystalline epitaxial $Ba_{0.5}Sr_{0.5}Ti_{1+y}O_3$
B17	Nicola Manca (*Delft University of Technology, The Netherlands*) Understanding the semimetallic state of $SrIrO_3$ thin films: from epitaxial growth to thermal and magneto-transport studies
B18	T.P.P. Le (*University of Twente, The Netherlands*) Tailoring Vanadium Dioxide Thin Film Orientation by $Ti_{0.87}O_2$ and $NbWO_6$ Nanosheets
B19	Victor Fuentes (*ICMAB-CSIC, Spain*) Thickness dependence of electronic properties in $SrIrO_3$ thin films grown by sputtering
B20	Wolfgang Stein (*SURFACE systems+technology GmbH+Co, Germany*) Multi process thin film deposition and complex sample preparation cycle under protected atmosphere
B21	Y.F. Nie (*Nanjing University, China*) Realization of freestanding transition metal oxide 2D crystals of sub-nanometer thickness
B22	Yorick Birkhölzer (*University of Twente, The Netherlands*) Large area PLD of ferroelectric oxides on silicon for neuromorphic applications
B23	Alberto Pomar (*ICMAB-CSIC, Spain*) Magnetic anisotropy and spin dynamics in chemically deposited $La_{0.92}MnO_3$ thin films

B24	C. Leighton (*University of Minnesota, USA*) Giant electrostatic modification of magnetism via electrolyte-gate-induced cluster percolation in epitaxial $La_{1-x}Sr_xCoO_3$
B25	D. Afanasiev (*Delft University of Technology, The Netherlands*) Resonant control of magnetism via selective excitation of the lattice vibration in magnetic oxide $DyFeO_3$
B26	F. Trier (*CNRS, Thales, France*) Non-local detection of spin diffusion in $LaAlO_3/SrTiO_3$ heterostructures
B27	G. Bimashofer (*PSI, Switzerland*) Reversible magnetoelectric switching by electrochemical lithium intercalation
B28	Hiro Nakamura (*MPI Stuttgart, Germany*) Axial spin-momentum locking and valley degree of freedom in antiperovskite Dirac materials
B29	John Edward Ordoñez (*Universidad del Valle, Colombia*) Analysis of magnetic anisotropy on in artificially multiferroic $BaTiO_3/La_{2/3}Sr_{1/3}MnO_3$ heterostructures
B30	Lim Zhi Shiuh (*National University of Singapore, Singapore*) Paramagnetic to antiferromagnetic quantum critical phase transition induced by bandwidth reduction
B31	Marta Gibert (*University of Zurich, Switzerland*) Double-perovskite La_2NiMnO_6: a thin film and a superlattice approach
B32	P. Radhakrishnan (*MPI Stuttgart, Germany*) Structural and electronic properties of rare-earth vanadate heterostructures
B33	Ryan Need (*NIST, USA*) Controlling magnetization in $SrTiO_3$ quantum wells embedded within Mott insulating heterostructures
B34	T. Tybell (*Norwegian University of Science and Technology, Norway*) The role of atomic reconstructions and antiferromagnetic spin structure to establish emerging interface spin textures at the (111)-oriented $La_{0.7}Sr_{0.3}MnO_3/LaFeO_3$ interface
B35	Xuefeng Wang (*Nanjing University, China*) Origin of emergent ferromagnetism in otherwise antiferromagnetic $LaMnO_3$ thin films
B36	Yichen Jia (*Yale University, USA*) Controllable spin injection across a crystalline $BaTiO_3$-Germanium interface
B37	Zhangzhang Cui (*University of Science and Technology of China, China*) Intrinsic magnetism of Aurivillius-type multiferroic thin films probed by resonant inelastic X-ray scattering and polarized neutron reflectivity
B38	C. Dominguez (*University of Geneva, Switzerland*) Electrical properties of $(111)_{pc}$ $SmNiO_3/NdNiO_3$ superlattices
B39	E. Cappelli (*University of Geneva, Switzerland*) Laser-ARPES investigation of the electronic structure of $LaNiO_3$ thin films
B40	Katrin Fürsich (*MPI Stuttgart, Germany*) Ultrahigh-resolution resonant inelastic x-ray scattering from rare-earth nickelates: magnetic and *dd*-excitations
B41	Sebastiaan van Dijken (*Aalto University School of Science, Finland*) In situ TEM of structural and resistive phase transitions in $La_{2/3}Sr_{1/3}MnO_3$ driven by voltage pulses and strain
B42	Alexander A. Demkov (*University of Texas, USA*) Large positive linear magnetoresistance in the two-dimensional t_{2g} electron gas at the $EuO/SrTiO_3$ interface
B43	Dowon Song (*Seoul National University, Republic of Korea*) $BaHf_{1-x}Ti_xO_3$ high-k perovskite dielectric
B44	Hiroyasu Yamahara (*University of Tokyo, Japan*) Magnetic and dielectric properties of strained Garnet Ferrite thin films
B45	Milena Cervo Sulzbach (*ICMAB-CSIC, Spain*) Thermionic field emission in back-to-back $BaTiO_3$-based Schottky interfaces
B46	Nagarajan Valanoor (*The University of New South Wales, Australia*) Non-volatile ferroelectric domain wall memory

B47	P. Tückmantel (*University of Geneva, Switzerland*) From local to macroscale switching dynamics in $Pb(Zr_{0.2}Ti_{0.8})O_3$ thin films
B48	Pu Yu (*Tsinghua University, China*) Magnetoelectric coupling through the electric-field controlled ionic evolution
B49	Rajesh Mandal (*Georg-August-Universität Göttingen, Germany*) Electrical and magnetic properties of hexagonal $TbMnO_3$-based heterostructures
B50	Shinhee Yun (*KAIST, Republic of Korea*) Flexoelectric polarizations at ferroelastic domain walls in non-ferroelectric WO_3 thin films
B51	Yinlian Zhu (*Chinese Academy of Sciences, China*) Giant polarization sustainability in ultrathin ferroelectric films characterized by Cs-corrected transmission electron microscopy
B52	A.E.M Smink (*University of Twente, The Netherlands*) Electrostatic control of the band structure and of superconductivity at the $LaAlO_3$-$SrTiO_3$ interface
B53	Ai Ikeda (*NTT Corporation, Japan*) Hole carriers driving superconductivity in infinite-layer cuprates
B54	Chunhai Yin (*Leiden University, The Netherlands*) Gate tunable carrier density and mobility at the $LaAlO_3/SrTiO_3$ interface
B55	Dennis Valbjørn Christensen (*Technical University of Denmark, Denmark*) Tuning the electronic and magnetic properties of g-$Al_2O_3/SrTiO_3$
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