

iW○E32



**32nd International Workshop
on Oxide Electronics**

Sendai, Japan
September 27 – 30, 2026

32nd International Workshop on Oxide Electronics

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Sendai International Center

Sendai, Japan

Tentative Program

Day 1: Sunday, September 27

Reception

Day 2: Monday, September 28

08:55-09:00 Opening Remarks

09:00-10:30 Correlated Oxides and Quantum Materials

09:00-09:30 Invited Speaker

Satoshi Okamoto (Oak Ridge National Laboratory)

Effect of strong correlations and spin-orbit coupling in transition-metal oxide thin films and heterostructures

09:30-10:00 Invited Speaker

Roman Engel-Herbert (Paul-Drude-Institut)

Transport characteristics of correlated metals in the high magnetic field limit

10:00-10:15 Oral Speaker

Kyle Shen (Cornell University)

Orbital-selective correlations in the highly metallic transparent oxide Sr_2MoO_4

10:15-10:30 Oral Speaker

Lior Kornblum (Technion – Israel Institute of Technology)

Degradation and resurrection of SrVO_3 surfaces

10:30-11:00 Coffee Break

11:00-12:30 Advanced Probes of Oxide Electronics

11:00-11:30 Invited Speaker

Ankit Disa (Cornell University)

Realizing non-equilibrium functionalities in complex oxides through engineered light-matter interactions

11:30-11:45 Oral Speaker

Hakuto Suzuki (Tohoku University)

Magnetic excitations in a superconducting bilayer nickelate probed with resonant inelastic x-ray scattering

11:45-12:00 Oral Speaker

Bongju Kim (Chung-Ang University)

Dominant d_{z^2} orbital character in superconducting $\text{La}_3\text{Ni}_2\text{O}_7$ thin films revealed by x-ray linear dichroism

12:00-12:15 Oral Speaker

Stefania Baronio (University of British Columbia)

Layer-resolved electronic structure of $\text{La}_3\text{Ni}_2\text{O}_7$ thin films by resonant x-ray reflectometry

12:15-12:30 *Oral Speaker*

Chao Yang (Max Planck Institute for Solid State Research)

Direct visualization of oxygen disorder and structural reconstruction in infinite-layer nickelate films

12:30-14:00 Lunch

14:00-16:00 Poster Session A

16:00-18:00 Membranes and Freestanding Oxide Electronics

16:00-16:30 *Invited Speaker*

Harold Y. Hwang (Stanford University)

Straining freestanding crystalline oxide membranes

16:30-17:00 *Invited Speaker*

Greta Segantini (University of Geneva)

Engineering functionalities and broken symmetries in oxide membranes

17:00-17:15 *Oral Speaker*

Lambert Alff (TU Darmstadt)

(Ba_{1-x}Sr_x)TiO₃ membranes for oxide electronics

17:15-17:30 *Oral Speaker*

Thomas Jespersen (Technical University of Denmark)

Josephson physics in free-standing LAO/STO micro-membranes

17:30-17:45 *Oral Speaker*

Nianpeng Lu (Institute of Physics, Chinese Academy of Sciences)

Freestanding oxide membranes and flexible devices

17:45-18:00 *Oral Speaker*

Taro Hitosugi (The University of Tokyo)

Data-driven thin-film material exploration using a digital laboratory with modular measurement instruments and standardized data format

Day 3: Tuesday, September 29

09:00-10:30 Spin-Orbitronics and Magnetic Oxides

09:00-09:30 *Invited Speaker*

Changhee Sohn (UNIST)

Magnetism in RuO₂ and potential applications in spintronics

09:30-09:45 *Oral Speaker*

Stefano Gariglio (Université de Genève)

The quantum metric of electrons with spin-momentum locking

09:45-10:00 *Oral Speaker*

Matthias Opel (Walther-Meissner-Institute)

Static and dynamic spin-Hall magnetoresistance in magnetic oxides

10:00-10:15 *Oral Speaker*

Wei-Li Lee (Academia Sinica)

Field-induced anisotropic nonlinear Hall effect in strained RuO₂ thin films

10:15-10:30 *Oral Speaker*

Junichi Shiogai (The University of Osaka)

A large modulation of ferromagnetic transition temperature in rippled
La_{2/3}Sr_{1/3}MnO₃ membrane

10:30-11:00 Coffee Break

11:00-12:30 Materials Design, Growth and Chemistry

11:00-11:30 *Invited Speaker*

Hiroshi Kageyama (Kyoto University)

Advanced anion control of structure and properties in mixed-anion
compounds

11:30-12:00 *Invited Speaker*

Mark Huijben (University of Twente)

Fast lithium-ion intercalation in a mutual crystalline-amorphous single phase

12:00-12:15 *Oral Speaker*

Tsukasa Katayama (Tokyo University of Science)

Antiferroelectric behavior in mixed-anion Bi₂TiO₄F₂ induced by rotation of
TiO₃F₃ octahedra

12:15-12:30 *Oral Speaker*

Masamichi Negishi (Tohoku University)

Suppressed superconductivity in heavy-fermion/superconductor
heteroepitaxial bilayers of rare-earth monoxides CeO/LaO

12:30-14:00 Lunch

14:00-16:00 Poster Session B

16:00-17:15 Oxide Interfaces and Two-Dimensional Electron Systems

16:00-16:30 *Invited Speaker*

Manuel Bibes (Laboratoire Albert Fert)

Linear and nonlinear transport in ferroic and multiferroic oxide two-dimensional electron gases

16:30-16:45 *Oral Speaker*

Gervasi Herranz (Institute for Materials Science of Barcelona ICMA-B-CSIC)

Manybody fluctuation contributions to quantum geometry

16:45-17:00 *Oral Speaker*

Marco Salluzzo (Istituto SPIN)

Non-volatile orbital magnetoelectric effect in a multiferroic two-dimensional electron systems

17:00-17:15 *Oral Speaker*

Yanwu Xie (Zhejiang University)

Coexisting ferroelectricity and editable superconducting diode effect at $\text{LaAlO}_3/\text{KTaO}_3$ interfaces

17:15-18:00 Award Session (iWOE Award Presentations)

17:15-17:35 *Award Presentation*

Tianxiang Nan (Tsinghua University)

Charge–spin conversion in oxide materials

17:35-17:55 *Award Presentation*

Varun Harbola (Tata Institute of Fundamental Research)

New perspectives in nanoscience with oxide membranes

17:55-18:00 *Award Presentation*

Jennifer Fowlie (Northwestern University) — Video Message

19:00 Banquet

Day 4: Wednesday, September 30

09:00-10:30 Ferroelectrics and Polar Oxide Heterostructures

09:00-09:30 *Invited Speaker*

Jorge Iñiguez-Gonzalez (Luxembourg Institute of Science and Technology)

Hafnia: a new ferroelectric archetype

09:30-09:45 *Oral Speaker*

Daniel Sando (University of Canterbury)

A polar topology network induces elastic stiffening in ferroelectric oxide superlattices

09:45-10:00 *Oral Speaker*

Marina Baryshnikova (imec)

Correlation between threading dislocation density and electro-optical properties of epitaxial BaTiO₃ thin films

10:00-10:15 *Oral Speaker*

Yinlian Zhu (Chinese Academy of Sciences)

Topological anti-hedgehog lattice in antiferroelectric PbZrO₃ films

10:15-10:30 *Oral Speaker*

Noah Schnitzer (Imperial College London)

Atomic resolution tracking of low-temperature ferroic phase transitions with cryogenic scanning transmission electron microscopy

10:30-11:00 Coffee Break

11:00-12:30 Devices, Integration and Functional Oxide Electronics

11:00-11:30 *Invited Speaker*

Masaharu Kobayashi (The University of Tokyo)

Carrier transport in nanoscale amorphous and poly OS transistors

11:30-11:45 *Oral Speaker*

Darrell G. Schlom (Cornell University)

Dawn of a 7 eV bandgap semiconductor and initial devices

11:45-12:00 *Oral Speaker*

Shikhar Misra (IIT Kanpur)

Functional oxides for next-generation electronics: From epitaxial films and freestanding membranes to AI-driven discovery

12:00-12:30 *Invited Speaker*

Xiao Renshaw Wang (Nanyang Technological University)

Heterogeneous integration of perovskite oxides towards future electronics

12:30-12:45 Closing Remarks