Thin films provide new materials for the next generation of energy-efficient components for microelectronics and energy conversion. This workshop serves to collect fresh ideas in various fields of forefront thin film materials research such as quantum materials, magnetism and oxide electronics.

The workshop aims to give ample room for free discussion to foster future collaborations and to strengthen existing ties.

The workshop is organized by the Advanced Thin Film Technology group at TU Darmstadt. Since decades, we are consistently working in thin film research using various custom designed oxide molecular beam epitaxy, pulsed laser deposition and sputtering systems.

Local organizing committee:
Lambert Alff
Marion Bracke

https://www.mawi.tu-darmstadt.de/ds/

Location in the heart of Darmstadt

Das Roeders
Rheinstraße 99
64295 Darmstadt

Only five minutes walking from Darmstadt main station.

Next to Hessian AI

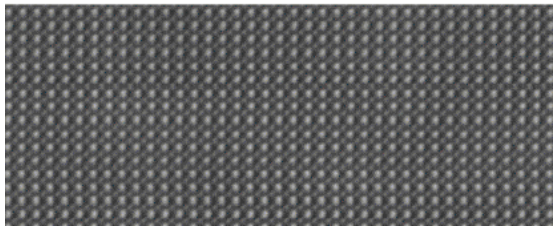
For parking use the car park Kinopolis

RSVP by November 10
leitung@oxide.tu-darmstadt.de

TECHNISCHE UNIVERSITÄT DARMSTADT

Workshop on Recent Advances in Thin Film Research

24 November 2023
Location: Roeders Darmstadt



Program

14:00 Gathering

15:00 Welcome (Lambert Alff)

15:05-15:30 Prof. Dr. Ilya Eremin (Theoretical Solid State Physics, Ruhr-Universität Bochum)

Are nickelates the new cuprate high-temperature superconductors?

15:30-15:50 Prof. Dr. Thomas Schröder (Director Leibniz-Institut für Kristallzüchtung, IKZ)

Crystalline materials for future electronics

15:50-16:10 Prof. Dr. Regina Dittmann (RWTH Aachen/Peter Grünberg-Institute, FZ Jülich)

Rational design of redox-based memristive devices for novel computing

16:10-16:30 Prof. Dr. Christian Hochberger (Computer systems, TU Darmstadt)

Novel computer architectures with memristors

16:30-17:00 Coffee break

17:00-17:20 Prof. Dr. Jasna Palakkal (Materials Physics, Universität Göttingen)

Versatile double perovskites: From spintronics to catalysis

17:20-17:40 Dr. Juliette Cardoletti (Luxembourg Institute of Science and Technology (LIST))

PZT growth on glass for haptic design

17:40-18:00 Prof. Dr. Lambert Alff (Materials Science, TU Darmstadt)

The beauty of thin films: From materials fundamentals to device applications

18:00-18:30 Prof. Dr. Dirk Manske (MPI for Solid State Research, Stuttgart/FU Berlin)

Experimental lecture: Wine films on glass

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19:00 Conference Dinner

(Dinner speeches welcome)

Open Space Discussions
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