

FEMS EUROMAT23

03 - 07 Sep 2023 (Frankfurt)

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FEMS EUROMAT is the most important international congress in materials science and technology in Europe. It continues a successful congress series promoting the transfer of knowledge and the exchange of experience between academia and industry. **Submission deadline: 31 January 2023**

Area A: Functional Materials

A08: Oxide Materials

Metal oxides offer exciting material properties for advanced device development. They allow for multifunctional properties, including transparent conductivity, the ability for n- and p-type doping for semiconductor and optoelectronic devices, they enable the pathway towards spintronics and multiferroics, they allow for phase transitions for switchable applications, like for thermochromic or electrochromic devices, they can be used as catalysts and photocatalysts and for energy conversion, energy storage, and chemical sensors, just to mention some key topics. Within this exciting set of material properties, fundamental concepts on structure formation and defect engineering rule the material performance, e. g. the ability for amorphous growth, for epitaxial growth, and for doping.

With our symposium, we're aiming to offer a platform for researchers in the field of metal oxides to present and to discuss the latest oxide material developments.

Topics will include:

- Thin film and bulk material synthesis and growth, defect, disorder in oxide films and heterostructures
- Physics, energy conversion, and storage using oxide thin films
- Oxide-based field effect and electronic devices
- Metal oxide chemical/gas sensor
- Heterostructures and hybrids for sensing devices
- Emerging phenomena and applications of novel oxide material system
- Two-dimensional electronic transport and magnetism at oxide interfaces

Symposium Organizer



Prof. Dr. Bernd Szyszka
TU Berlin

