

CALL FOR PAPERS

Welcome to the 2021 ISAF-ISIF-PFM Joint Conference. The conference will be held fully virtual from May 16-21, 2021.

This international conference aims to bring together leaders from academia, national laboratories and industrial research and development sectors. The conference will cover the most recent advancements in the science and technology of ferroelectrics, electroceramics, thin films, dielectric materials and their applications.

IMPORTANT DATES

January 15, 2021

Submission Deadline of Abstract

March 7, 2021

Notification to Authors of Accept/Reject Decision

May 15, 2021

Submission of final Proceeding Paper

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ISAF TOPICS

- » Fundamentals of ferroelectrics and multiferroic materials (theory, modeling and experiments)
- » Processing of piezoelectric crystals, ceramics, thick and thin films, composite, polymers, glass-ceramics and MLCCs.
- » Lead free dielectric and piezoelectric materials (A3+)
- » Structure characterization and properties of ferroelectric materials (dielectric, piezoelectric, ferroelectric, pyroelectric, electrocaloric, flexoelectric, photovoltaics and photocatalytics, etc.)
- » Applications of ferroelectrics (sensing, transducing, thermal imaging, energy harvesting and storage, etc.)

ISIF TOPICS

- » Materials for non-volatile memory and neuromorphic computing (including ferroelectrics, phase change, RRAM, magnetic)
- » Integrated dielectrics (energy storage, 5G, high K, gate dielectrics)
- » Piezoelectric MEMS and NEMS (resonators, energy harvesters, sensors, actuators, and transducers)
- » Wearable and implantable devices (biosensing, neural stimulation, prosthetics, hard coatings)
- » Processing routes for heterogeneous materials integration (oxides, chalcogenides, metals, and carbons)
- » Hybrid perovskites (photovoltaics, nonlinear optics, semiconductors)

PFM TOPICS

- » Instrumental aspects of PFM, ESM, SS-PFM and related techniques
- » Nanoelectromechanics of materials and PFM/ESM theory
- » Ferroelectric tunnelling and memristor effect via PFM/ESM
- » Multiferroic phenomena on the nanoscale
- » Disordered ferroelectrics and mesoscopic effects by PFM
- » Ferroelectric data storage and polarization lithography
- » Ionic conductors, battery materials and fuel cells on the nanoscale
- » Ferroelectric photovoltaics and tip-enhanced phenomena
- » Ferroelectric semiconductors and surface phenomena
- » Interface engineering via PFM
- » Biocompatible & organic polar materials on the nanoscale
- » 1D and 2D nanostructured materials via PFM