

## Special Issue

# Synthesis, Characterization, and Applications of Ferroelectric Films

### Message from the Guest Editors

This year, we commemorate 100 years since the discovery of ferroelectric materials and observation of their unusual properties by J. Valasek in Rochelle salt. Ferroelectric have been discovered in a variety of materials, but they have become particularly useful in the form of thin and thick films. To celebrate the 100th anniversary of the discovery of ferroelectricity, this Special Issue will provide a deep overview and the most recent advances in various topics related to ferroelectric films and their many applications. We look for papers presenting the latest developments and most cutting-edge studies in this area. The following is a list of some of the topics proposed for this Special Issue:

- Fundamentals of ferroelectric films;
- Advanced processing of ferroelectric films;
- Nanoscale characterization of ferroelectrics;
- Energy harvesting applications;
- Sensors and actuators, MEMS;
- Domain and domain wall engineering;
- Solid-state refrigeration;
- Ferroelectric memories;
- Topological ferroelectricity;
- Multiferroics;
- Machine learning for ferroelectrics research.

### Guest Editors

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### Deadline for manuscript submissions

closed (20 April 2022)



## Materials

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## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

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