Special Issue

Recent Research on Piezoelectric Ceramics

Message from the Guest Editors

Piezoelectric materials are widely used in various electronic devices, such as capacitors, sensors, transducers, thermistors, and actuators, due to their ability to interconvert mechanical and electrical energy. For these advanced applications, piezoceramics with good electrical properties can be prepared using methods such as solid-state reaction, sol–gel, hot-pressing, two-step sintering, and so on. Manufacturing technologies have attracted a lot of attention in recent decades, but they pose a great challenge in the quality and property of piezoceramics. Defects, oxygen vacancy, and uniform grain distribution easily occur during the preparation process. Understanding the electrical properties, determining defect evolution and grain growth mechanisms at the micro- and nano-scales, exploring innovative preparation technology, and optimizing preparation process parameters are of great significance to achieve piezoceramics with high electricity and temperature stability. The scope of this Special Issue includes but is not limited to

- Manufacture technologies of piezoceramics;
- Piezoelectricity;
- Ferroelectricity;
- Defects and oxygen vacancy;
- Grain;
- Electric property characterization.

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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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