



Advanced Electroceramics for Energy Conversion, Storage and Harvesting

Guest Editors:

Prof. Dr. Dawei Wang

Dr. Ge Wang

Dr. Zhilun Lu

Dr. Zhongming Fan

Dr. Weigang Yang

Prof. Dr. Francisco M. Morales

Prof. Dr. Vladislav V. Kharton

Deadline for manuscript
submissions:

closed (30 April 2021)

Message from the Guest Editors

Advanced electroceramics have attracted a large amount of attention due to their unique and diverse functional properties.

The concept of “processing–structure–property” has played a dominant role in the optimization of functional performance for advanced electroceramics. The crystal structure of inorganic materials can be modified through the appropriate chemical dopants, intrinsically influencing electrical or mechanical performance. Meanwhile, advanced processing techniques with precise control involved during fabrication of electroceramic materials and devices are equally important to deliver a promising performance.

This Special Issue aims to cover all the relevant aspects of advanced electroceramics for piezoelectric, ferroelectric, energy storage, energy harvesting, microwave, ionic conductor, and thermoelectric materials. Additionally,, advanced processing techniques, for example, cold sintering, spark plasma sintering and tape casting, coupled with advanced structural characterizations, for example, synchrotron x-ray diffraction and transmission electron microscopy, will also be covered.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, Italy

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](https://twitter.com/Crystals_MDPI)