

Special Issue

Magnetocalorics

Message from the Guest Editors

This Special Issue is devoted to magnetocaloric materials, technologies, and devices with magnetic phase transformations accompanied by the caloric effect.

A magnetic phase transition in a magnetocaloric material can be caused not only by a change in the applied external magnetic field, but also by a variation of temperature, pressure, stress, strain, or another stimulus. Multicaloric materials exhibit caloric responses to several external stimuli. The multicaloric effect is a combination of more than one effect from a subset of magneto-, electro-, elasto-, and barocaloric effects.

In this Special Issue, we would like to combine reports on magnetocalorics and related interesting topics, describing scientific discoveries, novel materials, new technologies and devices, theoretical limits, and future anticipations. Some of the topics are listed as the keywords. We welcome theory and experiment, reviews of the current state of the art, and any research related to the magnetocaloric effects, materials, technologies, and devices.

Guest Editors

Dr. Nikolai Zarkevich

Department of Energy, Ames Laboratory, Ames, IA 50011, USA

Dr. H. Yibole

Inner Mongolia Normal University, Inner Mongolia Key Laboratory for Physics and Chemistry of Functional Materials, Hohhot, 010022, China

Deadline for manuscript submissions

closed (30 September 2020)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/34321

Crystals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
crystals@mdpi.com

[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)





Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



[mdpi.com/journal/
crystals](https://mdpi.com/journal/crystals)



About the Journal

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

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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, Ei Compendex, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Crystallography) / CiteScore - Q2 (Condensed Matter Physics)