

Special Issue

High Temperature Superconductor

Message from the Guest Editors

Superconductors, as a class of unusual materials, exhibit unique behaviors, such as zero resistance, and have greatly practical applications. Therefore, the research into superconductors has attracted widespread attention, especially in the fields of condensed matter physics, chemistry, and materials science. In previous research, mercury was observed to show superconductivity at 4.2 K, opening the door to finding superconductors. Subsequently, the conventional superconductor MgB₂, described by the Bardeen–Cooper–Schrieffer (BCS) theory, was synthesized and had a significantly high-temperature (high-T_c) superconductivity of 39 K at ambient pressure, which motivates researchers to discover higher-T_c superconductors.

The goal of this Special Issue titled “High Temperature Superconductors” is to offer frontier advances in the study fields of novel excellent superconductive materials by revealing the relationship between superconductivity, structures, and electronic, electrical, etc., properties of materials. Authors are invited to contribute to the Special Issue with articles presenting exciting theoretical and experimental progress.

Guest Editors

Dr. Shoutao Zhang

Dr. Bo Gao

Dr. Yuhao Fu

Deadline for manuscript submissions

closed (15 June 2023)



Crystals

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.0



mdpi.com/si/152790

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)