Special Issue

Synthesis and Characterization of New Superconductors Materials

Message from the Guest Editors

In recent years, the saturation of the scientific interest in high-Tc superconductor perovskites, i.e., cuprates, was accompanied by a new stream of works based on new families of compounds showing high critical temperature superconductivity, i.e., intermetallic borides (e.g. MgB2), iron–nickel-based superconductors (La(Fe,Ni)(Pn,Ch)O, (Pn,Ch= pnictide or chalcogenide ions), heavy fermion superconductors (e.g., CeCoIn5), and superhydrides systems (e.g., H3S). This Special Issue aims to attract scientific contributions providing new insights and advances in the synthesis and characterization of novel superconductor materials, addressing multiple aspects of the overall physical/chemical problem, specifically the following:

Synthesis and structural analysis
Magnetic and/or electric characterization of the superconductive transition
Structural effects on superconductivity
Effect of magnetism on the superconductive state
Role of crystal symmetry
TC dependence on external stimuli and/or non-ambient conditions
Theoretical modeling

Guest Editors

Dr. Edmondo Gilioli

IMEM-CNR, (Institute of Materials for Electronic and Magnetism – National Research Council), Parco Area delle Scienze 37/A, 43124 Parma, Italy

Dr. Davide Delmonte

Istituto dei Materiali per l'Elettronica ed il Magnetismo, Parma, Italy

Deadline for manuscript submissions

closed (31 March 2020)

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/24648

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

mdpi.com/journal/crystals

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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