Special Issue

Advances in New Composite Insulating Materials: Crystal Structure, Properties, and Applications

Message from the Guest Editors

The energy problem has gradually become one of the major issues of global concern. New composite insulation materials and structures play an important role in reducing energy consumption and improving thermal insulation performance. This Special Issue highlights the forefront of new thermal insulation composites and structures, focusing on exploring the thermal and mechanical characteristics of composites and actively exploring new structural forms. It aims to reduce the environmental impact, improve energy efficiency, and explore alternative solutions to traditional materials and structural forms, such as composites with better thermal insulation, crystalline materials, aerogel materials, new structural forms with good energy efficiency, and improvements in their mechanical properties. This Special Issue encourages researchers, practitioners, and decision makers to adopt sustainable practices and promote positive change. By sharing groundbreaking research findings and facilitating collaboration, it contributes to creating a greener and more sustainable built environment.

Guest Editors

Prof. Dr. Mojia Huang

Prof. Dr. Zhiwen Lan

Dr. Tengfei Zhao

Deadline for manuscript submissions

30 September 2025

Crystals

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 5.0

mdpi.com/si/231991

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)