



Functional Materials and Metamaterials

Guest Editors:

Prof. Dr. Liangchi Zhang

Dr. Zhen Li

Dr. Yang He

Deadline for manuscript
submissions:

closed (31 July 2023)

Message from the Guest Editors

Functional materials and metamaterials involve the cross-disciplinary fields of material science, surface engineering, advanced manufacturing, condensed matter physics, quantum theory, and more. Their properties continuously inspire the creativity of researchers. A variety of these materials have been designed and fabricated, such as functional ceramics, left-handed materials, photonic crystals, 2D materials, perovskites, and other materials with a bright application prospect. The fabrication generally involves multi-scale manufacturing processes such as precision machining, micro/nanofabrication, 3D printing, biochemical synthesis, and coating and deposition. New fabrication approaches with good flexibility and high productivity are desired for the emerging functional and metamaterials. Meanwhile, their performance evaluation and application in fields like energy, sensing, biomedical engineering, communication, and computing also need to be extensively explored.

This Special Issue aims to collect original research articles and reviews focusing on fundamental theories, function mechanisms, novel design strategies, advanced manufacturing approaches and new applications.





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](#)