Special Issue

Advanced Materials Dedicated for Biomedical Applications

Message from the Guest Editors

In today's world, there is a demand for new technological solutions in many industries, including medical engineering. Advanced materials such as biocompatible alloys or biopolymers play an important role in tissue and biomedical engineering. They are widely applied in the medicine industry as implants or stents. The design and modelling of new materials and their manufacturing technology are supported by multiscale analysis, including micromechanical modelling and the determination of their microstructure, mechanical, and functional properties. The application of advanced techniques such as electron microscopy, numerical calculations FEM, or experimental strength tests allow to clearly define the properties of new developed materials. This approach contributes to significant progress in this area. The proposed Special Issue covers many of the topics mentioned above. The primary aim of this Special Issue is to provide an overview of the newly developed advanced materials dedicated to biomedical engineering.

Guest Editors

Dr. Krzysztof Szymkiewicz

Department of Applied Mechanics and Biomechanics, Cracow University of Technology, 31-155 Cracow, Poland

Prof. Dr. Marek Goral

Department of Material Science, Faculty of Mechanical Engineering and Aeronautics, Rzeszow University of Technology, Powstancow Warszawy 12, 35-959 Rzeszow, Poland

Deadline for manuscript submissions

closed (30 November 2022)



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/123676

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

mdpi.com/journal/ crystals





an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



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, Pl, 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)

