crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 3.6

Crystallographic Understanding of Deformation, Phase Transformation, and Recrystallization in Materials Engineering

Guest Editors:

Dr. Alexandru D. Stoica
Oak Ridge National Laboratory, Oak Ridge, USA

Dr. Ke An
Oak Ridge National Laboratory, Oak Ridge, TN 37830, USA

Deadline for manuscript submissions:
closed (30 November 2019)

Message from the Guest Editors

This Special Issue is inviting recent research exploiting state-of-the-art diffraction/scattering tools such as TEM, EBSD, x-rays, and neutrons in understanding the structure-to-properties relationship in materials during synthesis or alloying, processing, (additive) manufacturing, or other real-life operations. Some of the potential areas of focus are new alloys design, smart materials, metal matrix composites, ceramic materials, nuclear materials, additive manufacturing, etc. The crystallographic understanding or characterization of residual stress/strain build-up, strengthening and hardening mechanism, creep, fatigue, super elasticity/plasticity, shape memory effect, piezoelectric effect, mechanocaloric effect, magnetomechanical effect, phase transition under external stimuli, static and dynamic recrystallization, phase segregation, atomic level ordering or disordering, etc. are welcome. The demonstration of new instruments, techniques, and data analysis procedures that advance crystallographic characterizations in materials engineering is also a priority of this Special Issue.

crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.7

CITESCORE 3.6

Editor-in-Chief

Prof. Dr. Alessandra Toncelli
Department of Physics, University of Pisa, 56126 Pisa, PI, 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, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
𝕏@Crystals_MDPI