crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.4

CITESCORE 4.2

Emerging Nuclear Materials

Guest Editors:

Dr. Bo Huang
Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-Sen University, Zhuhai 519082, China

Dr. Peng Song
Research Department Nuclear Energy and Safety, Paul Scherrer Institut, 5232 Villigen, Switzerland

Deadline for manuscript submissions:
closed (31 July 2023)

Message from the Guest Editors

More extreme conditions in future nuclear energy systems, such as Gen IV fission reactors, fusion reactors, and charged particle accelerators, require materials to operate under higher temperatures, higher dpa, and more corrosive environments than those in current Gen II or Gen III systems. This requires significant improvements in the thermal, chemical, and radiation stability of nuclear materials. As a response to these requirements, advanced nuclear materials are emerging, and some of them have been deemed to be promising options for structural materials and fuels in advanced reactors and LWRs operating with extended lifetimes.

This Special Issue, entitled “Emerging Nuclear Materials”, aims to collect original research articles and reviews focusing on novel developments and new processing methodologies in the fabrication of nuclear materials, as well as its performance characterization in nuclear applications. Experimental, theoretical, and computational aspects of either the fundamental or applied nature of the emerging nuclear materials are welcome.

crystals

an Open Access Journal by MDPI

IMPACT FACTOR 2.4

CITESCORE 4.2

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, CAPlus / 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