



Wide Bandgap Semiconductor Materials and Devices

Guest Editors:

Prof. Dr. Haiding Sun

Prof. Dr. Bharat Jalan

Prof. Dr. Shibing Long

Prof. Dr. Yuhao Zhang

Prof. Dr. Rajendra Singh

Dr. Xuelin Yang

Prof. Dr. Yuji Zhao

Prof. Dr. Bin Liu

Deadline for manuscript
submissions:

closed (1 December 2021)

Message from the Guest Editors

Wide bandgap semiconductors (WBGs) comprise those materials with bandgaps greater than 3.0 eV and exhibit many attractive properties far beyond the capabilities of Si and GaAs. The WBGs's extraordinary physical and electrical properties make the materials a natural for meeting the performance demands of optoelectronic and power electronic device applications, thus the material- and device-related research based on these WBGs is one of the hottest topics in the semiconductor community.

We invite researchers to contribute to the Special Issue titled "Wide Bandgap Semiconductor Materials and Devices"; potential topics include but are not limited to:

- WBGs thin film growth, doping and defects, processing, and theory;
- WBGs low dimensional and nanostructure (quantum dot, quantum well, and quantum wire) synthesis, processing, and theory;
- WBGs electronic and optoelectronic properties and characterization;
- WBGs optoelectronic devices (LED, lasers, and detectors) and characterizations;
- WBGs power electronic devices and characterizations.





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](#)