



Recent Advances in III-Nitride Semiconductors

Guest Editors:

Prof. Dr. Peng Chen

1. Jiangsu Provincial Key Laboratory of Advanced Photonic and Electronic Materials, School of Electronic Science and Engineering, Nanjing University, Nanjing 210023, China
2. Nanjing National Laboratory of Microstructures, Nanjing University, Nanjing 210093, China

Prof. Dr. Zhizhong Chen

State Key Laboratory for Artificial Microstructure and Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, China

Deadline for manuscript submissions:

closed (15 February 2023)



Message from the Guest Editors

Dear Colleagues,

GaN and the group-III nitride family are typical wide bandgap semiconductors. The interest in group-III nitrides lies in their irreplaceable and efficient blue-UV luminescence capability. Recent progress in GaN-based material quality and device design relies on well-mastered techniques of material growth and the formation of desired structures with other elements. This offers a high possibility of creating high-quality materials and diverse functional devices.

Therefore, we invite researchers to contribute to this Special Issue on “Recent Advances in III-Nitride Semiconductors”, covering a broad spectrum of topics from the study of materials, micro/nano structures, and novel functional devices to new applications in frontier fields.

The topics include but are not limited to:

- Growth of GaN-based materials and micro/nanostructures;
- Characterization of the materials and the heterostructures;
- GaN-based novel devices, including emission, detection, and power devices;
- Application and integration of the materials and novel devices in novel electronics and photonics



crystals



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](#), [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](#)