# **Special Issue**

# Advancements in Wide and Ultra Wide Bandgap Semiconductor Devices for RF and Power Applications

# Message from the Guest Editors

We invite researchers to contribute to this Special Issue titled "Advancements in Wide and Ultra Wide Bandgap Semiconductor Devices for RF and Power Applications". This Special Issue covers a broad spectrum of topics, including the following:

- The study of wide bandgap semiconductor materials and micro/nano structures;
- Advanced GaN device design;
- Novel SiC transistor architectures:
- The design and challenges of Ga2O3 devices;
- Properties of diamond transistors.

Additionally, contributions focused on the characterization, reliability, modeling, and challenges related to the integration of wide bandgap devices are highly encouraged.

By contributing to this Special Issue, researchers can help drive forward the innovations necessary to meet the global economic challenges of digitization and decarbonization, ensuring a more efficient and sustainable future.

#### **Guest Editors**

Dr. Abdelaziz Rabehi

Sensor Laboratory, University of Brescia, Via D. Valotti 9, 25133 Brescia, Italy

Dr. Dmitri Donetski

Department of Electrical and Computer Engineering, Stony Brook University, Stony Brook, NY 11794, USA

# Deadline for manuscript submissions

30 September 2025



an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/216702

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)

