Special Issue

Advances in Wide Bandgap Semiconductor Materials

Message from the Guest Editors

This Special Issue of *Crystals* serves to provide a platform for researchers to report their studies on wide-bandgap semiconductor materials, including fundamental material properties, advanced growth techniques, novel device architectures, fabrication procedures, optical and electronic characteristics, and their applications in high-efficiency LEDs, UV photodetectors, high-power transistors, and next-generation power converters, etc. Potential topics include, but are not limited to, the following:

- Epitaxial growth of wide/ultra-wide bandgap semiconductors;
- Defect engineering and interface control;
- Strain modulation techniques for heterostructure design;
- Thermal management strategies;
- High-efficiency optoelectronic devices;
- Power electronic devices;
- Advanced characterization methods for material analysis;
- Study of Reliability and mechanisms;
- Innovative substrate technologies to reduce defects and improve crystal quality;
- Hybrid material integration.

Guest Editors

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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 crystal, where science merges with beauty and innovation.

Editor-in-Chief

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