

## Special Issue

# Crystalline Materials for Radiation Detection: A New Perspective (2nd Edition)

### Message from the Guest Editor

Developing efficient and environmentally friendly technologies for radiation detection is challenging. The recent progress in crystal growth, theoretical modelling, understanding of radiation-induced defects, and radiation hardness has offered new perspectives for radiation detection and crystalline materials, specifically wide-bandgap semiconductor crystals. This Special Issue of *Crystals* is dedicated to all aspects related to the growth, characterization, and application of crystalline materials for radiation detection, to provide an overview of current issues of interest and future perspectives. Researchers working in this field are invited to contribute papers on potential topics of interest, including but not limited to the following:

- Growth and characterization techniques of crystalline materials;
- Radiation detection;
- Wide-bandgap semiconductors;
- Radiation-induced defects;
- Modelling, first-principle calculations, etc..;
- Deep-level transient spectroscopy, electron paramagnetic resonance, etc.;

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### Guest Editor

Dr. Ivana Capan

Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia

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### Deadline for manuscript submissions

10 October 2025



## Crystals

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*Crystals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[crystals@mdpi.com](mailto:crystals@mdpi.com)

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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 *Crystals*, where science merges with beauty and innovation.

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### Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, PI, Italy

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