

## Special Issue

# Single Crystal Materials for Optical Applications

### Message from the Guest Editors

As important functional materials, crystals have many applications, such as in laser nonlinear optics, piezoelectrics, scintillation, modulators, etc. In the past and presently, numerous crystals, for example, Nd<sup>3+</sup>:Y<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> (YAG), KTiOPO<sub>4</sub> (KTP), LiNbO<sub>3</sub> (LN), and Bi<sub>4</sub>Ge<sub>3</sub>O<sub>12</sub> (BGO), and those in their families, have been used as laser and nonlinear optical materials, and this is expected to continue in the future. However, the development of optical technology necessitates new crystal materials with excellent optical properties. We are inviting researchers to submit original work to this Special Issue, 'Single Crystal Materials for Optical Applications', which intends to highlight the state of the art for single crystal materials. Topics of interest include, but are not limited to, the following aspects:

- Design, synthesis, characterization, and applications of single crystalline materials;
- Growth and characterization of crystals;
- X-ray photoelectron spectroscopy studies;
- Microstructure and morphology;
- Luminescence;
- Absorption properties;
- Relationship between structure and properties.

### Guest Editors

Prof. Dr. Xiulan Duan

Institute of Crystal Materials, Shandong University, Jinan, China

Prof. Dr. Xinqiang Wang

Institute of Crystal Materials, Shandong University, Jinan, China

### Deadline for manuscript submissions

20 December 2025



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/238448](https://mdpi.com/si/238448)

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

[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)





# Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)



## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

---

### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

---

### 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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /  
CiteScore - Q1 (Condensed Matter Physics)