

## Special Issue

# Crystal Growth and Characterization of Electronic and Optoelectronic Materials

### Message from the Guest Editor

The aim of this Special Issue, devoted to the topic "Crystal Growth and Characterization of Electronic and Optoelectronic Materials" is to address current challenges and developments in the field of crystal growth for electronic and optoelectronic applications engaging the inherent technological benefits of growth materials. For this issue, we invite research contributions reporting advances on topics such as bulk crystals and substrate technologies, epitaxy, defect and doping, interface and surface analysis, structural characterization, and study of relevant properties (including morphological, physical, optical, electric, etc.) of growth materials (bulk, thin films, and nanostructure). The applications from the crystals cover various devices, e.g., power device, RF device, light-emitting diodes (LEDs), lasers, photodetectors, photovoltaic cells, transistors or others relevant devices suitable for electronics and optoelectronics. Considering your outstanding contribution in this fascinating research field, I would like to cordially invite you to submit a paper to this Special Issue.

---

### Guest Editor

Dr. Si-Young Bae  
Korea Institute of Ceramic Engineering and Technology, Jinju, Korea

---

### Deadline for manuscript submissions

closed (31 July 2021)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/56817](https://mdpi.com/si/56817)

*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 Editorial Board

*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.

---

### Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

---

### 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)