

Special Issue

Wide Band Gap Semiconductors: From Growth to Applications

Message from the Guest Editors

The development of efficient and environmentally friendly semiconductor devices is a great challenge. Among the materials of present and future perspective are wide bandgap semiconductor materials. The recent progress in crystal growth, theoretical modeling, understanding of as-grown and/or intentionally introduced defects, and numerous applications has offered a new perspective for wide bandgap semiconductors such as SiC, GaN, Ga₂O₃, diamond, and others. This Special Issue of *Materials* is dedicated to all aspects related to the growth, material characterization, modeling, and applications of wide bandgap semiconductors with the aim to provide an overview of the issues of current interest and future perspectives. Researchers working in the field are invited to contribute. Potential topics of interest but are not limited to the following: growth and characterization techniques of crystalline materials; wide bandgap semiconductors; SiC, GaN, Ga₂O₃, diamond; device applications; modeling, first-principles calculations, etc.; deep level transient spectroscopy; electron paramagnetic resonance.

Guest Editors

Dr. José Coutinho

i3N, Department of Physics, University of Aveiro, Campus Santiago, 3810-193 Aveiro, Portugal

Dr. Ivana Capan

Ruđer Bošković Institute, Bijenička 54, 10000 Zagreb, Croatia

Deadline for manuscript submissions

closed (20 July 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/98173

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)