

Special Issue

Metamaterials: A Roadmap from the Perspectives of the Fascinating Properties and Applications

Message from the Guest Editor

Metamaterials are recently embedding new quantum materials such as graphene, dielectric nanostructures, and, as metasurfaces, surface geometries and surface waves, while also embracing new functionalities such as nonlinearity, quantum gain, and strong light–matter coupling. This Special Issue is devoted to exhibiting the current state of the art of the dynamic and vibrant field of photonic metamaterials, reaching across various disciplines, suggesting exciting applications in chemistry, material science, biology, medicine, and engineering. It will illuminate recent advances in the wider photonic metamaterials field, such as (to mention a few) active metamaterials and metasurfaces, self-organized nanoplasmonic metamaterials, graphene metamaterials, metamaterials with negative or vanishing refractive index and topological metamaterials facilitating ultraslow broadband waves on the nanoscale, and novel applications, such as stopped-light lasing.

Keywords

- metamaterial
- nanowires
- metasurfaces
- graphene
- medicine
- refractive index

Guest Editor

Dr. Tatjana Gric

Department of Electronic Systems, Vilnius Gediminas Technical University, 10223 Vilnius, Lithuania

Deadline for manuscript submissions

closed (10 April 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/205329

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 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)