



materials



an Open Access Journal by MDPI

Design and Analysis of Novel Materials and Structures in the THz Frequencies

Guest Editor:

Dr. Carlito S. Ponseca, Jr.

Division of Biomolecular and
Organic Electronics, Department
of Physics, Chemistry and
Biology, IFM Linköping University,
58183 Linköping, Sweden

Deadline for manuscript
submissions:

closed (20 August 2022)

Message from the Guest Editor

Terahertz (THz) radiation remains one of the least exploited frequencies in the electromagnetic spectrum. Some of its most recent applications include but are not limited to probing charge carrier dynamics in photovoltaic devices, controlling biological processes in living cells, and to the development of organic electronic devices in the THz frequencies. This review volume will delimit its scope to fundamental concepts of THz spectroscopy, progress on its use as a versatile optoelectronic material characterization technique, presentation of novel design structures for efficient generation and detection of this far-infrared radiation, and the possibility of its use as a control pulse for nonlinear light-matter interaction, among many others.

This Special Issue aims to stimulate researchers worldwide to share their interesting and promising works in the field of linear and nonlinear spectroscopy and/or in the development of THz devices and structures, and spectroscopy techniques and others listed below. It is my pleasure to invite you to submit a manuscript to this Special Issue. Original research articles, review articles, and communications are welcome.



mdpi.com/si/61576

Special Issue



an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)