Special Issue

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

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.

Guest Editor

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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.

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