Special Issue

Nanomaterials and Devices: Optical and Electrical Properties

Message from the Guest Editors

The development of new technologies and the improvement of existing technologies (photonics and energy) need novel materials with special tunable properties. Nanomaterials provide us with the platform to design these new materials for specific applications as it gives us access to very important physical, electrical, and chemical properties. The optical properties of nanomaterials (absorption, transmission, reflection, and emission) are dynamic and may significantly differ from their bulk counterparts. It has also been observed that the electrical and electrochemical properties (conductivity or resistivity) of materials change at the nanoscale. Optical and electrical properties are some of the key properties of materials that are used for various technological applications and may be engineered by manipulating the shape, size, and surface functionality of the materials' particles. Therefore, in this Special Issue, we welcome original research and review articles (on the synthesis and deposition of nanodevices) which focus on the optical and electrical properties of nanomaterials for photonics, energy storage, and photovoltaic applications.

Guest Editors

Prof. Dr. Simon Mokhotjwa Dhlamini
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Dr. Guy Leba Kabongo

Deadline for manuscript submissions

closed (10 September 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/178324

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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.

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