# Special Issue

# Progress in Optical Characterization of Semiconductor Nanomaterials and Devices

## Message from the Guest Editor

This Special Issue will cover the latest achievements and challenges of optical techniques in order to study semiconductor (nano)materials and devices. Topics covered include but are not limited to:

- Photoluminescence, ionoluminescence, spectroscopic ellipsometry, absorption, Fourier-transform infrared spectroscopy (FTIR), Raman and surface/tip-enhanced Raman spectroscopy (SERS, TERS), scanning near-field optical microscopy (nano-FTIR, nano-THz spectroscopy);
- Cathodoluminescence, scanning and transmission electron microscopy, energy-dispersive x-ray spectroscopy;
- Photocurrent, electroluminescence, electron beam induced current;
- III-N (InN, GaN, AlN), oxide (Ga2O3, NiO2, ZnO), III-V (GaAs, InP, InAs) semiconductors (nanowires, quantum dots, heterostructures), 2D materials (2D transition metal dichalcogenides, MXenes) and devices (solid-state emitters, photonics, plasmonics, spintronics, photovoltaics, transistors, thermoelectrics, batteries, supercapacitors, sensors applications);
- Theory and simulation.

## Guest Editor

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## Deadline for manuscript submissions

closed (10 May 2023)

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# 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

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