

## Special Issue

# Optical Characterization of Novel Composite and Optically Active Materials

### Message from the Guest Editor

There has been increasing interest over the last decade in novel optical composite materials. These materials, which demonstrate unique properties, are based on semiconductor nanocrystals of different shapes, viz. quantum dots, wires, and platelets, or simple metal nanoparticles. These materials are used in a variety of photonic and plasmonic applications. Applications include advanced light sources, photovoltaics, biosensing, bioimaging, and photonic circuitry with novel architectures. The synthesis and fabrication of these innovative composite materials requires a knowledge and understanding of the relationship between the chemical structure and interactions in these systems, as well as their optical characteristics when targeting specific applications. This Special Issue will be devoted to the optical characterization of new composite and optically active materials, including UV-VIS, CD, infrared, and raman spectroscopies. Original research papers and review articles related to these areas are cordially invited. Keywords

- infrared and Raman spectroscopy of condensed matter
- semiconductor quantum dots
- silicon photonic crystals
- 2D materials
- metal nanoparticles

### Guest Editor

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### Deadline for manuscript submissions

closed (31 December 2020)



## Materials

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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.

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