



Optical Spectroscopic Techniques in Nanomaterial Science: Raman, Infrared, Photoluminescence

Guest Editor:

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Message from the Guest Editor

Optical spectroscopic techniques are indispensable tools in modern nanomaterial science, as the light-matter interactions provide a wealth of complementary information over the traditional diffraction and electron microscopy techniques. Quantum confinement effects substantially modify the electronic structure and the optical excitation spectrum in nanoscopic volumes of materials.

The aim of this Special Issue of *Nanomaterials* is to cover recent advances in optical spectroscopic techniques – photoluminescence, Raman and infrared, in the most general scope of modern nanoscience. Papers describing the development of new nanomaterial characterization protocols, as well as more fundamental research giving insight into the structural, electronic, and optical properties of nanomaterials, are welcome.





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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