# **Special Issue**

# Synthesis and Spectral Characterization of Ceramics and Nanomaterials

## Message from the Guest Editor

In recent decades, nanotechnology has developed multiple applications of ceramics and nanomaterials in many areas of life, namely in electronics, energy and chemical industry, environmental protection, and medicine. Synthesis methods of ceramics and nanomaterials are constantly improved and modified in order to obtain a material with the desired properties. The present Special Issue in Nanomaterials is devoted to ceramics and nanomaterials obtained by various synthesis methods, e.g., solid-state sintering, sol-gel, co-precipitation, hydrothermal synthesis, mechanosynthesis, and others. Special emphasis will be focused on the magnetic, electrical, and optical properties of nanomaterials in the context of their applications in electronics, medicine, and environmental protection. Spectral methods, like Mössbauer spectroscopy, Raman spectroscopy, Fourier Transform Infrared (FTIR) spectroscopy, UV-Vis spectroscopy, Energy Dispersive X-ray spectroscopy (EDS), impedance spectroscopy, mass spectrometry and others should be used for accurate characterization of the material.

### **Guest Editor**

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## Deadline for manuscript submissions

closed (20 July 2024)



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# **About the Journal**

# 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 nanometerscale 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.

### **Editor-in-Chief**

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