Special Issue

Lanthanide-Doped Inorganic Luminescent Nanomaterials for Optoelectronic Applications

Message from the Guest Editor

Lanthanide-doped inorganic luminescent nanomaterials have garnered significant attention in recent years due to their unique optical properties and potential application in various optoelectronic devices. These materials typically consist of a host matrix doped with lanthanide ions, which exhibit characteristic luminescence upon excitation. Lanthanide-doped inorganic luminescent nanomaterials can be employed in various fields, including optoelectronics, biomedical imaging, sensing, lighting, and security. This Special Issue welcomes contributions from various scientific and engineering communities, and is particularly interest in studies on inorganic materials such as oxides, phosphates, or fluorides, which are doped with lanthanide ions. This Special Issue aims to present recent advances in lanthanide-doped inorganic luminescent nanomaterials as a versatile class of materials with applicative potential in optoelectronic devices, driven by their unique optical properties and tunable luminescence. We welcome the submission of original research articles and reviews.

Guest Editor

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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 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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