# Special Issue

# Thermal Transport in Nanostructured Materials

## Message from the Guest Editor

This Special Issue will study advancements in the applications and understanding of thermal transport in nanostructured materials and their composites. With the ever-increasing demand for efficient thermal management across critical sectors such as electronics, energy systems, and advanced manufacturing, the study of thermal transport and management has become increasingly important. The Special Issue will encompass a broad range of topics, including thermal transport mechanisms, thermal energy transfer, thermophysical properties, interfacial thermal resistance in nanostructured materials, and the influence of nanoscale effects on micro- and macroscale thermal applications. Contributions highlight both experimental and theoretical insights, as well as the latest findings and developments in the field, while addressing challenges in materials design, characterization, and application. This Special Issue will showcase state-of-the-art advancements and bridge the gap between fundamental science and practical applications, offering a comprehensive perspective on the thermal behavior of nanostructures and their composites for next-generation technologies.


## Guest Editor

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## Deadline for manuscript submissions

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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.

## Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
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