Special Issue

Thermal and Dielectric Properties of Nanostructures

Message from the Guest Editor

The field of nanostructures is rapidly evolving, with a strong focus on understanding and exploiting their thermal and dielectric properties. These properties are of paramount importance for the advancement of technology. Due to their unique size-dependent characteristics, nanostructures display thermal and dielectric behaviors that are markedly different from those of bulk materials. Current research reveals the immense potential of nanostructured materials in areas such as energy storage, sensing, and electronics. As our comprehension of these materials deepens, we are on the cusp of groundbreaking discoveries that could revolutionize energy efficiency and electronic device performance. This Special Issue is dedicated to showcasing the most recent research on nanostructures' thermal and dielectric properties. We are eager to feature contributions from leading experts in the field, aiming to provide a thorough and up-to-date account of the current state and future outlook of this dynamic area within materials science. You can submit your paper at the following link: https://www.mdpi.com/si/219626

Guest Editor

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Deadline for manuscript submissions

31 October 2025



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/219626

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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.

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