

Special Issue

Modelling Heat and Mass Transfer Phenomena in Nanostructured Materials

Message from the Guest Editor

The distinctive heat and mass transfer characteristics of nanostructured materials are the result of many phenomena occurring at various temporal and spatial scales. Although these novel materials offer precision in performance for specific applications, their complexity in material design also increases. The rapid prediction of these materials' heat and mass transport properties is essential for scaling them from lab to mass production in a variety of sectors. Moreover, tremendous effort in terms of theoretical analyses, experimental measurements, and numerical simulations has been devoted to understanding such complex heat and mass transfer processes. The Special Issue is focused on theoretical and/or numerical research (electronic, atomistic, mesoscopic, continuum, and/or system models) on heat and mass transfer related to the following topics. Original communications, articles, and review articles are welcome. We look forward to your submissions. Please see more details at the following link: <https://www.mdpi.com/si/162675>

Guest Editor

Dr. Matteo Fasano

Department of Energy, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129 Torino, Italy

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Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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