Special Issue

Mechanics of Micro/Nano Structures and Materials, Volume II

Message from the Guest Editors

In order to achieve micro/nanoelectromechanical systems (NEMS/MEMs) with enhanced functionality, the main structural components more and more often are made from functionally graded (FG) materials.

Composites made from FG materials (FGMs) or reinforced through functionally graded carbon nanotubes (FG-CNTs) are a novel type of composite materials designed and fabricated in such a way that their mechanical, electronic, and thermal properties vary gradually in preferred spatial directions. Among these engineering nanostructures, nanobeams have attracted more attention due to their engineering applications such as in nanoactuators, nanosensors, and atomic force microscopes (AFMs).

Volume II of this Special Issue will be a peer-reviewed forum for the publication of original papers. Potential topics include, but are not limited to, the following: experimental and computational techniques in nanotechnology and nanoscience; nanoelectromechanical systems (NEMS) and microelectromechanical systems (MEMS); functionally graded (FG) sandwich nanobeams and nanoplates; additive manufacturing.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2023)



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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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