



Recent Advances and Applications in Nanomechanics

Guest Editors:

Prof. Dr. Marko Čanadija

Faculty of Engineering, University
of Rijeka, Rijeka, Croatia

Prof. Dr. Raffaele Barretta

Department of Structures for
Engineering and Architecture,
University of Naples Federico II,
80125 Naples, Italy

Deadline for manuscript
submissions:

closed (31 May 2022)

Message from the Guest Editors

This Special Issue marks the 30th anniversary of the discovery of carbon nanotubes by Sumio Iijima, which triggered an exponential growth of interest in nanoscience and nanotechnology, and its main objective is to collect innovative contributions on the size-dependent behaviour of nano-engineered materials and small-scale structures for the design and optimisation of micro- and nano-electro-mechanical systems. Nanomechanics can be conveniently exploited to describe technically significant scale phenomena which do not occur in classical aerospace, civil and mechanical engineering structures. The development of adequate models, rigorously verified by experiments or numerical calculations using molecular dynamics, is driven by interests of the rapidly growing nanotechnology industry. This Special Issue should bridge, at least in part, this gap between real-life behaviour and mechanical models of nanoscopic structures.

For further reading, please follow the link to the Special Issue Website at: <http://www.mdpi.com/si/92542>

Prof. Dr. Marko Čanadija
Prof. Dr. Raffaele Barretta
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)