Special Issue

Advances in Computation and Modeling of Materials Mechanics

Message from the Guest Editors

The Special Issue "Advances in Computation and Modeling of Materials Mechanics" aims to explore the forefront of research in the field of advanced material mechanics using theoretical computation and simulation techniques. This Special Issue focuses on investigating the mechanical behavior and properties of advanced materials at different scales, which have significant implications for various industries and applications, including aerospace, nuclear, automotive, and structural engineering. Therefore, the topics covers a wide range of research areas, including but not limited to the following: (1) Development and application of computational models and simulation methods for analyzing the mechanical properties of advanced materials; (2) Investigation of the mechanical response of advanced materials under different loading conditions, such as tensile, compressive, and shear forces; (3) Exploration of the relationships between the microstructure and mechanical properties of advanced materials; (4) Study of the effects of various factors, such as grain boundaries, defects, and interfaces, on the mechanical behavior of advanced materials:

Guest Editors

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Deadline for manuscript submissions

closed (20 May 2025)



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Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/178360

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

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