



an Open Access Journal by MDPI

Modeling and Analysis of Static, Dynamic, and Thermal Behavior of Shell, Plate, and Beam Structures

Guest Editors:

Prof. Dr. Jarosław Jędrysiak

Department of Structural
Mechanics, Lodz University of
Technology, Stefana
Żeromskiego 116, 90-924 Łódź,
Poland

Prof. Dr. Izabela Lubowiecka

Structural Mechanics
Department, Gdańsk University of
Technology, ul. G. Narutowicza
11/12, 80-233 Gdańsk, Poland

Prof. Ewa Magnucka-Blandzi

Institute of Mathematics, Poznan
University of Technology, ul.
Piotrowo 3A, 60-965 Poznań,
Poland

Deadline for manuscript
submissions:

closed (20 June 2022)

Message from the Guest Editors

Dear Colleagues,

This Special Issue deals with analytical and computational methods in the mechanics of beams, plates, and shells. The main areas of interest of this edition include linear and nonlinear models of elasticity and plasticity of these structures; thermoelasticity; problems of vibrations, wave propagation, stability of beams, plates, and shells; heat conductivity; microheterogeneous structures; layered structures; and structures made of materials with special properties – metamaterials, auxetic materials, porous materials, biomaterials, and functionally graded materials.

We invite you to submit your scientific papers on the latest research results in these aspects of the mechanics of beams, plates, and shells, with an emphasis on applications in all areas of mechanics, biomechanics, and civil engineering.

Prof. Jarosław Jędrysiak
Prof. Dr. Izabela Lubowiecka
Prof. Ewa Magnucka-Blandzi
Guest Editors



mdpi.com/si/60523

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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.

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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)