Special Issue

Optimal Design of Materials and Structures

Message from the Guest Editors

The understanding and application of the optimal design of materials and constructions is a truly interdisciplinary endeavor. This work is an attempt to bring together recent developments in the field-from materials science, mechanics, optimization and engineering manufacturing including quality control and measurement techniques-into a single volume. An isotropic or anisotropic material cannot be treated as an existing material structure that can be directly utilized by designers. For engineering structures, the determination of optimal solutions by means of material design is more reliable, efficient and necessary in modern science and using modern techniques. The aim of this Special Issue is to explain and prove that seemingly different structural and manufacturing process optimization problems in the area of the material design can be solved in a unified, compact manner. The forthcoming Special Issue of *Materials* aims to follow new advances in the attractive field of optimal design in engineering. It is our pleasure to invite you to contribute your research article, communication, or review to this Special Issue.

Guest Editors

Prof. Dr. Aleksander Muc Institute of Machine Design, Cracow University of Technology, Warszawska 24, 31-155 Cracow, Poland

Prof. Dr. Jerzy A. Sładek

Laboratory of Coordinate Metrology, Faculty of Mechanical Engineering, Cracow University of Technology, Krakow, Poland

Deadline for manuscript submissions

closed (30 October 2019)



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/24604

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

mdpi.com/journal/

materials





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 6.4 Indexed in PubMed



materials



About the Journal

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

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

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)