







an Open Access Journal by MDPI

Materials with Shape Memory: Phase Transformations, Microstructure and Properties

Guest Editor:

Prof. Lotkov Aleksandr Ivanovich

Institute of Strength Physics and Materials Science, Siberian Branch, Russian Academy of Sciences

Deadline for manuscript submissions:

closed (20 April 2022)

Message from the Guest Editor

Currently, materials with shape memory are used in medicine as implants for the treatment of socially significant diseases and in the aerospace engineering and automotive industries; they also have great potential in micro-robotics. This Special Issue is devoted to both fundamental studies of nature and mechanisms of shape memory effects realization in materials, and the applied development and application of these materials. This issue of the journal aims to cover the topic of materials with shape memory as much as possible, and will include both articles presenting new original results and reviews of recent research and specific applications. Manuscripts will be welcomed from researchers working in higher education and research institutions, as well as industrial companies that develop and produce products using materials with shape memory.

Keywords

- shape memory materials
- microstructure
- fundamental properties
- developments













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 iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*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