materials

IMPACT FACTOR 3.1 | Indexed in: PubMed | CITESCORE 5.8

an Open Access Journal by MDPI

Research on Fatigue Behavior of Metals and Alloys

Guest Editor:

Prof. Dr. Sergey V. Konovalov
1. Head of Department of Metals Technology and Aviation Materials, Samara National Research University, Samara, Russia
2. Institute of Laser and Optoelectronics Intelligent Manufacturing, Wenzhou University, Wenzhou, China

Deadline for manuscript submissions:
closed (20 November 2022)

Message from the Guest Editor

In modern conditions of operation of machinery and constructions, the main tasks are to increase strength, resource, survivability, and durability. The durability and reliability of machines is largely determined by their fatigue resistance, since in the vast majority of cases for machine parts, the main type of loading is dynamic, repeated, and alternating loads, and the main type of failure is fatigue. The issues of fatigue and strength are the subject of the most careful consideration from the point of view of both scientific research and experimental design and technological developments. The difficulty in assessing the cyclic strength of construction materials is related to the fact that many different factors influence fatigue failure (structure, state of the surface layer, temperature and test conditions, loading frequency, stress concentration, cycle asymmetry, scale factor, and a number of others). Therefore, the study of the physical nature of changes in various parameters of metals during fatigue is of great scientific interest.

materials

IMPACT FACTOR 3.1 | Indexed in: PubMed | CITESCORE 5.8

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 - 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