Special Issue

Recent Developments in Fatigue and Wear Research and Processing Technologies for Various Materials to Meet the SDGs

Message from the Guest Editor

It is known that most of the fractures and functional losses in machines and structures are caused by fatigue and wear. Various observation, measurement, experimental, and analytical methods have been used to study fatigue and wear behavior from macroscopic (continuous mechanics) to microscopic (heterogeneous mechanics) levels. In addition, since the observed experimental phenomena span many fields, including mechanical science, materials science, and chemistry, interdisciplinary analysis is necessary. Considering the Sustainable Development Goals (SDGs) that are being promoted internationally these days, it is necessary to give more consideration than ever to high efficiency (energy saving), environmental load reduction, and reuse technology in the design of strength and processing technology of machines and structures. This Special Issue collects and provides readers with the latest research results related to fatigue, fracture, wear, and processing technology. It is my pleasure to invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

Prof. Dr. Sotomi Ishihara National Institute of Technology, Toyama College, 13 Hongo, Toyama 939-8630, Japan

Deadline for manuscript submissions

closed (10 June 2022)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/87182

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 3.2 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 - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)