Special Issue

Mechanical and Tribological Properties of Advanced Materials and Coatings

Message from the Guest Editor

Various materials such as metals, ceramics, polymers, and micro/nano materials can be synthesized or mixed into alloys or composites to improve various properties. In addition, the surface of the materials can be protected through various surface treatment/patterning and surface coating techniques. A number of studies are being conducted using theoretical, numerical/analytic, and experimental methods to improve mechanical and tribological properties of materials and coatings. Methods for improving the mechanical and tribological properties of materials and coatings include using various materials with excellent mechanical properties, friction and wear properties, or forming micro/nanopatterns, structures, and multilayers. In particular, the durability of the surface can be improved by understanding complex contact conditions and analyzing various mechanisms for friction and wear phenomena. In this Special Issue, we would like to deal with studies on preventing surface damage and improving mechanical and tribological properties using a wide range of materials, surface treatment/patterning, and coating technologies. We look forward to receiving your contributions to this issue.

Guest Editor

Dr. Chang-Lae Kim

Functional Materials and Tribology Laboratory, Department of Mechanical Engineering, Chosun University, 309 Pilmun-daero, Donggu, Gwangju 61452, Republic of Korea

Deadline for manuscript submissions

closed (20 May 2023)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/69421

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





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

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