Special Issue

Development and Application of High-Temperature Ceramics

Message from the Guest Editors

Due to the more severe service environment that hightemperature ceramics are subjected to, higher requirements are put forward for their performance. Thus, some new analytical models, as well as preparation, characterization and test methods for hightemperature ceramics have been proposed. We are delighted to invite contributions to this Special Issue on "Development and Application of High-Temperature Ceramics". In the collection, we hope to underline recent advances related to processing, microstructures, property characterization and optimization, and damage failure mechanism analyses for high-temperature ceramics. Consequently, research topics of interest may include, but are not limited to: processing; strengthening and toughening; property characterization; theoretical modeling; and damage failure mechanism analysis. Manuscripts in the form of full research papers. communications and review articles are all encouraged.

- high-temperature ceramics
- strengthening and toughening
- mechanical properties
- high-temperature applications
- service performance
- damage failure mechanism analysis
- ceramic matrix composites

Guest Editors

Dr. Yong Deng

School of Civil Aviation, Northwestern Polytechnical University, Xi'an, China

Dr. Ruzhuan Wang

School of Metallurgy and Materials Engineering, Chongqing University of Science & Technology, Chongqing, China

Deadline for manuscript submissions

closed (10 June 2023)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/120980

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)