Special Issue

Feature Papers in Refractories and Ceramics: Microstructure, Properties and Applications (3rd Edition)

Message from the Guest Editors

Refractories, as a class of ceramics with high fusion points, are basic materials in high-temperature industries such as metalluray, cement/glass production. etc. Today, "new refractory" is being developed to not only meet high-temperature structural support, but to be designed or tailored to special functional requirements. The "new refractory" is extending the frontiers of design and preparation of traditional high-temperature ceramics and allows significant improvements in hightemperature industries on economic and environmental impacts. In addition, the "structure-function" relationship of these ceramics as related to their hightemperature service performance should be known for every application. This Special Issue focuses on the development of new refractories and novel ceramics. The potential topics concerning their microstructure, properties, and applications include but are not limited to: functional refractory; novel ceramics; non-oxide ceramics; high-temperature heat-insulating materials; green ecological refractory; refractory castable; refractory raw materials; high-temperature behavior.

Guest Editors

Dr. Zhong Huang The State Key Laboratory of Refractories and Metallurgy, Wuhan University of Science & Technology, Wuhan, China

Dr. Bin Li

School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing, China

Deadline for manuscript submissions

20 March 2025



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 5.8 Indexed in PubMed



mdpi.com/si/213011

Materials 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 3.1 CiteScore 5.8 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (Condensed Matter Physics)