# **Special Issue**

# Research on Interfaces and Transportation Phenomena in Materials Under Extreme Conditions

# Message from the Guest Editors

We are pleased to announce that a new Special Issue. entitled "Research on Interfaces and Transportation Phenomena in Materials under Extreme Conditions". is open to submissions. With the rapid development of nanotechnology and material science, researchers are able to observe and investigate transportation phenomena under extreme conditions, such as atomic scale, high power density, ultra-fast process, etc. Advanced atomic scale simulation methods, including molecular dynamics simulation, first-principle calculation, the Monte Carlo method, etc., enable us to thoroughly understand the physical mechanism of transportation. This Special Issue is open to submissions on new measurement techniques. simulations, and the theoretical modeling of transportation phenomena under extreme conditions, among other things, providing new insights and perspectives.

# **Guest Editors**

Dr. Haidong Wang

Institute of Engineering Thermophysics, Department of Engineering Mechanics, Tsinghua University, Beijing 100084, China

Dr. Run Hu

School of Energy and Power Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

### Deadline for manuscript submissions

closed (20 August 2025)



an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed



mdpi.com/si/187778

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)