



Key Materials in Nuclear Reactors

Guest Editors:

Prof. Dr. Weizhong Han

Center for Advancing Materials
Performance from the
Nanoscale, State Key Laboratory
for Mechanical Behavior of
Materials, Xi'an Jiaotong
University, Xi'an 710049, China

Dr. Jing Hu

China Nuclear Power Technology
Research Institute, Shenzhen,
China

Deadline for manuscript
submissions:

10 November 2024

Message from the Guest Editors

This Special Issue on key materials in nuclear reactors will provide a platform on which to share cutting-edge research, exchange ideas, and foster a multidisciplinary dialogue that can lead to breakthroughs in material development, characterization techniques, and applications in the nuclear industry.

We cordially invite you to contribute to the Special Issue by presenting your research papers on nuclear materials; the topics of interest include, but are not limited to the following:

1. Nuclear reactor materials
2. Nuclear fuel cycle and materials
3. Radiation effects on materials
4. Nuclear waste management and disposal
5. Structural integrity and material performance
6. Radiation shielding materials
7. Nuclear material characterization techniques
8. Materials for fusion reactors

Thank you for considering our invitation, and we look forward to welcoming you to this Special Issue on key materials in nuclear reactors.





an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)