

Special Issue

Scientific Advances in Nuclear Waste Management

Message from the Guest Editor

In this Special Issue, scientific advances in nuclear waste management are presented. Potential topics for this Special Issue include, but are not limited to, the following:

- Management of uranium and/or thorium mining waste;
- Management of radioactive waste related to the extraction of critical minerals from various feedstocks such as monazite ores and produced waters;
- Reprocessing of used nuclear fuel;
- Technologies for the immobilization of nuclear waste at various levels ranging from low (LLW), to intermediate (ILW), and to high (HLW);
- Waste-form development and characterization;
- Siting studies for geological repositories;
- Buffer materials for engineered buffer systems (EBSs): their development and characterization;
- Development, verification, and validation of source-term model for radionuclides;
- Geochemical analogue studies of source-term elements such as U, Th, and Re that can be applied to elucidate the geochemical behaviours of source-term radionuclides in the near- and far-fields of geological repositories.

Guest Editor

Dr. Yongliang Xiong

Nuclear Waste Disposal Research & Analysis, Sandia National Laboratories (SNL), 1515 Eubank Boulevard SE, Albuquerque, NM 87123, USA

Deadline for manuscript submissions

closed (5 January 2026)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



mdpi.com/si/229732

Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)