

## Special Issue

# New Advances in Nuclear Systems, Reactor Physics, and Neutrino Monitoring of Reactors

### Message from the Guest Editors

Nuclear systems play a prominent role in energy production at the global level, and reactor physics is a lively field of research both for industrial applications and fundamental physics. Nowadays, this field is further enriched by neutrino reactor monitoring and the study of reactors as neutrino sources. In the last decade we have witnessed tremendous advances in reactor science, which deserve to be a focus of applied science. This Special Issue on "New Advances in Nuclear Systems, Reactor Physics, and Neutrino Monitoring of Reactors" testifies for such advances and is aimed at gathering researchers from all over the world to provide new insights and novel results in the field. The main subjects of this Special Issue are:

Advances in Generation IV reactors.  
Reactor modeling (thermofluids, fuel and moderators, nuclear reaction chains, mechanics, etc.).  
Reactor monitoring.  
Reactors as neutrino sources.  
Neutrino monitoring of nuclear plants.  
Fission reactions and neutrino production.  
Accelerator-driven reactors.

---

### Guest Editors

Dr. Alessandro Minotti

1. Department of Physics, University of Milano-Bicocca, Piazza della Scienza 3, I-20126 Milan, Italy
2. Istituto Nazionale di Fisica Nucleare-Sezione di Milano Bicocca, Piazza della Scienza 3, I-20126 Milan, Italy

Dr. Antonio Branca

1. Department of Physics, University of Milano-Bicocca, Piazza della Scienza 3, I-20126 Milan, Italy
2. Istituto Nazionale di Fisica Nucleare-Sezione di Milano Bicocca, Piazza della Scienza 3, I-20126 Milan, Italy

---

### Deadline for manuscript submissions

closed (13 December 2023)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/112130](https://mdpi.com/si/112130)

*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto:energies@mdpi.com)

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





# Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[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)