

## Special Issue

# Advanced and Emerging Technologies for Waste Valorization

### Message from the Guest Editors

Increased waste and residue generation as a result of rapid population growth and urbanization and their associated environmental impacts are some of the key challenges of today's economy. In recent years, waste valorization has gained growing interest as an alternative option for waste disposal and landfills. Waste valorization deals with the reuse, recycling, or composting of unwanted residues. It involves the extraction and recovery processes of valuable compounds, materials, and chemicals from waste streams and transforming them into value-added products or sources of energy. Different technologies have been employed for the conversion of waste streams into value-added products. This Special Issue is dedicated to research on advanced and emerging technologies that can contribute to higher extraction efficiency and lower energy consumption compared to conventional technologies. Topics of interest include the use of different non-conventional technologies such as ultrasound, microwaves, and supercritical and subcritical treatments for the extraction and conversion of different types of waste, such as agricultural waste, food waste, wastewater sludge, etc.

---

### Guest Editors

Dr. Laleh Nazari

National Research Council Canada (NRC), Aquatic and Crop Resource Development Research Centre, Halifax, NS B3H 3Z1, Canada

Dr. Yulin Hu

Assistant Professor, Faculty of Sustainable Design Engineering, University of Prince Edward Island, Charlottetown, PE, Canada

---

### Deadline for manuscript submissions

closed (10 April 2023)



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.2



[mdpi.com/si/137669](https://mdpi.com/si/137669)

*Energies*

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 3.0  
CiteScore 6.2



[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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)