

## Special Issue

# Nanomaterials and Their Applications in Energy Storage and Conversion

### Message from the Guest Editors

This Special Issue presents and collects papers that explore the theory, design, synthesis, and characterization of materials for applications in energy conversion and storage systems, including electrocatalysis, supercapacitors, perovskite materials, metal-ion batteries, and emerging metal-air batteries. Topics of interest for publication include, but are not limited to, the following:

- Research investigating the performance and durability of advanced nanomaterials in energy storage and conversion technologies.
- Nanomaterials for the hydrogen evolution reaction, oxygen evolution reaction, and oxygen reduction reaction.
- Materials in perovskite solar cells.
- Novel applications of nanomaterials in emerging/non-conventional energy storage and conversion systems.
- Sustainability of materials in energy storage and conversion technologies.
- Materials for metal-ion batteries, metal-air batteries, and supercapacitors.
- Theoretical and modeling approaches for nanomaterials in electrochemical energy systems.
- Material recovery from disposed electrochemical energy storage and conversion devices such as Li-ion Batteries, fuel cells, and supercapacitors.

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### Guest Editors

Dr. Jean Marie Vianney Nsanzimana

Department of Industrial Engineering, University of Padua, Via Francesco Marzolo, 1, 35122 Padua, Italy

Dr. Theophile Niyitanga

School of Materials Science and Engineering, Yeungnam University, Gyeongsan 38541, Republic of Korea

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### Deadline for manuscript submissions

closed (31 October 2025)



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

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## 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.

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### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University  
Niccolò Cusano, 00166 Roma, Italy

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