

Special Issue

Advanced Manufacturing Processes for Emerging Energy Storage Technologies

Message from the Guest Editors

The transition to sustainable and low-carbon energy systems demands breakthrough developments in energy storage technologies. From lithium-ion and solid-state batteries to next-generation supercapacitors and redox flow batteries, the performance, scalability, and affordability of these devices depend not only on advanced materials but also on innovative manufacturing processes. This Special Issue of *Processes* invites original research articles, reviews, and perspectives that highlight recent advances in manufacturing technologies for emerging energy storage systems. Topics of interest include, but are not limited to, the following:

- Novel fabrication techniques for electrodes, electrolytes, and cell architectures;
- Additive manufacturing (3D/4D printing) and digital manufacturing for energy devices;
- Process optimization and scale-up for battery and capacitor production;
- Green and sustainable processing routes for energy storage materials;
- Integration of AI, machine learning, and Industry 4.0 in energy device manufacturing;
- In situ monitoring, modeling, and control of manufacturing processes;
- Life-cycle assessment and process intensification for sustainable production

Guest Editors

Prof. Dr. Hicham Es-Soufi

Higher National School of Chemistry, Ibn Tofail University, Kenitra, Morocco

Dr. Hssain Bih

Laboratory of Processes, Energy, Materials, and Environment (LPEME), National School of Applied Engineering-Khouribga, Sultan Moulay Slimane University, Beni Mellal 23000, Morocco

Deadline for manuscript submissions

31 March 2026



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/251377

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

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





Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, 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, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))