

Special Issue

Advancements in Photovoltaic Technologies: Innovations for Enhanced Energy Conversion and Efficiency

Message from the Guest Editors

This Special Issue focuses on breakthroughs in photovoltaic (PV) technology to enhance energy conversion efficiency and sustainability in solar energy systems. We invite original research articles, reviews, and perspectives on various aspects of photovoltaic advancements, including:

- Development of solar cells, such as tandem and multijunction types.
- Emerging materials like perovskites, organic photovoltaics, and quantum dot solar cells.
- Advances in thin-film and flexible solar cell technologies.
- Integration of PV systems with smart grids and energy storage solutions.
- Innovations in cell architecture and design for energy conversion.
- Strategies to reduce energy losses and enhance cell longevity.
- Scaling up PV technologies for industrial application.
- Manufacturing advancements and cost reduction techniques.
- Environmental and lifecycle assessments of PV systems.

This issue aims to foster collaboration among researchers, engineers, and industry professionals, promoting progress in photovoltaic technology and its vital role in a sustainable energy future.

Guest Editors

Dr. Mohammed Gmal Osman Abdelfadeel

Doctoral School of Energy Engineering, National University of Science and Technology Politehnica Bucharest, 010029 București, România

Prof. Dr. Gheorghe Lazaroiu

University MARITIMA of Constanta, 900663 Constanta, Romania

Deadline for manuscript submissions

30 November 2025



Processes

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CiteScore 5.5



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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

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