Special Issue

Advancements in Photocatalytic Nanostructures: Synthesis, Characterization and Applications

Message from the Guest Editor

This Special Issue aims to provide a comprehensive overview of the latest advancements in photocatalytic nanostructures, focusing on their synthesis, characterization, and diverse applications. As the global demand for sustainable energy solutions and environmental remediation continues to grow, photocatalysis has emerged as a promising approach to harnessing solar energy for various chemical transformations. We welcome contributions that explore novel synthetic methods for developing photocatalytic nanostructures, including but not limited to green synthesis, sol-gel processes, hydrothermal techniques, and innovative surface modification strategies. Furthermore, we seek research articles that highlight the practical applications of photocatalytic nanostructures in areas such as wastewater treatment, air purification, CO2 reduction, and hydrogen production. By showcasing interdisciplinary approaches and real-world applications, this Special Issue aims to bridge the gap between fundamental research and technological implementation. We invite researchers to submit their work, with the aim of fostering vibrant discourse on the future of photocatalytic nanostructures.

Guest Editor

Prof. Dr. Giane Gonçalves Lenzi
Chemical Engineering Department, Federal University of Technology-Paraná, Ponta Grossa 84017-220, Brazil

Deadline for manuscript submissions

26 January 2026

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/224678

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

mdpi.com/journal/processes

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

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))