Special Issue

Semiconductors Design, Synthesis and Applications in Energy/Environmental Photocatalysis

Message from the Guest Editor

With the world's demand for energy and environmental costs have constantly increased, the development of efficient catalysts for clean energy production is, therefore, of significant importance. Heterostructured photocatalysts/photoelectrodes exhibit a better performance than the corresponding single-component counterparts. The construction of heterostructured materials with a close contact interface and strong interfacial interactions is, thus, vital for developing highly efficient catalysts for clean energy production, relieving future energy and environmental crises. This Special Issue, titled "Semiconductors Design, Synthesis and Applications in Energy/Environmental Photocatalysis", invites high-quality papers on topics including but not limited to:

- Process of constructing heterostructure materials with strong interfacial interactions;
- Designed construction of novel heterostructure for photocatalytic water splitting;
- Design of efficient heterojunction photoanodes for water oxidation;
- Mechanism of charge transfer within heterostructures;
- Theoretical calculation of interfacial interactions in inorganic/organic heterostructures.

Guest Editor

Dr. Jianfeng Ye

Department of Chemistry, Huazhong Agricultural University, Wuhan 430070, China

Deadline for manuscript submissions

closed (20 July 2025)

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/204677

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))