

Special Issue

Advances in Combustion Processes: Fundamentals and Applications

Message from the Guest Editors

Combustion science remains a cornerstone of energy systems, industrial processes, and technological innovation, driving advancements from power generation to aerospace propulsion. While decarbonization efforts have spurred significant interest in alternative fuels, fossil fuels remain integral to global energy infrastructure. Their continued use necessitates innovations in cleaner combustion technologies, carbon capture, and emission mitigation. Concurrently, alternative fuels such as hydrogen, ammonia, biofuels, and metal powders offer pathways to reduce greenhouse gas emissions, but which require rigorous scientific validation to ensure scalability and safety. Topics of interest include, but are not limited to, the following:

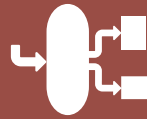
- Fundamental Combustion Characterization;
- Reaction Kinetics and Mechanisms;
- Diagnostics and Modeling: in situ optical diagnostics, machine learning-enhanced simulations, and high-fidelity CFD.
- Combustion applications: experimental and computational research;
- Emission Control and Sustainability;
- Cross-Fuel Comparative Analysis.

Guest Editors

Dr. Xinlu Han
Dr. Zhongqian Ling
Dr. Dingkun Yuan

Deadline for manuscript submissions

closed (30 April 2026)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/232553

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))