

Special Issue

Structure Optimization and Transport Characteristics of Porous Media

Message from the Guest Editors

Porous media are central to environmental sustainability and energy utilization. They enable targeted pollutant capture and CO₂ sequestration through structural optimization, while driving efficient operations (e.g., hydrocarbon recovery, geothermal energy) via advanced transport engineering. Achieving these objectives requires an integrated framework uniting materials science, fluid dynamics, and AI. This Special Issue spotlights research on the co-optimization of pore-scale design and system-scale transport control across diverse applications, inviting innovations that leverage AI to decode complex phenomena and deliver scalable solutions.

Guest Editors

Dr. Zhenlong Song

Prof. Dr. Tingting Wang

Dr. Kunpeng Zhang

Deadline for manuscript submissions

30 September 2025



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/230082

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))