Special Issue

Unconventional Energy Exploration Technology

Message from the Guest Editor

As global energy demands rise, the transition to sustainable systems is urgent. Unconventional energy resources, including shale gas, methane hydrates, geothermal reservoirs, hydrogen energy, and bioenergy, are critical for the future energy portfolio. Advances in exploration technologies, data-driven optimization, and sustainable practices are essential for responsibly unlocking these resources. This Special Issue aims to present cutting-edge advancements in the exploration, extraction, environmental management, and sustainable integration of these resources, covering fundamental theory, technological innovations, numerical modeling, and machine learning research. Topics of interest include:

- Advanced Geophysical Exploration Technologies
- Horizontal Drilling and Production Technology
- Energy Storage Technologies
- Fracturing Technologies
- AI-Driven Modeling for Energy Systems
- Numerical Simulation Methods for Flow in Porous Media
- Policy and Economic Analysis of Unconventional Energy
- Environmental Risk and Sustainability Assessment.

Guest Editor

Dr. Dongyu Wu
School of Geosciences and Info-Physics, Central South University, Changsha 410083, China

Deadline for manuscript submissions

20 July 2026

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/233912

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)

MDPI