

Special Issue

Optimization and Simulation of Intelligent Oil and Gas Wells

Message from the Guest Editors

Improving oil and gas production efficiency and reducing costs have become the inevitable choice for oil companies to improve competitiveness and anti-risk ability. Oil companies are looking to improve the quality and management of their decisions across the industry chain through data analytics, real-time monitoring, and automation. This Special Issue aims to present and disseminate the most recent advances related to the application of artificial intelligence in well drilling, reservoir simulation, oil production, hydraulic fracturing, etc. Topics of interest for publication include but are not limited to:

- All aspects of well drilling, reservoir simulation, oil production, hydraulic fracturing, etc.
- Trajectory control, risk detection, the rate of penetration prediction, risk management, and real-time prediction.
- Cutting transport, gas–liquid two-phase flow, and critical transport velocity.
- Gas kick, gas–liquid two-phase flow, kick handling, drilling fluid properties, and flow pattern recognition.
- History matching, production forecasting, and production optimization.
- Proppant transport, hydraulic fracturing design, and hydraulics optimization.

Guest Editors

Dr. Zhengming Xu

Prof. Dr. Feifei Zhang

Prof. Dr. Xiaofeng Sun

Prof. Dr. Qinzhuo Liao

Dr. Song Deng

Dr. Zhaopeng Zhu

Deadline for manuscript submissions

closed (16 January 2023)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/124395

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://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)