Special Issue

Recent Advances in Reservoir Simulation and Carbon Utilization and Storage

Message from the Guest Editors

Unconventional oil and gas development technologies need to incorporate special seepage flow laws in unconventional oil and gas reservoirs (e.g., non-Darcy flow and multi-scale flow in naturally fractured tight reservoirs), so as to be effectively applied to practice and guide production. This Special Issue aims to present and disseminate the most recent advances related to unconventional reservoir numerical simulation, unconventional reservoir physical simulation, and the utilization and underground storage of carbon dioxide in the development of petroleum reservoirs.

- Reservoir numerical/physical simulation;
- Microscale and nanoscale fluid flow in unconventional reservoirs;
- Multiscale pore structure characterization of unconventional reservoirs;
- Application of microfluidics and nanofluidics experiments in unconventional reservoirs;
- Multiscale simulation of oil and gas flow in unconventional reservoirs;
- Seepage flow mechanics in unconventional reservoirs;

Guest Editors

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Deadline for manuscript submissions

closed (31 January 2025)

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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.

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