

Special Issue

New Technology of Unconventional Reservoir Stimulation and Protection

Message from the Guest Editors

As oil and gas development moves toward higher efficiency, lower carbon emissions and greater intelligence, stimulation technologies are evolving toward diversification and precision. This Special Issue aims to bring together recent advances and engineering practices in enhanced unconventional oil and gas recovery, with a focus on hydraulic fracturing, temporary plugging and diversion, CO₂-based fracturing and multi-physics coupling simulations. The issue also considers the supportive role of artificial intelligence in areas such as fracture propagation prediction, optimization of fracturing parameters and monitoring data analysis. We encourage contributions that integrate fundamental research with field applications, including experimental studies, numerical modeling and case analyses. Through this Special Issue, we seek to deepen the understanding of stimulation mechanisms and promote the integration of new materials, advanced technologies and intelligent methods to support efficient development of unconventional reservoir.

Guest Editors

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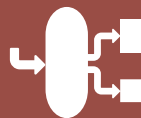
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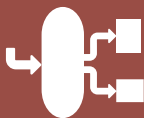


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