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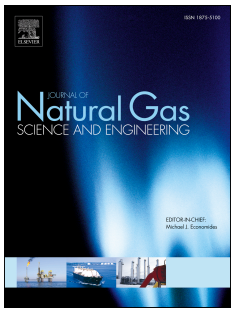

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Modeling Injection-Induced Seismicity through Calculation of Radiated Seismic Energy

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Key Points:

- The developed methodology is capable of identifying injection-induced seismic events by calculating radiated seismic energy,
- Assuming fluid pressure inside injection boreholes is directly related to the fluid pressure within fault planes, gradually increasing the injection pressure significantly reduces the seismic energy magnitude,
- Seismic moment may not be representative of radiated seismic energy generated by injection-induced events

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