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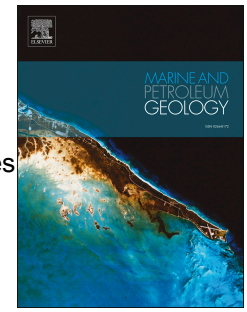

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Geochemical and geological characterization of marine–continental transitional shales from Longtan Formation in Yangtze Area, South China

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HIGHLIGHTS

- Highly organic-rich, thermally over-matured and type III kerogen are developed.
- Mixed organic matters originate from weakly oxidizing to weakly reducing environment.
- Rich clays will contribute for gas sorption but hinder reservoir fracturing.
- Various kinds of shale pores within nanometer to micrometer scale are well developed.
- Longtan shales show good potential of shale gas but great production difficulty.