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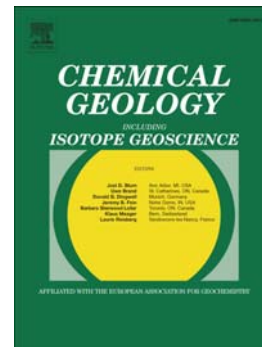
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The enrichment of heavy iron isotopes in authigenic pyrite as a possible indicator of sulfate-driven anaerobic oxidation of methane: Insights from the South China Sea

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ABSTRACT

Sulfate-driven anaerobic oxidation of methane (SO₄-AOM) and organoclastic sulfate reduction (OSR) in marine sediments commonly lead to the precipitation of authigenic pyrite with characteristic sulfur isotopic compositions. Yet, no reports on the iron isotopic composition of SO₄-AOM generated pyrite exist to the best of our knowledge and the processes controlling the distribution of iron isotopes during this biogeochemical process are not understood. To investigate

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