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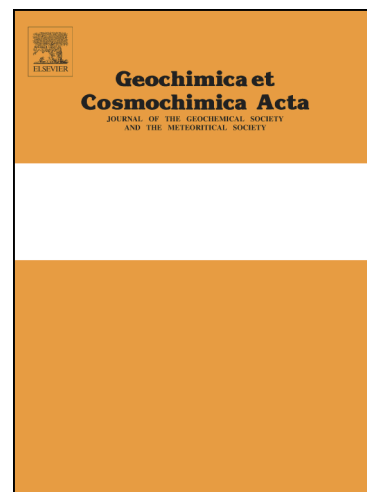
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Iron isotope biogeochemistry of Neoproterozoic marine shales

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Abstract

Iron isotopes have been widely applied to investigate the redox evolution of Earth's surface environments. However, it is still unclear whether iron cycling in the water column or during diagenesis represents the major control on the iron isotope composition of sediments and sedimentary rocks. Interpretation of isotopic data in terms of oceanic redox conditions is only possible if water column processes dominate the isotopic composition, whereas redox interpretations are less straightforward if diagenetic iron cycling controls the

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