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Early crustal evolution of the Yangtze Craton, South China: New constraints from zircon U-Pb-Hf isotopes and geochemistry of ca. 2.9–2.6 Ga granitic rocks in the Zhongxiang Complex

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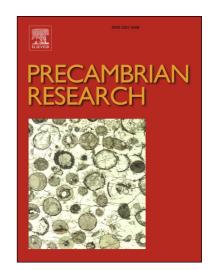
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## **ACCEPTED MANUSCRIPT**

Early crustal evolution of the Yangtze Craton, South China: New constraints from zircon U-Pb-Hf isotopes and geochemistry of ca. 2.9–2.6 Ga granitic rocks in the Zhongxiang Complex

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### **ABSTRACT**

We report here new zircon U-Pb age and Hf-isotope as well as geochemical analyses of the recently discovered Archean-Paleoproterozoic Zhongxiang Complex in the northern-central Yangtze Craton, South China, and interpret the early crustal evolution of the Yangtze Craton. Zircon LA-ICP-MS dating yielded magmatic crystallization ages of ca. 2.90–2.87 Ga for two monzogranites, ca. 2.77 Ga for a trondhjemitic gneiss, and ca. 2.67–2.62 Ga for three potassic granites. The trondhjemitic gneiss also contains zircon rims that record a metamorphic event at ca. 2.08 Ga. These results demonstrate that the Zhongxiang Complex is significantly older

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