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Precise and Aaccurate Re–Os Isotope Dating of Organic-rich Sedimentary Rocks by Thermal Ionization Mass Spectrometry with an Improved H_2O_2-HNO_3 Digestion Procedure

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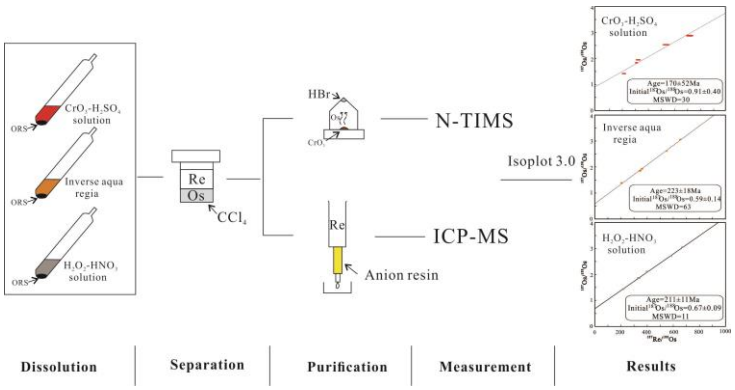
Graphical Abstract



Highlights:

- Assessing an alternate digestion medium, Hydrogen peroxide (H_2O_2) in a nitric acid medium (H_2O_2-HNO_3), for Re-Os isotope analysis in organic-rich sedimentary rocks.
- This medium can electively liberate hydrogenous Re and Os components from non-hydrogenous detrital Re and Os components.
- This method can increase the precision and accuracy of Re–Os depositional ages of organic-rich sedimentary systems

ABSTRACT