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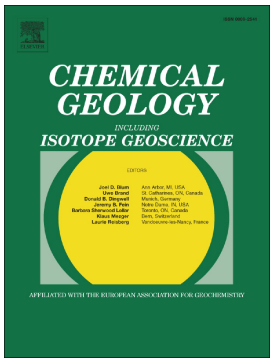

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Signal or noise? Isolating grain size effects on Nd and Sr isotope variability in Indus delta sediment provenance

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Highlights

- Grain size controlled Nd and Sr isotope variability is observed in Indus delta over the last 15 k.y.
- Mineralogy and grain size abundance variably control Nd and Sr isotopic compositions over time
- Parallel evolution and fractionation of $^{87}Sr/^{86}Sr$ values can be observed between <63 μm and 63–125 μm sediment
- Mineralogy, grain size, and analytical error cause no more than ±1.04 ε_{Nd} and ±0.0099 $^{87}Sr/^{86}Sr$ change in the bulk siliciclastic sediments
- An excess shift of 0.69–1.91 ε_{Nd} units over last 15 k.y. indicates provenance change must have occurred in upstream Indus drainage

Abstract