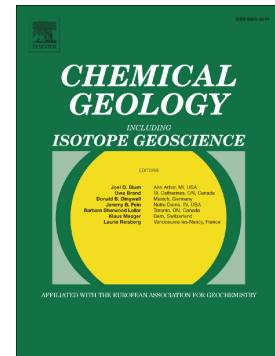


Accepted Manuscript

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PII: S0009-2541(18)30155-4
DOI: doi:[10.1016/j.chemgeo.2018.03.036](https://doi.org/10.1016/j.chemgeo.2018.03.036)
Reference: CHEMGE 18716
To appear in: *Chemical Geology*
Received date: 20 November 2017
Revised date: 26 February 2018
Accepted date: 23 March 2018

Please cite this article as: Tara N. Jonell, Yuting Li, Jurek Blusztajn, Liviu Giosan, Peter D. Clift, Signal or noise? Isolating grain size effects on Nd and Sr isotope variability in Indus delta sediment provenance. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Chemge*(2017), doi:[10.1016/j.chemgeo.2018.03.036](https://doi.org/10.1016/j.chemgeo.2018.03.036)

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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 $^{87}\text{Sr}/^{86}\text{Sr}$ values can be observed between <63 μm and 63–125 μm sediment
- Mineralogy, grain size, and analytical error cause no more than $\pm 1.04 \epsilon_{\text{Nd}}$ and $\pm 0.0099 \epsilon_{^{87}\text{Sr}/^{86}\text{Sr}}$ 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

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