

**GSA Data Repository Item 2018350**

Accompanies Garzanti, E., Limonta, M., Vezzoli, G., An, W., Wang, J., and Hu, X., 2018, Petrology and multimineral fingerprinting of modern sand generated from a dissected magmatic arc (Lhasa River, Tibet), *in* Ingersoll, R.V., Lawton, T.F., and Graham, S.A., eds., *Tectonics, Sedimentary Basins, and Provenance: A Celebration of William R. Dickinson's Career*: GSA Special Paper 540, [https://doi.org/10.1130/2018.2540\(09\)](https://doi.org/10.1130/2018.2540(09)).

Supplementary data associated with this paper include information on sampling sites (Table A1) and the complete datasets for bulk-sand petrography (Table A2), heavy minerals (Table A3), detrital zircon U-Pb geochronology (Table A4), Hf isotope signatures of zircon grains (Table A5), trace-element data on detrital apatite (Table A6), Sm and Nd isotope signatures of apatite grains (Table A7), and geochemistry of detrital rutile (Table A8), garnet (Table A9), and monazite (Table A10). Raman-spectroscopy data on detrital amphibole, pyroxene and epidote-group minerals are provided in Table A11. Table captions and methodological details, including the description of the approach followed in the calculation of provenance budgets and data sources for zircon ages in the Lhasa Block are given in Appendix A. The Google-Earth map of sampling sites Lhasariver.kmz is also provided.