

ALBERTO RESENTINI

Associate Professor

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SCIENTIFIC INTERESTS

<i>Main topics:</i>	Sediment provenance and source discrimination; physical and chemical processes affecting sediment composition; source to sink evolution of the sedimentary flux; automatic data collection
<i>Techniques:</i>	Bulk petrography; Raman spectroscopy; Detrital geo-thermochronology (AFT, Zircon U-Pb); Geochemistry
<i>Natural Labs:</i>	European Alps, Himalaya, Africa, China

PROFESSIONAL EXPERIENCE

<i>Since 2021</i>	Associate Professor 04/A2 GEO/02, University Milano Bicocca
<i>2018-2021</i>	Researcher 04/A2 GEO/02, University Milano Bicocca
<i>2011-2018</i>	Post-Doc in Provenance Studies, University Milano Bicocca

EDUCATION

<i>2011</i>	PhD in Earth Sciences University Milano Bicocca. "Quantitative provenance analysis of modern sands: bulk petrography, heavy minerals, apatite fission tracks"
<i>2007</i>	MSc in Earth Sciences University Milano Bicocca. "Composition of modern sediments derived from the Penninic Units of the Eastern Alps."

MENTORING

<i>PhD</i>	Supervisor of two PhD in Geological Sciences, University Milano-Bicocca
<i>BSc/MSc</i>	Supervisor/co-supervisor of 22 thesis, University Milano-Bicocca

TEACHING

<i>Since 2021</i>	Sedimentology (Lab); Sedimentary Geology (Lab)
<i>Since 2018</i>	Geological Mapping

EDITORIAL ACTIVITIES

Associate Editor	Associate Editor of "Journal of Sedimentary Research" "Earth and Planetary Science Letters", "Earth Sciences Reviews", "Geology", "Geochemistry, Geophysics, Geosystems", "Chemical Geology", "Basin Research", "Journal of Sedimentary Research", "Sedimentary Geology", "Catena", "Marine and Petroleum Geology", "Italian Journal of Geosciences", "Geological Journal", "Geological Magazine"
Reviewer	

AWARDS

2017	Research Award (Earth Sciences, 2 nd place); Università degli Studi di Milano Bicocca e Accademia Nazionali dei Lincei
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PUBLICATIONS

2010 - 2022	Author of 37 papers on international journals Scholar: https://scholar.google.com Scopus: https://www.scopus.com/authid
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ORGANIZATION OF MEETINGS AND SCHOOLS

2017	5 th Working Group on Sediment Generation Meeting, Department of Earth and Environmental Sciences, Università Milano Bicocca. https://www.wgsg.info ; https://sites.google.com/unimib.it/5wgsg/home .
2019	IAS 2019. Session "From sediment generation to sediment routing systems" Chaired by: Luca Caracciolo, David Chew, Sergio Andò and Alberto Resentini
2015	Andò, S., Limonta, M., Resentini, A. and Salata, D. Heavy minerals – a key tool in sediment provenance studies. IAS Meeting 2015, Krakow, short course.
2014	Resentini, A., Limonta, M. and Padoan, M. Provenance analysis – Bulk-sediment petrography and heavy minerals. IAS Meeting 2014, Geneva, short course.

SELECTED PUBLICATIONS:

1. Garzanti E., Pastore G., Stone A., Vainer S., Vermeesch P., **Resentini A.** (2022). Provenance of Kalahari Sand: Paleoweathering and recycling in a linked fluvial-aeolian system. *Earth Sciences Reviews*, 103867.
2. Pastore, G., Baird, T., Vermeesch, P., **Resentini, A.**, Garzanti, E. (2021). Provenance and recycling of Sahara Desert sand. *Earth-Science Reviews*, 103606.
3. **Resentini*, A.**, Andò, S., Garzanti, E., Malusà, M. G., Pastore, G., Vermeesch, P., Chanvry, E., Dall'Asta, M. (2020). Zircon as a provenance tracer: Coupling Raman spectroscopy and UPb geochronology in source-to-sink studies. *Chemical Geology*, 555, 119828.
4. **Resentini, A.**, Malusà, M. G., Garzanti, E. (2020) Ongoing exhumation of the Taiwan orogenic wedge revealed by detrital apatite thermochronology: The impact of effective mineral fertility and zero-track grains. *Earth and Planetary Science Letters*, 544, 116374.
5. Liang, W., **Resentini, A.**, Guo, R., Garzanti, E. (2020) Multimineral fingerprinting of modern sand generated from the Tethys Himalaya (Nianchu River, Tibet). *Sedimentary Geology*, 399, 105604.
6. **Resentini*, A.**, Andò, S., Garzanti, E. (2018). Quantifying roundness of detrital minerals by image analysis - sediment transport, shape effects and provenance implications. *Journal of Sedimentary Research*, 88, 276-289.

7. **Resentini*, A.**, Goren, L., Castelltort, S. Garzanti, E. (2017). Partitioning the sediment flux by provenance and tracing erosion patterns in Taiwan. *Journal of Geophysical Research – Earth Surface*, 122, 1430–1454.
8. Wittmann, H., Malusà, M.G., **Resentini, A.**, Garzanti E., Niedermann, S. (2016). The cosmogenic record of mountain erosion transmitted across a foreland basin: source-to-sink analysis of in situ ¹⁰Be, ²⁶Al and ²¹Ne in sediment of the Po river catchment. *Earth and Planetary Science Letters*, 452, 258-271.
9. Malusà, M.G., **Resentini*, A.**, Garzanti, E., 2016. Hydraulic sorting and mineral fertility bias in detrital geochronology. *Gondwana Research*, 31, 1-19.
10. Vermeesch, P., **Resentini, A.**, Garzanti, E., 2016. An R package for statistical provenance analysis. *Sedimentary Geology*, 336, 14-25.
11. Garzanti, E. and **Resentini, A.**, 2016. Provenance control on chemical indices of weathering (Taiwan river sands). *Sedimentary Geology*, 336, 81-95.
12. Nie, J., Stevens, T., Rittner, M., Stockli, M., Garzanti, E., Limonta, M., Bird, A., Andò, S., Vermeesch, P., Saylor, J., Lu, H., Breecker, D., Hu, X., Liu, S., **Resentini, A.**, Vezzoli, G., Peng, W., Carter, A., Ji, S. and Pan, B., 2015. Loess Plateau storage of Northeastern Tibetan Plateau-derived Yellow River sediment. *Nature Communications* 6:8511, DOI: 10.1038/ncomms9511.
13. Munack, H., Korup, O., **Resentini, A.**, Limonta, M., Garzanti, E., Blöthe, J.H., Scherler, D., Wittmann, H. and Kubik, P.W., 2014. Postglacial denudation of western Tibetan Plateau margin outpaced by long-term exhumation. *GSA Bulletin*, 126, 1580-1594.
14. Blöthe, J.H., Munack, H., Korup, O., Fölling, A., Garzanti, E., **Resentini, A.** and Kubik, P.W., 2014. Late Quaternary valley infill and dissection in the Indus River, western Tibetan Plateau margin. *Quaternary Science Reviews*, 94, 102-119.
15. **Resentini*, A.**, Malusà, M.G. and Garzanti, E., 2013. MinSORTING: An Excel® worksheet for modelling mineral grain-size distribution in sediments, with application to detrital geochronology and provenance studies. *Computers and Geosciences*, 59, 90-97.
16. Garzanti, E., Padoan, M., Andò, S., **Resentini, A.**, Vezzoli, G. and Lustrino, M., 2013. Weathering and relative durability of detrital minerals in equatorial climate: Sand petrology and geochemistry in the east African rift. *Journal of Geology*, 121, 547-580.
17. **Resentini, A.** and Malusà, M.G., 2012. Sediment budgets by detrital apatite fission-Track dating (Rivers Dora Baltea and Arc, Western Alps). *Special Paper of the Geological Society of America*, 487, 125-140.
18. Garzanti, E., **Resentini*, A.**, Vezzoli, G., Andò, S., Malusà, M. and Padoan, M., 2012. Forward compositional modelling of Alpine orogenic sediments. *Sedimentary Geology*, 280, 149-164.
19. Garzanti, E., **Resentini*, A.**, Vezzoli, G., Andò, S., Malusà, M.G., Padoan, M. and Paparella, P., 2010. Detrital fingerprints of fossil continental-subduction zones (Axial Belt Provenance, European Alps). *Journal of Geology*, 118, 341-362.