

Professional biography

1993 PhD, Department of Geology, University of Palermo, Italy and Department of Geography, University of Heidelberg, Germany

1994 Postdoctoral Researcher, Risø National Laboratory, Denmark

1995-1997 Postdoctoral Researcher, Department of Geography, University of Cologne, Germany

1997-1999 Postdoctoral Researcher, MPI for Nuclear Physics, Heidelberg, Germany

1999-2003 Lecturer Department of Geography, University of Bonn, Germany

2003 - 2005 Research Associate, Department of Geography, University of Liverpool, UK

2005 – 2017 Lecturer/Senior Lecturer, School of Environmental Sciences, University of Liverpool, UK

Since 2018 Research Associate School of Geology and Geography, University of Salzburg, Austria and School of Environmental Sciences, University of Liverpool, UK

Research interests

- Quaternary geology and stratigraphy
- Shallow marine and terrestrial sediments
- Proxy records of sea-level change
- Geochronology
- Luminescence dating technique

Publications

In total more than 80 publications; IS publications 65; citations 1687; H-index 23; ORCID ID: 0000-0003-1504-333x

Some relevant publications

2021

Mauz, B., Loïc Martin, Michael Discher, Chantal Tribolo, Sebastian Kreutzer, Chiara Bahl, Andreas Lang, Nobert Mercier, 2021. Technical note: On the reliability of laboratory beta-source calibration for luminescence dating. *Geochronology* 3, 371–381, <https://doi.org/10.5194/gchron-3-371-2021>.

Mauz, B., Elmejdoub, N., 2021. A review of last interglacial sea-level proxies in the eastern Mediterranean coastal region. *EarthArXiv*, <https://doi.org/10.5194/essd-2020-357>.

2020

Wang, F., Yongqiang Zong, **Mauz**, B., Jing Fang, Jianfen Li, Lizhu Tian, Yongsheng Chen, Zhiwen Shang, Xingyu Jiang, Giorgio Spada and Daniele Melini, 2020. Holocene sea-level change on the central coast Bohai Bay, China. *Earth Surf. Dynam.*, <https://doi.org/10.5194/esurf-8-679-2020>

Gouramanis C., Switzer A.D, Bristow C.S., Pham D.T., **Mauz B.**, Hoang Q. D., Doan L.D., Lee, Y.S., Soria J.L.A., Pile J., Ngo K.C.T., Nghiem, D., Sloss, C., 2020. Holocene evolution of the Chan May coastal embayment, central Vietnam: Changing coastal dynamics associated with decreasing rates of progradation possibly forced by mid- to late-Holocene sea-level changes. *Geomorphology*, <https://doi.org/10.1016/j.geomorph.2020.107273>.

2019

Kreutzer, S., **Mauz**, B., Martin, L., Mercier, N., 2019. Dose Rate Modelling of Carbonate-Rich Samples - an Implementation of Carb in R. *Ancient TL* 37(2), 1-8.

2018

Hodgson, D.M., Bernhardt, A., Clare, M.A., Da Silva, A.-C., Fosdick, J.C., **Mauz**, B., Midtkandal, I., Owen, A. and Romans, B.W., 2018. Grand Challenges (and Great Opportunities) in Sedimentology, Stratigraphy, and Diagenesis Research. *Front. Earth Sci.* 6:173. doi: 10.3389/feart.2018.00173.

Discher, M., **Mauz**, B., Martin, L., Durcan, J.A., King, G.E., Tsakalos, E., Christodoulakis, J. Lang, A., 2018. Calculating or simulating the dose rate? A comparison. *Radiation Measurements* 120, 202-208.

Abdualhadi, S.A., **Mauz**, B., Joss, S.D.T, Nolan, P., 2018. Detecting and quantifying uranium-series disequilibrium in natural samples for dosimetric dating applications. *Radiation Measurements* 114, 25-31.

Chamberlain, E.L., Törnqvist, T.E., Shen, Z., **Mauz**, B. and Wallinga, J., 2018. Anatomy of Mississippi Delta growth and its implications for coastal restoration. *Science Advances*, 2018;4: eaar4740.

Mauz, B., Shen, Z., Elmejdoub, N. and Spada, G., 2018. No evidence from the eastern Mediterranean for an MIS 5e double peak sea-level highstand. *Quaternary Research* 2018, 1-6.

2015 and older

Mauz, B., Vacchi, M, Green, A., Hoffmann, G. and Cooper, A, 2015. Beachrock. A tool for reconstructing relative sea level in the far-field. *Marine Geology* 362, 1-16.

Mauz, B., Ruggieri, G. and Spada, G., 2015. Terminal Antarctic melting inferred from a far-field coastal site. *Quaternary Science Reviews* 116, 1-11.

Shen, Z., Torbjorn, T., **Mauz**, B., Chamberlain, E., Nijhuis, L.A., 2015. Episodic overbank deposition as a dominant mechanism of floodplain and delta-plain aggradation. *Geology* 43, 875-878.

- Mauz, B.**, Hijma, M., Amorosi, A., Porat, N., Gallili, E. and Bloemendal, J., 2013. Aeolian beach ridges and their significance for climate and sea level: concept and insight from the Levant coast (East Mediterranean). *Earth-Science Reviews* 121, 31-54.
- Mellet, C.L., Hodgson, D.H., Lang, A., **Mauz, B.**, Selby, I. and Plater, A.J., 2012. Preservation of a drowned gravel barrier complex: A landscape evolution study from the north-eastern English Channel. *Marine Geology* 315-318, 115-131.
- Mauz, B.**, Fanelli, F., Elmejdoub, N. and Barbieri, R., 2012. Coastal response to climate change: Mediterranean shorelines during the last interglacial (MIS 5). *Quaternary Science Reviews* 54, 89-98.
- Hernandez, M., **Mauz, B.**, Mercier, N. and Shen, Z., 2012. Evaluating the efficiency of TT-OSL SAR protocols. *Radiation Measurements* 47, 669-673.
- Shen, Z. and **Mauz, B.**, 2012. Optical dating of young deltaic deposits in the Mississippi Delta with a single aliquot method. *Quaternary Geochronology* 10, 110-116.
- Shen, Z.X., Törnqvist, T., Autin, W.J., Mateo, Z.R.P., Straub, K.M. and **Mauz, B.**, 2012. Rapid and widespread response of the Lower Mississippi River to eustatic forcing during the last glacial-interglacial cycle. *Bulletin of the Geological Society of America*, 124, 690-704.
- Mellet, C.L., **Mauz, B.**, Hodgson, D.H., Plater, A.J. and Lang, A., 2012. Optical dating of drowned landscapes: a case study from the English Channel. *Quaternary Geochronology* 10, 201-208.
- Shen, Z., **Mauz, B.** and Lang, A., 2011. Source trap characterization of thermally transferred OSL in quartz. *J. Phys D: Applied Physics* 44, 295405.
- Shen, Z. and **Mauz, B.**, 2011. Estimating the equivalent dose of late Pleistocene fine silt quartz from the Lower Mississippi Valley using a common OSL growth curve. *Radiation Measurements* 46, 649-654.
- Elmejdoub, N., **Mauz, B.** and Jedoui, Y. 2010. Sea level and climatic controls on the late Pleistocene coastal aeolianites in the Cap Bon Peninsula, North-Eastern Tunisia. *Boreas*, 40, 198-207.
- Mauz, B.**, Baeteman, C., Bungenstock, F. and Plater, A.J., 2010. Optical dating of tidal sediments: potentials and limits inferred from the North Sea coast. *Quaternary Geochronology* 5, 667-678.
- Thrasher, I.M., **Mauz, B.**, Chiverrell, R.C. and Lang, A., 2009. Luminescence dating of glaciofluvial deposits: A review. *Earth-Science Reviews* 97, 133–146.
- Nathan, R. and **Mauz, B.**, 2008. On the dose rate estimate of carbonate-rich sediments for trapped charge dating. *Radiation Measurements* 43, 14-25.
- Mauz, B.** and Bungenstock, F., 2007. How to reconstruct trends of late Holocene relative sea level: A new approach using tidal flat clastic sediments and optical dating. *Marine Geology* 237, 225-237.

Mauz, B., Packman, S. and Lang, A., 2006. The alpha efficiency of silt-sized quartz: New data obtained by single and multiple aliquot protocols. *Ancient TL* 24, 47-52.

Poolton, N.R.J., **Mauz, B.**, Lang, A., Jain, M. and Malins, A.E.R., 2006. Optical excitation processes in the near band-edge region of KAlSi_3O_8 and $\text{NaAlSi}_3\text{O}_8$ feldspar. *Radiation Measurements* 41, 542-548.