

## THOMAS KOLB

### LIST OF PUBLICATIONS

#### Submitted

Zöller, L., **Kolb, T.**, 2021. Flussgerölle erzählen Geschichten. – Berichte der Naturwissenschaftlichen Gesellschaft Bayreuth. (submitted)

Tudyka, K., Poręba, G., Szymak, A., Rocznik, J., Pluta, J., Schüler, T., **Kolb, T.**, Murray, A., 2021. Systematic error in  $^{238}\text{U}$  decay chain radionuclides measurements due to  $^{222}\text{Rn}$  emanation from reference materials. – Measurement (in review).

Tudyka, K., Koruszowic, M., Osadnik, R., Poręba, G., Moska, P., Szymak, A., Bluszcz, A., Zhang, J., **Kolb, T.**, Adamiec, G., 2021.  $\mu\text{Rate}$ : an online dose-rate calculator for trapped charge dating. – Archaeometry (in review).

#### 2021

Richter, C, Roettig, C.-B., Wolf, D., Gaertner, A., **Kolb, T.**, Faust, D., 2021. Climate shifts vs. edaphic humidity and the difficulty of palaeoreconstructions - a malacological study on stable isotopes in dune sequences of Fuerteventura. - Journal of Quaternary Science (accepted).

Wolf, D., **Kolb, T.**, Ryborz, K., Heinrich, S., Schäfer, I., Calvo, R., Sanchez, J., Hambach, U., Zech, R., Zöller, L., Faust, D. (2021). Evidence for strong relations between the upper Tagus loess formation (central Iberia) and the marine atmosphere off the Iberian margin during the last glacial period. Quaternary Research, 1-30. DOI:10.1017/qua.2020.119.

#### 2020

Roettig, C-B., **Kolb, T.**, Zöller, L., Zech, M., Faust, D., 2020. A detailed chrono-stratigraphical record of canarian dune archives - Interplay of sand supply and volcanism, Journal of Arid Environments 183. DOI: <https://doi.org/10.1016/j.jaridenv.2020.104240>.

Tudyka, K., Bluszcz, A., Poręba, G., Miłosz, S., Adamiec, G., Kolarczyk, A., **Kolb, T.**, Lomax, J., Fuchs, M., 2020. Increased dose rate precision in combined  $\alpha$  and  $\beta$  counting in the  $\mu\text{Dose}$  system - a probabilistic approach to data analysis. – Radiation Measurements 134. DOI: <https://doi.org/10.1016/j.radmeas.2020.106310>.

#### 2019

Richter, C., Roettig, C.-B., Wolf, D., Groh, K., **Kolb, T.**, Faust, D. (2019): Changes in Pleistocene gastropod faunas on Fuerteventura (Canary Islands) and implications on shifting palaeoenvironmental conditions. – Quaternary Science Reviews 209, pp 63-81. DOI: <https://doi.org/10.1016/j.quascirev.2019.02.005>.

Wolf, D., Ryborz, K., **Kolb, T.**, Calvo Zapata, R., Sanchez Vizcaino, J., Zöller, L. and Faust, D. (2019): Origins and genesis of loess deposits in central Spain, as indicated by heavy mineral compositions and grain-size variability. Sedimentology 66, pp. 1139-1161. DOI: 10.1111/sed.12539

Roettig, C-B., Varga, G., Sauer, D., **Kolb, T.**, Wolf, D., Makowsky, V., Recio Espejo, J. M., Zöller, L., Faust, D. (2019): Characteristics, nature, and formation of palaeosurfaces within dunes on Fuerteventura. – Quaternary Research 91 (1), pp. 4-23. DOI: <https://doi.org/10.1017/qua.2018.52>.

## **2018**

**Kolb, T.**, Fuchs, M. (2018): Luminescence dating of pre-Eemian (pre-MIS 5e) fluvial terraces in Northern Bavaria (Germany) – benefits and limitations of applying a pIRIR225-approach. – *Geomorphology* 321, 16-32. DOI: <https://doi.org/10.1016/j.geomorph.2018.08.009>.

Schäfer, I.K., Bliedtner, M., Wolf, D., **Kolb, T.**, Zech, J., Faust, D., Zech, R. (2018): A  $\delta^{13}C$  and  $\delta^2H$  leaf wax record from the Late Quaternary loess-paleosoil sequence El Paraíso, Central Spain. – *Palaeogeography, Palaeoclimatology, Palaeoecology* 507, pp. 52-59. DOI: <https://doi.org/10.1016/j.palaeo.2018.06.039>.

Schmidt, C., Böskken, J., **Kolb, T.**, 2018. Is there a common alpha-efficiency in polymineral samples measured by various infrared stimulated luminescence protocols? – *Geochronometria* 45 (1), pp. 160-172. DOI: <https://doi.org/10.1515/geochr-2015-0095>.

**Kolb, T.** (2018): Middle and Upper Pleistocene fluvial terraces in an abandoned valley in Upper Franconia (Germany): Chronology and driving forces. – Bayreuth, 2018. - XXIII, pp. 239. (Dissertation Universität Bayreuth, Fakultät für Biologie, Chemie und Geowissenschaften).

Wolf, D., **Kolb, T.**, Alcaraz-Castaño, M., Heinrich, S., Baumgart, P., Calvo, R., Sánchez, J., Ryborz, K., Schäfer, I., Bliedtner, M., Zech, R., Zöller, L., Faust, D. (2018): Climate deteriorations and Neanderthal demise in interior Iberia. - *Scientific Reports* 8:7048. DOI: <https://doi.org/10.1038/s41598-018-25343-6>.

## **2017**

Schmidt, C., Schaarschmidt, M., **Kolb, T.**, Büchel, G., Richter, D. and Zöller, L. (2017): Luminescence dating of Late Pleistocene eruptions in the Eifel Volcanic Field, Germany. *Journal of Quaternary Science*, 32: 628–638. DOI: <https://doi.org/10.1002/jqs.2961>.

Roettig, C.-B., **Kolb, T.**, Wolf, D., Baumgart, P., Richter, C., Schleicher, A., Zöller, L., Faust, D. (2017): Complexity of Quaternary aeolian dynamics (Canary Islands). – *Palaeogeography, Palaeoclimatology, Palaeoecology* 472, pp 146 – 162. DOI: <https://doi.org/10.1016/j.palaeo.2017.01.039>.

**Kolb, T.**, Fuchs, M., Moine, O., Zöller, L. (2017): Quaternary river terraces and hillslope sediments as archives for paleoenvironmental reconstruction: new insights from the headwaters of the Main River, Germany. – *Zeitschrift für Geomorphologie, Suppl. Issues Vol. 61/1*, pp 53 – 76. DOI: [https://doi.org/10.1127/zfg\\_suppl/2016/0339](https://doi.org/10.1127/zfg_suppl/2016/0339).

## **2016**

**Kolb, T.**, Fuchs, M., Zöller, L. (2016): Deciphering fluvial landscape evolution by luminescence dating of river terrace formation: a case study from Northern Bavaria, Germany. – *Zeitschrift für Geomorphologie, Suppl. Issues Vol. 60/1*, pp 29 – 48. DOI: [https://doi.org/10.1127/zfg\\_suppl/2015/S-00193](https://doi.org/10.1127/zfg_suppl/2015/S-00193).

## **2012**

Zöller, L., Hambach, U., Kleber, A., **Kolb, T.**, Moine, O. & Kühn, P. (2012): Landscape development in the Trebgast Valley north of Bayreuth and its surroundings (Upper Franconia) – ongoing research. – In: Zöller, L. & Petersek, A. (ed.): *From Paleozoic to Quaternary. A field trip from the Franconian Alb to Bohemia*. DEUQUA Excursions, pp 6 – 24.

Zöller, L., Hambach, U., Kleber, A., **Kolb, T.** & Moine, O. (2012): Quaternary valley and slope development in the headwaters of the River Main, Upper Franconia – puzzling ancient stream courses and sedimentary archives. In: Sauer, D. (ed.): *From the northern ice shield to the Alpine glaciations. A Quaternary field trip through Germany*. Greifswald, pp 43 – 64.