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**Publications - Andreas Richter**
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**Peer-reviewed publications****Accepted for publication / in press**

- 01 Canarini, A., Schmidt, H., Fuchslueger, L., Martin, V., Herbold, C., Zezula, D., Gündler, P., Hasibeder, R., Jecmenica, M., Bahn, M., Richter, A. (2021) Ecological memory of recurrent drought modifies soil processes via changes in soil microbial community. **Nature Communications** (accepted for publication).
- 02 Margalef, O., Sardans, J., Maspons, J., Molowny-Horas, R., Fernández-Martínez, M., Janssens, I.A., Ciais, P., Richter, A., Obersteiner, M., Peñuelas, J. (2021) The effect of global change on soil phosphatase activity. **Global Change Biology** (accepted for publication).
- 03 Alteio, L., Séneca, J., Canarini, A., Angel, R., Guseva, K., Jansa, J., Kaiser, C., Richter, A., Schmidt, H. (2021) A critical perspective on interpreting amplicon sequencing data in soil ecological research. **Soil Biology and Biochemistry** 160 (in press).
- 04 Van Langenhove, L., Depaepe, T., Verryckt, L.T., Vallicrosa, H., Fuchslueger, L., Lugli, L., Bréchet, L., Ogaya, R., Llusia, J., Urbina, I., Gargallo-Garriga, A., Grau, O., Richter, A., Peñuelas, J., Van Der Straeten, D., Janssens, I. (2021) Impact of nutrient additions on free-living nitrogen fixation in litter and soil of two French-Guianese lowland tropical forests. **Journal of Geophysical Research: Biogeosciences** (in press).
- 05 Mayerhofer, W., Schintlmeister, A., Dietrich, M., Gorka, S., Wiesenbauer, J., Martin, V., Gabriel, R., Reipert, S., Weidinger, M., Clode, P., Wagner, M., Woebken, D., Richter, A., Kaiser, C. (2021) Recently photoassimilated Carbon and fungal-delivered Nitrogen are spatially correlated at the cellular scale in the ectomycorrhizal tissue of *Fagus sylvatica*. **New Phytologist** (in press).
- 06 Bi, Q.-F., Jin, B.-J., Zhu, D., Jiang, Y.-G., Zheng, B.-X., O'Connor, P., Yang, X.-R., Richter, A., Lin, X.-Y., Zhu, Y.-H. (2021) How can fertilization regimes and durations shape earthworm gut microbiota in a long-term field experiment? **Ecotoxicology and Environmental Safety** (in press)

**Published papers** (ISI *Journal Citation Reports* listed journals only)

- 07 Mooshammer, M., Wanek, W., Jones, S.H., Richter, A., Wagner, M. (2021) Cyanate is a low abundance but actively cycled nitrogen compound in soil. **Communications Earth & Environment** 2:161.
- 08 Meeran, K., Ingrisch, J., Reinthaler, D., Canarini, A., Müller, L., Pötsch, E., Richter, A., Bahn, M. (2021) Warming and elevated CO<sub>2</sub> intensify drought and recovery responses of grassland carbon allocation to soil respiration. **Global Change Biology** 27: 3230-3243.
- 09 Wasmund, K., Pelikan, C., Schintlmeister, A., Wagner, M., Watzka, W., Richter, A., Bhatnagar, S., Noel, A., Hubert, C.R.J., Rattei, T., Hofmann, T., Hausmann, B., Herbold, C.W., Loy, A. (2021) Genomic insights into diverse bacterial taxa that degrade extracellular DNA in marine sediments. **Nature Microbiology** 6:885-898.
- 10 Siewert, M.B., Lantuit, H., Richter, A., Hugelius G. (2021) Permafrost causes unique fine-scale spatial variability across tundra soils. **Global Biogeochemical Cycles** 35, e2020GB006659.
- 11 Sardans, J., Vallicrosa, H., Zuccarini, P., Farré-Armengol, G., Fernández-Martínez, M., Guille P., Gargallo-Garriga, A., Ciais, P., Janssens, I.A., Obersteiner, M., Richter, A., Peñuelas, J. (2021)

- Empirical support for the Biogeochemical Niche Hypothesis in forest trees. **Nature Ecology and Evolution** 5: 184-194.
- 12 Maraňon-Jimenez, S., Radujkovic, D., Verbruggen, E., Grau, O., Cuntz, M., Peñuelas, J., Richter, A., Schrupf, M., Rebmann, C. (2021) Shifts on the abundances of saprotrophic and ectomycorrhizal fungi at altered leaf litter inputs. **Frontiers in Plant Science** 12: 682142.
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  - 14 Bender, K.M., Svenning, M.M., Hu, Y., Richter, A., Schückel, J., Liebner, S., Tveit, A.T. (2021) Microbial responses to herbivory-induced vegetation changes in a high-Arctic peatland. **Polar Biology** 44: 899-911.
  - 15 Séneca, J., Pjevac, P., Canarini, A., Herbold, C., Zioutis, C., Dietrich, M., Simon, E., Prommer, J., Bahn, M., Pötsch, E., Wagner, M., Wanek, W., Richter, A. (2020) Composition and activity of nitrifier communities in soil are unresponsive to elevated temperature and CO<sub>2</sub>, but strongly affected by drought. **ISME Journal** 14: 3038-3053.
  - 16 Simon, E., Canarini, A., Martin, V., Séneca, J., Böckle, T., Reinthaler, D., Pötsch, E.M., Piepho, H.-P., Bahn, M., Wanek, W., Richter, A. (2020) Microbial growth and carbon use efficiency show seasonal responses in a multifactorial climate change experiment. **Communications Biology** 3: 584.
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  - 20 Walker, T.W.N., Janssens, I.A., Sigurdsson, B.D., Richter, A., Peñuelas, J., Leblans, N.I.W., Bahn, M., Bartrons, M., De Jonge, C., Fuchslueger, L., Gargallo-Garriga, A., Gunnarsdóttir, G.E., Maraňón-Jiménez, S., Oddsdóttir, E.S., Ostonen, I., Poeplau, C., Prommer, J., Radujković, D., Sardans, J., Sigurðsson, P., Soong, J.L., Vicca, S., Wallander, H., Weedon, J.T., Ilieva-Makulec, K., Verbruggen, E. (2020) A systemic overreaction to years versus decades of warming in a subarctic grassland ecosystem. **Nature Ecology and Evolution** 4: 101-108.
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