
Publications - Andreas Richter
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Peer-reviewed publications

(ISI Journal Citation Reports listed journals only)

2017

- 01 Turner, S., Meyer-Stüve, S., Schippers, A., Guggenberger, G., Schaarschmidt, F., Wild, B., Richter, A., Dohrmann, R., Mikutta, R. (2017) Microbial utilization of mineral-associated nitrogen in soils. **Soil Biology and Biochemistry** 104: 185-196.

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- 02 Lockhart, E., Wild, B., Richter, A., Simonin, K., Merchant, A. (2016) Stress-induced changes in carbon allocation among metabolite pools influence isotope-based predictions of water use efficiency in *Phaseolus vulgaris*. **Functional Plant Biology** 43: 1149-1158.
- 03 Smith, M., Wild, B., Richter, A., Simonin, K., Merchant, A. (2016) Carbon isotope composition of carbohydrates and polyols in leaf and phloem sap of *Phaseolus vulgaris* L. influences predictions of plant water use efficiency. **Plant and Cell Physiology** 57:1756-1766.
- 04 Fuchslueger, L., Bahn, M., Hasibeder, R., Kienzl, S., Fritz, K., Schmitt, M., Watzka, M., Richter, A. (2016) Drought history affects grassland plant and microbial carbon turnover during and after a subsequent drought event. **Journal of Ecology** 104: 1453-1465.
- 05 Palmtag, J., Ramage, J., Hugelius, G., Gentsch, N., Lashchinskiy, N., Richter, A. and Kuhry, P. (2016) Environmental and landscape controls of soil organic carbon storage in continuous permafrost terrain of the Taymyr Peninsula (N Siberia, Russia). **European Journal of Soil Science** 67: 478-491.
- 06 Wild, B., Gentsch, N., Čapek, P., Diáková, K., Alves, R., Bárta, J., Gittel, A., Hugelius, G., Knoltsch, A., Kuhry, P., Lashchinskiy, N., Mikutta, R., Palmtag, J., Schleper, C., Schneckner, J., Shibistova, O., Takriti, M., Torsvik, V., Urich, T., Watzka, M., Šantrůčková, H., Guggenberger, G., Richter, A. (2016) Plant-derived compounds stimulate the decomposition of organic matter in arctic permafrost soils. **Scientific Reports** 6: 25607.
- 07 Kohl L., Cumming, E., Cox, A., Rietze, A., Morrissey, L., Lang, S.Q., Richter, A., Suzuki, S., Nealson, K.H., Morrill, P.L. (2016) Exploring the metabolic potential of microbial communities in ultrabasic, reducing springs at The Cedars, CA, US: Evidence of microbial methanogenesis and heterotrophic acetogenesis. **Journal of Geophysical Research, Biogeosciences** 121, 1203–1220.
- 08 Spohn, M., Pötsch, E.M., Eichhorst, S.A., Woebken, D., Wanek, W., Richter, A. (2016) Soil microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. **Soil Biology and Biochemistry** 97: 168-175.
- 09 Graham, E.B., Knelman, J.E., Schindlbacher, A., Siciliano, S., Breulmann, M., Yannarell, A., Beman, J.M., Abell, J., Philippot, L., Prosser, J., Foulquier, A., Yuste, J.C., Glanville, H.C., Jones, D., Angel, R., Salminen, J., Newton, R.J., Bürgmann, H., Ingram, L.J., Hamer, U., Siljanen, H., Peltoniemi, K., Potthast, K., Bañeras, L., Hartmann, M., Banerjee, S., Yu, R., Nogaro, G., Richter, A., Koranda, M., Castle, S., Goberna, M., Song, B., Chatterjee, A. Nunes, O.C., Lopes, A.R., Cao, Y., Kaisermann, A., Hallin, S., Strickland, M.S., Garcia-Pausas, J., Barba, J., Kang, H., Isobe, K., Papaspyrou, S., Pastorelli, R., Lagomarsino, A., Lindström, E., Basiliko, N., Nemergut, D.R. (2016) Microbes as engines of ecosystem function: when does community structure enhance predictions of ecosystem processes? **Frontiers in Microbiology** 7: 214.
- 10 Spohn, M., Klaus, K., Wanek, W., Richter, A. (2016) Microbial carbon use efficiency and biomass turnover times depending on soil depth - Implications for carbon cycling. **Soil Biology and Biochemistry** 96: 74-81.

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- 11 Kaiser, C., Franklin, O., Richter, A., Dieckmann, U. (2015) Social interactions within decomposer communities lead to N retention and organic matter build-up in soils. **Nature Communications** 6: 8960.
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- 14 Capek, P., Diakova, K., Dickopp, J.-E., Barta, J., Wild, B., Schnecker, J., Aiglsdorfer, S., Guggenberg, G., Gentsch, N., Hugelius, G., Kuhry, P., Lashchinsky, N., Gittel, A., Schleper, C., Mikutta, R., Palmtag, J., Shibistova, O., Urich, T., Richter, A., Santruckova, H. (2015) The effect of warming on the vulnerability of subducted organic carbon in arctic soils. **Soil Biology and Biochemistry** 90: 19–29.
- 15 Wild, B., Schnecker, J., Knoltsch, J., Takriti, M., Mooshammer, M., Gentsch, N., Mikutta, R., Eloy Alves, R.J., Gittel, A., Lashchinskiy, N., Richter, A. (2015) Microbial nitrogen dynamics in organic and mineral soil horizons along a latitudinal transect in Western Siberia. **Global Biogeochemical Cycles** 29, 567–582.
- 16 Hasibeder, R., Fuchslueger, L., Richter, A., Bahn, M. (2015) Summer drought alters carbon allocation to roots and root respiration in mountain grassland. **New Phytologist** 3: 1117–1127.
- 17 Gentsch, N., Mikutta, R., Alves, R.J.E., Barta, J., Capek, P., Gittel, A., Hugelius, G., Kuhry, P., Lashchinskiy, N., Palmtag, J., Richter, A., Santruckova, H., Schnecker, J., Shibistova, O., Urich, T., Wild, B., Guggenberger, G. (2015) Storage and transformation of organic matter fractions in cryoturbated permafrost soils across the Siberian Arctic. **Biogeosciences** 12, 4525-4542.
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- 21 Geisen, S., Tveit, A.T., Clark, I.M., Richter, A., Svenning, M.M., Bonkowski, M., Urich, T. (2015) Metatranscriptomic census of active protists in soils. **The ISME Journal** 9: 2178-2190.
- 22 Palmtag, J., Hugelius, G., Lashchinskiy, N., Tamstorf, M. P., Richter, A., Elberling, B. and Kuhry, P. (2015) Storage, landscape distribution and burial history of soil organic matter in contrasting areas of continuous permafrost. **Arctic, Antarctic, and Alpine Research** 47: 71-88.
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- 33 Xu, X., Wanek, W., Zhou, C., Richter, A., Song, M., Cao, G., Ouyang, H., Kuzyakov, Y. (2014) Nutrient limitation of alpine plants: Implications from leaf N:P stoichiometry and leaf $\delta^{15}\text{N}$. **Journal of Plant Nutrition and Soil Science** 177: 378-387.
- 34 Stieglmeier, M., Mooshammer, M., Kitzler, B., Wanek, W., Zechmeister-Boltenstern, S., Richter, A., Schleper, C. (2014) Aerobic nitrous oxide production through N-nitrosating hybrid formation in ammonia oxidizing archaea. **ISME Journal** 8: 1135–1146.
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