

Full List of Peer-reviewed articles

117. Siljanen HMP, Alves RJE, Ronkainen JG, Lamprecht RE, Bhattarai HR, Marushchak ME, Martikainen PJ, [Schleper C](#), Biasi C (2019) Archaeal nitrification is a key driver of high nitrous oxide emissions from arctic peatlands. **Soil Biology and Biochemistry** 137: 107539. Doi: 10.1016/j.soilbio.2019.107539.
116. Manoharan L, Kozlowski J, Murdoch RW, Löffler FE, Sousa FL, [Schleper C](#) (2019) Metagenomes from Coastal Marine Sediments Give Insights into the Ecological Role and Cellular Features of *Loki*- and *Thorarchaeota*. **mBio**. doi: 10.1128/mBio.02039-19
115. Alves RJE, Kerou M, Zappe A, Bittner R, Abby SS, Schmidt HA, Pfeifer K, [Schleper C](#) (2019) Ammonia Oxidation by the Arctic Terrestrial Thaumarchaeote *Candidatus Nitrosocosmicus arcticus* Is Stimulated by Increasing Temperatures. **Frontiers in microbiology** 10: 1581. doi: 10.3389/fmicb.2019.01571.
114. Bassani D, Zink IA, Pribasniig T, Wolfinger MT, Romagnoli A, Resch A, [Schleper C](#), Blasi U, La Teana A (2019) Indications for a moonlighting function of translation factor alF5A in the crenarchaeum *Sulfolobus solfataricus*. **RNA Biology** 16(5):675-685. Doi: 10.1080/15476286.2019.1582953
113. Čapek P, Manzoni S, Kaštovská E, Wild B, Diáková K, Bárta J, Schneckner J, Biasi C, Martikainen PJ, Alves RJE, Guggenberger G, Gentsch N, Hugelius G, Palmtag J, Mikutta R, Shibistova O, Urich T, [Schleper C](#), Richter A, Šantrůčková H (2018) A plant-microbe interaction framework explaining nutrient effects on primary production. **Nature Ecology & Evolution** 2(10): 1588-1596. doi: 10.1038/s41559-018-0662-8.
112. Taubner RS, Pappenreiter P, Zwicker J, Smrzka D, Pruckner C, Kolar F, Bernacchi S, Seifert AH, Krajete A, Bach W, Peckmann J, Paulik C, Firneis MG, [Schleper C](#), Rittmann SKR (2018) Biological methane production under putative Enceladus-like conditions. **Nature Communications** 9(1): 748. doi: 10.1038/s41467-018-02876-y.
111. Baumann L, Taubner R, Bauersachs T, Steiner M, [Schleper C](#), Peckmann J, Rittmann S, Birgel D (2018) Intact polar lipid and core lipid inventory of the hydrothermal vent methanogens *Methanocaldococcus villosus* and *Methanothermococcus okinawensis*. **Organic Geochemistry** 126: 33-42. doi: 10.1016/j.orggeochem.2018.10.006.
110. Zwicker J, Birgel D, Bach W, Richoz S, Smrzka D, Grasemann C, Gier S, [Schleper C](#), Rittmann SR, Koşun E, Peckmann J (2018) Evidence for archaeal methanogenesis within veins at the onshore serpentinite-hosted Chimaera seeps, Turkey. **Chemical Geology** 483: 567-580. Doi: 10.1016/j.chemgeo.2018.03.027.
109. Šantrůčková H, Kotas P, Bárta J, Urich T, Čapek J, Palmtag J, Alves RJE, Biasi C, Biáková K, Gentsch N, Gittel A, Guggenberger G, Hugelius G, Lashchinsky N, Martikainen P, Mikutta R, [Schleper C](#), Schneckner J, Schwab C, Shibistova O, Wild B, Richter A (2018) Significance of dark CO₂ fixation in arctic soils. **Soil Biology and Biochemistry** 119: 11-21. doi: 10.1016/j.soilbio.2017.12.021.
108. Abby SS, Melcher M, Kerou M, Krupovic M, Stieglmeier M, Rossel C, Schleper C (2018) *Candidatus Nitrosocaldus cavascurensis*, an Ammonia Oxidizing, Extremely Thermophilic Archaeon with a Highly Mobile Genome. **Frontiers in Microbiology** 9: 28. doi: 10.3389/fmicb.2018.00028.

107. Alves RJE, Minh BQ, Urich T, von Haeseler A, Schleper C (2018) Unifying the global phylogeny and environmental distribution of ammonia-oxidising archaea based on amoA genes. **Nature communications** 9(1): 1517. doi: 10.1038/s41467-018-03861-1.
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105. Söllinger A, Tveit AT, Poulsen M, Noel SJ, Bengtsson M, Bernhardt J, Frydendahl Hellwing AL, Lund P, Riedel K, Schleper C, Højberg O, Urich T (2018) Holistic Assessment of Rumen Microbiome Dynamics through Quantitative Metatranscriptomics Reveals Multifunctional Redundancy during Key Steps of Anaerobic Feed Degradation. **mSystems** 3(4): e00038-18. doi: 10.1128/mSystems.00038-18.
104. Elling FJ, Köneke M, Nicol GW, Stieglmeier M, Bayer B, Spieck E, de la Torre JR, Becker KW, Thomm M, Prosser JI, Herndl GJ, Schleper C, Hinrichs KU. (2017) Chemotaxonomic characterisation of the thaumarchaeal lipidome. **Environmental Microbiology** 19(7):2681-2700. doi: 10.1111/1462-2920.13759.
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100. Wild B, Gentsch N, Čapek P, Diáková K, Alves RJ, 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 VL, 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. doi: 10.1038/srep25607.
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97. Söllinger A, Schwab C, Weinmaier T, Loy A, Tveit AT, Schleper C, Urich T (2015) Phylogenetic and genomic analysis of *Methanomassiliicoccales* in wetlands and animal intestinal tracts reveals clade-specific habitat preferences. **FEMS Microbiology Ecology** 92(1). doi: 10.1093/femsec/fiv149.

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92. Čapek P, Diakova K, Dickopp JE, Bárta J, Wild B, Schneckner J, Alves RJE, Aiglsdorfer S, Guggenberger G, Gentsch N, Hugelius G, Lashchinskiy N, Gittel A, Schleper C, Mikutta R, Palmtag J, Shibistova O, Urich T, Richter A, Šantrůčková H. (2015). The effect of warming on the vulnerability of subducted organic carbon in arctic soils. **Soil Biology & Biochemistry** 90: 19-29.
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