Petr Capek

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2089736/publications.pdf

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33 papers	2,118 citations	331538 21 h-index	414303 32 g-index
36 all docs	36 docs citations	36 times ranked	3157 citing authors

#	Article	IF	Citations
1	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. Nature Climate Change, 2016, 6, 950-953.	8.1	288
2	Input of easily available organic C and N stimulates microbial decomposition of soil organic matter in arctic permafrost soil. Soil Biology and Biochemistry, 2014, 75, 143-151.	4.2	213
3	Distinct microbial communities associated with buried soils in the Siberian tundra. ISME Journal, 2014, 8, 841-853.	4.4	137
4	Rapid degradation of pyrogenic carbon. Global Change Biology, 2012, 18, 3306-3316.	4.2	136
5	Optimal metabolic regulation along resource stoichiometry gradients. Ecology Letters, 2017, 20, 1182-1191.	3.0	118
6	Temperature response of permafrost soil carbon is attenuated by mineral protection. Global Change Biology, 2018, 24, 3401-3415.	4.2	107
7	A plantâ€“microbe interaction framework explaining nutrient effects on primary production. Nature Ecology and Evolution, 2018, 2, 1588-1596.	3.4	100
8	Reviews and syntheses: Carbon use efficiency from organisms to ecosystems â€“ definitions, theories, and empirical evidence. Biogeosciences, 2018, 15, 5929-5949.	1.3	98
9	Effects of Soil Organic Matter Properties and Microbial Community Composition on Enzyme Activities in Cryoturbated Arctic Soils. PLoS ONE, 2014, 9, e94076.	1.1	90
10	Plant-derived compounds stimulate the decomposition of organic matter in arctic permafrost soils. Scientific Reports, 2016, 6, 25607.	1.6	87
11	Storage and transformation of organic matter fractions in cryoturbated permafrost soils across the Siberian Arctic. Biogeosciences, 2015, 12, 4525-4542.	1.3	85
12	Nitrogen dynamics in Turbic Cryosols from Siberia and Greenland. Soil Biology and Biochemistry, 2013, 67, 85-93.	4.2	78
13	Site- and horizon-specific patterns of microbial community structure and enzyme activities in permafrost-affected soils of Greenland. Frontiers in Microbiology, 2014, 5, 541.	1.5	73
14	The effect of warming on the vulnerability of subducted organic carbon in arctic soils. Soil Biology and Biochemistry, 2015, 90, 19-29.	4.2	68
15	Fate of carbohydrates and lignin in north-east Siberian permafrost soils. Soil Biology and Biochemistry, 2018, 116, 311-322.	4.2	59
16	Significance of dark CO2 fixation in arctic soils. Soil Biology and Biochemistry, 2018, 119, 11-21.	4.2	58
17	Amino acid production exceeds plant nitrogen demand in Siberian tundra. Environmental Research Letters, 2018, 13, 034002.	2.2	49
18	Bacterial community of cushion plant Thylacospermum ceaspitosum on elevational gradient in the Himalayan cold desert. Frontiers in Microbiology, 2015, 6, 304.	1.5	44

#	Article	IF	Citations
19	Apparent temperature sensitivity of soil respiration can result from temperature driven changes in microbial biomass. Soil Biology and Biochemistry, 2019, 135, 286-293.	4.2	29
20	Drivers of phosphorus limitation across soil microbial communities. Functional Ecology, 2016, 30, 1705-1713.	1.7	27
21	Coupling the resource stoichiometry and microbial biomass turnover to predict nutrient mineralization and immobilization in soil. Geoderma, 2021, 385, 114884.	2.3	26
22	Incomplete cell disruption of resistant microbes. Scientific Reports, 2019, 9, 5618.	1.6	22
23	Variation in N₂Fixation in Subarctic Tundra in Relation to Landscape Position and Nitrogen Pools and Fluxes. Arctic, Antarctic, and Alpine Research, 2016, 48, 111-125.	0.4	19
24	Indications that long-term nitrogen loading limits carbon resources for soil microbes. Soil Biology and Biochemistry, 2017, 115, 310-321.	4.2	19
25	Recovery of the ectomycorrhizal community after termination of long-term nitrogen fertilisation of a boreal Norway spruce forest. Fungal Ecology, 2017, 29, 116-122.	0.7	17
26	The total microbiome functions in bacteria and fungi. Journal of Proteomics, 2020, 213, 103623.	1.2	16
27	Heterogeneity of carbon loss and its temperature sensitivity in East-European subarctic tundra soils. FEMS Microbiology Ecology, 2016, 92, fiw140.	1.3	10
28	Main photoautotrophic components of biofilms in natural draft cooling towers. Folia Microbiologica, 2016, 61, 255-260.	1.1	10
29	In situ phosphorus dynamics in soil: long-term ion-exchange resin study. Biogeochemistry, 2018, 139, 307-320.	1.7	8
30	Explorative Meta-Analysis of 377 Extant Fungal Genomes Predicted a Total Mycobiome Functionality of 42.4 Million KEGG Functions. Frontiers in Microbiology, 2020, 11, 143.	1.5	8
31	Lignin Preservation and Microbial Carbohydrate Metabolism in Permafrost Soils. Journal of Geophysical Research G: Biogeosciences, 2022, 127, e2020JG006181.	1.3	5
32	Biochemical inhibition of acid phosphatase activity in two mountain spruce forest soils. Biology and Fertility of Soils, 2021, 57, 991-1005.	2.3	2
33	Measurement ofin situPhosphorus Availability in Acidified Soils using Iron-Infused Resin. Communications in Soil Science and Plant Analysis, 0, , 1-8.	0.6	1