Wolfgang Wanek

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

168
papers8,762
citations53
h-index89
g-index222
ext. papers10,840
ext. citations6
avg, IF6.19
L-index

#	Paper	IF	Citations
168	The application of ecological stoichiometry to planthicrobial organic matter transformations. <i>Ecological Monographs</i> , 2015 , 85, 133-155	9	431
167	Adjustment of microbial nitrogen use efficiency to carbon:nitrogen imbalances regulates soil nitrogen cycling. <i>Nature Communications</i> , 2014 , 5, 3694	17.4	373
166	Stoichiometric imbalances between terrestrial decomposer communities and their resources: mechanisms and implications of microbial adaptations to their resources. <i>Frontiers in Microbiology</i> , 2014 , 5, 22	5.7	312
165	Root Exudation of Primary Metabolites: Mechanisms and Their Roles in Plant Responses to Environmental Stimuli. <i>Frontiers in Plant Science</i> , 2019 , 10, 157	6.2	253
164	Aerobic nitrous oxide production through N-nitrosating hybrid formation in ammonia-oxidizing archaea. <i>ISME Journal</i> , 2014 , 8, 1135-46	11.9	207
163	The effect of resource quantity and resource stoichiometry on microbial carbon-use-efficiency. <i>FEMS Microbiology Ecology</i> , 2010 , 73, 430-40	4.3	205
162	Long-term change in the nitrogen cycle of tropical forests. <i>Science</i> , 2011 , 334, 664-6	33.3	203
161	Alternative Methods for Measuring Inorganic, Organic, and Total Dissolved Nitrogen in Soil. <i>Soil Science Society of America Journal</i> , 2010 , 74, 1018-1027	2.5	199
160	Biochar decelerates soil organic nitrogen cycling but stimulates soil nitrification in a temperate arable field trial. <i>PLoS ONE</i> , 2014 , 9, e86388	3.7	178
159	Microbial carbon use efficiency and biomass turnover times depending on soil depth Implications for carbon cycling. <i>Soil Biology and Biochemistry</i> , 2016 , 96, 74-81	7.5	173
158	Stoichiometric controls of nitrogen and phosphorus cycling in decomposing beech leaf litter. <i>Ecology</i> , 2012 , 93, 770-82	4.6	165
157	Nitrogen fixation by phyllosphere bacteria associated with higher plants and their colonizing epiphytes of a tropical lowland rainforest of Costa Rica. <i>ISME Journal</i> , 2008 , 2, 561-70	11.9	160
156	Heterotrophic microbial communities use ancient carbon following glacial retreat. <i>Biology Letters</i> , 2007 , 3, 487-90	3.6	160
155	MANGROVE ISOTOPIC (15N AND 13C) FRACTIONATION ACROSS A NITROGEN VS. PHOSPHORUS LIMITATION GRADIENT. <i>Ecology</i> , 2002 , 83, 1065-1075	4.6	155
154	Functional diversity of the soil microflora in primary succession across two glacier forelands in the Central Alps. <i>European Journal of Soil Science</i> , 2003 , 54, 685-696	3.4	152
153	Host-compound foraging by intestinal microbiota revealed by single-cell stable isotope probing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 4720-5	11.5	147
152	Nitrification rates in Arctic soils are associated with functionally distinct populations of ammonia-oxidizing archaea. <i>ISME Journal</i> , 2013 , 7, 1620-31	11.9	131

(2007-2008)

Foliar delta(15)N values characterize soil N cycling and reflect nitrate or ammonium preference of plants along a temperate grassland gradient. <i>Oecologia</i> , 2008 , 156, 861-70	2.9	131
Temperature-dependent shift from labile to recalcitrant carbon sources of arctic heterotrophs. <i>Rapid Communications in Mass Spectrometry</i> , 2005 , 19, 1401-8	2.2	127
Direct dating of Early Upper Palaeolithic human remains from Mladec. <i>Nature</i> , 2005 , 435, 332-5	50.4	121
Physiological and morphological adaptations of the fruit tree Ziziphus rotundifolia in response to progressive drought stress. <i>Tree Physiology</i> , 2001 , 21, 705-15	4.2	119
Long-term increases in intrinsic water-use efficiency do not lead to increased stem growth in a tropical monsoon forest in western Thailand. <i>Global Change Biology</i> , 2011 , 17, 1049-1063	11.4	117
Soil microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. <i>Soil Biology and Biochemistry</i> , 2016 , 97, 168-175	7.5	117
Short-term competition between crop plants and soil microbes for inorganic N fertilizer. <i>Soil Biology and Biochemistry</i> , 2010 , 42, 360-372	7.5	113
Allochthonous and autochthonous particulate organic matter in floodplains of the River Danube: the importance of hydrological connectivity. <i>Freshwater Biology</i> , 2003 , 48, 220-232	3.1	113
Molecular diversity of fungal communities in agricultural soils from Lower Austria. <i>Fungal Diversity</i> , 2010 , 44, 65-75	17.6	103
Long-term trends in cellulose delta13 C and water-use efficiency of tropical Cedrela and Swietenia from Brazil. <i>Tree Physiology</i> , 2005 , 25, 745-52	4.2	92
Convergence of soil nitrogen isotopes across global climate gradients. <i>Scientific Reports</i> , 2015 , 5, 8280	4.9	90
Nitrogen-15 natural abundance in a montane cloud forest canopy as an indicator of nitrogen cycling and epiphyte nutrition. <i>Oecologia</i> , 2002 , 131, 350-355	2.9	90
Determination of gross rates of amino acid production and immobilization in decomposing leaf litter by a novel 15N isotope pool dilution technique. <i>Soil Biology and Biochemistry</i> , 2010 , 42, 1293-1302	7.5	89
Short-term changes in carbon isotope composition of soluble carbohydrates and starch: from canopy leaves to the root system. <i>Rapid Communications in Mass Spectrometry</i> , 2006 , 20, 653-60	2.2	85
Stable isotopic composition of carbon and nitrogen and nitrogen content in vascular epiphytes along an altitudinal transect*. <i>Plant, Cell and Environment</i> , 1999 , 22, 1435-1443	8.4	84
Dynamics of ammonia-oxidizing communities in barley-planted bulk soil and rhizosphere following nitrate and ammonium fertilizer amendment. <i>FEMS Microbiology Ecology</i> , 2010 , 74, 575-91	4.3	82
Increased microbial growth, biomass, and turnover drive soil organic carbon accumulation at higher plant diversity. <i>Global Change Biology</i> , 2020 , 26, 669-681	11.4	81
Microbial activities and foliar uptake of nitrogen in the epiphytic bromeliad Vriesea gigantea. <i>New Phytologist</i> , 2007 , 175, 311-320	9.8	75
	plants along a temperate grassland gradient. <i>Oecologia</i> , 2008, 156, 861-70 Temperature-dependent shift from labile to recalcitrant carbon sources of arctic heterotrophs. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 1401-8 Direct dating of Early Upper Palaeolithic human remains from Mladec. <i>Nature</i> , 2005, 435, 332-5 Physiological and morphological adaptations of the fruit tree Ziziphus rotundifolia in response to progressive drought stress. <i>Tree Physiology</i> , 2001, 21, 705-15 Long-term increases in intrinsic water-use efficiency do not lead to increased stem growth in a tropical monsoon forest in western Thailand. <i>Global Change Biology</i> , 2011, 17, 1049-1063 Soil microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. <i>Soil Biology and Biochemistry</i> , 2016, 97, 168-175 Short-term competition between crop plants and soil microbes for inorganic N fertilizer. <i>Soil Biology and Biochemistry</i> , 2010, 42, 360-372 Allochthonous and auto-chthonous particulate organic matter in floodplains of the River Danube: the importance of hydrological connectivity. <i>Freshwater Biology</i> , 2003, 48, 220-232 Molecular diversity of fungal communities in agricultural soils from Lower Austria. <i>Fungal Diversity</i> , 2010, 44, 65-75 Long-term trends in cellulose delta13 C and water-use efficiency of tropical Cedrela and Swietenia from Brazil. <i>Tree Physiology</i> , 2005, 25, 745-52 Convergence of soil nitrogen isotopes across global climate gradients. <i>Scientific Reports</i> , 2015, 5, 8280 Nitrogen-15 natural abundance in a montane cloud forest canopy as an indicator of nitrogen cycling and epiphyte nutrition. <i>Oecologia</i> , 2002, 131, 350-355 Determination of gross rates of amino acid production and immobilization in decomposing leaf litter by a novel 15N isotope pool dilution technique. <i>Soil Biology and Biochemistry</i> , 2010, 42, 1293-1302 Short-term changes in carbon isotope composition of soluble carbohydrates and starch: from canopy leaves to the root system. <i>Ra</i>	plants along a temperate grassland gradient. Oecologia, 2008, 156, 861-70 Temperature-dependent shift from labile to recalcitrant carbon sources of arctic heterotrophs. Rapid Communications in Mass Spectrometry, 2005, 19, 1401-8 Direct dating of Early Upper Palaeolithic human remains from Mladec. Nature, 2005, 435, 332-5 50-4 Physiological and morphological adaptations of the fruit tree Ziziphus rotundifolia in response to progressive drought stress. Tree Physiology, 2001, 21, 705-15 Long-term increases in intrinsic water-use efficiency on not lead to increased stem growth in a tropical monsoon forest in western Thailand. Global Change Biology, 2011, 17, 1049-1063 50il microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. Soil Biology and Biochemistry, 2016, 97, 168-175 5hort-term competition between crop plants and soil microbes for inorganic N fertilizer. Soil Biology and Biochemistry, 2010, 42, 360-372 Allochthonous and autochthonous particulate organic matter in floodplains of the River Danube: the importance of hydrological connectivity. Freshwater Biology, 2003, 48, 220-232 Allochthonous and autochthonous particulate organic matter in floodplains of the River Danube: the Importance of hydrological connectivity. Freshwater Biology, 2003, 48, 220-232 Allochthonous and autochthonous particulate organic matter in floodplains of the River Danube: the Importance of hydrological connectivity. Freshwater Biology, 2003, 48, 220-232 2100, 44, 65-75 220 Molecular diversity of fungal communities in agricultural soils from Lower Austria. Fungal Diversity, 2010, 44, 65-75 236 Allochthonous and autochthonous particulate organic matter in floodplains of the River Danube: the Importance of hydrological connectivity. Freshwater Biology, 2003, 48, 220-232 240 Molecular diversity of fungal communities in agricultural soils from Lower Austria. Fungal Diversity, 2010, 42, 65-75 Convergence of soil nitrogen isotopes across global climate gradient

133	Stable carbon isotopes in tree rings indicate improved water use efficiency and drought responses of a tropical dry forest tree species. <i>Trees - Structure and Function</i> , 2011 , 25, 103-113	2.6	73
132	Soil multifunctionality is affected by the soil environment and by microbial community composition and diversity. <i>Soil Biology and Biochemistry</i> , 2019 , 136, 107521	7.5	72
131	Microbial physiology and soil CO2 efflux after 9 years of soil warming in a temperate forest - no indications for thermal adaptations. <i>Global Change Biology</i> , 2015 , 21, 4265-77	11.4	72
130	Decoupling of microbial carbon, nitrogen, and phosphorus cycling in response to extreme temperature events. <i>Science Advances</i> , 2017 , 3, e1602781	14.3	70
129	Natural 15N abundance of soil N pools and N2O reflect the nitrogen dynamics of forest soils. <i>Plant and Soil</i> , 2007 , 295, 79-94	4.2	69
128	Interactions of nitrifying bacteria and heterotrophs: identification of a Micavibrio-like putative predator of Nitrospira spp. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 2027-37	4.8	67
127	Preparation of starch and other carbon fractions from higher plant leaves for stable carbon isotope analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2001 , 15, 1136-40	2.2	67
126	Preparation of starch and soluble sugars of plant material for the analysis of carbon isotope composition: a comparison of methods. <i>Rapid Communications in Mass Spectrometry</i> , 2009 , 23, 2476-88	2.2	65
125	Significance of organic nitrogen acquisition for dominant plant species in an alpine meadow on the Tibet plateau, China. <i>Plant and Soil</i> , 2006 , 285, 221-231	4.2	62
124	Growth explains microbial carbon use efficiency across soils differing in land use and geology. <i>Soil Biology and Biochemistry</i> , 2019 , 128, 45-55	7.5	61
123	Total nitrogen content and delta(15)N signatures in moss tissue: indicative value for nitrogen deposition patterns and source allocation on a nationwide scale. <i>Environmental Science & Environmental Science & Technology</i> , 2008 , 42, 8661-7	10.3	60
122	Plants feed ants: food bodies of myrmecophytic Piper and their significance for the interaction with Pheidole bicornis ants. <i>Oecologia</i> , 2002 , 133, 186-192	2.9	58
121	Shift in soilplant nitrogen dynamics of an alpinelival ecotone. Plant and Soil, 2007, 301, 65-76	4.2	57
120	Dominant plant species shift their nitrogen uptake patterns in response to nutrient enrichment caused by a fungal fairy in an alpine meadow. <i>Plant and Soil</i> , 2011 , 341, 495-504	4.2	56
119	Natural 15N abundance of plants and soils under different management practices in a montane grassland. <i>Soil Biology and Biochemistry</i> , 2006 , 38, 1564-1576	7.5	56
118	No evidence of aquatic priming effects in hyporheic zone microcosms. <i>Scientific Reports</i> , 2014 , 4, 5187	4.9	55
117	Do ants feed plants? A 15N labelling study of nitrogen fluxes from ants to plants in the mutualism of Pheidole and Piper. <i>Journal of Ecology</i> , 2003 , 91, 126-134	6	54
116	Physiological responses of bryophytes Thuidium tamariscinum and Hylocomium splendens to increased nitrogen deposition. <i>Annals of Botany</i> , 2007 , 99, 161-9	4.1	53

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115	Natural 15N abundance of epiphytes depends on the position within the forest canopy: source signals and isotope fractionation. <i>Plant, Cell and Environment</i> , 2002 , 25, 581-589	8.4	53
114	Community profiling and gene expression of fungal assimilatory nitrate reductases in agricultural soil. <i>ISME Journal</i> , 2011 , 5, 1771-83	11.9	52
113	Functional leaf traits of vascular epiphytes: vertical trends within the forest, intra- and interspecific trait variability, and taxonomic signals. <i>Functional Ecology</i> , 2016 , 30, 188-198	5.6	52
112	Soil organic matter quality exerts a stronger control than stoichiometry on microbial substrate use efficiency along a latitudinal transect. <i>Soil Biology and Biochemistry</i> , 2018 , 121, 212-220	7.5	49
111	Difference in delta(15)N signatures between nodulated roots and shoots of soybean is indicative of the contribution of symbiotic N(2) fixation to plant N. <i>Journal of Experimental Botany</i> , 2002 , 53, 1109-18	₃ 7	49
110	A suite of sensitive chemical methods to determine the \$\mathbb{1}5N\$ of ammonium, nitrate and total dissolved N in soil extracts. <i>Rapid Communications in Mass Spectrometry</i> , 2010 , 24, 3615-23	2.2	46
109	Evaluation of methods to measure differential 15N labeling of soil and root N pools for studies of root exudation. <i>Rapid Communications in Mass Spectrometry</i> , 2004 , 18, 2415-25	2.2	46
108	Controls of hydrochemical fluxes via stemflow in tropical lowland rainforests: Effects of meteorology and vegetation characteristics. <i>Journal of Hydrology</i> , 2012 , 452-453, 247-258	6	43
107	Effects of stoichiometry and temperature perturbations on beech leaf litter decomposition, enzyme activities and protein expression. <i>Biogeosciences</i> , 2012 , 9, 4537-4551	4.6	43
106	Contribution of carbon fixed by Rubisco and PEPC to phloem export in the Crassulacean acid metabolism plant Kalanchoe daigremontiana. <i>Journal of Experimental Botany</i> , 2010 , 61, 1375-83	7	41
105	Biosynthesis and accumulation of D-ononitol in Vigna umbellata in response to drought stress. <i>Physiologia Plantarum</i> , 1997 , 101, 416-424	4.6	41
104	Environmental effects on soil microbial nitrogen use efficiency are controlled by allocation of organic nitrogen to microbial growth and regulate gross N mineralization. <i>Soil Biology and Biochemistry</i> , 2019 , 135, 304-315	7.5	40
103	A novel 15N tracer model reveals: Plant nitrate uptake governs nitrogen transformation rates in agricultural soils. <i>Soil Biology and Biochemistry</i> , 2013 , 57, 301-310	7.5	40
102	Microclimatic patterns correlate with the distribution of epiphyllous bryophytes in a tropical lowland rain forest in Costa Rica. <i>Journal of Tropical Ecology</i> , 2009 , 25, 321-330	1.3	40
101	Are vascular epiphytes nitrogen or phosphorus limited? A study of plant (15) N fractionation and foliar N: P stoichiometry with the tank bromeliad Vriesea sanguinolenta. <i>New Phytologist</i> , 2011 , 192, 462-70	9.8	39
100	Light affects competition for inorganic and organic nitrogen between maize and rhizosphere microorganisms. <i>Plant and Soil</i> , 2008 , 304, 59-72	4.2	38
99	The fate of Corydalis cava elaiosomes within an ant colony of Myrmica rubra: elaiosomes are preferentially fed to larvae. <i>Insectes Sociaux</i> , 2005 , 52, 55-62	1.5	37
98	Landscape-Scale Controls on Aboveground Forest Carbon Stocks on the Osa Peninsula, Costa Rica. <i>PLoS ONE</i> , 2015 , 10, e0126748	3.7	37

97	Significant release and microbial utilization of amino sugars and D-amino acid enantiomers from microbial cell wall decomposition in soils. <i>Soil Biology and Biochemistry</i> , 2018 , 123, 115-125	7.5	36
96	Long-term trends in nitrogen isotope composition and nitrogen concentration in brazilian rainforest trees suggest changes in nitrogen cycle. <i>Environmental Science & amp; Technology</i> , 2010 , 44, 1191-6	10.3	35
95	Large Canopy Exchange Fluxes of Inorganic and Organic Nitrogen and Preferential Retention of Nitrogen by Epiphytes in a Tropical Lowland Rainforest. <i>Ecosystems</i> , 2010 , 13, 367-381	3.9	35
94	Direct measurement of the in situ decomposition of microbial-derived soil organic matter. <i>Soil Biology and Biochemistry</i> , 2020 , 141, 107660	7.5	35
93	Host tree phenology affects vascular epiphytes at the physiological, demographic and community level. <i>AoB PLANTS</i> , 2014 , 7,	2.9	34
92	Nutrient limitation of alpine plants: Implications from leaf N´: P stoichiometry and leaf 115N. <i>Journal of Plant Nutrition and Soil Science</i> , 2014 , 177, 378-387	2.3	34
91	Greenhouse gas fluxes respond to different N fertilizer types due to altered plant-soil-microbe interactions. <i>Plant and Soil</i> , 2011 , 343, 17-35	4.2	32
90	Little effects on soil organic matter chemistry of density fractions after seven years of forest soil warming. <i>Soil Biology and Biochemistry</i> , 2016 , 103, 300-307	7.5	32
89	Microtopography and Plant-Cover Controls on Nitrogen Dynamics in Hummock Tundra Ecosystems in Siberia. <i>Arctic, Antarctic, and Alpine Research</i> , 2005 , 37, 435-443	1.8	31
88	Influence of litter chemistry and stoichiometry on glucan depolymerization during decomposition of beech (Fagus sylvatica L.) litter. <i>Soil Biology and Biochemistry</i> , 2012 , 50, 174-187	7.5	30
87	The Forest Observation System, building a global reference dataset for remote sensing of forest biomass. <i>Scientific Data</i> , 2019 , 6, 198	8.2	29
86	Nitrogen nutrition during ontogeny of hemiepiphytic Clusia species. <i>Functional Plant Biology</i> , 2002 , 29, 733-740	2.7	29
85	Organic and inorganic nitrogen uptake by 21 dominant tree species in temperate and tropical forests. <i>Tree Physiology</i> , 2017 , 37, 1515-1526	4.2	28
84	Root-derived respiration and non-structural carbon of rice seedlings. <i>European Journal of Soil Biology</i> , 2008 , 44, 22-29	2.9	28
83	Size-Dependent Variation of Carbon and Nitrogen Isotope Abundances in Epiphytic Bromeliads. <i>Plant Biology</i> , 2003 , 5, 137-142	3.7	28
82	Oxygen isotopes in tree rings record variation in precipitation O and amount effects in the south of Mexico. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013 , 118, 1604-1615	3.7	27
81	Topography strongly affects atmospheric deposition and canopy exchange processes in different types of wet lowland rainforest, Southwest Costa Rica. <i>Biogeochemistry</i> , 2011 , 106, 371-396	3.8	27
80	A multi-isotopic approach to investigate the influence of land use on nitrate removal in a highly saline lake-aquifer system. <i>Science of the Total Environment</i> , 2018 , 631-632, 649-659	10.2	26

(2010-2018)

79	Application of stable-isotope labelling techniques for the detection of active diazotrophs. <i>Environmental Microbiology</i> , 2018 , 20, 44-61	5.2	26	
78	Flux Analysis of Free Amino Sugars and Amino Acids in Soils by Isotope Tracing with a Novel Liquid Chromatography/High Resolution Mass Spectrometry Platform. <i>Analytical Chemistry</i> , 2017 , 89, 9192-9	2070 ⁸	26	
77	Flow history explains temporal and spatial variation of carbon fractionation in stream periphyton. <i>Limnology and Oceanography</i> , 2005 , 50, 706-712	4.8	24	
76	Wide-spread limitation of soil organic nitrogen transformations by substrate availability and not by extracellular enzyme content. <i>Soil Biology and Biochemistry</i> , 2019 , 133, 37-49	7.5	23	
<i>75</i>	A simple method for -labelling with N and C of grassland plant species by foliar brushing. <i>Methods in Ecology and Evolution</i> , 2011 , 2, 326-332	7.7	23	
74	Use of decreasing foliar carbon isotope discrimination during water limitation as a carbon tracer to study whole plant carbon allocation. <i>Plant, Cell and Environment,</i> 2002 , 25, 609-616	8.4	23	
73	A closeup study of early beech litter decomposition: potential drivers and microbial interactions on a changing substrate. <i>Plant and Soil</i> , 2013 , 371, 139-154	4.2	22	
7²	Carbon isotope discrimination and water use efficiency relationships of alfalfa genotypes under irrigated and rain-fed organic farming. <i>European Journal of Agronomy</i> , 2013 , 50, 82-89	5	22	
71	A cost-effective high-throughput microcosm system for studying nitrogen dynamics at the plant-microbe-soil interface. <i>Plant and Soil</i> , 2009 , 317, 293-307	4.2	22	
70	Nitrogen input by cyanobacterial biofilms of an inselberg into a tropical rainforest in French Guiana. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2007 , 202, 521-529	1.9	22	
69	Contribution of carbonate weathering to the CO efflux from temperate forest soils. <i>Biogeochemistry</i> , 2015 , 124, 273-290	3.8	21	
68	Climatic and edaphic controls over tropical forest diversity and vegetation carbon storage. <i>Scientific Reports</i> , 2020 , 10, 5066	4.9	21	
67	Sensitivity of tropical forest aboveground productivity to climate anomalies in SW Costa Rica. <i>Global Biogeochemical Cycles</i> , 2014 , 28, 1437-1454	5.9	21	
66	Moss (113) C: an accurate proxy for past water environments in polar regions. <i>Global Change Biology</i> , 2015 , 21, 2454-64	11.4	20	
65	Spatio-temporal variations determine plantinicrobe competition for inorganic nitrogen in an alpine meadow. <i>Journal of Ecology</i> , 2011 , 99, no-no	6	20	
64	Contrasting adaptations to drought stress in field-grown Ziziphus mauritiana and Prunus persica trees: water relations, osmotic adjustment and carbon isotope composition. <i>Functional Plant Biology</i> , 2000 , 27, 985	2.7	20	
63	Full N tracer accounting to revisit major assumptions of N isotope pool dilution approaches for gross nitrogen mineralization. <i>Soil Biology and Biochemistry</i> , 2018 , 117, 16-26	7.5	20	
62	Microbial communities of arboreal and ground soils in the Esquinas rainforest, Costa Rica. <i>Plant and Soil</i> , 2010 , 329, 65-74	4.2	19	

61	Canopy interactions of rainfall in an off-shore mangrove ecosystem dominated by Rhizophora mangle (Belize). <i>Journal of Hydrology</i> , 2007 , 345, 70-79	6	19
60	pH-Dependent Bioavailability, Speciation, and Phytotoxicity of Tungsten (W) in Soil Affect Growth and Molybdoenzyme Activity of Nodulated Soybeans. <i>Environmental Science & Environmental Science & E</i>	10.3	18
59	Phyllosphere nitrogen relations: reciprocal transfer of nitrogen between epiphyllous liverworts and host plants in the understorey of a lowland tropical wet forest in Costa Rica. <i>New Phytologist</i> , 2005 , 166, 577-88	9.8	18
58	Mode of photosynthesis during different life stages of hemiepiphytic Clusia species. <i>Functional Plant Biology</i> , 2002 , 29, 725-732	2.7	18
57	New insights into mechanisms driving carbon allocation in tropical forests. <i>New Phytologist</i> , 2015 , 205, 137-46	9.8	16
56	Physiological diversity and biogeography of vascular epiphytes at RB Changuinola, Panama. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2011 , 206, 66-79	1.9	16
55	Vertical Redistribution of Soil Organic Carbon Pools After Twenty Years of Nitrogen Addition in Two Temperate Coniferous Forests. <i>Ecosystems</i> , 2019 , 22, 379-400	3.9	14
54	Mimicking floodplain reconnection and disconnection using ¹⁵N mesocosm incubations. <i>Biogeosciences</i> , 2012 , 9, 4263-4278	4.6	14
53	Short-term N uptake kinetics and nitrogen nutrition of bryophytes in a lowland rainforest, Costa Rica. <i>Functional Plant Biology</i> , 2008 , 35, 51-62	2.7	14
52	Composition and activity of nitrifier communities in soil are unresponsive to elevated temperature and CO, but strongly affected by drought. <i>ISME Journal</i> , 2020 , 14, 3038-3053	11.9	14
51	Microbial decomposition of 13C- labeled phytosiderophores in the rhizosphere of wheat: Mineralization dynamics and key microbial groups involved. <i>Soil Biology and Biochemistry</i> , 2016 , 98, 196-	-207	14
50	Metabolism of mineral-sorbed organic matter and microbial lifestyles in fluvial ecosystems. <i>Geophysical Research Letters</i> , 2016 , 43, 1582-1588	4.9	14
49	Increased temperature causes different carbon and nitrogen processing patterns in two common intertidal foraminifera (<i>Ammonia tepida</i> and <i>Haynesina germanica</i>). <i>Biogeosciences</i> , 2017 , 14, 2815-2829	4.6	13
48	Thaumarchaeal ammonium oxidation and evidence for a nitrogen cycle in a subsurface radioactive thermal spring in the Austrian Central Alps. <i>Frontiers in Microbiology</i> , 2014 , 5, 225	5.7	13
47	N2 fixation by organically grown soybean in Central Europe: Method of quantification and agronomic effects. <i>European Journal of Agronomy</i> , 2012 , 41, 11-17	5	12
46	Subsurface earthworm casts can be important soil microsites specifically influencing the growth of grassland plants. <i>Biology and Fertility of Soils</i> , 2013 , 49, 1097-1107	6.1	12
45	Effects of resource chemistry on the composition and function of stream hyporheic biofilms. <i>Frontiers in Microbiology</i> , 2012 , 3, 35	5.7	12
44	Carbon and Nitrogen Uptake of Calcareous Benthic Foraminifera along a Depth-Related Oxygen Gradient in the OMZ of the Arabian Sea. <i>Frontiers in Microbiology</i> , 2016 , 7, 71	5.7	11

(2011-2019)

43	Novel high-throughput approach to determine key processes of soil organic nitrogen cycling: Gross protein depolymerization and microbial amino acid uptake. <i>Soil Biology and Biochemistry</i> , 2019 , 130, 73-	8 ⁷ 1 ⁵	11
42	Resistant Soil Microbial Communities Show Signs of Increasing Phosphorus Limitation in Two Temperate Forests After Long-Term Nitrogen Addition. <i>Frontiers in Forests and Global Change</i> , 2019 , 2,	3.7	10
41	Quantifying microbial growth and carbon use efficiency in dry soil environments via O water vapor equilibration. <i>Global Change Biology</i> , 2020 , 26, 5333-5341	11.4	9
40	Flexibility of nitrogen metabolism in the tropical C3crassulacean acid metabolism tree species Clusia minor. <i>Functional Plant Biology</i> , 2002 , 29, 741-747	2.7	9
39	Food supply and size class depending variations in phytodetritus intake in the benthic foraminifer. Biology Open, 2018 , 7,	2.2	8
38	Age alters uptake pattern of organic and inorganic nitrogen by rubber trees. <i>Tree Physiology</i> , 2018 , 38, 1685-1693	4.2	7
37	The relationship between N isotopic fractionation within soybean and N2 fixation during soybean development. <i>Physiologia Plantarum</i> , 2014 , 152, 546-57	4.6	7
36	Effects of rhizospheric bicarbonate on net nitrate uptake and partitioning between the main nitrate utilising processes in Populus canescens and Sambucus nigra 2000 , 221, 13-24		7
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