Florian Wichern

List of Publications by Year
in descending order

53 papers	2,466 citations	304602 22 h-index	206029 48 g-index
54 all docs	54 docs citations	54 times ranked	2741 citing authors

#	Article	IF	Citations
1	Quantification of Grassland Biomass and Nitrogen Content through UAV Hyperspectral Imageryâ€"Active Sample Selection for Model Transfer. Drones, 2022, 6, 73.	2.7	9
2	Intraspecific variability overlays abiotic site effects on some quality parameters of walnut (Juglans) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.6	4
3	Hydrochar, digestate, and process water impacts on a soil's microbial community, processes, and metal bioavailability. Soil Science Society of America Journal, 2021, 85, 717-731.	1.2	11
4	Distinct Resistomes and Microbial Communities of Soils, Wastewater Treatment Plants and Households Suggest Development of Antibiotic Resistances Due to Distinct Environmental Conditions in Each Environment. Antibiotics, 2021, 10, 514.	1.5	8
5	Evidence of considerable C and N transfer from peas to cereals via direct root contact but not via mycorrhiza. Scientific Reports, 2021, 11, 11424.	1.6	9
6	Nitrogen Immobilisation and Microbial Biomass Build-Up Induced by Miscanthus x giganteus L. Based Fertilisers. Agronomy, 2021, 11, 1386.	1.3	4
7	Black Soldier Fly Diet Impacts Soil Greenhouse Gas Emissions From Frass Applied as Fertilizer. Frontiers in Sustainable Food Systems, 2021, 5, .	1.8	17
8	Microbial Biomass Sulphurâ€"An Important Yet Understudied Pool in Soil. Agronomy, 2021, 11, 1606.	1.3	14
9	Excellent excrement? Frass impacts on a soil's microbial community, processes and metal bioavailability. Applied Soil Ecology, 2021, 168, 104110.	2.1	25
10	Mycorrhiza Reduces Phosphorus Uptake from Struvite in Rye (Secale cereale L.) Plants. Journal of Soil Science and Plant Nutrition, 2021, 21, 3451-3460.	1.7	3
11	Restoring nutrient circularity in a nutrient-saturated area in Germany requires systemic change. Nutrient Cycling in Agroecosystems, 2021, 121, 209-226.	1.1	17
12	Utilisation of Miscanthus x giganteus L. Based C-Rich Fertilisers for N Immobilisation and Microbial Biomass Build-Up in a Crop Rotation. Agronomy, 2021, 11, 2390.	1.3	0
13	Living in the plastic age - Different short-term microbial response to microplastics addition to arable soils with contrasting soil organic matter content and farm management legacy. Environmental Pollution, 2020, 267, 115468.	3.7	57
14	The Household Resistome: Frequency of Î²-Lactamases, Class 1 Integrons, and Antibiotic-Resistant Bacteria in the Domestic Environment and Their Reduction during Automated Dishwashing and Laundering. Applied and Environmental Microbiology, 2020, 86, .	1.4	10
15	Restoring nutrient circularity: A review of nutrient stock and flow analyses of local agro-food-waste systems. Resources, Conservation and Recycling, 2020, 160, 104901.	5.3	29
16	Hazenite: a new secondary phosphorus, potassium and magnesium fertiliser. Plant, Soil and Environment, 2020, 66, 1-6.	1.0	10
17	Investigation of nutritional characteristics and free radical scavenging activity of wild apple, pear, rosehip, and barberry from the walnut-fruit forests of Kyrgyzstan. European Food Research and Technology, 2020, 246, 1095-1104.	1.6	22
18	Winter is coming â€“ Impact of temperature on the variation of beta-lactamase and mcr genes in a wastewater treatment plant. Science of the Total Environment, 2020, 712, 136499.	3.9	55

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19	Organic Amendments Alleviate Salinity Effects on Soil Microorganisms and Mineralisation Processes in Aerobic and Anaerobic Paddy Rice Soils. Frontiers in Sustainable Food Systems, 2020, 4, .	1.8	48
20	Get on your boots: estimating root biomass and rhizodeposition of peas under field conditions reveals the necessity of field experiments. Plant and Soil, 2019, 443, 449-462.	1.8	16
21	Determination of physicochemical parameters, phenolic content, and antioxidant capacity of wild cherry plum (Prunus divaricata Ledeb.) from the walnut-fruit forests of Kyrgyzstan. European Food Research and Technology, 2019, 245, 2293-2301.	1.6	16
22	Plant availability of magnesium and phosphorus from struvite with concurrent nitrification inhibitor application. Soil Use and Management, 2019, 35, 675-682.	2.6	7
23	In the land of plenty: catch crops trigger nitrogen uptake by soil microorganisms. Plant and Soil, 2018, 423, 549-562.	1.8	16
24	Alive and kicking: Why dormant soil microorganisms matter. Soil Biology and Biochemistry, 2018, 116, 419-430.	4.2	181
25	Even flow? Changes of carbon and nitrogen release from pea roots over time. Plant and Soil, 2018, 431, 143-157.	1.8	19
26	Mitigating Negative Microbial Effects of p-Nitrophenol, Phenol, Copper and Cadmium in a Sandy Loam Soil Using Biochar. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	8
27	Change of ergosterol content after inorganic N fertilizer application does not affect short-term C and N mineralization patterns in a grassland soil. Applied Soil Ecology, 2017, 111, 57-64.	2.1	5
28	Catch crops store more nitrogen below-ground when considering Rhizodeposits. Plant and Soil, 2017, 417, 287-299.	1.8	33
29	Relationship between Remote Sensing Data, Plant Biomass and Soil Nitrogen Dynamics in Intensively Managed Grasslands under Controlled Conditions. Sensors, 2017, 17, 1483.	2.1	14
30	Effects of salinity on seedling emergence and early seedling growth of Irvingia gabonensis (Irvingiaceae). Seed Science and Technology, 2017, 45, 282-295.	0.6	0
31	Shortâ€term effects of polyacrylamide and dicyandiamide on C and N mineralization in a sandy loam soil. Soil Use and Management, 2016, 32, 127-136.	2.6	6
32	Rice straw addition does not substantially alter microbial properties under hypersaline soil conditions. Biology and Fertility of Soils, 2016, 52, 867-877.	2.3	20
33	Digging in the dirt â€“ Inadequacy of belowground plant biomass quantification. Soil Biology and Biochemistry, 2016, 96, 137-144.	4.2	27
34	Africaâ€™s wooden elephant: the baobab tree (Adansonia digitata L.) in Sudan and Kenya: a review. Genetic Resources and Crop Evolution, 2016, 63, 377-399.	0.8	98
35	Priming effects of Aporrectodea caliginosa on young rhizodeposits and old soil organic matter following wheat straw addition. European Journal of Soil Biology, 2015, 70, 38-45.	1.4	13
36	Dose-dependent reactions of Aporrectodea caliginosa to perfluorooctanoic acid and perfluorooctanesulfonic acid in soil. Ecotoxicology and Environmental Safety, 2013, 95, 39-43.	2.9	23

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37	Interactions of mustard plants and soil microorganisms after application of sugarcane filter cake and pea residues to an Andosol. Journal of Plant Nutrition and Soil Science, 2012, 175, 931-938.	1.1	6
38	Stem labeling results in different patterns of ¹⁴C rhizorespiration and ¹⁵N distribution in plants compared to natural assimilation pathways. Journal of Plant Nutrition and Soil Science, 2011, 174, 732-741.	1.1	28
39	Evaluation of the wick method for in situ 13C and 15N labelling of annual plants using sugar-urea mixtures. Plant and Soil, 2010, 329, 105-115.	1.8	18
40	Spatial patterns of soil biological and physical properties in a ridge tilled and a ploughed Luvisol. Soil and Tillage Research, 2009, 105, 88-95.	2.6	31
41	CO2 evolution from a ridge tilled and a mouldboard ploughed Luvisol in the field. Applied Soil Ecology, 2009, 43, 89-94.	2.1	10
42	Soil Microbial Properties Along a Precipitation Transect in Southern Africa. Arid Land Research and Management, 2009, 23, 115-126.	0.6	24
43	Nitrogen rhizodeposition in agricultural crops: Methods, estimates and future prospects. Soil Biology and Biochemistry, 2008, 40, 30-48.	4.2	244
44	Quantitative assessment of the fungal contribution to microbial tissue in soil. Soil Biology and Biochemistry, 2008, 40, 2977-2991.	4.2	515
45	Respiration pattern and microbial use of field-grown transgenic Bt-maize residues. Soil Biology and Biochemistry, 2007, 39, 2380-2389.	4.2	36
46	Rhizodeposition of C and N in peas and oats after 13Câ€“15N double labelling under field conditions. Soil Biology and Biochemistry, 2007, 39, 2527-2537.	4.2	77
47	Release of C and N from roots of peas and oats and their availability to soil microorganisms. Soil Biology and Biochemistry, 2007, 39, 2829-2839.	4.2	90
48	Impact of salinity on soil microbial communities and the decomposition of maize in acidic soils. Geoderma, 2006, 137, 100-108.	2.3	359
49	Drainage, salt leaching and physico-chemical properties of irrigated man-made terrace soils in a mountain oasis of northern Oman. Geoderma, 2005, 125, 273-285.	2.3	49
50	Effects of manure quality and application forms on soil C and N turnover of a subtropical oasis soil under laboratory conditions. Biology and Fertility of Soils, 2004, 39, 165-171.	2.3	45
51	Changes in amino acid enantiomers and microbial performance in soils from a subtropical mountain oasis in Oman abandoned for different periods. Biology and Fertility of Soils, 2004, 39, 398-406.	2.3	23
52	Field measurements of the CO2 evolution rate under different crops during an irrigation cycle in a mountain oasis of Oman. Applied Soil Ecology, 2004, 25, 85-91.	2.1	32
53	Soil fertility breakdown in a subtropical South African vertisol site used as a home garden. Biology and Fertility of Soils, 2003, 37, 288-294.	2.3	9