Stephan Wirth

List of Publications by Year
in descending order

93 papers	4,549 citations	117625 34 h-index	114465 63 g-index
94 all docs	94 docs citations	94 times ranked	4688 citing authors

#	Article	IF	Citations
1	Biochar for Improving Soil Biological Properties and Mitigating Salt Stress in Plants on Salt-affected Soils. Communications in Soil Science and Plant Analysis, 2022, 53, 140-152.	1.4	21
2	The Integrated Effect of Microbial Inoculants and Biochar Types on Soil Biological Properties, and Plant Growth of Lettuce (Lactuca sativa L.). Plants, 2022, 11, 423.	3.5	11
3	Diversity and Plant Growth-Promoting Ability of Endophytic, Halotolerant Bacteria Associated with Tetragonia tetragonioides (Pall.) Kuntze. Plants, 2022, 11, 49.	3.5	13
4	Interactive Effects of Biochar, Nitrogen, and Phosphorous on the Symbiotic Performance, Growth, and Nutrient Uptake of Soybean (Glycine max L.). Agronomy, 2022, 12, 27.	3.0	4
5	Dynamics of Soil CO2 Efflux and Vertical CO2 Production in a European Beech and a Scots Pine Forest. Frontiers in Forests and Global Change, 2022, 5, .	2.3	4
6	Diversity and biological activity of culturable endophytic bacteria associated with marigold (<i>Calendula officinalis</i> L.). AIMS Microbiology, 2021, 7, 336-353.	2.2	11
7	Spatially-distributed microbial enzyme activities at intact, coated macropore surfaces in Luvisol Bt-horizons. Soil Biology and Biochemistry, 2021, 156, 108193.	8.8	8
8	Biochar mediated control of soil-borne phytopathogens. Environmental Sustainability, 2021, 4, 329-334.	2.8	8
9	Biochar mitigates effects of pesticides on soil biological activities. Environmental Sustainability, 2021, 4, 335-342.	2.8	23
10	Soil functional indicators in a mountain forest-rangeland mosaic of northern Iran. Ecological Indicators, 2021, 126, 107672.	6.3	10
11	Growth Response of Ginger (Zingiber officinale), Its Physiological Properties and Soil Enzyme Activities after Biochar Application under Greenhouse Conditions. Horticulturae, 2021, 7, 250.	2.8	17
12	Impacts of biochar on basil (Ocimum basilicum) growth, root morphological traits, plant biochemical and physiological properties and soil enzymatic activities. Scientia Horticulturae, 2021, 290, 110518.	3.6	37
13	Biochar Amendments Improve Licorice (Glycyrrhiza uralensis Fisch.) Growth and Nutrient Uptake under Salt Stress. Plants, 2021, 10, 2135.	3.5	22
14	Co-inoculation of rhizobacteria promotes growth, yield, and nutrient contents in soybean and improves soil enzymes and nutrients under drought conditions. Scientific Reports, 2021, 11, 22081.	3.3	58
15	Field Inoculation of Arbuscular Mycorrhizal Fungi Improves Fruit Quality and Root Physiological Activity of Citrus. Agriculture (Switzerland), 2021, 11, 1297.	3.1	14
16	Beneficial effects of biochar application on lettuce (Lactuca sativa L.) growth, root morphological traits and physiological properties. Annals of Phytomedicine an International Journal, 2021, 10, .	0.1	2
17	Effects of grazing management on leaf litter decomposition and soil microbial activities in northern Iranian rangeland. Geoderma, 2020, 361, 114100.	5.1	33
18	Endophytic bacteria associated with halophyte Seidlitzia rosmarinus Ehrenb. ex Boiss. from saline soil of Uzbekistan and their plant beneficial traits. Journal of Arid Land, 2020, 12, 730-740.	2.3	26

#	Article	IF	Citations
19	Co-Inoculation of Rhizobacteria and Biochar Application Improves Growth and Nutrientsin Soybean and Enriches Soil Nutrients and Enzymes. Agronomy, 2020, 10, 1142.	3.0	70
20	Plant growth response of broad bean (Vicia faba L.) to biochar amendment of loamy sand soil under irrigated and drought conditions. Environmental Sustainability, 2020, 3, 319-324.	2.8	16
21	Bacterial endophytes from horseradish (Armoracia rusticana G. Gaertn.,B.Mey.&Scherb.) with antimicrobial efficacy against pathogens. Plant, Soil and Environment, 2020, 66, 309-316.	2.2	13
22	Response of Soybean to Hydrochar-Based Rhizobium Inoculation in Loamy Sandy Soil. Microorganisms, 2020, 8, 1674.	3.6	10
23	Effects of shelterwood and single-tree cutting systems on topsoil quality and functions in northern Iranian forests. Forest Ecology and Management, 2020, 468, 118188.	3.2	10
24	The Effect of Biochars and Endophytic Bacteria on Growth and Root Rot Disease Incidence of Fusarium Infested Narrow-Leafed Lupin (Lupinus angustifolius L.). Microorganisms, 2020, 8, 496.	3.6	26
25	Effect of Biochar and Irrigation on Soybean-Rhizobium Symbiotic Performance and Soil Enzymatic Activity in Field Rhizosphere. Agronomy, 2019, 9, 626.	3.0	36
26	Salt-Tolerant Plant Growth Promoting Rhizobacteria for Enhancing Crop Productivity of Saline Soils. Frontiers in Microbiology, 2019, 10, 2791.	3.5	312
27	Soil Amendment With Different Maize Biochars Improves Chickpea Growth Under Different Moisture Levels by Improving Symbiotic Performance With Mesorhizobium ciceri and Soil Biochemical Properties to Varying Degrees. Frontiers in Microbiology, 2019, 10, 2423.	3.5	33
28	Effect of Biochar and Irrigation on the Interrelationships among Soybean Growth, Root Nodulation, Plant P Uptake, and Soil Nutrients in a Sandy Field. Sustainability, 2019, 11, 6542.	3.2	21
29	Role of calcium in AMF-mediated alleviation of the adverse impacts of cadmium stress in Bassia indica [Wight] A.J. Scott. Saudi Journal of Biological Sciences, 2019, 26, 828-838.	3.8	31
30	Comparing symbiotic performance and physiological responses of two soybean cultivars to arbuscular mycorrhizal fungi under salt stress. Saudi Journal of Biological Sciences, 2019, 26, 38-48.	3.8	53
31	Degradability of raw and post-processed chars in a two-year field experiment. Science of the Total Environment, 2018, 628-629, 1600-1608.	8.0	8
32	Plant Hormones as Key Regulators in Plant-Microbe Interactions Under Salt Stress. Microorganisms for Sustainability, 2018, , 165-182.	0.7	9
33	A multi-layer, closed-loop system for continuous measurement of soil CO2 concentration. Journal of Plant Nutrition and Soil Science, 2018, 181, 61-68.	1.9	11
34	Allelopathic effects of the aqueous extract of Rhazya stricta on growth and metabolism of Salsola villosa. Plant Biosystems, 2018, 152, 1263-1273.	1.6	15
35	Regulatory roles of 24-epibrassinolide in tolerance of <i>Acacia gerrardii</i> Benth to salt stress. Bioengineered, 2018, 9, 61-71.	3.2	21
36	Combining a root exclusion technique with continuous chamber and porous tube measurements for a pinâ€point separation of ecosystem respiration in croplands. Journal of Plant Nutrition and Soil Science, 2018, 181, 41-50.	1.9	9

#	Article	IF	Citations
37	Desert Truffles in Saudi Arabia: Diversity, Ecology, and Conservation. Soil Biology, 2018, , 353-369.	0.8	0
38	Soil Salinity and Microbes: Diversity, Ecology, and Biotechnological Potential. Microorganisms for Sustainability, 2018, , 317-332.	0.7	1
39	Medicinal plants with phytotoxic activity harbour endophytic bacteria with plant growth inhibitory properties. Environmental Sustainability, 2018, 1, 209-215.	2.8	10
40	Interactive Effects of Nutrients and Bradyrhizobium japonicum on the Growth and Root Architecture of Soybean (Glycine max L.). Frontiers in Microbiology, 2018, 9, 1000.	3.5	48
41	Diet simplification selects for high gut microbial diversity and strong fermenting ability in high-altitude pikas. Applied Microbiology and Biotechnology, 2018, 102, 6739-6751.	3.6	75
42	Potential effects of biochar-based microbial inoculants in agriculture. Environmental Sustainability, 2018, 1, 19-24.	2.8	50
43	Calcium application enhances growth and alleviates the damaging effects induced by Cd stress in sesame (<i>Sesamum indicum</i>L.). Journal of Plant Interactions, 2017, 12, 237-243.	2.1	37
44	Coordination between<i>Bradyrhizobium</i>and<i>Pseudomonas</i>alleviates salt stress in soybean through altering root system architecture. Journal of Plant Interactions, 2017, 12, 100-107.	2.1	145
45	Contrasting effects of biochar on N2O emission and N uptake at different N fertilizer levels on a temperate sandy loam. Science of the Total Environment, 2017, 578, 557-565.	8.0	42
46	Biochar-based Bradyrhizobium inoculum improves growth of lupin (Lupinus angustifolius L.) under drought stress. European Journal of Soil Biology, 2017, 78, 38-42.	3.2	75
47	Impact of soil salinity on the plant-growth â€“ promoting and biological control abilities of root associated bacteria. Saudi Journal of Biological Sciences, 2017, 24, 1601-1608.	3.8	98
48	Tripartite Interaction Among Root-Associated Beneficial Microbes Under Stress. , 2017, , 219-236.		1
49	Increased resistance of drought by Trichoderma harzianum fungal treatment correlates with increased secondary metabolites and proline content. Journal of Integrative Agriculture, 2017, 16, 1751-1757.	3.5	119
50	Microbial cooperation in the rhizosphere improves liquorice growth under salt stress. Bioengineered, 2017, 8, 433-438.	3.2	37
51	Phytohormones and Beneficial Microbes: Essential Components for Plants to Balance Stress and Fitness. Frontiers in Microbiology, 2017, 8, 2104.	3.5	448
52	Antimicrobial Activity of Medicinal Plants Correlates with the Proportion of Antagonistic Endophytes. Frontiers in Microbiology, 2017, 8, 199.	3.5	136
53	Endophytic Bacteria Improve Plant Growth, Symbiotic Performance of Chickpea (Cicer arietinum L.) and Induce Suppression of Root Rot Caused by Fusarium solani under Salt Stress. Frontiers in Microbiology, 2017, 8, 1887.	3.5	227
54	Biochar Treatment Resulted in a Combined Effect on Soybean Growth Promotion and a Shift in Plant Growth Promoting Rhizobacteria. Frontiers in Microbiology, 2016, 7, 209.	3.5	114

#	Article	IF	Citations
55	The Interaction between Arbuscular Mycorrhizal Fungi and Endophytic Bacteria Enhances Plant Growth of Acacia gerrardii under Salt Stress. Frontiers in Microbiology, 2016, 7, 1089.	3.5	229
56	Pika Gut May Select for Rare but Diverse Environmental Bacteria. Frontiers in Microbiology, 2016, 7, 1269.	3.5	65
57	Diversity and activity of cellulolytic bacteria, isolated from the gut contents of grass carp (<i>Ctenopharyngodon idellus</i>) (Valenciennes) fed on Sudan grass (<i>Sorghum sudanense</i>) or artificial feedstuffs. Aquaculture Research, 2016, 47, 153-164.	1.8	47
58	Alleviation of cadmium stress in Solanum lycopersicum L. by arbuscular mycorrhizal fungi via induction of acquired systemic tolerance. Saudi Journal of Biological Sciences, 2016, 23, 272-281.	3.8	133
59	Impact of chars and readily available carbon on soil microbial respiration and microbial community composition in a dynamic incubation experiment. Soil and Tillage Research, 2016, 164, 18-24.	5.6	35
60	Arbuscular mycorrhizal fungi alleviate salt stress in lupine (<italic>Lupinus termis</italic> Forsik) through modulation of antioxidant defense systems and physiological traits. Legume Research, 2016, 39, .	0.1	7
61	Diversity of autochthonous bacterial communities in the intestinal mucosa of grass carp (<i>Ctenopharyngodon idellus</i>) (Valenciennes) determined by culture-dependent and culture-independent techniques. Aquaculture Research, 2015, 46, 2344-2359.	1.8	42
62	Salt tolerant Methylobacterium mesophilicum showed viable colonization abilities in the plant rhizosphere. Saudi Journal of Biological Sciences, 2015, 22, 585-590.	3.8	17
63	Short-Term Response of Soil Respiration to Addition of Chars: Impact of Fermentation Post-Processing and Mineral Nitrogen. Pedosphere, 2015, 25, 761-769.	4.0	15
64	Impact of multi-resistant transgenic Bt maize on straw decomposition and the involved microbial communities. Applied Soil Ecology, 2014, 73, 9-18.	4.3	14
65	Alleviation of Salt Stress in Legumes by Co-inoculation with Pseudomonas and Rhizobium. , 2013, , 291-303.		25
66	Reconfigurable AUV for intervention missions: a case study on underwater object recovery. Intelligent Service Robotics, 2012, 5, 19-31.	2.6	82
67	Forest succession on abandoned arable soils in European Russia â€“ Impacts on microbial biomass, fungal-bacterial ratio, and basal CO2 respiration activity. European Journal of Soil Biology, 2011, 47, 169-174.	3.2	62
68	Secondary salinity effects on soil microbial biomass. Biology and Fertility of Soils, 2010, 46, 445-449.	4.3	90
69	Microbial respiration activities related to sequentially separated, particulate and water-soluble organic matter fractions from arable and forest topsoils. Soil Biology and Biochemistry, 2010, 42, 418-428.	8.8	37
70	Enzyme Activities in the Rhizosphere of Plants. Soil Biology, 2010, , 149-166.	0.8	18
71	Diversity and Activity of Cellulose-Decomposing Bacteria, Isolated from a Sandy and a Loamy Soil after Long-Term Manure Application. Microbial Ecology, 2008, 55, 512-522.	2.8	82
72	Comparative assessment of soil microbial biomass determined by the methods of direct microscopy and substrate-induced respiration. Microbiology, 2008, 77, 356-364.	1.2	15

#	ARTICLE	IF	CITATIONS
73	Microbial respiration activities of soils from different climatic regions of European Russia. European Journal of Soil Biology, 2008, 44, 147-157.	3.2	82
74	Assessing the Changes in Bacterial diversity in Rhizosphere and Phyllosphere of Transgenic and Non-transgenic Potato Plant. Plant Tissue Culture and Biotechnology, 2008, 17, 87-95.	0.2	5
75	Translocation of Soil Enzyme Activity by Leachates from Different Agricultural Drainage Systems. International Journal of Soil Science, 2008, 3, 52-61.	0.7	1
76	Implications of soil substrate and land use for properties of fen soils in North-East Germany Part I: Basic soil conditions, chemical and biological properties of topsoils. Archives of Agronomy and Soil Science, 2007, 53, 113-126.	2.6	17
77	Exploration Transform: A stable exploring algorithm for robots in rescue environments. , 2007, , .		38
78	Response of soil microbial biomass, activities, and community structure at a pine stand in northeastern Germany 5 years after thinning. Canadian Journal of Forest Research, 2006, 36, 1427-1434.	1.7	26
79	Application of multiple regression and neural network approaches for landscape-scale assessment of soil microbial biomass. Soil Biology and Biochemistry, 2005, 37, 1577-1580.	8.8	34
80	Microbial activity in a sandy arable soil is governed by the fertilization regime. European Journal of Soil Biology, 2004, 40, 87-94.	3.2	77
81	Soil microbiological monitoring of a pine forest after partial thinning for stand regeneration with beech seedlings. Soil Science and Plant Nutrition, 2004, 50, 815-819.	1.9	11
82	Cellulose-Degrading Potentials and Phylogenetic Classification of Carboxymethyl-cellulose Decomposing Bacteria Isolated from Soil. Systematic and Applied Microbiology, 2002, 25, 584-591.	2.8	42
83	The role played by microorganisms in the biogenesis of soil cracks: importance of substrate quantity and quality. Soil Biology and Biochemistry, 2001, 33, 1851-1858.	8.8	41
84	Soil Microbial Properties Across an Encatchment in the Moraine, Agricultural Landscape of Northeast Germany. Geomicrobiology Journal, 1999, 16, 207-219.	2.0	7
85	Phylogenetic Diversity and Population Densities of Culturable Cellulolytic Soil Bacteria across an Agricultural Encatchment. Microbial Ecology, 1999, 37, 238-247.	2.8	40
86	Soluble, dye-labelled substrates for a micro-plate assay of proteinase activity. Journal of Microbiological Methods, 1996, 25, 337-342.	1.6	10
87	A soluble, dye-labelled chitin derivative adapted for the assay of krill chitinase. Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1993, 105, 673-678.	0.2	9
88	Callase-(1,3-Î²-d-glucanase) activity during spring reactivation in deciduous trees. Plant Science, 1993, 93, 19-23.	3.6	25
89	Micro-plate colourimetric assay for Endo -acting cellulase, xylanase, chitinase, 1,3-Î²-glucanase and amylase extracted from forest soil horizons. Soil Biology and Biochemistry, 1992, 24, 511-519.	8.8	126
90	Water-soluble, dye-labelled fatty acid derivatives for preliminary detection of lipolytic microorganisms in agar media. FEMS Microbiology Letters, 1992, 95, 77-79.	1.8	0

#	Article	IF	Citations
91	Quantifizierung der CellulaseaktivitÃt und Nachweis von FettsÃure-Coating-Effekten im Pansen von Schafen. Journal of Animal Physiology and Animal Nutrition, 1991, 66, 45-52.	2.2	9
92	Dye-labelled substrates for the assay and detection of chitinase and lysozyme activity. Journal of Microbiological Methods, 1990, 12, 197-205.	1.6	245
93	Biochar amendments improve licorice growth and nutrient uptake through altering the root system and soil enzyme activities in loamy sand under salt stress. , 0, , .		0