

Shiwei Guo

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

8,234
citations

53660

45
h-index

51492

86
g-index

101
all docs

101
docs citations

101
times ranked

7756
citing authors

#	ARTICLE	IF	CITATIONS
1	Producing more grain with lower environmental costs. <i>Nature</i> , 2014, 514, 486-489.	13.7	1,292
2	The Critical Role of Potassium in Plant Stress Response. <i>International Journal of Molecular Sciences</i> , 2013, 14, 7370-7390.	1.8	1,096
3	Net annual global warming potential and greenhouse gas intensity in Chinese double rice-cropping systems: a 3-year field measurement in long-term fertilizer experiments. <i>Global Change Biology</i> , 2011, 17, 2196-2210.	4.2	445
4	Insight into how organic amendments can shape the soil microbiome in long-term field experiments as revealed by network analysis. <i>Soil Biology and Biochemistry</i> , 2016, 99, 137-149.	4.2	282
5	Organic amendments increase crop yields by improving microbe-mediated soil functioning of agroecosystems: A meta-analysis. <i>Soil Biology and Biochemistry</i> , 2018, 124, 105-115.	4.2	251
6	Role of Silicon on Plant-Pathogen Interactions. <i>Frontiers in Plant Science</i> , 2017, 8, 701.	1.7	239
7	Long-term fertilisation regimes affect the composition of the alkaline phosphomonoesterase encoding microbial community of a vertisol and its derivative soil fractions. <i>Biology and Fertility of Soils</i> , 2017, 53, 375-388.	2.3	211
8	Light-saturated photosynthetic rate in high-nitrogen rice (<i>Oryza sativa</i> L.) leaves is related to chloroplastic CO ₂ concentration. <i>Journal of Experimental Botany</i> , 2009, 60, 2351-2360.	2.4	154
9	Optimizing nitrogen supply increases rice yield and nitrogen use efficiency by regulating yield formation factors. <i>Field Crops Research</i> , 2013, 150, 99-107.	2.3	152
10	Deciphering the associations between soil microbial diversity and ecosystem multifunctionality driven by long-term fertilization management. <i>Functional Ecology</i> , 2018, 32, 1103-1116.	1.7	141
11	Synergistic and antagonistic interactions between potassium and magnesium in higher plants. <i>Crop Journal</i> , 2021, 9, 249-256.	2.3	116
12	Response of the bacterial diversity and soil enzyme activity in particle-size fractions of Mollisol after different fertilization in a long-term experiment. <i>Biology and Fertility of Soils</i> , 2014, 50, 901-911.	2.3	110
13	Understanding how long-term organic amendments increase soil phosphatase activities: Insight into phoD- and phoC-harboring functional microbial populations. <i>Soil Biology and Biochemistry</i> , 2019, 139, 107632.	4.2	110
14	The enhanced drought tolerance of rice plants under ammonium is related to aquaporin (AQP). <i>Plant Science</i> , 2015, 234, 14-21.	1.7	103
15	Soil fungal assemblage complexity is dependent on soil fertility and dominated by deterministic processes. <i>New Phytologist</i> , 2020, 226, 232-243.	3.5	101
16	Unravelling the Roles of Nitrogen Nutrition in Plant Disease Defences. <i>International Journal of Molecular Sciences</i> , 2020, 21, 572.	1.8	100
17	Fusaric acid is a crucial factor in the disturbance of leaf water imbalance in <i>Fusarium</i> -infected banana plants. <i>Plant Physiology and Biochemistry</i> , 2012, 60, 171-179.	2.8	99
18	Distinct drivers of activity, abundance, diversity and composition of ammonia-oxidizers: evidence from a long-term field experiment. <i>Soil Biology and Biochemistry</i> , 2017, 115, 403-414.	4.2	98

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19	Does Chloroplast Size Influence Photosynthetic Nitrogen Use Efficiency?. <i>PLoS ONE</i> , 2013, 8, e62036.	1.1	92
20	Bacterial rather than fungal community composition is associated with microbial activities and nutrient-use efficiencies in a paddy soil with short-term organic amendments. <i>Plant and Soil</i> , 2018, 424, 335-349.	1.8	88
21	The Interactions of Aquaporins and Mineral Nutrients in Higher Plants. <i>International Journal of Molecular Sciences</i> , 2016, 17, 1229.	1.8	86
22	Effect of organic substitution rates on soil quality and fungal community composition in a tea plantation with long-term fertilization. <i>Biology and Fertility of Soils</i> , 2020, 56, 633-646.	2.3	86
23	Drought-Induced Root Aerenchyma Formation Restricts Water Uptake in Rice Seedlings Supplied with Nitrate. <i>Plant and Cell Physiology</i> , 2012, 53, 495-504.	1.5	85
24	Soil fertility and its significance to crop productivity and sustainability in typical agroecosystem: a summary of long-term fertilizer experiments in China. <i>Plant and Soil</i> , 2014, 381, 13-23.	1.8	81
25	Ammonium nutrition increases water absorption in rice seedlings (<i>Oryza sativa</i> L.) under water stress. <i>Plant and Soil</i> , 2010, 331, 193-201.	1.8	80
26	Is Nitrogen a Key Determinant of Water Transport and Photosynthesis in Higher Plants Upon Drought Stress?. <i>Frontiers in Plant Science</i> , 2018, 9, 1143.	1.7	78
27	Do high nitrogen use efficiency rice cultivars reduce nitrogen losses from paddy fields?. <i>Agriculture, Ecosystems and Environment</i> , 2015, 209, 26-33.	2.5	76
28	Ammonium nutrition increases photosynthesis rate under water stress at early development stage of rice (<i>Oryza sativa</i> L.). <i>Plant and Soil</i> , 2007, 296, 115-124.	1.8	75
29	Functions of silicon in plant drought stress responses. <i>Horticulture Research</i> , 2021, 8, 254.	2.9	75
30	Ammonia volatilization in Chinese double rice-cropping systems: a 3-year field measurement in long-term fertilizer experiments. <i>Biology and Fertility of Soils</i> , 2014, 50, 715-725.	2.3	70
31	Water balance altered in cucumber plants infected with <i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> . <i>Scientific Reports</i> , 2015, 5, 7722.	1.6	68
32	Improving rice population productivity by reducing nitrogen rate and increasing plant density. <i>PLoS ONE</i> , 2017, 12, e0182310.	1.1	68
33	Relationship between water and nitrogen uptake in nitrate- and ammonium-supplied <i>Phaseolus vulgaris</i> L. plants. <i>Journal of Plant Nutrition and Soil Science</i> , 2007, 170, 73-80.	1.1	66
34	Different apparent CO ₂ compensation points in nitrate- and ammonium-grown <i>Phaseolus vulgaris</i> and the relationship to non-photorespiratory CO ₂ evolution. <i>Physiologia Plantarum</i> , 2005, 123, 288-301.	2.6	64
35	Root ABA Accumulation Enhances Rice Seedling Drought Tolerance under Ammonium Supply: Interaction with Aquaporins. <i>Frontiers in Plant Science</i> , 2016, 7, 1206.	1.7	64
36	New Insight into the Strategy for Nitrogen Metabolism in Plant Cells. <i>International Review of Cell and Molecular Biology</i> , 2014, 310, 1-37.	1.6	62

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37	Why Nitrogen Use Efficiency Decreases Under High Nitrogen Supply in Rice (<i>Oryza sativa</i> L.) Seedlings. <i>Journal of Plant Growth Regulation</i> , 2012, 31, 47-52.	2.8	58
38	N-fertilizer-driven association between the arbuscular mycorrhizal fungal community and diazotrophic community impacts wheat yield. <i>Agriculture, Ecosystems and Environment</i> , 2018, 254, 191-201.	2.5	57
39	Dynamics of the antibiotic resistome in agricultural soils amended with different sources of animal manures over three consecutive years. <i>Journal of Hazardous Materials</i> , 2021, 401, 123399.	6.5	57
40	Chloroplast Downsizing Under Nitrate Nutrition Restrained Mesophyll Conductance and Photosynthesis in Rice (<i>Oryza sativa</i> L.) Under Drought Conditions. <i>Plant and Cell Physiology</i> , 2012, 53, 892-900.	1.5	55
41	Thermographic visualization of leaf response in cucumber plants infected with the soil-borne pathogen <i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> . <i>Plant Physiology and Biochemistry</i> , 2012, 61, 153-161.	2.8	55
42	Long-term fertilization regimes drive the abundance and composition of N-cycling-related prokaryotic groups via soil particle-size differentiation. <i>Soil Biology and Biochemistry</i> , 2018, 116, 213-223.	4.2	52
43	The rice production practices of high yield and high nitrogen use efficiency in Jiangsu, China. <i>Scientific Reports</i> , 2017, 7, 2101.	1.6	51
44	Aquaporin PIP2;1 affects water transport and root growth in rice (<i>Oryza sativa</i> L.). <i>Plant Physiology and Biochemistry</i> , 2019, 139, 152-160.	2.8	51
45	Potassium mediates coordination of leaf photosynthesis and hydraulic conductance by modifications of leaf anatomy. <i>Plant, Cell and Environment</i> , 2019, 42, 2231-2244.	2.8	51
46	Water absorption is affected by the nitrogen supply to rice plants. <i>Plant and Soil</i> , 2015, 396, 397-410.	1.8	50
47	Long-term fertilization regimes change soil nitrification potential by impacting active autotrophic ammonia oxidizers and nitrite oxidizers as assessed by DNA stable isotope probing. <i>Environmental Microbiology</i> , 2019, 21, 1224-1240.	1.8	48
48	Crop rotation history constrains soil biodiversity and multifunctionality relationships. <i>Agriculture, Ecosystems and Environment</i> , 2021, 319, 107550.	2.5	48
49	Fusaric acid accelerates the senescence of leaf in banana when infected by <i>Fusarium</i> . <i>World Journal of Microbiology and Biotechnology</i> , 2014, 30, 1399-1408.	1.7	47
50	Alterations in soil fungal community composition and network assemblage structure by different long-term fertilization regimes are correlated to the soil ionome. <i>Biology and Fertility of Soils</i> , 2018, 54, 95-106.	2.3	47
51	Ammonium enhances the tolerance of rice seedlings (<i>Oryza sativa</i> L.) to drought condition. <i>Agricultural Water Management</i> , 2009, 96, 1746-1750.	2.4	46
52	Plant Primary Metabolism Regulated by Nitrogen Contributes to Plant-Pathogen Interactions. <i>Plant and Cell Physiology</i> , 2019, 60, 329-342.	1.5	45
53	Nitrate Increased Cucumber Tolerance to <i>Fusarium</i> Wilt by Regulating Fungal Toxin Production and Distribution. <i>Toxins</i> , 2017, 9, 100.	1.5	40
54	Role of Aquaporins in Determining Carbon and Nitrogen Status in Higher Plants. <i>International Journal of Molecular Sciences</i> , 2018, 19, 35.	1.8	39

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55	Nitrate Protects Cucumber Plants Against <i>Fusarium oxysporum</i> by Regulating Citrate Exudation. <i>Plant and Cell Physiology</i> , 2016, 57, 2001-2012.	1.5	37
56	Legacy effects of 8-year nitrogen inputs on bacterial assemblage in wheat rhizosphere. <i>Biology and Fertility of Soils</i> , 2020, 56, 583-596.	2.3	35
57	DNA Stable-Isotope Probing Delineates Carbon Flows from Rice Residues into Soil Microbial Communities Depending on Fertilization. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	34
58	Influence of N form on growth photosynthesis of <i>Phaseolus vulgaris</i> L. plants. <i>Journal of Plant Nutrition and Soil Science</i> , 2006, 169, 849-856.	1.1	33
59	Exploring the Roles of Aquaporins in Plant-Microbe Interactions. <i>Cells</i> , 2018, 7, 267.	1.8	32
60	Negative effects of the simulated nitrogen deposition on plant phenolic metabolism: A meta-analysis. <i>Science of the Total Environment</i> , 2020, 719, 137442.	3.9	32
61	Evaluation of the grain yield and nitrogen nutrient status of wheat (<i>Triticum aestivum</i> L.) using thermal imaging. <i>Field Crops Research</i> , 2016, 196, 463-472.	2.3	31
62	Leaf photosynthesis is mediated by the coordination of nitrogen and potassium: The importance of anatomical-determined mesophyll conductance to CO ₂ and carboxylation capacity. <i>Plant Science</i> , 2020, 290, 110267.	1.7	31
63	Effects of Local Nitrogen Supply on Water Uptake of Bean Plants in a Split Root System. <i>Journal of Integrative Plant Biology</i> , 2007, 49, 472-480.	4.1	29
64	Wilted cucumber plants infected by <i>Fusarium oxysporum</i> f. sp. <i>cucumerinum</i> do not suffer from water shortage. <i>Annals of Botany</i> , 2017, 120, 427-436.	1.4	29
65	Effect of fusaric acid on the leaf physiology of cucumber seedlings. <i>European Journal of Plant Pathology</i> , 2014, 138, 103-112.	0.8	28
66	Aquaporin plays an important role in mediating chloroplastic CO ₂ concentration under high N supply in rice (<i>Oryza sativa</i>) plants. <i>Physiologia Plantarum</i> , 2016, 156, 215-226.	2.6	28
67	Detection of the dynamic response of cucumber leaves to fusaric acid using thermal imaging. <i>Plant Physiology and Biochemistry</i> , 2013, 66, 68-76.	2.8	27
68	Active phoD-harboring bacteria are enriched by long-term organic fertilization. <i>Soil Biology and Biochemistry</i> , 2021, 152, 108071.	4.2	27
69	The photosynthetic and structural differences between leaves and siliques of <i>Brassica napus</i> exposed to potassium deficiency. <i>BMC Plant Biology</i> , 2017, 17, 240.	1.6	26
70	Potential role of photosynthesis-related factors in banana metabolism and defense against <i>Fusarium oxysporum</i> f. sp. <i>cubense</i> . <i>Environmental and Experimental Botany</i> , 2016, 129, 4-12.	2.0	25
71	Historical Nitrogen Deposition and Straw Addition Facilitate the Resistance of Soil Multifunctionality to Drying-Wetting Cycles. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	1.4	23
72	Plant Grafting Shapes Complexity and Co-occurrence of Rhizobacterial Assemblages. <i>Microbial Ecology</i> , 2020, 80, 643-655.	1.4	20

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73	Enhanced Salt Tolerance under Nitrate Nutrition is Associated with Apoplast Na ⁺ Content in Canola (<i>Brassica napus</i> L.) and Rice (<i>Oryza sativa</i> L.) Plants. <i>Plant and Cell Physiology</i> , 2016, 57, 2323-2333.	1.5	19
74	A 1H NMR study of water flow in <i>Phaseolus vulgaris</i> L. roots treated with nitrate or ammonium. <i>Plant and Soil</i> , 2009, 319, 307-321.	1.8	18
75	High water uptake ability was associated with root aerenchyma formation in rice: Evidence from local ammonium supply under osmotic stress conditions. <i>Plant Physiology and Biochemistry</i> , 2020, 150, 171-179.	2.8	18
76	Aquaporin Expression and Water Transport Pathways inside Leaves Are Affected by Nitrogen Supply through Transpiration in Rice Plants. <i>International Journal of Molecular Sciences</i> , 2018, 19, 256.	1.8	17
77	Nitrate Stabilizes the Rhizospheric Fungal Community to Suppress Fusarium Wilt Disease in Cucumber. <i>Molecular Plant-Microbe Interactions</i> , 2020, 33, 590-599.	1.4	17
78	Rare Bacteria Assembly in Soils Is Mainly Driven by Deterministic Processes. <i>Microbial Ecology</i> , 2022, 83, 137-150.	1.4	17
79	The source-sink balance during the grain filling period facilitates rice production under organic fertilizer substitution. <i>European Journal of Agronomy</i> , 2022, 134, 126468.	1.9	17
80	Long-term manure inputs induce a deep selection on agroecosystem soil antibiotic resistome. <i>Journal of Hazardous Materials</i> , 2022, 436, 129163.	6.5	17
81	Difference in Sodium Spatial Distribution in the Shoot of Two Canola Cultivars Under Saline Stress. <i>Plant and Cell Physiology</i> , 2012, 53, 1083-1092.	1.5	16
82	Nutrition-mediated cell and tissue-level anatomy triggers the covariation of leaf photosynthesis and leaf mass per area. <i>Journal of Experimental Botany</i> , 2020, 71, 6524-6537.	2.4	16
83	Are the microbial communities involved in glucose assimilation in paddy soils treated with different fertilization regimes for three years similar?. <i>Journal of Soils and Sediments</i> , 2018, 18, 2476-2490.	1.5	15
84	Nitrate increases ethylene production and aerenchyma formation in roots of lowland rice plants under water stress. <i>Functional Plant Biology</i> , 2017, 44, 430.	1.1	14
85	Nitrogen nutrient index and leaf function affect rice yield and nitrogen efficiency. <i>Plant and Soil</i> , 2019, 445, 7-21.	1.8	14
86	Soil ionic and enzymatic responses and correlations to fertilizations amended with and without organic fertilizer in long-term experiments. <i>Scientific Reports</i> , 2016, 6, 24559.	1.6	13
87	Zinc and Copper Enhance Cucumber Tolerance to Fusaric Acid by Mediating Its Distribution and Toxicity and Modifying the Antioxidant System. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3370.	1.8	13
88	Redox imbalance contributed differently to membrane damage of cucumber leaves under water stress and Fusarium infection. <i>Plant Science</i> , 2018, 274, 171-180.	1.7	12
89	Nitrogen-inputs regulate microbial functional and genetic resistance and resilience to drying-rewetting cycles, with implications for crop yields. <i>Plant and Soil</i> , 2019, 441, 301-315.	1.8	11
90	Anatomically induced changes in rice leaf mesophyll conductance explain the variation in photosynthetic nitrogen use efficiency under contrasting nitrogen supply. <i>BMC Plant Biology</i> , 2020, 20, 527.	1.6	11

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91	The Potential for Improving Rice Yield and Nitrogen Use Efficiency in Smallholder Farmers: A Case Study of Jiangsu, China. <i>Agronomy</i> , 2020, 10, 419.	1.3	9
92	Nitrate mediated resistance against <i>Fusarium</i> infection in cucumber plants acts via photorespiration. <i>Plant, Cell and Environment</i> , 2021, 44, 3412-3431.	2.8	9
93	Nitrogen improves plant cooling capacity under increased environmental temperature. <i>Plant and Soil</i> , 2022, 472, 329-344.	1.8	9
94	Meta-analysis of diazotrophic signatures across terrestrial ecosystems at the continental scale. <i>Environmental Microbiology</i> , 2022, 24, 2013-2028.	1.8	9
95	Higher Radiation Use Efficiency Produces Greater Biomass Before Heading and Grain Yield in Super Hybrid Rice. <i>Agronomy</i> , 2020, 10, 209.	1.3	8
96	The cross-kingdom roles of mineral nutrient transporters in plant-microbe relations. <i>Physiologia Plantarum</i> , 2021, 171, 771-784.	2.6	7
97	Ammonium enhances the uptake, bioaccumulation, and tolerance of phenanthrene in cucumber seedlings. <i>Plant and Soil</i> , 2012, 354, 185-195.	1.8	6
98	Leaf nitrate accumulation influences the photorespiration of rice (<i>Oryza sativa</i> L.) seedlings. <i>Plant and Soil</i> , 2020, 456, 323-338.	1.8	6
99	Chimeric plants favor asynchrony of conditionally rare bacterial species facilitating functional complementarity in rhizosphere. <i>Biology and Fertility of Soils</i> , 2022, 58, 459-470.	2.3	5
100	Variation in photosynthetic induction between super hybrid rice and inbred super rice. <i>Plant Physiology and Biochemistry</i> , 2022, 178, 105-115.	2.8	3