Shiqing Li

List of Publications by Citations

93 papers	3,564 citations	29 h-index	58 g-index
94 ext. papers	4,608 ext. citations	5.3 avg, IF	5.24 L-index

#	Paper	IF	Citations
93	Producing more grain with lower environmental costs. *Nature*, **2014**, 514, 486-9	50.4	860
92	Pursuing sustainable productivity with millions of smallholder farmers. *Nature*, **2018**, 555, 363-366	50.4	408
91	The effects of mulching on maize growth, yield and water use in a semi-arid region. *Agricultural Water Management*, **2013**, 123, 71-78	5.9	205
90	Multiple afforestation programs accelerate the greenness in the 'three North' region of China from 1982 to 2013. *Ecological Indicators*, **2016**, 61, 404-412	5.8	173
89	Growth and development of maize (Zea mays L.) in response to different field water management practices: Resource capture and use efficiency. *Agricultural and Forest Meteorology*, **2010**, 150, 606-613	5.8	147
88	Reveal the response of enzyme activities to heavy metals through in situ zymography. *Ecotoxicology and Environmental Safety*, **2018**, 156, 106-115	7	132
87	Closing the yield gap could reduce projected greenhouse gas emissions: a case study of maize production in China. *Global Change Biology*, **2013**, 19, 2467-77	11.4	124
86	Soil water dynamics and water use efficiency in spring maize (Zea mays L.) fields subjected to different water management practices on the Loess Plateau, China. *Agricultural Water Management* , **2010**, 97, 769-775	5.9	85
85	Long-term biochar application influences soil microbial community and its potential roles in semiarid farmland. *Applied Soil Ecology*, **2017**, 117-118, 10-15	5	82
84	Response of nitrous oxide emission to soil mulching and nitrogen fertilization in semi-arid farmland. *Agriculture, Ecosystems and Environment*, **2014**, 188, 20-28	5.7	75
83	Soil amendment with biochar increases maize yields in a semi-arid region by improving soil quality and root growth. *Crop and Pasture Science*, **2016**, 67, 495	2.2	57
82	Response of nitrogen use efficiency and soil nitrate dynamics to soil mulching in dryland maize (Zea mays L.) fields. *Nutrient Cycling in Agroecosystems*, **2015**, 101, 271-283	3.3	54
81	Optimizing Plant Density and Plastic Film Mulch to Increase Maize Productivity and Water-Use Efficiency in Semiarid Areas. *Agronomy Journal*, **2014**, 106, AGJ2AGRONJ130582	2.2	53
80	Sensitivity of soil water retention and availability to biochar addition in rainfed semi-arid farmland during a three-year field experiment. *Field Crops Research*, **2016**, 196, 284-293	5.5	52
79	Sensitivity of soil organic carbon stocks and fractions to soil surface mulching in semiarid farmland. *European Journal of Soil Biology*, **2015**, 67, 35-42	2.9	51
78	Fate of 15N fertilizer under different nitrogen split applications to plastic mulched maize in semiarid farmland. *Nutrient Cycling in Agroecosystems*, **2016**, 105, 129-140	3.3	51
77	Effect of split application of nitrogen on nitrous oxide emissions from plastic mulching maize in the semiarid Loess Plateau. *Agriculture, Ecosystems and Environment*, **2016**, 220, 21-27	5.7	43

76	Taibaiella smilacinae gen. nov., sp. nov., an endophytic member of the family Chitinophagaceae isolated from the stem of Smilacina japonica, and emended description of Flavihumibacter petaseus. *International Journal of Systematic and Evolutionary Microbiology*, **2013**, 63, 3769-3776	2.2	42
75	Soil Organic Nitrogen and Its Contribution to Crop Production. *Journal of Integrative Agriculture*, **2014**, 13, 2061-2080	3.2	39
74	Ecoenzymatic stoichiometry reveals microbial phosphorus limitation decreases the nitrogen cycling potential of soils in semi-arid agricultural ecosystems. *Soil and Tillage Research*, **2020**, 197, 104463	6.5	36
73	SourceSink Capacity Responsible for Higher Maize Yield with Removal of Plastic Film. *Agronomy Journal*, **2013**, 105, 591-598	2.2	35
72	Effects of plastic film mulching on soil greenhouse gases (CO2, CH4 and N2O) concentration within soil profiles in maize fields on the Loess Plateau, China. *Journal of Integrative Agriculture*, **2016**, 15, 451-464	3.2	35
71	Effects of water stress on water use efficiency of irrigated and rainfed wheat in the Loess Plateau, China. *Science of the Total Environment*, **2018**, 642, 1-11	10.2	34
70	Effects of biochar and maize straw on the short-term carbon and nitrogen dynamics in a cultivated silty loam in China. *Environmental Science and Pollution Research*, **2017**, 24, 1019-1029	5.1	32
69	Understanding Dry Matter and Nitrogen Accumulation for High-Yielding Film-Mulched Maize. *Agronomy Journal*, **2014**, 106, 390-396	2.2	32
68	Deciphering the rhizobium inoculation effect on spatial distribution of phosphatase activity in the rhizosphere of alfalfa under copper stress. *Soil Biology and Biochemistry*, **2019**, 137, 107574	7.5	30
67	Microbial functional diversity responses to 2 years since biochar application in silt-loam soils on the Loess Plateau. *Ecotoxicology and Environmental Safety*, **2017**, 144, 578-584	7	30
66	Effects of Biochar Application on CO2 Emissions from a Cultivated Soil under Semiarid Climate Conditions in Northwest China. *Sustainability*, **2017**, 9, 1482	3.6	30
65	Effect of nitrogen fertilization under plastic mulched and non-plastic mulched conditions on water use by maize plants in dryland areas of China. *Agricultural Water Management*, **2015**, 162, 15-32	5.9	29
64	Characteristics of N2O production and transport within soil profiles subjected to different nitrogen application rates in China. *Science of the Total Environment*, **2016**, 542, 864-75	10.2	26
63	Attainable yield achieved for plastic film-mulched maize in response to nitrogen deficit. *European Journal of Agronomy*, **2014**, 55, 53-62	5	21
62	Soil mulching can mitigate soil water deficiency impacts on rainfed maize production in semiarid environments. *Journal of Integrative Agriculture*, **2015**, 14, 58-66	3.2	20
61	Climate and land use controls on soil organic carbon in the loess plateau region of China. *PLoS ONE*, **2014**, 9, e95548	3.7	20
60	Soil C and N dynamics and hydrological processes in a maize-wheat rotation field subjected to different tillage and straw management practices. *Agriculture, Ecosystems and Environment*, **2019**, 285, 106616	5.7	19
59	Effects of Phosphorus Application in Different Soil Layers on Root Growth, Yield, and Water-Use Efficiency of Winter Wheat Grown Under Semi-Arid Conditions. *Journal of Integrative Agriculture*, **2014**, 13, 2028-2039	3.2	18

58	The factors related to carbon dioxide effluxes and production in the soil profiles of rain-fed maize fields. *Agriculture, Ecosystems and Environment*, **2016**, 216, 177-187	5.7	18
57	Seasonal dynamics of soil microbial activity after biochar addition in a dryland maize field in North-Western China. *Ecological Engineering*, **2017**, 104, 141-149	3.9	17
56	The effect of adapting cultivars on the water use efficiency of dryland maize (Zea mays L.) in northwestern China. *Agricultural Water Management*, **2015**, 148, 1-9	5.9	16
55	Cytotoxic Free Radicals on Air-Borne Soot Particles Generated by Burning Wood or Low-Maturity Coals. *Environmental Science & Technology*, **2020**, 54, 5608-5618	10.3	16
54	Maize Yield Response to Nitrogen Rate and Plant Density under Film Mulching. *Agronomy Journal*, **2018**, 110, 996-1007	2.2	16
53	EFFECTS OF SPATIAL COUPLING OF WATER AND FERTILIZER APPLICATIONS ON ROOT GROWTH CHARACTERISTICS AND WATER USE OF WINTER WHEAT. *Journal of Plant Nutrition*, **2013**, 36, 515-528	2.3	16
52	Effects of land-cover type and topography on soil organic carbon storage on Northern Loess Plateau, China. *Acta Agriculturae Scandinavica - Section B Soil and Plant Science*, **2010**, 60, 326-334	1.1	16
51	Mulching Effects on Labile Soil Organic Nitrogen Pools under a Spring Maize Cropping System in Semiarid Farmland. *Agronomy Journal*, **2015**, 107, 1465-1472	2.2	14
50	Microbial Functional Diversity, Biomass and Activity as Affected by Soil Surface Mulching in a Semiarid Farmland. *PLoS ONE*, **2016**, 11, e0159144	3.7	14
49	Methane uptake in semiarid farmland subjected to different mulching and nitrogen fertilization regimes. *Biology and Fertility of Soils*, **2016**, 52, 941-950	6.1	14
48	Changes in nutrient balance, environmental effects, and green development after returning farmland to forests: A case study in Ningxia, China. *Science of the Total Environment*, **2020**, 735, 139370	10.2	13
47	A novel approach for modelling vegetation distributions and analysing vegetation sensitivity through trait-climate relationships in China. *Scientific Reports*, **2016**, 6, 24110	4.9	13
46	Soil microbial community and network changes after long-term use of plastic mulch and nitrogen fertilization on semiarid farmland. *Geoderma*, **2021**, 396, 115086	6.7	13
45	Carbon dioxide fluxes in soil profiles as affected by maize phenology and nitrogen fertilization in the semiarid Loess Plateau. *Agriculture, Ecosystems and Environment*, **2017**, 236, 120-133	5.7	11
44	Responses of crop nitrogen partitioning, translocation and soil nitrogen residue to biochar addition in a temperate dryland agricultural soil. *Plant and Soil*, **2017**, 418, 405-421	4.2	10
43	Effects of the Spatial Coupling of Water and Fertilizer on the Chlorophyll Fluorescence Parameters of Winter Wheat Leaves. *Agricultural Sciences in China*, **2011**, 10, 1923-1931		10
42	Straw returning and one-time application of a mixture of controlled release and solid granular urea to reduce carbon footprint of plastic film mulching spring maize. *Journal of Cleaner Production*, **2021**, 280, 124478	10.3	10
41	The role of maize plants in regulating soil profile dynamics and surface emissions of nitrous oxide in a semiarid environment. *Biology and Fertility of Soils*, **2018**, 54, 119-135	6.1	9

40	Nutrient effects on diurnal variation and magnitude of hydraulic lift in winter wheat. *Agricultural Water Management*, **2011**, 98, 1589-1594	5.9	9
39	Effect of Foliar Nitrogen Application on Nitrogen Metabolism, Water Status, and Plant Growth in Two Maize Cultivars under Short-term Moderate Stress. *Journal of Plant Nutrition*, **2009**, 32, 1861-1881	2.3	9
38	CH4 fluxes and diffusion within soil profiles subjected to different fertilizer regimes on China Loess Plateau. *Agriculture, Ecosystems and Environment*, **2020**, 287, 106679	5.7	9
37	Soil microbial communities under film mulching and N fertilization in semiarid farmland. *Nutrient Cycling in Agroecosystems*, **2019**, 114, 157-170	3.3	7
36	High-yield characteristics and root support of rain-fed maize under film mulching. *Agronomy Journal*, **2020**, 112, 2115-2131	2.2	7
35	Effects of different mulching and fertilization on phosphorus transformation in upland farmland. *Journal of Environmental Management*, **2020**, 253, 109717	7.9	7
34	Effects of 15Nitrogen-Labeled Gel-Based Controlled-Release Fertilizer on Dry-Matter Accumulation and the Nutrient-Uptake Efficiency of Corn. *Communications in Soil Science and Plant Analysis*, **2011**, 42, 1594-1605	1.5	6
33	Film mulching affects root growth and function in dryland maize-soybean intercropping. *Field Crops Research*, **2021**, 271, 108240	5.5	6
32	Response of labile organic C and N pools to plastic film removal from semiarid farmland soil. *Soil Use and Management*, **2016**, 32, 535-542	3.1	5
31	Architectural and anatomical responses of maize roots to agronomic practices in a semi-arid environment. *Journal of Plant Nutrition and Soil Science*, **2019**, 182, 751-762	2.3	5
30	Changes in Phosphorus Requirement with Increasing Grain Yield for Winter Wheat. *Agronomy Journal*, **2015**, 107, 2003-2010	2.2	5
29	The combination of localized phosphorus and water supply indicates a high potential for savings of irrigation water and phosphorus fertilizer. *Journal of Plant Nutrition and Soil Science*, **2014**, 177, 884-891	2.3	5
28	Effects of enhanced atmospheric ammonia on photosynthetic characteristics of two maize (Zea mays L.) cultivars with various nitrogen supply across long-term growth period and their diurnal change patterns. *Photosynthetica*, **2010**, 48, 389-399	2.2	5
27	Film mulching optimizes the early root and shoot development of rain-fed spring maize. *Agronomy Journal*, **2020**, 112, 309-326	2.2	5
26	The fate of urea nitrogen applied to a vegetable crop rotation system. *Nutrient Cycling in Agroecosystems*, **2015**, 103, 279-292	3.3	4
25	Optimized Nitrogen Application Increases Soil Water Extraction by Changing in-Season Maize Root Morphology and Distribution in Rainfed Farmland. *Agronomy*, **2020**, 10, 1606	3.6	4
24	Application of the Hybrid-Maize model for limits to maize productivity analysis in a semiarid environment. *Scientia Agricola*, **2012**, 69, 300-307	2.5	4
23	Effects of atmospheric ammonia enrichment and nitrogen status on the growth of maize. *Soil Science and Plant Nutrition*, **2012**, 58, 32-40	1.6	4

22	Response of Maize Productivity and Resource Use Efficiency to Combined Application of Controlled-Release Urea and Normal Urea under Plastic Film Mulching in Semiarid Farmland. *Agronomy Journal*, **2019**, 111, 3194-3206	2.2	4
21	Microbial residues were increased by film mulching with manure amendment in a semiarid agroecosystem. *Archives of Agronomy and Soil Science*, **2019**, 65, 101-112	2	3
20	Nitrogen Mineralization Characteristics of Disturbed and Undisturbed Soil Samples for Four Main Soil Types on the Loess Plateau. *Communications in Soil Science and Plant Analysis*, **2013**, 44, 1659-1673	1.5	3
19	Microbial metabolic limitation of rhizosphere under heavy metal stress: Evidence from soil ecoenzymatic stoichiometry.. *Environmental Pollution*, **2022**, 300, 118978	9.3	3
18	Integrated microbiology and metabolomics analysis reveal responses of soil microorganisms and metabolic functions to phosphorus fertilizer on semiarid farm.. *Science of the Total Environment*, **2022**, 817, 152878	10.2	3
17	Comparative Study on Disturbed and Undisturbed Soil Sample Incubation for Estimating Soil Nitrogen-Supplying Capacity. *Communications in Soil Science and Plant Analysis*, **2010**, 41, 2371-2382	1.5	2
16	Rhizobium Inoculation Enhances the Resistance of Alfalfa and Microbial Characteristics in Copper-Contaminated Soil.. *Frontiers in Microbiology*, **2021**, 12, 781831	5.7	2
15	Response of maize yield and nitrogen leaching to combining controlled-release urea and normal urea under different surface mulching. *Journal of the Science of Food and Agriculture*, **2021**, 101, 5520-5528	4.3	2
14	Residual effects of fertilizer N response to split N applications in semiarid farmland. *Nutrient Cycling in Agroecosystems*, **2019**, 114, 99-110	3.3	1
13	Effects of soil water on maize root morphological and physiological responses to phosphorus supply. *Journal of Plant Nutrition and Soil Science*, **2019**, 182, 477-484	2.3	1
12	Effects of enhanced atmospheric ammonia on physiological characteristics of maize(Zea mays L.). *Journal of the Science of Food and Agriculture*, **2013**, 93, 3094-9	4.3	1
11	Nitrogen fertilization effects on nitrogen balance and use efficiency for film-mulched maize in a semiarid region. *Acta Agriculturae Scandinavica - Section B Soil and Plant Science*, **2013**, 63, 612-622	1.1	1
10	Effects of Elevated Ammonia Concentration and Nitrogen Status on the Growth and Yield of Winter Wheat. *Agronomy Journal*, **2010**, 102, 1194-1200	2.2	1
9	Contributions of Organic Nitrogen Forms to Mineralized Nitrogen during Incubation Experiments of the Soils on the Loess Plateau. *Communications in Soil Science and Plant Analysis*, **2009**, 40, 3399-3419	1.5	1
8	How Does Nitrogen Application Ameliorate Negative Effects of Long-Term Drought in Two Maize Cultivars in Relation to Plant Growth, Water Status, and Nitrogen Metabolism?. *Communications in Soil Science and Plant Analysis*, **2012**, 43, 1632-1646	1.5	1
7	The effect of long-term soil surface mulching on SOC fractions and the carbon management index in a semiarid agroecosystem. *Soil and Tillage Research*, **2022**, 216, 105233	6.5	1
6	High leaf area index inhibits net primary production in global temperate forest ecosystems. *Environmental Science and Pollution Research*, **2021**, 28, 22602-22611	5.1	1
5	Aboveground biomass response to increasing nitrogen deposition on grassland on the northern Loess Plateau of China. *Acta Agriculturae Scandinavica - Section B Soil and Plant Science*, **2011**, 61, 112-121	1.1	0

4	Film mulching combined with cow manure increases soil C and N. *Spanish Journal of Agricultural Research*, **2019**, 17, e1102	1.1	0
3	Interactions between maize plants and nitrogen impact on soil profile dynamics and surface uptake of methane on a dryland farm. *Agriculture, Ecosystems and Environment*, **2022**, 324, 107716	5.7	0
2	Carbon footprint, yield and economic performance assessment of different mulching strategies in a semi-arid spring maize system.. *Science of the Total Environment*, **2022**, 826, 154021	10.2	0
1	Analysis of UV□Vis spectral characteristics and content estimation of soil DOM under mulching practices. *Ecological Indicators*, **2022**, 138, 108869	5.8	0