Lei Shi

List of Publications by Year
in descending order

85 papers	3,223 citations	117625 34 h-index	175258 52 g-index
90 all docs	90 docs citations	90 times ranked	3354 citing authors

#	Article	IF	Citations
1	Comparative and parallel genome-wide association studies for metabolic and agronomic traits in cereals. Nature Communications, 2016, 7, 12767.	12.8	224
2	A functional genomics resource for Brassica napus: development of an EMS mutagenized population and discovery of FAE1 point mutations by TILLING. New Phytologist, 2008, 180, 751-765.	7.3	165
3	Quantitative trait loci for seed yield and yield-related traits, and their responses to reduced phosphorus supply in Brassica napus. Annals of Botany, 2012, 109, 747-759.	2.9	132
4	Characterization of metabolite quantitative trait loci and metabolic networks that control glucosinolate concentration in the seeds and leaves of Brassica napus. New Phytologist, 2012, 193, 96-108.	7.3	93
5	Quantitative trait loci for root morphology in response to low phosphorus stress in Brassica napus. Theoretical and Applied Genetics, 2010, 121, 181-193.	3.6	90
6	High-throughput root phenotyping screens identify genetic loci associated with root architectural traits in Brassica napus under contrasting phosphate availabilities. Annals of Botany, 2013, 112, 381-389.	2.9	90
7	Shaping an Optimal Soil by Rootâ€“Soil Interaction. Trends in Plant Science, 2017, 22, 823-829.	8.8	87
8	The evolution of Brassica napus FLOWERING LOCUST paralogues in the context of inverted chromosomal duplication blocks. BMC Evolutionary Biology, 2009, 9, 271.	3.2	86
9	Accumulated Expression Level of Cytosolic Glutamine Synthetase 1 Gene (OsGS1;1 or OsGS1;2) Alter Plant Development and the Carbon-Nitrogen Metabolic Status in Rice. PLoS ONE, 2014, 9, e95581.	2.5	81
10	A high activity zinc transporter OsZIP9 mediates zinc uptake in rice. Plant Journal, 2020, 103, 1695-1709.	5.7	81
11	Incorporating pleiotropic quantitative trait loci in dissection of complex traits: seed yield in rapeseed as an example. Theoretical and Applied Genetics, 2017, 130, 1569-1585.	3.6	78
12	Transcriptomicsâ€assisted quantitative trait locus fine mapping for the rapid identification of a nodulin 26â€like intrinsic protein gene regulating boron efficiency in allotetraploid rapeseed. Plant, Cell and Environment, 2016, 39, 1601-1618.	5.7	71
13	The boron transporter BnaC4.BOR1;1c is critical for inflorescence development and fertility under boron limitation in <scp>Brassica napus</scp>. Plant, Cell and Environment, 2017, 40, 1819-1833.	5.7	69
14	Quantitative trait loci affecting seed mineral concentrations in Brassica napus grown with contrasting phosphorus supplies. Annals of Botany, 2010, 105, 1221-1234.	2.9	68
15	Boron Alleviates Aluminum Toxicity by Promoting Root Alkalization in Transition Zone via Polar Auxin Transport. Plant Physiology, 2018, 177, 1254-1266.	4.8	65
16	Detection of QTL for phosphorus efficiency at vegetative stage in Brassica napus. Plant and Soil, 2011, 339, 97-111.	3.7	63
17	Mapping and cloning of quantitative trait loci for phosphorus efficiency in crops: opportunities and challenges. Plant and Soil, 2019, 439, 91-112.	3.7	63
18	A High-Density Genetic Map Identifies a Novel Major QTL for Boron Efficiency in Oilseed Rape (Brassica) Tj ETQq0 0 0 rgBT /Overlock 10	2.5	60

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19	Analyses of Long Non-Coding RNA and mRNA profiling using RNA sequencing in chicken testis with extreme sperm motility. Scientific Reports, 2017, 7, 9055.	3.3	58
20	Ochratoxin A biocontrol and biodegradation byBacillus subtilisCW 14. Journal of the Science of Food and Agriculture, 2014, 94, 1879-1885.	3.5	57
21	Genotypic differences in phosphorus acquisition and the rhizosphere properties of Brassica napus in response to low phosphorus stress. Plant and Soil, 2009, 320, 91-102.	3.7	55
22	QTL meta-analysis of root traits in Brassica napus under contrasting phosphorus supply in two growth systems. Scientific Reports, 2016, 6, 33113.	3.3	55
23	Physiological and genetic responses to boron deficiency inBrassica napus: A review. Soil Science and Plant Nutrition, 2014, 60, 304-313.	1.9	54
24	Genome-Wide Identification and Characterization of the Aquaporin Gene Family and Transcriptional Responses to Boron Deficiency in Brassica napus. Frontiers in Plant Science, 2017, 8, 1336.	3.6	54
25	Genomeâ€wide selection footprints and deleterious variations in young Asian allotetraploid rapeseed. Plant Biotechnology Journal, 2019, 17, 1998-2010.	8.3	54
26	The Stable Level of Glutamine synthetase 2 Plays an Important Role in Rice Growth and in Carbon-Nitrogen Metabolic Balance. International Journal of Molecular Sciences, 2015, 16, 12713-12736.	4.1	53
27	Genetic variants associated with the root system architecture of oilseed rape (Brassica napus L.) under contrasting phosphate supply. DNA Research, 2017, 24, 407-417.	3.4	52
28	Purple acid phosphatase 10c encodes a major acid phosphatase that regulates plant growth under phosphate-deficient conditions in rice. Journal of Experimental Botany, 2020, 71, 4321-4332.	4.8	48
29	Transcription factor BnaA9.WRKY47 contributes to the adaptation of Brassica napus to low boron stress by upâ€regulating the boric acid channel gene BnaA3.NIP5;1. Plant Biotechnology Journal, 2020, 18, 1241-1254.	8.3	47
30	QTL for Yield Traits and Their Association with Functional Genes in Response to Phosphorus Deficiency in Brassica napus. PLoS ONE, 2013, 8, e54559.	2.5	43
31	GENOTYPIC DIFFERENCES IN ROOT MORPHOLOGY AND PHOSPHORUS UPTAKE KINETICS INBRASSICA NAPUSUNDER LOW PHOSPHORUS SUPPLY. Journal of Plant Nutrition, 2010, 33, 889-901.	1.9	41
32	Comparative genome and transcriptome analysis unravels key factors of nitrogen use efficiency in <scp>Brassica napus</scp> L. Plant, Cell and Environment, 2020, 43, 712-731.	5.7	41
33	Proteomic alterations of Brassica napus root in response to boron deficiency. Plant Molecular Biology, 2010, 74, 265-278.	3.9	39
34	Physiological, genomic and transcriptional diversity in responses to boron deficiency in rapeseed genotypes. Journal of Experimental Botany, 2016, 67, 5769-5784.	4.8	38
35	Physiological and Transcriptional Analyses Reveal Differential Phytohormone Responses to Boron Deficiency in Brassica napus Genotypes. Frontiers in Plant Science, 2016, 7, 221.	3.6	36
36	Molecular identification of the phosphate transporter family 1 (PHT1) genes and their expression profiles in response to phosphorus deprivation and other abiotic stresses in Brassica napus. PLoS ONE, 2019, 14, e0220374.	2.5	33

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37	Regulation of soil aggregate size under different fertilizations on dissolved organic matter, cellobiose hydrolyzing microbial community and their roles in organic matter mineralization. Science of the Total Environment, 2021, 755, 142595.	8.0	33
38	Genome-Wide Identification and Characterization of SPX Domain-Containing Members and Their Responses to Phosphate Deficiency in Brassica napus. Frontiers in Plant Science, 2017, 8, 35.	3.6	31
39	A novelBrassicaâ€“rhizotron system to unravel the dynamic changes in root system architecture of oilseed rape under phosphorus deficiency. Annals of Botany, 2016, 118, 173-184.	2.9	30
40	Analysis of genetic factors that control shoot mineral concentrations in rapeseed (Brassica napus) in different boron environments. Plant and Soil, 2009, 320, 255-266.	3.7	29
41	Seed Quality Traits Can Be Predicted with High Accuracy in Brassica napus Using Genomic Data. PLoS ONE, 2016, 11, e0166624.	2.5	29
42	Cysteine Protease 51 (CP51), an anther-specific cysteine protease gene, is essential for pollen exine formation in Arabidopsis. Plant Cell, Tissue and Organ Culture, 2014, 119, 383-397.	2.3	26
43	Identification of Phosphorous Efficient Germplasm in Oilseed Rape. Journal of Plant Nutrition, 2009, 32, 1148-1163.	1.9	25
44	Effects of replacing dietary Aureomycin with a combination of plant essential oils on production performance and gastrointestinal health of broilers. Poultry Science, 2020, 99, 4521-4529.	3.4	25
45	Seminal Plasma Proteome as an Indicator of Sperm Dysfunction and Low Sperm Motility in Chickens. Molecular and Cellular Proteomics, 2020, 19, 1035-1046.	3.8	24
46	The impact of different morphological and biochemical root traits on phosphorus acquisition and seed yield of Brassica napus. Field Crops Research, 2020, 258, 107960.	5.1	22
47	Genome-Wide Systematic Characterization of the NPF Family Genes and Their Transcriptional Responses to Multiple Nutrient Stresses in Allotetraploid Rapeseed. International Journal of Molecular Sciences, 2020, 21, 5947.	4.1	22
48	Proteomics reveals the adaptability mechanism of Brassica napus to short-term boron deprivation. Plant and Soil, 2011, 347, 195-210.	3.7	21
49	A Natural Light/Dark Cycle Regulation of Carbon-Nitrogen Metabolism and Gene Expression in Rice Shoots. Frontiers in Plant Science, 2016, 7, 1318.	3.6	21
50	Brassica napus root mutants insensitive to exogenous cytokinin show phosphorus efficiency. Plant and Soil, 2012, 358, 61-74.	3.7	17
51	Genome-wide association study dissects the genetic control of plant height and branch number in response to low-phosphorus stress in Brassica napus. Annals of Botany, 2021, 128, 919-930.	2.9	17
52	Breeding histories and selection criteria for oilseed rape in Europe and China identified by genome wide pedigree dissection. Scientific Reports, 2017, 7, 1916.	3.3	16
53	Boron deficiencyâ€induced root growth inhibition is mediated by brassinosteroid signalling regulation in Arabidopsis. Plant Journal, 2021, 107, 564-578.	5.7	16
54	Hybrids generated by crossing elite laying chickens exhibited heterosis for clutch and egg quality traits. Poultry Science, 2020, 99, 6332-6340.	3.4	15

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55	Effect of age at photostimulation on sexual maturation and egg-laying performance of layer breeders. Poultry Science, 2020, 99, 812-819.	3.4	15
56	The rapeseed genotypes with contrasting NUE response discrepantly to varied provision of ammonium and nitrate by regulating photosynthesis, root morphology, nutritional status, and oxidative stress response. Plant Physiology and Biochemistry, 2021, 166, 348-360.	5.8	15
57	Effects of monochromatic green light stimulation during embryogenesis on hatching and posthatch performance of four strains of layer breeder. Poultry Science, 2020, 99, 5501-5508.	3.4	14
58	JASMONATE RESISTANT 1 negatively regulates root growth under boron deficiency in Arabidopsis. Journal of Experimental Botany, 2021, 72, 3108-3121.	4.8	14
59	Integrating a genome-wide association study with transcriptomic data to predict candidate genes and favourable haplotypes influencing Brassica napus seed phytate. DNA Research, 2021, 28, .	3.4	14
60	Comparative studies of semen quality traits and sperm kinematic parameters in relation to fertility rate between 2 genetic groups of breed lines. Poultry Science, 2020, 99, 6139-6146.	3.4	13
61	Differential Alternative Splicing Genes in Response to Boron Deficiency in Brassica napus. Genes, 2019, 10, 224.	2.4	12
62	Influence mechanisms of iron, aluminum and manganese oxides on the mineralization of organic matter in paddy soil. Journal of Environmental Management, 2022, 301, 113916.	7.8	12
63	Integrated transcriptome and metabolome analysis reveals the physiological and molecular responses of allotetraploid rapeseed to ammonium toxicity. Environmental and Experimental Botany, 2021, 189, 104550.	4.2	11
64	Identification and Comprehensive Analysis of the Nuclear Factor-Y Family Genes Reveal Their Multiple Roles in Response to Nutrient Deficiencies in Brassica napus. International Journal of Molecular Sciences, 2021, 22, 10354.	4.1	11
65	Effect of age at photostimulation on reproductive performance of Beijing-You Chicken breeders. Poultry Science, 2019, 98, 4522-4529.	3.4	10
66	Genome-Wide Dissection of the CRF Gene Family in Brassica napus Indicates that BnaCRF8s Specifically Regulate Root Architecture and Phosphate Homeostasis against Phosphate Fluctuation in Plants. International Journal of Molecular Sciences, 2020, 21, 3660.	4.1	10
67	Analysis of Long Non-Coding RNAs and mRNAs Associated with Lactation in the Crop of Pigeons (Columba livia). Genes, 2020, 11, 201.	2.4	10
68	The Effects of Condensed Molasses Soluble on the Growth and Development of Rapeseed through Seed Germination, Hydroponics and Field Trials. Agriculture (Switzerland), 2020, 10, 260.	3.1	10
69	Effect of balanced application of boron and phosphorus fertilizers on soil bacterial community, seed yield and phosphorus use efficiency of Brassica napus. Science of the Total Environment, 2021, 751, 141644.	8.0	10
70	Genetic Dissection of Root Angle of Brassica napus in Response to Low Phosphorus. Frontiers in Plant Science, 2021, 12, 697872.	3.6	10
71	Identification of QTLs associated with potassium use efficiency and underlying candidate genes by whole-genome resequencing of two parental lines in Brassica napus. Genomics, 2021, 113, 755-768.	2.9	9
72	Repression of transcription factor AtWRKY47 confers tolerance to boron toxicity in Arabidopsis thaliana. Ecotoxicology and Environmental Safety, 2021, 220, 112406.	6.0	9

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73	Local and systemic responses conferring acclimation of Brassica napus roots to low phosphorus conditions. Journal of Experimental Botany, 2022, 73, 4753-4777.	4.8	9
74	Boron and Phosphorus Act Synergistically to Modulate Absorption and Distribution of Phosphorus and Growth of Brassica napus. Journal of Agricultural and Food Chemistry, 2020, 68, 7830-7838.	5.2	8
75	Genetic dissection of the shoot and root ionomes of Brassica napus grown with contrasting phosphate supplies. Annals of Botany, 2020, 126, 119-140.	2.9	8
76	Identification of QTLs for relative root traits associated with phosphorus efficiency in two culture systems in Brassica napus. Euphytica, 2019, 215, 1.	1.2	7
77	Genotypic differences in the synergistic effect of nitrogen and boron on the seed yield and nitrogen use efficiency of Brassica napus. Journal of the Science of Food and Agriculture, 2022, 102, 3563-3571.	3.5	6
78	Monochromatic green light stimulation during incubation shortened the hatching time via pineal function in White Leghorn eggs. Journal of Animal Science and Biotechnology, 2021, 12, 17.	5.3	5
79	Genetic dissection of seed yield and yield-related traits in Brassica napus grown with contrasting nitrogen supplies. Molecular Breeding, 2022, 42, .	2.1	5
80	Phenotype characterization of crossed beaks in Beijing-You chickens based on morphological observation. Poultry Science, 2020, 99, 5197-5205.	3.4	4
81	Effects of age at photostimulation on sexual maturity and reproductive performance in rooster breeders. Poultry Science, 2021, 100, 101011.	3.4	3
82	Specific and multipleâ€target gene silencing reveals function diversity of <scp>BnaA2</scp>.<scp>NIP5</scp>;1 and <scp>BnaA3</scp>.<scp>NIP5</scp>;1 in Brassica napus. Plant, Cell and Environment, 2021, 44, 3184-3194.	5.7	3
83	Genetic Control of Seed Phytate Accumulation and the Development of Low-Phytate Crops: A Review and Perspective. Journal of Agricultural and Food Chemistry, 2022, 70, 3375-3390.	5.2	3
84	Genome-Wide Analysis, Evolutionary History and Response of ALMT Family to Phosphate Starvation in Brassica napus. International Journal of Molecular Sciences, 2021, 22, 4625.	4.1	1
85	Improved the Activity of Phosphite Dehydrogenase and its Application in Plant Biotechnology. Frontiers in Bioengineering and Biotechnology, 2021, 9, 764188.	4.1	1