Felix B Fritschi

List of Publications by Year
in descending order

76 papers	2,897 citations	236925 25 h-index	206112 48 g-index
84 all docs	84 docs citations	84 times ranked	2884 citing authors

#	Article	IF	Citations
1	Global Warming, Climate Change, and Environmental Pollution: Recipe for a Multifactorial Stress Combination Disaster. Trends in Plant Science, 2021, 26, 588-599.	8.8	437
2	Metaâ€analysis of drought and heat stress combination impact on crop yield and yield components. Physiologia Plantarum, 2021, 171, 66-76.	5.2	188
3	Jasmonic Acid Is Required for Plant Acclimation to a Combination of High Light and Heat Stress. Plant Physiology, 2019, 181, 1668-1682.	4.8	174
4	The impact of multifactorial stress combination on plant growth and survival. New Phytologist, 2021, 230, 1034-1048.	7.3	149
5	Genomic mechanisms of climate adaptation in polyploid bioenergy switchgrass. Nature, 2021, 590, 438-444.	27.8	144
6	Signal transduction networks during stress combination. Journal of Experimental Botany, 2020, 71, 1734-1741.	4.8	111
7	Vinobot and Vinoculer: Two Robotic Platforms for High-Throughput Field Phenotyping. Sensors, 2017, 17, 214.	3.8	103
8	Genome-wide association study (GWAS) of carbon isotope ratio (Î´13C) in diverse soybean [Glycine max (L.) Merr.] genotypes. Theoretical and Applied Genetics, 2015, 128, 73-91.	3.6	89
9	QTL Ã— environment interactions underlie adaptive divergence in switchgrass across a large latitudinal gradient. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12933-12941.	7.1	75
10	RhizoVision Crown: An Integrated Hardware and Software Platform for Root Crown Phenotyping. Plant Phenomics, 2020, 2020, 3074916.	5.9	74
11	Genomeâ€Wide Association Mapping of Carbon Isotope and Oxygen Isotope Ratios in Diverse Soybean Genotypes. Crop Science, 2017, 57, 3085-3100.	1.8	63
12	Soybean Maturity Group Choices for Early and Late Plantings in the Midsouth. Agronomy Journal, 2014, 106, 1893-1901.	1.8	59
13	Expression of Root-Related Transcription Factors Associated with Flooding Tolerance of Soybean (Glycine max). International Journal of Molecular Sciences, 2014, 15, 17622-17643.	4.1	55
14	Temporal dynamics of post-silking nitrogen fluxes and their effects on grain yield in maize under low to high nitrogen inputs. Field Crops Research, 2017, 204, 249-259.	5.1	55
15	The impact of water deficit and heat stress combination on the molecular response, physiology, and seed production of soybean. Physiologia Plantarum, 2021, 172, 41-52.	5.2	52
16	The impact of stress combination on reproductive processes in crops. Plant Science, 2021, 311, 111007.	3.6	51
17	Post-silking carbon partitioning under nitrogen deficiency revealed sink limitation of grain yield in maize. Journal of Experimental Botany, 2018, 69, 1707-1719.	4.8	48
18	Genome-wide association mapping of soybean chlorophyll traits based on canopy spectral reflectance and leaf extracts. BMC Plant Biology, 2016, 16, 174.	3.6	40

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19	Genome-Wide Association Study of Ureide Concentration in Diverse Maturity Group IV Soybean [<i>Glycine max</i>(L.) Merr.] Accessions. G3: Genes, Genomes, Genetics, 2015, 5, 2391-2403.	1.8	38
20	Differential regulation of flower transpiration during abiotic stress in annual plants. New Phytologist, 2022, 235, 611-629.	7.3	38
21	Diurnal dynamics of maize leaf photosynthesis and carbohydrate concentrations in response to differential N availability. Environmental and Experimental Botany, 2014, 99, 18-27.	4.2	36
22	Yield Response to Planting Date Among Soybean Maturity Groups for Irrigated Production in the US Midsouth. Crop Science, 2016, 56, 747-759.	1.8	35
23	Reproductive success of soybean (<scp><i>Glycine max</i></scp> L. Merril) cultivars and exotic lines under high daytime temperature. Plant, Cell and Environment, 2019, 42, 321-336.	5.7	33
24	Isolation and identification of an allelopathic phenylethylamine in rice. Phytochemistry, 2014, 108, 109-121.	2.9	31
25	Genomeâ€Wide Association Analysis of Diverse Soybean Genotypes Reveals Novel Markers for Nitrogen Traits. Plant Genome, 2015, 8, eplantgenome2014.11.0086.	2.8	31
26	Overcoming small minirhizotron datasets using transfer learning. Computers and Electronics in Agriculture, 2020, 175, 105466.	7.7	30
27	Rotation and tillage affect soybean grain composition, yield, and nutrient removal. Field Crops Research, 2014, 164, 12-21.	5.1	27
28	LabelStoma: A tool for stomata detection based on the YOLO algorithm. Computers and Electronics in Agriculture, 2020, 178, 105751.	7.7	27
29	A multiple ion-uptake phenotyping platform reveals shared mechanisms affecting nutrient uptake by roots. Plant Physiology, 2021, 185, 781-795.	4.8	27
30	Quantification of leaf pigments in soybean (Glycine max (L.) Merr.) based on wavelet decomposition of hyperspectral features. Field Crops Research, 2013, 149, 20-32.	5.1	26
31	Sweet sorghum ethanol yield component response to nitrogen fertilization. Industrial Crops and Products, 2016, 84, 43-49.	5.2	25
32	Fate of Nitrogenâ€15 Applied to Irrigated Acala and Pima Cotton. Agronomy Journal, 2004, 96, 646-655.	1.8	24
33	Maize, sweet sorghum, and high biomass sorghum ethanol yield comparison on marginal soils in Midwest USA. Biomass and Bioenergy, 2017, 107, 164-171.	5.7	24
34	Evaluation of Sweet Sorghum Bagasse as an Alternative Livestock Feed. Crop Science, 2013, 53, 1784-1790.	1.8	23
35	Assessment of growth, leaf N concentration and chlorophyll content of sweet sorghum using canopy reflectance. Field Crops Research, 2017, 209, 47-57.	5.1	23
36	Identification of Genomic Loci Associated with the Photochemical Reflectance Index by Genomeâ€Wide Association Study in Soybean. Plant Genome, 2016, 9, plantgenome2015.08.0072.	2.8	22

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37	Carbohydrate Dynamics in Maize Leaves and Developing Ears in Response to Nitrogen Application. Agronomy, 2018, 8, 302.	3.0	21
38	Effects of elevated [CO2] on photosynthesis and seed yield parameters in two soybean genotypes with contrasting water use efficiency. Environmental and Experimental Botany, 2020, 178, 104154.	4.2	21
39	Association Mapping of Total Carotenoids in Diverse Soybean Genotypes Based on Leaf Extracts and High-Throughput Canopy Spectral Reflectance Measurements. PLoS ONE, 2015, 10, e0137213.	2.5	20
40	Nitrogen Use Efficiency and Yield Response of High Biomass Sorghum in the Lower Midwest. Agronomy Journal, 2017, 109, 115-121.	1.8	20
41	Apoplastic infusion of sucrose into stem internodes during female flowering does not increase grain yield in maize plants grown under nitrogenâ€limiting conditions. Physiologia Plantarum, 2013, 148, 470-480.	5.2	19
42	Identification of genomic loci associated with 21chlorophyll fluorescence phenotypes by genome-wide association analysis in soybean. BMC Plant Biology, 2018, 18, 312.	3.6	19
43	Geographic variation in the genetic basis of resistance to leaf rust between locally adapted ecotypes of the biofuel crop switchgrass (<i>Panicum virgatum</i>). New Phytologist, 2020, 227, 1696-1708.	7.3	19
44	Identification of Novel Genomic Loci Associated with Soybean Shoot Tissue Macro and Micronutrient Concentrations. Plant Genome, 2018, 11, 170066.	2.8	17
45	Carbon Isotope Ratio Fractionation among Plant Tissues of Soybean. The Plant Phenome Journal, 2018, 1, 1-6.	2.0	16
46	Root identification in minirhizotron imagery with multiple instance learning. Machine Vision and Applications, 2020, 31, 1.	2.7	16
47	Preâ€and Postâ€silking Carbohydrate Concentrations in Maize Earâ€leaves and Developing Ears in Response to Nitrogen Availability. Crop Science, 2016, 56, 3218-3227.	1.8	15
48	Influence of Midsummer Planting Dates on Ethanol Production Potential of Sweet Sorghum. Agronomy Journal, 2013, 105, 1761-1768.	1.8	13
49	Long term tillage treatment effects on corn grain nutrient composition and yield. Field Crops Research, 2016, 191, 33-40.	5.1	13
50	Genome-Wide Association Mapping of Dark Green Color Index using a Diverse Panel of Soybean Accessions. Scientific Reports, 2020, 10, 5166.	3.3	13
51	Influence of artificially restricted rooting depth on soybean yield and seed quality. Agricultural Water Management, 2012, 105, 38-47.	5.6	12
52	Using Carbon Isotope Discrimination to Assess Genotypic Differences in Drought Resistance of Parental Lines of Common Bean. Crop Science, 2019, 59, 2153-2166.	1.8	12
53	The genetic basis of the root economics spectrum in a perennial grass. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
54	Influence of late planting on light interception, radiation use efficiency and biomass production of four sweet sorghum cultivars. Industrial Crops and Products, 2015, 76, 62-68.	5.2	10

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55	Nitrogen Content and Use Efficiency of Sweet Sorghum Grown in the Lower Midwest. Agronomy Journal, 2019, 111, 2920-2928.	1.8	10
56	Identification and Confirmation of Loci Associated With Canopy Wilting in Soybean Using Genome-Wide Association Mapping. Frontiers in Plant Science, 2021, 12, 698116.	3.6	9
57	Identification of quantitative trait loci for carbon isotope ratio (Î´13C) in a recombinant inbred population of soybean. Theoretical and Applied Genetics, 2020, 133, 2141-2155.	3.6	8
58	Coordinated Systemic Stomatal Responses in Soybean. Plant Physiology, 2020, 183, 1428-1431.	4.8	7
59	Genome-Wide Association Study of Topsoil Root System Architecture in Field-Grown Soybean [Glycine max (L.) Merr.]. Frontiers in Plant Science, 2020, 11, 590179.	3.6	7
60	Carbon accumulation in kernels of lowâ€nitrogen maize is not limited by carbon availability but by an imbalance of carbon and nitrogen assimilates. Journal of Plant Nutrition and Soil Science, 2021, 184, 217-226.	1.9	7
61	Weakly Supervised Minirhizotron Image Segmentation with MIL-CAM. Lecture Notes in Computer Science, 2020, , 433-449.	1.3	7
62	Synthesis and plant growth inhibitory activity of <i>N-trans</i>-cinnamoyltyramine: its possible inhibition mechanisms and biosynthesis pathway. Journal of Plant Interactions, 2017, 12, 51-57.	2.1	6
63	Nitrogen fertilization of high biomass sorghum affects macro- and micronutrient accumulation and tissue concentrations. Industrial Crops and Products, 2020, 156, 112819.	5.2	6
64	QTL Ã— environment interactions underlie ionome divergence in switchgrass. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	6
65	Distinct enhanced efficiency urea fertilizers differentially influence ammonia volatilization losses and maize yield. Plant and Soil, 2022, 475, 551-563.	3.7	6
66	Soil Carbon Changes Following Conversion to Annual Biofuel Feedstocks on Marginal Lands. Agronomy Journal, 2019, 111, 4-13.	1.8	5
67	A generalistâ€“specialist trade-off between switchgrass cytotypes impacts climate adaptation and geographic range. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2118879119.	7.1	5
68	Diversifying Soybean Production Risk Using Maturity Group and Planting Date Choices. Agronomy Journal, 2016, 108, 1917-1929.	1.8	4
69	Morphological Traits Underlying Differences in Early Vigor among Four Cotton Genotypes. Crop Science, 2019, 59, 1165-1181.	1.8	4
70	Mapping quantitative trait loci (QTL) for plant nitrogen isotope ratio (Î´15N) in soybean. Euphytica, 2020, 216, 1.	1.2	4
71	Vinobot and vinoculer: from real to simulated platforms. , 2018, , .		3
72	Influence of manganese availability on switchgrass and pearl millet biomass production. Crop Science, 2021, 61, 643-656.	1.8	2

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73	The genetic basis for panicle trait variation in switchgrass (Panicum virgatum). Theoretical and Applied Genetics, 2022, 135, 2577-2592.	3.6	2
74	Modeling to Evaluate and Manage Water and Environmental Sustainability of Bioenergy Crops in the United States. Advances in Agricultural Systems Modeling, 2015, , 139-160.	0.3	1
75	Characterization of Seedling Traits Associated with Early Vigor in Diverse Cotton Genotypes. Crop Science, 2019, 59, 708-717.	1.8	1
76	Spatio-Temporal Reconstruction and Visualization of Plant Growth for Phenotyping. , 2021, , .		1