Arti Singh

List of Publications by Year
in descending order

32 papers	2,939 citations	304743 22 h-index	414414 32 g-index
36 all docs	36 docs citations	36 times ranked	2762 citing authors

#	Article	IF	Citations
1	Machine Learning for High-Throughput Stress Phenotyping in Plants. Trends in Plant Science, 2016, 21, 110-124.	8.8	670
2	Deep Learning for Plant Stress Phenotyping: Trends and Future Perspectives. Trends in Plant Science, 2018, 23, 883-898.	8.8	391
3	An explainable deep machine vision framework for plant stress phenotyping. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4613-4618.	7.1	353
4	Plant disease identification using explainable 3D deep learning on hyperspectral images. Plant Methods, 2019, 15, 98.	4.3	202
5	A real-time phenotyping framework using machine learning for plant stress severity rating in soybean. Plant Methods, 2017, 13, 23.	4.3	124
6	A Weakly Supervised Deep Learning Framework for Sorghum Head Detection and Counting. Plant Phenomics, 2019, 2019, 1525874.	5.9	114
7	Hyperspectral band selection using genetic algorithm and support vector machines for early identification of charcoal rot disease in soybean stems. Plant Methods, 2018, 14, 86.	4.3	105
8	Genomeâ€wide association and epistasis studies unravel the genetic architecture of sudden death syndrome resistance in soybean. Plant Journal, 2015, 84, 1124-1136.	5.7	95
9	Challenges and Opportunities in Machine-Augmented Plant Stress Phenotyping. Trends in Plant Science, 2021, 26, 53-69.	8.8	92
10	Computer vision and machine learning enabled soybean root phenotyping pipeline. Plant Methods, 2020, 16, 5.	4.3	71
11	Computer vision and machine learning for robust phenotyping in genome-wide studies. Scientific Reports, 2017, 7, 44048.	3.3	68
12	Genetic Architecture of Charcoal Rot (Macrophomina phaseolina) Resistance in Soybean Revealed Using a Diverse Panel. Frontiers in Plant Science, 2017, 8, 1626.	3.6	67
13	Raffinose Family Oligosaccharides: Friend or Foe for Human and Plant Health?. Frontiers in Plant Science, 2022, 13, 829118.	3.6	62
14	A deep learning framework to discern and count microscopic nematode eggs. Scientific Reports, 2018, 8, 9145.	3.3	59
15	Main and epistatic loci studies in soybean for Sclerotinia sclerotiorum resistance reveal multiple modes of resistance in multi-environments. Scientific Reports, 2017, 7, 3554.	3.3	57
16	UAS-Based Plant Phenotyping for Research and Breeding Applications. Plant Phenomics, 2021, 2021, 9840192.	5.9	44
17	Genetic mapping of common bunt resistance and plant height QTL in wheat. Theoretical and Applied Genetics, 2016, 129, 243-256.	3.6	43
18	Soybean Root System Architecture Trait Study through Genotypic, Phenotypic, and Shape-Based Clusters. Plant Phenomics, 2020, 2020, 1925495.	5.9	40

#	Article	IF	Citations
19	Deconstructing the genetic architecture of iron deficiency chlorosis in soybean using genome-wide approaches. BMC Plant Biology, 2020, 20, 42.	3.6	32
20	Deep Multiview Image Fusion for Soybean Yield Estimation in Breeding Applications. Plant Phenomics, 2021, 2021, 9846470.	5.9	28
21	Quantitative trait loci for resistance to stripe rust of wheat revealed using global field nurseries and opportunities for stacking resistance genes. Theoretical and Applied Genetics, 2017, 130, 2617-2635.	3.6	27
22	Mapping quantitative trait loci associated with leaf rust resistance in five spring wheat populations using single nucleotide polymorphism markers. PLoS ONE, 2020, 15, e0230855.	2.5	25
23	A Novel Multirobot System for Plant Phenotyping. Robotics, 2018, 7, 61.	3.5	24
24	Meta-GWAS for quantitative trait loci identification in soybean. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	23
25	How useful is active learning for imageâ€based plant phenotyping?. The Plant Phenome Journal, 2021, 4, e20020.	2.0	21
26	Using Machine Learning to Develop a Fully Automated Soybean Nodule Acquisition Pipeline (SNAP). Plant Phenomics, 2021, 2021, 9834746.	5.9	18
27	Mapping quantitative trait loci associated with common bunt resistance in a spring wheat (Triticum) Tj ETQq1 1 0.784314 rgBT /Overlo	3.6	17
28	Automated trichome counting in soybean using advanced imageâ€processing techniques. Applications in Plant Sciences, 2020, 8, e11375.	2.1	17
29	Deploying Fourier Coefficients to Unravel Soybean Canopy Diversity. Frontiers in Plant Science, 2016, 7, 2066.	3.6	15
30	Strategies for the utilization of the USDA mung bean germplasm collection for breeding outcomes. Crop Science, 2021, 61, 422-442.	1.8	15
31	High-Throughput Phenotyping in Soybean. Concepts and Strategies in Plant Sciences, 2021, , 129-163.	0.5	11
32	Dissecting the Root Phenotypic and Genotypic Variability of the Iowa Mung Bean Diversity Panel. Frontiers in Plant Science, 2021, 12, 808001.	3.6	4