

Sachin Rustgi

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

3,337
citations

172457

29
h-index

149698

56
g-index

72
all docs

72
docs citations

72
times ranked

4314
citing authors

#	ARTICLE	IF	CITATIONS
1	Linkage disequilibrium and association studies in higher plants: Present status and future prospects. <i>Plant Molecular Biology</i> , 2005, 57, 461-485.	3.9	555
2	Array-based high-throughput DNA markers for crop improvement. <i>Heredity</i> , 2008, 101, 5-18.	2.6	285
3	Molecular markers from the transcribed/expressed region of the genome in higher plants. <i>Functional and Integrative Genomics</i> , 2004, 4, 139-62.	3.5	210
4	Persistent whole-chromosome aneuploidy is generally associated with nascent allohexaploid wheat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 3447-3452.	7.1	180
5	Evolution of physiological responses to salt stress in hexaploid wheat. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11882-11887.	7.1	159
6	Mutation of a major CG methylase in rice causes genome-wide hypomethylation, dysregulated genome expression, and seedling lethality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10642-10647.	7.1	149
7	Genetic and molecular basis of grain size and grain number and its relevance to grain productivity in higher plants. <i>Genome</i> , 2006, 49, 565-571.	2.0	143
8	Transgenerational memory of gene expression changes induced by heavy metal stress in rice (<i>Oryza</i>). <i>Journal of Experimental Botany</i> , 2014, 65, 1011-1020.	3.6	101
9	Structural genes of wheat and barley 5-methylcytosine DNA glycosylases and their potential applications for human health. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20543-20548.	7.1	87
10	Intrinsic karyotype stability and gene copy number variations may have laid the foundation for tetraploid wheat formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19466-19471.	7.1	79
11	Silencing of a metaphase I-specific gene results in a phenotype similar to that of the Pairing homeologous 1 (<i>Ph1</i>) gene mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14187-14192.	7.1	78
12	Virus-induced gene silencing (VIGS) of genes expressed in root, leaf, and meiotic tissues of wheat. <i>Functional and Integrative Genomics</i> , 2012, 12, 143-156.	3.5	74
13	Adverse Reactions to Wheat or Wheat Components. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2019, 18, 1437-1452.	11.7	71
14	Serpin1 and WSCP differentially regulate the activity of the cysteine protease RD21 during plant development in <i>Arabidopsis thaliana</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2212-2217.	7.1	67
15	A preliminary genetic analysis of fibre traits and the use of new genomic SSRs for genetic diversity in jute. <i>Euphytica</i> , 2008, 161, 413-427.	1.2	62
16	DNA polymorphism among 18 species of <i>Triticum</i> - <i>Aegilops</i> complex using wheat EST-SSRs. <i>Plant Science</i> , 2004, 166, 349-356.	3.6	55
17	The complex world of plant protease inhibitors: Insights into a Kunitz-type cysteine protease inhibitor of <i>Arabidopsis thaliana</i> . <i>Communicative and Integrative Biology</i> , 2018, 11, e1368599.	1.4	53
18	A Kunitz-type protease inhibitor regulates programmed cell death during flower development in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2015, 66, 6119-6135.	4.8	51

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19	Single nucleotide mutation in the barley <i>acetohydroxy acid synthase</i> (<i>AHAS</i>) gene confers resistance to imidazolinone herbicides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8909-8913.	7.1	50
20	Generation of Doubled Haploid Transgenic Wheat Lines by Microspore Transformation. <i>PLoS ONE</i> , 2013, 8, e80155.	2.5	44
21	Wheat Seed Proteins: Factors Influencing Their Content, Composition, and Technological Properties, and Strategies to Reduce Adverse Reactions. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2019, 18, 1751-1769.	11.7	41
22	Programmed chloroplast destruction during leaf senescence involves 13-lipoxygenase (13-LOX). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3383-3388.	7.1	40
23	Genetic Dissection of Yield and Its Component Traits Using High-Density Composite Map of Wheat Chromosome 3A: Bridging Gaps between QTLs and Underlying Genes. <i>PLoS ONE</i> , 2013, 8, e70526.	2.5	40
24	JIP60-mediated, jasmonate- and senescence-induced molecular switch in translation toward stress and defense protein synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14181-14186.	7.1	36
25	Wheat cytogenetics in the genomics era and its relevance to breeding. <i>Cytogenetic and Genome Research</i> , 2005, 109, 315-327.	1.1	34
26	Fine structure mapping of a gene-rich region of wheat carrying <i>Ph1</i> , a suppressor of crossing over between homoeologous chromosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 5815-5820.	7.1	33
27	Targeted modification of wheat grain protein to reduce the content of celiac causing epitopes. <i>Functional and Integrative Genomics</i> , 2012, 12, 417-438.	3.5	32
28	Water-soluble chlorophyll protein is involved in herbivore resistance activation during greening of <i>Arabidopsis thaliana</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7303-7308.	7.1	32
29	Analysis of Wheat Prolamins, the Causative Agents of Celiac Sprue, Using Reversed Phase High Performance Liquid Chromatography (RP-HPLC) and Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry (MALDI-TOF-MS). <i>Nutrients</i> , 2014, 6, 1578-1597.	4.1	31
30	Transcriptome-based analyses of phosphite-mediated suppression of rust pathogens <i>Puccinia emaculata</i> and <i>Phakopsora pachyrhizi</i> and functional characterization of selected fungal target genes. <i>Plant Journal</i> , 2018, 93, 894-904.	5.7	31
31	Gluten Detection Methods and their Critical Role in Assuring Safe Diets for Celiac Patients. <i>Nutrients</i> , 2019, 11, 2920.	4.1	31
32	Pattern of Protein Expression in Developing Wheat Grains Identified through Proteomic Analysis. <i>Frontiers in Plant Science</i> , 2017, 8, 962.	3.6	28
33	Substrate channeling in oxylipin biosynthesis through a protein complex in the plastid envelope of <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2019, 70, 1483-1495.	4.8	28
34	Comparative Lipidomic Analysis Reveals Heat Stress Responses of Two Soybean Genotypes Differing in Temperature Sensitivity. <i>Plants</i> , 2020, 9, 457.	3.5	28
35	EST-SSR Development from 5 <i>Lactuca</i> Species and Their Use in Studying Genetic Diversity Among <i>L. serriola</i> Biotypes. <i>Journal of Heredity</i> , 2011, 102, 17-28.	2.4	25
36	Development and use of miRNA-derived SSR markers for the study of genetic diversity, population structure, and characterization of genotypes for breeding heat tolerant wheat varieties. <i>PLoS ONE</i> , 2021, 16, e0231063.	2.5	25

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37	DNA Methylation Changes Induced in Rice by Exposure to High Concentrations of the Nitric Oxide Modulator, Sodium Nitroprusside. <i>Plant Molecular Biology Reporter</i> , 2015, 33, 1428-1440.	1.8	23
38	ALLENE OXIDE SYNTHASE and HYDROPEROXIDE LYASE, Two Non-Canonical Cytochrome P450s in <i>Arabidopsis thaliana</i> and Their Different Roles in Plant Defense. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3064.	4.1	22
39	Heat stress elicits remodeling in the anther lipidome of peanut. <i>Scientific Reports</i> , 2020, 10, 22163.	3.3	21
40	Array-Based High-Throughput DNA Markers and Genotyping Platforms for Cereal Genetics and Genomics. , 2013, , 11-55.		20
41	Development of wheat genotypes expressing a glutamine-specific endoprotease from barley and a prolyl endopeptidase from <i>Flavobacterium meningosepticum</i> or <i>Pyrococcus furiosus</i> as a potential remedy to celiac disease. <i>Functional and Integrative Genomics</i> , 2019, 19, 123-136.	3.5	19
42	Cell growth defect factor 1 is crucial for the plastid import of NADPH:protochlorophyllide oxidoreductase A in <i>Arabidopsis thaliana</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5838-5843.	7.1	16
43	An Ethylene-Protected Achilles™ Heel of Etiolated Seedlings for Arthropod Deterrence. <i>Frontiers in Plant Science</i> , 2016, 7, 1246.	3.6	15
44	Directed-Mutagenesis of <i>Flavobacterium meningosepticum</i> Prolyl-Oligopeptidase and a Glutamine-Specific Endopeptidase From Barley. <i>Frontiers in Nutrition</i> , 2020, 7, 11.	3.7	15
45	Performance of Bayesian and BLUP alphabets for genomic prediction: analysis, comparison and results. <i>Heredity</i> , 2022, 128, 519-530.	2.6	15
46	NADPH:protochlorophyllide oxidoreductase B (PORB) action in <i>Arabidopsis thaliana</i> revisited through transgenic expression of engineered barley PORB mutant proteins. <i>Plant Molecular Biology</i> , 2017, 94, 45-59.	3.9	11
47	Common functions of the chloroplast and mitochondrial co-chaperones cpDnaJL (CDF1) and mtDnaJ (PAM16) in protein import and ROS scavenging in <i>Arabidopsis thaliana</i> . <i>Communicative and Integrative Biology</i> , 2016, 9, e1119343.	1.4	10
48	Probing early wheat grain development via transcriptomic and proteomic approaches. <i>Functional and Integrative Genomics</i> , 2020, 20, 63-74.	3.5	10
49	Development and use of anchored-SSRs to study DNA polymorphism in bread wheat (<i>Triticum aestivum</i>) Tj ETQq1 1 0.784314 rgBT /O	1.7	7
50	Heat tolerance as a function of membrane lipid remodeling in the major US oilseed crops (soybean and) Tj ETQq0 0,0,rgBT /Oyerlock 10	1.7	0
51	Jasmonic acid protects etiolated seedlings of <i>Arabidopsis thaliana</i> against herbivorous arthropods. <i>Plant Signaling and Behavior</i> , 2016, 11, e1214349.	2.4	6
52	Doubled Haploid Transgenic Wheat Lines by Microspore Transformation. <i>Methods in Molecular Biology</i> , 2017, 1679, 213-234.	0.9	6
53	tRNA-Dependent Import of a Transit Sequence-Less Aminoacyl-tRNA Synthetase (LeuRS2) into the Mitochondria of <i>Arabidopsis</i> . <i>International Journal of Molecular Sciences</i> , 2021, 22, 3808.	4.1	5
54	Assessment of Genetic Diversity among Barley Cultivars and Breeding Lines Adapted to the US Pacific Northwest, and Its Implications in Breeding Barley for Imidazolinone-Resistance. <i>PLoS ONE</i> , 2014, 9, e100998.	2.5	5

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55	Use of Microspore-Derived Calli as Explants for Biolistic Transformation of Common Wheat. <i>Methods in Molecular Biology</i> , 2020, 2124, 263-279.	0.9	5
56	Multi-faceted approaches for breeding nutrient-dense, disease-resistant, and climate-resilient crop varieties for food and nutritional security. <i>Heredity</i> , 2022, 128, 387-390.	2.6	5
57	Population structure and genetic diversity of the Pee Dee cotton breeding program. <i>G3: Genes, Genomes, Genetics</i> , 2021, 11, .	1.8	4
58	Outlook for Implementation of Genomics-Based Selection in Public Cotton Breeding Programs. <i>Plants</i> , 2022, 11, 1446.	3.5	4
59	HP30, a mitochondrial PRAT protein for import of signal sequenceless precursor proteins in <i>Arabidopsis thaliana</i> . <i>Journal of Integrative Plant Biology</i> , 2017, 59, 535-551.	8.5	3
60	Health Hazards Associated with Wheat and Gluten Consumption in Susceptible Individuals and Status of Research on Dietary Therapies. , 2020, , 471-515.		3
61	Targeting Induced Local Lesions in the Wheat DEMETER and DRE2 Genes, Responsible for Transcriptional Derepression of Wheat Gluten Proteins in the Developing Endosperm. <i>Frontiers in Nutrition</i> , 2022, 9, 847635.	3.7	3
62	Use of methylation filtration and C0t fractionation for analysis of genome composition and comparative genomics in bread wheat. <i>Journal of Genetics and Genomics</i> , 2011, 38, 315-325.	3.9	2
63	Bringing Barley Back in Crop Rotation by Breeding for Imidazolinone Resistance. , 2013, 02, .		2
64	Various potentially toxic element tolerances in different rice genotypes correlate with distinct physiological responses and alterations in DNA methylation.. <i>Chemosphere</i> , 2022, 292, 133462.	8.2	2
65	Registration of "Fritz", a two-row spring barley. <i>Journal of Plant Registrations</i> , 2020, 14, 242-249.	0.5	1
66	PRAT Proteins Operate in Organellar Protein Import and Export in <i>Arabidopsis thaliana</i> . <i>Plants</i> , 2021, 10, 958.	3.5	1
67	Diter von Wettstein, Professor of Genetics and Master of Translating Science into Applications. <i>Methods in Molecular Biology</i> , 2020, 2124, 3-18.	0.9	0
68	Reduced-Immunogenicity Wheat Now Coming to Age. , 2021, , 15-42.		0
69	Reduced-Immunogenicity Wheat and Peanut Lines for People with Foodborne Disorders. , 0, , .		0