Venkatesan Sundaresan

List of Publications by Year
in descending order

98 papers	14,255 citations	27035 58 h-index	43601 95 g-index
168 all docs	168 docs citations	168 times ranked	13942 citing authors

#	Article	IF	Citations
1	Resetting of the 24-nt siRNA landscape in rice zygotes. Genome Research, 2022, 32, 309-323.	2.4	13
2	Acquisition of a complex root microbiome reshapes the transcriptomes of rice plants. New Phytologist, 2022, 235, 2008-2021.	3.5	8
3	Bioactive diterpenoids impact the composition of the root-associated microbiome in maize (Zea mays). Scientific Reports, 2021, 11, 333.	1.6	36
4	Plant zygote development: recent insights and applications to clonal seeds. Current Opinion in Plant Biology, 2021, 59, 101993.	3.5	22
5	DEFECTIVE EMBRYO AND MERISTEMS genes are required for cell division and gamete viability in Arabidopsis. PLoS Genetics, 2021, 17, e1009561.	1.5	3
6	Prolonged drought imparts lasting compositional changes to the rice root microbiome. Nature Plants, 2021, 7, 1065-1077.	4.7	111
7	Genome-wide redistribution of 24-nt siRNAs in rice gametes. Genome Research, 2020, 30, 173-184.	2.4	32
8	Coordinated Activation of ARF1 GTPases by ARF-GEF GNOM Dimers Is Essential for Vesicle Trafficking in Arabidopsis. Plant Cell, 2020, 32, 2491-2507.	3.1	17
9	Comparative Analysis of Root Microbiomes of Rice Cultivars with High and Low Methane Emissions Reveals Differences in Abundance of Methanogenic Archaea and Putative Upstream Fermenters. MSystems, 2020, 5, .	1.7	29
10	Soil domestication by rice cultivation results in plant-soil feedback through shifts in soil microbiota. Genome Biology, 2019, 20, 221.	3.8	54
11	Step-by-step protocols for rice gamete isolation. Plant Reproduction, 2019, 32, 5-13.	1.3	15
12	A male-expressed rice embryogenic trigger redirected for asexual propagation through seeds. Nature, 2019, 565, 91-95.	13.7	324
13	The gymnosperm ortholog of the angiosperm central cellâ€specification gene <i>CKI1</i> provides an essential clue to endosperm origin. New Phytologist, 2018, 218, 1685-1696.	3.5	13
14	ARF2â€“ARF4 and ARF5 are Essential for Female and Male Gametophyte Development in Arabidopsis. Plant and Cell Physiology, 2018, 59, 179-189.	1.5	55
15	Recent advances in understanding female gametophyte development. F1000Research, 2018, 7, 804.	0.8	21
16	Reproductive Long Intergenic Noncoding RNAs Exhibit Male Gamete Specificity and Polycomb Repressive Complex 2-Mediated Repression. Plant Physiology, 2018, 177, 1198-1217.	2.3	14
17	Compositional shifts in root-associated bacterial and archaeal microbiota track the plant life cycle in field-grown rice. PLoS Biology, 2018, 16, e2003862.	2.6	340
18	Extraction and 16S rRNA Sequence Analysis of Microbiomes Associated with Rice Roots. Bio-protocol, 2018, 8, e2884.	0.2	25

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19	Isolation of Rice Sperm Cells for Transcriptional Profiling. Methods in Molecular Biology, 2017, 1669, 211-219.	0.4	3
20	Drought Stress Results in a Compartment-Specific Restructuring of the Rice Root-Associated Microbiomes. MBio, 2017, 8, .	1.8	336
21	The Zygotic Transition Is Initiated in Unicellular Plant Zygotes with Asymmetric Activation of Parental Genomes. Developmental Cell, 2017, 43, 349-358.e4.	3.1	83
22	MicroRNAs: Tiny genetic switches in our genome. Resonance, 2017, 22, 163-176.	0.2	0
23	AHP2, AHP3, and AHP5 act downstream of CKI1 in Arabidopsis female gametophyte development. Journal of Experimental Botany, 2017, 68, 3365-3373.	2.4	29
24	The CKI1 Histidine Kinase Specifies the Female Gametic Precursor of the Endosperm. Developmental Cell, 2016, 37, 34-46.	3.1	54
25	Structure, variation, and assembly of the root-associated microbiomes of rice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E911-20.	3.3	2,016
26	Spore formation in plants: SPOROCYTELESS and more. Cell Research, 2015, 25, 7-8.	5.7	7
27	Auxin Import and Local Auxin Biosynthesis Are Required for Mitotic Divisions, Cell Expansion and Cell Specification during Female Gametophyte Development in Arabidopsis thaliana. PLoS ONE, 2015, 10, e0126164.	1.1	80
28	Antipodal cells persist through fertilization in the female gametophyte of Arabidopsis. Plant Reproduction, 2014, 27, 197-203.	1.3	29
29	A haploid genetics toolbox for Arabidopsis thaliana. Nature Communications, 2014, 5, 5334.	5.8	100
30	The polycomb group gene <i><scp>EMF</scp>2B</i> is essential for maintenance of floral meristem determinacy in rice. Plant Journal, 2014, 80, 883-894.	2.8	53
31	Pollen tube entry into the synergid cell of Arabidopsis is observed at a site distinct from the filiform apparatus. Plant Reproduction, 2013, 26, 93-99.	1.3	35
32	Transcriptomes of isolated <i>Oryza sativa</i> gametes characterized by deep sequencing: evidence for distinct sexâ€dependent chromatin and epigenetic states before fertilization. Plant Journal, 2013, 76, 729-741.	2.8	89
33	Production of a High-Efficiency TILLING Population through Polyploidization Â Â Â. Plant Physiology, 2013, 161, 1604-1614.	2.3	48
34	<i>oiwa</i>, a Female Gametophytic Mutant Impaired in a Mitochondrial Manganese-Superoxide Dismutase, Reveals Crucial Roles for Reactive Oxygen Species during Embryo Sac Development and Fertilization in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 1573-1591.	3.1	96
35	Mutant Resources for Functional Analysis of the Rice Genome. , 2013, , 81-115.		6
36	The Armadillo Repeat Gene <i>ZAK IXIK</i> Promotes <i>Arabidopsis</i> Early Embryo and Endosperm Development through a Distinctive Gametophytic Maternal Effect. Plant Cell, 2012, 24, 4026-4043.	3.1	19

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37	Molecular Characterization of the <i>glauce</i> Mutant: A Central Cellâ€“Specific Function Is Required for Double Fertilization in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 3264-3277.	3.1	25
38	Nonredundant Regulation of Rice Arbuscular Mycorrhizal Symbiosis by Two Members of the <i>PHOSPHATE TRANSPORTER1</i> Gene Family. Plant Cell, 2012, 24, 4236-4251.	3.1	306
39	The halfâ€size ABC transporters STR1 and STR2 are indispensable for mycorrhizal arbuscule formation in rice. Plant Journal, 2012, 69, 906-920.	2.8	131
40	The Rapidly Evolving Centromere-Specific Histone Has Stringent Functional Requirements in<i>Arabidopsis thaliana</i>. Genetics, 2010, 186, 461-471.	1.2	101
41	Development of Flowering Plant Gametophytes. Current Topics in Developmental Biology, 2010, 91, 379-412.	1.0	73
42	Pattern formation in miniature: the female gametophyte of flowering plants. Development (Cambridge), 2010, 137, 179-189.	1.2	88
43	Clusters and superclusters of phased small RNAs in the developing inflorescence of rice. Genome Research, 2009, 19, 1429-1440.	2.4	283
44	A Collection of <i>Ds</i> Insertional Mutants Associated With Defects in Male Gametophyte Development and Function in <i>Arabidopsis thaliana</i>. Genetics, 2009, 181, 1369-1385.	1.2	84
45	Mutant Resources in Rice for Functional Genomics of the Grasses. Plant Physiology, 2009, 149, 165-170.	2.3	167
46	<i>SLOW WALKER2</i>, a NOC1/MAK21 Homologue, Is Essential for Coordinated Cell Cycle Progression during Female Gametophyte Development in Arabidopsis. Plant Physiology, 2009, 151, 1486-1497.	2.3	59
47	Auxin-Dependent Patterning and Gamete Specification in the <i>Arabidopsis</i> Female Gametophyte. Science, 2009, 324, 1684-1689.	6.0	252
48	The RNA world is alive and well. Trends in Plant Science, 2008, 13, 311-313.	4.3	14
49	A Versatile Transposon-Based Activation Tag Vector System for Functional Genomics in Cereals and Other Monocot Plants. Plant Physiology, 2008, 146, 189-199.	2.3	64
50	Maternal Control of Male-Gamete Delivery in<i>Arabidopsis</i>Involves a Putative GPI-Anchored Protein Encoded by the<i>LORELEI</i>Gene. Plant Cell, 2008, 20, 3038-3049.	3.1	166
51	Cell-Fate Switch of Synergid to Egg Cell in<i>Arabidopsis eostre</i>Mutant Embryo Sacs Arises from Misexpression of the BEL1-Like Homeodomain Gene<i>BLH1</i>. Plant Cell, 2007, 19, 3578-3592.	3.1	242
52	The<i>TORMOZ</i>Gene Encodes a Nucleolar Protein Required for Regulated Division Planes and Embryo Development in<i>Arabidopsis</i>. Plant Cell, 2007, 19, 2246-2263.	3.1	47
53	Transposon Insertional Mutants: A Resource for Rice Functional Genomics. , 2007, , 223-271.		12
54	<i>Arabidopsis GLAUCE</i>promotes fertilization-independent endosperm development and expression of paternally inherited alleles. Development (Cambridge), 2007, 134, 4107-4117.	1.2	39

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55	<i>Arabidopsis</i> CYCD3 D-type cyclins link cell proliferation and endocycles and are rate-limiting for cytokinin responses. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14537-14542.	3.3	333
56	Efficient insertional mutagenesis in rice using the maize En/Spm elements. Plant Journal, 2005, 44, 879-892.	2.8	100
57	SLOW WALKER1, Essential for Gametogenesis in Arabidopsis, Encodes a WD40 Protein Involved in 18S Ribosomal RNA Biogenesis. Plant Cell, 2005, 17, 2340-2354.	3.1	163
58	An Inducible Targeted Tagging System for Localized Saturation Mutagenesis in Arabidopsis. Plant Physiology, 2005, 137, 3-12.	2.3	30
59	VANGUARD1 Encodes a Pectin Methylesterase That Enhances Pollen Tube Growth in the Arabidopsis Style and Transmitting Tract. Plant Cell, 2005, 17, 584-596.	3.1	386
60	Analysis of the Female Gametophyte Transcriptome of Arabidopsis by Comparative Expression Profiling. Plant Physiology, 2005, 139, 1853-1869.	2.3	150
61	Computational prediction of miRNAs in Arabidopsis thaliana. Genome Research, 2005, 15, 78-91.	2.4	324
62	Genetic and molecular identification of genes required for female gametophyte development and function in Arabidopsis. Development (Cambridge), 2005, 132, 603-614.	1.2	538
63	Control of seed size in plants. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17887-17888.	3.3	104
64	Functional Analysis of the Tandem-Duplicated P450 Genes SPS/BUS/CYP79F1 and CYP79F2 in Glucosinolate Biosynthesis and Plant Development by Ds Transposition-Generated Double Mutants. Plant Physiology, 2004, 135, 840-848.	2.3	70
65	Rice Mutant Resources for Gene Discovery. Plant Molecular Biology, 2004, 54, 325-334.	2.0	221
66	Establishing an efficient <i>Ac/Ds</i> tagging system in rice: largeâ€scale analysis of <i>Ds</i> flanking sequences. Plant Journal, 2004, 37, 301-314.	2.8	192
67	TheNOMEGAgene required for female gametophyte development encodes the putative APC6/CDC16 component of the Anaphase Promoting Complex inArabidopsis. Plant Journal, 2003, 36, 853-866.	2.8	98
68	TAPETUM DETERMINANT1 Is Required for Cell Specialization in the Arabidopsis Anther. Plant Cell, 2003, 15, 2792-2804.	3.1	305
69	YABBY Polarity Genes Mediate the Repression of KNOX Homeobox Genes in Arabidopsis. Plant Cell, 2002, 14, 2761-2770.	3.1	229
70	Transposons as tools for functional genomics. Plant Physiology and Biochemistry, 2001, 39, 243-252.	2.8	62
71	The Arabidopsis myc/bHLH gene ALCATRAZ enables cell separation in fruit dehiscence. Current Biology, 2001, 11, 1914-1922.	1.8	274
72	Control of axillary bud initiation and shoot architecture in Arabidopsis through the SUPERSHOOT gene. Genes and Development, 2001, 15, 1577-1588.	2.7	169

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73	Functional genomics in Arabidopsis: large-scale insertional mutagenesis complements the genome sequencing project. Current Opinion in Biotechnology, 2000, 11, 157-161.	3.3	207
74	Genetics of gametophyte biogenesis in Arabidopsis. Current Opinion in Plant Biology, 2000, 3, 53-57.	3.5	102
75	â€˜Florigenâ€™ enters the molecular age: long-distance signals that cause plants to flower. Trends in Biochemical Sciences, 2000, 25, 236-240.	3.7	82
76	Clonal analysis of the Arabidopsis root confirms that position, not lineage, determines cell fate. Planta, 2000, 211, 191-199.	1.6	145
77	A Weed Reaches New Heights Down Under. Plant Cell, 1999, 11, 1817-1826.	3.1	14
78	Analysis of Flanking Sequences fromDissociationInsertion Lines: A Database for Reverse Genetics in Arabidopsis. Plant Cell, 1999, 11, 2263-2270.	3.1	287
79	Molecular cloning of ABNORMAL FLORALâ€ˆORGANS : a gene required for flower development in Arabidopsis. Sexual Plant Reproduction, 1999, 12, 118-122.	2.2	34
80	The SPOROCYTELESS gene of Arabidopsis is required for initiation of sporogenesis and encodes a novel nuclear protein. Genes and Development, 1999, 13, 2108-2117.	2.7	456
81	The indeterminate Gene Encodes a Zinc Finger Protein and Regulates a Leaf-Generated Signal Required for the Transition to Flowering in Maize. Cell, 1998, 93, 593-603.	13.5	293
82	Horizontal spread of transposon mutagenesis: new uses for old elements. Trends in Plant Science, 1996, 1, 184-190.	4.3	79
83	Control of the transition to flowering. Current Opinion in Biotechnology, 1996, 7, 145-149.	3.3	6
84	Plant cyclins: a unified nomenclature for plant A-, B- and D-type cyclins based on sequence organization. Plant Molecular Biology, 1996, 32, 1003-1018.	2.0	232
85	Analysis of splice donor and acceptor site function in a transposable gene trap derived from the maize element Activator. Molecular Genetics and Genomics, 1995, 249, 91-101.	2.4	16
86	Patterns of gene action in plant development revealed by enhancer trap and gene trap transposable elements.. Genes and Development, 1995, 9, 1797-1810.	2.7	671
87	Gene trap tagging of PROLIFERA, an essential MCM2-3-5-like gene in Arabidopsis. Science, 1995, 268, 877-880.	6.0	266
88	Cloning of four cyclins from maize indicates that higher plants have three structurally distinct groups of mitotic cyclins.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7375-7379.	3.3	100
89	Somatic excision of theMu1transposable element of maize. Nucleic Acids Research, 1991, 19, 579-584.	6.5	67
90	Binding sites for maize nuclear proteins in the terminal inverted repeats of the Mul transposable element. Molecular Genetics and Genomics, 1991, 229, 17-26.	2.4	27

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91	A recombination hotspot in the maize A1 intragenic region. Theoretical and Applied Genetics, 1991, 81, 185-188.	1.8	64
92	Isolation and characterization of cDNA clones encoding a functional p34cdc2 homologue from Zea mays.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 3377-3381.	3.3	210
93	An extrachromosomal form of the Mu transposons of maize.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 4924-4928.	3.3	73
94	A Rhizobium meliloti symbiotic regulatory gene. Cell, 1984, 36, 1035-1043.	13.5	174
95	Klebsiella pneumoniae nifA product activates the Rhizobium meliloti nitrogenase promoter. Nature, 1983, 301, 728-732.	13.7	130
96	Promoters regulated by the glnG (ntrC) and nifA gene products share a heptameric consensus sequence in the -15 region.. Proceedings of the National Academy of Sciences of the United States of America, 1983, 80, 2524-2528.	3.3	84
97	Activation of Klebsiella pneumoniae and Rhizobium meliloti nitrogenase promoters by gln (ntr) regulatory proteins.. Proceedings of the National Academy of Sciences of the United States of America, 1983, 80, 4030-4034.	3.3	79
98	Directed transposon Tn5 mutagenesis and complementation analysis of rhizobium meliloti symbiotic nitrogen fixation genes. Cell, 1982, 29, 551-559.	13.5	228