

Blake C Meyers

List of Publications by Year in descending order

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128
papers

24,453
citations

10389

72
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16183

124
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144
all docs

144
docs citations

144
times ranked

17797
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat-responsive microRNAs and phased small interfering RNAs in reproductive development of flax. <i>Plant Direct</i> , 2022, 6, e385.	1.9	16
2	Evolution and diversification of reproductive phased small interfering RNAs in <i>Oryza</i> species. <i>New Phytologist</i> , 2021, 229, 2970-2983.	7.3	12
3	sRNAanno—a database repository of uniformly annotated small RNAs in plants. <i>Horticulture Research</i> , 2021, 8, 45.	6.3	63
4	Conserved and non-conserved triggers of 24-nucleotide reproductive phased siRNAs in eudicots. <i>Plant Journal</i> , 2021, 107, 1332-1345.	5.7	15
5	Pre-meiotic 21-nucleotide reproductive phased siRNAs emerged in seed plants and diversified in flowering plants. <i>Nature Communications</i> , 2021, 12, 4941.	12.8	21
6	<i>Aegilops tauschii</i> genome assembly Aet v5.0 features greater sequence contiguity and improved annotation. <i>Genes, Genomes, Genetics</i> , 2021, 11, .	1.8	19
7	Reproductive phased siRNA loci and DICER-LIKE5, but not microRNA loci, diversified in monocotyledonous plants. <i>Plant Physiology</i> , 2021, 185, 1764-1782.	4.8	17
8	Next-Generation Sequence Databases: RNA and Genomic Informatics Resources for Plants. <i>Plant Physiology</i> , 2020, 182, 136-146.	4.8	22
9	An Online Database for Exploring Over 2,000 Arabidopsis Small RNA Libraries. <i>Plant Physiology</i> , 2020, 182, 685-691.	4.8	19
10	Soybean DICER-LIKE2 Regulates Seed Coat Color via Production of Primary 22-Nucleotide Small Interfering RNAs from Long Inverted Repeats. <i>Plant Cell</i> , 2020, 32, 3662-3673.	6.6	35
11	Pre-meiotic, 24-nt reproductive phased siRNAs are abundant in anthers of wheat and barley but not rice and maize. <i>Plant Physiology</i> , 2020, 184, pp.00816.2020.	4.8	20
12	Quantitative, super-resolution localization of small RNAs with sRNA-PAINT. <i>Nucleic Acids Research</i> , 2020, 48, e96-e96.	14.5	14
13	PhasiRNAs in Plants: Their Biogenesis, Genic Sources, and Roles in Stress Responses, Development, and Reproduction. <i>Plant Cell</i> , 2020, 32, 3059-3080.	6.6	139
14	Small RNA discovery in the interaction between barley and the powdery mildew pathogen. <i>BMC Genomics</i> , 2019, 20, 610.	2.8	37
15	Plant Extracellular Vesicles Contain Diverse Small RNA Species and Are Enriched in 10- to 17-Nucleotide "Tiny" RNAs. <i>Plant Cell</i> , 2019, 31, 315-324.	6.6	171
16	MicroRNAs in Plants: Key Findings from the Early Years. <i>Plant Cell</i> , 2019, 31, 1206-1207.	6.6	29
17	24-nt reproductive phased siRNAs are broadly present in angiosperms. <i>Nature Communications</i> , 2019, 10, 627.	12.8	106
18	Despacto: the slow evolutionary changes in plant microRNAs. <i>Current Opinion in Plant Biology</i> , 2018, 42, 16-22.	7.1	83

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19	Revisiting Criteria for Plant MicroRNA Annotation in the Era of Big Data. <i>Plant Cell</i> , 2018, 30, 272-284.	6.6	406
20	<i>Cis</i> -directed cleavage and nonstoichiometric abundances of 21-nucleotide reproductive phased small interfering RNAs in grasses. <i>New Phytologist</i> , 2018, 220, 865-877.	7.3	38
21	Coupling of microRNA-directed phased small interfering RNA generation from long noncoding genes with alternative splicing and alternative polyadenylation in small RNA-mediated gene silencing. <i>New Phytologist</i> , 2018, 217, 1535-1550.	7.3	46
22	Maize Small RNAs as Seeds of Change and Stability in Gene Expression and Genome Stability. <i>Compendium of Plant Genomes</i> , 2018, , 113-127.	0.5	1
23	Characterizing Small RNAs in Filamentous Fungi Using the Rice Blast Fungus, <i>Magnaporthe oryzae</i> , as an Example. <i>Methods in Molecular Biology</i> , 2018, 1848, 53-66.	0.9	0
24	Biogenesis of a 22-nt microRNA in Phaseoleae species by precursor-programmed uridylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8037-8042.	7.1	46
25	Molecular mechanisms that limit the costs of NLR-mediated resistance in plants. <i>Molecular Plant Pathology</i> , 2018, 19, 2516-2523.	4.2	26
26	Plant 24-nt reproductive phasiRNAs from intramolecular duplex mRNAs in diverse monocots. <i>Genome Research</i> , 2018, 28, 1333-1344.	5.5	49
27	Threshold-dependent repression of SPL gene expression by miR156/miR157 controls vegetative phase change in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2018, 14, e1007337.	3.5	161
28	Characterization of Plant Small RNAs by Next Generation Sequencing. <i>Current Protocols in Plant Biology</i> , 2017, 2, 39-63.	2.8	29
29	Genome assembly with in vitro proximity ligation data and whole-genome triplication in lettuce. <i>Nature Communications</i> , 2017, 8, 14953.	12.8	330
30	Small RNA Functions Are Required for Growth and Development of <i>Magnaporthe oryzae</i> . <i>Molecular Plant-Microbe Interactions</i> , 2017, 30, 517-530.	2.6	68
31	FASTmiR: an RNA-based sensor for in vitro quantification and live-cell localization of small RNAs. <i>Nucleic Acids Research</i> , 2017, 45, e130-e130.	14.5	49
32	The asparagus genome sheds light on the origin and evolution of a young Y chromosome. <i>Nature Communications</i> , 2017, 8, 1279.	12.8	240
33	The Influence of Genotype and Environment on Small RNA Profiles in Grapevine Berry. <i>Frontiers in Plant Science</i> , 2016, 7, 1459.	3.6	40
34	<i>PMS1T</i> , producing phased small-interfering RNAs, regulates photoperiod-sensitive male sterility in rice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 15144-15149.	7.1	234
35	Identification and functional characterization of soybean root hair microRNAs expressed in response to <i>Bacteroides japonicum</i> infection. <i>Plant Biotechnology Journal</i> , 2016, 14, 332-341.	8.3	40
36	Dynamic changes of small RNAs in rice spikelet development reveal specialized reproductive phasiRNA pathways. <i>Journal of Experimental Botany</i> , 2016, 67, 6037-6049.	4.8	109

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37	The Diversification of Plant <i>NBS-LRR</i> Defense Genes Directs the Evolution of MicroRNAs That Target Them. <i>Molecular Biology and Evolution</i> , 2016, 33, 2692-2705.	8.9	200
38	Small RNAs Add Zing to the Zig-Zag-Zig Model of Plant Defenses. <i>Molecular Plant-Microbe Interactions</i> , 2016, 29, 165-169.	2.6	95
39	Evolution of plant genome architecture. <i>Genome Biology</i> , 2016, 17, 37.	8.8	331
40	High-resolution identification and abundance profiling of cassava (<i>Manihot esculenta</i> Crantz) microRNAs. <i>BMC Genomics</i> , 2016, 17, 85.	2.8	22
41	Secondary siRNA from <i>Medicago</i> <i>NBS-LRR</i> modulated via miRNA target interactions and their abundances. <i>Plant Journal</i> , 2015, 83, 451-465.	5.7	67
42	Coordination of MicroRNAs, PhasiRNAs, and <i>NBS-LRR</i> Genes in Response to a Plant Pathogen: Insights from Analyses of a Set of Soybean Rps Gene Near-Isogenic Lines. <i>Plant Genome</i> , 2015, 8, eplantgenome2014.09.0044.	2.8	31
43	Spatiotemporally dynamic, cell-type-dependent premeiotic and meiotic phasiRNAs in maize anthers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3146-3151.	7.1	310
44	Novel and Recently Evolved MicroRNA Clusters Regulate Expansive <i>F-BOX</i> Gene Networks through Phased Small Interfering RNAs in Wild Diploid Strawberry. <i>Plant Physiology</i> , 2015, 169, 594-610.	4.8	73
45	Distinct and Cooperative Activities of HESO1 and URT1 Nucleotidyl Transferases in MicroRNA Turnover in Arabidopsis. <i>PLoS Genetics</i> , 2015, 11, e1005119.	3.5	125
46	Evolutionary Patterns and Coevolutionary Consequences of <i>MIRNA</i> Genes and MicroRNA Targets Triggered by Multiple Mechanisms of Genomic Duplications in Soybean. <i>Plant Cell</i> , 2015, 27, 546-562.	6.6	89
47	miRVine: a microRNA expression atlas of grapevine based on small RNA sequencing. <i>BMC Genomics</i> , 2015, 16, 393.	2.8	73
48	Identification of micro RNA s and their mRNA targets during soybean nodule development: functional analysis of the role of miR393 in soybean nodulation. <i>New Phytologist</i> , 2015, 207, 748-759.	7.3	82
49	A One Precursor One siRNA Model for Pol IV-Dependent siRNA Biogenesis. <i>Cell</i> , 2015, 163, 445-455.	28.9	260
50	Extensive Families of miRNAs and <i>PHAS</i> Loci in Norway Spruce Demonstrate the Origins of Complex phasiRNA Networks in Seed Plants. <i>Molecular Biology and Evolution</i> , 2015, 32, 2905-2918.	8.9	141
51	Dicer-like 3 produces transposable element-associated 24-nt siRNAs that control agricultural traits in rice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3877-3882.	7.1	181
52	An Atlas of Soybean Small RNAs Identifies Phased siRNAs from Hundreds of Coding Genes. <i>Plant Cell</i> , 2014, 26, 4584-4601.	6.6	163
53	SPARTA: a parallelized pipeline for integrated analysis of plant miRNA and cleaved mRNA data sets, including new miRNA target-identification software. <i>Nucleic Acids Research</i> , 2014, 42, e139-e139.	14.5	69
54	miRNAs trigger widespread epigenetically activated siRNAs from transposons in Arabidopsis. <i>Nature</i> , 2014, 508, 411-415.	27.8	331

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55	Sample sequencing of vascular plants demonstrates widespread conservation and divergence of microRNAs. <i>Nature Communications</i> , 2014, 5, 3722.	12.8	224
56	Distinct and concurrent pathways of Pol II and Pol IV dependent siRNA biogenesis at a repetitive transposon silencer locus in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2014, 79, 127-138.	5.7	25
57	Rapid construction of parallel analysis of RNA end (PARE) libraries for Illumina sequencing. <i>Methods</i> , 2014, 67, 84-90.	3.8	89
58	Roles of small RNAs in soybean defense against <i>Phytophthora sojae</i> infection. <i>Plant Journal</i> , 2014, 79, 928-940.	5.7	122
59	Physiological stressors and invasive plant infections alter the small RNA transcriptome of the rice blast fungus, <i>Magnaporthe oryzae</i> . <i>BMC Genomics</i> , 2013, 14, 326.	2.8	49
60	Multiple RNA recognition patterns during microRNA biogenesis in plants. <i>Genome Research</i> , 2013, 23, 1675-1689.	5.5	110
61	The <i>Amborella</i> Genome and the Evolution of Flowering Plants. <i>Science</i> , 2013, 342, 1241089.	12.6	743
62	Biogenesis and function of rice small RNAs from non-coding RNA precursors. <i>Current Opinion in Plant Biology</i> , 2013, 16, 170-179.	7.1	83
63	Comprehensive Investigation of MicroRNAs Enhanced by Analysis of Sequence Variants, Expression Patterns, ARGONAUTE Loading, and Target Cleavage. <i>Plant Physiology</i> , 2013, 162, 1225-1245.	4.8	61
64	Composition and Expression of Conserved MicroRNA Genes in Diploid Cotton (<i>Gossypium</i>) Species. <i>Genome Biology and Evolution</i> , 2013, 5, 2449-2459.	2.5	35
65	Phased, Secondary, Small Interfering RNAs in Posttranscriptional Regulatory Networks. <i>Plant Cell</i> , 2013, 25, 2400-2415.	6.6	543
66	A transposable element is domesticated for service in the plant immune system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 14821-14822.	7.1	13
67	Plant MicroRNAs Display Differential 3' Truncation and Tailing Modifications That Are ARGONAUTE1 Dependent and Conserved Across Species. <i>Plant Cell</i> , 2013, 25, 2417-2428.	6.6	113
68	MicroRNA Superfamilies Descended from miR390 and Their Roles in Secondary Small Interfering RNA Biogenesis in Eudicots. <i>Plant Cell</i> , 2013, 25, 1555-1572.	6.6	141
69	Parallel analysis of RNA ends enhances global investigation of microRNAs and target RNAs of <i>Brachypodium distachyon</i> . <i>Genome Biology</i> , 2013, 14, R145.	9.6	67
70	RNA polymerase V-dependent small RNAs in <i>Arabidopsis</i> originate from small, intergenic loci including most SINE repeats. <i>Epigenetics</i> , 2012, 7, 781-795.	2.7	69
71	Tracing the origin and evolutionary history of plant nucleotide-binding site leucine-rich repeat (NBS-LRR) genes. <i>New Phytologist</i> , 2012, 193, 1049-1063.	7.3	198
72	Roles of DCL4 and DCL3b in rice phased small RNA biogenesis. <i>Plant Journal</i> , 2012, 69, 462-474.	5.7	289

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73	RNA-Seq reveals infection-related global gene changes in <i>Phytophthora phaseoli</i> , the causal agent of lima bean downy mildew. <i>Molecular Plant Pathology</i> , 2012, 13, 454-466.	4.2	36
74	The Medicago genome provides insight into the evolution of rhizobial symbioses. <i>Nature</i> , 2011, 480, 520-524.	27.8	1,166
75	Small RNA-mediated epigenetic modifications in plants. <i>Current Opinion in Plant Biology</i> , 2011, 14, 148-155.	7.1	135
76	A microRNA of infectious laryngotracheitis virus can downregulate and direct cleavage of ICP4 mRNA. <i>Virology</i> , 2011, 411, 25-31.	2.4	20
77	MicroRNAs as master regulators of the plant <i>NB-LRR</i> defense gene family via the production of phased, <i>trans</i> -acting siRNAs. <i>Genes and Development</i> , 2011, 25, 2540-2553.	5.9	668
78	Experimental design, preprocessing, normalization and differential expression analysis of small RNA sequencing experiments. <i>Silence: A Journal of RNA Regulation</i> , 2011, 2, 2.	8.1	82
79	Transcriptome dynamics through alternative polyadenylation in developmental and environmental responses in plants revealed by deep sequencing. <i>Genome Research</i> , 2011, 21, 1478-1486.	5.5	117
80	Massive Analysis of Rice Small RNAs: Mechanistic Implications of Regulated MicroRNAs and Variants for Differential Target RNA Cleavage. <i>Plant Cell</i> , 2011, 23, 4185-4207.	6.6	341
81	Prediction of novel miRNAs and associated target genes in <i>Glycine max</i> . <i>BMC Bioinformatics</i> , 2010, 11, S14.	2.6	108
82	siRNAs compete with miRNAs for methylation by HEN1 in <i>Arabidopsis</i> . <i>Nucleic Acids Research</i> , 2010, 38, 5844-5850.	14.5	59
83	Computational Methods for Comparative Analysis of Plant Small RNAs. <i>Methods in Molecular Biology</i> , 2010, 592, 163-181.	0.9	8
84	Genome Evolution Following Host Jumps in the Irish Potato Famine Pathogen Lineage. <i>Science</i> , 2010, 330, 1540-1543.	12.6	440
85	Genomic and small RNA sequencing of <i>Miscanthus giganteus</i> shows the utility of sorghum as a reference genome sequence for <i>Andropogoneae</i> grasses. <i>Genome Biology</i> , 2010, 11, R12.	9.6	93
86	Bioinformatics Analysis of Small RNAs in Plants Using Next Generation Sequencing Technologies. <i>Methods in Molecular Biology</i> , 2010, 592, 89-106.	0.9	35
87	Distinct extremely abundant siRNAs associated with cosuppression in petunia. <i>Rna</i> , 2009, 15, 1965-1970.	3.5	93
88	MicroRNAs of Gallid and Meleagrid herpesviruses show generally conserved genomic locations and are virus-specific. <i>Virology</i> , 2009, 388, 128-136.	2.4	56
89	Genome sequence and analysis of the Irish potato famine pathogen <i>Phytophthora infestans</i> . <i>Nature</i> , 2009, 461, 393-398.	27.8	1,405
90	Construction of Parallel Analysis of RNA Ends (PARE) libraries for the study of cleaved miRNA targets and the RNA degradome. <i>Nature Protocols</i> , 2009, 4, 356-362.	12.0	301

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91	MicroRNAs in the Rhizobia Legume Symbiosis. <i>Plant Physiology</i> , 2009, 151, 1002-1008.	4.8	63
92	Short-Read Sequencing Technologies for Transcriptional Analyses. <i>Annual Review of Plant Biology</i> , 2009, 60, 305-333.	18.7	118
93	Genome-wide identification of NBS resistance genes in <i>Populus trichocarpa</i> . <i>Plant Molecular Biology</i> , 2008, 66, 619-636.	3.9	247
94	The Cornucopia of Small RNAs in Plant Genomes. <i>Rice</i> , 2008, 1, 52-62.	4.0	7
95	Transposable Element Regulation in Rice and Arabidopsis: Diverse Patterns of Active Expression and siRNA-mediated Silencing. <i>Tropical Plant Biology</i> , 2008, 1, 72-84.	1.9	6
96	Frequent sequence exchanges between homologs of <i>RPP8</i> in Arabidopsis are not necessarily associated with genomic proximity. <i>Plant Journal</i> , 2008, 54, 69-80.	5.7	47
97	Global identification of microRNA-target RNA pairs by parallel analysis of RNA ends. <i>Nature Biotechnology</i> , 2008, 26, 941-946.	17.5	793
98	Deep Sequencing of Chicken microRNAs. <i>BMC Genomics</i> , 2008, 9, 185.	2.8	118
99	Criteria for Annotation of Plant MicroRNAs. <i>Plant Cell</i> , 2008, 20, 3186-3190.	6.6	1,158
100	Sequencing-based Measurements of mRNA and Small RNA. <i>Biotechnology in Agriculture and Forestry</i> , 2008, , 23-36.	0.2	0
101	Distinct size distribution of endogenous siRNAs in maize: Evidence from deep sequencing in the <i>mop1-1</i> mutant. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 14958-14963.	7.1	208
102	Genome-wide analysis for discovery of rice microRNAs reveals natural antisense microRNAs (nat-miRNAs). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 4951-4956.	7.1	218
103	Small RNA-Directed Epigenetic Natural Variation in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2008, 4, e1000056.	3.5	112
104	Construction of small RNA cDNA libraries for deep sequencing. <i>Methods</i> , 2007, 43, 110-117.	3.8	216
105	An expression atlas of rice mRNAs and small RNAs. <i>Nature Biotechnology</i> , 2007, 25, 473-477.	17.5	246
106	Global expression analysis of nucleotide binding site-leucine rich repeat-encoding and related genes in Arabidopsis. <i>BMC Plant Biology</i> , 2007, 7, 56.	3.6	166
107	Methods for Analysis of Gene Expression in Plants Using MPSS. , 2007, 406, 387-407.		9
108	Dissecting <i>Arabidopsis thaliana</i> DICER function in small RNA processing, gene silencing and DNA methylation patterning. <i>Nature Genetics</i> , 2006, 38, 721-725.	21.4	561

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109	Sweating the small stuff: microRNA discovery in plants. <i>Current Opinion in Biotechnology</i> , 2006, 17, 139-146.	6.6	63
110	Genomic and Genetic Characterization of Rice Cen3 Reveals Extensive Transcription and Evolutionary Implications of a Complex Centromere. <i>Plant Cell</i> , 2006, 18, 2123-2133.	6.6	95
111	Plant MPSS databases: signature-based transcriptional resources for analyses of mRNA and small RNA. <i>Nucleic Acids Research</i> , 2006, 34, D731-D735.	14.5	276
112	MicroRNAs and other small RNAs enriched in the Arabidopsis RNA-dependent RNA polymerase-2 mutant. <i>Genome Research</i> , 2006, 16, 1276-1288.	5.5	329
113	Marek's Disease Virus Encodes MicroRNAs That Map to <i>miq1</i> and the Latency-Associated Transcript. <i>Journal of Virology</i> , 2006, 80, 8778-8786.	3.4	196
114	Evolving disease resistance genes. <i>Current Opinion in Plant Biology</i> , 2005, 8, 129-134.	7.1	325
115	<i>Pseudomonas</i> versus Arabidopsis: Models for Genomic Research into Plant Disease Resistance. <i>BioScience</i> , 2005, 55, 679.	4.9	4
116	Elucidation of the Small RNA Component of the Transcriptome. <i>Science</i> , 2005, 309, 1567-1569.	12.6	582
117	Multiple Genetic Processes Result in Heterogeneous Rates of Evolution within the Major Cluster Disease Resistance Genes in Lettuce[W]. <i>Plant Cell</i> , 2004, 16, 2870-2894.	6.6	276
118	The Use of MPSS for Whole-Genome Transcriptional Analysis in Arabidopsis. <i>Genome Research</i> , 2004, 14, 1641-1653.	5.5	171
119	Genome-Wide Analysis of NBS-LRR-Encoding Genes in Arabidopsis[W]. <i>Plant Cell</i> , 2003, 15, 809-834.	6.6	1,457
120	TIR-X and TIR-NBS proteins: two new families related to disease resistance TIR-NBS-LRR proteins encoded in Arabidopsis and other plant genomes. <i>Plant Journal</i> , 2002, 32, 77-92.	5.7	241
121	Plant disease resistance genes encode members of an ancient and diverse protein family within the nucleotide-binding superfamily. <i>Plant Journal</i> , 1999, 20, 317-332.	5.7	729
122	The Major Resistance Gene Cluster in Lettuce Is Highly Duplicated and Spans Several Megabases. <i>Plant Cell</i> , 1998, 10, 1817-1832.	6.6	290
123	Clusters of Resistance Genes in Plants Evolve by Divergent Selection and a Birth-and-Death Process. <i>Genome Research</i> , 1998, 8, 1113-1130.	5.5	942
124	Resistance Gene Candidates Identified by PCR with Degenerate Oligonucleotide Primers Map to Clusters of Resistance Genes in Lettuce. <i>Molecular Plant-Microbe Interactions</i> , 1998, 11, 815-823.	2.6	213
125	Receptor-like Genes in the Major Resistance Locus of Lettuce Are Subject to Divergent Selection. <i>Plant Cell</i> , 1998, 10, 1833-1846.	6.6	288
126	The Major Resistance Gene Cluster in Lettuce Is Highly Duplicated and Spans Several Megabases. <i>Plant Cell</i> , 1998, 10, 1817.	6.6	29

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127	A Transgenic Mutant of <i>Lactuca sativa</i> (Lettuce) with a T-DNA Tightly Linked to Loss of Downy Mildew Resistance. <i>Molecular Plant-Microbe Interactions</i> , 1997, 10, 970-977.	2.6	24
128	The evolutionary history of small RNAs in Solanaceae. <i>Plant Physiology</i> , 0, , .	4.8	7