David C Baulcombe

List of Publications by Year
in descending order

211 papers	44,119 citations	1799 103 h-index	2078 204 g-index
229 all docs	229 docs citations	229 times ranked	23939 citing authors

#	Article	IF	Citations
1	A Species of Small Antisense RNA in Posttranscriptional Gene Silencing in Plants. Science, 1999, 286, 950-952.	12.6	2,663
2	RNA silencing in plants. Nature, 2004, 431, 356-363.	27.8	2,314
3	Criteria for Annotation of Plant MicroRNAs. Plant Cell, 2008, 20, 3186-3190.	6.6	1,158
4	An RNA-Dependent RNA Polymerase Gene in Arabidopsis Is Required for Posttranscriptional Gene Silencing Mediated by a Transgene but Not by a Virus. Cell, 2000, 101, 543-553.	28.9	956
5	Viral pathogenicity determinants are suppressors of transgene silencing in Nicotiana benthamiana. EMBO Journal, 1998, 17, 6739-6746.	7.8	947
6	Arabidopsis ARGONAUTE1 is an RNA Slicer that selectively recruits microRNAs and short interfering RNAs. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11928-11933.	7.1	920
7	Initiation and Maintenance of Virus-Induced Gene Silencing. Plant Cell, 1998, 10, 937-946.	6.6	896
8	Two classes of short interfering RNA in RNA silencing. EMBO Journal, 2002, 21, 4671-4679.	7.8	865
9	Technical Advance: Tobacco rattle virus as a vector for analysis of gene function by silencing. Plant Journal, 2008, 25, 237-245.	5.7	816
10	A Similarity Between Viral Defense and Gene Silencing in Plants. Science, 1997, 276, 1558-1560.	12.6	754
11	Modulation of floral development by a gibberellin-regulated microRNA. Development (Cambridge), 2004, 131, 3357-3365.	2.5	724
12	A MicroRNA Superfamily Regulates Nucleotide Binding Siteâ€"Leucine-Rich Repeats and Other mRNAs. Plant Cell, 2012, 24, 859-874.	6.6	697
13	Systemic Spread of Sequence-Specific Transgene RNA Degradation in Plants Is Initiated by Localized Introduction of Ectopic Promoterless DNA. Cell, 1998, 95, 177-187.	28.9	674
14	Small Silencing RNAs in Plants Are Mobile and Direct Epigenetic Modification in Recipient Cells. Science, 2010, 328, 872-875.	12.6	668
15	The Rx Gene from Potato Controls Separate Virus Resistance and Cell Death Responses. Plant Cell, 1999, 11, 781-791.	6.6	650
16	RNA Polymerase IV Directs Silencing of Endogenous DNA. Science, 2005, 308, 118-120.	12.6	647
17	A Viral Movement Protein Prevents Spread of the Gene Silencing Signal in Nicotiana benthamiana. Cell, 2000, 103, 157-167.	28.9	591
18	Fast forward genetics based on virus-induced gene silencing. Current Opinion in Plant Biology, 1999, 2, 109-113.	7.1	585

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19	Systemic signalling in gene silencing. Nature, 1997, 389, 553-553.	27.8	544
20	22-nucleotide RNAs trigger secondary siRNA biogenesis in plants. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15269-15274.	7.1	500
21	High throughput virus-induced gene silencing implicates heat shock protein 90 in plant disease resistance. EMBO Journal, 2003, 22, 5690-5699.	7.8	493
22	Jellyfish green fluorescent protein as a reporter for virus infections. Plant Journal, 1995, 7, 1045-1053.	5.7	485
23	RNAâ€“DNA Interactions and DNA Methylation in Post-Transcriptional Gene Silencing. Plant Cell, 1999, 11, 2291-2301.	6.6	477
24	Potato virus X as a vector for gene expression in plants.. Plant Journal, 1992, 2, 549-557.	5.7	463
25	miRNAs control gene expression in the single-cell alga Chlamydomonas reinhardtii. Nature, 2007, 447, 1126-1129.	27.8	461
26	Comparative Functional Genomics of the Fission Yeasts. Science, 2011, 332, 930-936.	12.6	458
27	An RNA-Dependent RNA Polymerase Prevents Meristem Invasion by Potato Virus X and Is Required for the Activity But Not the Production of a Systemic Silencing Signal. Plant Physiology, 2005, 138, 1842-1852.	4.8	438
28	Gene Silencing without DNA: RNA-Mediated Cross-Protection between Viruses. Plant Cell, 1999, 11, 1207-1215.	6.6	426
29	Spreading of RNA Targeting and DNA Methylation in RNA Silencing Requires Transcription of the Target Gene and a Putative RNA-Dependent RNA Polymerase. Plant Cell, 2002, 14, 857-867.	6.6	416
30	Virus-induced gene silencing in plants. Methods, 2003, 30, 296-303.	3.8	415
31	The top 100 questions of importance to the future of global agriculture. International Journal of Agricultural Sustainability, 2010, 8, 219-236.	3.5	405
32	Interaction between domains of a plant NBS-LRR protein in disease resistance-related cell death. EMBO Journal, 2002, 21, 4511-4519.	7.8	391
33	Ubiquitin ligase-associated protein SGT1 is required for host and nonhost disease resistance in plants. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10865-10869.	7.1	385
34	RNA-directed transcriptional gene silencing in plants can be inherited independently of the RNA trigger and requires Met1 for maintenance. Current Biology, 2001, 11, 747-757.	3.9	358
35	The<i>Arabidopsis</i>RNA-Directed DNA Methylation Argonautes Functionally Diverge Based on Their Expression and Interaction with Target Loci Â. Plant Cell, 2010, 22, 321-334.	6.6	346
36	Mechanisms of Pathogen-Derived Resistance to Viruses in Transgenic Plants.. Plant Cell, 1996, 8, 1833-1844.	6.6	343

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37	The Polerovirus Silencing Suppressor P0 Targets ARGONAUTE Proteins for Degradation. Current Biology, 2007, 17, 1609-1614.	3.9	341
38	Identification and characterization of small RNAs from the phloem of <i>Brassica napus</i>. Plant Journal, 2008, 53, 739-749.	5.7	338
39	An Antiviral Defense Role of AGO2 in Plants. PLoS ONE, 2011, 6, e14639.	2.5	321
40	Highly specific gene silencing by artificial microRNAs in the unicellular alga <i>Chlamydomonas reinhardtii</i>. Plant Journal, 2009, 58, 165-174.	5.7	317
41	Constitutive gain-of-function mutants in a nucleotide binding site-leucine rich repeat protein encoded at theRxlocus of potato. Plant Journal, 2002, 32, 195-204.	5.7	309
42	Homologues of a single resistance-gene cluster in potato confer resistance to distinct pathogens: a virus and a nematode. Plant Journal, 2000, 23, 567-576.	5.7	307
43	SDE3 encodes an RNA helicase required for post-transcriptional gene silencing in Arabidopsis. EMBO Journal, 2001, 20, 2069-2078.	7.8	306
44	Uniparental expression of PolIV-dependent siRNAs in developing endosperm of Arabidopsis. Nature, 2009, 460, 283-286.	27.8	297
45	Agrobacterium transient expression system as a tool for the isolation of disease resistance genes: application to the Rx2 locus in potato. Plant Journal, 2000, 21, 73-81.	5.7	288
46	Intercellular and systemic movement of RNA silencing signals. EMBO Journal, 2011, 30, 3553-3563.	7.8	279
47	NRG1, a CC-NB-LRR Protein, together with N, a TIR-NB-LRR Protein, Mediates Resistance against Tobacco Mosaic Virus. Current Biology, 2005, 15, 968-973.	3.9	267
48	Potato virus X as a vector for gene expression in plants. Plant Journal, 1992, 2, 549-557.	5.7	265
49	Standards for plant synthetic biology: a common syntax for exchange of <scp>DNA</scp> parts. New Phytologist, 2015, 208, 13-19.	7.3	263
50	Expression of biologically active viral satellite RNA from the nuclear genome of transformed plants. Nature, 1986, 321, 446-449.	27.8	257
51	Virus resistance in transgenic plants that express cucumber mosaic virus satellite RNA. Nature, 1987, 328, 799-802.	27.8	256
52	An SNF2 Protein Associated with Nuclear RNA Silencing and the Spread of a Silencing Signal between Cells in Arabidopsis. Plant Cell, 2007, 19, 1507-1521.	6.6	251
53	Virus-Induced Silencing of a Plant Cellulose Synthase Gene. Plant Cell, 2000, 12, 691-705.	6.6	249
54	PolIVb influences RNA-directed DNA methylation independently of its role in siRNA biogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3145-3150.	7.1	247

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55	Homology-dependent resistance: transgenic virus resistance in plants related to homology-dependent gene silencing. Plant Journal, 1995, 7, 1001-1013.	5.7	237
56	Cloning and characterization of micro-RNAs from moss. Plant Journal, 2005, 43, 837-848.	5.7	231
57	A saponin-detoxifying enzyme mediates suppression of plant defences. Nature, 2002, 418, 889-892.	27.8	226
58	Birth of a Photosynthetic Chassis: A MoClo Toolkit Enabling Synthetic Biology in the Microalga <i>Chlamydomonas reinhardtii</i>. ACS Synthetic Biology, 2018, 7, 2074-2086.	3.8	225
59	Elicitor-Mediated Oligomerization of the Tobacco N Disease Resistance Protein. Plant Cell, 2006, 18, 491-501.	6.6	224
60	Epigenetic Regulation in Plant Responses to the Environment. Cold Spring Harbor Perspectives in Biology, 2014, 6, a019471-a019471.	5.5	210
61	Consistent gene silencing in transgenic plants expressing a replicating potato virus X RNA. EMBO Journal, 1997, 16, 3675-3684.	7.8	206
62	Extraordinary transgressive phenotypes of hybrid tomato are influenced by epigenetics and small silencing RNAs. EMBO Journal, 2012, 31, 257-266.	7.8	204
63	Size constraints for targeting post-transcriptional gene silencing and for RNA-directed methylation inNicotiana benthamianausing a potato virus X vector. Plant Journal, 2001, 25, 417-425.	5.7	203
64	5â€² isomiR variation is of functional and evolutionary importance. Nucleic Acids Research, 2014, 42, 9424-9435.	14.5	203
65	Virus-induced gene silencing inSolanumspecies. Plant Journal, 2004, 39, 264-272.	5.7	200
66	RNA silencing. Trends in Biochemical Sciences, 2005, 30, 290-293.	7.5	195
67	Mobile small RNAs regulate genome-wide DNA methylation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E801-10.	7.1	192
68	Cell-to-Cell Movement of Potato Virus X Is Associated with a Change in the Size-Exclusion Limit of Plasmodesmata in Trichome Cells ofNicotiana clevelandii. Virology, 1996, 216, 197-201.	2.4	182
69	Physical Association of the NB-LRR Resistance Protein Rx with a Ran GTPaseâ€“Activating Protein Is Required for Extreme Resistance to Potato virus X. Plant Cell, 2007, 19, 1682-1694.	6.6	181
70	An EDS1 orthologue is required for N â€mediated resistance against tobacco mosaic virus. Plant Journal, 2002, 29, 569-579.	5.7	180
71	Mutational analysis of the coat protein gene of potato virus X: Effects on virion morphology and viral pathogenicity. Virology, 1992, 191, 223-230.	2.4	177
72	The tomato resistance protein Bs4 is a predicted non-nuclear TIR-NB-LRR protein that mediates defense responses to severely truncated derivatives of AvrBs4 and overexpressed AvrBs3. Plant Journal, 2004, 37, 46-60.	5.7	177

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73	Potato Virus X Amplicons in Arabidopsis Mediate Genetic and Epigenetic Gene Silencing. Plant Cell, 2000, 12, 369-379.	6.6	174
74	The coat protein of potato virus X is a strainâ€specific elicitor of <i>Rx</i> 1â€mediated virus resistance in potato. Plant Journal, 1995, 8, 933-941.	5.7	172
75	Defective RNA processing enhances RNA silencing and influences flowering of Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14994-15001.	7.1	172
76	Artificial evolution extends the spectrum of viruses that are targeted by a disease-resistance gene from potato. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18828-18833.	7.1	163
77	Widespread Role for the Flowering-Time Regulators FCA and FPA in RNA-Mediated Chromatin Silencing. Science, 2007, 318, 109-112.	12.6	161
78	Cell-to-cell movement of Potato Potexvirus X is dependent on suppression of RNA silencing. Plant Journal, 2005, 44, 471-482.	5.7	156
79	The silencing suppressor P25 of <i>Potato virus X</i> interacts with Argonaute1 and mediates its degradation through the proteasome pathway. Molecular Plant Pathology, 2010, 11, 641-649.	4.2	153
80	DNA Methylation Signatures of the Plant Chromomethyltransferases. PLoS Genetics, 2016, 12, e1006526.	3.5	149
81	Multimegabase Silencing in Nucleolar Dominance Involves siRNA-Directed DNA Methylation and Specific Methylcytosine-Binding Proteins. Molecular Cell, 2008, 32, 673-684.	9.7	144
82	RNA silencing. Current Biology, 2002, 12, R82-R84.	3.9	138
83	Stepwise artificial evolution of a plant disease resistance gene. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 21189-21194.	7.1	138
84	RNA Polymerase Slippage as a Mechanism for the Production of Frameshift Gene Products in Plant Viruses of the Potyviridae Family. Journal of Virology, 2015, 89, 6965-6967.	3.4	136
85	Molecular analysis of a resistance-breaking strain of potato virus X. Virology, 1992, 189, 609-617.	2.4	134
86	Ectopic pairing of homologous DNA and post-transcriptional gene silencing in transgenic plants. Current Opinion in Biotechnology, 1996, 7, 173-180.	6.6	134
87	VIGS, HIGS and FIGS: small RNA silencing in the interactions of viruses or filamentous organisms with their plant hosts. Current Opinion in Plant Biology, 2015, 26, 141-146.	7.1	134
88	Mobile 24 nt Small RNAs Direct Transcriptional Gene Silencing in the Root Meristems of Arabidopsis thaliana. Current Biology, 2011, 21, 1678-1683.	3.9	133
89	Maternal siRNAs as regulators of parental genome imbalance and gene expression in endosperm of <i>Arabidopsis</i> seeds. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5529-5534.	7.1	133
90	Secretion of a wheat Î±-amylase expressed in yeast. Nature, 1984, 308, 662-665.	27.8	130

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91	Gibberellic-acid-regulated expression of ?-amylase and six other genes in wheat aleurone layers. Planta, 1983, 157, 493-501.	3.2	125
92	Epigenetic transitions leading to heritable, RNA-mediated de novo silencing in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 917-922.	7.1	125
93	Silencing of a Gene Encoding a Protein Component of the Oxygen-Evolving Complex of Photosystem II Enhances Virus Replication in Plants. Virology, 2002, 295, 307-319.	2.4	121
94	Requirement of sense transcription for homologyâ€dependent virus resistance and <i>transâ€</i>inactivation. Plant Journal, 1997, 12, 597-603.	5.7	118
95	An atypical RNA polymerase involved in RNA silencing shares small subunits with RNA polymerase II. Nature Structural and Molecular Biology, 2009, 16, 91-93.	8.2	118
96	Silencing signals in plants: a long journey for small RNAs. Genome Biology, 2011, 12, 215.	9.6	117
97	The use of duplex-specific nuclease in ribosome profiling and a user-friendly software package for Ribo-seq data analysis. Rna, 2015, 21, 1731-1745.	3.5	117
98	JMJ14, a JmjC domain protein, is required for RNA silencing and cell-to-cell movement of an RNA silencing signal in <i>Arabidopsis</i>. Genes and Development, 2010, 24, 986-991.	5.9	116
99	Tobacco Rattle Virus 16-Kilodalton Protein Encodes a Suppressor of RNA Silencing That Allows Transient Viral Entry in Meristems. Journal of Virology, 2008, 82, 4064-4071.	3.4	114
100	Polygalacturonase-Inhibiting Proteins (PGIPs) with Different Specificities Are Expressed in Phaseolus vulgaris. Molecular Plant-Microbe Interactions, 1997, 10, 852-860.	2.6	112
101	A PHABULOSA/Cytokinin Feedback Loop Controls Root Growth in Arabidopsis. Current Biology, 2012, 22, 1699-1704.	3.9	112
102	Amplified Silencing. Science, 2007, 315, 199-200.	12.6	109
103	A Feature of the Coat Protein of Potato Virus X Affects Both Induced Virus Resistance in Potato and Viral Fitness. Virology, 1993, 197, 293-302.	2.4	104
104	Putative <i>Arabidopsis</i> THO/TREX mRNA export complex is involved in transgene and endogenous siRNA biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13948-13953.	7.1	101
105	Enhanced resistance to bacterial and oomycete pathogens by short tandem target mimic RNAs in tomato. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2755-2760.	7.1	101
106	Suppression of Virus Accumulation in Transgenic Plants Exhibiting Silencing of Nuclear Genes. Plant Cell, 1996, 8, 179.	6.6	98
107	The amplicon-plus system for high-level expression of transgenes in plants. Nature Biotechnology, 2002, 20, 622-625.	17.5	98
108	Small RNAs and heritable epigenetic variation in plants. Trends in Cell Biology, 2014, 24, 100-107.	7.9	98

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109	Epigenetic and Genetic Contributions to Adaptation in Chlamydomonas. Molecular Biology and Evolution, 2017, 34, 2285-2306.	8.9	97
110	Identification oftrans-acting siRNAs in moss and an RNA-dependent RNA polymerase required for their biogenesis. Plant Journal, 2006, 48, 511-521.	5.7	93
111	Diced defence. Nature, 2001, 409, 295-296.	27.8	90
112	Viral suppression of systemic silencing. Trends in Microbiology, 2002, 10, 306-308.	7.7	89
113	Resistance to rice yellow mottle virus (RYMV) in cultivated African rice varieties containing RYMV transgenes. Nature Biotechnology, 1999, 17, 702-707.	17.5	87
114	In Vivo Translation of the Triple Gene Block of Potato Virus X Requires Two Subgenomic mRNAs. Journal of Virology, 1998, 72, 8316-8320.	3.4	87
115	A novel wheat Î±-amylase gene (Î±-Amy3). Molecular Genetics and Genomics, 1987, 209, 33-40.	2.4	84
116	Gene silencing: RNA makes RNA makes no protein. Current Biology, 1999, 9, R599-R601.	3.9	84
117	?-amylase genes of wheat are two multigene families which are differentially expressed. Plant Molecular Biology, 1985, 5, 13-24.	3.9	83
118	Roles of RNA silencing in viral and non-viral plant immunity and in the crosstalk between disease resistance systems. Nature Reviews Molecular Cell Biology, 2022, 23, 645-662.	37.0	83
119	Tight Physical Linkage of the Nematode Resistance Gene Gpa2 and the Virus Resistance Gene Rx on a Single Segment Introgressed from the Wild Species Solanum tuberosum subsp. andigena CPC 1673 into Cultivated Potato. Molecular Plant-Microbe Interactions, 1999, 12, 197-206.	2.6	82
120	Using a Viral Vector to Reveal the Role of MicroRNA159 in Disease Symptom Induction by a Severe Strain of <i>Cucumber mosaic virus</i>. Plant Physiology, 2014, 164, 1378-1388.	4.8	78
121	Mechanisms of Pathogen-Derived Resistance to Viruses in Transgenic Plants. Plant Cell, 1996, 8, 1833.	6.6	77
122	An Ry-mediated resistance response in potato requires the intact active site of the NIa proteinase from potato virus Y. Plant Journal, 2000, 23, 653-661.	5.7	76
123	Cell-to-Cell Movement of the 25K Protein of Potato virus X Is Regulated by Three Other Viral Proteins. Molecular Plant-Microbe Interactions, 2000, 13, 599-605.	2.6	76
124	The 25-kDa Movement Protein of PVX Elicits Nb-Mediated Hypersensitive Cell Death in Potato. Molecular Plant-Microbe Interactions, 1999, 12, 536-543.	2.6	74
125	SDE5, the putative homologue of a human mRNA export factor, is required for transgene silencing and accumulation of trans-acting endogenous siRNA. Plant Journal, 2007, 50, 140-148.	5.7	74
126	Analysis of small RNA in fission yeast; centromeric siRNAs are potentially generated through a structured RNA. EMBO Journal, 2009, 28, 3832-3844.	7.8	73

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127	Crystal structure of p19 ? a universal suppressor of RNA silencing. Trends in Biochemical Sciences, 2004, 29, 279-281.	7.5	66
128	Initiation and Maintenance of Virus-Induced Gene Silencing. Plant Cell, 1998, 10, 937.	6.6	62
129	Sub-cellular Localization of the 25-kDa Protein Encoded in the Triple Gene Block of Potato Virus X. Virology, 1993, 197, 166-175.	2.4	59
130	The P1N-PISPO <i>trans</i> -Frame Gene of Sweet Potato Feathery Mottle Potyvirus Is Produced during Virus Infection and Functions as an RNA Silencing Suppressor. Journal of Virology, 2016, 90, 3543-3557.	3.4	59
131	Sequence heterogeneity and differential expression of the Î±-Amy2 gene family in wheat. Molecular Genetics and Genomics, 1988, 214, 232-240.	2.4	58
132	Novel strategies for engineering virus resistance in plants. Current Opinion in Biotechnology, 1994, 5, 117-124.	6.6	58
133	Preparation of a complementary DNA for leghaemoglobin and direct demonstration that leghaemoglobin is encoded by the soybean genome. Nucleic Acids Research, 1978, 5, 4141-4154.	14.5	57
134	Evolution of NBS-LRR Gene Copies among Dicot Plants and its Regulation by Members of the miR482/2118 Superfamily of miRNAs. Molecular Plant, 2015, 8, 329-331.	8.3	57
135	A novel DCL2-dependent miRNA pathway in tomato affects susceptibility to RNA viruses. Genes and Development, 2018, 32, 1155-1160.	5.9	57
136	Maternal small RNAs mediate spatial-temporal regulation of gene expression, imprinting, and seed development in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2761-2766.	7.1	54
137	Pathogenâ€derived resistance targeted against the negativeâ€strand RNA of tobacco mosaic virus: RNA strandâ€specific gene silencing?. Plant Journal, 1998, 13, 537-546.	5.7	53
138	Replicase-mediated resistance: a novel type of virus resistance in transgenic plants?. Trends in Microbiology, 1994, 2, 60-63.	7.7	52
139	MOLECULAR BIOLOGY: Unwinding RNA Silencing. Science, 2000, 290, 1108-1109.	12.6	51
140	Environmental and epigenetic regulation of Rider retrotransposons in tomato. PLoS Genetics, 2019, 15, e1008370.	3.5	51
141	Potato virus X amplicon-mediated silencing of nuclear genes. Plant Journal, 1999, 20, 357-362.	5.7	48
142	RNA silencing of hydrogenase(-like) genes and investigation of their physiological roles in the green alga <i>Chlamydomonas reinhardtii</i>. Biochemical Journal, 2010, 431, 345-352.	3.7	45
143	Most microRNAs in the single-cell alga <i>Chlamydomonas reinhardtii</i> are produced by Dicer-like 3-mediated cleavage of introns and untranslated regions of coding RNAs. Genome Research, 2016, 26, 519-529.	5.5	44
144	Evidence for Large Complex Networks of Plant Short Silencing RNAs. PLoS ONE, 2010, 5, e9901.	2.5	44

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145	RNA Silencing Pathways in Plants. Cold Spring Harbor Symposia on Quantitative Biology, 2004, 69, 363-370.	1.1	42
146	Potato virus Y NIa protease activity is not sufficient for elicitation ofRy-mediated disease resistance in potato. Plant Journal, 2003, 36, 755-761.	5.7	41
147	Short Silencing RNA: The Dark Matter of Genetics?. Cold Spring Harbor Symposia on Quantitative Biology, 2006, 71, 13-20.	1.1	40
148	Synthesis and secretion of wheat Î±-amylase in Saccharomyces cerevisiae. Gene, 1987, 55, 353-356.	2.2	39
149	The specific binding to 21-nt double-stranded RNAs is crucial for the anti-silencing activity of <i>Cucumber vein yellowing virus</i> P1b and perturbs endogenous small RNA populations. Rna, 2011, 17, 1148-1158.	3.5	38
150	Sequence Analysis of a â€œTrueâ€•Chalcone Synthase (chs_H1) Oligofamily from hop (Humulus lupulusL.) and PAP1 Activation ofchs_H1 in Heterologous Systems. Journal of Agricultural and Food Chemistry, 2006, 54, 7606-7615.	5.2	37
151	Transposon age and non-CG methylation. Nature Communications, 2020, 11, 1221.	12.8	37
152	Endogenous miRNA in the green alga Chlamydomonas regulates gene expression through CDS-targeting. Nature Plants, 2017, 3, 787-794.	9.3	36
153	Maize chlorotic mottle virus exhibits low divergence between differentiated regional sub-populations. Scientific Reports, 2018, 8, 1173.	3.3	36
154	Functionally Homologous Host Components Recognize Potato Virus X in Gomphrena globosa and Potato.. Plant Cell, 1993, 5, 921-930.	6.6	35
155	A Potato Virus X Resistance Gene Mediates an Induced, Nonspecific Resistance in Protoplasts. Plant Cell, 1993, 5, 913.	6.6	34
156	Gene Silencing without DNA: RNA-Mediated Cross-Protection between Viruses. Plant Cell, 1999, 11, 1207.	6.6	34
157	Standing Up for GMOs. Science, 2013, 341, 1320-1320.	12.6	33
158	DNA EVENTS: An RNA Microcosm. Science, 2002, 297, 2002-2003.	12.6	32
159	FDF-PAGE: a powerful technique revealing previously undetected small RNAs sequestered by complementary transcripts. Nucleic Acids Research, 2015, 43, 7590-7599.	14.5	32
160	Identifying small interfering RNA loci from high-throughput sequencing data. Bioinformatics, 2012, 28, 457-463.	4.1	30
161	Welcome to Silence. Silence: A Journal of RNA Regulation, 2010, 1, 1.	8.1	29
162	Strategies for virus resistance in plants. Trends in Genetics, 1989, 5, 56-60.	6.7	28

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163	Reaping Benefits of Crop Research. Science, 2010, 327, 761-761.	12.6	27
164	Viral Fitness Determines the Magnitude of Transcriptomic and Epigenomic Reprograming of Defense Responses in Plants. Molecular Biology and Evolution, 2020, 37, 1866-1881.	8.9	27
165	Acquisition of multiple virulence/avirulence determinants by potato virus X (PVX) has occurred through convergent evolution rather than through recombination. Virus Genes, 2000, 20, 165-172.	1.6	26
166	Cell-to-cell movement of potato virus X revealed by micro-injection of a viral vector tagged with the beta-glucuronidase gene. Plant Journal, 1995, 7, 135-140.	5.7	25
167	Virus-Induced Silencing of a Plant Cellulose Synthase Gene. Plant Cell, 2000, 12, 691.	6.6	25
168	Concurrent Suppression of Virus Replication and Rescue of Movement-Defective Virus in Transgenic Plants Expressing the Coat Protein of Potato Virus X. Virology, 1997, 236, 76-84.	2.4	24
169	Relationship between genome and epigenome - challenges and requirements for future research. BMC Genomics, 2014, 15, 487.	2.8	24
170	An unusual wheat insertion sequence (WIS1) lies upstream of an Î±-amylase gene in hexaploid wheat, and carries a â€œminisatelliteâ€•array. Molecular Genetics and Genomics, 1989, 217, 401-410.	2.4	23
171	The influence of small changes in transgene transcription on homology-dependent virus resistance and gene silencing. Plant Journal, 1997, 12, 1311-1318.	5.7	23
172	High-resolution genetic map of Nb, a gene that confers hypersensitive resistance to potato virus X in Solanum tuberosum. Theoretical and Applied Genetics, 2002, 105, 192-200.	3.6	21
173	An Atypical Epigenetic Mechanism Affects Uniparental Expression of Pol IV-Dependent siRNAs. PLoS ONE, 2011, 6, e25756.	2.5	21
174	<i>SLTAB2</i>is the paramutated<i>SULFUREA</i>locus in tomato. Journal of Experimental Botany, 2016, 67, 2655-2664.	4.8	20
175	Small RNAâ€"the Secret of Noble Rot. Science, 2013, 342, 45-46.	12.6	19
176	Metastable Differentially Methylated Regions within Arabidopsis Inbred Populations Are Associated with Modified Expression of Non-Coding Transcripts. PLoS ONE, 2012, 7, e45242.	2.5	19
177	Infectious in vitro transcripts from amplified cDNAs of the Y and Kin strains of cucumber mosaic virus. Gene, 1992, 114, 223-227.	2.2	18
178	miRNA-Mediated Regulation of Synthetic Gene Circuits in the Green Alga <i>Chlamydomonas reinhardtii</i>. ACS Synthetic Biology, 2019, 8, 358-370.	3.8	18
179	Amyl expression during wheat seed germination. Plant Science, 1995, 106, 207-213.	3.6	17
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