Phillip D Zamore

List of Publications by Citations

145 papers	34,076 citations	76 h-index	168 g-index
168 ext. papers	37,570 ext. citations	22 avg, IF	7.48 L-index

#	Paper	IF	Citations
145	Asymmetry in the assembly of the RNAi enzyme complex. *Cell*, **2003**, 115, 199-208	56.2	2208
144	A cellular function for the RNA-interference enzyme Dicer in the maturation of the let-7 small temporal RNA. *Science*, **2001**, 293, 834-8	33.3	2200
143	RNAi: double-stranded RNA directs the ATP-dependent cleavage of mRNA at 21 to 23 nucleotide intervals. *Cell*, **2000**, 101, 25-33	56.2	2137
142	Small silencing RNAs: an expanding universe. *Nature Reviews Genetics*, **2009**, 10, 94-108	30.1	1832
141	A microRNA in a multiple-turnover RNAi enzyme complex. *Science*, **2002**, 297, 2056-60	33.3	1640
140	Ribo-gnome: the big world of small RNAs. *Science*, **2005**, 309, 1519-24	33.3	1098
139	A distinct small RNA pathway silences selfish genetic elements in the germline. *Science*, **2006**, 313, 320-4	33.3	990
138	Passenger-strand cleavage facilitates assembly of siRNA into Ago2-containing RNAi enzyme complexes. *Cell*, **2005**, 123, 607-20	56.2	880
137	Diversifying microRNA sequence and function. *Nature Reviews Molecular Cell Biology*, **2013**, 14, 475-88	48.7	875
136	ATP requirements and small interfering RNA structure in the RNA interference pathway. *Cell*, **2001**, 107, 309-21	56.2	832
135	Paternally induced transgenerational environmental reprogramming of metabolic gene expression in mammals. *Cell*, **2010**, 143, 1084-96	56.2	831
134	A biochemical framework for RNA silencing in plants. *Genes and Development*, **2003**, 17, 49-63	12.6	738
133	Perspective: machines for RNAi. *Genes and Development*, **2005**, 19, 517-29	12.6	695
132	microPrimer: the biogenesis and function of microRNA. *Development (Cambridge)*, **2005**, 132, 4645-52	6.6	600
131	MicroRNA control of PHABULOSA in leaf development: importance of pairing to the microRNA 5R region. *EMBO Journal*, **2004**, 23, 3356-64	13	538
130	Sequence-specific inhibition of small RNA function. *PLoS Biology*, **2004**, 2, E98	9.7	530
129	Cloning and domain structure of the mammalian splicing factor U2AF. *Nature*, **1992**, 355, 609-14	50.4	520

128	Endogenous siRNAs derived from transposons and mRNAs in Drosophila somatic cells. *Science*, **2008**, 320, 1077-81	33.3	500
127	A factor, U2AF, is required for U2 snRNP binding and splicing complex assembly. *Cell*, **1988**, 52, 207-19	56.2	497
126	A protein sensor for siRNA asymmetry. *Science*, **2004**, 306, 1377-80	33.3	475
125	Kinetic analysis of the RNAi enzyme complex. *Nature Structural and Molecular Biology*, **2004**, 11, 599-606	17.6	424
124	Target RNA-directed trimming and tailing of small silencing RNAs. *Science*, **2010**, 328, 1534-9	33.3	419
123	Collapse of germline piRNAs in the absence of Argonaute3 reveals somatic piRNAs in flies. *Cell*, **2009**, 137, 509-21	56.2	417
122	Normal microRNA maturation and germ-line stem cell maintenance requires Loquacious, a double-stranded RNA-binding domain protein. *PLoS Biology*, **2005**, 3, e236	9.7	412
121	The Drosophila RNA methyltransferase, DmHen1, modifies germline piRNAs and single-stranded siRNAs in RISC. *Current Biology*, **2007**, 17, 1265-72	6.3	402
120	RNAi: nature abhors a double-strand. *Current Opinion in Genetics and Development*, **2002**, 12, 225-32	4.9	402
119	PIWI-interacting RNAs: small RNAs with big functions. *Nature Reviews Genetics*, **2019**, 20, 89-108	30.1	401
118	Evidence that siRNAs function as guides, not primers, in the Drosophila and human RNAi pathways. *Molecular Cell*, **2002**, 10, 537-48	17.6	395
117	Modular recognition of RNA by a human pumilio-homology domain. *Cell*, **2002**, 110, 501-12	56.2	387
116	Translational regulation in development. *Cell*, **1995**, 81, 171-8	56.2	363
115	Drosophila microRNAs are sorted into functionally distinct argonaute complexes after production by dicer-1. *Cell*, **2007**, 130, 287-97	56.2	336
114	RISC assembly defects in the Drosophila RNAi mutant armitage. *Cell*, **2004**, 116, 831-41	56.2	314
113	The RNA-induced silencing complex is a Mg2+-dependent endonuclease. *Current Biology*, **2004**, 14, 787-91	6.3	305
112	Sorting of Drosophila small silencing RNAs. *Cell*, **2007**, 130, 299-308	56.2	303
111	Ancient pathways programmed by small RNAs. *Science*, **2002**, 296, 1265-9	33.3	300

110	The Drosophila HP1 homolog Rhino is required for transposon silencing and piRNA production by dual-strand clusters. *Cell*, **2009**, 138, 1137-49	56.2	297
109	The protein Sex-lethal antagonizes the splicing factor U2AF to regulate alternative splicing of transformer pre-mRNA. *Nature*, **1993**, 362, 171-5	50.4	287
108	RNA interference: listening to the sound of silence. *Nature Structural Biology*, **2001**, 8, 746-50		286
107	Sorting of Drosophila small silencing RNAs partitions microRNA* strands into the RNA interference pathway. *Rna*, **2010**, 16, 43-56	5.8	265
106	Argonaute divides its RNA guide into domains with distinct functions and RNA-binding properties. *Cell*, **2012**, 151, 1055-67	56.2	262
105	An ancient transcription factor initiates the burst of piRNA production during early meiosis in mouse testes. *Molecular Cell*, **2013**, 50, 67-81	17.6	243
104	MicroRNA-33-dependent regulation of macrophage metabolism directs immune cell polarization in atherosclerosis. *Journal of Clinical Investigation*, **2015**, 125, 4334-48	15.9	241
103	Noncoding RNA. piRNA-guided transposon cleavage initiates Zucchini-dependent, phased piRNA production. *Science*, **2015**, 348, 817-21	33.3	236
102	Designing siRNA that distinguish between genes that differ by a single nucleotide. *PLoS Genetics*, **2006**, 2, e140	6	211
101	Five siRNAs targeting three SNPs may provide therapy for three-quarters of Huntington's disease patients. *Current Biology*, **2009**, 19, 774-8	6.3	198
100	Crystal structure of a Pumilio homology domain. *Molecular Cell*, **2001**, 7, 855-65	17.6	192
99	Deep annotation of Drosophila melanogaster microRNAs yields insights into their processing, modification, and emergence. *Genome Research*, **2011**, 21, 203-15	9.7	185
98	Adaptation to P element transposon invasion in Drosophila melanogaster. *Cell*, **2011**, 147, 1551-63	56.2	176
97	Single-Molecule Imaging Reveals that Argonaute Reshapes the Binding Properties of Its Nucleic Acid Guides. *Cell*, **2015**, 162, 84-95	56.2	168
96	UAP56 couples piRNA clusters to the perinuclear transposon silencing machinery. *Cell*, **2012**, 151, 871-884	56.2	164
95	Long-term, efficient inhibition of microRNA function in mice using rAAV vectors. *Nature Methods*, **2012**, 9, 403-9	21.6	159
94	Pan-arthropod analysis reveals somatic piRNAs as an ancestral defence against transposable elements. *Nature Ecology and Evolution*, **2018**, 2, 174-181	12.3	155
93	Selective silencing by RNAi of a dominant allele that causes amyotrophic lateral sclerosis. *Aging Cell*, **2003**, 2, 209-17	9.9	153

92	Argonaute loading improves the 5Rprecision of both MicroRNAs and their miRNA* strands in flies. *Current Biology*, **2008**, 18, 147-51	6.3	152
91	A role for microRNAs in the Drosophila circadian clock. *Genes and Development*, **2009**, 23, 2179-91	12.6	146
90	The HP1 homolog rhino anchors a nuclear complex that suppresses piRNA precursor splicing. *Cell*, **2014**, 157, 1353-1363	56.2	143
89	Beginning to understand microRNA function. *Cell Research*, **2007**, 17, 661-3	24.7	135
88	Dicer partner proteins tune the length of mature miRNAs in flies and mammals. *Cell*, **2012**, 151, 533-46	56.2	134
87	Heterotypic piRNA Ping-Pong requires qin, a protein with both E3 ligase and Tudor domains. *Molecular Cell*, **2011**, 44, 572-84	17.6	124
86	The 3Rto-5Rexoribonuclease Nibbler shapes the 3Rends of microRNAs bound to Drosophila Argonaute1. *Current Biology*, **2011**, 21, 1878-87	6.3	124
85	MicroRNA-regulated, systemically delivered rAAV9: a step closer to CNS-restricted transgene expression. *Molecular Therapy*, **2011**, 19, 526-35	11.7	115
84	MicroRNA biogenesis: drosha canRt cut it without a partner. *Current Biology*, **2005**, 15, R61-4	6.3	112
83	A single Argonaute protein mediates both transcriptional and posttranscriptional silencing in Schizosaccharomyces pombe. *Genes and Development*, **2004**, 18, 2359-67	12.6	109
82	Argonaute protein identity and pairing geometry determine cooperativity in mammalian RNA silencing. *Rna*, **2011**, 17, 1858-69	5.8	95
81	Phosphate and R2D2 restrict the substrate specificity of Dicer-2, an ATP-driven ribonuclease. *Molecular Cell*, **2011**, 42, 172-84	17.6	94
80	Strand-specific libraries for high throughput RNA sequencing (RNA-Seq) prepared without poly(A) selection. *Silence: A Journal of RNA Regulation*, **2012**, 3, 9		92
79	Sustained miRNA-mediated knockdown of mutant AAT with simultaneous augmentation of wild-type AAT has minimal effect on global liver miRNA profiles. *Molecular Therapy*, **2012**, 20, 590-600	11.7	90
78	In vitro analysis of RNA interference in Drosophila melanogaster. *Methods*, **2003**, 30, 330-6	4.6	89
77	A Single Mechanism of Biogenesis, Initiated and Directed by PIWI Proteins, Explains piRNA Production in Most Animals. *Molecular Cell*, **2018**, 71, 775-790.e5	17.6	89
76	Molecular biology. RNA interference. *Science*, **2000**, 287, 2431-3	33.3	88
75	Design and delivery of antisense oligonucleotides to block microRNA function in cultured Drosophila and human cells. *Nature Protocols*, **2008**, 3, 1537-49	18.8	85

74	piPipes: a set of pipelines for piRNA and transposon analysis via small RNA-seq, RNA-seq, degradome- and CAGE-seq, ChIP-seq and genomic DNA sequencing. *Bioinformatics*, **2015**, 31, 593-5	7.2	84
73	MicroRNAs: regulating a change of heart. *Circulation*, **2009**, 119, 2217-24	16.7	80
72	Slicing and Binding by Ago3 or Aub Trigger Piwi-Bound piRNA Production by Distinct Mechanisms. *Molecular Cell*, **2015**, 59, 819-30	17.6	79
71	Cnidarian microRNAs frequently regulate targets by cleavage. *Genome Research*, **2014**, 24, 651-63	9.7	78
70	The PUMILIO-RNA interaction: a single RNA-binding domain monomer recognizes a bipartite target sequence. *Biochemistry*, **1999**, 38, 596-604	3.2	78
69	Argonaute proteins. *Current Biology*, **2011**, 21, R446-9	6.3	75
68	Comparison of partially and fully chemically-modified siRNA in conjugate-mediated delivery in vivo. *Nucleic Acids Research*, **2018**, 46, 2185-2196	20.1	71
67	The initial uridine of primary piRNAs does not create the tenth adenine that Is the hallmark of secondary piRNAs. *Molecular Cell*, **2014**, 56, 708-16	17.6	71
66	Elimination of PCR duplicates in RNA-seq and small RNA-seq using unique molecular identifiers. *BMC Genomics*, **2018**, 19, 531	4.5	70
65	Plant RNAi: How a viral silencing suppressor inactivates siRNA. *Current Biology*, **2004**, 14, R198-200	6.3	63
64	Why do miRNAs live in the miRNP?. *Genes and Development*, **2002**, 16, 1025-31	12.6	54
63	Rethinking the microprocessor. *Cell*, **2006**, 125, 827-9	56.2	53
62	Competitive endogenous RNAs cannot alter microRNA function in vivo. *Molecular Cell*, **2014**, 54, 711-3	17.6	51
61	Small silencing RNAs. *Current Biology*, **2007**, 17, R789-93	6.3	49
60	Target RNA-directed tailing and trimming purifies the sorting of endo-siRNAs between the two Drosophila Argonaute proteins. *Rna*, **2011**, 17, 54-63	5.8	44
59	RNA interference: big applause for silencing in Stockholm. *Cell*, **2006**, 127, 1083-6	56.2	44
58	A 5Ruridine amplifies miRNA/miRNA* asymmetry in Drosophila by promoting RNA-induced silencing complex formation. *Silence: A Journal of RNA Regulation*, **2011**, 2, 4		43
57	The genome of the Hi5 germ cell line from , an agricultural pest and novel model for small RNA biology. *ELife*, **2018**, 7,	8.9	42

56	High-Throughput Analysis Reveals Rules for Target RNA Binding and Cleavage by AGO2. *Molecular Cell*, **2019**, 75, 741-755.e11	17.6	41
55	piRNAs. *Current Biology*, **2014**, 24, R730-3	6.3	39
54	Rapid and specific purification of Argonaute-small RNA complexes from crude cell lysates. *Rna*, **2013**, 19, 271-9	5.8	39
53	The evolutionarily conserved piRNA-producing locus pi6 is required for male mouse fertility. *Nature Genetics*, **2020**, 52, 728-739	36.3	37
52	Inorganic phosphate blocks binding of pre-miRNA to Dicer-2 via its PAZ domain. *EMBO Journal*, **2014**, 33, 371-84	13	33
51	Thirty-three years later, a glimpse at the ribonuclease III active site. *Molecular Cell*, **2001**, 8, 1158-60	17.6	33
50	The RNA-Binding ATPase, Armitage, Couples piRNA Amplification in Nuage to Phased piRNA Production on Mitochondria. *Molecular Cell*, **2019**, 74, 982-995.e6	17.6	32
49	Linking SNPs to CAG repeat length in Huntington's disease patients. *Nature Methods*, **2008**, 5, 951-3	21.6	28
48	Evolutionarily conserved pachytene piRNA loci are highly divergent among modern humans. *Nature Ecology and Evolution*, **2020**, 4, 156-168	12.3	27
47	Rapid Screening for CRISPR-Directed Editing of the Drosophila Genome Using white Coconversion. *G3: Genes, Genomes, Genetics*, **2016**, 6, 3197-3206	3.2	27
46	Somatic piRNA biogenesis. *EMBO Journal*, **2010**, 29, 3219-21	13	26
45	Assessing long-distance RNA sequence connectivity via RNA-templated DNA-DNA ligation. *ELife*, **2015**, 4,	8.9	25
44	Cas9-mediated allelic exchange repairs compound heterozygous recessive mutations in mice. *Nature Biotechnology*, **2018**, 36, 839-842	44.5	23
43	Huntington's disease: silencing a brutal killer. *Experimental Neurology*, **2009**, 220, 226-9	5.7	21
42	Thermus thermophilus Argonaute Functions in the Completion of DNA Replication. *Cell*, **2020**, 182, 1545-1559.e18	56.2	19
41	Antisense piRNA amplification, but not piRNA production or nuage assembly, requires the Tudor-domain protein Qin. *EMBO Journal*, **2014**, 33, 536-9	13	17
40	Biochemical dissection of RNA silencing in plants. *Methods in Molecular Biology*, **2004**, 257, 223-44	1.4	17
39	Transcriptome Profiling of Neovascularized Corneas Reveals miR-204 as a Multi-target Biotherapy Deliverable by rAAVs. *Molecular Therapy - Nucleic Acids*, **2018**, 10, 349-360	10.7	16

38	High-throughput sequencing analysis of post-liver transplantation HCV E2 glycoprotein evolution in the presence and absence of neutralizing monoclonal antibody. *PLoS ONE*, **2014**, 9, e100325	3.7	16
37	Welcome to silence. *Silence: A Journal of RNA Regulation*, **2010**, 1, 1		16
36	Tailor: a computational framework for detecting non-templated tailing of small silencing RNAs. *Nucleic Acids Research*, **2015**, 43, e109	20.1	15
35	Pitfalls of mapping high-throughput sequencing data to repetitive sequences: Piwi’s genomic targets still not identified. *Developmental Cell*, **2015**, 32, 765-71	10.2	14
34	Small RNA-directed silencing: the fly finds its inner fission yeast?. *Current Biology*, **2013**, 23, R318-20	6.3	14
33	Maelstrom Represses Canonical Polymerase II Transcription within Bi-directional piRNA Clusters in Drosophila melanogaster. *Molecular Cell*, **2019**, 73, 291-303.e6	17.6	14
32	SnapShot: Fly piRNAs, PIWI proteins, and the ping-pong cycle. *Cell*, **2009**, 139, 634, 634.e1	56.2	12
31	An automated Bayesian pipeline for rapid analysis of single-molecule binding data. *Nature Communications*, **2019**, 10, 272	17.4	11
30	Small methyltransferase RlmH assembles a composite active site to methylate a ribosomal pseudouridine. *Scientific Reports*, **2017**, 7, 969	4.9	10
29	Increased Steady-State Mutant Huntingtin mRNA in Huntington’s Disease Brain. *Journal of Huntington’s Disease*, **2013**, 2, 491-500	1.9	10
28	SnapShot: mouse piRNAs, PIWI proteins, and the ping-pong cycle. *Cell*, **2009**, 139, 830-830.e1	56.2	9
27	Isolation of Drosophila melanogaster testes. *Journal of Visualized Experiments*, **2011**,	1.6	8
26	Drosophila development: homeodomains and translational control. *Current Biology*, **1996**, 6, 773-5	6.3	7
25	RNA Interference and Small RNA Analysis. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	6
24	Analysis of Small RNAs by Northern Hybridization. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	6
23	A universal small molecule, inorganic phosphate, restricts the substrate specificity of Dicer-2 in small RNA biogenesis. *Cell Cycle*, **2014**, 13, 1671-6	4.7	5
22	Effective and Accurate Gene Silencing by a Recombinant AAV-Compatible MicroRNA Scaffold. *Molecular Therapy*, **2020**, 28, 422-430	11.7	5
21	Preparation of siRNA Duplexes. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	4

20	Inhibiting miRNA Function by Antisense Oligonucleotides in S2 Cells. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	4
19	Preparation of Antisense Oligonucleotides to Inhibit miRNA Function. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	4
18	An Evolutionarily Conserved piRNA-producing Locus Required for Male Mouse Fertility		4
17	Long first exons and epigenetic marks distinguish conserved pachytene piRNA clusters from other mammalian genes. *Nature Communications*, **2021**, 12, 73	17.4	4
16	Defining the functions of PIWI-interacting RNAs. *Nature Reviews Molecular Cell Biology*, **2021**, 22, 239-240	108.7	4
15	Preparation of dsRNAs for RNAi by In Vitro Transcription. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	3
14	MicroRNAs tame CRISPR-Cas9. *Nature Cell Biology*, **2019**, 21, 416-417	23.4	3
13	Inhibiting miRNA Function by Antisense Oligonucleotides in Cultured Mammalian Cells. *Cold Spring Harbor Protocols*, **2018**, 2018,	1.2	3
12	To Degrade a MicroRNA, Destroy Its Argonaute Protein. *Molecular Cell*, **2021**, 81, 223-225	17.6	3
11	RNAi in S2 Cells by dsRNA Soaking. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	2
10	RNAi in Mammalian Cells by siRNA Duplex Transfection. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	2
9	RNAi in S2 Cells by siRNA Duplex or dsRNA Transfection. *Cold Spring Harbor Protocols*, **2019**, 2019,	1.2	2
8	Loquacious, a Dicer Partner Protein, Functions in Both the MicroRNA and siRNA Pathways. *The Enzymes*, **2012**, 37-68	2.3	2
7	Terminal modification, sequence, length, and PIWI-protein identity determine piRNA stability. *Molecular Cell*, **2021**, 81, 4826-4842.e8	17.6	2
6	The tiny, conserved zinc-finger protein GTSF1 helps PIWI proteins achieve their full catalytic potential		2
5	Terminal Modification, Sequence, and Length Determine Small RNA Stability in Animals		1
4	Principles and pitfalls of high-throughput analysis of microRNA-binding thermodynamics and kinetics by RNA Bind-n-Seq.. *Cell Reports Methods*, **2022**, 2, 100185		0
3	RNA: methods and protocols - a new series. *Silence: A Journal of RNA Regulation*, **2012**, 3, 7		

2	What fruit flies teach us about RNA silencing.. *FASEB Journal*, **2009**, 23, 191.1	0.9
1	One small step for worms, one giant leap for small RNAs. *Nature Reviews Molecular Cell Biology*, **2020**, 21, 565	48.7