Phillip D Zamore

List of Publications by Year
in descending order

151 papers	40,240 citations	7069 78 h-index	8370 147 g-index
168 all docs	168 docs citations	168 times ranked	28722 citing authors

#	Article	IF	Citations
1	Principles and pitfalls of high-throughput analysis of microRNA-binding thermodynamics and kinetics by RNA Bind-n-Seq. Cell Reports Methods, 2022, 2, 100185.	1.4	4
2	High-throughput biochemical profiling reveals functional adaptation of a bacterial Argonaute. Molecular Cell, 2022, 82, 1329-1342.e8.	4.5	8
3	Tetrazine-Ligated CRISPR sgRNAs for Efficient Genome Editing. ACS Chemical Biology, 2022, 17, 1045-1050.	1.6	5
4	GTSF1 accelerates target RNA cleavage by PIWI-clade Argonaute proteins. Nature, 2022, 608, 618-625.	13.7	24
5	To Degrade a MicroRNA, Destroy Its Argonaute Protein. Molecular Cell, 2021, 81, 223-225.	4.5	9
6	Long first exons and epigenetic marks distinguish conserved pachytene piRNA clusters from other mammalian genes. Nature Communications, 2021, 12, 73.	5.8	17
7	Defining the functions of PIWI-interacting RNAs. Nature Reviews Molecular Cell Biology, 2021, 22, 239-240.	16.1	14
8	Terminal modification, sequence, length, and PIWI-protein identity determine piRNA stability. Molecular Cell, 2021, 81, 4826-4842.e8.	4.5	27
9	Evolutionarily conserved pachytene piRNA loci are highly divergent among modern humans. Nature Ecology and Evolution, 2020, 4, 156-168.	3.4	58
10	Effective and Accurate Gene Silencing by a Recombinant AAV-Compatible MicroRNA Scaffold. Molecular Therapy, 2020, 28, 422-430.	3.7	20
11	Thermus thermophilus Argonaute Functions in the Completion of DNA Replication. Cell, 2020, 182, 1545-1559.e18.	13.5	78
12	One small step for worms, one giant leap for small RNAs. Nature Reviews Molecular Cell Biology, 2020, 21, 565-565.	16.1	0
13	The evolutionarily conserved piRNA-producing locus pi6 is required for male mouse fertility. Nature Genetics, 2020, 52, 728-739.	9.4	96
14	High-Throughput Analysis Reveals Rules for Target RNA Binding and Cleavage by AGO2. Molecular Cell, 2019, 75, 741-755.e11.	4.5	107
15	An automated Bayesian pipeline for rapid analysis of single-molecule binding data. Nature Communications, 2019, 10, 272.	5.8	26
16	The RNA-Binding ATPase, Armitage, Couples piRNA Amplification in Nuage to Phased piRNA Production on Mitochondria. Molecular Cell, 2019, 74, 982-995.e6.	4.5	65
17	Preparation of dsRNAs for RNAi by In Vitro Transcription. Cold Spring Harbor Protocols, 2019, 2019, pdb.prot097469.	0.2	4
18	RNAi in <i>Drosophila</i> S2 Cells by dsRNA Soaking. Cold Spring Harbor Protocols, 2019, 2019, pdb.prot097477.	0.2	2

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19	MicroRNAs tame CRISPRâ€"Cas9. Nature Cell Biology, 2019, 21, 416-417.	4.6	3
20	Preparation of siRNA Duplexes. Cold Spring Harbor Protocols, 2019, 2019, pdb.prot097444.	0.2	6
21	RNAi in Mammalian Cells by siRNA Duplex Transfection. Cold Spring Harbor Protocols, 2019, 2019, pdb.prot097451.	0.2	2
22	RNAi in <i>Drosophila</i> S2 Cells by siRNA Duplex or dsRNA Transfection. Cold Spring Harbor Protocols, 2019, 2019, pdb.prot097485.	0.2	2
23	RNA Interference and Small RNA Analysis. Cold Spring Harbor Protocols, 2019, 2019, pdb.top097436.	0.2	9
24	PIWI-interacting RNAs: small RNAs with big functions. Nature Reviews Genetics, 2019, 20, 89-108.	7.7	779
25	Maelstrom Represses Canonical Polymerase II Transcription within Bi-directional piRNA Clusters in Drosophila melanogaster. Molecular Cell, 2019, 73, 291-303.e6.	4.5	33
26	Comparison of partially and fully chemically-modified siRNA in conjugate-mediated delivery in vivo. Nucleic Acids Research, 2018, 46, 2185-2196.	6.5	125
27	Inhibiting miRNA Function by Antisense Oligonucleotides in <i>Drosophila</i> S2 Cells. Cold Spring Harbor Protocols, 2018, 2018, pdb.prot097543.	0.2	4
28	Preparation of Antisense Oligonucleotides to Inhibit miRNA Function. Cold Spring Harbor Protocols, 2018, 2018, pdb.prot097527.	0.2	7
29	Inhibiting miRNA Function by Antisense Oligonucleotides in Cultured Mammalian Cells. Cold Spring Harbor Protocols, 2018, 2018, pdb.prot097535.	0.2	3
30	Transcriptome Profiling of Neovascularized Corneas Reveals miR-204 as a Multi-target Biotherapy Deliverable by rAAVs. Molecular Therapy - Nucleic Acids, 2018, 10, 349-360.	2.3	24
31	Pan-arthropod analysis reveals somatic piRNAs as an ancestral defence against transposable elements. Nature Ecology and Evolution, 2018, 2, 174-181.	3.4	214
32	A Single Mechanism of Biogenesis, Initiated and Directed by PIWI Proteins, Explains piRNA Production in Most Animals. Molecular Cell, 2018, 71, 775-790.e5.	4.5	159
33	The genome of the Hi5 germ cell line from Trichoplusia ni, an agricultural pest and novel model for small RNA biology. ELife, 2018, 7, .	2.8	68
34	Analysis of Small RNAs by Northern Hybridization. Cold Spring Harbor Protocols, 2018, 2018, pdb.prot097493.	0.2	8
35	Elimination of PCR duplicates in RNA-seq and small RNA-seq using unique molecular identifiers. BMC Genomics, 2018, 19, 531.	1.2	123
36	Cas9-mediated allelic exchange repairs compound heterozygous recessive mutations in mice. Nature Biotechnology, 2018, 36, 839-842.	9.4	36

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37	Small methyltransferase RlmH assembles a composite active site to methylate a ribosomal pseudouridine. Scientific Reports, 2017, 7, 969.	1.6	13
38	Rhino gives voice to silent chromatin. Nature, 2017, 549, 38-39.	13.7	1
39	Rapid Screening for CRISPR-Directed Editing of the Drosophila Genome Using white Coconversion. G3: Genes, Genomes, Genetics, 2016, 6, 3197-3206.	0.8	53
40	MicroRNA-33â€"dependent regulation of macrophage metabolism directs immune cell polarization in atherosclerosis. Journal of Clinical Investigation, 2015, 125, 4334-4348.	3.9	304
41	Tailor: a computational framework for detecting non-templated tailing of small silencing RNAs. Nucleic Acids Research, 2015, 43, e109-e109.	6.5	31
42	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, 593-595.	1.8	122
43	Single-Molecule Imaging Reveals that Argonaute Reshapes the Binding Properties of Its Nucleic Acid Guides. Cell, 2015, 162, 84-95.	13.5	246
44	piRNA-guided transposon cleavage initiates Zucchini-dependent, phased piRNA production. Science, 2015, 348, 817-821.	6.0	320
45	Pitfalls of Mapping High-Throughput Sequencing Data to Repetitive Sequences: Piwiâ€™s Genomic Targets Still Not Identified. Developmental Cell, 2015, 32, 765-771.	3.1	26
46	Slicing and Binding by Ago3 or Aub Trigger Piwi-Bound piRNA Production by Distinct Mechanisms. Molecular Cell, 2015, 59, 819-830.	4.5	112
47	Assessing long-distance RNA sequence connectivity via RNA-templated DNAâ€"DNA ligation. ELife, 2015, 4, .	2.8	29
48	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.	1.1	23
49	Antisense piRNA amplification, but not piRNA production or nuage assembly, requires the Tudor-domain protein Qin. EMBO Journal, 2014, 33, 536-539.	3.5	21
50	Inorganic phosphate blocks binding of pre-miRNA to Dicer-2 via its PAZ domain. EMBO Journal, 2014, 33, 371-384.	3.5	38
51	Cnidarian microRNAs frequently regulate targets by cleavage. Genome Research, 2014, 24, 651-663.	2.4	104
52	The Initial Uridine of Primary piRNAs Does Not Create the Tenth Adenine that Is the Hallmark of Secondary piRNAs. Molecular Cell, 2014, 56, 708-716.	4.5	102
53	A universal small molecule, inorganic phosphate, restricts the substrate specificity of Dicer-2 in small RNA biogenesis. Cell Cycle, 2014, 13, 1671-1676.	1.3	6
54	piRNAs. Current Biology, 2014, 24, R730-R733.	1.8	55

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55	Competitive Endogenous RNAs Cannot Alter MicroRNA Function InÂVivo. Molecular Cell, 2014, 54, 711-713.	4.5	54
56	The HP1 Homolog Rhino Anchors a Nuclear Complex that Suppresses piRNA Precursor Splicing. Cell, 2014, 157, 1353-1363.	13.5	198
57	An Ancient Transcription Factor Initiates the Burst of piRNA Production during Early Meiosis in Mouse Testes. Molecular Cell, 2013, 50, 67-81.	4.5	322
58	Small RNA-Directed Silencing: The Fly Finds Its Inner Fission Yeast?. Current Biology, 2013, 23, R318-R320.	1.8	16
59	Diversifying microRNA sequence and function. Nature Reviews Molecular Cell Biology, 2013, 14, 475-488.	16.1	1,066
60	Rapid and specific purification of Argonaute-small RNA complexes from crude cell lysates. Rna, 2013, 19, 271-279.	1.6	45
61	Defining piRNA primary transcripts. Cell Cycle, 2013, 12, 1657-1658.	1.3	24
62	Increased Steady-State Mutant Huntingtin mRNA in Huntington's Disease Brain. Journal of Huntington's Disease, 2013, 2, 491-500.	0.9	12
63	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.	3.7	105
64	Argonaute Divides Its RNA Guide into Domains with Distinct Functions and RNA-Binding Properties. Cell, 2012, 151, 1055-1067.	13.5	347
65	UAP56 Couples piRNA Clusters to the Perinuclear Transposon Silencing Machinery. Cell, 2012, 151, 871-884.	13.5	204
66	Long-term, efficient inhibition of microRNA function in mice using rAAV vectors. Nature Methods, 2012, 9, 403-409.	9.0	188
67	Loquacious, a Dicer Partner Protein, Functions in Both the MicroRNA and siRNA Pathways. The Enzymes, 2012, , 37-68.	0.7	3
68	Dicer Partner Proteins Tune the Length of Mature miRNAs in Flies and Mammals. Cell, 2012, 151, 533-546.	13.5	158
69	RNA: methods and protocols â€" a new series. Silence: A Journal of RNA Regulation, 2012, 3, 7.	8.0	0
70	Strand-specific libraries for high throughput RNA sequencing (RNA-Seq) prepared without poly(A) selection. Silence: A Journal of RNA Regulation, 2012, 3, 9.	8.0	122
71	Adaptation to P Element Transposon Invasion in Drosophila melanogaster. Cell, 2011, 147, 1551-1563.	13.5	226
72	Phosphate and R2D2 Restrict the Substrate Specificity of Dicer-2, an ATP-Driven Ribonuclease. Molecular Cell, 2011, 42, 172-184.	4.5	124

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73	Heterotypic piRNA Ping-Pong Requires Qin, a Protein with Both E3 Ligase and Tudor Domains. Molecular Cell, 2011, 44, 572-584.	4.5	156
74	Isolation of Drosophila melanogaster Testes. Journal of Visualized Experiments, 2011, , .	0.2	11
75	Argonaute proteins. Current Biology, 2011, 21, R446-R449.	1.8	89
76	The 3â€²-to-5â€² Exoribonuclease Nibbler Shapes the 3â€² Ends of MicroRNAs Bound to Drosophila Argonaute1. Current Biology, 2011, 21, 1878-1887.	1.8	143
77	A 5â€²-uridine amplifies miRNA/miRNA* asymmetry in Drosophila by promoting RNA-induced silencing complex formation. Silence: A Journal of RNA Regulation, 2011, 2, 4.	8.0	50
78	MicroRNA-regulated, Systemically Delivered rAAV9: A Step Closer to CNS-restricted Transgene Expression. Molecular Therapy, 2011, 19, 526-535.	3.7	143
79	Deep annotation of <i>Drosophila melanogaster</i> microRNAs yields insights into their processing, modification, and emergence. Genome Research, 2011, 21, 203-215.	2.4	207
80	Target RNA-directed tailing and trimming purifies the sorting of endo-siRNAs between the two <i>Drosophila</i> Argonaute proteins. Rna, 2011, 17, 54-63.	1.6	51
81	Argonaute protein identity and pairing geometry determine cooperativity in mammalian RNA silencing. Rna, 2011, 17, 1858-1869.	1.6	110
82	Welcome to Silence. Silence: A Journal of RNA Regulation, 2010, 1, 1.	8.0	29
83	Somatic piRNA biogenesis. EMBO Journal, 2010, 29, 3219-3221.	3.5	33
84	Target RNAâ€"Directed Trimming and Tailing of Small Silencing RNAs. Science, 2010, 328, 1534-1539.	6.0	514
85	Paternally Induced Transgenerational Environmental Reprogramming of Metabolic Gene Expression in Mammals. Cell, 2010, 143, 1084-1096.	13.5	990
86	Sorting of <i>Drosophila</i> small silencing RNAs partitions microRNA* strands into the RNA interference pathway. Rna, 2010, 16, 43-56.	1.6	304
87	A role for microRNAs in the <i>Drosophila</i> circadian clock. Genes and Development, 2009, 23, 2179-2191.	2.7	178
88	MicroRNAs. Circulation, 2009, 119, 2217-2224.	1.6	86
89	Five siRNAs Targeting Three SNPs May Provide Therapy for Three-Quarters of Huntington's Disease Patients. Current Biology, 2009, 19, 774-778.	1.8	227
90	Nucleus and gene expression. Current Opinion in Cell Biology, 2009, 21, 331-334.	2.6	0

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91	Small silencing RNAs: an expanding universe. Nature Reviews Genetics, 2009, 10, 94-108.	7.7	2,142
92	Collapse of Germline piRNAs in the Absence of Argonaute3 Reveals Somatic piRNAs in Flies. Cell, 2009, 137, 509-521.	13.5	503
93	The Drosophila HP1 Homolog Rhino Is Required for Transposon Silencing and piRNA Production by Dual-Strand Clusters. Cell, 2009, 138, 1137-1149.	13.5	382
94	SnapShot: Fly piRNAs, PIWI Proteins, and the Ping-Pong Cycle. Cell, 2009, 139, 634-634.e1.	13.5	17
95	SnapShot: Mouse piRNAs, PIWI Proteins, and the Ping-Pong Cycle. Cell, 2009, 139, 830-830.e1.	13.5	10
96	Huntington's disease: Silencing a brutal killer. Experimental Neurology, 2009, 220, 226-229.	2.0	21
97	What fruit flies teach us about RNA silencing.. FASEB Journal, 2009, 23, 191.1.	0.2	0
98	Linking SNPs to CAG repeat length in Huntington's disease patients. Nature Methods, 2008, 5, 951-953.	9.0	33
99	Design and delivery of antisense oligonucleotides to block microRNA function in cultured Drosophila and human cells. Nature Protocols, 2008, 3, 1537-1549.	5.5	91
100	Argonaute Loading Improves the 5â€² Precision of Both MicroRNAs and Their miRNAâˆ— Strands in Flies. Current Biology, 2008, 18, 147-151.	1.8	168
101	Endogenous siRNAs Derived from Transposons and mRNAs in <i>Drosophila</i> Somatic Cells. Science, 2008, 320, 1077-1081.	6.0	594
102	Drosophila microRNAs Are Sorted into Functionally Distinct Argonaute Complexes after Production by Dicer-1. Cell, 2007, 130, 287-297.	13.5	378
103	Sorting of Drosophila Small Silencing RNAs. Cell, 2007, 130, 299-308.	13.5	348
104	Genomic defence with a slice of pi. Nature, 2007, 446, 864-865.	13.7	37
105	Beginning to understand microRNA function. Cell Research, 2007, 17, 661-663.	5.7	157
106	The Drosophila RNA Methyltransferase, DmHen1, Modifies Germline piRNAs and Single-Stranded siRNAs in RISC. Current Biology, 2007, 17, 1265-1272.	1.8	464
107	Small silencing RNAs. Current Biology, 2007, 17, R789-R793.	1.8	58
108	A Distinct Small RNA Pathway Silences Selfish Genetic Elements in the Germline. Science, 2006, 313, 320-324.	6.0	1,185

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109	Designing siRNA That Distinguish between Genes That Differ by a Single Nucleotide. PLoS Genetics, 2006, 2, e140.	1.5	237
110	Rethinking the Microprocessor. Cell, 2006, 125, 827-829.	13.5	62
111	RNA Interference: Big Applause for Silencing in Stockholm. Cell, 2006, 127, 1083-1086.	13.5	55
112	MicroRNA Biogenesis: Drosha Can't Cut It without a Partner. Current Biology, 2005, 15, R61-R64.	1.8	126
113	Perspective: machines for RNAi. Genes and Development, 2005, 19, 517-529.	2.7	782
114	microPrimer: the biogenesis and function of microRNA. Development (Cambridge), 2005, 132, 4645-4652.	1.2	689
115	Ribo-gnome: The Big World of Small RNAs. Science, 2005, 309, 1519-1524.	6.0	1,195
116	Passenger-Strand Cleavage Facilitates Assembly of siRNA into Ago2-Containing RNAi Enzyme Complexes. Cell, 2005, 123, 607-620.	13.5	991
117	Normal microRNA Maturation and Germ-Line Stem Cell Maintenance Requires Loquacious, a Double-Stranded RNA-Binding Domain Protein. PLoS Biology, 2005, 3, e236.	2.6	457
118	Sequence-Specific Inhibition of Small RNA Function. PLoS Biology, 2004, 2, e98.	2.6	562
119	Biochemical Dissection of RNA Silencing in Plants. , 2004, 257, 223-244.		20
120	MicroRNA control of PHABULOSA in leaf development: importance of pairing to the microRNA 5â€² region. EMBO Journal, 2004, 23, 3356-3364.	3.5	630
121	Kinetic analysis of the RNAi enzyme complex. Nature Structural and Molecular Biology, 2004, 11, 599-606.	3.6	481
122	Plant RNAi: How aViral Silencing Suppressor Inactivates siRNA. Current Biology, 2004, 14, R198-R200.	1.8	69
123	The RNA-Induced Silencing Complex Is a Mg2+-Dependent Endonuclease. Current Biology, 2004, 14, 787-791.	1.8	349
124	A Protein Sensor for siRNA Asymmetry. Science, 2004, 306, 1377-1380.	6.0	526
125	RISC Assembly Defects in the Drosophila RNAi Mutant armitage. Cell, 2004, 116, 831-841.	13.5	339
126	A single Argonaute protein mediates both transcriptional and posttranscriptional silencing in Schizosaccharomyces pombe. Genes and Development, 2004, 18, 2359-2367.	2.7	128

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127	Selective silencing by RNAi of a dominant allele that causes amyotrophic lateral sclerosis. Aging Cell, 2003, 2, 209-217.	3.0	170
128	siRNAs knock down hepatitis. Nature Medicine, 2003, 9, 266-267.	15.2	32
129	A biochemical framework for RNA silencing in plants. Genes and Development, 2003, 17, 49-63.	2.7	832
130	Asymmetry in the Assembly of the RNAi Enzyme Complex. Cell, 2003, 115, 199-208.	13.5	2,486
131	In vitro analysis of RNA interference in Drosophila melanogaster. Methods, 2003, 30, 330-336.	1.9	100
132	Ancient Pathways Programmed by Small RNAs. Science, 2002, 296, 1265-1269.	6.0	334
133	Why do miRNAs live in the miRNP?. Genes and Development, 2002, 16, 1025-1031.	2.7	65
134	Modular Recognition of RNA by a Human Pumilio-Homology Domain. Cell, 2002, 110, 501-512.	13.5	450
135	Evidence that siRNAs Function as Guides, Not Primers, in the Drosophila and Human RNAi Pathways. Molecular Cell, 2002, 10, 537-548.	4.5	433
136	RNAi: nature abhors a double-strand. Current Opinion in Genetics and Development, 2002, 12, 225-232.	1.5	451
137	A microRNA in a Multiple-Turnover RNAi Enzyme Complex. Science, 2002, 297, 2056-2060.	6.0	1,844
138	A Cellular Function for the RNA-Interference Enzyme Dicer in the Maturation of the let-7 Small Temporal RNA. Science, 2001, 293, 834-838.	6.0	2,450
139	Crystal Structure of a Pumilio Homology Domain. Molecular Cell, 2001, 7, 855-865.	4.5	226
140	Thirty-Three Years Later, a Glimpse at the Ribonuclease III Active Site. Molecular Cell, 2001, 8, 1158-1160.	4.5	37
141	ATP Requirements and Small Interfering RNA Structure in the RNA Interference Pathway. Cell, 2001, 107, 309-321.	13.5	919
142	RNA interference: listening to the sound of silence. , 2001, 8, 746-750.		324
143	RNAi. Cell, 2000, 101, 25-33.	13.5	2,421
144	MOLECULAR BIOLOGY:RNA Interference. Science, 2000, 287, 2431-2433.	6.0	101

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145	The PUMILIOâˆ'RNA Interaction:â€‰ A Single RNA-Binding Domain Monomer Recognizes a Bipartite Target Sequence. Biochemistry, 1999, 38, 596-604.	1.2	86
146	Drosophila development: Homeodomains and translational control. Current Biology, 1996, 6, 773-775.	1.8	7
147	Translational regulation in development. Cell, 1995, 81, 171-178.	13.5	400
148	The protein Sex-lethal antagonizes the splicing factor U2AF to regulate alternative splicing of transformer pre-mRNA. Nature, 1993, 362, 171-175.	13.7	316
149	Cloning and domain structure of the mammalian splicing factor U2AF. Nature, 1992, 355, 609-614.	13.7	557
150	RNA binding: Î²S and basics. Nature, 1990, 348, 485-486.	13.7	34
151	A factor, U2AF, is required for U2 snRNP binding and splicing complex assembly. Cell, 1988, 52, 207-219.	13.5	531