Alexei A Aravin

List of Publications by Year
in descending order

46	11,494	126907	223800
papers	citations	33 h-index	46 g-index

53	53	53	7890
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Discrete Small RNA-Generating Loci as Master Regulators of Transposon Activity in Drosophila. Cell, 2007, 128, 1089-1103.	28.9	2,215
2	A novel class of small RNAs bind to MILI protein in mouse testes. Nature, 2006, 442, 203-207.	27.8	1,303
3	A piRNA Pathway Primed by Individual Transposons Is Linked to De Novo DNA Methylation in Mice. Molecular Cell, 2008, 31, 785-799.	9.7	1,029
4	The Piwi-piRNA Pathway Provides an Adaptive Defense in the Transposon Arms Race. Science, 2007, 318, 761-764.	12.6	941
5	Developmentally Regulated piRNA Clusters Implicate MILI in Transposon Control. Science, 2007, 316, 744-747.	12.6	879
6	An Epigenetic Role for Maternally Inherited piRNAs in Transposon Silencing. Science, 2008, 322, 1387-1392.	12.6	686
7	Double-stranded RNA-mediated silencing of genomic tandem repeats and transposable elements in the D. melanogaster germline. Current Biology, 2001, 11, 1017-1027.	3.9	685
8	Piwi induces piRNA-guided transcriptional silencing and establishment of a repressive chromatin state. Genes and Development, 2013, 27, 390-399.	5.9	429
9	Cytoplasmic Compartmentalization of the Fetal piRNA Pathway in Mice. PLoS Genetics, 2009, 5, e1000764.	3.5	252
10	The histone chaperone CAF-1 safeguards somatic cell identity. Nature, 2015, 528, 218-224.	27.8	244
11	Identification and characterization of small RNAs involved in RNA silencing. FEBS Letters, 2005, 579, 5830-5840.	2.8	214
12	Transgenerationally inherited piRNAs trigger piRNA biogenesis by changing the chromatin of piRNA clusters and inducing precursor processing. Genes and Development, 2014, 28, 1667-1680.	5.9	204
13	Bacterial Argonaute Samples the Transcriptome to Identify Foreign DNA. Molecular Cell, 2013, 51, 594-605.	9.7	200
14	piRNA pathway targets active LINE1 elements to establish the repressive H3K9me3 mark in germ cells. Genes and Development, 2014, 28, 1410-1428.	5.9	184
15	Dissection of a Natural RNA Silencing Process in the Drosophila melanogaster Germ Line. Molecular and Cellular Biology, 2004, 24, 6742-6750.	2.3	166
16	Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549.	5.9	123
17	piRNA Biogenesis in Drosophila melanogaster. Trends in Genetics, 2017, 33, 882-894.	6.7	119
18	Cutoff Suppresses RNA Polymerase II Termination to Ensure Expression of piRNA Precursors. Molecular Cell, 2016, 63, 97-109.	9.7	116

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19	DNA targeting and interference by a bacterial Argonaute nuclease. Nature, 2020, 587, 632-637.	27.8	114
20	The Expanded Universe of Prokaryotic Argonaute Proteins. MBio, 2018, 9, .	4.1	101
21	DNA interference and beyond: structure and functions of prokaryotic Argonaute proteins. Nature Communications, 2018, 9, 5165.	12.8	99
22	Aub and Ago3 Are Recruited to Nuage through Two Mechanisms to Form a Ping-Pong Complex Assembled by Krimper. Molecular Cell, 2015, 59, 564-575.	9.7	98
23	MIWI2 and MILI Have Differential Effects on piRNA Biogenesis and DNA Methylation. Cell Reports, 2015, 12, 1234-1243.	6.4	98
24	Production of artificial piRNAs in flies and mice. Rna, 2012, 18, 42-52.	3.5	94
25	The control of gene expression and cell identity by H3K9 trimethylation. Development (Cambridge), 2019, 146, .	2.5	93
26	Programmable DNA cleavage by Ago nucleases from mesophilic bacteria Clostridium butyricum and Limnothrix rosea. Nucleic Acids Research, 2019, 47, 5822-5836.	14.5	92
27	Stable Polycomb-dependent transgenerational inheritance of chromatin states in Drosophila. Nature Genetics, 2017, 49, 876-886.	21.4	81
28	Su(var)2-10 and the SUMO Pathway Link piRNA-Guided Target Recognition to Chromatin Silencing. Molecular Cell, 2020, 77, 556-570.e6.	9.7	74
29	Splicing-independent loading of TREX on nascent RNA is required for efficient expression of dual-strand piRNA clusters in Drosophila. Genes and Development, 2016, 30, 840-855.	5.9	71
30	A programmable pAgo nuclease with universal guide and target specificity from the mesophilic bacterium Kurthia massiliensis. Nucleic Acids Research, 2021, 49, 4054-4065.	14.5	53
31	A Transgenerational Process Defines piRNA Biogenesis in Drosophila virilis. Cell Reports, 2014, 8, 1617-1623.	6.4	49
32	Accommodation of Helical Imperfections in Rhodobacter sphaeroides Argonaute Ternary Complexes with Guide RNA and Target DNA. Cell Reports, 2018, 24, 453-462.	6.4	47
33	piRNA silencing contributes to interspecies hybrid sterility and reproductive isolation in Drosophila melanogaster. Nucleic Acids Research, 2019, 47, 4255-4271.	14.5	46
34	piRNA-mediated gene regulation and adaptation to sex-specific transposon expression in D. melanogaster male germline. Genes and Development, 2021, 35, 914-935.	5.9	46
35	Genome-wide DNA sampling by Ago nuclease from the cyanobacterium Synechococcus elongatus. RNA Biology, 2020, 17, 677-688.	3.1	41
36	The SUMO Ligase Su(var)2-10 Controls Hetero- and Euchromatic Gene Expression via Establishing H3K9 Trimethylation and Negative Feedback Regulation. Molecular Cell, 2020, 77, 571-585.e4.	9.7	36

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37	Non-coding RNAs in Transcriptional Regulation. Current Molecular Biology Reports, 2015, 1, 10-18.	1.6	33
38	Pitfalls of Mapping High-Throughput Sequencing Data to Repetitive Sequences: Piwiâ€™s Genomic Targets Still Not Identified. Developmental Cell, 2015, 32, 765-771.	7.0	26
39	Arginine methylation as a molecular signature of the Piwi small RNA pathway. Cell Cycle, 2009, 8, 4003-4004.	2.6	21
40	RDC complex executes a dynamic piRNA program during Drosophila spermatogenesis to safeguard male fertility. PLoS Genetics, 2021, 17, e1009591.	3.5	19
41	Stellate Genes and the piRNA Pathway in Speciation and Reproductive Isolation of Drosophila melanogaster. Frontiers in Genetics, 2020, 11, 610665.	2.3	14
42	Repression of interrupted and intact rDNA by the SUMO pathway in Drosophila melanogaster. ELife, 2020, 9, .	6.0	12
43	Binding of guide piRNA triggers methylation of the unstructured N-terminal region of Aub leading to assembly of the piRNA amplification complex. Nature Communications, 2021, 12, 4061.	12.8	11
44	Pachytene piRNAs as beneficial regulators or a defense system gone rogue. Nature Genetics, 2020, 52, 644-645.	21.4	9
45	Transposon-taming piRNAs in the germline: Where do they come from?. Molecular Cell, 2021, 81, 3884-3885.	9.7	6
46	Recognition of double-stranded DNA by the Rhodobacter sphaeroides Argonaute protein. Biochemical and Biophysical Research Communications, 2020, 533, 1484-1489.	2.1	5