# Alexei A Aravin

List of Publications by Year
in descending order



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|---|---|---|---|
| 46 papers | 11,494 citations | 126907<br>33 h-index | 223800<br>46 g-index |
| 53 all docs | 53 docs citations | 53 times ranked | 7890 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A programmable pAgo nuclease with universal guide and target specificity from the mesophilic bacterium <i>Kurthia massiliensis</i>. Nucleic Acids Research, 2021, 49, 4054-4065. | 14.5 | 53 |
| 2 | piRNA-mediated gene regulation and adaptation to sex-specific transposon expression in <i>D. melanogaster</i> male germline. Genes and Development, 2021, 35, 914-935. | 5.9 | 46 |
| 3 | 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 |
| 4 | RDC complex executes a dynamic piRNA program during Drosophila spermatogenesis to safeguard male fertility. PLoS Genetics, 2021, 17, e1009591. | 3.5 | 19 |
| 5 | Transposon-taming piRNAs in the germline: Where do they come from?. Molecular Cell, 2021, 81, 3884-3885. | 9.7 | 6 |
| 6 | 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 |
| 7 | 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 |
| 8 | DNA targeting and interference by a bacterial Argonaute nuclease. Nature, 2020, 587, 632-637. | 27.8 | 114 |
| 9 | Recognition of double-stranded DNA by the Rhodobacter sphaeroides Argonaute protein. Biochemical and Biophysical Research Communications, 2020, 533, 1484-1489. | 2.1 | 5 |
| 10 | Pachytene piRNAs as beneficial regulators or a defense system gone rogue. Nature Genetics, 2020, 52, 644-645. | 21.4 | 9 |
| 11 | Genome-wide DNA sampling by Ago nuclease from the cyanobacterium <i>Synechococcus elongatus</i>. RNA Biology, 2020, 17, 677-688. | 3.1 | 41 |
| 12 | Stellate Genes and the piRNA Pathway in Speciation and Reproductive Isolation of Drosophila melanogaster. Frontiers in Genetics, 2020, 11, 610665. | 2.3 | 14 |
| 13 | Repression of interrupted and intact rDNA by the SUMO pathway in Drosophila melanogaster. ELife, 2020, 9, . | 6.0 | 12 |
| 14 | The control of gene expression and cell identity by H3K9 trimethylation. Development (Cambridge), 2019, 146, . | 2.5 | 93 |
| 15 | Programmable DNA cleavage by Ago nucleases from mesophilic bacteria Clostridium butyricum and Limnothrix rosea. Nucleic Acids Research, 2019, 47, 5822-5836. | 14.5 | 92 |
| 16 | piRNA silencing contributes to interspecies hybrid sterility and reproductive isolation in Drosophila melanogaster. Nucleic Acids Research, 2019, 47, 4255-4271. | 14.5 | 46 |
| 17 | The Expanded Universe of Prokaryotic Argonaute Proteins. MBio, 2018, 9, . | 4.1 | 101 |
| 18 | DNA interference and beyond: structure and functions of prokaryotic Argonaute proteins. Nature Communications, 2018, 9, 5165. | 12.8 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | Stable Polycomb-dependent transgenerational inheritance of chromatin states in Drosophila. Nature Genetics, 2017, 49, 876-886. | 21.4 | 81 |
| 21 | piRNA Biogenesis in Drosophila melanogaster. Trends in Genetics, 2017, 33, 882-894. | 6.7 | 119 |
| 22 | Splicing-independent loading of TREX on nascent RNA is required for efficient expression of dual-strand piRNA clusters in <i>Drosophila</i>. Genes and Development, 2016, 30, 840-855. | 5.9 | 71 |
| 23 | Cutoff Suppresses RNA Polymerase II Termination to Ensure Expression of piRNA Precursors. Molecular Cell, 2016, 63, 97-109. | 9.7 | 116 |
| 24 | The histone chaperone CAF-1 safeguards somatic cell identity. Nature, 2015, 528, 218-224. | 27.8 | 244 |
| 25 | 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 |
| 26 | Non-coding RNAs in Transcriptional Regulation. Current Molecular Biology Reports, 2015, 1, 10-18. | 1.6 | 33 |
| 27 | 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 |
| 28 | MIWI2 and MILI Have Differential Effects on piRNA Biogenesis and DNA Methylation. Cell Reports, 2015, 12, 1234-1243. | 6.4 | 98 |
| 29 | A Transgenerational Process Defines piRNA Biogenesis in Drosophila virilis. Cell Reports, 2014, 8, 1617-1623. | 6.4 | 49 |
| 30 | 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 |
| 31 | Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549. | 5.9 | 123 |
| 32 | 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 |
| 33 | Bacterial Argonaute Samples the Transcriptome to Identify Foreign DNA. Molecular Cell, 2013, 51, 594-605. | 9.7 | 200 |
| 34 | Piwi induces piRNA-guided transcriptional silencing and establishment of a repressive chromatin state. Genes and Development, 2013, 27, 390-399. | 5.9 | 429 |
| 35 | Production of artificial piRNAs in flies and mice. Rna, 2012, 18, 42-52. | 3.5 | 94 |
| 36 | Arginine methylation as a molecular signature of the Piwi small RNA pathway. Cell Cycle, 2009, 8, 4003-4004. | 2.6 | 21 |

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|---|---|---|---|
| 37 | Cytoplasmic Compartmentalization of the Fetal piRNA Pathway in Mice. PLoS Genetics, 2009, 5, e1000764. | 3.5 | 252 |
| 38 | 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 |
| 39 | An Epigenetic Role for Maternally Inherited piRNAs in Transposon Silencing. Science, 2008, 322, 1387-1392. | 12.6 | 686 |
| 40 | Discrete Small RNA-Generating Loci as Master Regulators of Transposon Activity in Drosophila. Cell, 2007, 128, 1089-1103. | 28.9 | 2,215 |
| 41 | The Piwi-piRNA Pathway Provides an Adaptive Defense in the Transposon Arms Race. Science, 2007, 318, 761-764. | 12.6 | 941 |
| 42 | Developmentally Regulated piRNA Clusters Implicate MILI in Transposon Control. Science, 2007, 316, 744-747. | 12.6 | 879 |
| 43 | A novel class of small RNAs bind to MILI protein in mouse testes. Nature, 2006, 442, 203-207. | 27.8 | 1,303 |
| 44 | Identification and characterization of small RNAs involved in RNA silencing. FEBS Letters, 2005, 579, 5830-5840. | 2.8 | 214 |
| 45 | Dissection of a Natural RNA Silencing Process in the Drosophila melanogaster Germ Line. Molecular and Cellular Biology, 2004, 24, 6742-6750. | 2.3 | 166 |
| 46 | 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 |