Gregory James Hannon

List of Publications by Year
in descending order

74	29,776	38660 50	76769 74
papers	citations	h-index	g-index

93	93	93	24062
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A new regulatory motif in cell-cycle control causing specific inhibition of cyclin D/CDK4. Nature, 1993, 366, 704-707.	13.7	3,425
2	p21 is a universal inhibitor of cyclin kinases. Nature, 1993, 366, 701-704.	13.7	3,293
3	Discrete Small RNA-Generating Loci as Master Regulators of Transposon Activity in Drosophila. Cell, 2007, 128, 1089-1103.	13.5	2,215
4	pl5INK4B is a potentia| effector of TGF-Î²-induced cell cycle arrest. Nature, 1994, 371, 257-261.	13.7	1,948
5	The p21 inhibitor of cyclin-dependent kinases controls DNA replication by interaction with PCNA. Nature, 1994, 369, 574-578.	13.7	1,626
6	A germline-specific class of small RNAs binds mammalian Piwi proteins. Nature, 2006, 442, 199-202.	13.7	1,468
7	Radiation-induced cell cycle arrest compromised by p21 deficiency. Nature, 1995, 377, 552-557.	13.7	1,218
8	A piRNA Pathway Primed by Individual Transposons Is Linked to De Novo DNA Methylation in Mice. Molecular Cell, 2008, 31, 785-799.	4.5	1,029
9	MIWI2 Is Essential for Spermatogenesis and Repression of Transposons in the Mouse Male Germline. Developmental Cell, 2007, 12, 503-514.	3.1	1,014
10	A Role for Piwi and piRNAs in Germ Cell Maintenance and Transposon Silencing in Zebrafish. Cell, 2007, 129, 69-82.	13.5	989
11	The Piwi-piRNA Pathway Provides an Adaptive Defense in the Transposon Arms Race. Science, 2007, 318, 761-764.	6.0	941
12	Developmentally Regulated piRNA Clusters Implicate MILI in Transposon Control. Science, 2007, 316, 744-747.	6.0	879
13	Specialized piRNA Pathways Act in Germline and Somatic Tissues of the Drosophila Ovary. Cell, 2009, 137, 522-535.	13.5	774
14	A genome-scale shRNA resource for transgenic RNAi in Drosophila. Nature Methods, 2011, 8, 405-407.	9.0	733
15	An Epigenetic Role for Maternally Inherited piRNAs in Transposon Silencing. Science, 2008, 322, 1387-1392.	6.0	686
16	Differential effects by the p21 CDK inhibitor on PCNA-dependent DNA replication and repair. Nature, 1994, 371, 534-537.	13.7	632
17	Starvation-Induced Transgenerational Inheritance of Small RNAs in C.Âelegans. Cell, 2014, 158, 277-287.	13.5	448
18	One Loop to Rule Them All: The Ping-Pong Cycle and piRNA-Guided Silencing. Trends in Biochemical Sciences, 2016, 41, 324-337.	3.7	386

#	Article	IF	Citations
19	piRNA-Guided Genome Defense: From Biogenesis to Silencing. Annual Review of Genetics, 2018, 52, 131-157.	3.2	372
20	Asparagine bioavailability governs metastasis in a model of breast cancer. Nature, 2018, 554, 378-381.	13.7	362
21	A model of breast cancer heterogeneity reveals vascular mimicry as a driver of metastasis. Nature, 2015, 520, 358-362.	13.7	336
22	Proteomic analysis of murine Piwi proteins reveals a role for arginine methylation in specifying interaction with Tudor family members. Genes and Development, 2009, 23, 1749-1762.	2.7	287
23	The structural biochemistry of Zucchini implicates it as a nuclease in piRNA biogenesis. Nature, 2012, 491, 279-283.	13.7	276
24	Toolkit for evaluating genes required for proliferation and survival using tetracycline-regulated RNAi. Nature Biotechnology, 2011, 29, 79-83.	9.4	235
25	Multiple roles for Piwi in silencing Drosophila transposons. Genes and Development, 2013, 27, 400-412.	2.7	231
26	A Transcriptome-wide RNAi Screen in the Drosophila Ovary Reveals Factors of the Germline piRNA Pathway. Molecular Cell, 2013, 50, 749-761.	4.5	229
27	piRNA-directed cleavage of meiotic transcripts regulates spermatogenesis. Genes and Development, 2015, 29, 1032-1044.	2.7	220
28	Regulation of Ribosome Biogenesis and Protein Synthesis Controls Germline Stem Cell Differentiation. Cell Stem Cell, 2016, 18, 276-290.	5.2	199
29	piRNA Production Requires Heterochromatin Formation in Drosophila. Current Biology, 2011, 21, 1373-1379.	1.8	195
30	Functional Identification of Optimized RNAi Triggers Using a Massively Parallel Sensor Assay. Molecular Cell, 2011, 41, 733-746.	4.5	193
31	A Genome-wide RNAi Screen Draws a Genetic Framework for Transposon Control and Primary piRNA Biogenesis in Drosophila. Molecular Cell, 2013, 50, 736-748.	4.5	170
32	Panoramix enforces piRNA-dependent cotranscriptional silencing. Science, 2015, 350, 339-342.	6.0	162
33	Clonal Decomposition and DNA Replication States Defined by Scaled Single-Cell Genome Sequencing. Cell, 2019, 179, 1207-1221.e22.	13.5	162
34	Mutational landscape of EGFR- , MYC- , and Kras- driven genetically engineered mouse models of lung adenocarcinoma. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6409-E6417.	3.3	158
35	Probing the initiation and effector phases of the somatic piRNA pathway in Drosophila. Genes and Development, 2010, 24, 2499-2504.	2.7	132
36	lncRNAs in development and disease: from functions to mechanisms. Open Biology, 2017, 7, 170121.	1.5	126

#	Article	IF	Citations
37	Two waves of de novo methylation during mouse germ cell development. Genes and Development, 2014, 28, 1544-1549.	2.7	123
38	Vreteno, a gonad-specific protein, is essential for germline development and primary piRNA biogenesis in Drosophila. Development (Cambridge), 2011, 138, 4039-4050.	1.2	104
39	Tiling genomes of pathogenic viruses identifies potent antiviral shRNAs and reveals a role for secondary structure in shRNA efficacy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 869-874.	3.3	99
40	Essential Role for Endogenous siRNAs during Meiosis in Mouse Oocytes. PLoS Genetics, 2015, 11, e1005013.	1.5	97
41	Production of artificial piRNAs in flies and mice. Rna, 2012, 18, 42-52.	1.6	94
42	Genetic interactions of G-quadruplexes in humans. ELife, 2019, 8, .	2.8	91
43	A Computational Algorithm to Predict shRNA Potency. Molecular Cell, 2014, 56, 796-807.	4.5	90
44	An Epigenetic Memory of Pregnancy in the Mouse Mammary Gland. Cell Reports, 2015, 11, 1102-1109.	2.9	88
45	Molecular hierarchy of mammary differentiation yields refined markers of mammary stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7123-7130.	3.3	79
46	PHGDH heterogeneity potentiates cancerÂcell dissemination and metastasis. Nature, 2022, 605, 747-753.	13.7	77
47	Two ancient human genomes reveal Polynesian ancestry among the indigenous Botocudos of Brazil. Current Biology, 2014, 24, R1035-R1037.	1.8	73
48	shutdown is a component of the Drosophila piRNA biogenesis machinery. Rna, 2012, 18, 1446-1457.	1.6	72
49	A Genome-Wide Survey of Sexually Dimorphic Expression of Drosophila miRNAs Identifies the Steroid Hormone-Induced miRNA let-7 as a Regulator of Sexual Identity. Genetics, 2014, 198, 647-668.	1.2	68
50	Dephosphorylation of Tyrosine 393 in Argonaute 2 by Protein Tyrosine Phosphatase 1B Regulates Gene Silencing in Oncogenic RAS-Induced Senescence. Molecular Cell, 2014, 55, 782-790.	4.5	65
51	piRNA-guided co-transcriptional silencing coopts nuclear export factors. ELife, 2019, 8, .	2.8	60
52	lncRNA requirements for mouse acute myeloid leukemia and normal differentiation. ELife, 2017, 6, .	2.8	54
53	Minotaur is critical for primary piRNA biogenesis. Rna, 2013, 19, 1064-1077.	1.6	51
54	Specialization of the Drosophila nuclear export family protein Nxf3 for piRNA precursor export. Genes and Development, 2019, 33, 1208-1220.	2.7	49

#	Article	IF	Citations
55	A genome-wide RNAi screen identifies factors required for distinct stages of C. elegans piRNA biogenesis. Genes and Development, 2014, 28, 797-807.	2.7	48
56	RNF17 blocks promiscuous activity of PIWI proteins in mouse testes. Genes and Development, 2015, 29, 1403-1415.	2.7	47
57	A CRISPR Resource for Individual, Combinatorial, or Multiplexed Gene Knockout. Molecular Cell, 2017, 67, 348-354.e4.	4.5	45
58	BPTF Maintains Chromatin Accessibility and the Self-Renewal Capacity of Mammary Gland Stem Cells. Stem Cell Reports, 2017, 9, 23-31.	2.3	43
59	Effective control of SARS-CoV-2 transmission between healthcare workers during a period of diminished community prevalence of COVID-19. ELife, 2020, 9, .	2.8	40
60	Landscapes of cellular phenotypic diversity in breast cancer xenografts and their impact on drug response. Nature Communications, 2021, 12, 1998.	5.8	37
61	Oncogenic transformation of Drosophila somatic cells induces a functional piRNA pathway. Genes and Development, 2016, 30, 1623-1635.	2.7	33
62	Daedalus and Gasz recruit Armitage to mitochondria, bringing piRNA precursors to the biogenesis machinery. Genes and Development, 2019, 33, 844-856.	2.7	32
63	Dimerisation of the PICTS complex via LC8/Cut-up drives co-transcriptional transposon silencing in Drosophila. ELife, 2021, 10, .	2.8	28
64	lncRNA Spehd Regulates Hematopoietic Stem and Progenitor Cells and Is Required for Multilineage Differentiation. Cell Reports, 2019, 27, 719-729.e6.	2.9	27
65	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
66	Discovery of progenitor cell signatures by time-series synexpression analysis during Drosophila embryonic cell immortalization. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12974-12979.	3.3	26
67	Dual functions of Macpiwi1 in transposon silencing and stem cell maintenance in the flatworm Macrostomum lignano. Rna, 2015, 21, 1885-1897.	1.6	26
68	Maternally inherited piRNAs direct transient heterochromatin formation at active transposons during early Drosophila embryogenesis. ELife, 2021, 10, .	2.8	26
69	GoldCLIP: Gel-omitted Ligation-dependent CLIP. Genomics, Proteomics and Bioinformatics, 2018, 16, 136-143.	3.0	21
70	Characterization of universal features of partially methylated domains across tissues and species. Epigenetics and Chromatin, 2020, 13, 39.	1.8	16
71	Channel nuclear pore complex subunits are required for transposon silencing in Drosophila. ELife, 2021, 10, .	2.8	14
72	A Happy 3â€² Ending to the piRNA Maturation Story. Cell, 2016, 164, 838-840.	13.5	13

#	Article	IF	Citations
73	Gene expression signatures of individual ductal carcinoma in situ lesions identify processes and biomarkers associated with progression towards invasive ductal carcinoma. Nature Communications, 2022, 13, .	5.8	12
74	An evolutionarily conserved stop codon enrichment at the 5â€² ends of mammalian piRNAs. Nature Communications, 2022, 13, 2118.	5.8	3