

Gary Ruvkun

List of Publications by Year in descending order

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83
papers

19,635
citations

76196

40
h-index

85405

71
g-index

92
all docs

92
docs citations

92
times ranked

16002
citing authors

#	ARTICLE	IF	CITATIONS
1	The 21-nucleotide let-7 RNA regulates developmental timing in <i>Caenorhabditis elegans</i> . <i>Nature</i> , 2000, 403, 901-906.	13.7	4,315
2	Conservation of the sequence and temporal expression of let-7 heterochronic regulatory RNA. <i>Nature</i> , 2000, 408, 86-89.	13.7	2,167
3	daf-2, an Insulin Receptor-Like Gene That Regulates Longevity and Diapause in <i>Caenorhabditis elegans</i> . <i>Science</i> , 1997, 277, 942-946.	6.0	2,072
4	The Fork head transcription factor DAF-16 transduces insulin-like metabolic and longevity signals in <i>C. elegans</i> . <i>Nature</i> , 1997, 389, 994-999.	13.7	1,812
5	A systematic RNAi screen identifies a critical role for mitochondria in <i>C. elegans</i> longevity. <i>Nature Genetics</i> , 2003, 33, 40-48.	9.4	900
6	A phosphatidylinositol-3-OH kinase family member regulating longevity and diapause in <i>Caenorhabditis elegans</i> . <i>Nature</i> , 1996, 382, 536-539.	13.7	847
7	Regulation of <i>C. elegans</i> Life-Span by Insulinlike Signaling in the Nervous System. <i>Science</i> , 2000, 290, 147-150.	6.0	630
8	Food and metabolic signalling defects in a <i>Caenorhabditis elegans</i> serotonin-synthesis mutant. <i>Nature</i> , 2000, 403, 560-564.	13.7	573
9	A conserved siRNA-degrading RNase negatively regulates RNA interference in <i>C. elegans</i> . <i>Nature</i> , 2004, 427, 645-649.	13.7	540
10	THEGENETICS OFAGING. <i>Annual Review of Genomics and Human Genetics</i> , 2001, 2, 435-462.	2.5	340
11	Functional Proteomics Reveals the Biochemical Niche of <i>C. elegans</i> DCR-1 in Multiple Small-RNA-Mediated Pathways. <i>Cell</i> , 2006, 124, 343-354.	13.5	338
12	Inactivation of Conserved <i>C. elegans</i> Genes Engages Pathogen- and Xenobiotic-Associated Defenses. <i>Cell</i> , 2012, 149, 452-466.	13.5	325
13	<i>Caenorhabditis elegans</i> responses to bacteria from its natural habitats. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E3941-9.	3.3	317
14	An Insulin-like Signaling Pathway Affects Both Longevity and Reproduction in <i>Caenorhabditis elegans</i> . <i>Genetics</i> , 1998, 148, 703-717.	1.2	305
15	Functional Genomic Analysis of RNA Interference in <i>C. elegans</i> . <i>Science</i> , 2005, 308, 1164-1167.	6.0	266
16	<i>Caenorhabditis elegans</i> pathways that surveil and defend mitochondria. <i>Nature</i> , 2014, 508, 406-410.	13.7	260
17	Somatic misexpression of germline P granules and enhanced RNA interference in retinoblastoma pathway mutants. <i>Nature</i> , 2005, 436, 593-597.	13.7	250
18	The <i>Caenorhabditis elegans</i> heterochronic gene lin-14 encodes a nuclear protein that forms a temporal developmental switch. <i>Nature</i> , 1989, 338, 313-319.	13.7	216

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19	Caenorhabditis elegans has scores of homoeobox-containing genes. Nature, 1989, 341, 239-243.	13.7	210
20	Mitophagy confers resistance to siderophore-mediated killing by <i>Pseudomonas aeruginosa</i> . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1821-1826.	3.3	195
21	C. elegans unc-4 gene encodes a homeodomain protein that determines the pattern of synaptic input to specific motor neurons. Nature, 1992, 355, 841-845.	13.7	180
22	Proteasome dysfunction triggers activation of SKN-1A/Nrf1 by the aspartic protease DDI-1. ELife, 2016, 5, .	2.8	179
23	MUT-16 promotes formation of perinuclear <i>Mutator</i> foci required for RNA silencing in the <i>C. elegans</i> germline. Genes and Development, 2012, 26, 1433-1444.	2.7	160
24	Identification of small RNA pathway genes using patterns of phylogenetic conservation and divergence. Nature, 2013, 493, 694-698.	13.7	138
25	<i>mut-16</i> and other <i>mutator</i> class genes modulate 22G and 26G siRNA pathways in <i>Caenorhabditis elegans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1201-1208.	3.3	128
26	DAF-16/FOXO and HLH-30/TFEB function as combinatorial transcription factors to promote stress resistance and longevity. Nature Communications, 2018, 9, 4400.	5.8	113
27	TEMPORAL PATTERN FORMATION BY HETEROCHRONIC GENES. Annual Review of Genetics, 1997, 31, 611-634.	3.2	106
28	The 20 years it took to recognize the importance of tiny RNAs. Cell, 2004, 116, S93-S98.	13.5	98
29	The perfect storm of tiny RNAs. Nature Medicine, 2008, 14, 1041-1045.	15.2	97
30	Trans-splicing in C. elegans generates the negative RNAi regulator ERI-6/7. Nature, 2008, 455, 491-496.	13.7	95
31	Protein Sequence Editing of SKN-1A/Nrf1 by Peptide:N-Glycanase Controls Proteasome Gene Expression. Cell, 2019, 177, 737-750.e15.	13.5	86
32	piRNAs and piRNA-Dependent siRNAs Protect Conserved and Essential C.Âelegans Genes from Misrouting into the RNAi Pathway. Developmental Cell, 2015, 34, 457-465.	3.1	82
33	Hypoxia Rescues Frataxin Loss by Restoring Iron Sulfur Cluster Biogenesis. Cell, 2019, 177, 1507-1521.e16.	13.5	80
34	New motif in PBX genes. Nature Genetics, 1992, 1, 319-320.	9.4	78
35	The ERI-6/7 Helicase Acts at the First Stage of an siRNA Amplification Pathway That Targets Recent Gene Duplications. PLoS Genetics, 2011, 7, e1002369.	1.5	74
36	A microRNA program in the <i>C. elegans</i> hypodermis couples to intestinal mTORC2/PQM-1 signaling to modulate fat transport. Genes and Development, 2016, 30, 1515-1528.	2.7	61

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37	Repression of Germline RNAi Pathways in Somatic Cells by Retinoblastoma Pathway Chromatin Complexes. <i>PLoS Genetics</i> , 2012, 8, e1002542.	1.5	58
38	Microbial Diversity in a Hypersaline Sulfate Lake: A Terrestrial Analog of Ancient Mars. <i>Frontiers in Microbiology</i> , 2017, 8, 1819.	1.5	58
39	MLT-14 and SMUT-1 DEAD Box RNA Helicases Have Overlapping Roles in Germline RNAi and Endogenous siRNA Formation. <i>Current Biology</i> , 2014, 24, 839-844.	1.8	55
40	Mitochondrial Dysfunction in <i>C.Âelegans</i> Activates Mitochondrial Relocalization and Nuclear Hormone Receptor-Dependent Detoxification Genes. <i>Cell Metabolism</i> , 2019, 29, 1182-1191.e4.	7.2	55
41	Human disease locus discovery and mapping to molecular pathways through phylogenetic profiling. <i>Molecular Systems Biology</i> , 2013, 9, 692.	3.2	54
42	Endoplasmic reticulum-associated SKN-1A/Nrf1 mediates a cytoplasmic unfolded protein response and promotes longevity. <i>ELife</i> , 2019, 8, .	2.8	50
43	PhyloGene server for identification and visualization of co-evolving proteins using normalized phylogenetic profiles. <i>Nucleic Acids Research</i> , 2015, 43, W154-W159.	6.5	43
44	Gene Pathways That Delay <i>Caenorhabditis elegans</i> Reproductive Senescence. <i>PLoS Genetics</i> , 2014, 10, e1004752.	1.5	41
45	Isoform-Specific Mutations in the <i>Caenorhabditis elegans</i> Heterochronic Gene <i>lin-14</i> Affect Stage-Specific Patterning. <i>Genetics</i> , 2001, 157, 199-209.	1.2	37
46	Planetary Protection and Mars Special Regionsâ€”A Suggestion for Updating the Definition. <i>Astrobiology</i> , 2016, 16, 119-125.	1.5	36
47	Lysosomal activity regulates <i>Caenorhabditis elegans</i> mitochondrial dynamics through vitamin B12 metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 19970-19981.	3.3	36
48	Multiple small RNA pathways regulate the silencing of repeated and foreign genes in <i>C. elegans</i> . <i>Genes and Development</i> , 2013, 27, 2678-2695.	2.7	35
49	Dialogue between <i>E. coli</i> free radical pathways and the mitochondria of <i>C. elegans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12456-12461.	3.3	31
50	Nucleic Acid Extraction from Synthetic Mars Analog Soils for <i>in situ</i> Life Detection. <i>Astrobiology</i> , 2017, 17, 747-760.	1.5	30
51	<i>Caenorhabditis elegans</i> ADAR editing and the ERI-6/7/MOV10 RNAi pathway silence endogenous viral elements and LTR retrotransposons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 5987-5996.	3.3	29
52	The surveillance of pre-mRNA splicing is an early step in <i>C. elegans</i> RNAi of endogenous genes. <i>Genes and Development</i> , 2018, 32, 670-681.	2.7	27
53	Molybdenum cofactor transfer from bacteria to nematode mediates sulfite detoxification. <i>Nature Chemical Biology</i> , 2019, 15, 480-488.	3.9	27
54	Identification of genes in toxicity pathways of trinucleotide-repeat RNA in <i>C. elegans</i> . <i>Nature Structural and Molecular Biology</i> , 2014, 21, 712-720.	3.6	23

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55	Two isoforms of the essential <i>C. elegans</i> Argonaute CSR-1 differentially regulate sperm and oocyte fertility. <i>Nucleic Acids Research</i> , 2021, 49, 8836-8865.	6.5	23
56	Lipid signalling couples translational surveillance to systemic detoxification in <i>Caenorhabditis elegans</i> . <i>Nature Cell Biology</i> , 2015, 17, 1294-1303.	4.6	22
57	<i>Rhizobium</i> induces DNA damage in <i>Caenorhabditis elegans</i> intestinal cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3784-3792.	3.3	19
58	CarrierSeq: a sequence analysis workflow for low-input nanopore sequencing. <i>BMC Bioinformatics</i> , 2018, 19, 108.	1.2	18
59	Towards in situ sequencing for life detection. , 2017, , .		17
60	Endoplasmic Reticulum Homeostasis Is Modulated by the Forkhead Transcription Factor FKH-9 During Infection of <i>Caenorhabditis elegans</i> . <i>Genetics</i> , 2018, 210, 1329-1337.	1.2	17
61	Nucleic Acid Extraction and Sequencing from Low-Biomass Synthetic Mars Analog Soils for In Situ Life Detection. <i>Astrobiology</i> , 2019, 19, 1139-1152.	1.5	17
62	Nanopore sequencing at Mars, Europa, and microgravity conditions. <i>Npj Microgravity</i> , 2020, 6, 24.	1.9	17
63	A molecular growth industry. <i>Nature</i> , 1992, 360, 711-712.	13.7	16
64	ROS-based lethality of <i>Caenorhabditis elegans</i> mitochondrial electron transport mutants grown on <i>Escherichia coli</i> siderophore iron release mutants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21651-21658.	3.3	14
65	Sequencing nothing: Exploring failure modes of nanopore sensing and implications for life detection. <i>Life Sciences in Space Research</i> , 2018, 18, 80-86.	1.2	13
66	Acceleration profiles and processing methods for parabolic flight. <i>Npj Microgravity</i> , 2018, 4, 14.	1.9	13
67	Protein-bound molybdenum cofactor is bioavailable and rescues molybdenum cofactor-deficient <i>C. elegans</i> . <i>Genes and Development</i> , 2021, 35, 212-217.	2.7	13
68	Themes from a NASA workshop on gene regulatory processes in development and evolution. , 1999, 285, 104-115.		10
69	Genomic and Functional Characterization of <i>Enterococcus faecalis</i> Isolates Recovered From the International Space Station and Their Potential for Pathogenicity. <i>Frontiers in Microbiology</i> , 2020, 11, 515319.	1.5	10
70	Mitochondrial dysfunction induces RNA interference in <i>C. elegans</i> through a pathway homologous to the mammalian RIG-I antiviral response. <i>PLoS Biology</i> , 2020, 18, e3000996.	2.6	10
71	Regulation of <i>Caenorhabditis elegans</i> neuronal polarity by heterochronic genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 12327-12336.	3.3	9
72	Graded expression of <i>ceh-14</i> reporters in the hypodermis is induced by a gonadal signal. <i>Development Genes and Evolution</i> , 2000, 210, 564-569.	0.4	4

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73	Tiny RNA: Where do we come from? What are we? Where are we going?. Trends in Plant Science, 2008, 13, 313-316.	4.3	3
74	/MOCS2A is necessary for molybdenum cofactor synthesis in .. MicroPublication Biology, 2022, 2022, .	0.1	2
75	Nucleic Acid Sequencing Under Mars-Like Conditions. , 2019, , .		1
76	MXL-3 and HLH-30 transcriptionally link lipolysis and autophagy to nutrient availability. , 0, .		1
77	Title is missing!. , 2020, 18, e3000996.		0
78	Title is missing!. , 2020, 18, e3000996.		0
79	Title is missing!. , 2020, 18, e3000996.		0
80	Title is missing!. , 2020, 18, e3000996.		0
81	Title is missing!. , 2020, 18, e3000996.		0
82	Title is missing!. , 2020, 18, e3000996.		0
83	DEPCOD: a tool to detect and visualize co-evolution of protein domains. Nucleic Acids Research, 2022, , .	6.5	0