Hugh M Robertson

List of Publications by Year
in descending order

97 papers	15,029 citations	26630 56 h-index	37204 96 g-index
109 all docs	109 docs citations	109 times ranked	12095 citing authors

#	Article	IF	Citations
1	The Ecoresponsive Genome of <i>Daphnia pulex</i>. Science, 2011, 331, 555-561.	12.6	1,086
2	Functional and Evolutionary Insights from the Genomes of Three Parasitoid <i>Nasonia</i> Species. Science, 2010, 327, 343-348.	12.6	808
3	Molecular evolution of the insect chemoreceptor gene superfamily in Drosophila melanogaster. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14537-14542.	7.1	703
4	G Protein-Coupled Receptors inAnopheles gambiae. Science, 2002, 298, 176-178.	12.6	630
5	The chemoreceptor superfamily in the honey bee, <i>Apis mellifera</i>: Expansion of the odorant, but not gustatory, receptor family. Genome Research, 2006, 16, 1395-1403.	5.5	512
6	Genome sequences of the human body louse and its primary endosymbiont provide insights into the permanent parasitic lifestyle. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12168-12173.	7.1	482
7	Genomic insights into the Ixodes scapularis tick vector of Lyme disease. Nature Communications, 2016, 7, 10507.	12.8	450
8	Improved reference genome of Aedes aegypti informs arbovirus vector control. Nature, 2018, 563, 501-507.	27.8	426
9	The mariner transposable element is widespread in insects. Nature, 1993, 362, 241-245.	27.8	402
10	Finding the missing honey bee genes: lessons learned from a genome upgrade. BMC Genomics, 2014, 15, 86.	2.8	375
11	Molecular traces of alternative social organization in a termite genome. Nature Communications, 2014, 5, 3636.	12.8	371
12	Genomic signatures of evolutionary transitions from solitary to group living. Science, 2015, 348, 1139-1143.	12.6	357
13	The genomes of two key bumblebee species with primitive eusocial organization. Genome Biology, 2015, 16, 76.	8.8	330
14	Genome of <i>Rhodnius prolixus</i> , an insect vector of Chagas disease, reveals unique adaptations to hematophagy and parasite infection. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14936-14941.	7.1	329
15	Draft genome of the globally widespread and invasive Argentine ant (<i>Linepithema humile</i>). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5673-5678.	7.1	257
16	Annotated Expressed Sequence Tags and cDNA Microarrays for Studies of Brain and Behavior in the Honey Bee. Genome Research, 2002, 12, 555-566.	5.5	253
17	Genome of the house fly, Musca domestica L., a global vector of diseases with adaptations to a septic environment. Genome Biology, 2014, 15, 466.	8.8	252
18	Genome of the Asian longhorned beetle (Anoplophora glabripennis), a globally significant invasive species, reveals key functional and evolutionary innovations at the beetleâ€“plant interface. Genome Biology, 2016, 17, 227.	8.8	244

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19	The red flour beetle's large nose: An expanded odorant receptor gene family in Tribolium castaneum. Insect Biochemistry and Molecular Biology, 2008, 38, 387-397.	2.7	225
20	Molecular and phylogenetic analyses reveal mammalian-like clockwork in the honey bee (Apis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 2006, 16, 1352-1365.	5.5	223
21	Hemimetabolous genomes reveal molecular basis of termite eusociality. Nature Ecology and Evolution, 2018, 2, 557-566.	7.8	223
22	Draft genome of the red harvester ant <i>Pogonomyrmex barbatus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5667-5672.	7.1	222
23	The First Myriapod Genome Sequence Reveals Conservative Arthropod Gene Content and Genome Organisation in the Centipede Strigamia maritima. PLoS Biology, 2014, 12, e1002005.	5.6	221
24	Premetazoan genome evolution and the regulation of cell differentiation in the choanoflagellate Salpingoeca rosetta. Genome Biology, 2013, 14, R15.	9.6	219
25	A model species for agricultural pest genomics: the genome of the Colorado potato beetle, Leptinotarsa decemlineata (Coleoptera: Chrysomelidae). Scientific Reports, 2018, 8, 1931.	3.3	215
26	Factors Affecting Transposition of the Himar1 mariner Transposon in Vitro. Genetics, 1998, 149, 179-187.	2.9	207
27	A honey bee odorant receptor for the queen substance 9-oxo-2-decenoic acid. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14383-14388.	7.1	198
28	Creating a Buzz About Insect Genomes. Science, 2011, 331, 1386-1386.	12.6	185
29	Unique features of a global human ectoparasite identified through sequencing of the bed bug genome. Nature Communications, 2016, 7, 10165.	12.8	184
30	Large Gene Family Expansions and Adaptive Evolution for Odorant and Gustatory Receptors in the Pea Aphid, Acyrthosiphon pisum. Molecular Biology and Evolution, 2009, 26, 2073-2086.	8.9	176
31	A Massive Expansion of Effector Genes Underlies Gall-Formation in the Wheat Pest Mayetiola destructor. Current Biology, 2015, 25, 613-620.	3.9	171
32	A hybrid de novo genome assembly of the honeybee, Apis mellifera, with chromosome-length scaffolds. BMC Genomics, 2019, 20, 275.	2.8	171
33	The Tcl-mariner superfamily of transposons in animals. Journal of Insect Physiology, 1995, 41, 99-105.	2.0	166
34	Two Large Families of Chemoreceptor Genes in the Nematodes<i>Caenorhabditis elegans</i> and <i>Caenorhabditis briggsae</i> Reveal Extensive Gene Duplication, Diversification, Movement, and Intronâ€‰Loss. Genome Research, 1998, 8, 449-463.	5.5	164
35	Molecular Evolution of the Major Arthropod Chemoreceptor Gene Families. Annual Review of Entomology, 2019, 64, 227-242.	11.8	156
36	Evolution of the Gene Lineage Encoding the Carbon Dioxide Receptor in Insects. Journal of Insect Science, 2009, 9, 1-14.	1.5	144

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37	Pteropsin: A vertebrate-like non-visual opsin expressed in the honey bee brain. Insect Biochemistry and Molecular Biology, 2005, 35, 1367-1377.	2.7	138
38	The whole genome sequence of the Mediterranean fruit fly, Ceratitis capitata (Wiedemann), reveals insights into the biology and adaptive evolution of a highly invasive pest species. Genome Biology, 2016, 17, 192.	8.8	130
39	Sequencing and characterizing odorant receptors of the cerambycid beetle Megacyllene caryae. Insect Biochemistry and Molecular Biology, 2012, 42, 499-505.	2.7	124
40	Molecular evolution of an ancient mariner transposon, Hsmarl, in the human genome. Gene, 1997, 205, 203-217.	2.2	114
41	Molecular evolutionary trends and feeding ecology diversification in the Hemiptera, anchored by the milkweed bug genome. Genome Biology, 2019, 20, 64.	8.8	114
42	The chemoreceptor genes of the waterflea Daphnia pulex: many Grs but no Ors. BMC Evolutionary Biology, 2009, 9, 79.	3.2	107
43	The Caenorhabditis chemoreceptor gene families. BMC Biology, 2008, 6, 42.	3.8	106
44	The Gr Family of Candidate Gustatory and Olfactory Receptors in the Yellow-Fever Mosquito Aedes aegypti. Chemical Senses, 2008, 33, 79-93.	2.0	105
45	The origin of the odorant receptor gene family in insects. ELife, 2018, 7, .	6.0	103
46	Genome Sequencing of the Phytoseiid Predatory Mite<i>Metaseiulus occidentalis</i>Reveals Completely Atomized<i>Hox</i>Genes and Superdynamic Intron Evolution. Genome Biology and Evolution, 2016, 8, 1762-1775.	2.5	102
47	The putative chemoreceptor families of C. elegans. WormBook, 2006, , 1-12.	5.3	100
48	Bmmarl: a basal lineage of the mariner family of transposable elements in the silkworm moth, Bombyx mori. Insect Biochemistry and Molecular Biology, 1996, 26, 945-954.	2.7	98
49	Recent Horizontal Transfer of Mellifera Subfamily Mariner Transposons into Insect Lineages Representing Four Different Orders Shows that Selection Acts Only During Horizontal Transfer. Molecular Biology and Evolution, 2003, 20, 554-562.	8.9	95
50	Evolution of the sugar receptors in insects. BMC Evolutionary Biology, 2009, 9, 41.	3.2	90
51	Sex- and tissue-specific profiles of chemosensory gene expression in a herbivorous gall-inducing fly (Diptera: Cecidomyiidae). BMC Genomics, 2014, 15, 501.	2.8	81
52	The Toxicogenome of <i>Hyalella azteca</i>: A Model for Sediment Ecotoxicology and Evolutionary Toxicology. Environmental Science & Technology, 2018, 52, 6009-6022.	10.0	79
53	Adaptive evolution in the SRZ chemoreceptor families of Caenorhabditis elegans and Caenorhabditis briggsae. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4476-4481.	7.1	76
54	The Insect Chemoreceptor Superfamily Is Ancient in Animals. Chemical Senses, 2015, 40, 609-614.	2.0	75

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55	Enormous expansion of the chemosensory gene repertoire in the omnivorous German cockroach <i>Blattella germanica</i>. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2018, 330, 265-278.	1.3	71
56	Molecular evolution of the second ancient human mariner transposon, Hsmar2, illustrates patterns of neutral evolution in the human genome lineage. Gene, 1997, 205, 219-228.	2.2	70
57	Cytochrome P450 diversification and hostplant utilization patterns in specialist and generalist moths: Birth, death and adaptation. Molecular Ecology, 2017, 26, 6021-6035.	3.9	68
58	Loss of Transposase-DNA Interaction May Underlie the Divergence of mariner Family Transposable Elements and the Ability of More than One mariner to Occupy the Same Genome. Molecular Biology and Evolution, 2001, 18, 954-961.	8.9	67
59	Brown marmorated stink bug, Halyomorpha halys (StÃ¥l), genome: putative underpinnings of polyphagy, insecticide resistance potential and biology of a top worldwide pest. BMC Genomics, 2020, 21, 227.	2.8	60
60	Genus-Wide Characterization of Bumblebee Genomes Provides Insights into Their Evolution and Variation in Ecological and Behavioral Traits. Molecular Biology and Evolution, 2021, 38, 486-501.	8.9	58
61	Genome-enabled insights into the biology of thrips as crop pests. BMC Biology, 2020, 18, 142.	3.8	54
62	A Candidate Pheromone Receptor and Two Odorant Receptors of the Hawkmoth Manduca sexta. Chemical Senses, 2009, 34, 305-316.	2.0	53
63	Genomic features of the damselfly <i>Calopteryx splendens</i> representing a sister clade to most insect orders. Genome Biology and Evolution, 2017, 9, evx006.	2.5	53
64	Odorant and Gustatory Receptors in the Tsetse Fly Glossina morsitans morsitans. PLoS Neglected Tropical Diseases, 2014, 8, e2663.	3.0	51
65	Canonical TTAGG-repeat telomeres and telomerase in the honey bee, Apis mellifera. Genome Research, 2006, 16, 1345-1351.	5.5	47
66	Neutral Evolution of Ten Types of mariner Transposons in the Genomes of Caenorhabditis elegans and Caenorhabditis briggsae. Journal of Molecular Evolution, 2003, 56, 751-769.	1.8	44
67	Odorant Binding Proteins of the Red Imported Fire Ant, Solenopsis invicta: An Example of the Problems Facing the Analysis of Widely Divergent Proteins. PLoS ONE, 2011, 6, e16289.	2.5	42
68	The genomes of most animals have multiple members of the Tc1 family of transposable elements. Genetica, 1996, 98, 131-140.	1.1	41
69	The Bursicon Gene in Mosquitoes: An Unusual Example of mRNA Trans-splicing. Genetics, 2007, 176, 1351-1353.	2.9	40
70	A foreleg transcriptome for Ixodes scapularis ticks: Candidates for chemoreceptors and binding proteins that might be expressed in the sensory Hallerâ€™s organ. Ticks and Tick-borne Diseases, 2018, 9, 1317-1327.	2.7	39
71	Reconstructing the ancient mariners of humans. Nature Genetics, 1996, 12, 360-361.	21.4	38
72	Infiltration of mariner elements. Nature, 1993, 364, 109-110.	27.8	35

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73	Genome of the Parasitoid Wasp Diachasma alloeum, an Emerging Model for Ecological Speciation and Transitions to Asexual Reproduction. Genome Biology and Evolution, 2019, 11, 2767-2773.	2.5	34
74	Whole Genome Sequence of the Parasitoid Wasp <i>Microplitis demolitor</i> That Harbors an Endogenous Virus Mutualist. G3: Genes, Genomes, Genetics, 2018, 8, 2875-2880.	1.8	33
75	Localization of mariner DNA Transposons in the Human Genome by PRINS. Genome Research, 1999, 9, 839-843.	5.5	29
76	Genes Encoding Vitamin-K Epoxide Reductase Are Present in Drosophila and Trypanosomatid Protists. Genetics, 2004, 168, 1077-1080.	2.9	29
77	Amarinertransposable element from a lacewing. Nucleic Acids Research, 1992, 20, 6409-6409.	14.5	27
78	The chemoreceptors and odorant binding proteins of the soybean and pea aphids. Insect Biochemistry and Molecular Biology, 2019, 105, 69-78.	2.7	26
79	Genome sequence of the wheat stem sawfly, Cephus cinctus, representing an early-branching lineage of the Hymenoptera, illuminates evolution of hymenopteran chemoreceptors. Genome Biology and Evolution, 2018, 10, 2997-3011.	2.5	24
80	Distribution of Genes and Repetitive Elements in the<i>Diabrotica virgifera virgifera</i>Genome Estimated Using BAC Sequencing. Journal of Biomedicine and Biotechnology, 2012, 2012, 1-9.	3.0	20
81	The Insect Chemoreceptor Superfamily in<i>Drosophila pseudoobscura</i>: Molecular Evolution of Ecologically-Relevant Genes Over 25 Million Years. Journal of Insect Science, 2009, 9, 1-14.	1.5	19
82	The genome of the stable fly, Stomoxys calcitrans, reveals potential mechanisms underlying reproduction, host interactions, and novel targets for pest control. BMC Biology, 2021, 19, 41.	3.8	19
83	Selective Sweeps in a Nutshell: The Genomic Footprint of Rapid Insecticide Resistance Evolution in the Almond Agroecosystem. Genome Biology and Evolution, 2021, 13, .	2.5	19
84	Changes in the Peripheral Chemosensory System Drive Adaptive Shifts in Food Preferences in Insects. Frontiers in Cellular Neuroscience, 2018, 12, 281.	3.7	18
85	The genomic basis of evolutionary differentiation among honey bees. Genome Research, 2021, 31, 1203-1215.	5.5	17
86	Expressed Sequence Tags from Cephalic Chemosensory Organs of the Northern Walnut Husk Fly,Rhagoletis suavis, Including a Putative Canonical Odorant Receptor. Journal of Insect Science, 2010, 10, 1-11.	1.5	13
87	Taste: Independent origins of chemoreception coding systems?. Current Biology, 2001, 11, R560-R562.	3.9	12
88	Insect Genomes. American Entomologist, 2005, 51, 166-173.	0.2	12
89	The mariner Transposons of Animals. , 2002, , 173-185.		11
90	Manual superscaffolding of honey bee (Apis mellifera) chromosomes 12?16: implications for the draft genome assembly version 4, gene annotation, and chromosome structure. Insect Molecular Biology, 2007, 16, 401-410.	2.0	10

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91	Noncanonical GA and GG 5â€² Intron Donor Splice Sites Are Common in the Copepod Eurytemora affinis. G3: Genes, Genomes, Genetics, 2017, 7, 3967-3969.	1.8	8
92	Comment on Que et al. 2016. Journal of Medical Entomology, 2017, 54, 1-2.	1.8	5
93	Genome size evolution in the beetle genus <i>Diabrotica</i>. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	5
94	The choanoflagellate Monosiga brevicollis karyotype revealed by the genome sequence: Telomere-linked helicase genes resemble those of some fungi. Chromosome Research, 2009, 17, 873-882.	2.2	4
95	Simple Telomeres in a Simple Animal: Absence of Subtelomeric Repeat Regions in the Placozoan<i>Trichoplax adhaerens</i>. Genetics, 2009, 181, 323-325.	2.9	3
96	Positive selection in extra cellular domains in the diversification of Strigamia maritima chemoreceptors. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	3
97	The Genome of the Blind Soil-Dwelling and Ancestrally Wingless Dipluran Campodea augens: A Key Reference Hexapod for Studying the Emergence of Insect Innovations. Genome Biology and Evolution, 2020, 12, 3534-3549.	2.5	3