

# John K Colbourne

## List of Publications by Year in descending order

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115  
papers

9,959  
citations

50566

48  
h-index

43601

95  
g-index

126  
all docs

126  
docs citations

126  
times ranked

12124  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Ecoresponsive Genome of <i>Daphnia pulex</i> . Science, 2011, 331, 555-561.	6.0	1,086
2	Functional and Evolutionary Insights from the Genomes of Three Parasitoid <i>Nasonia</i> Species. Science, 2010, 327, 343-348.	6.0	808
3	The genome of the green anole lizard and a comparative analysis with birds and mammals. Nature, 2011, 477, 587-591.	13.7	575
4	Sequencing and de novo analysis of a coral larval transcriptome using 454 GSFlx. BMC Genomics, 2009, 10, 219.	1.2	405
5	Genomes of the rice pest brown planthopper and its endosymbionts reveal complex complementary contributions for host adaptation. Genome Biology, 2014, 15, 521.	3.8	404
6	Rapid, local adaptation of zooplankton behavior to changes in predation pressure in the absence of neutral genetic changes. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6256-6260.	3.3	373
7	The genomic landscape of rapid repeated evolutionary adaptation to toxic pollution in wild fish. Science, 2016, 354, 1305-1308.	6.0	348
8	Gut Pathology and Responses to the Microsporidium <i>Nosema ceranae</i> in the Honey Bee <i>Apis mellifera</i> . PLoS ONE, 2012, 7, e37017.	1.1	204
9	THE QUANTITATIVE AND MOLECULAR GENETIC ARCHITECTURE OF A SUBDIVIDED SPECIES. Evolution; International Journal of Organic Evolution, 1999, 53, 100-110.	1.1	192
10	The systematics of North American <i>Daphnia</i> (Crustacea: Anomopoda): a molecular phylogenetic approach. Philosophical Transactions of the Royal Society B: Biological Sciences, 1996, 351, 349-360.	1.8	185
11	A millennial-scale chronicle of evolutionary responses to cultural eutrophication in <i>Daphnia</i> . Ecology Letters, 2014, 17, 360-368.	3.0	178
12	Function and Evolution of DNA Methylation in <i>Nasonia vitripennis</i> . PLoS Genetics, 2013, 9, e1003872.	1.5	162
13	The Role of Omics in the Application of Adverse Outcome Pathways for Chemical Risk Assessment. Toxicological Sciences, 2017, 158, 252-262.	1.4	161
14	Conservation, loss, and redeployment of Wnt ligands in protostomes: implications for understanding the evolution of segment formation. BMC Evolutionary Biology, 2010, 10, 374.	3.2	153
15	The scale of divergence: A phylogenetic appraisal of intercontinental allopatric speciation in a passively dispersed freshwater zooplankton genus. Molecular Phylogenetics and Evolution, 2009, 50, 423-436.	1.2	146
16	Phylogenetics and Evolution of the <i>Daphnia longispina</i> Group (Crustacea) Based on 12S rDNA Sequence and Allozyme Variation. Molecular Phylogenetics and Evolution, 1996, 5, 495-510.	1.2	144
17	Multiple origins of pyrethroid insecticide resistance across the species complex of a nontarget aquatic crustacean, <i>Hyalella azteca</i> . Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16532-16537.	3.3	131
18	Long-term genetic shifts in a microcrustacean egg bank associated with anthropogenic changes in the Lake Constance ecosystem. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 1613-1618.	1.2	129

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19	wFleaBase: the Daphnia genome database. BMC Bioinformatics, 2005, 6, 45.	1.2	125
20	The evolutionary time machine: using dormant propagules to forecast how populations can adapt to changing environments. Trends in Ecology and Evolution, 2013, 28, 274-282.	4.2	123
21	Phylogenetics and evolution of a circumarctic species complex (Cladocera: Daphnia pulex). Biological Journal of the Linnean Society, 1998, 65, 347-365.	0.7	111
22	Gene response profiles for Daphnia pulex exposed to the environmental stressor cadmium reveals novel crustacean metallothioneins. BMC Genomics, 2007, 8, 477.	1.2	108
23	AphidBase: a centralized bioinformatic resource for annotation of the pea aphid genome. Insect Molecular Biology, 2010, 19, 5-12.	1.0	108
24	The Quantitative and Molecular Genetic Architecture of a Subdivided Species. Evolution; International Journal of Organic Evolution, 1999, 53, 100.	1.1	102
25	EVOLUTIONARY HISTORY OF CONTAGIOUS ASEXUALITY IN DAPHNIA PULEX. Evolution; International Journal of Organic Evolution, 2005, 59, 800-813.	1.1	102
26	ACCELERATED MOLECULAR EVOLUTION IN HALOPHILIC CRUSTACEANS. Evolution; International Journal of Organic Evolution, 2002, 56, 909-926.	1.1	101
27	A mutation in the receptor Methoprene-tolerant alters juvenile hormone response in insects and crustaceans. Nature Communications, 2013, 4, 1856.	5.8	100
28	Ecological genomics in Daphnia: stress responses and environmental sex determination. Heredity, 2008, 100, 184-190.	1.2	95
29	Characteristics of the genome of <i>Arsenophonus nasoniae</i> , sonâ€killer bacterium of the wasp <i>Nasonia</i> . Insect Molecular Biology, 2010, 19, 75-89.	1.0	94
30	The components of the Daphnia pulex immune system as revealed by complete genome sequencing. BMC Genomics, 2009, 10, 175.	1.2	93
31	Daphnia as an emerging model for toxicological genomics. Advances in Experimental Biology, 2008, 2, 165-328.	0.1	91
32	Daphnia magna transcriptome by RNA-Seq across 12 environmental stressors. Scientific Data, 2016, 3, 160030.	2.4	89
33	The evolution of salinity tolerance in <i>Daphnia</i> : a functional genomics approach. Ecology Letters, 2012, 15, 794-802.	3.0	88
34	Evolution of Enterohemorrhagic <i>Escherichia coli</i> Hemolysin Plasmids and the Locus for Enterocyte Effacement in Shiga Toxin-Producing <i>E. coli</i> . Infection and Immunity, 1998, 66, 2553-2561.	1.0	88
35	The Toxicogenome of <i>Hyalella azteca</i> : A Model for Sediment Ecotoxicology and Evolutionary Toxicology. Environmental Science & Technology, 2018, 52, 6009-6022.	4.6	79
36	A microsatellite-based genetic linkage map of the waterflea, Daphnia pulex: On the prospect of crustacean genomics. Genomics, 2006, 88, 415-430.	1.3	76

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37	Functional genomics of acclimation and adaptation in response to thermal stress in <i>Daphnia</i> . <i>BMC Genomics</i> , 2014, 15, 859.	1.2	68
38	HOLARCTIC PHYLOGEOGRAPHY OF AN ASEYUAL SPECIES COMPLEX I. MITOCHONDRIAL DNA VARIATION IN ARCTIC <i>DAPHNIA</i> . <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 777-792.	1.1	66
39	Targeted bisulfite sequencing by solution hybrid selection and massively parallel sequencing. <i>Nucleic Acids Research</i> , 2011, 39, e127-e127.	6.5	61
40	DNA fingerprinting of bluegill sunfish ( <i>Lepomis macrochirus</i> ) using (GT) <sub>n</sub> microsatellites and its potential for assessment of mating success. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 1996, 53, 342-349.	0.7	58
41	Five hundred and twenty-eight microsatellite markers for ecological genomic investigations using <i>Daphnia</i> . <i>Molecular Ecology Notes</i> , 2004, 4, 485-490.	1.7	58
42	Recent advances in crustacean genomics. <i>Integrative and Comparative Biology</i> , 2008, 48, 852-868.	0.9	54
43	Molecular cloning of doublesex genes of four cladocera (water flea) species. <i>BMC Genomics</i> , 2013, 14, 239.	1.2	53
44	The Unusually Long Small-Subunit Ribosomal RNA of the Crustacean, <i>Daphnia pulex</i> : Sequence and Predicted Secondary Structure. <i>Journal of Molecular Evolution</i> , 1998, 46, 307-313.	0.8	52
45	Predator-induced defences in <i>Daphnia pulex</i> : Selection and evaluation of internal reference genes for gene expression studies with real-time PCR. <i>BMC Molecular Biology</i> , 2010, 11, 50.	3.0	52
46	Identification of Pathways, Gene Networks, and Paralogous Gene Families in <i>Daphnia pulex</i> Responding to Exposure to the Toxic Cyanobacterium <i>Microcystis aeruginosa</i> . <i>Environmental Science &amp; Technology</i> , 2012, 46, 8448-8457.	4.6	52
47	Testosterone Affects Neural Gene Expression Differently in Male and Female Juncos: A Role for Hormones in Mediating Sexual Dimorphism and Conflict. <i>PLoS ONE</i> , 2013, 8, e61784.	1.1	52
48	Profiling sex-biased gene expression during parthenogenetic reproduction in <i>Daphnia pulex</i> . <i>BMC Genomics</i> , 2007, 8, 464.	1.2	51
49	How do consumers deal with stoichiometric constraints? Lessons from functional genomics using <i>Daphnia pulex</i> . <i>Molecular Ecology</i> , 2011, 20, 2341-2352.	2.0	51
50	Genome-Wide Transcription Profiles Reveal Genotype-Dependent Responses of Biological Pathways and Gene-Families in <i>Daphnia</i> Exposed to Single and Mixed Stressors. <i>Environmental Science &amp; Technology</i> , 2014, 48, 3513-3522.	4.6	51
51	Reconstructing the history of intercontinental dispersal in <i>Daphnia lumholtzi</i> by use of genetic markers. <i>Limnology and Oceanography</i> , 2000, 45, 1414-1419.	1.6	49
52	An SNP-based second-generation genetic map of <i>Daphnia magna</i> and its application to QTL analysis of phenotypic traits. <i>BMC Genomics</i> , 2014, 15, 1033.	1.2	49
53	Natural Selection Canalizes Expression Variation of Environmentally Induced Plasticity-Enabling Genes. <i>Molecular Biology and Evolution</i> , 2014, 31, 3002-3015.	3.5	48
54	Pattern of DNA Methylation in <i>Daphnia</i> : Evolutionary Perspective. <i>Genome Biology and Evolution</i> , 2018, 10, 1988-2007.	1.1	47

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55	The draft genome sequence of <i>Arsenophonus nasoniae</i> , sonâ€killer bacterium of <i>Nasonia vitripennis</i> , reveals genes associated with virulence and symbiosis. <i>Insect Molecular Biology</i> , 2010, 19, 59-73.	1.0	46
56	Progress towards an OECD reporting framework for transcriptomics and metabolomics in regulatory toxicology. <i>Regulatory Toxicology and Pharmacology</i> , 2021, 125, 105020.	1.3	46
57	Molecular Evolution of Daphnia Immunity Genes: Polymorphism in a Gram-Negative Binding Protein Gene and an ?-2-Macroglobulin Gene. <i>Journal of Molecular Evolution</i> , 2004, 59, 498-506.	0.8	45
58	The Landscape of Extreme Genomic Variation in the Highly Adaptable Atlantic Killifish. <i>Genome Biology and Evolution</i> , 2017, 9, 659-676.	1.1	43
59	Evolutionary history of contagious asexuality in <i>Daphnia pulex</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2005, 59, 800-13.	1.1	43
60	Why so many unknown genes? Partitioning orphans from a representative transcriptome of the lone star tick <i>Amblyomma americanum</i> . <i>BMC Genomics</i> , 2013, 14, 135.	1.2	42
61	The systematics of Australian <i>Daphnia</i> and <i>Daphniopsis</i> (Crustacea: Cladocera): a shared phylogenetic history transformed by habitat-specific rates of evolution. <i>Biological Journal of the Linnean Society</i> , 2006, 89, 469-488.	0.7	41
62	Genomics of Environmentally Induced Phenotypes in 2 Extremely Plastic Arthropods. <i>Journal of Heredity</i> , 2011, 102, 512-525.	1.0	41
63	Differential transcriptomic responses of ancient and modern <i>Daphnia</i> genotypes to phosphorus supply. <i>Molecular Ecology</i> , 2015, 24, 123-135.	2.0	38
64	Early transcriptional response pathways in <i>Daphnia magna</i> are coordinated in networks of crustacean-specific genes. <i>Molecular Ecology</i> , 2018, 27, 886-897.	2.0	38
65	Genomic data integration for ecological and evolutionary traits in non-model organisms. <i>BMC Genomics</i> , 2014, 15, 490.	1.2	36
66	Holarctic Phylogeography of an Asexual Species Complex I. Mitochondrial DNA Variation in Arctic <i>Daphnia</i> . <i>Evolution; International Journal of Organic Evolution</i> , 1999, 53, 777.	1.1	35
67	Functional characterization of four metallothionein genes in <i>Daphnia pulex</i> exposed to environmental stressors. <i>Aquatic Toxicology</i> , 2012, 110-111, 54-65.	1.9	35
68	De novo transcriptome sequencing in a songbird, the dark-eyed junco ( <i>Junco hyemalis</i> ): genomic tools for an ecological model system. <i>BMC Genomics</i> , 2012, 13, 305.	1.2	35
69	Transcriptome assembly and microarray construction for <i>Enchytraeus crypticus</i> , a model oligochaete to assess stress response mechanisms derived from soil conditions. <i>BMC Genomics</i> , 2014, 15, 302.	1.2	35
70	OGS2: genome re-annotation of the jewel wasp <i>Nasonia vitripennis</i> . <i>BMC Genomics</i> , 2016, 17, 678.	1.2	35
71	Reconstruction of Centuries-old <i>Daphnia</i> Communities in a Lake Recovering from Acidification and Metal Contamination. <i>Ambio</i> , 2003, 32, 214-218.	2.8	34
72	Novel Cadmium Responsive MicroRNAs in <i>Daphnia pulex</i> . <i>Environmental Science &amp; Technology</i> , 2015, 49, 14605-14613.	4.6	34

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73	Fine-Scale Mapping of the <i>Nasonia</i> Genome to Chromosomes Using a High-Density Genotyping Microarray. <i>G3: Genes, Genomes, Genetics</i> , 2013, 3, 205-215.	0.8	33
74	Mitotic activity patterns and cytoskeletal changes throughout the progression of diapause developmental program in <i>Daphnia</i> . <i>BMC Cell Biology</i> , 2018, 19, 30.	3.0	33
75	Vision of a near future: Bridging the human health“environment divide. Toward an integrated strategy to understand mechanisms across species for chemical safety assessment. <i>Toxicology in Vitro</i> , 2020, 62, 104692.	1.1	33
76	Multigenerational Exposures of <i>Daphnia Magna</i> to Pristine and Aged Silver Nanoparticles: Epigenetic Changes and Phenotypical Ageing Related Effects. <i>Small</i> , 2020, 16, e2000301.	5.2	31
77	Potential for sexual conflict assessed via testosterone-mediated transcriptional changes in liver and muscle of a songbird. <i>Journal of Experimental Biology</i> , 2014, 217, 507-17.	0.8	28
78	Extensive standing genetic variation from a small number of founders enables rapid adaptation in <i>Daphnia</i> . <i>Nature Communications</i> , 2021, 12, 4306.	5.8	27
79	Transcription patterns of genes encoding four metallothionein homologs in <i>Daphnia pulex</i> exposed to copper and cadmium are time- and homolog-dependent. <i>Aquatic Toxicology</i> , 2013, 142-143, 422-430.	1.9	26
80	Sampling <i>Daphnia</i> 's expressed genes: preservation, expansion and invention of crustacean genes with reference to insect genomes. <i>BMC Genomics</i> , 2007, 8, 217.	1.2	25
81	A comprehensive epigenomic analysis of phenotypically distinguishable, genetically identical female and male <i>Daphnia pulex</i> . <i>BMC Genomics</i> , 2020, 21, 17.	1.2	25
82	Functional genomics of intraspecific variation in carbon and phosphorus kinetics in <i>Daphnia</i> . <i>Journal of Experimental Zoology</i> , 2014, 321, 387-398.	1.2	24
83	A machine-learning approach to combined evidence validation of genome assemblies. <i>Bioinformatics</i> , 2008, 24, 744-750.	1.8	23
84	Ionotropic Glutamate Receptors Mediate Inducible Defense in the Water Flea <i>Daphnia pulex</i> . <i>PLoS ONE</i> , 2015, 10, e0121324.	1.1	23
85	Evolutionary transition from blood feeding to obligate nonbiting in a mosquito. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1009-1014.	3.3	23
86	Transgenerational response to early spring warming in <i>Daphnia</i> . <i>Scientific Reports</i> , 2019, 9, 4449.	1.6	21
87	The transcriptomic and proteomic responses of <i>Daphnia pulex</i> to changes in temperature and food supply comprise environment-specific and clone-specific elements. <i>BMC Genomics</i> , 2018, 19, 376.	1.2	19
88	Mixtures of Aluminum and Indium Induce More than Additive Phenotypic and Toxicogenomic Responses in <i>Daphnia magna</i> . <i>Environmental Science &amp; Technology</i> , 2019, 53, 1639-1649.	4.6	19
89	ESTPiper “a web-based analysis pipeline for expressed sequence tags. <i>BMC Genomics</i> , 2009, 10, 174.	1.2	17
90	Synergistic interactions of biotic and abiotic environmental stressors on gene expression. <i>Genome</i> , 2015, 58, 99-109.	0.9	17

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91	Thermal variation and factors influencing vertical migration behavior in <i>Daphnia</i> populations. <i>Journal of Thermal Biology</i> , 2016, 60, 70-78.	1.1	17
92	Male meiosis in Crustacea: synapsis, recombination, epigenetics and fertility in <i>Daphnia magna</i> . <i>Chromosoma</i> , 2016, 125, 769-787.	1.0	17
93	Dynamics of Cadmium Acclimation in <i>Daphnia pulex</i> : Linking Fitness Costs, Cross-Tolerance, and Hyper-Induction of Metallothionein. <i>Environmental Science &amp; Technology</i> , 2019, 53, 14670-14678.	4.6	16
94	EVOLUTIONARY HISTORY OF CONTAGIOUS ASEXUALITY IN <i>DAPHNIA PULEX</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2005, 59, 800.	1.1	15
95	Identification of maternally-loaded RNA transcripts in unfertilized eggs of <i>Tribolium castaneum</i> . <i>BMC Genomics</i> , 2012, 13, 671.	1.2	15
96	Evolutionary history of alpine and subalpine <i>Daphnia</i> in western North America. <i>Freshwater Biology</i> , 2013, 58, 1512-1522.	1.2	13
97	Conserved Transcription Factors Steer Growth-Related Genomic Programs in <i>Daphnia</i> . <i>Genome Biology and Evolution</i> , 2017, 9, 1821-1842.	1.1	13
98	Evolutionary divergence of core and post-translational circadian clock genes in the pitcher-plant mosquito, <i>Wyeomyia smithii</i> . <i>BMC Genomics</i> , 2015, 16, 754.	1.2	12
99	How omics technologies can enhance chemical safety regulation: perspectives from academia, government, and industry. <i>Environmental Toxicology and Chemistry</i> , 2018, 37, 1252-1259.	2.2	12
100	Scan, extract, wrap, compute—a 3D method to analyse morphological shape differences. <i>PeerJ</i> , 2018, 6, e4861.	0.9	12
101	Sex biased expression and co-expression networks in development, using the hymenopteran <i>Nasonia vitripennis</i> . <i>PLoS Genetics</i> , 2020, 16, e1008518.	1.5	11
102	Dual Labeled Expression Microarray Protocol for High-Throughput Genomic Investigations. <i>CGB Technical Report</i> , 2011, 2011, .	1.5	8
103	A Global Grid for Analysis of Arthropod Evolution. , 0, , .		7
104	Will genetic adaptation of natural populations to chemical pollution result in lower or higher tolerance to future climate change?. <i>Integrated Environmental Assessment and Management</i> , 2011, 7, 141-143.	1.6	7
105	Arsenic Reduces Gene Expression Response to Changing Salinity in Killifish. <i>Environmental Science &amp; Technology</i> , 2018, 52, 8811-8821.	4.6	5
106	Selection of Surrogate Animal Species for Comparative Toxicogenomics. , 2006, , 33-75.		5
107	Improved Algal Toxicity Test System for Robust Omics-Driven Mode-of-Action Discovery in <i>Chlamydomonas reinhardtii</i> . <i>Metabolites</i> , 2019, 9, 94.	1.3	4
108	Centennial clonal stability of asexual <i>Daphnia</i> in Greenland lakes despite climate variability. <i>Ecology and Evolution</i> , 2020, 10, 14178-14188.	0.8	4

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109	Invertebrate Model Species in AOP Development. , 2018, , 75-106.		3
110	Review of and Recommendations for Monitoring Contaminants and their Effects in the San Francisco Bayâ”Delta. San Francisco Estuary and Watershed Science, 2019, 17, .	0.2	3
111	Multigenerational Exposure to Nanoâ€TiO<sub>2</sub> Induces Ageing as a Stress Response Mitigated by Environmental Interactions. Advanced NanoBiomed Research, 2021, 1, 2000083.	1.7	3
112	Dual Labeled Expression-Tiling Microarray Protocol for Empirical Annotation of Genome Sequences. CGB Technical Report, 2011, 2011, .	1.5	3
113	Refining the evolutionary time machine: An assessment of whole genome amplification using single historical <i>Daphnia</i> eggs. Molecular Ecology Resources, 2022, 22, 946-961.	2.2	3
114	The Genomics of Cladoceran Physiology. , 2014, , 235-258.		2
115	Spatio-temporal processes drive fine-scale genetic structure in an otherwise panmictic seabird population. Scientific Reports, 2020, 10, 20725.	1.6	2