Kevin J Peterson

List of Publications by Year
in descending order

71 papers	11,465 citations	38742 50 h-index	88630 70 g-index
76 all docs	76 docs citations	76 times ranked	9805 citing authors

#	Article	IF	Citations
1	The Cambrian Conundrum: Early Divergence and Later Ecological Success in the Early History of Animals. Science, 2011, 334, 1091-1097.	12.6	1,055
2	The dynamic genome of Hydra. Nature, 2010, 464, 592-596.	27.8	743
3	Episodic radiations in the fly tree of life. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5690-5695.	7.1	739
4	The deep evolution of metazoan microRNAs. Evolution & Development, 2009, 11, 50-68.	2.0	491
5	Animal phylogeny and the ancestry of bilaterians: inferences from morphology and 18S rDNA gene sequences. Evolution & Development, 2001, 3, 170-205.	2.0	490
6	A Uniform System for the Annotation of Vertebrate microRNA Genes and the Evolution of the Human microRNAome. Annual Review of Genetics, 2015, 49, 213-242.	7.6	467
7	Estimating metazoan divergence times with a molecular clock. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6536-6541.	7.1	403
8	Acoelomorph flatworms are deuterostomes related to Xenoturbella. Nature, 2011, 470, 255-258.	27.8	400
9	MicroRNAs and the advent of vertebrate morphological complexity. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2946-2950.	7.1	373
10	Origin of the Eumetazoa: Testing ecological predictions of molecular clocks against the Proterozoic fossil record. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9547-9552.	7.1	327
11	The Ediacaran emergence of bilaterians: congruence between the genetic and the geological fossil records. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1435-1443.	4.0	286
12	The phylogenetic distribution of metazoan microRNAs: insights into evolutionary complexity and constraint. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2006, 306B, 575-588.	1.3	272
13	microRNAs reveal the interrelationships of hagfish, lampreys, and gnathostomes and the nature of the ancestral vertebrate. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19379-19383.	7.1	257
14	A congruent solution to arthropod phylogeny: phylogenomics, microRNAs and morphology support monophyletic Mandibulata. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 298-306.	2.6	227
15	MicroRNAs and metazoan macroevolution: insights into canalization, complexity, and the Cambrian explosion. BioEssays, 2009, 31, 736-747.	2.5	225
16	The end of the Ediacara biota: Extinction, biotic replacement, or Cheshire Cat?. Gondwana Research, 2013, 23, 558-573.	6.0	220
17	MicroRNAs and phylogenomics resolve the relationships of Tardigrada and suggest that velvet worms are the sister group of Arthropoda. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15920-15924.	7.1	212
18	The Interrelationships of Placental Mammals and the Limits of Phylogenetic Inference. Genome Biology and Evolution, 2016, 8, 330-344.	2.5	195

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19	MirGeneDB 2.0: the metazoan microRNA complement. Nucleic Acids Research, 2020, 48, D132-D141.	14.5	194
20	Dating the Time of Origin of Major Clades: Molecular Clocks and the Fossil Record. Annual Review of Earth and Planetary Sciences, 2002, 30, 65-88.	11.0	170
21	RNAcentral 2021: secondary structure integration, improved sequence search and new member databases. Nucleic Acids Research, 2021, 49, D212-D220.	14.5	160
22	Tempo and mode of early animal evolution: inferences from rocks, Hox, and molecular clocks. Paleobiology, 2005, 31, 36-55.	2.0	158
23	Phylogenetic-Signal Dissection of Nuclear Housekeeping Genes Supports the Paraphyly of Sponges and the Monophyly of Eumetazoa. Molecular Biology and Evolution, 2009, 26, 2261-2274.	8.9	158
24	Set-aside cells in maximal indirect development: Evolutionary and developmental significance. BioEssays, 1997, 19, 623-631.	2.5	152
25	Unusual gene order and organization of the sea urchin hox cluster. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2006, 306B, 45-58.	1.3	145
26	The Antagonistic Gene Paralogs Upf3a and Upf3b Govern Nonsense-Mediated RNA Decay. Cell, 2016, 165, 382-395.	28.9	132
27	Bilaterian Origins: Significance of New Experimental Observations. Developmental Biology, 2000, 219, 1-17.	2.0	122
28	miRNAs: Small Genes with Big Potential in Metazoan Phylogenetics. Molecular Biology and Evolution, 2013, 30, 2369-2382.	8.9	118
29	Paleogenomics of Echinoderms. Science, 2006, 314, 956-960.	12.6	117
30	A Fungal Analog for Newfoundland Ediacaran Fossils?. Integrative and Comparative Biology, 2003, 43, 127-136.	2.0	113
31	microRNA complements in deuterostomes: origin and evolution of microRNAs. Evolution & Development, 2011, 13, 15-27.	2.0	113
32	The A/P axis in echinoderm ontogeny and evolution: evidence from fossils and molecules. Evolution & Development, 2000, 2, 93-101.	2.0	109
33	Toward consilience in reptile phylogeny: miRNAs support an archosaur, not lepidosaur, affinity for turtles. Evolution & Development, 2014, 16, 189-196.	2.0	106
34	Macroevolutionary interplay between planktic larvae and benthic predators. Geology, 2005, 33, 929.	4.4	105
35	Isolation of Hox and Parahox genes in the hemichordate Ptychodera flava and the evolution of deuterostome Hox genes. Molecular Phylogenetics and Evolution, 2004, 31, 1208-1215.	2.7	103
36	Phylogenetic distribution of microRNAs supports the basal position of acoel flatworms and the polyphyly of Platyhelminthes. Evolution & Development, 2007, 9, 409-415.	2.0	98

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37	Do miRNAs have a deep evolutionary history?. BioEssays, 2012, 34, 857-866.	2.5	96
38	MicroRNAs support a turtle + lizard clade. Biology Letters, 2012, 8, 104-107.	2.3	96
39	A molecular palaeobiological hypothesis for the origin of aplacophoran molluscs and their derivation from chiton-like ancestors. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1259-1268.	2.6	86
40	MOLECULAR PALAEOBIOLOGY. Palaeontology, 2007, 50, 775-809.	2.2	83
41	Molecular paleoecology: using gene regulatory analysis to address the origins of complex life cycles in the late Precambrian. Evolution & Development, 2007, 9, 10-24.	2.0	80
42	Expression Pattern of Brachyury and Not in the Sea Urchin: Comparative Implications for the Origins of Mesoderm in the Basal Deuterostomes. Developmental Biology, 1999, 207, 419-431.	2.0	79
43	Evolution of metazoan morphological disparity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8909-E8918.	7.1	78
44	Expression of an NK2 homeodomain gene in the apical ectoderm defines a new territory in the early sea urchin embryo. Developmental Biology, 2004, 269, 152-164.	2.0	71
45	Resolving phylogenetic signal from noise when divergence is rapid: A new look at the old problem of echinoderm class relationships. Molecular Phylogenetics and Evolution, 2012, 62, 27-34.	2.7	70
46	Spdeadringer, a sea urchin embryo gene required separately in skeletogenic and oral ectoderm gene regulatory networks. Developmental Biology, 2003, 261, 55-81.	2.0	67
47	A phylogenetic test of the calcichordate scenario. Lethaia, 1995, 28, 25-38.	1.4	65
48	Genetic organization and embryonic expression of the ParaHox genes in the sea urchin S. purpuratus: Insights into the relationship between clustering and colinearity. Developmental Biology, 2006, 300, 63-73.	2.0	64
49	MirGeneDB 2.1: toward a complete sampling of all major animal phyla. Nucleic Acids Research, 2022, 50, D204-D210.	14.5	63
50	Molecular paleobiological insights into the origin of the Brachiopoda. Evolution & Development, 2011, 13, 290-303.	2.0	55
51	Testing putative hemichordate homologues of the chordate dorsal nervous system and endostyle: expression of NK2.1 (TTF-1) in the acorn worm Ptychodera flava (Hemichordata, Ptychoderidae). Evolution & Development, 2002, 4, 405-417.	2.0	54
52	MicroRNAs resolve an apparent conflict between annelid systematics and their fossil record. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 4315-4322.	2.6	54
53	Reconstruction of Family-Level Phylogenetic Relationships within Demospongiae (Porifera) Using Nuclear Encoded Housekeeping Genes. PLoS ONE, 2013, 8, e50437.	2.5	47
54	Unicellular Origin of the Animal MicroRNA Machinery. Current Biology, 2018, 28, 3288-3295.e5.	3.9	42

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55	Well-Annotated microRNAomes Do Not Evidence Pervasive miRNA Loss. Genome Biology and Evolution, 2018, 10, 1457-1470.	2.5	41
56	Spatial expression of a forkhead homologue in the sea urchin embryo. Mechanisms of Development, 1996, 60, 163-173.	1.7	37
57	Developmental Gene Regulation and the Evolution of Large Animal Body Plans. American Zoologist, 1998, 38, 609-620.	0.7	33
58	Big Strides in Cellular MicroRNA Expression. Trends in Genetics, 2018, 34, 165-167.	6.7	32
59	Poriferan ANTP genes: primitively simple or secondarily reduced?. Evolution & Development, 2007, 9, 405-408.	2.0	31
60	Large scale changes in the transcriptome of Eisenia fetida during regeneration. PLoS ONE, 2018, 13, e0204234.	2.5	31
61	The phylogeny, evolutionary developmental biology, and paleobiology of the Deuterostomia: 25Âyears of new techniques, new discoveries, and new ideas. Organisms Diversity and Evolution, 2016, 16, 401-418.	1.6	30
62	MicroRNAs and metazoan phylogeny: big trees from little genes. , 2009, , 157-170.		29
63	Developmental expression of COE across the Metazoa supports a conserved role in neuronal cell-type specification and mesodermal development. Development Genes and Evolution, 2010, 220, 221-234.	0.9	28
64	A micro <scp>RNA</scp> cluster in the Fragileâ€X region expressed during spermatogenesis targets <scp>FMR</scp> 1. EMBO Reports, 2019, 20, .	4.5	25
65	MicroRNAs support the monophyly of enteropneust hemichordates. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2013, 320, 368-374.	1.3	24
66	Quo vadis microRNAs?. Trends in Genetics, 2020, 36, 461-463.	6.7	24
67	CD2AP Regulates SUMOylation of CIN85 in Podocytes. Molecular and Cellular Biology, 2012, 32, 1068-1079.	2.3	18
68	The Identification of MicroRNAs in Calcisponges: Independent Evolution of MicroRNAs in Basal Metazoans. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2013, 320, 84-93.	1.3	18
69	MicroRNAs as Indicators into the Causes and Consequences of Whole-Genome Duplication Events. Molecular Biology and Evolution, 2022, 39, .	8.9	17
70	Response to: Xâ€linked miRâ€506 family miRNAs promote FMRP expression in mouse spermatogonia. EMBO Reports, 2020, 21, e49354.	4.5	1
71	Molecular Paleobiology and the Cambrian Explosion: 21stCentury Answers to 19thCentury Problems. The Paleontological Society Papers, 2008, 14, 105-116.	0.6	0