

# Philip Conrad James Donoghue

## List of Publications by Year in descending order

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Version: 2024-02-01

217  
papers

16,690  
citations

16451

64  
h-index

20358

116  
g-index

228  
all docs

228  
docs citations

228  
times ranked

12951  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Ediacaran origin of Ecdysozoa: integrating fossil and phylogenomic data. <i>Journal of the Geological Society</i> , 2022, 179, .	2.1	21
2	Integrated phylogenomics and fossil data illuminate the evolution of beetles. <i>Royal Society Open Science</i> , 2022, 9, 211771.	2.4	117
3	Dietary inference from dental topographic analysis of feeding tools in diverse animals. <i>Methods in Ecology and Evolution</i> , 2022, 13, 1464-1474.	5.2	1
4	A species-level timeline of mammal evolution integrating phylogenomic data. <i>Nature</i> , 2022, 602, 263-267.	27.8	84
5	Eukaryogenesis and oxygen in Earth history. <i>Nature Ecology and Evolution</i> , 2022, 6, 520-532.	7.8	48
6	Increasing morphological disparity and decreasing optimality for jaw speed and strength during the radiation of jawed vertebrates. <i>Science Advances</i> , 2022, 8, eabl3644.	10.3	16
7	Functional assessment of morphological homoplasy in stem-gnathostomes. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20202719.	2.6	8
8	Coevolution of enamel, ganoin, enameloid, and their matrix SCPP genes in osteichthyans. <i>iScience</i> , 2021, 24, 102023.	4.1	27
9	Fossil data support a pre-Cretaceous origin of flowering plants. <i>Nature Ecology and Evolution</i> , 2021, 5, 449-457.	7.8	59
10	Experimental taphonomy of organelles and the fossil record of early eukaryote evolution. <i>Science Advances</i> , 2021, 7, .	10.3	21
11	Exceptionally preserved early Cambrian bilaterian developmental stages from Mongolia. <i>Nature Communications</i> , 2021, 12, 1037.	12.8	10
12	Acanthodian dental development and the origin of gnathostome dentitions. <i>Nature Ecology and Evolution</i> , 2021, 5, 919-926.	7.8	14
13	Empirical distributions of homoplasy in morphological data. <i>Palaeontology</i> , 2021, 64, 505-518.	2.2	9
14	Diversification dynamics of total-, stem-, and crown-groups are compatible with molecular clock estimates of divergence times. <i>Science Advances</i> , 2021, 7, .	10.3	7
15	The developmental biology of <i>Charnia</i> and the eumetazoan affinity of the Ediacaran rangeomorphs. <i>Science Advances</i> , 2021, 7, .	10.3	36
16	Fossilization processes have little impact on tip-calibrated divergence time analyses. <i>Palaeontology</i> , 2021, 64, 687-697.	2.2	4
17	Phylogenetic sampling affects evolutionary patterns of morphological disparity. <i>Palaeontology</i> , 2021, 64, 765-787.	2.2	6
18	X-ray nanotomography and electron backscatter diffraction demonstrate the crystalline, heterogeneous and impermeable nature of conodont white matter. <i>Royal Society Open Science</i> , 2021, 8, 202013.	2.4	5

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19	The evolution of insect biodiversity. <i>Current Biology</i> , 2021, 31, R1299-R1311.	3.9	39
20	The evolutionary emergence of land plants. <i>Current Biology</i> , 2021, 31, R1281-R1298.	3.9	67
21	Ultrastructure and in-situ chemical characterization of intracellular granules of embryo-like fossils from the early Ediacaran Weng'an biota. <i>Palaontologische Zeitschrift</i> , 2021, 95, 611-621.	1.6	3
22	The Effect of Fossil Sampling on the Estimation of Divergence Times with the Fossilized Birth-Death Process. <i>Systematic Biology</i> , 2020, 69, 124-138.	5.6	30
23	The impact of fossil stratigraphic ranges on tip-calibration, and the accuracy and precision of divergence time estimates. <i>Palaeontology</i> , 2020, 63, 67-83.	2.2	25
24	Computational Fluid Dynamics Suggests Ecological Diversification among Stem-Gnathostomes. <i>Current Biology</i> , 2020, 30, 4808-4813.e3.	3.9	13
25	Performance of A Priori and A Posteriori Calibration Strategies in Divergence Time Estimation. <i>Genome Biology and Evolution</i> , 2020, 12, 1087-1098.	2.5	9
26	Mitochondrial genomes illuminate the evolutionary history of the Western honey bee ( <i>Apis mellifera</i> ). <i>Scientific Reports</i> , 2020, 10, 14515.	3.3	32
27	Categorical versus geometric morphometric approaches to characterizing the evolution of morphological disparity in Osteostraci (Vertebrata, stem Gnathostomata). <i>Palaeontology</i> , 2020, 63, 717-732.	2.2	10
28	Fossil cells. <i>Current Biology</i> , 2020, 30, R485-R490.	3.9	11
29	Developmental biology of <i>Helicoforamina</i> reveals holozoan affinity, cryptic diversity, and adaptation to heterogeneous environments in the early Ediacaran Weng'an biota (Doushantuo). <i>Trends in Ecology &amp; Evolution</i> , 2020, 35, 1143-1151.	10.7	1314
30	Nucleus preservation in early Ediacaran Weng'an embryo-like fossils, experimental taphonomy of nuclei and implications for reading the eukaryote fossil record. <i>Interface Focus</i> , 2020, 10, 20200015.	3.0	15
31	The origin and rise of complex life: progress requires interdisciplinary integration and hypothesis testing. <i>Interface Focus</i> , 2020, 10, 20200024.	3.0	13
32	Data curation and modeling of compositional heterogeneity in insect phylogenomics: A case study of the phylogeny of Dytiscoidea (Coleoptera: Adephega). <i>Molecular Phylogenetics and Evolution</i> , 2020, 147, 106782.	2.7	23
33	Disparities in the analysis of morphological disparity. <i>Biology Letters</i> , 2020, 16, 20200199.	2.3	60
34	Reprint of: "Gondolelloid multielement conodont apparatus (Nicoraella) from the Middle Triassic of Yunnan Province, southwestern China". <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2020, 549, 109670.	2.3	0
35	Plant Evolution: Assembling Land Plants. <i>Current Biology</i> , 2020, 30, R81-R83.	3.9	21
36	Integrated phylogenomic and fossil evidence of stick and leaf insects (Phasmatodea) reveal a Permian-Triassic co-origination with insectivores. <i>Royal Society Open Science</i> , 2020, 7, 201689.	2.4	25

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37	<strong>Fleas are parasitic scorpionflies</strong>. Palaeoentomology, 2020, 3, 641-653.	1.0	17
38	Probabilistic methods outperform parsimony in the phylogenetic analysis of data simulated without a probabilistic model. Palaeontology, 2019, 62, 1-17.	2.2	44
39	Middle Triassic conodont apparatus architecture revealed by synchrotron X-ray microtomography. Palaeoworld, 2019, 28, 429-440.	1.1	12
40	Gondolelloid multielement conodont apparatus (Nicoraella) from the Middle Triassic of Yunnan Province, southwestern China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 522, 98-110.	2.3	18
41	Evolution: The Flowering of Land Plant Evolution. Current Biology, 2019, 29, R753-R756.	3.9	12
42	Origin of horsetails and the role of whole-genome duplication in plant macroevolution. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191662.	2.6	17
43	Cellular preservation of excysting developmental stages of new eukaryotes from the early Ediacaran Wengâ€™an Biota. Palaeoworld, 2019, 28, 461-468.	1.1	4
44	The dermal skeleton of the jawless vertebrate Tremataspis mammillata (Osteostraci). Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (stem	1.2	8
45	Apparatus architecture of the conodont Nicoraella kockeli (Gondolelloidea, Prioniodinina) constrains functional interpretations. Palaeontology, 2019, 62, 823-835.	2.2	4
46	The apparatus composition and architecture of <i>Erismodus quadridactylus</i> and the implications for element homology in prioniodinin conodonts. Papers in Palaeontology, 2019, 5, 657-677.	1.5	3
47	The circulatory system of Galeaspida (Vertebrata; stem-Gnathostomata) revealed by synchrotron X-ray tomographic microscopy. Palaeoworld, 2019, 28, 441-460.	1.1	11
48	Tubular microfossils from the Ediacaran Wengâ€™an Biota (Doushantuo Formation, South China) are not early animals. Palaeoworld, 2019, 28, 469-477.	1.1	6
49	Anatomy of the Ediacaran rangeomorph <i>Charnia masoni</i>. Papers in Palaeontology, 2019, 5, 157-176.	1.5	16
50	The Early Ediacaran Caveasphaera Foreshadows the Evolutionary Origin of Animal-like Embryology. Current Biology, 2019, 29, 4307-4314.e2.	3.9	16
51	Tooth replacement in early sarcopterygians. Royal Society Open Science, 2019, 6, 191173.	2.4	13
52	Nuclear protein phylogenies support the monophyly of the three bryophyte groups (Bryophyta) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14	7.3	84
53	The timescale of early land plant evolution. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2274-E2283.	7.1	654
54	Empirical realism of simulated data is more important than the model used to generate it: a reply to Goloboff <i>etÂal</i>.. Palaeontology, 2018, 61, 631-635.	2.2	29

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55	Experimental analysis of soft-tissue fossilization: opening the black box. <i>Palaeontology</i> , 2018, 61, 317-323.	2.2	45
56	Constraining uncertainty in the timescale of angiosperm evolution and the veracity of a Cretaceous Terrestrial Revolution. <i>New Phytologist</i> , 2018, 218, 819-834.	7.3	149
57	The Interrelationships of Land Plants and the Nature of the Ancestral Embryophyte. <i>Current Biology</i> , 2018, 28, 733-745.e2.	3.9	398
58	The Efficacy of Consensus Tree Methods for Summarizing Phylogenetic Relationships from a Posterior Sample of Trees Estimated from Morphological Data. <i>Systematic Biology</i> , 2018, 67, 354-362.	5.6	45
59	Probabilistic methods surpass parsimony when assessing clade support in phylogenetic analyses of discrete morphological data. <i>Palaeontology</i> , 2018, 61, 105-118.	2.2	61
60	Ediacaran developmental biology. <i>Biological Reviews</i> , 2018, 93, 914-932.	10.4	80
61	Evolution of jaw disparity in fishes. <i>Palaeontology</i> , 2018, 61, 847-854.	2.2	21
62	Reply to Hedges et al.: Accurate timetrees do indeed require accurate calibrations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E9512-E9513.	7.1	15
63	Unicellular Origin of the Animal MicroRNA Machinery. <i>Current Biology</i> , 2018, 28, 3288-3295.e5.	3.9	42
64	Evolution of metazoan morphological disparity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8909-E8918.	7.1	78
65	Well-Annotated microRNAomes Do Not Evidence Pervasive miRNA Loss. <i>Genome Biology and Evolution</i> , 2018, 10, 1457-1470.	2.5	41
66	The nature of aspidin and the evolutionary origin of bone. <i>Nature Ecology and Evolution</i> , 2018, 2, 1501-1506.	7.8	28
67	Whole-Genome Duplication and Plant Macroevolution. <i>Trends in Plant Science</i> , 2018, 23, 933-945.	8.8	244
68	Integrated genomic and fossil evidence illuminates life's early evolution and eukaryote origin. <i>Nature Ecology and Evolution</i> , 2018, 2, 1556-1562.	7.8	274
69	MicroRNA annotation of plant genomes ~ Do it right or not at all. <i>BioEssays</i> , 2017, 39, 1600113.	2.5	50
70	Uncertain-tree: discriminating among competing approaches to the phylogenetic analysis of phenotype data. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20162290.	2.6	114
71	Open data and digital morphology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20170194.	2.6	103
72	The Weng'an Biota (Doushantuo Formation): an Ediacaran window on soft-bodied and multicellular microorganisms. <i>Journal of the Geological Society</i> , 2017, 174, 793-802.	2.1	43

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73	The origin of animals: Can molecular clocks and the fossil record be reconciled?. <i>BioEssays</i> , 2017, 39, 1-12.	2.5	105
74	Testing the molecular clock using mechanistic models of fossil preservation and molecular evolution. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20170227.	2.6	51
75	RelTime Rates Collapse to a Strict Clock When Estimating the Timeline of Animal Diversification. <i>Genome Biology and Evolution</i> , 2017, 9, 1320-1328.	2.5	25
76	Evolution: Divining the Nature of the Ancestral Vertebrate. <i>Current Biology</i> , 2017, 27, R277-R279.	3.9	8
77	Parsimony and maximum-likelihood phylogenetic analyses of morphology do not generally integrate uncertainty in inferring evolutionary history: a response to Brown <i>et al.</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20171636.	2.6	19
78	Nuclei and nucleoli in embryo-like fossils from the Ediacaran Weng'an Biota. <i>Precambrian Research</i> , 2017, 301, 145-151.	2.7	30
79	The early Cambrian fossil embryo <i>Pseudoooides</i> is a direct-developing cnidarian, not an early ecdysozoan. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20172188.	2.6	19
80	Constraining the timing of whole genome duplication in plant evolutionary history. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20170912.	2.6	47
81	Tips and nodes are complementary not competing approaches to the calibration of molecular clocks. <i>Biology Letters</i> , 2016, 12, 20150975.	2.3	42
82	Bayesian methods outperform parsimony but at the expense of precision in the estimation of phylogeny from discrete morphological data. <i>Biology Letters</i> , 2016, 12, 20160081.	2.3	160
83	Pigmented anatomy in Carboniferous cyclostomes and the evolution of the vertebrate eye. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20161151.	2.6	44
84	Developmental biology of the early Cambrian cnidarian <i>Olivoides</i> . <i>Palaeontology</i> , 2016, 59, 387-407.	2.2	29
85	A multicellular organism with embedded cell clusters from the Ediacaran Weng'an biota (Doushantuo Formation, South China). <i>Evolution &amp; Development</i> , 2016, 18, 308-316.	2.0	5
86	Evolution of the Calcium-Based Intracellular Signaling System. <i>Genome Biology and Evolution</i> , 2016, 8, 2118-2132.	2.5	35
87	Reply to "Placoderms and the evolutionary origin of teeth": Burrow <i>et al.</i> (2016). <i>Biology Letters</i> , 2016, 12, 20160526.	2.3	3
88	Dating species divergences using rocks and clocks. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20150126.	4.0	8
89	The evolution of methods for establishing evolutionary timescales. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20160020.	4.0	79
90	Tectonic blocks and molecular clocks. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20160098.	4.0	46

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91	The ins and outs of the evolutionary origin of teeth. <i>Evolution &amp; Development</i> , 2016, 18, 19-30.	2.0	60
92	The Interrelationships of Placental Mammals and the Limits of Phylogenetic Inference. <i>Genome Biology and Evolution</i> , 2016, 8, 330-344.	2.5	195
93	Translating taxonomy into the evolution of conodont feeding ecology. <i>Geology</i> , 2016, 44, 247-250.	4.4	30
94	Histology and affinity of anaspids, and the early evolution of the vertebrate dermal skeleton. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20152917.	2.6	44
95	Bayesian molecular clock dating of species divergences in the genomics era. <i>Nature Reviews Genetics</i> , 2016, 17, 71-80.	16.3	244
96	Histology of the heterostracan dermal skeleton: Insight into the origin of the vertebrate mineralised skeleton. <i>Journal of Morphology</i> , 2015, 276, 657-680.	1.2	35
97	Cyanobacteria and the Great Oxidation Event: evidence from genes and fossils. <i>Palaeontology</i> , 2015, 58, 769-785.	2.2	207
98	Experimental taphonomy of <i>Artemia</i> reveals the role of endogenous microbes in mediating decay and fossilization. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20150476.	2.6	65
99	Cyanobacteria and the Great Oxidation Event: evidence from genes and fossils. <i>Palaeontology</i> , 2015, 58, 935-936.	2.2	8
100	Size is not everything: rates of genome size evolution, not <i>C</i> -value, correlate with speciation in angiosperms. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20152289.	2.6	65
101	Calibration uncertainty in molecular dating analyses: there is no substitute for the prior evaluation of time priors. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20141013.	2.6	184
102	<i>Romundina</i> and the evolutionary origin of teeth. <i>Biology Letters</i> , 2015, 11, 20150326.	2.3	28
103	Critical appraisal of tubular putative eumetazoans from the Ediacaran Weng'an Doushantuo biota. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20151169.	2.6	21
104	Constraining the Deep Origin of Parasitic Flatworms and Host-Interactions with Fossil Evidence. <i>Advances in Parasitology</i> , 2015, 90, 93-135.	3.2	47
105	The Fossil Calibration Database—A New Resource for Divergence Dating. <i>Systematic Biology</i> , 2015, 64, 853-859.	5.6	54
106	Do cladistic and morphometric data capture common patterns of morphological disparity?. <i>Palaeontology</i> , 2015, 58, 393-399.	2.2	45
107	Ptychographic nanotomography at the Swiss Light Source. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
108	Uncertainty in the Timing of Origin of Animals and the Limits of Precision in Molecular Timescales. <i>Current Biology</i> , 2015, 25, 2939-2950.	3.9	370

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109	Dating Tips for Divergence-Time Estimation. Trends in Genetics, 2015, 31, 637-650.	6.7	126
110	Embryology in Deep Time. , 2015, , 45-63.		11
111	Discriminating signal from noise in the fossil record of early vertebrates reveals cryptic evolutionary history. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142245.	2.6	31
112	Distinguishing Biology from Geology in Soft-Tissue Preservation. The Paleontological Society Papers, 2014, 20, 275-288.	0.6	7
113	Evaluating scenarios for the evolutionary assembly of the brachiopod body plan. Evolution & Development, 2014, 16, 13-24.	2.0	22
114	Functional adaptation underpinned the evolutionary assembly of the earliest vertebrate skeleton. Evolution & Development, 2014, 16, 354-361.	2.0	9
115	Evolutionary history of plant microRNAs. Trends in Plant Science, 2014, 19, 175-182.	8.8	182
116	Finite element, occlusal, microwear and microstructural analyses indicate that conodont microstructure is adapted to dental function. Palaeontology, 2014, 57, 1059-1066.	2.2	30
117	Neither phylogenomic nor palaeontological data support a Palaeogene origin of placental mammals. Biology Letters, 2014, 10, 20131003.	2.3	87
118	Early vertebrate evolution. Palaeontology, 2014, 57, 879-893.	2.2	56
119	Developmental paleobiology of the vertebrate skeleton. Journal of Paleontology, 2014, 88, 676-683.	0.8	12
120	There is no general model for occlusal kinematics in conodonts. Lethaia, 2014, 47, 547-555.	1.4	16
121	A virtual world of paleontology. Trends in Ecology and Evolution, 2014, 29, 347-357.	8.7	205
122	A divergence dating analysis of turtles using fossil calibrations: an example of best practices. Journal of Paleontology, 2013, 87, 612-634.	0.8	128
123	Histology of âœœplacodermâœœdermal skeletons: Implications for the nature of the ancestral gnathostome. Journal of Morphology, 2013, 274, 627-644.	1.2	58
124	Embryos, polyps and medusae of the Early Cambrian scyphozoan <i>Olivoooides</i> . Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130071.	2.6	66
125	A daily-updated tree of (sequenced) life as a reference for genome research. Scientific Reports, 2013, 3, 2015.	3.3	47
126	Cutting the first âœœteethâœœ™: a new approach to functional analysis of conodont elements. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131524.	2.6	13



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127	The origin of conodonts and of vertebrate mineralized skeletons. <i>Nature</i> , 2013, 502, 546-549.	27.8	79
128	miRNAs: Small Genes with Big Potential in Metazoan Phylogenetics. <i>Molecular Biology and Evolution</i> , 2013, 30, 2369-2382.	8.9	118
129	Response to Comment on "Fossilized Nuclei and Germination Structures Identify Ediacaran Animal Embryos" as Encysting Protists. <i>Science</i> , 2012, 335, 1169-1169.	12.6	14
130	Testing models of dental development in the earliest bony vertebrates, <i>Andreolepis</i> and <i>Lophosteus</i> . <i>Biology Letters</i> , 2012, 8, 833-837.	2.3	18
131	Experimental taphonomy of giant sulphur bacteria: implications for the interpretation of the embryo-like Ediacaran Doushantuo fossils. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 1857-1864.	2.6	45
132	Phylogenomic datasets provide both precision and accuracy in estimating the timescale of placental mammal phylogeny. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 3491-3500.	2.6	449
133	A merciful death for the "earliest bilaterian," <i>Vernanimalcula</i> . <i>Evolution &amp; Development</i> , 2012, 14, 421-427.	2.0	33
134	Development of teeth and jaws in the earliest jawed vertebrates. <i>Nature</i> , 2012, 491, 748-751.	27.8	98
135	Do miRNAs have a deep evolutionary history?. <i>BioEssays</i> , 2012, 34, 857-866.	2.5	96
136	Ontogeny and microstructure of the enigmatic Cambrian tommotiid <i>Sunnaginia</i> Missarzhevsky, 1969. <i>Palaeontology</i> , 2012, 55, 661-676.	2.2	26
137	New palaeoscolecid worms from the Furongian (upper Cambrian) of Hunan, South China: is <i>Markuelia</i> an embryonic palaeoscolecid?. <i>Palaeontology</i> , 2012, 55, 613-622.	2.2	25
138	Exploring uncertainty in the calibration of the molecular clock. <i>Biology Letters</i> , 2012, 8, 156-159.	2.3	206
139	Testing microstructural adaptation in the earliest dental tools. <i>Biology Letters</i> , 2012, 8, 952-955.	2.3	15
140	Distinguishing geology from biology in the Ediacaran Doushantuo biota relaxes constraints on the timing of the origin of bilaterians. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 2369-2376.	2.6	43
141	The sharpest tools in the box? Quantitative analysis of conodont element functional morphology. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 2849-2854.	2.6	49
142	Best Practices for Justifying Fossil Calibrations. <i>Systematic Biology</i> , 2012, 61, 346-359.	5.6	616
143	Evolutionary crossroads in developmental biology: cyclostomes (lamprey and hagfish). <i>Development (Cambridge)</i> , 2012, 139, 2091-2099.	2.5	142
144	Fossilized Nuclei and Germination Structures Identify Ediacaran "Animal Embryos" as Encysting Protists. <i>Science</i> , 2011, 334, 1696-1699.	12.6	142

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145	Fossil jawless fish from China foreshadows early jawed vertebrate anatomy. <i>Nature</i> , 2011, 476, 324-327.	27.8	112
146	Evolutionary Origins of Animal Skeletal Biomineralization. <i>Cells Tissues Organs</i> , 2011, 194, 98-102.	2.3	74
147	Response by Philip Donoghue. <i>Journal of Paleontology</i> , 2011, 85, 1016-1016.	0.8	0
148	Teeth before jaws? Comparative analysis of the structure and development of the external and internal scales in the extinct jawless vertebrate <i>Oganellia scotica</i> . <i>Evolution &amp; Development</i> , 2011, 13, 523-532.	2.0	34
149	Establishing a time scale for plant evolution. <i>New Phytologist</i> , 2011, 192, 266-301.	7.3	306
150	Is evolutionary history repeatedly rewritten in light of new fossil discoveries?. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2011, 278, 599-604.	2.6	16
151	The Trouble with Topology: Phylogenies without Fossils Provide a Revisionist Perspective of Evolutionary History in Topological Analyses of Diversity. <i>Systematic Biology</i> , 2011, 60, 700-712.	5.6	20
152	Are palaeoscolecid ancestral ecdysozoans?. <i>Evolution &amp; Development</i> , 2010, 12, 177-200.	2.0	83
153	The anatomy, taphonomy, taxonomy and systematic affinity of <i>Markuelia</i> : Early Cambrian to Early Ordovician scalidophorans. <i>Palaeontology</i> , 2010, 53, 1291-1314.	2.2	53
154	Origins of multicellularity. <i>Nature</i> , 2010, 466, 41-42.	27.8	51
155	A formula for maximum possible steps in multistate characters: isolating matrix parameter effects on measures of evolutionary convergence. <i>Cladistics</i> , 2010, 26, 98-102.	3.3	11
156	microRNAs reveal the interrelationships of hagfish, lampreys, and gnathostomes and the nature of the ancestral vertebrate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19379-19383.	7.1	257
157	The Impact of the Representation of Fossil Calibrations on Bayesian Estimation of Species Divergence Times. <i>Systematic Biology</i> , 2010, 59, 74-89.	5.6	247
158	Skeletal histology of <i>Bothriolepis canadensis</i> (Placodermi, Antiarchi) and evolution of the skeleton at the origin of jawed vertebrates. <i>Journal of Morphology</i> , 2009, 270, 1364-1380.	1.2	39
159	Distinguishing heat from light in debate over controversial fossils. <i>BioEssays</i> , 2009, 31, 178-189.	2.5	145
160	The Evolutionary Emergence of Vertebrates From Among Their Spineless Relatives. <i>Evolution: Education and Outreach</i> , 2009, 2, 204-212.	0.8	2
161	Enameloid microstructure in the oldest known chondrichthyan teeth. <i>Acta Zoologica</i> , 2009, 90, 103-108.	0.8	28
162	ONTOGENY AND TAPHONOMY: AN EXPERIMENTAL TAPHONOMY STUDY OF THE DEVELOPMENT OF THE BRINE SHRIMP <i>ARTEMIA SALINA</i> . <i>Palaeontology</i> , 2009, 52, 169-186.	2.2	47

#	ARTICLE	IF	CITATIONS
163	Origin and evolution of the integumentary skeleton in non-tetrapod vertebrates. <i>Journal of Anatomy</i> , 2009, 214, 409-440.	1.5	207
164	Scanning Electron Microscopy and Synchrotron Radiation X-Ray Tomographic Microscopy of 330 Million Year Old Charcoalified Seed Fern Fertile Organs. <i>Microscopy and Microanalysis</i> , 2009, 15, 166-173.	0.4	20
165	The origin and evolution of the neural crest. <i>BioEssays</i> , 2008, 30, 530-541.	2.5	124
166	The anatomy, affinity and phylogenetic significance of <i>Osteostracis kirinskaya</i> (Osteostraci) from the Devonian of Siberia. <i>Journal of Vertebrate Paleontology</i> , 2008, 28, 613-625.	1.0	11
167	Deciphering the fossil record of early bilaterian embryonic development in light of experimental taphonomy. <i>Evolution &amp; Development</i> , 2008, 10, 339-349.	2.0	27
168	Embryo fossilization is a biological process mediated by microbial biofilms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 19360-19365.	7.1	119
169	MicroRNAs and the advent of vertebrate morphological complexity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 2946-2950.	7.1	373
170	The interrelationships of "complex" conodonts (Vertebrata). <i>Journal of Systematic Palaeontology</i> , 2008, 6, 119-153.	1.5	72
171	Rocks and clocks: calibrating the Tree of Life using fossils and molecules. <i>Trends in Ecology and Evolution</i> , 2007, 22, 424-431.	8.7	360
172	The homology and phylogeny of chondrichthyan tooth enameloid. <i>Journal of Morphology</i> , 2007, 268, 33-49.	1.2	81
173	Embryonic identity crisis. <i>Nature</i> , 2007, 445, 155-156.	27.8	41
174	Phase-contrast X-ray microtomography links Cretaceous seeds with Gnetales and Bennettitales. <i>Nature</i> , 2007, 450, 549-552.	27.8	172
175	The earliest fossil embryos begin to mature. <i>Evolution &amp; Development</i> , 2007, 9, 206-207.	2.0	5
176	Conchodontus, Mitrellataxis and Fungulodus: Conodonts, fish or both?. <i>Lethaia</i> , 2007, 31, 283-292.	1.4	16
177	MOLECULAR PALAEOBIOLOGY. <i>Palaeontology</i> , 2007, 50, 775-809.	2.2	83
178	Cellular and Subcellular Structure of Neoproterozoic Animal Embryos. <i>Science</i> , 2006, 314, 291-294.	12.6	190
179	Paleontological Evidence to Date the Tree of Life. <i>Molecular Biology and Evolution</i> , 2006, 24, 26-53.	8.9	834
180	Fossilized embryos are widespread but the record is temporally and taxonomically biased. <i>Evolution &amp; Development</i> , 2006, 8, 232-238.	2.0	119

#	ARTICLE	IF	CITATIONS
181	Synchrotron X-ray tomographic microscopy of fossil embryos. <i>Nature</i> , 2006, 442, 680-683.	27.8	279
182	The "Orsten" More than a Cambrian Konservat-Lagerstätte yielding exceptional preservation. <i>Palaeoworld</i> , 2006, 15, 266-282.	1.1	150
183	Early evolution of vertebrate skeletal tissues and cellular interactions, and the canalization of skeletal development. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , 2006, 306B, 278-294.	1.3	149
184	Paleontological Evidence to Date the Tree of Life. <i>Molecular Biology and Evolution</i> , 2006, 24, 889-891.	8.9	9
185	Experimental taphonomy shows the feasibility of fossil embryos. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 5846-5851.	7.1	112
186	Saving the stem group—a contradiction in terms?. <i>Paleobiology</i> , 2005, 31, 553-558.	2.0	7
187	The fossils of Orsten-type preservation from Middle and Upper Cambrian in Hunan, China "Three-dimensionally preserved soft-bodied fossils (Arthropods). <i>Science Bulletin</i> , 2005, 50, 1352.	1.7	31
188	BASAL TISSUE STRUCTURE IN THE EARLIEST EUCONODONTS: TESTING HYPOTHESES OF DEVELOPMENTAL PLASTICITY IN EUCONODONT PHYLOGENY. <i>Palaeontology</i> , 2005, 48, 411-421.	2.2	16
189	The anatomy, affinity, and phylogenetic significance of <i>Markuelia</i> . <i>Evolution &amp; Development</i> , 2005, 7, 468-482.	2.0	75
190	Saving the stem group—a contradiction in terms?. <i>Paleobiology</i> , 2005, 31, 553.	2.0	57
191	Histology of the galeaspid dermoskeleton and endoskeleton, and the origin and early evolution of the vertebrate cranial endoskeleton. <i>Journal of Vertebrate Paleontology</i> , 2005, 25, 745-756.	1.0	45
192	Genome duplication, extinction and vertebrate evolution. <i>Trends in Ecology and Evolution</i> , 2005, 20, 312-319.	8.7	231
193	Histology and affinity of the earliest armoured vertebrate. <i>Biology Letters</i> , 2005, 1, 446-449.	2.3	37
194	Fossil embryos from the Middle and Late Cambrian period of Hunan, south China. <i>Nature</i> , 2004, 427, 237-240.	27.8	154
195	The spatial and temporal diversification of Early Palaeozoic vertebrates. <i>Geological Society Special Publication</i> , 2002, 194, 69-83.	1.3	19
196	Evolution of development of the vertebrate dermal and oral skeletons: unraveling concepts, regulatory theories, and homologies. <i>Paleobiology</i> , 2002, 28, 474-507.	2.0	62
197	Origin and early evolution of vertebrate skeletonization. <i>Microscopy Research and Technique</i> , 2002, 59, 352-372.	2.2	197
198	Conodonts: Past, present, future. <i>Journal of Paleontology</i> , 2001, 75, 1174-1184.	0.8	39

#	ARTICLE	IF	CITATIONS
199	Conodonts Meet Cladistics: Recovering Relationships and Assessing the Completeness of the Conodont Fossil Record. <i>Palaeontology</i> , 2001, 44, 65-93.	2.2	33
200	Microstructural variation in conodont enamel is a functional adaptation. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2001, 268, 1691-1698.	2.6	48
201	CONODONTS: PAST, PRESENT, FUTURE. <i>Journal of Paleontology</i> , 2001, 75, 1174-1184.	0.8	62
202	The anatomy of <i>Turinia pagei</i> (Powrie), and the phylogenetic status of the Thelodonti. <i>Transactions of the Royal Society of Edinburgh: Earth Sciences</i> , 2001, 92, 15-37.	0.7	59
203	Orientation and anatomical notation in conodonts. <i>Journal of Paleontology</i> , 2000, 74, 113-122.	0.8	89
204	Conodont affinity and chordate phylogeny. <i>Biological Reviews</i> , 2000, 75, 191-251.	10.4	304
205	ORIENTATION AND ANATOMICAL NOTATION IN CONODONTS. <i>Journal of Paleontology</i> , 2000, 74, 113-122.	0.8	127
206	Conodont affinity and chordate phylogeny. <i>Biological Reviews</i> , 2000, 75, 191-251.	10.4	26
207	Growth, function, and the conodont fossil record. <i>Geology</i> , 1999, 27, 251.	4.4	50
208	Growth and patterning in the conodont skeleton. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1998, 353, 633-666.	4.0	103
209	Conodont anatomy, chordate phylogeny and vertebrate classification. <i>Lethaia</i> , 1998, 31, 211-219.	1.4	36
210	Conodonts: A Sister Group to Hagfishes?. , 1998, , 15-31.		18
211	An Early Triassic conodont with periodic growth?. <i>Journal of Micropalaeontology</i> , 1997, 16, 65-72.	3.6	17
212	Architecture and functional morphology of the skeletal apparatus of ozarkodinid conodonts. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1997, 352, 1545-1564.	4.0	74
213	A technique for conodont histology. <i>Lethaia</i> , 1997, 30, 329-330.	1.4	5
214	Modelling the Conodont Skeleton: A New Reconstruction for the Conodont Mouth. <i>The Paleontological Society Special Publications</i> , 1996, 8, 106-106.	0.0	0
215	Conodonts and the first vertebrates. <i>Endeavour</i> , 1995, 19, 20-27.	0.4	22
216	Constraints on the timescale of animal evolutionary history. <i>Palaeontologia Electronica</i> , 0, , .	0.9	71

#	ARTICLE	IF	CITATIONS
217	The Evolution of the Spiracular Region From Jawless Fishes to Tetrapods. <i>Frontiers in Ecology and Evolution</i> , 0, 10, .	2.2	8