Michael I Coates

List of Publications by Citations

75 papers	3,902 citations	35 h-index	61 g-index
85 ext. papers	4,459 ext. citations	10.5 avg, IF	5.58 L-index

#	Paper	IF	Citations
75	A new time-scale for ray-finned fish evolution. *Proceedings of the Royal Society B: Biological Sciences* , **2007**, 274, 489-98	4.4	248
74	Polydactyly in the earliest known tetrapod limbs. *Nature*, **1990**, 347, 66-69	50.4	242
73	Early tetrapod relationships revisited. *Biological Reviews*, **2003**, 78, 251-345	13.5	215
72	A lamprey from the Devonian period of South Africa. *Nature*, **2006**, 443, 981-4	50.4	185
71	Dates, nodes and character conflict: Addressing the Lissamphibian origin problem. *Journal of Systematic Palaeontology*, **2007**, 5, 69-122	2.3	155
70	End-Devonian extinction and a bottleneck in the early evolution of modern jawed vertebrates. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 10131-5	11.5	151
69	Acanthodes and shark-like conditions in the last common ancestor of modern gnathostomes. *Nature*, **2012**, 486, 247-50	50.4	141
68	Fish-like gills and breathing in the earliest known tetrapod. *Nature*, **1991**, 352, 234-236	50.4	131
67	The postcranial skeleton of the Devonian tetrapod Tulerpeton curtum Lebedev. *Zoological Journal of the Linnean Society*, **1995**, 114, 307-348	2.4	120
66	Evolutionary patterns in early tetrapods. I. Rapid initial diversification followed by decrease in rates of character change. *Proceedings of the Royal Society B: Biological Sciences*, **2006**, 273, 2107-11	4.4	116
65	Fins to limbs: what the fossils say. *Evolution & Development*, **2002**, 4, 390-401	2.6	102
64	A new technique for identifying sequence heterochrony. *Systematic Biology*, **2005**, 54, 230-40	8.4	97
63	Endocranial preservation of a Carboniferous actinopterygian from Lancashire, UK, and the interrelationships of primitive actinopterygians. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **1999**, 354, 435-462	5.8	86
62	Fins, limbs, and tails: outgrowths and axial patterning in vertebrate evolution. *BioEssays*, **1998**, 20, 371-381	4.1	85
61	Analyzing developmental sequences within a phylogenetic framework. *Systematic Biology*, **2002**, 51, 478-91	8.4	84
60	Evolutionary origins of the vertebrate dentition: phylogenetic patterns and developmental evolution. *European Journal of Oral Sciences*, **1998**, 106 Suppl 1, 482-500	2.3	84
59	The origin of vertebrate limbs. *Development (Cambridge)*, **1994**, 1994, 169-180	6.6	82

58	The early evolution of the tetrapod humerus. *Science*, **2004**, 304, 90-3	33.3	78
57	Analyzing evolutionary patterns in amniote embryonic development. *Evolution & Development*, **2002**, 4, 292-302	2.6	69
56	Behavioral evidence for the evolution of walking and bounding before terrestriality in sarcopterygian fishes. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 21146-51	11.5	67
55	The evolution of paired fins. *Theory in Biosciences*, **2003**, 122, 266-287	1.3	67
54	Ever Since Owen: Changing Perspectives on the Early Evolution of Tetrapods. *Annual Review of Ecology, Evolution, and Systematics*, **2008**, 39, 571-592	13.5	66
53	The most primitive osteichthyan braincase?. *Nature*, **2000**, 403, 185-8	50.4	61
52	Hagfish from the Cretaceous Tethys Sea and a reconciliation of the morphological-molecular conflict in early vertebrate phylogeny. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 2146-2151	11.5	56
51	First discovery of a primitive coelacanth fin fills a major gap in the evolution of lobed fins and limbs. *Evolution & Development*, **2007**, 9, 329-37	2.6	51
50	A supertree of early tetrapods. *Proceedings of the Royal Society B: Biological Sciences*, **2003**, 270, 2507-16	4.4	51
49	Branching, segmentation and the metapterygial axis: pattern versus process in the vertebrate limb. *BioEssays*, **2002**, 24, 460-5	4.1	50
48	From Haeckel to event-pairing: the evolution of developmental sequences. *Theory in Biosciences*, **2002**, 121, 297-320	1.3	46
47	A symmoriiform chondrichthyan braincase and the origin of chimaeroid fishes. *Nature*, **2017**, 541, 208-211	50.4	45
46	A NEW RECONSTRUCTION OF ONYCHOSELACHE TRAQUAIRI, COMMENTS ON EARLY CHONDRICHTHYAN PECTORAL GIRDLES AND HYBODONTIFORM PHYLOGENY. *Palaeontology*, **2007**, 50, 1421-1446	2.9	45
45	Evolutionary patterns in early tetrapods. II. Differing constraints on available character space among clades. *Proceedings of the Royal Society B: Biological Sciences*, **2006**, 273, 2113-8	4.4	43
44	Limb evolution. Fish fins or tetrapod limbs--a simple twist of fate?. *Current Biology*, **1995**, 5, 844-8	6.3	43
43	Spines and tissues of ancient sharks. *Nature*, **1998**, 396, 729-730	50.4	39
42	Nice snake, shame about the legs. *Trends in Ecology and Evolution*, **2000**, 15, 503-507	10.9	38
41	A newly recognized fossil coelacanth highlights the early morphological diversification of the clade. *Proceedings of the Royal Society B: Biological Sciences*, **2006**, 273, 245-50	4.4	36

40	An early chondrichthyan and the evolutionary assembly of a shark body plan. *Proceedings of the Royal Society B: Biological Sciences*, **2018**, 285,	4.4	34
39	Vertebrate Axial and Appendicular Patterning: The Early Development of Paired Appendages. *American Zoologist*, **1999**, 39, 676-685		34
38	Endoskeletal structure in (Osteichthyes, Actinopterygii), An early ray-finned fish. *Palaeontology*, **2015**, 58, 849-870	2.9	30
37	Comparative methods in developmental biology. *Zoology*, **2001**, 104, 278-83	1.7	30
36	Chondrichthyan-like scales from the Middle Ordovician of Australia. *Palaeontology*, **2012**, 55, 243-247	2.9	29
35	Some problems with typological thinking in evolution and development. *Evolution & Development*, **1999**, 1, 5-7	2.6	25
34	Phylotypic stage theory. *Trends in Ecology and Evolution*, **1998**, 13, 158	10.9	22
33	The oldest ionoscopiform from China sheds new light on the early evolution of halecomorph fishes. *Biology Letters*, **2014**, 10, 20140204	3.6	21
32	The long-rostrumed elasmobranch Bandringa Zangerl, 1969, and taphonomy within a Carboniferous shark nursery. *Journal of Vertebrate Paleontology*, **2014**, 34, 22-33	1.7	21
31	First shark from the Late Devonian (Frasnian) Gogo Formation, Western Australia sheds new light on the development of tessellated calcified cartilage. *PLoS ONE*, **2015**, 10, e0126066	3.7	21
30	Embryonic development of the axial column in the little skate, Leucoraja erinacea. *Journal of Morphology*, **2017**, 278, 300-320	1.6	19
29	Fossil juvenile coelacanths from the Devonian of South Africa shed light on the order of character acquisition in actinistians. *Zoological Journal of the Linnean Society*, **2015**, 175, 360-383	2.4	19
28	New Palaeontological Contributions to Limb Ontogeny and Phylogeny **1991**, 325-337		19
27	Styracopterid (Actinopterygii) ontogeny and the multiple origins of post-Hangenberg deep-bodied fishes. *Zoological Journal of the Linnean Society*, **2013**, 169, 156-199	2.4	18
26	Early tetrapod evolution. *Trends in Ecology and Evolution*, **2000**, 15, 327-328	10.9	18
25	Taxonomic revision of Plesiofuro mingshuica from the Lower Triassic of northern Gansu, China, and the relationships of early neopterygian clades. *Journal of Vertebrate Paleontology*, **2015**, 35, e1001515	1.7	17
24	The origins of adipose fins: an analysis of homoplasy and the serial homology of vertebrate appendages. *Proceedings of the Royal Society B: Biological Sciences*, **2014**, 281, 20133120	4.4	17
23	The early elasmobranch : phylogenetic relationships, ecomorphology and a new time-scale for shark evolution. *Proceedings of the Royal Society B: Biological Sciences*, **2019**, 286, 20191336	4.4	16

22	Ancestors and homology (the origin of the tetrapod limb). *Acta Biotheoretica*, **1993**, 41, 411-24	1.1	16
21	The systematics of the Mongolepidida (Chondrichthyes) and the Ordovician origins of the clade. *PeerJ*, **2016**, 4, e1850	3.1	16
20	Upper Ordovician chondrichthyan-like scales from North America. *Palaeontology*, **2015**, 58, 691-704	2.9	15
19	First tooth-set outside the jaws in a vertebrate. *Proceedings of the Royal Society B: Biological Sciences*, **2012**, 279, 775-9	4.4	15
18	Chondrenchelys problematica (Traquair, 1888) redescribed: a Lower Carboniferous, eel-like holocephalan from Scotland. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2014**, 105, 35-59	0.9	14
17	A fish and tetrapod fauna from Romer's Gap preserved in Scottish Tournaisian floodplain deposits. *Palaeontology*, **2019**, 62, 225-253	2.9	13
16	The tetrapod Caerorhachis bairdi Holmes and Carroll from the Lower Carboniferous of Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **2001**, 92, 229-261		13
15	A symmoriiform from the Late Devonian of Morocco demonstrates a derived jaw function in ancient chondrichthyans. *Communications Biology*, **2020**, 3, 681	6.7	13
14	Non-ammocoete larvae of Palaeozoic stem lampreys. *Nature*, **2021**, 591, 408-412	50.4	13
13	High-latitude Chondrichthyans from the Late Devonian (Famennian) Witpoort formation of South Africa. *Palaontologische Zeitschrift*, **2015**, 89, 147-169	1.2	10
12	Embryonic origin of the gnathostome vertebral skeleton. *Proceedings of the Royal Society B: Biological Sciences*, **2017**, 284,	4.4	9
11	Elegestolepis and its kin, the earliest monodontode chondrichthyans. *Journal of Vertebrate Paleontology*, **2017**, 37, e1245664	1.7	9
10	High-performance suction feeding in an early elasmobranch. *Science Advances*, **2019**, 5, eaax2742	14.3	6
9	This strange little palaeoniscid's a new early actinopterygian genus, and commentary on pectoral fin conditions and function. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2018**, 109, 15-31	0.9	6
8	The neurocranium of the Lower Carboniferous shark Tristychius arcuatus (Agassiz, 1837). *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2017**, 108, 19-35	0.9	5
7	Feeding structures in the ray-finned fish Eurynotus crenatus (Actinopterygii: Eurynotiformes): implications for trophic diversification among Carboniferous actinopterygians. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2018**, 109, 33-47	0.9	4
6	From Haeckel to event-pairing: the evolution of developmental sequences. *Theory in Biosciences*, **2002**, 121, 297-320	1.3	2
5	The postcranial anatomy of Whatcheeria deltae and its implications for the family Whatcheeriidae. *Zoological Journal of the Linnean Society*, **2021**, 193, 700-745	2.4	2

4	Using patterns of fin and limb phylogeny to test developmental-evolutionary scenarios. *Novartis Foundation Symposium*, **2007**, 284, 245-55; discussion 255-61		2
3	Fish rising. *Trends in Ecology and Evolution*, **2012**, 27, 10-11	10.9	1
2	There's a ratfish in our cellar!. *Geology Today*, **1997**, 13, 20-23	0.4	1
1	The last word on a lost world?. *Trends in Ecology and Evolution*, **2005**, 20, 425-426	10.9	0