Mikael Fortelius

List of Publications by Year
in descending order

96	7,058	87723 38	60497 81
papers	citations	h-index	g-index

100	100	100	7396
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Approaching a state shift in Earthâ€™s biosphere. Nature, 2012, 486, 52-58.	13.7	1,518
2	Functional Characterization of Ungulate Molars Using the Abrasion-Attrition Wear Gradient: A New Method for Reconstructing Paleodiets. American Museum Novitates, 2000, 3301, 1-36.	0.2	455
3	ON THE MEANS WHEREBY MAMMALS ACHIEVE INCREASED FUNCTIONAL DURABILITY OF THEIR DENTITIONS, WITH SPECIAL REFERENCE TO LIMITING FACTORS. Biological Reviews, 1988, 63, 197-230.	4.7	365
4	High-level similarity of dentitions in carnivorans and rodents. Nature, 2007, 445, 78-81.	13.7	336
5	Merging paleobiology with conservation biology to guide the future of terrestrial ecosystems. Science, 2017, 355, .	6.0	260
6	The Evolution of Maximum Body Size of Terrestrial Mammals. Science, 2010, 330, 1216-1219.	6.0	252
7	Late Miocene and Pliocene large land mammals and climatic changes in Eurasia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2006, 238, 219-227.	1.0	225
8	Adaptive radiation of multituberculate mammals before the extinction of dinosaurs. Nature, 2012, 483, 457-460.	13.7	221
9	Out of Tibet: Pliocene Woolly Rhino Suggests High-Plateau Origin of Ice Age Megaherbivores. Science, 2011, 333, 1285-1288.	6.0	164
10	Partitioning taxon, phylogenetic and functional beta diversity into replacement and richness difference components. Journal of Biogeography, 2014, 41, 749-761.	1.4	162
11	Strengthened East Asian summer monsoons during a period of high-latitude warmth? Isotopic evidence from Mio-Pliocene fossil mammals and soil carbonates from northern China. Earth and Planetary Science Letters, 2009, 277, 443-452.	1.8	161
12	Distribution history and climatic controls of the Late Miocene Pikermian chronofauna. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11867-11871.	3.3	156
13	Hypsodonty and tooth facet development in relation to diet and habitat in herbivorous ungulates: implications for understanding tooth wear. Mammal Review, 2013, 43, 34-46.	2.2	148
14	Common mammals drive the evolutionary increase of hypsodonty in the Neogene. Nature, 2002, 417, 538-540.	13.7	133
15	Differential mesowear in occluding upper and lower molars: Opening mesowear analysis for lower molars and premolars in hypsodont horses. Journal of Morphology, 2003, 258, 67-83.	0.6	125
16	The maximum rate of mammal evolution. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4187-4190.	3.3	107
17	Development, structure and function of rhinoceros enamel. Zoological Journal of the Linnean Society, 1986, 87, 181-214.	1.0	95
18	Asynchronous responses of East Asian and Indian summer monsoons to mountain uplift shown by regional climate modelling experiments. Climate Dynamics, 2013, 40, 1531-1549.	1.7	95

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19	Lower Extinction Risk in Sleepâ€orâ€Hide Mammals. American Naturalist, 2009, 173, 264-272.	1.0	93
20	Evolution of Neogene Mammals in Eurasia: Environmental Forcing and Biotic Interactions. Annual Review of Earth and Planetary Sciences, 2014, 42, 579-604.	4.6	91
21	Growth and wear of incisor and cheek teeth in domestic rabbits (Oryctolagus cuniculus) fed diets of different abrasiveness. Journal of Experimental Zoology, 2014, 321, 283-298.	1.2	85
22	Ecometrics: The traits that bind the past and present together. Integrative Zoology, 2010, 5, 88-101.	1.3	83
23	History matters: ecometrics and integrative climate change biology. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1131-1140.	1.2	81
24	Significant mid-latitude aridity in the middle Miocene of East Asia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2009, 279, 201-206.	1.0	80
25	An ecometric analysis of the fossil mammal record of the Turkana Basin. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150232.	1.8	80
26	A new specimen of Ankarapithecus meteai from the Sinap Formation of central Anatolia. Nature, 1996, 382, 349-351.	13.7	78
27	The rise and fall of the Old World savannah fauna and the origins of the African savannah biome. Nature Ecology and Evolution, 2018, 2, 241-246.	3.4	67
28	A new magnetostratigraphic framework for late Neogene Hipparion Red Clay in the eastern Loess Plateau of China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2008, 268, 47-57.	1.0	65
29	Analysis of heat transport mechanisms from a Late Miocene model experiment with a fully-coupled atmosphereâ€“ocean general circulation model. Palaeogeography, Palaeoclimatology, Palaeoecology, 2011, 304, 337-350.	1.0	65
30	Dental functional traits of mammals resolve productivity in terrestrial ecosystems past and present. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2793-2799.	1.2	64
31	The largest land mammal ever imagined. Zoological Journal of the Linnean Society, 1993, 108, 85-101.	1.0	62
32	Maintenance of Trophic Structure in Fossil Mammal Communities: Site Occupancy and Taxon Resilience. American Naturalist, 2004, 164, 614-624.	1.0	60
33	Reconciling taxon senescence with the Red Queenâ€™s hypothesis. Nature, 2017, 552, 92-95.	13.7	56
34	Introducing the Scientific Consensus on Maintaining Humanityâ€™s Life Support Systems in the 21st Century: Information for Policy Makers. Infrastructure Asset Management, 2014, 1, 78-109.	1.2	55
35	Functional evolution of the cheek tooth pattern and chewing direction in Tertiary horses. Paleobiology, 1984, 10, 439-452.	1.3	51
36	Patterns of maximum body size evolution in Cenozoic land mammals: eco-evolutionary processes and abiotic forcing. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132049.	1.2	48

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37	Mechanical modelling of tooth wear. Journal of the Royal Society Interface, 2016, 13, 20160399.	1.5	45
38	Seriation in Paleontological Data Using Markov Chain Monte Carlo Methods. PLoS Computational Biology, 2006, 2, e6.	1.5	41
39	From card catalogs to computers: databases in vertebrate paleontology. Journal of Vertebrate Paleontology, 2013, 33, 13-28.	0.4	41
40	A New Tooth Wearâ€“Based Dietary Analysis Method for Proboscidea (Mammalia). Journal of Vertebrate Paleontology, 2015, 35, e918546.	0.4	40
41	Paleoecology of the Serengeti during the Oldowan-Acheulean transition at Olduvai Gorge, Tanzania: The mammal and fish evidence. Journal of Human Evolution, 2018, 120, 48-75.	1.3	36
42	Magnetostratigraphy and paleoecology of the hominid-bearing locality Ã‡orakyerler, Tuglu Formation (Ã‡ankiri Basin, Central Anatolia). Journal of Vertebrate Paleontology, 2016, 36, e1071710.	0.4	34
43	Herbivore teeth predict climatic limits in Kenyan ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12751-12756.	3.3	31
44	Toward a holistic understanding of pastoralism. One Earth, 2021, 4, 651-665.	3.6	31
45	Co-occurrence of pliopithecoid and hominoid primates in the fossil record: An ecometric analysis. Journal of Human Evolution, 2015, 84, 25-41.	1.3	28
46	Dental topography and diets of platyrrhine primates. Historical Biology, 2018, 30, 64-75.	0.7	28
47	Pliocene to Middle Pleistocene climate history in the Guadix-Baza Basin, and the environmental conditions of early Homo dispersal in Europe. Quaternary Science Reviews, 2021, 268, 107132.	1.4	28
48	Effects of allometry, productivity and lifestyle on rates and limits of body size evolution. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131007.	1.2	26
49	The morphology and paleobiological significance of the horns ofCoelodonta antiquitatis(Mammalia: Rhinocerotidae). Journal of Vertebrate Paleontology, 1983, 3, 125-135.	0.4	21
50	The aspect Bernoulli model: multiple causes of presences and absences. Pattern Analysis and Applications, 2009, 12, 55-78.	3.1	21
51	Convergence in the distribution patterns of Europeâ€™s plants and mammals is due to environmental forcing. Journal of Biogeography, 2012, 39, 1633-1644.	1.4	20
52	New stratigraphically constrained palaeoenvironmental reconstructions for the first human settlement in Western Europe: The Early Pleistocene herpetofaunal assemblages from Barranco LeÃ³n and Fuente Nueva 3 (Granada, SE Spain). Quaternary Science Reviews, 2020, 243, 106466.	1.4	20
53	An Oasis in the Desert? History of Endemism and Climate in the Late Neogene of North China. Palaeontographica, Abteilung A: Palaozoologie - Stratigraphie, 2006, 277, 131-141.	1.5	20
54	Translating science for decision makers to help navigate the Anthropocene. Infrastructure Asset Management, 2014, 1, 160-170.	1.2	19

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55	Old world hipparion evolution, biogeography, climatology and ecology. Earth-Science Reviews, 2021, 221, 103784.	4.0	18
56	Use of meat resources in the Early Pleistocene assemblages from Fuente Nueva 3 (Orce, Granada,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.7	17
57	Taphonomic and spatial analyses from the Early Pleistocene site of Venta Micena 4 (Orce, Guadix-Baza) Tj ETQq1 1 0.784314 rgBT /O	1.6	16
58	Recent Advances in Paleobiological Research of the Late Miocene Maragheh Fauna, Northwest Iran. , 2013, , 546-565.		16
59	Finding partial orders from unordered 0-1 data. , 2005, , .		14
60	The late Miocene hominoid-bearing site in the Maragheh Formation, Northwest Iran. Palaeobiodiversity and Palaeoenvironments, 2016, 96, 349-371.	0.6	14
61	A Humboldtian approach to life and climate of the geological past: Estimating palaeotemperature from dental traits of mammalian communities. Journal of Biogeography, 2019, 46, 1760-1776.	1.4	14
62	Unravelling Hominin Activities in the Zooarchaeological Assemblage of Barranco LeÃ³n (Orce,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	0.7	12
63	Kâ€“Ar ages and petrology of the late Miocene pumices from the Maragheh Formation, northwest Iran. Palaeobiodiversity and Palaeoenvironments, 2016, 96, 399-431.	0.6	11
64	Depositional environment reconstruction of the Maragheh Formation, East Azarbaijan, Northwestern Iran. Palaeobiodiversity and Palaeoenvironments, 2016, 96, 383-398.	0.6	11
65	The phylogenetic signal in tooth wear: What does it mean?. Ecology and Evolution, 2018, 8, 11359-11362.	0.8	11
66	New fossil Suidae from Shanwang, Shandong, China. Journal of Vertebrate Paleontology, 2002, 22, 152-163.	0.4	10
67	Continental-Scale Patterns in Neogene Mammal Community Evolution and Biogeography. , 2013, , 629-655.		10
68	GENERA ARE OFTEN BETTER THAN SPECIES FOR DETECTING EVOLUTIONARY CHANGE IN THE FOSSIL RECORD: A REPLY TO SALESA ET AL.. Evolution; International Journal of Organic Evolution, 2011, 65, 1514-1516.	1.1	9
69	Adaptive dynamics on an environmental gradient that changes over a geological time-scale. Journal of Theoretical Biology, 2015, 376, 91-104.	0.8	9
70	Relative abundances and palaeoecology of four suid genera in the Turkana Basin, Kenya, during the late Miocene to Pleistocene. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 487, 187-193.	1.0	9
71	The nature of the Old World savannah palaeobiome. Nature Ecology and Evolution, 2019, 3, 504-504.	3.4	9
72	The case of the grassâ€eating suids in the Plioâ€Pleistocene Turkana Basin: 3D dental topography in relation to diet in extant and fossil pigs. Journal of Morphology, 2020, 281, 348-364.	0.6	9

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73	Palynological investigations in the Orce Archaeological Zone, Early Pleistocene of Southern Spain. Review of Palaeobotany and Palynology, 2022, 304, 104725.	0.8	9
74	Modeling the Population-Level Processes of Biodiversity Gain and Loss at Geological Timescales. American Naturalist, 2015, 186, 742-754.	1.0	8
75	Introduction to the special issue â€œThe late Miocene Maragheh mammal fauna; results of recent multidisciplinary researchâ€• Palaeobiodiversity and Palaeoenvironments, 2016, 96, 339-347.	0.6	6
76	The first hominoid from the Maragheh Formation, Iran. Palaeobiodiversity and Palaeoenvironments, 2016, 96, 373-381.	0.6	6
77	A new listriodont suid,Bunolistriodon meidamonsp. nov., from the middle Miocene of Anatolia. Journal of Vertebrate Paleontology, 1996, 16, 149-164.	0.4	5
78	On calibrating the completometer for the mammalian fossil record. Paleobiology, 2022, 48, 1-11.	1.3	5
79	The grassiness of all flesh. Journal of Biogeography, 2013, 40, 1213-1214.	1.4	4
80	Small mammal tooth enamel carbon isotope record of C4 grasses in late Neogene China. Global and Planetary Change, 2015, 133, 288-297.	1.6	4
81	Preliminary magnetostratigraphic results from the late Miocene Maragheh Formation, NW Iran. Palaeobiodiversity and Palaeoenvironments, 2016, 96, 433-443.	0.6	4
82	The largest land mammal ever imagined. Zoological Journal of the Linnean Society, 1993, 108, 85-101.	1.0	4
83	The palaeoenvironment of the middle Miocene pliopithecid locality in Damiao, Inner Mongolia, China. Journal of Human Evolution, 2017, 108, 31-46.	1.3	3
84	Do species factories exist? Detecting exceptional patterns of evolution in the mammalian fossil record. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212294.	1.2	3
85	Dental functional morphology predicts the scaling of chewing rate in mammals. Journal of Biomechanics, 2018, 67, 32-36.	0.9	2
86	Evolution of longevity in animals. A comparative approach. Journal of Human Evolution, 1989, 18, 283-285.	1.3	1
87	The Peopling of the Americas: No Revolution Yet?. Boreas, 2008, 15, 344-344.	1.2	1
88	Species discovery and dental ecometrics: good news, bad news and recommendations for the future. Historical Biology, 2023, 35, 678-692.	0.7	1
89	The Age of Mammals revisited. Lethaia, 1984, 17, 50-50.	0.6	0
90	Yesterday's camel. Boreas, 2008, 10, 136-136.	1.2	0

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91	Climate what climate?. Boreas, 2008, 14, 115-116.	1.2	0
92	Martin, Paul S. & Klein. Richard G. (eds.) 1984: Quaternary Extinctions: A Prehistoric Revolution. Boreas, 2008, 15, 136-136.	1.2	0
93	Two more books from A. A. Balkema. Boreas, 2008, 15, 32-32.	1.2	0
94	Mammal Proxy Methods for Estimating Precipitation. The Paleontological Society Special Publications, 2014, 13, 173-174.	0.0	0
95	All Sizes Fit the Red Queen. Paleobiology, 2020, 46, 478-494.	1.3	0
96	The best of all possible coexistence. Palaeobiodiversity and Palaeoenvironments, 2021, 101, 259-265.	0.6	0