Bruce J Macfadden

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11082737/publications.pdf

Version: 2024-02-01

146 papers	7,889 citations	53939 47 h-index	60403 85 g-index
152 all docs	152 docs citations	152 times ranked	6514 citing authors

#	Article	IF	Citations
1	Exploring the influence of teachers' beliefs and 3D printing integrated STEM instruction on studentsâ€™ STEM motivation. Computers and Education, 2020, 158, 103983.	5.1	43
2	Applications of 3D Paleontological Data at the Florida Museum of Natural History. Frontiers in Earth Science, 2020, 8, .	0.8	12
3	Presentation of the 2018 Paleontological Society Pojeta Award to Eugenie C. Scott. Journal of Paleontology, 2019, 93, 1033-1033.	0.5	0
4	Were You Successful? Evaluation and Metrics. , 2019, , 236-248.		0
5	Introduction: Science, STEM, and Society. , 2019, , 1-15.		0
6	NSF and Broader Impacts. , 2019, , 16-28.		0
7	Innovation, Opportunity, and Integration. , 2019, , 29-41.		0
8	Communication and Dissemination. , 2019, , 42-56.		0
9	Promoting Yourself and Optimizing Impact. , 2019, , 57-67.		0
10	Collaboration, Authorship, and Networks. , 2019, , 68-80.		0
11	Strategic versus Curiosity Science. , 2019, , 81-92.		0
12	Know Your Audience. , 2019, , 93-106.		0
13	Diversity, Equity, and Inclusion. , 2019, , 107-120.		0
14	Mentoring and Role Models. , 2019, , 121-135.		0
15	Formal Kâ€“12 Education and Partners. , 2019, , 136-149.		0
16	Informal STEM Learning in Museums and Beyond. , 2019, , 159-177.		0
17	Public Participation and Community (Citizen) Science. , 2019, , 178-193.		0
18	Computers and Cyberimpacts. , 2019, , 194-209.		0

#	Article	IF	Citations
19	Developing a Broader Impacts Plan. , 2019, , 210-223.		0
20	Project Management and Sustainability. , 2019, , 224-235.		0
21	Wrap-Up, the Future, and Broader Impacts 3.0. , 2019, , 249-258.		0
22	Body mass predicts isotope enrichment in herbivorous mammals. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181020.	1.2	75
23	Horses in the Cloud: big data exploration and mining of fossil and extantEquus(Mammalia: Equidae). Paleobiology, 2017, 43, 1-14.	1.3	34
24	Late Miocene chondrichthyans from Lago Bayano, Panama: Functional diversity, environment and biogeography. Journal of Paleontology, 2017, 91, 512-547.	0.5	16
25	Integrated Chronology, Flora and Faunas, and Paleoecology of the Alajuela Formation, Late Miocene of Panama. PLoS ONE, 2017, 12, e0170300.	1.1	10
26	3-D FOSSILS FOR Kâ€“12 EDUCATION: A CASE EXAMPLE USING THE GIANT EXTINCT SHARKCARCHAROCLES MEGALODON. The Paleontological Society Papers, 2016, 22, 197-209.	0.8	51
27	First North American fossil monkey and early Miocene tropical biotic interchange. Nature, 2016, 533, 243-246.	13.7	89
28	A large eagle (Aves, Accipitridae) from the early Miocene of Panama. Journal of Paleontology, 2016, 90, 1012-1015.	0.5	2
29	Seeking Shared Practice: A Juxtaposition of the Attributes and Activities of Organized Fossil Groups with Those of Professional Paleontology. Journal of Science Education and Technology, 2016, 25, 731-746.	2.4	32
30	Geographical distribution patterns of Carcharocles megalodon over time reveal clues about extinction mechanisms. Journal of Biogeography, 2016, 43, 1645-1655.	1.4	63
31	Quaternary gomphotheres (Mammalia: Proboscidea: Gomphotheriidae) from the continental shelf, Pearl Islands, Panama. Quaternary International, 2016, 392, 335-348.	0.7	1
32	Not Looking a Gift Horse in the Mouth: Exploring the Merits of a Studentâ€“Teacherâ€“Scientist Partnership. Journal of Biological Education, 2016, 50, 174-184.	0.8	9
33	INCREASING THE RESEARCH POTENTIAL OF DIGITIZED FOSSILS: A PILOT STUDY USING SPECIFY TO ATTACH STABLE ISOTOPE DATA TO VOUCHERED MUSEUM SPECIMENS. , 2016, , .		1
34	Comparative Diagenesis and Rare Earth Element Variation in Miocene Invertebrate and Vertebrate Fossils from Panama. Journal of Geology, 2015, 123, 491-507.	0.7	7
35	Devil's Den, Florida: Rare Earth Element Analysis Indicates Contemporaneity of Humans and Latest Pleistocene Fauna. PaleoAmerica, 2015, 1, 266-275.	0.4	4
36	New early Miocene protoceratids (Mammalia, Artiodactyla) from Panama. Journal of Vertebrate Paleontology, 2015, 35, e970688.	0.4	9

#	Article	IF	Citations
37	Gomphothere proboscidean (Gomphotherium) from the late Neogene of Panama. Journal of Paleontology, 2015, 89, 360-365.	0.5	6
38	Digitization of Biodiversity Collections Reveals Biggest Data on Biodiversity. BioScience, 2015, 65, 841-842.	2.2	150
39	The Early Miocene Protoceratids (Mammalia, Artiodactyla) from the Panama Canal Basin. The Paleontological Society Special Publications, 2014, 13, 164-164.	0.0	0
40	Fossilâ€"A National Network of Fossil Clubs and Professional Paleontologists in the U.S.. The Paleontological Society Special Publications, 2014, 13, 128-128.	0.0	0
41	Expansion of the Panama Canal and the Rise of the Isthmus. The Paleontological Society Special Publications, 2014, 13, 132-133.	0.0	0
42	Ecology of Miocene Amazonian Mammals Based on Evidence from Stable Isotopes. The Paleontological Society Special Publications, 2014, 13, 43-44.	0.0	0
43	Paleoecology of New Chondrichthyan Fauna from Middle Miocene (Barstovian), Gadsen County, Florida, USA. The Paleontological Society Special Publications, 2014, 13, 102-102.	0.0	1
44	Digitizing Paleontological Collections for New Audiences: Past Practices and the Potential for Public Participation. The Paleontological Society Special Publications, 2014, 13, 127-128.	0.0	0
45	At the Elbows of Scientists: Shaping Science Teachersâ€™ Conceptions and Enactment of Inquiry-Based Instruction. Research in Science Education, 2014, 44, 927-947.	1.4	33
46	Temporal Calibration and Biochronology of the Centenario Fauna, Early Miocene of Panama. Journal of Geology, 2014, 122, 113-135.	0.7	55
47	Systematics and biogeography of crocodylians from the Miocene of Panama. Journal of Vertebrate Paleontology, 2013, 33, 239-263.	0.4	60
48	First Central American record of Anthracotheriidae (Mammalia, Bothriodontinae) from the early Miocene of Panama. Journal of Vertebrate Paleontology, 2013, 33, 421-433.	0.4	25
49	Sharks and rays (Chondrichthyes, Elasmobranchii) from the late Miocene Gatun Formation of Panama. Journal of Paleontology, 2013, 87, 755-774.	0.5	33
50	A Computational- and Storage-Cloud for Integration of Biodiversity Collections. , 2013, , .		14
51	Early Miocene chondrichthyans from the Culebra Formation, Panama: A window into marine vertebrate faunas before closure the Central American Seaway. Journal of South American Earth Sciences, 2013, 42, 159-170.	0.6	28
52	Middle Pleistocene age of the fossiliferous sedimentary sequence from Tarija, Bolivia. Quaternary Research, 2013, 79, 268-273.	1.0	13
53	Dispersal of Pleistocene Equus (Family Equidae) into South America and Calibration of GABI 3 Based on Evidence from Tarija, Bolivia. PLoS ONE, 2013, 8, e59277.	1.1	24
54	New floridatragulines (Mammalia, Camelidae) from the early Miocene Las Cascadas Formation, Panama. Journal of Vertebrate Paleontology, 2012, 32, 456-475.	0.4	16

#	Article	IF	Citations
55	Humans were contemporaneous with late Pleistocene mammals in Florida: evidence from rare earth elemental analyses. Journal of Vertebrate Paleontology, 2012, 32, 708-716.	0.4	9
56	Origin of the white shark Carcharodon (Lamniformes: Lamnidae) based on recalibration of the Upper Neogene Pisco Formation of Peru. Palaeontology, 2012, 55, 1139-1153.	1.0	119
57	New turtles (Chelonia) from the late Eocene through late Miocene of the Panama Canal Basin. Journal of Paleontology, 2012, 86, 539-557.	0.5	33
58	Engaging Undergraduates in Informal Learning Experiences. The Paleontological Society Special Publications, 2012, 12, 247-256.	0.0	0
59	Fossil Horses, Orthogenesis, and Communicating Evolution in Museums. Evolution: Education and Outreach, 2012, 5, 29-37.	0.3	9
60	Earliest art in the Americas: incised image of a proboscidean on a mineralized extinct animal bone from Vero Beach, Florida. Journal of Archaeological Science, 2011, 38, 2908-2913.	1.2	39
61	Equine dental evolution. , 2011, , 3-10.		0
62	Extinct peccaryâ€œCynorcaâ€•occidentale(Tayassuidae, Tayassuinae) from the Miocene of Panama and correlations to North America. Journal of Paleontology, 2010, 84, 288-298.	0.5	29
63	Giant short-faced bears (Arctodus simus) in Pleistocene Florida USA, a substantial range extension. Journal of Paleontology, 2010, 84, 79-87.	0.5	8
64	Spatialâ€“temporal changes in Andean plateau climate and elevation from stable isotopes of mammal teeth. Earth and Planetary Science Letters, 2010, 289, 530-538.	1.8	63
65	Physical properties, geochemistry, and diagenesis of xenarthran teeth: Prospects for interpreting the paleoecology of extinct species. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 291, 180-189.	1.0	36
66	Ancient forests and grasslands in the desert: Diet and habitat of Late Pleistocene mammals from Northcentral Sonora, Mexico. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 297, 391-400.	1.0	36
67	Ancient Nursery Area for the Extinct Giant Shark Megalodon from the Miocene of Panama. PLoS ONE, 2010, 5, e10552.	1.1	83
68	Effects of Global Warming on Ancient Mammalian Communities and Their Environments. PLoS ONE, 2009, 4, e5750.	1.1	64
69	Calibration of mammoth (Mammuthus) dispersal into North America using rare earth elements of Plio-Pleistocene mammals from Florida. Quaternary Research, 2009, 71, 41-48.	1.0	17
70	New Data on Miocene Neotropical Provinciality from Cerdas, Bolivia. Journal of Mammalian Evolution, 2009, 16, 175-198.	1.0	67
71	Seasonal and geographic climate variabilities during the Last Glacial Maximum in North America: Applying isotopic analysis and macrophysical climate models. Palaeogeography, Palaeoclimatology, Palaeoecology, 2009, 283, 15-27.	1.0	21
72	Exceptional preservation of the white sharkCarcharodon(Lamniformes, Lamnidae) from the early Pliocene of Peru. Journal of Vertebrate Paleontology, 2009, 29, 1-13.	0.4	68

#	Article	IF	Citations
73	Three-toed browsing horseAnchitherium(Equidae) from the Miocene of Panama. Journal of Paleontology, 2009, 83, 489-492.	0.5	16
74	Training the Next Generation of Scientists about Broader Impacts. Social Epistemology, 2009, 23, 239-248.	0.7	26
75	Lower Miocene Stratigraphy along the Panama Canal and Its Bearing on the Central American Peninsula. PLoS ONE, 2008, 3, e2791.	1.1	128
76	Evolution, museums and society. Trends in Ecology and Evolution, 2008, 23, 589-591.	4.2	7
77	Geographic variation in diets of ancient populations of 5-million-year-old (early Pliocene) horses from southern North America. Palaeogeography, Palaeoclimatology, Palaeoecology, 2008, 266, 83-94.	1.0	20
78	Reply to Comment on â€œRapid late Miocene rise of the Bolivian Altiplano: Evidence for removal of mantle lithosphereâ€•by Garzione et al. (2006), Earth Planet. Sci. Lett. 241 (2006) 543â€“556. Earth and Planetary Science Letters, 2007, 259, 630-633.	1.8	16
79	Natural History Museum Visitors' Understanding of Evolution. BioScience, 2007, 57, 875-882.	2.2	68
80	Large temperature drop across the Eoceneâ€“Oligocene transition in central North America. Nature, 2007, 445, 639-642.	13.7	213
81	Revised age of the late Neogene terror bird (Titanis) in North America during the Great American Interchange. Geology, 2007, 35, 123.	2.0	52
82	Isotopic discrimination of resource partitioning among ungulates in C3-dominated communities from the Miocene of Florida and California. Paleobiology, 2006, 32, 191-205.	1.3	86
83	Rapid late Miocene rise of the Bolivian Altiplano: Evidence for removal of mantle lithosphere. Earth and Planetary Science Letters, 2006, 241, 543-556.	1.8	336
84	Quantification of diagenesis in Cenozoic sharks: Elemental and mineralogical changes. Geochimica Et Cosmochimica Acta, 2006, 70, 4921-4932.	1.6	31
85	Extinct mammalian biodiversity of the ancient New World tropics. Trends in Ecology and Evolution, 2006, 21, 157-165.	4.2	78
86	North American Miocene land mammals from Panama. Journal of Vertebrate Paleontology, 2006, 26, 720-734.	0.4	43
87	Diet and habitat of toxodont megaherbivores (Mammalia, Notoungulata) from the late Quaternary of South and Central America. Quaternary Research, 2005, 64, 113-124.	1.0	116
88	Terrestrial Mammalian Herbivore Response to Declining Levels of Atmospheric CO2 During the Cenozoic: Evidence from North American Fossil Horses (Family Equidae). , 2005, , 273-292.		9
89	EVOLUTION: Fossil Horses--Evidence for Evolution. Science, 2005, 307, 1728-1730.	6.0	112
90	Diets, habitat preferences, and niche differentiation of Cenozoic sirenians from Florida: evidence from stable isotopes. Paleobiology, 2004, 30, 297-324.	1.3	38

#	Article	IF	Citations
91	Ancient ecology of 15-million-year-old browsing mammals within C3 plant communities from Panama. Oecologia, 2004, 140, 169-182.	0.9	81
92	Chapter 17: Gigantism, Dwarfism, and Cope's Rule: â€œNothing in Evolution Makes Sense without a Phylogenyâ€• Bulletin of the American Museum of Natural History, 2004, 285, 219-237.	1.2	82
93	Incremental growth and diagenesis of skeletal parts of the lamnoid shark Otodus obliquus from the early Eocene (Ypresian) of Morocco. Palaeogeography, Palaeoclimatology, Palaeoecology, 2004, 206, 179-192.	1.0	18
94	â€œAmount Effectâ€•recorded in oxygen isotopes of Late Glacial horse (Equus) and bison (Bison) teeth from the Sonoran and Chihuahuan deserts, southwestern United States. Palaeogeography, Palaeoclimatology, Palaeoecology, 2004, 206, 337-353.	1.0	97
95	Middle Pleistocene Climate Change Recorded in Fossil Mammal Teeth from Tarija, Bolivia, and Upper Limit of the Ensenadan Land-Mammal Age. Quaternary Research, 2000, 54, 121-131.	1.0	51
96	Cenozoic Mammalian Herbivores From the Americas: Reconstructing Ancient Diets and Terrestrial Communities. Annual Review of Ecology, Evolution, and Systematics, 2000, 31, 33-59.	6.7	143
97	Evolution of the grazing niche in Pleistocene mammals from Florida: evidence from stable isotopes. Palaeogeography, Palaeoclimatology, Palaeoecology, 2000, 162, 155-169.	1.0	112
98	University Natural History Museums: The Public Education Mission. Curator, 2000, 43, 123-138.	0.2	3
99	The â€œGallop Pollâ€• Using Evaluation to Develop Fossil Horses in Cyberspace, An Online Exhibition. Curator, 2000, 43, 211-230.	0.2	3
100	Ancient latitudinal gradients of C3 /C4 grasses interpreted from stable isotopes of New World Pleistocene horse (Equus) teeth. Global Ecology and Biogeography, 1999, 8, 137-149.	2.7	101
101	Ancient latitudinal gradients of C3/C4 grasses interpreted from stable isotopes of New World Pleistocene horse (Equus) teeth. Global Ecology and Biogeography, 1999, 8, 137.	2.7	8
102	Magnetic polarity stratigraphy and correlation of the Arikaree Group, Arikareean (late) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td (Olig		16
103	Miocene/Pliocene shift: one step or several?. Nature, 1998, 393, 127-127.	13.7	18
104	Preorbital facial fossae, â€Onohippidium, and origin of South American Pleistocene horses: response to Alberdi and Prado. Journal of Vertebrate Paleontology, 1998, 18, 673-675.	0.4	5
105	Revised age of the Salla beds, Bolivia, and its bearing on the age of the Deseadan South American Land Mammal â€œAgeâ€• Journal of Vertebrate Paleontology, 1998, 18, 189-199.	0.4	79
106	Late Miocene three-toed horse Protohippus (Mammalia, Equidae) from southern Alabama. Journal of Paleontology, 1998, 72, 149-152.	0.5	6
107	Ancient feeding ecology and niche differentiation of Pleistocene mammalian herbivores from Tarija, Bolivia: morphological and isotopic evidence. Paleobiology, 1997, 23, 77-100.	1.3	111
108	Pleistocene horses from Tarija, Bolivia, and validity of the genus â€Onohippidium(Mammalia:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.4	31

#	Article	IF	Citations
109	Origin and evolution of the grazing guild in new world terrestrial mammals. Trends in Ecology and Evolution, 1997, 12, 182-187.	4.2	89
110	Global vegetation change through the Miocene/Pliocene boundary. Nature, 1997, 389, 153-158.	13.7	1,841
111	Mammalian herbivore communities, ancient feeding ecology, and carbon isotopes: A 10 million-year sequence from the Neogene of Florida. Journal of Vertebrate Paleontology, 1996, 16, 103-115.	0.4	178
112	Evolutionary and functional morphology of the knee in fossil and extant horses (Equidae). Journal of Vertebrate Paleontology, 1996, 16, 349-357.	0.4	30
113	Origin and Evolution of the Grazing Guild in Terrestrial Mammals: Morphological and Isotopic Evidence. The Paleontological Society Special Publications, 1996, 8, 252-252.	0.0	0
114	Cenozoic Terrestrial Ecosystem Evolution in Argentina: Evidence from Carbon Isotopes of Fossil Mammal Teeth. Palaios, 1996, 11, 319.	0.6	92
115	Neogene paleomagnetism and oroclinal bending of the central Andes of Bolivia. Journal of Geophysical Research, 1995, 100, 8153-8167.	3.3	79
116	Land mammal biostratigraphy and magnetostratigraphy of the Etadunna Formation (late Oligocene) of South Australia. Journal of Vertebrate Paleontology, 1994, 13, 483-515.	0.4	124
117	South American fossil mammals and carbon isotopes: a 25 million-year sequence from the Bolivian Andes. Palaeogeography, Palaeoclimatology, Palaeoecology, 1994, 107, 257-268.	1.0	98
118	Fossil horses and carbon isotopes: new evidence for Cenozoic dietary, habitat, and ecosystem changes in North America. Palaeogeography, Palaeoclimatology, Palaeoecology, 1994, 107, 269-279.	1.0	169
119	Fossil horses, carbon isotopes and global change. Trends in Ecology and Evolution, 1994, 9, 481-486.	4.2	75
120	Magnetic polarity stratigraphy of Inchasi: a Pliocene mammal-bearing locality from the Bolivian Andes deposited just before the Great American Interchange. Earth and Planetary Science Letters, 1993, 114, 229-241.	1.8	34
121	Evolutionary and functional morphology of the shoulder region and stay-apparatus in fossil and extant horses (Equidae). Journal of Vertebrate Paleontology, 1992, 12, 377-386.	0.4	19
122	Sr-isotopic, paleomagnetic, and biostratigraphic calibration of horse evolution: Evidence from the Miocene of Florida. Geology, 1991, 19, 242.	2.0	13
123	Chronology of Cenozoic primate localities in South America. Journal of Human Evolution, 1990, 19, 7-21.	1.3	73
124	Chronology of Cenozoic primate localities in South America. , 1990, , 7-21.		1
125	Paleomagnetism, geochronology, and possible tectonic rotation of the middle Miocene Barstow Formation, Mojave Desert, southern California. Bulletin of the Geological Society of America, 1990, 102, 478-493.	1.6	51
126	Paleomagnetism and Neogene clockwise rotation of the Northern Cady Mountains, Mojave Desert of southern California. Journal of Geophysical Research, 1990, 95, 4597-4608.	3.3	16

#	Article	IF	Citations
127	Late Cenozoic Paleomagnetism and Chronology of Andean Basins of Bolivia: Evidence for Possible Oroclinal Bending. Journal of Geology, 1990, 98, 541-555.	0.7	66
128	Fossil horses from â€œEohippusâ€•(Hyracotherium) to Equus, 2: rates of dental evolution revisited. Biological Journal of the Linnean Society, 1988, 35, 37-48.	0.7	46
129	Explosive speciation at the base of the adaptive radiation of Miocene grazing horses. Nature, 1988, 336, 466-468.	13.7	87
130	Horses, the Fossil Record, and Evolution. , 1988, , 131-158.		14
131	Systematics, phylogeny, and evolution of fossil horses: a rational alternative to Eisenmann et al. (1987). Journal of Vertebrate Paleontology, 1987, 7, 230-235.	0.4	2
132	Cranium ofEquus insulatus(Mammalia, Equidae) from the middle Pleistocene of Tarija, Bolivia. Journal of Vertebrate Paleontology, 1987, 7, 325-334.	0.4	14
133	Confirmation of a Late Oligocene-Early Miocene Age of the Deseadan Salla Beds of Bolivia. Journal of Geology, 1987, 95, 825-828.	0.7	24
134	Late Hemphillian monodactyl horses (Mammalia, Equidae) from the Bone Valley Formation of central Florida. Journal of Paleontology, 1986, 60, 466-475.	0.5	15
135	Fossil horses from â€œEohippusâ€•(Hyracotherium) to Equus: scaling, Cope's Law, and the evolution of body size. Paleobiology, 1986, 12, 355-369.	1.3	174
136	Patterns of phylogeny and rates of evolution in fossil horses: hipparions from the Miocene and Pliocene of North America. Paleobiology, 1985, 11, 245-257.	1.3	57
137	Magnetic Polarity Stratigraphy and Mammalian Fauna of the Deseadan (Late Oligocene-Early Miocene) Salla Beds of Northern Bolivia. Journal of Geology, 1985, 93, 223-250.	0.7	125
138	Magnetic Butterflies A Case Study of the Monarch (Lepidoptera, Danaidae). Topics in Geobiology, 1985, , 407-415.	0.6	12
139	Land-Mammal Ages, Faunal Heterochrony, and Temporal Resolution in Cenozoic Terrestrial Sequences. Journal of Geology, 1984, 92, 687-705.	0.7	50
140	AstrohippusandDinohippusfrom the YepÃ³mera local fauna (Hemphillian, Mexico) and implications for the phylogeny of one-toed horses. Journal of Vertebrate Paleontology, 1984, 4, 273-283.	0.4	23
141	Magnetic Polarity Stratigraphy of the Middle Pleistocene (Ensenadan) Tarija Formation of Southern Bolivia. Quaternary Research, 1983, 19, 172-187.	1.0	57
142	Systematics of the Neogene Siwalik hipparions (Mammalia, Equidae) based on cranial and dental morphology. Journal of Vertebrate Paleontology, 1982, 2, 185-218.	0.4	31
143	A reappraisal of the systematics, biogeography, and evolution of fossil horses. Paleobiology, 1982, 8, 315-327.	1.3	18
144	Induced Magnetization in the Monarch Butterfly, Danaus Plexippus (Insecta, Lepidoptera). Journal of Experimental Biology, 1982, 96, 1-9.	0.8	47

#	Article	IF	Citations
145	Earliest known Hipparion from Holarctica. Nature, 1977, 265, 532-533.	13.7	7
146	Cladistic Analysis of Primitive Equids, with Notes on Other Perissodactyls. Systematic Zoology, 1976, 25, 1.	1.6	33