Scott L Wing

List of Publications by Year
in descending order

116 papers	11,451 citations	34105 52 h-index	30087 103 g-index
121 all docs	121 docs citations	121 times ranked	9407 citing authors

#	Article	IF	Citations
1	Assessing the Causes of Late Pleistocene Extinctions on the Continents. Science, 2004, 306, 70-75.	12.6	894
2	The Paleocene-Eocene Thermal Maximum: A Perturbation of Carbon Cycle, Climate, and Biosphere with Implications for the Future. Annual Review of Earth and Planetary Sciences, 2011, 39, 489-516.	11.0	722
3	Global patterns in leaf ¹³ C discrimination and implications for studies of past and future climate. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5738-5743.	7.1	690
4	When did the Anthropocene begin? A mid-twentieth century boundary level is stratigraphically optimal. Quaternary International, 2015, 383, 196-203.	1.5	546
5	Transient Floral Change and Rapid Global Warming at the Paleocene-Eocene Boundary. Science, 2005, 310, 993-996.	12.6	486
6	Sensitivity of leaf size and shape to climate: global patterns and paleoclimatic applications. New Phytologist, 2011, 190, 724-739.	7.3	445
7	Eocene continental climates and latitudinal temperature gradients. Geology, 1995, 23, 1044.	4.4	438
8	Paleobotanical Evidence for Near Present-Day Levels of Atmospheric CO2 During Part of the Tertiary. Science, 2001, 292, 2310-2313.	12.6	309
9	Production of n-alkyl lipids in living plants and implications for the geologic past. Geochimica Et Cosmochimica Acta, 2011, 75, 7472-7485.	3.9	278
10	Using fossil leaves as paleoprecipitation indicators: An Eocene example. Geology, 1998, 26, 203.	4.4	264
11	High Plant Diversity in Eocene South America: Evidence from Patagonia. Science, 2003, 300, 122-125.	12.6	263
12	Late Paleocene fossils from the CerrejÃ³n Formation, Colombia, are the earliest record of Neotropical rainforest. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18627-18632.	7.1	256
13	ECOLOGICAL ASPECTS OF THE CRETACEOUS FLOWERING PLANT RADIATION. Annual Review of Earth and Planetary Sciences, 1998, 26, 379-421.	11.0	243
14	Sharply increased insect herbivory during the Paleoceneâ€"Eocene Thermal Maximum. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1960-1964.	7.1	224
15	Scale and diversity of the physical technosphere: A geological perspective. Infrastructure Asset Management, 2017, 4, 9-22.	1.6	193
16	Evolution of the Earliest Horses Driven by Climate Change in the Paleocene-Eocene Thermal Maximum. Science, 2012, 335, 959-962.	12.6	188
17	Two massive, rapid releases of carbon during the onset of the Palaeoceneâ€"Eocene thermalÂmaximum. Nature Geoscience, 2015, 8, 44-47.	12.9	188
18	Magnitude of the carbon isotope excursion at the Paleoceneâ€"Eocene thermal maximum: The role of plant community change. Earth and Planetary Science Letters, 2007, 262, 50-65.	4.4	178

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19	The fayum primate forest revisited. Journal of Human Evolution, 1982, 11, 603-632.	2.6	168
20	Implications of an exceptional fossil flora for Late Cretaceous vegetation. Nature, 1993, 363, 342-344.	27.8	163
21	Stratigraphic and Earth System approaches to defining the Anthropocene. Earth's Future, 2016, 4, 324-345.	6.3	162
22	Global Boundary Stratotype Section and Point (GSSP) for the Anthropocene Series: Where and how to look for potential candidates. Earth-Science Reviews, 2018, 178, 379-429.	9.1	153
23	The reflection of deciduous forest communities in leaf litter: implications for autochthonous litter assemblages from the fossil record. Paleobiology, 1992, 18, 30-49.	2.0	149
24	Holocene shifts in the assembly of plant and animal communities implicate human impacts. Nature, 2016, 529, 80-83.	27.8	147
25	The reciprocal interaction of angiosperm evolution and tetrapod herbivory. Review of Palaeobotany and Palynology, 1987, 50, 179-210.	1.5	145
26	History and causes of post-Laramide relief in the Rocky Mountain orogenic plateau. Bulletin of the Geological Society of America, 2006, 118, 393-405.	3.3	142
27	Plant and mammal diversity in the Paleocene to early Eocene of the Bighorn Basin. Palaeogeography, Palaeoclimatology, Palaeoecology, 1995, 115, 117-155.	2.3	138
28	Extinction at the end-Cretaceous and the origin of modern Neotropical rainforests. Science, 2021, 372, 63-68.	12.6	115
29	Computer vision cracks the leaf code. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3305-3310.	7.1	114
30	Early Eocene biotic and climatic change in interior western North America. Geology, 1991, 19, 1189.	4.4	112
31	Climate sensitivity to changes in land surface characteristics. Global and Planetary Change, 2000, 26, 445-465.	3.5	109
32	Ecological conservatism in the â€œliving fossilâ€•Ginkgo. Paleobiology, 2003, 29, 84-104.	2.0	109
33	Eocene and Oligocene Floras and Vegetation of the Rocky Mountains. Annals of the Missouri Botanical Garden, 1987, 74, 748.	1.3	103
34	Leaf wax composition and carbon isotopes vary among major conifer groups. Geochimica Et Cosmochimica Acta, 2015, 170, 145-156.	3.9	101
35	Making the case for a formal Anthropocene Epoch: an analysis of ongoing critiques. Newsletters on Stratigraphy, 2017, 50, 205-226.	1.2	100
36	Paleotemperature Estimation Using Leaf-Margin Analysis: Is Australia Different?. Palaios, 2004, 19, 129-142.	1.3	92

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37	Plant response to a global greenhouse event 56 million years ago. American Journal of Botany, 2013, 100, 1234-1254.	1.7	92
38	Eocene hyperthermal event offers insight into greenhouse warming. Eos, 2006, 87, 165.	0.1	91
39	Paleohydrologic response to continental warming during the Paleoceneâ€“Eocene Thermal Maximum, Bighorn Basin, Wyoming. Palaeogeography, Palaeoclimatology, Palaeoecology, 2013, 370, 196-208.	2.3	88
40	Evaluating the use of weathering indices for determining mean annual precipitation in the ancient stratigraphic record. Palaeogeography, Palaeoclimatology, Palaeoecology, 2011, 309, 358-366.	2.3	86
41	Conflict between Local and Global Changes in Plant Diversity through Geological Time. Palaios, 1995, 10, 551.	1.3	84
42	Floral response to rapid warming in the earliest Eocene and implications for concurrent faunal change. Paleobiology, 2001, 27, 539-563.	2.0	82
43	Paleocene Malvaceae from northern South America and their biogeographical implications. American Journal of Botany, 2011, 98, 1337-1355.	1.7	71
44	Basin-wide magnetostratigraphic framework for the Bighorn Basin, Wyoming. Bulletin of the Geological Society of America, 2007, 119, 848-859.	3.3	70
45	StomataCounter: a neural network for automatic stomata identification and counting. New Phytologist, 2019, 223, 1671-1681.	7.3	69
46	The Anthropocene: a conspicuous stratigraphical signal of anthropogenic changes in production and consumption across the biosphere. Earth's Future, 2016, 4, 34-53.	6.3	66
47	Palms (Arecaceae) from a Paleocene rainforest of northern Colombia. American Journal of Botany, 2009, 96, 1300-1312.	1.7	63
48	Improving the Ginkgo CO2 barometer: Implications for the early Cenozoic atmosphere. Earth and Planetary Science Letters, 2016, 439, 158-171.	4.4	60
49	A framework for evaluating the influence of climate, dispersal limitation, and biotic interactions using fossil pollen associations across the late Quaternary. Ecography, 2014, 37, 1095-1108.	4.5	57
50	Isotopic characteristics of canopies in simulated leaf assemblages. Geochimica Et Cosmochimica Acta, 2014, 144, 82-95.	3.9	57
51	Sedimentological, Taphonomic, and Climatic Aspects of Eocene Swamp Deposits (Willwood Formation,) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	56
52	Paleogene plants fractionated carbon isotopes similar to modern plants. Earth and Planetary Science Letters, 2015, 429, 33-44.	4.4	55
53	Fossils and fossil climate: the case for equable continental interiors in the Eocene. , 1994, , 35-44.		53
54	Scaling and structure of dicotyledonous leaf venation networks. Ecology Letters, 2012, 15, 87-95.	6.4	51

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55	Fossil Araceae from a Paleocene neotropical rainforest in Colombia. American Journal of Botany, 2008, 95, 1569-1583.	1.7	47
56	Distribution and carbon isotope patterns of diterpenoids and triterpenoids in modern temperate C3 trees and their geochemical significance. Geochimica Et Cosmochimica Acta, 2012, 85, 342-356.	3.9	47
57	Late Tertiary floral assemblage from upland gravel deposits of the southern Maryland Coastal Plain. Geology, 1990, 18, 311.	4.4	45
58	Stable isotopes in early Eocene mammals as indicators of forest canopy structure and resource partitioning. Paleobiology, 2008, 34, 282-300.	2.0	45
59	THE PLATYCARYA PERPLEX AND THE EVOLUTION OF THE JUGLANDACEAE. American Journal of Botany, 1984, 71, 388-411.	1.7	42
60	A comparison of terpenoid and leaf fossil vegetation proxies in Paleocene and Eocene Bighorn Basin sediments. Organic Geochemistry, 2014, 71, 30-42.	1.8	41
61	CRITICAL ISSUES OF SCALE IN PALEOECOLOGY. Palaios, 2009, 24, 1-4.	1.3	39
62	Synchronizing early Eocene deep-sea and continental records â€" cyclostratigraphic age models for the Bighorn Basin Coring Project drill cores. Climate of the Past, 2018, 14, 303-319.	3.4	39
63	An early Eocene cool period? Evidence for ceontinental cooling during the warmest part of the Cenozoic. , 1999, , 197-238.		38
64	HIGHâ€RESOLUTION LEAF Xâ€RADIOGRAPHY IN SYSTEMATICS AND PALEOBOTANY. American Journal of Botany, 1992, 79, 1320-1324.	1.7	37
65	Chemostratigraphic implications of spatial variation in the Paleoceneâ€Eocene Thermal Maximum carbon isotope excursion, SE Bighorn Basin, Wyoming. Geochemistry, Geophysics, Geosystems, 2013, 14, 4133-4152.	2.5	37
66	Distortion of carbon isotope excursion in bulk soil organic matter during the Paleocene-Eocene thermal maximum. Bulletin of the Geological Society of America, 2016, 128, 1352-1366.	3.3	36
67	Carbon and oxygen isotope records from Paleosols spanning the Paleocene-Eocene boundary, Bighorn Basin, Wyoming. , 2003, , .		32
68	Floral and environmental gradients on a Late Cretaceous landscape. Ecological Monographs, 2012, 82, 23-47.	5.4	32
69	Tertiary vegetation of North America as a context for mammalian evolution. , 0, , 37-65.		31
70	The Platycarya Perplex and the Evolution of the Juglandaceae. American Journal of Botany, 1984, 71, 388.	1.7	30
71	Middle to Late Paleocene Leguminosae fruits and leaves from Colombia. Australian Systematic Botany, 2019, 32, 385-408.	0.9	29
72	Does extinction wield an axe or pruning shears? How interactions between phylogeny and ecology affect patterns of extinction. Paleobiology, 2011, 37, 72-91.	2.0	28

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73	Consequences of elevated temperature and <scp><i>p</i>CO</scp>₂ on insect folivory at the ecosystem level: perspectives from the fossil record. Ecology and Evolution, 2016, 6, 4318-4331.	1.9	25
74	Constraining paleohydrologic change during the Paleocene-Eocene Thermal Maximum in the continental interior of North America. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 465, 237-246.	2.3	24
75	Mass extinctions in plant evolution. , 2004, , 61-98.		23
76	A phylogenetic analysis of conifer diterpenoids and their carbon isotopes for chemotaxonomic applications. Organic Geochemistry, 2019, 127, 50-58.	1.8	21
77	Floral change during the Initial Eocene Thermal Maximum in the Powder River Basin, Wyoming. , 2003, , .		19
78	Canopy structure in Late Cretaceous and Paleocene forests as reconstructed from carbon isotope analyses of fossil leaves. Geology, 2019, 47, 977-981.	4.4	19
79	Bighorn Basin Coring Project (BBCP): a continental perspective on early Paleogene hyperthermals. Scientific Drilling, 0, 16, 21-31.	0.6	18
80	Carbon Isotope Record of Trace <i>n</i>â€alkanes in a Continental PETM Section Recovered by the Bighorn Basin Coring Project (BBCP). Paleoceanography and Paleoclimatology, 2019, 34, 853-865.	2.9	18
81	Relation of Paleovegetation to Geometry and Cyclicity of Some Fluvial Carbonaceous Deposits. Journal of Sedimentary Research, 1984, Vol. 54, .	1.6	18
82	Clarifying the influence of water availability and plant types on carbon isotope discrimination by C3 plants. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E59-60; author reply E61.	7.1	17
83	Biomechanical and leafâ€"climate relationships: A comparison of ferns and seed plants. American Journal of Botany, 2014, 101, 338-347.	1.7	17
84	Global Changes in Terrestrial Vegetation and Continental Climate During the Paleoceneâ€Eocene Thermal Maximum. Paleoceanography and Paleoclimatology, 2022, 37, .	2.9	16
85	Reading the leaves: A comparison of leaf rank and automated areole measurement for quantifying aspects of leaf venation. Applications in Plant Sciences, 2014, 2, 1400006.	2.1	15
86	Comments and Reply on " 'Equable' climates during Earth history?". Geology, 1991, 19, 539.	4.4	13
87	ï»¿An image dataset of cleared, x-rayed, and fossil leaves vetted to plant family for human and machine learning. PhytoKeys, 2021, 187, 93-128.	1.0	12
88	Eocene continental climates and latitudinal temperature gradients: Comment and Reply. Geology, 1996, 24, 1054.	4.4	10
89	Swift Weathering Response on Floodplains During the Paleoceneâ€Eocene Thermal Maximum. Geophysical Research Letters, 2022, 49, .	4.0	10
90	Evolution and Expansion of Flowering Plants. The Paleontological Society Papers, 2000, 6, 209-232.	0.6	9

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91	Paleocene wind-dispersed fruits and seeds from Colombia and their implications for early Neotropical rainforests. Acta Palaeobotanica, 2014, 54, 197-229.	0.7	9
92	Reinvestigation of Leaf Rank, an Underappreciated Component of Leo Hickey's Legacy. Bulletin of the Peabody Museum of Natural History, 2014, 55, 79.	1.1	8
93	Binary-state speciation and extinction method is conditionally robust to realistic violations of its assumptions. BMC Evolutionary Biology, 2018, 18, 69.	3.2	7
94	Endocarps of <i>Pyrenacantha</i> (Icacinaceae) from the Early Oligocene of Egypt. International Journal of Plant Sciences, 2020, 181, 432-442.	1.3	7
95	Body massâ€related changes in mammal community assembly patterns during the late Quaternary of North America. Ecography, 2021, 44, 56-66.	4.5	7
96	Fossil papilionoids of the Bowdichia clade (Leguminosae) from the Paleogene of North America. American Journal of Botany, 2022, 109, 130-150.	1.7	7
97	First ichnofossils of flankâ€buttressed trees (late Eocene), Fayum Depression, Egypt. Ichnos, 1995, 3, 281-286.	0.5	6
98	Decreased soil carbon in a warming world: Degraded pyrogenic carbon during the Paleocene-Eocene Thermal Maximum, Bighorn Basin, Wyoming. Earth and Planetary Science Letters, 2021, 566, 116970.	4.4	6
99	High-Resolution Leaf X-Radiography in Systematics and Paleobotany. American Journal of Botany, 1992, 79, 1320.	1.7	6
100	Attached leaves and fruits of myrtaceous affinity from the Middle Eocene of Colorado. Review of Palaeobotany and Palynology, 1998, 102, 153-163.	1.5	5
101	Coring project in Bighorn Basin: Drilling phase complete. Eos, 2012, 93, 41-42.	0.1	4
102	Distinctive quadrangular seed-bearing structures of gnetalean affinity from the Late Jurassic Morrison Formation of Utah, USA. Journal of Systematic Palaeontology, 2021, 19, 743-760.	1.5	4
103	Fossil Atmospheres: a case study of citizen science in question-driven palaeontological research. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20170388.	4.0	3
104	Stable isotope study of fluid inclusions in fluorite from Idaho: Implications for continental climates during the Eocene: Comment and Reply. Geology, 1993, 21, 1051.	4.4	2
105	The Multi-Stranded Career of Leo J. Hickey. Bulletin of the Peabody Museum of Natural History, 2014, 55, 69-78.	1.1	2
106	Diversification in the Rosales is influenced by dispersal, geographic range size, and preâ€existing species richness. American Journal of Botany, 2022, , .	1.7	2
107	Paleoclimate, Proxies, Paradoxes, and Predictions. Palaios, 1994, 9, 121.	1.3	1
108	Lyons et al. reply. Nature, 2016, 538, E3-E4.	27.8	1

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109	Effects of the Paleocene-Eocene Thermal Maximum on Terrestrial Plants and Carbon Storage. The Paleontological Society Special Publications, 2014, 13, 131-132.	0.0	1
110	Prehistoric Wetlands. , 2021, , .		1
111	Paleocene-Eocene floral and climatic change in the Bighorn Basin. The Paleontological Society Special Publications, 1992, 6, 316-316.	0.0	0
112	Taphonomy and Depositional Environments of Fossil Plant Assemblages from Tabular Carbonaceous Shales of the Bighorn Basin, Wyoming. The Paleontological Society Special Publications, 1996, 8, 97-97.	0.0	0
113	A Dedication to Richard Hall Benson. The Paleontological Society Papers, 2003, 9, xvi-xviii.	0.6	0
114	Lyons et al. reply. Nature, 2016, 537, E5-E6.	27.8	0
115	Presentation of the 2018 Paleontological Society Medal to Anna K. Behrensmeyer. Journal of Paleontology, 2019, 93, 1036-1037.	0.8	0
116	Determining Paleoclimates. Science, 1993, 260, 278-279.	12.6	0