Aaron F Diefendorf

List of Publications by Year
in descending order

43 papers	2,390 citations	394421 19 h-index	276875 41 g-index
43 all docs	43 docs citations	43 times ranked	3042 citing authors

#	Article	IF	Citations
1	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
2	Extracting the most from terrestrial plant-derived n-alkyl lipids and their carbon isotopes from the sedimentary record: A review. Organic Geochemistry, 2017, 103, 1-21.	1.8	280
3	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
4	Slow release of fossil carbon during the Palaeoceneâ€“Eocene Thermal Maximum. Nature Geoscience, 2011, 4, 481-485.	12.9	214
5	Leaf wax composition and carbon isotopes vary among major conifer groups. Geochimica Et Cosmochimica Acta, 2015, 170, 145-156.	3.9	101
6	Long-term stabilization of deep soil carbon by fire and burial during early Holocene climate change. Nature Geoscience, 2014, 7, 428-432.	12.9	81
7	Hydrogen isotopes of n-alkanes and n-alkanoic acids as tracers of precipitation in a temperate forest and implications for paleorecords. Geochimica Et Cosmochimica Acta, 2017, 206, 166-183.	3.9	72
8	Paleogene plants fractionated carbon isotopes similar to modern plants. Earth and Planetary Science Letters, 2015, 429, 33-44.	4.4	55
9	Evidence for high-frequency late Glacial to mid-Holocene (16,800 to 5500 cal yr B.P.) climate variability from oxygen isotope values of Lough Inchiquin, Ireland. Quaternary Research, 2006, 65, 78-86.	1.7	47
10	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
11	Export of submicron particulate organic matter to mesopelagic depth in an oligotrophic gyre. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12565-12570.	7.1	47
12	Carbon isotopes of marl and lake sediment organic matter reflect terrestrial landscape change during the late Glacial and early Holocene (16,800 to 5,540Âcal yr B.P.): a multiproxy study of lacustrine sediments at Lough Inchiquin, western Ireland. Journal of Paleolimnology, 2008, 39, 101-115.	1.6	44
13	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
14	Sedimentary n-alkanes and n-alkanoic acids in a temperate bog are biased toward woody plants. Organic Geochemistry, 2019, 128, 94-107.	1.8	40
15	Survey of stable isotope values in Irish surface waters. Journal of Paleolimnology, 2005, 34, 257-269.	1.6	35
16	Effect of thermal maturation on plant-derived terpenoids and leaf wax n-alkyl components. Organic Geochemistry, 2015, 89-90, 61-70.	1.8	32
17	Origin and sedimentary fate of plant-derived terpenoids in a small river catchment and implications for terpenoids as quantitative paleovegetation proxies. Organic Geochemistry, 2015, 82, 22-32.	1.8	25
18	Appraising the roles of nutrient availability, global change, and functional traits during the angiosperm rise to dominance. Ecology Letters, 2010, 13, E1-6.	6.4	23

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19	Seasonal and canopy height variation in n-alkanes and their carbon isotopes in a temperate forest. Organic Geochemistry, 2018, 116, 23-34.	1.8	22
20	A phylogenetic analysis of conifer diterpenoids and their carbon isotopes for chemotaxonomic applications. Organic Geochemistry, 2019, 127, 50-58.	1.8	21
21	On geologic timescales, plant carbon isotope fractionation responds to precipitation similarly to modern plants and has a small negative correlation with pCO2. Geochimica Et Cosmochimica Acta, 2020, 270, 264-281.	3.9	20
22	Contrasting sensitivity of lake sediment n-alkanoic acids and n-alkanes to basin-scale vegetation and regional-scale precipitation Î´2H in the Adirondack Mountains, NY (USA). Geochimica Et Cosmochimica Acta, 2020, 268, 22-41.	3.9	19
23	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
24	Population differences in host plant preference and the importance of yeast and plant substrate to volatile composition. Ecology and Evolution, 2017, 7, 3815-3825.	1.9	17
25	Conifers are a major source of sedimentary leaf wax n-alkanes when dominant in the landscape: Case studies from the Paleogene. Organic Geochemistry, 2020, 147, 104069.	1.8	16
26	Dissolved organic matter dynamics in storm water runoff in a dryland urban region. Journal of Arid Environments, 2019, 165, 55-63.	2.4	15
27	Identifying the â€˜savannaâ€™ signature in lacustrine sediments in northern Australia. Quaternary Science Reviews, 2019, 203, 233-247.	3.0	14
28	Stable source of Holocene spring precipitation recorded in leaf wax hydrogen-isotope ratios from two New York lakes. Quaternary Science Reviews, 2020, 240, 106357.	3.0	11
29	Climate response of the Florida Peninsula to Heinrich events in the North Atlantic. Quaternary Science Reviews, 2018, 194, 1-11.	3.0	10
30	Last interglacial (MIS 5e) and Holocene paleohydrology and paleovegetation of midcontinental North America from Gulf of Mexico sediments. Quaternary Science Reviews, 2020, 227, 106066.	3.0	9
31	Plant wax and carbon isotope response to heat and drought in the conifer Juniperus monosperma. Organic Geochemistry, 2021, 153, 104197.	1.8	9
32	Centennial-scale age offsets of plant wax n-alkanes in Adirondack lake sediments. Geochimica Et Cosmochimica Acta, 2021, 300, 119-136.	3.9	8
33	Plant wax integration and transport from the Mississippi River Basin to the Gulf of Mexico inferred from GIS-enabled isoscapes and mixing models. Geochimica Et Cosmochimica Acta, 2019, 257, 131-149.	3.9	7
34	Synchronous Marine and Terrestrial Carbon Cycle Perturbation in the High Arctic During the PETM. Paleoceanography and Paleoclimatology, 2021, 36, e2020PA003942.	2.9	7
35	Hydrogen isotopic composition (Î´2H) of diatom-derived C20 highly branched isoprenoids from lake sediments tracks lake water Î´2H. Organic Geochemistry, 2020, 150, 104122.	1.8	5
36	Spatial variability in foliar carbon and nitrogen isotope values on Tenerife reflects both climate and soils: Establishing a framework for future work. Acta Oecologica, 2020, 109, 103647.	1.1	3

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37	Effects of drying methods on plant lipid compounds and bulk isotopic compositions. Rapid Communications in Mass Spectrometry, 2020, 34, e8900.	1.5	2
38	Hydrogen and carbon isotope fractionation in modern plant wax n-alkanes from the Falkland Islands. Organic Geochemistry, 2022, 166, 104404.	1.8	2
39	Local differences in paleohydrology have stronger influence on plant biomarkers than regional climate change across two Paleogene Laramide Basins, Wyoming, USA. Palaeogeography, Palaeoclimatology, Palaeoecology, 2022, 596, 110977.	2.3	2
40	A high-resolution record from Svalbard of carbon release during the Paleocene-Eocene thermal maximum. Journal of Earth Science (Wuhan, China), 2010, 21, 190-190.	3.2	1
41	Stable Isotope Tracers of Cretaceous Arctic Paleoprecipitation. Geosciences (Switzerland), 2022, 12, 143.	2.2	1
42	Can Stable Isotopes in Fossil Marine Arthropods Serve as Paleoecological Indicators?. The Paleontological Society Special Publications, 2014, 13, 149-150.	0.0	0
43	DYNAMICS OF DEPOSITION AND FOSSIL PRESERVATION AT THE EARLY EOCENE OKANAGAN HIGHLANDS OF BRITISH COLUMBIA, CANADA: INSIGHTS FROM ORGANIC GEOCHEMISTRY. Palaios, 2022, 37, 185-200.	1.3	0