Pratigya J Polissar

List of Publications by Year
in descending order

72 papers	3,659 citations	147801 31 h-index	133252 59 g-index
74 all docs	74 docs citations	74 times ranked	4456 citing authors

#	Article	IF	Citations
1	Molecular Paleohydrology: Interpreting the Hydrogen-Isotopic Composition of Lipid Biomarkers from Photosynthesizing Organisms. Annual Review of Earth and Planetary Sciences, 2012, 40, 221-249.	11.0	748
2	Paleoaltimetry of the Tibetan Plateau from D/H ratios of lipid biomarkers. Earth and Planetary Science Letters, 2009, 287, 64-76.	4.4	221
3	Northward extent of East Asian monsoon covaries with intensity on orbital and millennial timescales. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1817-1821.	7.1	192
4	Holocene paleohydrology and glacial history of the central Andes using multiproxy lake sediment studies. Palaeogeography, Palaeoclimatology, Palaeoecology, 2003, 194, 123-138.	2.3	185
5	A Tibetan lake sediment record of Holocene Indian summer monsoon variability. Earth and Planetary Science Letters, 2014, 399, 92-102.	4.4	162
6	Effects of aridity and vegetation on plant-wax ÎD in modern lake sediments. Geochimica Et Cosmochimica Acta, 2010, 74, 5785-5797.	3.9	158
7	Neogene biomarker record of vegetation change in eastern Africa. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6355-6363.	7.1	111
8	Solar modulation of Little Ice Age climate in the tropical Andes. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8937-8942.	7.1	93
9	Measurement of ¹³C and ¹⁵N Isotopic Composition on Nanomolar Quantities of C and N. Analytical Chemistry, 2009, 81, 755-763.	6.5	84
10	Reduced El NiÃ±oâ€“Southern Oscillation during the Last Glacial Maximum. Science, 2015, 347, 255-258.	12.6	83
11	Monsoon-driven Saharan dust variability over the past 240,000 years. Science Advances, 2019, 5, eaav1887.	10.3	83
12	Uncertainty in paleohydrologic reconstructions from molecular ÎD values. Geochimica Et Cosmochimica Acta, 2014, 129, 146-156.	3.9	81
13	Synchronous rise of African C4 ecosystems 10 million years ago in the absence of aridification. Nature Geoscience, 2019, 12, 657-660.	12.9	79
14	Multiproxy paleoaltimetry of the Late Oligocene-Pliocene Oiyug Basin, southern Tibet. Numerische Mathematik, 2016, 316, 401-436.	1.4	70
15	Large amplitude solar modulation cycles of10Be in Antarctica: Implications for atmospheric mixing processes and interpretation of the ice core record. Geophysical Research Letters, 1996, 23, 523-526.	4.0	67
16	Drought variability in the Pacific Northwest from a 6,000-yr lake sediment record. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3870-3875.	7.1	62
17	Biomarkers heat up during earthquakes: New evidence of seismic slip in the rock record. Geology, 2014, 42, 99-102.	4.4	57
18	Upregulation of phytoplankton carbon concentrating mechanisms during low CO2 glacial periods and implications for the phytoplankton pCO2 proxy. Quaternary Science Reviews, 2019, 208, 1-20.	3.0	55

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19	Differentiating temperate tree species and their organs using lipid biomarkers in leaves, roots and soil. Organic Geochemistry, 2012, 52, 130-141.	1.8	53
20	Last glacial maximum equilibrium-line altitude and paleo-temperature reconstructions for the Cordillera de MÃ©rida, Venezuelan Andes. Quaternary Research, 2007, 67, 115-127.	1.7	52
21	Initial Expansion of C₄ Vegetation in Australia During the Late Pliocene. Geophysical Research Letters, 2018, 45, 4831-4840.	4.0	52
22	Constraints on the salinityâ€“oxygen isotope relationship in the central tropical Pacific Ocean. Marine Chemistry, 2014, 161, 26-33.	2.3	50
23	Paleocene to Pliocene low-latitude, high-elevation basins of southern Tibet: Implications for tectonic models of India-Asia collision, Cenozoic climate, and geochemical weathering. Bulletin of the Geological Society of America, 2018, 130, 307-330.	3.3	50
24	Glacialâ€interglacial changes in central tropical Pacific surface seawater property gradients. Paleoceanography, 2015, 30, 423-438.	3.0	45
25	Dampened El NiÃ±o in the Early and Midâ€Holocene Due To Insolationâ€Forced Warming/Deepening of the Thermocline. Geophysical Research Letters, 2018, 45, 316-326.	4.0	42
26	Extractable organic material in fault zones as a tool to investigate frictional stress. Earth and Planetary Science Letters, 2011, 311, 439-447.	4.4	40
27	A Pleistocene palaeovegetation record from plant wax biomarkers from the Nachukui Formation, West Turkana, Kenya. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150235.	4.0	40
28	The modern and Last Glacial Maximum hydrological cycles of the Eastern Mediterranean and the Levant from a water isotope perspective. Earth and Planetary Science Letters, 2017, 457, 302-312.	4.4	38
29	15,000-yr Pollen Record of Vegetation change in the High Altitude Tropical Andes at Laguna Verde Alta, Venezuela. Quaternary Research, 2005, 64, 308-317.	1.7	32
30	Late Quaternary deglacial history of the MÃ©rida Andes, Venezuela. Journal of Quaternary Science, 2005, 20, 801-812.	2.1	32
31	Late-Holocene Indian summer monsoon variability revealed from a 3300-year-long lake sediment record from Nirâ€™pa Co, southeastern Tibet. Holocene, 2017, 27, 541-552.	1.7	32
32	Synchronous interhemispheric Holocene climate trends in the tropical Andes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14551-14556.	7.1	31
33	Using the sunspot cycle to date ice cores. Geophysical Research Letters, 1998, 25, 163-166.	4.0	26
34	Sediment provenance and controls on slip propagation: Lessons learned from the 2011 Tohoku and other great earthquakes of the subducting northwest Pacific plate. , 2015, 11, 533-541.		26
35	Sedentism and plant cultivation in northeast China emerged during affluent conditions. PLoS ONE, 2019, 14, e0218751.	2.5	26
36	Organic thermal maturity as a proxy for frictional fault heating: Experimental constraints on methylphenanthrene kinetics at earthquake timescales. Geochimica Et Cosmochimica Acta, 2015, 151, 103-116.	3.9	25

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37	Holocene hydrologic balance of tropical South America from oxygen isotopes of lake sediment opal, Venezuelan Andes. Earth and Planetary Science Letters, 2006, 242, 375-389.	4.4	24
38	Multiple major faults at the Japan Trench: Chemostratigraphy of the plate boundary at IODP Exp. 343: JFAST. Earth and Planetary Science Letters, 2015, 423, 57-66.	4.4	24
39	Sliding rocks at the Racetrack, Death Valley: What makes them move?. Geology, 1995, 23, 819.	4.4	22
40	Changes in northeast African hydrology and vegetation associated with Plioceneâ€“Pleistocene sapropel cycles. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150243.	4.0	22
41	Proglacial lake sediment records reveal Holocene climate changes in the Venezuelan Andes. Quaternary Science Reviews, 2014, 89, 44-55.	3.0	21
42	Dynamic carbonate sedimentation on the Northern Line Islands Ridge, Palmyra Basin. Marine Geology, 2016, 379, 194-207.	2.1	18
43	Picomolar-scale compound-specific isotope analyses. Rapid Communications in Mass Spectrometry, 2018, 32, 730-738.	1.5	18
44	Midlatitude Temperature Variations in the Oligocene to Early Miocene. Paleoceanography and Paleoclimatology, 2019, 34, 1328-1343.	2.9	17
45	Earthquake slip surfaces identified by biomarker thermal maturity within the 2011 Tohoku-Oki earthquake fault zone. Nature Communications, 2020, 11, 533.	12.8	17
46	Reaction kinetics of alkenone and nâ€alkane thermal alteration at seismic timescales. Geochemistry, Geophysics, Geosystems, 2017, 18, 204-219.	2.5	16
47	Biomarker thermal maturity experiments at earthquake slip rates. Earth and Planetary Science Letters, 2018, 502, 253-261.	4.4	15
48	Ecological dynamic equilibrium in an early Miocene (21.73â€¯Ma) forest, Ethiopia. Palaeogeography, Palaeoclimatology, Palaeoecology, 2020, 539, 109425.	2.3	14
49	Late Miocene C₄ Grassland Fire Feedbacks on the Indian Subcontinent. Paleoceanography and Paleoclimatology, 2021, 36, e2020PA004106.	2.9	14
50	Hydrologic Changes Drove the Late Miocene Expansion of C₄ Grasslands on the Northern Indian Subcontinent. Paleoceanography and Paleoclimatology, 2021, 36, e2020PA004108.	2.9	14
51	Paleoclimate support for a persistent dry island effect in the Colombian Andes during the last 4700 years. Holocene, 2018, 28, 217-228.	1.7	13
52	Leaf Wax ÎD and Î´¹³C in Soils Record Hydrological and Environmental Information Across a Climatic Gradient in Israel. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2898-2916.	3.0	11
53	Hot on the trail: Coseismic heating on a localized structure along the Muddy Mountain fault, Nevada. Journal of Structural Geology, 2019, 120, 67-79.	2.3	10
54	Modulation of late Pleistocene ENSO strength by the tropical Pacific thermocline. Nature Communications, 2020, 11, 5377.	12.8	10

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55	Pleistocene drivers of Northwest African hydroclimate and vegetation. Nature Communications, 2022, 13, .	12.8	10
56	Biomarker Thermal Maturity Reveals Localized Temperature Rise From Paleoseismic Slip Along the Punchbowl Fault, CA, USA. Geochemistry, Geophysics, Geosystems, 2019, 20, 3201-3215.	2.5	9
57	Carbon Isotope Fractionation in Noelaerhabdaceae Algae in Culture and a Critical Evaluation of the Alkenone Paleobarometer. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009657.	2.5	7
58	Reply to Liu et al.: East Asian summer monsoon rainfall dominates Lake Dali lake area changes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2989-E2990.	7.1	6
59	Soil Carbon Loss and Weak Fire Feedbacks During Pliocene C₄ Grassland Expansion in Australia. Geophysical Research Letters, 2021, 48, e2020GL090964.	4.0	6
60	Evidence of Seismic Slip on a Large Splay Fault in the Hikurangi Subduction Zone. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009638.	2.5	6
61	Carbon isotopes in aquatic plants, Long Valley Caldera, California as records of past hydrothermal and magmatic activity. Geophysical Research Letters, 1998, 25, 2853-2856.	4.0	5
62	Pliocene Paleoenvironments in the Meade Basin, Southwest Kansas, U.S.A.. Journal of Sedimentary Research, 2019, 89, 416-439.	1.6	5
63	A Multiâ€Proxy Approach Using Zircon (Uâ€Th)/He Thermochronometry and Biomarker Thermal Maturity to Robustly Capture Earthquake Temperature Rise Along the Punchbowl Fault, California. Geochemistry, Geophysics, Geosystems, 2022, 23, .	2.5	4
64	Reply: Late Quaternary deglacial history of the MÃ©rida Andes, Venezuela: response to comment. Journal of Quaternary Science, 2007, 22, 823-825.	2.1	3
65	Reply to: Multiple drivers of Miocene C4 ecosystem expansions. Nature Geoscience, 2020, 13, 465-467.	12.9	3
66	Controls on Alkenone Carbon Isotope Fractionation in the Modern Ocean. Geochemistry, Geophysics, Geosystems, 2021, 22, .	2.5	3
67	History of earthquakes along the creeping section of the San Andreas fault, California, USA. Geology, 2022, 50, 516-521.	4.4	3
68	Biotic and Abiotic Forcing During the Transition to Modern Grassland Ecosystems: Evolutionary and Ecological Responses of Small Mammal Communities Over the Last 5 Million Years. The Paleontological Society Papers, 2015, 21, 197-218.	0.6	2
69	Relationship between individual chamber and whole shell Mg/Ca ratios in Trilobatus sacculifer and implications for individual foraminifera palaeoceanographic reconstructions. Scientific Reports, 2021, 11, 463.	3.3	2
70	Characterizing late Quaternary lake-level variability in Lago de Tota, Colombian Andes, with CHIRP seismic stratigraphy. Journal of Paleolimnology, 2019, 62, 319-335.	1.6	1
71	Pairing plant-wax H and C isotopes with lake-area â€“ a method for evaluating the local amount effect in northern China during the late Quaternary. Organic Geochemistry, 2022, , 104403.	1.8	1
72	Sliding rocks at the Racetrack, Death Valley: What makes them move?: Comment and Reply. Geology, 1996, 24, 766.	4.4	0