Jessica E Tierney

List of Publications by Year
in descending order

79 papers	7,173 citations	61984 43 h-index	60623 81 g-index
103 all docs	103 docs citations	103 times ranked	6456 citing authors

#	Article	IF	Citations
1	Northern Hemisphere Controls on Tropical Southeast African Climate During the Past 60,000 Years. Science, 2008, 322, 252-255.	12.6	497
2	Multidecadal variability in East African hydroclimate controlled by the Indian Ocean. Nature, 2013, 493, 389-392.	27.8	290
3	Environmental controls on branched tetraether lipid distributions in tropical East African lake sediments. Geochimica Et Cosmochimica Acta, 2010, 74, 4902-4918.	3.9	269
4	Past climates inform our future. Science, 2020, 370, .	12.6	253
5	Distributions of branched GDGTs in a tropical lake system: Implications for lacustrine application of the MBT/CBT paleoproxy. Organic Geochemistry, 2009, 40, 1032-1036.	1.8	248
6	Early onset of industrial-era warming across the oceans and continents. Nature, 2016, 536, 411-418.	27.8	242
7	Rainfall regimes of the Green Sahara. Science Advances, 2017, 3, e1601503.	10.3	231
8	Abrupt Shifts in Horn of Africa Hydroclimate Since the Last Glacial Maximum. Science, 2013, 342, 843-846.	12.6	230
9	A Bayesian, spatially-varying calibration model for the TEX86 proxy. Geochimica Et Cosmochimica Acta, 2014, 127, 83-106.	3.9	219
10	Tropical sea surface temperatures for the past four centuries reconstructed from coral archives. Paleoceanography, 2015, 30, 226-252.	3.0	209
11	Glacial cooling and climate sensitivity revisited. Nature, 2020, 584, 569-573.	27.8	206
12	Late Quaternary behavior of the East African monsoon and the importance of the Congo Air Boundary. Quaternary Science Reviews, 2011, 30, 798-807.	3.0	194
13	Globally resolved surface temperatures since the Last Glacial Maximum. Nature, 2021, 599, 239-244.	27.8	193
14	Late-twentieth-century warming in Lake Tanganyika unprecedented since AD 500. Nature Geoscience, 2010, 3, 422-425.	12.9	188
15	Past and future rainfall in the Horn of Africa. Science Advances, 2015, 1, e1500682.	10.3	175
16	The effect of sea level on glacial Indo-PacificÂclimate. Nature Geoscience, 2013, 6, 485-491.	12.9	151
17	BAYSPLINE: A New Calibration for the Alkenone Paleothermometer. Paleoceanography and Paleoclimatology, 2018, 33, 281-301.	2.9	148
18	Core and intact polar glycerol dialkyl glycerol tetraethers (GDGTs) in Sand Pond, Warwick, Rhode Island (USA): Insights into the origin of lacustrine GDGTs. Geochimica Et Cosmochimica Acta, 2012, 77, 561-581.	3.9	140

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19	A TEX86 surface sediment database and extended Bayesian calibration. Scientific Data, 2015, 2, 150029.	5.3	134
20	The DeepMIP contribution to PMIP4: methodologies for selection, compilation and analysis of latest Paleocene and early Eocene climate proxy data, incorporating version 0.1 of the DeepMIP database. Geoscientific Model Development, 2019, 12, 3149-3206.	3.6	131
21	Model, proxy and isotopic perspectives on the East African Humid Period. Earth and Planetary Science Letters, 2011, 307, 103-112.	4.4	128
22	A climatic context for the out-of-Africa migration. Geology, 2017, 45, 1023-1026.	4.4	119
23	Simulation of Eocene extreme warmth and high climate sensitivity through cloud feedbacks. Science Advances, 2019, 5, eaax1874.	10.3	116
24	A molecular perspective on Late Quaternary climate and vegetation change in the Lake Tanganyika basin, East Africa. Quaternary Science Reviews, 2010, 29, 787-800.	3.0	112
25	A global database of Holocene paleotemperature records. Scientific Data, 2020, 7, 115.	5.3	112
26	BayMBT: A Bayesian calibration model for branched glycerol dialkyl glycerol tetraethers in soils and peats. Geochimica Et Cosmochimica Acta, 2020, 268, 142-159.	3.9	110
27	Coordinated hydrological regimes in the Indo-Pacific region during the past two millennia. Paleoceanography, 2010, 25, .	3.0	107
28	The PMIP4 Last Glacial Maximum experiments: preliminary results and comparison with the PMIP3 simulations. Climate of the Past, 2021, 17, 1065-1089.	3.4	107
29	Comparing proxy and model estimates of hydroclimate variability and change over the Common Era. Climate of the Past, 2017, 13, 1851-1900.	3.4	93
30	The DeepMIP contribution to PMIP4: experimental design for model simulations of the EECO, PETM, and pre-PETM (version 1.0). Geoscientific Model Development, 2017, 10, 889-901.	3.6	90
31	Indonesian vegetation response to changes in rainfall seasonality over the past 25,000 years. Nature Geoscience, 2014, 7, 513-517.	12.9	80
32	Deglacial Indian monsoon failure and North Atlantic stadials linked by Indian Ocean surfaceÂcooling. Nature Geoscience, 2016, 9, 46-50.	12.9	79
33	The climate response of the Indoâ€Pacific warm pool to glacial sea level. Paleoceanography, 2016, 31, 866-894.	3.0	76
34	Glacial changes in tropical climate amplified by the Indian Ocean. Science Advances, 2018, 4, eaat9658.	10.3	74
35	A global Bayesian temperature calibration for lacustrine brGDGTs. Geochimica Et Cosmochimica Acta, 2021, 305, 87-105.	3.9	74
36	DeepMIP: model intercomparison of early Eocene climatic optimum (EECO) large-scale climate features and comparison with proxy data. Climate of the Past, 2021, 17, 203-227.	3.4	71

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37	Global mean surface temperature and climate sensitivity of the early Eocene Climatic Optimum (EECO), Paleoceneâ€“Eocene Thermal Maximum (PETM), and latest Paleocene. Climate of the Past, 2020, 16, 1953-1968.	3.4	71
38	Pliocene Warmth Consistent With Greenhouse Gas Forcing. Geophysical Research Letters, 2019, 46, 9136-9144.	4.0	69
39	Identifying coherent spatiotemporal modes in time-uncertain proxy paleoclimate records. Climate Dynamics, 2013, 41, 1291-1306.	3.8	66
40	Bayesian Calibration of the Mg/Ca Paleothermometer in Planktic Foraminifera. Paleoceanography and Paleoclimatology, 2019, 34, 2005-2030.	2.9	56
41	Lessons from a high-CO₂ world: an ocean view from â€‰â¼â€‰3Âmillion years ago. Climate of the Past, 2020, 16, 1599-1615.	3.4	52
42	Subdecadally resolved paleoceanography of the Peru margin during the last two millennia. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	51
43	Ice-sheet modulation of deglacial North American monsoon intensification. Nature Geoscience, 2018, 11, 848-852.	12.9	49
44	Abrupt climate change in southeast tropical Africa influenced by Indian monsoon variability and ITCZ migration. Geophysical Research Letters, 2007, 34, .	4.0	47
45	Cooling and drying in northeast Africa across the Pliocene. Earth and Planetary Science Letters, 2016, 449, 430-438.	4.4	47
46	Glacial reduction of the North American Monsoon via surface cooling and atmospheric ventilation. Geophysical Research Letters, 2017, 44, 5113-5122.	4.0	36
47	Northern Hemisphere vegetation change drives a Holocene thermal maximum. Science Advances, 2022, 8, eabj6535.	10.3	35
48	Biomarkers reveal abrupt switches in hydroclimate during the last glacial in southern California. Earth and Planetary Science Letters, 2019, 515, 164-172.	4.4	34
49	Assessment of Equilibrium Climate Sensitivity of the Community Earth System Model Version 2 Through Simulation of the Last Glacial Maximum. Geophysical Research Letters, 2021, 48, e2020GL091220.	4.0	34
50	GDGT and alkenone flux in the northern Gulf of Mexico: Implications for the TEX₈₆ and U^{K'}₃₇ paleothermometers. Paleoceanography, 2016, 31, 1547-1561.	3.0	33
51	Lacustrine brGDGT response to microcosm and mesocosm incubations. Organic Geochemistry, 2019, 127, 12-22.	1.8	32
52	Shelf exposure influence on Indo-Pacific Warm Pool climate for the last 450,000 years. Earth and Planetary Science Letters, 2019, 516, 66-76.	4.4	30
53	Temperature changes across the Paleocene-Eocene Thermal Maximum â€“ a new high-resolution TEX86 temperature record from the Eastern North Sea Basin. Earth and Planetary Science Letters, 2020, 544, 116388.	4.4	29
54	Eocene temperature gradients. Nature Geoscience, 2017, 10, 538-539.	12.9	28

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55	Miocene C₄ Grassland Expansion as Recorded by the Indus Fan. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003856.	2.9	28
56	Global Core Top Calibration of Î´¹⁸O in Planktic Foraminifera to Sea Surface Temperature. Paleoceanography and Paleoclimatology, 2019, 34, 1292-1315.	2.9	26
57	Extremes in East African hydroclimate and links to Indo-Pacific variability on interannual to decadal timescales. Climate Dynamics, 2018, 50, 2971-2991.	3.8	24
58	Emergence of an equatorial mode of climate variability in the Indian Ocean. Science Advances, 2020, 6, eaay7684.	10.3	23
59	GDGT Thermometry: Lipid Tools for Reconstructing Paleotemperatures. The Paleontological Society Papers, 2012, 18, 115-132.	0.6	22
60	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
61	An El NiÃ±o Mode in the Glacial Indian Ocean?. Paleoceanography and Paleoclimatology, 2019, 34, 1316-1327.	2.9	22
62	Controlled lacustrine microcosms show a brGDGT response to environmental perturbations. Organic Geochemistry, 2020, 145, 104041.	1.8	22
63	Biomarker Approaches for Reconstructing Terrestrial Environmental Change. Annual Review of Earth and Planetary Sciences, 2022, 50, 369-394.	11.0	22
64	Unraveling Glacial Hydroclimate in the Indoâ€Pacific Warm Pool: Perspectives From Water Isotopes. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003985.	2.9	19
65	Comparison of three methods for the methylation of aliphatic and aromatic compounds. Rapid Communications in Mass Spectrometry, 2017, 31, 1633-1640.	1.5	17
66	Late Eocene Record of Hydrology and Temperature From Prydz Bay, East Antarctica. Paleoceanography and Paleoclimatology, 2021, 36, e2020PA004204.	2.9	17
67	Temperature and water depth effects on brGDGT distributions in sub-alpine lakes of mid-latitude North America. Organic Geochemistry, 2021, 152, 104174.	1.8	15
68	Identifying plant wax inputs in lake sediments using machine learning. Organic Geochemistry, 2021, 156, 104222.	1.8	15
69	Glacialâ€Interglacial Shifts Dominate Tropical Indoâ€Pacific Hydroclimate During the Late Pleistocene. Geophysical Research Letters, 2021, 48, e2021GL093339.	4.0	13
70	An automated method for the determination of the TEX86 and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>U</mml:mtext></mml:mrow><mml:mrow><mml:mn>37</mml:m paleotemperature indices. Organic Geochemistry, 2016, 92, 84-91.	1.8	11
71	South Pacific hydrologic and cyclone variability during the last 3000â€‰years. Paleoceanography, 2016, 31, 491-504.	3.0	8
72	Late Quaternary hydroclimate of the Levant: The leaf wax record from the Dead Sea. Quaternary Science Reviews, 2022, 289, 107613.	3.0	7

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73	Lipid Biomarker Record Documents Hydroclimatic Variability of the Mississippi River Basin During the Common Era. Geophysical Research Letters, 2020, 47, e2020GL087237.	4.0	6
74	Subseafloor Archaea reflect 139 kyrs of paleodepositional changes in the northern Red Sea. Geobiology, 2021, 19, 162-172.	2.4	6
75	Identifying the drivers of GDGT distributions in alkaline soil profiles within the Serengeti ecosystem. Organic Geochemistry, 2022, 169, 104433.	1.8	5
76	Climatic Drivers of Deglacial SST Variability in the Eastern Pacific. Paleoceanography and Paleoclimatology, 2021, 36, e2021PA004264.	2.9	3
77	Reflections on weather and climate research. Nature Reviews Earth & Environment, 2021, 2, 9-14.	29.7	1
78	Patterns and mechanisms of northeast Pacific temperature response to Pliocene boundary conditions. Paleoceanography and Paleoclimatology, 0, , .	2.9	1
79	Glacial warming in the Eastern Pacific Warm Pool. Geophysical Research Letters, 0, , .	4.0	0