Martin H Trauth

List of Publications by Year
in descending order

99 papers	4,969 citations	101543 36 h-index	98798 67 g-index
132 all docs	132 docs citations	132 times ranked	4174 citing authors

#	Article	IF	Citations
1	Tectonics and Climate of the Southern Central Andes. Annual Review of Earth and Planetary Sciences, 2007, 35, 747-787.	11.0	344
2	Late Cenozoic Moisture History of East Africa. Science, 2005, 309, 2051-2053.	12.6	328
3	Trends, rhythms and events in Plio-Pleistocene African climate. Quaternary Science Reviews, 2009, 28, 399-411.	3.0	289
4	High- and low-latitude forcing of Plio-Pleistocene East African climate and human evolution. Journal of Human Evolution, 2007, 53, 475-486.	2.6	287
5	Nonlinear detection of paleoclimate-variability transitions possibly related to human evolution. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20422-20427.	7.1	208
6	East African climate pulses and early human evolution. Quaternary Science Reviews, 2014, 101, 1-17.	3.0	202
7	Human evolution in a variable environment: the amplifier lakes of Eastern Africa. Quaternary Science Reviews, 2010, 29, 2981-2988.	3.0	196
8	East African climate change and orbital forcing during the last 175 kyr BP. Earth and Planetary Science Letters, 2003, 206, 297-313.	4.4	152
9	Multiple landslide clusters record Quaternary climate changes in the northwestern Argentine Andes. Palaeogeography, Palaeoclimatology, Palaeoecology, 2003, 194, 109-121.	2.3	128
10	Comparing modern and Pleistocene ENSO-like influences in NW Argentina using nonlinear time series analysis methods. Climate Dynamics, 2003, 21, 317-326.	3.8	122
11	Bioturbational mixing depth and carbon flux at the seafloor. Paleoceanography, 1997, 12, 517-526.	3.0	115
12	A synthesis of the theories and concepts of early human evolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140064.	4.0	115
13	Climatic change recorded in the sediments of the Chew Bahir basin, southern Ethiopia, during the last 45,000 years. Quaternary International, 2012, 274, 25-37.	1.5	111
14	Climate change and mass movements in the NW Argentine Andes. Earth and Planetary Science Letters, 2000, 179, 243-256.	4.4	108
15	Hidden diversity in diatoms of Kenyan Lake Naivasha: a genetic approach detects temporal variation. Molecular Ecology, 2012, 21, 1918-1930.	3.9	108
16	The sensitivity of East African rift lakes to climate fluctuations. Journal of Paleolimnology, 2010, 44, 629-644.	1.6	105
17	The Hominin Sites and Paleolakes Drilling Project: inferring the environmental context of human evolution from eastern African rift lake deposits. Scientific Drilling, 0, 21, 1-16.	0.6	82
18	Late Pleistoceneâ€“Holocene rise and collapse of Lake Suguta, northern Kenya Rift. Quaternary Science Reviews, 2009, 28, 911-925.	3.0	81

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19	Formation of landslide-dammed lakes during a wet period between 40,000 and 25,000 yr B.P. in northwestern Argentina. Palaeogeography, Palaeoclimatology, Palaeoecology, 1999, 153, 277-287.	2.3	80
20	Tectonic and climatic control on evolution of rift lakes in the Central Kenya Rift, East Africa. Quaternary Science Reviews, 2009, 28, 2804-2816.	3.0	78
21	Evidence for middle Miocene uplift of the East African Plateau. Geology, 2010, 38, 543-546.	4.4	76
22	The effects of solar irradiation changes on the migration of the Congo Air Boundary and water levels of paleo-Lake Suguta, Northern Kenya Rift, during the African Humid Period (15â€“5ka BP). Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 396, 1-16.	2.3	73
23	Historical genetics on a sediment core from a Kenyan lake: intraspecific genotype turnover in a tropical rotifer is related to past environmental changes. Journal of Paleolimnology, 2010, 43, 939-954.	1.6	67
24	Past abrupt changes, tipping points and cascading impacts in the Earth system. Nature Geoscience, 2021, 14, 550-558.	12.9	62
25	Comparison of the hydrological and hydrochemical evolution of Lake Naivasha (Kenya) during three highstands between 175 and 60 kyr BP. Palaeogeography, Palaeoclimatology, Palaeoecology, 2004, 215, 17-36.	2.3	61
26	Tephrochronologic Constraints on Temporal Distribution of Large Landslides in Northwest Argentina. Journal of Geology, 2000, 108, 35-52.	1.4	59
27	Identification of dynamical transitions in marine palaeoclimate records by recurrence network analysis. Nonlinear Processes in Geophysics, 2011, 18, 545-562.	1.3	59
28	Hydrological constraints of paleo-Lake Suguta in the Northern Kenya Rift during the African Humid Period (15â€“5kaBP). Global and Planetary Change, 2013, 111, 174-188.	3.5	58
29	Paleoprecipitation estimates for the Lake Naivasha basin (Kenya) during the last 175 k.y. using a lake-balance model. Global and Planetary Change, 2003, 36, 117-136.	3.5	56
30	Environmental change and human occupation of southern Ethiopia and northern Kenya during the last 20,000 years. Quaternary Science Reviews, 2015, 129, 333-340.	3.0	54
31	Environmental variability in Lake Naivasha, Kenya, over the last two centuries. Journal of Paleolimnology, 2011, 45, 353-367.	1.6	51
32	Molecular profiling of diatom assemblages in tropical lake sediments using taxonâ€specific PCR and Denaturing Highâ€Performance Liquid Chromatography (PCRâ€DHPLC). Molecular Ecology Resources, 2011, 11, 842-853.	4.8	47
33	Paleo-ENSO influence on African environments and early modern humans. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	47
34	Hydrological modelling of a Pleistocene landslide-dammed lake in the Santa Maria Basin, NW Argentina. Palaeogeography, Palaeoclimatology, Palaeoecology, 2001, 169, 113-127.	2.3	46
35	TURBO: a dynamic-probabilistic simulation to study the effects of bioturbation on paleoceanographic time series. Computers and Geosciences, 1998, 24, 433-441.	4.2	45
36	Response of the East African climate to orbital forcing during the last interglacial (130â€“117 ka) and the early last glacial (117â€“60 ka). Geology, 2001, 29, 499.	4.4	45

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37	MATLABÂ® Recipes for Earth Sciences. , 2010, , .		44
38	Plio-Pleistocene East African Pulsed Climate Variability and Its Influence on Early Human Evolution. Vertebrate Paleobiology and Paleoanthropology, 2009, , 151-158.	0.5	44
39	MATLABÂ® Recipes for Earth Sciences. , 2015, , .		34
40	Classifying past climate change in the Chew Bahir basin, southern Ethiopia, using recurrence quantification analysis. Climate Dynamics, 2019, 53, 2557-2572.	3.8	33
41	Early Holocene water budget of the Nakuru-Elmenteita basin, Central Kenya Rift. Journal of Paleolimnology, 2006, 36, 281-294.	1.6	32
42	Episodes of environmental stability versus instability in Late Cenozoic lake records of Eastern Africa. Journal of Human Evolution, 2015, 87, 21-31.	2.6	32
43	Hydroclimate changes in eastern Africa over the past 200,000 years may have influenced early human dispersal. Communications Earth & Environment, 2021, 2, .	6.8	32
44	TURBO2: A MATLAB simulation to study the effects of bioturbation on paleoceanographic time series. Computers and Geosciences, 2013, 61, 1-10.	4.2	31
45	Towards an understanding of climate proxy formation in the Chew Bahir basin, southern Ethiopian Rift. Palaeogeography, Palaeoclimatology, Palaeoecology, 2018, 501, 111-123.	2.3	30
46	Tectonics, Climate, and Landscape Evolution of the Southern Central Andes: the Argentine Puna Plateau and Adjacent Regions between 22 and 30Â°S. , 2006, , 265-283.		26
47	Three and half million year history of moisture availability of South West Africa: Evidence from ODP site 1085 biomarker records. Palaeogeography, Palaeoclimatology, Palaeoecology, 2012, 317-318, 41-47.	2.3	24
48	Abrupt or gradual? Change point analysis of the late Pleistoceneâ€“Holocene climate record from Chew Bahir, southern Ethiopia. Quaternary Research, 2018, 90, 321-330.	1.7	24
49	Northern Hemisphere Glaciation, African climate and human evolution. Quaternary Science Reviews, 2021, 268, 107095.	3.0	22
50	Orbital controls on eastern African hydroclimate in the Pleistocene. Scientific Reports, 2022, 12, 3170.	3.3	20
51	Late Pleistocene Climate Change and Erosion in the Santa Maria Basin, NW Argentina. Journal of Sedimentary Research, 2003, 73, 82-90.	1.6	19
52	The Mid-Miocene East African Plateau: a pre-rift topographic model inferred from the emplacement of the phonolitic Yatta lava flow, Kenya. Geological Society Special Publication, 2011, 357, 285-300.	1.3	19
53	Determining the Pace and Magnitude of Lake Level Changes in Southern Ethiopia Over the Last 20,000 Years Using Lake Balance Modeling and SEBAL. Frontiers in Earth Science, 2020, 8, .	1.8	18
54	Recurring types of variability and transitions in the â^¼620 kyr record of climate change from the Chew Bahir basin, southern Ethiopia. Quaternary Science Reviews, 2021, 266, 106777.	3.0	18

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55	Paleoceanographic Proxies in the Northern North Atlantic. , 2001, , 319-352.		18
56	A MATLAB based orientation analysis of Acheulean handaxe accumulations in Olorgesailie and Kariandusi, Kenya Rift. Journal of Human Evolution, 2013, 64, 569-581.	2.6	14
57	Semi-automated detection of annual laminae (varves) in lake sediments using a fuzzy logic algorithm. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 435, 272-282.	2.3	14
58	Using multiple chronometers to establish a long, directly-dated lacustrine record: Constraining >600,000 years of environmental change at Chew Bahir, Ethiopia. Quaternary Science Reviews, 2021, 266, 107025.	3.0	14
59	A new probabilistic technique to build an age model for complex stratigraphic sequences. Quaternary Geochronology, 2014, 22, 65-71.	1.4	13
60	Reconstructing the Environmental Context of Human Origins in Eastern Africa Through Scientific Drilling. Annual Review of Earth and Planetary Sciences, 2022, 50, 451-476.	11.0	13
61	Remotely-sensed evapotranspiration estimates for an improved hydrological modeling of the early Holocene mega-lake Suguta, northern Kenya Rift. Palaeogeography, Palaeoclimatology, Palaeoecology, 2012, 361-362, 14-20.	2.3	12
62	Title is missing!. Mathematical Geosciences, 1998, 30, 557-574.	0.9	11
63	Comment on â€œDiatomaceous sediments and environmental change in the Pleistocene Olorgesailie Formation, southern Kenya Riftâ€•by R.B. Owen, R. Potts, A.K. Behrensmeyer and P. Ditchfield [Palaeogeography, Palaeoclimatology, Palaeoecology 269 (2008) 17â€“37]. Palaeogeography, Palaeoclimatology, Palaeoecology, 2009, 282, 145-146.	2.3	11
64	Palaeolimnological reconstruction of recent environmental change in Lake Malombe (S. Malawi) using multiple proxies. Water S A, 2014, 40, 717.	0.4	11
65	Spectral analysis in Quaternary sciences. Quaternary Science Reviews, 2021, 270, 107157.	3.0	10
66	Changes in the cyclicity and variability of the eastern African paleoclimate over the last 620 kyrs. Quaternary Science Reviews, 2021, 273, 107219.	3.0	10
67	Mapping changing shorelines in the Malombe and Chiuta lakes of Malawiâ€”environmental effects of recent climatic variations. Catena, 2013, 104, 111-119.	5.0	9
68	Modelling vegetation change during Late Cenozoic uplift of the East African plateaus. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 467, 120-130.	2.3	9
69	MATLABÂ® Recipes for Earth Sciences. Springer Textbooks in Earth Sciences, Geography and Environment, 2021, , .	0.3	9
70	Multiband Wavelet Age Modeling for a âˆ¼293Âm (âˆ¼4600Âkyr) Sediment Core From Chew Bahir Basin, Southern Ethiopian Rift. Frontiers in Earth Science, 2021, 9, .	1.8	9
71	Exploring the Past Biosphere of Chew Bahir/Southern Ethiopia: Cross-Species Hybridization Capture of Ancient Sedimentary DNA from a Deep Drill Core. Frontiers in Earth Science, 2021, 9, .	1.8	8
72	Modern Sedimentation and Authigenic Mineral Formation in the Chew Bahir Basin, Southern Ethiopia: Implications for Interpretation of Late Quaternary Paleoclimate Records. Frontiers in Earth Science, 2021, 9, .	1.8	6

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73	Advanced Hyperspectral Analysis of Sediment Core Samples from the Chew Bahir Basin, Ethiopian Rift, in the Spectral Range from 0.25 to 17ÂÂµm: Support for Climate Proxy Interpretation. Frontiers in Earth Science, 2021, 9, .	1.8	6
74	A Phytolith Supported Biosphere-Hydrosphere Predictive Model for Southern Ethiopia: Insights into Paleoenvironmental Changes and Human Landscape Preferences since the Last Glacial Maximum. Geosciences (Switzerland), 2021, 11, 418.	2.2	5
75	Reply to the comment on â€œEnvironmental change and human occupation of southern Ethiopia and northern Kenya during the last 20,000 years. Quaternary Science Reviews 129: 333â€“340â€. Quaternary Science Reviews, 2016, 141, 130-133.	3.0	4
76	Classroom-sized geophysical experiments: magnetic surveying using modern smartphone devices. European Journal of Physics, 2018, 39, 035806.	0.6	4
77	Bayesian inference about Plio-Pleistocene climate transitions in Africa. Quaternary Science Reviews, 2022, 277, 107287.	3.0	4
78	Statistics on Directional Data. , 2007, , 263-277.		3
79	A better climate for human evolution. PAGES News, 2006, 14, 32-34.	0.3	1
80	Time-Series Analysis. , 2015, , 151-213.		1
81	Time-Series Analysis. , 2007, , 83-132.		0
82	Time-Series Analysis. , 2010, , 107-159.		0
83	Data Analysis in Earth Sciences. , 2010, , 1-9.		0
84	Searching and Reviewing Scientific Literature. Springer Textbooks in Earth Sciences, Geography and Environment, 2018, , 15-40.	0.3	0
85	Processing and Displaying Images in Earth Sciences. Springer Textbooks in Earth Sciences, Geography and Environment, 2018, , 143-167.	0.3	0
86	Multivariate Statistics. , 2006, , 213-230.		0
87	Multivariate Statistics. , 2007, , 245-261.		0
88	Statistics on Directional Data. , 2010, , 311-326.		0
89	Bivariate Statistics. , 2010, , 79-106.		0
90	Multivariate Statistics. , 2010, , 291-309.		0

#	Article	IF	Citations
91	THE CHEW BAHIR DRILLING PROJECT (HSPDP). FROM MUD, GRAINS AND CRYSTALS TO >500,000 YEARS OF CONTINUOUS CLIMATE HISTORY IN SOUTHERN ETHIOPIA. , 2017, , .		0
92	Creating Manuscripts, Flyers, and Brochures. Springer Textbooks in Earth Sciences, Geography and Environment, 2018, , 227-260.	0.3	0
93	ENVIRONMENTAL HISTORY AND HUMAN EVOLUTION IN EASTERN AFRICA: THE 550,000-YEAR CLIMATE RECORD FROM THE CHEW BAHIR BASIN, AN HSPDP KEY SITE IN SOUTHERN ETHIOPIA. , 2018, , .		0
94	Editing Graphics, Text, and Tables. Springer Textbooks in Earth Sciences, Geography and Environment, 2018, , 169-196.	0.3	0
95	25,000 YEARS OF MOISTURE VARIABILITY BASED ON DIATOM CONDUCTIVITY RECONSTRUCTION AT LAKE NAKURU, CENTRAL KENYA RIFT. , 2019, , .		0
96	Time-Series Analysis. Springer Textbooks in Earth Sciences, Geography and Environment, 2021, , 177-257.	0.3	0
97	Multivariate Statistics. Springer Textbooks in Earth Sciences, Geography and Environment, 2021, , 439-489.	0.3	0
98	Gravimetric, Magnetic and Weather Data. Springer Textbooks in Earth Sciences, Geography and Environment, 2021, , 301-340.	0.3	0
99	Introduction-Time series analysis for Earth, climate and life interactions. Quaternary Science Reviews, 2022, 284, 107475.	3.0	0