

Matthias Zabel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9422315/publications.pdf>

Version: 2024-02-01

103
papers

5,789
citations

76196

40
h-index

82410

72
g-index

122
all docs

122
docs citations

122
times ranked

6233
citing authors

#	ARTICLE	IF	CITATIONS
1	Early diagenesis of organic matter from sediments of the eastern subtropical Atlantic: evidence from stable nitrogen and carbon isotopes. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1795-1808.	1.6	317
2	Deep Sulfate Reduction Completely Mediated by Anaerobic Methane Oxidation in Sediments of the Upwelling Area off Namibia. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 455-464.	1.6	286
3	Global rates of marine sulfate reduction and implications for sub-sea-floor metabolic activities. <i>Science</i> , 2014, 344, 889-891.	6.0	253
4	Increase in African dust flux at the onset of commercial agriculture in the Sahel region. <i>Nature</i> , 2010, 466, 226-228.	13.7	247
5	Control of sulfate pore-water profiles by sedimentary events and the significance of anaerobic oxidation of methane for the burial of sulfur in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 2631-2647.	1.6	220
6	Microbial sequestration of phosphorus in anoxic upwelling sediments. <i>Nature Geoscience</i> , 2010, 3, 557-561.	5.4	214
7	Sahel megadroughts triggered by glacial slowdowns of Atlantic meridional overturning. <i>Paleoceanography</i> , 2008, 23, .	3.0	213
8	Early diagenetic processes, fluxes, and reaction rates in sediments of the South Atlantic. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 2041-2060.	1.6	184
9	Provenance of present-day eolian dust collected off NW Africa. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	174
10	Organic carbon content in surface sediments—defining regional provinces. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2004, 51, 2001-2026.	0.6	171
11	Distribution of major elements in Atlantic surface sediments (36°N–49°S): Imprint of terrigenous input and continental weathering. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	170
12	Late Quaternary Climate Changes in Central Africa as Inferred from Terrigenous Input to the Niger Fan. <i>Quaternary Research</i> , 2001, 56, 207-217.	1.0	138
13	Lateral transport controls distribution, quality, and burial of organic matter along continental slopes in high-productivity areas. <i>Geology</i> , 2006, 34, 205.	2.0	130
14	Interhemispheric symmetry of the tropical African rainbelt over the past 23,000 years. <i>Nature Geoscience</i> , 2011, 4, 42-45.	5.4	110
15	A 3 million year index for North African humidity/aridity and the implication of potential pan-African Humid periods. <i>Quaternary Science Reviews</i> , 2017, 171, 100-118.	1.4	108
16	Aging of marine organic matter during cross-shelf lateral transport in the Benguela upwelling system revealed by compound-specific radiocarbon dating. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, .	1.0	103
17	Unraveling signatures of biogeochemical processes and the depositional setting in the molecular composition of pore water DOM across different marine environments. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 207, 57-80.	1.6	103
18	Benthic carbon mineralization on a global scale. <i>Global Biogeochemical Cycles</i> , 2005, 19, .	1.9	95

#	ARTICLE	IF	CITATIONS
19	Modelling the joint variability of grain size and chemical composition in sediments. <i>Sedimentary Geology</i> , 2012, 280, 135-148.	1.0	88
20	Interaction between hydrocarbon seepage, chemosynthetic communities, and bottom water redox at cold seeps of the Makran accretionary prism: insights from habitat-specific pore water sampling and modeling. <i>Biogeosciences</i> , 2012, 9, 2013-2031.	1.3	87
21	COMMUNITIES AND MICROHABITATS OF LIVING BENTHIC FORAMINIFERA FROM THE TROPICAL EAST ATLANTIC: IMPACT OF DIFFERENT PRODUCTIVITY REGIMES. <i>Journal of Foraminiferal Research</i> , 2003, 33, 10-31.	0.1	86
22	Importance of submarine landslides for non-steady state conditions in pore water systems – lower Zaire (Congo) deep-sea fan. <i>Marine Geology</i> , 2001, 176, 87-99.	0.9	83
23	Nepheloid layer distribution in the Benguela upwelling area offshore Namibia. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2006, 53, 1423-1438.	0.6	78
24	Abrupt shifts of the Sahara – Sahel boundary during Heinrich stadials. <i>Climate of the Past</i> , 2013, 9, 1181-1191.	1.3	71
25	Phosphate oxygen isotopes: Insights into sedimentary phosphorus cycling from the Benguela upwelling system. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3741-3756.	1.6	68
26	Terrigenous input off northern South America driven by changes in Amazonian climate and the North Brazil Current retroflexion during the last 250 ka. <i>Climate of the Past</i> , 2014, 10, 843-862.	1.3	66
27	Origin of increased terrigenous supply to the NE South American continental margin during Heinrich Stadial 1 and the Younger Dryas. <i>Earth and Planetary Science Letters</i> , 2015, 432, 493-500.	1.8	65
28	Significance of the sedimentary Al/Ti ratio as an indicator for variations in the circulation patterns of the equatorial North Atlantic. <i>Paleoceanography</i> , 1999, 14, 789-799.	3.0	64
29	Fluxes of soot black carbon to South Atlantic sediments. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	1.9	62
30	Quantification of diffusive benthic fluxes of nitrate, phosphate, and silicate in the southern Atlantic Ocean. <i>Global Biogeochemical Cycles</i> , 1998, 12, 193-210.	1.9	60
31	Barium peaks at glacial terminations in sediments of the equatorial Atlantic Ocean – relicts of deglacial productivity pulses?. <i>Chemical Geology</i> , 2001, 175, 635-651.	1.4	60
32	Towards constraining H ₂ concentration in subseafloor sediment: A proposal for combined analysis by two distinct approaches. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 77, 186-201.	1.6	58
33	Regional distribution of diffusive phosphate and silicate fluxes through the sediment – water interface: the eastern South Atlantic. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1998, 45, 277-300.	0.6	56
34	Climate forcing of the Pb isotope record of terrigenous input into the Equatorial Atlantic. <i>Earth and Planetary Science Letters</i> , 2003, 213, 221-234.	1.8	56
35	Gas hydrates in shallow deposits of the Amsterdam mud volcano, Anaximander Mountains, Northeastern Mediterranean Sea. <i>Geo-Marine Letters</i> , 2010, 30, 187-206.	0.5	56
36	Luminescence of quartz and feldspar fingerprints provenance and correlates with the source area denudation in the Amazon River basin. <i>Earth and Planetary Science Letters</i> , 2018, 492, 152-162.	1.8	55

#	ARTICLE	IF	CITATIONS
37	Decoupling of bio- and geohopanoids in sediments of the Benguela Upwelling System (BUS). <i>Organic Geochemistry</i> , 2010, 41, 1119-1129.	0.9	53
38	Heavy metals in Changjiang estuarine and offshore sediments: responding to human activities. <i>Acta Oceanologica Sinica</i> , 2012, 31, 88-101.	0.4	49
39	Ultra-high-resolution paleoenvironmental records via direct laser-based analysis of lipid biomarkers in sediment core samples. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15669-15674.	3.3	45
40	A comparison of benthic nutrient fluxes from deep-sea sediments off Namibia and Argentina. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2029-2050.	0.6	43
41	Bacterial diversity and biogeochemistry of different chemosynthetic habitats of the REGAB cold seep (West African margin, 3160 m water depth). <i>Biogeosciences</i> , 2012, 9, 5031-5048.	1.3	43
42	Molecular evidence for anaerobic ammonium-oxidizing (anammox) bacteria in continental shelf and slope sediments off northwest Africa. <i>Limnology and Oceanography</i> , 2010, 55, 365-376.	1.6	42
43	Petroleum degradation and associated microbial signatures at the Chapopote asphalt volcano, Southern Gulf of Mexico. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 4377-4398.	1.6	41
44	Processes and Signals of Nonsteady-State Diagenesis in Deep-Sea Sediments and their Pore Waters. , 2003, , 431-459.		41
45	Origin, transport and deposition of leaf-wax biomarkers in the Amazon Basin and the adjacent Atlantic. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 192, 149-165.	1.6	40
46	Hydrogen isotope fractionation of leaf wax n-alkanes in southern African soils. <i>Organic Geochemistry</i> , 2017, 109, 1-13.	0.9	37
47	Different precipitation patterns across tropical South America during Heinrich and Dansgaard-Oeschger stadials. <i>Quaternary Science Reviews</i> , 2017, 177, 1-9.	1.4	37
48	Near-surface Heating of Young Rift Sediment Causes Mass Production and Discharge of Reactive Dissolved Organic Matter. <i>Scientific Reports</i> , 2017, 7, 44864.	1.6	36
49	Using Fourier transform infrared spectroscopy to determine mineral phases in sediments. <i>Sedimentary Geology</i> , 2018, 375, 27-35.	1.0	35
50	Simulation of early diagenetic processes in continental slope sediments off southwest Africa: the computer model CoTAM tested. <i>Marine Geology</i> , 1997, 144, 191-210.	0.9	32
51	Sea level and climate change at the southern Cape coast, South Africa, during the past 4.2 kyr. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2016, 446, 295-307.	1.0	32
52	Phosphorus cycling in marine sediments from the continental margin off Namibia. <i>Marine Geology</i> , 2010, 274, 95-106.	0.9	31
53	Potential of ikaite to record the evolution of oceanic $\delta^{18}O$. <i>Geology</i> , 2006, 34, 497.	2.0	29
54	Benthic Cycling of Oxygen, Nitrogen and Phosphorus. , 2006, , 207-240.		29

#	ARTICLE	IF	CITATIONS
55	Microbial biomarkers support organic carbon transport from methane-rich Amazon wetlands to the shelf and deep sea fan during recent and glacial climate conditions. <i>Organic Geochemistry</i> , 2014, 67, 85-98.	0.9	29
56	Southern Hemisphere anticyclonic circulation drives oceanic and climatic conditions in late Holocene southernmost Africa. <i>Climate of the Past</i> , 2017, 13, 649-665.	1.3	28
57	Sources, transport and deposition of terrestrial organic material: A case study from southwestern Africa. <i>Quaternary Science Reviews</i> , 2016, 149, 215-229.	1.4	26
58	Instantaneous benthic response to different organic matter quality: In situ experiments in the Benguela Upwelling System. <i>Marine Biology Research</i> , 2007, 3, 342-356.	0.3	25
59	Holocene paleo-climatic record from the South African Namaqualand mudbelt: A source to sink approach. <i>Quaternary International</i> , 2016, 404, 121-135.	0.7	25
60	Variability in mid-depth ventilation of the western Atlantic Ocean during the last deglaciation. <i>Paleoceanography</i> , 2017, 32, 948-965.	3.0	25
61	Geochemical distribution patterns as indicators for productivity and terrigenous input off NW Africa. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2012, 66, 51-66.	0.6	24
62	Holocene environmental change along the southern Cape coast of South Africa – Insights from the Eilandvlei sediment record spanning the last 8.9 kyr. <i>Global and Planetary Change</i> , 2018, 163, 51-66.	1.6	23
63	Phosphate geochemistry, mineralization processes, and Thioploca distribution in shelf sediments off central Chile. <i>Marine Geology</i> , 2010, 277, 61-72.	0.9	22
64	Multiproxy characterization and budgeting of terrigenous endmembers at the NW African continental margin. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	20
65	Late Quaternary climate variability at Mfabeni peatland, eastern South Africa. <i>Climate of the Past</i> , 2019, 15, 1153-1170.	1.3	20
66	Seismic stratigraphy of the inner to mid Agulhas bank, South Africa. <i>Quaternary Science Reviews</i> , 2020, 235, 105979.	1.4	20
67	Marine sediment pore-water profiles of phosphate d18O using a refined microextraction. <i>Limnology and Oceanography: Methods</i> , 2011, 9, 110-120.	1.0	19
68	Origin and processing of terrestrial organic carbon in the Amazon system: lignin phenols in river, shelf, and fan sediments. <i>Biogeosciences</i> , 2017, 14, 2495-2512.	1.3	19
69	Isoprenoid Quinones Resolve the Stratification of Redox Processes in a Biogeochemical Continuum from the Photic Zone to Deep Anoxic Sediments of the Black Sea. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	19
70	Consistent CO2 release by pyrite oxidation on continental shelves prior to glacial terminations. <i>Nature Geoscience</i> , 2019, 12, 929-934.	5.4	19
71	The Fate of Carbon in Sediments of the Xingu and Tapaj�s Clearwater Rivers, Eastern Amazon. <i>Frontiers in Marine Science</i> , 2017, 4, .	1.2	18
72	Benthic phosphorus and iron budgets for three NW African slope sediments: a balance approach. <i>Biogeosciences</i> , 2010, 7, 469-480.	1.3	15

#	ARTICLE	IF	CITATIONS
73	Modern and late Pleistocene particulate organic carbon transport by the Amazon River: Insights from long-chain alkyl diols. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 262, 1-19.	1.6	14
74	Spatiotemporal Variations of Riverine Discharge Within the Amazon Basin During the Late Holocene Coincide With Extratropical Temperature Anomalies. <i>Geophysical Research Letters</i> , 2019, 46, 9013-9022.	1.5	14
75	Mid- and low latitude effects on eastern South African rainfall over the Holocene. <i>Quaternary Science Reviews</i> , 2020, 229, 106088.	1.4	14
76	Equatorial Pacific forcing of western Amazonian precipitation during Heinrich Stadial 1. <i>Scientific Reports</i> , 2016, 6, 35866.	1.6	13
77	The Provenance of Terrigenous Components in Marine Sediments Along the East Coast of Southern Africa. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 1946-1962.	1.0	13
78	A study of particle exchange at the sediment-water interface in the Benguela upwelling area based on ²³⁴ Th/ ²³⁸ U disequilibrium. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2006, 53, 1742-1761.	0.6	12
79	Mid-to Late Holocene climatic and anthropogenic influences in Mpondoland, South Africa. <i>Quaternary Science Reviews</i> , 2021, 261, 106938.	1.4	11
80	In search of sediment deposits from the Limpopo (Delagoa Bight, southern Africa): Deciphering the catchment provenance of coastal sediments. <i>Sedimentary Geology</i> , 2019, 380, 94-104.	1.0	10
81	Shallow Gas Hydrate Accumulations at a Nigerian Deepwater Pockmark: Quantities and Dynamics. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018283.	1.4	10
82	High-resolution geochemical records of extreme drought in southeastern Africa during the past 7000 years. <i>Quaternary Science Reviews</i> , 2020, 236, 106294.	1.4	10
83	Late-Holocene dynamics of sea-surface temperature and terrestrial hydrology in southwestern Africa. <i>Holocene</i> , 2018, 28, 695-705.	0.9	9
84	Early Diagenesis at the Benthic Boundary Layer: Oxygen and Nitrate in Marine Sediments. , 2000, , 209-231.		9
85	Glacial to interglacial climate variability in the southeastern African subtropics (25°–20°S). <i>Climate of the Past</i> , 2021, 17, 345-360.	1.3	8
86	Quantification and Regionalization of Benthic Reflux. , 2006, , 429-456.		7
87	Coupling of benthic oxygen uptake and silica release: implications for estimating biogenic particle fluxes to the seafloor. <i>Geo-Marine Letters</i> , 2010, 30, 493-509.	0.5	7
88	A Long-term Monitoring Array for Landslide Precursors: A Case Study at the Ligurian Slope (Western Tj ETQq0 0 0 rgBT /Overlock 10 Tf		
89	Giant Seafloor Depressions Caused by Slope Failures and Bottom Currents on the Namibia Continental Margin. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2020GC009548.	1.0	7
90	Terrigenous Signals in Sediments of the Low-Latitude Atlantic - Indications to Environmental Variations during the Late Quaternary: Part II: Lithogenic Matter. , 2003, , 323-345.		7

#	ARTICLE	IF	CITATIONS
91	Holocene hydrologic and vegetation developments in the Orange River catchment (South Africa) and their controls. <i>Holocene</i> , 2018, 28, 1288-1300.	0.9	6
92	Persistent deep water anoxia in the eastern South Atlantic during the last ice age. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	6
93	Stormier mid-Holocene southwest Indian Ocean due to poleward trending tropical cyclones. <i>Nature Geoscience</i> , 2022, 15, 60-66.	5.4	5
94	Multi-proxy reconstruction of terrigenous input and sea-surface temperatures in the eastern Gulf of Guinea over the last ~35ka. <i>Marine Geology</i> , 2012, 319-322, 35-46.	0.9	4
95	The Importance of Mineralization Processes in Surface Sediments at Continental Margins. , 2002, , 253-267.		4
96	Bacterial and eukaryotic intact polar lipids point to in situ production as a key source of labile organic matter in hadal surface sediment of the Atacama Trench. <i>Biogeosciences</i> , 2022, 19, 1395-1420.	1.3	4
97	3. Mud volcanoes as dynamic sedimentary phenomena that host marine ecosystems. , 2017, , 53-84.		3
98	Terrigenous Signals in Sediments of the Low Latitude Atlantic â€” Implications for Environmental Variations during the Late Quarternary: Part I: Organic Carbon. , 2003, , 295-322.		3
99	Temporal stability and origin of chemoclines in the deep hypersaline anoxic Urania basin. <i>Geophysical Research Letters</i> , 2015, 42, 4888-4895.	1.5	2
100	Anatomy of a â€”suspendedâ€” seafloor in the dense brine waters of the deep hypersaline Urania Basin. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2020, 171, 104626.	0.6	2
101	Coupling of dissolved organic carbon, sulfur and iron cycling in Black Sea sediments over the Holocene and the late Pleistocene: Insights from an empirical dynamic model. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 307, 302-318.	1.6	2
102	Back to the Ocean Cycles: Benthic Fluxes and Their Distribution Patterns. , 2000, , 373-395.		2
103	Origin, transport, and retention of fluvial sedimentary organic matter in South Africa's largest freshwater wetland, Mkhuze Wetland System. <i>Biogeosciences</i> , 2022, 19, 2881-2902.	1.3	1