Matthias Zabel

List of Publications by Year
in descending order

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103 papers	5,789 citations	76294 40 h-index	82499 72 g-index
122 all docs	122 docs citations	122 times ranked	6233 citing authors

#	Article	IF	Citations
1	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. Biogeosciences, 2022, 19, 1395-1420.	1.3	4
2	Stormier mid-Holocene southwest Indian Ocean due to poleward trending tropical cyclones. Nature Geoscience, 2022, 15, 60-66.	5.4	5
3	Origin, transport, and retention of fluvial sedimentary organic matter in South Africa's largest freshwater wetland, Mkhuze Wetland System. Biogeosciences, 2022, 19, 2881-2902.	1.3	1
4	Glacial to interglacial climate variability in the southeastern African subtropics (25â€“20Â°â€‰S). Climate of the Past, 2021, 17, 345-360.	1.3	8
5	Giant Seafloor Depressions Caused by Slope Failures and Bottom Currents on the Namibia Continental Margin. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009548.	1.0	7
6	Mid-to Late Holocene climatic and anthropogenic influences in Mpondoland, South Africa. Quaternary Science Reviews, 2021, 261, 106938.	1.4	11
7	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. Geochimica Et Cosmochimica Acta, 2021, 307, 302-318.	1.6	2
8	Persistent deep water anoxia in the eastern South Atlantic during the last ice age. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	6
9	Anatomy of a â€˜suspendedâ€™ seafloor in the dense brine waters of the deep hypersaline Urania Basin. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 171, 104626.	0.6	2
10	Seismic stratigraphy of the inner to mid Agulhas bank, South Africa. Quaternary Science Reviews, 2020, 235, 105979.	1.4	20
11	Mid- and low latitude effects on eastern South African rainfall over the Holocene. Quaternary Science Reviews, 2020, 229, 106088.	1.4	14
12	Shallow Gas Hydrate Accumulations at a Nigerian Deepwater Pockmarkâ€”Quantities and Dynamics. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018283.	1.4	10
13	High-resolution geochemical records of extreme drought in southeastern Africa during the past 7000 years. Quaternary Science Reviews, 2020, 236, 106294.	1.4	10
14	Modern and late Pleistocene particulate organic carbon transport by the Amazon River: Insights from long-chain alkyl diols. Geochimica Et Cosmochimica Acta, 2019, 262, 1-19.	1.6	14
15	Late Quaternary climate variability at Mfabeni peatland, eastern South Africa. Climate of the Past, 2019, 15, 1153-1170.	1.3	20
16	Spatiotemporal Variations of Riverine Discharge Within the Amazon Basin During the Late Holocene Coincide With Extratropical Temperature Anomalies. Geophysical Research Letters, 2019, 46, 9013-9022.	1.5	14
17	Consistent CO2 release by pyrite oxidation on continental shelves prior to glacial terminations. Nature Geoscience, 2019, 12, 929-934.	5.4	19
18	In search of sediment deposits from the Limpopo (Delagoa Bight, southern Africa): Deciphering the catchment provenance of coastal sediments. Sedimentary Geology, 2019, 380, 94-104.	1.0	10

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19	Isoprenoid Quinones Resolve the Stratification of Redox Processes in a Biogeochemical Continuum from the Photic Zone to Deep Anoxic Sediments of the Black Sea. Applied and Environmental Microbiology, 2018, 84, .	1.4	19
20	Luminescence of quartz and feldspar fingerprints provenance and correlates with the source area denudation in the Amazon River basin. Earth and Planetary Science Letters, 2018, 492, 152-162.	1.8	55
21	Holocene hydrologic and vegetation developments in the Orange River catchment (South Africa) and their controls. Holocene, 2018, 28, 1288-1300.	0.9	6
22	Holocene environmental change along the southern Cape coast of South Africa â€“ Insights from the Eilandvlei sediment record spanning the last 8.9â€¯kyr. Global and Planetary Change, 2018, 163, 51-66.	1.6	23
23	Using Fourier transform infrared spectroscopy to determine mineral phases in sediments. Sedimentary Geology, 2018, 375, 27-35.	1.0	35
24	Late-Holocene dynamics of sea-surface temperature and terrestrial hydrology in southwestern Africa. Holocene, 2018, 28, 695-705.	0.9	9
25	The Provenance of Terrigenous Components in Marine Sediments Along the East Coast of Southern Africa. Geochemistry, Geophysics, Geosystems, 2018, 19, 1946-1962.	1.0	13
26	Near-surface Heating of Young Rift Sediment Causes Mass Production and Discharge of Reactive Dissolved Organic Matter. Scientific Reports, 2017, 7, 44864.	1.6	36
27	Hydrogen isotope fractionation of leaf wax n-alkanes in southern African soils. Organic Geochemistry, 2017, 109, 1-13.	0.9	37
28	Unraveling signatures of biogeochemical processes and the depositional setting in the molecular composition of pore water DOM across different marine environments. Geochimica Et Cosmochimica Acta, 2017, 207, 57-80.	1.6	103
29	Different precipitation patterns across tropical South America during Heinrich and Dansgaard-Oeschger stadials. Quaternary Science Reviews, 2017, 177, 1-9.	1.4	37
30	Variability in midâ€depth ventilation of the western Atlantic Ocean during the last deglaciation. Paleoceanography, 2017, 32, 948-965.	3.0	25
31	A 3 million year index for North African humidity/aridity and the implication of potential pan-African Humid periods. Quaternary Science Reviews, 2017, 171, 100-118.	1.4	108
32	3. Mud volcanoes as dynamic sedimentary phenomena that host marine ecosystems. , 2017, , 53-84.		3
33	Southern Hemisphere anticyclonic circulation drives oceanic and climatic conditions in late Holocene southernmost Africa. Climate of the Past, 2017, 13, 649-665.	1.3	28
34	The Fate of Carbon in Sediments of the Xingu and TapajÃ³s Clearwater Rivers, Eastern Amazon. Frontiers in Marine Science, 2017, 4, .	1.2	18
35	Origin and processing of terrestrial organic carbon in the Amazon system: lignin phenols in river, shelf, and fan sediments. Biogeosciences, 2017, 14, 2495-2512.	1.3	19
36	Holocene paleo-climatic record from the South African Namaqualand mudbelt: A source to sink approach. Quaternary International, 2016, 404, 121-135.	0.7	25

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37	Sea level and climate change at the southern Cape coast, South Africa, during the past 4.2 kyr. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 446, 295-307.	1.0	32
38	Origin, transport and deposition of leaf-wax biomarkers in the Amazon Basin and the adjacent Atlantic. Geochimica Et Cosmochimica Acta, 2016, 192, 149-165.	1.6	40
39	Sources, transport and deposition of terrestrial organic material: A case study from southwestern Africa. Quaternary Science Reviews, 2016, 149, 215-229.	1.4	26
40	Equatorial Pacific forcing of western Amazonian precipitation during Heinrich Stadial 1. Scientific Reports, 2016, 6, 35866.	1.6	13
41	Temporal stability and origin of chemoclines in the deep hypersaline anoxic Urania basin. Geophysical Research Letters, 2015, 42, 4888-4895.	1.5	2
42	Origin of increased terrigenous supply to the NE South American continental margin during Heinrich Stadial 1 and the Younger Dryas. Earth and Planetary Science Letters, 2015, 432, 493-500.	1.8	65
43	Terrigenous input off northern South America driven by changes in Amazonian climate and the North Brazil Current retroflection during the last 250 ka. Climate of the Past, 2014, 10, 843-862.	1.3	66
44	Global rates of marine sulfate reduction and implications for subâ€“sea-floor metabolic activities. Science, 2014, 344, 889-891.	6.0	253
45	Ultra-high-resolution paleoenvironmental records via direct laser-based analysis of lipid biomarkers in sediment core samples. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15669-15674.	3.3	45
46	Microbial biomarkers support organic carbon transport from methane-rich Amazon wetlands to the shelf and deep sea fan during recent and glacial climate conditions. Organic Geochemistry, 2014, 67, 85-98.	0.9	29
47	Abrupt shifts of the Saharaâ€“Sahel boundary during Heinrich stadials. Climate of the Past, 2013, 9, 1181-1191.	1.3	71
48	A Long-term Monitoring Array for Landslide Precursors: A Case Study at the Ligurian Slope (Western) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7	
49	Geochemical distribution patterns as indicators for productivity and terrigenous input off NW Africa. Deep-Sea Research Part I: Oceanographic Research Papers, 2012, 66, 51-66.	0.6	24
50	Towards constraining H2 concentration in subseafloor sediment: A proposal for combined analysis by two distinct approaches. Geochimica Et Cosmochimica Acta, 2012, 77, 186-201.	1.6	58
51	Distribution of major elements in Atlantic surface sediments (36Â°Nâ€“49Â°S): Imprint of terrigenous input and continental weathering. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	170
52	Multiproxy characterization and budgeting of terrigenous endâ€members at the NW African continental margin. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	20
53	Modelling the joint variability of grain size and chemical composition in sediments. Sedimentary Geology, 2012, 280, 135-148.	1.0	88
54	Multi-proxy reconstruction of terrigenous input and sea-surface temperatures in the eastern Gulf of Guinea over the last ~35ka. Marine Geology, 2012, 319-322, 35-46.	0.9	4

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55	Bacterial diversity and biogeochemistry of different chemosynthetic habitats of the REGAB cold seep (West African margin, 3160 m water depth). Biogeosciences, 2012, 9, 5031-5048.	1.3	43
56	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. Biogeosciences, 2012, 9, 2013-2031.	1.3	87
57	Heavy metals in Changjiang estuarine and offshore sediments: responding to human activities. Acta Oceanologica Sinica, 2012, 31, 88-101.	0.4	49
58	Phosphate oxygen isotopes: Insights into sedimentary phosphorus cycling from the Benguela upwelling system. Geochimica Et Cosmochimica Acta, 2011, 75, 3741-3756.	1.6	68
59	Petroleum degradation and associated microbial signatures at the Chapopote asphalt volcano, Southern Gulf of Mexico. Geochimica Et Cosmochimica Acta, 2011, 75, 4377-4398.	1.6	41
60	Marine sediment poreâ€water profiles of phosphate d18O using a refined microâ€extraction. Limnology and Oceanography: Methods, 2011, 9, 110-120.	1.0	19
61	Interhemispheric symmetry of the tropical African rainbelt over the past 23,000 years. Nature Geoscience, 2011, 4, 42-45.	5.4	110
62	Molecular evidence for anaerobic ammonium-oxidizing (anammox) bacteria in continental shelf and slope sediments off northwest Africa. Limnology and Oceanography, 2010, 55, 365-376.	1.6	42
63	Gas hydrates in shallow deposits of the Amsterdam mud volcano, Anaximander Mountains, Northeastern Mediterranean Sea. Geo-Marine Letters, 2010, 30, 187-206.	0.5	56
64	Coupling of benthic oxygen uptake and silica release: implications for estimating biogenic particle fluxes to the seafloor. Geo-Marine Letters, 2010, 30, 493-509.	0.5	7
65	Phosphorus cycling in marine sediments from the continental margin off Namibia. Marine Geology, 2010, 274, 95-106.	0.9	31
66	Phosphate geochemistry, mineralization processes, and Thioploca distribution in shelf sediments off central Chile. Marine Geology, 2010, 277, 61-72.	0.9	22
67	Microbial sequestration of phosphorus in anoxic upwelling sediments. Nature Geoscience, 2010, 3, 557-561.	5.4	214
68	Benthic phosphorus and iron budgets for three NW African slope sediments: a balance approach. Biogeosciences, 2010, 7, 469-480.	1.3	15
69	Decoupling of bio- and geohopanoids in sediments of the Benguela Upwelling System (BUS). Organic Geochemistry, 2010, 41, 1119-1129.	0.9	53
70	Increase in African dust flux at the onset of commercial agriculture in the Sahel region. Nature, 2010, 466, 226-228.	13.7	247
71	Fluxes of soot black carbon to South Atlantic sediments. Global Biogeochemical Cycles, 2009, 23, .	1.9	62
72	Sahel megadroughts triggered by glacial slowdowns of Atlantic meridional overturning. Paleoceanography, 2008, 23, .	3.0	213

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73	Aging of marine organic matter during crossâ€shelf lateral transport in the Benguela upwelling system revealed by compoundâ€specific radiocarbon dating. Geochemistry, Geophysics, Geosystems, 2007, 8, .	1.0	103
74	Instantaneous benthic response to different organic matter quality: In situ experiments in the Benguela Upwelling System. Marine Biology Research, 2007, 3, 342-356.	0.3	25
75	Lateral transport controls distribution, quality, and burial of organic matter along continental slopes in high-productivity areas. Geology, 2006, 34, 205.	2.0	130
76	Potential of ikaite to record the evolution of oceanic Î´18O. Geology, 2006, 34, 497.	2.0	29
77	Nepheloid layer distribution in the Benguela upwelling area offshore Namibia. Deep-Sea Research Part I: Oceanographic Research Papers, 2006, 53, 1423-1438.	0.6	78
78	A study of particle exchange at the sedimentâ€“water interface in the Benguela upwelling area based on 234Th/238U disequilibrium. Deep-Sea Research Part I: Oceanographic Research Papers, 2006, 53, 1742-1761.	0.6	12
79	Benthic Cycling of Oxygen, Nitrogen and Phosphorus. , 2006, , 207-240.		29
80	Quantification and Regionalization of Benthic Reflux. , 2006, , 429-456.		7
81	Benthic carbon mineralization on a global scale. Global Biogeochemical Cycles, 2005, 19, .	1.9	95
82	Provenance of present-day eolian dust collected off NW Africa. Journal of Geophysical Research, 2005, 110, .	3.3	174
83	Organic carbon content in surface sedimentsâ€”defining regional provinces. Deep-Sea Research Part I: Oceanographic Research Papers, 2004, 51, 2001-2026.	0.6	171
84	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. Geochimica Et Cosmochimica Acta, 2003, 67, 2631-2647.	1.6	220
85	Climate forcing of the Pb isotope record of terrigenous input into the Equatorial Atlantic. Earth and Planetary Science Letters, 2003, 213, 221-234.	1.8	56
86	COMMUNITIES AND MICROHABITATS OF LIVING BENTHIC FORAMINIFERA FROM THE TROPICAL EAST ATLANTIC: IMPACT OF DIFFERENT PRODUCTIVITY REGIMES. Journal of Foraminiferal Research, 2003, 33, 10-31.	0.1	86
87	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
88	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
89	Processes and Signals of Nonsteady-State Diagenesis in Deep-Sea Sediments and their Pore Waters. , 2003, , 431-459.		41
90	The Importance of Mineralization Processes in Surface Sediments at Continental Margins. , 2002, , 253-267.		4

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91	Early diagenesis of organic matter from sediments of the eastern subtropical Atlantic: evidence from stable nitrogen and carbon isotopes. Geochimica Et Cosmochimica Acta, 2001, 65, 1795-1808.	1.6	317
92	Barium peaks at glacial terminations in sediments of the equatorial Atlantic Oceanâ€"relicts of deglacial productivity pulses?. Chemical Geology, 2001, 175, 635-651.	1.4	60
93	Importance of submarine landslides for non-steady state conditions in pore water systems â€" lower Zaire (Congo) deep-sea fan. Marine Geology, 2001, 176, 87-99.	0.9	83
94	Late Quaternary Climate Changes in Central Africa as Inferred from Terrigenous Input to the Niger Fan. Quaternary Research, 2001, 56, 207-217.	1.0	138
95	A comparison of benthic nutrient fluxes from deep-sea sediments off Namibia and Argentina. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 2029-2050.	0.6	43
96	Back to the Ocean Cycles: Benthic Fluxes and Their Distribution Patterns. , 2000, , 373-395.		2
97	Early Diagenesis at the Benthic Boundary Layer: Oxygen and Nitrate in Marine Sediments. , 2000, , 209-231.		9
98	Significance of the sedimentary Alâˆ¶Ti ratio as an indicator for variations in the circulation patterns of the equatorial North Atlantic. Paleoceanography, 1999, 14, 789-799.	3.0	64
99	Regional distribution of diffusive phosphate and silicate fluxes through the sedimentâ€“water interface: the eastern South Atlantic. Deep-Sea Research Part I: Oceanographic Research Papers, 1998, 45, 277-300.	0.6	56
100	Deep Sulfate Reduction Completely Mediated by Anaerobic Methane Oxidation in Sediments of the Upwelling Area off Namibia. Geochimica Et Cosmochimica Acta, 1998, 62, 455-464.	1.6	286
101	Quantification of diffusive benthic fluxes of nitrate, phosphate, and silicate in the southern Atlantic Ocean. Global Biogeochemical Cycles, 1998, 12, 193-210.	1.9	60
102	Simulation of early diagenetic processes in continental slope sediments off southwest Africa: the computer model CoTAM tested. Marine Geology, 1997, 144, 191-210.	0.9	32
103	Early diagenetic processes, fluxes, and reaction rates in sediments of the South Atlantic. Geochimica Et Cosmochimica Acta, 1994, 58, 2041-2060.	1.6	184