George Kling

List of Publications by Year in descending order

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Version: 2024-02-01

122 papers	10,845 citations	39113 52 h-index	36203 101 g-index
131 all docs	131 docs citations	131 times ranked	11302 citing authors

#	Article	IF	Citations
1	Heterotrophic Bacteria Dominate Catalase Expression during Microcystis Blooms. Applied and Environmental Microbiology, 2022, 88, .	1.4	14
2	Ecosystem Recovery from Disturbance is Constrained by N Cycle Openness, Vegetation-Soil N Distribution, Form of N Losses, and the Balance Between Vegetation and Soil-Microbial Processes. Ecosystems, 2021, 24, 667-685.	1.6	15
3	Rainfall Alters Permafrost Soil Redox Conditions, but Meta-Omics Show Divergent Microbial Community Responses by Tundra Type in the Arctic. Soil Systems, 2021, 5, 17.	1.0	5
4	Active layer freeze-thaw and water storage dynamics in permafrost environments inferred from InSAR. Remote Sensing of Environment, 2020, 248, 112007.	4.6	51
5	Interannual, summer, and diel variability of CH4and CO2effluxes from Toolik Lake, Alaska, during the ice-free periods 2010â€“2015. Environmental Sciences: Processes and Impacts, 2020, 22, 2181-2198.	1.7	3
6	Empirical Models for Predicting Water and Heat Flow Properties of Permafrost Soils. Geophysical Research Letters, 2020, 47, e2020GL087646.	1.5	18
7	Arctic Amplification of Global Warming Strengthened by Sunlight Oxidation of Permafrost Carbon to CO₂. Geophysical Research Letters, 2020, 47, e2020GL087085.	1.5	38
8	Experimental metatranscriptomics reveals the costs and benefits of dissolved organic matter photoâ€alteration for freshwater microbes. Environmental Microbiology, 2020, 22, 3505-3521.	1.8	21
9	Long-term reliability of the Figaro TGSÂ2600 solid-state methane sensor under low-Arctic conditions at Toolik Lake, Alaska. Atmospheric Measurement Techniques, 2020, 13, 2681-2695.	1.2	14
10	Monitoring Soil Water and Organic Carbon Storage Patterns at the Arctic Foothills, Alaska, Using Insar. , 2020, , .		1
11	The Controls of Iron and Oxygen on Hydroxyl Radical (â€¢OH) Production in Soils. Soil Systems, 2019, 3, 1.	1.0	48
12	Active Layer Groundwater Flow: The Interrelated Effects of Stratigraphy, Thaw, and Topography. Water Resources Research, 2019, 55, 6555-6576.	1.7	29
13	The Expanding Footprint of Rapid Arctic Change. Earth's Future, 2019, 7, 212-218.	2.4	38
14	Interactions between sunlight and microorganisms influence dissolved organic matter degradation along the aquatic continuum. Limnology and Oceanography Letters, 2018, 3, 102-116.	1.6	137
15	The role of iron and reactive oxygen species in the production of CO2 in arctic soil waters. Geochimica Et Cosmochimica Acta, 2018, 224, 80-95.	1.6	89
16	Nitrate is an important nitrogen source for Arctic tundra plants. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3398-3403.	3.3	102
17	Groundwater Flow and Exchange Across the Land Surface Explain Carbon Export Patterns in Continuous Permafrost Watersheds. Geophysical Research Letters, 2018, 45, 7596-7605.	1.5	37
18	Ecosystem responses to climate change at a Low Arctic and a High Arctic long-term research site. Ambio, 2017, 46, 160-173.	2.8	60

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19	Cyanobacterial harmful algal blooms are a biological disturbance to Western Lake Erie bacterial communities. Environmental Microbiology, 2017, 19, 1149-1162.	1.8	193
20	Photochemical alteration of organic carbon draining permafrost soils shifts microbial metabolic pathways and stimulates respiration. Nature Communications, 2017, 8, 772.	5.8	112
21	Seasonal Dynamics in Dissolved Organic Matter, Hydrogen Peroxide, and Cyanobacterial Blooms in Lake Erie. Frontiers in Marine Science, 2016, 3, .	1.2	57
22	Multiple thermo-erosional episodes during the past six millennia: Implications for the response of Arctic permafrost to climate change. Geology, 2016, 44, 439-442.	2.0	10
23	Effects of long-term nutrient additions on Arctic tundra, stream, and lake ecosystems: beyond NPP. Oecologia, 2016, 182, 653-665.	0.9	16
24	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. Environmental Research Letters, 2016, 11, 034014.	2.2	199
25	Exotic earthworm community composition interacts with soil texture to affect redistribution and retention of litter-derived C and N in northern temperate forest soils. Biogeochemistry, 2015, 126, 379-395.	1.7	22
26	Benthic community metabolism in deep and shallow Arctic lakes during 13 years of wholeâ€“lake fertilization. Limnology and Oceanography, 2015, 60, 1604-1618.	1.6	25
27	Controls on dissolved organic matter (DOM) degradation in a headwater stream: the influence of photochemical and hydrological conditions in determining light-limitation or substrate-limitation of photo-degradation. Biogeosciences, 2015, 12, 6669-6685.	1.3	79
28	The Comparative Limnology of Lakes Nyos and Monoun, Cameroon. Advances in Volcanology, 2015, , 401-425.	0.7	8
29	Isolating the effects of storm events on arctic aquatic bacteria: temperature, nutrients, and community composition as controls on bacterial productivity. Frontiers in Microbiology, 2015, 06, 250.	1.5	16
30	Metacommunity dynamics of bacteria in an arctic lake: the impact of species sorting and mass effects on bacterial production and biogeography. Frontiers in Microbiology, 2014, 5, 82.	1.5	71
31	Sunlight controls water column processing of carbon in arctic fresh waters. Science, 2014, 345, 925-928.	6.0	428
32	Landâ€“Water Interactions. , 2014, , 143-172.		9
33	Dark Formation of Hydroxyl Radical in Arctic Soil and Surface Waters. Environmental Science & Technology, 2013, 47, 12860-12867.	4.6	198
34	Surface exposure to sunlight stimulates CO ₂ release from permafrost soil carbon in the Arctic. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3429-3434.	3.3	166
35	Communityâ€specific impacts of exotic earthworm invasions on soil carbon dynamics in a sandy temperate forest. Ecology, 2013, 94, 2827-2837.	1.5	30
36	Performance of a low-cost methane sensor for ambient concentration measurements in preliminary studies. Atmospheric Measurement Techniques, 2012, 5, 1925-1934.	1.2	56

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37	Microbial diversity in arctic freshwaters is structured by inoculation of microbes from soils. ISME Journal, 2012, 6, 1629-1639.	4.4	303
38	Variability of inâ€stream and riparian storage in a beaded arctic stream. Hydrological Processes, 2012, 26, 2938-2950.	1.1	22
39	Processing arctic eddyâ€flux data using a simple carbonâ€exchange model embedded in the ensemble Kalman filter. Ecological Applications, 2010, 20, 1285-1301.	1.8	25
40	Multiple stressors cause rapid ecosystem change in Lake Victoria. Freshwater Biology, 2010, 55, 19-42.	1.2	284
41	Temperature controls on aquatic bacterial production and community dynamics in arctic lakes and streams. Environmental Microbiology, 2010, 12, 1319-1333.	1.8	154
42	Stream geochemistry as an indicator of increasing permafrost thaw depth in an arctic watershed. Chemical Geology, 2010, 273, 76-81.	1.4	120
43	Carnivory and resourceâ€based niche differentiation in anuran larvae: implications for food web and experimental ecology. Freshwater Biology, 2009, 54, 572-586.	1.2	121
44	Lakes of the Arctic. , 2009, , 577-588.		14
45	Nutrient fluxes across reaches and impoundments in two southeastern Michigan watersheds. Lake and Reservoir Management, 2009, 25, 389-400.	0.4	16
46	Climateâ€related variations in mixing dynamics in an Alaskan arctic lake. Limnology and Oceanography, 2009, 54, 2401-2417.	1.6	92
47	Hydrologic and biogeochemical controls on the spatial and temporal patterns of nitrogen and phosphorus in the Kuparuk River, arctic Alaska. Hydrological Processes, 2008, 22, 3294-3309.	1.1	69
48	Internal wave effects on photosynthesis: Experiments, theory, and modeling. Limnology and Oceanography, 2008, 53, 339-353.	1.6	37
49	Evolution of CO2 in Lakes Monoun and Nyos, Cameroon, before and during controlled degassing. Geochemical Journal, 2008, 42, 93-118.	0.5	80
50	Geochemistry of Soils and Streams on Surfaces of Varying Ages in Arctic Alaska. Arctic, Antarctic, and Alpine Research, 2007, 39, 84-98.	0.4	79
51	BIOGEOGRAPHY OF BACTERIOPLANKTON IN LAKES AND STREAMS OF AN ARCTIC TUNDRA CATCHMENT. Ecology, 2007, 88, 1365-1378.	1.5	184
52	Bacterial responses in activity and community composition to photo-oxidation of dissolved organic matter from soil and surface waters. Aquatic Sciences, 2007, 69, 96-107.	0.6	55
53	Silicate weathering in temperate forest soils: insights from a field experiment. Biogeochemistry, 2007, 82, 111-126.	1.7	9
54	MICROBIAL COMMUNITY COMPOSITION AND FUNCTION ACROSS AN ARCTIC TUNDRA LANDSCAPE. Ecology, 2006, 87, 1659-1670.	1.5	83

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55	DYNAMICS OF LAKE ERUPTIONS AND POSSIBLE OCEAN ERUPTIONS. Annual Review of Earth and Planetary Sciences, 2006, 34, 293-324.	4.6	44
56	Physical pathways of nutrient supply in a small, ultraoligotrophic arctic lake during summer stratification. Limnology and Oceanography, 2006, 51, 1107-1124.	1.6	74
57	Limnology of Andean piedmont rivers of Venezuela. Journal of the North American Benthological Society, 2006, 25, 66-81.	3.0	17
58	VARIATION IN DISSOLVED ORGANIC MATTER CONTROLS BACTERIAL PRODUCTION AND COMMUNITY COMPOSITION. Ecology, 2006, 87, 2068-2079.	1.5	296
59	VARIATION IN DISSOLVED ORGANIC MATTER CONTROLS BACTERIAL PRODUCTION AND COMMUNITY COMPOSITION. , 2006, 87, 2068.		1
60	Long-term response and recovery to nutrient addition of a partitioned arctic lake. Freshwater Biology, 2005, 50, 731-741.	1.2	33
61	From The Cover: Degassing Lakes Nyos and Monoun: Defusing certain disaster. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14185-14190.	3.3	95
62	A Case History: Effects of Mixing Regime on Nutrient Dynamics and Community Structure in Third Sister Lake, Michigan During Late Winter and Early Spring 2003. Lake and Reservoir Management, 2005, 21, 316-329.	0.4	34
63	Seasonal and interannual variation of bacterial production in lowland rivers of the Orinoco basin. Freshwater Biology, 2004, 49, 1400-1414.	1.2	40
64	Holocene pollen records from the central Arctic Foothills, northern Alaska: testing the role of substrate in the response of tundra to climate change. Journal of Ecology, 2003, 91, 1034-1048.	1.9	39
65	Effects of CO2and nutrient availability on mineral weathering in controlled tree growth experiments. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	30
66	CO2exchange between air and water in an Arctic Alaskan and midlatitude Swiss lake: Importance of convective mixing. Journal of Geophysical Research, 2003, 108, .	3.3	153
67	An approach to understanding hydrologic connectivity on the hillslope and the implications for nutrient transport. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	222
68	Mercury Concentrations in Water, Sediment, and Biota from Lake Victoria, East Africa. Journal of Great Lakes Research, 2003, 29, 283-291.	0.8	34
69	Bacterioplankton Community Shifts in an Arctic Lake Correlate with Seasonal Changes in Organic Matter Source. Applied and Environmental Microbiology, 2003, 69, 2253-2268.	1.4	363
70	Bottom-up controls on bacterial production in tropical lowland rivers. Limnology and Oceanography, 2003, 48, 1466-1475.	1.6	31
71	The microbial and metazoan community associated with colonies of Trichodesmium spp.: a quantitative survey. Journal of Plankton Research, 2002, 24, 913-922.	0.8	92
72	Spatialâ€temporal variability in surface layer deepening and lateral advection in an embayment of Lake Victoria, East Africa. Limnology and Oceanography, 2002, 47, 656-671.	1.6	164

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73	Pulse-labeling studies of carbon cycling in Arctic tundra ecosystems: The contribution of photosynthates to methane emission. Global Biogeochemical Cycles, 2002, 16, 10-1-10-8.	1.9	61
74	Pulse-labeling studies of carbon cycling in arctic tundra ecosystems: Contribution of photosynthates to soil organic matter. Global Biogeochemical Cycles, 2002, 16, 48-1-48-8.	1.9	24
75	Title is missing!. Biogeochemistry, 2002, 60, 213-234.	1.7	64
76	Diurnal fluctuations in PCO2, DIC, oxygen and nutrients at inshore sites in Lake Victoria, Uganda. , 2001, , 67-82.		9
77	Integration of lakes and streams in a landscape perspective: the importance of material processing on spatial patterns and temporal coherence. Freshwater Biology, 2000, 43, 477-497.	1.2	212
78	A lake's life is not its own. Nature, 2000, 408, 149-150.	13.7	7
79	A Limnological Survey of Third Sister Lake, Michigan with Historical Comparisons. Lake and Reservoir Management, 2000, 16, 253-267.	0.4	31
80	Simulating the effects of climate change and climate variability on carbon dynamics in Arctic tundra. Global Biogeochemical Cycles, 2000, 14, 1123-1136.	1.9	35
81	Impact of global change on the biogeochemistry and ecology of an Arctic freshwater system. Polar Research, 1999, 18, 207-214.	1.6	108
82	Spatial Variation among Lakes within Landscapes: Ecological Organization along Lake Chains. Ecosystems, 1999, 2, 395-410.	1.6	179
83	Hydrologic modeling of an arctic tundra watershed: Toward Pan-Arctic predictions. Journal of Geophysical Research, 1999, 104, 27507-27518.	3.3	21
84	A Coupled Field and Modeling Approach for the Analysis of Nitrogen Cycling in Streams. Journal of the North American Benthological Society, 1999, 18, 199-221.	3.0	45
85	Impact of global change on the biogeochemistry and ecology of an Arctic freshwater system. Polar Research, 1999, 18, 207-214.	1.6	30
86	A CH4emission estimate for the Kuparuk River basin, Alaska. Journal of Geophysical Research, 1998, 103, 29005-29013.	3.3	63
87	The character and bioactivity of dissolved organic matter at thaw and in the spring runoff waters of the arctic tundra North Slope, Alaska. Journal of Geophysical Research, 1998, 103, 28939-28946.	3.3	68
88	The Limnology of Toolik Lake. Ecological Studies, 1997, , 61-106.	0.4	34
89	A tracer investigation of nitrogen cycling in a pristine tundra river. Canadian Journal of Fisheries and Aquatic Sciences, 1997, 54, 2361-2367.	0.7	77
90	EFFECTS OF CLIMATE CHANGE ON THE FRESHWATERS OF ARCTIC AND SUBARCTIC NORTH AMERICA. Hydrological Processes, 1997, 11, 873-902.	1.1	329

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91	The Kuparuk River: A Long-Term Study of Biological and Chemical Processes in an Arctic River. Ecological Studies, 1997, , 107-129.	0.4	23
92	Long-Term Measurements at the Arctic LTER Site. , 1995, , 391-409.		5
93	Land-Water Interactions: The Influence of Terrestrial Diversity on Aquatic Ecosystems. Ecological Studies, 1995, , 297-310.	0.4	12
94	Long-Term Measurements at the Arctic LTER Site. , 1995, , 391-409.		0
95	Degassing of Lake Nyos. Nature, 1994, 368, 405-406.	13.7	37
96	Carbon Dioxide Supersaturation in the Surface Waters of Lakes. Science, 1994, 265, 1568-1570.	6.0	967
97	Six years of change at Lake Nyos, Cameroon, yield clues to the past and cautions for the future.. Geochemical Journal, 1994, 28, 139-162.	0.5	63
98	Ecosystem-Scale Experiments. Advances in Chemistry Series, 1994, , 91-120.	0.6	14
99	Gas buildup in Lake Nyos, Cameroon: The recharge process and its consequences. Applied Geochemistry, 1993, 8, 207-221.	1.4	81
100	Stable Isotopes Resolve the Drift Paradox for Baetis Mayflies in an Arctic River. Ecology, 1993, 74, 2315-2325.	1.5	218
101	Stable Isotopes and Planktonic Trophic Structure in Arctic Lakes. Ecology, 1992, 73, 561-566.	1.5	355
102	The flux of CO2 and CH4 from lakes and rivers in arctic Alaska. , 1992, , 23-36.		64
103	The biogeochemistry and zoogeography of lakes and rivers in arctic Alaska. Hydrobiologia, 1992, 240, 1-14.	1.0	75
104	The flux of CO2 and CH4 from lakes and rivers in arctic Alaska. Hydrobiologia, 1992, 240, 23-36.	1.0	252
105	The biogeochemistry and zoogeography of lakes and rivers in arctic Alaska. , 1992, , 1-14.		7
106	West Cameroon Quaternary lacustrine deposits: preliminary results. Journal of African Earth Sciences (and the Middle East), 1991, 12, 147-157.	0.2	7
107	Arctic Lakes and Streams as Gas Conduits to the Atmosphere: Implications for Tundra Carbon Budgets. Science, 1991, 251, 298-301.	6.0	504
108	A comparative view of Lakes Nyos and Monoun, Cameroon, West Africa. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 1991, 24, 1102-1105.	0.1	6

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109	The role of seasonal turnover in lake alkalinity dynamics. Limnology and Oceanography, 1991, 36, 106-122.	1.6	21
110	Conclusions from Lake Nyos disaster. Nature, 1990, 348, 201-201.	13.7	42
111	Lithostratigraphy, volcanism, paleomagnetism and palynology of Quaternary lacustrine deposits from Barombi Mbo (West Cameroon): Preliminary results. Journal of Volcanology and Geothermal Research, 1990, 42, 319-335.	0.8	41
112	Safety of Cameroonian lakes. Nature, 1989, 337, 215-215.	13.7	5
113	The evolution of thermal structure and water chemistry in Lake Nyos. Journal of Volcanology and Geothermal Research, 1989, 39, 151-165.	0.8	76
114	The genusDaphnia in Cameroon, West Africa. Hydrobiologia, 1988, 160, 257-261.	1.0	15
115	Comparative transparency, depth of mixing, and stability of stratification in lakes of Cameroon, West Africa1. Limnology and Oceanography, 1988, 33, 27-40.	1.6	155
116	Seasonal Mixing and Catastrophic Degassing in Tropical Lakes, Cameroon, West Africa. Science, 1987, 237, 1022-1024.	6.0	54
117	The 1986 Lake Nyos Gas Disaster in Cameroon, West Africa. Science, 1987, 236, 169-175.	6.0	342
118	The physicochemistry of some dune ponds on the Outer Banks, North Carolina. Hydrobiologia, 1986, 134, 3-10.	1.0	7
119	Acid Precipitation in the Colorado Front Range: An Overview with Time Predictions for Significant Effects. Arctic and Alpine Research, 1984, 16, 321.	1.3	20
120	The Critical Importance of Buoyancy Flux for Gas Flux Across the Air-Water Interface. Geophysical Monograph Series, 0, , 135-139.	0.1	23
121	Understanding the effects of climate change via disturbance on pristine arctic lakesâ€”multitrophic level response and recovery to a 12â€yr, lowâ€level fertilization experiment. Limnology and Oceanography, 0, , .	1.6	4
122	Processing Arctic Eddy-Flux Data Using a Simple Carbon-Exchange Model Embedded in the Ensemble Kalman Filter. , 0, , 100319061507001.		1