

Georgiy B Kirillin

List of Publications by Year in descending order

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Version: 2024-02-01

75
papers

2,763
citations

159585

30
h-index

197818

49
g-index

110
all docs

110
docs citations

110
times ranked

2909
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics of seasonally ice-covered lakes: a review. <i>Aquatic Sciences</i> , 2012, 74, 659-682.	1.5	284
2	The under-ice microbiome of seasonally frozen lakes. <i>Limnology and Oceanography</i> , 2013, 58, 1998-2012.	3.1	173
3	Modeling lakes and reservoirs in the climate system. <i>Limnology and Oceanography</i> , 2009, 54, 2315-2329.	3.1	101
4	Radiatively driven convection in ice-covered lakes: Observations, scaling, and a mixed layer model. <i>Journal of Geophysical Research</i> , 2002, 107, 7-1.	3.3	87
5	Contribution of oxic methane production to surface methane emission in lakes and its global importance. <i>Nature Communications</i> , 2019, 10, 5497.	12.8	84
6	Generalized scaling of seasonal thermal stratification in lakes. <i>Earth-Science Reviews</i> , 2016, 161, 179-190.	9.1	77
7	Consequences of thermal pollution from a nuclear plant on lake temperature and mixing regime. <i>Journal of Hydrology</i> , 2013, 496, 47-56.	5.4	71
8	Attribution of global lake systems change to anthropogenic forcing. <i>Nature Geoscience</i> , 2021, 14, 849-854.	12.9	70
9	Enhancing Surface Methane Fluxes from an Oligotrophic Lake: Exploring the Microbubble Hypothesis. <i>Environmental Science & Technology</i> , 2015, 49, 873-880.	10.0	69
10	Future projections of temperature and mixing regime of European temperate lakes. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 1533-1551.	4.9	69
11	Lake ice phenology in Berlin-Brandenburg from 1947 to 2007: observations and model hindcasts. <i>Climatic Change</i> , 2012, 112, 791-817.	3.6	65
12	Zooplankton carcasses and non-predatory mortality in freshwater and inland sea environments. <i>Journal of Plankton Research</i> , 2014, 36, 597-612.	1.8	63
13	FLake-Global: Online lake model with worldwide coverage. <i>Environmental Modelling and Software</i> , 2011, 26, 683-684.	4.5	62
14	Physical background of the development of oxygen depletion in ice-covered lakes. <i>Oecologia</i> , 2007, 151, 331-340.	2.0	61
15	Some features of the thermal and dissolved oxygen structure in boreal, shallow ice-covered Lake Vendyurskoe, Russia. <i>Aquatic Ecology</i> , 2009, 43, 617-627.	1.5	57
16	Present state of the Aral Sea: diverging physical and biological characteristics of the residual basins. <i>Scientific Reports</i> , 2016, 6, 23906.	3.3	56
17	Extreme Weather Event Triggers Cascade Towards Extreme Turbidity in a Clear-water Lake. <i>Ecosystems</i> , 2017, 20, 1407-1420.	3.4	56
18	Thermocline deepening boosts ecosystem metabolism: evidence from a large-scale lake enclosure experiment simulating a summer storm. <i>Global Change Biology</i> , 2017, 23, 1448-1462.	9.5	55

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19	Rapid degradation of permafrost underneath waterbodies in tundra landscapesâ€”Toward a representation of thermokarst in land surface models. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016, 121, 2446-2470.	2.8	54
20	High Spatiotemporal Dynamics of Methane Production and Emission in Oxic Surface Water. <i>Environmental Science & Technology</i> , 2020, 54, 1451-1463.	10.0	48
21	Integrating Perspectives to Understand Lake Ice Dynamics in a Changing World. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2020JG005799.	3.0	48
22	Axisymmetric circulation driven by marginal heating in iceâ€”covered lakes. <i>Geophysical Research Letters</i> , 2015, 42, 2893-2900.	4.0	40
23	Planktonic events may cause polymictic-dimictic regime shifts in temperate lakes. <i>Scientific Reports</i> , 2016, 6, 24361.	3.3	40
24	Modeling sinking rate of zooplankton carcasses: Effects of stratification and mixing. <i>Limnology and Oceanography</i> , 2012, 57, 881-894.	3.1	39
25	Thermal processes of thermokarst lakes in the continuous permafrost zone of northern Siberia â€” observations and modeling (Lena River Delta, Siberia). <i>Biogeosciences</i> , 2015, 12, 5941-5965.	3.3	38
26	A framework for ensemble modelling of climate change impacts on lakes worldwide: the ISIMIP Lake Sector. <i>Geoscientific Model Development</i> , 2022, 15, 4597-4623.	3.6	37
27	A parameterized model of heat storage by lake sediments. <i>Environmental Modelling and Software</i> , 2010, 25, 793-801.	4.5	35
28	Localization of lacustrine groundwater discharge (LGD) by airborne measurement of thermal infrared radiation. <i>Remote Sensing of Environment</i> , 2013, 138, 119-125.	11.0	35
29	Seasonal thermal regime and climatic trends in lakes of the Tibetan highlands. <i>Hydrology and Earth System Sciences</i> , 2017, 21, 1895-1909.	4.9	34
30	Climate change impact on thermal and oxygen regime of shallow lakes. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 64, 17264.	1.7	32
31	Effects of spring warming and mixing duration on diatom deposition in deep Tiefer See, NE Germany. <i>Journal of Paleolimnology</i> , 2017, 57, 37-49.	1.6	32
32	Airlake boundary layer and performance of a simple lake parameterization scheme over the Tibetan highlands. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 68, 31091.	1.7	30
33	Numerical study on the response of the largest lake in China to climate change. <i>Hydrology and Earth System Sciences</i> , 2019, 23, 2093-2109.	4.9	30
34	Turbulent mixing and heat fluxes under lake ice: the role of seiche oscillations. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 6493-6504.	4.9	29
35	Basin-scale circulation and heat fluxes in ice-covered lakes. <i>Limnology and Oceanography</i> , 2014, 59, 445-464.	3.1	28
36	Iceâ€”Covered Lakes of Tibetan Plateau as Solar Heat Collectors. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093429.	4.0	27

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37	Thermal instability in freshwater lakes under ice: Effect of salt gradients or solar radiation?. <i>Cold Regions Science and Technology</i> , 2011, 65, 184-190.	3.5	26
38	Basin-scale internal waves in the bottom boundary layer of ice-covered Lake Müggelsee, Germany. <i>Aquatic Ecology</i> , 2009, 43, 641-651.	1.5	25
39	Climate Change Demands Adaptive Management of Urban Lakes: Model-Based Assessment of Management Scenarios for Lake Tegel (Berlin, Germany). <i>Water (Switzerland)</i> , 2018, 10, 186.	2.7	25
40	Effects of the Largest Lake of the Tibetan Plateau on the Regional Climate. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033396.	3.3	24
41	Ice-water heat exchange during ice growth in Lake Baikal. <i>Journal of Great Lakes Research</i> , 2014, 40, 599-607.	1.9	23
42	Criteria for the onset and breakup of summer lake stratification based on routine temperature measurements. <i>Fundamental and Applied Limnology</i> , 2014, 184, 183-194.	0.7	23
43	Seeking a compromise between pharmaceutical pollution and phosphorus load: Management strategies for Lake Tegel, Berlin. <i>Water Research</i> , 2012, 46, 4153-4163.	11.3	22
44	Upwelling of deep water during thermal stratification onset—A major mechanism of vertical transport in small temperate lakes in spring?. <i>Water Resources Research</i> , 2015, 51, 9612-9627.	4.2	22
45	Fine scale structure of convective mixed layer in ice-covered lake. <i>Environmental Fluid Mechanics</i> , 2019, 19, 751-764.	1.6	22
46	Transient convection in upper lake sediments produced by internal seiching. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	21
47	Citizen science shows systematic changes in the temperature difference between air and inland waters with global warming. <i>Scientific Reports</i> , 2017, 7, 43890.	3.3	21
48	Ice cover decay and heat balance in Lake Kilpisjärvi in Arctic tundra. <i>Journal of Limnology</i> , 2019, 78, .	1.1	21
49	Seasonal pattern of rotation-affected internal seiches in a small temperate lake. <i>Limnology and Oceanography</i> , 2013, 58, 1344-1360.	3.1	20
50	Effects of wind-driven circulation on river intrusion in Lake Tegel: modeling study with projection on transport of pollutants. <i>Environmental Fluid Mechanics</i> , 2012, 12, 321-339.	1.6	18
51	Plasticity in habitat use determines metabolic response of fish to global warming in stratified lakes. <i>Oecologia</i> , 2012, 170, 275-287.	2.0	16
52	Net groundwater inflow in an enclosed lake: from synoptic variations to climatic projections. <i>Hydrological Processes</i> , 2013, 27, 347-359.	2.6	15
53	Estimating In Situ Zooplankton Non-Predation Mortality in an Oligo-Mesotrophic Lake from Sediment Trap Data: Caveats and Reality Check. <i>PLoS ONE</i> , 2015, 10, e0131431.	2.5	15
54	Fate of pharmaceutical micro-pollutants in Lake Tegel (Berlin, Germany): the impact of lake-specific mechanisms. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	14

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55	Turbulence in the stratified boundary layer under ice: observations from Lake Baikal and a new similarity model. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1691-1708.	4.9	13
56	A mesoscale vortex in a small stratified lake. <i>Environmental Fluid Mechanics</i> , 2008, 8, 349-366.	1.6	12
57	New profiling and mooring records help to assess variability of Lake Issyk-Kul and reveal unknown features of its thermohaline structure. <i>Hydrology and Earth System Sciences</i> , 2018, 22, 6279-6295.	4.9	11
58	Lake–Atmosphere Heat Flux Dynamics of a Thermokarst Lake in Arctic Siberia. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 5222-5239.	3.3	10
59	Methane hydrate emergence from Lake Baikal: direct observations, modelling, and hydrate footprints in seasonal ice cover. <i>Scientific Reports</i> , 2019, 9, 19361.	3.3	10
60	The extent and variability of storm–induced temperature changes in lakes measured with long–term and high–frequency data. <i>Limnology and Oceanography</i> , 2021, 66, 1979-1992.	3.1	10
61	Surface seiches in Flathead Lake. <i>Hydrology and Earth System Sciences</i> , 2015, 19, 2605-2615.	4.9	9
62	Variation of bacterial communities along the vertical gradient in Lake Issyk Kul, Kyrgyzstan. <i>Environmental Microbiology Reports</i> , 2021, 13, 337-347.	2.4	9
63	Periodic convection within littoral lake sediments on the background of seiche–driven oxygen fluctuations. <i>Limnology & Oceanography Fluids & Environments</i> , 2014, 4, 17-33.	1.7	8
64	The world’s largest heliothermal lake newly formed in the Aral Sea basin. <i>Environmental Research Letters</i> , 2021, 16, 115009.	5.2	8
65	A study of heat transport at the ice base and structure of the under-ice water layer in Southern Baikal. <i>Water Resources</i> , 2017, 44, 428-441.	0.9	7
66	Thermal Responses of the Largest Freshwater Lake in the Tibetan Plateau and Its Nearby Saline Lake to Climate Change. <i>Remote Sensing</i> , 2022, 14, 1774.	4.0	7
67	Effects of water column processes on the use of sediment traps to measure zooplankton non-predatory mortality: a mathematical and empirical assessment. <i>Journal of Plankton Research</i> , 2018, 40, 91-106.	1.8	6
68	An Automatic Method to Detect Lake Ice Phenology Using MODIS Daily Temperature Imagery. <i>Remote Sensing</i> , 2021, 13, 2711.	4.0	6
69	Changing Pattern of Water Level Trends in Eurasian Endorheic Lakes as a Response to the Recent Climate Variability. <i>Remote Sensing</i> , 2021, 13, 3705.	4.0	6
70	A low–cost underwater particle tracking velocimetry system for measuring in–situ particle flux and sedimentation rate in low–turbulence environments. <i>Limnology and Oceanography: Methods</i> , 2019, 17, 665-681.	2.0	5
71	Modeling reservoir surface temperatures for regional and global climate models: a multi-model study on the inflow and level variation effects. <i>Geoscientific Model Development</i> , 2022, 15, 173-197.	3.6	4
72	Autonomous System for Lake Ice Monitoring. <i>Sensors</i> , 2021, 21, 8505.	3.8	4

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73	Numerical Modeling of Vertical Distribution of Living and Dead Copepods <i>Arctodiaptomus salinus</i> in Salt Lake Shira. <i>Contemporary Problems of Ecology</i> , 2018, 11, 543-550.	0.7	2
74	Lake Ice Formation and Melt. <i>Under-Ice Dynamics.</i> , 2022, , 534-545.		1
75	Sources and scales of near-bottom turbulent mixing in large meromictic Lake Iseo. <i>Journal of Great Lakes Research</i> , 2020, 46, 1581-1594.	1.9	1