Sebastian Sobek

List of Publications by Year
in descending order

68	8,935	109264 35	95218 68
papers	citations	h-index	g-index

68	68	68	7418
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cross-continental importance of CH4 emissions from dry inland-waters. Science of the Total Environment, 2022, 814, 151925.	3.9	13
2	Global increase in methane production under future warming of lake bottom waters. Global Change Biology, 2022, 28, 5427-5440.	4.2	27
3	Hotspots of Diffusive CO₂ and CH₄ Emission From Tropical Reservoirs Shift Through Time. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006014.	1.3	14
4	Spatially Resolved Measurements in Tropical Reservoirs Reveal Elevated Methane Ebullition at River Inflows and at High Productivity. Global Biogeochemical Cycles, 2021, 35, e2020GB006717.	1.9	15
5	An empirical model to predict methane production in inland water sediment from particular organic matter supply and reactivity. Limnology and Oceanography, 2021, 66, 3643-3655.	1.6	18
6	Where does the river end? Drivers of spatiotemporal variability in CO 2 concentration and flux in the inflow area of a large boreal lake. Limnology and Oceanography, 2020, 65, 1161-1174.	1.6	8
7	The CO₂â€equivalent balance of freshwater ecosystems is nonâ€linearly related to productivity. Global Change Biology, 2020, 26, 5705-5715.	4.2	29
8	Comparing methane ebullition variability across space and time in a Brazilian reservoir. Limnology and Oceanography, 2020, 65, 1623-1634.	1.6	32
9	High organic carbon burial but high potential for methane ebullition in the sediments of an Amazonian hydroelectric reservoir. Biogeosciences, 2020, 17, 1495-1505.	1.3	15
10	Predicting lake dissolved organic carbon at a global scale. Scientific Reports, 2020, 10, 8471.	1.6	56
11	Implications of river intrusion and convective mixing on the spatial and temporal variability of under-ice CO2. Inland Waters, 2019, 9, 162-176.	1.1	12
12	Methane formation in tropical reservoirs predicted from sediment age and nitrogen. Scientific Reports, 2019, 9, 11017.	1.6	20
13	Carbon dioxide emission from drawdown areas of a Brazilian reservoir is linked to surrounding land cover. Aquatic Sciences, 2019, 81, 1.	0.6	25
14	The transformation of macrophyteâ€derived organic matter to methane relates to plant water and nutrient contents. Limnology and Oceanography, 2019, 64, 1737-1749.	1.6	31
15	Reduced Mineralization of Terrestrial OC in Anoxic Sediment Suggests Enhanced Burial Efficiency in Reservoirs Compared to Other Depositional Environments. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 678-688.	1.3	15
16	Carbon dioxide and methane emissions of Swedish lowâ€order streamsâ€”a national estimate and lessons learnt from more than a decade of observations. Limnology and Oceanography Letters, 2018, 3, 156-167.	1.6	49
17	Large but variable methane production in anoxic freshwater sediment upon addition of allochthonous and autochthonous organic matter. Limnology and Oceanography, 2018, 63, 1488-1501.	1.6	121
18	Spatially Resolved Measurements of CO₂ and CH₄ Concentration and Gas-Exchange Velocity Highly Influence Carbon-Emission Estimates of Reservoirs. Environmental Science & Technology, 2018, 52, 607-615.	4.6	65

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19	<scp>CO</scp>₂ evasion from boreal lakes: Revised estimate, drivers of spatial variability, and future projections. Global Change Biology, 2018, 24, 711-728.	4.2	56
20	Greenhouse Gas Emissions from Freshwater Reservoirs: What Does the Atmosphere See?. Ecosystems, 2018, 21, 1058-1071.	1.6	145
21	High spatial variability of gas transfer velocity in streams revealed by turbulence measurements. Inland Waters, 2018, 8, 461-473.	1.1	19
22	High variability in iron-bound organic carbon among five boreal lake sediments. Biogeochemistry, 2018, 139, 19-29.	1.7	17
23	Extreme drought boosts CO₂ and CH₄ emissions from reservoir drawdown areas. Inland Waters, 2018, 8, 329-340.	1.1	44
24	High terrestrial carbon load via groundwater to a boreal lake dominated by surface water inflow. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 15-29.	1.3	39
25	Organic carbon burial in global lakes and reservoirs. Nature Communications, 2017, 8, 1694.	5.8	307
26	Temperature Dependence of Apparent Respiratory Quotients and Oxygen Penetration Depth in Contrasting Lake Sediments. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3076-3087.	1.3	19
27	Widespread release of dissolved organic carbon from anoxic boreal lake sediments. Inland Waters, 2017, 7, 151-163.	1.1	16
28	Organic carbon burial efficiency in a subtropical hydroelectric reservoir. Biogeosciences, 2016, 13, 3331-3342.	1.3	33
29	Enhanced carbon loss from anoxic lake sediment through diffusion of dissolved organic carbon. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1959-1977.	1.3	31
30	Low sedimentâ€water gas exchange in a small boreal lake. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2493-2505.	1.3	4
31	The role of sediments in the carbon budget of a small boreal lake. Limnology and Oceanography, 2016, 61, 1814-1825.	1.6	46
32	Regional Variability and Drivers of Below Ice CO2 in Boreal and Subarctic Lakes. Ecosystems, 2016, 19, 461-476.	1.6	28
33	The effect of lake browning and respiration mode on the burial and fate of carbon and mercury in the sediment of two boreal lakes. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 233-245.	1.3	35
34	Carbon dioxide evasion from headwater systems strongly contributes to the total export of carbon from a small boreal lake catchment. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 13-28.	1.3	46
35	Temperature sensitivity of organic carbon mineralization in contrasting lake sediments. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1215-1225.	1.3	64
36	Phosphorus transport by the largest Amazon tributary (Madeira River, Brazil) and its sensitivity to precipitation and damming. Inland Waters, 2015, 5, 275-282.	1.1	17

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37	Temporal control on concentration, character, and export of dissolved organic carbon in two hemiboreal headwater streams draining contrasting catchments. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 832-846.	1.3	34
38	Uncoupled organic matter burial and quality in boreal lake sediments over the Holocene. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1751-1763.	1.3	21
39	Carbon Sequestration in a Large Hydroelectric Reservoir: An Integrative Seismic Approach. Ecosystems, 2014, 17, 430-441.	1.6	45
40	Cold carbon storage. Nature, 2014, 511, 415-416.	13.7	1
41	Low organic carbon burial efficiency in arctic lake sediments. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1231-1243.	1.3	55
42	Regionalâ€scale variation of dissolved organic carbon concentrations in Swedish lakes. Limnology and Oceanography, 2014, 59, 1612-1620.	1.6	28
43	Global carbon dioxide emissions from inland waters. Nature, 2013, 503, 355-359.	13.7	1,670
44	Benthic ostracode Î´13C as sensor for early Holocene establishment of modern circulation patterns in Central Europe. Quaternary Science Reviews, 2013, 66, 112-122.	1.4	22
45	Spatial variation of sediment mineralization supports differential CO2 emissions from a tropical hydroelectric reservoir. Frontiers in Microbiology, 2013, 4, 101.	1.5	33
46	Hydroelectric carbon sequestration. Nature Geoscience, 2012, 5, 838-840.	5.4	64
47	Carbon Dioxide in Boreal Surface Waters: A Comparison of Lakes and Streams. Ecosystems, 2012, 15, 1295-1307.	1.6	61
48	Extreme organic carbon burial fuels intense methane bubbling in a temperate reservoir. Geophysical Research Letters, 2012, 39, .	1.5	130
49	Predicting the depth and volume of lakes from map-derived parameters. Inland Waters, 2011, 1, 177-184.	1.1	57
50	The burial efficiency of organic carbon in the sediments of Lake Kinneret. Aquatic Sciences, 2011, 73, 355-364.	0.6	36
51	Temperature-controlled organic carbon mineralization in lake sediments. Nature, 2010, 466, 478-481.	13.7	460
52	Extreme Methane Emissions from a Swiss Hydropower Reservoir: Contribution from Bubbling Sediments. Environmental Science & Technology, 2010, 44, 2419-2425.	4.6	235
53	Large CO₂ disequilibria in tropical lakes. Global Biogeochemical Cycles, 2009, 23, .	1.9	94
54	Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography, 2009, 54, 2298-2314.	1.6	1,977

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55	Organic carbon burial efficiency in lake sediments controlled by oxygen exposure time and sediment source. Limnology and Oceanography, 2009, 54, 2243-2254.	1.6	323
56	Linking allochthonous dissolved organic matter and boreal lake sediment carbon sequestration: The role of lightâ€mediated flocculation. Limnology and Oceanography, 2008, 53, 2416-2426.	1.6	114
57	Patterns and regulation of dissolved organic carbon: An analysis of 7,500 widely distributed lakes. Limnology and Oceanography, 2007, 52, 1208-1219.	1.6	391
58	Changes in bacterial community composition along a solar radiation gradient in humic waters. Aquatic Sciences, 2006, 68, 415-424.	0.6	19
59	Organic carbon budget for the Gulf of Bothnia. Journal of Marine Systems, 2006, 63, 155-161.	0.9	63
60	A Carbon Budget of a Small Humic Lake: An Example of the Importance of Lakes for Organic Matter Cycling in Boreal Catchments. Ambio, 2006, 35, 469-475.	2.8	80
61	Mapping lake CDOM by satellite remote sensing. Remote Sensing of Environment, 2005, 94, 535-540.	4.6	247
62	Contribution of Sediment Respiration to Summer CO2 Emission from Low Productive Boreal and Subarctic Lakes. Microbial Ecology, 2005, 50, 529-535.	1.4	60
63	Using Satellite Remote Sensing to Estimate the Colored Dissolved Organic Matter Absorption Coefficient in Lakes. Ecosystems, 2005, 8, 709-720.	1.6	106
64	Temperature independence of carbon dioxide supersaturation in global lakes. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	1.9	318
65	Emission of CO2 from hydroelectric reservoirs in northern Sweden. Archiv FÃ¼r Hydrobiologie, 2004, 159, 25-42.	1.1	15
66	Role of lakes for organic carbon cycling in the boreal zone. Global Change Biology, 2004, 10, 141-147.	4.2	281
67	Seasonal variation of CO2saturation in the Gulf of Bothnia: Indications of marine net heterotrophy. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	55
68	The catchment and climate regulation of pCO2 in boreal lakes. Global Change Biology, 2003, 9, 630-641.	4.2	309