Craig E Williamson

List of Publications by Year
in descending order

86 papers	8,449 citations	66336 42 h-index	56717 83 g-index
90 all docs	90 docs citations	90 times ranked	8152 citing authors

#	Article	IF	Citations
1	Earlier ice breakup induces changepoint responses in duration and variability of spring mixing and summer stratification in dimictic lakes. Limnology and Oceanography, 2022, 67, .	3.1	11
2	Reintegrating Biology Through the Nexus of Energy, Information, and Matter. Integrative and Comparative Biology, 2022, 61, 2082-2094.	2.0	3
3	Environmental effects of stratospheric ozone depletion, UV radiation, and interactions with climate change: UNEP Environmental Effects Assessment Panel, Update 2021. Photochemical and Photobiological Sciences, 2022, 21, 275-301.	2.9	40
4	Optical Properties of Water. , 2021, , .		1
5	Environmental effects of stratospheric ozone depletion, UV radiation, and interactions with climate change: UNEP Environmental Effects Assessment Panel, Update 2020. Photochemical and Photobiological Sciences, 2021, 20, 1-67.	2.9	93
6	Smoke from regional wildfires alters lake ecology. Scientific Reports, 2021, 11, 10922.	3.3	15
7	Widespread deoxygenation of temperate lakes. Nature, 2021, 594, 66-70.	27.8	267
8	The success of the Montreal Protocol in mitigating interactive effects of stratospheric ozone depletion and climate change on the environment. Global Change Biology, 2021, 27, 5681-5683.	9.5	9
9	Consequences of changing water clarity on the fish and fisheries of the Laurentian Great Lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 1524-1542.	1.4	18
10	Global data set of long-term summertime vertical temperature profiles in 153 lakes. Scientific Data, 2021, 8, 200.	5.3	7
11	Ultraviolet Radiation. , 2021, , .		1
12	Meteorological drivers of interannual variation in transparency of mountain lakes. Arctic, Antarctic, and Alpine Research, 2020, 52, 424-434.	1.1	2
13	Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. Scientific Reports, 2020, 10, 20514.	3.3	56
14	Key rules of life and the fading cryosphere: Impacts in alpine lakes and streams. Global Change Biology, 2020, 26, 6644-6656.	9.5	46
15	Shedding light on environmentally transmitted parasites: lighter conditions within lakes restrict epidemic size. Ecology, 2020, 101, e03168.	3.2	17
16	Insects in highâ€elevation streams: Life in extreme environments imperiled by climate change. Global Change Biology, 2020, 26, 6667-6684.	9.5	57
17	Environmental effects of stratospheric ozone depletion, UV radiation and interactions with climate change: UNEP Environmental Effects Assessment Panel, update 2019. Photochemical and Photobiological Sciences, 2020, 19, 542-584.	2.9	59
18	The effects of dissolved organic matter from a native and an invasive plant species on juvenile Daphnia survival and growth. Journal of Plankton Research, 2020, 42, 453-456.	1.8	3

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19	Habitat-Mediated Responses of Zooplankton to Decreasing Light in Two Temperate Lakes Undergoing Long-Term Browning. Frontiers in Environmental Science, 2020, 8, .	3.3	15
20	Light exposure decreases infectivity of the Daphnia parasite Pasteuria ramosa. Journal of Plankton Research, 2020, 42, 41-44.	1.8	9
21	The relative importance of photodegradation and biodegradation of terrestrially derived dissolved organic carbon across four lakes of differing trophic status. Biogeosciences, 2020, 17, 6327-6340.	3.3	11
22	Dissolved organic matter protects mosquito larvae from damaging solar UV radiation. PLoS ONE, 2020, 15, e0240261.	2.5	10
23	Ozone depletion, ultraviolet radiation, climate change and prospects for a sustainable future. Nature Sustainability, 2019, 2, 569-579.	23.7	156
24	The interactive effects of stratospheric ozone depletion, UV radiation, and climate change on aquatic ecosystems. Photochemical and Photobiological Sciences, 2019, 18, 717-746.	2.9	108
25	Environmental effects of ozone depletion, UV radiation and interactions with climate change: UNEP Environmental Effects Assessment Panel, update 2017. Photochemical and Photobiological Sciences, 2018, 17, 127-179.	2.9	177
26	Browningâ€Related Decreases in Water Transparency Lead to Longâ€Term Increases in Surface Water Temperature and Thermal Stratification in Two Small Lakes. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1651-1665.	3.0	63
27	Landscape-scale regulators of water transparency in mountain lakes: implications of projected glacial loss. Canadian Journal of Fisheries and Aquatic Sciences, 2018, 75, 1169-1176.	1.4	10
28	Browning-related oxygen depletion in an oligotrophic lake. Inland Waters, 2018, 8, 255-263.	2.2	40
29	Climate change-induced increases in precipitation are reducing the potential for solar ultraviolet radiation to inactivate pathogens in surface waters. Scientific Reports, 2017, 7, 13033.	3.3	62
30	Nutrients associated with terrestrial dissolved organic matter drive changes in zooplankton:phytoplankton biomass ratios in an alpine lake. Freshwater Biology, 2017, 62, 40-51.	2.4	47
31	Transparency, Geomorphology and Mixing Regime Explain Variability in Trends in Lake Temperature and Stratification across Northeastern North America (1975â€“2014). Water (Switzerland), 2017, 9, 442.	2.7	77
32	The potential of high-frequency profiling to assess vertical and seasonal patterns of phytoplankton dynamics in lakes: an extension of the Plankton Ecology Group (PEG) model. Inland Waters, 2016, 6, 565-580.	2.2	34
33	Effect of Clonal Selection on Daphnia Tolerance to Dark Experimental Conditions. PLoS ONE, 2016, 11, e0159628.	2.5	4
34	Sentinel responses to droughts, wildfires, and floods: effects of <scp>UV</scp> radiation on lakes and their ecosystem services. Frontiers in Ecology and the Environment, 2016, 14, 102-109.	4.0	67
35	Vertical redistribution of zooplankton in an oligotrophic lake associated with reduction in ultraviolet radiation by wildfire smoke. Geophysical Research Letters, 2016, 43, 3746-3753.	4.0	26
36	Ecological consequences of long-term browning in lakes. Scientific Reports, 2016, 5, 18666.	3.3	168

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37	Measuring the distribution, abundance, and biovolume of zooplankton in an oligotrophic freshwater lake with a 710 kHz scientific echosounder. Limnology and Oceanography: Methods, 2016, 14, 231-244.	2.0	11
38	Behavioral responses of freshwater calanoid copepods to the presence of ultraviolet radiation: avoidance and attraction. Journal of Plankton Research, 2016, 38, 16-26.	1.8	28
39	Rapid and highly variable warming of lake surface waters around the globe. Geophysical Research Letters, 2015, 42, 10,773.	4.0	767
40	A global database of lake surface temperatures collected by in situ and satellite methods from 1985â€“2009. Scientific Data, 2015, 2, 150008.	5.3	153
41	Shifts in microbial food web structure and productivity after additions of naturally occurring dissolved organic matter: Results from largeâ€scale lacustrine mesocosms. Limnology and Oceanography, 2015, 60, 2130-2144.	3.1	22
42	Direct and indirect effects of additions of chromophoric dissolved organic matter on zooplankton during largeâ€scale mesocosm experiments in an oligotrophic lake. Freshwater Biology, 2015, 60, 2362-2378.	2.4	18
43	Diel vertical migration of copepods in mountain lakes: The changing role of ultraviolet radiation across a transparency gradient. Limnology and Oceanography, 2015, 60, 252-262.	3.1	40
44	The role of ultraviolet radiation in the diel vertical migration of zooplankton: an experimental test of the transparency-regulator hypothesis. Journal of Plankton Research, 2015, 37, 886-896.	1.8	19
45	Light attenuation characteristics of glaciallyâ€fed lakes. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1446-1457.	3.0	74
46	The invasion window for warmwater fish in clearwater lakes: the role of ultraviolet radiation and temperature. Diversity and Distributions, 2014, 20, 181-192.	4.1	8
47	Solar ultraviolet radiation in a changing climate. Nature Climate Change, 2014, 4, 434-441.	18.8	277
48	Lakes as sensors in the landscape: Optical metrics as scalable sentinel responses to climate change. Limnology and Oceanography, 2014, 59, 840-850.	3.1	81
49	Effects of UV radiation on aquatic ecosystems and interactions with other environmental factors. Photochemical and Photobiological Sciences, 2014, 14, 108-126.	2.9	301
50	The impacts of climate change on ecosystem structure and function. Frontiers in Ecology and the Environment, 2013, 11, 474-482.	4.0	433
51	Response of phytoplankton in an alpine lake to inputs of dissolved organic matter through nutrient enrichment and trophic forcing. Limnology and Oceanography, 2013, 58, 867-880.	3.1	64
52	The role of ultraviolet radiation and fish in regulating the vertical distribution of Daphnia. Limnology and Oceanography, 2012, 57, 1867-1876.	3.1	36
53	Development and application of a UV attainment threshold for the prevention of warmwater aquatic invasive species. Biological Invasions, 2012, 14, 2331-2342.	2.4	4
54	Solar radiation decreases parasitism in Daphnia. Ecology Letters, 2012, 15, 47-54.	6.4	62

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55	Lakes in a New Light: Indirect Effects of Ultraviolet Radiation. Freshwater Reviews: A Journal of the Freshwater Biological Association, 2011, 4, 115-134.	1.0	9
56	Implications of climate change for Daphnia in alpine lakes: predictions from long-term dynamics, spatial distribution, and a short-term experiment. Hydrobiologia, 2011, 676, 263-277.	2.0	25
57	Toward a more comprehensive theory of zooplankton diel vertical migration: Integrating ultraviolet radiation and water transparency into the biotic paradigm. Limnology and Oceanography, 2011, 56, 1603-1623.	3.1	170
58	Ultraviolet radiation affects invasibility of lake ecosystems by warmâ€water fish. Ecology, 2010, 91, 882-890.	3.2	26
59	Lake metabolism and the diel oxygen technique: State of the science. Limnology and Oceanography: Methods, 2010, 8, 628-644.	2.0	214
60	When UV Meets Fresh Water. Science, 2010, 329, 637-639.	12.6	59
61	Sentinels of Change. Science, 2009, 323, 887-888.	12.6	228
62	Ultraviolet Insights: Attempting to Resolve Enigmatic Patterns in Pelagic Freshwaters â€“ The Historical Context and a View to the Future. International Review of Hydrobiology, 2009, 94, 129-142.	0.9	13
63	Effects of nutrients and dissolved organic matter on the response of phytoplankton to ultraviolet radiation: experimental comparison in spring versus summer. Hydrobiologia, 2009, 619, 155-166.	2.0	10
64	Modeling dissolved organic carbon in subalpine and alpine lakes with GIS and remote sensing. Landscape Ecology, 2009, 24, 807-816.	4.2	31
65	Differences in UV transparency and thermal structure between alpine and subalpine lakes: implications for organisms. Photochemical and Photobiological Sciences, 2009, 8, 1244-1256.	2.9	103
66	Patterns of spatial and temporal variability of UV transparency in Lake Tahoe, Californiaâ€Nevada. Journal of Geophysical Research, 2009, 114, .	3.3	37
67	UVâ€enhanced fish predation and the differential migration of zooplankton to UV radiation and fish. Limnology and Oceanography, 2009, 54, 1152-1161.	3.1	35
68	Lakes and reservoirs as sentinels, integrators, and regulators of climate change. Limnology and Oceanography, 2009, 54, 2273-2282.	3.1	589
69	What Do Lakes and Reservoirs Tell Us About Climate Change?: Chapman Conference on Lakes as Sentinels, Integrators, and Regulators of Climate Change; Incline Village, Nevada, 8-10 September 2008. Eos, 2008, 89, 546-546.	0.1	3
70	Lakes and streams as sentinels of environmental change in terrestrial and atmospheric processes. Frontiers in Ecology and the Environment, 2008, 6, 247-254.	4.0	348
71	Using elemental ratios of calcium and strontium to track calcium availability in the freshwater zooplankton Daphnia pulicaria. Journal of Geophysical Research, 2008, 113, .	3.3	3
72	Artificial UV-B and Solar Radiation Reduce in Vitro Infectivity of the Human Pathogen Cryptosporidium parvum. Environmental Science & Technology, 2007, 41, 7101-7106.	10.0	43

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73	Photoprotective compounds in weakly and strongly pigmented copepods and co-occurring cladocerans. Freshwater Biology, 2007, 52, 2121-2133.	2.4	57
74	How do temperature, dissolved organic matter and nutrients influence the response of Leptodiaptomus ashlandi to UV radiation in a subalpine lake?. Freshwater Biology, 2006, 51, 1827-1837.	2.4	24
75	Zooplankton behavioral responses to solar UV radiation vary within and among lakes. Journal of Plankton Research, 2005, 27, 461-471.	1.8	65
76	Molecular response to climate change: temperature dependence of UV-induced DNA damage and repair in the freshwater crustaceanDaphnia pulicaria. Global Change Biology, 2004, 10, 408-416.	9.5	129
77	Environmental Constraints on Spawning Depth of Yellow Perch: The Roles of Low Temperature and High Solar Ultraviolet Radiation. Transactions of the American Fisheries Society, 2004, 133, 718-726.	1.4	55
78	Temperatureâ€dependent ultraviolet responses in zooplankton: Implications of climate change. Limnology and Oceanography, 2002, 47, 1844-1848.	3.1	87
79	ULTRAVIOLET RADIATION AND ZOOPLANKTON COMMUNITY STRUCTURE FOLLOWING DEGLACIATION IN GLACIER BAY, ALASKA. Ecology, 2001, 82, 1748-1760.	3.2	94
80	BENEFICIAL AND DETRIMENTAL EFFECTS OF UV ON AQUATIC ORGANISMS: IMPLICATIONS OF SPECTRAL VARIATION. , 2001, 11, 1843-1857.		141
81	The implications of solar UV radiation exposure for fish and fisheries. Fish and Fisheries, 2001, 2, 250-260.	5.3	94
82	Dissolved organic carbon and nutrients as regulators of lake ecosystems: Resurrection of a more integrated paradigm. Limnology and Oceanography, 1999, 44, 795-803.	3.1	342
83	Does UV play a role in changes in predation and zooplankton community structure in acidified lakes?. Limnology and Oceanography, 1999, 44, 774-783.	3.1	85
84	Ultraviolet radiation in North American lakes: Attenuation estimates from DOC measurements and implications for plankton communities. Limnology and Oceanography, 1996, 41, 1024-1034.	3.1	280
85	The attenuation of solar UV radiation in lakes and the role of dissolved organic carbon. Limnology and Oceanography, 1995, 40, 1381-1391.	3.1	692
86	The impact of short-term exposure to UV-B radiation on zooplankton communities in north temperate lakes. Journal of Plankton Research, 1994, 16, 205-218.	1.8	168