Christine Michel

List of Publications by Year
in descending order

42	2,961	218677	265206
papers	citations	26 h-index	42 g-index

43	43	43	3651
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Arctic sea ice in transformation: A review of recent observed changes and impacts on biology and human activity. Reviews of Geophysics, 2014, 52, 185-217.	23.0	424
2	A novel chemical fossil of palaeo sea ice: IP25. Organic Geochemistry, 2007, 38, 16-27.	1.8	321
3	Global and regional drivers of nutrient supply, primary production and CO2 drawdown in the changing Arctic Ocean. Progress in Oceanography, 2015, 139, 171-196.	3.2	226
4	Role of sea ice in global biogeochemical cycles: emerging views and challenges. Quaternary Science Reviews, 2013, 79, 207-230.	3.0	202
5	Bloom dynamics in early opening waters of the Arctic Ocean. Limnology and Oceanography, 2006, 51, 900-912.	3.1	181
6	Biogenic carbon flows through the planktonic food web of the Amundsen Gulf (Arctic Ocean): A synthesis of field measurements and inverse modeling analyses. Progress in Oceanography, 2011, 91, 410-436.	3.2	138
7	Seasonal variation in benthic community oxygen demand: A response to an ice algal bloom in the Beaufort Sea, Canadian Arctic?. Journal of Marine Systems, 2007, 67, 1-12.	2.1	118
8	Modeling ice algal growth and decline in a seasonally ice-covered region of the Arctic (Resolute) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	3.3	113
9	Protist assemblages in winter sea ice: setting the stage for the spring ice algal bloom. Polar Biology, 2011, 34, 1803-1817.	1.2	89
10	Winterâ€“spring dynamics in sea-ice carbon cycling in the coastal Arctic Ocean. Journal of Marine Systems, 2008, 74, 918-932.	2.1	86
11	Methods for biogeochemical studies of sea ice: The state of the art, caveats, and recommendations. Elementa, 2015, 3, .	3.2	77
12	Trophic structure and pathways of biogenic carbon flow in the eastern North Water Polynya. Progress in Oceanography, 2006, 71, 402-425.	3.2	71
13	Hydrocarbon biodegradation by Arctic sea-ice and sub-ice microbial communities during microcosm experiments, Northwest Passage (Nunavut, Canada). FEMS Microbiology Ecology, 2016, 92, fiw130.	2.7	68
14	Springtime coupling between ice algal and phytoplankton assemblages in southeastern Hudson Bay, Canadian Arctic. Polar Biology, 1993, 13, 441.	1.2	67
15	Arctic Ocean outflow shelves in the changing Arctic: A review and perspectives. Progress in Oceanography, 2015, 139, 66-88.	3.2	65
16	Metagenomic survey of the taxonomic and functional microbial communities of seawater and sea ice from the Canadian Arctic. Scientific Reports, 2017, 7, 42242.	3.3	59
17	Broad-scale predictability of carbohydrates and exopolymers in Antarctic and Arctic sea ice. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15734-15739.	7.1	52
18	Role of free-living and particle-attached bacteria in the recycling and export of organic material in the Hudson Bay system. Journal of Marine Systems, 2011, 88, 434-445.	2.1	49

#	Article	IF	Citations
19	Summertime primary production and carbon export in the southeastern Beaufort Sea during the low ice year of 2008. Polar Biology, 2011, 34, 1989-2005.	1.2	48
20	Organic matter from Arctic sea-ice loss alters bacterial community structure and function. Nature Climate Change, 2019, 9, 170-176.	18.8	48
21	Mesoscale distribution and functional diversity of picoeukaryotes in the first-year sea ice of the Canadian Arctic. ISME Journal, 2013, 7, 1461-1471.	9.8	46
22	Sub-ice colonialMelosira arcticain Arctic first-year ice. Diatom Research, 2014, 29, 213-221.	1.2	44
23	Evidence for microbial attenuation of particle flux in the Amundsen Gulf and Beaufort Sea: elevated hydrolytic enzyme activity on sinking aggregates. Polar Biology, 2011, 34, 2007-2023.	1.2	42
24	Comparing Springtime Ice-Algal Chlorophyll a and Physical Properties of Multi-Year and First-Year Sea Ice from the Lincoln Sea. PLoS ONE, 2015, 10, e0122418.	2.5	32
25	Panâ€Arctic sea iceâ€algal chl a biomass and suitable habitat are largely underestimated for multiyear ice. Global Change Biology, 2017, 23, 4581-4597.	9.5	29
26	Contrasting Ice Algae and Snowâ€Dependent Irradiance Relationships Between Firstâ€Year and Multiyear Sea Ice. Geophysical Research Letters, 2019, 46, 10834-10843.	4.0	29
27	Essential gaps and uncertainties in the understanding of the roles and functions of Arctic sea ice. Environmental Research Letters, 2019, 14, 043002.	5.2	24
28	Spatial variability in organic material sinking export in the Hudson Bay system, Canada, during fall. Continental Shelf Research, 2009, 29, 1276-1288.	1.8	23
29	Primary production and sinking export during fall in the Hudson Bay system, Canada. Continental Shelf Research, 2013, 52, 62-72.	1.8	23
30	Large, Omega-3 Rich, Pelagic Diatoms under Arctic Sea Ice: Sources and Implications for Food Webs. PLoS ONE, 2014, 9, e114070.	2.5	23
31	Influence of the Mackenzie River plume on the sinking export of particulate material on the shelf. Journal of Marine Systems, 2008, 74, 810-824.	2.1	17
32	Patterns and drivers of carbohydrate budgets in ice algal assemblages from first year <scp>A</scp>rctic sea ice. Limnology and Oceanography, 2016, 61, 919-937.	3.1	17
33	Size-fractionated phytoplankton production and biomass during the decline of the northwest Atlantic spring bloom. Journal of Plankton Research, 2009, 31, 429-446.	1.8	16
34	Temporal and spatial variability in sea-ice carbon:nitrogen ratios on Canadian Arctic shelves. Elementa, 2015, 3, .	3.2	16
35	Seasonal variability of light absorption properties and water optical constituents in Hudson Bay, Canada. Journal of Geophysical Research: Oceans, 2013, 118, 3087-3102.	2.6	15
36	Effects of subgridâ€scale snow thickness variability on radiative transfer in sea ice. Journal of Geophysical Research: Oceans, 2015, 120, 5597-5614.	2.6	15

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37	Biological Impact of Ocean Acidification in the Canadian Arctic: Widespread Severe Pteropod Shell Dissolution in Amundsen Gulf. Frontiers in Marine Science, 2021, 8, .	2.5	14
38	Marine mammal biodiversity and rare narwhal (Monodon monoceros) observations near northern Ellesmere Island, Canada. Ecosphere, 2021, 12, e03534.	2.2	4
39	Contribution of Snow to Arctic Firstâ€Year and Multiâ€Year Sea Ice Mass Balance Within the Last Ice Area. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016971.	2.6	3
40	Novel observations of Atlantic walruses (Odobenus rosmarus rosmarus) in Archer Fjord, northern Ellesmere Island, Nunavut, Canada. Polar Biology, 2019, 42, 1193-1198.	1.2	2
41	Narwhal (Monodon monoceros) detection by infrared flukeprints from aerial survey imagery. Ecosphere, 2021, 12, e03698.	2.2	2
42	Fatty acids and stable isotope signatures of first-year and multiyear sea ice in the Canadian High Arctic. Elementa, 2020, 8, .	3.2	1