Delphine Lannuzel

List of Publications by Year
in descending order

64	3,942	109321	123424
papers	citations	35 h-index	61 g-index

68	68	68	3985
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrothermal contribution to the oceanic dissolved iron inventory. Nature Geoscience, 2010, 3, 252-256.	12.9	353
2	Mercury in the Southern Ocean. Geochimica Et Cosmochimica Acta, 2011, 75, 4037-4052.	3.9	209
3	Role of sea ice in global biogeochemical cycles: emerging views and challenges. Quaternary Science Reviews, 2013, 79, 207-230.	3.0	202
4	Microplastic contamination in east Antarctic sea ice. Marine Pollution Bulletin, 2020, 154, 111130.	5.0	171
5	Biogeochemical iron budgets of the Southern Ocean south of Australia: Decoupling of iron and nutrient cycles in the subantarctic zone by the summertime supply. Global Biogeochemical Cycles, 2009, 23, .	4.9	164
6	Distribution and biogeochemical behaviour of iron in the East Antarctic sea ice. Marine Chemistry, 2007, 106, 18-32.	2.3	160
7	Southern Ocean iron fertilization by baleen whales and Antarctic krill. Fish and Fisheries, 2010, 11, 203-209.	5.3	146
8	Iron study during a time series in the western Weddell pack ice. Marine Chemistry, 2008, 108, 85-95.	2.3	131
9	Natural iron fertilization of the Atlantic sector of the Southern Ocean by continental shelf sources of the Antarctic Peninsula. Journal of Geophysical Research, 2012, 117, .	3.3	99
10	The future of Arctic sea-ice biogeochemistry and ice-associated ecosystems. Nature Climate Change, 2020, 10, 983-992.	18.8	96
11	Chlorophyll a in Antarctic sea ice from historical ice core data. Geophysical Research Letters, 2012, 39, .	4.0	95
12	Distribution of dissolved iron in Antarctic sea ice: Spatial, seasonal, and interâ€annual variability. Journal of Geophysical Research, 2010, 115, .	3.3	94
13	Biogeochemical observations during the winterâ€“spring transition in East Antarctic sea ice: Evidence of iron and exopolysaccharide controls. Marine Chemistry, 2009, 115, 163-175.	2.3	84
14	Precise measurement of Fe isotopes in marine samples by multi-collector inductively coupled plasma mass spectrometry (MC-ICP-MS). Analytica Chimica Acta, 2007, 589, 105-119.	5.4	83
15	Methods for biogeochemical studies of sea ice: The state of the art, caveats, and recommendations. Elementa, 2015, 3, .	3.2	77
16	Temporal evolution of decaying summer first-year sea ice in the Western Weddell Sea, Antarctica. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 975-987.	1.4	75
17	Southern Ocean CO₂ sink: The contribution of the sea ice. Journal of Geophysical Research: Oceans, 2014, 119, 6340-6355.	2.6	72
18	The characteristics of dissolved organic matter (DOM) and chromophoric dissolved organic matter (CDOM) in Antarctic sea ice. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1075-1091.	1.4	71

#	Article	IF	Citations
19	Modern sampling and analytical methods for the determination of trace elements in marine particulate material using magnetic sector inductively coupled plasmaâ€“mass spectrometry. Analytica Chimica Acta, 2010, 676, 15-27.	5.4	70
20	Distribution of dissolved and particulate metals in Antarctic sea ice. Marine Chemistry, 2011, 124, 134-146.	2.3	68
21	Critical evaluation of a seaFAST system for the analysis of trace metals in marine samples. Talanta, 2019, 197, 653-668.	5.5	68
22	High-accuracy determination of iron in seawater by isotope dilution multiple collector inductively coupled plasma mass spectrometry (ID-MC-ICP-MS) using nitrilotriacetic acid chelating resin for pre-concentration and matrix separation. Analytica Chimica Acta, 2008, 623, 126-139.	5.4	65
23	Distributions of dissolved and particulate iron in the sub-Antarctic and Polar Frontal Southern Ocean (Australian sector). Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 2094-2112.	1.4	65
24	Iron in sea ice: Review and new insights. Elementa, 2016, 4, .	3.2	65
25	Development of a sampling and flow injection analysis technique for iron determination in the sea ice environment. Analytica Chimica Acta, 2006, 556, 476-483.	5.4	62
26	The Biogeochemical Role of Baleen Whales and Krill in Southern Ocean Nutrient Cycling. PLoS ONE, 2014, 9, e114067.	2.5	57
27	Large flux of iron from the Amery Ice Shelf marine ice to Prydz Bay, East Antarctica. Journal of Geophysical Research: Oceans, 2016, 121, 6009-6020.	2.6	47
28	High temporal resolution observations of spring fast ice melt and seawater iron enrichment in East Antarctica. Journal of Geophysical Research, 2011, 116, .	3.3	46
29	Biogeochemistry and microbial community composition in sea ice and underlying seawater off East Antarctica during early spring. Polar Biology, 2009, 32, 879-895.	1.2	44
30	Iron fractionation in pack and fast ice in East Antarctica: Temporal decoupling between the release of dissolved and particulate iron during spring melt. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1222-1236.	1.4	43
31	Size fractionation of iron, manganese and aluminium in Antarctic fast ice reveals a lithogenic origin and low iron solubility. Marine Chemistry, 2014, 161, 47-56.	2.3	42
32	Organic ligands control the concentrations of dissolved iron in Antarctic sea ice. Marine Chemistry, 2015, 174, 120-130.	2.3	40
33	Macro-nutrient concentrations in Antarctic pack ice: Overall patterns and overlooked processes. Elementa, 2017, 5, .	3.2	39
34	Advances in the offline trace metal extraction of Mn, Co, Ni, Cu, Cd, and Pb from open ocean seawater samples with determination by sector field ICP-MS analysis. Analytical Methods, 2014, 6, 2837-2847.	2.7	38
35	A preliminary model of iron fertilisation by baleen whales and Antarctic krill in the Southern Ocean: Sensitivity of primary productivity estimates to parameter uncertainty. Ecological Modelling, 2016, 320, 203-212.	2.5	35
36	Dissolved and particulate metals (Fe, Zn, Cu, Cd, Pb) in two habitats from an active hydrothermal field on the EPR at 13Â°N. Science of the Total Environment, 2008, 392, 119-129.	8.0	34

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37	Chlorophyllâ€a in Antarctic Landfast Sea Ice: A First Synthesis of Historical Ice Core Data. Journal of Geophysical Research: Oceans, 2018, 123, 8444-8459.	2.6	34
38	Iron biogeochemistry in Antarctic pack ice during SIPEX-2. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 131, 111-122.	1.4	33
39	Distribution and characterization of dissolved and particulate organic matter in Antarctic pack ice. Polar Biology, 2009, 32, 733-750.	1.2	32
40	Sea Ice Meltwater and Circumpolar Deep Water Drive Contrasting Productivity in Three Antarctic Polynyas. Journal of Geophysical Research: Oceans, 2019, 124, 2943-2968.	2.6	31
41	Effect of melting Antarctic sea ice on the fate of microbial communities studied in microcosms. Polar Biology, 2013, 36, 1483-1497.	1.2	29
42	Preliminary investigation into the stimulation of phytoplankton photophysiology and growth by whale faeces. Journal of Experimental Marine Biology and Ecology, 2013, 446, 1-9.	1.5	28
43	Climate change impacts on sea-ice ecosystems and associated ecosystem services. Elementa, 2021, 9, .	3.2	26
44	High variability in dissolved iron concentrations in the vicinity of the Kerguelen Islands (Southern) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.3	24
45	Trace metals Cd, Co, Cu, Ni, and Zn in waters of the subantarctic and Polar Frontal Zones south of Tasmania during the â€˜SAZ-Senseâ€™ project. Marine Chemistry, 2013, 148, 63-76.	2.3	21
46	Incorporation of iron and organic matter into young Antarctic sea ice during its initial growth stages. Elementa, 2016, 4, .	3.2	21
47	Sea-ice algal primary production and nitrogen uptake rates off East Antarctica. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 131, 140-149.	1.4	18
48	Influence of organic complexation on dissolved iron distribution in East Antarctic pack ice. Marine Chemistry, 2018, 203, 28-37.	2.3	17
49	Enhanced Iron Flux to Antarctic Sea Ice via Dust Deposition From Iceâ€Free Coastal Areas. Journal of Geophysical Research: Oceans, 2019, 124, 8538-8557.	2.6	17
50	What sea-ice biogeochemical modellers need from observers. Elementa, 0, 4, 000084.	3.2	17
51	The Neodymium Isotope Fingerprint of AdÃ©lie Coast Bottom Water. Geophysical Research Letters, 2018, 45, 11,247.	4.0	16
52	Nutrient Distribution in East Antarctic Summer Sea Ice: A Potential Iron Contribution From Glacial Basal Melt. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016130.	2.6	16
53	Understanding the variability in the iron concentration of Antarctic krill. Limnology and Oceanography, 2016, 61, 1651-1660.	3.1	15
54	Physical speciation and solubility of iron from baleen whale faecal material. Marine Chemistry, 2017, 194, 79-88.	2.3	15

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55	Dissolved iron and iron(II) distributions beneath the pack ice in the East Antarctic (120Â°E) during the winter/spring transition. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 131, 96-110.	1.4	14
56	The biogeochemical role of a microbial biofilm in sea ice. Elementa, 2021, 9, .	3.2	13
57	Field Observations and Physicalâ€Biogeochemical Modeling Suggest Low Silicon Affinity for Antarctic Fast Ice Diatoms. Journal of Geophysical Research: Oceans, 2019, 124, 7837-7853.	2.6	11
58	Calving Event Led to Changes in Phytoplankton Bloom Phenology in the Mertz Polynya, Antarctica. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016387.	2.6	11
59	Circumpolar Deep Water and Shelf Sediments Support Late Summer Microbial Iron Remineralization. Global Biogeochemical Cycles, 2021, 35, e2020GB006921.	4.9	8
60	Organic Matter Controls of Iron Incorporation in Growing Sea Ice. Frontiers in Earth Science, 2018, 6, .	1.8	7
61	Size fractionation and bioavailability of iron released from melting sea ice in a subpolar marginal sea. Marine Chemistry, 2020, 221, 103774.	2.3	5
62	Effect of salinity and temperature on the determination of dissolved iron-binding organic ligands in the polar marine environment. Marine Chemistry, 2021, , 104051.	2.3	3
63	Concentration and isotopic composition of bromine and chlorine in Antarctic sea ice. Geochimica Et Cosmochimica Acta, 2021, 293, 18-27.	3.9	1
64	Spatial and seasonal distribution of dissolved and particulate bioactive metals in Antarctic sea ice. Elementa, 2021, 9, .	3.2	0