

Bruno Delille

List of Publications by Year in descending order

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Version: 2024-02-01

101
papers

8,104
citations

81434

41
h-index

66518

82
g-index

125
all docs

125
docs citations

125
times ranked

8474
citing authors

#	ARTICLE	IF	CITATIONS
1	Sea ice contribution to the air-sea CO ₂ exchange in the Arctic and Southern Oceans. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 823.	0.8	102
2	The biogeochemical role of a microbial biofilm in sea ice. <i>Elementa</i> , 2021, 9, .	1.1	13
3	Dynamics of the deep chlorophyll maximum in the Black Sea as depicted by BGC-Argo floats. <i>Biogeosciences</i> , 2021, 18, 755-774.	1.3	15
4	Sources and sinks of methane in sea ice. <i>Elementa</i> , 2021, 9, .	1.1	5
5	Landfast sea ice in the Bothnian Bay (Baltic Sea) as a temporary storage compartment for greenhouse gases. <i>Elementa</i> , 2021, 9, .	1.1	2
6	The future of Arctic sea-ice biogeochemistry and ice-associated ecosystems. <i>Nature Climate Change</i> , 2020, 10, 983-992.	8.1	96
7	Sea-ice production and air/ice/ocean/biogeochemistry interactions in the Ross Sea during the PIPERS 2017 autumn field campaign. <i>Annals of Glaciology</i> , 2020, 61, 181-195.	2.8	31
8	Sea Ice CO ₂ Dynamics Across Seasons: Impact of Processes at the Interfaces. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC015807.	1.0	14
9	Physical and biological properties of early winter Antarctic sea ice in the Ross Sea. <i>Annals of Glaciology</i> , 2020, 61, 241-259.	2.8	9
10	Dimethylsulfoniopropionate (DMSP) and dimethylsulfoxide (DMSO) cell quotas variations arising from sea ice shifts of salinity and temperature in the Prymnesiophyceae <i>Phaeocystis antarctica</i> . <i>Environmental Chemistry</i> , 2020, 17, 509.	0.7	3
11	Constraining Southern Ocean Air-Sea-Ice Fluxes Through Enhanced Observations. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	31
12	Polar Ocean Observations: A Critical Gap in the Observing System and Its Effect on Environmental Predictions From Hours to a Season. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	43
13	Evidence of Freezing Pressure in Sea Ice Discrete Brine Inclusions and Its Impact on Aqueous-Gaseous Equilibrium. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 1660-1678.	1.0	8
14	Fostering multidisciplinary research on interactions between chemistry, biology, and physics within the coupled cryosphere-atmosphere system. <i>Elementa</i> , 2019, 7, .	1.1	6
15	The first known virus isolates from Antarctic sea ice have complex infection patterns. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	1.3	20
16	CO ₂ flux over young and snow-covered Arctic pack ice in winter and spring. <i>Biogeosciences</i> , 2018, 15, 3331-3343.	1.3	24
17	Chlorophyll <i>a</i> in Antarctic Landfast Sea Ice: A First Synthesis of Historical Ice Core Data. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 8444-8459.	1.0	34
18	An active bacterial community linked to high chl <i>a</i> concentrations in Antarctic winter-pack ice and evidence for the development of an anaerobic sea-ice bacterial community. <i>ISME Journal</i> , 2017, 11, 2345-2355.	4.4	16

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19	Biogeochemical Impact of Snow Cover and Cyclonic Intrusions on the Winter Weddell Sea Ice Pack. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 9548-9571.	1.0	17
20	Global high-resolution monthly CO_2 climatology for the coastal ocean derived from neural network interpolation. <i>Biogeosciences</i> , 2017, 14, 4545-4561.	1.3	71
21	Macro-nutrient concentrations in Antarctic pack ice: Overall patterns and overlooked processes. <i>Elementa</i> , 2017, 5, .	1.1	39
22	Estimates of ikaite export from sea ice to the underlying seawater in "seawater mesocosm. <i>Cryosphere</i> , 2016, 10, 2173-2189.	1.5	20
23	Imaging air volume fraction in sea ice using non-destructive X-ray tomography. <i>Cryosphere</i> , 2016, 10, 1125-1145.	1.5	33
24	Massive marine methane emissions from near-shore shallow coastal areas. <i>Scientific Reports</i> , 2016, 6, 27908.	1.6	121
25	The impact of dissolved organic carbon and bacterial respiration on pCO_2 in experimental sea ice. <i>Progress in Oceanography</i> , 2016, 141, 153-167.	1.5	1
26	Air-ice carbon pathways inferred from a sea ice tank experiment. <i>Elementa</i> , 2016, 4, .	1.1	11
27	Assessment of the sea-ice carbon pump: Insights from a three-dimensional ocean-sea-ice biogeochemical model (NEMO-LIM-PISCES). <i>Elementa</i> , 2016, 4, .	1.1	20
28	Incorporation of iron and organic matter into young Antarctic sea ice during its initial growth stages. <i>Elementa</i> , 2016, 4, .	1.1	21
29	Influence of short-term synoptic events and snow depth on DMS, DMSP, and DMSO dynamics in Antarctic spring sea ice. <i>Elementa</i> , 2016, 4, .	1.1	10
30	Drivers of inorganic carbon dynamics in first-year sea ice: A model study. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 471-495.	1.0	28
31	Assessing the O_2 budget under sea ice: An experimental and modelling approach. <i>Elementa</i> , 2015, 3, .	1.1	3
32	First <i>in situ</i> determination of gas transport coefficients (K_L , K_G , and K_A) from bulk gas concentration measurements (O_2 , N_2 , Ar) in natural sea ice. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 6655-6668.	1.0	29
33	CO_2 and CH_4 in sea ice from a subarctic fjord under influence of riverine input. <i>Biogeosciences</i> , 2014, 11, 6525-6538.	1.3	17
34	Physical controls on the storage of methane in landfast sea ice. <i>Cryosphere</i> , 2014, 8, 1019-1029.	1.5	20
35	Insights into oxygen transport and net community production in sea ice from oxygen, nitrogen and argon concentrations. <i>Biogeosciences</i> , 2014, 11, 5007-5020.	1.3	15
36	Sea ice CO_2 dynamics and air-sea CO_2 fluxes during the Sea Ice Mass Balance in the Antarctic (SIMBA) experiment "Bellingshausen Sea, Antarctica. <i>Cryosphere</i> , 2014, 8, 2395-2407.	1.5	20

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37	Air-Sea Interactions of Natural Long-Lived Greenhouse Gases (CO ₂ , N ₂ O, CH ₄) in a Changing Climate. Springer Earth System Sciences, 2014, , 113-169.	0.1	29
38	Modelling argon dynamics in first-year sea ice. Ocean Modelling, 2014, 73, 1-18.	1.0	29
39	Physical and bacterial controls on inorganic nutrients and dissolved organic carbon during a sea ice growth and decay experiment. Marine Chemistry, 2014, 166, 59-69.	0.9	21
40	Southern Ocean CO ₂ sink: The contribution of the sea ice. Journal of Geophysical Research: Oceans, 2014, 119, 6340-6355.	1.0	72
41	Biogenic silica recycling in sea ice inferred from Si-isotopes: constraints from Arctic winter first-year sea ice. Biogeochemistry, 2014, 119, 25-33.	1.7	14
42	Physical and biological controls on DMS,P dynamics in ice shelf-influenced fast ice during a winter-spring and a spring-summer transitions. Journal of Geophysical Research: Oceans, 2014, 119, 2882-2905.	1.0	22
43	Transfer Across the Air-Sea Interface. Springer Earth System Sciences, 2014, , 55-112.	0.1	69
44	Effect of melting Antarctic sea ice on the fate of microbial communities studied in microcosms. Polar Biology, 2013, 36, 1483-1497.	0.5	29
45	Tracers of physical and biogeochemical processes, past changes and ongoing anthropogenic impacts: The 43rd International Liege Colloquium on Ocean Dynamics, Liege, Belgium, May 2â€“6, 2011. Journal of Marine Systems, 2013, 126, 1-2.	0.9	0
46	Role of sea ice in global biogeochemical cycles: emerging views and challenges. Quaternary Science Reviews, 2013, 79, 207-230.	1.4	202
47	Particle export during a bloom of <i>Emiliania huxleyi</i> in the North-West European continental margin. Journal of Marine Systems, 2013, 109-110, S182-S190.	0.9	12
48	First estimates of the contribution of CaCO ₃ precipitation to the release of CO ₂ to the atmosphere during young sea ice growth. Journal of Geophysical Research: Oceans, 2013, 118, 244-255.	1.0	69
49	Physical and biogeochemical properties in landfast sea ice (Barrow, Alaska): Insights on brine and gas dynamics across seasons. Journal of Geophysical Research: Oceans, 2013, 118, 3172-3189.	1.0	75
50	Water column distribution and carbon isotopic signal of cholesterol, brassicasterol and particulate organic carbon in the Atlantic sector of the Southern Ocean. Biogeosciences, 2013, 10, 2787-2801.	1.3	13
51	Investigations on physical and textural properties of Arctic first-year sea ice in the Amundsen Gulf, Canada, November 2007â€“June 2008 (IPY-CFL system study). Journal of Glaciology, 2013, 59, 819-837.	1.1	22
52	Short-term variability in bacterial abundance, cell properties, and incorporation of leucine and thymidine in subarctic sea ice. Aquatic Microbial Ecology, 2013, 71, 57-73.	0.9	29
53	Dynamics of pCO ₂ and related airâ€“ice CO ₂ fluxes in the Arctic coastal zone (Amundsen Gulf, Beaufort Sea). Journal of Geophysical Research, 2012, 117, .	3.3	85
54	Towards a method for high vertical resolution measurements of the partial pressure of CO ₂ within bulk sea ice. Journal of Glaciology, 2012, 58, 287-300.	1.1	17

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55	Spatial and temporal CO ₂ exchanges measured by Eddy Covariance over a temperate intertidal flat and their relationships to net ecosystem production. <i>Biogeosciences</i> , 2012, 9, 249-268.	1.3	39
56	Variability of Carbon Dioxide and Methane in the Epilimnion of Lake Kivu. , 2012, , 47-66.		8
57	Diffusive methane emissions to the atmosphere from Lake Kivu (Eastern Africa). <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	65
58	Biogeochemistry and carbon mass balance of a coccolithophore bloom in the northern Bay of Biscay (June 2006). <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2011, 58, 111-127.	0.6	16
59	Sea ice and snow cover characteristics during the winter-spring transition in the Bellingshausen Sea: An overview of SIMBA 2007. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2011, 58, 1019-1038.	0.6	42
60	Carbonate system in the water masses of the Southeast Atlantic sector of the Southern Ocean during February and March 2008. <i>Biogeosciences</i> , 2011, 8, 1401-1413.	1.3	19
61	Carbon and nitrogen flows during a bloom of the coccolithophore <i>Emiliana huxleyi</i> : Modelling a mesocosm experiment. <i>Journal of Marine Systems</i> , 2011, 85, 71-85.	0.9	20
62	Benthic remineralization in the northwest European continental margin (northern Bay of Biscay). <i>Continental Shelf Research</i> , 2011, 31, 644-658.	0.9	18
63	Sea ice contribution to the air-sea CO ₂ exchange in the Arctic and Southern Oceans. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2011, 63, .	0.8	30
64	Seasonal variability of methane in the rivers and lagoons of Ivory Coast (West Africa). <i>Biogeochemistry</i> , 2010, 100, 21-37.	1.7	81
65	Biogeochemical study of a coccolithophore bloom in the northern Bay of Biscay (NE Atlantic Ocean) in June 2004. <i>Progress in Oceanography</i> , 2010, 86, 317-336.	1.5	44
66	EPOCA/EUR-OCEANS data compilation on the biological and biogeochemical responses to ocean acidification. <i>Earth System Science Data</i> , 2010, 2, 167-175.	3.7	23
67	Dissolved inorganic carbon dynamics and air-sea carbon dioxide fluxes during coccolithophore blooms in the northwest European continental margin (northern Bay of Biscay). <i>Global Biogeochemical Cycles</i> , 2010, 24, .	1.9	19
68	Influence of giant kelp beds (<i>Macrocystis pyrifera</i>) on diel cycles of pCO ₂ and DIC in the Sub-Antarctic coastal area. <i>Estuarine, Coastal and Shelf Science</i> , 2009, 81, 114-122.	0.9	81
69	Seasonal Variability of Carbon Dioxide in the Rivers and Lagoons of Ivory Coast (West Africa). <i>Estuaries and Coasts</i> , 2009, 32, 246-260.	1.0	99
70	Climatological mean and decadal change in surface ocean pCO ₂ , and net sea-air CO ₂ flux over the global oceans. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2009, 56, 554-577.	0.6	1,540
71	Net ecosystem production and carbon dioxide fluxes in the Scheldt estuarine plume. <i>BMC Ecology</i> , 2008, 8, 15.	3.0	49
72	Iron study during a time series in the western Weddell pack ice. <i>Marine Chemistry</i> , 2008, 108, 85-95.	0.9	131

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73	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.	0.6	75
74	Effects of CO ₂ on particle size distribution and phytoplankton abundance during a mesocosm bloom experiment (PeECE II). Biogeosciences, 2008, 5, 509-521.	1.3	99
75	Inter-annual variability of the carbon dioxide oceanic sink south of Tasmania. Biogeosciences, 2008, 5, 141-155.	1.3	42
76	Biogas (CO ₂ , O ₂ , dimethylsulfide) dynamics in spring Antarctic fast ice. Limnology and Oceanography, 2007, 52, 1367-1379.	1.6	127
77	Spatial and temporal variation of bacterioplankton in a sub-Antarctic coastal area (Kerguelen) Tj ETQq1 1 0.784314 rgBT /Ovrglock 10	0.9	8
78	CO ₂ deposition over the multi-year ice of the western Weddell Sea. Geophysical Research Letters, 2006, 33, .	1.5	57
79	Carbon dioxide in European coastal waters. Estuarine, Coastal and Shelf Science, 2006, 70, 375-387.	0.9	239
80	Barium distribution across the Southern Ocean frontal system in the Crozet-Kerguelen Basin. Marine Chemistry, 2005, 95, 149-162.	0.9	44
81	Whole-system metabolism and CO ₂ fluxes in a Mediterranean Bay dominated by seagrass beds (Palma Bay, NW Mediterranean). Biogeosciences, 2005, 2, 43-60.	1.3	91
82	Testing the direct effect of CO ₂ concentration on a bloom of the coccolithophorid <i>Emiliana huxleyi</i> in mesocosm experiments. Limnology and Oceanography, 2005, 50, 493-507.	1.6	244
83	Response of primary production and calcification to changes of pCO ₂ during experimental blooms of the coccolithophorid <i>Emiliana huxleyi</i> . Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	1.9	215
84	Variability of the net air-sea CO ₂ flux inferred from shipboard and satellite measurements in the Southern Ocean south of Tasmania and New Zealand. Journal of Geophysical Research, 2005, 110, .	3.3	30
85	Budgeting sinks and sources of CO ₂ in the coastal ocean: Diversity of ecosystems counts. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	515
86	Net ecosystem metabolism in a micro-tidal estuary (Randers Fjord, Denmark): evaluation of methods. Marine Ecology - Progress Series, 2005, 301, 23-41.	0.9	86
87	Gas transfer velocities of CO ₂ in three European estuaries (Randers Fjord, Scheldt, and) Tj ETQq1 1 0.784314 rgBT /Overbo	1.6	238
88	Fronts in the Southern Indian Ocean as inferred from satellite sea surface temperature data. Journal of Marine Systems, 2004, 45, 55-73.	0.9	95
89	Variability of the gas transfer velocity of CO ₂ in a macrotidal estuary (the Scheldt). Estuaries and Coasts, 2004, 27, 593-603.	1.7	205
90	Crude oil bioremediation in sub-Antarctic intertidal sediments: chemistry and toxicity of oiled residues. Marine Environmental Research, 2004, 57, 311-327.	1.1	97

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91	Transparent exopolymer particles and dissolved organic carbon production by <i>Emiliana huxleyi</i> exposed to different CO ₂ concentrations: a mesocosm experiment. <i>Aquatic Microbial Ecology</i> , 2004, 34, 93-104.	0.9	172
92	Chromophoric dissolved organic matter in experimental mesocosms maintained under different pCO ₂ levels. <i>Marine Ecology - Progress Series</i> , 2004, 272, 25-31.	0.9	58
93	Oceanic fronts in the southern Indian Ocean as inferred from the NOAA SST, TOPEX/Poseidon and ERS-2 altimetry data. <i>Gayana</i> , 2004, 68, .	0.0	3
94	Atmospheric CO ₂ flux from mangrove surrounding waters. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	179
95	Effect of nutrient enrichments on the bacterial assemblage of Antarctic soils contaminated by diesel or crude oil. <i>Polar Record</i> , 2003, 39, 309-318.	0.4	18
96	Mesoscale surface distribution of biogeochemical characteristics in the Crozet Basin frontal zones (South Indian Ocean). <i>Marine Ecology - Progress Series</i> , 2003, 249, 1-14.	0.9	10
97	Carbonate dissolution in the turbid and eutrophic Loire estuary. <i>Marine Ecology - Progress Series</i> , 2003, 259, 129-138.	0.9	111
98	Effectiveness of Bioremediation of Crude Oil Contaminated Subantarctic Intertidal Sediment: The Microbial Response. <i>Microbial Ecology</i> , 2002, 44, 118-126.	1.4	53
99	Seasonal changes of pCO ₂ over a subantarctic <i>Macrocystis</i> kelp bed. <i>Polar Biology</i> , 2000, 23, 706-716.	0.5	52
100	Field observations on the variability of crude oil impact on indigenous hydrocarbon-degrading bacteria from sub-Antarctic intertidal sediments. <i>Marine Environmental Research</i> , 2000, 49, 403-417.	1.1	60
101	Carbon Dioxide Emission from European Estuaries. , 1998, 282, 434-436.		480