Nathalie Lefevre

List of Publications by Year
in descending order

76 papers	9,777 citations	172457 29 h-index	71685 76 g-index
84 all docs	84 docs citations	84 times ranked	13033 citing authors

#	Article	IF	Citations
1	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	9.9	1,477
2	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	9.9	1,167
3	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	9.9	1,159
4	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	9.9	905
5	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	9.9	801
6	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	9.9	663
7	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	9.9	616
8	A multi-decade record of high-quality <i>f</i>CO₂ data in version 3 of the Surface Ocean CO₂ Atlas (SOCAT). Earth System Science Data, 2016, 8, 383-413.	9.9	413
9	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	9.9	311
10	A uniform, quality controlled Surface Ocean CO₂ Atlas (SOCAT). Earth System Science Data, 2013, 5, 125-143.	9.9	158
11	An update to the Surface Ocean CO₂ Atlas (SOCAT version 2). Earth System Science Data, 2014, 6, 69-90.	9.9	158
12	An assessment of the Atlantic and Arctic seaâ€“air CO₂ fluxes, 1990â€“2009. Biogeosciences, 2013, 10, 607-627.	3.3	131
13	Modeling the geochemical cycle of iron in the oceans and its impact on atmospheric CO2concentrations. Global Biogeochemical Cycles, 1999, 13, 727-736.	4.9	107
14	Surface Ocean CO₂ Atlas (SOCAT) gridded data products. Earth System Science Data, 2013, 5, 145-153.	9.9	101
15	A decrease in the sink for atmospheric CO2in the North Atlantic. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	92
16	EUREC⁴A. Earth System Science Data, 2021, 13, 4067-4119.	9.9	88
17	The Tropical Atlantic Observing System. Frontiers in Marine Science, 2019, 6, .	2.5	80
18	PIRATA: A Sustained Observing System for Tropical Atlantic Climate Research and Forecasting. Earth and Space Science, 2019, 6, 577-616.	2.6	63

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19	Observations of pCO2in the coastal upwelling off Chile: Spatial and temporal extrapolation using satellite data. Journal of Geophysical Research, 2002, 107, 8-1.	3.3	62
20	A new optical sensor for PCO2 measurements in seawater. Marine Chemistry, 1993, 42, 189-198.	2.3	58
21	A comparison of multiple regression and neural network techniques for mapping in situ pCO2 data. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 375-384.	1.6	54
22	Origin of CO₂ undersaturation in the western tropical Atlantic. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 595.	1.6	48
23	Variability ofpCO2in the tropical Atlantic in 1995. Journal of Geophysical Research, 1998, 103, 5623-5634.	3.3	47
24	Estimating pCO2 from sea surface temperatures in the Atlantic gyres. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 539-554.	1.4	42
25	PCO2, chemical properties, and estimated new production in the equatorial Pacific in Januaryâ€“March 1991. Journal of Geophysical Research, 1994, 99, 12639.	3.3	35
26	Modeling carbon to nitrogen and carbon to chlorophyll a ratios in the ocean at low latitudes: Evaluation of the role of physiological plasticity. Limnology and Oceanography, 2003, 48, 1796-1807.	3.1	35
27	Surface ocean carbon dioxide during the Atlantic Meridional Transect (1995â€“2013); evidence of ocean acidification. Progress in Oceanography, 2017, 158, 65-75.	3.2	35
28	Estimation of the oceanic pCO₂ in the North Atlantic from VOS lines in-situ measurements: parameters needed to generate seasonally mean maps. Annales Geophysicae, 2007, 25, 2247-2257.	1.6	33
29	Seasonal and interannual variability of seaâ€“air CO₂ fluxes in the tropical Atlantic affected by the Amazon River plume. Global Biogeochemical Cycles, 2015, 29, 1640-1655.	4.9	32
30	Increased CO₂ outgassing in Februaryâ€“May 2010 in the tropical Atlantic following the 2009 Pacific El NiÃ±o. Journal of Geophysical Research: Oceans, 2013, 118, 1645-1657.	2.6	31
31	A comparison of multiple regression and neural network techniques for mapping in situ pCO₂ data. Tellus, Series B: Chemical and Physical Meteorology, 2022, 57, 375.	1.6	30
32	Variability of fCO₂ in the Eastern Tropical Atlantic from a moored buoy. Journal of Geophysical Research, 2008, 113, .	3.3	28
33	The overlooked tropical oceanic CO₂ sink. Geophysical Research Letters, 2016, 43, 3804-3812.	4.0	28
34	A Synoptic Assessment of the Amazon River-Ocean Continuum during Boreal Autumn: From Physics to Plankton Communities and Carbon Flux. Frontiers in Microbiology, 2017, 8, 1358.	3.5	26
35	Airâ€sea CO₂ fluxes in the equatorial Pacific in Januaryâ€March 1991. Geophysical Research Letters, 1992, 19, 2223-2226.	4.0	25
36	Winter weather controls net influx of atmospheric CO2 on the north-west European shelf. Scientific Reports, 2019, 9, 20153.	3.3	25

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37	Net Heterotrophy in the Amazon Continental Shelf Changes Rapidly to a Sink of CO2 in the Outer Amazon Plume. Frontiers in Marine Science, 2017, 4, .	2.5	22
38	Spatial and Temporal Variability of the CO2 Fluxes in a Tropical, Highly Urbanized Estuary. Estuaries and Coasts, 2013, 36, 1054-1072.	2.2	21
39	Impact of physical processes on the seasonal distribution of the fugacity of CO₂ in the western tropical Atlantic. Journal of Geophysical Research: Oceans, 2014, 119, 646-663.	2.6	21
40	Satellite-derived CO₂fugacity in surface seawater of the tropical Atlantic Ocean using a feedforward neural network. International Journal of Remote Sensing, 2016, 37, 580-598.	2.9	21
41	Air-sea CO 2 fluxes for the Brazilian northeast continental shelf in a climatic transition region. Journal of Marine Systems, 2017, 173, 70-80.	2.1	21
42	Assessing the seasonality of the oceanic sink for CO2in the northern hemisphere. Global Biogeochemical Cycles, 1999, 13, 273-286.	4.9	20
43	Sea water fugacity of CO₂ at the PIRATA mooring at 6°S, 10°W. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 636.	1.6	20
44	Low CO2 concentrations in the Gulf of Guinea during the upwelling season in 2006. Marine Chemistry, 2009, 113, 93-101.	2.3	19
45	Distribution of CO2 parameters in the Western Tropical Atlantic Ocean. Dynamics of Atmospheres and Oceans, 2016, 73, 47-60.	1.8	19
46	Amazon Plume Salinity Response to Ocean Teleconnections. Frontiers in Marine Science, 2017, 4, .	2.5	19
47	Carbon and oxygen net community production in the eastern tropical Atlantic estimated from a moored buoy. Global Biogeochemical Cycles, 2012, 26, .	4.9	18
48	A source of CO2 to the atmosphere throughout the year in the Maranhense continental shelf (2Â°30'S,) Tj ETQq0 0 0 rgBT /Overlock 10	1.8	18
49	Collapse of the tropical and subtropical North Atlantic CO2 sink in boreal spring of 2010. Scientific Reports, 2017, 7, 41694.	3.3	17
50	Distribution of the CO2 partial pressure along an Atlantic meridional transect. Progress in Oceanography, 2000, 45, 401-413.	3.2	16
51	Surface CO2 parameters and airâ€“sea CO2 flux distribution in the eastern equatorial Atlantic Ocean. Journal of Marine Systems, 2010, 82, 135-144.	2.1	16
52	Seasonal sea-surface carbon dioxide in the Azores area. Marine Chemistry, 2005, 96, 35-51.	2.3	15
53	Spatial and temporal variability of CO2 fluxes in tropical estuarine systems near areas of high population density in Brazil. Regional Environmental Change, 2015, 15, 619-630.	2.9	13
54	Constraining the Oceanic Uptake and Fluxes of Greenhouse Gases by Building an Ocean Network of Certified Stations: The Ocean Component of the Integrated Carbon Observation System, ICOS-Oceans. Frontiers in Marine Science, 2019, 6, .	2.5	13

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55	Wintertime process study of the North Brazil Current rings reveals the region as a larger sink for CO₂ than expected. Biogeosciences, 2022, 19, 2969-2988.	3.3	12
56	A comparison of Multiple Non-linear regression and neural network techniques for sea surface salinity estimation in the tropical Atlantic ocean based on satellite data. ESAIM Proceedings and Surveys, 2015, 49, 65-77.	0.4	11
57	Overview of optical designs of the port-plug components for the ITER Equatorial Wide Angle Viewing System (WAVS). Fusion Engineering and Design, 2019, 146, 2442-2445.	1.9	11
58	The sensitivity of atmospheric CO2 concentrations to input of iron to the oceans. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 453-460.	1.6	10
59	Variability of CO2 fugacity at the western edge of the tropical Atlantic Ocean from the 8Â°N to 38Â°W PIRATA buoy. Dynamics of Atmospheres and Oceans, 2017, 78, 1-13.	1.8	10
60	Intraâ€•and Interâ€Annual Variability of North Brazil Current Rings Using Angular Momentum Eddy Detection and Tracking Algorithm: Observations From 1993 to 2016. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015921.	2.6	10
61	The sensitivity of atmospheric CO2 concentrations to input of iron to the oceans.. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 453-460.	1.6	9
62	Variability and trends of carbon parameters at a time series in the eastern tropical Atlantic. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 30305.	1.6	9
63	On the variability in the CO2 system and water productivity in the western tropical Atlantic off North and Northeast Brazil. Journal of Marine Systems, 2019, 189, 62-77.	2.1	9
64	Nutrient Input and CO₂ Flux of a Tropical Coastal Fluvial System with High Population Density in the Northeast Region of Brazil. Journal of Water Resource and Protection, 2013, 05, 362-375.	0.8	9
65	Alkalinity, inorganic carbon and CO2 flux variability during extreme rainfall years (2010-2011) in two polluted tropical estuaries NE Brazil. Brazilian Journal of Oceanography, 2018, 66, 115-130.	0.6	7
66	Ocean Circulation Drives the Variability of the Carbon System in the Eastern Tropical Atlantic. Oceans, 2021, 2, 126-148.	1.3	6
67	Amazon River propagation evidenced by a CO2 decrease at 8Â°N, 38Â°W in September 2013. Journal of Marine Systems, 2020, 211, 103419.	2.1	5
68	Spatial and temporal variability of the physical, carbonate and CO2 properties in the Southern Ocean surface waters during austral summer (2005-2019). Deep-Sea Research Part I: Oceanographic Research Papers, 2022, , 103836.	1.4	4
69	Basinâ€Scale Estimate of the Seaâ€Air CO 2 Flux During the 2010 Warm Event in the Tropical North Atlantic. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 973-986.	3.0	3
70	Carbon chemistry variability around a tropical archipelago. Marine and Freshwater Research, 2019, 70, 767.	1.3	3
71	Les avancÃ©es d'AMMA sur les interactions ocÃ©an-atmosphÃ¨re. La MÃ©tÃ©orologie, 2012, 8, 17.	0.5	3
72	Phytoplankton physiology can affect ocean surface temperatures. Geophysical Research Letters, 2001, 28, 1251-1254.	4.0	2

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73	Evidence for enhanced primary production driving significant CO2 drawdown associated with the Atlantic ITCZ. Science of the Total Environment, 2022, 838, 156592.	8.0	2
74	Origin of CO₂undersaturation in the western tropical Atlantic. Tellus, Series B: Chemical and Physical Meteorology, 2010, 62, .	1.6	1
75	CaracterizaciÃ³n de los flujos de CO2 y los parÃ¡metros asociados con el sistema de carbonato en el estuario RÃo Formoso, Brasil. Revista De Biologia Marina Y Oceanografia, 2015, 50, 603-609.	0.2	0
76	A comparative study of total alkalinity and total inorganic carbon near tropical Atlantic coastal regions. Journal of Coastal Conservation, 2022, 26, .	1.6	0