Corinne Le QuÃ©rÃ©

List of Publications by Year
in descending order

Version: 2024-02-01

155 papers	36,098 citations	8755 77 h-index	8878 150 g-index
193 all docs	193 docs citations	193 times ranked	37817 citing authors

#	Article	IF	Citations
1	An efficient and accurate representation of complex oceanic and biospheric models of anthropogenic carbon uptake. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 397.	0.8	64
2	Two decades of ocean CO₂ sink and variability. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 649.	0.8	20
3	Climate change and biospheric output. Science, 2022, 375, 1091-1092.	6.0	2
4	Global fossil carbon emissions rebound near pre-COVID-19 levels. Environmental Research Letters, 2022, 17, 031001.	2.2	42
5	Global and Regional Trends and Drivers of Fire Under Climate Change. Reviews of Geophysics, 2022, 60, .	9.0	182
6	Novel quantification of regional fossil fuel CO ₂ reductions during COVID-19 lockdowns using atmospheric oxygen measurements. Science Advances, 2022, 8, eabl9250.	4.7	12
7	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	3.7	663
8	Data-based estimates of interannual seaâ€“air CO₂ flux variations 1957â€“2020 and their relation to environmental drivers. Biogeosciences, 2022, 19, 2627-2652.	1.3	21
9	Global patterns of daily CO2 emissions reductions in the first year of COVID-19. Nature Geoscience, 2022, 15, 615-620.	5.4	46
10	Decarbonising the critical sectors of aviation, shipping, road freight and industry to limit warming to 1.5â€“2Â°C. Climate Policy, 2021, 21, 455-474.	2.6	72
11	Gridded fossil CO2 emissions and related O2 combustion consistent with national inventories 1959â€“2018. Scientific Data, 2021, 8, 2.	2.4	56
12	Role of jellyfish in the plankton ecosystem revealed using a global ocean biogeochemical model. Biogeosciences, 2021, 18, 1291-1320.	1.3	41
13	Fossil CO2 emissions in the post-COVID-19 era. Nature Climate Change, 2021, 11, 197-199.	8.1	171
14	The CO2 Human Emissions (CHE) Project: First Steps Towards a European Operational Capacity to Monitor Anthropogenic CO2 Emissions. Frontiers in Remote Sensing, 2021, 2, .	1.3	13
15	Carbon dioxide emissions continue to grow amidst slowly emerging climate policies. Nature Climate Change, 2020, 10, 3-6.	8.1	324
16	Use of aviation by climate change researchers: Structural influences, personal attitudes, and information provision. Global Environmental Change, 2020, 65, 102184.	3.6	60
17	Current and future global climate impacts resulting from COVID-19. Nature Climate Change, 2020, 10, 913-919.	8.1	400
18	Consistency and Challenges in the Ocean Carbon Sink Estimate for the Global Carbon Budget. Frontiers in Marine Science, 2020, 7, .	1.2	114

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19	Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. Nature Climate Change, 2020, 10, 647-653.	8.1	1,408
20	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	3.7	1,477
21	Drivers of declining CO2 emissions in 18 developed economies. Nature Climate Change, 2019, 9, 213-217.	8.1	307
22	Decadal trends in the ocean carbon sink. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11646-11651.	3.3	94
23	Five decades of northern land carbon uptake revealed by the interhemispheric CO2 gradient. Nature, 2019, 568, 221-225.	13.7	124
24	Large Contribution of Pteropods to Shallow CaCO₃ Export. Global Biogeochemical Cycles, 2019, 33, 458-468.	1.9	66
25	Persistent fossil fuel growth threatens the Paris Agreement and planetary health. Environmental Research Letters, 2019, 14, 121001.	2.2	133
26	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	3.7	1,159
27	Recent Changes in Global Photosynthesis and Terrestrial Ecosystem Respiration Constrained From Multiple Observations. Geophysical Research Letters, 2018, 45, 1058-1068.	1.5	19
28	The myriad challenges of the Paris Agreement. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20180066.	1.6	18
29	Implications for workability and survivability in populations exposed to extreme heat under climate change: a modelling study. Lancet Planetary Health, The, 2018, 2, e540-e547.	5.1	68
30	Constraints on global oceanic emissions of N₂O from observations and models. Biogeosciences, 2018, 15, 2161-2175.	1.3	38
31	Emissions are still rising: ramp up the cuts. Nature, 2018, 564, 27-30.	13.7	136
32	Global energy growth is outpacing decarbonization. Environmental Research Letters, 2018, 13, 120401.	2.2	188
33	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. Nature Geoscience, 2018, 11, 739-743.	5.4	110
34	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	3.7	1,167
35	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	3.7	801
36	Key indicators to track current progress and future ambition of the Paris Agreement. Nature Climate Change, 2017, 7, 118-122.	8.1	298

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37	Climate research must sharpen its view. Nature Climate Change, 2017, 7, 89-91.	8.1	80
38	Biogeochemical modelling of dissolved oxygen in a changing ocean. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160328.	1.6	20
39	Towards real-time verification of CO2 emissions. Nature Climate Change, 2017, 7, 848-850.	8.1	168
40	Warning signs for stabilizing global CO ₂ emissions. Environmental Research Letters, 2017, 12, 110202.	2.2	158
41	In situ measurements of atmospheric O₂ and CO₂ reveal an unexpected O₂ signal over the tropical Atlantic Ocean. Global Biogeochemical Cycles, 2017, 31, 1289-1305.	1.9	12
42	The Challenge of Urban Heat Exposure under Climate Change: An Analysis of Cities in the Sustainable Healthy Urban Environments (SHUE) Database. Climate, 2017, 5, 93.	1.2	12
43	chapter 2 A Statistical Gap-Filling Method to Interpolate Global Monthly Surface Ocean Carbon Dioxide Data. , 2017, , 15-62.		0
44	Role of zooplankton dynamics for Southern Ocean phytoplankton biomass and global biogeochemical cycles. Biogeosciences, 2016, 13, 4111-4133.	1.3	84
45	The Physiological Response of Picophytoplankton to Temperature and Its Model Representation. Frontiers in Marine Science, 2016, 3, .	1.2	29
46	Urban infrastructure choices structure climate solutions. Nature Climate Change, 2016, 6, 1054-1056.	8.1	144
47	Reducing uncertainties in decadal variability of the global carbon budget with multiple datasets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13104-13108.	3.3	39
48	The implications of COP21 for our future climate. Public Health Reviews, 2016, 37, 29.	1.3	2
49	Reaching peak emissions. Nature Climate Change, 2016, 6, 7-10.	8.1	194
50	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	3.7	905
51	On the Southern Ocean CO₂ uptake and the role of the biological carbon pump in the 21st century. Global Biogeochemical Cycles, 2015, 29, 1451-1470.	1.9	85
52	A statistical gapâ€filling method to interpolate global monthly surface ocean carbon dioxide data. Journal of Advances in Modeling Earth Systems, 2015, 7, 1554-1575.	1.3	31
53	Drivers and uncertainties of future global marine primary production in marine ecosystem models. Biogeosciences, 2015, 12, 6955-6984.	1.3	252
54	The ocean carbon sink â€“ impacts, vulnerabilities and challenges. Earth System Dynamics, 2015, 6, 327-358.	2.7	109

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55	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	1.3	587
56	Ecological niches of open ocean phytoplankton taxa. Limnology and Oceanography, 2015, 60, 1020-1038.	1.6	104
57	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	3.7	616
58	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	3.7	463
59	The declining uptake rate of atmospheric CO₂ by land and ocean sinks. Biogeosciences, 2014, 11, 3453-3475.	1.3	62
60	iMarNet: an ocean biogeochemistry model intercomparison project within a common physical ocean modelling framework. Biogeosciences, 2014, 11, 7291-7304.	1.3	65
61	Radical emission reductions: the role of demand reductions in accelerating full decarbonization. Carbon Management, 2014, 5, 321-323.	1.2	15
62	Betting on negative emissions. Nature Climate Change, 2014, 4, 850-853.	8.1	846
63	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	3.7	311
64	Persistent growth of CO2 emissions and implications for reaching climate targets. Nature Geoscience, 2014, 7, 709-715.	5.4	615
65	Sharing a quota on cumulative carbon emissions. Nature Climate Change, 2014, 4, 873-879.	8.1	295
66	Combined constraints on global ocean primary production using observations and models. Global Biogeochemical Cycles, 2013, 27, 847-858.	1.9	118
67	Anthropogenic CO2 emissions. Nature Climate Change, 2013, 3, 603-604.	8.1	18
68	Southern Hemisphere westerly wind changes during the Last Glacial Maximum: paleo-data synthesis. Quaternary Science Reviews, 2013, 68, 76-95.	1.4	238
69	Comparing food web structures and dynamics across a suite of global marine ecosystem models. Ecological Modelling, 2013, 261-262, 43-57.	1.2	71
70	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	5.4	1,649
71	The challenge to keep global warming below 2 Â°C. Nature Climate Change, 2013, 3, 4-6.	8.1	809
72	Rapid climatic driven shifts of diatoms at high latitudes. Remote Sensing of Environment, 2013, 132, 195-201.	4.6	45

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73	Southern Hemisphere westerly wind changes during the Last Glacial Maximum: model-data comparison. Quaternary Science Reviews, 2013, 64, 104-120.	1.4	121
74	Going beyond two degrees? The risks and opportunities of alternative options. Climate Policy, 2013, 13, 751-769.	2.6	107
75	The global carbon budget 1959â€“2011. Earth System Science Data, 2013, 5, 165-185.	3.7	527
76	MAREDAT: towards a world atlas of MARine Ecosystem DATa. Earth System Science Data, 2013, 5, 227-239.	3.7	145
77	Distribution of known macrozooplankton abundance and biomass in the global ocean. Earth System Science Data, 2013, 5, 241-257.	3.7	36
78	Interview: Interview with Professor Corinne Le QuÃ©rÃ©. Carbon Management, 2013, 4, 243-248.	1.2	0
79	Consumption-based GHG emission accounting: a UK case study. Climate Policy, 2013, 13, 451-470.	2.6	268
80	Climate sensitivity in the Anthropocene. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 1121-1131.	1.0	24
81	Global ocean carbon uptake: magnitude, variability and trends. Biogeosciences, 2013, 10, 1983-2000.	1.3	276
82	Detecting an external influence on recent changes in oceanic oxygen using an optimal fingerprinting method. Biogeosciences, 2013, 10, 1799-1813.	1.3	36
83	Phytoplankton competition during the spring bloom in four plankton functional type models. Biogeosciences, 2013, 10, 6833-6850.	1.3	68
84	Carbon emissions from land use and land-cover change. Biogeosciences, 2012, 9, 5125-5142.	1.3	839
85	Phytoplankton phenology in the global ocean. Ecological Indicators, 2012, 14, 152-163.	2.6	192
86	Autocorrelation characteristics of surface ocean pCO₂and airâ€sea CO₂ fluxes. Global Biogeochemical Cycles, 2012, 26, .	1.9	32
87	Quantifying the impact of anthropogenic nitrogen deposition on oceanic nitrous oxide. Geophysical Research Letters, 2012, 39, .	1.5	57
88	Rapid growth in CO2 emissions after the 2008â€“2009 global financial crisis. Nature Climate Change, 2012, 2, 2-4.	8.1	697
89	An International Effort to Quantify Regional Carbon Fluxes. Eos, 2011, 92, 81-82.	0.1	93
90	Economic value of improved quantification in global sources and sinks of carbon dioxide. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 1967-1979.	1.6	23

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91	Stability of complex food webs: Resilience, resistance and the average interaction strength. Journal of Theoretical Biology, 2011, 272, 160-173.	0.8	41
92	Marine ecosystem models for earth systems applications: The MarQUEST experience. Journal of Marine Systems, 2010, 81, 19-33.	0.9	37
93	Comparison of the emergent behavior of a complex ecosystem model in two ocean general circulation models. Progress in Oceanography, 2010, 84, 204-224.	1.5	50
94	Trends in the land and ocean carbon uptake. Current Opinion in Environmental Sustainability, 2010, 2, 219-224.	3.1	33
95	An International Carbon Office to assist policy-based science. Current Opinion in Environmental Sustainability, 2010, 2, 297-300.	3.1	11
96	Interactions of the carbon cycle, human activity, and the climate system: a research portfolio. Current Opinion in Environmental Sustainability, 2010, 2, 301-311.	3.1	62
97	Update on CO2 emissions. Nature Geoscience, 2010, 3, 811-812.	5.4	561
98	Filling the gap in scientific institutions to support global carbon management. Carbon Management, 2010, 1, 5-7.	1.2	0
99	Simulating dimethylsulphide seasonality with the Dynamic Green Ocean Model PlankTOM5. Journal of Geophysical Research, 2010, 115, .	3.3	53
100	Sensitivity of global ocean biogeochemical dynamics to ecosystem structure in a future climate. Geophysical Research Letters, 2010, 37, .	1.5	26
101	Impact of climate change and variability on the global oceanic sink of CO₂. Global Biogeochemical Cycles, 2010, 24, .	1.9	173
102	Biogeochemical fluxes through microzooplankton. Global Biogeochemical Cycles, 2010, 24, .	1.9	116
103	Journal club. Nature, 2009, 461, 1031-1031.	13.7	0
104	Trends in the sources and sinks of carbon dioxide. Nature Geoscience, 2009, 2, 831-836.	5.4	1,746
105	Surface-ocean CO2 variability and vulnerability. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 504-511.	0.6	62
106	Dedication to Dr. Taro Takahashi. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 503.	0.6	0
107	Glacial-interglacial variability in atmospheric CO2. Geophysical Monograph Series, 2009, , 251-286.	0.1	77
108	Introduction to surface ocean-lower atmosphere processes. Geophysical Monograph Series, 2009, , 1-5.	0.1	3

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109	Marine pelagic ecosystems. Geophysical Monograph Series, 2009, , 119-137.	0.1	5
110	Ocean carbon cycle. Geophysical Monograph Series, 2009, , 181-195.	0.1	7
111	Biogeochemical modeling. Geophysical Monograph Series, 2009, , 319-328.	0.1	0
112	Plankton Functional Types in a New Generation of Biogeochemical Models: Integration of Plankton Abundance Data for the Evaluation of Marine Biogeochemical Models; Cambridge, United Kingdom, 1-3 October 2008. Eos, 2009, 90, 30-31.	0.1	12
113	Chapter 1 Impacts of the Oceans on Climate Change. Advances in Marine Biology, 2009, 56, 1-150.	0.7	110
114	Global dust cycle. Geophysical Monograph Series, 2009, , 37-55.	0.1	5
115	Interannual variability in oceanic biogeochemical processes inferred by inversion of atmospheric O2/N2 and CO2 data. Tellus, Series B: Chemical and Physical Meteorology, 2008, 60, 685-705.	0.8	42
116	Preferential uptake of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:msub><mml:mrow><mml:mtext>NH</mml:mtext></mml:mrow><mml:mrow><mml: over <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:msup><mml:mrow><mml:msub><mml:mrow><mml:mtext>NO</mml:mtext></mml:mrow><mml:mrow><mml: Ecological Modelling, 2008, 218, 393-397.	1.2	11
117	Importance of coastal nutrient supply for global ocean biogeochemistry. Global Biogeochemical Cycles, 2008, 22, .	1.9	36
118	Variability in atmospheric O₂ and CO₂ concentrations in the southern Pacific Ocean and their comparison with model estimates. Journal of Geophysical Research, 2008, 113, .	3.3	2
119	Ocean biogeochemical response to phytoplanktonâ€light feedback in a global model. Journal of Geophysical Research, 2008, 113, .	3.3	33
120	The Impacts of the Oceans on Climate Change. , 2008, , .		1
121	Growth rates of six coccolithophorid strains as a function of temperature. Limnology and Oceanography, 2008, 53, 1181-1185.	1.6	84
122	Anthropogenic and biophysical contributions to increasing atmospheric CO₂ growth rate and airborne fraction. Biogeosciences, 2008, 5, 1601-1613.	1.3	107
123	Global and regional drivers of accelerating CO2 emissions. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10288-10293.	3.3	1,426
124	Saturation of the Southern Ocean CO2 Sink Due to Recent Climate Change. Science, 2007, 316, 1735-1738.	6.0	779
125	Contributions to accelerating atmospheric CO ₂ growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18866-18870.	3.3	1,770
126	Potential impact of changes in river nutrient supply on global ocean biogeochemistry. Global Biogeochemical Cycles, 2007, 21, .	1.9	64

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127	Surface ocean CO2 variability and vulnerability workshop, Paris, France, 11â€“14 April 2007. Eos, 2007, 88, 287-287.	0.1	5
128	Model uncertainty in the ecosystem approach to fisheries. Fish and Fisheries, 2007, 8, 315-336.	2.7	98
129	Biogeochemical fluxes through mesozooplankton. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	155
130	North Pacific carbon cycle response to climate variability on seasonal to decadal timescales. Journal of Geophysical Research, 2006, 111, .	3.3	81
131	Modeling interactions between marine ecosystems and climate. Eos, 2006, 87, 452.	0.1	3
132	The unknown and the uncertain in Earth system modeling. Eos, 2006, 87, 496.	0.1	6
133	A comparison of global estimates of marine primary production from ocean color. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 741-770.	0.6	574
134	Reply to Horizons Article â€˜Plankton functional type modelling: running before we can walkâ€™ Anderson (2005): I. Abrupt changes in marine ecosystems?. Journal of Plankton Research, 2006, 28, 871-872.	0.8	36
135	Ecosystem dynamics based on plankton functional types for global ocean biogeochemistry models. Global Change Biology, 2005, 11, 051013014052005-???.	4.2	353
136	Multiple constraints on regional CO2flux variations over land and oceans. Global Biogeochemical Cycles, 2005, 19, .	1.9	154
137	Bio-optical feedbacks among phytoplankton, upper ocean physics and sea-ice in a global model. Geophysical Research Letters, 2005, 32, .	1.5	162
138	Role of Marine Biology in Glacial-Interglacial CO2 Cycles. Science, 2005, 308, 74-78.	6.0	358
139	Biosphere dynamics: Challenges for Earth system models. Geophysical Monograph Series, 2004, , 269-278.	0.1	5
140	Two decades of ocean CO2 sink and variability. Tellus, Series B: Chemical and Physical Meteorology, 2003, 55, 649-656.	0.8	92
141	Propagation of climatic events on ocean stratification, marine biology, and CO2: Case studies over the 1979â€“1999 period. Journal of Geophysical Research, 2003, 108, .	3.3	45
142	Dust impact on marine biota and atmospheric CO2during glacial periods. Paleoceanography, 2003, 18, n/a-n/a.	3.0	263
143	Climate-induced oceanic oxygen fluxes: Implications for the contemporary carbon budget. Global Biogeochemical Cycles, 2002, 16, 6-1-6-13.	1.9	247
144	Antarctic circumpolar wave impact on marine biology: A natural laboratory for climate change study. Geophysical Research Letters, 2002, 29, 45-1-45-4.	1.5	25

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145	Seasonal and interannual variability of CO2 in the equatorial Pacific. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 2443-2469.	0.6	176
146	Maximum impacts of future reforestation or deforestation on atmospheric CO2. Global Change Biology, 2002, 8, 1047-1052.	4.2	191
147	Estimates of anthropogenic carbon uptake from four three-dimensional global ocean models. Global Biogeochemical Cycles, 2001, 15, 43-60.	1.9	274
148	Regional Changes in Carbon Dioxide Fluxes of Land and Oceans Since 1980. Science, 2000, 290, 1342-1346.	6.0	680
149	Interannual variability of the oceanic sink of CO2from 1979 through 1997. Global Biogeochemical Cycles, 2000, 14, 1247-1265.	1.9	156
150	Interannual variability of equatorial Pacific CO2fluxes estimated from temperature and salinity data. Geophysical Research Letters, 2000, 27, 1735-1738.	1.5	24
151	Spatial distribution of air-sea CO2fluxes and the interhemispheric transport of carbon by the oceans. Global Biogeochemical Cycles, 1999, 13, 287-305.	1.9	99
152	Oceanic Carbon Dioxide Uptake in a Model of Century-Scale Global Warming. Science, 1996, 274, 1346-1350.	6.0	317
153	An efficient and accurate representation of complex oceanic and biospheric models of anthropogenic carbon uptake. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 397-417.	0.8	240
154	Limiting future atmospheric carbon dioxide. Global Biogeochemical Cycles, 1995, 9, 121-137.	1.9	70
155	Airâ€"sea C0 2 transfer and the carbon budget of the North Atlantic. Philosophical Transactions of the Royal Society B: Biological Sciences, 1995, 348, 211-219.	1.8	88