

Jorge L Sarmiento

List of Publications by Year in descending order

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58
papers

14,789
citations

81434

41
h-index

156644

58
g-index

60
all docs

60
docs citations

60
times ranked

15858
citing authors

#	ARTICLE	IF	CITATIONS
1	Indo-Pacific Sector Dominates Southern Ocean Carbon Outgassing. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	1.9	14
2	The Deep Ocean's Carbon Exhaust. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	1.9	12
3	Importance of wind and meltwater for observed chemical and physical changes in the Southern Ocean. <i>Nature Geoscience</i> , 2020, 13, 35-42.	5.4	42
4	Supercooled Southern Ocean Waters. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090242.	1.5	21
5	Time of Emergence and Large Ensemble Intercomparison for Ocean Biogeochemical Trends. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2019GB006453.	1.9	33
6	Seasonal modulation of phytoplankton biomass in the Southern Ocean. <i>Nature Communications</i> , 2020, 11, 5364.	5.8	51
7	Emergence of anthropogenic signals in the ocean carbon cycle. <i>Nature Climate Change</i> , 2019, 9, 719-725.	8.1	54
8	Nutrient Controls on Export Production in the Southern Ocean. <i>Global Biogeochemical Cycles</i> , 2019, 33, 942-956.	1.9	30
9	Reassessing Southern Ocean Air-Sea CO ₂ Flux Estimates With the Addition of Biogeochemical Float Observations. <i>Global Biogeochemical Cycles</i> , 2019, 33, 1370-1388.	1.9	95
10	Climate change impacts on mismatches between phytoplankton blooms and fish spawning phenology. <i>Global Change Biology</i> , 2019, 25, 2544-2559.	4.2	93
11	Deciphering Patterns and Drivers of Heat and Carbon Storage in the Southern Ocean. <i>Geophysical Research Letters</i> , 2019, 46, 3359-3367.	1.5	16
12	Southern Ocean Biogeochemical Float Deployment Strategy, With Example From the Greenwich Meridian Line (GO-SHIP A12). <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 403-431.	1.0	25
13	Metrics for the Evaluation of the Southern Ocean in Coupled Climate Models and Earth System Models. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 3120-3143.	1.0	29
14	Lagrangian Timescales of Southern Ocean Upwelling in a Hierarchy of Model Resolutions. <i>Geophysical Research Letters</i> , 2018, 45, 891-898.	1.5	16
15	Global Nitrous Oxide Production Determined by Oxygen Sensitivity of Nitrification and Denitrification. <i>Global Biogeochemical Cycles</i> , 2018, 32, 1790-1802.	1.9	63
16	Assessment of Export Efficiency Equations in the Southern Ocean Applied to Satellite-Based Net Primary Production. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 2945-2964.	1.0	35
17	Assessment of Autonomous pH Measurements for Determining Surface Seawater Partial Pressure of CO ₂ . <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 4003-4013.	1.0	22
18	Autonomous Biogeochemical Floats Detect Significant Carbon Dioxide Outgassing in the High-Latitude Southern Ocean. <i>Geophysical Research Letters</i> , 2018, 45, 9049-9057.	1.5	138

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19	Reconciling fisheries catch and ocean productivity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1441-E1449.	3.3	195
20	Rapid emergence of climate change in environmental drivers of marine ecosystems. Nature Communications, 2017, 8, 14682.	5.8	216
21	Calculating surface ocean pCO ₂ from biogeochemical Argo floats equipped with pH: An uncertainty analysis. Global Biogeochemical Cycles, 2017, 31, 591-604.	1.9	104
22	Annual boom–bust cycles of polar phytoplankton biomass revealed by space-based lidar. Nature Geoscience, 2017, 10, 118-122.	5.4	150
23	Mechanistic Drivers of Reemergence of Anthropogenic Carbon in the Equatorial Pacific. Geophysical Research Letters, 2017, 44, 9433-9439.	1.5	10
24	Spiraling pathways of global deep waters to the surface of the Southern Ocean. Nature Communications, 2017, 8, 172.	5.8	144
25	Biogeochemical sensor performance in the SOCCOM profiling float array. Journal of Geophysical Research: Oceans, 2017, 122, 6416-6436.	1.0	190
26	Oxygen in the Southern Ocean From Argo Floats: Determination of Processes Driving Air–Sea Fluxes. Journal of Geophysical Research: Oceans, 2017, 122, 8661-8682.	1.0	38
27	Annual nitrate drawdown observed by SOCCOM profiling floats and the relationship to annual net community production. Journal of Geophysical Research: Oceans, 2017, 122, 6668-6683.	1.0	54
28	Empirical algorithms to estimate water column pH in the Southern Ocean. Geophysical Research Letters, 2016, 43, 3415-3422.	1.5	48
29	Mechanisms of Southern Ocean Heat Uptake and Transport in a Global Eddyding Climate Model. Journal of Climate, 2016, 29, 2059-2075.	1.2	56
30	Upwelling in the Southern Ocean. Physics Today, 2015, 68, 27-32.	0.3	70
31	Complex functionality with minimal computation: Promise and pitfalls of reduced-tracer ocean biogeochemistry models. Journal of Advances in Modeling Earth Systems, 2015, 7, 2012-2028.	1.3	49
32	Dominance of the Southern Ocean in Anthropogenic Carbon and Heat Uptake in CMIP5 Models. Journal of Climate, 2015, 28, 862-886.	1.2	432
33	Role of Mesoscale Eddies in Cross-Frontal Transport of Heat and Biogeochemical Tracers in the Southern Ocean. Journal of Physical Oceanography, 2015, 45, 3057-3081.	0.7	94
34	Impact of Weddell Sea deep convection on natural and anthropogenic carbon in a climate model. Geophysical Research Letters, 2014, 41, 7262-7269.	1.5	39
35	An observing system simulation for Southern Ocean carbon dioxide uptake. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130046.	1.6	41
36	Connecting Changing Ocean Circulation with Changing Climate. Journal of Climate, 2013, 26, 2268-2278.	1.2	152

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37	Marine Taxa Track Local Climate Velocities. <i>Science</i> , 2013, 341, 1239-1242.	6.0	1,025
38	Data-based estimates of suboxia, denitrification, and N_2O production in the ocean and their sensitivities to dissolved O_2 . <i>Global Biogeochemical Cycles</i> , 2012, 26, .	1.9	183
39	Detection of anthropogenic climate change in satellite records of ocean chlorophyll and productivity. <i>Biogeosciences</i> , 2010, 7, 621-640.	1.3	360
40	Efficiency of small scale carbon mitigation by patch iron fertilization. <i>Biogeosciences</i> , 2010, 7, 3593-3624.	1.3	64
41	Trends in the sources and sinks of carbon dioxide. <i>Nature Geoscience</i> , 2009, 2, 831-836.	5.4	1,746
42	Oceanic sources, sinks, and transport of atmospheric CO_2 . <i>Global Biogeochemical Cycles</i> , 2009, 23, .	1.9	455
43	Impact of oceanic circulation on biological carbon storage in the ocean and atmospheric CO_2 . <i>Global Biogeochemical Cycles</i> , 2008, 22, .	1.9	118
44	Inverse estimates of the oceanic sources and sinks of natural CO_2 and the implied oceanic carbon transport. <i>Global Biogeochemical Cycles</i> , 2007, 21, .	1.9	156
45	Impact of circulation on export production, dissolved organic matter, and dissolved oxygen in the ocean: Results from Phase II of the Ocean Carbon Cycle Model Intercomparison Project (OCMIP2). <i>Global Biogeochemical Cycles</i> , 2007, 21, .	1.9	211
46	A synthesis of global particle export from the surface ocean and cycling through the ocean interior and on the seafloor. <i>Global Biogeochemical Cycles</i> , 2007, 21, .	1.9	464
47	Diagnosing the contribution of phytoplankton functional groups to the production and export of particulate organic carbon, $CaCO_3$, and opal from global nutrient and alkalinity distributions. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	1.9	199
48	The Southern Ocean biogeochemical divide. <i>Nature</i> , 2006, 441, 964-967.	13.7	268
49	Climate-driven trends in contemporary ocean productivity. <i>Nature</i> , 2006, 444, 752-755.	13.7	1,873
50	Empirical and mechanistic models for the particle export ratio. <i>Global Biogeochemical Cycles</i> , 2005, 19, n/a-n/a.	1.9	353
51	High-latitude controls of thermocline nutrients and low latitude biological productivity. <i>Nature</i> , 2004, 427, 56-60.	13.7	1,090
52	Response of ocean ecosystems to climate warming. <i>Global Biogeochemical Cycles</i> , 2004, 18, n/a-n/a.	1.9	694
53	Air-sea flux of oxygen estimated from bulk data: Implications For the marine and atmospheric oxygen cycles. <i>Global Biogeochemical Cycles</i> , 2001, 15, 783-803.	1.9	86
54	Simulated response of the ocean carbon cycle to anthropogenic climate warming. <i>Nature</i> , 1998, 393, 245-249.	13.7	814

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55	An improved method for detecting anthropogenic CO ₂ in the oceans. <i>Global Biogeochemical Cycles</i> , 1996, 10, 809-837.	1.9	415
56	Carbon biogeochemistry and climate change. <i>Photosynthesis Research</i> , 1994, 39, 209-234.	1.6	70
57	Redfield ratios of remineralization determined by nutrient data analysis. <i>Global Biogeochemical Cycles</i> , 1994, 8, 65-80.	1.9	1,036
58	Three-dimensional simulations of the impact of Southern Ocean nutrient depletion on atmospheric CO ₂ and ocean chemistry. <i>Limnology and Oceanography</i> , 1991, 36, 1928-1950.	1.6	237