

Wei-Jun Cai

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8907592/publications.pdf>

Version: 2024-02-01

240
papers

17,031
citations

10986

71
h-index

18130

120
g-index

259
all docs

259
docs citations

259
times ranked

11354
citing authors

#	ARTICLE	IF	CITATIONS
1	The changing carbon cycle of the coastal ocean. <i>Nature</i> , 2013, 504, 61-70.	27.8	1,146
2	Acidification of subsurface coastal waters enhanced by eutrophication. <i>Nature Geoscience</i> , 2011, 4, 766-770.	12.9	928
3	Estuarine and Coastal Ocean Carbon Paradox: CO ₂ Sinks or Sites of Terrestrial Carbon Incineration?. <i>Annual Review of Marine Science</i> , 2011, 3, 123-145.	11.6	669
4	The chemistry, fluxes, and sources of carbon dioxide in the estuarine waters of the Satilla and Altamaha Rivers, Georgia. <i>Limnology and Oceanography</i> , 1998, 43, 657-668.	3.1	451
5	A multi-decade record of high-quality CO ₂ data in version 3 of the Surface Ocean CO ₂ Atlas (SOCAT). <i>Earth System Science Data</i> , 2016, 8, 383-413.	9.9	413
6	The biogeochemistry of inorganic carbon and nutrients in the Pearl River estuary and the adjacent Northern South China Sea. <i>Continental Shelf Research</i> , 2004, 24, 1301-1319.	1.8	317
7	Air-sea exchange of carbon dioxide in ocean margins: A province-based synthesis. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	307
8	Mesoscale Eddies Drive Increased Silica Export in the Subtropical Pacific Ocean. <i>Science</i> , 2007, 316, 1017-1021.	12.6	249
9	Eutrophication-Driven Deoxygenation in the Coastal Ocean. <i>Oceanography</i> , 2014, 27, 172-183.	1.0	245
10	Comparison of hypoxia among four river-dominated ocean margins: The Changjiang (Yangtze), Mississippi, Pearl, and Rhône rivers. <i>Continental Shelf Research</i> , 2008, 28, 1527-1537.	1.8	227
11	Acidification in the U.S. Southeast: Causes, Potential Consequences and the Role of the Southeast Ocean and Coastal Acidification Network. <i>Frontiers in Marine Science</i> , 2020, 7, 1-548.	2.5	222
12	Decrease in the CO ₂ Uptake Capacity in an Ice-Free Arctic Ocean Basin. <i>Science</i> , 2010, 329, 556-559.	12.6	218
13	Oxygen depletion in the upper reach of the Pearl River estuary during a winter drought. <i>Marine Chemistry</i> , 2006, 102, 159-169.	2.3	216
14	High partial pressure of CO ₂ and its maintaining mechanism in a subtropical estuary: the Pearl River estuary, China. <i>Marine Chemistry</i> , 2005, 93, 21-32.	2.3	209
15	Oxygen penetration depths and fluxes in marine sediments. <i>Marine Chemistry</i> , 1996, 52, 123-131.	2.3	203
16	A comparative overview of weathering intensity and HCO ₃ ⁻ flux in the world's major rivers with emphasis on the Changjiang, Huanghe, Zhujiang (Pearl) and Mississippi Rivers. <i>Continental Shelf Research</i> , 2008, 28, 1538-1549.	1.8	203
17	Spatial distribution of riverine DOC inputs to the ocean: an updated global synthesis. <i>Current Opinion in Environmental Sustainability</i> , 2012, 4, 170-178.	6.3	201
18	Eutrophication Induced CO ₂ -Acidification of Subsurface Coastal Waters: Interactive Effects of Temperature, Salinity, and Atmospheric CO ₂ . <i>Environmental Science & Technology</i> , 2012, 46, 10651-10659.	10.0	197

#	ARTICLE	IF	CITATIONS
19	Carbon sequestration in wetland dominated coastal systemsâ€”a global sink of rapidly diminishing magnitude. <i>Current Opinion in Environmental Sustainability</i> , 2012, 4, 186-194.	6.3	193
20	Eutrophication-Driven Hypoxia in the East China Sea off the Changjiang Estuary. <i>Environmental Science & Technology</i> , 2016, 50, 2255-2263.	10.0	184
21	Carbon dioxide degassing and inorganic carbon export from a marshâ€”dominated estuary (the Duplin) Tj ETQq1 1 0.784314 gBT /Over 3.1 180	3.1	180
22	A comparative study of carbon dioxide degassing in riverâ€”and marineâ€”dominated estuaries. <i>Limnology and Oceanography</i> , 2008, 53, 2603-2615.	3.1	170
23	The geochemistry of dissolved inorganic carbon in a surficial groundwater aquifer in North Inlet, South Carolina, and the carbon fluxes to the coastal ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 631-639.	3.9	163
24	Coral physiology and microbiome dynamics under combined warming and ocean acidification. <i>PLoS ONE</i> , 2018, 13, e0191156.	2.5	158
25	A uniform, quality controlled Surface Ocean CO<sub>2</sub</sub> Atlas (SOCAT). <i>Earth System Science Data</i> , 2013, 5, 125-143.	9.9	158
26	An update to the Surface Ocean CO<sub>2</sub</sub> Atlas (SOCAT version 2). <i>Earth System Science Data</i> , 2014, 6, 69-90.	9.9	158
27	Alkalinity distribution in the western North Atlantic Ocean margins. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	155
28	Acid-Base Properties of Dissolved Organic Matter in the Estuarine Waters of Georgia, USA. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 473-483.	3.9	151
29	Carbon Budget of Tidal Wetlands, Estuaries, and Shelf Waters of Eastern North America. <i>Global Biogeochemical Cycles</i> , 2018, 32, 389-416.	4.9	147
30	And on Top of All Thatâ€” Coping with Ocean Acidification in the Midst of Many Stressors. <i>Oceanography</i> , 2015, 25, 48-61.	1.0	143
31	The marine inorganic carbon system along the Gulf of Mexico and Atlantic coasts of the United States: Insights from a transregional coastal carbon study. <i>Limnology and Oceanography</i> , 2013, 58, 325-342.	3.1	141
32	Oxygen and carbon dioxide mass balance for the estuarineâ€”intertidal marsh complex of five rivers in the southeastern U.S.. <i>Limnology and Oceanography</i> , 1999, 44, 639-649.	3.1	139
33	Coral Energy Reserves and Calcification in a High-CO2 World at Two Temperatures. <i>PLoS ONE</i> , 2013, 8, e75049.	2.5	137
34	Riverine inorganic carbon flux and rate of biological uptake in the Mississippi River plume. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	133
35	Effects of an estuarine plume-associated bloom on the carbonate system in the lower reaches of the Pearl River estuary and the coastal zone of the northern South China Sea. <i>Continental Shelf Research</i> , 2008, 28, 1416-1423.	1.8	130
36	Redox reactions and weak buffering capacity lead to acidification in the Chesapeake Bay. <i>Nature Communications</i> , 2017, 8, 369.	12.8	128

#	ARTICLE	IF	CITATIONS
37	The role of marsh-dominated heterotrophic continental margins in transport of CO ₂ between the atmosphere, the land-sea interface and the ocean. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	121
38	Photooxidation and Its Effects on the Carboxyl Content of Dissolved Organic Matter in Two Coastal Rivers in the Southeastern United States. <i>Environmental Science & Technology</i> , 2004, 38, 4113-4119.	10.0	120
39	Air-sea CO ₂ fluxes on the U.S. South Atlantic Bight: Spatial and seasonal variability. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	119
40	Microelectrode characterization of coral daytime interior pH and carbonate chemistry. <i>Nature Communications</i> , 2016, 7, 11144.	12.8	115
41	Continental shelves as a variable but increasing global sink for atmospheric carbon dioxide. <i>Nature Communications</i> , 2018, 9, 454.	12.8	112
42	Distributions and air-sea fluxes of CO ₂ in the summer Bering Sea. <i>Acta Oceanologica Sinica</i> , 2014, 33, 1-8.	1.0	111
43	A retrospective analysis of nutrients and phytoplankton productivity in the Mississippi River plume. <i>Continental Shelf Research</i> , 2008, 28, 1466-1475.	1.8	109
44	Diurnal variations of surface seawater pCO ₂ in contrasting coastal environments. <i>Limnology and Oceanography</i> , 2009, 54, 735-745.	3.1	109
45	An assessment of ocean margin anaerobic processes on oceanic alkalinity budget. <i>Global Biogeochemical Cycles</i> , 2011, 25, n/a-n/a.	4.9	108
46	Remote sensing of salinity from satellite-derived CDOM in the Changjiang River dominated East China Sea. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 227-243.	2.6	106
47	Impact of human activities on organic carbon transport in the Yellow River. <i>Biogeosciences</i> , 2013, 10, 2513-2524.	3.3	103
48	Microelectrode studies of organic carbon degradation and calcite dissolution at a California Continental rise site. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 497-511.	3.9	101
49	Increase in acidifying water in the western Arctic Ocean. <i>Nature Climate Change</i> , 2017, 7, 195-199.	18.8	101
50	Diatom bloom-derived bottom water hypoxia off the Changjiang estuary, with and without typhoon influence. <i>Limnology and Oceanography</i> , 2017, 62, 1552-1569.	3.1	101
51	Surface Ocean CO ₂ Atlas (SOCAT) gridded data products. <i>Earth System Science Data</i> , 2013, 5, 145-153.	9.9	101
52	The partial pressure of carbon dioxide and air-sea fluxes in the northern South China Sea in spring, summer and autumn. <i>Marine Chemistry</i> , 2005, 96, 87-97.	2.3	97
53	Assessment of sample storage techniques for total alkalinity and dissolved inorganic carbon in seawater. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 711-717.	2.0	97
54	Studies on the sea surface microlayer. <i>Journal of Colloid and Interface Science</i> , 2003, 264, 148-159.	9.4	96

#	ARTICLE	IF	CITATIONS
55	Increasing Mississippi river discharge throughout the 21st century influenced by changes in climate, land use, and atmospheric CO ₂ . <i>Geophysical Research Letters</i> , 2014, 41, 4978-4986.	4.0	96
56	Ocean acidification along the Gulf Coast and East Coast of the USA. <i>Continental Shelf Research</i> , 2015, 98, 54-71.	1.8	96
57	Carbon dynamics and community production in the Mississippi River plume. <i>Limnology and Oceanography</i> , 2012, 57, 1-17.	3.1	94
58	The combined effects of acidification and hypoxia on pH and aragonite saturation in the coastal waters of the California current ecosystem and the northern Gulf of Mexico. <i>Continental Shelf Research</i> , 2018, 152, 50-60.	1.8	94
59	Net ecosystem production and organic carbon balance of U.S. East Coast estuaries: A synthesis approach. <i>Global Biogeochemical Cycles</i> , 2015, 29, 96-111.	4.9	93
60	Seasonal variations in the inorganic carbon system in the Pearl River (Zhujiang) estuary. <i>Continental Shelf Research</i> , 2008, 28, 1424-1434.	1.8	91
61	CO ₂ flux and seasonal variability in a large subtropical estuarine system, the Pearl River Estuary, China. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	90
62	Long-term trends in evapotranspiration and runoff over the drainage basins of the Gulf of Mexico during 1901-2008. <i>Water Resources Research</i> , 2013, 49, 1988-2012.	4.2	90
63	Eutrophication-induced acidification of coastal waters in the northern Gulf of Mexico: Insights into origin and processes from a coupled physical-biogeochemical model. <i>Geophysical Research Letters</i> , 2017, 44, 946-956.	4.0	89
64	Summertime Changjiang River plume variation during 1998-2010. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 6238-6257.	2.6	88
65	Surface ocean CO ₂ seasonality and sea-air CO ₂ flux estimates for the North American east coast. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 5439-5460.	2.6	87
66	The development of pH and pCO ₂ microelectrodes for studying the carbonate chemistry of pore waters near the sediment-water interface. <i>Limnology and Oceanography</i> , 1993, 38, 1762-1773.	3.1	81
67	Satellite ocean color assessment of air-sea fluxes of CO ₂ in a river-dominated coastal margin. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	4.0	81
68	Spatial Patterns of Groundwater Biogeochemical Reactivity in an Intertidal Beach Aquifer. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2548-2562.	3.0	81
69	The spatiotemporal distribution of dissolved inorganic and organic carbon in the main stem of the Changjiang (Yangtze) River and the effect of the Three Gorges Reservoir. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 741-757.	3.0	79
70	A machine learning approach to estimate surface ocean pCO ₂ from satellite measurements. <i>Remote Sensing of Environment</i> , 2019, 228, 203-226.	11.0	79
71	Intertidal marsh as a source of dissolved inorganic carbon and a sink of nitrate in the Satilla River-estuarine complex in the southeastern U.S.. <i>Limnology and Oceanography</i> , 2000, 45, 1743-1752.	3.1	77
72	Seasonal variations of sea-air CO ₂ fluxes in the largest tropical marginal sea (South China Sea) based on multiple-year underway measurements. <i>Biogeosciences</i> , 2013, 10, 7775-7791.	3.3	77

#	ARTICLE	IF	CITATIONS
73	Controls on surface water carbonate chemistry along North American ocean margins. <i>Nature Communications</i> , 2020, 11, 2691.	12.8	77
74	Physiological response to elevated temperature and pCO ₂ varies across four Pacific coral species: Understanding the unique host+symbiont response. <i>Scientific Reports</i> , 2015, 5, 18371.	3.3	72
75	The carbon dioxide system on the Mississippi River-dominated continental shelf in the northern Gulf of Mexico: 1. Distribution and air-sea CO ₂ flux. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 1429-1445.	2.6	72
76	Modeling ocean circulation and biogeochemical variability in the Gulf of Mexico. <i>Biogeosciences</i> , 2013, 10, 7219-7234.	3.3	70
77	A mechanistic semi-analytical method for remotely sensing sea surface CO ₂ in river-dominated coastal oceans: A case study from the East China Sea. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 2331-2349.	2.6	69
78	Autonomous seawater pCO ₂ and pH time series from 40 surface buoys and the emergence of anthropogenic trends. <i>Earth System Science Data</i> , 2019, 11, 421-439.	9.9	69
79	Natural and Anthropogenic Drivers of Acidification in Large Estuaries. <i>Annual Review of Marine Science</i> , 2021, 13, 23-55.	11.6	68
80	Air-water fluxes and sources of carbon dioxide in the Delaware Estuary: spatial and seasonal variability. <i>Biogeosciences</i> , 2015, 12, 6085-6101.	3.3	67
81	Sea surface carbon dioxide at the Georgia time series site (2006-2007): Air-sea flux and controlling processes. <i>Progress in Oceanography</i> , 2016, 140, 14-26.	3.2	66
82	Comment on "Enhanced Open Ocean Storage of CO ₂ from Shelf Sea Pumping". <i>Science</i> , 2004, 306, 1477c-1477c.	12.6	61
83	Using present-day observations to detect when anthropogenic change forces surface ocean carbonate chemistry outside preindustrial bounds. <i>Biogeosciences</i> , 2016, 13, 5065-5083.	3.3	60
84	Estuarine acidification and minimum buffer zone—A conceptual study. <i>Geophysical Research Letters</i> , 2013, 40, 5176-5181.	4.0	56
85	pH and pCO ₂ microelectrode measurements and the diffusive behavior of carbon dioxide species in coastal marine sediments. <i>Marine Chemistry</i> , 2000, 70, 133-148.	2.3	55
86	Benthic oxygen flux, bottom water oxygen concentration and core top organic carbon content in the deep northeast Pacific Ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1995, 42, 1681-1699.	1.4	54
87	Seasonal variability in air-sea fluxes of CO ₂ in a river-influenced coastal margin. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	54
88	An Improved Potentiometric pCO ₂ Microelectrode. <i>Analytical Chemistry</i> , 1997, 69, 5052-5058.	6.5	53
89	The Ocean Carbon Cycle in the Western Arctic Ocean: Distributions and Air-Sea Fluxes of Carbon Dioxide. <i>Oceanography</i> , 2011, 24, 186-201.	1.0	53
90	Century-long increasing trend and variability of dissolved organic carbon export from the Mississippi River basin driven by natural and anthropogenic forcing. <i>Global Biogeochemical Cycles</i> , 2016, 30, 1288-1299.	4.9	53

#	ARTICLE	IF	CITATIONS
91	CO ₂ uptake in the East China Sea relying on Changjiang runoff is prone to change. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	51
92	Controls on Carbonate System Dynamics in a Coastal Plain Estuary: A Modeling Study. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 61-78.	3.0	51
93	Coupling of surface and dissolved oxygen in the northern South China Sea: impacts of contrasting coastal processes. <i>Biogeosciences</i> , 2009, 6, 2589-2598.	3.3	48
94	The marine carbonate system of the Arctic Ocean: Assessment of internal consistency and sampling considerations, summer 2010. <i>Marine Chemistry</i> , 2015, 176, 174-188.	2.3	48
95	Seasonal variability of the inorganic carbon system in a large coastal plain estuary. <i>Biogeosciences</i> , 2017, 14, 4949-4963.	3.3	48
96	Biogeochemical characteristics of the lower Mississippi River, USA, during June 2003. <i>Estuaries and Coasts</i> , 2005, 28, 664-674.	1.7	47
97	Internal consistency of marine carbonate system measurements and assessments of aragonite saturation state: Insights from two U.S. coastal cruises. <i>Marine Chemistry</i> , 2015, 176, 9-20.	2.3	47
98	Sea surface CO ₂ -SST relationships across a cold-core cyclonic eddy: Implications for understanding regional variability and air-sea gas exchange. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	46
99	Climate extremes dominating seasonal and interannual variations in carbon export from the Mississippi River Basin. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1333-1347.	4.9	46
100	Chesapeake Bay acidification buffered by spatially decoupled carbonate mineral cycling. <i>Nature Geoscience</i> , 2020, 13, 441-447.	12.9	44
101	Long-term Trajectory of Nitrogen Loading and Delivery From Mississippi River Basin to the Gulf of Mexico. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2019GB006475.	4.9	44
102	Preferential dissolution of carbonate shells driven by petroleum seep activity in the Gulf of Mexico. <i>Earth and Planetary Science Letters</i> , 2006, 248, 227-243.	4.4	43
103	Satellite estimation of coastal pCO ₂ and air-sea flux of carbon dioxide in the northern Gulf of Mexico. <i>Remote Sensing of Environment</i> , 2018, 207, 71-83.	11.0	42
104	Degradation of algal lipids in microcosm sediments with different mixing regimes. <i>Organic Geochemistry</i> , 2002, 33, 445-459.	1.8	41
105	Effects of a wind-driven cross-shelf large river plume on biological production and CO ₂ uptake on the Gulf of Mexico during spring. <i>Limnology and Oceanography</i> , 2013, 58, 1727-1735.	3.1	41
106	Removal of dissolved inorganic carbon in the Yellow River Estuary. <i>Limnology and Oceanography</i> , 2014, 59, 413-426.	3.1	41
107	Consumption of atmospheric CO ₂ via chemical weathering in the Yellow River basin: The Qinghai-Tibet Plateau is the main contributor to the high dissolved inorganic carbon in the Yellow River. <i>Chemical Geology</i> , 2016, 430, 34-44.	3.3	41
108	Direct determination of thickness of sea surface microlayer using a pH microelectrode at original location. <i>Science in China Series B: Chemistry</i> , 2003, 46, 339.	0.8	40

#	ARTICLE	IF	CITATIONS
109	Seasonality of CO ₂ in coastal oceans altered by increasing anthropogenic nutrient delivery from large rivers: evidence from the Changjiang "East China Sea system. <i>Biogeosciences</i> , 2013, 10, 3889-3899.	3.3	40
110	Sea-ice loss amplifies summertime decadal CO ₂ increase in the western Arctic Ocean. <i>Nature Climate Change</i> , 2020, 10, 678-684.	18.8	40
111	Sea-air CO ₂ exchange in the western Arctic coastal ocean. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1190-1209.	4.9	39
112	The southeastern continental shelf of the United States as an atmospheric CO ₂ source and an exporter of inorganic carbon to the ocean. <i>Continental Shelf Research</i> , 2005, 25, 1917-1941.	1.8	38
113	Large increase in dissolved inorganic carbon flux from the Mississippi River to Gulf of Mexico due to climatic and anthropogenic changes over the 21st century. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 724-736.	3.0	38
114	Carbon Cycling and the Coupling Between Proton and Electron Transfer Reactions in Aquatic Sediments in Lake Champlain. <i>Aquatic Geochemistry</i> , 2010, 16, 421-446.	1.3	37
115	Correcting a major error in assessing organic carbon pollution in natural waters. <i>Science Advances</i> , 2021, 7, .	10.3	37
116	Chesapeake Bay Inorganic Carbon: Spatial Distribution and Seasonal Variability. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	36
117	Increased extreme precipitation challenges nitrogen load management to the Gulf of Mexico. <i>Communications Earth & Environment</i> , 2020, 1, .	6.8	36
118	Treated Wastewater Changes the Export of Dissolved Inorganic Carbon and Its Isotopic Composition and Leads to Acidification in Coastal Oceans. <i>Environmental Science & Technology</i> , 2018, 52, 5590-5599.	10.0	35
119	Influence of terrestrial inputs on continental shelf carbon dioxide. <i>Biogeosciences</i> , 2013, 10, 839-849.	3.3	34
120	Ecosystem Metabolism and Carbon Balance in Chesapeake Bay: A 30-Year Analysis Using a Coupled Hydrodynamic-Biogeochemical Model. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 6141-6153.	2.6	34
121	Sea surface aragonite saturation state variations and control mechanisms at the Gray's Reef time-series site off Georgia, USA (2006-2007). <i>Marine Chemistry</i> , 2017, 195, 27-40.	2.3	32
122	The stoichiometry of inorganic carbon and nutrient removal in the Mississippi River plume and adjacent continental shelf. <i>Biogeosciences</i> , 2012, 9, 2781-2792.	3.3	31
123	Changing riverine organic C:N ratios along the Pearl River: Implications for estuarine and coastal carbon cycles. <i>Science of the Total Environment</i> , 2020, 709, 136052.	8.0	31
124	The role of Mg ²⁺ in inhibiting CaCO ₃ precipitation from seawater. <i>Marine Chemistry</i> , 2021, 237, 104036.	2.3	31
125	A long pathlength liquid-core waveguide sensor for real-time pCO ₂ measurements at sea. <i>Marine Chemistry</i> , 2003, 84, 73-84.	2.3	30
126	Satellite Assessment of Bio-Optical Properties of Northern Gulf of Mexico Coastal Waters Following Hurricanes Katrina and Rita. <i>Sensors</i> , 2008, 8, 4135-4150.	3.8	30

#	ARTICLE	IF	CITATIONS
127	Carbonate mineral saturation states along the U.S. East Coast. <i>Limnology and Oceanography</i> , 2010, 55, 2424-2432.	3.1	30
128	Air-sea CO ₂ fluxes in the southern Yellow Sea: An examination of the continental shelf pump hypothesis. <i>Continental Shelf Research</i> , 2011, 31, 1904-1914.	1.8	30
129	Calcification of the planktonic foraminifera <i>Globigerina bulloides</i> and carbonate ion concentration: Results from the Santa Barbara Basin. <i>Paleoceanography</i> , 2016, 31, 1083-1102.	3.0	30
130	Ocean carbonate system computation for anoxic waters using an updated CO ₂ SYN program. <i>Marine Chemistry</i> , 2017, 195, 90-93.	2.3	30
131	The response of inorganic carbon distributions and dynamics to upwelling-favorable winds on the northern Gulf of Mexico during summer. <i>Continental Shelf Research</i> , 2015, 111, 211-222.	1.8	29
132	Inorganic carbon and oxygen dynamics in a marsh-dominated estuary. <i>Limnology and Oceanography</i> , 2018, 63, 47-71.	3.1	29
133	Bacterial production and respiration in subtropical Hong Kong waters: influence of the Pearl River discharge and sewage effluent. <i>Aquatic Microbial Ecology</i> , 2010, 58, 167-179.	1.8	29
134	Total alkalinity minus dissolved inorganic carbon as a proxy for deciphering ocean acidification mechanisms. <i>Marine Chemistry</i> , 2020, 222, 103791.	2.3	28
135	Organic carbon fluxes mediated by corals at elevated pCO ₂ and temperature. <i>Marine Ecology - Progress Series</i> , 2015, 519, 153-164.	1.9	27
136	Effects of eutrophication and benthic respiration on water column carbonate chemistry in a traditional hypoxic zone in the Northern Gulf of Mexico. <i>Marine Chemistry</i> , 2017, 194, 33-42.	2.3	27
137	Air-water CO ₂ evasion from US East Coast estuaries. <i>Biogeosciences</i> , 2017, 14, 2441-2468.	3.3	27
138	Decadal CO ₂ trends in global ocean margins and adjacent boundary current-influenced areas. <i>Geophysical Research Letters</i> , 2017, 44, 8962-8970.	4.0	26
139	Influence of seasonal monsoons on net community production and CO ₂ in subtropical Hong Kong coastal waters. <i>Biogeosciences</i> , 2011, 8, 289-300.	3.3	25
140	A long pathlength spectrophotometric pCO ₂ sensor using a gas-permeable liquid-core waveguide. <i>Talanta</i> , 2002, 57, 69-80.	5.5	24
141	Short-term variability of aragonite saturation state in the central M&A-tlantic B&ght. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 4274-4290.	2.6	24
142	Pelagic community respiration on the continental shelf off Georgia, USA. <i>Biogeochemistry</i> , 2010, 98, 101-113.	3.5	23
143	On the calculation of eddy diffusivity in the shelf water from radium isotopes: High sensitivity to advection. <i>Journal of Marine Systems</i> , 2011, 86, 28-33.	2.1	23
144	The Development and Validation of a Profiling Glider Deep ISFET-Based pH Sensor for High Resolution Observations of Coastal and Ocean Acidification. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	23

#	ARTICLE	IF	CITATIONS
145	Distributions and air-sea fluxes of carbon dioxide in the Western Arctic Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2012, 81-84, 46-52.	1.4	22
146	Coral responses to ocean warming and acidification: Implications for future distribution of coral reefs in the South China Sea. Marine Pollution Bulletin, 2019, 138, 241-248.	5.0	22
147	Long-Term Changes of Carbonate Chemistry Variables Along the North American East Coast. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015982.	2.6	22
148	Modeling CO_2 variability in the Gulf of Mexico. Biogeosciences, 2016, 13, 4359-4377.	3.3	21
149	Response of sea surface fugacity of CO_2 to the SAM shift south of Tasmania: Regional differences. Geophysical Research Letters, 2015, 42, 3973-3979.	4.0	20
150	Remote Sensing of Sea Surface pCO_2 in the Bering Sea in Summer Based on a Mechanistic Semi-Analytical Algorithm (MeSAA). Remote Sensing, 2016, 8, 558.	4.0	20
151	Assessment of the suitability of Durafet-based sensors for pH measurement in dynamic estuarine environments. Estuarine, Coastal and Shelf Science, 2018, 200, 152-168.	2.1	20
152	Understanding Anthropogenic Impacts on pH and Aragonite Saturation State in Chesapeake Bay: Insights From a 30-Year Model Study. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005620.	3.0	20
153	Source partitioning of oxygen-consuming organic matter in the hypoxic zone of the Chesapeake Bay. Limnology and Oceanography, 2020, 65, 1801-1817.	3.1	20
154	Aragonite saturation state in a monsoonal upwelling system off Java, Indonesia. Journal of Marine Systems, 2016, 153, 10-17.	2.1	19
155	Multidecadal CO_2 Increase Along the United States Southeast Coastal Margin. Journal of Geophysical Research: Oceans, 2017, 122, 10061-10072.	2.6	19
156	Physical and Biogeochemical Controls on pH Dynamics in the Northern Gulf of Mexico During Summer Hypoxia. Journal of Geophysical Research: Oceans, 2019, 124, 5979-5998.	2.6	19
157	Freshening leads to a three-decade trend of declining nutrients in the western Arctic Ocean. Environmental Research Letters, 2021, 16, 054047.	5.2	19
158	Pore-water geochemistry of two contrasting brine-charged seep sites in the northern Gulf of Mexico continental slope. Marine Chemistry, 2010, 118, 99-107.	2.3	18
159	Time series pCO_2 at a coastal mooring: Internal consistency, seasonal cycles, and interannual variability. Continental Shelf Research, 2017, 145, 95-108.	1.8	18
160	Hypoxic Bottom Waters as a Carbon Source to Atmosphere During a Typhoon Passage Over the East China Sea. Geophysical Research Letters, 2019, 46, 11329-11337.	4.0	18
161	Time of Emergence of Surface Ocean Carbon Dioxide Trends in the North American Coastal Margins in Support of Ocean Acidification Observing System Design. Frontiers in Marine Science, 2019, 6, .	2.5	18
162	Summertime Evolution of Net Community Production and CO_2 Flux in the Western Arctic Ocean. Global Biogeochemical Cycles, 2021, 35, e2020GB006651.	4.9	18

#	ARTICLE	IF	CITATIONS
163	Estimating surface pCO ₂ in the northern Gulf of Mexico: Which remote sensing model to use?. <i>Continental Shelf Research</i> , 2017, 151, 94-110.	1.8	17
164	Effects of Biological Production and Vertical Mixing on Sea Surface pCO ₂ Variations in the Changjiang River Plume During Early Autumn: A Buoy-Based Time Series Study. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 6156-6173.	2.6	17
165	Climatic modulation of surface acidification rates through summertime wind forcing in the Southern Ocean. <i>Nature Communications</i> , 2018, 9, 3240.	12.8	17
166	pH polymeric membrane microelectrodes based on neutral carriers and their application in aquatic environments. <i>Analytica Chimica Acta</i> , 1999, 395, 285-291.	5.4	16
167	The impact of denitrification on the atmospheric CO ₂ uptake potential of seawater. <i>Marine Chemistry</i> , 2011, 127, 192-198.	2.3	16
168	Physical dynamics and biogeochemistry of the Pearl River plume. , 2013, , 321-352.		16
169	Calibration and evaluation of a carbonate microsensor for studies of the marine inorganic carbon system. <i>Journal of Oceanography</i> , 2014, 70, 425-433.	1.7	16
170	Spatial and Temporal Variability of pCO ₂ , Carbon Fluxes, and Saturation State on the West Florida Shelf. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 6174-6188.	2.6	16
171	Seasonal and spatial variability in surface pCO ₂ and "water CO ₂ " flux in the Chesapeake Bay. <i>Limnology and Oceanography</i> , 2020, 65, 3046-3065.	3.1	16
172	Best Practice Data Standards for Discrete Chemical Oceanographic Observations. <i>Frontiers in Marine Science</i> , 2022, 8, .	2.5	16
173	Temporal variation and stoichiometric ratios of organic matter remineralization in bottom waters of the northern Gulf of Mexico during late spring and summer. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 8304-8326.	2.6	15
174	Carbon Biogeochemistry of the Western Arctic: Primary Production, Carbon Export and the Controls on Ocean Acidification. , 2014, , 223-268.		15
175	Carbon dioxide dynamics and fluxes in coastal waters influenced by river plumes. , 2013, , 155-173.		14
176	High-temperature acclimation strategies within the thermally tolerant endosymbiont <i>Symbiodinium trenchii</i> and its coral host, <i>Turbinaria reniformis</i> , differ with changing pCO ₂ and nutrients. <i>Marine Biology</i> , 2016, 163, 1.	1.5	14
177	Coral calcification under environmental change: a direct comparison of the alkalinity anomaly and buoyant weight techniques. <i>Coral Reefs</i> , 2017, 36, 13-25.	2.2	14
178	Coastal Ocean Data Analysis Product in North America (CODAP-NA) " an internally consistent data product for discrete inorganic carbon, oxygen, and nutrients on the North American ocean margins. <i>Earth System Science Data</i> , 2021, 13, 2777-2799.	9.9	14
179	GEOCHEMICAL CONTROLS ON CARBONATE SHELL TAPHONOMY IN NORTHERN GULF OF MEXICO CONTINENTAL SHELF AND SLOPE SEDIMENTS. <i>Palaios</i> , 2012, 27, 571-584.	1.3	13
180	Estimating summer sea surface pCO ₂ on a river-dominated continental shelf using a satellite-based semi-mechanistic model. <i>Remote Sensing of Environment</i> , 2019, 225, 115-126.	11.0	13

#	ARTICLE	IF	CITATIONS
181	Effects of Wind-Driven Lateral Upwelling on Estuarine Carbonate Chemistry. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	13
182	Why are Surface Ocean pH and CaCO ₃ Saturation State Often out of Phase in Spatial Patterns and Seasonal Cycles?. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2021GB006949.	4.9	13
183	Responses of the marine carbonate system to a green tide: A case study of an <i>Ulva prolifera</i> bloom in Qingdao coastal waters. <i>Harmful Algae</i> , 2021, 110, 102133.	4.8	13
184	Rapid Acidification of the Arctic Chukchi Sea Waters Driven by Anthropogenic Forcing and Biological Carbon Recycling. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	13
185	On some biases of estimating the global distribution of air-sea CO ₂ flux by bulk parameterizations. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	12
186	The carbon dioxide system and net community production within a cyclonic eddy in the lee of Hawaii. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 1412-1425.	1.4	12
187	Autonomous Observation of Seasonal Carbonate Chemistry Dynamics in the Mid-Atlantic Bight. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2020JC016505.	2.6	12
188	Climate and Human-Driven Variability of Summer Hypoxia on a Large River-Dominated Shelf as Revealed by a Hypoxia Index. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	12
189	Moderate nutrient concentrations are not detrimental to corals under future ocean conditions. <i>Marine Biology</i> , 2021, 168, 1.	1.5	12
190	Increase in CO ₂ Uptake Capacity in the Arctic Chukchi Sea During Summer Revealed by Satellite-Based Estimation. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093844.	4.0	12
191	Quantitative interpretation of vertical profiles of calcium and pH in the coral coelenteron. <i>Marine Chemistry</i> , 2018, 204, 62-69.	2.3	11
192	Simultaneous determination of dissolved inorganic carbon (DIC) concentration and stable isotope (¹³ C-DIC) by Cavity Ring-Down Spectroscopy: Application to study carbonate dynamics in the Chesapeake Bay. <i>Marine Chemistry</i> , 2019, 215, 103689.	2.3	11
193	Spring net community production and its coupling with the CO ₂ dynamics in the surface water of the northern Gulf of Mexico. <i>Biogeosciences</i> , 2019, 16, 3507-3525.	3.3	11
194	Winter mixing accelerates decomposition of sedimentary organic carbon in seasonally hypoxic coastal seas. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 317, 457-471.	3.9	11
195	The Electrochemical Determination of Nitric Oxide in Seawater Media with Microelectrodes. <i>Sensors</i> , 2003, 3, 304-313.	3.8	10
196	An Ultrahigh Precision, High-Frequency Dissolved Inorganic Carbon Analyzer Based on Dual Isotope Dilution and Cavity Ring-Down Spectroscopy. <i>Environmental Science & Technology</i> , 2015, 49, 8602-8610.	10.0	10
197	Coupled oxygen and dissolved inorganic carbon dynamics in coastal ocean and its use as a potential indicator for detecting water column oil degradation. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2016, 129, 311-318.	1.4	10
198	Surface seawater partial pressure of CO ₂ variability and air-sea CO ₂ fluxes in the Bering Sea in July 2010. <i>Continental Shelf Research</i> , 2020, 193, 104031.	1.8	10

#	ARTICLE	IF	CITATIONS
199	Seasonal variations in strontium and carbon isotope systematics in the Lower Mississippi River: Implications for chemical weathering. <i>Chemical Geology</i> , 2020, 553, 119810.	3.3	10
200	Seasonal Mixing and Biological Controls of the Carbonate System in a River-Dominated Continental Shelf Subject to Eutrophication and Hypoxia in the Northern Gulf of Mexico. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	10
201	Carbonate chemistry variability in the southern Yellow Sea and East China Sea during spring of 2017 and summer of 2018. <i>Science of the Total Environment</i> , 2021, 779, 146376.	8.0	10
202	Carbon Fluxes Across Boundaries in the Pacific Arctic Region in a Changing Environment. , 2014, , 199-222.		10
203	Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring. , 2018, , .		9
204	Purified meta-Cresol Purple dye perturbation: How it influences spectrophotometric pH measurements. <i>Marine Chemistry</i> , 2020, 225, 103849.	2.3	9
205	Biological regulation of pH during intensive growth of phytoplankton in two eutrophic estuarine waters. <i>Marine Ecology - Progress Series</i> , 2019, 609, 87-99.	1.9	9
206	Extreme Nitrate Deficits in the Western Arctic Ocean: Origin, Decadal Changes, and Implications for Denitrification on a Polar Marginal Shelf. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	9
207	Carbon Isotopic and Lithologic Constraints on the Sources and Cycling of Inorganic Carbon in Four Large Rivers in China: Yangtze, Yellow, Pearl, and Heilongjiang. <i>Journal of Geophysical Research C: Biogeosciences</i> , 2021, 126, e2020JG005901.	3.0	8
208	Supply-controlled calcium carbonate dissolution decouples the seasonal dissolved oxygen and p _H minima in Chesapeake Bay. <i>Limnology and Oceanography</i> , 2021, 66, 3796-3810.	3.1	8
209	Geochemical environments of continental shelf-upper slope sediments in the northern Gulf of Mexico. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2011, 312, 265-277.	2.3	7
210	Nutrient and carbon dynamics in a large river-dominated coastal ecosystem: the Mississippi-Atchafalaya River system. , 2013, , 448-472.		7
211	Agents of change and temporal nutrient dynamics in the Altamaha River Watershed. <i>Ecosphere</i> , 2017, 8, e01519.	2.2	7
212	The ebb and flow of protons: A novel approach for the assessment of estuarine and coastal acidification. <i>Estuarine, Coastal and Shelf Science</i> , 2020, 236, 106627.	2.1	7
213	Precise determination of seawater calcium using isotope dilution inductively coupled plasma mass spectrometry. <i>Analyst, The</i> , 2014, 139, 734.	3.5	6
214	Biological regulation of carbonate chemistry during diatom growth under different concentrations of Ca ²⁺ and Mg ²⁺ . <i>Marine Chemistry</i> , 2018, 203, 38-48.	2.3	6
215	Wind-driven lateral variations of partial pressure of carbon dioxide in a large estuary. <i>Journal of Marine Systems</i> , 2019, 195, 67-73.	2.1	6
216	Benthic Respiration in Hypoxic Waters Enhances Bottom Water Acidification in the Northern Gulf of Mexico. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2020JC016152.	2.6	6

#	ARTICLE	IF	CITATIONS
217	Contrasting Controls of Acidification Metrics Across Environmental Gradients in the North Pacific and the Adjunct Arctic Ocean: Insight From a Transregional Study. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094473.	4.0	6
218	CO ₂ system in the oligotrophic northwest Pacific Ocean during the Asian dust storm season. <i>Marine Chemistry</i> , 2011, 127, 210-222.	2.3	5
219	Ocean Ventilation Controls the Contrasting Anthropogenic CO ₂ Uptake Rates Between the Western and Eastern South Atlantic Ocean Basins. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	5
220	Wastewater alkalinity addition as a novel approach for ocean negative carbon emissions. <i>Innovation(China)</i> , 2022, 3, 100272.	9.1	5
221	Porewater Redox Species, pH and pCO ₂ in Aquatic Sediments: Electrochemical Sensor Studies in Lake Champlain and Sapelo Island. <i>ACS Symposium Series</i> , 2002, , 188-209.	0.5	4
222	Sediment, organic carbon, nutrients, and trace elements: sources, transport, and biogeochemical cycles in the lowermost Mississippi River. , 2013, , 397-420.		4
223	Carbon and nutrient fluxes across tropical river-coastal boundaries. , 0, , 373-394.		4
224	The evolution of carbon signatures carried by the Ganges-Brahmaputra river system: a source-to-sink perspective. , 0, , 353-372.		4
225	Carbonate Parameter Estimation and Its Application in Revealing Temporal and Spatial Variation in the South and Mid-Atlantic Bight, USA. <i>Journal of Geophysical Research: Oceans</i> , 2022, 127, .	2.6	4
226	Monitoring Ocean Acidification within State Borders: Lessons from Washington State (USA). <i>Coastal Management</i> , 2021, 49, 487-509.	2.0	3
227	Seasonal and Spatial Production Patterns of Dissolved Inorganic Carbon and Total Alkalinity in a Shallow Beach Aquifer. <i>Frontiers in Marine Science</i> , 2022, 9, .	2.5	3
228	An introduction to the biogeochemistry of river-coastal systems. , 0, , 3-18.		2
229	Water and sediment dynamics through the wetlands and coastal water bodies of large river deltaic plains. , 2013, , 21-54.		2
230	Sedimentary carbon dynamics of the Atchafalaya and Mississippi River Delta system and associated margin. , 2013, , 473-502.		2
231	Composition and fluxes of carbon and nutrient species from the Yukon River basin in a changing environment. , 2013, , 503-529.		2
232	A long pathlength spectrophotometric pCO ₂ sensor using a gas-permeable liquid-core waveguide. <i>Talanta</i> , 2002, 57, 69-80.	5.5	2
233	Biogeochemical studies from the Chinese National Arctic Research Expeditions (CHINAREs). <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2012, 81-84, 1-2.	1.4	1
234	Dynamics of phytoplankton blooms and nutrient limitation in the Pearl River (Zhujiang) estuarine coastal waters. , 0, , 274-295.		1

#	ARTICLE	IF	CITATIONS
235	Carbon biogeochemistry in the continuum of the Changjiang (Yangtze) River watersheds across the East China Sea. , 0, , 237-273.		1
236	The Mid-Atlantic Bight Dissolved Inorganic Carbon System Observed in the March 1996 DOE Ocean Margins Program (OMP)â€™A Baseline Study. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	1
237	Greenland Blocking Promotes Subtropical North Atlantic Spring Blooms. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092252.	4.0	1
238	Oxygen, Carbon Dioxide, and Estuarine Condition. , 2006, , 179-201.		1
239	High anti-interference ability induced by the SP/SiOx/ImIL composite film on IrOx pH electrodes. <i>Analytica Chimica Acta</i> , 2022, 1197, 339489.	5.4	1
240	Performance evaluations and applications of a $\hat{13}\text{C}$ -DIC analyzer in seawater and estuarine waters. <i>Science of the Total Environment</i> , 2022, , 155013.	8.0	0