Michael D Degrandpre

List of Publications by Year
in descending order

55	2,429	172457	206112
papers	citations	29 h-index	48 g-index

56	56	56	2980
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Volcanic ash fuels anomalous plankton bloom in subarctic northeast Pacific. Geophysical Research Letters, 2010, 37, .	4.0	238
2	Air-sea CO2exchange in the equatorial Pacific. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	143
3	Aragonite saturation state dynamics in a coastal upwelling zone. Geophysical Research Letters, 2013, 40, 2720-2725.	4.0	120
4	A sensor for in situ indicator-based measurements of seawater pH. Marine Chemistry, 2008, 109, 18-28.	2.3	109
5	Long path fiber-optic sensor for evanescent field absorbance measurements. Analytical Chemistry, 1988, 60, 2582-2586.	6.5	108
6	A Submersible Autonomous Sensor for Spectrophotometric pH Measurements of Natural Waters. Analytical Chemistry, 2003, 75, 1844-1850.	6.5	92
7	Carbonate buffering and metabolic controls on carbon dioxide in rivers. Global Biogeochemical Cycles, 2017, 31, 663-677.	4.9	92
8	Measurement of seawater pCO2 using a renewable-reagent fiber optic sensor with colorimetric detection. Analytical Chemistry, 1993, 65, 331-337.	6.5	84
9	Calibration-Free Optical Chemical Sensors. Analytical Chemistry, 1999, 71, 1152-1159.	6.5	83
10	A Fiber-Optic FT-NIR Evanescent Field Absorbance Sensor. Applied Spectroscopy, 1990, 44, 273-279.	2.2	82
11	Biogeochemical Controls on Diel Cycling of Stable Isotopes of Dissolved O2and Dissolved Inorganic Carbon in the Big Hole River, Montana. Environmental Science & Technology, 2005, 39, 7134-7140.	10.0	82
12	Dissolved O₂/Ar and other methods reveal rapid changes in productivity during a Lagrangian experiment in the Southern Ocean. Journal of Geophysical Research, 2012, 117, .	3.3	70
13	Applications of in situ pH measurements for inorganic carbon calculations. Marine Chemistry, 2011, 125, 82-90.	2.3	63
14	Shortâ€term and seasonal pH,pCO₂and saturation state variability in a coralâ€reef ecosystem. Global Biogeochemical Cycles, 2012, 26, .	4.9	56
15	Diel variations in stream chemistry and isotopic composition of dissolved inorganic carbon, upper Clark Fork River, Montana, USA. Applied Geochemistry, 2007, 22, 1329-1343.	3.0	54
16	Thin film planar waveguide sensor for liquid phase absorbance measurements. Analytical Chemistry, 1990, 62, 2012-2017.	6.5	50
17	Ocean Time Series Observations of Changing Marine Ecosystems: An Era of Integration, Synthesis, and Societal Applications. Frontiers in Marine Science, 2019, 6, .	2.5	50
18	An Enhanced Ocean Acidification Observing Network: From People to Technology to Data Synthesis and Information Exchange. Frontiers in Marine Science, 2019, 6, .	2.5	48

#	Article	IF	Citations
19	In situ pCO₂ and O₂ measurements in a lake during turnover and stratification: Observations and modeling. Limnology and Oceanography, 2004, 49, 330-340.	3.1	47
20	Autonomous in Situ Measurements of Seawater Alkalinity. Environmental Science & Technology, 2014, 48, 9573-9581.	10.0	46
21	Diel behavior of stable isotopes of dissolved oxygen and dissolved inorganic carbon in rivers over a range of trophic conditions, and in a mesocosm experiment. Chemical Geology, 2010, 269, 22-32.	3.3	44
22	Spectrophotometric pH measurements of freshwater. Analytica Chimica Acta, 2002, 453, 13-20.	5.4	41
23	Polymer-coated cylindrical waveguide absorption sensor for high acidities. Analytical Chemistry, 1989, 61, 1674-1678.	6.5	40
24	Controls of riverine CO₂ over an annual cycle determined using direct, high temporal resolution pCO₂ measurements. Journal of Geophysical Research, 2010, 115, .	3.3	40
25	Sea-ice loss amplifies summertime decadal CO2 increase in the western Arctic Ocean. Nature Climate Change, 2020, 10, 678-684.	18.8	40
26	Considerations for the measurement of spectrophotometric pH for ocean acidification and other studies. Limnology and Oceanography: Methods, 2014, 12, 830-839.	2.0	38
27	Influence of climate and land use in carbon biogeochemistry in lower reaches of rivers in central southern Chile: Implications for the carbonate system in riverâ€influenced rocky shore environments. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 673-692.	3.0	37
28	Under-ice CO2 and O2 variability in a freshwater lake. Biogeochemistry, 2002, 61, 95-113.	3.5	35
29	Tracer Monitored Titrations:Â Measurement of Total Alkalinity. Analytical Chemistry, 2006, 78, 1817-1826.	6.5	34
30	Spectrophotometric measurement of freshwater pH with purified metaâ€cresol purple and phenol red. Limnology and Oceanography: Methods, 2016, 14, 864-873.	2.0	32
31	Uptake and sequestration of atmospheric CO2in the Labrador Sea deep convection region. Geophysical Research Letters, 2006, 33, .	4.0	28
32	Sea surface pCO₂ and carbon export during the Labrador Sea springâ€summer bloom: An in situ mass balance approach. Journal of Geophysical Research, 2009, 114, .	3.3	27
33	Observed variability of Lake Superior pCO2. Limnology and Oceanography, 2011, 56, 775-786.	3.1	26
34	Sea surfacepCO₂and O₂in the Southern Ocean during the austral fall, 2008. Journal of Geophysical Research, 2011, 116, .	3.3	24
35	Autonomous Optofluidic Chemical Analyzers for Marine Applications: Insights from the Submersible Autonomous Moored Instruments (SAMI) for pH and pCO2. Frontiers in Marine Science, 2018, 4, .	2.5	24
36	A Lagrangian study of surfacepCO2dynamics in the eastern equatorial Pacific Ocean. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	23

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37	Changes in the Arctic Ocean Carbon Cycle With Diminishing Ice Cover. Geophysical Research Letters, 2020, 47, e2020GL088051.	4.0	23
38	Evaluation of Indicator-Based pH Measurements for Freshwater over a Wide Range of Buffer Intensities. Environmental Science & Technology, 2008, 42, 6092-6099.	10.0	19
39	Seasonal Changes in Carbonate Saturation State and Airâ€Sea CO₂ Fluxes During an Annual Cycle in a Stratifiedâ€Temperate Fjord (ReloncavÃ-Fjord, Chilean Patagonia). Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2851-2865.	3.0	17
40	Consistency and stability of purified meta-cresol purple for spectrophotometric pH measurements in seawater. Marine Chemistry, 2021, 236, 104018.	2.3	15
41	Bioâ€optical observations of the 2004 Labrador Sea phytoplankton bloom. Journal of Geophysical Research, 2011, 116, .	3.3	14
42	Sea surfacepCO₂and O₂dynamics in the partially ice-covered Arctic Ocean. Journal of Geophysical Research: Oceans, 2017, 122, 1425-1438.	2.6	12
43	Inorganic Carbon and pCO₂ Variability During Ice Formation in the Beaufort Gyre of the Canada Basin. Journal of Geophysical Research: Oceans, 2019, 124, 4017-4028.	2.6	12
44	Universal Tracer Monitored Titrations. Analytical Chemistry, 2011, 83, 9217-9220.	6.5	9
45	Investigations of Air-Sea Gas Exchange in the CoOP Coastal Air-Sea Chemical Exchange Project. Oceanography, 2008, 21, 34-45.	1.0	9
46	Comparison between Two Detection Systems for Fiber-Optic Chemical Sensor Applications. Applied Spectroscopy, 2006, 60, 465-470.	2.2	8
47	Autonomous in situ measurements of freshwater alkalinity. Limnology and Oceanography: Methods, 2021, 19, 51-66.	2.0	8
48	Lateral, Vertical, and Temporal Variability of Seawater Carbonate Chemistry at Hog Reef, Bermuda. Frontiers in Marine Science, 2021, 8, .	2.5	7
49	An inter-comparison of autonomous in situ instruments for ocean CO2 measurements under laboratory-controlled conditions. Marine Chemistry, 2022, 240, 104085.	2.3	7
50	Evanescent field fiber optic probe for process analysis. ISA Transactions, 1989, 28, 71-77.	5.7	6
51	Observations of River Solute Concentrations during Ice Formation. ACS ES&T Water, 2021, 1, 1695-1701.	4.6	5
52	Comparison of spectrophotometric and electrochemical <scp>pH</scp> measurements for calculating freshwater <scp>pCO₂</scp>. Limnology and Oceanography: Methods, 2022, 20, 514-529.	2.0	3
53	Collaborative Achievements and Challenges for Our 10â€YR River Research Effort. Limnology and Oceanography Bulletin, 2021, 30, 127-128.	0.4	2
54	A multiyear assessment of biological pertubations of CO<inf>2</inf> in the Northeast Channel of the Gulf of Maine. , 2011, , .		1

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55	Understanding the Implications of Hydrographic Processes on the Dynamics of the Carbonate System in a Sub-Antarctic Marine-Terminating Glacier-Fjord (53Â°S). Frontiers in Marine Science, 0, 9, .	2.5	1