

# Philippe D Tortell

## List of Publications by Year in descending order

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Version: 2024-02-01

99  
papers

7,260  
citations

100601

38  
h-index

68831

81  
g-index

102  
all docs

102  
docs citations

102  
times ranked

8805  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved prediction of dimethyl sulfide (DMS) distributions in the northeast subarctic Pacific using machine-learning algorithms. <i>Biogeosciences</i> , 2022, 19, 1705-1721.	1.3	6
2	Interannual Variability in Methane and Nitrous Oxide Concentrations and Sea-to-Air Fluxes Across the North American Arctic Ocean (2015–2019). <i>Global Biogeochemical Cycles</i> , 2022, 36, .	1.9	8
3	Characterization of marine microbial communities around an Arctic seabed hydrocarbon seep at Scott Inlet, Baffin Bay. <i>Science of the Total Environment</i> , 2021, 762, 143961.	3.9	12
4	Potential roles of dimethylsulfoxide in regional sulfur cycling and phytoplankton physiological ecology in the <sc>NE</sc> Subarctic Pacific. <i>Limnology and Oceanography</i> , 2021, 66, 76-94.	1.6	7
5	Covariability of Fraser River sockeye salmon productivity and phytoplankton biomass in the Gulf of Alaska. <i>Fisheries Oceanography</i> , 2021, 30, 666.	0.9	1
6	$\delta^{15}\text{N} / \text{N}_2$ as a tracer of mixed layer net community production: Theoretical considerations and proof-of-concept. <i>Limnology and Oceanography: Methods</i> , 2021, 19, 497-509.	1.0	4
7	First estimation of the diffusive methane flux and concentrations from Lake Winnipeg, a large, shallow and eutrophic lake. <i>Journal of Great Lakes Research</i> , 2021, 47, 741-750.	0.8	4
8	Single-Turnover Variable Chlorophyll Fluorescence as a Tool for Assessing Phytoplankton Photosynthesis and Primary Productivity: Opportunities, Caveats and Recommendations. <i>Frontiers in Marine Science</i> , 2021, 8, .	1.2	27
9	Anthropogenic and Climatic Contributions to Observed Carbon System Trends in the Northeast Pacific. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006829.	1.9	13
10	$\delta^{15}\text{O}_2 / \text{N}_2$ as a New Tracer of Marine Net Community Production: Application and Evaluation in the Subarctic Northeast Pacific and Canadian Arctic Ocean. <i>Frontiers in Marine Science</i> , 2021, 8, .	1.2	3
11	WTO must ban harmful fisheries subsidies. <i>Science</i> , 2021, 374, 544-544.	6.0	45
12	Irradiance and nutrient-dependent effects on photosynthetic electron transport in Arctic phytoplankton: A comparison of two chlorophyll fluorescence-based approaches to derive primary photochemistry. <i>PLoS ONE</i> , 2021, 16, e0256410.	1.1	4
13	Application of purge and trap-atmospheric pressure chemical ionization-tandem mass spectrometry for the determination of dimethylsulfide in seawater. <i>Limnology and Oceanography: Methods</i> , 2020, 18, 547-559.	1.0	4
14	River Inflow Dominates Methane Emissions in an Arctic Coastal System. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087669.	1.5	18
15	Earth 2020: Science, society, and sustainability in the Anthropocene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 8683-8691.	3.3	28
16	Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. <i>Biogeosciences</i> , 2020, 17, 5809-5828.	1.3	16
17	The Pressure of In Situ Gases Instrument (PIGI) for Autonomous Shipboard Measurement of Dissolved O <sub>2</sub> and N <sub>2</sub> in Surface Ocean Waters. <i>Oceanography</i> , 2020, 33, .	0.5	6
18	Decoupling of $\delta^{15}\text{O}$ and $\delta^{15}\text{N}$ and particulate organic carbon dynamics in nearshore surface ocean waters. <i>Biogeosciences</i> , 2020, 17, 3277-3298.	1.3	3

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19	Time-series CH <sub>4</sub> measurements from Saanich Inlet, BC, a seasonally anoxic fjord. <i>Marine Chemistry</i> , 2019, 215, 103664.	0.9	10
20	Diurnal regulation of photosynthetic light absorption, electron transport and carbon fixation in two contrasting oceanic environments. <i>Biogeosciences</i> , 2019, 16, 1381-1399.	1.3	25
21	Patterns and drivers of dimethylsulfide concentration in the northeast subarctic Pacific across multiple spatial and temporal scales. <i>Biogeosciences</i> , 2019, 16, 1729-1754.	1.3	11
22	A Harmonized Nitrous Oxide (N <sub>2</sub> O) Ocean Observation Network for the 21st Century. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	32
23	Global satellite-observed daily vertical migrations of ocean animals. <i>Nature</i> , 2019, 576, 257-261.	13.7	111
24	Refined Estimates of Net Community Production in the Subarctic Northeast Pacific Derived From <sup>18</sup> O <sub>2</sub> /Ar Measurements With N <sub>2</sub> O-Based Corrections for Vertical Mixing. <i>Global Biogeochemical Cycles</i> , 2018, 32, 326-350.	1.9	19
25	Carbon: Chlorophyll Ratios and Net Primary Productivity of Subarctic Pacific Surface Waters Derived From Autonomous Shipboard Sensors. <i>Global Biogeochemical Cycles</i> , 2018, 32, 267-288.	1.9	32
26	Resistance of Arctic phytoplankton to ocean acidification and enhanced irradiance. <i>Polar Biology</i> , 2018, 41, 399-413.	0.5	23
27	Optically-derived estimates of phytoplankton size class and taxonomic group biomass in the Eastern Subarctic Pacific Ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2018, 136, 107-118.	0.6	10
28	Compensation of ocean acidification effects in Arctic phytoplankton assemblages. <i>Nature Climate Change</i> , 2018, 8, 529-533.	8.1	60
29	A multi-year time-series of N <sub>2</sub> O dynamics in a seasonally anoxic fjord: Saanich Inlet, British Columbia. <i>Limnology and Oceanography</i> , 2018, 63, 524-539.	1.6	16
30	The distribution of methylated sulfur compounds, DMS and DMSP, in Canadian subarctic and Arctic marine waters during summer 2015. <i>Biogeosciences</i> , 2018, 15, 2449-2465.	1.3	25
31	An intercomparison of oceanic methane and nitrous oxide measurements. <i>Biogeosciences</i> , 2018, 15, 5891-5907.	1.3	42
32	Observations of Zooplankton Diel Vertical Migration From High-Resolution Surface Ocean Optical Measurements. <i>Geophysical Research Letters</i> , 2018, 45, 13,396.	1.5	5
33	Methane and nitrous oxide distributions in coastal and open ocean waters of the Northeast Subarctic Pacific during 2015–2016. <i>Marine Chemistry</i> , 2018, 200, 45-56.	0.9	8
34	Methane and nitrous oxide distributions across the North American Arctic Ocean during summer, 2015. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 390-412.	1.0	38
35	Concentrations and cycling of DMS, DMSP, and DMSO in coastal and offshore waters of the Subarctic Pacific during summer, 2010–2011. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 3269-3286.	1.0	25
36	Primary productivity and the coupling of photosynthetic electron transport and carbon fixation in the Arctic Ocean. <i>Limnology and Oceanography</i> , 2017, 62, 898-921.	1.6	43

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37	Processes driving seasonal variability in DMS, DMSP, and DMSO concentrations and turnover in coastal Antarctic waters. <i>Limnology and Oceanography</i> , 2017, 62, 104-124.	1.6	40
38	A compendium of geochemical information from the Saanich Inlet water column. <i>Scientific Data</i> , 2017, 4, 170159.	2.4	29
39	Diurnal variation in the coupling of photosynthetic electron transport and carbon fixation in iron-limited phytoplankton in the NE subarctic Pacific. <i>Biogeosciences</i> , 2016, 13, 1019-1035.	1.3	61
40	Impact of ocean acidification on phytoplankton assemblage, growth, and DMS production following Fe-dust additions in the NE Pacific high-nutrient, low-chlorophyll waters. <i>Biogeosciences</i> , 2016, 13, 1677-1692.	1.3	13
41	Methanotrophic Community Dynamics in a Seasonally Anoxic Fjord: Saanich Inlet, British Columbia. <i>Frontiers in Marine Science</i> , 2016, 3, .	1.2	17
42	Sources of dissolved inorganic carbon to the Canada Basin halocline: A multitracer study. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 2918-2936.	1.0	13
43	Towards a revised climatology of summertime dimethylsulfide concentrations and sea-air fluxes in the Southern Ocean. <i>Environmental Chemistry</i> , 2016, 13, 364.	0.7	25
44	Factors controlling methane and nitrous-oxide variability in the southern British Columbia coastal upwelling system. <i>Marine Chemistry</i> , 2016, 179, 56-67.	0.9	19
45	Biological and physical controls on N <sub>2</sub> , O <sub>2</sub> , and CO <sub>2</sub> distributions in contrasting Southern Ocean surface waters. <i>Global Biogeochemical Cycles</i> , 2015, 29, 994-1013.	1.9	22
46	The imbalance of new and export production in the western Antarctic Peninsula, a potentially "leaky" ecosystem. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1400-1420.	1.9	30
47	Inorganic carbon system dynamics in landfast Arctic sea ice during the early melt period. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 3542-3566.	1.0	20
48	An automated, high throughput method for accurate and precise measurements of dissolved nitrous oxide and methane concentrations in natural waters. <i>Limnology and Oceanography: Methods</i> , 2015, 13, 345-355.	1.0	22
49	Measurement of DMS, DMSO, and DMSP in natural waters by automated sequential chemical analysis. <i>Limnology and Oceanography: Methods</i> , 2015, 13, 451-462.	1.0	17
50	Interacting Effects of Light and Iron Availability on the Coupling of Photosynthetic Electron Transport and CO <sub>2</sub> -Assimilation in Marine Phytoplankton. <i>PLoS ONE</i> , 2015, 10, e0133235.	1.1	76
51	Low temperature reduces the energetic requirement for the CO <sub>2</sub> concentrating mechanism in diatoms. <i>New Phytologist</i> , 2015, 205, 192-201.	3.5	54
52	Slow carboxylation of Rubisco constrains the rate of carbon fixation during Antarctic phytoplankton blooms. <i>New Phytologist</i> , 2015, 205, 172-181.	3.5	93
53	Gross and net production during the spring bloom along the Western Antarctic Peninsula. <i>New Phytologist</i> , 2015, 205, 182-191.	3.5	45
54	Antarctic phytoplankton down-regulate their carbon-concentrating mechanisms under high CO <sub>2</sub> with no change in growth rates. <i>Marine Ecology - Progress Series</i> , 2015, 532, 13-28.	0.9	50

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55	Metabolic balance of coastal Antarctic waters revealed by autonomous $\text{pCO}_2$ and $\delta^{18}\text{O}_2/\text{Ar}$ measurements. <i>Geophysical Research Letters</i> , 2014, 41, 6803-6810.	1.5	58
56	Over-determination of the carbonate system in natural sea-ice brine and assessment of carbonic acid dissociation constants under low temperature, high salinity conditions. <i>Marine Chemistry</i> , 2014, 165, 36-45.	0.9	17
57	Strong shift from $\text{HCO}_3^-$ to $\text{CO}_2$ uptake in <i>Emiliania huxleyi</i> with acidification: new approach unravels acclimation versus short-term pH effects. <i>Photosynthesis Research</i> , 2014, 121, 265-275.	1.6	39
58	Determination of particulate organic carbon sources to the surface mixed layer of the Canada Basin, Arctic Ocean. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 1084-1102.	1.0	18
59	Iron Limitation Modulates Ocean Acidification Effects on Southern Ocean Phytoplankton Communities. <i>PLoS ONE</i> , 2013, 8, e79890.	1.1	88
60	Inorganic C utilization and C isotope fractionation by pelagic and sea ice algal assemblages along the Antarctic continental shelf. <i>Marine Ecology - Progress Series</i> , 2013, 483, 47-66.	0.9	18
61	Evaluating DMS measurements and model results in the Northeast subarctic Pacific from 1996-2010. <i>Biogeochemistry</i> , 2012, 110, 269-285.	1.7	15
62	Influence of regional climate forcing on surface water $\text{pCO}_2$ , $\delta^{18}\text{O}_2/\text{Ar}$ and dimethylsulfide (DMS) along the southern British Columbia coast. <i>Continental Shelf Research</i> , 2012, 47, 119-132.	0.9	25
63	Spatial distribution of $\text{pCO}_2$ , $\delta^{18}\text{O}_2/\text{Ar}$ and dimethylsulfide (DMS) in polynya waters and the sea ice zone of the Amundsen Sea, Antarctica. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2012, 71-76, 77-93.	0.6	52
64	Vertical structure, seasonal drawdown, and net community production in the Ross Sea, Antarctica. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	34
65	High concentrations and turnover rates of DMS, DMSP and DMSO in Antarctic sea ice. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	58
66	Spatial variability and temporal dynamics of surface water $\text{pCO}_2$ , $\delta^{18}\text{O}_2/\text{Ar}$ and dimethylsulfide in the Ross Sea, Antarctica. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2011, 58, 241-259.	0.6	60
67	Fine-scale spatial and temporal variability of surface water dimethylsulfide (DMS) concentrations and sea-air fluxes in the NE Subarctic Pacific. <i>Marine Chemistry</i> , 2011, 126, 63-75.	0.9	29
68	INORGANIC CARBON UTILIZATION BY ROSS SEA PHYTOPLANKTON ACROSS NATURAL AND EXPERIMENTAL $\text{CO}_2$ GRADIENTS. <i>Journal of Phycology</i> , 2010, 46, 433-443.	1.0	25
69	Microbial community dynamics in a seasonally anoxic fjord: Saanich Inlet, British Columbia. <i>Environmental Microbiology</i> , 2010, 12, 172-191.	1.8	198
70	Spatial and temporal variability of the dimethylsulfide to chlorophyll ratio in the surface ocean: an assessment based on phytoplankton group dominance determined from space. <i>Biogeosciences</i> , 2010, 7, 3215-3237.	1.3	10
71	Unveiling a phytoplankton hotspot at a narrow boundary between coastal and offshore waters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 16571-16576.	3.3	74
72	N and O isotope effects during nitrate assimilation by unicellular prokaryotic and eukaryotic plankton cultures. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 1030-1040.	1.6	165

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73	From laboratory manipulations to Earth system models: scaling calcification impacts of ocean acidification. <i>Biogeosciences</i> , 2009, 6, 2611-2623.	1.3	122
74	Metagenome of a Versatile Chemolithoautotroph from Expanding Oceanic Dead Zones. <i>Science</i> , 2009, 326, 578-582.	6.0	312
75	Spatial and temporal variability of biogenic gases during the Southern Ocean spring bloom. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	33
76	High-resolution measurement of Southern Ocean CO <sub>2</sub> and O <sub>2</sub> /Ar by membrane inlet mass spectrometry. <i>Marine Chemistry</i> , 2008, 108, 184-194.	0.9	38
77	Bicarbonate transport and extracellular carbonic anhydrase in marine diatoms. <i>Physiologia Plantarum</i> , 2008, 133, 106-116.	2.6	44
78	A high-resolution survey of DMS, CO <sub>2</sub> , and O <sub>2</sub> /Ar distributions in productive coastal waters. <i>Global Biogeochemical Cycles</i> , 2008, 22, .	1.9	39
79	CO <sub>2</sub> sensitivity of Southern Ocean phytoplankton. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	240
80	Nitrogen and oxygen isotope fractionation during dissimilatory nitrate reduction by denitrifying bacteria. <i>Limnology and Oceanography</i> , 2008, 53, 2533-2545.	1.6	360
81	Inorganic carbon uptake by Southern Ocean phytoplankton. <i>Limnology and Oceanography</i> , 2008, 53, 1266-1278.	1.6	70
82	Isotope disequilibrium and mass spectrometric studies of inorganic carbon acquisition by phytoplankton. <i>Limnology and Oceanography: Methods</i> , 2007, 5, 328-337.	1.0	48
83	Fifty years of ocean observations in the Pacific Northeast. <i>Eos</i> , 2006, 87, 551.	0.1	3
84	A method for nitrite removal in nitrate N and O isotope analyses. <i>Limnology and Oceanography: Methods</i> , 2006, 4, 205-212.	1.0	70
85	Bicarbonate transport and extracellular carbonic anhydrase activity in Bering Sea phytoplankton assemblages: Results from isotope disequilibrium experiments. <i>Limnology and Oceanography</i> , 2006, 51, 2111-2121.	1.6	50
86	Inorganic carbon uptake and intracellular assimilation by subarctic Pacific phytoplankton assemblages. <i>Limnology and Oceanography</i> , 2006, 51, 2102-2110.	1.6	45
87	Dissolved gas measurements in oceanic waters made by membrane inlet mass spectrometry. <i>Limnology and Oceanography: Methods</i> , 2005, 3, 24-37.	1.0	135
88	Small-scale heterogeneity of dissolved gas concentrations in marine continental shelf waters. <i>Geochemistry, Geophysics, Geosystems</i> , 2005, 6, n/a-n/a.	1.0	27
89	Sources of inorganic carbon for phytoplankton in the eastern Subtropical and Equatorial Pacific Ocean. <i>Limnology and Oceanography</i> , 2002, 47, 1012-1022.	1.6	89
90	Acquisition of inorganic carbon by the marine diatom <i>Thalassiosira weissflogii</i> . <i>Functional Plant Biology</i> , 2002, 29, 301.	1.1	85

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91	CO2 effects on taxonomic composition and nutrient utilization in an Equatorial Pacific phytoplankton assemblage. <i>Marine Ecology - Progress Series</i> , 2002, 236, 37-43.	0.9	270
92	Differential effects of iron additions on organic and inorganic carbon production by phytoplankton. <i>Limnology and Oceanography</i> , 2001, 46, 1199-1202.	1.6	23
93	Evolutionary and ecological perspectives on carbon acquisition in phytoplankton. <i>Limnology and Oceanography</i> , 2000, 45, 744-750.	1.6	186
94	Reduced calcification of marine plankton in response to increased atmospheric CO2. <i>Nature</i> , 2000, 407, 364-367.	13.7	1,276
95	Inorganic carbon acquisition in coastal Pacific phytoplankton communities. <i>Limnology and Oceanography</i> , 2000, 45, 1485-1500.	1.6	158
96	Marine bacteria and biogeochemical cycling of iron in the oceans. <i>FEMS Microbiology Ecology</i> , 1999, 29, 1-11.	1.3	169
97	Active uptake of bicarbonate by diatoms. <i>Nature</i> , 1997, 390, 243-244.	13.7	155
98	The role of heterotrophic bacteria in iron-limited ocean ecosystems. <i>Nature</i> , 1996, 383, 330-332.	13.7	255
99	Impact of vertical mixing on summertime net community production in Canadian Arctic and Subarctic waters: Insights from in situ measurements and numerical simulations. <i>Journal of Geophysical Research: Oceans</i> , 0, , .	1.0	1