## Thorsten Dittmar

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4053214/publications.pdf

Version: 2024-02-01

229 papers

27,417 citations

9234 74 h-index 157 g-index

243 all docs 243 docs citations

times ranked

243

18494 citing authors

#	Article	IF	CITATIONS
1	Persistence of soil organic matter as an ecosystem property. Nature, 2011, 478, 49-56.	13.7	4,243
2	A simple and efficient method for the solidâ€phase extraction of dissolved organic matter (SPEâ€DOM) from seawater. Limnology and Oceanography: Methods, 2008, 6, 230-235.	1.0	1,329
3	From mass to structure: an aromaticity index for high-resolution mass data of natural organic matter. Rapid Communications in Mass Spectrometry, 2006, 20, 926-932.	0.7	1,058
4	Organic carbon dynamics in mangrove ecosystems: A review. Aquatic Botany, 2008, 89, 201-219.	0.8	966
5	Mangrove production and carbon sinks: A revision of global budget estimates. Global Biogeochemical Cycles, 2008, 22, .	1.9	812
6	Chemodiversity of dissolved organic matter in lakes driven by climate and hydrology. Nature Communications, 2014, 5, 3804.	5.8	508
7	The biogeochemistry of the river and shelf ecosystem of the Arctic Ocean: a review. Marine Chemistry, 2003, 83, 103-120.	0.9	457
8	Persistence of dissolved organic matter in lakes related to its molecular characteristics. Nature Geoscience, 2015, 8, 454-457.	5.4	457
9	Molecular formulae of marine and terrigenous dissolved organic matter detected by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. Geochimica Et Cosmochimica Acta, 2005, 69, 3299-3308.	1.6	445
10	Global Charcoal Mobilization from Soils via Dissolution and Riverine Transport to the Oceans. Science, 2013, 340, 345-347.	6.0	432
11	Fundamentals of Molecular Formula Assignment to Ultrahigh Resolution Mass Data of Natural Organic Matter. Analytical Chemistry, 2007, 79, 1758-1763.	3.2	414
12	Mangroves, a major source of dissolved organic carbon to the oceans. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	375
13	Iron traps terrestrially derived dissolved organic matter at redox interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10101-10105.	3.3	360
14	Degradation of terrestrially derived macromolecules in the Amazon River. Nature Geoscience, 2013, 6, 530-533.	5.4	300
15	What's in an EEM? Molecular Signatures Associated with Dissolved Organic Fluorescence in Boreal Canada. Environmental Science & Echnology, 2014, 48, 10598-10606.	4.6	292
16	Chemical dispersants can suppress the activity of natural oil-degrading microorganisms. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14900-14905.	3.3	276
17	A heat-induced molecular signature in marine dissolved organic matter. Nature Geoscience, 2009, 2, 175-179.	5.4	265
18	Detecting the signature of permafrost thaw in Arctic rivers. Geophysical Research Letters, 2015, 42, 2830-2835.	1.5	261

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19	Towards a global assessment of pyrogenic carbon from vegetation fires. Global Change Biology, 2016, 22, 76-91.	4.2	256
20	Biogeochemically diverse organic matter in Alpine glaciers and its downstream fate. Nature Geoscience, 2012, 5, 710-714.	5.4	254
21	Tidal pumping drives nutrient and dissolved organic matter dynamics in a Gulf of Mexico subterranean estuary. Geochimica Et Cosmochimica Acta, 2009, 73, 1325-1339.	1.6	245
22	Molecular Fractionation of Dissolved Organic Matter with Metal Salts. Environmental Science & Emp; Technology, 2012, 46, 4419-4426.	4.6	243
23	Dilution limits dissolved organic carbon utilization in the deep ocean. Science, 2015, 348, 331-333.	6.0	230
24	Persistence of dissolved organic matter explained by molecular changes during its passage through soil. Nature Geoscience, 2019, 12, 755-761.	5.4	230
25	The molecular level determination of black carbon in marine dissolved organic matter. Organic Geochemistry, 2008, 39, 396-407.	0.9	222
26	Biogeochemistry of dissolved organic matter in an anoxic intertidal creek bank. Geochimica Et Cosmochimica Acta, 2014, 140, 418-434.	1.6	218
27	Universal molecular structures in natural dissolved organic matter. Nature Communications, 2018, 9, 3178.	5.8	213
28	Photo-lability of deep ocean dissolved black carbon. Biogeosciences, 2012, 9, 1661-1670.	1.3	207
29	Molecular-level changes of dissolved organic matter along the Amazon River-to-ocean continuum. Marine Chemistry, 2015, 177, 218-231.	0.9	206
30	Thermogenic organic matter dissolved in the abyssal ocean. Marine Chemistry, 2006, 102, 208-217.	0.9	196
31	River or mangrove? Tracing major organic matter sources in tropical Brazilian coastal waters. Marine Chemistry, 2001, 73, 253-271.	0.9	190
32	Hailstones: A Window into the Microbial and Chemical Inventory of a Storm Cloud. PLoS ONE, 2013, 8, e53550.	1.1	186
33	Source and biolability of ancient dissolved organic matter in glacier and lake ecosystems on the Tibetan Plateau. Geochimica Et Cosmochimica Acta, 2014, 142, 64-74.	1.6	186
34	Molecular evidence for lignin degradation in sulfate-reducing mangrove sediments (Amazônia, Brazil). Geochimica Et Cosmochimica Acta, 2001, 65, 1417-1428.	1.6	184
35	Driving Forces Behind Nutrient and Organic Matter Dynamics in a Mangrove Tidal Creek in North Brazil. Estuarine, Coastal and Shelf Science, 2001, 52, 249-259.	0.9	184
36	Continuous flux of dissolved black carbon from a vanished tropical forest biome. Nature Geoscience, 2012, 5, 618-622.	5.4	183

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37	Nutrient biogeochemistry in a Gulf of Mexico subterranean estuary and groundwaterâ€derived fluxes to the coastal ocean. Limnology and Oceanography, 2008, 53, 705-718.	1.6	181
38	Origin and biogeochemical cycling of organic nitrogen in the eastern Arctic Ocean as evident from Dand L-amino acids. Geochimica Et Cosmochimica Acta, 2001, 65, 4103-4114.	1.6	173
39	A Method Detection Limit for the Analysis of Natural Organic Matter via Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Analytical Chemistry, 2014, 86, 8376-8382.	3.2	169
40	An intercomparison of three methods for the large-scale isolation of oceanic dissolved organic matter. Marine Chemistry, 2014, 161, 14-19.	0.9	168
41	Inefficient microbial production of refractory dissolved organic matter in the ocean. Nature Communications, 2015, 6, 7422.	5.8	166
42	Linking the Molecular Signature of Heteroatomic Dissolved Organic Matter to Watershed Characteristics in World Rivers. Environmental Science & Environ	4.6	166
43	Heterotrophic organisms dominate nitrogen fixation in the South Pacific Gyre. ISME Journal, 2012, 6, 1238-1249.	4.4	162
44	Microbial and Chemical Characterization of Underwater Fresh Water Springs in the Dead Sea. PLoS ONE, 2012, 7, e38319.	1.1	161
45	Deciphering associations between dissolved organic molecules and bacterial communities in a pelagic marine system. ISME Journal, 2016, 10, 1717-1730.	4.4	155
46	Advanced characterization of marine dissolved organic matter by combining reversed-phase liquid chromatography and FT-ICR-MS. Marine Chemistry, 2008, 111, 233-241.	0.9	154
47	Fate of the Amazon River dissolved organic matter in the tropical Atlantic Ocean. Global Biogeochemical Cycles, 2015, 29, 677-690.	1.9	148
48	Molecular properties of deep-sea dissolved organic matter are predictable by the central limit theorem: Evidence from tandem FT-ICR-MS. Marine Chemistry, 2017, 191, 9-15.	0.9	145
49	Evaluation of the Orbitrap Mass Spectrometer for the Molecular Fingerprinting Analysis of Natural Dissolved Organic Matter. Analytical Chemistry, 2016, 88, 7698-7704.	3.2	135
50	Molecular characterization of dissolved organic matter in a North Brazilian mangrove porewater and mangrove-fringed estuaries by ultrahigh resolution Fourier Transform-Ion Cyclotron Resonance mass spectrometry and excitation/emission spectroscopy. Marine Chemistry, 2007, 105, 15-29.	0.9	134
51	Dissolved Organic Matter in Headwater Streams: Compositional Variability across Climatic Regions of North America. Geochimica Et Cosmochimica Acta, 2012, 94, 95-108.	1.6	116
52	Molecular composition of dissolved organic matter from a wetland plant (Juncus effusus) after photochemical and microbial decomposition (1.25 yr): Common features with deep sea dissolved organic matter. Organic Geochemistry, 2013, 60, 62-71.	0.9	113
53	How Deep-Sea Wood Falls Sustain Chemosynthetic Life. PLoS ONE, 2013, 8, e53590.	1.1	113
54	An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer?. Limnology and Oceanography: Methods, 2020, 18, 235-258.	1.0	109

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55	Do mangroves rather than rivers provide nutrients to coastal environments south of the Amazon River? Evidence from long-term flux measurements. Marine Ecology - Progress Series, 2001, 213, 67-77.	0.9	107
56	Dissolved organic matter composition and photochemical transformations in the northern North Pacific Ocean. Geophysical Research Letters, 2015, 42, 863-870.	1.5	106
57	Aerosols as a source of dissolved black carbon to the ocean. Nature Communications, 2017, 8, 510.	5.8	106
58	Comprehensive characterization of marine dissolved organic matter by Fourier transform ion cyclotron resonance mass spectrometry with electrospray and atmospheric pressure photoionization. Rapid Communications in Mass Spectrometry, 2010, 24, 643-650.	0.7	104
59	Efficient removal of recalcitrant deep-ocean dissolved organic matter during hydrothermalÂcirculation. Nature Geoscience, 2015, 8, 856-860.	5.4	104
60	Benthic-pelagic coupling of nutrients and dissolved organic matter composition in an intertidal sandy beach. Marine Chemistry, 2015, 176, 150-163.	0.9	102
61	Chemical and microbial diversity covary in fresh water to influence ecosystem functioning. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24689-24695.	3.3	98
62	Tracing suspended organic nitrogen from the Yangtze River catchment into the East China Sea. Marine Chemistry, 2007, 107, 367-377.	0.9	97
63	Molecular Signatures of Biogeochemical Transformations in Dissolved Organic Matter from Ten World Rivers. Frontiers in Earth Science, 2016, 4, .	0.8	96
64	The Exometabolome of Two Model Strains of the Roseobacter Group: A Marketplace of Microbial Metabolites. Frontiers in Microbiology, 2017, 8, 1985.	1.5	96
65	Molecular Fractionation of Dissolved Organic Matter in a Shallow Subterranean Estuary: The Role of the Iron Curtain. Environmental Science & Eamp; Technology, 2017, 51, 1312-1320.	4.6	95
66	Climate warming alters subsoil but not topsoil carbon dynamics in alpine grassland. Global Change Biology, 2019, 25, 4383-4393.	4.2	94
67	Recalcitrant dissolved organic matter in the ocean: major contribution of small amphiphilics. Marine Chemistry, 2003, 82, 115-123.	0.9	92
68	The drivers of biogeochemistry in beach ecosystems: A cross-shore transect from the dunes to the low-water line. Marine Chemistry, 2017, 190, 35-50.	0.9	90
69	Characterization of dissolved organic matter across the Subtropical Convergence off the South Island, New Zealand. Marine Chemistry, 2011, 123, 99-110.	0.9	87
70	Reasons Behind the Long-Term Stability of Dissolved Organic Matter. , 2015, , 369-388.		86
71	Enigmatic persistence of dissolved organic matter in the ocean. Nature Reviews Earth & Environment, 2021, 2, 570-583.	12.2	84
72	Utilizing colored dissolved organic matter to derive dissolved black carbon export by arctic rivers. Frontiers in Earth Science, 2015, 3, .	0.8	83

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73	The Molecular Composition of Dissolved Organic Matter in Forest Soils as a Function of pH and Temperature. PLoS ONE, 2015, 10, e0119188.	1.1	83
74	Dissolved Organic Matter in Aquatic Systems. , 2014, , 125-156.		82
75	A novel molecular approach for tracing terrigenous dissolved organic matter into the deep ocean. Global Biogeochemical Cycles, 2016, 30, 689-699.	1.9	81
76	Low volume quantification of dissolved organic carbon and dissolved nitrogen. Limnology and Oceanography: Methods, 2012, 10, 347-352.	1.0	79
77	Comparing molecular composition of dissolved organic matter in soil and stream water: Influence of land use and chemical characteristics. Science of the Total Environment, 2016, 571, 142-152.	3.9	79
78	Carbon, nutrient and trace metal cycling in sandy sediments: AÂcomparison of high-energy beaches and backbarrier tidal flats. Estuarine, Coastal and Shelf Science, 2015, 159, 1-14.	0.9	78
79	Spatial Dependence of Reduced Sulfur in Everglades Dissolved Organic Matter Controlled by Sulfate Enrichment. Environmental Science & Enrichment. Environmental Science & Enrichment. Environmental Science & Enrichment. Environmental Science & Enrichment.	4.6	78
80	Composition and Transformation of Dissolved Organic Matter in the Baltic Sea. Frontiers in Earth Science, 2017, 5, .	0.8	76
81	Associations Between the Molecular and Optical Properties of Dissolved Organic Matter in the Florida Everglades, a Model Coastal Wetland System. Frontiers in Chemistry, 2015, 3, 66.	1.8	74
82	Biphasic cellular adaptations and ecological implications of <i>Alteromonas macleodii</i> degrading a mixture of algal polysaccharides. ISME Journal, 2019, 13, 92-103.	4.4	74
83	ICBM-OCEAN: Processing Ultrahigh-Resolution Mass Spectrometry Data of Complex Molecular Mixtures. Analytical Chemistry, 2020, 92, 6832-6838.	3.2	74
84	Molecular alteration of marine dissolved organic matter under experimental hydrothermal conditions. Geochimica Et Cosmochimica Acta, 2016, 175, 68-85.	1.6	73
85	Microbial decomposition of marine dissolved organic matter in cool oceanic crust. Nature Geoscience, 2018, 11, 334-339.	5.4	71
86	Ammoniaâ€oxidizing archaea release a suite of organic compounds potentially fueling prokaryotic heterotrophy in the ocean. Environmental Microbiology, 2019, 21, 4062-4075.	1.8	71
87	Fires prime terrestrial organic carbon for riverine export to the global oceans. Nature Communications, 2020, 11, 2791.	5.8	71
88	Illuminating the deep: Molecular signatures of photochemical alteration of dissolved organic matter from North Atlantic Deep Water. Marine Chemistry, 2015, 177, 318-324.	0.9	69
89	Porewater exchange as a driver of carbon dynamics across a terrestrial-marine transect: Insights from coupled 222Rn and pCO2 observations in the German Wadden Sea. Marine Chemistry, 2015, 171, 10-20.	0.9	68
90	Latitude and pH driven trends in the molecular composition of DOM across a north south transect along the Yenisei River. Geochimica Et Cosmochimica Acta, 2013, 123, 93-105.	1.6	67

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91	Experimental Evidence for Abiotic Sulfurization of Marine Dissolved Organic Matter. Frontiers in Marine Science, 2017, 4, .	1.2	67
92	Discharge of dissolved black carbon from a fireâ€affected intertidal system. Limnology and Oceanography, 2012, 57, 1171-1181.	1.6	66
93	Environmental Drivers of Dissolved Organic Matter Molecular Composition in the Delaware Estuary. Frontiers in Earth Science, 2016, 4, .	0.8	65
94	Uranium and barium cycling in a salt wedge subterranean estuary: The influence of tidal pumping. Chemical Geology, 2011, 287, 114-123.	1.4	64
95	Functional Molecular Diversity of Marine Dissolved Organic Matter Is Reduced during Degradation. Frontiers in Marine Science, 2017, 4, .	1.2	64
96	Influence of Ocean Acidification on a Natural Winter-to-Summer Plankton Succession: First Insights from a Long-Term Mesocosm Study Draw Attention to Periods of Low Nutrient Concentrations. PLoS ONE, 2016, 11, e0159068.	1.1	64
97	Tracing terrigenous dissolved organic matter and its photochemical decay in the ocean by using liquid chromatography/mass spectrometry. Marine Chemistry, 2007, 107, 378-387.	0.9	63
98	Comparison of gas with liquid chromatography for the determination of benzenepolycarboxylic acids as molecular tracers of black carbon. Organic Geochemistry, 2011, 42, 275-282.	0.9	62
99	Mesopelagic N2 Fixation Related to Organic Matter Composition in the Solomon and Bismarck Seas (Southwest Pacific). PLoS ONE, 2015, 10, e0143775.	1.1	62
100	Nutrient dynamics in a mangrove creek (North Brazil) during the dry season. Mangroves and Salt Marshes, 1999, 3, 185-195.	0.6	61
101	Investigating the potential of solid-phase extraction and Fourier-transform ion cyclotron resonance mass spectrometry (FT-ICR-MS) for the isolation and identification of dissolved metal–organic complexes from natural waters. Marine Chemistry, 2015, 173, 78-92.	0.9	60
102	Molecular evidence for abiotic sulfurization of dissolved organic matter in marine shallow hydrothermal systems. Geochimica Et Cosmochimica Acta, 2016, 190, 35-52.	1.6	60
103	Title is missing!. Mangroves and Salt Marshes, 1999, 3, 9-15.	0.6	58
104	Molecular Determinants of Dissolved Organic Matter Reactivity in Lake Water. Frontiers in Earth Science, 2017, 5, .	0.8	58
105	Thermally altered marine dissolved organic matter in hydrothermal fluids. Organic Geochemistry, 2017, 110, 73-86.	0.9	57
106	Exo-Metabolome of Pseudovibrio sp. FO-BEG1 Analyzed by Ultra-High Resolution Mass Spectrometry and the Effect of Phosphate Limitation. PLoS ONE, 2014, 9, e96038.	1.1	57
107	Dynamics and stoichiometry of nutrients and phytoplankton in waters influenced by the oxygen minimum zone in the eastern tropical Pacific. Deep-Sea Research Part I: Oceanographic Research Papers, 2012, 62, 20-31.	0.6	56
108	Dissolved organic matter in pore water of Arctic Ocean sediments: Environmental influence on molecular composition. Organic Geochemistry, 2016, 97, 41-52.	0.9	56

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109	Molecular Hysteresis: Hydrologically Driven Changes in Riverine Dissolved Organic Matter Chemistry During a Storm Event. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 759-774.	1.3	55
110	Uncoupling of Bacterial and Terrigenous Dissolved Organic Matter Dynamics in Decomposition Experiments. PLoS ONE, 2014, 9, e93945.	1.1	54
111	Controls of Land Use and the River Continuum Concept on Dissolved Organic Matter Composition in an Anthropogenically Disturbed Subtropical Watershed. Environmental Science &	4.6	54
112	Novel insights into the molecular structure of non-volatile marine dissolved organic sulfur. Marine Chemistry, 2015, 168, 86-94.	0.9	53
113	Low photolability of yedoma permafrost dissolved organic carbon. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 200-211.	1.3	52
114	The black carbon cycle and its role in the Earth system. Nature Reviews Earth & Environment, 2022, 3, 516-532.	12.2	52
115	Conservation of dissolved organic matter molecular composition during mixing of the deep water masses of the northeast Atlantic Ocean. Marine Chemistry, 2015, 177, 288-297.	0.9	51
116	Emergence of the Reactivity Continuum of Organic Matter from Kinetics of a Multitude of Individual Molecular Constituents. Environmental Science & Env	4.6	51
117	Nitrogen Cycling of Active Bacteria within Oligotrophic Sediment of the Mid-Atlantic Ridge Flank. Geomicrobiology Journal, 2018, 35, 468-483.	1.0	50
118	Does the Chemodiversity of Bacterial Exometabolomes Sustain the Chemodiversity of Marine Dissolved Organic Matter?. Frontiers in Microbiology, 2019, 10, 215.	1.5	50
119	Acidification and warming affect prominent bacteria in two seasonal phytoplankton bloom mesocosms. Environmental Microbiology, 2016, 18, 4579-4595.	1.8	49
120	The Optical, Chemical, and Molecular Dissolved Organic Matter Succession Along a Boreal Soilâ€Streamâ€River Continuum. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2892-2908.	1.3	49
121	Influence of Ocean Acidification and Deep Water Upwelling on Oligotrophic Plankton Communities in the Subtropical North Atlantic: Insights from an In situ Mesocosm Study. Frontiers in Marine Science, 2017, 4, .	1.2	49
122	Molecular evidence for rapid dissolved organic matter turnover in Arctic fjords. Marine Chemistry, 2014, 160, 1-10.	0.9	48
123	Bacterial community structure and dissolved organic matter in repeatedly flooded subsurface karst water pools. FEMS Microbiology Ecology, 2014, 89, 111-126.	1.3	48
124	Bioavailability and molecular composition of dissolved organic matter from a diffuse hydrothermal system. Marine Chemistry, 2015, 177, 257-266.	0.9	48
125	Short-Term Dynamics of North Sea Bacterioplankton-Dissolved Organic Matter Coherence on Molecular Level. Frontiers in Microbiology, 2016, 7, 321.	1.5	48
126	Molecular and Optical Properties of Tree-Derived Dissolved Organic Matter in Throughfall and Stemflow from Live Oaks and Eastern Red Cedar. Frontiers in Earth Science, 2017, 5, .	0.8	48

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127	Genomic, metabolic and phenotypic variability shapes ecological differentiation and intraspecies interactions of Alteromonas macleodii. Scientific Reports, 2020, 10, 809.	1.6	48
128	Marked isotopic variability within and between the Amazon River and marine dissolved black carbon pools. Nature Communications, 2019, 10, 4018.	5.8	47
129	Ecosystemâ€Specific Composition of Dissolved Organic Matter. Vadose Zone Journal, 2014, 13, 1-10.	1.3	46
130	Effects of ocean acidification on marine dissolved organic matter are not detectable over the succession of phytoplankton blooms. Science Advances, 2015, 1, e1500531.	4.7	45
131	High pore-water derived CO2 and CH4 emissions from a macro-tidal mangrove creek in the Amazon region. Geochimica Et Cosmochimica Acta, 2019, 247, 106-120.	1.6	45
132	Enhanced carbon overconsumption in response to increasing temperatures during a mesocosm experiment. Biogeosciences, 2012, 9, 3531-3545.	1.3	44
133	Basinâ€wide N <sub>2</sub> fixation in the deep waters of the Mediterranean Sea. Global Biogeochemical Cycles, 2016, 30, 952-961.	1.9	43
134	Molecular characterization of dissolved black nitrogen via electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. Organic Geochemistry, 2015, 79, 21-30.	0.9	42
135	Biodegradation of crude oil and dispersants in deep seawater from the Gulf of Mexico: Insights from ultra-high resolution mass spectrometry. Deep-Sea Research Part II: Topical Studies in Oceanography, 2016, 129, 108-118.	0.6	42
136	Diversity of bacterial communities and dissolved organic matter in a temperate estuary. FEMS Microbiology Ecology, 2018, 94, .	1.3	42
137	Linking optical and molecular signatures of dissolved organic matter in the Mediterranean Sea. Scientific Reports, 2017, 7, 3436.	1.6	41
138	Molecular composition of dissolved organic matter in the Mediterranean Sea. Limnology and Oceanography, 2017, 62, 2699-2712.	1.6	41
139	Spatial and Temporal Patterns of Pore Water Chemistry in the Inter-Tidal Zone of a High Energy Beach. Frontiers in Marine Science, 2019, 6, .	1.2	41
140	Long-term stability of marine dissolved organic carbon emerges from a neutral network of compounds and microbes. Scientific Reports, 2019, 9, 17780.	1.6	41
141	Seasonal and spatial variability of dissolved organic matter composition in the lower Amazon River. Biogeochemistry, 2016, 131, 281-302.	1.7	40
142	Climate-driven shifts in sediment chemistry enhance methane production in northern lakes. Nature Communications, 2018, 9, 1801.	5.8	39
143	Land Use Controls on the Spatial Variability of Dissolved Black Carbon in a Subtropical Watershed. Environmental Science & Dissolved Black Carbon in a Subtropical Watershed.	4.6	39
144	Photochemical Alteration of Dissolved Organic Sulfur from Sulfidic Porewater. Environmental Science &	4.6	38

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145	Dissolved Black Carbon in the Headwaters-to-Ocean Continuum of ParaÃba Do Sul River, Brazil. Frontiers in Earth Science, 2017, 5, .	0.8	38
146	Molecular composition and origin of water-soluble organic matter in marine aerosols in the Pacific off China. Atmospheric Environment, 2018, 191, 27-35.	1.9	38
147	Different Responses of Dissolved Black Carbon and Dissolved Lignin to Seasonal Hydrological Changes and an Extreme Rain Event. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 479-493.	1.3	38
148	Export of terrigenous dissolved organic matter in a broad continental shelf. Limnology and Oceanography, 2017, 62, 1718-1731.	1.6	36
149	Microbially-Mediated Transformations of Estuarine Dissolved Organic Matter. Frontiers in Marine Science, 2017, 4, .	1.2	36
150	Fossil Fuel Combustion Emission From South Asia Influences Precipitation Dissolved Organic Carbon Reaching the Remote Tibetan Plateau: Isotopic and Molecular Evidence. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6248-6258.	1.2	34
151	Sulfurization of dissolved organic matter in the anoxic water column of the Black Sea. Science Advances, 2021, 7, .	4.7	34
152	Linking molecular size, composition and carbon turnover of extractable soil microbial compounds. Soil Biology and Biochemistry, 2016, 100, 66-73.	4.2	33
153	Improved Mass Accuracy and Isotope Confirmation through Alignment of Ultrahigh-Resolution Mass Spectra of Complex Natural Mixtures. Analytical Chemistry, 2020, 92, 2558-2565.	3.2	33
154	Molecular Signals of Heterogeneous Terrestrial Environments Identified in Dissolved Organic Matter: A Comparative Analysis of Orbitrap and Ion Cyclotron Resonance Mass Spectrometers. Frontiers in Earth Science, $2018, 6, .$	0.8	32
155	Rapid microbial diversification of dissolved organic matter in oceanic surface waters leads to carbon sequestration. Scientific Reports, 2020, 10, 13025.	1.6	32
156	Hydrochemical processes controlling arsenic and heavy metal contamination in the Elqui river system (Chile). Science of the Total Environment, 2004, 325, 193-207.	3.9	31
157	Mangrove inundation and nutrient dynamics from a GIS perspective. Wetlands Ecology and Management, 2004, 12, 81-86.	0.7	30
158	Evidence for terrigenous dissolved organic nitrogen in the Arctic deep sea. Limnology and Oceanography, 2004, 49, 148-156.	1.6	29
159	Production, partitioning and stoichiometry of organic matter under variable nutrient supply during mesocosm experiments in the tropical Pacific and Atlantic Ocean. Biogeosciences, 2012, 9, 4629-4643.	1.3	29
160	Non-conservative behavior of fluorescent dissolved organic matter (FDOM) within a subterranean estuary. Continental Shelf Research, 2015, 110, 183-190.	0.9	29
161	Questions remain about the biolability of dissolved black carbon along the combustion continuum. Nature Communications, 2021, 12, 4281.	5.8	28
162	The Analysis of Amino Acids in Seawater. , 2009, , .		28

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163	Marine Dissolved Organic Matter Shares Thousands of Molecular Formulae Yet Differs Structurally across Major Water Masses. Environmental Science & Environmental Science & 2022, 56, 3758-3769.	4.6	28
164	Interaction between iron and dissolved organic matter in a marine shallow hydrothermal system off Dominica Island (Lesser Antilles). Marine Chemistry, 2015, 177, 677-686.	0.9	26
165	Bottled aqua incognita: microbiota assembly and dissolved organic matter diversity in natural mineral waters. Microbiome, 2017, 5, 126.	4.9	26
166	Impact of UV radiation on DOM transformation on molecular level using FT-ICR-MS and PARAFAC. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 230, 118027.	2.0	26
167	Carbon and alkalinity outwelling across the <scp>groundwaterâ€reekâ€shelf</scp> continuum off Amazonian mangroves. Limnology and Oceanography Letters, 2021, 6, 369-378.	1.6	26
168	Fe- and Cu-Complex Formation with Artificial Ligands Investigated by Ultra-High Resolution Fourier-Transform ion Cyclotron Resonance Mass Spectrometry (FT-ICR-MS): Implications for Natural Metal-Organic Complex Studies. Frontiers in Marine Science, 2016, 3, .	1.2	25
169	Reply to Prince et al.: Ability of chemical dispersants to reduce oil spill impacts remains unclear.  Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1422-E1423.	3.3	25
170	Droughtâ€induced variability in dissolved organic matter composition in a marshâ€dominated estuary. Geophysical Research Letters, 2015, 42, 6446-6453.	1.5	24
171	Analytical and Computational Advances, Opportunities, and Challenges in Marine Organic Biogeochemistry in an Era of "Omics― Frontiers in Marine Science, 2020, 7, .	1.2	24
172	Can primary production contribute non-labile organic matter in the sea: Amino acid enantiomers along the coast south of the Changjiang Estuary in May. Journal of Marine Systems, 2014, 129, 343-349.	0.9	23
173	Non-conservative Behavior of Dissolved Organic Matter and Trace Metals (Mn, Fe, Ba) Driven by Porewater Exchange in a Subtropical Mangrove-Estuary. Frontiers in Marine Science, 2019, 6, .	1.2	22
174	Uncoupled organic matter burial and quality in boreal lake sediments over the Holocene. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1751-1763.	1.3	21
175	Do Regional Aerosols Contribute to the Riverine Export of Dissolved Black Carbon?. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2925-2938.	1.3	21
176	Fourier transform ion cyclotron resonance mass spectrometrical analysis of raw fermented cocoa beans of Cameroon and Ivory Coast origin. Food Research International, 2014, 64, 958-961.	2.9	20
177	Extraordinary slow degradation of dissolved organic carbon (DOC) in a cold marginal sea. Scientific Reports, 2015, 5, 13808.	1.6	19
178	Phosphate Limitation Triggers the Dissolution of Precipitated Iron by the Marine Bacterium Pseudovibrio sp. FO-BEG1. Frontiers in Microbiology, 2017, 8, 364.	1.5	19
179	Inorganic and organic iron and copper species of the subterranean estuary: Origins and fate. Geochimica Et Cosmochimica Acta, 2019, 259, 211-232.	1.6	19
180	Riverine mixing at the molecular scale – An ultrahigh-resolution mass spectrometry study on dissolved organic matter and selected metals in the Amazon confluence zone (Manaus, Brazil). Organic Geochemistry, 2019, 129, 45-62.	0.9	18

#	Article	IF	Citations
181	Accumulation of DOC in the South Pacific Subtropical Gyre from a molecular perspective. Marine Chemistry, 2021, 231, 103955.	0.9	18
182	Marine dissolved organic matter: a vast and unexplored molecular space. Applied Microbiology and Biotechnology, 2021, 105, 7225-7239.	1.7	18
183	Substrate Use of Pseudovibrio sp. Growing in Ultra-Oligotrophic Seawater. PLoS ONE, 2015, 10, e0121675.	1.1	17
184	Differential responses of marine, mesohaline and oligohaline bacterial communities to the addition of terrigenous carbon. Environmental Microbiology, 2017, 19, 3098-3117.	1.8	17
185	Plant diversity enhances production and downward transport of biodegradable dissolved organic matter. Journal of Ecology, 2021, 109, 1284-1297.	1.9	17
186	Environmental Controls on the Riverine Export of Dissolved Black Carbon. Global Biogeochemical Cycles, 2019, 33, 849-874.	1.9	16
187	Dissolved Organic Matter Processing in Pristine Antarctic Streams. Environmental Science & Emp; Technology, 2021, 55, 10175-10185.	4.6	16
188	Dissolved organic matter sources in glacierized watersheds delineated through compositional and carbon isotopic modeling. Limnology and Oceanography, 2021, 66, 438-451.	1.6	16
189	Ocean Acidification Experiments in Large-Scale Mesocosms Reveal Similar Dynamics of Dissolved Organic Matter Production and Biotransformation. Frontiers in Marine Science, 2017, 4, .	1.2	15
190	Aphotic N <sub>2</sub> fixation along an oligotrophic to ultraoligotrophic transect in the western tropical South Pacific Ocean. Biogeosciences, 2018, 15, 3107-3119.	1.3	15
191	Molecular Traits of Dissolved Organic Matter in the Subterranean Estuary of a High-Energy Beach: Indications of Sources and Sinks. Frontiers in Marine Science, 2021, 8, .	1.2	15
192	Stratification and the distribution of phytoplankton, nutrients, inorganic carbon, and sulfur in the surface waters of Weddell Sea leads. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 988-999.	0.6	14
193	Organic Molecular Signatures of the Congo River and Comparison to the Amazon. Global Biogeochemical Cycles, 2022, 36, .	1.9	14
194	Molecular signatures of dissolved organic matter in a tropical karst system. Organic Geochemistry, 2017, 113, 141-149.	0.9	13
195	Molecular Composition of Dissolved Organic Matter in Sediment Porewater of the Arctic Deep-Sea Observatory HAUSGARTEN (Fram Strait). Frontiers in Marine Science, 2020, 7, .	1.2	13
196	Natural Asphalt Seeps Are Potential Sources for Recalcitrant Oceanic Dissolved Organic Sulfur and Dissolved Black Carbon. Environmental Science & Envi	4.6	13
197	Biogeochemical cycling of molybdenum and thallium during a phytoplankton summer bloom: A mesocosm study. Marine Chemistry, 2021, 229, 103910.	0.9	12
198	The evolution of stream dissolved organic matter composition following glacier retreat in coastal watersheds of southeast Alaska. Biogeochemistry, 2023, 164, 99-116.	1.7	12

#	Article	IF	Citations
199	Drivers of Organic Molecular Signatures in the Amazon River. Global Biogeochemical Cycles, 2021, 35, e2021GB006938.	1.9	12
200	Mangrove microbiome reveals importance of sulfur metabolism in tropical coastal waters. Science of the Total Environment, 2022, 813, 151889.	3.9	12
201	Response to Comment on "Dilution limits dissolved organic carbon utilization in the deep ocean― Science, 2015, 350, 1483-1483.	6.0	11
202	Biogeochemical Impacts of a Black Carbon Wet Deposition Event in Halong Bay, Vietnam. Frontiers in Marine Science, 2019, 6, .	1.2	11
203	Niche partitioning by photosynthetic plankton as a driver of CO2-fixation across the oligotrophic South Pacific Subtropical Ocean. ISME Journal, 2022, 16, 465-476.	4.4	10
204	Microbial Physiology Governs the Oceanic Distribution of Dissolved Organic Carbon in a Scenario of Equal Degradability. Frontiers in Marine Science, 2020, 7, .	1.2	9
205	Adaptations of microbial communities and dissolved organics to seasonal pressures in a mesotrophic coastal Mediterranean lake. Environmental Microbiology, 2022, 24, 2282-2298.	1.8	9
206	Dissolved Organic Matter Cycling in the Coastal Upwelling System Off Central Peru During an "El Niño―Year. Frontiers in Marine Science, 2019, 6, .	1.2	8
207	Fourier transform ion cyclotron resonance mass spectrometric analysis of NSO-compounds generated in hydrothermally altered sediments from the Escanaba Trough, northeastern Pacific Ocean. Organic Geochemistry, 2020, 149, 104085.	0.9	8
208	Controls on turnover of marine dissolved organic matter—testing the null hypothesis of purely concentrationâ€driven uptake: Comment on Shen and Benner, "Molecular properties are a primary control on the microbial utilization of dissolved organic matter in the oceanâ€. Limnology and Oceanography, 2022, 67, 673-679.	1.6	8
209	Interplay between microbial community composition and chemodiversity of dissolved organic matter throughout the Black Sea water column redox gradient. Limnology and Oceanography, 2022, 67, 329-347.	1.6	8
210	Comment on "Dissolved organic sulfur in the ocean: Biogeochemistry of a petagram inventoryâ€. Science, 2017, 356, 813-813.	6.0	7
211	Travel Time and Source Variation Explain the Molecular Transformation of Dissolved Organic Matter in an Alpine Stream Network. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005616.	1.3	7
212	Antioxidant Activity and Phenolic Content of Marine Dissolved Organic Matter and Their Relation to Molecular Composition. Frontiers in Marine Science, 2020, 7, .	1.2	7
213	Imprint of Kairei and Pelagia deep-sea hydrothermal systems (Indian Ocean) on marine dissolved organic matter. Organic Geochemistry, 2021, 152, 104141.	0.9	7
214	Organic Matter and Mangrove Productivity. , 2010, , 175-193.		6
215	Evaluation of Copper Oxide Oxidation for Quantification of Lignin in Municipal Solid Waste. Environmental Engineering Science, 2015, 32, 486-496.	0.8	6
216	Seasonal dynamics of atmospheric and river inputs of black carbon, and impacts on biogeochemical cycles in Halong Bay, Vietnam. Elementa, 2017, 5, .	1.1	6

#	Article	IF	CITATIONS
217	Biodegradability of hydrothermally altered deep-sea dissolved organic matter. Marine Chemistry, 2019, 217, 103706.	0.9	6
218	The carbon and nitrogen budget of <i>Desmophyllum dianthus</i> â€"a voracious cold-water coral thriving in an acidified Patagonian fjord. PeerJ, 2021, 9, e12609.	0.9	6
219	Exploring the Suitability of Ecosystem Metabolomes to Assess Imprints of Brownification and Nutrient Enrichment on Lakes. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005903.	1.3	5
220	Dissolved organic compounds with synchronous dynamics share chemical properties and origin. Limnology and Oceanography, 2021, 66, 4001-4016.	1.6	5
221	Biogeochemical thallium cycling during a mesocosm phytoplankton spring bloom: Biotic versus abiotic drivers. Geochimica Et Cosmochimica Acta, 2021, 313, 257-276.	1.6	5
222	The detection of bacterial exometabolites in marine dissolved organic matter through ultrahighâ€resolution mass spectrometry. Limnology and Oceanography: Methods, 2022, 20, 350-360.	1.0	5
223	From mass to structure: an aromaticity index for high-resolution mass data of natural organic matter. , 2006, 20, 926.		4
224	Nocturnal dissolved organic matter release by turf algae and its role in the microbialization of reefs. Functional Ecology, 2022, 36, 2104-2118.	1.7	4
225	Tools for Studying Biogeochemical Connectivity Among Tropical Coastal Ecosystems. , 2009, , 425-455.		3
226	Dem Kohlenstoff im Meer auf der Spur. Nachrichten Aus Der Chemie, 2009, 57, 387-391.	0.0	1
227	The Biogeochemistry of the Caeté Mangrove-Shelf System. Ecological Studies, 2010, , 45-67.	0.4	1
228	When Forests Take Over After Land Abandonment: Dissolved Organic Matter Response in Headwater Mountain Streams. Frontiers in Water, 2021, 3, .	1.0	1
229	Editorial: Current Topics in Marine Organic Biogeochemical Research. Frontiers in Marine Science, 2020, 7, .	1.2	O