

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

9264

74
h-index

6471

157
g-index

243
all docs

243
docs citations

243
times ranked

18494
citing authors

#	ARTICLE	IF	CITATIONS
1	Persistence of soil organic matter as an ecosystem property. <i>Nature</i> , 2011, 478, 49-56.	27.8	4,243
2	A simple and efficient method for the solid-phase extraction of dissolved organic matter (SPE- DOM) from seawater. <i>Limnology and Oceanography: Methods</i> , 2008, 6, 230-235.	2.0	1,329
3	From mass to structure: an aromaticity index for high-resolution mass data of natural organic matter. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 926-932.	1.5	1,058
4	Organic carbon dynamics in mangrove ecosystems: A review. <i>Aquatic Botany</i> , 2008, 89, 201-219.	1.6	966
5	Mangrove production and carbon sinks: A revision of global budget estimates. <i>Global Biogeochemical Cycles</i> , 2008, 22, .	4.9	812
6	Chemodiversity of dissolved organic matter in lakes driven by climate and hydrology. <i>Nature Communications</i> , 2014, 5, 3804.	12.8	508
7	The biogeochemistry of the river and shelf ecosystem of the Arctic Ocean: a review. <i>Marine Chemistry</i> , 2003, 83, 103-120.	2.3	457
8	Persistence of dissolved organic matter in lakes related to its molecular characteristics. <i>Nature Geoscience</i> , 2015, 8, 454-457.	12.9	457
9	Molecular formulae of marine and terrigenous dissolved organic matter detected by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 3299-3308.	3.9	445
10	Global Charcoal Mobilization from Soils via Dissolution and Riverine Transport to the Oceans. <i>Science</i> , 2013, 340, 345-347.	12.6	432
11	Fundamentals of Molecular Formula Assignment to Ultrahigh Resolution Mass Data of Natural Organic Matter. <i>Analytical Chemistry</i> , 2007, 79, 1758-1763.	6.5	414
12	Mangroves, a major source of dissolved organic carbon to the oceans. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	4.9	375
13	Iron traps terrestrially derived dissolved organic matter at redox interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10101-10105.	7.1	360
14	Degradation of terrestrially derived macromolecules in the Amazon River. <i>Nature Geoscience</i> , 2013, 6, 530-533.	12.9	300
15	What are TM s in an EEM? Molecular Signatures Associated with Dissolved Organic Fluorescence in Boreal Canada. <i>Environmental Science & Technology</i> , 2014, 48, 10598-10606.	10.0	292
16	Chemical dispersants can suppress the activity of natural oil-degrading microorganisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14900-14905.	7.1	276
17	A heat-induced molecular signature in marine dissolved organic matter. <i>Nature Geoscience</i> , 2009, 2, 175-179.	12.9	265
18	Detecting the signature of permafrost thaw in Arctic rivers. <i>Geophysical Research Letters</i> , 2015, 42, 2830-2835.	4.0	261

#	ARTICLE	IF	CITATIONS
19	Towards a global assessment of pyrogenic carbon from vegetation fires. <i>Global Change Biology</i> , 2016, 22, 76-91.	9.5	256
20	Biogeochemically diverse organic matter in Alpine glaciers and its downstream fate. <i>Nature Geoscience</i> , 2012, 5, 710-714.	12.9	254
21	Tidal pumping drives nutrient and dissolved organic matter dynamics in a Gulf of Mexico subterranean estuary. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1325-1339.	3.9	245
22	Molecular Fractionation of Dissolved Organic Matter with Metal Salts. <i>Environmental Science & Technology</i> , 2012, 46, 4419-4426.	10.0	243
23	Dilution limits dissolved organic carbon utilization in the deep ocean. <i>Science</i> , 2015, 348, 331-333.	12.6	230
24	Persistence of dissolved organic matter explained by molecular changes during its passage through soil. <i>Nature Geoscience</i> , 2019, 12, 755-761.	12.9	230
25	The molecular level determination of black carbon in marine dissolved organic matter. <i>Organic Geochemistry</i> , 2008, 39, 396-407.	1.8	222
26	Biogeochemistry of dissolved organic matter in an anoxic intertidal creek bank. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 140, 418-434.	3.9	218
27	Universal molecular structures in natural dissolved organic matter. <i>Nature Communications</i> , 2018, 9, 3178.	12.8	213
28	Photo-lability of deep ocean dissolved black carbon. <i>Biogeosciences</i> , 2012, 9, 1661-1670.	3.3	207
29	Molecular-level changes of dissolved organic matter along the Amazon River-to-ocean continuum. <i>Marine Chemistry</i> , 2015, 177, 218-231.	2.3	206
30	Thermogenic organic matter dissolved in the abyssal ocean. <i>Marine Chemistry</i> , 2006, 102, 208-217.	2.3	196
31	River or mangrove? Tracing major organic matter sources in tropical Brazilian coastal waters. <i>Marine Chemistry</i> , 2001, 73, 253-271.	2.3	190
32	Hailstones: A Window into the Microbial and Chemical Inventory of a Storm Cloud. <i>PLoS ONE</i> , 2013, 8, e53550.	2.5	186
33	Source and biolability of ancient dissolved organic matter in glacier and lake ecosystems on the Tibetan Plateau. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 142, 64-74.	3.9	186
34	Molecular evidence for lignin degradation in sulfate-reducing mangrove sediments (Amaz�nia, Brazil). <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1417-1428.	3.9	184
35	Driving Forces Behind Nutrient and Organic Matter Dynamics in a Mangrove Tidal Creek in North Brazil. <i>Estuarine, Coastal and Shelf Science</i> , 2001, 52, 249-259.	2.1	184
36	Continuous flux of dissolved black carbon from a vanished tropical forest biome. <i>Nature Geoscience</i> , 2012, 5, 618-622.	12.9	183

#	ARTICLE	IF	CITATIONS
37	Nutrient biogeochemistry in a Gulf of Mexico subterranean estuary and groundwater-derived fluxes to the coastal ocean. <i>Limnology and Oceanography</i> , 2008, 53, 705-718.	3.1	181
38	Origin and biogeochemical cycling of organic nitrogen in the eastern Arctic Ocean as evident from D- and L-amino acids. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 4103-4114.	3.9	173
39	A Method Detection Limit for the Analysis of Natural Organic Matter via Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 8376-8382.	6.5	169
40	An intercomparison of three methods for the large-scale isolation of oceanic dissolved organic matter. <i>Marine Chemistry</i> , 2014, 161, 14-19.	2.3	168
41	Inefficient microbial production of refractory dissolved organic matter in the ocean. <i>Nature Communications</i> , 2015, 6, 7422.	12.8	166
42	Linking the Molecular Signature of Heteroatomic Dissolved Organic Matter to Watershed Characteristics in World Rivers. <i>Environmental Science & Technology</i> , 2015, 49, 13798-13806.	10.0	166
43	Heterotrophic organisms dominate nitrogen fixation in the South Pacific Gyre. <i>ISME Journal</i> , 2012, 6, 1238-1249.	9.8	162
44	Microbial and Chemical Characterization of Underwater Fresh Water Springs in the Dead Sea. <i>PLoS ONE</i> , 2012, 7, e38319.	2.5	161
45	Deciphering associations between dissolved organic molecules and bacterial communities in a pelagic marine system. <i>ISME Journal</i> , 2016, 10, 1717-1730.	9.8	155
46	Advanced characterization of marine dissolved organic matter by combining reversed-phase liquid chromatography and FT-ICR-MS. <i>Marine Chemistry</i> , 2008, 111, 233-241.	2.3	154
47	Fate of the Amazon River dissolved organic matter in the tropical Atlantic Ocean. <i>Global Biogeochemical Cycles</i> , 2015, 29, 677-690.	4.9	148
48	Molecular properties of deep-sea dissolved organic matter are predictable by the central limit theorem: Evidence from tandem FT-ICR-MS. <i>Marine Chemistry</i> , 2017, 191, 9-15.	2.3	145
49	Evaluation of the Orbitrap Mass Spectrometer for the Molecular Fingerprinting Analysis of Natural Dissolved Organic Matter. <i>Analytical Chemistry</i> , 2016, 88, 7698-7704.	6.5	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. <i>Marine Chemistry</i> , 2007, 105, 15-29.	2.3	134
51	Dissolved Organic Matter in Headwater Streams: Compositional Variability across Climatic Regions of North America. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 94, 95-108.	3.9	116
52	Molecular composition of dissolved organic matter from a wetland plant (<i>Juncus effusus</i>) after photochemical and microbial decomposition (1.25 yr): Common features with deep sea dissolved organic matter. <i>Organic Geochemistry</i> , 2013, 60, 62-71.	1.8	113
53	How Deep-Sea Wood Falls Sustain Chemosynthetic Life. <i>PLoS ONE</i> , 2013, 8, e53590.	2.5	113
54	An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer?. <i>Limnology and Oceanography: Methods</i> , 2020, 18, 235-258.	2.0	109

#	ARTICLE	IF	CITATIONS
55	Do mangroves rather than rivers provide nutrients to coastal environments south of the Amazon River? Evidence from long-term flux measurements. <i>Marine Ecology - Progress Series</i> , 2001, 213, 67-77.	1.9	107
56	Dissolved organic matter composition and photochemical transformations in the northern North Pacific Ocean. <i>Geophysical Research Letters</i> , 2015, 42, 863-870.	4.0	106
57	Aerosols as a source of dissolved black carbon to the ocean. <i>Nature Communications</i> , 2017, 8, 510.	12.8	106
58	Comprehensive characterization of marine dissolved organic matter by Fourier transform ion cyclotron resonance mass spectrometry with electrospray and atmospheric pressure photoionization. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 643-650.	1.5	104
59	Efficient removal of recalcitrant deep-ocean dissolved organic matter during hydrothermal circulation. <i>Nature Geoscience</i> , 2015, 8, 856-860.	12.9	104
60	Benthic-pelagic coupling of nutrients and dissolved organic matter composition in an intertidal sandy beach. <i>Marine Chemistry</i> , 2015, 176, 150-163.	2.3	102
61	Chemical and microbial diversity covary in fresh water to influence ecosystem functioning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 24689-24695.	7.1	98
62	Tracing suspended organic nitrogen from the Yangtze River catchment into the East China Sea. <i>Marine Chemistry</i> , 2007, 107, 367-377.	2.3	97
63	Molecular Signatures of Biogeochemical Transformations in Dissolved Organic Matter from Ten World Rivers. <i>Frontiers in Earth Science</i> , 2016, 4, .	1.8	96
64	The Exometabolome of Two Model Strains of the Roseobacter Group: A Marketplace of Microbial Metabolites. <i>Frontiers in Microbiology</i> , 2017, 8, 1985.	3.5	96
65	Molecular Fractionation of Dissolved Organic Matter in a Shallow Subterranean Estuary: The Role of the Iron Curtain. <i>Environmental Science & Technology</i> , 2017, 51, 1312-1320.	10.0	95
66	Climate warming alters subsoil but not topsoil carbon dynamics in alpine grassland. <i>Global Change Biology</i> , 2019, 25, 4383-4393.	9.5	94
67	Recalcitrant dissolved organic matter in the ocean: major contribution of small amphiphilics. <i>Marine Chemistry</i> , 2003, 82, 115-123.	2.3	92
68	The drivers of biogeochemistry in beach ecosystems: A cross-shore transect from the dunes to the low-water line. <i>Marine Chemistry</i> , 2017, 190, 35-50.	2.3	90
69	Characterization of dissolved organic matter across the Subtropical Convergence off the South Island, New Zealand. <i>Marine Chemistry</i> , 2011, 123, 99-110.	2.3	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. <i>Nature Reviews Earth & Environment</i> , 2021, 2, 570-583.	29.7	84
72	Utilizing colored dissolved organic matter to derive dissolved black carbon export by arctic rivers. <i>Frontiers in Earth Science</i> , 2015, 3, .	1.8	83

#	ARTICLE	IF	CITATIONS
73	The Molecular Composition of Dissolved Organic Matter in Forest Soils as a Function of pH and Temperature. PLoS ONE, 2015, 10, e0119188.	2.5	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.	4.9	81
76	Low volume quantification of dissolved organic carbon and dissolved nitrogen. Limnology and Oceanography: Methods, 2012, 10, 347-352.	2.0	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.	8.0	79
78	Carbon, nutrient and trace metal cycling in sandy sediments: A comparison of high-energy beaches and backbarrier tidal flats. Estuarine, Coastal and Shelf Science, 2015, 159, 1-14.	2.1	78
79	Spatial Dependence of Reduced Sulfur in Everglades Dissolved Organic Matter Controlled by Sulfate Enrichment. Environmental Science & Technology, 2017, 51, 3630-3639.	10.0	78
80	Composition and Transformation of Dissolved Organic Matter in the Baltic Sea. Frontiers in Earth Science, 2017, 5, .	1.8	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.	3.6	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.	9.8	74
83	ICBM-OCEAN: Processing Ultrahigh-Resolution Mass Spectrometry Data of Complex Molecular Mixtures. Analytical Chemistry, 2020, 92, 6832-6838.	6.5	74
84	Molecular alteration of marine dissolved organic matter under experimental hydrothermal conditions. Geochimica Et Cosmochimica Acta, 2016, 175, 68-85.	3.9	73
85	Microbial decomposition of marine dissolved organic matter in cool oceanic crust. Nature Geoscience, 2018, 11, 334-339.	12.9	71
86	Ammonia-oxidizing archaea release a suite of organic compounds potentially fueling prokaryotic heterotrophy in the ocean. Environmental Microbiology, 2019, 21, 4062-4075.	3.8	71
87	Fires prime terrestrial organic carbon for riverine export to the global oceans. Nature Communications, 2020, 11, 2791.	12.8	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.	2.3	69
89	Porewater exchange as a driver of carbon dynamics across a terrestrial-marine transect: Insights from coupled ^{222}Rn and pCO_2 observations in the German Wadden Sea. Marine Chemistry, 2015, 171, 10-20.	2.3	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.	3.9	67

#	ARTICLE	IF	CITATIONS
91	Experimental Evidence for Abiotic Sulfurization of Marine Dissolved Organic Matter. <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	67
92	Discharge of dissolved black carbon from a fire-affected intertidal system. <i>Limnology and Oceanography</i> , 2012, 57, 1171-1181.	3.1	66
93	Environmental Drivers of Dissolved Organic Matter Molecular Composition in the Delaware Estuary. <i>Frontiers in Earth Science</i> , 2016, 4, .	1.8	65
94	Uranium and barium cycling in a salt wedge subterranean estuary: The influence of tidal pumping. <i>Chemical Geology</i> , 2011, 287, 114-123.	3.3	64
95	Functional Molecular Diversity of Marine Dissolved Organic Matter Is Reduced during Degradation. <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	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. <i>PLoS ONE</i> , 2016, 11, e0159068.	2.5	64
97	Tracing terrigenous dissolved organic matter and its photochemical decay in the ocean by using liquid chromatography/mass spectrometry. <i>Marine Chemistry</i> , 2007, 107, 378-387.	2.3	63
98	Comparison of gas with liquid chromatography for the determination of benzenepolycarboxylic acids as molecular tracers of black carbon. <i>Organic Geochemistry</i> , 2011, 42, 275-282.	1.8	62
99	Mesopelagic N ₂ Fixation Related to Organic Matter Composition in the Solomon and Bismarck Seas (Southwest Pacific). <i>PLoS ONE</i> , 2015, 10, e0143775.	2.5	62
100	Nutrient dynamics in a mangrove creek (North Brazil) during the dry season. <i>Mangroves and Salt Marshes</i> , 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. <i>Marine Chemistry</i> , 2015, 173, 78-92.	2.3	60
102	Molecular evidence for abiotic sulfurization of dissolved organic matter in marine shallow hydrothermal systems. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 190, 35-52.	3.9	60
103	Title is missing!. <i>Mangroves and Salt Marshes</i> , 1999, 3, 9-15.	0.6	58
104	Molecular Determinants of Dissolved Organic Matter Reactivity in Lake Water. <i>Frontiers in Earth Science</i> , 2017, 5, .	1.8	58
105	Thermally altered marine dissolved organic matter in hydrothermal fluids. <i>Organic Geochemistry</i> , 2017, 110, 73-86.	1.8	57
106	Exo-Metabolome of <i>Pseudovibrio</i> sp. FO-BEG1 Analyzed by Ultra-High Resolution Mass Spectrometry and the Effect of Phosphate Limitation. <i>PLoS ONE</i> , 2014, 9, e96038.	2.5	57
107	Dynamics and stoichiometry of nutrients and phytoplankton in waters influenced by the oxygen minimum zone in the eastern tropical Pacific. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2012, 62, 20-31.	1.4	56
108	Dissolved organic matter in pore water of Arctic Ocean sediments: Environmental influence on molecular composition. <i>Organic Geochemistry</i> , 2016, 97, 41-52.	1.8	56

#	ARTICLE	IF	CITATIONS
109	Molecular Hysteresis: Hydrologically Driven Changes in Riverine Dissolved Organic Matter Chemistry During a Storm Event. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 759-774.	3.0	55
110	Uncoupling of Bacterial and Terrigenous Dissolved Organic Matter Dynamics in Decomposition Experiments. <i>PLoS ONE</i> , 2014, 9, e93945.	2.5	54
111	Controls of Land Use and the River Continuum Concept on Dissolved Organic Matter Composition in an Anthropogenically Disturbed Subtropical Watershed. <i>Environmental Science & Technology</i> , 2020, 54, 195-206.	10.0	54
112	Novel insights into the molecular structure of non-volatile marine dissolved organic sulfur. <i>Marine Chemistry</i> , 2015, 168, 86-94.	2.3	53
113	Low photolability of yedoma permafrost dissolved organic carbon. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 200-211.	3.0	52
114	The black carbon cycle and its role in the Earth system. <i>Nature Reviews Earth & Environment</i> , 2022, 3, 516-532.	29.7	52
115	Conservation of dissolved organic matter molecular composition during mixing of the deep water masses of the northeast Atlantic Ocean. <i>Marine Chemistry</i> , 2015, 177, 288-297.	2.3	51
116	Emergence of the Reactivity Continuum of Organic Matter from Kinetics of a Multitude of Individual Molecular Constituents. <i>Environmental Science & Technology</i> , 2017, 51, 11571-11579.	10.0	51
117	Nitrogen Cycling of Active Bacteria within Oligotrophic Sediment of the Mid-Atlantic Ridge Flank. <i>Geomicrobiology Journal</i> , 2018, 35, 468-483.	2.0	50
118	Does the Chemodiversity of Bacterial Exometabolomes Sustain the Chemodiversity of Marine Dissolved Organic Matter?. <i>Frontiers in Microbiology</i> , 2019, 10, 215.	3.5	50
119	Acidification and warming affect prominent bacteria in two seasonal phytoplankton bloom mesocosms. <i>Environmental Microbiology</i> , 2016, 18, 4579-4595.	3.8	49
120	The Optical, Chemical, and Molecular Dissolved Organic Matter Succession Along a Boreal Soilâ€Streamâ€River Continuum. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2892-2908.	3.0	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. <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	49
122	Molecular evidence for rapid dissolved organic matter turnover in Arctic fjords. <i>Marine Chemistry</i> , 2014, 160, 1-10.	2.3	48
123	Bacterial community structure and dissolved organic matter in repeatedly flooded subsurface karst water pools. <i>FEMS Microbiology Ecology</i> , 2014, 89, 111-126.	2.7	48
124	Bioavailability and molecular composition of dissolved organic matter from a diffuse hydrothermal system. <i>Marine Chemistry</i> , 2015, 177, 257-266.	2.3	48
125	Short-Term Dynamics of North Sea Bacterioplankton-Dissolved Organic Matter Coherence on Molecular Level. <i>Frontiers in Microbiology</i> , 2016, 7, 321.	3.5	48
126	Molecular and Optical Properties of Tree-Derived Dissolved Organic Matter in Throughfall and Stemflow from Live Oaks and Eastern Red Cedar. <i>Frontiers in Earth Science</i> , 2017, 5, .	1.8	48

#	ARTICLE	IF	CITATIONS
127	Genomic, metabolic and phenotypic variability shapes ecological differentiation and intraspecies interactions of <i>Alteromonas macleodii</i> . <i>Scientific Reports</i> , 2020, 10, 809.	3.3	48
128	Marked isotopic variability within and between the Amazon River and marine dissolved black carbon pools. <i>Nature Communications</i> , 2019, 10, 4018.	12.8	47
129	Ecosystem-specific Composition of Dissolved Organic Matter. <i>Vadose Zone Journal</i> , 2014, 13, 1-10.	2.2	46
130	Effects of ocean acidification on marine dissolved organic matter are not detectable over the succession of phytoplankton blooms. <i>Science Advances</i> , 2015, 1, e1500531.	10.3	45
131	High pore-water derived CO ₂ and CH ₄ emissions from a macro-tidal mangrove creek in the Amazon region. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 247, 106-120.	3.9	45
132	Enhanced carbon overconsumption in response to increasing temperatures during a mesocosm experiment. <i>Biogeosciences</i> , 2012, 9, 3531-3545.	3.3	44
133	Basin-wide N ₂ fixation in the deep waters of the Mediterranean Sea. <i>Global Biogeochemical Cycles</i> , 2016, 30, 952-961.	4.9	43
134	Molecular characterization of dissolved black nitrogen via electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. <i>Organic Geochemistry</i> , 2015, 79, 21-30.	1.8	42
135	Biodegradation of crude oil and dispersants in deep seawater from the Gulf of Mexico: Insights from ultra-high resolution mass spectrometry. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2016, 129, 108-118.	1.4	42
136	Diversity of bacterial communities and dissolved organic matter in a temperate estuary. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	42
137	Linking optical and molecular signatures of dissolved organic matter in the Mediterranean Sea. <i>Scientific Reports</i> , 2017, 7, 3436.	3.3	41
138	Molecular composition of dissolved organic matter in the Mediterranean Sea. <i>Limnology and Oceanography</i> , 2017, 62, 2699-2712.	3.1	41
139	Spatial and Temporal Patterns of Pore Water Chemistry in the Inter-Tidal Zone of a High Energy Beach. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	41
140	Long-term stability of marine dissolved organic carbon emerges from a neutral network of compounds and microbes. <i>Scientific Reports</i> , 2019, 9, 17780.	3.3	41
141	Seasonal and spatial variability of dissolved organic matter composition in the lower Amazon River. <i>Biogeochemistry</i> , 2016, 131, 281-302.	3.5	40
142	Climate-driven shifts in sediment chemistry enhance methane production in northern lakes. <i>Nature Communications</i> , 2018, 9, 1801.	12.8	39
143	Land Use Controls on the Spatial Variability of Dissolved Black Carbon in a Subtropical Watershed. <i>Environmental Science & Technology</i> , 2018, 52, 8104-8114.	10.0	39
144	Photochemical Alteration of Dissolved Organic Sulfur from Sulfidic Porewater. <i>Environmental Science & Technology</i> , 2017, 51, 14144-14154.	10.0	38

#	ARTICLE	IF	CITATIONS
145	Dissolved Black Carbon in the Headwaters-to-Ocean Continuum of Para�ba Do Sul River, Brazil. <i>Frontiers in Earth Science</i> , 2017, 5, .	1.8	38
146	Molecular composition and origin of water-soluble organic matter in marine aerosols in the Pacific off China. <i>Atmospheric Environment</i> , 2018, 191, 27-35.	4.1	38
147	Different Responses of Dissolved Black Carbon and Dissolved Lignin to Seasonal Hydrological Changes and an Extreme Rain Event. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 479-493.	3.0	38
148	Export of terrigenous dissolved organic matter in a broad continental shelf. <i>Limnology and Oceanography</i> , 2017, 62, 1718-1731.	3.1	36
149	Microbially-Mediated Transformations of Estuarine Dissolved Organic Matter. <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	36
150	Fossil Fuel Combustion Emission From South Asia Influences Precipitation Dissolved Organic Carbon Reaching the Remote Tibetan Plateau: Isotopic and Molecular Evidence. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 6248-6258.	3.3	34
151	Sulfurization of dissolved organic matter in the anoxic water column of the Black Sea. <i>Science Advances</i> , 2021, 7, .	10.3	34
152	Linking molecular size, composition and carbon turnover of extractable soil microbial compounds. <i>Soil Biology and Biochemistry</i> , 2016, 100, 66-73.	8.8	33
153	Improved Mass Accuracy and Isotope Confirmation through Alignment of Ultrahigh-Resolution Mass Spectra of Complex Natural Mixtures. <i>Analytical Chemistry</i> , 2020, 92, 2558-2565.	6.5	33
154	Molecular Signals of Heterogeneous Terrestrial Environments Identified in Dissolved Organic Matter: A Comparative Analysis of Orbitrap and Ion Cyclotron Resonance Mass Spectrometers. <i>Frontiers in Earth Science</i> , 2018, 6, .	1.8	32
155	Rapid microbial diversification of dissolved organic matter in oceanic surface waters leads to carbon sequestration. <i>Scientific Reports</i> , 2020, 10, 13025.	3.3	32
156	Hydrochemical processes controlling arsenic and heavy metal contamination in the Elqui river system (Chile). <i>Science of the Total Environment</i> , 2004, 325, 193-207.	8.0	31
157	Mangrove inundation and nutrient dynamics from a GIS perspective. <i>Wetlands Ecology and Management</i> , 2004, 12, 81-86.	1.5	30
158	Evidence for terrigenous dissolved organic nitrogen in the Arctic deep sea. <i>Limnology and Oceanography</i> , 2004, 49, 148-156.	3.1	29
159	Production, partitioning and stoichiometry of organic matter under variable nutrient supply during mesocosm experiments in the tropical Pacific and Atlantic Ocean. <i>Biogeosciences</i> , 2012, 9, 4629-4643.	3.3	29
160	Non-conservative behavior of fluorescent dissolved organic matter (FDOM) within a subterranean estuary. <i>Continental Shelf Research</i> , 2015, 110, 183-190.	1.8	29
161	Questions remain about the biolability of dissolved black carbon along the combustion continuum. <i>Nature Communications</i> , 2021, 12, 4281.	12.8	28
162	The Analysis of Amino Acids in Seawater. , 2009, , .		28

#	ARTICLE	IF	CITATIONS
163	Marine Dissolved Organic Matter Shares Thousands of Molecular Formulae Yet Differs Structurally across Major Water Masses. <i>Environmental Science & Technology</i> , 2022, 56, 3758-3769.	10.0	28
164	Interaction between iron and dissolved organic matter in a marine shallow hydrothermal system off Dominica Island (Lesser Antilles). <i>Marine Chemistry</i> , 2015, 177, 677-686.	2.3	26
165	Bottled aqua incognita: microbiota assembly and dissolved organic matter diversity in natural mineral waters. <i>Microbiome</i> , 2017, 5, 126.	11.1	26
166	Impact of UV radiation on DOM transformation on molecular level using FT-ICR-MS and PARAFAC. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 230, 118027.	3.9	26
167	Carbon and alkalinity outwelling across the <scp>groundwaterâ€creekâ€shelf</scp> continuum off Amazonian mangroves. <i>Limnology and Oceanography Letters</i> , 2021, 6, 369-378.	3.9	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. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	25
169	Reply to Prince et al.: Ability of chemical dispersants to reduce oil spill impacts remains unclear. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1422-E1423.	7.1	25
170	Droughtâ€nduced variability in dissolved organic matter composition in a marshâ€dominated estuary. <i>Geophysical Research Letters</i> , 2015, 42, 6446-6453.	4.0	24
171	Analytical and Computational Advances, Opportunities, and Challenges in Marine Organic Biogeochemistry in an Era of â€œOmicsâ€. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	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. <i>Journal of Marine Systems</i> , 2014, 129, 343-349.	2.1	23
173	Non-conservative Behavior of Dissolved Organic Matter and Trace Metals (Mn, Fe, Ba) Driven by Porewater Exchange in a Subtropical Mangrove-Estuary. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	22
174	Uncoupled organic matter burial and quality in boreal lake sediments over the Holocene. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1751-1763.	3.0	21
175	Do Regional Aerosols Contribute to the Riverine Export of Dissolved Black Carbon?. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2925-2938.	3.0	21
176	Fourier transform ion cyclotron resonance mass spectrometrical analysis of raw fermented cocoa beans of Cameroon and Ivory Coast origin. <i>Food Research International</i> , 2014, 64, 958-961.	6.2	20
177	Extraordinary slow degradation of dissolved organic carbon (DOC) in a cold marginal sea. <i>Scientific Reports</i> , 2015, 5, 13808.	3.3	19
178	Phosphate Limitation Triggers the Dissolution of Precipitated Iron by the Marine Bacterium <i>Pseudovibrio</i> sp. FO-BEG1. <i>Frontiers in Microbiology</i> , 2017, 8, 364.	3.5	19
179	Inorganic and organic iron and copper species of the subterranean estuary: Origins and fate. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 259, 211-232.	3.9	19
180	Riverine mixing at the molecular scale â€“ An ultrahigh-resolution mass spectrometry study on dissolved organic matter and selected metals in the Amazon confluence zone (Manaus, Brazil). <i>Organic Geochemistry</i> , 2019, 129, 45-62.	1.8	18

#	ARTICLE	IF	CITATIONS
181	Accumulation of DOC in the South Pacific Subtropical Gyre from a molecular perspective. <i>Marine Chemistry</i> , 2021, 231, 103955.	2.3	18
182	Marine dissolved organic matter: a vast and unexplored molecular space. <i>Applied Microbiology and Biotechnology</i> , 2021, 105, 7225-7239.	3.6	18
183	Substrate Use of <i>Pseudovibrio</i> sp. Growing in Ultra-Oligotrophic Seawater. <i>PLoS ONE</i> , 2015, 10, e0121675.	2.5	17
184	Differential responses of marine, mesohaline and oligohaline bacterial communities to the addition of terrigenous carbon. <i>Environmental Microbiology</i> , 2017, 19, 3098-3117.	3.8	17
185	Plant diversity enhances production and downward transport of biodegradable dissolved organic matter. <i>Journal of Ecology</i> , 2021, 109, 1284-1297.	4.0	17
186	Environmental Controls on the Riverine Export of Dissolved Black Carbon. <i>Global Biogeochemical Cycles</i> , 2019, 33, 849-874.	4.9	16
187	Dissolved Organic Matter Processing in Pristine Antarctic Streams. <i>Environmental Science & Technology</i> , 2021, 55, 10175-10185.	10.0	16
188	Dissolved organic matter sources in glacierized watersheds delineated through compositional and carbon isotopic modeling. <i>Limnology and Oceanography</i> , 2021, 66, 438-451.	3.1	16
189	Ocean Acidification Experiments in Large-Scale Mesocosms Reveal Similar Dynamics of Dissolved Organic Matter Production and Biotransformation. <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	15
190	Aphotic N<sub>2> fixation along an oligotrophic to ultraoligotrophic transect in the western tropical South Pacific Ocean. <i>Biogeosciences</i> , 2018, 15, 3107-3119.	3.3	15
191	Molecular Traits of Dissolved Organic Matter in the Subterranean Estuary of a High-Energy Beach: Indications of Sources and Sinks. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	15
192	Stratification and the distribution of phytoplankton, nutrients, inorganic carbon, and sulfur in the surface waters of Weddell Sea leads. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 988-999.	1.4	14
193	Organic Molecular Signatures of the Congo River and Comparison to the Amazon. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	14
194	Molecular signatures of dissolved organic matter in a tropical karst system. <i>Organic Geochemistry</i> , 2017, 113, 141-149.	1.8	13
195	Molecular Composition of Dissolved Organic Matter in Sediment Porewater of the Arctic Deep-Sea Observatory HAUSGARTEN (Fram Strait). <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	13
196	Natural Asphalt Seeps Are Potential Sources for Recalcitrant Oceanic Dissolved Organic Sulfur and Dissolved Black Carbon. <i>Environmental Science & Technology</i> , 2022, 56, 9092-9102.	10.0	13
197	Biogeochemical cycling of molybdenum and thallium during a phytoplankton summer bloom: A mesocosm study. <i>Marine Chemistry</i> , 2021, 229, 103910.	2.3	12
198	The evolution of stream dissolved organic matter composition following glacier retreat in coastal watersheds of southeast Alaska. <i>Biogeochemistry</i> , 2023, 164, 99-116.	3.5	12

#	ARTICLE	IF	CITATIONS
199	Drivers of Organic Molecular Signatures in the Amazon River. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2021GB006938.	4.9	12
200	Mangrove microbiome reveals importance of sulfur metabolism in tropical coastal waters. <i>Science of the Total Environment</i> , 2022, 813, 151889.	8.0	12
201	Response to Comment on "Dilution limits dissolved organic carbon utilization in the deep ocean". <i>Science</i> , 2015, 350, 1483-1483.	12.6	11
202	Biogeochemical Impacts of a Black Carbon Wet Deposition Event in Halong Bay, Vietnam. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	11
203	Niche partitioning by photosynthetic plankton as a driver of CO ₂ -fixation across the oligotrophic South Pacific Subtropical Ocean. <i>ISME Journal</i> , 2022, 16, 465-476.	9.8	10
204	Microbial Physiology Governs the Oceanic Distribution of Dissolved Organic Carbon in a Scenario of Equal Degradability. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	9
205	Adaptations of microbial communities and dissolved organics to seasonal pressures in a mesotrophic coastal Mediterranean lake. <i>Environmental Microbiology</i> , 2022, 24, 2282-2298.	3.8	9
206	Dissolved Organic Matter Cycling in the Coastal Upwelling System Off Central Peru During an "El Niño" Year. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	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. <i>Organic Geochemistry</i> , 2020, 149, 104085.	1.8	8
208	Controls on turnover of marine dissolved organic matter—testing the null hypothesis of purely concentration-driven uptake: Comment on Shen and Benner, "Molecular properties are a primary control on the microbial utilization of dissolved organic matter in the ocean". <i>Limnology and Oceanography</i> , 2022, 67, 673-679.	3.1	8
209	Interplay between microbial community composition and chemodiversity of dissolved organic matter throughout the Black Sea water column redox gradient. <i>Limnology and Oceanography</i> , 2022, 67, 329-347.	3.1	8
210	Comment on "Dissolved organic sulfur in the ocean: Biogeochemistry of a petagram inventory". <i>Science</i> , 2017, 356, 813-813.	12.6	7
211	Travel Time and Source Variation Explain the Molecular Transformation of Dissolved Organic Matter in an Alpine Stream Network. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005616.	3.0	7
212	Antioxidant Activity and Phenolic Content of Marine Dissolved Organic Matter and Their Relation to Molecular Composition. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	7
213	Imprint of Kairei and Pelagia deep-sea hydrothermal systems (Indian Ocean) on marine dissolved organic matter. <i>Organic Geochemistry</i> , 2021, 152, 104141.	1.8	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. <i>Environmental Engineering Science</i> , 2015, 32, 486-496.	1.6	6
216	Seasonal dynamics of atmospheric and river inputs of black carbon, and impacts on biogeochemical cycles in Halong Bay, Vietnam. <i>Elementa</i> , 2017, 5, .	3.2	6

#	ARTICLE	IF	CITATIONS
217	Biodegradability of hydrothermally altered deep-sea dissolved organic matter. <i>Marine Chemistry</i> , 2019, 217, 103706.	2.3	6
218	The carbon and nitrogen budget of <i>Desmophyllum dianthus</i> "a voracious cold-water coral thriving in an acidified Patagonian fjord. <i>PeerJ</i> , 2021, 9, e12609.	2.0	6
219	Exploring the Suitability of Ecosystem Metabolomes to Assess Imprints of Brownification and Nutrient Enrichment on Lakes. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG005903.	3.0	5
220	Dissolved organic compounds with synchronous dynamics share chemical properties and origin. <i>Limnology and Oceanography</i> , 2021, 66, 4001-4016.	3.1	5
221	Biogeochemical thallium cycling during a mesocosm phytoplankton spring bloom: Biotic versus abiotic drivers. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 313, 257-276.	3.9	5
222	The detection of bacterial exometabolites in marine dissolved organic matter through ultrahigh-resolution mass spectrometry. <i>Limnology and Oceanography: Methods</i> , 2022, 20, 350-360.	2.0	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. <i>Functional Ecology</i> , 2022, 36, 2104-2118.	3.6	4
225	Tools for Studying Biogeochemical Connectivity Among Tropical Coastal Ecosystems. , 2009, , 425-455.		3
226	Dem Kohlenstoff im Meer auf der Spur. <i>Nachrichten Aus Der Chemie</i> , 2009, 57, 387-391.	0.0	1
227	The Biogeochemistry of the Caet Mangrove-Shelf System. <i>Ecological Studies</i> , 2010, , 45-67.	1.2	1
228	When Forests Take Over After Land Abandonment: Dissolved Organic Matter Response in Headwater Mountain Streams. <i>Frontiers in Water</i> , 2021, 3, .	2.3	1
229	Editorial: Current Topics in Marine Organic Biogeochemical Research. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	0