

Ronnie N Glud

List of Publications by Year in descending order

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Version: 2024-02-01

161
papers

10,349
citations

26630

56
h-index

40979

93
g-index

169
all docs

169
docs citations

169
times ranked

7814
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen dynamics of marine sediments. <i>Marine Biology Research</i> , 2008, 4, 243-289.	0.7	684
2	Concentration and transport of nitrate by the mat-forming sulphur bacterium <i>Thioploca</i> . <i>Nature</i> , 1995, 374, 713-715.	27.8	410
3	Denitrification and anammox activity in Arctic marine sediments. <i>Limnology and Oceanography</i> , 2004, 49, 1493-1502.	3.1	283
4	High rates of microbial carbon turnover in sediments in the deepest oceanic trench on Earth. <i>Nature Geoscience</i> , 2013, 6, 284-288.	12.9	262
5	Diffusive and total oxygen uptake of deep-sea sediments in the eastern South Atlantic Ocean: in situ and laboratory measurements. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1994, 41, 1767-1788.	1.4	258
6	Inorganic carbon transport during sea ice growth and decay: A carbon pump in polar seas. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	199
7	MICROENVIRONMENTAL CONTROL OF PHOTOSYNTHESIS AND PHOTOSYNTHESIS-COUPLED RESPIRATION IN AN EPILITHIC CYANOBACTERIAL BIOFILM1. <i>Journal of Phycology</i> , 1996, 32, 799-812.	2.3	194
8	Oxygen dynamics in the rhizosphere of <i>Zostera marina</i> : A two-dimensional planar optode study. <i>Limnology and Oceanography</i> , 2006, 51, 1072-1083.	3.1	194
9	Small-scale spatial and temporal variability in coastal benthic O ₂ dynamics: Effects of fauna activity. <i>Limnology and Oceanography</i> , 2004, 49, 1471-1481.	3.1	186
10	A simple and inexpensive high resolution color ratiometric planar optode imaging approach: application to oxygen and pH sensing. <i>Limnology and Oceanography: Methods</i> , 2011, 9, 348-360.	2.0	180
11	N ₂ production rates limited by nitrite availability in the Bay of Bengal oxygen minimum zone. <i>Nature Geoscience</i> , 2017, 10, 24-29.	12.9	180
12	Impacts of longline mussel farming on oxygen and nitrogen dynamics and biological communities of coastal sediments. <i>Aquaculture</i> , 2003, 218, 567-588.	3.5	174
13	Anaerobic N ₂ production in Arctic sea ice. <i>Limnology and Oceanography</i> , 2004, 49, 86-94.	3.1	169
14	Benthic carbon mineralization in the Atlantic: a synthesis based on in situ data from the last decade. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2002, 49, 1255-1279.	1.4	159
15	Two decades of chemical imaging of solutes in sediments and soils – a review. <i>Analytica Chimica Acta</i> , 2015, 878, 9-42.	5.4	156
16	Seasonal dynamics of benthic O ₂ uptake in a semienclosed bay: Importance of diffusion and faunal activity. <i>Limnology and Oceanography</i> , 2003, 48, 1265-1276.	3.1	133
17	Hadal disturbance in the Japan Trench induced by the 2011 Tohoku “Oki Earthquake. <i>Scientific Reports</i> , 2013, 3, 1915.	3.3	131
18	Manganese oxidation and in situ manganese fluxes from a coastal sediment. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 2563-2570.	3.9	128

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19	PHOTOSYNTHESIS AND PHOTOSYNTHESIS-COUPLED RESPIRATION IN NATURAL BIOFILMS QUANTIFIED WITH OXYGEN MICROSENSORS ¹ . <i>Journal of Phycology</i> , 1992, 28, 51-60.	2.3	125
20	Benthic solute exchange and carbon mineralization in two shallow subtidal sandy sediments: Effect of advective porewater exchange. <i>Limnology and Oceanography</i> , 2007, 52, 1943-1963.	3.1	125
21	Localized Flux Maxima of Arsenic, Lead, and Iron around Root Apices in Flooded Lowland Rice. <i>Environmental Science & Technology</i> , 2014, 48, 8498-8506.	10.0	124
22	An in situ instrument for planar O ₂ optode measurements at benthic interfaces. <i>Limnology and Oceanography</i> , 2001, 46, 2073-2080.	3.1	109
23	Effects on the benthic diffusive boundary layer imposed by microelectrodes. <i>Limnology and Oceanography</i> , 1994, 39, 462-467.	3.1	106
24	Linking Soil O ₂ , CO ₂ , and CH ₄ Concentrations in a Wetland Soil: Implications for CO ₂ and CH ₄ Fluxes. <i>Environmental Science & Technology</i> , 2011, 45, 3393-3399.	10.0	103
25	Sea ice contribution to the air-sea CO ₂ exchange in the Arctic and Southern Oceans. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 63, 823.	1.6	102
26	Composition, Buoyancy Regulation and Fate of Ice Algal Aggregates in the Central Arctic Ocean. <i>PLoS ONE</i> , 2014, 9, e107452.	2.5	101
27	Diel coral reef acidification driven by porewater advection in permeable carbonate sands, Heron Island, Great Barrier Reef. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	100
28	HETEROGENEITY OF OXYGEN PRODUCTION AND CONSUMPTION IN A PHOTOSYNTHETIC MICROBIAL MAT AS STUDIED BY PLANAR OPTODES. <i>Journal of Phycology</i> , 1999, 35, 270-279.	2.3	96
29	Denitrification activity and oxygen dynamics in Arctic sea ice. <i>Polar Biology</i> , 2008, 31, 527-537.	1.2	95
30	Nitrogen cycling in a deep ocean margin sediment (Sagami Bay, Japan). <i>Limnology and Oceanography</i> , 2009, 54, 723-734.	3.1	94
31	Fine scale remobilisation of Fe, Mn, Co, Ni, Cu and Cd in contaminated marine sediment. <i>Marine Chemistry</i> , 2007, 106, 192-207.	2.3	91
32	Ice crystals in melting sea ice – implications for $\delta^{18}O$, $\delta^{13}C$, CO ₂ and pH levels in Arctic surface waters. <i>Cryosphere</i> , 2012, 6, 901-908.	3.9	91
33	Predicting the signal of O ₂ microsensors from physical dimensions, temperature, salinity, and O ₂ concentration. <i>Limnology and Oceanography</i> , 1998, 43, 1932-1937.	3.1	87
34	In situ microsensor studies of a shallow water hydrothermal vent at Milos, Greece. <i>Marine Chemistry</i> , 2000, 69, 43-54.	2.3	87
35	Increased CO ₂ uptake due to sea ice growth and decay in the Nordic Seas. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	86
36	Biogeochemical responses to mass coral spawning at the Great Barrier Reef: Effects on respiration and primary production. <i>Limnology and Oceanography</i> , 2008, 53, 1014-1024.	3.1	83

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37	Benthic microalgal production in the Arctic: applied methods and status of the current database. <i>Botanica Marina</i> , 2009, 52, 559-571.	1.2	82
38	Copepod guts as biogeochemical hotspots in the sea: Evidence from microelectrode profiling of <i>Calanus</i> spp. <i>Limnology and Oceanography</i> , 2011, 56, 666-672.	3.1	82
39	A microoptode array for fine-scale measurement of oxygen distribution. <i>Sensors and Actuators B: Chemical</i> , 1997, 38, 122-129.	7.8	81
40	Eddy correlation measurements of oxygen uptake in deep ocean sediments. <i>Limnology and Oceanography: Methods</i> , 2009, 7, 576-584.	2.0	81
41	Virus and bacteria dynamics of a coastal sediment: Implication for benthic carbon cycling. <i>Limnology and Oceanography</i> , 2004, 49, 2073-2081.	3.1	79
42	Time-resolved pH imaging in marine sediments with a luminescent planar optode. <i>Limnology and Oceanography: Methods</i> , 2006, 4, 336-345.	2.0	79
43	Mass coral spawning: A natural large-scale nutrient addition experiment. <i>Limnology and Oceanography</i> , 2008, 53, 997-1013.	3.1	79
44	Ikaite crystal distribution in winter sea ice and implications for CO ₂ system dynamics. <i>Cryosphere</i> , 2013, 7, 707-718.	3.9	79
45	Benthic primary production and O ₂ -CO ₂ dynamics in a shallow-water sediment: Spatial and temporal heterogeneity. <i>Ophelia</i> , 2000, 53, 159-171.	0.3	78
46	Quantification of denitrification in permeable sediments: Insights from a two-dimensional simulation analysis and experimental data. <i>Limnology and Oceanography: Methods</i> , 2006, 4, 294-307.	2.0	77
47	Quantifying denitrification in rippled permeable sands through combined flume experiments and modeling. <i>Limnology and Oceanography</i> , 2012, 57, 1217-1232.	3.1	77
48	Distribution of viruses and bacteria in relation to diagenetic activity in an estuarine sediment. <i>Limnology and Oceanography</i> , 2003, 48, 1447-1456.	3.1	76
49	Distribution of oxygen in surface sediments from central Sagami Bay, Japan: In situ measurements by microelectrodes and planar optodes. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 1974-1987.	1.4	71
50	PRIMARY PRODUCTION OF CRUSTOSE CORALLINE RED ALGAE IN A HIGH ARCTIC FJORD. <i>Journal of Phycology</i> , 2002, 38, 273-283.	2.3	68
51	Transport Zonation Limits Coupled Nitrification-Denitrification in Permeable Sediments. <i>Environmental Science & Technology</i> , 2013, 47, 13404-13411.	10.0	65
52	O ₂ dynamics in the rhizosphere of young rice plants (<i>Oryza sativa</i> L.) as studied by planar optodes. <i>Plant and Soil</i> , 2015, 390, 279-292.	3.7	65
53	In situ microscale variation in distribution and consumption of O ₂ : A case study from a deep ocean margin sediment (Sagami Bay, Japan). <i>Limnology and Oceanography</i> , 2009, 54, 1-12.	3.1	62
54	Recent sediment dynamics in hadal trenches: Evidence for the influence of higher-frequency (tidal), Tj ETQqO 0 0 rgBT /Overlock 10 Tf 50	1.4	62

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55	Calibration and performance of the stirred flux chamber from the benthic lander Elinor. Deep-Sea Research Part I: Oceanographic Research Papers, 1995, 42, 1029-1042.	1.4	61
56	Seasonal rates of benthic primary production in a Greenland fjord measured by aquatic eddy correlation. Limnology and Oceanography, 2014, 59, 1555-1569.	3.1	61
57	Veil architecture in a sulphide-oxidizing bacterium enhances countercurrent flux. Nature, 1998, 394, 367-369.	27.8	60
58	Heterogeneity of O ₂ dynamics in soil amended with animal manure and implications for greenhouse gas emissions. Soil Biology and Biochemistry, 2015, 84, 96-106.	8.8	59
59	Effect of the diffusive boundary layer on benthic mineralization and O ₂ distribution: A theoretical model analysis. Limnology and Oceanography, 2007, 52, 547-557.	3.1	58
60	TEMPERATURE EFFECTS ON MICROALGAL PHOTOSYNTHESISâ€”LIGHT RESPONSES MEASURED BY O ₂ PRODUCTION, PULSEâ€”AMPLITUDEâ€”MODULATED FLUORESCENCE, AND ¹⁴ C ASSIMILATION ¹ . Journal of Phycology, 2008, 44, 501-514.	2.3	58
61	Quantifying tidally driven benthic oxygen exchange across permeable sediments: An aquatic eddy correlation study. Journal of Geophysical Research: Oceans, 2014, 119, 6918-6932.	2.6	57
62	A synthesis of the arctic terrestrial and marine carbon cycles under pressure from a dwindling cryosphere. Ambio, 2017, 46, 53-69.	5.5	56
63	Platinum octaethylporphyrin based planar optodes combined with an UV-LED excitation light source: An ideal tool for high-resolution O ₂ imaging in O ₂ depleted environments. Marine Chemistry, 2006, 100, 95-107.	2.3	55
64	Effects of transient bottom water currents and oxygen concentrations on benthic exchange rates as assessed by eddy correlation measurements. Journal of Geophysical Research: Oceans, 2013, 118, 1157-1169.	2.6	55
65	Anaerobic Nitrogen Turnover by Sinking Diatom Aggregates at Varying Ambient Oxygen Levels. Frontiers in Microbiology, 2016, 7, 98.	3.5	55
66	Seasonal ecosystem metabolism across shallow benthic habitats measured by aquatic eddy covariance. Limnology and Oceanography Letters, 2019, 4, 79-86.	3.9	55
67	Benthic Carbon Mineralization in Hadal Trenches: Insights From In Situ Determination of Benthic Oxygen Consumption. Geophysical Research Letters, 2018, 45, 2752-2760.	4.0	54
68	Spatial distribution and activity of viruses in the deep-sea sediments of Sagami Bay, Japan. Deep-Sea Research Part I: Oceanographic Research Papers, 2006, 53, 1-13.	1.4	52
69	Soil heterogeneity effects on O ₂ distribution and CH ₄ emissions from wetlands: In situ and mesocosm studies with planar O ₂ optodes and membrane inlet mass spectrometry. Soil Biology and Biochemistry, 2010, 42, 2254-2265.	8.8	52
70	Comparison between infaunal communities of the deep floor and edge of the Tonga Trench: Possible effects of differences in organic matter supply. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 116, 264-275.	1.4	52
71	Influence of porewater advection on denitrification in carbonate sands: Evidence from repacked sediment column experiments. Geochimica Et Cosmochimica Acta, 2012, 96, 247-258.	3.9	51
72	Simple, robust eddy correlation amplifier for aquatic dissolved oxygen and hydrogen sulfide flux measurements. Limnology and Oceanography: Methods, 2011, 9, 340-347.	2.0	50

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73	Sediment oxygen consumption: Role in the global marine carbon cycle. <i>Earth-Science Reviews</i> , 2022, 228, 103987.	9.1	50
74	Linking <i>Arenicola marina</i> irrigation behavior to oxygen transport and dynamics in sandy sediments. <i>Journal of Marine Research</i> , 2006, 64, 915-938.	0.3	49
75	Hadal trenches are dynamic hotspots for early diagenesis in the deep sea. <i>Communications Earth & Environment</i> , 2021, 2, .	6.8	49
76	Metabolomics Reveals Cryptic Interactive Effects of Species Interactions and Environmental Stress on Nitrogen and Sulfur Metabolism in Seagrass. <i>Environmental Science & Technology</i> , 2016, 50, 11602-11609.	10.0	48
77	Copepod carcasses as microbial hot spots for pelagic denitrification. <i>Limnology and Oceanography</i> , 2015, 60, 2026-2036.	3.1	47
78	Degradation of mussel (<i>Mytilus edulis</i>) fecal pellets released from hanging long-lines upon sinking and after settling at the sediment. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2010, 67, 1376-1387.	1.4	46
79	Seasonal metabolism and carbon export potential of a key coastal habitat: The perennial canopy-forming macroalga <i>Fucus vesiculosus</i> . <i>Limnology and Oceanography</i> , 2019, 64, 149-164.	3.1	46
80	LUMOS - A Sensitive and Reliable Optode System for Measuring Dissolved Oxygen in the Nanomolar Range. <i>PLoS ONE</i> , 2015, 10, e0128125.	2.5	45
81	Diffusivity in surficial sediments and benthic mats determined by use of a combined N ₂ O-O ₂ microsensor. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 231-237.	3.9	44
82	Fabrication and test of sol-gel based planar oxygen optodes for use in aquatic sediments. <i>Marine Chemistry</i> , 2005, 97, 262-276.	2.3	43
83	Oxygen dynamics around buried lesser sandeels <i>Ammodytes tobianus</i> (Linnaeus 1785): mode of ventilation and oxygen requirements. <i>Journal of Experimental Biology</i> , 2007, 210, 1006-1014.	1.7	42
84	A combined sensor for simultaneous high resolution 2D imaging of oxygen and trace metals fluxes. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 389-401.	2.0	42
85	Effects of cattle slurry and nitrification inhibitor application on spatial soil O ₂ dynamics and N ₂ O production pathways. <i>Soil Biology and Biochemistry</i> , 2017, 114, 200-209.	8.8	42
86	Adaptation, test and in situ measurements with O ₂ microoptodes on benthic landers. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1999, 46, 171-183.	1.4	41
87	Viral activity along a trophic gradient in continental margin sediments off central Chile. <i>Marine Biology Research</i> , 2006, 2, 41-51.	0.7	41
88	The kinetics of denitrification in permeable sediments. <i>Biogeochemistry</i> , 2013, 113, 563-572.	3.5	40
89	Cable bacteria promote DNRA through iron sulfide dissolution. <i>Limnology and Oceanography</i> , 2019, 64, 1228-1238.	3.1	38
90	Modelling Marine Sediment Biogeochemistry: Current Knowledge Gaps, Challenges, and Some Methodological Advice for Advancement. <i>Frontiers in Marine Science</i> , 2018, 5, .	2.5	36

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91	Aquatic Eddy Correlation: Quantifying the Artificial Flux Caused by Stirring-Sensitive O ₂ Sensors. PLoS ONE, 2015, 10, e0116564.	2.5	36
92	An Assessment of the Precision and Confidence of Aquatic Eddy Correlation Measurements. Journal of Atmospheric and Oceanic Technology, 2015, 32, 642-655.	1.3	35
93	Viral dynamics in a coastal sediment: seasonal pattern, controlling factors and relations to the pelagic-benthic coupling. Marine Biology Research, 2008, 4, 165-179.	0.7	34
94	Oxygen exchange and ice melt measured at the ice-water interface by eddy correlation. Biogeosciences, 2012, 9, 1957-1967.	3.3	34
95	The relative contributions of biological and abiotic processes to carbon dynamics in subarctic sea ice. Polar Biology, 2013, 36, 1761-1777.	1.2	34
96	Aquatic Eddy Covariance: The Method and Its Contributions to Defining Oxygen and Carbon Fluxes in Marine Environments. Annual Review of Marine Science, 2022, 14, 431-455.	11.6	33
97	Oxygen penetration around burrows and roots in aquatic sediments. Journal of Marine Research, 2010, 68, 309-336.	0.3	32
98	Metabolism in anoxic permeable sediments is dominated by eukaryotic dark fermentation. Nature Geoscience, 2017, 10, 30-35.	12.9	31
99	Growth limitation of three Arctic sea ice algal species: effects of salinity, pH, and inorganic carbon availability. Polar Biology, 2011, 34, 1157-1165.	1.2	29
100	The isotope effect of denitrification in permeable sediments. Geochimica Et Cosmochimica Acta, 2014, 133, 156-167.	3.9	29
101	New Training to Meet the Global Phosphorus Challenge. Environmental Science & Technology, 2019, 53, 8479-8481.	10.0	29
102	Microbial community structure in hadal sediments: high similarity along trench axes and strong changes along redox gradients. ISME Journal, 2021, 15, 3455-3467.	9.8	29
103	Anoxic microniches in marine sediments induced by aggregate settlement: biogeochemical dynamics and implications. Biogeochemistry, 2014, 119, 307.	3.5	28
104	Biological- and physical-induced oxygen dynamics in melting sea ice of the Fram Strait. Limnology and Oceanography, 2014, 59, 1097-1111.	3.1	28
105	Intracellular Nitrate of Marine Diatoms as a Driver of Anaerobic Nitrogen Cycling in Sinking Aggregates. Frontiers in Microbiology, 2016, 7, 1669.	3.5	28
106	In situ quantification of ultra-low O ₂ concentrations in oxygen minimum zones: Application of novel optodes. Limnology and Oceanography: Methods, 2016, 14, 784-800.	2.0	28
107	Benthic Oxygen and Nitrogen Exchange on a Cold-Water Coral Reef in the North-East Atlantic Ocean. Frontiers in Marine Science, 2019, 6, .	2.5	28
108	Spatial heterogeneity and short-term oxygen dynamics in the rhizosphere of <i>Vallisneria spiralis</i> : Implications for nutrient cycling. Freshwater Biology, 2019, 64, 532-543.	2.4	28

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109	Flow-induced flushing of relict tube structures in the central Skagerrak (Norway). <i>Marine Biology</i> , 2002, 141, 939-945.	1.5	27
110	Benthic Carbon Mineralization and Nutrient Turnover in a Scottish Sea Loch: An Integrative In Situ Study. <i>Aquatic Geochemistry</i> , 2016, 22, 443-467.	1.3	27
111	Fixed-Nitrogen Loss Associated with Sinking Zooplankton Carcasses in a Coastal Oxygen Minimum Zone (Golfo Dulce, Costa Rica). <i>Frontiers in Marine Science</i> , 2017, 4, .	2.5	26
112	A METHOD TO IMPROVE THE SPATIAL RESOLUTION OF PHOTOSYNTHETIC RATES OBTAINED BY OXYGEN MICROSENSORS. <i>Journal of Phycology</i> , 1998, 34, 89-93.	2.3	25
113	High mercury accumulation in deep-ocean hadal sediments. <i>Scientific Reports</i> , 2021, 11, 10970.	3.3	24
114	Comparison of three different methods for assessing in situ friction velocity: A case study from Loch Etive, Scotland. <i>Limnology and Oceanography: Methods</i> , 2011, 9, 275-287.	2.0	23
115	Spatial Oxygen Distribution and Nitrous Oxide Emissions from Soil after Manure Application: A Novel Approach Using Planar Optodes. <i>Journal of Environmental Quality</i> , 2014, 43, 1809-1812.	2.0	23
116	Phytoplankton Productivity in an Arctic Fjord (West Greenland): Estimating Electron Requirements for Carbon Fixation and Oxygen Production. <i>PLoS ONE</i> , 2015, 10, e0133275.	2.5	22
117	Reach-scale river metabolism across contrasting sub-catchment geologies: Effect of light and hydrology. <i>Limnology and Oceanography</i> , 2017, 62, S381-S399.	3.1	22
118	An Optode Sensor Array for Long-Term In Situ Oxygen Measurements in Soil and Sediment. <i>Journal of Environmental Quality</i> , 2013, 42, 1267-1273.	2.0	21
119	Towards a sampling design for characterizing habitat-specific benthic biodiversity related to oxygen flux dynamics using Aquatic Eddy Covariance. <i>PLoS ONE</i> , 2019, 14, e0211673.	2.5	21
120	Estimating Respiration Rates and Secondary Production of Macrobenthic Communities Across Coastal Habitats with Contrasting Structural Biodiversity. <i>Ecosystems</i> , 2020, 23, 630-647.	3.4	21
121	Meiofauna improve oxygenation and accelerate sulfide removal in the seasonally hypoxic seabed. <i>Marine Environmental Research</i> , 2020, 159, 104968.	2.5	20
122	Anammox bacteria drive fixed nitrogen loss in hadal trench sediments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	20
123	Effects of temperature and irradiance on a benthic microalgal community: A combined two-dimensional oxygen and fluorescence imaging approach. <i>Limnology and Oceanography</i> , 2014, 59, 1599-1611.	3.1	19
124	Bacterial carbon cycling in a subarctic fjord: A seasonal study on microbial activity, growth efficiency, and virus-induced mortality in Kobbefjord, Greenland. <i>Limnology and Oceanography</i> , 2012, 57, 1732-1742.	3.1	18
125	Parameterization of atmosphere-surface exchange of CO ₂ over sea ice. <i>Cryosphere</i> , 2014, 8, 853-866.	3.9	18
126	Benthic primary production and respiration of shallow rocky habitats: a case study from South Bay (Doumer Island, Western Antarctic Peninsula). <i>Polar Biology</i> , 2019, 42, 1459-1474.	1.2	18

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127	Glycerol dialkyl glycerol tetraethers in surface sediments from three Pacific trenches: Distribution, source and environmental implications. <i>Organic Geochemistry</i> , 2020, 147, 104079.	1.8	18
128	Spatial variability of prokaryotic and viral abundances in the Kermadec and Atacama Trench regions. <i>Limnology and Oceanography</i> , 2021, 66, 2095-2109.	3.1	18
129	A benthic lander for tracer studies in the sea bed: in situ measurements of sulfate reduction. <i>Continental Shelf Research</i> , 1998, 18, 1581-1594.	1.8	17
130	A conspicuous H ₂ S-oxidizing microbial mat from a high-latitude Arctic fjord (Young Sound, NE) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62.	1.5	17
131	The transformation and fate of sub- ¹³ C Arctic microphytobenthos carbon revealed through ¹³ C labeling. <i>Limnology and Oceanography</i> , 2016, 61, 2296-2308.	3.1	17
132	Sharp contrasts between freshwater and marine microbial enzymatic capabilities, community composition, and DOM pools in a NE Greenland fjord. <i>Limnology and Oceanography</i> , 2020, 65, 77-95.	3.1	17
133	Mapping cold-water coral biomass: an approach to derive ecosystem functions. <i>Coral Reefs</i> , 2021, 40, 215-231.	2.2	16
134	Distribution, Source, and Burial of Sedimentary Organic Carbon in Kermadec and Atacama Trenches. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG006189.	3.0	16
135	Biosensor for laboratory and lander-based analysis of benthic nitrate plus nitrite distribution in marine environments. <i>Limnology and Oceanography: Methods</i> , 2009, 7, 761-770.	2.0	15
136	A mesocosm study of oxygen and trace metal dynamics in sediment microniches of reactive organic material. <i>Scientific Reports</i> , 2017, 7, 11369.	3.3	15
137	Light indirectly mediates bivalve habitat modification and impacts on seagrass. <i>Journal of Experimental Marine Biology and Ecology</i> , 2015, 472, 41-53.	1.5	14
138	A new large egg type from the marine live feed calanoid copepod <i>Acartia tonsa</i> (Dana) – Perspectives for selective breeding of designer feed for hatcheries. <i>Aquaculture</i> , 2015, 436, 114-120.	3.5	14
139	The hadal zone is an important and heterogeneous sink of black carbon in the ocean. <i>Communications Earth & Environment</i> , 2022, 3, .	6.8	14
140	Respiration by marine snow at high hydrostatic pressure: Insights from continuous oxygen measurements in a rotating pressure tank. <i>Limnology and Oceanography</i> , 2021, 66, 2797-2809.	3.1	13
141	Nutrient availability limits biological production in Arctic sea ice melt ponds. <i>Polar Biology</i> , 2017, 40, 1593-1606.	1.2	12
142	Effect of settled diatom aggregates on benthic nitrogen cycling. <i>Limnology and Oceanography</i> , 2018, 63, 431-444.	3.1	11
143	Pore water conditions driving calcium carbonate dissolution in reef sands. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 279, 16-28.	3.9	11
144	Contrasting Biophysical Controls on Carbon Dioxide and Methane Outgassing From Streams. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	3.0	11

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145	Intracellular nitrate storage by diatoms can be an important nitrogen pool in freshwater and marine ecosystems. <i>Communications Earth & Environment</i> , 2022, 3, .	6.8	11
146	Oxygen fluxes beneath Arctic land-fast ice and pack ice: towards estimates of ice productivity. <i>Polar Biology</i> , 2018, 41, 2119-2134.	1.2	10
147	Plankton respiration in the Atacama Trench region: Implications for particulate organic carbon flux into the hadal realm. <i>Limnology and Oceanography</i> , 2021, 66, 3134-3148.	3.1	10
148	Sediment reworking by the burrowing polychaete <i>Hediste diversicolor</i> modulated by environmental and biological factors across the temperate North Atlantic. A tribute to Gaston Desrosiers. <i>Journal of Experimental Marine Biology and Ecology</i> , 2021, 541, 151588.	1.5	10
149	<i>Eurythenes atacamensis</i> sp. nov. (Crustacea: Amphipoda) exhibits ontogenetic vertical stratification across abyssal and hadal depths in the Atacama Trench, eastern South Pacific Ocean. <i>Marine Biodiversity</i> , 2021, 51, 51.	1.0	9
150	Spatial and temporal anoxia in single-ostium <i>Halichondria panicea</i> demosponge explants studied with planar optodes. <i>Marine Biology</i> , 2021, 168, 1.	1.5	9
151	Benthic mineralization and solute exchange on a Celtic Sea sand-bank (Jones Bank). <i>Progress in Oceanography</i> , 2013, 117, 64-75.	3.2	8
152	Freshwater copepod carcasses as pelagic microsites of dissimilatory nitrate reduction to ammonium. <i>FEMS Microbiology Ecology</i> , 2018, 94, .	2.7	7
153	Depression chains in seafloor of contrasting morphology, Atacama Trench margin: a comment on Marsh <i>et al.</i> (2018). <i>Royal Society Open Science</i> , 2019, 6, 182053.	2.4	7
154	Headwater gas exchange quantified from O_2 mass balances at the reach scale. <i>Limnology and Oceanography: Methods</i> , 2018, 16, 696-709.	2.0	6
155	Intra- and inter-spatial variability of meiofauna in hadal trenches is linked to microbial activity and food availability. <i>Scientific Reports</i> , 2022, 12, 4338.	3.3	5
156	Element cycling and aquatic function in a changing Arctic. <i>Limnology and Oceanography</i> , 2021, 66, S1.	3.1	4
157	A microsensor-based method for measuring respiration of individual nematodes. <i>Methods in Ecology and Evolution</i> , 2021, 12, 1841-1847.	5.2	4
158	Technical note: Estimating light-use efficiency of benthic habitats using underwater O_2 and eddy covariance. <i>Biogeosciences</i> , 2020, 17, 4343-4353.	3.3	4
159	Deposition and benthic mineralization of organic carbon: A seasonal study from Faroe Islands. <i>Journal of Marine Systems</i> , 2018, 177, 53-61.	2.1	3
160	Methods to Assess High-Resolution Subsurface Gas Concentrations and Gas Fluxes in Wetland Ecosystems. <i>Soil Science Society of America Book Series</i> , 0, , 949-970.	0.3	2
161	Exchange and Microdistribution of Solutes at the Benthic Interface: An In Situ Study in Aarhus Bight, Denmark. <i>ACS Symposium Series</i> , 2002, , 144-161.	0.5	1