

Gas transport from methane-saturated, tidal freshwater

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Variations in sedimentary carbon remineralization rates in the White Oak River estuary, North Carolina. <i>Limnology and Oceanography</i> , 1990, 35, 372-383.	3.1	80
2	Air pressure and methane fluxes. <i>Nature</i> , 1990, 347, 718-719.	27.8	167
3	Dinitrogen and nitrous oxide emission and entrapment in <i>Spartina alterniflora</i> saltmarsh soils following addition of N-15 labelled ammonium and nitrate. <i>Estuarine, Coastal and Shelf Science</i> , 1991, 32, 161-172.	2.1	38
4	Methane fluxes in the southern North Sea: the role of European rivers. <i>Continental Shelf Research</i> , 1991, 11, 37-52.	1.8	76
5	Relationships between CH ₄ emission, biomass, and CO ₂ exchange in a subtropical grassland. <i>Journal of Geophysical Research</i> , 1991, 96, 13067-13071.	3.3	109
6	Role of Plants in Regulating the Methane Flux to the Atmosphere. , 1991, , 29-63.		147
7	Effects of Vegetation on Methane Flux, Reservoirs, and Carbon Isotopic Composition. , 1991, , 65-92.		130
8	Biogeochemistry of billabong sediments. I. The effect of macrophytes. <i>Freshwater Biology</i> , 1991, 26, 209-226.	2.4	59
9	Relationship between Aboveground and Belowground Biomass of <i>Spartina alterniflora</i> (Smooth) Tj ETQq0 0 0 rgBT /Qverlock 10 Tf 50 4.	1.7	103
10	CH ₄ production via CO ₂ reduction in a temperate bog: A source of ¹³ C-depleted CH ₄ . <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 3493-3503.	3.9	187
11	Episodic fluxes of methane from subarctic fens. <i>Canadian Journal of Soil Science</i> , 1992, 72, 441-452.	1.2	97
12	Methane transport mechanisms and isotopic fractionation in emergent macrophytes of an Alaskan tundra lake. <i>Journal of Geophysical Research</i> , 1992, 97, 16681-16688.	3.3	93
13	Methane flux from <i>Peltandra virginica</i> : stable isotope tracing and chamber effects. <i>Global Biogeochemical Cycles</i> , 1992, 6, 15-31.	4.9	94
14	Carbon and hydrogen isotopic characterization of methane from wetlands and lakes of the Yukonâ€Kuskokwim delta, western Alaska. <i>Journal of Geophysical Research</i> , 1992, 97, 16689-16701.	3.3	82
15	Seasonal variations of stable hydrogen and carbon isotope ratios of methane in subtropical freshwater sediments. <i>Global Biogeochemical Cycles</i> , 1992, 6, 125-138.	4.9	24
16	Plantâ€dependent CH ₄ emission in a subarctic Canadian fen. <i>Global Biogeochemical Cycles</i> , 1992, 6, 225-231.	4.9	245
17	Biogeochemistry of billabong sediments. II. Seasonal variations in methane production. <i>Freshwater Biology</i> , 1992, 27, 435-445.	2.4	78
18	Seasonal variation of fungal biomass in the sediment of a salt marsh in New Brunswick. <i>Microbial Ecology</i> , 1993, 26, 37-45.	2.8	22

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19	Quantification of methane oxidation in the rhizosphere of emergent aquatic macrophytes: defining upper limits. <i>Biogeochemistry</i> , 1993, 23, 79-97.	3.5	104
20	Carbon remineralization in a north Florida swamp forest: Effects of water level on the pathways and rates of soil organic matter decomposition. <i>Global Biogeochemical Cycles</i> , 1993, 7, 475-490.	4.9	48
21	Methane and Carbon Dioxide Concentrations in Bogs and Fens--with Special Reference to the Effects of the Botanical Composition of the Peat. <i>Journal of Ecology</i> , 1993, 81, 615.	4.0	56
22	Methane Flux from Mangrove Sediments along the Southwestern Coast of Puerto Rico. <i>Estuaries and Coasts</i> , 1994, 17, 140.	1.7	79
23	The influence of methane oxidation on the stable isotopic composition of methane emitted from Florida swamp forests. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 4377-4388.	3.9	106
24	Methane emission by bubbling from Gatun Lake, Panama. <i>Journal of Geophysical Research</i> , 1994, 99, 8307.	3.3	189
25	Convective gas flow in <i>Eleocharis sphacelata</i> R. Br.: methane transport and release from wetlands. <i>Aquatic Botany</i> , 1994, 47, 197-212.	1.6	100
26	Production and emission of methane in a brackish and a freshwater wetland. <i>Soil Biology and Biochemistry</i> , 1994, 26, 7-18.	8.8	53
27	Methane flux from beds of <i>Baumea arthropphylla</i> (Nees) Boeckeler and <i>Triglochin procerum</i> R. Br. at Bool Lagoon, South Australia. <i>Marine and Freshwater Research</i> , 1994, 45, 1543.	1.3	9
28	Methane dynamics across a tidally flooded riverbank margin. <i>Limnology and Oceanography</i> , 1995, 40, 1112-1129.	3.1	86
29	Methanogenesis in Arizona, USA dryland streams. <i>Biogeochemistry</i> , 1995, 31, 155-173.	3.5	53
30	Denitrification measured by a direct N ₂ flux method in sediments of Waquoit Bay, MA. <i>Biogeochemistry</i> , 1995, 31, 63.	3.5	32
31	Methane Fluxes from an Australian Floodplain Wetland: The Importance of Emergent Macrophytes. <i>Journal of the North American Benthological Society</i> , 1995, 14, 582-598.	3.1	32
32	Temporal variations in dissolved methane deep in the Lake Agassiz Peatlands, Minnesota. <i>Global Biogeochemical Cycles</i> , 1995, 9, 197-212.	4.9	81
33	Microbial diversity and activity in a Danish Fjord with anoxic deep water. <i>Ophelia</i> , 1995, 43, 45-100.	0.3	151
34	Role of wetland plants in the diurnal control of CH ₄ and CO ₂ fluxes in peat. <i>Soil Biology and Biochemistry</i> , 1996, 28, 17-23.	8.8	174
35	A history of pressurised gas-flow studies in plants. <i>Aquatic Botany</i> , 1996, 54, 87-100.	1.6	81
36	Trapped methane volume and potential effects on methane ebullition in a northern peatland. <i>Limnology and Oceanography</i> , 1996, 41, 1375-1383.	3.1	151

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37	Losses of inorganic carbon and nitrous oxide from a temperate freshwater wetland in relation to nitrate loading. <i>Biogeochemistry</i> , 1996, 35, 305-326.	3.5	36
38	Summer Methane Fluxes and Fall Oxygen Resources of Onondaga Lake. <i>Lake and Reservoir Management</i> , 1996, 12, 91-101.	1.3	28
39	Methane Efflux from Emergent Vegetation in Peatlands. <i>Journal of Ecology</i> , 1996, 84, 239.	4.0	181
40	Methane oxidation and pathways of production in a Texas paddy field deduced from measurements of flux, $\delta^{13}C$, and δ^2H of CH_4 . <i>Global Biogeochemical Cycles</i> , 1997, 11, 323-348.	4.9	124
41	Investigation of the methyl fluoride technique for determining rhizospheric methane oxidation. <i>Biogeochemistry</i> , 1997, 36, 153-172.	3.5	47
42	Die-back of <i>Phragmites australis</i> : influence on the distribution and rate of sediment methanogenesis. <i>Biogeochemistry</i> , 1997, 36, 173-188.	3.5	43
43	The influence of raised water table levels on carbon dioxide and methane production in ditch-dissected peat grasslands in the Netherlands. <i>Ecological Engineering</i> , 1997, 8, 129-144.	3.6	45
44	Micrometeorological measurements of methane flux in a Minnesota peatland during two growing seasons. <i>Biogeochemistry</i> , 1998, 40, 1-15.	3.5	46
45	Effects of two common macrophytes on methane dynamics in freshwater sediments. , 1998, 43, 79-104.		95
46	Management implications of metal transfer pathways from a refuse tip to mangrove sediments. <i>Science of the Total Environment</i> , 1998, 222, 17-34.	8.0	18
47	Redox stratification and heavy metal partitioning in <i>Avicennia</i> -dominated mangrove sediments: a geochemical model. <i>Chemical Geology</i> , 1998, 149, 147-171.	3.3	224
48	Controls on the stable carbon isotopic composition of biogenic methane produced in a tidal freshwater estuarine sediment. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 1075-1082.	3.9	34
49	Methane emission from lakes. <i>Chemosphere</i> , 1999, 38, 1453-1459.	8.2	10
50	Differences in CH_4 oxidation and pathways of production between rice cultivars deduced from measurements of CH_4 flux and $\delta^{13}C$ of CH_4 and CO_2 . <i>Global Biogeochemical Cycles</i> , 1999, 13, 1029-1044.	4.9	70
51	Methane emissions from beaver ponds: Rates, patterns, and transport mechanisms. <i>Global Biogeochemical Cycles</i> , 1999, 13, 1079-1090.	4.9	36
52	Methane dynamics of a northern boreal beaver pond. <i>Ecoscience</i> , 1999, 6, 577-586.	1.4	38
53	Estimating the groundwater contribution into Florida Bay via natural tracers, ^{222}Rn and CH_4 . <i>Limnology and Oceanography</i> , 2000, 45, 1546-1557.	3.1	90
54	Resuspension and oxygen uptake of sediments in combined sewers. <i>Urban Water</i> , 2000, 2, 21-27.	0.5	22

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55	Fluxes of methane and carbon dioxide from a small productive lake to the atmosphere. <i>Biogeochemistry</i> , 2000, 49, 1-19.	3.5	244
56	Selective chemical extraction and grainsize normalisation for environmental assessment of anoxic sediments: validation of an integrated procedure. <i>Science of the Total Environment</i> , 2000, 258, 149-170.	8.0	54
57	Factors Influencing Stable Isotope Ratios in CH ₄ and CO ₂ Within Subenvironments of Freshwater Wetlands: Implications for δ ¹³ C-Signatures of Emissions. <i>Isotopes in Environmental and Health Studies</i> , 2000, 36, 151-176.	1.0	43
58	Radiocarbon and stable carbon isotopic evidence for transport and transformation of dissolved organic carbon, dissolved inorganic carbon, and CH ₄ in a northern Minnesota peatland. <i>Global Biogeochemical Cycles</i> , 2000, 14, 1095-1108.	4.9	187
59	Methane in the southern North Sea: Low-salinity inputs, estuarine removal, and atmospheric flux. <i>Global Biogeochemical Cycles</i> , 2000, 14, 1205-1217.	4.9	136
60	Temporal variation in natural methane seep rate due to tides, Coal Oil Point area, California. <i>Journal of Geophysical Research</i> , 2001, 106, 27077-27086.	3.3	123
61	Modeling methane fluxes in wetlands with gas-transporting plants: 1. Single-root scale. <i>Journal of Geophysical Research</i> , 2001, 106, 3511-3528.	3.3	36
62	Are Phragmites-dominated wetlands a net source or net sink of greenhouse gases?. <i>Aquatic Botany</i> , 2001, 69, 313-324.	1.6	252
63	Diel variation in methane emissions from stands of <i>Phragmites australis</i> (Cav.) Trin. ex Steud. and <i>Typha latifolia</i> L. in a boreal lake. <i>Aquatic Botany</i> , 2001, 71, 259-271.	1.6	67
65	Rate of growth of isolated bubbles in sediments with a diagenetic source of methane. <i>Limnology and Oceanography</i> , 2001, 46, 616-622.	3.1	46
66	Tracking the fate of a high concentration groundwater nitrate plume through a fringing marsh: A combined groundwater tracer and in situ isotope enrichment study. <i>Limnology and Oceanography</i> , 2001, 46, 1977-1989.	3.1	94
67	Title is missing!. <i>Water, Air and Soil Pollution</i> , 2001, 1, 447-454.	0.8	9
68	Title is missing!. <i>Biogeochemistry</i> , 2001, 52, 207-224.	3.5	57
69	Gas transport in a residual layer of a water basin. <i>Chemosphere</i> , 2001, 3, 33-40.	1.2	8
70	A Gas-Capture Buoy for Measuring Bubbling Gas Flux in Oceans and Lakes. <i>Journal of Atmospheric and Oceanic Technology</i> , 2001, 18, 1411-1420.	1.3	22
71	Production of methane from allasses in eastern Siberia: Implications from its ¹⁴ C and stable isotopic compositions. <i>Global Biogeochemical Cycles</i> , 2002, 16, 14-1-14-15.	4.9	68
72	A mass balance of carbon stable isotopes in an organic-rich methane-producing lacustrine sediment (Lake Bled, Slovenia). <i>Global and Planetary Change</i> , 2002, 33, 57-72.	3.5	41
73	Methanotrophic bacteria and their activity on submerged aquatic macrophytes. <i>Aquatic Botany</i> , 2002, 72, 107-119.	1.6	52

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74	Mechanical response of sediments to bubble growth. <i>Marine Geology</i> , 2002, 187, 347-363.	2.1	134
75	Title is missing!. <i>Biogeochemistry</i> , 2002, 59, 269-286.	3.5	145
76	Title is missing!. <i>Biogeochemistry</i> , 2002, 61, 1-19.	3.5	41
77	Title is missing!. <i>Biogeochemistry</i> , 2003, 62, 19-37.	3.5	86
78	Methane (CH ₄) release from littoral wetlands of Boreal lakes during an extended flooding period. <i>Global Change Biology</i> , 2003, 9, 413-424.	9.5	52
79	Use of hydraulic head to estimate volumetric gas content and ebullition flux in northern peatlands. <i>Water Resources Research</i> , 2003, 39, .	4.2	90
80	Theoretical consideration of methane emission from sediments. <i>Chemosphere</i> , 2003, 50, 191-200.	8.2	9
81	Physical Controls on Methane Ebullition from Reservoirs and Lakes. <i>Environmental and Engineering Geoscience</i> , 2003, 9, 167-178.	0.9	141
82	Diel Variation of Methane Fluxes in Summer in a Eutrophic Subtropical Lake in China. <i>Journal of Freshwater Ecology</i> , 2004, 19, 639-644.	1.2	23
83	Carbon turnover in peatland mesocosms exposed to different water table levels. <i>Biogeochemistry</i> , 2004, 67, 331-351.	3.5	226
84	Methane concentration and emission as affected by methane transport capacity of plants in freshwater marsh. <i>Water, Air, and Soil Pollution</i> , 2004, 158, 99-111.	2.4	24
85	Influence of plants on the methane emission from sediments. <i>Chemosphere</i> , 2004, 54, 209-215.	8.2	13
86	Extreme ¹³ C enrichments in a shallow hypereutrophic lake: Implications for carbon cycling. <i>Limnology and Oceanography</i> , 2004, 49, 1152-1159.	3.1	70
87	Coastal seismic wipe-outs: Distribution controlled by pore water salinity. <i>Marine Geology</i> , 2005, 217, 161-175.	2.1	10
88	Plant species effects on methane emissions from freshwater marshes. <i>Atmospheric Environment</i> , 2005, 39, 3199-3207.	4.1	139
89	Hypothesis for increased atmospheric methane input from hydrocarbon seeps on exposed continental shelves during glacial low sea level. <i>Marine and Petroleum Geology</i> , 2005, 22, 591-596.	3.3	28
90	Release of gas bubbles from lake sediment traced by noble gas isotopes in the sediment pore water. <i>Earth and Planetary Science Letters</i> , 2005, 235, 31-44.	4.4	66
91	The effect of gas transport on the isotope signature of methane in wetlands. <i>Organic Geochemistry</i> , 2005, 36, 753-768.	1.8	172

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93	Sediment porewater exchange and solute release during ebullition. <i>Marine Chemistry</i> , 2006, 102, 60-71.	2.3	29
94	Spatial patterns in dissolved oxygen and methane concentrations in a prairie pothole wetland in Iowa, USA. <i>Wetlands</i> , 2006, 26, 1020-1025.	1.5	15
95	Experimental Test of a Mechanistic Model of Production, Flux and Gas Bubble Zonation in Non-vegetated Flooded Rice Field Soil. <i>Biogeochemistry</i> , 2006, 78, 315-342.	3.5	5
96	Spatial and temporal distribution of methane in an extensive shallow estuary, South India. <i>Journal of Earth System Science</i> , 2006, 115, 451-460.	1.3	43
97	Bubble-induced porewater mixing: A 3-D model for deep porewater irrigation. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5135-5154.	3.9	89
98	Seabed Fluid Flow. <i>Geofluids</i> , 2007, 7, 468-469.	0.7	13
99	Methane release and coastal environment in the East Siberian Arctic shelf. <i>Journal of Marine Systems</i> , 2007, 66, 227-243.	2.1	101
100	Nitrogen ebullition in a Colorado plains river. <i>Biogeochemistry</i> , 2008, 89, 367-377.	3.5	22
101	Emissions of Greenhouse Gases CH ₄ and N ₂ O from Low-gradient Streams in Agriculturally Developed Catchments. <i>Water, Air, and Soil Pollution</i> , 2008, 188, 155-170.	2.4	62
102	Methane production and bubble emissions from arctic lakes: Isotopic implications for source pathways and ages. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	170
103	Methane bubbles in surface peat cores: <i>in situ</i> measurements. <i>Global Change Biology</i> , 2008, 14, 916-924.	9.5	12
104	Methane and nitrous oxide fluxes in the polluted Adyar River and estuary, SE India. <i>Marine Pollution Bulletin</i> , 2008, 56, 2043-2051.	5.0	120
105	Methane dynamics in different boreal lake types. <i>Biogeosciences</i> , 2009, 6, 209-223.	3.3	181
106	A Model for Contaminant and Sediment Transport via Gas Ebullition Through a Sediment Cap. <i>Environmental Engineering Science</i> , 2009, 26, 1381-1391.	1.6	14
107	Effects of tidal fluctuations on CO ₂ and CH ₄ fluxes in the littoral zone of a brackish-water lake. <i>Limnology</i> , 2009, 10, 229-237.	1.5	18
108	Investigation of NAPL transport through a model sand cap during ebullition. <i>Remediation</i> , 2009, 19, 63-69.	2.4	6
109	EBULLITION-FACILITATED TRANSPORT OF MANUFACTURED GAS PLANT TAR FROM CONTAMINATED SEDIMENT. <i>Environmental Toxicology and Chemistry</i> , 2009, 28, 2298.	4.3	21
110	The contribution of the East Siberian shelf to the modern methane cycle. <i>Herald of the Russian Academy of Sciences</i> , 2009, 79, 237-246.	0.6	32

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111	Transient growth of an isolated bubble in muddy, fine-grained sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 2581-2591.	3.9	47
112	Impact of terrestrial carbon input on methane emissions from an Alaskan Arctic lake. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	9
113	A simple technique for continuous measurement of time-variable gas transfer in surface waters. <i>Limnology and Oceanography: Methods</i> , 2009, 7, 185-195.	2.0	40
114	A low-cost automated trap to measure bubbling gas fluxes. <i>Limnology and Oceanography: Methods</i> , 2010, 8, 363-375.	2.0	29
115	Seasonal variability of methane in the rivers and lagoons of Ivory Coast (West Africa). <i>Biogeochemistry</i> , 2010, 100, 21-37.	3.5	81
116	Methane sources, sinks and fluxes in a temperate tidal Lagoon: The Arcachon lagoon (SW France). <i>Estuarine, Coastal and Shelf Science</i> , 2010, 89, 256-266.	2.1	56
117	Stability of bubbles in a linear elastic medium: Implications for bubble growth in marine sediments. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	36
118	Methane dynamics across wetland plant species. <i>Aquatic Botany</i> , 2010, 93, 107-113.	1.6	87
119	Theory of methane emission from wetlands. <i>Energy and Environmental Science</i> , 2010, 3, 1057.	30.8	8
120	Initial rise of bubbles in cohesive sediments by a process of viscoelastic fracture. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	76
121	Release of multiple bubbles from cohesive sediments. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	35
122	In situ Raman-based measurements of high dissolved methane concentrations in hydrate-rich ocean sediments. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	47
123	Diffusive and ebullitive transport of methane and nitrous oxide from streams: Are bubble-mediated fluxes important?. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	86
124	Atmospheric pressure drives changes in the vertical distribution of biogenic free-phase gas in a northern peatland. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	35
125	Estuarine and Coastal Sediments " Coupled Biogeochemical Cycling. , 2011, , 279-316.		25
126	Field-based measurements of sulfur gas emissions from an agricultural coastal acid sulfate soil, eastern Australia. <i>Soil Research</i> , 2011, 49, 471.	1.1	11
127	Accelerated microbial organic matter mineralization following salt-water intrusion into tidal freshwater marsh soils. <i>Biogeochemistry</i> , 2011, 102, 135-151.	3.5	243
128	The Production of Trace Gases in the Estuarine and Coastal Environment. , 2011, , 271-309.		5

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129	Carbon Dioxide and Methane Dynamics in Estuaries. , 2011, , 119-161.		150
130	Acoustic detection of gas bubbles in saturated sands at high spatial and temporal resolution. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 129-141.	2.0	8
131	The physics of bubbles in surficial, soft, cohesive sediments. <i>Marine and Petroleum Geology</i> , 2012, 38, 1-18.	3.3	116
132	The challenges of measuring methane fluxes and concentrations over a peatland pasture. <i>Agricultural and Forest Meteorology</i> , 2012, 153, 177-187.	4.8	113
133	Characterization of subsurface methane production and release over 3years at a New Hampshire wetland. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 91, 120-139.	3.9	18
134	Controls on gas transfer velocities in a large river. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	69
135	Methane flux from sediment into near-bottom water in the coastal area of the Puck Bay (Southern Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.7	10
136	Automated Flux Chamber for Investigating Gas Flux at Water–Air Interfaces. <i>Environmental Science & Technology</i> , 2013, 47, 968-975.	10.0	38
137	Ebullition of methane from rice paddies: the importance of furthering understanding. <i>Plant and Soil</i> , 2013, 370, 31-34.	3.7	22
138	Autonomous Application of Quantitative PCR in the Deep Sea: In Situ Surveys of Aerobic Methanotrophs Using the Deep-Sea Environmental Sample Processor. <i>Environmental Science & Technology</i> , 2013, 47, 9339-9346.	10.0	47
139	Methane Accumulation and Release from Deep Peat: Measurements, Conceptual Models, and Biogeochemical Significance. <i>Geophysical Monograph Series</i> , 0, , 145-158.	0.1	7
140	Methane bubble growth in fine-grained muddy aquatic sediment: Insight from modeling. <i>Earth and Planetary Science Letters</i> , 2013, 377-378, 336-346.	4.4	35
141	Estimation of N ₂ and N ₂ O ebullition from eutrophic water using an improved bubble trap device. <i>Ecological Engineering</i> , 2013, 57, 403-412.	3.6	23
142	Submarine groundwater discharge in the Sarasota Bay system: Its assessment and implications for the nearshore coastal environment. <i>Continental Shelf Research</i> , 2013, 53, 63-76.	1.8	16
143	Dynamics and exchange fluxes of methane in the estuarine mangrove environment of the Sundarbans, NE coast of India. <i>Atmospheric Environment</i> , 2013, 77, 631-639.	4.1	48
144	The Impact of Sediment and Carbon Fluxes on the Biogeochemistry of Methane and Sulfur in Littoral Baltic Sea Sediments (Himmerfjärden, Sweden). <i>Estuaries and Coasts</i> , 2013, 36, 98-115.	2.2	42
145	Constraining spatial variability of methane ebullition seeps in thermokarst lakes using point process models. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 1015-1034.	3.0	60
146	Seasonal variations of methane fluxes from an unvegetated tidal freshwater mudflat (Hammersmith) Tj ETQq1 1 0.784314 rgBT /Overbo	3.5	16

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147	Temporal variability of <i>in situ</i> methane concentrations in gas hydrate-bearing sediments near Bullseye Vent, Northern Cascadia Margin. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 2445-2459.	2.5	27
148	Tidal marsh methane dynamics: Difference in seasonal lags in emissions driven by storage in vegetated versus unvegetated sediments. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 1802-1813.	3.0	26
149	Pumping methane out of aquatic sediments – ebullition forcing mechanisms in an impounded river. <i>Biogeosciences</i> , 2014, 11, 2925-2938.	3.3	95
150	Ebullition-enhanced solute transport in coarse-grained sediments. <i>Limnology and Oceanography</i> , 2014, 59, 1733-1748.	3.1	16
151	Physical controls on CH ₄ emissions from a newly flooded subtropical freshwater hydroelectric reservoir: Nam Theun 2. <i>Biogeosciences</i> , 2014, 11, 4251-4269.	3.3	51
152	Air-Sea Interactions of Natural Long-Lived Greenhouse Gases (CO ₂ , N ₂ O, CH ₄) in a Changing Climate. <i>Springer Earth System Sciences</i> , 2014, , 113-169.	0.2	29
153	Spatial and temporal dynamics of diffusive methane emissions in the Okavango Delta, northern Botswana, Africa. <i>Wetlands Ecology and Management</i> , 2014, 22, 63-78.	1.5	24
154	Ebullitive methane emissions from oxygenated wetland streams. <i>Global Change Biology</i> , 2014, 20, 3408-3422.	9.5	69
155	Seasonal methanotrophy across a hydrological gradient in a freshwater wetland. <i>Ecological Engineering</i> , 2014, 72, 116-124.	3.6	15
156	Atmospheric noble gases as tracers of biogenic gas dynamics in a shallow unconfined aquifer. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 128, 144-157.	3.9	13
157	Plant-mediated transport and isotopic composition of methane from shallow tropical wetlands. <i>Inland Waters</i> , 2014, 4, 369-376.	2.2	8
158	Modeling methane emissions from arctic lakes: Model development and site-level study. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 459-483.	3.8	71
159	Dissolved gas dynamics in wetland soils: Root-mediated gas transfer kinetics determined via push-pull tracer tests. <i>Water Resources Research</i> , 2015, 51, 7343-7357.	4.2	12
160	Gas bubble transport and emissions for shallow peat from a northern peatland: The role of pressure changes and peat structure. <i>Water Resources Research</i> , 2015, 51, 151-168.	4.2	23
161	Impacts of Biochar Amendment on Greenhouse Gas Emissions from Agricultural Soils. <i>SSSA Special Publication Series</i> , 0, , 259-293.	0.2	4
162	Sediment iron content does not play a significant suppressive role on methane emissions from boreal littoral sedge (<i>Carex</i>) vegetation. <i>Aquatic Botany</i> , 2015, 127, 70-79.	1.6	1
163	Tidal controls on trace gas dynamics in a seagrass meadow of the Ria Formosa lagoon (southern) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 1	3.3	31
164	Gas Transport and Exchange through Wetland Plant Aerenchyma. <i>Soil Science Society of America Book Series</i> , 2015, , 177-196.	0.3	2

#	ARTICLE	IF	CITATIONS
165	Does <i>Juncus effusus</i> enhance methane emissions from grazed pastures on peat?. <i>Biogeosciences</i> , 2015, 12, 5667-5676.	3.3	7
166	Modeling of gas generation from the river adjacent to the manufactured gas plant. <i>RSC Advances</i> , 2015, 5, 9565-9573.	3.6	3
167	Applying a new method for direct collection, volume quantification and determination of N ₂ emission from water. <i>Journal of Environmental Sciences</i> , 2015, 27, 217-224.	6.1	4
168	CO ₂ and CH ₄ isotope compositions and production pathways in a tropical peatland. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1-18.	4.9	41
170	Does vegetation affect the methane oxidation efficiency of passive biosystems?. <i>Waste Management</i> , 2015, 38, 240-249.	7.4	17
171	Above- and Belowground Biomass Allocation in Four Dominant Salt Marsh Species of the Eastern United States. <i>Wetlands</i> , 2015, 35, 21-30.	1.5	37
172	Anthropogenic effects on greenhouse gas (CH ₄ and N ₂ O) emissions in the Guadalete River Estuary (SW) Tj ETQq0.0.0 rgBT /Overlock 1	8.0	68
173	Reviews and syntheses: Four decades of modeling methane cycling in terrestrial ecosystems. <i>Biogeosciences</i> , 2016, 13, 3735-3755.	3.3	102
174	Ephemerality of discrete methane vents in lake sediments. <i>Geophysical Research Letters</i> , 2016, 43, 4374-4381.	4.0	32
175	Biased sampling of methane release from northern lakes: A problem for extrapolation. <i>Geophysical Research Letters</i> , 2016, 43, 1256-1262.	4.0	128
176	Substrate mapping of three rivers in a Ramsar wetland in Jamaica: a comparison of data collection (hydroacoustic v. grab samples), classification and kriging methods. <i>Marine and Freshwater Research</i> , 2016, 67, 1771.	1.3	6
177	Effect of plants on processes of methane cycle in bottom deposits and soil rhizosphere. <i>Contemporary Problems of Ecology</i> , 2016, 9, 771-782.	0.7	3
178	Supplemental tests of gas trapping device for N ₂ flux measurement. <i>Ecological Engineering</i> , 2016, 93, 9-12.	3.6	2
179	The role of sediment structure in gas bubble storage and release. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 1992-2005.	3.0	51
180	Methane emission through ebullition from an estuarine mudflat: 1. A conceptual model to explain tidal forcing based on effective stress changes. <i>Water Resources Research</i> , 2016, 52, 4469-4485.	4.2	19
181	Biogeochemistry of Ethanol and Acetaldehyde in Freshwater Sediments. <i>Aquatic Geochemistry</i> , 2016, 22, 177-195.	1.3	9
182	Processes affecting molecular and stable isotope compositions of sediment gas in estuarine waters along the southern Baltic coast (Poland). <i>Biogeochemistry</i> , 2016, 131, 203-228.	3.5	2
183	High resolution sampling of methane transport in the Columbia River near a field plume: Implications for sources and sinks in a river-dominated estuary. <i>Limnology and Oceanography</i> , 2016, 61, S204.	3.1	10

#	ARTICLE	IF	CITATIONS
184	Heat-Wave Effects on Oxygen, Nutrients, and Phytoplankton Can Alter Global Warming Potential of Gases Emitted from a Small Shallow Lake. <i>Environmental Science & Technology</i> , 2016, 50, 6267-6275.	10.0	43
185	Intense methane ebullition from open water area of a shallow peatland lake on the eastern Tibetan Plateau. <i>Science of the Total Environment</i> , 2016, 542, 57-64.	8.0	30
186	Reservoir Water-Level Drawdowns Accelerate and Amplify Methane Emission. <i>Environmental Science & Technology</i> , 2017, 51, 1267-1277.	10.0	91
187	Inside Story of Gas Processes within Stormwater Biofilters: Does Greenhouse Gas Production Tarnish the Benefits of Nitrogen Removal?. <i>Environmental Science & Technology</i> , 2017, 51, 3703-3713.	10.0	10
188	Methane fluxes from tropical coastal lagoons surrounded by mangroves, Yucatán, Mexico. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1156-1174.	3.0	46
189	Mechanistic modeling of microbial interactions at pore to profile scale resolve methane emission dynamics from permafrost soil. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1216-1238.	3.0	21
190	Persistence of bubble outlets in soft, methane-generating sediments. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1298-1320.	3.0	25
191	Data-Constrained Projections of Methane Fluxes in a Northern Minnesota Peatland in Response to Elevated CO ₂ and Warming. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2841-2861.	3.0	47
192	Effects of seasonality, transport pathway, and spatial structure on greenhouse gas fluxes in a restored wetland. <i>Global Change Biology</i> , 2017, 23, 2768-2782.	9.5	54
193	Methane emission through ebullition from an estuarine mudflat: 2. Field observations and modeling of occurrence probability. <i>Water Resources Research</i> , 2017, 53, 6439-6453.	4.2	6
194	Oxygen Ebullition From Lakes. <i>Geophysical Research Letters</i> , 2017, 44, 9372-9378.	4.0	24
195	Timescale dependence of environmental controls on methane efflux from Poyang Hu, China. <i>Biogeosciences</i> , 2017, 14, 2019-2032.	3.3	13
196	Exploring sub-daily to seasonal variations in methane exchange in a single-crop rice paddy in central Japan. <i>Atmospheric Environment</i> , 2018, 179, 156-165.	4.1	13
197	Benthic fluxes of methane along the salinity gradient of a tropical monsoonal estuary: Implications for CH ₄ supersaturation and emission. <i>Marine Chemistry</i> , 2018, 202, 73-85.	2.3	20
198	Gas bubble cavities in deltaic muds, Lake Powell delta, Glen Canyon National Recreation Area, Hite, Utah. <i>Marine and Petroleum Geology</i> , 2018, 92, 904-912.	3.3	3
199	Methane Feedbacks to the Global Climate System in a Warmer World. <i>Reviews of Geophysics</i> , 2018, 56, 207-250.	23.0	354
200	Importance of sediment organic matter to methane ebullition in a sub-tropical freshwater reservoir. <i>Science of the Total Environment</i> , 2018, 621, 1199-1207.	8.0	34
201	Standing Dead Trees are a Conduit for the Atmospheric Flux of CH ₄ and CO ₂ from Wetlands. <i>Wetlands</i> , 2018, 38, 133-143.	1.5	18

#	ARTICLE	IF	CITATIONS
202	Effects of an Experimental Water-level Drawdown on Methane Emissions from a Eutrophic Reservoir. <i>Ecosystems</i> , 2018, 21, 657-674.	3.4	38
203	Distribution and isotopic signature of deep gases in submerged soils in an island of the Lower Delta of the Paraná River, Argentina. <i>Environmental Monitoring and Assessment</i> , 2018, 190, 647.	2.7	1
204	Carbon dioxide emissions from the flat bottom and shallow Nam Theun 2 Reservoir: drawdown area as a neglected pathway to the atmosphere. <i>Biogeosciences</i> , 2018, 15, 1775-1794.	3.3	15
205	Formate and Hydrogen as Electron Shuttles in Terminal Fermentations in an Oligotrophic Freshwater Lake Sediment. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	13
206	Bubble-mediated methane release from polluted Dalian Bay in China in summer, 2016. <i>Continental Shelf Research</i> , 2019, 185, 51-56.	1.8	8
207	Experimental influence of storm-surge salinity on soil greenhouse gas emissions from a tidal salt marsh. <i>Science of the Total Environment</i> , 2019, 686, 1164-1172.	8.0	40
208	What the bubble knows: Lake methane dynamics revealed by sediment gas bubble composition. <i>Limnology and Oceanography</i> , 2019, 64, 1526-1544.	3.1	47
209	Methane Bubble Escape From Gas Horizon in Muddy Aquatic Sediment Under Periodic Wave Loading. <i>Geophysical Research Letters</i> , 2019, 46, 6507-6515.	4.0	7
210	Are methane emissions from mangrove stems a cryptic carbon loss pathway? Insights from a catastrophic forest mortality. <i>New Phytologist</i> , 2019, 224, 146-154.	7.3	66
211	Rapid formation of iron sulfides alters soil morphology and chemistry following simulated marsh restoration. <i>Geoderma</i> , 2019, 351, 76-84.	5.1	9
212	Sulfate deprivation triggers high methane production in a disturbed and rewetted coastal peatland. <i>Biogeosciences</i> , 2019, 16, 1937-1953.	3.3	29
213	iAMES: An inexpensive, automated Methane Emission Sensor. <i>Environmental Science & Technology</i> , 2019, 53, 6420-6426.	10.0	16
214	Methane Dynamics Associated with Tidal Processes in the Lower Columbia River. <i>Estuaries and Coasts</i> , 2019, 42, 1249-1264.	2.2	3
215	Wetland methane emissions dominated by plant-mediated fluxes: Contrasting emissions pathways and seasons within a shallow freshwater subtropical wetland. <i>Limnology and Oceanography</i> , 2019, 64, 1895-1912.	3.1	52
216	Influence of water column stratification and mixing patterns on the fate of methane produced in deep sediments of a small eutrophic lake. <i>Limnology and Oceanography</i> , 2019, 64, 2114-2128.	3.1	48
217	Highly Dynamic Methane Emission from the West Siberian Boreal Floodplains. <i>Wetlands</i> , 2019, 39, 217-226.	1.5	10
218	Biogeochemistry of Tidal Freshwater Wetlands. , 2019, , 641-683.		19
219	Biogeochemical and physical controls on methane fluxes from two ferruginous meromictic lakes. <i>Geobiology</i> , 2020, 18, 54-69.	2.4	14

#	ARTICLE	IF	CITATIONS
220	Legacy Effects of Eutrophication on Modern Methane Dynamics in a Boreal Estuary. <i>Estuaries and Coasts</i> , 2020, 43, 189-206.	2.2	25
221	Methane dissolution inside bulk or porous-medium-confined water at near-hydrate equilibrium conditions. <i>Molecular Physics</i> , 2020, 118, e1699186.	1.7	1
222	Methane and Carbon Dioxide Emissions From Reservoirs: Controls and Upscaling. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005474.	3.0	26
223	Spatial and temporal variability of methane emissions from cascading reservoirs in the Upper Mekong River. <i>Water Research</i> , 2020, 186, 116319.	11.3	29
224	Vegetation Affects Timing and Location of Wetland Methane Emissions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2020JG005777.	3.0	33
225	Variability of a natural hydrocarbon seep and its connection to the ocean surface. <i>Scientific Reports</i> , 2020, 10, 12654.	3.3	19
226	Spatial and temporal heterogeneity of geochemical controls on carbon cycling in a tidal salt marsh. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 282, 1-18.	3.9	43
227	Temperature Proxies as a Solution to Biased Sampling of Lake Methane Emissions. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088647.	4.0	14
228	Gas ebullition from petroleum hydrocarbons in aquatic sediments: A review. <i>Journal of Environmental Management</i> , 2020, 271, 110997.	7.8	10
229	Carbon Dioxide and Methane Emissions From A Temperate Salt Marsh Tidal Creek. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005558.	3.0	27
230	Methane emissions from oil and gas platforms in the Bohai Sea, China. <i>Environmental Pollution</i> , 2020, 263, 114486.	7.5	11
231	Greenhouse gas emissions (CO ₂ and CH ₄) and inorganic carbon behavior in an urban highly polluted tropical coastal lagoon (SE, Brazil). <i>Environmental Science and Pollution Research</i> , 2021, 28, 38173-38192.	5.3	17
232	Noble gases as tracers for the gas dynamics in methane supersaturated lacustrine sediments. <i>Chemical Geology</i> , 2021, 568, 119905.	3.3	2
233	Identifying dominant environmental predictors of freshwater wetland methane fluxes across diurnal to seasonal time scales. <i>Global Change Biology</i> , 2021, 27, 3582-3604.	9.5	59
234	Ebullition dominates methane fluxes from the water surface across different ecohydrological patches in a temperate freshwater marsh at the end of the growing season. <i>Science of the Total Environment</i> , 2021, 767, 144498.	8.0	24
235	Gas Pressure Dynamics in Small and Mid-Size Lakes. <i>Water (Switzerland)</i> , 2021, 13, 1824.	2.7	7
236	Sea-Air Exchange of Methane in Shallow Inshore Areas of the Baltic Sea. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	5
237	An Integrative Model for Soil Biogeochemistry and Methane Processes: I. Model Structure and Sensitivity Analysis. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2019JG005468.	3.0	11

#	ARTICLE	IF	CITATIONS
238	Carbon Dioxide and Methane Emissions from Estuaries. , 0, , 187-207.		20
239	Biogenic Trace Gas Exchanges. , 2000, , 235-248.		4
241	Seasonal Variations in the Isotopic Composition of Methane Associated with Aquatic Macrophytes. , 1993, , 619-632.		2
242	Methane Oxidation in Coastal Marine Environments. , 1996, , 51-68.		21
243	Modeling trace gas emissions from agricultural ecosystems. , 2000, , 259-276.		93
244	Methane Fluxes from a Wetland using the Flux-Gradient Technique. , 2001, , 447-454.		3
245	Vertical transport of sediment-associated metals and cyanobacteria by ebullition in a stratified lake. Biogeosciences, 2020, 17, 3135-3147.	3.3	8
246	Mineralization of organic matter in boreal lake sediments: rates, pathways, and nature of the fermenting substrates. Biogeosciences, 2020, 17, 4571-4589.	3.3	4
253	Methane dynamics of saltmarsh soils built up from marine and peat material at the German North Sea coast. , 2002, , 197-213.		1
254	Deep-water coral reefs: unique biodiversity hot-spots. Choice Reviews, 2008, 46, 46-2065-46-2065.	0.2	3
255	An Empirical Model for Dinitrogen Gas Emission from Inland Waters. Atmospheric and Climate Sciences, 2019, 09, 1-25.	0.3	1
257	Radiocarbon Analyses Quantify Peat Carbon Losses With Increasing Temperature in a Whole Ecosystem Warming Experiment. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006511.	3.0	7
258	Disproportionate Contribution of Vegetated Habitats to the CH ₄ and CO ₂ Budgets of a Boreal Lake. Ecosystems, 2022, 25, 1522-1541.	3.4	14
259	Dominance of Diffusive Methane Emissions From Lowland Headwater Streams Promotes Oxidation and Isotopic Enrichment. Frontiers in Environmental Science, 2022, 9, .	3.3	5
260	Mechanism of Faster CH ₄ Bubble Growth Under Surface Waves in Muddy Aquatic Sediments: Effects of Wave Amplitude, Period, and Water Depth. Frontiers in Earth Science, 2022, 10, .	1.8	3
261	The tidal freshwater river zone: Physical properties and biogeochemical contribution to estuarine hypoxia and acidification - The "hydrologic switch" Estuarine, Coastal and Shelf Science, 2022, 268, 107786.	2.1	3
262	Water-air gas exchange of CO ₂ and CH ₄ in coastal wetlands. , 2022, , 167-196.		0
263	Advance in Numerical Simulation Research of Marine Methane Processes. Frontiers in Earth Science, 2022, 10, .	1.8	1

#	ARTICLE	IF	CITATIONS
264	Ebullition Regulated by Pressure Variations in a Boreal Pit Lake. <i>Frontiers in Earth Science</i> , 2022, 10, .	1.8	1
265	Physiological processes affecting methane transport by wetland vegetation – A review. <i>Aquatic Botany</i> , 2022, 182, 103547.	1.6	22
266	Mathematical Model of the Decomposition of Unstable Gas Hydrate Accumulations in the Cryolithozone. <i>Geosciences (Switzerland)</i> , 2022, 12, 345.	2.2	2
268	Changing temporal and spatial patterns of methane emission from rivers by reservoir dams: a review. <i>Environmental Science and Pollution Research</i> , 2023, 30, 74485-74499.	5.3	1
269	Resource availability governs polyhydroxyalkanoate (PHA) accumulation and diversity of methanotrophic enrichments from wetlands. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 11, .	4.1	2
270	Practical Guide to Measuring Wetland Carbon Pools and Fluxes. <i>Wetlands</i> , 2023, 43, .	1.5	2
271	Large Methane Emissions From Tree Stems Complicate the Wetland Methane Budget. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2023, 128, .	3.0	0
272	Estuarine and Coastal Sediments – Coupled Biogeochemical Cycling. , 2024, , 578-625.		1
273	Subsurface Redox Interactions Regulate Ebullitive Methane Flux in Heterogeneous Mississippi River Deltaic Wetland. <i>Journal of Advances in Modeling Earth Systems</i> , 2024, 16, .	3.8	2
274	Methane gas dynamics in sediments of Lake Kinneret, Israel, and their controls: Insights from a multiannual acoustic investigation and correlation analysis. <i>Science of the Total Environment</i> , 2024, 918, 170480.	8.0	0
275	Methane oxidation minimizes emissions and offsets to carbon burial in mangroves. <i>Nature Climate Change</i> , 2024, 14, 275-281.	18.8	0
276	High methane ebullition throughout one year in a regulated central European stream. <i>Scientific Reports</i> , 2024, 14, .	3.3	0
277	Carbon Dioxide and Methane Dynamics in Estuaries. , 2011, , 78-122.		0
278	The Production of Trace Gases in the Estuarine and Coastal Environment. , 2011, , 35-77.		0