Nigel Roulet

List of Publications by Year
in descending order

195 papers	18,211 citations	10351 72 h-index	14702 127 g-index
214 all docs	214 docs citations	214 times ranked	11701 citing authors

#	Article	IF	Citations
1	Northern fens: methane flux and climatic change. Tellus, Series B: Chemical and Physical Meteorology, 2022, 44, 100.	0.8	145
2	Integrating McGill Wetland Model (MWM) with peat cohort tracking and microbial controls. Science of the Total Environment, 2022, 806, 151223.	3.9	5
3	The essential carbon service provided by northern peatlands. Frontiers in Ecology and the Environment, 2022, 20, 222-230.	1.9	27
4	Latitude, Elevation, and Mean Annual Temperature Predict Peat Organic Matter Chemistry at a Global Scale. Global Biogeochemical Cycles, 2022, 36, .	1.9	11
5	Controls on autotrophic and heterotrophic respiration in an ombrotrophic bog. Biogeosciences, 2022, 19, 3285-3303.	1.3	8
6	Cutover Peat Limits Methane Production Causing Low Emission at a Restored Peatland. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	1.3	4
7	Beyond the usual suspects: methanogenic communities in eastern North American peatlands are also influenced by nickel and copper concentrations. FEMS Microbiology Letters, 2021, , .	0.7	4
8	Mechanisms for the Development of Microform Patterns in Peatlands of the Hudson Bay Lowland. Ecosystems, 2020, 23, 741-767.	1.6	9
9	Limited effect of drainage on peat properties, porewater chemistry, and peat decomposition proxies in a boreal peatland. Biogeochemistry, 2020, 151, 43-62.	1.7	7
10	Morphometric Control on Dissolved Organic Carbon in Subarctic Streams. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005348.	1.3	2
11	Increasing contribution of peatlands to boreal evapotranspiration in a warming climate. Nature Climate Change, 2020, 10, 555-560.	8.1	106
12	Peatland Microbial Community Composition Is Driven by a Natural Climate Gradient. Microbial Ecology, 2020, 80, 593-602.	1.4	15
13	Drainage reduces the resilience of a boreal peatland. Environmental Research Communications, 2020, 2, 065001.	0.9	23
14	The biophysical climate mitigation potential of boreal peatlands during the growing season. Environmental Research Letters, 2020, 15, 104004.	2.2	31
15	Modelling the habitat preference of two key <i>Sphagnum</i> species in a poor fen as controlled by capitulum water content. Biogeosciences, 2020, 17, 5693-5719.	1.3	8
16	Soil nitrogen determines greenhouse gas emissions from northern peatlands under concurrent warming and vegetation shifting. Communications Biology, 2019, 2, 132.	2.0	27
17	The Spatial Heterogeneity of Vegetation, Hydrology and Water Chemistry in a Peatland with Open-Water Pools. Ecosystems, 2019, 22, 1352-1367.	1.6	14
18	Prompt active restoration of peatlands substantially reduces climate impact. Environmental Research Letters, 2019, 14, 124030.	2.2	37

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19	Post-thaw variability in litter decomposition best explained by microtopography at an ice-rich permafrost peatland. Arctic, Antarctic, and Alpine Research, 2018, 50, .	0.4	9
20	Wetlands In a Changing Climate: Science, Policy and Management. Wetlands, 2018, 38, 183-205.	0.7	234
21	Lichens: A limit to peat growth?. Journal of Ecology, 2018, 106, 2301-2319.	1.9	16
22	Modelling CO2 emissions from water surface of a boreal hydroelectric reservoir. Science of the Total Environment, 2018, 612, 392-404.	3.9	8
23	Airborne Hyperspectral Evaluation of Maximum Gross Photosynthesis, Gravimetric Water Content, and CO2 Uptake Efficiency of the Mer Bleue Ombrotrophic Peatland. Remote Sensing, 2018, 10, 565.	1.8	23
24	Multiâ€year net ecosystem carbon balance of a restored peatland reveals a return to carbon sink. Global Change Biology, 2018, 24, 5751-5768.	4.2	71
25	Dissolved organic carbon in streams within a subarctic catchment analysed using a GIS/remote sensing approach. PLoS ONE, 2018, 13, e0199608.	1.1	8
26	Estimating Peatland Water Table Depth and Net Ecosystem Exchange: A Comparison between Satellite and Airborne Imagery. Remote Sensing, 2018, 10, 687.	1.8	33
27	Comparison of plant litter and peat decomposition changes with permafrost thaw in a subarctic peatland. Plant and Soil, 2017, 417, 197-216.	1.8	8
28	Predicting peatland carbon fluxes from nonâ€destructive plant traits. Functional Ecology, 2017, 31, 1824-1833.	1.7	28
29	Ecohydrological feedbacks in peatlands: an empirical test of the relationship among vegetation, microtopography and water table. Ecohydrology, 2016, 9, 1346-1357.	1.1	62
30	Temperature the dominant control on the enzyme-latch across a range of temperate peatland types. Soil Biology and Biochemistry, 2016, 97, 121-130.	4.2	40
31	Simulating carbon dioxide exchange in boreal ecosystems flooded by reservoirs. Ecological Modelling, 2016, 327, 1-17.	1.2	11
32	Biodegradability of Vegetation-Derived Dissolved Organic Carbon in a Cool Temperate Ombrotrophic Bog. Ecosystems, 2016, 19, 1023-1036.	1.6	40
33	Effects of long-term fertilization on peat stoichiometry and associated microbial enzyme activity in an ombrotrophic bog. Biogeochemistry, 2016, 129, 149-164.	1.7	42
34	Focus on the impact of climate change on wetland ecosystems and carbon dynamics. Environmental Research Letters, 2016, 11, 100201.	2.2	27
35	Light use efficiency of peatlands: Variability and suitability for modeling ecosystem production. Remote Sensing of Environment, 2016, 183, 239-249.	4.6	19
36	Modeling surface energy fluxes and thermal dynamics of a seasonally ice-covered hydroelectric reservoir. Science of the Total Environment, 2016, 550, 793-805.	3.9	10

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37	Overriding control of methane flux temporal variability by water table dynamics in a Southern Hemisphere, raised bog. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 819-831.	1.3	44
38	Can boreal peatlands with pools be net sinks for CO ₂ ?. Environmental Research Letters, 2015, 10, 035002.	2.2	17
39	Environmental correlates of peatland carbon fluxes in a thawing landscape: do transitional thaw stages matter?. Biogeosciences, 2015, 12, 3119-3130.	1.3	27
40	Effect of inundation, oxygen and temperature on carbon mineralization in boreal ecosystems. Science of the Total Environment, 2015, 511, 381-392.	3.9	16
41	Effect of open water pools on ecosystem scale surface-atmosphere carbon dioxide exchange in a boreal peatland. Biogeochemistry, 2015, 124, 291-304.	1.7	12
42	The uncertain climate footprint of wetlands under human pressure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4594-4599.	3.3	171
43	Carbon release from boreal peatland open water pools: Implication for the contemporary C exchange. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 207-222.	1.3	34
44	Increases in aboveground biomass and leaf area 85 years after drainage in a bog. Botany, 2014, 92, 713-721.	0.5	13
45	Phenology and its role in carbon dioxide exchange processes in northern peatlands. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1370-1384.	1.3	24
46	Permafrost conditions in peatlands regulate magnitude, timing, and chemical composition of catchment dissolved organic carbon export. Global Change Biology, 2014, 20, 3122-3136.	4.2	47
47	Errors in greenhouse forcing and soil carbon sequestration estimates in freshwater wetlands: a comment on Mitsch et al. (2013). Landscape Ecology, 2014, 29, 1481-1485.	1.9	23
48	The spatial and temporal relationships between CO2 and CH4 exchange in a temperate ombrotrophic bog. Atmospheric Environment, 2014, 89, 249-259.	1.9	47
49	Spatial and temporal variations of methane flux measured by autochambers in a temperate ombrotrophic peatland. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 864-880.	1.3	37
50	Evidence for a nonmonotonic relationship between ecosystemâ€scale peatland methane emissions and water table depth. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 826-835.	1.3	61
51	Dissolved organic carbon and total dissolved nitrogen production by boreal soils and litter: the role of flooding, oxygen concentration, and temperature. Biogeochemistry, 2014, 118, 35-48.	1.7	32
52	Climate change reduces the capacity of northern peatlands to absorb the atmospheric carbon dioxide: The different responses of bogs and fens. Global Biogeochemical Cycles, 2014, 28, 1005-1024.	1.9	95
53	Total waterborne carbon export and DOC composition from ten nested subarctic peatland catchmentsâ€”importance of peatland cover, groundwater influence, and interâ€annual variability of precipitation patterns. Hydrological Processes, 2013, 27, 2280-2294.	1.1	64
54	Estimating carbon dioxide exchange rates at contrasting northern peatlands using MODIS satellite data. Remote Sensing of Environment, 2013, 137, 234-243.	4.6	24

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55	Academic Performance Indicators for Departments of Geography in the United States and Canada. Professional Geographer, 2013, 65, 433-450.	1.0	9
56	Simulation of six years of carbon fluxes for a sedgeâ€dominated oligotrophic minerogenic peatland in Northern Sweden using the McGill Wetland Model (MWM). Journal of Geophysical Research G: Biogeosciences, 2013, 118, 795-807.	1.3	31
57	Impact of long-term drainage on summer groundwater flow patterns in the Mer Bleue peatland, Ontario, Canada. Hydrology and Earth System Sciences, 2013, 17, 3485-3498.	1.9	10
58	Do Root Exudates Enhance Peat Decomposition?. Geomicrobiology Journal, 2012, 29, 374-378.	1.0	67
59	Simulating the Carbon Cycling of Northern Peatlands Using a Land Surface Scheme Coupled to a Wetland Carbon Model (CLASS3W-MWM). Atmosphere - Ocean, 2012, 50, 487-506.	0.6	17
60	The net carbon footprint of a newly created boreal hydroelectric reservoir. Global Biogeochemical Cycles, 2012, 26, .	1.9	117
61	Net carbon accumulation of a highâ€latitude permafrost palsa mire similar to permafrostâ€free peatlands. Geophysical Research Letters, 2012, 39, .	1.5	76
62	Effects of permafrost and hydrology on the composition and transport of dissolved organic carbon in a subarctic peatland complex. Journal of Geophysical Research, 2012, 117, .	3.3	125
63	Peatlands as a model ecosystem of soil carbon dynamics: Reply to Comment on â€œPeatlands and their role in the global carbon cycleâ€. Eos, 2012, 93, 31-31.	0.1	3
64	A modelâ€data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	274
65	Scaling relationships for event water contributions and transit times in smallâ€forested catchments in Eastern Quebec. Water Resources Research, 2012, 48, .	1.7	32
66	The effect of atmospheric turbulence and chamber deployment period on autochamber CO₂ and CH₄ flux measurements in an ombrotrophic peatland. Biogeosciences, 2012, 9, 3305-3322.	1.3	71
67	Peatlands in the Earthâ€™s 21st century climate system. Environmental Reviews, 2011, 19, 371-396.	2.1	323
68	Peatlands and Their Role in the Global Carbon Cycle. Eos, 2011, 92, 97-98.	0.1	153
69	Dealing with microtopography of an ombrotrophic bog for simulating ecosystem-level CO2 exchanges. Ecological Modelling, 2011, 222, 1038-1047.	1.2	26
70	A Multi-Year Record of Methane Flux at the Mer Bleue Bog, Southern Canada. Ecosystems, 2011, 14, 646-657.	1.6	123
71	Variability in exchange of CO₂ across 12 northern peatland and tundra sites. Global Change Biology, 2010, 16, 2436-2448.	4.2	144
72	The first-order effect of Holocene Northern Peatlands on global carbon cycle dynamics. IOP Conference Series: Earth and Environmental Science, 2010, 9, 012004.	0.2	1

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73	Assessing long-term hydrological and ecological responses to drainage in a raised bog using paleoecology and a hydrosequence. Journal of Vegetation Science, 2010, 21, 143-156.	1.1	83
74	Maintaining the role of Canadaâ€™s forests and peatlands in climate regulation. Forestry Chronicle, 2010, 86, 434-443.	0.5	69
75	McGill wetland model: evaluation of a peatland carbon simulator developed for global assessments. Biogeosciences, 2010, 7, 3517-3530.	1.3	86
76	Climate control of terrestrial carbon exchange across biomes and continents. Environmental Research Letters, 2010, 5, 034007.	2.2	137
77	A new model of Holocene peatland net primary production, decomposition, water balance, and peat accumulation. Earth System Dynamics, 2010, 1, 1-21.	2.7	182
78	The direct and indirect effects of inter-annual meteorological variability on ecosystem carbon dioxide exchange at a temperate ombrotrophic bog. Agricultural and Forest Meteorology, 2010, 150, 1402-1411.	1.9	51
79	The global carbon cycle in the Canadian Earth system model (CanESM1): Preindustrial control simulation. Journal of Geophysical Research, 2010, 115, .	3.3	66
80	Using MODIS derived <i>f</i>PAR with ground based flux tower measurements to derive the light use efficiency for two Canadian peatlands. Biogeosciences, 2009, 6, 225-234.	1.3	25
81	Antecedent moisture conditions and catchment morphology as controls on spatial patterns of runoff generation in small forest catchments. Journal of Hydrology, 2009, 377, 351-366.	2.3	105
82	Boreal forests' carbon stores need better management. Nature, 2009, 462, 276-276.	13.7	8
83	Do pool surface area and depth control CO₂ and CH₄ fluxes from an ombrotrophic raised bog, James Bay, Canada?. Journal of Geophysical Research, 2009, 114, .	3.3	38
84	Sensitivity of the carbon cycle in the Arctic to climate change. Ecological Monographs, 2009, 79, 523-555.	2.4	814
85	Peatlands and Global Carbon Cycle Modeling: Peatland Ecosystem Analysis and Training Network (PeatNet) Workshop; Durham, New Hampshire, 14-15 May 2009. Eos, 2009, 90, 251-251.	0.1	0
86	The importance of Northern Peatlands in global carbon systems during the Holocene. Climate of the Past, 2009, 5, 683-693.	1.3	16
87	Corrigendum to "The importance of Northern Peatlands in global carbon systems during the Holocene" published in Clim. Past, 5, 683â€“693, 2009. Climate of the Past, 2009, 5, 721-722.	1.3	0
88	Spatially explicit simulation of peatland hydrology and carbon dioxide exchange: Influence of mesoscale topography. Journal of Geophysical Research, 2008, 113, .	3.3	53
89	Net ecosystem CO2 exchange in a temperate cattail marsh in relation to biophysical properties. Agricultural and Forest Meteorology, 2008, 148, 69-81.	1.9	83
90	Corrigendum to "Peatlands and the carbon cycle: from local processes to global implications a synthesis" published in Biogeosciences, 5, 1475â€“1491, 2008. Biogeosciences, 2008, 5, 1739-1739.	1.3	29

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91	Peatlands and the carbon cycle: from local processes to global implications â€“ a synthesis. Biogeosciences, 2008, 5, 1475-1491.	1.3	630
92	Validating Surface Heat Fluxes and Soil Moisture Simulated by the Land Surface Scheme CLASS under Subarctic Tundra Conditions. , 2008, , 435-444.		1
93	Using direct and indirect measurements of leaf area index to characterize the shrub canopy in an ombrotrophic peatland. Agricultural and Forest Meteorology, 2007, 144, 200-212.	1.9	60
94	Belowground carbon turnover in a temperate ombrotrophic bog. Global Biogeochemical Cycles, 2007, 21, .	1.9	67
95	Methane fluxes from three peatlands in the La Grande RiviÃ¨re watershed, James Bay lowland, Canada. Journal of Geophysical Research, 2007, 112, .	3.3	93
96	Peatlands and the carbon cycle: From local processes to global implications. Eos, 2007, 88, 295-295.	0.1	6
97	Investigating hydrologic connectivity and its association with threshold change in runoff response in a temperate forested watershed. Hydrological Processes, 2007, 21, 3391-3408.	1.1	128
98	Contemporary carbon balance and late Holocene carbon accumulation in a northern peatland. Global Change Biology, 2007, 13, 397-411.	4.2	521
99	Holocene radiative forcing impact of northern peatland carbon accumulation and methane emissions. Global Change Biology, 2007, 13, 1079-1088.	4.2	283
100	How northern peatlands influence the Earth's radiative budget: Sustained methane emission versus sustained carbon sequestration. Journal of Geophysical Research, 2006, 111, .	3.3	196
101	Investigating the applicability of end-member mixing analysis (EMMA) across scale: A study of eight small, nested catchments in a temperate forested watershed. Water Resources Research, 2006, 42, .	1.7	90
102	Controls on latent heat flux and energy partitioning at a peat bog in eastern Canada. Agricultural and Forest Meteorology, 2006, 140, 308-321.	1.9	57
103	Hydrological effects on carbon cycles of Canadaâ€™s forests and wetlands. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 16-30.	0.8	45
104	Spring photosynthesis in a cool temperate bog. Global Change Biology, 2006, 12, 2323-2335.	4.2	58
105	Browning the waters. Nature, 2006, 444, 283-284.	13.7	356
106	Late-summer carbon fluxes from Canadian forests and peatlands along an eastÂ–west continental transect. Canadian Journal of Forest Research, 2006, 36, 783-800.	0.8	91
107	SEASONAL AND INTER-ANNUAL DECOMPOSITION, MICROBIAL BIOMASS, AND NITROGEN DYNAMICS IN A CANADIAN BOG. Soil Science, 2005, 170, 902-912.	0.9	24
108	Patterns of nitrogen and sulfur accumulation and retention in ombrotrophic bogs, eastern Canada. Global Change Biology, 2005, 11, 356-367.	4.2	79

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109	Annual and seasonal variability in evapotranspiration and water table at a shrub-covered bog in southern Ontario, Canada. Hydrological Processes, 2005, 19, 3533-3550.	1.1	182
110	Plant Species Numbers Predicted by a Topography-based Groundwater Flow Index. Ecosystems, 2005, 8, 430-441.	1.6	160
111	Ecosystem Respiration in a Cool Temperate Bog Depends on Peat Temperature But Not Water Table. Ecosystems, 2005, 8, 619-629.	1.6	247
112	On the relationship between cloudiness and net ecosystem carbon dioxide exchange in a peatland ecosystem. Ecoscience, 2005, 12, 53-69.	0.6	51
113	Greenhouse Gas Emissions from Canadian Peat Extraction, 1990â€“2000: A Life-cycle Analysis. Ambio, 2005, 34, 456-461.	2.8	93
114	Holocene climate and carbon cycle dynamics: Experiments with the â€œgreenâ€•McGill Paleoclimate Model. Global Biogeochemical Cycles, 2005, 19, .	1.9	19
115	Nitrogen deposition and increased carbon accumulation in ombrotrophic peatlands in eastern Canada. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	147
116	Seasonal contribution of CO2fluxes in the annual C budget of a northern bog. Global Biogeochemical Cycles, 2003, 17, .	1.9	31
117	Interannual variability in the peatland-atmosphere carbon dioxide exchange at an ombrotrophic bog. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	307
118	Dynamics and chemistry of dissolved organic carbon in Precambrian Shield catchments and an impounded wetland. Canadian Journal of Fisheries and Aquatic Sciences, 2003, 60, 612-623.	0.7	35
119	Modeling seasonal to annual carbon balance of Mer Bleue Bog, Ontario, Canada. Global Biogeochemical Cycles, 2002, 16, 4-1-4-21.	1.9	138
120	Methane efflux from boreal wetlands: Theory and testing of the ecosystem model Ecosys with chamber and tower flux measurements. Global Biogeochemical Cycles, 2002, 16, 2-1-2-16.	1.9	66
121	Controls on the fate and transport of methylmercury in a boreal headwater catchment, northwestern Ontario, Canada. Hydrology and Earth System Sciences, 2002, 6, 785-794.	1.9	48
122	Plant biomass and production and CO2 exchange in an ombrotrophic bog. Journal of Ecology, 2002, 90, 25-36.	1.9	315
123	Tropical pasture carbon cycling: relationships between C source/sink strength, above-ground biomass and grazing. Ecology Letters, 2002, 5, 367-376.	3.0	70
124	Mercury cycling in boreal ecosystems: The long-term effect of acid rain constituents on peatland pore water methylmercury concentrations. Geophysical Research Letters, 2001, 28, 1227-1230.	1.5	51
125	Annual cycle of CO2exchange at a bog peatland. Journal of Geophysical Research, 2001, 106, 3071-3081.	3.3	158
126	Groundwater flow patterns in a large peatland. Journal of Hydrology, 2001, 246, 142-154.	2.3	136

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127	Modeling Northern Peatland Decomposition and Peat Accumulation. Ecosystems, 2001, 4, 479-498.	1.6	250
128	Hydrology and dissolved organic carbon biogeochemistry in an ombrotrophic bog. Hydrological Processes, 2001, 15, 3151-3166.	1.1	148
129	Title is missing!. Water, Air and Soil Pollution, 2001, 1, 447-454.	0.8	9
130	Spatial and temporal dynamics of mercury in Precambrian Shield upland runoff. Biogeochemistry, 2001, 52, 13-40.	1.7	31
131	Methane Fluxes from a Wetland using the Flux-Gradient Technique. , 2001, , 447-454.		3
132	A test of the Canadian land surface scheme (class) for a variety of wetland types. Atmosphere - Ocean, 2000, 38, 161-179.	0.6	59
133	Modelling groundwater-surface water mixing in a headwater wetland: implications for hydrograph separation. Hydrological Processes, 2000, 14, 2697-2710.	1.1	14
134	Carbon balance of a boreal patterned peatland. Global Change Biology, 2000, 6, 87-97.	4.2	184
135	Arctic and boreal ecosystems of western North America as components of the climate system. Global Change Biology, 2000, 6, 211-223.	4.2	488
136	Modelling and analysis of peatlands as dynamical systems. Journal of Ecology, 2000, 88, 230-242.	1.9	210
137	Peatlands, carbon storage, greenhouse gases, and the Kyoto Protocol: Prospects and significance for Canada. Wetlands, 2000, 20, 605-615.	0.7	239
138	Parametrization of peatland hydraulic properties for the Canadian land surface scheme. Atmosphere - Ocean, 2000, 38, 141-160.	0.6	271
139	In situ sulphate stimulation of mercury methylation in a boreal peatland: Toward a link between acid rain and methylmercury contamination in remote environments. Global Biogeochemical Cycles, 1999, 13, 743-750.	1.9	158
140	Methane dynamics of a northern boreal beaver pond. Ecoscience, 1999, 6, 577-586.	0.6	38
141	Uncertainty in Predicting the Effect of Climatic Change on the Carbon Cycling of Canadian Peatlands. Climatic Change, 1998, 40, 229-245.	1.7	337
142	Sinks and sources of methylmercury in a boreal catchment. Biogeochemistry, 1998, 41, 277-291.	1.7	40
143	The baseflow and storm flow hydrology of a precambrian shield headwater peatland. Hydrological Processes, 1998, 12, 57-72.	1.1	72
144	Spring and Summer Runoff Hydrology of a Subarctic Patterned Wetland. Arctic and Alpine Research, 1998, 30, 285.	1.3	78

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145	A stochastic appraisal of the annual carbon budget of a large circumboreal peatland, Rapid River Watershed, northern Minnesota. Global Biogeochemical Cycles, 1998, 12, 715-727.	1.9	21
146	Relationship between ecosystem productivity and photosynthetically active radiation for northern peatlands. Global Biogeochemical Cycles, 1998, 12, 115-126.	1.9	165
147	Increases in Fluxes of Greenhouse Gases and Methyl Mercury following FloodingÂofÂanÂExperimentalÂReservoirâ€. Environmental Science & Technology, 1997, 31, 1334-1344.	4.6	305
148	CO2and CH4flux between a boreal beaver pond and the atmosphere. Journal of Geophysical Research, 1997, 102, 29313-29319.	3.3	92
149	Groundwater flow and dissolved carbon movement in a boreal peatland. Journal of Hydrology, 1997, 191, 122-138.	2.3	140
150	EFFECTS OF CLIMATE CHANGE ON THE FRESHWATERS OF ARCTIC AND SUBARCTIC NORTH AMERICA. Hydrological Processes, 1997, 11, 873-902.	1.1	329
151	Atmosphere-wetland carbon exchanges: Scale dependency of CO2and CH4exchange on the developmental topography of a peatland. Global Biogeochemical Cycles, 1996, 10, 233-245.	1.9	211
152	The hydrology and methylmercury dynamics of a Precambrian shield headwater peatland. Water Resources Research, 1996, 32, 1785-1794.	1.7	134
153	Production and Loss of Methylmercury and Loss of Total Mercury from Boreal Forest Catchments Containing Different Types of Wetlands. Environmental Science & Technology, 1996, 30, 2719-2729.	4.6	287
154	Groundwater-surface water interactions in headwater forested wetlands of the Canadian Shield. Journal of Hydrology, 1996, 181, 127-147.	2.3	172
155	Water table control of CH4emission enhancement by vascular plants in boreal peatlands. Journal of Geophysical Research, 1996, 101, 22775-22785.	3.3	165
156	Remote sensing of the land surface for studies of global change: Models â€" algorithms â€" experiments. Remote Sensing of Environment, 1995, 51, 3-26.	4.6	309
157	The effect of forestry drainage practices on the emission of methane from northern peatlands. Canadian Journal of Forest Research, 1995, 25, 491-499.	0.8	68
158	Solid phase controls of dissolved aluminum within upland Precambrian shield catchments. Biogeochemistry, 1994, 26, 85-114.	1.7	9
159	Runoff generation in zero-order precambrian shield catchments: The stormflow response of a heterogeneous landscape. Hydrological Processes, 1994, 8, 369-388.	1.1	84
160	Flux to the atmosphere of CH4and CO2from wetland ponds on the Hudson Bay lowlands (HBLs). Journal of Geophysical Research, 1994, 99, 1495.	3.3	150
161	Sea breezes and advective effects in southwest James Bay. Journal of Geophysical Research, 1994, 99, 1623.	3.3	16
162	Role of the Hudson Bay lowland as a source of atmospheric methane. Journal of Geophysical Research, 1994, 99, 1439.	3.3	128

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163	The Northern Wetlands Study (NOWES): An overview. Journal of Geophysical Research, 1994, 99, 1423.	3.3	36
164	Methane emissions from wetlands, southern Hudson Bay lowland. Journal of Geophysical Research, 1994, 99, 1455.	3.3	108
165	Terrestrial Biosphere-Atmosphere Exchange in High Latitudes. , 1994, , 165-178.		15
166	The biogeochemistry of pristine, headwater Precambrian shield watersheds: an analysis of material transport within a heterogeneous landscape. Biogeochemistry, 1993, 22, 37-79.	1.7	52
167	Runoff mechanisms in a forested groundwater discharge wetland. Journal of Hydrology, 1993, 147, 37-60.	2.3	81
168	Methane Emissions from Wetlands in the Midboreal Region of Northern Ontario, Canada. Ecology, 1993, 74, 2240-2254.	1.5	179
169	Methane flux from drained northern peatlands: Effect of a persistent water table lowering on flux. Global Biogeochemical Cycles, 1993, 7, 749-769.	1.9	141
170	Methane flux: Water table relations in northern wetlands. Geophysical Research Letters, 1993, 20, 587-590.	1.5	263
171	Microtopography and methane flux in boreal peatlands, northern Ontario, Canada. Canadian Journal of Botany, 1993, 71, 1056-1063.	1.2	118
172	Formation and Consumption of Methane. , 1993, , 128-137.		0
173	A comparison of evaporation rates from two fens of the Hudson Bay Lowland. Aquatic Botany, 1992, 44, 59-69.	0.8	67
174	Episodic fluxes of methane from subarctic fens. Canadian Journal of Soil Science, 1992, 72, 441-452.	0.5	97
175	Low boreal wetlands as a source of atmospheric methane. Journal of Geophysical Research, 1992, 97, 3739-3749.	3.3	195
176	Northern fens: methane flux and climatic change. Tellus, Series B: Chemical and Physical Meteorology, 1992, 44, 100-105.	0.8	179
177	A comparison of dynamic and static chambers for methane emission measurements from subarctic fens. Atmosphere - Ocean, 1991, 29, 102-109.	0.6	50
178	Surface Level and Water Table Fluctuations in a Subarctic Fen. Arctic and Alpine Research, 1991, 23, 303.	1.3	62
179	Continuous measurement of the depth of water table (inundation) in wetlands with fluctuating surfaces. Hydrological Processes, 1991, 5, 399-403.	1.1	35
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