Martyn Tranter

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8172678/publications.pdf

Version: 2024-02-01

182 papers	10,049 citations	26630 56 h-index	45317 90 g-index
201 all docs	201 docs citations	201 times ranked	6183 citing authors

#	Article	IF	Citations
1	GLACIAL ECOSYSTEMS. Ecological Monographs, 2008, 78, 41-67.	5.4	435
2	Glacier shrinkage driving global changes in downstream systems. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9770-9778.	7.1	381
3	Physical, chemical and biological processes in Lake Vostok and other Antarctic subglacial lakes. Nature, 2001, 414, 603-609.	27.8	240
4	Widespread bacterial populations at glacier beds and their relationship to rock weathering and carbon cycling. Geology, 1999, 27, 107.	4.4	236
5	Geochemical weathering at the bed of Haut Glacier d'Arolla, Switzerland?a new model. Hydrological Processes, 2002, 16, 959-993.	2.6	232
6	Contributions from glacially derived sediment to the global iron (oxyhydr)oxide cycle: Implications for iron delivery to the oceans. Geochimica Et Cosmochimica Acta, 2006, 70, 2765-2780.	3.9	216
7	Ice sheets as a significant source of highly reactive nanoparticulate iron to the oceans. Nature Communications, 2014, 5, 3929.	12.8	208
8	Bioavailable iron in the Southern Ocean: the significance of the iceberg conveyor belt. Geochemical Transactions, 2008, 9, 7.	0.7	194
9	A conceptual model of solute acquisition by Alpine glacial meltwaters. Journal of Glaciology, 1993, 39, 573-581.	2.2	191
10	Photophysiology and albedo-changing potential of the ice algal community on the surface of the Greenland ice sheet. ISME Journal, 2012, 6, 2302-2313.	9.8	190
11	Potential methane reservoirs beneath Antarctica. Nature, 2012, 488, 633-637.	27.8	184
12	Limnological conditions in Subglacial Lake Vostok, Antarctica. Limnology and Oceanography, 2006, 51, 2485-2501.	3.1	169
13	Evolution of cryoconite holes and their contribution to meltwater runoff from glaciers in the McMurdo Dry Valleys, Antarctica. Journal of Glaciology, 2004, 50, 35-45.	2.2	168
14	Rates of chemical denudation and CO drawdown in a glacier-covered alpine catchment. Geology, 1995, 23, 61.	4.4	167
15	The Biodiversity and Biogeochemistry of Cryoconite Holes from McMurdo Dry Valley Glaciers, Antarctica. Arctic, Antarctic, and Alpine Research, 2004, 36, 84-91.	1.1	154
16	The Greenland Ice Sheet as a hot spot of phosphorus weathering and export in the Arctic. Global Biogeochemical Cycles, 2016, 30, 191-210.	4.9	137
17	Contemporary rates of chemical denudation and atmospheric CO2 sequestration in glacier basins: an Arctic perspective. Earth Surface Processes and Landforms, 2000, 25, 1447-1471.	2.5	122
18	Ice sheets as a missing source of silica to the polar oceans. Nature Communications, 2017, 8, 14198.	12.8	122

#	Article	IF	Citations
19	Hydrological controls on microbial communities in subglacial environments. Hydrological Processes, 2005, 19, 995-998.	2.6	121
20	The composition of snowfall, snowpack and meltwater in the Scottish highlands-evidence for preferential elution. Atmospheric Environment, 1986, 20, 517-525.	1.0	120
21	Microbial primary production on an Arctic glacier is insignificant in comparison with allochthonous organic carbon input. Environmental Microbiology, 2008, 10, 2172-2178.	3.8	119
22	Stable isotope evidence for microbial sulphate reduction at the bed of a polythermal high Arctic glacier. Earth and Planetary Science Letters, 2004, 219, 341-355.	4.4	118
23	Extreme hydrochemical conditions in natural microcosms entombed within Antarctic ice. Hydrological Processes, 2004, 18, 379-387.	2.6	113
24	Sulphide oxidation under partially anoxic conditions at the bed of the Haut Glacier d'Arolla, Switzerland. Hydrological Processes, 2002, 16, 2363-2368.	2.6	110
25	Inputs of glacially derived dissolved and colloidal iron to the coastal ocean and implications for primary productivity. Global Biogeochemical Cycles, 2008, 22, .	4.9	109
26	Greenland Ice Sheet exports labile organic carbon to the Arctic oceans. Biogeosciences, 2014, 11, 4015-4028.	3.3	107
27	Carbon fluxes through bacterial communities on glacier surfaces. Annals of Glaciology, 2010, 51, 32-40.	1.4	104
28	Algae Drive Enhanced Darkening of Bare Ice on the Greenland Ice Sheet. Geophysical Research Letters, 2017, 44, 11,463.	4.0	101
29	A microbial driver of chemical weathering in glaciated systems. Geology, 2013, 41, 215-218.	4.4	95
30	Nitrogen fixation on Arctic glaciers, Svalbard. Journal of Geophysical Research, 2011, 116, .	3.3	91
31	Groundwater hydrochemistry in the active layer of the proglacial zone, Finsterwalderbreen, Svalbard. Journal of Hydrology, 2002, 269, 208-223.	5.4	88
32	Antarctic ice sheet fertilises the Southern Ocean. Biogeosciences, 2014, 11, 2635-2643.	3.3	88
33	Impact of post-mixing chemical reactions on the major ion chemistry of bulk meltwaters draining the haut glacier d'arolla, valais, Switzerland. Hydrological Processes, 1994, 8, 465-480.	2.6	85
34	HYDROCHEMISTRY AS AN INDICATOR OF SUBGLACIAL DRAINAGE SYSTEM STRUCTURE: A COMPARISON OF ALPINE AND SUB-POLAR ENVIRONMENTS. Hydrological Processes, 1996, 10, 541-556.	2.6	82
35	Methanogenic potential of Arctic and Antarctic subglacial environments with contrasting organic carbon sources. Global Change Biology, 2012, 18, 3332-3345.	9.5	82
36	Rock comminution as a source of hydrogen for subglacial ecosystems. Nature Geoscience, 2015, 8, 851-855.	12.9	82

#	Article	IF	Citations
37	Algal photophysiology drives darkening and melt of the Greenland Ice Sheet. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5694-5705.	7.1	81
38	The hydrochemistry of Bayelva, a high Arctic proglacial stream in Svalbard. Journal of Hydrology, 2002, 257, 91-114.	5.4	79
39	Glacier algae accelerate melt rates on the south-western Greenland Ice Sheet. Cryosphere, 2020, 14, 309-330.	3.9	78
40	VARIABILITY IN THE CHEMICAL COMPOSITION OFIN SITU SUBGLACIAL MELTWATERS. Hydrological Processes, 1997, 11, 59-77.	2.6	77
41	Microbially driven export of labile organic carbon from the Greenland ice sheet. Nature Geoscience, 2017, 10, 360-365.	12.9	75
42	Black acidic snow in the remote Scottish Highlands. Nature, 1984, 312, 58-61.	27.8	73
43	Suspended sediment yield and transfer processes in a small High-Arctic glacier basin, Svalbard. , 1998, 12, 73-86.		70
44	Suspended sediment fluxes in a high-Arctic glacierised catchment: implications for fluvial sediment storage. Sedimentary Geology, 2003, 162, 105-117.	2.1	70
45	Biogeochemical evolution of cryoconite holes on Canada Glacier, Taylor Valley, Antarctica. Journal of Geophysical Research, 2007, 112, .	3.3	70
46	â€˜Acidic episodesâ€™ in surface waters in Europe. Journal of Hydrology, 1992, 132, 25-69.	5.4	68
47	The hydrochemistry of Lake Vostok and the potential for life in Antarctic subglacial lakes. Hydrological Processes, 2003, 17, 795-814.	2.6	68
48	Observations of the preferential loss of major ions from melting snow and laboratory ice. Water Research, 1987, 21, 1279-1286.	11.3	67
49	Do Cryoconite Holes have the Potential to be Significant Sources of C, N, and P to Downstream Depauperate Ecosystems of Taylor Valley, Antarctica?. Arctic, Antarctic, and Alpine Research, 2013, 45, 440-454.	1.1	67
50	The potential role of the Antarctic Ice Sheet in global biogeochemical cycles. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2013, 104, 55-67.	0.3	65
51	Potentially bioavailable iron delivery by iceberg-hosted sediments and atmospheric dust to the polar oceans. Biogeosciences, 2016, 13, 3887-3900.	3.3	65
52	Sources, cycling and export of nitrogen on the Greenland Ice Sheet. Biogeosciences, 2016, 13, 6339-6352.	3.3	64
53	Subglacial Lake Whillans microbial biogeochemistry: a synthesis of current knowledge. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20140290.	3.4	64
54	Clean access, measurement, and sampling of Ellsworth Subglacial Lake: A method for exploring deep Antarctic subglacial lake environments. Reviews of Geophysics, 2012, 50, .	23.0	63

#	Article	IF	Citations
55	Quantifying bioalbedo: a new physically based model and discussion of empirical methods for characterising biological influence on ice and snow albedo. Cryosphere, 2017, 11, 2611-2632.	3.9	61
56	Use of factor analysis to investigate processes controlling the chemical composition of four streams in the Adirondack Mountains, New York. Journal of Hydrology, 1996, 185, 297-316.	5.4	60
57	The Geochemistry of Supraglacial Streams of Canada Glacier, Taylor Valley (Antarctica), and their Evolution into Proglacial Waters. Aquatic Geochemistry, 2005, 11, 391-412.	1.3	59
58	Microbial nitrogen cycling on the Greenland Ice Sheet. Biogeosciences, 2012, 9, 2431-2442.	3.3	59
59	Dark ice dynamics of the south-west Greenland Ice Sheet. Cryosphere, 2017, 11, 2491-2506.	3.9	58
60	Darkening of the Greenland Ice Sheet: Fungal Abundance and Diversity Are Associated With Algal Bloom. Frontiers in Microbiology, 2019, 10, 557.	3.5	58
61	The composition of the englacial and subglacial component in bulk meltwaters draining the Gornergletscher, Switzerland. Journal of Glaciology, 1991, 37, 59-66.	2.2	57
62	Temporal variations in physical and chemical features of cryoconite holes on Canada Glacier, McMurdo Dry Valleys, Antarctica. Journal of Geophysical Research, 2008, 113, .	3.3	57
63	Direct effect of ice sheets on terrestrial bicarbonate, sulphate and base cation fluxes during the last glacial cycle: minimal impact on atmospheric CO2 concentrations. Chemical Geology, 2002, 190, 33-44.	3.3	56
64	Stable microbial community composition on the Greenland Ice Sheet. Frontiers in Microbiology, 2015, 6, 193.	3.5	56
65	Hydrochemistry of meltwaters draining a polythermal-based, high-Arctic glacier, south Svalbard: II. Winter and early Spring. Hydrological Processes, 2000, 14, 1767-1786.	2.6	55
66	Biolabile ferrous iron bearing nanoparticles in glacial sediments. Earth and Planetary Science Letters, 2018, 493, 92-101.	4.4	53
67	Speciation, phase association and potential bioavailability of phosphorus on a Svalbard glacier. Biogeochemistry, 2008, 90, 1-13.	3.5	52
68	Controls on the autochthonous production and respiration of organic matter in cryoconite holes on high Arctic glaciers. Journal of Geophysical Research, 2012, 117, .	3.3	51
69	Biological impact on Greenland's albedo. Nature Geoscience, 2014, 7, 691-691.	12.9	51
70	Comments on the use of chemically based mixing models in glacier hydrology. Journal of Glaciology, 1995, 41, 241-246.	2.2	50
71	Enhancement of glacial solute fluxes in the proglacial zone of a polythermal glacier. Journal of Glaciology, 2001, 47, 378-386.	2.2	50
72	Mineral phosphorus drives glacier algal blooms on the Greenland Ice Sheet. Nature Communications, 2021, 12, 570.	12.8	50

#	Article	IF	Citations
73	Kinetic isotopic fractionation during carbonate dissolution in laboratory experiments: Implications for detection of microbial CO2 signatures using Î´13C-DIC. Geochimica Et Cosmochimica Acta, 2004, 68, 4309-4317.	3.9	48
74	Schwertmannite in wet, acid, and oxic microenvironments beneath polar and polythermal glaciers. Geology, 2009, 37, 431-434.	4.4	46
75	Cryospheric ecosystems: a synthesis of snowpack and glacial research. Environmental Research Letters, 2015, 10, 110201.	5.2	45
76	Trace elements in snow samples from the Scottish Highlands: Sources and dissolved/particulate distributions. Atmospheric Environment Part A General Topics, 1992, 26, 393-401.	1.3	44
77	Spring thaw ionic pulses boost nutrient availability and microbial growth in entombed Antarctic Dry Valley cryoconite holes. Frontiers in Microbiology, 2014, 5, 694.	3.5	44
78	Viral impacts on bacterial communities in Arctic cryoconite. Environmental Research Letters, 2013, 8, 045021.	5.2	43
79	A conceptual model of solute acquisition by Alpine glacial meltwaters. Journal of Glaciology, 1993, 39, 573-581.	2.2	43
80	Evidence for seasonal subglacial outburst events at a polythermal glacier, Finsterwalderbreen, Svalbard. Hydrological Processes, 2001, 15, 2259-2280.	2.6	41
81	Laboratory investigation of inorganic carbon uptake by cryoconite debris from Werenskioldbreen, Svalbard. Journal of Geophysical Research, 2007, 112, .	3.3	41
82	Phosphatase activity and organic phosphorus turnover on a high Arctic glacier. Biogeosciences, 2009, 6, 913-922.	3.3	41
83	Bacteria in Subglacial Environments. , 2008, , 51-71.		40
84	Enhanced trace element mobilization by Earthâ€™s ice sheets. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31648-31659.	7.1	40
85	Iron in Glacial Systems: Speciation, Reactivity, Freezing Behavior, and Alteration During Transport. Frontiers in Earth Science, 2018, 6, .	1.8	39
86	Modelled glacial and non-glacial HCO3â^', Si and Ge fluxes since the LGM: little potential for impact on atmospheric CO2 concentrations and a potential proxy of continental chemical erosion, the marine Ge/Si ratio. Global and Planetary Change, 2002, 33, 139-153.	3.5	38
87	Evidence for widespread anoxia in the proglacial zone of an Arctic glacier. Chemical Geology, 2007, 243, 1-15.	3.3	38
88	Algal growth and weathering crust state drive variability in western Greenland Ice Sheet ice albedo. Cryosphere, 2020, 14, 521-538.	3.9	38
89	Microbiology of Subglacial Environments. , 2017, , 83-110.		37
90	Distribution and Transport of Chemical Constituents in the Clyde Estuary. Estuarine, Coastal and Shelf Science, 1994, 39, 105-126.	2.1	36

#	Article	IF	Citations
91	Environmental factors influencing diatom communities in Antarctic cryoconite holes. Environmental Research Letters, 2013, 8, 045006.	5.2	36
92	Microbial dynamics in a High Arctic glacier forefield: a combined field, laboratory, and modelling approach. Biogeosciences, 2016, 13, 5677-5696.	3.3	36
93	Metagenomic insights into diazotrophic communities across Arctic glacier forefields. FEMS Microbiology Ecology, 2018, 94, .	2.7	36
94	Theoretical framework and diagnostic criteria for the identification of palaeo-subglacial lakes. Quaternary Science Reviews, 2012, 53, 88-110.	3.0	35
95	High-Resolution in Situ Measurement of Nitrate in Runoff from the Greenland Ice Sheet. Environmental Science & Technology, 2017, 51, 12518-12527.	10.0	35
96	Spatial variability in the chemical composition of snowcover in a small, remote, scottish catchment. Atmospheric Environment, 1987, 21, 853-862.	1.0	33
97	Nanoparticulate bioavailable iron minerals in icebergs and glaciers. Mineralogical Magazine, 2008, 72, 345-348.	1.4	33
98	Dissolved organic nutrients dominate melting surface ice of the Dark Zone (Greenland Ice Sheet). Biogeosciences, 2019, 16, 3283-3296.	3.3	33
99	Limitations to a microbial iron cycle on Mars. Planetary and Space Science, 2012, 72, 116-128.	1.7	32
100	A Two-Component Mixing Model for Predicting Regional Episodic Acidification of Surface Waters During Spring Snowmelt Periods. Water Resources Research, 1995, 31, 1011-1021.	4.2	30
101	The characteristics and formation of a highâ€arctic proglacial icing. Geografiska Annaler, Series A: Physical Geography, 2004, 86, 265-275.	1.5	30
102	Continental weathering fluxes during the last glacial/interglacial cycle: insights from the marine sedimentary Pb isotope record at Orphan Knoll, NW Atlantic. Quaternary Science Reviews, 2012, 38, 89-99.	3.0	30
103	The impact of a single black snowfall on streamwater chemistry in the Scottish Highlands. Nature, 1988, 332, 826-829.	27.8	29
104	The silicon cycle impacted by past ice sheets. Nature Communications, 2018, 9, 3210.	12.8	29
105	Scientific access into Mercer Subglacial Lake: scientific objectives, drilling operations and initial observations. Annals of Glaciology, 2021, 62, 340-352.	1.4	29
106	Controls on the Composition of Snowmelt. , 1991, , 241-271.		28
107	Trickle or treat: The dynamics of nutrient export from polar glaciers. Hydrological Processes, 2017, 31, 1776-1789.	2.6	27
108	The composition of acidic meltwaters during snowmelt in the Scottish Highlands. Water, Air, and Soil Pollution, 1987, 36, 75-90.	2.4	26

#	Article	IF	Citations
109	Highâ€resolution monitoring reveals dissolved oxygen dynamics in an Antarctic cryoconite hole. Hydrological Processes, 2011, 25, 2868-2877.	2.6	25
110	A laboratory investigation of the leaching of solute from snowpack by rainfall. Hydrological Processes, 1992, 6, 169-178.	2.6	24
111	The hydrology of the proglacial zone of a high-Arctic glacier (Finsterwalderbreen, Svalbard): Atmospheric and surface water fluxes. Journal of Hydrology, 2009, 378, 150-160.	5.4	24
112	Response of Antarctic cryoconite microbial communities to light. FEMS Microbiology Ecology, 2016, 92, fiw076.	2.7	24
113	Bacterial Dynamics in Supraglacial Habitats of the Greenland Ice Sheet. Frontiers in Microbiology, 2019, 10, 1366.	3.5	23
114	Heavily-contaminated snowfalls in the remote Scottish Highlands: A consequence of regional-scale mixing and transport. Atmospheric Environment Part A General Topics, 1992, 26, 95-112.	1.3	22
115	The weathering of aeolian dusts in alpine snows. Atmospheric Environment, 1996, 30, 1317-1325.	4.1	22
116	The hydrology of the proglacial zone of a high-Arctic glacier(Finsterwalderbreen, Svalbard): Sub-surface water fluxes and complete water budget. Journal of Hydrology, 2011, 406, 88-96.	5.4	22
117	Geochemical studies in a remote scottish upland catchment II. Streamwater chemistry during snow-melt. Water, Air, and Soil Pollution, 1989, 43, 231-248.	2.4	21
118	Sampling strategy to describe the temporal hydrochemical characteristics of an alpine proglacial stream. Hydrological Processes, 1994, 8, 1-25.	2.6	20
119	Glacial flours as a potential source of Fe(II) and Fe(III) to polar waters. Biogeochemistry, 2014, 118, 443-452.	3.5	20
120	Rapid development of anoxic niches in supraglacial ecosystems. Arctic, Antarctic, and Alpine Research, 2018, 50, .	1.1	20
121	Spatial Variability of Antarctic Surface Snow Bacterial Communities. Frontiers in Microbiology, 2019, 10, 461.	3.5	20
122	The loss of halide and sulphate ions from melting ice. Water Research, 1988, 22, 693-700.	11.3	19
123	The character and causes of a pronounced snowmelt-induced â€˜acidic episodeâ€™ in a Scottish subarctic catchment. Journal of Hydrology, 1993, 146, 267-300.	5.4	19
124	Episodic acidification of freshwater systems in Canada â€” Physical and geochemical processes. Water, Air, and Soil Pollution, 1994, 72, 19-39.	2.4	19
125	Dissolved oxygen variations in alpine glacial meltwaters. Earth Surface Processes and Landforms, 1994, 19, 247-253.	2.5	19
126	Incorporation of particulates into accreted ice above subglacial Vostok lake, Antarctica. Annals of Glaciology, 2005, 40, 145-150.	1.4	19

#	Article	IF	Citations
127	Interannual variability in the spatial distribution of winter accumulation at a high-Arctic glacier (Finsterwalderbreen, Svalbard), and its relationship with topography. Annals of Glaciology, 2005, 42, 243-248.	1.4	19
128	Hydrochemistry of ice stream bedsâ€"evaporitic or microbial effects?. Hydrological Processes, 2010, 24, 517-523.	2.6	19
129	Dynamic behaviour of supraglacial lakes on cold polar glaciers: Canada Glacier, McMurdo Dry Valleys, Antarctica. Journal of Glaciology, 2010, 56, 366-368.	2.2	19
130	Clean subglacial access: prospects for future deep hot-water drilling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20140304.	3.4	19
131	Determination of Dissolved Oxygen in the Cryosphere: A Comprehensive Laboratory and Field Evaluation of Fiber Optic Sensors. Environmental Science & Technology, 2011, 45, 700-705.	10.0	18
132	Physiological Capabilities of Cryoconite Hole Microorganisms. Frontiers in Microbiology, 2020, 11, 1783.	3.5	18
133	Trace-element studies in a remote scottish upland catchment. Water, Air, and Soil Pollution, 1988, 37, 255-271.	2.4	17
134	Prediction of episodic acidification in North-eastern USA: an empirical/mechanistic approach. Hydrological Processes, 1999, 13, 1181-1195.	2.6	17
135	The Mcmurdo Dry Valleys Longâ€Term Ecological Rsearch Program: New understanding of the biogeochemistry of the Dry Valley Lakes: A review1. Polar Geography, 2001, 25, 202-217.	1.9	16
136	Chemical sensors for in situ data collection in the cryosphere. TrAC - Trends in Analytical Chemistry, 2016, 82, 348-357.	11.4	15
137	Microbiology: lessons from a first attempt at Lake Ellsworth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20140291.	3.4	15
138	Solute in high arctic glacier snow cover and its impact on runoff chemistry. Annals of Glaciology, 1998, 26, 156-160.	1.4	13
139	Environmentally clean access to Antarctic subglacial aquatic environments. Antarctic Science, 2020, 32, 329-340.	0.9	13
140	The chemical composition of runoff from Canada Glacier, Antarctica: implications for glacier hydrology duringa cool summer. Annals of Glaciology, 2005, 40, 15-19.	1.4	12
141	A Pb isotope tracer of ocean-ice sheet interaction: the record from the NE Atlantic during the Last Glacial/Interglacial cycle. Quaternary Science Reviews, 2013, 82, 133-144.	3.0	12
142	Monitoring a changing Arctic: Recent advancements in the study of sea ice microbial communities. Ambio, 2022, 51, 318-332.	5.5	12
143	Use of electrothermal vaporization inductively coupled plasma mass spectrometry for single-element and multi-element determinations. Analytical Proceedings, 1992, 29, 284-296.	0.4	11
144	Identification and analysis of low-molecular-weight dissolved organic carbon in subglacial basal ice ecosystems by ion chromatography. Biogeosciences, 2016, 13, 3833-3846.	3.3	11

#	Article	IF	Citations
145	What Darkens the Greenland Ice Sheet?. Eos, 2015, 96, .	0.1	11
146	Switch in chemical weathering caused by the mass balance variability in a Himalayan glacierized basin: a case of Chhota Shigri Glacier. Hydrological Sciences Journal, 2019, 64, 179-189.	2.6	10
147	Measuring <scp>pH</scp> in low ionic strength glacial meltwaters using ion selective field effect transistor (ISFET) technology. Limnology and Oceanography: Methods, 2021, 19, 222-233.	2.0	10
148	Subglacial environments and the search for life beyond the Earth. Geophysical Monograph Series, 2011, , 129-148.	0.1	10
149	Glacier Biogeochemistry. Geochemical Perspectives, 2017, , 173-339.	4.5	10
150	The solute and particulate chemistry of background versus a polluted, black snowfall on the Cairngorm mountains, Scotland. Atmospheric Environment, 1989, 23, 395-401.	1.0	9
151	Introduction to special section on Microcosms in Ice: The Biogeochemistry of Cryoconite Holes. Journal of Geophysical Research, 2008, 113, .	3.3	9
152	Subglacial erosion has the potential to sustain microbial processes in Subglacial Lake Whillans, Antarctica. Communications Earth & Environment, 2021, 2, .	6.8	9
153	The rate of chemical weathering beneath a quiescent, surge-type, polythermal-based glacier, southern Spitsbergen, Svalbard. Annals of Glaciology, 1997, 24, 27-31.	1.4	9
154	Drainageâ€system development in consecutive melt seasons at a polythermal, Arctic glacier, evaluated by flowâ€recession analysis and linearâ€reservoir simulation. Water Resources Research, 2013, 49, 4230-4243.	4.2	8
155	Macro-Nutrient Stoichiometry of Glacier Algae From the Southwestern Margin of the Greenland Ice Sheet. Frontiers in Plant Science, 2021, 12, 673614.	3.6	8
156	The biogeochemistry and hydrology of McMurdo Dry Valley glaciers: is there life on martian ice now?. , 0, , 195-220.		7
157	Estuarine mixing of clay minerals in the Solent region, southern England. Sedimentary Geology, 1994, 92, 241-255.	2.1	7
158	Is Vostok lake in steady state?. Annals of Glaciology, 2004, 39, 490-494.	1.4	7
159	Nineteenth century black Scottish showers. Atmospheric Environment, 1986, 20, 1053-1057.	1.0	6
160	Solute in high arctic glacier snow cover and its impact on runoff chemistry. Annals of Glaciology, 1998, 26, 156-160.	1.4	6
161	Tracer-based estimation of temporal variation of water sources: an insight from supra- and subglacial environments. Hydrological Sciences Journal, 2018, 63, 1717-1732.	2.6	6
162	Snowmelt modelling on signy island, South Orkney Islands. Annals of Glaciology, 1998, 26, 161-166.	1.4	6

#	Article	IF	Citations
163	The composition of the englacial and subglacial component in bulk meltwaters draining the Gornergletscher, Switzerland. Journal of Glaciology, 1991, 37, 59-66.	2.2	6
164	Microbes eat rock under ice. Nature, 2014, 512, 256-257.	27.8	5
165	Grand challenge for low temperature and pressure geochemistryâ€"sparks in the dark, on Earth, Mars, and throughout the Galaxy. Frontiers in Earth Science, 2015, 3, .	1.8	5
166	Source of Lake Vostok Cations Constrained with Strontium Isotopes. Frontiers in Earth Science, 2016, 4, .	1.8	5
167	Comments on the use of chemically based mixing models in glacier hydrology. Journal of Glaciology, 1995, 41, 241-246.	2.2	4
168	Glacial Chemical Weathering, Runoff Composition and Solute Fluxes. , 0, , 71-75.		4
169	Over Winter Microbial Processes in a Svalbard Snow Pack: An Experimental Approach. Frontiers in Microbiology, 2020, 11, 1029.	3.5	4
170	Snowmelt modelling on signy island, South Orkney Islands. Annals of Glaciology, 1998, 26, 161-166.	1.4	4
171	Temporal Variability of Surface Reflectance Supersedes Spatial Resolution in Defining Greenlandâ€™s Bare-Ice Albedo. Remote Sensing, 2022, 14, 62.	4.0	4
172	Comment on â€œThe Episodic Acidification of Adirondack Lakes During Snowmeltâ€•by Douglas A. Schaefer et al. Water Resources Research, 1996, 32, 491-493.	4.2	2
173	Dissolved Nitrogen Speciation and Concentration During Spring Thaw in the Greenland Ice Sheet Dark Zone: Evidence for Microbial Activity. Frontiers in Earth Science, 2022, 10, .	1.8	2
174	Trace Metal and Rare Earth Content of Black Precipitation Events. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 1990, 12, 363-369.	0.5	1
175	HYDROCHEMISTRY AS AN INDICATOR OF SUBGLACIAL DRAINAGE SYSTEM STRUCTURE: A COMPARISON OF ALPINE AND SUBâ€POLAR ENVIRONMENTS. Hydrological Processes, 1996, 10, 541-556.	2.6	1
176	Greenland Ice Sheet Surfaces Colonized by Microbial Communities Emit Volatile Organic Compounds. Frontiers in Microbiology, 0, 13, .	3.5	1
177	The chemical composition of snow at a rural upland site in mid-wales. Atmospheric Environment, 1985, 19, 841.	1.0	0
178	Multi-element geochemical analysis of snow samples: Use of discriminant analysis in interpreting the results. Environmental Monitoring and Assessment, 1993, 27, 159-174.	2.7	0
179	Ancient organics reign on glaciers. Nature Geoscience, 2012, 5, 167-168.	12.9	0
180	Solute in Glacial Meltwaters. Encyclopedia of Earth Sciences Series, 2011, , 1074-1077.	0.1	0

#	Article	IF	Citations
181	A ferrous wheel beneath the Antarctic Ice Sheet. , 2021, , .		0
182	Aerosols and Albedo: Links between Airborne Particulate Matter and Melting of the Greenland Ice Sheet. , 2020, , .		0