Michiel Van den Broeke

List of Publications by Year
in descending order

388 papers	39,156 citations	3449 93 h-index	4853 174 g-index
516 all docs	516 docs citations	516 times ranked	18483 citing authors

#	Article	IF	Citations
1	Eight glacial cycles from an Antarctic ice core. Nature, 2004, 429, 623-628.	13.7	2,015
2	A Reconciled Estimate of Ice-Sheet Mass Balance. Science, 2012, 338, 1183-1189.	6.0	1,246
3	One-to-one coupling of glacial climate variability in Greenland and Antarctica. Nature, 2006, 444, 195-198.	13.7	1,111
4	Antarctic ice-sheet loss driven by basal melting of ice shelves. Nature, 2012, 484, 502-505.	13.7	1,051
5	A Reconciled Estimate of Glacier Contributions to Sea Level Rise: 2003 to 2009. Science, 2013, 340, 852-857.	6.0	1,044
6	Acceleration of the contribution of the Greenland and Antarctic ice sheets to sea level rise. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	870
7	Recent Antarctic ice mass loss from radarÂinterferometry and regional climateÂmodelling. Nature Geoscience, 2008, 1, 106-110.	5.4	819
8	Mass balance of the Antarctic Ice Sheet from 1992 to 2017. Nature, 2018, 558, 219-222.	13.7	759
9	Partitioning Recent Greenland Mass Loss. Science, 2009, 326, 984-986.	6.0	755
10	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. Journal of Advances in Modeling Earth Systems, 2019, 11, 4245-4287.	1.3	692
11	Four decades of Antarctic Ice Sheet mass balance from 1979â€“2017. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1095-1103.	3.3	662
12	BedMachine v3: Complete Bed Topography and Ocean Bathymetry Mapping of Greenland From Multibeam Echo Sounding Combined With Mass Conservation. Geophysical Research Letters, 2017, 44, 11051-11061.	1.5	536
13	Calving fluxes and basal melt rates of Antarctic ice shelves. Nature, 2013, 502, 89-92.	13.7	503
14	An improved mass budget for the Greenland ice sheet. Geophysical Research Letters, 2014, 41, 866-872.	1.5	500
15	Forty-six years of Greenland Ice Sheet mass balance from 1972 to 2018. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9239-9244.	3.3	452
16	Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet. Nature Geoscience, 2020, 13, 132-137.	5.4	431
17	Higher surface mass balance of the Greenland ice sheet revealed by highâ€resolution climate modeling. Geophysical Research Letters, 2009, 36, .	1.5	430
18	Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	415

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19	On the recent contribution of the Greenland ice sheet to sea level change. Cryosphere, 2016, 10, 1933-1946.	1.5	358
20	A Review of Antarctic Surface Snow Isotopic Composition: Observations, Atmospheric Circulation, and Isotopic Modeling*. Journal of Climate, 2008, 21, 3359-3387.	1.2	344
21	Estimating the Greenland ice sheet surface mass balance contribution to future sea level rise using the regional atmospheric climate model MAR. Cryosphere, 2013, 7, 469-489.	1.5	325
22	A new, highâ€resolution surface mass balance map of Antarctica (1979â€"2010) based on regional atmospheric climate modeling. Geophysical Research Letters, 2012, 39, .	1.5	315
23	Increased West Antarctic and unchanged East Antarctic ice discharge over the last 7 years. Cryosphere, 2018, 12, 521-547.	1.5	283
24	Large and Rapid Melt-Induced Velocity Changes in the Ablation Zone of the Greenland Ice Sheet. Science, 2008, 321, 111-113.	6.0	277
25	Regional acceleration in ice mass loss from Greenland and Antarctica using GRACE timeâ€variable gravity data. Geophysical Research Letters, 2014, 41, 8130-8137.	1.5	268
26	Modelling the climate and surface mass balance of polar ice sheets using RACMO2 â€" PartÂ2: Antarctica (1979â€"2016). Cryosphere, 2018, 12, 1479-1498.	1.5	268
27	Recent large increases in freshwater fluxes from Greenland into the North Atlantic. Geophysical Research Letters, 2012, 39, .	1.5	261
28	An improved semi-empirical model for the densification of Antarctic firn. Cryosphere, 2011, 5, 809-819.	1.5	256
29	Reassessment of the Antarctic surface mass balance using calibrated output of a regional atmospheric climate model. Journal of Geophysical Research, 2006, 111, .	3.3	236
30	Sustained mass loss of the northeast Greenland ice sheet triggered by regional warming. Nature Climate Change, 2014, 4, 292-299.	8.1	225
31	Melting trends over the Greenland ice sheet (1958â€"2009) from spaceborne microwave data and regional climate models. Cryosphere, 2011, 5, 359-375.	1.5	217
32	Spatial and temporal distribution of mass loss from the Greenland Ice Sheet since AD 1900. Nature, 2015, 528, 396-400.	13.7	210
33	Improved representation of East Antarctic surface mass balance in a regional atmospheric climate model. Journal of Glaciology, 2014, 60, 761-770.	1.1	208
34	The role of albedo and accumulation in the 2010 melting record in Greenland. Environmental Research Letters, 2011, 6, 014005.	2.2	207
35	Projected land ice contributions to twenty-first-century sea level rise. Nature, 2021, 593, 74-82.	13.7	200
36	Retreating alpine glaciers: increased melt rates due to accumulation of dust (Vadret da Morteratsch,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.1	197

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37	Twentieth-Century Global-Mean Sea Level Rise: Is the Whole Greater than the Sum of the Parts?. Journal of Climate, 2013, 26, 4476-4499.	1.2	197
38	Extensive liquid meltwater storage in firn within the Greenland ice sheet. Nature Geoscience, 2014, 7, 95-98.	5.4	196
39	Modelling the climate and surface mass balance of polar ice sheets using RACMO2 â€" PartÂ1: Greenland (1958â€"2016). Cryosphere, 2018, 12, 811-831.	1.5	194
40	Distinct patterns of seasonal Greenland glacier velocity. Geophysical Research Letters, 2014, 41, 7209-7216.	1.5	190
41	Strong surface melting preceded collapse of Antarctic Peninsula ice shelf. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	186
42	Timing and origin of recent regional ice-mass loss in Greenland. Earth and Planetary Science Letters, 2012, 333-334, 293-303.	1.8	179
43	Dynamic thinning of glaciers on the Southern Antarctic Peninsula. Science, 2015, 348, 899-903.	6.0	176
44	Evaluation of the updated regional climate model RACMO2.3: summer snowfall impact on the Greenland Ice Sheet. Cryosphere, 2015, 9, 1831-1844.	1.5	175
45	Estimation of the Antarctic surface mass balance using the regional climate model MAR (1979â€"2015) and identification of dominant processes. Cryosphere, 2019, 13, 281-296.	1.5	171
46	Divergent trajectories of Antarctic surface melt under two twenty-first-century climate scenarios. Nature Geoscience, 2015, 8, 927-932.	5.4	170
47	Groundâ€based measurements of spatial and temporal variability of snow accumulation in East Antarctica. Reviews of Geophysics, 2008, 46, .	9.0	164
48	Clouds enhance Greenland ice sheet meltwater runoff. Nature Communications, 2016, 7, 10266.	5.8	164
49	When can we expect extremely high surface temperatures?. Geophysical Research Letters, 2008, 35, .	1.5	157
50	Continuity of Ice Sheet Mass Loss in Greenland and Antarctica From the GRACE and GRACE Followâ€On Missions. Geophysical Research Letters, 2020, 47, e2020GL087291.	1.5	155
51	Dynamic ice loss from the Greenland Ice Sheet driven by sustained glacier retreat. Communications Earth & Environment, 2020, 1, .	2.6	153
52	Accelerating changes in ice mass within Greenland, and the ice sheetâ€™s sensitivity to atmospheric forcing. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1934-1939.	3.3	152
53	A highâ€resolution record of Greenland mass balance. Geophysical Research Letters, 2016, 43, 7002-7010.	1.5	146
54	The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. Cryosphere, 2020, 14, 3071-3096.	1.5	144

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55	Laser altimetry reveals complex pattern of Greenland Ice Sheet dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18478-18483.	3.3	143
56	The Surface Energy Balance of Antarctic Snow and Blue Ice. Journal of Applied Meteorology and Climatology, 1995, 34, 902-926.	1.7	140
57	Elevation Changes in Antarctica Mainly Determined by Accumulation Variability. Science, 2008, 320, 1626-1629.	6.0	138
58	Meltwater produced by windâ€"albedo interaction stored in an East Antarctic ice shelf. Nature Climate Change, 2017, 7, 58-62.	8.1	138
59	Rapid ablation zone expansion amplifies north Greenland mass loss. Science Advances, 2019, 5, eaaw0123.	4.7	136
60	Glacial Isostatic Adjustment over Antarctica from combined ICESat and GRACE satellite data. Earth and Planetary Science Letters, 2009, 288, 516-523.	1.8	135
61	The Greenland and Antarctic ice sheets under 1.5 Â°C global warming. Nature Climate Change, 2018, 8, 1053-1061.	8.1	135
62	Precipitation, sublimation, and snow drift in the Antarctic Peninsula region from a regional atmospheric model. Journal of Geophysical Research, 2004, 109, .	3.3	133
63	Assessing and Improving the Quality of Unattended Radiation Observations in Antarctica. Journal of Atmospheric and Oceanic Technology, 2004, 21, 1417-1431.	0.5	132
64	Climate of the Greenland ice sheet using a high-resolution climate model â€" Part 1: Evaluation. Cryosphere, 2010, 4, 511-527.	1.5	132
65	Fate of the Atlantic Meridional Overturning Circulation: Strong decline under continued warming and Greenland melting. Geophysical Research Letters, 2016, 43, 12,252.	1.5	132
66	Limits in detecting acceleration of ice sheet mass loss due to climate variability. Nature Geoscience, 2013, 6, 613-616.	5.4	131
67	The use of GPS horizontals for loading studies, with applications to northern California and southeast Greenland. Journal of Geophysical Research: Solid Earth, 2013, 118, 1795-1806.	1.4	130
68	Consistent evidence of increasing Antarctic accumulation with warming. Nature Climate Change, 2015, 5, 348-352.	8.1	130
69	Recent increases in Arctic freshwater flux affects Labrador Sea convection and Atlantic overturning circulation. Nature Communications, 2016, 7, 10525.	5.8	130
70	Surface mass balance model intercomparison for the Greenland ice sheet. Cryosphere, 2013, 7, 599-614.	1.5	127
71	Partitioning of melt energy and meltwater fluxes in the ablation zone of the west Greenland ice sheet. Cryosphere, 2008, 2, 179-189.	1.5	127
72	AÂdaily, 1â€‾km resolution data set of downscaled Greenland ice sheet surface mass balance (1958â€"2015). Cryosphere, 2016, 10, 2361-2377.	1.5	126

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73	Century-scale simulations of the response of the West Antarctic Ice Sheet to a warming climate. Cryosphere, 2015, 9, 1579-1600.	1.5	125
74	Regional Antarctic snow accumulation over the past 1000 years. Climate of the Past, 2017, 13, 1491-1513.	1.3	124
75	Airborneâ€radar and iceâ€core observations of annual snow accumulation over Thwaites Glacier, West Antarctica confirm the spatiotemporal variability of global and regional atmospheric models. Geophysical Research Letters, 2013, 40, 3649-3654.	1.5	119
76	Observing and Modeling Ice Sheet Surface Mass Balance. Reviews of Geophysics, 2019, 57, 376-420.	9.0	119
77	Greenland Ice Sheet surface mass balance 1870 to 2010 based on Twentieth Century Reanalysis, and links with global climate forcing. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	118
78	Mass balance of Greenland's three largest outlet glaciers, 2000-2010. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	116
79	Trends in Antarctic Peninsula surface melting conditions from observations and regional climate modeling. Journal of Geophysical Research F: Earth Surface, 2013, 118, 315-330.	1.0	116
80	The seasonal cycle and interannual variability of surface energy balance and melt in the ablation zone of the west Greenland ice sheet. Cryosphere, 2011, 5, 377-390.	1.5	114
81	Nonlinear rise in Greenland runoff in response to post-industrial Arctic warming. Nature, 2018, 564, 104-108.	13.7	114
82	Firn air depletion as a precursor of Antarctic ice-shelf collapse. Journal of Glaciology, 2014, 60, 205-214.	1.1	113
83	Changes in Antarctic temperature, wind and precipitation in response to the Antarctic Oscillation. Annals of Glaciology, 2004, 39, 119-126.	2.8	112
84	Surface mass-balance observations and automatic weather station data along a transect near Kangerlussuaq, West Greenland. Annals of Glaciology, 2005, 42, 311-316.	2.8	111
85	Satelliteâ€based estimates of Antarctic surface meltwater fluxes. Geophysical Research Letters, 2013, 40, 6148-6153.	1.5	111
86	GrSMBMIP: intercomparison of the modelled 1980â€"2012 surface mass balance over the Greenland Ice Sheet. Cryosphere, 2020, 14, 3935-3958.	1.5	111
87	Substantial export of suspended sediment to the global oceans from glacial erosion in Greenland. Nature Geoscience, 2017, 10, 859-863.	5.4	110
88	Land Ice Freshwater Budget of the Arctic and North Atlantic Oceans: 1. Data, Methods, and Results. Journal of Geophysical Research: Oceans, 2018, 123, 1827-1837.	1.0	110
89	Factors Controlling the Near-Surface Wind Field in Antarctica*. Monthly Weather Review, 2003, 131, 733-743.	0.5	109
90	Sensitivity of Greenland Ice Sheet surface mass balance to surface albedo parameterization: a study with a regional climate model. Cryosphere, 2012, 6, 1175-1186.	1.5	109

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91	A new albedo parameterization for use in climate models over the Antarctic ice sheet. Journal of Geophysical Research, 2011, 116, .	3.3	107
92	Greenland ice sheet surface mass balance: evaluating simulations and making projections with regional climate models. Cryosphere, 2012, 6, 1275-1294.	1.5	106
93	Quantarctica, an integrated mapping environment for Antarctica, the Southern Ocean, and sub-Antarctic islands. Environmental Modelling and Software, 2021, 140, 105015.	1.9	106
94	Future surface mass balance of the Antarctic ice sheet and its influence on sea level change, simulated by a regional atmospheric climate model. Climate Dynamics, 2013, 41, 867-884.	1.7	104
95	Surface radiation balance in the ablation zone of the west Greenland ice sheet. Journal of Geophysical Research, 2008, 113, .	3.3	101
96	Self-regulation of ice flow varies across the ablation area in south-west Greenland. Cryosphere, 2015, 9, 603-611.	1.5	101
97	Algae Drive Enhanced Darkening of Bare Ice on the Greenland Ice Sheet. Geophysical Research Letters, 2017, 44, 11,463.	1.5	101
98	Present-day and future Antarctic ice sheet climate and surface mass balance in the Community Earth System Model. Climate Dynamics, 2016, 47, 1367-1381.	1.7	99
99	The Dominant Role of Extreme Precipitation Events in Antarctic Snowfall Variability. Geophysical Research Letters, 2019, 46, 3502-3511.	1.5	98
100	Extreme Precipitation and Climate Gradients in Patagonia Revealed by High-Resolution Regional Atmospheric Climate Modeling. Journal of Climate, 2014, 27, 4607-4621.	1.2	97
101	The impact of glacier geometry on meltwater plume structure and submarine melt in Greenland fjords. Geophysical Research Letters, 2016, 43, 9739-9748.	1.5	97
102	Twenty-one years of mass balance observations along the K-transect, West Greenland. Earth System Science Data, 2012, 4, 31-35.	3.7	97
103	Large surface meltwater discharge from the Kangerlussuaq sector of the Greenland ice sheet during the record-warm year 2010 explained by detailed energy balance observations. Cryosphere, 2012, 6, 199-209.	1.5	96
104	Significant contribution of insolation to Eemian melting of the Greenland ice sheet. Nature Geoscience, 2011, 4, 679-683.	5.4	94
105	Greenland Ice Sheet Surface Mass Loss: Recent Developments in Observation and Modeling. Current Climate Change Reports, 2017, 3, 345-356.	2.8	94
106	Irreversible mass loss of Canadian Arctic Archipelago glaciers. Geophysical Research Letters, 2013, 40, 870-874.	1.5	93
107	Mass loss of the Amundsen Sea Embayment of West Antarctica from four independent techniques. Geophysical Research Letters, 2014, 41, 8421-8428.	1.5	91
108	Constraining the recent mass balance of Pine Island and Thwaites glaciers, West Antarctica, with airborne observations of snow accumulation. Cryosphere, 2014, 8, 1375-1392.	1.5	90

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109	Contemporary (1960â€"2012) Evolution of the Climate and Surface Mass Balance of the Greenland Ice Sheet. Surveys in Geophysics, 2014, 35, 1155-1174.	2.1	89
110	Limits to future expansion of surfaceâ€meltâ€enhanced ice flow into the interior of western Greenland. Geophysical Research Letters, 2015, 42, 1800-1807.	1.5	89
111	The modelled surface mass balance of the Antarctic Peninsula at 5.5â€¯km horizontal resolution. Cryosphere, 2016, 10, 271-285.	1.5	89
112	Daily cycle of the surface energy balance in Antarctica and the influence of clouds. International Journal of Climatology, 2006, 26, 1587-1605.	1.5	88
113	Ultralow Surface Temperatures in East Antarctica From Satellite Thermal Infrared Mapping: The Coldest Places on Earth. Geophysical Research Letters, 2018, 45, 6124-6133.	1.5	88
114	Characteristics of the Antarctic surface mass balance, 1958â€"2002, using a regional atmospheric climate model. Annals of Glaciology, 2005, 41, 97-104.	2.8	87
115	Influence of persistent wind scour on the surface mass balance of Antarctica. Nature Geoscience, 2013, 6, 367-371.	5.4	87
116	Interruption of two decades of Jakobshavn Isbrae acceleration and thinning as regional ocean cools. Nature Geoscience, 2019, 12, 277-283.	5.4	87
117	Air Parcel Trajectories and Snowfall Related to Five Deep Drilling Locations in Antarctica Based on the ERA-15 Dataset*. Journal of Climate, 2002, 15, 1957-1968.	1.2	86
118	Ocean forcing drives glacier retreat in Greenland. Science Advances, 2021, 7, .	4.7	86
119	Surface radiation balance in Antarctica as measured with automatic weather stations. Journal of Geophysical Research, 2004, 109, .	3.3	85
120	Seasonal cycles of Antarctic surface energy balance from automatic weather stations. Annals of Glaciology, 2005, 41, 131-139.	2.8	85
121	Enhanced basal lubrication and the contribution of the Greenland ice sheet to future sea-level rise. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14156-14161.	3.3	85
122	Modeling of oceanâ€induced ice melt rates of five west Greenland glaciers over the past two decades. Geophysical Research Letters, 2016, 43, 6374-6382.	1.5	85
123	Rapid expansion of Greenlandâ€™s low-permeability ice slabs. Nature, 2019, 573, 403-407.	13.7	84
124	Seasonal to decadal variability in ice discharge from the Greenland Ice Sheet. Cryosphere, 2018, 12, 3813-3825.	1.5	83
125	Temporal and Spatial Variations of the Aerodynamic Roughness Length in the Ablation Zone of the Greenland Ice Sheet. Boundary-Layer Meteorology, 2008, 128, 315-338.	1.2	82
126	Climate of the Greenland ice sheet using a high-resolution climate model â€" Part 2: Near-surface climate and energy balance. Cryosphere, 2010, 4, 529-544.	1.5	81

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127	Aerial Photographs Reveal Lateâ€"20th-Century Dynamic Ice Loss in Northwestern Greenland. Science, 2012, 337, 569-573.	6.0	81
128	Modeling drifting snow in Antarctica with a regional climate model: 1. Methods and model evaluation. Journal of Geophysical Research, 2012, 117, .	3.3	81
129	Influence of ice-sheet geometry and supraglacial lakes on seasonal ice-flow variability. Cryosphere, 2013, 7, 1185-1192.	1.5	80
130	Near-surface climate and surface energy budget of Larsen C ice shelf, Antarctic Peninsula. Cryosphere, 2012, 6, 353-363.	1.5	79
131	Improving the Representation of Polar Snow and Firn in the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 2583-2600.	1.3	78
132	Empirical estimation of present-day Antarctic glacial isostatic adjustment and ice mass change. Cryosphere, 2014, 8, 743-760.	1.5	77
133	Extent of low-accumulation 'wind glaze' areas on the East Antarctic plateau: implications for continental ice mass balance. Journal of Glaciology, 2012, 58, 633-647.	1.1	76
134	Observed thinning of Totten Glacier is linked to coastal polynya variability. Nature Communications, 2013, 4, 2857.	5.8	76
135	Four decades of Antarctic surface elevation changes from multi-mission satellite altimetry. Cryosphere, 2019, 13, 427-449.	1.5	76
136	Snowfall in coastal West Antarctica much greater than previously assumed. Geophysical Research Letters, 2006, 33, .	1.5	75
137	Depth and Density of the Antarctic Firn Layer. Arctic, Antarctic, and Alpine Research, 2008, 40, 432-438.	0.4	75
138	Antarctic ice-mass balance 2003 to 2012: regional reanalysis of GRACE satellite gravimetry measurements with improved estimate of glacial-isostatic adjustment based on GPS uplift rates. Cryosphere, 2013, 7, 1499-1512.	1.5	75
139	State of the Climate in 2008. Bulletin of the American Meteorological Society, 2009, 90, S1-S196.	1.7	74
140	Inland thinning on the Greenland ice sheet controlled by outlet glacier geometry. Nature Geoscience, 2017, 10, 366-369.	5.4	74
141	Temporal and spatial variability of the surface mass balance in Dronning Maud Land, Antarctica, as derived from automatic weather stations. Journal of Glaciology, 2003, 49, 512-520.	1.1	73
142	Elevation change of the Greenland Ice Sheet due to surface mass balance and firn processes, 1960â€"2014. Cryosphere, 2015, 9, 2009-2025.	1.5	73
143	Recent snowfall anomalies in Dronning Maud Land, East Antarctica, in a historical and future climate perspective. Geophysical Research Letters, 2013, 40, 2684-2688.	1.5	72
144	A tipping point in refreezing accelerates mass loss of Greenlandâ€™s glaciers and ice caps. Nature Communications, 2017, 8, 14730.	5.8	72

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145	Experimental protocol for sea level projections from ISMIP6 stand-alone ice sheet models. Cryosphere, 2020, 14, 2331-2368.	1.5	72
146	Rapid loss of firn pore space accelerates 21st century Greenland mass loss. Geophysical Research Letters, 2013, 40, 2109-2113.	1.5	70
147	Coupled simulations of Greenland Ice Sheet and climate change up to A.D. 2300. Geophysical Research Letters, 2015, 42, 3927-3935.	1.5	70
148	Drifting snow climate of the Greenland ice sheet: a study with a regional climate model. Cryosphere, 2012, 6, 891-899.	1.5	69
149	Evidence of meltwater retention within the Greenland ice sheet. Cryosphere, 2013, 7, 1433-1445.	1.5	69
150	The Freshwater System West of the Antarctic Peninsula: Spatial and Temporal Changes. Journal of Climate, 2013, 26, 1669-1684.	1.2	68
151	<i>Brief Communication</i> "Expansion of meltwater lakes on the Greenland Ice Sheet". Cryosphere, 2013, 7, 201-204.	1.5	68
152	The observed katabatic flow at the edge of the Greenland ice sheet during GIMEX-91. Global and Planetary Change, 1994, 9, 3-15.	1.6	67
153	The Summer Surface Energy Balance of the High Antarctic Plateau. Boundary-Layer Meteorology, 2005, 115, 289-317.	1.2	67
154	The 1958â€“2009 Greenland ice sheet surface melt and the mid-tropospheric atmospheric circulation. Climate Dynamics, 2011, 36, 139-159.	1.7	67
155	Refreezing on the Greenland ice sheet: a comparison of parameterizations. Cryosphere, 2012, 6, 743-762.	1.5	67
156	Updated cloud physics in a regional atmospheric climate model improves the modelled surface energy balance of Antarctica. Cryosphere, 2014, 8, 125-135.	1.5	67
157	Using MODIS land surface temperatures and the Crocus snow model to understand the warm bias of ERA-Interim reanalyses at the surface in Antarctica. Cryosphere, 2014, 8, 1361-1373.	1.5	67
158	Explaining the presence of perennial liquid water bodies in the firn of the Greenland Ice Sheet. Geophysical Research Letters, 2014, 41, 476-483.	1.5	66
159	Direct measurements of meltwater runoff on the Greenland ice sheet surface. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10622-E10631.	3.3	66
160	Six Decades of Glacial Mass Loss in the Canadian Arctic Archipelago. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1430-1449.	1.0	65
161	Intense Winter Surface Melt on an Antarctic Ice Shelf. Geophysical Research Letters, 2018, 45, 7615-7623.	1.5	65
162	Surface energy balance in the ablation zone of Midtdalsbreen, a glacier in southern Norway: Interannual variability and the effect of clouds. Journal of Geophysical Research, 2008, 113, .	3.3	64

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163	A new ice-core record from Lomonosovfonna, Svalbard: viewing the 1920â€“97 data in relation to present climate and environmental conditions. Journal of Glaciology, 2001, 47, 335-345.	1.1	63
164	The role of radiation penetration in the energy budget of the snowpack at Summit, Greenland. Cryosphere, 2009, 3, 155-165.	1.5	62
165	Oceanic controls on the mass balance of Wilkins Ice Shelf, Antarctica. Journal of Geophysical Research, 2012, 117, .	3.3	62
166	Coupled regional climateâ€“ice-sheet simulation shows limited Greenland ice loss during the Eemian. Climate of the Past, 2013, 9, 1773-1788.	1.3	62
167	Firn Meltwater Retention on the Greenland Ice Sheet: A Model Comparison. Frontiers in Earth Science, 2017, 5, .	0.8	62
168	Insignificant change in Antarctic snowmelt volume since 1979. Geophysical Research Letters, 2012, 39, .	1.5	61
169	Closing the sea level budget on a regional scale: Trends and variability on the Northwestern European continental shelf. Geophysical Research Letters, 2016, 43, 10864-10872.	1.5	61
170	The semi-annual oscillation and Antarctic climate. Part 1: influence on near surface temperatures (1957â€“79). Antarctic Science, 1998, 10, 175-183.	0.5	60
171	Modelling snowdrift sublimation on an Antarctic ice shelf. Cryosphere, 2010, 4, 179-190.	1.5	60
172	Representing Greenland ice sheet freshwater fluxes in climate models. Geophysical Research Letters, 2015, 42, 6373-6381.	1.5	60
173	Temperature and Wind Climate of the Antarctic Peninsula as Simulated by a High-Resolution Regional Atmospheric Climate Model. Journal of Climate, 2015, 28, 7306-7326.	1.2	60
174	The near-surface wind field over the Antarctic continent. International Journal of Climatology, 2004, 24, 1973-1982.	1.5	59
175	Analysis of meteorological data and the surface energy balance of McCall Glacier, Alaska, USA. Journal of Glaciology, 2005, 51, 451-461.	1.1	59
176	Surface layer climate and turbulent exchange in the ablation zone of the west Greenland ice sheet. International Journal of Climatology, 2009, 29, 2309-2323.	1.5	59
177	Validation of the summertime surface energy budget of Larsen C Ice Shelf (Antarctica) as represented in three highâ€resolution atmospheric models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1335-1347.	1.2	59
178	Greenland surface mass-balance observations from the ice-sheet ablation area and local glaciers. Journal of Glaciology, 2016, 62, 861-887.	1.1	59
179	Spatial and temporal variation of sublimation on Antarctica: Results of a high-resolution general circulation model. Journal of Geophysical Research, 1997, 102, 29765-29777.	3.3	58
180	Momentum Budget of the East Antarctic Atmospheric Boundary Layer: Results of a Regional Climate Model. Journals of the Atmospheric Sciences, 2002, 59, 3117-3129.	0.6	58

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181	A study of the surface mass balance in Dronning Maud Land, Antarctica, using automatic weather stationS. Journal of Glaciology, 2004, 50, 565-582.	1.1	58
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