Richard B Alley

List of Publications by Year
in descending order

210 papers	16,402 citations	15504 65 h-index	18647 119 g-index
213 all docs	213 docs citations	213 times ranked	10442 citing authors

#	Article	IF	Citations
1	The Younger Dryas cold interval as viewed from central Greenland. Quaternary Science Reviews, 2000, 19, 213-226.	3.0	752
2	The 8k event: cause and consequences of a major Holocene abrupt climate change. Quaternary Science Reviews, 2005, 24, 1123-1149.	3.0	727
3	Timing of abrupt climate change at the end of the Younger Dryas interval from thermally fractionated gases in polar ice. Nature, 1998, 391, 141-146.	27.8	639
4	Ice-Sheet and Sea-Level Changes. Science, 2005, 310, 456-460.	12.6	463
5	The role of seasonality in abrupt climate change. Quaternary Science Reviews, 2005, 24, 1159-1182.	3.0	463
6	Northern Hemisphere Ice-Sheet Influences on Global Climate Change. Science, 1999, 286, 1104-1111.	12.6	432
7	Paleoclimatic Evidence for Future Ice-Sheet Instability and Rapid Sea-Level Rise. Science, 2006, 311, 1747-1750.	12.6	400
8	Potential Antarctic Ice Sheet retreat driven by hydrofracturing and ice cliff failure. Earth and Planetary Science Letters, 2015, 412, 112-121.	4.4	362
9	History of sea ice in the Arctic. Quaternary Science Reviews, 2010, 29, 1757-1778.	3.0	343
10	The polar regions in a 2Â°C warmer world. Science Advances, 2019, 5, eaaw9883.	10.3	289
11	THE DEGLACIATION OF THE NORTHERN HEMISPHERE: A Global Perspective. Annual Review of Earth and Planetary Sciences, 1999, 27, 149-182.	11.0	275
12	Flow-law hypotheses for ice-sheet modeling. Journal of Glaciology, 1992, 38, 245-256.	2.2	268
13	Stability of the West Antarctic ice sheet in a warming world. Nature Geoscience, 2011, 4, 506-513.	12.9	261
14	Tidally Controlled Stick-Slip Discharge of a West Antarctic Ice. Science, 2003, 301, 1087-1089.	12.6	260
15	Deforming-bed origin for southern Laurentide till sheets?. Journal of Glaciology, 1991, 37, 67-76.	2.2	242
16	Arctic amplification: can the past constrain the future?. Quaternary Science Reviews, 2010, 29, 1779-1790.	3.0	233
17	The Paris Climate Agreement and future sea-level rise from Antarctica. Nature, 2021, 593, 83-89.	27.8	219
18	Putting the Younger Dryas cold event into context. Quaternary Science Reviews, 2010, 29, 1078-1081.	3.0	218

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19	Glaciohydraulic supercooling: a freeze-on mechanism to create stratified, debris-rich basal ice: I. Field evidence. Journal of Glaciology, 1998, 44, 547-562.	2.2	207
20	In search of ice-stream sticky spots. Journal of Glaciology, 1993, 39, 447-454.	2.2	206
21	Continued evolution of Jakobshavn Isbrae following its rapid speedup. Journal of Geophysical Research, 2008, 113, .	3.3	202
22	Implications of increased Greenland surface melt under global-warming scenarios: ice-sheet simulations. Quaternary Science Reviews, 2004, 23, 1013-1027.	3.0	197
23	Ice-Sheet Response to Oceanic Forcing. Science, 2012, 338, 1172-1176.	12.6	197
24	History of the Greenland Ice Sheet: paleoclimatic insights. Quaternary Science Reviews, 2010, 29, 1728-1756.	3.0	177
25	Effect of Sedimentation on Ice-Sheet Grounding-Line Stability. Science, 2007, 315, 1838-1841.	12.6	176
26	Impact of climate change on New York Cityâ€™s coastal flood hazard: Increasing flood heights from the preindustrial to 2300 CE. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11861-11866.	7.1	169
27	Relative Performance of Self-Organizing Maps and Principal Component Analysis in Pattern Extraction from Synthetic Climatological Data. Polar Geography, 2005, 29, 188-212.	1.9	167
28	Discovery of Till Deposition at the Grounding Line of Whillans Ice Stream. Science, 2007, 315, 1835-1838.	12.6	164
29	Stagnation of Ice Stream C, West Antarctica by water piracy. Geophysical Research Letters, 1997, 24, 265-268.	4.0	162
30	Basal Zone of the West Antarctic Ice Streams and its Role in Lubrication of Their Rapid Motion. Antarctic Research Series, 0, , 157-199.	0.2	159
31	Deforming-bed origin for southern Laurentide till sheets?. Journal of Glaciology, 1991, 37, 67-76.	2.2	151
32	Ice Core Records of Atmospheric N2O Covering the Last 106,000 Years. Science, 2003, 301, 945-948.	12.6	150
33	Iceâ€front variation and tidewater behavior on Helheim and Kangerdlugssuaq Glaciers, Greenland. Journal of Geophysical Research, 2008, 113, .	3.3	147
34	Origin of the first global meltwater pulse following the Last Glacial Maximum. Paleoceanography, 1996, 11, 563-577.	3.0	141
35	Seasonal to decadal scale variations in the surface velocity of Jakobshavn Isbrae, Greenland: Observation and modelâ€based analysis. Journal of Geophysical Research, 2012, 117, .	3.3	134
36	Timing of millennial-scale climate change at Siple Dome, West Antarctica, during the last glacial period. Quaternary Science Reviews, 2005, 24, 1333-1343.	3.0	130

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37	Geological record of ice shelf break-up and grounding line retreat, Pine Island Bay, West Antarctica. Geology, 2011, 39, 691-694.	4.4	125
38	Access of surface meltwater to beds of sub-freezing glaciers: preliminary insights. Annals of Glaciology, 2005, 40, 8-14.	1.4	120
39	Wally Was Right: Predictive Ability of the North Atlantic â€œConveyor Beltâ€•Hypothesis for Abrupt Climate Change. Annual Review of Earth and Planetary Sciences, 2007, 35, 241-272.	11.0	120
40	Calibration of the Î´18O isotopic paleothermometer for central Greenland, using borehole temperatures. Journal of Glaciology, 1994, 40, 341-349.	2.2	117
41	A 10Be chronology of lateglacial and Holocene mountain glaciation in the Scoresby Sund region, east Greenland: implications for seasonality during lateglacial time. Quaternary Science Reviews, 2008, 27, 2273-2282.	3.0	112
42	Glaciohydraulic supercooling: a freeze-on mechanism to create stratified, debris-rich basal ice: II. Theory. Journal of Glaciology, 1998, 44, 563-569.	2.2	111
43	Concerning the Deposition and Diagenesis of Strata in Polar Firn. Journal of Glaciology, 1988, 34, 283-290.	2.2	110
44	Basal mechanics of ice streams: Insights from the stickâ€slip motion of Whillans Ice Stream, West Antarctica. Journal of Geophysical Research, 2009, 114, .	3.3	110
45	Ice-Core Analysis on the Siple Coast of West Antarctica. Annals of Glaciology, 1988, 11, 1-7.	1.4	109
46	Deglacial temperature history of West Antarctica. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14249-14254.	7.1	105
47	The Younger Dryas Termination and North Atlantic Deep Water Formation: Insights from climate model simulations and Greenland Ice Cores. Paleoceanography, 1997, 12, 23-38.	3.0	101
48	A northern lead in the orbital band: northâ€“south phasing of Ice-Age events. Quaternary Science Reviews, 2002, 21, 431-441.	3.0	97
49	Greenland was nearly ice-free for extended periods during the Pleistocene. Nature, 2016, 540, 252-255.	27.8	95
50	Laboratory study of the frictional rheology of sheared till. Journal of Geophysical Research, 2008, 113, .	3.3	94
51	Improved moraine age interpretations through explicit matching of geomorphic process models to cosmogenic nuclide measurements from single landforms. Quaternary Research, 2012, 77, 293-304.	1.7	91
52	Dating the Siple Dome (Antarctica) ice core by manual and computer interpretation of annual layering. Journal of Glaciology, 2004, 50, 453-461.	2.2	90
53	A Simple Law for Ice-Shelf Calving. Science, 2008, 322, 1344-1344.	12.6	88
54	Rapid response of modern day ice sheets to external forcing. Earth and Planetary Science Letters, 2007, 257, 1-13.	4.4	86

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55	Oceanic Forcing of Ice-Sheet Retreat: West Antarctica and More. Annual Review of Earth and Planetary Sciences, 2015, 43, 207-231.	11.0	83
56	Tidal pacing, skipped slips and the slowdown of Whillans Ice Stream, Antarctica. Journal of Glaciology, 2014, 60, 795-807.	2.2	81
57	Response of the East Antarctica ice sheet to seaâ€level rise. Journal of Geophysical Research, 1984, 89, 6487-6493.	3.3	79
58	Ice-shelf tidal flexure and subglacial pressure variations. Earth and Planetary Science Letters, 2013, 361, 422-428.	4.4	79
59	Sedimentary processes may cause fluctuations of tidewater glaciers. Annals of Glaciology, 1991, 15, 119-124.	1.4	78
60	Evidence of microbial consortia metabolizing within a low-latitude mountain glacier. Geology, 2003, 31, 231.	4.4	78
61	Phase relationships between Antarctic and Greenland climate records. Annals of Glaciology, 2002, 35, 451-456.	1.4	73
62	Dilatant till facilitates ice-stream flow in northeast Greenland. Earth and Planetary Science Letters, 2014, 401, 57-69.	4.4	73
63	Glaciohydraulic supercooling: a freeze-on mechanism to create stratified, debris-rich basal ice: II. Theory. Journal of Glaciology, 1998, 44, 563-569.	2.2	72
64	Nucleation and seismic tremor associated with the glacial earthquakes of Whillans Ice Stream, Antarctica. Geophysical Research Letters, 2013, 40, 312-315.	4.0	71
65	Sensitivity of Pine Island Glacier to observed ocean forcing. Geophysical Research Letters, 2016, 43, 10,817.	4.0	69
66	Variations in melt-layer frequency in the GISP2 ice core: implications for Holocene summer temperatures in central Greenland. Annals of Glaciology, 1995, 21, 64-70.	1.4	68
67	Subglacial Lake Whillans â€" Ice-penetrating radar and GPS observations of a shallow active reservoir beneath a West Antarctic ice stream. Earth and Planetary Science Letters, 2012, 331-332, 237-245.	4.4	66
68	Motion of an Antarctic glacier by repeated tidally modulated earthquakes. Nature Geoscience, 2012, 5, 623-626.	12.9	66
69	The Robustness of Midlatitude Weather Pattern Changes due to Arctic Sea Ice Loss. Journal of Climate, 2016, 29, 7831-7849.	3.2	65
70	Is erosion by deforming subglacial sediments significant? (Toward till continuity). Annals of Glaciology, 1996, 22, 17-24.	1.4	64
71	Subglacial sediments as a control on the onset and location of two Siple Coast ice streams, West Antarctica. Journal of Geophysical Research, 2006, 111, .	3.3	64
72	Geologic Controls on the Initiation of Rapid Basal Motion for West Antarctic Ice Streams: A Geophysical Perspective Including New Airborne Radar Sounding and Laser Altimetry Results. Antarctic Research Series, 0, , 105-121.	0.2	63

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73	Microstructures of sediment flow deposits and subglacial sediments: a comparison. Boreas, 2001, 30, 254-262.	2.4	61
74	Antarctic surface temperature and elevation during the Last Glacial Maximum. Science, 2021, 372, 1097-1101.	12.6	61
75	Seismic observations of transient subglacial waterâ€flow beneath MacAyeal Ice Stream, West Antarctica. Geophysical Research Letters, 2009, 36, .	4.0	60
76	Dynamics of stickâ€"slip motion, Whillans Ice Stream, Antarctica. Earth and Planetary Science Letters, 2011, 305, 283-289.	4.4	60
77	How high will the seas rise?. Science, 2016, 354, 1375-1377.	12.6	59
78	Polar Firn Densification and Grain Growth. Annals of Glaciology, 1982, 3, 7-11.	1.4	58
79	Variations in melt-layer frequency in the GISP2 ice core: implications for Holocene summer temperatures in central Greenland. Annals of Glaciology, 1995, 21, 64-70.	1.4	58
80	Extensive storage of basal meltwater in the onset region of a major West Antarctic ice stream. Geology, 2007, 35, 251.	4.4	57
81	Seismic and geodetic evidence for groundingâ€line control of Whillans Ice Stream stickâ€slip events. Journal of Geophysical Research F: Earth Surface, 2014, 119, 333-348.	2.8	55
82	Subglacial Lake Whillans â€" Seismic observations of a shallow active reservoir beneath a West Antarctic ice stream. Earth and Planetary Science Letters, 2012, 331-332, 201-209.	4.4	54
83	Glacial advance and stagnation caused by rock avalanches. Earth and Planetary Science Letters, 2010, 294, 123-130.	4.4	53
84	Twenty-first century sea-level rise could exceed IPCC projections for strong-warming futures. One Earth, 2020, 3, 691-703.	6.8	52
85	Basal conditions at the grounding zone of Whillans Ice Stream, West Antarctica, from iceâ€penetrating radar. Journal of Geophysical Research F: Earth Surface, 2016, 121, 1954-1983.	2.8	50
86	Ice-sheet mass balance: assessment, attribution and prognosis. Annals of Glaciology, 2007, 46, 1-7.	1.4	49
87	Recent Warming in Central Greenland?. Annals of Glaciology, 1990, 14, 6-8.	1.4	48
88	Englacial seismic reflectivity: imaging crystal-orientation fabric in West Antarctica. Journal of Glaciology, 2011, 57, 639-650.	2.2	42
89	Windblown Pliocene diatoms and East Antarctic Ice Sheet retreat. Nature Communications, 2016, 7, 12957.	12.8	42
90	TOWARDS A HYDROLOGICAL MODEL FOR COMPUTERIZED ICE-SHEET SIMULATIONS. Hydrological Processes, 1996, 10, 649-660.	2.6	41

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91	Subglacial thermal balance permits ongoing grounding-line retreat along the Siple Coast of West Antarctica. Annals of Glaciology, 2003, 36, 251-256.	1.4	41
92	Physical properties of the WAIS Divide ice core. Journal of Glaciology, 2014, 60, 1181-1198.	2.2	41
93	Ice sheet grounding zone stabilization due to till compaction. Geophysical Research Letters, 2013, 40, 5406-5411.	4.0	40
94	Basal conditions and ice dynamics inferred from radar-derived internal stratigraphy of the northeast Greenland ice stream. Annals of Glaciology, 2014, 55, 127-137.	1.4	40
95	Relating bed character and subglacial morphology using seismic data from Thwaites Glacier, West Antarctica. Earth and Planetary Science Letters, 2019, 507, 199-206.	4.4	40
96	Basal-crevasse-fill origin of laminated debris bands at Matanuska Glacier, Alaska, U.S.A.. Journal of Glaciology, 2001, 47, 412-422.	2.2	39
97	Modeling Ice-Sheet Flow. Science, 2012, 336, 551-552.	12.6	39
98	Observing and modeling the influence of layering on bubble trapping in polar firn. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2558-2574.	3.3	39
99	Unique and exceptionally long interglacial marine isotope stage 11: Window into Earth warm future climate. Geophysical Monograph Series, 2003, , 1-14.	0.1	38
100	The SP19 chronology for the South Pole Ice Core â€“ Part 1: volcanic matching and annual layer counting. Climate of the Past, 2019, 15, 1793-1808.	3.4	38
101	Spatial and temporal characterization of Hoar Formation in central Greenland using SSM/I brightness temperatures. Geophysical Research Letters, 1993, 20, 2643-2646.	4.0	37
102	Understanding Glacier Flow in Changing Times. Science, 2008, 322, 1061-1062.	12.6	37
103	Dynamic perennial firn aquifer on an Arctic glacier. Geophysical Research Letters, 2015, 42, 1418-1426.	4.0	37
104	Troughs developed in ice-stream shear margins precondition ice shelves for ocean-driven breakup. Science Advances, 2019, 5, eaax2215.	10.3	37
105	Fracture toughness of ice and firn determined from the modified ring test. Journal of Glaciology, 1995, 41, 383-394.	2.2	36
106	Preliminary results of tritium analyses in basal ice, Matanuska Glacier, Alaska, U.S.A.: evidence for subglacial ice accretion. Annals of Glaciology, 1996, 22, 126-133.	1.4	36
107	Towards ice-core-based synoptic reconstructions of west antarctic climate with artificial neural networks. International Journal of Climatology, 2005, 25, 581-610.	3.5	36
108	Basal characteristics of the main sticky spot on the ice plain of Whillans Ice Stream, Antarctica. Earth and Planetary Science Letters, 2016, 440, 12-19.	4.4	35

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109	Ice-Core Analysis on the Siple Coast of West Antarctica. Annals of Glaciology, 1988, 11, 1-7.	1.4	34
110	Potential for stratigraphie folding near ice-sheet centers. Journal of Glaciology, 2001, 47, 639-648.	2.2	33
111	Sediment deposition at the modern grounding zone of Whillans Ice Stream, West Antarctica. Geophysical Research Letters, 2013, 40, 3934-3939.	4.0	33
112	Ice thickness and isostatic imbalances in the Ross Embayment, West Antarctica: model results. Global and Planetary Change, 2004, 42, 265-278.	3.5	32
113	Characterization and formation of melt layers in polar snow: observations and experiments from West Antarctica. Journal of Glaciology, 2005, 51, 307-312.	2.2	32
114	Glaciohydraulic supercooling in former ice sheets?. Geomorphology, 2006, 75, 20-32.	2.6	31
115	Subglacial bathymetry and sediment distribution beneath Pine Island Glacier ice shelf modeled using aerogravity and in situ geophysical data: New results. Earth and Planetary Science Letters, 2016, 433, 63-75.	4.4	31
116	Sub-catchment melt and long-term stability of ice stream D, West Antarctica. Geophysical Research Letters, 2002, 29, 55-1-55-4.	4.0	30
117	Rise in frequency of surface melting at Siple Dome through the Holocene: Evidence for increasing marine influence on the climate of West Antarctica. Journal of Geophysical Research, 2008, 113, .	3.3	30
118	Comment on "Absence of Cooling in New Zealand and the Adjacent Ocean During the Younger Dryas Chronozone". Science, 2008, 320, 746-746.	12.6	30
119	Ice-cliff failure via retrogressive slumping. Geology, 2019, 47, 449-452.	4.4	30
120	Characterization of a hoar-development episode using SSM/I brightness temperatures in the vicinity of the GISP2 site, Greenland. Annals of Glaciology, 1993, 17, 183-188.	1.4	29
121	Exploring till bed kinematics using AMS magnetic fabrics and pebble fabrics: the Weedsport drumlin field, New York State, USA. Boreas, 2012, 41, 31-41.	2.4	29
122	Interannual Arctic sea ice variability and associated winter weather patterns: A regional perspective for 1979â€“2014. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,433.	3.3	29
123	Preliminary results of tritium analyses in basal ice, Matanuska Glacier, Alaska, U.S.A.: evidence for subglacial ice accretion. Annals of Glaciology, 1996, 22, 126-133.	1.4	28
124	Palaeoclimatic insights into future climate challenges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1831-1849.	3.4	28
125	Polar Firn Densification and Grain Growth. Annals of Glaciology, 1982, 3, 7-11.	1.4	28
126	Comment on â€œCatastrophic ice shelf breakup as the source of Heinrich event icebergsâ€•by C. L. Hulbe et al.. Paleoceanography, 2005, 20, n/a-n/a.	3.0	27

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127	Automatic Weather Stations and Artificial Neural Networks: Improving the Instrumental Record in West Antarctica. Monthly Weather Review, 2002, 130, 3037-3053.	1.4	26
128	Sediment, glaciohydraulic supercooling, and fast glacier flow. Annals of Glaciology, 2003, 36, 135-141.	1.4	26
129	West Antarctic Ice Sheet Elevation Changes. Antarctic Research Series, 0, , 75-90.	0.2	26
130	Is erosion by deforming subglacial sediments significant? (Toward till continuity). Annals of Glaciology, 1996, 22, 17-24.	1.4	26
131	A viscoelastic flowline model applied to tidal forcing of Bindschadler Ice Stream, West Antarctica. Earth and Planetary Science Letters, 2012, 319-320, 128-132.	4.4	25
132	Comment on â€œGreenland-Antarctic phase relations and millennial time-scale climate fluctuations in the Greenland ice-coresâ€•by C. Wunsch. Quaternary Science Reviews, 2004, 23, 2053-2054.	3.0	24
133	Decoding ice sheet behavior using englacial layer slopes. Geophysical Research Letters, 2017, 44, 5561-5570.	4.0	24
134	Multiple Steady States in Ice-Water-Till Systems. Annals of Glaciology, 1990, 14, 1-5.	1.4	23
135	Annual layers in polar firn detected by Borehole Optical Stratigraphy. Geophysical Research Letters, 2003, 30, .	4.0	23
136	Past rates of climate change in the Arctic. Quaternary Science Reviews, 2010, 29, 1716-1727.	3.0	23
137	Grounding-Line Systems: Processes, Glaciological Inferences and the Stratigraphic Record. Antarctic Research Series, 2013, , 169-187.	0.2	23
138	Onset of Streaming Flow in the Siple Coast Region, West Antarctica. Antarctic Research Series, 0, , 123-136.	0.2	23
139	Ice streamsâ€"fast, and faster?. Comptes Rendus Physique, 2004, 5, 723-734.	0.9	22
140	Initial effects of oceanic warming on a coupled oceanâ€"ice shelfâ€"ice stream system. Earth and Planetary Science Letters, 2009, 287, 483-487.	4.4	22
141	Subglacial bathymetry and sediment layer distribution beneath the Pine Island Glacier ice shelf, West Antarctica, modeled using aerogravity and autonomous underwater vehicle data. Annals of Glaciology, 2013, 54, 27-32.	1.4	22
142	The Flow Regime of Ice Stream C and Hypotheses Concerning Its Recent Stagnation. Antarctic Research Series, 0, , 283-296.	0.2	22
143	Concerning the Deposition and Diagenesis of Strata in Polar Firn. Journal of Glaciology, 1988, 34, 283-290.	2.2	22
144	Microstructures of glacigenic sediment-flow deposits, Matanuska Glacier, Alaska. , 1999, , .		21

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145	Increasing temperature forcing reduces the Greenland Ice Sheetâ€™s response time scale. Climate Dynamics, 2015, 45, 2001-2011.	3.8	20
146	The impact of spatially-variable basal properties on outlet glacier flow. Earth and Planetary Science Letters, 2019, 515, 200-208.	4.4	20
147	Toward using borehole temperatures to calibrate an isotopic paleothermometer in central Greenland. Global and Planetary Change, 1992, 6, 265-268.	3.5	19
148	A 15-year West Antarctic climatology from six automatic weather station temperature and pressure records. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	19
149	Three-Dimensional Coordination Number from Two-Dimensional Measurements: A New Method. Journal of Glaciology, 1986, 32, 391-396.	2.2	18
150	Toward using borehole temperatures to calibrate an isotopic paleothermometer in central Greenland. Palaeogeography, Palaeoclimatology, Palaeoecology, 1992, 98, 265-268.	2.3	18
151	Conditions for bubble elongation in cold ice-sheet ice. Journal of Glaciology, 1999, 45, 147-153.	2.2	18
152	Glaciological and geological implications of basal-ice accretion in overdeepenings. , 1999, , .		17
153	Modeling dependence of moraine deposition on climate history: the effect of seasonality. Quaternary Science Reviews, 2009, 28, 639-646.	3.0	17
154	On the nature of the dirty ice at the bottom of the GISP2 ice core. Earth and Planetary Science Letters, 2010, 299, 466-473.	4.4	17
155	Ice Streams B and C. Antarctic Research Series, 0, , 257-281.	0.2	17
156	Calibration of the Î´¹⁸O isotopic paleothermometer for central Greenland, using borehole temperatures. Journal of Glaciology, 1994, 40, 341-349.	2.2	17
157	Holocene dynamics of the Rhone Glacier, Switzerland, deduced from ice flow models and cosmogenic nuclides. Earth and Planetary Science Letters, 2012, 351-352, 27-35.	4.4	16
158	Recent Warming in Central Greenland?. Annals of Glaciology, 1990, 14, 6-8.	1.4	16
159	Field evidence for the recognition of glaciohydrologic supercooling. , 1999, , .		15
160	Preliminary study of laminated, silt-rich debris bands: Matanuska Glacier, Alaska, U.S.A.. Annals of Glaciology, 1999, 28, 261-266.	1.4	15
161	Dating annual layers of a shallow Antarctic ice core with an optical scanner. Journal of Glaciology, 2008, 54, 831-838.	2.2	15
162	Differentiating bubble-free layers from melt layers in ice cores using noble gases. Journal of Glaciology, 2015, 61, 585-594.	2.2	15

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163	Lithospheric Structure of Greenland From Ambient Noise and Earthquake Surface Wave Tomography. Journal of Geophysical Research: Solid Earth, 2018, 123, 7850-7876.	3.4	15
164	Two-dimensional electrical stratigraphy of the Siple Dome (Antarctica) ice core. Journal of Glaciology, 2004, 50, 231-235.	2.2	14
165	The West Antarctic Ice Sheet and Sea-Level Change. Antarctic Research Series, 0, , 1-11.	0.2	14
166	Bathymetry and geological structures beneath the Ross Ice Shelf at the mouth of Whillans Ice Stream, West Antarctica, modeled from groundâ€based gravity measurements. Journal of Geophysical Research: Solid Earth, 2013, 118, 4535-4546.	3.4	14
167	Controls on Larsen C Ice Shelf Retreat From a 60â€Year Satellite Data Record. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	2.8	14
168	Comment on â€œWhen Earth's freezer door is left ajarâ€• Eos, 2003, 84, 315.	0.1	13
169	PHYSICS: Ancient Lessons for Our Future Climate. Science, 2004, 306, 821-822.	12.6	13
170	Antarctic sea ice: a self-organizing map-based perspective. Annals of Glaciology, 2007, 46, 391-396.	1.4	13
171	Reliability of ice-core science: historical insights. Journal of Glaciology, 2010, 56, 1095-1103.	2.2	13
172	Origin of stratified basal ice in outlet glaciers of VatnajÃ¶kull and Ã–rÃ¦fajÃ¶kull, Iceland. Boreas, 2010, 39, 457-470.	2.4	13
173	Glacier velocity variability due to rain-induced sliding and cavity formation. Earth and Planetary Science Letters, 2015, 432, 273-282.	4.4	13
174	Multiple Steady States in Ice-Water-Till Systems. Annals of Glaciology, 1990, 14, 1-5.	1.4	13
175	An integrated system for optical imaging of ice cores. Cold Regions Science and Technology, 2008, 53, 216-228.	3.5	12
176	Enhancement of volcanism and geothermal heat flux by iceâ€age cycling: A stress modeling study of Greenland. Journal of Geophysical Research F: Earth Surface, 2016, 121, 1456-1471.	2.8	12
177	Five millennia of surface temperatures and ice core bubble characteristics from the WAIS Divide deep core, West Antarctica. Paleoceanography, 2016, 31, 416-433.	3.0	12
178	Effect of Stratigraphy on Radar-Altimetry Data Collected Over Ice Sheets. Annals of Glaciology, 1988, 11, 60-63.	1.4	11
179	9. Oxygen- and Hydrogen-Isotopic Ratios of Water in Precipitation: Beyond Paleothermometry. , 2001, , 527-554.		11
180	Temperature variability at Siple Dome, West Antarctica, derived from ECMWF re-analyses, SSM/I and SMMR brightness temperatures and AWS records. Annals of Glaciology, 2002, 34, 106-112.	1.4	11

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181	The PSU/UofC finite-element thermomechanical flowline model of ice-sheet evolution. Cold Regions Science and Technology, 2005, 42, 145-168.	3.5	10
182	Efficient Flowline Simulations of Ice Shelfâ€"Ocean Interactions: Sensitivity Studies with a Fully Coupled Model. Journal of Physical Oceanography, 2013, 43, 2200-2210.	1.7	10
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