Poul Christoffersen

List of Publications by Year
in descending order

83	3,052	136740 32	189595 50
papers	citations	h-index	g-index

133	133	133	2907
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	UAV photogrammetry and structure from motion to assess calving dynamics at Store Glacier, a large outlet draining the Greenland ice sheet. Cryosphere, 2015, 9, 1-11.	1.5	215
2	Calving on tidewater glaciers amplified by submarine frontal melting. Cryosphere, 2013, 7, 119-128.	1.5	169
3	Ocean forcing of the Greenland Ice Sheet: Calving fronts and patterns of retreat identified by automatic satellite monitoring of eastern outlet glaciers. Journal of Geophysical Research, 2011, 116, .	3.3	127
4	Amplified melt and flow of the Greenland ice sheet driven by late-summer cyclonic rainfall. Nature Geoscience, 2015, 8, 647-653.	5.4	107
5	Response of subglacial sediments to basal freeze-on 1. Theory and comparison to observations from beneath the West Antarctic Ice Sheet. Journal of Geophysical Research, 2003, 108, .	3.3	95
6	Warming of waters in an East Greenland fjord prior to glacier retreat: mechanisms and connection to large-scale atmospheric conditions. Cryosphere, 2011, 5, 701-714.	1.5	93
7	Iceâ€“ocean interaction and calving front morphology at two west Greenland tidewater outlet glaciers. Cryosphere, 2014, 8, 1457-1468.	1.5	88
8	Significant groundwater contribution to Antarctic ice streams hydrologic budget. Geophysical Research Letters, 2014, 41, 2003-2010.	1.5	87
9	Are seasonal calving dynamics forced by buttressing from ice mÃ©lange or undercutting by melting? Outcomes from full-Stokes simulations of Store Glacier, West Greenland. Cryosphere, 2014, 8, 2353-2365.	1.5	78
10	Basal melting of Ross Ice Shelf from solar heat absorption in an ice-front polynya. Nature Geoscience, 2019, 12, 435-440.	5.4	69
11	Sensitive response of the Greenland Ice Sheet to surface melt drainage over a soft bed. Nature Communications, 2014, 5, 5052.	5.8	67
12	High-accuracy UAV photogrammetry of ice sheet dynamics with no ground control. Cryosphere, 2019, 13, 955-968.	1.5	67
13	Dynamic patterns of ice stream flow in a 3-D higher-order ice sheet model with plastic bed and simplified hydrology. Journal of Geophysical Research, 2011, 116, .	3.3	66
14	Greenland subglacial lakes detected by radar. Geophysical Research Letters, 2013, 40, 6154-6159.	1.5	62
15	Basal processes beneath an Arctic glacier and their geomorphic imprint after a surge, Elisebreen, Svalbard. Quaternary Research, 2005, 64, 125-137.	1.0	61
16	Thermodynamics of basal freeze-on: predicting basal and subglacial signatures of stopped ice streams and interstream ridges. Annals of Glaciology, 2003, 36, 233-243.	2.8	55
17	A Fullâ€Stokes 3â€D Calving Model Applied to a Large Greenlandic Glacier. Journal of Geophysical Research F: Earth Surface, 2018, 123, 410-432.	1.0	54
18	Signature of palaeoâ€iceâ€stream stagnation: till consolidation induced by basal freezeâ€on. Boreas, 2003, 32, 114-129.	1.2	52

#	Article	IF	Citations
19	Basal topographic controls on rapid retreat of Humboldt Glacier, northern Greenland. Journal of Glaciology, 2015, 61, 137-150.	1.1	52
20	Basal ice sequences in Antarctic ice stream: Exposure of past hydrologic conditions and a principal mode of sediment transfer. Journal of Geophysical Research, 2010, 115, .	3.3	51
21	Linear response of east Greenlandâ€™s tidewater glaciers to ocean/atmosphere warming. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7907-7912.	3.3	51
22	Cascading lake drainage on the Greenland Ice Sheet triggered by tensile shock and fracture. Nature Communications, 2018, 9, 1064.	5.8	47
23	Distributed Acoustic Sensing of Seismic Properties in a Borehole Drilled on a Fastâ€Flowing Greenlandic Outlet Glacier. Geophysical Research Letters, 2020, 47, e2020GL088148.	1.5	43
24	Physical Conditions of Fast Glacier Flow: 1. Measurements From Boreholes Drilled to the Bed of Store Glacier, West Greenland. Journal of Geophysical Research F: Earth Surface, 2018, 123, 324-348.	1.0	41
25	Supraglacial lake drainage at a fast-flowing Greenlandic outlet glacier. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25468-25477.	3.3	41
26	Large subglacial lake beneath the Laurentide Ice Sheet inferred from sedimentary sequences. Geology, 2008, 36, 563.	2.0	40
27	Variable deceleration of Whillans Ice Stream, West Antarctica. Journal of Geophysical Research F: Earth Surface, 2014, 119, 212-224.	1.0	40
28	Brief communication Greenland's shrinking ice cover: "fast times" but not that fast. Cryosphere, 2012, 6, 533-537.	1.5	39
29	Seismic evidence for complex sedimentary control of Greenland Ice Sheet flow. Science Advances, 2017, 3, e1603071.	4.7	39
30	Formation and deformation of basal till during a glacier surge; Elisebreen, Svalbard. Geomorphology, 2006, 81, 217-234.	1.1	38
31	Surface Meltwater Impounded by Seasonal Englacial Storage in West Greenland. Geophysical Research Letters, 2018, 45, 10,474.	1.5	36
32	Antarctic subglacial groundwater: a concept paper on its measurement and potential influence on ice flow. Geological Society Special Publication, 2018, 461, 197-213.	0.8	35
33	Exploration of Ellsworth Subglacial Lake: a concept paper on the development, organisation and execution of an experiment to explore, measure and sample the environment of a West Antarctic subglacial lake. Reviews in Environmental Science and Biotechnology, 2007, 6, 161-179.	3.9	34
34	Cenozoic Climate and Sea Level History from Glacimarine Strata off the Victoria Land Coast, Cape Roberts Project, Antarctica. , 2009, , 259-287.		34
35	Partitioning effects from ocean and atmosphere on the calving stability of Kangerdlugssuaq Glacier, East Greenland. Annals of Glaciology, 2012, 53, 249-256.	2.8	34
36	Sensitivity of basal conditions in an inverse model: Vestfonna ice cap, Nordaustlandet/Svalbard. Cryosphere, 2012, 6, 771-783.	1.5	33

#	Article	IF	Citations
37	A quantitative framework for interpretation of basal ice facies formed by ice accretion over subglacial sediment. Journal of Geophysical Research, 2006, 111, .	3.3	32
38	The influence of subglacial hydrology on the flow of Kamb Ice Stream, West Antarctica. Journal of Geophysical Research F: Earth Surface, 2013, 118, 97-110.	1.0	32
39	Physical Conditions of Fast Glacier Flow: 2. Variable Extent of Anisotropic Ice and Soft Basal Sediment From Seismic Reflection Data Acquired on Store Glacier, West Greenland. Journal of Geophysical Research F: Earth Surface, 2018, 123, 349-362.	1.0	26
40	Resolving the internal and basal geometry of ice masses using imaging phase-sensitive radar. Journal of Glaciology, 2018, 64, 649-660.	1.1	26
41	Sedimentological Signature of A Deformable Bed Preserved Beneath An Ice Stream In A Late Pleistocene Glacial Sequence, Ross Sea, Antarctica. Journal of Sedimentary Research, 2012, 82, 270-282.	0.8	25
42	Surface undulations of Antarctic ice streams tightly controlled by bedrock topography. Cryosphere, 2013, 7, 407-417.	1.5	25
43	Reactivation of Kamb Ice Stream tributaries triggers centuryâ€scale reorganization of Siple Coast ice flow in West Antarctica. Geophysical Research Letters, 2015, 42, 8471-8480.	1.5	24
44	Sensitivity of a calving glacier to iceâ€“ocean interactions under climate change: new insights from a 3-D full-Stokes model. Cryosphere, 2019, 13, 1681-1694.	1.5	23
45	Coupled modelling of subglacial hydrology and calving-front melting at Store Glacier, West Greenland. Cryosphere, 2020, 14, 905-924.	1.5	22
46	Ice thickness and basal conditions of vestfonna ice cap, eastern svalbard. Geografiska Annaler, Series A: Physical Geography, 2011, 93, 311-322.	0.6	20
47	Inferring Ice Fabric From Birefringence Loss in Airborne Radargrams: Application to the Eastern Shear Margin of Thwaites Glacier, West Antarctica. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF006023.	1.0	19
48	Thermodynamics of a fast-moving Greenlandic outlet glacier revealed by fiber-optic distributed temperature sensing. Science Advances, 2021, 7, .	4.7	17
49	Observation Bias Correction Reveals More Rapidly Draining Lakes on the Greenland Ice Sheet. Journal of Geophysical Research F: Earth Surface, 2017, 122, 1867-1881.	1.0	15
50	Spatial distribution and change in the surface iceâ€velocity field of vestfonna ice cap, nordaustlandet, svalbard, 1995â€“2010 using geodetic and satellite interferometry data. Geografiska Annaler, Series A: Physical Geography, 2011, 93, 323-335.	0.6	14
51	Subglacial lake sediments and sedimentary processes: Potential archives of ice sheet evolution, past environmental change, and the presence of life. Geophysical Monograph Series, 2011, , 83-110.	0.1	14
52	Sedimentary Signatures of the Waterloo Moraine, Ontario, Canada. , 2009, , 85-108.		13
53	Analysis of the microbial community and geochemistry of a sediment core from Great Slave Lake, Canada. Antonie Van Leeuwenhoek, 2011, 99, 423-430.	0.7	13
54	Physical Conditions of Fast Glacier Flow: 3. Seasonallyâ€Evolving Ice Deformation on Store Glacier, West Greenland. Journal of Geophysical Research F: Earth Surface, 2019, 124, 245-267.	1.0	13

#	Article	IF	Citations
55	Boreholeâ€Based Characterization of Deep Mixedâ€Mode Crevasses at a Greenlandic Outlet Glacier. AGU Advances, 2021, 2, e2020AV000291.	2.3	13
56	Signature of palaeo-ice-stream stagnation: till consolidation induced by basal freeze-on. Boreas, 2003, 32, 114-129.	1.2	12
57	A fully-coupled 3D model of a large Greenlandic outlet glacier with evolving subglacial hydrology, frontal plume melting and calving. Journal of Glaciology, 2022, 68, 486-502.	1.1	12
58	Dynamics of the late Plioâ€“Pleistocene West Antarctic Ice Sheet documented in subglacial diamictites, AND-1B drill core. Global and Planetary Change, 2014, 119, 56-70.	1.6	11
59	Controls on Water Storage and Drainage in Crevasses on the Greenland Ice Sheet. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006287.	1.0	11
60	Calving of a Large Greenlandic Tidewater Glacier has Complex Links to Meltwater Plumes and MÃ©lange. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF006051.	1.0	10
61	Rapid basal melting of the Greenland Ice Sheet from surface meltwater drainage. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	10
62	Is the Greenland Ice Sheet in a state of collapse?. Geology Today, 2006, 22, 98-103.	0.3	9
63	Glaciological Monitoring Using the Sun as a Radio Source for Echo Detection. Geophysical Research Letters, 2021, 48, e2021GL092450.	1.5	8
64	Rapid and accurate polarimetric radar measurements of ice crystal fabric orientation at the Western Antarctic Ice Sheet (WAIS) Divide ice core site. Cryosphere, 2021, 15, 4117-4133.	1.5	8
65	Post-Processing Synchronized Bistatic Radar for Long Offset Glacier Sounding. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	2.7	7
66	Cryoegg: development and field trials of a wireless subglacial probe for deep, fast-moving ice. Journal of Glaciology, 2021, 67, 627-640.	1.1	6
67	Hydrologic forcing of ice stream flow promotes rapid transport of sediment in basal ice. Geology, 2012, 40, 735-738.	2.0	5
68	Contrasting Hydrological Controls on Bed Properties During the Acceleration of Pine Island Glacier, West Antarctica. Journal of Geophysical Research F: Earth Surface, 2019, 124, 80-96.	1.0	5
69	Estimating Episodic Permafrost Development in Northern Germany during the Pleistocene. , 2009, , 109-119.		4
70	Reply to comment by A. W. Rempel et al. on â€œA quantitative framework for interpretation of basal ice facies formed by ice accretion over subglacial sedimentâ€. Journal of Geophysical Research, 2007, 112, .	3.3	3
71	Seasonal Controls on Deposition of Late Devensian Glaciolacustrine Sediments, Central Ireland. , 2009, , 149-163.		3
72	Anatomy and Facies Association of a Drumlin in Co. Down, Northern Ireland, from Seismic and Electrical Resistivity Surveys. , 2009, , 165-176.		3

#	Article	IF	Citations
73	Water flow through sediments and at the ice-sediment interface beneath Sermeq Kujalleq (Store) Tj ETQq1 1 0.784314 rgBT /Overloc	1.1	3
74	POLYNEUROPATHY IN PATIENTS WITH URAEMIA TREATED WITH DIALYSIS. Acta Neurologica Scandinavica, 2009, 46, 206-206.	1.0	2
75	Sedimentology, Structural Characteristics and Morphology of a Neoglacial High-Arctic Moraine-Mound Complex: Midre LovÃ©nbreen, Svalbard. , 2009, , 11-22.		2
76	Changing Extent of Lakes and Permafrost on the North Slope of Alaska. , 2012, , .		2
77	The Newbigging Esker System, Lanarkshire, Southern Scotland: A Model for Composite Tunnel, Subaqueous Fan and Supraglacial Esker Sedimentation. , 2009, , 177-202.		1
78	Sediments and Landforms in an Upland Glaciated-Valley Landsystem: Upper Ennerdale, English Lake District. , 2009, , 235-256.		1
79	Glacial Stress Field Orientation Reconstructed through Micromorphology and ÂµX-Ray Computed Tomography of Till. , 2009, , 289-294.		1
80	A New Laboratory Apparatus for Investigating Clast Ploughing. , 2009, , 23-34.		1
81	Greenland Ice Sheet. Encyclopedia of Earth Sciences Series, 2011, , 484-489.	0.1	1
82	ICELANDIC ICE MOUNTAINS: DRAFT OF A PHYSICAL, GEOGRAPHICAL, AND HISTORICAL DESCRIPTION OF ICELANDIC ICE MOUNTAINS ON THE BASIS OF A JOURNEY TO THE MOST PROMINENT OF THEM IN 1792â€“1794. Sveinn PÃ¡lsson. 2004. Edited by R.S. Williams Jr and O. SigurÃ°sson. Reykjavik: Icelandic Literary Society. xxxvi + 183 p, illustrated, hard cover. ISBN 9979-66-146-1. $US56.00. Polar Record, 2005, 41, 368-369.	0.4	0
83	A Brief Review on Modeling Sediment Erosion, Transport and Deposition by Former Large Ice Sheets. , 2009, , 53-64.		0