Sebastian H Mernild

List of Publications by Year
in descending order

80	5,079	101543 36	95266 68
papers	citations	h-index	g-index

90	90	90	6101
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mass balance of the Antarctic Ice Sheet from 1992 to 2017. Nature, 2018, 558, 219-222.	27.8	759
2	Twenty-three unsolved problems in hydrology (UPH) â€“ a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
3	Mass balance of the Greenland Ice Sheet from 1992 to 2018. Nature, 2020, 579, 233-239.	27.8	434
4	Arctic terrestrial hydrology: A synthesis of processes, regional effects, and research challenges. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 621-649.	3.0	293
5	The influence of North Atlantic atmospheric and oceanic forcing effects on 1900â€“2010 Greenland summer climate and ice melt/runoff. International Journal of Climatology, 2013, 33, 862-880.	3.5	193
6	Atmospheric and oceanic climate forcing of the exceptional Greenland ice sheet surface melt in summer 2012. International Journal of Climatology, 2014, 34, 1022-1037.	3.5	182
7	Trajectory of the Arctic as an integrated system. Ecological Applications, 2013, 23, 1837-1868.	3.8	166
8	Recent warming in Greenland in a long-term instrumental (1881â€“2012) climatic context: I. Evaluation of surface air temperature records. Environmental Research Letters, 2012, 7, 045404.	5.2	135
9	Fate of the Atlantic Meridional Overturning Circulation: Strong decline under continued warming and Greenland melting. Geophysical Research Letters, 2016, 43, 12,252.	4.0	132
10	GrSMBMIP: intercomparison of the modelled 1980â€“2012 surface mass balance over the Greenland Ice Sheet. Cryosphere, 2020, 14, 3935-3958.	3.9	111
11	Greenland precipitation trends in a longâ€term instrumental climate context (1890â€“2012): evaluation of coastal and ice core records. International Journal of Climatology, 2015, 35, 303-320.	3.5	84
12	Global glacier changes: a revised assessment of committed mass losses and sampling uncertainties. Cryosphere, 2013, 7, 1565-1577.	3.9	76
13	Snow Distribution and Melt Modeling for Mittivakkat Glacier, Ammassalik Island, Southeast Greenland. Journal of Hydrometeorology, 2006, 7, 808-824.	1.9	74
14	Greenland Ice Sheet Surface Mass-Balance Modeling in a 131-Yr Perspective, 1950â€“2080. Journal of Hydrometeorology, 2010, 11, 3-25.	1.9	70
15	Greenland ice sheet surface melt extent and trends: 1960â€“2010. Journal of Glaciology, 2011, 57, 621-628.	2.2	66
16	Greenland surface air temperature changes from 1981 to 2019 and implications for iceâ€sheet melt and massâ€balance change. International Journal of Climatology, 2021, 41, E1336.	3.5	65
17	Snow cover and snow albedo changes in the central Andes of Chile and Argentina from daily MODIS observations (2000â€“2016). Remote Sensing of Environment, 2018, 209, 240-252.	11.0	64
18	Global sea-level contribution from Arctic land ice: 1971â€“2017. Environmental Research Letters, 2018, 13, 125012.	5.2	62

#	Article	IF	Citations
19	The Arctic in the Twenty-First Century: Changing Biogeochemical Linkages across a Paraglacial Landscape of Greenland. BioScience, 2017, 67, 118-133.	4.9	60
20	Greenland surface mass-balance observations from the ice-sheet ablation area and local glaciers. Journal of Glaciology, 2016, 62, 861-887.	2.2	59
21	Observed runoff, jÃ¶kulhlaups and suspended sediment load from the Greenland ice sheet at Kangerlussuaq, West Greenland, 2007 and 2008. Journal of Glaciology, 2009, 55, 855-858.	2.2	57
22	The Influence of Air Temperature Inversions on Snowmelt and Glacier Mass Balance Simulations, Ammassalik Island, Southeast Greenland. Journal of Applied Meteorology and Climatology, 2010, 49, 47-67.	1.5	57
23	Strong Downslope Wind Events in Ammassalik, Southeast Greenland. Journal of Climate, 2014, 27, 977-993.	3.2	56
24	A predictive model for the spectral â€œbioalbedoâ€•of snow. Journal of Geophysical Research F: Earth Surface, 2017, 122, 434-454.	2.8	55
25	Greenland Freshwater Runoff. Part II: Distribution and Trends, 1960â€“2010. Journal of Climate, 2012, 25, 6015-6035.	3.2	53
26	Greenland Ice Sheet surface massâ€balance modelling and freshwater flux for 2007, and in a 1995â€“2007 perspective. Hydrological Processes, 2009, 23, 2470-2484.	2.6	52
27	Greenland Freshwater Runoff. Part I: A Runoff Routing Model for Glaciated and Nonglaciated Landscapes (HydroFlow). Journal of Climate, 2012, 25, 5997-6014.	3.2	52
28	Mass loss and imbalance of glaciers along the Andes Cordillera to the sub-Antarctic islands. Global and Planetary Change, 2015, 133, 109-119.	3.5	52
29	Identification of snow ablation rate, ELA, AAR and net mass balance using transient snowline variations on two Arctic glaciers. Journal of Glaciology, 2013, 59, 649-659.	2.2	50
30	Glacier area changes in the central Chilean and Argentinean Andes 1955â€“2013/14. Journal of Glaciology, 2016, 62, 391-401.	2.2	49
31	Sediment plumes as a proxy for local ice-sheet runoff in Kangerlussuaq Fjord, West Greenland. Journal of Glaciology, 2010, 56, 813-821.	2.2	47
32	Coastal Greenland air temperature extremes and trends 1890â€“2010: annual and monthly analysis. International Journal of Climatology, 2014, 34, 1472-1487.	3.5	46
33	Increasing mass loss from Greenland's Mittivakkat Gletscher. Cryosphere, 2011, 5, 341-348.	3.9	44
34	The Andes Cordillera. Part I: snow distribution, properties, and trends (1979â€“2014). International Journal of Climatology, 2017, 37, 1680-1698.	3.5	42
35	Quantifying flow regimes in a Greenland glacial fjord using iceberg drifters. Geophysical Research Letters, 2014, 41, 8411-8420.	4.0	41
36	The Andes Cordillera. Part <scp>III</scp>: glacier surface mass balance and contribution to sea level rise (1979â€“2014). International Journal of Climatology, 2017, 37, 3154-3174.	3.5	41

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37	Sediment transport to the Arctic Ocean and adjoining cold oceans*. Hydrology Research, 2006, 37, 413-432.	2.7	40
38	Snowâ€distribution and melt modelling for glaciers in Zackenberg river drainage basin, northâ€eastern Greenland. Hydrological Processes, 2007, 21, 3249-3263.	2.6	39
39	Climatic control on river discharge simulations, Zackenberg River drainage basin, northeast Greenland. Hydrological Processes, 2008, 22, 1932-1948.	2.6	35
40	Surface Mass Balance and Runoff Modeling Using HIRHAM4 RCM at Kangerlussuaq (SÃ¸ndre) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	3.2	35
41	The impact of resolution on the representation of southeast Greenland barrier winds and katabatic flows. Geophysical Research Letters, 2015, 42, 3011-3018.	4.0	35
42	Surface Melt Area and Water Balance Modeling on the Greenland Ice Sheet 1995â€“2005. Journal of Hydrometeorology, 2008, 9, 1191-1211.	1.9	33
43	Freshwater flux to Sermilik Fjord, SE Greenland. Cryosphere, 2010, 4, 453-465.	3.9	33
44	Multi-decadal marine- and land-terminating glacier recession in the Ammassalik region, southeast Greenland. Cryosphere, 2012, 6, 625-639.	3.9	32
45	Meltwater flux and runoff modeling in the ablation area of Jakobshavn IsbrÃ¦, West Greenland. Journal of Glaciology, 2010, 56, 20-32.	2.2	29
46	Reconstructing Greenland Ice Sheet meltwater discharge through the Watson River (1949â€“2017). Arctic, Antarctic, and Alpine Research, 2018, 50, .	1.1	27
47	Runoff and mass-balance simulations from the Greenland Ice Sheet at Kangerlussuaq (SÃ¸ndre) Tj ETQq1 1 0.784314 rgBT /Overlock 1	3.9	26
48	Water flow through Mittivakkat Glacier, Ammassalik Island, SE Greenland. Geografisk Tidsskrift, 2006, 106, 25-43.	0.6	25
49	Northern Hemisphere Glacier and Ice Cap Surface Mass Balance and Contribution to Sea Level Rise. Journal of Climate, 2014, 27, 6051-6073.	3.2	23
50	Volume measurements of Mittivakkat Gletscher, southeast Greenland. Journal of Glaciology, 2014, 60, 1199-1207.	2.2	22
51	Climate-driven fluctuations in freshwater flux to Sermilik Fjord, East Greenland, during the last 4000 years. Holocene, 2012, 22, 155-164.	1.7	19
52	Stable oxygen isotope variability in two contrasting glacier river catchments in Greenland. Hydrology and Earth System Sciences, 2016, 20, 1197-1210.	4.9	19
53	Volume and velocity changes at Mittivakkat Gletscher, southeast Greenland. Journal of Glaciology, 2013, 59, 660-670.	2.2	17
54	Freshwater Flux and Spatiotemporal Simulated Runoff Variability into Ilulissat Icefjord, West Greenland, Linked to Salinity and Temperature Observations near Tidewater Glacier Margins Obtained Using Instrumented Ringed Seals. Journal of Physical Oceanography, 2015, 45, 1426-1445.	1.7	17

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55	Surface velocity fluctuations for Glaciar Universidad, central Chile, between 1967 and 2015. Journal of Glaciology, 2016, 62, 847-860.	2.2	17
56	East Greenland freshwater runoff to the Greenlandâ€Icelandâ€Norwegian Seas 1999â€“2004 and 2071â€“2100. Hydrological Processes, 2008, 22, 4571-4586.	2.6	16
57	Observed sediment and solute transport from the Kangerlussuaq sector of the Greenland Ice Sheet (2006â€“2016). Arctic, Antarctic, and Alpine Research, 2018, 50, .	1.1	16
58	Albedo decline on Greenland's Mittivakkat Gletscher in a warming climate. International Journal of Climatology, 2015, 35, 2294-2307.	3.5	15
59	The internal drainage system of the lower Mittivakkat Glacier, Ammassalik Island, SE Greenland. Geografisk Tidsskrift, 2006, 106, 13-24.	0.6	12
60	The Andes Cordillera. Part IV: spatioâ€temporal freshwater runâ€off distribution to adjacent seas (1979â€“2014). International Journal of Climatology, 2017, 37, 3175-3196.	3.5	12
61	Meteorological stations at the Sermilik Station, Southeast Greenland: physical environment and meteorological observations 2002. Geografisk Tidsskrift, 2004, 104, 47-58.	0.6	9
62	Meteorological observations 2003 at the Sermilik Station, Ammassalik Island, Southeast Greenland. Geografisk Tidsskrift, 2005, 105, 49-56.	0.6	9
63	The Andes Cordillera. Part <scp>II</scp>: Rio Olivares Basin snow conditions (1979â€“2014), central Chile. International Journal of Climatology, 2017, 37, 1699-1715.	3.5	9
64	Simulated Internal Storage Buildup, Release, and Runoff from Greenland Ice Sheet at Kangerlussuaq, West Greenland. Arctic, Antarctic, and Alpine Research, 2012, 44, 83-94.	1.1	8
65	Fluctuations of sediment accumulation rates in front of an Arctic delta in Greenland. Holocene, 2013, 23, 860-868.	1.7	8
66	Surface Air Temperature Fluctuations and Lapse Rates on Olivares Gamma Glacier, Rio Olivares Basin, Central Chile, from a Novel Meteorological Sensor Network. Advances in Meteorology, 2017, 2017, 1-15.	1.6	8
67	High-resolution ice sheet surface mass-balance and spatiotemporal runoff simulations: Kangerlussuaq, west Greenland. Arctic, Antarctic, and Alpine Research, 2018, 50, .	1.1	8
68	Annual River Runoff Variations and Trends for the Andes Cordillera. Journal of Hydrometeorology, 2018, 19, 1167-1189.	1.9	7
69	Modeling Suspended Sediment Concentration and Transport, Mittivakkat Glacier, Southeast Greenland. Arctic, Antarctic, and Alpine Research, 2012, 44, 306-318.	1.1	6
70	Atmospheric and oceanic influence on mass balance of northern North Atlantic region land-terminating glaciers. Geografiska Annaler, Series A: Physical Geography, 2014, 96, n/a-n/a.	1.5	6
71	Combined influence of oceanic and atmospheric circulations on Greenland sea ice concentration. Cryosphere, 2021, 15, 1307-1319.	3.9	6
72	Meteorological observations 2004 at the Sermilik Station, Ammassalik Island, Southeast Greenland. Geografisk Tidsskrift, 2006, 106, 131-140.	0.6	5

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73	The role of blocking circulation and emerging open water feedbacks on Greenland coldâ€season air temperature variability over the last century. International Journal of Climatology, 2021, 41, E2778.	3.5	5
74	A test of classification and regionalisation of Danish watercourses. Geografisk Tidsskrift, 2003, 103, 13-25.	0.6	4
75	Surface melt extent for the Greenland Ice Sheet, 2011. Geografisk Tidsskrift, 2012, 112, 84-88.	0.6	4
76	Land-terminating glacier volume changes in different Circum-Arctic areas, mid-1980s to late-2000s/2011. Geografisk Tidsskrift, 2013, 113, 65-70.	0.6	3
77	Meteorological observations 2006 and ground temperature variations over 12-year at the Sermilik Station, Ammassalik Island, Southeast Greenland. Geografisk Tidsskrift, 2008, 108, 153-161.	0.6	2
78	Glacier changes in the circumpolar Arctic and sub-Arctic, mid-1980s to late-2000s/2011. Geografisk Tidsskrift, 2015, 115, 39-56.	0.6	2
79	Statistical EOF analysis of spatiotemporal glacier mass-balance variability: a case study of Mittivakkat Gletscher, SE Greenland. Geografisk Tidsskrift, 2018, 118, 1-16.	0.6	2
80	Greenland Ice Sheet and Arctic Mountain Glaciers. , 2021, , 133-156.		0