Willem Jan van de Berg

List of Publications by Year
in descending order

73	10,065	57758	82547
papers	citations	44 h-index	72 g-index

121	121	121	6254
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sensitivity of Antarctic surface climate to a new spectral snow albedo and radiative transfer scheme in RACMO2.3p3. Cryosphere, 2022, 16, 1071-1089.	3.9	1
2	Spatial Variability of the Snowmeltâ€Albedo Feedback in Antarctica. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005696.	2.8	13
3	A 21st Century Warming Threshold for Sustained Greenland Ice Sheet Mass Loss. Geophysical Research Letters, 2021, 48, e2020GL090471.	4.0	29
4	Impact of updated radiative transfer scheme in snow and ice in RACMO2.3p3 on the surface mass and energy budget of the Greenland ice sheet. Cryosphere, 2021, 15, 1823-1844.	3.9	7
5	Uncertainty in East Antarctic Firn Thickness Constrained Using a Model Ensemble Approach. Geophysical Research Letters, 2021, 48, e2020GL092060.	4.0	10
6	What is the surface mass balance of Antarctica? An intercomparison of regional climate model estimates. Cryosphere, 2021, 15, 3751-3784.	3.9	55
7	Mass balance of the Greenland Ice Sheet from 1992 to 2018. Nature, 2020, 579, 233-239.	27.8	434
8	Low elevation of Svalbard glaciers drives high mass loss variability. Nature Communications, 2020, 11, 4597.	12.8	52
9	Brief communication: CESM2 climate forcing (1950â€“2014) yields realistic Greenland ice sheet surface mass balance. Cryosphere, 2020, 14, 1425-1435.	3.9	11
10	A benchmark dataset of in situ Antarctic surface melt rates and energy balance. Journal of Glaciology, 2020, 66, 291-302.	2.2	25
11	The added value of high resolution in estimating the surface mass balance in southern Greenland. Cryosphere, 2020, 14, 1809-1827.	3.9	7
12	Impact of coastal East Antarctic ice rises on surface mass balance: insights from observations and modeling. Cryosphere, 2020, 14, 3367-3380.	3.9	17
13	Evaluation of a new snow albedo scheme for the Greenland ice sheet in the Regional Atmospheric Climate Model (RACMO2). Cryosphere, 2020, 14, 3645-3662.	3.9	12
14	GrSMBMIP: intercomparison of the modelled 1980â€“2012 surface mass balance over the Greenland Ice Sheet. Cryosphere, 2020, 14, 3935-3958.	3.9	111
15	Rapid ablation zone expansion amplifies north Greenland mass loss. Science Advances, 2019, 5, eaaw0123.	10.3	136
16	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.	3.9	171
17	A module to convert spectral to narrowband snow albedo for use in climate models: SNOWBAL v1.2. Geoscientific Model Development, 2019, 12, 5157-5175.	3.6	11
18	Six Decades of Glacial Mass Loss in the Canadian Arctic Archipelago. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1430-1449.	2.8	65

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19	Modelling the climate and surface mass balance of polar ice sheets using RACMO2 â€“ PartÂ2: Antarctica (1979â€“2016). Cryosphere, 2018, 12, 1479-1498.	3.9	268
20	Climate and surface mass balance of coastal West Antarctica resolved by regional climate modelling. Annals of Glaciology, 2018, 59, 29-41.	1.4	40
21	Modelling the climate and surface mass balance of polar ice sheets using RACMO2 â€“ PartÂ1: Greenland (1958â€“2016). Cryosphere, 2018, 12, 811-831.	3.9	194
22	Coralline Algae Archive Fjord Surface Water Temperatures in Southwest Greenland. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2617-2626.	3.0	5
23	Mass balance of the Antarctic Ice Sheet from 1992 to 2017. Nature, 2018, 558, 219-222.	27.8	759
24	A tipping point in refreezing accelerates mass loss of Greenlandâ€™s glaciers and ice caps. Nature Communications, 2017, 8, 14730.	12.8	72
25	Meltwater produced by windâ€“albedo interaction stored in an East Antarctic ice shelf. Nature Climate Change, 2017, 7, 58-62.	18.8	138
26	Channelized Melting Drives Thinning Under a Rapidly Melting Antarctic Ice Shelf. Geophysical Research Letters, 2017, 44, 9796-9804.	4.0	61
27	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.	7.1	66
28	Oceanographic Controls on the Variability of Iceâ€Shelf Basal Melting and Circulation of Glacial Meltwater in the Amundsen Sea Embayment, Antarctica. Journal of Geophysical Research: Oceans, 2017, 122, 10131-10155.	2.6	49
29	Greenland Ice Sheet Surface Mass Loss: Recent Developments in Observation and Modeling. Current Climate Change Reports, 2017, 3, 345-356.	8.6	94
30	Sensitivity, stability and future evolution of the world's northernmost ice cap, Hans Tausen Iskappe (Greenland). Cryosphere, 2017, 11, 805-825.	3.9	17
31	On the recent contribution of the Greenland ice sheet to sea level change. Cryosphere, 2016, 10, 1933-1946.	3.9	358
32	AÂdaily, 1â€¯km resolution data set of downscaled Greenland ice sheet surface mass balance (1958â€“2015). Cryosphere, 2016, 10, 2361-2377.	3.9	126
33	The modelled surface mass balance of the Antarctic Peninsula at 5.5â€¯km horizontal resolution. Cryosphere, 2016, 10, 271-285.	3.9	89
34	A Multidisciplinary Perspective on Climate Model Evaluation For Antarctica. Bulletin of the American Meteorological Society, 2016, 97, ES23-ES26.	3.3	7
35	A highâ€resolution record of Greenland mass balance. Geophysical Research Letters, 2016, 43, 7002-7010.	4.0	146
36	OBLIMAP 2.0: a fast climate modelâ€“ice sheet model coupler including online embeddable mapping routines. Geoscientific Model Development, 2016, 9, 4111-4132.	3.6	13

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37	Brief Communication: Upper-air relaxation in RACMO2 significantly improves modelled interannual surface mass balanceÂvariabilityÂinÂAntarctica. Cryosphere, 2016, 10, 459-463.	3.9	35
38	Evaluation of the updated regional climate model RACMO2.3: summer snowfall impact on the Greenland Ice Sheet. Cryosphere, 2015, 9, 1831-1844.	3.9	175
39	Mass balance of the SÃ¸r Rondane glacial system, East Antarctica. Annals of Glaciology, 2015, 56, 63-69.	1.4	9
40	A model study of the effect of climate and sea-level change on the evolution of the Antarctic Ice Sheet from the Last Glacial Maximum to 2100. Climate Dynamics, 2015, 45, 837-851.	3.8	12
41	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.	3.2	60
42	Updated cloud physics in a regional atmospheric climate model improves the modelled surface energy balance of Antarctica. Cryosphere, 2014, 8, 125-135.	3.9	67
43	Sensitivity of Greenland Ice Sheet surface mass balance to perturbations in sea surface temperature and sea ice cover: a study with the regional climate model MAR. Cryosphere, 2014, 8, 1871-1883.	3.9	43
44	Modelling the evolution of the Antarctic ice sheet since the last interglacial. Cryosphere, 2014, 8, 1347-1360.	3.9	31
45	Extreme Precipitation and Climate Gradients in Patagonia Revealed by High-Resolution Regional Atmospheric Climate Modeling. Journal of Climate, 2014, 27, 4607-4621.	3.2	97
46	Distinct patterns of seasonal Greenland glacier velocity. Geophysical Research Letters, 2014, 41, 7209-7216.	4.0	190
47	Drifting snow measurements on the Greenland Ice Sheet and their application for model evaluation. Cryosphere, 2014, 8, 801-814.	3.9	22
48	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.	3.8	104
49	Coupled regional climateâ€“ice-sheet simulation shows limited Greenland ice loss during the Eemian. Climate of the Past, 2013, 9, 1773-1788.	3.4	62
50	Importance of precipitation seasonality for the interpretation of Eemian ice core isotope records from Greenland. Climate of the Past, 2013, 9, 1589-1600.	3.4	10
51	Greenland ice sheet surface mass balance: evaluating simulations and making projections with regional climate models. Cryosphere, 2012, 6, 1275-1294.	3.9	106
52	Coupling of climate models and ice sheet models by surface mass balance gradients: application to the Greenland Ice Sheet. Cryosphere, 2012, 6, 255-272.	3.9	54
53	Modeling drifting snow in Antarctica with a regional climate model: 1. Methods and model evaluation. Journal of Geophysical Research, 2012, 117, .	3.3	81
54	A Reconciled Estimate of Ice-Sheet Mass Balance. Science, 2012, 338, 1183-1189.	12.6	1,246

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55	A new, highâ€resolution surface mass balance map of Antarctica (1979â€“2010) based on regional atmospheric climate modeling. Geophysical Research Letters, 2012, 39, .	4.0	315
56	A new albedo parameterization for use in climate models over the Antarctic ice sheet. Journal of Geophysical Research, 2011, 116, .	3.3	107
57	Momentum budget of the atmospheric boundary layer over the Greenland ice sheet and its surrounding seas. Journal of Geophysical Research, 2011, 116, .	3.3	30
58	The role of albedo and accumulation in the 2010 melting record in Greenland. Environmental Research Letters, 2011, 6, 014005.	5.2	207
59	Significant contribution of insolation to Eemian melting of the Greenland ice sheet. Nature Geoscience, 2011, 4, 679-683.	12.9	94
60	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.	3.9	81
61	Climate of the Greenland ice sheet using a high-resolution climate model â€“ Part 1: Evaluation. Cryosphere, 2010, 4, 511-527.	3.9	132
62	Towards a re-assessment of the surface mass balance of the Greenland ice sheet. EPJ Web of Conferences, 2009, 1, 171-176.	0.3	0
63	Partitioning Recent Greenland Mass Loss. Science, 2009, 326, 984-986.	12.6	755
64	Higher surface mass balance of the Greenland ice sheet revealed by highâ€resolution climate modeling. Geophysical Research Letters, 2009, 36, .	4.0	430
65	Recent Antarctic ice mass loss from radarÂinterferometry and regional climateÂmodelling. Nature Geoscience, 2008, 1, 106-110.	12.9	819
66	Elevation Changes in Antarctica Mainly Determined by Accumulation Variability. Science, 2008, 320, 1626-1629.	12.6	138
67	A Review of Antarctic Surface Snow Isotopic Composition: Observations, Atmospheric Circulation, and Isotopic Modeling*. Journal of Climate, 2008, 21, 3359-3387.	3.2	344
68	Firn depth correction along the Antarctic grounding line. Antarctic Science, 2008, 20, 513-517.	0.9	34
69	Heat budget of the East Antarctic lower atmosphere derived from a regional atmospheric climate model. Journal of Geophysical Research, 2007, 112, .	3.3	26
70	Snowfall in coastal West Antarctica much greater than previously assumed. Geophysical Research Letters, 2006, 33, .	4.0	75
71	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
72	Identification of Antarctic ablation areas using a regional atmospheric climate model. Journal of Geophysical Research, 2006, 111, .	3.3	53

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73	Experimental verification of Lorentzâ€™ linearization procedure for quadratic friction. Fluid Dynamics Research, 2005, 36, 175-188.	1.3	31