

# Christophe Genthon

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4157119/publications.pdf>

Version: 2024-02-01

66  
papers

3,460  
citations

136740

32  
h-index

149479

56  
g-index

96  
all docs

96  
docs citations

96  
times ranked

2619  
citing authors

#	ARTICLE	IF	CITATIONS
1	Vostok ice core: a continuous isotope temperature record over the last climatic cycle (160,000 years). <i>Nature</i> , 1987, 329, 403-408.	13.7	846
2	Ground-based measurements of spatial and temporal variability of snow accumulation in East Antarctica. <i>Reviews of Geophysics</i> , 2008, 46, .	9.0	164
3	Simulated Antarctic precipitation and surface mass balance at the end of the twentieth and twenty-first centuries. <i>Climate Dynamics</i> , 2006, 28, 215-230.	1.7	144
4	GCM analysis of local influences on ice core signals. <i>Geophysical Research Letters</i> , 1997, 24, 2825-2828.	1.5	136
5	Evaluation of current and projected Antarctic precipitation in CMIP5 models. <i>Climate Dynamics</i> , 2017, 48, 225-239.	1.7	125
6	How much snow falls on the Antarctic ice sheet?. <i>Cryosphere</i> , 2014, 8, 1577-1587.	1.5	124
7	Katabatic winds diminish precipitation contribution to the Antarctic ice mass balance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10858-10863.	3.3	72
8	Meteorological atmospheric boundary layer measurements and ECMWF analyses during summer at Dome C, Antarctica. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	71
9	Two years of atmospheric boundary layer observations on a 45m tower at Dome C on the Antarctic plateau. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 3218-3232.	1.2	67
10	Transport of Snow by the Wind: A Comparison Between Observations in Adélie Land, Antarctica, and Simulations Made with the Regional Climate Model MAR. <i>Boundary-Layer Meteorology</i> , 2013, 146, 133-147.	1.2	66
11	Measurements of precipitation in Dumont d'Urville, Adélie Land, East Antarctica. <i>Cryosphere</i> , 2017, 11, 1797-1811.	1.5	60
12	Stable boundary layer regimes at Dome C, Antarctica: observation and analysis. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 1241-1253.	1.0	58
13	Snow/atmosphere coupled simulation at Dome C, Antarctica. <i>Journal of Glaciology</i> , 2011, 57, 721-736.	1.1	55
14	Regime Transitions in Near-Surface Temperature Inversions: A Conceptual Model. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 1057-1073.	0.6	55
15	Interannual Antarctic tropospheric circulation and precipitation variability. <i>Climate Dynamics</i> , 2003, 21, 289-307.	1.7	51
16	Antarctic surface mass balance and systematic biases in general circulation models. <i>Journal of Geophysical Research</i> , 2001, 106, 20653-20664.	3.3	49
17	A 40-year accumulation dataset for Adélie Land, Antarctica and its application for model validation. <i>Climate Dynamics</i> , 2012, 38, 75-86.	1.7	49
18	Atmospheric Temperature Measurement Biases on the Antarctic Plateau. <i>Journal of Atmospheric and Oceanic Technology</i> , 2011, 28, 1598-1605.	0.5	48

#	ARTICLE	IF	CITATIONS
19	Archival processes of the water stable isotope signal in East Antarctic ice cores. <i>Cryosphere</i> , 2018, 12, 1745-1766.	1.5	48
20	Continuous measurements of isotopic composition of water vapour on the East Antarctic Plateau. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 8521-8538.	1.9	47
21	Momentum- and Heat-Flux Parametrization at Dome C, Antarctica: A Sensitivity Study. <i>Boundary-Layer Meteorology</i> , 2017, 162, 341-367.	1.2	46
22	Antarctic precipitation and climate-change predictions: horizontal resolution and margin vs plateau issues. <i>Annals of Glaciology</i> , 2009, 50, 55-60.	2.8	45
23	Comparison between observed and simulated aeolian snow mass fluxes in Adélie Land, East Antarctica. <i>Cryosphere</i> , 2015, 9, 1373-1383.	1.5	43
24	An up-to-date quality-controlled surface mass balance data set for the 90°S–180°E Antarctica sector and 1950–2005 period. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	42
25	Evaluation of Antarctic snowfall in global meteorological reanalyses. <i>Atmospheric Research</i> , 2017, 190, 104-112.	1.8	42
26	Stable Surface-Based Turbulent Layer During the Polar Winter at Dome C, Antarctica: Sodar and In Situ Observations. <i>Boundary-Layer Meteorology</i> , 2019, 171, 101-128.	1.2	41
27	Blowing snow in coastal Adélie Land, Antarctica: three atmospheric-moisture issues. <i>Cryosphere</i> , 2014, 8, 1905-1919.	1.5	40
28	Modeling the mass and surface heat budgets in a coastal blue ice area of Adelie Land, Antarctica. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	38
29	Characterization of the boundary layer at Dome C (East Antarctica) during the OPAL summer campaign. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6225-6236.	1.9	38
30	Evaluation of the CloudSat surface snowfall product over Antarctica using ground-based precipitation radars. <i>Cryosphere</i> , 2018, 12, 3775-3789.	1.5	37
31	The surface accumulation and ablation of a coastal blue-ice area near Cap Prudhomme, Terre Adélie, Antarctica. <i>Journal of Glaciology</i> , 2007, 53, 635-645.	1.1	36
32	Meteorological and snow accumulation gradients across Dome C, East Antarctic plateau. <i>International Journal of Climatology</i> , 2016, 36, 455-466.	1.5	36
33	Interannual variability of the surface mass balance of West Antarctica from ITASE cores and ERA40 reanalyses, 1958–2000. <i>Climate Dynamics</i> , 2005, 24, 759-770.	1.7	35
34	Modeling the Dynamics of the Atmospheric Boundary Layer Over the Antarctic Plateau With a General Circulation Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 98-125.	1.3	34
35	Present and Future of Rainfall in Antarctica. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092281.	1.5	33
36	How Does Ground Clutter Affect CloudSat Snowfall Retrievals Over Ice Sheets?. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2019, 16, 342-346.	1.4	30

#	ARTICLE	IF	CITATIONS
37	Seasonal Variations in Drag Coefficient over a Sastrugi-Covered Snowfield in Coastal East Antarctica. <i>Boundary-Layer Meteorology</i> , 2017, 164, 107-133.	1.2	28
38	Brief communication: Evaluating Antarctic precipitation in ERA5 and CMIP6 against CloudSat observations. <i>Cryosphere</i> , 2020, 14, 2715-2727.	1.5	28
39	Snow melting bias in microwave mapping of Antarctic snow accumulation. <i>Cryosphere</i> , 2008, 2, 109-115.	1.5	25
40	Do climate models underestimate snow accumulation on the Antarctic plateau? A re-evaluation of/from in situ observations in East Wilkes and Victoria Lands. <i>Annals of Glaciology</i> , 2009, 50, 61-65.	2.8	25
41	A novel experimental study of aeolian snow transport in Adelie Land (Antarctica). <i>Cold Regions Science and Technology</i> , 2014, 108, 125-138.	1.6	24
42	Detection of snowfall occurrence during blowing snow events using photoelectric sensors. <i>Cold Regions Science and Technology</i> , 2014, 106-107, 11-21.	1.6	23
43	Transitions in the wintertime near-surface temperature inversion at Dome C, Antarctica. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2019, 145, 930-946.	1.0	23
44	Atmospheric moisture supersaturation in the near-surface atmosphere at Dome C, Antarctic Plateau. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 691-704.	1.9	22
45	Antarctic boundary layer parametrization in a general circulation model: 1D simulations facing summer observations at Dome C. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 6818-6843.	1.2	22
46	The vertical structure of precipitation at two stations in East Antarctica derived from micro rain radars. <i>Cryosphere</i> , 2019, 13, 247-264.	1.5	20
47	Evaluation of CloudSat snowfall rate profiles by a comparison with in situ micro-rain radar observations in East Antarctica. <i>Cryosphere</i> , 2019, 13, 943-954.	1.5	19
48	Numerical modeling of snow cover over polar ice sheets. <i>Annals of Glaciology</i> , 1997, 25, 170-176.	2.8	19
49	Numerical modeling of snow cover over polar ice sheets. <i>Annals of Glaciology</i> , 1997, 25, 170-176.	2.8	18
50	Large-Eddy Simulations of the Steady Wintertime Antarctic Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2019, 173, 165-192.	1.2	17
51	Potential of Passive Microwave around 183 GHz for Snowfall Detection in the Arctic. <i>Remote Sensing</i> , 2019, 11, 2200.	1.8	17
52	Precipitation at Dumont d'Urville, Adélie Land, East Antarctica: the APRES3 field campaigns dataset. <i>Earth System Science Data</i> , 2018, 10, 1605-1612.	3.7	17
53	Present weather-sensor tests for measuring drifting snow. <i>Annals of Glaciology</i> , 2011, 52, 176-184.	2.8	15
54	Summer to Winter Diurnal Variabilities of Temperature and Water Vapour in the Lowermost Troposphere as Observed by HAMSTRAD over Dome C, Antarctica. <i>Boundary-Layer Meteorology</i> , 2012, 143, 227-259.	1.2	15

#	ARTICLE	IF	CITATIONS
55	On the atmosphere for astronomers above Dome C, Antarctica. <i>Antarctic Science</i> , 2006, 18, 437-444.	0.5	13
56	Arctic Snowfall from CloudSat Observations and Reanalyses. <i>Journal of Climate</i> , 2020, 33, 2093-2109.	1.2	13
57	The surface layer observed by a high-resolution sodar at DOME C, Antarctica. <i>Annals of Geophysics</i> , 2014, 56, .	0.5	12
58	A case study of a low-level jet during OPALE. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6237-6246.	1.9	11
59	Numerical simulations of Greenland snowpack and comparison with passive microwave spectral signatures. <i>Annals of Glaciology</i> , 2001, 32, 109-115.	2.8	10
60	CloudSatâ€inferred Vertical Structure of Snowfall Over the Antarctic Continent. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031399.	1.2	10
61	10 years of temperature and wind observation on a 45â€™m tower at Dome C, East Antarctic plateau. <i>Earth System Science Data</i> , 2021, 13, 5731-5746.	3.7	10
62	Statistical analyses and correlation between tropospheric temperature and humidity at Dome C, Antarctica. <i>Antarctic Science</i> , 2014, 26, 290-308.	0.5	8
63	Characterization of Atmospheric Ekman Spirals at Dome C, Antarctica. <i>Boundary-Layer Meteorology</i> , 2016, 160, 363-373.	1.2	6
64	Water vapor in cold and clean atmosphere: a 3-year data set in the boundary layer of Dome C, East Antarctic Plateau. <i>Earth System Science Data</i> , 2022, 14, 1571-1580.	3.7	5
65	Comment on â€œSurface Air Relative Humidities Spuriously Exceeding 100% in CMIP5 Model Output and Their Impact on Future Projectionsâ€by K. Ruosteenoja et al. (2017). <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 8724-8727.	1.2	2
66	Evaluation of coastal Antarctic precipitation in LMDz6 global atmospheric model using ground-based radar observations. <i>Arctic and Antarctic Research</i> , 2021, 67, 147-164.	0.1	2