Andrew Orr

List of Publications by Year
in descending order

49 papers	2,674 citations	218677 26 h-index	197818 49 g-index
53 all docs	53 docs citations	53 times ranked	2877 citing authors

#	Article	IF	Citations
1	Nonâ€annular atmospheric circulation change induced by stratospheric ozone depletion and its role in the recent increase of Antarctic sea ice extent. Geophysical Research Letters, 2009, 36, .	4.0	410
2	The Impact of a Changing Southern Hemisphere Annular Mode on Antarctic Peninsula Summer Temperatures. Journal of Climate, 2006, 19, 5388-5404.	3.2	295
3	The Influence of the Amundsenâ€“Bellingshausen Seas Low on the Climate of West Antarctica and Its Representation in Coupled Climate Model Simulations. Journal of Climate, 2013, 26, 6633-6648.	3.2	222
4	The Amundsen Sea low. International Journal of Climatology, 2013, 33, 1818-1829.	3.5	203
5	Atmosphereâ€oceanâ€ice interactions in the Amundsen Sea Embayment, West Antarctica. Reviews of Geophysics, 2017, 55, 235-276.	23.0	92
6	Characteristics of Summer Airflow over the Antarctic Peninsula in Response to Recent Strengthening of Westerly Circumpolar Winds. Journals of the Atmospheric Sciences, 2008, 65, 1396-1413.	1.7	84
7	Foehn jets over the Larsen C Ice Shelf, Antarctica. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 698-713.	2.7	81
8	Evaluation of four global reanalysis products using in situ observations in the Amundsen Sea Embayment, Antarctica. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6240-6257.	3.3	70
9	Intense Winter Surface Melt on an Antarctic Ice Shelf. Geophysical Research Letters, 2018, 45, 7615-7623.	4.0	65
10	Foehn warming distributions in nonlinear and linear flow regimes: a focus on the Antarctic Peninsula. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 618-631.	2.7	63
11	Validation of the summertime surface energy budget of Larsen C Ice Shelf (Antarctica) as represented in three highâ€resolution atmospheric models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1335-1347.	3.3	59
12	Future circulation changes off West Antarctica: Sensitivity of the Amundsen Sea Low to projected anthropogenic forcing. Geophysical Research Letters, 2016, 43, 367-376.	4.0	59
13	A â€˜low-levelâ€™ explanation for the recent large warming trend over the western Antarctic Peninsula involving blocked winds and changes in zonal circulation. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	57
14	The Relationship between the Southern Hemisphere Annular Mode and Antarctic Peninsula Summer Temperatures: Analysis of a High-Resolution Model Climatology. Journal of Climate, 2008, 21, 1649-1668.	3.2	56
15	Strong wind events in the Antarctic. Journal of Geophysical Research, 2009, 114, .	3.3	55
16	What is the surface mass balance of Antarctica? An intercomparison of regional climate model estimates. Cryosphere, 2021, 15, 3751-3784.	3.9	55
17	Sensitivity of simulated summer monsoonal precipitation in Langtang Valley, Himalaya, to cloud microphysics schemes in WRF. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6298-6318.	3.3	49
18	Polar Stratospheric Clouds: Satellite Observations, Processes, and Role in Ozone Depletion. Reviews of Geophysics, 2021, 59, e2020RG000702.	23.0	49

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19	A decadal satellite record of gravity wave activity in the lower stratosphere to study polar stratospheric cloud formation. Atmospheric Chemistry and Physics, 2017, 17, 2901-2920.	4.9	48
20	Met Office Unified Model highâ€resolution simulations of a strong wind event in Antarctica. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 2287-2297.	2.7	46
21	The Impact of FÃ¶hn Winds on Surface Energy Balance During the 2010â€“2011 Melt Season Over Larsen C Ice Shelf, Antarctica. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,062.	3.3	39
22	Coriolis effects in mesoscale flows with sharp changes in surface conditions. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2703-2731.	2.7	38
23	A climatology of polar stratospheric cloud composition between 2002 and 2012 based on MIPAS/Envisat observations. Atmospheric Chemistry and Physics, 2018, 18, 5089-5113.	4.9	38
24	Does Strong Tropospheric Forcing Cause Largeâ€Amplitude Mesospheric Gravity Waves? A DEEPWAVE Case Study. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,422.	3.3	33
25	Summer Drivers of Atmospheric Variability Affecting Ice Shelf Thinning in the Amundsen Sea Embayment, West Antarctica. Geophysical Research Letters, 2018, 45, 4124-4133.	4.0	32
26	Bias Correction of Highâ€Resolution Regional Climate Model Precipitation Output Gives the Best Estimates of Precipitation in Himalayan Catchments. Journal of Geophysical Research D: Atmospheres, 2019, 124, 14220-14239.	3.3	30
27	Effects Of Changing Surface Heat Flux On Atmospheric Boundary-Layer Flow Over Flat Terrain. Boundary-Layer Meteorology, 2005, 116, 331-361.	2.3	27
28	Inclusion of mountain-wave-induced cooling for the formation of PSCs over the Antarctic Peninsula in a chemistryâ€“climate model. Atmospheric Chemistry and Physics, 2015, 15, 1071-1086.	4.9	27
29	The impacts of El NiÃ±o on the observed sea ice budget of West Antarctica. Geophysical Research Letters, 2017, 44, 6200-6208.	4.0	27
30	An assessment of the Polar Weather Research and Forecasting (WRF) model representation of nearâ€surface meteorological variables over West Antarctica. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1532-1548.	3.3	26
31	Confronting Arctic Troposphere, Clouds, and Surface Energy Budget Representations in Regional Climate Models With Observations. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031783.	3.3	26
32	Lateral meltwater transfer across an Antarctic ice shelf. Cryosphere, 2020, 14, 2313-2330.	3.9	26
33	Summertime cloud phase strongly influences surface melting on the Larsen C ice shelf, Antarctica. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1575-1589.	2.7	23
34	Clouds and Radiation Processes in Regional Climate Models Evaluated Using Observations Over the Iceâ€free Arctic Ocean. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033904.	3.3	22
35	Coriolis effects on wind jets and cloudiness along coasts. Weather, 2005, 60, 291-299.	0.7	21
36	Observations and fineâ€scale model simulations of gravity waves over Davis, East Antarctica (69Â°S,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.3	20

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37	Dynamical Drivers of the Local Wind Regime in a Himalayan Valley. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13,186.	3.3	16
38	Knowledge Priorities on Climate Change and Water in the Upper Indus Basin: A Horizon Scanning Exercise to Identify the Top 100 Research Questions in Social and Natural Sciences. Earth's Future, 2022, 10, .	6.3	14
39	The Energy and Mass Balance of Peruvian Glaciers. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034911.	3.3	11
40	Characteristics of Stable Flows over Southern Greenland. Pure and Applied Geophysics, 2005, 162, 1747-1778.	1.9	10
41	Comparison of kilometre and subâ€kilometre scale simulations of a foehn wind event over the Larsen C Ice Shelf, Antarctic Peninsula using the Met Office Unified Model (<scp>MetUM</scp>). Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3472-3492.	2.7	9
42	Brief communication: Impact of common ice mask in surface mass balance estimates over the Antarctic ice sheet. Cryosphere, 2022, 16, 711-718.	3.9	9
43	The Springtime Influence of Natural Tropical Pacific Variability on the Surface Climate of the Ross Ice Shelf, West Antarctica: Implications for Ice Shelf Thinning. Scientific Reports, 2018, 8, 11983.	3.3	8
44	Polar stratospheric clouds initiated by mountain waves in a global chemistryâ€“climate model: a missing piece in fully modelling polar stratospheric ozone depletion. Atmospheric Chemistry and Physics, 2020, 20, 12483-12497.	4.9	8
45	Is our dynamical understanding of the circulation changes associated with the Antarctic ozone hole sensitive to the choice of reanalysis dataset?. Atmospheric Chemistry and Physics, 2021, 21, 7451-7472.	4.9	3
46	Nonâ€additive response of the highâ€latitude Southern Hemisphere climate to aerosol forcing in a climate model with interactive chemistry. Atmospheric Science Letters, 2020, 21, e1004.	1.9	2
47	Meteorological impacts of a novel debrisâ€covered glacier category in a regional climate model across a Himalayan catchment. Atmospheric Science Letters, 2021, 22, e1018.	1.9	2
48	A 20â€Year Study of Melt Processes Over Larsen C Ice Shelf Using a Highâ€Resolution Regional Atmospheric Model: 1. Model Configuration and Validation. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	2
49	A 20â€Year Study of Melt Processes Over Larsen C Ice Shelf Using a Highâ€Resolution Regional Atmospheric Model: 2. Drivers of Surface Melting. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	1