

# Ian A Renfrew

## List of Publications by Year in descending order

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Version: 2024-02-01

100  
papers

4,410  
citations

101543

36  
h-index

118850

62  
g-index

105  
all docs

105  
docs citations

105  
times ranked

4519  
citing authors

#	ARTICLE	IF	CITATIONS
1	Binary interactions between polar lows. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 49, 577.	1.7	16
2	The surface climatology of an ordinary katabatic wind regime in Coats Land, Antarctica. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 54, 463.	1.7	15
3	Greenland plateau jets. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 65, 17468.	1.7	10
4	Sea-ice retreat suggests re-organization of water mass transformation in the Nordic and Barents Seas. <i>Nature Communications</i> , 2022, 13, 67.	12.8	19
5	The Annual Salinity Cycle of the Denmark Strait Overflow. <i>Journal of Geophysical Research: Oceans</i> , 2022, 127, .	2.6	1
6	Ship-based estimates of momentum transfer coefficient over sea ice and recommendations for its parameterization. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 4763-4778.	4.9	7
7	A 20â€Year Study of Melt Processes Over Larsen C Ice Shelf Using a Highâ€Resolution Regional Atmospheric Model: 1. Model Configuration and Validation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	2
8	A 20â€Year Study of Melt Processes Over Larsen C Ice Shelf Using a Highâ€Resolution Regional Atmospheric Model: 2. Drivers of Surface Melting. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	1
9	An evaluation of surface meteorology and fluxes over the Iceland and Greenland Seas in <scp>ERA5</scp> reanalysis: The impact of sea ice distribution. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2021, 147, 691-712.	2.7	43
10	Subâ€km scale numerical weather prediction model simulations of radiation fog. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2021, 147, 746-763.	2.7	19
11	The Response of the Nordic Seas to Wintertime Sea Ice Retreat. <i>Journal of Climate</i> , 2021, 34, 6041-6056.	3.2	5
12	Surface Heat and Moisture Exchange in the Marginal Ice Zone: Observations and a New Parameterization Scheme for Weather and Climate Models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD034827.	3.3	13
13	Characteristics of Cold Air Outbreak events and associated Polar Mesoscale Cyclogenesis over the North Atlantic region. <i>Journal of Climate</i> , 2021, , 1-52.	3.2	10
14	The impact of wintertime sea-ice anomalies on high surface heat flux events in the Iceland and Greenland Seas. <i>Climate Dynamics</i> , 2020, 54, 1937-1952.	3.8	7
15	Atmospheric Drivers of Melt on Larsen C Ice Shelf: Surface Energy Budget Regimes and the Impact of Foehn. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032463.	3.3	39
16	Summertime cloud phase strongly influences surface melting on the Larsen C ice shelf, Antarctica. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 1575-1589.	2.7	23
17	Atmospheric sensitivity to marginalâ€iceâ€zone drag: Local and global responses. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2019, 145, 1165-1179.	2.7	22
18	The Iceland Greenland Seas Project. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 1795-1817.	3.3	21

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19	The Impact of High-Frequency Weather Systems on $\langle \text{SST} \rangle$ and Surface Mixed Layer in the Central Arabian Sea. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 1091-1104.	2.6	10
20	Meteorological Controls on Local and Regional Volcanic Ash Dispersal. <i>Scientific Reports</i> , 2018, 8, 6873.	3.3	23
21	Numerical modelling of the evolution of the boundary layer during a radiation fog event. <i>Weather</i> , 2018, 73, 310-316.	0.7	14
22	Current Challenges in Orographic Flow Dynamics: Turbulent Exchange Due to Low-Level Gravity-Wave Processes. <i>Atmosphere</i> , 2018, 9, 361.	2.3	21
23	Modification of Polar Low Development by Orography and Sea Ice. <i>Monthly Weather Review</i> , 2018, 146, 3325-3341.	1.4	11
24	Southern Ocean mesocyclones and polar lows from manually tracked satellite mosaics. <i>Geophysical Research Letters</i> , 2017, 44, 7985-7993.	4.0	18
25	Orographic effects on the transport and deposition of volcanic ash: A case study of Mount Sakurajima, Japan. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 9332-9350.	3.3	29
26	The Impact of Föhn Winds on Surface Energy Balance During the 2010-2011 Melt Season Over Larsen C Ice Shelf, Antarctica. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 12,062.	3.3	39
27	Structure of a shear-line polar low. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 12-26.	2.7	23
28	Between the Devil and the Deep Blue Sea: The Role of the Amundsen Sea Continental Shelf in Exchanges Between Ocean and Ice Shelves. , 2016, 29, 118-129.		36
29	Paving the Way for the Year of Polar Prediction. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, ES85-ES88.	3.3	20
30	Arctic System Reanalysis improvements in topographically forced winds near Greenland. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 2033-2045.	2.7	32
31	Advancing Polar Prediction Capabilities on Daily to Seasonal Time Scales. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 1631-1647.	3.3	199
32	Evaluation of four global reanalysis products using in situ observations in the Amundsen Sea Embayment, Antarctica. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 6240-6257.	3.3	70
33	High-Latitude Dynamics of Atmosphere-Ice-Ocean Interactions. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, ES179-ES182.	3.3	7
34	Foehn warming distributions in nonlinear and linear flow regimes: a focus on the Antarctic Peninsula. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 618-631.	2.7	63
35	Observations of surface momentum exchange over the marginal ice zone and recommendations for its parametrisation. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1545-1563.	4.9	36
36	Observed microphysical changes in Arctic mixed-phase clouds when transitioning from sea ice to open ocean. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 13945-13967.	4.9	31

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37	The Causes of Foehn Warming in the Lee of Mountains. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 455-466.	3.3	104
38	Thermally Induced Convective Circulation and Precipitation over an Isolated Volcano. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 1667-1686.	1.7	10
39	Foehn jets over the Larsen C Ice Shelf, Antarctica. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 698-713.	2.7	81
40	The impact of resolution on the representation of southeast Greenland barrier winds and katabatic flows. <i>Geophysical Research Letters</i> , 2015, 42, 3011-3018.	4.0	35
41	Meteorological buoy observations from the central Iceland Sea. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 3199-3208.	3.3	30
42	Aircraft-based observations of air-sea turbulent fluxes around the British Isles. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 139-152.	2.7	22
43	Decreasing intensity of open-ocean convection in the Greenland and Iceland seas. <i>Nature Climate Change</i> , 2015, 5, 877-882.	18.8	63
44	Cloud Banding and Winds in Intense European Cyclones: Results from the DIAMET Project. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 249-265.	3.3	32
45	Offshore Transport of Dense Water from the East Greenland Shelf. <i>Journal of Physical Oceanography</i> , 2014, 44, 229-245.	1.7	23
46	What causes the location of the air-sea turbulent heat flux maximum over the Labrador Sea?. <i>Geophysical Research Letters</i> , 2014, 41, 3628-3635.	4.0	16
47	Advances in understanding and parameterization of small-scale physical processes in the marine Arctic climate system: a review. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9403-9450.	4.9	145
48	Corrigendum to "Advances in understanding and parameterization of small-scale physical processes in the marine Arctic climate system: a review" published in <i>Atmos. Chem. Phys.</i> , 14, 9403-9450, 2014. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9923-9923.	4.9	0
49	The impact of polar mesoscale storms on northeast Atlantic Ocean circulation. <i>Nature Geoscience</i> , 2013, 6, 34-37.	12.9	85
50	Multidecadal Mobility of the North Atlantic Oscillation. <i>Journal of Climate</i> , 2013, 26, 2453-2466.	3.2	120
51	High-Latitude Ocean and Sea Ice Surface Fluxes: Challenges for Climate Research. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, 403-423.	3.3	137
52	On the spatial distribution of high winds off southeast Greenland. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	27
53	Spatial distribution of air-sea heat fluxes over the sub-polar North Atlantic Ocean. <i>Geophysical Research Letters</i> , 2012, 39, .	4.0	29
54	Cold European winters: interplay between the NAO and the East Atlantic mode. <i>Atmospheric Science Letters</i> , 2012, 13, 1-8.	1.9	94

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55	Seasonal evolution of the upper-ocean adjacent to the South Orkney Islands, Southern Ocean: Results from a "lazy biological mooring". Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1569-1579.	1.4	34
56	Complexities in the climate of the subpolar North Atlantic: a case study from the winter of 2007. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 757-767.	2.7	34
57	Forecast Impact of Targeted Observations: Sensitivity to Observation Error and Proximity to Steep Orography. Monthly Weather Review, 2011, 139, 69-78.	1.4	11
58	A Climatology of Wintertime Barrier Winds off Southeast Greenland. Journal of Climate, 2011, 24, 4701-4717.	3.2	81
59	A parameterization of Greenland's tip jets suitable for ocean or coupled climate models. Journal of Geophysical Research, 2010, 115, .	3.3	8
60	Changes in the freshwater composition of the upper ocean west of the Antarctic Peninsula during the first decade of the 21st century. Progress in Oceanography, 2010, 87, 127-143.	3.2	60
61	Convective heat transfer over thin ice covered coastal polynyas. Journal of Geophysical Research, 2010, 115, .	3.3	29
62	Seasonal Evolution of Aleutian Low Pressure Systems: Implications for the North Pacific Subpolar Circulation*. Journal of Physical Oceanography, 2009, 39, 1317-1339.	1.7	59
63	Aircraft-based observations of air-sea fluxes over Denmark Strait and the Irminger Sea during high wind speed conditions. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 2030-2045.	2.7	87
64	A comparison of aircraft-based surface-layer observations over Denmark Strait and the Irminger Sea with meteorological analyses and QuikSCAT winds. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 2046-2066.	2.7	72
65	An overview of barrier winds off southeastern Greenland during the Greenland Flow Distortion experiment. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1950-1967.	2.7	48
66	The impact of targeted observations made during the Greenland Flow Distortion Experiment. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 2012-2029.	2.7	10
67	On the impact of high-resolution, high-frequency meteorological forcing on Denmark Strait ocean circulation. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 2067-2085.	2.7	32
68	An easterly tip jet off Cape Farewell, Greenland. I: Aircraft observations. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1919-1933.	2.7	36
69	An easterly tip jet off Cape Farewell, Greenland. II: Simulations and dynamics. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1934-1949.	2.7	36
70	The Greenland Flow Distortion experiment. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1917-1918.	2.7	1
71	Atmospheric conditions associated with oceanic convection in the south-east Labrador Sea. Geophysical Research Letters, 2008, 35, .	4.0	27
72	Modeling the impact of polar mesocyclones on ocean circulation. Journal of Geophysical Research, 2008, 113, .	3.3	38

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73	Variability in the freshwater balance of northern Marguerite Bay, Antarctic Peninsula: Results from 180. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 309-322.	1.4	100
74	Buoy observations from the windiest location in the world ocean, Cape Farewell, Greenland. Geophysical Research Letters, 2008, 35, .	4.0	44
75	THE GREENLAND FLOW DISTORTION EXPERIMENT. Bulletin of the American Meteorological Society, 2008, 89, 1307-1324.	3.3	75
76	Convection in the Western North Atlantic Sub-Polar Gyre: Do Small-Scale Wind Events Matter?. , 2008, , 629-652.		10
77	Polar Mesoscale Cyclones in the Northeast Atlantic: Comparing Climatologies from ERA-40 and Satellite Imagery. Monthly Weather Review, 2006, 134, 1518-1533.	1.4	72
78	Profiles of katabatic flow in summer and winter over Coats Land, Antarctica. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 779-802.	2.7	44
79	The Effect of the Sea-ice Zone on the Development of Boundary-layer Roll Clouds During Cold Air Outbreaks. Boundary-Layer Meteorology, 2006, 118, 557-581.	2.3	45
80	Tip Jets and Barrier Winds: A QuikSCAT Climatology of High Wind Speed Events around Greenland. Journal of Climate, 2005, 18, 3713-3725.	3.2	169
81	Numerical simulations of katabatic jumps in coats land, Antartica. Boundary-Layer Meteorology, 2005, 114, 413-437.	2.3	15
82	An Autonomous Doppler Sodar Wind Profiling System. Journal of Atmospheric and Oceanic Technology, 2005, 22, 1309-1325.	1.3	24
83	SEAFLUX. Bulletin of the American Meteorological Society, 2004, 85, 409-424.	3.3	120
84	The dynamics of idealized katabatic flow over a moderate slope and ice shelf. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 1023-1045.	2.7	65
85	A high-resolution simulation of convective roll clouds during a cold-air outbreak. Geophysical Research Letters, 2004, 31, .	4.0	54
86	Impact of the 1997/98 ENSO on upper ocean characteristics in Marguerite Bay, western Antarctic Peninsula. Journal of Geophysical Research, 2004, 109, .	3.3	60
87	The Labrador Sea Deep Convection Experiment data collection. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	6
88	Observational studies. , 2003, , 150-285.		4
89	A Comparison of Surface Layer and Surface Turbulent Flux Observations over the Labrador Sea with ECMWF Analyses and NCEP Reanalyses. Journal of Physical Oceanography, 2002, 32, 383-400.	1.7	192
90	A Reconstruction of the Air-Sea Interaction Associated with the Weddell Polynya. Journal of Physical Oceanography, 2002, 32, 1685-1698.	1.7	43

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91	An Assessment of the Surface Turbulent Heat Fluxes from the NCEP–NCAR Reanalysis over the Western Boundary Currents. <i>Journal of Climate</i> , 2002, 15, 2020-2037.	3.2	70
92	Coastal polynyas in the southern Weddell Sea: Variability of the surface energy budget. <i>Journal of Geophysical Research</i> , 2002, 107, 16-1.	3.3	84
93	Weather image. <i>Weather</i> , 2002, 57, 468-468.	0.7	0
94	The surface climatology of an ordinary katabatic wind regime in Coats Land, Antarctica. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2002, 54, 463-484.	1.7	21
95	A Simple Model Of The Convective Internal Boundary Layer And Its Application To Surface Heat Flux Estimates Within Polynyas. <i>Boundary-Layer Meteorology</i> , 2000, 94, 335-356.	2.3	28
96	An Extreme Cold-Air Outbreak over the Labrador Sea: Roll Vortices and Air–Sea Interaction. <i>Monthly Weather Review</i> , 1999, 127, 2379-2394.	1.4	99
97	Mesoscale Forecasting during a Field Program: Meteorological Support of the Labrador Sea Deep Convection Experiment. <i>Bulletin of the American Meteorological Society</i> , 1999, 80, 605-620.	3.3	35
98	The Labrador Sea Deep Convection Experiment. <i>Bulletin of the American Meteorological Society</i> , 1998, 79, 2033-2058.	3.3	202
99	Binary interactions between polar lows. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1997, 49, 577-594.	1.7	5
100	A Ship-Based Characterization of Coherent Boundary-Layer Structures Over the Lifecycle of a Marine Cold-Air Outbreak. <i>Boundary-Layer Meteorology</i> , 0, , 1.	2.3	1