Christian M. Grams

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Balancing Europeâ€™s wind-power output through spatial deployment informed by weather regimes. Nature Climate Change, 2017, 7, 557-562.	18.8	236
2	Importance of latent heat release in ascending air streams for atmospheric blocking. Nature Geoscience, 2015, 8, 610-614.	12.9	183
3	The key role of diabatic processes in modifying the upperâ€tropospheric wave guide: a North Atlantic caseâ€study. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 2174-2193.	2.7	177
4	Uplift of Saharan dust south of the intertropical discontinuity. Journal of Geophysical Research, 2008, 113, .	3.3	113
5	Atmospheric processes triggering the central European floods in June 2013. Natural Hazards and Earth System Sciences, 2014, 14, 1691-1702.	3.6	111
6	Influence of blocking on Northern European and Western Russian heatwaves in large climate model ensembles. Environmental Research Letters, 2018, 13, 054015.	5.2	111
7	Global Climatologies of Eulerian and Lagrangian Flow Features based on ERA-Interim. Bulletin of the American Meteorological Society, 2017, 98, 1739-1748.	3.3	108
8	The North Atlantic Waveguide and Downstream Impact Experiment. Bulletin of the American Meteorological Society, 2018, 99, 1607-1637.	3.3	105
9	The Extratropical Transition of Tropical Cyclones. Part I: Cyclone Evolution and Direct Impacts. Monthly Weather Review, 2017, 145, 4317-4344.	1.4	102
10	The Key Role of Diabatic Outflow in Amplifying the Midlatitude Flow: A Representative Case Study of Weather Systems Surrounding Western North Pacific Extratropical Transition. Monthly Weather Review, 2016, 144, 3847-3869.	1.4	75
11	The link between eddyâ€driven jet variability and weather regimes in the North Atlanticâ€European sector. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2960-2972.	2.7	64
12	The Atlantic inflow to the Saharan heat low: observations and modelling. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 125-140.	2.7	59
13	An atmospheric dynamics perspective on the amplification and propagation of forecast error in numerical weather prediction models: A case study. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 2577-2591.	2.7	58
14	The Extratropical Transition of Tropical Cyclones. Part II: Interaction with the Midlatitude Flow, Downstream Impacts, and Implications for Predictability. Monthly Weather Review, 2019, 147, 1077-1106.	1.4	55
15	The impact of Typhoon Jangmi (2008) on the midlatitude flow. Part I: Upperâ€level ridgebuilding and modification of the jet. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 2148-2164.	2.7	54
16	Exceptional Air Mass Transport and Dynamical Drivers of an Extreme Wintertime Arctic Warm Event. Geophysical Research Letters, 2017, 44, 12,028.	4.0	48
17	Modulation of Atmospheric River Occurrence and Associated Precipitation Extremes in the North Atlantic Region by European Weather Regimes. Geophysical Research Letters, 2019, 46, 1014-1023.	4.0	48
18	The role of North Atlanticâ€“European weather regimes in the surface impact of sudden stratospheric warming events. Weather and Climate Dynamics, 2020, 1, 373-388.	3.5	44

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19	The impact of Typhoon Jangmi (2008) on the midlatitude flow. Part II: Downstream evolution. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 2165-2180.	2.7	41
20	Linking Lowâ€Frequency Largeâ€Scale Circulation Patterns to Cold Air Outbreak Formation in the Northeastern North Atlantic. Geophysical Research Letters, 2018, 45, 2542-2553.	4.0	40
21	Dynamics of a local Alpine flooding event in October 2011: moisture source and largeâ€scale circulation. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1922-1937.	2.7	36
22	Stratospheric modulation of the largeâ€scale circulation in the Atlanticâ€"European region and its implications for surface weather events. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 3732-3750.	2.7	32
23	European high-impact weather caused by the downstream response to the extratropical transition of North Atlantic Hurricane Katia (2011). Geophysical Research Letters, 2015, 42, 8738-8748.	4.0	30
24	Yearâ€round subâ€seasonal forecast skill for Atlanticâ€"European weather regimes. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 4283-4309.	2.7	29
25	Does the lower stratosphere provide predictability for monthâ€ahead wind electricity generation in Europe?. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 3025-3036.	2.7	25
26	Dynamics of concurrent and sequential Central European and Scandinavian heatwaves. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 2998-3013.	2.7	24
27	The role of large-scale dynamics in an exceptional sequence of severe thunderstorms in Europe Mayâ€"June 2018. Weather and Climate Dynamics, 2020, 1, 325-348.	3.5	24
28	A Phase Locking Perspective on Rossby Wave Amplification and Atmospheric Blocking Downstream of Recurving Western North Pacific Tropical Cyclones. Monthly Weather Review, 2019, 147, 567-589.	1.4	23
29	Planning aircraft measurements within a warm conveyor belt. Weather, 2014, 69, 161-166.	0.7	22
30	Do Atlanticâ€European Weather Regimes Physically Exist?. Geophysical Research Letters, 2021, 48, e2021GL095574.	4.0	22
31	Stratospheric influence on ECMWF subâ€seasonal forecast skill for energyâ€industryâ€relevant surface weather in European countries. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 3675-3694.	2.7	19
32	Enhanced Tropospheric Wave Forcing of Two Anticyclones in the Prephase of the January 2009 Major Stratospheric Sudden Warming Event. Monthly Weather Review, 2017, 145, 1797-1815.	1.4	18
33	A quantitative assessment of the sensitivity of the downstream midlatitude flow response to extratropical transition of tropical cyclones. Geophysical Research Letters, 2015, 42, 9521-9529.	4.0	17
34	A weather system perspective on winterâ€"spring rainfall variability in southeastern Australia during ElÂNiÃ±o. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 2614-2633.	2.7	17
35	Simulations of the effects of surface heat flux anomalies on stratification, convective growth, and vertical transport within the Saharan boundary layer. Journal of Geophysical Research, 2010, 115, .	3.3	15
36	Verification of North Atlantic warm conveyor belt outflows in ECMWF forecasts. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1333-1344.	2.7	15

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37	Three-dimensional visualization of ensemble weather forecasts â€“ Part 2: Forecasting warm conveyor belt situations for aircraft-based field campaigns. Geoscientific Model Development, 2015, 8, 2355-2377.	3.6	15
38	Rossby Wave Initiation by Recurving Tropical Cyclones in the Western North Pacific. Monthly Weather Review, 2018, 146, 1283-1301.	1.4	15
39	Sub-national variability of wind power generation in complex terrain and its correlation with large-scale meteorology. Environmental Research Letters, 2020, 15, 044025.	5.2	15
40	The Climatological Impact of Recurving North Atlantic Tropical Cyclones on Downstream Extreme Precipitation Events. Monthly Weather Review, 2019, 147, 1513-1532.	1.4	14
41	Tropospheric Role in the Predictability of the Surface Impact of the 2018 Sudden Stratospheric Warming Event. Geophysical Research Letters, 2022, 49, .	4.0	6
42	The Effects of Orography on the Extratropical Transition of Tropical Cyclones: A Case Study of Typhoon Sinlaku (2008). Monthly Weather Review, 2018, 146, 4231-4246.	1.4	5
43	The effect of stochastically perturbed parametrisation tendencies (SPPT) on rapidly ascending air streams. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1242-1261.	2.7	5