Paul D Williams

List of Publications by Year
in descending order

63	2,131	257450	243625
papers	citations	24 h-index	44 g-index

72	72	72	1750
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The performance of filtered leapfrog schemes in benchmark simulations. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 784-808.	2.7	3
2	Modelling the effect of electric aircraft on airport operations and infrastructure. Technological Forecasting and Social Change, 2022, 177, 121553.	11.6	11
3	Reviewing the impacts of climate change on air transport operations. Aeronautical Journal, 2022, 126, 209-221.	1.6	13
4	Aircraft observations and reanalysis depictions of trends in the North Atlantic winter jet stream wind speeds and turbulence. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 2927-2941.	2.7	5
5	Reducing transatlantic flight emissions by fuel-optimised routing. Environmental Research Letters, 2021, 16, 025002.	5.2	19
6	Proâ€•L * â€•A Probabilistic L * Mapping Tool for Ground Observations. Space Weather, 2021, 19, e2020SW002602.	3.7	3
7	Accounting for Variability in ULF Wave Radial Diffusion Models. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027254.	2.4	10
8	The impacts of climate change on Greek airports. Climatic Change, 2020, 160, 219-231.	3.6	23
9	Multiâ€diagnostic multiâ€model ensemble forecasts of aviation turbulence. Meteorological Applications, 2020, 27, e1885.	2.1	4
10	Impact of climate variabilities on trans-oceanic flight times and emissions during strong NAO and ENSO phases. Environmental Research Letters, 2020, 15, 105017.	5.2	8
11	Increased shear in the North Atlantic upper-level jet stream over the past four decades. Nature, 2019, 572, 639-642.	27.8	68
12	Thank You to Our 2018 Peer Reviewers. Geophysical Research Letters, 2019, 46, 12608-12636.	4.0	0
13	Uncertainty and scale interactions in ocean ensembles: From seasonal forecasts to multidecadal climate predictions. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 160-175.	2.7	27
14	A Review of High Impact Weather for Aviation Meteorology. Pure and Applied Geophysics, 2019, 176, 1869-1921.	1.9	162
15	Evaluation of ARM tethered-balloon system instrumentation for supercooled liquid water and distributed temperature sensing in mixed-phase Arctic clouds. Atmospheric Measurement Techniques, 2019, 12, 6845-6864.	3.1	12
16	Multiâ€model ensemble predictions of aviation turbulence. Meteorological Applications, 2019, 26, 416-428.	2.1	22
17	Aviation Turbulence: Dynamics, Forecasting, and Response to Climate Change. Pure and Applied Geophysics, 2019, 176, 2081-2095.	1.9	37
18	Appreciation of 2017 GRL Peer Reviewers. Geophysical Research Letters, 2018, 45, 4494-4528.	4.0	0

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19	Increased light, moderate, and severe clear-air turbulence in response to climate change. Advances in Atmospheric Sciences, 2017, 34, 576-586.	4.3	84
20	Global Response of Clearâ€Air Turbulence to Climate Change. Geophysical Research Letters, 2017, 44, 9976-9984.	4.0	51
21	Note: A miniature oscillating microbalance for sampling ice and volcanic ash from a small airborne platform. Review of Scientific Instruments, 2017, 88, 086108.	1.3	3
22	Research Collaborations for Better Predictions of Aviation Weather Hazards. Bulletin of the American Meteorological Society, 2017, 98, ES103-ES107.	3.3	12
23	A Census of Atmospheric Variability From Seconds to Decades. Geophysical Research Letters, 2017, 44, 11,201.	4.0	28
24	Stochastic Parameterization: Toward a New View of Weather and Climate Models. Bulletin of the American Meteorological Society, 2017, 98, 565-588.	3.3	247
25	Note: A self-calibrating wide range electrometer for in-cloud measurements. Review of Scientific Instruments, 2017, 88, 126109.	1.3	7
26	Improved Climate Simulations through a Stochastic Parameterization of Ocean Eddies. Journal of Climate, 2016, 29, 8763-8781.	3.2	21
27	On the detection and attribution of gravity waves generated by the 20 March 2015 solar eclipse. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150222.	3.4	21
28	Transatlantic flight times and climate change. Environmental Research Letters, 2016, 11, 024008.	5.2	56
29	Focus on stochastic flows and climate statistics. New Journal of Physics, 2016, 18, 090201.	2.9	1
30	Coordinated weather balloon solar radiation measurements during a solar eclipse. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150221.	3.4	15
31	Is there a Rhythm Of The Rain? An analysis of weather in popular music. Weather, 2015, 70, 198-204.	0.7	1
32	The compositeâ€tendency Robertâ€“Asselinâ€“Williams (<scp>RAW</scp>) filter in semiâ€implicit integrations. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 764-773.	2.7	5
33	The Dynamics of Baroclinic Zonal Jets*. Journals of the Atmospheric Sciences, 2015, 72, 1137-1151.	1.7	9
34	Note: A balloon-borne accelerometer technique for measuring atmospheric turbulence. Review of Scientific Instruments, 2015, 86, 016109.	1.3	18
35	Stochastic climate theory and modeling. Wiley Interdisciplinary Reviews: Climate Change, 2015, 6, 63-78.	8.1	110
36	Intensification of winter transatlantic aviation turbulence in response to climate change. Nature Climate Change, 2013, 3, 644-648.	18.8	102

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37	Mathematics applied to the climate system: outstanding challenges and recent progress. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120518.	3.4	4
38	Achieving Seventh-Order Amplitude Accuracy in Leapfrog Integrations. Monthly Weather Review, 2013, 141, 3037-3051.	1.4	24
39	Climatic impacts of stochastic fluctuations in airâ€“sea fluxes. Geophysical Research Letters, 2012, 39, .	4.0	36
40	Comment on â€œA modified leapfrog scheme for shallow water equationsâ€•by Wen-Yih Sun and Oliver M.T. Sun. Computers and Fluids, 2012, 62, 91.	2.5	0
41	An improvement in clearâ€air turbulence forecasting based on spontaneous imbalance theory: the ULTURB algorithm. Meteorological Applications, 2012, 19, 71-78.	2.1	17
42	Generation of inertiaâ€“gravity waves in the rotating thermal annulus by a localised boundary layer instability. Geophysical and Astrophysical Fluid Dynamics, 2011, 105, 161-181.	1.2	19
43	Meteorological phenomena in Western classical orchestral music. Weather, 2011, 66, 300-306.	0.7	13
44	The Effects of the RAW Filter on the Climatology and Forecast Skill of the SPEEDY Model. Monthly Weather Review, 2011, 139, 608-619.	1.4	25
45	The RAW Filter: An Improvement to the Robertâ€“Asselin Filter in Semi-Implicit Integrations. Monthly Weather Review, 2011, 139, 1996-2007.	1.4	68
46	Testing the limits of quasi-geostrophic theory: application to observed laboratory flows outside the quasi-geostrophic regime. Journal of Fluid Mechanics, 2010, 649, 187-203.	3.4	23
47	The role of mean ocean salinity in climate. Dynamics of Atmospheres and Oceans, 2010, 49, 108-123.	1.8	25
48	QUAGMIRE v1.3: a quasi-geostrophic model for investigating rotating fluids experiments. Geoscientific Model Development, 2009, 2, 13-32.	3.6	9
49	A Proposed Modification to the Robertâ€“Asselin Time Filter*. Monthly Weather Review, 2009, 137, 2538-2546.	1.4	101
50	Sudden Stratospheric Warmings as Noise-Induced Transitions. Journals of the Atmospheric Sciences, 2008, 65, 3337-3343.	1.7	31
51	Introduction. Stochastic physics and climate modelling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2419-2425.	3.4	43
52	Application of the Lighthillâ€“Ford Theory of Spontaneous Imbalance to Clear-Air Turbulence Forecasting. Journals of the Atmospheric Sciences, 2008, 65, 3292-3304.	1.7	59
53	Inertiaâ€“Gravity Waves Emitted from Balanced Flow: Observations, Properties, and Consequences. Journals of the Atmospheric Sciences, 2008, 65, 3543-3556.	1.7	70
54	Dynamics of Convectively Driven Banded Jets in the Laboratory. Journals of the Atmospheric Sciences, 2007, 64, 4031-4052.	1.7	63

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55	A new feedback on climate change from the hydrological cycle. Geophysical Research Letters, 2007, 34, .	4.0	32
56	On the climate response of the low-latitude Pacific Ocean to changes in the global freshwater cycle. Climate Dynamics, 2006, 27, 593-611.	3.8	14
57	Modelling climate change: the role of unresolved processes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 2931-2946.	3.4	59
58	On the generation mechanisms of short-scale unbalanced modes in rotating two-layer flows with vertical shear. Journal of Fluid Mechanics, 2005, 528, 1-22.	3.4	63
59	A calibrated, non-invasive method for measuring the internal interface height field at high resolution in the rotating, two-layer annulus. Geophysical and Astrophysical Fluid Dynamics, 2004, 98, 453-471.	1.2	11
60	Jupiter's and Saturn's convectively driven banded jets in the laboratory. Geophysical Research Letters, 2004, 31, .	4.0	42
61	Spontaneous generation and impact of inertia-gravity waves in a stratified, two-layer shear flow. Geophysical Research Letters, 2003, 30, .	4.0	46
62	The role of nonhydrostatic dynamics in controlling development of a surface ocean front. Ocean Modelling, 2002, 4, 121-135.	2.4	5
63	Can a climate model successfully diagnose clearâ€air turbulence and its response to climate change?. Quarterly Journal of the Royal Meteorological Society, 0, , .	2.7	4