Dennis Hartmann

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4547978/publications.pdf

Version: 2024-02-01

84 papers	9,757 citations	41344 49 h-index	56724 83 g-index
101 all docs	101 docs citations	101 times ranked	6725 citing authors

#	Article	IF	Citations
1	The Seasonal Cycle of Low Stratiform Clouds. Journal of Climate, 1993, 6, 1587-1606.	3.2	1,289
2	The Effect of Cloud Type on Earth's Energy Balance: Global Analysis. Journal of Climate, 1992, 5, 1281-1304.	3.2	588
3	The Life Cycle of the Northern Hemisphere Sudden Stratospheric Warmings. Journal of Climate, 2004, 17, 2584-2596.	3.2	409
4	An important constraint on tropical cloud - climate feedback. Geophysical Research Letters, 2002, 29, 12-1-12-4.	4.0	337
5	Connections Between Clouds, Radiation, and Midlatitude Dynamics: a Review. Current Climate Change Reports, 2015, 1, 94-102.	8.6	337
6	Spatial Variability of Liquid Water Path in Marine Low Cloud: The Importance of Mesoscale Cellular Convection. Journal of Climate, 2006, 19, 1748-1764.	3.2	306
7	Some Implications of the Mesoscale Circulations in Tropical Cloud Clusters for Large-Scale Dynamics and Climate. Journals of the Atmospheric Sciences, 1984, 41, 113-121.	1.7	271
8	Pacific sea surface temperature and the winter of 2014. Geophysical Research Letters, 2015, 42, 1894-1902.	4.0	252
9	Tropospheric Precursors of Anomalous Northern Hemisphere Stratospheric Polar Vortices. Journal of Climate, 2010, 23, 3282-3299.	3.2	246
10	The heat balance of the tropical tropopause, cirrus, and stratospheric dehydration. Geophysical Research Letters, 2001, 28, 1969-1972.	4.0	227
11	Why is longwave cloud feedback positive?. Journal of Geophysical Research, 2010, 115, .	3.3	223
12	Different ENSO teleconnections and their effects on the stratospheric polar vortex. Journal of Geophysical Research, 2008, 113, .	3.3	214
13	Tropical Convection and the Energy Balance at the Top of the Atmosphere. Journal of Climate, 2001, 14, 4495-4511.	3.2	210
14	Computing and Partitioning Cloud Feedbacks Using Cloud Property Histograms. Part I: Cloud Radiative Kernels. Journal of Climate, 2012, 25, 3715-3735.	3.2	195
15	On the Use of Earth Radiation Budget Statistics for Studies of Clouds and Climate. Journals of the Atmospheric Sciences, 1980, 37, 1233-1250.	1.7	192
16	Computing and Partitioning Cloud Feedbacks Using Cloud Property Histograms. Part II: Attribution to Changes in Cloud Amount, Altitude, and Optical Depth. Journal of Climate, 2012, 25, 3736-3754.	3.2	192
17	The Atmospheric Energy Constraint on Global-Mean Precipitation Change. Journal of Climate, 2014, 27, 757-768.	3.2	187
18	Effects of the El NiÃ±oâ€“Southern Oscillation and the Quasiâ€Biennial Oscillation on polar temperatures in the stratosphere. Journal of Geophysical Research, 2007, 112, .	3.3	182

#	Article	IF	Citations
19	Increased Occurrence of Stratospheric Sudden Warmings during El NiÃ±o as Simulated by WACCM. Journal of Climate, 2006, 19, 324-332.	3.2	181
20	Stratosphere-troposphere evolution during polar vortex intensification. Journal of Geophysical Research, 2005, 110, .	3.3	156
21	Cloud feedback mechanisms and their representation in global climate models. Wiley Interdisciplinary Reviews: Climate Change, 2017, 8, e465.	8.1	154
22	Large-Scale Effects on the Regulation of Tropical Sea Surface Temperature. Journal of Climate, 1993, 6, 2049-2062.	3.2	153
23	Natural aerosols explain seasonal and spatial patterns of Southern Ocean cloud albedo. Science Advances, 2015, 1, e1500157.	10.3	144
24	Does the Holtonâ€“Tan Mechanism Explain How the Quasi-Biennial Oscillation Modulates the Arctic Polar Vortex?. Journals of the Atmospheric Sciences, 2012, 69, 1713-1733.	1.7	135
25	Mixedâ€phase cloud physics and Southern Ocean cloud feedback in climate models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9539-9554.	3.3	120
26	On the relationships among cloud cover, mixedâ€phase partitioning, and planetary albedo in GCMs. Journal of Advances in Modeling Earth Systems, 2016, 8, 650-668.	3.8	120
27	Disentangling Global Warming, Multidecadal Variability, and El NiÃ±o in Pacific Temperatures. Geophysical Research Letters, 2018, 45, 2487-2496.	4.0	114
28	The Effect of the MJO on the North American Monsoon*. Journal of Climate, 2006, 19, 333-343.	3.2	103
29	The response of the Southern Hemispheric eddy-driven jet to future changes in shortwave radiation in CMIP5. Geophysical Research Letters, 2014, 41, 3244-3250.	4.0	98
30	A Trajectory Analysis of Tropical Upper-Tropospheric Moisture and Convection. Journal of Climate, 1997, 10, 2533-2547.	3.2	95
31	The Influence of the Quasi-Biennial Oscillation on the Troposphere in Winter in a Hierarchy of Models. Part I: Simplified Dry GCMs. Journals of the Atmospheric Sciences, 2011, 68, 1273-1289.	1.7	94
32	Clouds and the Atmospheric Circulation Response to Warming. Journal of Climate, 2016, 29, 783-799.	3.2	94
33	La NiÃ±aâ€“like Mean-State Response to Global Warming and Potential Oceanic Roles. Journal of Climate, 2017, 30, 4207-4225.	3.2	88
34	No Evidence for Iris. Bulletin of the American Meteorological Society, 2002, 83, 249-254.	3.3	86
35	The observed sensitivity of high clouds to mean surface temperature anomalies in the tropics. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	85
36	Mechanisms of the Negative Shortwave Cloud Feedback in Middle to High Latitudes. Journal of Climate, 2016, 29, 139-157.	3.2	81

#	Article	IF	Citations
37	The global aerosolâ€cloud first indirect effect estimated using MODIS, MERRA, and AeroCom. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1779-1796.	3.3	81
38	Testing the Fixed Anvil Temperature Hypothesis in a Cloud-Resolving Model. Journal of Climate, 2007, 20, 2051-2057.	3.2	79
39	Detection of Rossby wave breaking and its response to shifts of the midlatitude jet with climate change. Journal of Geophysical Research, 2012, 117, .	3.3	76
40	Oceanâ€“Atmosphere Dynamical Coupling Fundamental to the Atlantic Multidecadal Oscillation. Journal of Climate, 2019, 32, 251-272.	3.2	74
41	Changes in the strength of the Brewer-Dobson circulation in a simple AGCM. Geophysical Research Letters, 2005, 32, .	4.0	70
42	Tropical cirrus and water vapor: an effective Earth infrared iris feedback?. Atmospheric Chemistry and Physics, 2002, 2, 31-37.	4.9	69
43	Radiative and Convective Driving of Tropical High Clouds. Journal of Climate, 2007, 20, 5510-5526.	3.2	69
44	The Influence of the Quasi-Biennial Oscillation on the Troposphere in Winter in a Hierarchy of Models. Part II: Perpetual Winter WACCM Runs. Journals of the Atmospheric Sciences, 2011, 68, 2026-2041.	1.7	67
45	Observed Southern Ocean Cloud Properties and Shortwave Reflection. Part II: Phase Changes and Low Cloud Feedback*. Journal of Climate, 2014, 27, 8858-8868.	3.2	61
46	Influence of the quasiâ€biennial oscillation on the North Pacific and El NiÃ±o teleconnections. Journal of Geophysical Research, 2010, 115, .	3.3	60
47	Observational evidence for a negative shortwave cloud feedback in middle to high latitudes. Geophysical Research Letters, 2016, 43, 1331-1339.	4.0	60
48	The Change in Low Cloud Cover in a Warmed Climate Inferred from AIRS, MODIS, and ERA-Interim. Journal of Climate, 2017, 30, 3609-3620.	3.2	56
49	Antarctic Sea Ice Response to Weather and Climate Modes of Variability*. Journal of Climate, 2016, 29, 721-741.	3.2	52
50	Influence of eddyâ€driven jet latitude on North Atlantic jet persistence and blocking frequency in CMIP3 integrations. Geophysical Research Letters, 2010, 37, .	4.0	49
51	Observational evidence of strengthening of the Breweâ€Dobson circulation since 1980. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,214.	3.3	48
52	Observed Southern Ocean Cloud Properties and Shortwave Reflection. Part I: Calculation of SW Flux from Observed Cloud Properties*. Journal of Climate, 2014, 27, 8836-8857.	3.2	47
53	The Role of Cloud Radiative Heating in Determining the Location of the ITCZ in Aquaplanet Simulations. Journal of Climate, 2016, 29, 2741-2763.	3.2	47
54	The balanced radiative effect of tropical anvil clouds. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5003-5020.	3.3	47

#	Article	IF	Citations
55	Predicting decadal trends in cloud droplet number concentration using reanalysis and satellite data. Atmospheric Chemistry and Physics, 2018, 18, 2035-2047.	4.9	44
56	Effect of latitude on the persistence of eddyâ€driven jets. Geophysical Research Letters, 2010, 37, .	4.0	42
57	What Drives the Life Cycle of Tropical Anvil Clouds?. Journal of Advances in Modeling Earth Systems, 2019, 11, 2586-2605.	3.8	42
58	Testing a theory for the effect of latitude on the persistence of eddyâ€driven jets using CMIP3 simulations. Geophysical Research Letters, 2010, 37, .	4.0	41
59	Nonlinear ENSO Warming Suppression (NEWS). Journal of Climate, 2017, 30, 4227-4251.	3.2	39
60	Testing the Role of Radiation in Determining Tropical Cloud-Top Temperature. Journal of Climate, 2012, 25, 5731-5747.	3.2	37
61	Impact of Tropical SST on Stratospheric Planetary Waves in the Southern Hemisphere. Journal of Climate, 2012, 25, 5030-5046.	3.2	36
62	Observations of a substantial cloudâ€aerosol indirect effect during the 2014â€“2015 BÃ¡rÃ°arbungaâ€VeiðivÃ¶tn fissure eruption in Iceland. Geophysical Research Letters, 2015, 42, 10,409.	4.0	34
63	Instantaneous Linkages between Clouds and Large-Scale Meteorology over the Southern Ocean in Observations and a Climate Model. Journal of Climate, 2017, 30, 9455-9474.	3.2	33
64	The Life Cycle and Net Radiative Effect of Tropical Anvil Clouds. Journal of Advances in Modeling Earth Systems, 2018, 10, 3012-3029.	3.8	32
65	Classifying the tropospheric precursor patterns of sudden stratospheric warmings. Geophysical Research Letters, 2017, 44, 8011-8016.	4.0	28
66	The Life Cycle of Anvil Clouds and the Top-of-Atmosphere Radiation Balance over the Tropical West Pacific. Journal of Climate, 2018, 31, 10059-10080.	3.2	28
67	Tropical anvil clouds and climate sensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8897-8899.	7.1	27
68	Weakening of Nonlinear ENSO Under Global Warming. Geophysical Research Letters, 2018, 45, 8557-8567.	4.0	26
69	On the influence of poleward jet shift on shortwave cloud feedback in global climate models. Journal of Advances in Modeling Earth Systems, 2015, 7, 2044-2059.	3.8	23
70	The role of cloud radiative heating within the atmosphere on the high cloud amount and topâ€ofâ€atmosphere cloud radiative effect. Journal of Advances in Modeling Earth Systems, 2016, 8, 1391-1410.	3.8	20
71	Tropical Anvil Clouds: Radiative Driving Toward a Preferred State. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033107.	3.3	20
72	Ocean Circulation Signatures of North Pacific Decadal Variability. Geophysical Research Letters, 2019, 46, 1690-1701.	4.0	19

#	Article	IF	Citations
73	A Test of the Simulation of Tropical Convective Cloudiness by a Cloud-Resolving Model. Journal of Climate, 2009, 22, 2834-2849.	3.2	16
74	A Lagrangian Perspective on Tropical Anvil Cloud Lifecycle in Present and Future Climate. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033487.	3.3	14
75	Large-scale Controls on Cloudiness. , 2009, , 217-234.		14
76	Balanced Cloud Radiative Effects Across a Range of Dynamical Conditions Over the Tropical West Pacific. Geophysical Research Letters, 2018, 45, 11,490.	4.0	13
77	Convection and Climate: What Have We Learned from Simple Models and Simplified Settings?. Current Climate Change Reports, 2019, 5, 196-206.	8.6	13
78	Is the Net Cloud Radiative Effect Constrained to be Uniform Over the Tropical Warm Pools?. Geophysical Research Letters, 2019, 46, 12495-12503.	4.0	11
79	Mixed-Phase Cloud Feedbacks. , 2018, , 215-236.		7
80	The Role of Synoptic Waves in the Formation and Maintenance of the Western Hemisphere Circulation Pattern. Journal of Climate, 2017, 30, 10259-10274.	3.2	6
81	Diurnal Differences in Tropical Maritime Anvil Cloud Evolution. Journal of Climate, 2022, 35, 1655-1677.	3.2	6
82	Radiative Cooling, Latent Heating, and Cloud Ice in the Tropical Upper Troposphere. Journal of Climate, 2022, 35, 1643-1654.	3.2	3
83	Congestus Mode Invigoration by Convective Aggregation in Simulations of Radiativeâ€Convective Equilibrium. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	3
84	Global Radiative Convective Equilibrium With a Slab Ocean: SST Contrast, Sensitivity and Circulation. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	1