Hui Su

List of Publications by Year
in descending order

88	3,264	136885	168321
papers	citations	32 h-index	53 g-index

92	92	92	3676
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of cloud and water vapor simulations in CMIP5 climate models using NASA â€œAâ€Trainâ€• satellite observations. Journal of Geophysical Research, 2012, 117, .	3.3	316
2	Decadal-scale trends in regional aerosol particle properties and their linkage to emission changes. Environmental Research Letters, 2017, 12, 054021.	2.2	109
3	Teleconnection Mechanisms for Tropical Pacific Descent Anomalies during El NiÃ±o*. Journals of the Atmospheric Sciences, 2002, 59, 2694-2712.	0.6	108
4	Tightening of tropical ascent and high clouds key to precipitation change in a warmer climate. Nature Communications, 2017, 8, 15771.	5.8	107
5	Weakening and strengthening structures in the Hadley Circulation change under global warming and implications for cloud response and climate sensitivity. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5787-5805.	1.2	104
6	Contrasting effects on deep convective clouds by different types of aerosols. Nature Communications, 2018, 9, 3874.	5.8	96
7	Evaluation of CMIP5 simulated clouds and TOA radiation budgets using NASA satellite observations. Climate Dynamics, 2015, 44, 2229-2247.	1.7	91
8	Diagnosis of regimeâ€dependent cloud simulation errors in CMIP5 models using â€œAâ€Trainâ€•satellite observations and reanalysis data. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2762-2780.	1.2	90
9	The Hunga Tongaâ€Hunga Ha'apai Hydration of the Stratosphere. Geophysical Research Letters, 2022, 49, .	1.5	89
10	Connecting surface emissions, convective uplifting, and longâ€range transport of carbon monoxide in the upper troposphere: New observations from the Aura Microwave Limb Sounder. Geophysical Research Letters, 2007, 34, .	1.5	86
11	Atmospheric responses to the redistribution of anthropogenic aerosols. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9625-9641.	1.2	86
12	An assessment of upper troposphere and lower stratosphere water vapor in MERRA, MERRA2, and ECMWF reanalyses using Aura MLS observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,468.	1.2	72
13	Enhanced positive water vapor feedback associated with tropical deep convection: New evidence from Aura MLS. Geophysical Research Letters, 2006, 33, .	1.5	71
14	Sensitivity of Tropical Tropospheric Temperature to Sea Surface Temperature Forcing*. Journal of Climate, 2003, 16, 1283-1301.	1.2	69
15	Impact of cloud microphysics on hurricane track forecasts. Geophysical Research Letters, 2007, 34, .	1.5	68
16	Application of active spaceborne remote sensing for understanding biases between passive cloud water path retrievals. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8962-8979.	1.2	67
17	Moist Teleconnection Mechanisms for the Tropical South American and Atlantic Sector*. Journal of Climate, 2005, 18, 3928-3950.	1.2	65
18	Longâ€term cloud change imprinted in seasonal cloud variation: More evidence of high climate sensitivity. Geophysical Research Letters, 2015, 42, 8729-8737.	1.5	62

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19	Enhanced PM2.5 pollution in China due to aerosol-cloud interactions. Scientific Reports, 2017, 7, 4453.	1.6	61
20	Clean and polluted clouds: Relationships among pollution, ice clouds, and precipitation in South America. Geophysical Research Letters, 2008, 35, .	1.5	60
21	Comparison of upper tropospheric water vapor observations from the Microwave Limb Sounder and Atmospheric Infrared Sounder. Journal of Geophysical Research, 2008, 113, .	3.3	60
22	Relationship of environmental relative humidity with North Atlantic tropical cyclone intensity and intensification rate. Geophysical Research Letters, 2012, 39, .	1.5	53
23	Tropical Clouds and Circulation Changes during the 2006/07 and 2009/10 El NiÃ±os. Journal of Climate, 2013, 26, 399-413.	1.2	49
24	Intra-annual variations of regional aerosol optical depth, vertical distribution, and particle types from multiple satellite and ground-based observational datasets. Atmospheric Chemistry and Physics, 2018, 18, 11247-11260.	1.9	49
25	The Scatter in Tropical Average Precipitation Anomalies*. Journal of Climate, 2003, 16, 3966-3977.	1.2	46
26	Toward reconciling the influence of atmospheric aerosols and greenhouse gases on light precipitation changes in Eastern China. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5878-5887.	1.2	46
27	Regional simulations of deep convection and biomass burning over South America: 2. Biomass burning aerosol effects on clouds and precipitation. Journal of Geophysical Research, 2011, 116, .	3.3	45
28	Regional simulation of aerosol impacts on precipitation during the East Asian summer monsoon. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6454-6467.	1.2	45
29	How do the water vapor and carbon monoxide â€œtape recordersâ€•start near the tropical tropopause?. Geophysical Research Letters, 2007, 34, .	1.5	40
30	Applying Satellite Observations of Tropical Cyclone Internal Structures to Rapid Intensification Forecast With Machine Learning. Geophysical Research Letters, 2020, 47, e2020GL089102.	1.5	40
31	Observed vertical structure of tropical oceanic clouds sorted in largeâ€scale regimes. Geophysical Research Letters, 2008, 35, .	1.5	39
32	Five year (2004â€“2009) observations of upper tropospheric water vapor and cloud ice from MLS and comparisons with GEOSâ€5 analyses. Journal of Geophysical Research, 2010, 115, .	3.3	39
33	Impact of aerosols on ice crystal size. Atmospheric Chemistry and Physics, 2018, 18, 1065-1078.	1.9	37
34	Comparison of regime-sorted tropical cloud profiles observed by CloudSat with GEOS5 analyses and two general circulation model simulations. Journal of Geophysical Research, 2011, 116, .	3.3	36
35	Evaluating the Diurnal Cycle of Upper-Tropospheric Ice Clouds in Climate Models Using SMILES Observations. Journals of the Atmospheric Sciences, 2015, 72, 1022-1044.	0.6	35
36	Dynamical mechanisms for African monsoon changes during the mid-Holocene. Journal of Geophysical Research, 2005, 110, .	3.3	33

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37	A quantitative assessment of precipitation associated with the ITCZ in the CMIP5 GCM simulations. Climate Dynamics, 2016, 47, 1863-1880.	1.7	33
38	Typeâ€Dependent Responses of Ice Cloud Properties to Aerosols From Satellite Retrievals. Geophysical Research Letters, 2018, 45, 3297-3306.	1.5	33
39	Observed Increase of TTL Temperature and Water Vapor in Polluted Clouds over Asia. Journal of Climate, 2011, 24, 2728-2736.	1.2	30
40	Reduced European aerosol emissions suppress winter extremes over northern Eurasia. Nature Climate Change, 2020, 10, 225-230.	8.1	29
41	Variations of tropical upper tropospheric clouds with sea surface temperature and implications for radiative effects. Journal of Geophysical Research, 2008, 113, .	3.3	28
42	Elucidating the Role of Anthropogenic Aerosols in Arctic Sea Ice Variations. Journal of Climate, 2018, 31, 99-114.	1.2	27
43	Climatology of cloud water content associated with different cloud types observed by Aâ€Train satellites. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4196-4212.	1.2	26
44	The linkage between stratospheric water vapor and surface temperature in an observation-constrained coupled general circulation model. Climate Dynamics, 2017, 48, 2671-2683.	1.7	26
45	Relationships of upper tropospheric water vapor, clouds and SST: MLS observations, ECMWF analyses and GCM simulations. Geophysical Research Letters, 2006, 33, .	1.5	23
46	Unforced Surface Air Temperature Variability and Its Contrasting Relationship with the Anomalous TOA Energy Flux at Local and Global Spatial Scales*. Journal of Climate, 2016, 29, 925-940.	1.2	23
47	Large-scale controls of propagation of the Madden-Julian Oscillation. Npj Climate and Atmospheric Science, 2020, 3, .	2.6	21
48	Radiative effects of upper tropospheric clouds observed by Aura MLS and CloudSat. Geophysical Research Letters, 2009, 36, .	1.5	20
49	A simulation of ice cloud particle size, humidity, and temperature measurements from the TWICE CubeSat. Earth and Space Science, 2017, 4, 574-587.	1.1	20
50	Modeling Study of the Air Quality Impact of Recordâ€Breaking Southern California Wildfires in December 2017. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6554-6570.	1.2	19
51	Enhanced landâ€“sea warming contrast elevates aerosol pollution in a warmer world. Nature Climate Change, 2019, 9, 300-305.	8.1	19
52	A Damping Effect of the Maritime Continent for the Maddenâ€Julian Oscillation. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13693-13713.	1.2	17
53	Improvements in Cloud and Water Vapor Simulations Over the Tropical Oceans in CMIP6 Compared to CMIP5. Earth and Space Science, 2021, 8, e2020EA001520.	1.1	17
54	Tropical water vapor variations during the 2006â€“2007 and 2009â€“2010 El NiÃ±os: Satellite observation and GFDL AM2.1 simulation. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8910-8920.	1.2	16

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55	Error analysis of upper tropospheric water vapor in CMIP5 models using â€œA-Trainâ€•satellite observations and reanalysis data. Climate Dynamics, 2016, 46, 2787-2803.	1.7	16
56	An Assessment of Tropospheric Water Vapor Feedback Using Radiative Kernels. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1499-1509.	1.2	16
57	Interannual variations of water vapor in the tropical upper troposphere and the lower and middle stratosphere and their connections to ENSO and QBO. Atmospheric Chemistry and Physics, 2019, 19, 9913-9926.	1.9	16
58	High cloud variations with surface temperature from 2002 to 2015: Contributions to atmospheric radiative cooling rate and precipitation changes. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5457-5471.	1.2	14
59	Effect of Arctic clouds on the iceâ€albedo feedback in midsummer. International Journal of Climatology, 2020, 40, 4707-4714.	1.5	14
60	Observational estimation of radiative feedback to surface air temperature over Northern High Latitudes. Climate Dynamics, 2018, 50, 615-628.	1.7	12
61	Simulation of Remote Sensing of Clouds and Humidity From Space Using a Combined Platform of Radar and Multifrequency Microwave Radiometers. Earth and Space Science, 2019, 6, 1234-1243.	1.1	12
62	Mortality burdens in California due to air pollution attributable to local and nonlocal emissions. Environment International, 2019, 133, 105232.	4.8	12
63	Observed Tightening of Tropical Ascent in Recent Decades and Linkage to Regional Precipitation Changes. Geophysical Research Letters, 2020, 47, e2019GL085809.	1.5	12
64	An analysis of high cloud variability: imprints from the El NiÃ±oâ€“Southern Oscillation. Climate Dynamics, 2017, 48, 447-457.	1.7	11
65	On the Emergent Constraints of Climate Sensitivity. Journal of Climate, 2018, 31, 863-875.	1.2	11
66	Relationships Between Tropical Ascent and High Cloud Fraction Changes With Warming Revealed by Perturbation Physics Experiments in CAM5. Geophysical Research Letters, 2019, 46, 10112-10121.	1.5	11
67	Convective Entrainment Rates Estimated From Aura CO and CloudSat/CALIPSO Observations and Comparison With GEOSâ€5. Journal of Geophysical Research D: Atmospheres, 2019, 124, 9796-9807.	1.2	11
68	Evaluation of UTLS carbon monoxide simulations in GMI and GEOS-Chem chemical transport models using Aura MLS observations. Atmospheric Chemistry and Physics, 2016, 16, 5641-5663.	1.9	10
69	A dichotomy between model responses of tropical ascent and descent to surface warming. Npj Climate and Atmospheric Science, 2019, 2, .	2.6	10
70	Spread in the magnitude of climate model interdecadal global temperature variability traced to disagreements over highâ€latitude oceans. Geophysical Research Letters, 2016, 43, 12543-12549.	1.5	9
71	Modulation of Midtropospheric CO2 by the South Atlantic Walker Circulation*. Journals of the Atmospheric Sciences, 2015, 72, 2241-2247.	0.6	8
72	Water vapor changes under global warming and the linkage to present-day interannual variabilities in CMIP5 models. Climate Dynamics, 2016, 47, 3673-3691.	1.7	7

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73	Precipitation, circulation, and cloud variability over the past two decades. Earth and Space Science, 2017, 4, 597-606.	1.1	7
74	A global record of single-layered ice cloud properties and associated radiative heating rate profiles from an A-Train perspective. Climate Dynamics, 2019, 53, 3069-3088.	1.7	7
75	Impact of Cloud Ice Particle Size Uncertainty in a Climate Model and Implications for Future Satellite Missions. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032119.	1.2	7
76	A Comparative Study of Atmospheric Moisture Recycling Rate between Observations and Models. Journal of Climate, 2018, 31, 2389-2398.	1.2	6
77	Interpretation of the Top-of-Atmosphere Energy Flux for Future Arctic Warming. Scientific Reports, 2019, 9, 13059.	1.6	6
78	Reply to comment by Roberto Rondanelli and Richard S. Lindzen on â€œVariations in convective precipitation fraction and stratiform area with sea surface temperatureâ€• Journal of Geophysical Research, 2010, 115, .	3.3	5
79	Invariability of Arctic Topâ€ofâ€Atmosphere Radiative Response to Surface Temperature Changes. Earth and Space Science, 2020, 7, e2020EA001316.	1.1	3
80	A Samplingâ€Based Path Planning Algorithm for Improving Observations in Tropical Cyclones. Earth and Space Science, 2022, 9, .	1.1	3
81	Variation of upper tropospheric clouds and water vapour over the Indian Ocean. International Journal of Climatology, 2014, 34, 3840-3848.	1.5	2
82	ENSO regulation of farâ€and midâ€infrared contributions to clearâ€sky OLR. Geophysical Research Letters, 2016, 43, 8751-8759.	1.5	2
83	Correction to â€œReply to comment by Roberto Rondanelli and Richard S. Lindzen on â€œObserved variations in convective precipitation fraction and stratiform area with sea surface temperatureâ€â€• Journal of Geophysical Research, 2010, 115, .	3.3	1
84	Thank You to Our 2018 Peer Reviewers. Geophysical Research Letters, 2019, 46, 12608-12636.	1.5	0
85	Thank You to Our 2019 Peer Reviewers. Geophysical Research Letters, 2020, 47, e2020GL088048.	1.5	0
86	Thank You to Our 2020 Peer Reviewers. Geophysical Research Letters, 2021, 48, e2021GL093126.	1.5	0
87	Thank You to Our 2021 Peer Reviewers. Geophysical Research Letters, 2022, 49, .	1.5	0
88	Discovering Precursors to Tropical Cyclone Rapid Intensification in the Atlantic Basin Using Spatiotemporal Data Mining. Atmosphere, 2022, 13, 882.	1.0	0