Yimin Liu

List of Publications by Year
in descending order

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114 papers	6,688 citations	94381 37 h-index	66879 78 g-index
117 all docs	117 docs citations	117 times ranked	4706 citing authors

#	Article	IF	Citations
1	Thermal Controls on the Asian Summer Monsoon. Scientific Reports, 2012, 2, 404.	1.6	615
2	The Influence of Mechanical and Thermal Forcing by the Tibetan Plateau on Asian Climate. Journal of Hydrometeorology, 2007, 8, 770-789.	0.7	611
3	Recent Third Poleâ€™s Rapid Warming Accompanies Cryospheric Melt and Water Cycle Intensification and Interactions between Monsoon and Environment: Multidisciplinary Approach with Observations, Modeling, and Analysis. Bulletin of the American Meteorological Society, 2019, 100, 423-444.	1.7	590
4	Tibetan Plateau warming and precipitation changes in East Asia. Geophysical Research Letters, 2008, 35, .	1.5	543
5	Tibetan Plateau climate dynamics: recent research progress and outlook. National Science Review, 2015, 2, 100-116.	4.6	342
6	The flexible global ocean-atmosphere-land system model, Grid-point Version 2: FGOALS-g2. Advances in Atmospheric Sciences, 2013, 30, 543-560.	1.9	253
7	The Flexible Global Ocean-Atmosphere-Land system model, Spectral Version 2: FGOALS-s2. Advances in Atmospheric Sciences, 2013, 30, 561-576.	1.9	210
8	Intensification of Northern Hemisphere subtropical highs in a warming climate. Nature Geoscience, 2012, 5, 830-834.	5.4	190
9	New proofs of the recent climate warming over the Tibetan Plateau as a result of the increasing greenhouse gases emissions. Science Bulletin, 2006, 51, 1396-1400.	1.7	151
10	Weather and climate effects of the Tibetan Plateau. Advances in Atmospheric Sciences, 2012, 29, 978-992.	1.9	140
11	The Third Atmospheric Scientific Experiment for Understanding the Earthâ€“Atmosphere Coupled System over the Tibetan Plateau and Its Effects. Bulletin of the American Meteorological Society, 2018, 99, 757-776.	1.7	128
12	Revisiting Asian monsoon formation and change associated with Tibetan Plateau forcing: I. Formation. Climate Dynamics, 2012, 39, 1169-1181.	1.7	125
13	Landâ€“atmosphereâ€“ocean coupling associated with the Tibetan Plateau and its climate impacts. National Science Review, 2020, 7, 534-552.	4.6	119
14	Summertime quadruplet heating pattern in the subtropics and the associated atmospheric circulation. Geophysical Research Letters, 2003, 30, n/a-n/a.	1.5	116
15	Revisiting Asian monsoon formation and change associated with Tibetan Plateau forcing: II. Change. Climate Dynamics, 2012, 39, 1183-1195.	1.7	116
16	CAS FGOALS-f3-L Model Datasets for CMIP6 Historical Atmospheric Model Intercomparison Project Simulation. Advances in Atmospheric Sciences, 2019, 36, 771-778.	1.9	109
17	Anomalous summer climate in China influenced by the tropical Indo-Pacific Oceans. Climate Dynamics, 2011, 36, 769-782.	1.7	86
18	Recent progress in the impact of the Tibetan Plateau on climate in China. Advances in Atmospheric Sciences, 2007, 24, 1060-1076.	1.9	83

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19	Global energy and water balance: Characteristics from <scp>F</scp>initeâ€volume <scp>A</scp>tmospheric <scp>M</scp>odel of the <scp>IAP/LASG</scp> (<scp>FAMIL</scp>1). Journal of Advances in Modeling Earth Systems, 2015, 7, 1-20.	1.3	78
20	Two types of summertime heating over the Asian large-scale orography and excitation of potential-vorticity forcing I. Over Tibetan Plateau. Science China Earth Sciences, 2016, 59, 1996-2008.	2.3	76
21	Location and variation of the summertime upper-troposphere temperature maximum over South Asia. Climate Dynamics, 2015, 45, 2757-2774.	1.7	70
22	Cloud vertical structure, precipitation, and cloud radiative effects over Tibetan Plateau and its neighboring regions. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5864-5877.	1.2	69
23	An introduction to the coupled model FGOALS1.1-s and its performance in East Asia. Advances in Atmospheric Sciences, 2010, 27, 1131-1142.	1.9	64
24	Airâ€“sea interaction and formation of the Asian summer monsoon onset vortex over the Bay of Bengal. Climate Dynamics, 2012, 38, 261-279.	1.7	64
25	Interannual variability of the spring atmospheric heat source over the Tibetan Plateau forced by the North Atlantic SSTA. Climate Dynamics, 2015, 45, 1617-1634.	1.7	64
26	An assessment of summer sensible heat flux on the Tibetan Plateau from eight data sets. Science China Earth Sciences, 2012, 55, 779-786.	2.3	62
27	The possible impact of urbanization on a heavy rainfall event in Beijing. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8132-8143.	1.2	61
28	Understanding the surface temperature cold bias in CMIP5 AGCMs over the Tibetan Plateau. Advances in Atmospheric Sciences, 2017, 34, 1447-1460.	1.9	59
29	Asian summer monsoon onset barrier and its formation mechanism. Climate Dynamics, 2015, 45, 711-726.	1.7	53
30	Roles of Anomalous Tibetan Plateau Warming on the Severe 2008 Winter Storm in Central-Southern China. Monthly Weather Review, 2010, 138, 2375-2384.	0.5	52
31	Formation and variation of the atmospheric heat source over the Tibetan Plateau and its climate effects. Advances in Atmospheric Sciences, 2017, 34, 1169-1184.	1.9	51
32	Impact of Mongolian Plateau versus Tibetan Plateau on the westerly jet over North Pacific Ocean. Climate Dynamics, 2015, 44, 3067-3076.	1.7	50
33	Heating status of the Tibetan Plateau from April to June and rainfall and atmospheric circulation anomaly over East Asia in midsummer. Science in China Series D: Earth Sciences, 2005, 48, 250-257.	0.9	49
34	Evaluation of FAMIL2 in Simulating the Climatology and Seasonalâ€toâ€Interannual Variability of Tropical Cyclone Characteristics. Journal of Advances in Modeling Earth Systems, 2019, 11, 1117-1136.	1.3	49
35	Science and Prediction of Heavy Rainfall over China: Research Progress since the Reform and Opening-Up of New China. Journal of Meteorological Research, 2020, 34, 427-459.	0.9	47
36	Outlook for El Niño and the Indian Ocean Dipole in autumn-winter 2018–2019. Chinese Science Bulletin, 2019, 64, 73-78.	0.4	46

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37	Two types of summertime heating over Asian large-scale orography and excitation of potential-vorticity forcing II. Sensible heating over Tibetan-Iranian Plateau. Science China Earth Sciences, 2017, 60, 733-744.	2.3	41
38	Clustering of Tibetan Plateau Vortices by 10â€“30-Day Intraseasonal Oscillation*. Monthly Weather Review, 2014, 142, 290-300.	0.5	39
39	Intensification of the Southern Hemisphere summertime subtropical anticyclones in a warming climate. Geophysical Research Letters, 2013, 40, 5959-5964.	1.5	36
40	The Tibetan Plateau Surface-Atmosphere Coupling System and Its Weather and Climate Effects: The Third Tibetan Plateau Atmospheric Science Experiment. Journal of Meteorological Research, 2019, 33, 375-399.	0.9	36
41	Sensitivity of ITCZ configuration to cumulus convective parameterizations on an aqua planet. Climate Dynamics, 2010, 34, 223-240.	1.7	33
42	Vortex genesis over the Bay of Bengal in spring and its role in the onset of the Asian Summer Monsoon. Science China Earth Sciences, 2011, 54, 1-9.	2.3	33
43	CAS FGOALS-f3-L Model Datasets for CMIP6 GMMIP Tier-1 and Tier-3 Experiments. Advances in Atmospheric Sciences, 2020, 37, 18-28.	1.9	32
44	Impact of North Atlantic SST and Tibetan Plateau forcing on seasonal transition of springtime South Asian monsoon circulation. Climate Dynamics, 2021, 56, 559-579.	1.7	32
45	Dynamical and thermal problems in vortex development and movement. Part I: A PV-Q view. Journal of Meteorological Research, 2013, 27, 1-14.	1.0	31
46	Astronomical and Hydrological Perspective of Mountain Impacts on the Asian Summer Monsoon. Scientific Reports, 2015, 5, 17586.	1.6	31
47	Impact of urbanization on boundary layer structure in Beijing. Climatic Change, 2013, 120, 123-136.	1.7	30
48	The role of airâ€“sea interactions in regulating the thermal effect of the Tibetanâ€“Iranian Plateau on the Asian summer monsoon. Climate Dynamics, 2019, 52, 4227-4245.	1.7	30
49	PVâ€Q Perspective of Cyclogenesis and Vertical Velocity Development Downstream of the Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030912.	1.2	26
50	Influences of external forcing changes on the summer cooling trend over East Asia. Climatic Change, 2013, 117, 829-841.	1.7	25
51	Impacts of the Tibetan Plateau on Asian Climate. Meteorological Monographs, 2016, 56, 7.1-7.29.	5.0	25
52	An evaluation of cloud vertical structure in three reanalyses against CloudSat/cloudâ€aerosol lidar and infrared pathfinder satellite observations. Atmospheric Science Letters, 2019, 20, e906.	0.8	24
53	The role of land-sea distribution in the formation of the Asian summer monsoon. Geophysical Research Letters, 2005, 32, .	1.5	22
54	Improvement of land surface temperature simulation over the Tibetan Plateau and the associated impact on circulation in East Asia. Atmospheric Science Letters, 2016, 17, 162-168.	0.8	22

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55	Eurasian Cooling Linked with Arctic Warming: Insights from PV Dynamics. Journal of Climate, 2020, 33, 2627-2644.	1.2	22
56	Impact of tropical cyclone development on the instability of South Asian High and the summer monsoon onset over Bay of Bengal. Climate Dynamics, 2013, 41, 2603-2616.	1.7	19
57	Quasi-biweekly impact of the atmospheric heat source over the Tibetan Plateau on summer rainfall in Eastern China. Climate Dynamics, 2019, 53, 4489-4504.	1.7	19
58	A dynamic and thermodynamic coupling view of the linkages between Eurasian cooling and Arctic warming. Climate Dynamics, 2022, 58, 2725-2744.	1.7	19
59	Vertical Structures of Convective and Stratiform Clouds in Boreal Summer over the Tibetan Plateau and Its Neighboring Regions. Advances in Atmospheric Sciences, 2019, 36, 1089-1102.	1.9	18
60	CAS FGOALS-f3-L model dataset descriptions for CMIP6 DECK experiments. Atmospheric and Oceanic Science Letters, 2020, 13, 582-588.	0.5	18
61	Comparisons of soil moisture datasets over the Tibetan Plateau and application to the simulation of Asia summer monsoon onset. Advances in Atmospheric Sciences, 2010, 27, 303-314.	1.9	17
62	Largeâ€Scale Dynamics and Moisture Sources of the Precipitation Over the Western Tibetan Plateau in Boreal Winter. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032133.	1.2	17
63	Effect of horizontal resolution on the simulation of tropical cyclones in the Chinese Academy of Sciences FGOALS-f3 climate system model. Geoscientific Model Development, 2021, 14, 6113-6133.	1.3	17
64	Cloud radiative forcing in Asian monsoon region simulated by IPCC AR4 AMIP models. Advances in Atmospheric Sciences, 2009, 26, 923-939.	1.9	16
65	Coupling of the Quasiâ€Biweekly Oscillation of the Tibetan Plateau Summer Monsoon With the Arctic Oscillation. Geophysical Research Letters, 2018, 45, 7756-7764.	1.5	16
66	The effects of asymmetric potential vorticity forcing on the instability of South Asia High and Indian summer monsoon onset. Science China Earth Sciences, 2014, 57, 337-350.	2.3	15
67	CAS FGOALS-f3-H and CAS FGOALS-f3-L outputs for the high-resolution model intercomparison project simulation of CMIP6. Atmospheric and Oceanic Science Letters, 2020, 13, 576-581.	0.5	15
68	Abnormal warm seaâ€surface temperature in the Indian Ocean, active potential vorticity over the Tibetan Plateau, and severe flooding along the Yangtze River in summer 2020. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1001-1019.	1.0	15
69	On the incident solar radiation in CMIP5 models. Geophysical Research Letters, 2015, 42, 1930-1935.	1.5	14
70	Warm season heavy rainfall events over the Huaihe River Valley and their linkage with wintertime thermal condition of the tropical oceans. Climate Dynamics, 2016, 46, 71-82.	1.7	13
71	Characteristics of the potential vorticity and its budget in the surface layer over the Tibetan plateau. International Journal of Climatology, 2021, 41, 439-455.	1.5	13
72	Topâ€ofâ€Atmosphere Radiation Budget and Cloud Radiative Effects Over the Tibetan Plateau and Adjacent Monsoon Regions From CMIP6 Simulations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034345.	1.2	13

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73	Features of rainfall and latent heating structure simulated by two convective parameterization schemes. Science China Earth Sciences, 2011, 54, 1779-1788.	2.3	12
74	The application of flux-form semi-Lagrangian transport scheme in a spectral atmosphere model. Advances in Atmospheric Sciences, 2013, 30, 89-100.	1.9	12
75	Comparisons of GCM cloud cover parameterizations with cloud-resolving model explicit simulations. Science China Earth Sciences, 2015, 58, 604-614.	2.3	12
76	Impact of potential vorticity anomalies around the eastern Tibetan Plateau on quasi-biweekly oscillations of summer rainfall within and south of the Yangtze Basin in 2016. Climate Dynamics, 2021, 56, 813-835.	1.7	12
77	ADAPTATION OF THE ATMOSPHERIC CIRCULATION TO THERMAL FORCING OVER THE TIBETAN PLATEAU. World Scientific Series on Asia-Pacific Weather and Climate, 2004, , 92-114.	0.2	12
78	A study on sulfate optical properties and direct radiative forcing using LASG-IAP general circulation model. Advances in Atmospheric Sciences, 2012, 29, 1185-1199.	1.9	11
79	Impact of Surface Potential Vorticity Density Forcing over the Tibetan Plateau on the South China Extreme Precipitation in January 2008. Part I: Data Analysis. Journal of Meteorological Research, 2019, 33, 400-415.	0.9	11
80	Climate sensitivity and cloud feedback processes imposed by two different external forcings in an aquaplanet GCM. Theoretical and Applied Climatology, 2012, 110, 1-10.	1.3	10
81	Dynamical Seasonal Prediction of Tropical Cyclone Activity Using the FGOALS-f2 Ensemble Prediction System. Weather and Forecasting, 2021, 36, 1759-1778.	0.5	10
82	Dynamical and thermal problems in vortex development and movement. Part II: Generalized slantwise vorticity development. Journal of Meteorological Research, 2013, 27, 15-25.	1.0	9
83	Seasonal evolution of subtropical anticyclones in the climate system model FGOALS-s2. Advances in Atmospheric Sciences, 2013, 30, 593-606.	1.9	9
84	PV Perspective of Impacts on Downstream Extreme Rainfall Event of a Tibetan Plateau Vortex Collaborating with a Southwest China Vortex. Advances in Atmospheric Sciences, 2021, 38, 1835-1851.	1.9	9
85	Impact of Surface Potential Vorticity Density Forcing over the Tibetan Plateau on the South China Extreme Precipitation in January 2008. Part II: Numerical Simulation. Journal of Meteorological Research, 2019, 33, 416-432.	0.9	7
86	Comparison of mixed-phase clouds over the Arctic and the Tibetan Plateau: seasonality and vertical structure of cloud radiative effects. Climate Dynamics, 2020, 54, 4811-4822.	1.7	7
87	Dependence of cloud radiation on cloud overlap, horizontal inhomogeneity, and vertical alignment in stratiform and convective regions. Atmospheric Research, 2021, 249, 105358.	1.8	7
88	A Regimeâ€Based Investigation Into the Errors of CMIP6 Simulated Cloud Radiative Effects Using Satellite Observations. Geophysical Research Letters, 2021, 48, e2021GL095399.	1.5	7
89	Potential vorticity perspective of the genesis of a Tibetan Plateau vortex in June 2016. Climate Dynamics, 2022, 58, 3351-3367.	1.7	7
90	Earth System Model FGOALS-s2: Coupling a dynamic global vegetation and terrestrial carbon model with the physical climate system model. Advances in Atmospheric Sciences, 2013, 30, 1549-1559.	1.9	6

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91	Assessment of reanalysis flux products based on eddy covariance observations over the Tibetan Plateau. Theoretical and Applied Climatology, 2019, 138, 275-292.	1.3	6
92	Impact of urbanization on rainfall of different strengths in the Beijing area. Theoretical and Applied Climatology, 2020, 139, 1097-1110.	1.3	6
93	Interannual Influences of the Surface Potential Vorticity Forcing over the Tibetan Plateau on East Asian Summer Rainfall. Advances in Atmospheric Sciences, 2022, 39, 1050-1061.	1.9	6
94	Potential Impact of Spring Thermal Forcing Over the Tibetan Plateau on the Following Winter El NiÃ±oâ€“Southern Oscillation. Geophysical Research Letters, 2022, 49, .	1.5	6
95	An evaluation of the effects of cloud parameterization in the R42L9 GCM. Advances in Atmospheric Sciences, 2004, 21, 153-162.	1.9	5
96	Simulating and Evaluating Global Aerosol Distributions With the Online Aerosolâ€Coupled CASâ€FGOALS Model. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032097.	1.2	5
97	Linkage between cross-equatorial potential vorticity flux and surface air temperature over the midâ€“high latitudes of Eurasia during boreal spring. Climate Dynamics, 2022, 59, 3247-3263.	1.7	5
98	Contrasts of atmospheric circulation and associated tropical convection between Huaihe River valley and Yangtze River valley mei-yu flooding. Advances in Atmospheric Sciences, 2012, 29, 755-768.	1.9	4
99	LASG Global AGCM with a Two-moment Cloud Microphysics Scheme: Energy Balance and Cloud Radiative Forcing Characteristics. Advances in Atmospheric Sciences, 2019, 36, 697-710.	1.9	4
100	CAS FGOALS-f3-L Large-ensemble Simulations for the CMIP6 Polar Amplification Model Intercomparison Project. Advances in Atmospheric Sciences, 2021, 38, 1028-1049.	1.9	4
101	Effects of Cloud Microphysics on the Vertical Structures of Cloud Radiative Effects over the Tibetan Plateau and the Arctic. Remote Sensing, 2021, 13, 2651.	1.8	4
102	Evaluation of the seasonality and spatial aspects of the Southern Annular Mode in <scp>CMIP6</scp> models. International Journal of Climatology, 2022, 42, 3820-3837.	1.5	4
103	Quantification of Seasonal and Interannual Variations of the Tibetan Plateau Surface Thermodynamic Forcing Based on the Potential Vorticity. Geophysical Research Letters, 2022, 49, .	1.5	4
104	Interannual Impact of the North Atlantic Tripole SST Mode on the Surface Potential Vorticity Over the Tibetan Plateau During Boreal Summer. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	4
105	FORMATION OF THE SUMMERTIME SUBTROPICAL ANTICYCLONES. World Scientific Series on Asia-Pacific Weather and Climate, 2004, , 499-544.	0.2	3
106	Comparisons of the temperature and humidity profiles of reanalysis products with shipboard GPS sounding measurements obtained during the 2018 Eastern Indian Ocean Open Cruise. Atmospheric and Oceanic Science Letters, 2019, 12, 177-183.	0.5	3
107	The climate variability in global land precipitation in FGOALS-f3-L: A comparison between GMMIP and historical simulations. Atmospheric and Oceanic Science Letters, 2020, 13, 559-567.	0.5	3
108	Modelling study on the source contribution to aerosol over the Tibetan Plateau. International Journal of Climatology, 2021, 41, 3247-3265.	1.5	3

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109	Modulation of land-sea thermal contrast on the energy source and sink of tropical cyclone activity and its annual cycle. Science China Earth Sciences, 2012, 55, 1855-1871.	2.3	2
110	Meridional Tripole Mode of Winter Precipitation over the Arctic and Continental North Africaâ€“Eurasia. Journal of Climate, 2021, , 1.	1.2	1
111	The Nature of the Thermal Forcing of the Asian Summer Monsoon. World Scientific Series on Asia-Pacific Weather and Climate, 2021, , 27-36.	0.2	0
112	Monthly prediction of tropical cyclone activity over the South China Sea using the FGOALS-f2 ensemble prediction system. Atmospheric and Oceanic Science Letters, 2021, , 100116.	0.5	0
113	Sensitivities of simulated global aerosol optical depth and aerosol-radiation interactions to different horizontal resolutions in CAS-FGOALS-f3. Atmospheric Environment, 2022, 271, 118920.	1.9	0
114	Simulating Aerosol Optical Depth and Direct Radiative Effects over the Tibetan Plateau with a High-Resolution CAS FGOALS-f3 Model. Advances in Atmospheric Sciences, 0, , .	1.9	0