Tongwen Wu

List of Publications by Year
in descending order

90 papers	6,578 citations

117625

34 h-index

69250

77 g-index

119 all docs	119 docs citations

119 times ranked

7692 citing authors

#	Article	IF	Citations
1	The Subseasonal to Seasonal (S2S) Prediction Project Database. Bulletin of the American Meteorological Society, 2017, 98, 163-173.	3.3	617
2	Carbon–Concentration and Carbon–Climate Feedbacks in CMIP5 Earth System Models. Journal of Climate, 2013, 26, 5289-5314.	3.2	576
3	The Beijing Climate Center Climate System Model (BCC-CSM): the main progress from CMIP5 to CMIP6. Geoscientific Model Development, 2019, 12, 1573-1600.	3.6	458
4	Vertical structure and physical processes of the Madden–Julian oscillation: Exploring key model physics in climate simulations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4718-4748.	3.3	332
5	Evaluation of cloud and water vapor simulations in CMIP5 climate models using NASA "A-Train" satellite observations. Journal of Geophysical Research, 2012, 117, .	3.3	316
6	Changes in soil organic carbon storage predicted by Earth system models during the 21st century. Biogeosciences, 2014, 11, 2341-2356.	3.3	259
7	Carbon–concentration and carbon–climate feedbacks in CMIP6 models and their comparison to CMIP5 models. Biogeosciences, 2020, 17, 4173-4222.	3.3	255
8	The Beijing Climate Center atmospheric general circulation model: description and its performance for the present-day climate. Climate Dynamics, 2010, 34, 123-147.	3.8	246
9	Global carbon budgets simulated by the Beijing Climate Center Climate System Model for the last century. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4326-4347.	3.3	226
10	Comparison of <scp>CMIP6</scp> and <scp>CMIP5</scp> simulations of precipitation in China and the East Asian summer monsoon. International Journal of Climatology, 2020, 40, 6423-6440.	3.5	211
11	The Flexible Global Ocean-Atmosphere-Land system model, Spectral Version 2: FGOALS-s2. Advances in Atmospheric Sciences, 2013, 30, 561-576.	4.3	210
12	Biotic and Human Vulnerability to Projected Changes in Ocean Biogeochemistry over the 21st Century. PLoS Biology, 2013, 11, e1001682.	5.6	194
13	Tracking Improvement in Simulated Marine Biogeochemistry Between CMIP5 and CMIP6. Current Climate Change Reports, 2020, 6, 95-119.	8.6	155
14	Recent progress in studies of climate change in China. Advances in Atmospheric Sciences, 2012, 29, 958-977.	4.3	153
15	A mass-flux cumulus parameterization scheme for large-scale models: description and test with observations. Climate Dynamics, 2012, 38, 725-744.	3.8	152
16	An overview of BCC climate system model development and application for climate change studies. Journal of Meteorological Research, 2014, 28, 34-56.	1.0	138
17	Causes and implications of persistent atmospheric carbon dioxide biases in Earth System Models. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 141-162.	3.0	121
18	Constraining human contributions to observed warming since the pre-industrial period. Nature Climate Change, 2021, 11, 207-212.	18.8	108

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19	Historical and future changes in air pollutants from CMIP6 models. Atmospheric Chemistry and Physics, 2020, 20, 14547-14579.	4.9	105
20	Diagnosis of regime‑dependent cloud simulation errors in CMIP5 models using "A‑Train" satellite observations and reanalysis data. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2762-2780.	3.3	90
21	Climate Change Projections over East Asia with BCC_CSM1.1 Climate Model under RCP Scenarios. Journal of the Meteorological Society of Japan, 2013, 91, 413-429.	1.8	75
22	MJO prediction using the sub-seasonal to seasonal forecast model of Beijing Climate Center. Climate Dynamics, 2017, 48, 3283-3307.	3.8	72
23	A Modified Dynamic Framework for the Atmospheric Spectral Model and Its Application. Journals of the Atmospheric Sciences, 2008, 65, 2235-2253.	1.7	70
24	Simulations of the Asian summer monsoon in the sub‑seasonal to seasonal prediction project (<scp>S2S</scp>) database. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2282-2295.	2.7	67
25	Beijing Climate Center Earth System Model version 1 (BCC-ESM1): model description and evaluation of aerosol simulations. Geoscientific Model Development, 2020, 13, 977-1005.	3.6	65
26	Effective radiative forcing from emissions of reactive gases and aerosols – a multi-model comparison. Atmospheric Chemistry and Physics, 2021, 21, 853-874.	4.9	65
27	A review of progress in coupled ocean-atmosphere model developments for ENSO studies in China. Journal of Oceanology and Limnology, 2020, 38, 930-961.	1.3	62
28	Observed and Simulated Teleconnections Between the Stratospheric Quasi‑Biennial Oscillation and Northern Hemisphere Winter Atmospheric Circulation. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1219-1232.	3.3	59
29	Evaluating stratospheric ozone and water vapour changes in CMIP6 models from 1850 to 2100. Atmospheric Chemistry and Physics, 2021, 21, 5015-5061.	4.9	54
30	Performance of the seasonal forecasting of the Asian summer monsoon by BCC_CSM1.1(m). Advances in Atmospheric Sciences, 2015, 32, 1156-1172.	4.3	53
31	BCC-CSM2-HR: a high-resolution version of the Beijing Climate Center Climate System Model. Geoscientific Model Development, 2021, 14, 2977-3006.	3.6	52
32	The quasi-stationary feature of nocturnal precipitation in the Sichuan Basin and the role of the Tibetan Plateau. Climate Dynamics, 2013, 41, 977-994.	3.8	51
33	Development of Climate and Earth System Models in China: Past Achievements and New CMIP6 Results. Journal of Meteorological Research, 2020, 34, 1-19.	2.4	46
34	Historical total ozone radiative forcing derived from CMIP6 simulations. Npj Climate and Atmospheric Science, 2020, 3, .	6.8	44
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.	1.7	35
36	New insights into natural variability and anthropogenic forcing of global/regional climate evolution. Npj Climate and Atmospheric Science, 2019, 2, .	6.8	34

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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.	3.8	33
38	Climate and air quality impacts due to mitigation of non-methane near-term climate forcers. Atmospheric Chemistry and Physics, 2020, 20, 9641-9663.	4.9	30
39	Thermal Contrast between the Middle-Latitude Asian Continent and Adjacent Ocean and Its Connection to the East Asian Summer Precipitation. Journal of Climate, 2008, 21, 4992-5007.	3.2	29
40	A merging scheme for constructing daily precipitation analyses based on objective bias‐correction and error estimation techniques. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8671-8692.	3.3	28
41	Effect of the strengthened western Pacific subtropical high on summer visibility decrease over eastern China since 1973. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7142-7156.	3.3	26
42	Parametric Sensitivity Analysis for the Asian Summer Monsoon Precipitation Simulation in the Beijing Climate Center AGCM, Version 2.1. Journal of Climate, 2015, 28, 5622-5644.	3.2	26
43	The January 2021 Sudden Stratospheric Warming and Its Prediction in Subseasonal to Seasonal Models. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035057.	3.3	26
44	An empirical formula to compute snow cover fraction in GCMs. Advances in Atmospheric Sciences, 2004, 21, 529-535.	4.3	25
45	Cloudiness characteristics over Southeast Asia from satellite FY‐2C and their comparison to three other cloud data sets. Journal of Geophysical Research, 2009, 114, .	3.3	24
46	Scale-Dependent Performance of CMIP5 Earth System Models in Simulating Terrestrial Vegetation Carbon*. Journal of Climate, 2015, 28, 5217-5232.	3.2	24
47	QBO Changes in CMIP6 Climate Projections. Geophysical Research Letters, 2020, 47, e2019GL086903.	4.0	24
48	Changes in precipitation extremes over Eastern China simulated by the Beijing Climate Center Â Climate System Model (BCC_CSM1.0). Climate Research, 2011, 50, 227-245.	1.1	23
49	Validity of parameter optimization in improving MJO simulation and prediction using the sub-seasonal to seasonal forecast model of Beijing Climate Center. Climate Dynamics, 2019, 52, 3823-3843.	3.8	21
50	Radiation budget biases in AMIP5 models over the East Asian monsoon region. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,400.	3.3	19
51	Relationships between interannual and intraseasonal variations of the Asian-western Pacific summer monsoon hindcasted by BCC_CSM1.1(m). Advances in Atmospheric Sciences, 2014, 31, 1051-1064.	4.3	19
52	Subseasonal Dynamical Prediction of East Asian Cold Surges. Weather and Forecasting, 2017, 32, 1675-1694.	1.4	19
53	Decadal prediction skill of BCC‐CSM1.1 climate model in East Asia. International Journal of Climatology, 2018, 38, 584-592.	3.5	19
54	Projections of annual mean air temperature and precipitation over the globe and in China during the 21st century by the BCC Climate System Model BCC_CSM1.0. Journal of Meteorological Research, 2012, 26, 362-375.	1.0	17

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55	A strategy for merging objective estimates of global daily precipitation from gauge observations, satellite estimates, and numerical predictions. Advances in Atmospheric Sciences, 2016, 33, 889-904.	4.3	16
56	Near-Global Atmospheric Responses to Observed Springtime Tibetan Plateau Snow Anomalies. Journal of Climate, 2020, 33, 1691-1706.	3.2	15
57	Development of Coupled Data Assimilation With the BCC Climate System Model: Highlighting the Role of Sea-Ice Assimilation for Global Analysis. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002368.	3.8	14
58	The role of anthropogenic aerosols in the anomalous cooling from 1960 to 1990 in the CMIP6 Earth system models. Atmospheric Chemistry and Physics, 2021, 21, 18609-18627.	4.9	14
59	Using a deterministic time-lagged ensemble forecast with a probabilistic threshold for improving 6–15day summer precipitation prediction in China. Atmospheric Research, 2015, 156, 142-159.	4.1	13
60	Improvement of 6–15 day precipitation forecasts using a time-lagged ensemble method. Advances in Atmospheric Sciences, 2014, 31, 293-304.	4.3	12
61	Development of the global atmospheric chemistry general circulation model BCC-GEOS-Chem v1.0: model description and evaluation. Geoscientific Model Development, 2020, 13, 3817-3838.	3.6	12
62	The coherent interdecadal changes of East Asia climate in mid-summer simulated by BCC_AGCM 2.0.1. Climate Dynamics, 2012, 39, 155-163.	3.8	10
63	Variability of the Stratospheric Quasi-Biennial Oscillation and Its Wave Forcing Simulated in the Beijing Climate Center Atmospheric General Circulation Model. Journals of the Atmospheric Sciences, 2020, 77, 149-165.	1.7	10
64	Changes in anthropogenic precursor emissions drive shifts in the ozone seasonal cycle throughout the northern midlatitude troposphere. Atmospheric Chemistry and Physics, 2022, 22, 3507-3524.	4.9	10
65	Validation of parameterizations for the surface turbulent fluxes over sea ice with CHINARE 2010 and SHEBA data. Polar Research, 2013, 32, 20818.	1.6	9
66	Evaluation of the tropical variability from the Beijing Climate Center's real-time operational global Ocean Data Assimilation System. Advances in Atmospheric Sciences, 2016, 33, 208-220.	4.3	9
67	Impact of Higher Resolution on Precipitation over China in CMIP6 HighResMIP Models. Atmosphere, 2021, 12, 762.	2.3	9
68	A Numerical Simulation of Microphysical Structure of Cloud Associated with the 2008 Winter Freezing Rain over Southern China. Journal of the Meteorological Society of Japan, 2013, 91, 101-117.	1.8	8
69	An evaluation of boreal summer intra-seasonal oscillation simulated by BCC_AGCM2.2. Climate Dynamics, 2017, 48, 3409-3423.	3.8	8
70	Impacts of atmospheric and oceanic initial conditions on boreal summer intraseasonal oscillation forecast in the BCC model. Theoretical and Applied Climatology, 2020, 142, 393-406.	2.8	8
71	Shortened Duration of Global Warming Slowdowns with Elevated Greenhouse Gas Emissions. Journal of Meteorological Research, 2021, 35, 225-237.	2.4	8
72	Investigations on the anthropogenic reversal of the natural ozone gradient between northern and southern midlatitudes. Atmospheric Chemistry and Physics, 2021, 21, 9669-9679.	4.9	8

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73	Asymmetry of surface climate change under RCP2.6 projections from the CMIP5 models. Advances in Atmospheric Sciences, 2013, 30, 796-805.	4.3	7
74	Factors Limiting the Forecast Skill of the Boreal Summer Intraseasonal Oscillation in a Subseasonal-to-Seasonal Model. Advances in Atmospheric Sciences, 2019, 36, 104-118.	4.3	7
75	Improvement of Drag Coefficient Calculation Under Near‐Neutral Conditions in Light Winds Over land. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033472.	3.3	6
76	Stratospheric Nudging And Predictable Surface Impacts (SNAPSI): a protocol for investigating the role of stratospheric polar vortex disturbances in subseasonal to seasonal forecasts. Geoscientific Model Development, 2022, 15, 5073-5092.	3.6	6
77	An evaluation of the effects of cloud parameterization in the R42L9 GCM. Advances in Atmospheric Sciences, 2004, 21, 153-162.	4.3	5
78	Mitigation of the double ITCZ syndrome in BCC-CSM2-MR through improving parameterizations of boundary-layer turbulence and shallow convection. Geoscientific Model Development, 2021, 14, 5183-5204.	3.6	5
79	BCC-ESM1 Model Datasets for the CMIP6 Aerosol Chemistry Model Intercomparison Project (AerChemMIP). Advances in Atmospheric Sciences, 2021, 38, 317-328.	4.3	5
80	A simulation study on the extreme temperature events of the 20th century by using the BCC_AGCM. Journal of Meteorological Research, 2012, 26, 489-507.	1.0	4
81	Operational climate prediction in the era of big data in China: Reviews and prospects. Journal of Meteorological Research, 2016, 30, 444-456.	2.4	4
82	Impacts of SIS and CICE as Sea Ice Components in BCC_CSM on the Simulation of the Arctic Climate. Journal of Ocean University of China, 2019, 18, 553-562.	1.2	4
83	A collaborative analysis framework for distributed gridded environmental data. Environmental Modelling and Software, 2019, 111, 324-339.	4.5	4
84	Development and Evaluation of High Resolution Climate System Models. , 2016, , .		3
85	Improved Simulation of the Antarctic Stratospheric Final Warming by Modifying the Orographic Gravity Wave Parameterization in the Beijing Climate Center Atmospheric General Circulation Model. Atmosphere, 2020, 11, 576.	2.3	3
86	Dynamical Seasonal Prediction of the Asian Summer Monsoon in the China Meteorological Administration Climate Prediction System Version 3. Frontiers in Earth Science, 0, 10, .	1.8	3
87	Investigating the ENSO prediction skills of the Beijing Climate Center climate prediction system version 2. Acta Oceanologica Sinica, 2022, 41, 99-109.	1.0	2
88	Present-Day PM2.5 over Asia: Simulation and Uncertainty in CMIP6 ESMs. Journal of Meteorological Research, 2022, 36, 429-449.	2.4	2
89	Overview of the Chinese National Key Basic Research Project Entitled "Development and Evaluation of High-Resolution Climate System Models". , 2016, , 1-48.		0
90	Studies on the Model Dynamics and Physical Parameterizations of the High-Resolution Version of the Global Climate System Model BCC_CSM. , 2016, , 105-161.		0