Baike Xi

List of Publications by Year in descending order

84 papers	2,333 citations	218677 26 h-index	243625 44 g-index
99 all docs	99 docs citations	99 times ranked	2574 citing authors

#	Article	IF	Citations
1	Environmental effects on aerosolâ€“cloud interaction in non-precipitating marine boundary layer (MBL) clouds over the eastern North Atlantic. Atmospheric Chemistry and Physics, 2022, 22, 335-354.	4.9	11
2	Maritime Aerosol and CCN Profiles Derived From Shipâ€Based Measurements Over Eastern North Pacific During MAGIC. Earth and Space Science, 2022, 9, .	2.6	0
3	Cloud phase and macrophysical properties over the Southern Ocean during the MARCUS field campaign. Atmospheric Measurement Techniques, 2022, 15, 3761-3777.	3.1	1
4	Summertime low clouds mediate the impact of the large-scale circulation on Arctic sea ice. Communications Earth & Environment, 2021, 2, .	6.8	18
5	Integrative Monsoon Frontal Rainfall Experiment (IMFRE-I): A Mid-Term Review. Advances in Atmospheric Sciences, 2021, 38, 357-374.	4.3	2
6	New Observational Constraints on Warm Rain Processes and Their Climate Implications. Geophysical Research Letters, 2021, 48, e2020GL091836.	4.0	6
7	Maritime Cloud and Drizzle Microphysical Properties Retrieved From Shipâ€Based Observations During MAGIC. Earth and Space Science, 2021, 8, e2020EA001588.	2.6	2
8	Retrieving high-resolution surface photosynthetically active radiation from the MODIS and GOES-16 ABI data. Remote Sensing of Environment, 2021, 260, 112436.	11.0	10
9	The climate response to increased cloud liquid water over the Arctic in CESM1: a sensitivity study of Wegenerâ€“Bergeronâ€“Findeisen process. Climate Dynamics, 2021, 56, 3373-3394.	3.8	8
10	Spatial Distribution and Impacts of Aerosols on Clouds Under Meiyu Frontal Weather Background Over Central China Based on Aircraft Observations. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031915.	3.3	9
11	Statistical Characteristics of Raindrop Size Distributions and Parameters in Central China During the Meiyu Seasons. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031954.	3.3	19
12	Comparative Study of Cloud Liquid Water and Rain Liquid Water Obtained From Microwave Radiometer and Micro Rain Radar Observations Over Central China During the Monsoon. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032456.	3.3	12
13	Characteristics of Ice Cloudâ€“Precipitation of Warm Season Mesoscale Convective Systems over the Great Plains. Journal of Hydrometeorology, 2020, 21, 317-334.	1.9	2
14	Profiles of MBL Cloud and Drizzle Microphysical Properties Retrieved From Groundâ€Based Observations and Validated by Aircraft In Situ Measurements Over the Azores. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032205.	3.3	26
15	Investigation of aerosolâ€“cloud interactions under different absorptive aerosol regimes using Atmospheric Radiation Measurement (ARM) southern Great Plains (SGP) ground-based measurements. Atmospheric Chemistry and Physics, 2020, 20, 3483-3501.	4.9	18
16	Cloud and Precipitation Properties of MCSs Along the Meiyu Frontal Zone in Central and Southern China and Their Associated Largeâ€Scale Environments. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031601.	3.3	20
17	Vertical Distributions of Raindrops and Zâ€R Relationships Using Microrain Radar and 2â€Dâ€Video Distrometer Measurements During the Integrative Monsoon Frontal Rainfall Experiment (IMFRE). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031108.	3.3	16
18	Can the GPM IMERG Final Product Accurately Represent MCSsâ€™ Precipitation Characteristics over the Central and Eastern United States?. Journal of Hydrometeorology, 2020, 21, 39-57.	1.9	57

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19	Quantifying Longâ€Term Seasonal and Regional Impacts of North American Fire Activity on Continental Boundary Layer Aerosols and Cloud Condensation Nuclei. Earth and Space Science, 2020, 7, e2020EA001113.	2.6	1
20	A Climatology of Marine Boundary Layer Cloud and Drizzle Properties Derived from Ground-Based Observations over the Azores. Journal of Climate, 2020, 33, 10133-10148.	3.2	13
21	Impacts of long-range transport of aerosols on marine-boundary-layer clouds in the eastern North Atlantic. Atmospheric Chemistry and Physics, 2020, 20, 14741-14755.	4.9	21
22	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.	3.8	7
23	Estimation of liquid water path below the melting layer in stratiform precipitation systems using radar measurements during MC3E. Atmospheric Measurement Techniques, 2019, 12, 3743-3759.	3.1	5
24	Thicker Clouds and Accelerated Arctic Sea Ice Decline: The Atmosphereâ€Sea Ice Interactions in Spring. Geophysical Research Letters, 2019, 46, 6980-6989.	4.0	47
25	Understanding Ice Cloudâ€Precipitation Properties of Three Modes of Mesoscale Convective Systems During PECAN. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4121-4140.	3.3	10
26	A Regime-Based Evaluation of Southern and Northern Great Plains Warm-Season Precipitation Events in WRF. Weather and Forecasting, 2019, 34, 805-831.	1.4	15
27	A survey of the atmospheric physical processes key to the onset of Arctic sea ice melt in spring. Climate Dynamics, 2019, 52, 4907-4922.	3.8	13
28	Comparisons of Ice Water Path in Deep Convective Systems Among Groundâ€Based, GOES, and CERESâ€MODIS Retrievals. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1708-1723.	3.3	15
29	Aerosol properties and their impacts on surface CCN at the ARM Southern Great Plains site during the 2011 Midlatitude Continental Convective Clouds Experiment. Advances in Atmospheric Sciences, 2018, 35, 224-233.	4.3	14
30	Evaluation of autoconversion and accretion enhancement factors in general circulation model warm-rain parameterizations using ground-based measurements over the Azores. Atmospheric Chemistry and Physics, 2018, 18, 17405-17420.	4.9	21
31	Influence of Wind Direction on Thermodynamic Properties and Arctic Mixedâ€Phase Clouds in Autumn at UtqiaÄ¡vik, Alaska. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9589-9603.	3.3	6
32	Investigation of Liquid Cloud Microphysical Properties of Deep Convective Systems: 2. Parameterization of Raindrop Size Distribution and its Application for Convective Rain Estimation. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,637.	3.3	8
33	Using AIRS and ARM SGP Clearâ€Sky Observations to Evaluate Meteorological Reanalyses: A Hyperspectral Radiance Closure Approach. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,720.	3.3	3
34	Comparison of Daytime Lowâ€Level Cloud Properties Derived From GOES and ARM SGP Measurements. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8221-8237.	3.3	6
35	Evaluation of NASA GISS post-CMIP5 single column model simulated clouds and precipitation using ARM Southern Great Plains observations. Advances in Atmospheric Sciences, 2017, 34, 306-320.	4.3	8
36	Intercomparisons of marine boundary layer cloud properties from the ARM CAPâ€MBL campaign and two MODIS cloud products. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2351-2365.	3.3	16

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37	The footprints of 16â€‰year trends of Arctic springtime cloud and radiation properties on September sea ice retreat. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2179-2193.	3.3	20
38	Quantifying the Uncertainties of Reanalyzed Arctic Cloud and Radiation Properties Using Satellite Surface Observations. Journal of Climate, 2017, 30, 8007-8029.	3.2	31
39	Evaluation of Reanalyzed Precipitation Variability and Trends Using the Gridded Gauge-Based Analysis over the CONUS. Journal of Hydrometeorology, 2017, 18, 2227-2248.	1.9	18
40	Effects of environment forcing on marine boundary layer cloudâ€drizzle processes. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4463-4478.	3.3	15
41	Comparison of the GPCP 1DD Precipitation Product and NEXRAD Q2 Precipitation Estimates over the Continental United States. Journal of Hydrometeorology, 2016, 17, 1837-1853.	1.9	4
42	A clearâ€sky radiation closure study using a oneâ€dimensional radiative transfer model and collocated satelliteâ€surfaceâ€reanalysis data sets. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13,698.	3.3	5
43	Retrievals of ice cloud microphysical properties of deep convective systems using radar measurements. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,820.	3.3	16
44	A radiation closure study of Arctic stratus cloud microphysical properties using the collocated satellite-surface data and Fu-Liou radiative transfer model. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,175-10,198.	3.3	14
45	Investigation of liquid cloud microphysical properties of deep convective systems: 1. Parameterization raindrop size distribution and its application for stratiform rain estimation. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,739.	3.3	18
46	Determining the Best Method for Estimating the Observed Level of Maximum Detrainment Based on Radar Reflectivity. Monthly Weather Review, 2016, 144, 2915-2926.	1.4	4
47	A quantitative assessment of precipitation associated with the ITCZ in the CMIP5 GCM simulations. Climate Dynamics, 2016, 47, 1863-1880.	3.8	33
48	Cloud fraction at the ARM SGP site: reducing uncertainty with self-organizing maps. Theoretical and Applied Climatology, 2016, 124, 43-54.	2.8	12
49	Improving Satellite Quantitative Precipitation Estimation Using GOES-Retrieved Cloud Optical Depth. Journal of Hydrometeorology, 2016, 17, 557-570.	1.9	15
50	Evaluation and intercomparison of clouds, precipitation, and radiation budgets in recent reanalyses using satellite-surface observations. Climate Dynamics, 2016, 46, 2123-2144.	3.8	45
51	Investigation of ice cloud microphysical properties of DCSs using aircraft in situ measurements during MC3E over the ARM SGP site. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3533-3552.	3.3	28
52	Comparison of atmospheric profiles between microwave radiometer retrievals and radiosonde soundings. Journal of Geophysical Research D: Atmospheres, 2015, 120, 10,313.	3.3	38
53	Investigation of the marine boundary layer cloud and CCN properties under coupled and decoupled conditions over the Azores. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6179-6191.	3.3	37
54	Characterizing Arctic mixedâ€phase cloud structure and its relationship with humidity and temperature inversion using ARM NSA observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7737-7746.	3.3	18

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55	Marine boundary layer drizzle properties and their impact on cloud property retrieval. Atmospheric Measurement Techniques, 2015, 8, 3555-3562.	3.1	19
56	Assessment of NASA GISS CMIP5 and Post-CMIP5 Simulated Clouds and TOA Radiation Budgets Using Satellite Observations. Part II: TOA Radiation Budget and CREs. Journal of Climate, 2015, 28, 1842-1864.	3.2	21
57	Evaluation of CMIP5 simulated clouds and TOA radiation budgets using NASA satellite observations. Climate Dynamics, 2015, 44, 2229-2247.	3.8	91
58	Assessment of NASA GISS CMIP5 and Post-CMIP5 Simulated Clouds and TOA Radiation Budgets Using Satellite Observations. Part I: Cloud Fraction and Properties. Journal of Climate, 2014, 27, 4189-4208.	3.2	39
59	Investigation of the Diurnal Variation of Marine Boundary Layer Cloud Microphysical Properties at the Azores. Journal of Climate, 2014, 27, 8827-8835.	3.2	31
60	Assessment of SCaMPR and NEXRAD Q2 Precipitation Estimates Using Oklahoma Mesonet Observations. Journal of Hydrometeorology, 2014, 15, 2484-2500.	1.9	12
61	Cloud fraction at the ARM SGP site. Theoretical and Applied Climatology, 2014, 115, 91-105.	2.8	15
62	A 19-Month Record of Marine Aerosolâ€“Cloudâ€“Radiation Properties Derived from DOE ARM Mobile Facility Deployment at the Azores. Part I: Cloud Fraction and Single-Layered MBL Cloud Properties. Journal of Climate, 2014, 27, 3665-3682.	3.2	56
63	Critical mechanisms for the formation of extreme arctic sea-ice extent in the summers of 2007 and 1996. Climate Dynamics, 2014, 43, 53-70.	3.8	15
64	Comparison of marine boundary layer cloud properties from CERESâ€MODIS Edition 4 and DOE ARM AMF measurements at the Azores. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9509-9529.	3.3	22
65	Aerosol properties and their influences on marine boundary layer cloud condensation nuclei at the ARM mobile facility over the Azores. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4859-4872.	3.3	43
66	Impacts of microphysical scheme on convective and stratiform characteristics in two high precipitation squall line events. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,119.	3.3	49
67	A Comparison of the Mineral Dust Absorptive Properties between Two Asian Dust Events. Atmosphere, 2013, 4, 1-16.	2.3	8
68	Evaluation and Intercomparison of Cloud Fraction and Radiative Fluxes in Recent Reanalyses over the Arctic Using BSRN Surface Observations. Journal of Climate, 2012, 25, 2291-2305.	3.2	82
69	Life cycle of midlatitude deep convective systems in a Lagrangian framework. Journal of Geophysical Research, 2012, 117, .	3.3	61
70	CERES Edition-2 Cloud Property Retrievals Using TRMM VIRS and Terra and Aqua MODIS Dataâ€”Part II: Examples of Average Results and Comparisons With Other Data. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4401-4430.	6.3	123
71	Investigation of the 2006 drought and 2007 flood extremes at the Southern Great Plains through an integrative analysis of observations. Journal of Geophysical Research, 2011, 116, .	3.3	64
72	Top-of-atmosphere radiation budget of convective core/stratiform rain and anvil clouds from deep convective systems. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	56

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73	A Comparison of MERRA and NARR Reanalyses with the DOE ARM SGP Data. Journal of Climate, 2011, 24, 4541-4557.	3.2	124
74	Evaluation of the NASA GISS Single-Column Model Simulated Clouds Using Combined Surface and Satellite Observations. Journal of Climate, 2010, 23, 5175-5192.	3.2	27
75	A 10 year climatology of cloud fraction and vertical distribution derived from both surface and GOES observations over the DOE ARM SPG site. Journal of Geophysical Research, 2010, 115, .	3.3	71
76	A 10 year climatology of Arctic cloud fraction and radiative forcing at Barrow, Alaska. Journal of Geophysical Research, 2010, 115, .	3.3	142
77	A study of Asian dust plumes using satellite, surface, and aircraft measurements during the INTEXâ€B field experiment. Journal of Geophysical Research, 2010, 115, .	3.3	27
78	Correction to â€œA 10 year climatology of cloud fraction and vertical distribution derived from both surface and GOES observations over the DOE ARM SPG siteâ€. Journal of Geophysical Research, 2010, 115, .	3.3	1
79	A Method to Merge WSR-88D Data with ARM SGP Millimeter Cloud Radar Data by Studying Deep Convective Systems. Journal of Atmospheric and Oceanic Technology, 2009, 26, 958-971.	1.3	11
80	Comparison of CERESâ€MODIS stratus cloud properties with groundâ€based measurements at the DOE ARM Southern Great Plains site. Journal of Geophysical Research, 2008, 113, .	3.3	80
81	Using observations of deep convective systems to constrain atmospheric column absorption of solar radiation in the optically thick limit. Journal of Geophysical Research, 2008, 113, .	3.3	14
82	Observational evidence of changes in water vapor, clouds, and radiation at the ARM SGP site. Geophysical Research Letters, 2006, 33, .	4.0	11
83	A Climatology of Midlatitude Continental Clouds from the ARM SGP Central Facility. Part II: Cloud Fraction and Surface Radiative Forcing. Journal of Climate, 2006, 19, 1765-1783.	3.2	104
84	A Climatology of Midlatitude Continental Clouds from the ARM SGP Central Facility: Part I: Low-Level Cloud Macrophysical, Microphysical, and Radiative Properties. Journal of Climate, 2005, 18, 1391-1410.	3.2	76