Heng Xiao

List of Publications by Year
in descending order

33 papers	526 citations	623188 14 h-index	713013 21 g-index
38 all docs	38 docs citations	38 times ranked	1033 citing authors

#	Article	IF	Citations
1	Determining Spatial Scales of Soil Moistureâ€"Cloud Coupling Pathways Using Semiâ€Idealized Simulations. Journal of Geophysical Research D: Atmospheres, 2022, 127, e2021JD035282.	1.2	2
2	A Machineâ€Learningâ€Assisted Stochastic Cloud Population Model as a Parameterization of Cumulus Convection. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	3
3	Simulated Dust Transport in the Convective Boundary Layer. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033429.	1.2	3
4	On the estimation of boundary layer heights: a machine learning approach. Atmospheric Measurement Techniques, 2021, 14, 4403-4424.	1.2	26
5	Characterization of Surface Heterogeneityâ€Induced Convection Using Cluster Analysis. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032550.	1.2	9
6	Assessing CLUBB PDF Closure Assumptions for a Continental Shallowâ€toâ€Deep Convective Transition Case Over Multiple Spatial Scales. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002145.	1.3	3
7	Understanding irrigation impacts on low-level jets over the Great Plains. Climate Dynamics, 2020, 55, 925-943.	1.7	7
8	The Large-Eddy Simulation (LES) Atmospheric Radiation Measurement (ARM) Symbiotic Simulation and Observation (LASSO) Activity for Continental Shallow Convection. Bulletin of the American Meteorological Society, 2020, 101, E462-E479.	1.7	41
9	Overview of the HI-SCALE Field Campaign: A New Perspective on Shallow Convective Clouds. Bulletin of the American Meteorological Society, 2019, 100, 821-840.	1.7	44
10	Reconciling Differences Between Largeâ€Eddy Simulations and Doppler Lidar Observations of Continental Shallow Cumulus Cloudâ€Base Vertical Velocity. Geophysical Research Letters, 2019, 46, 11539-11547.	1.5	14
11	The Impact of Variable Landâ€Atmosphere Coupling on Convective Cloud Populations Observed During the 2016 HIâ€SCALE Field Campaign. Journal of Advances in Modeling Earth Systems, 2019, 11, 2629-2654.	1.3	22
12	A Stochastic Framework for Modeling the Population Dynamics of Convective Clouds. Journal of Advances in Modeling Earth Systems, 2018, 10, 448-465.	1.3	19
13	Role of Troposphereâ€Convectionâ€Land Coupling in the Southwestern Amazon Precipitation Bias of the Community Earth System Model Version 1 (CESM1). Journal of Geophysical Research D: Atmospheres, 2018, 123, 8374-8399.	1.2	19
14	The Impact of Surface Heterogeneities and Landâ€Atmosphere Interactions on Shallow Clouds Over ARM SGP Site. Journal of Advances in Modeling Earth Systems, 2018, 10, 1220-1244.	1.3	17
15	Singleâ€Column Model Simulations of Subtropical Marine Boundaryâ€Layer Cloud Transitions Under Weakening Inversions. Journal of Advances in Modeling Earth Systems, 2017, 9, 2385-2412.	1.3	27
16	Assessing the Resolution Adaptability of the Zhangâ€McFarlane Cumulus Parameterization With Spatial and Temporal Averaging. Journal of Advances in Modeling Earth Systems, 2017, 9, 2753-2770.	1.3	11
17	A multiscale modeling framework model (superparameterized CAM5) with a higherâ€order turbulence closure: Model description and lowâ€cloud simulations. Journal of Advances in Modeling Earth Systems, 2015, 7, 484-509.	1.3	39
18	Modifications to <scp>WRF</scp>'s dynamical core to improve the treatment of moisture for largeâ€eddy simulations. Journal of Advances in Modeling Earth Systems, 2015, 7, 1627-1642.	1.3	8

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19	Resolutionâ€dependent behavior of subgridâ€scale vertical transport in the Z hangâ€•M c F arlane convection parameterization. Journal of Advances in Modeling Earth Systems, 2015, 7, 537-550.	1.3	8
20	Impact of resolution on simulation of closed mesoscale cellular convection identified by dynamically guided watershed segmentation. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,674.	1.2	4
21	Improving subtropical boundary layer cloudiness in the 2011 NCEP GFS. Geoscientific Model Development, 2014, 7, 2107-2120.	1.3	2
22	Diagnosis of the marine low cloud simulation in the NCAR community earth system model (CESM) and the NCEP global forecast system (GFS)-modular ocean model v4 (MOM4) coupled model. Climate Dynamics, 2014, 43, 737-752.	1.7	11
23	Impact of subgridâ€scale radiative heating variability on the stratocumulusâ€toâ€trade cumulus transition in climate models. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4192-4203.	1.2	9
24	The Separate Physics and Dynamics Experiment (SPADE) framework for determining resolution awareness: A case study of microphysics. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9258-9276.	1.2	13
25	Sensitivity of Global Tropical Climate to Land Surface Processes: Mean State and Interannual Variability. Journal of Climate, 2013, 26, 1818-1837.	1.2	9
26	On the Connection between Continental-Scale Land Surface Processes and the Tropical Climate in a Coupled Oceanâ€“Atmosphereâ€“Land System. Journal of Climate, 2013, 26, 9006-9025.	1.2	9
27	Transitions of cloudâ€topped marine boundary layers characterized by AIRS, MODIS, and a large eddy simulation model. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8598-8611.	1.2	9
28	A treatment for the stratocumulus-to-cumulus transition in GCMs. Climate Dynamics, 2012, 39, 3075-3089.	1.7	7
29	Impact of land surface processes on the South American warm season climate. Climate Dynamics, 2011, 37, 187-203.	1.7	25
30	Buoyancy reversal, decoupling and the transition from stratocumulus to shallow cumulus topped marine boundary layers. Climate Dynamics, 2011, 37, 971-984.	1.7	31
31	Simulation of low clouds in the Southeast Pacific by the NCEP GFS: sensitivity to vertical mixing. Atmospheric Chemistry and Physics, 2010, 10, 12261-12272.	1.9	28
32	Seasonal Cycleâ€“El NiÃ±o Relationship: Validation of Hypotheses. Journals of the Atmospheric Sciences, 2009, 66, 1633-1653.	0.6	15
33	Correlative Evolutions of ENSO and the Seasonal Cycle in the Tropical Pacific Ocean. Journals of the Atmospheric Sciences, 2009, 66, 1041-1049.	0.6	5