

Hsi-Yen

List of Publications by Year in descending order

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Version: 2024-02-01

43
papers

1,747
citations

304368

22
h-index

288905

40
g-index

43
all docs

43
docs citations

43
times ranked

2216
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Vertical structure and physical processes of the Madden-Julian oscillation: Exploring key model physics in climate simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4718-4748. | 1.2 | 332 |
| 2 | Characterizing and understanding radiation budget biases in CMIP3/CMIP5 GCMs, contemporary GCM, and reanalysis. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 8166-8184. | 1.2 | 127 |
| 3 | On the Correspondence between Mean Forecast Errors and Climate Errors in CMIP5 Models. <i>Journal of Climate</i> , 2014, 27, 1781-1798. | 1.2 | 110 |
| 4 | Improved Diurnal Cycle of Precipitation in E3SM With a Revised Convective Triggering Function. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2290-2310. | 1.3 | 86 |
| 5 | On the Correspondence between Short- and Long-Time-Scale Systematic Errors in CAM4/CAM5 for the Year of Tropical Convection. <i>Journal of Climate</i> , 2012, 25, 7937-7955. | 1.2 | 79 |
| 6 | Vertical structure and physical processes of the Madden-Julian oscillation: Linking hindcast fidelity to simulated diabatic heating and moistening. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4690-4717. | 1.2 | 63 |
| 7 | How does increasing horizontal resolution in a global climate model improve the simulation of aerosol-cloud interactions?. <i>Geophysical Research Letters</i> , 2015, 42, 5058-5065. | 1.5 | 62 |
| 8 | CAUSES: Attribution of Surface Radiation Biases in NWP and Climate Models near the U.S. Southern Great Plains. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 3612-3644. | 1.2 | 62 |
| 9 | CAUSES: On the Role of Surface Energy Budget Errors to the Warm Surface Air Temperature Error Over the Central United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 2888-2909. | 1.2 | 60 |
| 10 | Evaluation of Clouds in Version 1 of the E3SM Atmosphere Model With Satellite Simulators. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 1253-1268. | 1.3 | 55 |
| 11 | An improved hindcast approach for evaluation and diagnosis of physical processes in global climate models. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 1810-1827. | 1.3 | 54 |
| 12 | Introduction to CAUSES: Description of Weather and Climate Models and Their Near-Surface Temperature Errors in 5-Day Hindcasts Near the Southern Great Plains. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 2655-2683. | 1.2 | 53 |
| 13 | Parametric Sensitivity and Uncertainty Quantification in the Version 1 of E3SM Atmosphere Model Based on Short Perturbed Parameter Ensemble Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 13,046. | 1.2 | 53 |
| 14 | The parametric sensitivity of CAM5's MJO. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 1424-1444. | 1.2 | 51 |
| 15 | Metrics and Diagnostics for Precipitation-Related Processes in Climate Model Short-Range Hindcasts. <i>Journal of Climate</i> , 2013, 26, 1516-1534. | 1.2 | 45 |
| 16 | Disproportionate control on aerosol burden by light rain. <i>Nature Geoscience</i> , 2021, 14, 72-76. | 5.4 | 39 |
| 17 | CAUSES: Diagnosis of the Summertime Warm Bias in CMIP5 Climate Models at the ARM Southern Great Plains Site. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 2968-2992. | 1.2 | 33 |
| 18 | A Diagnostic Cloud Scheme to Improve Subtropical Low Clouds in NCAR Community Atmosphere Model (CAM5). <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 320-341. | 1.3 | 29 |

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|----|--|-----|-----------|
| 19 | Impacts of SST anomalies on the North Atlantic atmospheric circulation: a case study for the northern winter 1995/1996. <i>Climate Dynamics</i> , 2007, 29, 807-819. | 1.7 | 28 |
| 20 | Impact of land surface processes on the South American warm season climate. <i>Climate Dynamics</i> , 2011, 37, 187-203. | 1.7 | 25 |
| 21 | Using ARM Observations to Evaluate Climate Model Simulations of Land-Atmosphere Coupling on the U.S. Southern Great Plains. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,524. | 1.2 | 24 |
| 22 | Convection-Permitting Simulations With the E3SM Global Atmosphere Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002544. | 1.3 | 23 |
| 23 | Using regime analysis to identify the contribution of clouds to surface temperature errors in weather and climate models. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 3190-3206. | 1.0 | 22 |
| 24 | Assessment of marine boundary layer cloud simulations in the CAM with CLUBB and updated microphysics scheme based on ARM observations from the Azores. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 8472-8492. | 1.2 | 20 |
| 25 | Mechanisms for Precipitation Variability of the Eastern Brazil/SACZ Convective Margin. <i>Journal of Climate</i> , 2011, 24, 3445-3456. | 1.2 | 19 |
| 26 | Learning to Correct Climate Projection Biases. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002509. | 1.3 | 19 |
| 27 | The Summertime Precipitation Bias in E3SM Atmosphere Model Version 1 over the Central United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 8935-8952. | 1.2 | 14 |
| 28 | Toward Understanding the Simulated Phase Partitioning of Arctic Single-Layer Mixed-Phase Clouds in E3SM. <i>Earth and Space Science</i> , 2020, 7, e2020EA001125. | 1.1 | 14 |
| 29 | Evaluating the Bias of South China Sea Summer Monsoon Precipitation Associated with Fast Physical Processes Using a Climate Model Hindcast Approach. <i>Journal of Climate</i> , 2019, 32, 4491-4507. | 1.2 | 13 |
| 30 | Effects of coupling a stochastic convective parameterization with the Zhang-McFarlane scheme on precipitation simulation in the DOE E3SMv1.0 atmosphere model. <i>Geoscientific Model Development</i> , 2021, 14, 1575-1593. | 1.3 | 13 |
| 31 | Evaluation of an ice cloud parameterization based on a dynamical-microphysical lifetime concept using CloudSat observations and the ERA-Interim reanalysis. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 12 |
| 32 | A cloudy planetary boundary layer oscillation arising from the coupling of turbulence with precipitation in climate simulations. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 1973-1993. | 1.3 | 12 |
| 33 | Automatic tuning of the Community Atmospheric Model (CAM5) by using short-term hindcasts with an improved downhill simplex optimization method. <i>Geoscientific Model Development</i> , 2018, 11, 5189-5201. | 1.3 | 11 |
| 34 | The response of coastal stratocumulus clouds to agricultural irrigation in California. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 6044-6051. | 1.2 | 10 |
| 35 | Low-cloud characteristics over the tropical western Pacific from ARM observations and CAM5 simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 8953-8970. | 1.2 | 10 |
| 36 | Regional Moisture Budget and Land-Atmosphere Coupling Over the U.S. Southern Great Plains Inferred From the ARM Long-Term Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 10091-10108. | 1.2 | 10 |

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|----|--|-----|-----------|
| 37 | A Hindcast Approach to Diagnosing the Equatorial Pacific Cold Tongue SST Bias in CESM1. <i>Journal of Climate</i> , 2020, 33, 1437-1453. | 1.2 | 10 |
| 38 | Sensitivity of Global Tropical Climate to Land Surface Processes: Mean State and Interannual Variability. <i>Journal of Climate</i> , 2013, 26, 1818-1837. | 1.2 | 9 |
| 39 | On the Connection between Continental-Scale Land Surface Processes and the Tropical Climate in a Coupled Ocean-Atmosphere-Land System. <i>Journal of Climate</i> , 2013, 26, 9006-9025. | 1.2 | 9 |
| 40 | A multi-year short-range hindcast experiment with CESM1 for evaluating climate model moist processes from diurnal to interannual timescales. <i>Geoscientific Model Development</i> , 2021, 14, 73-90. | 1.3 | 9 |
| 41 | A treatment for the stratocumulus-to-cumulus transition in GCMs. <i>Climate Dynamics</i> , 2012, 39, 3075-3089. | 1.7 | 7 |
| 42 | Evaluation of the Causes of Wet-Season Dry Biases Over Amazonia in CAM5. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033859. | 1.2 | 6 |
| 43 | Superior Daily and Sub-Daily Precipitation Statistics for Intense and Long-Lived Storms in Global Storm-Resolving Models. <i>Geophysical Research Letters</i> , 2022, 49, . | 1.5 | 5 |