

# L Ruby Leung

## List of Publications by Year in descending order

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327  
papers

21,640  
citations

8159

76  
h-index

13727

129  
g-index

428  
all docs

428  
docs citations

428  
times ranked

16551  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrologic Implications of Dynamical and Statistical Approaches to Downscaling Climate Model Outputs. <i>Climatic Change</i> , 2004, 62, 189-216.	1.7	1,503
2	A review on regional convection-permitting climate modeling: Demonstrations, prospects, and challenges. <i>Reviews of Geophysics</i> , 2015, 53, 323-361.	9.0	907
3	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4245-4287.	1.3	692
4	High Resolution Model Intercomparison Project (HighResMIP v1.0) for CMIP6. <i>Geoscientific Model Development</i> , 2016, 9, 4185-4208.	1.3	643
5	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2089-2129.	1.3	404
6	Regional Climate Modeling: Progress, Challenges, and Prospects. <i>Journal of the Meteorological Society of Japan</i> , 2004, 82, 1599-1628.	0.7	391
7	Improving the representation of hydrologic processes in Earth System Models. <i>Water Resources Research</i> , 2015, 51, 5929-5956.	1.7	366
8	Mid-Century Ensemble Regional Climate Change Scenarios for the Western United States. <i>Climatic Change</i> , 2004, 62, 75-113.	1.7	332
9	Sensitivity studies on the impacts of Tibetan Plateau snowpack pollution on the Asian hydrological cycle and monsoon climate. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 1929-1948.	1.9	285
10	Microphysical effects determine macrophysical response for aerosol impacts on deep convective clouds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E4581-90.	3.3	274
11	Dominant role by vertical wind shear in regulating aerosol effects on deep convective clouds. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	265
12	The spatial distribution of mineral dust and its shortwave radiative forcing over North Africa: modeling sensitivities to dust emissions and aerosol size treatments. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 8821-8838.	1.9	265
13	Heavy pollution suppresses light rain in China: Observations and modeling. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	255
14	MIRAGE: Model description and evaluation of aerosols and trace gases. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	251
15	More frequent cloud-free sky and less surface solar radiation in China from 1955 to 2000. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	1.5	249
16	Atmospheric rivers induced heavy precipitation and flooding in the western U.S. simulated by the WRF regional climate model. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	248
17	Radiative impact of mineral dust on monsoon precipitation variability over West Africa. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 1879-1893.	1.9	222
18	Atmospheric River Tracking Method Intercomparison Project (ARTMIP): project goals and experimental design. <i>Geoscientific Model Development</i> , 2018, 11, 2455-2474.	1.3	221

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19	Ocean barrier layers'™ effect on tropical cyclone intensification. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14343-14347.	3.3	202
20	North American extreme temperature events and related large scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. Climate Dynamics, 2016, 46, 1151-1184.	1.7	199
21	More frequent intense and long-lived storms dominate the springtime trend in central US rainfall. Nature Communications, 2016, 7, 13429.	5.8	191
22	A Physically Based Runoff Routing Model for Land Surface and Earth System Models. Journal of Hydrometeorology, 2013, 14, 808-828.	0.7	187
23	Climate change projections of the North American Regional Climate Change Assessment Program (NARCCAP). Climatic Change, 2013, 120, 965-975.	1.7	184
24	Variability of solar radiation under cloud-free skies in China: The role of aerosols. Geophysical Research Letters, 2007, 34, .	1.5	172
25	Responses and impacts of atmospheric rivers to climate change. Nature Reviews Earth & Environment, 2020, 1, 143-157.	12.2	171
26	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2377-2411.	1.3	168
27	Contribution of urbanization to the increase of extreme heat events in an urban agglomeration in east China. Geophysical Research Letters, 2017, 44, 6940-6950.	1.5	161
28	Dynamical and thermodynamical modulations on future changes of landfalling atmospheric rivers over western North America. Geophysical Research Letters, 2015, 42, 7179-7186.	1.5	153
29	Potential regional climate change and implications to U.S. air quality. Geophysical Research Letters, 2005, 32, .	1.5	152
30	Aerosol impacts on clouds and precipitation in eastern China: Results from bin and bulk microphysics. Journal of Geophysical Research, 2012, 117, .	3.3	152
31	Structure and Evolution of Mesoscale Convective Systems: Sensitivity to Cloud Microphysics in Convection-Permitting Simulations Over the United States. Journal of Advances in Modeling Earth Systems, 2018, 10, 1470-1494.	1.3	145
32	Substantial contribution of anthropogenic air pollution to catastrophic floods in Southwest China. Geophysical Research Letters, 2015, 42, 6066-6075.	1.5	144
33	Increase in the intensity of postmonsoon Bay of Bengal tropical cyclones. Geophysical Research Letters, 2014, 41, 3594-3601.	1.5	138
34	Modeling the transport and radiative forcing of Taklimakan dust over the Tibetan Plateau: A case study in the summer of 2006. Journal of Geophysical Research D: Atmospheres, 2013, 118, 797-812.	1.2	136
35	The Sensitivity of Precipitation and Snowpack Simulations to Model Resolution via Nesting in Regions of Complex Terrain. Journal of Hydrometeorology, 2003, 4, 1025-1043.	0.7	133
36	Urbanization-induced urban heat island and aerosol effects on climate extremes in the Yangtze River Delta region of China. Atmospheric Chemistry and Physics, 2017, 17, 5439-5457.	1.9	133

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37	Hydroclimate of the Western United States Based on Observations and Regional Climate Simulation of 1981–2000. Part I: Seasonal Statistics. <i>Journal of Climate</i> , 2003, 16, 1892-1911.	1.2	130
38	Uncertainty in modeling dust mass balance and radiative forcing from size parameterization. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 10733-10753.	1.9	128
39	21st century United States emissions mitigation could increase water stress more than the climate change it is mitigating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10635-10640.	3.3	128
40	A projection of changes in landfalling atmospheric river frequency and extreme precipitation over western North America from the Large Ensemble CESM simulations. <i>Geophysical Research Letters</i> , 2016, 43, 1357-1363.	1.5	128
41	Variation of the radiative properties during black carbon aging: theoretical and experimental intercomparison. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 11967-11980.	1.9	127
42	Effects of soot-induced snow albedo change on snowpack and hydrological cycle in western United States based on Weather Research and Forecasting chemistry and regional climate simulations. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	126
43	The Atmospheric River Tracking Method Intercomparison Project (ARTMIP): Quantifying Uncertainties in Atmospheric River Climatology. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 13777-13802.	1.2	126
44	A new global river network database for macroscale hydrologic modeling. <i>Water Resources Research</i> , 2012, 48, .	1.7	122
45	Climate change impacts on wind power generation. <i>Nature Reviews Earth &amp; Environment</i> , 2020, 1, 627-643.	12.2	120
46	Investigating the nexus of climate, energy, water, and land at decision-relevant scales: the Platform for Regional Integrated Modeling and Analysis (PRIMA). <i>Climatic Change</i> , 2015, 129, 573-588.	1.7	119
47	Research Needs and Directions of Regional Climate Modeling Using WRF and CCSM. <i>Bulletin of the American Meteorological Society</i> , 2006, 87, 1747-1752.	1.7	118
48	Regional climate model projections for the State of Washington. <i>Climatic Change</i> , 2010, 102, 51-75.	1.7	118
49	A subgrid parameterization of orographic precipitation. <i>Theoretical and Applied Climatology</i> , 1995, 52, 95-118.	1.3	116
50	Modeling the Effects of Groundwater-Fed Irrigation on Terrestrial Hydrology over the Conterminous United States. <i>Journal of Hydrometeorology</i> , 2014, 15, 957-972.	0.7	116
51	Simulating black carbon and dust and their radiative forcing in seasonal snow: a case study over North China with field campaign measurements. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 11475-11491.	1.9	115
52	Uncertainty quantification and parameter tuning in the CAM5 Zhang–McFarlane convection scheme and impact of improved convection on the global circulation and climate. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 395-415.	1.2	112
53	Regional modeling of dust mass balance and radiative forcing over East Asia using WRF-Chem. <i>Aeolian Research</i> , 2014, 15, 15-30.	1.1	112
54	The DOE E3SM Coupled Model Version 1: Description and Results at High Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4095-4146.	1.3	112

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55	Evaluating runoff simulations from the Community Land Model 4.0 using observations from flux towers and a mountainous watershed. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	111
56	On an improved sub-regional water resources management representation for integration into earth system models. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 3605-3622.	1.9	109
57	Modeling the effects of irrigation on land surface fluxes and states over the conterminous United States: Sensitivity to input data and model parameters. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9789-9803.	1.2	103
58	Aerosol impacts on California winter clouds and precipitation during CalWater 2011: local pollution versus long-range transported dust. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 81-101.	1.9	101
59	Dust dominates high-altitude snow darkening and melt over high-mountain Asia. <i>Nature Climate Change</i> , 2020, 10, 1045-1051.	8.1	101
60	Black carbon radiative forcing over the Tibetan Plateau. <i>Geophysical Research Letters</i> , 2014, 41, 7806-7813.	1.5	100
61	Potential aerosol indirect effects on atmospheric circulation and radiative forcing through deep convection. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	99
62	Pacific Northwest Climate Sensitivity Simulated by a Regional Climate Model Driven by a GCM. Part II: 2A—CO <sub>2</sub> Simulations. <i>Journal of Climate</i> , 1999, 12, 2031-2053.	1.2	98
63	Sensitivity of surface flux simulations to hydrologic parameters based on an uncertainty quantification framework applied to the Community Land Model. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	97
64	Increasing Magnitude of Hurricane Rapid Intensification in the Central and Eastern Tropical Atlantic. <i>Geophysical Research Letters</i> , 2018, 45, 4238-4247.	1.5	95
65	Substantial ozone enhancement over the North China Plain from increased biogenic emissions due to heat waves and land cover in summer 2017. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 12195-12207.	1.9	95
66	Urbanization Impact on Regional Climate and Extreme Weather: Current Understanding, Uncertainties, and Future Research Directions. <i>Advances in Atmospheric Sciences</i> , 2022, 39, 819-860.	1.9	94
67	Sensitivity of U.S. summer precipitation to model resolution and convective parameterizations across gray zone resolutions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 2714-2733.	1.2	93
68	Parameterizing Subgrid Orographic Precipitation and Surface Cover in Climate Models. <i>Monthly Weather Review</i> , 1998, 126, 3271-3291.	0.5	92
69	A case study of urbanization impact on summer precipitation in the Greater Beijing Metropolitan Area: Urban heat island versus aerosol effects. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 10,903-10,914.	1.2	92
70	Spatiotemporal Characteristics and Large-Scale Environments of Mesoscale Convective Systems East of the Rocky Mountains. <i>Journal of Climate</i> , 2019, 32, 7303-7328.	1.2	91
71	The Ongoing Need for High-Resolution Regional Climate Models: Process Understanding and Stakeholder Information. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, E664-E683.	1.7	90
72	Pacific Northwest Climate Sensitivity Simulated by a Regional Climate Model Driven by a GCM. Part I: Control Simulations. <i>Journal of Climate</i> , 1999, 12, 2010-2030.	1.2	89

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73	A modeling study of irrigation effects on global surface water and groundwater resources under a changing climate. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 1285-1304.	1.3	88
74	A Global High-Resolution Mesoscale Convective System Database Using Satellite-Derived Cloud Tops, Surface Precipitation, and Tracking. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034202.	1.2	88
75	WRF-Chem simulations of aerosols and anthropogenic aerosol radiative forcing in East Asia. <i>Atmospheric Environment</i> , 2014, 92, 250-266.	1.9	86
76	POTENTIAL CLIMATE CHANGE IMPACTS ON MOUNTAIN WATERSHEDS IN THE PACIFIC NORTHWEST. <i>Journal of the American Water Resources Association</i> , 1999, 35, 1463-1471.	1.0	85
77	Impact of the Desert dust on the summer monsoon system over Southwestern North America. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 3717-3731.	1.9	83
78	Evaluating Global Streamflow Simulations by a Physically Based Routing Model Coupled with the Community Land Model. <i>Journal of Hydrometeorology</i> , 2015, 16, 948-971.	0.7	81
79	Sources of errors in the simulation of south Asian summer monsoon in the CMIP5 GCMs. <i>Climate Dynamics</i> , 2017, 49, 193-223.	1.7	80
80	Dam Construction in Lancang-Mekong River Basin Could Mitigate Future Flood Risk From Warming-Induced Intensified Rainfall. <i>Geophysical Research Letters</i> , 2017, 44, 10,378.	1.5	79
81	Development of high resolution land surface parameters for the Community Land Model. <i>Geoscientific Model Development</i> , 2012, 5, 1341-1362.	1.3	78
82	Uncertainties in Projecting Future Changes in Atmospheric Rivers and Their Impacts on Heavy Precipitation over Europe. <i>Journal of Climate</i> , 2016, 29, 6711-6726.	1.2	75
83	Stochastic parameterization for light absorption by internally mixed BC/dust in snow grains for application to climate models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 7616-7632.	1.2	74
84	Hydroclimate of the Western United States Based on Observations and Regional Climate Simulation of 1981-2000. Part II: Mesoscale ENSO Anomalies. <i>Journal of Climate</i> , 2003, 16, 1912-1928.	1.2	72
85	Effects of cloud condensation nuclei and ice nucleating particles on precipitation processes and supercooled liquid in mixed-phase orographic clouds. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1017-1035.	1.9	71
86	Contribution of land-atmosphere coupling to summer climate variability over the contiguous United States. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	70
87	Significant impacts of irrigation water sources and methods on modeling irrigation effects in the ACME and Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 1665-1683.	1.3	70
88	Aerosols in the E3SM Version 1: New Developments and Their Impacts on Radiative Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001851.	1.3	68
89	Climate-soil-vegetation control on groundwater table dynamics and its feedbacks in a climate model. <i>Climate Dynamics</i> , 2011, 36, 57-81.	1.7	67
90	Water Balance in the Amazon Basin from a Land Surface Model Ensemble. <i>Journal of Hydrometeorology</i> , 2014, 15, 2586-2614.	0.7	66

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91	Resolution and Dynamical Core Dependence of Atmospheric River Frequency in Global Model Simulations. <i>Journal of Climate</i> , 2015, 28, 2764-2776.	1.2	66
92	Effects of aerosols on the dynamics and microphysics of squall lines simulated by spectral bin and bulk parameterization schemes. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	65
93	Characterization of speciated aerosol direct radiative forcing over California. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 2372-2388.	1.2	65
94	The DOE E3SM v1.1 Biogeochemistry Configuration: Description and Simulated Ecosystemâ€Climate Responses to Historical Changes in Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001766.	1.3	65
95	Robust spring drying in the southwestern U.S. and seasonal migration of wet/dry patterns in a warmer climate. <i>Geophysical Research Letters</i> , 2014, 41, 1745-1751.	1.5	64
96	Dynamic Potential Intensity: An improved representation of the ocean's impact on tropical cyclones. <i>Geophysical Research Letters</i> , 2015, 42, 6739-6746.	1.5	64
97	Contrasting Spring and Summer Large-Scale Environments Associated with Mesoscale Convective Systems over the U.S. Great Plains. <i>Journal of Climate</i> , 2019, 32, 6749-6767.	1.2	64
98	A longâ€term regional simulation and observations of the hydroclimate in China. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	63
99	Seasonally dependent responses of subtropical highs and tropical rainfall to anthropogenic warming. <i>Nature Climate Change</i> , 2018, 8, 787-792.	8.1	63
100	Trans-Pacific transport and evolution of aerosols: evaluation of quasi-global WRF-Chem simulation with multiple observations. <i>Geoscientific Model Development</i> , 2016, 9, 1725-1746.	1.3	62
101	North American extreme precipitation events and related large-scale meteorological patterns: a review of statistical methods, dynamics, modeling, and trends. <i>Climate Dynamics</i> , 2019, 53, 6835-6875.	1.7	61
102	One-way coupling of an integrated assessment model and a water resources model: evaluation and implications of future changes over the US Midwest. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 4555-4575.	1.9	61
103	Hydrological Drought in the Anthropocene: Impacts of Local Water Extraction and Reservoir Regulation in the U.S.. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,313.	1.2	58
104	Nextâ€Generation Intensityâ€Durationâ€Frequency Curves for Hydrologic Design in Snowâ€Dominated Environments. <i>Water Resources Research</i> , 2018, 54, 1093-1108.	1.7	58
105	Modeling the Impacts of Urbanization on Summer Thermal Comfort: The Role of Urban Land Use and Anthropogenic Heat. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 6681-6697.	1.2	58
106	Application of a subgrid orographic precipitation/surface hydrology scheme to a mountain watershed. <i>Journal of Geophysical Research</i> , 1996, 101, 12803-12817.	3.3	56
107	Uncertainty Analysis of Runoff Simulations and Parameter Identifiability in the Community Land Model: Evidence from MOPEX Basins. <i>Journal of Hydrometeorology</i> , 2013, 14, 1754-1772.	0.7	55
108	Impacts of compound extreme weather events on ozone in the present and future. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 9861-9877.	1.9	55

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109	Local finite-amplitude wave activity as an objective diagnostic of midlatitude extreme weather. <i>Geophysical Research Letters</i> , 2015, 42, 10,952.	1.5	54
110	Environments of Long-Lived Mesoscale Convective Systems Over the Central United States in Convection Permitting Climate Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 13,288.	1.2	54
111	The Role of Climate Covariability on Crop Yields in the Conterminous United States. <i>Scientific Reports</i> , 2016, 6, 33160.	1.6	53
112	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
113	Seesaw haze pollution in North China modulated by the sub-seasonal variability of atmospheric circulation. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 565-576.	1.9	53
114	Trends in surface equivalent potential temperature: A more comprehensive metric for global warming and weather extremes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	53
115	Physics-Dynamics Coupling in Weather, Climate, and Earth System Models: Challenges and Recent Progress. <i>Monthly Weather Review</i> , 2018, 146, 3505-3544.	0.5	52
116	Exploring a Multiresolution Approach Using AMIP Simulations. <i>Journal of Climate</i> , 2015, 28, 5549-5574.	1.2	51
117	Representation of Plant Hydraulics in the Noah-MP Land Surface Model: Model Development and Multiscale Evaluation. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2020MS002214.	1.3	50
118	Implementing and Evaluating Variable Soil Thickness in the Community Land Model, Version 4.5 (CLM4.5). <i>Journal of Climate</i> , 2016, 29, 3441-3461.	1.2	49
119	Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. <i>Journal of Advances in Modeling Earth Systems</i> , 2014, 6, 658-679.	1.3	48
120	Modeling surface water dynamics in the Amazon Basin using MOSART-Inundation v1.0: impacts of geomorphological parameters and river flow representation. <i>Geoscientific Model Development</i> , 2017, 10, 1233-1259.	1.3	48
121	Observed Scaling in Clouds and Precipitation and Scale Incognizance in Regional to Global Atmospheric Models. <i>Journal of Climate</i> , 2013, 26, 9313-9333.	1.2	46
122	Understanding Flood Seasonality and Its Temporal Shifts within the Contiguous United States. <i>Journal of Hydrometeorology</i> , 2017, 18, 1997-2009.	0.7	45
123	A Hierarchical Evaluation of Regional Climate Simulations. <i>Eos</i> , 2013, 94, 297-298.	0.1	44
124	Predictability of Extreme Precipitation in Western U.S. Watersheds Based on Atmospheric River Occurrence, Intensity, and Duration. <i>Geophysical Research Letters</i> , 2018, 45, 11,693.	1.5	44
125	Impact of Atmospheric Rivers on Surface Hydrological Processes in Western U.S. Watersheds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 8896-8916.	1.2	44
126	Persistent cold air outbreaks over North America in a warming climate. <i>Environmental Research Letters</i> , 2015, 10, 044001.	2.2	43



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127	An Introduction to the E3SM Special Collection: Goals, Science Drivers, Development, and Analysis. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001821.	1.3	43
128	Toward the Dynamical Convergence on the Jet Stream in Aquaplanet AGCMs. <i>Journal of Climate</i> , 2015, 28, 6763-6782.	1.2	42
129	Future Changes in Seasonality of the North Pacific and North Atlantic Subtropical Highs. <i>Geophysical Research Letters</i> , 2018, 45, 11,959.	1.5	42
130	Error Characteristics of Two Grid Refinement Approaches in Aquaplanet Simulations: MPAS-A and WRF. <i>Monthly Weather Review</i> , 2013, 141, 3022-3036.	0.5	41
131	Pronounced Impact of Salinity on Rapidly Intensifying Tropical Cyclones. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, E1497-E1511.	1.7	41
132	Evaluation of Mesoscale Convective Systems in Climate Simulations: Methodological Development and Results from MPAS-CAM over the United States. <i>Journal of Climate</i> , 2021, 34, 2611-2633.	1.2	40
133	Roles of SST versus Internal Atmospheric Variability in Winter Extreme Precipitation Variability along the U.S. West Coast. <i>Journal of Climate</i> , 2018, 31, 8039-8058.	1.2	39
134	Modeling the contributions of Northern Hemisphere dust sources to dust outflow from East Asia. <i>Atmospheric Environment</i> , 2019, 202, 234-243.	1.9	39
135	Regional Snow Parameters Estimation for Large-Domain Hydrological Applications in the Western United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5296-5313.	1.2	38
136	Links between flood frequency and annual water balance behaviors: A basis for similarity and regionalization. <i>Water Resources Research</i> , 2014, 50, 937-953.	1.7	37
137	Urbanization Effect on Winter Haze in the Yangtze River Delta Region of China. <i>Geophysical Research Letters</i> , 2018, 45, 6710-6718.	1.5	37
138	The Dependence of ITCZ Structure on Model Resolution and Dynamical Core in Aquaplanet Simulations. <i>Journal of Climate</i> , 2014, 27, 2375-2385.	1.2	36
139	Cyclone-cyclone interactions through the ocean pathway. <i>Geophysical Research Letters</i> , 2014, 41, 6855-6862.	1.5	36
140	A parameterization of sub-grid topographical effects on solar radiation in the E3SM Land Model (version 1.0): implementation and evaluation over the Tibetan Plateau. <i>Geoscientific Model Development</i> , 2021, 14, 6273-6289.	1.3	36
141	Atmospheric Moisture Budget and Spatial Resolution Dependence of Precipitation Extremes in Aquaplanet Simulations. <i>Journal of Climate</i> , 2014, 27, 3565-3581.	1.2	35
142	Probable Maximum Precipitation in the U.S. Pacific Northwest in a Changing Climate. <i>Water Resources Research</i> , 2017, 53, 9600-9622.	1.7	35
143	A New Global Storage-Depth Data Set for Modeling Reservoirs in Land Surface and Earth System Models. <i>Water Resources Research</i> , 2018, 54, 10,372.	1.7	35
144	Abrupt emissions reductions during COVID-19 contributed to record summer rainfall in China. <i>Nature Communications</i> , 2022, 13, 959.	5.8	35

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145	Increases in Future AR Count and Size: Overview of the ARTMIP Tier 2 CMIP5/6 Experiment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	35
146	Investigation of aerosol indirect effects using a cumulus microphysics parameterization in a regional climate model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 906-926.	1.2	34
147	Dominating Controls for Wetter South Asian Summer Monsoon in the Twenty-First Century. <i>Journal of Climate</i> , 2015, 28, 3400-3419.	1.2	34
148	Nonlinear Filtering Effects of Reservoirs on Flood Frequency Curves at the Regional Scale. <i>Water Resources Research</i> , 2017, 53, 8277-8292.	1.7	34
149	An Overview of ARTMIP's Tier 2 Reanalysis Intercomparison: Uncertainty in the Detection of Atmospheric Rivers and Their Associated Precipitation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	34
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