Isla R Simpson

List of Publications by Year
in descending order

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80	5,708	94433 37	82547 72
papers	citations	h-index	g-index

87	87	87	5113
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Response of the Quasiâ€Biennial Oscillation to a warming climate in global climate models. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1490-1518.	2.7	36
2	Teleconnections of the Quasiâ€Biennial Oscillation in a multiâ€model ensemble of QBOâ€resolving models. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1568-1592.	2.7	23
3	Specified dynamics scheme impacts on wave-mean flow dynamics, convection, and tracer transport in CESM2 (WACCM6). Atmospheric Chemistry and Physics, 2022, 22, 197-214.	4.9	13
4	Uncertainty in the Winter Tropospheric Response to Arctic Sea Ice Loss: The Role of Stratospheric Polar Vortex Internal Variability. Journal of Climate, 2022, 35, 3109-3130.	3.2	12
5	Record Low North American Monsoon Rainfall in 2020 Reignites Drought over the American Southwest. Bulletin of the American Meteorological Society, 2022, 103, S26-S32.	3.3	6
6	The impact of the QBO on the region of the tropical tropopause in QBOi models: Presentâ€day simulations. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1945-1964.	2.7	3
7	Improvements in Wintertime Surface Temperature Variability in the Community Earth System Model Version 2 (CESM2) Related to the Representation of Snow Density. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	1
8	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
9	Pervasive alterations to snow-dominated ecosystem functions under climate change. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	13
10	Land Surface Air Temperature Variations Across the Globe Updated to 2019: The CRUTEM5 Data Set. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2019JD032352.	3.3	78
11	An Updated Assessment of Nearâ€Surface Temperature Change From 1850: The HadCRUT5 Data Set. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2019JD032361.	3.3	299
12	The Influence of the Stratosphere on the Tropical Troposphere. Journal of the Meteorological Society of Japan, 2021, 99, 803-845.	1.8	31
13	Emergent Constraints on the Large-Scale Atmospheric Circulation and Regional Hydroclimate: Do They Still Work in CMIP6 and How Much Can They Actually Constrain the Future?. Journal of Climate, 2021, 34, 6355-6377.	3.2	14
14	Robust winter warming over Eurasia under stratospheric sulfate geoengineering â€“ the role of stratospheric dynamics. Atmospheric Chemistry and Physics, 2021, 21, 6985-6997.	4.9	28
15	Hot extremes have become drier in the United States Southwest. Nature Climate Change, 2021, 11, 598-604.	18.8	40
16	Ubiquity of human-induced changes in climate variability. Earth System Dynamics, 2021, 12, 1393-1411.	7.1	131
17	A Minimal Model to Diagnose the Contribution of the Stratosphere to Tropospheric Forecast Skill. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	3.3	3
18	The Role of the Stratosphere in Subseasonal to Seasonal Prediction: 1. Predictability of the Stratosphere. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030920.	3.3	78

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19	The Role of the Stratosphere in Subseasonal to Seasonal Prediction: 2. Predictability Arising From Stratosphereâ€Troposphere Coupling. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030923.	3.3	119
20	An Evaluation of the Largeâ€Scale Atmospheric Circulation and Its Variability in CESM2 and Other CMIP Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032835.	3.3	55
21	Reduced Poleward Transport Due to Stratospheric Heating Under Stratospheric Aerosols Geoengineering. Geophysical Research Letters, 2020, 47, e2020GL089470.	4.0	32
22	CO₂ Increase Experiments Using the CESM: Relationship to Climate Sensitivity and Comparison of CESM1 to CESM2. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002120.	3.8	25
23	The Lack of QBOâ€MJO Connection in CMIP6 Models. Geophysical Research Letters, 2020, 47, e2020GL087295.	4.0	34
24	Insights from Earth system model initial-condition large ensembles and future prospects. Nature Climate Change, 2020, 10, 277-286.	18.8	436
25	The Change in the ENSO Teleconnection under a Low Global Warming Scenario and the Uncertainty due to Internal Variability. Journal of Climate, 2020, 33, 4871-4889.	3.2	12
26	Uncertainty in the Response of Sudden Stratospheric Warmings and Stratosphereâ€Troposphere Coupling to Quadrupled CO₂ Concentrations in CMIP6 Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032345.	3.3	50
27	Progress in Simulating the Quasiâ€Biennial Oscillation in CMIP Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032362.	3.3	59
28	Tropical Widening: From Global Variations to Regional Impacts. Bulletin of the American Meteorological Society, 2020, 101, E897-E904.	3.3	31
29	A Regime Perspective on the North Atlantic Eddy-Driven Jet Response to Sudden Stratospheric Warmings. Journal of Climate, 2020, 33, 3901-3917.	3.2	16
30	Mechanisms of Winter Precipitation Variability in the Europeanâ€“Mediterranean Region Associated with the North Atlantic Oscillation. Journal of Climate, 2020, 33, 7179-7196.	3.2	26
31	Isolating the Evolving Contributions of Anthropogenic Aerosols and Greenhouse Gases: A New CESM1 Large Ensemble Community Resource. Journal of Climate, 2020, 33, 7835-7858.	3.2	93
32	Climate engineering to mitigate the projected 21st-century terrestrial drying of the Americas: a direct comparison of carbon capture and sulfur injection. Earth System Dynamics, 2020, 11, 673-695.	7.1	7
33	Model Biases in the Simulation of the Springtime North Pacific ENSO Teleconnection. Journal of Climate, 2020, 33, 9985-10002.	3.2	9
34	Decadal predictability of late winter precipitation in western Europe through an oceanâ€“jet stream connection. Nature Geoscience, 2019, 12, 613-619.	12.9	48
35	Soil Moisture and Other Hydrological Changes in a Stratospheric Aerosol Geoengineering Large Ensemble. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12773-12793.	3.3	38
36	Intermodel Spread in the Northern Hemisphere Stratospheric Polar Vortex Response to Climate Change in the CMIP5 Models. Geophysical Research Letters, 2019, 46, 13290-13298.	4.0	11

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37	Nonlinear Response of Extreme Precipitation to Warming in CESM1. Geophysical Research Letters, 2019, 46, 10551-10560.	4.0	35
38	The Whole Atmosphere Community Climate Model Version 6 (WACCM6). Journal of Geophysical Research D: Atmospheres, 2019, 124, 12380-12403.	3.3	261
39	Predictability of Northern Hemisphere Final Stratospheric Warmings and Their Surface Impacts. Geophysical Research Letters, 2019, 46, 10578-10588.	4.0	41
40	Climate Variability and Change of Mediterranean-Type Climates. Journal of Climate, 2019, 32, 2887-2915.	3.2	132
41	Comparing Surface and Stratospheric Impacts of Geoengineering With Different SO₂ Injection Strategies. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7900-7918.	3.3	56
42	The Single Column Atmosphere Model Version 6 (SCAM6): Not a Scam but a Tool for Model Evaluation and Development. Journal of Advances in Modeling Earth Systems, 2019, 11, 1381-1401.	3.8	36
43	The Regional Hydroclimate Response to Stratospheric Sulfate Geoengineering and the Role of Stratospheric Heating. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12587-12616.	3.3	73
44	Local and Nonlocal Land Surface Influence in European Heatwave Initial Condition Ensembles. Geophysical Research Letters, 2019, 46, 14082-14092.	4.0	17
45	Stratospheric Sulfate Aerosol Geoengineering Could Alter the Highâ€Latitude Seasonal Cycle. Geophysical Research Letters, 2019, 46, 14153-14163.	4.0	40
46	Recent Tropical Expansion: Natural Variability or Forced Response?. Journal of Climate, 2019, 32, 1551-1571.	3.2	87
47	Taking climate model evaluation to the next level. Nature Climate Change, 2019, 9, 102-110.	18.8	407
48	Sub-seasonal Predictability and the Stratosphere. , 2019, , 223-241.		41
49	How Well Do We Know ENSOâ€™s Climate Impacts over North America, and How Do We Evaluate Models Accordingly?. Journal of Climate, 2018, 31, 4991-5014.	3.2	83
50	Why Do Modeled and Observed Surface Wind Stress Climatologies Differ in the Trade Wind Regions?. Journal of Climate, 2018, 31, 491-513.	3.2	11
51	The TropD software package (v1): standardized methods for calculating tropical-width diagnostics. Geoscientific Model Development, 2018, 11, 4339-4357.	3.6	42
52	CESM1(WACCM) Stratospheric Aerosol Geoengineering Large Ensemble Project. Bulletin of the American Meteorological Society, 2018, 99, 2361-2371.	3.3	129
53	Stratospheric Response in the First Geoengineering Simulation Meeting Multiple Surface Climate Objectives. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5762-5782.	3.3	17
54	Persistent polar ocean warming in a strategically geoengineered climate. Nature Geoscience, 2018, 11, 910-914.	12.9	29

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55	A stratospheric pathway linking a colder Siberia to Barents-Kara Sea sea ice loss. Science Advances, 2018, 4, eaat6025.	10.3	165
56	Modeled and Observed Multidecadal Variability in the North Atlantic Jet Stream and Its Connection to Sea Surface Temperatures. Journal of Climate, 2018, 31, 8313-8338.	3.2	47
57	Revisiting the Relationship among Metrics of Tropical Expansion. Journal of Climate, 2018, 31, 7565-7581.	3.2	61
58	The Downward Influence of Uncertainty in the Northern Hemisphere Stratospheric Polar Vortex Response to Climate Change. Journal of Climate, 2018, 31, 6371-6391.	3.2	35
59	Attributing the U.S. Southwest's Recent Shift Into Drier Conditions. Geophysical Research Letters, 2018, 45, 6251-6261.	4.0	82
60	The Northern Hemisphere Extratropical Atmospheric Circulation Response to ENSO: How Well Do We Know It and How Do We Evaluate Models Accordingly?. Journal of Climate, 2017, 30, 5059-5082.	3.2	180
61	Seasonal Sensitivity of the Northern Hemisphere Jet Streams to Arctic Temperatures on Subseasonal Time Scales. Journal of Climate, 2017, 30, 10117-10137.	3.2	25
62	Revisiting the relationship between jet position, forced response, and annular mode variability in the southern midlatitudes. Geophysical Research Letters, 2016, 43, 2896-2903.	4.0	80
63	Western boundary currents and climate change. Journal of Geophysical Research: Oceans, 2016, 121, 7212-7214.	2.6	18
64	Storm track processes and the opposing influences of climate change. Nature Geoscience, 2016, 9, 656-664.	12.9	370
65	Quantifying Eddy Feedbacks and Forcings in the Tropospheric Response to Stratospheric Sudden Warmings. Journals of the Atmospheric Sciences, 2016, 73, 3641-3657.	1.7	27
66	Causes of change in Northern Hemisphere winter meridional winds and regional hydroclimate. Nature Climate Change, 2016, 6, 65-70.	18.8	108
67	Mediterranean Summer Climate and the Importance of Middle East Topography*. Journal of Climate, 2015, 28, 1977-1996.	3.2	23
68	A Diagnosis of the Seasonally and Longitudinally Varying Midlatitude Circulation Response to Global Warming*. Journals of the Atmospheric Sciences, 2014, 71, 2489-2515.	1.7	157
69	The Downward Influence of Stratospheric Sudden Warmings*. Journals of the Atmospheric Sciences, 2014, 71, 3856-3876.	1.7	185
70	Analysis of <scp>UK</scp> precipitation extremes derived from Met Office gridded data. International Journal of Climatology, 2014, 34, 2438-2449.	3.5	32
71	Causes of Increasing Aridification of the Mediterranean Region in Response to Rising Greenhouse Gases*. Journal of Climate, 2014, 27, 4655-4676.	3.2	137
72	Dynamical and Thermodynamical Causes of Large-Scale Changes in the Hydrological Cycle over North America in Response to Global Warming*. Journal of Climate, 2014, 27, 7921-7948.	3.2	124

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73	Southern Annular Mode Dynamics in Observations and Models. Part I: The Influence of Climatological Zonal Wind Biases in a Comprehensive GCM. Journal of Climate, 2013, 26, 3953-3967.	3.2	26
74	Southern Annular Mode Dynamics in Observations and Models. Part II: Eddy Feedbacks. Journal of Climate, 2013, 26, 5220-5241.	3.2	42
75	A Mechanism for the Effect of Tropospheric Jet Structure on the Annular Modeâ€“Like Response to Stratospheric Forcing. Journals of the Atmospheric Sciences, 2012, 69, 2152-2170.	1.7	22
76	Updated precipitation series for the UK derived from Met Office gridded data. International Journal of Climatology, 2012, 32, 2271-2282.	3.5	17
77	Stratospheric variability and tropospheric annular-mode timescales. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	50
78	Dynamics of the Lower Stratospheric Circulation Response to ENSO. Journals of the Atmospheric Sciences, 2011, 68, 2537-2556.	1.7	29
79	The Impact of the State of the Troposphere on the Response to Stratospheric Heating in a Simplified GCM. Journal of Climate, 2010, 23, 6166-6185.	3.2	22
80	The Role of Eddies in Driving the Tropospheric Response to Stratospheric Heating Perturbations. Journals of the Atmospheric Sciences, 2009, 66, 1347-1365.	1.7	179