Jadwiga H Richter

List of Publications by Year
in descending order

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74 papers	4,873 citations	126907 33 h-index	98798 67 g-index
84 all docs	84 docs citations	84 times ranked	4135 citing authors

#	Article	IF	Citations
1	The Mean Climate of the Community Atmosphere Model (CAM4) in Forced SST and Fully Coupled Experiments. Journal of Climate, 2013, 26, 5150-5168.	3.2	639
2	The Impact of Convection on ENSO: From a Delayed Oscillator to a Series of Events. Journal of Climate, 2008, 21, 5904-5924.	3.2	532
3	Toward a Physically Based Gravity Wave Source Parameterization in a General Circulation Model. Journals of the Atmospheric Sciences, 2010, 67, 136-156.	1.7	374
4	Effects of Convective Momentum Transport on the Atmospheric Circulation in the Community Atmosphere Model, Version 3. Journal of Climate, 2008, 21, 1487-1499.	3.2	265
5	The Whole Atmosphere Community Climate Model Version 6 (WACCM6). Journal of Geophysical Research D: Atmospheres, 2019, 124, 12380-12403.	3.3	261
6	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2377-2411.	3.8	168
7	Thermosphere extension of the Whole Atmosphere Community Climate Model. Journal of Geophysical Research, 2010, 115, .	3.3	144
8	CESM1(WACCM) Stratospheric Aerosol Geoengineering Large Ensemble Project. Bulletin of the American Meteorological Society, 2018, 99, 2361-2371.	3.3	129
9	Radiative and Chemical Response to Interactive Stratospheric Sulfate Aerosols in Fully Coupled CESM1(WACCM). Journal of Geophysical Research D: Atmospheres, 2017, 122, 13,061.	3.3	128
10	WACCM simulations of the mean circulation and trace species transport in the winter mesosphere. Journal of Geophysical Research, 2011, 116, .	3.3	123
11	First Simulations of Designing Stratospheric Sulfate Aerosol Geoengineering to Meet Multiple Simultaneous Climate Objectives. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,616.	3.3	114
12	The Climate Response to Stratospheric Aerosol Geoengineering Can Be Tailored Using Multiple Injection Locations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,574.	3.3	95
13	Initialized Earth System prediction from subseasonal to decadal timescales. Nature Reviews Earth & Environment, 2021, 2, 340-357.	29.7	85
14	Overview of experiment design and comparison of models participating in phase 1 of the SPARC Quasi-Biennial Oscillation initiative (QBOi). Geoscientific Model Development, 2018, 11, 1009-1032.	3.6	81
15	Sensitivity of Aerosol Distribution and Climate Response to Stratospheric SO₂ Injection Locations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,591.	3.3	79
16	Distinguishing Stratospheric Sudden Warmings from ENSO as Key Drivers of Wintertime Climate Variability over the North Atlantic and Eurasia. Journal of Climate, 2017, 30, 1959-1969.	3.2	77
17	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
18	Stratospheric Dynamical Response and Ozone Feedbacks in the Presence of SO₂ Injections. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,557.	3.3	69

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19	On the simulation of the quasi-biennial oscillation in the Community Atmosphere Model, version 5. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3045-3062.	3.3	66
20	Dynamics of the middle atmosphere as simulated by the Whole Atmosphere Community Climate Model, version 3 (WACCM3). Journal of Geophysical Research, 2008, 113, .	3.3	60
21	Progress in Simulating the Quasiâ€Biennial Oscillation in CMIP Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032362.	3.3	59
22	Effects of Different Stratospheric SO₂ Injection Altitudes on Stratospheric Chemistry and Dynamics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4654-4673.	3.3	58
23	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
24	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
25	On the Momentum Budget of the Quasi-Biennial Oscillation in the Whole Atmosphere Community Climate Model. Journals of the Atmospheric Sciences, 2019, 76, 69-87.	1.7	52
26	Effects of stratospheric variability on El NiÃ±o teleconnections. Environmental Research Letters, 2015, 10, 124021.	5.2	47
27	Structure of the migrating diurnal tide in the Whole Atmosphere Community Climate Model (WACCM). Advances in Space Research, 2008, 41, 1398-1407.	2.6	46
28	Evaluation of the Quasiâ€Biennial Oscillation in global climate models for the SPARC QBOâ€initiative. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1459-1489.	2.7	41
29	Stratospheric Sulfate Aerosol Geoengineering Could Alter the Highâ€Latitude Seasonal Cycle. Geophysical Research Letters, 2019, 46, 14153-14163.	4.0	40
30	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
31	On the forcing of the Mesospheric Semi-Annual Oscillation in the Whole Atmosphere Community Climate Model. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	37
32	Effects of vertical resolution and nonorographic gravity wave drag on the simulated climate in the Community Atmosphere Model, version 5. Journal of Advances in Modeling Earth Systems, 2014, 6, 357-383.	3.8	36
33	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
34	Timescale for Detecting the Climate Response to Stratospheric Aerosol Geoengineering. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1233-1247.	3.3	34
35	The Lack of QBOâ€MJO Connection in CMIP6 Models. Geophysical Research Letters, 2020, 47, e2020GL087295.	4.0	34
36	Reduced Poleward Transport Due to Stratospheric Heating Under Stratospheric Aerosols Geoengineering. Geophysical Research Letters, 2020, 47, e2020GL089470.	4.0	32

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37	Influence of the quasi-biennial oscillation and El NiÃ±oâ€“Southern Oscillation on the frequency of sudden stratospheric warmings. Journal of Geophysical Research, 2011, 116, .	3.3	30
38	Generation and Trapping of Gravity Waves from Convection with Comparison to Parameterization. Journals of the Atmospheric Sciences, 2006, 63, 2963-2977.	1.7	29
39	Simulations of the response of mesospheric circulation and temperature to the Antarctic ozone hole. Geophysical Research Letters, 2010, 37, .	4.0	29
40	Persistent polar ocean warming in a strategically geoengineered climate. Nature Geoscience, 2018, 11, 910-914.	12.9	29
41	Seasonal Injection Strategies for Stratospheric Aerosol Geoengineering. Geophysical Research Letters, 2019, 46, 7790-7799.	4.0	29
42	An evaluation of tropical waves and wave forcing of the QBO in the QBOi models. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1541-1567.	2.7	29
43	Insignificant QBOâ€MJO Prediction Skill Relationship in the SubX and S2S Subseasonal Reforecasts. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12655-12666.	3.3	27
44	Seasonally Modulated Stratospheric Aerosol Geoengineering Alters the Climate Outcomes. Geophysical Research Letters, 2020, 47, e2020GL088337.	4.0	27
45	An Analysis of Gravity Wave Spectral Characteristics in Moist Baroclinic Jetâ€“Front Systems. Journals of the Atmospheric Sciences, 2016, 73, 3133-3155.	1.7	26
46	Characteristics of Gravity Waves from Convection and Implications for Their Parameterization in Global Circulation Models. Journals of the Atmospheric Sciences, 2016, 73, 2729-2742.	1.7	24
47	QBO Changes in CMIP6 Climate Projections. Geophysical Research Letters, 2020, 47, e2019GL086903.	4.0	24
48	Long-range prediction and the stratosphere. Atmospheric Chemistry and Physics, 2022, 22, 2601-2623.	4.9	24
49	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
50	Differing responses of the quasi-biennial oscillation to artificial SO₂ injections in two global models. Atmospheric Chemistry and Physics, 2020, 20, 8975-8987.	4.9	19
51	Subseasonal Earth System Prediction with CESM2. Weather and Forecasting, 2022, 37, 797-815.	1.4	18
52	Response of Surface Ultraviolet and Visible Radiation to Stratospheric SO2 Injections. Atmosphere, 2018, 9, 432.	2.3	17
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	Limited surface impacts of the January 2021 sudden stratospheric warming. Nature Communications, 2022, 13, 1136.	12.8	17

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55	Improved Simulation of the QBO in E3SMv1. Journal of Advances in Modeling Earth Systems, 2019, 11, 3403-3418.	3.8	15
56	Characteristics of Future Warmer Base States in CESM2. Earth and Space Science, 2020, 7, e2020EA001296.	2.6	14
57	Effects of Organized Convection Parameterization on the MJO and Precipitation in E3SMv1. Part I: Mesoscale Heating. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002401.	3.8	14
58	The Simulation of Stratospheric Water Vapor Over the Asian Summer Monsoon in CESM1(WACCM) Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11377-11391.	3.3	13
59	Sensitivity of Total Column Ozone to Stratospheric Sulfur Injection Strategies. Geophysical Research Letters, 2021, 48, e2021GL094058.	4.0	13
60	The equatorial stratospheric semiannual oscillation and timeâ€mean winds in QBOi models. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1593-1609.	2.7	12
61	Variability of the Stratospheric Quasi-Biennial Oscillation and Its Wave Forcing Simulated in the Beijing Climate Center Atmospheric General Circulation Model. Journals of the Atmospheric Sciences, 2020, 77, 149-165.	1.7	10
62	Subseasonal Prediction with and without a Well-Represented Stratosphere in CESM1. Weather and Forecasting, 2020, 35, 2589-2602.	1.4	10
63	An objective analysis of the QBO in ERAâ€Interim and the Community Atmosphere Model, version 5. Geophysical Research Letters, 2014, 41, 7791-7798.	4.0	8
64	Assessing terrestrial biogeochemical feedbacks in a strategically geoengineered climate. Environmental Research Letters, 2020, 15, 104043.	5.2	8
65	Observational Validation of Parameterized Gravity Waves From Tropical Convection in the Whole Atmosphere Community Climate Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033954.	3.3	7
66	Limitations of assuming internal mixing between different aerosol species: a case study with sulfate geoengineering simulations. Atmospheric Chemistry and Physics, 2022, 22, 1739-1756.	4.9	6
67	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
68	Attribution of NAO Predictive Skill Beyond 2ÂWeeks in Boreal Winter. Geophysical Research Letters, 2020, 47, e2020GL090451.	4.0	4
69	A Positive Zonal Wind Feedback on Sudden Stratospheric Warming Development Revealed by CESM2 (WACCM6) Reforecasts. Geophysical Research Letters, 2021, 48, e2020GL090863.	4.0	4
70	Using TRMM Latent Heat as a Source to Estimate Convection Induced Gravity Wave Momentum Flux in the Lower Stratosphere. Journal of Geophysical Research D: Atmospheres, 2022, 127, e2021JD035785.	3.3	3
71	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
72	Holistic Assessment of SO 2 Injections Using CESM1(WACCM): Introduction to the Special Issue. Journal of Geophysical Research D: Atmospheres, 2019, 124, 444-450.	3.3	2

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73	Atmospheric rivers impacting western North America in a world with climate intervention. Npj Climate and Atmospheric Science, 2022, 5, .	6.8	2
74	Predictability of the Mesosphere and Lower Thermosphere During Major Sudden Stratospheric Warmings. Geophysical Research Letters, 2021, 48, e2021GL093716.	4.0	1