Chaim Garfinkel

List of Publications by Year
in descending order

100 papers	4,813 citations	109321 35 h-index	106344 65 g-index
161 all docs	161 docs citations	161 times ranked	2917 citing authors

#	Article	IF	Citations
1	Storm track processes and the opposing influences of climate change. Nature Geoscience, 2016, 9, 656-664.	12.9	370
2	Tropospheric Precursors of Anomalous Northern Hemisphere Stratospheric Polar Vortices. Journal of Climate, 2010, 23, 3282-3299.	3.2	246
3	The Teleconnection of El NiÃ±o Southern Oscillation to the Stratosphere. Reviews of Geophysics, 2019, 57, 5-47.	23.0	245
4	Different ENSO teleconnections and their effects on the stratospheric polar vortex. Journal of Geophysical Research, 2008, 113, .	3.3	214
5	Sudden Stratospheric Warmings. Reviews of Geophysics, 2021, 59, .	23.0	204
6	Effects of the El NiÃ±oâ€“Southern Oscillation and the Quasiâ€Biennial Oscillation on polar temperatures in the stratosphere. Journal of Geophysical Research, 2007, 112, .	3.3	182
7	Linking Arctic variability and change with extreme winter weather in the United States. Science, 2021, 373, 1116-1121.	12.6	145
8	Does the Holtonâ€“Tan Mechanism Explain How the Quasi-Biennial Oscillation Modulates the Arctic Polar Vortex?. Journals of the Atmospheric Sciences, 2012, 69, 1713-1733.	1.7	135
9	Observed connection between stratospheric sudden warmings and the Maddenâ€Julian Oscillation. Geophysical Research Letters, 2012, 39, .	4.0	128
10	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
11	The Effect of Tropospheric Jet Latitude on Coupling between the Stratospheric Polar Vortex and the Troposphere. Journal of Climate, 2013, 26, 2077-2095.	3.2	98
12	The Influence of the Quasi-Biennial Oscillation on the Troposphere in Winter in a Hierarchy of Models. Part I: Simplified Dry GCMs. Journals of the Atmospheric Sciences, 2011, 68, 1273-1289.	1.7	94
13	On the influence of North Pacific sea surface temperature on the Arctic winter climate. Journal of Geophysical Research, 2012, 117, .	3.3	92
14	Modifications of the quasiâ€biennial oscillation by a geoengineering perturbation of the stratospheric aerosol layer. Geophysical Research Letters, 2014, 41, 1738-1744.	4.0	90
15	Impact of the MJO on the boreal winter extratropical circulation. Geophysical Research Letters, 2014, 41, 6055-6062.	4.0	90
16	Are the teleconnections of Central Pacific and Eastern Pacific El NiÃ±o distinct in boreal wintertime?. Climate Dynamics, 2013, 41, 1835-1852.	3.8	83
17	Drivers of the Recent Tropical Expansion in the Southern Hemisphere: Changing SSTs or Ozone Depletion?. Journal of Climate, 2015, 28, 6581-6586.	3.2	83
18	Stratospheric variability contributed to and sustained the recent hiatus in Eurasian winter warming. Geophysical Research Letters, 2017, 44, 374-382.	4.0	82

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19	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
20	The 2019 New Year Stratospheric Sudden Warming and Its Realâ€Time Predictions in Multiple S2S Models. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11155-11174.	3.3	77
21	Why might stratospheric sudden warmings occur with similar frequency in El NiÃ±o and La NiÃ±a winters?. Journal of Geophysical Research, 2012, 117, .	3.3	75
22	The Downward Influence of Sudden Stratospheric Warmings: Association with Tropospheric Precursors. Journal of Climate, 2019, 32, 85-108.	3.2	75
23	Predicting the Downward and Surface Influence of the February 2018 and January 2019 Sudden Stratospheric Warming Events in Subseasonal to Seasonal (S2S) Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031919.	3.3	72
24	The Influence of the Quasi-Biennial Oscillation on the Troposphere in Winter in a Hierarchy of Models. Part II: Perpetual Winter WACCM Runs. Journals of the Atmospheric Sciences, 2011, 68, 2026-2041.	1.7	67
25	Extra-tropical atmospheric response to ENSO in the CMIP5 models. Climate Dynamics, 2014, 43, 3367-3376.	3.8	67
26	The Southern Hemisphere Minor Sudden Stratospheric Warming in September 2019 and its Predictions in S2S Models. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032723.	3.3	63
27	Recent Hadley cell expansion: The role of internal atmospheric variability in reconciling modeled and observed trends. Geophysical Research Letters, 2015, 42, 10,824.	4.0	62
28	Influence of the quasiâ€biennial oscillation on the North Pacific and El NiÃ±o teleconnections. Journal of Geophysical Research, 2010, 115, .	3.3	60
29	The Arctic vortex in March 2011: a dynamical perspective. Atmospheric Chemistry and Physics, 2011, 11, 11447-11453.	4.9	60
30	Extratropical Atmospheric Predictability From the Quasiâ€Biennial Oscillation in Subseasonal Forecast Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7855-7866.	3.3	53
31	MJOâ€Related Tropical Convection Anomalies Lead to More Accurate Stratospheric Vortex Variability in Subseasonal Forecast Models. Geophysical Research Letters, 2017, 44, 10054-10062.	4.0	49
32	Temperature trends in the tropical upper troposphere and lower stratosphere: Connections with sea surface temperatures and implications for water vapor and ozone. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9658-9672.	3.3	47
33	The Building Blocks of Northern Hemisphere Wintertime Stationary Waves. Journal of Climate, 2020, 33, 5611-5633.	3.2	43
34	Sub-seasonal Predictability and the Stratosphere. , 2019, , 223-241.		41
35	Arctic Ozone Loss in March 2020 and its Seasonal Prediction in CFSv2: A Comparative Study With the 1997 and 2011 Cases. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033524.	3.3	40
36	Relative roles of the MJO and stratospheric variability in North Atlantic and European winter climate. Journal of Geophysical Research D: Atmospheres, 2017, 122, 4184-4201.	3.3	39

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37	Tropospheric jet response to Antarctic ozone depletion: An update with Chemistry-Climate Model Initiative (CCMI) models. Environmental Research Letters, 2018, 13, 054024.	5.2	38
38	Impact of the Quasi-Biennial Oscillation on the Northern Winter Stratospheric Polar Vortex in CMIP5/6 Models. Journal of Climate, 2020, 33, 4787-4813.	3.2	38
39	The Non-Gaussianity and Spatial Asymmetry of Temperature Extremes Relative to the Storm Track: The Role of Horizontal Advection. Journal of Climate, 2017, 30, 445-464.	3.2	36
40	Nonlinear response of tropical lower-stratospheric temperature and water vapor to ENSO. Atmospheric Chemistry and Physics, 2018, 18, 4597-4615.	4.9	36
41	Northern Hemisphere Stratospheric Pathway of Different El NiÃ±o Flavors in Stratosphere-Resolving CMIP5 Models. Journal of Climate, 2017, 30, 4351-4371.	3.2	34
42	Contrasting Effects of Central Pacific and Eastern Pacific El NiÃ±o on stratospheric water vapor. Geophysical Research Letters, 2013, 40, 4115-4120.	4.0	33
43	CMIP5/6 models project little change in the statistical characteristics of sudden stratospheric warmings in the 21st century. Environmental Research Letters, 2021, 16, 034024.	5.2	33
44	How Does the Quasi-Biennial Oscillation Affect the Boreal Winter Tropospheric Circulation in CMIP5/6 Models?. Journal of Climate, 2020, 33, 8975-8996.	3.2	32
45	Effect of recent sea surface temperature trends on the Arctic stratospheric vortex. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5404-5416.	3.3	30
46	Time-varying changes in the simulated structure of the Brewerâ€“Dobson Circulation. Atmospheric Chemistry and Physics, 2017, 17, 1313-1327.	4.9	30
47	The salience of nonlinearities in the boreal winter response to ENSO: Arctic stratosphere and Europe. Climate Dynamics, 2019, 53, 4591-4610.	3.8	30
48	Modulation of the Northern Winter Stratospheric El NiÃ±oâ€“Southern Oscillation Teleconnection by the PDO. Journal of Climate, 2019, 32, 5761-5783.	3.2	29
49	A Census of Atmospheric Variability From Seconds to Decades. Geophysical Research Letters, 2017, 44, 11,201.	4.0	28
50	Improvement of the GEOS-5 AGCM upon updating the air-sea roughness parameterization. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	27
51	The salience of nonlinearities in the boreal winter response to ENSO: North Pacific and North America. Climate Dynamics, 2019, 52, 4429-4446.	3.8	27
52	The Generic Nature of the Tropospheric Response to Sudden Stratospheric Warmings. Journal of Climate, 2020, 33, 5589-5610.	3.2	26
53	The January 2021 Sudden Stratospheric Warming and Its Prediction in Subseasonal to Seasonal Models. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035057.	3.3	26
54	Long-range prediction and the stratosphere. Atmospheric Chemistry and Physics, 2022, 22, 2601-2623.	4.9	24

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55	Projected changes of stratospheric final warmings in the Northern and Southern Hemispheres by CMIP5/6 models. Climate Dynamics, 2021, 56, 3353-3371.	3.8	23
56	Robustness of the Simulated Tropospheric Response to Ozone Depletion. Journal of Climate, 2017, 30, 2577-2585.	3.2	21
57	Effect of Gravity Waves From Small Islands in the Southern Ocean on the Southern Hemisphere Atmospheric Circulation. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1552-1561.	3.3	19
58	Troposphereâ€Stratosphere Coupling in Subseasonalâ€toâ€Seasonal Models and Its Importance for a Realistic Extratropical Response to the Maddenâ€Julian Oscillation. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032043.	3.3	19
59	Weakening of the Teleconnection From El NiÃ±oâ€"Southern Oscillation to the Arctic Stratosphere Over the Past Few Decades: What Can Be Learned From Subseasonal Forecast Models?. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7683-7696.	3.3	17
60	Toward Narrowing Uncertainty in Future Projections of Local Extreme Precipitation. Geophysical Research Letters, 2021, 48, e2020GL091823.	4.0	17
61	The Strong Stratospheric Polar Vortex in March 2020 in Subâ€Seasonal to Seasonal Models: Implications for Empirical Prediction of the Low Arctic Total Ozone Extreme. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034190.	3.3	17
62	Advances in the Prediction of MJO Teleconnections in the S2S Forecast Systems. Bulletin of the American Meteorological Society, 2022, 103, E1426-E1447.	3.3	17
63	Tropospheric Rossby Wave Breaking and Variability of the Latitude of the Eddy-Driven Jet. Journal of Climate, 2014, 27, 7069-7085.	3.2	16
64	Projected Strengthening of the Extratropical Surface Impacts of the Stratospheric Quasiâ€Biennial Oscillation. Geophysical Research Letters, 2020, 47, e2020GL089149.	4.0	16
65	A QBO Cookbook: Sensitivity of the Quasiâ€Biennial Oscillation to Resolution, Resolved Waves, and Parameterized Gravity Waves. Journal of Advances in Modeling Earth Systems, 2022, 14, e2021MS002568.	3.8	16
66	Influence of Arctic stratospheric ozone on surface climate in CCMI models. Atmospheric Chemistry and Physics, 2019, 19, 9253-9268.	4.9	15
67	Mean State of the Northern Hemisphere Stratospheric Polar Vortex in Three Generations of CMIP Models. Journal of Climate, 2022, 35, 4603-4625.	3.2	15
68	Classification of eastward propagating waves on the spherical Earth. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 1554-1564.	2.7	14
69	The Role of Zonally Averaged Climate Change in Contributing to Intermodel Spread in CMIP5 Predicted Local Precipitation Changes. Journal of Climate, 2020, 33, 1141-1154.	3.2	14
70	Predictability of the early winter Arctic oscillation from autumn Eurasian snowcover in subseasonal forecast models. Climate Dynamics, 2020, 55, 961-974.	3.8	14
71	The Impact of Split and Displacement Sudden Stratospheric Warmings on the Troposphere. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033989.	3.3	14
72	Might stratospheric variability lead to improved predictability of ENSO events?. Environmental Research Letters, 2017, 12, 031001.	5.2	13

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73	Sensitivity of the atmospheric response to warm pool El NiÃ±o events to modeled SSTs and future climate forcings. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,371.	3.3	12
74	Stratospheric response to intraseasonal changes in incoming solar radiation. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7648-7660.	3.3	12
75	The Impact of SST Biases in the Tropical East Pacific and Agulhas Current Region on Atmospheric Stationary Waves in the Southern Hemisphere. Journal of Climate, 2020, 33, 9351-9374.	3.2	12
76	Uncertainty in Projected Changes in Precipitation Minus Evaporation: Dominant Role of Dynamic Circulation Changes and Weak Role for Thermodynamic Changes. Geophysical Research Letters, 2022, 49, .	4.0	12
77	Connections between the Spring Breakup of the Southern Hemisphere Polar Vortex, Stationary Waves, and Airâ€“Sea Roughness. Journals of the Atmospheric Sciences, 2013, 70, 2137-2151.	1.7	10
78	The mixed Rossbyâ€“gravity wave on the spherical Earth. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 1820-1830.	2.7	9
79	The Efficiency of Upward Wave Propagation near the Tropopause: Importance of the Form of the Refractive Index. Journals of the Atmospheric Sciences, 2021, 78, 2605-2617.	1.7	9
80	Reduced Rainfall in Future Heavy Precipitation Events Related to Contracted Rain Area Despite Increased Rain Rate. Earth's Future, 2022, 10, e2021EF002397.	6.3	9
81	Influence of the El NiÃ±oâ€“Southern Oscillation on entry stratospheric water vapor in coupled chemistryâ€“ocean CCMI and CMIP6 models. Atmospheric Chemistry and Physics, 2021, 21, 3725-3740.	4.9	8
82	Development of the Extratropical Response to the Stratospheric Quasi-Biennial Oscillation. Journal of Climate, 2021, , 1-44.	3.2	7
83	Impact of stratospheric ozone on the subseasonal prediction in the southern hemisphere spring. Progress in Earth and Planetary Science, 2022, 9, .	3.0	7
84	Influence of the Quasiâ€Biennial Oscillation on the Spatial Structure of the Wintertime Arctic Oscillation. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	6
85	The roles of the Quasi-Biennial Oscillation and El NiÃ±o for entry stratospheric water vapor in observations and coupled chemistryâ€“ocean CCMI and CMIP6 models. Atmospheric Chemistry and Physics, 2022, 22, 7523-7538.	4.9	6
86	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
87	The influence of jet stream regime on extreme weather events. , 2016, , 79-94.		5
88	Barotropic modes, baroclinic modes and equivalent depths in the atmosphere. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 2096-2115.	2.7	5
89	Barotropic Impacts of Surface Friction on Eddy Kinetic Energy and Momentum Fluxes: An Alternative to the Barotropic Governor. Journals of the Atmospheric Sciences, 2012, 69, 3028-3039.	1.7	4
90	Transient Extratropical Response to Solar Ultraviolet Radiation in the Northern Hemisphere Winter. Journal of Climate, 2021, 34, 3367-3383.	3.2	4

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91	Nonlinear Interaction Between the Drivers of the Monsoon and Summertime Stationary Waves. Geophysical Research Letters, 2021, 48, e2020GL092321.	4.0	4
92	Stationary wave biases and their effect on upward troposphereâ€“ stratosphere coupling in sub-seasonal prediction models. Weather and Climate Dynamics, 2022, 3, 679-692.	3.5	4
93	Tropical background and wave spectra: contribution of wave-wave interactions in a moderately nonlinear turbulent flow. Journals of the Atmospheric Sciences, 2021, , .	1.7	3
94	The power distribution between symmetric and anti-symmetric components of the tropical wavenumber-frequency spectrum. Journals of the Atmospheric Sciences, 2021, , .	1.7	3
95	Planetary, inertiaâ€“gravity and Kelvin waves on the <i>f</i>â€plane and Î²â€plane in the presence of a uniform zonal flow. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 2935-2952.	2.7	3
96	Barotropic instability of a zonal jet on the sphere: from non-divergence through quasi-geostrophy to shallow water. Geophysical and Astrophysical Fluid Dynamics, 2021, 115, 15-34.	1.2	2
97	Arctic change reduces risk of cold extremesâ€"Response. Science, 2022, 375, 729-730.	12.6	2
98	On the tropospheric response to transient stratospheric momentum torques. Journals of the Atmospheric Sciences, 2021, , .	1.7	1
99	Waves on the equatorial Î²-plane in the presence of a uniform zonal flow: Beyond the Doppler shift. Physics of Fluids, 2022, 34, .	4.0	1
100	A note on the power distribution between symmetric and anti-symmetric components of the tropical Brightness Temperature spectrum in the wavenumber-frequency plane. Journals of the Atmospheric Sciences, 2021, , .	1.7	0