Edwin P Gerber

List of Publications by Year
in descending order

64	4,208	87888 38	133252 59
papers	citations	h-index	g-index

79	79	79	3468
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Machine Learning Gravity Wave Parameterization Generalizes to Capture the QBO and Response to Increased CO₂. Geophysical Research Letters, 2022, 49, .	4.0	15
3	Sudden Stratospheric Warmings. Reviews of Geophysics, 2021, 59, .	23.0	204
4	Is our dynamical understanding of the circulation changes associated with the Antarctic ozone hole sensitive to the choice of reanalysis dataset?. Atmospheric Chemistry and Physics, 2021, 21, 7451-7472.	4.9	3
5	Nonlinear Interaction Between the Drivers of the Monsoon and Summertime Stationary Waves. Geophysical Research Letters, 2021, 48, e2020GL092321.	4.0	4
6	Tropical teleconnection impacts on Antarctic climate changes. Nature Reviews Earth & Environment, 2021, 2, 680-698.	29.7	85
7	Numerical impacts on tracer transport: Diagnosing the influence of dynamical core formulation and resolution on stratospheric transport. Journals of the Atmospheric Sciences, 2021, , .	1.7	3
8	Stratospheric Adiabatic Mixing Rates Derived From the Vertical Gradient of Age of Air. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	3.3	3
9	Downward Migration of the Zonalâ€Mean Circulation in the Tropical Atmosphere. Geophysical Research Letters, 2020, 47, e2020GL088084.	4.0	0
10	Numerical impacts on tracer transport: A proposed intercomparison test of Atmospheric General Circulation Models. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 3937-3964.	2.7	9
11	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
12	The Building Blocks of Northern Hemisphere Wintertime Stationary Waves. Journal of Climate, 2020, 33, 5611-5633.	3.2	43
13	The Generic Nature of the Tropospheric Response to Sudden Stratospheric Warmings. Journal of Climate, 2020, 33, 5589-5610.	3.2	26
14	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
15	Model Hierarchies for Understanding Atmospheric Circulation. Reviews of Geophysics, 2019, 57, 250-280.	23.0	58
16	Imagining Simpler Worlds to Understand the Complexity of Our Own. Journal of Advances in Modeling Earth Systems, 2019, 11, 2862-2867.	3.8	0
17	The Downward Influence of Sudden Stratospheric Warmings: Association with Tropospheric Precursors. Journal of Climate, 2019, 32, 85-108.	3.2	75
18	Sub-seasonal Predictability and the Stratosphere. , 2019, , 223-241.		41

#	Article	IF	Citations
19	The Circulation Response to Volcanic Eruptions: The Key Roles of Stratospheric Warming and Eddy Interactions. Journal of Climate, 2019, 32, 1101-1120.	3.2	20
20	Optimizing the Definition of a Sudden Stratospheric Warming. Journal of Climate, 2018, 31, 2337-2344.	3.2	49
21	Quantifying the variability of the annular modes: reanalysis uncertainty vs. sampling uncertainty. Atmospheric Chemistry and Physics, 2018, 18, 17099-17117.	4.9	34
22	Isca, v1.0: a framework for the global modelling of the atmospheres of Earth and other planets at varying levels of complexity. Geoscientific Model Development, 2018, 11, 843-859.	3.6	97
23	Defining Sudden Stratospheric Warming in Climate Models: Accounting for Biases in Model Climatologies. Journal of Climate, 2017, 30, 5529-5546.	3.2	41
24	The strength of the meridional overturning circulation of the stratosphere. Nature Geoscience, 2017, 10, 663-667.	12.9	27
25	Untangling the Annual Cycle of the Tropical Tropopause Layer with an Idealized Moist Model. Journal of Climate, 2017, 30, 7339-7358.	3.2	48
26	What Makes an Annular Mode â€œAnnularâ€?. Journals of the Atmospheric Sciences, 2017, 74, 317-332.	1.7	13
27	Introduction to the SPARC Reanalysis Intercomparison ProjectÂ(S-RIP) and overview of the reanalysis systems. Atmospheric Chemistry and Physics, 2017, 17, 1417-1452.	4.9	276
28	The Dynamics and Variability Model Intercomparison Project (DynVarMIP) for CMIP6: assessing the stratosphereâ€“troposphere system. Geoscientific Model Development, 2016, 9, 3413-3425.	3.6	32
29	The Model Intercomparison Project on the climatic response to Volcanic forcing (VolMIP): experimental design and forcing input data for CMIP6. Geoscientific Model Development, 2016, 9, 2701-2719.	3.6	138
30	Examining the Predictability of the Stratospheric Sudden Warming of January 2013 Using Multiple NWP Systems. Monthly Weather Review, 2016, 144, 1935-1960.	1.4	62
31	Is the Brewerâ€Dobson circulation increasing or moving upward?. Geophysical Research Letters, 2016, 43, 1772-1779.	4.0	56
32	The Rain Is Askew: Two Idealized Models Relating Vertical Velocity and Precipitation Distributions in a Warming World. Journal of Climate, 2016, 29, 6445-6462.	3.2	50
33	The Relationship between Age of Air and the Diabatic Circulation of the Stratosphere. Journals of the Atmospheric Sciences, 2016, 73, 4507-4518.	1.7	23
34	Constraining Future Summer Austral Jet Stream Positions in the CMIP5 Ensemble by Process-Oriented Multiple Diagnostic Regression*. Journal of Climate, 2016, 29, 673-687.	3.2	33
35	The predictability of the extratropical stratosphere on monthly timeâ€scales and its impact on the skill of tropospheric forecasts. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 987-1003.	2.7	162
36	Rossby Waves Mediate Impacts of Tropical Oceans on West Antarctic Atmospheric Circulation in Austral Winter. Journal of Climate, 2015, 28, 8151-8164.	3.2	53

#	Article	IF	Citations
37	A Rossby Wave Bridge from the Tropical Atlantic to West Antarctica. Journal of Climate, 2015, 28, 2256-2273.	3.2	72
38	Seasonal Variability of the Polar Stratospheric Vortex in an Idealized AGCM with Varying Tropospheric Wave Forcing. Journals of the Atmospheric Sciences, 2015, 72, 2248-2266.	1.7	37
39	Stratosphere and Its Coupling to the Troposphere and Beyond. , 2015, , 1418-1424.		2
40	Quantifying the Summertime Response of the Austral Jet Stream and Hadley Cell to Stratospheric Ozone and Greenhouse Gases. Journal of Climate, 2014, 27, 5538-5559.	3.2	62
41	The Impact of Baroclinic Eddy Feedback on the Persistence of Jet Variability in the Two-Layer Model. Journals of the Atmospheric Sciences, 2014, 71, 410-429.	1.7	30
42	Impacts of the north and tropical Atlantic Ocean on the Antarctic Peninsula and sea ice. Nature, 2014, 505, 538-542.	27.8	238
43	What Drives the Brewerâ€“Dobson Circulation?. Journals of the Atmospheric Sciences, 2014, 71, 3837-3855.	1.7	57
44	Northern winter climate change: Assessment of uncertainty in CMIP5 projections related to stratosphere-troposphere coupling. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7979-7998.	3.3	131
45	Climate Processes: Clouds, Aerosols and Dynamics. , 2013, , 73-103.		15
46	On the lack of stratospheric dynamical variability in lowâ€top versions of the CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2494-2505.	3.3	268
47	Compensation between Resolved and Unresolved Wave Driving in the Stratosphere: Implications for Downward Control. Journals of the Atmospheric Sciences, 2013, 70, 3780-3798.	1.7	76
48	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
49	Understanding Hadley Cell Expansion versus Contraction: Insights from Simplified Models and Implications for Recent Observations. Journal of Climate, 2013, 26, 4304-4321.	3.2	81
50	The Role of High-Latitude Waves in the Intraseasonal to Seasonal Variability of Tropical Upwelling in the Brewerâ€“Dobson Circulation. Journals of the Atmospheric Sciences, 2013, 70, 1631-1648.	1.7	35
51	Abrupt Circulation Responses to Tropical Upper-Tropospheric Warming in a Relatively Simple Stratosphere-Resolving AGCM. Journal of Climate, 2012, 25, 4097-4115.	3.2	20
52	Assessing and Understanding the Impact of Stratospheric Dynamics and Variability on the Earth System. Bulletin of the American Meteorological Society, 2012, 93, 845-859.	3.3	146
53	Stratospheric versus Tropospheric Control of the Strength and Structure of the Brewerâ€“Dobson Circulation. Journals of the Atmospheric Sciences, 2012, 69, 2857-2877.	1.7	52
54	The role of stratosphereâ€troposphere coupling in the occurrence of extreme winter cold spells over northern Europe. Journal of Advances in Modeling Earth Systems, 2012, 4, .	3.8	69

#	Article	IF	Citations
55	Antarctic ozone depletion and trends in tropopause Rossby wave breaking. Atmospheric Science Letters, 2012, 13, 164-168.	1.9	13
56	Stratosphereâ€troposphere coupling and annular mode variability in chemistryâ€climate models. Journal of Geophysical Research, 2010, 115, .	3.3	107
57	On the Zonal Structure of the North Atlantic Oscillation and Annular Modes. Journals of the Atmospheric Sciences, 2009, 66, 332-352.	1.7	39
58	Stratosphereâ€“Troposphere Coupling in a Relatively Simple AGCM: The Importance of Stratospheric Variability. Journal of Climate, 2009, 22, 1920-1933.	3.2	126
59	Stratospheric influence on the tropospheric circulation revealed by idealized ensemble forecasts. Geophysical Research Letters, 2009, 36, .	4.0	84
60	Local and hemispheric dynamics of the North Atlantic Oscillation, annular patterns and the zonal index. Dynamics of Atmospheres and Oceans, 2008, 44, 184-212.	1.8	85
61	Testing the Annular Mode Autocorrelation Time Scale in Simple Atmospheric General Circulation Models. Monthly Weather Review, 2008, 136, 1523-1536.	1.4	88
62	Eddyâ€“Zonal Flow Interactions and the Persistence of the Zonal Index. Journals of the Atmospheric Sciences, 2007, 64, 3296-3311.	1.7	108
63	A Stochastic Model for the Spatial Structure of Annular Patterns of Variability and the North Atlantic Oscillation. Journal of Climate, 2005, 18, 2102-2118.	3.2	45
64	A Mechanism and Simple Dynamical Model of the North Atlantic Oscillation and Annular Modes. Journals of the Atmospheric Sciences, 2004, 61, 264-280.	1.7	143