Gary L Russell

List of Publications by Year
in descending order

73	12,597	87888 38	85541 71
papers	citations	h-index	g-index

78	78	78	10660
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficacy of climate forcings. Journal of Geophysical Research, 2005, 110, .	3.3	1,104
2	Efficient Three-Dimensional Global Models for Climate Studies: Models I and II. Monthly Weather Review, 1983, 111, 609-662.	1.4	1,022
3	Climate Impact of Increasing Atmospheric Carbon Dioxide. Science, 1981, 213, 957-966.	12.6	911
4	Present-Day Atmospheric Simulations Using GISS ModelE: Comparison to In Situ, Satellite, and Reanalysis Data. Journal of Climate, 2006, 19, 153-192.	3.2	832
5	Global climate changes as forecast by Goddard Institute for Space Studies threeâ€dimensional model. Journal of Geophysical Research, 1988, 93, 9341-9364.	3.3	820
6	Climate sensitivity: Analysis of feedback mechanisms. Geophysical Monograph Series, 1984, , 130-163.	0.1	791
7	Earth's Energy Imbalance: Confirmation and Implications. Science, 2005, 308, 1431-1435.	12.6	728
8	Configuration and assessment of the GISS ModelE2 contributions to the CMIP5 archive. Journal of Advances in Modeling Earth Systems, 2014, 6, 141-184.	3.8	597
9	Climate sensitivity, sea level and atmospheric carbon dioxide. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120294.	3.4	429
10	Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 Â°C global warming could be dangerous. Atmospheric Chemistry and Physics, 2016, 16, 3761-3812.	4.9	421
11	Climate change and trace gases. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1925-1954.	3.4	323
12	A coupled atmosphereâ€ocean model for transient climate change studies. Atmosphere - Ocean, 1995, 33, 683-730.	1.6	297
13	Climate Response Times: Dependence on Climate Sensitivity and Ocean Mixing. Science, 1985, 229, 857-859.	12.6	275
14	Amplification of Surface Temperature Trends and Variability in the Tropical Atmosphere. Science, 2005, 309, 1551-1556.	12.6	267
15	A New Finite-Differencing Scheme for the Tracer Transport Equation. Journal of Applied Meteorology, 1981, 20, 1483-1498.	1.1	250
16	GISSâ€E2.1: Configurations and Climatology. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002025.	3.8	234
17	Climate simulations for 1880â€“2003 with GISS modelE. Climate Dynamics, 2007, 29, 661-696.	3.8	227
18	Continental-Scale River Flow in Climate Models. Journal of Climate, 1994, 7, 914-928.	3.2	218

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19	Dangerous human-made interference with climate: a GISS modelE study. Atmospheric Chemistry and Physics, 2007, 7, 2287-2312.	4.9	211
20	Young people's burden: requirement of negative CO₂ emissions. Earth System Dynamics, 2017, 8, 577-616.	7.1	189
21	The impact of global warming on river runoff. Journal of Geophysical Research, 1992, 97, 2757-2764.	3.3	180
22	Global sources of local precipitation as determined by the Nasa/Giss GCM. Geophysical Research Letters, 1986, 13, 121-124.	4.0	177
23	Forcings and chaos in interannual to decadal climate change. Journal of Geophysical Research, 1997, 102, 25679-25720.	3.3	164
24	The GISS Global Climate-Middle Atmosphere Model. Part I: Model Structure and Climatology. Journals of the Atmospheric Sciences, 1988, 45, 329-370.	1.7	159
25	Stable water isotope behavior during the last glacial maximum: A general circulation model analysis. Journal of Geophysical Research, 1994, 99, 25791.	3.3	150
26	CMIP5 historical simulations (1850â€“2012) with GISS ModelE2. Journal of Advances in Modeling Earth Systems, 2014, 6, 441-478.	3.8	133
27	Using a global climate model to evaluate the influences of water vapor, snow cover and atmospheric aerosol on warming in the Tibetan Plateau during the twenty-first century. Climate Dynamics, 2010, 34, 859-872.	3.8	130
28	Future climate change under RCP emission scenarios with GISS <scp>M</scp>odelE2. Journal of Advances in Modeling Earth Systems, 2015, 7, 244-267.	3.8	112
29	Global river runoff calculated from a global atmospheric general circulation model. Journal of Hydrology, 1990, 117, 241-254.	5.4	101
30	Comparison of model and observed regional temperature changes during the past 40 years. Journal of Geophysical Research, 2000, 105, 14891-14898.	3.3	86
31	The magnitude of global fresh-water transports of importance to ocean circulation. Climate Dynamics, 1990, 4, 73-79.	3.8	75
32	Modeling changes in summer temperature of the Fraser River during the next century. Journal of Hydrology, 2007, 342, 336-346.	5.4	65
33	Seasonal oceanic heat transports computed from an atmospheric model. Dynamics of Atmospheres and Oceans, 1985, 9, 253-271.	1.8	62
34	Origin of July Antarctic precipitation and its influence on deuterium content: a GCM analysis. Climate Dynamics, 1992, 7, 195-203.	3.8	62
35	Effects of glacial meltwater in the GISS coupled atmosphereocean model: 1. North Atlantic Deep Water response. Journal of Geophysical Research, 2001, 106, 27335-27353.	3.3	59
36	CMIP6 Historical Simulations (1850â€“2014) With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2021, 13, e2019MS002034.	3.8	49

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37	The tropical rain belts with an annual cycle and a continent model intercomparison project: TRACMIP. Journal of Advances in Modeling Earth Systems, 2016, 8, 1868-1891.	3.8	47
38	Comparison of mean climate trends in the Northern Hemisphere between National Centers for Environmental Prediction and two atmosphere-ocean model forced runs. Journal of Geophysical Research, 2002, 107, ACL 7-1.	3.3	41
39	Annual oceanic heat transports computed from an atmospheric model. Dynamics of Atmospheres and Oceans, 1983, 7, 95-109.	1.8	39
40	Projected impact of climate change on the freshwater and salt budgets of the Arctic Ocean by a global climate model. Geophysical Research Letters, 2000, 27, 1183-1186.	4.0	38
41	Antarctic Glacial Melt as a Driver of Recent Southern Ocean Climate Trends. Geophysical Research Letters, 2020, 47, e2019GL086892.	4.0	34
42	Sensitivity of sea ice to physical parameterizations in the GISS global climate model. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	33
43	GISS Model E2.2: A Climate Model Optimized for the Middle Atmosphereâ€"Model Structure, Climatology, Variability, and Climate Sensitivity. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032204.	3.3	32
44	The global geochemistry of bombâ€produced tritium: General circulation model compared to available observations and traditional interpretations. Journal of Geophysical Research, 1989, 94, 18305-18326.	3.3	30
45	The role of long-lived greenhouse gases as principal LW control knob that governs the global surface temperature for past and future climate change. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 19734.	1.6	30
46	Natural airâ€"sea flux of CO2 in simulations of the NASA-GISS climate model: Sensitivity to the physical ocean model formulation. Ocean Modelling, 2013, 66, 26-44.	2.4	27
47	Fast atmosphereâ€ocean model runs with large changes in CO₂. Geophysical Research Letters, 2013, 40, 5787-5792.	4.0	24
48	Ocean heat transport during the Last Glacial Maximum. Paleoceanography, 1989, 4, 141-155.	3.0	22
49	Future Climate Change Under SSP Emission Scenarios With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	22
50	Projected regime shift in Arctic cloud and water vapor feedbacks. Environmental Research Letters, 2011, 6, 044007.	5.2	20
51	Observed and modeled relationships among Arctic climate variables. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	16
52	Oceanic freshwater transport during the Last Glacial Maximum. Paleoceanography, 1990, 5, 397-407.	3.0	15
53	Global Carbon Cycle and Climate Feedbacks in the NASA GISS ModelE2.1. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002030.	3.8	15
54	Atmospheric general circulation model simulations with an interactive ocean: Effects of sea surface temperature anomalies in the arabian sea. Atmosphere - Ocean, 1983, 21, 94-106.	1.6	13

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55	High latitude river runoff in a doubled CO2 climate. Climatic Change, 1995, 30, 7-26.	3.6	13
56	Modeling the effect of wetlands, flooding, and irrigation on river flow: Application to the Aral Sea. Water Resources Research, 1999, 35, 1869-1876.	4.2	13
57	Step-Mountain Technique Applied to an Atmospheric C-Grid Model, or How to Improve Precipitation near Mountains. Monthly Weather Review, 2007, 135, 4060-4076.	1.4	12
58	Projected Impact of Climate Change on the Energy Budget of the Arctic Ocean by a Global Climate Model. Journal of Climate, 2002, 15, 3028-3042.	3.2	10
59	Future regime shift in feedbacks during Arctic winter. Geophysical Research Letters, 2007, 34, .	4.0	10
60	Drivers of Airâ€Sea CO₂ Flux Seasonality and its Longâ€Term Changes in the NASAâ€GISS Model CMIP6 Submission. Journal of Advances in Modeling Earth Systems, 2021, 13, e2019MS002028.	3.8	9
61	The Effects of Uplift on Ocean-Atmosphere Circulation. , 1997, , 123-147.		9
62	Impacts of model improvements on general circulation model sensitivity to sea-surface temperature forcing. International Journal of Climatology, 1995, 15, 1061-1086.	3.5	8
63	Are stronger North-Atlantic southwesterlies the forcing to the late-winter warming in Europe?. International Journal of Climatology, 2002, 22, 743-750.	3.5	8
64	Investigating the interactions among river flow, salinity and sea ice using a global coupled atmosphereâ€"oceanâ€"ice model. Annals of Glaciology, 1997, 25, 121-126.	1.4	7
65	Climate change and the Arctic hydrologic cycle as calculated by a global coupled atmosphereâ€“ocean model. Annals of Glaciology, 1995, 21, 91-95.	1.4	6
66	Detecting time variations in gravity associated with climate change. Journal of Geophysical Research, 2002, 107, ETG 3-1.	3.3	6
67	Seasonal oceanic heat transports computed from an atmospheric model and ocean temperature climatology. Dynamics of Atmospheres and Oceans, 1989, 14, 77-92.	1.8	4
68	Analysis of global climate model experiments to elucidate past and future changes in surface insolation and warming in China. Geophysical Research Letters, 2006, 33, .	4.0	4
69	Comparing GCM-generated land surface water budgets using a simple common framework. Water Science and Application, 2001, , 95-105.	0.3	3
70	Investigating the interactions among river flow, salinity and sea ice using a global coupled atmosphereâ€"oceanâ€"ice model. Annals of Glaciology, 1997, 25, 121-126.	1.4	2
71	Symmetric equations on the surface of a sphere as used by model GISS:IB. Geoscientific Model Development, 2018, 11, 4637-4656.	3.6	1
72	Unique Observational Constraints on the Seasonal and Longitudinal Variability of the Earthâ€™s Planetary Albedo and Cloud Distribution Inferred From EPIC Measurements. Frontiers in Remote Sensing, 2022, 2, .	3.5	1

#	Article	IF	Citations
73	Reply to Rasool. Climatic Change, 1983, 5, 203-204.	3.6	0