David Rind

List of Publications by Year
in descending order

126 papers	19,376 citations	14614 66 h-index	17055 122 g-index
130 all docs	130 docs citations	130 times ranked	13358 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.	0.5	1,022
3	Does the oceanâ€“atmosphere system have more than one stable mode of operation?. Nature, 1985, 315, 21-26.	13.7	998
4	Climate Impact of Increasing Atmospheric Carbon Dioxide. Science, 1981, 213, 957-966.	6.0	911
5	Present-Day Atmospheric Simulations Using GISS ModelE: Comparison to In Situ, Satellite, and Reanalysis Data. Journal of Climate, 2006, 19, 153-192.	1.2	832
6	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
7	Solar Forcing of Regional Climate Change During the Maunder Minimum. Science, 2001, 294, 2149-2152.	6.0	688
8	Configuration and assessment of the GISS ModelE2 contributions to the CMIP5 archive. Journal of Advances in Modeling Earth Systems, 2014, 6, 141-184.	1.3	597
9	Solar Cycle Variability, Ozone, and Climate. Science, 1999, 284, 305-308.	6.0	524
10	Increased polar stratospheric ozone losses and delayed eventual recovery owing to increasing greenhouse-gas concentrations. Nature, 1998, 392, 589-592.	13.7	509
11	Climate-induced changes in forest disturbance and vegetation. Nature, 1990, 343, 51-53.	13.7	505
12	Atmospheric CO ₂ : Principal Control Knob Governing Earthâ€™s Temperature. Science, 2010, 330, 356-359.	6.0	443
13	Terrestrial Conditions at the Last Glacial Maximum and CLIMAP Sea-Surface Temperature Estimates: Are They Consistent?. Quaternary Research, 1985, 24, 1-22.	1.0	418
14	Monsoon changes for 6000 years ago: Results of 18 simulations from the Paleoclimate Modeling Intercomparison Project (PMIP). Geophysical Research Letters, 1999, 26, 859-862.	1.5	374
15	A coupled atmosphereâ€ocean model for transient climate change studies. Atmosphere - Ocean, 1995, 33, 683-730.	0.6	297
16	A U.S. CLIVAR Project to Assess and Compare the Responses of Global Climate Models to Drought-Related SST Forcing Patterns: Overview and Results. Journal of Climate, 2009, 22, 5251-5272.	1.2	282
17	Climate Response Times: Dependence on Climate Sensitivity and Ocean Mixing. Science, 1985, 229, 857-859.	6.0	275
18	The Effect of Snow Cover on the Climate. Journal of Climate, 1991, 4, 689-706.	1.2	275

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19	The Sun's Role in Climate Variations. Science, 2002, 296, 673-677.	6.0	274
20	The impact of cold North Atlantic sea surface temperatures on climate: implications for the Younger Dryas cooling (11?10 k). Climate Dynamics, 1986, 1, 3-33.	1.7	268
21	GISSâ€E2.1: Configurations and Climatology. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002025.	1.3	234
22	Climate simulations for 1880â€“2003 with GISS modelE. Climate Dynamics, 2007, 29, 661-696.	1.7	227
23	An Efficient Approach to Modeling the Topographic Control of Surface Hydrology for Regional and Global Climate Modeling. Journal of Climate, 1997, 10, 118-137.	1.2	224
24	Glacial-Interglacial Changes in Moisture Sources for Greenland: Influences on the Ice Core Record of Climate. Science, 1994, 263, 508-511.	6.0	215
25	Climate Forcing by Changing Solar Radiation. Journal of Climate, 1998, 11, 3069-3094.	1.2	214
26	Dangerous human-made interference with climate: a GISS modelE study. Atmospheric Chemistry and Physics, 2007, 7, 2287-2312.	1.9	211
27	Change in climate variability in the 21st century. Climatic Change, 1989, 14, 5-37.	1.7	201
28	What determines the cloudâ€toâ€ground lightning fraction in thunderstorms?. Geophysical Research Letters, 1993, 20, 463-466.	1.5	200
29	The Impact of a 2 Ã— CO2Climate on Lightning-Caused Fires. Journal of Climate, 1994, 7, 1484-1494.	1.2	190
30	Climate Change and the Middle Atmosphere. Part I: The Doubled CO2Climate. Journals of the Atmospheric Sciences, 1990, 47, 475-494.	0.6	180
31	Hypothesized causes of decade-to-century-scale climate variability: Climate model results. Quaternary Science Reviews, 1993, 12, 357-374.	1.4	180
32	Global sources of local precipitation as determined by the Nasa/Giss GCM. Geophysical Research Letters, 1986, 13, 121-124.	1.5	177
33	Positive water vapour feedback in climate models confirmed by satellite data. Nature, 1991, 349, 500-503.	13.7	172
34	The Role of Sea Ice in 2Ã—CO2Climate Model Sensitivity. Part I: The Total Influence of Sea Ice Thickness and Extent. Journal of Climate, 1995, 8, 449-463.	1.2	168
35	Modeling Global Lightning Distributions in a General Circulation Model. Monthly Weather Review, 1994, 122, 1930-1939.	0.5	167
36	Complexity and Climate. Science, 1999, 284, 105-107.	6.0	167

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37	Hypothesized climate forcing time series for the last 500 years. Journal of Geophysical Research, 2001, 106, 14783-14803.	3.3	166
38	Possible role of dust-induced regional warming in abrupt climate change during the last glacial period. Nature, 1996, 384, 447-449.	13.7	163
39	The GISS Global Climate-Middle Atmosphere Model. Part I: Model Structure and Climatology. Journals of the Atmospheric Sciences, 1988, 45, 329-370.	0.6	159
40	Climatic effects of 1950â€“2050 changes in US anthropogenic aerosols â€“ Part 1: Aerosol trends and radiative forcing. Atmospheric Chemistry and Physics, 2012, 12, 3333-3348.	1.9	157
41	Pangaean climate during the Early Jurassic: GCM simulations and the sedimentary record of paleoclimate. Bulletin of the Geological Society of America, 1992, 104, 543.	1.6	149
42	Latitudinal temperature gradients and climate change. Journal of Geophysical Research, 1998, 103, 5943-5971.	3.3	148
43	Climatic effects of 1950â€“2050 changes in US anthropogenic aerosols â€“ Part 2: Climate response. Atmospheric Chemistry and Physics, 2012, 12, 3349-3362.	1.9	136
44	Sensitivity of Asian and African climate to variations in seasonal insolation, glacial ice cover, sea surface temperature, and Asian orography. Journal of Geophysical Research, 1993, 98, 7265-7287.	3.3	134
45	CMIP5 historical simulations (1850â€“2012) with GISS ModelE2. Journal of Advances in Modeling Earth Systems, 2014, 6, 441-478.	1.3	133
46	A New Look at Stratospheric Sudden Warmings. Part II: Evaluation of Numerical Model Simulations. Journal of Climate, 2007, 20, 470-488.	1.2	129
47	Joint investigations of the middle Pliocene climate II: GISS GCM Northern Hemisphere results. Global and Planetary Change, 1994, 9, 197-219.	1.6	128
48	Climate change in the circum-North Atlantic region during the last deglaciation. Nature, 1989, 338, 553-557.	13.7	127
49	The Influence of Ground Moisture Conditions in North America on Summer Climate as Modeled in the GISS GCM. Monthly Weather Review, 1982, 110, 1487-1494.	0.5	117
50	Climate Change and the Middle Atmosphere. Part III: The Doubled CO2Climate Revisited. Journal of Climate, 1998, 11, 876-894.	1.2	112
51	Future climate change under RCP emission scenarios with GISS <scp>M</scp>odelE2. Journal of Advances in Modeling Earth Systems, 2015, 7, 244-267.	1.3	112
52	Global Patterns of Cloud Optical Thickness Variation with Temperature. Journal of Climate, 1992, 5, 1484-1495.	1.2	107
53	Modeling the Effects of UV Variability and the QBO on the Troposphereâ€“Stratosphere System. Part I:. The Middle Atmosphere. Journal of Climate, 1995, 8, 2058-2079.	1.2	104
54	SUN-CLIMATE CONNECTIONS: Earth's Response to a Variable Sun. Science, 2001, 292, 234-236.	6.0	101

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55	Coupled Aerosol-Chemistryâ€“Climate Twentieth-Century Transient Model Investigation: Trends in Short-Lived Species and Climate Responses. Journal of Climate, 2011, 24, 2693-2714.	1.2	98
56	The Relative Importance of Solar and Anthropogenic Forcing of Climate Change between the Maunder Minimum and the Present. Journal of Climate, 2004, 17, 906-929.	1.2	96
57	Exploring the stratospheric/tropospheric response to solar forcing. Journal of Geophysical Research, 2008, 113, .	3.3	89
58	Comparison between SAGE II and ISCCP high-level clouds: 1. Global and zonal mean cloud amounts. Journal of Geophysical Research, 1995, 100, 1121-1135.	3.3	88
59	The Dynamics of Warm and Cold Climates. Journals of the Atmospheric Sciences, 1986, 43, 3-25.	0.6	81
60	Beryllium 10/beryllium 7 as a tracer of stratospheric transport. Journal of Geophysical Research, 1998, 103, 3907-3917.	3.3	80
61	Modelling the hydrological cycle in assessments of climate change. Nature, 1992, 358, 119-122.	13.7	78
62	Climatic effects of reduced Arctic sea ice limits in the Giss II General Circulation Model. Paleoceanography, 1990, 5, 367-382.	3.0	71
63	The Importance of Mesoscale Circulations Generated by Subgrid-Scale Landscape Heterogeneities in General Circulation Models. Journal of Climate, 1995, 8, 191-205.	1.2	70
64	Modeling the Effects of UV Variability and the QBO on the Troposphereâ€“Stratosphere System. Part II: The Troposphere. Journal of Climate, 1995, 8, 2080-2095.	1.2	70
65	Dependence of Warm and Cold Climate Depiction on Climate Model Resolution. Journal of Climate, 1988, 1, 965-997.	1.2	69
66	Climate Change and the Middle Atmosphere. Part II: The Impact of Volcanic Aerosols. Journal of Climate, 1992, 5, 189-208.	1.2	69
67	Use of on-line tracers as a diagnostic tool in general circulation model development: 2. Transport between the troposphere and stratosphere. Journal of Geophysical Research, 1999, 104, 9151-9167.	3.3	69
68	Response to CO2Transient Increase in the GISS Coupled Model:Regional Coolings in a Warming Climate. Journal of Climate, 1999, 12, 531-539.	1.2	67
69	Irrigated afforestation of the Sahara and Australian Outback to end global warming. Climatic Change, 2009, 97, 409-437.	1.7	63
70	Relating paleoclimate data and past temperature gradients: Some suggestive rules. Quaternary Science Reviews, 2000, 19, 381-390.	1.4	60
71	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
72	AO/NAO response to climate change: 1. Respective influences of stratospheric and tropospheric climate changes. Journal of Geophysical Research, 2005, 110, .	3.3	58

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73	The GISS Global Climate-Middle Atmosphere Model. Part II. Model Variability Due to Interactions between Planetary Waves, the Mean Circulation and Gravity Wave Drag. Journals of the Atmospheric Sciences, 1988, 45, 371-386.	0.6	56
74	Climate Change and the Middle Atmosphere. Part IV: Ozone Response to Doubled CO2. Journal of Climate, 1998, 11, 895-918.	1.2	53
75	Radiative cooling by stratospheric water vapor: Big differences in GCM results. Geophysical Research Letters, 2001, 28, 2791-2794.	1.5	50
76	CMIP6 Historical Simulations (1850â€“2014) With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2021, 13, e2019MS002034.	1.3	49
77	Regional warming from aerosol removal over the United States: Results from a transient 2010â€“2050 climate simulation. Atmospheric Environment, 2012, 46, 545-553.	1.9	43
78	Interannual Variability of the Antarctic Ozone Hole in a GCM. Part I: The Influence of Tropospheric Wave Variability. Journals of the Atmospheric Sciences, 1997, 54, 2308-2319.	0.6	41
79	The Impact of Sea Ice Concentration Accuracies on Climate Model Simulations with the GISS GCM. Journal of Climate, 2001, 14, 2606-2623.	1.2	41
80	Effects of glacial meltwater in the GISS coupled atmosphere-ocean model: 2. A bipolar seesaw in Atlantic Deep Water production. Journal of Geophysical Research, 2001, 106, 27355-27365.	3.3	40
81	Heating of the lower thermosphere by the dissipation of acoustic waves. Journal of Atmospheric and Solar-Terrestrial Physics, 1977, 39, 445-456.	0.9	34
82	The Role of sea ice in 2Ã—CO2climate model sensitivity: Part II: Hemispheric dependencies. Geophysical Research Letters, 1997, 24, 1491-1494.	1.5	32
83	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.	1.2	32
84	The role of the stratosphere in climate change. Surveys in Geophysics, 1993, 14, 133-165.	2.1	31
85	Improved surface and boundary layer models for the Goddard Institute for Space Studies general circulation model. Journal of Geophysical Research, 1997, 102, 16407-16422.	3.3	31
86	The QBO in two GISS global climate models: 1. Generation of the QBO. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8798-8824.	1.2	31
87	Isotopic responses to interannual climate variability simulated by an atmospheric general circulation model. Quaternary Science Reviews, 1993, 12, 387-406.	1.4	30
88	Investigation of the lower thermosphere results of ten years of continuous observations with natural infrasound. Journal of Atmospheric and Solar-Terrestrial Physics, 1978, 40, 1199-1209.	0.9	29
89	Seasonal Precipitation Timing and Ice Core Records. Science, 1995, 269, 247-248.	6.0	27
90	The Consequences of Not Knowing Low- and High-Latitude Climate Sensitivity. Bulletin of the American Meteorological Society, 2008, 89, 855-864.	1.7	27

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91	Climate change and the middle atmosphere: 5. Paleostratosphere in cold and warm climates. Journal of Geophysical Research, 2001, 106, 20195-20212.	3.3	26
92	Sensitivity of present and future surface temperatures to precipitation characteristics. Climate Research, 2004, 28, 53-65.	0.4	26
93	Interactive nature of climate change and aerosol forcing. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3457-3480.	1.2	25
94	GCM Simulations of Volcanic Aerosol Forcing. Part I: Climate Changes Induced by Steady-State Perturbations. Journal of Climate, 1993, 6, 1719-1742.	1.2	24
95	Sensitivity of tracer transports and stratospheric ozone to sea surface temperature patterns in the doubled CO2climate. Journal of Geophysical Research, 2002, 107, ACL 25-1.	3.3	24
96	Future Climate Change Under SSP Emission Scenarios With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	22
97	Influence of the latitudinal temperature gradient on soil dust concentration and deposition in Greenland. Journal of Geophysical Research, 2000, 105, 7199-7212.	3.3	21
98	Puzzles from the tropics. Nature, 1990, 346, 317-318.	13.7	19
99	Potential effects of cloud optical thickness on climate warming. Nature, 1993, 366, 670-672.	13.7	19
100	Multicentury Instability of the Atlantic Meridional Circulation in Rapid Warming Simulations With GISS ModelE2. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6331-6355.	1.2	19
101	Swiss glacier recession since the Little Ice Age: Reconciliation with climate records. Geophysical Research Letters, 1999, 26, 1909-1912.	1.5	18
102	Climate Variability and Climate Change. Developments in Atmospheric Science, 1991, 19, 69-78.	0.3	17
103	Climatic Effects of Atmospheric Carbon Dioxide. Science, 1983, 220, 874-875.	6.0	16
104	Tropical cooling and the isotopic composition of precipitation in general circulation model simulations of the ice age climate. Climate Dynamics, 2001, 17, 489-502.	1.7	16
105	The dry stratosphere: A limit on cometary water influx. Geophysical Research Letters, 1998, 25, 1649-1652.	1.5	15
106	Modelling the future: a joint venture. Nature, 1988, 334, 483-486.	13.7	14
107	GISS Model E2.2: A Climate Model Optimized for the Middle Atmosphereâ€"2. Validation of Largeâ€Scale Transport and Evaluation of Climate Response. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033151.	1.2	14
108	Wonderland climate model. Journal of Geophysical Research, 1997, 102, 6823-6830.	3.3	13

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109	Dynamical and Trace Gas Responses of the Quasiâ€Biennial Oscillation to Increased CO₂. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034151.	1.2	11
110	THE ROLE OF MOISTURE TRANSPORT BETWEEN GROUND AND ATMOSPHERE IN GLOBAL CHANGE. Annual Review of Environment and Resources, 1997, 22, 47-74.	1.2	10
111	A preliminary zonal mean climatology of water vapour in the stratosphere and mesosphere. Advances in Space Research, 1998, 21, 1417-1420.	1.2	10
112	Testing GISS-MM5 physics configurations for use in regional impacts studies. Climatic Change, 2010, 99, 567-587.	1.7	9
113	Interannual Variability of the Antarctic Ozone Hole in a GCM. Part II: A Comparison of Unforced and QBO-Induced Variability. Journals of the Atmospheric Sciences, 1999, 56, 1873-1884.	0.6	8
114	Teleconnections in a warmer climate: the pliocene perspective. Climate Dynamics, 2011, 37, 1869-1887.	1.7	8
115	Comment on S. H. Schneider's editorial ?can modeling of the ancient past verify prediction of future climates??. Climatic Change, 1986, 9, 357-360.	1.7	7
116	Tidal wind control of long-range rocket infrasound. Journal of Geophysical Research, 1975, 80, 1662-1664.	3.3	6
117	Climate responses to SATIRE and SIM-based spectral solar forcing in a 3D atmosphere-ocean coupled GCM. Journal of Space Weather and Space Climate, 2017, 7, A11.	1.1	5
118	Response of the Quasiâ€Biennial Oscillation to Historical Volcanic Eruptions. Geophysical Research Letters, 2021, 48, e2021GL095412.	1.5	5
119	An uplifting experience. Nature, 1992, 360, 414-415.	13.7	4
120	Estimating Solar Forcing of Climate Change during the Maunder Minimum. International Astronomical Union Colloquium, 1994, 143, 236-243.	0.1	3
121	GCM Hindcasts of SST Forced Climate Variability over Agriculturally Intensive Regions. Climatic Change, 2000, 45, 279-322.	1.7	3
122	Probing the atmosphere with infrasound. Physics Teacher, 1979, 17, 102-108.	0.2	0
123	Reply to Rasool. Climatic Change, 1983, 5, 203-204.	1.7	0
124	Sea-level effects due to long-term climate change as estimated from global climate models. Geophysical Journal International, 1986, 87, 117-118.	1.0	0
125	Supplement to The Consequences of not Knowing Low- High-Latitude Climate Sensitivity. Bulletin of the American Meteorological Society, 2008, 89, ES24-ES35.	1.7	0
126	Relationship Between Midstratospheric Temperatures and Tropospheric Synoptic Features1. Monthly Weather Review, 1973, 101, 475-485.	0.5	0