William Collins

List of Publications by Year in Descending Order

166 papers	20,775 citations	50 h-index	143 g-index
183 ext. papers	23,156 ext. citations	7.7 avg, IF	6.21 L-index

#	Paper	IF	Citations
166	The Influence of Ocean Coupling on Simulated and Projected Tropical Cyclone Precipitation in the HighResMIP-PRIMAVERA Simulations. *Geophysical Research Letters*, **2021**, 48, e2021GL094801	4.9	1
165	Evaluation of extreme sub-daily precipitation in high-resolution global climate model simulations. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2021**, 379, 20190545	3	9
164	Sources of Subseasonal-To-Seasonal Predictability of Atmospheric Rivers and Precipitation in the Western United States. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD034053	4.4	6
163	Uncertainties in Atmospheric River Lifecycles by Detection Algorithms: Climatology and Variability. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033711	4.4	9
162	Equity is more important for the social cost of methane than climate uncertainty. *Nature*, **2021**, 592, 564-570	50.4	2
161	Global Microphysical Sensitivity of Superparameterized Precipitation Extremes. *Earth and Space Science*, **2021**, 8, e2020EA001308	3.1	
160	An Investigation Into Biases in Instantaneous Aerosol Radiative Effects Calculated by Shortwave Parameterizations in Two Earth System Models. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2019JD032323	4.4	1
159	ClimateNet: an expert-labeled open dataset and deep learning architecture for enabling high-precision analyses of extreme weather. *Geoscientific Model Development*, **2021**, 14, 107-124	6.3	13
158	Quantifying the influence of natural climate variability on in situ measurements of seasonal total and extreme daily precipitation. *Climate Dynamics*, **2021**, 56, 3205-3230	4.2	2
157	Distortions of the Rain Distribution With Warming, With and Without Self-Aggregation. *Journal of Advances in Modeling Earth Systems*, **2021**, 13, e2020MS002256	7.1	2
156	Quantitative Precipitation Estimation of Extremes in CONUS With Radar Data. *Geophysical Research Letters*, **2021**, 48, e2021GL094697	4.9	3
155	Constraining and Characterizing the Size of Atmospheric Rivers: A Perspective Independent From the Detection Algorithm. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033746	4.4	1
154	Effective radiative forcing and adjustments in CMIP6 models **2020**,		3
153	Effective radiative forcing and adjustments in CMIP6 models. *Atmospheric Chemistry and Physics*, **2020**, 20, 9591-9618	6.8	66
152	Detection of atmospheric rivers with inline uncertainty quantification: TECA-BARD v1.0.1. *Geoscientific Model Development*, **2020**, 13, 6131-6148	6.3	7
151	Microphysical Sensitivity of Superparameterized Precipitation Extremes in the Contiguous United States Due to Feedbacks on Large-Scale Circulation. *Earth and Space Science*, **2020**, 7, e2019EA000731	3.1	3
150	Maximizing ENSO as a source of western US hydroclimate predictability. *Climate Dynamics*, **2020**, 54, 351-372	4.2	28

149	A probabilistic gridded product for daily precipitation extremes over the United States. *Climate Dynamics*, **2019**, 53, 2517-2538	4.2	20
148	ESD Reviews: Climate feedbacks in the Earth system and prospects for their evaluation. *Earth System Dynamics*, **2019**, 10, 379-452	4.8	31
147	Detected Changes in Precipitation Extremes at Their Native Scales Derived from In Situ Measurements. *Journal of Climate*, **2019**, 32, 8087-8109	4.4	6
146	Optimization of the Eddy-Diffusivity/Mass-Flux Shallow Cumulus and Boundary-Layer Parameterization Using Surrogate Models. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 402-416	7.1	4
145	Taking climate model evaluation to the next level. *Nature Climate Change*, **2019**, 9, 102-110	21.4	200
144	Quantifying the Effects of Historical Land Cover Conversion Uncertainty on Global Carbon and Climate Estimates. *Geophysical Research Letters*, **2018**, 45, 974-982	4.9	15
143	Observationally derived rise in methane surface forcing mediated by water vapour trends. *Nature Geoscience*, **2018**, 11, 238-243	18.3	24
142	A basis set for exploration of sensitivity to prescribed ocean conditions for estimating human contributions to extreme weather in CAM5.1-1degree. *Weather and Climate Extremes*, **2018**, 19, 10-19	6	24
141	Reducing uncertainties in climate models. *Science*, **2018**, 361, 326-327	33.3	42
140	An Intercomparison of GCM and RCM Dynamical Downscaling for Characterizing the Hydroclimatology of California and Nevada. *Journal of Hydrometeorology*, **2018**, 19, 1485-1506	3.7	9
139	Prognostic Power of Extreme Rainfall Scaling Formulas Across Space and Time Scales. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 3252-3267	7.1	5
138	Sensitivity of Mountain Hydroclimate Simulations in Variable-Resolution CESM to Microphysics and Horizontal Resolution. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 1357-1380	7.1	16
137	Quantifying Human-Mediated Carbon Cycle Feedbacks. *Geophysical Research Letters*, **2018**, 45, 11,370	4.9	7
136	Large regional shortwave forcing by anthropogenic methane informed by Jovian observations. *Science Advances*, **2018**, 4, eaas9593	14.3	8
135	Biospheric feedback effects in a synchronously coupled model of human and Earth systems. *Nature Climate Change*, **2017**, 7, 496-500	21.4	31
134	Diagnosing conditional anthropogenic contributions to heavy Colorado rainfall in September 2013. *Weather and Climate Extremes*, **2017**, 17, 1-6	6	32
133	An Independent Assessment of Anthropogenic Attribution Statements for Recent Extreme Temperature and Rainfall Events. *Journal of Climate*, **2017**, 30, 5-16	4.4	58
132	Spherical Harmonic Spectral Estimation on Arbitrary Grids. *Monthly Weather Review*, **2017**, 145, 3355-3363	2.4	2

131	Simultaneous characterization of mesoscale and convective-scale tropical rainfall extremes and their dynamical and thermodynamic modes of change. *Journal of Advances in Modeling Earth Systems*, **2017**, 9, 2103-2119	7.1	14
130	A New Paradigm for Diagnosing Contributions to Model Aerosol Forcing Error. *Geophysical Research Letters*, **2017**, 44, 12,004	4.9	6
129	Evaluation of hydrologic components of community land model 4 and bias identification. *International Journal of Applied Earth Observation and Geoinformation*, **2016**, 48, 5-16	7.3	14
128	Resolution dependence of precipitation statistical fidelity in hindcast simulations. *Journal of Advances in Modeling Earth Systems*, **2016**, 8, 976-990	7.1	45
127	A multimodel intercomparison of resolution effects on precipitation: simulations and theory. *Climate Dynamics*, **2016**, 47, 2205-2218	4.2	37
126	A fast and objective multidimensional kernel density estimation method: fastKDE. *Computational Statistics and Data Analysis*, **2016**, 101, 148-160	1.6	65
125	The Impact of ARM on Climate Modeling. *Meteorological Monographs*, **2016**, 57, 26.1-26.16	5.7	5
124	The spectroscopic foundation of radiative forcing of climate by carbon dioxide. *Geophysical Research Letters*, **2016**, 43, 5318-5325	4.9	14
123	What are the effects of Agro-Ecological Zones and land use region boundaries on land resource projection using the Global Change Assessment Model?. *Environmental Modelling and Software*, **2016**, 85, 246-265	5.2	13
122	ENSO regulation of far- and mid-infrared contributions to clear-sky OLR. *Geophysical Research Letters*, **2016**, 43, 8751-8759	4.9	1
121	Observational determination of surface radiative forcing by CO2 from 2000 to 2010. *Nature*, **2015**, 519, 339-43	50.4	127
120	An integrated assessment of water-energy and climate change in sacramento, california: how strong is the nexus?. *Climatic Change*, **2015**, 132, 223-235	4.5	28
119	Resolution Dependence of Future Tropical Cyclone Projections of CAM5.1 in the U.S. CLIVAR Hurricane Working Group Idealized Configurations. *Journal of Climate*, **2015**, 28, 3905-3925	4.4	90
118	Statistical uncertainty of eddy covariance CO2 fluxes inferred using a residual bootstrap approach. *Agricultural and Forest Meteorology*, **2015**, 206, 163-171	5.8	3
117	From research to action on climate change. *Frontiers in Ecology and the Environment*, **2015**, 13, 459-459	5.5	
116	Sensitivity of MJO propagation to a robust positive Indian Ocean dipole event in the superparameterized CAM. *Journal of Advances in Modeling Earth Systems*, **2015**, 7, 1901-1917	7.1	17
115	Progress in Fast, Accurate Multi-scale Climate Simulations. *Procedia Computer Science*, **2015**, 51, 2006-2015	1.5	2
114	Origins of climate model discrepancies in atmospheric shortwave absorption and global precipitation changes. *Geophysical Research Letters*, **2015**, 42, 8749-8757	4.9	14

113	Pan-spectral observing system simulation experiments of shortwave reflectance and long-wave radiance for climate model evaluation. *Geoscientific Model Development*, **2015**, 8, 1943-1954	6.3	10
112	The integrated Earth system model version 1: formulation and functionality. *Geoscientific Model Development*, **2015**, 8, 2203-2219	6.3	42
111	Accounting for radiative forcing from albedo change in future global land-use scenarios. *Climatic Change*, **2015**, 131, 691-703	4.5	25
110	Characterization of extreme precipitation within atmospheric river events over California. *Advances in Statistical Climatology, Meteorology and Oceanography*, **2015**, 1, 45-57	1.5	10
109	TECA: Petascale Pattern Recognition for Climate Science. *Lecture Notes in Computer Science*, **2015**, 426-436	3.9	7
108	Far-infrared surface emissivity and climate. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 16297-302	11.5	34
107	Reducing the computational cost of the ECF using a nuFFT: A fast and objective probability density estimation method. *Computational Statistics and Data Analysis*, **2014**, 79, 222-234	1.6	20
106	Interannual variability of the Earth's spectral solar reflectance from measurements and simulations. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 4458-4470	4.4	4
105	The robust dynamical contribution to precipitation extremes in idealized warming simulations across model resolutions. *Geophysical Research Letters*, **2014**, 41, 2971-2978	4.9	23
104	The spatial scale dependence of water vapor variability inferred from observations from a very tall tower. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 9822-9837	4.4	4
103	Global simulations of aerosol amount and size using MODIS observations assimilated with an Ensemble Kalman Filter. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 12,780-12,806	4.4	11
102	Temporal variability of observed and simulated hyperspectral reflectance. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 10,262-10,280	4.4	4
101	Forest response to increased disturbance in the central Amazon and comparison to western Amazonian forests. *Biogeosciences*, **2014**, 11, 5773-5794	4.6	18
100	From land use to land cover: restoring the afforestation signal in a coupled integrated assessment Earth system model and the implications for CMIP5 RCP simulations. *Biogeosciences*, **2014**, 11, 6435-6450	4.6	39
99	The effect of horizontal resolution on simulation quality in the Community Atmospheric Model, CAM5.1. *Journal of Advances in Modeling Earth Systems*, **2014**, 6, 980-997	7.1	178
98	A Hierarchical Evaluation of Regional Climate Simulations. *Eos*, **2013**, 94, 297-298	1.5	33
97	On the additivity of radiative forcing between land use change and greenhouse gases. *Geophysical Research Letters*, **2013**, 40, 4036-4041	4.9	37
96	The Community Earth System Model: A Framework for Collaborative Research. *Bulletin of the American Meteorological Society*, **2013**, 94, 1339-1360	6.1	1412

95	Greenhouse Gas Policy Influences Climate via Direct Effects of Land-Use Change. *Journal of Climate* , **2013**, 26, 3657-3670	4.4	55
94	Achieving Climate Change Absolute Accuracy in Orbit. *Bulletin of the American Meteorological Society*, **2013**, 94, 1519-1539	6.1	183
93	PORT, a CESM tool for the diagnosis of radiative forcing. *Geoscientific Model Development*, **2013**, 6, 469-476	6.3	54
92	Observed Scaling in Clouds and Precipitation and Scale Incognizance in Regional to Global Atmospheric Models. *Journal of Climate*, **2013**, 26, 9313-9333	4.4	40
91	On the Usage of Spectral and Broadband Satellite Instrument Measurements to Differentiate Climate Models with Different Cloud Feedback Strengths. *Journal of Climate*, **2013**, 26, 6561-6574	4.4	5
90	Global dust simulations in the multiscale modeling framework. *Journal of Advances in Modeling Earth Systems*, **2013**, 5, 15-31	7.1	2
89	Hurricanes in an aquaplanet world: Implications of the impacts of external forcing and model horizontal resolution. *Journal of Advances in Modeling Earth Systems*, **2013**, 5, 134-145	7.1	8
88	Quantitative comparison of the variability in observed and simulated shortwave reflectance. *Atmospheric Chemistry and Physics*, **2013**, 13, 3133-3147	6.8	11
87	Climate response due to carbonaceous aerosols and aerosol-induced SST effects in NCAR community atmospheric model CAM3.5. *Atmospheric Chemistry and Physics*, **2013**, 13, 7489-7510	6.8	15
86	A case study of subdaily simulated and observed continental convective precipitation: CMIP5 and multiscale global climate models comparison. *Geophysical Research Letters*, **2013**, 40, 5999-6003	4.9	28
85	The effect of vertically resolved soil biogeochemistry and alternate soil C and N models on C dynamics of CLM4. *Biogeosciences*, **2013**, 10, 7109-7131	4.6	282
84	Impact of ocean model resolution on CCSM climate simulations. *Climate Dynamics*, **2012**, 39, 1303-1328	4.2	151
83	Application of the CALIOP layer product to evaluate the vertical distribution of aerosols estimated by global models: AeroCom phase I results. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		137
82	Super-parameterization□A better way to simulate regional extreme precipitation?. *Journal of Advances in Modeling Earth Systems*, **2012**, 4, n/a-n/a	7.1	52
81	Global transport of passive tracers in conventional and superparameterized climate models: Evaluation of multi-scale methods. *Journal of Advances in Modeling Earth Systems*, **2012**, 4, n/a-n/a	7.1	3
80	First-Order Structure Function Analysis of Statistical Scale Invariance in the AIRS-Observed Water Vapor Field. *Journal of Climate*, **2012**, 25, 5538-5555	4.4	18
79	Local and Remote Climate Impacts from Expansion of Woody Biomass for Bioenergy Feedstock in the Southeastern United States. *Journal of Climate*, **2012**, 25, 7643-7659	4.4	7
78	Toward a minimal representation of aerosols in climate models: description and evaluation in the Community Atmosphere Model CAM5. *Geoscientific Model Development*, **2012**, 5, 709-739	6.3	648

77	PORT, a CESM tool for the diagnosis of radiative forcing **2012**,		4
76	CLARREO shortwave observing system simulation experiments of the twenty-first century: Simulator design and implementation. *Journal of Geophysical Research*, **2011**, 116,		34
75	Improvements of top-of-atmosphere and surface irradiance computations with CALIPSO-, CloudSat-, and MODIS-derived cloud and aerosol properties. *Journal of Geophysical Research*, **2011**, 116,		174
74	Simulation studies for the detection of changes in broadband albedo and shortwave nadir reflectance spectra under a climate change scenario. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		12
73	Using surface remote sensors to derive radiative characteristics of Mixed-Phase Clouds: an example from M-PACE. *Atmospheric Chemistry and Physics*, **2011**, 11, 11937-11949	6.8	8
72	Response of precipitation extremes to idealized global warming in an aqua-planet climate model: towards a robust projection across different horizontal resolutions. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2011**, 63, 876-883	2	25
71	Impact of horizontal resolution on simulation of precipitation extremes in an aqua-planet version of Community Atmospheric Model (CAM3). *Tellus, Series A: Dynamic Meteorology and Oceanography* , **2011**, 63, 884-892	2	63
70	Extension of the weak-line approximation and application to correlated-k methods. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2011**, 112, 1525-1532	2.1	8
69	Relating Satellite-Observed Cloud Properties from MODIS to Meteorological Conditions for Marine Boundary Layer Clouds. *Journal of Climate*, **2010**, 23, 1374-1391	4.4	15
68	Effects of Black Carbon Aerosols on the Indian Monsoon. *Journal of Climate*, **2008**, 21, 2869-2882	4.4	344
67	Radiative forcing by long-lived greenhouse gases: Calculations with the AER radiative transfer models. *Journal of Geophysical Research*, **2008**, 113,		2260
66	Investigation of Regional and Seasonal Variations in Marine Boundary Layer Cloud Properties from MODIS Observations. *Journal of Climate*, **2008**, 21, 4955-4973	4.4	39
65	The physical science behind climate change. *Scientific American*, **2007**, 297, 64-73	0.5	27
64	Impact of Desert Dust Radiative Forcing on Sahel Precipitation: Relative Importance of Dust Compared to Sea Surface Temperature Variations, Vegetation Changes, and Greenhouse Gas Warming. *Journal of Climate*, **2007**, 20, 1445-1467	4.4	252
63	Climate Change Projections for the Twenty-First Century and Climate Change Commitment in the CCSM3. *Journal of Climate*, **2006**, 19, 2597-2616	4.4	220
62	The Formulation and Atmospheric Simulation of the Community Atmosphere Model Version 3 (CAM3). *Journal of Climate*, **2006**, 19, 2144-2161	4.4	812
61	The Community Climate System Model Version 3 (CCSM3). *Journal of Climate*, **2006**, 19, 2122-2143	4.4	1917
60	Radiative forcing by well-mixed greenhouse gases: Estimates from climate models in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4). *Journal of Geophysical Research*, **2006**, 111,		183

59	Effects of increased near-infrared absorption by water vapor on the climate system. *Journal of Geophysical Research*, **2006**, 111,		23
58	Climate response and radiative forcing from mineral aerosols during the last glacial maximum, pre-industrial, current and doubled-carbon dioxide climates. *Geophysical Research Letters*, **2006**, 33,	4.9	119
57	An AeroCom initial assessment optical properties in aerosol component modules of global models. *Atmospheric Chemistry and Physics*, **2006**, 6, 1815-1834	6.8	575
56	The Climate Sensitivity of the Community Climate System Model Version 3 (CCSM3). *Journal of Climate*, **2006**, 19, 2584-2596	4.4	148
55	Climatology of Upper-Tropospheric Relative Humidity from the Atmospheric Infrared Sounder and Implications for Climate. *Journal of Climate*, **2006**, 19, 6104-6121	4.4	71
54	Radiative and Dynamical Feedbacks over the Equatorial Cold Tongue: Results from Nine Atmospheric GCMs. *Journal of Climate*, **2006**, 19, 4059-4074	4.4	67
53	Response of a coupled chemistry-climate model to changes in aerosol emissions: Global impact on the hydrological cycle and the tropospheric burdens of OH, ozone, and NOx. *Geophysical Research Letters*, **2005**, 32,	4.9	49
52	Assessing future nitrogen deposition and carbon cycle feedback using a multimodel approach: Analysis of nitrogen deposition. *Journal of Geophysical Research*, **2005**, 110,		221
51	Amplification of surface temperature trends and variability in the tropical atmosphere. *Science*, **2005**, 309, 1551-6	33.3	229
50	How much more global warming and sea level rise?. *Science*, **2005**, 307, 1769-72	33.3	458
49	Using the PARAGON Framework to Establish an Accurate, Consistent, and Cohesive Long-Term Aerosol Record. *Bulletin of the American Meteorological Society*, **2004**, 85, 1535-1548	6.1	5
48	PARAGON: An Integrated Approach for Characterizing Aerosol Climate Impacts and Environmental Interactions. *Bulletin of the American Meteorological Society*, **2004**, 85, 1491-1502	6.1	49
47	Effect of clouds on photolysis and oxidants in the troposphere. *Journal of Geophysical Research*, **2003**, 108,		208
46	Comparison of ScaRaB, GOES 8, aircraft, and surface observations of the absorption of solar radiation by clouds. *Journal of Geophysical Research*, **2002**, 107, ACL 1-1-ACL 1-6		7
45	An updated parameterization for infrared emission and absorption by water vapor in the National Center for Atmospheric Research Community Atmosphere Model. *Journal of Geophysical Research*, **2002**, 107, ACL 17-1		71
44	Simulation of aerosol distributions and radiative forcing for INDOEX: Regional climate impacts. *Journal of Geophysical Research*, **2002**, 107, INX2 27-1		76
43	The ScaRaB Resurs Earth Radiation Budget Dataset and First Results. *Bulletin of the American Meteorological Society*, **2001**, 82, 1397-1408	6.1	34
42	Effects of Enhanced Shortwave Absorption on Coupled Simulations of the Tropical Climate System. *Journal of Climate*, **2001**, 14, 1147-1165	4.4	9

41	Parameterization of Generalized Cloud Overlap for Radiative Calculations in General Circulation Models. *Journals of the Atmospheric Sciences*, **2001**, 58, 3224-3242	2.1	119
40	The NCEP/NCAR 50-Year Reanalysis: Monthly Means CD-ROM and Documentation. *Bulletin of the American Meteorological Society*, **2001**, 82, 247-267	6.1	3331
39	Indian Ocean Experiment: An integrated analysis of the climate forcing and effects of the great Indo-Asian haze. *Journal of Geophysical Research*, **2001**, 106, 28371-28398		1041
38	Simulating aerosols using a chemical transport model with assimilation of satellite aerosol retrievals: Methodology for INDOEX. *Journal of Geophysical Research*, **2001**, 106, 7313-7336		248
37	Understanding the Indian Ocean Experiment (INDOEX) aerosol distributions with an aerosol assimilation. *Journal of Geophysical Research*, **2001**, 106, 7337-7355		145
36	Dust and pollution transport on global scales: Aerosol measurements and model predictions. *Journal of Geophysical Research*, **2001**, 106, 32555-32569		100
35	Response of the NCAR Climate System Model to Increased CO2and the Role of Physical Processes. *Journal of Climate*, **2000**, 13, 1879-1898	4.4	112
34	Indian Ocean Low Clouds during the Winter Monsoon. *Journal of Climate*, **2000**, 13, 2028-2043	4.4	23
33	Determination of surface heating by convective cloud systems in the central equatorial Pacific from surface and satellite measurements. *Journal of Geophysical Research*, **2000**, 105, 14807-14821		3
32	Detecting tropical convection using AVHRR satellite data. *Journal of Geophysical Research*, **1999**, 104, 9213-9228		6
31	Long-Term Behavior of Cloud Systems in TOGA COARE and Their Interactions with Radiative and Surface Processes. Part II: Effects of Ice Microphysics on Cloud-Radiation Interaction. *Journals of the Atmospheric Sciences*, **1999**, 56, 3177-3195	2.1	73
30	A global signature of enhanced shortwave absorption by clouds. *Journal of Geophysical Research*, **1998**, 103, 31669-31679		29
29	Cloud properties leading to highly reflective tropical cirrus: Interpretations from CEPEX, TOGA COARE, and Kwajalein, Marshall Islands. *Journal of Geophysical Research*, **1998**, 103, 8805-8812		16
28	Direct observations of aerosol radiative forcing over the tropical Indian Ocean during the January-February 1996 pre-INDOEX cruise. *Journal of Geophysical Research*, **1998**, 103, 13827-13836		150
27	The ScaRaB Earth Radiation Budget Dataset. *Bulletin of the American Meteorological Society*, **1998**, 79, 765-783	6.1	100
26	Comparison of Tropical Ocean-Atmosphere Fluxes with the NCAR Community Climate Model CCM3*. *Journal of Climate*, **1997**, 10, 3047-3058	4.4	10
25	Atmospheric absorption during the Atmospheric Radiation Measurement (ARM) Enhanced Shortwave Experiment (ARESE). *Journal of Geophysical Research*, **1997**, 102, 29901-29915		68
24	Atmospheric Radiation Measurements Enhanced Shortwave Experiment (ARESE): Experimental and data details. *Journal of Geophysical Research*, **1997**, 102, 29929-29937		35

23	Direct Radiometric Observations of the Water Vapor Greenhouse Effect Over the Equatorial Pacific Ocean. *Science*, **1997**, 275, 1773-6	33.3	14
22	Radiative effects of convection in the tropical Pacific. *Journal of Geophysical Research*, **1996**, 101, 14999-15012		15
21	An estimate of the surface shortwave cloud forcing over the western Pacific during TOGA COARE. *Geophysical Research Letters*, **1996**, 23, 519-522	4.9	28
20	Validation of Clear-Sky Fluxes for Tropical Oceans from the Earth Radiation Budget Experiment. *Journal of Climate*, **1995**, 8, 569-578	4.4	22
19	The role of water vapor and convection during the Central Equatorial Pacific Experiment from observations and model simulations. *Journal of Geophysical Research*, **1995**, 100, 26229		10
18	Comment on the Paper An inquiry into the cirrus-cloud thermostat effect for tropical sea surface temperature by K. M. Lau, C. H. Sui, M. D. Chou and W. K. Tau. *Geophysical Research Letters*, **1994**, 21, 1185-1186	4.9	3
17	Relationship between clear-sky atmospheric greenhouse effect and deep convection during the Central Equatorial Pacific Experiment: Model calculations and satellite observations. *Journal of Geophysical Research*, **1994**, 99, 25891		11
16	A thermostat in the tropics?. *Nature*, **1993**, 361, 410-411	50.4	16
15	Mechanics of apparent horizons. *Physical Review D*, **1992**, 45, 495-498	4.9	28
14	Thermostat and global warming. *Nature*, **1992**, 357, 649-649	50.4	20
13	The theory of magnetohydrodynamic wave generation by localized sources. III - Efficiency of plasma heating by dissipation of far-field waves. *Astrophysical Journal*, **1992**, 384, 319	4.7	10
12	Thermodynamic regulation of ocean warming by cirrus clouds deduced from observations of the 1987 El Nio. *Nature*, **1991**, 351, 27-32	50.4	561
11	The theory of magnetohydrodynamic wave generation by localized sources. I - General asymptotic theory. *Astrophysical Journal*, **1989**, 337, 548	4.7	10
10	The theory of magnetohydrodynamic wave generation by localized sources. II - Collisionless dissipation of wave packets. *Astrophysical Journal*, **1989**, 343, 499	4.7	12
9	Thermal production of superheavy magnetic monopoles in the new inflationary-Universe scenario. *Physical Review D*, **1984**, 29, 2158-2161	4.9	8
8	Anthropogenic and Natural Radiative Forcing659-740		472
7	Evaluation of Climate Models741-866		264
6	Climate response due to carbonaceous aerosols and aerosol-induced SST effects in NCAR community atmospheric model CAM3.5		1

List of Publications

5	The effect of vertically-resolved soil biogeochemistry and alternate soil C and N models on C dynamics of CLM4		15
4	From land use to land cover: restoring the afforestation signal in a coupled integrated assessment earth system model and the implications for CMIP5 RCP simulations		4
3	Forest response to increased disturbance in the Central Amazon and comparison to Western Amazonian forests		3
2	The integrated Earth System Model (iESM): formulation and functionality		11
1	A low-to-no snow future and its impacts on water resources in the western United States. *Nature Reviews Earth & Environment*,	30.2	14