David A Randall

List of Publications by Year
in descending order

237 papers	25,676 citations	7096 78 h-index	7160 153 g-index
248 all docs	248 docs citations	248 times ranked	12047 citing authors

#	Article	IF	Citations
1	A Revised Land Surface Parameterization (SiB2) for Atmospheric GCMS. Part I: Model Formulation. Journal of Climate, 1996, 9, 676-705.	3.2	1,574
2	Modeling the Exchanges of Energy, Water, and Carbon Between Continents and the Atmosphere. Science, 1997, 275, 502-509.	12.6	1,280
3	How Well Do We Understand and Evaluate Climate Change Feedback Processes?. Journal of Climate, 2006, 19, 3445-3482.	3.2	849
4	A Revised Land Surface Parameterization (SiB2) for Atmospheric GCMS. Part II: The Generation of Global Fields of Terrestrial Biophysical Parameters from Satellite Data. Journal of Climate, 1996, 9, 706-737.	3.2	834
5	Cloud Resolving Modeling of the ARM Summer 1997 IOP: Model Formulation, Results, Uncertainties, and Sensitivities. Journals of the Atmospheric Sciences, 2003, 60, 607-625.	1.7	730
6	Intercomparison and interpretation of climate feedback processes in 19 atmospheric general circulation models. Journal of Geophysical Research, 1990, 95, 16601-16615.	3.3	722
7	Overview of Arctic Cloud and Radiation Characteristics. Journal of Climate, 1996, 9, 1731-1764.	3.2	649
8	Breaking the Cloud Parameterization Deadlock. Bulletin of the American Meteorological Society, 2003, 84, 1547-1564.	3.3	622
9	Comparison of Radiative and Physiological Effects of Doubled Atmospheric CO2 on Climate. Science, 1996, 271, 1402-1406.	12.6	516
10	Intraseasonal oscillations in 15 atmospheric general circulation models: results from an AMIP diagnostic subproject. Climate Dynamics, 1996, 12, 325-357.	3.8	486
11	Interpretation of Cloud-Climate Feedback as Produced by 14 Atmospheric General Circulation Models. Science, 1989, 245, 513-516.	12.6	460
12	A global 1Â° by 1Â° NDVI data set for climate studies. Part 2: The generation of global fields of terrestrial biophysical parameters from the NDVI. International Journal of Remote Sensing, 1994, 15, 3519-3545.	2.9	443
13	A fast radiation parameterization for atmospheric circulation models. Journal of Geophysical Research, 1987, 92, 1009-1016.	3.3	389
14	Latitudinal gradient of atmospheric CO2 due to seasonal exchange with land biota. Nature, 1995, 376, 240-243.	27.8	384
15	A cloud resolving model as a cloud parameterization in the NCAR Community Climate System Model: Preliminary results. Geophysical Research Letters, 2001, 28, 3617-3620.	4.0	371
16	Simulations of the Atmospheric General Circulation Using a Cloud-Resolving Model as a Superparameterization of Physical Processes. Journals of the Atmospheric Sciences, 2005, 62, 2136-2154.	1.7	340
17	Evidence for Large Decadal Variability in the Tropical Mean Radiative Energy Budget. Science, 2002, 295, 841-844.	12.6	333
18	Mission to Planet Earth: Role of Clouds and Radiation in Climate. Bulletin of the American Meteorological Society, 1995, 76, 2125-2153.	3.3	317

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19	Partitioning of ocean and land uptake of CO2as inferred by Î´13C measurements from the NOAA Climate Monitoring and Diagnostics Laboratory Global Air Sampling Network. Journal of Geophysical Research, 1995, 100, 5051.	3.3	315
20	Conditional Instability of the First Kind Upside-Down. Journals of the Atmospheric Sciences, 1980, 37, 125-130.	1.7	307
21	A Semiempirical Cloudiness Parameterization for Use in Climate Models. Journals of the Atmospheric Sciences, 1996, 53, 3084-3102.	1.7	293
22	High-Resolution Simulation of Shallow-to-Deep Convection Transition over Land. Journals of the Atmospheric Sciences, 2006, 63, 3421-3436.	1.7	286
23	Observed Characteristics of the MJO Relative to Maximum Rainfall. Journals of the Atmospheric Sciences, 2007, 64, 2332-2354.	1.7	284
24	Effects of Implementing the Simple Biosphere Model in a General Circulation Model. Journals of the Atmospheric Sciences, 1989, 46, 2757-2782.	1.7	263
25	Numerical Integration of the Shallow-Water Equations on a Twisted Icosahedral Grid. Part I: Basic Design and Results of Tests. Monthly Weather Review, 1995, 123, 1862-1880.	1.4	258
26	Cloud feedback in atmospheric general circulation models: An update. Journal of Geophysical Research, 1996, 101, 12791-12794.	3.3	257
27	Liquid and Ice Cloud Microphysics in the CSU General Circulation Model. Part 1: Model Description and Simulated Microphysical Processes. Journal of Climate, 1996, 9, 489-529.	3.2	257
28	Diurnal Variability of the Hydrologic Cycle in a General Circulation Model. Journals of the Atmospheric Sciences, 1991, 48, 40-62.	1.7	255
29	FIRE Arctic Clouds Experiment. Bulletin of the American Meteorological Society, 2000, 81, 5-29.	3.3	249
30	Outlook for Research on Subtropical Marine Stratification Clouds. Bulletin of the American Meteorological Society, 1984, 65, 1290-1301.	3.3	241
31	Interactions among Radiation, Convection, and Large-Scale Dynamics in a General Circulation Model. Journals of the Atmospheric Sciences, 1989, 46, 1943-1970.	1.7	222
32	Single-Column Models and Cloud Ensemble Models as Links between Observations and Climate Models. Journal of Climate, 1996, 9, 1683-1697.	3.2	219
33	Clouds and the Earth's Radiant Energy System (CERES): algorithm overview. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1127-1141.	6.3	218
34	Observations of Marine Stratocumulus Clouds During FIRE. Bulletin of the American Meteorological Society, 1988, 69, 618-626.	3.3	215
35	Sensitivity of Climate to Changes in NDVI. Journal of Climate, 2000, 13, 2277-2292.	3.2	209
36	Carbon 13 exchanges between the atmosphere and biosphere. Global Biogeochemical Cycles, 1997, 11, 507-533.	4.9	206

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37	A three-dimensional synthesis study of Î´18O in atmospheric CO2: 1. Surface fluxes. Journal of Geophysical Research, 1997, 102, 5857-5872.	3.3	200
38	Northern Hemisphere atmospheric blocking as simulated by 15 atmospheric general circulation models in the period 1979-1988. Climate Dynamics, 1998, 14, 385-407.	3.8	195
39	An intercomparison of cloud-resolving models with the Atmospheric Radiation Measurement summer 1997 Intensive Observation Period data. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 593-624.	2.7	192
40	The Parameterization Of the Planetary Boundary Layer in the UCLA General Circulation Model: Formulation and Results. Monthly Weather Review, 1983, 111, 2224-2243.	1.4	172
41	Interpretation of Snow-Climate Feedback as Produced by 17 General Circulation Models. Science, 1991, 253, 888-892.	12.6	171
42	Confronting Models with Data: The GEWEX Cloud Systems Study. Bulletin of the American Meteorological Society, 2003, 84, 455-470.	3.3	170
43	Structure of the Maddenâ€"Julian Oscillation in the Superparameterized CAM. Journals of the Atmospheric Sciences, 2009, 66, 3277-3296.	1.7	167
44	Diurnal Variability of the Hydrologic Cycle and Radiative Fluxes: Comparisons between Observations and a GCM. Journal of Climate, 2000, 13, 4159-4179.	3.2	165
45	Stochastic generation of subgrid-scale cloudy columns for large-scale models. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2047-2067.	2.7	154
46	Globalâ€scale convective aggregation: Implications for the Maddenâ€Julian Oscillation. Journal of Advances in Modeling Earth Systems, 2015, 7, 1499-1518.	3.8	141
47	Low-Frequency Oscillations in Radiative-Convective Systems. Journals of the Atmospheric Sciences, 1994, 51, 1089-1099.	1.7	140
48	Tropical and Subtropical Cloud Transitions in Weather and Climate Prediction Models: The GCSS/WGNE Pacific Cross-Section Intercomparison (GPCI). Journal of Climate, 2011, 24, 5223-5256.	3.2	134
49	A Revised Land Surface Parameterization (SiB2) for GCMS. Part III: The Greening of the Colorado State University General Circulation Model. Journal of Climate, 1996, 9, 738-763.	3.2	131
50	The Community Climate System Model. Bulletin of the American Meteorological Society, 2001, 82, 2357-2376.	3.3	131
51	Evaluation of the Simulated Interannual and Subseasonal Variability in an AMIP-Style Simulation Using the CSU Multiscale Modeling Framework. Journal of Climate, 2008, 21, 413-431.	3.2	128
52	The Role of Convective Moistening in the Maddenâ€"Julian Oscillation. Journals of the Atmospheric Sciences, 2009, 66, 3297-3312.	1.7	128
53	A Multiscale Modeling System: Developments, Applications, and Critical Issues. Bulletin of the American Meteorological Society, 2009, 90, 515-534.	3.3	128
54	Status of and Outlook for Large-Scale Modeling of Atmosphereâ€"Iceâ€"Ocean Interactions in the Arctic. Bulletin of the American Meteorological Society, 1998, 79, 197-219.	3.3	126

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55	Geostrophic Adjustment and the Finite-Difference Shallow-Water Equations. Monthly Weather Review, 1994, 122, 1371-1377.	1.4	125
56	Explicit Simulation of Cumulus Ensembles with the GATE Phase III Data: Comparison with Observations. Journals of the Atmospheric Sciences, 1996, 53, 3710-3736.	1.7	125
57	Earth Radiation Budget and Cloudiness Simulations with a General Circulation Model. Journals of the Atmospheric Sciences, 1989, 46, 1922-1942.	1.7	123
58	Numerical Integration of the Shallow-Water Equations on a Twisted Icosahedral Grid. Part II. A Detailed Description of the Grid and an Analysis of Numerical Accuracy. Monthly Weather Review, 1995, 123, 1881-1887.	1.4	122
59	A Second-Order Bulk Boundary-Layer Model. Journals of the Atmospheric Sciences, 1992, 49, 1903-1923.	1.7	121
60	Intercomparison and evaluation of cumulus parametrizations under summertime midlatitude continental conditions. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1095-1135.	2.7	119
61	Toward a Unified Parameterization of the Boundary Layer and Moist Convection. Part I: A New Type of Mass-Flux Model. Journals of the Atmospheric Sciences, 2001, 58, 2021-2036.	1.7	118
62	Implementation of the Arakawa-Schubert Cumulus Parameterization with a Prognostic Closure. , 1993, , 137-144.		116
63	Modeling the Atmospheric General Circulation Using a Spherical Geodesic Grid: A New Class of Dynamical Cores. Monthly Weather Review, 2000, 128, 2471-2490.	1.4	108
64	A comparison of single column model simulations of summertime midlatitude continental convection. Journal of Geophysical Research, 2000, 105, 2091-2124.	3.3	107
65	Climate modeling with spherical geodesic grids. Computing in Science and Engineering, 2002, 4, 32-41.	1.2	103
66	Convective Precipitation Variability as a Tool for General Circulation Model Analysis. Journal of Climate, 2007, 20, 91-112.	3.2	101
67	A mechanism for the influence of vegetation on the response of the diurnal temperature range to changing climate. Geophysical Research Letters, 2000, 27, 3381-3384.	4.0	100
68	Simulations of terrestrial carbon metabolism and atmospheric CO₂ in a general circulation model: Part 1: Surface carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 521.	1.6	99
69	An oceanâ€atmosphere climate simulation with an embedded cloud resolving model. Geophysical Research Letters, 2010, 37, .	4.0	97
70	Scientific Investigations Planned for the Lidar In-Space Technology Experiment (LITE). Bulletin of the American Meteorological Society, 1993, 74, 205-214.	3.3	95
71	Impact of Interactive Radiative Transfer on the Macroscopic Behavior of Cumulus Ensembles. Part II: Mechanisms for Cloud-Radiation Interactions. Journals of the Atmospheric Sciences, 1995, 52, 800-817.	1.7	95
72	Vertical-Mode and Cloud Decomposition of Large-Scale Convectively Coupled Gravity Waves in a Two-Dimensional Cloud-Resolving Model. Journals of the Atmospheric Sciences, 2007, 64, 1210-1229.	1.7	95

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73	Largeâ€Eddy Simulation of Maritime Deep Tropical Convection. Journal of Advances in Modeling Earth Systems, 2009, 1, .	3.8	95
74	Effects of model resolution and subgrid-scale physics on the simulation of precipitation in the continental United States. Climate Dynamics, 2004, 23, 243-258.	3.8	92
75	Interactions between Vegetation and Climate: Radiative and Physiological Effects of Doubled Atmospheric CO2. Journal of Climate, 1999, 12, 309-324.	3.2	91
76	Simulations of terrestrial carbon metabolism and atmospheric CO₂ in a general circulation model: Part 2: Simulated CO₂ concentrations. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 543.	1.6	90
77	Northward Propagation Mechanisms of the Boreal Summer Intraseasonal Oscillation in the ERA-Interim and SP-CCSM. Journal of Climate, 2013, 26, 1973-1992.	3.2	87
78	Clearing clouds of uncertainty. Nature Climate Change, 2017, 7, 674-678.	18.8	87
79	Clouds and Convective Selfâ€Aggregation in a Multimodel Ensemble of Radiativeâ€Convective Equilibrium Simulations. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002138.	3.8	86
80	Seasonal Simulations of the Planetary Boundary Layer and Boundary-Layer Stratocumulus Clouds with a General Circulation Model. Journals of the Atmospheric Sciences, 1985, 42, 641-676.	1.7	84
81	Intercomparison and interpretation of surface energy fluxes in atmospheric general circulation models. Journal of Geophysical Research, 1992, 97, 3711-3724.	3.3	81
82	Uncertainties in Carbon Dioxide Radiative Forcing in Atmospheric General Circulation Models. Science, 1993, 262, 1252-1255.	12.6	81
83	A Potential Enstrophy and Energy Conserving Numerical Scheme for Solution of the Shallow-Water Equations on a Geodesic Grid. Monthly Weather Review, 2002, 130, 1397-1410.	1.4	80
84	FIREâ€"The First ISCCP Regional Experiment. Bulletin of the American Meteorological Society, 1987, 68, 114-118.	3.3	79
85	Simulations of terrestrial carbon metabolism and atmospheric CO2 in a general circulation model. Part 1: Surface carbon fluxes. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 521-542.	1.6	76
86	A three-dimensional synthesis study of Î´18O in atmospheric CO2: 2. Simulations with the TM2 transport model. Journal of Geophysical Research, 1997, 102, 5873-5883.	3.3	75
87	MJO Intensification with Warming in the Superparameterized CESM. Journal of Climate, 2015, 28, 2706-2724.	3.2	74
88	Large-Eddy Simulation of Evaporatively Driven Entrainment in Cloud-Topped Mixed Layers. Journals of the Atmospheric Sciences, 2008, 65, 1481-1504.	1.7	71
89	Parameterization of the Atmospheric Boundary Layer: A View from Just Above the Inversion. Bulletin of the American Meteorological Society, 2008, 89, 453-458.	3.3	70
90	Intraseasonal Variability in Coupled GCMs: The Roles of Ocean Feedbacks and Model Physics. Journal of Climate, 2014, 27, 4970-4995.	3.2	70

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91	Simulations of terrestrial carbon metabolism and atmospheric CO2 in a general circulation model. Part 2: Simulated CO2 concentrations. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 543-567.	1.6	69
92	Alternative methods for specification of observed forcing in single-column models and cloud system models. Journal of Geophysical Research, 1999, 104, 24527-24545.	3.3	69
93	Beyond deadlock. Geophysical Research Letters, 2013, 40, 5970-5976.	4.0	69
94	Simulations of midlatitude frontal clouds by single-column and cloud-resolving models during the Atmospheric Radiation Measurement March 2000 cloud intensive operational period. Journal of Geophysical Research, 2005, 110, .	3.3	66
95	The Asian Monsoon in the Superparameterized CCSM and Its Relationship to Tropical Wave Activity. Journal of Climate, 2011, 24, 5134-5156.	3.2	65
96	Diagnosing ocean feedbacks to the MJO: SSTâ€modulated surface fluxes and the moist static energy budget. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8350-8373.	3.3	64
97	Robust effects of cloud superparameterization on simulated daily rainfall intensity statistics across multiple versions of the <scp>C</scp>ommunity <scp>E</scp>arth <scp>S</scp>ystem <scp>M</scp>odel. Journal of Advances in Modeling Earth Systems, 2016, 8, 140-165.	3.8	64
98	Dark Warming. Journal of Climate, 2016, 29, 705-719.	3.2	63
99	A cumulus parameterization with multiple cloud base levels. Journal of Geophysical Research, 1998, 103, 11341-11353.	3.3	61
100	Updraft and Downdraft Statistics of Simulated Tropical and Midlatitude Cumulus Convection. Journals of the Atmospheric Sciences, 2001, 58, 1630-1649.	1.7	61
101	A cumulus parametrization with a prognostic closure. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 949-981.	2.7	60
102	Cloud-radiative effects on implied oceanic energy transports as simulated by Atmospheric General Circulation Models. Geophysical Research Letters, 1995, 22, 791-794.	4.0	59
103	Atmospheric Mechanisms for MJO Decay Over the Maritime Continent. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5188-5204.	3.3	59
104	Analysis of snow feedbacks in 14 general circulation models. Journal of Geophysical Research, 1994, 99, 20757.	3.3	58
105	Measurements, Models, and Hypotheses in the Atmospheric Sciences. Bulletin of the American Meteorological Society, 1997, 78, 399-406.	3.3	58
106	DCMIP2016: a review of non-hydrostatic dynamical core design and intercomparison of participating models. Geoscientific Model Development, 2017, 10, 4477-4509.	3.6	58
107	Entrainment into a Stratocumulus Layer with Distributed Radiative Cooling. Journals of the Atmospheric Sciences, 1980, 37, 148-159.	1.7	56
108	A Stochastic Model of Cumulus Clumping. Journals of the Atmospheric Sciences, 1980, 37, 2068-2078.	1.7	55

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109	Liquid and Ice Cloud Microphysics in the CSU General Circulation Model. Part II: Impact on Cloudiness, the Earth's Radiation Budget, and the General Circulation of the Atmosphere. Journal of Climate, 1996, 9, 530-560.	3.2	55
110	Impact of Interactive Radiative Transfer on the Macroscopic Behavior of Cumulus Ensembles. Part I: Radiation Parameterization and Sensitivity Tests. Journals of the Atmospheric Sciences, 1995, 52, 785-799.	1.7	53
111	Cooling of Entrained Parcels in a Large-Eddy Simulation. Journals of the Atmospheric Sciences, 2012, 69, 1118-1136.	1.7	53
112	Modeling springtime shallow frontal clouds with cloud-resolving and single-column models. Journal of Geophysical Research, 2005, 110, .	3.3	51
113	Cloud Modeling Tests of the ULTIMATEâ€“MACHO Scalar Advection Scheme. Monthly Weather Review, 2011, 139, 3248-3264.	1.4	50
114	Observations of the Earth's Radiation Budget in relation to atmospheric hydrology: 4. Atmospheric column radiative cooling over the world's oceans. Journal of Geophysical Research, 1994, 99, 18585.	3.3	49
115	100 Years of Earth System Model Development. Meteorological Monographs, 2019, 59, 12.1-12.66.	5.0	48
116	A Mixed Scheme for Subgrid-Scale Fluxes in Cloud-Resolving Models. Journals of the Atmospheric Sciences, 2010, 67, 3692-3705.	1.7	47
117	The Moist Available Energy of a Conditionally Unstable Atmosphere. Journals of the Atmospheric Sciences, 1992, 49, 240-255.	1.7	45
118	Impacts of Idealized Airâ€“Sea Coupling on Maddenâ€“Julian Oscillation Structure in the Superparameterized CAM. Journals of the Atmospheric Sciences, 2011, 68, 1990-2008.	1.7	45
119	Impact of Evapotranspiration on Dry Season Climate in the Amazon Forest*. Journal of Climate, 2014, 27, 574-591.	3.2	45
120	Quantifying the limits of convective parameterizations. Journal of Geophysical Research, 2011, 116, .	3.3	44
121	Physical Processes within the Nocturnal Stratus-topped Boundary Layer. Journals of the Atmospheric Sciences, 1992, 49, 2384-2401.	1.7	43
122	Low-Frequency Oscillations In Radiative-Convective Systems. Part II: An Idealized Model. Journals of the Atmospheric Sciences, 1995, 52, 478-490.	1.7	43
123	Simulations of the Tropical General Circulation with a Multiscale Global Model. Meteorological Monographs, 2016, 56, 15.1-15.15.	5.0	42
124	Comments on â€œThe Parameterization of Radiation for Numerical Weather Prediction and Climate Modelsâ€ Monthly Weather Review, 1985, 113, 1832-1833.	1.4	41
125	Evaluation of Statistically Based Cloudiness Parameterizations Used in Climate Models. Journals of the Atmospheric Sciences, 1996, 53, 3103-3119.	1.7	41
126	Comparison of the seasonal change in cloud-radiative forcing from atmospheric general circulation models and satellite observations. Journal of Geophysical Research, 1997, 102, 16593-16603.	3.3	41

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127	Liquid and Ice Cloud Microphysics in the CSU General Circulation Model. Part III: Sensitivity to Modeling Assumptions. Journal of Climate, 1996, 9, 561-586.	3.2	40
128	Initiation of ensemble data assimilation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2006, 58, 159-170.	1.7	40
129	Moist synoptic transport of CO₂ along the midâ€latitude storm track. Geophysical Research Letters, 2011, 38, .	4.0	40
130	Influence of Large-Scale Advective Cooling and Moistening Effects on the Quasi-Equilibrium Behavior of Explicitly Simulated Cumulus Ensembles. Journals of the Atmospheric Sciences, 1998, 55, 896-909.	1.7	37
131	Toward a Unified Parameterization of the Boundary Layer and Moist Convection. Part II: Lateral Mass Exchanges and Subplume-Scale Fluxes. Journals of the Atmospheric Sciences, 2001, 58, 2037-2051.	1.7	37
132	Toward a Unified Parameterization of the Boundary Layer and Moist Convection. Part III: Simulations of Clear and Cloudy Convection. Journals of the Atmospheric Sciences, 2001, 58, 2052-2072.	1.7	37
133	Stratocumulus cloud deepening through entrainment. Tellus, Series A: Dynamic Meteorology and Oceanography, 1984, 36A, 446-457.	1.7	36
134	Cloud parameterization for climate modeling: Status and prospects. Atmospheric Research, 1989, 23, 345-361.	4.1	36
135	The Moist Available Energy of a Conditionally Unstable Atmosphere. Part II: Further Analysis of GATE Data. Journals of the Atmospheric Sciences, 1994, 51, 703-710.	1.7	35
136	Role of deep soil moisture in modulating climate in the Amazon rainforest. Geophysical Research Letters, 2010, 37, .	4.0	33
137	Optimized Icosahedral Grids: Performance of Finite-Difference Operators and Multigrid Solver. Monthly Weather Review, 2013, 141, 4450-4469.	1.4	33
138	Problems in Simulating the Stratocumulus-Topped Boundary Layer with a Third-Order Closure Model. Journals of the Atmospheric Sciences, 1984, 41, 1588-1600.	1.7	32
139	East Asian winter monsoon: results from eight AMIP models. Climate Dynamics, 1997, 13, 797-820.	3.8	32
140	The ZM Grid: An Alternative to the Z Grid. Monthly Weather Review, 2002, 130, 1411-1422.	1.4	32
141	Similarity of Deep Continental Cumulus Convection as Revealed by a Three-Dimensional Cloud-Resolving Model. Journals of the Atmospheric Sciences, 2002, 59, 2550-2566.	1.7	32
142	Buoyant Production and Consumption of Turbulence Kinetic Energy in Cloud-Topped Mixed Layers. Journals of the Atmospheric Sciences, 1984, 41, 402-413.	1.7	31
143	Turbulent Fluxes of Liquid Water and Buoyancy in Partly Cloudy Layers. Journals of the Atmospheric Sciences, 1987, 44, 850-858.	1.7	31
144	On Fire at Ten. Advances in Geophysics, 1996, , 37-177.	2.8	29

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145	The Convection Connection: How Ocean Feedbacks Affect Tropical Mean Moisture and MJO Propagation. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11910-11931.	3.3	28
146	Numerical Investigations of the Roles of Radiative and Evaporative Feedbacks in Stratocumulus Entrainment and Breakup. Journals of the Atmospheric Sciences, 1995, 52, 2869-2883.	1.7	27
147	A global radiative-convective feedback. Geophysical Research Letters, 1994, 21, 2035-2038.	4.0	26
148	The Earth's radiation budget and its relation to atmospheric hydrology: 3. Comparison of observations over the oceans with a GCM. Journal of Geophysical Research, 1993, 98, 4931-4950.	3.3	25
149	Observed variations of tropical convective available potential energy. Journal of Geophysical Research, 2004, 109, .	3.3	25
150	On the Dynamics of Stratocumulus Formation and Dissipation. Journals of the Atmospheric Sciences, 1984, 41, 3052-3057.	1.7	24
151	Global consequences of interactions between clouds and radiation at scales unresolved by global climate models. Geophysical Research Letters, 2005, 32, .	4.0	24
152	Effects of explicit atmospheric convection at high CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10943-10948.	7.1	24
153	Simulations of the West African Monsoon with a Superparameterized Climate Model. Part II: African Easterly Waves. Journal of Climate, 2014, 27, 8323-8341.	3.2	24
154	Impacts of cloud superparameterization on projected daily rainfall intensity climate changes in multiple versions of the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2016, 8, 1727-1750.	3.8	23
155	Relationship between the Longwave Cloud Radiative Forcing at the Surface and the Top of the Atmosphere. Journal of Climate, 1990, 3, 1435-1443.	3.2	22
156	Sensitivity of Convective Selfâ€Aggregation to Domain Size. Journal of Advances in Modeling Earth Systems, 2019, 11, 1995-2019.	3.8	22
157	Radiative-convective disequilibrium. Atmospheric Research, 1994, 31, 315-327.	4.1	21
158	Sensitivity of the simulated Asian summer monsoon to parameterized physical processes. Journal of Geophysical Research, 1999, 104, 12177-12191.	3.3	21
159	Spontaneous Aggregation of Convective Storms. Annual Review of Fluid Mechanics, 2022, 54, 133-157.	25.0	21
160	Calculation of the global land surface energy, water and CO2fluxes with an off-line version of SiB2. Journal of Geophysical Research, 1996, 101, 19061-19075.	3.3	20
161	Closed Mesoscale Cellular Convection Driven by Cloud-Top Radiative Cooling. Journals of the Atmospheric Sciences, 1996, 53, 2144-2165.	1.7	20
162	Flying the TRMM Satellite in a general circulation model. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	20

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163	The Tropical Marine Boundary Layer Under a Deep Convection System: a Largeâ€Eddy Simulation Study. Journal of Advances in Modeling Earth Systems, 2009, 1, .	3.8	20
164	Atmospheric radiative transfer through global arrays of 2D clouds. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	19
165	Stratocumulus cloud deepening through entrainment. Tellus, Series A: Dynamic Meteorology and Oceanography, 1984, 36, 446-457.	1.7	18
166	A numerical investigation of boundary layer quasiâ€equilibrium. Geophysical Research Letters, 2015, 42, 550-556.	4.0	18
167	Total energy and potential enstrophy conserving schemes for the shallow water equations using Hamiltonian methods â€" Part 1: Derivation and properties. Geoscientific Model Development, 2017, 10, 791-810.	3.6	18
168	Simulation of the South Asian Monsoon in a Coupled Model with an Embedded Cloud-Resolving Model. Journal of Climate, 2014, 27, 1121-1142.	3.2	17
169	Explicit Simulation of Midlatitude Cumulus Ensembles: Comparison with ARM Data. Journals of the Atmospheric Sciences, 2000, 57, 2839-2858.	1.7	16
170	Diagnosing Monthly Mean Boundary Layer Properties from Reanalysis Data Using a Bulk Boundary Layer Model. Journals of the Atmospheric Sciences, 2006, 63, 998-1012.	1.7	16
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