

Graham Feingold

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2765575/publications.pdf>

Version: 2024-02-01

205
papers

17,323
citations

13827

67
h-index

19136

118
g-index

267
all docs

267
docs citations

267
times ranked

8151
citing authors

#	ARTICLE	IF	CITATIONS
1	Untangling aerosol effects on clouds and precipitation in a buffered system. <i>Nature</i> , 2009, 461, 607-613.	13.7	1,005
2	A review of measurement-based assessments of the aerosol direct radiative effect and forcing. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 613-666.	1.9	745
3	The effect of physical and chemical aerosol properties on warm cloud droplet activation. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 2593-2649.	1.9	690
4	Resilience of persistent Arctic mixed-phase clouds. <i>Nature Geoscience</i> , 2012, 5, 11-17.	5.4	498
5	Improving our fundamental understanding of the role of aerosol-cloud interactions in the climate system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5781-5790.	3.3	479
6	Bounding Global Aerosol Radiative Forcing of Climate Change. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000660.	9.0	424
7	Aerosol indirect effects – general circulation model intercomparison and evaluation with satellite data. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 8697-8717.	1.9	418
8	The Impact of Giant Cloud Condensation Nuclei on Drizzle Formation in Stratocumulus: Implications for Cloud Radiative Properties. <i>Journals of the Atmospheric Sciences</i> , 1999, 56, 4100-4117.	0.6	301
9	A modeling study of aqueous production of dicarboxylic acids: 1. Chemical pathways and speciated organic mass production. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	284
10	First measurements of the Twomey indirect effect using ground-based remote sensors. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	275
11	Large-Eddy Simulations of Trade Wind Cumuli: Investigation of Aerosol Indirect Effects. <i>Journals of the Atmospheric Sciences</i> , 2006, 63, 1605-1622.	0.6	261
12	An Efficient Numerical Solution to the Stochastic Collection Equation. <i>Journals of the Atmospheric Sciences</i> , 1987, 44, 3139-3149.	0.6	252
13	Secondary organic aerosol yields from cloud-processing of isoprene oxidation products. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	238
14	Aerosol Effects on Clouds, Precipitation, and the Organization of Shallow Cumulus Convection. <i>Journals of the Atmospheric Sciences</i> , 2008, 65, 392-406.	0.6	238
15	Large-Eddy Simulations of Strongly Precipitating, Shallow, Stratocumulus-Topped Boundary Layers. <i>Journals of the Atmospheric Sciences</i> , 1998, 55, 3616-3638.	0.6	229
16	The Lognormal Fit to Raindrop Spectra from Frontal Convective Clouds in Israel. <i>Journal of Climate and Applied Meteorology</i> , 1986, 25, 1346-1363.	1.0	220
17	Modeling Mesoscale Cellular Structures and Drizzle in Marine Stratocumulus. Part I: Impact of Drizzle on the Formation and Evolution of Open Cells. <i>Journals of the Atmospheric Sciences</i> , 2009, 66, 3237-3256.	0.6	206
18	On smoke suppression of clouds in Amazonia. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	204

#	ARTICLE	IF	CITATIONS
19	Aerosol-induced intensification of rain from the tropics to the mid-latitudes. <i>Nature Geoscience</i> , 2012, 5, 118-122.	5.4	202
20	Analysis of smoke impact on clouds in Brazilian biomass burning regions: An extension of Twomey's approach. <i>Journal of Geophysical Research</i> , 2001, 106, 22907-22922.	3.3	197
21	The invigoration of deep convective clouds over the Atlantic: aerosol effect, meteorology or retrieval artifact?. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 8855-8872.	1.9	190
22	Oxalic acid in clear and cloudy atmospheres: Analysis of data from International Consortium for Atmospheric Research on Transport and Transformation 2004. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	187
23	Remote Sensing of Droplet Number Concentration in Warm Clouds: A Review of the Current State of Knowledge and Perspectives. <i>Reviews of Geophysics</i> , 2018, 56, 409-453.	9.0	185
24	On the Source of Organic Acid Aerosol Layers above Clouds. <i>Environmental Science & Technology</i> , 2007, 41, 4647-4654.	4.6	182
25	The influence of chemical composition and mixing state of Los Angeles urban aerosol on CCN number and cloud properties. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 5649-5667.	1.9	171
26	Elements of the Microphysical Structure of Numerically Simulated Nonprecipitating Stratocumulus. <i>Journals of the Atmospheric Sciences</i> , 1996, 53, 980-1006.	0.6	169
27	Aerosol effects on the lifetime of shallow cumulus. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	167
28	Precipitation-generated oscillations in open cellular cloud fields. <i>Nature</i> , 2010, 466, 849-852.	13.7	163
29	Overview of the Second Texas Air Quality Study (TexAQS II) and the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	162
30	Modeling of the first indirect effect: Analysis of measurement requirements. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	155
31	Analysis of the Influence of Film-Forming Compounds on Droplet Growth: Implications for Cloud Microphysical Processes and Climate. <i>Journals of the Atmospheric Sciences</i> , 2002, 59, 2006-2018.	0.6	154
32	Can aerosol decrease cloud lifetime?. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	153
33	An assessment of aerosol-cloud interactions in marine stratus clouds based on surface remote sensing. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	148
34	Effects of cloud horizontal inhomogeneity and drizzle on remote sensing of cloud droplet effective radius: Case studies based on large-eddy simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	139
35	The scale problem in quantifying aerosol indirect effects. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1031-1049.	1.9	137
36	Modeling Mesoscale Cellular Structures and Drizzle in Marine Stratocumulus. Part II: The Microphysics and Dynamics of the Boundary Region between Open and Closed Cells. <i>Journals of the Atmospheric Sciences</i> , 2009, 66, 3257-3275.	0.6	129

#	ARTICLE	IF	CITATIONS
37	Influence of water-soluble organic carbon on cloud drop number concentration. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	126
38	CCN predictions using simplified assumptions of organic aerosol composition and mixing state: a synthesis from six different locations. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 4795-4807.	1.9	124
39	The Evolution of Raindrop Spectra. Part II: Collisional Collection/Breakup and Evaporation in a Rainshaft. <i>Journals of the Atmospheric Sciences</i> , 1989, 46, 3312-3328.	0.6	123
40	Effect of aerosol on warm convective clouds: Aerosol-cloud-surface flux feedbacks in a new coupled large eddy model. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	122
41	Particulate organic acids and overall water-soluble aerosol composition measurements from the 2006 Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	121
42	Evolution of Raindrop Spectra. Part I: Solution to the Stochastic Collection/Breakup Equation Using the Method of Moments. <i>Journals of the Atmospheric Sciences</i> , 1988, 45, 3387-3399.	0.6	120
43	Modification of aerosol mass and size distribution due to aqueous-phase SO ₂ oxidation in clouds: Comparisons of several models. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	120
44	Simulations of marine stratocumulus using a new microphysical parameterization scheme. <i>Atmospheric Research</i> , 1998, 47-48, 505-528.	1.8	119
45	Prediction of cloud condensation nucleus number concentration using measurements of aerosol size distributions and composition and light scattering enhancement due to humidity. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	119
46	On the precipitation susceptibility of clouds to aerosol perturbations. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	118
47	The Influence of Entrainment and Mixing Assumption on Aerosol-Cloud Interactions in Marine Stratocumulus. <i>Journals of the Atmospheric Sciences</i> , 2009, 66, 1450-1464.	0.6	116
48	Numerical simulations of stratocumulus processing of cloud condensation nuclei through collision-coalescence. <i>Journal of Geophysical Research</i> , 1996, 101, 21391-21402.	3.3	115
49	How small is a small cloud?. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 3855-3864.	1.9	113
50	On the link between ocean biota emissions, aerosol, and maritime clouds: Airborne, ground, and satellite measurements off the coast of California. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	1.9	113
51	Water activity and activation diameters from hygroscopicity data - Part II: Application to organic species. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 795-809.	1.9	111
52	On cloud radar and microwave radiometer measurements of stratus cloud liquid water profiles. <i>Journal of Geophysical Research</i> , 1998, 103, 23195-23197.	3.3	108
53	Parameterizations of Condensational Growth of Droplets for Use in General Circulation Models. <i>Journals of the Atmospheric Sciences</i> , 1992, 49, 2325-2342.	0.6	107
54	The Relationship between Drop In-Cloud Residence Time and Drizzle Production in Numerically Simulated Stratocumulus Clouds. <i>Journals of the Atmospheric Sciences</i> , 1996, 53, 1108-1122.	0.6	103

#	ARTICLE	IF	CITATIONS
55	Evaluation of Scalar Advection Schemes in the Advanced Research WRF Model Using Large-Eddy Simulations of Aerosol–Cloud Interactions. <i>Monthly Weather Review</i> , 2009, 137, 2547-2558.	0.5	100
56	Effect of biomass burning on marine stratocumulus clouds off the California coast. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 8841-8856.	1.9	96
57	Turbulence, Condensation, and Liquid Water Transport in Numerically Simulated Nonprecipitating Stratocumulus Clouds. <i>Journals of the Atmospheric Sciences</i> , 2003, 60, 262-278.	0.6	93
58	Aerosol–cloud–precipitation system as a predator-prey problem. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12227-12232.	3.3	93
59	Modelling microphysical and meteorological controls on precipitation and cloud cellular structures in Southeast Pacific stratocumulus. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 6347-6362.	1.9	91
60	Vertical transport and processing of aerosols in a mixed-phase convective cloud and the feedback on cloud development. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2005, 131, 221-245.	1.0	88
61	EUREC<sup>4</sup</sup>A. <i>Earth System Science Data</i> , 2021, 13, 4067-4119.	3.7	88
62	Cloud condensation nuclei activity, closure, and droplet growth kinetics of Houston aerosol during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	85
63	Manipulating marine stratocumulus cloud amount and albedo: a process-modelling study of aerosol-cloud-precipitation interactions in response to injection of cloud condensation nuclei. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 4237-4249.	1.9	85
64	Cloud condensation nuclei as a modulator of ice processes in Arctic mixed-phase clouds. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 8003-8015.	1.9	84
65	Simulations of aerosol-cloud-dynamical feedbacks resulting from entrainment of aerosol into the marine boundary layer during the Atlantic Stratocumulus Transition Experiment. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 20-1.	3.3	82
66	Radiative Impacts on the Growth of a Population of Drops within Simulated Summertime Arctic Stratus. <i>Journals of the Atmospheric Sciences</i> , 2000, 57, 766-785.	0.6	81
67	Quantifying error in the radiative forcing of the first aerosol indirect effect. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	81
68	Racoro Extended-Term Aircraft Observations of Boundary Layer Clouds. <i>Bulletin of the American Meteorological Society</i> , 2012, 93, 861-878.	1.7	81
69	Modeling chemical and aerosol processes in the transition from closed to open cells during VOCALS-REx. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 7491-7514.	1.9	80
70	An explicit cloud microphysics/LES model designed to simulate the Twomey effect. <i>Atmospheric Research</i> , 1994, 33, 207-233.	1.8	78
71	Ocean–Cloud–Atmosphere–Land Interactions in the Southeastern Pacific: The VOCALS Program. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 357-375.	1.7	76
72	Effect of Aerosol on the Susceptibility and Efficiency of Precipitation in Warm Trade Cumulus Clouds. <i>Journals of the Atmospheric Sciences</i> , 2010, 67, 3525-3540.	0.6	73

#	ARTICLE	IF	CITATIONS
73	Aerosol-cloud relationships in continental shallow cumulus. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	72
74	Cloud processing of aerosol as modeled by a large eddy simulation with coupled microphysics and aqueous chemistry. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 6-1-AAC 6-15.	3.3	71
75	The Radiative Forcing of Aerosol-Cloud Interactions in Liquid Clouds: Wrestling and Embracing Uncertainty. <i>Current Climate Change Reports</i> , 2018, 4, 23-40.	2.8	70
76	Stratocumulus to Cumulus Transition by Drizzle. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 2333-2349.	1.3	69
77	The role of ice nuclei recycling in the maintenance of cloud ice in Arctic mixed-phase stratocumulus. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 10631-10643.	1.9	68
78	Stratocumulus processing of gases and cloud condensation nuclei: 1. Trajectory ensemble model. <i>Journal of Geophysical Research</i> , 1998, 103, 19527-19542.	3.3	66
79	Marine stratocumulus aerosol-cloud relationships in the MASE experiment: Precipitation susceptibility in eastern Pacific marine stratocumulus. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	65
80	Aerosol indirect effect studies at Southern Great Plains during the May 2003 Intensive Operations Period. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	64
81	Does cloud processing of aerosol enhance droplet concentrations?. <i>Journal of Geophysical Research</i> , 2000, 105, 24351-24361.	3.3	62
82	Aerosols' influence on the interplay between condensation, evaporation and rain in warm cumulus cloud. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 15-24.	1.9	62
83	Aerosol hygroscopic properties as measured by lidar and comparison with in situ measurements. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	61
84	Efficient computation of vapor and heat diffusion between hydrometeors in a numerical model. <i>Atmospheric Research</i> , 2000, 53, 171-183.	1.8	60
85	Aerosol and gas re-distribution by shallow cumulus clouds: An investigation using airborne measurements. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	58
86	New approaches to quantifying aerosol influence on the cloud radiative effect. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5812-5819.	3.3	58
87	The Spurious Production of Cloud-Edge Supersaturations by Eulerian Models. <i>Monthly Weather Review</i> , 1996, 124, 1034-1041.	0.5	56
88	Observations of the boundary layer, cloud, and aerosol variability in the southeast Pacific near-coastal marine stratocumulus during VOCALS-REx. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9943-9959.	1.9	56
89	A modeling study of the effect of drizzle on cloud optical depth and susceptibility. <i>Journal of Geophysical Research</i> , 1997, 102, 13527-13534.	3.3	55
90	Effect of aerosol on trade cumulus cloud morphology. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	55

#	ARTICLE	IF	CITATIONS
91	Aerosol-cloud-climate cooling overestimated by ship-track data. <i>Science</i> , 2021, 371, 485-489.	6.0	55
92	Aerosol effects on the intercloud region of a small cumulus cloud field. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	54
93	Technical note: Large-eddy simulation of cloudy boundary layer with the Advanced Research WRF model. <i>Journal of Advances in Modeling Earth Systems</i> , 2012, 4, .	1.3	52
94	The Retrieval of Stratus Cloud Droplet Effective Radius with Cloud Radars. <i>Journal of Atmospheric and Oceanic Technology</i> , 2002, 19, 835-842.	0.5	51
95	On the reversibility of transitions between closed and open cellular convection. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 7351-7367.	1.9	51
96	On the representation of immersion and condensation freezing in cloud models using different nucleation schemes. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 5807-5826.	1.9	50
97	On the relationship between cloud contact time and precipitation susceptibility to aerosol. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 10,544.	1.2	50
98	Constraining the Twomey effect from satellite observations: issues and perspectives. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 15079-15099.	1.9	49
99	Effect of Aerosol on Cloud-Environment Interactions in Trade Cumulus. <i>Journals of the Atmospheric Sciences</i> , 2012, 69, 3607-3632.	0.6	48
100	A modeling study of aqueous production of dicarboxylic acids: 2. Implications for cloud microphysics. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	47
101	Cloud-Aerosol Interactions from the Micro to the Cloud Scale. , 2009, , 319-338.		47
102	Comparison between lidar and nephelometer measurements of aerosol hygroscopicity at the Southern Great Plains Atmospheric Radiation Measurement site. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	45
103	Stratocumulus to cumulus transition in the presence of elevated smoke layers. <i>Geophysical Research Letters</i> , 2015, 42, 10,478.	1.5	45
104	Precipitating cloud-system response to aerosol perturbations. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	44
105	Opportunistic experiments to constrain aerosol effective radiative forcing. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 641-674.	1.9	44
106	Explanation of discrepancies among satellite observations of the aerosol indirect effects. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	42
107	Deconstructing the precipitation susceptibility construct: Improving methodology for aerosol-cloud precipitation studies. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	42
108	Investigating potential biases in observed and modeled metrics of aerosol-cloud-precipitation interactions. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 4027-4037.	1.9	41

#	ARTICLE	IF	CITATIONS
109	On the relationship between relative humidity and particle backscattering coefficient in the marine boundary layer determined with differential absorption lidar. <i>Journal of Geophysical Research</i> , 2000, 105, 4729-4741.	3.3	40
110	On the Drop-Size Dependence of Organic Acid and Formaldehyde Concentrations in Fog. <i>Journal of Atmospheric Chemistry</i> , 2003, 46, 239-269.	1.4	40
111	On the relationship between open cellular convective cloud patterns and the spatial distribution of precipitation. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1237-1251.	1.9	38
112	On the relationship between responses in cloud water and precipitation to changes in aerosol. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 11817-11831.	1.9	36
113	Joint retrievals of cloud and drizzle in marine boundary layer clouds using ground-based radar, lidar and zenith radiances. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 2663-2683.	1.2	35
114	The future of Earth system prediction: Advances in model-data fusion. <i>Science Advances</i> , 2022, 8, eabn3488.	4.7	35
115	A critique of one- and two-dimensional models of boundary layer clouds with a binned representations of drop microphysics. <i>Atmospheric Research</i> , 1998, 47-48, 529-553.	1.8	34
116	Large-eddy simulations of entrainment of cloud condensation nuclei into the Arctic boundary layer: May 18, 1998, FIRE/SHEBA case study. <i>Journal of Geophysical Research</i> , 2001, 106, 15113-15122.	3.3	33
117	Inhomogeneous Mixing in Lagrangian Cloud Models: Effects on the Production of Precipitation Embryos. <i>Journals of the Atmospheric Sciences</i> , 2019, 76, 113-133.	0.6	33
118	A modeling study of the effect of nitric acid on cloud properties. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	31
119	Statistical comparison of properties of simulated and observed cumulus clouds in the vicinity of Houston during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	31
120	Sensitivities of immersion freezing: Reconciling classical nucleation theory and deterministic expressions. <i>Geophysical Research Letters</i> , 2013, 40, 3320-3324.	1.5	31
121	Cloud's Center of Gravity "a compact approach to analyze convective cloud development. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 155-161.	1.9	30
122	Network approach to patterns in stratocumulus clouds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10578-10583.	3.3	30
123	Entrainment and Mixing in Stratocumulus: Effects of a New Explicit Subgrid-Scale Scheme for Large-Eddy Simulations with Particle-Based Microphysics. <i>Journals of the Atmospheric Sciences</i> , 2019, 76, 1955-1973.	0.6	29
124	Characterization of cumulus cloud fields using trajectories in the center of gravity versus water mass phase space: 2. Aerosol effects on warm convective clouds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 6356-6373.	1.2	28
125	The impact of microphysical parameters, ice nucleation mode, and habit growth on the ice/liquid partitioning in mixed-phase Arctic clouds. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	27
126	A novel ensemble method for retrieving properties of warm cloud in 3-D using ground-based scanning radar and zenith radiances. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 10,912-10,930.	1.2	27

#	ARTICLE	IF	CITATIONS
127	Expected impact of an aged biomass burning aerosol on cloud condensation nuclei and cloud droplet concentrations. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	26
128	Aerosol effects on the cloud-field properties of tropical convective clouds. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 6713-6726.	1.9	26
129	On the relationship among cloud turbulence, droplet formation and drizzle as viewed by Doppler radar, microwave radiometer and lidar. <i>Journal of Geophysical Research</i> , 1999, 104, 22195-22203.	3.3	25
130	Retrieval of aerosol properties from combined multiwavelength lidar and sunphotometer measurements. <i>Applied Optics</i> , 2006, 45, 7429.	2.1	25
131	Exploratory cloud-resolving simulations of boundary-layer Arctic stratus clouds. <i>Atmospheric Research</i> , 1998, 47-48, 573-597.	1.8	24
132	Stratocumulus processing of gases and cloud condensation nuclei: 2. Chemistry sensitivity analysis. <i>Journal of Geophysical Research</i> , 1999, 104, 16061-16080.	3.3	24
133	Shortwave Radiative Impacts from Aerosol Effects on Marine Shallow Cumuli. <i>Journals of the Atmospheric Sciences</i> , 2008, 65, 1979-1990.	0.6	24
134	Irradiance in polluted cumulus fields: Measured and modeled cloud-aerosol effects. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	24
135	On the interaction between marine boundary layer cellular cloudiness and surface heat fluxes. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 61-79.	1.9	24
136	Characterization of cumulus cloud fields using trajectories in the center of gravity versus water mass phase space: 1. Cloud tracking and phase space description. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 6336-6355.	1.2	24
137	The observed influence of local anthropogenic pollution on northern Alaskan cloud properties. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 14709-14726.	1.9	24
138	Preface to special section: Atmospheric Radiation Measurement Program May 2003 Intensive Operations Period examining aerosol properties and radiative influences. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	23
139	A model of coupled oscillators applied to the aerosol-cloud-precipitation system. <i>Nonlinear Processes in Geophysics</i> , 2013, 20, 1011-1021.	0.6	23
140	An emulator approach to stratocumulus susceptibility. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10191-10203.	1.9	23
141	Role of NO ₃ in sulfate production in the wintertime northern latitudes. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 5-1.	3.3	22
142	Surface Solar Irradiance in Continental Shallow Cumulus Fields: Observations and Large-Eddy Simulation. <i>Journals of the Atmospheric Sciences</i> , 2019, 77, 1065-1080.	0.6	22
143	A long-term study of aerosol-cloud interactions and their radiative effect at the Southern Great Plains using ground-based measurements. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11301-11318.	1.9	21
144	Feasibility of Using Multiwavelength Lidar Measurements to Measure Cloud Condensation Nuclei. <i>Journal of Atmospheric and Oceanic Technology</i> , 1994, 11, 1543-1558.	0.5	20

#	ARTICLE	IF	CITATIONS
145	Anthropogenic Air Pollution Delays Marine Stratocumulus Breakup to Open Cells. <i>Geophysical Research Letters</i> , 2019, 46, 14135-14144.	1.5	20
146	A satellite perspective on cloud water to rain water conversion rates and relationships with environmental conditions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 6643-6650.	1.2	19
147	From Sugar to Flowers: A Transition of Shallow Cumulus Organization During ATOMIC. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002619.	1.3	19
148	Adaptive behavior of marine cellular clouds. <i>Scientific Reports</i> , 2013, 3, 2507.	1.6	18
149	Mesoscale organization, entrainment, and the properties of a closed-cell stratocumulus cloud. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 2214-2229.	1.3	18
150	Feasibility of Retrieving Cloud Condensation Nucleus Properties from Doppler Cloud Radar, Microwave Radiometer, and Lidar. <i>Journal of Atmospheric and Oceanic Technology</i> , 1998, 15, 1188-1195.	0.5	17
151	On the link between Amazonian forest properties and shallow cumulus cloud fields. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6063-6074.	1.9	17
152	Cloud Microphysical Implications for Marine Cloud Brightening: The Importance of the Seeded Particle Size Distribution. <i>Journals of the Atmospheric Sciences</i> , 2021, 78, 3247-3262.	0.6	17
153	Albedo susceptibility of northeastern Pacific stratocumulus: the role of covarying meteorological conditions. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 861-880.	1.9	17
154	Vertical profiles of droplet effective radius in shallow convective clouds. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 4633-4644.	1.9	16
155	The Evolution of Raindrop Spectra. Part III: Downdraft Generation in an Axisymmetrical Rainshaft Model. <i>Journals of the Atmospheric Sciences</i> , 1991, 48, 315-330.	0.6	15
156	The Evolution of Raindrop Spectra: Comparisons between Modeled and Observed Spectra along a Mountain Slope in Switzerland. <i>Journal of Applied Meteorology and Climatology</i> , 1991, 30, 893-900.	1.7	15
157	Modeling cloud effects on hydrogen peroxide and methylhydroperoxide in the marine atmosphere. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 7-1.	3.3	15
158	Climate Processes: Clouds, Aerosols and Dynamics. , 2013, , 73-103.		15
159	Wind speed response of marine non-precipitating stratocumulus clouds over a diurnal cycle in cloud-system resolving simulations. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 5811-5839.	1.9	15
160	Aerosols, clouds, and precipitation in the North Atlantic trades observed during the Barbados aerosol cloud experiment "Part 1: Distributions and variability. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 8643-8666.	1.9	15
161	Exploring the nonlinear cloud and rain equation. <i>Chaos</i> , 2017, 27, 013107.	1.0	15
162	Liquid Water Path Steady States in Stratocumulus: Insights from Process-Level Emulation and Mixed-Layer Theory. <i>Journals of the Atmospheric Sciences</i> , 2020, 77, 2203-2215.	0.6	15

#	ARTICLE	IF	CITATIONS
163	3D cloud reconstructions: Evaluation of scanning radar scan strategy with a view to surface shortwave radiation closure. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9153-9167.	1.2	14
164	Detection limits of albedo changes induced by climate engineering. <i>Nature Climate Change</i> , 2014, 4, 93-98.	8.1	14
165	ARMâ€™s Aerosolâ€™Cloudâ€™Precipitation Research (Aerosol Indirect Effects). <i>Meteorological Monographs</i> , 2016, 57, 22.1-22.15.	5.0	14
166	Framework for improvement by vertical enhancement: A simple approach to improve representation of low and highâ€™level clouds in largeâ€™scale models. <i>Journal of Advances in Modeling Earth Systems</i> , 2017, 9, 627-646.	1.3	14
167	Cloud droplet growth in shallow cumulus clouds considering 1-D and 3-D thermal radiative effects. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 6295-6313.	1.9	14
168	Aerosolâ€™Cloud Interactions in Trade Wind Cumulus Clouds and the Role of Vertical Wind Shear. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 12244-12261.	1.2	14
169	Observations from the NOAA P-3 aircraft during ATOMIC. <i>Earth System Science Data</i> , 2021, 13, 3281-3296.	3.7	14
170	To assess marine cloud brightening's technical feasibility, we need to know what to studyâ€™and when to stop. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	14
171	Evaluation of Modeled Stratocumulus-Capped Boundary Layer Turbulence with Shipborne Data. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 3895-3919.	0.6	13
172	Effect of gradients in biomass burning aerosol on shallow cumulus convective circulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 9948-9964.	1.2	13
173	Gaussian Process Modeling of Heterogeneity and Discontinuities Using Voronoi Tessellations. <i>Technometrics</i> , 2021, 63, 53-63.	1.3	13
174	Vertical transport of pollutants by shallow cumuli from large eddy simulations. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11319-11327.	1.9	12
175	On the size distribution of cloud holes in stratocumulus and their relationship to cloudâ€™top entrainment. <i>Geophysical Research Letters</i> , 2013, 40, 2450-2454.	1.5	12
176	Analysis of albedo versus cloud fraction relationships in liquid water clouds using heuristic models and large eddy simulation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 7086-7102.	1.2	12
177	Quantification of the Radiative Effect of Aerosolâ€™Cloud Interactions in Shallow Continental Cumulus Clouds. <i>Journals of the Atmospheric Sciences</i> , 2020, 77, 2905-2920.	0.6	12
178	Quantifying albedo susceptibility biases in shallow clouds. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 3303-3319.	1.9	11
179	On clocks and clouds. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6729-6738.	1.9	10
180	On the Relationship Between Shallow Cumulus Cloud Field Properties and Surface Solar Irradiance. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL090152.	1.5	10

#	ARTICLE	IF	CITATIONS
181	Application of the Lognormal Raindrop Distribution to Differential Reflectivity Radar Measurement (ZDR). <i>Journal of Atmospheric and Oceanic Technology</i> , 1987, 4, 377-382.	0.5	9
182	A comparative study of the response of modeled non-drizzling stratocumulus to meteorological and aerosol perturbations. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 2507-2529.	1.9	9
183	Estimating parameters of the nonlinear cloud and rain equation from a large-eddy simulation. <i>Physica D: Nonlinear Phenomena</i> , 2020, 410, 132500.	1.3	9
184	On the Importance of Sea Surface Temperature for Aerosol-Induced Brightening of Marine Clouds and Implications for Cloud Feedback in a Future Warmer Climate. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095896.	1.5	9
185	Parameterization of the Evaporation of Rainfall for Use in General Circulation Models. <i>Journals of the Atmospheric Sciences</i> , 1993, 50, 3454-3467.	0.6	8
186	Comparison of Observed and Simulated Drop Size Distributions from Large-Eddy Simulations with Bin Microphysics. <i>Monthly Weather Review</i> , 2019, 147, 477-493.	0.5	8
187	Reply to 'Water vapour affects both rain and aerosol optical depth'. <i>Nature Geoscience</i> , 2013, 6, 5-5.	5.4	7
188	Parameterization of the Spatial Variability of Rain for Large-Scale Models and Remote Sensing. <i>Journal of Applied Meteorology and Climatology</i> , 2015, 54, 2027-2046.	0.6	7
189	Feedback mechanisms of shallow convective clouds in a warmer climate as demonstrated by changes in buoyancy. <i>Environmental Research Letters</i> , 2018, 13, 054033.	2.2	7
190	Observational Constraints on Warm Cloud Microphysical Processes Using Machine Learning and Optimization Techniques. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091236.	1.5	7
191	Realism of Lagrangian Large Eddy Simulations Driven by Reanalysis Meteorology: Tracking a Pocket of Open Cells Under a Biomass Burning Aerosol Layer. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002664.	1.3	6
192	Analysis of two independent methods for retrieving liquid water profiles in spring and summer Arctic boundary clouds. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	5
193	Measurement and interpretation of cloud effects on the concentrations of hydrogen peroxide and organoperoxides over Ontario, Canada. <i>Atmospheric Research</i> , 2006, 81, 140-149.	1.8	5
194	Influence of Aerosol Embedded in Shallow Cumulus Cloud Fields on the Surface Solar Irradiance. <i>Journal of Geophysical Research D: Atmospheres</i> , 0, , .	1.2	5
195	Scale Awareness, Resolved Circulations, and Practical Limits in the MYNN-EDMF Boundary Layer and Shallow Cumulus Scheme. <i>Monthly Weather Review</i> , 2020, 148, 4629-4639.	0.5	4
196	Effects of Pollution Aerosol and Biomass Burning on Clouds and Precipitation: Numerical Modeling Studies. , 2009, , 243-276.		3
197	The Shortwave Spectral Radiometer for Atmospheric Science: Capabilities and Applications from the ARM User Facility. <i>Bulletin of the American Meteorological Society</i> , 2021, 102, E539-E554.	1.7	2
198	Impact of Local Convective Cloud Systems on Summer Daytime Shelter Temperature. <i>Journal of Applied Meteorology and Climatology</i> , 1993, 32, 1569-1578.	1.7	1

#	ARTICLE	IF	CITATIONS
199	POSSIBLE EFFECTS OF SURFACTANTS ON DROPLET GROWTH: IMPLICATIONS FOR CLOUD MICROPHYSICAL PROCESSES AND CLIMATE. <i>Journal of Aerosol Science</i> , 2001, 32, 923-924.	1.8	1
200	Model evaluation and intercomparison of marine warm low cloud fractions with neural network ensembles. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002625.	1.3	1
201	An inverse technique for obtaining cirrus cloud microphysical parameters using combined radar and lidar backscatter measurements. , 0, , .		0
202	Feasibility of retrieving cloud condensation nucleus properties from lidar, Doppler cloud radar, and microwave radiometer. , 1998, , .		0
203	How resilient are cloud systems to aerosol perturbations?. , 2013, , .		0
204	Sensitivities of immersion freezing: Transition from classical nucleation theory to deterministic expressions. , 2013, , .		0
205	Twoâ€­Dimensional Idealized Hadley Circulation Simulation for Global High Resolution Model Development. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, e2021MS002714.	1.3	0