Andrew M Vogelmann

List of Publications by Year
in descending order

68	2,626	186254	197805
papers	citations	28 h-index	49 g-index

78	78	78	3176
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ACE-ASIA: Regional Climatic and Atmospheric Chemical Effects of Asian Dust and Pollution. Bulletin of the American Meteorological Society, 2004, 85, 367-380.	3.3	330
2	Thin Liquid Water Clouds: Their Importance and Our Challenge. Bulletin of the American Meteorological Society, 2007, 88, 177-190.	3.3	195
3	A climatologically significant aerosol longwave indirect effect in the Arctic. Nature, 2006, 439, 453-456.	27.8	185
4	Saharan Dust Aerosol Radiative Forcing Measured from Space. Journal of Climate, 2004, 17, 2558-2571.	3.2	119
5	January 2016 extensive summer melt in West Antarctica favoured by strong El NiÃ±o. Nature Communications, 2017, 8, 15799.	12.8	116
6	A Comparison of CCM2â€“BATS Skin Temperature and Surface-Air Temperature with Satellite and Surface Observations. Journal of Climate, 1997, 10, 1505-1524.	3.2	101
7	The Role of Cloud Microphysics Parameterization in the Simulation of Mesoscale Convective System Clouds and Precipitation in the Tropical Western Pacific. Journals of the Atmospheric Sciences, 2013, 70, 1104-1128.	1.7	93
8	Racoro Extended-Term Aircraft Observations of Boundary Layer Clouds. Bulletin of the American Meteorological Society, 2012, 93, 861-878.	3.3	81
9	Modifications to the Water Vapor Continuum in the Microwave Suggested by Ground-Based 150-GHz Observations. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 3326-3337.	6.3	76
10	Influence of relative humidity on aerosol radiative forcing: An ACE-Asia experiment perspective. Journal of Geophysical Research, 2003, 108, .	3.3	74
11	Sensitivity of Idealized Squall-Line Simulations to the Level of Complexity Used in Two-Moment Bulk Microphysics Schemes. Monthly Weather Review, 2012, 140, 1883-1907.	1.4	73
12	Empirical relationship between entrainment rate and microphysics in cumulus clouds. Geophysical Research Letters, 2013, 40, 2333-2338.	4.0	65
13	Clearâ€sky infrared aerosol radiative forcing at the surface and the top of the atmosphere. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 2927-2947.	2.7	54
14	Observations of large aerosol infrared forcing at the surface. Geophysical Research Letters, 2003, 30, .	4.0	53
15	Observed impacts of vertical velocity on cloud microphysics and implications for aerosol indirect effects. Geophysical Research Letters, 2012, 39, .	4.0	49
16	Enhancements in biologically effective ultraviolet radiation following volcanic eruptions. Nature, 1992, 359, 47-49.	27.8	47
17	AWARE: The Atmospheric Radiation Measurement (ARM) West Antarctic Radiation Experiment. Bulletin of the American Meteorological Society, 2020, 101, E1069-E1091.	3.3	46
18	Relating Cirrus Cloud Properties to Observed Fluxes: A Critical Assessment. Journals of the Atmospheric Sciences, 1995, 52, 4285-4301.	1.7	43

#	Article	IF	Citations
19	Investigation of Regional and Seasonal Variations in Marine Boundary Layer Cloud Properties from MODIS Observations. Journal of Climate, 2008, 21, 4955-4973.	3.2	42
20	The Large-Eddy Simulation (LES) Atmospheric Radiation Measurement (ARM) Symbiotic Simulation and Observation (LASSO) Activity for Continental Shallow Convection. Bulletin of the American Meteorological Society, 2020, 101, E462-E479.	3.3	41
21	RACORO continental boundary layer cloud investigations: 2. Largeâ€eddy simulations of cumulus clouds and evaluation with in situ and groundâ€based observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5993-6014.	3.3	35
22	West Antarctic Ice Sheet Cloud Cover and Surface Radiation Budget from NASA A-Train Satellites. Journal of Climate, 2017, 30, 6151-6170.	3.2	33
23	New insights into ice multiplication using remote-sensing observations of slightly supercooled mixed-phase clouds in the Arctic. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	33
24	Lateral entrainment rate in shallow cumuli: Dependence on dry air sources and probability density functions. Geophysical Research Letters, 2012, 39, .	4.0	32
25	A Method of Correcting for Tilt from Horizontal in Downwelling Shortwave Irradiance Measurements on Moving Platforms. The Open Atmospheric Science Journal, 2010, 4, 78-87.	0.5	32
26	Ice particle production in mid-level stratiform mixed-phase clouds observed with collocated A-Train measurements. Atmospheric Chemistry and Physics, 2018, 18, 4317-4327.	4.9	31
27	Cloud droplet size distribution broadening during diffusional growth: ripening amplified by deactivation and reactivation. Atmospheric Chemistry and Physics, 2018, 18, 7313-7328.	4.9	30
28	The Cloud-resolving model Radar SIMulator (CR-SIM) Version 3.3: description and applications of aÂvirtual observatory. Geoscientific Model Development, 2020, 13, 1975-1998.	3.6	28
29	Observational constraints on non-Lorentzian continuum effects in the near-infrared solar spectrum using ARM ARESE data. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 231-246.	2.3	25
30	Estimation of cloud fraction profile in shallow convection using a scanning cloud radar. Geophysical Research Letters, 2016, 43, 10,998.	4.0	22
31	Is Contact Nucleation Caused by Pressure Perturbation?. Atmosphere, 2020, 11, 1.	2.3	22
32	Effects of dirty snow in nuclear winter simulations. Journal of Geophysical Research, 1988, 93, 5319-5332.	3.3	20
33	RACORO continental boundary layer cloud investigations: 1. Case study development and ensemble largeâ€scale forcings. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5962-5992.	3.3	20
34	Scaling of Drizzle Virga Depth With Cloud Thickness for Marine Stratocumulus Clouds. Geophysical Research Letters, 2018, 45, 3746-3753.	4.0	20
35	Antarctic Cloud Macrophysical, Thermodynamic Phase, and Atmospheric Inversion Coupling Properties at McMurdo Stationâ€”Part II: Radiative Impact During Different Synoptic Regimes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1697-1719.	3.3	20
36	Scale Dependence of Solar Heating Rates in Convective Cloud Systems with Implications to General Circulation Models. Journal of Climate, 2001, 14, 1738-1752.	3.2	19

#	Article	IF	Citations
37	The WRF nested within the CESM: Simulations of a midlatitude cyclone over the Southern Great Plains. Journal of Advances in Modeling Earth Systems, 2013, 5, 611-622.	3.8	18
38	RACORO continental boundary layer cloud investigations: 3. Separation of parameterization biases singleâ€column model CAM5 simulations of shallow cumulus. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6015-6033.	3.3	18
39	Expected magnitude of the aerosol shortwave indirect effect in springtime Arctic liquid water clouds. Geophysical Research Letters, 2007, 34, .	4.0	17
40	Relating Satellite-Observed Cloud Properties from MODIS to Meteorological Conditions for Marine Boundary Layer Clouds. Journal of Climate, 2010, 23, 1374-1391.	3.2	17
41	Improving Convection Trigger Functions in Deep Convective Parameterization Schemes Using Machine Learning. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002365.	3.8	16
42	Observational quantification of a total aerosol indirect effect in the Arctic. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 181.	1.6	15
43	The influence of mixed-phase clouds on surface shortwave irradiance during the Arctic spring. Journal of Geophysical Research, 2011, 116, .	3.3	15
44	Cloud Properties over the North Slope of Alaska: Identifying the Prevailing Meteorological Regimes. Journal of Climate, 2012, 25, 8238-8258.	3.2	14
45	Methods for Estimating 2D Cloud Size Distributions from 1D Observations. Journals of the Atmospheric Sciences, 2017, 74, 3405-3417.	1.7	14
46	Reconciling Differences Between Largeâ€Eddy Simulations and Doppler Lidar Observations of Continental Shallow Cumulus Cloudâ€Base Vertical Velocity. Geophysical Research Letters, 2019, 46, 11539-11547.	4.0	14
47	Comparison of Antarctic and Arctic Singleâ€Layer Stratiform Mixedâ€Phase Cloud Properties Using Groundâ€Based Remote Sensing Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10186-10204.	3.3	14
48	Development of fineâ€resolution analyses and expanded largeâ€scale forcing properties: 1. Methodology and evaluation. Journal of Geophysical Research D: Atmospheres, 2015, 120, 654-666.	3.3	13
49	Effects of cloud shape and water vapor distribution on solar absorption in the near infrared. Geophysical Research Letters, 1998, 25, 1899-1902.	4.0	12
50	A new approach to estimate supersaturation fluctuations in stratocumulus cloud using ground-based remote-sensing measurements. Atmospheric Measurement Techniques, 2019, 12, 5817-5828.	3.1	11
51	Spectral characteristics of background error covariance and multiscale data assimilation. International Journal for Numerical Methods in Fluids, 2016, 82, 1035-1048.	1.6	10
52	The role of precipitation size distributions in kmâ€scale NWP simulations of intense precipitation: evaluation of cloud properties and surface precipitation. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 2163-2181.	2.7	9
53	Energetics of surface melt in West Antarctica. Cryosphere, 2021, 15, 3459-3494.	3.9	9
54	Validation of visible/near-IR atmospheric absorption and solar emission spectroscopic models at 1 cmâ^'1resolution. Journal of Geophysical Research, 2000, 105, 22445-22454.	3.3	8

#	Article	IF	Citations
55	Modifications to <scp>WRF</scp>'s dynamical core to improve the treatment of moisture for largeâ€eddy simulations. Journal of Advances in Modeling Earth Systems, 2015, 7, 1627-1642.	3.8	8
56	Multispectral sensor data simulation modeling based on the multiple scattering LOWTRAN code. Remote Sensing of Environment, 1988, 26, 75-99.	11.0	7
57	Evaluation of aerosolâ€cloud interaction in the GISS ModelE using ARM observations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6383-6395.	3.3	6
58	Largeâ€Eddy Simulations of a Convection Cloud Chamber: Sensitivity to Bin Microphysics and Advection. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	6
59	The unexplained solar absorption and atmospheric H2O: a direct test using clear-sky data. Tellus, Series A: Dynamic Meteorology and Oceanography, 1998, 50, 525-533.	1.7	5
60	On the Life Cycle of a Shallow Cumulus Cloud: Is It a Bubble or Plume, Active or Forced?. Journals of the Atmospheric Sciences, 2021, 78, 2823-2833.	1.7	5
61	The unexplained solar absorption and atmospheric H2O: a direct test using clear-sky data. Tellus, Series A: Dynamic Meteorology and Oceanography, 1998, 50, 525-533.	1.7	4
62	Development of fineâ€resolution analyses and expanded largeâ€scale forcing properties: 2. Scale awareness and application to singleâ€column model experiments. Journal of Geophysical Research D: Atmospheres, 2015, 120, 667-677.	3.3	4
63	Characterizing Subsiding Shells in Shallow Cumulus Using Doppler Lidar and Largeâ€Eddy Simulation. Geophysical Research Letters, 2020, 47, e2020GL089699.	4.0	3
64	Largeâ€Scale Forcing Impact on the Development of Shallow Convective Clouds Revealed From LASSO Largeâ€Eddy Simulations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035208.	3.3	3
65	Retrievals of cloud optical depth and effective radius from Thin-Cloud Rotating Shadowband Radiometer measurements. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	2
66	Clear-sky infrared aerosol radiative forcing at the surface and the top of the atmosphere. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 2927-2947.	2.7	2
67	Design of a Shadowband Spectral Radiometer for the Retrieval of Thin Cloud Optical Depth, Liquid Water Path, and the Effective Radius. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1458-1465.	1.3	1
68	Examination of Humidity and Ice Supersaturation Profiles Over West Antarctica Using Ground-Based G-Band Radiometer Retrievals. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	0