Wayne Angevine

List of Publications by Year
in descending order

89 papers	5,812 citations	66343 42 h-index	85541 71 g-index
109 all docs	109 docs citations	109 times ranked	5532 citing authors

#	Article	IF	Citations
1	Effect of petrochemical industrial emissions of reactive alkenes and NOxon tropospheric ozone formation in Houston, Texas. Journal of Geophysical Research, 2003, 108, .	3.3	263
2	The Lagrangian particle dispersion model FLEXPART-WRF version 3.1. Geoscientific Model Development, 2013, 6, 1889-1904.	3.6	256
3	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9233-9257.	3.3	231
4	Boundary Layer Height and Entrainment Zone Thickness Measured by Lidars and Wind-Profiling Radars. Journal of Applied Meteorology and Climatology, 2000, 39, 1233-1247.	1.7	215
5	Boundary-layer depth and entrainment zone characterization with a boundary-layer profiler. Boundary-Layer Meteorology, 1994, 68, 375-385.	2.3	201
6	The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5830-5866.	3.3	199
7	Developments in UHF lower tropospheric wind profiling at NOAA's Aeronomy Laboratory. Radio Science, 1995, 30, 977-1001.	1.6	183
8	Evaluation of the Diurnal Cycle in the Atmospheric Boundary Layer Over Land as Represented by a Variety of Single-Column Models: The Second GABLS Experiment. Boundary-Layer Meteorology, 2011, 140, 177-206.	2.3	158
9	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence. Atmospheric Chemistry and Physics, 2014, 14, 10931-10960.	4.9	151
10	Top-down estimate of surface flux in the Los Angeles Basin using a mesoscale inverse modeling technique: assessing anthropogenic emissions of CO, NO_x and CO₂ and their impacts. Atmospheric Chemistry and Physics, 2013, 13, 3661-3677.	4.9	142
11	Nighttime removal of NOxin the summer marine boundary layer. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	127
12	Signatures of terminal alkene oxidation in airborne formaldehyde measurements during TexAQS 2000. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	126
13	High resolution vertical distributions of NO₃ and N₂O₅ through the nocturnal boundary layer. Atmospheric Chemistry and Physics, 2007, 7, 139-149.	4.9	119
14	Evaluation of urban surface parameterizations in the WRF model using measurements during the Texas Air Quality Study 2006 field campaign. Atmospheric Chemistry and Physics, 2011, 11, 2127-2143.	4.9	119
15	Performance of an Eddy Diffusivityâ€“Mass Flux Scheme for Shallow Cumulus Boundary Layers. Monthly Weather Review, 2010, 138, 2895-2912.	1.4	116
16	Atmospheric emissions from the Deepwater Horizon spill constrain air-water partitioning, hydrocarbon fate, and leak rate. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	107
17	The glyoxal budget and its contribution to organic aerosol for Los Angeles, California, during CalNex 2010. Journal of Geophysical Research, 2011, 116, .	3.3	99
18	Multisensor Estimation of Mixing Heights over a Coastal City. Journal of Applied Meteorology and Climatology, 2008, 47, 27-43.	1.5	87

#	Article	IF	Citations
19	Improving Wind Energy Forecasting through Numerical Weather Prediction Model Development. Bulletin of the American Meteorological Society, 2019, 100, 2201-2220.	3.3	87
20	Influence of oil and gas emissions on summertime ozone in the Colorado Northern Front Range. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8712-8729.	3.3	86
21	Evaluations of NO_x and highly reactive VOC emission inventories in Texas and their implications for ozone plume simulations during the Texas Air Quality Study 2006. Atmospheric Chemistry and Physics, 2011, 11, 11361-11386.	4.9	85
22	The Third GABLS Intercomparison Case for Evaluation Studies of Boundary-Layer Models. Part B: Results and Process Understanding. Boundary-Layer Meteorology, 2014, 152, 157-187.	2.3	83
23	Observations Of The Morning Transition Of The Convective Boundary Layer. Boundary-Layer Meteorology, 2001, 101, 209-227.	2.3	81
24	Vertical profiles in NO₃ and N₂O₅ measured from an aircraft: Results from the NOAA Pâ€3 and surface platforms during the New England Air Quality Study 2004. Journal of Geophysical Research, 2007, 112, .	3.3	75
25	Measurements of 3-methyl furan, methyl vinyl ketone, and methacrolein at a rural forested site in the southeastern United States. Journal of Geophysical Research, 1995, 100, 11393.	3.3	74
26	Boundary layer aerosol chemistry during TexAQS/GoMACCS 2006: Insights into aerosol sources and transformation processes. Journal of Geophysical Research, 2008, 113, .	3.3	73
27	Top-down estimate of anthropogenic emission inventories and their interannual variability in Houston using a mesoscale inverse modeling technique. Journal of Geophysical Research, 2011, 116, .	3.3	73
28	Meteorological Model Evaluation for CalNex 2010. Monthly Weather Review, 2012, 140, 3885-3906.	1.4	70
29	Urban-rural contrasts in mixing height and cloudiness over Nashville in 1999. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	65
30	Convective Boundary Layer Height Measurement with Wind Profilers and Comparison to Cloud Base. Journal of Atmospheric and Oceanic Technology, 1998, 15, 1331-1338.	1.3	63
31	Coastal Boundary Layer Influence on Pollutant Transport in New England. Journal of Applied Meteorology and Climatology, 2004, 43, 1425-1437.	1.7	63
32	Surface observations for monitoring urban fossil fuel CO₂ emissions: Minimum site location requirements for the Los Angeles megacity. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1577-1584.	3.3	61
33	100 Years of Progress in Boundary Layer Meteorology. Meteorological Monographs, 2019, 59, 9.1-9.85.	5.0	61
34	Emissions of organic carbon and methane from petroleum and dairy operations in California's San Joaquin Valley. Atmospheric Chemistry and Physics, 2014, 14, 4955-4978.	4.9	59
35	Cases-97: Late-Morning Warming And Moistening Of The Convective Boundary Layer Over The Walnut River Watershed. Boundary-Layer Meteorology, 2002, 104, 1-52.	2.3	57
36	Mesoscale meteorology of the New England coast, Gulf of Maine, and Nova Scotia: Overview. Journal of Geophysical Research, 1996, 101, 28893-28901.	3.3	55

#	Article	IF	Citations
37	Wind Profiler and RASS Measurements Compared with Measurements from a 450-m-Tall Tower. Journal of Atmospheric and Oceanic Technology, 1998, 15, 818-825.	1.3	55
38	Errors in Mean Vertical Velocities Measured by Boundary Layer Wind Profilers. Journal of Atmospheric and Oceanic Technology, 1997, 14, 565-569.	1.3	54
39	The sea breeze/land breeze circulation in Los Angeles and its influence on nitryl chloride production in this region. Journal of Geophysical Research, 2012, 117, .	3.3	54
40	The Flatland Boundary Layer Experiments. Bulletin of the American Meteorological Society, 1998, 79, 419-431.	3.3	53
41	Observations of the Afternoon Transition of the Convective Boundary Layer. Journal of Applied Meteorology and Climatology, 2002, 41, 3-11.	1.7	51
42	In situ vertical profiles of aerosol extinction, mass, and composition over the southeast United States during SENEX and SEAC⁴RS: observations of a modest aerosol enhancement aloft. Atmospheric Chemistry and Physics, 2015, 15, 7085-7102.	4.9	50
43	A new inversion method to calculate emission inventories without a prior at mesoscale: Application to the anthropogenic CO₂ emission from Houston, Texas. Journal of Geophysical Research, 2012, 117, .	3.3	44
44	Nighttime isoprene trends at an urban forested site during the 1999 Southern Oxidant Study. Journal of Geophysical Research, 2002, 107, ACH 7-1.	3.3	43
45	An Integrated Turbulence Scheme for Boundary Layers with Shallow Cumulus Applied to Pollutant Transport. Journal of Applied Meteorology and Climatology, 2005, 44, 1436-1452.	1.7	43
46	Comparing the impact of meteorological variability on surface ozone during the NEAQS (2002) and ICARTT (2004) field campaigns. Journal of Geophysical Research, 2007, 112, .	3.3	43
47	Transitional, entraining, cloudy, and coastal boundary layers. Acta Geophysica, 2008, 56, 2-20.	2.0	43
48	Emissions of terpenoids, benzenoids, and other biogenic gas-phase organic compounds from agricultural crops and their potential implications for air quality. Atmospheric Chemistry and Physics, 2014, 14, 5393-5413.	4.9	43
49	Select strengths and biases of models in representing the Arctic winter boundary layer over sea ice: the Larcform 1 single column model intercomparison. Journal of Advances in Modeling Earth Systems, 2016, 8, 1345-1357.	3.8	43
50	Improved Radio Acoustic Sounding Techniques. Journal of Atmospheric and Oceanic Technology, 1994, 11, 42-49.	1.3	41
51	Turbulent bulk transfer coefficients and ozone deposition velocity in the International Consortium for Atmospheric Research into Transport and Transformation. Journal of Geophysical Research, 2006, 111, .	3.3	41
52	Uncertainty in Lagrangian pollutant transport simulations due to meteorological uncertainty from a mesoscale WRF ensemble. Geoscientific Model Development, 2014, 7, 2817-2829.	3.6	40
53	Entrainment results from the Flatland boundary layer experiments. Journal of Geophysical Research, 1998, 103, 13689-13701.	3.3	39
54	Observations of ozone transport from the free troposphere to the Los Angeles basin. Journal of Geophysical Research, 2012, 117, .	3.3	38

#	Article	IF	Citations
55	Topâ€down estimate of methane emissions in California using a mesoscale inverse modeling technique: The South Coast Air Basin. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6698-6711.	3.3	38
56	Land surface spinup for episodic modeling. Atmospheric Chemistry and Physics, 2014, 14, 8165-8172.	4.9	37
57	Numerical uncertainty at mesoscale in a Lagrangian model in complex terrain. Geoscientific Model Development, 2012, 5, 1127-1136.	3.6	36
58	Shallow Cumulus in WRF Parameterizations Evaluated against LASSO Large-Eddy Simulations. Monthly Weather Review, 2018, 146, 4303-4322.	1.4	36
59	Remote Sensing of Vertical Velocity Variance and Surface Heat Flux in a Convective Boundary Layer. Journal of Applied Meteorology and Climatology, 1994, 33, 977-983.	1.7	35
60	Entrainment results including advection and case studies from the Flatland boundary layer experiments. Journal of Geophysical Research, 1999, 104, 30947-30963.	3.3	35
61	Structure and formation of the highly stable marine boundary layer over the Gulf of Maine. Journal of Geophysical Research, 2006, 111, .	3.3	35
62	Errors in Radio Acoustic Sounding of Temperature. Journal of Atmospheric and Oceanic Technology, 1994, 11, 837-842.	1.3	31
63	Transition Periods in the Diurnally-Varying Atmospheric Boundary Layer Over Land. Boundary-Layer Meteorology, 2020, 177, 205-223.	2.3	29
64	Virtual Heat Flux Measurements from a Boundary-Layer Profiler-RASS Compared to Aircraft Measurements. Journal of Applied Meteorology and Climatology, 1993, 32, 1901-1907.	1.7	28
65	Comparison of Wind Profiler and Aircraft Wind Measurements at Chebogue Point, Nova Scotia. Journal of Atmospheric and Oceanic Technology, 1995, 12, 421-426.	1.3	28
66	Modeling of the Coastal Boundary Layer and Pollutant Transport in New England. Journal of Applied Meteorology and Climatology, 2006, 45, 137-154.	1.5	28
67	Singleâ€Column Model Simulations of Subtropical Marine Boundaryâ€Layer Cloud Transitions Under Weakening Inversions. Journal of Advances in Modeling Earth Systems, 2017, 9, 2385-2412.	3.8	27
68	Ozone production and transport near Nashville, Tennessee: Results from the 1994 study at New Hendersonville. Journal of Geophysical Research, 2000, 105, 9137-9153.	3.3	26
69	Vertical variations in O3concentrations before and after a gust front passage. Journal of Geophysical Research, 2002, 107, ACH 9-1.	3.3	26
70	Pollutant transport among California regions. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6750-6763.	3.3	26
71	Topâ€down estimate of methane emissions in California using a mesoscale inverse modeling technique: The San Joaquin Valley. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3686-3699.	3.3	26
72	Ensemble Data Assimilation to Characterize Surface-Layer Errors in Numerical Weather Prediction Models. Monthly Weather Review, 2013, 141, 1804-1821.	1.4	25

#	Article	IF	Citations
73	Nitrous oxide (N₂O) emissions from California based on 2010 CalNex airborne measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2809-2820.	3.3	24
74	Intercomparison of atmospheric trace gas dispersion models: Barnett Shale case study. Atmospheric Chemistry and Physics, 2019, 19, 2561-2576.	4.9	24
75	Improving a global model from the boundary layer: Total turbulent energy and the neutral limit <scp>P</scp>randtl number. Journal of Advances in Modeling Earth Systems, 2015, 7, 791-805.	3.8	23
76	Local meteorological features affecting chemical measurements at a North Atlantic coastal site. Journal of Geophysical Research, 1996, 101, 28935-28946.	3.3	22
77	Fluxes of Heat and Momentum Measured with a Boundary-Layer Wind Profiler Radar-Radio Acoustic Sounding System. Journal of Applied Meteorology and Climatology, 1993, 32, 73-80.	1.7	21
78	Evaluation of the NCEP Mesoscale Eta Model Convective Boundary Layer for Air Quality Applications. Monthly Weather Review, 2001, 129, 2761-2775.	1.4	19
79	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesvilleâ€Bossier Oil and Gas Production Region Using Airborne Measurements. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3520-3531.	3.3	18
80	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1777-1803.	3.3	15
81	Mesoscale model performance with assimilation of wind profiler data: Sensitivity to assimilation parameters and network configuration. Journal of Geophysical Research, 2007, 112, .	3.3	14
82	Demistify: a large-eddy simulation (LES) and single-column model (SCM) intercomparison of radiation fog. Atmospheric Chemistry and Physics, 2022, 22, 319-333.	4.9	14
83	Regional contrast in morning transitions observed during the 1999 Southern Oxidants Study Nashville/Middle Tennessee Intensive. Journal of Geophysical Research, 2002, 107, ACL 21-1-ACL 21-12.	3.3	13
84	Errors in top-down estimates of emissions using a known source. Atmospheric Chemistry and Physics, 2020, 20, 11855-11868.	4.9	11
85	Comparison of Measured and Modeled Surface Fluxes of Heat, Moisture, and Chemical Dry Deposition. , 1996, , 613-621.		7
86	The Role of Radiation in Heating the Clear-Air Convective Boundary Layer: Revisiting CASES-97. Boundary-Layer Meteorology, 2021, 178, 341-361.	2.3	4
87	Scale Awareness, Resolved Circulations, and Practical Limits in the MYNNâ€“EDMF Boundary Layer and Shallow Cumulus Scheme. Monthly Weather Review, 2020, 148, 4629-4639.	1.4	4
88	Correction to â€œRegional contrast in morning transitions observed during the 1999 Southern Oxidants Study Nashville/Middle Tennessee Intensiveâ€•by A. B. White et al.. Journal of Geophysical Research, 2003, 108, .	3.3	1
89	Corrigendum to "In situ vertical profiles of aerosol extinction, mass, and composition over the southeast United States during SENEX and SEAC⁴RS: observations of a modest aerosol enhancement aloft" published in Atmos. Chem. Phys., 15, 7085â€“7102, 2015. Atmospheric Chemistry and Physics, 2015, 15, 8455-8455.	4.9	1