Annmarie G Carlton

List of Publications by Year
in descending order

78 papers	6,486 citations	126907 33 h-index	79698 73 g-index
107 all docs	107 docs citations	107 times ranked	4495 citing authors

#	Article	IF	Citations
1	Thank You to Our 2021 Peer Reviewers. Reviews of Geophysics, 2022, 60, .	23.0	0
2	Investigating the evolution of water-soluble organic carbon in evaporating cloud water. Environmental Science Atmospheres, 2021, 1, 21-30.	2.4	2
3	Thank You to Our Peer Reviewers for 2020. Reviews of Geophysics, 2021, 59, e2021RG000741.	23.0	0
4	Diurnal and Seasonal Variations in the Phase State of Secondary Organic Aerosol Material over the Contiguous US Simulated in CMAQ. ACS Earth and Space Chemistry, 2021, 5, 1971-1982.	2.7	12
5	Urban aerosol chemistry at a landâ€“water transition site during summer â€“ Part 1: Impact of agricultural and industrial ammonia emissions. Atmospheric Chemistry and Physics, 2021, 21, 13051-13065.	4.9	2
6	Box Model Intercomparison of Cloud Chemistry. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	3.3	7
7	Partitioning of Ambient Organic Gases to Inorganic Salt Solutions: Influence of Salt Identity, Ionic Strength, and pH. Geophysical Research Letters, 2021, 48, e2021GL095247.	4.0	5
8	Urban aerosol chemistry at a landâ€“water transition site during summer â€“ PartÂ2: Aerosol pH and liquid water content. Atmospheric Chemistry and Physics, 2021, 21, 18271-18281.	4.9	2
9	Multiphase Atmospheric Chemistry in Liquid Water: Impacts and Controllability of Organic Aerosol. Accounts of Chemical Research, 2020, 53, 1715-1723.	15.6	23
10	Changing Nature of Organic Carbon over the United States. Environmental Science & Technology, 2020, 54, 10524-10532.	10.0	11
11	No evidence for brown carbon formation in ambient particles undergoing atmospherically relevant drying. Environmental Sciences: Processes and Impacts, 2020, 22, 442-450.	3.5	8
12	Thank You to Our Peer Reviewers for 2019. Reviews of Geophysics, 2020, 58, no.	23.0	0
13	On Aerosol Liquid Water and Sulfate Associations: The Potential for Fine Particulate Matter Biases. Atmosphere, 2020, 11, 194.	2.3	9
14	Overview of the CPOC Pilot Study at Whiteface Mountain, NY: Cloud Processing of Organics within Clouds (CPOC). Bulletin of the American Meteorological Society, 2020, 101, E1820-E1841.	3.3	8
15	Differences in fine particle chemical composition on clear and cloudy days. Atmospheric Chemistry and Physics, 2020, 20, 11607-11624.	4.9	7
16	Assessing the effects of power grid expansion on human health externalities. Socio-Economic Planning Sciences, 2019, 66, 92-104.	5.0	16
17	A Metamodeling Framework for Quantifying Health Damages of Power Grid Expansion Plans. International Journal of Environmental Research and Public Health, 2019, 16, 1857.	2.6	1
18	Aerosol Optical Thickness: Organic Composition, Associated Particle Water, and Aloft Extinction. ACS Earth and Space Chemistry, 2019, 3, 403-412.	2.7	7

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19	Chemical composition of ultrafine aerosol particles in central Amazonia during the wet season. Atmospheric Chemistry and Physics, 2019, 19, 13053-13066.	4.9	11
20	Controlling Biogenic Particle Mass with NOx and SOx. Em: Air and Waste Management Association's Magazine for Environmental Managers, 2019, null, 9-13.	0.2	0
21	Vertically resolved concentration and liquid water content of atmospheric nanoparticles at the US DOE Southern Great Plains site. Atmospheric Chemistry and Physics, 2018, 18, 311-326.	4.9	31
22	Synthesis of the Southeast Atmosphere Studies: Investigating Fundamental Atmospheric Chemistry Questions. Bulletin of the American Meteorological Society, 2018, 99, 547-567.	3.3	62
23	Southeast Atmosphere Studies: learning from model-observation syntheses. Atmospheric Chemistry and Physics, 2018, 18, 2615-2651.	4.9	36
24	Detailed Characterization of Organic Carbon from Fire: Capitalizing on Analytical Advances To Improve Atmospheric Models. ACS Symposium Series, 2018, , 349-361.	0.5	0
25	Generation expansion planning considering health and societal damages â€“ A simulation-based optimization approach. Energy, 2018, 164, 951-963.	8.8	32
26	Additional Benefits of Federal Air-Quality Rules: Model Estimates of Controllable Biogenic Secondary Organic Aerosol. Environmental Science & Technology, 2018, 52, 9254-9265.	10.0	36
27	Potential of Aerosol Liquid Water to Facilitate Organic Aerosol Formation: Assessing Knowledge Gaps about Precursors and Partitioning. Environmental Science & Technology, 2017, 51, 3327-3335.	10.0	55
28	The Essential Role for Laboratory Studies in Atmospheric Chemistry. Environmental Science & Technology, 2017, 51, 2519-2528.	10.0	75
29	Simulating Aqueous-Phase Isoprene-Epoxydiol (IEPOX) Secondary Organic Aerosol Production During the 2013 Southern Oxidant and Aerosol Study (SOAS). Environmental Science & Technology, 2017, 51, 5026-5034.	10.0	86
30	Federal Science Matters: We All Live Downwind of a Harvey-Arkema Disaster. Environmental Science & Technology, 2017, 51, 10930-10931.	10.0	1
31	Why and How to Write a Highâ€Impact Review Paper: Lessons From Eight Years of Editorial Board Service to Reviews of Geophysics. Reviews of Geophysics, 2017, 55, 860-863.	23.0	1
32	Multiphase Chemistry: Experimental Design for Coordinated Measurement and Modeling Studies of Cloud Processing at a Mountaintop. Bulletin of the American Meteorological Society, 2017, 98, ES163-ES167.	3.3	8
33	Urban emissions of water vapor in winter. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9467-9484.	3.3	18
34	On the implications of aerosol liquid water and phase separation for organic aerosol mass. Atmospheric Chemistry and Physics, 2017, 17, 343-369.	4.9	189
35	Semivolatile POA and parameterized total combustion SOA in CMAQv5.2: impacts on source strength and partitioning. Atmospheric Chemistry and Physics, 2017, 17, 11107-11133.	4.9	109
36	A framework for expanding aqueous chemistry in the Community Multiscale Air Quality (CMAQ) model version 5.1. Geoscientific Model Development, 2017, 10, 1587-1605.	3.6	50

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37	High Electricity Demand in the Northeast U.S.: PJM Reliability Network and Peaking Unit Impacts on Air Quality. Environmental Science & Technology, 2016, 50, 8375-8384.	10.0	10
38	Reconciling satellite aerosol optical thickness and surface fine particle mass through aerosol liquid water. Geophysical Research Letters, 2016, 43, 11,903.	4.0	18
39	Aerosol optical properties in the southeastern United States in summer â€“ PartÂ1: Hygroscopic growth. Atmospheric Chemistry and Physics, 2016, 16, 4987-5007.	4.9	88
40	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign. Atmospheric Chemistry and Physics, 2016, 16, 14409-14420.	4.9	33
41	Liquid Water: Ubiquitous Contributor to Aerosol Mass. Environmental Science and Technology Letters, 2016, 3, 257-263.	8.7	121
42	Fine-particle water and pH in the southeastern United States. Atmospheric Chemistry and Physics, 2015, 15, 5211-5228.	4.9	413
43	Modeling the formation and aging of secondary organic aerosols in Los Angeles during CalNex 2010. Atmospheric Chemistry and Physics, 2015, 15, 5773-5801.	4.9	139
44	Gas and aerosol carbon in California: comparison of measurements and model predictions in Pasadena and Bakersfield. Atmospheric Chemistry and Physics, 2015, 15, 5243-5258.	4.9	48
45	Decreasing Aerosol Water Is Consistent with OC Trends in the Southeast U.S.. Environmental Science & Technology, 2015, 49, 7843-7850.	10.0	47
46	Temporalization of Peak Electric Generation Particulate Matter Emissions during High Energy Demand Days. Environmental Science & Technology, 2015, 49, 4696-4704.	10.0	14
47	Regional Air Quality Model Application of the Aqueous-Phase Photo Reduction of Atmospheric Oxidized Mercury by Dicarboxylic Acids. Atmosphere, 2014, 5, 1-15.	2.3	23
48	The Data Gap: Can a Lack of Monitors Obscure Loss of Clean Air Act Benefits in Fracking Areas?. Environmental Science & Technology, 2014, 48, 893-894.	10.0	23
49	Aerosol Liquid Water Driven by Anthropogenic Nitrate: Implications for Lifetimes of Water-Soluble Organic Gases and Potential for Secondary Organic Aerosol Formation. Environmental Science & Technology, 2014, 48, 11127-11136.	10.0	94
50	Partitioning of HNO3, H2O2 and SO2 to cloud ice: Simulations with CMAQ. Atmospheric Environment, 2014, 88, 239-246.	4.1	1
51	Trends in particle-phase liquid water during the Southern Oxidant and Aerosol Study. Atmospheric Chemistry and Physics, 2014, 14, 10911-10930.	4.9	75
52	Organosulfates in cloud water above the Ozarks' isoprene source region. Atmospheric Environment, 2013, 77, 231-238.	4.1	52
53	Particle partitioning potential of organic compounds is highest in the Eastern US and driven by anthropogenic water. Atmospheric Chemistry and Physics, 2013, 13, 10203-10214.	4.9	162
54	Analyzing experimental data and model parameters: implications for predictions of SOA using chemical transport models. Atmospheric Chemistry and Physics, 2013, 13, 12073-12088.	4.9	38

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55	Evaluation of factors controlling global secondary organic aerosol production from cloud processes. Atmospheric Chemistry and Physics, 2013, 13, 1913-1926.	4.9	27
56	Combining Bayesian methods and aircraft observations to constrain the HO[.] + NO₂ reaction rate. Atmospheric Chemistry and Physics, 2012, 12, 653-667.	4.9	33
57	Aerosols from Fires: An Examination of the Effects on Ozone Photochemistry in the Western United States. Environmental Science & Technology, 2012, 46, 11878-11886.	10.0	61
58	Global inâ€cloud production of secondary organic aerosols: Implementation of a detailed chemical mechanism in the GFDL atmospheric model AM3. Journal of Geophysical Research, 2012, 117, .	3.3	57
59	Modeling secondary organic aerosol formation from xylene and aromatic mixtures using a dynamic partitioning approach incorporating particle aqueous-phase chemistry (II). Atmospheric Environment, 2012, 56, 250-260.	4.1	8
60	Photochemical Modeling of the Ozark Isoprene Volcano: MEGAN, BEIS, and Their Impacts on Air Quality Predictions. Environmental Science & Technology, 2011, 45, 4438-4445.	10.0	114
61	Modeling secondary organic aerosol using a dynamic partitioning approach incorporating particle aqueous-phase chemistry. Atmospheric Environment, 2011, 45, 1126-1137.	4.1	25
62	Evaluation of simulated photochemical partitioning of oxidized nitrogen in the upper troposphere. Atmospheric Chemistry and Physics, 2011, 11, 275-291.	4.9	37
63	Impact of a new condensed toluene mechanism on air quality model predictions in the US. Geoscientific Model Development, 2011, 4, 183-193.	3.6	53
64	The contribution of marine organics to the air quality of the western United States. Atmospheric Chemistry and Physics, 2010, 10, 7415-7423.	4.9	21
65	SOA from methylglyoxal in clouds and wet aerosols: Measurement and prediction of key products. Atmospheric Environment, 2010, 44, 5218-5226.	4.1	181
66	Model Representation of Secondary Organic Aerosol in CMAQv4.7. Environmental Science & Technology, 2010, 44, 8553-8560.	10.0	364
67	To What Extent Can Biogenic SOA be Controlled?. Environmental Science & Technology, 2010, 44, 3376-3380.	10.0	254
68	Examination of the impact of photoexcited NO2 chemistry on regional air quality. Atmospheric Environment, 2009, 43, 6383-6387.	4.1	20
69	A review of Secondary Organic Aerosol (SOA) formation from isoprene. Atmospheric Chemistry and Physics, 2009, 9, 4987-5005.	4.9	750
70	Oligomers formed through in-cloud methylglyoxal reactions: Chemical composition, properties, and mechanisms investigated by ultra-high resolution FT-ICR mass spectrometry. Atmospheric Environment, 2008, 42, 1476-1490.	4.1	325
71	CMAQ Model Performance Enhanced When In-Cloud Secondary Organic Aerosol is Included: Comparisons of Organic Carbon Predictions with Measurements. Environmental Science & Technology, 2008, 42, 8798-8802.	10.0	183
72	Secondary organic aerosol yields from cloudâ€processing of isoprene oxidation products. Geophysical Research Letters, 2008, 35, .	4.0	238

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73	Atmospheric oxalic acid and SOA production from glyoxal: Results of aqueous photooxidation experiments. Atmospheric Environment, 2007, 41, 7588-7602.	4.1	487
74	Link between isoprene and secondary organic aerosol (SOA): Pyruvic acid oxidation yields low volatility organic acids in clouds. Geophysical Research Letters, 2006, 33, .	4.0	304
75	Evidence for Oligomer Formation in Clouds:Â Reactions of Isoprene Oxidation Products. Environmental Science & Technology, 2006, 40, 4956-4960.	10.0	175
76	Isoprene Forms Secondary Organic Aerosol through Cloud Processing:Â Model Simulations. Environmental Science & Technology, 2005, 39, 4441-4446.	10.0	405
77	Design of a Cost-Effective Weighing Facility for PM2.5 Quality Assurance. Journal of the Air and Waste Management Association, 2002, 52, 506-510.	1.9	7
78	Microanalysis Methods for Characterization of Personal Aerosol Exposures. Aerosol Science and Technology, 1999, 31, 66-80.	3.1	23