

# Christian M Carrico

## List of Publications by Year in descending order

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43  
papers

3,450  
citations

172457

29  
h-index

265206

42  
g-index

44  
all docs

44  
docs citations

44  
times ranked

3528  
citing authors

#	ARTICLE	IF	CITATIONS
1	Emissions of trace gases and aerosols during the open combustion of biomass in the laboratory. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	336
2	Determination of levoglucosan in biomass combustion aerosol by high-performance anion-exchange chromatography with pulsed amperometric detection. <i>Atmospheric Environment</i> , 2006, 40, 299-311.	4.1	273
3	Mixtures of pollution, dust, sea salt, and volcanic aerosol during ACE-Asia: Radiative properties as a function of relative humidity. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	234
4	Cloud condensation nucleation activity of biomass burning aerosol. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	213
5	Hygroscopicity and cloud droplet activation of mineral dust aerosol. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	159
6	Biomass burning smoke aerosol properties measured during Fire Laboratory at Missoula Experiments (FLAME). <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	150
7	Ice nuclei emissions from biomass burning. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	125
8	Aerosol optical properties measured on board the Ronald H. Brown during ACE-Asia as a function of aerosol chemical composition and source region. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	123
9	Reduction in biomass burning aerosol light absorption upon humidification: roles of inorganically-induced hygroscopicity, particle collapse, and photoacoustic heat and mass transfer. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 8949-8966.	4.9	119
10	Hygroscopic growth behavior of a carbon-dominated aerosol in Yosemite National Park. <i>Atmospheric Environment</i> , 2005, 39, 1393-1404.	4.1	113
11	Impact of particulate organic matter on the relative humidity dependence of light scattering: A simplified parameterization. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	4.0	113
12	Climate change impacts on fire regimes and key ecosystem services in Rocky Mountain forests. <i>Forest Ecology and Management</i> , 2014, 327, 290-305.	3.2	113
13	Water activity and activation diameters from hygroscopicity data - Part II: Application to organic species. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 795-809.	4.9	111
14	Water uptake and chemical composition of fresh aerosols generated in open burning of biomass. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5165-5178.	4.9	104
15	Chemical processing does not always impair heterogeneous ice nucleation of mineral dust particles. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	102
16	Urban aerosol radiative properties: Measurements during the 1999 Atlanta Supersite Experiment. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	84
17	Influence of relative humidity on aerosol radiative forcing: An ACE-Asia experiment perspective. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	74
18	A comparison and summary of aerosol optical properties as observed in situ from aircraft, ship, and land during ACE-Asia. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	74

#	ARTICLE	IF	CITATIONS
19	Characteristics of atmospheric ice nucleating particles associated with biomass burning in the US: Prescribed burns and wildfires. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 10458-10470.	3.3	73
20	Aerosol hygroscopicity and cloud droplet activation of extracts of filters from biomass burning experiments. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	69
21	Role of molecular size in cloud droplet activation. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	69
22	Ice nucleation behavior of biomass combustion particles at cirrus temperatures. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	68
23	Smoke-impacted regional haze in California during the summer of 2002. <i>Agricultural and Forest Meteorology</i> , 2006, 137, 25-42.	4.8	55
24	Humidification factors from laboratory studies of fresh smoke from biomass fuels. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	49
25	Heterogeneous ice nucleation measurements of secondary organic aerosol generated from ozonolysis of alkenes. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	43
26	Environmental snapshots from ACE-Asia. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	42
27	Ice nucleating particle emissions from biomass combustion and the potential importance of soot aerosol. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 5888-5903.	3.3	42
28	Aerosol optical properties along the northeast coast of North America during the New England Air Quality Study-Intercontinental Transport and Chemical Transformation 2004 campaign and the influence of aerosol composition. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	41
29	Observations of smoke-influenced aerosol during the Yosemite Aerosol Characterization Study: Size distributions and chemical composition. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	40
30	Enhanced concentrations of reactive nitrogen species in wildfire smoke. <i>Atmospheric Environment</i> , 2017, 148, 8-15.	4.1	38
31	Measured and modeled humidification factors of fresh smoke particles from biomass burning: role of inorganic constituents. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 6179-6194.	4.9	33
32	Rapidly evolving ultrafine and fine mode biomass smoke physical properties: Comparing laboratory and field results. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 5750-5768.	3.3	27
33	Mie Scattering Captures Observed Optical Properties of Ambient Biomass Burning Plumes Assuming Uniform Black, Brown, and Organic Carbon Mixtures. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 11406-11427.	3.3	23
34	Optical Properties of Laboratory and Ambient Biomass Burning Aerosols: Elucidating Black, Brown, and Organic Carbon Components and Mixing Regimes. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5088-5105.	3.3	21
35	Southwestern U.S. Biomass Burning Smoke Hygroscopicity: The Role of Plant Phenology, Chemical Composition, and Combustion Properties. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 5416-5432.	3.3	19
36	Observations of smoke-influenced aerosol during the Yosemite Aerosol Characterization Study: 2. Aerosol scattering and absorbing properties. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	17

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37	Observations of ice nucleation by ambient aerosol in the homogeneous freezing regime. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	15
38	Low hygroscopicity of ambient fresh carbonaceous aerosols from pyrotechnics smoke. <i>Atmospheric Environment</i> , 2018, 178, 101-108.	4.1	15
39	Optical and Chemical Analysis of Absorption Enhancement by Mixed Carbonaceous Aerosols in the 2019 Woodbury, AZ, Fire Plume. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032399.	3.3	13
40	A Quantitative Method to Measure and Speciate Amines in Ambient Aerosol Samples. <i>Atmosphere</i> , 2020, 11, 808.	2.3	7
41	NO <sub>x</sub> instrument intercomparison for laboratory biomass burning source studies and urban ambient measurements in Albuquerque, New Mexico. <i>Journal of the Air and Waste Management Association</i> , 2018, 68, 1175-1189.	1.9	6
42	Humidified single-scattering albedometer (H-CAPS-PM <sub>SSA</sub> ): Design, data analysis, and validation. <i>Aerosol Science and Technology</i> , 2021, 55, 749-768.	3.1	4
43	Complexities in Modeling Organic Aerosol Light Absorption. <i>Journal of Physical Chemistry A</i> , 0, , .	2.5	1