

Scot T Martin

List of PR Articles by Year in descending order

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116

PR articles

8,274

PR citations

26924

49

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34570

88

g-index

120

documents

9117

doc citations

29041

52

h-index

7320

citing authors

#	ARTICLE	IF	PR CITATIONS
1	How do aerosols above the residual layer affect the planetary boundary layer height?. Science of the Total Environment, 2022, 814, 151953.	8.4	43
2	Tight Coupling of Surface and In-Plant Biochemistry and Convection Governs Key Fine Particulate Components over the Amazon Rainforest. ACS Earth and Space Chemistry, 2022, 6, 380-390.	3.2	25
3	Rapid growth of anthropogenic organic nanoparticles greatly alters cloud life cycle in the Amazon rainforest. Science Advances, 2022, 8, .	11.0	44
4	Reconciling Observed and Predicted Tropical Rainforest OH Concentrations. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.0	11
5	Phase Behavior of Internal Mixtures of Hydrocarbon-like Primary Organic Aerosol and Secondary Aerosol Based on Their Differences in Oxygen-to-Carbon Ratios. Environmental Science & Technology, 2022, 56, 3960-3973.	11.1	26
6	Assessing the Nonlinear Effect of Atmospheric Variables on Primary and Oxygenated Organic Aerosol Concentration Using Machine Learning. ACS Earth and Space Chemistry, 2022, 6, 1059-1066.	3.2	20
7	Partitioning of Organonitrates in the Production of Secondary Organic Aerosols from α -Pinene Photo-Oxidation. Environmental Science & Technology, 2022, 56, 5421-5429.	11.1	18
8	Liquid-liquid phase separation reduces radiative absorption by aged black carbon aerosols. Communications Earth & Environment, 2022, 3, .	6.9	33
9	River Winds and Transport of Forest Volatiles in the Amazonian Riparian Ecoregion. Environmental Science & Technology, 2022, 56, 12667-12677.	11.1	10
10	Near-canopy horizontal concentration heterogeneity of semivolatile oxygenated organic compounds and implications for 2-methyltetrols primary emissions. Environmental Science Atmospheres, 2021, 1, 8-20.	2.7	8
11	Unmanned Aerial Vehicle Measurements of Volatile Organic Compounds over a Subtropical Forest in China and Implications for Emission Heterogeneity. ACS Earth and Space Chemistry, 2021, 5, 247-256.	3.2	26
12	Aqueous production of secondary organic aerosol from fossil-fuel emissions in winter Beijing haze. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.6	120
13	Optimization and Representativeness of Atmospheric Chemical Sampling by Hovering Unmanned Aerial Vehicles Over Tropical Forests. Earth and Space Science, 2021, 8, .	2.4	15
14	Fluorescence Aerosol Flow Tube Spectroscopy to Detect Liquid-Liquid Phase Separation. ACS Earth and Space Chemistry, 2021, 5, 1223-1232.	3.2	25
15	Humidity Dependence of the Condensational Growth of α -Pinene Secondary Organic Aerosol Particles. Environmental Science & Technology, 2021, 55, 14360-14369.	11.1	26
16	River winds and pollutant recirculation near the Manaus city in the central Amazon. Communications Earth & Environment, 2021, 2, .	6.9	12
17	Enhanced aerosol particle growth sustained by high continental chlorine emission in India. Nature Geoscience, 2021, 14, 77-84.	11.6	150
18	Chemical Characterization and Source Apportionment of Organic Aerosols in the Coastal City of Chennai, India: Impact of Marine Air Masses on Aerosol Chemical Composition and Potential for Secondary Organic Aerosol Formation. ACS Earth and Space Chemistry, 2021, 5, 3197-3209.	3.2	19

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19	Temperature-Dependent Viscosity of Organic Materials Characterized by Atomic Force Microscope. <i>Atmosphere</i> , 2021, 12, 1476.	2.2	5
20	Planetary Boundary Layer Height Modulates Aerosol-Water Vapor Interactions During Winter in the Megacity of Delhi. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, .	3.0	15
21	Vertical profiling of fine particulate matter and black carbon by using unmanned aerial vehicle in Macau, China. <i>Science of the Total Environment</i> , 2020, 709, 136109.	8.4	57
22	Synergistic Uptake by Acidic Sulfate Particles of Gaseous Mixtures of Glyoxal and Pinanediol. <i>Environmental Science & Technology</i> , 2020, 54, 11762-11770.	11.1	5
23	Vertical Profiles of Atmospheric Species Concentrations and Nighttime Boundary Layer Structure in the Dry Season over an Urban Environment in Central Amazon Collected by an Unmanned Aerial Vehicle. <i>Atmosphere</i> , 2020, 11, 1371.	2.2	20
24	The Stove, Dome, and Umbrella Effects of Atmospheric Aerosol on the Development of the Planetary Boundary Layer in Hazy Regions. <i>Geophysical Research Letters</i> , 2020, 47, .	4.1	118
25	Fast sulfate formation from oxidation of SO ₂ by NO ₂ and HONO observed in Beijing haze. <i>Nature Communications</i> , 2020, 11, .	13.9	244
26	Comparison of aircraft measurements during GoAmazon2014/5 and ACRIDICON-CHUVA. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 661-684.	2.9	15
27	Exploration of oxidative chemistry and secondary organic aerosol formation in the Amazon during the wet season: explicit modeling of the Manaus urban plume with GECKO-A. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5995-6014.	4.6	11
28	Unified Description of Diffusion Coefficients from Small to Large Molecules in Organic-Water Mixtures. <i>Journal of Physical Chemistry A</i> , 2020, 124, 2301-2308.	2.5	38
29	Impact of biomass burning on a metropolitan area in the Amazon during the 2015 El Niño: The enhancement of carbon monoxide and levoglucosan concentrations. <i>Environmental Pollution</i> , 2020, 260, 114029.	7.8	17
30	Leaf isoprene and monoterpene emission distribution across hyperdominant tree genera in the Amazon basin. <i>Phytochemistry</i> , 2020, 175, 112366.	3.1	42
31	Natural and Anthropogenically Influenced Isoprene Oxidation in Southeastern United States and Central Amazon. <i>Environmental Science & Technology</i> , 2020, 54, 5980-5991.	11.1	38
32	New SOA Treatments Within the Energy Exascale Earth System Model (E3SM): Strong Production and Sinks Govern Atmospheric SOA Distributions and Radiative Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, .	4.0	26
33	Synthesis and surface spectroscopy of α -pinene isotopologues and their corresponding secondary organic material. <i>Chemical Science</i> , 2019, 10, 8390-8398.	7.1	12
34	A sampler for atmospheric volatile organic compounds by copter unmanned aerial vehicles. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 3123-3135.	2.9	63
35	Contributions of biomass-burning, urban, and biogenic emissions to the concentrations and light-absorbing properties of particulate matter in central Amazonia during the dry season. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 7973-8001.	4.6	48
36	The influence that different urban development models has on PM _{2.5} elemental and bioaccessible profiles. <i>Scientific Reports</i> , 2019, 9, .	3.5	18

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37	Quantifying the Role of the Relative Humidity-Dependent Physical State of Organic Particulate Matter in the Uptake of Semivolatile Organic Molecules. <i>Environmental Science & Technology</i> , 2019, 53, 13209-13218.	11.1	23
38	Intermediate-scale horizontal isoprene concentrations in the near-canopy forest atmosphere and implications for emission heterogeneity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 19318-19323.	7.6	49
39	Vertical Profiles of Ozone Concentration Collected by an Unmanned Aerial Vehicle and the Mixing of the Nighttime Boundary Layer over an Amazonian Urban Area. <i>Atmosphere</i> , 2019, 10, 599.	2.2	28
40	Radical Formation by Fine Particulate Matter Associated with Highly Oxygenated Molecules. <i>Environmental Science & Technology</i> , 2019, 53, 12506-12518.	11.1	62
41	Increasing Isoprene Epoxydiol-to-Inorganic Sulfate Aerosol Ratio Results in Extensive Conversion of Inorganic Sulfate to Organosulfur Forms: Implications for Aerosol Physicochemical Properties. <i>Environmental Science & Technology</i> , 2019, 53, 8682-8694.	11.1	161
42	Urban pollution greatly enhances formation of natural aerosols over the Amazon rainforest. <i>Nature Communications</i> , 2019, 10, .	13.9	183
43	Influence of Particle Surface Area Concentration on the Production of Organic Particulate Matter in a Continuously Mixed Flow Reactor. <i>Environmental Science & Technology</i> , 2019, 53, 4968-4976.	11.1	4
44	Chemical composition of ultrafine aerosol particles in central Amazonia during the wet season. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 13053-13066.	4.6	16
45	Observations of particulate matter, NO ₂ , SO ₂ , O ₃ , H ₂ S and selected VOCs at a semi-urban environment in the Amazon region. <i>Science of the Total Environment</i> , 2019, 650, 996-1006.	8.4	30
46	Atmospheric ¹² Caryophyllene-Derived Ozonolysis Products at Interfaces. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 158-169.	3.2	10
47	The viscosity of atmospherically relevant organic particles. <i>Nature Communications</i> , 2018, 9, .	13.9	341
48	Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 467-493.	4.6	77
49	Isoprene photo-oxidation products quantify the effect of pollution on hydroxyl radicals over Amazonia. <i>Science Advances</i> , 2018, 4, .	11.0	40
50	Highly Viscous States Affect the Browning of Atmospheric Organic Particulate Matter. <i>ACS Central Science</i> , 2018, 4, 207-215.	9.2	71
51	Substantial convection and precipitation enhancements by ultrafine aerosol particles. <i>Science</i> , 2018, 359, 411-418.	36.4	406
52	Impact of the biomass burning on methane variability during dry years in the Amazon measured from an aircraft and the AIRS sensor. <i>Science of the Total Environment</i> , 2018, 624, 509-516.	8.4	11
53	Growth Kinetics and Size Distribution Dynamics of Viscous Secondary Organic Aerosol. <i>Environmental Science & Technology</i> , 2018, 52, 1191-1199.	11.1	103
54	Aircraft-based observations of isoprene-epoxydiol-derived secondary organic aerosol (IEPOX-SOA) in the tropical upper troposphere over the Amazon region. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14979-15001.	4.6	48

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55	Production and Measurement of Organic Particulate Matter in the Harvard Environmental Chamber. <i>Journal of Visualized Experiments</i> , 2018, , .	0.3	3
56	Production and Measurement of Organic Particulate Matter in a Flow Tube Reactor. <i>Journal of Visualized Experiments</i> , 2018, , .	0.3	4
57	Organosulfates in aerosols downwind of an urban region in central Amazon. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1546-1558.	3.2	50
58	Resolving the mechanisms of hygroscopic growth and cloud condensation nuclei activity for organic particulate matter. <i>Nature Communications</i> , 2018, 9, .	13.9	121
59	The Reactivity of Toluene-Derived Secondary Organic Material with Ammonia and the Influence of Water Vapor. <i>Journal of Physical Chemistry A</i> , 2018, 122, 7739-7747.	2.5	11
60	Long-term observations of cloud condensation nuclei over the Amazon rain forest “ Part 2: Variability and characteristics of biomass burning, long-range transport, and pristine rain forest aerosols. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10289-10331.	4.6	81
61	Observations of sesquiterpenes and their oxidation products in central Amazonia during the wet and dry seasons. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10433-10457.	4.6	67
62	Aircraft observations of the chemical composition and aging of aerosol in the Manaus urban plume during GoAmazon 2014/5. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10773-10797.	4.6	42
63	Influence of Particle Physical State on the Uptake of Medium-Sized Organic Molecules. <i>Environmental Science & Technology</i> , 2018, 52, 8381-8389.	11.1	13
64	Urban influence on the concentration and composition of submicron particulate matter in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 12185-12206.	4.6	36
65	Observations of Manaus urban plume evolution and interaction with biogenic emissions in GoAmazon 2014/5. <i>Atmospheric Environment</i> , 2018, 191, 513-524.	3.8	21
66	Airborne observations reveal elevational gradient in tropical forest isoprene emissions. <i>Nature Communications</i> , 2017, 8, .	13.9	67
67	Monoterpene “ <i>thermometer</i> ” of tropical forest atmosphere response to climate warming. <i>Plant, Cell and Environment</i> , 2017, 40, 441-452.	6.5	77
68	Cloud Activation Potentials for Atmospheric α -Pinene and β -Caryophyllene Ozonolysis Products. <i>ACS Central Science</i> , 2017, 3, 715-725.	9.2	50
69	Influence of urban pollution on the production of organic particulate matter from isoprene epoxydiols in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6611-6629.	4.6	49
70	Anthropogenic influences on the physical state of submicron particulate matter over a tropical forest. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1759-1773.	4.6	59
71	Liquid–liquid phase separation in particles containing secondary organic material free of inorganic salts. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 11261-11271.	4.6	52
72	CCN activity and organic hygroscopicity of aerosols downwind of an urban region in central Amazonia: seasonal and diel variations and impact of anthropogenic emissions. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 11779-11801.	4.6	81

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73	Power plant fuel switching and air quality in a tropical, forested environment. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8987-8998.	4.6	32
74	Elemental Mixing State of Aerosol Particles Collected in Central Amazonia during GoAmazon2014/15. <i>Atmosphere</i> , 2017, 8, 173.	2.2	42
75	Recent advances in understanding secondary organic aerosol: Implications for global climate forcing. <i>Reviews of Geophysics</i> , 2017, 55, 509-559.	34.3	803
76	Isoprene photochemistry over the Amazon rainforest. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6125-6130.	7.6	97
77	Ambient Gas-Particle Partitioning of Tracers for Biogenic Oxidation. <i>Environmental Science & Technology</i> , 2016, 50, 9952-9962.	11.1	84
78	Lability of secondary organic particulate matter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12643-12648.	7.6	105
79	Effect of varying experimental conditions on the viscosity of α -pinene derived secondary organic material. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 6027-6040.	4.6	90
80	Impacts of the Manaus pollution plume on the microphysical properties of Amazonian warm-phase clouds in the wet season. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7029-7041.	4.6	33
81	Long-term observations of cloud condensation nuclei in the Amazon rain forest " Part 1: Aerosol size distribution, hygroscopicity, and new model parametrizations for CCN prediction. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 15709-15740.	4.6	124
82	Relative humidity-dependent viscosity of secondary organic material from toluene photo-oxidation and possible implications for organic particulate matter over megacities. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 8817-8830.	4.6	105
83	ACRIDICON"CHUVA Campaign: Studying Tropical Deep Convective Clouds and Precipitation over Amazonia Using the New German Research Aircraft HALO. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 1885-1908.	0.0	134
84	Hygroscopic Influence on the Semisolid-to-Liquid Transition of Secondary Organic Materials. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4386-4395.	2.5	129
85	Chemical Reactivity and Liquid/Nonliquid States of Secondary Organic Material. <i>Environmental Science & Technology</i> , 2015, 49, 13264-13274.	11.1	80
86	Water diffusion in atmospherically relevant α -pinene secondary organic material. <i>Chemical Science</i> , 2015, 6, 4876-4883.	7.1	123
87	Impactor Apparatus for the Study of Particle Rebound: Relative Humidity and Capillary Forces. <i>Aerosol Science and Technology</i> , 2014, 48, 42-52.	2.2	104
88	An Analytic Equation for the Volume Fraction of Condensation Grown Mixed Particles and Applications to Secondary Organic Material Produced in Continuously Mixed Flow Reactors. <i>Aerosol Science and Technology</i> , 2014, 48, 803-812.	2.2	5
89	Complex Refractive Indices of Thin Films of Secondary Organic Materials by Spectroscopic Ellipsometry from 220 to 1200 nm. <i>Environmental Science & Technology</i> , 2013, 47, 13594-13601.	11.1	95
90	Atmospheric aerosols in Amazonia and land use change: from natural biogenic to biomass burning conditions. <i>Faraday Discussions</i> , 2013, 165, 203.	3.0	235

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91	Chemically Resolved Particle Fluxes Over Tropical and Temperate Forests. <i>Aerosol Science and Technology</i> , 2013, 47, 818-830.	2.2	28
92	Viscosity of α -pinene secondary organic material and implications for particle growth and reactivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8014-8019.	7.6	433
93	Particle Size Distributions following Condensational Growth in Continuous Flow Aerosol Reactors as Derived from Residence Time Distributions: Theoretical Development and Application to Secondary Organic Aerosol. <i>Aerosol Science and Technology</i> , 2012, 46, 937-949.	2.2	24
94	Phase of atmospheric secondary organic material affects its reactivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 17354-17359.	7.6	205
95	Particle-Phase Chemistry of Secondary Organic Material: Modeled Compared to Measured O:C and H:C Elemental Ratios Provide Constraints. <i>Environmental Science & Technology</i> , 2011, 45, 4763-4770.	11.1	171
96	Stereochemical transfer to atmospheric aerosol particles accompanying the oxidation of biogenic volatile organic compounds. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.1	22
97	Sources and properties of Amazonian aerosol particles. <i>Reviews of Geophysics</i> , 2010, 48, .	34.3	303
98	Hygroscopic behavior and liquid-layer composition of aerosol particles generated from natural and artificial seawater. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.6	55
99	Deliquescence and Efflorescence of Potassium Salts Relevant to Biomass-Burning Aerosol Particles. <i>Aerosol Science and Technology</i> , 2009, 43, 799-807.	2.2	109
100	Global distribution of solid and aqueous sulfate aerosols: Effect of the hysteresis of particle phase transitions. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.6	87
101	Sensitivity of sulfate direct climate forcing to the hysteresis of particle phase transitions. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.6	69
102	Phase changes of ambient particles in the Southern Great Plains of Oklahoma. <i>Geophysical Research Letters</i> , 2008, 35, .	4.1	29
103	Water Uptake by NaCl Particles Prior to Deliquescence and the Phase Rule. <i>Aerosol Science and Technology</i> , 2008, 42, 281-294.	2.2	96
104	Oxaloacetate-to-malate conversion by mineral photoelectrochemistry: implications for the viability of the reductive tricarboxylic acid cycle in prebiotic chemistry. <i>International Journal of Astrobiology</i> , 2008, 7, 271-278.	0.9	31
105	Hygroscopic behavior of NaCl-bearing natural aerosol particles using environmental transmission electron microscopy. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.6	80
106	Satellite characterization of urban aerosols: Importance of including hygroscopicity and mixing state in the retrieval algorithms. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.6	92
107	Cloud condensation nucleus activity of secondary organic aerosol particles mixed with sulfate. <i>Geophysical Research Letters</i> , 2007, 34, .	4.1	70
108	Hygroscopic behavior of aerosol particles from biomass fires using environmental transmission electron microscopy. <i>Journal of Atmospheric Chemistry</i> , 2006, 56, 259-273.	1.6	86

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109	Phase Transitions of Single Salt Particles Studied Using a Transmission Electron Microscope with an Environmental Cell. <i>Aerosol Science and Technology</i> , 2005, 39, 849-856.	2.2	130
110	Dissolution rates and pit morphologies of rhombohedral carbonate minerals. <i>American Mineralogist</i> , 2004, 89, 554-563.	1.8	79
111	Crystallization of atmospheric sulfate-nitrate-ammonium particles. <i>Geophysical Research Letters</i> , 2003, 30, .	4.1	69
112	Solubility and freezing effects of Fe ²⁺ and Mg ²⁺ in H ₂ SO ₄ solutions representative of upper tropospheric and lower stratospheric sulfate particles. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.6	16
113	Ice Nucleation Kinetics of Aerosols Containing Aqueous and Solid Ammonium Sulfate Particles. <i>Journal of Physical Chemistry A</i> , 2002, 106, 293-306.	2.5	42
114	Size effect of hematite and corundum inclusions on the efflorescence relative humidities of aqueous ammonium nitrate particles. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 3-1-AAC 3-9.	3.6	35
115	The size effect of hematite and corundum inclusions on the efflorescence relative humidities of aqueous ammonium sulfate particles. <i>Geophysical Research Letters</i> , 2001, 28, 2601-2604.	4.1	50
116	Phase Transitions of Aqueous Atmospheric Particles. <i>Chemical Reviews</i> , 2000, 100, 3403-3454.	52.7	708