Lin Wang

List of Publications by Year
in descending order

116 papers	7,267 citations	61984 43 h-index	62596 80 g-index
158 all docs	158 docs citations	158 times ranked	6595 citing authors

#	Article	IF	Citations
1	Nucleation and Growth of Nanoparticles in the Atmosphere. Chemical Reviews, 2012, 112, 1957-2011.	47.7	938
2	Atmospheric new particle formation from sulfuric acid and amines in a Chinese megacity. Science, 2018, 361, 278-281.	12.6	415
3	Particulate Matter Exposure and Stress Hormone Levels. Circulation, 2017, 136, 618-627.	1.6	364
4	Serial interval of SARS-CoV-2 was shortened over time by nonpharmaceutical interventions. Science, 2020, 369, 1106-1109.	12.6	303
5	Atmospheric nanoparticles formed from heterogeneous reactions of organics. Nature Geoscience, 2010, 3, 238-242.	12.9	269
6	Formation of nanoparticles of blue haze enhanced by anthropogenic pollution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17650-17654.	7.1	244
7	A laboratory study of agricultural crop residue combustion in China: Emission factors and emission inventory. Atmospheric Environment, 2008, 42, 8432-8441.	4.1	202
8	Particle Size Distribution and Polycyclic Aromatic Hydrocarbons Emissions from Agricultural Crop Residue Burning. Environmental Science & Technology, 2011, 45, 5477-5482.	10.0	202
9	Enhanced Light Absorption and Scattering by Carbon Soot Aerosol Internally Mixed with Sulfuric Acid. Journal of Physical Chemistry A, 2009, 113, 1066-1074.	2.5	200
10	Strong atmospheric new particle formation in winter in urban Shanghai, China. Atmospheric Chemistry and Physics, 2015, 15, 1769-1781.	4.9	147
11	Heterogeneous Chemistry of Alkylamines with Sulfuric Acid: Implications for Atmospheric Formation of Alkylaminium Sulfates. Environmental Science & Technology, 2010, 44, 2461-2465.	10.0	130
12	Measurement of atmospheric amines and ammonia using the high resolution time-of-flight chemical ionization mass spectrometry. Atmospheric Environment, 2015, 102, 249-259.	4.1	130
13	Atmospheric gas-to-particle conversion: why NPF events are observed in megacities?. Faraday Discussions, 2017, 200, 271-288.	3.2	120
14	Heterogeneous Reactions of Alkylamines with Ammonium Sulfate and Ammonium Bisulfate. Environmental Science & Technology, 2011, 45, 4748-4755.	10.0	113
15	New particle formation in China: Current knowledge and further directions. Science of the Total Environment, 2017, 577, 258-266.	8.0	106
16	Effects of dicarboxylic acid coating on the optical properties of soot. Physical Chemistry Chemical Physics, 2009, 11, 7869.	2.8	99
17	Effects of Coating of Dicarboxylic Acids on the Massâ^'Mobility Relationship of Soot Particles. Environmental Science & Technology, 2009, 43, 2787-2792.	10.0	98
18	Morphology, composition and mixing state of individual carbonaceous aerosol in urban Shanghai. Atmospheric Chemistry and Physics, 2012, 12, 693-707.	4.9	96

#	Article	IF	Citations
19	Detection of atmospheric gaseous amines and amides by a high-resolution time-of-flight chemical ionization mass spectrometer with protonated ethanol reagent ions. Atmospheric Chemistry and Physics, 2016, 16, 14527-14543.	4.9	95
20	Seasonal and diurnal variations of particulate organosulfates in urban Shanghai, China. Atmospheric Environment, 2014, 85, 152-160.	4.1	91
21	Molecular characterization of atmospheric particulate organosulfates in three megacities at the middle and lower reaches of the Yangtze River. Atmospheric Chemistry and Physics, 2016, 16, 2285-2298.	4.9	89
22	Airborne submicron particulate (PM1) pollution in Shanghai, China: Chemical variability, formation/dissociation of associated semi-volatile components and the impacts on visibility. Science of the Total Environment, 2014, 473-474, 199-206.	8.0	84
23	Chemical Characteristics of Organic Aerosols in Shanghai: A Study by Ultrahighâ€Performance Liquid Chromatography Coupled With Orbitrap Mass Spectrometry. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,703.	3.3	82
24	Dicarbonyl Products of the OH Radical-Initiated Reactions of Naphthalene and the C1- and C2-Alkylnaphthalenes. Environmental Science & Technology, 2007, 41, 2803-2810.	10.0	81
25	Seasonal Characteristics of New Particle Formation and Growth in Urban Beijing. Environmental Science & Technology, 2020, 54, 8547-8557.	10.0	78
26	Formation of 9,10-phenanthrenequinone by atmospheric gas-phase reactions of phenanthrene. Atmospheric Environment, 2007, 41, 2025-2035.	4.1	75
27	Reactions of Chlorine Atoms with a Series of Aromatic Hydrocarbons. Environmental Science & Technology, 2005, 39, 5302-5310.	10.0	74
28	Is reducing new particle formation a plausible solution to mitigate particulate air pollution in Beijing and other Chinese megacities?. Faraday Discussions, 2021, 226, 334-347.	3.2	74
29	Measurements of sub-3â€¯nm particles using a particle size magnifier in different environments: from clean mountain top to polluted megacities. Atmospheric Chemistry and Physics, 2017, 17, 2163-2187.	4.9	71
30	Sulfuric acidâ€“amine nucleation in urban Beijing. Atmospheric Chemistry and Physics, 2021, 21, 2457-2468.	4.9	70
31	Atmospheric Photosensitization: A New Pathway for Sulfate Formation. Environmental Science & Technology, 2020, 54, 3114-3120.	10.0	65
32	The effects of firework regulation on air quality and public health during the Chinese Spring Festival from 2013 to 2017 in a Chinese megacity. Environment International, 2019, 126, 96-106.	10.0	64
33	The effects of nitrate on the heterogeneous uptake of sulfur dioxide on hematite. Atmospheric Chemistry and Physics, 2014, 14, 9451-9467.	4.9	61
34	Particle exposure level and potential health risks of domestic Chinese cooking. Building and Environment, 2017, 123, 564-574.	6.9	60
35	Spatially explicit analysis identifies significant potential for bioenergy with carbon capture and storage in China. Nature Communications, 2021, 12, 3159.	12.8	58
36	Single particle analysis of amines in ambient aerosol in Shanghai. Environmental Chemistry, 2012, 9, 202.	1.5	54

#	Article	IF	Citations
37	Reactions of Atmospheric Particulate Stabilized Criegee Intermediates Lead to High-Molecular-Weight Aerosol Components. Environmental Science & Technology, 2016, 50, 5702-5710.	10.0	54
38	Continuous and comprehensive atmospheric observations in Beijing: a station to understand the complex urban atmospheric environment. Big Earth Data, 2020, 4, 295-321.	4.4	54
39	The Synergistic Role of Sulfuric Acid, Bases, and Oxidized Organics Governing Newâ€Particle Formation in Beijing. Geophysical Research Letters, 2021, 48, e2020GL091944.	4.0	53
40	Variation of size-segregated particle number concentrations in wintertime Beijing. Atmospheric Chemistry and Physics, 2020, 20, 1201-1216.	4.9	52
41	Consecutive transport of anthropogenic air masses and dust storm plume: Two case events at Shanghai, China. Atmospheric Research, 2013, 127, 22-33.	4.1	51
42	Multi-pollutant emissions from the burning of major agricultural residues in China and the related health-economic effects. Atmospheric Chemistry and Physics, 2017, 17, 4957-4988.	4.9	50
43	A proxy for atmospheric daytime gaseous sulfuric acid concentration in urban Beijing. Atmospheric Chemistry and Physics, 2019, 19, 1971-1983.	4.9	46
44	Chemistry-triggered events of PM2.5 explosive growth during late autumn and winter in Shanghai, China. Environmental Pollution, 2019, 254, 112864.	7.5	44
45	On secondary new particle formation in China. Frontiers of Environmental Science and Engineering, 2016, 10, 1.	6.0	43
46	Evolution of biomass burning smoke particles in the dark. Atmospheric Environment, 2015, 120, 244-252.	4.1	41
47	Physiochemical properties of carbonaceous aerosol from agricultural residue burning: Density, volatility, and hygroscopicity. Atmospheric Environment, 2016, 140, 94-105.	4.1	41
48	Long-range and regional transported size-resolved atmospheric aerosols during summertime in urban Shanghai. Science of the Total Environment, 2017, 583, 334-343.	8.0	41
49	Rapid modification of cloudâ€nucleating ability of aerosols by biogenic emissions. Geophysical Research Letters, 2013, 40, 6293-6297.	4.0	40
50	Role of stabilized Criegee Intermediate in secondary organic aerosol formation from the ozonolysis of Î±-cedrene. Atmospheric Environment, 2014, 94, 448-457.	4.1	40
51	Atmospheric Pressure-Ion Drift Chemical Ionization Mass Spectrometry for Detection of Trace Gas Species. Analytical Chemistry, 2010, 82, 7302-7308.	6.5	39
52	Evaluation of the chemical composition of gas- and particle-phase products of aromatic oxidation. Atmospheric Chemistry and Physics, 2020, 20, 9783-9803.	4.9	39
53	Characteristics of size-resolved atmospheric inorganic and carbonaceous aerosols in urban Shanghai. Atmospheric Environment, 2017, 167, 625-641.	4.1	37
54	High-resolution modeling of gaseous methylamines over a polluted region in China: source-dependent emissions and implications of spatial variations. Atmospheric Chemistry and Physics, 2018, 18, 7933-7950.	4.9	37

#	Article	IF	Citations
55	Laboratory Investigation on the Role of Organics in Atmospheric Nanoparticle Growth. Journal of Physical Chemistry A, 2011, 115, 8940-8947.	2.5	34
56	Unprecedented Ambient Sulfur Trioxide (SO₃) Detection: Possible Formation Mechanism and Atmospheric Implications. Environmental Science and Technology Letters, 2020, 7, 809-818.	8.7	34
57	Acidâ€“Base Clusters during Atmospheric New Particle Formation in Urban Beijing. Environmental Science & Technology, 2021, 55, 10994-11005.	10.0	34
58	Atmospheric Sulfuric AcidâEDimethylamine Nucleation Enhanced by Trifluoroacetic Acid. Geophysical Research Letters, 2020, 47, e2019GL085627.	4.0	33
59	Trends in heterogeneous aqueous reaction in continuous haze episodes in suburban Shanghai: An in-depth case study. Science of the Total Environment, 2018, 634, 1192-1204.	8.0	32
60	Kinetics and Products of Photolysis and Reaction with OH Radicals of a Series of Aromatic Carbonyl Compounds. Environmental Science & Technology, 2006, 40, 5465-5471.	10.0	30
61	Heterogeneous Uptake of Carbonyl Sulfide on Hematite and Hematiteâ^'NaCl Mixtures. Environmental Science & Technology, 2007, 41, 6484-6490.	10.0	30
62	Mixing state and particle hygroscopicity of organic-dominated aerosols over the Pearl River Delta region in China. Atmospheric Chemistry and Physics, 2018, 18, 14079-14094.	4.9	30
63	Assessing the Effect of Reactive Oxygen Species and Volatile Organic Compound Profiles Coming from Certain Types of Chinese Cooking on the Toxicity of Human Bronchial Epithelial Cells. Environmental Science & Technology, 2020, 54, 8868-8877.	10.0	30
64	Carbonyl Sulfide Derived from Catalytic Oxidation of Carbon Disulfide over Atmospheric Particles. Environmental Science & Technology, 2001, 35, 2543-2547.	10.0	29
65	Oxygenated products formed from OH-initiated reactions of trimethylbenzene: autoxidation and accretion. Atmospheric Chemistry and Physics, 2020, 20, 9563-9579.	4.9	29
66	Responses of gaseous sulfuric acid and particulate sulfate to reduced SO2 concentration: A perspective from long-term measurements in Beijing. Science of the Total Environment, 2020, 721, 137700.	8.0	28
67	Aerosol single scattering albedo affected by chemical composition: An investigation using CRDS combined with MARGA. Atmospheric Research, 2013, 124, 149-157.	4.1	27
68	Particle-Phase Photoreactions of HULIS and TMIs Establish a Strong Source of H₂O₂ and Particulate Sulfate in the Winter North China Plain. Environmental Science & Technology, 2021, 55, 7818-7830.	10.0	24
69	Investigating particles, VOCs, ROS produced from mosquito-repellent incense emissions and implications in SOA formation and human health. Building and Environment, 2018, 143, 645-651.	6.9	22
70	An indicator for sulfuric acidâ€“amine nucleation in atmospheric environments. Aerosol Science and Technology, 2021, 55, 1059-1069.	3.1	19
71	Emissions of Ammonia and Other Nitrogen-Containing Volatile Organic Compounds from Motor Vehicles under Low-Speed Driving Conditions. Environmental Science & Technology, 2022, 56, 5440-5447.	10.0	19
72	A multifunctional HTDMA system with a robust temperature control. Advances in Atmospheric Sciences, 2009, 26, 1235-1240.	4.3	18

#	Article	IF	Citations
73	Detection of gaseous dimethylamine using vocus proton-transfer-reaction time-of-flight mass spectrometry. Atmospheric Environment, 2020, 243, 117875.	4.1	18
74	Addressing Unresolved Complex Mixture of I/SVOCs Emitted From Incomplete Combustion of Solid Fuels by Nontarget Analysis. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035835.	3.3	18
75	Absorption Enhancement of Black Carbon Aerosols Constrained by Mixing-State Heterogeneity. Environmental Science & Technology, 2022, 56, 1586-1593.	10.0	18
76	Comparison of Alkylnitronaphthalenes Formed in NO₃ and OH Radical-Initiated Chamber Reactions with those Observed in Ambient Air. Environmental Science & Technology, 2010, 44, 2981-2987.	10.0	17
77	Estimating the influence of transport on aerosol size distributions during new particle formation events. Atmospheric Chemistry and Physics, 2018, 18, 16587-16599.	4.9	17
78	Impact of adsorbed nitrate on the heterogeneous conversion of SO2 on Î±-Fe2O3 in the absence and presence of simulated solar irradiation. Science of the Total Environment, 2019, 649, 1393-1402.	8.0	17
79	Direct Observation of Sulfate Explosive Growth in Wet Plumes Emitted From Typical Coalâ€Fired Stationary Sources. Geophysical Research Letters, 2021, 48, e2020GL092071.	4.0	17
80	Modification in light absorption cross section of laboratory-generated black carbon-brown carbon particles upon surface reaction and hydration. Atmospheric Environment, 2015, 116, 253-261.	4.1	16
81	Uptake of Gaseous Alkylamides by Suspended Sulfuric Acid Particles: Formation of Ammonium/Aminium Salts. Environmental Science & Technology, 2017, 51, 11710-11717.	10.0	16
82	Natural attenuation mechanism and health risk assessment of 1,1,2-trichloroethane in contaminated groundwater. Journal of Environmental Management, 2019, 242, 457-464.	7.8	16
83	Chemical Characteristics and Brown Carbon Chromophores of Atmospheric Organic Aerosols Over the Yangtze River Channel: A Cruise Campaign. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032497.	3.3	16
84	Predicting the effect of confinement on the COVID-19 spread using machine learning enriched with satellite air pollution observations. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	16
85	Molecular Composition of Oxygenated Organic Molecules and Their Contributions to Organic Aerosol in Beijing. Environmental Science & Technology, 2022, 56, 770-778.	10.0	16
86	Characteristics of air pollution episodes influenced by biomass burning pollution in Shanghai, China. Atmospheric Environment, 2020, 238, 117756.	4.1	15
87	The roles of aqueous-phase chemistry and photochemical oxidation in oxygenated organic aerosols formation. Atmospheric Environment, 2021, 266, 118738.	4.1	14
88	Using highly time-resolved online mass spectrometry to examine biogenic and anthropogenic contributions to organic aerosol in Beijing. Faraday Discussions, 2021, 226, 382-408.	3.2	13
89	Hygroscopicity of ambient submicron particles in urban Hangzhou, China. Frontiers of Environmental Science and Engineering in China, 2011, 5, 342-347.	0.8	12
90	Double High-Level Ozone and PM2.5 Co-Pollution Episodes in Shanghai, China: Pollution Characteristics and Significant Role of Daytime HONO. Atmosphere, 2021, 12, 557.	2.3	12

#	Article	IF	Citations
91	Size-resolved chemical composition analysis of ions produced by a commercial soft X-ray aerosol neutralizer. Journal of Aerosol Science, 2020, 147, 105586.	3.8	11
92	Assessment of particle size magnifier inversion methods to obtain the particle size distribution from atmospheric measurements. Atmospheric Measurement Techniques, 2020, 13, 4885-4898.	3.1	11
93	The effects of surfactants on the heterogeneous uptake of sulfur dioxide on hematite. Atmospheric Environment, 2019, 213, 548-557.	4.1	10
94	Sizeâ€Resolved Mixing States and Sources of Amineâ€Containing Particles in the East China Sea. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033162.	3.3	10
95	Complexation of Fe(III)/Catechols in atmospheric aqueous phase and the consequent cytotoxicity assessment in human bronchial epithelial cells (BEAS-2B). Ecotoxicology and Environmental Safety, 2020, 202, 110898.	6.0	10
96	Air quality in the middle and lower reaches of the Yangtze River channel: a cruise campaign. Atmospheric Chemistry and Physics, 2018, 18, 14445-14464.	4.9	9
97	Impact of heterogeneous uptake of nitrogen dioxide on the conversion of acetaldehyde on gamma-alumina in the absence and presence of simulated solar irradiation. Atmospheric Environment, 2018, 187, 282-291.	4.1	9
98	A method for particulate matter 2.5 (PM2.5) biotoxicity assay using luminescent bacterium. Ecotoxicology and Environmental Safety, 2019, 170, 796-803.	6.0	9
99	Impacts of coagulation on the appearance time method for new particle growth rate evaluation and their corrections. Atmospheric Chemistry and Physics, 2021, 21, 2287-2304.	4.9	9
100	Secondary Inorganic Ions Characteristics in PM_{2.5} Along Offshore and Coastal Areas of the Megacity Shanghai. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035139.	3.3	9
101	Characterization of a KanomaxÂ® fast condensation particle counter in the sub-10 nm range. Journal of Aerosol Science, 2021, 155, 105772.	3.8	8
102	Measurement of atmospheric nanoparticles: Bridging the gap between gas-phase molecules and larger particles. Journal of Environmental Sciences, 2023, 123, 183-202.	6.1	7
103	Effect of NO₂ Concentration on Product Yields of the Gas-Phase NO₃ Radical-Initiated Reaction of Ethyl- and Dimethyl-naphthalenes. Environmental Science & Technology, 2009, 43, 2766-2772.	10.0	6
104	PM_{1.0}-Nitrite Heterogeneous Formation Demonstrated via a Modified Versatile Aerosol Concentration Enrichment System Coupled with Ion Chromatography. Environmental Science & Technology, 2021, 55, 9794-9804.	10.0	6
105	Development of an automatic linear calibration method for high-resolution single-particle mass spectrometry: improved chemical species identification for atmospheric aerosols. Atmospheric Measurement Techniques, 2020, 13, 4111-4121.	3.1	6
106	Catalytic oxidation of CS2 over atmospheric particles and oxide catalysts. Science in China Series B: Chemistry, 2001, 44, 587-595.	0.8	5
107	Atmospheric gaseous organic acids in winter in a rural site of the North China Plain. Journal of Environmental Sciences, 2022, 113, 190-203.	6.1	5
108	Characterization of peroxyacetyl nitrate (PAN) under different PM2.5 concentration in wintertime at a North China rural site. Journal of Environmental Sciences, 2022, 114, 221-232.	6.1	5

#	Article	IF	Citations
109	Total OH Reactivity Measurements in a Suburban Site of Shanghai. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	5
110	Accurate observation of black and brown carbon in atmospheric fine particles via a versatile aerosol concentration enrichment system (VACES). Science of the Total Environment, 2022, 837, 155817.	8.0	4
111	Production Flux and Chemical Characteristics of Spray Aerosol Generated From Raindrop Impact on Seawater and Soil. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032052.	3.3	3
112	Performance comparison of SMPSs with soft X-ray and Kr-85 neutralizers in a humid atmosphere. Journal of Aerosol Science, 2021, 154, 105756.	3.8	3
113	Aqueous phase oxidation of bisulfite influenced by nitrate and its photolysis. Science of the Total Environment, 2021, 785, 147345.	8.0	3
114	Combined effects of high relative humidity and ultraviolet irradiation: Enhancing the production of gaseous NO2 from the photolysis of NH4NO3. Science of the Total Environment, 2022, 838, 156480.	8.0	3
115	On the Ship Particle Number Emission Index: Sizeâ€Resolved Microphysics and Key Controlling Parameters. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034427.	3.3	2
116	Hydroxyl radical-initiated aging of particulate squalane. Atmospheric Environment, 2020, 237, 117663.	4.1	1