Barbara Finlayson-Pitts

List of Publications by Year
in descending order

211 papers	13,689 citations	22099 59 h-index	25716 108 g-index
225 all docs	225 docs citations	225 times ranked	8039 citing authors

#	Article	IF	Citations
1	Tropospheric Air Pollution: Ozone, Airborne Toxics, Polycyclic Aromatic Hydrocarbons, and Particles. Science, 1997, 276, 1045-1051.	6.0	990
2	Experiments and Simulations of Ion-Enhanced Interfacial Chemistry on Aqueous NaCl Aerosols. Science, 2000, 288, 301-306.	6.0	615
3	Unexpectedly high concentrations of molecular chlorine in coastal air. Nature, 1998, 394, 353-356.	13.7	584
4	The heterogeneous hydrolysis of NO2 in laboratory systems and in outdoor and indoor atmospheres: An integrated mechanism. Physical Chemistry Chemical Physics, 2003, 5, 223-242.	1.3	577
5	Formation of chemically active chlorine compounds by reactions of atmospheric NaCl particles with gaseous N2O5 and ClONO2. Nature, 1989, 337, 241-244.	13.7	410
6	The Tropospheric Chemistry of Sea Salt:â€‰ A Molecular-Level View of the Chemistry of NaCl and NaBr. Chemical Reviews, 2003, 103, 4801-4822.	23.0	374
7	The Role of Br2 and BrCl in Surface Ozone Destruction at Polar Sunrise. Science, 2001, 291, 471-474.	6.0	353
8	Formation of Molecular Chlorine from the Photolysis of Ozone and Aqueous Sea-Salt Particles. Science, 1998, 279, 74-76.	6.0	293
9	Nonequilibrium atmospheric secondary organic aerosol formation and growth. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2836-2841.	3.3	261
10	Reactions at Interfaces As a Source of Sulfate Formation in Sea-Salt Particles. Science, 2003, 301, 340-344.	6.0	254
11	Physical Chemistry of Airborne Sea Salt Particles and Their Components. Journal of Physical Chemistry A, 2000, 104, 11463-11477.	1.1	217
12	Reactions at surfaces in the atmosphere: integration of experiments and theory as necessary (but not) Tj ETQq0 0 0 rgBT /Overlock 10 T Physics, 2009, 11, 7760.	1.3	217
13	The nature of water on surfaces of laboratory systems and implications for heterogeneous chemistry in the troposphere. Physical Chemistry Chemical Physics, 2004, 6, 604.	1.3	214
14	Adsorption of Atmospherically Relevant Gases at the Air/Water Interface:â€‰ Free Energy Profiles of Aqueous Solvation of N2, O2, O3, OH, H2O, HO2, and H2O2. Journal of Physical Chemistry A, 2004, 108, 11573-11579.	1.1	195
15	Ozone destruction and bromine photochemistry at ground level in the Arctic spring. Nature, 1990, 343, 622-625.	13.7	193
16	Simplified mechanism for new particle formation from methanesulfonic acid, amines, and water via experiments and ab initio calculations. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18719-18724.	3.3	173
17	Chlorine atoms as a potential tropospheric oxidant in the marine boundary layer. Research on Chemical Intermediates, 1993, 19, 235-249.	1.3	164
18	Reaction of NO2 with NaCl and atmospheric implications of NOCl formation. Nature, 1983, 306, 676-677.	13.7	161

#	Article	IF	Citations
19	Comparison of FTIR and Particle Mass Spectrometry for the Measurement of Particulate Organic Nitrates. Environmental Science & Technology, 2010, 44, 1056-1061.	4.6	155
20	A Diffuse Reflectance Infrared Fourier Transform Spectroscopic Study of the Surface Reaction of NaCl with Gaseous NO2 and HNO3. The Journal of Physical Chemistry, 1994, 98, 3747-3755.	2.9	151
21	Sodium nitrate particles: physical and chemical properties during hydration and dehydration, and implications for aged sea salt aerosols. Journal of Aerosol Science, 2004, 35, 869-887.	1.8	147
22	Formation of Molecular Bromine from the Reaction of Ozone with Deliquesced NaBr Aerosol:â€‰ Evidence for Interface Chemistry. Journal of Physical Chemistry A, 2004, 108, 11559-11572.	1.1	138
23	The photochemical production of HONO during the heterogeneous hydrolysis of NO2. Physical Chemistry Chemical Physics, 2004, 6, 3836.	1.3	136
24	Knudsen Cell Studies of the Uptake of Gaseous HNO3and Other Oxides of Nitrogen on Solid NaCl:Â The Role of Surface-Adsorbed Water. The Journal of Physical Chemistry, 1996, 100, 15218-15228.	2.9	133
25	Bromine activation in the troposphere by the dark reaction of O3with seawater ice. Geophysical Research Letters, 1998, 25, 3923-3926.	1.5	130
26	Integrating phase and composition of secondary organic aerosol from the ozonolysis of Î±-pinene. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7552-7557.	3.3	130
27	Interaction of Gas-Phase Ozone at 296 K with Unsaturated Self-Assembled Monolayers:Â A New Look at an Old System. Journal of Physical Chemistry A, 2004, 108, 10473-10485.	1.1	123
28	Kinetics of reactions of chlorine atoms with a series of alkenes at 1 atm and 298 K: structure and reactivity. Physical Chemistry Chemical Physics, 2002, 4, 5813-5820.	1.3	117
29	Reactions of Methanesulfonic Acid with Amines and Ammonia as a Source of New Particles in Air. Journal of Physical Chemistry B, 2016, 120, 1526-1536.	1.2	115
30	Water-Induced Reorganization of Ultrathin Nitrate Films on NaCl:Â Implications for the Tropospheric Chemistry of Sea Salt Particles. The Journal of Physical Chemistry, 1996, 100, 6371-6375.	2.9	114
31	Molecular halogens before and during ozone depletion events in the Arctic at polar sunrise: concentrations and sources. Atmospheric Environment, 2002, 36, 2721-2731.	1.9	113
32	New Experimental and Theoretical Approach to the Heterogeneous Hydrolysis of NO2:Â Key Role of Molecular Nitric Acid and Its Complexesâ€. Journal of Physical Chemistry A, 2006, 110, 6886-6897.	1.1	113
33	Chlorine activation indoors and outdoors via surface-mediated reactions of nitrogen oxides with hydrogen chloride. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13647-13654.	3.3	107
34	Kinetics and Mechanism of the Reaction of Cl Atoms with 2-Methyl-1,3-butadiene (Isoprene) at 298 K. Journal of Physical Chemistry A, 1997, 101, 1509-1517.	1.1	102
35	Introduction:â€‰ Structure and Chemistry at Aqueous Interfaces. Chemical Reviews, 2006, 106, 1137-1139.	23.0	102
36	Real-Time Monitoring of the Kinetics and Gas-Phase Products of the Reaction of Ozone with an Unsaturated Phospholipid at the Airâ^'Water Interface. Langmuir, 2000, 16, 9321-9330.	1.6	101

#	Article	IF	Citations
37	Reaction of Gaseous Nitric Oxide with Nitric Acid on Silica Surfaces in the Presence of Water at Room Temperature. Journal of Physical Chemistry A, 2001, 105, 10339-10346.	1.1	98
38	Heterogeneous chemistry in the troposphere: Experimental approaches and applications to the chemistry of sea salt particles. International Reviews in Physical Chemistry, 1999, 18, 343-385.	0.9	97
39	Computational Studies of Atmospherically-Relevant Chemical Reactions in Water Clusters and on Liquid Water and Ice Surfaces. Accounts of Chemical Research, 2015, 48, 399-406.	7.6	89
40	New particle formation and growth from methanesulfonic acid, trimethylamine and water. Physical Chemistry Chemical Physics, 2015, 17, 13699-13709.	1.3	88
41	Diffuse Reflectance Infrared Studies of the Reaction of Synthetic Sea Salt Mixtures with NO2:Â A Key Role for Hydrates in the Kinetics and Mechanism. Journal of Physical Chemistry A, 1997, 101, 1277-1286.	1.1	82
42	Rate Constants and Kinetic Isotope Effects in the Reactions of Atomic Chlorine withn-Butane and Simple Alkenes at Room Temperature. Journal of Physical Chemistry A, 1998, 102, 8510-8519.	1.1	81
43	Photooxidation of Î±-pinene at high relative humidity in the presence of increasing concentrations of NOx. Atmospheric Environment, 2008, 42, 5044-5060.	1.9	78
44	Role of the reaction of stabilized Criegee intermediates with peroxy radicals in particle formation and growth in air. Physical Chemistry Chemical Physics, 2015, 17, 12500-12514.	1.3	78
45	Laboratory Studies of Potential Mechanisms of Renoxification of Tropospheric Nitric Acid. Environmental Science & Technology, 2003, 37, 548-554.	4.6	77
46	The future of airborne sulfur-containing particles in the absence of fossil fuel sulfur dioxide emissions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13514-13519.	3.3	76
47	New Particle Formation from Methanesulfonic Acid and Amines/Ammonia as a Function of Temperature. Environmental Science & Technology, 2017, 51, 243-252.	4.6	76
48	Analysis of relative rate measurements. International Journal of Chemical Kinetics, 1997, 29, 665-672.	1.0	73
49	Enhanced photolysis in aerosols: evidence for important surface effects. Physical Chemistry Chemical Physics, 2006, 8, 4700.	1.3	72
50	Ionization of N₂O₄ in Contact with Water: Mechanism, Time Scales and Atmospheric Implications. Journal of the American Chemical Society, 2009, 131, 12180-12185.	6.6	72
51	FTIR Studies of the Reaction of Gaseous NO with HNO3 on Porous Glass:â€‰ Implications for Conversion of HNO3 to Photochemically Active NOx in the Atmosphere. Journal of Physical Chemistry A, 2000, 104, 9705-9711.	1.1	70
52	Interactions of monolayers of unsaturated phosphocholines with ozone at the air-water interface. Langmuir, 1994, 10, 4637-4644.	1.6	69
53	Enhanced surface photochemistry in chlorideâ€“nitrate ion mixtures. Physical Chemistry Chemical Physics, 2008, 10, 5668.	1.3	69
54	X-ray photoelectron spectroscopic studies of the heterogenous reaction of gaseous nitric acid with sodium chloride: Kinetics and contribution to the chemistry of the marine troposphere. Geophysical Research Letters, 1994, 21, 1623-1626.	1.5	63

#	Article	IF	Citations
55	Halogens in the Troposphere. Analytical Chemistry, 2010, 82, 770-776.	3.2	63
56	Identification of Organic Nitrates in the NO₃Radical Initiated Oxidation of Î±-Pinene by Atmospheric Pressure Chemical Ionization Mass Spectrometry. Environmental Science & Technology, 2010, 44, 5887-5893.	4.6	63
57	The reaction of gaseous N₂O₅ with solid NaCl at 298 K: Estimated lower limit to the reaction probability and its potential role in tropospheric and stratospheric chemistry. Geophysical Research Letters, 1991, 18, 17-20.	1.5	62
58	Knudsen Cell Studies of the Reaction of Gaseous Nitric Acid with Synthetic Sea Salt at 298 K. Journal of Physical Chemistry A, 1997, 101, 9993-9999.	1.1	62
59	Infrared Absorption Cross-Section Measurements for Nitrous Acid (HONO) at Room Temperature. Journal of Physical Chemistry A, 2000, 104, 1692-1699.	1.1	61
60	Rate Constants for the Reactions of Chlorine Atoms with Some Simple Alkanes at 298 K: Measurement of a Self-Consistent Set Using Both Absolute and Relative Rate Methods. The Journal of Physical Chemistry, 1995, 99, 13156-13162.	2.9	60
61	Kinetics of reaction of chlorine atoms with some biogenic organics. International Journal of Chemical Kinetics, 1999, 31, 491-499.	1.0	60
62	A New Approach to Determining Gas-Particle Reaction Probabilities and Application to the Heterogeneous Reaction of Deliquesced Sodium Chloride Particles with Gas-Phase Hydroxyl Radicals. Journal of Physical Chemistry A, 2006, 110, 10619-10627.	1.1	60
63	Enhancement of N2O4on Porous Glass at Room Temperature:Â A Key Intermediate in the Heterogeneous Hydrolysis of NO2?. Journal of Physical Chemistry A, 2000, 104, 171-175.	1.1	59
64	X-ray Photoelectron Spectroscopy Studies of the Effects of Water Vapor on Ultrathin Nitrate Layers on NaCl. The Journal of Physical Chemistry, 1996, 100, 19891-19897.	2.9	57
65	Laboratory studies of sources of HONO in polluted urban atmospheres. Geophysical Research Letters, 2000, 27, 3229-3232.	1.5	56
66	Experimental and Theoretical Characterization of Adsorbed Water on Self-Assembled Monolayers: Understanding the Interaction of Water with Atmospherically Relevant Surfaces. Journal of Physical Chemistry A, 2009, 113, 2060-2069.	1.1	56
67	Nitrate Ion Photolysis in Thin Water Films in the Presence of Bromide Ions. Journal of Physical Chemistry A, 2011, 115, 5810-5821.	1.1	54
68	The Role of Oxalic Acid in New Particle Formation from Methanesulfonic Acid, Methylamine, and Water. Environmental Science & Technology, 2017, 51, 2124-2130.	4.6	53
69	HONO decomposition on borosilicate glass surfaces: implications for environmental chamber studies and field experiments. Physical Chemistry Chemical Physics, 2003, 5, 5236.	1.3	52
70	Gas-Phase Molecular Halogen Formation from NaCl and NaBr Aerosols:â€‰ When Are Interface Reactions Important?. Journal of Physical Chemistry A, 2006, 110, 1859-1867.	1.1	50
71	Knudsen cell studies of the reactions of N2O5 and ClONO2 with NaCl: development and application of a model for estimating available surface areas and corrected uptake coefficients. Physical Chemistry Chemical Physics, 2003, 5, 1780-1789.	1.3	49
72	Fluorescence, Absorption, and Excitation Spectra of Polycyclic Aromatic Hydrocarbons as a Tool for Quantitative Analysis. Journal of Chemical Education, 2004, 81, 242.	1.1	49

#	Article	IF	Citations
73	Photochemical Processes Induced by Vibrational Overtone Excitations:Â Dynamics Simulations forcis-HONO,trans-HONO, HNO3, and HNO3â¯H2Oâ€. Journal of Physical Chemistry A, 2006, 110, 5342-5354.	1.1	49
74	Infrared Spectroscopic Studies of Binary Solutions of Nitric Acid and Water and Ternary Solutions of Nitric Acid, Sulfuric Acid, and Water at Room Temperature:â€‰ Evidence for Molecular Nitric Acid at the Surface. Journal of Physical Chemistry A, 2001, 105, 1890-1896.	1.1	48
75	Structure of Large Nitrateâ¯Water Clusters at Ambient Temperatures: Simulations with Effective Fragment Potentials and Force Fields with Implications for Atmospheric Chemistry. Journal of Physical Chemistry A, 2009, 113, 12805-12814.	1.1	47
76	Measurement of gas-phase ammonia and amines in air by collection onto an ion exchange resin and analysis by ion chromatography. Atmospheric Measurement Techniques, 2014, 7, 2733-2744.	1.2	45
77	Analysis of secondary organic aerosols in air using extractive electrospray ionization mass spectrometry (EESI-MS). RSC Advances, 2012, 2, 2930.	1.7	44
78	Kinetics and Atmospheric Chemistry. , 2000, , 130-178.		43
79	Knudsen Cell Studies of the Reaction of Gaseous HNO3with NaCl Using Less than a Single Layer of Particles at 298 K:Â A Modified Mechanism. Journal of Physical Chemistry A, 2003, 107, 7818-7826.	1.1	43
80	A new mechanism for ozonolysis of unsaturated organics on solids: phosphocholines on NaCl as a model for sea salt particles. Physical Chemistry Chemical Physics, 2008, 10, 528-541.	1.3	43
81	Unusual aggregates from the oxidation of alkene self-assembled monolayers: a previously unrecognized mechanism for SAM ozonolysis?. Physical Chemistry Chemical Physics, 2005, 7, 3605.	1.3	42
82	Proton Transfer in Mixed Clusters of Methanesulfonic Acid, Methylamine, and Oxalic Acid: Implications for Atmospheric Particle Formation. Journal of Physical Chemistry A, 2017, 121, 2377-2385.	1.1	42
83	Particle formation and growth from oxalic acid, methanesulfonic acid, trimethylamine and water: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2017, 19, 28286-28301.	1.3	42
84	Rate constants for the reactions of chlorine atoms with a series of unsaturated aldehydes and ketones at 298 K: structure and reactivity. Physical Chemistry Chemical Physics, 2002, 4, 1824-1831.	1.3	41
85	Unique products of the reaction of isoprene with atomic chlorine: Potential markers of chlorine atom chemistry. Geophysical Research Letters, 1997, 24, 1615-1618.	1.5	40
86	Catalytic Role for Water in the Atmospheric Production of ClNO. Journal of Physical Chemistry A, 2010, 114, 4609-4618.	1.1	40
87	Synthesis and identification by infrared spectroscopy of gaseous nitryl bromide, BrNO2. The Journal of Physical Chemistry, 1989, 93, 4397-4400.	2.9	39
88	The uptake of SO2on synthetic sea salt and some of its components. Geophysical Research Letters, 2000, 27, 887-890.	1.5	39
89	Uptake and Reaction of ClONO2on NaCl and Synthetic Sea Salt. Journal of Physical Chemistry A, 2001, 105, 5178-5187.	1.1	39
90	Complexes of HNO3 and NO3â¯ with NO2 and N2O4, and their potential role in atmospheric HONO formation. Physical Chemistry Chemical Physics, 2008, 10, 6019.	1.3	39

#	Article	IF	Citations
91	Atmospheric Solids Analysis Probe Mass Spectrometry: A New Approach for Airborne Particle Analysis. Analytical Chemistry, 2010, 82, 5922-5927.	3.2	39
92	Formation of secondary ozonides from the reaction of an unsaturated phosphatidylcholine with ozone. Chemical Research in Toxicology, 1990, 3, 517-523.	1.7	38
93	Photochemistry of Thin Solid Films of the Neonicotinoid Imidacloprid on Surfaces. Environmental Science & Technology, 2017, 51, 2660-2668.	4.6	37
94	Absorption cross sections for gaseous ClNO₂ and Cl₂ at 298 K: Potential organic oxidant source in the marine troposphere. Journal of Geophysical Research, 1992, 97, 7651-7656.	3.3	36
95	Production of Gas Phase NO₂ and Halogens from the Photochemical Oxidation of Aqueous Mixtures of Sea Salt and Nitrate Ions at Room Temperature. Environmental Science & Technology, 2012, 46, 10447-10454.	4.6	35
96	A New Aerosol Flow System for Photochemical and Thermal Studies of Tropospheric Aerosols. Aerosol Science and Technology, 2010, 44, 329-338.	1.5	34
97	NO_x Reactions on Aqueous Surfaces with Gaseous HCl: Formation of a Potential Precursor to Atmospheric Cl Atoms. Journal of Physical Chemistry Letters, 2012, 3, 3405-3410.	2.1	34
98	Comment on â€œIndications of photochemical histories of Pacific air masses from measurements of atmospheric trace species at Point Arena, Californiaâ€•by D. D. Parrish et al.. Journal of Geophysical Research, 1993, 98, 14991-14993.	3.3	33
99	A new dark source of the gaseous hydroxyl radical for relative rate measurements. The Journal of Physical Chemistry, 1993, 97, 1172-1177.	2.9	33
100	Atmospheric Chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6566-6567.	3.3	33
101	Nitrogen dioxide at the airâ€“water interface: trapping, absorption, and solvation in the bulk and at the surface. Physical Chemistry Chemical Physics, 2013, 15, 204-212.	1.3	33
102	Phase, composition, and growth mechanism for secondary organic aerosol from the ozonolysis of <i>Î±</i>-cedrene. Atmospheric Chemistry and Physics, 2016, 16, 3245-3264.	1.9	33
103	Kinetics of the reactions of OH with methyl chloroform and methane: Implications for global tropospheric OH and the methane budget. Geophysical Research Letters, 1992, 19, 1371-1374.	1.5	32
104	Interactions of gaseous nitric acid with surfaces of environmental interest. Physical Chemistry Chemical Physics, 2004, 6, 3879.	1.3	31
105	Amineâ€“Amine Exchange in Aminiumâ€“Methanesulfonate Aerosols. Journal of Physical Chemistry C, 2014, 118, 29431-29440.	1.5	31
106	Reaction of a charge-separated ONONO2 species with water in the formation of HONO: an MP2 Molecular Dynamics study. Physical Chemistry Chemical Physics, 2014, 16, 4483.	1.3	31
107	Characterization of organic coatings on hygroscopic salt particles and their atmospheric impacts. Atmospheric Environment, 2010, 44, 1209-1218.	1.9	29
108	Reaction of gas phase OH with unsaturated self-assembled monolayers and relevance to atmospheric organic oxidations. Physical Chemistry Chemical Physics, 2010, 12, 9419.	1.3	29

#	Article	IF	Citations
109	Characterization of HOCl Using Atmospheric Pressure Ionization Mass Spectrometry. Journal of Physical Chemistry A, 1999, 103, 8231-8238.	1.1	28
110	Nitrate ion photochemistry at interfaces: a new mechanism for oxidation of Î±-pinene. Physical Chemistry Chemical Physics, 2008, 10, 3063.	1.3	27
111	Challenges associated with the sampling and analysis of organosulfur compounds in air using real-time PTR-ToF-MS and offline GC-FID. Atmospheric Measurement Techniques, 2016, 9, 1325-1340.	1.2	27
112	A new approach to studying aqueous reactions using diffuse reflectance infrared Fourier transform spectrometry: application to the uptake and oxidation of SO2 on OH-processed model sea salt aerosol. Physical Chemistry Chemical Physics, 2007, 9, 1980.	1.3	26
113	Surprising Formation of p-Cymene in the Oxidation of Î±-Pinene in Air by the Atmospheric Oxidants OH, O₃, and NO₃. Environmental Science & Technology, 2011, 45, 2755-2760.	4.6	26
114	Measurement of Vapor Pressures and Heats of Sublimation of Dicarboxylic Acids Using Atmospheric Solids Analysis Probe Mass Spectrometry. Journal of Physical Chemistry A, 2012, 116, 5900-5909.	1.1	26
115	Inverse Kinetic Isotope Effect in the Reaction of Atomic Chlorine with C2H4and C2D4. Journal of Physical Chemistry A, 1997, 101, 9187-9190.	1.1	25
116	New insights into secondary organic aerosol from the ozonolysis of Î±-pinene from combined infrared spectroscopy and mass spectrometry measurements. Physical Chemistry Chemical Physics, 2014, 16, 22706-22716.	1.3	24
117	An upper limit to the concentration of an SO2 complex at the airâ€“water interface at 298 K: infrared experiments and ab initio calculations. Physical Chemistry Chemical Physics, 2002, 4, 1832-1838.	1.3	23
118	Hydroxyl Radical Quantum Yields from Isopropyl Nitrite Photolysis in Air. Environmental Science & Technology, 2010, 44, 8150-8155.	4.6	23
119	Infrared Studies of the Reaction of Methanesulfonic Acid with Trimethylamine on Surfaces. Environmental Science & Technology, 2014, 48, 323-330.	4.6	23
120	Rates and Mechanisms of Gas-Phase Reactions in Irradiated Organic â€“ NOx â€“ Air Mixtures. , 2000, , 179-263.		22
121	Contamination from electrically conductive silicone tubing during aerosol chemical analysis. Atmospheric Environment, 2009, 43, 2836-2839.	1.9	22
122	New Mechanism of Extractive Electrospray Ionization Mass Spectrometry for Heterogeneous Solid Particles. Analytical Chemistry, 2018, 90, 2055-2062.	3.2	22
123	Formation of gas-phase bromine compounds by reaction of solid sodium bromide with gaseous nitryl hypochlorite, chlorine and chlorine bromide at 298 K. The Journal of Physical Chemistry, 1991, 95, 6951-6958.	2.9	21
124	A Unique Method for Laboratory Quantification of Gaseous Nitrous Acid (HONO) Using the Reaction HONO + HCl â†' ClNO + H2O. Journal of Physical Chemistry A, 2000, 104, 329-335.	1.1	21
125	Aerosol fast flow reactor for laboratory studies of new particle formation. Journal of Aerosol Science, 2014, 78, 30-40.	1.8	21
126	Photochemistry of Solid Films of the Neonicotinoid Nitenpyram. Environmental Science & Technology, 2018, 52, 2760-2767.	4.6	21

#	Article	IF	Citations
127	Unique Photochemistry of Surface Nitrate. The Journal of Physical Chemistry, 1995, 99, 17269-17272.	2.9	20
128	A New GC-MS Experiment for the Undergraduate Instrumental Analysis Laboratory in Environmental Chemistry: Methyl-t-butyl Ether and Benzene in Gasoline. Journal of Chemical Education, 1998, 75, 1595.	1.1	20
129	Production of gas phase NO2 and halogens from the photolysis of thin water films containing nitrate, chloride and bromide ions at room temperature. Physical Chemistry Chemical Physics, 2013, 15, 17636.	1.3	20
130	Mechanism for formation of atmospheric Cl atom precursors in the reaction of dinitrogen oxides with HCl/Cl^{â˜}on aqueous films. Physical Chemistry Chemical Physics, 2015, 17, 19360-19370.	1.3	20
131	Size-Resolved Chemical Composition of Sub-20 nm Particles from Methanesulfonic Acid Reactions with Methylamine and Ammonia. ACS Earth and Space Chemistry, 2020, 4, 1182-1194.	1.2	20
132	Reactions of dinitrogen pentoxide and nitrogen dioxide with 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine. Lipids, 1991, 26, 306-314.	0.7	19
133	Tropospheric HONO and reactions of oxides of nitrogen with NaCl. Geophysical Research Letters, 1994, 21, 2291-2294.	1.5	19
134	Acid Deposition. , 2000, , 294-348.		19
135	Substrate Changes Associated with the Chemistry of Self-Assembled Monolayers on Silicon. Langmuir, 2006, 22, 5617-5624.	1.6	19
136	Unusual Oxidation of Organics at Interfaces from the Bottom Up and Atmospheric Implications. Journal of the American Chemical Society, 2008, 130, 11272-11273.	6.6	19
137	New insights into atmospherically relevant reaction systems using direct analysis in real-time mass spectrometry (DART-MS). Atmospheric Measurement Techniques, 2017, 10, 1373-1386.	1.2	19
138	Techniques for quantifying gaseous HOCl using atmospheric pressure ionization mass spectrometry. Physical Chemistry Chemical Physics, 1999, 1, 5615-5621.	1.3	18
139	Secondary Ozonide Formation from the Ozone Oxidation of Unsaturated Self-Assembled Monolayers on Zinc Selenide Attenuated Total Reflectance Crystals. Journal of Physical Chemistry C, 2009, 113, 11060-11065.	1.5	18
140	The impact of organic coatings on light scattering by sodium chloride particles. Atmospheric Environment, 2011, 45, 4123-4132.	1.9	18
141	Integrated experimental and theoretical approach to probe the synergistic effect of ammonia in methanesulfonic acid reactions with small alkylamines. Environmental Sciences: Processes and Impacts, 2020, 22, 305-328.	1.7	18
142	Measurement of Trace Metals in Tobacco and Cigarette Ash by Inductively Coupled Plasma-Atomic Emission Spectroscopy. Journal of Chemical Education, 2003, 80, 83.	1.1	17
143	Hydroxyl radical oxidation of phospholipid-coated NaCl particles. Physical Chemistry Chemical Physics, 2013, 15, 9833.	1.3	17
144	Introductory lecture: atmospheric chemistry in the Anthropocene. Faraday Discussions, 2017, 200, 11-58.	1.6	17

#	Article	IF	Citations
145	A Fourier transform infrared spectrometry study of the reactions of phosphatidylcholines with gaseous N2O5 and NO2. Toxicology and Applied Pharmacology, 1987, 89, 438-448.	1.3	16
146	The dimethyl sulfide reaction with atomic chlorine and its implications for the budget of methyl chloride. Geophysical Research Letters, 1996, 23, 1661-1664.	1.5	16
147	Particles in the Troposphere. , 2000, , 349-435.		16
148	The effect of cations on NO₂ production from the photolysis of aqueous thin water films of nitrate salts. Physical Chemistry Chemical Physics, 2015, 17, 32211-32218.	1.3	16
149	Open questions on the chemical composition of airborne particles. Communications Chemistry, 2020, 3, .	2.0	16
150	Probing the sensitivity of gaseous Br2 production from the oxidation of aqueous bromide-containing aerosols and atmospheric implications. Atmospheric Environment, 2009, 43, 3951-3962.	1.9	15
151	Chlorine chronicles. Nature Chemistry, 2013, 5, 724-724.	6.6	15
152	Experimental and theoretical studies of the interaction of gas phase nitric acid and water with a self-assembled monolayer. Physical Chemistry Chemical Physics, 2013, 15, 448-458.	1.3	15
153	Uptake of water by an acidâ€“base nanoparticle: theoretical and experimental studies of the methanesulfonic acidâ€“methylamine system. Physical Chemistry Chemical Physics, 2018, 20, 22249-22259.	1.3	15
154	Chromatography, Absorption, and Fluorescence: A New Instrumental Analysis Experiment on the Measurement of Polycyclic Aromatic Hydrocarbons in Cigarette Smoke. Journal of Chemical Education, 1998, 75, 1599.	1.1	14
155	Photochemistry of Important Atmospheric Species. , 2000, , 86-129.		14
156	Chemistry of Inorganic Nitrogen Compounds. , 2000, , 264-293.		14
157	Unique markers of chlorine atom chemistry in coastal urban areas: The reaction with 1,3-butadiene in air at room temperature. Journal of Geophysical Research, 2001, 106, 4939-4958.	3.3	14
158	Probing surfaces of atmospherically relevant organic particles by easy ambient sonic-spray ionization mass spectrometry (EASI-MS). Chemical Science, 2019, 10, 884-897.	3.7	14
159	Evidence for a kinetically controlled burying mechanism for growth of high viscosity secondary organic aerosol. Environmental Sciences: Processes and Impacts, 2020, 22, 66-83.	1.7	14
160	Unexpected formation of oxygen-free products and nitrous acid from the ozonolysis of the neonicotinoid nitenpyram. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11321-11327.	3.3	14
161	Temperature dependence of the hydroxyl + nitrosyl chloride (ClNO) reaction: evidence for two competing reaction channels. The Journal of Physical Chemistry, 1986, 90, 17-19.	2.9	13
162	Effects of Ozone Combined with Components of Acid Fogs on Breathing Pattern, Metabolic Rate, Pulmonary Surfactant Composition, and Lung Injury in Rats. Inhalation Toxicology, 1991, 3, 1-25.	0.8	13

#	Article	IF	Citations
163	Identification of Fatty Acids, Phospholipids, and Their Oxidation Products Using Matrix-Assisted Laser Desorption Ionization Mass Spectrometry and Electrospray Ionization Mass Spectrometry. Journal of Chemical Education, 2010, 87, 186-189.	1.1	13
164	Isomerization and ionization of N2O4 on model ice and silica surfaces. Chemical Physics, 2012, 405, 52-59.	0.9	13
165	Relative rate constants for removal of vibrationally excited OH(X2?i)v=9 by some small molecules at room temperature. International Journal of Chemical Kinetics, 1983, 15, 151-165.	1.0	12
166	A Diffuse Reflectance Infrared Fourier Transform Spectroscopic (DRIFTS) Study of the Surface Reaction of NaCl with Gaseous NO2 and HNO3. [Erratum to document cited in CA120:228408]. The Journal of Physical Chemistry, 1995, 99, 13052-13052.	2.9	12
167	Airborne Polycyclic Aromatic Hydrocarbons and Their Derivatives. , 2000, , 436-546.		12
168	Nitrite-Induced Oxidation of Organic Coatings on Models for Airborne Particles. Journal of Physical Chemistry A, 2009, 113, 7205-7212.	1.1	12
169	Rapid formation of molecular bromine from deliquesced NaBr aerosol in the presence of ozone and UV light. Atmospheric Environment, 2014, 89, 491-506.	1.9	12
170	Kinetics, mechanisms and ionic liquids in the uptake of n-butylamine onto low molecular weight dicarboxylic acids. Physical Chemistry Chemical Physics, 2017, 19, 4827-4839.	1.3	12
171	A cautionary note on the effects of laboratory air contaminants on ambient ionization mass spectrometry measurements. Rapid Communications in Mass Spectrometry, 2017, 31, 1659-1668.	0.7	12
172	Understanding interactions of organic nitrates with the surface and bulk of organic films: implications for particle growth in the atmosphere. Environmental Sciences: Processes and Impacts, 2018, 20, 1593-1610.	1.7	12
173	Reaction of hydroxyl with nitrosyl chloride: kinetics and mechanisms. The Journal of Physical Chemistry, 1987, 91, 2377-2382.	2.9	11
174	Analytical Methods and Typical Atmospheric Concentrations for Gases and Particles. , 2000, , 547-656.		11
175	Nanoparticles grown from methanesulfonic acid and methylamine: microscopic structures and formation mechanism. Physical Chemistry Chemical Physics, 2017, 19, 31949-31957.	1.3	11
176	Are Changes in Breathing Pattern on Exposure to Ozone Related to Changes in Pulmonary Surfactant?. Inhalation Toxicology, 1994, 6, 267-287.	0.8	10
177	Illustration of Deviations in the Beer-Lambert Law in an Instrumental Analysis Laboratory: Measuring Atmospheric Pollutants by Differential Optical Absorption Spectrometry. Journal of Chemical Education, 1997, 74, 1459.	1.1	10
178	4-Chlorocrotonaldehyde as a unique chlorine-containing compound from the reaction of atomic chlorine with 1,3-butadiene in air at room temperature. Geophysical Research Letters, 2000, 27, 947-950.	1.5	10
179	FTIR Study of N2O3on Porous Glass at Room Temperature. Journal of Physical Chemistry A, 2000, 104, 8038-8044.	1.1	10
180	Thermal and photochemical reactions of NO2 on chromium(iii) oxide surfaces at atmospheric pressure. Physical Chemistry Chemical Physics, 2012, 14, 15840.	1.3	10

#	Article	IF	Citations
181	Measurement of Organics Using Three FTIR Techniques: Absorption, Attenuated Total Reflectance, and Diffuse Reflectance. Journal of Chemical Education, 2003, 80, 672.	1.1	9
182	Surfactant-free latex spheres for size calibration of mobility particle sizers in atmospheric aerosol applications. Atmospheric Environment, 2014, 82, 56-59.	1.9	9
183	Quantum Yields and N₂O Formation from Photolysis of Solid Films of Neonicotinoids. Journal of Agricultural and Food Chemistry, 2019, 67, 1638-1646.	2.4	9
184	Sensitivity and uncertainty analysis of the mechanism of gas-phase chlorine production from NaCl aerosols in the MAGIC model. Atmospheric Environment, 2008, 42, 6934-6941.	1.9	8
185	Heterogeneous oxidation of a phosphocholine on synthetic sea salt by ozone at room temperature. Physical Chemistry Chemical Physics, 2013, 15, 1990-2002.	1.3	8
186	Knudsen cell studies of the uptake of gaseous ammonia and amines onto C3â€“C7 solid dicarboxylic acids. Physical Chemistry Chemical Physics, 2017, 19, 26296-26309.	1.3	8
187	Experimental and Theoretical Studies of the Environmental Sensitivity of the Absorption Spectra and Photochemistry of Nitenpyram and Analogs. ACS Earth and Space Chemistry, 2019, 3, 2063-2075.	1.2	8
188	A simple titration technique for determining atomic hydrogen concentrations in fast flow discharge systems. Chemical Physics Letters, 1979, 61, 300-306.	1.2	7
189	Interaction of gas-phase deuterium atoms with silica surfaces. The Journal of Physical Chemistry, 1982, 86, 3499-3501.	2.9	7
190	An upper limit on the production of N2O from the reaction of O(Â¹D) With CO2in the presence of N2. Geophysical Research Letters, 1998, 25, 517-520.	1.5	7
191	The Atmospheric System. , 2000, , 15-42.		7
192	Kinetics of the gas-phase reaction of hydroxyl with nitryl chloride from 259 to 348 K. The Journal of Physical Chemistry, 1992, 96, 2568-2572.	2.9	6
193	Global Tropospheric Chemistry and Climate Change. , 2000, , 762-843.		6
194	Interactions of gaseous HNO₃and water with individual and mixed alkyl self-assembled monolayers at room temperature. Physical Chemistry Chemical Physics, 2014, 16, 2358-2367.	1.3	6
195	Multiphase chemistry in the troposphere: It all starts â€¦ and ends â€¦ with gases. International Journal of Chemical Kinetics, 2019, 51, 736-752.	1.0	6
196	Novel ionization reagent for the measurement of gasâ€phase ammonia and amines using a standâ€alone atmospheric pressure gas chromatography (APGC) source. Rapid Communications in Mass Spectrometry, 2020, 34, e8561.	0.7	6
197	Homogeneous and Heterogeneous Chemistry in the Stratosphere. , 2000, , 657-726.		5
198	Comment on "A study of the stability of methanol-fueled vehicle emissions in Tedlar bags". Environmental Science & Technology, 1992, 26, 1668-1670.	4.6	4

#	Article	IF	Citations
199	Thermal and photochemical oxidation of self-assembled monolayers on alumina particles exposed to nitrogen dioxide. Physical Chemistry Chemical Physics, 2011, 13, 604-611.	1.3	4
200	Enhanced Gas Uptake during Î±-Pinene Ozonolysis Points to a Burying Mechanism. ACS Earth and Space Chemistry, 2020, 4, 1435-1447.	1.2	4
201	Probing Matrix Effects on the Heterogeneous Photochemistry of Neonicotinoid Pesticides, Dinotefuran and Nitenpyram. ACS Earth and Space Chemistry, 2021, 5, 1196-1209.	1.2	4
202	Response to Comments on "Reactions at Interfaces As a Source of Sulfate Formation in Sea-Salt Particles". Science, 2004, 303, 628d-628.	6.0	3
203	Role of Gas-Phase Halogen Bonding in Ambient Chemical Ionization Mass Spectrometry Utilizing Iodine. ACS Earth and Space Chemistry, 2019, 3, 1315-1328.	1.2	3
204	Moyers receives Edward A. Flinn III Award: Citation. Eos, 2012, 93, 33-34.	0.1	2
205	Reply to Comment on â€œInverse Kinetic Isotope Effect in the Reaction of Atomic Chlorine with C2H4and C2D4â€• Journal of Physical Chemistry A, 1998, 102, 6056-6056.	1.1	1
206	Kinetics of reaction of chlorine atoms with some biogenic organics. , 1999, 31, 491.		1
207	Kinetics of interaction of vibrationally excited OH(X2?i)v=9 with simple hydrocarbons at room temperature. International Journal of Chemical Kinetics, 1985, 17, 613-628.	1.0	0
208	F. Sherwood Rowland: A man of science, vision, integrity, and kindness. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13881-13882.	3.3	0
209	Preface of John C. Hemminger Festschrift. Journal of Physical Chemistry C, 2014, 118, 28923-28923.	1.5	0
210	A semi-blind source separation method for differential optical absorption spectroscopy of atmospheric gas mixtures. Inverse Problems and Imaging, 2014, 8, 587-610.	0.6	0
211	Effects of the VACES particle concentrator on secondary organic aerosol and ambient particle composition. Aerosol Science and Technology, 2022, 56, 785-801.	1.5	0