

# Barbara Finlayson-Pitts

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9407494/publications.pdf>

Version: 2024-02-01

211  
papers

13,689  
citations

22132

59  
h-index

25770

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. <i>Science</i> , 1997, 276, 1045-1051.	6.0	990
2	Experiments and Simulations of Ion-Enhanced Interfacial Chemistry on Aqueous NaCl Aerosols. <i>Science</i> , 2000, 288, 301-306.	6.0	615
3	Unexpectedly high concentrations of molecular chlorine in coastal air. <i>Nature</i> , 1998, 394, 353-356.	13.7	584
4	The heterogeneous hydrolysis of NO <sub>2</sub> in laboratory systems and in outdoor and indoor atmospheres: An integrated mechanism. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 223-242.	1.3	577
5	Formation of chemically active chlorine compounds by reactions of atmospheric NaCl particles with gaseous N <sub>2</sub> O <sub>5</sub> and ClONO <sub>2</sub> . <i>Nature</i> , 1989, 337, 241-244.	13.7	410
6	The Tropospheric Chemistry of Sea Salt: A Molecular-Level View of the Chemistry of NaCl and NaBr. <i>Chemical Reviews</i> , 2003, 103, 4801-4822.	23.0	374
7	The Role of Br <sub>2</sub> and BrCl in Surface Ozone Destruction at Polar Sunrise. <i>Science</i> , 2001, 291, 471-474.	6.0	353
8	Formation of Molecular Chlorine from the Photolysis of Ozone and Aqueous Sea-Salt Particles. <i>Science</i> , 1998, 279, 74-76.	6.0	293
9	Nonequilibrium atmospheric secondary organic aerosol formation and growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 2836-2841.	3.3	261
10	Reactions at Interfaces As a Source of Sulfate Formation in Sea-Salt Particles. <i>Science</i> , 2003, 301, 340-344.	6.0	254
11	Physical Chemistry of Airborne Sea Salt Particles and Their Components. <i>Journal of Physical Chemistry A</i> , 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 <i>Physics</i> , 2009, 11, 7760.	1.3	217
13	The nature of water on surfaces of laboratory systems and implications for heterogeneous chemistry in the troposphere. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 604.	1.3	214
14	Adsorption of Atmospherically Relevant Gases at the Air/Water Interface: Free Energy Profiles of Aqueous Solvation of N <sub>2</sub> , O <sub>2</sub> , O <sub>3</sub> , OH, H <sub>2</sub> O, HO <sub>2</sub> , and H <sub>2</sub> O <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , 2004, 108, 11573-11579.	1.1	195
15	Ozone destruction and bromine photochemistry at ground level in the Arctic spring. <i>Nature</i> , 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. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18719-18724.	3.3	173
17	Chlorine atoms as a potential tropospheric oxidant in the marine boundary layer. <i>Research on Chemical Intermediates</i> , 1993, 19, 235-249.	1.3	164
18	Reaction of NO <sub>2</sub> with NaCl and atmospheric implications of NOCl formation. <i>Nature</i> , 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. <i>Environmental Science &amp; Technology</i> , 2010, 44, 1056-1061.	4.6	155
20	A Diffuse Reflectance Infrared Fourier Transform Spectroscopic Study of the Surface Reaction of NaCl with Gaseous NO <sub>2</sub> and HNO <sub>3</sub> . <i>The Journal of Physical Chemistry</i> , 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. <i>Journal of Aerosol Science</i> , 2004, 35, 869-887.	1.8	147
22	Formation of Molecular Bromine from the Reaction of Ozone with Deliquesced NaBr Aerosol: Evidence for Interface Chemistry. <i>Journal of Physical Chemistry A</i> , 2004, 108, 11559-11572.	1.1	138
23	The photochemical production of HONO during the heterogeneous hydrolysis of NO <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 3836.	1.3	136
24	Knudsen Cell Studies of the Uptake of Gaseous HNO <sub>3</sub> and Other Oxides of Nitrogen on Solid NaCl: The Role of Surface-Adsorbed Water. <i>The Journal of Physical Chemistry</i> , 1996, 100, 15218-15228.	2.9	133
25	Bromine activation in the troposphere by the dark reaction of O <sub>3</sub> with seawater ice. <i>Geophysical Research Letters</i> , 1998, 25, 3923-3926.	1.5	130
26	Integrating phase and composition of secondary organic aerosol from the ozonolysis of $\alpha$ -pinene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7552-7557.	3.3	130
27	Interaction of Gas-Phase Ozone at 296 K with Unsaturated Self-Assembled Monolayers: A New Look at an Old System. <i>Journal of Physical Chemistry A</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 5813-5820.	1.3	117
29	Reactions of Methanesulfonic Acid with Amines and Ammonia as a Source of New Particles in Air. <i>Journal of Physical Chemistry B</i> , 2016, 120, 1526-1536.	1.2	115
30	Water-Induced Reorganization of Ultrathin Nitrate Films on NaCl: Implications for the Tropospheric Chemistry of Sea Salt Particles. <i>The Journal of Physical Chemistry</i> , 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. <i>Atmospheric Environment</i> , 2002, 36, 2721-2731.	1.9	113
32	New Experimental and Theoretical Approach to the Heterogeneous Hydrolysis of NO <sub>2</sub> : Key Role of Molecular Nitric Acid and Its Complexes. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6886-6897.	1.1	113
33	Chlorine activation indoors and outdoors via surface-mediated reactions of nitrogen oxides with hydrogen chloride. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 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. <i>Journal of Physical Chemistry A</i> , 1997, 101, 1509-1517.	1.1	102
35	Introduction: Structure and Chemistry at Aqueous Interfaces. <i>Chemical Reviews</i> , 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 Air-Water Interface. <i>Langmuir</i> , 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. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10339-10346.	1.1	98
38	Heterogeneous chemistry in the troposphere: Experimental approaches and applications to the chemistry of sea salt particles. <i>International Reviews in Physical Chemistry</i> , 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. <i>Accounts of Chemical Research</i> , 2015, 48, 399-406.	7.6	89
40	New particle formation and growth from methanesulfonic acid, trimethylamine and water. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 13699-13709.	1.3	88
41	Diffuse Reflectance Infrared Studies of the Reaction of Synthetic Sea Salt Mixtures with NO <sub>2</sub> : A Key Role for Hydrates in the Kinetics and Mechanism. <i>Journal of Physical Chemistry A</i> , 1997, 101, 1277-1286.	1.1	82
42	Rate Constants and Kinetic Isotope Effects in the Reactions of Atomic Chlorine with n-Butane and Simple Alkenes at Room Temperature. <i>Journal of Physical Chemistry A</i> , 1998, 102, 8510-8519.	1.1	81
43	Photooxidation of $\alpha$ -pinene at high relative humidity in the presence of increasing concentrations of NO <sub>x</sub> . <i>Atmospheric Environment</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 12500-12514.	1.3	78
45	Laboratory Studies of Potential Mechanisms of Renoxification of Tropospheric Nitric Acid. <i>Environmental Science &amp; Technology</i> , 2003, 37, 548-554.	4.6	77
46	The future of airborne sulfur-containing particles in the absence of fossil fuel sulfur dioxide emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13514-13519.	3.3	76
47	New Particle Formation from Methanesulfonic Acid and Amines/Ammonia as a Function of Temperature. <i>Environmental Science &amp; Technology</i> , 2017, 51, 243-252.	4.6	76
48	Analysis of relative rate measurements. <i>International Journal of Chemical Kinetics</i> , 1997, 29, 665-672.	1.0	73
49	Enhanced photolysis in aerosols: evidence for important surface effects. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 4700.	1.3	72
50	Ionization of N <sub>2</sub> O <sub>4</sub> in Contact with Water: Mechanism, Time Scales and Atmospheric Implications. <i>Journal of the American Chemical Society</i> , 2009, 131, 12180-12185.	6.6	72
51	FTIR Studies of the Reaction of Gaseous NO with HNO <sub>3</sub> on Porous Glass: Implications for Conversion of HNO <sub>3</sub> to Photochemically Active NO <sub>x</sub> in the Atmosphere. <i>Journal of Physical Chemistry A</i> , 2000, 104, 9705-9711.	1.1	70
52	Interactions of monolayers of unsaturated phosphocholines with ozone at the air-water interface. <i>Langmuir</i> , 1994, 10, 4637-4644.	1.6	69
53	Enhanced surface photochemistry in chloride-nitrate ion mixtures. <i>Physical Chemistry Chemical Physics</i> , 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. <i>Geophysical Research Letters</i> , 1994, 21, 1623-1626.	1.5	63

#	ARTICLE	IF	CITATIONS
55	Halogens in the Troposphere. <i>Analytical Chemistry</i> , 2010, 82, 770-776.	3.2	63
56	Identification of Organic Nitrates in the NO <sub>3</sub> Radical Initiated Oxidation of $\alpha$ -Pinene by Atmospheric Pressure Chemical Ionization Mass Spectrometry. <i>Environmental Science &amp; Technology</i> , 2010, 44, 5887-5893.	4.6	63
57	The reaction of gaseous N <sub>2</sub> O <sub>5</sub> with solid NaCl at 298 K: Estimated lower limit to the reaction probability and its potential role in tropospheric and stratospheric chemistry. <i>Geophysical Research Letters</i> , 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. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9993-9999.	1.1	62
59	Infrared Absorption Cross-Section Measurements for Nitrous Acid (HONO) at Room Temperature. <i>Journal of Physical Chemistry A</i> , 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. <i>The Journal of Physical Chemistry</i> , 1995, 99, 13156-13162.	2.9	60
61	Kinetics of reaction of chlorine atoms with some biogenic organics. <i>International Journal of Chemical Kinetics</i> , 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. <i>Journal of Physical Chemistry A</i> , 2006, 110, 10619-10627.	1.1	60
63	Enhancement of N <sub>2</sub> O <sub>4</sub> on Porous Glass at Room Temperature: A Key Intermediate in the Heterogeneous Hydrolysis of NO <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , 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. <i>The Journal of Physical Chemistry</i> , 1996, 100, 19891-19897.	2.9	57
65	Laboratory studies of sources of HONO in polluted urban atmospheres. <i>Geophysical Research Letters</i> , 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. <i>Journal of Physical Chemistry A</i> , 2009, 113, 2060-2069.	1.1	56
67	Nitrate Ion Photolysis in Thin Water Films in the Presence of Bromide Ions. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5810-5821.	1.1	54
68	The Role of Oxalic Acid in New Particle Formation from Methanesulfonic Acid, Methylamine, and Water. <i>Environmental Science &amp; Technology</i> , 2017, 51, 2124-2130.	4.6	53
69	HONO decomposition on borosilicate glass surfaces: implications for environmental chamber studies and field experiments. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 5236.	1.3	52
70	Gas-Phase Molecular Halogen Formation from NaCl and NaBr Aerosols: When Are Interface Reactions Important?. <i>Journal of Physical Chemistry A</i> , 2006, 110, 1859-1867.	1.1	50
71	Knudsen cell studies of the reactions of N <sub>2</sub> O <sub>5</sub> and ClONO <sub>2</sub> with NaCl: development and application of a model for estimating available surface areas and corrected uptake coefficients. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1780-1789.	1.3	49
72	Fluorescence, Absorption, and Excitation Spectra of Polycyclic Aromatic Hydrocarbons as a Tool for Quantitative Analysis. <i>Journal of Chemical Education</i> , 2004, 81, 242.	1.1	49

#	ARTICLE	IF	CITATIONS
73	Photochemical Processes Induced by Vibrational Overtone Excitations: Dynamics Simulations for cis-HONO, trans-HONO, HNO <sub>3</sub> , and HNO <sub>3</sub> ·H <sub>2</sub> O. <i>Journal of Physical Chemistry A</i> , 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: Evidence for Molecular Nitric Acid at the Surface. <i>Journal of Physical Chemistry A</i> , 2001, 105, 1890-1896.	1.1	48
75	Structure of Large Nitrate·Water Clusters at Ambient Temperatures: Simulations with Effective Fragment Potentials and Force Fields with Implications for Atmospheric Chemistry. <i>Journal of Physical Chemistry A</i> , 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. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 2733-2744.	1.2	45
77	Analysis of secondary organic aerosols in air using extractive electrospray ionization mass spectrometry (EESI-MS). <i>RSC Advances</i> , 2012, 2, 2930.	1.7	44
78	Kinetics and Atmospheric Chemistry. , 2000, , 130-178.		43
79	Knudsen Cell Studies of the Reaction of Gaseous HNO <sub>3</sub> with NaCl Using Less than a Single Layer of Particles at 298 K: A Modified Mechanism. <i>Journal of Physical Chemistry A</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 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?. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3605.	1.3	42
82	Proton Transfer in Mixed Clusters of Methanesulfonic Acid, Methylamine, and Oxalic Acid: Implications for Atmospheric Particle Formation. <i>Journal of Physical Chemistry A</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 1824-1831.	1.3	41
85	Unique products of the reaction of isoprene with atomic chlorine: Potential markers of chlorine atom chemistry. <i>Geophysical Research Letters</i> , 1997, 24, 1615-1618.	1.5	40
86	Catalytic Role for Water in the Atmospheric Production of ClNO. <i>Journal of Physical Chemistry A</i> , 2010, 114, 4609-4618.	1.1	40
87	Synthesis and identification by infrared spectroscopy of gaseous nitryl bromide, BrNO <sub>2</sub> . <i>The Journal of Physical Chemistry</i> , 1989, 93, 4397-4400.	2.9	39
88	The uptake of SO <sub>2</sub> on synthetic sea salt and some of its components. <i>Geophysical Research Letters</i> , 2000, 27, 887-890.	1.5	39
89	Uptake and Reaction of ClONO <sub>2</sub> on NaCl and Synthetic Sea Salt. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5178-5187.	1.1	39
90	Complexes of HNO <sub>3</sub> and NO <sub>3</sub> · with NO <sub>2</sub> and N <sub>2</sub> O <sub>4</sub> , and their potential role in atmospheric HONO formation. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 6019.	1.3	39

#	ARTICLE	IF	CITATIONS
91	Atmospheric Solids Analysis Probe Mass Spectrometry: A New Approach for Airborne Particle Analysis. <i>Analytical Chemistry</i> , 2010, 82, 5922-5927.	3.2	39
92	Formation of secondary ozonides from the reaction of an unsaturated phosphatidylcholine with ozone. <i>Chemical Research in Toxicology</i> , 1990, 3, 517-523.	1.7	38
93	Photochemistry of Thin Solid Films of the Neonicotinoid Imidacloprid on Surfaces. <i>Environmental Science &amp; Technology</i> , 2017, 51, 2660-2668.	4.6	37
94	Absorption cross sections for gaseous $\text{ClNO}_2$ and $\text{Cl}_2$ at 298 K: Potential organic oxidant source in the marine troposphere. <i>Journal of Geophysical Research</i> , 1992, 97, 7651-7656.	3.3	36
95	Production of Gas Phase $\text{NO}_2$ and Halogens from the Photochemical Oxidation of Aqueous Mixtures of Sea Salt and Nitrate Ions at Room Temperature. <i>Environmental Science &amp; Technology</i> , 2012, 46, 10447-10454.	4.6	35
96	A New Aerosol Flow System for Photochemical and Thermal Studies of Tropospheric Aerosols. <i>Aerosol Science and Technology</i> , 2010, 44, 329-338.	1.5	34
97	$\text{NO}_x$ Reactions on Aqueous Surfaces with Gaseous HCl: Formation of a Potential Precursor to Atmospheric Cl Atoms. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3405-3410.	2.1	34
98	Comment on "Indications of photochemical histories of Pacific air masses from measurements of atmospheric trace species at Point Arena, California" by D. D. Parrish et al.. <i>Journal of Geophysical Research</i> , 1993, 98, 14991-14993.	3.3	33
99	A new dark source of the gaseous hydroxyl radical for relative rate measurements. <i>The Journal of Physical Chemistry</i> , 1993, 97, 1172-1177.	2.9	33
100	Atmospheric Chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 6566-6567.	3.3	33
101	Nitrogen dioxide at the air-water interface: trapping, absorption, and solvation in the bulk and at the surface. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 204-212.	1.3	33
102	Phase, composition, and growth mechanism for secondary organic aerosol from the ozonolysis of $\alpha$ -pinene. <i>Atmospheric Chemistry and Physics</i> , 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. <i>Geophysical Research Letters</i> , 1992, 19, 1371-1374.	1.5	32
104	Interactions of gaseous nitric acid with surfaces of environmental interest. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 3879.	1.3	31
105	Amine-Amine Exchange in Ammonium Methanesulfonate Aerosols. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29431-29440.	1.5	31
106	Reaction of a charge-separated ONONO <sub>2</sub> species with water in the formation of HONO: an MP2 Molecular Dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4483.	1.3	31
107	Characterization of organic coatings on hygroscopic salt particles and their atmospheric impacts. <i>Atmospheric Environment</i> , 2010, 44, 1209-1218.	1.9	29
108	Reaction of gas phase OH with unsaturated self-assembled monolayers and relevance to atmospheric organic oxidations. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9419.	1.3	29

#	ARTICLE	IF	CITATIONS
109	Characterization of HOCl Using Atmospheric Pressure Ionization Mass Spectrometry. <i>Journal of Physical Chemistry A</i> , 1999, 103, 8231-8238.	1.1	28
110	Nitrate ion photochemistry at interfaces: a new mechanism for oxidation of $\alpha$ -pinene. <i>Physical Chemistry Chemical Physics</i> , 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. <i>Atmospheric Measurement Techniques</i> , 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 SO <sub>2</sub> on OH-processed model sea salt aerosol. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1980.	1.3	26
113	Surprising Formation of <i>p</i> -Cymene in the Oxidation of $\alpha$ -Pinene in Air by the Atmospheric Oxidants OH, O <sub>3</sub> , and NO <sub>3</sub> . <i>Environmental Science &amp; Technology</i> , 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. <i>Journal of Physical Chemistry A</i> , 2012, 116, 5900-5909.	1.1	26
115	Inverse Kinetic Isotope Effect in the Reaction of Atomic Chlorine with C <sub>2</sub> H <sub>4</sub> and C <sub>2</sub> D <sub>4</sub> . <i>Journal of Physical Chemistry A</i> , 1997, 101, 9187-9190.	1.1	25
116	New insights into secondary organic aerosol from the ozonolysis of $\alpha$ -pinene from combined infrared spectroscopy and mass spectrometry measurements. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 22706-22716.	1.3	24
117	An upper limit to the concentration of an SO <sub>2</sub> complex at the air-water interface at 298 K: infrared experiments and ab initio calculations. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 1832-1838.	1.3	23
118	Hydroxyl Radical Quantum Yields from Isopropyl Nitrite Photolysis in Air. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8150-8155.	4.6	23
119	Infrared Studies of the Reaction of Methanesulfonic Acid with Trimethylamine on Surfaces. <i>Environmental Science &amp; Technology</i> , 2014, 48, 323-330.	4.6	23
120	Rates and Mechanisms of Gas-Phase Reactions in Irradiated Organic + NO <sub>x</sub> Air Mixtures. , 2000, , 179-263.		22
121	Contamination from electrically conductive silicone tubing during aerosol chemical analysis. <i>Atmospheric Environment</i> , 2009, 43, 2836-2839.	1.9	22
122	New Mechanism of Extractive Electrospray Ionization Mass Spectrometry for Heterogeneous Solid Particles. <i>Analytical Chemistry</i> , 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. <i>The Journal of Physical Chemistry</i> , 1991, 95, 6951-6958.	2.9	21
124	A Unique Method for Laboratory Quantification of Gaseous Nitrous Acid (HONO) Using the Reaction HONO + HCl → ClNO + H <sub>2</sub> O. <i>Journal of Physical Chemistry A</i> , 2000, 104, 329-335.	1.1	21
125	Aerosol fast flow reactor for laboratory studies of new particle formation. <i>Journal of Aerosol Science</i> , 2014, 78, 30-40.	1.8	21
126	Photochemistry of Solid Films of the Neonicotinoid Nitenpyram. <i>Environmental Science &amp; Technology</i> , 2018, 52, 2760-2767.	4.6	21



#	ARTICLE	IF	CITATIONS
127	Unique Photochemistry of Surface Nitrate. <i>The Journal of Physical Chemistry</i> , 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. <i>Journal of Chemical Education</i> , 1998, 75, 1595.	1.1	20
129	Production of gas phase NO <sub>2</sub> and halogens from the photolysis of thin water films containing nitrate, chloride and bromide ions at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 17636.	1.3	20
130	Mechanism for formation of atmospheric Cl atom precursors in the reaction of dinitrogen oxides with HCl/Cl <sup>+</sup> on aqueous films. <i>Physical Chemistry Chemical Physics</i> , 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. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1182-1194.	1.2	20
132	Reactions of dinitrogen pentoxide and nitrogen dioxide with 1-palmitoyl-2-oleoyl-sn-glycero-3-phosphocholine. <i>Lipids</i> , 1991, 26, 306-314.	0.7	19
133	Tropospheric HONO and reactions of oxides of nitrogen with NaCl. <i>Geophysical Research Letters</i> , 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. <i>Langmuir</i> , 2006, 22, 5617-5624.	1.6	19
136	Unusual Oxidation of Organics at Interfaces from the Bottom Up and Atmospheric Implications. <i>Journal of the American Chemical Society</i> , 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). <i>Atmospheric Measurement Techniques</i> , 2017, 10, 1373-1386.	1.2	19
138	Techniques for quantifying gaseous HOCl using atmospheric pressure ionization mass spectrometry. <i>Physical Chemistry Chemical Physics</i> , 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. <i>Journal of Physical Chemistry C</i> , 2009, 113, 11060-11065.	1.5	18
140	The impact of organic coatings on light scattering by sodium chloride particles. <i>Atmospheric Environment</i> , 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. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 305-328.	1.7	18
142	Measurement of Trace Metals in Tobacco and Cigarette Ash by Inductively Coupled Plasma-Atomic Emission Spectroscopy. <i>Journal of Chemical Education</i> , 2003, 80, 83.	1.1	17
143	Hydroxyl radical oxidation of phospholipid-coated NaCl particles. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9833.	1.3	17
144	Introductory lecture: atmospheric chemistry in the Anthropocene. <i>Faraday Discussions</i> , 2017, 200, 11-58.	1.6	17

#	ARTICLE	IF	CITATIONS
145	A Fourier transform infrared spectrometry study of the reactions of phosphatidylcholines with gaseous N <sub>2</sub> O <sub>5</sub> and NO <sub>2</sub> . <i>Toxicology and Applied Pharmacology</i> , 1987, 89, 438-448.	1.3	16
146	The dimethyl sulfide reaction with atomic chlorine and its implications for the budget of methyl chloride. <i>Geophysical Research Letters</i> , 1996, 23, 1661-1664.	1.5	16
147	Particles in the Troposphere. , 2000, , 349-435.		16
148	The effect of cations on NO <sub>2</sub> production from the photolysis of aqueous thin water films of nitrate salts. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 32211-32218.	1.3	16
149	Open questions on the chemical composition of airborne particles. <i>Communications Chemistry</i> , 2020, 3, .	2.0	16
150	Probing the sensitivity of gaseous Br <sub>2</sub> production from the oxidation of aqueous bromide-containing aerosols and atmospheric implications. <i>Atmospheric Environment</i> , 2009, 43, 3951-3962.	1.9	15
151	Chlorine chronicles. <i>Nature Chemistry</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 448-458.	1.3	15
153	Uptake of water by an acid-base nanoparticle: theoretical and experimental studies of the methanesulfonic acid-methylamine system. <i>Physical Chemistry Chemical Physics</i> , 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. <i>Journal of Chemical Education</i> , 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. <i>Journal of Geophysical Research</i> , 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). <i>Chemical Science</i> , 2019, 10, 884-897.	3.7	14
159	Evidence for a kinetically controlled burying mechanism for growth of high viscosity secondary organic aerosol. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 66-83.	1.7	14
160	Unexpected formation of oxygen-free products and nitrous acid from the ozonolysis of the neonicotinoid nitenpyram. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11321-11327.	3.3	14
161	Temperature dependence of the hydroxyl + nitrosyl chloride (ClNO) reaction: evidence for two competing reaction channels. <i>The Journal of Physical Chemistry</i> , 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. <i>Inhalation Toxicology</i> , 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. <i>Journal of Chemical Education</i> , 2010, 87, 186-189.	1.1	13
164	Isomerization and ionization of N <sub>2</sub> O <sub>4</sub> on model ice and silica surfaces. <i>Chemical Physics</i> , 2012, 405, 52-59.	0.9	13
165	Relative rate constants for removal of vibrationally excited OH(X <sup>2</sup> Π)v=9 by some small molecules at room temperature. <i>International Journal of Chemical Kinetics</i> , 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 NO <sub>2</sub> and HNO <sub>3</sub> . [Erratum to document cited in CA120:228408]. <i>The Journal of Physical Chemistry</i> , 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. <i>Journal of Physical Chemistry A</i> , 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. <i>Atmospheric Environment</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 4827-4839.	1.3	12
171	A cautionary note on the effects of laboratory air contaminants on ambient ionization mass spectrometry measurements. <i>Rapid Communications in Mass Spectrometry</i> , 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. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1593-1610.	1.7	12
173	Reaction of hydroxyl with nitrosyl chloride: kinetics and mechanisms. <i>The Journal of Physical Chemistry</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 31949-31957.	1.3	11
176	Are Changes in Breathing Pattern on Exposure to Ozone Related to Changes in Pulmonary Surfactant?. <i>Inhalation Toxicology</i> , 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. <i>Journal of Chemical Education</i> , 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. <i>Geophysical Research Letters</i> , 2000, 27, 947-950.	1.5	10
179	FTIR Study of N <sub>2</sub> O <sub>3</sub> on Porous Glass at Room Temperature. <i>Journal of Physical Chemistry A</i> , 2000, 104, 8038-8044.	1.1	10
180	Thermal and photochemical reactions of NO <sub>2</sub> on chromium(iii) oxide surfaces at atmospheric pressure. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 15840.	1.3	10

#	ARTICLE	IF	CITATIONS
181	Measurement of Organics Using Three FTIR Techniques: Absorption, Attenuated Total Reflectance, and Diffuse Reflectance. <i>Journal of Chemical Education</i> , 2003, 80, 672.	1.1	9
182	Surfactant-free latex spheres for size calibration of mobility particle sizers in atmospheric aerosol applications. <i>Atmospheric Environment</i> , 2014, 82, 56-59.	1.9	9
183	Quantum Yields and N <sub>2</sub> O Formation from Photolysis of Solid Films of Neonicotinoids. <i>Journal of Agricultural and Food Chemistry</i> , 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. <i>Atmospheric Environment</i> , 2008, 42, 6934-6941.	1.9	8
185	Heterogeneous oxidation of a phosphocholine on synthetic sea salt by ozone at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1990-2002.	1.3	8
186	Knudsen cell studies of the uptake of gaseous ammonia and amines onto C <sub>3</sub> -C <sub>7</sub> solid dicarboxylic acids. <i>Physical Chemistry Chemical Physics</i> , 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. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2063-2075.	1.2	8
188	A simple titration technique for determining atomic hydrogen concentrations in fast flow discharge systems. <i>Chemical Physics Letters</i> , 1979, 61, 300-306.	1.2	7
189	Interaction of gas-phase deuterium atoms with silica surfaces. <i>The Journal of Physical Chemistry</i> , 1982, 86, 3499-3501.	2.9	7
190	An upper limit on the production of N <sub>2</sub> O from the reaction of O( <sup>1</sup> D) With CO <sub>2</sub> in the presence of N <sub>2</sub> . <i>Geophysical Research Letters</i> , 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 nitril chloride from 259 to 348 K. <i>The Journal of Physical Chemistry</i> , 1992, 96, 2568-2572.	2.9	6
193	Global Tropospheric Chemistry and Climate Change. , 2000, , 762-843.		6
194	Interactions of gaseous HNO <sub>3</sub> and water with individual and mixed alkyl self-assembled monolayers at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2358-2367.	1.3	6
195	Multiphase chemistry in the troposphere: It all starts with and ends with gases. <i>International Journal of Chemical Kinetics</i> , 2019, 51, 736-752.	1.0	6
196	Novel ionization reagent for the measurement of gas-phase ammonia and amines using a standalone atmospheric pressure gas chromatography (APGC) source. <i>Rapid Communications in Mass Spectrometry</i> , 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". <i>Environmental Science &amp; Technology</i> , 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. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 604-611.	1.3	4
200	Enhanced Gas Uptake during $\alpha$ -Pinene Ozonolysis Points to a Burying Mechanism. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1435-1447.	1.2	4
201	Probing Matrix Effects on the Heterogeneous Photochemistry of Neonicotinoid Pesticides, Dinotefuran and Nitenpyram. <i>ACS Earth and Space Chemistry</i> , 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". <i>Science</i> , 2004, 303, 628d-628.	6.0	3
203	Role of Gas-Phase Halogen Bonding in Ambient Chemical Ionization Mass Spectrometry Utilizing Iodine. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1315-1328.	1.2	3
204	Moyers receives Edward A. Flinn III Award: Citation. <i>Eos</i> , 2012, 93, 33-34.	0.1	2
205	Reply to Comment on "Inverse Kinetic Isotope Effect in the Reaction of Atomic Chlorine with C <sub>2</sub> H <sub>4</sub> and C <sub>2</sub> D <sub>4</sub> ". <i>Journal of Physical Chemistry A</i> , 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( $v=9$ ) with simple hydrocarbons at room temperature. <i>International Journal of Chemical Kinetics</i> , 1985, 17, 613-628.	1.0	0
208	F. Sherwood Rowland: A man of science, vision, integrity, and kindness. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13881-13882.	3.3	0
209	Preface of John C. Hemminger Festschrift. <i>Journal of Physical Chemistry C</i> , 2014, 118, 28923-28923.	1.5	0
210	A semi-blind source separation method for differential optical absorption spectroscopy of atmospheric gas mixtures. <i>Inverse Problems and Imaging</i> , 2014, 8, 587-610.	0.6	0
211	Effects of the VACES particle concentrator on secondary organic aerosol and ambient particle composition. <i>Aerosol Science and Technology</i> , 2022, 56, 785-801.	1.5	0