Markus Ammann

List of Publications by Year in descending order

177 papers	11,285 citations	38660 50 h-index	37111 96 g-index
252 all docs	252 docs citations	252 times ranked	7860 citing authors

#	Article	IF	Citations
1	Gas uptake and chemical aging of semisolid organic aerosol particles. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11003-11008.	3.3	555
2	An overview of snow photochemistry: evidence, mechanisms and impacts. Atmospheric Chemistry and Physics, 2007, 7, 4329-4373.	1.9	554
3	Heterogeneous Photochemistry in the Atmosphere. Chemical Reviews, 2015, 115, 4218-4258.	23.0	497
4	Photosensitized reduction of nitrogen dioxide on humic acid as a source of nitrous acid. Nature, 2006, 440, 195-198.	13.7	469
5	Heterogeneous production of nitrous acid on soot in polluted air masses. Nature, 1998, 395, 157-160.	13.7	383
6	An overview of current issues in the uptake of atmospheric trace gases by aerosols and clouds. Atmospheric Chemistry and Physics, 2010, 10, 10561-10605.	1.9	352
7	Photoenhanced uptake of gaseous NO2 on solid organic compounds: a photochemical source of HONO?. Faraday Discussions, 2005, 130, 195.	1.6	337
8	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume V â€“ heterogeneous reactions on solid substrates. Atmospheric Chemistry and Physics, 2010, 10, 9059-9223.	1.9	312
9	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	1.9	278
10	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions â€“ Part 1: General equations, parameters, and terminology. Atmospheric Chemistry and Physics, 2007, 7, 5989-6023.	1.9	262
11	Light changes the atmospheric reactivity of soot. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6605-6609.	3.3	252
12	A review of airâ€“ice chemical and physical interactions (AICI): liquids, quasi-liquids, and solids in snow. Atmospheric Chemistry and Physics, 2014, 14, 1587-1633.	1.9	235
13	Light induced conversion of nitrogen dioxide into nitrous acid on submicron humic acid aerosol. Atmospheric Chemistry and Physics, 2007, 7, 4237-4248.	1.9	234
14	Photoenhanced uptake of NO₂ on mineral dust: Laboratory experiments and model simulations. Geophysical Research Letters, 2008, 35, .	1.5	200
15	The Uptake of Acidic Gases on Ice. Chemical Reviews, 2006, 106, 1375-1444.	23.0	190
16	Estimating the uptake of traffic-derived NO 2 from 15 N abundance in Norway spruce needles. Oecologia, 1999, 118, 124-131.	0.9	177
17	The role of long-lived reactive oxygen intermediates in the reaction of ozone with aerosol particles. Nature Chemistry, 2011, 3, 291-295.	6.6	172
18	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume VI â€“ heterogeneous reactions with liquid substrates. Atmospheric Chemistry and Physics, 2013, 13, 8045-8228.	1.9	167

#	Article	IF	Citations
19	Heterogeneous Reaction of NO2on Diesel Soot Particles. Environmental Science & Technology, 2001, 35, 2191-2199.	4.6	162
20	Partitioning of reactive nitrogen (NO_y) and dependence on meteorological conditions in the lower free troposphere. Atmospheric Chemistry and Physics, 2003, 3, 779-796.	1.9	161
21	Effects of reversible adsorption and Langmuirâ€“Hinshelwood surface reactions on gas uptake by atmospheric particles. Physical Chemistry Chemical Physics, 2003, 5, 351-356.	1.3	153
22	Significance of Semivolatile Diesel Exhaust Organics for Secondary HONO Formation. Environmental Science & Technology, 2002, 36, 677-682.	4.6	135
23	Heterogeneous formation of nitrous acid (HONO) on soot aerosol particles. Journal of Geophysical Research, 1999, 104, 13825-13832.	3.3	126
24	Effect of humidity on nitric acid uptake to mineral dust aerosol particles. Atmospheric Chemistry and Physics, 2006, 6, 2147-2160.	1.9	125
25	Ozone uptake on glassy, semi-solid and liquid organic matter and the role of reactive oxygen intermediates in atmospheric aerosol chemistry. Physical Chemistry Chemical Physics, 2016, 18, 12662-12674.	1.3	117
26	The Effect of an Organic Surfactant on the Liquidâ^'Vapor Interface of an Electrolyte Solution. Journal of Physical Chemistry C, 2007, 111, 13497-13509.	1.5	115
27	Summertime NOyspeciation at the Jungfraujoch, 3580 m above sea level, Switzerland. Journal of Geophysical Research, 2000, 105, 6655-6667.	3.3	110
28	Organics in environmental ices: sources, chemistry, and impacts. Atmospheric Chemistry and Physics, 2012, 12, 9653-9678.	1.9	110
29	First detection of nitrogen from NOx in tree rings: a 15N/14N study near a motorway. Atmospheric Environment, 2004, 38, 2779-2787.	1.9	103
30	Variations in diesel soot reactivity along the exhaust after-treatment system, based on the morphology and nanostructure of primary soot particles. Combustion and Flame, 2013, 160, 671-681.	2.8	100
31	Generation of Submicron Arizona Test Dust Aerosol: Chemical and Hygroscopic Properties. Aerosol Science and Technology, 2005, 39, 452-460.	1.5	95
32	Measuring the specific surface area of snow with X-ray tomography and gas adsorption: comparison and implications for surface smoothness. Atmospheric Chemistry and Physics, 2008, 8, 1261-1275.	1.9	95
33	The nature of nitrate at the ice surface studied by XPS and NEXAFS. Physical Chemistry Chemical Physics, 2010, 12, 8870.	1.3	91
34	Nitrogen dioxide multiphase chemistry: Uptake kinetics on aqueous solutions containing phenolic compounds. Physical Chemistry Chemical Physics, 2005, 7, 2513.	1.3	89
35	Kinetic model framework for aerosol and cloud surface chemistry and gas-particle interactions â€“ Part 2: Exemplary practical applications and numerical simulations. Atmospheric Chemistry and Physics, 2007, 7, 6025-6045.	1.9	84
36	Multiphase Chemical Kinetics of the Nitration of Aerosolized Protein by Ozone and Nitrogen Dioxide. Environmental Science & Technology, 2012, 46, 6672-6680.	4.6	80

#	Article	IF	Citations
37	NOy speciation with a combined wet effluent diffusion denuder â€“ aerosol collector coupled to ion chromatography. Atmospheric Environment, 1999, 33, 1131-1140.	1.9	79
38	Kinetic regimes and limiting cases of gas uptake and heterogeneous reactions in atmospheric aerosols and clouds: a general classification scheme. Atmospheric Chemistry and Physics, 2013, 13, 6663-6686.	1.9	77
39	Quantitative depth profiling of Ce³⁺ in Pt/CeO₂ by in situ high-energy XPS in a hydrogen atmosphere. Physical Chemistry Chemical Physics, 2015, 17, 5078-5083.	1.3	77
40	On the NO2+ soot reaction in the atmosphere. Journal of Geophysical Research, 1999, 104, 1729-1736.	3.3	76
41	The Essential Role for Laboratory Studies in Atmospheric Chemistry. Environmental Science & Technology, 2017, 51, 2519-2528.	4.6	75
42	The adsorption of nitrogen oxides on crystalline ice. Atmospheric Chemistry and Physics, 2002, 2, 235-247.	1.9	72
43	Product study of oleic acid ozonolysis as function of humidity. Atmospheric Environment, 2009, 43, 3662-3669.	1.9	67
44	Uptake of HNO₃ to deliquescent sea-salt particles: a study using the short-lived radioactive isotope tracer ¹³N. Atmospheric Chemistry and Physics, 2002, 2, 249-257.	1.9	64
45	A new endstation at the Swiss Light Source for ultraviolet photoelectron spectroscopy, X-ray photoelectron spectroscopy, and X-ray absorption spectroscopy measurements of liquid solutions. Review of Scientific Instruments, 2013, 84, 073904.	0.6	62
46	Heterogeneous Chemical Processing of13NO2by Monodisperse Carbon Aerosols at Very Low Concentrations. The Journal of Physical Chemistry, 1996, 100, 15487-15493.	2.9	60
47	A surface-stabilized ozonide triggers bromide oxidation at the aqueous solution-vapour interface. Nature Communications, 2017, 8, 700.	5.8	59
48	Evaluated kinetic and photochemical data for atmospheric chemistry: Volume VII â€“ Criegee intermediates. Atmospheric Chemistry and Physics, 2020, 20, 13497-13519.	1.9	55
49	Humic acid in ice: Photo-enhanced conversion of nitrogen dioxide into nitrous acid. Atmospheric Environment, 2010, 44, 5443-5450.	1.9	54
50	The Environmental Photochemistry of Oxide Surfaces and the Nature of Frozen Salt Solutions: A New in Situ XPS Approach. Topics in Catalysis, 2016, 59, 591-604.	1.3	54
51	Adsorption of Acetic Acid on Ice Studied by Ambient-Pressure XPS and Partial-Electron-Yield NEXAFS Spectroscopy at 230â€“240 K. Journal of Physical Chemistry A, 2013, 117, 401-409.	1.1	52
52	Effect of Surface Charge Density on the Affinity of Oxide Nanoparticles for the Vaporâ€“Water Interface. Langmuir, 2013, 29, 5023-5029.	1.6	52
53	The reaction of NO2 with solid anthrarobin (1,2,10-trihydroxy-anthracene). Physical Chemistry Chemical Physics, 2002, 4, 3684-3690.	1.3	51
54	Heterogeneous photochemistry of imidazole-2-carboxaldehyde: HO₂ radical formation and aerosol growth. Atmospheric Chemistry and Physics, 2016, 16, 11823-11836.	1.9	48

#	Article	IF	Citations
55	Organic Nitrate Contribution to New Particle Formation and Growth in Secondary Organic Aerosols from Î±-Pinene Ozonolysis. Environmental Science & Technology, 2016, 50, 6334-6342.	4.6	47
56	Viscosity controls humidity dependence of N₂O₅ uptake to citric acid aerosol. Atmospheric Chemistry and Physics, 2015, 15, 13615-13625.	1.9	46
57	Particle-Phase Photosensitized Radical Production and Aerosol Aging. Environmental Science & Technology, 2018, 52, 7680-7688.	4.6	45
58	Probing the solidâ€“liquid interface with tender x rays: A new ambient-pressure x-ray photoelectron spectroscopy endstation at the Swiss Light Source. Review of Scientific Instruments, 2020, 91, 023103.	0.6	45
59	The effect of fatty acid surfactants on the uptake of nitric acid to deliquesced NaCl aerosol. Atmospheric Chemistry and Physics, 2008, 8, 5127-5141.	1.9	44
60	Atmospheric Pressure Coated-Wall Flow-Tube Study of Acetone Adsorption on Ice. Journal of Physical Chemistry A, 2005, 109, 4531-4539.	1.1	43
61	The effect of fatty acid surfactants on the uptake of ozone to aqueous halogenide particles. Atmospheric Chemistry and Physics, 2010, 10, 11489-11500.	1.9	43
62	UVA/Vis-induced nitrous acid formation on polyphenolic films exposed to gaseous NO2. Photochemical and Photobiological Sciences, 2011, 10, 1680-1690.	1.6	43
63	Increased steady state uptake of ozone on soot due to UV/Vis radiation. Journal of Geophysical Research, 2011, 116, .	3.3	43
64	Photochemical Formation of Nitrite and Nitrous Acid (HONO) upon Irradiation of Nitrophenols in Aqueous Solution and in Viscous Secondary Organic Aerosol Proxy. Environmental Science & Technology, 2017, 51, 7486-7495.	4.6	42
65	Changes of fatty acid aerosol hygroscopicity induced by ozonolysis under humid conditions. Atmospheric Chemistry and Physics, 2008, 8, 4683-4690.	1.9	41
66	Kinetics of the heterogeneous reaction of nitric acid with mineral dust particles: an aerosol flowtube study. Physical Chemistry Chemical Physics, 2009, 11, 7921.	1.3	41
67	The influence of physical state on shikimic acid ozonolysis: a case for in situ microspectroscopy. Atmospheric Chemistry and Physics, 2014, 14, 10761-10772.	1.9	41
68	Shikimic acid ozonolysis kinetics of the transition from liquid aqueous solution to highly viscous glass. Physical Chemistry Chemical Physics, 2015, 17, 31101-31109.	1.3	41
69	Accommodation coefficient of HOBr on deliquescent sodium bromide aerosol particles. Atmospheric Chemistry and Physics, 2002, 2, 121-131.	1.9	39
70	The partitioning of acetone to different types of ice and snow between 198 and 223 K. Geophysical Research Letters, 2004, 31, .	1.5	39
71	Electrodynamic balance measurements of thermodynamic, kinetic, and optical aerosol properties inaccessible to bulk methods. Atmospheric Measurement Techniques, 2015, 8, 2397-2408.	1.2	39
72	Surface Chemical Properties of Eutectic and Frozen NaCl Solutions Probed by XPS and NEXAFS. ChemPhysChem, 2010, 11, 3859-3866.	1.0	38

#	Article	IF	Citations
73	Lightâ€induced ozone depletion by humic acid films and submicron aerosol particles. Journal of Geophysical Research, 2009, 114, .	3.3	37
74	Fatty Acid Surfactant Photochemistry Results in New Particle Formation. Scientific Reports, 2017, 7, 12693.	1.6	37
75	Photolytic radical persistence due to anoxia in viscous aerosol particles. Nature Communications, 2021, 12, 1769.	5.8	37
76	An in situ cell to study phase transitions in individual aerosol particles on a substrate using scanning transmission x-ray microspectroscopy. Review of Scientific Instruments, 2010, 81, 113706.	0.6	35
77	Electronic Structures of Formic Acid (HCOOH) and Formate (HCOO^{â€“}) in Aqueous Solutions. Journal of Physical Chemistry Letters, 2012, 3, 1754-1759.	2.1	35
78	Reaction Kinetics of NO2 with Resorcinol and 2,7-Naphthalenediol in the Aqueous Phase at Different pH. Journal of Physical Chemistry A, 2002, 106, 12045-12050.	1.1	33
79	Technical note: Monte Carlo genetic algorithm (MCGA) for model analysis of multiphase chemical kinetics to determine transport and reaction rate coefficients using multiple experimental data sets. Atmospheric Chemistry and Physics, 2017, 17, 8021-8029.	1.9	33
80	Acetone adsorption on ice investigated by X-ray spectroscopy and density functional theory. Physical Chemistry Chemical Physics, 2011, 13, 19988.	1.3	32
81	Direct observation of water uptake and release in individual submicrometer sized ammonium sulfate and ammonium sulfate/adipic acid particles using X-ray microspectroscopy. Journal of Aerosol Science, 2011, 42, 38-51.	1.8	32
82	Photoinduced reduction of divalent mercury in ice by organic matter. Chemosphere, 2011, 82, 199-203.	4.2	32
83	Uptake of Ozone to Deliquesced KI and Mixed KI/NaCl Aerosol Particles. Journal of Physical Chemistry A, 2010, 114, 7085-7093.	1.1	31
84	Exploring the Environmental Photochemistry on the TiO₂(110) Surface in Situ by Near Ambient Pressure X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 7076-7085.	1.5	31
85	Use of positron-emitting nitrogen-13 for studies of the selective reduction of nitric oxide by ammonia over vanadia/titania catalyst at very low reactant concentrations. The Journal of Physical Chemistry, 1993, 97, 12325-12330.	2.9	30
86	Adsorption of NO2 on carbon aerosol particles in the low ppb range. Atmospheric Environment, 1999, 33, 2815-2822.	1.9	30
87	Aircraft soot from conventional fuels and biofuels during ground idleÂand climb-out conditions: Electron microscopy and X-ray micro-spectroscopy. Environmental Pollution, 2019, 247, 658-667.	3.7	30
88	Evaluated kinetic and photochemical data for atmospheric chemistry: volume VIII â€“ gas-phase reactions of organic species with four, or more, carbon atoms (â€‰â‰¥â€‰C₄). Atmospheric Chemistry and Physics, 2021, 21, 4797-4808.	1.9	30
89	The effect of viscosity and diffusion on the HO₂ uptake by sucrose and secondary organic aerosol particles. Atmospheric Chemistry and Physics, 2016, 16, 13035-13047.	1.9	29
90	A surface-promoted redox reaction occurs spontaneously on solvating inorganic aerosol surfaces. Science, 2021, 374, 747-752.	6.0	28

#	Article	IF	Citations
91	Interaction of gaseous elemental mercury with snow surfaces: laboratory investigation. Environmental Research Letters, 2008, 3, 045009.	2.2	26
92	Chemical Composition and Properties of the Liquidâ€“Vapor Interface of Aqueous C1 to C4 Monofunctional Acid and Alcohol Solutions. Journal of Physical Chemistry A, 2016, 120, 9749-9758.	1.1	26
93	Uptake of gaseous formaldehyde by soil surfaces: a combination of adsorption/desorption equilibrium and chemical reactions. Atmospheric Chemistry and Physics, 2016, 16, 10299-10311.	1.9	26
94	Coexistence of Physisorbed and Solvated HCl at Warm Ice Surfaces. Journal of Physical Chemistry Letters, 2017, 8, 4757-4762.	2.1	26
95	Diffusion of NO_x and HONO in snow: A laboratory study. Journal of Geophysical Research, 2010, 115, .	3.3	25
96	Liquidâ€“Vapor Interface of Formic Acid Solutions in Salt Water: A Comparison of Macroscopic Surface Tension and Microscopic in Situ X-ray Photoelectron Spectroscopy Measurements. Journal of Physical Chemistry C, 2014, 118, 29350-29360.	1.5	24
97	Competition between Organics and Bromide at the Aqueous Solutionâ€“Air Interface as Seen from Ozone Uptake Kinetics and X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry A, 2015, 119, 4600-4608.	1.1	24
98	Interaction of Nitrous Acid with Polycrystalline Ice: Adsorption on the Surface and Diffusion into the Bulk. Journal of Physical Chemistry C, 2010, 114, 2208-2219.	1.5	22
99	Light-induced protein nitration and degradation with HONOÂemission. Atmospheric Chemistry and Physics, 2017, 17, 11819-11833.	1.9	22
100	Surface Propensity of Aqueous Atmospheric Bromine at the Liquidâ€“Gas Interface. Journal of Physical Chemistry Letters, 2020, 11, 3422-3429.	2.1	22
101	Amplification of light within aerosol particles accelerates in-particle photochemistry. Science, 2022, 376, 293-296.	6.0	21
102	Co-adsorption of acetic acid and nitrous acid on ice. Physical Chemistry Chemical Physics, 2010, 12, 7194.	1.3	20
103	Photochemical degradation of iron(III) citrate/citric acid aerosol quantified with the combination of three complementary experimental techniques and a kinetic process model. Atmospheric Chemistry and Physics, 2021, 21, 315-338.	1.9	20
104	Characterization of ultrafine aerosol particles in Mt. Etna emissions. Bulletin of Volcanology, 1990, 52, 577-583.	1.1	19
105	An atmospheric pressure chemical ionization mass spectrometer (APCI-MS) combined with a chromatographic technique to measure the adsorption enthalpy of acetone on ice. International Journal of Mass Spectrometry, 2003, 226, 279-290.	0.7	19
106	Photoemission from clean and oxygen-covered ultrafine nickel particles. Physical Review B, 1991, 44, 8284-8287.	1.1	18
107	Photoelectric charging of ultrafine volcanic aerosols: Detection of Cu(I) as a tracer of chlorides in magmatic gases. Journal of Geophysical Research, 1993, 98, 551-556.	3.3	18
108	Emerging Areas in Atmospheric Photochemistry. Topics in Current Chemistry, 2012, 339, 1-53.	4.0	18

#	Article	IF	Citations
109	The adsorption of peroxynitric acid on ice between 230 K and 253 K. Atmospheric Chemistry and Physics, 2012, 12, 1833-1845.	1.9	18
110	Standard States and Thermochemical Kinetics in Heterogeneous Atmospheric Chemistry. Journal of Physical Chemistry A, 2012, 116, 6312-6316.	1.1	18
111	Reversibly Physisorbed and Chemisorbed Water on Carboxylic Salt Surfaces Under Atmospheric Conditions. Journal of Physical Chemistry C, 2020, 124, 5263-5269.	1.5	18
112	Tracing uptake and assimilation of NO2in spruce needles with13N. Journal of Experimental Botany, 1995, 46, 1685-1691.	2.4	17
113	Aging induced changes on NEXAFS fingerprints in individual combustion particles. Atmospheric Chemistry and Physics, 2011, 11, 11777-11791.	1.9	17
114	Ozoneâ€Induced Band Bending on Metalâ€Oxide Surfaces Studied under Environmental Conditions. ChemPhysChem, 2013, 14, 2419-2425.	1.0	17
115	Experimental Evidence for the Formation of Solvation Shells by Soluble Species at a Nonuniform Airâ€“Ice Interface. ACS Earth and Space Chemistry, 2017, 1, 572-579.	1.2	17
116	Bromine Enrichment in the Near-Surface Region of Br-Doped NaCl Single Crystals Diagnosed by Rutherford Backscattering Spectrometry. Journal of Physical Chemistry A, 2007, 111, 4312-4321.	1.1	16
117	A continuous flow diffusion chamber study of sea salt particles acting as cloud nuclei: deliquescence and ice nucleation. Tellus, Series B: Chemical and Physical Meteorology, 2022, 70, 1463806.	0.8	16
118	X-Ray Excited Electron Spectroscopy to Study Gasâ€“Liquid Interfaces of Atmospheric Relevance. , 2018, , 135-166.		16
119	Aging induced changes in ice nucleation activity of combustion aerosol as determined by near edge X-ray absorption fine structure (NEXAFS) spectroscopy. Environmental Sciences: Processes and Impacts, 2020, 22, 895-907.	1.7	16
120	Surface Segregation Acts as Surface Engineering for the Oxygen Evolution Reaction on Perovskite Oxides in Alkaline Media. Chemistry of Materials, 2020, 32, 5256-5263.	3.2	16
121	Uptake and assimilation of atmospheric NO2 â€” N by spruce needles (Picea abies): A field study. Water, Air, and Soil Pollution, 1995, 85, 1497-1502.	1.1	15
122	Ion Spatial Distributions at the Airâ€“ and Vacuumâ€“Aqueous K₂CO₃ Interfaces. Journal of Physical Chemistry C, 2015, 119, 4976-4982.	1.5	15
123	Visualizing reaction and diffusion in xanthan gum aerosol particles exposed to ozone. Physical Chemistry Chemical Physics, 2019, 21, 20613-20627.	1.3	15
124	Aerosol dynamics and lightâ€scattering properties of a volcanic plume. Journal of Geophysical Research, 1993, 98, 19705-19711.	3.3	14
125	The impact of multiphase reactions of NO₂ with aromatics: a modelling approach. Atmospheric Chemistry and Physics, 2002, 2, 215-226.	1.9	14
126	Diffusion of volatile organics through porous snow: impact of surface adsorption and grain boundaries. Atmospheric Chemistry and Physics, 2013, 13, 6727-6739.	1.9	14

#	Article	IF	Citations
127	Pre-melting and the adsorption of formic acid at the airâ€“ice interface at 253 K as seen by NEXAFS and XPS. Physical Chemistry Chemical Physics, 2018, 20, 24408-24417.	1.3	14
128	Study of HI, HBr and NO2 adsorption on graphite and silver aerosol particles using short-lived isotopes. Journal of Aerosol Science, 1995, 26, 61-70.	1.8	13
129	Phase Behavior of Hydrocarbon-like Primary Organic Aerosol and Secondary Organic Aerosol Proxies Based on Their Elemental Oxygen-to-Carbon Ratio. Environmental Science & Technology, 2021, 55, 12202-12214.	4.6	13
130	Humidity driven nanoscale chemical separation in complex organic matter. Environmental Chemistry, 2011, 8, 450.	0.7	13
131	Halogen activation and radical cycling initiated by imidazole-2-carboxaldehyde photochemistry. Atmospheric Chemistry and Physics, 2019, 19, 10817-10828.	1.9	12
132	Physicochemical uptake and release of volatile organic compounds by soil in coated-wall flow tube experiments with ambient air. Atmospheric Chemistry and Physics, 2019, 19, 2209-2232.	1.9	12
133	Direct evidence of cobalt oxyhydroxide formation on a La_{0.2}Sr_{0.8}CoO₃ perovskite water splitting catalyst. Journal of Materials Chemistry A, 2022, 10, 2434-2444.	5.2	12
134	Phase Behavior of Internal Mixtures of Hydrocarbon-like Primary Organic Aerosol and Secondary Aerosol Based on Their Differences in Oxygen-to-Carbon Ratios. Environmental Science & Technology, 2022, 56, 3960-3973.	4.6	12
135	Uptake of NO2 to Deliquesced Dihydroxybenzoate Aerosol Particles. Journal of Physical Chemistry A, 2009, 113, 10979-10987.	1.1	11
136	Disordered Adsorbed Water Layers on TiO₂ Nanoparticles under Subsaturated Humidity Conditions at 235 K. Journal of Physical Chemistry Letters, 2019, 10, 7433-7438.	2.1	11
137	Opinion: The germicidal effect of ambient air (open-air factor) revisited. Atmospheric Chemistry and Physics, 2021, 21, 13011-13018.	1.9	11
138	Impact of Tetrabutylammonium on the Oxidation of Bromide by Ozone. ACS Earth and Space Chemistry, 2021, 5, 3008-3021.	1.2	11
139	Technical note: Adsorption and desorption equilibria from statistical thermodynamics and rates from transition state theory. Atmospheric Chemistry and Physics, 2021, 21, 15725-15753.	1.9	11
140	Thermochromatographic Investigation of 13N Labelled Nitrous Gases and of Fission Noble Gases at Low Temperatures. Radiochimica Acta, 1995, 68, 41-50.	0.5	10
141	Microphysics of the aqueous bulk counters the water activity driven rate acceleration of bromide oxidation by ozone from 289â€“245 K. Environmental Sciences: Processes and Impacts, 2019, 21, 63-73.	1.7	10
142	The opposing effect of butanol and butyric acid on the abundance of bromide and iodide at the aqueous solutionâ€“air interface. Physical Chemistry Chemical Physics, 2019, 21, 8418-8427.	1.3	10
143	Monitoring volcanic activity by characterization of ultrafine aerosol emissions. Journal of Aerosol Science, 1990, 21, S275-S278.	1.8	9
144	Temporal evolution of surface and grain boundary area in artificial ice beads and implications for snow chemistry. Journal of Glaciology, 2012, 58, 815-817.	1.1	9

#	Article	IF	Citations
145	Corrigendum to "Evaluated kinetic and photochemical data for atmospheric chemistry: Volume V â€“ heterogeneous reactions on solid substrates" published in Atmos. Chem. Phys. 10, 9059â€“9223, 2010. Atmospheric Chemistry and Physics, 2013, 13, 7359-7359.	1.9	9
146	Technical note: Influence of surface roughness and local turbulence on coated-wall flow tube experiments for gas uptake andÂkineticÂstudies. Atmospheric Chemistry and Physics, 2018, 18, 2669-2686.	1.9	9
147	Influence of humidity and iron(<scp>iii</scp>) on photodegradation of atmospheric secondary organic aerosol particles. Physical Chemistry Chemical Physics, 2018, 20, 30021-30031.	1.3	9
148	Ordered Hydrogen Bonding Structure of Water Molecules Adsorbed on Silver Iodide Particles under Subsaturated Conditions. Journal of Physical Chemistry C, 2021, 125, 11628-11635.	1.5	9
149	Continuous monitoring of ultrafine aerosol emissions at Mt. Etna. Geophysical Research Letters, 1992, 19, 1387-1390.	1.5	8
150	Interfacial supercooling and the precipitation of hydrohalite in frozen NaCl solutions as seen by X-ray absorption spectroscopy. Cryosphere, 2021, 15, 2001-2020.	1.5	8
151	Efficient bulk mass accommodation and dissociation of N₂O₅ in neutral aqueous aerosol. Atmospheric Chemistry and Physics, 2017, 17, 6493-6502.	1.9	7
152	Liquidâ€“Gas Interface of Iron Aqueous Solutions and Fenton Reagents. Journal of Physical Chemistry Letters, 2022, 13, 2994-3001.	2.1	7
153	A novel synthesis of the N-13 labeled atmospheric trace gas peroxynitric acid. Radiochimica Acta, 2011, 99, 285-292.	0.5	6
154	In situ detection of monovalent copper in aerosols by photoemission. Fresenius' Journal of Analytical Chemistry, 1992, 343, 491-496.	1.5	5
155	NO2 -induced nitrate reductase activity in needles of Norway spruce (Picea abies) under laboratory and field conditions. Physiologia Plantarum, 1998, 102, 596-604.	2.6	5
156	Formation of hono from the reaction of NO2 with diesel soot. Journal of Aerosol Science, 2000, 31, 1035.	1.8	5
157	Title is missing!. Journal of Radioanalytical and Nuclear Chemistry, 2002, 254, 201-208.	0.7	5
158	Chemical investigations of isotope separation on line target units for carbon and nitrogen beams. Review of Scientific Instruments, 2006, 77, 03A708.	0.6	5
159	3-D imaging and quantification of graupel porosity by synchrotron-based micro-tomography. Atmospheric Measurement Techniques, 2011, 4, 2225-2234.	1.2	5
160	Carbon Dioxide Diffusivity in Single, Levitated Organic Aerosol Particles. Journal of Physical Chemistry Letters, 2019, 10, 4484-4489.	2.1	5
161	Snow heterogeneous reactivity of bromide with ozone lost during snow metamorphism. Atmospheric Chemistry and Physics, 2020, 20, 13443-13454.	1.9	5
162	MIMiX: a Multipurpose In situ Microreactor system for X-ray microspectroscopy to mimic atmospheric aerosol processing. Atmospheric Measurement Techniques, 2020, 13, 3717-3729.	1.2	5

#	Article	IF	Citations
163	Hole Dynamics in Photoexcited Hematite Studied with Femtosecond Oxygen K-edge X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 4207-4214.	2.1	5
164	Chemical reactions on aerosol particle surfaces: Concept and methods. Journal of Aerosol Science, 1996, 27, S651-S652.	1.8	4
165	Correction to â€œThe partitioning of acetone to different types of ice and snow between 198 and 223 Kâ€• Geophysical Research Letters, 2004, 31, .	1.5	3
166	Production and use of 13N labeled N2O5 to determine gasâ€“aerosol interaction kinetics. Radiochimica Acta, 2014, .	0.5	3
167	Continuous automated measurement of the soluble fraction of atmospheric aerosols. Journal of Aerosol Science, 1997, 28, S155-S156.	1.8	2
168	Nitrous acid formation on soot particles: Surface chemistry and the effect of humidity. Journal of Aerosol Science, 1998, 29, S1031-S1032.	1.8	2
169	Ice nucleation imaged with X-ray spectro-microscopy. Environmental Science Atmospheres, 2022, 2, 335-351.	0.9	2
170	Reply to â€œComment on â€˜Liquidâ€“Gas Interface of Iron Aqueous Solutions and Fenton Reagentsâ€™â€• Journal of Physical Chemistry Letters, 2022, 13, 6681-6682.	2.1	2
171	12 O 01 Interactions of single HI, HBr, and NO2 molecules with aerosol particles. Journal of Aerosol Science, 1993, 24, S69-S70.	1.8	1
172	Interaction of radioactively labelled NO2 with diesel and iron oxide aerosols. Journal of Aerosol Science, 1996, 27, S669-S670.	1.8	1
173	IUPAC in the (real) clouds. Chemistry International, 2018, 40, 10-13.	0.3	1
174	Adsorption and reaction of NO2 with carbon aerosol particles at different humidities and ozone concentrations. Journal of Aerosol Science, 1997, 28, S339-S340.	1.8	0
175	The effect of sampling conditions on the reactivity of diesel soot particles towards NO2. Journal of Aerosol Science, 1999, 30, S873-S874.	1.8	0
176	Coupling a Knudsen reactor with the short lived radioactive tracer 13N for atmospheric chemistry studies. Review of Scientific Instruments, 2013, 84, 035101.	0.6	0
177	Imaging Molecular Reaction and Diffusion in Organic Aerosol Particles. Microscopy and Microanalysis, 2018, 24, 496-497.	0.2	0