Vicki H Grassian

List of Publications by Year
in descending order

166 papers	15,766 citations	13068 68 h-index	18075 120 g-index
168 all docs	168 docs citations	168 times ranked	17217 citing authors

#	Article	IF	Citations
1	Reactions on Mineral Dust. Chemical Reviews, 2003, 103, 4883-4940.	23.0	820
2	Aggregation and Dissolution of 4 nm ZnO Nanoparticles in Aqueous Environments: Influence of pH, Ionic Strength, Size, and Adsorption of Humic Acid. Langmuir, 2011, 27, 6059-6068.	1.6	810
3	Titanium Dioxide Photocatalysis in Atmospheric Chemistry. Chemical Reviews, 2012, 112, 5919-5948.	23.0	710
4	Bringing the ocean into the laboratory to probe the chemical complexity of sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7550-7555.	3.3	439
5	Inhalation Exposure Study of Titanium Dioxide Nanoparticles with a Primary Particle Size of 2 to 5 nm. Environmental Health Perspectives, 2007, 115, 397-402.	2.8	376
6	Sea spray aerosol as a unique source of ice nucleating particles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5797-5803.	3.3	323
7	Dissolution of ZnO Nanoparticles at Circumneutral pH: A Study of Size Effects in the Presence and Absence of Citric Acid. Langmuir, 2012, 28, 396-403.	1.6	321
8	Adsorption of sulfur dioxide on hematite and goethite particle surfaces. Physical Chemistry Chemical Physics, 2007, 9, 5542.	1.3	303
9	Interactions of Water with Mineral Dust Aerosol: Water Adsorption, Hygroscopicity, Cloud Condensation, and Ice Nucleation. Chemical Reviews, 2016, 116, 4205-4259.	23.0	296
10	Chemistry and Related Properties of Freshly Emitted Sea Spray Aerosol. Chemical Reviews, 2015, 115, 4383-4399.	23.0	289
11	When Size <i>Really</i> Matters: Size-Dependent Properties and Surface Chemistry of Metal and Metal Oxide Nanoparticles in Gas and Liquid Phase Environments. Journal of Physical Chemistry C, 2008, 112, 18303-18313.	1.5	257
12	Silver nanoparticles in simulated biological media: a study of aggregation, sedimentation, and dissolution. Journal of Nanoparticle Research, 2011, 13, 233-244.	0.8	253
13	Carbon dioxide adsorption on oxide nanoparticle surfaces. Chemical Engineering Journal, 2011, 170, 471-481.	6.6	247
14	Citric Acid Adsorption on TiO₂ Nanoparticles in Aqueous Suspensions at Acidic and Circumneutral pH: Surface Coverage, Surface Speciation, and Its Impact on Nanoparticleâ˘Nanoparticle Interactions. Journal of the American Chemical Society, 2010, 132, 14986-14994.	6.6	246
15	XPS study of nitrogen dioxide adsorption on metal oxide particle surfaces under different environmental conditions. Physical Chemistry Chemical Physics, 2009, 11, 8295.	1.3	241
16	Oxide surfaces as environmental interfaces. Surface Science Reports, 2003, 52, 63-161.	3.8	231
17	Adsorption of Organic Acids on TiO₂ Nanoparticles: Effects of pH, Nanoparticle Size, and Nanoparticle Aggregation. Langmuir, 2008, 24, 6659-6667.	1.6	230
18	Chemistry and Photochemistry of Mineral Dust Aerosol. Annual Review of Physical Chemistry, 2008, 59, 27-51.	4.8	222

#	Article	IF	Citations
19	ATR-FTIR spectroscopy as a tool to probe surface adsorption on nanoparticles at the liquidâ€"solid interface in environmentally and biologically relevant media. Analyst, The, 2014, 139, 870-881.	1.7	212
20	Toxicity assessment of zinc oxide nanoparticles using sub-acute and sub-chronic murine inhalation models. Particle and Fibre Toxicology, 2014, 11, 15.	2.8	194
21	Agglomeration, isolation and dissolution of commercially manufactured silver nanoparticles in aqueous environments. Journal of Nanoparticle Research, 2010, 12, 1945-1958.	0.8	192
22	Role(s) of adsorbed water in the surface chemistry of environmental interfaces. Chemical Communications, 2013, 49, 3071.	2.2	192
23	Environmental Implications of Nanoparticle Aging in the Processing and Fate of Copper-Based Nanomaterials. Environmental Science & Technology, 2012, 46, 7001-7010.	4.6	183
24	Nanosilver induces minimal lung toxicity or inflammation in a subacute murine inhalation model. Particle and Fibre Toxicology, 2011, 8, 5.	2.8	179
25	Size-Dependent Changes in Sea Spray Aerosol Composition and Properties with Different Seawater Conditions. Environmental Science & Technology, 2013, 47, 5603-5612.	4.6	175
26	Microbial Control of Sea Spray Aerosol Composition: A Tale of Two Blooms. ACS Central Science, 2015, 1, 124-131.	5.3	172
27	FTIR Spectroscopy Combined with Isotope Labeling and Quantum Chemical Calculations to Investigate Adsorbed Bicarbonate Formation Following Reaction of Carbon Dioxide with Surface Hydroxyl Groups on Fe2O3and Al2O3. Journal of Physical Chemistry B, 2006, 110, 12005-12016.	1.2	170
28	Reactions of sulfur dioxide on calcium carbonate single crystal and particle surfaces at the adsorbed water carbonate interface. Physical Chemistry Chemical Physics, 2007, 9, 3011.	1.3	156
29	Analysis of Atmospheric Aerosols. Annual Review of Analytical Chemistry, 2008, 1, 485-514.	2.8	145
30	Analysis of Organic Anionic Surfactants in Fine and Coarse Fractions of Freshly Emitted Sea Spray Aerosol. Environmental Science & Technology, 2016, 50, 2477-2486.	4.6	143
31	A template-free, thermal decomposition method to synthesize mesoporous MgO with a nanocrystalline framework and its application in carbon dioxide adsorption. Journal of Materials Chemistry, 2010, 20, 8705.	6.7	142
32	Characterization and acidâ€mobilization study of ironâ€containing mineral dust source materials. Journal of Geophysical Research, 2008, 113, .	3.3	139
33	Physicochemical Properties of Nitrate Aerosols:â€‰ Implications for the Atmosphere. Journal of Physical Chemistry A, 2006, 110, 11785-11799.	1.1	137
34	Carbonic Acid:â€‰ An Important Intermediate in the Surface Chemistry of Calcium Carbonate. Journal of the American Chemical Society, 2004, 126, 8068-8069.	6.6	126
35	An investigation of water uptake on clays minerals using ATRâ€FTIR spectroscopy coupled with quartz crystal microbalance measurements. Journal of Geophysical Research, 2007, 112, .	3.3	126
36	Surface Chemistry and Dissolution of Î±-FeOOH Nanorods and Microrods: Environmental Implications of Size-Dependent Interactions with Oxalate. Journal of Physical Chemistry C, 2009, 113, 2175-2186.	1.5	120

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37	Heterogeneous uptake and reaction of nitrogen oxides and volatile organic compounds on the surface of atmospheric particles including oxides, carbonates, soot and mineral dust: Implications for the chemical balance of the troposphere. International Reviews in Physical Chemistry, 2001, 20, 467-548.	0.9	119
38	FTIR spectroscopy combined with quantum chemical calculations to investigate adsorbed nitrate on aluminium oxide surfaces in the presence and absence of co-adsorbed water. Physical Chemistry Chemical Physics, 2007, 9, 4970.	1.3	119
39	Sea spray aerosol chemical composition: elemental and molecular mimics for laboratory studies of heterogeneous and multiphase reactions. Chemical Society Reviews, 2018, 47, 2374-2400.	18.7	117
40	Airborne Monitoring to Distinguish Engineered Nanomaterials from Incidental Particles for Environmental Health and Safety. Journal of Occupational and Environmental Hygiene, 2008, 6, 73-81.	0.4	112
41	The devil is in the details (or the surface): impact of surface structure and surface energetics on understanding the behavior of nanomaterials in the environment. Journal of Environmental Monitoring, 2011, 13, 1135.	2.1	111
42	Molecular Diversity of Sea Spray Aerosol Particles: Impact of Ocean Biology on Particle Composition and Hygroscopicity. CheM, 2017, 2, 655-667.	5.8	111
43	Size Matters in the Water Uptake and Hygroscopic Growth of Atmospherically Relevant Multicomponent Aerosol Particles. Journal of Physical Chemistry A, 2015, 119, 4489-4497.	1.1	110
44	Atmospheric chemistry of bioaerosols: heterogeneous and multiphase reactions with atmospheric oxidants and other trace gases. Chemical Science, 2016, 7, 6604-6616.	3.7	109
45	Inflammatory response of mice to manufactured titanium dioxide nanoparticles: Comparison of size effects through different exposure routes. Nanotoxicology, 2007, 1, 211-226.	1.6	105
46	Sulfur dioxide adsorption and photooxidation on isotopically-labeled titanium dioxide nanoparticle surfaces: roles of surface hydroxyl groups and adsorbed water in the formation and stability of adsorbed sulfite and sulfate. Physical Chemistry Chemical Physics, 2012, 14, 6957.	1.3	104
47	Raman microspectroscopy and vibrational sum frequency generation spectroscopy as probes of the bulk and surface compositions of size-resolved sea spray aerosol particles. Physical Chemistry Chemical Physics, 2013, 15, 6206.	1.3	103
48	Interpreting nanoscale size-effects in aggregated Fe-oxide suspensions: Reaction of Fe(II) with Goethite. Geochimica Et Cosmochimica Acta, 2008, 72, 1365-1380.	1.6	102
49	Iron oxide nanoparticles induce Pseudomonas aeruginosa growth, induce biofilm formation, and inhibit antimicrobial peptide function. Environmental Science: Nano, 2014, 1, 123.	2.2	96
50	Heterogeneous Uptake of Ozone on Reactive Components of Mineral Dust Aerosol:Â An Environmental Aerosol Reaction Chamber Study. Journal of Physical Chemistry A, 2006, 110, 13799-13807.	1.1	94
51	Inflammatory response of mice following inhalation exposure to iron and copper nanoparticles. Nanotoxicology, 2008, 2, 189-204.	1.6	91
52	Sulfur Dioxide Adsorption on TiO₂ Nanoparticles: Influence of Particle Size, Coadsorbates, Sample Pretreatment, and Light on Surface Speciation and Surface Coverage. Journal of Physical Chemistry C, 2011, 115, 492-500.	1.5	91
53	Enrichment of Saccharides and Divalent Cations in Sea Spray Aerosol During Two Phytoplankton Blooms. Environmental Science & Technology, 2016, 50, 11511-11520.	4.6	90
54	Surface Reactions of Carbon Dioxide at the Adsorbed Waterâ˜Iron Oxide Interface. Journal of Physical Chemistry B, 2005, 109, 12227-12230.	1.2	89

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55	Inside versus Outside: Ion Redistribution in Nitric Acid Reacted Sea Spray Aerosol Particles as Determined by Single Particle Analysis. Journal of the American Chemical Society, 2013, 135, 14528-14531.	6.6	89
56	Impact of marine biogeochemistry on the chemical mixing state and cloud forming ability of nascent sea spray aerosol. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8553-8565.	1.2	84
57	Titanium Dioxide Nanoparticle Surface Reactivity with Atmospheric Gases, CO₂, SO₂, and NO₂: Roles of Surface Hydroxyl Groups and Adsorbed Water in the Formation and Stability of Adsorbed Products. Journal of Physical Chemistry C, 2014, 118, 23011-23021.	1.5	84
58	Sea Spray Aerosol: The Chemical Link between the Oceans, Atmosphere, and Climate. Accounts of Chemical Research, 2017, 50, 599-604.	7.6	84
59	Dynamics of Water Adsorption onto a Calcite Surface as a Function of Relative Humidity. Journal of Physical Chemistry C, 2008, 112, 2109-2115.	1.5	83
60	Three-dimensional simulations of inorganic aerosol distributions in east Asia during spring 2001. Journal of Geophysical Research, 2004, 109, .	3.3	80
61	N2O5 hydrolysis on the components of mineral dust and sea salt aerosol: Comparison study in an environmental aerosol reaction chamber. Atmospheric Environment, 2006, 40, 7401-7408.	1.9	77
62	Effects of copper nanoparticle exposure on host defense in a murine pulmonary infection model. Particle and Fibre Toxicology, 2011, 8, 29.	2.8	76
63	Surface Adsorption of Suwannee River Humic Acid on TiO₂ Nanoparticles: A Study of pH and Particle Size. Langmuir, 2018, 34, 3136-3145.	1.6	76
64	Surface Photochemistry of Adsorbed Nitrate: The Role of Adsorbed Water in the Formation of Reduced Nitrogen Species on Î±-Fe₂O₃ Particle Surfaces. Journal of Physical Chemistry A, 2014, 118, 158-166.	1.1	75
65	Reactions on Atmospheric Dust Particles: Surface Photochemistry and Size-Dependent Nanoscale Redox Chemistry. Journal of Physical Chemistry Letters, 2010, 1, 1729-1737.	2.1	74
66	Sea Spray Aerosol Structure and Composition Using Cryogenic Transmission Electron Microscopy. ACS Central Science, 2016, 2, 40-47.	5.3	74
67	Photochemistry of Adsorbed Nitrate on Aluminum Oxide Particle Surfaces. Journal of Physical Chemistry A, 2009, 113, 7818-7825.	1.1	73
68	Acidity across the interface from the ocean surface to sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	73
69	Selectivity Across the Interface: A Test of Surface Activity in the Composition of Organic-Enriched Aerosols from Bubble Bursting. Journal of Physical Chemistry Letters, 2016, 7, 1692-1696.	2.1	70
70	Indoor Surface Chemistry: Developing a Molecular Picture of Reactions on Indoor Interfaces. CheM, 2020, 6, 3203-3218.	5.8	70
71	Attenuated Total Reflection Fourier Transform Infrared Spectroscopy to Investigate Water Uptake and Phase Transitions in Atmospherically Relevant Particles. Applied Spectroscopy, 2007, 61, 283-292.	1.2	69
72	Surface Reactions of Carbon Dioxide at the Adsorbed Waterâˆ'Oxide Interface. Journal of Physical Chemistry C, 2007, 111, 14870-14880.	1.5	69

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73	Sulfur Dioxide Adsorption on ZnO Nanoparticles and Nanorods. Journal of Physical Chemistry C, 2011, 115, 10164-10172.	1.5	68
74	Biological and environmental media control oxide nanoparticle surface composition: the roles of biological components (proteins and amino acids), inorganic oxyanions and humic acid. Environmental Science: Nano, 2015, 2, 429-439.	2.2	68
75	Heterogeneous Reactivity of Nitric Acid with Nascent Sea Spray Aerosol: Large Differences Observed between and within Individual Particles. Journal of Physical Chemistry Letters, 2014, 5, 2493-2500.	2.1	66
76	Coupled infrared extinction and size distribution measurements for several clay components of mineral dust aerosol. Journal of Geophysical Research, 2008, 113, .	3.3	65
77	Photoreductive dissolution of Feâ€containing mineral dust particles in acidic media. Journal of Geophysical Research, 2010, 115, .	3.3	65
78	Linking hygroscopicity and the surface microstructure of model inorganic salts, simple and complex carbohydrates, and authentic sea spray aerosol particles. Physical Chemistry Chemical Physics, 2017, 19, 21101-21111.	1.3	65
79	Water adsorption and cloud condensation nuclei activity of calcite and calcite coated with model humic and fulvic acids. Atmospheric Environment, 2008, 42, 5672-5684.	1.9	64
80	Histidine Adsorption on TiO₂ Nanoparticles: An Integrated Spectroscopic, Thermodynamic, and Molecular-Based Approach toward Understanding Nanoâ€“Bio Interactions. Langmuir, 2014, 30, 8751-8760.	1.6	64
81	Bovine Serum Albumin Adsorption on TiO₂ Nanoparticle Surfaces: Effects of pH and Coadsorption of Phosphate on Proteinâ€“Surface Interactions and Protein Structure. Journal of Physical Chemistry C, 2017, 121, 21763-21771.	1.5	63
82	Advancing Model Systems for Fundamental Laboratory Studies of Sea Spray Aerosol Using the Microbial Loop. Journal of Physical Chemistry A, 2015, 119, 8860-8870.	1.1	62
83	Heterogeneous Photochemistry of Trace Atmospheric Gases with Components of Mineral Dust Aerosol. Journal of Physical Chemistry A, 2011, 115, 490-499.	1.1	61
84	Aerosol chemistry and climate: Laboratory studies of the carbonate component of mineral dust and its reaction products. Geophysical Research Letters, 2006, 33, .	1.5	60
85	pH-dependent adsorption of Î±-amino acids, lysine, glutamic acid, serine and glycine, on TiO2 nanoparticle surfaces. Journal of Colloid and Interface Science, 2019, 554, 362-375.	5.0	59
86	Transition Metal Associations with Primary Biological Particles in Sea Spray Aerosol Generated in a Wave Channel. Environmental Science & Technology, 2014, 48, 1324-1333.	4.6	58
87	Role of Atmospheric CO₂ and H₂O Adsorption on ZnO and CuO Nanoparticle Aging: Formation of New Surface Phases and the Impact on Nanoparticle Dissolution. Journal of Physical Chemistry C, 2016, 120, 19195-19203.	1.5	57
88	Surface Adsorption and Photochemistry of Gas-Phase Formic Acid on TiO₂ Nanoparticles: The Role of Adsorbed Water in Surface Coordination, Adsorption Kinetics, and Rate of Photoproduct Formation. Journal of Physical Chemistry C, 2014, 118, 25487-25495.	1.5	56
89	Humidity-dependent surface tension measurements of individual inorganic and organic submicrometre liquid particles. Chemical Science, 2015, 6, 3242-3247.	3.7	56
90	A Kinetic Study of Ozone Decomposition on Illuminated Oxide Surfaces. Journal of Physical Chemistry A, 2011, 115, 11979-11987.	1.1	55

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91	NanoEHS â€“ defining fundamental science needs: no easy feat when the simple itself is complex. Environmental Science: Nano, 2016, 3, 15-27.	2.2	53
92	Heterogeneous Atmospheric Chemistry of Lead Oxide Particles with Nitrogen Dioxide Increases Lead Solubility: Environmental and Health Implications. Environmental Science & Technology, 2012, 46, 12806-12813.	4.6	50
93	Size-Resolved Sea Spray Aerosol Particles Studied by Vibrational Sum Frequency Generation. Journal of Physical Chemistry A, 2013, 117, 6589-6601.	1.1	50
94	Quantifying the Hygroscopic Growth of Individual Submicrometer Particles with Atomic Force Microscopy. Analytical Chemistry, 2016, 88, 3647-3654.	3.2	50
95	Generation of Internally Mixed Insoluble and Soluble Aerosol Particles to Investigate the Impact of Atmospheric Aging and Heterogeneous Processing on the CCN Activity of Mineral Dust Aerosol. Aerosol Science and Technology, 2007, 41, 914-924.	1.5	49
96	Adsorption of bovine serum albumin on silicon dioxide nanoparticles: Impact of <i>p</i>H on nanoparticleâ€“protein interactions. Biointerphases, 2017, 12, 02D404.	0.6	48
97	Reactive uptake of acetic acid on calcite and nitric acid reacted calcite aerosol in an environmental reaction chamber. Physical Chemistry Chemical Physics, 2008, 10, 142-152.	1.3	46
98	Nanoâ€“Bio Interactions of Porous and Nonporous Silica Nanoparticles of Varied Surface Chemistry: A Structural, Kinetic, and Thermodynamic Study of Protein Adsorption from RPMI Culture Medium. Langmuir, 2016, 32, 731-742.	1.6	45
99	A Newly Designed and Constructed Instrument for Coupled Infrared Extinction and Size Distribution Measurements of Aerosols. Aerosol Science and Technology, 2007, 41, 701-710.	1.5	43
100	Nanorod Dissolution Quenched in the Aggregated State. Langmuir, 2010, 26, 1524-1527.	1.6	43
101	Surface Chemistry of Î±-FeOOH Nanorods and Microrods with Gas-Phase Nitric Acid and Water Vapor: Insights into the Role of Particle Size, Surface Structure, and Surface Hydroxyl Groups in the Adsorption and Reactivity of Î±-FeOOH with Atmospheric Gases. Journal of Physical Chemistry C, 2012, 116, 12566-12577.	1.5	43
102	Heterogeneous Uptake and Adsorption of Gas-Phase Formic Acid on Oxide and Clay Particle Surfaces: The Roles of Surface Hydroxyl Groups and Adsorbed Water in Formic Acid Adsorption and the Impact of Formic Acid Adsorption on Water Uptake. Journal of Physical Chemistry A, 2013, 117, 11316-11327.	1.1	43
103	Heterogeneous Reactions of Acetic Acid with Oxide Surfaces: Effects of Mineralogy and Relative Humidity. Journal of Physical Chemistry A, 2016, 120, 5609-5616.	1.1	43
104	Formation of paratacamite nanomaterials via the conversion of aged and oxidized copper nanoparticles in hydrochloric acidic media. Journal of Materials Chemistry, 2011, 21, 3162.	6.7	42
105	Direct Surface Tension Measurements of Individual Sub-Micrometer Particles Using Atomic Force Microscopy. Journal of Physical Chemistry A, 2017, 121, 8296-8305.	1.1	42
106	Surface science of complex environmental interfaces: Oxide and carbonate surfaces in dynamic equilibrium with water vapor. Surface Science, 2008, 602, 2955-2962.	0.8	41
107	Laboratory study of the effect of oxalic acid on the cloud condensation nuclei activity of mineral dust aerosol. Atmospheric Environment, 2012, 46, 125-130.	1.9	41
108	Nanoparticle aerosol generation methods from bulk powders for inhalation exposure studies. Nanotoxicology, 2009, 3, 265-275.	1.6	39

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109	Calcite surface in humid environments. Surface Science, 2009, 603, L99-L104.	0.8	37
110	Infrared extinction spectroscopy and microâ€Raman spectroscopy of select components of mineral dust mixed with organic compounds. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6593-6606.	1.2	37
111	Ice nucleation by particles containing long-chain fatty acids of relevance to freezing by sea spray aerosols. Environmental Sciences: Processes and Impacts, 2018, 20, 1559-1569.	1.7	37
112	Let there be light: stability of palmitic acid monolayers at the air/salt water interface in the presence and absence of simulated solar light and a photosensitizer. Chemical Science, 2018, 9, 5716-5723.	3.7	37
113	Sea Spray Aerosol: Where Marine Biology Meets Atmospheric Chemistry. ACS Central Science, 2018, 4, 1617-1623.	5.3	36
114	Commercially manufactured engineered nanomaterials for environmental and health studies: Important insights provided by independent characterization. Environmental Toxicology and Chemistry, 2010, 29, 715-721.	2.2	35
115	Substrate-Deposited Sea Spray Aerosol Particles: Influence of Analytical Method, Substrate, and Storage Conditions on Particle Size, Phase, and Morphology. Environmental Science & Technology, 2015, 49, 13447-13453.	4.6	35
116	Nitrate Photochemistry on Laboratory Proxies of Mineral Dust Aerosol: Wavelength Dependence and Action Spectra. Journal of Physical Chemistry C, 2014, 118, 29117-29125.	1.5	34
117	Nanoparticle Dissolution from the Particle Perspective: Insights from Particle Sizing Measurements. Langmuir, 2010, 26, 12505-12508.	1.6	31
118	Proton-promoted dissolution of Î±-FeOOH nanorods and microrods: Size dependence, anion effects (carbonate and phosphate), aggregation and surface adsorption. Journal of Colloid and Interface Science, 2012, 385, 15-23.	5.0	31
119	Environmental aerosol chamber studies of extinction spectra of mineral dust aerosol components: Broadband IRâ€UV extinction spectra. Journal of Geophysical Research, 2007, 112, .	3.3	30
120	Competition between Displacement and Dissociation of a Strong Acid Compared to a Weak Acid Adsorbed on Silica Particle Surfaces: The Role of Adsorbed Water. Journal of Physical Chemistry A, 2016, 120, 4016-4024.	1.1	30
121	Organic Enrichment, Physical Phase State, and Surface Tension Depression of Nascent Coreâ€"Shell Sea Spray Aerosols during Two Phytoplankton Blooms. ACS Earth and Space Chemistry, 2020, 4, 650-660.	1.2	29
122	Detection of Active Microbial Enzymes in Nascent Sea Spray Aerosol: Implications for Atmospheric Chemistry and Climate. Environmental Science and Technology Letters, 2019, 6, 171-177.	3.9	28
123	Formation of Microcrystals, Micropuddles, and Other Spatial Inhomogenieties in Surface Reactions under Ambient Conditions:Â An Atomic Force Microscopy Study of Water and Nitric Acid Adsorption on MgO(100) and CaCO3(101Ì„4). Langmuir, 2005, 21, 8793-8801.	1.6	27
124	A comparative evaluation of water uptake on several mineral dust sources. Environmental Chemistry, 2010, 7, 162.	0.7	27
125	Murine pulmonary responses after sub-chronic exposure to aluminum oxide-based nanowhiskers. Particle and Fibre Toxicology, 2012, 9, 22.	2.8	25
126	Heterogeneous and multiphase formation pathways of gypsum in the atmosphere. Physical Chemistry Chemical Physics, 2013, 15, 19196.	1.3	25

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127	Lab on a tip: atomic force microscopy â€“ photothermal infrared spectroscopy of atmospherically relevant organic/inorganic aerosol particles in the nanometer to micrometer size range. Analyst, The, 2018, 143, 2765-2774.	1.7	25
128	Heterogeneous uptake of octamethylcyclotetrasiloxane (D4) and decamethylcyclopentasiloxane (D5) onto mineral dust aerosol under variable RH conditions. Atmospheric Environment, 2009, 43, 4060-4069.	1.9	24
129	Spatially Resolved Product Formation in the Reaction of Formic Acid with Calcium Carbonate (101Ì„4):Â The Role of Step Density and Adsorbed Water-Assisted Ion Mobility. Langmuir, 2007, 23, 7039-7045.	1.6	23
130	Heterogeneous Interactions between Gas-Phase Pyruvic Acid and Hydroxylated Silica Surfaces: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry A, 2019, 123, 983-991.	1.1	23
131	Heterogeneous Chemistry of Lipopolysaccharides with Gas-Phase Nitric Acid: Reactive Sites and Reaction Pathways. Journal of Physical Chemistry A, 2016, 120, 6444-6450.	1.1	22
132	Accurate quantification of tio₂nanoparticles collected on air filters using a microwave-assisted acid digestion method. Journal of Occupational and Environmental Hygiene, 2016, 13, 30-39.	0.4	22
133	Physicochemical properties of air discharge-generated manganese oxide nanoparticles: comparison to welding fumes. Environmental Science: Nano, 2018, 5, 696-707.	2.2	22
134	Insights into the behavior of nonanoic acid and its conjugate base at the air/water interface through a combined experimental and theoretical approach. Chemical Science, 2020, 11, 10647-10656.	3.7	21
135	Nitrate Photochemistry in NaY Zeolite: Product Formation and Product Stability under Different Environmental Conditions. Journal of Physical Chemistry A, 2013, 117, 2205-2212.	1.1	20
136	Displacement reactions between environmentally and biologically relevant ligands on TiO₂ nanoparticles: insights into the aging of nanoparticles in the environment. Environmental Science: Nano, 2019, 6, 489-504.	2.2	20
137	Enhanced heterogeneous uptake of sulfur dioxide on mineral particles through modification of iron speciation during simulated cloud processing. Atmospheric Chemistry and Physics, 2019, 19, 12569-12585.	1.9	18
138	Physicochemical Mixing State of Sea Spray Aerosols: Morphologies Exhibit Size Dependence. ACS Earth and Space Chemistry, 2020, 4, 1604-1611.	1.2	18
139	Impact of pH and NaCl and CaCl₂ Salts on the Speciation and Photochemistry of Pyruvic Acid in the Aqueous Phase. Journal of Physical Chemistry A, 2020, 124, 5071-5080.	1.1	18
140	Sulfate formation catalyzed by coal fly ash, mineral dust and iron(iii) oxide: variable influence of temperature and light. Environmental Sciences: Processes and Impacts, 2016, 18, 1484-1491.	1.7	17
141	Surface-Catalyzed Chlorine and Nitrogen Activation: Mechanisms for the Heterogeneous Formation of ClNO, NO, NO₂, HONO, and N₂O from HNO₃ and HCl on Aluminum Oxide Particle Surfaces. Journal of Physical Chemistry A, 2012, 116, 5180-5192.	1.1	16
142	Extinction spectra of mineral dust aerosol components in an environmental aerosol chamber: IR resonance studies. Atmospheric Environment, 2008, 42, 1752-1761.	1.9	15
143	Salting Up of Proteins at the Air/Water Interface. Langmuir, 2019, 35, 13815-13820.	1.6	15
144	Processing and Ageing in the Atmosphere. , 2014, , 75-92.		14

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145	Chemistry and Photochemistry of Pyruvic Acid Adsorbed on Oxide Surfaces. Journal of Physical Chemistry A, 2019, 123, 7661-7671.	1.1	12
146	Temperature-Dependent Phase Transitions of Aqueous Aerosol Droplet Systems in Microfluidic Traps. ACS Earth and Space Chemistry, 2020, 4, 1527-1539.	1.2	12
147	Ice Nucleating Activity and Residual Particle Morphology of Bulk Seawater and Sea Surface Microlayer. ACS Earth and Space Chemistry, 2021, 5, 1916-1928.	1.2	12
148	Size-Dependent Morphology, Composition, Phase State, and Water Uptake of Nascent Submicrometer Sea Spray Aerosols during a Phytoplankton Bloom. ACS Earth and Space Chemistry, 2022, 6, 116-130.	1.2	12
149	Impact of surface adsorbed biologically and environmentally relevant coatings on TiO₂ nanoparticle reactivity. Environmental Science: Nano, 2020, 7, 3783-3793.	2.2	11
150	The Sea Spray Chemistry and Particle Evolution study (SeaSCAPE): overview and experimental methods. Environmental Sciences: Processes and Impacts, 2022, 24, 290-315.	1.7	11
151	Optical properties of non-spherical desert dust particles in the terrestrial infrared â€“ An asymptotic approximation approach. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 178, 209-223.	1.1	10
152	Atmospheric Benzothiazoles in a Coastal Marine Environment. Environmental Science & Technology, 2021, 55, 15705-15714.	4.6	9
153	Temperature-Dependent Liquid Water Structure for Individual Micron-Sized, Supercooled Aqueous Droplets with Inclusions. Journal of Physical Chemistry A, 2021, 125, 10742-10749.	1.1	8
154	Toward a microscopic model of light absorbing dissolved organic compounds in aqueous environments: theoretical and experimental study. Physical Chemistry Chemical Physics, 2021, 23, 10487-10497.	1.3	7
155	Low-Temperature Water Uptake of Individual Marine and Biologically Relevant Atmospheric Particles Using Micro-Raman Spectroscopy. Journal of Physical Chemistry A, 2021, 125, 9691-9699.	1.1	7
156	Gasâ€“Liquid Interfaces in the Atmosphere. , 2018, , 271-313.		6
157	Cation-Driven Lipopolysaccharide Morphological Changes Impact Heterogeneous Reactions of Nitric Acid with Sea Spray Aerosol Particles. Journal of Physical Chemistry Letters, 2021, 12, 5023-5029.	2.1	6
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