

# Vicki Grassian

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/24891/publications.pdf>

Version: 2024-02-01

264  
papers

17,707  
citations

10979

71  
h-index

16636

123  
g-index

271  
all docs

271  
docs citations

271  
times ranked

17617  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Reactions on Mineral Dust. <i>Chemical Reviews</i> , 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. <i>Langmuir</i> , 2011, 27, 6059-6068.  | 1.6  | 810       |
| 3  | Titanium Dioxide Photocatalysis in Atmospheric Chemistry. <i>Chemical Reviews</i> , 2012, 112, 5919-5948.   | 23.0 | 710       |
| 4  | Bringing the ocean into the laboratory to probe the chemical complexity of sea spray aerosol. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 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. <i>Environmental Health Perspectives</i> , 2007, 115, 397-402.   | 2.8  | 376       |
| 6  | Spectroscopic Study of Nitric Acid and Water Adsorption on Oxide Particles: Enhanced Nitric Acid Uptake Kinetics in the Presence of Adsorbed Water. <i>Journal of Physical Chemistry A</i> , 2001, 105, 6443-6457.  | 1.1  | 332       |
| 7  | Sea spray aerosol as a unique source of ice nucleating particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5797-5803.  | 3.3  | 323       |
| 8  | Dissolution of ZnO Nanoparticles at Circumneutral pH: A Study of Size Effects in the Presence and Absence of Citric Acid. <i>Langmuir</i> , 2012, 28, 396-403.  | 1.6  | 321       |
| 9  | Interactions of Water with Mineral Dust Aerosol: Water Adsorption, Hygroscopicity, Cloud Condensation, and Ice Nucleation. <i>Chemical Reviews</i> , 2016, 116, 4205-4259.  | 23.0 | 296       |
| 10 | Chemistry and Related Properties of Freshly Emitted Sea Spray Aerosol. <i>Chemical Reviews</i> , 2015, 115, 4383-4399.  | 23.0 | 289       |
| 11 | Silver nanoparticles in simulated biological media: a study of aggregation, sedimentation, and dissolution. <i>Journal of Nanoparticle Research</i> , 2011, 13, 233-244.  | 0.8  | 253       |
| 12 | Citric Acid Adsorption on TiO <sub>2</sub> Nanoparticles in Aqueous Suspensions at Acidic and Circumneutral pH: Surface Coverage, Surface Speciation, and Its Impact on Nanoparticle-Nanoparticle Interactions. <i>Journal of the American Chemical Society</i> , 2010, 132, 14986-14994. | 6.6  | 246       |
| 13 | XPS study of nitrogen dioxide adsorption on metal oxide particle surfaces under different environmental conditions. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8295.  | 1.3  | 241       |
| 14 | Adsorption of Organic Acids on TiO <sub>2</sub> Nanoparticles: Effects of pH, Nanoparticle Size, and Nanoparticle Aggregation. <i>Langmuir</i> , 2008, 24, 6659-6667.   | 1.6  | 230       |
| 15 | Transmission FT-IR and Knudsen Cell Study of the Heterogeneous Reactivity of Gaseous Nitrogen Dioxide on Mineral Oxide Particles. <i>Journal of Physical Chemistry A</i> , 1999, 103, 6184-6190.  | 1.1  | 228       |
| 16 | Water, sulfur dioxide and nitric acid adsorption on calcium carbonate: A transmission and ATR-FTIR study. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 1266.   | 1.3  | 223       |
| 17 | ATR-FTIR spectroscopy as a tool to probe surface adsorption on nanoparticles at the liquid-solid interface in environmentally and biologically relevant media. <i>Analyst</i> , 2014, 139, 870-881.   | 1.7  | 212       |
| 18 | Toxicity assessment of zinc oxide nanoparticles using sub-acute and sub-chronic murine inhalation models. <i>Particle and Fibre Toxicology</i> , 2014, 11, 15.  | 2.8  | 194       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Agglomeration, isolation and dissolution of commercially manufactured silver nanoparticles in aqueous environments. <i>Journal of Nanoparticle Research</i> , 2010, 12, 1945-1958.  | 0.8 | 192       |
| 20 | Role(s) of adsorbed water in the surface chemistry of environmental interfaces. <i>Chemical Communications</i> , 2013, 49, 3071.  | 2.2 | 192       |
| 21 | Heterogeneous reactions of NO <sub>2</sub> and HNO <sub>3</sub> on oxides and mineral dust: A combined laboratory and modeling study. <i>Journal of Geophysical Research</i> , 2001, 106, 18055-18066.  | 3.3 | 182       |
| 22 | A laboratory study of the heterogeneous uptake and oxidation of sulfur dioxide on mineral dust particles. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 16-1-ACH 16-9.  | 3.3 | 179       |
| 23 | Size-Dependent Changes in Sea Spray Aerosol Composition and Properties with Different Seawater Conditions. <i>Environmental Science &amp; Technology</i> , 2013, 47, 5603-5612.   | 4.6 | 175       |
| 24 | Microbial Control of Sea Spray Aerosol Composition: A Tale of Two Blooms. <i>ACS Central Science</i> , 2015, 1, 124-131.  | 5.3 | 172       |
| 25 | Heterogeneous Reaction of NO <sub>2</sub> : Characterization of Gas-Phase and Adsorbed Products from the Reaction, 2NO <sub>2</sub> (g) + H <sub>2</sub> O(a) → HONO(g) + HNO <sub>3</sub> (a) on Hydrated Silica Particles. <i>Journal of Physical Chemistry A</i> , 1999, 103, 7217-7223. | 1.1 | 164       |
| 26 | Reactions of sulfur dioxide on calcium carbonate single crystal and particle surfaces at the adsorbed water carbonate interface. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 3011.  | 1.3 | 156       |
| 27 | A laboratory study of the heterogeneous reaction of nitric acid on calcium carbonate particles. <i>Journal of Geophysical Research</i> , 2000, 105, 29053-29064.  | 3.3 | 152       |
| 28 | Heterogeneous chemistry of individual mineral dust particles with nitric acid: A combined CCSEM/EDX, ESEM, and ICP-MS study. <i>Journal of Geophysical Research</i> , 2005, 110, .  | 3.3 | 151       |
| 29 | Analysis of Organic Anionic Surfactants in Fine and Coarse Fractions of Freshly Emitted Sea Spray Aerosol. <i>Environmental Science &amp; Technology</i> , 2016, 50, 2477-2486.   | 4.6 | 143       |
| 30 | A template-free, thermal decomposition method to synthesize mesoporous MgO with a nanocrystalline framework and its application in carbon dioxide adsorption. <i>Journal of Materials Chemistry</i> , 2010, 20, 8705.   | 6.7 | 142       |
| 31 | Overview of HOMEChem: House Observations of Microbial and Environmental Chemistry. <i>Environmental Sciences: Processes and Impacts</i> , 2019, 21, 1280-1300.  | 1.7 | 140       |
| 32 | Characterization and acid mobilization study of iron-containing mineral dust source materials. <i>Journal of Geophysical Research</i> , 2008, 113, .  | 3.3 | 139       |
| 33 | Physicochemical Properties of Nitrate Aerosols: Implications for the Atmosphere. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11785-11799.   | 1.1 | 137       |
| 34 | Coal Fly Ash as a Source of Iron in Atmospheric Dust. <i>Environmental Science &amp; Technology</i> , 2012, 46, 2112-2120.  | 4.6 | 129       |
| 35 | Silica nanoparticle-generated ROS as a predictor of cellular toxicity: mechanistic insights and safety by design. <i>Environmental Science: Nano</i> , 2016, 3, 56-66.  | 2.2 | 128       |
| 36 | An investigation of water uptake on clays minerals using ATR-FTIR spectroscopy coupled with quartz crystal microbalance measurements. <i>Journal of Geophysical Research</i> , 2007, 112, .   | 3.3 | 126       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | The transformation of solid atmospheric particles into liquid droplets through heterogeneous chemistry: Laboratory insights into the processing of calcium containing mineral dust aerosol in the troposphere. <i>Geophysical Research Letters</i> , 2003, 30, .   | 1.5  | 125       |
| 38 | Surface Chemistry and Dissolution of $\hat{1}\pm$ -FeOOH Nanorods and Microrods: Environmental Implications of Size-Dependent Interactions with Oxalate. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2175-2186.  | 1.5  | 120       |
| 39 | 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. <i>International Reviews in Physical Chemistry</i> , 2001, 20, 467-548.                                       | 0.9  | 119       |
| 40 | FTIR spectroscopy combined with quantum chemical calculations to investigate adsorbed nitrate on aluminium oxide surfaces in the presence and absence of co-adsorbed water. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 4970.  | 1.3  | 119       |
| 41 | Single-Particle SEM-EDX Analysis of Iron-Containing Coarse Particulate Matter in an Urban Environment: Sources and Distribution of Iron within Cleveland, Ohio. <i>Environmental Science &amp; Technology</i> , 2012, 46, 4331-4339.   | 4.6  | 119       |
| 42 | Sea spray aerosol chemical composition: elemental and molecular mimics for laboratory studies of heterogeneous and multiphase reactions. <i>Chemical Society Reviews</i> , 2018, 47, 2374-2400.  | 18.7 | 117       |
| 43 | Simulated atmospheric processing of iron oxyhydroxide minerals at low pH: Roles of particle size and acid anion in iron dissolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 6628-6633.  | 3.3  | 116       |
| 44 | Airborne Monitoring to Distinguish Engineered Nanomaterials from Incidental Particles for Environmental Health and Safety. <i>Journal of Occupational and Environmental Hygiene</i> , 2008, 6, 73-81.  | 0.4  | 112       |
| 45 | 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. <i>Journal of Environmental Monitoring</i> , 2011, 13, 1135.   | 2.1  | 111       |
| 46 | Molecular Diversity of Sea Spray Aerosol Particles: Impact of Ocean Biology on Particle Composition and Hygroscopicity. <i>CheM</i> , 2017, 2, 655-667.  | 5.8  | 111       |
| 47 | Size Matters in the Water Uptake and Hygroscopic Growth of Atmospherically Relevant Multicomponent Aerosol Particles. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4489-4497.   | 1.1  | 110       |
| 48 | Atmospheric chemistry of bioaerosols: heterogeneous and multiphase reactions with atmospheric oxidants and other trace gases. <i>Chemical Science</i> , 2016, 7, 6604-6616.  | 3.7  | 109       |
| 49 | Bovine serum albumin adsorption on SiO <sub>2</sub> and TiO <sub>2</sub> nanoparticle surfaces at circumneutral and acidic pH: A tale of two nano-bio surface interactions. <i>Journal of Colloid and Interface Science</i> , 2017, 493, 334-341.  | 5.0  | 109       |
| 50 | Gas-Phase Photooxidation of Trichloroethylene on TiO <sub>2</sub> and ZnO: Influence of Trichloroethylene Pressure, Oxygen Pressure, and the Photocatalyst Surface on the Product Distribution. <i>Journal of Physical Chemistry B</i> , 1998, 102, 549-556.   | 1.2  | 106       |
| 51 | Photooxidation of Trichloroethylene on Pt/TiO <sub>2</sub> . <i>Journal of Physical Chemistry B</i> , 1998, 102, 1418-1423.  | 1.2  | 105       |
| 52 | Inflammatory response of mice to manufactured titanium dioxide nanoparticles: Comparison of size effects through different exposure routes. <i>Nanotoxicology</i> , 2007, 1, 211-226.  | 1.6  | 105       |
| 53 | Raman microspectroscopy and vibrational sum frequency generation spectroscopy as probes of the bulk and surface compositions of size-resolved sea spray aerosol particles. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 6206.  | 1.3  | 103       |
| 54 | Heterogeneous Uptake Kinetics of Volatile Organic Compounds on Oxide Surfaces Using a Knudsen Cell Reactor: Adsorption of Acetic Acid, Formaldehyde, and Methanol on $\hat{1}\pm$ -Fe <sub>2</sub> O <sub>3</sub> , $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> , and SiO <sub>2</sub> . <i>Journal of Physical Chemistry A</i> , 2003, 107, 4250-4261. | 1.1  | 102       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | A Knudsen Cell Study of the Heterogeneous Reactivity of Nitric Acid on Oxide and Mineral Dust Particles. <i>Journal of Physical Chemistry A</i> , 2001, 105, 6609-6620.  | 1.1  | 100       |
| 56 | Iron Dissolution of Dust Source Materials during Simulated Acidic Processing: The Effect of Sulfuric, Acetic, and Oxalic Acids. <i>Environmental Science &amp; Technology</i> , 2013, 47, 10312-10321.   | 4.6  | 98        |
| 57 | Iron oxide nanoparticles induce <i>Pseudomonas aeruginosa</i> growth, induce biofilm formation, and inhibit antimicrobial peptide function. <i>Environmental Science: Nano</i> , 2014, 1, 123.   | 2.2  | 96        |
| 58 | Direct aerosol chemical composition measurements to evaluate the physicochemical differences between controlled sea spray aerosol generation schemes. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3667-3683.  | 1.2  | 95        |
| 59 | Inflammatory response of mice following inhalation exposure to iron and copper nanoparticles. <i>Nanotoxicology</i> , 2008, 2, 189-204.  | 1.6  | 91        |
| 60 | Sulfur Dioxide Adsorption on TiO <sub>2</sub> Nanoparticles: Influence of Particle Size, Coadsorbates, Sample Pretreatment, and Light on Surface Speciation and Surface Coverage. <i>Journal of Physical Chemistry C</i> , 2011, 115, 492-500.   | 1.5  | 91        |
| 61 | Enrichment of Saccharides and Divalent Cations in Sea Spray Aerosol During Two Phytoplankton Blooms. <i>Environmental Science &amp; Technology</i> , 2016, 50, 11511-11520.  | 4.6  | 90        |
| 62 | Surface Reactions of Carbon Dioxide at the Adsorbed Water-Iron Oxide Interface. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12227-12230.   | 1.2  | 89        |
| 63 | Inside versus Outside: Ion Redistribution in Nitric Acid Reacted Sea Spray Aerosol Particles as Determined by Single Particle Analysis. <i>Journal of the American Chemical Society</i> , 2013, 135, 14528-14531.  | 6.6  | 89        |
| 64 | Impact of marine biogeochemistry on the chemical mixing state and cloud forming ability of nascent sea spray aerosol. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 8553-8565.  | 1.2  | 84        |
| 65 | Titanium Dioxide Nanoparticle Surface Reactivity with Atmospheric Gases, CO <sub>2</sub> , SO <sub>2</sub> , and NO <sub>2</sub> : Roles of Surface Hydroxyl Groups and Adsorbed Water in the Formation and Stability of Adsorbed Products. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23011-23021. | 1.5  | 84        |
| 66 | Sea Spray Aerosol: The Chemical Link between the Oceans, Atmosphere, and Climate. <i>Accounts of Chemical Research</i> , 2017, 50, 599-604.  | 7.6  | 84        |
| 67 | Dynamics of Water Adsorption onto a Calcite Surface as a Function of Relative Humidity. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2109-2115.   | 1.5  | 83        |
| 68 | Size-dependent cytotoxicity of copper oxide nanoparticles in lung epithelial cells. <i>Environmental Science: Nano</i> , 2016, 3, 365-374.   | 2.2  | 78        |
| 69 | Heterogeneous chemistry of NO <sub>2</sub> on mineral oxide particles: Spectroscopic evidence for oxide-coordinated and water-solvated surface nitrate. <i>Geophysical Research Letters</i> , 1998, 25, 3835-3838.   | 1.5  | 76        |
| 70 | Carbon dioxide (C <sub>16</sub> O <sub>2</sub> and C <sub>18</sub> O <sub>2</sub> ) adsorption in zeolite Y materials: effect of cation, adsorbed water and particle size. <i>Energy and Environmental Science</i> , 2009, 2, 401.   | 15.6 | 76        |
| 71 | Surface Adsorption of Suwannee River Humic Acid on TiO <sub>2</sub> Nanoparticles: A Study of pH and Particle Size. <i>Langmuir</i> , 2018, 34, 3136-3145.   | 1.6  | 76        |
| 72 | Surface Photochemistry of Adsorbed Nitrate: The Role of Adsorbed Water in the Formation of Reduced Nitrogen Species on Î±-Fe <sub>2</sub> O <sub>3</sub> Particle Surfaces. <i>Journal of Physical Chemistry A</i> , 2014, 118, 158-166.   | 1.1  | 75        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Sea Spray Aerosol Structure and Composition Using Cryogenic Transmission Electron Microscopy. ACS Central Science, 2016, 2, 40-47.   | 5.3 | 74        |
| 74 | Photochemistry of Adsorbed Nitrate on Aluminum Oxide Particle Surfaces. Journal of Physical Chemistry A, 2009, 113, 7818-7825.   | 1.1 | 73        |
| 75 | 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        |
| 76 | Heterogeneous reactions of volatile organic compounds on oxide particles of the most abundant crustal elements: Surface reactions of acetaldehyde, acetone, and propionaldehyde on SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , and CaO. Journal of Geophysical Research, 2001, 106, 5517-5529. | 3.3 | 71        |
| 77 | 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        |
| 78 | Indoor Surface Chemistry: Developing a Molecular Picture of Reactions on Indoor Interfaces. Chem, 2020, 6, 3203-3218.  | 5.8 | 70        |
| 79 | Surface Reactions of Carbon Dioxide at the Adsorbed Water/Oxide Interface. Journal of Physical Chemistry C, 2007, 111, 14870-14880.  | 1.5 | 69        |
| 80 | A laboratory investigation of light scattering from representative components of mineral dust aerosol at a wavelength of 550 nm. Journal of Geophysical Research, 2008, 113, .   | 3.3 | 68        |
| 81 | Sulfur Dioxide Adsorption on ZnO Nanoparticles and Nanorods. Journal of Physical Chemistry C, 2011, 115, 10164-10172.  | 1.5 | 68        |
| 82 | 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        |
| 83 | Heterogeneous reactions of NO <sub>2</sub> on NaCl and Al <sub>2</sub> O <sub>3</sub> particles. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 2585-2590.  | 0.9 | 67        |
| 84 | A Mesocosm Double Feature: Insights into the Chemical Makeup of Marine Ice Nucleating Particles. Journals of the Atmospheric Sciences, 2018, 75, 2405-2423.  | 0.6 | 67        |
| 85 | 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        |
| 86 | Coupled infrared extinction and size distribution measurements for several clay components of mineral dust aerosol. Journal of Geophysical Research, 2008, 113, .  | 3.3 | 65        |
| 87 | Photoreductive dissolution of Fe-containing mineral dust particles in acidic media. Journal of Geophysical Research, 2010, 115, .  | 3.3 | 65        |
| 88 | 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        |
| 89 | Histidine Adsorption on TiO <sub>2</sub> Nanoparticles: An Integrated Spectroscopic, Thermodynamic, and Molecular-Based Approach toward Understanding Nano-Bio Interactions. Langmuir, 2014, 30, 8751-8760.  | 1.6 | 64        |
| 90 | Co <sub>3</sub> O <sub>4</sub> nanoparticles as oxygen carriers for chemical looping combustion: A materials characterization approach to understanding oxygen carrier performance. Chemical Engineering Journal, 2017, 319, 279-287.  | 6.6 | 64        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | Bovine Serum Albumin Adsorption on TiO <sub>2</sub> 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        |
| 92  | 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        |
| 93  | Poly(isophthalic acid)(ethylene oxide) as a Macromolecular Modulator for Metalâ€“Organic Polyhedra. Journal of the American Chemical Society, 2016, 138, 9646-9654.   | 6.6 | 61        |
| 94  | 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        |
| 95  | pH-dependent adsorption of $\hat{\pm}$ -amino acids, lysine, glutamic acid, serine and glycine, on TiO <sub>2</sub> nanoparticle surfaces. Journal of Colloid and Interface Science, 2019, 554, 362-375.  | 5.0 | 59        |
| 96  | Heterogeneous and catalytic uptake of ozone on mineral oxides and dusts: A Knudsen cell investigation. Geophysical Research Letters, 2002, 29, 10-1-10-4.   | 1.5 | 58        |
| 97  | Role of Atmospheric CO <sub>2</sub> and H <sub>2</sub> O 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        |
| 98  | Surface Adsorption and Photochemistry of Gas-Phase Formic Acid on TiO <sub>2</sub> 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        |
| 99  | Humidity-dependent surface tension measurements of individual inorganic and organic submicrometre liquid particles. Chemical Science, 2015, 6, 3242-3247.   | 3.7 | 56        |
| 100 | Photooxidation of 1-Alkenes in Zeolites:â€“ A Study of the Factors that Influence Product Selectivity and Formation. Journal of the American Chemical Society, 1999, 121, 5063-5072.  | 6.6 | 55        |
| 101 | Water Uptake and Hygroscopic Growth of Organosulfate Aerosol. Environmental Science & Technology, 2016, 50, 4259-4268.  | 4.6 | 54        |
| 102 | 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        |
| 103 | A molecular picture of surface interactions of organic compounds on prevalent indoor surfaces: limonene adsorption on SiO <sub>2</sub> . Chemical Science, 2019, 10, 2906-2914.   | 3.7 | 52        |
| 104 | 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        |
| 105 | Size-Resolved Sea Spray Aerosol Particles Studied by Vibrational Sum Frequency Generation. Journal of Physical Chemistry A, 2013, 117, 6589-6601.   | 1.1 | 50        |
| 106 | Quantifying the Hygroscopic Growth of Individual Submicrometer Particles with Atomic Force Microscopy. Analytical Chemistry, 2016, 88, 3647-3654.   | 3.2 | 50        |
| 107 | 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        |
| 108 | CO Adsorption as a Probe of Acid Sites and the Electric Field in Alkaline Earth Exchanged Zeolite Beta Using FT-IR and ab Initio Quantum Calculations. Journal of Physical Chemistry B, 1999, 103, 5058-5062.   | 1.2 | 48        |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | Adsorption of bovine serum albumin on silicon dioxide nanoparticles: Impact of $pH$ on nanoparticle-protein interactions. <i>Biointerphases</i> , 2017, 12, 02D404.  | 0.6 | 48        |
| 110 | Photochemical reactions of <i>cis</i> - and <i>trans</i> -1,2-dichloroethene adsorbed on Pd(111) and Pt(111). <i>Journal of Chemical Physics</i> , 1988, 88, 4484-4491.  | 1.2 | 47        |
| 111 | Nano-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. <i>Langmuir</i> , 2016, 32, 731-742.  | 1.6 | 45        |
| 112 | Increasing the Efficacy of Stem Cell Therapy via Triple-Function Inorganic Nanoparticles. <i>ACS Nano</i> , 2019, 13, 6605-6617.   | 7.3 | 44        |
| 113 | A Newly Designed and Constructed Instrument for Coupled Infrared Extinction and Size Distribution Measurements of Aerosols. <i>Aerosol Science and Technology</i> , 2007, 41, 701-710.   | 1.5 | 43        |
| 114 | ATR-FTIR Spectroscopy in the Undergraduate Chemistry Laboratory. Part I: Fundamentals and Examples. <i>Journal of Chemical Education</i> , 2008, 85, 279.  | 1.1 | 43        |
| 115 | Nanorod Dissolution Quenched in the Aggregated State. <i>Langmuir</i> , 2010, 26, 1524-1527.   | 1.6 | 43        |
| 116 | Surface Chemistry of $\pm$ -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 $\pm$ -FeOOH with Atmospheric Gases. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12566-12577. | 1.5 | 43        |
| 117 | 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. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11316-11327.                         | 1.1 | 43        |
| 118 | Heterogeneous Reactions of Acetic Acid with Oxide Surfaces: Effects of Mineralogy and Relative Humidity. <i>Journal of Physical Chemistry A</i> , 2016, 120, 5609-5616.  | 1.1 | 43        |
| 119 | Formation of paratacamite nanomaterials via the conversion of aged and oxidized copper nanoparticles in hydrochloric acidic media. <i>Journal of Materials Chemistry</i> , 2011, 21, 3162.   | 6.7 | 42        |
| 120 | Optical and Physicochemical Properties of Brown Carbon Aerosol: Light Scattering, FTIR Extinction Spectroscopy, and Hygroscopic Growth. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4155-4166.   | 1.1 | 42        |
| 121 | Direct Surface Tension Measurements of Individual Sub-Micrometer Particles Using Atomic Force Microscopy. <i>Journal of Physical Chemistry A</i> , 2017, 121, 8296-8305.   | 1.1 | 42        |
| 122 | 310 nm Irradiation of Atmospherically Relevant Concentrated Aqueous Nitrate Solutions: Nitrite Production and Quantum Yields. <i>Journal of Physical Chemistry A</i> , 2008, 112, 13275-13281.   | 1.1 | 40        |
| 123 | Heterogeneous conversion of calcite aerosol by nitric acid. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 622-634.   | 1.3 | 39        |
| 124 | Infrared extinction spectroscopy and micro-Raman spectroscopy of select components of mineral dust mixed with organic compounds. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 6593-6606.   | 1.2 | 37        |
| 125 | Ice nucleation by particles containing long-chain fatty acids of relevance to freezing by sea spray aerosols. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1559-1569.  | 1.7 | 37        |
| 126 | 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. <i>Chemical Science</i> , 2018, 9, 5716-5723.  | 3.7 | 37        |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 127 | Photooxidation of Toluene and p-Xylene in Cation-Exchanged Zeolites X, Y, ZSM-5, and Beta: The Role of Zeolite Physicochemical Properties in Product Yield and Selectivity. <i>Journal of Physical Chemistry B</i> , 2000, 104, 5706-5714.   | 1.2 | 36        |
| 128 | Biological Impacts on Carbon Speciation and Morphology of Sea Spray Aerosol. <i>ACS Earth and Space Chemistry</i> , 2017, 1, 551-561.  | 1.2 | 36        |
| 129 | Sea Spray Aerosol: Where Marine Biology Meets Atmospheric Chemistry. <i>ACS Central Science</i> , 2018, 4, 1617-1623.  | 5.3 | 36        |
| 130 | Substrate-Deposited Sea Spray Aerosol Particles: Influence of Analytical Method, Substrate, and Storage Conditions on Particle Size, Phase, and Morphology. <i>Environmental Science &amp; Technology</i> , 2015, 49, 13447-13453.   | 4.6 | 35        |
| 131 | Nitrate Photochemistry on Laboratory Proxies of Mineral Dust Aerosol: Wavelength Dependence and Action Spectra. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29117-29125.   | 1.5 | 34        |
| 132 | Fe <sub>2</sub> O <sub>3</sub> Nanoparticles as Oxygen Carriers for Chemical Looping Combustion: An Integrated Materials Characterization Approach to Understanding Oxygen Carrier Performance, Reduction Mechanism, and Particle Size Effects. <i>Energy &amp; Fuels</i> , 2018, 32, 7959-7970. | 2.5 | 33        |
| 133 | Proton-promoted dissolution of FeOOH nanorods and microrods: Size dependence, anion effects (carbonate and phosphate), aggregation and surface adsorption. <i>Journal of Colloid and Interface Science</i> , 2012, 385, 15-23.   | 5.0 | 31        |
| 134 | Environmental aerosol chamber studies of extinction spectra of mineral dust aerosol components: Broadband IR-UV extinction spectra. <i>Journal of Geophysical Research</i> , 2007, 112, .  | 3.3 | 30        |
| 135 | Competition between Displacement and Dissociation of a Strong Acid Compared to a Weak Acid Adsorbed on Silica Particle Surfaces: The Role of Adsorbed Water. <i>Journal of Physical Chemistry A</i> , 2016, 120, 4016-4024.  | 1.1 | 30        |
| 136 | An FT-IR Study of NO <sub>2</sub> Reduction in Nanocrystalline NaY Zeolite: Effect of Zeolite Crystal Size and Adsorbed Water. <i>Catalysis Letters</i> , 2005, 103, 23-32.  | 1.4 | 29        |
| 137 | Bioavailability, Trophic Transfer, and Toxicity of Manufactured Metal and Metal Oxide Nanoparticles in Terrestrial Environments. , 0, , 345-366.   |     | 29        |
| 138 | Titration of Aerosol pH through Droplet Coalescence. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4476-4483.   | 2.1 | 29        |
| 139 | CuS nanoparticles in humid environments: adsorbed water enhances the transformation of CuS to CuSO <sub>4</sub> . <i>Nanoscale</i> , 2020, 12, 19350-19358.  | 2.8 | 29        |
| 140 | Organic Enrichment, Physical Phase State, and Surface Tension Depression of Nascent Core-Shell Sea Spray Aerosols during Two Phytoplankton Blooms. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 650-660.  | 1.2 | 29        |
| 141 | Detection of Active Microbial Enzymes in Nascent Sea Spray Aerosol: Implications for Atmospheric Chemistry and Climate. <i>Environmental Science and Technology Letters</i> , 2019, 6, 171-177.  | 3.9 | 28        |
| 142 | Absorption spectra of benzoic acid in water at different pH and in the presence of salts: insights from the integration of experimental data and theoretical cluster models. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5046-5056.   | 1.3 | 28        |
| 143 | Enhanced Rates of Transition-Metal-Ion-Catalyzed Oxidation of S(IV) in Aqueous Aerosols: Insights into Sulfate Aerosol Formation in the Atmosphere. <i>Environmental Science &amp; Technology</i> , 2021, 55, 10291-10299.   | 4.6 | 28        |
| 144 | Crystal Clear? Microspectroscopic Imaging and Physicochemical Characterization of Indoor Depositions on Window Glass. <i>Environmental Science and Technology Letters</i> , 2018, 5, 514-519.  | 3.9 | 27        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | What Is the Driving Force behind the Adsorption of Hydrophobic Molecules on Hydrophilic Surfaces?. Journal of Physical Chemistry Letters, 2019, 10, 468-473.  | 2.1 | 27        |
| 146 | Lab on a tip: atomic force microscopy and 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        |
| 147 | Atomic Force Microscopy and X-ray Photoelectron Spectroscopy Study of NO <sub>2</sub> Reactions on CaCO <sub>3</sub> (101...4) Surfaces in Humid Environments. Journal of Physical Chemistry A, 2012, 116, 9001-9009.               | 1.1 | 24        |
| 148 | The Old and the New: Aging of Sea Spray Aerosol and Formation of Secondary Marine Aerosol through OH Oxidation Reactions. ACS Earth and Space Chemistry, 2019, 3, 2307-2314.  | 1.2 | 24        |
| 149 | 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        |
| 150 | Methane Dissociation on Fe <sub>2</sub> O <sub>3</sub> (0001) and Fe <sub>3</sub> O <sub>4</sub> (111) Surfaces: First-Principles Insights into Chemical Looping Combustion. Journal of Physical Chemistry C, 2019, 123, 6450-6463. | 1.5 | 23        |
| 151 | Radical-Initiated Formation of Aromatic Organosulfates and Sulfonates in the Aqueous Phase. Environmental Science & Technology, 2020, 54, 11857-11864.  | 4.6 | 23        |
| 152 | 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        |
| 153 | Accurate quantification of TiO <sub>2</sub> nanoparticles collected on air filters using a microwave-assisted acid digestion method. Journal of Occupational and Environmental Hygiene, 2016, 13, 30-39.                            | 0.4 | 22        |
| 154 | Physicochemical properties of air discharge-generated manganese oxide nanoparticles: comparison to welding fumes. Environmental Science: Nano, 2018, 5, 696-707.  | 2.2 | 22        |
| 155 | Challenges and Opportunities in Molecular-Level Indoor Surface Chemistry and Physics. Cell Reports Physical Science, 2020, 1, 100256.   | 2.8 | 22        |
| 156 | Surface adsorption of Nordic aquatic fulvic acid on amine-functionalized and non-functionalized mesoporous silica nanoparticles. Environmental Science: Nano, 2018, 5, 2162-2171.   | 2.2 | 21        |
| 157 | Shedding Light on Photosensitized Reactions within Marine-Relevant Organic Thin Films. ACS Earth and Space Chemistry, 2019, 3, 1614-1623.   | 1.2 | 21        |
| 158 | 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        |
| 159 | Infrared extinction spectra of mineral dust aerosol: Single components and complex mixtures. Journal of Geophysical Research, 2012, 117, .  | 3.3 | 20        |
| 160 | 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        |
| 161 | Displacement reactions between environmentally and biologically relevant ligands on TiO <sub>2</sub> nanoparticles: insights into the aging of nanoparticles in the environment. Environmental Science: Nano, 2019, 6, 489-504.     | 2.2 | 20        |
| 162 | Matrix studies of aerosol particle shape effects on IR resonance spectral line profiles and comparison with an experiment. Journal of Geophysical Research, 2009, 114, .  | 3.3 | 19        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Formation of Organosulfur Compounds through Transition Metal Ion-Catalyzed Aqueous Phase Reactions. <i>Environmental Science and Technology Letters</i> , 2018, 5, 315-321.  | 3.9 | 19        |
| 164 | Impacts of Lipase Enzyme on the Surface Properties of Marine Aerosols. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3839-3849.  | 2.1 | 19        |
| 165 | Absorption spectra of pyruvic acid in water: insights from calculations for small hydrates and comparison to experiment. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12658-12670.   | 1.3 | 19        |
| 166 | Water uptake of humic and fulvic acid: measurements and modelling using single parameter K <sup>A</sup> hler theory. <i>Environmental Chemistry</i> , 2009, 6, 380.  | 0.7 | 18        |
| 167 | Optical properties of selected components of mineral dust aerosol processed with organic acids and humic material. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 2437-2452.   | 1.2 | 18        |
| 168 | Plasma protein adsorption on TiO <sub>2</sub> nanoparticles: Impact of surface adsorption on temperature-dependent structural changes. <i>Polyhedron</i> , 2019, 171, 147-154.   | 1.0 | 18        |
| 169 | Physicochemical Mixing State of Sea Spray Aerosols: Morphologies Exhibit Size Dependence. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1604-1611.   | 1.2 | 18        |
| 170 | Glass surface evolution following gas adsorption and particle deposition from indoor cooking events as probed by microspectroscopic analysis. <i>Environmental Sciences: Processes and Impacts</i> , 2020, 22, 1698-1709.  | 1.7 | 18        |
| 171 | Impact of pH and NaCl and CaCl <sub>2</sub> Salts on the Speciation and Photochemistry of Pyruvic Acid in the Aqueous Phase. <i>Journal of Physical Chemistry A</i> , 2020, 124, 5071-5080.  | 1.1 | 18        |
| 172 | A Comprehensive Study of the Reactions of Methyl Fragments from Methyl Iodide Dissociation on Reduced and Oxidized Silica-Supported Copper Nanoparticles. <i>Journal of the American Chemical Society</i> , 1997, 119, 1697-1707.  | 6.6 | 17        |
| 173 | Correlated IR spectroscopy and visible light scattering measurements of mineral dust aerosol. <i>Journal of Geophysical Research</i> , 2010, 115, .  | 3.3 | 17        |
| 174 | Sulfate formation catalyzed by coal fly ash, mineral dust and iron(III) oxide: variable influence of temperature and light. <i>Environmental Sciences: Processes and Impacts</i> , 2016, 18, 1484-1491.  | 1.7 | 17        |
| 175 | Measurement of size-dependent dynamic shape factors of quartz particles in two flow regimes. <i>Aerosol Science and Technology</i> , 2016, 50, 870-879.  | 1.5 | 17        |
| 176 | Nucleotide Adsorption on Iron(III) Oxide Nanoparticle Surfaces: Insights into Nano-Geo-Bio Interactions Through Vibrational Spectroscopy. <i>Langmuir</i> , 2020, 36, 15501-15513.   | 1.6 | 17        |
| 177 | Surface-Catalyzed Chlorine and Nitrogen Activation: Mechanisms for the Heterogeneous Formation of ClNO, NO, NO <sub>2</sub> , HONO, and N <sub>2</sub> O from HNO <sub>3</sub> and HCl on Aluminum Oxide Particle Surfaces. <i>Journal of Physical Chemistry A</i> , 2012, 116, 5180-5192. | 1.1 | 16        |
| 178 | Physicochemical Characterization of Simulated Welding Fumes from a Spark Discharge System. <i>Aerosol Science and Technology</i> , 2014, 48, 768-776.  | 1.5 | 16        |
| 179 | Impact of Adsorbed Water on the Interaction of Limonene with Hydroxylated SiO <sub>2</sub> : Implications of H- <sup>1</sup> H Bonding for Surfaces in Humid Environments. <i>Journal of Physical Chemistry A</i> , 2020, 124, 10592-10599.  | 1.1 | 16        |
| 180 | Optical Properties of Humic Material Standards: Solution Phase and Aerosol Measurements. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 1102-1111.  | 1.2 | 15        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Salting Up of Proteins at the Air/Water Interface. <i>Langmuir</i> , 2019, 35, 13815-13820.   | 1.6 | 15        |
| 182 | Nitrous Acid (HONO) Formation from the Irradiation of Aqueous Nitrate Solutions in the Presence of Marine Chromophoric Dissolved Organic Matter: Comparison to Other Organic Photosensitizers. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 3056-3064. | 1.2 | 15        |
| 183 | Measurements of Immersion Freezing and Heterogeneous Chemistry of Atmospherically Relevant Single Particles with Micro-Raman Spectroscopy. <i>Analytical Chemistry</i> , 2019, 91, 11138-11145.   | 3.2 | 14        |
| 184 | Linking Solid-State Reduction Mechanisms to Size-Dependent Reactivity of Metal Oxide Oxygen Carriers for Chemical Looping Combustion. <i>ACS Applied Energy Materials</i> , 2021, 4, 1163-1172.   | 2.5 | 14        |
| 185 | HONO Production from Gypsum Surfaces Following Exposure to NO <sub>2</sub> and HNO <sub>3</sub> : Roles of Relative Humidity and Light Source. <i>Environmental Science &amp; Technology</i> , 2021, 55, 9761-9772.                                       | 4.6 | 14        |
| 186 | Amino Acids Are Driven to the Interface by Salts and Acidic Environments. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2824-2829.   | 2.1 | 14        |
| 187 | Formation of Organosulfur Compounds from Aqueous Phase Reactions of S(IV) with Methacrolein and Methyl Vinyl Ketone in the Presence of Transition Metal Ions. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1749-1755.                                  | 1.2 | 13        |
| 188 | Chemistry and Photochemistry of Pyruvic Acid Adsorbed on Oxide Surfaces. <i>Journal of Physical Chemistry A</i> , 2019, 123, 7661-7671.   | 1.1 | 12        |
| 189 | Temperature-Dependent Phase Transitions of Aqueous Aerosol Droplet Systems in Microfluidic Traps. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1527-1539.  | 1.2 | 12        |
| 190 | Emerging investigator series: chemical and physical properties of organic mixtures on indoor surfaces during HOMEChem. <i>Environmental Sciences: Processes and Impacts</i> , 2021, 23, 559-568.  | 1.7 | 12        |
| 191 | Ice Nucleating Activity and Residual Particle Morphology of Bulk Seawater and Sea Surface Microlayer. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1916-1928.  | 1.2 | 12        |
| 192 | Size-Dependent Morphology, Composition, Phase State, and Water Uptake of Nascent Submicrometer Sea Spray Aerosols during a Phytoplankton Bloom. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 116-130.  | 1.2 | 12        |
| 193 | Why Indoor Chemistry Matters: A National Academies Consensus Report. <i>Environmental Science &amp; Technology</i> , 2022, 56, 10560-10563.   | 4.6 | 12        |
| 194 | ATR-FTIR Spectroscopy in the Undergraduate Chemistry Laboratory. Part II: A Physical Chemistry Laboratory Experiment on Surface Adsorption. <i>Journal of Chemical Education</i> , 2008, 85, 282.   | 1.1 | 11        |
| 195 | A combined laboratory and modeling study of the infrared extinction and visible light scattering properties of mineral dust aerosol. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 435-452.  | 1.2 | 11        |
| 196 | A Granular Bed for Use in a Nanoparticle Respiratory Deposition Sampler. <i>Aerosol Science and Technology</i> , 2015, 49, 179-187.   | 1.5 | 11        |
| 197 | Size, composition, morphology, and health implications of airborne incidental metal-containing nanoparticles. <i>Journal of Occupational and Environmental Hygiene</i> , 2019, 16, 387-399.   | 0.4 | 11        |
| 198 | Impact of surface adsorbed biologically and environmentally relevant coatings on TiO <sub>2</sub> nanoparticle reactivity. <i>Environmental Science: Nano</i> , 2020, 7, 3783-3793.   | 2.2 | 11        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | Environmental Aspects of Oxide Nanoparticles: Probing Oxide Nanoparticle Surface Processes Under Different Environmental Conditions. <i>Annual Review of Analytical Chemistry</i> , 2021, 14, 489-514.                            | 2.8 | 11        |
| 200 | How should we define an indoor surface?. <i>Indoor Air</i> , 2022, 32, e12955.  | 2.0 | 11        |
| 201 | The Sea Spray Chemistry and Particle Evolution study (SeaSCAPE): overview and experimental methods. <i>Environmental Sciences: Processes and Impacts</i> , 2022, 24, 290-315.   | 1.7 | 11        |
| 202 | RAIRS and TPD Study of the Direct Photopolymerization of Styrene Thin Films in Ultrahigh Vacuum. <i>Langmuir</i> , 1997, 13, 2307-2313.   | 1.6 | 10        |
| 203 | Porous polyurethane foam for use as a particle collection substrate in a nanoparticle respiratory deposition sampler. <i>Aerosol Science and Technology</i> , 2016, 50, 497-506.  | 1.5 | 10        |
| 204 | Adsorption of constitutional isomers of cyclic monoterpenes on hydroxylated silica surfaces. <i>Journal of Chemical Physics</i> , 2021, 154, 124703.  | 1.2 | 10        |
| 205 | Infrared Optical Constants of Organic Aerosols: Organic Acids and Model Humic-Like Substances (HULIS). <i>Aerosol Science and Technology</i> , 2014, 48, 630-637.   | 1.5 | 9         |
| 206 | Influence of Glyoxal on the Catalytic Oxidation of S(IV) in Acidic Aqueous Media. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 142-149.  | 1.2 | 9         |
| 207 | Heterogeneous Interactions of Prevalent Indoor Oxygenated Organic Compounds on Hydroxylated SiO <sub>2</sub> Surfaces. <i>Environmental Science &amp; Technology</i> , 2021, 55, 6623-6630.                                       | 4.6 | 9         |
| 208 | Atmospheric Benzothiazoles in a Coastal Marine Environment. <i>Environmental Science &amp; Technology</i> , 2021, 55, 15705-15714.  | 4.6 | 9         |
| 209 | Heterogeneous Reactions of $\alpha$ -Pinene on Mineral Surfaces: Formation of Organonitrates and $\alpha$ -Pinene Oxidation Products. <i>Journal of Physical Chemistry A</i> , 2022, 126, 4068-4079.                              | 1.1 | 9         |
| 210 | Optical Property Measurements and Single Particle Analysis of Secondary Organic Aerosol Produced from the Aqueous-Phase Reaction of Ammonium Sulfate with Methylglyoxal. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 356-365. | 1.2 | 8         |
| 211 | Surfactant Charge Modulates Structure and Stability of Lipase-Embedded Monolayers at Marine-Relevant Aerosol Surfaces. <i>Langmuir</i> , 2019, 35, 9050-9060.   | 1.6 | 8         |
| 212 | Temperature-Dependent Liquid Water Structure for Individual Micron-Sized, Supercooled Aqueous Droplets with Inclusions. <i>Journal of Physical Chemistry A</i> , 2021, 125, 10742-10749.  | 1.1 | 8         |
| 213 | Temperature-Programmed Desorption and Reflectance Absorption Infrared Spectroscopy of H <sub>2</sub> O:HBr Thin Films of Varying Stoichiometry from <1:1 to 5:1. <i>Journal of Physical Chemistry B</i> , 2000, 104, 86-92.       | 1.2 | 7         |
| 214 | Properties of Commercial Nanoparticles that Affect Their Removal During Water Treatment. , 0, , 69-90.  |     | 7         |
| 215 | Chemistry's Contributions to Our Understanding of Atmospheric Science and Climate. <i>Journal of Chemical Education</i> , 2015, 92, 595-597.  | 1.1 | 7         |
| 216 | Particle Concentrations in Occupational Settings Measured with a Nanoparticle Respiratory Deposition (NRD) Sampler. <i>Annals of Work Exposures and Health</i> , 2018, 62, 699-710.   | 0.6 | 7         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 217 | Toward a microscopic model of light absorbing dissolved organic compounds in aqueous environments: theoretical and experimental study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10487-10497.   | 1.3 | 7         |
| 218 | Low-Temperature Water Uptake of Individual Marine and Biologically Relevant Atmospheric Particles Using Micro-Raman Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2021, 125, 9691-9699.   | 1.1 | 7         |
| 219 | Gas-liquid Interfaces in the Atmosphere. , 2018, , 271-313.  |     | 6         |
| 220 | Cation-Driven Lipopolysaccharide Morphological Changes Impact Heterogeneous Reactions of Nitric Acid with Sea Spray Aerosol Particles. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5023-5029.   | 2.1 | 6         |
| 221 | Liquid Sampling-Atmospheric Pressure Glow Discharge Ionization as a Technique for the Characterization of Salt-Containing Organic Samples. <i>Analytical Chemistry</i> , 2020, 92, 8845-8851.  | 3.2 | 6         |
| 222 | Heterogeneous Interactions between Carvone and Hydroxylated SiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 0, , .   | 1.5 | 6         |
| 223 | Attenuated Total Reflection-Fourier Transform Infrared and Atomic Force Microscopy-Infrared Spectroscopic Investigation of Suwannee River Fulvic Acid and Its Interactions with Fe(II)-FeOOH. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 81-89. | 1.2 | 6         |
| 224 | Transport and Retention of Nanomaterials in Porous Media. , 0, , 91-106.   |     | 5         |
| 225 | Environmental Science: Nano – a journal is born : A new journal with a large scope that focuses on small materials. <i>Environmental Science: Nano</i> , 2014, 1, 8.   | 2.2 | 5         |
| 226 | Particle Chemistry in the Environment: Challenges and Opportunities. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3880-3881.  | 2.1 | 5         |
| 227 | Bacterial Interactions with CdSe Quantum Dots and Environmental Implications. , 0, , 197-231.  |     | 4         |
| 228 | Nanomaterials and the Environment. , 0, , 1-18.  |     | 4         |
| 229 | An Integrated Approach Toward Understanding the Environmental Fate, Transport, Toxicity, and Health Hazards of Nanomaterials. , 0, , 43-68.  |     | 4         |
| 230 | Mechanistic study of oil adsorption onto PVP-coated magnetic nanoparticles: an integrated experimental and molecular dynamics study to inform remediation. <i>Environmental Science: Nano</i> , 2021, 8, 485-492.                                    | 2.2 | 4         |
| 231 | Nanosopic Study of Water Uptake on Glass Surfaces with Organic Thin Films and Particles from Exposure to Indoor Cooking Activities: Comparison to Model Systems. <i>Environmental Science &amp; Technology</i> , 2022, 56, 1594-1604.                | 4.6 | 4         |
| 232 | Absorption Spectra and the Electronic Structure of Gallic Acid in Water at Different pH: Experimental Data and Theoretical Cluster Models. <i>Journal of Physical Chemistry A</i> , 2022, 126, 190-197.  | 1.1 | 4         |
| 233 | Photoacoustic Enhancement of Ferricyanide-Treated Silver Chalcogenide-Coated Gold Nanorods. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7605-7614.   | 1.5 | 4         |
| 234 | Adsorption and Reaction of Ethyl Fragments on Reduced and Oxidized Silica-Supported Copper Particles. <i>Langmuir</i> , 1998, 14, 1411-1418.   | 1.6 | 3         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | Occupational Health Hazards of Nanoparticles. , 0, , 429-460.  |     | 3         |
| 236 | Rapid analysis of the size distribution of metal-containing aerosol. Aerosol Science and Technology, 2017, 51, 108-115.  | 1.5 | 3         |
| 237 | The rapid acidification of sea spray aerosols. Physics Today, 2022, 75, 58-59.   | 0.3 | 3         |
| 238 | Photooxidation of Toluene in Cation-Exchanged Zeolites. ACS Symposium Series, 2000, , 206-216.   | 0.5 | 2         |
| 239 | Development of Nanocrystalline Zeolite Materials as Environmental Catalysts. ACS Symposium Series, 2004, , 277-283.  | 0.5 | 2         |
| 240 | Chemical Properties of Oxide Nanoparticles: Surface Adsorption Studies from Gas- and Liquid-Phase Environments. , 2006, , 335-351.   |     | 2         |
| 241 | In Vitro Models for Nanoparticle Toxicology. , 0, , 261-286.   |     | 2         |
| 242 | Environmental Science: Nano “ news, progress and impact. Environmental Science: Nano, 2017, 4, 11-11.  | 2.2 | 2         |
| 243 | Zeolites and Mesoporous Silica: From Greener Synthesis to Surface Chemistry of Environmental and Biological Interactions. , 2019, , 375-397.   |     | 2         |
| 244 | Interaction of beta-lactoglobulin and bovine serum albumin with iron oxide ( $\text{Fe}_2\text{O}_3$ ) nanoparticles in the presence and absence of pre-adsorbed phosphate. Environmental Science: Nano, 2021, 8, 2811-2823. | 2.2 | 2         |
| 245 | Assessing the Life Cycle Environmental Implications of Nanomanufacturing: Opportunities and Challenges. , 0, , 19-42.  |     | 2         |
| 246 | Monoethanolamine adsorption on oxide surfaces. Journal of Colloid and Interface Science, 2022, 614, 75-83.   | 5.0 | 2         |
| 247 | Physical Chemistry of Environmental Interfaces and the Environment in Physical Chemistry” A Career Perspective. Journal of Physical Chemistry C, 2022, 126, 12320-12326.   | 1.5 | 2         |
| 248 | Surface Oxides on Carbon Nanotubes (CNTs): Effects on CNT Stability and Sorption Properties in Aquatic Environments. , 0, , 133-158.   |     | 1         |
| 249 | Chemical and Photochemical Reactivity of Fullerenes in the Aqueous Phase. , 0, , 159-195.  |     | 1         |
| 250 | Growth and Some Enzymatic Responses of E. Coli to Photocatalytic TiO <sub>2</sub> . , 0, , 319-344.  |     | 1         |
| 251 | Health Effects of Inhaled Engineered Nanoscale Materials. , 0, , 367-404.  |     | 1         |
| 252 | Size-Dependent Properties and Surface Chemistry of Oxide-Based Nanomaterials in Environmental Processes. ACS Symposium Series, 2010, , 15-33.  | 0.5 | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 253 | Environmental Science: Nano – immediacy index and more. Environmental Science: Nano, 2016, 3, 234-235.  | 2.2 | 1         |
| 254 | Potential Toxicity of Fullerenes and Molecular Modeling of Their Transport across Lipid Membranes. , 0, , 233-260.  |     | 1         |
| 255 | Building Bridges between Sustainability and Chemistry in Education and Outreach. ACS Symposium Series, 2020, , 45-53.   | 0.5 | 1         |
| 256 | Physical Chemistry of Environmental Interfaces and the Environment in Physical Chemistry – A Career Perspective. Journal of Physical Chemistry B, 2022, 126, 5598-5604. | 1.2 | 1         |
| 257 | Physical Chemistry of Environmental Interfaces and the Environment in Physical Chemistry – A Career Perspective. Journal of Physical Chemistry A, 2022, 126, 4874-4880. | 1.1 | 1         |
| 258 | Effect of Surface Roughness on Surface Photochemistry. Materials Research Society Symposia Proceedings, 1994, 354, 555.   | 0.1 | 0         |
| 259 | Neurotoxicity of Manufactured Nanoparticles. , 0, , 405-428.  |     | 0         |
| 260 | Transport of Nanomaterials in Unsaturated Porous Media. , 0, , 107-131.   |     | 0         |
| 261 | Environmental Science: Nano – the first year a successful launch. Environmental Science: Nano, 2015, 2, 9-10.   | 2.2 | 0         |
| 262 | Environmental Science: Nano – Editors' symposium, revised scope and first impact factor. Environmental Science: Nano, 2016, 3, 695-695.                                 | 2.2 | 0         |
| 263 | Tribute to Veronica Vaida. Journal of Physical Chemistry A, 2018, 122, 1157-1158.   | 1.1 | 0         |
| 264 | Biological Activity of Mineral Fibers and Carbon Particulates: Implications for Nanoparticle Toxicity and the Role of Surface Chemistry. , 0, , 287-318.                |     | 0         |