

Thomas Berkemeier

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

2,264
citations

236925

25
h-index

302126

39
g-index

64
all docs

64
docs citations

64
times ranked

2552
citing authors

#	ARTICLE	IF	CITATIONS
1	Global distribution of particle phase state in atmospheric secondary organic aerosols. <i>Nature Communications</i> , 2017, 8, 15002.	12.8	295
2	Chemical exposure-response relationship between air pollutants and reactive oxygen species in the human respiratory tract. <i>Scientific Reports</i> , 2016, 6, 32916.	3.3	228
3	Competition between water uptake and ice nucleation by glassy organic aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 12513-12531.	4.9	151
4	Hydroxyl radicals from secondary organic aerosol decomposition in water. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1761-1771.	4.9	138
5	Ozone uptake on glassy, semi-solid and liquid organic matter and the role of reactive oxygen intermediates in atmospheric aerosol chemistry. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12662-12674.	2.8	117
6	Multiphase Chemical Kinetics of OH Radical Uptake by Molecular Organic Markers of Biomass Burning Aerosols: Humidity and Temperature Dependence, Surface Reaction, and Bulk Diffusion. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4533-4544.	2.5	101
7	Direct imaging of changes in aerosol particle viscosity upon hydration and chemical aging. <i>Chemical Science</i> , 2016, 7, 1357-1367.	7.4	101
8	Molecular corridors and kinetic regimes in the multiphase chemical evolution of secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 8323-8341.	4.9	87
9	Quantitative Efficacy Classification of Ice Recrystallization Inhibition Agents. <i>Crystal Growth and Design</i> , 2014, 14, 4285-4294.	3.0	85
10	Kinetic regimes and limiting cases of gas uptake and heterogeneous reactions in atmospheric aerosols and clouds: a general classification scheme. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 6663-6686.	4.9	77
11	Secondary Organic Aerosol (SOA) from Nitrate Radical Oxidation of Monoterpenes: Effects of Temperature, Dilution, and Humidity on Aerosol Formation, Mixing, and Evaporation. <i>Environmental Science & Technology</i> , 2017, 51, 7831-7841.	10.0	71
12	Chemical kinetics of multiphase reactions between ozone and human skin lipids: Implications for indoor air quality and health effects. <i>Indoor Air</i> , 2017, 27, 816-828.	4.3	64
13	Protein Cross-Linking and Oligomerization through Dityrosine Formation upon Exposure to Ozone. <i>Environmental Science & Technology</i> , 2015, 49, 10859-10866.	10.0	55
14	Reactive oxygen species formed in aqueous mixtures of secondary organic aerosols and mineral dust influencing cloud chemistry and public health in the Anthropocene. <i>Faraday Discussions</i> , 2017, 200, 251-270.	3.2	51
15	Organic Nitrate Contribution to New Particle Formation and Growth in Secondary Organic Aerosols from \pm -Pinene Ozonolysis. <i>Environmental Science & Technology</i> , 2016, 50, 6334-6342.	10.0	47
16	Viscosity controls humidity dependence of N_2O_5 uptake to citric acid aerosol. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 13615-13625.	4.9	46
17	Radical Formation by Fine Particulate Matter Associated with Highly Oxygenated Molecules. <i>Environmental Science & Technology</i> , 2019, 53, 12506-12518.	10.0	45
18	Shikimic acid ozonolysis kinetics of the transition from liquid aqueous solution to highly viscous glass. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31101-31109.	2.8	41

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19	Condensed-phase biogenicâ€“anthropogenic interactions with implications for cold cloud formation. <i>Faraday Discussions</i> , 2017, 200, 165-194.	3.2	40
20	Influence of particle viscosity on mass transfer and heterogeneous ozonolysis kinetics in aqueousâ€“sucroseâ€“maleic acid aerosol. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15560-15573.	2.8	39
21	Hydroxyl Radical Production by Air Pollutants in Epithelial Lining Fluid Governed by Interconversion and Scavenging of Reactive Oxygen Species. <i>Environmental Science & Technology</i> , 2021, 55, 14069-14079.	10.0	39
22	Atmospheric protein chemistry influenced by anthropogenic air pollutants: nitration and oligomerization upon exposure to ozone and nitrogen dioxide. <i>Faraday Discussions</i> , 2017, 200, 413-427.	3.2	37
23	Discontinuities in hygroscopic growth below and above water saturation for laboratory surrogates of oligomers in organic atmospheric aerosols. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 12767-12792.	4.9	34
24	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. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 8021-8029.	4.9	33
25	Synthesis and characterization of natural and modified antifreeze glycopeptides: glycosylated foldamers. <i>Amino Acids</i> , 2011, 41, 719-732.	2.7	29
26	The effect of viscosity and diffusion on the HO<sub>2</sub> uptake by sucrose and secondary organic aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 13035-13047.	4.9	29
27	Development and calibration of a novel sensor to quantify the water content of surface soils and biological soil crusts. <i>Methods in Ecology and Evolution</i> , 2016, 7, 14-22.	5.2	28
28	Ozonolysis of Oleic Acid Aerosol Revisited: Multiphase Chemical Kinetics and Reaction Mechanisms. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 3313-3323.	2.7	25
29	Heterogeneous OH Oxidation, Shielding Effects, and Implications for the Atmospheric Fate of Terbutylazine and Other Pesticides. <i>Environmental Science & Technology</i> , 2017, 51, 13749-13754.	10.0	24
30	Compositional evolution of particle-phase reaction products and water in the heterogeneous OH oxidation of model aqueous organic aerosols. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 14415-14431.	4.9	17
31	Modeling the Formation, Degradation, and Spatiotemporal Distribution of 2-Nitrofluoranthene and 2-Nitropyrene in the Global Atmosphere. <i>Environmental Science & Technology</i> , 2020, 54, 14224-14234.	10.0	17
32	Visualizing reaction and diffusion in xanthan gum aerosol particles exposed to ozone. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 20613-20627.	2.8	15
33	Oligomerization and Nitration of the Grass Pollen Allergen Phl p 5 by Ozone, Nitrogen Dioxide, and Peroxynitrite: Reaction Products, Kinetics, and Health Effects. <i>International Journal of Molecular Sciences</i> , 2021, 22, 7616.	4.1	14
34	Kinetic modeling of formation and evaporation of secondary organic aerosol from NO<sub>3</sub> oxidation of pure and mixed monoterpenes. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 15513-15535.	4.9	14
35	Non-equilibrium interplay between gasâ€“particle partitioning and multiphase chemical reactions of semi-volatile compounds: mechanistic insights and practical implications for atmospheric modeling of polycyclic aromatic hydrocarbons. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6175-6198.	4.9	10
36	Aqueous-phase reactive species formed by fine particulate matter from remote forests and polluted urban air. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10439-10455.	4.9	6

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37	Environmentally persistent free radicals in indoor particulate matter, dust, and on surfaces. Environmental Science Atmospheres, 2022, 2, 128-136.	2.4	3
38	Gas-Phase Reaction Kinetics of the Ortho and Ipso Adducts 1,2,4,5-Tetramethylbenzeneâ€“OH with O2. ACS Earth and Space Chemistry, 2021, 5, 2243-2251.	2.7	2
39	Emerging investigator series: deposited particles and human lung lining fluid are dynamic, chemically-complex reservoirs leading to thirdhand smoke emissions and exposure. Environmental Science Atmospheres, 2022, 2, 943-963.	2.4	1
40	Imaging Molecular Reaction and Diffusion in Organic Aerosol Particles. Microscopy and Microanalysis, 2018, 24, 496-497.	0.4	0