

Gabriel Isaacman-VanWertz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4175551/publications.pdf>

Version: 2024-02-01

57
papers

4,632
citations

117625

34
h-index

144013

57
g-index

80
all docs

80
docs citations

80
times ranked

4601
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of organic molecular structure on the estimation of atmospherically relevant physicochemical parameters. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6541-6563.	4.9	20
2	Coupling a gas chromatograph simultaneously to a flame ionization detector and chemical ionization mass spectrometer for isomer-resolved measurements of particle-phase organic compounds. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 3895-3907.	3.1	10
3	Detailed chemical characterization of the composition and variability of soil gas at remediated residential heating oil discharges. <i>Journal of Hazardous Materials</i> , 2021, 413, 125372.	12.4	1
4	Organic Sulfur Products and Peroxy Radical Isomerization in the OH Oxidation of Dimethyl Sulfide. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 2013-2020.	2.7	20
5	Volatile chemical product emissions enhance ozone and modulate urban chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	103
6	Correcting bias in log-linear instrument calibrations in the context of chemical ionization mass spectrometry. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6551-6560.	3.1	3
7	Measurement report: Variability in the composition of biogenic volatile organic compounds in a Southeastern US forest and their role in atmospheric reactivity. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15755-15770.	4.9	10
8	Quantification of isomer-resolved iodide chemical ionization mass spectrometry sensitivity and uncertainty using a voltage-scanning approach. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6835-6850.	3.1	12
9	Modeled Emission of Hydroxyl and Ozone Reactivity from Evaporation of Fragrance Mixtures. <i>Environmental Science & Technology</i> , 2021, 55, 15672-15679.	10.0	3
10	Contrasting Reactive Organic Carbon Observations in the Southeast United States (SOAS) and Southern California (CalNex). <i>Environmental Science & Technology</i> , 2020, 54, 14923-14935.	10.0	15
11	Characterization of Hydrocarbon Groups in Complex Mixtures Using Gas Chromatography with Unit-Mass Resolution Electron Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 12481-12488.	6.5	6
12	Natural and Anthropogenically Influenced Isoprene Oxidation in Southeastern United States and Central Amazon. <i>Environmental Science & Technology</i> , 2020, 54, 5980-5991.	10.0	22
13	A new approach for measuring the carbon and oxygen content of atmospherically relevant compounds and mixtures. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 4911-4925.	3.1	5
14	Contributions of biomass-burning, urban, and biogenic emissions to the concentrations and light-absorbing properties of particulate matter in central Amazonia during the dry season. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 7973-8001.	4.9	36
15	Urban pollution greatly enhances formation of natural aerosols over the Amazon rainforest. <i>Nature Communications</i> , 2019, 10, 1046.	12.8	131
16	Modeling the formation and growth of organic films on indoor surfaces. <i>Indoor Air</i> , 2019, 29, 17-29.	4.3	35
17	Chemical evolution of atmospheric organic carbon over multiple generations of oxidation. <i>Nature Chemistry</i> , 2018, 10, 462-468.	13.6	92
18	Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 467-493.	4.9	63

#	ARTICLE	IF	CITATIONS
19	Monoterpenes are the largest source of summertime organic aerosol in the southeastern United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2038-2043.	7.1	186
20	Volatile chemical products emerging as largest petrochemical source of urban organic emissions. <i>Science</i> , 2018, 359, 760-764.	12.6	716
21	Chemistry of Volatile Organic Compounds in the Los Angeles Basin: Formation of Oxygenated Compounds and Determination of Emission Ratios. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 2298-2319.	3.3	43
22	Coupling of organic and inorganic aerosol systems and the effect on gas/particle partitioning in the southeastern US. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 357-370.	4.9	66
23	Organosulfates in aerosols downwind of an urban region in central Amazon. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 1546-1558.	3.5	40
24	Observations of sesquiterpenes and their oxidation products in central Amazonia during the wet and dry seasons. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10433-10457.	4.9	53
25	Calibration and assessment of electrochemical air quality sensors by co-location with regulatory-grade instruments. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 315-328.	3.1	89
26	Urban influence on the concentration and composition of submicron particulate matter in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 12185-12206.	4.9	30
27	Observations of sesquiterpenes and their oxidation products in central Amazonia during the wet and dry seasons. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10433-10457.	4.9	22
28	Field intercomparison of the gas/particle partitioning of oxygenated organics during the Southern Oxidant and Aerosol Study (SOAS) in 2013. <i>Aerosol Science and Technology</i> , 2017, 51, 30-56.	3.1	39
29	Improved molecular level identification of organic compounds using comprehensive two-dimensional chromatography, dual ionization energies and high resolution mass spectrometry. <i>Analyst</i> , 2017, 142, 2395-2403.	3.5	33
30	Using advanced mass spectrometry techniques to fully characterize atmospheric organic carbon: current capabilities and remaining gaps. <i>Faraday Discussions</i> , 2017, 200, 579-598.	3.2	37
31	Automated single-ion peak fitting as an efficient approach for analyzing complex chromatographic data. <i>Journal of Chromatography A</i> , 2017, 1529, 81-92.	3.7	35
32	On the implications of aerosol liquid water and phase separation for organic aerosol mass. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 343-369.	4.9	189
33	Influence of urban pollution on the production of organic particulate matter from isoprene epoxydiols in central Amazonia. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6611-6629.	4.9	45
34	Chemistry of Volatile Organic Compounds in the Los Angeles basin: Nighttime Removal of Alkenes and Determination of Emission Ratios. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,843.	3.3	37
35	An improved, automated whole air sampler and gas chromatography mass spectrometry analysis system for volatile organic compounds in the atmosphere. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 291-313.	3.1	54
36	Ambient Gas-Particle Partitioning of Tracers for Biogenic Oxidation. <i>Environmental Science & Technology</i> , 2016, 50, 9952-9962.	10.0	69

#	ARTICLE	IF	CITATIONS
37	Fundamental Time Scales Governing Organic Aerosol Multiphase Partitioning and Oxidative Aging. <i>Environmental Science & Technology</i> , 2015, 49, 9768-9777.	10.0	23
38	Characterization of a real-time tracer for isoprene epoxydiols-derived secondary organic aerosol (IEPOX-SOA) from aerosol mass spectrometer measurements. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 11807-11833.	4.9	185
39	Comprehensive Chemical Characterization of Hydrocarbons in NIST Standard Reference Material 2779 Gulf of Mexico Crude Oil. <i>Environmental Science & Technology</i> , 2015, 49, 13130-13138.	10.0	39
40	Effects of anthropogenic emissions on aerosol formation from isoprene and monoterpenes in the southeastern United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 37-42.	7.1	496
41	Development of an automated high-temperature valveless injection system for online gas chromatography. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 4431-4444.	3.1	16
42	Online derivatization for hourly measurements of gas- and particle-phase semi-volatile oxygenated organic compounds by thermal desorption aerosol gas chromatography (SV-TAG). <i>Atmospheric Measurement Techniques</i> , 2014, 7, 4417-4429.	3.1	96
43	Lubricating Oil Dominates Primary Organic Aerosol Emissions from Motor Vehicles. <i>Environmental Science & Technology</i> , 2014, 48, 3698-3706.	10.0	145
44	Chemical Composition of Gas-Phase Organic Carbon Emissions from Motor Vehicles and Implications for Ozone Production. <i>Environmental Science & Technology</i> , 2013, 47, 11837-11848.	10.0	137
45	Insights into Secondary Organic Aerosol Formation Mechanisms from Measured Gas/Particle Partitioning of Specific Organic Tracer Compounds. <i>Environmental Science & Technology</i> , 2013, 47, 3781-3787.	10.0	58
46	The Influence of Molecular Structure and Aerosol Phase on the Heterogeneous Oxidation of Normal and Branched Alkanes by OH. <i>Journal of Physical Chemistry A</i> , 2013, 117, 3990-4000.	2.5	52
47	Sources of organic aerosol investigated using organic compounds as tracers measured during CalNex in Bakersfield. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 11,388.	3.3	26
48	OH-Initiated Heterogeneous Oxidation of Cholestane: A Model System for Understanding the Photochemical Aging of Cyclic Alkane Aerosols. <i>Journal of Physical Chemistry A</i> , 2013, 117, 12449-12458.	2.5	23
49	Detailed chemical characterization of unresolved complex mixtures in atmospheric organics: Insights into emission sources, atmospheric processing, and secondary organic aerosol formation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 6783-6796.	3.3	69
50	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 9233-9257.	3.3	231
51	Elucidating secondary organic aerosol from diesel and gasoline vehicles through detailed characterization of organic carbon emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18318-18323.	7.1	409
52	Embracing Complexity: Deciphering Origins and Transformations of Atmospheric Organics through Speciated Measurements. <i>Environmental Science & Technology</i> , 2012, 46, 5265-5266.	10.0	7
53	Improved Resolution of Hydrocarbon Structures and Constitutional Isomers in Complex Mixtures Using Gas Chromatography-Vacuum Ultraviolet-Mass Spectrometry. <i>Analytical Chemistry</i> , 2012, 84, 2335-2342.	6.5	101
54	Heterogeneous OH Oxidation of Motor Oil Particles Causes Selective Depletion of Branched and Less Cyclic Hydrocarbons. <i>Environmental Science & Technology</i> , 2012, 46, 10632-10640.	10.0	39

#	ARTICLE	IF	CITATIONS
55	Thermal Desorption Comprehensive Two-Dimensional Gas Chromatography: An Improved Instrument for In-Situ Speciated Measurements of Organic Aerosols. <i>Aerosol Science and Technology</i> , 2012, 46, 380-393.	3.1	37
56	Understanding evolution of product composition and volatility distribution through in-situ GC — GC analysis: a case study of longifolene ozonolysis. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 5335-5346.	4.9	35
57	A versatile and reproducible automatic injection system for liquid standard introduction: application to in-situ calibration. <i>Atmospheric Measurement Techniques</i> , 2011, 4, 1937-1942.	3.1	28