

Felipe D Lopez-Hilfiker

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

6,312
citations

101384

36
h-index

123241

61
g-index

62
all docs

62
docs citations

62
times ranked

4884
citing authors

#	ARTICLE	IF	CITATIONS
1	A large source of low-volatility secondary organic aerosol. <i>Nature</i> , 2014, 506, 476-479.	13.7	1,448
2	An Iodide-Adduct High-Resolution Time-of-Flight Chemical-Ionization Mass Spectrometer: Application to Atmospheric Inorganic and Organic Compounds. <i>Environmental Science & Technology</i> , 2014, 48, 6309-6317.	4.6	406
3	A novel method for online analysis of gas and particle composition: description and evaluation of a Filter Inlet for Gases and AEROsols (FIGAERO). <i>Atmospheric Measurement Techniques</i> , 2014, 7, 983-1001.	1.2	345
4	Contribution of Nitrated Phenols to Wood Burning Brown Carbon Light Absorption in Detling, United Kingdom during Winter Time. <i>Environmental Science & Technology</i> , 2013, 47, 6316-6324.	4.6	304
5	Highly functionalized organic nitrates in the southeast United States: Contribution to secondary organic aerosol and reactive nitrogen budgets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1516-1521.	3.3	269
6	A large and ubiquitous source of atmospheric formic acid. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6283-6304.	1.9	197
7	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.	3.3	186
8	Fine particle pH and the partitioning of nitric acid during winter in the northeastern United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 10,355.	1.2	176
9	Evaluation of a New Reagent-Ion Source and Focusing Ion-Molecule Reactor for Use in Proton-Transfer-Reaction Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 12011-12018.	3.2	168
10	The role of chlorine in global tropospheric chemistry. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 3981-4003.	1.9	160
11	Molecular Composition and Volatility of Organic Aerosol in the Southeastern U.S.: Implications for IEPOX Derived SOA. <i>Environmental Science & Technology</i> , 2016, 50, 2200-2209.	4.6	141
12	Constraining the sensitivity of iodide adduct chemical ionization mass spectrometry to multifunctional organic molecules using the collision limit and thermodynamic stability of iodide ion adducts. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1505-1512.	1.2	132
13	Phase partitioning and volatility of secondary organic aerosol components formed from α -pinene ozonolysis and OH oxidation: the importance of accretion products and other low volatility compounds. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 7765-7776.	1.9	126
14	Organic nitrate aerosol formation via $\text{NO}_3 + \text{biogenic volatile organic compounds}$ in the southeastern United States. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 13377-13392.	1.9	124
15	Chemical feedbacks weaken the wintertime response of particulate sulfate and nitrate to emissions reductions over the eastern United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8110-8115.	3.3	118
16	Meteorology, Air Quality, and Health in London: The ClearLo Project. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 779-804.	1.7	105
17	Heterogeneous N_2O_5 Uptake During Winter: Aircraft Measurements During the 2015 WINTER Campaign and Critical Evaluation of Current Parameterizations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 4345-4372.	1.2	103
18	Efficient Isoprene Secondary Organic Aerosol Formation from a Non-IEPOX Pathway. <i>Environmental Science & Technology</i> , 2016, 50, 9872-9880.	4.6	100

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19	A Chemical Ionization High-Resolution Time-of-Flight Mass Spectrometer Coupled to a Micro Orifice Volatilization Impactor (MOVI-HRToF-CIMS) for Analysis of Gas and Particle-Phase Organic Species. <i>Aerosol Science and Technology</i> , 2012, 46, 1313-1327.	1.5	99
20	Modeling the Detection of Organic and Inorganic Compounds Using Iodide-Based Chemical Ionization. <i>Journal of Physical Chemistry A</i> , 2016, 120, 576-587.	1.1	93
21	An extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF) for online measurement of atmospheric aerosol particles. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 4867-4886.	1.2	91
22	Anthropogenic enhancements to production of highly oxygenated molecules from autoxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6641-6646.	3.3	78
23	Ambient observations of dimers from terpene oxidation in the gas phase: Implications for new particle formation and growth. <i>Geophysical Research Letters</i> , 2017, 44, 2958-2966.	1.5	71
24	Molecular composition and volatility of isoprene photochemical oxidation secondary organic aerosol under low and high-NO conditions. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 159-174.	1.2	70
25	On the fate of oxygenated organic molecules in atmospheric aerosol particles. <i>Science Advances</i> , 2020, 6, eaax8922.	4.7	63
26	Instrumentation and measurement strategy for the NOAA SENEX aircraft campaign as part of the Southeast Atmosphere Study 2013. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 3063-3093.	1.2	58
27	Ozone production chemistry in the presence of urban plumes. <i>Faraday Discussions</i> , 2016, 189, 169-189.	1.6	56
28	Isomerization of Second-Generation Isoprene Peroxy Radicals: Epoxide Formation and Implications for Secondary Organic Aerosol Yields. <i>Environmental Science & Technology</i> , 2017, 51, 4978-4987.	4.6	53
29	Validity and limitations of simple reaction kinetics to calculate concentrations of organic compounds from ion counts in PTR-MS. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 6193-6208.	1.2	53
30	NO _x Lifetime and NO _y Partitioning During WINTER. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 9813-9827.	1.2	52
31	Nitrogen Oxides Emissions, Chemistry, Deposition, and Export Over the Northeast United States During the WINTER Aircraft Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,368.	1.2	49
32	Isothermal Evaporation of α -Pinene Ozonolysis SOA: Volatility, Phase State, and Oligomeric Composition. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 1058-1067.	1.2	49
33	Estimating the contribution of organic acids to northern hemispheric continental organic aerosol. <i>Geophysical Research Letters</i> , 2015, 42, 6084-6090.	1.5	43
34	A model framework to retrieve thermodynamic and kinetic properties of organic aerosol from composition-resolved thermal desorption measurements. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14757-14785.	1.9	42
35	Predicting secondary organic aerosol phase state and viscosity and its effect on multiphase chemistry in a regional-scale air quality model. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 8201-8225.	1.9	42
36	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.	1.5	39

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37	Semi-volatile and highly oxygenated gaseous and particulate organic compounds observed above a boreal forest canopy. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 11547-11562.	1.9	39
38	Flight Deployment of a High-Resolution Time-of-Flight Chemical Ionization Mass Spectrometer: Observations of Reactive Halogen and Nitrogen Oxide Species. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 7670-7686.	1.2	39
39	Temperature dependent halogen activation by N_2O_5 reactions on halide-doped ice surfaces. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 5237-5247.	1.9	38
40	Chamber-based insights into the factors controlling epoxydiol (IEPOX) secondary organic aerosol (SOA) yield, composition, and volatility. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 11253-11265.	1.9	38
41	Organic aerosol source apportionment in Zurich using an extractive electrospray ionization time-of-flight mass spectrometer (EESI-TOF-MS) – Part 1: Biogenic influences and day-night chemistry in summer. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 14825-14848.	1.9	38
42	High upward fluxes of formic acid from a boreal forest canopy. <i>Geophysical Research Letters</i> , 2016, 43, 9342-9351.	1.5	36
43	Evaluating Organic Aerosol Sources and Evolution with a Combined Molecular Composition and Volatility Framework Using the Filter Inlet for Gases and Aerosols (FIGAERO). <i>Accounts of Chemical Research</i> , 2020, 53, 1415-1426.	7.6	36
44	Identifying precursors and aqueous organic aerosol formation pathways during the SOAS campaign. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14409-14420.	1.9	33
45	Airborne Observations of Reactive Inorganic Chlorine and Bromine Species in the Exhaust of Coal-fired Power Plants. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 11225-11237.	1.2	33
46	Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2341-2361.	1.9	30
47	Biomass Burning Markers and Residential Burning in the WINTER Aircraft Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 1846-1861.	1.2	30
48	Surgical smoke: still an underestimated health hazard in the operating theatre. <i>European Journal of Cardio-thoracic Surgery</i> , 2019, 55, 626-631.	0.6	29
49	Anthropogenic Control Over Wintertime Oxidation of Atmospheric Pollutants. <i>Geophysical Research Letters</i> , 2019, 46, 14826-14835.	1.5	28
50	Widespread Pollution From Secondary Sources of Organic Aerosols During Winter in the Northeastern United States. <i>Geophysical Research Letters</i> , 2019, 46, 2974-2983.	1.5	25
51	Wintertime Gas-Particle Partitioning and Speciation of Inorganic Chlorine in the Lower Troposphere Over the Northeast United States and Coastal Ocean. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12,897.	1.2	21
52	An electrospray chemical ionization source for real-time measurement of atmospheric organic and inorganic vapors. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 3609-3625.	1.2	19
53	Resolving Ambient Organic Aerosol Formation and Aging Pathways with Simultaneous Molecular Composition and Volatility Observations. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 391-402.	1.2	19
54	Wintertime Overnight NO_x Removal in a Southeastern United States Coal-fired Power Plant Plume: A Model for Understanding Winter NO_x Processing and its Implications. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 1412-1425.	1.2	14

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55	Gas to Particle Partitioning of Organic Acids in the Boreal Atmosphere. ACS Earth and Space Chemistry, 2019, 3, 1279-1287.	1.2	13
56	Molecular characterization of ultrafine particles using extractive electrospray time-of-flight mass spectrometry. Environmental Science Atmospheres, 2021, 1, 434-448.	0.9	10
57	Thermal Desorptionâ€“Vocus Enables Online Nondestructive Quantification of 2,4,6-Trichloroanisole in Cork Stoppers below the Perception Threshold. Analytical Chemistry, 2020, 92, 9823-9829.	3.2	9
58	A robust clustering algorithm for analysis of composition-dependent organic aerosol thermal desorption measurements. Atmospheric Chemistry and Physics, 2020, 20, 2489-2512.	1.9	9
59	Comparison of Airborne Reactive Nitrogen Measurements During WINTER. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10483-10502.	1.2	7
60	Global simulations of monoterpene-derived peroxy radical fates and the distributions of highly oxygenated organic molecules (HOMs) and accretion products. Atmospheric Chemistry and Physics, 2022, 22, 5477-5494.	1.9	6
61	Effects of oligomerization and decomposition on the nanoparticle growth: a model study. Atmospheric Chemistry and Physics, 2022, 22, 155-171.	1.9	4