Jerome Brioude

List of Publications by Citations

75 papers	3,649 citations	32 h-index	60 g-index
100 ext. papers	4,186 ext. citations	5.9 avg, IF	4.41 L-index

#	Paper	IF	Citations
75	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. *Geophysical Research Letters*, **2009**, 36, n/a-n/a	4.9	249
74	The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-REx): goals, platforms, and field operations. *Atmospheric Chemistry and Physics*, **2011**, 11, 627-654	6.8	238
73	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. *Atmospheric Chemistry and Physics*, **2011**, 11, 2423-2453	6.8	217
72	Organic aerosol composition and sources in Pasadena, California, during the 2010 CalNex campaign. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 9233-9257	4.4	201
71	Organic aerosol formation in urban and industrial plumes near Houston and Dallas, Texas. *Journal of Geophysical Research*, **2009**, 114,		196
70	The Lagrangian particle dispersion model FLEXPART-WRF version 3.1. *Geoscientific Model Development*, **2013**, 6, 1889-1904	6.3	192
69	Quantifying sources of methane using light alkanes in the Los Angeles basin, California. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 4974-4990	4.4	146
68	Organic aerosol formation downwind from the Deepwater Horizon oil spill. *Science*, **2011**, 331, 1295-9	33.3	138
67	Simulation of semi-explicit mechanisms of SOA formation from glyoxal in aerosol in a 3-D model. *Atmospheric Chemistry and Physics*, **2014**, 14, 6213-6239	6.8	129
66	Top-down estimate of surface flux in the Los Angeles Basin using a mesoscale inverse modeling technique: assessing anthropogenic emissions of CO, NO_x and CO₂ and their impacts. *Atmospheric Chemistry and Physics*, **2013**, 13, 3661-3677	6.8	119
65	Nocturnal isoprene oxidation over the Northeast United States in summer and its impact on reactive nitrogen partitioning and secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2009**, 9, 3027-3042	6.8	114
64	The Lagrangian particle dispersion model FLEXPART version 10.4. *Geoscientific Model Development*, **2019**, 12, 4955-4997	6.3	104
63	Air pollution during the 2003 European heat wave as seen by MOZAIC airliners. *Atmospheric Chemistry and Physics*, **2008**, 8, 2133-2150	6.8	97
62	Stratospheric influence on surface ozone in the Los Angeles area during late spring and early summer of 2010. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		94
61	Effect of biomass burning on marine stratocumulus clouds off the California coast. *Atmospheric Chemistry and Physics*, **2009**, 9, 8841-8856	6.8	85
60	Black carbon aerosol over the Los Angeles Basin during CalNex. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		70
59	Evaluations of NO_x and highly reactive VOC emission inventories in Texas and their implications for ozone plume simulations during the Texas Air Quality Study 2006. *Atmospheric Chemistry and Physics*, **2011**, 11, 11361-11386	6.8	70

58	An overview of the 2013 Las Vegas Ozone Study (LVOS): Impact of stratospheric intrusions and long-range transport on surface air quality. *Atmospheric Environment*, **2015**, 109, 305-322	5.3	67
57	Meteorological Model Evaluation for CalNex 2010. *Monthly Weather Review*, **2012**, 140, 3885-3906	2.4	63
56	Cloud condensation nuclei as a modulator of ice processes in Arctic mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2011**, 11, 8003-8015	6.8	61
55	Air quality implications of the Deepwater Horizon oil spill. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 20280-5	11.5	59
54	Top-down estimate of anthropogenic emission inventories and their interannual variability in Houston using a mesoscale inverse modeling technique. *Journal of Geophysical Research*, **2011**, 116,		58
53	Evaluation of Lagrangian Particle Dispersion Models with Measurements from Controlled Tracer Releases. *Journal of Applied Meteorology and Climatology*, **2013**, 52, 2623-2637	2.7	57
52	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013. *Atmospheric Measurement Techniques*, **2016**, 9, 3063-3093	4	50
51	Emissions of organic carbon and methane from petroleum and dairy operations in California's San Joaquin Valley. *Atmospheric Chemistry and Physics*, **2014**, 14, 4955-4978	6.8	47
50	Vertical ozone measurements in the troposphere over the Eastern Mediterranean and comparison with Central Europe. *Atmospheric Chemistry and Physics*, **2007**, 7, 3783-3790	6.8	44
49	A new inversion method to calculate emission inventories without a prior at mesoscale: Application to the anthropogenic CO2 emission from Houston, Texas. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		40
48	Transport of NOx in East Asia identified by satellite and in situ measurements and Lagrangian particle dispersion model simulations. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 2574-2596	4.4	39
47	Mixing between a stratospheric intrusion and a biomass burning plume. *Atmospheric Chemistry and Physics*, **2007**, 7, 4229-4235	6.8	35
46	Uncertainty in Lagrangian pollutant transport simulations due to meteorological uncertainty from a mesoscale WRF ensemble. *Geoscientific Model Development*, **2014**, 7, 2817-2829	6.3	34
45	Observations of ozone transport from the free troposphere to the Los Angeles basin. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		33
44	Injection in the lower stratosphere of biomass fire emissions followed by long-range transport: a MOZAIC case study. *Atmospheric Chemistry and Physics*, **2009**, 9, 5829-5846	6.8	33
43	Numerical uncertainty at mesoscale in a Lagrangian model in complex terrain. *Geoscientific Model Development*, **2012**, 5, 1127-1136	6.3	32
42	Transport effects on the vertical distribution of tropospheric ozone over western India. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 10012-10026	4.4	31
41	Lagrangian Stochastic Modelling of Dispersion in the Convective Boundary Layer with Skewed Turbulence Conditions and a Vertical Density Gradient: Formulation and Implementation in the FLEXPART Model. *Boundary-Layer Meteorology*, **2015**, 154, 367-390	3.4	30

40	Top-down estimate of methane emissions in California using a mesoscale inverse modeling technique: The South Coast Air Basin. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 6698-6711	4.4	30
39	Microscale anthropogenic pollution modelling in a small tropical island during weak trade winds: Lagrangian particle dispersion simulations using real nested LES meteorological fields. *Atmospheric Environment*, **2016**, 139, 98-112	5.3	27
38	Entrainment of stratospheric air and Asian pollution by the convective boundary layer in the southwestern U.S.. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 1312-1337	4.4	26
37	Emissions of terpenoids, benzenoids, and other biogenic gas-phase organic compounds from agricultural crops and their potential implications for air quality. *Atmospheric Chemistry and Physics*, **2014**, 14, 5393-5413	6.8	23
36	Smoke dispersion modeling over complex terrain using high resolution meteorological data and satellite observations The FireHub platform. *Atmospheric Environment*, **2015**, 119, 348-361	5.3	22
35	Top-down estimate of methane emissions in California using a mesoscale inverse modeling technique: The San Joaquin Valley. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 3686-3699	4.4	22
34	Pollutant transport among California regions. *Journal of Geophysical Research D: Atmospheres*, **2013** , 118, 6750-6763	4.4	22
33	Coordinated profiling of stratospheric intrusions and transported pollution by the Tropospheric Ozone Lidar Network (TOLNet) and NASA Alpha Jet experiment (AJAX): Observations and comparison to HYSPLIT, RAQMS, and FLEXPART. *Atmospheric Environment*, **2018**, 174, 1-14	5.3	22
32	Composition and Source Apportionment of Organic Aerosol in Beirut, Lebanon, During Winter 2012. *Aerosol Science and Technology*, **2013**, 47, 1258-1266	3.4	18
31	The isotopic composition of near-surface water vapor at the Maïdo observatory (Reunion Island, southwestern Indian Ocean) documents the controls of the humidity of the subtropical troposphere. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 9628-9650	4.4	17
30	Stratosphere-troposphere exchange in a summertime extratropical low: analysis. *Atmospheric Chemistry and Physics*, **2006**, 6, 2337-2353	6.8	17
29	First results of the Piton de la Fournaise STRAP 2015 experiment: multidisciplinary tracking of a volcanic gas and aerosol plume. *Atmospheric Chemistry and Physics*, **2017**, 17, 5355-5378	6.8	16
28	Inorganic and black carbon aerosols in the Los Angeles Basin during CalNex. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 1777-1803	4.4	13
27	Marine aerosol distribution and variability over the pristine Southern Indian Ocean. *Atmospheric Environment*, **2018**, 182, 17-30	5.3	12
26	Inversion Estimates of Lognormally Distributed Methane Emission Rates From the Haynesville-Bossier Oil and Gas Production Region Using Airborne Measurements. *Journal of Geophysical Research D: Atmospheres*, **2019**, 124, 3520-3531	4.4	11
25	Modeling ultrafine particle growth at a pine forest site influenced by anthropogenic pollution during BEACHON-RoMBAS 2011. *Atmospheric Chemistry and Physics*, **2014**, 14, 11011-11029	6.8	9
24	The Lagrangian particle dispersion model FLEXPART version 10.3 **2019**,		7
23	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013		6

22	Analysis of Volatile Organic Compounds during the OCTAVE Campaign: Sources and Distributions of Formaldehyde on Reunion Island. *Atmosphere*, **2020**, 11, 140	2.7	5
21	Ozone Production in the Soberanes Smoke Haze: Implications for Air Quality in the San Joaquin Valley During the California Baseline Ozone Transport Study. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031777	4.4	5
20	The Lagrangian particle dispersion model FLEXPART-WRF version 3.0 **2013**,		5
19	Simulation of semi-explicit mechanisms of SOA formation from glyoxal in a 3-D model		5
18	Development of turbulent scheme in the FLEXPART-AROME v1.2.1 Lagrangian particle dispersion model. *Geoscientific Model Development*, **2019**, 12, 4245-4259	6.3	5
17	Characterisation of African biomass burning plumes and impacts on the atmospheric composition over the south-west Indian Ocean. *Atmospheric Chemistry and Physics*, **2020**, 20, 14821-14845	6.8	3
16	Top-down estimate of surface flux in the Los Angeles Basin using a mesoscale inverse modeling technique: assessing anthropogenic emissions of CO, NO_x and CO₂ and their impacts		3
15	Emissions of organic carbon and methane from petroleum and dairy operations in California's San Joaquin Valley		3
14	Modeling ultrafine particle growth at a pine forest site influenced by anthropogenic pollution during BEACHON-RoMBAS 2011		3
13	Measurement report: Source apportionment of volatile organic compounds at the remote high-altitude Maïdo observatory. *Atmospheric Chemistry and Physics*, **2021**, 21, 12965-12988	6.8	3
12	Development of turbulent scheme in the FLEXPART-AROME v1.2.1 Lagrangian particle dispersion model **2019**,		2
11	Effect of deep convection on the tropical tropopause layer composition over the southwest Indian Ocean during austral summer. *Atmospheric Chemistry and Physics*, **2020**, 20, 10565-10586	6.8	2
10	Emissions of terpenoids, benzenoids, and other biogenic gas-phase organic compounds from agricultural crops and their potential implications for air quality		2
9	The Environmental Effects of the April 2020 Wildfires and the Cs-137 Re-Suspension in the Chernobyl Exclusion Zone: A Multi-Hazard Threat. *Atmosphere*, **2021**, 12, 467	2.7	2
8	Unprecedented Observations of a Nascent In Situ Cirrus in the Tropical Tropopause Layer. *Geophysical Research Letters*, **2021**, 48, e2020GL090936	4.9	2
7	Evaluating the added value of multi-input atmospheric transport ensemble modeling for applications of the Comprehensive Nuclear Test-Ban Treaty organization (CTBTO). *Journal of Environmental Radioactivity*, **2021**, 237, 106649	2.4	2
6	The <i>Fires, Asian, and Stratospheric Transport</i>–Las Vegas Ozone Study (<i>FAST</i>-LVOS). *Atmospheric Chemistry and Physics*, **2022**, 22, 1707-1737	6.8	1
5	Impact of convection on the upper-tropospheric composition (water vapor and ozone) over a subtropical site (Réunion island; 21.1° S, 55.5° E) in the Indian Ocean. *Atmospheric Chemistry and Physics*, **2020**, 20, 8611-8626	6.8	1

4	Investigation of several proxies to estimate sulfuric acid concentration under volcanic plume conditions. *Atmospheric Chemistry and Physics*, **2021**, 21, 4541-4560	6.8	1
3	Description and evaluation of REFIST v1.0: a regional greenhouse gas flux inversion system in Canada **2016**,		1
2	Origin of water-soluble organic aerosols at the Maïdo high-altitude observatory, Réunion Island, in the tropical Indian Ocean. *Atmospheric Chemistry and Physics*, **2021**, 21, 17017-17029	6.8	0
1	Novel Pathways to Form Secondary Organic Aerosols: Glyoxal SOA in WRF/Chem. *Springer Proceedings in Complexity*, **2014**, 149-154	0.3	