Maud Leriche

List of Publications by Year
in descending order

33 papers	1,412 citations	516561 16 h-index	395590 33 g-index
40 all docs	40 docs citations	40 times ranked	1985 citing authors

#	Article	IF	Citations
1	Transition Metals in Atmospheric Liquid Phases:Â Sources, Reactivity, and Sensitive Parameters. Chemical Reviews, 2005, 105, 3388-3431.	23.0	267
2	Overview of the Meso-NH model version 5.4 and its applications. Geoscientific Model Development, 2018, 11, 1929-1969.	1.3	194
3	Microbiology and atmospheric processes: chemical interactions of primary biological aerosols. Biogeosciences, 2008, 5, 1073-1084.	1.3	140
4	Contribution of Microbial Activity to Carbon Chemistry in Clouds. Applied and Environmental Microbiology, 2010, 76, 23-29.	1.4	98
5	Cloud-scale model intercomparison of chemical constituent transport in deep convection. Atmospheric Chemistry and Physics, 2007, 7, 4709-4731.	1.9	96
6	The role of transition metal ions on HO_x radicals in clouds: a numerical evaluation of its impact on multiphase chemistry. Atmospheric Chemistry and Physics, 2004, 4, 95-110.	1.9	79
7	Impact of radical versus non-radical pathway in the Fenton chemistry on the iron redox cycle in clouds. Chemosphere, 2005, 60, 718-724.	4.2	70
8	A model for tropospheric multiphase chemistry: application to one cloudy event during the CIME experiment. Atmospheric Environment, 2000, 34, 5015-5036.	1.9	56
9	Mixing of dust aerosols into a mesoscale convective system. Atmospheric Research, 2010, 96, 302-314.	1.8	45
10	LIMA (v1.0): A quasi two-moment microphysical scheme driven by a multimodal population of cloud condensation and ice freezing nuclei. Geoscientific Model Development, 2016, 9, 567-586.	1.3	44
11	Scavenging of aerosol particles by rain in a cloud resolving model. Atmospheric Research, 2010, 96, 325-336.	1.8	33
12	Effect of iron dissolution on cloud chemistry: from laboratory measurements to model results. Atmospheric Pollution Research, 2010, 1, 220-228.	1.8	32
13	CLEPS 1.0: A new protocol for cloud aqueous phase oxidation of VOC mechanisms. Geoscientific Model Development, 2017, 10, 1339-1362.	1.3	30
14	A cloud chemistry module for the 3-D cloud-resolving mesoscale model Meso-NH with application to idealized cases. Geoscientific Model Development, 2013, 6, 1275-1298.	1.3	29
15	Modeling study of strong acids formation and partitioning in a polluted cloud during wintertime. Journal of Geophysical Research, 2003, 108, .	3.3	23
16	Coupling quasi-spectral microphysics with multiphase chemistry: a case study of a polluted air mass at the top of the Puy de DÃ´me mountain (France). Atmospheric Environment, 2001, 35, 5411-5423.	1.9	19
17	Effect of mixed-phase cloud on the chemical budget of trace gases: A modeling approach. Atmospheric Research, 2010, 97, 540-554.	1.8	19
18	Numerical quantification of sources and phase partitioning of chemical species in cloud: application to wintertime anthropogenic air masses at the Puy de DÃ´me station. Journal of Atmospheric Chemistry, 2007, 57, 281-297.	1.4	18

#	Article	IF	Citations
19	Modeling lightning-NO_{<i>x</i>} chemistry on a sub-grid scale in a global chemical transport model. Atmospheric Chemistry and Physics, 2016, 16, 5867-5889.	1.9	17
20	Modeling the partitioning of organic chemical species in cloud phases with CLEPS (1.1). Atmospheric Chemistry and Physics, 2018, 18, 2225-2242.	1.9	12
21	Modeling the lava heat flux during severe effusive volcanic eruption: An important impact on surface air quality. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,729-11,742.	1.2	10
22	Evaluation of Meso-NH and WRF/CHEM simulated gas and aerosol chemistry over Europe based on hourly observations. Atmospheric Research, 2016, 176-177, 43-63.	1.8	10
23	Volcanic Plume Aging During Passive Degassing and Low Eruptive Events of Etna and Stromboli Volcanoes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11389-11405.	1.2	9
24	Insights into tropical cloud chemistry in RÃ©union (Indian Ocean): results from the BIO-MAÃĐO campaign. Atmospheric Chemistry and Physics, 2022, 22, 505-533.	1.9	6
25	Transition Metals in Atmospheric Liquid Phases. Sources, Reactivity, and Sensitive Parameters. ChemInform, 2005, 36, no.	0.1	5
26	What is the effect of cloud inhomogeneities on actinic fluxes and chemical species concentrations?. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	5
27	LES study of the impact of moist thermals on the oxidative capacity of the atmosphere in southern West Africa. Atmospheric Chemistry and Physics, 2018, 18, 6601-6624.	1.9	4
28	Chapter 4.9 Modelling of the July 10 STERAO storm with the RAMS model: Chemical species redistribution including gas phase and aqueous phase chemistry. Developments in Environmental Science, 2007, , 437-446.	0.5	3
29	Evaluation of Aerosol Chemical Composition Simulations by the WRF-Chem Model at the Puy de DÃ´me Station (France). Aerosol and Air Quality Research, 2016, 16, 909-917.	0.9	3
30	Convective uplift of pollution from the Sichuan Basin into the Asian monsoon anticyclone during the StratoClim aircraft campaign. Atmospheric Chemistry and Physics, 2021, 21, 3255-3274.	1.9	3
31	Role of sublimation and riming in the precipitation distribution in the Kananaskis Valley, Alberta, Canada. Hydrology and Earth System Sciences, 2019, 23, 4097-4111.	1.9	2
32	High Resolution Dynamical Analysis of Volatile Organic Compounds (VOC) Measurements During the BIOâ€MAÃĐO Field Campaign (RÃ©union Island, Indian Ocean). Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	2
33	Transition Metal Ions in Cloud Chemistry. , 2004, , 569-579.		0