Nadine Chaumerliac

List of Publications by Year
in descending order

53	2,298	331538	223716
papers	citations	21 h-index	46 g-index

58	58	58	2870
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atmospheric composition change: Ecosystemsâ€“Atmosphere interactions. Atmospheric Environment, 2009, 43, 5193-5267.	1.9	609
2	Transition Metals in Atmospheric Liquid Phases:Â Sources, Reactivity, and Sensitive Parameters. Chemical Reviews, 2005, 105, 3388-3431.	23.0	267
3	Potential impact of microbial activity on the oxidant capacity and organic carbon budget in clouds. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 559-564.	3.3	153
4	Microbiology and atmospheric processes: chemical interactions of primary biological aerosols. Biogeosciences, 2008, 5, 1073-1084.	1.3	140
5	Molecular Characterization of Cloud Water Samples Collected at the Puy de DÃ´me (France) by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. Environmental Science & Technology, 2018, 52, 10275-10285.	4.6	100
6	Classification of clouds sampled at the puy de DÃ´me (France) based on 10 yr of monitoring of their physicochemical properties. Atmospheric Chemistry and Physics, 2014, 14, 1485-1506.	1.9	92
7	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
8	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
9	Scavenging of acidic gases (HCOOH, CH3COOH, HNO3, HCl, and SO2) and ammonia in mixed liquid-solid water clouds at the Puy de DÃ´me mountain (France). Journal of Geophysical Research, 2000, 105, 6817-6835.	3.3	68
10	A model for tropospheric multiphase chemistry: application to one cloudy event during the CIME experiment. Atmospheric Environment, 2000, 34, 5015-5036.	1.9	56
11	A better understanding of hydroxyl radical photochemical sources in cloud waters collected at the puy de DÃ´me station â€“ experimental versus modelled formation rates. Atmospheric Chemistry and Physics, 2015, 15, 9191-9202.	1.9	50
12	Deviations from the Henry's law equilibrium during cloud events: a numerical approach of the mass transfer between phases and its specific numerical effects. Atmospheric Research, 1998, 49, 139-161.	1.8	49
13	Ozone nighttime recovery in the marine boundary layer: Measurement and simulation of the ozone diurnal cycle at Reunion Island. Journal of Geophysical Research, 1998, 103, 3463-3473.	3.3	37
14	Numerical Simulation of Orographic Enhancement of Rain with a Mesoscale Model. Journal of Climate and Applied Meteorology, 1987, 26, 661-669.	1.0	33
15	Effect of iron dissolution on cloud chemistry: from laboratory measurements to model results. Atmospheric Pollution Research, 2010, 1, 220-228.	1.8	32
16	Impact of cloud dynamics on tropospheric chemistry: Advances in modeling the interactions between microphysical and chemical processes. Journal of Atmospheric Chemistry, 1994, 18, 247-266.	1.4	31
17	CLEPS 1.0: A new protocol for cloud aqueous phase oxidation of VOC mechanisms. Geoscientific Model Development, 2017, 10, 1339-1362.	1.3	30
18	Evaluation of modeled cloud chemistry mechanism against laboratory irradiation experiments: The HxOy/iron/carboxylic acid chemical system. Atmospheric Environment, 2013, 77, 686-695.	1.9	26

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19	CÃ©zeaux-Aulnat-Opme-Puy De DÃ´me: a multi-site for the long-term survey of the tropospheric composition and climate change. Atmospheric Measurement Techniques, 2020, 13, 3413-3445.	1.2	26
20	Towards an operational aqueous phase chemistry mechanism for regional chemistry-transport models: CAPRAM-RED and its application to the COSMO-MUSCAT model. Journal of Atmospheric Chemistry, 2009, 64, 1-35.	1.4	25
21	Modeling study of strong acids formation and partitioning in a polluted cloud during wintertime. Journal of Geophysical Research, 2003, 108, .	3.3	23
22	Chemical Characterization of Cloudwater Collected at Puy de DÃ´me by FT-ICR MS Reveals the Presence of SOA Components. ACS Earth and Space Chemistry, 2019, 3, 2076-2087.	1.2	21
23	Effects of Different Rain Parameterizations on the Simulation of Mesoscale Orographic Precipitation. Journal of Applied Meteorology and Climatology, 1989, 28, 1197-1212.	1.7	20
24	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
25	Effect of mixed-phase cloud on the chemical budget of trace gases: A modeling approach. Atmospheric Research, 2010, 97, 540-554.	1.8	19
26	Modeling of scavenging processes in clouds: some remaining questions about the partitioning of gases among gas and liquid phases. Atmospheric Research, 2000, 53, 29-43.	1.8	18
27	A two-moment parameterization of aerosol nucleation and impaction scavenging for a warm cloud microphysics: description and results from a two-dimensional simulation. Atmospheric Research, 2004, 70, 171-208.	1.8	18
28	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
29	Effect of endogenous microbiota on the molecular composition of cloud water: a study by Fourier-transform ion cyclotron resonance mass spectrometry (FT-ICR MS). Scientific Reports, 2019, 9, 7663.	1.6	18
30	Evaluation of RadVil, a Radar-Based Very Short-Term Rainfall Forecasting Model. Journal of Hydrometeorology, 2006, 7, 178-189.	0.7	16
31	The transport and redistribution of atmospheric gases in regions of frontal rain. Journal of Atmospheric Chemistry, 1992, 14, 43-51.	1.4	14
32	Photolytic impact of a stratocumulus cloud layer upon the chemistry of an offshore advected plume of pollutants during the NARE 1993 intensive experiment: a numerical study. Atmospheric Research, 2004, 70, 89-108.	1.8	12
33	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
34	Impact of Two Microphysical Schemes upon Gas Scavenging and Deposition in a Mesoscale Meteorological Model. Journal of Applied Meteorology and Climatology, 1991, 30, 88-97.	1.7	11
35	Influence of Different Microphysical Schemes on the Prediction of Dissolution of Nonreactive Gases by Cloud Droplets and Raindrops. Journal of Applied Meteorology and Climatology, 1994, 33, 1096-1109.	1.7	11
36	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

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37	Trace Metals in Cloud Water Sampled at the Puy De DÃ´me Station. Atmosphere, 2017, 8, 225.	1.0	10
38	Mesoscale modeling of acidity production in orographic clouds and rain. Atmospheric Environment Part A General Topics, 1990, 24, 1573-1584.	1.3	9
39	A Modeling Study of the Influence of Ice Scavenging on the Chemical Composition of Liquid-Phase Precipitation of a Cumulonimbus Cloud. Journal of Applied Meteorology and Climatology, 1999, 38, 1148-1160.	1.7	9
40	Effects of a polydisperse cloud on tropospheric chemistry. Journal of Geophysical Research, 1996, 101, 25949-25965.	3.3	8
41	Box Model Intercomparison of Cloud Chemistry. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	1.2	7
42	Transition Metals in Atmospheric Liquid Phases. Sources, Reactivity, and Sensitive Parameters. ChemInform, 2005, 36, no.	0.1	5
43	Tracer redistribution by clouds in West Africa: Numerical modeling for dry and wet seasons. Journal of Geophysical Research, 1994, 99, 12873.	3.3	4
44	Influence of strong iron-binding ligands on cloud water oxidant capacity. Science of the Total Environment, 2022, 829, 154642.	3.9	4
45	A numerical study of the seasonal variations for tracer redistribution by clouds over West Africa. Journal of Atmospheric Chemistry, 1995, 20, 237-258.	1.4	3
46	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
47	Acidity Production in a Mesoscale Model with Semi-Spectral Microphysics. , 1989, , 237-244.		1
48	Impact of Aerosol Properties on Cloud and Precipitation Formation. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 153-158.	0.1	0
49	Evaluation of Cloud Chemistry Mechanism Towards Laboratory Experiments. Springer Proceedings in Complexity, 2014, , 137-141.	0.2	0
50	Mesoscale Modeling of Pollutant Transport and Deposition in Case of Frontal Rain. , 1991, , 553-558.		0
51	Impact of Different Clouds on Tropospheric Chemistry. , 1996, , 73-79.		0
52	Study of the Role of a Stratiform Cloud Layer on the Redistribution of Hydrogen Peroxide. , 1998, , 125-132.		0
53	Regional Modeling of Aerosol Chemical Composition at the Puy de DÃ´me (France). Springer Proceedings in Complexity, 2016, , 49-53.	0.2	0