Alessandro Franchin

List of Publications by Year
in descending order

36 papers	6,410 citations	218677 26 h-index	377865 34 g-index
36 all docs	36 docs citations	36 times ranked	4227 citing authors

#	Article	IF	Citations
1	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. Nature, 2011, 476, 429-433.	27.8	1,114
2	Direct Observations of Atmospheric Aerosol Nucleation. Science, 2013, 339, 943-946.	12.6	876
3	Molecular understanding of sulphuric acidâ€“amine particle nucleation in the atmosphere. Nature, 2013, 502, 359-363.	27.8	774
4	The role of low-volatility organic compounds in initial particle growth in the atmosphere. Nature, 2016, 533, 527-531.	27.8	540
5	Ion-induced nucleation of pure biogenic particles. Nature, 2016, 533, 521-526.	27.8	528
6	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. Science, 2014, 344, 717-721.	12.6	456
7	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17223-17228.	7.1	300
8	Global atmospheric particle formation from CERN CLOUD measurements. Science, 2016, 354, 1119-1124.	12.6	289
9	Molecular-scale evidence of aerosol particle formation via sequential addition of HIO3. Nature, 2016, 537, 532-534.	27.8	237
10	Neutral molecular cluster formation of sulfuric acidâ€“dimethylamine observed in real time under atmospheric conditions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15019-15024.	7.1	208
11	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	12.8	116
12	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12053-12058.	7.1	107
13	Effect of ions on sulfuric acidâ€water binary particle formation: 2. Experimental data and comparison with QCâ€normalized classical nucleation theory. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1752-1775.	3.3	99
14	On the composition of ammoniaâ€“sulfuric-acid ion clusters during aerosol particle formation. Atmospheric Chemistry and Physics, 2015, 15, 55-78.	4.9	84
15	An Odd Oxygen Framework for Wintertime Ammonium Nitrate Aerosol Pollution in Urban Areas: NO_x and VOC Control as Mitigation Strategies. Geophysical Research Letters, 2019, 46, 4971-4979.	4.0	80
16	An Instrumental Comparison of Mobility and Mass Measurements of Atmospheric Small Ions. Aerosol Science and Technology, 2011, 45, 522-532.	3.1	72
17	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12,377.	3.3	71
18	Performance of diethylene glycol-based particle counters in the sub-3 nm size range. Atmospheric Measurement Techniques, 2013, 6, 1793-1804.	3.1	63

#	Article	IF	Citations
19	Insight into Acidâ€“Base Nucleation Experiments by Comparison of the Chemical Composition of Positive, Negative, and Neutral Clusters. Environmental Science & Technology, 2014, 48, 13675-13684.	10.0	51
20	Experimental investigation of ionâ€“ion recombination under atmospheric conditions. Atmospheric Chemistry and Physics, 2015, 15, 7203-7216.	4.9	46
21	Heterogeneous Nucleation onto Ions and Neutralized Ions: Insights into Sign-Preference. Journal of Physical Chemistry C, 2016, 120, 7444-7450.	3.1	45
22	Comparing simulated and experimental molecular cluster distributions. Faraday Discussions, 2013, 165, 75.	3.2	33
23	Airborne and ground-based observations of ammonium-nitrate-dominated aerosols in a shallow boundary layer during intense winter pollution episodes in northern Utah. Atmospheric Chemistry and Physics, 2018, 18, 17259-17276.	4.9	33
24	On the contribution of nocturnal heterogeneous reactive nitrogen chemistry to particulate matter formation during wintertime pollution events in Northern Utah. Atmospheric Chemistry and Physics, 2019, 19, 9287-9308.	4.9	33
25	Variability and Time of Day Dependence of Ozone Photochemistry in Western Wildfire Plumes. Environmental Science & Technology, 2021, 55, 10280-10290.	10.0	31
26	Thermodynamics of the formation of sulfuric acid dimers in the binary (H₂SO₄â€“H<sub>2</sub and ternary (H₂SO₄â€“H<sub>2</sub system. Atmospheric Chemistry and Physics, 2015, 15, 10701-10721.	4.9	27
27	Effect of dimethylamine on the gas phase sulfuric acid concentration measured by Chemical Ionization Mass Spectrometry. Journal of Geophysical Research D: Atmospheres, 2016, 121, 3036-3049.	3.3	17
28	Comparison of the SAWNUC model with CLOUD measurements of sulphuric acidâ€water nucleation. Journal of Geophysical Research D: Atmospheres, 2016, 121, 12401-12414.	3.3	16
29	Wintertime spatial distribution of ammonia and its emission sources in the Great Salt Lake region. Atmospheric Chemistry and Physics, 2019, 19, 15691-15709.	4.9	15
30	Modeling the thermodynamics and kinetics of sulfuric acid-dimethylamine-water nanoparticle growth in the CLOUD chamber. Aerosol Science and Technology, 2016, 50, 1017-1032.	3.1	13
31	Technical Note: Using DEG-CPCs at upper tropospheric temperatures. Atmospheric Chemistry and Physics, 2015, 15, 7547-7555.	4.9	11
32	Evaporation of sulfate aerosols at low relative humidity. Atmospheric Chemistry and Physics, 2017, 17, 8923-8938.	4.9	11
33	The role of coarse aerosol particles as a sink of HNO₃ in wintertime pollution events in the Salt Lake Valley. Atmospheric Chemistry and Physics, 2021, 21, 8111-8126.	4.9	9
34	Production of neutral molecular clusters by controlled neutralization of mobility standards. Aerosol Science and Technology, 2017, 51, 946-955.	3.1	5
35	Modelling new particle formation from JuÌˆlich plant atmosphere chamber and CERN CLOUD chamber measurements. , 2013, , .		0
36	The particle size magnifier closing the gap between measurement of molecules, molecular clusters and aerosol particles. , 2013, , .		0