Antonio R Tome

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1985700/publications.pdf

Version: 2024-02-01

49 papers	6,313 citations	147786 31 h-index	223791 46 g-index
64 all docs	64 docs citations	64 times ranked	4037 citing authors

#	Article	IF	Citations
1	Survival of newly formed particles in haze conditions. Environmental Science Atmospheres, 2022, 2, 491-499.	2.4	8
2	Synergistic HNO3â€“H2SO4â€“NH3 upper tropospheric particle formation. Nature, 2022, 605, 483-489.	27.8	26
3	Determination of the collision rate coefficient between charged iodic acid clusters and iodic acid using the appearance time method. Aerosol Science and Technology, 2021, 55, 231-242.	3.1	18
4	Data Acquisition System of the CLOUD Experiment at CERN. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	2
5	Molecular characterization of ultrafine particles using extractive electrospray time-of-flight mass spectrometry. Environmental Science Atmospheres, 2021, 1, 434-448.	2.4	10
6	Role of iodine oxoacids in atmospheric aerosol nucleation. Science, 2021, 371, 589-595.	12.6	94
7	The driving factors of new particle formation and growth in the polluted boundary layer. Atmospheric Chemistry and Physics, 2021, 21, 14275-14291.	4.9	38
8	Chemical composition of nanoparticles from <i>Î±</i>-pinene nucleation and the influence of isoprene and relative humidity at low temperature. Atmospheric Chemistry and Physics, 2021, 21, 17099-17114.	4.9	12
9	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. Nature, 2020, 581, 184-189.	27.8	169
10	Size-dependent influence of NO _x on the growth rates of organic aerosol particles. Science Advances, 2020, 6, eaay4945.	10.3	61
11	Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds. Environmental Science & Technology, 2020, 54, 7911-7921.	10.0	66
12	Enhanced growth rate of atmospheric particles from sulfuric acid. Atmospheric Chemistry and Physics, 2020, 20, 7359-7372.	4.9	58
13	Molecular understanding of the suppression of new-particle formation by isoprene. Atmospheric Chemistry and Physics, 2020, 20, 11809-11821.	4.9	49
14	Molecular understanding of new-particle formation from <i>Î±</i>-pinene between â^'50 and +25â€‰Â°C. Atmospheric Chemistry and Physics, 2020, 20, 9183-9207.	4.9	68
15	Formation of Highly Oxygenated Organic Molecules from Î±-Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. ACS Earth and Space Chemistry, 2019, 3, 873-883.	2.7	52
16	CFD Analysis of Flow Structures in a Mixing Chamber. , 2019, , .		0
17	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. Atmospheric Chemistry and Physics, 2018, 18, 65-79.	4.9	56
18	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. Science Advances, 2018, 4, eaau5363.	10.3	164

#	Article	IF	Citations
19	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9122-9127.	7.1	118
20	The role of ions in new particle formation in the CLOUD chamber. Atmospheric Chemistry and Physics, 2017, 17, 15181-15197.	4.9	50
21	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
22	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
23	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
24	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
25	The role of low-volatility organic compounds in initial particle growth in the atmosphere. Nature, 2016, 533, 527-531.	27.8	540
26	Ion-induced nucleation of pure biogenic particles. Nature, 2016, 533, 521-526.	27.8	528
27	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
28	Global atmospheric particle formation from CERN CLOUD measurements. Science, 2016, 354, 1119-1124.	12.6	289
29	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	12.8	116
30	Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of <i>Î±</i>-pinene. Atmospheric Chemistry and Physics, 2016, 16, 6495-6509.	4.9	71
31	Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. Atmospheric Chemistry and Physics, 2016, 16, 1693-1712.	4.9	47
32	Hygroscopicity of nanoparticles produced from homogeneous nucleation in the CLOUD experiments. Atmospheric Chemistry and Physics, 2016, 16, 293-304.	4.9	29
33	Phase transition observations and discrimination of small cloud particles by light polarization in expansion chamber experiments. Atmospheric Chemistry and Physics, 2016, 16, 3651-3664.	4.9	11
34	Experimental investigation of ionâ€“ion recombination under atmospheric conditions. Atmospheric Chemistry and Physics, 2015, 15, 7203-7216.	4.9	46
35	Thermodynamics of the formation of sulfuric acid dimers in the binary (H₂SO₄â€“H<sub>2</s and ternary (H₂SO₄â€“H<sub>2</s system. Atmospheric Chemistry and Physics, 2015, 15, 10701-10721.	4.9	27
36	Elemental composition and clustering behaviour of Î±-pinene oxidation products for different oxidation conditions. Atmospheric Chemistry and Physics, 2015, 15, 4145-4159.	4.9	17

#	Article	IF	Citations
37	On the composition of ammoniaâ€“sulfuric-acid ion clusters during aerosol particle formation. Atmospheric Chemistry and Physics, 2015, 15, 55-78.	4.9	84
38	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
39	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. Science, 2014, 344, 717-721.	12.6	456
40	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
41	Molecular understanding of sulphuric acidâ€“amine particle nucleation in the atmosphere. Nature, 2013, 502, 359-363.	27.8	774
42	Evolution of nanoparticle composition in CLOUD in presence of sulphuric acid, ammonia and organics. , 2013, , .		1
43	The CLOUD data acquisition system and online derivation of nucleation rates. , 2013, , .		0
44	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
45	Evolution of particle composition in CLOUD nucleation experiments. Atmospheric Chemistry and Physics, 2013, 13, 5587-5600.	4.9	33
46	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. Nature, 2011, 476, 429-433.	27.8	1,114
47	Spatial structure of the evolution of surface temperatureÂ(1951â€“2004). Climatic Change, 2009, 93, 269-284.	3.6	15
48	The HERA-B database services. Computer Physics Communications, 2001, 140, 172-178.	7.5	4
49	Entropy budget of the atmosphere. Journal of Geophysical Research, 1991, 96, 10981-10988.	3.3	109