Hanna VehkamÃ¤ki

List of Publications by Year
in descending order

214 papers	13,417 citations	23567 58 h-index	27406 106 g-index
265 all docs	265 docs citations	265 times ranked	6101 citing authors

#	Article	IF	Citations
1	Formation and growth rates of ultrafine atmospheric particles: a review of observations. Journal of Aerosol Science, 2004, 35, 143-176.	3.8	2,034
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	An improved parameterization for sulfuric acidâ€“water nucleation rates for tropospheric and stratospheric conditions. Journal of Geophysical Research, 2002, 107, AAC 3-1.	3.3	492
5	Amines are likely to enhance neutral and ion-induced sulfuric acid-water nucleation in the atmosphere more effectively than ammonia. Atmospheric Chemistry and Physics, 2008, 8, 4095-4103.	4.9	424
6	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
7	From quantum chemical formation free energies to evaporation rates. Atmospheric Chemistry and Physics, 2012, 12, 225-235.	4.9	247
8	Enhancing effect of dimethylamine in sulfuric acid nucleation in the presence of water â€“ a computational study. Atmospheric Chemistry and Physics, 2010, 10, 4961-4974.	4.9	245
9	Molecular-scale evidence of aerosol particle formation via sequential addition of HIO3. Nature, 2016, 537, 532-534.	27.8	237
10	Parametrization of ternary nucleation rates for H2SO4-NH3-H2O vapors. Journal of Geophysical Research, 2002, 107, AAC 6-1.	3.3	235
11	Heterogeneous Nucleation Experiments Bridging the Scale from Molecular Ion Clusters to Nanoparticles. Science, 2008, 319, 1374-1377.	12.6	232
12	Atmospheric Cluster Dynamics Code: a flexible method for solution of the birth-death equations. Atmospheric Chemistry and Physics, 2012, 12, 2345-2355.	4.9	226
13	Composition and temporal behavior of ambient ions in the boreal forest. Atmospheric Chemistry and Physics, 2010, 10, 8513-8530.	4.9	170
14	Free energy barrier in the growth of sulfuric acidâ€“ammonia and sulfuric acidâ€“dimethylamine clusters. Journal of Chemical Physics, 2013, 139, 084312.	3.0	164
15	Ultrafine particle scavenging coefficients calculated from 6 years field measurements. Atmospheric Environment, 2003, 37, 3605-3613.	4.1	150
16	The condensation particle counter battery (CPCB): A new tool to investigate the activation properties of nanoparticles. Journal of Aerosol Science, 2007, 38, 289-304.	3.8	145
17	Atmospheric nucleation: highlights of the EUCAARI project and future directions. Atmospheric Chemistry and Physics, 2010, 10, 10829-10848.	4.9	144
18	New parameterization of sulfuric acidâ€ammoniaâ€water ternary nucleation rates at tropospheric conditions. Journal of Geophysical Research, 2007, 112, .	3.3	131

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19	Origin of the Failure of Classical Nucleation Theory: Incorrect Description of the Smallest Clusters. Physical Review Letters, 2007, 98, 145702.	7.8	121
20	On the formation of sulphuric acid â€“ amine clusters in varying atmospheric conditions and its influence on atmospheric new particle formation. Atmospheric Chemistry and Physics, 2012, 12, 9113-9133.	4.9	119
21	Ab initio study of gas-phase sulphuric acid hydrates containing 1 to 3 water molecules. Journal of Chemical Physics, 1998, 108, 1031-1039.	3.0	116
22	The effect of acidâ€“base clustering and ions on the growth of atmospheric nano-particles. Nature Communications, 2016, 7, 11594.	12.8	116
23	Fatty acids on continental sulfate aerosol particles. Journal of Geophysical Research, 2005, 110, n/a-n/a.	3.3	111
24	A density functional study on water-sulfuric acid-ammonia clusters and implications for atmospheric cluster formation. Journal of Geophysical Research, 2007, 112, .	3.3	111
25	Methane sulfonic acid-enhanced formation of molecular clusters of sulfuric acid and dimethyl amine. Atmospheric Chemistry and Physics, 2014, 14, 12023-12030.	4.9	110
26	An improved model for hydrate formation in sulfuric acidâ€“water nucleation. Journal of Chemical Physics, 2002, 116, 218.	3.0	107
27	How do organic vapors contribute to new-particle formation?. Faraday Discussions, 2013, 165, 91.	3.2	105
28	Energetics of Atmospherically Implicated Clusters Made of Sulfuric Acid, Ammonia, and Dimethyl Amine. Journal of Physical Chemistry A, 2013, 117, 3819-3825.	2.5	102
29	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
30	Hydration of Atmospherically Relevant Molecular Clusters: Computational Chemistry and Classical Thermodynamics. Journal of Physical Chemistry A, 2014, 118, 2599-2611.	2.5	98
31	Modeling the formation and growth of atmospheric molecular clusters: A review. Journal of Aerosol Science, 2020, 149, 105621.	3.8	98
32	New particle formation from sulfuric acid and amines: Comparison of monomethylamine, dimethylamine, and trimethylamine. Journal of Geophysical Research D: Atmospheres, 2017, 122, 7103-7118.	3.3	97
33	An improved model for ternary nucleation of sulfuric acidâ€“ammoniaâ€“water. Journal of Chemical Physics, 2002, 116, 4221-4227.	3.0	96
34	Thermodynamics and kinetics of atmospheric aerosol particle formation and growth. Chemical Society Reviews, 2012, 41, 5160.	38.1	95
35	Atmospheric Fate of Monoethanolamine: Enhancing New Particle Formation of Sulfuric Acid as an Important Removal Process. Environmental Science & Technology, 2017, 51, 8422-8431.	10.0	95
36	Atmospheric particle formation events at VÃ¤rriÃ¶ measurement station in Finnish Lapland 1998-2002. Atmospheric Chemistry and Physics, 2004, 4, 2015-2023.	4.9	92

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37	Ab Initio and Density Functional Theory Reinvestigation of Gas-Phase Sulfuric Acid Monohydrate and Ammonium Hydrogen Sulfate. Journal of Physical Chemistry A, 2006, 110, 7178-7188.	2.5	92
38	The role of highly oxygenated organic molecules in the Boreal aerosol-cloud-climate system. Nature Communications, 2019, 10, 4370.	12.8	91
39	The role of ammonia in sulfuric acid ion induced nucleation. Atmospheric Chemistry and Physics, 2008, 8, 2859-2867.	4.9	90
40	Self-Catalytic Reaction of SO₃ and NH₃ To Produce Sulfamic Acid and Its Implication to Atmospheric Particle Formation. Journal of the American Chemical Society, 2018, 140, 11020-11028.	13.7	86
41	Coupled Cluster Evaluation of the Stability of Atmospheric Acidâ€“Base Clusters with up to 10 Molecules. Journal of Physical Chemistry A, 2016, 120, 621-630.	2.5	83
42	Liquid-drop formalism and free-energy surfaces in binary homogeneous nucleation theory. Journal of Chemical Physics, 1999, 111, 2019-2027.	3.0	82
43	Nucleation studies in the Martian atmosphere. Journal of Geophysical Research, 2005, 110, .	3.3	82
44	Amine substitution into sulfuric acid â€“ ammonia clusters. Atmospheric Chemistry and Physics, 2012, 12, 3591-3599.	4.9	82
45	Estimation of line tension and contact angle from heterogeneous nucleation experimental data. Journal of Chemical Physics, 2007, 126, 094705.	3.0	80
46	Dilution and aerosol dynamics within a diesel car exhaust plumeâ€”CFD simulations of on-road measurement conditions. Atmospheric Environment, 2007, 41, 7440-7461.	4.1	79
47	Monte Carlo simulations of critical cluster sizes and nucleation rates of water. Journal of Chemical Physics, 2004, 121, 914-924.	3.0	78
48	Changes in background aerosol composition in Finland during polluted and clean periods studied by TEM/EDX individual particle analysis. Atmospheric Chemistry and Physics, 2006, 6, 5049-5066.	4.9	77
49	Characterization of aerosol particle episodes in Finland caused by wildfires in Eastern Europe. Atmospheric Chemistry and Physics, 2005, 5, 2299-2310.	4.9	73
50	Modelling Binary Homogeneous Nucleation of Waterâ^'Sulfuric Acid Vapours:Â Parameterisation for High Temperature Emissions. Environmental Science & Technology, 2003, 37, 3392-3398.	10.0	72
51	Experimental Observation of Strongly Bound Dimers of Sulfuric Acid: Application to Nucleation in the Atmosphere. Physical Review Letters, 2011, 106, 228302.	7.8	72
52	Diamines Can Initiate New Particle Formation in the Atmosphere. Journal of Physical Chemistry A, 2017, 121, 6155-6164.	2.5	72
53	Strong Hydrogen Bonded Molecular Interactions between Atmospheric Diamines and Sulfuric Acid. Journal of Physical Chemistry A, 2016, 120, 3693-3700.	2.5	70
54	The effect of H₂SO₄ â€“ amine clustering on chemical ionization mass spectrometry (CIMS) measurements of gas-phase sulfuric acid. Atmospheric Chemistry and Physics, 2011, 11, 3007-3019.	4.9	69

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55	Computational Study on the Effect of Hydration on New Particle Formation in the Sulfuric Acid/Ammonia and Sulfuric Acid/Dimethylamine Systems. Journal of Physical Chemistry A, 2016, 120, 1886-1896.	2.5	68
56	Significance of Ammonia in Growth of Atmospheric Nanoclusters. Journal of Physical Chemistry A, 2007, 111, 10671-10674.	2.5	66
57	Characterization and source identification of a fine particle episode in Finland. Atmospheric Environment, 2004, 38, 5003-5012.	4.1	65
58	Formation and growth of indoor air aerosol particles as a result of d-limonene oxidation. Atmospheric Environment, 2006, 40, 7882-7892.	4.1	63
59	Long-range transport episodes of fine particles in southern Finland during 1999â€“2007. Atmospheric Environment, 2009, 43, 1255-1264.	4.1	63
60	Estimating the NH₃:H₂SO<sub>4</sub&a ratio of nucleating clusters in atmospheric conditions using quantum chemical methods. Atmospheric Chemistry and Physics, 2007, 7, 2765-2773.	4.9	62
61	Electrical charging changes the composition of sulfuric acidâ€“ammonia/dimethylamine clusters. Atmospheric Chemistry and Physics, 2014, 14, 7995-8007.	4.9	59
62	Configurational Sampling of Noncovalent (Atmospheric) Molecular Clusters: Sulfuric Acid and Guanidine. Journal of Physical Chemistry A, 2019, 123, 6022-6033.	2.5	54
63	Methanesulfonic Acid-driven New Particle Formation Enhanced by Monoethanolamine: A Computational Study. Environmental Science & Technology, 2019, 53, 14387-14397.	10.0	50
64	Ternary nucleation. Journal of Aerosol Science, 1999, 30, 131-138.	3.8	48
65	Critical cluster size and droplet nucleation rate from growth and decay simulations of Lennard-Jones clusters. Journal of Chemical Physics, 2000, 112, 4193-4202.	3.0	48
66	Heterogeneous nucleation as a potential sulphate-coating mechanism of atmospheric mineral dust particles and implications of coated dust on new particle formation. Journal of Geophysical Research, 2003, 108, .	3.3	48
67	Formation of atmospheric molecular clusters consisting of sulfuric acid and C₈H₁₂O₆ tricarboxylic acid. Physical Chemistry Chemical Physics, 2017, 19, 4877-4886.	2.8	47
68	Ternary nucleation of inorganic acids, ammonia, and water. Journal of Chemical Physics, 2002, 117, 8418-8425.	3.0	46
69	Heterogeneous Nucleation onto Ions and Neutralized Ions: Insights into Sign-Preference. Journal of Physical Chemistry C, 2016, 120, 7444-7450.	3.1	45
70	How well can we predict cluster fragmentation inside a mass spectrometer?. Chemical Communications, 2019, 55, 5946-5949.	4.1	43
71	Stable Ammonium Bisulfate Clusters in the Atmosphere. Physical Review Letters, 2004, 93, 148501.	7.8	42
72	Technical Note: The heterogeneous Zeldovich factor. Atmospheric Chemistry and Physics, 2007, 7, 309-313.	4.9	42

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73	Piperazine Enhancing Sulfuric Acid-Based New Particle Formation: Implications for the Atmospheric Fate of Piperazine. Environmental Science & Technology, 2019, 53, 8785-8795.	10.0	41
74	Binary homogeneous nucleation in waterâ€"succinic acid and waterâ€"glutaric acid systems. Journal of Chemical Physics, 2004, 120, 282-291.	3.0	40
75	Effect of Conformers on Free Energies of Atmospheric Complexes. Journal of Physical Chemistry A, 2016, 120, 8613-8624.	2.5	36
76	Structural Effects of Amines in Enhancing Methanesulfonic Acid-Driven New Particle Formation. Environmental Science & Technology, 2020, 54, 13498-13508.	10.0	36
77	Rethinking the application of the first nucleation theorem to particle formation. Journal of Chemical Physics, 2012, 136, 094107.	3.0	35
78	Effect of Bisulfate, Ammonia, and Ammonium on the Clustering of Organic Acids and Sulfuric Acid. Journal of Physical Chemistry A, 2017, 121, 4812-4824.	2.5	35
79	Structures, Hydration, and Electrical Mobilities of Bisulfate Ionâ€"Sulfuric Acidâ€"Ammonia/Dimethylamine Clusters: A Computational Study. Journal of Physical Chemistry A, 2015, 119, 9670-9679.	2.5	34
80	Effect of ions on sulfuric acidâ€•water binary particle formation: 1. Theory for kineticâ€•and nucleationâ€•type particle formation and atmospheric implications. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1736-1751.	3.3	34
81	Impact of Quantum Chemistry Parameter Choices and Cluster Distribution Model Settings on Modeled Atmospheric Particle Formation Rates. Journal of Physical Chemistry A, 2020, 124, 5931-5943.	2.5	34
82	Computational Study of the Reaction between Biogenic Stabilized Criegee Intermediates and Sulfuric Acid. Journal of Physical Chemistry A, 2007, 111, 3394-3401.	2.5	33
83	Comparing simulated and experimental molecular cluster distributions. Faraday Discussions, 2013, 165, 75.	3.2	33
84	CIMS Sulfuric Acid Detection Efficiency Enhanced by Amines Due to Higher Dipole Moments: A Computational Study. Journal of Physical Chemistry A, 2013, 117, 14109-14119.	2.5	33
85	Atmospheric Sulfuric Acidâ€•Dimethylamine Nucleation Enhanced by Trifluoroacetic Acid. Geophysical Research Letters, 2020, 47, e2019GL085627.	4.0	33
86	Simulation of atmospheric nucleation mode: A comparison of nucleation models and size distribution representations. Journal of Geophysical Research, 2003, 108, .	3.3	32
87	Can Highly Oxidized Organics Contribute to Atmospheric New Particle Formation?. Journal of Physical Chemistry A, 2016, 120, 1452-1458.	2.5	32
88	Guanidine: A Highly Efficient Stabilizer in Atmospheric New-Particle Formation. Journal of Physical Chemistry A, 2018, 122, 4717-4729.	2.5	32
89	Unexpected quenching effect on new particle formation from the atmospheric reaction of methanol with SO ₃. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24966-24971.	7.1	32
90	Modeling on Fragmentation of Clusters inside a Mass Spectrometer. Journal of Physical Chemistry A, 2019, 123, 611-624.	2.5	32

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91	A thermodynamically consistent determination of surface tension of small Lennard-Jones clusters from simulation and theory. Journal of Chemical Physics, 2010, 133, 044704.	3.0	31
92	Rate enhancement in collisions of sulfuric acid molecules due to long-range intermolecular forces. Atmospheric Chemistry and Physics, 2019, 19, 13355-13366.	4.9	31
93	Strange Predictions by Binary Heterogeneous Nucleation Theory Compared with a Quantitative Experimentâ€. Journal of Physical Chemistry B, 2001, 105, 11800-11808.	2.6	30
94	The Effect of Water and Bases on the Clustering of a Cyclohexene Autoxidation Product C₆H₈O₇ with Sulfuric Acid. Journal of Physical Chemistry A, 2016, 120, 2240-2249.	2.5	30
95	Critical cluster size cannot in practice be determined by slope analysis in atmospherically relevant applications. Journal of Aerosol Science, 2014, 77, 127-144.	3.8	29
96	Nucleation theorems applied to the Ising model. Physical Review E, 1999, 59, 6483-6488.	2.1	28
97	The sign preference in sulfuric acid nucleation. Computational and Theoretical Chemistry, 2009, 901, 169-173.	1.5	28
98	Two-component heterogeneous nucleation kinetics and an application to Mars. Journal of Chemical Physics, 2007, 127, 134710.	3.0	27
99	Heterogeneous multicomponent nucleation theorems for the analysis of nanoclusters. Journal of Chemical Physics, 2007, 126, 174707.	3.0	26
100	Quantitative Characterization of Critical Nanoclusters Nucleated on Large Single Molecules. Physical Review Letters, 2012, 108, 085701.	7.8	26
101	New Parameterizations for Neutral and Ionâ€Induced Sulfuric Acidâ€Water Particle Formation in Nucleation and Kinetic Regimes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1269-1296.	3.3	26
102	Ion Mobility-Mass Spectrometry of Iodine Pentoxideâ€"Iodic Acid Hybrid Cluster Anions in Dry and Humidified Atmospheres. Journal of Physical Chemistry Letters, 2019, 10, 1935-1941.	4.6	26
103	Structural Rearrangements and Magic Numbers in Reactions between Pyridine-Containing Water Clusters and Ammonia. Journal of Physical Chemistry A, 2012, 116, 4902-4908.	2.5	25
104	Volatile Nanoparticle Formation and Growth within a Diluting Diesel Car Exhaust. Journal of the Air and Waste Management Association, 2011, 61, 399-408.	1.9	24
105	Exploring the atmospheric chemistry of O₂SO₃<sup>âˆ’</sup&am and assessing the maximum turnover number of ion-catalysed H₂SO₄ formation. Atmospheric Chemistry and Physics, 2013, 13, 3695-3703.	4.9	24
106	Homogeneous nucleation of n-nonane and n-propanol mixtures: A comparison of classical nucleation theory and experiments. Journal of Chemical Physics, 2005, 123, 244502.	3.0	22
107	Cluster sizes in direct and indirect molecular dynamics simulations of nucleation. Journal of Chemical Physics, 2009, 131, 244511.	3.0	22
108	On the stability and dynamics of (sulfuric acid)(ammonia) and (sulfuric acid)(dimethylamine) clusters: A first-principles molecular dynamics investigation. Chemical Physics, 2014, 428, 164-174.	1.9	22

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109	Clustering mechanism of oxocarboxylic acids involving hydration reaction: Implications for the atmospheric models. Journal of Chemical Physics, 2018, 148, 214303.	3.0	22
110	Comparative study on methodology in molecular dynamics simulation of nucleation. Journal of Chemical Physics, 2007, 126, 224517.	3.0	21
111	Investigating Atmospheric Sulfuric Acidâ€"Waterâ€"Ammonia Particle Formation Using Quantum Chemistry. Advances in Quantum Chemistry, 2008, 55, 407-427.	0.8	21
112	The role of cluster energy nonaccommodation in atmospheric sulfuric acid nucleation. Journal of Chemical Physics, 2010, 132, 024304.	3.0	21
113	Vapor-liquid nucleation of argon: Exploration of various intermolecular potentials. Journal of Chemical Physics, 2010, 133, 084106.	3.0	20
114	Growth rates of atmospheric molecular clusters based on appearance times and collisionâ€"evaporation fluxes: Growth by monomers. Journal of Aerosol Science, 2014, 78, 55-70.	3.8	20
115	Atomistic Simulation of Ice Nucleation on Silver Iodide (0001) Surfaces with Defects. Journal of Physical Chemistry C, 2020, 124, 436-445.	3.1	20
116	Analysis of waterâ€"ethanol nucleation rate data with two component nucleation theorems. Journal of Chemical Physics, 2000, 113, 3261-3269.	3.0	19
117	Binary nucleation kinetics: A matrix method. Journal of Chemical Physics, 1994, 101, 9997-10002.	3.0	17
118	Kinetic effect of cluster-cluster processes on homogeneous nucleation rates in one- and two-component systems. Journal of Chemical Physics, 1997, 107, 3196-3203.	3.0	17
119	Molecular dynamic simulations of atomâ€"cluster collision processes. Journal of Chemical Physics, 2004, 120, 165-169.	3.0	17
120	Comparison of Monte Carlo simulation methods for the calculation of the nucleation barrier of argon. Atmospheric Research, 2006, 82, 489-502.	4.1	17
121	Analysis and evaluation of selected PM10 pollution episodes in the Helsinki Metropolitan Area in 2002. Atmospheric Environment, 2008, 42, 3992-4005.	4.1	17
122	Reactions and Reaction Rate of Atmospheric SO₂ and O₃^{â€"} (H₂O)_{<i>n</i>} Collisions via Molecular Dynamics Simulations. Journal of Physical Chemistry A, 2013, 117, 3143-3148.	2.5	17
123	Growth of atmospheric clusters involving clusterâ€"cluster collisions: comparison of different growth rate methods. Atmospheric Chemistry and Physics, 2016, 16, 5545-5560.	4.9	16
124	Hydration of Atmospheric Molecular Clusters III: Procedure for Efficient Free Energy Surface Exploration of Large Hydrated Clusters. Journal of Physical Chemistry A, 2020, 124, 5253-5261.	2.5	16
125	Equilibrium sizes and formation energies of small and large Lennard-Jones clusters from molecular dynamics: A consistent comparison to Monte Carlo simulations and density functional theories. Journal of Chemical Physics, 2008, 129, 234506.	3.0	15
126	From collisions to clusters: first steps of sulphuric acid nanocluster formation dynamics. Molecular Physics, 2014, 112, 1979-1986.	1.7	15

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127	Predicting gasâ€“particle partitioning coefficients of atmospheric molecules with machine learning. Atmospheric Chemistry and Physics, 2021, 21, 13227-13246.	4.9	15
128	Connection between the virial equation of state and physical clusters in a low density vapor. Journal of Chemical Physics, 2007, 127, 104303.	3.0	13
129	Implementation of state-of-the-art ternary new-particle formation scheme to the regional chemical transport model PMCAMx-UF in Europe. Geoscientific Model Development, 2016, 9, 2741-2754.	3.6	13
130	Deviation from equilibrium conditions in molecular dynamic simulations of homogeneous nucleation. Journal of Chemical Physics, 2018, 148, 164508.	3.0	13
131	Homogeneous Ternary H2SO4-NH3-H2O Nucleation and Diesel Exhaust: a Classical Approach. Aerosol and Air Quality Research, 2007, 7, 489-499.	2.1	13
132	Postcollision relaxation of small atomic clusters. Journal of Chemical Physics, 2006, 124, 024303.	3.0	12
133	Computational investigation of the possible role of some intermediate products of SO2 oxidation in sulfuric acidâ€“water nucleation. Atmospheric Research, 2009, 91, 47-52.	4.1	12
134	Comment on â€˜Enhancement in the production of nucleating clusters due to dimethylamine and large uncertainties in the thermochemistry of amine-enhanced nucleationâ€™ by Nadykto et al., Chem. Phys. Lett. 609 (2014) 42â€“49. Chemical Physics Letters, 2015, 624, 107-110.	2.6	12
135	Homogeneous nucleation of carbon dioxide in supersonic nozzles II: molecular dynamics simulations and properties of nucleating clusters. Physical Chemistry Chemical Physics, 2021, 23, 4517-4529.	2.8	12
136	The role of dimers in evaporation of small argon clusters. Journal of Chemical Physics, 2004, 121, 819-822.	3.0	11
137	Comparison between the classical theory predictions and molecular simulation results for heterogeneous nucleation of argon. Journal of Chemical Physics, 2006, 125, 164712.	3.0	11
138	Carbon dioxideâ€“water clusters in the atmosphere of Mars. Computational and Theoretical Chemistry, 2011, 965, 353-358.	2.5	11
139	Proton affinities of candidates for positively charged ambient ions in boreal forests. Atmospheric Chemistry and Physics, 2013, 13, 10397-10404.	4.9	11
140	Exploring the chemical fate of the sulfate radical anion by reaction with sulfur dioxide in the gas phase. Atmospheric Chemistry and Physics, 2015, 15, 495-503.	4.9	11
141	Homogeneous nucleation of carbon dioxide in supersonic nozzles I: experiments and classical theories. Physical Chemistry Chemical Physics, 2020, 22, 19282-19298.	2.8	11
142	Excess energies of n- and i-octane molecular clusters. Journal of Chemical Physics, 2001, 114, 5509-5513.	3.0	10
143	A Closure Study of the Reaction between Sulfur Dioxide and the Sulfate Radical Ion from First-Principles Molecular Dynamics Simulations. Journal of Physical Chemistry A, 2016, 120, 1046-1050.	2.5	10
144	Theoretical and Experimental Study on Phase Transitions and Mass Fluxes of Supersaturated Water Vapor onto Different Insoluble Flat Surfaces. Langmuir, 2006, 22, 10061-10065.	3.5	9

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145	Molecular dynamics simulation of atomic clusters in equilibrium with a vapour. Molecular Simulation, 2007, 33, 245-251.	2.0	9
146	Correction to â€œNew parameterization of sulfuric acidâ€ammoniaâ€water ternary nucleation rates at tropospheric conditionsâ€. Journal of Geophysical Research, 2009, 114, .	3.3	9
147	Corrigendum to "The role of ammonia in sulfuric acid ion induced nucleation" published in Atmos. Chem. Phys., 8, 2859â€"2867, 2008. Atmospheric Chemistry and Physics, 2009, 9, 7431-7434.	4.9	9
148	Performance of some nucleation theories with a nonsharp droplet-vapor interface. Journal of Chemical Physics, 2010, 133, 154503.	3.0	9
149	Resolving the anomalous infrared spectrum of the MeCNâ€"HCl molecular cluster using ab Initio molecular dynamics. Physical Chemistry Chemical Physics, 2014, 16, 24685-24690.	2.8	9
150	Effect of Hydration and Base Contaminants on Sulfuric Acid Diffusion Measurement: A Computational Study. Aerosol Science and Technology, 2014, 48, 593-603.	3.1	9
151	On the gas-phase reaction between SO₂ and O₂^{âˆ’}(H₂O)_{0â€"3} clusters â€" an ab initio study. Physical Chemistry Chemical Physics, 2014, 16, 5987-5992.	2.8	9
152	Reaction Mechanisms Underlying Unfunctionalized Alkyl Nitrate Hydrolysis in Aqueous Aerosols. ACS Earth and Space Chemistry, 2021, 5, 210-225.	2.7	9
153	Dynamic Surface Tension Enhances the Stability of Nanobubbles in Xylem Sap. Frontiers in Plant Science, 2021, 12, 732701.	3.6	9
154	Analysis of nucleation ability of cluster configurations with Monte Carlo simulations of argon. Journal of Chemical Physics, 2006, 125, 084503.	3.0	8
155	Homogeneous vs. heterogeneous nucleation in water-dicarboxylic acid systems. Atmospheric Chemistry and Physics, 2009, 9, 1873-1881.	4.9	8
156	Molecular Origin of the Sign Preference of Ion- Induced Heterogeneous Nucleation in a Complex Ionic Liquidâ€"Diethylene Glycol System. Journal of Physical Chemistry C, 2020, 124, 26944-26952.	3.1	8
157	New Particle Formation from the Vapor Phase: From Barrier-Controlled Nucleation to the Collisional Limit. Journal of Physical Chemistry Letters, 2021, 12, 4593-4599.	4.6	8
158	Aerosol formation in diffusive boundary layer: Binary homogeneous nucleation of ammonia and water vapours. Journal of Aerosol Science, 1995, 26, 547-558.	3.8	7
159	Energetics of smalln-pentanol clusters from droplet nucleation rate data. Journal of Chemical Physics, 2000, 112, 5393-5398.	3.0	7
160	Atmospheric variability and binary homogeneous nucleation: A parametrisation and conditions required for a significant effect. Atmospheric Research, 2006, 82, 503-513.	4.1	7
161	Identification of molecular cluster evaporation rates, cluster formation enthalpies and entropies by Monte Carlo method. Atmospheric Chemistry and Physics, 2020, 20, 15867-15906.	4.9	7
162	A study on the fragmentation of sulfuric acid and dimethylamine clusters inside an atmospheric pressure interface time-of-flight mass spectrometer. Atmospheric Measurement Techniques, 2022, 15, 11-19.	3.1	7

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163	Separation of isomers using a differential mobility analyser (DMA): Comparison of experimental vs modelled ion mobility. Talanta, 2022, 243, 123339.	5.5	7
164	Heterogeneous Nucleation of Butanol on NaCl: A Computational Study of Temperature, Humidity, Seed Charge, and Seed Size Effects. Journal of Physical Chemistry A, 2021, 125, 3025-3036.	2.5	6
165	A comparison of rigid and flexible water models in collisions of monomers and small clusters. Journal of Chemical Physics, 2006, 125, 094313.	3.0	5
166	An Exploratory Study of the Learning of Transferable Skills in a Research-Oriented Intensive Course in Atmospheric Sciences. Sustainability, 2018, 10, 1385.	3.2	5
167	The role of the attractive potential of a droplet in unary and binary steady state nucleation. Journal of Chemical Physics, 1997, 107, 544-549.	3.0	4
168	Reversible work of the formation of a layer of a new phase on a spherical charged conductor within a uniform multicomponent macroscopic mother phase. Journal of Chemical Physics, 2003, 119, 10733-10744.	3.0	4
169	Parameterization of ammonia and water content of atmospheric droplets with fixed number of sulfuric acid molecules. Atmospheric Research, 2006, 82, 514-522.	4.1	4
170	Extrapolating particle concentration along the size axis in the nanometer size range requires discrete rate equations. Journal of Aerosol Science, 2015, 90, 1-13.	3.8	4
171	Computational Study of the Effect of Mineral Dust on Secondary Organic Aerosol Formation by Accretion Reactions of Closed-Shell Organic Compounds. Journal of Physical Chemistry A, 2019, 123, 9008-9018.	2.5	4
172	Highly oxygenated organic molecule cluster decomposition in atmospheric pressure interface time-of-flight mass spectrometers. Atmospheric Measurement Techniques, 2020, 13, 3581-3593.	3.1	4
173	Nonisothermal nucleation in the gas phase is driven by cool subcritical clusters. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	4
174	Heterogeneous nucleation in multi-component vapor on a partially wettable charged conducting particle. II. The generalized Laplace, Gibbs-Kelvin, and Young equations and application to nucleation. Journal of Chemical Physics, 2013, 139, 134108.	3.0	3
175	Heterogeneous Nucleation Theorems for Multicomponent Systems. , 2007, , 235-239.		3
176	Seedâ€“Adsorbate Interactions as the Key of Heterogeneous Butanol and Diethylene Glycol Nucleation on Ammonium Bisulfate and Tetramethylammonium Bromide. Journal of Physical Chemistry A, 2020, 124, 10527-10539.	2.5	3
177	EFFECT OF SULFURIC ACID ON THE COMPOSITION OF NEGATIVE SMALL AIR IONS: A NUMERICAL SIMULATION. Journal of Aerosol Science, 2004, 35, S953-S954.	3.8	2
178	Density-functional study of the sign preference of the binding of 1-propanol to tungsten oxide seed particles. Computational and Theoretical Chemistry, 2011, 966, 322-327.	2.5	2
179	From gas-phase oxidation of SO[sub 2] by SO[sub 4][sup â^'] to the formation of sulfuric acid. AIP Conference Proceedings, 2013, , .	0.4	2
180	Corrigendum to "From quantum chemical formation free energies to evaporation rates" published in Atmos. Chem. Phys., 12, 225â€“235, 2012. Atmospheric Chemistry and Physics, 2013, 13, 3321-3327.	4.9	2

#	Article	IF	Citations
181	The First Heterogeneous Nucleation Theorem Including Line Tension: Analysis of Experimental Data. , 2007, , 230-234.		2
182	COMPARISON OF PARTICLE SIZE DISTRIBUTIONS INDOORS AND OUTDOORS MEASURED IN A MOULD DAMAGE AND IN A REFERENCE BUILDING. Journal of Aerosol Science, 2004, 35, S739-S740.	3.8	1
183	Quantum chemical studies on peroxodisulfuric acidâ€"sulfuric acidâ€"water clusters. Computational and Theoretical Chemistry, 2011, 967, 219-225.	2.5	1
184	Heterogeneous nucleation in multi-component vapor on a partially wettable charged conducting particle. I. Formulation of general equations: Electrical surface and line excess quantities. Journal of Chemical Physics, 2013, 139, 134107.	3.0	1
185	Hydration of pure and base-Containing sulfuric acid clusters studied by computational chemistry methods. , 2013, , .		1
186	The charging properties of protonated acetone and acetone clusters. , 2013, , .		1
187	Experimental setup affects the particle formation rate and its slope d(log J)/d(log C). , 2013, , .		1
188	The charging of neutral dimethylamine and dimethylamineâ€"sulfuric acid clusters using protonated acetone. Atmospheric Measurement Techniques, 2015, 8, 2577-2588.	3.1	1
189	On Water Condensation Particle Counters and their Applicability to Field Measurements. , 2007, , 707-710.		1
190	A Kinetically Correct and an Approximate Model of Heterogeneous Nucleation. , 2007, , 322-326.		1
191	An Insight into the Failure of Classical Nucleation Theory. , 2007, , 121-125.		1
192	Nucleation rates of Lennard-Jones clusters from growth and decay simulations. AIP Conference Proceedings, 2000, , .	0.4	0
193	EFFECT OF VARIABILITY IN TEMPERATURE AND VAPOUR CONCENTRATION ON NEW PARTICLE FORMATION. Journal of Aerosol Science, 2004, 35, S939-S940.	3.8	0
194	ATMOSPHERIC PARTICLE FORMATION EVENTS AT VÃ„RRIÃ– MEASUREMENT STATION 1998-2002. Journal of Aerosol Science, 2004, 35, S1045-S1046.	3.8	0
195	SIMULATIONS OF ARGON CLUSTERS: VARIATION OF GROWTH AND DECAY PROBABILITIES WITH INTRINSIC CLUSTER PROPERTIES. Journal of Aerosol Science, 2004, 35, S835-S836.	3.8	0
196	Nucleation in the atmosphere of Mars. Journal of Aerosol Science, 2004, 35, S943-S944.	3.8	0
197	NON-STEADY-STATE BINARY WATER-SULPHURIC ACID NUCLEATION MODEL. Journal of Aerosol Science, 2004, 35, S1199-S1200.	3.8	0
198	PARAMETERIZATIONS OF WATER-SULFURIC ACID-AMMONIA DROPLETS IN ATMOSPHERIC CONDITIONS. Journal of Aerosol Science, 2004, 35, S1255-S1256.	3.8	0

#	Article	IF	Citations
199	COMPARISON OF TWO MONTE CARLO NUCLEATION SIMULATION METHODS. Journal of Aerosol Science, 2004, 35, S765-S766.	3.8	0
200	A Comparative Study in Molecular Dynamics Simulation of Nucleation. , 2007, , 195-199.		0
201	On the similarity of equilibrium and critical clusters in atomic vapors. Journal of Chemical Physics, 2013, 138, 104504.	3.0	0
202	On atmospheric neutral and ion clusters observed in HyytiaÌˆlaÌˆ spring 2011. , 2013, , .		0
203	First-principles molecular dynamics simulations of (sulfuric acid)1(dimethylamine)1 cluster formation. , 2013, , .		0
204	Charged and neutral binary nucleation of sulfuric acid in free troposphere conditions. , 2013, , .		0
205	Is there an energy barrier in the growth of sulfuric acid clusters?. , 2013, , .		0
206	Log-log slope analyses of simulated particle formation events at different conditions. , 2013, , .		0
207	The effect of early growth dynamics on determining particle formation rates of a nucleating burst. , 2013, , .		0
208	Linking neutral and charged sulfuric acid-ammonia and sulfuric acid-dimethylamine clusters. , 2013, , .		0
209	The role of highly oxidized organics in new particle formation. , 2013, , .		0
210	RE-EVALUATION OF PARAMETRISATIONS OF SULPHURIC ACID-WATER NUCLEATION RATES. Journal of Aerosol Science, 2001, 32, 1031-1032.	3.8	0
211	Monte Carlo Simulations on Heterogeneous Nucleation I: The Point Where the Classical Theory Fails. , 2007, , 317-321.		0
212	Two-component Heterogeneous Nucleation in the Martian Atmosphere. , 2007, , 310-313.		0
213	Investigating the Role of Ammonia in Atmospheric Nucleation. , 2007, , 52-56.		0
214	Clear, transparent, and timely communication for fair authorship decisions: a practical guide. Geoscience Communication, 2021, 4, 507-516.	0.9	0