Akua A Asa-Awuku

List of Publications by Year
in descending order

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67 papers	2,180 citations	318942 23 h-index	312153 41 g-index
86 all docs	86 docs citations	86 times ranked	2657 citing authors

#	Article	IF	Citations
1	Hygroscopicity of polycatechol and polyguaiacol secondary organic aerosol in sub- and supersaturated water vapor environments. Environmental Science Atmospheres, 2022, 2, 24-33.	0.9	8
2	Absorption Spectra of Martian Dust Simulants. ACS Earth and Space Chemistry, 2022, 6, 672-682.	1.2	1
3	Cloud condensation nuclei (CCN) activity analysis of low-hygroscopicity aerosols using the aerodynamic aerosol classifier (AAC). Atmospheric Measurement Techniques, 2022, 15, 1007-1019.	1.2	4
4	Hygroscopicity and cloud condensation nucleation activities of hydroxyalkylsulfonates. Science of the Total Environment, 2022, 830, 154767.	3.9	6
5	Size, Shape, and Phase of Nanoscale Uric Acid Particles. ACS Omega, 2022, 7, 24202-24207.	1.6	2
6	Interactions of organosulfates with water vapor under sub- and supersaturated conditions. Atmospheric Chemistry and Physics, 2021, 21, 7135-7148.	1.9	16
7	Hygroscopicity and the water-polymer interaction parameter of nano-sized biodegradable hydrophilic substances. Aerosol Science and Technology, 2021, 55, 1115-1124.	1.5	3
8	Intermediate and high ethanol blends reduce secondary organic aerosol formation from gasoline direct injection vehicles. Atmospheric Environment, 2020, 220, 117064.	1.9	20
9	Direct Comparison of the Submicron Aerosol Hygroscopicity of Water-Soluble Sugars. ACS Earth and Space Chemistry, 2020, 4, 2215-2226.	1.2	17
10	Comparison of three essential sub-micrometer aerosol measurements: Mass, size and shape. Aerosol Science and Technology, 2020, 54, 1197-1209.	1.5	12
11	Evaluating the relationships between aromatic and ethanol levels in gasoline on secondary aerosol formation from a gasoline direct injection vehicle. Science of the Total Environment, 2020, 737, 140333.	3.9	12
12	External and internal cloud condensation nuclei (CCN) mixtures: controlled laboratory studies of varying mixing states. Atmospheric Measurement Techniques, 2019, 12, 4277-4289.	1.2	17
13	Insight into the Role of Water-Soluble Organic Solvents for the Cloud Condensation Nuclei Activation of Cholesterol. ACS Earth and Space Chemistry, 2019, 3, 1697-1705.	1.2	12
14	Emissions from a flex fuel GDI vehicle operating on ethanol fuels show marked contrasts in chemical, physical and toxicological characteristics as a function of ethanol content. Science of the Total Environment, 2019, 683, 749-761.	3.9	26
15	Using a new Mobile Atmospheric Chamber (MACh) to investigate the formation of secondary aerosols from mobile sources: The case of gasoline direct injection vehicles. Journal of Aerosol Science, 2019, 133, 1-11.	1.8	16
16	Catalyzed Gasoline Particulate Filters Reduce Secondary Organic Aerosol Production from Gasoline Direct Injection Vehicles. Environmental Science & Technology, 2019, 53, 3037-3047.	4.6	14
17	Investigation of the Effect of Mid- And High-Level Ethanol Blends on the Particulate and the Mobile Source Air Toxic Emissions from a Gasoline Direct Injection Flex Fuel Vehicle. Energy & Fuels, 2019, 33, 429-440.	2.5	25
18	Physical, chemical, and toxicological characteristics of particulate emissions from current technology gasoline direct injection vehicles. Science of the Total Environment, 2019, 650, 1182-1194.	3.9	35

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19	Sources of variance in BC mass measurements from a small marine engine: Influence of the instruments, fuels and loads. Atmospheric Environment, 2018, 182, 128-137.	1.9	20
20	Gasoline Particulate Filters as an Effective Tool to Reduce Particulate and Polycyclic Aromatic Hydrocarbon Emissions from Gasoline Direct Injection (GDI) Vehicles: A Case Study with Two GDI Vehicles. Environmental Science & Technology, 2018, 52, 3275-3284.	4.6	61
21	Gas-phase kinetics modifies the CCN activity of a biogenic SOA. Physical Chemistry Chemical Physics, 2018, 20, 6591-6597.	1.3	1
22	Exploring CCN droplet suppression with a higher sensitivity optical particle counter. Aerosol Science and Technology, 2018, 52, 78-86.	1.5	2
23	Cloud condensation nuclei activity and droplet formation of primary and secondary organic aerosol mixtures. Aerosol Science and Technology, 2018, 52, 242-251.	1.5	15
24	Investigation of ambient aerosol effective density with and without using a catalytic stripper. Atmospheric Environment, 2018, 187, 84-92.	1.9	10
25	Will Aerosol Hygroscopicity Change with Biodiesel, Renewable Diesel Fuels and Emission Control Technologies?. Environmental Science & Technology, 2017, 51, 1580-1586.	4.6	7
26	Understanding particles emitted from spray and wall-guided gasoline direct injection and flex fuel vehicles operating on ethanol and iso-butanol gasoline blends. Aerosol Science and Technology, 2017, 51, 330-341.	1.5	7
27	Does chronic nitrogen deposition during biomass growth affect atmospheric emissions from biomass burning?. Environmental Research Letters, 2016, 11, 034007.	2.2	2
28	Temperature Effects on Secondary Organic Aerosol (SOA) from the Dark Ozonolysis and Photo-Oxidation of Isoprene. Environmental Science & Technology, 2016, 50, 5564-5571.	4.6	37
29	Real-Time Ultrafine Aerosol Measurements from Wastewater Treatment Facilities. Environmental Science & Technology, 2016, 50, 11137-11144.	4.6	20
30	Integrating Cloud Condensation Nuclei Predictions with Fast Time Resolved Aerosol Instrumentation to Determine the Hygroscopic Properties of Emissions Over Transient Drive Cycles. Aerosol Science and Technology, 2015, 49, 1149-1159.	1.5	6
31	Experimentally measured morphology of biomass burning aerosol and its impacts on CCN ability. Atmospheric Chemistry and Physics, 2015, 15, 1807-1821.	1.9	28
32	CCN Properties of Organic Aerosol Collected Below and within Marine Stratocumulus Clouds near Monterey, California. Atmosphere, 2015, 6, 1590-1607.	1.0	6
33	Evaluating the Effects of Aromatics Content in Gasoline on Gaseous and Particulate Matter Emissions from SI-PFI and SIDI Vehicles. Environmental Science & Technology, 2015, 49, 7021-7031.	4.6	92
34	Particle speciation of emissions from iso-butanol and ethanol blended gasoline in light-duty vehicles. Journal of Aerosol Science, 2015, 84, 39-52.	1.8	19
35	The impact of ethanol and iso-butanol blends on gaseous and particulate emissions from two passenger cars equipped with spray-guided and wall-guided direct injection SI (spark ignition) engines. Energy, 2015, 82, 168-179.	4.5	70
36	Components of Particle Emissions from Light-Duty Spark-Ignition Vehicles with Varying Aromatic Content and Octane Rating in Gasoline. Environmental Science & Technology, 2015, 49, 10682-10691.	4.6	13

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37	Comparison of Vehicle Exhaust Particle Size Distributions Measured by SMPS and EEPS During Steady-State Conditions. Aerosol Science and Technology, 2015, 49, 984-996.	1.5	45
38	Evaluating Particulate Emissions from a Flexible Fuel Vehicle with Direct Injection when Operated on Ethanol and Iso-butanol Blends. , 2014, , .		7
39	Adhesion of Dust Particles to Common Indoor Surfaces in an Air-Conditioned Environment. Aerosol Science and Technology, 2014, 48, 541-551.	1.5	33
40	Assessing the Impacts of Ethanol and Isobutanol on Gaseous and Particulate Emissions from Flexible Fuel Vehicles. Environmental Science & Technology, 2014, 48, 14016-14024.	4.6	46
41	A Unique Online Method to Infer Water-Insoluble Particle Contributions. Aerosol Science and Technology, 2014, 48, 706-714.	1.5	3
42	Aerosol Hygroscopicity: Particle Water Content and Its Role in Atmospheric Processes. , 2014, , 331-361.		38
43	Rebuttal to Correspondence on â€œChanges in Droplet Surface Tension Affect the Observed Hygroscopicity of Photochemically Aged Biomass Burning Aerosolâ€. Environmental Science & Technology, 2014, 48, 2084-2085.	4.6	2
44	Evaluating the regulated emissions, air toxics, ultrafine particles, and black carbon from SI-PFI and SI-DI vehicles operating on different ethanol and iso-butanol blends. Fuel, 2014, 128, 410-421.	3.4	118
45	Cloud condensation nuclei (CCN) activity of aliphatic amine secondary aerosol. Atmospheric Chemistry and Physics, 2014, 14, 5959-5967.	1.9	16
46	NO3 radical, OH radical and O3-initiated secondary aerosol formation from aliphatic amines. Atmospheric Environment, 2013, 72, 105-112.	1.9	44
47	Density and elemental ratios of secondary organic aerosol: Application of a density prediction method. Atmospheric Environment, 2013, 68, 273-277.	1.9	79
48	Real-Time Study of Particle-Phase Products from Î±-Pinene Ozonolysis and Isoprene Photooxidation Using Particle into Liquid Sampling Directly Coupled to a Time-of-Flight Mass Spectrometer (PILS-ToF). Aerosol Science and Technology, 2013, 47, 1374-1382.	1.5	14
49	Changes in Droplet Surface Tension Affect the Observed Hygroscopicity of Photochemically Aged Biomass Burning Aerosol. Environmental Science & Technology, 2013, 47, 10980-10986.	4.6	33
50	The Effects of Mainstream and Sidestream Environmental Tobacco Smoke Composition for Enhanced Condensational Droplet Growth by Water Vapor. Aerosol Science and Technology, 2012, 46, 760-766.	1.5	13
51	Are sesquiterpenes a good source of secondary organic cloud condensation nuclei (CCN)? Revisiting Î²-caryophyllene CCN. Atmospheric Chemistry and Physics, 2012, 12, 8377-8388.	1.9	24
52	Benefits of Two Mitigation Strategies for Container Vessels: Cleaner Engines and Cleaner Fuels. Environmental Science & Technology, 2012, 46, 5049-5056.	4.6	39
53	Airborne cloud condensation nuclei measurements during the 2006 Texas Air Quality Study. Journal of Geophysical Research, 2011, 116, .	3.3	91
54	Water-soluble SOA from Alkene ozonolysis: composition and droplet activation kinetics inferences from analysis of CCN activity. Atmospheric Chemistry and Physics, 2010, 10, 1585-1597.	1.9	86

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55	Characterization of a method for aerosol generation from heavy fuel oil (HFO) as an alternative to emissions from ship diesel engines. Journal of Aerosol Science, 2010, 41, 1143-1151.	1.8	9
56	Mixing and phase partitioning of primary and secondary organic aerosols. Geophysical Research Letters, 2009, 36, .	1.5	50
57	Relating CCN activity, volatility, and droplet growth kinetics of Î²-caryophyllene secondary organic aerosol. Atmospheric Chemistry and Physics, 2009, 9, 795-812.	1.9	170
58	CCN activity and droplet growth kinetics of fresh and aged monoterpene secondary organic aerosol. Atmospheric Chemistry and Physics, 2008, 8, 3937-3949.	1.9	199
59	Investigation of molar volume and surfactant characteristics of water-soluble organic compounds in biomass burning aerosol. Atmospheric Chemistry and Physics, 2008, 8, 799-812.	1.9	136
60	Inferring thermodynamic properties from CCN activation experiments: single-component and binary aerosols. Atmospheric Chemistry and Physics, 2007, 7, 5263-5274.	1.9	64
61	Effect of solute dissolution kinetics on cloud droplet formation: Extended KÃ¶hler theory. Journal of Geophysical Research, 2007, 112, .	3.3	54
62	Criteria Emissions, Particle Number Emissions, Size Distributions, and Black Carbon Measurements from PFI Gasoline Vehicles Fuelled with Different Ethanol and Butanol Blends. , 0, , .		12
63	Determination of Suspended Exhaust PM Mass for Light-Duty Vehicles. , 0, , .		20
64	Regulated Emissions, Air Toxics, and Particle Emissions from SI-DI Light-Duty Vehicles Operating on Different Iso-Butanol and Ethanol Blends. SAE International Journal of Fuels and Lubricants, 0, 7, 183-199.	0.2	21
65	A Complete Assessment of the Emissions Performance of Ethanol Blends and Iso-Butanol Blends from a Fleet of Nine PFI and GDI Vehicles. SAE International Journal of Fuels and Lubricants, 0, 8, 374-395.	0.2	18
66	Hygroscopicity of internally mixed ammonium sulfate and secondary organic aerosol particles formed at low and high relative humidity. Environmental Science Atmospheres, 0, , .	0.9	3
67	Hygroscopicity of nitrogen-containing organic carbon compounds: o-aminophenol and p-aminophenol. Environmental Sciences: Processes and Impacts, 0, , .	1.7	0