Topi RÃ¶nkkÃ¶

List of Publications by Year
in descending order

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120	4,283	94433	144013
papers	citations	37 h-index	57 g-index

133	133	133	3258
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Connection between lung deposited surface area (LDSA) and black carbon (BC) concentrations in road traffic and harbour environments. Atmospheric Environment, 2022, 272, 118931.	4.1	18
2	Contribution of traffic-originated nanoparticle emissions to regional and local aerosol levels. Atmospheric Chemistry and Physics, 2022, 22, 1131-1148.	4.9	6
3	Characterization of particle sources and comparison of different particle metrics in an urban detached housing area, Finland. Atmospheric Environment, 2022, 272, 118939.	4.1	3
4	Exhaust emissions from a prototype non-road natural gas engine. Fuel, 2022, 316, 123387.	6.4	2
5	Experimental and numerical analysis of fine particle and soot formation in a modern 100 MW pulverized biomass heating plant. Combustion and Flame, 2022, 240, 111960.	5.2	13
6	Input-adaptive linear mixed-effects model for estimating alveolar lung-deposited surface area (LDSA) using multipollutant datasets. Atmospheric Chemistry and Physics, 2022, 22, 1861-1882.	4.9	3
7	Secondary Organic and Inorganic Aerosol Formation from a GDI Vehicle under Different Driving Conditions. Atmosphere, 2022, 13, 433.	2.3	2
8	Suitability of Different Methods for Measuring Black Carbon Emissions from Marine Engines. Atmosphere, 2022, 13, 31.	2.3	5
9	TUBE Project: Transport-Derived Ultrafines and the Brain Effects. International Journal of Environmental Research and Public Health, 2022, 19, 311.	2.6	1
10	Opinion: Insights into updating Ambient Air Quality Directive 2008/50/EC. Atmospheric Chemistry and Physics, 2022, 22, 4801-4808.	4.9	8
11	Black carbon toxicity dependence on particle coating: Measurements with a novel cell exposure method. Science of the Total Environment, 2022, 838, 156543.	8.0	16
12	Spatiotemporal variation and trends in equivalent black carbon in the Helsinki metropolitan area in Finland. Atmospheric Chemistry and Physics, 2021, 21, 1173-1189.	4.9	33
13	Globally and locally applicable technologies to accelerate electrification. , 2021, , 25-55.		2
14	Concentrations and Size Distributions of Particle Lung-deposited Surface Area (LDSA) in an Underground Mine. Aerosol and Air Quality Research, 2021, 21, 200660.	2.1	11
15	Effects of marine fuel sulfur restrictions on particle number concentrations and size distributions in ship plumes in the Baltic Sea. Atmospheric Chemistry and Physics, 2021, 21, 3215-3234.	4.9	8
16	In-depth characterization of submicron particulate matter inter-annual variations at a street canyon site in northern Europe. Atmospheric Chemistry and Physics, 2021, 21, 6297-6314.	4.9	25
17	Overview of Sources and Characteristics of Nanoparticles in Urban Traffic-Influenced Areas. Advances in Alzheimer's Disease, 2021, , .	0.2	0
18	Variation of Absorption Ã…ngstrÃ¶m Exponent in Aerosols From Different Emission Sources. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034094.	3.3	37

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19	The characteristics and size of lung-depositing particles vary significantly between high and low pollution traffic environments. Atmospheric Environment, 2021, 255, 118421.	4.1	19
20	Measurement report: The influence of traffic and new particle formation on the size distribution of 1â€“800â€‰nm particles in Helsinki â€“ a street canyon and an urban background station comparison. Atmospheric Chemistry and Physics, 2021, 21, 9931-9953.	4.9	13
21	Effects of driving conditions on secondary aerosol formation from a GDI vehicle using an oxidation flow reactor. Environmental Pollution, 2021, 282, 117069.	7.5	10
22	Using an oxidation flow reactor to understand the effects of gasoline aromatics and ethanol levels on secondary aerosol formation. Environmental Research, 2021, 200, 111453.	7.5	4
23	Household solid waste combustion with wood increases particulate trace metal and lung deposited surface area emissions. Journal of Environmental Management, 2021, 293, 112793.	7.8	12
24	Shipping Remains a Globally Significant Source of Anthropogenic PN Emissions Even after 2020 Sulfur Regulation. Environmental Science & Technology, 2021, 55, 129-138.	10.0	31
25	Sources of black carbon at residential and traffic environments obtained by two source apportionment methods. Atmospheric Chemistry and Physics, 2021, 21, 14851-14869.	4.9	25
26	Chemical and physical characterization of oil shale combustion emissions in Estonia. Atmospheric Environment: X, 2021, 12, 100139.	1.4	1
27	Long-term sensor measurements of lung deposited surface area of particulate matter emitted from local vehicular and residential wood combustion sources. Aerosol Science and Technology, 2020, 54, 190-202.	3.1	35
28	Nonvolatile ultrafine particles observed to form trimodal size distributions in non-road diesel engine exhaust. Aerosol Science and Technology, 2020, 54, 1345-1358.	3.1	13
29	Comprehensive emission characterisation of exhaust from alternative fuelled cars. Atmospheric Environment, 2020, 236, 117643.	4.1	21
30	Particulate emissions of a modern diesel passenger car under laboratory and real-world transient driving conditions. Environmental Pollution, 2020, 265, 114948.	7.5	39
31	Toxicological evaluation of exhaust emissions from light-duty vehicles using different fuel alternatives in sub-freezing conditions. Particle and Fibre Toxicology, 2020, 17, 17.	6.2	14
32	Traffic-originated nanocluster emission exceeds H₂SO₄-driven photochemical new particle formation in an urban area. Atmospheric Chemistry and Physics, 2020, 20, 1-13.	4.9	36
33	Measurement of the human respiratory tract deposited surface area of particles with an electrical low pressure impactor. Aerosol Science and Technology, 2020, 54, 958-971.	3.1	17
34	Physical Characteristics of Particle Emissions from a Medium Speed Ship Engine Fueled with Natural Gas and Low-Sulfur Liquid Fuels. Environmental Science & Technology, 2020, 54, 5376-5384.	10.0	30
35	Sensitivity of spatial aerosol particle distributions to the boundary conditions in the PALM model system 6.0. Geoscientific Model Development, 2020, 13, 5663-5685.	3.6	20
36	CITYZER observation network and data delivery system. Geoscientific Instrumentation, Methods and Data Systems, 2020, 9, 397-406.	1.6	0

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37	Strategies To Diminish the Emissions of Particles and Secondary Aerosol Formation from Diesel Engines. Environmental Science & Technology, 2019, 53, 10408-10416.	10.0	26
38	Potential of renewable fuel to reduce diesel exhaust particle emissions. Applied Energy, 2019, 254, 113636.	10.1	29
39	Adaptation of Black Carbon Footprint Concept Would Accelerate Mitigation of Global Warming. Environmental Science & Technology, 2019, 53, 12153-12155.	10.0	14
40	Characterization of laboratory and real driving emissions of individual Euro 6 light-duty vehicles â€“ Fresh particles and secondary aerosol formation. Environmental Pollution, 2019, 255, 113175.	7.5	38
41	Overview of Sources and Characteristics of Nanoparticles in Urban Traffic-Influenced Areas. Journal of Alzheimer's Disease, 2019, 72, 15-28.	2.6	76
42	Inversely modeling homogeneous H₂SO₄â€‰â€“â€‰H₂O nucleation rate in exhaust-related conditions. Atmospheric Chemistry and Physics, 2019, 19, 6367-6388.	4.9	6
43	Dispersion of a Traffic Related Nanocluster Aerosol Near a Major Road. Atmosphere, 2019, 10, 309.	2.3	14
44	Particle emissions of Euro VI, EEV and retrofitted EEV city buses in real traffic. Environmental Pollution, 2019, 250, 708-716.	7.5	27
45	Emission measurements with gravimetric impactors and electrical devices: An aerosol instrument comparison. Aerosol Science and Technology, 2019, 53, 526-539.	3.1	8
46	Particulate Mass and Nonvolatile Particle Number Emissions from Marine Engines Using Low-Sulfur Fuels, Natural Gas, or Scrubbers. Environmental Science & Technology, 2019, 53, 3315-3322.	10.0	69
47	Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles. Aerosol Science and Technology, 2019, 53, 594-607.	3.1	29
48	Characteristics of particle emissions and their atmospheric dilution during co-combustion of coal and wood pellets in a large combined heat and power plant. Journal of the Air and Waste Management Association, 2019, 69, 97-108.	1.9	5
49	Applicability of Optical and Diffusion Charging-Based Particulate Matter Sensors to Urban Air Quality Measurements. Aerosol and Air Quality Research, 2019, 19, 1024-1039.	2.1	22
50	Comparative performance of a thermal denuder and a catalytic stripper in sampling laboratory and marine exhaust aerosols. Aerosol Science and Technology, 2018, 52, 420-432.	3.1	26
51	Considerations in analysing elemental carbon from marine engine exhaust using residual, distillate and biofuels. Journal of Aerosol Science, 2018, 126, 191-204.	3.8	16
52	Alzheimer's disease and alpha-synuclein pathology in the olfactory bulbs of infants, children, teens and adults â‰¯40 years in Metropolitan Mexico City. APOE4 carriers at higher risk of suicide accelerate their olfactory bulb pathology. Environmental Research, 2018, 166, 348-362.	7.5	71
53	Diurnal variation of nanocluster aerosol concentrations and emission factors in a street canyon. Atmospheric Environment, 2018, 189, 98-106.	4.1	43
54	Performance evaluation of the HR-ELPIâ€‰+â€‰inversion. Aerosol Science and Technology, 2018, 52, 1037-1047.	3.1	17

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55	The characterization of surgical smoke from various tissues and its implications for occupational safety. PLoS ONE, 2018, 13, e0195274.	2.5	64
56	Vertical profiles of lung deposited surface area concentration of particulate matter measured with a drone in a street canyon. Environmental Pollution, 2018, 241, 96-105.	7.5	46
57	Characteristics and source apportionment of black carbon in the Helsinki metropolitan area, Finland. Atmospheric Environment, 2018, 190, 87-98.	4.1	118
58	Natural Gas Engine Emission Reduction by Catalysts. Emission Control Science and Technology, 2017, 3, 142-152.	1.5	22
59	Exhaust emissions of non-road mobile machine: Real-world and laboratory studies with diesel and HVO fuels. Fuel, 2017, 202, 154-164.	6.4	75
60	Physical and chemical characterization of urban winter-time aerosols by mobile measurements in Helsinki, Finland. Atmospheric Environment, 2017, 158, 60-75.	4.1	38
61	Investigating the chemical species in submicron particles emitted by city buses. Aerosol Science and Technology, 2017, 51, 317-329.	3.1	21
62	Physical and chemical characteristics of flue-gas particles in a large pulverized fuel-fired power plant boiler during co-combustion of coal and wood pellets. Combustion and Flame, 2017, 176, 554-566.	5.2	35
63	Performance of ventilation filtration technologies on characteristic traffic related aerosol down to nanocluster size. Aerosol Science and Technology, 2017, 51, 1398-1408.	3.1	16
64	Traffic is a major source of atmospheric nanocluster aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7549-7554.	7.1	171
65	Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle. Atmospheric Chemistry and Physics, 2017, 17, 5311-5329.	4.9	55
66	Comparison of primary and secondary particle formation from natural gas engine exhaust and of their volatility characteristics. Atmospheric Chemistry and Physics, 2017, 17, 8739-8755.	4.9	20
67	A New Miniaturized Sensor for Ultra-Fast On-Board Soot Concentration Measurements. SAE International Journal of Engines, 2017, 10, 1859-1865.	0.4	6
68	A new oxidation flow reactor for measuring secondary aerosol formation of rapidly changing emission sources. Atmospheric Measurement Techniques, 2017, 10, 1519-1537.	3.1	44
69	Lung deposited surface area size distributions of particulate matter in different urban areas. Atmospheric Environment, 2016, 136, 105-113.	4.1	67
70	Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions. Fuel, 2016, 186, 456-465.	6.4	48
71	Heavy Duty Diesel Exhaust Particles during Engine Motoring Formed by Lube Oil Consumption. Environmental Science & Technology, 2016, 50, 12504-12511.	10.0	25
72	New particle formation in the fresh flue-gas plume from a coal-fired power plant: effect of flue-gas cleaning. Atmospheric Chemistry and Physics, 2016, 16, 7485-7496.	4.9	17

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73	Chemical and physical characterization of traffic particles in four different highway environments in the Helsinki metropolitan area. Atmospheric Chemistry and Physics, 2016, 16, 5497-5512.	4.9	43
74	Time-resolved characterization of primary particle emissions and secondary particle formation from a modern gasoline passenger car. Atmospheric Chemistry and Physics, 2016, 16, 8559-8570.	4.9	76
75	Exhaust particle and NOx emission performance of an SCR heavy duty truck operating in real-world conditions. Atmospheric Environment, 2016, 126, 136-144.	4.1	27
76	Physical and Chemical Characterization of Real-World Particle Number and Mass Emissions from City Buses in Finland. Environmental Science & Technology, 2016, 50, 294-304.	10.0	41
77	Improving Urban Air Quality Measurements by a Diffusion Charger Based Electrical Particle Sensors - A Field Study in Beijing, China. Aerosol and Air Quality Research, 2016, 16, 3001-3011.	2.1	7
78	Model studies of volatile diesel exhaust particle formation: are organic vapours involved in nucleation and growth?. Atmospheric Chemistry and Physics, 2015, 15, 10435-10452.	4.9	32
79	CFD modeling of a vehicle exhaust laboratory sampling system: sulfur-driven nucleation and growth in diluting diesel exhaust. Atmospheric Chemistry and Physics, 2015, 15, 5305-5323.	4.9	13
80	Characterization of trace metals on soot aerosol particles with the SP-AMS: detection and quantification. Atmospheric Measurement Techniques, 2015, 8, 4803-4815.	3.1	26
81	Effects of Fresh Lubricant Oils on Particle Emissions Emitted by a Modern Gasoline Direct Injection Passenger Car. Environmental Science & Technology, 2015, 49, 3644-3652.	10.0	70
82	Monitoring urban air quality with a diffusion charger based electrical particle sensor. Urban Climate, 2015, 14, 441-456.	5.7	16
83	The formation and physical properties of the particle emissions from a natural gas engine. Fuel, 2015, 162, 155-161.	6.4	98
84	Physical properties of aerosol particles measured from a bubbling fluidized bed boiler. Fuel, 2015, 139, 144-153.	6.4	11
85	Seasonal and Diurnal Variations of Fluorescent Bioaerosol Concentration and Size Distribution in the Urban Environment. Aerosol and Air Quality Research, 2015, 15, 572-581.	2.1	33
86	Mobile measurements of ship emissions in two harbour areas in Finland. Atmospheric Measurement Techniques, 2014, 7, 149-161.	3.1	78
87	Exhaust particles of modern gasoline vehicles: A laboratory and an on-road study. Atmospheric Environment, 2014, 97, 262-270.	4.1	145
88	Vehicle Engines Produce Exhaust Nanoparticles Even When Not Fueled. Environmental Science & Technology, 2014, 48, 2043-2050.	10.0	77
89	Optical and Chemical Characterization of Aerosols Emitted from Coal, Heavy and Light Fuel Oil, and Small-Scale Wood Combustion. Environmental Science & Technology, 2014, 48, 827-836.	10.0	15
90	Sulfur Driven Nucleation Mode Formation in Diesel Exhaust under Transient Driving Conditions. Environmental Science & Technology, 2014, 48, 140206134439008.	10.0	16

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91	Chemical composition and size of particles in emissions of a coal-fired power plant with flue gas desulfurization. Journal of Aerosol Science, 2014, 73, 14-26.	3.8	58
92	High-resolution low-pressure cascade impactor. Journal of Aerosol Science, 2014, 78, 97-109.	3.8	24
93	Mobile Particle and NOx Emission Characterization at Helsinki Downtown: Comparison of Different Traffic Flow Areas. Aerosol and Air Quality Research, 2014, 14, 1372-1382.	2.1	24
94	Effects of Gaseous Sulphuric Acid on Diesel Exhaust Nanoparticle Formation and Characteristics. Environmental Science & Technology, 2013, 47, 11882-11889.	10.0	74
95	Impact of Vehicle Development and Fuel Quality on Exhaust Nanoparticle Emissions of Traffic. Environmental Science & Technology, 2013, 47, 130715120557004.	10.0	4
96	Size Distribution, Chemical Composition, and Hygroscopicity of Fine Particles Emitted from an Oil-Fired Heating Plant. Environmental Science & Technology, 2013, 47, 14468-14475.	10.0	16
97	The Effect of a Particle Oxidation Catalyst (POCÂ®) on Particle Emissions of a GDI Car during Transient Engine Operation. , 2013, , .		4
98	Spatial and temporal characterization of traffic emissions in urban microenvironments with a mobile laboratory. Atmospheric Environment, 2012, 63, 156-167.	4.1	100
99	First Online Measurements of Sulfuric Acid Gas in Modern Heavy-Duty Diesel Engine Exhaust: Implications for Nanoparticle Formation. Environmental Science & Technology, 2012, 46, 11227-11234.	10.0	78
100	Effect of Fuel Injection Pressure on a Heavy-Duty Diesel Engine Nonvolatile Particle Emission. Environmental Science & Technology, 2011, 45, 2504-2509.	10.0	46
101	Can Real-World Diesel Exhaust Particle Size Distribution be Reproduced in the Laboratory? A Critical Review Jorma Keskinen. Journal of the Air and Waste Management Association, 2010, 60, 1245-1255.	1.9	76
102	Dependence between Nonvolatile Nucleation Mode Particle and Soot Number Concentrations in an EGR Equipped Heavy-Duty Diesel Engine Exhaust. Environmental Science & Technology, 2010, 44, 3175-3180.	10.0	57
103	Can real-world diesel exhaust particle size distribution be reproduced in the laboratory? A critical review. Journal of the Air and Waste Management Association, 2010, 60, 1245-55.	1.9	6
104	Diesel Particle Emission Reduction by a Particle Oxidation Catalyst. , 2009, , .		14
105	Nanoparticle Emissions from a Heavy-Duty Engine Running on Alternative Diesel Fuels. Environmental Science & Technology, 2009, 43, 9501-9506.	10.0	51
106	Effect of Open Channel Filter on Particle Emissions of Modern Diesel Engine. Journal of the Air and Waste Management Association, 2009, 59, 1148-1154.	1.9	54
107	Heavy Duty Diesel Engine Exhaust Aerosol Particle and Ion Measurements. Environmental Science & Technology, 2009, 43, 163-168.	10.0	70
108	The Effect of Sulphur in Diesel Exhaust Aerosol: Models Compared with Measurements. Aerosol Science and Technology, 2008, 42, 916-929.	3.1	25

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109	Nucleation Mode Particles with a Nonvolatile Core in the Exhaust of a Heavy Duty Diesel Vehicle. Environmental Science & Technology, 2007, 41, 6384-6389.	10.0	216
110	Development of particle number size distribution near a major road in Helsinki during an episodic inversion situation. Atmospheric Environment, 2007, 41, 1759-1767.	4.1	47
111	Computation of maximum rate of waterâ€“sulphuric acid nucleation in diesel exhaust. Journal of Aerosol Science, 2006, 37, 1596-1604.	3.8	28
112	Winter and summer time size distributions and densities of traffic-related aerosol particles at a busy highway in Helsinki. Atmospheric Chemistry and Physics, 2006, 6, 2411-2421.	4.9	81
113	Dispersion of particles and trace gases nearby a city highway: Mobile laboratory measurements in Finland. Atmospheric Environment, 2006, 40, 867-879.	4.1	115
114	Effect of dilution conditions and driving parameters on nucleation mode particles in diesel exhaust: Laboratory and on-road study. Atmospheric Environment, 2006, 40, 2893-2901.	4.1	177
115	DYNAMOMETER VERSUS REAL-LIFE NANOPARTICLE EMISSIONS OF VEHICLES â€“ PROJECT LIPIKA. Journal of Aerosol Science, 2004, 35, S1035-S1036.	3.8	1
116	Effect of Exhaust Flow Conditions and External Cooling on the Performance of the Particle Oxidation Catalyst (POC). , 0, , .		7
117	Reduction of Heavy-Duty Diesel Exhaust Particle Number and Mass at Low Exhaust Temperature Driving by the DOC and the SCR. SAE International Journal of Fuels and Lubricants, 0, 5, 1114-1122.	0.2	15
118	Performance of Particle Oxidation Catalyst and Particle Formation Studies with Sulphur Containing Fuels. SAE International Journal of Fuels and Lubricants, 0, 5, 611-619.	0.2	10
119	Effect of Injection Parameters on Exhaust Gaseous and Nucleation Mode Particle Emissions of a Tier 4i Nonroad Diesel Engine. , 0, , .		6
120	Characterization of Physical and Chemical Properties of Particulate Emissions of a Modern Diesel-Powered Tractor under Real Driving Conditions. , 0, , .		1