

# Ta-Chih Hsiao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9145913/publications.pdf>

Version: 2024-02-01

92  
papers

1,691  
citations

257101

24  
h-index

377514

34  
g-index

99  
all docs

99  
docs citations

99  
times ranked

2243  
citing authors

#	ARTICLE	IF	CITATIONS
1	Particulate matter and SARS-CoV-2: A possible model of COVID-19 transmission. <i>Science of the Total Environment</i> , 2021, 750, 141532.	3.9	86
2	Interactions between biomass-burning aerosols and clouds over Southeast Asia: Current status, challenges, and perspectives. <i>Environmental Pollution</i> , 2014, 195, 292-307.	3.7	68
3	New particle growth and shrinkage observed in subtropical environments. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 547-564.	1.9	57
4	Satellite-Surface Perspectives of Air Quality and Aerosol-Cloud Effects on the Environment: An Overview of 7-SEAS/BASELInE. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2581-2602.	0.9	52
5	Effects of the geometric configuration on cyclone performance. <i>Journal of Aerosol Science</i> , 2015, 86, 1-12.	1.8	50
6	Traffic-related particulate matter exposure induces nephrotoxicity in vitro and in vivo. <i>Free Radical Biology and Medicine</i> , 2019, 135, 235-244.	1.3	46
7	Microglial activation and inflammation caused by traffic-related particulate matter. <i>Chemico-Biological Interactions</i> , 2019, 311, 108762.	1.7	44
8	Effect of geometric configuration on the collection efficiency of axial flow cyclones. <i>Journal of Aerosol Science</i> , 2011, 42, 78-86.	1.8	43
9	Allergenicity and toxicology of inhaled silver nanoparticles in allergen-provocation mice models. <i>International Journal of Nanomedicine</i> , 2013, 8, 4495.	3.3	43
10	Pulmonary exposure to metal fume particulate matter cause sleep disturbances in shipyard welders. <i>Environmental Pollution</i> , 2018, 232, 523-532.	3.7	40
11	Chronic pulmonary exposure to traffic-related fine particulate matter causes brain impairment in adult rats. <i>Particle and Fibre Toxicology</i> , 2018, 15, 44.	2.8	39
12	Vertical Distribution and Columnar Optical Properties of Springtime Biomass-Burning Aerosols over Northern Indochina during 2014 7-SEAS Campaign. <i>Aerosol and Air Quality Research</i> , 2015, 15, 2037-2050.	0.9	39
13	Radiative Effect of Springtime Biomass-Burning Aerosols over Northern Indochina during 7-SEAS/BASELInE 2013 Campaign. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2802-2817.	0.9	39
14	Effects of temperature, dust concentration, and filtration superficial velocity on the loading behavior and dust cakes of ceramic candle filters during hot gas filtration. <i>Separation and Purification Technology</i> , 2018, 198, 146-154.	3.9	37
15	Hygroscopic behavior of atmospheric aerosol in Taipei. <i>Atmospheric Environment</i> , 2003, 37, 2069-2075.	1.9	35
16	Association of ultrafine particles with cardiopulmonary health among adult subjects in the urban areas of northern Taiwan. <i>Science of the Total Environment</i> , 2018, 627, 211-215.	3.9	35
17	A Simulation Study on PM <sub>2.5</sub> Sources and Meteorological Characteristics at the Northern Tip of Taiwan in the Early Stage of the Asian Haze Period. <i>Aerosol and Air Quality Research</i> , 2017, 17, 3166-3178.	0.9	32
18	Size distribution, biological characteristics and emerging contaminants of aerosols emitted from an urban wastewater treatment plant. <i>Journal of Hazardous Materials</i> , 2020, 388, 121809.	6.5	30

#	ARTICLE	IF	CITATIONS
19	COVID-19: An Aerosol's Point of View from Expiration to Transmission to Viral-mechanism. <i>Aerosol and Air Quality Research</i> , 2020, , 905-910.	0.9	30
20	Investigation into the pulmonary inflammopathology of exposure to nickel oxide nanoparticles in mice. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 2329-2339.	1.7	28
21	Zirconium-Based Metal-Organic Framework Nanocarrier for the Controlled Release of Ibuprofen. <i>ACS Applied Nano Materials</i> , 2019, 2, 3329-3334.	2.4	28
22	Experimental observations of the transition pressure drop characteristics of fibrous filters loaded with oil-coated particles. <i>Separation and Purification Technology</i> , 2015, 149, 47-54.	3.9	26
23	Analyzing major renewable energy sources and power stability in Taiwan by 2030. <i>Energy Policy</i> , 2019, 125, 293-306.	4.2	26
24	Indoor, outdoor, and personal exposure to PM2.5 and their bioreactivity among healthy residents of Hong Kong. <i>Environmental Research</i> , 2020, 188, 109780.	3.7	26
25	Aerosol Chemical Profile of Near-Source Biomass Burning Smoke in Sonla, Vietnam during 7-SEAS Campaigns in 2012 and 2013. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2603-2617.	0.9	26
26	Evaluation of Nano- and Submicron Particle Penetration through Ten Nonwoven Fabrics Using a Wind-Driven Approach. <i>Journal of Occupational and Environmental Hygiene</i> , 2011, 8, 13-22.	0.4	24
27	Contributions of local pollution emissions to particle bioreactivity in downwind cities in China during Asian dust periods. <i>Environmental Pollution</i> , 2019, 245, 675-683.	3.7	24
28	Effects of size and surface of zinc oxide and aluminum-doped zinc oxide nanoparticles on cell viability inferred by proteomic analyses. <i>International Journal of Nanomedicine</i> , 2014, 9, 3631.	3.3	23
29	Simulating the transport and chemical evolution of biomass burning pollutants originating from Southeast Asia during 7-SEAS/2010 Dongsha experiment. <i>Atmospheric Environment</i> , 2015, 112, 294-305.	1.9	22
30	Comprehensive PM2.5 Organic Molecular Composition and Stable Carbon Isotope Ratios at Sonla, Vietnam: Fingerprint of Biomass Burning Components. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2618-2634.	0.9	21
31	Surface PEGylation of Silver Nanoparticles: Kinetics of Simultaneous Surface Dissolution and Molecular Desorption. <i>Langmuir</i> , 2016, 32, 9807-9815.	1.6	20
32	Development of a Multi-Stage Axial Flow Cyclone. <i>Aerosol Science and Technology</i> , 2010, 44, 253-261.	1.5	19
33	Aqueous film formation on irregularly shaped inorganic nanoparticles before deliquescence, as revealed by a hygroscopic differential mobility analyzer's Aerosol particle mass system. <i>Aerosol Science and Technology</i> , 2016, 50, 568-577.	1.5	19
34	Interactions of chemical components in ambient PM2.5 with influenza viruses. <i>Journal of Hazardous Materials</i> , 2022, 423, 127243.	6.5	19
35	Pulmonary pathobiology induced by zinc oxide nanoparticles in mice: A 24-hour and 28-day follow-up study. <i>Toxicology and Applied Pharmacology</i> , 2017, 327, 13-22.	1.3	18
36	Quantifying Surface Area of Nanosheet Graphene Oxide Colloid Using a Gas-Phase Electrostatic Approach. <i>Analytical Chemistry</i> , 2017, 89, 12217-12222.	3.2	18

#	ARTICLE	IF	CITATIONS
37	Development of mini-cyclones as the size-selective inlet of miniature particle detectors. <i>Journal of Aerosol Science</i> , 2009, 40, 481-491.	1.8	17
38	Aerosol optical properties at the Lulin Atmospheric Background Station in Taiwan and the influences of long-range transport of air pollutants. <i>Atmospheric Environment</i> , 2017, 150, 366-378.	1.9	17
39	SUV39H1 Reduction Is Implicated in Abnormal Inflammation in COPD. <i>Scientific Reports</i> , 2017, 7, 46667.	1.6	17
40	An Experimental Study on Performance Improvement of the Stairmand Cyclone Design. <i>Aerosol and Air Quality Research</i> , 2014, 14, 1003-1016.	0.9	17
41	Characterization of Particulate Matter Profiling and Alveolar Deposition from Biomass Burning in Northern Thailand: The 7-SEAS Study. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2897-2906.	0.9	17
42	Quantifying the impacts of PM <sub>2.5</sub> constituents and relative humidity on visibility impairment in a suburban area of eastern Asia using long-term in-situ measurements. <i>Science of the Total Environment</i> , 2022, 818, 151759.	3.9	17
43	Filter Quality of Pleated Filter Cartridges. <i>Annals of Occupational Hygiene</i> , 2008, 52, 207-12.	1.9	16
44	Experimental Comparison of Two Portable and Real-Time Size Distribution Analyzers for Nano/Submicron Aerosol Measurements. <i>Aerosol and Air Quality Research</i> , 2016, 16, 919-929.	0.9	16
45	The Simulation of Long-Range Transport of Biomass Burning Plume and Short-Range Transport of Anthropogenic Pollutants to a Mountain Observatory in East Asia during the 7-SEAS/2010 Dongsha Experiment. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2933-2949.	0.9	16
46	Investigation of the CCN Activity, BC and UVBC Mass Concentrations of Biomass Burning Aerosols during the 2013 BASELInE Campaign. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2742-2756.	0.9	16
47	Computational fluid dynamics study of the effects of flow and geometry parameters on a linear-slit virtual impactor for sampling and concentrating aerosols. <i>Journal of Aerosol Science</i> , 2019, 131, 28-40.	1.8	15
48	Improving the removal efficiency of fine particulate matters in air pollution control devices: Design and performance of an electrostatic aerosol particle agglomerator. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 107, 110-118.	2.7	14
49	Alveolar epithelial inter-alpha-trypsin inhibitor heavy chain 4 deficiency associated with senescence-regulated apoptosis by air pollution. <i>Environmental Pollution</i> , 2021, 278, 116863.	3.7	14
50	In-Situ and Remotely-Sensed Observations of Biomass Burning Aerosols at Doi Ang Khang, Thailand during 7-SEAS/BASELInE 2015. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2786-2801.	0.9	13
51	Particulate matter in a motorcycle-dominated urban area: Source apportionment and cancer risk of lung deposited surface area (LDSA) concentrations. <i>Journal of Hazardous Materials</i> , 2022, 427, 128188.	6.5	13
52	Inhibition of the WNT/ $\beta$ -catenin pathway by fine particulate matter in haze: Roles of metals and polycyclic aromatic hydrocarbons. <i>Atmospheric Environment</i> , 2015, 109, 118-129.	1.9	12
53	Performance study of a miniature quadru-inlet cyclone. <i>Journal of Aerosol Science</i> , 2015, 90, 161-168.	1.8	12
54	Effects of physical characteristics of carbon black on metabolic regulation in mice. <i>Environmental Pollution</i> , 2018, 232, 494-504.	3.7	11

#	ARTICLE	IF	CITATIONS
55	Alteration in angiotensin-converting enzyme 2 by PM <sub>1</sub> during the development of emphysema in rats. <i>ERJ Open Research</i> , 2020, 6, 00174-2020.	1.1	11
56	Toxicological effects of personal exposure to fine particles in adult residents of Hong Kong. <i>Environmental Pollution</i> , 2021, 275, 116633.	3.7	10
57	Chemically and temporally resolved oxidative potential of urban fine particulate matter. <i>Environmental Pollution</i> , 2021, 291, 118206.	3.7	10
58	Urban wastewater treatment plants as a potential source of ketamine and methamphetamine emissions to air. <i>Water Research</i> , 2020, 172, 115495.	5.3	9
59	Air pollution-regulated E-cadherin mediates contact inhibition of proliferation via the hippo signaling pathways in emphysema. <i>Chemico-Biological Interactions</i> , 2022, 351, 109763.	1.7	8
60	Development of a Compact Electrostatic Nanoparticle Sampler for Offline Aerosol Characterization. <i>Mapan - Journal of Metrology Society of India</i> , 2013, 28, 217-226.	1.0	7
61	Development and collection efficiency of an electrostatic precipitator for in-vitro toxicity studies of nano- and submicron-sized aerosols. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 72, 1-9.	2.7	7
62	Loss of E-cadherin due to road dust PM <sub>2.5</sub> activates the EGFR in human pharyngeal epithelial cells. <i>Environmental Science and Pollution Research</i> , 2021, 28, 53872-53887.	2.7	7
63	Chlorine dioxide gas generation using rotating packed bed for air disinfection in a hospital. <i>Journal of Cleaner Production</i> , 2021, 320, 128885.	4.6	7
64	Analyzing the increasing importance of nitrate in Taiwan from long-term trend of measurements. <i>Atmospheric Environment</i> , 2021, 267, 118749.	1.9	7
65	A Recirculation Aerosol Wind Tunnel for Evaluating Aerosol Samplers and Measuring Particle Penetration through Protective Clothing Materials. <i>Annals of Occupational Hygiene</i> , 2011, 55, 784-96.	1.9	6
66	Exposure assessment of particulate and gaseous pollutants emitted during surgery in operating rooms of different specialties. <i>Air Quality, Atmosphere and Health</i> , 2018, 11, 937-947.	1.5	6
67	Effects of Human Umbilical Cord-Derived Mesenchymal Stem Cells on the Acute Cigarette Smoke-Induced Pulmonary Inflammation Model. <i>Frontiers in Physiology</i> , 2020, 11, 962.	1.3	6
68	Therapeutic Potential of Human Umbilical Cord-Derived Mesenchymal Stem Cells in Recovering From Murine Pulmonary Emphysema Under Cigarette Smoke Exposure. <i>Frontiers in Medicine</i> , 2021, 8, 713824.	1.2	6
69	Quantitative characterization of colloidal assembly of graphene oxide-silver nanoparticle hybrids using aerosol differential mobility-coupled mass analyses. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 5933-5941.	1.9	5
70	Spectral Derivatives of Optical Depth for Partitioning Aerosol Type and Loading. <i>Remote Sensing</i> , 2021, 13, 1544.	1.8	5
71	Organic carbon and acidic ions in PM <sub>2.5</sub> contributed to particle bioreactivity in Chinese megacities during haze episodes. <i>Environmental Science and Pollution Research</i> , 2022, 29, 11865-11873.	2.7	5
72	Relationships between atmospheric mercury and optical properties of spring outflow aerosols from Southeast Asia. <i>Atmospheric Pollution Research</i> , 2021, 12, 101178.	1.8	5

#	ARTICLE	IF	CITATIONS
73	COMMIT in 7-SEAS/BASELInE: Operation of and Observations from a Novel, Mobile Laboratory for Measuring In-Situ Properties of Aerosols and Gases. <i>Aerosol and Air Quality Research</i> , 2016, 16, 2728-2741.	0.9	5
74	Serum Neurofilament Light Polypeptide is a Biomarker for Inflammation in Cerebrospinal Fluid Caused by Fine Particulate Matter. <i>Aerosol and Air Quality Research</i> , 2020, , .	0.9	5
75	Deployment of a mobile platform to characterize spatial and temporal variation of on-road fine particles in an urban area. <i>Environmental Research</i> , 2022, 204, 112349.	3.7	5
76	Contributions of acidic ions in secondary aerosol to PM2.5 bioreactivity in an urban area. <i>Atmospheric Environment</i> , 2022, 275, 119001.	1.9	5
77	A Multidomain Magnetic Passive Aerosol Sampler: Development and Experimental Evaluation. <i>Aerosol Science and Technology</i> , 2013, 47, 37-45.	1.5	4
78	Characterization of pulmonary protein profiles in response to zinc oxide nanoparticles in mice: a&nbsp;24-hour and 28-day follow-up study. <i>International Journal of Nanomedicine</i> , 2015, 10, 4705.	3.3	4
79	Potential Approach for Single-Peak Extinction Fitting of Aerosol Profiles Based on In Situ Measurements for the Improvement of Surface PM2.5 Retrieval from Satellite AOD Product. <i>Remote Sensing</i> , 2020, 12, 2174.	1.8	4
80	Small Cyclones with Conical Contraction Bodies. <i>Aerosol and Air Quality Research</i> , 2018, 18, 2519-2528.	0.9	4
81	Effects of temperature, pressure, and carrier gases on the performance of an aerosol particle mass analyser. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4617-4626.	1.2	3
82	Modeling of the Transitional Pressure Drop of Fibrous Filter Media Loaded with Oil-coated Particles. <i>Aerosol and Air Quality Research</i> , 2019, 19, 1625-1635.	0.9	3
83	Atmospheric observations of new particle growth and shrinkage. , 2013, , .		2
84	Mixing weight determination for retrieving optical properties of polluted dust with MODIS and AERONET data. <i>Environmental Research Letters</i> , 2016, 11, 085002.	2.2	2
85	Effect of flow rate on detection limit of particle size for a steam-based aerosol collector. <i>Atmospheric Environment</i> , 2019, 202, 160-166.	1.9	2
86	Associations between lung-deposited dose of particulate matter and culture-positive pulmonary tuberculosis pleurisy. <i>Environmental Science and Pollution Research</i> , 2022, 29, 6140-6150.	2.7	2
87	Preface to Special Issue - Long-range transported air pollutants in East Asia â€• Observation, measurements, and model analysis. <i>Aerosol and Air Quality Research</i> , 2017, 17, I-II.	0.9	1
88	Effect of particle morphology on performance of an electrostatic airâ€™liquid interface cell exposure system for nanotoxicology studies. <i>Nanotoxicology</i> , 2021, 15, 1-13.	1.6	1
89	Visible light active photocatalyst from recycled disposable heating pads. <i>Journal of Nanophotonics</i> , 2016, 10, 016016.	0.4	0
90	Preface to Special Issue Atmospheric Chemistry and Physics at Mountain Sites 2017. <i>Aerosol and Air Quality Research</i> , 2019, 19, I-I.	0.9	0

#	ARTICLE	IF	CITATIONS
91	Fine and ultrafine particles in Taiwan urban area. AIP Conference Proceedings, 2021, , .	0.3	0
92	Pulmonary toxicity induced by electric charged soot particles in mice. , 2020, , .		0