Shelly L Miller

List of Publications by Year
in descending order

96 papers	5,565 citations	87843 38 h-index	88593 70 g-index
104 all docs	104 docs citations	104 times ranked	5912 citing authors

#	Article	IF	Citations
1	How can airborne transmission of COVID-19 indoors be minimised?. Environment International, 2020, 142, 105832.	4.8	933
2	Transmission of SARSâ€CoVâ€2 by inhalation of respiratory aerosol in the Skagit Valley Chorale superspreading event. Indoor Air, 2021, 31, 314-323.	2.0	505
3	The ecology of microscopic life in household dust. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151139.	1.2	205
4	A paradigm shift to combat indoor respiratory infection. Science, 2021, 372, 689-691.	6.0	192
5	Source apportionment of exposures to volatile organic compounds. I. Evaluation of receptor models using simulated exposure data. Atmospheric Environment, 2002, 36, 3629-3641.	1.9	153
6	Effects of Relative Humidity on the Ultraviolet Induced Inactivation of Airborne Bacteria. Aerosol Science and Technology, 2001, 35, 728-740.	1.5	150
7	Review and comparison of HVAC operation guidelines in different countries during the COVID-19 pandemic. Building and Environment, 2021, 187, 107368.	3.0	147
8	Ten questions concerning the microbiomes of buildings. Building and Environment, 2016, 109, 224-234.	3.0	143
9	Efficacy of ultraviolet germicidal irradiation of upper-room air in inactivating airborne bacterial spores and mycobacteria in full-scale studies. Atmospheric Environment, 2003, 37, 405-419.	1.9	136
10	Effectiveness of In-Room Air Filtration and Dilution Ventilation for Tuberculosis Infection Control. Journal of the Air and Waste Management Association, 1996, 46, 869-882.	0.9	113
11	Practical Indicators for Risk of Airborne Transmission in Shared Indoor Environments and Their Application to COVID-19 Outbreaks. Environmental Science & Technology, 2022, 56, 1125-1137.	4.6	109
12	Particle Image Velocimetry of Human Cough. Aerosol Science and Technology, 2011, 45, 415-422.	1.5	99
13	Role of mechanical ventilation in the airborne transmission of infectious agents in buildings. Indoor Air, 2016, 26, 666-678.	2.0	97
14	Contribution of human-related sources to indoor volatile organic compounds in a university classroom. Indoor Air, 2016, 26, 925-938.	2.0	91
15	Time-Resolved Measurements of Indoor Chemical Emissions, Deposition, and Reactions in a University Art Museum. Environmental Science & Technology, 2019, 53, 4794-4802.	4.6	89
16	Impacts of Flood Damage on Airborne Bacteria and Fungi in Homes after the 2013 Colorado Front Range Flood. Environmental Science & Technology, 2015, 49, 2675-2684.	4.6	88
17	Environmental tobacco smoke particles in multizone indoor environments. Atmospheric Environment, 2001, 35, 2053-2067.	1.9	86
18	Impact of Environmental Factors on Efficacy of Upper-Room Air Ultraviolet Germicidal Irradiation for Inactivating Airborne Mycobacteria. Environmental Science & Technology, 2005, 39, 9656-9664.	4.6	86

#	Article	IF	Citations
19	Impact of Outdoor Air Pollution on Indoor Air Quality in Low-Income Homes during Wildfire Seasons. International Journal of Environmental Research and Public Health, 2019, 16, 3535.	1.2	86
20	UV Air Cleaners and Upper-Room Air Ultraviolet Germicidal Irradiation for Controlling Airborne Bacteria and Fungal Spores. Journal of Occupational and Environmental Hygiene, 2006, 3, 536-546.	0.4	83
21	Ambient bioaerosol indices for indoor air quality assessments of flood reclamation. Journal of Aerosol Science, 2005, 36, 763-783.	1.8	78
22	Concentrations and source insights for trace elements in fine and coarse particulate matter. Atmospheric Environment, 2014, 89, 373-381.	1.9	68
23	Dosimetry of Roomâ€Air Germicidal (254 nm) Radiation Using Spherical Actinometry. Photochemistry and Photobiology, 1999, 70, 314-318.	1.3	64
24	Airborne Infection withBacillus anthracisâ€"from Mills to Mail. Emerging Infectious Diseases, 2004, 10, 996-1001.	2.0	63
25	Source apportionment of exposures to volatile organic compounds: II. Application of receptor models to TEAM study data. Atmospheric Environment, 2002, 36, 3643-3658.	1.9	59
26	Prescribed Burns and Wildfires in Colorado: Impacts of Mitigation Measures on Indoor Air Particulate Matter. Journal of the Air and Waste Management Association, 2005, 55, 1516-1526.	0.9	59
27	Evaluation of a Methodology for Quantifying the Effect of Room Air Ultraviolet Germicidal Irradiation on Airborne Bacteria. Aerosol Science and Technology, 2000, 33, 274-295.	1.5	56
28	Ultraviolet Germicidal Irradiation: Future Directions for Air Disinfection and Building Applications. Photochemistry and Photobiology, 2013, 89, 777-781.	1.3	51
29	Framework for Evaluating Measures to Control Nosocomial Tuberculosis Transmission. Indoor Air, 1998, 8, 205-218.	2.0	50
30	A Multi-Zone Model Evaluation of the Efficacy of Upper-Room Air Ultraviolet Germicidal Irradiation. Journal of Occupational and Environmental Hygiene, 1999, 14, 317-328.	0.5	50
31	Source apportionment using positive matrix factorization on daily measurements of inorganic and organic speciated PM2.5. Atmospheric Environment, 2010, 44, 2731-2741.	1.9	50
32	Fossil Fuel Combustion Is Driving Indoor CO₂ Toward Levels Harmful to Human Cognition. GeoHealth, 2020, 4, e2019GH000237.	1.9	49
33	The Denver Aerosol Sources and Health (DASH) study: Overview and early findings. Atmospheric Environment, 2009, 43, 1666-1673.	1.9	47
34	Microbial analyses of airborne dust collected from dormitory rooms predict the sex of occupants. Indoor Air, 2017, 27, 338-344.	2.0	47
35	Inactivation of Airborne Microorganisms Using Novel Ultraviolet Radiation Sources in Reflective Flow-Through Control Devices. Aerosol Science and Technology, 2010, 44, 541-550.	1.5	46
36	Implementing a negative-pressure isolation ward for a surge in airborne infectious patients. American Journal of Infection Control, 2017, 45, 652-659.	1.1	43

#	Article	IF	Citations
37	Positive Matrix Factorization of PM_{2.5}: Comparison and Implications of Using Different Speciation Data Sets. Environmental Science & Technology, 2012, 46, 11962-11970.	4.6	42
38	Source apportionment of exposure to toxic volatile organic compounds using positive matrix factorization. Journal of Exposure Science and Environmental Epidemiology, 2001, 11, 295-307.	1.8	40
39	Ultraviolet germicidal irradiation inactivation of airborne fungal spores and bacteria in upper-room air and HVAC in-duct configurations. Journal of Environmental Engineering and Science, 2007, 6, 1-9.	0.3	40
40	A Combined Fluorochrome Method for Quantitation of Metabolically Active and Inactive Airborne Bacteria. Aerosol Science and Technology, 1999, 30, 145-160.	1.5	39
41	Assessing positive matrix factorization model fit: a new method to estimate uncertainty and bias in factor contributions at the measurement time scale. Atmospheric Chemistry and Physics, 2009, 9, 497-513.	1.9	38
42	Budgets of Organic Carbon Composition and Oxidation in Indoor Air. Environmental Science & Technology, 2019, 53, 13053-13063.	4.6	37
43	Diversity of DNA and RNA Viruses in Indoor Air As Assessed via Metagenomic Sequencing. Environmental Science & Technology, 2018, 52, 1014-1027.	4.6	35
44	The impacts of cooking and an assessment of indoor air quality in Colorado passive and tightly constructed homes. Building and Environment, 2018, 144, 573-582.	3.0	35
45	Positive matrix factorization of a 32-month series of daily PM2.5 speciation data with incorporation of temperature stratification. Atmospheric Environment, 2013, 65, 11-20.	1.9	34
46	Particle size distributions and concentrations of airborne endotoxin using novel collection methods in homes during the winter and summer seasons. Indoor Air, 2006, 16, 216-226.	2.0	33
47	Relationships between home ventilation rates and respiratory health in the Colorado Home Energy Efficiency and Respiratory Health (CHEER) study. Environmental Research, 2019, 169, 297-307.	3.7	33
48	Nonlinear Least-Squares Minimization Applied to Tracer Gas Decay for Determining Airflow Rates in a Two-Zone Building. Indoor Air, 1997, 7, 64-75.	2.0	30
49	Implementing a negative pressure isolation space within a skilled nursing facility to control SARS-CoV-2 transmission. American Journal of Infection Control, 2021, 49, 438-446.	1.1	30
50	Comparisons of urban and rural PM_{10â^'2.5} and PM_{2.5} mass concentrations and semi-volatile fractions in northeastern Colorado. Atmospheric Chemistry and Physics, 2016, 16, 7469-7484.	1.9	28
51	High temporal variability in airborne bacterial diversity and abundance inside singleâ€family residences. Indoor Air, 2017, 27, 576-586.	2.0	24
52	Measurements and Simulations of Aerosol Released while Singing and Playing Wind Instruments. ACS Environmental Au, 2021, 1, 71-84.	3.3	24
53	Characterization and Nonparametric Regression of Rural and Urban Coarse Particulate Matter Mass Concentrations in Northeastern Colorado. Aerosol Science and Technology, 2012, 46, 108-123.	1.5	21
54	The short-term association of selected components of fine particulate matter and mortality in the Denver Aerosol Sources and Health (DASH) study. Environmental Health, 2015, 14, 49.	1.7	21

#	Article	IF	Citations
55	Seasonal Variability of Airborne Particulate Matter and Bacterial Concentrations in Colorado Homes. Atmosphere, 2018, 9, 133.	1.0	21
56	Autoxidation of Limonene Emitted in a University Art Museum. Environmental Science and Technology Letters, 2019, 6, 520-524.	3.9	21
57	Room-level ventilation in schools and universities. Atmospheric Environment: X, 2022, 13, 100152.	0.8	21
58	Intra-urban spatial variability of PM2.5-bound carbonaceous components. Atmospheric Environment, 2012, 60, 486-494.	1.9	20
59	Impact of Low-Income Home Energy-Efficiency Retrofits on Building Air Tightness and Healthy Home Indicators. Sustainability, 2019, 11, 2667.	1.6	20
60	Evaluating SARSâ€CoVâ€2 airborne quanta transmission and exposure risk in a mechanically ventilated multizone office building. Building and Environment, 2022, 219, 109184.	3.0	20
61	Intra-urban spatial variability and uncertainty assessment of PM2.5 sources based on carbonaceous species. Atmospheric Environment, 2012, 60, 305-315.	1.9	18
62	Using Computational Fluid Dynamics Modeling to Evaluate the Design of Hospital Ultraviolet Germicidal Irradiation Systems for Inactivating Airborne Mycobacteria^{â€}. Photochemistry and Photobiology, 2013, 89, 792-798.	1.3	17
63	Ultrafine and Fine Particulate Matter Inside and Outside of Mechanically Ventilated Buildings. International Journal of Environmental Research and Public Health, 2017, 14, 128.	1.2	17
64	Housing Environments and Child Health Conditions Among Recent Mexican Immigrant Families: A Population-Based Study. Journal of Immigrant and Minority Health, 2010, 12, 617-625.	0.8	16
65	Ultraviolet germicidal coil cleaning: Decreased surface microbial loading and resuspension of cell clusters. Building and Environment, 2016, 105, 50-55.	3.0	16
66	Effects of Ceiling-Mounted HEPA-UV Air Filters on Airborne Bacteria Concentrations in an Indoor Therapy Pool Building. Journal of the Air and Waste Management Association, 2005, 55, 210-218.	0.9	14
67	Global Endeavors to Address the Health Effects of Urban Air Pollution. Environmental Science & Technology, 2022, 56, 6793-6798.	4.6	14
68	Indoor Pollutant Levels from the Use of Unvented Natural Gas Fireplaces in Boulder, Colorado. Journal of the Air and Waste Management Association, 2001, 51, 1654-1661.	0.9	13
69	The Impact of Industrial Odors on the Subjective Well-Being of Communities in Colorado. International Journal of Environmental Research and Public Health, 2018, 15, 1091.	1.2	13
70	Social and Environmental Neighborhood Typologies and Lung Function in a Low-Income, Urban Population. International Journal of Environmental Research and Public Health, 2019, 16, 1133.	1.2	13
71	Modeling the impacts of physical distancing and other exposure determinants on aerosol transmission. Journal of Occupational and Environmental Hygiene, 2021, 18, 495-509.	0.4	13
72	Method for Estimating Ultraviolet Germicidal Fluence Rates in a Hospital Room. Infection Control and Hospital Epidemiology, 2008, 29, 1042-1047.	1.0	12

#	Article	IF	Citations
73	Ultraviolet germicidal coil cleaning: Impact on heat transfer effectiveness and static pressure drop. Building and Environment, 2017, 112, 159-165.	3.0	12
74	Industrial Odor Source Identification Based on Wind Direction and Social Participation. International Journal of Environmental Research and Public Health, 2019, 16, 1242.	1.2	12
75	An assessment of indoor air quality in recent Mexican immigrant housing in Commerce City, Colorado. Atmospheric Environment, 2009, 43, 5661-5667.	1.9	11
76	Industrial odor sources and air pollutant concentrations in Globeville, a Denver, Colorado neighborhood. Journal of the Air and Waste Management Association, 2015, 65, 1127-1140.	0.9	11
77	Potential airborne pathogen transmission in a hospital with and without surge control ventilation system modifications. Building and Environment, 2016, 106, 175-180.	3.0	11
78	Why Was My Paper Rejected without Review?. Environmental Science & Technology, 2020, 54, 11641-11644.	4.6	10
79	Estimation of Needed Isolation Capacity for an Airborne Influenza Pandemic. Health Security, 2016, 14, 258-263.	0.9	9
80	Errors in coarse particulate matter mass concentrations and spatiotemporal characteristics when using subtraction estimation methods. Journal of the Air and Waste Management Association, 2013, 63, 1386-1398.	0.9	8
81	Upper Room Germicidal Ultraviolet Systems for Air Disinfection Are Ready for Wide Implementation. American Journal of Respiratory and Critical Care Medicine, 2015, 192, 407-409.	2.5	8
82	Characterization of aerosol plumes from singing and playing wind instruments associated with the risk of airborne virus transmission. Indoor Air, 2022, 32, .	2.0	8
83	Volatile Organic Compound Emissions From Heated Synthetic Hair: A Pilot Study. Environmental Health Insights, 2020, 14, 117863021989087.	0.6	7
84	Sources of Gas-Phase Species in an Art Museum from Comprehensive Real-Time Measurements. ACS Earth and Space Chemistry, 2021, 5, 2252-2267.	1.2	7
85	Air pollutant emissions from multi jet fusion, material-jetting, and digital light synthesis commercial 3D printers in a service bureau. Building and Environment, 2021, 202, 108008.	3.0	7
86	Air infiltration in low-income, urban homes and its relationship to lung function. Journal of Exposure Science and Environmental Epidemiology, 2020, 30, 262-270.	1.8	6
87	A Lagrangian Approach Towards Quantitative Analysis of Flow-mediated Infection Transmission in Indoor Spaces with Application to SARS-COV-2. International Journal of Computational Fluid Dynamics, 2021, 35, 727-742.	0.5	6
88	Safety Practices in Relation to Home Ownership Among Urban Mexican Immigrant Families. Journal of Community Health, 2012, 37, 165-175.	1.9	5
89	Influence of Powder Type on Aerosol Emissions in Powder-Binder Jetting with Emphasis on Lunar Regolith for In Situ Space Applications. ACS ES&T Engineering, 2021, 1, 183-191.	3.7	5
90	Total and culturable airborne bacteria and fungi in arid region flood-damaged residences. Journal of Aerosol Science, 2000, 31, 35-36.	1.8	3

#	Article	IF	Citations
91	Identification of barriers and research opportunities to improve the effective and efficient application of adjunct UVC surface disinfection in healthcare. , 2018, , .		2
92	An Exploratory Investigation of Government Air Monitoring Data after Hurricane Harvey. International Journal of Environmental Research and Public Health, 2022, 19, 5559.	1.2	2
93	Congratulations to the recipients of the Academy of Fellows of ISIAQ Awards 2020. Indoor Air, 2021, 31, 1687-1690.	2.0	1
94	A Mixed-methods Study of Non-text Social Media Content as a Window into African-American Youth STEM Identities. , 0, , .		1
95	Letters to the Editor. Journal of the Air and Waste Management Association, 2002, 52, 1133-1138.	0.9	0
96	Modeling county-level benzene emissions using transportation analysis zones in the Denver metro area. Atmospheric Environment: X, 2022, , 100180.	0.8	0