## **Ronald Shaffer**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/647236/publications.pdf

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62 papers 3,197 citations

30 h-index 54 g-index

63 all docs 63
docs citations

63 times ranked

3506 citing authors

#	Article	IF	CITATIONS
1	Evaluation of Five Decontamination Methods for Filtering Facepiece Respirators. Annals of Occupational Hygiene, 2009, 53, 815-27.	1.9	273
2	Simple Respiratory Protection—Evaluation of the Filtration Performance of Cloth Masks and Common Fabric Materials Against 20–1000 nm Size Particles. Annals of Occupational Hygiene, 2010, 54, 789-98.	1.9	229
3	Genetic Algorithm-Based Method for Selecting Wavelengths and Model Size for Use with Partial Least-Squares Regression:Â Application to Near-Infrared Spectroscopy. Analytical Chemistry, 1996, 68, 4200-4212.	6.5	186
4	A comparison study of chemical sensor array pattern recognition algorithms. Analytica Chimica Acta, 1999, 384, 305-317.	5.4	145
5	Comparison of Nanoparticle Filtration Performance of NIOSH-approved and CE-Marked Particulate Filtering Facepiece Respirators. Annals of Occupational Hygiene, 2009, 53, 117-128.	1.9	137
6	A comparison of facemask and respirator filtration test methods. Journal of Occupational and Environmental Hygiene, 2017, 14, 92-103.	1.0	137
7	A method to determine the available UV-C dose for the decontamination of filtering facepiece respirators. Journal of Applied Microbiology, 2011, 110, 287-295.	3.1	115
8	Impact of multiple consecutive donnings on filtering facepiece respirator fit. American Journal of Infection Control, 2012, 40, 375-380.	2.3	105
9	Considerations for Recommending Extended Use and Limited Reuse of Filtering Facepiece Respirators in Health Care Settings. Journal of Occupational and Environmental Hygiene, 2014, 11, D115-D128.	1.0	104
10	Facial Anthropometric Differences among Gender, Ethnicity, and Age Groups. Annals of Occupational Hygiene, 2010, 54, 391-402.	1.9	98
11	Respiratory protection against airborne nanoparticles: a review. Journal of Nanoparticle Research, 2009, 11, 1661-1672.	1.9	96
12	Evaluation of Microwave Steam Bags for the Decontamination of Filtering Facepiece Respirators. PLoS ONE, 2011, 6, e18585.	2.5	77
13	The "NRL-SAWRHINO― a nose for toxic gases. Sensors and Actuators B: Chemical, 2000, 65, 10-13.	7.8	75
14	The development of combinatorial chemistry methods for coating development. Progress in Organic Coatings, 2002, 45, 313-321.	3.9	66
15	Speciation of chromium in simulated soil samples using X-ray absorption spectroscopy and multivariate calibration. Analytica Chimica Acta, 2001, 442, 295-304.	5.4	65
16	Genetic Algorithm-Based Protocol for Coupling Digital Filtering and Partial Least-Squares Regression:Â Application to the Near-Infrared Analysis of Glucose in Biological Matrices. Analytical Chemistry, 1996, 68, 2663-2675.	6.5	64
17	Development of a Test System To Evaluate Procedures for Decontamination of Respirators Containing Viral Droplets. Applied and Environmental Microbiology, 2009, 75, 7303-7309.	3.1	64
18	Selective Metals Determination with a Photoreversible Spirobenzopyran. Analytical Chemistry, 1999, 71, 5322-5327.	6.5	60

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19	B95: A new respirator for health care personnel. American Journal of Infection Control, 2013, 41, 1224-1230.	2.3	57
20	Multi-criteria fire detection systems using a probabilistic neural network. Sensors and Actuators B: Chemical, 2000, 69, 325-335.	7.8	53
21	Evaluation of the filtration performance of 21 N95 filtering face piece respirators after prolonged storage. American Journal of Infection Control, 2009, 37, 381-386.	2.3	52
22	Peer Reviewed: Learning Optimization From Nature: Genetic Algorithms and Simulated Annealing. Analytical Chemistry, 1997, 69, 236A-242A.	6.5	50
23	Evaluation of the survivability of MS2 viral aerosols deposited on filtering face piece respirator samples incorporating antimicrobial technologies. American Journal of Infection Control, 2010, 38, 9-17.	2.3	48
24	Prevalence of Respiratory Protective Devices in U.S. Health Care Facilities. Workplace Health and Safety, 2016, 64, 359-368.	1.4	47
25	Development of a Test System To Apply Virus-Containing Particles to Filtering Facepiece Respirators for the Evaluation of Decontamination Procedures. Applied and Environmental Microbiology, 2009, 75, 1500-1507.	3.1	45
26	Impact of Low Filter Resistances on Subjective and Physiological Responses to Filtering Facepiece Respirators. PLoS ONE, 2013, 8, e84901.	2.5	43
27	Improved Probabilistic Neural Network Algorithm for Chemical Sensor Array Pattern Recognition. Analytical Chemistry, 1999, 71, 4263-4271.	6.5	38
28	Reaerosolization of MS2 Bacteriophage from an N95 Filtering Facepiece Respirator by Simulated Coughing. Annals of Occupational Hygiene, 2012, 56, 315-325.	1.9	38
29	Using physics-based modeler outputs to train probabilistic neural networks for unexploded ordnance (UXO) classification in magnetometry surveys. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 797-804.	6.3	37
30	Infrared imaging for leak detection of N95 filtering facepiece respirators: A pilot study. American Journal of Industrial Medicine, 2011, 54, 628-636.	2.1	33
31	Physiological Evaluation of Personal Protective Ensembles Recommended for Use in West Africa. Disaster Medicine and Public Health Preparedness, 2017, 11, 580-586.	1.3	33
32	Healthcare personnel exposure in an emergency department during influenza season. PLoS ONE, 2018, 13, e0203223.	2.5	29
33	Assessment of influenza virus exposure and recovery from contaminated surgical masks and N95 respirators. Journal of Virological Methods, 2018, 260, 98-106.	2.1	29
34	Validation and Application of Models to Predict Facemask Influenza Contamination in Healthcare Settings. Risk Analysis, 2014, 34, 1423-1434.	2.7	28
35	Application of Quantitative Chemometric Analysis Techniques to Direct Sampling Mass Spectrometry. Analytical Chemistry, 2001, 73, 596-605.	6.5	27
36	Multiway analysis of preconcentrator-sampled surface acoustic wave chemical sensor array data. Field Analytical Chemistry and Technology, 1998, 2, 179-192.	0.8	25

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37	Combinatorial chemistry methods for coating development. Progress in Organic Coatings, 2003, 47, 112-119.	3.9	25
38	Challenge of N95 Filtering Facepiece Respirators with Viable H1N1 Influenza Aerosols. Infection Control and Hospital Epidemiology, 2013, 34, 494-499.	1.8	25
39	Evaluation of Nano- and Submicron Particle Penetration through Ten Nonwoven Fabrics Using a Wind-Driven Approach. Journal of Occupational and Environmental Hygiene, 2011, 8, 13-22.	1.0	24
40	New Respirator Fit Test Panels Representing the Current Chinese Civilian Workers. Annals of Occupational Hygiene, 2009, 53, 297-305.	1.9	22
41	Criteria for the Collection of Useful Respirator Performance Data in the Workplace. Journal of Occupational and Environmental Hygiene, 2014, 11, 218-226.	1.0	21
42	Selecting models for a respiratory protection program: What can we learn from the scientific literature?. American Journal of Infection Control, 2015, 43, 127-132.	2.3	21
43	Effect of multiple alcohol-based hand rub applications on the tensile properties of thirteen brands of medical exam nitrile and latex gloves. Journal of Occupational and Environmental Hygiene, 2016, 13, 905-914.	1.0	21
44	Temporal changes in filtering-facepiece respirator fit. Journal of Occupational and Environmental Hygiene, 2016, 13, 265-274.	1.0	21
45	Mixture Analysis Using Membrane Introduction Mass Spectrometry and Multivariate Calibration. Analytical Chemistry, 1997, 69, 4721-4727.	6.5	20
46	Combinatorial chemistry methods for coating development. Progress in Organic Coatings, 2003, 47, 120-127.	3.9	20
47	Personal Interventions for Reducing Exposure and Risk for Outdoor Air Pollution: An Official American Thoracic Society Workshop Report. Annals of the American Thoracic Society, 2021, 18, 1435-1443.	3.2	19
48	Physiological Evaluation of Cooling Devices in Conjunction With Personal Protective Ensembles Recommended for Use in West Africa. Disaster Medicine and Public Health Preparedness, 2017, 11, 573-579.	1.3	17
49	Baseline Evaluation With a Sweating Thermal Manikin of Personal Protective Ensembles Recommended for Use in West Africa. Disaster Medicine and Public Health Preparedness, 2015, 9, 536-542.	1.3	16
50	Comparison of Spectral and Interferogram Processing Methods Using Simulated Passive Fourier Transform Infrared Remote Sensing Data. Applied Spectroscopy, 2001, 55, 1404-1413.	2.2	15
51	Resistance to synthetic blood penetration of National Institute for Occupational Safety and Health-approved N95 filtering facepiece respirators and surgical N95 respirators. American Journal of Infection Control, 2015, 43, 1190-1196.	2.3	15
52	Recommended test methods and pass/fail criteria for a respirator fit capability test of half-mask air-purifying respirators. Journal of Occupational and Environmental Hygiene, 2017, 14, 473-481.	1.0	14
53	Comparison of optimization algorithms for piecewise linear discriminant analysis: application to Fourier transform infrared remote sensing measurements. Analytica Chimica Acta, 1996, 331, 157-175.	5.4	13
54	A Control Banding Framework for Protecting the US Workforce from Aerosol Transmissible Infectious Disease Outbreaks with High Public Health Consequences. Health Security, 2019, 17, 124-132.	1.8	13

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55	The Application of Chemometric Methods to Correlate Fuel Performance with Composition from Gas Chromatography. Energy &	5.1	10
56	Evaluation of gowns and coveralls used by medical personnel working with Ebola patients against simulated bodily fluids using an Elbow Lean Test. Journal of Occupational and Environmental Hygiene, 2016, 13, 881-893.	1.0	10
57	Review of Chamber Design Requirements for Testing of Personal Protective Clothing Ensembles. Journal of Occupational and Environmental Hygiene, 2007, 4, 562-571.	1.0	9
58	Survival of Bacteriophage MS2 on Filtering Facepiece Respirator Coupons. Applied Biosafety, 2010, 15, 71-76.	0.5	9
59	Combinatorial chemistry methods for coating development. Progress in Organic Coatings, 2003, 48, 219-226.	3.9	7
60	Open-path Fourier transform infrared spectroscopy. Field Analytical Chemistry and Technology, 1999, 3, 67-68.	0.8	1
61	Letters to the Editor. Journal of Occupational and Environmental Hygiene, 2009, 7, D1-D2.	1.0	1
62	Software: Fitting Data to Models. Analytical Chemistry, 1996, 68, 368A-369A.	6.5	0