

# Matthew E Staymates

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

533  
citations

759233

12  
h-index

642732

23  
g-index

33  
all docs

33  
docs citations

33  
times ranked

599  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimized thermal desorption for improved sensitivity in trace explosives detection by ion mobility spectrometry. <i>Analyst, The</i> , 2012, 137, 2614.	3.5	94
2	Rapid analysis of trace drugs and metabolites using a thermal desorption DART-MS configuration. <i>Analytical Methods</i> , 2016, 8, 6494-6499.	2.7	54
3	Biomimetic Sniffing Improves the Detection Performance of a 3D Printed Nose of a Dog and a Commercial Trace Vapor Detector. <i>Scientific Reports</i> , 2016, 6, 36876.	3.3	49
4	Flow visualization of an N95 respirator with and without an exhalation valve using schlieren imaging and light scattering. <i>Physics of Fluids</i> , 2020, 32, 111703.	4.0	49
5	Detection of Nonvolatile Inorganic Oxidizer-Based Explosives from Wipe Collections by Infrared Thermal Desorption—Direct Analysis in Real Time Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 6419-6425.	6.5	38
6	DART-MS analysis of inorganic explosives using high temperature thermal desorption. <i>Analytical Methods</i> , 2017, 9, 4988-4996.	2.7	33
7	Fabrication of polymer microsphere particle standards containing trace explosives using an oil/water emulsion solvent extraction piezoelectric printing process. <i>Talanta</i> , 2008, 76, 949-955.	5.5	27
8	Hydration of Hydrophilic Cloth Face Masks Enhances the Filtration of Nanoparticles. <i>ACS Applied Nano Materials</i> , 2021, 4, 2694-2701.	5.0	27
9	Dynamics of silver nanoparticle release from wound dressings revealed via in situ nanoscale imaging. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 2481-2489.	3.6	20
10	Broad spectrum infrared thermal desorption of wipe-based explosive and narcotic samples for trace mass spectrometric detection. <i>Analyst, The</i> , 2017, 142, 3002-3010.	3.5	18
11	The effect of reusing wipes for particle collection. <i>International Journal for Ion Mobility Spectrometry</i> , 2016, 19, 41-49.	1.4	15
12	Optimization of confined direct analysis in real time mass spectrometry (DART-MS). <i>Analyst, The</i> , 2020, 145, 2743-2750.	3.5	15
13	Pressure-Sensitive Sampling Wands for Homeland Security Applications. <i>IEEE Sensors Journal</i> , 2013, 13, 4844-4850.	4.7	14
14	Evaluation of a drop-on-demand micro-dispensing system for development of artificial fingerprints. <i>Analytical Methods</i> , 2013, 5, 180-186.	2.7	13
15	A new wipe-sampling instrument for measuring the collection efficiency of trace explosives residues. <i>Analytical Methods</i> , 2018, 10, 204-213.	2.7	13
16	Filter Inserts Impact Cloth Mask Performance against Nano- to Micro-Sized Particles. <i>ACS Nano</i> , 2021, 15, 12860-12868.	14.6	13
17	Production and characterization of polymer microspheres containing trace explosives using precision particle fabrication technology. <i>Journal of Microencapsulation</i> , 2010, 27, 426-435.	2.8	11
18	Particle Fabrication Using Inkjet Printing onto Hydrophobic Surfaces for Optimization and Calibration of Trace Contraband Detection Sensors. <i>Sensors</i> , 2015, 15, 29618-29634.	3.8	11

#	ARTICLE	IF	CITATIONS
19	Thermal desorption and vapor transport characteristics in an explosive trace detector. Analyst, The, 2011, 136, 3967.	3.5	8
20	Quantifying Trace 2,4,6-Trinitrotoluene (TNT) in Polymer Microspheres. Propellants, Explosives, Pyrotechnics, 2016, 41, 160-165.	1.6	4
21	Standardized Method for Measuring Collection Efficiency from Wipe-sampling of Trace Explosives. Journal of Visualized Experiments, 2017, , .	0.3	3
22	The internal fluid mechanics of explosive trace detectors using computational fluid dynamics. , 2009, , .		2
23	High-speed imaging system to visualize particle removal/collection via wipe sampling and aerodynamic sampling. Review of Scientific Instruments, 2019, 90, 063703.	1.3	1
24	Improving particle collection efficiency of sampling wipes used for trace chemical detection. Analytical Methods, 2022, 14, 581-587.	2.7	1
25	Review of the National Institute of Standards and Technology Research Program in Trace Contraband Detection. , 2019, , 49-62.		0