Thomas P Forbes

List of Publications by Citations

48 papers	781 citations	16 h-index	26 g-index
48 ext. papers	926 ext. citations	4.9 avg, IF	5.03 L-index

#	Paper	IF	Citations
48	Microfluidic magnetophoretic separations of immunomagnetically labeled rare mammalian cells. *Lab on A Chip*, **2012**, 12, 1471-9	7.2	100
47	Recent advances in ambient mass spectrometry of trace explosives. *Analyst, The*, **2018**, 143, 1948-1969	5	53
46	Test Sample for the Spatially Resolved Quantification of Illicit Drugs on Fingerprints Using Imaging Mass Spectrometry. *Analytical Chemistry*, **2015**, 87, 5444-50	7.8	41
45	Rapid Analysis of Trace Drugs and Metabolites Using a Thermal Desorption DART-MS Configuration. *Analytical Methods*, **2016**, 8, 6494-6499	3.2	41
44	Engineering and analysis of surface interactions in a microfluidic herringbone micromixer. *Lab on A Chip*, **2012**, 12, 2634-7	7.2	41
43	Mass spectrometry detection and imaging of inorganic and organic explosive device signatures using desorption electro-flow focusing ionization. *Analytical Chemistry*, **2014**, 86, 7788-97	7.8	40
42	Chemical imaging of artificial fingerprints by desorption electro-flow focusing ionization mass spectrometry. *Analyst, The*, **2014**, 139, 2982-5	5	35
41	Rapid detection of sugar alcohol precursors and corresponding nitrate ester explosives using direct analysis in real time mass spectrometry. *Analyst, The*, **2015**, 140, 2785-96	5	34
40	Detection of Nonvolatile Inorganic Oxidizer-Based Explosives from Wipe Collections by Infrared Thermal Desorption-Direct Analysis in Real Time Mass Spectrometry. *Analytical Chemistry*, **2018**, 90, 6419-6425	7.8	27
39	DART-MS analysis of inorganic explosives using high temperature thermal desorption. *Analytical Methods*, **2017**, 9, 4988-4996	3.2	25
38	Desorption electro-flow focusing ionization of explosives and narcotics for ambient pressure mass spectrometry. *Analyst, The*, **2013**, 138, 5665-73	5	22
37	In-source collision induced dissociation of inorganic explosives for mass spectrometric signature detection and chemical imaging. *Analytica Chimica Acta*, **2015**, 892, 1-9	6.6	19
36	A simple packed bed device for antibody labelled rare cell capture from whole blood. *Lab on A Chip*, **2012**, 12, 4972-5	7.2	18
35	Forensic Analysis and Differentiation of Black Powder and Black Powder Substitute Chemical Signatures by Infrared Thermal Desorption-DART-MS. *Analytical Chemistry*, **2019**, 91, 1089-1097	7.8	18
34	Broad spectrum infrared thermal desorption of wipe-based explosive and narcotic samples for trace mass spectrometric detection. *Analyst, The*, **2017**, 142, 3002-3010	5	17
33	Trace detection and competitive ionization of erythritol tetranitrate in mixtures using direct analysis in real time mass spectrometry. *Analytical Methods*, **2015**, 7, 3632-3636	3.2	16
32	Electrohydrodynamics of charge separation in droplet-based ion sources with time-varying electrical and mechanical actuation. *Journal of the American Society for Mass Spectrometry*, **2010**, 21, 501-10	3.5	16

31	Analytical performance of a venturi-assisted array of micromachined ultrasonic electrosprays coupled to ion trap mass spectrometry for the analysis of peptides and proteins. *Analytical Chemistry*, **2007**, 79, 8154-61	7.8	16
30	Ion mobility spectrometry nuisance alarm threshold analysis for illicit narcotics based on environmental background and a ROC-curve approach. *Analyst, The*, **2016**, 141, 4438-46	5	15
29	Comparison of the internal energy deposition of Venturi-assisted electrospray ionization and a Venturi-assisted array of micromachined ultrasonic electrosprays (AMUSE). *Journal of the American Society for Mass Spectrometry*, **2008**, 19, 1320-9	3.5	15
28	Forensic applications of DART-MS: A review of recent literature. *Forensic Chemistry*, **2021**, 22, 100294	2.8	15
27	Capturing rare cells from blood using a packed bed of custom-synthesized chitosan microparticles. *Journal of Materials Chemistry B*, **2013**, 1, 4313-4319	7.3	13
26	Trace Detection and Chemical Analysis of Homemade Fuel-Oxidizer Mixture Explosives: Emerging Challenges and Perspectives. *TrAC - Trends in Analytical Chemistry*, **2020**, 131, 116023-116023	14.6	12
25	Detection and identification of sugar alcohol sweeteners by ion mobility spectrometry. *Analytical Methods*, **2016**, 8, 5611-5618	3.2	12
24	Rapid detection and isotopic measurement of discrete inorganic samples using acoustically actuated droplet ejection and extractive electrospray ionization mass spectrometry. *Rapid Communications in Mass Spectrometry*, **2015**, 29, 19-28	2.2	12
23	Optimization of confined direct analysis in real time mass spectrometry (DART-MS). *Analyst, The*, **2020**, 145, 2743-2750	5	10
22	Droplet charging regimes for ultrasonic atomization of a liquid electrolyte in an external electric field. *Physics of Fluids*, **2011**, 23, 12104	4.4	10
21	Characterization of charge separation in the Array of Micromachined UltraSonic Electrospray (AMUSE) ion source for mass spectrometry. *Journal of the American Society for Mass Spectrometry*, **2009**, 20, 1684-7	3.5	10
20	Direct analysis in real time mass spectrometry of potential by-products from homemade nitrate ester explosive synthesis. *Talanta*, **2016**, 150, 177-83	6.2	9
19	Discriminative potential of ion mobility spectrometry for the detection of fentanyl and fentanyl analogues relative to confounding environmental interferents. *Analyst, The*, **2019**, 144, 6391-6403	5	9
18	Emerging techniques for the detection of pyrotechnic residues from seized postal packages containing fireworks. *Forensic Science International*, **2020**, 308, 110160	2.6	8
17	Primary and secondary droplet and charge transmission characteristics of desorption electro-flow focusing ionization. *Applied Physics Letters*, **2013**, 102, 214102	3.4	8
16	Enhanced aerodynamic reach of vapor and aerosol sampling for real-time mass spectrometric detection using Venturi-assisted entrainment and ionization. *Analytica Chimica Acta*, **2017**, 957, 20-28	6.6	7
15	Multiplexed operation of a micromachined ultrasonic droplet ejector array. *Review of Scientific Instruments*, **2007**, 78, 104101	1.7	7
14	Considerations for uranium isotope ratio analysis by atmospheric pressure ionization mass spectrometry. *Analyst, The*, **2018**, 144, 317-323	5	5

13	Separation and Detection of Trace Fentanyl from Complex Mixtures Using Gradient Elution Moving Boundary Electrophoresis. *Analytical Chemistry*, **2019**, 91, 13014-13021	7.8	4
12	Detection of fuel-oxidizer explosives utilizing portable capillary electrophoresis with wipe-based sampling. *Electrophoresis*, **2020**, 41, 1482-1490	3.6	4
11	Visualizing mass transport in desorption electrospray ionization using time-of-flight secondary ion mass spectrometry. *Analyst, The*, **2014**, 139, 2668-73	5	4
10	Theoretical analysis of a magnetophoresis-diffusion T-sensor immunoassay. *Lab on A Chip*, **2013**, 13, 3935-44	7.2	3
9	Confined DART-MS for Rapid Chemical Analysis of Electronic Cigarette Aerosols and Spiked Drugs. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 2274-2280	3.5	3
8	DART-MS Spectral Similarity of Infrared Thermally Desorbed Solid Particulate and Solution Cast Propellant Samples. *Journal of the American Society for Mass Spectrometry*, **2021**, 32, 1033-1040	3.5	2
7	Nanocalorimetry of explosives prepared by inkjet printing. *Thermochimica Acta*, **2020**, 685, 178510	2.9	1
6	Regime transition in electromechanical fluid atomization and implications to analyte ionization for mass spectrometric analysis. *Journal of the American Society for Mass Spectrometry*, **2010**, 21, 1900-5	3.5	1
5	Rapid, presumptive identification of seed-based toxins using direct analysis in real time mass spectrometry (DART-MS) and its variants.. *Science and Justice - Journal of the Forensic Science Society*, **2022**, 62, 145-151	2	1
4	Inorganic oxidizer detection from propellants, pyrotechnics, and homemade explosive powders using gradient elution moving boundary electrophoresis. *Electrophoresis*, **2021**, 42, 279-288	3.6	1
3	Open port sampling interface mass spectrometry of wipe-based explosives, oxidizers, and narcotics for trace contraband detection. *Analytical Methods*, **2021**, 13, 3453-3460	3.2	1
2	Electrochemical Ionization and Analyte Charging in the Array of Micromachined UltraSonic Electrospray (AMUSE) Ion Source. *Journal of Electroanalytical Chemistry*, **2010**, 645, 167-173	4.1	0
1	Review of the National Institute of Standards and Technology Research Program in Trace Contraband Detection **2019**, 49-62		