Xiaoyu Zhou

List of Publications by Year in Descending Order

40 papers	517 citations	13 h-index	21 g-index
40 ext. papers	587 ext. citations	5 avg, IF	3.89 L-index

#	Paper	IF	Citations
40	Recent advances in on-site mass spectrometry analysis for clinical applications.. *TrAC - Trends in Analytical Chemistry*, **2022**, 149, 116548	14.6	2
39	Mass Analysis Using Collective Interaction of Ions in an Ion Trap. *Analytical Chemistry*, **2021**, 93, 5998-6002	7.8	2
38	Tandem-in-time mass spectrometry analysis facilitated by real-time pressure adjustments. *International Journal of Mass Spectrometry*, **2021**, 462, 116523	1.9	2
37	Ion Mobility Separation Using a Dual-LIT Miniature Mass Spectrometer. *Analytical Chemistry*, **2020**, 92, 2573-2579	7.8	7
36	Statistical Algorithm Enables Rapid Computation of Space Charge Effect and Spectral Correction in a Miniature Ion Trap Mass Spectrometer. *Journal of the American Society for Mass Spectrometry*, **2020**, 31, 429-433	3.5	4
35	One-pot hydrothermal cross-linking preparation of poly(vinylpyrrolidone) immobilized silica stationary phase for hydrophilic interaction chromatography. *Journal of Chromatography A*, **2020**, 1633, 461656	4.5	3
34	A Gas-Phase Reaction Accelerator Using Vortex Flows. *Analytical Chemistry*, **2020**, 92, 12049-12054	7.8	4
33	Numerical simulation for mass spectrometry instrumentation. *International Journal of Mass Spectrometry*, **2020**, 458, 116439	1.9	1
32	Ion-Neutral Collision Effects on Ion Trapping and Pseudopotential Depth in Ion Trap Mass Spectrometry. *Journal of the American Society for Mass Spectrometry*, **2019**, 30, 2750-2755	3.5	5
31	The efficient profiling of serum N-linked glycans by a highly porous 3D graphene composite. *Analyst, The*, **2019**, 144, 5261-5270	5	2
30	Tandem Analysis by a Dual-Trap Miniature Mass Spectrometer. *Analytical Chemistry*, **2019**, 91, 1391-1398	7.8	32
29	Study of In-Trap Ion Clouds by Ion Trajectory Simulations. *Journal of the American Society for Mass Spectrometry*, **2018**, 29, 223-229	3.5	3
28	Highly Specific Enrichment of Multi-phosphopeptides by the Diphosphorylated Fructose-Modified Dual-Metal-Centered Zirconium-Organic Framework. *ACS Applied Materials & Interfaces*, **2018**, 10, 32613-32621	9.5	33
27	Stimulated Motion Suppression (STMS): a New Approach to Break the Resolution Barrier for Ion Trap Mass Spectrometry. *Journal of the American Society for Mass Spectrometry*, **2018**, 29, 1738-1744	3.5	3
26	Ion transfer between ion source and mass spectrometer inlet: electro-hydrodynamic simulation and experimental validation. *Rapid Communications in Mass Spectrometry*, **2016**, 30 Suppl 1, 29-33	2.2	8
25	Development of Visible-Wavelength MALDI Cell Mass Spectrometry for High-Efficiency Single-Cell Analysis. *Analytical Chemistry*, **2016**, 88, 11913-11918	7.8	13
24	Following the Ions through a Mass Spectrometer with Atmospheric Pressure Interface: Simulation of Complete Ion Trajectories from Ion Source to Mass Analyzer. *Analytical Chemistry*, **2016**, 88, 7033-40	7.8	17

23	Direct Analysis of Nonvolatile Chemical Compounds on Surfaces Using a Hand-Held Mass Spectrometer with Synchronized Discharge Ionization Function. *Analytical Chemistry*, **2016**, 88, 826-31	7.8	20
22	Nonlinear Ion Harmonics in the Paul Trap with Added Octopole Field: Theoretical Characterization and New Insight into Nonlinear Resonance Effect. *Journal of the American Society for Mass Spectrometry*, **2016**, 27, 344-51	3.5	3
21	A Theoretical Method for Characterizing Nonlinear Effects in Paul Traps with Added Octopole Field. *Journal of the American Society for Mass Spectrometry*, **2015**, 26, 1338-48	3.5	8
20	Design of portable mass spectrometers with handheld probes: aspects of the sampling and miniature pumping systems. *Journal of the American Society for Mass Spectrometry*, **2015**, 26, 240-7	3.5	57
19	High efficiency tandem mass spectrometry analysis using dual linear ion traps. *Analyst, The*, **2014**, 139, 4779-84	5	22
18	Flowing gas in mass spectrometer: method for characterization and impact on ion processing. *Analyst, The*, **2014**, 139, 5215-22	5	20
17	Quantitative assessment of protein adsorption on microparticles with particle mass spectrometry. *Analytical Chemistry*, **2014**, 86, 3876-81	7.8	12
16	Ion sponge: a 3-dimentional array of quadrupole ion traps for trapping and mass-selectively processing ions in gas phase. *Analytical Chemistry*, **2014**, 86, 4102-9	7.8	14
15	Nonlinear effects in Paul traps operated in the second stability region: analytical analysis and numerical verification. *Journal of the American Society for Mass Spectrometry*, **2014**, 25, 1882-9	3.5	4
14	Development of miniature mass spectrometry systems for bioanalysis outside the conventional laboratories. *Bioanalysis*, **2014**, 6, 1497-508	2.1	23
13	CHAPTER 16:Paper Spray. *New Developments in Mass Spectrometry*, **2014**, 389-422	2.3	3
12	Chapter 6:Low-Temperature Plasma Probe. *New Developments in Mass Spectrometry*, **2014**, 137-163	2.3	
11	Study of nonlinear resonance effect in Paul trap. *Journal of the American Society for Mass Spectrometry*, **2013**, 24, 794-800	3.5	9
10	Simulation of rarefied gas flows in atmospheric pressure interfaces for mass spectrometry systems. *Journal of the American Society for Mass Spectrometry*, **2013**, 24, 1890-9	3.5	20
9	Ambient aerodynamic desorption/ionization method for microparticle mass measurement. *Analytical Chemistry*, **2013**, 85, 4370-5	7.8	10
8	The development of charge detection-quadrupole ion trap mass spectrometry driven by rectangular and triangular waves. *Analyst, The*, **2012**, 137, 1199-204	5	7
7	High-salt-tolerance matrix for facile detection of glucose in rat brain microdialysates by MALDI mass spectrometry. *Analytical Chemistry*, **2012**, 84, 465-9	7.8	76
6	Characteristics of electrical field and ion motion in surface-electrode ion traps. *Journal of Mass Spectrometry*, **2012**, 47, 286-93	2.2	4

5	Characterization of bioparticles using a miniature cylindrical ion trap mass spectrometer operated at rough vacuum. *Analyst, The*, **2011**, 136, 1305-9	5	22
4	Direct analysis of oligosaccharides and alpha hydroxy acids in fruits using electrosonic spray ionization mass spectrometry. *Analyst, The*, **2011**, 136, 3809-14	5	6
3	Potential distribution and transmission characteristics in a curved quadrupole ion guide. *Journal of the American Society for Mass Spectrometry*, **2011**, 22, 386-98	3.5	9
2	Characterization of column packing materials in high-performance liquid chromatography by charge-detection quadrupole ion trap mass spectrometry. *Analytical Chemistry*, **2011**, 83, 5400-6	7.8	9
1	Characteristics of stability boundary and frequency in nonlinear ion trap mass spectrometer. *Journal of the American Society for Mass Spectrometry*, **2010**, 21, 1588-95	3.5	18