

Wei Xu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/131229/publications.pdf>

Version: 2024-02-01

68
papers

1,415
citations

304368

22
h-index

377514

34
g-index

70
all docs

70
docs citations

70
times ranked

775
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of a miniature mass spectrometer with continuous atmospheric pressure interface. <i>Analyst, The</i> , 2015, 140, 3406-3414.	1.7	101
2	Direct analysis of melamine in complex matrices using a handheld mass spectrometer. <i>Analyst, The</i> , 2010, 135, 705-711.	1.7	96
3	Mini Mass Spectrometer Integrated with a Miniature Ion Funnel. <i>Analytical Chemistry</i> , 2017, 89, 4177-4183.	3.2	64
4	Study of Discontinuous Atmospheric Pressure Interfaces for Mass Spectrometry Instrumentation Development. <i>Analytical Chemistry</i> , 2010, 82, 6584-6592.	3.2	59
5	Ion trap mass analysis at high pressure: A theoretical view. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 2144-2153.	1.2	56
6	Miniaturization of Mass Spectrometry Analysis Systems. <i>Journal of the Association for Laboratory Automation</i> , 2010, 15, 433-439.	2.8	51
7	A "Brick Mass Spectrometer" Driven by a Sinusoidal Frequency Scanning Technique. <i>Analytical Chemistry</i> , 2017, 89, 5578-5584.	3.2	50
8	Characterization of electrode surface roughness and its impact on ion trap mass analysis. <i>Journal of Mass Spectrometry</i> , 2009, 44, 353-360.	0.7	42
9	Development and Characterizations of a Miniature Capillary Electrophoresis Mass Spectrometry System. <i>Analytical Chemistry</i> , 2015, 87, 2236-2241.	3.2	40
10	Recent developments of miniature ion trap mass spectrometers. <i>Chinese Chemical Letters</i> , 2018, 29, 1578-1584.	4.8	40
11	The coupling effects of hexapole and octopole fields in quadrupole ion traps: a theoretical study. <i>Journal of Mass Spectrometry</i> , 2013, 48, 937-944.	0.7	37
12	Ion trap mass analysis at high pressure: an experimental characterization. <i>Journal of Mass Spectrometry</i> , 2010, 45, 26-34.	0.7	34
13	Direct Biological Sample Analyses by Laserspray Ionization Miniature Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 5696-5702.	3.2	34
14	Fluorescence resonance energy transfer-based nanomaterials for the sensing in biological systems. <i>Chinese Chemical Letters</i> , 2022, 33, 4505-4516.	4.8	32
15	Structure and effective charge characterization of proteins by a mobility capillary electrophoresis based method. <i>Chemical Science</i> , 2019, 10, 7779-7787.	3.7	30
16	Structural Analysis of Biomolecules through a Combination of Mobility Capillary Electrophoresis and Mass Spectrometry. <i>ACS Omega</i> , 2019, 4, 2377-2386.	1.6	30
17	An aerodynamic assisted miniature mass spectrometer for enhanced volatile sample analysis. <i>Analyst, The</i> , 2016, 141, 5404-5411.	1.7	29
18	Improving the Performances of a "Brick Mass Spectrometer" by Quadrupole Enhanced Dipolar Resonance Ejection from the Linear Ion Trap. <i>Analytical Chemistry</i> , 2018, 90, 11671-11679.	3.2	29

#	ARTICLE	IF	CITATIONS
19	Sampling Wand for an Ion Trap Mass Spectrometer. <i>Analytical Chemistry</i> , 2011, 83, 1857-1861.	3.2	27
20	Pseudo-Multiple Reaction Monitoring (Pseudo-MRM) Mode on the "Brick" Mass Spectrometer, Using the Grid-SWIFT Waveform. <i>Analytical Chemistry</i> , 2019, 91, 13838-13846.	3.2	25
21	Chemiluminescence Resonance Energy Transfer-Based Mesoporous Silica Nanosensors for the Detection of miRNA. <i>ACS Sensors</i> , 2020, 5, 2800-2805.	4.0	25
22	Modeling of ion transient response to dipolar AC excitation in a quadrupole ion trap. <i>International Journal of Mass Spectrometry</i> , 2011, 308, 49-55.	0.7	24
23	A "Brick" Mass Spectrometer with Photoionization for Direct Analysis of Trace Volatile Compounds. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 961-968.	1.2	21
24	Rapid 3-dimensional shape determination of globular proteins by mobility capillary electrophoresis and native mass spectrometry. <i>Chemical Science</i> , 2020, 11, 4758-4765.	3.7	20
25	A pulsed pinhole atmospheric pressure interface for simplified mass spectrometry instrumentation with enhanced sensitivity. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 701-706.	0.7	19
26	Boosting the Sensitivity and Selectivity of a Miniature Mass Spectrometer Using a Hybrid Ion Funnel. <i>Analytical Chemistry</i> , 2019, 91, 7911-7919.	3.2	19
27	Mini 2000: A Robust Miniature Mass Spectrometer with Continuous Atmospheric Pressure Interface. <i>Instruments</i> , 2018, 2, 2.	0.8	17
28	Reducing Space Charge Effects in a Linear Ion Trap by Rhombic Ion Excitation and Ejection. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 1256-1262.	1.2	16
29	Characterization of geometry deviation effects on ion trap mass analysis: A comparison study. <i>International Journal of Mass Spectrometry</i> , 2014, 370, 125-131.	0.7	15
30	Ion Sponge: A 3-Dimensional Array of Quadrupole Ion Traps for Trapping and Mass-Selectively Processing Ions in Gas Phase. <i>Analytical Chemistry</i> , 2014, 86, 4102-4109.	3.2	15
31	Collision cross section measurements for biomolecules within a high-resolution FT-ICR cell: theory. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9060-9067.	1.3	15
32	Extracting biomolecule collision cross sections from the high-resolution FT-ICR mass spectral linewidths. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 713-717.	1.3	15
33	A two-step method for rapid characterization of electroosmotic flows in capillary electrophoresis. <i>Electrophoresis</i> , 2017, 38, 3130-3135.	1.3	15
34	Direct bacteria analysis using laserspray ionization miniature mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 4031-4040.	1.9	15
35	Realistic modeling of ion-neutral collisions in quadrupole ion traps. <i>Journal of Mass Spectrometry</i> , 2015, 50, 95-102.	0.7	14
36	The Coupling of Taylor Dispersion Analysis and Mass Spectrometry to Differentiate Protein Conformations. <i>Analytical Chemistry</i> , 2020, 92, 5200-5206.	3.2	14

#	ARTICLE	IF	CITATIONS
37	A simple desorption atmospheric pressure chemical ionization method for enhanced non-volatile sample analysis. <i>Analytica Chimica Acta</i> , 2018, 1002, 62-69.	2.6	13
38	High-Throughput and Direct Sample Screening Using a Laser Spray Ionization Miniature Mass Spectrometer. <i>Analytical Chemistry</i> , 2019, 91, 8808-8813.	3.2	13
39	Ambient ionization coupled with a miniature mass spectrometer for rapid identification of unauthorized adulterants in food. <i>Journal of Food Composition and Analysis</i> , 2020, 85, 103333.	1.9	13
40	Ion collision crosssection measurements in quadrupole ion traps using a time-frequency analysis method. <i>Analyst, The</i> , 2014, 139, 6144-6153.	1.7	12
41	Mobility Capillary Electrophoresis-Restrained Modeling Method for Protein Structure Analysis in Mixtures. <i>Journal of Physical Chemistry B</i> , 2019, 123, 2335-2341.	1.2	12
42	A dual-source miniature mass spectrometer with improved sensitivity. <i>International Journal of Mass Spectrometry</i> , 2017, 423, 15-19.	0.7	11
43	Coupling handheld liquid microjunction-surface sampling probe (hLMJ-SSP) to the miniature mass spectrometer for automated and in-situ surface analysis. <i>Talanta</i> , 2022, 242, 123090.	2.9	11
44	Improving the Performance of the Mini 2000 Mass Spectrometer with a Triboelectric Nanogenerator Electrospray Ionization Source. <i>ACS Omega</i> , 2018, 3, 12229-12234.	1.6	10
45	Study of the efficiency for ion transfer through bent capillaries. <i>Journal of Mass Spectrometry</i> , 2012, 47, 1466-1472.	0.7	9
46	Rapid screening of explosives in ambient environment by aerodynamic assisted thermo desorption mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2017, 52, 1-6.	0.7	9
47	Toward Nanopore Electrospray Mass Spectrometry: Nanopore Effects in the Analysis of Bacteria. <i>ACS Central Science</i> , 2020, 6, 1001-1008.	5.3	9
48	Development of a miniature protein mass spectrometer capable of analyzing native proteins. <i>Talanta</i> , 2021, 233, 122580.	2.9	9
49	Ion collision cross section measurements in Fourier transform-based mass analyzers. <i>Analyst, The</i> , 2016, 141, 3554-3561.	1.7	8
50	Electro-kinetic assisted electrospray ionization for enhanced complex sample analysis. <i>Talanta</i> , 2017, 164, 45-51.	2.9	8
51	Straight nano-electrospray ionization and its coupling of mobility capillary electrophoresis to mass spectrometry. <i>Talanta</i> , 2020, 206, 120183.	2.9	8
52	A mini mass spectrometer with a low noise Faraday detector. <i>Analyst, The</i> , 2020, 145, 3892-3898.	1.7	7
53	Qualitative screening of prohibited drugs in dietary supplements using a homemade miniature mass spectrometer. <i>International Journal of Mass Spectrometry</i> , 2021, 462, 116521.	0.7	7
54	A general purpose MALDI matrix for the analyses of small organic, peptide and protein molecules. <i>Analyst, The</i> , 2021, 146, 4080-4086.	1.7	7

#	ARTICLE	IF	CITATIONS
55	Dual-Polarity Ion Trap Mass Spectrometry: Dynamic Monitoring and Controlling Gas-phase Ion-Ion Reactions. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 1262-1270.	1.2	5
56	Instantaneous Response of Bacteria to External Stimuli Monitored by Syringe Spray Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 11417-11422.	3.2	5
57	Toward high pressure miniature protein mass spectrometer: Theory and initial results. <i>Journal of Mass Spectrometry</i> , 2019, 54, 957-965.	0.7	5
58	Integration of a liquid-phase ion trap with a miniature mass spectrometer. <i>Analytica Chimica Acta</i> , 2022, 1193, 339315.	2.6	5
59	Probing protein higher-order structures by native capillary electrophoresis-mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 157, 116739.	5.8	5
60	Rapid determination of bacterial aminoglycoside resistance in environmental samples using membrane electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 202-207.	0.7	4
61	Extracting biomolecule collision cross sections from FT-ICR mass spectral line shape. <i>Talanta</i> , 2019, 205, 120093.	2.9	4
62	Electric modeling and characterization of pulsed high-voltage nanoelectrospray ionization sources by a miniature ion trap mass spectrometer. <i>Journal of Mass Spectrometry</i> , 2019, 54, 583-591.	0.7	4
63	High ohmic resistor hyphenated gel loading tip nano-electrospray ionization source for mini mass spectrometer. <i>Talanta</i> , 2019, 202, 59-66.	2.9	4
64	Liquid-Phase Ion Trap for Ion Trapping, Transfer, and Sequential Ejection in Solutions. <i>Analytical Chemistry</i> , 2020, 92, 9065-9071.	3.2	4
65	Ion collision cross section analyses in quadrupole ion traps using the filter diagonalization method: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 12058-12064.	1.3	3
66	Development of a miniature mass spectrometer with in-source desolvation. <i>International Journal of Mass Spectrometry</i> , 2016, 397-398, 1-5.	0.7	3
67	Rapid characterization of structure-dependency gas-phase ion/ion reaction via accumulative tandem MS. <i>Talanta</i> , 2019, 195, 17-22.	2.9	2
68	Coupling of micro solid-phase extraction with electrospray ionization and its potential for complex sample analyses using a miniature mass spectrometer. <i>International Journal of Mass Spectrometry</i> , 2021, 469, 116675.	0.7	0