Zongxiu Nie

List of Publications by Year
in descending order

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82 papers	2,310 citations	201575 27 h-index	243529 44 g-index
85 all docs	85 docs citations	85 times ranked	2558 citing authors

#	Article	IF	Citations
1	Mass spectrometry imaging reveals the sub-organ distribution of carbon nanomaterials. Nature Nanotechnology, 2015, 10, 176-182.	15.6	164
2	Carbon Nanodots As a Matrix for the Analysis of Low-Molecular-Weight Molecules in Both Positive- and Negative-Ion Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry and Quantification of Glucose and Uric Acid in Real Samples. Analytical Chemistry, 2013, 85, 6646-6652.	3.2	151
3	MALDI-TOF MS Imaging of Metabolites with a N-(1-Naphthyl) Ethylenediamine Dihydrochloride Matrix and Its Application to Colorectal Cancer Liver Metastasis. Analytical Chemistry, 2015, 87, 422-430.	3.2	120
4	1,5-Diaminonaphthalene Hydrochloride Assisted Laser Desorption/Ionization Mass Spectrometry Imaging of Small Molecules in Tissues Following Focal Cerebral Ischemia. Analytical Chemistry, 2014, 86, 10114-10121.	3.2	105
5	High-Salt-Tolerance Matrix for Facile Detection of Glucose in Rat Brain Microdialysates by MALDI Mass Spectrometry. Analytical Chemistry, 2012, 84, 465-469.	3.2	91
6	A Near-Infrared-II Polymer with Tandem Fluorophores Demonstrates Superior Biodegradability for Simultaneous Drug Tracking and Treatment Efficacy Feedback. ACS Nano, 2021, 15, 5428-5438.	7.3	79
7	Mass spectrometry imaging of the in situ drug release from nanocarriers. Science Advances, 2018, 4, eaat9039.	4.7	70
8	Laser-Induced Acoustic Desorption Mass Spectrometry of Single Bioparticles. Angewandte Chemie - International Edition, 2006, 45, 1423-1426.	7.2	63
9	2,3,4,5-Tetrakis(3â€²,4â€²-dihydroxylphenyl)thiophene: A New Matrix for the Selective Analysis of Low Molecular Weight Amines and Direct Determination of Creatinine in Urine by MALDI-TOF MS. Analytical Chemistry, 2012, 84, 10291-10297.	3.2	60
10	Synthesis of graphene nanosheet powder with layer number control via a soluble salt-assisted route. RSC Advances, 2014, 4, 13350.	1.7	54
11	Mass Spectrometry Imaging of Kidney Tissue Sections of Rat Subjected to Unilateral Ureteral Obstruction. Scientific Reports, 2017, 7, 41954.	1.6	54
12	Bacterial capture efficiency in fluid bloodstream improved by bendable nanowires. Nature Communications, 2018, 9, 444.	5.8	53
13	N-Phenyl-2-naphthylamine as a Novel MALDI Matrix for Analysis and in Situ Imaging of Small Molecules. Analytical Chemistry, 2018, 90, 729-736.	3.2	51
14	Hexagonal boron nitride nanosheets as a multifunctional background-free matrix to detect small molecules and complicated samples by MALDI mass spectrometry. Chemical Communications, 2017, 53, 8114-8117.	2.2	45
15	Hot electron transfer promotes ion production in plasmonic metal nanostructure assisted laser desorption ionization mass spectrometry. Chemical Communications, 2018, 54, 10905-10908.	2.2	44
16	N-(1-Naphthyl) Ethylenediamine Dinitrate: A New Matrix for Negative Ion MALDI-TOF MS Analysis of Small Molecules. Journal of the American Society for Mass Spectrometry, 2012, 23, 1454-1460.	1.2	40
17	High-Speed Mass Analysis of Whole Erythrocytes by Charge-Detection Quadrupole Ion Trap Mass Spectrometry. Analytical Chemistry, 2007, 79, 7401-7407.	3.2	38
18	Ultratrace and robust visual sensor of Cd2+ ions based on the size-dependent optical properties of Au@g-CNQDs nanoparticles in mice models. Biosensors and Bioelectronics, 2018, 103, 87-93.	5.3	37

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19	Microscopy-Based Mass Measurement of a Single Whole Virus in a Cylindrical Ion Trap. Angewandte Chemie - International Edition, 2006, 45, 8131-8134.	7.2	34
20	Synthesis of Indazoles and Azaindazoles by Intramolecular Aerobic Oxidative Cï£¿N Coupling under Transitionâ€Metalâ€Free Conditions. Chemistry - A European Journal, 2014, 20, 3932-3938.	1.7	34
21	Chiral Primary Amine/Ketone Cooperative Catalysis for Asymmetric Î±-Hydroxylation with Hydrogen Peroxide. Journal of the American Chemical Society, 2021, 143, 1078-1087.	6.6	34
22	Differentiation and Relative Quantitation of Disaccharide Isomers by MALDI-TOF/TOF Mass Spectrometry. Analytical Chemistry, 2018, 90, 1525-1530.	3.2	33
23	MALDI-TOF/TOF tandem mass spectrometry imaging reveals non-uniform distribution of disaccharide isomers in plant tissues. Food Chemistry, 2021, 338, 127984.	4.2	33
24	Calibration of a frequency-scan quadrupole ion trap mass spectrometer for microparticle mass analysis. International Journal of Mass Spectrometry, 2008, 270, 8-15.	0.7	32
25	Revealing the Sulfur Redox Paths in a Liâ€“S Battery by an In Situ Hyphenated Technique of Electrochemistry and Mass Spectrometry. Advanced Materials, 2022, 34, e2106618.	11.1	31
26	Ti₃C₂ MXene as a novel substrate provides rapid differentiation and quantitation of glycan isomers with LDI-MS. Chemical Communications, 2019, 55, 10619-10622.	2.2	30
27	Utilizing a Mini-Humidifier To Deposit Matrix for MALDI Imaging. Analytical Chemistry, 2018, 90, 8309-8313.	3.2	28
28	TiO₂/MXeneâ€Assisted LDIâ€MS for Urine Metabolic Profiling in Urinary Disease. Advanced Functional Materials, 2021, 31, 2106743.	7.8	27
29	1-Naphthylhydrazine hydrochloride: A new matrix for the quantification of glucose and homogentisic acid in real samples by MALDI-TOF MS. Clinica Chimica Acta, 2013, 420, 94-98.	0.5	26
30	Laser cleavable probes for in situ multiplexed glycan detection by single cell mass spectrometry. Chemical Science, 2019, 10, 10958-10962.	3.7	26
31	(S)-Oxiracetam is the Active Ingredient in Oxiracetam that Alleviates the Cognitive Impairment Induced by Chronic Cerebral Hypoperfusion in Rats. Scientific Reports, 2017, 7, 10052.	1.6	25
32	Polydopamine-Modified Substrates for High-Sensitivity Laser Desorption Ionization Mass Spectrometry Imaging. ACS Applied Materials & Interfaces, 2019, 11, 46140-46148.	4.0	25
33	Mass spectrometry for multi-dimensional characterization of natural and synthetic materials at the nanoscale. Chemical Society Reviews, 2021, 50, 5243-5280.	18.7	23
34	Application of Graphdiyne in Surface-Assisted Laser Desorption Ionization Mass Spectrometry. ACS Applied Materials & Interfaces, 2021, 13, 1914-1920.	4.0	23
35	A novel mass spectrometry method based on competitive non-covalent interaction for the detection of biomarkers. Chemical Communications, 2018, 54, 10726-10729.	2.2	22
36	High-Throughput Monitoring of Multiclass Syrup Adulterants in Honey Based on the Oligosaccharide and Polysaccharide Profiles by MALDI Mass Spectrometry. Journal of Agricultural and Food Chemistry, 2019, 67, 11256-11261.	2.4	22

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37	Effects of Thymoquinone on Small-Molecule Metabolites in a Rat Model of Cerebral Ischemia Reperfusion Injury Assessed using MALDI-MSI. Metabolites, 2020, 10, 27.	1.3	22
38	Point-of-Care Test Paper for Exhaled Breath Aldehyde Analysis via Mass Spectrometry. Analytical Chemistry, 2021, 93, 9158-9165.	3.2	22
39	Fluorographene nanosheets: a new carbon-based matrix for the detection of small molecules by MALDI-TOF MS. RSC Advances, 2016, 6, 99714-99719.	1.7	21
40	Direct identification of forensic body fluids by MALDI-MS. Analyst, The, 2019, 144, 7017-7023.	1.7	20
41	Electrospray soft-landing for the construction of non-covalent molecular nanostructures using charged droplets under ambient conditions. Chemical Communications, 2016, 52, 13660-13663.	2.2	19
42	Development of Visible-Wavelength MALDI Cell Mass Spectrometry for High-Efficiency Single-Cell Analysis. Analytical Chemistry, 2016, 88, 11913-11918.	3.2	19
43	Enhancing surface-assisted laser desorption ionization mass spectrometry performance by integrating plasmonic hot-electron transfer effect through surface modification. Chemical Communications, 2019, 55, 5769-5772.	2.2	18
44	Mass Spectrometry Imaging Reveals In Situ Behaviors of Multiple Components in Aerosol Particles. Angewandte Chemie - International Edition, 2021, 60, 23225-23231.	7.2	16
45	Organic salt NEDC (N-naphthylethylenediamine dihydrochloride) assisted laser desorption ionization mass spectrometry for identification of metal ions in real samples. Analyst, The, 2014, 139, 3469-3475.	1.7	15
46	Laser Cleavable Probes-Based Cell Surface Engineering for in Situ Sialoglycoconjugates Profiling by Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2018, 90, 6397-6402.	3.2	15
47	In Situ Bioconjugation and Ambient Surface Modification Using Reactive Charged Droplets. Analytical Chemistry, 2015, 87, 3144-3148.	3.2	14
48	Mass Spectrometry Genotyping of Human Papillomavirus Based on High-Efficiency Selective Enrichment of Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 41178-41184.	4.0	14
49	Direct identification and metabolomic analysis of Huanglongbing associated with Candidatus Liberibacter spp. in navel orange by MALDI-TOF-MS. Analytical and Bioanalytical Chemistry, 2020, 412, 3091-3101.	1.9	14
50	Quantitative Assessment of Protein Adsorption on Microparticles with Particle Mass Spectrometry. Analytical Chemistry, 2014, 86, 3876-3881.	3.2	13
51	Heat-Induced Rearrangement of the Disulfide Bond of Lactoglobulin Characterized by Multiply Charged MALDI-TOF/TOF Mass Spectrometry. Analytical Chemistry, 2018, 90, 10670-10675.	3.2	13
52	Investigation and Applications of In-Source Oxidation in Liquid Sampling-Atmospheric Pressure Afterglow Microplasma Ionization (LS-APAG) Source. Journal of the American Society for Mass Spectrometry, 2017, 28, 1036-1047.	1.2	12
53	Ultrafast Photocatalytic Reaction Screening by Mass Spectrometry. Analytical Chemistry, 2020, 92, 6564-6570.	3.2	12
54	Pocket-Size â€œMasSpec Pointerâ€•for Ambient Ionization Mass Spectrometry. Analytical Chemistry, 2021, 93, 13326-13333.	3.2	12

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55	The development of charge detection-quadrupole ion trap mass spectrometry driven by rectangular and triangular waves. Analyst, The, 2012, 137, 1199.	1.7	11
56	Ambient Aerodynamic Desorption/Ionization Method for Microparticle Mass Measurement. Analytical Chemistry, 2013, 85, 4370-4375.	3.2	11
57	Characterization of organic aerosol in Beijing by laser desorption ionization coupled with Fourier Transform Ion Cyclotron Resonance Mass spectrometry. Atmospheric Environment, 2017, 159, 55-65.	1.9	11
58	Biofluids Metabolic Profiling Based on PS@Fe₃O₄â€“NH₂ Magnetic Beads-Assisted LDI-MS for Liver Cancer Screening. Analytical Chemistry, 2022, 94, 10367-10374.	3.2	11
59	Characterization of Column Packing Materials in High-Performance Liquid Chromatography by Charge-Detection Quadrupole Ion Trap Mass Spectrometry. Analytical Chemistry, 2011, 83, 5400-5406.	3.2	10
60	Rapid detection of polyhydroxylated alkaloids in mulberry using leaf spray mass spectrometry. Analytical Methods, 2013, 5, 2455.	1.3	10
61	Improving the Performance of the Mini 2000 Mass Spectrometer with a Triboelectric Nanogenerator Electrospray Ionization Source. ACS Omega, 2018, 3, 12229-12234.	1.6	10
62	Plasma-based ambient sampling/ionization/transmission integrated source for mass spectrometry. Analyst, The, 2014, 139, 5387-5392.	1.7	9
63	A Theoretical Method for Characterizing Nonlinear Effects in Paul Traps with Added Octopole Field. Journal of the American Society for Mass Spectrometry, 2015, 26, 1338-1348.	1.2	9
64	The bridge between thin layer chromatography-mass spectrometry and high-performance liquid chromatography-mass spectrometry: The realization of liquid thin layer chromatography-mass spectrometry. Journal of Chromatography A, 2016, 1460, 181-189.	1.8	9
65	A Miniature Particle Mass Spectrometer. Analytical Chemistry, 2019, 91, 9393-9397.	3.2	9
66	Competitive adsorption on gold nanoparticles for human papillomavirus 16 L1 protein detection by LDI-MS. Analyst, The, 2019, 144, 6641-6646.	1.7	9
67	Development of an Automatic Ultrasonic Matrix Sprayer for Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging. Analytical Chemistry, 2022, 94, 6457-6462.	3.2	9
68	Copperâ€Catalyzed Aerobic Autoxidation of Nâ€Hydroxycarbamates Probed by Mass Spectrometry. Chemistry - A European Journal, 2015, 21, 14630-14637.	1.7	8
69	Mass, Size, and Density Measurements of Microparticles in a Quadrupole Ion Trap. Analytical Chemistry, 2019, 91, 13508-13513.	3.2	8
70	Profiling of Urine Carbonyl Metabolic Fingerprints in Bladder Cancer Based on Ambient Ionization Mass Spectrometry. Analytical Chemistry, 2022, 94, 9894-9902.	3.2	7
71	A Gas-Phase Reaction Accelerator Using Vortex Flows. Analytical Chemistry, 2020, 92, 12049-12054.	3.2	6
72	Characteristics of electrical field and ion motion in surfaceâ€electrode ion traps. Journal of Mass Spectrometry, 2012, 47, 286-293.	0.7	5

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73	Application of flowerlike MgO for highly sensitive determination of lead via matrixâ€assisted laser desorption/ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2016, 30, 208-216.	0.7	5
74	Revealing the Distribution of Aggregation-Induced Emission Nanoparticles via Dual-Modality Imaging with Fluorescence and Mass Spectrometry. Research, 2021, 2021, 9784053.	2.8	5
75	Hand-powered ionization methods for the mass spectrometric detection of small molecules. International Journal of Mass Spectrometry, 2021, 470, 116716.	0.7	4
76	Laser Desorption/Ionization Mass Spectrometry Imaging: A New Tool to See through Nanoscale Particles in Biological Systems. Chemistry - A European Journal, 2022, 28, .	1.7	4
77	Mass Spectrometry Imaging Reveals In Situ Behaviors of Multiple Components in Aerosol Particles. Angewandte Chemie, 2021, 133, 23413-23419.	1.6	3
78	High Speed Mass Measurement of a Single Metalâ€“Organic Framework Nanocrystal in a Paul Trap. Analytical Chemistry, 2022, 94, 2686-2692.	3.2	3
79	Development of capillary-paper spray for small-molecule analysis in complex samples. Analytical and Bioanalytical Chemistry, 2021, 413, 1099-1106.	1.9	2
80	In-depth free fatty acids annotation of edible oil by mCPBA epoxidation and tandem mass spectrometry. Food Chemistry, 2022, 374, 131793.	4.2	2
81	Response to Comment on â€œA Theoretical Method for Characterizing Nonlinear Effects in Paul Traps with Added Octopole Fieldâ€. Journal of the American Society for Mass Spectrometry, 2021, 32, 1271-1271.	1.2	0
82	InnenrÃ¼cktitelbild: Mass Spectrometry Imaging Reveals In Situ Behaviors of Multiple Components in Aerosol Particles (Angew. Chem. 43/2021). Angewandte Chemie, 2021, 133, 23655-23655.	1.6	0