Peter Nemes

List of Publications by Year
in descending order

67 papers	4,483 citations	134610 34 h-index	139680 61 g-index
70 all docs	70 docs citations	70 times ranked	3913 citing authors

#	Article	IF	Citations
1	Capillary Electrophoresis Mass Spectrometry for Scalable Single-Cell Proteomics. Frontiers in Chemistry, 2022, 10, 863979.	1.8	15
2	Patch-Clamp Proteomics of Single Neurons in Tissue Using Electrophysiology and Subcellular Capillary Electrophoresis Mass Spectrometry. Analytical Chemistry, 2022, 94, 1637-1644.	3.2	20
3	Cell-Lineage Guided Mass Spectrometry Proteomics in the Developing (Frog) Embryo. Journal of Visualized Experiments, 2022, , .	0.2	2
4	Microanalysis of Brain Angiotensin Peptides Using Ultrasensitive Capillary Electrophoresis Trapped Ion Mobility Mass Spectrometry. Analytical Chemistry, 2022, 94, 9018-9025.	3.2	11
5	In Vivo Subcellular Mass Spectrometry Enables Proteoâ€Metabolomic Singleâ€Cell Systems Biology in a Chordate Embryo Developing to a Normally Behaving Tadpole (X. laevis)**. Angewandte Chemie, 2021, 133, 12962-12968.	1.6	4
6	SENP1-mediated deSUMOylation of JAK2 regulates its kinase activity and platinum drug resistance. Cell Death and Disease, 2021, 12, 341.	2.7	13
7	Altering metabolite distribution at Xenopus cleavage stages affects leftâ€“right gene expression asymmetries. Genesis, 2021, 59, e23418.	0.8	6
8	In Vivo Subcellular Mass Spectrometry Enables Proteoâ€Metabolomic Singleâ€Cell Systems Biology in a Chordate Embryo Developing to a Normally Behaving Tadpole (X. laevis)**. Angewandte Chemie - International Edition, 2021, 60, 12852-12858.	7.2	47
9	Frontispiz: In Vivo Subcellular Mass Spectrometry Enables Proteoâ€Metabolomic Singleâ€Cell Systems Biology in a Chordate Embryo Developing to a Normally Behaving Tadpole (X. laevis). Angewandte Chemie, 2021, 133, .	1.6	0
10	Frontispiece: In Vivo Subcellular Mass Spectrometry Enables Proteoâ€Metabolomic Singleâ€Cell Systems Biology in a Chordate Embryo Developing to a Normally Behaving Tadpole (X. laevis). Angewandte Chemie - International Edition, 2021, 60, .	7.2	0
11	Mass spectrometry based proteomics for developmental neurobiology in the amphibian Xenopus laevis. Current Topics in Developmental Biology, 2021, 145, 205-231.	1.0	4
12	Mass spectrometry comes of age for subcellular organelles. Nature Methods, 2021, 18, 1157-1158.	9.0	10
13	Data-Dependent Acquisition Ladder for Capillary Electrophoresis Mass Spectrometry-Based Ultrasensitive (Neuro)Proteomics. Analytical Chemistry, 2021, 93, 15964-15972.	3.2	18
14	Capillary Electrophoresis-Mass Spectrometry at Trial by Metabo-Ring: Effective Electrophoretic Mobility for Reproducible and Robust Compound Annotation. Analytical Chemistry, 2020, 92, 14103-14112.	3.2	44
15	Single-cell proteomics in complex tissues using microprobe capillary electrophoresis mass spectrometry. Methods in Enzymology, 2019, 628, 263-292.	0.4	21
16	Deciphering Metabolic Heterogeneity by Single-Cell Analysis. Analytical Chemistry, 2019, 91, 13314-13323.	3.2	87
17	Dual cationicâ€“anionic profiling of metabolites in a single identified cell in a live Xenopus laevis embryo by microprobe CE-ESI-MS. Analyst, The, 2019, 144, 892-900.	1.7	45
18	Microsampling Capillary Electrophoresis Mass Spectrometry Enables Single-Cell Proteomics in Complex Tissues: Developing Cell Clones in Live Xenopus laevis and Zebrafish Embryos. Analytical Chemistry, 2019, 91, 4797-4805.	3.2	97

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19	A microanalytical capillary electrophoresis mass spectrometry assay for quantifying angiotensin peptides in the brain. Analytical and Bioanalytical Chemistry, 2019, 411, 4661-4671.	1.9	27
20	Trace, Machine Learning of Signal Images for Trace-Sensitive Mass Spectrometry: A Case Study from Single-Cell Metabolomics. Analytical Chemistry, 2019, 91, 5768-5776.	3.2	27
21	Response to Letter to the Editor regarding â€œA microanalytical capillary electrophoresis mass spectrometry assay for quantifying angiotensin peptides in the brainâ€. Analytical and Bioanalytical Chemistry, 2019, 411, 8165-8166.	1.9	2
22	Proteomic Characterization of the Neural Ectoderm Fated Cell Clones in the Xenopus laevis Embryo by High-Resolution Mass Spectrometry. ACS Chemical Neuroscience, 2018, 9, 2064-2073.	1.7	19
23	Enhanced Peptide Detection Toward Single-Neuron Proteomics by Reversed-Phase Fractionation Capillary Electrophoresis Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 913-922.	1.2	34
24	Inferring Mechanism of Action of an Unknown Compound from Time Series Omics Data. Lecture Notes in Computer Science, 2018, , 238-255.	1.0	3
25	Newâ€generation mass spectrometry expands the toolbox of cell and developmental biology. Genesis, 2017, 55, e23012.	0.8	19
26	In Situ Microprobe Single-Cell Capillary Electrophoresis Mass Spectrometry: Metabolic Reorganization in Single Differentiating Cells in the Live Vertebrate (Xenopus laevis) Embryo. Analytical Chemistry, 2017, 89, 7069-7076.	3.2	110
27	Metabolic comparison of dorsal versus ventral cells directly in the live 8-cell frog embryo by microprobe single-cell CE-ESI-MS. Analytical Methods, 2017, 9, 4964-4970.	1.3	38
28	Tapered-Tip Capillary Electrophoresis Nano-Electrospray Ionization Mass Spectrometry for Ultrasensitive Proteomics: the Mouse Cortex. Journal of the American Society for Mass Spectrometry, 2017, 28, 597-607.	1.2	53
29	Microprobe Capillary Electrophoresis Mass Spectrometry for Single-cell Metabolomics in Live Frog (Xenopus laevis) Embryos. Journal of Visualized Experiments, 2017, , .	0.2	11
30	High-Sensitivity Mass Spectrometry for Probing Gene Translation in Single Embryonic Cells in the Early Frog (Xenopus) Embryo. Frontiers in Cell and Developmental Biology, 2016, 4, 100.	1.8	19
31	Singleâ€Cell Mass Spectrometry for Discovery Proteomics: Quantifying Translational Cell Heterogeneity in the 16â€Cell Frog (Xenopus) Embryo. Angewandte Chemie, 2016, 128, 2500-2504.	1.6	20
32	Label-free Quantification of Proteins in Single Embryonic Cells with Neural Fate in the Cleavage-Stage Frog (Xenopus laevis) Embryo using Capillary Electrophoresis Electrospray Ionization High-Resolution Mass Spectrometry (CE-ESI-HRMS). Molecular and Cellular Proteomics, 2016, 15, 2756-2768.	2.5	70
33	Single-cell mass spectrometry with multi-solvent extraction identifies metabolic differences between left and right blastomeres in the 8-cell frog (Xenopus) embryo. Analyst, The, 2016, 141, 3648-3656.	1.7	76
34	Singleâ€Cell Mass Spectrometry for Discovery Proteomics: Quantifying Translational Cell Heterogeneity in the 16â€Cell Frog (Xenopus) Embryo. Angewandte Chemie - International Edition, 2016, 55, 2454-2458.	7.2	188
35	Microprobe MS Imaging of Live Tissues, Cells, and Bacterial Colonies Using LAESI. , 2016, , 149-167.		4
36	Quantification of plant surface metabolites by matrixâ€assisted laser desorptionâ€“ionization mass spectrometry imaging: glucosinolates on <scp>A</scp>rabidopsis thaliana leaves. Plant Journal, 2015, 81, 961-972.	2.8	68

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37	Single-cell mass spectrometry reveals small molecules that affect cell fates in the 16-cell embryo. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6545-6550.	3.3	174
38	One-Hour Screening of Adulterated Heparin by Simplified Peroxide Digestion and Fast RPIP-LC-MS². Analytical Chemistry, 2015, 87, 8424-8432.	3.2	7
39	Ambient molecular imaging by laser ablation electrospray ionization mass spectrometry with ion mobility separation. International Journal of Mass Spectrometry, 2015, 377, 681-689.	0.7	53
40	Biomolecular Imaging with a C60-SIMS/MALDI Dual Ion Source Hybrid Mass Spectrometer: Instrumentation, Matrix Enhancement, and Single Cell Analysis. Journal of the American Society for Mass Spectrometry, 2014, 25, 1897-1907.	1.2	61
41	Mass Spectrometryâ€"Based Methodologies for Single-Cell Metabolite Detection and Identification. , 2013, , 119-139.		2
42	Qualitative and quantitative metabolomic investigation of single neurons by capillary electrophoresis electrospray ionization mass spectrometry. Nature Protocols, 2013, 8, 783-799.	5.5	116
43	Combining Small-Volume Metabolomic and Transcriptomic Approaches for Assessing Brain Chemistry. Analytical Chemistry, 2013, 85, 3136-3143.	3.2	24
44	High-Throughput Differentiation of Heparin from Other Glycosaminoglycans by Pyrolysis Mass Spectrometry. Analytical Chemistry, 2013, 85, 7405-7412.	3.2	18
45	Internal energy deposition and ion fragmentation in atmospheric-pressure mid-infrared laser ablation electrospray ionization. Physical Chemistry Chemical Physics, 2012, 14, 2501.	1.3	41
46	Single-Cell Metabolomics: Changes in the Metabolome of Freshly Isolated and Cultured Neurons. ACS Chemical Neuroscience, 2012, 3, 782-792.	1.7	67
47	Ambient mass spectrometry for in vivo local analysis and in situ molecular tissue imaging. TrAC - Trends in Analytical Chemistry, 2012, 34, 22-34.	5.8	120
48	Profiling metabolites and peptides in single cells. Nature Methods, 2011, 8, S20-S29.	9.0	311
49	Metabolic Differentiation of Neuronal Phenotypes by Single-cell Capillary Electrophoresisâ€"Electrospray Ionization-Mass Spectrometry. Analytical Chemistry, 2011, 83, 6810-6817.	3.2	128
50	Atmospheric-pressure Molecular Imaging of Biological Tissues and Biofilms by LAESI Mass Spectrometry. Journal of Visualized Experiments, 2010, , .	0.2	16
51	Ablation and analysis of small cell populations and single cells by consecutive laser pulses. Applied Physics A: Materials Science and Processing, 2010, 101, 121-126.	1.1	36
52	Laser Ablation Electrospray Ionization for Atmospheric Pressure Molecular Imaging Mass Spectrometry. Methods in Molecular Biology, 2010, 656, 159-171.	0.4	33
53	Simultaneous Imaging of Small Metabolites and Lipids in Rat Brain Tissues at Atmospheric Pressure by Laser Ablation Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2010, 82, 982-988.	3.2	198
54	Direct analysis of lipids and small metabolites in mouse brain tissue by AP IR-MALDI and reactive LAESI mass spectrometry. Analyst, The, 2010, 135, 751.	1.7	90

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55	Three-Dimensional Imaging of Metabolites in Tissues under Ambient Conditions by Laser Ablation Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2009, 81, 6668-6675.	3.2	205
56	Molecular imaging by Mid-IR laser ablation mass spectrometry. Applied Physics A: Materials Science and Processing, 2008, 93, 885-891.	1.1	47
57	Ambient Molecular Imaging and Depth Profiling of Live Tissue by Infrared Laser Ablation Electrospray Ionization Mass Spectrometry. Analytical Chemistry, 2008, 80, 4575-4582.	3.2	228
58	Conformational and Noncovalent Complexation Changes in Proteins during Electrospray Ionization. Analytical Chemistry, 2008, 80, 387-395.	3.2	35
59	Astable regime in electrosprays. Physical Review E, 2007, 76, 026320.	0.8	59
60	Laser Ablation Electrospray Ionization for Atmospheric Pressure, in Vivo, and Imaging Mass Spectrometry. Analytical Chemistry, 2007, 79, 8098-8106.	3.2	743
61	Spraying Mode Effect on Droplet Formation and Ion Chemistry in Electrosprays. Analytical Chemistry, 2007, 79, 3105-3116.	3.2	151
62	Order-Chaos-Order Transitions in Electrosprays: The Electrified Dripping Faucet. Physical Review Letters, 2006, 97, 064502.	2.9	61
63	How much charge is there on a pulsating Taylor cone?. Applied Physics Letters, 2006, 89, 064104.	1.5	48
64	Amino acid cluster formation studied by electrospray ionization mass spectrometry. Journal of Mass Spectrometry, 2005, 40, 43-49.	0.7	65
65	Tandem Sonogashira Coupling: An Efficient Tool for the Synthesis of Diarylalkynes.. ChemInform, 2005, 36, no.	0.1	0
66	Tandem Sonogashira Coupling:â€‰ An Efficient Tool for the Synthesis of Diarylalkynes. Organic Letters, 2004, 6, 4917-4920.	2.4	109
67	Direct Metabolomics from Tissues and Cells: Laser Ablation Electrospray Ionization for Small Molecule and Lipid Characterization. , 0, , 140-158.		1