

Paweł, Urban

List of Publications by Year in descending order

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109
papers

3,464
citations

172386

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h-index

155592

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g-index

111
all docs

111
docs citations

111
times ranked

4044
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoparticles: Their potential toxicity, waste and environmental management. <i>Waste Management</i> , 2009, 29, 2587-2595.	3.7	521
2	Mass spectrometry-based metabolomics of single yeast cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8790-8794.	3.3	214
3	Enzymatic microreactors in chemical analysis and kinetic studies. <i>Biotechnology Advances</i> , 2006, 24, 42-57.	6.0	194
4	Electrophoretic methods for separation of nanoparticles. <i>Journal of Separation Science</i> , 2009, 32, 1889-1906.	1.3	148
5	Analytical techniques for single-cell metabolomics: state of the art and trends. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 2493-2504.	1.9	136
6	Single-Cell MALDI-MS as an Analytical Tool for Studying Intrapopulation Metabolic Heterogeneity of Unicellular Organisms. <i>Analytical Chemistry</i> , 2010, 82, 7394-7400.	3.2	132
7	High-density micro-arrays for mass spectrometry. <i>Lab on A Chip</i> , 2010, 10, 3206.	3.1	105
8	Universal electronics for miniature and automated chemical assays. <i>Analyst, The</i> , 2015, 140, 963-975.	1.7	73
9	The dawn of unmanned analytical laboratories. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 88, 41-52.	5.8	71
10	Hydrogel Micropatches for Sampling and Profiling Skin Metabolites. <i>Analytical Chemistry</i> , 2014, 86, 2337-2344.	3.2	62
11	Advances in ultrasensitive mass spectrometry of organic molecules. <i>Chemical Society Reviews</i> , 2013, 42, 5299.	18.7	61
12	Quantitative mass spectrometry: an overview. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150382.	1.6	61
13	Multidimensional Analysis of Single Algal Cells by Integrating Microspectroscopy with Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 1843-1849.	3.2	59
14	Coffee-ring effects in laser desorption/ionization mass spectrometry. <i>Analytica Chimica Acta</i> , 2013, 766, 77-82.	2.6	59
15	Analysis of single algal cells by combining mass spectrometry with Raman and fluorescence mapping. <i>Analyst, The</i> , 2013, 138, 6732.	1.7	56
16	Recent advances in robotic protein sample preparation for clinical analysis and other biomedical applications. <i>Clinica Chimica Acta</i> , 2020, 507, 104-116.	0.5	54
17	Hydrogel Micropatch and Mass Spectrometry-Assisted Screening for Psoriasis-Related Skin Metabolites. <i>Clinical Chemistry</i> , 2016, 62, 1120-1128.	1.5	52
18	Elevating Chemistry Research with a Modern Electronics Toolkit. <i>Chemical Reviews</i> , 2020, 120, 9482-9553.	23.0	49

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19	Open-Source Electronics As a Technological Aid in Chemical Education. <i>Journal of Chemical Education</i> , 2014, 91, 751-752.	1.1	46
20	Lab-on-a-Plate: Extending the functionality of MALDI-MS and LDI-MS targets. <i>Mass Spectrometry Reviews</i> , 2011, 30, 435-478.	2.8	45
21	Time-resolved mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 44, 106-120.	5.8	45
22	Robotics-assisted mass spectrometry assay platform enabled by open-source electronics. <i>Biosensors and Bioelectronics</i> , 2015, 64, 260-268.	5.3	44
23	Prototyping Instruments for the Chemical Laboratory Using Inexpensive Electronic Modules. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11074-11077.	7.2	40
24	Skin Metabolomics. <i>Trends in Endocrinology and Metabolism</i> , 2021, 32, 66-75.	3.1	39
25	Capillary Action-Supported Contactless Atmospheric Pressure Ionization for the Combined Sampling and Mass Spectrometric Analysis of Biomolecules. <i>Analytical Chemistry</i> , 2011, 83, 2866-2869.	3.2	37
26	Carbon-13 labelling strategy for studying the ATP metabolism in individual yeast cells by micro-arrays for mass spectrometry. <i>Molecular BioSystems</i> , 2011, 7, 2837.	2.9	35
27	Fizzy Extraction of Volatile and Semivolatile Compounds into the Gas Phase. <i>Analytical Chemistry</i> , 2016, 88, 8735-8740.	3.2	33
28	Dual robotic arm - production line - mass spectrometry assay guided by multiple Arduino-type microcontrollers. <i>Sensors and Actuators B: Chemical</i> , 2017, 239, 608-616.	4.0	33
29	Compartmentalised chemistry: from studies on the origin of life to engineered biochemical systems. <i>New Journal of Chemistry</i> , 2014, 38, 5135-5141.	1.4	31
30	A compact 3D-printed interface for coupling open digital microchips with Venturi easy ambient sonic-spray ionization mass spectrometry. <i>Analyst, The</i> , 2015, 140, 1495-1501.	1.7	30
31	Automation of mass spectrometric detection of analytes and related workflows: A review. <i>Talanta</i> , 2020, 208, 120304.	2.9	30
32	Facilitating chemical and biochemical experiments with electronic microcontrollers and single-board computers. <i>Nature Protocols</i> , 2020, 15, 925-990.	5.5	29
33	Micropatch-arrayed pads for non-invasive spatial and temporal profiling of topical drugs on skin surface. <i>Journal of Mass Spectrometry</i> , 2015, 50, 1321-1325.	0.7	27
34	Probing Skin for Metabolites and Topical Drugs with Hydrogel Micropatches. <i>Analytical Chemistry</i> , 2017, 89, 2664-2670.	3.2	27
35	Facile analysis of metabolites by capillary electrophoresis coupled to matrix-assisted laser desorption/ionization mass spectrometry using target plates with polysilazane nanocoating and grooves. <i>Analyst, The</i> , 2009, 134, 1536.	1.7	26
36	Automated on-line liquid-liquid extraction system for temporal mass spectrometric analysis of dynamic samples. <i>Analytica Chimica Acta</i> , 2015, 894, 35-43.	2.6	26

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37	Accumulation and translocation of cesium-137 in onion plants (<i>Allium cepa</i>). <i>Environmental and Experimental Botany</i> , 2004, 51, 3-7.	2.0	23
38	Quantitative mass spectrometry of unconventional human biological matrices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150380.	1.6	23
39	Please Avoid Plotting Analytical Response against Logarithm of Concentration. <i>Analytical Chemistry</i> , 2020, 92, 10210-10212.	3.2	22
40	Visualization of electrophoretically mediated in-capillary reactions using a complementary metal oxide semiconductor-based absorbance detector. <i>Analytica Chimica Acta</i> , 2006, 570, 1-7.	2.6	21
41	Automated system for extraction and instantaneous analysis of millimeter-sized samples. <i>RSC Advances</i> , 2014, 4, 10693.	1.7	21
42	Miniature flowing atmospheric-pressure afterglow ion source for facile interfacing of CE with MS. <i>Electrophoresis</i> , 2010, 31, 3597-3605.	1.3	20
43	On-line monitoring of Soxhlet extraction by chromatography and mass spectrometry to reveal temporal extract profiles. <i>Analytica Chimica Acta</i> , 2015, 881, 74-81.	2.6	20
44	Clarifying Misconceptions about Mass and Concentration Sensitivity. <i>Journal of Chemical Education</i> , 2016, 93, 984-987.	1.1	20
45	Electrophoretic assay for penicillinase: Substrate specificity screening by parallel CE with an active pixel sensor. <i>Electrophoresis</i> , 2007, 28, 1926-1936.	1.3	19
46	Interfacing Microfluidics and Laser Desorption/Ionization Mass Spectrometry by Continuous Deposition for Application in Single Cell Analysis. <i>Chimia</i> , 2009, 63, 185.	0.3	19
47	Separation and online preconcentration by multistep stacking with large-volume injection of anabolic steroids by capillary electrokinetic chromatography using charged cyclodextrins and UV-absorption detection. <i>Journal of Separation Science</i> , 2005, 28, 2200-2209.	1.3	18
48	Microscale MALDI Imaging of Outer-Layer Lipids in Intact Egg Chambers from <i>Drosophila melanogaster</i> . <i>Analytical Chemistry</i> , 2011, 83, 3918-3925.	3.2	18
49	Electrophoretically mediated microanalysis of a nicotinamide adenine dinucleotide-dependent enzyme and its facile multiplexing using an active pixel sensor UV detector. <i>Journal of Chromatography A</i> , 2007, 1162, 132-140.	1.8	17
50	A pinch-valve interface for automated sampling and monitoring of dynamic processes by gas chromatography-mass spectrometry. <i>Analytical Methods</i> , 2014, 6, 4652.	1.3	16
51	Mass spectrometric method incorporating enzymatic amplification for attomole-level analysis of target metabolites in biological samples. <i>Chemical Communications</i> , 2010, 46, 2212.	2.2	15
52	Sample Flow Rate Scan in Electrospray Ionization Mass Spectrometry Reveals Alterations in Protein Charge State Distribution. <i>Analytical Chemistry</i> , 2020, 92, 13042-13049.	3.2	15
53	1,4-Benzoquinone-based electrophoretic assay for glucose oxidase. <i>Analytical Biochemistry</i> , 2006, 359, 35-39.	1.1	14
54	On-Target Labeling of Intracellular Metabolites Combined with Chemical Mapping of Individual Hyphae Revealing Cytoplasmic Relocation of Isotopologues. <i>Analytical Chemistry</i> , 2012, 84, 5110-5116.	3.2	14

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55	Spatiotemporal effects of a bioautocatalytic chemical wave revealed by time-resolved mass spectrometry. <i>RSC Advances</i> , 2013, 4, 2103-2108.	1.7	14
56	Automation of fizzy extraction enabled by inexpensive open-source modules. <i>Heliyon</i> , 2019, 5, e01639.	1.4	14
57	On-line coupling of fizzy extraction with gas chromatography. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 2511-2520.	1.9	14
58	Telechemistry: monitoring chemical reactions via the cloud using the Particle Photon Wi-Fi module. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 1616-1622.	1.9	14
59	Rapid Extraction and Analysis of Volatile Solutes with an Effervescent Tablet. <i>Analytical Chemistry</i> , 2020, 92, 2756-2763.	3.2	14
60	Temporal Analysis of Conformers in the Course of pH Scan Directed by Urea "Urease Reaction" A "Protein Clock". <i>Analytical Chemistry</i> , 2019, 91, 8814-8819.	3.2	13
61	On-line low-volume transesterification-based assay for immobilized lipases. <i>Journal of Biotechnology</i> , 2006, 126, 508-518.	1.9	12
62	Multi-compound electrophoretic assays for tyramine oxidase with a UV area detector imaging multiple windows on a looped capillary. <i>Journal of Chromatography A</i> , 2008, 1206, 52-63.	1.8	12
63	Microcontroller-Assisted Compensation of Adenosine Triphosphate Levels: Instrument and Method Development. <i>Scientific Reports</i> , 2015, 5, 8135.	1.6	12
64	Fizzy Extraction of Volatile Organic Compounds Combined with Atmospheric Pressure Chemical Ionization Quadrupole Mass Spectrometry. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	12
65	Temporal Correlations of Skin and Blood Metabolites with Clinical Outcomes of Biologic Therapy in Psoriasis. <i>Journal of applied laboratory medicine</i> , The, 2020, 5, 877-888.	0.6	12
66	Portable Pen-Probe Analyzer Based on Ion Mobility Spectrometry for <i>In Situ</i> Analysis of Volatile Organic Compounds Emanating from Surfaces and Wireless Transmission of the Acquired Spectra. <i>Analytical Chemistry</i> , 2021, 93, 2424-2432.	3.2	12
67	Self-built labware stimulates creativity. <i>Nature</i> , 2016, 532, 313-313.	13.7	11
68	Kinetic study of continuous liquid-liquid extraction of wine with real-time detection. <i>Analytica Chimica Acta</i> , 2018, 1034, 85-91.	2.6	11
69	Programmable flow rate scanner for evaluating detector sensitivity regime. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 992-998.	4.0	11
70	Spectral imaging of chemical reactions using a computer display and a digital camera. <i>RSC Advances</i> , 2014, 4, 31094.	1.7	10
71	Recording temporal characteristics of convection currents by continuous and segmented-flow sampling. <i>RSC Advances</i> , 2012, 2, 12431.	1.7	9
72	On the dynamics of kefir volatome. <i>RSC Advances</i> , 2014, 4, 28865.	1.7	9

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73	Chemical clocks, oscillations, and other temporal effects in analytical chemistry: oddity or viable approach?. <i>Analyst, The</i> , 2018, 143, 3514-3525.	1.7	9
74	Pilot Study of Bioaccumulation and Distribution of Cesium, Potassium, Sodium and Calcium in King Oyster Mushroom (<i>Pleurotus Eryngii</i>) Grown Under Controlled Conditions. <i>International Journal of Phytoremediation</i> , 2008, 10, 503-514.	1.7	8
75	Plug-Volume-Modulated Dilution Generator for Flask-Free Chemistry. <i>Analytical Chemistry</i> , 2016, 88, 11663-11669.	3.2	8
76	BioChemPen for a Rapid Analysis of Compounds Supported on Solid Surfaces. <i>ACS Sensors</i> , 2021, 6, 3744-3752.	4.0	8
77	Liquid-phase and gas-phase investigation of biomolecules in a single experiment. <i>Analytical Methods</i> , 2013, 5, 5908.	1.3	7
78	A hybrid nanoparticle matrix for mass spectrometry. <i>RSC Advances</i> , 2013, 3, 6865.	1.7	7
79	Automated Dual-Chamber Sampling System to Follow Dynamics of Volatile Organic Compounds Emitted by Biological Specimens. <i>Analytical Chemistry</i> , 2018, 90, 13848-13854.	3.2	7
80	Microanalysis Using Acoustically Actuated Droplets Pinned Onto a Thread. <i>IEEE Access</i> , 2019, 7, 154743-154749.	2.6	7
81	On-Line Coupling of Simultaneous Distillation-Extraction Using the Likens-Nickerson Apparatus with Gas Chromatography. <i>Analytical Chemistry</i> , 2020, 92, 1228-1235.	3.2	7
82	On the mechanism of automated fizzy extraction. , 0, 1, e2.		7
83	Electrophoretic method for assessment of substrate promiscuity of a heterogeneous biocatalyst using an area imaging ultraviolet detector. <i>Analyst, The</i> , 2007, 132, 979.	1.7	6
84	Fusion of microlitre water-in-oil droplets for simple, fast and green chemical assays. <i>Analyst, The</i> , 2015, 140, 5145-5151.	1.7	6
85	Dry ice fog extraction of volatile organic compounds. <i>Journal of Chromatography A</i> , 2019, 1585, 196-201.	1.8	6
86	Isotope Label-Aided Mass Spectrometry Reveals the Influence of Environmental Factors on Metabolism in Single Eggs of Fruit Fly. <i>PLoS ONE</i> , 2012, 7, e50258.	1.1	6
87	Nucleotide-Dependent Bioautocatalytic Timer Reaction. <i>ACS Synthetic Biology</i> , 2016, 5, 962-968.	1.9	5
88	Prototype of an Interface for Hyphenating Distillation with Gas Chromatography and Mass Spectrometry. <i>Mass Spectrometry</i> , 2017, 6, S0061-S0061.	0.2	5
89	Tufted Hairgrass (<i>Deschampsia caespitosa</i>) Exhibits a Lower Photosynthetic Plasticity than Antarctic Hairgrass (<i>D. antarctica</i>). <i>Journal of Integrative Plant Biology</i> , 2009, 51, 593-603.	4.1	4
90	One-Step Detection of Major Lipid Components in Submicroliter Volumes of Unpurified Liposome and Cell Suspensions. <i>Analytical Chemistry</i> , 2016, 88, 7337-7343.	3.2	4

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91	Capillary hydrodynamic chromatography reveals temporal profiles of cell aggregates. <i>Analytica Chimica Acta</i> , 2016, 910, 75-83.	2.6	4
92	Agarose-Based Gel-Phase Microextraction Technique for Quick Sampling of Polar Analytes Adsorbed on Surfaces. <i>ACS Omega</i> , 2019, 4, 19063-19070.	1.6	4
93	Robotized Noncontact Open-Space Mapping of Volatile Organic Compounds Emanating from Solid Specimens. <i>Analytical Chemistry</i> , 2021, 93, 6889-6894.	3.2	4
94	Portable fizzy extraction ion-mobility spectrometry system. <i>Analytica Chimica Acta</i> , 2022, 1204, 339699.	2.6	4
95	Mass spectrometry-guided refinement of chemical energy buffers. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20150812.	1.0	3
96	Prototypenentwicklung von Instrumenten für das chemische Laboratorium mithilfe von preiswerten Elektronikmodulen. <i>Angewandte Chemie</i> , 2018, 130, 11241-11245.	1.6	3
97	Name Concepts in Analytical Science. <i>Journal of Chemical Education</i> , 2014, 91, 1753-1756.	1.1	2
98	Facile multi-dimensional profiling of chemical gradients at the millimetre scale. <i>Analyst, The</i> , 2016, 141, 150-156.	1.7	2
99	Spontaneous luminescence color change in the firefly luciferase assay system. <i>Analytical Biochemistry</i> , 2017, 539, 54-59.	1.1	2
100	Blotting paper as a disposable tool for sampling chemical residues from skin surface. <i>Journal of Food and Drug Analysis</i> , 2019, 27, 610-613.	0.9	2
101	Catalytic Oxygenation-Mediated Extraction as a Facile and Green Way to Analyze Volatile Solutes. <i>Analytical Chemistry</i> , 2021, 93, 8923-8930.	3.2	2
102	Telechemistry 2.0: Remote monitoring of fluorescent chemical reactions. <i>HardwareX</i> , 2021, 10, e00244.	1.1	2
103	Cool Mist Scavenging of Gas-Phase Molecules. <i>Analytical Sciences</i> , 2017, 33, 1161-1167.	0.8	1
104	In quest for chemomarkers to classify Taiwanese teas. <i>Analytical Methods</i> , 2014, 6, 3013.	1.3	0
105	In-Oleo Microgasometry of Nanoliter-Scale Gas Volumes with Image-Based Detection. <i>Analytical Chemistry</i> , 2016, 88, 11368-11372.	3.2	0
106	A Role Model with Endless Enthusiasm for Science: In Memory of Tsutomu Masujima. <i>Journal of the Mass Spectrometry Society of Japan</i> , 2017, 65, 150-153.	0.0	0
107	Clinical Analysis by Mass Spectrometry. , 2018, , .		0
108	Colorful Bioluminescence: Exploring ATP's Effect On The Firefly Luciferase Reaction. , 2018, , .		0

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109	Flat Disc-Shaped Sampling Probe and Online Re-extraction Apparatus for Mass Spectrometric Analysis of Skin Metabolites: A Proof of Concept. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2803-2811.	1.2	0