

# Paweł, Urban

## List of Publications by Year in descending order

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109  
papers

3,464  
citations

172457

29  
h-index

155660

55  
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.	7.4	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.	7.1	214
3	Enzymatic microreactors in chemical analysis and kinetic studies. <i>Biotechnology Advances</i> , 2006, 24, 42-57.	11.7	194
4	Electrophoretic methods for separation of nanoparticles. <i>Journal of Separation Science</i> , 2009, 32, 1889-1906.	2.5	148
5	Analytical techniques for single-cell metabolomics: state of the art and trends. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 2493-2504.	3.7	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.	6.5	132
7	High-density micro-arrays for mass spectrometry. <i>Lab on A Chip</i> , 2010, 10, 3206.	6.0	105
8	Universal electronics for miniature and automated chemical assays. <i>Analyst, The</i> , 2015, 140, 963-975.	3.5	73
9	The dawn of unmanned analytical laboratories. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 88, 41-52.	11.4	71
10	Hydrogel Micropatches for Sampling and Profiling Skin Metabolites. <i>Analytical Chemistry</i> , 2014, 86, 2337-2344.	6.5	62
11	Advances in ultrasensitive mass spectrometry of organic molecules. <i>Chemical Society Reviews</i> , 2013, 42, 5299.	38.1	61
12	Quantitative mass spectrometry: an overview. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150382.	3.4	61
13	Multidimensional Analysis of Single Algal Cells by Integrating Microspectroscopy with Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 1843-1849.	6.5	59
14	Coffee-ring effects in laser desorption/ionization mass spectrometry. <i>Analytica Chimica Acta</i> , 2013, 766, 77-82.	5.4	59
15	Analysis of single algal cells by combining mass spectrometry with Raman and fluorescence mapping. <i>Analyst, The</i> , 2013, 138, 6732.	3.5	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.	1.1	54
17	Hydrogel Micropatch and Mass Spectrometry-Assisted Screening for Psoriasis-Related Skin Metabolites. <i>Clinical Chemistry</i> , 2016, 62, 1120-1128.	3.2	52
18	Elevating Chemistry Research with a Modern Electronics Toolkit. <i>Chemical Reviews</i> , 2020, 120, 9482-9553.	47.7	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.	2.3	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.	5.4	45
21	Time-resolved mass spectrometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 44, 106-120.	11.4	45
22	Robotics-assisted mass spectrometry assay platform enabled by open-source electronics. <i>Biosensors and Bioelectronics</i> , 2015, 64, 260-268.	10.1	44
23	Prototyping Instruments for the Chemical Laboratory Using Inexpensive Electronic Modules. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11074-11077.	13.8	40
24	Skin Metabolomics. <i>Trends in Endocrinology and Metabolism</i> , 2021, 32, 66-75.	7.1	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.	6.5	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.	6.5	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.	7.8	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.	2.8	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.	3.5	30
31	Automation of mass spectrometric detection of analytes and related workflows: A review. <i>Talanta</i> , 2020, 208, 120304.	5.5	30
32	Facilitating chemical and biochemical experiments with electronic microcontrollers and single-board computers. <i>Nature Protocols</i> , 2020, 15, 925-990.	12.0	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.	1.6	27
34	Probing Skin for Metabolites and Topical Drugs with Hydrogel Micropatches. <i>Analytical Chemistry</i> , 2017, 89, 2664-2670.	6.5	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.	3.5	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.	5.4	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.	4.2	23
38	Quantitative mass spectrometry of unconventional human biological matrices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150380.	3.4	23
39	Please Avoid Plotting Analytical Response against Logarithm of Concentration. <i>Analytical Chemistry</i> , 2020, 92, 10210-10212.	6.5	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.	5.4	21
41	Automated system for extraction and instantaneous analysis of millimeter-sized samples. <i>RSC Advances</i> , 2014, 4, 10693.	3.6	21
42	Miniature flowing atmospheric-pressure afterglow ion source for facile interfacing of CE with MS. <i>Electrophoresis</i> , 2010, 31, 3597-3605.	2.4	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.	5.4	20
44	Clarifying Misconceptions about Mass and Concentration Sensitivity. <i>Journal of Chemical Education</i> , 2016, 93, 984-987.	2.3	20
45	Electrophoretic assay for penicillinase: Substrate specificity screening by parallel CE with an active pixel sensor. <i>Electrophoresis</i> , 2007, 28, 1926-1936.	2.4	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.	0.6	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.	2.5	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.	6.5	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.	3.7	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.	2.7	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.	4.1	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.	6.5	15
53	1,4-Benzoquinone-based electrophoretic assay for glucose oxidase. <i>Analytical Biochemistry</i> , 2006, 359, 35-39.	2.4	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.	6.5	14

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55	Spatiotemporal effects of a bioautocatalytic chemical wave revealed by time-resolved mass spectrometry. RSC Advances, 2013, 4, 2103-2108.	3.6	14
56	Automation of fizzy extraction enabled by inexpensive open-source modules. Heliyon, 2019, 5, e01639.	3.2	14
57	On-line coupling of fizzy extraction with gas chromatography. Analytical and Bioanalytical Chemistry, 2019, 411, 2511-2520.	3.7	14
58	Telechemistry: monitoring chemical reactions via the cloud using the Particle Photon Wi-Fi module. Reaction Chemistry and Engineering, 2019, 4, 1616-1622.	3.7	14
59	Rapid Extraction and Analysis of Volatile Solutes with an Effervescent Tablet. Analytical Chemistry, 2020, 92, 2756-2763.	6.5	14
60	Temporal Analysis of Conformers in the Course of pH Scan Directed by Urea "Urease Reaction" A "Protein Clock". Analytical Chemistry, 2019, 91, 8814-8819.	6.5	13
61	On-line low-volume transesterification-based assay for immobilized lipases. Journal of Biotechnology, 2006, 126, 508-518.	3.8	12
62	Multi-compound electrophoretic assays for tyramine oxidase with a UV area detector imaging multiple windows on a looped capillary. Journal of Chromatography A, 2008, 1206, 52-63.	3.7	12
63	Microcontroller-Assisted Compensation of Adenosine Triphosphate Levels: Instrument and Method Development. Scientific Reports, 2015, 5, 8135.	3.3	12
64	Fizzy Extraction of Volatile Organic Compounds Combined with Atmospheric Pressure Chemical Ionization Quadrupole Mass Spectrometry. Journal of Visualized Experiments, 2017, , .	0.3	12
65	Temporal Correlations of Skin and Blood Metabolites with Clinical Outcomes of Biologic Therapy in Psoriasis. journal of applied laboratory medicine, The, 2020, 5, 877-888.	1.3	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. Analytical Chemistry, 2021, 93, 2424-2432.	6.5	12
67	Self-built labware stimulates creativity. Nature, 2016, 532, 313-313.	27.8	11
68	Kinetic study of continuous liquid-liquid extraction of wine with real-time detection. Analytica Chimica Acta, 2018, 1034, 85-91.	5.4	11
69	Programmable flow rate scanner for evaluating detector sensitivity regime. Sensors and Actuators B: Chemical, 2019, 282, 992-998.	7.8	11
70	Spectral imaging of chemical reactions using a computer display and a digital camera. RSC Advances, 2014, 4, 31094.	3.6	10
71	Recording temporal characteristics of convection currents by continuous and segmented-flow sampling. RSC Advances, 2012, 2, 12431.	3.6	9
72	On the dynamics of kefir volatome. RSC Advances, 2014, 4, 28865.	3.6	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.	3.5	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.	3.1	8
75	Plug-Volume-Modulated Dilution Generator for Flask-Free Chemistry. <i>Analytical Chemistry</i> , 2016, 88, 11663-11669.	6.5	8
76	BioChemPen for a Rapid Analysis of Compounds Supported on Solid Surfaces. <i>ACS Sensors</i> , 2021, 6, 3744-3752.	7.8	8
77	Liquid-phase and gas-phase investigation of biomolecules in a single experiment. <i>Analytical Methods</i> , 2013, 5, 5908.	2.7	7
78	A hybrid nanoparticle matrix for mass spectrometry. <i>RSC Advances</i> , 2013, 3, 6865.	3.6	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.	6.5	7
80	Microanalysis Using Acoustically Actuated Droplets Pinned Onto a Thread. <i>IEEE Access</i> , 2019, 7, 154743-154749.	4.2	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.	6.5	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.	3.5	6
84	Fusion of microlitre water-in-oil droplets for simple, fast and green chemical assays. <i>Analyst, The</i> , 2015, 140, 5145-5151.	3.5	6
85	Dry ice fog extraction of volatile organic compounds. <i>Journal of Chromatography A</i> , 2019, 1585, 196-201.	3.7	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.	2.5	6
87	Nucleotide-Dependent Bioautocatalytic Timer Reaction. <i>ACS Synthetic Biology</i> , 2016, 5, 962-968.	3.8	5
88	Prototype of an Interface for Hyphenating Distillation with Gas Chromatography and Mass Spectrometry. <i>Mass Spectrometry</i> , 2017, 6, S0061-S0061.	0.6	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.	8.5	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.	6.5	4

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91	Capillary hydrodynamic chromatography reveals temporal profiles of cell aggregates. <i>Analytica Chimica Acta</i> , 2016, 910, 75-83.	5.4	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.	3.5	4
93	Robotized Noncontact Open-Space Mapping of Volatile Organic Compounds Emanating from Solid Specimens. <i>Analytical Chemistry</i> , 2021, 93, 6889-6894.	6.5	4
94	Portable fizzy extraction ion-mobility spectrometry system. <i>Analytica Chimica Acta</i> , 2022, 1204, 339699.	5.4	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.	2.1	3
96	Prototypenentwicklung von Instrumenten für das chemische Laboratorium mithilfe von preiswerten Elektronikmodulen. <i>Angewandte Chemie</i> , 2018, 130, 11241-11245.	2.0	3
97	Name Concepts in Analytical Science. <i>Journal of Chemical Education</i> , 2014, 91, 1753-1756.	2.3	2
98	Facile multi-dimensional profiling of chemical gradients at the millimetre scale. <i>Analyst, The</i> , 2016, 141, 150-156.	3.5	2
99	Spontaneous luminescence color change in the firefly luciferase assay system. <i>Analytical Biochemistry</i> , 2017, 539, 54-59.	2.4	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.	1.9	2
101	Catalytic Oxygenation-Mediated Extraction as a Facile and Green Way to Analyze Volatile Solutes. <i>Analytical Chemistry</i> , 2021, 93, 8923-8930.	6.5	2
102	Telechemistry 2.0: Remote monitoring of fluorescent chemical reactions. <i>HardwareX</i> , 2021, 10, e00244.	2.2	2
103	Cool Mist Scavenging of Gas-Phase Molecules. <i>Analytical Sciences</i> , 2017, 33, 1161-1167.	1.6	1
104	In quest for chemomarkers to classify Taiwanese teas. <i>Analytical Methods</i> , 2014, 6, 3013.	2.7	0
105	In-Oleo Microgasometry of Nanoliter-Scale Gas Volumes with Image-Based Detection. <i>Analytical Chemistry</i> , 2016, 88, 11368-11372.	6.5	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.	0.1	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.	2.8	0