

# Vilmos Kertesz

## List of Publications by Year in descending order

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103  
papers

4,452  
citations

81900

39  
h-index

114465

63  
g-index

106  
all docs

106  
docs citations

106  
times ranked

3251  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fully automated liquid extraction-based surface sampling and ionization using a chip-based robotic nanoelectrospray platform. <i>Journal of Mass Spectrometry</i> , 2010, 45, 252-260.	1.6	308
2	Computer-Aided Design of a Sulfate-Encapsulating Receptor. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4025-4029.	13.8	189
3	Comparison of Drug Distribution Images from Whole-Body Thin Tissue Sections Obtained Using Desorption Electrospray Ionization Tandem Mass Spectrometry and Autoradiography. <i>Analytical Chemistry</i> , 2008, 80, 5168-5177.	6.5	159
4	Using the Electrochemistry of the Electrospray Ion Source. <i>Analytical Chemistry</i> , 2007, 79, 5510-5520.	6.5	150
5	Liquid microjunction surface sampling probe electrospray mass spectrometry for detection of drugs and metabolites in thin tissue sections. <i>Journal of Mass Spectrometry</i> , 2008, 43, 500-508.	1.6	147
6	Improved imaging resolution in desorption electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 2639-2644.	1.5	140
7	Thin-Layer Chromatography/Desorption Electrospray Ionization Mass Spectrometry: Investigation of Goldenseal Alkaloids. <i>Analytical Chemistry</i> , 2007, 79, 2778-2789.	6.5	139
8	Automated Sampling and Imaging of Analytes Separated on Thin-Layer Chromatography Plates Using Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2006, 78, 4938-4944.	6.5	123
9	Poly(methylene blue) modified electrode sensor for haemoglobin. <i>Analytica Chimica Acta</i> , 1999, 385, 119-123.	5.4	103
10	Automation of a Surface Sampling Probe/Electrospray Mass Spectrometry System. <i>Analytical Chemistry</i> , 2005, 77, 7183-7189.	6.5	103
11	Liquid Microjunction Surface Sampling Coupled with High-Pressure Liquid Chromatography-Electrospray Ionization-Mass Spectrometry for Analysis of Drugs and Metabolites in Whole-Body Thin Tissue Sections. <i>Analytical Chemistry</i> , 2010, 82, 5917-5921.	6.5	96
12	Electrochemical quartz crystal microbalance study of the influence of the solution composition on the behaviour of poly(aniline) electrodes. <i>Electrochimica Acta</i> , 1998, 43, 2305-2323.	5.2	82
13	Application of a Liquid Extraction Based Sealing Surface Sampling Probe for Mass Spectrometric Analysis of Dried Blood Spots and Mouse Whole-Body Thin Tissue Sections. <i>Analytical Chemistry</i> , 2009, 81, 9146-9152.	6.5	82
14	Electrochemical quartz crystal microbalance study of ion transport accompanying charging-discharging of poly(pyrrrole) films. <i>Journal of Solid State Electrochemistry</i> , 1999, 3, 251-257.	2.5	77
15	Continuous-flow liquid microjunction surface sampling probe connected on-line with high-performance liquid chromatography/mass spectrometry for spatially resolved analysis of small molecules and proteins. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 1329-1334.	1.5	77
16	Electropolymerization of Methylene Blue Investigated Using On-Line Electrochemistry/Electrospray Mass Spectrometry. <i>Electroanalysis</i> , 2001, 13, 1425-1430.	2.9	73
17	Surface Scanning Analysis of Planar Arrays of Analytes with Desorption Electrospray Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , 2007, 79, 5956-5962.	6.5	71
18	High-Throughput Mode Liquid Microjunction Surface Sampling Probe. <i>Analytical Chemistry</i> , 2009, 81, 7096-7101.	6.5	71

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19	An open port sampling interface for liquid introduction atmospheric pressure ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 1749-1756.	1.5	70
20	Unexpected Analyte Oxidation during Desorption Electrospray Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 1208-1214.	6.5	69
21	Scanning and Surface Alignment Considerations in Chemical Imaging with Desorption Electrospray Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 1027-1032.	6.5	61
22	HPTLC/DESI-MS imaging of tryptic protein digests separated in two dimensions. <i>Journal of Mass Spectrometry</i> , 2008, 43, 1627-1635.	1.6	59
23	High-Throughput Virtual Screening and Validation of a SARS-CoV-2 Main Protease Noncovalent Inhibitor. <i>Journal of Chemical Information and Modeling</i> , 2022, 62, 116-128.	5.4	54
24	Monitoring of formation and redox transformations of poly(Methylene blue) films using an electrochemical quartz crystal microbalance. <i>Electrochimica Acta</i> , 1996, 41, 2877-2881.	5.2	53
25	Development of an Electrochemical Oxidation Method for Probing Higher Order Protein Structure with Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 3304-3317.	6.5	53
26	Redox buffering in an electrospray ion source using a copper capillary emitter. <i>Journal of Mass Spectrometry</i> , 2001, 36, 1125-1132.	1.6	52
27	Combining Laser Ablation/Liquid Phase Collection Surface Sampling and High-Performance Liquid Chromatography with Electrospray Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 1874-1878.	6.5	52
28	Using HPTLC/DESI-MS for peptide identification in 1D separations of tryptic protein digests. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 391, 317-324.	3.7	50
29	Microgravimetric monitoring of transport of cations during redox reactions of indium(III) hexacyanoferrate(III,II). <i>Journal of Electroanalytical Chemistry</i> , 1998, 452, 57-62.	3.8	46
30	Dereplicating and Spatial Mapping of Secondary Metabolites from Fungal Cultures <i>in Situ</i> . <i>Journal of Natural Products</i> , 2015, 78, 1926-1936.	3.0	46
31	Effect of the temperature on the conductivity and capacitance of poly(aniline) film electrodes. <i>Electrochimica Acta</i> , 1993, 38, 2503-2510.	5.2	45
32	Minimizing analyte electrolysis in an electrospray emitter. <i>Journal of Mass Spectrometry</i> , 2001, 36, 204-210.	1.6	44
33	Characterization and Application of a Hybrid Optical Microscopy/Laser Ablation Liquid Vortex Capture/Electrospray Ionization System for Mass Spectrometry Imaging with Sub-micrometer Spatial Resolution. <i>Analytical Chemistry</i> , 2015, 87, 11113-11121.	6.5	44
34	An electrochemical quartz crystal microbalance study of the influence of pH and solution composition on the electrochemical behaviour of poly(aniline) films. <i>Electrochimica Acta</i> , 1993, 38, 393-397.	5.2	43
35	Surface-assisted reduction of aniline oligomers, N-phenyl-1,4-phenylenediimine and thionin in atmospheric pressure chemical ionization and atmospheric pressure photoionization. <i>Journal of the American Society for Mass Spectrometry</i> , 2002, 13, 109-117.	2.8	41
36	Efficient analyte oxidation in an electrospray ion source using a porous flow-through electrode emitter. <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 1755-1766.	2.8	41

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37	Online, Absolute Quantitation of Propranolol from Spatially Distinct 20- and 40- $\mu$ m Dissections of Brain, Liver, and Kidney Thin Tissue Sections by Laser Microdissection-Liquid Vortex Capture-Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 6026-6034.	6.5	41
38	Thin-layer chromatography/electrospray ionization triple-quadrupole linear ion trap mass spectrometry system: analysis of rhodamine dyes separated on reversed-phase C8 plates. <i>Journal of Mass Spectrometry</i> , 2005, 40, 866-875.	1.6	40
39	Rapid, Untargeted Chemical Profiling of Single Cells in Their Native Environment. <i>Analytical Chemistry</i> , 2019, 91, 6118-6126.	6.5	40
40	Electrochemistry-electrospray-mass spectrometry study of cesium uptake in nickel hexacyanoferrate films. <i>Electrochimica Acta</i> , 2002, 47, 1035-1042.	5.2	38
41	Molecular Surface Sampling and Chemical Imaging using Proximal Probe Thermal Desorption/Secondary Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2011, 83, 598-603.	6.5	36
42	Combining transmission geometry laser ablation and a non-contact continuous flow surface sampling probe/electrospray emitter for mass spectrometry based chemical imaging. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 3735-3740.	1.5	36
43	Probe beam deflection studies of electrochemical oscillations during galvanostatic oxidation of formic acid at a platinum electrode. <i>Journal of Electroanalytical Chemistry</i> , 1995, 392, 91-95.	3.8	35
44	Electrochemical Detection of Surface Hybridization of Oligodeoxynucleotides Bearing Anthraquinone Tags at Gold Electrodes. <i>Electroanalysis</i> , 2000, 12, 889-894.	2.9	35
45	Enhanced Study and Control of Analyte Oxidation in Electrospray Using a Thin-Channel, Planar Electrode Emitter. <i>Analytical Chemistry</i> , 2002, 74, 5047-5056.	6.5	35
46	Expanded Electrochemical Capabilities of the Electrospray Ion Source Using Porous Flow-Through Electrodes as the Upstream Ground and Emitter High-Voltage Contact. <i>Analytical Chemistry</i> , 2005, 77, 8041-8049.	6.5	34
47	Automated liquid microjunction surface sampling-HPLC-MS/MS analysis of drugs and metabolites in whole-body thin tissue sections. <i>Bioanalysis</i> , 2013, 5, 819-826.	1.5	34
48	Laser dissection sampling modes for direct mass spectral analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 611-619.	1.5	34
49	Preparation and characterisation of polyaniline electrode modified with diamino-methylbenzoate. <i>Electrochimica Acta</i> , 2001, 46, 3955-3962.	5.2	33
50	Laser microdissection and atmospheric pressure chemical ionization mass spectrometry coupled for multimodal imaging. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 1429-1436.	1.5	33
51	Rapid analysis of isomeric exogenous metabolites by differential mobility spectrometry mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2011, 25, 3382-3386.	1.5	32
52	Rapid sample classification using an open port sampling interface coupled with liquid introduction atmospheric pressure ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 281-291.	1.5	32
53	Co-registered Topographical, Band Excitation Nanomechanical, and Mass Spectral Imaging Using a Combined Atomic Force Microscopy/Mass Spectrometry Platform. <i>ACS Nano</i> , 2015, 9, 4260-4269.	14.6	31
54	Study and Application of a Controlled-Potential Electrochemistry-Electrospray Emitter for Electrospray Mass Spectrometry. <i>Analytical Chemistry</i> , 2005, 77, 4366-4373.	6.5	29

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55	Sampling reliability, spatial resolution, spatial precision, and extraction efficiency in droplet-based liquid microjunction surface sampling. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 1553-1560.	1.5	29
56	An enhanced droplet-based liquid microjunction surface sampling system coupled with HPLC-ESI-MS/MS for spatially resolved analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 2117-2125.	3.7	29
57	Experimental evidence for the periodical changes of the amount of chemisorbed species accompanying the potential oscillations produced in the course of galvanostatic oxidation of formic acid on platinum. <i>Electrochimica Acta</i> , 1993, 38, 2385-2386.	5.2	28
58	Simultaneous oscillations of the surface mass and potential in the course of the galvanostatic oxidation of 2-propanol. <i>The Journal of Physical Chemistry</i> , 1993, 97, 6104-6106.	2.9	28
59	Effect of poly(aniline) pseudocapacitance on potential and EQCM frequency oscillations arising in the course of galvanostatic oxidation of formic acid on platinum. <i>Electrochimica Acta</i> , 1997, 42, 229-235.	5.2	27
60	Improved desorption electrospray ionization mass spectrometry performance using edge sampling and a rotational sample stage. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 3846-3850.	1.5	27
61	Electrochemically initiated tagging of thiols using an electrospray ionization based liquid microjunction surface sampling probe two-electrode cell. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 1380-1386.	1.5	26
62	Topographical and Chemical Imaging of a Phase Separated Polymer Using a Combined Atomic Force Microscopy/Infrared Spectroscopy/Mass Spectrometry Platform. <i>Analytical Chemistry</i> , 2016, 88, 2864-2870.	6.5	26
63	Droplet probe: coupling chromatography to the in situ evaluation of the chemistry of nature. <i>Natural Product Reports</i> , 2019, 36, 944-959.	10.3	25
64	Profiling of adrenocorticotrophic hormone and arginine vasopressin in human pituitary gland and tumor thin tissue sections using droplet-based liquid-microjunction surface-sampling-HPLC-ESI-MS-MS. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 5989-5998.	3.7	24
65	Extraction efficiency and implications for absolute quantitation of propranolol in mouse brain, liver and kidney tissue sections using droplet-based liquid microjunction surface sampling high-performance liquid chromatography/electrospray ionization tandem. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 1705-1712.	1.5	24
66	Laser Ablation Sampling of Materials Directly into the Formed Liquid Microjunction of a Continuous Flow Surface Sampling Probe/Electrospray Ionization Emitter for Mass Spectral Analysis and Imaging. <i>Analytical Chemistry</i> , 2013, 85, 10211-10217.	6.5	21
67	Monitoring ionic adducts to elucidate reaction mechanisms: reduction of tetracyanoquinodimethane and oxidation of triphenylamine investigated using on-line electrochemistry/electrospray mass spectrometry. <i>Journal of Solid State Electrochemistry</i> , 2005, 9, 390-397.	2.5	20
68	Immediate drop on demand technology (I-DOT) coupled with mass spectrometry via an open port sampling interface. <i>Bioanalysis</i> , 2017, 9, 1667-1679.	1.5	20
69	Minimizing analyte electrolysis in electrospray ionization mass spectrometry using a redox buffer coated emitter electrode. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 1327-1334.	1.5	18
70	Expanded use of a battery-powered two-electrode emitter cell for electrospray mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2006, 17, 953-961.	2.8	17
71	Controlled-Resonant Surface Tapping-Mode Scanning Probe Electrospray Ionization Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2014, 86, 3146-3152.	6.5	17
72	Combined Falling Drop/Open Port Sampling Interface System for Automated Flow Injection Mass Spectrometry. <i>Analytical Chemistry</i> , 2017, 89, 12578-12586.	6.5	17

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73	Liquid microjunction surface sampling of acetaminophen, terfenadine and their metabolites in thin tissue sections. <i>Bioanalysis</i> , 2014, 6, 2599-2606.	1.5	16
74	Quantitation of repaglinide and metabolites in mouse whole-body thin tissue sections using droplet-based liquid microjunction surface sampling-high-performance liquid chromatography-electrospray ionization tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1439, 137-143.	3.7	16
75	Automated Optically Guided System for Chemical Analysis of Single Plant and Algae Cells Using Laser Microdissection/Liquid Vortex Capture/Mass Spectrometry. <i>Frontiers in Plant Science</i> , 2018, 9, 1211.	3.6	16
76	Enhanced frequency oscillations accompanying galvanostatic potential oscillations at Pt electrode in Cu <sup>2+</sup> formic acid systems. <i>Electrochimica Acta</i> , 1995, 40, 221-225.	5.2	15
77	Surface titration of DNA-modified gold electrodes with a thiol-tethered anthraquinone. <i>Journal of Electroanalytical Chemistry</i> , 2000, 493, 28-36.	3.8	15
78	N-Phenyl-1,4-Phenylenediamine and Benzidine Oxidation Products Identified Using On-Line Electrochemistry/Electrospray Fourier Transform Mass Spectrometry This manuscript has been authored by a contractor of the U.S. Government under contract No. DE-AC05-00OR22725. Accordingly, the U.S. Government retains a paid-up, nonexclusive, irrevocable, worldwide license to publish or reproduce the published form of this contribution, prepare derivative works, distribute copies to the public, and perform publicly and d. <i>Electroanalysis</i> , 2002, 14, 1027.	2.9	14
79	Chronoamperometry of surface-confined redox couples. Application to daunomycin adsorbed on hanging mercury drop electrodes. <i>Electrochimica Acta</i> , 1999, 45, 1095-1104.	5.2	13
80	Control of analyte electrolysis in electrospray ionization mass spectrometry using repetitively pulsed high voltage. <i>International Journal of Mass Spectrometry</i> , 2011, 303, 206-211.	1.5	13
81	PTMSearchPlus: Software Tool for Automated Protein Identification and Post-Translational Modification Characterization by Integrating Accurate Intact Protein Mass and Bottom-Up Mass Spectrometric Data Searches. <i>Analytical Chemistry</i> , 2009, 81, 8387-8395.	6.5	12
82	Spatial profiling of stapled Î±-helical peptide ATSP-7041 in mouse whole-body thin tissue sections using droplet-based liquid microjunction surface sampling-HPLC-ESI-MS/MS. <i>International Journal of Mass Spectrometry</i> , 2019, 437, 17-22.	1.5	12
83	Solvent effects on differentiation of mouse brain tissue using laser microdissection "cut and drop"™ sampling with direct mass spectral analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2018, 32, 414-422.	1.5	11
84	Spatially resolved absolute quantitation in thin tissue by mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 2619-2636.	3.7	11
85	Utilizing the inherent electrolysis in a chip-based nanoelectrospray emitter system to facilitate selective ionization and mass spectrometric analysis of metallo alkylporphyrins. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 335-343.	3.7	10
86	Geochemical Evidence for Rare-Earth Element Mobilization during Kaolin Diagenesis. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 506-520.	2.7	9
87	Rapid quantitation of ascorbic and folic acids in SRM 3280 multivitamin/multielement tablets using flow-injection tandem mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2013, 27, 163-168.	1.5	8
88	Comparison of Internal Energy Distributions of Ions Created by Electrospray Ionization and Laser Ablation-Liquid Vortex Capture/Electrospray Ionization. <i>Journal of the American Society for Mass Spectrometry</i> , 2015, 26, 1462-1468.	2.8	8
89	Chronoamperometry of Surface-Confined Redox Couples for Irreversible Two-Step and Three-Step Consecutive Reaction Mechanisms. <i>Analytical Chemistry</i> , 1999, 71, 3905-3909.	6.5	7
90	Poly(3,4-ethylenedioxyppyrrrole)-modified emitter electrode for substitution of homogeneous redox buffer agent hydroquinone in electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 3368-3371.	1.5	7

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91	Atomic Force Microscopy Thermally-Assisted Microsampling with Atmospheric Pressure Temperature Ramped Thermal Desorption/Ionization-Mass Spectrometry Analysis. <i>Analytical Chemistry</i> , 2017, 89, 3036-3042.	6.5	7
92	<i>In Situ</i> Chemical Monitoring and Imaging of Contents within Microfluidic Devices Having a Porous Membrane Wall Using Liquid Microjunction Surface Sampling Probe Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 832-839.	2.8	7
93	Design and Evaluation of a Tethered, Open Port Sampling Interface for Liquid Extraction-Mass Spectrometry Chemical Analysis. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 198-205.	2.8	7
94	Quantitative metrics for assessment of chemical image quality and spatial resolution. <i>Rapid Communications in Mass Spectrometry</i> , 2016, 30, 927-932.	1.5	6
95	Chemical Imaging with Desorption Electrospray Ionization Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2010, 656, 231-241.	0.9	5
96	Absolute quantitation of propranolol from 200- $\mu$ m regions of mouse brain and liver thin tissues using laser ablation-dropletProbe-mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9010.	1.5	4
97	Quantitation of amiodarone and N-desethylamiodarone in single HepG2 cells by single-cell printing-liquid vortex capture-mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 6917-6927.	3.7	4
98	Polymeric spatial resolution test patterns for mass spectrometry imaging using nano-thermal analysis with atomic force microscopy. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 1204-1210.	1.5	2
99	Laser Capture Microdissection-Liquid Vortex Capture Mass Spectrometry Metabolic Profiling of Single Onion Epidermis and Microalgae Cells. <i>Methods in Molecular Biology</i> , 2020, 2064, 89-101.	0.9	2
100	An effective QWBA/UHPLC-MS/tissue punch approach: solving a pharmacokinetic issue via quantitative Met-ID. <i>Drug Metabolism Letters</i> , 2021, 14, 152-162.	0.8	1
101	Development and Application of DropletProbe Mass Spectrometry for Examining Biodistribution of Therapeutics. <i>Methods in Molecular Biology</i> , 2022, 2437, 171-180.	0.9	1
102	George Inzelt: a tribute on the occasion of his 75th birthday. <i>Journal of Solid State Electrochemistry</i> , 2021, 25, 2703-2704.	2.5	0
103	Integrated laser ablation-dropletProbe-mass spectrometry for absolute drug quantitation, metabolite detection, and distribution in tissue. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9202.	1.5	0