

Tapio Kotiaho

List of Publications by Year in descending order

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68
papers

2,199
citations

159585

30
h-index

233421

45
g-index

70
all docs

70
docs citations

70
times ranked

1945
citing authors

#	ARTICLE	IF	CITATIONS
1	Membrane Introduction Mass Spectrometry. <i>Analytical Chemistry</i> , 1991, 63, 875A-883A.	6.5	137
2	Microchip technology in mass spectrometry. <i>Mass Spectrometry Reviews</i> , 2009, 29, n/a-n/a.	5.4	94
3	Characterization of SU-8 for electrokinetic microfluidic applications. <i>Lab on A Chip</i> , 2005, 5, 888.	6.0	93
4	Poly(dimethylsiloxane) electrospray devices fabricated with diamond-like carbonâ€“poly(dimethylsiloxane) coated SU-8 masters. <i>Lab on A Chip</i> , 2003, 3, 67-72.	6.0	83
5	Separation of steroid isomers by ion mobility mass spectrometry. <i>Journal of Chromatography A</i> , 2013, 1310, 133-137.	3.7	81
6	A Cryotrap Membrane Introduction Mass Spectrometry System for Analysis of Volatile Organic Compounds in Water at the Low Parts-per-Trillion Level. <i>Analytical Chemistry</i> , 1996, 68, 3502-3506.	6.5	78
7	ADVANCES IN MEMBRANE INLET MASS SPECTROMETRY (MIMS). <i>Reviews in Analytical Chemistry</i> , 1996, 15, .	3.2	75
8	Analysis of small molecules by ultra thin-layer chromatography-atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2005, 16, 906-915.	2.8	61
9	Analysis of lipids with desorption atmospheric pressure photoionizationâ€“mass spectrometry (DAPPIâ€“MS) and desorption electrospray ionizationâ€“mass spectrometry (DESIâ€“MS). <i>Journal of Mass Spectrometry</i> , 2012, 47, 611-619.	1.6	61
10	Fully Microfabricated and Integrated SU-8-Based Capillary Electrophoresis-Electrospray Ionization Microchips for Mass Spectrometry. <i>Analytical Chemistry</i> , 2007, 79, 9135-9144.	6.5	56
11	Desorption and Ionization Mechanisms in Desorption Atmospheric Pressure Photoionization. <i>Analytical Chemistry</i> , 2008, 80, 7460-7466.	6.5	56
12	Tetraalkylammonium halides as chemical standards for positive electrospray ionization with ion mobility spectrometry/mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2005, 19, 3051-3055.	1.5	50
13	Rapid and sensitive drug metabolism studies by SU-8 microchip capillary electrophoresis-electrospray ionization mass spectrometry. <i>Journal of Chromatography A</i> , 2011, 1218, 739-745.	3.7	48
14	Chemical analysis using 3D printed glass microfluidics. <i>Analytical Methods</i> , 2019, 11, 1802-1810.	2.7	48
15	Analysis of Volatile Organic Compounds in Water and Soil Samples by Purge-and-Membrane Mass Spectrometry. <i>Analytical Chemistry</i> , 1998, 70, 3028-3032.	6.5	45
16	Development of a membrane inlet mass spectrometric method for analysis of air samples. <i>Analytica Chimica Acta</i> , 1997, 349, 359-365.	5.4	44
17	Fabrication and fluidic characterization of silicon micropillar array electrospray ionization chip. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 380-387.	7.8	44
18	Feasibility of atmospheric pressure desorption/ionization on silicon mass spectrometry in analysis of drugs. <i>Rapid Communications in Mass Spectrometry</i> , 2003, 17, 1339-1343.	1.5	43

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19	Analysis of amphetamines and fentanyl by atmospheric pressure desorption/ionization on silicon mass spectrometry and matrix-assisted laser desorption/ionization mass spectrometry and its application to forensic analysis of drug seizures. <i>Journal of Mass Spectrometry</i> , 2005, 40, 539-545.	1.6	43
20	Silicon micropillar array electrospray chip for drug and biomolecule analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2007, 21, 3677-3682.	1.5	43
21	Development of an ion mobility spectrometer for use in an atmospheric pressure ionization ion mobility spectrometer/mass spectrometer instrument for fast screening analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 3131-3139.	1.5	42
22	Fabrication of enclosed SU-8 tips for electrospray ionization-mass spectrometry. <i>Electrophoresis</i> , 2005, 26, 4691-4702.	2.4	42
23	Microchip capillary electrophoresis-“electrospray ionization”-mass spectrometry of intact proteins using uncoated Ormocomp microchips. <i>Analytica Chimica Acta</i> , 2012, 711, 69-76.	5.4	42
24	Preparation of porous n-type silicon sample plates for desorption/ionization on silicon mass spectrometry (DIOS-MS). <i>Lab on A Chip</i> , 2002, 2, 247-253.	6.0	40
25	Theoretical analysis of probe dynamics in flow injection/membrane introduction mass spectrometry. <i>Analytical Chemistry</i> , 1991, 63, 2460-2465.	6.5	36
26	Performance of SU-8 Microchips as Separation Devices and Comparison with Glass Microchips. <i>Analytical Chemistry</i> , 2007, 79, 6255-6263.	6.5	36
27	A miniaturised 3D printed polypropylene reactor for online reaction analysis by mass spectrometry. <i>Reaction Chemistry and Engineering</i> , 2017, 2, 299-303.	3.7	36
28	Characterization of a high resolution drift tube ion mobility spectrometer with a multi-ion source platform. <i>International Journal of Mass Spectrometry</i> , 2010, 298, 24-29.	1.5	34
29	Analysis of Volatile Organic Sulfur Compounds in Air by Membrane Inlet Mass Spectrometry. <i>Analytical Chemistry</i> , 1997, 69, 4536-4539.	6.5	33
30	Adjusting mobility scales of ion mobility spectrometers using 2,6-DtBP as a reference compound. <i>Talanta</i> , 2008, 76, 1218-1223.	5.5	31
31	Hybrid Ceramic Polymers: New, Nonbiofouling, and Optically Transparent Materials for Microfluidics. <i>Analytical Chemistry</i> , 2010, 82, 3874-3882.	6.5	30
32	Comparison of TiO ₂ photocatalysis, electrochemically assisted Fenton reaction and direct electrochemistry for simulation of phase I metabolism reactions of drugs. <i>European Journal of Pharmaceutical Sciences</i> , 2016, 83, 36-44.	4.0	29
33	A Microfabricated Nebulizer for Liquid Vaporization in Chemical Analysis. <i>Journal of Microelectromechanical Systems</i> , 2006, 15, 1251-1259.	2.5	28
34	Feasibility of SU-8-based capillary electrophoresis-electrospray ionization mass spectrometry microfluidic chips for the analysis of human cell lysates. <i>Electrophoresis</i> , 2010, 31, 3745-3753.	2.4	27
35	Characterization of proton-bound acetate dimers in ion mobility spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2008, 19, 1361-1366.	2.8	24
36	Novel hybrid material for microfluidic devices. <i>Sensors and Actuators B: Chemical</i> , 2008, 132, 397-403.	7.8	24

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37	Minimum proton affinity for efficient ionization with atmospheric pressure desorption/ionization on silicon mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 3669-3673.	1.5	23
38	Separation of different ion structures in atmospheric pressure photoionization-ion mobility spectrometry-mass spectrometry (APPI-IMS-MS). <i>Journal of the American Society for Mass Spectrometry</i> , 2010, 21, 1565-1572.	2.8	23
39	Oxidation of Tyrosine-Phosphopeptides by Titanium Dioxide Photocatalysis. <i>Journal of the American Chemical Society</i> , 2016, 138, 7452-7455.	13.7	23
40	Sterically hindered phenols in negative ion mobility spectrometry-mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 3069-3076.	1.5	21
41	Impact of Pore Size and Surface Chemistry of Porous Silicon Particles and Structure of Phospholipids on Their Interactions. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 2308-2313.	5.2	21
42	Application of the numerical model describing analyte permeation through hollow fiber membranes into vacuum for determination of permeation parameters of organic compounds in a silicone membrane. <i>International Journal of Mass Spectrometry</i> , 2001, 212, 205-217.	1.5	20
43	Interfacing an aspiration ion mobility spectrometer to a triple quadrupole mass spectrometer. <i>Review of Scientific Instruments</i> , 2007, 78, 044101.	1.3	20
44	Fabrication of porous membrane filter from p-type silicon. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005, 202, 1624-1628.	1.8	19
45	Analytical characterization of microfabricated SU-8 emitters for electrospray ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2008, 43, 726-735.	1.6	18
46	Practical realization of a sub- $\lambda/2$ acoustic jet. <i>Scientific Reports</i> , 2019, 9, 5189.	3.3	18
47	Utilization of a multimembrane inlet and a cyclic sudden sampling introduction mode in membrane inlet mass spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2004, 15, 823-831.	2.8	15
48	Imitation of phase I oxidative metabolism of anabolic steroids by titanium dioxide photocatalysis. <i>European Journal of Pharmaceutical Sciences</i> , 2014, 65, 45-55.	4.0	15
49	Rapid separation of phosphopeptides by microchip electrophoresis-electrospray ionization mass spectrometry. <i>Journal of Chromatography A</i> , 2016, 1440, 249-254.	3.7	15
50	Desorption atmospheric pressure photoionization with polydimethylsiloxane as extraction phase and sample plate material. <i>Analytica Chimica Acta</i> , 2010, 682, 1-8.	5.4	13
51	Interfacing microchip isoelectric focusing with on-chip electrospray ionization mass spectrometry. <i>Journal of Chromatography A</i> , 2015, 1398, 121-126.	3.7	13
52	Gas-phase chemistry of acylium ions. Seven-to-five ring contraction of 1,3-dioxepane and 1,3-dioxep-5-ene. <i>Journal of Mass Spectrometry</i> , 1999, 34, 670-676.	1.6	12
53	Temperature modeling and measurement of an electrokinetic separation chip. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 479-491.	2.2	12
54	Simple 3D printed stainless steel microreactors for online mass spectrometric analysis. <i>Heliyon</i> , 2019, 5, e02002.	3.2	10

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55	Desorption atmospheric pressure photoionization high-resolution mass spectrometry: a complementary approach for the chemical analysis of atmospheric aerosols. <i>Rapid Communications in Mass Spectrometry</i> , 2015, 29, 1233-1241.	1.5	8
56	Comparison of liquid chromatography-mass spectrometry and direct infusion microchip electrospray ionization mass spectrometry in global metabolomics of cell samples. <i>European Journal of Pharmaceutical Sciences</i> , 2019, 138, 104991.	4.0	8
57	Enantioselective hyperporous molecularly imprinted thin film polymers. <i>RSC Advances</i> , 2019, 9, 33653-33656.	3.6	8
58	Separation of isomeric amines with ion mobility spectrometry. <i>Talanta</i> , 2015, 132, 889-893.	5.5	7
59	TiO ₂ Photocatalysis-DESI-MS Rotating Array Platform for High-Throughput Investigation of Oxidation Reactions. <i>Analytical Chemistry</i> , 2017, 89, 11214-11218.	6.5	7
60	Identification of ozone-oxidation products of oxycodone by electrospray ion trap mass spectrometry. <i>Journal of Mass Spectrometry</i> , 2001, 36, 791-797.	1.6	6
61	Letter: A Simple Ion Source Set-up for Desorption/Ionization on Silicon with Ion Mobility Spectrometry and Ion Mobility Spectrometry-Mass Spectrometry. <i>European Journal of Mass Spectrometry</i> , 2011, 17, 593-597.	1.0	6
62	Thiol-ene micropillar array electrospray ionization platform for zeptomole level bioanalysis. <i>Analyst</i> , 2017, 142, 2552-2557.	3.5	5
63	Ion density of positive and negative ions at ambient pressure in air at 12-136 Åmm from 4.9 kV soft x-ray source. <i>Review of Scientific Instruments</i> , 2021, 92, 054104.	1.3	5
64	Multiplexed analysis of amino acids in mice brain microdialysis samples using isobaric labeling and liquid chromatography-high resolution tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2021, 1656, 462537.	3.7	5
65	Mechanism of the Oxidation of Heptafulvenes to Tropones Studied by Online Mass Spectrometry and Density Functional Theory Calculations. <i>Journal of Organic Chemistry</i> , 2019, 84, 13975-13982.	3.2	2
66	Parametric Sensitivity in a Generalized Model for Atmospheric Pressure Chemical Ionization Reactions. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2218-2226.	2.8	2
67	3D acoustic jet. , 2019, , .		1
68	Fabrication of nanocluster silicon surface with electric discharge and the application in desorption/ionization on silicon-mass spectrometry. <i>Lab on A Chip</i> , 2010, 10, 1689.	6.0	0