JÃ¶rg P Kutter

List of Publications by Year
in descending order

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107	5,155	76196	88477
papers	citations	40 h-index	70 g-index

110	110	110	5486
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CO2-laser micromachining and back-end processing for rapid production of PMMA-based microfluidic systems. Lab on A Chip, 2002, 2, 242.	3.1	432
2	Cyclic olefin polymers: emerging materials for lab-on-a-chip applications. Microfluidics and Nanofluidics, 2010, 9, 145-161.	1.0	332
3	Recent developments in detection for microfluidic systems. Electrophoresis, 2004, 25, 3498-3512.	1.3	218
4	Recent advances in lab-on-a-chip for biosensing applications. Biosensors and Bioelectronics, 2016, 76, 213-233.	5.3	193
5	Current developments in electrophoretic and chromatographic separation methods on microfabricated devices. TrAC - Trends in Analytical Chemistry, 2000, 19, 352-363.	5.8	176
6	Integration of polymer waveguides for optical detection in microfabricated chemical analysis systems. Applied Optics, 2003, 42, 4072.	2.1	176
7	Solvent-Programmed Microchip Open-Channel Electrochromatography. Analytical Chemistry, 1998, 70, 3291-3297.	3.2	156
8	Microstructure fabrication with a CO2 laser system. Journal of Micromechanics and Microengineering, 2004, 14, 182-189.	1.5	142
9	Integrated Microchip Device with Electrokinetically Controlled Solvent Mixing for Isocratic and Gradient Elution in Micellar Electrokinetic Chromatography. Analytical Chemistry, 1997, 69, 5165-5171.	3.2	127
10	Monolithic integration of optical waveguides for absorbance detection in microfabricated electrophoresis devices. Electrophoresis, 2001, 22, 3930-3938.	1.3	112
11	Effect of Joule heating on efficiency and performance for microchip-based and capillary-based electrophoretic separation systems: A closer look. Electrophoresis, 2004, 25, 253-269.	1.3	109
12	Liquid phase chromatography on microchips. Journal of Chromatography A, 2012, 1221, 72-82.	1.8	107
13	Nanofluidic Devices with Two Pores in Series for Resistive-Pulse Sensing of Single Virus Capsids. Analytical Chemistry, 2011, 83, 9573-9578.	3.2	100
14	Solid phase extraction on microfluidic devices. Journal of Separation Science, 2000, 12, 93-97.	1.0	97
15	Performance of an in-plane detection cell with integrated waveguides for UV/Vis absorbance measurements on microfluidic separation devices. Electrophoresis, 2002, 23, 3528-3536.	1.3	95
16	On-Chip Electro Membrane Extraction with Online Ultraviolet and Mass Spectrometric Detection. Analytical Chemistry, 2011, 83, 44-51.	3.2	93
17	Recent advances in X-ray compatible microfluidics for applications in soft materials and life sciences. Lab on A Chip, 2016, 16, 4263-4295.	3.1	91
18	A multi-chamber microfluidic intestinal barrier model using Caco-2 cells for drug transport studies. PLoS ONE, 2018, 13, e0197101.	1.1	90

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19	Optical detection in microfluidic systems. Electrophoresis, 2009, 30, S92-100.	1.3	89
20	Long-term stable electroosmotic pump with ion exchange membranes. Lab on A Chip, 2005, 5, 730.	3.1	88
21	High-Throughput Small Angle X-ray Scattering from Proteins in Solution Using a Microfluidic Front-End. Analytical Chemistry, 2008, 80, 3648-3654.	3.2	88
22	Gold nanoparticle-based optical microfluidic sensors for analysis of environmental pollutants. Lab on A Chip, 2012, 12, 4651.	3.1	81
23	Integrated optical measurement system for fluorescence spectroscopy in microfluidic channels. Review of Scientific Instruments, 2001, 72, 229-233.	0.6	75
24	Thiolâ€“Ene Based Polymers as Versatile Materials for Microfluidic Devices for Life Sciences Applications. ACS Applied Materials & Interfaces, 2020, 12, 10080-10095.	4.0	73
25	Monolithic integration of microfluidic channels and optical waveguides in silica on silicon. Applied Optics, 2001, 40, 6246.	2.1	72
26	Improved bacteria detection by coupling magneto-immunocapture and amperometry at flow-channel microband electrodes. Biosensors and Bioelectronics, 2011, 26, 3633-3640.	5.3	69
27	Carbon nanotube based separation columns for high electrical field strengths in microchip electrochromatography. Lab on A Chip, 2011, 11, 2116.	3.1	68
28	A biochemical microdevice with an integrated chemiluminescence detector. Sensors and Actuators B: Chemical, 2003, 90, 15-21.	4.0	66
29	Determination of metal cations in microchip electrophoresis using on-chip complexation and sample stacking. Journal of Separation Science, 1998, 10, 313-319.	1.0	63
30	Spatial confinement of ultrasonic force fields in microfluidic channels. Ultrasonics, 2009, 49, 112-119.	2.1	63
31	Rapid and simple preparation of thiolâ€“ene emulsion-templated monoliths and their application as enzymatic microreactors. Lab on A Chip, 2015, 15, 2162-2172.	3.1	51
32	Pure-silica optical waveguides, fiber couplers, and high-aspect ratio submicrometer channels for electrokinetic separation devices. Electrophoresis, 2004, 25, 3788-3795.	1.3	49
33	A cyclo olefin polymer microfluidic chip with integrated gold microelectrodes for aqueous and non-aqueous electrochemistry. Lab on A Chip, 2010, 10, 1254.	3.1	49
34	Rapid photochemical surface patterning of proteins in thiolâ€“ene based microfluidic devices. Analyst, The, 2013, 138, 845-849.	1.7	49
35	Refractive Index Sensor Based on a 1D Photonic Crystal in a Microfluidic Channel. Sensors, 2010, 10, 2348-2358.	2.1	47
36	AC electroosmotic pump with bubble-free palladium electrodes and rectifying polymer membrane valves. Lab on A Chip, 2006, 6, 280-288.	3.1	46

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37	Underivatized cyclic olefin copolymer as substrate material and stationary phase for capillary and microchip electrochromatography. Electrophoresis, 2008, 29, 3145-3152.	1.3	45
38	Nanoliter-Scale Electromembrane Extraction and Enrichment in a Microfluidic Chip. Analytical Chemistry, 2018, 90, 9322-9329.	3.2	44
39	A Microfluidic Device with an Integrated Waveguide Beam Splitter for Velocity Measurements of Flowing Particles by Fourier Transformation. Analytical Chemistry, 2003, 75, 4931-4936.	3.2	43
40	Oxygen Management at the Microscale: A Functional Biochip Material with Long-Lasting and Tunable Oxygen Scavenging Properties for Cell Culture Applications. ACS Applied Materials & Interfaces, 2019, 11, 9730-9739.	4.0	42
41	Ultraviolet transparent silicon oxynitride waveguides for biochemical microsystems. Optics Letters, 2001, 26, 716.	1.7	41
42	Thiol-ene Monolithic Pepsin Microreactor with a 3D-Printed Interface for Efficient UPLC-MS Peptide Mapping Analyses. Analytical Chemistry, 2017, 89, 4573-4580.	3.2	41
43	Separation and quantification of cellulases and hemicellulases by capillary electrophoresis. Analytical Biochemistry, 2003, 317, 85-93.	1.1	40
44	Fabrication and bonding of thiol-ene-based microfluidic devices. Journal of Micromechanics and Microengineering, 2013, 23, 037002.	1.5	40
45	Surface functionalized thiolâ€ene waveguides for fluorescence biosensing in microfluidic devices. Electrophoresis, 2014, 35, 282-288.	1.3	39
46	Electrophoresis microchip with integrated waveguides for simultaneous native UV fluorescence and absorbance detection. Electrophoresis, 2009, 30, 4172-4178.	1.3	34
47	Microfluidic Platform for the Continuous Production and Characterization of Multilamellar Vesicles: A Synchrotron Small-Angle X-ray Scattering (SAXS) Study. Journal of Physical Chemistry Letters, 2017, 8, 73-79.	2.1	34
48	Automated microfluidic sample-preparation platform for high-throughput structural investigation of proteins by small-angle X-ray scattering. Journal of Applied Crystallography, 2011, 44, 1090-1099.	1.9	31
49	Dielectrophoresis microsystem with integrated flow cytometers for on-line monitoring of sorting efficiency. Electrophoresis, 2006, 27, 5081-5092.	1.3	29
50	CO2 laser microfabrication of an integrated polymer microfluidic manifold for the determination of phosphorus. Lab on A Chip, 2003, 3, 221.	3.1	28
51	Construction and characterisation of a modular microfluidic system: coupling magnetic capture and electrochemical detection. Microfluidics and Nanofluidics, 2010, 8, 393-402.	1.0	27
52	Direct monitoring of calcium-triggered phase transitions in cubosomes using small-angle X-ray scattering combined with microfluidics. Journal of Applied Crystallography, 2016, 49, 2005-2014.	1.9	26
53	Anti-stiction coating of PDMS moulds for rapid microchannel fabrication by double replica moulding. Journal of Micromechanics and Microengineering, 2011, 21, 105020.	1.5	25
54	The MainSTREAM Component Platform. Journal of the Association for Laboratory Automation, 2013, 18, 212-228.	2.8	25

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55	Thiol-ene Microfluidic Chip for Performing Hydrogen/Deuterium Exchange of Proteins at Subsecond Time Scales. Analytical Chemistry, 2019, 91, 1309-1317.	3.2	25
56	Microfabricated porous glass channels for electrokinetic separation devices. Lab on A Chip, 2005, 5, 1310.	3.1	24
57	Nanoparticleâ€based capillary electroseparation of proteins in polymer capillaries under physiological conditions. Electrophoresis, 2010, 31, 459-464.	1.3	23
58	Towards a portable microchip system with integrated thermal control and polymer waveguides for real-time PCR. Electrophoresis, 2006, 27, 5051-5058.	1.3	22
59	Carbon nanotube based stationary phases for microchip chromatography. Lab on A Chip, 2012, 12, 1951.	3.1	21
60	Electromembrane extraction in microfluidic formats. Journal of Separation Science, 2022, 45, 246-257.	1.3	19
61	A neutral polyacrylate copolymer coating for surface modification of thiol-ene microchannels for improved performance of protein separation by microchip electrophoresis. Mikrochimica Acta, 2016, 183, 2111-2121.	2.5	18
62	Micro-droplet arrays for micro-compartmentalization using an air/water interface. Lab on A Chip, 2018, 18, 2797-2805.	3.1	18
63	Chloroform compatible, thiol-ene based replica molded micro chemical devices as an alternative to glass microfluidic chips. Lab on A Chip, 2019, 19, 798-806.	3.1	18
64	A thiol-ene microfluidic device enabling continuous enzymatic digestion and electrophoretic separation as front-end to mass spectrometric peptide analysis. Analytical and Bioanalytical Chemistry, 2020, 412, 3559-3571.	1.9	17
65	Hydrogen/Deuterium Exchange Mass Spectrometry with Integrated Electrochemical Reduction and Microchip-Enabled Deglycosylation for Epitope Mapping of Heavily Glycosylated and Disulfide-Bonded Proteins. Analytical Chemistry, 2021, 93, 16330-16340.	3.2	17
66	Disposable Miniaturized Screenâ€Printed pH and Reference Electrodes for Potentiometric Systems. Electroanalysis, 2011, 23, 115-121.	1.5	16
67	The effect of electroosmotic and hydrodynamic flow profile superposition on band broadening in capillary electrophoresis. Journal of High Resolution Chromatography, 1995, 18, 741-744.	2.0	14
68	Fully integrated optical systems for lab-on-a-chip applications. , 2005, 5730, 211.		14
69	Integration of a zero dead-volume PDMS rotary switch valve in a miniaturised (bio)electroanalytical system. Lab on A Chip, 2010, 10, 1841.	3.1	14
70	Onâ€chip electromembrane extraction of acidic drugs. Electrophoresis, 2019, 40, 2514-2521.	1.3	13
71	Influence of Counter Pressure on Separation Performance in SDS-MEKC. Journal of High Resolution Chromatography, 1998, 21, 435-439.	2.0	12
72	Detection of unlabeled particles in the low micrometer size range using light scattering and hydrodynamic 3D focusing in a microfluidic system. Electrophoresis, 2012, 33, 1715-1722.	1.3	12

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73	Continuous electromembrane extraction coupled with mass spectrometry â€“ Perspectives and challenges. Analytica Chimica Acta, 2018, 999, 27-36.	2.6	12
74	Thiol-ene microfluidic chip for fast on-chip sample clean-up, separation and ESI mass spectrometry of peptides and proteins. Analytica Chimica Acta, 2020, 1140, 168-177.	2.6	12
75	Polymer microvalve with pre-stressed membranes for tunable flowâ€“pressure characteristics. Microfluidics and Nanofluidics, 2011, 10, 381-388.	1.0	11
76	Roll-to-plate fabrication of microfluidic devices with rheology-modified thiol-ene resins. Journal of Micromechanics and Microengineering, 2016, 26, 075014.	1.5	11
77	Thick-film voltammetric pH-sensors with internal indicator and reference species. Talanta, 2012, 99, 737-743.	2.9	10
78	An all thiolâ€“ene microchip for solid phase extraction featuring an in situ polymerized monolith and integrated 3D replica-molded emitter for direct electrospray mass spectrometry. Analytical Methods, 2018, 10, 2854-2862.	1.3	10
79	Microfluidic approaches for the production of monodisperse, superparamagnetic microspheres in the low micrometer size range. Journal of Magnetism and Magnetic Materials, 2019, 471, 286-293.	1.0	10
80	Synergistic antibacterial effect of inhaled aztreonam and tobramycin fixed dose combination to combat multidrug-resistant Gram-negative bacteria. International Journal of Pharmaceutics, 2020, 590, 119877.	2.6	10
81	Use of charge transfer interacting additives in electrokinetic chromatography. Journal of Separation Science, 1997, 9, 15-20.	1.0	9
82	Characterization of a patch-clamp microchannel array towards neuronal networks analysis. Microfluidics and Nanofluidics, 2010, 9, 963-972.	1.0	9
83	On-a-chip tryptic digestion of transthyretin: a step toward an integrated microfluidic system for the follow-up of familial transthyretin amyloidosis. Analyst, The, 2018, 143, 1077-1086.	1.7	8
84	Fiberâ€free coupling between bulk laser beams and onâ€chip polymerâ€based multimode waveguides. Electrophoresis, 2011, 32, 1224-1232.	1.3	7
85	Recent advances in microchip enantioseparation and analysis. Electrophoresis, 2020, 41, 2122-2135.	1.3	7
86	Microchip electroseparation of proteins using lipidâ€based nanoparticles. Electrophoresis, 2010, 31, 3696-3702.	1.3	6
87	Preface. Talanta, 2002, 56, 221.	2.9	5
88	Three-layer poly(methyl methacrylate) microsystem for analysis of lysosomal enzymes for diagnostic purposes. Analytica Chimica Acta, 2015, 853, 702-709.	2.6	5
89	Improved antibacterial efficiency of inhaled thiamphenicol dry powders: Mathematical modelling of in vitro dissolution kinetic and in vitro antibacterial efficacy. European Journal of Pharmaceutical Sciences, 2020, 152, 105435.	1.9	5
90	A low-energy, turning microvalve with high-pressure seals: scaling of friction. Journal of Micromechanics and Microengineering, 2006, 16, 2121-2127.	1.5	4

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91	Direct Electromembrane Extractionâ€Based Mass Spectrometry: A Tool for Studying Drug Metabolism Properties of Liver Organoids. Analysis & Sensing, 0, , .	1.1	3
92	Microfluidics and Miniaturization. Electrophoresis, 2011, 32, 3093-3093.	1.3	2
93	Rapid Electrophoretic and Chromatographic Analysis on Microchips. , 1998, , 315-318.		2
94	Generation of transient and tunable oxygen gradients in microfluidic channels utilizing the oxygen scavenging properties of thiol-ene polymers. Microfluidics and Nanofluidics, 2022, 26, 1.	1.0	2
95	Electrokinetic Chromatography on Microfluidic Devices. , 0, , 337-349.		1
96	Preparation of Heat-Denatured Macroaggregated Albumin for Biomedical Applications Using a Microfluidics Platform. ACS Biomaterials Science and Engineering, 2021, 7, 2823-2834.	2.6	1
97	Monolithic integration of optical waveguides for absorbance detection in microfabricated electrophoresis devices. , 2001, 22, 3930.		1
98	In-Plane UV Absorbance Detection in Silicon-Based Electrophoresis Devices Using Monolithically Integrated Optical Waveguides. , 2001, , 280-282.		1
99	Analytical Chemistry on Microsystems. , 0, , 213-249.		0
100	Editorial: Electrophoresis 24/2005. Electrophoresis, 2005, 26, 4573-4573.	1.3	0
101	Miniaturization 2006 Issue. Electrophoresis, 2006, 27, 4875-4875.	1.3	0
102	Miniaturization 2007 issue. Electrophoresis, 2007, 28, 4509-4509.	1.3	0
103	Miniaturization 2010. Electrophoresis, 2010, 31, 3621-3621.	1.3	0
104	Integrating Carbon Nanotubes into Microfluidic Chips for Separating Biochemical Compounds. Materials Research Society Symposia Proceedings, 2012, 1371, 57.	0.1	0
105	Lab on a Chip: Scandinavia. Lab on A Chip, 2012, 12, 4601.	3.1	0
106	Non-aqueous electrophoresis integrated with electrospray ionization mass spectrometry on a thiol-ene polymerâ€“based microchip device. Analytical and Bioanalytical Chemistry, 2021, 413, 4195-4205.	1.9	0
107	Chromatography in Microstructures. , 2007, , 439-469.		0