

Bruce K. Gale

List of Publications by Year in descending order

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190
papers

5,755
citations

81743

39
h-index

95083

68
g-index

190
all docs

190
docs citations

190
times ranked

7188
citing authors

#	ARTICLE	IF	CITATIONS
1	Viscoelastic Particle Focusing and Separation in a Spiral Channel. <i>Micromachines</i> , 2022, 13, 361.	1.4	13
2	Separation of U87 glioblastoma cell-derived small and medium extracellular vesicles using elasto-inertial flow focusing (a spiral channel). <i>Scientific Reports</i> , 2022, 12, 6146.	1.6	8
3	Design of a hydrodynamic cavitation system for the extraction and detection of <i>Escherichia coli</i> (O157:H7) from ground beef. <i>Sensors and Actuators B: Chemical</i> , 2022, 369, 132370.	4.0	1
4	Modeling diffusion-based drug release inside a nerve conduit in vitro and in vivo validation study. <i>Drug Delivery and Translational Research</i> , 2021, 11, 154-168.	3.0	3
5	SARS-CoV-2 pandemic: a review of molecular diagnostic tools including sample collection and commercial response with associated advantages and limitations. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 49-71.	1.9	110
6	High efficiency rare sperm separation from biopsy samples in an inertial focusing device. <i>Analyst</i> , The, 2021, 146, 3368-3377.	1.7	14
7	Development and Testing of a Continuous Flow-Electrical-Split-Flow Lateral Transport Thin Separation System (FI-EL-SPLITT). <i>Analytical Chemistry</i> , 2021, 93, 2888-2897.	3.2	1
8	Compression of the vascular wall to create a friction fit in a vascular anastomotic coupler. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 123, 104681.	1.5	2
9	Experiment, Theory, and Simulation of a Flow-Electrical-Split Flow Thin Particle Separation Device. <i>Journal of Chromatography A</i> , 2021, 1659, 462634.	1.8	0
10	Entrapping bupivacaine-loaded emulsions in a crosslinked-hydrogel increases anesthetic effect and duration in a rat sciatic nerve block model. <i>International Journal of Pharmaceutics</i> , 2020, 588, 119703.	2.6	11
11	Optimization of a microfluidic spiral channel used to separate sperm from blood cells. <i>Biomicrofluidics</i> , 2020, 14, 064103.	1.2	8
12	Optimization of Dean flow microfluidic chip for sperm preparation for intrauterine insemination. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	1.0	10
13	An automated instrument for intrauterine insemination sperm preparation. <i>Scientific Reports</i> , 2020, 10, 21385.	1.6	9
14	Characterization of Human Glioblastoma versus Normal Plasma-Derived Extracellular Vesicles Preisolated by Differential Centrifugation Using Cyclical Electrical Field-Flow Fractionation. <i>Analytical Chemistry</i> , 2020, 92, 9866-9876.	3.2	8
15	Enhanced chromosome extraction from cells using a pinched flow microfluidic device. <i>Biomedical Microdevices</i> , 2020, 22, 25.	1.4	4
16	AUTHOR REPLY. <i>Urology</i> , 2020, 140, 75-76.	0.5	0
17	Microfluidic System for Rapid Isolation of Sperm From Microdissection TESE Specimens. <i>Urology</i> , 2020, 140, 70-76.	0.5	9
18	Characterization and differential retention of Q beta bacteriophage virus-like particles using cyclical electrical field-flow fractionation and asymmetrical flow field-flow fractionation. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 1563-1572.	1.9	16

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19	Towards a better testicular sperm extraction: novel sperm sorting technologies for non-motile sperm extracted by microdissection TESE. <i>Translational Andrology and Urology</i> , 2020, 9, S206-S214.	0.6	20
20	Characteristics of electrical field flow fractionation with chronoamperometry and electrochemical impedance. <i>Micro and Nano Letters</i> , 2020, 15, 13-17.	0.6	3
21	Size and shape based chromosome separation in the inertial focusing device. <i>Biomicrofluidics</i> , 2020, 14, 064109.	1.2	6
22	Designing a Novel Drug Delivering Nerve Guide: A Preliminary Study. <i>Journal of Medical and Biological Engineering</i> , 2019, 39, 294-304.	1.0	3
23	Local FK506 delivery at the direct nerve repair site improves nerve regeneration. <i>Muscle and Nerve</i> , 2019, 60, 613-620.	1.0	18
24	Flexible, transparent, sub-100 μm microfluidic channels with fused deposition modeling 3D-printed thermoplastic polyurethane. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 095010.	1.5	61
25	A Tunable Microfluidic Device Enables Cargo Encapsulation by Cell- or Organelle-Sized Lipid Vesicles Comprising Asymmetric Lipid Bilayers. <i>Advanced Biology</i> , 2019, 3, 1900010.	3.0	10
26	Hydrodynamic cavitation for the rapid separation and electrochemical detection of <i>Cryptosporidium parvum</i> and <i>Escherichia coli</i> O157:H7 in ground beef. <i>Biosensors and Bioelectronics</i> , 2019, 135, 137-144.	5.3	12
27	Viscoelastic second normal stress difference dominated multiple-stream particle focusing in microfluidic channels. <i>Applied Physics Letters</i> , 2019, 115, 263702.	1.5	14
28	Drug-delivering nerve conduit improves regeneration in a critical-sized gap. <i>Biotechnology and Bioengineering</i> , 2019, 116, 143-154.	1.7	23
29	Skeletal muscle interstitial fluid metabolomics at rest and associated with an exercise bout: application in rats and humans. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2019, 316, E43-E53.	1.8	22
30	Sperm-like-particle (SLP) behavior in curved microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	1.0	18
31	A Biodegradable Vascular Coupling Device for End-to-End Anastomosis. <i>Journal of Medical and Biological Engineering</i> , 2018, 38, 715-723.	1.0	2
32	Microfluidic-based sperm sorting & analysis for treatment of male infertility. <i>Translational Andrology and Urology</i> , 2018, 7, S336-S347.	0.6	66
33	Exosome Isolation: Cyclical Electrical Field Flow Fractionation in Low-Ionic-Strength Fluids. <i>Analytical Chemistry</i> , 2018, 90, 12783-12790.	3.2	44
34	A Review of Current Methods in Microfluidic Device Fabrication and Future Commercialization Prospects. <i>Inventions</i> , 2018, 3, 60.	1.3	309
35	Design and operation of a microfluidic chip for trapping, and off-chip collection of a few human sperm. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 097002.	1.5	1
36	Instrumentation for xPCR Incorporating qPCR and HRMA. <i>Analytical Chemistry</i> , 2018, 90, 7190-7196.	3.2	23

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37	FDM 3D Printing of High-Pressure, Heat-Resistant, Transparent Microfluidic Devices. <i>Analytical Chemistry</i> , 2018, 90, 10450-10456.	3.2	91
38	Electrochemical Detection of E. coli O157:H7 in Water after Electrocatalytic and Ultraviolet Treatments Using a Polyguanine-Labeled Secondary Bead Sensor. <i>Sensors</i> , 2018, 18, 1497.	2.1	13
39	An automated system for rapid cellular extraction from live zebrafish embryos and larvae: Development and application to genotyping. <i>PLoS ONE</i> , 2018, 13, e0193180.	1.1	24
40	Optimization of micropatterned poly(lactic-co-glycolic acid) films for enhancing dorsal root ganglion cell orientation and extension. <i>Neural Regeneration Research</i> , 2018, 13, 105.	1.6	14
41	Controlled release of FK506 from micropatterned PLGA films: potential for application in peripheral nerve repair. <i>Neural Regeneration Research</i> , 2018, 13, 1247.	1.6	17
42	Vascular Coupling System for End-to-End Anastomosis: An In Vivo Pilot Case Report. <i>Cardiovascular Engineering and Technology</i> , 2017, 8, 91-95.	0.7	6
43	Use of a highly parallel microfluidic flow cell array to determine therapeutic drug dose response curves. <i>Biomedical Microdevices</i> , 2017, 19, 25.	1.4	2
44	Separation of sperm cells from samples containing high concentrations of white blood cells using a spiral channel. <i>Biomicrofluidics</i> , 2017, 11, 054106.	1.2	49
45	Novel drug delivering conduit for peripheral nerve regeneration. <i>Journal of Neural Engineering</i> , 2017, 14, 066011.	1.8	20
46	Effect Of combining FK506 and neurotrophins on neurite branching and elongation. <i>Muscle and Nerve</i> , 2017, 55, 570-581.	1.0	23
47	Experimental validation of an optofluidic platform for microbial single cell isolation and whole genome amplification for human microbiome applications. , 2017, , .		0
48	A disposable, continuous-flow polymerase chain reaction device: design, fabrication and evaluation. <i>Biomedical Microdevices</i> , 2016, 18, 62.	1.4	18
49	Controlled Delivery of FK506 to Improve Nerve Regeneration. <i>Shock</i> , 2016, 46, 154-159.	1.0	28
50	Optimization and Evaluation of a Vascular Coupling Device for End-to-End Anastomosis: A Finite-Element Analysis. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2016, 10, .	0.4	2
51	Nerve growth factor released from a novel PLGA nerve conduit can improve axon growth. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 045016.	1.5	11
52	Microfluidics: The future of microdissection TESE?. <i>Systems Biology in Reproductive Medicine</i> , 2016, 62, 161-170.	1.0	32
53	Modeling Carbon Nanotube Connectivity and Surface Activity in a Contact Lens Biofuel Cell. <i>Electrochimica Acta</i> , 2016, 203, 30-40.	2.6	36
54	Transdermal Delivery of siRNA through Microneedle Array. <i>Scientific Reports</i> , 2016, 6, 21422.	1.6	54

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55	Dean flow fractionation of chromosomes. , 2016, , .		0
56	Biased cyclical electrical field-flow fractionation for separation of submicron particles. Analytical and Bioanalytical Chemistry, 2016, 408, 855-863.	1.9	10
57	Photocatalytic microfluidic reactors utilizing titania nanotubes on titanium mesh for degradation of organic and biological contaminants. Journal of Environmental Chemical Engineering, 2016, 4, 657-663.	3.3	19
58	Effect of Ionic and Nonionic Carriers in Electrical Field-Flow Fractionation. Analytical Chemistry, 2016, 88, 1794-1803.	3.2	10
59	Particle Based Modeling of Electrical Field Flow Fractionation Systems. Chromatography (Basel), 2015, 2, 594-610.	1.2	5
60	Maximizing fibroblast adhesion on protein-coated surfaces using microfluidic cell printing. RSC Advances, 2015, 5, 104101-104109.	1.7	4
61	A New Vascular Coupler Design for End-to-End Anastomosis: Fabrication and Proof-of-Concept Evaluation. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	3
62	A Novel Vascular Coupling System for End-to-End Anastomosis. Cardiovascular Engineering and Technology, 2015, 6, 294-302.	0.7	8
63	Highly Sensitive Bacteria Quantification Using Immunomagnetic Separation and Electrochemical Detection of Guanine-Labeled Secondary Beads. Sensors, 2015, 15, 12034-12052.	2.1	45
64	Microfluidic-aided genotyping of zebrafish in the first 48h with 100% viability. Biomedical Microdevices, 2015, 17, 43.	1.4	6
65	Field and flow-based separations. Analytical and Bioanalytical Chemistry, 2015, 407, 4299-4300.	1.9	0
66	Anodized titania nanotube array microfluidic device for photocatalytic application: Experiment and simulation. Applied Catalysis B: Environmental, 2015, 174-175, 167-175.	10.8	16
67	Non-motile sperm cell separation using a spiral channel. Analytical Methods, 2015, 7, 8041-8047.	1.3	51
68	Contact lens biofuel cell tested in a synthetic tear solution. Biosensors and Bioelectronics, 2015, 68, 142-148.	5.3	130
69	Simple and cost-effective fabrication of microvalve arrays in PDMS using laser cut molds with application to <i>C. elegans</i> manipulation in microfluidics. Journal of Micromechanics and Microengineering, 2014, 24, 105007.	1.5	10
70	Vaccine Delivery: Nanocomposite-Enhanced Dissolving Microneedles for Improved Transdermal Delivery to Human Skin (Adv. Healthcare Mater. 4/2014). Advanced Healthcare Materials, 2014, 3, 462-462.	3.9	2
71	Design, fabrication, and testing of a novel end-to-end vascular coupling system. , 2014, 2014, 6593-6.		0
72	Microfluidic devices for rapid and sensitive identification of organisms. , 2014, 2014, 774-7.		0

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73	Improved polyvinylpyrrolidone microneedle arrays with non-stoichiometric cyclodextrin. Journal of Materials Chemistry B, 2014, 2, 1699-1705.	2.9	57
74	Design, fabrication and testing of a novel vascular coupling device. Biomedical Microdevices, 2014, 16, 173-180.	1.4	9
75	Quasi-digital PCR: Enrichment and quantification of rare DNA variants. Biomedical Microdevices, 2014, 16, 639-644.	1.4	6
76	A critical comparison of protein microarray fabrication technologies. Analyst, The, 2014, 139, 1303-1326.	1.7	154
77	Nanocomposite-strengthened Dissolving Microneedles for Improved Transdermal Delivery to Human Skin. Advanced Healthcare Materials, 2014, 3, 555-564.	3.9	61
78	Circuit modification in electrical field flow fractionation systems generating higher resolution separation of nanoparticles. Journal of Chromatography A, 2014, 1365, 164-172.	1.8	8
79	A review of exosome separation techniques and characterization of B16-F10 mouse melanoma exosomes with AF4-UV-MALS-DLS-TEM. Analytical and Bioanalytical Chemistry, 2014, 406, 7855-7866.	1.9	141
80	The Submerged Printing of Cells onto a Modified Surface Using a Continuous Flow Microspotter. Journal of Visualized Experiments, 2014, , .	0.2	1
81	Biased Cyclical Electrical Field Flow Fractionation for Separation of Sub 50 nm Particles. Analytical Chemistry, 2013, 85, 11225-11232.	3.2	23
82	Separation of Magnetic Nanoparticles by Cyclical Electrical Field Flow Fractionation. IEEE Transactions on Magnetics, 2013, 49, 331-335.	1.2	7
83	Particulate and Dissolved Trace Element Concentrations in Three Southern Ecuador Rivers Impacted by Artisanal Gold Mining. Water, Air, and Soil Pollution, 2013, 224, 1.	1.1	48
84	Microfluidic integrated multi-walled carbon nanotube (MWCNT) sensor for electrochemical nucleic acid concentration measurement. Sensors and Actuators B: Chemical, 2013, 185, 370-376.	4.0	35
85	Applications of Microfluidics for Molecular Diagnostics. Methods in Molecular Biology, 2013, 949, 305-334.	0.4	33
86	Platinum functionalized titania nanotube array sensor for detection of Trichloroethylene in water. , 2013, , .		2
87	Enzymatic Biofuel Cell with a Flow-through Toray Paper Bioanode for Improved Fuel Utilization. Journal of the Electrochemical Society, 2013, 160, H612-H619.	1.3	29
88	Design and in Vitro Biocompatibility of a Novel Ocular Drug Delivery Device. Journal of Functional Biomaterials, 2013, 4, 14-26.	1.8	13
89	Cyclical magnetic field flow fractionation. Journal of Applied Physics, 2012, 111, 07D128.	1.1	4
90	Depth measurement in fully enclosed microchannels using laser interferometry. Measurement Science and Technology, 2012, 23, 087004.	1.4	2

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91	An electrostatic microvalve for pneumatic control of microfluidic systems. Journal of Micromechanics and Microengineering, 2012, 22, 025019.	1.5	29
92	Electrical Field-Flow Fractionation for Metal Nanoparticle Characterization. Analytical Chemistry, 2012, 84, 4993-4998.	3.2	23
93	New approaches to bridge nerve gaps: Development of a novel drug-delivering nerve conduit. , 2012, 2012, 747-50.		2
94	Characterization of Polymerized Liposomes Using a Combination of dc and Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2012, 84, 8323-8329.	3.2	14
95	Automated microfluidic DNA/RNA extraction with both disposable and reusable components. Journal of Micromechanics and Microengineering, 2012, 22, 015007.	1.5	15
96	Diffusion Split-Flow Thin Cell (SPLITT) system for protein separations. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2012, 902, 78-83.	1.2	10
97	A novel method for effective field measurements in electrical field-flow fractionation. Electrophoresis, 2012, 33, 1040-1047.	1.3	6
98	Characterization of a microscale thermal-electrical field-flow fractionation system. Journal of Chromatography A, 2012, 1225, 174-181.	1.8	6
99	Optimization and characterization of a microscale thermal field-flow fractionation system. Sensors and Actuators B: Chemical, 2012, 162, 223-228.	4.0	2
100	Nanoparticle Characterization by Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2011, 83, 6565-6572.	3.2	32
101	Electrochemical quantification of DNA using aluminum oxide membranes. Procedia Engineering, 2011, 25, 713-716.	1.2	3
102	Endocapsular carousel technique phacoemulsification. Journal of Cataract and Refractive Surgery, 2011, 37, 433-437.	0.7	6
103	Microfluidic laminate-based phantom for diffusion tensor-magnetic resonance imaging. Journal of Micromechanics and Microengineering, 2011, 21, 095027.	1.5	3
104	Minor Losses in Rectangular Xurographic Microchannels. , 2010, , .		1
105	The capsule drug device: Novel approach for drug delivery to the eye. Vision Research, 2010, 50, 680-685.	0.7	46
106	Optimization of cyclical electrical field flow fractionation. Electrophoresis, 2010, 31, 3372-3379.	1.3	10
107	Evaluation needle length and density of microneedle arrays in the pretreatment of skin for transdermal drug delivery. International Journal of Pharmaceutics, 2010, 391, 7-12.	2.6	152
108	Improved Biomolecule microarrays by Printing on Nanoporous Aluminum Oxide Using a Continuous-flow Microspotter. Small, 2010, 6, 1415-1421.	5.2	7

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109	Anin situheater for a phase-change-material-based actuation system. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 085039.	1.5	11
110	Slip due to surface roughness for a Newtonian liquid in a viscous microscale disk pump. <i>Physics of Fluids</i> , 2010, 22, .	1.6	17
111	Sample to answer: a fully integrated nucleic acid identification system for bacteria monitoring. , 2010, , .		2
112	Spinning Disk Platform for Microfluidic Digital Polymerase Chain Reaction. <i>Analytical Chemistry</i> , 2010, 82, 1546-1550.	3.2	113
113	A PCR reactor with an integrated alumina membrane for nucleic acid isolation. <i>Analyst, The</i> , 2010, 135, 2408.	1.7	53
114	Expanding the introduction of microfluidics through a problem-based laboratory course to multiple engineering disciplines at five universities. , 2010, , .		2
115	Bubble inclusion and removal using PDMS membrane-based gas permeation for applications in pumping, valving and mixing in microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 095011.	1.5	35
116	Applications, techniques, and microfluidic interfacing for nanoscale biosensing. <i>Microfluidics and Nanofluidics</i> , 2009, 7, 149-167.	1.0	64
117	Parallel determination of phenotypic cytotoxicity with a micropattern of mutant cell lines. <i>Biomedical Microdevices</i> , 2009, 11, 443-452.	1.4	0
118	Flexible fabrication, packaging, and detection approach for microscale chromatography systems. <i>Sensors and Actuators B: Chemical</i> , 2009, 141, 316-321.	4.0	6
119	â€œSpot and hopâ€ Internal referencing for surface plasmon resonance imaging using a three-dimensional microfluidic flow cell array. <i>Analytical Biochemistry</i> , 2009, 385, 309-313.	1.1	26
120	Detergent screening of a G-protein-coupled receptor using serial and array biosensor technologies. <i>Analytical Biochemistry</i> , 2009, 386, 98-104.	1.1	37
121	Spatial DNA Melting Analysis for Genotyping and Variant Scanning. <i>Analytical Chemistry</i> , 2009, 81, 2053-2058.	3.2	34
122	Stable, Ligand-Doped, Poly(bis-SorbPC) Lipid Bilayer Arrays for Protein Binding and Detection. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 1310-1315.	4.0	19
123	In Situ Microarray Fabrication and Analysis Using a Microfluidic Flow Cell Array Integrated with Surface Plasmon Resonance Microscopy. <i>Analytical Chemistry</i> , 2009, 81, 4296-4301.	3.2	31
124	Rapid prototyping of microfluidic systems using a PDMS/polymer tape composite. <i>Lab on A Chip</i> , 2009, 9, 1290.	3.1	80
125	Microfluidic sample preparation: cell lysis and nucleic acid purification. <i>Integrative Biology (United Tj ETQq1 1 0.784314 rgBT /Overlock</i>	0.6	244
126	Continuous-flow thermal gradient PCR. <i>Biomedical Microdevices</i> , 2008, 10, 187-195.	1.4	88

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127	Continuous-flow microfluidic printing of proteins for array-based applications including surface plasmon resonance imaging. <i>Analytical Biochemistry</i> , 2008, 373, 141-146.	1.1	69
128	Improved continuous-flow print head for micro-array deposition. <i>Analytical Biochemistry</i> , 2008, 382, 55-59.	1.1	17
129	Determining the optimal PDMS-PDMS bonding technique for microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 067001.	1.5	448
130	Low-Cost MEMS Technologies. , 2008, , 341-378.		12
131	Quantitative and qualitative analysis of a microfluidic DNA extraction system using a nanoporous ALOx membrane. <i>Lab on A Chip</i> , 2008, 8, 1516.	3.1	57
132	Flow-induced thermal effects on spatial DNA melting. <i>Lab on A Chip</i> , 2008, 8, 1922.	3.1	26
133	Product differentiation during continuous-flow thermal gradient PCR. <i>Lab on A Chip</i> , 2008, 8, 919.	3.1	43
134	Micropatterned Fluid Lipid Bilayer Arrays Created Using a Continuous Flow Microspotter. <i>Analytical Chemistry</i> , 2008, 80, 7980-7987.	3.2	39
135	Optimal Conditions for Protein Array Deposition Using Continuous Flow. <i>Analytical Chemistry</i> , 2008, 80, 8561-8567.	3.2	18
136	Large-area, high-aspect-ratio SU-8 molds for the fabrication of PDMS microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 045021.	1.5	52
137	Comparison of glass etching to xurography prototyping of microfluidic channels for DNA melting analysis. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 2407-2413.	1.5	33
138	Thermal gradient PCR in a continuous-flow microchip. , 2007, , .		8
139	Nanoparticle analysis using microscale field flow fractionation. , 2007, , .		2
140	Direct Adsorption and Detection of Proteins, Including Ferritin, onto Microlens Array Patterned Bioarrays. <i>Journal of the American Chemical Society</i> , 2007, 129, 9252-9253.	6.6	49
141	Spin-assembled nanofilms for gaseous oxygen sensing. <i>Sensors and Actuators B: Chemical</i> , 2007, 120, 426-433.	4.0	7
142	Solution-phase DNA mutation scanning and SNP genotyping by nanoliter melting analysis. <i>Biomedical Microdevices</i> , 2007, 9, 159-166.	1.4	23
143	Microscale Field-Flow Fractionation: Theory and Practice. , 2007, , 471-521.		7
144	Characterization of a microscale cyclical electrical field flow fractionation system. <i>Lab on A Chip</i> , 2006, 6, 645.	3.1	18

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145	A microfabricated electrical SPLITT system. Lab on A Chip, 2006, 6, 105-114.	3.1	35
146	Reduction of End Effect-Induced Zone Broadening in Field-Flow Fractionation Channels. Analytical Chemistry, 2006, 78, 7978-7985.	3.2	14
147	Effect of Carrier Ionic Strength in Microscale Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2006, 78, 2557-2564.	3.2	15
148	Microfluidic DNA extraction using a patterned aluminum oxide membrane. , 2006, 6112, 167.		1
149	Miniature Single-Disk Viscous Pump (Single-DVP), Performance Characterization. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 602-610.	0.8	31
150	Geometric scaling effects on instrumental plate height in field flow fractionation. Journal of Chromatography A, 2006, 1104, 282-290.	1.8	19
151	Improved theory of cyclical electrical field flow fractionation. Electrophoresis, 2006, 27, 2833-2843.	1.3	13
152	Patterning of a nanoporous membrane for multi-sample DNA extraction. Journal of Micromechanics and Microengineering, 2006, 16, 33-39.	1.5	17
153	Design, fabrication, and packaging of a practical multianalyte-capable optical biosensor. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2006, 5, 021105.	1.0	6
154	A Novel PDMS Microfluidic Spotter for Fabrication of Protein Chips and Microarrays. Journal of Microelectromechanical Systems, 2006, 15, 1145-1151.	1.7	44
155	A PDMS-based gas permeation pump for on-chip fluid handling in microfluidic devices. Journal of Micromechanics and Microengineering, 2006, 16, 2396-2402.	1.5	129
156	Performance and Development of a Miniature Rotary Shaft Pump. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 752-760.	0.8	10
157	A novel PDMS microfluidic spotter for fabrication of protein chips and microarrays. , 2005, , .		7
158	Single-disk and double-disk viscous micropumps. Sensors and Actuators A: Physical, 2005, 122, 149-158.	2.0	32
159	Cyclical electrical field flow fractionation. Electrophoresis, 2005, 26, 1623-1632.	1.3	38
160	Micro-structure mechanical failure characterization using rotating Couette flow in a small gap. Journal of Micromechanics and Microengineering, 2005, 15, 792-801.	1.5	6
161	Characterization of interconnects used in PDMS microfluidic systems. Journal of Micromechanics and Microengineering, 2005, 15, 928-934.	1.5	273
162	A monolithic PDMS waveguide system fabricated using soft-lithography techniques. Journal of Lightwave Technology, 2005, 23, 2088-2093.	2.7	192

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163	Integrated optical glucose sensor fabricated using PDMS waveguides on a PDMS substrate. , 2004, 5345, 98.		11
164	Flexible coupling of a waveguide detector with a microscale field flow fractionation device. , 2004, 5345, 250.		2
165	Performance and Development of a Miniature Rotary Shaft Pump (RSP). , 2004, , 705.		1
166	Single-Disk and Double-Disk Viscous Micropump. , 2004, , .		2
167	Platelet Function Analyzer: Shear Activation of Platelets in Microchannels. Biomedical Microdevices, 2003, 5, 207-215.	1.4	18
168	An integrated optical oxygen sensor fabricated using rapid-prototyping techniques. Lab on A Chip, 2003, 3, 297.	3.1	68
169	Integrated optical biochemical sensor fabricated using rapid-prototyping techniques. , 2003, , .		8
170	Geometric Scaling Effects in Electrical Field Flow Fractionation. 2. Experimental Results. Analytical Chemistry, 2002, 74, 1024-1030.	3.2	40
171	A Microfabricated Thermal Field-Flow Fractionation System. Analytical Chemistry, 2002, 74, 1211-1216.	3.2	69
172	Electrostatic self-assembly of a ruthenium-based oxygen sensitive dye using polyionâ€“dye interpolyelectrolyte formation. Sensors and Actuators B: Chemical, 2002, 87, 336-345.	4.0	37
173	BioMEMS Education at Louisiana Tech University. Biomedical Microdevices, 2002, 4, 223-230.	1.4	2
174	Viral Separations Using a Microfabricated Electrical Splitt System. , 2002, , 584-586.		1
175	Geometric Scaling Effects in Electrical Field Flow Fractionation. 1. Theoretical Analysis. Analytical Chemistry, 2001, 73, 2345-2352.	3.2	40
176	Microscale Purification Systems for Biological Sample Preparation. Biomedical Microdevices, 2001, 3, 211-218.	1.4	11
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