Bruce K. Gale

List of Publications by Year
in descending order

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	Determining the optimal PDMSâ€“PDMS bonding technique for microfluidic devices. Journal of Micromechanics and Microengineering, 2008, 18, 067001.	1.5	448
2	A Review of Current Methods in Microfluidic Device Fabrication and Future Commercialization Prospects. Inventions, 2018, 3, 60.	1.3	309
3	Characterization of interconnects used in PDMS microfluidic systems. Journal of Micromechanics and Microengineering, 2005, 15, 928-934.	1.5	273
4	Microfluidic sample preparation: cell lysis and nucleic acid purification. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.6	244
5	A monolithic PDMS waveguide system fabricated using soft-lithography techniques. Journal of Lightwave Technology, 2005, 23, 2088-2093.	2.7	192
6	A critical comparison of protein microarray fabrication technologies. Analyst, The, 2014, 139, 1303-1326.	1.7	154
7	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
8	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
9	Contact lens biofuel cell tested in a synthetic tear solution. Biosensors and Bioelectronics, 2015, 68, 142-148.	5.3	130
10	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
11	Spinning Disk Platform for Microfluidic Digital Polymerase Chain Reaction. Analytical Chemistry, 2010, 82, 1546-1550.	3.2	113
12	SARS-CoV-2 pandemic: a review of molecular diagnostic tools including sample collection and commercial response with associated advantages and limitations. Analytical and Bioanalytical Chemistry, 2021, 413, 49-71.	1.9	110
13	FDM 3D Printing of High-Pressure, Heat-Resistant, Transparent Microfluidic Devices. Analytical Chemistry, 2018, 90, 10450-10456.	3.2	91
14	Continuous-flow thermal gradient PCR. Biomedical Microdevices, 2008, 10, 187-195.	1.4	88
15	Rapid prototyping of microfluidic systems using a PDMS/polymer tape composite. Lab on A Chip, 2009, 9, 1290.	3.1	80
16	A Microfabricated Thermal Field-Flow Fractionation System. Analytical Chemistry, 2002, 74, 1211-1216.	3.2	69
17	Continuous-flow microfluidic printing of proteins for array-based applications including surface plasmon resonance imaging. Analytical Biochemistry, 2008, 373, 141-146.	1.1	69
18	An integrated optical oxygen sensor fabricated using rapid-prototyping techniques. Lab on A Chip, 2003, 3, 297.	3.1	68

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19	Microfluidicâ€”based sperm sorting & analysis for treatment of male infertility. Translational Andrology and Urology, 2018, 7, S336-S347.	0.6	66
20	Applications, techniques, and microfluidic interfacing for nanoscale biosensing. Microfluidics and Nanofluidics, 2009, 7, 149-167.	1.0	64
21	Nanocompositeâ€Strengthened Dissolving Microneedles for Improved Transdermal Delivery to Human Skin. Advanced Healthcare Materials, 2014, 3, 555-564.	3.9	61
22	Flexible, transparent, sub-100 Âµm microfluidic channels with fused deposition modeling 3D-printed thermoplastic polyurethane. Journal of Micromechanics and Microengineering, 2019, 29, 095010.	1.5	61
23	A micromachined electrical field-flow fractionation (Î¼-EFFF) system. IEEE Transactions on Biomedical Engineering, 1998, 45, 1459-1469.	2.5	58
24	Quantitative and qualitative analysis of a microfluidic DNA extraction system using a nanoporous AlOx membrane. Lab on A Chip, 2008, 8, 1516.	3.1	57
25	Improved polyvinylpyrrolidone microneedle arrays with non-stoichiometric cyclodextrin. Journal of Materials Chemistry B, 2014, 2, 1699-1705.	2.9	57
26	Transdermal Delivery of siRNA through Microneedle Array. Scientific Reports, 2016, 6, 21422.	1.6	54
27	A PCR reactor with an integrated alumina membrane for nucleic acid isolation. Analyst, The, 2010, 135, 2408.	1.7	53
28	Large-area, high-aspect-ratio SU-8 molds for the fabrication of PDMS microfluidic devices. Journal of Micromechanics and Microengineering, 2008, 18, 045021.	1.5	52
29	Non-motile sperm cell separation using a spiral channel. Analytical Methods, 2015, 7, 8041-8047.	1.3	51
30	<title>Effects of rectangular microchannel aspect ratio on laminar friction constant</title>. , 1999, , .		50
31	Direct Adsorption and Detection of Proteins, Including Ferritin, onto Microlens Array Patterned Bioarrays. Journal of the American Chemical Society, 2007, 129, 9252-9253.	6.6	49
32	Separation of sperm cells from samples containing high concentrations of white blood cells using a spiral channel. Biomicrofluidics, 2017, 11, 054106.	1.2	49
33	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
34	The capsule drug device: Novel approach for drug delivery to the eye. Vision Research, 2010, 50, 680-685.	0.7	46
35	Highly Sensitive Bacteria Quantification Using Immunomagnetic Separation and Electrochemical Detection of Guanine-Labeled Secondary Beads. Sensors, 2015, 15, 12034-12052.	2.1	45
36	A Novel PDMS Microfluidic Spotter for Fabrication of Protein Chips and Microarrays. Journal of Microelectromechanical Systems, 2006, 15, 1145-1151.	1.7	44

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37	Exosome Isolation: Cyclical Electrical Field Flow Fractionation in Low-Ionic-Strength Fluids. Analytical Chemistry, 2018, 90, 12783-12790.	3.2	44
38	Product differentiation during continuous-flow thermal gradient PCR. Lab on A Chip, 2008, 8, 919.	3.1	43
39	Geometric Scaling Effects in Electrical Field Flow Fractionation. 1. Theoretical Analysis. Analytical Chemistry, 2001, 73, 2345-2352.	3.2	40
40	Geometric Scaling Effects in Electrical Field Flow Fractionation. 2. Experimental Results. Analytical Chemistry, 2002, 74, 1024-1030.	3.2	40
41	Micropatterned Fluid Lipid Bilayer Arrays Created Using a Continuous Flow Microspotter. Analytical Chemistry, 2008, 80, 7980-7987.	3.2	39
42	Cyclical electrical field flow fractionation. Electrophoresis, 2005, 26, 1623-1632.	1.3	38
43	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
44	Detergent screening of a G-protein-coupled receptor using serial and array biosensor technologies. Analytical Biochemistry, 2009, 386, 98-104.	1.1	37
45	Modeling Carbon Nanotube Connectivity and Surface Activity in a Contact Lens Biofuel Cell. Electrochimica Acta, 2016, 203, 30-40.	2.6	36
46	A microfabricated electrical SPLITT system. Lab on A Chip, 2006, 6, 105-114.	3.1	35
47	Bubble inclusion and removal using PDMS membrane-based gas permeation for applications in pumping, valving and mixing in microfluidic devices. Journal of Micromechanics and Microengineering, 2009, 19, 095011.	1.5	35
48	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
49	Spatial DNA Melting Analysis for Genotyping and Variant Scanning. Analytical Chemistry, 2009, 81, 2053-2058.	3.2	34
50	Comparison of glass etching to xurography prototyping of microfluidic channels for DNA melting analysis. Journal of Micromechanics and Microengineering, 2007, 17, 2407-2413.	1.5	33
51	Applications of Microfluidics for Molecular Diagnostics. Methods in Molecular Biology, 2013, 949, 305-334.	0.4	33
52	Single-disk and double-disk viscous micropumps. Sensors and Actuators A: Physical, 2005, 122, 149-158.	2.0	32
53	Nanoparticle Characterization by Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2011, 83, 6565-6572.	3.2	32
54	Microfluidics: The future of microdissection TESE?. Systems Biology in Reproductive Medicine, 2016, 62, 161-170.	1.0	32

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55	Miniature Single-Disk Viscous Pump (Single-DVP), Performance Characterization. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 602-610.	0.8	31
56	In Situ Microarray Fabrication and Analysis Using a Microfluidic Flow Cell Array Integrated with Surface Plasmon Resonance Microscopy. Analytical Chemistry, 2009, 81, 4296-4301.	3.2	31
57	An electrostatic microvalve for pneumatic control of microfluidic systems. Journal of Micromechanics and Microengineering, 2012, 22, 025019.	1.5	29
58	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
59	Controlled Delivery of FK506 to Improve Nerve Regeneration. Shock, 2016, 46, 154-159.	1.0	28
60	Flow-induced thermal effects on spatial DNA melting. Lab on A Chip, 2008, 8, 1922.	3.1	26
61	â€œSpot and hopâ€• Internal referencing for surface plasmon resonance imaging using a three-dimensional microfluidic flow cell array. Analytical Biochemistry, 2009, 385, 309-313.	1.1	26
62	An automated system for rapid cellular extraction from live zebrafish embryos and larvae: Development and application to genotyping. PLoS ONE, 2018, 13, e0193180.	1.1	24
63	Solution-phase DNA mutation scanning and SNP genotyping by nanoliter melting analysis. Biomedical Microdevices, 2007, 9, 159-166.	1.4	23
64	Electrical Field-Flow Fractionation for Metal Nanoparticle Characterization. Analytical Chemistry, 2012, 84, 4993-4998.	3.2	23
65	Biased Cyclical Electrical Field Flow Fractionation for Separation of Sub 50 nm Particles. Analytical Chemistry, 2013, 85, 11225-11232.	3.2	23
66	Effect Of combining FK506 and neurotrophins on neurite branching and elongation. Muscle and Nerve, 2017, 55, 570-581.	1.0	23
67	Instrumentation for xPCR Incorporating qPCR and HRMA. Analytical Chemistry, 2018, 90, 7190-7196.	3.2	23
68	Drugâ€delivering nerve conduit improves regeneration in a criticalâ€sized gap. Biotechnology and Bioengineering, 2019, 116, 143-154.	1.7	23
69	Skeletal muscle interstitial fluid metabolomics at rest and associated with an exercise bout: application in rats and humans. American Journal of Physiology - Endocrinology and Metabolism, 2019, 316, E43-E53.	1.8	22
70	Novel drug delivering conduit for peripheral nerve regeneration. Journal of Neural Engineering, 2017, 14, 066011.	1.8	20
71	Towards a better testicular sperm extraction: novel sperm sorting technologies for non-motile sperm extracted by microdissection TESE. Translational Andrology and Urology, 2020, 9, S206-S214.	0.6	20
72	Geometric scaling effects on instrumental plate height in field flow fractionation. Journal of Chromatography A, 2006, 1104, 282-290.	1.8	19

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73	Stable, Ligand-Doped, Poly(bis-SorbPC) Lipid Bilayer Arrays for Protein Binding and Detection. ACS Applied Materials & Interfaces, 2009, 1, 1310-1315.	4.0	19
74	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
75	Platelet Function Analyzer: Shear Activation of Platelets in Microchannels. Biomedical Microdevices, 2003, 5, 207-215.	1.4	18
76	Characterization of a microscale cyclical electrical field flow fractionation system. Lab on A Chip, 2006, 6, 645.	3.1	18
77	Optimal Conditions for Protein Array Deposition Using Continuous Flow. Analytical Chemistry, 2008, 80, 8561-8567.	3.2	18
78	A disposable, continuous-flow polymerase chain reaction device: design, fabrication and evaluation. Biomedical Microdevices, 2016, 18, 62.	1.4	18
79	Local FK506 delivery at the direct nerve repair site improves nerve regeneration. Muscle and Nerve, 2019, 60, 613-620.	1.0	18
80	Sperm-like-particle (SLP) behavior in curved microfluidic channels. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	18
81	Patterning of a nanoporous membrane for multi-sample DNA extraction. Journal of Micromechanics and Microengineering, 2006, 16, 33-39.	1.5	17
82	Improved continuous-flow print head for micro-array deposition. Analytical Biochemistry, 2008, 382, 55-59.	1.1	17
83	Slip due to surface roughness for a Newtonian liquid in a viscous microscale disk pump. Physics of Fluids, 2010, 22, .	1.6	17
84	Controlled release of FK506 from micropatterned PLGA films: potential for application in peripheral nerve repair. Neural Regeneration Research, 2018, 13, 1247.	1.6	17
85	Anodized titania nanotube array microfluidic device for photocatalytic application: Experiment and simulation. Applied Catalysis B: Environmental, 2015, 174-175, 167-175.	10.8	16
86	Characterization and differential retention of Q beta bacteriophage virus-like particles using cyclical electrical fieldâ€“flow fractionation and asymmetrical flow fieldâ€“flow fractionation. Analytical and Bioanalytical Chemistry, 2020, 412, 1563-1572.	1.9	16
87	Effect of Carrier Ionic Strength in Microscale Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2006, 78, 2557-2564.	3.2	15
88	Automated microfluidic DNA/RNA extraction with both disposable and reusable components. Journal of Micromechanics and Microengineering, 2012, 22, 015007.	1.5	15
89	Reduction of End Effect-Induced Zone Broadening in Field-Flow Fractionation Channels. Analytical Chemistry, 2006, 78, 7978-7985.	3.2	14
90	Characterization of Polymerized Liposomes Using a Combination of dc and Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2012, 84, 8323-8329.	3.2	14

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91	Viscoelastic second normal stress difference dominated multiple-stream particle focusing in microfluidic channels. Applied Physics Letters, 2019, 115, 263702.	1.5	14
92	High efficiency rare sperm separation from biopsy samples in an inertial focusing device. Analyst, The, 2021, 146, 3368-3377.	1.7	14
93	Optimization of micropatterned poly(lactic-co-glycolic acid) films for enhancing dorsal root ganglion cell orientation and extension. Neural Regeneration Research, 2018, 13, 105.	1.6	14
94	Improved theory of cyclical electrical field flow fractionation. Electrophoresis, 2006, 27, 2833-2843.	1.3	13
95	Design and in Vitro Biocompatibility of a Novel Ocular Drug Delivery Device. Journal of Functional Biomaterials, 2013, 4, 14-26.	1.8	13
96	Electrochemical Detection of E. coli O157:H7 in Water after Electrocatalytic and Ultraviolet Treatments Using a Polyguanine-Labeled Secondary Bead Sensor. Sensors, 2018, 18, 1497.	2.1	13
97	Viscoelastic Particle Focusing and Separation in a Spiral Channel. Micromachines, 2022, 13, 361.	1.4	13
98	Low-Cost MEMS Technologies. , 2008, , 341-378.		12
99	Hydrodynamic cavitation for the rapid separation and electrochemical detection of Cryptosporidium parvum and Escherichia coli O157:H7 in ground beef. Biosensors and Bioelectronics, 2019, 135, 137-144.	5.3	12
100	Microscale Purification Systems for Biological Sample Preparation. Biomedical Microdevices, 2001, 3, 211-218.	1.4	11
101	Integrated optical glucose sensor fabricated using PDMS waveguides on a PDMS substrate. , 2004, 5345, 98.		11
102	Anin situheater for a phase-change-material-based actuation system. Journal of Micromechanics and Microengineering, 2010, 20, 085039.	1.5	11
103	Nerve growth factor released from a novel PLGA nerve conduit can improve axon growth. Journal of Micromechanics and Microengineering, 2016, 26, 045016.	1.5	11
104	Entrapping bupivacaine-loaded emulsions in a crosslinked-hydrogel increases anesthetic effect and duration in a rat sciatic nerve block model. International Journal of Pharmaceutics, 2020, 588, 119703.	2.6	11
105	Performance and Development of a Miniature Rotary Shaft Pump. Journal of Fluids Engineering, Transactions of the ASME, 2005, 127, 752-760.	0.8	10
106	Optimization of cyclical electrical field flow fractionation. Electrophoresis, 2010, 31, 3372-3379.	1.3	10
107	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
108	Simple and cost-effective fabrication of microvalve arrays in PDMS using laser cut molds with application toC. elegansmanipulation in microfluidics. Journal of Micromechanics and Microengineering, 2014, 24, 105007.	1.5	10

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109	Biased cyclical electrical field-flow fractionation for separation of submicron particles. Analytical and Bioanalytical Chemistry, 2016, 408, 855-863.	1.9	10
110	Effect of Ionic and Nonionic Carriers in Electrical Field-Flow Fractionation. Analytical Chemistry, 2016, 88, 1794-1803.	3.2	10
111	A Tunable Microfluidic Device Enables Cargo Encapsulation by Cellâ€•or Organelleâ€Sized Lipid Vesicles Comprising Asymmetric Lipid Bilayers. Advanced Biology, 2019, 3, 1900010.	3.0	10
112	Optimization of Dean flow microfluidic chip for sperm preparation for intrauterine insemination. Microfluidics and Nanofluidics, 2020, 24, 1.	1.0	10
113	Design, fabrication and testing of a novel vascular coupling device. Biomedical Microdevices, 2014, 16, 173-180.	1.4	9
114	An automated instrument for intrauterine insemination sperm preparation. Scientific Reports, 2020, 10, 21385.	1.6	9
115	Microfluidic System for Rapid Isolation of Sperm From Microdissection TESE Specimens. Urology, 2020, 140, 70-76.	0.5	9
116	Electrical conductivity particle detector for use in biological and chemical micro-analysis systems. , 1998, 3515, 230.		8
117	Integrated optical biochemical sensor fabricated using rapid-prototyping techniques. , 2003, , .		8
118	Thermal gradient PCR in a continuous-flow microchip. , 2007, , .		8
119	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
120	A Novel Vascular Coupling System for End-to-End Anastomosis. Cardiovascular Engineering and Technology, 2015, 6, 294-302.	0.7	8
121	Optimization of a microfluidic spiral channel used to separate sperm from blood cells. Biomicrofluidics, 2020, 14, 064103.	1.2	8
122	Characterization of Human Glioblastoma versus Normal Plasma-Derived Extracellular Vesicles Preisolated by Differential Centrifugation Using Cyclical Electrical Field-Flow Fractionation. Analytical Chemistry, 2020, 92, 9866-9876.	3.2	8
123	Separation of U87 glioblastoma cell-derived small and medium extracellular vesicles using elasto-inertial flow focusing (a spiral channel). Scientific Reports, 2022, 12, 6146.	1.6	8
124	A novel PDMS microfluidic spotter for fabrication of protein chips and microarrays. , 2005, , .		7
125	Spin-assembled nanofilms for gaseous oxygen sensing. Sensors and Actuators B: Chemical, 2007, 120, 426-433.	4.0	7
126	Improved Biomolecule microarrays by Printing on Nanoporous Aluminum Oxide Using a Continuousâ€Flow Microspotter. Small, 2010, 6, 1415-1421.	5.2	7

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127	Separation of Magnetic Nanoparticles by Cyclical Electrical Field Flow Fractionation. IEEE Transactions on Magnetics, 2013, 49, 331-335.	1.2	7
128	Microscale Field-Flow Fractionation: Theory and Practice. , 2007, , 471-521.		7
129	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
130	Design, fabrication, and packaging of a practical multianalyte-capable optical biosensor. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2006, 5, 021105.	1.0	6
131	Flexible fabrication, packaging, and detection approach for microscale chromatography systems. Sensors and Actuators B: Chemical, 2009, 141, 316-321.	4.0	6
132	Endocapsular carousel technique phacoemulsification. Journal of Cataract and Refractive Surgery, 2011, 37, 433-437.	0.7	6
133	A novel method for effective field measurements in electrical fieldâ€flow fractionation. Electrophoresis, 2012, 33, 1040-1047.	1.3	6
134	Characterization of a microscale thermalâ€“electrical field-flow fractionation system. Journal of Chromatography A, 2012, 1225, 174-181.	1.8	6
135	Quasi-digital PCR: Enrichment and quantification of rare DNA variants. Biomedical Microdevices, 2014, 16, 639-644.	1.4	6
136	Microfluidic-aided genotyping of zebrafish in the first 48Âh with 100Â% viability. Biomedical Microdevices, 2015, 17, 43.	1.4	6
137	Vascular Coupling System for End-to-End Anastomosis: An In Vivo Pilot Case Report. Cardiovascular Engineering and Technology, 2017, 8, 91-95.	0.7	6
138	Size and shape based chromosome separation in the inertial focusing device. Biomicrofluidics, 2020, 14, 064109.	1.2	6
139	<title>Electrical impedance-spectroscopy particle detector for use in microanalysis systems</title>. , 1999, 3877, 190.		5
140	Particle Based Modeling of Electrical Field Flow Fractionation Systems. Chromatography (Basel), 2015, 2, 594-610.	1.2	5
141	Multi-DNA Extraction Chip Based on an Aluminum Oxide Membrane Integrated into a PDMS Microfluidic Structure. , 0, , .		4
142	Cyclical magnetic field flow fractionation. Journal of Applied Physics, 2012, 111, 07D128.	1.1	4
143	Maximizing fibroblast adhesion on protein-coated surfaces using microfluidic cell printing. RSC Advances, 2015, 5, 104101-104109.	1.7	4
144	Enhanced chromosome extraction from cells using a pinched flow microfluidic device. Biomedical Microdevices, 2020, 22, 25.	1.4	4

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145	Using microfabrication and electrostatic layer-by-layer (LbL) self-assembly technologies to improve the growth and alignment of smooth muscle cells. , 0, , .		3
146	Electrochemical quantification of DNA using aluminum oxide membranes. Procedia Engineering, 2011, 25, 713-716.	1.2	3
147	Microfluidic laminate-based phantom for diffusion tensor-magnetic resonance imaging. Journal of Micromechanics and Microengineering, 2011, 21, 095027.	1.5	3
148	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
149	Designing a Novel Drug Delivering Nerve Guide: A Preliminary Study. Journal of Medical and Biological Engineering, 2019, 39, 294-304.	1.0	3
150	Modeling diffusion-based drug release inside a nerve conduit in vitro and in vivo validation study. Drug Delivery and Translational Research, 2021, 11, 154-168.	3.0	3
151	Characteristics of electrical field flow fractionation with chronoamperometry and electrochemical impedance. Micro and Nano Letters, 2020, 15, 13-17.	0.6	3
152	BioMEMS Education at Louisiana Tech University. Biomedical Microdevices, 2002, 4, 223-230.	1.4	2
153	Flexible coupling of a waveguide detector with a microscale field flow fractionation device. , 2004, 5345, 250.		2
154	Design and fabrication of a multianalyte-capable optical biosensor using a multiphysics approach. , 0, , .		2
155	Nanoparticle analysis using microscale field flow fractionation. , 2007, , .		2
156	Sample to answer: a fully integrated nucleic acid identification system for bacteria monitoring. , 2010, , .		2
157	Expanding the introduction of microfluidics through a problem-based laboratory course to multiple engineering disciplines at five universities. , 2010, , .		2
158	Depth measurement in fully enclosed microchannels using laser interferometry. Measurement Science and Technology, 2012, 23, 087004.	1.4	2
159	New approaches to bridge nerve gaps: Development of a novel drug-delivering nerve conduit. , 2012, 2012, 747-50.		2
160	Optimization and characterization of a microscale thermal field-flow fractionation system. Sensors and Actuators B: Chemical, 2012, 162, 223-228.	4.0	2
161	Platinum functionalized titania nanotube array sensor for detection of Trichloroethylene in water. , 2013, , .		2
162	Vaccine Delivery: Nanocompositeâ€Strengthened Dissolving Microneedles for Improved Transdermal Delivery to Human Skin (Adv. Healthcare Mater. 4/2014). Advanced Healthcare Materials, 2014, 3, 462-462.	3.9	2

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163	Optimization and Evaluation of a Vascular Coupling Device for End-to-End Anastomosis: A Finite-Element Analysis. Journal of Medical Devices, Transactions of the ASME, 2016, 10, .	0.4	2
164	Use of a highly parallel microfluidic flow cell array to determine therapeutic drug dose response curves. Biomedical Microdevices, 2017, 19, 25.	1.4	2
165	A Biodegradable Vascular Coupling Device for End-to-End Anastomosis. Journal of Medical and Biological Engineering, 2018, 38, 715-723.	1.0	2
166	Compression of the vascular wall to create a friction fit in a vascular anastomotic coupler. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104681.	1.5	2
167	Single-Disk and Double-Disk Viscous Micropump. , 2004, , .		2
168	Micromachined metallic pipettes and bioanalysis systems. , 0, , .		1
169	A novel integrated optical dissolved oxygen sensor for cell culture and micro total analysis systems. , 0, , .		1
170	Performance and Development of a Miniature Rotary Shaft Pump (RSP). , 2004, , 705.		1
171	Microfluidic DNA extraction using a patterned aluminum oxide membrane. , 2006, 6112, 167.		1
172	Minor Losses in Rectangular Xurographic Microchannels. , 2010, , .		1
173	The Submerged Printing of Cells onto a Modified Surface Using a Continuous Flow Microspotter. Journal of Visualized Experiments, 2014, , .	0.2	1
174	Design and operation of a microfluidic chip for trapping, and off-chip collection of a few human sperm. Journal of Micromechanics and Microengineering, 2018, 28, 097002.	1.5	1
175	Development and Testing of a Continuous Flow-Electrical-Split-Flow Lateral Transport Thin Separation System (Fl-El-SPLITT). Analytical Chemistry, 2021, 93, 2888-2897.	3.2	1
176	Viral Separations Using a Microfabricated Electrical Splitt System. , 2002, , 584-586.		1
177	Design of a hydrodynamic cavitation system for the extraction and detection of Escherichia coli (O157:H7) from ground beef. Sensors and Actuators B: Chemical, 2022, 369, 132370.	4.0	1
178	Rehabilitative biomicrosystems. , 0, , .		0
179	Microfluidic platelet function analyzer for shear-induced platelet activation studies. , 0, , .		0
180	A PDMS Microfluidic Spotter for Fabrication of Lipid Microarrays. , 0, , .		0

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181	Parallel determination of phenotypic cytotoxicity with a micropattern of mutant cell lines. Biomedical Microdevices, 2009, 11, 443-452.	1.4	0
182	Design, fabrication, and testing of a novel end-to-end vascular coupling system. , 2014, 2014, 6593-6.		0
183	Microfluidic devices for rapid and sensitive identification of organisms. , 2014, 2014, 774-7.		0
184	Field and flow-based separations. Analytical and Bioanalytical Chemistry, 2015, 407, 4299-4300.	1.9	0
185	Dean flow fractionation of chromosomes. , 2016, , .		0
186	Experimental validation of an optofluidic platform for microbial single cell isolation and whole genome amplification for human microbiome applications. , 2017, , .		0
187	AUTHOR REPLY. Urology, 2020, 140, 75-76.	0.5	0
188	Experiment, Theory, and Simulation of a Flow-Electrical-Split Flow Thin Particle Separation Device. Journal of Chromatography A, 2021, 1659, 462634.	1.8	0
189	Evaluating the influence of particle morphology and density on the viscosity and injectability of a novel long-acting local anesthetic suspension. Journal of Biomaterials Applications, 0, , 088532822211064.	1.2	0
190	Automated passive serial dilution microfluidic chip for calcium quantification based on the Arsenazo III method. Sensors & Diagnostics, 0, , .	1.9	0