

Bruce K. Gale

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

175
papers

4,465
citations

36
h-index

60
g-index

190
ext. papers

5,168
ext. citations

4.6
avg, IF

5.74
L-index

#	Paper	IF	Citations
175	Determining the optimal PDMS/PDMS bonding technique for microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 067001	2	373
174	Microfluidic sample preparation: cell lysis and nucleic acid purification. <i>Integrative Biology (United Kingdom)</i> , 2009 , 1, 574-86	3.7	211
173	Characterization of interconnects used in PDMS microfluidic systems. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 928-934	2	196
172	A Review of Current Methods in Microfluidic Device Fabrication and Future Commercialization Prospects. <i>Inventions</i> , 2018 , 3, 60	2.9	193
171	A monolithic PDMS waveguide system fabricated using soft-lithography techniques. <i>Journal of Lightwave Technology</i> , 2005 , 23, 2088-2093	4	152
170	A critical comparison of protein microarray fabrication technologies. <i>Analyst, The</i> , 2014 , 139, 1303-26	5	129
169	A review of exosome separation techniques and characterization of B16-F10 mouse melanoma exosomes with AF4-UV-MALS-DLS-TEM. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 7855-66	4.4	116
168	A PDMS-based gas permeation pump for on-chip fluid handling in microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 2396-2402	2	112
167	Contact lens biofuel cell tested in a synthetic tear solution. <i>Biosensors and Bioelectronics</i> , 2015 , 68, 142-148	14.8	108
166	Evaluation needle length and density of microneedle arrays in the pretreatment of skin for transdermal drug delivery. <i>International Journal of Pharmaceutics</i> , 2010 , 391, 7-12	6.5	106
165	Spinning disk platform for microfluidic digital polymerase chain reaction. <i>Analytical Chemistry</i> , 2010 , 82, 1546-50	7.8	96
164	Continuous-flow thermal gradient PCR. <i>Biomedical Microdevices</i> , 2008 , 10, 187-95	3.7	78
163	Rapid prototyping of microfluidic systems using a PDMS/polymer tape composite. <i>Lab on A Chip</i> , 2009 , 9, 1290-3	7.2	70
162	Continuous-flow microfluidic printing of proteins for array-based applications including surface plasmon resonance imaging. <i>Analytical Biochemistry</i> , 2008 , 373, 141-6	3.1	63
161	A microfabricated thermal field-flow fractionation system. <i>Analytical Chemistry</i> , 2002 , 74, 1211-6	7.8	62
160	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	4.4	60
159	FDM 3D Printing of High-Pressure, Heat-Resistant, Transparent Microfluidic Devices. <i>Analytical Chemistry</i> , 2018 , 90, 10450-10456	7.8	59

158	An integrated optical oxygen sensor fabricated using rapid-prototyping techniques. <i>Lab on A Chip</i> , 2003 , 3, 297-301	7.2	58
157	Applications, techniques, and microfluidic interfacing for nanoscale biosensing. <i>Microfluidics and Nanofluidics</i> , 2009 , 7, 149-167	2.8	53
156	Quantitative and qualitative analysis of a microfluidic DNA extraction system using a nanoporous ALO(x) membrane. <i>Lab on A Chip</i> , 2008 , 8, 1516-23	7.2	53
155	A micromachined electrical field-flow fractionation (mu-EFFF) system. <i>IEEE Transactions on Biomedical Engineering</i> , 1998 , 45, 1459-69	5	47
154	Nanocomposite-strengthened dissolving microneedles for improved transdermal delivery to human skin. <i>Advanced Healthcare Materials</i> , 2014 , 3, 555-64	10.1	46
153	Direct adsorption and detection of proteins, including ferritin, onto microlens array patterned bioarrays. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9252-3	16.4	45
152	Transdermal Delivery of siRNA through Microneedle Array. <i>Scientific Reports</i> , 2016 , 6, 21422	4.9	44
151	A PCR reactor with an integrated alumina membrane for nucleic acid isolation. <i>Analyst, The</i> , 2010 , 135, 2408-14	5	44
150	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	2	44
149	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	2	40
148	The capsule drug device: novel approach for drug delivery to the eye. <i>Vision Research</i> , 2010 , 50, 680-5	2.1	40
147	Non-motile sperm cell separation using a spiral channel. <i>Analytical Methods</i> , 2015 , 7, 8041-8047	3.2	39
146	Separation of sperm cells from samples containing high concentrations of white blood cells using a spiral channel. <i>Biomicrofluidics</i> , 2017 , 11, 054106	3.2	38
145	Product differentiation during continuous-flow thermal gradient PCR. <i>Lab on A Chip</i> , 2008 , 8, 919-24	7.2	38
144	Geometric scaling effects in electrical field flow fractionation. 1. Theoretical analysis. <i>Analytical Chemistry</i> , 2001 , 73, 2345-52	7.8	37
143	Improved polyvinylpyrrolidone microneedle arrays with non-stoichiometric cyclodextrin. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 1699-1705	7.3	36
142	Micropatterned fluid lipid bilayer arrays created using a continuous flow microspotter. <i>Analytical Chemistry</i> , 2008 , 80, 7980-7	7.8	36
141	Geometric scaling effects in electrical field flow fractionation. 2. Experimental results. <i>Analytical Chemistry</i> , 2002 , 74, 1024-30	7.8	36

140	Microfluidic-based sperm sorting & analysis for treatment of male infertility. <i>Translational Andrology and Urology</i> , 2018 , 7, S336-S347	2.3	36
139	Highly sensitive bacteria quantification using immunomagnetic separation and electrochemical detection of guanine-labeled secondary beads. <i>Sensors</i> , 2015 , 15, 12034-52	3.8	35
138	A Novel PDMS Microfluidic Spotter for Fabrication of Protein Chips and Microarrays. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 1145-1151	2.5	35
137	Detergent screening of a G-protein-coupled receptor using serial and array biosensor technologies. <i>Analytical Biochemistry</i> , 2009 , 386, 98-104	3.1	34
136	Spatial DNA melting analysis for genotyping and variant scanning. <i>Analytical Chemistry</i> , 2009 , 81, 2053-87.8		34
135	A microfabricated electrical SPLITT system. <i>Lab on A Chip</i> , 2006 , 6, 105-14	7.2	34
134	Microfluidic integrated multi-walled carbon nanotube (MWCNT) sensor for electrochemical nucleic acid concentration measurement. <i>Sensors and Actuators B: Chemical</i> , 2013 , 185, 370-376	8.5	33
133	Electrostatic self-assembly of a ruthenium-based oxygen sensitive dye using polyion-dye interpolyelectrolyte formation. <i>Sensors and Actuators B: Chemical</i> , 2002 , 87, 336-345	8.5	33
132	Effects of rectangular microchannel aspect ratio on laminar friction constant 1999 ,		31
131	Cyclical electrical field flow fractionation. <i>Electrophoresis</i> , 2005 , 26, 1623-32	3.6	30
130	Modeling Carbon Nanotube Connectivity and Surface Activity in a Contact Lens Biofuel Cell. <i>Electrochimica Acta</i> , 2016 , 203, 30-40	6.7	30
129	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	2	29
128	Particulate and Dissolved Trace Element Concentrations in Three Southern Ecuador Rivers Impacted by Artisanal Gold Mining. <i>Water, Air, and Soil Pollution</i> , 2013 , 224, 1	2.6	28
127	In situ microarray fabrication and analysis using a microfluidic flow cell array integrated with surface plasmon resonance microscopy. <i>Analytical Chemistry</i> , 2009 , 81, 4296-301	7.8	28
126	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	2	28
125	Enzymatic Biofuel Cell with a Flow-through Toray Paper Bioanode for Improved Fuel Utilization. <i>Journal of the Electrochemical Society</i> , 2013 , 160, H612-H619	3.9	27
124	Exosome Isolation: Cyclical Electrical Field Flow Fractionation in Low-Ionic-Strength Fluids. <i>Analytical Chemistry</i> , 2018 , 90, 12783-12790	7.8	27
123	Nanoparticle characterization by cyclical electrical field-flow fractionation. <i>Analytical Chemistry</i> , 2011 , 83, 6565-72	7.8	26

122	Microfluidics: The future of microdissection TESE?. <i>Systems Biology in Reproductive Medicine</i> , 2016 , 62, 161-70	2.9	26
121	Flow-induced thermal effects on spatial DNA melting. <i>Lab on A Chip</i> , 2008 , 8, 1922-9	7.2	25
120	"Spot and hop": internal referencing for surface plasmon resonance imaging using a three-dimensional microfluidic flow cell array. <i>Analytical Biochemistry</i> , 2009 , 385, 309-13	3.1	24
119	Miniature Single-Disk Viscous Pump (Single-DVP), Performance Characterization. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2006 , 128, 602-610	2.1	24
118	Applications of microfluidics for molecular diagnostics. <i>Methods in Molecular Biology</i> , 2013 , 949, 305-34	1.4	23
117	Single-disk and double-disk viscous micropumps. <i>Sensors and Actuators A: Physical</i> , 2005 , 122, 149-158	3.9	23
116	Solution-phase DNA mutation scanning and SNP genotyping by nanoliter melting analysis. <i>Biomedical Microdevices</i> , 2007 , 9, 159-66	3.7	22
115	Controlled Delivery of FK506 to Improve Nerve Regeneration. <i>Shock</i> , 2016 , 46, 154-9	3.4	22
114	Electrical field-flow fractionation for metal nanoparticle characterization. <i>Analytical Chemistry</i> , 2012 , 84, 4993-8	7.8	20
113	Effect Of combining FK506 and neurotrophins on neurite branching and elongation. <i>Muscle and Nerve</i> , 2017 , 55, 570-581	3.4	19
112	An electrostatic microvalve for pneumatic control of microfluidic systems. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 025019	2	19
111	Biased cyclical electrical field flow fractionation for separation of sub 50 nm particles. <i>Analytical Chemistry</i> , 2013 , 85, 11225-32	7.8	18
110	Optimal conditions for protein array deposition using continuous flow. <i>Analytical Chemistry</i> , 2008 , 80, 8561-7	7.8	18
109	Geometric scaling effects on instrumental plate height in field flow fractionation. <i>Journal of Chromatography A</i> , 2006 , 1104, 282-90	4.5	18
108	Stable, ligand-doped, poly(bis-SorbPC) lipid bilayer arrays for protein binding and detection. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 1310-5	9.5	17
107	Improved continuous-flow print head for micro-array deposition. <i>Analytical Biochemistry</i> , 2008 , 382, 55-9	3.1	17
106	Patterning of a nanoporous membrane for multi-sample DNA extraction. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 33-39	2	16
105	Characterization of a microscale cyclical electrical field flow fractionation system. <i>Lab on A Chip</i> , 2006 , 6, 645-54	7.2	16

104	Effect of carrier ionic strength in microscale cyclical electrical field-flow fractionation. <i>Analytical Chemistry</i> , 2006 , 78, 2557-64	7.8	15
103	Platelet Function Analyzer: Shear Activation of Platelets in Microchannels. <i>Biomedical Microdevices</i> , 2003 , 5, 207-215	3.7	15
102	Photocatalytic microfluidic reactors utilizing titania nanotubes on titanium mesh for degradation of organic and biological contaminants. <i>Journal of Environmental Chemical Engineering</i> , 2016 , 4, 657-663	6.8	14
101	Novel drug delivering conduit for peripheral nerve regeneration. <i>Journal of Neural Engineering</i> , 2017 , 14, 066011	5	14
100	A disposable, continuous-flow polymerase chain reaction device: design, fabrication and evaluation. <i>Biomedical Microdevices</i> , 2016 , 18, 62	3.7	14
99	Characterization of polymerized liposomes using a combination of dc and cyclical electrical field-flow fractionation. <i>Analytical Chemistry</i> , 2012 , 84, 8323-9	7.8	13
98	Automated microfluidic DNA/RNA extraction with both disposable and reusable components. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 015007	2	13
97	Slip due to surface roughness for a Newtonian liquid in a viscous microscale disk pump. <i>Physics of Fluids</i> , 2010 , 22, 052002	4.4	13
96	Drug-delivering nerve conduit improves regeneration in a critical-sized gap. <i>Biotechnology and Bioengineering</i> , 2019 , 116, 143-154	4.9	13
95	Instrumentation for xPCR Incorporating qPCR and HRMA. <i>Analytical Chemistry</i> , 2018 , 90, 7190-7196	7.8	13
94	Anodized titania nanotube array microfluidic device for photocatalytic application: Experiment and simulation. <i>Applied Catalysis B: Environmental</i> , 2015 , 174-175, 167-175	21.8	12
93	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	3.7	12
92	Reduction of end effect-induced zone broadening in field-flow fractionation channels. <i>Analytical Chemistry</i> , 2006 , 78, 7978-85	7.8	12
91	Improved theory of cyclical electrical field flow fractionation. <i>Electrophoresis</i> , 2006 , 27, 2833-43	3.6	11
90	Controlled release of FK506 from micropatterned PLGA films: potential for application in peripheral nerve repair. <i>Neural Regeneration Research</i> , 2018 , 13, 1247-1252	4.5	11
89	Design and in vitro biocompatibility of a novel ocular drug delivery device. <i>Journal of Functional Biomaterials</i> , 2013 , 4, 14-26	4.8	10
88	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, 105-111	4.5	10
87	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	3.5	9

86	Design, fabrication and testing of a novel vascular coupling device. <i>Biomedical Microdevices</i> , 2014 , 16, 173-80	3.7	9
85	Diffusion Split-Flow Thin Cell (SPLITT) system for protein separations. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2012 , 902, 78-83	3.2	9
84	Anin situ heater for a phase-change-material-based actuation system. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 085039	2	9
83	Microscale Purification Systems for Biological Sample Preparation. <i>Biomedical Microdevices</i> , 2001 , 3, 211-218	3.7	9
82	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	6	9
81	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	2.3	9
80	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	7.8	8
79	Effect of Ionic and Nonionic Carriers in Electrical Field-Flow Fractionation. <i>Analytical Chemistry</i> , 2016 , 88, 1794-803	7.8	8
78	Electrochemical Detection of O157:H7 in Water after Electrocatalytic and Ultraviolet Treatments Using a Polyguanine-Labeled Secondary Bead Sensor. <i>Sensors</i> , 2018 , 18,	3.8	8
77	Circuit modification in electrical field flow fractionation systems generating higher resolution separation of nanoparticles. <i>Journal of Chromatography A</i> , 2014 , 1365, 164-72	4.5	8
76	Optimization of cyclical electrical field flow fractionation. <i>Electrophoresis</i> , 2010 , 31, 3372-9	3.6	8
75	Performance and Development of a Miniature Rotary Shaft Pump. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2005 , 127, 752-760	2.1	8
74	Nerve growth factor released from a novel PLGA nerve conduit can improve axon growth. <i>Journal of Micromechanics and Microengineering</i> , 2016 , 26, 045016	2	8
73	Sperm-like-particle (SLP) behavior in curved microfluidic channels. <i>Microfluidics and Nanofluidics</i> , 2019 , 23, 1	2.8	8
72	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	4.4	7
71	Biased cyclical electrical field-flow fractionation for separation of submicron particles. <i>Analytical and Bioanalytical Chemistry</i> , 2016 , 408, 855-63	4.4	7
70	Separation of Magnetic Nanoparticles by Cyclical Electrical Field Flow Fractionation. <i>IEEE Transactions on Magnetics</i> , 2013 , 49, 331-335	2	7
69	Simple and cost-effective fabrication of microvalve arrays in PDMS using laser cut molds with application to C. elegans manipulation in microfluidics. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 105007	2	7

68	Improved biomolecule microarrays by printing on nanoporous aluminum oxide using a continuous-flow microspotter. <i>Small</i> , 2010 , 6, 1415-21	11	7
67	Thermal gradient PCR in a continuous-flow microchip 2007 ,		7
66	Integrated optical glucose sensor fabricated using PDMS waveguides on a PDMS substrate 2004 , 5345, 98		7
65	A novel PDMS microfluidic spotter for fabrication of protein chips and microarrays 2005 ,		7
64	Viscoelastic second normal stress difference dominated multiple-stream particle focusing in microfluidic channels. <i>Applied Physics Letters</i> , 2019 , 115, 263702	3-4	7
63	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	11.8	6
62	A Novel Vascular Coupling System for End-to-End Anastomosis. <i>Cardiovascular Engineering and Technology</i> , 2015 , 6, 294-302	2.2	6
61	Local FK506 delivery at the direct nerve repair site improves nerve regeneration. <i>Muscle and Nerve</i> , 2019 , 60, 613-620	3-4	6
60	A novel method for effective field measurements in electrical field-flow fractionation. <i>Electrophoresis</i> , 2012 , 33, 1040-7	3.6	6
59	Characterization of a microscale thermal-electrical field-flow fractionation system. <i>Journal of Chromatography A</i> , 2012 , 1225, 174-81	4.5	6
58	Flexible fabrication, packaging, and detection approach for microscale chromatography systems. <i>Sensors and Actuators B: Chemical</i> , 2009 , 141, 316-321	8.5	6
57	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	6.5	6
56	Microscale Field-Flow Fractionation: Theory and Practice 2007 , 471-521		6
55	Vascular Coupling System for End-to-End Anastomosis: An In Vivo Pilot Case Report. <i>Cardiovascular Engineering and Technology</i> , 2017 , 8, 91-95	2.2	5
54	Microfluidic System for Rapid Isolation of Sperm From Microdissection TESE Specimens. <i>Urology</i> , 2020 , 140, 70-76	1.6	5
53	Quasi-digital PCR: Enrichment and quantification of rare DNA variants. <i>Biomedical Microdevices</i> , 2014 , 16, 639-44	3-7	5
52	Particle Based Modeling of Electrical Field Flow Fractionation Systems. <i>Chromatography (Basel)</i> , 2015 , 2, 594-610		5
51	Low-Cost MEMS Technologies 2008 , 341-378		5

50	Spin-assembled nanofilms for gaseous oxygen sensing. <i>Sensors and Actuators B: Chemical</i> , 2007 , 120, 426-433	8.5	5
49	Integrated optical biochemical sensor fabricated using rapid-prototyping techniques 2003 ,		5
48	Micro-structure mechanical failure characterization using rotating Couette flow in a small gap. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 792-801	2	5
47	Optimization of Dean flow microfluidic chip for sperm preparation for intrauterine insemination. <i>Microfluidics and Nanofluidics</i> , 2020 , 24, 1	2.8	5
46	High efficiency rare sperm separation from biopsy samples in an inertial focusing device. <i>Analyst, The</i> , 2021 , 146, 3368-3377	5	5
45	Microfluidic-aided genotyping of zebrafish in the first 48 h with 100% viability. <i>Biomedical Microdevices</i> , 2015 , 17, 43	3.7	4
44	Maximizing Fibroblast Adhesion on Protein-Coated Surfaces Using Microfluidic Cell Printing. <i>RSC Advances</i> , 2015 , 5, 104101-104109	3.7	4
43	Endocapsular carousel technique phacoemulsification. <i>Journal of Cataract and Refractive Surgery</i> , 2011 , 37, 433-7	2.3	4
42	Cyclical magnetic field flow fractionation. <i>Journal of Applied Physics</i> , 2012 , 111, 07D128	2.5	4
41	Design, fabrication, and packaging of a practical multianalyte-capable optical biosensor. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2006 , 5, 021105	0.7	4
40	Optimization of a microfluidic spiral channel used to separate sperm from blood cells. <i>Biomicrofluidics</i> , 2020 , 14, 064103	3.2	4
39	Enhanced chromosome extraction from cells using a pinched flow microfluidic device. <i>Biomedical Microdevices</i> , 2020 , 22, 25	3.7	3
38	Designing a Novel Drug Delivering Nerve Guide: A Preliminary Study. <i>Journal of Medical and Biological Engineering</i> , 2019 , 39, 294-304	2.2	3
37	A New Vascular Coupler Design for End-to-End Anastomosis: Fabrication and Proof-of-Concept Evaluation. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015 , 9,	1.3	3
36	Microfluidic laminate-based phantom for diffusion tensor-magnetic resonance imaging (DT-MRI). <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 950271-9502711	2	3
35	Use of a highly parallel microfluidic flow cell array to determine therapeutic drug dose response curves. <i>Biomedical Microdevices</i> , 2017 , 19, 25	3.7	2
34	An automated instrument for intrauterine insemination sperm preparation. <i>Scientific Reports</i> , 2020 , 10, 21385	4.9	2
33	Optimization and characterization of a microscale thermal field-flow fractionation system. <i>Sensors and Actuators B: Chemical</i> , 2012 , 162, 223-228	8.5	2

32	Vaccine Delivery: Nanocomposite-Strengthened Dissolving Microneedles for Improved Transdermal Delivery to Human Skin (Adv. Healthcare Mater. 4/2014). <i>Advanced Healthcare Materials</i> , 2014 , 3, 462-462 ^{10.1}	2
31	New approaches to bridge nerve gaps: development of a novel drug-delivering nerve conduit. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2012 , 2012, 747-50	0.9 2
30	Platinum functionalized titania nanotube array sensor for detection of Trichloroethylene in water 2013 ,	2
29	Sample to answer: a fully integrated nucleic acid identification system for bacteria monitoring 2010 ,	2
28	Expanding the introduction of microfluidics through a problem-based laboratory course to multiple engineering disciplines at five universities 2010 ,	2
27	Depth measurement in fully enclosed microchannels using laser interferometry. <i>Measurement Science and Technology</i> , 2012 , 23, 087004	2 2
26	Nanoparticle analysis using microscale field flow fractionation 2007 ,	2
25	BioMEMS Education at Louisiana Tech University. <i>Biomedical Microdevices</i> , 2002 , 4, 223-230	3.7 2
24	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,	1.3 2
23	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	6.2 2
22	Viscoelastic Particle Focusing and Separation in a Spiral Channel.. <i>Micromachines</i> , 2022 , 13,	3.3 2
21	A Biodegradable Vascular Coupling Device for End-to-End Anastomosis. <i>Journal of Medical and Biological Engineering</i> , 2018 , 38, 715-723	2.2 1
20	The submerged printing of cells onto a modified surface using a continuous flow microspotter. <i>Journal of Visualized Experiments</i> , 2014 ,	1.6 1
19	Electrochemical quantification of DNA using aluminum oxide membranes. <i>Procedia Engineering</i> , 2011 , 25, 713-716	1
18	Design and fabrication of a multianalyte-capable optical biosensor using a multiphysics approach	1
17	Microfluidic DNA extraction using a patterned aluminum oxide membrane 2006 , 6112, 167	1
16	Flexible coupling of a waveguide detector with a microscale field flow fractionation device 2004 , 5345, 250	1
15	Electrical conductivity particle detector for use in biological and chemical micro-analysis systems 1998 , 3515, 230	1

14	Size and shape based chromosome separation in the inertial focusing device. <i>Biomicrofluidics</i> , 2020 , 14, 064109	3.2	1
13	Characteristics of electrical field flow fractionation with chronoamperometry and electrochemical impedance. <i>Micro and Nano Letters</i> , 2020 , 15, 13-17	0.9	1
12	Viral Separations Using a Microfabricated Electrical Splitt System 2002 , 584-586		1
11	Development and Testing of a Continuous Flow-Electrical-Split-Flow Lateral Transport Thin Separation System (Fl-El-SPLITT). <i>Analytical Chemistry</i> , 2021 , 93, 2888-2897	7.8	1
10	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	2	1
9	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	4.9	1
8	AUTHOR REPLY. <i>Urology</i> , 2020 , 140, 75-76	1.6	
7	Design, fabrication, and testing of a novel end-to-end vascular coupling system. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 6593-6	0.9	
6	Microfluidic devices for rapid and sensitive identification of organisms. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2014 , 2014, 774-7	0.9	
5	Parallel determination of phenotypic cytotoxicity with a micropattern of mutant cell lines. <i>Biomedical Microdevices</i> , 2009 , 11, 443-52	3.7	
4	Performance and Development of a Miniature Rotary Shaft Pump (RSP) 2004 , 705		
3	Experiment, theory, and simulation of a flow-electrical-split flow thin particle separation device. <i>Journal of Chromatography A</i> , 2021 , 1659, 462634	4.5	
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