

Hywel Morgan

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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.

249
papers

13,173
citations

60
h-index

106
g-index

271
ext. papers

14,785
ext. citations

4.8
avg, IF

6.57
L-index

#	Paper	IF	Citations
249	Ac electrokinetics: a review of forces in microelectrode structures. <i>Journal Physics D: Applied Physics</i> , 1998 , 31, 2338-2353	3	903
248	Electrohydrodynamics and dielectrophoresis in microsystems: scaling laws. <i>Journal Physics D: Applied Physics</i> , 2003 , 36, 2584-2597	3	493
247	Superhydrophobicity and superhydrophilicity of regular nanopatterns. <i>Nano Letters</i> , 2005 , 5, 2097-103	11.5	433
246	Separation of submicron bioparticles by dielectrophoresis. <i>Biophysical Journal</i> , 1999 , 77, 516-25	2.9	419
245	Single-cell microfluidic impedance cytometry: a review. <i>Microfluidics and Nanofluidics</i> , 2010 , 8, 423-443	2.8	374
244	AC Electric-Field-Induced Fluid Flow in Microelectrodes. <i>Journal of Colloid and Interface Science</i> , 1999 , 217, 420-422	9.3	374
243	Leukocyte analysis and differentiation using high speed microfluidic single cell impedance cytometry. <i>Lab on A Chip</i> , 2009 , 9, 2881-9	7.2	306
242	Recent developments in 2D layered inorganic nanomaterials for sensing. <i>Nanoscale</i> , 2015 , 7, 13293-312	7.7	305
241	Single cell dielectric spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2007 , 40, 61-70	3	281
240	Electrothermally induced fluid flow on microelectrodes. <i>Journal of Electrostatics</i> , 2001 , 53, 71-87	1.7	218
239	Dielectrophoresis of Submicrometer Latex Spheres. 1. Experimental Results. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 41-50	3.4	197
238	The electrokinetic properties of latex particles: comparison of electrophoresis and dielectrophoresis. <i>Journal of Colloid and Interface Science</i> , 2005 , 285, 419-28	9.3	189
237	Dielectrophoretic manipulation of rod-shaped viral particles. <i>Journal of Electrostatics</i> , 1997 , 42, 279-293	1.7	184
236	Ac electrokinetics: a survey of sub-micrometre particle dynamics. <i>Journal Physics D: Applied Physics</i> , 2000 , 33, 632-641	3	172
235	The dielectrophoretic and travelling wave forces generated by interdigitated electrode arrays: analytical solution using Fourier series. <i>Journal Physics D: Applied Physics</i> , 2001 , 34, 1553-1561	3	159
234	Synergistic and hierarchical adhesive and topographic guidance of BHK cells. <i>Experimental Cell Research</i> , 1996 , 228, 313-25	4.2	147
233	Negative DEP traps for single cell immobilisation. <i>Lab on A Chip</i> , 2009 , 9, 1534-40	7.2	137

232	Manipulation and trapping of sub-micron bioparticles using dielectrophoresis. <i>Journal of Proteomics</i> , 1997 , 35, 89-102		137
231	High throughput particle analysis: combining dielectrophoretic particle focussing with confocal optical detection. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1621-30	11.8	131
230	Dielectrophoretic separation of nano-particles. <i>Journal Physics D: Applied Physics</i> , 1997 , 30, L41-L44	3	128
229	Single cell impedance cytometry for identification and counting of CD4 T-cells in human blood using impedance labels. <i>Analytical Chemistry</i> , 2010 , 82, 1455-61	7.8	127
228	Electrothermal flows generated by alternating and rotating electric fields in microsystems. <i>Journal of Fluid Mechanics</i> , 2006 , 564, 415	3.7	127
227	Programmable large area digital microfluidic array with integrated droplet sensing for bioassays. <i>Lab on A Chip</i> , 2012 , 12, 3305-13	7.2	126
226	Lab-on-chip measurement of nitrate and nitrite for in situ analysis of natural waters. <i>Environmental Science & Technology</i> , 2012 , 46, 9548-56	10.3	124
225	Numerical solution of the dielectrophoretic and travelling wave forces for interdigitated electrode arrays using the finite element method. <i>Journal of Electrostatics</i> , 2002 , 56, 235-254	1.7	122
224	Manipulation of herpes simplex virus type 1 by dielectrophoresis. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1998 , 1425, 119-26	4	118
223	Microparticle encoding technologies for high-throughput multiplexed suspension assays. <i>Integrative Biology (United Kingdom)</i> , 2009 , 1, 345-62	3.7	115
222	Models for interpreting surface potential measurements and their application to phospholipid monolayers. <i>Journal of Colloid and Interface Science</i> , 1990 , 139, 508-518	9.3	112
221	Binding of anionic lipids to at least three nonannular sites on the potassium channel KcsA is required for channel opening. <i>Biophysical Journal</i> , 2008 , 94, 1689-98	2.9	107
220	Separation of submicrometre particles using a combination of dielectrophoretic and electrohydrodynamic forces. <i>Journal Physics D: Applied Physics</i> , 1998 , 31, L25-L30	3	105
219	Micro-impedance cytometry for detection and analysis of micron-sized particles and bacteria. <i>Lab on A Chip</i> , 2011 , 11, 407-12	7.2	102
218	Micron-Scale Patterning of Biological Molecules. <i>Angewandte Chemie International Edition in English</i> , 1995 , 34, 91-93		102
217	The dielectrophoretic levitation and separation of latex beads in microchips. <i>Electrophoresis</i> , 2001 , 22, 3893-901	3.6	96
216	Large-area travelling-wave dielectrophoresis particle separator. <i>Journal of Micromechanics and Microengineering</i> , 1997 , 7, 65-70	2	94
215	Dielectrophoretic investigations of sub-micrometre latex spheres. <i>Journal Physics D: Applied Physics</i> , 1997 , 30, 2626-2633	3	90

214	Thin film polycrystalline silicon nanowire biosensors. <i>Nano Letters</i> , 2012 , 12, 1868-72	11.5	89
213	Electric field induced fluid flow on microelectrodes: the effect of illumination. <i>Journal Physics D: Applied Physics</i> , 2000 , 33, L13-L17	3	89
212	Dielectrophoretic trapping of single sub-micrometre scale bioparticles. <i>Journal Physics D: Applied Physics</i> , 1998 , 31, 2205-2210	3	89
211	High speed multi-frequency impedance analysis of single particles in a microfluidic cytometer using maximum length sequences. <i>Lab on A Chip</i> , 2007 , 7, 1034-40	7.2	88
210	Dielectric spectroscopy of single cells: time domain analysis using Maxwell's mixture equation. <i>Journal Physics D: Applied Physics</i> , 2007 , 40, 1-8	3	87
209	Bead-based immunoassays using a micro-chip flow cytometer. <i>Lab on A Chip</i> , 2007 , 7, 1048-56	7.2	83
208	Microfluidic colourimetric chemical analysis system: Application to nitrite detection. <i>Analytical Methods</i> , 2010 , 2, 484	3.2	81
207	The Dielectrophoretic Behavior of Submicron Latex Spheres: Influence of Surface Conductance. <i>Journal of Colloid and Interface Science</i> , 1999 , 220, 454-457	9.3	81
206	In vivo oxygen, temperature and pH dynamics in the female reproductive tract and their importance in human conception: a systematic review. <i>Human Reproduction Update</i> , 2018 , 24, 15-34	15.8	78
205	Measuring the dielectric properties of herpes simplex virus type 1 virions with dielectrophoresis. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2002 , 1571, 1-8	4	78
204	Rapid and sensitive detection of antibiotic resistance on a programmable digital microfluidic platform. <i>Lab on A Chip</i> , 2015 , 15, 3065-75	7.2	77
203	Integrated systems for rapid point of care (PoC) blood cell analysis. <i>Lab on A Chip</i> , 2011 , 11, 1249-55	7.2	76
202	Electrophysiological characterization of membrane disruption by nanoparticles. <i>ACS Nano</i> , 2011 , 5, 3599-606	16.0	73
201	Cell reactions to dielectrophoretic manipulation. <i>Biochemical and Biophysical Research Communications</i> , 1999 , 257, 687-98	3.4	73
200	Alternating current electrokinetic properties of gold-coated microspheres. <i>Langmuir</i> , 2012 , 28, 13861-70	4	72
199	A surface plasmon resonance immunosensor based on the streptavidin-biotin complex. <i>Biosensors and Bioelectronics</i> , 1992 , 7, 405-10	11.8	70
198	On-chip electrical impedance tomography for imaging biological cells. <i>Biosensors and Bioelectronics</i> , 2010 , 25, 1109-15	11.8	69
197	Design and fabrication of travelling wave dielectrophoresis structures. <i>Journal of Micromechanics and Microengineering</i> , 2000 , 10, 72-79	2	69

196	Continuous differential impedance spectroscopy of single cells. <i>Microfluidics and Nanofluidics</i> , 2010 , 9, 191-198	2.8	68
195	Dielectrophoretic Characterization and Separation of Antibody-Coated Submicrometer Latex Spheres. <i>Analytical Chemistry</i> , 1999 , 71, 3441-3445	7.8	68
194	Broadband single cell impedance spectroscopy using maximum length sequences: theoretical analysis and practical considerations. <i>Measurement Science and Technology</i> , 2007 , 18, 2859-2868	2	66
193	Microdevices for dielectrophoretic flow-through cell separation. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2003 , 22, 85-90		65
192	Formation of artificial lipid bilayers using droplet dielectrophoresis. <i>Lab on A Chip</i> , 2008 , 8, 1617-20	7.2	64
191	Proton transport at the monolayer-water interface. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1991 , 1062, 149-56	3.8	62
190	High speed simultaneous single particle impedance and fluorescence analysis on a chip. <i>Current Applied Physics</i> , 2006 , 6, 367-370	2.6	60
189	Controlled delivery of proteins into bilayer lipid membranes on chip. <i>Lab on A Chip</i> , 2007 , 7, 1176-83	7.2	58
188	Positional dependence of particles in microfluidic impedance cytometry. <i>Lab on A Chip</i> , 2011 , 11, 1234-9	7.2	57
187	Microfluidic array platform for simultaneous lipid bilayer membrane formation. <i>Biosensors and Bioelectronics</i> , 2009 , 24, 1235-40	11.8	57
186	Microfluidic lysis of human blood for leukocyte analysis using single cell impedance cytometry. <i>Analytical Chemistry</i> , 2012 , 84, 1070-5	7.8	56
185	Patterning and regeneration of surfaces with antibodies. <i>Analytical Chemistry</i> , 1995 , 67, 3605-7	7.8	56
184	Dielectrophoretic investigation of plant virus particles: Cow Pea Mosaic Virus and Tobacco Mosaic Virus. <i>Electrophoresis</i> , 2006 , 27, 3939-48	3.6	55
183	Experiments on AC electrokinetic pumping of liquids using arrays of microelectrodes. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2006 , 13, 670-677	2.3	55
182	Dielectrophoretic manipulation and characterization of herpes simplex virus-1 capsids. <i>European Biophysics Journal</i> , 2001 , 30, 268-72	1.9	55
181	Electrorotation of metallic microspheres. <i>Langmuir</i> , 2011 , 27, 2128-31	4	51
180	An automated microfluidic colourimetric sensor applied in situ to determine nitrite concentration. <i>Sensors and Actuators B: Chemical</i> , 2011 , 156, 1009-1014	8.5	51
179	ANALYTICAL AND NUMERICAL MODELING METHODS FOR IMPEDANCE ANALYSIS OF SINGLE CELLS ON-CHIP. <i>Nano</i> , 2008 , 03, 55-63	1.1	51

178	The role of electrohydrodynamic forces in the dielectrophoretic manipulation and separation of particles. <i>Journal of Electrostatics</i> , 1999 , 47, 71-81	1.7	51
177	High accuracy particle analysis using sheathless microfluidic impedance cytometry. <i>Lab on A Chip</i> , 2016 , 16, 2467-73	7.2	50
176	Substrate arrays of iridium oxide microelectrodes for in vitro neuronal interfacing. <i>Frontiers in Neuroengineering</i> , 2009 , 2, 1		49
175	Surface plasmon resonance studies of chemisorbed biotin-streptavidin multilayers. <i>Thin Solid Films</i> , 1992 , 209, 122-126	2.2	49
174	AC electrokinetics of conducting microparticles: A review. <i>Current Opinion in Colloid and Interface Science</i> , 2016 , 24, 79-90	7.6	48
173	Chemically resistant microfluidic valves from Viton [®] membranes bonded to COC and PMMA. <i>Lab on A Chip</i> , 2011 , 11, 2455-9	7.2	48
172	Analytical solutions of ac electrokinetics in interdigitated electrode arrays: electric field, dielectrophoretic and traveling-wave dielectrophoretic forces. <i>Physical Review E</i> , 2007 , 76, 046610	2.4	48
171	Simultaneous determination of follicle stimulating hormone and luteinising hormone using a multianalyte immunosensor. <i>Analytica Chimica Acta</i> , 1995 , 310, 251-256	6.6	48
170	Microfluidic impedance cytometry of tumour cells in blood. <i>Biomicrofluidics</i> , 2014 , 8, 064124	3.2	47
169	Nanomolar detection with high sensitivity microfluidic absorption cells manufactured in tinted PMMA for chemical analysis. <i>Talanta</i> , 2011 , 84, 235-9	6.2	46
168	Interdroplet bilayer arrays in millifluidic droplet traps from 3D-printed moulds. <i>Lab on A Chip</i> , 2014 , 14, 722-9	7.2	45
167	Air-exposure technique for the formation of artificial lipid bilayers in microsystems. <i>Langmuir</i> , 2007 , 23, 8277-84	4	45
166	Personal respirators for population level control of the COVID19 pandemic. <i>Journal of Infection</i> , 2020 , 81, 318-356	18.9	44
165	On-chip epithelial barrier function assays using electrical impedance spectroscopy. <i>Lab on A Chip</i> , 2010 , 10, 1611-7	7.2	43
164	A highly specific Escherichia coli qPCR and its comparison with existing methods for environmental waters. <i>Water Research</i> , 2017 , 126, 101-110	12.5	42
163	A sheath-less combined optical and impedance micro-cytometer. <i>Lab on A Chip</i> , 2014 , 14, 3064-73	7.2	41
162	High-Speed Single-Cell Dielectric Spectroscopy. <i>ACS Sensors</i> , 2020 , 5, 423-430	9.2	40
161	Simultaneous high speed optical and impedance analysis of single particles with a microfluidic cytometer. <i>Lab on A Chip</i> , 2012 , 12, 118-26	7.2	40

160	Impedance spectroscopy using maximum length sequences: application to single cell analysis. <i>Review of Scientific Instruments</i> , 2007 , 78, 054301	1.7	40
159	Temporal Monitoring of Differentiated Human Airway Epithelial Cells Using Microfluidics. <i>PLoS ONE</i> , 2015 , 10, e0139872	3.7	39
158	A Miniature, High Precision Conductivity and Temperature Sensor System for Ocean Monitoring. <i>IEEE Sensors Journal</i> , 2011 , 11, 3246-3252	4	39
157	Ultra-fast electronic detection of antimicrobial resistance genes using isothermal amplification and Thin Film Transistor sensors. <i>Biosensors and Bioelectronics</i> , 2017 , 96, 281-287	11.8	38
156	Photo-patterning of sensor surfaces with biomolecular structures: characterisation using AFM and fluorescence microscopy. <i>Biosensors and Bioelectronics</i> , 1995 , 10, 841-6	11.8	38
155	The surface potential of monolayers formed on weak acidic electrolytes: Implications for lateral conduction. <i>Chemical Physics Letters</i> , 1989 , 161, 147-150	2.5	38
154	A fast impedance-based antimicrobial susceptibility test. <i>Nature Communications</i> , 2020 , 11, 5328	17.4	38
153	Real-time microfluidic recombinase polymerase amplification for the toxin B gene of <i>Clostridium difficile</i> on a SlipChip platform. <i>Analyst, The</i> , 2015 , 140, 258-64	5	37
152	Flow reversal in traveling-wave electrokinetics: an analysis of forces due to ionic concentration gradients. <i>Langmuir</i> , 2009 , 25, 4988-97	4	37
151	Trapping single human osteoblast-like cells from a heterogeneous population using a dielectrophoretic microfluidic device. <i>Biomicrofluidics</i> , 2010 , 4,	3.2	37
150	Traveling-wave electrokinetic micropumps: velocity, electrical current, and impedance measurements. <i>Langmuir</i> , 2008 , 24, 9361-9	4	37
149	Two-dimensional proton conduction at a membrane surface: Influence of molecular packing and hydrogen bonding. <i>Chemical Physics Letters</i> , 1988 , 150, 311-314	2.5	37
148	Electro-orientation and electrorotation of metal nanowires. <i>Physical Review E</i> , 2013 , 88, 063018	2.4	36
147	Single-colloidal particle impedance spectroscopy: complete equivalent circuit analysis of polyelectrolyte microcapsules. <i>Langmuir</i> , 2010 , 26, 3821-8	4	36
146	High density patterns fabricated in SU-8 by UV curing nanoimprint. <i>Microelectronic Engineering</i> , 2007 , 84, 872-876	2.5	36
145	Measurement of bacterial flagellar thrust by negative dielectrophoresis. <i>Biotechnology Progress</i> , 1999 , 15, 245-9	2.8	36
144	One-Step Electrodeposition of NiCo ₂ S ₄ Nanosheets on Patterned Platinum Electrodes for Non-Enzymatic Glucose Sensing. <i>Chemistry - an Asian Journal</i> , 2016 , 11, 1837-41	4.5	36
143	Characterisation of an irreversible bonding process for COC π OC and COC β DMS π OC sandwich structures and application to microvalves. <i>Sensors and Actuators B: Chemical</i> , 2011 , 160, 1473-1480	8.5	35

142	Electrorotation studies of baby hamster kidney fibroblasts infected with herpes simplex virus type 1. <i>Biophysical Journal</i> , 1999 , 76, 2833-42	2.9	35
141	Controlling the wettability of hierarchically structured thermoplastics. <i>Langmuir</i> , 2012 , 28, 896-904	4	34
140	Digital signal processing methods for impedance microfluidic cytometry. <i>Microfluidics and Nanofluidics</i> , 2009 , 6, 179-187	2.8	34
139	Rapid fabrication of polymer microfluidic systems for the production of artificial lipid bilayers. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, S139-S144	2	33
138	Mechanical phenotyping of primary human skeletal stem cells in heterogeneous populations by real-time deformability cytometry. <i>Integrative Biology (United Kingdom)</i> , 2016 , 8, 616-23	3.7	33
137	Rapid rotation of micron and submicron dielectric particles measured using optical tweezers. <i>Journal of Modern Optics</i> , 2003 , 50, 1539-1554	1.1	32
136	Amperometric IFN- γ immunosensors with commercially fabricated PCB sensing electrodes. <i>Biosensors and Bioelectronics</i> , 2016 , 86, 805-810	11.8	32
135	Diffractive micro bar codes for encoding of biomolecules in multiplexed assays. <i>Analytical Chemistry</i> , 2008 , 80, 1902-9	7.8	31
134	Shaped apertures in photoresist films enhance the lifetime and mechanical stability of suspended lipid bilayers. <i>Biophysical Journal</i> , 2014 , 106, 1650-9	2.9	30
133	The effect of water quality on the electrical characteristics of Langmuir monolayers. <i>Thin Solid Films</i> , 1989 , 173, L141-L147	2.2	30
132	A proton-injecting technique for the measurement of hydration-dependent protonic conductivity. <i>Journal of Physics E: Scientific Instruments</i> , 1986 , 19, 80-82		30
131	Label-free enrichment of primary human skeletal progenitor cells using deterministic lateral displacement. <i>Lab on A Chip</i> , 2019 , 19, 513-523	7.2	28
130	AC electrokinetic biased deterministic lateral displacement for tunable particle separation. <i>Lab on A Chip</i> , 2019 , 19, 1386-1396	7.2	28
129	Protonic and ionic conduction in lysozyme. Hydration and field-dependent effects. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1986 , 82, 143		28
128	Surface and Electrical Characterization of Ag/AgCl Pseudo-Reference Electrodes Manufactured with Commercially Available PCB Technologies. <i>Sensors</i> , 2015 , 15, 18102-13	3.8	26
127	Micromachined glass apertures for artificial lipid bilayer formation in a microfluidic system. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, S189-S196	2	26
126	Air-trapping on biocompatible nanopatterns. <i>Langmuir</i> , 2006 , 22, 11230-3	4	26
125	NeuroChip: a microfluidic electrophysiological device for genetic and chemical biology screening of <i>Caenorhabditis elegans</i> adult and larvae. <i>PLoS ONE</i> , 2013 , 8, e64297	3.7	26

124	Multistep synthesis on SU-8: combining microfabrication and solid-phase chemistry on a single material. <i>ACS Combinatorial Science</i> , 2007 , 9, 462-72		25
123	Polarity-dependent voltage-gated porin channels from <i>Escherichia coli</i> in lipid bilayer membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1990 , 1021, 175-81	3.8	25
122	Electroporation and lysis of marine microalga <i>Karenia brevis</i> for RNA extraction and amplification. <i>Journal of the Royal Society Interface</i> , 2011 , 8, 601-8	4.1	24
121	Characterization of chemisorbed monolayers by surface potential measurements. <i>Journal Physics D: Applied Physics</i> , 1991 , 24, 1443-1450	3	24
120	Low-Cost Nanoribbon Sensors for Protein Analysis in Human Serum Using a Miniature Bead-Based Enzyme-Linked Immunosorbent Assay. <i>Analytical Chemistry</i> , 2016 , 88, 4872-8	7.8	24
119	A Novel Microfluidic Point-of-Care Biosensor System on Printed Circuit Board for Cytokine Detection. <i>Sensors</i> , 2018 , 18,	3.8	24
118	Cellular crosstalk between airway epithelial and endothelial cells regulates barrier functions during exposure to double-stranded RNA. <i>Immunity, Inflammation and Disease</i> , 2017 , 5, 45-56	2.4	23
117	Electric-field-induced rotation of Brownian metal nanowires. <i>Physical Review E</i> , 2013 , 88, 033025	2.4	23
116	A Programmable Digital Microfluidic Assay for the Simultaneous Detection of Multiple Anti-Microbial Resistance Genes. <i>Micromachines</i> , 2017 , 8, 111	3.3	23
115	Bilayer lipid membranes from falling droplets. <i>Analytical and Bioanalytical Chemistry</i> , 2009 , 393, 1601-5	4.4	23
114	Lateral conduction at a monolayer-water interface. <i>Thin Solid Films</i> , 1989 , 178, 73-79	2.2	23
113	Comparison of venous and capillary differential leukocyte counts using a standard hematology analyzer and a novel microfluidic impedance cytometer. <i>PLoS ONE</i> , 2012 , 7, e43702	3.7	22
112	Electrorotation of titanium microspheres. <i>Electrophoresis</i> , 2013 , 34, 979-86	3.6	22
111	Design, simulation and characterisation of integrated optics for a microfabricated flow cytometer. <i>Optics Communications</i> , 2010 , 283, 1987-1992	2	22
110	On-chip cavity-enhanced absorption spectroscopy using a white light-emitting diode and polymer mirrors. <i>Lab on A Chip</i> , 2015 , 15, 711-7	7.2	21
109	A Distributed Amplifier System for Bilayer Lipid Membrane (BLM) Arrays With Noise and Individual Offset Cancellation. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2015 , 9, 334-44	5.1	21
108	Temporal optimization of microfluidic colorimetric sensors by use of multiplexed stop-flow architecture. <i>Analytical Chemistry</i> , 2011 , 83, 4814-21	7.8	21
107	Interconnected reversible lab-on-a-chip technology. <i>Lab on A Chip</i> , 2002 , 2, 65-9	7.2	21

106	Simple and rapid sample preparation system for the molecular detection of antibiotic resistant pathogens in human urine. <i>Biomedical Microdevices</i> , 2016 , 18, 18	3.7	20
105	A fluorogenic heterogeneous immunoassay for cardiac muscle troponin cTnI on a digital microfluidic device. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 5967-76	4.4	20
104	Size and dielectric properties of skeletal stem cells change critically after enrichment and expansion from human bone marrow: consequences for microfluidic cell sorting. <i>Journal of the Royal Society Interface</i> , 2017 , 14,	4.1	20
103	Design and fabrication of an ac-electro-osmosis micropump with 3D high-aspect-ratio electrodes using only SU-8. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 035018	2	20
102	Parallel Recording of Single Ion Channels: A Heterogeneous System Approach. <i>IEEE Nanotechnology Magazine</i> , 2010 , 9, 295-302	2.6	20
101	Real-time isothermal RNA amplification of toxic marine microalgae using preserved reagents on an integrated microfluidic platform. <i>Analyst, The</i> , 2013 , 138, 593-602	5	19
100	Self-assembly of metal nanowires induced by alternating current electric fields. <i>Applied Physics Letters</i> , 2015 , 106, 023110	3.4	19
99	Control of two-phase flow in a microfluidic system using ac electric fields. <i>Applied Physics Letters</i> , 2007 , 91, 254107	3.4	19
98	Image-based sorting and negative dielectrophoresis for high purity cell and particle separation. <i>Electrophoresis</i> , 2019 , 40, 2718-2727	3.6	18
97	An Assay System for Point-of-Care Diagnosis of Tuberculosis using Commercially Manufactured PCB Technology. <i>Scientific Reports</i> , 2017 , 7, 685	4.9	18
96	Droplet-based in situ compartmentalization of chemically separated components after isoelectric focusing in a Slipchip. <i>Lab on A Chip</i> , 2014 , 14, 555-61	7.2	17
95	Towards molecular computing: co-development of microfluidic devices and chemical reaction media. <i>BioSystems</i> , 2012 , 109, 18-23	1.9	17
94	Measuring the frequency dependent polarizability of colloidal particles from dielectrophoretic collection data. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2001 , 8, 566-571	2.3	17
93	Three-Mask Polysilicon Thin-Film Transistor Biosensor. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 2170-2176	2.9	16
92	Single-channel electrophysiology of cell-free expressed ion channels by direct incorporation in lipid bilayers. <i>Analyst, The</i> , 2013 , 138, 7294-8	5	16
91	Cell-free protein expression systems in microdroplets: Stabilization of interdroplet bilayers. <i>Biomicrofluidics</i> , 2013 , 7, 14108	3.2	16
90	On-chip real-time nucleic acid sequence-based amplification for RNA detection and amplification. <i>Analytical Methods</i> , 2011 , 3, 2127	3.2	16
89	Fabrication of diffraction-encoded micro-particles using nano-imprint lithography. <i>Journal of Micromechanics and Microengineering</i> , 2007 , 17, S116-S121	2	16

88	Skeletal stem cell isolation: A review on the state-of-the-art microfluidic label-free sorting techniques. <i>Biotechnology Advances</i> , 2016 , 34, 908-923	17.8	16
87	Low-cost top-down zinc oxide nanowire sensors through a highly transferable ion beam etching for healthcare applications. <i>Microelectronic Engineering</i> , 2016 , 153, 96-100	2.5	15
86	Surface plasmon resonance microscopy: Reconstructing a three-dimensional image. <i>Applied Physics Letters</i> , 1994 , 64, 1330-1331	3.4	15
85	The electrochemical 4-chlorophenol sensing properties of a plasma-treated multilayer graphene modified photolithography patterned platinum electrode. <i>RSC Advances</i> , 2016 , 6, 105920-105929	3.7	14
84	Electro-orientation of a metal nanowire counterbalanced by thermal torques. <i>Physical Review E</i> , 2014 , 89, 062306	2.4	14
83	Kinetics and thermodynamics of biotinylated oligonucleotide probe binding to particle-immobilized avidin and implications for multiplexing applications. <i>Analytical Chemistry</i> , 2011 , 83, 2005-11	7.8	14
82	Characterization of non-spherical polymer particles by combined electrorotation and electroorientation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011 , 376, 67-71	5.1	14
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