

Shizhi Qian

List of Publications by Year in Descending Order

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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.

154
papers

5,211
citations

42
h-index

62
g-index

159
ext. papers

5,833
ext. citations

4.9
avg, IF

5.89
L-index

#	Paper	IF	Citations
154	A hand-held, real-time, AI-assisted capillary convection PCR system for point-of-care diagnosis of African swine fever virus. <i>Sensors and Actuators B: Chemical</i> , 2022 , 358, 131476	8.5	0
153	Electroosmotic Flow of Viscoelastic Fluid through a Constriction Microchannel. <i>Micromachines</i> , 2021 , 12,	3.3	4
152	Tunable-Focus Liquid Lens through Charge Injection. <i>Micromachines</i> , 2020 , 11,	3.3	2
151	Biomimetic metal-organic nanoparticles prepared with a 3D-printed microfluidic device as a novel formulation for disulfiram-based therapy against breast cancer. <i>Applied Materials Today</i> , 2020 , 18,	6.6	17
150	Free convective PCR: From principle study to commercial applications-A critical review. <i>Analytica Chimica Acta</i> , 2020 , 1108, 177-197	6.6	16
149	Tuning Ion Transport through a Nanopore by Self-Oscillating Chemical Reactions. <i>Analytical Chemistry</i> , 2019 , 91, 4600-4607	7.8	6
148	Computational Design of a Single Heater Convective Polymerase Chain Reaction for Point-of-Care. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2019 , 13,	1.3	5
147	Real-time capillary convective PCR based on horizontal thermal convection. <i>Microfluidics and Nanofluidics</i> , 2019 , 23, 1	2.8	15
146	Electroosmotic Flow of Viscoelastic Fluid in a Nanochannel Connecting Two Reservoirs. <i>Micromachines</i> , 2019 , 10,	3.3	5
145	Preparation of giant lipid vesicles with controllable sizes by a modified hydrophilic polydimethylsiloxane microarray chip. <i>Journal of Colloid and Interface Science</i> , 2019 , 536, 53-61	9.3	6
144	Mechanical response of an epithelial island subject to uniaxial stretch on a hybrid silicone substrate. <i>Cellular and Molecular Bioengineering</i> , 2019 , 12, 33-40	3.9	2
143	Effect of pharmacological modulation of actin and myosin on collective cell electrotaxis. <i>Bioelectromagnetics</i> , 2018 , 39, 289-298	1.6	6
142	A Single-Bead-Based, Fully Integrated Microfluidic System for High-Throughput CD4+T Lymphocyte Enumeration. <i>SLAS Technology</i> , 2018 , 23, 134-143	3	4
141	Stiffness Measurement of Soft Silicone Substrates for Mechanobiology Studies Using a Widefield Fluorescence Microscope. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	7
140	Electroosmotic Flow of Viscoelastic Fluid in a Nanoslit. <i>Micromachines</i> , 2018 , 9,	3.3	14
139	Fully resolved simulation of single-particle dynamics in a microcavity. <i>Microfluidics and Nanofluidics</i> , 2018 , 22, 1	2.8	11
138	Topology optimization of electrode patterns for electroosmotic micromixer. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 126, 1299-1315	4.9	18

137	A Low-Cost and Fast Real-Time PCR System Based on Capillary Convection. <i>SLAS Technology</i> , 2017 , 22, 13-17	3	10
136	A smartphone-based point-of-care diagnosis of H1N1 with microfluidic convection PCR. <i>Microsystem Technologies</i> , 2017 , 23, 2951-2956	1.7	33
135	Buffer anions can enormously enhance the electrokinetic energy conversion in nanofluidics with highly overlapped double layers. <i>Nano Energy</i> , 2017 , 32, 374-381	17.1	49
134	Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	32
133	Eckart acoustic streaming in a heptagonal chamber by multiple acoustic transducers. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	10
132	Nanosecond pulsed electric field induced changes in cell surface charge density. <i>Micron</i> , 2017 , 100, 45-49.	3	3
131	A Smartphone-Based Genotyping Method for Hepatitis B Virus at Point-of-Care Settings. <i>SLAS Technology</i> , 2017 , 22, 122-129	3	7
130	Performance Investigation of a Wearable Distributed-Deflection Sensor in Arterial Pulse Waveform Measurement. <i>IEEE Sensors Journal</i> , 2017 , 17, 3994-4004	4	12
129	Analytical model for surface-charge-governed nanochannel conductance. <i>Sensors and Actuators B: Chemical</i> , 2017 , 247, 697-705	8.5	10
128	Instrument-free point-of-care molecular diagnosis of H1N1 based on microfluidic convective PCR. <i>Sensors and Actuators B: Chemical</i> , 2017 , 243, 738-744	8.5	32
127	Endogenous Sheet-Averaged Tension Within a Large Epithelial Cell Colony. <i>Journal of Biomechanical Engineering</i> , 2017 , 139,	2.1	5
126	Controllable cell electroporation using microcavity electrodes. <i>Sensors and Actuators B: Chemical</i> , 2017 , 240, 434-442	8.5	5
125	Optimal Control-Based Inverse Determination of Electrode Distribution for Electroosmotic Micromixer. <i>Micromachines</i> , 2017 , 8,	3.3	7
124	Gate modulation of proton transport in a nanopore. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 7449-58	5.8	23
123	Gated ion transport in a soft nanochannel with biomimetic polyelectrolyte brush layers. <i>Sensors and Actuators B: Chemical</i> , 2016 , 229, 305-314	8.5	29
122	Electrophoresis of pH-regulated nanoparticles: impact of the Stern layer. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 9927-34	3.6	16
121	Electrokinetic Phenomena in Pencil Lead-Based Microfluidics. <i>Micromachines</i> , 2016 , 7,	3.3	10
120	Self-Diffusiophoresis of Janus Catalytic Micromotors in Confined Geometries. <i>Langmuir</i> , 2016 , 32, 5580-92	9.2	27

119	Viscous Damping in a Microfluidic Load Sensor. <i>IEEE Sensors Journal</i> , 2016 , 16, 4725-4732	4	1
118	Gate manipulation of ionic conductance in a nanochannel with overlapped electric double layers. <i>Sensors and Actuators B: Chemical</i> , 2015 , 215, 266-271	8.5	25
117	pH-Regulated nanopore conductance with overlapped electric double layers. <i>Electrochemistry Communications</i> , 2015 , 55, 60-63	5.1	18
116	pH-regulated ionic conductance in a nanochannel with overlapped electric double layers. <i>Analytical Chemistry</i> , 2015 , 87, 4508-14	7.8	80
115	Ion transport and selectivity in biomimetic nanopores with pH-tunable zwitterionic polyelectrolyte brushes. <i>Nanoscale</i> , 2015 , 7, 17020-9	7.7	57
114	Buffer effect on the ionic conductance in a pH-regulated nanochannel. <i>Electrochemistry Communications</i> , 2015 , 51, 129-132	5.1	16
113	Analytical model for charge properties of silica particles. <i>Journal of Colloid and Interface Science</i> , 2014 , 425, 128-30	9.3	22
112	Joule heating effects on reservoir-based dielectrophoresis. <i>Electrophoresis</i> , 2014 , 35, 721-7	3.6	29
111	Size Dependent Surface Charge Properties of Silica Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1836-1842	3.8	168
110	Proton enhancement in an extended nanochannel. <i>Langmuir</i> , 2014 , 30, 13116-20	4	12
109	pH-regulated ionic current rectification in conical nanopores functionalized with polyelectrolyte brushes. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 2465-74	3.6	50
108	Programmable ionic conductance in a pH-regulated gated nanochannel. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 20138-46	3.6	38
107	Tuning ion transport and selectivity by a salt gradient in a charged nanopore. <i>Analytical Chemistry</i> , 2014 , 86, 2681-6	7.8	67
106	Tunable Donnan Potential and Electrokinetic Flow in a Biomimetic Gated Nanochannel with pH-Regulated Polyelectrolyte Brushes. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19806-19813	3.8	32
105	Charge Leakage Mediated Pattern Miniaturization in the Electric Field Induced Instabilities of an Elastic Membrane. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 18840-18851	3.9	2
104	pH-regulated ionic conductance in a nanopore. <i>Electrochemistry Communications</i> , 2014 , 43, 91-94	5.1	27
103	Surface Charge of a Nanoparticle Interacting with a Flat Substrate. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 10927-10935	3.8	28
102	Direct numerical simulation of AC dielectrophoretic particle-particle interactive motions. <i>Journal of Colloid and Interface Science</i> , 2014 , 417, 72-9	9.3	54

101	Tunable Streaming Current in a pH-Regulated Nanochannel by a Field Effect Transistor. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 6090-6099	3.8	34
100	Analytical model for surface charge property of pH-regulated nanorods. <i>Electrochemistry Communications</i> , 2014 , 45, 75-78	5.1	7
99	Induced-charge electro-osmosis of polymer-containing fluid around a metallic rod. <i>Microfluidics and Nanofluidics</i> , 2014 , 16, 247-255	2.8	13
98	Electroviscous effect on the streaming current in a pH-regulated nanochannel. <i>Electrochemistry Communications</i> , 2014 , 48, 77-80	5.1	22
97	Microfluidic electrical sorting of particles based on shape in a spiral microchannel. <i>Biomicrofluidics</i> , 2014 , 8, 014101	3.2	27
96	Field Effect Modulation of Surface Charge Property and Electroosmotic Flow in a Nanochannel: Stern Layer Effect. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 9322-9331	3.8	54
95	Long-wave interfacial instabilities in a thin electrolyte film undergoing coupled electrokinetic flows: a nonlinear analysis. <i>Microfluidics and Nanofluidics</i> , 2013 , 15, 19-33	2.8	10
94	A cell electrofusion microfluidic chip with micro-cavity microelectrode array. <i>Microfluidics and Nanofluidics</i> , 2013 , 15, 151-160	2.8	11
93	Field effect regulation of Donnan potential and electrokinetic flow in a functionalized soft nanochannel. <i>Soft Matter</i> , 2013 , 9, 9767	3.6	32
92	Electroformation and electrofusion of giant vesicles in a microfluidic device. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013 , 110, 81-7	6	18
91	Cell electrofusion in microfluidic devices: A review. <i>Sensors and Actuators B: Chemical</i> , 2013 , 178, 63-85	8.5	43
90	Micro-PIV measurements of induced-charge electro-osmosis around a metal rod. <i>Microfluidics and Nanofluidics</i> , 2013 , 14, 153-162	2.8	22
89	Reservoir-based dielectrophoresis for microfluidic particle separation by charge. <i>Electrophoresis</i> , 2013 , 34, 961-8	3.6	22
88	Ion transport in a pH-regulated nanopore. <i>Analytical Chemistry</i> , 2013 , 85, 7527-34	7.8	104
87	Induced-Charge Electroosmosis Around Touching Metal Rods. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2013 , 135,	2.1	21
86	Low-Voltage Pulsed Electric Field Sterilization on a Microfluidic Chip. <i>Electroanalysis</i> , 2013 , 25, 1301-1309		6
85	Tuning surface charge property by floating gate field effect transistor. <i>Journal of Colloid and Interface Science</i> , 2012 , 365, 326-8	9.3	9
84	Counterion condensation in pH-regulated polyelectrolytes. <i>Electrochemistry Communications</i> , 2012 , 19, 97-100	5.1	32

83	Field effect control of electrokinetic transport in micro/nanofluidics. <i>Sensors and Actuators B: Chemical</i> , 2012 , 161, 1150-1167	8.5	39
82	Electro-magnetic-field-induced flow and interfacial instabilities in confined stratified liquid layers. <i>Theoretical and Computational Fluid Dynamics</i> , 2012 , 26, 23-28	2.3	15
81	Instabilities in free-surface electroosmotic flows. <i>Theoretical and Computational Fluid Dynamics</i> , 2012 , 26, 311-318	2.3	19
80	Electrokinetics of pH-regulated zwitterionic polyelectrolyte nanoparticles. <i>Nanoscale</i> , 2012 , 4, 7575-84	7.7	34
79	Slowing down DNA translocation through a nanopore by lowering fluid temperature. <i>Electrophoresis</i> , 2012 , 33, 3458-65	3.6	24
78	Regulating DNA translocation through functionalized soft nanopores. <i>Nanoscale</i> , 2012 , 4, 2685-93	7.7	68
77	Electrokinetic ion and fluid transport in nanopores functionalized by polyelectrolyte brushes. <i>Nanoscale</i> , 2012 , 4, 5169-77	7.7	61
76	Controlling pH-regulated bionanoparticles translocation through nanopores with polyelectrolyte brushes. <i>Analytical Chemistry</i> , 2012 , 84, 9615-22	7.8	40
75	Microfluidic separation of live and dead yeast cells using reservoir-based dielectrophoresis. <i>Biomicrofluidics</i> , 2012 , 6, 34102	3.2	97
74	Ion Concentration Polarization in Polyelectrolyte-Modified Nanopores. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 8672-8677	3.8	97
73	DNA Electrokinetic Translocation through a Nanopore: Local Permittivity Environment Effect. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4793-4801	3.8	42
72	Field Effect Control of Surface Charge Property and Electroosmotic Flow in Nanofluidics. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4209-4216	3.8	86
71	A cell electrofusion microfluidic chip using discrete coplanar vertical sidewall microelectrodes. <i>Electrophoresis</i> , 2012 , 33, 1980-6	3.6	12
70	Probing nanoparticle interactions in cell culture media. <i>Colloids and Surfaces B: Biointerfaces</i> , 2012 , 95, 96-102	6	79
69	Polarization Effect of a Dielectric Membrane on the Ionic Current Rectification in a Conical Nanopore. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 24951-24959	3.8	26
68	Electrokinetic particle translocation through a nanopore. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 4060-71	3.6	61
67	Electrophoretic motion of a soft spherical particle in a nanopore. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011 , 88, 165-74	6	32
66	Direct numerical simulation of electrokinetic translocation of a cylindrical particle through a nanopore using a Poisson-Boltzmann approach. <i>Electrophoresis</i> , 2011 , 32, 996-1005	3.6	25

65	Electrokinetic motion of a deformable particle: dielectrophoretic effect. <i>Electrophoresis</i> , 2011 , 32, 2282-916	3.6	23
64	Electrokinetic particle translocation through a nanopore containing a floating electrode. <i>Electrophoresis</i> , 2011 , 32, 1864-74	3.6	27
63	A high-throughput dielectrophoresis-based cell electrofusion microfluidic device. <i>Electrophoresis</i> , 2011 , 32, 2488-95	3.6	31
62	Surface instability of a thin electrolyte film undergoing coupled electroosmotic and electrophoretic flows in a microfluidic channel. <i>Electrophoresis</i> , 2011 , 32, 3257-67	3.6	24
61	Parametric study on instabilities in a two-layer electromagnetohydrodynamic channel flow confined between two parallel electrodes. <i>Physical Review E</i> , 2011 , 83, 036313	2.4	26
60	Electrophoretic motion of a nanorod along the axis of a nanopore under a salt gradient. <i>Journal of Colloid and Interface Science</i> , 2011 , 356, 331-40	9.3	9
59	On steady two-fluid electroosmotic flow with full interfacial electrostatics. <i>Journal of Colloid and Interface Science</i> , 2011 , 357, 521-6	9.3	30
58	A MEMS-based electronic capsule for time controlled drug delivery in the alimentary canal. <i>Sensors and Actuators A: Physical</i> , 2011 , 169, 211-216	3.9	9
57	On-demand particle enrichment in a microfluidic channel by a locally controlled floating electrode. <i>Sensors and Actuators B: Chemical</i> , 2011 , 153, 277-283	8.5	14
56	Ionic current rectification in a conical nanofluidic field effect transistor. <i>Sensors and Actuators B: Chemical</i> , 2011 , 157, 742-751	8.5	40
55	A cell electrofusion microfluidic device integrated with 3D thin-film microelectrode arrays. <i>Biomicrofluidics</i> , 2011 , 5, 34121-3412112	3.2	30
54	Dielectrophoretic choking phenomenon in a converging-diverging microchannel. <i>Biomicrofluidics</i> , 2010 , 4, 13201	3.2	42
53	Electrodifusiophoretic motion of a charged spherical particle in a nanopore. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 4082-93	3.4	34
52	Diffusiophoretic motion of a charged spherical particle in a nanopore. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 6437-46	3.4	20
51	Effects of Electroosmotic Flow on Ionic Current Rectification in Conical Nanopores. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3883-3890	3.8	139
50	Field effect regulation of DNA translocation through a nanopore. <i>Analytical Chemistry</i> , 2010 , 82, 8217-2578	9.3	93
49	DC dielectrophoretic particle-particle interactions and their relative motions. <i>Journal of Colloid and Interface Science</i> , 2010 , 346, 448-54	9.3	72
48	DC electrokinetic particle transport in an L-shaped microchannel. <i>Langmuir</i> , 2010 , 26, 2937-44	4	65

47	Dispersion state and toxicity of mWCNTs in cell culture medium with different T80 concentrations. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010 , 78, 36-43	6	14
46	Self-Organized Micropatterning of Thin Viscous Bilayers Under Microgravity. <i>Microgravity Science and Technology</i> , 2010 , 22, 273-282	1.6	4
45	The Effect of Axial Concentration Gradient on Electrophoretic Motion of a Charged Spherical Particle in a Nanopore. <i>Microgravity Science and Technology</i> , 2010 , 22, 329-338	1.6	23
44	Diffusiophoresis of an elongated cylindrical nanoparticle along the axis of a nanopore. <i>ChemPhysChem</i> , 2010 , 11, 3281-90	3.2	42
43	Manipulating particles in microfluidics by floating electrodes. <i>Electrophoresis</i> , 2010 , 31, 3711-8	3.6	29
42	Preparation of alpha sources using magnetohydrodynamic electrodeposition for radionuclide metrology. <i>Journal of Colloid and Interface Science</i> , 2010 , 342, 128-34	9.3	3
41	Wall-induced lateral migration in particle electrophoresis through a rectangular microchannel. <i>Journal of Colloid and Interface Science</i> , 2010 , 347, 142-6	9.3	56
40	Is free surface free in micro-scale electrokinetic flows?. <i>Journal of Colloid and Interface Science</i> , 2010 , 347, 153-5	9.3	16
39	Three-dimensional electrokinetic particle focusing in a rectangular microchannel. <i>Journal of Colloid and Interface Science</i> , 2010 , 350, 377-9	9.3	36
38	A low-voltage nano-porous electroosmotic pump. <i>Journal of Colloid and Interface Science</i> , 2010 , 350, 465-70	9.3	40
37	CHARACTERIZATION OF FINGER ISOMETRIC FORCE PRODUCTION WITH MAXIMUM POWER OF SURFACE ELECTROMYOGRAPHY. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2009 , 21, 193-199	0.6	1
36	Synthesis and Characterization of Birnessite and Cryptomelane Nanostructures in Presence of Hoffmeister Anions. <i>Journal of Nanomaterials</i> , 2009 , 2009, 1-8	3.2	14
35	Transient electrophoretic motion of a charged particle through a converging-diverging microchannel: effect of direct current-dielectrophoretic force. <i>Electrophoresis</i> , 2009 , 30, 2499-506	3.6	60
34	Magneto-Hydrodynamics Based Microfluidics. <i>Mechanics Research Communications</i> , 2009 , 36, 10-21	2.2	150
33	Free-surface problems in electrokinetic micro- and nanofluidics. <i>Mechanics Research Communications</i> , 2009 , 36, 82-91	2.2	17
32	Effect of linear surface-charge non-uniformities on the electrokinetic ionic-current rectification in conical nanopores. <i>Journal of Colloid and Interface Science</i> , 2009 , 329, 376-83	9.3	35
31	Ultrasensitive detection of mercury (II) ions using electrochemical surface plasmon resonance with magnetohydrodynamic convection. <i>Journal of Colloid and Interface Science</i> , 2009 , 333, 485-90	9.3	35
30	dc electrokinetic transport of cylindrical cells in straight microchannels. <i>Biomicrofluidics</i> , 2009 , 3, 44110	3.2	51

29	Pressure-driven transport of particles through a converging-diverging microchannel. <i>Biomicrofluidics</i> , 2009 , 3, 22404	3.2	35
28	Electrophoretic motion of a spherical particle with a symmetric nonuniform surface charge distribution in a nanotube. <i>Langmuir</i> , 2008 , 24, 5332-40	4	49
27	Analysis of self-electrophoretic motion of a spherical particle in a nanotube: effect of nonuniform surface charge density. <i>Langmuir</i> , 2008 , 24, 4778-84	4	33
26	Analytical Prediction of Flow Field in Magnetohydrodynamic-Based Microfluidic Devices. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2008 , 130,	2.1	22
25	The Effect of Stirring on the Morphology of Birnessite Nanoparticles. <i>Journal of Nanomaterials</i> , 2008 , 2008, 1-9	3.2	12
24	A New Method of Synthesizing Black Birnessite Nanoparticles: From Brown to Black Birnessite with Nanostructures. <i>Journal of Nanomaterials</i> , 2008 , 2008, 1-8	3.2	11
23	Mixers 2008 , 323-373		1
22	Stripping analysis of mercury(II) ionic solutions under magneto-hydrodynamic convection. <i>Journal of Colloid and Interface Science</i> , 2008 , 317, 175-82	9.3	5
21	The effect of translocating cylindrical particles on the ionic current through a nanopore. <i>Biophysical Journal</i> , 2007 , 92, 1164-77	2.9	90
20	Diffusioosmotic flows in slit nanochannels. <i>Journal of Colloid and Interface Science</i> , 2007 , 315, 721-30	9.3	58
19	Modeling RedOx-based magnetohydrodynamics in three-dimensional microfluidic channels. <i>Physics of Fluids</i> , 2007 , 19, 083604	4.4	25
18	Coupling between electroosmotically driven flow and bipolar faradaic depolarization processes in electron-conducting microchannels. <i>Journal of Colloid and Interface Science</i> , 2006 , 297, 341-52	9.3	12
17	Modulation of electroosmotic flows in electron-conducting microchannels by coupled quasi-reversible faradaic and adsorption-mediated depolarization. <i>Journal of Colloid and Interface Science</i> , 2006 , 300, 413-28	9.3	9
16	Electrochemical reaction with RedOx electrolyte in toroidal conduits in the presence of natural convection. <i>International Journal of Heat and Mass Transfer</i> , 2006 , 49, 3968-3976	4.9	17
15	Electrophoretic motion of a spherical particle in a converging-diverging nanotube. <i>Journal of Colloid and Interface Science</i> , 2006 , 303, 579-92	9.3	62
14	Filling carbon nanotubes with particles. <i>Nano Letters</i> , 2005 , 5, 873-8	11.5	107
13	Thermally-actuated, phase change flow control for microfluidic systems. <i>Lab on A Chip</i> , 2005 , 5, 1277-85	7.2	52
12	Magnetohydrodynamic flow of RedOx electrolyte. <i>Physics of Fluids</i> , 2005 , 17, 067105	4.4	47

11	Theoretical investigation of electro-osmotic flows and chaotic stirring in rectangular cavities. <i>Applied Mathematical Modelling</i> , 2005 , 29, 726-753	4.5	46
10	Analysis of sedimentation biodetectors. <i>Chemical Engineering Science</i> , 2005 , 60, 2585-2598	4.4	7
9	Analysis of lateral flow biodetectors: competitive format. <i>Analytical Biochemistry</i> , 2004 , 326, 211-24	3.1	85
8	Thermosiphon-based PCR reactor: experiment and modeling. <i>Analytical Chemistry</i> , 2004 , 76, 3707-15	7.8	80
7	A mathematical model of lateral flow bioreactions applied to sandwich assays. <i>Analytical Biochemistry</i> , 2003 , 322, 89-98	3.1	90
6	A magneto-hydrodynamically controlled fluidic network. <i>Sensors and Actuators B: Chemical</i> , 2003 , 88, 205-216	8.5	83
5	A stirrer for magnetohydrodynamically controlled minute fluidic networks. <i>Physics of Fluids</i> , 2002 , 14, 3584-3592	4.4	47
4	A chaotic electroosmotic stirrer. <i>Analytical Chemistry</i> , 2002 , 74, 3616-25	7.8	124
3	A magnetohydrodynamic chaotic stirrer. <i>Journal of Fluid Mechanics</i> , 2002 , 468, 153-177	3.7	94
2	Electrokinetic Particle Transport in Micro-/Nanofluidics		25
1	Field Effect Control of Ion, Fluid, and Particle Transport in Micro/Nanofluidics 2688-2704		