# Shizhi Qian

### List of Publications by Citations

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62 154 5,211 42 h-index g-index citations papers 5,833 5.89 159 4.9 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
154	Size Dependent Surface Charge Properties of Silica Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 1836-1842	3.8	168
153	Magneto-Hydrodynamics Based Microfluidics. <i>Mechanics Research Communications</i> , <b>2009</b> , 36, 10-21	2.2	150
152	Effects of Electroosmotic Flow on Ionic Current Rectification in Conical Nanopores. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 3883-3890	3.8	139
151	A chaotic electroosmotic stirrer. Analytical Chemistry, 2002, 74, 3616-25	7.8	124
150	Filling carbon nanotubes with particles. <i>Nano Letters</i> , <b>2005</b> , 5, 873-8	11.5	107
149	Ion transport in a pH-regulated nanopore. Analytical Chemistry, 2013, 85, 7527-34	7.8	104
148	Microfluidic separation of live and dead yeast cells using reservoir-based dielectrophoresis. <i>Biomicrofluidics</i> , <b>2012</b> , 6, 34102	3.2	97
147	Ion Concentration Polarization in Polyelectrolyte-Modified Nanopores. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 8672-8677	3.8	97
146	A magnetohydrodynamic chaotic stirrer. <i>Journal of Fluid Mechanics</i> , <b>2002</b> , 468, 153-177	3.7	94
145	Field effect regulation of DNA translocation through a nanopore. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 8217-	<b>25</b> 7.8	93
144	The effect of translocating cylindrical particles on the ionic current through a nanopore. <i>Biophysical Journal</i> , <b>2007</b> , 92, 1164-77	2.9	90
143	A mathematical model of lateral flow bioreactions applied to sandwich assays. <i>Analytical Biochemistry</i> , <b>2003</b> , 322, 89-98	3.1	90
142	Field Effect Control of Surface Charge Property and Electroosmotic Flow in Nanofluidics. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 4209-4216	3.8	86
141	Analysis of lateral flow biodetectors: competitive format. <i>Analytical Biochemistry</i> , <b>2004</b> , 326, 211-24	3.1	85
140	A magneto-hydrodynamically controlled fluidic network. <i>Sensors and Actuators B: Chemical</i> , <b>2003</b> , 88, 205-216	8.5	83
139	pH-regulated ionic conductance in a nanochannel with overlapped electric double layers. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 4508-14	7.8	80
138	Thermosiphon-based PCR reactor: experiment and modeling. <i>Analytical Chemistry</i> , <b>2004</b> , 76, 3707-15	7.8	80

## (2017-2012)

137	Probing nanoparticle interactions in cell culture media. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2012</b> , 95, 96-102	6	79
136	DC dielectrophoretic particle-particle interactions and their relative motions. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 346, 448-54	9.3	72
135	Regulating DNA translocation through functionalized soft nanopores. <i>Nanoscale</i> , <b>2012</b> , 4, 2685-93	7.7	68
134	Tuning ion transport and selectivity by a salt gradient in a charged nanopore. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 2681-6	7.8	67
133	DC electrokinetic particle transport in an L-shaped microchannel. <i>Langmuir</i> , <b>2010</b> , 26, 2937-44	4	65
132	Electrophoretic motion of a spherical particle in a converging-diverging nanotube. <i>Journal of Colloid and Interface Science</i> , <b>2006</b> , 303, 579-92	9.3	62
131	Electrokinetic ion and fluid transport in nanopores functionalized by polyelectrolyte brushes. <i>Nanoscale</i> , <b>2012</b> , 4, 5169-77	7.7	61
130	Electrokinetic particle translocation through a nanopore. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 4060-71	3.6	61
129	Transient electrophoretic motion of a charged particle through a converging-diverging microchannel: effect of direct current-dielectrophoretic force. <i>Electrophoresis</i> , <b>2009</b> , 30, 2499-506	3.6	60
128	Diffusioosmotic flows in slit nanochannels. <i>Journal of Colloid and Interface Science</i> , <b>2007</b> , 315, 721-30	9.3	58
127	Ion transport and selectivity in biomimetic nanopores with pH-tunable zwitterionic polyelectrolyte brushes. <i>Nanoscale</i> , <b>2015</b> , 7, 17020-9	7.7	57
126	Wall-induced lateral migration in particle electrophoresis through a rectangular microchannel. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 347, 142-6	9.3	56
125	Direct numerical simulation of AC dielectrophoretic particle-particle interactive motions. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 417, 72-9	9.3	54
124	Field Effect Modulation of Surface Charge Property and Electroosmotic Flow in a Nanochannel: Stern Layer Effect. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 9322-9331	3.8	54
123	Thermally-actuated, phase change flow control for microfluidic systems. <i>Lab on A Chip</i> , <b>2005</b> , 5, 1277-85	7.2	52
122	dc electrokinetic transport of cylindrical cells in straight microchannels. <i>Biomicrofluidics</i> , <b>2009</b> , 3, 44110	3.2	51
121	pH-regulated ionic current rectification in conical nanopores functionalized with polyelectrolyte brushes. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 2465-74	3.6	50
120	Buffer anions can enormously enhance the electrokinetic energy conversion in nanofluidics with highly overlapped double layers. <i>Nano Energy</i> , <b>2017</b> , 32, 374-381	17.1	49

119	Electrophoretic motion of a spherical particle with a symmetric nonuniform surface charge distribution in a nanotube. <i>Langmuir</i> , <b>2008</b> , 24, 5332-40	4	49
118	Magnetohydrodynamic flow of RedOx electrolyte. <i>Physics of Fluids</i> , <b>2005</b> , 17, 067105	4.4	47
117	A stirrer for magnetohydrodynamically controlled minute fluidic networks. <i>Physics of Fluids</i> , <b>2002</b> , 14, 3584-3592	4.4	47
116	Theoretical investigation of electro-osmotic flows and chaotic stirring in rectangular cavities. <i>Applied Mathematical Modelling</i> , <b>2005</b> , 29, 726-753	4.5	46
115	Cell electrofusion in microfluidic devices: A review. Sensors and Actuators B: Chemical, 2013, 178, 63-85	8.5	43
114	DNA Electrokinetic Translocation through a Nanopore: Local Permittivity Environment Effect. Journal of Physical Chemistry C, <b>2012</b> , 116, 4793-4801	3.8	42
113	Dielectrophoretic choking phenomenon in a converging-diverging microchannel. <i>Biomicrofluidics</i> , <b>2010</b> , 4, 13201	3.2	42
112	Diffusiophoresis of an elongated cylindrical nanoparticle along the axis of a nanopore. <i>ChemPhysChem</i> , <b>2010</b> , 11, 3281-90	3.2	42
111	Controlling pH-regulated bionanoparticles translocation through nanopores with polyelectrolyte brushes. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 9615-22	7.8	40
110	Ionic current rectification in a conical nanofluidic field effect transistor. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 157, 742-751	8.5	40
109	A low-voltage nano-porous electroosmotic pump. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 350, 465-70	9.3	40
108	Field effect control of electrokinetic transport in micro/nanofluidics. <i>Sensors and Actuators B: Chemical</i> , <b>2012</b> , 161, 1150-1167	8.5	39
107	Programmable ionic conductance in a pH-regulated gated nanochannel. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 20138-46	3.6	38
106	Three-dimensional electrokinetic particle focusing in a rectangular microchannel. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 350, 377-9	9.3	36
105	Effect of linear surface-charge non-uniformities on the electrokinetic ionic-current rectification in conical nanopores. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 329, 376-83	9.3	35
104	Ultrasensitive detection of mercury (II) ions using electrochemical surface plasmon resonance with magnetohydrodynamic convection. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 333, 485-90	9.3	35
103	Pressure-driven transport of particles through a converging-diverging microchannel. <i>Biomicrofluidics</i> , <b>2009</b> , 3, 22404	3.2	35
102	Tunable Streaming Current in a pH-Regulated Nanochannel by a Field Effect Transistor. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 6090-6099	3.8	34

Electrokinetics of pH-regulated zwitterionic polyelectrolyte nanoparticles. <i>Nanoscale</i> , <b>2012</b> , 4, 7575-84	7.7	34
Electrodiffusiophoretic motion of a charged spherical particle in a nanopore. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 4082-93	3.4	34
A smartphone-based point-of-care diagnosis of H1N1 with microfluidic convection PCR. <i>Microsystem Technologies</i> , <b>2017</b> , 23, 2951-2956	1.7	33
Analysis of self-electrophoretic motion of a spherical particle in a nanotube: effect of nonuniform surface charge density. <i>Langmuir</i> , <b>2008</b> , 24, 4778-84	4	33
Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	32
Instrument-free point-of-care molecular diagnosis of H1N1 based on microfluidic convective PCR. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 243, 738-744	8.5	32
Tunable Donnan Potential and Electrokinetic Flow in a Biomimetic Gated Nanochannel with pH-Regulated Polyelectrolyte Brushes. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 19806-19813	3.8	32
Counterion condensation in pH-regulated polyelectrolytes. <i>Electrochemistry Communications</i> , <b>2012</b> , 19, 97-100	5.1	32
Field effect regulation of Donnan potential and electrokinetic flow in a functionalized soft nanochannel. <i>Soft Matter</i> , <b>2013</b> , 9, 9767	3.6	32
Electrophoretic motion of a soft spherical particle in a nanopore. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2011</b> , 88, 165-74	6	32
A high-throughput dielectrophoresis-based cell electrofusion microfluidic device. <i>Electrophoresis</i> , <b>2011</b> , 32, 2488-95	3.6	31
On steady two-fluid electroosmotic flow with full interfacial electrostatics. <i>Journal of Colloid and Interface Science</i> , <b>2011</b> , 357, 521-6	9.3	30
A cell electrofusion microfluidic device integrated with 3D thin-film microelectrode arrays. <i>Biomicrofluidics</i> , <b>2011</b> , 5, 34121-3412112	3.2	30
Gated ion transport in a soft nanochannel with biomimetic polyelectrolyte brush layers. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 229, 305-314	8.5	29
Joule heating effects on reservoir-based dielectrophoresis. <i>Electrophoresis</i> , <b>2014</b> , 35, 721-7	3.6	29
Manipulating particles in microfluidics by floating electrodes. <i>Electrophoresis</i> , <b>2010</b> , 31, 3711-8	3.6	29
Surface Charge of a Nanoparticle Interacting with a Flat Substrate. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 10927-10935	3.8	28
pH-regulated ionic conductance in a nanopore. <i>Electrochemistry Communications</i> , <b>2014</b> , 43, 91-94	5.1	27
	Electrodiffusiophoretic motion of a charged spherical particle in a nanopore. <i>Journal of Physical Chemistry B</i> , 2010, 114, 4082-93  A smartphone-based point-of-care diagnosis of H1N1 with microfluidic convection PCR. <i>Microsystem Technologies</i> , 2017, 23, 2951-2956  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  Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1  Instrument-free point-of-care molecular diagnosis of H1N1 based on microfluidic convective PCR. <i>Sensors and Actuators B</i> : <i>Chemical</i> , 2017, 243, 738-744  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  Counterion condensation in pH-regulated polyelectrolytes. <i>Electrochemistry Communications</i> , 2012, 19, 97-100  Field effect regulation of Donnan potential and electrokinetic flow in a functionalized soft nanochannel. <i>Soft Matter</i> , 2013, 9, 9767  Electrophoretic motion of a soft spherical particle in a nanopore. <i>Colloids and Surfaces B</i> : <i>Biointerfaces</i> , 2011, 88, 165-74  A high-throughput dielectrophoresis-based cell electrofusion microfluidic device. <i>Electrophoresis</i> , 2011, 32, 2488-95  On steady two-fluid electroosmotic flow with full interfacial electrostatics. <i>Journal of Colloid and Interface Science</i> , 2011, 357, 521-6  A cell electrofusion microfluidic device integrated with 3D thin-film microelectrode arrays. <i>Biomicrofluidics</i> , 2011, 5, 34121-3412112  Gated ion transport in a soft nanochannel with biomimetic polyelectrolyte brush layers. <i>Sensors and Actuators B</i> : <i>Chemical</i> , 2016, 229, 305-314  Joule heating effects on reservoir-based dielectrophoresis. <i>Electrophoresis</i> , 2014, 35, 721-7  Manipulating particles in microfluidics by floating electrodes. <i>Electrophoresis</i> , 2010, 31, 3711-8	A smartphone-based point-of-care diagnosis of H1N1 with microfluidic convection PCR.  Microsystem Technologies, 2017, 23, 2951-2956  Analysis of self-electrophoretic motion of a spherical particle in a nanotube: effect of nonuniform surface charge density. Langmuir, 2008, 24, 4778-84  Design of microfluidic channel networks with specified output flow rates using the CFD-based optimization method. Microfluidics and Nanofluidics, 2017, 21, 1  Instrument-free point-of-care molecular diagnosis of H1N1 based on microfluidic convective PCR. Sensors and Actuators B: Chemical, 2017, 243, 738-744  Tunable Donnan Potential and Electrokinetic Flow in a Biomimetic Gated Nanochannel with pH-Regulated Polyelectrolyte Brushes. Journal of Physical Chemistry C, 2014, 118, 19806-19813  38  Counterion condensation in pH-regulated polyelectrolytes. Electrochemistry Communications, 2012, 19, 97-100  Field effect regulation of Donnan potential and electrokinetic flow in a functionalized soft nanochannel. Soft Matter, 2013, 9, 9767  Electrophoretic motion of a soft spherical particle in a nanopore. Colloids and Surfaces B: Biointerfaces, 2011, 88, 165-74  A high-throughput dielectrophoresis-based cell electrofusion microfluidic device. Electrophoresis, 2011, 32, 2488-95  On steady two-fluid electroosmotic flow with full interfacial electrostatics. Journal of Colloid and Interface Science, 2011, 357, 521-6  A cell electrofusion microfluidic device integrated with 3D thin-film microelectrode arrays. Biomicrofluidics, 2011, 5, 34121-3412112  Gated ion transport in a soft nanochannel with biomimetic polyelectrolyte brush layers. Sensors and Actuators B: Chemical, 2016, 229, 305-314  Joule heating effects on reservoir-based dielectrophoresis. Electrophoresis, 2010, 31, 3711-8  36  Manipulating particles in microfluidics by floating electrodes. Electrophoresis, 2010, 31, 3711-8  37  Surface Charge of a Nanoparticle Interacting with a Flat Substrate. Journal of Physical Chemistry C, 2014, 118, 10927-10935

83	Microfluidic electrical sorting of particles based on shape in a spiral microchannel. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 014101	3.2	27
82	Electrokinetic particle translocation through a nanopore containing a floating electrode. <i>Electrophoresis</i> , <b>2011</b> , 32, 1864-74	3.6	27
81	Self-Diffusiophoresis of Janus Catalytic Micromotors in Confined Geometries. <i>Langmuir</i> , <b>2016</b> , 32, 5580	)- <u>9</u>  2	27
80	Polarization Effect of a Dielectric Membrane on the Ionic Current Rectification in a Conical Nanopore. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 24951-24959	3.8	26
79	Parametric study on instabilities in a two-layer electromagnetohydrodynamic channel flow confined between two parallel electrodes. <i>Physical Review E</i> , <b>2011</b> , 83, 036313	2.4	26
78	Gate manipulation of ionic conductance in a nanochannel with overlapped electric double layers. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 215, 266-271	8.5	25
77	Direct numerical simulation of electrokinetic translocation of a cylindrical particle through a nanopore using a Poisson-Boltzmann approach. <i>Electrophoresis</i> , <b>2011</b> , 32, 996-1005	3.6	25
76	Modeling RedOx-based magnetohydrodynamics in three-dimensional microfluidic channels. <i>Physics of Fluids</i> , <b>2007</b> , 19, 083604	4.4	25
75	Electrokinetic Particle Transport in Micro-/Nanofluidics		25
74	Slowing down DNA translocation through a nanopore by lowering fluid temperature. <i>Electrophoresis</i> , <b>2012</b> , 33, 3458-65	3.6	24
73	Surface instability of a thin electrolyte film undergoing coupled electroosmotic and electrophoretic flows in a microfluidic channel. <i>Electrophoresis</i> , <b>2011</b> , 32, 3257-67	3.6	24
72	Gate modulation of proton transport in a nanopore. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 7449	9-586	23
71	Electrokinetic motion of a deformable particle: dielectrophoretic effect. <i>Electrophoresis</i> , <b>2011</b> , 32, 2282	2- <b>3</b> .6	23
70	The Effect of Axial Concentration Gradient on Electrophoretic Motion of a Charged Spherical Particle in a Nanopore. <i>Microgravity Science and Technology</i> , <b>2010</b> , 22, 329-338	1.6	23
69	Analytical model for charge properties of silica particles. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 425, 128-30	9.3	22
68	Micro-PIV measurements of induced-charge electro-osmosis around a metal rod. <i>Microfluidics and Nanofluidics</i> , <b>2013</b> , 14, 153-162	2.8	22
67	Electroviscous effect on the streaming current in a pH-regulated nanochannel. <i>Electrochemistry Communications</i> , <b>2014</b> , 48, 77-80	5.1	22
66	Reservoir-based dielectrophoresis for microfluidic particle separation by charge. <i>Electrophoresis</i> , <b>2013</b> , 34, 961-8	3.6	22

## (2009-2008)

65	Analytical Prediction of Flow Field in Magnetohydrodynamic-Based Microfluidic Devices. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>2008</b> , 130,	2.1	22	
64	Induced-Charge Electroosmosis Around Touching Metal Rods. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>2013</b> , 135,	2.1	21	
63	Diffusiophoretic motion of a charged spherical particle in a nanopore. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 6437-46	3.4	20	
62	Instabilities in free-surface electroosmotic flows. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2012</b> , 26, 311-318	2.3	19	
61	pH-Regulated nanopore conductance with overlapped electric double layers. <i>Electrochemistry Communications</i> , <b>2015</b> , 55, 60-63	5.1	18	
60	Electroformation and electrofusion of giant vesicles in a microfluidic device. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2013</b> , 110, 81-7	6	18	
59	Topology optimization of electrode patterns for electroosmotic micromixer. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 126, 1299-1315	4.9	18	
58	Free-surface problems in electrokinetic micro- and nanofluidics. <i>Mechanics Research Communications</i> , <b>2009</b> , 36, 82-91	2.2	17	
57	Electrochemical reaction with RedOx electrolyte in toroidal conduits in the presence of natural convection. <i>International Journal of Heat and Mass Transfer</i> , <b>2006</b> , 49, 3968-3976	4.9	17	
56	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> , <b>2020</b> , 18,	6.6	17	
55	Electrophoresis of pH-regulated nanoparticles: impact of the Stern layer. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 9927-34	3.6	16	
54	Buffer effect on the ionic conductance in a pH-regulated nanochannel. <i>Electrochemistry Communications</i> , <b>2015</b> , 51, 129-132	5.1	16	
53	Is free surface free in micro-scale electrokinetic flows?. <i>Journal of Colloid and Interface Science</i> , <b>2010</b> , 347, 153-5	9.3	16	
52	Free convective PCR: From principle study to commercial applications-A critical review. <i>Analytica Chimica Acta</i> , <b>2020</b> , 1108, 177-197	6.6	16	
51	Electro-magnetic-field-induced flow and interfacial instabilities in confined stratified liquid layers. <i>Theoretical and Computational Fluid Dynamics</i> , <b>2012</b> , 26, 23-28	2.3	15	
50	Real-time capillary convective PCR based on horizontal thermal convection. <i>Microfluidics and Nanofluidics</i> , <b>2019</b> , 23, 1	2.8	15	
49	Electroosmotic Flow of Viscoelastic Fluid in a Nanoslit. <i>Micromachines</i> , <b>2018</b> , 9,	3.3	14	
48	Synthesis and Characterization of Birnessite and Cryptomelane Nanostructures in Presence of Hoffmeister Anions. <i>Journal of Nanomaterials</i> , <b>2009</b> , 2009, 1-8	3.2	14	

47	On-demand particle enrichment in a microfluidic channel by a locally controlled floating electrode. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 153, 277-283	8.5	14
46	Dispersion state and toxicity of mwCNTs in cell culture medium with different T80 concentrations. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2010</b> , 78, 36-43	6	14
45	Induced-charge electro-osmosis of polymer-containing fluid around a metallic rod. <i>Microfluidics and Nanofluidics</i> , <b>2014</b> , 16, 247-255	2.8	13
44	Performance Investigation of a Wearable Distributed-Deflection Sensor in Arterial Pulse Waveform Measurement. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 3994-4004	4	12
43	Proton enhancement in an extended nanochannel. <i>Langmuir</i> , <b>2014</b> , 30, 13116-20	4	12
42	A cell electrofusion microfluidic chip using discrete coplanar vertical sidewall microelectrodes. <i>Electrophoresis</i> , <b>2012</b> , 33, 1980-6	3.6	12
41	The Effect of Stirring on the Morphology of Birnessite Nanoparticles. <i>Journal of Nanomaterials</i> , <b>2008</b> , 2008, 1-9	3.2	12
40	Coupling between electroosmotically driven flow and bipolar faradaic depolarization processes in electron-conducting microchannels. <i>Journal of Colloid and Interface Science</i> , <b>2006</b> , 297, 341-52	9.3	12
39	A cell electrofusion microfluidic chip with micro-cavity microelectrode array. <i>Microfluidics and Nanofluidics</i> , <b>2013</b> , 15, 151-160	2.8	11
38	A New Method of Synthesizing Black Birnessite Nanoparticles: From Brown to Black Birnessite with Nanostructures. <i>Journal of Nanomaterials</i> , <b>2008</b> , 2008, 1-8	3.2	11
37	Fully resolved simulation of single-particle dynamics in a microcavity. <i>Microfluidics and Nanofluidics</i> , <b>2018</b> , 22, 1	2.8	11
36	A Low-Cost and Fast Real-Time PCR System Based on Capillary Convection. <i>SLAS Technology</i> , <b>2017</b> , 22, 13-17	3	10
35	Eckart acoustic streaming in a heptagonal chamber by multiple acoustic transducers. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	10
34	Analytical model for surface-charge-governed nanochannel conductance. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 247, 697-705	8.5	10
33	Long-wave interfacial instabilities in a thin electrolyte film undergoing coupled electrokinetic flows: a nonlinear analysis. <i>Microfluidics and Nanofluidics</i> , <b>2013</b> , 15, 19-33	2.8	10
32	Electrokinetic Phenomena in Pencil Lead-Based Microfluidics. <i>Micromachines</i> , <b>2016</b> , 7,	3.3	10
31	Tuning surface charge property by floating gate field effect transistor. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 365, 326-8	9.3	9
30	Electrophoretic motion of a nanorod along the axis of a nanopore under a salt gradient. <i>Journal of Colloid and Interface Science</i> , <b>2011</b> , 356, 331-40	9.3	9

## (2010-2011)

29	A MEMS-based electronic capsule for time controlled drug delivery in the alimentary canal. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 169, 211-216	3.9	9
28	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> , <b>2006</b> , 300, 413-28	9.3	9
27	A Smartphone-Based Genotyping Method for Hepatitis B Virus at Point-of-Care Settings. <i>SLAS Technology</i> , <b>2017</b> , 22, 122-129	3	7
26	Stiffness Measurement of Soft Silicone Substrates for Mechanobiology Studies Using a Widefield Fluorescence Microscope. <i>Journal of Visualized Experiments</i> , <b>2018</b> ,	1.6	7
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23	Analysis of sedimentation biodetectors. Chemical Engineering Science, 2005, 60, 2585-2598	4.4	7
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20	Low-Voltage Pulsed Electric Field Sterilization on a Microfluidic Chip. <i>Electroanalysis</i> , <b>2013</b> , 25, 1301-1	30 <del>9</del>	6
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	Computational Design of a Single Heater Convective Polymerase Chain Reaction for Point-of-Care. Journal of Medical Devices, Transactions of the ASME, 2019, 13,  Electroosmotic Flow of Viscoelastic Fluid in a Nanochannel Connecting Two Reservoirs.	1.3	

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