

Ac electrokinetics: a review of forces in microelectrode

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Growth Kinetics and Behavior of Dust Particles in Silane Plasmas. Japanese Journal of Applied Physics, 1993, 32, 3074-3080.	0.8	44
2	Characterisation of Herpes Simplex Virus particles by dielectrophoretic crossover methods. , 0, , .		0
3	Sub-micrometre AC electrokinetics. , 0, , .		0
4	The role of electrohydrodynamic forces in the dielectrophoretic manipulation and separation of particles. Journal of Electrostatics, 1999, 47, 71-81.	1.0	64
5	AC Electric-Field-Induced Fluid Flow in Microelectrodes. Journal of Colloid and Interface Science, 1999, 217, 420-422.	5.0	458
6	An evanescent-field technique for dielectrophoresis studies of colloidal particles. Measurement Science and Technology, 1999, 10, 759-762.	1.4	7
7	Separation of Submicron Bioparticles by Dielectrophoresis. Biophysical Journal, 1999, 77, 516-525.	0.2	492
8	Dielectrophoresis of Submicrometer Latex Spheres. 1. Experimental Results. Journal of Physical Chemistry B, 1999, 103, 41-50.	1.2	214
9	Pumping liquids using asymmetric electrode arrays. Physical Review E, 2000, 61, R45-R48.	0.8	370
10	Fluid flow induced by nonuniform ac electric fields in electrolytes on microelectrodes. I. Experimental measurements. Physical Review E, 2000, 61, 4011-4018.	0.8	434
11	AC electrokinetics: applications for nanotechnology. Nanotechnology, 2000, 11, 124-132.	1.3	268
12	Fluid flow induced by nonuniform ac electric fields in electrolytes on microelectrodes. II. A linear double-layer analysis. Physical Review E, 2000, 61, 4019-4028.	0.8	332
13	Ac electrokinetics: a survey of sub-micrometre particle dynamics. Journal Physics D: Applied Physics, 2000, 33, 632-641.	1.3	200
14	Electric field induced fluid flow on microelectrodes: the effect of illumination. Journal Physics D: Applied Physics, 2000, 33, L13-L17.	1.3	103
15	Holding Forces of Single-Particle Dielectrophoretic Traps. Biophysical Journal, 2001, 80, 531-542.	0.2	182
16	Liquid Flows in Microchannels. Mechanical Engineering Series, 2001, , .	0.1	20
17	Sub-micron sized biological particle manipulation and characterisation. Journal of Electrostatics, 2001, 51-52, 15-19.	1.0	19
18	Electrothermally induced fluid flow on microelectrodes. Journal of Electrostatics, 2001, 53, 71-87.	1.0	251

#	ARTICLE	IF	CITATIONS
19	Theoretical Model of Electrode Polarization and AC Electroosmotic Fluid Flow in Planar Electrode Arrays. <i>Journal of Colloid and Interface Science</i> , 2001, 238, 449-451.	5.0	19
20	The dielectrophoretic levitation and separation of latex beads in microchips. <i>Electrophoresis</i> , 2001, 22, 3893-3901.	1.3	114
21	Dielectrophoretic trapping of dissociated fetal cortical rat neurons. <i>IEEE Transactions on Biomedical Engineering</i> , 2001, 48, 921-930.	2.5	51
22	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.	1.8	17
23	AC electric-field-induced fluid flow in microelectrode structures: scaling laws. , 0, , .		1
24	Manipulation of Bio-Particles in Microelectrode Structures by Means of Non-Uniform AC Electric Fields. , 2002, , 165.		2
25	Bio-inspired Self-Assembly of Micro and Nano-Structures for Sensing and Electronic Applications. <i>Materials Research Society Symposia Proceedings</i> , 2002, 739, 971.	0.1	0
26	Electric field and Charged Molecules Mediated Self-Assembly for Electronic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2002, 735, 11171.	0.1	2
27	Electric field and Charged Molecules Mediated Self-Assembly for Electronic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2002, 761, 1.	0.1	1
28	Fluid flow induced by nonuniform ac electric fields in electrolytes on microelectrodes.â€fIII.â€fObservation of streamlines and numerical simulation. <i>Physical Review E</i> , 2002, 66, 026305.	0.8	330
29	Dielectric mixtures: electrical properties and modeling. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2002, 9, 809-828.	1.8	248
30	Understanding dielectrophoretic trapping of neuronal cells: modelling electric field, electrode-liquid interface and fluid flow. <i>Journal Physics D: Applied Physics</i> , 2002, 35, 1592-1602.	1.3	49
31	A dielectrophoretic chaotic mixer. , 0, , .		42
32	Dielectrophoretic dual-frequency electrode array for the manipulation of sub-micron sized particles. , 0, , .		0
33	Electro-orientation of <i>Schizosaccharomyces pombe</i> in high conductivity media. <i>Journal of Microbiological Methods</i> , 2002, 50, 55-62.	0.7	14
34	Strategies for dielectrophoretic separation in laboratory-on-a-chip systems. <i>Electrophoresis</i> , 2002, 23, 2569-2582.	1.3	369
35	Formation of artificial, structured microbial consortia (ASMC) by dielectrophoresis. <i>Enzyme and Microbial Technology</i> , 2002, 31, 35-43.	1.6	38
36	Rectified Motion of Colloids in Asymmetrically Structured Channels. <i>Physical Review Letters</i> , 2002, 88, 168301.	2.9	110

#	ARTICLE	IF	CITATIONS
37	Measurement of AC Electrokinetic Flows. Biomedical Microdevices, 2003, 5, 139-145.	1.4	36
38	The potential of dielectrophoresis for single-cell experiments. IEEE Engineering in Medicine and Biology Magazine, 2003, 22, 51-61.	1.1	98
39	Manipulation and characterization of red blood cells with alternating current fields in microdevices. Electrophoresis, 2003, 24, 3703-3717.	1.3	117
40	Low voltage plug flow pumping using anisotropic electrode arrays. Sensors and Actuators B: Chemical, 2003, 92, 262-268.	4.0	73
41	Electrohydrodynamics and dielectrophoresis in microsystems: scaling laws. Journal Physics D: Applied Physics, 2003, 36, 2584-2597.	1.3	587
42	Dielectrophoretic manipulation of surface-bound DNA. IET Nanobiotechnology, 2003, 150, 54.	2.1	10
43	Aggregation profile characterisation in dielectrophoretic structures using bacteria and submicron latex particles. IET Nanobiotechnology, 2003, 150, 70.	2.1	7
44	Selective dielectrophoretic manipulation of surface-immobilized DNA molecules. Nanotechnology, 2003, 14, 896-902.	1.3	51
45	Removal of PCR inhibitors using dielectrophoresis as a selective filter in a microsystem. Lab on A Chip, 2003, 3, 212.	3.1	46
46	Pumping of liquids with ac voltages applied to asymmetric pairs of microelectrodes. Physical Review E, 2003, 67, 056302.	0.8	205
47	Limitations on the scale of an electrode array for trapping particles in microfluidics by positive dielectrophoresis. Applied Physics Letters, 2003, 82, 4839-4841.	1.5	19
48	Dielectrophoresis and electrohydrodynamics-mediated fluidic assembly of silicon resistors. Applied Physics Letters, 2003, 83, 3833-3835.	1.5	25
49	Plastic microfluidic devices. , 2003, , 83-112.		7
50	An AC electroosmotic processor for biomolecules. , 0, , .		7
51	AC Electrokinetics for Microfluidic Immunosensors. , 2003, , 479.		2
52	Electronic manipulation of DNA and proteins for potential nano-bio circuit assembly. , 2004, , .		7
53	Dielectrophoresis of Nanoparticles. , 2004, , 85.		0
54	Finite element modelling of a 3 dimensional dielectrophoretic flow separator device for optimal bioprocessing conditions. , 2004, 2004, 2587-90.		0

#	ARTICLE	IF	CITATIONS
55	Numerical simulation of travelling wave induced electrothermal fluid flow. Journal Physics D: Applied Physics, 2004, 37, 2323-2330.	1.3	42
56	AC electroosmosis in microchannels packed with a porous medium. Journal of Micromechanics and Microengineering, 2004, 14, 1249-1257.	1.5	17
57	Diffuse-charge dynamics in electrochemical systems. Physical Review E, 2004, 70, 021506.	0.8	822
58	ENGINEERING FLOWS IN SMALL DEVICES. Annual Review of Fluid Mechanics, 2004, 36, 381-411.	10.8	3,041
59	Dielectrophoresis of nanoparticles. Electrophoresis, 2004, 25, 3625-3632.	1.3	94
60	A method for determining electrophoretic and electroosmotic mobilities using AC and DC electric field particle displacements. Journal of Colloid and Interface Science, 2004, 269, 192-204.	5.0	61
61	Simulation study of dielectrophoretic particle sorters. Sensors and Actuators B: Chemical, 2004, 103, 331-338.	4.0	15
62	Frequency-dependent laminar electroosmotic flow in a closed-end rectangular microchannel. Journal of Colloid and Interface Science, 2004, 275, 679-698.	5.0	51
63	The role of electrochemical reactions during electrophoretic particle deposition. Journal of Colloid and Interface Science, 2004, 278, 146-154.	5.0	18
64	Electronic manipulation of DNA, proteins, and nanoparticles for potential circuit assembly. Biosensors and Bioelectronics, 2004, 20, 606-619.	5.3	181
65	Vertical Focusing Device Utilizing Dielectrophoretic Force and Its Application on Microflow Cytometer. Journal of Microelectromechanical Systems, 2004, 13, 923-932.	1.7	84
66	Mechanistic Investigation of Nanoparticle Motion in Pulsed Voltage Miniaturized Electrical Field Flow Fractionation Device by in Situ Fluorescence Imaging. Analytical Chemistry, 2004, 76, 2719-2724.	3.2	8
67	Control and Modeling of the Dielectrophoretic Assembly of On-Chip Nanoparticle Wires. Langmuir, 2004, 20, 467-476.	1.6	150
68	Electrokinetic Bioprocessor for Concentrating Cells and Molecules. Analytical Chemistry, 2004, 76, 6908-6914.	3.2	164
69	Geometric and Material Determinants of Patterning Efficiency by Dielectrophoresis. Biophysical Journal, 2004, 87, 2131-2147.	0.2	75
70	Induced-Charge Electrokinetic Phenomena: Theory and Microfluidic Applications. Physical Review Letters, 2004, 92, 066101.	2.9	588
71	Dielectrophoretic Batch Fabrication of Bundled Carbon Nanotube Thermal Sensors. IEEE Nanotechnology Magazine, 2004, 3, 395-403.	1.1	108
72	Quantifying dielectrophoretic collections of sub-micron particles on microelectrodes. Measurement Science and Technology, 2004, 15, 254-266.	1.4	33

#	ARTICLE	IF	CITATIONS
73	Rapid assembly of carbon nanotubes for nanosensing by dielectrophoretic force. <i>Nanotechnology</i> , 2004, 15, S672-S677.	1.3	79
74	Surface Conductance Induced Dielectrophoresis of Semiconducting Single-Walled Carbon Nanotubes. <i>Nano Letters</i> , 2004, 4, 1395-1399.	4.5	213
75	Electrokinetic micropump and micromixer design based on ac faradaic polarization. <i>Journal of Applied Physics</i> , 2004, 96, 1730-1733.	1.1	127
76	Induced-charge electro-osmosis. <i>Journal of Fluid Mechanics</i> , 2004, 509, 217-252.	1.4	636
77	A New ac Electro spray Mechanism by Maxwell-Wagner Polarization and Capillary Resonance. <i>Physical Review Letters</i> , 2004, 92, 133902.	2.9	107
78	Manipulation of Microparticles Using New Modes of Traveling-Wave-Dielectrophoretic Forces: Numerical Simulation and Experiments. <i>IEEE/ASME Transactions on Mechatronics</i> , 2004, 9, 377-383.	3.7	26
79	Electrokinetics in Micro Devices for Biotechnology Applications. <i>IEEE/ASME Transactions on Mechatronics</i> , 2004, 9, 366-376.	3.7	210
80	AC Electrokinetic Pumps for Micro/NanoFluidics. , 2004, , 267.		1
81	AC Electrokinetics for Biosensors. , 2004, , 101.		1
82	Control of Liquid-Bubble Interface to Create a Two-Phase, Dielectrophoretic Mesopump. , 2005, , 369.		0
83	Cell separation technique in dielectrophoretic chip with bulk electrode. , 2005, 6036, 95.		1
84	Controlled aggregation of silver nanoparticles using DEP force for SERS (surface enhanced Raman) Tj ETQq1 1 0.784314 rgBT /Overlock		
85	The electrokinetic properties of latex particles: comparison of electrophoresis and dielectrophoresis. <i>Journal of Colloid and Interface Science</i> , 2005, 285, 419-428.	5.0	216
86	Teaching cells to dance: the impact of transistor miniaturization on the manipulation of populations of living cells. <i>Solid-State Electronics</i> , 2005, 49, 674-683.	0.8	6
87	Harnessing dielectric forces for separations of cells, fine particles and macromolecules. <i>Journal of Chromatography A</i> , 2005, 1079, 59-68.	1.8	70
88	Experimental observation of induced-charge electro-osmosis around a metal wire in a microchannel. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 267, 122-132.	2.3	140
89	Dielectrophoresis of nanocolloids: A molecular dynamics study. <i>European Physical Journal E</i> , 2005, 18, 133-142.	0.7	24
90	Dielectrophoresis induced clustering regimes of viable yeast cells. <i>Electrophoresis</i> , 2005, 26, 3738-3744.	1.3	46

#	ARTICLE	IF	CITATIONS
91	Fast immobilization of probe beads by dielectrophoresis-controlled adhesion in a versatile microfluidic platform for affinity assay. <i>Electrophoresis</i> , 2005, 26, 3697-3705.	1.3	26
92	Experimental analysis of particle and fluid motion in ac electrokinetics. <i>Experiments in Fluids</i> , 2005, 38, 1-10.	1.1	72
93	Electrical porous silicon chemical sensor for detection of organic solvents. <i>Sensors and Actuators B: Chemical</i> , 2005, 106, 347-357.	4.0	126
94	Particle detection by electrical impedance spectroscopy with asymmetric-polarization AC electroosmotic trapping. <i>Microfluidics and Nanofluidics</i> , 2005, 1, 161-167.	1.0	108
95	Directed Assembly of Nanoelements Using Electrostatically Addressable Templates. <i>Materials Research Society Symposia Proceedings</i> , 2005, 901, 1.	0.1	7
96	Manipulation of bio-particles by means of nonuniform AC electric fields. , 2005, 5839, 138.		0
97	Frequency-dependent velocity and vorticity fields of electro-osmotic flow in a closed-end cylindrical microchannel. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 301-312.	1.5	22
98	Theory of simultaneous control of orientation and translational motion of nanorods using positive dielectrophoretic forces. <i>Journal of Applied Physics</i> , 2005, 98, 124314.	1.1	13
99	Influence of alternating current electrokinetic forces and torque on the elongation of immobilized DNA. <i>Journal of Applied Physics</i> , 2005, 97, 014702.	1.1	21
100	Control of Particles in Microelectrode Devices. <i>Physical Review Letters</i> , 2005, 95, 236002.	2.9	29
101	Electrohydrodynamics of binary electrolytes driven by modulated surface potentials. <i>Physical Review E</i> , 2005, 71, 056306.	0.8	26
102	Trapping Single Molecules by Dielectrophoresis. <i>Physical Review Letters</i> , 2005, 95, 128102.	2.9	174
103	All CMOS low power platform for dielectrophoresis bio-analysis. , 0, , .		4
104	Motion of Nanoparticles in Nanofluids Under an Electric Field. , 2005, , 497.		8
105	Self-Assembly of Metallic Nanowires from Aqueous Solution. <i>Nano Letters</i> , 2005, 5, 175-178.	4.5	115
106	Single-Molecule Tracing on a Fluidic Microchip for Quantitative Detection of Low-Abundance Nucleic Acids. <i>Journal of the American Chemical Society</i> , 2005, 127, 5354-5359.	6.6	114
107	A three-dimensional dielectrophoretic particle focusing channel for microcytometry applications. <i>Journal of Microelectromechanical Systems</i> , 2005, 14, 480-487.	1.7	135
108	Long-Range AC Electroosmotic Trapping and Detection of Bioparticles. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 2815-2822.	1.8	127

#	ARTICLE	IF	CITATIONS
109	Dielectrophoretic Traps for Single-Particle Patterning. Biophysical Journal, 2005, 88, 2193-2205.	0.2	183
110	Trapping, Deformation, and Rotation of Giant Unilamellar Vesicles in Octode Dielectrophoretic Field Cages. Biophysical Journal, 2005, 89, 554-562.	0.2	32
111	Million-fold Preconcentration of Proteins and Peptides by Nanofluidic Filter. Analytical Chemistry, 2005, 77, 4293-4299.	3.2	565
112	Electrothermal stirring for heterogeneous immunoassays. Lab on A Chip, 2005, 5, 1366.	3.1	177
113	Integrated Microfluidic System for DNA Analysis. , 2006, , .		2
114	Simulation studies on electrothermal fluid flow induced in a dielectrophoretic microelectrode system. Journal of Micromechanics and Microengineering, 2006, 16, 2411-2419.	1.5	52
115	Controlling electrohydrodynamic pumping in microchannels through defined temperature fields. Physics of Fluids, 2006, 18, 051707.	1.6	32
116	Computing stationary free-surface shapes in microfluidics. Physics of Fluids, 2006, 18, 103303.	1.6	17
117	Theoretical prediction of fast 3D AC electro-osmotic pumps. Lab on A Chip, 2006, 6, 1455.	3.1	150
118	Formation of multilayer aggregates of mammalian cells by dielectrophoresis. Journal of Micromechanics and Microengineering, 2006, 16, 1769-1777.	1.5	31
119	A Dielectrophoretic Chip With a 3-D Electric Field Gradient. Journal of Microelectromechanical Systems, 2006, 15, 1506-1513.	1.7	38
120	Dielectrophoresis of DNA: Time- and Frequency-Dependent Collections on Microelectrodes [†] . IEEE Transactions on Nanobioscience, 2006, 5, 139-146.	2.2	75
121	Dielectrophoretic assembly of reversible and irreversible metal nanowire networks and vertically aligned arrays. Applied Physics Letters, 2006, 88, 233118.	1.5	56
122	Development of an automated microspotting system for rapid dielectrophoretic fabrication of bundled carbon nanotube sensors. IEEE Transactions on Automation Science and Engineering, 2006, 3, 218-227.	3.4	15
123	Directional flow induced by synchronized longitudinal and zeta-potential controlling AC-electrical fields. Lab on A Chip, 2006, 6, 1300.	3.1	43
124	Electrothermal flows generated by alternating and rotating electric fields in microsystems. Journal of Fluid Mechanics, 2006, 564, 415.	1.4	142
125	Breaking symmetries in induced-charge electro-osmosis and electrophoresis. Journal of Fluid Mechanics, 2006, 560, 65.	1.4	293
126	Direct Measurement of Ion Accumulation at the Electrode Electrolyte Interface under an Oscillatory Electric Field. Journal of Physical Chemistry B, 2006, 110, 12581-12587.	1.2	16

#	ARTICLE	IF	CITATIONS
127	Dielectrophoretic Assembly of Nanowires. <i>Journal of Physical Chemistry B</i> , 2006, 110, 14098-14106.	1.2	168
128	Effects of dc-dielectrophoretic force on particle trajectories in microchannels. <i>Journal of Applied Physics</i> , 2006, 99, 064702.	1.1	104
129	Dependence of dielectrophoretic force on the size of linear erythrocyte aggregates in suspension. <i>Biophysics (Russian Federation)</i> , 2006, 51, 645-653.	0.2	1
130	Simultaneous cell lysis and bead trapping in a continuous flow microfluidic device. <i>Sensors and Actuators B: Chemical</i> , 2006, 113, 944-955.	4.0	48
131	ELECTRICAL FORCES FOR MICROSCALE CELL MANIPULATION. <i>Annual Review of Biomedical Engineering</i> , 2006, 8, 425-454.	5.7	790
132	On-chip micromanipulation and assembly of colloidal particles by electric fields. <i>Soft Matter</i> , 2006, 2, 738.	1.2	300
133	Simulation and experimental characterization of electroosmotic flow in surface modified channels. <i>Microfluidics and Nanofluidics</i> , 2006, 2, 345-355.	1.0	19
134	AC electroosmotic flow in a DNA concentrator. <i>Microfluidics and Nanofluidics</i> , 2006, 2, 513-523.	1.0	87
135	Manipulation of particles using dielectrophoresis. <i>Mechanics Research Communications</i> , 2006, 33, 108-122.	1.0	57
136	Accumulation and trapping of hepatitis A virus particles by electrohydrodynamic flow and dielectrophoresis. <i>Electrophoresis</i> , 2006, 27, 1386-1393.	1.3	87
137	Electrode surface ratio optimization for thermal performance in 3-D dielectrophoretic single-cell traps. <i>Electrophoresis</i> , 2006, 27, 1984-1995.	1.3	7
138	Thin Films of Metallic Carbon Nanotubes Prepared by Dielectrophoresis. <i>Advanced Materials</i> , 2006, 18, 1468-1470.	11.1	139
139	Selective sample recovery of DEP-separated cells and particles by phaseguide-controlled laminar flow. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 1847-1853.	1.5	29
140	Microfluidic transport by AC electroosmosis. <i>Journal of Physics: Conference Series</i> , 2006, 34, 356-361.	0.3	23
141	Need for Simulation-Based Design Analysis and Optimization. <i>Journal of the Association for Laboratory Automation</i> , 2006, 11, 118-127.	2.8	1
142	Cell Physiometry Tools based on Dielectrophoresis. , 2006, , 103-126.		13
143	Polyhedra Formation and Transient Cone Ejection of a Resonant Microdrop Forced by an ac Electric Field. <i>Physical Review Letters</i> , 2006, 96, 254502.	2.9	19
144	Frequency response in surface-potential driven electrohydrodynamics. <i>Physical Review E</i> , 2006, 73, 037302.	0.8	3

#	ARTICLE	IF	CITATIONS
145	Automated Dielectrophoretic Cell Fractionation System Using MEMS Technology. , 2006, , .		1
146	Large scale directed assembly of nanoparticles using nanotrench templates. Applied Physics Letters, 2006, 89, 193108.	1.5	47
148	Controlled Bio-Carriers Based on Magnetotactic Bacteria. , 2007, , .		10
149	Design and Fabrication of an Automated Microchip-Based Cell Separation Device. Analytical Letters, 2007, 40, 763-778.	1.0	2
150	A new working principle for ac electro-hydrodynamic on-chip micro-pumps. Journal Physics D: Applied Physics, 2007, 40, 6850-6856.	1.3	26
151	Adaptive temperature estimation in 3D single-cell dielectrophoretic traps using the boundary element method. Molecular Simulation, 2007, 33, 599-603.	0.9	0
152	Theoretical analysis based on particle electro-mechanics for Au Pearl Chain Formation. , 2007, , .		4
153	Nanoelectromechanical Systems " Experiments and Modeling. Nanoscience and Technology, 2007, , 135-196.	1.5	3
154	Nonlinear Phenomena in Induced Charge Electroosmosis. , 2007, , 761.		6
155	Integration of electrodes in Si channels using low temperature polymethylmethacrylate bonding. Journal of Vacuum Science & Technology B, 2007, 25, 368.	1.3	5
156	On the height of cell aggregates formed with positive dielectrophoresis. Journal Physics D: Applied Physics, 2007, 40, 106-113.	1.3	12
157	The dielectrophoretic attachment of nanotube fibres on tungsten needles. Nanotechnology, 2007, 18, 145504.	1.3	12
158	MOLECULAR SELF-ASSEMBLY: A TOOLKIT FOR ENGINEERING AT THE NANOMETER SCALE. Series on Iraq War and Its Consequences, 2007, , 127-165.	0.1	0
159	AC electrokinetic manipulation of DNA. Journal Physics D: Applied Physics, 2007, 40, 114-118.	1.3	13
160	Effects of Microchannel Cross-Section and Applied Electric Field on Electroosmotic Mobility. , 2007, , .		2
161	Directed assembly of gold nanoparticle nanowires and networks for nanodevices. Applied Physics Letters, 2007, 91, 063101.	1.5	46
162	Numerical analysis of mixing by electrothermal induced flow in microfluidic systems. Biomicrofluidics, 2007, 1, 024102.	1.2	32
163	AC Electroosmotic Generated In-Plane Microvortices for Stationary or Continuous Fluid Mixing. , 2007, , .		1

#	ARTICLE	IF	CITATIONS
164	Electrothermal flow in dielectrophoresis of single-walled carbon nanotubes. Physical Review B, 2007, 76, .	1.1	10
165	Two dimensional simulation on immunoassay for a biosensor with applying electrothermal effect. Applied Physics Letters, 2007, 91, 113904.	1.5	21
166	An Aligned Carbon Nanotube Biosensor for DNA Detection. , 2007, , .		14
167	Precise DNA placement and stretching in electrode gaps using electric fields in a microfluidic system. Applied Physics Letters, 2007, 90, 083901.	1.5	12
168	Characterization of laterally aligned carbon nanotubes formed by AC dielectrophoresis. , 2007, , .		0
169	Modeling dielectrophoretic force for manipulating carbon nanotubes (CNTs). , 2007, , .		7
170	AC electrothermal manipulation of conductive fluids and particles for lab-chip applications. IET Nanobiotechnology, 2007, 1, 36.	1.9	119
171	Design and simulation of interdigitated micro-electrode arrays for tumor cells separation and detection. , 2007, 6592, 253.		1
172	Spatial redistribution of nano-particles using electrokinetic micro-focuser. Proceedings of SPIE, 2007, , .	0.8	1
173	Manipulation of Biological Samples using Electric Field. Semiconductor Conference, 2009 CAS 2009 International, 2007, , .	0.0	0
174	Electroosmosis and thermal effects in magnetohydrodynamic (MHD) micropumps using 3D MHD equations. Sensors and Actuators B: Chemical, 2007, 122, 42-52.	4.0	29
175	Generalized Model for Time Periodic Electroosmotic Flows with Overlapping Electrical Double Layers. Langmuir, 2007, 23, 12421-12428.	1.6	62
176	Modeling the mechanisms driving ac electro-osmotic flow on planar microelectrodes. Applied Physics Letters, 2007, 91, 064103.	1.5	2
177	Single cell dielectric spectroscopy. Journal Physics D: Applied Physics, 2007, 40, 61-70.	1.3	365
178	Thermometry in dielectrophoresis chips for contact-free cell handling. Journal Physics D: Applied Physics, 2007, 40, 95-105.	1.3	37
179	AC electrothermal enhancement of heterogeneous assays in microfluidics. Lab on A Chip, 2007, 7, 1553.	3.1	105
180	Electrophoretic and Dielectrophoretic Field Gradient Technique for Separating Bioparticles. Analytical Chemistry, 2007, 79, 4552-4557.	3.2	140
181	Determination of the Accumulated Location of Microparticle Collection Caused by AC EO. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
182	Design and Evaluation of the Nanorod Arrangement Pattern using Electro-magnetic Field Effect. , 2007, , .		0
183	Control of two-phase flow in a microfluidic system using ac electric fields. Applied Physics Letters, 2007, 91, 254107.	1.5	20
184	Sequential Field-Flow Cell Separation Method in a Dielectrophoretic Chip With 3-D Electrodes. Journal of Microelectromechanical Systems, 2007, 16, 1120-1129.	1.7	40
185	The centrifugal microfluidic Bio-Disk platform. Journal of Micromechanics and Microengineering, 2007, 17, S103-S115.	1.5	521
186	Using Nonuniform Electric Fields To Accelerate the Transport of Viruses to Surfaces from Media of Physiological Ionic Strength. Langmuir, 2007, 23, 3840-3848.	1.6	37
187	Synthesis of Gold Nanotadpoles by a Temperature-Reducing Seed Approach and the Dielectrophoretic Manipulation. Journal of Physical Chemistry C, 2007, 111, 16154-16160.	1.5	28
188	Simulation-Based Analysis of Fluid Flow and Electrokinetic Phenomena in Microfluidic Devices. Clinics in Laboratory Medicine, 2007, 27, 41-59.	0.7	4
189	Frequency Dependence of Gold Nanoparticle Superassembly by Dielectrophoresis. Langmuir, 2007, 23, 12450-12456.	1.6	130
190	Dynamic Cell Fractionation and Transportation Using Moving Dielectrophoresis. Analytical Chemistry, 2007, 79, 6975-6987.	3.2	52
191	Influences of electroosmotic flows in nanopillar chips on DNA separation: Experimental results and numerical simulations. Israel Journal of Chemistry, 2007, 47, 161-169.	1.0	19
192	Dielectrophoretic Control of Bubble Transport in Mesochannelsâ€” Experimental Study. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 1131-1139.	0.8	4
193	Enhancement of Biosensor Binding Kinetics Using AC Electrokinetic Mixing. ECS Meeting Abstracts, 2007, , .	0.0	0
194	Tissue engineering with electric fields: Investigation of the shape of mammalian cell aggregates formed at interdigitated oppositely castellated electrodes. Electrophoresis, 2007, 28, 3821-3828.	1.3	19
195	Single DNA Molecule Isolation and Trapping in a Microfluidic Device. ChemPhysChem, 2007, 8, 1875-1880.	1.0	40
196	An integrated dielectrophoretic quartz crystal microbalance (DEP-QCM) device for rapid biosensing applications. Biosensors and Bioelectronics, 2007, 23, 225-232.	5.3	31
197	Electrical and thermal characterization of a dielectrophoretic chip with 3D electrodes for cells manipulation. Electrochimica Acta, 2007, 52, 2862-2868.	2.6	65
198	Numerical design of a 3-D microsystem for bioparticle dielectrophoresis: The Pyramidal Microdevice. Journal of Electrostatics, 2007, 65, 511-520.	1.0	14
199	A micro shear stress sensor based on laterally aligned carbon nanotubes. Sensors and Actuators A: Physical, 2007, 133, 431-438.	2.0	44

#	ARTICLE	IF	CITATIONS
200	AC electroosmotic generated in-plane microvortices for stationary or continuous fluid mixing. <i>Sensors and Actuators B: Chemical</i> , 2007, 125, 326-336.	4.0	50
201	Surface conservation laws at microscopically diffuse interfaces. <i>Journal of Colloid and Interface Science</i> , 2007, 315, 319-329.	5.0	37
202	Remotely powered self-propelling particles and micropumps based on miniature diodes. <i>Nature Materials</i> , 2007, 6, 235-240.	13.3	279
203	An experimental study on the AC electroosmotic flow around a pair of electrodes in a microchannel. <i>Journal of Mechanical Science and Technology</i> , 2007, 21, 2237-2243.	0.7	2
204	Enhancing microcantilever capability with integrated AC electroosmotic trapping. <i>Microfluidics and Nanofluidics</i> , 2007, 3, 369-375.	1.0	41
205	Numerical investigation of AC electrokinetic virus trapping inside high ionic strength media. <i>Microfluidics and Nanofluidics</i> , 2007, 3, 547-560.	1.0	12
206	Novel systems for configurable AC electroosmotic pumping. <i>Microfluidics and Nanofluidics</i> , 2007, 3, 709-714.	1.0	33
207	Stretching and immobilization of DNA for studies of proteinâ€“DNA interactions at the single-molecule level. <i>Nanoscale Research Letters</i> , 2007, 2, 185-201.	3.1	29
208	Direct assembly of nanoparticles for large-scale fabrication of nanodevices and structures. <i>Journal of Nanoparticle Research</i> , 2008, 10, 947-954.	0.8	23
209	Gravitation-driven stress-reduced cell handling. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 857-863.	1.9	12
210	Effects of applied electric field and microchannel wetted perimeter on electroosmotic velocity. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 185-192.	1.0	12
211	High-current density DC magnetohydrodynamics micropump with bubble isolation and release system. <i>Microfluidics and Nanofluidics</i> , 2008, 5, 383-393.	1.0	39
212	Microtubule Alignment and Manipulation Using AC Electrokinetics. <i>Small</i> , 2008, 4, 1371-1381.	5.2	53
213	Observations and analysis of electrokinetically driven particle trapping in planar microelectrode arrays. <i>Canadian Journal of Chemical Engineering</i> , 2008, 86, 609-621.	0.9	6
214	Joule heating in electrokinetic flow. <i>Electrophoresis</i> , 2008, 29, 33-43.	1.3	129
215	Accumulation and filtering of nanoparticles in microchannels using electrohydrodynamically induced vortical flows. <i>Electrophoresis</i> , 2008, 29, 2987-2996.	1.3	26
216	Alternating current electrokinetic separation and detection of DNA nanoparticles in highâ€“conductance solutions. <i>Electrophoresis</i> , 2008, 29, 1765-1774.	1.3	80
217	Electrohydrodynamicâ€“mediated dielectrophoretic separation and transport based on asymmetric electrode pairs. <i>Electrophoresis</i> , 2008, 29, 5017-5025.	1.3	9

#	ARTICLE	IF	CITATIONS
218	Simulation of Stokes flow over microelectrodes with least-squares meshfree method. Simulation Modelling Practice and Theory, 2008, 16, 294-314.	2.2	8
219	Manipulation of nanoparticles and biomolecules by electric field and surface tension. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 2156-2172.	3.4	40
220	T cell activation on a single-cell level in dielectrophoresis-based microfluidic devices. Journal of Chromatography A, 2008, 1202, 83-89.	1.8	23
221	Electric field-directed assembly of gold and platinum nanowires from an electrolysis process. Electrochemistry Communications, 2008, 10, 222-224.	2.3	5
222	Particle AC electrokinetics in planar interdigitated microelectrode geometry. Journal of Electrostatics, 2008, 66, 609-619.	1.0	19
223	A numerical analysis of forces imposed on particles in conventional dielectrophoresis in microchannels with interdigitated electrodes. Journal of Electrostatics, 2008, 66, 620-626.	1.0	57
224	Induced-Charge Electrophoresis of Metallodielectric Particles. Physical Review Letters, 2008, 100, 058302.	2.9	427
225	Electroosmosis at spherical and cylindrical metal surfaces. Colloid Journal, 2008, 70, 695-702.	0.5	11
226	Voltage self-sustained oscillation and phase separation dynamics in a thin layer of a weakly conducting ferromagnetic liquid with periodically emerging electrohydrodynamic flows. Technical Physics, 2008, 53, 192-198.	0.2	5
227	Interactions of electrical fields with fluids:laboratory-on-a-chip applications. IET Nanobiotechnology, 2008, 2, 14.	1.9	66
228	Mass flow-rate control through time periodic electro-osmotic flows in circular microchannels. Physics of Fluids, 2008, 20, .	1.6	71
229	Asymptotic analysis of ion transport in a nonlinear regime around polarized electrodes under ac. Physical Review E, 2008, 77, 031504.	0.8	30
230	Electrokinetic patterning of colloidal particles with optical landscapes. Lab on A Chip, 2008, 8, 1879.	3.1	92
231	A symmetry electrode array for AC and traveling wave electroosmosis pumping. , 2008, , .		0
232	Formation of gold Nano-particle chains by DEP — a parametric experimental analysis. , 2008, , .		3
233	Limitations of Au Particle Nanoassembly Using Dielectrophoretic Force—A Parametric Experimental and Theoretical Study. IEEE Nanotechnology Magazine, 2008, 7, 477-479.	1.1	12
234	Operational Regimes and Physics Present in Optoelectronic Tweezers. Journal of Microelectromechanical Systems, 2008, 17, 342-350.	1.7	158
235	A novel microfluidic driver via AC electrokinetics. Lab on A Chip, 2008, 8, 725.	3.1	16

#	ARTICLE	IF	CITATIONS
236	Numerical design of electrical-mechanical traps. Lab on A Chip, 2008, 8, 755.	3.1	15
237	Cell Motion Model for Moving Dielectrophoresis. Analytical Chemistry, 2008, 80, 5454-5461.	3.2	40
238	Feedback control circuit for biased AC electroosmosis micropump. , 2008, , .		0
239	Integrated Nanopore/Microchannel Devices for ac Electrokinetic Trapping of Particles. Analytical Chemistry, 2008, 80, 657-664.	3.2	59
240	Artificial cilia for active micro-fluidic mixing. Lab on A Chip, 2008, 8, 533.	3.1	250
241	Alternating Current Electrokinetic Motion of Colloidal Particles on Interdigitated Microelectrodes. Analytical Chemistry, 2008, 80, 2832-2841.	3.2	46
242	Dielectrophoretic and Electrothermal Effects at Alternating Current Heated Disk Microelectrodes. Analytical Chemistry, 2008, 80, 7392-7400.	3.2	40
243	Carbon nanotube samples prepared by an electric-field-assisted assembly method appropriate for the fabrication processes of tip-based nanodevices. Journal of Micromechanics and Microengineering, 2008, 18, 035008.	1.5	4
244	Nonlinear electrophoresis of ideally polarizable particles. Europhysics Letters, 2008, 82, 54004.	0.7	22
245	Microgrooves Enhanced AC Electrothermal Pumping for High Conductivity Microfluids. , 2008, , .		0
246	A Study of AC Electrokinetic Phenomena Under DC Electroosmotic Flows. , 2008, , .		0
247	Biomolecular Shuttles Under Dielectrophoretic Forces. , 2008, , .		1
248	Development of multi-layer for Au nanorod assembly. , 2008, , .		0
249	MULTI-LAYER STRUCTURE DESIGN AND SIMULATION FOR AU NANOROD ASSEMBLY. AIP Conference Proceedings, 2008, , .	0.3	0
250	Fundamental aspects of concentration polarization arising from nonuniform electrokinetic transport. Physics of Fluids, 2008, 20, .	1.6	56
251	Nonlinear interactions in electrophoresis of ideally polarizable particles. Physics of Fluids, 2008, 20, .	1.6	46
252	Electrohydromechanical analysis based on conductivity gradient in microchannel. Chinese Physics B, 2008, 17, 4541-4546.	0.7	13
253	Contact-free single-cell cultivation by negative dielectrophoresis. Journal Physics D: Applied Physics, 2008, 41, 175502.	1.3	29

#	ARTICLE	IF	CITATIONS
254	Particle entrapment in a fluid suspension as a feedback effect. <i>New Journal of Physics</i> , 2008, 10, 063030.	1.2	9
255	Combined Microfluidic and Microelectric Trap of Nanopolymeric Beading Conjugant in Continuous Flow. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 2270-2274.	0.8	8
256	The immobilization of DNA molecules to electrodes in confined channels at physiological pH. <i>Nanotechnology</i> , 2008, 19, 465102.	1.3	3
257	Design and generation of DEP force for assembly of CNT-based nano devices. , 2008, , .		4
258	Dielectrophoretic Frequency Effect on Purification and Field Emission of Carbon Nanotubes. , 2008, , .		0
259	Scaling analysis of a universal electrode for molecular biosensors. , 2008, , .		3
260	Enhanced ac electrothermal fluidic pumping in microgrooved channels. <i>Journal of Applied Physics</i> , 2008, 104, 064902.	1.1	50
261	Simulation on binding efficiency of immunoassay for a biosensor with applying electrothermal effect. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	47
262	AC Electrokinetic Phenomena Generated by Microelectrode Structures. <i>Journal of Visualized Experiments</i> , 2008, , .	0.2	1
263	The application of dielectrophoresis on the characterization of electric property in multi-walled carbon nanotubes. , 2008, , .		0
264	Alignment of MWCNTs in polymer composites by dielectrophoresis. <i>EPJ Applied Physics</i> , 2008, 42, 241-246.	0.3	22
265	The effect of chamber size on collection efficiency and pattern in 3D electroosmosis chip. <i>Proceedings of SPIE</i> , 2008, , .	0.8	1
266	Bacterial handling under the influence of non-uniform electric fields: dielectrophoretic and electrohydrodynamic effects. <i>Anais Da Academia Brasileira De Ciencias</i> , 2008, 80, 627-638.	0.3	10
267	ac-field-induced fluid pumping in microsystems with asymmetric temperature gradients. <i>Physical Review E</i> , 2009, 79, 026309.	0.8	12
268	Disinfection of E. coli by nonthermal microplasma electrolysis in normal saline solution. <i>Applied Physics Letters</i> , 2009, 94, 161501.	1.5	56
269	Electrothermal ac electro-osmosis. <i>Applied Physics Letters</i> , 2009, 94, 024101.	1.5	28
270	Experimental characterization of induction electrohydrodynamics for integrated microchannel pumping. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 055015.	1.5	16
271	Experimental verification of Faradaic charging in ac electrokinetics. <i>Biomicrofluidics</i> , 2009, 3, 022405.	1.2	25

#	ARTICLE	IF	CITATIONS
272	Microwave-induced water flows in microsystems. Applied Physics Letters, 2009, 94, 024104.	1.5	8
273	Hybrid electrokinetics for separation, mixing, and concentration of colloidal particles. Nanotechnology, 2009, 20, 165701.	1.3	24
274	Using Dielectrophoresis to Trap Nanobead/Stem Cell Compounds in Continuous Flow. Journal of the Electrochemical Society, 2009, 156, G97.	1.3	13
275	Metallic Nanoparticle Manipulation using Optoelectronic Tweezers. , 2009, , .		5
276	Ultra Fast Micropumping by Reaction Enhanced AC Electrothermal Effect. , 2009, , .		0
277	Proposed triaxial atomic force microscope contact-free tweezers for nanoassembly. Nanotechnology, 2009, 20, 385302.	1.3	15
278	Single-stranded DNA concentration by electrokinetic forces. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2009, 8, 021107.	1.0	0
279	Induced-charge electrokinetic flows about polarizable nano-particles: the thick-Debye-layer limit. Journal of Fluid Mechanics, 2009, 627, 341-360.	1.4	9
280	Insulator-based dielectrophoretic separation of small particles in a sawtooth channel. Electrophoresis, 2009, 30, 1441-1448.	1.3	56
281	Carbon nanotube-based sensor-integrated microfluidic platform for real-time chemical concentration detection. Electrophoresis, 2009, 30, 3198-3205.	1.3	19
282	An AC electrokinetic method for enhanced detection of DNA nanoparticles. Journal of Biophotonics, 2009, 2, 253-261.	1.1	31
283	Electrophoretic methods for separation of nanoparticles. Journal of Separation Science, 2009, 32, 1889-1906.	1.3	148
284	Trapping of cells by insulator-based dielectrophoresis using open-top microstructures. Microsystem Technologies, 2009, 15, 1141-1148.	1.2	23
285	Effects of discrete-electrode configuration on traveling-wave electrohydrodynamic pumping. Microfluidics and Nanofluidics, 2009, 6, 221-230.	1.0	18
286	Experiments on opto-electrically generated microfluidic vortices. Microfluidics and Nanofluidics, 2009, 6, 637-646.	1.0	61
287	A liquid film motor. Microfluidics and Nanofluidics, 2009, 6, 711-715.	1.0	28
288	Modeling and optimization of a multi-enzyme electrokinetically driven multiplexed microchip for simultaneous detection of sugars. Microfluidics and Nanofluidics, 2009, 7, 393-406.	1.0	11
289	Microfluidic flow reversal at low frequency by AC electrothermal effect. Microfluidics and Nanofluidics, 2009, 7, 757-765.	1.0	29

#	ARTICLE	IF	CITATIONS
290	AC electrokinetic pumping on symmetric electrode arrays. <i>Microfluidics and Nanofluidics</i> , 2009, 7, 767-772.	1.0	33
291	Effect of induced-charge double layer on dielectrophoretic motion of particles. <i>Mechanics Research Communications</i> , 2009, 36, 46-54.	1.0	5
292	Selective trapping of live and dead mammalian cells using insulator-based dielectrophoresis within open-top microstructures. <i>Biomedical Microdevices</i> , 2009, 11, 597-607.	1.4	99
293	Water flows induced by microwave electric fields in microsystems. <i>Journal of Electrostatics</i> , 2009, 67, 377-380.	1.0	3
294	Probing DNA mechanical characteristics by dielectrophoresis. <i>Sensors and Actuators B: Chemical</i> , 2009, 136, 472-478.	4.0	19
295	Liposome rupture and contents release over coplanar microelectrode arrays. <i>Journal of Colloid and Interface Science</i> , 2009, 332, 113-121.	5.0	11
296	Electrokinetic DNA concentration in microsystems. <i>Sensors and Actuators A: Physical</i> , 2009, 156, 381-387.	2.0	22
297	Single-cell trapping utilizing negative dielectrophoretic quadrupole and microwell electrodes. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3637-3644.	5.3	79
298	Applications of electrohydrodynamics and Joule heating effects in microfluidic chips: A review. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 3477-3490.	0.9	23
299	Ultrafast micropumping by biased alternating current electrokinetics. <i>Applied Physics Letters</i> , 2009, 94, 064101.	1.5	58
300	Active Manipulation of Quantum Dots using AC Electrokinetics. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6561-6565.	1.5	37
301	Optoelectrofluidic Control of Colloidal Assembly in an Optically Induced Electric Field. <i>Langmuir</i> , 2009, 25, 6010-6014.	1.6	27
302	Study of the Internal Morphology of Cation-Exchange Membranes by Means of Electroosmotic Permeability Relaxations. <i>Journal of Physical Chemistry B</i> , 2009, 113, 12952-12957.	1.2	2
303	NanoPen: Dynamic, Low-Power, and Light-Actuated Patterning of Nanoparticles. <i>Nano Letters</i> , 2009, 9, 2921-2925.	4.5	93
304	Correlating short-term Ca ²⁺ responses with long-term protein expression after activation of single T cells. <i>Lab on A Chip</i> , 2009, 9, 3517.	3.1	27
305	Experimental and theoretical analysis of DEP-based particle deflection for the separation of protein-bound particles. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 015029.	1.5	3
306	Modeling and characterization of electrostatic comb-drive actuators in conducting liquid media. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 065008.	1.5	165
307	Dielectrophoretic field-flow method for separating particle populations in a chip with asymmetric electrodes. <i>Biomicrofluidics</i> , 2009, 3, 44104.	1.2	33

#	ARTICLE	IF	CITATIONS
308	Comprehensive analysis of particle motion under non-uniform AC electric fields in a microchannel. Lab on A Chip, 2009, 9, 62-78.	3.1	104
309	Micro-fluidic actuation using magnetic artificial cilia. Lab on A Chip, 2009, 9, 3413.	3.1	145
310	DC-biased AC-electroosmotic and AC-electrothermal flow mixing in microchannels. Lab on A Chip, 2009, 9, 802-809.	3.1	141
311	Particle Trapping in High-Conductivity Media with Electrothermally Enhanced Negative Dielectrophoresis. Analytical Chemistry, 2009, 81, 2303-2310.	3.2	78
312	Design, fabrication and measurement of CNT based ISFET for NANO devices. , 2009, , .		0
313	An electrohydrodynamic flow in ac electrowetting. Biomicrofluidics, 2009, 3, 44113.	1.2	70
314	Particle-localized AC and DC manipulation and electrokinetics. Annual Reports on the Progress of Chemistry Section C, 2009, 105, 213.	4.4	114
315	Assessment of three AC electroosmotic flow protocols for mixing in microfluidic channel. Lab on A Chip, 2009, 9, 1267.	3.1	23
316	Reconfigurable dielectrophoretic device for neurotransmitters sensing and manipulation. , 2009, , .		3
317	Design, fabrication and testing of CNT based ISFET for Nano pH sensor application: A preliminary study. , 2009, , .		1
318	An electrothermal micromixer for molecular analysis. , 2009, , .		2
319	A Bubble-Free AC Electrokinetic Micropump Using the Asymmetric Capacitance-Modulated Microelectrode Array for Microfluidic Flow Control. Journal of Microelectromechanical Systems, 2009, 18, 38-51.	1.7	10
320	Alternating Current Electrospraying. Industrial & Engineering Chemistry Research, 2009, 48, 9358-9368.	1.8	20
321	Enhanced dc conductivity of low volume-fraction nano-particulate suspensions in silicone and perfluorinated oils. Journal Physics D: Applied Physics, 2009, 42, 062003.	1.3	4
322	Experimental Demonstration of Localized Flow Control in a Microchannel Using Induced-Charge Electroosmosis. , 2009, , .		0
323	An Improved LIEP Method Utilizing Electrothermal Technology. , 2010, , .		0
324	Submicroscale Flow Sensor Employing Suspended Hot Film with Carbon Nanotube Fins. Journal of Thermal Science and Technology, 2010, 5, 51-60.	0.6	11
325	Optically Modulated Electrokinetic Manipulation and Concentration of Colloidal Particles near an Electrode Surface. Langmuir, 2010, 26, 5262-5272.	1.6	69

#	ARTICLE	IF	CITATIONS
326	Thermal non-equilibrium transport in colloids. Reports on Progress in Physics, 2010, 73, 126601.	8.1	321
327	Dielectrophoresis for manipulation of micro/nano particles in microfluidic systems. Analytical and Bioanalytical Chemistry, 2010, 396, 401-420.	1.9	262
328	Label-free cell separation and sorting in microfluidic systems. Analytical and Bioanalytical Chemistry, 2010, 397, 3249-3267.	1.9	789
329	A microfluidic device for rapid concentration of particles in continuous flow by DC dielectrophoresis. Microfluidics and Nanofluidics, 2010, 9, 281-291.	1.0	41
330	Hydrodynamic separation of cells utilizing insulator-based dielectrophoresis. Microsystem Technologies, 2010, 16, 1097-1104.	1.2	18
331	Time periodic electroosmotic flow between oscillating boundaries in narrow confinements. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2010, 2, 61-73.	0.7	6
332	Mathematical modeling of AC electroosmosis in microfluidic and nanofluidic chips using equilibrium and non-equilibrium approaches. Journal of Applied Electrochemistry, 2010, 40, 967-980.	1.5	28
333	AC electrokinetic platform for iontophoretic transdermal drug delivery. Journal of Controlled Release, 2010, 145, 134-140.	4.8	16
334	Electrothermal flow effects in insulating (electrodeless) dielectrophoresis systems. Electrophoresis, 2010, 31, 3622-3633.	1.3	88
335	Creation of arrays of cell aggregates in defined patterns for developmental biology studies using dielectrophoresis. Biotechnology and Bioengineering, 2010, 105, 945-954.	1.7	8
336	Individual evaluation of DEP, EP and AC-EOF effects on λ DNA molecules in a DNA concentrator. Sensors and Actuators B: Chemical, 2010, 143, 769-775.	4.0	27
337	Enhancement of heterogeneous immunoassays using AC electroosmosis. Sensors and Actuators B: Chemical, 2010, 147, 366-375.	4.0	53
338	Surfactant-free dielectrophoretic deposition of multi-walled carbon nanotubes with tunable deposition density. Carbon, 2010, 48, 3559-3569.	5.4	21
339	Label-Free Attomolar Detection of Proteins Using Integrated Nanoelectronic and Electrokinetic Devices. Small, 2010, 6, 967-973.	5.2	75
341	Enhancement of On-chip Bioassay Efficiency With Electrothermal Effect. Materials Research Society Symposia Proceedings, 2010, 1272, 1.	0.1	0
342	Electrothermal Fluid Manipulation of High-Conductivity Samples for Laboratory Automation Applications. Journal of the Association for Laboratory Automation, 2010, 15, 426-432.	2.8	56
343	Numerical and Experimental Study on Dielectrophoretic and Electrohydrodynamic Traps using Micro-Particles on an Interdigitated Electrode Array System. International Journal of Nonlinear Sciences and Numerical Simulation, 2010, 11, .	0.4	2
344	Electrokinetic framework of dielectrophoretic deposition devices. Journal of Applied Physics, 2010, 107, .	1.1	43

#	ARTICLE	IF	CITATIONS
345	Patterning of dielectric nanoparticles using dielectrophoretic forces generated by ferroelectric polydomain films. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	24
346	Modeling of dielectrophoretic transport of myoglobin molecules in microchannels. <i>Biomicrofluidics</i> , 2010, 4, 014105.	1.2	23
347	Electrothermally driven flows in ac electrowetting. <i>Physical Review E</i> , 2010, 81, 015303.	0.8	61
348	Electro-osmotic flows over highly polarizable dielectric surfaces. <i>Physics of Fluids</i> , 2010, 22, .	1.6	31
349	Comparison of Experiments and Simulation of Joule Heating in ac Electrokinetic Chips. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2010, 132, .	0.8	12
350	A new approach of preparing electronic circuit on textile utilizing electrothermal. , 2010, , .		0
351	On Chip Micropumping for Biofluids by Temperature Biased AC Electrothermal Effect. , 2010, , .		0
352	Analysis Tools for Thermally Driven Microfluidics. , 2010, , .		0
353	Combined Microfluidicâ€“Electric Diffused Mixing of Living Cells in Continuous Flow. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 024205.	0.8	6
354	Microfluidic Transport and Micro-scale Flow Physics: An Overview. , 2010, , 1-85.		5
355	Rapid Isolation and Detection of Cell Free Circulating DNA and Other Disease Biomarkers Directly from Whole Blood. , 2010, , 247-257.		1
356	Optically induced electrokinetic concentration and sorting of colloids. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 015022.	1.5	40
357	High-Resolution Local Imaging of Temperature in Dielectrophoretic Platforms. <i>Analytical Chemistry</i> , 2010, 82, 7509-7514.	3.2	17
358	Molecular Simulation of Polyelectrolyte Conformational Dynamics under an AC Electric Field. <i>Macromolecules</i> , 2010, 43, 4805-4813.	2.2	21
359	Hydrodynamic trap for single particles and cells. <i>Applied Physics Letters</i> , 2010, 96, 224101.	1.5	120
360	Selective Parallel Integration of Individual Metallic Single-Walled Carbon Nanotubes from Heterogeneous Solutions. <i>Langmuir</i> , 2010, 26, 10419-10424.	1.6	14
361	Hysteretic Conformational Transition of Single Flexible Polyelectrolyte under Resonant AC Electric Polarization. <i>Macromolecules</i> , 2010, 43, 7402-7405.	2.2	21
362	Quantitative measurements of absolute dielectrophoretic forces using optical tweezers. <i>Optics Letters</i> , 2010, 35, 2493.	1.7	12

#	ARTICLE	IF	CITATIONS
363	Dielectrophoretic separation of colorectal cancer cells. <i>Biomicrofluidics</i> , 2010, 4, 13204.	1.2	91
364	Blood plasma separation and extraction from a minute amount of blood using dielectrophoretic and capillary forces. <i>Sensors and Actuators B: Chemical</i> , 2010, 145, 561-569.	4.0	96
365	Toward High Net Velocities in AC Electroosmotic Micropumps Based on Asymmetric Coplanar Electrodes. <i>IEEE Transactions on Industry Applications</i> , 2010, 46, 1679-1691.	3.3	9
366	Perspectives of Micro and Nanofabrication of Carbon for Electrochemical and Microfluidic Applications. , 2010, , 181-263.		9
367	Negative dielectrophoretic capture of bacterial spores in food matrices. <i>Biomicrofluidics</i> , 2010, 4, 034107.	1.2	42
369	Strongly nonlinear dynamics of electrolytes in large ac voltages. <i>Physical Review E</i> , 2010, 82, 011501.	0.8	115
370	Integrated AC electrokinetic cell separation in a closed-loop device. <i>Lab on A Chip</i> , 2010, 10, 718.	3.1	34
371	Dielectrophoretic assembly of 2 nm gold particles for nano-sensing applications. , 2010, , .		0
372	An AC Electrokinetic Device for the rapid separation and detection of cancer related DNA nanoparticulate biomarkers. , 2011, , .		2
373	Dielectrophoretic forces generated by ferroelectric polydomain films. <i>Phase Transitions</i> , 2011, 84, 810-820.	0.6	3
374	An electro-thermal micro mixer. , 2011, , .		5
375	Electrodes Architectures for Dielectrophoretic-Based Cells Manipulation in LoCs: Modeling, Simulation and Experimental Results. , 2011, , .		2
376	Filtration at the microfluidic level: enrichment of nanoparticles by tunable filters. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 324101.	0.7	9
377	Using Chelating Chitosan Nanobeads and a Microfluidicâ€œMicroelectric Trap to Sort Lead(II) in a Continuous Bloodstream Flow. <i>Journal of the Electrochemical Society</i> , 2011, 158, D166.	1.3	4
378	Automated Dielectrophoretic Characterization of <i>Mycobacterium smegmatis</i> . <i>Analytical Chemistry</i> , 2011, 83, 3507-3515.	3.2	46
379	AC Electrokinetic Micro- and Nano-particle Manipulation and Characterization. , 2011, , 1-28.		5
380	Dynamical mechanism of the liquid film motor. <i>Physical Review E</i> , 2011, 83, 026303.	0.8	11
381	Large-scale integration of single-walled carbon nanotubes and graphene into sensors and devices using dielectrophoresis: A review. <i>Journal of Materials Research</i> , 2011, 26, 1561-1571.	1.2	23

#	ARTICLE	IF	CITATIONS
382	Electrically Induced Colloidal Clusters for Generating Shear Mixing and Visualizing Flow in Microchannels. <i>Langmuir</i> , 2011, 27, 12815-12821.	1.6	2
383	Electrokinetics and Electrohydrodynamics in Microsystems. , 2011, , .		142
384	Optoelectrofluidic platforms for chemistry and biology. <i>Lab on A Chip</i> , 2011, 11, 33-47.	3.1	92
385	A microfluidic-based hydrodynamic trap: design and implementation. <i>Lab on A Chip</i> , 2011, 11, 1786.	3.1	153
386	In situ dynamic measurements of the enhanced SERS signal using an optoelectrofluidic SERS platform. <i>Lab on A Chip</i> , 2011, 11, 2518.	3.1	52
387	Hybrid electrokinetic manipulation in high-conductivity media. <i>Lab on A Chip</i> , 2011, 11, 1770.	3.1	88
388	Single-DNA-molecule trapping with silicon nanotweezers using pulsed dielectrophoresis. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 054020.	1.5	29
389	Effects of Faradaic currents on AC electroosmotic flows with coplanar symmetric electrodes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 376, 47-52.	2.3	9
390	Microwave-induced water flow in a microchannel built on a coplanar waveguide. <i>Journal of Applied Physics</i> , 2011, 110, 064912.	1.1	4
391	Enhancing the Performance of Surface-based Biosensors by AC Electrokinetic Effects - a Review. , 0, , .		0
392	Optoelectrofluidic Manipulation of Nanoparticles and Biomolecules. <i>Advances in OptoElectronics</i> , 2011, 2011, 1-13.	0.6	7
393	Electrohydrodynamic pumping in microsystems. <i>Journal of Physics: Conference Series</i> , 2011, 301, 012028.	0.3	2
394	Study on Micro Optical Diffusion Sensor Using Laser-Induced Dielectrophoresis (Preliminary) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 267 T RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 2011, 77, 1567-1577.	0.2	0
395	Numerical Study Regarding the Influence of Electrodesâ€™ Geometry on the Dielectrophoretic Forces. , 2011, , .		0
396	A study on three-dimensional electrode arrays fabricated by PolyMUMPsÂ® for AC electro-osmotic pumping. <i>Microelectronic Engineering</i> , 2011, 88, 3113-3118.	1.1	5
397	Review of the theory of generalised dielectrophoresis. <i>IET Nanobiotechnology</i> , 2011, 5, 86.	1.9	30
398	Handheld device for the enrichment of rare cells utilising dielectrophoresis in stepping electric fields. <i>Micro and Nano Letters</i> , 2011, 6, 201.	0.6	1
399	Manipulation of microparticles using surface acoustic wave in microfluidic systems: a brief review. <i>Korea Australia Rheology Journal</i> , 2011, 23, 255-267.	0.7	16

#	ARTICLE	IF	CITATIONS
400	An investigation on the behavior of electrospun ZnO nanofibers under the application of low frequency AC electric fields. <i>Journal of Materials Science: Materials in Electronics</i> , 2011, 22, 1303-1307.	1.1	14
401	Sample preconcentration in microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 481-511.	1.0	103
402	Two-phase AC electrothermal fluidic pumping in a coplanar asymmetric electrode array. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 521-529.	1.0	53
403	Localized flow control in microchannels using induced-charge electroosmosis near conductive obstacles. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 1257-1267.	1.0	15
404	Fractionation and characterization of nano- and microparticles in liquid media. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 400, 1787-1804.	1.9	81
405	Electrochemical microfluidics. <i>Chemical Engineering Science</i> , 2011, 66, 1412-1425.	1.9	73
406	Manipulation of gold coated microspheres using electrorotation. <i>Science China Technological Sciences</i> , 2011, 54, 643-649.	2.0	4
407	System Integration - A Major Step toward Lab on a Chip. <i>Journal of Biological Engineering</i> , 2011, 5, 6.	2.0	76
408	Joule heating effects on electroosmotic flow in insulator-based dielectrophoresis. <i>Electrophoresis</i> , 2011, 32, 2274-2281.	1.3	86
409	Real-time cell electrophysiology using a multi-channel dielectrophoretic microelectrode array. <i>Electrophoresis</i> , 2011, 32, 2541-2549.	1.3	24
410	Dielectrophoretic particle-particle interaction under AC electrohydrodynamic flow conditions. <i>Electrophoresis</i> , 2011, 32, 2298-2306.	1.3	18
411	Three-dimensional focusing of particles using negative dielectrophoretic force in a microfluidic chip with insulating microstructures and dual planar microelectrodes. <i>Electrophoresis</i> , 2011, 32, 2428-2435.	1.3	24
412	Fast solvers for models of ICEO microfluidic flows. <i>International Journal for Numerical Methods in Fluids</i> , 2011, 65, 383-404.	0.9	4
413	Integration of single-cell trapping and impedance measurement utilizing microwell electrodes. <i>Biosensors and Bioelectronics</i> , 2011, 26, 2025-2031.	5.3	33
414	A short review on AC electro-thermal micropumps based on smeared structural polarizations in the presence of a temperature gradient. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 376, 97-101.	2.3	32
415	Effect of dispersing media on microstructure of electrophoretically deposited TiO ₂ nanoparticles in dye-sensitized solar cells. <i>Applied Surface Science</i> , 2011, 257, 8500-8505.	3.1	19
416	Numerical simulations of phenomena observed at hot microelectrodes: Inlaid microdisk. <i>Electrochimica Acta</i> , 2011, 56, 7288-7297.	2.6	13
417	Dielectrophoretic and AC electroosmotic trapping of DNA: Numerical simulation incorporating fluid dynamics and steric particle effects. <i>Journal of Electrostatics</i> , 2011, 69, 111-118.	1.0	14

#	ARTICLE	IF	CITATIONS
418	A parametric study of AC electrothermal flow in microchannels with asymmetrical interdigitated electrodes. International Communications in Heat and Mass Transfer, 2011, 38, 275-279.	2.9	55
419	Mixing-dynamics of a passive scalar in a three-dimensional microchannel. International Journal of Heat and Mass Transfer, 2011, 54, 959-966.	2.5	4
420	A cellular preconcentrator utilizing dielectrophoresis generated by curvy electrodes in stepping electric fields. Microelectronic Engineering, 2011, 88, 1764-1767.	1.1	10
421	Non-vanishing ponderomotive AC electrophoretic effect for particle trapping. Nanotechnology, 2011, 22, 245103.	1.3	7
422	A hybrid electrokinetic bioprocessor for static and dynamic pathogen manipulation in physiological samples. , 2011, , .		0
423	Exploitation of physical and chemical constraints for three-dimensional microtissue construction in microfluidics. Biomicrofluidics, 2011, 5, 022203.	1.2	41
424	A handheld preconcentrator for the rapid collection of cancerous cells using dielectrophoresis generated by circular microelectrodes in stepping electric fields. Biomicrofluidics, 2011, 5, 34101-3410110.	1.2	34
425	Trapping Single Cells: Comparison between Sandwiched Insulation with Back Contact (SIBC) and Planar Biochip. Materials Science Forum, 0, 700, 188-194.	0.3	1
426	A new electrothermal technology based on LIEP method. , 2011, , .		0
427	Electrohydrodynamic Pumping in Microsystems. , 2011, , 127-175.		3
428	Automated optical cell detection, sorting, and temperature measurements. , 2011, , .		0
429	Numerical Simulation of Dielectrophoresis Induced Electrothermal Fluid Flow. Key Engineering Materials, 0, 483, 270-275.	0.4	0
430	A theoretical and experimental study of ac electrothermal flows. Journal Physics D: Applied Physics, 2012, 45, 185301.	1.3	61
431	AFM, Tapping Mode. , 2012, , 99-99.		2
432	Single cell measurement using the portable impedance analyzer. , 2012, , .		2
433	Induced-charge electro-osmosis beyond weak fields. Physical Review E, 2012, 86, 061506.	0.8	49
434	Dynamic path planning in robot-aided optical manipulation of biological cells. , 2012, , .		1
435	Study on the use of dielectrophoresis and electrothermal forces to produce on-chip micromixers and microconcentrators. Biomicrofluidics, 2012, 6, 034118.	1.2	26

#	ARTICLE	IF	CITATIONS
436	Theory of water and charged liquid bridges. <i>Physical Review E</i> , 2012, 86, 026302.	0.8	22
437	AC-dielectrophoretic characterization and separation of submicron and micron particles using sidewall AgPDMS electrodes. <i>Biomicrofluidics</i> , 2012, 6, 12807-128079.	1.2	34
438	A 2D-planar dielectrophoretic model. , 2012, , .		0
439	Floating-electrode enhanced constriction dielectrophoresis for biomolecular trapping in physiological media of high conductivity. <i>Biomicrofluidics</i> , 2012, 6, 12806-1280614.	1.2	51
440	Microfluidic Systems for Diagnostic Applications: A Review. <i>Journal of the Association for Laboratory Automation</i> , 2012, 17, 330-347.	2.8	95
441	Heat-transfer enhancement in AC electro-osmotic micro-flows. <i>Journal of Physics: Conference Series</i> , 2012, 395, 012094.	0.3	1
442	Micro/Nano Fluidics Mechanics and Transducers. , 2012, , 45-69.		0
443	Advances in Model Development for Carbon Nanotube Assembly by Dielectrophoresis. <i>Advanced Materials Research</i> , 0, 557-559, 510-514.	0.3	0
446	Recent Applications of AC Electrokinetics in Biomolecular Analysis on Microfluidic Devices. <i>Analytical Sciences</i> , 2012, 28, 3.	0.8	13
447	Particle focusing in a contactless dielectrophoretic microfluidic chip with insulating structures. <i>Microsystem Technologies</i> , 2012, 18, 1879-1886.	1.2	8
448	A microfabricated module for isolating cervical carcinoma cells from peripheral blood utilizing dielectrophoresis in stepping electric fields. <i>Microsystem Technologies</i> , 2012, 18, 1887-1896.	1.2	18
449	Numerical simulation of AC electrothermal micropump using a fully coupled model. <i>Microfluidics and Nanofluidics</i> , 2012, 13, 411-420.	1.0	30
450	Numerical simulation of traveling wave-induced electroconvection. <i>Microfluidics and Nanofluidics</i> , 2012, 13, 421-428.	1.0	6
451	Advances in electrokinetics and their applications in micro/nano fluidics. <i>Microfluidics and Nanofluidics</i> , 2012, 13, 179-203.	1.0	115
452	Characterization and separation of <i>Cryptosporidium</i> and <i>Giardia</i> cells using on-chip dielectrophoresis. <i>Biomicrofluidics</i> , 2012, 6, 12805-1280514.	1.2	22
453	A universal electrode approach for automated electrochemical detection of bacterial 16S rRNA. , 2012, , .		0
454	AC electrokinetics assisted impedance biosensors for rapid bacteria detection. , 2012, , .		0
455	Electrokinetic focusing and separation of mammalian cells in conductive biological fluids. <i>Analyst</i> , The, 2012, 137, 5215.	1.7	41

#	ARTICLE	IF	CITATIONS
456	Electrically Tunable Partial Coalescence of Oppositely Charged Drops. <i>Physical Review Letters</i> , 2012, 109, 094501.	2.9	72
457	Water film motor driven by alternating electric fields: Its dynamical characteristics. <i>Physical Review E</i> , 2012, 85, 036314.	0.8	11
458	Ultrahigh Frequency Voltammetry: Effect of Electrode Material and Frequency of Alternating Potential Modulation on Mass Transport at Hot-Disk Microelectrodes. <i>Analytical Chemistry</i> , 2012, 84, 1353-1359.	3.2	19
459	AC Electrokinetic Templating of Colloidal Particle Assemblies: Effect of Electrohydrodynamic Flows. <i>Langmuir</i> , 2012, 28, 4586-4597.	1.6	4
460	Study of Active Micromixer Driven by Electrothermal Force. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 047002.	0.8	18
461	In Situ Electrokinetic Enhancement for Self-Assembled-Monolayer-Based Electrochemical Biosensing. <i>Analytical Chemistry</i> , 2012, 84, 2702-2707.	3.2	37
462	Optoelectronic reconfigurable microchannels. <i>Lab on A Chip</i> , 2012, 12, 5086.	3.1	8
463	Droplet Microreactors for Materials Synthesis. , 2012, , 179-209.		0
464	Silicon insulator-based dielectrophoresis devices for minimized heating effects. <i>Electrophoresis</i> , 2012, 33, 2498-2507.	1.3	25
465	Dielectrophoretic isolation of <scp>DNA</scp> and nanoparticles from blood. <i>Electrophoresis</i> , 2012, 33, 2482-2490.	1.3	63
466	Fluid mixing using AC electrothermal flow on meandering electrodes in a microchannel. <i>Electrophoresis</i> , 2012, 33, 2668-2673.	1.3	51
467	Using a Microfluidic Microelectric Device to Directly Separate Serum/Blood Cells from a Continuous Whole Bloodstream Flow. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 037002.	0.8	1
468	Drug Delivery System. , 2012, , 587-587.		0
469	Flow Control of Small Objects on Chip: Manipulating Live Cells, Quantum Dots, and Nanowires. <i>IEEE Control Systems</i> , 2012, 32, 26-53.	1.0	53
470	Ab Initio DFT Simulations of Nanostructures. , 2012, , 11-17.		3
471	Doping in Organic Semiconductors. , 2012, , 583-587.		0
472	Analysis of Nanoparticles Based on Electrophoretic Separations. <i>Comprehensive Analytical Chemistry</i> , 2012, , 33-89.	0.7	4
473	AFM. , 2012, , 83-83.		0

#	ARTICLE	IF	CITATIONS
474	Dye Sensitized Solar Cells. , 2012, , 604-604.		0
475	Continuous particle focusing in a waved microchannel using negative dc dielectrophoresis. Journal of Micromechanics and Microengineering, 2012, 22, 095001.	1.5	39
476	Effect of solution conductivity and electrode shape on the deposition of carbon nanotubes from solution using dielectrophoresis. Nanotechnology, 2012, 23, 495606.	1.3	23
477	Electric tweezers: negative dielectrophoretic multiple particle positioning. New Journal of Physics, 2012, 14, 063012.	1.2	7
478	Joule heating effects on electrokinetic focusing and trapping of particles in constriction microchannels. Journal of Micromechanics and Microengineering, 2012, 22, 075011.	1.5	22
480	AC Electroosmosis: Basics and Lab-on-a-Chip Applications. , 2012, , 25-30.		1
481	Highly controlled electrofusion of individually selected cells in dielectrophoretic field cages. Lab on A Chip, 2012, 12, 443-450.	3.1	93
482	MEMS Microfluidics for Lab-on-a-Chip Applications. , 0, , .		5
483	Design and Generation of Dielectrophoretic Forces for Manipulating Carbon Nanotubes. , 2012, , 29-49.		1
484	A microfluidic device for separating erythrocytes polluted by lead (II) from a continuous bloodstream flow. Electrophoresis, 2012, 33, 780-787.	1.3	6
485	Electrokinetic concentration and patterning of colloids with a scanning laser. Electrophoresis, 2012, 33, 1931-1937.	1.3	12
486	Nanoconstriction device for rapid protein preconcentration in physiological media through a balance of electrokinetic forces. Electrophoresis, 2012, 33, 1958-1966.	1.3	55
487	Spectral density representation of dielectric mixtures. Applied Physics A: Materials Science and Processing, 2012, 107, 575-582.	1.1	6
488	Rotational regimes of freely suspended liquid crystal films under electric current in presence of an external electric field. Microfluidics and Nanofluidics, 2012, 13, 83-89.	1.0	12
489	Effect of Low Frequency Electric Field Parameters on Chain Formation of ZnO Nanoparticles for Gas Sensing Applications. Journal of the American Ceramic Society, 2012, 95, 1843-1850.	1.9	11
490	A phase field model for multiphase electro-hydrodynamic flow. International Journal of Multiphase Flow, 2012, 45, 1-11.	1.6	115
491	Development of CNT-ISFET based pH sensing system using atomic force microscopy. Sensors and Actuators A: Physical, 2012, 173, 293-301.	2.0	18
492	Configurable AC electroosmotic pumping and mixing. Microelectronic Engineering, 2012, 90, 47-50.	1.1	14

#	ARTICLE	IF	CITATIONS
493	Dielectrophoresis-Based Integrated Lab-on-Chip for Nano and Micro-Particles Manipulation and Capacitive Detection. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 120-132.	2.7	61
494	Three dimensional simulation on binding efficiency of immunoassay for a biosensor with applying electrothermal effect. Heat and Mass Transfer, 2013, 49, 1647-1658.	1.2	26
495	Study on an alternating current electrothermal micropump for microneedle-based fluid delivery systems. Journal of Applied Physics, 2013, 114, 024701.	1.1	19
496	Fabrication of Nanoassemblies Using Flow Control. Nano Letters, 2013, 13, 3936-3941.	4.5	10
497	Measurement of periodic micro flows using micro-particle image velocimetry with phase sampling. Microfluidics and Nanofluidics, 2013, 15, 127-135.	1.0	2
498	Microfluidic manipulation with artificial/bioinspired cilia. Trends in Biotechnology, 2013, 31, 85-91.	4.9	138
499	Controlling SWCNT assembling density by electrokinetics. Sensors and Actuators A: Physical, 2013, 201, 36-42.	2.0	6
500	Comprehensive analysis of alternating current electrokinetics induced motion of colloidal particles in a three-dimensional microfluidic chip. Journal of Applied Physics, 2013, 113, 194702.	1.1	14
501	AC electrokinetic manipulation of selenium nanoparticles for potential nanosensor applications. Materials Research Bulletin, 2013, 48, 1262-1267.	2.7	17
502	A 2D-Planar Dielectrophoretic Model with Electro-Thermally Induced Fluid Motion and the Stability of Trapping Zones. Journal of Nonlinear Science, 2013, 23, 1001-1021.	1.0	1
503	Continuous manipulation and separation of particles using combined obstacle- and curvature-induced direct current dielectrophoresis. Electrophoresis, 2013, 34, 952-960.	1.3	40
504	Dielectrophoretic isolation and detection of cfDNA nanoparticulate biomarkers and virus from blood. Electrophoresis, 2013, 34, 1076-1084.	1.3	67
505	Automatic microcircuit formation based on gold-coated SU-8 microrods via dielectrophoresis. Chinese Physics B, 2013, 22, 087701.	0.7	0
506	Improved particle concentration by cascade AC electroosmotic flow. Microfluidics and Nanofluidics, 2013, 14, 1021-1030.	1.0	11
507	A Universal Electrode Approach for Automated Electrochemical Molecular Analyses. Journal of Microelectromechanical Systems, 2013, 22, 1126-1132.	1.7	14
508	An AC electrokinetics facilitated biosensor cassette for rapid pathogen identification. Analyst, The, 2013, 138, 3660.	1.7	28
509	An AC electrokinetic impedance immunosensor for rapid detection of tuberculosis. Analyst, The, 2013, 138, 7188.	1.7	57
510	Micro-organism extraction from biological samples using DEP forces enhanced by osmotic shock. Lab on A Chip, 2013, 13, 901.	3.1	20

#	ARTICLE	IF	CITATIONS
511	Continuous size-based focusing and bifurcating microparticle streams using a negative dielectrophoretic system. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 265-276.	1.0	8
512	Water film washers and mixers: their rotational modes and electro-hydrodynamical flows induced by square-wave electric fields. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 319-328.	1.0	3
513	The movement of actin-myosin biomolecular linear motor under AC electric fields: An experimental study. <i>Journal of Colloid and Interface Science</i> , 2013, 394, 312-318.	5.0	3
514	Electrokinetic confinement of axonal growth for dynamically configurable neural networks. <i>Lab on A Chip</i> , 2013, 13, 589.	3.1	41
515	Dielectrophoresis: Applications and future outlook in point of care. <i>Electrophoresis</i> , 2013, 34, 1008-1027.	1.3	70
516	Sample preparation for micro total analytical systems (µ-TASs). <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 43, 174-188.	5.8	30
517	Separation of microalgae with different lipid contents by dielectrophoresis. <i>Bioresource Technology</i> , 2013, 135, 137-141.	4.8	49
518	A Fast Algorithm to Predict Cell Trajectories in Microdevices Using Dielectrophoresis. <i>Numerical Heat Transfer; Part A: Applications</i> , 2013, 64, 107-131.	1.2	10
519	Alternating current-dielectrophoresis driven on-chip collection and chaining of green microalgae in freshwaters. <i>Biomicrofluidics</i> , 2013, 7, 24109.	1.2	26
520	Continuous separation of colloidal particles using dielectrophoresis. <i>Electrophoresis</i> , 2013, 34, 969-978.	1.3	45
521	Moving pulsed dielectrophoresis. <i>Lab on A Chip</i> , 2013, 13, 1538.	3.1	20
522	Dielectrophoretic trapping of nanoparticles with an electrokinetic nanoprobe. <i>Electrophoresis</i> , 2013, 34, 1922-1930.	1.3	19
523	Rapid generation and manipulation of microfluidic vortex flows induced by AC electrokinetics with optical illumination. <i>Lab on A Chip</i> , 2013, 13, 1289.	3.1	18
524	Electrokinetic trapping and surface enhanced Raman scattering detection of biomolecules using optofluidic device integrated with a microneedles array. <i>Biomicrofluidics</i> , 2013, 7, 14111.	1.2	19
525	Numerical modeling of Joule heating effects in insulator-based dielectrophoresis microdevices. <i>Electrophoresis</i> , 2013, 34, 674-683.	1.3	45
526	Directed assembly of conducting polymers on sub-micron templates by electrical fields. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013, 178, 190-201.	1.7	3
527	Directed Motion of Colloidal Particles in a Galvanic Microreactor. <i>Langmuir</i> , 2013, 29, 2498-2505.	1.6	4
528	Cementation of Colloidal Particles on Electrodes in a Galvanic Microreactor. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 6346-6353.	4.0	2

#	ARTICLE	IF	CITATIONS
529	A simple and quick fabrication method of microfluidic cell sorter using Dielectrophoresis. , 2013, , .		2
530	Directed Self-Assembly of Colloidal Model Systems on Charge-Selective Surfaces in External Electric Fields: Theory and Numerical Analysis. Journal of Physical Chemistry B, 2013, 117, 1527-1536.	1.2	5
531	Single Cell Antimicrobial Susceptibility Testing by Confined Microchannels and Electrokinetic Loading. Analytical Chemistry, 2013, 85, 3971-3976.	3.2	91
532	Distinguishing cells by their first-order transient motion response under an optically induced dielectrophoretic force field. Applied Physics Letters, 2013, 103, .	1.5	16
533	Hybrid Modeling Method for a DEP Based Particle Manipulation. Sensors, 2013, 13, 1730-1753.	2.1	5
534	NUMERICAL INVESTIGATIONS OF AC ELECTRO-KINETIC FORCES TO ENHANCE THE RATE OF TRANSPORT OF REACTANTS IN A MICROCHANNEL. Mechanika, 2013, 19, .	0.3	1
535	The Electric Field Analysis of Interdigitated Electrode-Array Based on Semi-Analytical Method. Key Engineering Materials, 0, 562-565, 1218-1223.	0.4	0
536	Advances in Numerical and Experimental Study of Dielectrophoretic Assembly of Carbon Nanotubes. Materials Science Forum, 2013, 745-746, 430-435.	0.3	2
537	Dynamical trapping of colloids at the stagnation points of electro-osmotic vortices of the second kind. Physical Review E, 2013, 87, .	0.8	28
538	Nonlinear electrokinetic flow about a polarized conducting drop. Physical Review E, 2013, 87, 041002.	0.8	10
539	Integrated microfluidic systems for molecular diagnostics: A universal electrode platform for rapid diagnosis of urinary tract infections. IEEE Nanotechnology Magazine, 2013, 7, 31-37.	0.9	10
540	Label-free isolation of circulating tumor cells in microfluidic devices: Current research and perspectives. Biomicrofluidics, 2013, 7, 11810.	1.2	96
541	Microfluidic devices for cell manipulation. , 2013, , 283-350.		3
542	Dielectrophoretic manipulation and separation of particles in an S-shaped microchannel with hurdles. , 2013, , .		0
543	Scaling down constrictionâ€based (electrodeless) dielectrophoresis devices for trapping nanoscale bioparticles in physiological media of highâ€conductivity. Electrophoresis, 2013, 34, 1097-1104.	1.3	63
544	Experimental verification of an equivalent circuit for the characterization of electrothermal micropumps: High pumping velocities induced by the external inductance at driving voltages below 5 V. Electrophoresis, 2013, 34, 562-574.	1.3	26
545	Enhanced electrothermal pumping with thin film resistive heaters. Electrophoresis, 2013, 34, 1400-1408.	1.3	41
546	3D Velocity Measurement by Orthogonal-Plane Micro-PIV for Electrokinetic Enhancement of Surface Reaction. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
547	Numerical Simulation of 2D Electrothermal Flow Using Boundary Element Method. , 2013, , .		1
548	Comprehensive Analysis of Human Cells Motion under an Irrotational AC Electric Field in an Electro-Microfluidic Chip. PLoS ONE, 2014, 9, e95231.	1.1	15
549	Lab-on-a-chip particles manipulation for point-of-care diagnostic systems utilizing dielectrophoresis. , 2014, , .		1
550	Directed Electric Field $\langle i \rangle Z \langle /i \rangle$ Alignment Kinetics of Anisotropic Nanoparticles for Enhanced Ionic Conductivity. Advanced Functional Materials, 2014, 24, 7698-7708.	7.8	28
551	Spatially variant red blood cell crenation in alternating current non-uniform fields. Biomicrofluidics, 2014, 8, 021803.	1.2	17
552	A NOVEL PHOTOELECTRIC CAPILLARY FOR MANIPULATION OF BIOLOGICAL PARTICLES. Instrumentation Science and Technology, 2014, 42, 618-626.	0.9	0
553	The Influence of Electrodes Position to Alternating Current Annular Micromixer. Key Engineering Materials, 2014, 609-610, 1343-1348.	0.4	0
554	On the Mechanism of AC Electroosmosis. Advanced Materials Research, 0, 986-987, 136-145.	0.3	0
555	A numerical study of 2D AC electrothermal pump by lattice Boltzmann method. , 2014, , .		0
556	$\langle i \rangle$ In situ $\langle /i \rangle$ emulsification using a non-uniform alternating electric field. Applied Physics Letters, 2014, 105, 074105.	1.5	4
557	Induced-charge electro-osmosis around metal and Janus spheres in water: Patterns of flow and breaking symmetries. Physical Review E, 2014, 90, 051002.	0.8	55
558	Self-Consistent Approach to Global Charge Neutrality in Electrokinetics: A Surface Potential Trap Model. Physical Review X, 2014, 4, .	2.8	14
559	Improving the binding efficiency of quartz crystal microbalance biosensors by applying the electrothermal effect. Biomicrofluidics, 2014, 8, 054116.	1.2	11
560	A theoretical and numerical investigation of travelling wave induction microfluidic pumping in a temperature gradient. Journal Physics D: Applied Physics, 2014, 47, 075501.	1.3	39
561	Quantitative biomechanics of healthy and diseased human red blood cells using dielectrophoresis in a microfluidic system. Extreme Mechanics Letters, 2014, 1, 35-41.	2.0	88
562	Particle dynamics and rapid trapping in electro-osmotic flow around a sharp microchannel corner. Physics of Fluids, 2014, 26, .	1.6	19
563	Investigation of electrical stimulus on chitosan film based DDS. , 2014, 2014, 1424-7.		0
564	Non-ponderomotive stability and random motion in micro-/nano-scale quadrupole dielectrophoretic traps. Journal Physics D: Applied Physics, 2014, 47, 435501.	1.3	1

#	ARTICLE	IF	CITATIONS
565	Experimental and numerical analysis of electrophoretic deposition on charge selective surfaces in external electric fields. <i>Advances in Applied Ceramics</i> , 2014, 113, 55-64.	0.6	5
566	AC electrothermal micropump for biofluidic applications using numerous microelectrode pairs. , 2014, , .		5
567	Electrokinetic stringency control in self-assembled monolayer-based biosensors for multiplex urinary tract infection diagnosis. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 159-166.	1.7	26
568	Optimization of planar interdigitated microelectrode array for biofluid transport by AC electrothermal effect. <i>Microfluidics and Nanofluidics</i> , 2014, 16, 167-178.	1.0	56
569	Dielectrophoresis in aqueous suspension: impact of electrode configuration. <i>Microfluidics and Nanofluidics</i> , 2014, 17, 499-507.	1.0	15
570	Manipulation and Optical Detection of Colloidal Functional Plasmonic Nanostructures in Microfluidic Systems. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 102-114.	1.9	3
571	Effects of chip geometries on dielectrophoresis and electrorotation investigation. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2014, 27, 103-110.	1.9	5
572	Creation of single-particle environment by positive dielectrophoresis and liquid dielectrophoresis. <i>Microfluidics and Nanofluidics</i> , 2014, 16, 525-532.	1.0	3
573	Coupled lattice Boltzmann method for simulating electrokinetic flows: A localized scheme for the Nernst-Planck model. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014, 19, 3570-3590.	1.7	44
574	Chaotic Induced-Charge Electro-Osmosis. <i>Physical Review Letters</i> , 2014, 112, 128302.	2.9	103
575	Joule heating effects on reservoir-based dielectrophoresis. <i>Electrophoresis</i> , 2014, 35, 721-727.	1.3	36
576	Effect of dispersant on chain formation capability of TiO ₂ nanoparticles under low frequency electric fields for NO ₂ gas sensing applications. <i>Journal of the European Ceramic Society</i> , 2014, 34, 1201-1208.	2.8	17
577	Dielectrophoretic deposition of carbon nanotubes: The role of field frequency and its dependence on solution conductivity. <i>Microelectronic Engineering</i> , 2014, 114, 26-30.	1.1	17
578	Functionality of dielectrophoretically immobilized enzyme molecules. <i>Electrophoresis</i> , 2014, 35, 459-466.	1.3	19
579	Electrokinetic Study and Surface Conductance of Carbon Nanotubes in Liquid Crystal Medium. <i>Soft Materials</i> , 2014, 12, 284-289.	0.8	8
580	Convection and mass transfer enhanced rapid capacitive serum immunoassay. <i>RSC Advances</i> , 2014, 4, 9064.	1.7	10
581	Photothermal Heating Enabled by Plasmonic Nanostructures for Electrokinetic Manipulation and Sorting of Particles. <i>ACS Nano</i> , 2014, 8, 9035-9043.	7.3	73
582	Dielectrophoresis-Enhanced Plasmonic Sensing with Gold Nanohole Arrays. <i>Nano Letters</i> , 2014, 14, 2006-2012.	4.5	149

#	ARTICLE	IF	CITATIONS
583	Individual Template-Stripped Conductive Gold Pyramids for Tip-Enhanced Dielectrophoresis. ACS Photonics, 2014, 1, 464-470.	3.2	30
584	Higher-order dielectrophoresis of nonspherical particles. Physical Review E, 2014, 89, 063302.	0.8	26
585	Battery-powered portable instrument system for single-cell trapping, impedance measurements, and modeling analyses. Electrophoresis, 2014, 35, 2392-2400.	1.3	12
586	Pulsating electric field modulated contact line dynamics of immiscible binary systems in narrow confinements under an electrical double layer phenomenon. Soft Matter, 2014, 10, 8512-8523.	1.2	25
587	Application of astigmatism-PTV to analyze the vortex structure of AC electroosmotic flows. Microfluidics and Nanofluidics, 2014, 16, 553-569.	1.0	10
588	Validated numerical analysis of vortical structures in 3D AC electro-osmotic flows. Microfluidics and Nanofluidics, 2014, 16, 1019.	1.0	4
589	Rapid Antimicrobial Susceptibility Testing with Electrokinetics Enhanced Biosensors for Diagnosis of Acute Bacterial Infections. Annals of Biomedical Engineering, 2014, 42, 2314-2321.	1.3	37
590	Low-Copy Number Protein Detection by Electrode Nanogap-Enabled Dielectrophoretic Trapping for Surface-Enhanced Raman Spectroscopy and Electronic Measurements. Nano Letters, 2014, 14, 2242-2250.	4.5	40
591	Dielectrophoretic isolation and detection of cancer-related circulating cell-free DNA biomarkers from blood and plasma. Electrophoresis, 2014, 35, 1828-1836.	1.3	55
592	Thermoelectrical Modeling of Bipolar Coagulation on Posterior Spinal Artery in a Porcine Spinal Surgery Model. IEEE Transactions on Biomedical Engineering, 2014, 61, 182-188.	2.5	9
593	Dielectrophoretic separation of micron and submicron particles: A review. Electrophoresis, 2014, 35, 2656-2672.	1.3	65
594	Multiplexed actuation using ultra dielectrophoresis for proteomics applications: a comprehensive electrical and electrothermal design methodology. Lab on A Chip, 2014, 14, 2105-2114.	3.1	9
595	Microfluidic mixing on application of traveling wave electroosmosis. European Journal of Mechanics, B/Fluids, 2014, 48, 153-164.	1.2	16
596	A parametric study of electrothermal flow inside an AC EWOD droplet. International Communications in Heat and Mass Transfer, 2014, 55, 63-70.	2.9	4
597	Real-time dielectrophoretic signaling and image quantification methods for evaluating electrokinetic properties of nanoparticles. Electrophoresis, 2015, 36, 1443-1450.	1.3	9
598	AC Electrokinetics for Bioanalysis on a Microchip. Bunseki Kagaku, 2015, 64, 1-8.	0.1	0
599	Bifurcation in the Steady-State Height of Colloidal Particles near an Electrode in Oscillatory Electric Fields: Evidence for a Tertiary Potential Minimum. Physical Review X, 2015, 5, .	2.8	19
600	Alternating current electrohydrodynamics in microsystems: Pushing biomolecules and cells around on surfaces. Biomicrofluidics, 2015, 9, 061501.	1.2	25

#	ARTICLE	IF	CITATIONS
602	Alternating current electrokinetics enhanced in situ capacitive immunoassay. <i>Electrophoresis</i> , 2015, 36, 471-474.	1.3	26
603	Recovery of Drug Delivery Nanoparticles from Human Plasma Using an Electrokinetic Platform Technology. <i>Small</i> , 2015, 11, 5088-5096.	5.2	36
604	Electrothermal pumping with interdigitated electrodes and resistive heaters. <i>Electrophoresis</i> , 2015, 36, 1681-1689.	1.3	34
605	Numerical calculation of dielectrophoretic and electrostatic forces acting on micro-scale particles. <i>Journal of Physics: Conference Series</i> , 2015, 646, 012047.	0.3	2
606	Fluidic dielectrophoresis: The polarization and displacement of electrical liquid interfaces. <i>Electrophoresis</i> , 2015, 36, 1386-1395.	1.3	18
607	Bubble-free electrokinetic flow with propylene carbonate. <i>Electrophoresis</i> , 2015, 36, 2622-2629.	1.3	4
608	Device for dielectrophoretic separation and collection of nanoparticles and DNA under high conductance conditions. <i>Electrophoresis</i> , 2015, 36, 1107-1114.	1.3	23
609	Continuous dielectrophoretic particle separation using a microfluidic device with 3D electrodes and vaulted obstacles. <i>Electrophoresis</i> , 2015, 36, 1744-1753.	1.3	62
610	Two-Dimensional Algal Collection and Assembly by Combining AC-Dielectrophoresis with Fluorescence Detection for Contaminant-Induced Oxidative Stress Sensing. <i>Biosensors</i> , 2015, 5, 319-336.	2.3	19
611	Dynamic Dielectrophoresis Model of Multi-Phase Ionic Fluids. <i>PLoS ONE</i> , 2015, 10, e0117456.	1.1	2
612	Controlled motion of electrically neutral microparticles by pulsed direct current. <i>Scientific Reports</i> , 2015, 5, 10162.	1.6	31
613	Resonant dielectrophoresis and electrohydrodynamics for high-sensitivity impedance detection of whole-cell bacteria. <i>Lab on A Chip</i> , 2015, 15, 3183-3191.	3.1	17
614	A novel alternating current multiple array electrothermal micropump for lab-on-a-chip applications. <i>Biomicrofluidics</i> , 2015, 9, 014113.	1.2	58
615	3D Insulator-based dielectrophoresis using DC-biased, AC electric fields for selective bacterial trapping. <i>Electrophoresis</i> , 2015, 36, 277-283.	1.3	28
616	The Assembly and Fabrication of Single CuO Nanowire Electronic Device Based on Controllable DWS-DEP Technology. <i>IEEE Nanotechnology Magazine</i> , 2015, 14, 101-107.	1.1	12
617	Combination of ac electroosmosis and dielectrophoresis for particle manipulation on electrically-induced microscale wave structures. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 035003.	1.5	9
618	Particle focusing by AC electroosmosis with additional axial flow. <i>Microfluidics and Nanofluidics</i> , 2015, 18, 1115-1129.	1.0	12
619	AC Electrokinetics of Physiological Fluids for Biomedical Applications. <i>Journal of the Association for Laboratory Automation</i> , 2015, 20, 611-620.	2.8	40

#	ARTICLE	IF	CITATIONS
620	A generic and label free method based on dielectrophoresis for the continuous separation of microorganism from whole blood samples. <i>Sensors and Actuators B: Chemical</i> , 2015, 212, 335-343.	4.0	35
621	Cell patterning using a dielectrophoretic hydrodynamic trap. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 363-373.	1.0	20
622	Simulation of TiO ₂ particle trajectory in AC electric field. <i>Computational Materials Science</i> , 2015, 108, 183-191.	1.4	2
623	Predicting and eliminating Joule heating constraints in large dielectrophoretic IDE separators. <i>Chemical Engineering Science</i> , 2015, 137, 235-242.	1.9	11
624	AFM-based protein fishing in the pulsed electric field. <i>Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry</i> , 2015, 9, 121-129.	0.2	10
625	A numerical study of 2D electrothermal flow using boundary element method. <i>Applied Mathematical Modelling</i> , 2015, 39, 2777-2795.	2.2	11
626	Light-actuated electrothermal microfluidic motion: experimental investigation and physical interpretation. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 609-619.	1.0	15
627	Modeling the trajectory of microparticles subjected to dielectrophoresis in a microfluidic device for field flow fractionation. <i>Chemical Engineering Science</i> , 2015, 138, 266-280.	1.9	38
628	Rapid capacitive detection of femtomolar levels of bisphenol A using an aptamer-modified disposable microelectrode array. <i>Mikrochimica Acta</i> , 2015, 182, 2361-2367.	2.5	32
629	An electrokinetic microdevice for isolation and quantification of circulating cell-free DNA from physiological samples. , 2015, , .		1
630	Ultra-capacitor flexible films with tailored dielectric constants using electric field assisted assembly of nanoparticles. <i>Nanoscale</i> , 2015, 7, 20571-20583.	2.8	22
631	Induced soap-film flow by non-uniform alternating electric field. <i>Journal of Electrostatics</i> , 2015, 73, 112-116.	1.0	9
632	Optofluidic droplet router. <i>Laser and Photonics Reviews</i> , 2015, 9, 98-104.	4.4	54
633	Model-based analysis of a dielectrophoretic microfluidic device for field flow fractionation. <i>Journal of Separation Science</i> , 2016, 39, 3028-3036.	1.3	21
634	Long-range electrothermal fluid motion in microfluidic systems. <i>International Journal of Heat and Mass Transfer</i> , 2016, 98, 341-349.	2.5	36
635	Optoelectric patterning: Effect of electrode material and thickness on laser-induced AC electrothermal flow. <i>Electrophoresis</i> , 2016, 37, 658-665.	1.3	7
636	Enhancement of the Analyte Mass Transport in a Microfluidic Biosensor by Deformation of Fluid Flow and Electrothermal Force. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2016, 138, .	1.3	17
637	An effective electrical sensing scheme using AC electrothermal flow on a biosensor platform based on a carbon nanotube network. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	21

#	ARTICLE	IF	CITATIONS
638	In-plane microvortices micromixer-based AC electrothermal for testing drug induced death of tumor cells. <i>Biomicrofluidics</i> , 2016, 10, 064102.	1.2	35
639	Effects of discrete-electrode arrangement on traveling-wave electroosmotic pumping. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 095003.	1.5	19
640	Sheathless electrokinetic particle separation in a bifurcating microchannel. <i>Biomicrofluidics</i> , 2016, 10, 054104.	1.2	15
641	High-throughput screening of filamentous fungi using nanoliter-range droplet-based microfluidics. <i>Scientific Reports</i> , 2016, 6, 27223.	1.6	119
642	Micro/Nano Electrochemical Sensors for Ion Sensing. , 2016, , 187-227.		1
643	Development of three-dimensional integrated microchannel-electrode system to understand the particles' movement with electrokinetics. <i>Biomicrofluidics</i> , 2016, 10, 024105.	1.2	23
644	Liquid crystal-enabled electrophoresis and electro-osmosis. <i>Series in Sof Condensed Matter</i> , 2016, , 415-457.	0.1	1
645	Diffusive-convective transition in the non-equilibrium charging of an electric double layer. <i>Europhysics Letters</i> , 2016, 116, 58001.	0.7	8
646	AC Electroosmotic Pumping in Nanofluidic Funnels. <i>Analytical Chemistry</i> , 2016, 88, 6390-6394.	3.2	26
647	Electrothermal effect on the immunoassay in a microchannel of a biosensor with asymmetrical interdigitated electrodes. <i>Applied Thermal Engineering</i> , 2016, 105, 77-84.	3.0	27
648	Microparticle trajectories in a high-throughput channel for contact-free fractionation by dielectrophoresis. <i>Chemical Engineering Science</i> , 2016, 153, 34-44.	1.9	24
649	A hybrid experimental-numerical technique for determining 3D velocity fields from planar 2D PIV data. <i>Measurement Science and Technology</i> , 2016, 27, 094010.	1.4	2
650	An Ohmic model for electrokinetic flows of binary asymmetric electrolytes. <i>Current Opinion in Colloid and Interface Science</i> , 2016, 24, 52-63.	3.4	12
651	Rotation induced by uniform and non-uniform magnetic fields in a conducting fluid carrying an electric current. <i>RSC Advances</i> , 2016, 6, 112641-112645.	1.7	6
652	Active Particles in Complex and Crowded Environments. <i>Reviews of Modern Physics</i> , 2016, 88, .	16.4	1,875
653	Sensitivity improvement of an electrical sensor achieved by control of biomolecules based on the negative dielectrophoretic force. <i>Biosensors and Bioelectronics</i> , 2016, 85, 977-985.	5.3	30
654	AC electrokinetics of conducting microparticles: A review. <i>Current Opinion in Colloid and Interface Science</i> , 2016, 24, 79-90.	3.4	62
655	Competition between Induced-Charge Electro-Osmosis and Electrothermal Effects at Low Frequencies around a Weakly Polarizable Microchannel Corner. <i>Physical Review Applied</i> , 2016, 5, .	1.5	35

#	ARTICLE	IF	CITATIONS
656	Numerical Study of the Electrothermal Effect on the Kinetic Reaction of Immunoassays for a Microfluidic Biosensor. <i>Langmuir</i> , 2016, 32, 13305-13312.	1.6	19
657	Microcontact Printing of Thiol-Functionalized Ionic Liquid Microarrays for "Membrane-less" and "Spill-less" Gas Sensors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31368-31374.	4.0	11
658	Investigation of localization of DNA molecules using triangular metal electrodes with varying separation. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	1
659	Development of a High-Resolution Scheme for Solving the PNP-NS Equations in Curved Channels. <i>Communications in Computational Physics</i> , 2016, 19, 496-533.	0.7	3
660	Dynamic optoelectric trapping and deposition of multiwalled carbon nanotubes. <i>Microsystems and Nanoengineering</i> , 2016, 2, 16005.	3.4	11
661	Combined AC electroosmosis and dielectrophoresis for controlled rotation of microparticles. <i>Biomicrofluidics</i> , 2016, 10, 024101.	1.2	21
662	Alternating current electrothermal micromixer with thin film resistive heaters. <i>Advances in Mechanical Engineering</i> , 2016, 8, 168781401664626.	0.8	14
663	Bi-directional ACET micropump for on-chip biological applications. <i>Electrophoresis</i> , 2016, 37, 719-726.	1.3	34
664	Numerical simulation of a 2D electrothermal pump by lattice Boltzmann method on GPU. <i>Numerical Heat Transfer; Part A: Applications</i> , 2016, 69, 677-693.	1.2	14
665	On micro-electrokinetic scalar turbulence in microfluidics at a low Reynolds number. <i>Lab on A Chip</i> , 2016, 16, 1030-1038.	3.1	30
666	Microelectrokinetic turbulence in microfluidics at low Reynolds number. <i>Physical Review E</i> , 2016, 93, 013106.	0.8	23
667	Continuous separation of multiple size microparticles using alternating current dielectrophoresis in microfluidic device with acupuncture needle electrodes. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2016, 29, 325-331.	1.9	9
668	An Overview of Alternating Electric Fields Therapy (NovoTTF Therapy) for the Treatment of Malignant Glioma. <i>Current Neurology and Neuroscience Reports</i> , 2016, 16, 8.	2.0	54
669	Electrothermal flow on electrodes arrays at physiological conductivities. <i>IET Nanobiotechnology</i> , 2016, 10, 54-61.	1.9	9
670	Long-range and rapid transport of individual nano-objects by a hybrid electrothermoplasmonic nanotweezer. <i>Nature Nanotechnology</i> , 2016, 11, 53-59.	15.6	231
671	Analysis and measurement of dielectrophoretic manipulation of particles and lymphocytes using rail-type electrodes. <i>Medical Engineering and Physics</i> , 2016, 38, 24-32.	0.8	11
672	CFD design of a microfluidic device for continuous dielectrophoretic separation of charged gold nanoparticles. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 58, 39-48.	2.7	16
673	Dielectrophoresis-Mediated Electrodeformation as a Means of Determining Individual Platelet Stiffness. <i>Annals of Biomedical Engineering</i> , 2016, 44, 903-913.	1.3	28

#	ARTICLE	IF	CITATIONS
674	Configurable ACET micro-manipulator for high conductive mediums by using a novel electrode engineering. <i>Microsystem Technologies</i> , 2017, 23, 1393-1403.	1.2	9
675	Dielectrophoretic spectroscopy using a microscopic electrode array. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
676	Isomotive dielectrophoresis for parallel analysis of individual particles. <i>Electrophoresis</i> , 2017, 38, 1441-1449.	1.3	16
677	AC electrothermal technique in microchannels. , 2017, , .		1
678	Rapid mixing by turbulent-like electrokinetic microflow. <i>Chemical Engineering Science</i> , 2017, 165, 113-121.	1.9	19
679	Multifunctional, inexpensive, and reusable nanoparticle-printed biochip for cell manipulation and diagnosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1306-E1315.	3.3	55
680	Rapid mixing with high throughput in a semi-active semi-passive micromixer. <i>Electrophoresis</i> , 2017, 38, 1310-1317.	1.3	66
681	Alternating current dielectrophoresis of biomacromolecules: The interplay of electrokinetic effects. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 391-408.	4.0	39
682	Quantitative measurements of dielectrophoresis in a nanoscale electrode array with an atomic force microscopy. <i>Applied Physics Letters</i> , 2017, 110, 203701.	1.5	3
683	Capacitive DNA sensor for rapid and sensitive detection of whole genome human herpesvirus-1 dsDNA in serum. <i>Electrophoresis</i> , 2017, 38, 1617-1623.	1.3	26
684	Joule heating effects on two-phase flows in dielectrophoresis microchips. <i>Biochip Journal</i> , 2017, 11, 196-205.	2.5	15
685	Particle Catcher Using Induced-Charge Electroosmosis. <i>Journal of the Physical Society of Japan</i> , 2017, 86, 014401.	0.7	6
686	DNA dielectrophoresis: Theory and applications a review. <i>Electrophoresis</i> , 2017, 38, 1483-1506.	1.3	67
687	Nano-scale AC electrokinetics and electrohydrodynamics. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 011001.	1.3	2
688	Customised spatiotemporal temperature gradients created by a liquid metal enabled vortex generator. <i>Lab on A Chip</i> , 2017, 17, 3862-3873.	3.1	23
689	Numerical investigations of electrothermally actuated moving contact line dynamics: Effect of property contrasts. <i>Physics of Fluids</i> , 2017, 29, 082009.	1.6	12
690	Impedance Analysis AC Techniques. <i>Cellular Quantification. Bioanalysis</i> , 2017, , 137-166.	0.1	0
692	Analysis of micromixing of non-Newtonian fluids driven by alternating current electrothermal flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2017, 247, 123-131.	1.0	56

#	ARTICLE	IF	CITATIONS
693	Highly sensitive protein detection by biospecific <sc>AFM</sc>-based fishing with pulsed electrical stimulation. FEBS Open Bio, 2017, 7, 1186-1195.	1.0	13
694	Nonlinear electrokinetic effects in insulator-based dielectrophoretic systems. Electrophoresis, 2017, 38, 2576-2586.	1.3	27
695	Theoretical and experimental study of high conductive fluid and electric field interaction inside a microchannel. , 2017, , .		0
696	Heavily doped silicon electrode for dielectrophoresis in high conductivity media. Applied Physics Letters, 2017, 111, .	1.5	13
697	Scaling of velocity and scalar structure functions in ac electrokinetic turbulence. Physical Review E, 2017, 95, 023111.	0.8	12
698	Rapid Isolation and Detection of Exosomes and Associated Biomarkers from Plasma. ACS Nano, 2017, 11, 6641-6651.	7.3	275
699	Rotational electrohydrodynamics of a non-Newtonian fluid under electrical double-layer phenomenon: the role of lateral confinement. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	35
700	Surface-charge effects on the electro-orientation of insulating boron-nitride nanotubes in aqueous suspension. Journal of Colloid and Interface Science, 2017, 505, 1185-1192.	5.0	7
701	AC Electrokinetic Fast Mixing in Non-Parallel Microchannels. Chemical Engineering Communications, 2017, 204, 190-197.	1.5	15
702	Stimuli-Responsive Interfaces. , 2017, , .		3
703	Electric Field-Induced Arrangement of Colloidal Materials in Microfluidic Devices. , 2017, , 297-313.		0
704	Microfluidic Studies of Polymer Adsorption in Flow. Macromolecular Chemistry and Physics, 2017, 218, 1600328.	1.1	3
705	Joule heating effects on electroosmotic entry flow. Electrophoresis, 2017, 38, 572-579.	1.3	41
706	Enhanced model-based design of a high-throughput three dimensional micromixer driven by alternating-current electrothermal flow. Electrophoresis, 2017, 38, 258-269.	1.3	26
707	AC electrothermal actuation mechanism for on-chip mixing of high ionic strength fluids. Microsystem Technologies, 2017, 23, 1495-1507.	1.2	7
708	Charge-based separation of particles and cells with similar sizes via the wall-induced electrical lift. Electrophoresis, 2017, 38, 320-326.	1.3	10
709	Effect of travelling wave electric field on fine particles motion on an electrodynamic board. , 2017, , .		5
710	Dielectrophoresis enrichment with built-in capacitive sensor microfluidic platform for tumor rare cell detection. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
711	INFLUENCE OF THE GEOMETRY OF ASYMMETRICAL ELECTRODE ARRAYS ON THE ALTERNATING CURRENT ELECTRO-OSMOSIS FLOW IN MICROCHANNELS. <i>Interfacial Phenomena and Heat Transfer</i> , 2017, 5, 1-8.	0.3	2
712	Simulation Analysis of Improving Microfluidic Heterogeneous Immunoassay Using Induced Charge Electroosmosis on a Floating Gate. <i>Micromachines</i> , 2017, 8, 212.	1.4	14
713	Characterizing Esophageal Cancerous Cells at Different Stages Using the Dielectrophoretic Impedance Measurement Method in a Microchip. <i>Sensors</i> , 2017, 17, 1053.	2.1	23
714	Reversed Currents in Charged Liquid Bridges. <i>Water (Switzerland)</i> , 2017, 9, 353.	1.2	2
715	Alternating Current-Dielectrophoresis Collection and Chaining of Phytoplankton on Chip: Comparison of Individual Species and Artificial Communities. <i>Biosensors</i> , 2017, 7, 4.	2.3	11
716	Frequency-Dependent Electroformation of Giant Unilamellar Vesicles in 3D and 2D Microelectrode Systems. <i>Micromachines</i> , 2017, 8, 24.	1.4	6
717	Three-dimensional particle behavior using defocusing method in micro-toroidal vortex generated by optoelectrokinetic flow. <i>Journal of Visualization</i> , 2018, 21, 569-583.	1.1	1
718	Automated characterization and assembly of individual nanowires for device fabrication. <i>Lab on A Chip</i> , 2018, 18, 1494-1503.	3.1	17
719	Applications: Micro PIV. , 2018, , 547-584.		1
720	Investigation of pumping mechanism for non-Newtonian blood flow with AC electrothermal forces in a microchannel by hybrid boundary element method and immersed boundary-lattice Boltzmann method. <i>Electrophoresis</i> , 2018, 39, 1329-1338.	1.3	16
721	Dynamics of dielectric liquid rise between parallel electrodes under capillary and dielectrophoretic forces. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 055304.	1.3	5
722	Dielectrophoretic immobilisation of nanoparticles as isolated singles in regular arrays. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 065308.	1.3	9
723	Fluid Mixing for Low-Power \hat{c} Digital Microfluidics \hat{c} ™ Using Electroactive Molecular Monolayers. <i>Small</i> , 2018, 14, 1703344.	5.2	10
724	Reconfigurable engineered motile semiconductor microparticles. <i>Nature Communications</i> , 2018, 9, 1791.	5.8	18
725	Randles Circuit Analysis Toward Investigating Interfacial Effects on Microchannel Electrodes. , 2018, 2, 1-4.		7
726	Ultra-fast AC electro-osmotic micropump with arrays of asymmetric ring electrode pairs in 3D cylindrical microchannel. <i>Journal of Applied Physics</i> , 2018, 123, 164301.	1.1	2
727	Dielectrophoresis Microfluidic Enrichment Platform with Built-In Capacitive Sensor for Rare Tumor Cell Detection. <i>Biochip Journal</i> , 2018, 12, 114-122.	2.5	24
728	The plasmonic properties of gold nanoparticle clusters formed <i>via</i> applying an AC electric field. <i>Soft Matter</i> , 2018, 14, 3372-3377.	1.2	12

#	ARTICLE	IF	CITATIONS
729	Simple Approach to Reducing Particle Trapping Voltage in Insulator-Based Dielectrophoretic Systems. <i>Analytical Chemistry</i> , 2018, 90, 4310-4315.	3.2	30
730	Effects of electrothermal vortices on insulator-based dielectrophoresis for circulating tumor cell separation. <i>Electrophoresis</i> , 2018, 39, 869-877.	1.3	46
731	Simulation analysis of rectifying microfluidic mixing with field-effect-tunable electrothermal induced flow. <i>Electrophoresis</i> , 2018, 39, 779-793.	1.3	16
732	Recent advances in AC electrokinetic sample enrichment techniques for biosensor development. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 3601-3615.	4.0	41
733	A high-efficiency micromixing effect by pulsed AC electrothermal flow. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2018, 37, 418-431.	0.5	5
734	Review: Electric field driven pumping in microfluidic device. <i>Electrophoresis</i> , 2018, 39, 702-731.	1.3	84
735	An AC electrothermal self-circulating system with a minimalist process to construct a biomimetic liver lobule model for drug testing. <i>RSC Advances</i> , 2018, 8, 36987-36998.	1.7	3
736	Selective electrohydrodynamic concentration of waterborne parasites on a chip. <i>Lab on A Chip</i> , 2018, 18, 3310-3322.	3.1	5
737	Fast and Reversible Chemiresistive Sensors for Robust Detection of Organic Vapors Using Oleylamine-Functionalized Palladium Nanoparticles. <i>International Journal of High Speed Electronics and Systems</i> , 2018, 27, 1840027.	0.3	4
738	Cancer Detection at your Fingertips: Smartphone-Enabled DNA Testing. , 2018, 2018, 5418-5421.		3
739	Physics of liquid crystals of bent-shaped molecules. <i>Reviews of Modern Physics</i> , 2018, 90, .	16.4	118
740	A Simple Separation Method of the Protein and Polystyrene Bead-Labeled Protein for Enhancing the Performance of Fluorescent Sensor. <i>Journal of Analytical Methods in Chemistry</i> , 2018, 2018, 1-7.	0.7	0
741	Microfluidic dielectrophoretic cell manipulation towards stable cell contact assemblies. <i>Biomedical Microdevices</i> , 2018, 20, 95.	1.4	10
742	Dielectrophoretic separation with a floating-electrode array embedded in microfabricated fluidic networks. <i>Physics of Fluids</i> , 2018, 30, .	1.6	32
743	Magnetic field sensors using arrays of electrospun magnetoelectric Janus nanowires. <i>Microsystems and Nanoengineering</i> , 2018, 4, 37.	3.4	22
744	Propulsion and assembly of remotely powered p-type silicon microparticles. <i>APL Materials</i> , 2018, 6, 121102.	2.2	2
745	Electrothermally modulated contact line dynamics of a binary fluid in a patterned fluidic environment. <i>Physics of Fluids</i> , 2018, 30, .	1.6	36
746	Bioparticle delivery in physiological conductivity solution using AC electrokinetic micropump with castellated electrodes. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 465401.	1.3	10

#	ARTICLE	IF	CITATIONS
747	Energy-efficient generation of controlled vortices on low-voltage digital microfluidic platform. <i>Applied Physics Letters</i> , 2018, 113, 124103.	1.5	11
748	Biofluid pumping and mixing by an AC electrothermal micropump embedded with a spiral microelectrode pair in a cylindrical microchannel. <i>Electrophoresis</i> , 2018, 39, 3156-3170.	1.3	19
749	Review on the physics of electrospray: From electrokinetics to the operating conditions of single and coaxial Taylor cone-jets, and AC electrospray. <i>Journal of Aerosol Science</i> , 2018, 125, 32-56.	1.8	182
750	SERS-from-scratch: An electric field-guided nanoparticle assembly method for cleanroom-free and low-cost preparation of surface-enhanced Raman scattering substrates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 553, 695-702.	2.3	23
751	Molecular assessment of circulating exosomes toward liquid biopsy diagnosis of Ewing sarcoma family of tumors. <i>Translational Research</i> , 2018, 201, 136-153.	2.2	20
752	Electrothermally actuated moving contact line dynamics over chemically patterned surfaces with resistive heaters. <i>Physics of Fluids</i> , 2018, 30, .	1.6	22
753	Direct heating of aqueous droplets using high frequency voltage signals on an EWOD platform. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 862-872.	4.0	22
754	Electro-thermally driven transport of a non-conducting fluid in a two-layer system for MEMS and biomedical applications. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	17
755	Overcoming Diffusion-Limited Biosensing by Electrothermoplasmonics. <i>ACS Photonics</i> , 2018, 5, 3673-3679.	3.2	42
756	Design of an optofluidic diffusion sensor by transient grating using dielectrophoresis. <i>Optics Express</i> , 2018, 26, 16970.	1.7	9
757	Parallel profiling of cancer cells and proteins using a graphene oxide functionalized ac-EHD SERS immunoassay. <i>Nanoscale</i> , 2018, 10, 18482-18491.	2.8	29
758	Microfluidic Technology for Cell Manipulation. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 992.	1.3	18
759	An impedimetric bioaffinity sensing chip integrated with the long-range DC-biased AC electrokinetic centripetal vortex produced in a high conductivity solution. <i>Biomicrofluidics</i> , 2018, 12, 044102.	1.2	4
760	External-Stimuli-Assisted Control over Assemblies of Plasmonic Metals. <i>Materials</i> , 2018, 11, 794.	1.3	11
761	A low voltage nanopipette dielectrophoretic device for rapid entrapment of nanoparticles and exosomes extracted from plasma of healthy donors. <i>Scientific Reports</i> , 2018, 8, 6751.	1.6	45
762	Alteration in contact line dynamics of fluid-fluid interfaces in narrow confinements through competition between thermocapillary and electrothermal effects. <i>Physics of Fluids</i> , 2018, 30, .	1.6	13
763	Direct Detection of Toxic Contaminants in Minimally Processed Food Products Using Dendritic Surface-Enhanced Raman Scattering Substrates. <i>Sensors</i> , 2018, 18, 2726.	2.1	35
764	Finite element analysis of effects of Joule heating, electro-osmosis and slip conditions on the performance of magnetohydrodynamic (MHD) micropumps. <i>AIP Advances</i> , 2018, 8, 075330.	0.6	3

#	ARTICLE	IF	CITATIONS
765	Numerical Study of Particle-Fluid Flow Under AC Electrokinetics in Electrode-Multilayered Microfluidic Device. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 453-463.	2.5	16
766	A highly sensitive aptasensor for on-site detection of lipopolysaccharides in food. <i>Electrophoresis</i> , 2019, 40, 890-896.	1.3	14
767	Revisit of wall-induced lateral migration in particle electrophoresis through a straight rectangular microchannel: Effects of particle zeta potential. <i>Electrophoresis</i> , 2019, 40, 955-960.	1.3	8
768	Strong rotating flow in stationary droplets in low power budget using wire electrode configuration. <i>Electrophoresis</i> , 2019, 40, 2971-2978.	1.3	4
769	Multifrequency Induced-Charge Electroosmosis. <i>Micromachines</i> , 2019, 10, 447.	1.4	4
770	Dielectrophoresis of Amyloid-Beta Proteins as a Microfluidic Template for Alzheimer's Research. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3595.	1.8	6
771	Confined 1D Propulsion of Metallodielectric Janus Micromotors on Microelectrodes under Alternating Current Electric Fields. <i>ACS Nano</i> , 2019, 13, 8842-8853.	7.3	49
772	Brownian Motion and Large Electric Polarizabilities Facilitate Dielectrophoretic Capture of Sub-200 nm Gold Nanoparticles in Water. <i>ChemPhysChem</i> , 2019, 20, 3354-3365.	1.0	7
773	Biomechanical human models for seating discomfort assessment. , 2019, , 643-656.		6
774	Optimization and parametric study of AC electroosmotic micropumping by response surface method. <i>SN Applied Sciences</i> , 2019, 1, 1.	1.5	1
775	AC electrokinetic induced non-Newtonian electrothermal blood flow in 3D microfluidic biosensor with ring electrodes for point-of-care diagnostics. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	15
776	Characterization of Temperature Rise in Alternating Current Electrothermal Flow Using Thermoreflectance Method. <i>Analytical Chemistry</i> , 2019, 91, 12492-12500.	3.2	15
777	A phase-field-based lattice Boltzmann modeling of two-phase electro-hydrodynamic flows. <i>Physics of Fluids</i> , 2019, 31, .	1.6	35
778	Signal generation and storage in FRET-based nanocommunications. <i>Nano Communication Networks</i> , 2019, 21, 100254.	1.6	2
779	Directionally controlled open channel microfluidics. <i>Physics of Fluids</i> , 2019, 31, .	1.6	13
780	Simultaneous Pumping and Mixing of Biological Fluids in a Double-Array Electrothermal Microfluidic Device. <i>Micromachines</i> , 2019, 10, 92.	1.4	14
781	Asymmetric rectified electric fields between parallel electrodes: Numerical and scaling analyses. <i>Physical Review E</i> , 2019, 99, 062603.	0.8	12
782	Cascade of turbulent energy and scalar variance in DC electrokinetic turbulence. <i>Physica D: Nonlinear Phenomena</i> , 2019, 399, 42-50.	1.3	5

#	ARTICLE	IF	CITATIONS
783	A Continuous Flow-through Microfluidic Device for Electrical Lysis of Cells. <i>Micromachines</i> , 2019, 10, 247.	1.4	13
784	Relationships between Electrolyte Concentration and the Supercapacitive Swing Adsorption of CO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21489-21495.	4.0	8
785	Capacitive Detection of Insulin Antibody enhanced by AC Electrothermal mixing. , 2019, , .		1
786	Synthesis of Ag and Cd nanoparticles by nanosecond-pulsed discharge in liquid nitrogen. <i>Frontiers of Chemical Science and Engineering</i> , 2019, 13, 360-368.	2.3	11
787	Numerical investigation of the effect of the electrodes bed on the electrothermally induced fluid flow velocity inside a microchannel. <i>International Journal of Mechanical Sciences</i> , 2019, 157-158, 415-427.	3.6	8
788	Microfluidic analysis of fentanyl-laced heroin samples by surface-enhanced Raman spectroscopy in a hydrophobic medium. <i>Analyst, The</i> , 2019, 144, 3080-3087.	1.7	29
789	Numerical Study of Enhancement of Positive Dielectrophoresis Particle Trapping in Electrode-Multilayered Microfluidic Device. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2936-2944.	2.5	4
790	Triggerable Mutually Amplified Signal Probe Based SERS-Microfluidics Platform for the Efficient Enrichment and Quantitative Detection of miRNA. <i>Analytical Chemistry</i> , 2019, 91, 5043-5050.	3.2	55
791	A microscopic physical description of electrothermal-induced flow for control of ion current transport in microfluidics interfacing nanofluidics. <i>Electrophoresis</i> , 2019, 40, 2683-2698.	1.3	28
792	Interfacial dynamics of immiscible binary fluids through ordered porous media: The interplay of thermal and electric fields. <i>Physics of Fluids</i> , 2019, 31, .	1.6	10
793	Recent advances in direct current electrokinetic manipulation of particles for microfluidic applications. <i>Electrophoresis</i> , 2019, 40, 2484-2513.	1.3	88
794	Analytical study of AC electroosmotic mixing in 2-dimensional microchannel with time periodic surface potential. <i>Biomicrofluidics</i> , 2019, 13, 024102.	1.2	1
795	Particle Timing Control and Alignment in Microchannel Flow by Applying Periodic Force Control Using Dielectrophoretic Force. <i>Analytical Chemistry</i> , 2019, 91, 6462-6470.	3.2	5
796	Continuous Particle Trapping, Switching, and Sorting Utilizing a Combination of Dielectrophoresis and Alternating Current Electrothermal Flow. <i>Analytical Chemistry</i> , 2019, 91, 5729-5738.	3.2	37
797	Joule heating-induced particle manipulation on a microfluidic chip. <i>Biomicrofluidics</i> , 2019, 13, 014113.	1.2	17
798	Optofluidic control using plasmonic TiN bowtie nanoantenna. <i>Optical Materials Express</i> , 2019, 9, 953.	1.6	16
799	Multi-Stage Particle Separation based on Microstructure Filtration and Dielectrophoresis. <i>Micromachines</i> , 2019, 10, 103.	1.4	17
800	A novel approach for microparticle separation based on dielectrophoresis method. <i>Biomedical Physics and Engineering Express</i> , 2019, 5, 035004.	0.6	2

#	ARTICLE	IF	CITATIONS
801	Impact of spatial harmonic waves on dielectric particles displacement in standing and traveling wave electric fields. <i>Journal of Electrostatics</i> , 2019, 98, 25-33.	1.0	12
802	AC Electrothermal Effect in Microfluidics: A Review. <i>Micromachines</i> , 2019, 10, 762.	1.4	41
803	Light programmable micro/nanomotors with optically tunable in-phase electric polarization. <i>Nature Communications</i> , 2019, 10, 5275.	5.8	33
804	New insights into anhydrobiosis using cellular dielectrophoresis-based characterization. <i>Biomicrofluidics</i> , 2019, 13, 064113.	1.2	6
805	Alternating Current Electrothermal Flow for Energy Efficient Thermal Management of Microprocessor Hot Spots. , 2019, . .		1
806	Combining dielectrophoresis and computer vision for precise and fully automated single-cell handling and analysis. <i>Lab on A Chip</i> , 2019, 19, 4016-4020.	3.1	12
807	Assessment of forces acting on fine particles on a traveling-wave electric field conveyor: Application to powder manipulation. <i>Powder Technology</i> , 2019, 343, 375-382.	2.1	21
808	Light-actuated electrothermal microfluidic flow for micro-mixing. <i>Journal of Micromechanics and Microengineering</i> , 2019, 29, 017003.	1.5	6
809	Dielectrophoresis-based filtration effect and detection of amyloid beta in plasma for Alzheimer's disease diagnosis. <i>Biosensors and Bioelectronics</i> , 2019, 128, 166-175.	5.3	18
810	Analysis of Different Computational Techniques for Calculating the Polarizability Tensors of Stem Cells With Realistic Three-Dimensional Morphologies. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 1816-1831.	2.5	3
811	Microfluidic platform for dielectrophoretic separation of bio-particles using serpentine microelectrodes. <i>Microsystem Technologies</i> , 2019, 25, 2813-2820.	1.2	6
812	Cell transport and suspension in high conductivity electrothermal flow with negative dielectrophoresis by immersed boundary-lattice Boltzmann method. <i>International Journal of Heat and Mass Transfer</i> , 2019, 128, 1229-1244.	2.5	23
813	Dielectrophoretic manipulation of nanomaterials: A review. <i>Electrophoresis</i> , 2019, 40, 873-889.	1.3	38
814	On hybrid electroosmotic kinetics for field-effect-reconfigurable nanoparticle trapping in a four-terminal spiral microelectrode array. <i>Electrophoresis</i> , 2019, 40, 979-992.	1.3	21
815	Scaling law analysis of electrohydrodynamics and dielectrophoresis for isomotive dielectrophoresis microfluidic devices. <i>Electrophoresis</i> , 2020, 41, 148-155.	1.3	6
816	Measurement of the real part of the Clausius-Mossotti factor of dielectrophoresis for Brownian particles. <i>Electrophoresis</i> , 2020, 41, 137-147.	1.3	7
817	Selective Manipulation of Biomolecules with Insulator-Based Dielectrophoretic Tweezers. <i>ACS Applied Nano Materials</i> , 2020, 3, 797-805.	2.4	13
818	Controlling the concentration of gold nanorods during their dielectrophoresis-assisted deposition. <i>Materials Research Express</i> , 2020, 7, 015050.	0.8	0

#	ARTICLE	IF	CITATIONS
819	Combined alternating current electrothermal and dielectrophoresis-induced tunable patterning to actuate on-chip microreactions and switching at a floating electrode. <i>Sensors and Actuators B: Chemical</i> , 2020, 304, 127397.	4.0	14
820	On-Chip Concentration and Patterning of Biological Cells Using Interplay of Electrical and Thermal Fields. <i>Analytical Chemistry</i> , 2020, 92, 838-844.	3.2	11
821	Reduction of Taylor-Aris dispersion by lateral mixing for chromatographic applications. <i>Lab on A Chip</i> , 2020, 20, 3938-3947.	3.1	12
822	An Electrochemical Biosensor Platform for Rapid Immunoanalysis of Physiological Fluids. <i>IEEE Open Journal of Nanotechnology</i> , 2020, 1, 31-37.	0.9	5
823	Regulating the aggregation of colloidal particles in an electro-osmotic micropump. <i>Soft Matter</i> , 2020, 16, 10707-10715.	1.2	1
824	Dielectrophoretic Crossover Frequency of Single Particles: Quantifying the Effect of Surface Functional Groups and Electrohydrodynamic Flow Drag Force. <i>Nanomaterials</i> , 2020, 10, 1364.	1.9	5
825	Guided Electrokinetic Assembly of Polystyrene Microbeads onto Photopatterned Carbon Electrode Arrays. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35647-35656.	4.0	5
826	Development of a noise elimination electrical impedance spectroscopy (neEIS) system for single cell identification. <i>Sensing and Bio-Sensing Research</i> , 2020, 30, 100381.	2.2	2
827	Exact axisymmetric interaction of phoretically active Janus particles. <i>Journal of Fluid Mechanics</i> , 2020, 905, .	1.4	15
828	ISFET-Based Sensing and Electric Field Actuation of DNA for On-Chip Detection: A Review. <i>IEEE Sensors Journal</i> , 2020, 20, 11044-11065.	2.4	36
829	Electrochemical metamaterials. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 2101-2111.	1.2	3
830	Phase-controlled field-effect micromixing using AC electroosmosis. <i>Microsystems and Nanoengineering</i> , 2020, 6, 60.	3.4	29
831	Large-Scale Flow in Micro Electrokinetic Turbulent Mixer. <i>Micromachines</i> , 2020, 11, 813.	1.4	8
832	Simulation of the Slip Velocity Effect in an AC Electrothermal Micropump. <i>Micromachines</i> , 2020, 11, 825.	1.4	8
833	AC Electrothermal Flow-Enhanced, Label-Free Immunosensor for Rapid Electrochemical Sensing. , 2020, , .		1
834	Probing Electrified Liquid-Solid Interfaces with Scanning Electron Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 56650-56657.	4.0	3
835	Dielectrophoresis Response of Water-in-Oil-in-Water Double Emulsion Droplets with Singular or Dual Cores. <i>Micromachines</i> , 2020, 11, 1121.	1.4	9
836	Rapid and Sensitive Detection of Nanomolecules by an AC Electrothermal Flow Facilitated Impedance Immunosensor. <i>Analytical Chemistry</i> , 2020, 92, 7762-7769.	3.2	13

#	ARTICLE	IF	CITATIONS
837	Electrohydrodynamic-Driven Micromixing for the Synthesis of Highly Monodisperse Nanoscale Liposomes. <i>ACS Applied Nano Materials</i> , 2020, 3, 4000-4013.	2.4	17
838	Simple model for the electric field and spatial distribution of ions in a microdroplet. <i>Journal of Chemical Physics</i> , 2020, 152, 184702.	1.2	98
839	Pumping of Ionic Liquids by Liquid Metal-Enabled Electrocapillary Flow under DC-Biased AC Forcing. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000345.	1.9	12
840	Study of dielectric particles motion in traveling and standing electrostatic waves using particle tracking velocimetry. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 385502.	1.3	9
841	Precise capture and dynamic relocation of nanoparticulate biomolecules through dielectrophoretic enhancement by vertical nanogap architectures. <i>Nature Communications</i> , 2020, 11, 2804.	5.8	22
842	Numerical simulation of a microfluidic biosensor for C-reactive protein detection into a microchannel with considering electrothermal effect. <i>AEJ - Alexandria Engineering Journal</i> , 2020, 59, 1649-1659.	3.4	5
843	A perturbation solution to the full Poisson-Nernst-Planck equations yields an asymmetric rectified electric field. <i>Soft Matter</i> , 2020, 16, 7052-7062.	1.2	15
844	Applications of Converged Various Forces for Detection of Biomolecules and Novelty of Dielectrophoretic Force in the Applications. <i>Sensors</i> , 2020, 20, 3242.	2.1	8
845	Insulator-based dielectrophoretic antifouling of nanoporous membrane for high conductive water desalination. <i>Desalination</i> , 2020, 482, 114410.	4.0	9
846	Alternating Current Electrothermal Flow for Cooling of Localized Hot Spots in Microelectronic Devices. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2020, 10, 1020-1027.	1.4	1
847	Electroosmosis of a viscoelastic fluid over non-uniformly charged surfaces: Effect of fluid relaxation and retardation time. <i>Physics of Fluids</i> , 2020, 32, .	1.6	27
848	Buoyancy-Free Janus Microcylinders as Mobile Microelectrode Arrays for Continuous Microfluidic Biomolecule Collection within a Wide Frequency Range: A Numerical Simulation Study. <i>Micromachines</i> , 2020, 11, 289.	1.4	9
849	AC electrokinetic immobilization of organic dye molecules. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 3859-3870.	1.9	3
850	Carbon nanotube collections by electro-osmosis in microfluidic systems. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	4
851	Numerical investigation of the effect of electrode arrangement and geometry on electrothermal fluid flow pumping and mixing in microchannel. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 150, 107864.	1.8	8
852	Microfluidic-assisted polymer-protein assembly to fabricate homogeneous functional nanoparticles. <i>Materials Science and Engineering C</i> , 2020, 111, 110768.	3.8	43
853	Numerical investigation into continuous separation of particles and cells in a two-component fluid flow using dielectrophoresis. <i>Journal of Molecular Liquids</i> , 2020, 310, 113211.	2.3	18
854	Step-Wise Deposition Process for Dielectrophoretic Formation of Conductive 50-Micron-Long Carbon Nanotube Bridges. <i>Micromachines</i> , 2020, 11, 371.	1.4	12

#	ARTICLE	IF	CITATIONS
855	AC Electroosmosis Effect on Microfluidic Heterogeneous Immunoassay Efficiency. <i>Micromachines</i> , 2020, 11, 342.	1.4	13
856	Dielectrophoretic properties of submicron diamond particles in sodium chloride aqueous solution. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 046502.	0.8	4
857	Liquid metal droplet-enabled electrocapillary flow in biased alternating electric fields: a theoretical analysis from the perspective of induced-charge electrokinetics. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 085007.	1.5	8
858	Dielectrophoresis of proteins: experimental data and evolving theory. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 3801-3811.	1.9	23
859	Advances and applications of isomotive dielectrophoresis for cell analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 3813-3833.	1.9	11
860	Dynamic-coupling analyses of cells localization by the negative dielectrophoresis. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2021, 235, 402-411.	1.1	5
861	Continuous-Flow Nanoparticle Trapping Driven by Hybrid Electrokinetics in Microfluidics. <i>Electrophoresis</i> , 2021, 42, 939-949.	1.3	24
862	Dielectrophoretic crossover frequency of individual pearl chains formed by bonded colloidal spheres. <i>Sensors and Actuators B: Chemical</i> , 2021, 327, 128888.	4.0	2
863	Numerical study and Taguchi optimization of fluid mixing by a microheater-modulated alternating current electrothermal flow in a Y-shape microchannel. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129242.	4.0	12
864	Dielectrophoretic ultra-high-frequency characterization and in silico sorting on uptake of rare earth elements by <i>Cupriavidus necator</i> . <i>Electrophoresis</i> , 2021, 42, 656-666.	1.3	2
865	A survey of electrokinetically-driven microfluidics for cancer cells manipulation. <i>Electrophoresis</i> , 2021, 42, 605-625.	1.3	7
866	Dielectrophoresis-field flow fractionation for separation of particles: A critical review. <i>Journal of Chromatography A</i> , 2021, 1637, 461799.	1.8	34
867	Joule heating-enabled electrothermal enrichment of nanoparticles in insulator-based dielectrophoretic microdevices. <i>Electrophoresis</i> , 2021, 42, 626-634.	1.3	9
868	Pumping of electrolyte with mobile liquid metal droplets driven by continuous electrowetting: A full-scaled simulation study considering surface-coupled electrocapillary two-phase flow. <i>Electrophoresis</i> , 2021, 42, 950-966.	1.3	14
869	Principles of carbon nanotube dielectrophoresis. <i>Nano Research</i> , 2021, 14, 2188-2206.	5.8	14
870	Dielectrophoretic characterization of dendritic cell deformability upon maturation. <i>BioTechniques</i> , 2021, 70, 29-36.	0.8	6
871	Influence of the obstacles on dielectrophoresis-assisted separation in microfluidic devices for cancerous cells. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2021, 43, 1.	0.8	7
872	Combining field-modulating electroosmotic vortex and insulating post to manipulate particles based on dielectrophoresis. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2021, 42, 371-386.	1.9	5

#	ARTICLE	IF	CITATIONS
873	Microconfined electroosmotic flow of a complex fluid with asymmetric charges: Interplay of fluid rheology and physicochemical heterogeneity. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2021, 289, 104479.	1.0	11
874	Dynamically controlled dielectrophoresis using resonant tuning. <i>Electrophoresis</i> , 2021, 42, 1079-1092.	1.3	4
875	Rational Design of Self-Propelling Particles for Unified Cargo Loading and Transportation. <i>Small</i> , 2021, 17, 2007819.	5.2	5
876	Nanoscale Terahertz Monitoring on Multiphase Dynamic Assembly of Nanoparticles under Aqueous Environment. <i>Advanced Science</i> , 2021, 8, e2004826.	5.6	12
877	Guided Healing of Damaged Microelectrodes via Electrokinetic Assembly of Conductive Carbon Nanotube Bridges. <i>Micromachines</i> , 2021, 12, 405.	1.4	1
878	Spreadsheet analysis of the field-driven start-up flow in a microfluidic channel. <i>Electrophoresis</i> , 2021, 42, 2465-2473.	1.3	2
879	A Simulation Study of the Electrothermal Effect on Cyclic Voltammetric Detection Efficiency of Methamphetamine in a Microfluidic Sensor. <i>Multiscale Science and Engineering</i> , 2021, 3, 155-164.	0.9	2
880	Electrokinetic mixing of two fluids with equivalent conductivity. <i>Chinese Journal of Chemical Engineering</i> , 2022, 42, 256-260.	1.7	5
881	Review of nonlinear electrokinetic flows in insulator-based dielectrophoresis: From induced charge to Joule heating effects. <i>Electrophoresis</i> , 2022, 43, 167-189.	1.3	26
882	Nanopore-based active oil droplet filtration under negative DC dielectrophoresis for oily wastewater treatment. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 345302.	1.3	5
883	Control of Mass Flow-Rate of Viscoelastic Fluids Through Time-Periodic Electro-Osmotic Flows in a Microchannel. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2021, , .	0.8	3
884	Effects of surfactant solubility on the hydrodynamics of a viscous drop in a dc electric field. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	3
885	AC electrokinetic isolation and detection of extracellular vesicles from dental pulp stem cells: Theoretical simulation incorporating fluid mechanics. <i>Electrophoresis</i> , 2021, 42, 2018-2026.	1.3	2
886	Active, Reactive, and Apparent Power in Dielectrophoresis: Force Corrections from the Capacitive Charging Work on Suspensions Described by Maxwell-Wagner's Mixing Equation. <i>Micromachines</i> , 2021, 12, 738.	1.4	7
887	Electrothermoplasmonic Trapping and Dynamic Manipulation of Single Colloidal Nanodiamond. <i>Nano Letters</i> , 2021, 21, 4921-4927.	4.5	21
888	A Sensitive and Specific Genomic RNA Sensor for Point-of-Care Screening of Zika Virus from Serum. <i>Analytical Chemistry</i> , 2021, 93, 11379-11387.	3.2	2
889	AC electrohydrodynamic Landau-Squire flows around a conducting nanotip. <i>Journal of Fluid Mechanics</i> , 2021, 925, .	1.4	0
890	Dielectrophoretic Trapping for Nanoparticles, High-Molecule-Weight DNA, and SYBR Gold Using Polyimide-Based Printed Circuit Board. <i>IEEE Sensors Journal</i> , 2021, 21, 18451-18458.	2.4	3

#	ARTICLE	IF	CITATIONS
891	Enhancing affinity-based electroanalytical biosensors by integrated AC electrokinetic enrichment – A mini review. <i>Electrophoresis</i> , 2022, 43, 201-211.	1.3	8
892	Enhancement of COVID-19 detection time by means of electrothermal force. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 86.	1.0	18
893	Interplay of induced charge electroosmosis and electrothermal flow in insulator-based dielectrophoresis. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	3
894	A critical review on the fabrication techniques that can enable higher throughput in dielectrophoresis devices. <i>Electrophoresis</i> , 2021, , .	1.3	8
895	Novel Micro-Nano Optoelectronic Biosensor for Label-Free Real-Time Biofilm Monitoring. <i>Biosensors</i> , 2021, 11, 361.	2.3	23
896	Particle timing and spacing control in microchannel flow by applying periodic force over space and time. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 1.	1.0	2
897	Microfluidic devices for cell manipulation. , 2021, , 329-389.		1
898	Small universal mechanical module driven by a liquid metal droplet. <i>Lab on A Chip</i> , 2021, 21, 2771-2780.	3.1	11
899	On the design, functions, and biomedical applications of high-throughput dielectrophoretic micro-/nanoplatfoms: a review. <i>Nanoscale</i> , 2021, 13, 4330-4358.	2.8	24
900	Liquid Optothermoelectrics: Fundamentals and Applications. <i>Langmuir</i> , 2021, 37, 1315-1336.	1.6	14
901	Numerical analysis of combined electroosmotic-pressure driven flow of a viscoelastic fluid over high zeta potential modulated surfaces. <i>Physics of Fluids</i> , 2021, 33, .	1.6	27
902	Electric polarizability of metallodielectric Janus particles in electrolyte solutions. <i>Soft Matter</i> , 2021, 17, 9410-9419.	1.2	9
903	Biodetection Using Micro-Physiometry Tools Based on Electrokinetic Phenomena. , 2005, , 129-142.		1
904	Particle Dynamics in a Dielectrophoretic Microdevice. , 2006, , 259-276.		1
905	Biomedical Microfluidics and Electrokinetics. , 2006, , 657-677.		1
906	Electrohydrodynamic and Magnetohydrodynamic Micropumps. , 2007, , 59-116.		14
907	Controlling the Self-Assembly of Zinc Porphyrin P2. <i>Springer Theses</i> , 2013, , 27-90.	0.0	1
908	Microfluidic Platforms for Bio-applications. <i>Microsystems and Nanosystems</i> , 2017, , 253-282.	0.1	9

#	ARTICLE	IF	CITATIONS
909	Microelectrode Fabrication Using Indium Tin Oxide (ITO) For Microfluidic Devices Employing Dielectrophoresis. IFMBE Proceedings, 2008, , 719-722.	0.2	3
910	Application of PIV to AC Electrokinetic Flow. , 2004, , 3-16.		1
911	Induced-Charge Electrokinetic Phenomena. , 2011, , 221-297.		17
912	Nonlinear Electrokinetic Flow: Theory, Experiment, and Potential Applications. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 3-17.	0.1	2
913	AC Electrokinetics of Nanoparticles. , 2015, , 1-10.		2
914	Accurate Measurement of Dielectrophoretic (DEP) Mobility of Particles and Macromolecules. , 2001, , 236-238.		2
915	Electric-field-induced out-of-plane alignment of clay in poly(dimethylsiloxane) with enhanced anisotropic thermal conductivity and mechanical properties. Composites Science and Technology, 2018, 165, 39-47.	3.8	21
916	Orders-of-Magnitude Larger Force Demonstrated for Dielectrophoresis of Proteins Enabling High-Resolution Separations Based on New Mechanisms. Analytical Chemistry, 2021, 93, 1352-1359.	3.2	18
917	Alternating current electrothermal modulated moving contact line dynamics of immiscible binary fluids over patterned surfaces. Soft Matter, 2017, 13, 6377-6389.	1.2	17
918	Investigation of particle inertial migration in high particle concentration suspension flow by multi-electrodes sensing and Eulerian-Lagrangian simulation in a square microchannel. Biomicrofluidics, 2016, 10, 024120.	1.2	13
919	Induced-charge electrokinetics in microfluidics: a review on recent advancements. Journal of Micromechanics and Microengineering, 2020, 30, 113001.	1.5	18
920	Multiple frequency electrothermal induced flow: theory and microfluidic applications. Journal Physics D: Applied Physics, 2020, 53, 175304.	1.3	21
921	Continuous trapping of bacteria in non-Newtonian blood flow using negative dielectrophoresis with quadrupole electrodes. Journal Physics D: Applied Physics, 2021, 54, 015401.	1.3	3
923	Opto-electro-fluidics and tip coax conical surface plasmons. Physical Review Fluids, 2016, 1, .	1.0	8
924	Predictive model for convective flows induced by surface reactivity contrast. Physical Review Fluids, 2018, 3, .	1.0	9
925	Asymmetric rectified electric fields generate flows that can dominate induced-charge electrokinetics. Physical Review Fluids, 2020, 5, .	1.0	20
926	Electrokinetic Propulsion of Polymer Microparticulates Along Glassy Carbon Electrode Array. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.8	1
928	Electrical Detection in Microfluidic Flow Cytometers. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
929	Mass Flow Rate Control in a Cylindrical Capillary by an AC Electric Field at High Zeta Potential. International Journal of Micro-nano Scale Transport, 2014, 5, 23-38.	0.2	1
930	Dependence of Shape and Geometry of Microelectrodes in Manipulating Polarizable Particles like DNA through Electro-kinetic Effects. Defence Science Journal, 2016, 66, 307.	0.5	3
931	INVESTIGATION OF THE EFFECT OF ELECTRIC FIELD ON CO2 ABSORPTION IN WATER/Fe3O4 NANOFLUID. Brazilian Journal of Chemical Engineering, 2019, 36, 1333-1342.	0.7	5
932	Advances of LOC-Based Particle Manipulation by AC Electrical Fields. Recent Patents on Electrical Engineering, 2008, 1, 178-187.	0.4	3
933	In-situ AC electroosmotic and thermal perturbation effects for wide range of ionic strength. AIMS Biophysics, 2017, 4, 451-464.	0.3	2
934	Multiphysical Modeling of DC and AC Electroosmosis in Micro- and Nanosystems. , 0, , .		4
935	Effect of asymmetrical micro electrode surface topography on alternating current electroosmosis flow rate. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 020702.	0.2	2
936	Using a Microfluidicâ€Microelectric Device to Directly Separate Serum/Blood Cells from a Continuous Whole Bloodstream Flow. Japanese Journal of Applied Physics, 2012, 51, 037002.	0.8	1
937	Study of Active Micromixer Driven by Electrothermal Force. Japanese Journal of Applied Physics, 2012, 51, 047002.	0.8	11
938	Nano/Micro Technologies for Detecting a Single DNA Molecule. , 2003, , 477-493.		0
940	Modeling Dielectrophoretic Force Induced Bubble Motion in Micro-Channels. , 2006, , .		0
941	Bio-MEMS Devices in Cell Manipulation. , 2006, , 237-262.		0
942	Biological- and Chemical-Mediated Self-Assembly of Artificial Micro- and Nanostructures. The Electrical Engineering Handbook, 2007, , 17-1-17-38.	0.2	1
943	Nanoparticle Manipulation by Electrostatic Forces. The Electrical Engineering Handbook, 2007, , 16-1-16-32.	0.2	0
944	Numerical and Theoretical Analysis of the Ion Transport Around a Completely Polarizable Electrode Under AC for Use in Microfluidics. , 2007, , .		0
945	Numerical analysis of thermal and electrohydrodynamic effects in travelling-wave dielectrophoretic devices. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2007, 29, 410-420.	0.8	0
946	Microfluidics. , 2009, , 5573-5588.		0
948	10.1007/s11454-008-2007-0. , 2010, 53, 192.		0

#	ARTICLE	IF	CITATIONS
949	AC Electrokinetic Particle Manipulation in Microsystems. NATO Science for Peace and Security Series A: Chemistry and Biology, 2010, , 481-506.	0.5	0
950	Electrorotation manipulation of microparticles induced by torque and electroosmotic slip in microsystem. Wuli Xuebao/Acta Physica Sinica, 2011, 60, 010701.	0.2	0
951	Manipulation by Electrical Fields. , 2011, , 57-88.		0
952	Manipulation by Electrical Fields. , 2011, , 41-71.		0
953	Electrohydrodynamical characteristics of liquid film motor driven by a square-wave electrophoresis electric field. Wuli Xuebao/Acta Physica Sinica, 2012, 61, 134703.	0.2	1
954	Nanoparticle Manipulation by Electrostatic Forces. The Electrical Engineering Handbook, 2012, , 279-312.	0.2	0
955	Biological- and Chemical-Mediated Self-Assembly of Artificial Micro- and Nanostructures. The Electrical Engineering Handbook, 2012, , 313-350.	0.2	0
956	Electrothermal Effects. , 2013, , 1-9.		0
958	Fluid flow driven by AC electric fields in microelectrodes. , 1999, , 151-154.		0
959	Modern Thermoelectrochemistry. Monographs in Electrochemistry, 2015, , 53-72.	0.2	0
961	Effect of Curvature of Tip and Convexity of Electrode on Localization of Particles. Open Journal of Fluid Dynamics, 2015, 05, 295-301.	0.3	1
965	Detection of Nanoparticulate Biomarkers in Blood. , 2016, , 707-715.		0
966	Dielectrophoresis. , 2016, , 730-741.		0
968	Mikroströmungen. , 2016, , 1-52.		0
969	Rapid Electrokinetic Patterning and Its Applications. , 2016, , 3409-3419.		0
970	Tumor-Treating Electric Fields for Glioblastoma. , 2016, , 213-224.		1
971	Mikroströmungen. , 2017, , 663-714.		0
972	Micro-hole array fluorescent sensor based on AC-Dielectrophoresis (DEP) for simultaneous analysis of nano-molecules. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
975	Electrical Detection in Microfluidic Flow Cytometers. , 2019, , 181-199.		0
976	Co-deposition and electrokinetic behavior of TiO ₂ –WO ₃ nanoparticles under non-uniform AC field. International Journal of Materials Research, 2019, 110, 773-780.	0.1	1
977	AC Electrokinetics-Enhanced Capacitive Virus Detection. , 2020, , 1-26.		0
978	Nanomanipulation with Designer Thermoplasmonic Metasurface. , 0, , .		0
979	Effects of laser light and AC signals on opto-electrohydrodynamic flow with twin microvortices: I. non-uniform AC electric fields. Journal of Micromechanics and Microengineering, 2021, 31, 025007.	1.5	0
980	Assembly of long carbon nanotube bridges across transparent electrodes using novel thickness-controlled dielectrophoresis. Electrophoresis, 2022, 43, 487-494.	1.3	12
981	AC Electrokinetic Stirring and Focusing of Nanoparticles. , 2006, , 243-255.		0
982	Electric-Field-Driven Micro/Nanomachines for Biological Applications. , 2022, , 113-131.		1
983	Emerging on-chip electrokinetic based technologies for purification of circulating cancer biomarkers towards liquid biopsy: A review. Electrophoresis, 2022, 43, 288-308.	1.3	7
984	Electrical Propulsion and Cargo Transport of Microbowl Shaped Janus Particles. Small, 2022, 18, e2101809.	5.2	9
985	Microscale electrokinetic-based analysis of intact cells and viruses. Electrophoresis, 2022, 43, 263-287.	1.3	12
986	Shaping liquid films by dielectrophoresis. Flow, 2021, 1, .	1.0	3
987	Effect of Permittivity on the Electric-Field-Driven Rotation Dynamics in a Liquid Film. Applied Mechanics, 2022, 3, 78-87.	0.7	1
988	Faradaic-free electrokinetic nucleic acid amplification (E-NAAMP) using localized on-chip high frequency Joule heating. Biomicrofluidics, 2022, 16, 014101.	1.2	0
989	Effects of Frequency and Joule Heating on Height Rise between Parallel Electrodes with AC Electric Fields. Langmuir, 2022, 38, 1204-1214.	1.6	6
990	AC Electrokinetics-Enhanced Capacitive Virus Detection. , 2022, , 317-341.		0
991	Continuous-Flow Size Fractionation of Extracellular Vesicles Using A Microfluidic Junction Featuring Electrode Microbridges. , 2022, , .		0
992	Fluid pumping by liquid metal droplet utilizing ac electric field. Physical Review E, 2022, 105, 025102.	0.8	21

#	ARTICLE	IF	CITATIONS
993	3D simulation of microfluidic biosensor for SARS-CoV-2 S protein binding kinetics using new reaction surface design. <i>European Physical Journal Plus</i> , 2022, 137, 241.	1.2	14
994	Artificial Intelligence Algorithms Enable Automated Characterization of the Positive and Negative Dielectrophoretic Ranges of Applied Frequency. <i>Micromachines</i> , 2022, 13, 399.	1.4	2
995	Ultrafast Electrothermal Flow-Enhanced Magneto Biosensor for Highly Sensitive Protein Detection in Whole Blood. <i>Angewandte Chemie</i> , 0, , .	1.6	0
996	Ultrafast Electrothermal Flow-Enhanced Magneto Biosensor for Highly Sensitive Protein Detection in Whole Blood. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	9
997	AC electrokinetic immobilization of influenza virus. <i>Electrophoresis</i> , 2022, , .	1.3	3
998	3D Concentric Electrodes-Based Alternating Current Electrohydrodynamics: Design, Simulation, Fabrication, and Potential Applications for Bioassays. <i>Biosensors</i> , 2022, 12, 215.	2.3	2
999	Rational Design and Numerical Analysis of a Hybrid Floating cDE Separator for Continuous Dielectrophoretic Separation of Microparticles at High Throughput. <i>Micromachines</i> , 2022, 13, 582.	1.4	4
1000	AC electroosmosis micromixing on a lab-on-a-foil electric microfluidic device. <i>Sensors and Actuators B: Chemical</i> , 2022, 359, 131611.	4.0	13
1001	Sorting Gold and Sand (Silica) Using Atomic Force Microscope-Based Dielectrophoresis. <i>Nano-Micro Letters</i> , 2022, 14, 13.	14.4	3
1002	Reconfigurable microfluidics. <i>Nature Reviews Chemistry</i> , 2022, 6, 70-80.	13.8	38
1003	Mikroströmungen. <i>Springer Reference Technik</i> , 2020, , 1-53.	0.0	0
1004	Design parameters optimization of an electrothermal flow biosensor for the SARS-CoV-2 S protein immunoassay. <i>Indian Journal of Physics</i> , 2022, 96, 4091-4101.	0.9	11
1005	Diagnosis of Bloodstream Infections: An Evolution of Technologies towards Accurate and Rapid Identification and Antibiotic Susceptibility Testing. <i>Antibiotics</i> , 2022, 11, 511.	1.5	16
1006	Quantifying the dielectrophoretic force on colloidal particles in microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2022, 26, .	1.0	9
1008	A systematic overview of electrode configuration in electrically-driven micropumps. <i>Electrophoresis</i> , 2022, 43, 1476-1520.	1.3	9
1009	A tripodal wheeled mobile robot driven by a liquid metal motor. <i>Lab on A Chip</i> , 2022, 22, 1943-1950.	3.1	9
1010	Efficacy of microconfined fluid mixing in a combined electroosmotic and pressure driven transport of complex fluid over discrete electrodes. <i>Physics of Fluids</i> , 2022, 34, .	1.6	11
1011	Reaction-Free Concentration Gradient Generation in Spatially Nonuniform AC Electric Fields. <i>Langmuir</i> , 2022, 38, 5977-5986.	1.6	5

#	ARTICLE	IF	CITATIONS
1012	Numerical investigation of continuous acoustic particle separation using electrothermal pumping in a point of care microfluidic device. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 176, 108964.	1.8	3
1013	Optical trapping in micro- and nanoconfinement systems: Role of thermo-fluid dynamics and applications. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2022, 52, 100533.	5.6	5
1014	Trapping plasmonic nanoparticles with MHz electric fields. <i>Applied Physics Letters</i> , 2022, 120, 203303.	1.5	1
1015	Numerical characterization of inter-core coalescence by AC dielectrophoresis in double emulsion droplets. <i>Electrophoresis</i> , 2022, 43, 2141-2155.	1.3	4
1016	Transport-Induced-Charge Distribution Near the Entrance of an Ultrathin Nanopore. , 2022, , .		0
1017	Potential neuroprotective effect of stem cells from apical papilla derived extracellular vesicles enriched by lab-on-chip approach during retinal degeneration. <i>Cellular and Molecular Life Sciences</i> , 2022, 79, .	2.4	4
1018	Efficient nanoparticle focusing utilizing cascade AC electroosmotic flow. <i>Electrophoresis</i> , 0, , .	1.3	3
1019	A Critical Review on the Sensing, Control, and Manipulation of Single Molecules on Optofluidic Devices. <i>Micromachines</i> , 2022, 13, 968.	1.4	3
1020	Dielectrophoresis from the System's Point of View: A Tale of Inhomogeneous Object Polarization, Mirror Charges, High Repelling and Snap-to-Surface Forces and Complex Trajectories Featuring Bifurcation Points and Watersheds. <i>Micromachines</i> , 2022, 13, 1002.	1.4	3
1021	Passively and actively enhanced surface plasmon resonance sensing strategies towards single molecular detection. <i>Nano Research</i> , 2022, 15, 8367-8388.	5.8	10
1022	Dielectrophoretic Traps for Efficient Bead and Cell Trapping and Formation of Aggregates of Controlled Size and Composition. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	2
1023	Engineered exosomes for studies in tumor immunology. <i>Immunological Reviews</i> , 2022, 312, 76-102.	2.8	18
1024	Mixing and Flow Transition in an Optimized Electrokinetic Turbulent Micromixer. <i>Analytical Chemistry</i> , 2022, 94, 12231-12239.	3.2	5
1025	Influence of polydopamine functionalization on the rapid protein immobilization by alternating current electrophoretic deposition. <i>Surfaces and Interfaces</i> , 2022, 34, 102347.	1.5	3
1026	Mikroströmungen. , 2022, , 625-677.		0
1027	Dielectrophoresis: An Approach to Increase Sensitivity, Reduce Response Time and to Suppress Nonspecific Binding in Biosensors?. <i>Biosensors</i> , 2022, 12, 784.	2.3	4
1028	Exosomes as New Generation Vehicles for Drug Delivery: Biomedical Applications and Future Perspectives. <i>Molecules</i> , 2022, 27, 7289.	1.7	32
1029	Alternating-current nonlinear electrokinetics in microfluidic insulator-decorated bipolar electrochemistry. <i>Physics of Fluids</i> , 2022, 34, .	1.6	13

#	ARTICLE	IF	CITATIONS
1030	Non-uniform electric field-induced yeast cell electrokinetic behavior. <i>Ingenieria E Investigacion</i> , 2008, 28, 116-121.	0.2	2
1032	Electro-thermal actuated micromixer with VU/VIU/VUVIU/MIUVU patterned microgrooves. <i>Brazilian Journal of Chemical Engineering</i> , 0, , .	0.7	0
1033	On-chip integrated quantum emitter with "trap-enhance-guide"™: a simulation approach. <i>Optics Express</i> , 2022, 30, 48051.	1.7	0
1034	Alterations in electroosmotic slip velocity: combined effect of viscoelasticity and surface potential undulation. <i>European Physical Journal: Special Topics</i> , 2023, 232, 935-948.	1.2	3
1035	Efficient AC electrothermal flow (ACET) on-chip for enhanced immunoassays. <i>Lab on A Chip</i> , 2023, 23, 1637-1648.	3.1	3
1036	Induced-charge electroosmosis for rapid mixing of reactive precipitation systems to obtain small and uniform particles. <i>Chemical Engineering Research and Design</i> , 2023, 190, 715-729.	2.7	4
1037	Study on ethanol driven by alternating current electroosmosis in microchannels. <i>Sensors and Actuators A: Physical</i> , 2023, 351, 114174.	2.0	0
1038	Reduced Order Modeling of ACET Driven Flows for Cooling of Localized Hotspots in CPUs. , 2022, , .		0
1039	Numerical simulation and optimization of AC electrothermal microfluidic biosensor for COVID-19 detection through Taguchi method and artificial network. <i>European Physical Journal Plus</i> , 2023, 138, .	1.2	13
1040	Protein Dielectrophoresis with Gradient Array of Conductive Electrodes Sheds New Light on Empirical Theory. <i>Analytical Chemistry</i> , 2023, 95, 2958-2966.	3.2	2
1041	Simulation and experimental validation of the interplay between dielectrophoretic and electroosmotic behavior of conductive and insulator particles for nanofabrication and lab-on-chip applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2023, 663, 131065.	2.3	5
1042	Advances in Microscale Droplet Generation and Manipulation. <i>Langmuir</i> , 2023, 39, 2461-2482.	1.6	10
1043	Transition Routes of Electrokinetic Flow in a Divergent Microchannel with Bending Walls. <i>Micromachines</i> , 2023, 14, 474.	1.4	1
1044	Multiplexed Long-Range Electrohydrodynamic Transport and Nano-Optical Trapping with Cascaded Bowtie Photonic Crystal Nanobeams. <i>Physical Review Letters</i> , 2023, 130, .	2.9	9
1045	On Practical Aspects of Single-Entity Electrochemical Measurements with Hot Microelectrodes. <i>Analytical Chemistry</i> , 2023, 95, 4577-4584.	3.2	0
1046	Catalytic activity of glucose oxidase after dielectrophoretic immobilization on nanoelectrodes. <i>Electrophoresis</i> , 2023, 44, 956-967.	1.3	1
1047	Dielectrophoretic alignment of carbon nanotubes: theory, applications, and future. <i>Nanotechnology</i> , 2023, 34, 242001.	1.3	8
1048	Electroosmotic mixing of non-Newtonian fluid in an optimized geometry connected with a modulated microchamber. <i>Physics of Fluids</i> , 2023, 35, .	1.6	5

#	ARTICLE	IF	CITATIONS
1049	The System's Point of View Applied to Dielectrophoresis in Plate Capacitor and Pointed-versus-Pointed Electrode Chambers. <i>Micromachines</i> , 2023, 14, 670.	1.4	0
1050	Long-Range ACEO Phenomena in Microfluidic Channel. <i>Surfaces</i> , 2023, 6, 145-163.	1.0	0
1070	BioNanotechnology and BioMEMS (BNM): State-of-the-Art Applications, Opportunities, and Challenges. <i>Lab on A Chip</i> , 0, , .	3.1	1
1071	An electrospun nanofiber mat as an electrode for AC-dielectrophoretic trapping of nanoparticles. <i>Nanoscale</i> , 2023, 15, 18241-18249.	2.8	0
1072	Recent Progress in Rapid Biosensor Fabrication Methods: Focus on Electrical Potential Application. <i>Biochip Journal</i> , 0, , .	2.5	0