Scaling down constrictionâ€based (electrodeless) dielec nanoscale bioparticles in physiological media of highâ€

Electrophoresis

34, 1097-1104

DOI: 10.1002/elps.201200456

Citation Report

#	Article	IF	Citations
1	Enhanced penetration of fluoride particles into bovine enamel by combining dielectrophoresis with AC electroosmosis. Electrophoresis, 2013, 34, 2945-2955.	1.3	8
2	Six-Helix Bundle and Triangle DNA Origami Insulator-Based Dielectrophoresis. Analytical Chemistry, 2013, 85, 11427-11434.	3.2	29
3	Quantifying spatio-temporal dynamics of biomarker pre-concentration and depletion in microfluidic systems by intensity threshold analysis. Biomicrofluidics, 2014, 8, 052009.	1.2	18
4	Electrical tweezer for highly parallelized electrorotation measurements over a wide frequency bandwidth. Electrophoresis, 2014, 35, 1795-1802.	1.3	33
5	Continuous-flow dielectrophoretic trapping and patterning of colloidal particles in a ratchet microchannel. Journal of Micromechanics and Microengineering, 2014, 24, 075007.	1.5	23
6	Non-ponderomotive stability and random motion in micro-/nano-scale quadrupole dielectrophoretic traps. Journal Physics D: Applied Physics, 2014, 47, 435501.	1.3	1
7	Nanoelectronic impedance detection of target cells. Biotechnology and Bioengineering, 2014, 111, 1161-1169.	1.7	21
8	Joule heating effects on reservoirâ€based dielectrophoresis. Electrophoresis, 2014, 35, 721-727.	1.3	36
9	Dielectrophoretic Monitoring and Interstrain Separation of Intact Clostridium difficile Based on Their S(Surface)-Layers. Analytical Chemistry, 2014, 86, 10855-10863.	3.2	31
10	Electrokinetic Preconcentration and Detection of Neuropeptides at Patterned Graphene-Modified Electrodes in a Nanochannel. Analytical Chemistry, 2014, 86, 4120-4125.	3.2	182
11	Temporal and Spatial Temperature Measurement in Insulator-Based Dielectrophoretic Devices. Analytical Chemistry, 2014, 86, 6516-6524.	3.2	30
12	A wide-bandwidth power amplifier for frequency-selective insulator-based dielectrophoresis. Lab on A Chip, 2014, 14, 4183-4187.	3.1	22
13	Insulator-based dielectrophoresis of mitochondria. Biomicrofluidics, 2014, 8, 021801.	1.2	36
14	Isolation and enrichment of low abundant particles with insulator-based dielectrophoresis. Biomicrofluidics, 2015, 9, 064113.	1.2	34
15	On-chip DNA preconcentration in different media conductivities by electrodeless dielectrophoresis. Biomicrofluidics, 2015, 9, 054115.	1.2	14
16	Nanoconstriction-based electrodeless dielectrophoresis chip for nanoparticle and protein preconcentration. Applied Physics Express, 2015, 8, 085201.	1.1	12
17	3D Insulatorâ€based dielectrophoresis using DCâ€biased, AC electric fields for selective bacterial trapping. Electrophoresis, 2015, 36, 277-283.	1.3	28
18	AC Electrokinetics of Physiological Fluids for Biomedical Applications. Journal of the Association for Laboratory Automation, 2015, 20, 611-620.	2.8	40

#	Article	IF	Citations
19	Joule heating in low-voltage electroosmotic with electrolyte containing nano-bubble mixtures through microchannel rectangular orifice. Chemical Engineering Research and Design, 2015, 102, 407-415.	2.7	15
20	Protein dielectrophoresis and the link to dielectric properties. Bioanalysis, 2015, 7, 353-371.	0.6	22
21	Ultrafast immunoassays by coupling dielectrophoretic biomarker enrichment in nanoslit channel with electrochemical detection on graphene. Lab on A Chip, 2015, 15, 4563-4570.	3.1	82
22	Nanomaterial-based electrochemical sensing of neurological drugs and neurotransmitters. Mikrochimica Acta, 2015, 182, 1-41.	2.5	275
23	Dielectrophoretic behavior of PEGylated RNase A inside a microchannel with diamondâ€shaped insulating posts. Electrophoresis, 2016, 37, 519-528.	1.3	17
24	Effects of thermal boundary conditions on the joule heating of electrolyte in a microchannel. Journal of Hydrodynamics, 2016, 28, 850-862.	1.3	2
25	Nanoslit design for ion conductivity gradient enhanced dielectrophoresis for ultrafast biomarker enrichment in physiological media. Biomicrofluidics, 2016, 10, 033109.	1.2	15
26	Precipitantless Crystallization of Protein Molecules Induced by High Surface Potential. Crystal Growth and Design, 2016, 16, 5323-5329.	1.4	4
27	Aptamer-functionalized nanoparticles for surface immobilization-free electrochemical detection of cortisol in a microfluidic device. Biosensors and Bioelectronics, 2016, 78, 244-252.	5.3	157
28	Review: Microbial analysis in dielectrophoretic microfluidic systems. Analytica Chimica Acta, 2017, 966, 11-33.	2.6	113
29	Alternating current dielectrophoresis of biomacromolecules: The interplay of electrokinetic effects. Sensors and Actuators B: Chemical, 2017, 252, 391-408.	4.0	39
30	Joule heating effects on two-phase flows in dielectrophoresis microchips. Biochip Journal, 2017, 11, 196-205.	2.5	15
31	Integrated dielectrophoretic and surface plasmonic platform for million-fold improvement in the detection of fluorescent events. Biomicrofluidics, 2017, 11, 044115.	1.2	10
32	DC biased low-frequency insulating constriction dielectrophoresis for protein biomolecules concentration. Biofabrication, 2017, 9, 045003.	3.7	13
33	Dielectrophoresis for Biomedical Sciences Applications: A Review. Sensors, 2017, 17, 449.	2.1	147
34	Electrothermal enrichment of submicron particles in an insulatorâ€based dielectrophoretic microdevice. Electrophoresis, 2018, 39, 887-896.	1.3	31
35	Three-Dimensional Reservoir-Based Dielectrophoresis (rDEP) for Enhanced Particle Enrichment. Micromachines, 2018, 9, 123.	1.4	24
36	Nanofluidic fluorescence microscopy with integrated concentration gradient generation for one-shot parallel kinetic assays. Sensors and Actuators B: Chemical, 2018, 274, 338-342.	4.0	3

#	Article	IF	Citations
37	On the recent developments of insulatorâ€based dielectrophoresis: A review. Electrophoresis, 2019, 40, 358-375.	1.3	100
38	A review of sorting, separation and isolation of cells and microbeads for biomedical applications: microfluidic approaches. Analyst, The, 2019, 144, 87-113.	1.7	199
39	Joule heating effects in optimized insulatorâ€based dielectrophoretic devices: An interplay between post geometry and temperature rise. Electrophoresis, 2019, 40, 1408-1416.	1.3	31
40	Localized Dielectric Loss Heating in Dielectrophoresis Devices. Scientific Reports, 2019, 9, 18977.	1.6	23
41	Dielectrophoresis: From Molecular to Micrometer-Scale Analytes. Analytical Chemistry, 2019, 91, 277-295.	3.2	85
42	Dielectrophoretic manipulation of nanomaterials: A review. Electrophoresis, 2019, 40, 873-889.	1.3	38
43	Recent advances in dielectrophoresisâ€based cell viability assessment. Electrophoresis, 2020, 41, 917-932.	1.3	22
44	Electrokinetic characterization of synthetic protein nanoparticles. Beilstein Journal of Nanotechnology, 2020, 11, 1556-1567.	1.5	11
45	Protein Dielectrophoresis: I. Status of Experiments and an Empirical Theory. Micromachines, 2020, 11, 533.	1.4	35
46	AC electrokinetic immobilization of organic dye molecules. Analytical and Bioanalytical Chemistry, 2020, 412, 3859-3870.	1.9	3
47	Dielectrophoresis of proteins: experimental data and evolving theory. Analytical and Bioanalytical Chemistry, 2020, 412, 3801-3811.	1.9	23
48	Joule heating effects on electrokinetic flows with conductivity gradients. Electrophoresis, 2021, 42, 967-974.	1.3	11
49	Joule heatingâ€enabled electrothermal enrichment of nanoparticles in insulatorâ€based dielectrophoretic microdevices. Electrophoresis, 2021, 42, 626-634.	1.3	9
50	Review of nonlinear electrokinetic flows in insulatorâ€based dielectrophoresis: From induced charge to Joule heating effects. Electrophoresis, 2022, 43, 167-189.	1.3	26
51	Particle trapping in electrically driven insulatorâ€based microfluidics: Dielectrophoresis and inducedâ€charge electrokinetics. Electrophoresis, 2021, 42, 2445-2464.	1.3	31
52	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
53	Applications of Dielectrophoresis in the Field of Medical Sciences. International Journal of Scientific Research in Science and Technology, 2019, , 328-341.	0.1	2
54	Progress of Microfluidic Continuous Separation Techniques for Micro-/Nanoscale Bioparticles. Biosensors, 2021, 11, 464.	2.3	12

#	Article	IF	Citations
55	Protein Dielectrophoresis: A Tale of Two Clausius-Mossottisâ€"Or Something Else?. Micromachines, 2022, 13, 261.	1.4	13
56	Onâ€chip microfluidic buffer swap of biological samples inâ€line with downstream dielectrophoresis. Electrophoresis, 2022, 43, 1275-1282.	1.3	7
57	A review of active and passive hybrid systems based on Dielectrophoresis for the manipulation of microparticles. Journal of Chromatography A, 2022, 1676, 463268.	1.8	21
58	A correlation of conductivity medium and bioparticle viability on dielectrophoresisâ€based biomedical applications. Electrophoresis, 2023, 44, 573-620.	1.3	1
59	Wireless dielectrophoresis trapping and remote impedance sensing via resonant wireless power transfer. Nature Communications, 2023, 14, .	5.8	1
62	Advanced manufacturing of nanoparticle formulations of drugs and biologics using microfluidics. Analyst, The, 0, , .	1.7	0