Pablo Garcia-Sanchez

List of Publications by Year
in descending order

62 papers	1,129 citations	361413 20 h-index	414414 32 g-index
62 all docs	62 docs citations	62 times ranked	858 citing authors

#	Article	IF	Citations
1	The role of particle-electrode wall interactions in mobility of active Janus particles driven by electric fields. Journal of Colloid and Interface Science, 2022, 616, 465-475.	9.4	13
2	Wall Repulsion of Charged Colloidal Particles during Electrophoresis in Microfluidic Channels. Physical Review Letters, 2022, 128, 074501.	7.8	11
3	Stationary Electro-osmotic Flow Driven by ac Fields around Insulators. Physical Review Applied, 2021, 15, .	3.8	20
4	Continuous Particle Separation in Microfluidics: Deterministic Lateral Displacement Assisted by Electric Fields. Micromachines, 2021, 12, 66.	2.9	1
5	Stationary electro-osmotic flow driven by AC fields around charged dielectric spheres. Journal of Fluid Mechanics, 2021, 924, .	3.4	11
6	Concentrationâ€“Polarization Electroosmosis near Insulating Constrictions within Microfluidic Channels. Analytical Chemistry, 2021, 93, 14667-14674.	6.5	7
7	Short communication: A simple and accurate method of measuring the zetaâ€potential of microfluidic channels. Electrophoresis, 2021, , .	2.4	4
8	Electrokinetic biased deterministic lateral displacement: scaling analysis and simulations. Journal of Chromatography A, 2020, 1623, 461151.	3.7	15
9	Dipolophoresis and Travelling-Wave Dipolophoresis of Metal Microparticles. Micromachines, 2020, 11, 259.	2.9	4
10	Dielectrophoretic Force Equilibrium of Complex Particles. Physical Review Applied, 2020, 14, .	3.8	1
11	Combining DC and AC electric fields with deterministic lateral displacement for micro- and nano-particle separation. Biomicrofluidics, 2019, 13, 054110.	2.4	26
12	Electrorotation of semiconducting microspheres. Physical Review E, 2019, 100, 042616.	2.1	11
13	Editorial for the Special Issue on AC Electrokinetics in Microfluidic Devices. Micromachines, 2019, 10, 345.	2.9	0
14	AC electrokinetic biased deterministic lateral displacement for tunable particle separation. Lab on A Chip, 2019, 19, 1386-1396.	6.0	49
15	Electrokinetics of metal cylinders. Physical Review E, 2019, 99, 032603.	2.1	4
16	Levitation? Yes, it is possible!. American Journal of Physics, 2019, 87, 270-274.	0.7	1
17	Modeling the AC Electrokinetic Behavior of Semiconducting Spheres. Micromachines, 2019, 10, 100.	2.9	11
18	Controllable production of Janus ligaments by AC fields in a flow-focusing junction. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	0

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19	Pumping of electrolytes by electrical forces induced on the diffusion layer: A weakly nonlinear analysis. Physical Review E, 2017, 95, 022802.	2.1	6
20	Electrorotation and Electroorientation of Semiconductor Nanowires. Langmuir, 2017, 33, 8553-8561.	3.5	16
21	Droplet group production in an AC electro-flow-focusing microdevice. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	4
22	Heat Transfer Enhancement in a Stagnant Dielectric Liquid by the Up and Down Motion of Conductive Particles Induced by Coulomb Forces. Journal of Applied Fluid Mechanics, 2017, 10, 169-182.	0.2	2
23	AC electrified jets in a flow-focusing device: Jet length scaling. Biomicrofluidics, 2016, 10, 043504.	2.4	20
24	AC electrokinetics of conducting microparticles: A review. Current Opinion in Colloid and Interface Science, 2016, 24, 79-90.	7.4	62
25	Electrorotation of a metal sphere immersed in an electrolyte of finite Debye length. Physical Review E, 2015, 92, 052313.	2.1	25
26	Self-assembly of metal nanowires induced by alternating current electric fields. Applied Physics Letters, 2015, 106, .	3.3	21
27	Dynamics of a Levitron under a periodic magnetic forcing. American Journal of Physics, 2015, 83, 133-142.	0.7	4
28	Breakup length of AC electrified jets in a microfluidic flow-focusing junction. Microfluidics and Nanofluidics, 2015, 19, 787-794.	2.2	29
29	AC Electroosmosis: Basics and Lab-on-a-Chip Applications. , 2015, , 1-7.		2
30	Electro-orientation of a metal nanowire counterbalanced by thermal torques. Physical Review E, 2014, 89, 062306.	2.1	16
31	The microfluidic Kelvin water dropper. Lab on A Chip, 2013, 13, 4503.	6.0	36
32	Electric-field-induced rotation of Brownian metal nanowires. Physical Review E, 2013, 88, 033025.	2.1	26
33	Electrorotation of titanium microspheres. Electrophoresis, 2013, 34, 979-986.	2.4	24
34	Electro-orientation and electrorotation of metal nanowires. Physical Review E, 2013, 88, 063018.	2.1	44
35	Actuation of co-flowing electrolytes in a microfluidic system by microelectrode arrays. Microfluidics and Nanofluidics, 2012, 13, 441-449.	2.2	17
36	Alternating Current Electrokinetic Properties of Gold-Coated Microspheres. Langmuir, 2012, 28, 13861-13870.	3.5	80

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37	Effects of Faradaic currents on AC electroosmotic flows with coplanar symmetric electrodes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 376, 47-52.	4.7	9
38	Electrohydrodynamic actuation of co-flowing liquids by means of microelectrode arrays. Journal of Physics: Conference Series, 2011, 301, 012031.	0.4	1
39	Fundamentals of Electrowetting and Applications in Microsystems. , 2011, , 85-125.		6
40	Effect of the combined action of Faradaic currents and mobility differences in ac electro-osmosis. Physical Review E, 2010, 81, 016320.	2.1	33
41	Electrothermally driven flows in ac electrowetting. Physical Review E, 2010, 81, 015303.	2.1	61
42	Microwave-induced water flows in microsystems. Applied Physics Letters, 2009, 94, 024104.	3.3	8
43	AC electrokinetic pumping on symmetric electrode arrays. Microfluidics and Nanofluidics, 2009, 7, 767-772.	2.2	33
44	Water flows induced by microwave electric fields in microsystems. Journal of Electrostatics, 2009, 67, 377-380.	1.9	3
45	Electrical manipulation of electrolytes with conductivity gradients in microsystems. Journal of Electrostatics, 2009, 67, 372-376.	1.9	19
46	Flow Reversal in Traveling-Wave Electrokinetics: An Analysis of Forces Due to Ionic Concentration Gradients. Langmuir, 2009, 25, 4988-4997.	3.5	44
47	Experiments on traveling-wave electroosmosis: effect of electrolyte conductivity. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 417-423.	2.9	13
48	The effect of electrode height on the performance of travelling-wave electroosmotic micropumps. Microfluidics and Nanofluidics, 2008, 5, 307-312.	2.2	19
49	A symmetry electrode array for AC and traveling wave electroosmosis pumping. , 2008, , .		0
50	Flow of electrolytes induced by AC voltages in a point-plane electrode microsystem. , 2008, , .		0
51	Effect of the difference in ion mobilities on traveling-wave electro-osmosis. , 2008, , .		1
52	Traveling-Wave Electrokinetic Micropumps: Velocity, Electrical Current, and Impedance Measurements. Langmuir, 2008, 24, 9361-9369.	3.5	44
53	Experiments on pumping of liquids using arrays of microelectrodes subjected to travelling wave potentials. Journal of Physics: Conference Series, 2008, 142, 012055.	0.4	2
54	Pumping electrolytes with arrays of electrodes subjected to travelling-wave potentials: Electrode design. , 2007, , .		0

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55	Control of two-phase flow in a microfluidic system using ac electric fields. Applied Physics Letters, 2007, 91, 254107.	3.3	20
56	A linear analysis of the effect of Faradaic currents on traveling-wave electroosmosis. Journal of Colloid and Interface Science, 2007, 309, 323-331.	9.4	42
57	Experiments on AC electrokinetic pumping of liquids using arrays of microelectrodes. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 670-677.	2.9	69
58	Electroviscous Effect of Moderately Concentrated Colloidal Suspensions under Overlapping Conditions. Journal of Physical Chemistry B, 2005, 109, 5289-5299.	2.6	17
59	Electroviscous Effect of Moderately Concentrated Colloidal Suspensions:Â Stern-Layer Influence. Journal of Physical Chemistry B, 2005, 109, 24369-24379.	2.6	12
60	Stern-layer parameters of alumina suspensions. Journal of Colloid and Interface Science, 2003, 268, 400-407.	9.4	4
61	Electroviscous Effect of Moderately Concentrated Colloidal Suspensions. Journal of Physical Chemistry B, 2003, 107, 9528-9534.	2.6	37
62	An Experimental Test of Booth's Primary Electroviscous Effect Theory. Journal of Colloid and Interface Science, 2002, 255, 208-213.	9.4	9