Juan G Santiago

List of Publications by Year
in descending order

219 papers	12,327 citations	23302 58 h-index	29795 104 g-index
234 all docs	234 docs citations	234 times ranked	11838 citing authors

#	Article	IF	Citations
1	Analytical solutions for viscoelectric effects in electrokinetic nanochannels. Electrophoresis, 2024, 45, 676-686.	2.9	0
2	Design and Evaluation of a Robust CRISPR Kinetic Assay for Hot-Spot Genotyping. Analytical Chemistry, 2024, 96, 7444-7451.	6.8	0
3	A critical review of microfluidic systems for CRISPR assays. Lab on A Chip, 2023, 23, 938-963.	6.1	17
4	Stream lamination and rapid mixing in a microfluidic jet for X-ray spectroscopy studies. Flow, 2023, 3, .	2.7	0
5	Taylor dispersion in arbitrarily shaped axisymmetric channels. Journal of Fluid Mechanics, 2023, 976, .	3.5	0
6	A modular and reconfigurable open-channel gated device for the electrokinetic extraction of cell-free DNA assays. Analytica Chimica Acta, 2022, 1200, 339435.	5.5	3
7	Single-layer graphene prevents Cassie-wetting failure of structured hydrophobic surface for efficient condensation. Journal of Colloid and Interface Science, 2022, 615, 302-308.	9.6	7
8	Millisecond timescale reactions observed via X-ray spectroscopy in a 3D microfabricated fused silica mixer. Corrigendum. Journal of Synchrotron Radiation, 2022, 29, 930.	2.4	0
9	Highâ€Performance Dielectric Elastomer Nanogenerator for Efficient Energy Harvesting and Sensing via Alternative Current Method. Advanced Science, 2022, 9, e2201098.	12.4	13
10	Synergistic effect of Pt and Hf on the early-stage oxidation behaviour of NiAl coating at 1000 Â°C. Corrosion Communications, 2022, 5, 49-61.	6.3	5
11	Assembly of two-dimensional nanofluidic channel with high proton conductivity using single-layer MnO2 nanosheets. Science China Materials, 2022, 65, 2578-2584.	6.5	3
12	Wires with Continuous Sabal Leafâ€Patterned Micropores Constructed by Freeze Printing for a Wearable Sensor Responsible to Multiple Deformations. Small, 2022, 18, e2201091.	11.2	6
13	Isotachophoresis: Theory and Microfluidic Applications. Chemical Reviews, 2022, 122, 12904-12976.	51.4	16
14	Enzyme Kinetics and Detector Sensitivity Determine Limits of Detection of Amplification-Free CRISPR-Cas12 and CRISPR-Cas13 Diagnostics. Analytical Chemistry, 2022, 94, 9826-9834.	6.8	63
15	Inconsistent treatments of the kinetics of Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) impair assessment of its diagnostic potential. QRB Discovery, 2022, 3, .	0.5	7
16	Review: Inconsistent Treatments of CRISPR Kinetics Impair Assessment of Its Diagnostic Potential â€" R0/PR1. QRB Discovery, 2022, , .	0.5	0
17	Review: Inconsistent Treatments of CRISPR Kinetics Impair Assessment of Its Diagnostic Potential â€" R0/PR2. QRB Discovery, 2022, , .	0.5	0
18	Electrochemical Methods for Water Purification, Ion Separations, and Energy Conversion. Chemical Reviews, 2022, 122, 13547-13635.	51.4	186

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19	Uncertainty Quantification of Michaelisâ€“Menten Kinetic Rates and Its Application to the Analysis of CRISPRâ€Based Diagnostics. Angewandte Chemie - International Edition, 2022, 61, .	14.8	11
20	Liquid Heterostructures: Generation of Liquidâ€“Liquid Interfaces in Free-Flowing Liquid Sheets. Langmuir, 2022, 38, 12822-12832.	3.7	9
21	Detection and Discrimination of Single Nucleotide Polymorphisms by Quantification of CRISPR-Cas Catalytic Efficiency. Analytical Chemistry, 2022, 94, 15117-15123.	6.8	12
22	Evaluating the Effects of Varying Model Parameter Values on the Characteristics of a Photovoltaic Module. Lecture Notes in Networks and Systems, 2021, , 141-155.	0.0	0
23	Flow forth. Flow, 2021, 1, .	2.7	0
24	Thermorheological evidence and structure of heterogeneity in syndiotactic polypropylene melts with strong memory effects. Polymer, 2021, 218, 123484.	3.9	7
25	Efficacy and safety of glucose-lowering agents in patients with type 2 diabetes: A network meta-analysis of randomized, active comparator-controlled trials. Nutrition, Metabolism and Cardiovascular Diseases, 2021, 31, 1027-1034.	2.7	11
26	Millisecond timescale reactions observed via X-ray spectroscopy in a 3D microfabricated fused silica mixer. Journal of Synchrotron Radiation, 2021, 28, 1100-1113.	2.4	4
27	CRISPR Enzyme Kinetics for Molecular Diagnostics. Analytical Chemistry, 2021, 93, 7456-7464.	6.8	105
28	Fast Water Evaporation from Nanopores. Advanced Materials Interfaces, 2021, 8, 2100660.	4.1	8
29	Tunable Photocatalytic Activity of PEOâ€Stabilized ZnOâ€“Polyoxometalate Nanostructures in Aqueous Solution. Advanced Materials Interfaces, 2021, 8, 2002130.	4.1	11
30	Capacitive Deionization. Materials and Energy, 2021, , 289-336.	0.0	0
31	Species Abundance and Reaction Off-Rate Regulate Product Formation in Reactions Accelerated Using Isotachophoresis. Analytical Chemistry, 2021, 93, 12541-12548.	6.8	3
32	Dopamine D1Â+ÂD3 receptor density may correlate with parkinson disease clinical features. Annals of Clinical and Translational Neurology, 2021, 8, 224-237.	3.7	14
33	Web-Based Open-Source Tool for Isotachophoresis. Analytical Chemistry, 2021, 93, 15768-15774.	6.8	10
34	Photoinduced directional domain sliding motion in peptide hydrogels promotes ectodermal differentiation of embryonic stem cells. Science China Materials, 2020, 63, 467-478.	6.5	1
35	Energy transfer for storage or recovery in capacitive deionization using a DC-DC converter. Journal of Power Sources, 2020, 448, 227409.	8.0	16
36	Simultaneous optical and infrared thermal imaging of isotachophoresis. Analytica Chimica Acta, 2020, 1131, 9-17.	5.5	5

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37	Effects of Weak Electrolytes on Electric Double Layer Ion Distributions. Journal of Physical Chemistry Letters, 2020, 11, 8302-8306.	4.9	15
38	Electric field-driven microfluidics for rapid CRISPR-based diagnostics and its application to detection of SARS-CoV-2. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29518-29525.	7.6	243
39	Thermal Selfâ€Protection of Zincâ€ion Batteries Enabled by Smart Hygroscopic Hydrogel Electrolytes. Advanced Energy Materials, 2020, 10, 2002898.	22.2	112
40	Immune Checkpoint Inhibitor-Induced Thyroiditis Is Associated with Increased Intrathyroidal T Lymphocyte Subpopulations. Thyroid, 2020, 30, 1440-1450.	5.1	61
41	Understanding resistances in capacitive deionization devices. Environmental Science: Water Research and Technology, 2020, 6, 1842-1854.	2.2	6
42	Process design tools and techno-economic analysis for capacitive deionization. Water Research, 2020, 183, 116034.	11.4	22
43	A system for the high-throughput measurement of the shear modulus distribution of human red blood cells. Lab on A Chip, 2020, 20, 2927-2936.	6.1	21
44	On the competition between mixing rate and uniformity in a coaxial hydrodynamic focusing mixer. Analytica Chimica Acta, 2020, 1103, 1-10.	5.5	6
45	Jacques Glowinski, neurobiologist and head of school. Comptes Rendus - Biologies, 2020, 343, 11-14.	0.3	0
46	Promoting Energy Efficiency via a Selfâ€Adaptive Evaporative Cooling Hydrogel. Advanced Materials, 2020, 32, e1907307.	24.3	161
47	Structure and dynamic properties of stretched water in graphene nanochannels by molecular dynamics simulation: effects of stretching extent. Physical Chemistry Chemical Physics, 2019, 21, 19163-19171.	2.9	21
48	Simultaneous RNA purification and size selection using on-chip isotachophoresis with an ionic spacer. Lab on A Chip, 2019, 19, 2741-2749.	6.1	15
49	Liquid flow-induced electricity in carbon nanomaterials. Sustainable Energy and Fuels, 2019, 3, 599-610.	4.8	22
50	Complex nearly immotile behaviour of enzymatically driven cargos. Soft Matter, 2019, 15, 1847-1852.	2.8	2
51	Evaluation of IVIG response in relation to Th1/Th2 cytokines in pediatricm immune thrombocytopenia. Cytokine, 2019, 120, 234-241.	3.2	8
52	Using Ultramicroporous Carbon for the Selective Removal of Nitrate with Capacitive Deionization. Environmental Science & Technology, 2019, 53, 10863-10870.	10.5	128
53	Interfacial Solarâ€toâ€Heat Conversion for Desalination. Advanced Energy Materials, 2019, 9, 1900310.	22.2	186
54	Comments on â€œComparison of energy consumption in desalination by capacitive deionization and reverse osmosisâ€• Desalination, 2019, 461, 30-36.	8.3	39

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55	High water recovery and improved thermodynamic efficiency for capacitive deionization using variable flowrate operation. Water Research, 2019, 155, 76-85.	11.4	58
56	Performance metrics for the objective assessment of capacitive deionization systems. Water Research, 2019, 152, 126-137.	11.4	210
57	The Effect of Press Door Impact Beam Inclination Angle on Bending Strength. Transactions of the Korean Society of Automotive Engineers, 2019, 27, 427-433.	0.3	0
58	Highly photoluminescent two-dimensional imine-based covalent organic frameworks for chemical sensing. Chemical Communications, 2018, 54, 2349-2352.	4.2	219
59	Charging and Transport Dynamics of a Flow-Through Electrode Capacitive Deionization System. Journal of Physical Chemistry B, 2018, 122, 240-249.	2.7	37
60	Self similarities in desalination dynamics and performance using capacitive deionization. Water Research, 2018, 140, 323-334.	11.4	31
61	Nitrate removal from water using electrostatic regeneration of functionalized adsorbent. Chemical Engineering Journal, 2018, 334, 1289-1296.	13.0	61
62	Isotachophoresis applied to biomolecular reactions. Lab on A Chip, 2018, 18, 11-26.	6.1	32
63	Adsorption and capacitive regeneration of nitrate using inverted capacitive deionization with surfactant functionalized carbon electrodes. Separation and Purification Technology, 2018, 194, 410-415.	8.1	54
64	Quantifying the flow efficiency in constant-current capacitive deionization. Water Research, 2018, 129, 327-336.	11.4	67
65	Modelling and optimization applied to the design of fast hydrodynamic focusing microfluidic mixer for protein folding. Journal of Mathematics in Industry, 2018, 8, .	1.2	5
66	Ion selectivity in capacitive deionization with functionalized electrode: Theory and experimental validation. Water Research X, 2018, 1, 100008.	6.2	67
67	Efficient Production of On-Target Reads for Small RNA Sequencing of Single Cells Using Modified Adapters. Analytical Chemistry, 2018, 90, 12609-12615.	6.8	14
68	Frequency analysis and resonant operation for efficient capacitive deionization. Water Research, 2018, 144, 581-591.	11.4	17
69	Self-Cleaning Porous Surfaces for Dry Condensation. ACS Applied Materials & Interfaces, 2018, 10, 26759-26764.	8.3	25
70	SINC-seq: correlation of transient gene expressions between nucleus and cytoplasm reflects single-cell physiology. Genome Biology, 2018, 19, 66.	9.2	52
71	Tailored porous electrode resistance for controlling electrolyte depletion and improving charging response in electrochemical systems. Journal of Power Sources, 2018, 397, 252-261.	8.0	5
72	Tailoring Permeability of Microporous Copper Structures through Template Sintering. ACS Applied Materials & Interfaces, 2018, 10, 30487-30494.	8.3	19

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73	Thermodynamics of Ion Separation by Electrosorption. Environmental Science & Technology, 2018, 52, 10196-10204.	10.5	54
74	Enhanced Capillaryâ€Fed Boiling in Copper Inverse Opals via Template Sintering. Advanced Functional Materials, 2018, 28, 1803689.	16.5	56
75	A method for quantifying in plane permeability of porous thin films. Journal of Colloid and Interface Science, 2018, 530, 667-674.	9.6	6
76	Device design and flow scaling for liquid sheet jets. Physical Review Fluids, 2018, 3, .	2.6	18
77	34 UnterstÃ¼tzer / Gratulanten. , 2018, , 367-377.		0
78	Nondestructive nanostraw intracellular sampling for longitudinal cell monitoring. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1866-E1874.	7.6	127
79	Rapid Hydrogenâ€“Deuterium Exchange in Liquid Droplets. Journal of the American Chemical Society, 2017, 139, 6851-6854.	14.6	74
80	Assay for Listeria monocytogenes cells in whole blood using isotachophoresis and recombinase polymerase amplification. Analyst, The, 2017, 142, 48-54.	3.5	31
81	Equilibria model for pH variations and ion adsorption in capacitive deionization electrodes. Water Research, 2017, 122, 387-397.	11.4	50
82	Bio-inspired intelligent evaporation modulation in a thermo-sensitive nanogel colloid solution for self-thermoregulation. Physical Chemistry Chemical Physics, 2017, 19, 16312-16316.	2.9	1
83	Extreme Twoâ€Phase Cooling from Laserâ€Etched Diamond and Conformal, Templateâ€Fabricated Microporous Copper. Advanced Functional Materials, 2017, 27, 1703265.	16.5	89
84	Solar-driven simultaneous steam production and electricity generation from salinity. Energy and Environmental Science, 2017, 10, 1923-1927.	32.2	410
85	A Fully Integrated CMOS Fluorescence Biochip for DNA and RNA Testing. IEEE Journal of Solid-State Circuits, 2017, 52, 2857-2870.	5.7	44
86	False data injection attacks on phasor measurements that bypass low-rank decomposition. , 2017, , .		21
87	Comparison and Research of the Mechanical Items of Standards for Controlled Door Closing Devices. IOP Conference Series: Materials Science and Engineering, 2017, 239, 012003.	0.6	0
88	Design sensitivity and mixing uniformity of a micro-fluidic mixer. Physics of Fluids, 2016, 28, .	3.9	12
89	Prevention of microalbuminuria using early intervention with renin-angiotensin system inhibitors in patients with type 2 diabetes: A systematic review. JRAAS - Journal of the Renin-Angiotensin-Aldosterone System, 2016, 17, 147032031665204.	1.6	37
90	Energy consumption analysis of constant voltage and constant current operations in capacitive deionization. Desalination, 2016, 400, 18-24.	8.3	129

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91	Energy breakdown in capacitive deionization. Water Research, 2016, 104, 303-311.	11.4	117
92	An Ohmic model for electrokinetic flows of binary asymmetric electrolytes. Current Opinion in Colloid and Interface Science, 2016, 24, 52-63.	8.0	12
93	Influx and Production Rates in Peak-Mode Isotachophoresis. Analytical Chemistry, 2016, 88, 11352-11357.	6.8	7
94	Protocol for Microfluidic System to Automate the Preparation and Fractionation of the Nucleic Acids in the Cytoplasm Versus Nuclei of Single Cells. Bio-protocol, 2016, 6, .	0.4	5
95	Grouting to remove piles from a tunnelling machine cutter-head. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2015, 168, 358-370.	1.7	3
96	Approaching the limits of two-phase boiling heat transfer: High heat flux and low superheat. Applied Physics Letters, 2015, 107, .	3.2	57
97	Rapid Slow Off-Rate Modified Aptamer (SOMAmer)-Based Detection of C-Reactive Protein Using Isotachophoresis and an Ionic Spacer. Analytical Chemistry, 2015, 87, 6736-6743.	6.8	37
98	Transient delivery of modified mRNA encoding TERT rapidly extends telomeres in human cells. FASEB Journal, 2015, 29, 1930-1939.	0.5	90
99	Burst behavior at a capillary tip: Effect of low and high surface tension. Journal of Colloid and Interface Science, 2015, 455, 1-5.	9.6	19
100	Characterization of Resistances of a Capacitive Deionization System. Environmental Science & Technology, 2015, 49, 9699-9706.	10.5	114
101	Extraction and fractionation of RNA and DNA from single cells using selective lysing and isotachophoresis. Proceedings of SPIE, 2015, , .	1.0	0
102	Isotachophoresis for fractionation and recovery of cytoplasmic RNA and nucleus from single cells. Electrophoresis, 2015, 36, 1658-1662.	2.9	25
103	Two-Dimensional Porous Electrode Model for Capacitive Deionization. Journal of Physical Chemistry C, 2015, 119, 24681-24694.	3.3	122
104	Increasing Hybridization Rate and Sensitivity of Beadâ€Based Assays Using Isotachophoresis. Angewandte Chemie - International Edition, 2014, 53, 13813-13816.	14.8	16
105	On the chronology of the Uluzzian. Journal of Human Evolution, 2014, 68, 1-13.	2.8	110
106	Purification of nucleic acids using isotachophoresis. Journal of Chromatography A, 2014, 1335, 105-120.	3.8	80
107	Increasing hybridization rate and sensitivity of DNA microarrays using isotachophoresis. Lab on A Chip, 2014, 14, 2958-2967.	6.1	53
108	Phase-separation of wetting fluids using nanoporous alumina membranes and micro-glass capillaries. , 2014, , .		3

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109	Simultaneous Purification and Fractionation of Nucleic Acids and Proteins from Complex Samples Using Bidirectional Isotachophoresis. Analytical Chemistry, 2014, 86, 7264-7268.	6.8	29
110	On-Chip Separation and Analysis of RNA and DNA from Single Cells. Analytical Chemistry, 2014, 86, 1953-1957.	6.8	54
111	Coupling Isotachophoresis with Affinity Chromatography for Rapid and Selective Purification with High Column Utilization, Part 1: Theory. Analytical Chemistry, 2014, 86, 6220-6228.	6.8	10
112	Coupling Isotachophoresis with Affinity Chromatography for Rapid and Selective Purification with High Column Utilization, Part 2: Experimental Study. Analytical Chemistry, 2014, 86, 6229-6236.	6.8	20
113	An injection molded microchip for nucleic acid purification from 25 microliter samples using isotachophoresis. Journal of Chromatography A, 2014, 1331, 139-142.	3.8	36
114	In Situ Spatially and Temporally Resolved Measurements of Salt Concentration between Charging Porous Electrodes for Desalination by Capacitive Deionization. Environmental Science & Technology, 2014, 48, 2008-2015.	10.5	66
115	Increasing Hybridization Rate and Sensitivity of Beadâ€Based Assays Using Isotachophoresis. Angewandte Chemie, 2014, 126, 14033-14036.	2.1	8
116	Impedance-based study of capacitive porous carbon electrodes with hierarchical and bimodal porosity. Journal of Power Sources, 2013, 241, 266-273.	8.0	85
117	Isotachophoresis with ionic spacer and two-stage separation for high sensitivity DNA hybridization assay. Analyst, The, 2013, 138, 3117.	3.5	33
118	Integration of rapid DNA hybridization and capillary zone electrophoresis using bidirectional isotachophoresis. Analyst, The, 2013, 138, 87-90.	3.5	35
119	A method for non-invasive full-field imaging and quantification of chemical species. Lab on A Chip, 2013, 13, 1632.	6.1	8
120	Coupling isotachophoresis and capillary electrophoresis: a review and comparison of methods. Analyst, The, 2013, 138, 735-754.	3.5	69
121	Rapid Highâ€Specificity microRNA Detection Using a Twoâ€stage Isotachophoresis Assay. Angewandte Chemie, 2013, 125, 11748-11751.	2.1	17
122	Unraveling the potential and pore-size dependent capacitance of slit-shaped graphitic carbon pores in aqueous electrolytes. Physical Chemistry Chemical Physics, 2013, 15, 2309.	2.9	82
123	Temperature Effects on Electrophoresis. Analytical Chemistry, 2013, 85, 5103-5113.	6.8	28
124	Two- and three-dimensional modeling and optimization applied to the design of a fast hydrodynamic focusing microfluidic mixer for protein folding. Physics of Fluids, 2013, 25, .	3.9	21
125	Smart CMOS image sensor for lightning detection and imaging. Applied Optics, 2013, 52, C16.	1.8	6
126	Giant Thermal Transport Phase Lagging in CNT Aggregates. Nanoscale and Microscale Thermophysical Engineering, 2013, 17, 236-244.	2.6	1

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127	Rapid Highâ€Specificity microRNA Detection Using a Twoâ€stage Isotachophoresis Assay. Angewandte Chemie - International Edition, 2013, 52, 11534-11537.	14.8	53
128	Electric fields yield chaos in microflows. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14353-14356.	7.6	49
129	Rapid hybridization of nucleic acids using isotachophoresis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11127-11132.	7.6	91
130	On-chip Isotachophoresis for Separation of Ions and Purification of Nucleic Acids. Journal of Visualized Experiments, 2012, , e3890.	0.3	23
131	Robust and highâ€resolution simulations of nonlinear electrokinetic processes in variable crossâ€section channels. Electrophoresis, 2012, 33, 3036-3051.	2.9	27
132	Integration of On-Chip Isotachophoresis and Functionalized Hydrogels for Enhanced-Sensitivity Nucleic Acid Detection. Analytical Chemistry, 2012, 84, 6366-6369.	6.8	61
133	Capacitive desalination with flow-through electrodes. Energy and Environmental Science, 2012, 5, 9511.	32.2	344
134	Bacterial RNA Extraction and Purification from Whole Human Blood Using Isotachophoresis. Analytical Chemistry, 2012, 84, 5858-5863.	6.8	42
135	Concentration cascade of leading electrolyte using bidirectional isotachophoresis. Electrophoresis, 2012, 33, 1048-1059.	2.9	15
136	The Rabin Index of Parity Games. Lecture Notes in Computer Science, 2012, , 259-260.	1.0	1
137	MicroRNA Profiling by Simultaneous Selective Isotachophoresis and Hybridization with Molecular Beacons. Analytical Chemistry, 2011, 83, 2310-2316.	6.8	74
138	Rapid Detection of Urinary Tract Infections Using Isotachophoresis and Molecular Beacons. Analytical Chemistry, 2011, 83, 4110-4117.	6.8	88
139	Extraction of DNA from Malaria-Infected Erythrocytes Using Isotachophoresis. Analytical Chemistry, 2011, 83, 9715-9718.	6.8	42
140	Electroosmotic pump performance is affected by concentration polarizations of both electrodes and pump. Sensors and Actuators A: Physical, 2011, 165, 310-315.	4.2	45
141	Carbon Nanoparticles on Carbon Fabric for Flexible and Highâ€Performance Field Emitters. Advanced Functional Materials, 2011, 21, 2150-2154.	16.5	73
142	Electrophoretic mobility measurements of fluorescent dyes using onâ€chip capillary electrophoresis. Electrophoresis, 2011, 32, 3286-3294.	2.9	67
143	Sample dispersion in isotachophoresis. Journal of Fluid Mechanics, 2011, 679, 455-475.	3.5	53
144	In situ-polymerized wicks for passive water management in proton exchange membrane fuel cells. Journal of Power Sources, 2010, 195, 1667-1675.	8.0	18

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145	Ionic strength effects on electrophoretic focusing and separations. Electrophoresis, 2010, 31, 910-919.	2.9	63
146	A self-priming, roller-free, miniature, peristaltic pump operable with a single, reciprocating actuator. Sensors and Actuators A: Physical, 2010, 160, 141-146.	4.2	38
147	A two-liquid electroosmotic pump using low applied voltage and power. Sensors and Actuators A: Physical, 2010, 163, 311-314.	4.2	34
148	Evidence shows concentration polarization and its propagation can be key factors determining electroosmotic pump performance. Sensors and Actuators B: Chemical, 2010, 143, 795-798.	8.0	15
149	Design and fabrication of porous polymer wick structures. Sensors and Actuators B: Chemical, 2010, 150, 556-563.	8.0	18
150	Compact adaptive-grid scheme for high numerical resolution simulations of isotachophoresis. Journal of Chromatography A, 2010, 1217, 588-599.	3.8	25
151	Establishment of an Agrobacterium-mediated transformation system for Periploca sepium Bunge. Plant Biotechnology, 2010, 27, 173-181.	1.0	5
152	Quantification of Global MicroRNA Abundance by Selective Isotachophoresis. Analytical Chemistry, 2010, 82, 9631-9635.	6.8	31
153	Fluorescent Carrier Ampholytes Assay for Portable, Label-Free Detection of Chemical Toxins in Tap Water. Analytical Chemistry, 2010, 82, 1858-1866.	6.8	20
154	Miniaturized system for isotachophoresis assays. Lab on A Chip, 2010, 10, 2242.	6.1	40
155	Method for Analyte Identification Using Isotachophoresis and a Fluorescent Carrier Ampholyte Assay. Analytical Chemistry, 2010, 82, 2134-2138.	6.8	15
156	Hydrodynamic interactions in metal rodlike-particle suspensions due to induced charge electroosmosis. Physical Review E, 2009, 79, 011402.	2.1	47
157	In Situ Polymerized Wicks for Passive Water Management and Humidification of Dry Gases. ECS Transactions, 2009, 25, 303-309.	0.6	3
158	Electrokinetic control of sample splitting at a channel bifurcation using isotachophoresis. New Journal of Physics, 2009, 11, 075026.	2.9	17
159	Imaging and Quantification of Isotachophoresis Zones Using Nonfocusing Fluorescent Tracers. Analytical Chemistry, 2009, 81, 3022-3028.	6.8	48
160	Engineering model for coupling wicks and electroosmotic pumps with proton exchange membrane fuel cells for active water management. Electrochimica Acta, 2009, 54, 6223-6233.	5.4	13
161	Two-phase hydrodynamics in a miniature direct methanol fuel cell. International Journal of Heat and Mass Transfer, 2009, 52, 5158-5166.	4.9	14
162	Dry gas operation of proton exchange membrane fuel cells with parallel channels: Non-porous versus porous plates. Journal of Power Sources, 2009, 188, 82-88.	8.0	25

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163	Open source simulation tool for electrophoretic stacking, focusing, and separation. Journal of Chromatography A, 2009, 1216, 1008-1018.	3.8	107
164	Basic principles of electrolyte chemistry for microfluidic electrokinetics. Part I: Acidâ€“base equilibria and pH buffers. Lab on A Chip, 2009, 9, 2437.	6.1	102
165	Purification of Nucleic Acids from Whole Blood Using Isotachophoresis. Analytical Chemistry, 2009, 81, 9507-9511.	6.8	95
166	Rapid and selective extraction, isolation, preconcentration, and quantitation of small RNAs from cell lysate using on-chip isotachophoresis. Lab on A Chip, 2009, 9, 2145.	6.1	66
167	Special issue on fundamental principles and techniques in microfluidics. Lab on A Chip, 2009, 9, 2423.	6.1	3
168	High flow rate per power electroosmotic pumping using low ion density solvents. Sensors and Actuators A: Physical, 2008, 141, 201-212.	4.2	46
169	Sea level rise, hydrologic runoff, and the flooding of Venice. Water Resources Research, 2008, 44, .	4.2	30
170	Sample Zone Dynamics in Peak Mode Isotachophoresis. Analytical Chemistry, 2008, 80, 6300-6307.	6.8	95
171	Ballistic dispersion in temperature gradient focusing. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 595-612.	2.1	14
172	A depth-averaged electrokinetic flow model for shallow microchannels. Journal of Fluid Mechanics, 2008, 608, 43-70.	3.5	35
173	Measurement of Temperature and Reaction Species in the Cathode Diffusion Layer of a Free-Convection Fuel Cell. Journal of the Electrochemical Society, 2007, 154, B910.	2.9	19
174	Free-surface microfluidic control of surface-enhanced Raman spectroscopy for the optimized detection of airborne molecules. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18898-18901.	7.6	144
175	An Electro-osmotic Fuel Pump for Direct Methanol Fuel Cells. Electrochemical and Solid-State Letters, 2007, 10, B196.	2.3	28
176	Active Water Management for PEM Fuel Cells. Journal of the Electrochemical Society, 2007, 154, B1049.	2.9	64
177	Achievements in workplace neutron dosimetry in the last decade: lessons learned from the EVIDOS project. Radiation Protection Dosimetry, 2007, 126, 471-476.	0.8	7
178	Damage Behavior and Tribo-Characteristics of DLC-Si Coating for Forming Die. , 2007, , 891.		0
179	Taylorâ€“Aris dispersion in temperature gradient focusing. Electrophoresis, 2007, 28, 2333-2344.	2.9	21
180	Current distribution in polymer electrolyte membrane fuel cell with active water management. Journal of Power Sources, 2007, 174, 272-281.	8.0	52

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181	Toward orientation-independent design for gas recombination in closed-loop electroosmotic pumps. Sensors and Actuators B: Chemical, 2007, 128, 334-339.	8.0	15
182	Comments on the conditions for similitude in electroosmotic flows. Journal of Colloid and Interface Science, 2007, 310, 675-677.	9.6	8
183	Investigation of internal pressure gradients generated in electrokinetic flows with axial conductivity gradients. Experiments in Fluids, 2007, 43, 959-967.	2.3	15
184	Engineering model of a passive planar air breathing fuel cell cathode. Journal of Power Sources, 2007, 167, 118-129.	8.0	91
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