

Juan G Santiago

List of Publications by Year in descending order

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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	A particle image velocimetry system for microfluidics. <i>Experiments in Fluids</i> , 1998, 25, 316-319.	2.3	1,086
2	PIV measurements of a microchannel flow. <i>Experiments in Fluids</i> , 1999, 27, 414-419.	2.3	743
3	A PIV Algorithm for Estimating Time-Averaged Velocity Fields. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2000, 122, 285-289.	1.6	414
4	Solar-driven simultaneous steam production and electricity generation from salinity. <i>Energy and Environmental Science</i> , 2017, 10, 1923-1927.	32.2	410
5	Capacitive desalination with flow-through electrodes. <i>Energy and Environmental Science</i> , 2012, 5, 9511.	32.2	344
6	Electroosmotic Flows in Microchannels with Finite Inertial and Pressure Forces. <i>Analytical Chemistry</i> , 2001, 73, 2353-2365.	6.8	264
7	Electric field-driven microfluidics for rapid CRISPR-based diagnostics and its application to detection of SARS-CoV-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 29518-29525.	7.6	243
8	On-Chip Millionfold Sample Stacking Using Transient Isotachophoresis. <i>Analytical Chemistry</i> , 2006, 78, 2319-2327.	6.8	220
9	Highly photoluminescent two-dimensional imine-based covalent organic frameworks for chemical sensing. <i>Chemical Communications</i> , 2018, 54, 2349-2352.	4.2	219
10	Instability of electrokinetic microchannel flows with conductivity gradients. <i>Physics of Fluids</i> , 2004, 16, 1922-1935.	3.9	216
11	Performance metrics for the objective assessment of capacitive deionization systems. <i>Water Research</i> , 2019, 152, 126-137.	11.4	210
12	Interfacial Solar-to-Heat Conversion for Desalination. <i>Advanced Energy Materials</i> , 2019, 9, 1900310.	22.2	186
13	Electrochemical Methods for Water Purification, Ion Separations, and Energy Conversion. <i>Chemical Reviews</i> , 2022, 122, 13547-13635.	51.4	186
14	Convective and absolute electrokinetic instability with conductivity gradients. <i>Journal of Fluid Mechanics</i> , 2005, 524, 263-303.	3.5	182
15	Particle imaging techniques for microfabricated fluidic systems. <i>Experiments in Fluids</i> , 2003, 34, 504-514.	2.3	165
16	Promoting Energy Efficiency via a Self-Adaptive Evaporative Cooling Hydrogel. <i>Advanced Materials</i> , 2020, 32, e1907307.	24.3	161
17	Free-surface microfluidic control of surface-enhanced Raman spectroscopy for the optimized detection of airborne molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18898-18901.	7.6	144
18	Femtomole Mixer for Microsecond Kinetic Studies of Protein Folding. <i>Analytical Chemistry</i> , 2004, 76, 7169-7178.	6.8	138

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19	Energy consumption analysis of constant voltage and constant current operations in capacitive deionization. <i>Desalination</i> , 2016, 400, 18-24.	8.3	129
20	Using Ultramicroporous Carbon for the Selective Removal of Nitrate with Capacitive Deionization. <i>Environmental Science & Technology</i> , 2019, 53, 10863-10870.	10.5	128
21	Nondestructive nanostraw intracellular sampling for longitudinal cell monitoring. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1866-E1874.	7.6	127
22	Two-Dimensional Porous Electrode Model for Capacitive Deionization. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24681-24694.	3.3	122
23	Convective instability of electrokinetic flows in a cross-shaped microchannel. <i>Journal of Fluid Mechanics</i> , 2006, 555, 1.	3.5	121
24	Energy breakdown in capacitive deionization. <i>Water Research</i> , 2016, 104, 303-311.	11.4	117
25	Characterization of Resistances of a Capacitive Deionization System. <i>Environmental Science & Technology</i> , 2015, 49, 9699-9706.	10.5	114
26	Thermal Self-Protection of Zinc-Ion Batteries Enabled by Smart Hygroscopic Hydrogel Electrolytes. <i>Advanced Energy Materials</i> , 2020, 10, 2002898.	22.2	112
27	Water management in proton exchange membrane fuel cells using integrated electroosmotic pumping. <i>Journal of Power Sources</i> , 2006, 161, 191-202.	8.0	110
28	On the chronology of the Uluzzian. <i>Journal of Human Evolution</i> , 2014, 68, 1-13.	2.8	110
29	Open source simulation tool for electrophoretic stacking, focusing, and separation. <i>Journal of Chromatography A</i> , 2009, 1216, 1008-1018.	3.8	107
30	CRISPR Enzyme Kinetics for Molecular Diagnostics. <i>Analytical Chemistry</i> , 2021, 93, 7456-7464.	6.8	105
31	The role of ambient conditions on the performance of a planar, air-breathing hydrogen PEM fuel cell. <i>Journal of Power Sources</i> , 2006, 161, 168-182.	8.0	103
32	Basic principles of electrolyte chemistry for microfluidic electrokinetics. Part I: Acid-base equilibria and pH buffers. <i>Lab on A Chip</i> , 2009, 9, 2437.	6.1	102
33	Sample Zone Dynamics in Peak Mode Isotachopheresis. <i>Analytical Chemistry</i> , 2008, 80, 6300-6307.	6.8	95
34	Purification of Nucleic Acids from Whole Blood Using Isotachopheresis. <i>Analytical Chemistry</i> , 2009, 81, 9507-9511.	6.8	95
35	Engineering model of a passive planar air breathing fuel cell cathode. <i>Journal of Power Sources</i> , 2007, 167, 118-129.	8.0	91
36	Rapid hybridization of nucleic acids using isotachopheresis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 11127-11132.	7.6	91

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37	Transient delivery of modified mRNA encoding TERT rapidly extends telomeres in human cells. <i>FASEB Journal</i> , 2015, 29, 1930-1939.	0.5	90
38	Extreme Two-Phase Cooling from Laser-Etched Diamond and Conformal, Template-Fabricated Microporous Copper. <i>Advanced Functional Materials</i> , 2017, 27, 1703265.	16.5	89
39	Rapid Detection of Urinary Tract Infections Using Isotachopheresis and Molecular Beacons. <i>Analytical Chemistry</i> , 2011, 83, 4110-4117.	6.8	88
40	Impedance-based study of capacitive porous carbon electrodes with hierarchical and bimodal porosity. <i>Journal of Power Sources</i> , 2013, 241, 266-273.	8.0	85
41	Unraveling the potential and pore-size dependent capacitance of slit-shaped graphitic carbon pores in aqueous electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2309.	2.9	82
42	Purification of nucleic acids using isotachopheresis. <i>Journal of Chromatography A</i> , 2014, 1335, 105-120.	3.8	80
43	Optimization of a Microfluidic Mixer for Studying Protein Folding Kinetics. <i>Analytical Chemistry</i> , 2006, 78, 4299-4306.	6.8	77
44	Dynamics of field-amplified sample stacking. <i>Journal of Fluid Mechanics</i> , 2005, 543, 57.	3.5	75
45	High-pressure electroosmotic pumps based on porous polymer monoliths. <i>Sensors and Actuators B: Chemical</i> , 2004, 99, 66-73.	8.0	74
46	MicroRNA Profiling by Simultaneous Selective Isotachopheresis and Hybridization with Molecular Beacons. <i>Analytical Chemistry</i> , 2011, 83, 2310-2316.	6.8	74
47	Rapid Hydrogen-Deuterium Exchange in Liquid Droplets. <i>Journal of the American Chemical Society</i> , 2017, 139, 6851-6854.	14.6	74
48	Carbon Nanoparticles on Carbon Fabric for Flexible and High-Performance Field Emitters. <i>Advanced Functional Materials</i> , 2011, 21, 2150-2154.	16.5	73
49	Coupling isotachopheresis and capillary electrophoresis: a review and comparison of methods. <i>Analyst</i> , The, 2013, 138, 735-754.	3.5	69
50	Electrophoretic mobility measurements of fluorescent dyes using on-chip capillary electrophoresis. <i>Electrophoresis</i> , 2011, 32, 3286-3294.	2.9	67
51	Quantifying the flow efficiency in constant-current capacitive deionization. <i>Water Research</i> , 2018, 129, 327-336.	11.4	67
52	Ion selectivity in capacitive deionization with functionalized electrode: Theory and experimental validation. <i>Water Research X</i> , 2018, 1, 100008.	6.2	67
53	Rapid and selective extraction, isolation, preconcentration, and quantitation of small RNAs from cell lysate using on-chip isotachopheresis. <i>Lab on A Chip</i> , 2009, 9, 2145.	6.1	66
54	In Situ Spatially and Temporally Resolved Measurements of Salt Concentration between Charging Porous Electrodes for Desalination by Capacitive Deionization. <i>Environmental Science & Technology</i> , 2014, 48, 2008-2015.	10.5	66

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55	Increased risk for transverse digital deficiency after chorionic villus sampling: Results of the United States multistate case-control study, 1988-1992. <i>Teratology</i> , 1995, 51, 20-29.	1.5	65
56	Active Water Management for PEM Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2007, 154, B1049.	2.9	64
57	Ionic strength effects on electrophoretic focusing and separations. <i>Electrophoresis</i> , 2010, 31, 910-919.	2.9	63
58	Enzyme Kinetics and Detector Sensitivity Determine Limits of Detection of Amplification-Free CRISPR-Cas12 and CRISPR-Cas13 Diagnostics. <i>Analytical Chemistry</i> , 2022, 94, 9826-9834.	6.8	63
59	Integration of On-Chip Isotachophoresis and Functionalized Hydrogels for Enhanced-Sensitivity Nucleic Acid Detection. <i>Analytical Chemistry</i> , 2012, 84, 6366-6369.	6.8	61
60	Nitrate removal from water using electrostatic regeneration of functionalized adsorbent. <i>Chemical Engineering Journal</i> , 2018, 334, 1289-1296.	13.0	61
61	Immune Checkpoint Inhibitor-Induced Thyroiditis Is Associated with Increased Intrathyroidal T Lymphocyte Subpopulations. <i>Thyroid</i> , 2020, 30, 1440-1450.	5.1	61
62	High water recovery and improved thermodynamic efficiency for capacitive deionization using variable flowrate operation. <i>Water Research</i> , 2019, 155, 76-85.	11.4	58
63	Approaching the limits of two-phase boiling heat transfer: High heat flux and low superheat. <i>Applied Physics Letters</i> , 2015, 107, .	3.2	57
64	Enhanced Capillaryâ€fed Boiling in Copper Inverse Opals via Template Sintering. <i>Advanced Functional Materials</i> , 2018, 28, 1803689.	16.5	56
65	On-Chip Separation and Analysis of RNA and DNA from Single Cells. <i>Analytical Chemistry</i> , 2014, 86, 1953-1957.	6.8	54
66	Adsorption and capacitive regeneration of nitrate using inverted capacitive deionization with surfactant functionalized carbon electrodes. <i>Separation and Purification Technology</i> , 2018, 194, 410-415.	8.1	54
67	Thermodynamics of Ion Separation by Electrosorption. <i>Environmental Science & Technology</i> , 2018, 52, 10196-10204.	10.5	54
68	Sample dispersion in isotachophoresis. <i>Journal of Fluid Mechanics</i> , 2011, 679, 455-475.	3.5	53
69	Rapid Highâ€specificity microRNA Detection Using a Twoâ€stage Isotachophoresis Assay. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11534-11537.	14.8	53
70	Increasing hybridization rate and sensitivity of DNA microarrays using isotachophoresis. <i>Lab on A Chip</i> , 2014, 14, 2958-2967.	6.1	53
71	Current distribution in polymer electrolyte membrane fuel cell with active water management. <i>Journal of Power Sources</i> , 2007, 174, 272-281.	8.0	52
72	SINC-seq: correlation of transient gene expressions between nucleus and cytoplasm reflects single-cell physiology. <i>Genome Biology</i> , 2018, 19, 66.	9.2	52

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73	Equilibria model for pH variations and ion adsorption in capacitive deionization electrodes. <i>Water Research</i> , 2017, 122, 387-397.	11.4	50
74	Electric fields yield chaos in microflows. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14353-14356.	7.6	49
75	Imaging and Quantification of Isotachophoresis Zones Using Nonfocusing Fluorescent Tracers. <i>Analytical Chemistry</i> , 2009, 81, 3022-3028.	6.8	48
76	Hydrodynamic interactions in metal rodlike-particle suspensions due to induced charge electroosmosis. <i>Physical Review E</i> , 2009, 79, 011402.	2.1	47
77	High flow rate per power electroosmotic pumping using low ion density solvents. <i>Sensors and Actuators A: Physical</i> , 2008, 141, 201-212.	4.2	46
78	Electroosmotic pump performance is affected by concentration polarizations of both electrodes and pump. <i>Sensors and Actuators A: Physical</i> , 2011, 165, 310-315.	4.2	45
79	Electrokinetic instabilities in thin microchannels. <i>Physics of Fluids</i> , 2005, 17, 018103.	3.9	44
80	A Fully Integrated CMOS Fluorescence Biochip for DNA and RNA Testing. <i>IEEE Journal of Solid-State Circuits</i> , 2017, 52, 2857-2870.	5.7	44
81	Extraction of DNA from Malaria-Infected Erythrocytes Using Isotachophoresis. <i>Analytical Chemistry</i> , 2011, 83, 9715-9718.	6.8	42
82	Bacterial RNA Extraction and Purification from Whole Human Blood Using Isotachophoresis. <i>Analytical Chemistry</i> , 2012, 84, 5858-5863.	6.8	42
83	Miniaturized system for isotachophoresis assays. <i>Lab on A Chip</i> , 2010, 10, 2242.	6.1	40
84	Direct Comparison of Demyelinating Disease Induced by the Daniel's Strain and BeAn Strain of Theiler's Murine Encephalomyelitis Virus. <i>Brain Pathology</i> , 2003, 13, 291-308.	4.2	39
85	Comments on "Comparison of energy consumption in desalination by capacitive deionization and reverse osmosis". <i>Desalination</i> , 2019, 461, 30-36.	8.3	39
86	A self-priming, roller-free, miniature, peristaltic pump operable with a single, reciprocating actuator. <i>Sensors and Actuators A: Physical</i> , 2010, 160, 141-146.	4.2	38
87	Rapid Slow Off-Rate Modified Aptamer (SOMAmer)-Based Detection of C-Reactive Protein Using Isotachophoresis and an Ionic Spacer. <i>Analytical Chemistry</i> , 2015, 87, 6736-6743.	6.8	37
88	Prevention of microalbuminuria using early intervention with renin-angiotensin system inhibitors in patients with type 2 diabetes: A systematic review. <i>JRAAS - Journal of the Renin-Angiotensin-Aldosterone System</i> , 2016, 17, 147032031665204.	1.6	37
89	Charging and Transport Dynamics of a Flow-Through Electrode Capacitive Deionization System. <i>Journal of Physical Chemistry B</i> , 2018, 122, 240-249.	2.7	37
90	An injection molded microchip for nucleic acid purification from 25 microliter samples using isotachophoresis. <i>Journal of Chromatography A</i> , 2014, 1331, 139-142.	3.8	36

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91	A depth-averaged electrokinetic flow model for shallow microchannels. <i>Journal of Fluid Mechanics</i> , 2008, 608, 43-70.	3.5	35
92	Integration of rapid DNA hybridization and capillary zone electrophoresis using bidirectional isotachophoresis. <i>Analyst, The</i> , 2013, 138, 87-90.	3.5	35
93	Multiple-species model for electrokinetic instability. <i>Physics of Fluids</i> , 2005, 17, 064108.	3.9	34
94	A two-liquid electroosmotic pump using low applied voltage and power. <i>Sensors and Actuators A: Physical</i> , 2010, 163, 311-314.	4.2	34
95	Isotachophoresis with ionic spacer and two-stage separation for high sensitivity DNA hybridization assay. <i>Analyst, The</i> , 2013, 138, 3117.	3.5	33
96	Isotachophoresis applied to biomolecular reactions. <i>Lab on A Chip</i> , 2018, 18, 11-26.	6.1	32
97	Quantification of Global MicroRNA Abundance by Selective Isotachophoresis. <i>Analytical Chemistry</i> , 2010, 82, 9631-9635.	6.8	31
98	Assay for <i>Listeria monocytogenes</i> cells in whole blood using isotachophoresis and recombinase polymerase amplification. <i>Analyst, The</i> , 2017, 142, 48-54.	3.5	31
99	Self similarities in desalination dynamics and performance using capacitive deionization. <i>Water Research</i> , 2018, 140, 323-334.	11.4	31
100	Sea level rise, hydrologic runoff, and the flooding of Venice. <i>Water Resources Research</i> , 2008, 44, .	4.2	30
101	Semi-deterministic and genetic algorithms for global optimization of microfluidic protein-folding devices. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 66, 319-333.	2.9	29
102	Simultaneous Purification and Fractionation of Nucleic Acids and Proteins from Complex Samples Using Bidirectional Isotachophoresis. <i>Analytical Chemistry</i> , 2014, 86, 7264-7268.	6.8	29
103	An Electro-osmotic Fuel Pump for Direct Methanol Fuel Cells. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, B196.	2.3	28
104	Temperature Effects on Electrophoresis. <i>Analytical Chemistry</i> , 2013, 85, 5103-5113.	6.8	28
105	Novel massive ground states of spin chains in a magnetic field. <i>European Physical Journal B</i> , 1998, 5, 705-717.	1.6	27
106	Robust and high-resolution simulations of nonlinear electrokinetic processes in variable cross-section channels. <i>Electrophoresis</i> , 2012, 33, 3036-3051.	2.9	27
107	Osteopathia striata with cranial sclerosis: Variable expressivity in a four generation pedigree. <i>American Journal of Medical Genetics Part A</i> , 1996, 63, 68-73.	2.3	26
108	Dry gas operation of proton exchange membrane fuel cells with parallel channels: Non-porous versus porous plates. <i>Journal of Power Sources</i> , 2009, 188, 82-88.	8.0	25

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109	Compact adaptive-grid scheme for high numerical resolution simulations of isotachopheresis. <i>Journal of Chromatography A</i> , 2010, 1217, 588-599.	3.8	25
110	Isotachopheresis for fractionation and recovery of cytoplasmic RNA and nucleus from single cells. <i>Electrophoresis</i> , 2015, 36, 1658-1662.	2.9	25
111	Self-Cleaning Porous Surfaces for Dry Condensation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26759-26764.	8.3	25
112	On-chip Isotachopheresis for Separation of Ions and Purification of Nucleic Acids. <i>Journal of Visualized Experiments</i> , 2012, , e3890.	0.3	23
113	Electron impact ionization of unstable enols: $\text{H}_2\text{C}=\text{C}(\text{OH})\text{CHO}$, $\text{H}_2\text{C}=\text{C}(\text{OH})\text{CH}_3$ and $\text{H}_2\text{C}=\text{C}(\text{OH})\text{C}_2\text{H}_5$. <i>Organic Mass Spectrometry</i> , 1986, 21, 661-664.	1.3	22
114	Liquid flow-induced electricity in carbon nanomaterials. <i>Sustainable Energy and Fuels</i> , 2019, 3, 599-610.	4.8	22
115	Process design tools and techno-economic analysis for capacitive deionization. <i>Water Research</i> , 2020, 183, 116034.	11.4	22
116	ADVANCED COOLING TECHNOLOGIES FOR MICROPROCESSORS. <i>International Journal of High Speed Electronics and Systems</i> , 2006, 16, 301-313.	0.6	21
117	Taylor-Aris dispersion in temperature gradient focusing. <i>Electrophoresis</i> , 2007, 28, 2333-2344.	2.9	21
118	Two- and three-dimensional modeling and optimization applied to the design of a fast hydrodynamic focusing microfluidic mixer for protein folding. <i>Physics of Fluids</i> , 2013, 25, .	3.9	21
119	False data injection attacks on phasor measurements that bypass low-rank decomposition. , 2017, , .		21
120	Structure and dynamic properties of stretched water in graphene nanochannels by molecular dynamics simulation: effects of stretching extent. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19163-19171.	2.9	21
121	A system for the high-throughput measurement of the shear modulus distribution of human red blood cells. <i>Lab on A Chip</i> , 2020, 20, 2927-2936.	6.1	21
122	Fluorescent Carrier Ampholytes Assay for Portable, Label-Free Detection of Chemical Toxins in Tap Water. <i>Analytical Chemistry</i> , 2010, 82, 1858-1866.	6.8	20
123	Coupling Isotachopheresis with Affinity Chromatography for Rapid and Selective Purification with High Column Utilization, Part 2: Experimental Study. <i>Analytical Chemistry</i> , 2014, 86, 6229-6236.	6.8	20
124	Measurement of Temperature and Reaction Species in the Cathode Diffusion Layer of a Free-Convection Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2007, 154, B910.	2.9	19
125	Burst behavior at a capillary tip: Effect of low and high surface tension. <i>Journal of Colloid and Interface Science</i> , 2015, 455, 1-5.	9.6	19
126	Tailoring Permeability of Microporous Copper Structures through Template Sintering. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30487-30494.	8.3	19

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127	Surface-bonded fiber optic Sagnac sensors for ultrasound detection. Ultrasonics, 2004, 42, 837-841.	4.0	18
128	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
129	Design and fabrication of porous polymer wick structures. Sensors and Actuators B: Chemical, 2010, 150, 556-563.	8.0	18
130	Device design and flow scaling for liquid sheet jets. Physical Review Fluids, 2018, 3, .	2.6	18
131	Electrokinetic control of sample splitting at a channel bifurcation using isotachophoresis. New Journal of Physics, 2009, 11, 075026.	2.9	17
132	Rapid High-Specificity microRNA Detection Using a Two-Stage Isotachophoresis Assay. Angewandte Chemie, 2013, 125, 11748-11751.	2.1	17
133	Frequency analysis and resonant operation for efficient capacitive deionization. Water Research, 2018, 144, 581-591.	11.4	17
134	A critical review of microfluidic systems for CRISPR assays. Lab on A Chip, 2023, 23, 938-963.	6.1	17
135	Increasing Hybridization Rate and Sensitivity of Bead-Based Assays Using Isotachophoresis. Angewandte Chemie - International Edition, 2014, 53, 13813-13816.	14.8	16
136	Energy transfer for storage or recovery in capacitive deionization using a DC-DC converter. Journal of Power Sources, 2020, 448, 227409.	8.0	16
137	Isotachophoresis: Theory and Microfluidic Applications. Chemical Reviews, 2022, 122, 12904-12976.	51.4	16
138	A laser induced cavitation pump. Journal of Micromechanics and Microengineering, 2004, 14, 1037-1046.	2.6	15
139	Toward orientation-independent design for gas recombination in closed-loop electroosmotic pumps. Sensors and Actuators B: Chemical, 2007, 128, 334-339.	8.0	15
140	Investigation of internal pressure gradients generated in electrokinetic flows with axial conductivity gradients. Experiments in Fluids, 2007, 43, 959-967.	2.3	15
141	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
142	Method for Analyte Identification Using Isotachophoresis and a Fluorescent Carrier Ampholyte Assay. Analytical Chemistry, 2010, 82, 2134-2138.	6.8	15
143	Concentration cascade of leading electrolyte using bidirectional isotachophoresis. Electrophoresis, 2012, 33, 1048-1059.	2.9	15
144	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

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145	Effects of Weak Electrolytes on Electric Double Layer Ion Distributions. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8302-8306.	4.9	15
146	A hybrid method for bubble geometry reconstruction in two-phase microchannels. <i>Experiments in Fluids</i> , 2006, 40, 847-858.	2.3	14
147	Ballistic dispersion in temperature gradient focusing. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2008, 464, 595-612.	2.1	14
148	Two-phase hydrodynamics in a miniature direct methanol fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2009, 52, 5158-5166.	4.9	14
149	Efficient Production of On-Target Reads for Small RNA Sequencing of Single Cells Using Modified Adapters. <i>Analytical Chemistry</i> , 2018, 90, 12609-12615.	6.8	14
150	Dopamine D1+D3 receptor density may correlate with parkinson disease clinical features. <i>Annals of Clinical and Translational Neurology</i> , 2021, 8, 224-237.	3.7	14
151	Engineering model for coupling wicks and electroosmotic pumps with proton exchange membrane fuel cells for active water management. <i>Electrochimica Acta</i> , 2009, 54, 6223-6233.	5.4	13
152	High-Performance Dielectric Elastomer Nanogenerator for Efficient Energy Harvesting and Sensing via Alternative Current Method. <i>Advanced Science</i> , 2022, 9, e2201098.	12.4	13
153	Design sensitivity and mixing uniformity of a micro-fluidic mixer. <i>Physics of Fluids</i> , 2016, 28, .	3.9	12
154	An Ohmic model for electrokinetic flows of binary asymmetric electrolytes. <i>Current Opinion in Colloid and Interface Science</i> , 2016, 24, 52-63.	8.0	12
155	Detection and Discrimination of Single Nucleotide Polymorphisms by Quantification of CRISPR-Cas Catalytic Efficiency. <i>Analytical Chemistry</i> , 2022, 94, 15117-15123.	6.8	12
156	Efficacy and safety of glucose-lowering agents in patients with type 2 diabetes: A network meta-analysis of randomized, active comparator-controlled trials. <i>Nutrition, Metabolism and Cardiovascular Diseases</i> , 2021, 31, 1027-1034.	2.7	11
157	Tunable Photocatalytic Activity of PEO-Stabilized ZnO-Polyoxometalate Nanostructures in Aqueous Solution. <i>Advanced Materials Interfaces</i> , 2021, 8, 2002130.	4.1	11
158	Uncertainty Quantification of Michaelis-Menten Kinetic Rates and Its Application to the Analysis of CRISPR-Based Diagnostics. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	14.8	11
159	Coupling Isotachophoresis with Affinity Chromatography for Rapid and Selective Purification with High Column Utilization, Part 1: Theory. <i>Analytical Chemistry</i> , 2014, 86, 6220-6228.	6.8	10
160	Web-Based Open-Source Tool for Isotachophoresis. <i>Analytical Chemistry</i> , 2021, 93, 15768-15774.	6.8	10
161	Liquid Heterostructures: Generation of Liquid-Liquid Interfaces in Free-Flowing Liquid Sheets. <i>Langmuir</i> , 2022, 38, 12822-12832.	3.7	9
162	Comments on the conditions for similitude in electroosmotic flows. <i>Journal of Colloid and Interface Science</i> , 2007, 310, 675-677.	9.6	8

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