Chih-Yuan Lin

List of Publications by Year
in descending order

42	1,857	201385 27	288905 40
papers	citations	h-index	g-index

43	43	43	1158
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rectification of Concentration Polarization in Mesopores Leads To High Conductance Ionic Diodes and High Performance Osmotic Power. Journal of the American Chemical Society, 2019, 141, 3691-3698.	6.6	187
2	pH-Regulated Ionic Conductance in a Nanochannel with Overlapped Electric Double Layers. Analytical Chemistry, 2015, 87, 4508-4514.	3.2	105
3	Salinity gradient power: influences of temperature and nanopore size. Nanoscale, 2016, 8, 2350-2357.	2.8	99
4	Voltage-Induced Modulation of Ionic Concentrations and Ion Current Rectification in Mesopores with Highly Charged Pore Walls. Journal of Physical Chemistry Letters, 2018, 9, 393-398.	2.1	90
5	Power generation by a pH-regulated conical nanopore through reverse electrodialysis. Journal of Power Sources, 2017, 366, 169-177.	4.0	73
6	Charge Inversion and Calcium Gating in Mixtures of Ions in Nanopores. Journal of the American Chemical Society, 2020, 142, 2925-2934.	6.6	73
7	Ionic Current Rectification in a pH-Tunable Polyelectrolyte Brushes Functionalized Conical Nanopore: Effect of Salt Gradient. Analytical Chemistry, 2016, 88, 1176-1187.	3.2	70
8	Ionic Current Rectification in a Conical Nanopore: Influences of Electroosmotic Flow and Type of Salt. Journal of Physical Chemistry C, 2017, 121, 4576-4582.	1.5	66
9	The Design and Characterization of Multifunctional Aptamer Nanopore Sensors. ACS Nano, 2018, 12, 4844-4852.	7.3	66
10	Influences of Cone Angle and Surface Charge Density on the Ion Current Rectification Behavior of a Conical Nanopore. Journal of Physical Chemistry C, 2016, 120, 25620-25627.	1.5	63
11	Ion Current Rectification Behavior of Bioinspired Nanopores Having a pH-Tunable Zwitterionic Surface. Analytical Chemistry, 2017, 89, 3952-3958.	3.2	62
12	An ultrathin ionomer interphase for high efficiency lithium anode in carbonate based electrolyte. Nature Communications, 2019, 10, 5824.	5.8	62
13	Regulating Current Rectification and Nanoparticle Transport Through a Salt Gradient in Bipolar Nanopores. Small, 2015, 11, 4594-4602.	5.2	60
14	Power generation from a pH-regulated nanochannel through reverse electrodialysis: Effects of nanochannel shape and non-uniform H+ distribution. Electrochimica Acta, 2019, 294, 84-92.	2.6	58
15	Highly Charged Particles Cause a Larger Current Blockage in Micropores Compared to Neutral Particles. ACS Nano, 2016, 10, 8413-8422.	7.3	57
16	Salt gradient driven ion transport in solid-state nanopores: the crucial role of reservoir geometry and size. Physical Chemistry Chemical Physics, 2016, 18, 30160-30165.	1.3	55
17	Influence of electroosmotic flow on the ionic current rectification in a pH-regulated, conical nanopore. Nanoscale, 2015, 7, 14023-14031.	2.8	54
18	Rectification of ionic current in nanopores functionalized with bipolar polyelectrolyte brushes. Sensors and Actuators B: Chemical, 2018, 258, 1223-1229.	4.0	53

#	Article	IF	Citations
19	Importance of polyelectrolyte modification for rectifying the ionic current in conically shaped nanochannels. Physical Chemistry Chemical Physics, 2017, 19, 5351-5360.	1.3	45
20	Ionic amplifying circuits inspired by electronics and biology. Nature Communications, 2020, 11, 1568.	5.8	45
21	Modulation of Charge Density and Charge Polarity of Nanopore Wall by Salt Gradient and Voltage. ACS Nano, 2019, 13, 9868-9879.	7.3	42
22	Tunable Current Rectification and Selectivity Demonstrated in Nanofluidic Diodes through Kinetic Functionalization. Journal of Physical Chemistry Letters, 2020, 11, 60-66.	2.1	42
23	Salinity gradient power: Optimization of nanopore size. Electrochimica Acta, 2016, 219, 790-797.	2.6	41
24	Ion-to-Neutral Ratios and Thermal Proton Transfer in Matrix-Assisted Laser Desorption/Ionization. Journal of the American Society for Mass Spectrometry, 2015, 26, 1242-1251.	1.2	36
25	Salt-Dependent Ion Current Rectification in Conical Nanopores: Impact of Salt Concentration and Cone Angle. Journal of Physical Chemistry C, 2017, 121, 28139-28147.	1.5	33
26	Influence of salt valence on the rectification behavior of nanochannels. Journal of Colloid and Interface Science, 2018, 531, 483-492.	5.0	31
27	Dual pH Gradient and Voltage Modulation of Ion Transport and Current Rectification in Biomimetic Nanopores Functionalized with a pH-Tunable Polyelectrolyte. Journal of Physical Chemistry C, 2019, 123, 12437-12443.	1.5	28
28	Electrodiffusioosmosis-Induced Negative Differential Resistance in pH-Regulated Mesopores Containing Purely Monovalent Solutions. ACS Applied Materials & Interfaces, 2020, 12, 3198-3204.	4.0	27
29	Influence of the shape of a polyelectrolyte on its electrophoretic behavior. Soft Matter, 2012, 8, 9469.	1.2	21
30	Voltage-controlled ion transport and selectivity in a conical nanopore functionalized with pH-tunable polyelectrolyte brushes. Journal of Colloid and Interface Science, 2019, 537, 496-504.	5.0	20
31	Electrokinetic Phenomena in Organic Solvents. Journal of Physical Chemistry B, 2019, 123, 6123-6131.	1.2	17
32	Electrophoresis of Deformable Polyelectrolytes in a Nanofluidic Channel. Langmuir, 2013, 29, 2446-2454.	1.6	12
33	Electrokinetic ion transport in an asymmetric double-gated nanochannel with a pH-tunable zwitterionic surface. Physical Chemistry Chemical Physics, 2019, 21, 7773-7780.	1.3	12
34	Does decarboxylation make 2,5-dihydroxybenzoic acid special in matrix-assisted laser desorption/ionization?. Rapid Communications in Mass Spectrometry, 2014, 28, 1082-1088.	0.7	10
35	Ion transport in a pH-regulated conical nanopore filled with a power-law fluid. Journal of Colloid and Interface Science, 2019, 537, 358-365.	5.0	10
36	Origin of Ultrahigh Rectification in Polyelectrolyte Bilayers Modified Conical Nanopores. Journal of Physical Chemistry Letters, 2021, 12, 11858-11864.	2.1	10

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37	Engineering adjustable two-pore devices for parallel ion transport and DNA translocations. Journal of Chemical Physics, 2021, 154, 105102.	1.2	9
38	Devices for Nanoscale Guiding of DNA through a 2D Nanopore. ACS Sensors, 2021, 6, 2534-2545.	4.0	8
39	Proteinâ€enabled detection of ibuprofen and sulfamethoxazole using solidâ€state nanopores. Proteomics, 2022, 22, e2100071.	1.3	4
40	Rectifying Ionic Current in Conical Sub-Micropores Functionalized with Poly-L-Lysine. Biophysical Journal, 2018, 114, 494a.	0.2	0
41	Deformability of Individual Cells Probed by Electrical and Optical Signals. Biophysical Journal, 2018, 114, 192a.	0.2	0
42	Investigation of entrance effects on particle electrophoretic behavior near a nanopore for resistive pulse sensing. Electrophoresis, 2021, 42, 2206-2214.	1.3	0