

Rhokyun Kwak

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5559081/publications.pdf>

Version: 2024-02-01

28
papers

1,309
citations

394421

19
h-index

501196

28
g-index

28
all docs

28
docs citations

28
times ranked

1276
citing authors

#	ARTICLE	IF	CITATIONS
1	Microscale electro dialysis: Concentration profiling and vortex visualization. <i>Desalination</i> , 2013, 308, 138-146.	8.2	166
2	Continuous-Flow Biomolecule and Cell Concentrator by Ion Concentration Polarization. <i>Analytical Chemistry</i> , 2011, 83, 7348-7355.	6.5	134
3	Shear Flow of an Electrically Charged Fluid by Ion Concentration Polarization: Scaling Laws for Electroconvective Vortices. <i>Physical Review Letters</i> , 2013, 110, 114501.	7.8	134
4	Microfluidic paper-based biomolecule preconcentrator based on ion concentration polarization. <i>Lab on A Chip</i> , 2016, 16, 2219-2227.	6.0	87
5	Isolation of extracellular vesicle from blood plasma using electrophoretic migration through porous membrane. <i>Sensors and Actuators B: Chemical</i> , 2016, 233, 289-297.	7.8	85
6	UV-assisted capillary force lithography for engineering biomimetic multiscale hierarchical structures: From lotus leaf to gecko foot hairs. <i>Nanoscale</i> , 2009, 1, 331.	5.6	74
7	Generation and Self-Replication of Monolithic, Dual-Scale Polymer Structures by Two-Step Capillary-Force Lithography. <i>Small</i> , 2008, 4, 1913-1918.	10.0	71
8	Multi-vortical flow inducing electrokinetic instability in ion concentration polarization layer. <i>Nanoscale</i> , 2012, 4, 7406.	5.6	69
9	Purification of High Salinity Brine by Multi-Stage Ion Concentration Polarization Desalination. <i>Scientific Reports</i> , 2016, 6, 31850.	3.3	67
10	Enhanced Salt Removal by Unipolar Ion Conduction in Ion Concentration Polarization Desalination. <i>Scientific Reports</i> , 2016, 6, 25349.	3.3	65
11	Paper-Based Flow Fractionation System Applicable to Preconcentration and Field-Flow Separation. <i>Analytical Chemistry</i> , 2016, 88, 1682-1687.	6.5	58
12	Spatiotemporally Defining Biomolecule Preconcentration by Merging Ion Concentration Polarization. <i>Analytical Chemistry</i> , 2016, 88, 988-996.	6.5	35
13	Energy efficiency enhancement of electromembrane desalination systems by local flow redistribution optimized for the asymmetry of cation/anion diffusivity. <i>Journal of Membrane Science</i> , 2017, 524, 280-287.	8.2	33
14	Fabrication of Monolithic Bridge Structures by Vacuum-Assisted Capillary-Force Lithography. <i>Small</i> , 2009, 5, 790-794.	10.0	32
15	High-ionic-strength pre-concentration via ion concentration polarization for blood-based biofluids. <i>Sensors and Actuators B: Chemical</i> , 2018, 268, 485-493.	7.8	31
16	Sheltering the perturbed vortical layer of electroconvection under shear flow. <i>Journal of Fluid Mechanics</i> , 2017, 813, 799-823.	3.4	27
17	Microscale electrodeionization: In situ concentration profiling and flow visualization. <i>Water Research</i> , 2020, 170, 115310.	11.3	21
18	Solvent-Assisted Decal Transfer Lithography by Oxygen-Plasma Bonding and Anisotropic Swelling. <i>Advanced Materials</i> , 2010, 22, 2426-2429.	21.0	19

#	ARTICLE	IF	CITATIONS
19	Pattern Formation of Three-Dimensional Electroconvection on a Charge Selective Surface. <i>Physical Review Letters</i> , 2020, 124, 154502.	7.8	19
20	Controlling ion transport with pattern structures on ion exchange membranes in electrodialysis. <i>Desalination</i> , 2021, 499, 114801.	8.2	19
21	Half-Cell Ion Concentration Polarization on Nafion-Coated Electrode. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2991-2999.	4.6	11
22	Partially Cured Photopolymer with Gradient Bingham Plastic Behaviors as a Versatile Deformable Material. <i>ACS Macro Letters</i> , 2017, 6, 561-565.	4.8	10
23	Nanopore Sensing in Aqueous Two-Phase System: Simultaneous Enhancement of Signal and Translocation Time via Conformal Coating. <i>Small</i> , 2017, 13, 1601725.	10.0	9
24	Nonlinear dynamics of ion concentration polarization in capacitive deionization. <i>Desalination</i> , 2019, 458, 14-24.	8.2	9
25	Concentric ion concentration polarization desalination for efficient En-bloc preconcentration and desalination. <i>Desalination</i> , 2021, 499, 114810.	8.2	9
26	Decoupled rolling, sliding and sticking of a viscoplastic drop on a superhydrophobic surface. <i>Journal of Fluid Mechanics</i> , 2021, 908, .	3.4	8
27	Simultaneous electric production and sizing of emulsion droplets in microfluidics. <i>Soft Matter</i> , 2020, 16, 614-622.	2.7	4
28	Generation of Solvent-Free 3D Lipid Structure Arrays on High Aspect Ratio Si Microwell Substrate. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801554.	3.7	3