## 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 28 g-index

28 all docs

28 docs citations

times ranked

28

1276 citing authors

#	Article	IF	CITATIONS
1	Controlling ion transport with pattern structures on ion exchange membranes in electrodialysis. Desalination, 2021, 499, 114801.	8.2	19
2	Concentric ion concentration polarization desalination for efficient En-bloc preconcentration and desalination. Desalination, 2021, 499, 114810.	8.2	9
3	Decoupled rolling, sliding and sticking of a viscoplastic drop on a superhydrophobic surface. Journal of Fluid Mechanics, 2021, 908, .	3.4	8
4	Simultaneous electric production and sizing of emulsion droplets in microfluidics. Soft Matter, 2020, 16, 614-622.	2.7	4
5	Microscale electrodeionization: In situ concentration profiling and flow visualization. Water Research, 2020, 170, 115310.	11.3	21
6	Pattern Formation of Three-Dimensional Electroconvection on a Charge Selective Surface. Physical Review Letters, 2020, 124, 154502.	7.8	19
7	Generation of Solventâ€Free 3D Lipid Structure Arrays on High Aspect Ratio Si Microwell Substrate. Advanced Materials Interfaces, 2019, 6, 1801554.	3.7	3
8	Nonlinear dynamics of ion concentration polarization in capacitive deionization. Desalination, 2019, 458, 14-24.	8.2	9
9	High-ionic-strength pre-concentration via ion concentration polarization for blood-based biofluids. Sensors and Actuators B: Chemical, 2018, 268, 485-493.	7.8	31
10	Half-Cell Ion Concentration Polarization on Nafion-Coated Electrode. Journal of Physical Chemistry Letters, 2018, 9, 2991-2999.	4.6	11
11	Energy efficiency enhancement of electromembrane desalination systems by local flow redistribution optimized for the asymmetry of cation/anion diffusivity. Journal of Membrane Science, 2017, 524, 280-287.	8.2	33
12	Sheltering the perturbed vortical layer of electroconvection under shear flow. Journal of Fluid Mechanics, 2017, 813, 799-823.	3.4	27
13	Partially Cured Photopolymer with Gradient Bingham Plastic Behaviors as a Versatile Deformable Material. ACS Macro Letters, 2017, 6, 561-565.	4.8	10
14	Nanopore Sensing in Aqueous Twoâ€Phase System: Simultaneous Enhancement of Signal and Translocation Time via Conformal Coating. Small, 2017, 13, 1601725.	10.0	9
15	Enhanced Salt Removal by Unipolar Ion Conduction in Ion Concentration Polarization Desalination. Scientific Reports, 2016, 6, 25349.	3.3	65
16	Microfluidic paper-based biomolecule preconcentrator based on ion concentration polarization. Lab on A Chip, 2016, 16, 2219-2227.	6.0	87
17	Isolation of extracellular vesicle from blood plasma using electrophoretic migration through porous membrane. Sensors and Actuators B: Chemical, 2016, 233, 289-297.	7.8	85
18	Purification of High Salinity Brine by Multi-Stage Ion Concentration Polarization Desalination. Scientific Reports, 2016, 6, 31850.	3.3	67

#	Article	IF	CITATION
19	Spatiotemporally Defining Biomolecule Preconcentration by Merging Ion Concentration Polarization. Analytical Chemistry, 2016, 88, 988-996.	6.5	35
20	Paper-Based Flow Fractionation System Applicable to Preconcentration and Field-Flow Separation. Analytical Chemistry, 2016, 88, 1682-1687.	6.5	58
21	Microscale electrodialysis: Concentration profiling and vortex visualization. Desalination, 2013, 308, 138-146.	8.2	166
22	Shear Flow of an Electrically Charged Fluid by Ion Concentration Polarization: Scaling Laws for Electroconvective Vortices. Physical Review Letters, 2013, 110, 114501.	7.8	134
23	Multi-vortical flow inducing electrokinetic instability in ion concentration polarization layer. Nanoscale, 2012, 4, 7406.	5.6	69
24	Continuous-Flow Biomolecule and Cell Concentrator by Ion Concentration Polarization. Analytical Chemistry, 2011, 83, 7348-7355.	6.5	134
25	Solventâ€Assisted Decal Transfer Lithography by Oxygenâ€Plasma Bonding and Anisotropic Swelling. Advanced Materials, 2010, 22, 2426-2429.	21.0	19
26	Fabrication of Monolithic Bridge Structures by Vacuumâ€Assisted Capillaryâ€Force Lithography. Small, 2009, 5, 790-794.	10.0	32
27	UV-assisted capillary force lithography for engineering biomimetic multiscale hierarchical structures: From lotus leaf to gecko foot hairs. Nanoscale, 2009, 1, 331.	5.6	74
28	Generation and Selfâ€Replication of Monolithic, Dualâ€Scale Polymer Structures by Twoâ€Step Capillaryâ€Force Lithography. Small, 2008, 4, 1913-1918.	10.0	71