

# Taeyoung Kim

## List of Publications by Year in descending order

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Version: 2024-02-01

27  
papers

1,632  
citations

393982

19  
h-index

525886

27  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1622  
citing authors

#	ARTICLE	IF	CITATIONS
1	Low Energy Desalination Using Battery Electrode Deionization. <i>Environmental Science and Technology Letters</i> , 2017, 4, 444-449.	3.9	224
2	CDI ragone plot as a functional tool to evaluate desalination performance in capacitive deionization. <i>RSC Advances</i> , 2015, 5, 1456-1461.	1.7	219
3	Comparison of salt adsorption capacity and energy consumption between constant current and constant voltage operation in capacitive deionization. <i>Desalination</i> , 2014, 352, 52-57.	4.0	116
4	Influence of attached bacteria and biofilm on double-layer capacitance during biofilm monitoring by electrochemical impedance spectroscopy. <i>Water Research</i> , 2011, 45, 4615-4622.	5.3	99
5	Direct energy recovery system for membrane capacitive deionization. <i>Desalination</i> , 2016, 398, 144-150.	4.0	98
6	A thermally regenerative ammonia battery with carbon-silver electrodes for converting low-grade waste heat to electricity. <i>Journal of Power Sources</i> , 2018, 373, 95-102.	4.0	79
7	Solvent evaporation mediated preparation of hierarchically porous metal organic framework-derived carbon with controllable and accessible large-scale porosity. <i>Carbon</i> , 2014, 71, 294-302.	5.4	77
8	Ammonium Removal from Domestic Wastewater Using Selective Battery Electrodes. <i>Environmental Science and Technology Letters</i> , 2018, 5, 578-583.	3.9	77
9	Relationship between capacitance of activated carbon composite electrodes measured at a low electrolyte concentration and their desalination performance in capacitive deionization. <i>Journal of Electroanalytical Chemistry</i> , 2013, 704, 169-174.	1.9	74
10	Harvesting Energy from Salinity Differences Using Battery Electrodes in a Concentration Flow Cell. <i>Environmental Science &amp; Technology</i> , 2016, 50, 9791-9797.	4.6	67
11	Rapid bacterial detection with an interdigitated array electrode by electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 2012, 82, 126-131.	2.6	62
12	Temporal and spatial distribution of pH in flow-mode capacitive deionization and membrane capacitive deionization. <i>Desalination</i> , 2018, 439, 188-195.	4.0	62
13	Hydrogen peroxide generation in flow-mode capacitive deionization. <i>Journal of Electroanalytical Chemistry</i> , 2016, 776, 101-104.	1.9	60
14	High power densities created from salinity differences by combining electrode and Donnan potentials in a concentration flow cell. <i>Energy and Environmental Science</i> , 2017, 10, 1003-1012.	15.6	55
15	Cyclic voltammetry for monitoring bacterial attachment and biofilm formation. <i>Journal of Industrial and Engineering Chemistry</i> , 2012, 18, 800-807.	2.9	54
16	Evaluating Battery-like Reactions to Harvest Energy from Salinity Differences using Ammonium Bicarbonate Salt Solutions. <i>ChemSusChem</i> , 2016, 9, 981-988.	3.6	36
17	Integrating Reverse Electrodialysis Stacks with Flow Batteries for Improved Energy Recovery from Salinity Gradients and Energy Storage. <i>ChemSusChem</i> , 2017, 10, 797-803.	3.6	28
18	A pH-Gradient Flow Cell for Converting Waste CO <sub>2</sub> into Electricity. <i>Environmental Science and Technology Letters</i> , 2017, 4, 49-53.	3.9	25

#	ARTICLE	IF	CITATIONS
19	Extraction of Salinity-Gradient Energy by a Hybrid Capacitive-Mixing System. <i>ChemSusChem</i> , 2017, 10, 1600-1606.	3.6	24
20	Potential Sweep Method to Evaluate Rate Capability in Capacitive Deionization. <i>Electrochimica Acta</i> , 2014, 139, 374-380.	2.6	20
21	Asymmetric and Symmetric Redox Flow Batteries for Energy-Efficient, High-Recovery Water Desalination. <i>Environmental Science &amp; Technology</i> , 2022, 56, 4477-4488.	4.6	19
22	Electro-Forward Osmosis. <i>Environmental Science &amp; Technology</i> , 2019, 53, 8352-8361.	4.6	16
23	Continuous Solar Desalination of Brackish Water via a Monolithically Integrated Redox Flow Device. <i>ACS ES&amp;T Engineering</i> , 2021, 1, 1678-1687.	3.7	16
24	Biocompatible Ag nanoparticle-embedded poly(2-hydroxyethyl methacrylate) derivative films with bacterial adhesion-resistant and antibacterial properties. <i>Macromolecular Research</i> , 2014, 22, 337-343.	1.0	8
25	Stepwise ammonium enrichment using selective battery electrodes. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 1649-1657.	1.2	8
26	Ammonia Recovery from Domestic Wastewater Using a Proton-Mediated Redox Couple. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12699-12707.	3.2	7
27	Experimental Analysis and Modeling of Closed-Loop Redox Flow Desalination. <i>Journal of the Electrochemical Society</i> , 2022, 169, 063521.	1.3	2