

Younggy Kim

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1325053/publications.pdf>

Version: 2024-02-01

53
papers

2,536
citations

236612

25
h-index

189595

50
g-index

53
all docs

53
docs citations

53
times ranked

2268
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial desalination cells for energy production and desalination. <i>Desalination</i> , 2013, 308, 122-130.	4.0	246
2	Energy Capture from Thermolytic Solutions in Microbial Reverse-Electrodialysis Cells. <i>Science</i> , 2012, 335, 1474-1477.	6.0	232
3	Global and regional potential of wastewater as a water, nutrient and energy source. <i>Natural Resources Forum</i> , 2020, 44, 40-51.	1.8	190
4	Series Assembly of Microbial Desalination Cells Containing Stacked Electrodialysis Cells for Partial or Complete Seawater Desalination. <i>Environmental Science & Technology</i> , 2011, 45, 5840-5845.	4.6	167
5	Hydrogen production from inexhaustible supplies of fresh and salt water using microbial reverse-electrodialysis electrolysis cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16176-16181.	3.3	159
6	Capturing power at higher voltages from arrays of microbial fuel cells without voltage reversal. <i>Energy and Environmental Science</i> , 2011, 4, 4662.	15.6	143
7	Microbial Reverse Electrodialysis Cells for Synergistically Enhanced Power Production. <i>Environmental Science & Technology</i> , 2011, 45, 5834-5839.	4.6	112
8	Hydrogen Generation in Microbial Reverse-Electrodialysis Electrolysis Cells Using a Heat-Regenerated Salt Solution. <i>Environmental Science & Technology</i> , 2012, 46, 5240-5246.	4.6	101
9	Simultaneous removal of organic matter and salt ions from saline wastewater in bioelectrochemical systems. <i>Desalination</i> , 2013, 308, 115-121.	4.0	98
10	Cadmium (II) removal mechanisms in microbial electrolysis cells. <i>Journal of Hazardous Materials</i> , 2016, 311, 134-141.	6.5	81
11	Energy efficient reconcentration of diluted human urine using ion exchange membranes in bioelectrochemical systems. <i>Water Research</i> , 2014, 64, 61-72.	5.3	77
12	Competitive separation of di- vs. mono-valent cations in electrodialysis: Effects of the boundary layer properties. <i>Water Research</i> , 2012, 46, 2042-2056.	5.3	73
13	Powering microbial electrolysis cells by capacitor circuits charged using microbial fuel cell. <i>Journal of Power Sources</i> , 2013, 229, 198-202.	4.0	63
14	Enhanced digestion of waste activated sludge using microbial electrolysis cells at ambient temperature. <i>Water Research</i> , 2015, 87, 503-512.	5.3	62
15	Methanogenesis control by electrolytic oxygen production in microbial electrolysis cells. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 3079-3086.	3.8	61
16	Electrodialysis with spacers: Effects of variation and correlation of boundary layer thickness. <i>Desalination</i> , 2011, 274, 54-63.	4.0	57
17	Treatment of model inland brackish groundwater reverse osmosis concentrate with electrodialysis—Part I: sensitivity to superficial velocity. <i>Desalination</i> , 2014, 344, 152-162.	4.0	54
18	Increasing Desalination by Mitigating Anolyte pH Imbalance Using Catholyte Effluent Addition in a Multi-Anode Bench Scale Microbial Desalination Cell. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 1200-1206.	3.2	51

#	ARTICLE	IF	CITATIONS
19	Microbial electrolysis cell with spiral wound electrode for wastewater treatment and methane production. <i>Process Biochemistry</i> , 2015, 50, 1103-1109.	1.8	50
20	The yield and decay coefficients of exoelectrogenic bacteria in bioelectrochemical systems. <i>Water Research</i> , 2016, 94, 233-239.	5.3	43
21	Electrochemical analysis of separators used in single-chamber, air-cathode microbial fuel cells. <i>Electrochimica Acta</i> , 2013, 89, 45-51.	2.6	39
22	Treatment of model inland brackish groundwater reverse osmosis concentrate with electrodialysis – Part II: Sensitivity to voltage application and membranes. <i>Desalination</i> , 2014, 345, 128-135.	4.0	37
23	Influence of substrate concentration and feed frequency on ammonia inhibition in microbial fuel cells. <i>Journal of Power Sources</i> , 2014, 271, 360-365.	4.0	33
24	Preparation and characterization of ion selective membrane and its application for Cu ²⁺ removal. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 60, 475-484.	2.9	30
25	Increasing phosphorus recovery from dewatering centrate in microbial electrolysis cells. <i>Biotechnology for Biofuels</i> , 2017, 10, 70.	6.2	29
26	Microbial fuel cells: Devices for real wastewater treatment, rather than electricity production. <i>Science of the Total Environment</i> , 2021, 775, 145904.	3.9	25
27	Comprehensive model applications for better understanding of pilot-scale membrane-aerated biofilm reactor performance. <i>Journal of Water Process Engineering</i> , 2021, 40, 101894.	2.6	21
28	Stacked multi-electrode design of microbial electrolysis cells for rapid and low-sludge treatment of municipal wastewater. <i>Biotechnology for Biofuels</i> , 2019, 12, 23.	6.2	20
29	Lead(II) Removal at the Bioanode of Microbial Electrolysis Cells. <i>ChemistrySelect</i> , 2016, 1, 5743-5748.	0.7	17
30	Molecular biology and modeling analysis reveal functional roles of propionate to acetate ratios on microbial syntrophy and competition in electro-assisted anaerobic digestion. <i>Water Research</i> , 2022, 216, 118335.	5.3	17
31	Treatment of model inland brackish groundwater reverse osmosis concentrate with electrodialysis – Part III: Sensitivity to composition and hydraulic recovery. <i>Desalination</i> , 2014, 347, 158-164.	4.0	16
32	Junction potentials in thermolytic reverse electrodialysis. <i>Desalination</i> , 2015, 369, 149-155.	4.0	15
33	Ammonium sulfate production from wastewater and low-grade sulfuric acid using bipolar- and cation-exchange membranes. <i>Journal of Cleaner Production</i> , 2021, 285, 124888.	4.6	15
34	A robust inexact trapezoidal T2 fuzzy approach coupling possibility degrees for solid waste disposal allocation with integrated optimal greenhouse gas control under uncertainty. <i>Journal of Cleaner Production</i> , 2019, 221, 753-767.	4.6	13
35	Scalable multi-electrode microbial electrolysis cells for high electric current and rapid organic removal. <i>Journal of Power Sources</i> , 2018, 391, 67-72.	4.0	11
36	Overlimiting current by interactive ionic transport between space charge region and electric double layer near ion-exchange membranes. <i>Desalination</i> , 2012, 285, 245-252.	4.0	9

#	ARTICLE	IF	CITATIONS
37	The Painlevé equation of the second kind for the binary ionic transport in diffusion boundary layers near ion-exchange membranes at overlimiting current. <i>Journal of Electroanalytical Chemistry</i> , 2010, 639, 59-66.	1.9	8
38	Enhanced Pb(II) removal from water using conductive carbonaceous nanomaterials as bacterial scaffolds: An experimental and modelling approach. <i>Journal of Hazardous Materials</i> , 2022, 431, 128516.	6.5	8
39	Electrochemical techniques for evaluating short-chain fatty acid utilization by bioanodes. <i>Environmental Science and Pollution Research</i> , 2017, 24, 2620-2626.	2.7	6
40	Isolation of Pb(II)-reducing bacteria and demonstration of biological Pb(II) reduction to metallic Pb. <i>Journal of Hazardous Materials</i> , 2022, 423, 126975.	6.5	6
41	Estimation of kinetic constants in high-density polyethylene bead degradation using hydrolytic enzymes. <i>Environmental Pollution</i> , 2022, 298, 118821.	3.7	6
42	Model study on real-time aeration based on nitrite for effective operation of single-stage anammox. <i>Environmental Research</i> , 2022, 212, 113554.	3.7	5
43	Effect of Low Cadmium Concentration on the Removal Efficiency and Mechanisms in Microbial Electrolysis Cells. <i>ChemistrySelect</i> , 2016, 1, 6920-6924.	0.7	4
44	Accurate and rapid organic detection by eliminating hysteresis in bioanode sensor applications. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 905-910.	1.2	4
45	Ammonia separation from wastewater using bipolar membrane electrodialysis. <i>Electrochemical Science Advances</i> , 2021, 1, e2000030.	1.2	4
46	Membrane Scaling in Electrodialysis Fed with High-Strength Wastewater. <i>Environmental Engineering Science</i> , 2021, 38, 832-840.	0.8	4
47	Selectivity coefficients of cation-exchange membranes: Maximizing consistency and minimizing error amplification. <i>Separation and Purification Technology</i> , 2011, 81, 357-362.	3.9	3
48	Electrochemical silver dissolution and recovery as a potential method to disinfect drinking water for underprivileged societies. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 304-311.	1.2	3
49	A Bi-Objective Pseudo-Interval T2 Linear Programming Approach and Its Application to Water Resources Management Under Uncertainty. <i>Water (Switzerland)</i> , 2018, 10, 1545.	1.2	3
50	Modeling the anaerobic digestion of wastewater sludge under sulfate-rich conditions. <i>Water Environment Research</i> , 2021, 93, 2084-2096.	1.3	3
51	The $\hat{\pm}$ -Representation Inexact T2 Fuzzy Sets Programming Model for Water Resources Management of the Southern Min River Basin under Uncertainty. <i>Symmetry</i> , 2018, 10, 579.	1.1	1
52	A new model with serial hydrolysis reactions for the anaerobic digestion of waste activated sludge under thermophilic conditions. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 2182-2192.	1.2	1
53	Fractionated volatile solids for understanding thermophilic pretreatment of waste activated sludge at 55, 65, and 75°C. <i>Water Environment Research</i> , 2021, 93, 201-206.	1.3	0