

Dawei Liang

List of Publications by Year in descending order

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86
papers

3,315
citations

126858

33
h-index

161767

54
g-index

86
all docs

86
docs citations

86
times ranked

3830
citing authors

#	ARTICLE	IF	CITATIONS
1	Phthalates biodegradation in the environment. <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 183-98.	1.7	336
2	Anaerobic treatment of phenol in wastewater under thermophilic condition. <i>Water Research</i> , 2006, 40, 427-434.	5.3	166
3	The role of transparent exopolymer particles (TEP) in membrane fouling: A critical review. <i>Water Research</i> , 2020, 181, 115930.	5.3	128
4	Electron transport chains in organohalide-respiring bacteria and bioremediation implications. <i>Biotechnology Advances</i> , 2018, 36, 1194-1206.	6.0	108
5	Enhanced H ₂ production from corn stalk by integrating dark fermentation and single chamber microbial electrolysis cells with double anode arrangement. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 8977-8982.	3.8	101
6	Intermolecular interactions of polysaccharides in membrane fouling during microfiltration. <i>Water Research</i> , 2018, 143, 38-46.	5.3	82
7	Aerobic degradation of diethyl phthalate by <i>Sphingomonas</i> sp.. <i>Bioresource Technology</i> , 2007, 98, 717-720.	4.8	79
8	Ultrafiltration behaviors of alginate blocks at various calcium concentrations. <i>Water Research</i> , 2015, 83, 248-257.	5.3	76
9	Enhancement of hydrogen production in a single chamber microbial electrolysis cell through anode arrangement optimization. <i>Bioresource Technology</i> , 2011, 102, 10881-10885.	4.8	73
10	Anaerobic degradation of dimethyl phthalate in wastewater in a UASB reactor. <i>Water Research</i> , 2007, 41, 2879-2884.	5.3	70
11	Layer-by-layer self-assembly of Nafion [®] [CS ⁺ PWA] composite membranes with suppressed vanadium ion crossover for vanadium redox flow battery applications. <i>RSC Advances</i> , 2014, 4, 24831-24837.	1.7	70
12	Laccase-Carbon nanotube nanocomposites for enhancing dyes removal. <i>Journal of Cleaner Production</i> , 2020, 242, 118425.	4.6	65
13	Polytetrafluoroethylene (PTFE) reinforced poly(ethersulphone)-poly(vinyl pyrrolidone) composite membrane for high temperature proton exchange membrane fuel cells. <i>Journal of Membrane Science</i> , 2014, 464, 1-7.	4.1	64
14	Titanium nitride as an electrocatalyst for V(II)/V(III) redox couples in all-vanadium redox flow batteries. <i>Electrochimica Acta</i> , 2015, 182, 834-840.	2.6	64
15	Efficient H ₂ production in a microbial photoelectrochemical cell with a composite Cu ₂ O/NiO photocathode under visible light. <i>Applied Energy</i> , 2016, 168, 544-549.	5.1	61
16	Organohalide-Respiring Bacteria in Polluted Urban Rivers Employ Novel Bifunctional Reductive Dehalogenases to Dechlorinate Polychlorinated Biphenyls and Tetrachloroethene. <i>Environmental Science & Technology</i> , 2020, 54, 8791-8800.	4.6	61
17	Effect of magnesium ion on polysaccharide fouling. <i>Chemical Engineering Journal</i> , 2020, 379, 122351.	6.6	60
18	A novel partial-denitrification strategy for post-anammox to effectively remove nitrogen from landfill leachate. <i>Science of the Total Environment</i> , 2018, 633, 745-751.	3.9	59

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19	Novel methanol-blocking proton exchange membrane achieved via self-anchoring phosphotungstic acid into chitosan membrane with submicro-pores. <i>Journal of Membrane Science</i> , 2016, 500, 203-210.	4.1	58
20	Alginate block fractions and their effects on membrane fouling. <i>Water Research</i> , 2013, 47, 6618-6627.	5.3	57
21	A Self-Anchored Phosphotungstic Acid Hybrid Proton Exchange Membrane Achieved via One-Step Synthesis. <i>Advanced Energy Materials</i> , 2014, 4, 1400842.	10.2	56
22	Performance prediction of ZVI-based anaerobic digestion reactor using machine learning algorithms. <i>Waste Management</i> , 2021, 121, 59-66.	3.7	56
23	Nonionic surfactant greatly enhances the reductive debromination of polybrominated diphenyl ethers by nanoscale zero-valent iron: Mechanism and kinetics. <i>Journal of Hazardous Materials</i> , 2014, 278, 592-596.	6.5	55
24	Microbiological mechanism of the improved nitrogen and phosphorus removal by embedding microbial fuel cell in Anaerobic-Anoxic-Oxic wastewater treatment process. <i>Bioresource Technology</i> , 2016, 207, 109-117.	4.8	52
25	Quantification and characterization of β -lactam resistance genes in 15 sewage treatment plants from East Asia and North America. <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 1351-1358.	1.7	48
26	Reaction heterogeneity in the bridging effect of divalent cations on polysaccharide fouling. <i>Journal of Membrane Science</i> , 2022, 641, 119933.	4.1	48
27	Simultaneous electro-oxidation and in situ electro-peroxone process for the degradation of refractory organics in wastewater. <i>Journal of Hazardous Materials</i> , 2019, 364, 468-474.	6.5	47
28	Ultra-low loading Pt decorated coral-like Pd nanochain networks with enhanced activity and stability towards formic acid electrooxidation. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1548-1552.	5.2	46
29	Applying hybrid coagulants and polyacrylamide flocculants in the treatment of high-phosphorus hematite flotation wastewater (HHFW): Optimization through response surface methodology. <i>Separation and Purification Technology</i> , 2010, 76, 72-78.	3.9	43
30	Brush-like polyaniline nanoarray modified anode for improvement of power output in microbial fuel cell. <i>Bioresource Technology</i> , 2017, 233, 291-295.	4.8	41
31	Efficient removal of refractory organics in landfill leachate concentrates by electrocoagulation in tandem with simultaneous electro-oxidation and in-situ peroxone. <i>Environmental Research</i> , 2020, 183, 109249.	3.7	41
32	The structural and functional properties of polysaccharide foulants in membrane fouling. <i>Chemosphere</i> , 2021, 268, 129364.	4.2	41
33	Characterization of a butanol-acetone-producing <i>Clostridium</i> strain and identification of its solventogenic genes. <i>Bioresource Technology</i> , 2013, 135, 372-378.	4.8	38
34	Transparent exopolymer particles (TEP) and their potential effect on membrane biofouling. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5705-5710.	1.7	34
35	A robust and cost-effective integrated process for nitrogen and bio-refractory organics removal from landfill leachate via short-cut nitrification, anaerobic ammonium oxidation in tandem with electrochemical oxidation. <i>Bioresource Technology</i> , 2016, 212, 296-301.	4.8	34
36	Bibliometric and content analysis on emerging technologies of hydrogen production using microbial electrolysis cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 33310-33324.	3.8	32

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37	Transparent exopolymer particles (TEPs)-associated protobiofilm: A neglected contributor to biofouling during membrane filtration. <i>Frontiers of Environmental Science and Engineering</i> , 2021, 15, 1.	3.3	31
38	Enhanced electro-oxidation/peroxone (in situ) process with a Ti-based nickel-antimony doped tin oxide anode for phenol degradation. <i>Journal of Hazardous Materials</i> , 2020, 384, 121398.	6.5	30
39	New insights into transparent exopolymer particles (TEP) formation from precursor materials at various Na ⁺ /Ca ²⁺ ratios. <i>Scientific Reports</i> , 2016, 6, 19747.	1.6	29
40	Chitosan-based activated carbon as economic and efficient sustainable material for capacitive deionization of low salinity water. <i>RSC Advances</i> , 2019, 9, 26676-26684.	1.7	29
41	Effect of ultrasound irradiation combined with ozone pretreatment on the anaerobic digestion for the biosludge exposed to trace-level levofloxacin: Degradation, microbial community and ARGs analysis. <i>Journal of Environmental Management</i> , 2020, 262, 110356.	3.8	28
42	Hydrogen production from lignocellulosic hydrolysate in an up-scaled microbial electrolysis cell with stacked bio-electrodes. <i>Bioresource Technology</i> , 2021, 320, 124314.	4.8	28
43	Transparent exopolymer particles (TEP)-associated membrane fouling at different Na ⁺ concentrations. <i>Water Research</i> , 2017, 111, 52-58.	5.3	27
44	Substrate-dependent competition and cooperation relationships between <i>Geobacter</i> and <i>Dehalococcoides</i> for their organohalide respiration. <i>ISME Communications</i> , 2021, 1, .	1.7	27
45	Biostabilization of cadmium contaminated sediments using indigenous sulfate reducing bacteria: Efficiency and process. <i>Chemosphere</i> , 2018, 201, 697-707.	4.2	26
46	Bamboolike Carbon Microfibers Derived from <i>Typha Orientalis</i> Fibers for Supercapacitors and Capacitive Deionization. <i>Journal of the Electrochemical Society</i> , 2019, 166, A236-A244.	1.3	25
47	Development and characteristics of rapidly formed hydrogen-producing granules in an acidic anaerobic sequencing batch reactor (AnSBR). <i>Biochemical Engineering Journal</i> , 2010, 49, 119-125.	1.8	24
48	Heterogeneous bacteriorhodopsin/gold nanoparticle stacks as a photovoltaic system. <i>Nano Energy</i> , 2015, 11, 654-661.	8.2	23
49	Denitrifying degradation of dimethyl phthalate. <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 221-229.	1.7	22
50	Novel electrochemical advanced oxidation processes with H ₂ O ₂ generation cathode for water treatment: A review. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107896.	3.3	22
51	Effects of bicarbonate and cathode potential on hydrogen production in a biocathode electrolysis cell. <i>Frontiers of Environmental Science and Engineering</i> , 2014, 8, 624-630.	3.3	21
52	Membrane Fouling and Performance of Flat Ceramic Membranes in the Application of Drinking Water Purification. <i>Water (Switzerland)</i> , 2019, 11, 2606.	1.2	21
53	Nernst-ping-pong model for evaluating the effects of the substrate concentration and anode potential on the kinetic characteristics of bioanode. <i>Bioresource Technology</i> , 2013, 136, 610-616.	4.8	19
54	Dehalococcoides as a Potential Biomarker Evidence for Uncharacterized Organohalides in Environmental Samples. <i>Frontiers in Microbiology</i> , 2017, 8, 1677.	1.5	18

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55	Enhanced capacitive deionization of an integrated membrane electrode by thin layer spray-coating of ion exchange polymers on activated carbon electrode. <i>Desalination</i> , 2020, 491, 114460.	4.0	17
56	Sludge digestibility and functionally active microorganisms in methanogenic sludge digesters revealed by <i>E. coli</i> -fed digestion and microbial source tracking. <i>Environmental Research</i> , 2021, 193, 110539.	3.7	16
57	Degradation of triclosan by anodic oxidation/in-situ peroxone process: Kinetics, pathway and reaction mechanism. <i>Chemosphere</i> , 2021, 272, 129453.	4.2	16
58	A proteorhodopsin-based biohybrid light-powering pH sensor. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15821.	1.3	15
59	Extracellular electron transfer of <i>Shewanella oneidensis</i> MR-1 for cathodic hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2019, 305, 528-533.	2.6	15
60	Novel Inorganic Integrated Membrane Electrodes for Membrane Capacitive Deionization. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 46537-46548.	4.0	15
61	Enhanced refractory organics removal by H_2O_2 and O_2 generated in an electro-oxidation system with cathodic Fenton-like reaction. <i>Journal of Hazardous Materials</i> , 2022, 434, 128923.	6.5	15
62	Hydrophilic porous materials provide efficient gas-liquid separation to advance hydrogen production in microbial electrolysis cells. <i>Bioresource Technology</i> , 2021, 337, 125352.	4.8	14
63	Filtration Performances of Different Polysaccharides in Microfiltration Process. <i>Processes</i> , 2019, 7, 897.	1.3	13
64	Microbial characterization and quantification of an anaerobic sludge degrading dimethyl phthalate. <i>Journal of Applied Microbiology</i> , 2009, 106, 296-305.	1.4	12
65	Insights into the Fouling Propensities of Natural Derived Alginate Blocks during the Microfiltration Process. <i>Processes</i> , 2019, 7, 858.	1.3	12
66	Genome-Centric Metagenomic Insights into the Impact of Alkaline/Acid and Thermal Sludge Pretreatment on the Microbiome in Digestion Sludge. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	12
67	Real-time quantifications of dominant anaerobes in an upflow reactor by polymerase chain reaction using a TaqMan probe. <i>Water Science and Technology</i> , 2008, 57, 1851-1855.	1.2	11
68	Thermally reduced graphene oxide as an electrode for CDI processes: A compromise between performance and scalability?. <i>Desalination</i> , 2020, 492, 114599.	4.0	11
69	Nitrogen Removal via Nitrite from Seawater Contained Sewage. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2004, 39, 1667-1680.	0.9	10
70	3D Proton Transfer Augments Bio-Photocurrent Generation. <i>Advanced Materials</i> , 2015, 27, 2668-2673.	11.1	10
71	Development and characterization of an anaerobic microcosm for reductive dechlorination of PCBs. <i>Frontiers of Environmental Science and Engineering</i> , 2017, 11, 1.	3.3	10
72	Low-grade heat energy driven microbial electrosynthesis for ethanol and acetate production from CO_2 reduction. <i>Journal of Power Sources</i> , 2020, 477, 228990.	4.0	10

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73	Bulk modification of Nafion® with purple membrane for direct methanol fuel cell applications. <i>Journal of Membrane Science</i> , 2011, 382, 350-350.	4.1	9
74	Novel Pd-decorated amorphous Ni-B/C catalysts with enhanced oxygen reduction reaction activities in alkaline media. <i>RSC Advances</i> , 2014, 4, 51126-51132.	1.7	9
75	Can bicarbonate replace phosphate to improve the sustainability of bioelectrochemical systems for H ₂ production?. <i>RSC Advances</i> , 2015, 5, 27082-27086.	1.7	8
76	Water content as a primary parameter determines microbial reductive dechlorination activities in soil. <i>Chemosphere</i> , 2021, 267, 129152.	4.2	8
77	A Global Overview of SARS-CoV-2 in Wastewater: Detection, Treatment, and Prevention. <i>ACS ES&T Water</i> , 2021, 1, 2174-2185.	2.3	8
78	Anaerobic Treatment of Phenolic Wastewaters. , 2010, , 185-205.		7
79	Unidirectional electron injection and accelerated proton transport in bacteriorhodopsin based Bio-p-n junctions. <i>Biosensors and Bioelectronics</i> , 2021, 173, 112811.	5.3	6
80	Kinetics and gene diversity of denitrifying biocathode in biological electrochemical systems. <i>RSC Advances</i> , 2017, 7, 24981-24987.	1.7	5
81	Phosphate recovery from the P-enriched brine of AnMBR-RO-IE treating municipal wastewater via an innovated phosphorus recovery batch reactor with nano-sorbents. <i>Chemosphere</i> , 2021, 284, 131259.	4.2	5
82	Novel Surrogates for Membrane Fouling and the Application of Support Vector Machine in Analyzing Fouling Mechanism. <i>Membranes</i> , 2021, 11, 990.	1.4	5
83	Effect of PAC on the Behavior of Dynamic Membrane Bioreactor Filtration Layer Based on the Analysis of Mixed Liquid Properties and Model Fitting. <i>Membranes</i> , 2020, 10, 420.	1.4	4
84	Efficient double-strand scission of plasmid DNA by quaternized-chitosan zinc complex. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 1814-1817.	1.0	3
85	The Limitations in Current Studies of Organic Fouling and Future Prospects. <i>Membranes</i> , 2021, 11, 922.	1.4	3
86	A low-toxic artificial fluorescent glycoprotein can serve as an efficient cytoplasmic labeling in living cell. <i>Carbohydrate Polymers</i> , 2015, 117, 211-214.	5.1	1