

# 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	Reaction heterogeneity in the bridging effect of divalent cations on polysaccharide fouling. <i>Journal of Membrane Science</i> , 2022, 641, 119933.	4.1	48
2	Enhanced refractory organics removal by $\text{H}_2\text{O}_2$ and $\text{O}_2$ generated in an electro-oxidation system with cathodic Fenton-like reaction. <i>Journal of Hazardous Materials</i> , 2022, 434, 128923.	6.5	15
3	Novel electrochemical advanced oxidation processes with $\text{H}_2\text{O}_2$ generation cathode for water treatment: A review. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107896.	3.3	22
4	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
5	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
6	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
7	Water content as a primary parameter determines microbial reductive dechlorination activities in soil. <i>Chemosphere</i> , 2021, 267, 129152.	4.2	8
8	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
9	Performance prediction of ZVI-based anaerobic digestion reactor using machine learning algorithms. <i>Waste Management</i> , 2021, 121, 59-66.	3.7	56
10	The structural and functional properties of polysaccharide foulants in membrane fouling. <i>Chemosphere</i> , 2021, 268, 129364.	4.2	41
11	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
12	Degradation of triclosan by anodic oxidation/in-situ peroxone process: Kinetics, pathway and reaction mechanism. <i>Chemosphere</i> , 2021, 272, 129453.	4.2	16
13	A Global Overview of SARS-CoV-2 in Wastewater: Detection, Treatment, and Prevention. <i>ACS ES&amp;T Water</i> , 2021, 1, 2174-2185.	2.3	8
14	Novel Inorganic Integrated Membrane Electrodes for Membrane Capacitive Deionization. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 46537-46548.	4.0	15
15	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
16	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
17	The Limitations in Current Studies of Organic Fouling and Future Prospects. <i>Membranes</i> , 2021, 11, 922.	1.4	3
18	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

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19	Laccase-Carbon nanotube nanocomposites for enhancing dyes removal. Journal of Cleaner Production, 2020, 242, 118425.	4.6	65
20	Enhanced electro-oxidation/peroxone (in situ) process with a Ti-based nickel-antimony doped tin oxide anode for phenol degradation. Journal of Hazardous Materials, 2020, 384, 121398.	6.5	30
21	Effect of magnesium ion on polysaccharide fouling. Chemical Engineering Journal, 2020, 379, 122351.	6.6	60
22	Genome-Centric Metagenomic Insights into the Impact of Alkaline/Acid and Thermal Sludge Pretreatment on the Microbiome in Digestion Sludge. Applied and Environmental Microbiology, 2020, 86, .	1.4	12
23	Low-grade heat energy driven microbial electrosynthesis for ethanol and acetate production from CO <sub>2</sub> reduction. Journal of Power Sources, 2020, 477, 228990.	4.0	10
24	Thermally reduced graphene oxide as an electrode for CDI processes: A compromise between performance and scalability?. Desalination, 2020, 492, 114599.	4.0	11
25	Bibliometric and content analysis on emerging technologies of hydrogen production using microbial electrolysis cells. International Journal of Hydrogen Energy, 2020, 45, 33310-33324.	3.8	32
26	Effect of PAC on the Behavior of Dynamic Membrane Bioreactor Filtration Layer Based on the Analysis of Mixed Liquid Properties and Model Fitting. Membranes, 2020, 10, 420.	1.4	4
27	Organohalide-Respiring Bacteria in Polluted Urban Rivers Employ Novel Bifunctional Reductive Dehalogenases to Dechlorinate Polychlorinated Biphenyls and Tetrachloroethene. Environmental Science & Technology, 2020, 54, 8791-8800.	4.6	61
28	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. Journal of Environmental Management, 2020, 262, 110356.	3.8	28
29	Enhanced capacitive deionization of an integrated membrane electrode by thin layer spray-coating of ion exchange polymers on activated carbon electrode. Desalination, 2020, 491, 114460.	4.0	17
30	Efficient removal of refractory organics in landfill leachate concentrates by electrocoagulation in tandem with simultaneous electro-oxidation and in-situ peroxone. Environmental Research, 2020, 183, 109249.	3.7	41
31	The role of transparent exopolymer particles (TEP) in membrane fouling: A critical review. Water Research, 2020, 181, 115930.	5.3	128
32	Chitosan-based activated carbon as economic and efficient sustainable material for capacitive deionization of low salinity water. RSC Advances, 2019, 9, 26676-26684.	1.7	29
33	Bamboolike Carbon Microfibers Derived from <i>Typha Orientalis</i> Fibers for Supercapacitors and Capacitive Deionization. Journal of the Electrochemical Society, 2019, 166, A236-A244.	1.3	25
34	Extracellular electron transfer of <i>Shewanella oneidensis</i> MR-1 for cathodic hydrogen evolution reaction. Electrochimica Acta, 2019, 305, 528-533.	2.6	15
35	Membrane Fouling and Performance of Flat Ceramic Membranes in the Application of Drinking Water Purification. Water (Switzerland), 2019, 11, 2606.	1.2	21
36	Insights into the Fouling Propensities of Natural Derived Alginate Blocks during the Microfiltration Process. Processes, 2019, 7, 858.	1.3	12

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37	Filtration Performances of Different Polysaccharides in Microfiltration Process. <i>Processes</i> , 2019, 7, 897.	1.3	13
38	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
39	Biostabilization of cadmium contaminated sediments using indigenous sulfate reducing bacteria: Efficiency and process. <i>Chemosphere</i> , 2018, 201, 697-707.	4.2	26
40	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
41	Electron transport chains in organohalide-respiring bacteria and bioremediation implications. <i>Biotechnology Advances</i> , 2018, 36, 1194-1206.	6.0	108
42	Intermolecular interactions of polysaccharides in membrane fouling during microfiltration. <i>Water Research</i> , 2018, 143, 38-46.	5.3	82
43	Transparent exopolymer particles (TEP)-associated membrane fouling at different Na <sup>+</sup> concentrations. <i>Water Research</i> , 2017, 111, 52-58.	5.3	27
44	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
45	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
46	Kinetics and gene diversity of denitrifying biocathode in biological electrochemical systems. <i>RSC Advances</i> , 2017, 7, 24981-24987.	1.7	5
47	Dehalococcoides as a Potential Biomarker Evidence for Uncharacterized Organohalides in Environmental Samples. <i>Frontiers in Microbiology</i> , 2017, 8, 1677.	1.5	18
48	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
49	New insights into transparent exopolymer particles (TEP) formation from precursor materials at various Na <sup>+</sup> /Ca <sup>2+</sup> ratios. <i>Scientific Reports</i> , 2016, 6, 19747.	1.6	29
50	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
51	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
52	Efficient H <sub>2</sub> production in a microbial photoelectrochemical cell with a composite Cu <sub>2</sub> O/NiO photocathode under visible light. <i>Applied Energy</i> , 2016, 168, 544-549.	5.1	61
53	Ultrafiltration behaviors of alginate blocks at various calcium concentrations. <i>Water Research</i> , 2015, 83, 248-257.	5.3	76
54	Can bicarbonate replace phosphate to improve the sustainability of bioelectrochemical systems for H <sub>2</sub> production?. <i>RSC Advances</i> , 2015, 5, 27082-27086.	1.7	8

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55	3D Proton Transfer Augments Bio-Photocurrent Generation. <i>Advanced Materials</i> , 2015, 27, 2668-2673.	11.1	10
56	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
57	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
58	Heterogeneous bacteriorhodopsin/gold nanoparticle stacks as a photovoltaic system. <i>Nano Energy</i> , 2015, 11, 654-661.	8.2	23
59	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
60	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
61	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
62	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
63	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
64	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
65	Enhanced H <sub>2</sub> 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
66	Transparent exopolymer particles (TEP) and their potential effect on membrane biofouling. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 5705-5710.	1.7	34
67	A proteorhodopsin-based biohybrid light-powering pH sensor. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15821.	1.3	15
68	Alginate block fractions and their effects on membrane fouling. <i>Water Research</i> , 2013, 47, 6618-6627.	5.3	57
69	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
70	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
71	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
72	Quantification and characterization of $\beta$ -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

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73	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
74	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
75	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
76	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
77	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
78	Anaerobic Treatment of Phenolic Wastewaters. , 2010, , 185-205.		7
79	Microbial characterization and quantification of an anaerobic sludge degrading dimethyl phthalate. <i>Journal of Applied Microbiology</i> , 2009, 106, 296-305.	1.4	12
80	Phthalates biodegradation in the environment. <i>Applied Microbiology and Biotechnology</i> , 2008, 80, 183-98.	1.7	336
81	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
82	Anaerobic degradation of dimethyl phthalate in wastewater in a UASB reactor. <i>Water Research</i> , 2007, 41, 2879-2884.	5.3	70
83	Aerobic degradation of diethyl phthalate by <i>Sphingomonas</i> sp.. <i>Bioresource Technology</i> , 2007, 98, 717-720.	4.8	79
84	Denitrifying degradation of dimethyl phthalate. <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 221-229.	1.7	22
85	Anaerobic treatment of phenol in wastewater under thermophilic condition. <i>Water Research</i> , 2006, 40, 427-434.	5.3	166
86	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