

Bin Liang

List of Publications by Year in descending order

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98
papers

4,492
citations

81900

39
h-index

118850

62
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102
all docs

102
docs citations

102
times ranked

3274
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient Reduction of Nitrobenzene to Aniline with a Biocatalyzed Cathode. <i>Environmental Science & Technology</i> , 2011, 45, 10186-10193.	10.0	254
2	Accelerated Reduction of Chlorinated Nitroaromatic Antibiotic Chloramphenicol by Biocathode. <i>Environmental Science & Technology</i> , 2013, 47, 5353-5361.	10.0	230
3	Accelerated microbial reductive dechlorination of 2,4,6-trichlorophenol by weak electrical stimulation. <i>Water Research</i> , 2019, 162, 236-245.	11.3	181
4	Cathodic degradation of antibiotics: Characterization and pathway analysis. <i>Water Research</i> , 2015, 72, 281-292.	11.3	166
5	Ultrafine palladium nanoparticles supported on 3D self-supported Ni foam for cathodic dechlorination of florfenicol. <i>Chemical Engineering Journal</i> , 2019, 359, 894-901.	12.7	136
6	Microbial community structure and function of Nitrobenzene reduction biocathode in response to carbon source switchover. <i>Water Research</i> , 2014, 54, 137-148.	11.3	134
7	Biocathodic Methanogenic Community in an Integrated Anaerobic Digestion and Microbial Electrolysis System for Enhancement of Methane Production from Waste Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4913-4921.	6.7	106
8	Selective stress of antibiotics on microbial denitrification: Inhibitory effects, dynamics of microbial community structure and function. <i>Journal of Hazardous Materials</i> , 2021, 405, 124366.	12.4	103
9	Response of chloramphenicol-reducing biocathode resistome to continuous electrical stimulation. <i>Water Research</i> , 2019, 148, 398-406.	11.3	90
10	Microbial network for waste activated sludge cascade utilization in an integrated system of microbial electrolysis and anaerobic fermentation. <i>Biotechnology for Biofuels</i> , 2016, 9, 83.	6.2	82
11	Enhanced decolorization of azo dye in a small pilot-scale anaerobic baffled reactor coupled with biocatalyzed electrolysis system (ABR+BES): A design suitable for scaling-up. <i>Bioresource Technology</i> , 2014, 163, 254-261.	9.6	81
12	Electrical selection for planktonic sludge microbial community function and assembly. <i>Water Research</i> , 2021, 206, 117744.	11.3	81
13	Functional Characterization of a Novel Amidase Involved in Biotransformation of Triclocarban and its Dehalogenated Congeners in <i>Ochrobactrum</i> sp. TCC-2. <i>Environmental Science & Technology</i> , 2017, 51, 291-300.	10.0	79
14	Stimulation of oxygen to bioanode for energy recovery from recalcitrant organic matter aniline in microbial fuel cells (MFCs). <i>Water Research</i> , 2015, 81, 72-83.	11.3	76
15	Azo dye removal in a membrane-free up-flow biocatalyzed electrolysis reactor coupled with an aerobic bio-contact oxidation reactor. <i>Journal of Hazardous Materials</i> , 2012, 239-240, 257-264.	12.4	75
16	Effects of different carbon substrates on performance, microbiome community structure and function for bioelectrochemical-stimulated dechlorination of tetrachloroethylene. <i>Chemical Engineering Journal</i> , 2018, 352, 730-736.	12.7	72
17	Microbial Interactions Drive the Complete Catabolism of the Antibiotic Sulfamethoxazole in Activated Sludge Microbiomes. <i>Environmental Science & Technology</i> , 2021, 55, 3270-3282.	10.0	70
18	Challenges and opportunities for the biodegradation of chlorophenols: Aerobic, anaerobic and bioelectrochemical processes. <i>Water Research</i> , 2021, 193, 116862.	11.3	66

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19	Adsorption and degradation of triazophos, chlorpyrifos and their main hydrolytic metabolites in paddy soil from Chaohu Lake, China. <i>Journal of Environmental Management</i> , 2011, 92, 2229-2234.	7.8	62
20	Bioelectrochemical degradation of monoaromatic compounds: Current advances and challenges. <i>Journal of Hazardous Materials</i> , 2020, 398, 122892.	12.4	62
21	Polarity inversion of bioanode for biocathodic reduction of aromatic pollutants. <i>Journal of Hazardous Materials</i> , 2017, 331, 280-288.	12.4	58
22	Efficient azo dye removal in bioelectrochemical system and post-aerobic bioreactor: Optimization and characterization. <i>Chemical Engineering Journal</i> , 2014, 243, 355-363.	12.7	55
23	Fate, risk and removal of triclocarban: A critical review. <i>Journal of Hazardous Materials</i> , 2020, 387, 121944.	12.4	54
24	UV photolysis as an efficient pretreatment method for antibiotics decomposition and their antibacterial activity elimination. <i>Journal of Hazardous Materials</i> , 2020, 392, 122321.	12.4	54
25	Reductive degradation of chloramphenicol using bioelectrochemical system (BES): A comparative study of abiotic cathode and biocathode. <i>Bioresource Technology</i> , 2013, 143, 699-702.	9.6	53
26	Electrochemistry-stimulated environmental bioremediation: Development of applicable modular electrode and system scale-up. <i>Environmental Science and Ecotechnology</i> , 2020, 3, 100050.	13.5	53
27	Identification of biofilm formation and exoelectrogenic population structure and function with graphene/polyaniline modified anode in microbial fuel cell. <i>Chemosphere</i> , 2019, 219, 358-364.	8.2	52
28	Electrostimulated bio-dechlorination of trichloroethene by potential regulation: Kinetics, microbial community structure and function. <i>Chemical Engineering Journal</i> , 2019, 357, 633-640.	12.7	52
29	Enhanced short chain fatty acids production from waste activated sludge conditioning with typical agricultural residues: carbon source composition regulates community functions. <i>Biotechnology for Biofuels</i> , 2015, 8, 192.	6.2	51
30	Performance and microbial community responses of anaerobic digestion of waste activated sludge to residual benzalkonium chlorides. <i>Energy Conversion and Management</i> , 2019, 202, 112211.	9.2	50
31	A novel TiO ₂ /graphite felt photoanode assisted electro-Fenton catalytic membrane process for sequential degradation of antibiotic florfenicol and elimination of its antibacterial activity. <i>Chemical Engineering Journal</i> , 2020, 391, 123503.	12.7	48
32	Low temperature acclimation with electrical stimulation enhance the biocathode functioning stability for antibiotics detoxification. <i>Water Research</i> , 2016, 100, 157-168.	11.3	47
33	Fine-tuning key parameters of an integrated reactor system for the simultaneous removal of COD, sulfate and ammonium and elemental sulfur reclamation. <i>Journal of Hazardous Materials</i> , 2014, 269, 56-67.	12.4	46
34	Response of antimicrobial nitrofurazone-degrading biocathode communities to different cathode potentials. <i>Bioresource Technology</i> , 2017, 241, 951-958.	9.6	46
35	Anaerobic mineralization of 2,4,6-tribromophenol to CO ₂ by a synthetic microbial community comprising <i>Clostridium</i> , <i>Dehalobacter</i> , and <i>Desulfatiglans</i> . <i>Bioresource Technology</i> , 2015, 176, 225-232.	9.6	45
36	Electrocatalytic dechlorination of halogenated antibiotics via synergistic effect of chlorine-cobalt bond and atomic H*. <i>Journal of Hazardous Materials</i> , 2018, 358, 294-301.	12.4	44

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37	Isolation and characterization of three <i>Sphingobium</i> sp. strains capable of degrading isoproturon and cloning of the catechol 1,2-dioxygenase gene from these strains. <i>World Journal of Microbiology and Biotechnology</i> , 2009, 25, 259-268.	3.6	43
38	Improving biocathode community multifunctionality by polarity inversion for simultaneous bioelectroreduction processes in domestic wastewater. <i>Chemosphere</i> , 2018, 194, 553-561.	8.2	43
39	Bioremediation of contaminated urban river sediment with methanol stimulation: Metabolic processes accompanied with microbial community changes. <i>Science of the Total Environment</i> , 2019, 653, 649-657.	8.0	43
40	Insights on uranium removal by ion exchange columns: The deactivation mechanisms, and an overlooked biological pathway. <i>Chemical Engineering Journal</i> , 2022, 434, 134708.	12.7	43
41	Response of anodic bacterial community to the polarity inversion for chloramphenicol reduction. <i>Bioresource Technology</i> , 2016, 221, 666-670.	9.6	42
42	Novel Pathway for Chloramphenicol Catabolism in the Activated Sludge Bacterial Isolate <i>Sphingobium</i> sp. CAP-1. <i>Environmental Science & Technology</i> , 2020, 54, 7591-7600.	10.0	41
43	Hydrolytic Dechlorination of Chlorothalonil by <i>Ochrobactrum</i> sp. CTN-11 Isolated from a Chlorothalonil-Contaminated Soil. <i>Current Microbiology</i> , 2010, 61, 226-233.	2.2	39
44	Horizontal transfer of dehalogenase genes involved in the catalysis of chlorinated compounds: evidence and ecological role. <i>Critical Reviews in Microbiology</i> , 2012, 38, 95-110.	6.1	37
45	Effect of temperature switchover on the degradation of antibiotic chloramphenicol by biocathode bioelectrochemical system. <i>Journal of Environmental Sciences</i> , 2014, 26, 1689-1697.	6.1	37
46	Enhanced bioelectroremediation of a complexly contaminated river sediment through stimulating electroactive degraders with methanol supply. <i>Journal of Hazardous Materials</i> , 2018, 349, 168-176.	12.4	37
47	The contamination of microplastics in China's aquatic environment: Occurrence, detection and implications for ecological risk. <i>Environmental Pollution</i> , 2022, 296, 118737.	7.5	37
48	Accelerated decolorization of azo dye Congo red in a combined bioanode–biocathode bioelectrochemical system with modified electrodes deployment. <i>Bioresource Technology</i> , 2014, 151, 332-339.	9.6	36
49	Bioaugmentation of activated sludge with elemental sulfur producing strain <i>Thiopseudomonas denitrificans</i> X2 against nitrate shock load. <i>Bioresource Technology</i> , 2016, 220, 647-650.	9.6	35
50	Coupled sulfur and electrode-driven autotrophic denitrification for significantly enhanced nitrate removal. <i>Water Research</i> , 2022, 220, 118675.	11.3	35
51	Bioelectrochemical assisted dechlorination of tetrachloroethylene and 1,2-dichloroethane by acclimation of anaerobic sludge. <i>Chemosphere</i> , 2019, 227, 514-521.	8.2	33
52	Facilitation of Bacterial Adaptation to Chlorothalonil-Contaminated Sites by Horizontal Transfer of the Chlorothalonil Hydrolytic Dehalogenase Gene. <i>Applied and Environmental Microbiology</i> , 2011, 77, 4268-4272.	3.1	32
53	Effect of electrode position on azo dye removal in an up-flow hybrid anaerobic digestion reactor with built-in bioelectrochemical system. <i>Scientific Reports</i> , 2016, 6, 25223.	3.3	32
54	Combined bioaugmentation with electro-biostimulation for improved bioremediation of antimicrobial triclocarban and PAHs complexly contaminated sediments. <i>Journal of Hazardous Materials</i> , 2021, 403, 123937.	12.4	30

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55	<i>Pseudoxanthomonas jiangsuensis</i> sp. Nov., a DDT-Degrading Bacterium Isolated from a Long-Term DDT-Polluted Soil. <i>Current Microbiology</i> , 2011, 62, 1760-1766.	2.2	29
56	Improved azo dye decolorization in a modified sleeve-type bioelectrochemical system. <i>Bioresource Technology</i> , 2013, 143, 669-673.	9.6	29
57	Characterization of an efficient chloramphenicol-mineralizing bacterial consortium. <i>Chemosphere</i> , 2019, 222, 149-155.	8.2	29
58	Mutual effect between electrochemically active bacteria (EAB) and azo dye in bio-electrochemical system (BES). <i>Chemosphere</i> , 2020, 239, 124787.	8.2	29
59	Recent Advances in the Biodegradation of Chlorothalonil. <i>Current Microbiology</i> , 2011, 63, 450-457.	2.2	27
60	Electrochemical degradation of nitrofurans furazolidone by cathode: Characterization, pathway and antibacterial activity analysis. <i>Chemical Engineering Journal</i> , 2015, 262, 1244-1251.	12.7	27
61	Biodegradation and metabolism of tetrabromobisphenol A in microbial fuel cell: Behaviors, dynamic pathway and the molecular ecological mechanism. <i>Journal of Hazardous Materials</i> , 2021, 417, 126104.	12.4	27
62	Current advances and challenges for direct interspecies electron transfer in anaerobic digestion of waste activated sludge. <i>Chemical Engineering Journal</i> , 2022, 450, 137973.	12.7	27
63	Palladium/iron nanoparticles stimulate tetrabromobisphenol a microbial reductive debromination and further mineralization in sediment. <i>Environment International</i> , 2020, 135, 105353.	10.0	26
64	Co-metabolism of DDT by the newly isolated bacterium, <i>Pseudoxanthomonas</i> sp. wax. <i>Brazilian Journal of Microbiology</i> , 2010, 41, 431-438.	2.0	25
65	Fate of antibiotic resistance genes during temperature-changed psychrophilic anaerobic digestion of municipal sludge. <i>Water Research</i> , 2021, 194, 116926.	11.3	25
66	Role and significance of co-additive of biochar and nano-magnetite on methane production from waste activated sludge: Non-synergistic rather than synergistic effects. <i>Chemical Engineering Journal</i> , 2022, 439, 135746.	12.7	25
67	Enhanced degradation of azo dye alizarin yellow R in a combined process of iron-carbon microelectrolysis and aerobic bio-contact oxidation. <i>Environmental Science and Pollution Research</i> , 2012, 19, 1385-1391.	5.3	24
68	Comprehensive study on hybrid anaerobic reactor built-in with sleeve type bioelectrocatalyzed modules. <i>Chemical Engineering Journal</i> , 2017, 330, 1306-1315.	12.7	24
69	Anaerobic biodegradation of trimethoprim with sulfate as an electron acceptor. <i>Frontiers of Environmental Science and Engineering</i> , 2019, 13, 1.	6.0	24
70	Responses of anaerobic digestion of waste activated sludge to long-term stress of benzalkonium chlorides: Insights to extracellular polymeric substances and microbial communities. <i>Science of the Total Environment</i> , 2021, 796, 148957.	8.0	24
71	Bioaugmentation of triclocarban and its dechlorinated congeners contaminated soil with functional degraders and the bacterial community response. <i>Environmental Research</i> , 2020, 180, 108840.	7.5	23
72	Role and significance of water and acid washing on biochar for regulating methane production from waste activated sludge. <i>Science of the Total Environment</i> , 2022, 817, 152950.	8.0	23

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73	Decolorization enhancement by optimizing azo dye loading rate in an anaerobic reactor. <i>RSC Advances</i> , 2016, 6, 49995-50001.	3.6	22
74	Recirculation ratio regulates denitrifying sulfide removal and elemental sulfur recovery by altering sludge characteristics and microbial community composition in an EGSB reactor. <i>Environmental Research</i> , 2020, 181, 108905.	7.5	20
75	Fate of residual ¹⁵ N-labeled fertilizer in dryland farming systems on soils of contrasting fertility. <i>Soil Science and Plant Nutrition</i> , 2015, 61, 846-855.	1.9	19
76	Bioelectrochemical reduction of an azo dye by a <i>Shewanella oneidensis</i> MR-1 formed biocathode. <i>International Biodeterioration and Biodegradation</i> , 2016, 115, 250-256.	3.9	19
77	Electron Fluxes in Biocathode Bioelectrochemical Systems Performing Dechlorination of Chlorinated Aliphatic Hydrocarbons. <i>Frontiers in Microbiology</i> , 2018, 9, 2306.	3.5	18
78	Simultaneous removal of tetrachloroethylene and nitrate with a novel sulfur-packed biocathode system: The synergy between bioelectrocatalytic dechlorination and sulfur autotrophic denitrification. <i>Chemical Engineering Journal</i> , 2022, 439, 135793.	12.7	18
79	Weak electro-stimulation promotes microbial uranium removal: Efficacy and mechanisms. <i>Journal of Hazardous Materials</i> , 2022, 439, 129622.	12.4	18
80	A horizontal plug-flow baffled bioelectrocatalyzed reactor for the reductive decolorization of Alizarin Yellow R. <i>Bioresource Technology</i> , 2015, 195, 73-77.	9.6	16
81	Enhanced Biotransformation of Triclocarban by <i>Ochrobactrum</i> sp. TCC-1 Under Anoxic Nitrate Respiration Conditions. <i>Current Microbiology</i> , 2017, 74, 491-498.	2.2	16
82	Microbial fuel cell-upflow biofilter coupling system for deep denitrification and power recovery: Efficiencies, bacterial succession and interactions. <i>Environmental Research</i> , 2021, 196, 110331.	7.5	16
83	Influence of nitrate concentration on trichloroethylene reductive dechlorination in weak electric stimulation system. <i>Chemosphere</i> , 2022, 295, 133935.	8.2	15
84	Transcriptional and metabolic response against hydroxyethane-(1,1-bisphosphonic acid) on bacterial denitrification by a halophilic <i>Pannonibacter</i> sp. strain DN. <i>Chemosphere</i> , 2020, 252, 126478.	8.2	14
85	Accelerated bioremediation of a complexly contaminated river sediment through ZVI-electrode combined stimulation. <i>Journal of Hazardous Materials</i> , 2021, 413, 125392.	12.4	14
86	Spatial Abundance and Distribution of Potential Microbes and Functional Genes Associated with Anaerobic Mineralization of Pentachlorophenol in a Cylindrical Reactor. <i>Scientific Reports</i> , 2016, 6, 19015.	3.3	13
87	Effect of preferential UV photolysis on the source control of antibiotic resistome during subsequent biological treatment systems. <i>Journal of Hazardous Materials</i> , 2021, 414, 125484.	12.4	12
88	Effects of surface charge, hydrophilicity and hydrophobicity on functional biocathode catalytic efficiency and community structure. <i>Chemosphere</i> , 2018, 202, 105-110.	8.2	10
89	Complete genome sequences of the antibiotic sulfamethoxazole-mineralizing bacteria <i>Paenarthrobacter</i> sp. P27 and <i>Norcardiodes</i> sp. N27. <i>Environmental Research</i> , 2022, 204, 112013.	7.5	10
90	Unraveling the behaviors of sulfonamide antibiotics on the production of short-chain fatty acids by anaerobic fermentation from waste activated sludge and the microbial ecological mechanism. <i>Chemosphere</i> , 2022, 296, 133903.	8.2	10

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91	Natural iridoids from <i>Patrinia heterophylla</i> showing anti-inflammatory activities in vitro and in vivo. <i>Bioorganic Chemistry</i> , 2020, 104, 104331.	4.1	9
92	Effective electrocatalytic hydrodechlorination of 2,4,6-trichlorophenol by a novel Pd/MnO ₂ /Ni foam cathode. <i>Chinese Chemical Letters</i> , 2022, 33, 3823-3828.	9.0	9
93	Influence of COD/sulfate ratios on the integrated reactor system for simultaneous removal of carbon, sulfur and nitrogen. <i>Water Science and Technology</i> , 2015, 71, 709-716.	2.5	8
94	Influence on denitrifying community performance by the long-term exposure to sulfamethoxazole and chlortetracycline in the continuous-flow EGSB reactors. <i>Environmental Research</i> , 2022, 204, 111979.	7.5	7
95	Co-metabolism of DDT by the newly isolated bacterium, <i>Pseudoxanthomonas</i> sp. wax. <i>Brazilian Journal of Microbiology</i> , 2010, 41, 431-8.	2.0	7
96	Bioelectrochemical catabolism of triclocarban through the cascade acclimation of triclocarban-hydrolyzing and chloroanilines-oxidizing microbial communities. <i>Environmental Research</i> , 2022, 210, 112880.	7.5	7
97	Electrode-Respiring Microbiomes Associated with the Enhanced Bioelectrodegradation Function. , 2019, , 47-72.		2
98	Weak electrostimulation enhanced the microbial transformation of ibuprofen and naproxen. <i>Science of the Total Environment</i> , 2022, 835, 155522.	8.0	2