

# Lei Zhang

## List of Publications by Year in descending order

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57  
papers

1,576  
citations

257101

24  
h-index

329751

37  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1100  
citing authors

#	ARTICLE	IF	CITATIONS
1	Calcium hypochlorite pretreatment improves thermophilic digestion of waste activated sludge in an upflow anaerobic sludge blanket reactor. <i>Science of the Total Environment</i> , 2022, 809, 151130.	3.9	8
2	Roles of granular activated carbon (GAC) and operational factors on active microbiome development in anaerobic reactors. <i>Bioresource Technology</i> , 2022, 343, 126104.	4.8	10
3	Impacts of granular activated carbon addition on anaerobic granulation in blackwater treatment. <i>Environmental Research</i> , 2022, 206, 112406.	3.7	17
4	Microbial co-occurrence network topological properties link with reactor parameters and reveal importance of low-abundance genera. <i>Npj Biofilms and Microbiomes</i> , 2022, 8, 3.	2.9	52
5	Calcium Hypochlorite Pretreatment Enhances Waste-Activated Sludge Degradation during Aerobic Digestion. <i>Journal of Environmental Engineering, ASCE</i> , 2022, 148, .	0.7	2
6	Enhancing the resistance to H <sub>2</sub> S toxicity during anaerobic digestion of low-strength wastewater through granular activated carbon (GAC) addition. <i>Journal of Hazardous Materials</i> , 2022, 430, 128473.	6.5	18
7	Metagenomic insights into direct interspecies electron transfer and quorum sensing in blackwater anaerobic digestion reactors supplemented with granular activated carbon. <i>Bioresource Technology</i> , 2022, 352, 127113.	4.8	26
8	Coupling of (methane+air)-membrane biofilms and air-membrane biofilms: Treatment of p-nitroaniline wastewater. <i>Journal of Hazardous Materials</i> , 2022, 435, 128946.	6.5	2
9	A high-rate anaerobic biofilm reactor for biomethane recovery from source-separated blackwater at ambient temperature. <i>Water Environment Research</i> , 2021, 93, 61-74.	1.3	11
10	Self-fluidized GAC-amended UASB reactor for enhanced methane production. <i>Chemical Engineering Journal</i> , 2021, 420, 127652.	6.6	24
11	Microbial community dynamics in granular activated carbon enhanced up-flow anaerobic sludge blanket (UASB) treating municipal sewage under sulfate reducing and psychrophilic conditions. <i>Chemical Engineering Journal</i> , 2021, 405, 126957.	6.6	30
12	Simultaneous Phosphorus Recovery in Energy Generation Reactor (SPRING): High Rate Thermophilic Blackwater Treatment. <i>Resources, Conservation and Recycling</i> , 2021, 164, 105163.	5.3	24
13	Calcium phosphate granules formation: Key to high rate of mesophilic UASB treatment of toilet wastewater. <i>Science of the Total Environment</i> , 2021, 773, 144972.	3.9	21
14	Anaerobic co-digestion of Cannabis ruderalis straw and blackwater: Hydrothermal pretreatment assessment and mono/co-digestion analysis. <i>Renewable Energy</i> , 2021, 170, 1107-1113.	4.3	13
15	Performance assessment on anaerobic co-digestion of Cannabis ruderalis and blackwater: Ultrasonic pretreatment and kinetic analysis. <i>Resources, Conservation and Recycling</i> , 2021, 169, 105506.	5.3	19
16	Thermophilic co-digestion of blackwater and organic kitchen waste: Impacts of granular activated carbon and different mixing ratios. <i>Waste Management</i> , 2021, 131, 453-461.	3.7	7
17	Impact of feedwater protein contents on calcium phosphate mineralization in anaerobic digesters. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106445.	3.3	2
18	A new non-steady-state mass balance model for quantifying microbiome responses to disturbances in wastewater bioreactors. <i>Journal of Environmental Management</i> , 2021, 296, 113370.	3.8	4

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19	Application of an indigenous microorganisms-based fixed-bed GAC-biofilm reactor for passive and sustainable treatment of oil sands process water through combined adsorption and biodegradation processes. <i>Chemosphere</i> , 2021, 280, 130635.	4.2	11
20	Anaerobically digested blackwater treatment by simultaneous denitrification and anammox processes: Feeding loading affects reactor performance and microbial community succession. <i>Chemosphere</i> , 2020, 241, 125101.	4.2	35
21	Biomethane recovery from source-diverted household blackwater: Impacts from feed sulfate. <i>Chemical Engineering Research and Design</i> , 2020, 136, 28-38.	2.7	27
22	Greywater treatment using an oxygen-based membrane biofilm reactor: Formation of dynamic multifunctional biofilm for organics and nitrogen removal. <i>Chemical Engineering Journal</i> , 2020, 386, 123989.	6.6	48
23	RNA-based spatial community analysis revealed intra-reactor variation and expanded collection of direct interspecies electron transfer microorganisms in anaerobic digestion. <i>Bioresource Technology</i> , 2020, 298, 122534.	4.8	39
24	Experimental investigation on the shear properties of notched connections in mass timber panel-concrete composite floors. <i>Construction and Building Materials</i> , 2020, 234, 117375.	3.2	25
25	Blackwater biomethane recovery using a thermophilic upflow anaerobic sludge blanket reactor: Impacts of effluent recirculation on reactor performance. <i>Journal of Environmental Management</i> , 2020, 274, 111157.	3.8	16
26	Three-dimension oxygen gradient induced low energy input for grey water treatment in an oxygen-based membrane biofilm reactor. <i>Environmental Research</i> , 2020, 191, 110124.	3.7	17
27	Key syntrophic partnerships identified in a granular activated carbon amended UASB treating municipal sewage under low temperature conditions. <i>Bioresource Technology</i> , 2020, 312, 123556.	4.8	41
28	Granular activated carbon stimulated microbial physiological changes for enhanced anaerobic digestion of municipal sewage. <i>Chemical Engineering Journal</i> , 2020, 400, 125838.	6.6	44
29	Treatment of grey water (GW) with high linear alkylbenzene sulfonates (LAS) content and carbon/nitrogen (C/N) ratio in an oxygen-based membrane biofilm reactor (O <sub>2</sub> -MBfR). <i>Chemosphere</i> , 2020, 258, 127363.	4.2	25
30	Mesophiles outperform thermophiles in the anaerobic digestion of blackwater with kitchen residuals: Insights into process limitations. <i>Waste Management</i> , 2020, 105, 279-288.	3.7	20
31	Biofiltration of oil sands process water in fixed-bed biofilm reactors shapes microbial community structure for enhanced degradation of naphthenic acids. <i>Science of the Total Environment</i> , 2020, 718, 137028.	3.9	18
32	Different micro-aeration rates facilitate production of different end-products from source-diverted blackwater. <i>Water Research</i> , 2020, 177, 115783.	5.3	37
33	High-loading food waste and blackwater anaerobic co-digestion: Maximizing bioenergy recovery. <i>Chemical Engineering Journal</i> , 2020, 394, 124911.	6.6	55
34	Enhancing biomethane recovery from source-diverted blackwater through hydrogenotrophic methanogenesis dominant pathway. <i>Chemical Engineering Journal</i> , 2019, 378, 122258.	6.6	46
35	Overcoming ammonia inhibition in anaerobic blackwater treatment with granular activated carbon: the role of electroactive microorganisms. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 383-396.	1.2	46
36	Microbial community dynamics in anaerobic digesters treating conventional and vacuum toilet flushed blackwater. <i>Water Research</i> , 2019, 160, 249-258.	5.3	71

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37	Anaerobic digestion of blackwater assisted by granular activated carbon: From digestion inhibition to methanogenesis enhancement. <i>Chemosphere</i> , 2019, 233, 462-471.	4.2	25
38	Integrated mild ozonation with biofiltration can effectively enhance the removal of naphthenic acids from hydrocarbon-contaminated water. <i>Science of the Total Environment</i> , 2019, 678, 197-206.	3.9	19
39	Impact of zero valent iron on blackwater anaerobic digestion. <i>Bioresource Technology</i> , 2019, 285, 121351.	4.8	49
40	Pretreatment for anaerobic blackwater treatment: ultrasonication and thermal hydrolysis. <i>Journal of Environmental Engineering and Science</i> , 2019, 14, 32-36.	0.3	7
41	Promoting waste activated sludge reduction by linear alkylbenzene sulfonates: Surfactant dose control extracellular polymeric substances solubilization and microbial community succession. <i>Journal of Hazardous Materials</i> , 2019, 374, 74-82.	6.5	30
42	Cocoamidopropyl Betaine Dosage Dependence of Short-Time Aerobic Digestion for Waste-Activated Sludge Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 877-884.	3.2	4
43	Enhancing blackwater methane production by enriching hydrogenotrophic methanogens through hydrogen supplementation. <i>Bioresource Technology</i> , 2019, 278, 481-485.	4.8	42
44	Energy recovery from municipal wastewater: impacts of temperature and collection systems. <i>Journal of Environmental Engineering and Science</i> , 2019, 14, 24-31.	0.3	9
45	Performance of anaerobic treatment of blackwater collected from different toilet flushing systems: Can we achieve both energy recovery and water conservation?. <i>Journal of Hazardous Materials</i> , 2019, 365, 44-52.	6.5	95
46	Improving the energy efficiency of a pilot-scale UASB-digester for low temperature domestic wastewater treatment. <i>Biochemical Engineering Journal</i> , 2018, 135, 71-78.	1.8	30
47	Degradation of recalcitrant naphthenic acids from raw and ozonated oil sands process-affected waters by a semi-passive biofiltration process. <i>Water Research</i> , 2018, 133, 310-318.	5.3	23
48	Anaerobic treatment of raw domestic wastewater in a UASB-digester at 10°C and microbial community dynamics. <i>Chemical Engineering Journal</i> , 2018, 334, 2088-2097.	6.6	67
49	Bioelectrochemical enhancement of methane production in low temperature anaerobic digestion at 10°C. <i>Water Research</i> , 2016, 99, 281-287.	5.3	103
50	Adsorption property of direct red brown onto acid-thermal-modified sepiolite and optimization of adsorption conditions using Box-Behnken response surface methodology. <i>Desalination and Water Treatment</i> , 2014, 52, 880-888.	1.0	4
51	Influence of the organic loading rate on the performance and the granular sludge characteristics of an EGSB reactor used for treating traditional Chinese medicine wastewater. <i>Environmental Science and Pollution Research</i> , 2014, 21, 8167-8175.	2.7	13
52	Co-digestion to support low temperature anaerobic pretreatment of municipal sewage in a UASB-digester. <i>Bioresource Technology</i> , 2013, 148, 560-566.	4.8	52
53	Evaluation of long term stability of seeded bacteria in a bio-enhanced activated carbon filter used for treating drinking water. <i>International Biodeterioration and Biodegradation</i> , 2013, 85, 701-708.	1.9	14
54	The Characteristic of the Soluble Microbial Products from an Anaerobic Reactor at Low Temperature. <i>Advanced Materials Research</i> , 2012, 518-523, 1808-1812.	0.3	0

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55	The effect of sludge recirculation rate on a UASB-digester treating domestic sewage at 15 °C. Water Science and Technology, 2012, 66, 2597-2603.	1.2	12
56	Spatial distribution of dynamics characteristic in the intermittent aeration static composting of sewage sludge. Bioresource Technology, 2011, 102, 5528-5532.	4.8	65
57	Enhancement of tannery wastewater treatment at low temperature by coagulation coupled with cationic polyacrylamide. , 2009, , .		2