

Lei Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2170120/publications.pdf>

Version: 2024-02-01

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 | Bioelectrochemical enhancement of methane production in low temperature anaerobic digestion at 10°C. <i>Water Research</i> , 2016, 99, 281-287. | 5.3 | 103 |
| 2 | 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 |
| 3 | Microbial community dynamics in anaerobic digesters treating conventional and vacuum toilet flushed blackwater. <i>Water Research</i> , 2019, 160, 249-258. | 5.3 | 71 |
| 4 | 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 |
| 5 | Spatial distribution of dynamics characteristic in the intermittent aeration static composting of sewage sludge. <i>Bioresource Technology</i> , 2011, 102, 5528-5532. | 4.8 | 65 |
| 6 | High-loading food waste and blackwater anaerobic co-digestion: Maximizing bioenergy recovery. <i>Chemical Engineering Journal</i> , 2020, 394, 124911. | 6.6 | 55 |
| 7 | 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 |
| 8 | 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 |
| 9 | Impact of zero valent iron on blackwater anaerobic digestion. <i>Bioresource Technology</i> , 2019, 285, 121351. | 4.8 | 49 |
| 10 | 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 |
| 11 | Enhancing biomethane recovery from source-diverted blackwater through hydrogenotrophic methanogenesis dominant pathway. <i>Chemical Engineering Journal</i> , 2019, 378, 122258. | 6.6 | 46 |
| 12 | 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 |
| 13 | 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 |
| 14 | Enhancing blackwater methane production by enriching hydrogenotrophic methanogens through hydrogen supplementation. <i>Bioresource Technology</i> , 2019, 278, 481-485. | 4.8 | 42 |
| 15 | 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 |
| 16 | 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 |
| 17 | Different micro-aeration rates facilitate production of different end-products from source-diverted blackwater. <i>Water Research</i> , 2020, 177, 115783. | 5.3 | 37 |
| 18 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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 |
| 25 | 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 |
| 26 | 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 (O2-MBfR). <i>Chemosphere</i> , 2020, 258, 127363. | 4.2 | 25 |
| 27 | Self-fluidized GAC-amended UASB reactor for enhanced methane production. <i>Chemical Engineering Journal</i> , 2021, 420, 127652. | 6.6 | 24 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | 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 |
| 32 | 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 |
| 33 | Performance assessment on anaerobic co-digestion of <i>Cannabis ruderalis</i> and blackwater: Ultrasonic pretreatment and kinetic analysis. <i>Resources, Conservation and Recycling</i> , 2021, 169, 105506. | 5.3 | 19 |
| 34 | 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 |
| 35 | Enhancing the resistance to H ₂ 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 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Impacts of granular activated carbon addition on anaerobic granulation in blackwater treatment. <i>Environmental Research</i> , 2022, 206, 112406. | 3.7 | 17 |
| 38 | 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 |
| 39 | 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 |
| 40 | 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 |
| 41 | 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 |
| 42 | The effect of sludge recirculation rate on a UASB-digester treating domestic sewage at 15 Å°C. <i>Water Science and Technology</i> , 2012, 66, 2597-2603. | 1.2 | 12 |
| 43 | 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 |
| 44 | 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 |
| 45 | 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 |
| 46 | 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 |
| 47 | 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 |
| 48 | Pretreatment for anaerobic blackwater treatment: ultrasonication and thermal hydrolysis. <i>Journal of Environmental Engineering and Science</i> , 2019, 14, 32-36. | 0.3 | 7 |
| 49 | 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 |
| 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 | 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 |
| 52 | 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 |
| 53 | Enhancement of tannery wastewater treatment at low temperature by coagulation coupled with cationic polyacrylamide. , 2009, , . | | 2 |
| 54 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Calcium Hypochlorite Pretreatment Enhances Waste-Activated Sludge Degradation during Aerobic Digestion. <i>Journal of Environmental Engineering, ASCE</i> , 2022, 148, . | 0.7 | 2 |
| 56 | 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 |
| 57 | 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 |