# Zhidan Liu

List of Publications by Year
in descending order

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| | | 61857 | 88477 |
|---|---|---|---|
| 103 | 5,378 | 43 | 70 |
| papers | citations | h-index | g-index |

| | | | |
|---|---|---|---|
| 106 | 106 | 106 | 4036 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Elemental migration and transformation during hydrothermal liquefaction of biomass. Journal of Hazardous Materials, 2022, 423, 126961. | 6.5 | 59 |
| 2 | Multi-cycle aqueous arsenic removal by novel magnetic N/S-doped hydrochars activated via one-pot and two-stage schemes. Chemical Engineering Journal, 2022, 429, 132071. | 6.6 | 13 |
| 3 | Construct a novel anti-bacteria pool from hydrothermal liquefaction aqueous family. Journal of Hazardous Materials, 2022, 423, 127162. | 6.5 | 8 |
| 4 | Pilot electrochemical prevention of reclaimed water irrigation clogging: Function interactions and microbial metabolism. Journal of Cleaner Production, 2022, 336, 130436. | 4.6 | 3 |
| 5 | Insights into hydrothermal process of microalgae via novel modified kinetic model and thermodynamic analysis. Fuel, 2022, 317, 123540. | 3.4 | 7 |
| 6 | Construction of a Novel Closed-Loop Livestock Waste Valorization Paradigm: Bridging Manure and Ammonia Gas via Phosphate-Doped Hydrochar. ACS ES&T Engineering, 2022, 2, 1732-1744. | 3.7 | 2 |
| 7 | Enhanced anaerobic digestion of post-hydrothermal liquefaction wastewater: Bio-methane production, carbon distribution and microbial metabolism. Science of the Total Environment, 2022, 837, 155659. | 3.9 | 8 |
| 8 | Electrochemical biofilm control by reconstructing microbial community in agricultural water distribution systems. Journal of Hazardous Materials, 2021, 403, 123616. | 6.5 | 20 |
| 9 | A critical review on livestock manure biorefinery technologies: Sustainability, challenges, and future perspectives. Renewable and Sustainable Energy Reviews, 2021, 135, 110033. | 8.2 | 176 |
| 10 | Fabrication, characterization and sorption properties of activated biochar from livestock manure via three different approaches. Resources, Conservation and Recycling, 2021, 168, 105254. | 5.3 | 28 |
| 11 | In Situ hydrochar regulates Cu fate and speciation: Insights into transformation mechanism. Journal of Hazardous Materials, 2021, 410, 124616. | 6.5 | 5 |
| 12 | Hydrochar and pyrochar for sorption of pollutants in wastewater and exhaust gas: A critical review. Environmental Pollution, 2021, 268, 115910. | 3.7 | 80 |
| 13 | Enhancing energy recovery via two stage co-fermentation of hydrothermal liquefaction aqueous phase and crude glycerol. Energy Conversion and Management, 2021, 231, 113855. | 4.4 | 16 |
| 14 | Development of a mobile, pilot scale hydrothermal liquefaction reactor: Food waste conversion product analysis and techno-economic assessment. Energy Conversion and Management: X, 2021, 10, 100076. | 0.9 | 15 |
| 15 | Accelerating anaerobic digestion for methane production: Potential role of direct interspecies electron transfer. Renewable and Sustainable Energy Reviews, 2021, 145, 111069. | 8.2 | 86 |
| 16 | Long-term in situ bioelectrochemical monitoring of biohythane process: Metabolic interactions and microbial evolution. Bioresource Technology, 2021, 332, 125119. | 4.8 | 26 |
| 17 | Hydrothermal liquefaction accelerates the toxicity and solubility of arsenic in biowaste. Journal of Hazardous Materials, 2021, 418, 126341. | 6.5 | 16 |
| 18 | Towards transportation fuel production from food waste: Potential of biocrude oil distillates for gasoline, diesel, and jet fuel. Fuel, 2021, 301, 121028. | 3.4 | 20 |

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|---|---|---|---|
| 19 | Arsenic removal via a novel hydrochar from livestock waste co-activated with thiourea and Î³-Fe2O3 nanoparticles. Journal of Hazardous Materials, 2021, 419, 126457. | 6.5 | 28 |
| 20 | Effect of biomass origins and composition on stability of hydrothermal biocrude oil. Fuel, 2021, 302, 121138. | 3.4 | 20 |
| 21 | An innovative multistage anaerobic hythane reactor (MAHR): Metabolic flux, thermodynamics and microbial functions. Water Research, 2020, 169, 115216. | 5.3 | 15 |
| 22 | Environment-enhancing process for algal wastewater treatment, heavy metal control and hydrothermal biofuel production: A critical review. Bioresource Technology, 2020, 298, 122421. | 4.8 | 80 |
| 23 | Effect of pH control on biohythane production and microbial structure in an innovative multistage anaerobic hythane reactor (MAHR). International Journal of Hydrogen Energy, 2020, 45, 4193-4204. | 3.8 | 10 |
| 24 | Comparison of hydrochar- and pyrochar-based solid acid catalysts from cornstalk: Physiochemical properties, catalytic activity and deactivation behavior. Bioresource Technology, 2020, 297, 122477. | 4.8 | 36 |
| 25 | Enhanced biohydrogen and biomethane production from Chlorella sp. with hydrothermal treatment. Energy Conversion and Management, 2020, 205, 112373. | 4.4 | 48 |
| 26 | Valorization of hydrothermal liquefaction aqueous phase: pathways towards commercial viability. Progress in Energy and Combustion Science, 2020, 77, 100819. | 15.8 | 204 |
| 27 | A pilot study of biohythane production from cornstalk via two-stage anaerobic fermentation. International Journal of Hydrogen Energy, 2020, 45, 31719-31731. | 3.8 | 17 |
| 28 | Characterization and bioremediation potential of byproducts from hydrothermal liquefaction of food wastes. Bioresource Technology Reports, 2020, 12, 100555. | 1.5 | 8 |
| 29 | Sequent production of proteins and biogas from Chlorella sp. via CO2 assisted hydrothermal treatment and anaerobic digestion. Journal of Cleaner Production, 2020, 277, 123563. | 4.6 | 15 |
| 30 | Establishment and performance of a plug-flow continuous hydrothermal reactor for biocrude oil production. Fuel, 2020, 280, 118605. | 3.4 | 19 |
| 31 | The Role of Biochar to Enhance Anaerobic Digestion: A Review. Journal of Renewable Materials, 2020, 8, 1033-1052. | 1.1 | 35 |
| 32 | Catalytic hydrothermal liquefaction of microalgae over mesoporous silica-based materials with site-separated acids and bases. Fuel, 2020, 279, 118529. | 3.4 | 31 |
| 33 | Human waste anaerobic digestion as a promising low-carbon strategy: Operating performance, microbial dynamics and environmental footprint. Journal of Cleaner Production, 2020, 256, 120414. | 4.6 | 26 |
| 34 | Life cycle assessment of anaerobic digestion of pig manure coupled with different digestate treatment technologies. Environment International, 2020, 137, 105522. | 4.8 | 92 |
| 35 | Zeolite-amended microalgal-bacterial system in a membrane photobioreactor for promoting system stability, biomass production, and wastewater treatment efficiency to realize Environmental-Enhancing Energy paradigm. Journal of Applied Phycology, 2019, 31, 335-344. | 1.5 | 8 |
| 36 | 110th Anniversary: Influence of Solvents on Biocrude from Hydrothermal Liquefaction of Soybean Oil, Soy Protein, Cellulose, Xylose, and Lignin, and Their Quinary Mixture. Industrial & Engineering Chemistry Research, 2019, 58, 13971-13976. | 1.8 | 30 |

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|---|---|---|---|
| 37 | Comparative production of biochars from corn stalk and cow manure. Bioresource Technology, 2019, 291, 121855. | 4.8 | 28 |
| 38 | Hydrothermal treatment of Chlorella sp.: Influence on biochemical methane potential, microbial function and biochemical metabolism. Bioresource Technology, 2019, 289, 121746. | 4.8 | 14 |
| 39 | Effect of Aging in Nitrogen and Air on the Properties of Biocrude Produced by Hydrothermal Liquefaction of Spirulina. Energy & Fuels, 2019, 33, 9870-9878. | 2.5 | 16 |
| 40 | Pretreatment of pig manure liquid digestate for microalgae cultivation via innovative flocculation-biological contact oxidation approach. Science of the Total Environment, 2019, 694, 133720. | 3.9 | 24 |
| 41 | Anaerobic conversion of the hydrothermal liquefaction aqueous phase: fate of organics and intensification with granule activated carbon/ozone pretreatment. Green Chemistry, 2019, 21, 1305-1318. | 4.6 | 79 |
| 42 | Water Footprint Assessment of Eggs in a Parent-Stock Layer Breeder Farm. Water (Switzerland), 2019, 11, 2546. | 1.2 | 2 |
| 43 | Improved methane production and energy recovery of post-hydrothermal liquefaction waste water via integration of zeolite adsorption and anaerobic digestion. Science of the Total Environment, 2019, 651, 61-69. | 3.9 | 47 |
| 44 | A solar-driven continuous hydrothermal pretreatment system for biomethane production from microalgae biomass. Applied Energy, 2019, 236, 1011-1018. | 5.1 | 55 |
| 45 | Effects of the extraction solvents in hydrothermal liquefaction processes: Biocrude oil quality and energy conversion efficiency. Energy, 2019, 167, 189-197. | 4.5 | 67 |
| 46 | Effect of organic loading rate on anaerobic digestion of pig manure: Methane production, mass flow, reactor scale and heating scenarios. Journal of Environmental Management, 2019, 231, 646-652. | 3.8 | 71 |
| 47 | Biohythane production of post-hydrothermal liquefaction wastewater: A comparison of two-stage fermentation and catalytic hydrothermal gasification. Bioresource Technology, 2019, 274, 335-342. | 4.8 | 38 |
| 48 | Hydrothermal conversion of anaerobic wastewater fed microalgae: effects of reaction temperature on products distribution and biocrude properties. IET Renewable Power Generation, 2019, 13, 2215-2220. | 1.7 | 4 |
| 49 | Treatment of recalcitrant wastewater and hydrogen production via microbial electrolysis cells. International Journal of Agricultural and Biological Engineering, 2019, 12, 179-189. | 0.3 | 8 |
| 50 | Biogas liquid digestate grown Chlorella sp. for biocrude oil production via hydrothermal liquefaction. Science of the Total Environment, 2018, 635, 70-77. | 3.9 | 39 |
| 51 | Microbial electrolysis treatment of post-hydrothermal liquefaction wastewater with hydrogen generation. Applied Energy, 2018, 212, 509-515. | 5.1 | 71 |
| 52 | Inhibitors degradation and microbial response during continuous anaerobic conversion of hydrothermal liquefaction wastewater. Science of the Total Environment, 2018, 630, 1124-1132. | 3.9 | 72 |
| 53 | Comparing two enhancing methods for improving kitchen waste anaerobic digestion: Bentonite addition and autoclaved de-oiling pretreatment. Chemical Engineering Research and Design, 2018, 115, 116-124. | 2.7 | 25 |
| 54 | Bioprocess engineering for biohythane production from low-grade waste biomass: technical challenges towards scale up. Current Opinion in Biotechnology, 2018, 50, 25-31. | 3.3 | 62 |

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|---|---|---|---|
| 55 | Biocrude production and heavy metal migration during hydrothermal liquefaction of swine manure. Chemical Engineering Research and Design, 2018, 115, 108-115. | 2.7 | 74 |
| 56 | Synergistic and Antagonistic Interactions during Hydrothermal Liquefaction of Soybean Oil, Soy Protein, Cellulose, Xylose, and Lignin. ACS Sustainable Chemistry and Engineering, 2018, 6, 14501-14509. | 3.2 | 111 |
| 57 | Hydrothermal cell disruption of Nannochloropsis sp. and its influence on lipid extraction. Algal Research, 2018, 35, 407-415. | 2.4 | 16 |
| 58 | Drag reduction and shear-induced cells migration behavior of microalgae slurry in tube flow. Bioresource Technology, 2018, 270, 38-45. | 4.8 | 8 |
| 59 | Hydrothermal liquefaction of typical livestock manures in China: Biocrude oil production and migration of heavy metals. Journal of Analytical and Applied Pyrolysis, 2018, 135, 133-140. | 2.6 | 74 |
| 60 | Microalgae cultivation and culture medium recycling by a two-stage cultivation system. Frontiers of Environmental Science and Engineering, 2018, 12, 1. | 3.3 | 38 |
| 61 | Nitrogen Migration and Transformation during Hydrothermal Liquefaction of Livestock Manures. ACS Sustainable Chemistry and Engineering, 2018, 6, 13570-13578. | 3.2 | 78 |
| 62 | Rheological properties of microalgae slurry under subcritical conditions for hydrothermal hydrolysis systems. Algal Research, 2018, 33, 78-83. | 2.4 | 22 |
| 63 | Hydrothermal hydrolysis pretreatment of microalgae slurries in a continuous reactor under subcritical conditions for largeâ€“scale application. Bioresource Technology, 2018, 266, 306-314. | 4.8 | 21 |
| 64 | Anaerobic and photocatalytic treatments of post-hydrothermal liquefaction wastewater using H2O2. Bioresource Technology Reports, 2018, 3, 247-255. | 1.5 | 24 |
| 65 | Influence of Fe/HZSM-5 catalyst on elemental distribution and product properties during hydrothermal liquefaction of Nannochloropsis sp.. Algal Research, 2018, 35, 1-9. | 2.4 | 28 |
| 66 | Hot Water Pretreatment. , 2018, , 1-26. | | 0 |
| 67 | Elemental migration and characterization of products during hydrothermal liquefaction of cornstalk. Bioresource Technology, 2017, 243, 9-16. | 4.8 | 72 |
| 68 | Simultaneous production of biocrude oil and recovery of nutrients and metals from human feces via hydrothermal liquefaction. Energy Conversion and Management, 2017, 134, 340-346. | 4.4 | 106 |
| 69 | Co-digestion of chicken manure and microalgae Chlorella 1067 grown in the recycled digestate: Nutrients reuse and biogas enhancement. Waste Management, 2017, 70, 247-254. | 3.7 | 59 |
| 70 | Influence of catalysts on hydrogen production from wastewater generated from the HTL of human feces via catalytic hydrothermal gasification. International Journal of Hydrogen Energy, 2017, 42, 20503-20511. | 3.8 | 51 |
| 71 | Anaerobic co-digestion of chicken manure and microalgae Chlorella sp.: Methane potential, microbial diversity and synergistic impact evaluation. Waste Management, 2017, 68, 120-127. | 3.7 | 69 |
| 72 | Algae biomass as a precursor for synthesis of nitrogen-and sulfur-co-doped carbon dots: A better probe in Arabidopsis guard cells and root tissues. Journal of Photochemistry and Photobiology B: Biology, 2017, 174, 315-322. | 1.7 | 36 |

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|---|---|---|---|
| 73 | Anaerobic digestion of wastewater generated from the hydrothermal liquefaction of Spirulina: Toxicity assessment and minimization. Energy Conversion and Management, 2017, 141, 420-428. | 4.4 | 101 |
| 74 | Improved production and quality of biocrude oil from low-lipid high-ash macroalgae Enteromorpha prolifera via addition of crude glycerol. Journal of Cleaner Production, 2017, 142, 749-757. | 4.6 | 61 |
| 75 | Hydrothermal Liquefaction (HTL): A Promising Pathway for Biorefinery of Algae. , 2017, , 361-391. | | 9 |
| 76 | Continuous production of biohythane from hydrothermal liquefied cornstalk biomass via two-stage high-rate anaerobic reactors. Biotechnology for Biofuels, 2016, 9, 254. | 6.2 | 76 |
| 77 | Microbial electrolysis cell to treat hydrothermal liquefied wastewater from cornstalk and recover hydrogen: Degradation of organic compounds and characterization of microbial community. International Journal of Hydrogen Energy, 2016, 41, 4132-4142. | 3.8 | 73 |
| 78 | Nutrient recovery and biomass production by cultivating Chlorella vulgaris 1067 from four types of post-hydrothermal liquefaction wastewater. Journal of Applied Phycology, 2016, 28, 1031-1039. | 1.5 | 39 |
| 79 | Recovery of reducing sugars and volatile fatty acids from cornstalk at different hydrothermal treatment severity. Bioresource Technology, 2016, 199, 220-227. | 4.8 | 67 |
| 80 | Comparing three methods for photosynthetic bacteria separation and recycling during wastewater treatment. Desalination and Water Treatment, 2016, 57, 12467-12477. | 1.0 | 11 |
| 81 | Towards biohythane production from biomass: Influence of operational stage on anaerobic fermentation and microbial community. International Journal of Hydrogen Energy, 2016, 41, 4429-4438. | 3.8 | 81 |
| 82 | Optimization ofChlorella pyrenoidosaY3 biomass production in poultry waste anaerobic-digested effluents using a response surface methodology. Desalination and Water Treatment, 2016, 57, 8711-8719. | 1.0 | 4 |
| 83 | An investigation of reaction pathways of hydrothermal liquefaction using Chlorella pyrenoidosa and Spirulina platensis. Energy Conversion and Management, 2015, 96, 330-339. | 4.4 | 228 |
| 84 | The role of hydraulic retention time on controlling methanogenesis and homoacetogenesis in biohydrogen production using upflow anaerobic sludge blanket (UASB) reactor and packed bed reactor (PBR). International Journal of Hydrogen Energy, 2015, 40, 11414-11421. | 3.8 | 83 |
| 85 | Effect of reaction mode on biohydrogen production and its microbial diversity. International Journal of Hydrogen Energy, 2015, 40, 3191-3200. | 3.8 | 44 |
| 86 | Hydrothermal liquefaction of harvested high-ash low-lipid algal biomass from Dianchi Lake: Effects of operational parameters and relations of products. Bioresource Technology, 2015, 184, 336-343. | 4.8 | 79 |
| 87 | Performance and microbial community of carbon nanotube fixed-bed microbial fuel cell continuously fed with hydrothermal liquefied cornstalk biomass. Bioresource Technology, 2015, 185, 294-301. | 4.8 | 32 |
| 88 | Carbon nanotubes simultaneously as the anode and microbial carrier for up-flow fixed-bed microbial fuel cell. Biochemical Engineering Journal, 2015, 94, 39-44. | 1.8 | 32 |
| 89 | Effects of furan derivatives on biohydrogen fermentation from wet steam-exploded cornstalk and its microbial community. Bioresource Technology, 2015, 175, 152-159. | 4.8 | 86 |
| 90 | Temporal changes in the characteristics of algae in Dianchi Lake, Yunnan Province, China. Frontiers of Agricultural Science and Engineering, 2015, 2, 266. | 0.9 | 0 |

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| 91 | Focusing on the process diagnosis of anaerobic fermentation by a novel sensor system combining microbial fuel cell, gas flow meter and pH meter. International Journal of Hydrogen Energy, 2014, 39, 13658-13664. | 3.8 | 13 |
| 92 | Conversion efficiency and oil quality of low-lipid high-protein and high-lipid low-protein microalgae via hydrothermal liquefaction. Bioresource Technology, 2014, 154, 322-329. | 4.8 | 225 |
| 93 | Co-liquefaction of swine manure and mixed-culture algal biomass from a wastewater treatment system to produce bio-crude oil. Applied Energy, 2014, 128, 209-216. | 5.1 | 186 |
| 94 | Effects of operating parameters on hydrogen production from raw wet steam-exploded cornstalk and two-stage fermentation potential for biohythane production. Biochemical Engineering Journal, 2014, 90, 234-238. | 1.8 | 27 |
| 95 | Hydrothermal liquefaction for algal biorefinery: A critical review. Renewable and Sustainable Energy Reviews, 2014, 38, 933-950. | 8.2 | 306 |
| 96 | Nutrient Flows and Quality of Bio-crude Oil Produced via Catalytic Hydrothermal Liquefaction of Low-Lipid Microalgae. Bioenergy Research, 2014, 7, 1317-1328. | 2.2 | 73 |
| 97 | States and challenges for high-value biohythane production from waste biomass by dark fermentation technology. Bioresource Technology, 2013, 135, 292-303. | 4.8 | 186 |
| 98 | Enhanced hydrogen production in a UASB reactor by retaining microbial consortium onto carbon nanotubes (CNTs). International Journal of Hydrogen Energy, 2012, 37, 10619-10626. | 3.8 | 91 |
| 99 | Microbial fuel cell based biosensor for in situ monitoring of anaerobic digestion process. Bioresource Technology, 2011, 102, 10221-10229. | 4.8 | 89 |
| 100 | Study of operational performance and electrical response on mediator-less microbial fuel cells fed with carbon- and protein-rich substrates. Biochemical Engineering Journal, 2009, 45, 185-191. | 1.8 | 123 |
| 101 | A novel configuration of microbial fuel cell stack bridged internally through an extra cation exchange membrane. Biotechnology Letters, 2008, 30, 1017-1023. | 1.1 | 27 |
| 102 | Pretreatment of poultry waste anaerobic digested effluents by chitosan flocculation for Chlorella pyrenoidosa growth and pollutants removal;. , 0, 77, 299-305. | | 1 |
| 103 | Combination of electrolysis and microalgae cultivation to beneficial reuse fertilizer wastewater from poultry manure anaerobic digestion effluent. , 0, 183, 139-148. | | 3 |