Yuanhui Zhang

List of Publications by Citations

90 papers	3,728 citations	36 h-index	60 g-index
92 ext. papers	4,481 ext. citations	8.7 avg, IF	5.74 L-index

#	Paper	IF	Citations
90	Distributions of carbon and nitrogen in the products from hydrothermal liquefaction of low-lipid microalgae. *Energy and Environmental Science*, **2011**, 4, 4587	35.4	262
89	Hydrothermal liquefaction for algal biorefinery: A critical review. *Renewable and Sustainable Energy Reviews*, **2014**, 38, 933-950	16.2	258
88	Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil. *Bioresource Technology*, **2014**, 152, 130-9	11	247
87	A synergistic combination of algal wastewater treatment and hydrothermal biofuel production maximized by nutrient and carbon recycling. *Energy and Environmental Science*, **2013**, 6, 3765	35.4	203
86	Conversion efficiency and oil quality of low-lipid high-protein and high-lipid low-protein microalgae via hydrothermal liquefaction. *Bioresource Technology*, **2014**, 154, 322-9	11	189
85	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	10.7	146
84	Hydrothermal liquefaction of Chlorella pyrenoidosa in sub- and supercritical ethanol with heterogeneous catalysts. *Bioresource Technology*, **2013**, 133, 389-97	11	119
83	Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae. *Bioresource Technology*, **2015**, 178, 139-146	11	114
82	Valorization of hydrothermal liquefaction aqueous phase: pathways towards commercial viability. *Progress in Energy and Combustion Science*, **2020**, 77, 100819	33.6	98
81	Characterization of aqueous phase from the hydrothermal liquefaction of Chlorella pyrenoidosa. *Bioresource Technology*, **2015**, 184, 328-335	11	86
80	Energy and nutrient recovery efficiencies in biocrude oil produced via hydrothermal liquefaction of Chlorella pyrenoidosa. *RSC Advances*, **2014**, 4, 16958	3.7	79
79	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	10.6	75
78	Effects of furan derivatives on biohydrogen fermentation from wet steam-exploded cornstalk and its microbial community. *Bioresource Technology*, **2015**, 175, 152-9	11	73
77	Anaerobic digestion of wastewater generated from the hydrothermal liquefaction of Spirulina: Toxicity assessment and minimization. *Energy Conversion and Management*, **2017**, 141, 420-428	10.6	73
76	Hydrothermal Liquefaction of Microalgae in an Ethanol□Water Co-Solvent To Produce Biocrude Oil. *Energy & Fuels*, **2014**, 28, 5178-5183	4.1	71
75	Towards biohythane production from biomass: Influence of operational stage on anaerobic fermentation and microbial community. *International Journal of Hydrogen Energy*, **2016**, 41, 4429-4438	6.7	69
74	Nutrient Flows and Quality of Bio-crude Oil Produced via Catalytic Hydrothermal Liquefaction of Low-Lipid Microalgae. *Bioenergy Research*, **2014**, 7, 1317-1328	3.1	65

73	Renewable diesel blendstocks produced by hydrothermal liquefaction of wet biowaste. *Nature Sustainability*, **2018**, 1, 702-710	22.1	64
72	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	11	63
71	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	8.3	56
70	Elemental migration and characterization of products during hydrothermal liquefaction of cornstalk. *Bioresource Technology*, **2017**, 243, 9-16	11	54
69	Anaerobic co-digestion of chicken manure and microalgae Chlorella sp.: Methane potential, microbial diversity and synergistic impact evaluation. *Waste Management*, **2017**, 68, 120-127	8.6	52
68	Anaerobic digestion of post-hydrothermal liquefaction wastewater for improved energy efficiency of hydrothermal bioenergy processes. *Water Science and Technology*, **2015**, 72, 2139-47	2.2	50
67	Effect of ash on hydrothermal liquefaction of high-ash content algal biomass. *Algal Research*, **2017**, 25, 297-306	5	49
66	Recovery of reducing sugars and volatile fatty acids from cornstalk at different hydrothermal treatment severity. *Bioresource Technology*, **2016**, 199, 220-227	11	46
65	Effects of the extraction solvents in hydrothermal liquefaction processes: Biocrude oil quality and energy conversion efficiency. *Energy*, **2019**, 167, 189-197	7.9	46
64	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	8.6	45
63	Inhibitors degradation and microbial response during continuous anaerobic conversion of hydrothermal liquefaction wastewater. *Science of the Total Environment*, **2018**, 630, 1124-1132	10.2	45
62	Nitrogen Migration and Transformation during Hydrothermal Liquefaction of Livestock Manures. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 13570-13578	8.3	44
61	Integrated anaerobic digestion and algae cultivation for energy recovery and nutrient supply from post-hydrothermal liquefaction wastewater. *Bioresource Technology*, **2018**, 266, 349-356	11	43
60	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	10	42
59	Physical pretreatments of wastewater algae to reduce ash content and improve thermal decomposition characteristics. *Bioresource Technology*, **2014**, 169, 816-820	11	42
58	Bioprocess engineering for biohythane production from low-grade waste biomass: technical challenges towards scale up. *Current Opinion in Biotechnology*, **2018**, 50, 25-31	11.4	41
57	Experimental and model enhancement of food waste hydrothermal liquefaction with combined effects of biochemical composition and reaction conditions. *Bioresource Technology*, **2019**, 284, 139-147	11	40
56	Environment-enhancing process for algal wastewater treatment, heavy metal control and hydrothermal biofuel production: A critical review. *Bioresource Technology*, **2020**, 298, 122421	11	39

55	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	3.2	36
54	Hydrothermal Liquefaction to Convert Biomass into Crude Oil **2010**, 201-232		33
53	Biogas liquid digestate grown Chlorella sp. for biocrude oil production via hydrothermal liquefaction. *Science of the Total Environment*, **2018**, 635, 70-77	10.2	32
52	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	6.7	32
51	An Overview of Room Air Motion Measurement: Technology and Application. *HVAC and R Research*, **2007**, 13, 929-950		29
50	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	6.7	28
49	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	10.2	28
48	Extract Nitrogen-Containing Compounds in Biocrude Oil Converted from Wet Biowaste via Hydrothermal Liquefaction. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 2182-2190	8.3	26
47	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	11	24
46	Biohythane production of post-hydrothermal liquefaction wastewater: A comparison of two-stage fermentation and catalytic hydrothermal gasification. *Bioresource Technology*, **2019**, 274, 335-342	11	23
45	Moisture effects on gas-phase biofilter ammonia removal efficiency, nitrous oxide generation, and microbial communities. *Journal of Hazardous Materials*, **2014**, 271, 292-301	12.8	22
44	Biocrude Oil Production through the Maillard Reaction between Leucine and Glucose during Hydrothermal Liquefaction. *Energy & Fuels*, **2019**, 33, 8758-8765	4.1	21
43	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	3.9	18
42	Pretreatment of pig manure liquid digestate for microalgae cultivation via innovative flocculation-biological contact oxidation approach. *Science of the Total Environment*, **2019**, 694, 133720	10.2	17
41	Seasonal Patterns in Microbial Community Composition in Denitrifying Bioreactors Treating Subsurface Agricultural Drainage. *Microbial Ecology*, **2015**, 70, 710-23	4.4	16
40	Natural light-micro aerobic condition for PSB wastewater treatment: a flexible, simple, and effective resource recovery wastewater treatment process. *Environmental Technology (United Kingdom)*, **2018**, 39, 74-82	2.6	16
39	Product and Economic Analysis of Direct Liquefaction of Swine Manure. *Bioenergy Research*, **2011**, 4, 324-333	3.1	15
38	Performance Evaluation of Mesophilic Anaerobic Digestion of Chicken Manure with Algal Digestate. *Energies*, **2018**, 11, 1829	3.1	14

37	Continuous treatment of hydrothermal liquefaction wastewater in an anaerobic biofilm reactor: Potential role of granular activated carbon. *Journal of Cleaner Production*, **2020**, 276, 122836	10.3	14
36	Improve the biodegradability of post-hydrothermal liquefaction wastewater with ozone: conversion of phenols and N-heterocyclic compounds. *Water Science and Technology*, **2017**, 2017, 248-255	3.2	14
35	Analysis of particle-borne odorants emitted from concentrated animal feeding operations. *Science of the Total Environment*, **2014**, 490, 322-33	10.2	12
34	Establishment and performance of a plug-flow continuous hydrothermal reactor for biocrude oil production. *Fuel*, **2020**, 280, 118605	7.1	12
33	Comparative production of biochars from corn stalk and cow manure. *Bioresource Technology*, **2019** , 291, 121855	11	11
32	Sampling Efficiency of the Tsi Aerodynamic Particle Sizer. *Instrumentation Science and Technology*, **1998**, 26, 363-373	1.4	11
31	Using co-metabolism to accelerate synthetic starch wastewater degradation and nutrient recovery in photosynthetic bacterial wastewater treatment technology. *Environmental Technology (United Kingdom)*, **2016**, 37, 775-84	2.6	10
30	Comparing three methods for photosynthetic bacteria separation and recycling during wastewater treatment. *Desalination and Water Treatment*, **2016**, 57, 12467-12477		9
29	Effect of Aging in Nitrogen and Air on the Properties of Biocrude Produced by Hydrothermal Liquefaction of Spirulina. *Energy & Fuels*, **2019**, 33, 9870-9878	4.1	8
28	Reduce recalcitrance of cornstalk using post-hydrothermal liquefaction wastewater pretreatment. *Bioresource Technology*, **2019**, 279, 57-66	11	8
27	Hydroponic Lettuce Production Using Treated Post-Hydrothermal Liquefaction Wastewater (PHW). *Sustainability*, **2019**, 11, 3605	3.6	8
26	Biocrude Oil from Algal Bloom Microalgae: A Novel Integration of Biological and Thermochemical Techniques. *Environmental Science & Technology*, **2021**, 55, 1973-1983	10.3	8
25	Investigation of combustion and spray of biowaste based fuel and diesel blends. *Fuel*, **2020**, 268, 117382	7.1	7
24	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	3.2	6
23	Airborne exposure patterns from a passenger source in aircraft cabins. *HVAC and R Research*, **2013**, 19, 962-73		6
22	Anaerobic digestion of aqueous phase from hydrothermal liquefaction of Spirulina using biostimulated sludge. *Bioresource Technology*, **2020**, 312, 123552	11	6
21	An innovative multistage anaerobic hythane reactor (MAHR): Metabolic flux, thermodynamics and microbial functions. *Water Research*, **2020**, 169, 115216	12.5	6
20	Hydrothermal liquefaction accelerates the toxicity and solubility of arsenic in biowaste. *Journal of Hazardous Materials*, **2021**, 418, 126341	12.8	6

19	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	2.5	5
18	Effect of biomass origins and composition on stability of hydrothermal biocrude oil. *Fuel*, **2021**, 302, 121138	7.1	5
17	Fate and transport of estrogenic compounds in an integrated swine manure treatment systems combining algal-bacterial bioreactor and hydrothermal processes for improved water quality. *Environmental Science and Pollution Research*, **2019**, 26, 16800-16813	5.1	4
16	3D real-time volumetric particle tracking velocimetry – A promising tool for studies of airflow around high-rise buildings. *Building and Environment*, **2020**, 178, 106930	6.5	4
15	Renewable diesel blendstocks and bioprivileged chemicals distilled from algal biocrude oil converted via hydrothermal liquefaction. *Sustainable Energy and Fuels*, **2020**, 4, 5165-5178	5.8	4
14	Towards transportation fuel production from food waste: Potential of biocrude oil distillates for gasoline, diesel, and jet fuel. *Fuel*, **2021**, 301, 121028	7.1	4
13	Adsorption or direct interspecies electron transfer? A comprehensive investigation of the role of biochar in anaerobic digestion of hydrothermal liquefaction aqueous phase. *Chemical Engineering Journal*, **2022**, 435, 135078	14.7	3
12	Characterization and bioremediation potential of byproducts from hydrothermal liquefaction of food wastes. *Bioresource Technology Reports*, **2020**, 12, 100555	4.1	3
11	Laboratory testing of flat oval transitions to determine loss coefficients (RP-1606). *Science and Technology for the Built Environment*, **2015**, 21, 386-395	1.8	2
10	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	2.9	2
9	Enhancing energy recovery via two stage co-fermentation of hydrothermal liquefaction aqueous phase and crude glycerol. *Energy Conversion and Management*, **2021**, 231, 113855	10.6	2
8	Experimental and Numerical Model Investigations of Oxygen-Enriched Characteristics in Air-Conditioned Rooms. *Applied Sciences (Switzerland)*, **2021**, 11, 4733	2.6	2
7	Spray and combustion characteristics of pure hydrothermal liquefaction biofuel and mixture blends with diesel. *Fuel*, **2021**, 294, 120498	7.1	2
6	The application of an absorbent-amended microalgal-bacterial system for enhancing hydrothermal liquefaction wastewater treatment and resource recovery. *Journal of Applied Phycology*, **2021**, 33, 79-90	3.2	2
5	Hydrothermal processes for simultaneous bioenergy recovery and destruction of bioactive microconstituents from biosolids. *Proceedings of the Water Environment Federation*, **2017**, 2017, 329-359		1
4	A GPU-accelerated particle-detection algorithm for real-time volumetric particle-tracking velocimetry under non-uniform illumination. *Measurement Science and Technology*, **2021**, 32, 105304	2	1
3	In Situ hydrochar regulates Cu fate and speciation: Insights into transformation mechanism. *Journal of Hazardous Materials*, **2021**, 410, 124616	12.8	1
2	Testing the plastic-wrapped composting system to dispose of swine mortalities during an animal disease outbreak. *Journal of Environmental Quality*, **2021**, 50, 899-910	3.4	0

1 Water Footprint Assessment of Eggs in a Parent-Stock Layer Breeder Farm. *Water (Switzerland)*, **2019**, 11, 2546 3