

# Yuanhui Zhang

## List of Publications by Year in descending order

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91  
papers

5,169  
citations

81900

39  
h-index

88630

70  
g-index

92  
all docs

92  
docs citations

92  
times ranked

3334  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrothermal liquefaction for algal biorefinery: A critical review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 38, 933-950.	16.4	306
2	Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil. <i>Bioresource Technology</i> , 2014, 152, 130-139.	9.6	301
3	Distributions of carbon and nitrogen in the products from hydrothermal liquefaction of low-lipid microalgae. <i>Energy and Environmental Science</i> , 2011, 4, 4587.	30.8	285
4	A synergistic combination of algal wastewater treatment and hydrothermal biofuel production maximized by nutrient and carbon recycling. <i>Energy and Environmental Science</i> , 2013, 6, 3765.	30.8	228
5	Conversion efficiency and oil quality of low-lipid high-protein and high-lipid low-protein microalgae via hydrothermal liquefaction. <i>Bioresource Technology</i> , 2014, 154, 322-329.	9.6	225
6	Valorization of hydrothermal liquefaction aqueous phase: pathways towards commercial viability. <i>Progress in Energy and Combustion Science</i> , 2020, 77, 100819.	31.2	204
7	Co-liquefaction of swine manure and mixed-culture algal biomass from a wastewater treatment system to produce bio-crude oil. <i>Applied Energy</i> , 2014, 128, 209-216.	10.1	186
8	Hydrothermal liquefaction of <i>Chlorella pyrenoidosa</i> in sub- and supercritical ethanol with heterogeneous catalysts. <i>Bioresource Technology</i> , 2013, 133, 389-397.	9.6	147
9	Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae. <i>Bioresource Technology</i> , 2015, 178, 139-146.	9.6	144
10	Synergistic and Antagonistic Interactions during Hydrothermal Liquefaction of Soybean Oil, Soy Protein, Cellulose, Xylose, and Lignin. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14501-14509.	6.7	111
11	Renewable diesel blendstocks produced by hydrothermal liquefaction of wet biowaste. <i>Nature Sustainability</i> , 2018, 1, 702-710.	23.7	110
12	Simultaneous production of biocrude oil and recovery of nutrients and metals from human feces via hydrothermal liquefaction. <i>Energy Conversion and Management</i> , 2017, 134, 340-346.	9.2	106
13	Characterization of aqueous phase from the hydrothermal liquefaction of <i>Chlorella pyrenoidosa</i> . <i>Bioresource Technology</i> , 2015, 184, 328-335.	9.6	101
14	Anaerobic digestion of wastewater generated from the hydrothermal liquefaction of <i>Spirulina</i> : Toxicity assessment and minimization. <i>Energy Conversion and Management</i> , 2017, 141, 420-428.	9.2	101
15	Energy and nutrient recovery efficiencies in biocrude oil produced via hydrothermal liquefaction of <i>Chlorella pyrenoidosa</i> . <i>RSC Advances</i> , 2014, 4, 16958.	3.6	91
16	Hydrothermal Liquefaction of Microalgae in an Ethanol-Water Co-Solvent To Produce Biocrude Oil. <i>Energy &amp; Fuels</i> , 2014, 28, 5178-5183.	5.1	88
17	Effects of furan derivatives on biohydrogen fermentation from wet steam-exploded cornstalk and its microbial community. <i>Bioresource Technology</i> , 2015, 175, 152-159.	9.6	86
18	Towards biohythane production from biomass: Influence of operational stage on anaerobic fermentation and microbial community. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4429-4438.	7.1	81

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19	Environment-enhancing process for algal wastewater treatment, heavy metal control and hydrothermal biofuel production: A critical review. <i>Bioresource Technology</i> , 2020, 298, 122421.	9.6	80
20	Hydrothermal liquefaction of harvested high-ash low-lipid algal biomass from Dianchi Lake: Effects of operational parameters and relations of products. <i>Bioresource Technology</i> , 2015, 184, 336-343.	9.6	79
21	Anaerobic conversion of the hydrothermal liquefaction aqueous phase: fate of organics and intensification with granule activated carbon/ozone pretreatment. <i>Green Chemistry</i> , 2019, 21, 1305-1318.	9.0	79
22	Nitrogen Migration and Transformation during Hydrothermal Liquefaction of Livestock Manures. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13570-13578.	6.7	78
23	Experimental and model enhancement of food waste hydrothermal liquefaction with combined effects of biochemical composition and reaction conditions. <i>Bioresource Technology</i> , 2019, 284, 139-147.	9.6	78
24	Nutrient Flows and Quality of Bio-crude Oil Produced via Catalytic Hydrothermal Liquefaction of Low-Lipid Microalgae. <i>Bioenergy Research</i> , 2014, 7, 1317-1328.	3.9	73
25	Elemental migration and characterization of products during hydrothermal liquefaction of cornstalk. <i>Bioresource Technology</i> , 2017, 243, 9-16.	9.6	72
26	Inhibitors degradation and microbial response during continuous anaerobic conversion of hydrothermal liquefaction wastewater. <i>Science of the Total Environment</i> , 2018, 630, 1124-1132.	8.0	72
27	Effect of ash on hydrothermal liquefaction of high-ash content algal biomass. <i>Algal Research</i> , 2017, 25, 297-306.	4.6	70
28	Anaerobic co-digestion of chicken manure and microalgae <i>Chlorella</i> sp.: Methane potential, microbial diversity and synergistic impact evaluation. <i>Waste Management</i> , 2017, 68, 120-127.	7.4	69
29	Anaerobic digestion of post-hydrothermal liquefaction wastewater for improved energy efficiency of hydrothermal bioenergy processes. <i>Water Science and Technology</i> , 2015, 72, 2139-2147.	2.5	68
30	Recovery of reducing sugars and volatile fatty acids from cornstalk at different hydrothermal treatment severity. <i>Bioresource Technology</i> , 2016, 199, 220-227.	9.6	67
31	Effects of the extraction solvents in hydrothermal liquefaction processes: Biocrude oil quality and energy conversion efficiency. <i>Energy</i> , 2019, 167, 189-197.	8.8	67
32	Bioprocess engineering for biohythane production from low-grade waste biomass: technical challenges towards scale up. <i>Current Opinion in Biotechnology</i> , 2018, 50, 25-31.	6.6	62
33	Integrated anaerobic digestion and algae cultivation for energy recovery and nutrient supply from post-hydrothermal liquefaction wastewater. <i>Bioresource Technology</i> , 2018, 266, 349-356.	9.6	62
34	Co-digestion of chicken manure and microalgae <i>Chlorella</i> 1067 grown in the recycled digestate: Nutrients reuse and biogas enhancement. <i>Waste Management</i> , 2017, 70, 247-254.	7.4	59
35	Physical pretreatments of wastewater algae to reduce ash content and improve thermal decomposition characteristics. <i>Bioresource Technology</i> , 2014, 169, 816-820.	9.6	58
36	Adsorption or direct interspecies electron transfer? A comprehensive investigation of the role of biochar in anaerobic digestion of hydrothermal liquefaction aqueous phase. <i>Chemical Engineering Journal</i> , 2022, 435, 135078.	12.7	52

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37	Influence of catalysts on hydrogen production from wastewater generated from the HTL of human feces via catalytic hydrothermal gasification. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 20503-20511.	7.1	51
38	Improved methane production and energy recovery of post-hydrothermal liquefaction waste water via integration of zeolite adsorption and anaerobic digestion. <i>Science of the Total Environment</i> , 2019, 651, 61-69.	8.0	47
39	Biocrude Oil Production through the Maillard Reaction between Leucine and Glucose during Hydrothermal Liquefaction. <i>Energy &amp; Fuels</i> , 2019, 33, 8758-8765.	5.1	42
40	Nutrient recovery and biomass production by cultivating <i>Chlorella vulgaris</i> 1067 from four types of post-hydrothermal liquefaction wastewater. <i>Journal of Applied Phycology</i> , 2016, 28, 1031-1039.	2.8	39
41	Biogas liquid digestate grown <i>Chlorella</i> sp. for biocrude oil production via hydrothermal liquefaction. <i>Science of the Total Environment</i> , 2018, 635, 70-77.	8.0	39
42	Biohythane production of post-hydrothermal liquefaction wastewater: A comparison of two-stage fermentation and catalytic hydrothermal gasification. <i>Bioresource Technology</i> , 2019, 274, 335-342.	9.6	38
43	Algae biomass as a precursor for synthesis of nitrogen-and sulfur-co-doped carbon dots: A better probe in <i>Arabidopsis</i> guard cells and root tissues. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 174, 315-322.	3.8	36
44	Performance and microbial community of carbon nanotube fixed-bed microbial fuel cell continuously fed with hydrothermal liquefied cornstalk biomass. <i>Bioresource Technology</i> , 2015, 185, 294-301.	9.6	32
45	Extract Nitrogen-Containing Compounds in Biocrude Oil Converted from Wet Biowaste via Hydrothermal Liquefaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 2182-2190.	6.7	32
46	An Overview of Room Air Motion Measurement: Technology and Application. <i>HVAC and R Research</i> , 2007, 13, 929-950.	0.6	31
47	<i>110th Anniversary:</i> Influence of Solvents on Biocrude from Hydrothermal Liquefaction of Soybean Oil, Soy Protein, Cellulose, Xylose, and Lignin, and Their Quinary Mixture. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 13971-13976.	3.7	30
48	Moisture effects on gas-phase biofilter ammonia removal efficiency, nitrous oxide generation, and microbial communities. <i>Journal of Hazardous Materials</i> , 2014, 271, 292-301.	12.4	29
49	Comparative production of biochars from corn stalk and cow manure. <i>Bioresource Technology</i> , 2019, 291, 121855.	9.6	28
50	Continuous treatment of hydrothermal liquefaction wastewater in an anaerobic biofilm reactor: Potential role of granular activated carbon. <i>Journal of Cleaner Production</i> , 2020, 276, 122836.	9.3	26
51	Pretreatment of pig manure liquid digestate for microalgae cultivation via innovative flocculation-biological contact oxidation approach. <i>Science of the Total Environment</i> , 2019, 694, 133720.	8.0	24
52	Improve the biodegradability of post-hydrothermal liquefaction wastewater with ozone: conversion of phenols and N-heterocyclic compounds. <i>Water Science and Technology</i> , 2018, 2017, 248-255.	2.5	23
53	Performance Evaluation of Mesophilic Anaerobic Digestion of Chicken Manure with Algal Digestate. <i>Energies</i> , 2018, 11, 1829.	3.1	22
54	Seasonal Patterns in Microbial Community Composition in Denitrifying Bioreactors Treating Subsurface Agricultural Drainage. <i>Microbial Ecology</i> , 2015, 70, 710-723.	2.8	21

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55	Product and Economic Analysis of Direct Liquefaction of Swine Manure. <i>Bioenergy Research</i> , 2011, 4, 324-333.	3.9	20
56	Biocrude Oil from Algal Bloom Microalgae: A Novel Integration of Biological and Thermochemical Techniques. <i>Environmental Science &amp; Technology</i> , 2021, 55, 1973-1983.	10.0	20
57	Towards transportation fuel production from food waste: Potential of biocrude oil distillates for gasoline, diesel, and jet fuel. <i>Fuel</i> , 2021, 301, 121028.	6.4	20
58	Effect of biomass origins and composition on stability of hydrothermal biocrude oil. <i>Fuel</i> , 2021, 302, 121138.	6.4	20
59	Establishment and performance of a plug-flow continuous hydrothermal reactor for biocrude oil production. <i>Fuel</i> , 2020, 280, 118605.	6.4	19
60	Natural light-micro aerobic condition for PSB wastewater treatment: a flexible, simple, and effective resource recovery wastewater treatment process. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 74-82.	2.2	18
61	Analysis of particle-borne odorants emitted from concentrated animal feeding operations. <i>Science of the Total Environment</i> , 2014, 490, 322-333.	8.0	16
62	Effect of Aging in Nitrogen and Air on the Properties of Biocrude Produced by Hydrothermal Liquefaction of <i>Spirulina</i> . <i>Energy &amp; Fuels</i> , 2019, 33, 9870-9878.	5.1	16
63	Enhancing energy recovery via two stage co-fermentation of hydrothermal liquefaction aqueous phase and crude glycerol. <i>Energy Conversion and Management</i> , 2021, 231, 113855.	9.2	16
64	Hydrothermal liquefaction accelerates the toxicity and solubility of arsenic in biowaste. <i>Journal of Hazardous Materials</i> , 2021, 418, 126341.	12.4	16
65	An innovative multistage anaerobic methane reactor (MAHR): Metabolic flux, thermodynamics and microbial functions. <i>Water Research</i> , 2020, 169, 115216.	11.3	15
66	Development of a mobile, pilot scale hydrothermal liquefaction reactor: Food waste conversion product analysis and techno-economic assessment. <i>Energy Conversion and Management: X</i> , 2021, 10, 100076.	1.6	15
67	Hydroponic Lettuce Production Using Treated Post-Hydrothermal Liquefaction Wastewater (PHW). <i>Sustainability</i> , 2019, 11, 3605.	3.2	14
68	Using co-metabolism to accelerate synthetic starch wastewater degradation and nutrient recovery in photosynthetic bacterial wastewater treatment technology. <i>Environmental Technology (United Kingdom)</i> , 2021, 42, 110-120.	1.0	13
69	Anaerobic digestion of aqueous phase from hydrothermal liquefaction of <i>Spirulina</i> using biostimulated sludge. <i>Bioresource Technology</i> , 2020, 312, 123552.	9.6	12
70	Sampling Efficiency of the Tsi Aerodynamic Particle Sizer. <i>Instrumentation Science and Technology</i> , 1998, 26, 363-373.	1.8	11
71	Comparing three methods for photosynthetic bacteria separation and recycling during wastewater treatment. <i>Desalination and Water Treatment</i> , 2016, 57, 12467-12477.	1.0	11
72	Reduce recalcitrance of cornstalk using post-hydrothermal liquefaction wastewater pretreatment. <i>Bioresource Technology</i> , 2019, 279, 57-66.	9.6	11

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73	Investigation of combustion and spray of biowaste based fuel and diesel blends. <i>Fuel</i> , 2020, 268, 117382.	6.4	11
74	Airborne exposure patterns from a passenger source in aircraft cabins. <i>HVAC and R Research</i> , 2013, 19, 962-973.	0.6	10
75	3D real-time volumetric particle tracking velocimetry – A promising tool for studies of airflow around high-rise buildings. <i>Building and Environment</i> , 2020, 178, 106930.	6.9	10
76	Diesel blends produced via emulsification of hydrothermal liquefaction biocrude from food waste. <i>Fuel</i> , 2022, 324, 124817.	6.4	10
77	Spray and combustion characteristics of pure hydrothermal liquefaction biofuel and mixture blends with diesel. <i>Fuel</i> , 2021, 294, 120498.	6.4	9
78	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. <i>Journal of Applied Phycology</i> , 2019, 31, 335-344.	2.8	8
79	Characterization and bioremediation potential of byproducts from hydrothermal liquefaction of food wastes. <i>Bioresource Technology Reports</i> , 2020, 12, 100555.	2.7	8
80	Renewable diesel blendstocks and bioprivileged chemicals distilled from algal biocrude oil converted via hydrothermal liquefaction. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5165-5178.	4.9	8
81	Fate and transport of estrogenic compounds in an integrated swine manure treatment systems combining algal-bacterial bioreactor and hydrothermal processes for improved water quality. <i>Environmental Science and Pollution Research</i> , 2019, 26, 16800-16813.	5.3	7
82	In Situ hydrochar regulates Cu fate and speciation: Insights into transformation mechanism. <i>Journal of Hazardous Materials</i> , 2021, 410, 124616.	12.4	5
83	Testing the plastic-wrapped composting system to dispose of swine mortalities during an animal disease outbreak. <i>Journal of Environmental Quality</i> , 2021, 50, 899-910.	2.0	4
84	Experimental and Numerical Model Investigations of Oxygen-Enriched Characteristics in Air-Conditioned Rooms. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4733.	2.5	4
85	Hydrothermal conversion of anaerobic wastewater fed microalgae: effects of reaction temperature on products distribution and biocrude properties. <i>IET Renewable Power Generation</i> , 2019, 13, 2215-2220.	3.1	4
86	The application of an absorbent-amended microalgal-bacterial system for enhancing hydrothermal liquefaction wastewater treatment and resource recovery. <i>Journal of Applied Phycology</i> , 2021, 33, 79-90.	2.8	3
87	A GPU-accelerated particle-detection algorithm for real-time volumetric particle-tracking velocimetry under non-uniform illumination. <i>Measurement Science and Technology</i> , 2021, 32, 105304.	2.6	3
88	Laboratory testing of flat oval transitions to determine loss coefficients (RP-1606). <i>Science and Technology for the Built Environment</i> , 2015, 21, 386-395.	1.7	2
89	Water Footprint Assessment of Eggs in a Parent-Stock Layer Breeder Farm. <i>Water (Switzerland)</i> , 2019, 11, 2546.	2.7	2
90	Construction of a Novel Closed-Loop Livestock Waste Valorization Paradigm: Bridging Manure and Ammonia Gas via Phosphate-Doped Hydrochar. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 1732-1744.	7.6	2

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91	Hydrothermal processes for simultaneous bioenergy recovery and destruction of bioactive microconstituents from biosolids. Proceedings of the Water Environment Federation, 2017, 2017, 329-359.	0.0	1