Wenguang Zhou

List of Publications by Year
in descending order

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66	5,034	101384	102304
papers	citations	36 h-index	66 g-index

66	66	66	4405
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microalgae-based wastewater treatment for nutrients recovery: A review. Bioresource Technology, 2019, 291, 121934.	4.8	413
2	Biochar stability assessment methods: A review. Science of the Total Environment, 2019, 647, 210-222.	3.9	352
3	Local bioprospecting for high-lipid producing microalgal strains to be grown on concentrated municipal wastewater for biofuel production. Bioresource Technology, 2011, 102, 6909-6919.	4.8	344
4	Use of microalgae based technology for the removal of antibiotics from wastewater: A review. Chemosphere, 2020, 238, 124680.	4.2	267
5	Novel Fungal Pelletization-Assisted Technology for Algae Harvesting and Wastewater Treatment. Applied Biochemistry and Biotechnology, 2012, 167, 214-228.	1.4	207
6	A hetero-photoautotrophic two-stage cultivation process to improve wastewater nutrient removal and enhance algal lipid accumulation. Bioresource Technology, 2012, 110, 448-455.	4.8	203
7	Use of microalgae to recycle nutrients in aqueous phase derived from hydrothermal liquefaction process. Bioresource Technology, 2018, 256, 529-542.	4.8	198
8	Effect of wastewater-borne bacteria on algal growth and nutrients removal in wastewater-based algae cultivation system. Bioresource Technology, 2014, 167, 8-13.	4.8	166
9	Growing Chlorella sp. on meat processing wastewater for nutrient removal and biomass production. Bioresource Technology, 2015, 198, 189-197.	4.8	155
10	Filamentous fungi assisted bio-flocculation: A novel alternative technique for harvesting heterotrophic and autotrophic microalgal cells. Separation and Purification Technology, 2013, 107, 158-165.	3.9	154
11	Utilization of municipal solid and liquid wastes for bioenergy and bioproducts production. Bioresource Technology, 2016, 215, 163-172.	4.8	141
12	A Review on the Use of Microalgae for Sustainable Aquaculture. Applied Sciences (Switzerland), 2019, 9, 2377.	1.3	135
13	A review on pyrolysis of protein-rich biomass: Nitrogen transformation. Bioresource Technology, 2020, 315, 123801.	4.8	131
14	A comparative study between fungal pellet- and spore-assisted microalgae harvesting methods for algae bioflocculation. Bioresource Technology, 2018, 259, 181-190.	4.8	120
15	Simultaneous production of triacylglycerol and high-value carotenoids by the astaxanthin-producing oleaginous green microalga Chlorella zofingiensis. Bioresource Technology, 2016, 214, 319-327.	4.8	114
16	Beneficial synergistic effect on bio-oil production from co-liquefaction of sewage sludge and lignocellulosic biomass. Bioresource Technology, 2018, 251, 49-56.	4.8	106
17	Enhanced mixotrophic growth of microalga Chlorella sp. on pretreated swine manure for simultaneous biofuel feedstock production and nutrient removal. Bioresource Technology, 2012, 126, 71-79.	4.8	97
18	Mitigating ammonia nitrogen deficiency in dairy wastewaters for algae cultivation. Bioresource Technology, 2016, 201, 33-40.	4.8	93

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19	Mass Cultivation of Microalgae on Animal Wastewater: a Sequential Two-Stage Cultivation Process for Energy Crop and Omega-3-Rich Animal Feed Production. Applied Biochemistry and Biotechnology, 2012, 168, 348-363.	1.4	82
20	Development of an effective acidogenically digested swine manure-based algal system for improved wastewater treatment and biofuel and feed production. Applied Energy, 2013, 107, 255-263.	5.1	82
21	Machine learning prediction and optimization of bio-oil production from hydrothermal liquefaction of algae. Bioresource Technology, 2021, 342, 126011.	4.8	82
22	Co-culture of fungi-microalgae consortium for wastewater treatment: A review. Bioresource Technology, 2021, 330, 125008.	4.8	81
23	The migration and transformation behavior of heavy metals during co-liquefaction of municipal sewage sludge and lignocellulosic biomass. Bioresource Technology, 2018, 259, 156-163.	4.8	74
24	Aqueous phase recirculation during hydrothermal carbonization of microalgae and soybean straw: A comparison study. Bioresource Technology, 2020, 298, 122502.	4.8	72
25	Isolation of a bacterial strain, Acinetobacter sp. from centrate wastewater and study of its cooperation with algae in nutrients removal. Bioresource Technology, 2017, 235, 59-69.	4.8	69
26	Biochar stability assessment by incubation and modelling: Methods, drawbacks and recommendations. Science of the Total Environment, 2019, 664, 11-23.	3.9	69
27	Astaxanthin as a microalgal metabolite for aquaculture: A review on the synthetic mechanisms, production techniques, and practical application. Algal Research, 2021, 54, 102178.	2.4	64
28	The effect of aqueous phase recirculation on hydrothermal liquefaction/carbonization of biomass: A review. Bioresource Technology, 2020, 318, 124081.	4.8	58
29	Life cycle assessment of industrial scale production of spirulina tablets. Algal Research, 2018, 34, 154-163.	2.4	57
30	Microalgae screening under CO 2 stress: Growth and micro-nutrients removal efficiency. Journal of Photochemistry and Photobiology B: Biology, 2017, 170, 91-98.	1.7	52
31	A novel approach of using zeolite for ammonium toxicity mitigation and value-added Spirulina cultivation in wastewater. Bioresource Technology, 2019, 280, 127-135.	4.8	51
32	Co-cultivation of microalgae in aquaponic systems. Bioresource Technology, 2017, 245, 27-34.	4.8	49
33	Exploration of a mechanism for the production of highly unsaturated fatty acids in Scenedesmus sp. at low temperature grown on oil crop residue based medium. Bioresource Technology, 2017, 244, 542-551.	4.8	44
34	Chemical compositions and wastewater properties of aqueous phase (wastewater) produced from the hydrothermal treatment of wet biomass: A review. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2648-2659.	1.2	44
35	A state-of-the-art review on the synthetic mechanisms, production technologies, and practical application of polyunsaturated fatty acids from microalgae. Algal Research, 2021, 55, 102281.	2.4	43
36	The application of microalgae biomass and bio-products as aquafeed for aquaculture. Algal Research, 2021, 60, 102541.	2.4	43

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37	Trophic mode conversion and nitrogen deprivation of microalgae for high ammonium removal from synthetic wastewater. Bioresource Technology, 2015, 196, 668-676.	4.8	40
38	A novel algal biofilm photobioreactor for efficient hog manure wastewater utilization and treatment. Bioresource Technology, 2019, 292, 121925.	4.8	40
39	Microalgae biotechnology as a promising pathway to ecofriendly aquaculture: a stateâ€ofâ€theâ€art review. Journal of Chemical Technology and Biotechnology, 2021, 96, 837-852.	1.6	39
40	Cold Flow Properties of Biodiesel and the Improvement Methods: A Review. Energy & Fuels, 2020, 34, 10364-10383.	2.5	35
41	Mutual influence of light and CO2 on carbon sequestration via cultivating mixotrophic alga Auxenochlorella protothecoides UMN280 in an organic carbon-rich wastewater. Journal of Applied Phycology, 2012, 24, 1099-1105.	1.5	30
42	Isolation of a non-fermentative bacterium, Pseudomonas aeruginosa, using intracellular carbon for denitrification and phosphorus-accumulation and relevant metabolic mechanisms. Bioresource Technology, 2016, 211, 6-15.	4.8	29
43	Hydrothermal Carbonization of Microalgae-Fungal Pellets: Removal of Nutrients from the Aqueous Phase Fungi and Microalgae Cultivation. ACS Sustainable Chemistry and Engineering, 2020, 8, 16823-16832.	3.2	26
44	Co-liquefaction of Chlorella and soybean straw for production of bio-crude: Effects of reusing aqueous phase as the reaction medium. Science of the Total Environment, 2022, 820, 153348.	3.9	25
45	Application of a novel microalgaeâ€film based air purifier to improve air quality through oxygen production and fine particulates removal. Journal of Chemical Technology and Biotechnology, 2019, 94, 1057-1063.	1.6	22
46	Microalgae for nutrient recycling from food waste to aquaculture as feed substitute: a promising pathway to ecoâ€friendly development. Journal of Chemical Technology and Biotechnology, 2021, 96, 2496-2508.	1.6	22
47	Sandcastle worm-inspired phytic acid and magnesium oxychloride cement copolymerization for performance enhancement. Journal of Hazardous Materials, 2021, 404, 123992.	6.5	20
48	Toxicity alleviation for microalgae cultivation by cationic starch addition and ammonia stripping and study on the cost assessment. RSC Advances, 2019, 9, 38235-38245.	1.7	19
49	Lipid Production of Heterotrophic Chlorella sp. from Hydrolysate Mixtures of Lipid-Extracted Microalgal Biomass Residues and Molasses. Applied Biochemistry and Biotechnology, 2015, 177, 662-674.	1.4	17
50	Microalgae biotechnology as an attempt for bioregenerative life support systems: problems and prospects. Journal of Chemical Technology and Biotechnology, 2019, 94, 3039-3048.	1.6	17
51	The novel approach of using microbial system for sustainable development of aquaponics. Journal of Cleaner Production, 2019, 217, 573-575.	4.6	17
52	Metabolomic Evaluation of Scenedesmus sp. as a Feed Ingredient Revealed Dose-Dependent Effects on Redox Balance, Intermediary and Microbial Metabolism in a Mouse Model. Nutrients, 2019, 11, 1971.	1.7	15
53	Microbial communityâ€assisted water quality control and nutrients recovery: emerging technologies for the sustainable development of aquaponics. Journal of Chemical Technology and Biotechnology, 2019, 94, 2405-2411.	1.6	14
54	Replacement of feed by fresh microalgae as a novel technology to alleviate water deterioration in aquaculture. RSC Advances, 2020, 10, 20794-20800.	1.7	14

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55	Modelling the thresholds of nitrogen/phosphorus concentration and hydraulic retention time for bloom control in reclaimed water landscape. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	3.3	12
56	Application of nitrogen sufficiency conversion strategy for microalgae-based ammonium-rich wastewater treatment. Environmental Technology (United Kingdom), 2016, 37, 2638-2648.	1.2	11
57	Enhanced Harvesting of Chlorella vulgaris Using Combined Flocculants. Applied Biochemistry and Biotechnology, 2016, 180, 791-804.	1.4	11
58	Emerging trends of culturing microalgae for fishâ€•rearing environment protection. Journal of Chemical Technology and Biotechnology, 2021, 96, 31-37.	1.6	11
59	Enhancing Algal Yield and Nutrient Removal from Anaerobic Digestion Piggery Effluent by an Integrated Process-Optimization Strategy of Fungal Decolorization and Microalgae Cultivation. Applied Sciences (Switzerland), 2022, 12, 4741.	1.3	10
60	Microalgaâ€•and yeastâ€‘based astaxanthin production via nutrient recovery from wastewater for aquaculture practice: an emerging technology for sustainable development. Journal of Chemical Technology and Biotechnology, 2022, 97, 3035-3048.	1.6	7
61	Exploring an isolate of the oleaginous alga Micractinium inermum for lipid production: molecular characterization and physiochemical analysis under multiple growth conditions. Journal of Applied Phycology, 2019, 31, 1035-1046.	1.5	5
62	Application of microalgae biotechnology for the sustainable development of aquaculture. Advances in Bioenergy, 2021, , 117-163.	0.5	5
63	Advancements of application of microalgae biotechnology in the aquaculture water quality control. Advances in Bioenergy, 2022, , 167-210.	0.5	4
64	The Next Generation Feedstock of Biofuel: Jatropha or Chlorella as Assessed by Their Life-Cycle Inventories. Agriculture (Switzerland), 2014, 4, 217-230.	1.4	2
65	Determination and comparison of the activation energies of biodiesel microemulsion and biodiesel blends. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2019, , 1-10.	1.2	2
66	Effects of Algae Feeding on Mouse Metabolome. FASEB Journal, 2015, 29, 745.3.	0.2	1