

Zhiyou Wen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5331993/publications.pdf>

Version: 2024-02-01

81
papers

5,803
citations

76196

40
h-index

76769

74
g-index

83
all docs

83
docs citations

83
times ranked

5699
citing authors

#	ARTICLE	IF	CITATIONS
1	Production of Biodiesel Fuel from the Microalga <i>Schizochytrium limacinum</i> by Direct Transesterification of Algal Biomass. <i>Energy & Fuels</i> , 2009, 23, 5179-5183.	2.5	438
2	Enhancing enzymatic digestibility of switchgrass by microwave-assisted alkali pretreatment. <i>Biochemical Engineering Journal</i> , 2008, 38, 369-378.	1.8	380
3	Development of an attached microalgal growth system for biofuel production. <i>Applied Microbiology and Biotechnology</i> , 2010, 85, 525-534.	1.7	339
4	Producing Docosahexaenoic Acid (DHA)-Rich Algae from Biodiesel-Derived Crude Glycerol: Effects of Impurities on DHA Production and Algal Biomass Composition. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 3933-3939.	2.4	281
5	Use of microalgae based technology for the removal of antibiotics from wastewater: A review. <i>Chemosphere</i> , 2020, 238, 124680.	4.2	267
6	Development of a rotating algal biofilm growth system for attached microalgae growth with in situ biomass harvest. <i>Bioresource Technology</i> , 2013, 150, 195-201.	4.8	233
7	Use of microalgae to recycle nutrients in aqueous phase derived from hydrothermal liquefaction process. <i>Bioresource Technology</i> , 2018, 256, 529-542.	4.8	198
8	Continuous culture of the microalgae <i>Schizochytrium limacinum</i> on biodiesel-derived crude glycerol for producing docosahexaenoic acid. <i>Bioresource Technology</i> , 2011, 102, 88-93.	4.8	179
9	Biofilm-based algal cultivation systems. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 5781-5789.	1.7	179
10	Syngas fermentation of <i>Clostridium carboxidivoran</i> P7 in a hollow fiber membrane biofilm reactor: Evaluating the mass transfer coefficient and ethanol production performance. <i>Biochemical Engineering Journal</i> , 2014, 85, 21-29.	1.8	132
11	Yearlong evaluation of performance and durability of a pilot-scale Revolving Algal Biofilm (RAB) cultivation system. <i>Bioresource Technology</i> , 2014, 171, 50-58.	4.8	120
12	Microalgae flocculation: Impact of flocculant type, algae species and cell concentration. <i>Algal Research</i> , 2014, 3, 30-35.	2.4	119
13	Use of Biodiesel-Derived Crude Glycerol for Producing Eicosapentaenoic Acid (EPA) by the Fungus <i>Pythium irregulare</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 2739-2744.	2.4	116
14	Mortar crack repair using microbial induced calcite precipitation method. <i>Cement and Concrete Composites</i> , 2017, 83, 209-221.	4.6	115
15	Hybrid thermochemical processing: fermentation of pyrolysis-derived bio-oil. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 1519-1523.	1.7	101
16	Sustainable Biocement Production via Microbially Induced Calcium Carbonate Precipitation: Use of Limestone and Acetic Acid Derived from Pyrolysis of Lignocellulosic Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 5183-5190.	3.2	101
17	Effects of the surface physico-chemical properties and the surface textures on the initial colonization and the attached growth in algal biofilm. <i>Biotechnology for Biofuels</i> , 2016, 9, 38.	6.2	99
18	Enhancing anaerobic digestibility and phosphorus recovery of dairy manure through microwave-based thermochemical pretreatment. <i>Water Research</i> , 2009, 43, 3493-3502.	5.3	88

#	ARTICLE	IF	CITATIONS
19	Syngas fermentation by <i>Clostridium carboxidivorans</i> P7 in a horizontal rotating packed bed biofilm reactor with enhanced ethanol production. <i>Applied Energy</i> , 2017, 187, 585-594.	5.1	88
20	Deletion of meso-2,3-butanediol dehydrogenase gene bud C for enhanced D-2,3-butanediol production in <i>Bacillus licheniformis</i> . <i>Biotechnology for Biofuels</i> , 2014, 7, 16.	6.2	86
21	Evaluation of revolving algae biofilm reactors for nutrients and metals removal from sludge thickening supernatant in a municipal wastewater treatment facility. <i>Water Research</i> , 2018, 143, 467-478.	5.3	85
22	Enhancing mass transfer and ethanol production in syngas fermentation of <i>Clostridium carboxidivorans</i> P7 through a monolithic biofilm reactor. <i>Applied Energy</i> , 2014, 136, 68-76.	5.1	80
23	A thermochemical "biochemical hybrid processing of lignocellulosic biomass for producing fuels and chemicals. <i>Biotechnology Advances</i> , 2015, 33, 1799-1813.	6.0	80
24	Evaluating algal growth performance and water use efficiency of pilot-scale revolving algal biofilm (RAB) culture systems. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2040-2050.	1.7	79
25	Engineering <i>Bacillus licheniformis</i> for the production of meso-2,3-butanediol. <i>Biotechnology for Biofuels</i> , 2016, 9, 117.	6.2	79
26	Overliming detoxification of pyrolytic sugar syrup for direct fermentation of levoglucosan to ethanol. <i>Bioresource Technology</i> , 2013, 150, 220-227.	4.8	77
27	A novel approach to improve poly- γ -glutamic acid production by NADPH Regeneration in <i>Bacillus licheniformis</i> WX-02. <i>Scientific Reports</i> , 2017, 7, 43404.	1.6	73
28	Improvement of lichenysin production in <i>Bacillus licheniformis</i> by replacement of native promoter of lichenysin biosynthesis operon and medium optimization. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 8895-8903.	1.7	71
29	Recovery and Utilization of Lignin Monomers as Part of the Biorefinery Approach. <i>Energies</i> , 2016, 9, 808.	1.6	69
30	Treatment of acidic sulfate-containing wastewater using revolving algae biofilm reactors: Sulfur removal performance and microbial community characterization. <i>Bioresource Technology</i> , 2018, 264, 24-34.	4.8	67
31	Bioactive compounds and biological functions of sea cucumbers as potential functional foods. <i>Journal of Functional Foods</i> , 2018, 49, 73-84.	1.6	67
32	Utilization of acetic acid-rich pyrolytic bio-oil by microalga <i>Chlamydomonas reinhardtii</i> : Reducing bio-oil toxicity and enhancing algal toxicity tolerance. <i>Bioresource Technology</i> , 2013, 133, 500-506.	4.8	62
33	Enhanced production of poly- γ -glutamic acid by improving ATP supply in metabolically engineered <i>Bacillus licheniformis</i> . <i>Biotechnology and Bioengineering</i> , 2018, 115, 2541-2553.	1.7	62
34	Kinetic modeling of enzymatic hydrolysis of cellulose in differently pretreated fibers from dairy manure. <i>Biotechnology and Bioengineering</i> , 2008, 101, 441-451.	1.7	56
35	Evaluation of the Biogenic Amines Formation and Degradation Abilities of <i>Lactobacillus curvatus</i> From Chinese Bacon. <i>Frontiers in Microbiology</i> , 2018, 9, 1015.	1.5	52
36	Effective recovery of poly- ϵ -hydroxybutyrate (PHB) biopolymer from <i>Cupriavidus necator</i> using a novel and environmentally friendly solvent system. <i>Biotechnology Progress</i> , 2016, 32, 678-685.	1.3	50

#	ARTICLE	IF	CITATIONS
37	Production of biorenewable styrene: utilization of biomass-derived sugars and insights into toxicity. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2016, 43, 595-604.	1.4	50
38	Use of dry-milling derived thin stillage for producing eicosapentaenoic acid (EPA) by the fungus <i>Pythium irregulare</i> . <i>Bioresource Technology</i> , 2012, 111, 404-409.	4.8	48
39	Removal of total dissolved solids from wastewater using a revolving algal biofilm reactor. <i>Water Environment Research</i> , 2020, 92, 766-778.	1.3	45
40	Biochar as an Additive in Anaerobic Digestion of Municipal Sludge: Biochar Properties and Their Effects on the Digestion Performance. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6391-6401.	3.2	45
41	Evaluation of the Biogenic Amines and Microbial Contribution in Traditional Chinese Sausages. <i>Frontiers in Microbiology</i> , 2019, 10, 872.	1.5	42
42	Removal of pharmaceutical and personal care products (PPCPs) from waterbody using a revolving algal biofilm (RAB) reactor. <i>Journal of Hazardous Materials</i> , 2021, 406, 124284.	6.5	41
43	Anaerobic digestion of aqueous phase from pyrolysis of biomass: Reducing toxicity and improving microbial tolerance. <i>Bioresource Technology</i> , 2019, 292, 121976.	4.8	39
44	Composting clam processing wastes in a laboratory- and pilot-scale in-vessel system. <i>Waste Management</i> , 2009, 29, 180-185.	3.7	38
45	Enhancement of acetoin production from <i>Bacillus licheniformis</i> by 2,3-butanediol conversion strategy: Metabolic engineering and fermentation control. <i>Process Biochemistry</i> , 2017, 57, 35-42.	1.8	35
46	Use of wavelength-selective optical light filters for enhanced microalgal growth in different algal cultivation systems. <i>Bioresource Technology</i> , 2015, 179, 473-482.	4.8	34
47	Use of microalgae for mitigating ammonia and CO ₂ emissions from animal production operations – Evaluation of gas removal efficiency and algal biomass composition. <i>Algal Research</i> , 2015, 11, 204-210.	2.4	30
48	Rewiring glycerol metabolism for enhanced production of poly- β -glutamic acid in <i>Bacillus licheniformis</i> . <i>Biotechnology for Biofuels</i> , 2018, 11, 306.	6.2	30
49	High-level production of short branched-chain fatty acids from waste materials by genetically modified <i>Bacillus licheniformis</i> . <i>Bioresource Technology</i> , 2019, 271, 325-331.	4.8	30
50	Biogenic amines analysis and microbial contribution in traditional fermented food of Douchi. <i>Scientific Reports</i> , 2018, 8, 12567.	1.6	29
51	A novel bulk-gas-to-atomized-liquid reactor for enhanced mass transfer efficiency and its application to syngas fermentation. <i>Chemical Engineering Journal</i> , 2019, 370, 60-70.	6.6	29
52	An experimental investigation on the multiphase flows and turbulent mixing in a flat-panel photobioreactor for algae cultivation. <i>Journal of Applied Phycology</i> , 2014, 26, 2097-2107.	1.5	27
53	Alkaline treatment for detoxification of acetic acid-rich pyrolytic bio-oil for microalgae fermentation: Effects of alkaline species and the detoxification mechanisms. <i>Biomass and Bioenergy</i> , 2015, 80, 203-212.	2.9	26
54	Deciphering <i>Clostridium</i> metabolism and its responses to bioreactor mass transfer during syngas fermentation. <i>Scientific Reports</i> , 2017, 7, 10090.	1.6	26

#	ARTICLE	IF	CITATIONS
55	Nonfeed Application of Rendered Animal Proteins for Microbial Production of Eicosapentaenoic Acid by the Fungus <i>Pythium irregulare</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 11990-11996.	2.4	25
56	Improvement of glycerol catabolism in <i>Bacillus licheniformis</i> for production of poly- γ -glutamic acid. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 7155-7164.	1.7	24
57	Microalgae fermentation of acetic acid-rich pyrolytic bio-oil: Reducing bio-oil toxicity by alkali treatment. <i>Environmental Progress and Sustainable Energy</i> , 2013, 32, 955-961.	1.3	21
58	Metabolic engineering of <i>Bacillus amyloliquefaciens</i> for enhanced production of S-adenosylmethionine by coupling of an engineered S-adenosylmethionine pathway and the tricarboxylic acid cycle. <i>Biotechnology for Biofuels</i> , 2019, 12, 211.	6.2	20
59	Solid-State Anaerobic Digestion for Waste Management and Biogas Production. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2019, 169, 147-168.	0.6	20
60	A laboratory study of microalgae-based ammonia gas mitigation with potential application for improving air quality in animal production operations. <i>Journal of the Air and Waste Management Association</i> , 2014, 64, 330-339.	0.9	19
61	Promoting microbial utilization of phenolic substrates from bio-oil. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 1531-1545.	1.4	18
62	Removing high concentration of nickel (II) ions from synthetic wastewater by an indigenous microalgae consortium with a Revolving Algal Biofilm (RAB) system. <i>Algal Research</i> , 2021, 59, 102464.	2.4	18
63	Corn distillers dried grains with solubles: Production, properties, and potential uses. <i>Cereal Chemistry</i> , 2021, 98, 999-1019.	1.1	17
64	Identification of Soil Microbes Capable of Utilizing Cellobiosan. <i>PLoS ONE</i> , 2016, 11, e0149336.	1.1	16
65	Damage to the microbial cell membrane during pyrolytic sugar utilization and strategies for increasing resistance. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2017, 44, 1279-1292.	1.4	16
66	A lignin-first strategy to recover hydroxycinnamic acids and improve cellulosic ethanol production from corn stover. <i>Biomass and Bioenergy</i> , 2020, 138, 105579.	2.9	16
67	Comparison of product distribution, content and fermentability of biomass in a hybrid thermochemical/biological processing platform. <i>Biomass and Bioenergy</i> , 2019, 120, 107-116.	2.9	15
68	Efficient synthesis of 2-phenylethanol from L-phenylalanine by engineered <i>Bacillus licheniformis</i> using molasses as carbon source. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 7507-7520.	1.7	14
69	Biosynthesis of a Novel Bioactive Metabolite of Spermidine from <i>Bacillus amyloliquefaciens</i> : Gene Mining, Sequence Analysis, and Combined Expression. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 267-274.	2.4	14
70	Microalgae-based wastewater treatment and utilization of microalgae biomass. <i>Advances in Bioenergy</i> , 2021, 6, 165-198.	0.5	13
71	The non-nutritional performance characteristics of peptones made from rendered protein. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2010, 37, 95-102.	1.4	12
72	Utilization of pyrolytic substrate by microalga <i>Chlamydomonas reinhardtii</i> : cell membrane property change as a response of the substrate toxicity. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 4241-4251.	1.7	12

#	ARTICLE	IF	CITATIONS
73	Ultrasonic-assisted extraction of squalene and vitamin E based oil from <i>Zizyphi Spinosae Semen</i> and evaluation of its antioxidant activity. <i>Journal of Food Measurement and Characterization</i> , 2018, 12, 2844-2854.	1.6	12
74	Effects of light intensity on the production of phycoerythrin and polyunsaturated fatty acid by microalga <i>Rhodomonas salina</i> . <i>Algal Research</i> , 2021, 58, 102397.	2.4	12
75	The pharmacokinetics and tissue distribution of coumaroylspinosin in rat: A novel flavone C-glycoside derived from <i>Zizyphi Spinosi Semen</i> . <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017, 1046, 18-25.	1.2	10
76	Comprehensive determination of nine polyphenols in <i>Polygoni Avicularis Herba</i> with a new HPLC-DAD method and their correlation with the antioxidant activities. <i>Journal of Food Measurement and Characterization</i> , 2018, 12, 1593-1600.	1.6	10
77	Identification and Quantification of Triterpenoids in Lingzhi or Reishi Medicinal Mushroom, <i>Ganoderma lucidum</i> (Agaricomycetes), with HPLC-MS/MS Methods. <i>International Journal of Medicinal Mushrooms</i> , 2018, 20, 919-934.	0.9	9
78	A new HPLC-MS/MS method for investigating degradation kinetics of 6-feruloylspinosin and identifying its metabolites by rat intestinal bacterial flora <i>in vitro</i> . <i>Journal of Liquid Chromatography and Related Technologies</i> , 2016, 39, 724-729.	0.5	8
79	Techno-economic and environmental impact assessment of using corn stover biochar for manure derived renewable natural gas production. <i>Applied Energy</i> , 2022, 321, 119376.	5.1	7
80	The safety assessment of <i>Pythium irregulare</i> as a producer of biomass and eicosapentaenoic acid for use in dietary supplements and food ingredients. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 7579-7585.	1.7	5
81	Evaluation of the Performance of a Revolving Algae Biofilm System for Recovering Nitrogen and Phosphorus from Municipal Wastewater. <i>Proceedings of the Water Environment Federation</i> , 2016, 2988-3000.	0.0	2