Shih-Hsin Ho

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/89767/publications.pdf

Version: 2024-02-01

247 papers 20,000 citations

7069 78 h-index 128 g-index

249 all docs 249 docs citations

times ranked

249

14546 citing authors

#	Article	IF	CITATIONS
1	Effect of light intensity and nitrogen starvation on CO2 fixation and lipid/carbohydrate production of an indigenous microalga Scenedesmus obliquus CNW-N. Bioresource Technology, 2012, 113, 244-252.	4.8	645
2	A review on conventional and novel materials towards heavy metal adsorption in wastewater treatment application. Journal of Cleaner Production, 2021, 296, 126589.	4.6	628
3	Microalgae-based carbohydrates for biofuel production. Biochemical Engineering Journal, 2013, 78, 1-10.	1.8	563
4	Bioethanol production using carbohydrate-rich microalgae biomass as feedstock. Bioresource Technology, 2013, 135, 191-198.	4.8	538
5	Perspectives on microalgal CO2-emission mitigation systems â€" A review. Biotechnology Advances, 2011, 29, 189-198.	6.0	482
6	Progress in biomass torrefaction: Principles, applications and challenges. Progress in Energy and Combustion Science, 2021, 82, 100887.	15.8	429
7	Microalgae-based biorefinery – From biofuels to natural products. Bioresource Technology, 2013, 135, 166-174.	4.8	406
8	Activation of peroxymonosulfate/persulfate by nanomaterials for sulfate radical-based advanced oxidation technologies. Current Opinion in Chemical Engineering, 2018, 19, 51-58.	3.8	352
9	N-doped graphitic biochars from C-phycocyanin extracted Spirulina residue for catalytic persulfate activation toward nonradical disinfection and organic oxidation. Water Research, 2019, 159, 77-86.	5.3	347
10	Perspectives on the feasibility of using microalgae for industrial wastewater treatment. Bioresource Technology, 2016, 222, 485-497.	4.8	333
11	Mechanistic insight into reactivity of sulfate radical with aromatic contaminants through single-electron transfer pathway. Chemical Engineering Journal, 2017, 327, 1056-1065.	6.6	296
12	Scenedesmus obliquus CNW-N as a potential candidate for CO2 mitigation and biodiesel production. Bioresource Technology, 2010, 101, 8725-8730.	4.8	295
13	Perspectives on engineering strategies for improving biofuel production from microalgae — A critical review. Biotechnology Advances, 2014, 32, 1448-1459.	6.0	258
14	Current progress and future prospect of microalgal biomass harvest using various flocculation technologies. Bioresource Technology, 2015, 184, 251-257.	4.8	235
15	Multifaceted roles of microalgae in the application of wastewater biotreatment: A review. Environmental Pollution, 2021, 269, 116236.	3.7	231
16	A review on microalgae cultivation and harvesting, and their biomass extraction processing using ionic liquids. Bioengineered, 2020, 11 , $116-129$.	1.4	229
17	Potential utilization of bioproducts from microalgae for the quality enhancement of natural products. Bioresource Technology, 2020, 304, 122997.	4.8	224
18	High-efficiency removal of lead from wastewater by biochar derived from anaerobic digestion sludge. Bioresource Technology, 2017, 246, 142-149.	4.8	216

#	Article	IF	CITATIONS
19	Progress and challenges in photocatalytic disinfection of waterborne Viruses: A review to fill current knowledge gaps. Chemical Engineering Journal, 2019, 355, 399-415.	6.6	207
20	Highly efficient adsorption of dyes by biochar derived from pigments-extracted macroalgae pyrolyzed at different temperature. Bioresource Technology, 2018, 259, 104-110.	4.8	205
21	Cultivation of Chlorella vulgaris JSC-6 with swine wastewater for simultaneous nutrient/COD removal and carbohydrate production. Bioresource Technology, 2015, 198, 619-625.	4.8	195
22	Modeling and fault diagnosis of a photovoltaic system. Electric Power Systems Research, 2008, 78, 97-105.	2.1	190
23	Production, properties, and catalytic applications of sludge derived biochar for environmental remediation. Water Research, 2020, 187, 116390.	5.3	180
24	Magnetic Nanoscale Zerovalent Iron Assisted Biochar: Interfacial Chemical Behaviors and Heavy Metals Remediation Performance. ACS Sustainable Chemistry and Engineering, 2017, 5, 9673-9682.	3.2	176
25	Torrefaction performance and energy usage of biomass wastes and their correlations with torrefaction severity index. Applied Energy, 2018, 220, 598-604.	5.1	175
26	Characterization and optimization of carbohydrate production from an indigenous microalga Chlorella vulgaris FSP-E. Bioresource Technology, 2013, 135, 157-165.	4.8	171
27	Enhancing lutein productivity of an indigenous microalga Scenedesmus obliquus FSP-3 using light-related strategies. Bioresource Technology, 2014, 152, 275-282.	4.8	171
28	Enhanced hexavalent chromium removal performance and stabilization by magnetic iron nanoparticles assisted biochar in aqueous solution: Mechanisms and application potential. Chemosphere, 2018, 207, 50-59.	4.2	164
29	Biological remediation of acid mine drainage: Review of past trends and current outlook. Environmental Science and Ecotechnology, 2020, 2, 100024.	6.7	162
30	Advanced oxidation processes for water disinfection: Features, mechanisms and prospects. Chemical Engineering Journal, 2021, 409, 128207.	6.6	162
31	Revealing the role of adsorption in ciprofloxacin and sulfadiazine elimination routes in microalgae. Water Research, 2020, 172, 115475.	5 . 3	158
32	Plasmonic-based nanomaterials for environmental remediation. Applied Catalysis B: Environmental, 2018, 237, 721-741.	10.8	146
33	Adsorption of p-nitrophenols (PNP) on microalgal biochar: Analysis of high adsorption capacity and mechanism. Bioresource Technology, 2017, 244, 1456-1464.	4.8	144
34	Anisotropic plasmonic nanostructures for colorimetric sensing. Nano Today, 2020, 32, 100855.	6.2	143
35	Lead removal by a magnetic biochar derived from persulfate-ZVI treated sludge together with one-pot pyrolysis. Bioresource Technology, 2018, 247, 463-470.	4.8	138
36	Recent advances in nanoscale-metal assisted biochar derived from waste biomass used for heavy metals removal. Bioresource Technology, 2017, 246, 123-134.	4.8	134

#	Article	IF	CITATIONS
37	Technologies towards antibiotic resistance genes (ARGs) removal from aquatic environment: A critical review. Journal of Hazardous Materials, 2021, 411, 125148.	6.5	134
38	CO ₂ , NO _x and SO _x removal from flue gas via microalgae cultivation: A critical review. Biotechnology Journal, 2015, 10, 829-839.	1.8	132
39	Understanding Mechanisms of Synergy between Acidification and Ultrasound Treatments for Activated Sludge Dewatering: From Bench to Pilot–Scale Investigation. Environmental Science & Technology, 2018, 52, 4313-4323.	4.6	126
40	Bioprocess development on microalgae-based CO2 fixation and bioethanol production using Scenedesmus obliquus CNW-N. Bioresource Technology, 2013, 145, 142-149.	4.8	125
41	Phototrophic cultivation of a thermo-tolerant Desmodesmus sp. for lutein production: Effects of nitrate concentration, light intensity and fed-batch operation. Bioresource Technology, 2013, 144, 435-444.	4.8	124
42	Dynamic metabolic profiling together with transcription analysis reveals salinity-induced starch-to-lipid biosynthesis in alga Chlamydomonas sp. JSC4. Scientific Reports, 2017, 7, 45471.	1.6	121
43	Cultivating Chlorella sorokiniana AK-1 with swine wastewater for simultaneous wastewater treatment and algal biomass production. Bioresource Technology, 2020, 302, 122814.	4.8	120
44	Waste biorefineries â€" integrating anaerobic digestion and microalgae cultivation for bioenergy production. Current Opinion in Biotechnology, 2018, 50, 101-110.	3.3	119
45	Inactivation of pathogenic microorganisms by sulfate radical: Present and future. Chemical Engineering Journal, 2019, 371, 222-232.	6.6	118
46	Mechanistic insight into degradation of endocrine disrupting chemical by hydroxyl radical: An experimental and theoretical approach. Environmental Pollution, 2017, 231, 1446-1452.	3.7	117
47	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. Applied Catalysis B: Environmental, 2019, 256, 117795.	10.8	117
48	Characterization of flocculating agent from the self-flocculating microalga Scenedesmus obliquus AS-6-1 for efficient biomass harvest. Bioresource Technology, 2013, 145, 285-289.	4.8	114
49	Microalgal-biochar immobilized complex: A novel efficient biosorbent for cadmium removal from aqueous solution. Bioresource Technology, 2017, 244, 1031-1038.	4.8	110
50	Engineering strategies for improving the CO2 fixation and carbohydrate productivity of Scenedesmus obliquus CNW-N used for bioethanol fermentation. Bioresource Technology, 2013, 143, 163-171.	4.8	108
51	Role of biochar surface characteristics in the adsorption of aromatic compounds: Pore structure and functional groups. Chinese Chemical Letters, 2021, 32, 2939-2946.	4.8	107
52	Continuous cultivation of microalgae in photobioreactors as a source of renewable energy: Current status and future challenges. Renewable and Sustainable Energy Reviews, 2022, 154, 111852.	8.2	107
53	Graphitic biochar catalysts from anaerobic digestion sludge for nonradical degradation of micropollutants and disinfection. Chemical Engineering Journal, 2020, 384, 123244.	6.6	105
54	Progress and perspective on algal plastics – A critical review. Bioresource Technology, 2019, 289, 121700.	4.8	102

#	Article	IF	Citations
55	Optimizing biodiesel production in marine Chlamydomonassp. JSC4 through metabolic profiling and an innovative salinity-gradient strategy. Biotechnology for Biofuels, 2014, 7, 97.	6.2	101
56	Enhancing bio-butanol production from biomass of Chlorella vulgaris JSC-6 with sequential alkali pretreatment and acid hydrolysis. Bioresource Technology, 2016, 200, 557-564.	4.8	101
57	Combination of tumour-infarction therapy and chemotherapy via the co-delivery of doxorubicin and thrombin encapsulated in tumour-targeted nanoparticles. Nature Biomedical Engineering, 2020, 4, 732-742.	11.6	99
58	Current advances on fermentative biobutanol production using third generation feedstock. Biotechnology Advances, 2017, 35, 1049-1059.	6.0	98
59	Natural sponge-like wood-derived aerogel for solar-assisted adsorption and recovery of high-viscous crude oil. Chemical Engineering Journal, 2020, 400, 125865.	6.6	96
60	Nonradical oxidation in persulfate activation by graphene-like nanosheets (GNS): Differentiating the contributions of singlet oxygen (102) and sorption-dependent electron transfer. Chemical Engineering Journal, 2020, 393, 124725.	6.6	94
61	Engineering and modeling perspectives on photocatalytic reactors for water treatment. Water Research, 2021, 202, 117421.	5. 3	94
62	Converting nitrogen and phosphorus wastewater into bioenergy using microalgae-bacteria consortia: A critical review. Bioresource Technology, 2021, 342, 126056.	4.8	94
63	Oxidative torrefaction of biomass nutshells: Evaluations of energy efficiency as well as biochar transportation and storage. Applied Energy, 2019, 235, 428-441.	5.1	93
64	Characterization, extraction and purification of lutein produced by an indigenous microalga Scenedesmus obliquus CNW-N. Biochemical Engineering Journal, 2013, 78, 24-31.	1.8	92
65	Revolutions in algal biochar for different applications: State-of-the-art techniques and future scenarios. Chinese Chemical Letters, 2020, 31, 2591-2602.	4.8	91
66	Microalgae as a solution of third world energy crisis for biofuels production from wastewater toward carbon neutrality: An updated review. Chemosphere, 2022, 291, 132863.	4.2	89
67	Algae-mediated antibiotic wastewater treatment: A critical review. Environmental Science and Ecotechnology, 2022, 9, 100145.	6.7	89
68	Microalgae for biofuels, wastewater treatment and environmental monitoring. Environmental Chemistry Letters, 2021, 19, 2891-2904.	8.3	87
69	Polyethylenimine-modified chitosan materials for the recovery of La(III) from leachates of bauxite residue. Chemical Engineering Journal, 2020, 388, 124307.	6.6	86
70	Microalgal-based biochar in wastewater remediation: Its synthesis, characterization and applications. Environmental Research, 2022, 204, 111966.	3.7	86
71	Dispersed ozone flotation of Chlorella vulgaris. Bioresource Technology, 2010, 101, 9092-9096.	4.8	85
72	Establishment of an efficient genetic transformation system in Scenedesmus obliquus. Journal of Biotechnology, 2013, 163, 61-68.	1.9	85

#	Article	IF	CITATIONS
73	Glycogen production for biofuels by the euryhaline cyanobacteria Synechococcus sp. strain PCC 7002 from an oceanic environment. Biotechnology for Biofuels, 2014, 7, 88.	6.2	85
74	Improving dewaterability and filterability of waste activated sludge by electrochemical Fenton pretreatment. Chemical Engineering Journal, 2019, 362, 525-536.	6.6	85
75	Simultaneous Detection and Removal of Formaldehyde at Room Temperature: Janus Au@ZnO@ZIF-8 Nanoparticles. Nano-Micro Letters, 2018, 10, 4.	14.4	84
76	Electrophilicity index as a critical indicator for the biodegradation of the pharmaceuticals in aerobic activated sludge processes. Water Research, 2019, 160, 10-17.	5.3	84
77	Mechanistic Study on the Role of Soluble Microbial Products in Sulfate Radical-Mediated Degradation of Pharmaceuticals. Environmental Science & Environmental Environmen	4.6	83
78	Development of lipid productivities under different CO2 conditions of marine microalgae Chlamydomonas sp. JSC4. Bioresource Technology, 2014, 152, 247-252.	4.8	82
79	Nutrients and COD removal of swine wastewater with an isolated microalgal strain Neochloris aquatica CL-M1 accumulating high carbohydrate content used for biobutanol production. Bioresource Technology, 2017, 242, 7-14.	4.8	81
80	Biohydrogen production from microalgae for environmental sustainability. Chemosphere, 2022, 291, 132717.	4.2	81
81	Harvesting of Scenedesmus obliquus FSP-3 using dispersed ozone flotation. Bioresource Technology, 2011, 102, 82-87.	4.8	80
82	Generation of high-efficient biochar for dye adsorption using frass of yellow mealworms (larvae of) Tj ETQq0 0 (Production, 2019, 227, 33-47.	O rgBT /Ove 4.6	erlock 10 Tf 50 78
83	Sustainable biochar as an electrocatalysts for the oxygen reduction reaction in microbial fuel cells. Green Energy and Environment, 2021, 6, 644-659.	4.7	77
84	Magnetic biochar catalysts from anaerobic digested sludge: Production, application and environment impact. Environment International, 2019, 126, 302-308.	4.8	76
85	Characterization of biomass waste torrefaction under conventional and microwave heating. Bioresource Technology, 2018, 264, 7-16.	4.8	75
86	Adsorption behavior of Cr(VI) by magnetically modified Enteromorpha prolifera based biochar and the toxicity analysis. Journal of Hazardous Materials, 2020, 395, 122658.	6.5	75
87	Photoelectrochemical cell for simultaneous electricity generation and heavy metals recovery from wastewater. Journal of Hazardous Materials, 2017, 323, 681-689.	6.5	72
88	Optimizing real swine wastewater treatment efficiency and carbohydrate productivity of newly microalga Chlamydomonas sp. QWY37 used for cell-displayed bioethanol production. Bioresource Technology, 2020, 305, 123072.	4.8	70
89	CO2 mitigation and phycoremediation of industrial flue gas and wastewater via microalgae-bacteria consortium: Possibilities and challenges. Chemical Engineering Journal, 2021, 425, 131436.	6.6	70
90	Characterization of photosynthetic carbon dioxide fixation ability of indigenous Scenedesmus obliquus isolates. Biochemical Engineering Journal, 2010, 53, 57-62.	1.8	69

#	Article	lF	CITATIONS
91	Origins of boron catalysis in peroxymonosulfate activation and advanced oxidation. Journal of Materials Chemistry A, 2019, 7, 23904-23913.	5.2	67
92	Enhanced wood-derived photothermal evaporation system by in-situ incorporated lignin carbon quantum dots. Chemical Engineering Journal, 2021, 405, 126703.	6.6	66
93	Biotransformation of sulfamethoxazole by microalgae: Removal efficiency, pathways, and mechanisms. Water Research, 2022, 221, 118834.	5.3	66
94	Dually Prewetted Underwater Superoleophobic and under Oil Superhydrophobic Fabric for Successive Separation of Light Oil/Water/Heavy Oil Three-Phase Mixtures. ACS Applied Materials & lnterfaces, 2017, 9, 36368-36376.	4.0	65
95	Enhancing cell growth and lutein productivity of Desmodesmus sp. F51 by optimal utilization of inorganic carbon sources and ammonium salt. Bioresource Technology, 2017, 244, 664-671.	4.8	65
96	Exploring the high lipid production potential of a thermotolerant microalga using statistical optimization and semi-continuous cultivation. Bioresource Technology, 2014, 163, 128-135.	4.8	63
97	Feasibility of CO2 mitigation and carbohydrate production by microalga Scenedesmus obliquus CNW-N used for bioethanol fermentation under outdoor conditions: effects of seasonal changes. Biotechnology for Biofuels, 2017, 10, 27.	6.2	63
98	Elucidating sulfate radical-mediated disinfection profiles and mechanisms of Escherichia coli and Enterococcus faecalis in municipal wastewater. Water Research, 2020, 173, 115552.	5. 3	63
99	Sorption of ionized dyes on high-salinity microalgal residue derived biochar: Electron acceptor-donor and metal-organic bridging mechanisms. Journal of Hazardous Materials, 2020, 393, 122435.	6.5	62
100	Achieving high lipid productivity of a thermotolerant microalga Desmodesmus sp. F2 by optimizing environmental factors and nutrient conditions. Bioresource Technology, 2014, 156, 108-116.	4.8	61
101	Dynamic metabolic profiling of the marine microalga Chlamydomonas sp. JSC4 and enhancing its oil production by optimizing light intensity. Biotechnology for Biofuels, 2015, 8, 48.	6.2	61
102	A novel clean production approach to utilize crop waste residues as co-diet for mealworm (Tenebrio) Tj ETQq0 0 Pollution, 2019, 252, 1142-1153.	0 rgBT /O\ 3.7	verlock 10 Tf 61
103	Comparison and characterization of property variation of microalgal biomass with non-oxidative and oxidative torrefaction. Fuel, 2019, 246, 375-385.	3.4	61
104	Nanostructured manganese oxides: natural/artificial formation and their induced catalysis for wastewater remediation. Environmental Science: Nano, 2020, 7, 368-396.	2.2	61
105	Advancement of green technologies: A comprehensive review on the potential application of microalgae biomass. Chemosphere, 2021, 281, 130886.	4.2	61
106	Recent advances in yeast cell-surface display technologies for waste biorefineries. Bioresource Technology, 2016, 215, 324-333.	4.8	60
107	Dual purpose microalgae-based biorefinery for treating pharmaceuticals and personal care products (PPCPs) residues and biodiesel production. Science of the Total Environment, 2019, 688, 253-261.	3.9	60
108	Enhancing cadmium bioremediation by a complex of water-hyacinth derived pellets immobilized with Chlorella sp Bioresource Technology, 2018, 257, 157-163.	4.8	58

#	Article	IF	CITATIONS
109	Combining light strategies with recycled medium to enhance the economic feasibility of phycocyanin production with Spirulina platensis. Bioresource Technology, 2018, 247, 669-675.	4.8	58
110	Insights into the microalgae-bacteria consortia treating swine wastewater: Symbiotic mechanism and resistance genes analysis. Bioresource Technology, 2022, 349, 126892.	4.8	58
111	Production and optimization of high grade cellulase from waste date seeds by Cellulomonas uda NCIM 2353 for biohydrogen production. International Journal of Hydrogen Energy, 2020, 45, 22260-22270.	3.8	57
112	Microalgal Torrefaction for Solid Biofuel Production. Trends in Biotechnology, 2020, 38, 1023-1033.	4.9	57
113	Simultaneous enhancement of CO2 fixation and lutein production with thermo-tolerant Desmodesmus sp. F51 using a repeated fed-batch cultivation strategy. Biochemical Engineering Journal, 2014, 86, 33-40.	1.8	56
114	Combined cell-surface display- and secretion-based strategies for production of cellulosic ethanol with Saccharomyces cerevisiae. Biotechnology for Biofuels, 2015, 8, 162.	6.2	56
115	Application of biodegradable cellulose-based biomass materials in wastewater treatment. Environmental Pollution, 2021, 290, 118087.	3.7	56
116	Kinetics and mechanisms of the formation of chlorinated and oxygenated polycyclic aromatic hydrocarbons during chlorination. Chemical Engineering Journal, 2018, 351, 248-257.	6.6	54
117	Recent advances on food waste pretreatment technology via microalgae for source of polyhydroxyalkanoates. Journal of Environmental Management, 2021, 293, 112782.	3.8	54
118	Unraveling the effects of arbuscular mycorrhizal fungus on uptake, translocation, and distribution of cadmium in Phragmites australis (Cav.) Trin. ex Steud. Ecotoxicology and Environmental Safety, 2018, 149, 43-50.	2.9	53
119	Enhanced Directional Seawater Desalination Using a Structure-Guided Wood Aerogel. ACS Applied Materials & Samp; Interfaces, 2020, 12, 22387-22397.	4.0	53
120	Permeabilization of Haematococcus pluvialis and solid-liquid extraction of astaxanthin by CO2-based alkyl carbamate ionic liquids. Chemical Engineering Journal, 2021, 411, 128510.	6.6	53
121	Quantitation of protein phosphorylation in pregnant rat uteri using stable isotope dimethyl labeling coupled with IMAC. Proteomics, 2006, 6, 1722-1734.	1.3	52
122	Mechanism and experimental study on the photocatalytic performance of Ag/AgCl @ chiral TiO2 nanofibers photocatalyst: The impact of wastewater components. Journal of Hazardous Materials, 2015, 285, 277-284.	6.5	52
123	Optimizing real swine wastewater treatment with maximum carbohydrate production by a newly isolated indigenous microalga Parachlorella kessleri QWY28. Bioresource Technology, 2019, 289, 121702.	4.8	52
124	Recent advances in hydrogen production by thermo-catalytic conversion of biomass. International Journal of Hydrogen Energy, 2019, 44, 14266-14278.	3.8	52
125	Enhancing the production of eicosapentaenoic acid (EPA) from Nannochloropsis oceanica CY2 using innovative photobioreactors with optimal light source arrangements. Bioresource Technology, 2015, 191, 407-413.	4.8	51
126	Converting oils high in phospholipids to biodiesel using immobilized Aspergillus oryzae whole-cell biocatalysts expressing Fusarium heterosporum lipase. Biochemical Engineering Journal, 2016, 105, 10-15.	1.8	51

#	Article	IF	CITATIONS
127	Enhancing lutein productivity of Chlamydomonas sp. via high-intensity light exposure with corresponding carotenogenic genes expression profiles. Bioresource Technology, 2019, 275, 416-420.	4.8	51
128	How does ionic liquid play a role in sustainability of biomass processing?. Journal of Cleaner Production, 2021, 284, 124772.	4.6	51
129	New concept in swine wastewater treatment: development of a self-sustaining synergetic microalgae-bacteria symbiosis (ABS) system to achieve environmental sustainability. Journal of Hazardous Materials, 2021, 418, 126264.	6.5	51
130	Bioconversion of mature landfill leachate into biohydrogen and volatile fatty acids via microalgal photosynthesis together with dark fermentation. Energy Conversion and Management, 2022, 252, 115035.	4.4	51
131	Effects of nitrogen source availability and bioreactor operating strategies on lutein production with Scenedesmus obliquus FSP-3. Bioresource Technology, 2015, 184, 131-138.	4.8	50
132	Lipase cocktail for efficient conversion of oils containing phospholipids to biodiesel. Bioresource Technology, 2016, 211, 224-230.	4.8	50
133	Evolutionary engineering of salt-resistant Chlamydomonas sp. strains reveals salinity stress-activated starch-to-lipid biosynthesis switching. Bioresource Technology, 2017, 245, 1484-1490.	4.8	50
134	Ag/AgCl@helical chiral TiO2 nanofibers as a visible-light driven plasmon photocatalyst. Chemical Communications, 2013, 49, 10367-10369.	2.2	49
135	Effect of plant species compositions on performance of lab-scale constructed wetland through investigating photosynthesis and microbial communities. Bioresource Technology, 2017, 229, 196-203.	4.8	49
136	Tailoring a novel hierarchical cheese-like porous biochar from algae residue to boost sulfathiazole removal. Environmental Science and Ecotechnology, 2022, 10, 100168.	6.7	49
137	Photobioreactor strategies for improving the CO2 fixation efficiency of indigenous Scenedesmus obliquus CNW-N: Statistical optimization of CO2 feeding, illumination, and operation mode. Bioresource Technology, 2012, 105, 106-113.	4.8	48
138	Engineering of a novel cellulose-adherent cellulolytic Saccharomyces cerevisiae for cellulosic biofuel production. Scientific Reports, 2016, 6, 24550.	1.6	48
139	A dually prewetted membrane for continuous filtration of water-in-light oil, oil-in-water, and water-in-heavy oil multiphase emulsion mixtures. Journal of Materials Chemistry A, 2019, 7, 11305-11313.	5. 2	47
140	Smart microalgae farming with internet-of-things for sustainable agriculture. Biotechnology Advances, 2022, 57, 107931.	6.0	47
141	Enhancing lutein production with Chlorella sorokiniana Mb-1 by optimizing acetate and nitrate concentrations under mixotrophic growth. Journal of the Taiwan Institute of Chemical Engineers, 2017, 79, 88-96.	2.7	45
142	A sustainable solution to plastics pollution: An eco-friendly bioplastic film production from high-salt contained Spirulina sp. residues. Journal of Hazardous Materials, 2020, 388, 121773.	6.5	45
143	Improvement of ethanol production from crystalline cellulose via optimizing cellulase ratios in cellulolytic <i>Saccharomyces cerevisiae </i> i> Biotechnology and Bioengineering, 2017, 114, 1201-1207.	1.7	44
144	Designing and characterizing a multi-stepped ultrasonic horn for enhanced sonochemical performance. Ultrasonics Sonochemistry, 2015, 27, 325-333.	3.8	43

#	Article	IF	Citations
145	Optimizing the production of short and medium chain fatty acids (SCFAs and MCFAs) from waste activated sludge using different alkyl polyglucose surfactants, through bacterial metabolic analysis. Journal of Hazardous Materials, 2020, 384, 121384.	6.5	42
146	Graphitic nitride-catalyzed advanced oxidation processes (AOPs) for landfill leachate treatment: A mini review. Chemical Engineering Research and Design, 2020, 139, 230-240.	2.7	42
147	Disruption of thermo-tolerant Desmodesmus sp. F51 in high pressure homogenization as a prelude to carotenoids extraction. Biochemical Engineering Journal, 2016, 109, 243-251.	1.8	40
148	Integration of sludge digestion and microalgae cultivation for enhancing bioenergy and biorefinery. Renewable and Sustainable Energy Reviews, 2018, 96, 76-90.	8.2	40
149	Adaptive response of arbuscular mycorrhizal symbiosis to accumulation of elements and translocation in Phragmites australis affected by cadmium stress. Journal of Environmental Management, 2017, 197, 448-455.	3.8	39
150	Improving polyglucan production in cyanobacteria and microalgae via cultivation design and metabolic engineering. Biotechnology Journal, 2015, 10, 886-898.	1.8	38
151	Spirulina platensis based biorefinery for the production of value-added products for food and pharmaceutical applications. Bioresource Technology, 2019, 289, 121727.	4.8	38
152	Comprehensive Utilization of Marine Microalgae for Enhanced Co-Production of Multiple Compounds. Marine Drugs, 2020, 18, 467.	2.2	38
153	Co-production of lutein and fatty acid in microalga Chlamydomonas sp. JSC4 in response to different temperatures with gene expression profiles. Algal Research, 2020, 47, 101821.	2.4	38
154	Lignocellulosic saccharification by a newly isolated bacterium, Ruminiclostridium thermocellum M3 and cellular cellulase activities for high ratio of glucose to cellobiose. Biotechnology for Biofuels, 2016, 9, 172.	6.2	37
155	Rapid in vivo lipid/carbohydrate quantification of single microalgal cell by Raman spectral imaging to reveal salinity-induced starch-to-lipid shift. Biotechnology for Biofuels, 2017, 10, 9.	6.2	37
156	Photobioreactors., 2017,, 313-352.		37
157	Algae-mediated biosystems for metallic nanoparticle production: From synthetic mechanisms to aquatic environmental applications. Journal of Hazardous Materials, 2021, 420, 126625.	6.5	37
158	Recent advances of algae-bacteria consortia in aquatic remediation. Critical Reviews in Environmental Science and Technology, 2023, 53, 315-339.	6.6	37
159	Bioprocess operation strategies with mixotrophy/photoinduction to enhance lutein production of microalga Chlorella sorokiniana FZU60. Bioresource Technology, 2019, 290, 121798.	4.8	36
160	Development of a facile and bi-functional superhydrophobic suspension and its applications in superhydrophobic coatings and aerogels in high-efficiency oil–water separation. Green Chemistry, 2020, 22, 7424-7434.	4.6	36
161	Role of Rhizophagus irregularis in alleviating cadmium toxicity via improving the growth, micro- and macroelements uptake in Phragmites australis. Environmental Science and Pollution Research, 2017, 24, 3593-3607.	2.7	35
162	The critical utilization of active heterotrophic microalgae for bioremoval of Cr(VI) in organics co-contaminated wastewater. Chemosphere, 2019, 228, 536-544.	4.2	35

#	Article	IF	CITATIONS
163	Two-stage bioprocess for hyper-production of lutein from microalga Chlorella sorokiniana FZU60: Effects of temperature, light intensity, and operation strategies. Algal Research, 2020, 52, 102119.	2.4	35
164	Strategies related to light quality and temperature to improve lutein production of marine microalga Chlamydomonas sp Bioprocess and Biosystems Engineering, 2019, 42, 435-443.	1.7	33
165	Pilot-scale cultivation of Chlorella sorokiniana FZU60 with a mixotrophy/photoautotrophy two-stage strategy for efficient lutein production. Bioresource Technology, 2020, 314, 123767.	4.8	33
166	Modeling of quantitative effects of water components on the photocatalytic degradation of 17α-ethynylestradiol in a modified flat plate serpentine reactor. Journal of Hazardous Materials, 2013, 254-255, 64-71.	6.5	32
167	Enhancing production of lutein by a mixotrophic cultivation system using microalga Scenedesmus obliquus CWL-1. Bioresource Technology, 2019, 291, 121891.	4.8	32
168	Inhibition kinetics of ammonium oxidizing bacteria under Cu(II) and As(III) stresses during the nitritation process. Chemical Engineering Journal, 2018, 352, 811-817.	6.6	30
169	Synchronous removal of emulsions and soluble organic contaminants via a microalgae-based membrane system: performance and mechanisms. Water Research, 2021, 206, 117741.	5.3	30
170	Characterization and quantification of chromate adsorption by layered porous iron oxyhydroxide: An experimental and theoretical study. Journal of Hazardous Materials, 2017, 338, 472-481.	6.5	29
171	Distribution of flame retardants in smartphones and identification of current-use organic chemicals including three novel aryl organophosphate esters. Science of the Total Environment, 2019, 693, 133654.	3.9	29
172	Co-culture of Chlorella and Scenedesmus could enhance total lipid production under bacteria quorum sensing molecule stress. Journal of Water Process Engineering, 2021, 39, 101739.	2.6	29
173	Effective purification of oily wastewater using lignocellulosic biomass: A review. Chinese Chemical Letters, 2022, 33, 2807-2816.	4.8	29
174	Proteomic analysis of proteins from bronchoalveolar lavage fluid reveals the action mechanism of ultrafine carbon blackâ€induced lung injury in mice. Proteomics, 2007, 7, 4388-4397.	1.3	28
175	Improving carbohydrate production of <i>Chlorella sorokiniana</i> NIESâ€2168 through semiâ€continuous process coupled with mixotrophic cultivation. Biotechnology Journal, 2016, 11, 1072-1081.	1.8	28
176	Fermentation of pigment-extracted microalgal residue using yeast cell-surface display: direct high-density ethanol production with competitive life cycle impacts. Green Chemistry, 2020, 22, 153-162.	4.6	27
177	Effect of torrefaction on the structure and reactivity of rice straw as well as life cycle assessment of torrefaction process. Energy, 2022, 240, 122470.	4.5	27
178	Modulating the tumor microenvironment with new therapeutic nanoparticles: A promising paradigm for tumor treatment. Medicinal Research Reviews, 2020, 40, 1084-1102.	5.0	26
179	Simultaneous photocatalytic degradation of ibuprofen and H2 evolution over Au/sheaf-like TiO2 mesocrystals. Chemosphere, 2020, 261, 127759.	4.2	26
180	Cell growth and lipid accumulation of a microalgal mutant Scenedesmus sp. Z-4 by combining light/dark cycle with temperature variation. Biotechnology for Biofuels, 2017, 10, 260.	6.2	25

#	Article	IF	Citations
181	How to enhance carbon capture by evolution of microalgal photosynthesis?. Separation and Purification Technology, 2022, 291, 120951.	3.9	24
182	Mechanisms of simultaneous hydrogen production and estrogenic activity removal from secondary effluent though solar photocatalysis. Water Research, 2013, 47, 3173-3182.	5.3	23
183	Ag/ZnO hollow sphere composites: reusable photocatalyst for photocatalytic degradation of 171±-ethinylestradiol. Environmental Science and Pollution Research, 2014, 21, 5177-5186.	2.7	23
184	Manipulating Nutritional Conditions and Salinityâ€Gradient Stress for Enhanced Lutein Production in Marine Microalga <i>Chlamydomonas</i> sp Biotechnology Journal, 2019, 14, e1800380.	1.8	23
185	Immobilization of Hg(II) on high-salinity Spirulina residue-induced biochar from aqueous solutions: Sorption and transformation mechanisms by the dual-mode isotherms. Environmental Pollution, 2020, 265, 115087.	3.7	23
186	Selection of elite microalgae for biodiesel production in tropical conditions using a standardized platform. Bioresource Technology, 2013, 147, 135-142.	4.8	22
187	Facile and rapid separation of oil from emulsions by hydrophobic and lipophilic Fe3O4/sawdust composites. Chemical Engineering Research and Design, 2018, 129, 102-110.	2.7	22
188	Wastewater treatment nexus: Carbon nanomaterials towards potential aquatic ecotoxicity. Journal of Hazardous Materials, 2021, 417, 125959.	6.5	22
189	Bimetallic nitrogen-doped porous carbon derived from ZIF-L&FeTPP@ZIF-8 as electrocatalysis and application for antibiotic wastewater treatment. Separation and Purification Technology, 2021, 276, 119259.	3.9	22
190	Exploring the inhibitory characteristics of acid hydrolysates upon butanol fermentation: A toxicological assessment. Bioresource Technology, 2015, 198, 571-576.	4.8	20
191	Migration of Iron Oxide Nanoparticle through a Silica Shell by the Redox-Buffering Effect. ACS Nano, 2018, 12, 10949-10956.	7.3	20
192	Comparative indexes, fuel characterization and thermogravimetric-Fourier transform infrared spectrometer-mass spectrogram (TG-FTIR-MS) analysis of microalga Nannochloropsis Oceanica under oxidative and inert torrefaction. Energy, 2021, 230, 120824.	4.5	20
193	Salinity-induced microalgal-based mariculture wastewater treatment combined with biodiesel production. Bioresource Technology, 2021, 340, 125638.	4.8	20
194	Conversion of Chlamydomonas sp. JSC4 lipids to biodiesel using Fusarium heterosporum lipase-expressing Aspergillus oryzae whole-cell as biocatalyst. Algal Research, 2017, 28, 16-23.	2.4	19
195	Preparation of a new superhydrophobic/superoleophilic corn straw fiber used as an oil absorbent for selective absorption of oil from water. Bioresources and Bioprocessing, 2018, 5, .	2.0	19
196	Attached culture of Chlamydomonas sp. JSC4 for biofilm production and TN/TP/Cu(II) removal. Biochemical Engineering Journal, 2019, 141, 1-9.	1.8	19
197	Computational simulation associated with biological effects of alkyl organophosphate flame retardants with different carbon chain lengths on Chlorella pyrenoidosa. Chemosphere, 2021, 263, 127997.	4.2	19
198	Superhydrophobic/superoleophilic corn straw as an eco-friendly oil sorbent for the removal of spilled oil. Clean Technologies and Environmental Policy, 2021, 23, 145-152.	2.1	19

#	Article	IF	Citations
199	Simultaneous implementation of sludge dewatering and solid biofuel production by microwave torrefaction. Environmental Research, 2021, 195, 110775.	3.7	19
200	Enhancing the oil extraction efficiency of Chlorella vulgaris with cell-disruptive pretreatment using active extracellular substances from Bacillus thuringiensis ITRI-G1. Biochemical Engineering Journal, 2015, 101, 185-190.	1.8	18
201	Enhancing lipid production in attached culture of a thermotolerant microalga Desmodesmus sp. F51 using light-related strategies. Biochemical Engineering Journal, 2018, 129, 119-128.	1.8	18
202	Using a trait-based approach to optimize mixotrophic growth of the red microalga Porphyridium purpureum towards fatty acid production. Biotechnology for Biofuels, 2018, 11, 273.	6.2	18
203	Biorefining and the Functional Properties of Proteins from Lipid and Pigment Extract Residue of Chlorella pyrenoidosa. Marine Drugs, 2019, 17, 454.	2.2	18
204	Applying a modified Donnan model to describe the surface complexation of chromate to iron oxyhydroxide agglomerates with heteromorphous pores. Journal of Colloid and Interface Science, 2017, 506, 66-75.	5.0	17
205	Treatment for Landfill Leachate via Physicochemical Approaches. Chemical and Biochemical Engineering Quarterly, 2020, 34, 1-24.	0.5	17
206	Simultaneous separation of multiphase emulsion mixture and catalytic degradation of BPA via microalgae residue membranes. Chemical Engineering Journal, 2020, 393, 124750.	6.6	17
207	Exploring the potential of a newly constructed manganese peroxidase-producing yeast consortium for tolerating lignin degradation inhibitors while simultaneously decolorizing and detoxifying textile azo dye wastewater. Bioresource Technology, 2022, 351, 126861.	4.8	17
208	Optimizing and understanding the pressurized vertical electro-osmotic dewatering of activated sludge. Chemical Engineering Research and Design, 2020, 140, 392-402.	2.7	16
209	Rational design of Spirulina residue-derived graphene oxide as an efficient metal-free catalyst for sulfathiazole removal. Separation and Purification Technology, 2022, 290, 120862.	3.9	16
210	Genome sequencing, assembly, and annotation of the self-flocculating microalga Scenedesmus obliquus AS-6-11. BMC Genomics, 2020, 21, 743.	1.2	15
211	Effects of Biochar on Microalgal Growth: Difference between Dissolved and Undissolved Fractions. ACS Sustainable Chemistry and Engineering, 2020, 8, 9156-9164.	3.2	15
212	Structure-mechanism relationship for enhancing photocatalytic H2 production. International Journal of Hydrogen Energy, 2022, 47, 37517-37530.	3.8	15
213	Ferrofluid-assisted rapid and directional harvesting of marine microalgal Chlorella sp. used for biodiesel production. Bioresource Technology, 2017, 244, 1337-1340.	4.8	14
214	Development and modeling of a flat plate serpentine reactor for photocatalytic degradation of 17-ethinylestradiol. Environmental Science and Pollution Research, 2013, 20, 2321-2329.	2.7	13
215	Enhanced thermal conductivity of waste sawdust-based composite phase change materials with expanded graphite for thermal energy storage. Bioresources and Bioprocessing, 2017, 4, .	2.0	13
216	Conceptual design of a hybrid thin layer cascade photobioreactor for microalgal biodiesel synthesis. International Journal of Energy Research, 2020, 44, 9757-9771.	2.2	13

#	Article	IF	CITATIONS
217	Aliphatic Group-Tethered Iridium Complex as a Theranostic Agent against Malignant Melanoma Metastasis. ACS Applied Bio Materials, 2020, 3, 2017-2027.	2.3	13
218	Synchronous removal of emulsions and organic dye over palladium nanoparticles anchored cellulose-based membrane. Journal of Environmental Management, 2021, 288, 112402.	3.8	13
219	Emerging biological wastewater treatment using microalgal-bacterial granules: A review. Bioresource Technology, 2022, 351, 127089.	4.8	13
220	Metabolomic assessment of arsenite toxicity and novel biomarker discovery in early development of zebrafish embryos. Toxicology Letters, 2018, 290, 116-122.	0.4	12
221	Induced cultivation pattern enhanced the phycoerythrin production in red alga Porphyridium purpureum. Bioprocess and Biosystems Engineering, 2020, 43, 347-355.	1.7	12
222	An overlooked effect induced by surface modification: different molecular response of <i>Chlorella pyrenoidosa</i> to graphitized and oxidized nanodiamonds. Environmental Science: Nano, 2020, 7, 2302-2312.	2.2	12
223	Enhancement of co-production of lutein and protein in Chlorella sorokiniana FZU60 using different bioprocess operation strategies. Bioresources and Bioprocessing, 2021, 8, .	2.0	12
224	Enhancing astaxanthin production in Haematococcus pluvialis QLD by a pH steady NaHCO3-CO2-C/NH4Cl-N culture system. Algal Research, 2022, 64, 102697.	2.4	12
225	Oxidative torrefaction of microalga Nannochloropsis Oceanica activated by potassium carbonate for solid biofuel production. Environmental Research, 2022, 212, 113389.	3.7	12
226	Phytotoxic effect and molecular mechanism induced by nanodiamonds towards aquatic Chlorella pyrenoidosa by integrating regular and transcriptomic analyses. Chemosphere, 2021, 270, 129473.	4.2	11
227	Cationic polyacrylamide (CPAM) enhanced pressurized vertical electro-osmotic dewatering of activated sludge. Science of the Total Environment, 2022, 818, 151787.	3.9	11
228	Adsorption of sulfamethoxazole via biochar: The key role of characteristic components derived from different growth stage of microalgae. Environmental Research, 2022, 210, 112965.	3.7	11
229	Oxidative torrefaction performance of microalga Nannochloropsis Oceanica towards an upgraded microalgal solid biofuel. Journal of Biotechnology, 2021, 338, 81-90.	1.9	10
230	Promotion effects of ultrasound on sludge biodegradation by thermophilic bacteria Geobacillus stearothermophilus TP-12. Biochemical Engineering Journal, 2016, 105, 281-287.	1.8	9
231	Versatile strategy of sulfanilamide antibiotics removal via microalgal biochar: Role of oxygen-enriched functional groups. Chemosphere, 2022, 304, 135244.	4.2	9
232	Detecting Ferric Iron by Microalgal Residue-Derived Fluorescent Nanosensor with an Advanced Kinetic Model. IScience, 2020, 23, 101174.	1.9	8
233	Role of nitrogen transport for efficient energy conversion potential in low carbon and high nitrogen/phosphorus wastewater by microalgal-bacterial system. Bioresource Technology, 2022, 351, 127019.	4.8	8
234	Enhancing Biohydrogen Production from Chlorella Vulgaris FSP-E Under Mixotrophic Cultivation Conditions. Energy Procedia, 2014, 61, 870-873.	1.8	7

#	Article	IF	Citations
235	Fabrication of Green Superhydrophobic/Superoleophilic Wood Flour for Efficient Oil Separation from Water. Processes, 2019, 7, 414.	1.3	7
236	Algal culture and biofuel production using wastewater., 2019,, 167-198.		7
237	Evaluation of genes involved in oxidative phosphorylation in yeast by developing a simple and rapid method to measure mitochondrial ATP synthetic activity. Microbial Cell Factories, 2015, 14, 56.	1.9	5
238	Strategies for achieving highâ€level and stable production of toxic Streptomyces phospholipase D in Escherichia coli. Journal of Chemical Technology and Biotechnology, 2019, 94, 1220-1229.	1.6	5
239	Unraveling hydrogen production potential by glucose and xylose coâ€fermentation of Thermoanaerobacterium thermosaccharolyticum W16 and its metabolisms through transcriptomic sequencing. International Journal of Energy Research, 2020, 44, 9617-9628.	2.2	5
240	Revealing the role of nitrate on sulfide removal coupled with bioenergy production in Chlamydomonas sp. Tai-03: Metabolic pathways and mechanisms. Journal of Hazardous Materials, 2020, 399, 123115.	6.5	5
241	Simultaneous blocking of the panâ€RAF and S100B pathways as a synergistic therapeutic strategy against malignant melanoma. Journal of Cellular and Molecular Medicine, 2021, 25, 1972-1981.	1.6	5
242	Elemental loss, enrichment, transformation and life cycle assessment of torrefied corncob. Energy, 2022, 242, 123019.	4.5	4
243	Improving reverse osmosis concentrate treatment and nutrients conversion to Chlorella vulgaris bioenergy assisted with granular activated carbon. Science of the Total Environment, 2022, 815, 152663.	3.9	4
244	Molecular mechanism of arachidonic acid biosynthesis in Porphyridium purpureum promoted by nitrogen limitation. Bioprocess and Biosystems Engineering, 2021, 44, 1491-1499.	1.7	3
245	Green Energy Technology. Energies, 2021, 14, 6842.	1.6	3
246	Rational Design OfÂSpirulina Residue-Derived GrapheneÂOxideÂAsÂAn Efficient Metal-FreeÂCatalystÂFor Sulfathiazole Removal. SSRN Electronic Journal, 0, , .	0.4	0
247	Insights into the Microalgae-Bacteria Consortia (Mbc) Treating Swine Wastewater with Low C/N Ratio: Symbiotic Mechanism and Resistance Genes Analysis. SSRN Electronic Journal, 0, , .	0.4	0