

Derek Chan Juinn Chieh

List of Publications by Year in descending order

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58
papers

2,317
citations

304368

22
h-index

214527

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59
all docs

59
docs citations

59
times ranked

2671
citing authors

#	ARTICLE	IF	CITATIONS
1	Microalgae as a sustainable energy source for biodiesel production: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 584-593.	8.2	857
2	Rapid Magnetophoretic Separation of Microalgae. <i>Small</i> , 2012, 8, 1683-1692.	5.2	154
3	Magnetophoretic removal of microalgae from fishpond water: Feasibility of high gradient and low gradient magnetic separation. <i>Chemical Engineering Journal</i> , 2012, 211-212, 22-30.	6.6	92
4	Crossflow microfiltration of microalgae biomass for biofuel production. <i>Desalination</i> , 2012, 302, 65-70.	4.0	92
5	Emulsion liquid membrane for cadmium removal: Studies on emulsion diameter and stability. <i>Desalination</i> , 2012, 287, 30-34.	4.0	86
6	Magnetophoretic separation of microalgae: the role of nanoparticles and polymer binder in harvesting biofuel. <i>RSC Advances</i> , 2014, 4, 4114-4121.	1.7	71
7	Wastewater phytoremediation by <i>Salvinia molesta</i> . <i>Journal of Water Process Engineering</i> , 2017, 15, 107-115.	2.6	67
8	Comparison of harvesting methods for microalgae <i>Chlorella</i> sp. and its potential use as a biodiesel feedstock. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 2244-2253.	1.2	63
9	Synergistic effect of pretreatment and fermentation process on carbohydrate-rich <i>Scenedesmus dimorphus</i> for bioethanol production. <i>Energy Conversion and Management</i> , 2017, 141, 410-419.	4.4	61
10	Sustainable production of bioethanol using lipid-extracted biomass from <i>Scenedesmus dimorphus</i> . <i>Journal of Cleaner Production</i> , 2016, 130, 68-73.	4.6	60
11	Physiology of microalgal biofilm: a review on prediction of adhesion on substrates. <i>Bioengineered</i> , 2021, 12, 7577-7599.	1.4	57
12	The role of particle-to-cell interactions in dictating nanoparticle aided magnetophoretic separation of microalgal cells. <i>Nanoscale</i> , 2014, 6, 12838-12848.	2.8	49
13	Harvesting of microalgal biomass using MF membrane: Kinetic model, CDE model and extended DLVO theory. <i>Journal of Membrane Science</i> , 2013, 446, 341-349.	4.1	40
14	Magnetophoretic separation of <i>Chlorella</i> sp.: Role of cationic polymer binder. <i>Chemical Engineering Research and Design</i> , 2014, 92, 515-521.	2.7	39
15	A methodological review on the characterization of microalgal biofilm and its extracellular polymeric substances. <i>Journal of Applied Microbiology</i> , 2022, 132, 3490-3514.	1.4	38
16	Superhydrophobic coating of silica with photoluminescence properties synthesized from rice husk ash. <i>Progress in Organic Coatings</i> , 2017, 111, 29-37.	1.9	33
17	Kinetic studies and thermodynamics of oil extraction and transesterification of <i>Chlorella</i> sp. for biodiesel production. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 891-897.	1.2	29
18	Physico-chemistry and adhesion kinetics of algal biofilm on polyethersulfone (PES) membrane with different surface wettability. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106531.	3.3	28

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19	Phytoremediation capabilities of <i>Spirodela polyrhiza</i> , <i>Salvinia molesta</i> and <i>Lemna</i> sp. in synthetic wastewater: A comparative study. <i>International Journal of Phytoremediation</i> , 2018, 20, 1179-1186.	1.7	26
20	Biofilm formation of benthic diatoms on commercial polyvinylidene fluoride membrane. <i>Algal Research</i> , 2021, 55, 102260.	2.4	26
21	Recent advances of biosurfactant for waste and pollution bioremediation: Substitutions of petroleum-based surfactants. <i>Environmental Research</i> , 2022, 212, 113126.	3.7	26
22	Influences of diatom frustule morphologies on protein adsorption behavior. <i>Journal of Applied Phycology</i> , 2015, 27, 763-775.	1.5	25
23	Artificial Magnetotaxis of Microbot: Magnetophoresis versus Self-Swimming. <i>Langmuir</i> , 2018, 34, 7971-7980.	1.6	25
24	Membrane surface roughness promotes rapid initial cell adhesion and long term microalgal biofilm stability. <i>Environmental Research</i> , 2022, 206, 112602.	3.7	24
25	Synthesis and characterization of TiO ₂ membrane with palladium impregnation for hydrogen separation. <i>Journal of Membrane Science</i> , 2011, 366, 166-175.	4.1	19
26	Fluorescent molecularly imprinted polymer based on <i>Navicula</i> sp. frustules for optical detection of lysozyme. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 2083-2093.	1.9	18
27	The role of substrates towards marine diatom <i>Cylindrotheca fusiformis</i> adhesion and biofilm development. <i>Journal of Applied Phycology</i> , 2021, 33, 2845-2862.	1.5	17
28	Ultrasonic Enhancement on Propolis Extraction at Varied pH and Alcohol Content. <i>Journal of Food Process Engineering</i> , 2015, 38, 562-570.	1.5	16
29	A Complete Proposed Framework for Coastal Water Quality Monitoring System With Algae Predictive Model. <i>IEEE Access</i> , 2021, 9, 108249-108265.	2.6	15
30	Recent advances of natural biopolymeric culture scaffold: synthesis and modification. <i>Bioengineered</i> , 2022, 13, 2226-2247.	1.4	15
31	Membrane application in proteomic studies: Preliminary studies on the effect of pH, ionic strength and pressure on protein fractionation. <i>Desalination</i> , 2005, 179, 381-390.	4.0	14
32	Effects of dissolved organic matter and suspended solids on the magnetophoretic separation of microalgal cells from an aqueous environment. <i>Chemical Engineering Journal</i> , 2015, 281, 523-530.	6.6	14
33	Toxicity of bare and surfaced functionalized iron oxide nanoparticles towards microalgae. <i>International Journal of Phytoremediation</i> , 2016, 18, 643-650.	1.7	14
34	Microfiltration of <i>Chlorella</i> sp.: Influence of material and membrane pore size. <i>Membrane Water Treatment</i> , 2013, 4, 143-155.	0.5	14
35	Microalgal exopolymeric substances fouling in submerged vacuum membrane distillation and its mitigation via enhanced air bubbling. <i>Desalination</i> , 2021, 508, 115047.	4.0	12
36	Development of treated palm oil mill effluent (POME) culture medium for plant tissue culture of <i>Hemianthus callitrichoides</i> . <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 4890-4896.	3.3	11

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37	The enhancement of treatment capacity and the performance of phytoremediation system by fed batch and periodic harvesting. RSC Advances, 2021, 11, 6049-6059.	1.7	10
38	Effect of high temperature toward microalgal organic matter and its impact toward membrane distillation application. Water Environment Research, 2021, 93, 1107-1115.	1.3	8
39	The Role of Cationic Coagulant-to-Cell Interaction in Dictating the Flocculation-Aided Sedimentation of Freshwater Microalgae. Arabian Journal for Science and Engineering, 2018, 43, 2217-2225.	1.7	7
40	Molecularly imprinted polymer layers using Navicula sp. frustule as core material for selective recognition of lysozyme. Chemical Engineering Research and Design, 2015, 101, 2-14.	2.7	6
41	Motion control of biohybrid microbots under low Reynolds number environment: Magnetotaxis. Chemical Engineering and Processing: Process Intensification, 2019, 141, 107530.	1.8	6
42	Estimation of mass, chlorophylls, and anthocyanins of Spirodela polyrhiza with smartphone acquired images. Computers and Electronics in Agriculture, 2021, 190, 106449.	3.7	6
43	Nutrient uptakes and biochemical composition of <i>Lemna minor</i> in brackish water. Aquaculture Research, 2020, 51, 3563-3570.	0.9	4
44	A comparative study on physicochemical properties, pyrolytic behaviour and kinetic parameters of environmentally harmful aquatic weeds for sustainable shellfish aquaculture. Journal of Hazardous Materials, 2022, 424, 127329.	6.5	4
45	The Transport Behavior of a Biflagellated Microswimmer before and after Cargo Loading. Langmuir, 2021, 37, 9192-9201.	1.6	3
46	Effect of the colloidal stability of SF-IONPs on the performance of magnetophoretic separation of microalgae. AIP Conference Proceedings, 2017, , .	0.3	2
47	Exponential decay: an approach to model nutrient uptake rates of macrophytes. International Journal of Phytoremediation, 2021, 23, 1519-1524.	1.7	2
48	Stability evaluation and formula optimization of cellulose-based scaffold for the air-liquid interface cultivation of Navicula incerta. Environmental Research, 2021, 199, 111298.	3.7	2
49	Biomass and eicosapentaenoic acid production from <i>Amphora</i> sp. under different environmental and nutritional conditions. Biotechnology and Applied Biochemistry, 2023, 70, 568-580.	1.4	2
50	Improvement of biomass and juvenile hormone III (JH III) production from <i>Cyperus aromaticus</i> cell suspension culture via in situ membrane filtration technology. Acta Physiologiae Plantarum, 2010, 32, 1153-1159.	1.0	1
51	The Effects of Organic Binders on Palladium Impregnated in TiO ₂ Membrane Synthesis: X-Ray Diffraction Analysis. Journal of the American Ceramic Society, 2010, 93, 3595-3599.	1.9	1
52	Effects of angled-impeller rotational speed and aeration rate on production of artemisinin and cell biomass of <i>Artemisia annua</i> L.. In Vitro Cellular and Developmental Biology - Plant, 2015, 51, 324-331.	0.9	1
53	Fishpond water treatment: Removal of microalgae from fishpond wastewater through embedding-flocculation and sedimentation. AIP Conference Proceedings, 2019, , .	0.3	1
54	Microalgae adhesion on polymeric membrane. AIP Conference Proceedings, 2019, , .	0.3	1

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55	Image analysis of Spirodela polyrhiza for the semiquantitative detection of copper. Journal of Environmental Chemical Engineering, 2020, 8, 103043.	3.3	1
56	The role and effectiveness of monoculture and polyculture phytoremediation systems in fish farm wastewater. RSC Advances, 2021, 11, 13853-13866.	1.7	1
57	Treatment of river water using modular gravity-driven ultrafiltration (GDU) for individual contingency water supply. Water Science and Technology: Water Supply, 0, , .	1.0	1
58	Harvesting of Microalgae from Synthetic Fertilizer Wastewater by Magnetic Particles Through Embedding Flocculation Strategy. Arabian Journal for Science and Engineering, 2021, 46, 6619-6633.	1.7	0