

Ismail Rawat

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

3,796
citations

147566

31
h-index

243296

44
g-index

50
all docs

50
docs citations

50
times ranked

3727
citing authors

#	ARTICLE	IF	CITATIONS
1	Biodiesel from microalgae: A critical evaluation from laboratory to large scale production. <i>Applied Energy</i> , 2013, 103, 444-467.	5.1	786
2	Towards a sustainable approach for development of biodiesel from plant and microalgae. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 29, 216-245.	8.2	241
3	Trends and novel strategies for enhancing lipid accumulation and quality in microalgae. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 55, 1-16.	8.2	227
4	Efficacy of drying and cell disruption techniques on lipid recovery from microalgae for biodiesel production. <i>Fuel</i> , 2014, 128, 46-52.	3.4	190
5	Investigation of combined effect of nitrogen, phosphorus and iron on lipid productivity of microalgae <i>Ankistrodesmus falcatus</i> KJ671624 using response surface methodology. <i>Biochemical Engineering Journal</i> , 2015, 94, 22-29.	1.8	169
6	The optimization of biomass and lipid yields of <i>Chlorella sorokiniana</i> when using wastewater supplemented with different nitrogen sources. <i>Bioresource Technology</i> , 2014, 168, 127-135.	4.8	157
7	Dual role of <i>Chlorella sorokiniana</i> and <i>Scenedesmus obliquus</i> for comprehensive wastewater treatment and biomass production for bio-fuels. <i>Journal of Cleaner Production</i> , 2016, 115, 255-264.	4.6	157
8	Prospects, recent advancements and challenges of different wastewater streams for microalgal cultivation. <i>Journal of Environmental Management</i> , 2017, 203, 299-315.	3.8	132
9	Light enhancement strategies improve microalgal biomass productivity. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 80, 765-773.	8.2	113
10	Techno-economic estimation of wastewater phycoremediation and environmental benefits using <i>Scenedesmus obliquus</i> microalgae. <i>Journal of Environmental Management</i> , 2019, 240, 293-302.	3.8	104
11	Conversion of microalgal lipids to biodiesel using chromium-aluminum mixed oxide as a heterogeneous solid acid catalyst. <i>Renewable Energy</i> , 2017, 105, 175-182.	4.3	99
12	Biodiesel synthesis from microalgae using immobilized <i>Aspergillus niger</i> whole cell lipase biocatalyst. <i>Renewable Energy</i> , 2016, 85, 1002-1010.	4.3	87
13	Cultivation of <i>Chlorella pyrenoidosa</i> in outdoor open raceway pond using domestic wastewater as medium in arid desert region. <i>Bioresource Technology</i> , 2016, 219, 749-752.	4.8	81
14	Lipid extracted algae as a source for protein and reduced sugar: A step closer to the biorefinery. <i>Bioresource Technology</i> , 2015, 179, 559-564.	4.8	79
15	Synthesis of biodiesel from <i>Scenedesmus</i> sp. by microwave and ultrasound assisted in situ transesterification using tungstated zirconia as a solid acid catalyst. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1503-1511.	2.7	74
16	Evaluating the potential of cytokinins for biomass and lipid enhancement in microalga <i>Acutodesmus obliquus</i> under nitrogen stress. <i>Energy Conversion and Management</i> , 2017, 140, 14-23.	4.4	74
17	Improving the feasibility of aquaculture feed by using microalgae. <i>Environmental Science and Pollution Research</i> , 2021, 28, 43234-43257.	2.7	69
18	Electrochemical harvesting process for microalgae by using nonsacrificial carbon electrode: A sustainable approach for biodiesel production. <i>Chemical Engineering Journal</i> , 2014, 255, 327-333.	6.6	67

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19	Biocatalytic conversion of lipids from microalgae <i>Scenedesmus obliquus</i> to biodiesel using <i>Pseudomonas fluorescens</i> lipase. <i>Fuel</i> , 2015, 147, 117-124.	3.4	60
20	An innovative electrochemical process to alleviate the challenges for harvesting of small size microalgae by using non-sacrificial carbon electrodes. <i>Algal Research</i> , 2016, 19, 292-298.	2.4	58
21	Exploration of Microalgae Biorefinery by Optimizing Sequential Extraction of Major Metabolites from <i>Scenedesmus obliquus</i> . <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 3407-3412.	1.8	56
22	Evaluation of various cell drying and disruption techniques for sustainable metabolite extractions from microalgae grown in wastewater: A multivariate approach. <i>Journal of Cleaner Production</i> , 2018, 182, 634-643.	4.6	55
23	Wastewater to biofuels: Comprehensive evaluation of various flocculants on biochemical composition and yield of microalgae. <i>Ecological Engineering</i> , 2018, 117, 62-68.	1.6	54
24	Combined metals and EDTA control: An integrated and scalable lipid enhancement strategy to alleviate biomass constraints in microalgae under nitrogen limited conditions. <i>Energy Conversion and Management</i> , 2016, 114, 100-109.	4.4	52
25	Techno-economic feasibility of algal aquaculture via fish and biodiesel production pathways: A commercial-scale application. <i>Science of the Total Environment</i> , 2020, 704, 135259.	3.9	46
26	Design and development of polyamine polymer for harvesting microalgae for biofuels production. <i>Energy Conversion and Management</i> , 2014, 85, 537-544.	4.4	41
27	Improving the feasibility of producing biofuels from microalgae using wastewater. <i>Environmental Technology (United Kingdom)</i> , 2013, 34, 1765-1775.	1.2	39
28	Evaluation of operating conditions for sustainable harvesting of microalgal biomass applying electrochemical method using non sacrificial electrodes. <i>Bioresource Technology</i> , 2015, 176, 1-7.	4.8	39
29	Prospective options of algae-derived nutraceuticals as supplements to combat COVID-19 and human coronavirus diseases. <i>Nutrition</i> , 2021, 83, 111089.	1.1	39
30	Adaptability of growth and nutrient uptake potential of <i>Chlorella sorokiniana</i> with variable nutrient loading. <i>Bioresource Technology</i> , 2014, 174, 60-66.	4.8	36
31	Sustainable dewatering and drying of self-flocculating microalgae and study of cake properties. <i>Journal of Cleaner Production</i> , 2017, 159, 248-256.	4.6	33
32	Cultivation of <i>Chlorella sorokiniana</i> and <i>Scenedesmus obliquus</i> in wastewater: Fuzzy intelligence for evaluation of growth parameters and metabolites extraction. <i>Journal of Cleaner Production</i> , 2017, 147, 419-430.	4.6	32
33	Artificial neural network and techno-economic estimation with algae-based tertiary wastewater treatment. <i>Journal of Water Process Engineering</i> , 2021, 40, 101761.	2.6	31
34	Insights into the potential impact of algae-mediated wastewater beneficiation for the circular bioeconomy: A global perspective. <i>Journal of Environmental Management</i> , 2021, 297, 113257.	3.8	31
35	Hydrothermal liquefaction of algal feedstocks: The effect of biomass characteristics and extraction solvents. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 156, 111973.	8.2	29
36	Microalgae Applications in Wastewater Treatment. <i>Green Energy and Technology</i> , 2016, , 249-268.	0.4	26

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37	Evaluation of various solvent systems for lipid extraction from wet microalgal biomass and its effects on primary metabolites of lipid-extracted biomass. <i>Environmental Science and Pollution Research</i> , 2017, 24, 15299-15307.	2.7	25
38	A comparative study on biochemical methane potential of algal substrates: Implications of biomass pre-treatment and product extraction. <i>Bioresource Technology</i> , 2017, 234, 320-326.	4.8	17
39	Catalytic pyrolysis of nutrient-stressed <i>Scenedesmus obliquus</i> microalgae for high-quality bio-oil production. <i>Renewable Energy</i> , 2021, 179, 2036-2047.	4.3	16
40	Microalgae Isolation and Basic Culturing Techniques. , 2015, , 43-54.		15
41	Sustainable Production of Biofuels from Microalgae Using a Biorefinery Approach. , 2015, , 115-128.		15
42	A novel organic dye-based approach to increase photon flux density for enhanced microalgal pigment production. <i>Journal of Cleaner Production</i> , 2018, 198, 187-194.	4.6	14
43	Thermal Behavior and Pyrolytic Characteristics of Freshwater <i>Scenedesmus</i> sp. Biomass. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2015, 37, 1383-1391.	1.2	11
44	Valorization of poultry litter using <i>Acutodesmus obliquus</i> and its integrated application for lipids and fertilizer production. <i>Science of the Total Environment</i> , 2021, 796, 149018.	3.9	8
45	Meeting sustainable development goals (SDGs) through progression of pilot-scale algal system to commercial raceway pond (300,000 L). <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 7663-7676.	2.9	6
46	Carbon Dioxide Sequestration by Microalgae: Biorefinery Approach for Clean Energy and Environment. , 2015, , 147-154.		2
47	Enhancing the efficiency of thermal conversion of microalgae: a review. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 8813-8827.	2.9	2
48	Phycoremediation by High-Rate Algal Ponds (HRAPs). , 2013, , 179-200.		1
49	Catalytic Conversion of Microalgal Lipids to Biodiesel: Overview and Recent Advances. , 2017, , 315-329.		1
50	Valorization of Wastewater via Nutrient Recovery Using Algae-Based Processes. , 2021, , 1-26.		0