Kuppam Chandrasekhar

List of Publications by Year in descending order

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75 papers 3,973 citations

33 h-index 58 g-index

78 all docs

78 docs citations

78 times ranked 2953 citing authors

#	Article	IF	CITATIONS
1	A comprehensive review of microbial electrolysis cells (MEC) reactor designs and configurations for sustainable hydrogen gas production. AEJ - Alexandria Engineering Journal, 2016, 55, 427-443.	3.4	375
2	Biohydrogen Production: Strategies to Improve Process Efficiency through Microbial Routes. International Journal of Molecular Sciences, 2015, 16, 8266-8293.	1.8	303
3	Production of biofuels from microalgae - A review on cultivation, harvesting, lipid extraction, and numerous applications of microalgae. Renewable and Sustainable Energy Reviews, 2018, 94, 49-68.	8.2	288
4	Recent advances and emerging challenges in microbial electrolysis cells (MECs) for microbial production of hydrogen and value-added chemicals. Renewable and Sustainable Energy Reviews, 2016, 61, 501-525.	8.2	283
5	Self-induced bio-potential and graphite electron accepting conditions enhances petroleum sludge degradation in bio-electrochemical system with simultaneous power generation. Bioresource Technology, 2011, 102, 9532-9541.	4.8	141
6	Bio-electrochemical remediation of real field petroleum sludge as an electron donor with simultaneous power generation facilitates biotransformation of PAH: Effect of substrate concentration. Bioresource Technology, 2012, 110, 517-525.	4.8	121
7	Solid phase microbial fuel cell (SMFC) for harnessing bioelectricity from composite food waste fermentation: Influence of electrode assembly and buffering capacity. Bioresource Technology, 2011, 102, 7077-7085.	4.8	117
8	A comprehensive overview on light independent fermentative hydrogen production from wastewater feedstock and possible integrative options. Energy Conversion and Management, 2017, 141, 390-402.	4.4	107
9	Waste based hydrogen production for circular bioeconomy: Current status and future directions. Bioresource Technology, 2020, 302, 122920.	4.8	98
10	Hydrogen gas production with an electroformed Ni mesh cathode catalysts in a single-chamber microbial electrolysis cell (MEC). International Journal of Hydrogen Energy, 2015, 40, 14095-14103.	3.8	92
11	Surpassing the current limitations of high purity H2 production in microbial electrolysis cell (MECs): Strategies for inhibiting growth of methanogens. Bioelectrochemistry, 2018, 119, 211-219.	2.4	92
12	Recent advances in commercial biorefineries for lignocellulosic ethanol production: Current status, challenges and future perspectives. Bioresource Technology, 2022, 344, 126292.	4.8	92
13	Lignocellulosic biomass as renewable feedstock for biodegradable and recyclable plastics production: A sustainable approach. Renewable and Sustainable Energy Reviews, 2022, 158, 112130.	8.2	90
14	Bioelectrochemical systems using microalgae – A concise research update. Chemosphere, 2017, 177, 35-43.	4.2	88
15	Recycling of cathode material from spent lithium-ion batteries: Challenges and future perspectives. Journal of Hazardous Materials, 2022, 429, 128312.	6.5	83
16	Aerobic remediation of petroleum sludge through soil supplementation: Microbial community analysis. Journal of Hazardous Materials, 2011, 197, 80-87.	6.5	82
17	Solid phase bio-electrofermentation of food waste to harvest value-added products associated with waste remediation. Waste Management, 2015, 45, 57-65.	3.7	82
18	Endocrine disruptive estrogens role in electron transfer: Bio-electrochemical remediation with microbial mediated electrogenesis. Bioresource Technology, 2012, 104, 547-556.	4.8	81

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19	Electro-Fermentation in Aid of Bioenergy and Biopolymers. Energies, 2018, 11, 343.	1.6	80
20	State-of-the-art technologies for continuous high-rate biohydrogen production. Bioresource Technology, 2021, 320, 124304.	4.8	73
21	Use of Industrial Wastes as Sustainable Nutrient Sources for Bacterial Cellulose (BC) Production: Mechanism, Advances, and Future Perspectives. Polymers, 2021, 13, 3365.	2.0	67
22	Sequential microbial activities mediated bioelectricity production from distillery wastewater using bio-electrochemical system with simultaneous waste remediation. International Journal of Hydrogen Energy, 2017, 42, 1130-1141.	3.8	63
23	Induced catabolic bio-electrohydrolysis of complex food waste by regulating external resistance for enhancing acidogenic biohydrogen production. Bioresource Technology, 2014, 165, 372-382.	4.8	61
24	Bio-electrohydrolysis as a pretreatment strategy to catabolize complex food waste in closed circuitry: Function of electron flux to enhance acidogenic biohydrogen production. International Journal of Hydrogen Energy, 2014, 39, 11411-11422.	3.8	61
25	Influence of carbohydrates and proteins concentration on fermentative hydrogen production using canteen based waste under acidophilic microenvironment. Journal of Biotechnology, 2011, 155, 387-395.	1.9	55
26	Synthesis of \hat{I}^3 -valerolactone (GVL) and their applications for lignocellulosic deconstruction for sustainable green biorefineries. Fuel, 2021, 303, 121333.	3.4	52
27	Photosynthetic microorganisms (Algae) mediated bioelectricity generation in microbial fuel cell: Concise review. Environmental Technology and Innovation, 2020, 19, 100959.	3.0	51
28	A comprehensive review on two-stage integrative schemes for the valorization of dark fermentative effluents. Critical Reviews in Biotechnology, 2018, 38, 868-882.	5.1	48
29	Electro-fermentation for biofuels and biochemicals production: Current status and future directions. Bioresource Technology, 2021, 323, 124598.	4.8	45
30	Performance optimization of microbial electrolysis cell (MEC) for palm oil mill effluent (POME) wastewater treatment and sustainable Bio-H2 production using response surface methodology (RSM). International Journal of Hydrogen Energy, 2022, 47, 15464-15479.	3.8	45
31	Advanced technologies on the sustainable approaches for conversion of organic waste to valuable bioproducts: Emerging circular bioeconomy perspective. Fuel, 2022, 324, 124313.	3.4	45
32	Effectiveness of piggery waste treatment using microbial fuel cells coupled with elutriated-phased acid fermentation. Bioresource Technology, 2017, 244, 650-657.	4.8	40
33	Upgrading the value of anaerobic fermentation via renewable chemicals production: A sustainable integration for circular bioeconomy. Science of the Total Environment, 2022, 806, 150312.	3.9	39
34	Algae biorefinery: A promising approach to promote microalgae industry and waste utilization. Journal of Biotechnology, 2022, 345, 1-16.	1.9	34
35	Microbial Electro-Remediation (MER) of hazardous waste in aid of sustainable energy generation and resource recovery. Environmental Technology and Innovation, 2020, 19, 100997.	3.0	33
36	Critical challenges and technological breakthroughs in food waste hydrolysis and detoxification for fuels and chemicals production. Bioresource Technology, 2022, 360, 127512.	4.8	31

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37	Simultaneous production of flavonoids and lipids from Chlorella vulgaris and Chlorella pyrenoidosa. Biomass Conversion and Biorefinery, 2022, 12, 683-691.	2.9	24
38	Recent biotechnological trends in lactic acid bacterial fermentation for food processing industries. Systems Microbiology and Biomanufacturing, 2022, 2, 14-40.	1.5	24
39	BIOREMEDIATION OF PETROLEUM SLUDGE UNDER ANAEROBIC MICROENVIRONMENT: INFLUENCE OF BIOSTIMULATION AND BIOAUGMENTATION. Environmental Engineering and Management Journal, 2011, 10, 1609-1616.	0.2	22
40	Biohydrogen Production from Wastewater. , 2013, , 223-257.		21
41	Relative evaluation of acid, alkali, and hydrothermal pretreatment influence on biochemical methane potential of date biomass. Journal of Environmental Chemical Engineering, 2021, 9, 106031.	3 . 3	20
42	Regulation and augmentation of anaerobic digestion processes via the use of bioelectrochemical systems. Bioresource Technology, 2022, 346, 126628.	4.8	20
43	Bio-electrocatalytic remediation of hydrocarbons contaminated soil with integrated natural attenuation and chemical oxidant. Chemosphere, 2021, 280, 130649.	4.2	19
44	Simultaneous production of astaxanthin and lipids from Chlorella sorokiniana in the presence of reactive oxygen species: a biorefinery approach. Biomass Conversion and Biorefinery, 2022, 12, 881-889.	2.9	18
45	SMFC as a tool for the removal of hydrocarbons and metals in the marine environment: a concise research update. Environmental Science and Pollution Research, 2021, 28, 30436-30451.	2.7	18
46	Challenges in Microbial Fuel Cell and Future Scope. , 2018, , 483-499.		17
47	Evaluation of the biochemical methane potential of different sorts of Algerian date biomass. Environmental Technology and Innovation, 2020, 20, 101180.	3.0	17
48	Basic Principles of Microbial Fuel Cell: Technical Challenges and Economic Feasibility., 2017, , 165-188.		16
49	Effective and Nonprecious Cathode Catalysts for Oxygen Reduction Reaction in Microbial Fuel Cells. , 2019, , 485-501.		16
50	Potato Chip-Like 0D Interconnected ZnCo2O4 Nanoparticles for High-Performance Supercapacitors. Crystals, 2021, 11, 469.	1.0	16
51	Bioelectrochemical system-mediated waste valorization. Systems Microbiology and Biomanufacturing, 2021, 1, 432-443.	1.5	16
52	Biohydrogen Production: Integrated Approaches to Improve the Process Efficiency., 2017, , 189-210.		14
53	Extraction and characterization of microalgaeâ€derived phenolics for pharmaceutical applications: A systematic review. Journal of Basic Microbiology, 2022, 62, 1044-1063.	1.8	14
54	Recent biotechnological developments in reshaping the microalgal genome: A signal for green recovery in biorefinery practices. Chemosphere, 2022, 293, 133513.	4.2	14

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55	Comparison of alkali and ionic liquid pretreatment methods on the biochemical methane potential of date palm waste biomass. Bioresource Technology, 2022, 360, 127505.	4.8	12
56	Basics of Methanogenesis in Anaerobic Digester. , 2017, , 291-314.		11
57	Use of Biochar-Based Cathodes and Increase in the Electron Flow by Pseudomonas aeruginosa to Improve Waste Treatment in Microbial Fuel Cells. Processes, 2021, 9, 1941.	1.3	11
58	Bioelectrochemical systems in aid of sustainable biorefineries for the production of value-added products and resource recovery from wastewater: A critical review and future perspectives. Bioresource Technology, 2022, 359, 127435.	4.8	10
59	Biohydrogen production in microbial electrolysis cells from renewable resources. , 2018, , 331-356.		9
60	Acidogenic Biohydrogen Production From Wastewater. , 2019, , 279-320.		8
61	Algaeâ€"The Potential Future Fuel: Challenges and Prospects. , 2017, , 239-251.		7
62	Phytotherapic Drugs for COVID-19 Treatment: A Scoping Review. Current Pharmaceutical Design, 2021, 27, 3389-3398.	0.9	5
63	Facets of diatom biology and their potential applications. Biomass Conversion and Biorefinery, 0, , $1.$	2.9	5
64	Harvesting Energy Using Compost as a Source of Carbon and Electrogenic Bacteria., 2020,, 217-234.		5
65	Contaminant Removal and Energy Recovery in Microbial Fuel Cells. , 2019, , 76-94.		5
66	Selection of the best barrier solutions for liquid displacement gas collecting metre to prevent gas solubility in microbial electrolysis cells. International Journal of Renewable Energy Technology, 2017, 8, 93.	0.2	4
67	Fundamentals of Bacterial Biofilm: Present State of Art. , 2018, , 43-60.		3
68	Algal Bioeconomy: A Platform for Clean Energy and Fuel. Clean Energy Production Technologies, 2020, , 335-370.	0.3	3
69	Bacterial-Mediated Biofouling: Fundamentals and Control Techniques. , 2018, , 263-284.		2
70	Production of a Variety of Industrially Significant Products by Biological Sources Through Fermentation. Microorganisms for Sustainability, 2019, , 201-221.	0.4	2
71	Applications of Nanomaterials and Future Prospects for Nanobionics. Nanotechnology in the Life Sciences, 2019, , 177-197.	0.4	2
72	Potential Applications of Biopolymers in Fisheries Industry. Springer Series on Polymer and Composite Materials, 2022, , 199-221.	0.5	2

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73	Greener synthesis of enzymes from marine microbes using nanomaterials. , 2021, , 109-136.		0
74	Wastewater treatment systems and power generation. , 2021, , 321-348.		0
75	Strategies in the direction of scaling-up aspects of microbial electrolysis cells. , 2022, , 359-375.		O