Vinod Kumar

List of Publications by Year in descending order

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56 papers	1,629 citations	257450 24 h-index	315739 38 g-index
58 all docs	58 docs citations	58 times ranked	1076 citing authors

#	Article	IF	Citations
1	Multimetal tolerance mechanisms in bacteria: The resistance strategies acquired by bacteria that can be exploited to â€˜clean-upâ€™ heavy metal contaminants from water. Aquatic Toxicology, 2019, 212, 1-10.	4.0	125
2	Production of biodiesel and bioethanol using algal biomass harvested from fresh water river. Renewable Energy, 2018, 116, 606-612.	8.9	83
3	Multifunctional Î²-Cyclodextrin-EDTA-Chitosan polymer adsorbent synthesis for simultaneous removal of heavy metals and organic dyes from wastewater. Environmental Pollution, 2022, 292, 118447.	7.5	80
4	Food irradiation: Effect of ionizing and non-ionizing radiations on preservation of fruits and vegetablesâ€“ a review. Trends in Food Science and Technology, 2021, 114, 372-385.	15.1	75
5	Fabrication of GOâ€“MnO2 nanocomposite using hydrothermal process for cationic and anionic dyes adsorption: Kinetics, isotherm, and reusability. Journal of Environmental Chemical Engineering, 2021, 9, 106045.	6.7	67
6	Graphene oxide-manganese ferrite (GO-MnFe2O4) nanocomposite: One-pot hydrothermal synthesis and its use for adsorptive removal of Pb2+ ions from aqueous medium. Journal of Molecular Liquids, 2020, 315, 113769.	4.9	65
7	Sputtering based synthesis of CuO nanoparticles and their structural, thermal and optical studies. Materials Science in Semiconductor Processing, 2018, 76, 55-60.	4.0	60
8	Graphitic bio-char and bio-oil synthesis via hydrothermal carbonization-co-liquefaction of microalgae biomass (oiled/de-oiled) and multiple heavy metals remediations. Journal of Hazardous Materials, 2021, 409, 124987.	12.4	57
9	Synthesis of EDTA-functionalized graphene oxide-chitosan nanocomposite for simultaneous removal of inorganic and organic pollutants from complex wastewater. Chemosphere, 2022, 287, 132385.	8.2	57
10	Microalgae with a truncated light-harvesting antenna to maximize photosynthetic efficiency and biomass productivity: Recent advances and current challenges. Process Biochemistry, 2021, 104, 83-91.	3.7	56
11	Effect of catalyst and temperature on the quality and productivity of HTL bio-oil from microalgae: A review. Renewable Energy, 2021, 174, 810-822.	8.9	55
12	Small-scale phyco-mitigation of raw urban wastewater integrated with biodiesel production and its utilization for aquaculture. Bioresource Technology, 2020, 297, 122489.	9.6	51
13	Microalgae fuel cell for wastewater treatment: Recent advances and challenges. Journal of Water Process Engineering, 2020, 38, 101549.	5.6	43
14	Impact of aquatic microplastics and nanoplastics pollution on ecological systems and sustainable remediation strategies of biodegradation and photodegradation. Science of the Total Environment, 2022, 806, 151358.	8.0	41
15	Algae-based sustainable approach for simultaneous removal of micropollutants, and bacteria from urban wastewater and its real-time reuse for aquaculture. Science of the Total Environment, 2021, 774, 145556.	8.0	40
16	Application of agar liquid-gel transition in cultivation and harvesting of microalgae for biodiesel production. Bioresource Technology, 2017, 243, 163-168.	9.6	38
17	The effects of ultraviolet radiation on growth, biomass, lipid accumulation and biodiesel properties of microalgae. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 787-793.	2.3	37
18	Cold plasma technology: advanced and sustainable approach for wastewater treatment. Environmental Science and Pollution Research, 2021, 28, 65062-65082.	5.3	36

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19	Synthesis of ZrO2 nanoparticles using reactive magnetron sputtering and their structural, morphological and thermal studies. Materials Chemistry and Physics, 2018, 212, 268-273.	4.0	30
20	Recent advances and viability in sustainable thermochemical conversion of sludge to bio-fuel production. Fuel, 2022, 316, 123351.	6.4	29
21	Synergistic dynamics of light, photoperiod and chemical stimulants influences biomass and lipid productivity in Chlorella singularis (UUIND5) for biodiesel production. Applied Biological Chemistry, 2018, 61, 7-13.	1.9	28
22	Simultaneous capturing of mixed contaminants from wastewater using novel one-pot chitosan functionalized with EDTA and graphene oxide adsorbent. Environmental Pollution, 2022, 304, 119130.	7.5	28
23	Simultaneous Removal of Heavy Metals and Ciprofloxacin Micropollutants from Wastewater Using Ethylenediaminetetraacetic Acid-Functionalized Î²-Cyclodextrin-Chitosan Adsorbent. ACS Omega, 2021, 6, 34624-34634.	3.5	28
24	Evaluation, comparison of different solvent extraction, cell disruption methods and hydrothermal liquefaction of Oedogonium macroalgae for biofuel production. Biotechnology Reports (Amsterdam,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.6	26
25	Impact of glyphosate herbicide stress on metabolic growth and lipid inducement in Chlorella sorokiniana UUIND6 for biodiesel production. Algal Research, 2020, 51, 102071.	4.6	25
26	Micro-pollutant Pb(II) mitigation and lipid induction in oleaginous microalgae Chlorella sorokiniana UUIND6. Environmental Technology and Innovation, 2021, 23, 101613.	6.1	25
27	Hydropyrolysis of freshwater macroalgal bloom for bio-oil and biochar production: Kinetics and isotherm for removal of multiple heavy metals. Environmental Technology and Innovation, 2021, 22, 101440.	6.1	24
28	Edible hydrocolloids as sustainable substitute for non-biodegradable materials. Critical Reviews in Food Science and Nutrition, 2022, 62, 693-725.	10.3	23
29	Pretreated animal and human waste as a substantial nutrient source for cultivation of microalgae for biodiesel production. Environmental Science and Pollution Research, 2018, 25, 22052-22059.	5.3	21
30	Detoxification mechanism of organophosphorus pesticide via carboxylestrase pathway that triggers de novo TAG biosynthesis in oleaginous microalgae. Aquatic Toxicology, 2019, 209, 49-55.	4.0	21
31	The potential of nuclear magnetic resonance (NMR) in metabolomics and lipidomics of microalgae- a review. Archives of Biochemistry and Biophysics, 2021, 710, 108987.	3.0	21
32	Biomass Pyrolysis-Current status and future directions. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 2914-2921.	2.3	20
33	Photosynthetic microalgaeâ€“based carbon sequestration and generation of biomass in biorefinery approach for renewable biofuels for a cleaner environment. Biomass Conversion and Biorefinery, 2023, 13, 7403-7421.	4.6	20
34	One-step functionalization of chitosan using EDTA: Kinetics and isotherms modeling for multiple heavy metals adsorption and their mechanism. Journal of Water Process Engineering, 2022, 49, 102989.	5.6	20
35	Bio-flocculation of oleaginous microalgae integrated with municipal wastewater treatment and its hydrothermal liquefaction for biofuel production. Environmental Technology and Innovation, 2022, 26, 102340.	6.1	19
36	Low-temperature catalyst based Hydrothermal liquefaction of harmful Macroalgal blooms, and aqueous phase nutrient recycling by microalgae. Scientific Reports, 2019, 9, 11384.	3.3	18

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37	Bio-remediation capacity for Cd(II) and Pb(II) from the aqueous medium by two novel strains of microalgae and their effect on lipidomics and metabolomics. Journal of Water Process Engineering, 2021, 44, 102404.	5.6	18
38	Different Cell Disruption and Lipid Extraction Methods from Microalgae for Biodiesel Production. , 2019, , 265-292.		16
39	Impact of pyrene (polycyclic aromatic hydrocarbons) pollutant on metabolites and lipid induction in microalgae Chlorella sorokiniana (UUIND6) to produce renewable biodiesel. Chemosphere, 2021, 285, 131482.	8.2	16
40	Microwave-assisted pretreatment of harmful algal blooms for microbial oil-centered biorefinery approach. Biomass Conversion and Biorefinery, 2022, 12, 3097-3105.	4.6	11
41	Hydrothermal liquefaction of municipal wastewater sludge and nutrient recovery from the aqueous phase. Biofuels, 2022, 13, 657-662.	2.4	10
42	Production of high value-added biomolecules by microalgae cultivation in wastewater from anaerobic digestates of food waste: a review. Biomass Conversion and Biorefinery, 2023, 13, 9625-9642.	4.6	9
43	An integrated approach for extracting fuel, chemicals, and residual carbon using pine needles. Biomass Conversion and Biorefinery, 2018, 8, 447-454.	4.6	8
44	Integration of microalgal bioremediation and biofuel production: A â€˜clean upâ€™ strategy with potential for sustainable energy resources. Current Research in Green and Sustainable Chemistry, 2021, 4, 100128.	5.6	8
45	3D Bioprinting to Fabricate Living Microalgal Materials. Trends in Biotechnology, 2021, 39, 1243-1244.	9.3	8
46	Physicochemical properties, nutritional and sensory quality of lowâ€fat Ashwagandha and Giloyâ€fortified sponge cakes during storage. Journal of Food Processing and Preservation, 2022, 46, e16280.	2.0	8
47	Effect of bacterial amylase pretreatment on bioethanol production from starch-based solid waste (SBSW). Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 2604-2609.	2.3	7
48	Multi-stage hydrothermal liquefaction modeling of sludge and microalgae biomass to increase bio-oil yield. Fuel, 2022, 328, 125253.	6.4	7
49	1H NMR-based metabolomics and lipidomics of microalgae. Trends in Plant Science, 2021, 26, 984-985.	8.8	3
50	Dairy Industry wastewater and stormwater energy valorization: effect of wastewater nutrients on microalgae-yeast biomass. Biomass Conversion and Biorefinery, 0, , .	4.6	3
51	Sustainability of <scp>Ageratum conyzoides</scp> (billy goat weed) for bioethanol and recycling of residues for gaseous fuel production. Engineering Reports, 2021, 3, e12284.	1.7	2
52	Bio-oil Production by Hydrothermal Liquefaction of Wet Biomass of Microalgae in a Plant with Heat Recovery. SSRN Electronic Journal, 2018, , .	0.4	1
53	A Review on Microalgae Application in Bioenergy Generation & Integrated Wastewater Management. SSRN Electronic Journal, 0, , .	0.4	1
54	Microalgal Cd resistance and its exertions on pigments, biomass and lipid profiles. Bioremediation Journal, 2021, 25, 169-177.	2.0	1

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55	Effect of bacterial amylase pretreatment on alcohol production from starch-based solid waste. Biofuels, 2016, 7, 465-470.	2.4	0
56	Integration of wastewater valorization with microalgae for biofuel production. , 2020, , 343-360.		0