RaviRanjan Kumar

List of Publications by Year
in descending order

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74 papers	2,826 citations	185998 28 h-index	189595 50 g-index
75 all docs	75 docs citations	75 times ranked	3479 citing authors

#	Article	IF	Citations
1	Environment-friendly Fully Biodegradable Jute-Poly(vinyl Alcohol) Modified Soy Composite Development as Plastic Substitute. Journal of Natural Fibers, 2022, 19, 905-914.	1.7	7
2	Adsorptive removal of metformin on specially designed algae-lignocellulosic biochar mix and techno-economic feasibility assessment. Environmental Pollution, 2022, 292, 118256.	3.7	22
3	Influence of Copper on the Microstructural, Mechanical, and Biological Properties of Commercially Pure Zn-Based Alloys for a Potential Biodegradable Implant. ACS Biomaterials Science and Engineering, 2022, 8, 1443-1463.	2.6	10
4	Strategic implementation of integrated bioaugmentation and biostimulation for efficient mitigation of petroleum hydrocarbon pollutants from terrestrial and aquatic environment. Marine Pollution Bulletin, 2022, 177, 113492.	2.3	16
5	Decellularized bone matrix/oleoyl chitosan derived supramolecular injectable hydrogel promotes efficient bone integration. Materials Science and Engineering C, 2021, 119, 111604.	3.8	27
6	Enhanced biodegradation of total petroleum hydrocarbons by implementing a novel two-step bioaugmentation strategy using indigenous bacterial consortium. Journal of Environmental Management, 2021, 292, 112746.	3.8	27
7	Treatment of petroleum refinery sludge by petroleum degrading bacterium Stenotrophomonas pavanii IRB19 as an efficient novel technology. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2021, 56, 1-13.	0.9	10
8	Biofunctionalized nanomaterials for in situ clean-up of hydrocarbon contamination: A quantum jump in global bioremediation research. Journal of Environmental Management, 2020, 256, 109913.	3.8	35
9	Bacterial abundance and diversity in Microchloropsis salina (formerly Nannochloropsis salina) cultures in response to the presence of ammonium, nitrate and glycerol. Journal of Applied Phycology, 2020, 32, 839-850.	1.5	8
10	Multi-fold enhancement in sustainable production of biomass, lipids and biodiesel from oleaginous yeast: an artificial neural network-genetic algorithm approach. Sustainable Energy and Fuels, 2020, 4, 6075-6084.	2.5	14
11	Converting Polymer Trash into Treasure: An Approach to Prepare MoS₂ Nanosheets Decorated PVDF Sponge for Oil/Water Separation and Antibacterial Applications. Industrial & Engineering Chemistry Research, 2020, 59, 20141-20154.	1.8	13
12	Optimal and strategic delivery of CO₂ for Chlorella minutissima-mediated valorization of domestic wastewater with concomitant production of biomass and biofuel. Sustainable Energy and Fuels, 2020, 4, 6321-6329.	2.5	9
13	Accelerated weathering analysis of jute reinforced cashewnut shell liquid modified soy based green composite. SPE Polymers, 2020, 1, 81-89.	1.4	5
14	Production, partial purification and characterization of a proteoglycan bioemulsifier from an oleaginous yeast. Bioprocess and Biosystems Engineering, 2020, 43, 1747-1759.	1.7	17
15	Environmental impact analysis of oleaginous yeast based biodiesel and bio-crude production by life cycle assessment. Journal of Cleaner Production, 2020, 271, 122349.	4.6	34
16	A sustainable perspective of microalgal biorefinery for coâ€production and recovery of highâ€value carotenoid and biofuel with CO₂ valorization. Biofuels, Bioproducts and Biorefining, 2020, 14, 879-897.	1.9	32
17	N-Acetyl-d-glucosamine Production by a Chitinase of Marine Fungal Origin: a Case Study of Potential Industrial Significance for Valorization of Waste Chitins. Applied Biochemistry and Biotechnology, 2019, 187, 407-423.	1.4	22
18	Consolidated bioprocessing of wastewater cocktail in an algal biorefinery for enhanced biomass, lipid and lutein production coupled with efficient CO2 capture: An advanced optimization approach. Journal of Environmental Management, 2019, 252, 109696.	3.8	28

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19	A biorefinery for valorization of industrial waste-water and flue gas by microalgae for waste mitigation, carbon-dioxide sequestration and algal biomass production. Science of the Total Environment, 2019, 688, 129-135.	3.9	120
20	Strategic valorization of de-oiled microalgal biomass waste as biofertilizer for sustainable and improved agriculture of rice (Oryza sativa L.) crop. Science of the Total Environment, 2019, 682, 475-484.	3.9	61
21	Electrodeposited functionally graded coating inhibits Gram-positive and Gram-negative bacteria by a lipid peroxidation mediated membrane damage mechanism. Materials Science and Engineering C, 2019, 102, 623-633.	3.8	7
22	Performance evaluation of an outdoor algal biorefinery for sustainable production of biomass, lipid and lutein valorizing flue-gas carbon dioxide and wastewater cocktail. Bioresource Technology, 2019, 283, 198-206.	4.8	50
23	Supercritical CO2 Transesterification of Triolein to Methyl-Oleate in a Batch Reactor: Experimental and Simulation Results. Processes, 2019, 7, 16.	1.3	7
24	Zero-waste algal biorefinery for bioenergy and biochar: A green leap towards achieving energy and environmental sustainability. Science of the Total Environment, 2019, 650, 2467-2482.	3.9	157
25	Process optimization involving critical evaluation of oxygen transfer, oxygen uptake and nitrogen limitation for enhanced biomass and lipid production by oleaginous yeast for biofuel application. Bioprocess and Biosystems Engineering, 2018, 41, 1103-1113.	1.7	23
26	Modeling and Analysis of Micellar and Microbubble Dynamics To Derive New Insights in Molecular Interactions Impacting the Packing Behavior of a Green Surfactant for Potential Engineering Implications. ACS Sustainable Chemistry and Engineering, 2018, 6, 4046-4055.	3.2	6
27	Lignocellulosic biorefinery as a model for sustainable development of biofuels and value added products. Bioresource Technology, 2018, 247, 1144-1154.	4.8	346
28	Quorum sensing inhibitory activity of the metabolome from endophytic Kwoniella sp. PY016: characterization and hybrid model-based optimization. Applied Microbiology and Biotechnology, 2018, 102, 7389-7406.	1.7	5
29	Bacillus lipopeptides: powerful capping and dispersing agents of silver nanoparticles. Applied Nanoscience (Switzerland), 2018, 8, 1809-1821.	1.6	15
30	Artificial intelligence driven process optimization for cleaner production of biomass with co-valorization of wastewater and flue gas in an algal biorefinery. Journal of Cleaner Production, 2018, 201, 1092-1100.	4.6	81
31	Performance evaluation of a yeast biorefinery as a sustainable model for co-production of biomass, bioemulsifier, lipid, biodiesel and animal-feed components using inexpensive raw materials. Sustainable Energy and Fuels, 2017, 1, 923-931.	2.5	28
32	Biosurfactant-biopolymer driven microbial enhanced oil recovery (MEOR) and its optimization by an ANN-GA hybrid technique. Journal of Biotechnology, 2017, 256, 46-56.	1.9	64
33	Therapeutic implication of â€˜Iturin Aâ€™ for targeting MD-2/TLR4 complex to overcome angiogenesis and invasion. Cellular Signalling, 2017, 35, 24-36.	1.7	30
34	Smart and Reusable Biopolymer Nanocomposite for Simultaneous Microalgal Biomass Harvesting and Disruption: Integrated Downstream Processing for a Sustainable Biorefinery. ACS Sustainable Chemistry and Engineering, 2017, 5, 852-861.	3.2	34
35	Resensitization of Akt Induced Docetaxel Resistance in Breast Cancer by â€˜Iturin Aâ€™ a Lipopeptide Molecule from Marine Bacteria Bacillus megaterium. Scientific Reports, 2017, 7, 17324.	1.6	30
36	Recent Inventions and Trends in Algal Biofuels Research. Recent Patents on Biotechnology, 2016, 10, 30-42.	0.4	12

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37	Study on life cycle of a sporogenous probiotic bacterium in mammalian gastrointestinal tract with image processing analysis. , 2016, , .		0
38	Modelling of oxygen-evolving-complex ionization dynamics for energy-efficient production of microalgal biomass, pigment and lipid with carbon capture: an engineering vision for a biorefinery. RSC Advances, 2016, 6, 51941-51956.	1.7	12
39	Nanocomposite films based on cellulose acetate/polyethylene glycol/modified montmorillonite as nontoxic active packaging material. RSC Advances, 2016, 6, 92569-92578.	1.7	36
40	Development and Scale-up of an Efficient and Green Process for HPLC Purification of Antimicrobial Homologues of Commercially Important Microbial Lipopeptides. ACS Sustainable Chemistry and Engineering, 2016, 4, 6638-6646.	3.2	14
41	Sustainable valorization of flue gas CO₂and wastewater for the production of microalgal biomass as a biofuel feedstock in closed and open reactor systems. RSC Advances, 2016, 6, 91111-91120.	1.7	50
42	Rationally leveraging mixotrophic growth of microalgae in different photobioreactor configurations for reducing the carbon footprint of an algal biorefinery: a techno-economic perspective. RSC Advances, 2016, 6, 72897-72904.	1.7	34
43	Pre-clinical risk assessment and therapeutic potential of antitumor lipopeptide â€˜Iturin Aâ€™ in an in vivo and in vitro model. RSC Advances, 2016, 6, 71612-71623.	1.7	20
44	Integrated in situ transesterification for improved biodiesel production from oleaginous yeast: a value proposition for possible industrial implication. RSC Advances, 2016, 6, 70364-70373.	1.7	37
45	Performance evaluation of microalgae for concomitant wastewater bioremediation, CO2 biofixation and lipid biosynthesis for biodiesel application. Algal Research, 2016, 16, 216-223.	2.4	183
46	Downstream processing of microalgal feedstock for lipid and carbohydrate in a biorefinery concept: a holistic approach for biofuel applications. RSC Advances, 2016, 6, 29486-29496.	1.7	45
47	An Antimicrobial Metabolite from Bacillus sp.: Significant Activity Against Pathogenic Bacteria Including Multidrug-Resistant Clinical Strains. Frontiers in Microbiology, 2015, 6, 1335.	1.5	37
48	Marine lipopeptide Iturin A inhibits Akt mediated GSK3Î² and FoxO3a signaling and triggers apoptosis in breast cancer. Scientific Reports, 2015, 5, 10316.	1.6	96
49	Green surfactant of marine origin exerting a cytotoxic effect on cancer cell lines. RSC Advances, 2015, 5, 53086-53094.	1.7	4
50	Performance evaluation of a green process for microalgal CO2 sequestration in closed photobioreactor using flue gas generated in-situ. Bioresource Technology, 2015, 191, 399-406.	4.8	89
51	Green integrated process for mitigation of municipal and industrial liquid and solid waste mixes for enhanced microalgal biomass and lipid synthesis for biodiesel. RSC Advances, 2015, 5, 70929-70938.	1.7	22
52	Process design for augmentation and spectrofluorometric quantification of neutral lipid by judicious doping of pathway intermediate in the culture of marine Chlorella variabilis for biodiesel application. Bioresource Technology, 2015, 198, 781-788.	4.8	7
53	Process integration for microalgal lutein and biodiesel production with concomitant flue gas CO₂ sequestration: a biorefinery model for healthcare, energy and environment. RSC Advances, 2015, 5, 73381-73394.	1.7	58
54	Biodegradation of chemically modified lignocellulosic sisal fibers: study of the mechanism for enzymatic degradation of cellulose. E-Polymers, 2015, 15, 185-194.	1.3	8

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55	An advanced hybrid medium optimization strategy for the enhanced productivity of lutein in Chlorella minutissima. Algal Research, 2015, 7, 24-32.	2.4	56
56	Low fucose containing bacterial polysaccharide facilitate mitochondriaâ€dependent ROSâ€induced apoptosis of human lung epithelial carcinoma via controlled regulation of MAPKsâ€mediated Nrf2/Keap1 homeostasis signaling. Molecular Carcinogenesis, 2015, 54, 1636-1655.	1.3	25
57	Microbial amphiphiles: a class of promising new-generation anticancer agents. Drug Discovery Today, 2015, 20, 136-146.	3.2	47
58	Effect of photodegradation of lignocellulosic fibers transesterified with vegetable oil. Fibers and Polymers, 2014, 15, 2345-2354.	1.1	5
59	Effect of nanoclay on physical, mechanical, and microbial degradation of jute-reinforced, soy milk-based nano-biocomposites. Polymer Engineering and Science, 2014, 54, 345-354.	1.5	11
60	Antimicrobial activity and biodegradation behavior of poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (adipateâ€coâ	1.3	57
61	Bacterial Fucose-Rich Polysaccharide Stabilizes MAPK-Mediated Nrf2/Keap1 Signaling by Directly Scavenging Reactive Oxygen Species during Hydrogen Peroxide-Induced Apoptosis of Human Lung Fibroblast Cells. PLoS ONE, 2014, 9, e113663.	1.1	39
62	Development and characterization of plasticized starchâ€based biocomposites with soy pulp as reinforcement filler. Journal of Applied Polymer Science, 2013, 127, 4681-4687.	1.3	8
63	Development of a novel integrated continuous reactor system for biocatalytic production of biodiesel. Bioresource Technology, 2013, 147, 395-400.	4.8	20
64	Performance evaluation of an ANNâ€“GA aided experimental modeling and optimization procedure for enhanced synthesis of marine biosurfactant in a stirred tank reactor. Journal of Chemical Technology and Biotechnology, 2013, 88, 794-799.	1.6	27
65	Physical and mechanical characterization of jute reinforced soy composites. Journal of Reinforced Plastics and Composites, 2013, 32, 1380-1390.	1.6	10
66	Development and Characterization of Nanoclay-Modified Soy Resin-Based Jute Composite as an Eco-friendly/Green Product. Polymer-Plastics Technology and Engineering, 2013, 52, 833-840.	1.9	9
67	Performance evaluation of batch and unsteady state fedâ€batch reactor operations for the production of a marine microbial surfactant. Journal of Chemical Technology and Biotechnology, 2013, 88, 719-726.	1.6	9
68	Timeâ€dependent dosing of Fe²⁺ for improved lipopeptide production by marine Bacillus megaterium. Journal of Chemical Technology and Biotechnology, 2012, 87, 1661-1669.	1.6	31
69	ENZYMATIC PROCESSING OF CHITINACEOUS WASTES FOR N-ACETYL-D-GLUCOSAMINE PRODUCTION: AN EXAMPLE OF GREEN AND EFFICIENT ENVIRONMENTAL MANAGEMENT. Environmental Engineering and Management Journal, 2012, 11, 1849-1855.	0.2	11
70	Molecular Characterization and In Vitro Analyses of a Sporogenous Bacterium with Potential Probiotic Properties. Probiotics and Antimicrobial Proteins, 2010, 2, 152-161.	1.9	9
71	Matrix Assisted Laser Desorption Ionization-Time of Flight Mass Spectral Analysis of Marine Lipopeptides with Potential Therapeutic Implications. International Journal of Peptide Research and Therapeutics, 2010, 16, 79-85.	0.9	13
72	Marine Bacterium Derived Lipopeptides: Characterization and Cytotoxic Activity Against Cancer Cell Lines. International Journal of Peptide Research and Therapeutics, 2010, 16, 215-222.	0.9	70

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73	Surfactin: Biosynthesis, Genetics and Potential Applications. Advances in Experimental Medicine and Biology, 2010, 672, 316-323.	0.8	61
74	Response Surface Optimization of the Critical Media Components for the Production of Surfactin. Journal of Chemical Technology and Biotechnology, 1997, 68, 263-270.	1.6	141