Sheena K Kumari

List of Publications by Year
in descending order

84 papers	3,462 citations	201674 27 h-index	149698 56 g-index
85 all docs	85 docs citations	85 times ranked	4235 citing authors

#	Article	IF	Citations
1	Global diversity and biogeography of bacterial communities in wastewater treatment plants. Nature Microbiology, 2019, 4, 1183-1195.	13.3	491
2	Bioprospecting for hyper-lipid producing microalgal strains for sustainable biofuel production. Bioresource Technology, 2011, 102, 57-70.	9.6	381
3	Microplastics in the environment: Interactions with microbes and chemical contaminants. Science of the Total Environment, 2020, 743, 140518.	8.0	229
4	Trends and novel strategies for enhancing lipid accumulation and quality in microalgae. Renewable and Sustainable Energy Reviews, 2016, 55, 1-16.	16.4	227
5	Investigation of combined effect of nitrogen, phosphorus and iron on lipid productivity of microalgae Ankistrodesmus falcatus KJ671624 using response surface methodology. Biochemical Engineering Journal, 2015, 94, 22-29.	3.6	169
6	Biohydrogen production from sugarcane bagasse hydrolysate: effects of pH, S/X, Fe2+, and magnetite nanoparticles. Environmental Science and Pollution Research, 2017, 24, 8790-8804.	5.3	132
7	Prospects, recent advancements and challenges of different wastewater streams for microalgal cultivation. Journal of Environmental Management, 2017, 203, 299-315.	7.8	132
8	Coronaviruses in wastewater processes: Source, fate and potential risks. Environment International, 2020, 143, 105962.	10.0	108
9	Continuous biohydrogen production from starch wastewater via sequential dark-photo fermentation with emphasize on maghemite nanoparticles. Journal of Industrial and Engineering Chemistry, 2015, 21, 500-506.	5.8	94
10	Trends in biohydrogen production: major challenges and state-of-the-art developments. Environmental Technology (United Kingdom), 2013, 34, 1653-1670.	2.2	92
11	Biodiesel synthesis from microalgae using immobilized Aspergillus niger whole cell lipase biocatalyst. Renewable Energy, 2016, 85, 1002-1010.	8.9	87
12	Status of pathogens, antibiotic resistance genes and antibiotic residues in wastewater treatment systems. Reviews in Environmental Science and Biotechnology, 2017, 16, 491-515.	8.1	80
13	Critical Analysis of Biomass Retention Strategies in Mainstream and Sidestream ANAMMOX-Mediated Nitrogen Removal Systems. Environmental Science & Technology, 2021, 55, 9-24.	10.0	68
14	Combined metals and EDTA control: An integrated and scalable lipid enhancement strategy to alleviate biomass constraints in microalgae under nitrogen limited conditions. Energy Conversion and Management, 2016, 114, 100-109.	9.2	52
15	Pathways of 3-biofules (hydrogen, ethanol and methane) production from petrochemical industry wastewater via anaerobic packed bed baffled reactor inoculated with mixed culture bacteria. Energy Conversion and Management, 2016, 122, 119-130.	9.2	46
16	Emerging contaminants in South African water environment- a critical review of their occurrence, sources and ecotoxicological risks. Chemosphere, 2021, 269, 128737.	8.2	46
17	Utilization of Pistia stratiotes (aquatic weed) for fermentative biohydrogen: Electron-equivalent balance, stoichiometry, and cost estimation. International Journal of Hydrogen Energy, 2018, 43, 8243-8255.	7.1	43
18	Effect of thermal pre-treatment on inoculum sludge to enhance bio-hydrogen production from alkali hydrolysed rice straw in a mesophilic anaerobic baffled reactor. Environmental Technology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		

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19	Application of quantitative RT-PCR to determine the distribution of Microthrix parvicella in full-scale activated sludge treatment systems. Applied Microbiology and Biotechnology, 2009, 83, 1135-1141.	3.6	39
20	ACCase and rbcL gene expression as a function of nutrient and metal stress for enhancing lipid productivity in Chlorella sorokiniana. Energy Conversion and Management, 2017, 148, 809-819.	9.2	38
21	Decision tree for identification and prediction of filamentous bulking at full-scale activated sludge wastewater treatment plant. Chemical Engineering Research and Design, 2019, 126, 25-34.	5.6	38
22	Monitoring changes in COVID-19 infection using wastewater-based epidemiology: A South African perspective. Science of the Total Environment, 2021, 786, 147273.	8.0	38
23	Multidisciplinary characterization of nitrogen-removal granular sludge: A review of advances and technologies. Water Research, 2022, 214, 118214.	11.3	34
24	Comparison of droplet digital PCR and quantitative PCR for the detection of Salmonella and its application for river sediments. Journal of Water and Health, 2017, 15, 505-508.	2.6	32
25	Detection of SARS-CoV-2 RNA on contact surfaces within shared sanitation facilities. International Journal of Hygiene and Environmental Health, 2021, 236, 113807.	4.3	31
26	Optimization of biogas generation using anaerobic digestion models and computational intelligence approaches. Reviews in Chemical Engineering, 2017, 33, .	4.4	30
27	Algae-mediated processes for the treatment of antiretroviral drugs in wastewater: Prospects and challenges. Chemosphere, 2021, 280, 130674.	8.2	30
28	Polyhydroxyalkanoates production from fermented paperboard mill wastewater using acetate-enriched bacteria. Clean Technologies and Environmental Policy, 2017, 19, 935-947.	4.1	29
29	Upgrading continuous H_2 gas recovery from rice straw hydrolysate via fermentation process amended with magnetite nanoparticles. International Journal of Energy Research, 2019, 43, 3516-3527.	4.5	29
30	Effect of selected wastewater characteristics on estimation of SARS-CoV-2 viral load in wastewater. Environmental Research, 2022, 203, 111877.	7.5	29
31	Use of mixed culture bacteria for photofermentive hydrogen of dark fermentation effluent. Bioresource Technology, 2014, 168, 119-126.	9.6	27
32	Extraction and characterisation of analytical grade C-phycocyanin from Euhalothece sp.. Journal of Applied Phycology, 2019, 31, 1661-1674.	2.8	26
33	Microalgae Applications in Wastewater Treatment. Green Energy and Technology, 2016, , 249-268.	0.6	26
34	Biohydrogen fermentation from Pistia stratiotes (aquatic weed) using mixed and pure bacterial cultures. International Journal of Hydrogen Energy, 2019, 44, 17720-17731.	7.1	25
35	Elucidating the role of nutrients in C-phycocyanin production by the halophilic cyanobacterium Euhalothece sp.. Journal of Applied Phycology, 2018, 30, 2259-2271.	2.8	23
36	RT-LAMP: A Cheaper, Simpler and Faster Alternative for the Detection of SARS-CoV-2 in Wastewater. Food and Environmental Virology, 2021, 13, 447-456.	3.4	23

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37	Artificial intelligence and multivariate statistics for comprehensive assessment of filamentous bacteria in wastewater treatment plants experiencing sludge bulking. Environmental Technology and Innovation, 2020, 19, 100853.	6.1	22
38	Kinetic Modelling and Characterization of Microbial Community Present in a Full-Scale UASB Reactor Treating Brewery Effluent. Microbial Ecology, 2014, 67, 358-368.	2.8	20
39	Physiological responses of carbon-sequestering microalgae to elevated carbon regimes. European Journal of Phycology, 2016, 51, 401-412.	2.0	18
40	Phenotypic and genotypic characterisation of an unique indigenous hypersaline unicellular cyanobacterium, Euhalothece sp.nov. Microbiological Research, 2018, 211, 47-56.	5.3	17
41	Impact of sludge bulking on receiving environment using quantitative microbial risk assessment (QMRA)-based management for full-scale wastewater treatment plants. Journal of Environmental Management, 2020, 267, 110660.	7.8	17
42	Artificial Intelligence for the Evaluation of Operational Parameters Influencing Nitrification and Nitrifiers in an Activated Sludge Process. Microbial Ecology, 2016, 72, 49-63.	2.8	16
43	Principal component analysis and characterization of methane community in a full-scale bioenergy producing UASB reactor treating brewery wastewater. Physics and Chemistry of the Earth, 2018, 108, 1-8.	2.9	16
44	Evaluation of phytotoxicity effect on selected crops using treated and untreated wastewater from different configurative domestic wastewater plants. Environmental Technology (United Kingdom), 2016, 37, 1782-1789.	2.2	15
45	Principal component analysis for interaction of nitrifiers and wastewater environments at a full-scale activated sludge plant. International Journal of Environmental Science and Technology, 2018, 15, 1477-1490.	3.5	14
46	Identification, antibiotic resistance, and virulence profiling of Aeromonas and Pseudomonas species from wastewater and surface water. Environmental Monitoring and Assessment, 2021, 193, 294.	2.7	14
47	Profiling of emerging pathogens, antibiotic resistance genes and mobile genetic elements in different biological wastewater treatment plants. Journal of Environmental Chemical Engineering, 2022, 10, 107596.	6.7	14
48	Sustainable fermentation approach for biogenic hydrogen productivity from delignified sugarcane bagasse. International Journal of Hydrogen Energy, 2022, 47, 37343-37358.	7.1	13
49	A logistic model for the remediation of filamentous bulking in a biological nutrient removal wastewater treatment plant. Water Science and Technology, 2015, 72, 391-405.	2.5	12
50	A review on application of next-generation sequencing methods for profiling of protozoan parasites in water: Current methodologies, challenges, and perspectives. Journal of Microbiological Methods, 2021, 187, 106269.	1.6	12
51	Wastewater-Based Surveillance of Antibiotic Resistance Genes Associated with Tuberculosis Treatment Regimen in KwaZulu Natal, South Africa. Antibiotics, 2021, 10, 1362.	3.7	12
52	Ecophysiology of nitrifying communities in membrane bioreactors. International Journal of Environmental Science and Technology, 2015, 12, 747-762.	3.5	11
53	Characterization of brewery wastewater composition. International Journal of Ecological Science and Environmental Engineering, 2015, 9, 1073-1076.	0.0	11
54	Phenol degrading ability of *Rhodococcus pyrinidivorans* and *Pseudomonas aeruginosa* isolated from activated sludge plants in South Africa. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2013, 48, 947-953.	1.7	10

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55	Rapid quantification and analysis of genetic diversity among *Gordonia* populations in foaming activated sludge plants. Journal of Basic Microbiology, 2011, 51, 415-423.	3.3	9
56	Impact of informal settlements and wastewater treatment plants on helminth egg contamination of urban rivers and risks associated with exposure. Environmental Monitoring and Assessment, 2020, 192, 713.	2.7	9
57	Phycoremediation of Emerging Contaminants. , 2015, , 129-146.		8
58	Role of treatment configuration in simultaneous removal of priority phthalic acid esters and nitrogen in a post anoxic integrated biofilm activated sludge system. Science of the Total Environment, 2020, 702, 134733.	8.0	8
59	The evaluation of COD fractionation and modeling as a key factor for appropriate optimization and monitoring of modern cost-effective activated sludge systems. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2019, 54, 736-744.	1.7	7
60	Performance assessment of aerobic granulation for the post treatment of anaerobic effluents. Environmental Technology and Innovation, 2020, 17, 100588.	6.1	7
61	Microbiota of a Full-scale UASB Reactor Treating Brewery Wastewater Using Illumina MiSeq Sequencing. Open Microbiology Journal, 2019, 13, 1-9.	0.7	7
62	Molecular surveillance of tuberculosis-causing mycobacteria in wastewater. Heliyon, 2022, 8, e08910.	3.2	7
63	Distribution of *Nitrosomonas*‐Related Ammonia‐Oxidizing Bacteria and *Nitrobacter*‐Related Nitrite‐Oxidizing Bacteria in Two Full‐Scale Biological Nutrient Removal Plants. Water Environment Research, 2013, 85, 374-381.	2.7	6
64	Potential strategies for the mainstream application of anammox in treatment of anaerobic effluents - A review. Critical Reviews in Environmental Science and Technology, 2021, 51, 2567-2594.	12.8	6
65	Fuzzy inference optimization algorithms for enhancing the modelling accuracy of wastewater quality parameters. Journal of Environmental Management, 2021, 293, 112862.	7.8	6
66	Critical review of process control strategies in anammox-mediated nitrogen removal systems. Journal of Environmental Chemical Engineering, 2022, 10, 108068.	6.7	6
67	Evaluation of Ammonia Oxidizing Bacterial Community Structure of a Municipal Activated Sludge Plant by 454 High-Throughput Pyrosequencing. Environmental Processes, 2018, 5, 43-57.	3.5	5
68	Development and evaluation of a molecular based protocol for detection and quantification of Cryptosporidium spp. in wastewater. Experimental Parasitology, 2022, 234, 108216.	1.2	5
69	Effect of ammonium to nitrite ratio on reactor performance and microbial population structure in anammox reactors. Environmental Technology (United Kingdom), 2020, 41, 3396-3411.	2.2	4
70	An in silico structural and physiochemical analysis of C-Phycocyanin of halophile Euhalothece sp.. Algal Research, 2020, 51, 102025.	4.6	4
71	Detection of multidrug resistant environmental isolates of *acinetobacter* and *Stenotrophomonas maltophilia*: a possible threat for community acquired infections?. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2021, 56, 1-13.	1.7	4
72	Potential and Challenges Encountered in the Application of Wastewater-Based Epidemiology as an Early Warning System for COVID-19 Infections in South Africa. ACS ES&T Water, 2022, 2, 2105-2113.	4.6	4

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73	Development of Bacillus spp. consortium for one-step â€œAerobic Nitrification-Denitrificationâ€•in a fluidized-bed reactor. Bioresource Technology Reports, 2022, 17, 100922.	2.7	3
74	Epibiont growth on filamentous bacteria found in activated sludge: a morphological approach. Archives of Microbiology, 2018, 200, 493-503.	2.2	2
75	Proposed formulations for error reduction in leachate pollution index (LPI) estimation due to the absence of leachate parameters. Environmental Technology and Innovation, 2021, 23, 101623.	6.1	2
76	Technological Advances in Biohydrogen Production from Microalgae. , 2017, , 347-360.		2
77	Impact of pre-treatments on nitrifying bacterial community analysis from wastewater using fluorescent in situ hybridization and confocal scanning laser microscopy. Journal of General and Applied Microbiology, 2010, 56, 101-106.	0.7	2
78	Pharmacognostical and Phytochemical Evaluation of the leaves of Bauhinia purpurea Linn. Ancient Science of Life: Journal of International Institute of Ayurveda, 2010, 30, 28-32.	0.3	2
79	Characterization of <i>Nocardia farcinica</i>, a Filamentous Bacterium Isolated from Foaming Activated Sludge Samples. Water Environment Research, 2011, 83, 527-531.	2.7	1
80	Transport of Emerging Contaminants from Agricultural Soil to Groundwater. Sustainable Agriculture Reviews, 2021, , 261-281.	1.1	1
81	Process Performance and Microbial Community Structures in Three Anammox-Mediated Systems with Different Mixing Conditions. Journal of Environmental Chemical Engineering, 2021, , 106466.	6.7	1
82	Chapter 4 Molecular Characterization and Quantification of Microbial Communities in Wastewater Treatment Systems. , 2016, , 59-114.		1
83	Genetic Engineering Tools for Enhancing Lipid Production in Microalgae. , 2015, , 119-127.		0
84	Biotechnological Intervention to Enhance the Potential Ability of Bioenergy Plants for Phytoremediation. , 2017, , 387-408.		0