

# Mathava Kumar

## List of Publications by Year in descending order

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75  
papers

3,258  
citations

147786

31  
h-index

155644

55  
g-index

77  
all docs

77  
docs citations

77  
times ranked

3644  
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-composting of green waste and food waste at low C/N ratio. <i>Waste Management</i> , 2010, 30, 602-609.	7.4	328
2	Co-existence of anammox and denitrification for simultaneous nitrogen and carbon removal—Strategies and issues. <i>Journal of Hazardous Materials</i> , 2010, 178, 1-9.	12.4	279
3	Simultaneous partial nitrification, anaerobic ammonium oxidation and denitrification (SNAD) in a full-scale landfill-leachate treatment plant. <i>Journal of Hazardous Materials</i> , 2010, 175, 622-628.	12.4	214
4	Microbial fuel cell-based biosensor for online monitoring wastewater quality: A critical review. <i>Science of the Total Environment</i> , 2020, 712, 135612.	8.0	143
5	Adsorption and desorption characteristics of hydrophobic pesticide endosulfan in four Indian soils. <i>Chemosphere</i> , 2006, 62, 1064-1077.	8.2	139
6	Development of simultaneous partial nitrification, anammox and denitrification (SNAD) process in a sequential batch reactor. <i>Bioresource Technology</i> , 2011, 102, 5514-5519.	9.6	123
7	Evaluation of single-component and multi-component adsorption of metronidazole, phosphate and nitrate on activated carbon from <i>Prosopis juliflora</i> . <i>Chemical Engineering Journal</i> , 2018, 346, 525-534.	12.7	119
8	Antagonistic and synergistic analysis of antibiotic adsorption on <i>Prosopis juliflora</i> activated carbon in multicomponent systems. <i>Chemical Engineering Journal</i> , 2020, 381, 122713.	12.7	90
9	Photocatalytic degradation of carbofuran by TiO <sub>2</sub> -coated activated carbon: Model for kinetic, electrical energy per order and economic analysis. <i>Journal of Environmental Management</i> , 2016, 181, 201-207.	7.8	78
10	Bioremediation of endosulfan contaminated soil and water—Optimization of operating conditions in laboratory scale reactors. <i>Journal of Hazardous Materials</i> , 2006, 136, 354-364.	12.4	76
11	Sequential coagulation/flocculation and microwave-persulfate processes for landfill leachate treatment: Assessment of bio-toxicity, effect of pretreatment and cost-analysis. <i>Waste Management</i> , 2019, 85, 18-29.	7.4	76
12	Nano-bubble flotation technology with coagulation process for the cost-effective treatment of chemical mechanical polishing wastewater. <i>Separation and Purification Technology</i> , 2007, 58, 61-67.	7.9	73
13	Effect of ZnO morphology on GO-ZnO modified polyamide reverse osmosis membranes for desalination. <i>Desalination</i> , 2019, 467, 245-256.	8.2	73
14	Anaerobic biotransformation of fluorene and phenanthrene by sulfate-reducing bacteria and identification of biotransformation pathway. <i>Journal of Hazardous Materials</i> , 2009, 164, 847-855.	12.4	70
15	Synthesis and application of stable, reusable TiO <sub>2</sub> polymeric composites for photocatalytic removal of metronidazole: Removal kinetics and density functional analysis. <i>Chemical Engineering Journal</i> , 2019, 359, 963-975.	12.7	60
16	Boosted sono-oxidative catalytic degradation of Brilliant green dye by magnetic MgFe <sub>2</sub> O <sub>4</sub> catalyst: Degradation mechanism, assessment of bio-toxicity and cost analysis. <i>Ultrasonics Sonochemistry</i> , 2021, 75, 105592.	8.2	57
17	Photocatalytic-oxidation and photo-persulfate-oxidation of sulfadiazine in a laboratory-scale reactor: Analysis of catalyst support, oxidant dosage, removal-rate and degradation pathway. <i>Journal of Environmental Management</i> , 2018, 222, 164-173.	7.8	55
18	Mature landfill leachate treatment using sonolytic-persulfate/hydrogen peroxide oxidation: Optimization of process parameters. <i>Ultrasonics Sonochemistry</i> , 2019, 54, 210-219.	8.2	55

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19	Enrichment and Isolation of a Mixed Bacterial Culture for Complete Mineralization of Endosulfan. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2006, 41, 81-96.	1.5	51
20	Pharmaceutical products as emerging contaminant in water: relevance for developing nations and identification of critical compounds for Indian environment. <i>Environmental Monitoring and Assessment</i> , 2018, 190, 288.	2.7	50
21	Degradation kinetics of di-(2-ethylhexyl) phthalate (DEHP) and organic matter of sewage sludge during composting. <i>Journal of Hazardous Materials</i> , 2008, 154, 55-62.	12.4	48
22	Effect of supplementary carbon addition in the treatment of low C/N high-technology industrial wastewater by MBR. <i>Bioresource Technology</i> , 2012, 113, 148-153.	9.6	47
23	Photochemical degradation of carbofuran and elucidation of removal mechanism. <i>Chemical Engineering Journal</i> , 2011, 166, 150-156.	12.7	43
24	Review on polyaniline as reductive photocatalyst for the construction of the visible light active heterojunction for the generation of reactive oxygen species. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105725.	6.7	42
25	Morphological effect of ZnO nanostructures on desalination performance and antibacterial activity of thin-film nanocomposite (TFN) membrane. <i>Desalination</i> , 2020, 495, 114673.	8.2	39
26	Simultaneous sulfate reduction and copper removal by a PVA-immobilized sulfate reducing bacterial culture. <i>Bioresource Technology</i> , 2010, 101, 4354-4361.	9.6	37
27	Suitability of microwave and microwave-coupled systems for landfill leachate treatment: An overview. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 6165-6178.	6.7	36
28	Kinetics, equilibrium data and modeling studies for the sorption of chromium by <i>Prosopis juliflora</i> bark carbon. <i>Arabian Journal of Chemistry</i> , 2017, 10, S1567-S1577.	4.9	35
29	Photocatalytic degradation of metformin and amoxicillin in synthetic hospital wastewater: effect of classical parameters. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 5463-5474.	3.5	35
30	Livestock Wastewater Treatment in Batch and Continuous Photocatalytic Systems: Performance and Economic Analyses. <i>Water, Air, and Soil Pollution</i> , 2015, 226, 1.	2.4	34
31	Photo-Fenton pretreatment of carbofuran – Analyses via experimental design, detoxification and biodegradability enhancement. <i>Separation and Purification Technology</i> , 2011, 81, 325-331.	7.9	33
32	Analysis of metronidazole removal and micro-toxicity in photolytic systems: Effects of persulfate dosage, anions and reactor operation-mode. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 754-761.	6.7	33
33	Immobilized biomass systems: an approach for trace organics removal from wastewater and environmental remediation. <i>Current Opinion in Environmental Science and Health</i> , 2019, 12, 18-29.	4.1	33
34	Pb removal in pervious concrete filter: Effects of accelerated carbonation and hydraulic retention time. <i>Construction and Building Materials</i> , 2018, 174, 224-232.	7.2	30
35	Metronidazole removal in powder-activated carbon and concrete-containing graphene adsorption systems: Estimation of kinetic, equilibrium and thermodynamic parameters and optimization of adsorption by a central composite design. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2017, 52, 1269-1283.	1.7	29
36	Microwave-assisted persulfate/peroxymonosulfate process for environmental remediation. <i>Current Opinion in Chemical Engineering</i> , 2022, 36, 100826.	7.8	29

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37	Endosulfan Mineralization by Bacterial Isolates and Possible Degradation Pathway Identification. <i>Bioremediation Journal</i> , 2006, 10, 179-190.	2.0	28
38	Simultaneous removal of antibiotic and nutrients via <i>Prosopis juliflora</i> activated carbon column: Performance evaluation, effect of operational parameters and breakthrough modeling. <i>Chemosphere</i> , 2021, 262, 127820.	8.2	28
39	Determination of optimal phenanthrene, sulfate and biomass concentrations for anaerobic biodegradation of phenanthrene by sulfate-reducing bacteria and elucidation of metabolic pathway. <i>Journal of Hazardous Materials</i> , 2009, 171, 1112-1119.	12.4	25
40	Degradation of carbofuran-contaminated water by the Fenton process. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2009, 44, 914-920.	1.7	25
41	Landfill-leachate treatment by simultaneous partial nitrification, anammox and denitrification (SNAD) process. <i>Desalination and Water Treatment</i> , 2011, 32, 4-9.	1.0	25
42	High-rate composting of barley dregs with sewage sludge in a pilot scale bioreactor. <i>Bioresource Technology</i> , 2008, 99, 2210-2217.	9.6	24
43	Simultaneous degradation of anionic and cationic dyes from multi-dye systems using falling film photoreactor: performance evaluation, kinetic and toxicity analysis. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104486.	6.7	24
44	Performance Analysis of Photolytic, Photocatalytic, and Adsorption Systems in the Degradation of Metronidazole on the Perspective of Removal Rate and Energy Consumption. <i>Water, Air, and Soil Pollution</i> , 2017, 228, 1.	2.4	23
45	Carbofuran removal in continuous-photocatalytic reactor: Reactor optimization, rate-constant determination and carbofuran degradation pathway analysis. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2017, 52, 353-360.	1.5	19
46	Performance evaluation of cement-carbon composite for adsorptive removal of acidic and basic dyes from single and multi-component systems. <i>Environmental Technology and Innovation</i> , 2019, 16, 100478.	6.1	19
47	Enhanced persulfate activated sono-catalytic degradation of brilliant green dye by magnetic CaFe <sub>2</sub> O <sub>4</sub> nanoparticles: Degradation pathway study, assessment of bio-toxicity and cost analysis. <i>Surfaces and Interfaces</i> , 2021, 26, 101412.	3.0	19
48	Sulfamethoxazole in poultry wastewater: Identification, treatability and degradation pathway determination in a membrane-photocatalytic slurry reactor. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2015, 50, 1011-1019.	1.7	17
49	Electrochemical oxidation of distillery wastewater by dimensionally stable Ti-RuO <sub>2</sub> anodes. <i>Environmental Technology and Innovation</i> , 2020, 20, 101181.	6.1	16
50	Assessment of di-(2-ethylhexyl)phthalate (DEHP) Removal in a Rotating Biological Contactor and Activated Sludge Process Treating Domestic Wastewater. <i>Separation Science and Technology</i> , 2010, 45, 221-227.	2.5	15
51	Biodegradation of endosulfan-contaminated soil in a pilot-scale reactor-bioaugmented with mixed bacterial culture. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2007, 42, 707-715.	1.5	13
52	Melanoidin removal in multi-oxidant supplemented microwave system: Optimization of operating conditions using response surface methodology and cost estimation. <i>Journal of Water Process Engineering</i> , 2020, 33, 101008.	5.6	13
53	Biodegradation of soil-applied polycyclic aromatic hydrocarbons by sulfate-reducing bacterial consortium. <i>Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering</i> , 2009, 44, 12-20.	1.7	11
54	Microwave induced catalytic treatment of brilliant green dye with carbon doped zinc oxide nanoparticles: Central composite design, toxicity assessment and cost analysis. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2020, 14, 100361.	2.9	11

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55	Influence of organic matter and solute concentration on nitrate sorption in batch and diffusion-cell experiments. <i>Bioresource Technology</i> , 2011, 102, 5283-5289.	9.6	10
56	Interpretation of redox potential variation during biological denitrification using linear non-equilibrium thermodynamic model. <i>International Biodeterioration and Biodegradation</i> , 2012, 67, 28-39.	3.9	9
57	Extent of Precipitation and Sorption During Copper Removal from Synthetic Wastewater in the Presence of Sulfate-Reducing Bacteria. <i>Environmental Engineering Science</i> , 2009, 26, 1087-1096.	1.6	8
58	Heavy Metal Removal and Leaching from Pervious Concrete Filter: Influence of Operating Water Head and Reduced Graphene Oxide Addition. <i>Journal of Environmental Engineering, ASCE</i> , 2019, 145, .	1.4	8
59	Facile synthesis of graphitic carbon nitride from acetic acid pretreatment to activate persulfate in presence of blue light for photocatalytic removal of metronidazole. <i>Chemosphere</i> , 2021, 276, 130171.	8.2	8
60	Assessment of Di-(2-Ethylhexyl) Phthalate (DEHP) in Municipal and Industrial Sludges of Taiwan by Supercritical Fluid Extraction (SFE) and Gas Chromatography with Electron Ionization Detection. <i>Separation Science and Technology</i> , 2008, 43, 132-146.	2.5	7
61	Photocatalytic degradation of poultry wastewater using activated carbon-supported titanium dioxide. <i>Desalination and Water Treatment</i> , 2015, 54, 3279-3290.	1.0	7
62	Starch and powdered activated carbon amended alginate-biomass beads for metronidazole and bulk organic matter removal: Synthesis, optimization, reaction kinetics and reusability. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106102.	6.7	7
63	Sulfamethoxazole removal in membrane-photocatalytic reactor system – experimentation and modelling. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 1697-1704.	2.2	6
64	Aminoclay-Graphene Oxide Composite for Thin-Film Composite Reverse Osmosis Membranes with Unprecedented Water Flux and Fouling Resistance. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100533.	3.7	6
65	Treatment of carbofuran-bearing synthetic wastewater using UASB process. <i>Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes</i> , 2007, 42, 189-199.	1.5	5
66	Anammox Processes. , 2017, , 381-407.		5
67	Leachate treatment using sequential microwave and algal photo-bioreactor: Effect of pretreatment on reactor performance and biomass productivity. <i>Journal of Environmental Management</i> , 2022, 311, 114830.	7.8	5
68	Development of Linear Irreversible Thermodynamic Model for Oxidation Reduction Potential in Environmental Microbial System. <i>Biophysical Journal</i> , 2007, 93, 787-794.	0.5	4
69	Versatility of fluorene metabolite (phenol) in fluorene biodegradation by a sulfate reducing culture. <i>International Biodeterioration and Biodegradation</i> , 2011, 65, 522-526.	3.9	4
70	Synthesis and Application of Chitosan-Graphene Oxide and Titanium-Dioxide Coated Granular Activated Carbon Composites for Adsorptive and Photocatalytic Removal of Antibiotics. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2021, 25, .	2.0	4
71	Iron oxide-modified pervious concrete filter for lead removal from wastewater. <i>Environmental Technology and Innovation</i> , 2022, 28, 102681.	6.1	4
72	Granular Activated Carbon Supported Titanium Dioxide Photocatalytic Process for Carbofuran Removal. , 2016, , 195-201.		1

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73	Remediation of Endosulfan Contaminated System by Microbes. Environmental Science and Engineering, 2017, , 59-81.	0.2	1
74	Biodegradation of Emerging Organic Contaminants by Composting. Handbook of Environmental Chemistry, 2012, , 113-136.	0.4	0
75	Metronidazole Removal from Wastewater via Biomass Coimmobilized with Powdered Activated Carbon: Effects of PAC, Bead Volume, and Organic Carbon Content. Journal of Hazardous, Toxic, and Radioactive Waste, 2022, 26, .	2.0	0