Shaily Mahendra

List of Publications by Year
in descending order

82 papers	9,564 citations	126708 33 h-index	62479 80 g-index
85 all docs	85 docs citations	85 times ranked	12338 citing authors

#	Article	IF	Citations
1	Nanomaterials in the environment: Behavior, fate, bioavailability, and effects. Environmental Toxicology and Chemistry, 2008, 27, 1825-1851.	2.2	2,370
2	Antimicrobial nanomaterials for water disinfection and microbial control: Potential applications and implications. Water Research, 2008, 42, 4591-4602.	5.3	2,019
3	Polysulfone ultrafiltration membranes impregnated with silver nanoparticles show improved biofouling resistance and virus removal. Water Research, 2009, 43, 715-723.	5.3	718
4	Nanomaterials in the Construction Industry: A Review of Their Applications and Environmental Health and Safety Considerations. ACS Nano, 2010, 4, 3580-3590.	7.3	616
5	Developmental phytotoxicity of metal oxide nanoparticles to <i>Arabidopsis thaliana</i>. Environmental Toxicology and Chemistry, 2010, 29, 669-675.	2.2	474
6	Degradation and Removal Methods for Perfluoroalkyl and Polyfluoroalkyl Substances in Water. Environmental Engineering Science, 2016, 33, 615-649.	0.8	254
7	Effects of nano-scale zero-valent iron particles on a mixed culture dechlorinating trichloroethylene. Bioresource Technology, 2010, 101, 1141-1146.	4.8	227
8	Kinetics of 1,4-Dioxane Biodegradation by Monooxygenase-Expressing Bacteria. Environmental Science & Technology, 2006, 40, 5435-5442.	4.6	189
9	Quantum Dot Weathering Results in Microbial Toxicity. Environmental Science & Technology, 2008, 42, 9424-9430.	4.6	187
10	In situ Synthesis of Metal Nanoparticle Embedded Free Standing Multifunctional PDMS Films. Macromolecular Rapid Communications, 2009, 30, 1116-1122.	2.0	143
11	Pseudonocardia dioxanivorans sp. nov., a novel actinomycete that grows on 1,4-dioxane. International Journal of Systematic and Evolutionary Microbiology, 2005, 55, 593-598.	0.8	133
12	A Multisite Survey To Identify the Scale of the 1,4-Dioxane Problem at Contaminated Groundwater Sites. Environmental Science and Technology Letters, 2014, 1, 254-258.	3.9	124
13	Development of bioreactors for comparative study of natural attenuation, biostimulation, and bioaugmentation of petroleum-hydrocarbon contaminated soil. Journal of Hazardous Materials, 2018, 342, 270-278.	6.5	110
14	Identification of the Intermediates of in Vivo Oxidation of 1,4-Dioxane by Monooxygenase-Containing Bacteria. Environmental Science & Technology, 2007, 41, 7330-7336.	4.6	106
15	Evidence of 1,4-Dioxane Attenuation at Groundwater Sites Contaminated with Chlorinated Solvents and 1,4-Dioxane. Environmental Science & Technology, 2015, 49, 6510-6518.	4.6	104
16	Degradation of phenol by synergistic chlorine-enhanced photo-assisted electrochemical oxidation. Chemical Engineering Journal, 2014, 240, 235-243.	6.6	89
17	Advances in bioremediation of 1,4-dioxane-contaminated waters. Journal of Environmental Management, 2017, 204, 765-774.	3.8	89
18	Biodegradation Kinetics of 1,4-Dioxane in Chlorinated Solvent Mixtures. Environmental Science & Technology, 2016, 50, 9599-9607.	4.6	76

#	Article	IF	Citations
19	The impact of chlorinated solvent co-contaminants on the biodegradation kinetics of 1,4-dioxane. Chemosphere, 2013, 91, 88-92.	4.2	73
20	1,4-Dioxane biodegradation at low temperatures in Arctic groundwater samples. Water Research, 2010, 44, 2894-2900.	5.3	69
21	Identification of Biomarker Genes To Predict Biodegradation of 1,4-Dioxane. Applied and Environmental Microbiology, 2014, 80, 3209-3218.	1.4	69
22	Stable Carbon Isotope Fractionation during Aerobic Biodegradation of Chlorinated Ethenes. Environmental Science & Technology, 2004, 38, 3126-3130.	4.6	65
23	Biotransformation of 6:2 Fluorotelomer Alcohol (6:2 FTOH) by a Wood-Rotting Fungus. Environmental Science & Technology, 2014, 48, 4012-4020.	4.6	57
24	Genome Sequence of the 1,4-Dioxane-Degrading Pseudonocardia dioxanivoransStrain CB1190. Journal of Bacteriology, 2011, 193, 4549-4550.	1.0	56
25	Vault Nanoparticles Packaged with Enzymes as an Efficient Pollutant Biodegradation Technology. ACS Nano, 2015, 9, 10931-10940.	7.3	49
26	Effects of water chemistry on structure and performance of polyamide composite membranes. Journal of Membrane Science, 2014, 452, 415-425.	4.1	47
27	Characterizing the intrinsic bioremediation potential of 1,4-dioxane and trichloroethene using innovative environmental diagnostic tools. Journal of Environmental Monitoring, 2012, 14, 2317.	2.1	44
28	Biochar increases nitrate removal capacity of woodchip biofilters during high-intensity rainfall. Water Research, 2019, 165, 115008.	5.3	42
29	Nanomaterial-Supported Enzymes for Water Purification and Monitoring in Point-of-Use Water Supply Systems. Accounts of Chemical Research, 2019, 52, 876-885.	7.6	42
30	Response and recovery of microbial communities subjected to oxidative and biological treatments of 1,4-dioxane and co-contaminants. Water Research, 2019, 149, 74-85.	5.3	41
31	Abiotic and bioaugmented granular activated carbon for the treatment of 1,4-dioxane-contaminated water. Environmental Pollution, 2018, 240, 916-924.	3.7	38
32	Monitoring, assessment, and prediction of microbial shifts in coupled catalysis and biodegradation of 1,4-dioxane and co-contaminants. Water Research, 2020, 173, 115540.	5.3	37
33	Perfluoroalkyl acids on suspended particles: Significant transport pathways in surface runoff, surface waters, and subsurface soils. Journal of Hazardous Materials, 2021, 417, 126159.	6.5	37
34	Synergistic Treatment of Mixed 1,4-Dioxane and Chlorinated Solvent Contaminations by Coupling Electrochemical Oxidation with Aerobic Biodegradation. Environmental Science & Technology, 2017, 51, 12619-12629.	4.6	36
35	Planktonic and biofilmâ€grown nitrogenâ€cycling bacteria exhibit different susceptibilities to copper nanoparticles. Environmental Toxicology and Chemistry, 2015, 34, 887-897.	2.2	35
36	A Multiple Lines of Evidence Framework to Evaluate Intrinsic Biodegradation of 1,4â€Dioxane. Remediation, 2016, 27, 93-114.	1.1	34

#	Article	IF	Citations
37	A Mixed Microbial Community for the Biodegradation of Chlorinated Ethenes and 1,4-Dioxane. Environmental Science and Technology Letters, 2019, 6, 49-54.	3.9	34
38	Antibiotic Resistance in Airborne Bacteria Near Conventional and Organic Beef Cattle Farms in California, USA. Water, Air, and Soil Pollution, 2016, 227, 1.	1.1	33
39	Genome-Wide Assessment in Escherichia coli Reveals Time-Dependent Nanotoxicity Paradigms. ACS Nano, 2012, 6, 9402-9415.	7.3	31
40	Release of soil colloids during flow interruption increases the pore-water PFAS concentration in saturated soil. Environmental Pollution, 2021, 286, 117297.	3.7	30
41	Co-contaminant effects on 1,4-dioxane biodegradation in packed soil column flow-through systems. Environmental Pollution, 2018, 243, 573-581.	3.7	29
42	A Vault-Encapsulated Enzyme Approach for Efficient Degradation and Detoxification of Bisphenol A and Its Analogues. ACS Sustainable Chemistry and Engineering, 2019, 7, 5808-5817.	3.2	28
43	Transition Metals and Organic Ligands Influence Biodegradation of 1,4-Dioxane. Applied Biochemistry and Biotechnology, 2014, 173, 291-306.	1.4	24
44	Mechanisms of 1,4-Dioxane Biodegradation and Adsorption by Bio-Zeolite in the Presence of Chlorinated Solvents: Experimental and Molecular Dynamics Simulation Studies. Environmental Science & Technology, 2019, 53, 14538-14547.	4.6	24
45	Enhanced removal of per- and polyfluoroalkyl substances in complex matrices by polyDADMAC-coated regenerable granular activated carbon. Environmental Pollution, 2022, 294, 118603.	3.7	24
46	Removal of 1,4-dioxane by titanium silicalite-1: Separation mechanisms and bioregeneration of sorption sites. Chemical Engineering Journal, 2019, 371, 193-202.	6.6	23
47	Sonolytic destruction of Per- and polyfluoroalkyl substances in groundwater, aqueous Film-Forming Foams, and investigation derived waste. Chemical Engineering Journal, 2021, 425, 131778.	6.6	23
48	Immobilized fungal enzymes: Innovations and potential applications in biodegradation and biosynthesis. Biotechnology Advances, 2022, 57, 107936.	6.0	23
49	Biodegradation mechanisms of sulfonamides by Phanerochaete chrysosporium â€“ Luffa fiber system revealed at the transcriptome level. Chemosphere, 2021, 266, 129194.	4.2	22
50	Decolorization and detoxification of synthetic dye compounds by laccase immobilized in vault nanoparticles. Bioresource Technology, 2022, 351, 127040.	4.8	22
51	Profiling microbial community structures and functions in bioremediation strategies for treating 1,4-dioxane-contaminated groundwater. Journal of Hazardous Materials, 2021, 408, 124457.	6.5	21
52	Identification of novel 1,4-dioxane degraders and related genes from activated sludge by taxonomic and functional gene sequence analysis. Journal of Hazardous Materials, 2021, 412, 125157.	6.5	21
53	Performance testing of mesh anodes for in situ electrochemical oxidation of PFAS. Chemical Engineering Journal Advances, 2022, 9, 100205.	2.4	19
54	A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices. Advanced Materials, 2022, 34, e2200254.	11.1	18

#	Article	IF	Citations
55	Cometabolic biotransformation of 1,4-dioxane in mixtures with hexavalent chromium using attached and planktonic bacteria. Science of the Total Environment, 2020, 706, 135734.	3.9	17
56	Fungal biotransformation of 6:2 fluorotelomer alcohol. Remediation, 2018, 28, 59-70.	1.1	16
57	Characterization of Sulfur in Raw and Anaerobically Digested Municipal Wastewater Treatment Sludges. Water Environment Research, 2013, 85, 124-132.	1.3	15
58	Bioelectrochemical Treatment of 1,4-Dioxane in the Presence of Chlorinated Solvents: Design, Process, and Sustainability Considerations. ACS Sustainable Chemistry and Engineering, 2021, 9, 3172-3182.	3.2	15
59	Synthesis and assembly of human vault particles in yeast. Biotechnology and Bioengineering, 2018, 115, 2941-2950.	1.7	14
60	Microbial responses to combined oxidation and catalysis treatment of 1,4-dioxane and co-contaminants in groundwater and soil. Frontiers of Environmental Science and Engineering, 2018, 12, 1.	3.3	12
61	Vault packaged enzyme mediated degradation of amino-aromatic energetic compounds. Chemosphere, 2020, 242, 125117.	4.2	11
62	Differential Sensitivity of Wetland-Derived Nitrogen Cycling Microorganisms to Copper Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 11642-11652.	3.2	10
63	Vault nanocapsule-mediated biomimetic silicification for efficient and robust immobilization of proteins in silica composites. Chemical Engineering Journal, 2021, 418, 129406.	6.6	9
64	Dry-wet and freeze-thaw cycles enhance PFOA leaching from subsurface soils. Journal of Hazardous Materials Letters, 2021, 2, 100029.	2.0	9
65	Nanotechnology-Enabled Water Disinfection and Microbial Control: Merits and Limitations. , 2009, , 157-166.		8
66	Potential Environmental and Human Health Impacts of Nanomaterials Used in the Construction Industry. , 2009, , 1-14.		8
67	Molecular Biological Methods in Environmental Engineering. Water Environment Research, 2011, 83, 927-955.	1.3	7
68	Copper status of exposed microorganisms influences susceptibility to metallic nanoparticles. Environmental Toxicology and Chemistry, 2016, 35, 1148-1158.	2.2	7
69	Bioremediation of 1,4â€Dioxane: Successful Demonstration of In Situ and Ex Situ Approaches. Ground Water Monitoring and Remediation, 2019, 39, 15-24.	0.6	7
70	Novel Applications of Molecular Biological and Microscopic Tools in Environmental Engineering. Water Environment Research, 2013, 85, 917-950.	1.3	6
71	Encapsulation of Exogenous Proteins in Vault Nanoparticles. Methods in Molecular Biology, 2018, 1798, 25-37.	0.4	4
72	How permeable could a reverse osmosis membrane be if it was specifically developed for uncharged organic solute rejection?. AWWA Water Science, 2020, 2, e1189.	1.0	4

#	Article	IF	Citations
73	Vinyl chloride and 1,4-dioxane metabolism by Pseudonocardia dioxanivorans CB1190. Journal of Hazardous Materials Letters, 2021, 2, 100039.	2.0	4
74	Advancements in Molecular Techniques and Applications in Environmental Engineering. Water Environment Research, 2012, 84, 814-844.	1.3	3
75	Nanotechnology-Enabled Water Disinfection and Microbial Control. , 2014, , 319-327.		3
76	A multipronged approach for systematic in vitro quantification of catheter-associated biofilms. Journal of Hazardous Materials Letters, 2021, 2, 100032.	2.0	3
77	Safety issues relating to nanomaterials for construction applications. , 2013, , 127-158.		2
78	Nanomaterials in Civil Engineering. , 2013, , 1039-1062.		2
79	Tracking antibiotic resistance through the environment near a biosolid spreading ground: Resistome changes, distribution, and metal(loid) co-selection. Science of the Total Environment, 2022, 823, 153570.	3.9	2
80	Stable Carbon Isotope Fractionation During 1,4-Dioxane Biodegradation. Proceedings of the Water Environment Federation, 2011, 2011, 111-116.	0.0	1
81	Differential Sensitivity of Wetland-Derived Nitrogen Cycling Microorganisms to Copper Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 11642-11652.	3.2	1
82	A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices (Adv. Mater. 20/2022). Advanced Materials, 2022, 34, .	11.1	1