Shaily Mahendra

List of Publications by Citations

82 papers	7,813 citations	29 h-index	85 g-index
85 ext. papers	8,676 ext. citations	8.9 avg, IF	5.89 L-index

#	Paper	IF	Citations
82	Nanomaterials in the environment: behavior, fate, bioavailability, and effects. *Environmental Toxicology and Chemistry*, **2008**, 27, 1825-51	3.8	2098
81	Antimicrobial nanomaterials for water disinfection and microbial control: potential applications and implications. *Water Research*, **2008**, 42, 4591-602	12.5	1773
80	Polysulfone ultrafiltration membranes impregnated with silver nanoparticles show improved biofouling resistance and virus removal. *Water Research*, **2009**, 43, 715-23	12.5	610
79	Nanomaterials in the construction industry: a review of their applications and environmental health and safety considerations. *ACS Nano*, **2010**, 4, 3580-90	16.7	521
78	Developmental phytotoxicity of metal oxide nanoparticles to Arabidopsis thaliana. *Environmental Toxicology and Chemistry*, **2010**, 29, 669-75	3.8	387
77	Effects of nano-scale zero-valent iron particles on a mixed culture dechlorinating trichloroethylene. *Bioresource Technology*, **2010**, 101, 1141-6	11	206
76	Degradation and Removal Methods for Perfluoroalkyl and Polyfluoroalkyl Substances in Water. *Environmental Engineering Science*, **2016**, 33, 615-649	2	198
75	Quantum dot weathering results in microbial toxicity. *Environmental Science & Technology*, **2008**, 42, 9424-30	10.3	173
74	Kinetics of 1,4-dioxane biodegradation by monooxygenase-expressing bacteria. *Environmental Science & Technology*, **2006**, 40, 5435-42	10.3	144
73	In situ Synthesis of Metal Nanoparticle Embedded Free Standing Multifunctional PDMS Films. *Macromolecular Rapid Communications*, **2009**, 30, 1116-22	4.8	117
72	Pseudonocardia dioxanivorans sp. nov., a novel actinomycete that grows on 1,4-dioxane. *International Journal of Systematic and Evolutionary Microbiology*, **2005**, 55, 593-598	2.2	112
71	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	11	88
70	Identification of the intermediates of in vivo oxidation of 1 ,4-dioxane by monooxygenase-containing bacteria. *Environmental Science & Technology*, **2007**, 41, 7330-6	10.3	86
69	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	12.8	79
68	Evidence of 1,4-dioxane attenuation at groundwater sites contaminated with chlorinated solvents and 1,4-dioxane. *Environmental Science & Technology*, **2015**, 49, 6510-8	10.3	76
67	Degradation of phenol by synergistic chlorine-enhanced photo-assisted electrochemical oxidation. *Chemical Engineering Journal*, **2014**, 240, 235-243	14.7	73
66	Advances in bioremediation of 1,4-dioxane-contaminated waters. *Journal of Environmental Management*, **2017**, 204, 765-774	7.9	63

65	Stable carbon isotope fractionation during aerobic biodegradation of chlorinated ethenes. *Environmental Science & Technology*, **2004**, 38, 3126-30	10.3	61
64	1,4-Dioxane biodegradation at low temperatures in Arctic groundwater samples. *Water Research*, **2010**, 44, 2894-900	12.5	58
63	The impact of chlorinated solvent co-contaminants on the biodegradation kinetics of 1,4-dioxane. *Chemosphere*, **2013**, 91, 88-92	8.4	56
62	Biodegradation Kinetics of 1,4-Dioxane in Chlorinated Solvent Mixtures. *Environmental Science & Technology*, **2016**, 50, 9599-607	10.3	54
61	Identification of biomarker genes to predict biodegradation of 1,4-dioxane. *Applied and Environmental Microbiology*, **2014**, 80, 3209-18	4.8	54
60	Genome sequence of the 1,4-dioxane-degrading Pseudonocardia dioxanivorans strain CB1190. *Journal of Bacteriology*, **2011**, 193, 4549-50	3.5	51
59	Characterizing the intrinsic bioremediation potential of 1,4-dioxane and trichloroethene using innovative environmental diagnostic tools. *Journal of Environmental Monitoring*, **2012**, 14, 2317-26		40
58	Vault Nanoparticles Packaged with Enzymes as an Efficient Pollutant Biodegradation Technology. *ACS Nano*, **2015**, 9, 10931-40	16.7	36
57	Biotransformation of 6:2 fluorotelomer alcohol (6:2 FTOH) by a wood-rotting fungus. *Environmental Science & Technology*, **2014**, 48, 4012-20	10.3	35
56	Effects of water chemistry on structure and performance of polyamide composite membranes. *Journal of Membrane Science*, **2014**, 452, 415-425	9.6	34
55	A Multiple Lines of Evidence Framework to Evaluate Intrinsic Biodegradation of 1,4-Dioxane. *Remediation*, **2016**, 27, 93-114	1.8	30
54	Planktonic and biofilm-grown nitrogen-cycling bacteria exhibit different susceptibilities to copper nanoparticles. *Environmental Toxicology and Chemistry*, **2015**, 34, 887-97	3.8	29
53	Nanomaterial-Supported Enzymes for Water Purification and Monitoring in Point-of-Use Water Supply Systems. *Accounts of Chemical Research*, **2019**, 52, 876-885	24.3	27
52	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	12.5	27
51	Abiotic and bioaugmented granular activated carbon for the treatment of 1,4-dioxane-contaminated water. *Environmental Pollution*, **2018**, 240, 916-924	9.3	26
50	Genome-wide assessment in Escherichia coli reveals time-dependent nanotoxicity paradigms. *ACS Nano*, **2012**, 6, 9402-15	16.7	25
49	Monitoring, assessment, and prediction of microbial shifts in coupled catalysis and biodegradation of 1,4-dioxane and co-contaminants. *Water Research*, **2020**, 173, 115540	12.5	25
48	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	10.3	24

47	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	8.3	22
46	Transition metals and organic ligands influence biodegradation of 1,4-dioxane. *Applied Biochemistry and Biotechnology*, **2014**, 173, 291-306	3.2	21
45	Biochar increases nitrate removal capacity of woodchip biofilters during high-intensity rainfall. *Water Research*, **2019**, 165, 115008	12.5	20
44	Co-contaminant effects on 1,4-dioxane biodegradation in packed soil column flow-through systems. *Environmental Pollution*, **2018**, 243, 573-581	9.3	19
43	Antibiotic Resistance in Airborne Bacteria Near Conventional and Organic Beef Cattle Farms in California, USA. *Water, Air, and Soil Pollution*, **2016**, 227, 1	2.6	17
42	A Mixed Microbial Community for the Biodegradation of Chlorinated Ethenes and 1,4-Dioxane. *Environmental Science and Technology Letters*, **2019**, 6, 49-54	11	17
41	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	10.3	13
40	Removal of 1,4-dioxane by titanium silicalite-1: Separation mechanisms and bioregeneration of sorption sites. *Chemical Engineering Journal*, **2019**, 371, 193-202	14.7	11
39	Perfluoroalkyl acids on suspended particles: Significant transport pathways in surface runoff, surface waters, and subsurface soils. *Journal of Hazardous Materials*, **2021**, 417, 126159	12.8	11
38	Synthesis and assembly of human vault particles in yeast. *Biotechnology and Bioengineering*, **2018**, 115, 2941-2950	4.9	10
37	Release of soil colloids during flow interruption increases the pore-water PFAS concentration in saturated soil. *Environmental Pollution*, **2021**, 286, 117297	9.3	10
36	Cometabolic biotransformation of 1,4-dioxane in mixtures with hexavalent chromium using attached and planktonic bacteria. *Science of the Total Environment*, **2020**, 706, 135734	10.2	9
35	Biodegradation mechanisms of sulfonamides by Phanerochaete chrysosporium - Luffa fiber system revealed at the transcriptome level. *Chemosphere*, **2021**, 266, 129194	8.4	9
34	Characterization of sulfur in raw and anaerobically digested municipal wastewater treatment sludges. *Water Environment Research*, **2013**, 85, 124-32	2.8	8
33	Profiling microbial community structures and functions in bioremediation strategies for treating 1,4-dioxane-contaminated groundwater. *Journal of Hazardous Materials*, **2021**, 408, 124457	12.8	8
32	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	5.8	8
31	Copper status of exposed microorganisms influences susceptibility to metallic nanoparticles. *Environmental Toxicology and Chemistry*, **2016**, 35, 1148-58	3.8	7
30	Nanotechnology-Enabled Water Disinfection and Microbial Control: Merits and Limitations **2009**, 157-166		7

29	Vault packaged enzyme mediated degradation of amino-aromatic energetic compounds. *Chemosphere*, **2020**, 242, 125117	8.4	7
28	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	12.8	6
27	Sonolytic destruction of Per- and polyfluoroalkyl substances in groundwater, aqueous Film-Forming Foams, and investigation derived waste. *Chemical Engineering Journal*, **2021**, 425, 131778	14.7	6
26	Fungal biotransformation of 6:2 fluorotelomer alcohol. *Remediation*, **2018**, 28, 59-70	1.8	5
25	Differential Sensitivity of Wetland-Derived Nitrogen Cycling Microorganisms to Copper Nanoparticles. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11642-11652	8.3	5
24	Novel Applications of Molecular Biological and Microscopic Tools in Environmental Engineering. *Water Environment Research*, **2013**, 85, 917-950	2.8	5
23	Molecular Biological Methods in Environmental Engineering. *Water Environment Research*, **2011**, 83, 927-955	2.8	5
22	Potential Environmental and Human Health Impacts of Nanomaterials Used in the Construction Industry **2009**, 1-14		5
21	Dry-wet and freeze-thaw cycles enhance PFOA leaching from subsurface soils. *Journal of Hazardous Materials Letters*, **2021**, 2, 100029	3.3	4
20	Encapsulation of Exogenous Proteins in Vault Nanoparticles. *Methods in Molecular Biology*, **2018**, 1798, 25-37	1.4	3
19	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	8.3	3
18	Vault nanocapsule-mediated biomimetic silicification for efficient and robust immobilization of proteins in silica composites. *Chemical Engineering Journal*, **2021**, 418, 129406	14.7	3
17	Immobilized fungal enzymes: Innovations and potential applications in biodegradation and biosynthesis.. *Biotechnology Advances*, **2022**, 57, 107936	17.8	3
16	Bioremediation of 1,4-Dioxane: Successful Demonstration of In Situ and Ex Situ Approaches. *Ground Water Monitoring and Remediation*, **2019**, 39, 15-24	1.4	2
15	Safety issues relating to nanomaterials for construction applications **2013**, 127-158		2
14	Nanotechnology-Enabled Water Disinfection and Microbial Control: Merits and Limitations **2014**, 319-327		2
13	Advancements in Molecular Techniques and Applications in Environmental Engineering. *Water Environment Research*, **2012**, 84, 814-844	2.8	2
12	Enhanced removal of per- and polyfluoroalkyl substances in complex matrices by polyDADMAC-coated regenerable granular activated carbon. *Environmental Pollution*, **2021**, 294, 118603	9.3	2

11	Nanomaterials in Civil Engineering **2013**, 1039-1062		2
10	A multipronged approach for systematic in vitro quantification of catheter-associated biofilms. *Journal of Hazardous Materials Letters*, **2021**, 2, 100032	3.3	2
9	Stable Carbon Isotope Fractionation During 1,4-Dioxane Biodegradation. *Proceedings of the Water Environment Federation*, **2011**, 2011, 111-116		1
8	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	10.2	1
7	Performance testing of mesh anodes for in situ electrochemical oxidation of PFAS. *Chemical Engineering Journal Advances*, **2022**, 9, 100205	3.6	1
6	How permeable could a reverse osmosis membrane be if it was specifically developed for uncharged organic solute rejection?. *AWWA Water Science*, **2020**, 2, e1189	1.6	1
5	A readily scalable, clinically demonstrated, antibiofouling zwitterionic surface treatment for implantable medical devices.. *Advanced Materials*, **2022**, e2200254	24	1
4	Decolorization and detoxification of synthetic dye compounds by laccase immobilized in vault nanoparticles.. *Bioresource Technology*, **2022**, 351, 127040	11	1
3	Vinyl chloride and 1,4-dioxane metabolism by Pseudonocardia dioxanivorans CB1190. *Journal of Hazardous Materials Letters*, **2021**, 2, 100039	3.3	0
2	Differential Sensitivity of Wetland-Derived Nitrogen Cycling Microorganisms to Copper Nanoparticles. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 11642-11652	8.3	
1	A Readily Scalable, Clinically Demonstrated, Antibiofouling Zwitterionic Surface Treatment for Implantable Medical Devices (Adv. Mater. 20/2022). *Advanced Materials*, **2022**, 34, 2270152	24	