Weimin Sun

List of Publications by Year
in descending order

102 papers	3,859 citations	81743 39 h-index	149479 56 g-index
103 all docs	103 docs citations	103 times ranked	2955 citing authors

#	Article	IF	Citations
1	Correlating microbial community compositions with environmental factors in activated sludge from four full-scale municipal wastewater treatment plants in Shanghai, China. Applied Microbiology and Biotechnology, 2016, 100, 4663-4673.	1.7	139
2	Response of Soil Microbial Communities to Elevated Antimony and Arsenic Contamination Indicates the Relationship between the Innate Microbiota and Contaminant Fractions. Environmental Science & Technology, 2017, 51, 9165-9175.	4.6	133
3	Microbial community analysis in rice paddy soils irrigated by acid mine drainage contaminated water. Applied Microbiology and Biotechnology, 2015, 99, 2911-2922.	1.7	131
4	Arsenic and antimony co-contamination influences on soil microbial community composition and functions: Relevance to arsenic resistance and carbon, nitrogen, and sulfur cycling. Environment International, 2021, 153, 106522.	4.8	120
5	Bacterial Survival Strategies in an Alkaline Tailing Site and the Physiological Mechanisms of Dominant Phylotypes As Revealed by Metagenomic Analyses. Environmental Science & Technology, 2018, 52, 13370-13380.	4.6	112
6	Profiling microbial community in a watershed heavily contaminated by an active antimony (Sb) mine in Southwest China. Science of the Total Environment, 2016, 550, 297-308.	3.9	104
7	Impacts of coexisting antibiotics, antibacterial residues, and heavy metals on the occurrence of erythromycin resistance genes in urban wastewater. Applied Microbiology and Biotechnology, 2015, 99, 3971-3980.	1.7	92
8	Diversity of Five Anaerobic Toluene-Degrading Microbial Communities Investigated Using Stable Isotope Probing. Applied and Environmental Microbiology, 2012, 78, 972-980.	1.4	89
9	Uncovering microbial responses to sharp geochemical gradients in a terrace contaminated by acid mine drainage. Environmental Pollution, 2020, 261, 114226.	3.7	88
10	Acid mine drainage affects the diversity and metal resistance gene profile of sediment bacterial community along a river. Chemosphere, 2019, 217, 790-799.	4.2	83
11	Characterization of Nitrate-Dependent As(III)-Oxidizing Communities in Arsenic-Contaminated Soil and Investigation of Their Metabolic Potentials by the Combination of DNA-Stable Isotope Probing and Metagenomics. Environmental Science & Technology, 2020, 54, 7366-7377.	4.6	82
12	Identification of a Novel Toluene-Degrading Bacterium from the Candidate Phylum TM7, as Determined by DNA Stable Isotope Probing. Applied and Environmental Microbiology, 2009, 75, 4644-4647.	1.4	77
13	Bacterial response to sharp geochemical gradients caused by acid mine drainage intrusion in a terrace: Relevance of C, N, and S cycling and metal resistance. Environment International, 2020, 138, 105601.	4.8	74
14	Diversity of the Sediment Microbial Community in the Aha Watershed (Southwest China) in Response to Acid Mine Drainage Pollution Gradients. Applied and Environmental Microbiology, 2015, 81, 4874-4884.	1.4	73
15	Novel aerobic benzene degrading microorganisms identified in three soils by stable isotope probing. Biodegradation, 2011, 22, 71-81.	1.5	72
16	Paddy soil microbial communities driven by environment- and microbe-microbe interactions: A case study of elevation-resolved microbial communities in a rice terrace. Science of the Total Environment, 2018, 612, 884-893.	3.9	70
17	Chemolithoautotropic Diazotrophy Dominates the Nitrogen Fixation Process in Mine Tailings. Environmental Science & Technology, 2020, 54, 6082-6093.	4.6	63
18	Investigation of the Ecological Roles of Putative Keystone Taxa during Tailing Revegetation. Environmental Science & Technology, 2020, 54, 11258-11270.	4.6	62

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19	Depth-resolved microbial community analyses in two contrasting soil cores contaminated by antimony and arsenic. Environmental Pollution, 2017, 221, 244-255.	3.7	60
20	Identification of Anaerobic Aniline-Degrading Bacteria at a Contaminated Industrial Site. Environmental Science & Technology, 2015, 49, 11079-11088.	4.6	56
21	Variation in rhizosphere microbiota correlates with edaphic factor in an abandoned antimony tailing dump. Environmental Pollution, 2019, 253, 141-151.	3.7	56
22	Microbial diversity and community structure in an antimony-rich tailings dump. Applied Microbiology and Biotechnology, 2016, 100, 7751-7763.	1.7	55
23	Microbial communities inhabiting oil-contaminated soils from two major oilfields in Northern China: Implications for active petroleum-degrading capacity. Journal of Microbiology, 2015, 53, 371-378.	1.3	53
24	Root-associated (rhizosphere and endosphere) microbiomes of the Miscanthus sinensis and their response to the heavy metal contamination. Journal of Environmental Sciences, 2021, 104, 387-398.	3.2	53
25	Direct Link between Toluene Degradation in Contaminated-Site Microcosms and a Polaromonas Strain. Applied and Environmental Microbiology, 2010, 76, 956-959.	1.4	50
26	Bacteria diversity, distribution and insight into their role in <scp>S</scp> and <scp>F</scp>e biogeochemical cycling during black shale weathering. Environmental Microbiology, 2014, 16, 3533-3547.	1.8	50
27	Impacts of antimony and arsenic co-contamination on the river sedimentary microbial community in an antimony-contaminated river. Science of the Total Environment, 2020, 713, 136451.	3.9	49
28	Identification of Desulfosporosinus as toluene-assimilating microorganisms from a methanogenic consortium. International Biodeterioration and Biodegradation, 2014, 88, 13-19.	1.9	48
29	Correlating microbial community profiles with geochemical conditions in a watershed heavily contaminated by an antimony tailing pond. Environmental Pollution, 2016, 215, 141-153.	3.7	48
30	Desulfurivibrio spp. mediate sulfur-oxidation coupled to Sb(V) reduction, a novel biogeochemical process. ISME Journal, 2022, 16, 1547-1556.	4.4	48
31	Rhizosphere Microbial Response to Multiple Metal(loid)s in Different Contaminated Arable Soils Indicates Crop-Specific Metal-Microbe Interactions. Applied and Environmental Microbiology, 2018, 84, .	1.4	47
32	Bacterial response to antimony and arsenic contamination in rice paddies during different flooding conditions. Science of the Total Environment, 2019, 675, 273-285.	3.9	47
33	V^V Reduction by Polaromonas spp. in Vanadium Mine Tailings. Environmental Science & Technology, 2020, 54, 14442-14454.	4.6	47
34	Serratia spp. Are Responsible for Nitrogen Fixation Fueled by As(III) Oxidation, a Novel Biogeochemical Process Identified in Mine Tailings. Environmental Science & Technology, 2022, 56, 2033-2043.	4.6	46
35	Nonylphenol biodegradation in river sediment and associated shifts in community structures of bacteria and ammonia-oxidizing microorganisms. Ecotoxicology and Environmental Safety, 2014, 106, 1-5.	2.9	45
36	Impacts of Arsenic and Antimony Co-Contamination on Sedimentary Microbial Communities in Rivers with Different Pollution Gradients. Microbial Ecology, 2019, 78, 589-602.	1.4	45

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37	Microbiomeâ€“environment interactions in antimony-contaminated rice paddies and the correlation of core microbiome with arsenic and antimony contamination. Chemosphere, 2021, 263, 128227.	4.2	45
38	The composition, biotic network, and assembly of plastisphere protistan taxonomic and functional communities in plastic-mulching croplands. Journal of Hazardous Materials, 2022, 430, 128390.	6.5	45
39	Presence, diversity and enumeration of functional genes (bssA and bamA) relating to toluene degradation across a range of redox conditions and inoculum sources. Biodegradation, 2014, 25, 189-203.	1.5	43
40	Toxic effects of microplastics in plants depend more by their surface functional groups than just accumulation contents. Science of the Total Environment, 2022, 833, 155097.	3.9	42
41	Anaerobic Methyl tert -Butyl Ether-Degrading Microorganisms Identified in Wastewater Treatment Plant Samples by Stable Isotope Probing. Applied and Environmental Microbiology, 2012, 78, 2973-2980.	1.4	41
42	Hydrophobic organic chemicals (HOCs) removal from biologically treated landfill leachate by powder-activated carbon (PAC), granular-activated carbon (GAC) and biomimetic fat cell (BFC). Journal of Hazardous Materials, 2009, 163, 1084-1089.	6.5	40
43	Characterization of the microbial community composition and the distribution of Fe-metabolizing bacteria in a creek contaminated by acid mine drainage. Applied Microbiology and Biotechnology, 2016, 100, 8523-8535.	1.7	40
44	Comparative characterization of microbial communities that inhabit arsenic-rich and antimony-rich contaminated sites: Responses to two different contamination conditions. Environmental Pollution, 2020, 260, 114052.	3.7	40
45	From mesophilic to thermophilic digestion: the transitions of anaerobic bacterial, archaeal, and fungal community structures in sludge and manure samples. Applied Microbiology and Biotechnology, 2015, 99, 10271-10282.	1.7	38
46	Stable Isotope Probing Identifies Novel m-Xylene Degraders in Soil Microcosms from Contaminated and Uncontaminated Sites. Water, Air, and Soil Pollution, 2010, 212, 113-122.	1.1	37
47	Remediation of antimony-rich mine waters: Assessment of antimony removal and shifts in the microbial community of an onsite field-scale bioreactor. Environmental Pollution, 2016, 215, 213-222.	3.7	37
48	Soil bacterial community functions and distribution after mining disturbance. Soil Biology and Biochemistry, 2021, 157, 108232.	4.2	36
49	Profiling microbial community structures across six large oilfields in China and the potential role of dominant microorganisms in bioremediation. Applied Microbiology and Biotechnology, 2015, 99, 8751-8764.	1.7	35
50	Response of soil protozoa to acid mine drainage in a contaminated terrace. Journal of Hazardous Materials, 2022, 421, 126790.	6.5	33
51	A Combination of Stable Isotope Probing, Illumina Sequencing, and Co-occurrence Network to Investigate Thermophilic Acetate- and Lactate-Utilizing Bacteria. Microbial Ecology, 2018, 75, 113-122.	1.4	32
52	Comparative Analyses of the Microbial Communities Inhabiting Coal Mining Waste Dump and an Adjacent Acid Mine Drainage Creek. Microbial Ecology, 2019, 78, 651-664.	1.4	29
53	Metabolic potentials of members of the class Acidobacteriia in metalâ€contaminated soils revealed by metagenomic analysis. Environmental Microbiology, 2022, 24, 803-818.	1.8	29
54	Vegetation type impacts microbial interaction with antimony contaminants in a mining-contaminated soil environment. Environmental Pollution, 2019, 252, 1872-1881.	3.7	27

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55	Characterization of iron-metabolizing communities in soils contaminated by acid mine drainage from an abandoned coal mine in Southwest China. Environmental Science and Pollution Research, 2019, 26, 9585-9598.	2.7	27
56	Biodegradation of nonylphenol by two alphaproteobacterial strains in liquid culture and sediment microcosm. International Biodeterioration and Biodegradation, 2014, 92, 1-5.	1.9	25
57	Root microbiome assembly of Asâ€hyperaccumulator <scp>Pteris vittata</scp> and its efficacy in arsenic requisition. Environmental Microbiology, 2021, 23, 1959-1971.	1.8	25
58	Bacteria responsible for nitrate-dependent antimonite oxidation in antimony-contaminated paddy soil revealed by the combination of DNA-SIP and metagenomics. Soil Biology and Biochemistry, 2021, 156, 108194.	4.2	25
59	Microbial adaptation in vertical soil profiles contaminated by an antimony smelting plant. FEMS Microbiology Ecology, 2020, 96, .	1.3	23
60	Effects of Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) on Soil Microbial Community. Microbial Ecology, 2022, 83, 929-941.	1.4	23
61	Phanerochaete chrysosporium inoculation shapes the indigenous fungal communities during agricultural waste composting. Biodegradation, 2014, 25, 669-680.	1.5	22
62	Efficient reduction of antimony by sulfate-reducer enriched bio-cathode with hydrogen production in a microbial electrolysis cell. Science of the Total Environment, 2021, 774, 145733.	3.9	22
63	Identification of Antimonate Reducing Bacteria and Their Potential Metabolic Traits by the Combination of Stable Isotope Probing and Metagenomic-Pangenomic Analysis. Environmental Science & Technology, 2021, 55, 13902-13912.	4.6	22
64	Variation in the diazotrophic community in a vertical soil profile contaminated with antimony and arsenic. Environmental Pollution, 2021, 291, 118248.	3.7	22
65	Diversity and Metabolic Potentials of As(III)-Oxidizing Bacteria in Activated Sludge. Applied and Environmental Microbiology, 2021, 87, e0176921.	1.4	21
66	Identification of a Ruminococcaceae Species as the Methyl tert-Butyl Ether (MTBE) Degrading Bacterium in a Methanogenic Consortium. Environmental Science & Technology, 2016, 50, 1455-1464.	4.6	20
67	Microbial iron reduction as a method for immobilization of a low concentration of dissolved cadmium. Journal of Environmental Management, 2018, 217, 747-753.	3.8	20
68	Microbial community responses to land-use types and its ecological roles in mining area. Science of the Total Environment, 2021, 775, 145753.	3.9	20
69	Thallium shifts the bacterial and fungal community structures in thallium mine waste rocks. Environmental Pollution, 2021, 268, 115834.	3.7	19
70	Simazine biodegradation and community structures of ammonia-oxidizing microorganisms in bioaugmented soil: impact of ammonia and nitrate nitrogen sources. Environmental Science and Pollution Research, 2014, 21, 3175-3181.	2.7	18
71	Investigation of the antimony fractions and indigenous microbiota in aerobic and anaerobic rice paddies. Science of the Total Environment, 2021, 771, 145408.	3.9	17
72	Biosorption of Chromium(VI) Ions by Deposits Produced from Chicken Feathers after Soluble Keratin Extraction. Clean - Soil, Air, Water, 2014, 42, 1558-1566.	0.7	16

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73	DNA-SIP Reveals the Diversity of Chemolithoautotrophic Bacteria Inhabiting Three Different Soil Types in Typical Karst Rocky Desertification Ecosystems in Southwest China. Microbial Ecology, 2018, 76, 976-990.	1.4	16
74	Cooperation triggers nitrogen removal and algal inhibition by actinomycetes during landscape water treatment: Performance and metabolic activity. Bioresource Technology, 2022, 356, 127313.	4.8	16
75	Effects of antimony on anaerobic methane oxidization and microbial community in an antimony-contaminated paddy soil: A microcosm study. Science of the Total Environment, 2021, 784, 147239.	3.9	15
76	Bacteria responsible for antimonite oxidation in antimony-contaminated soil revealed by DNA-SIP coupled to metagenomics. FEMS Microbiology Ecology, 2021, 97, .	1.3	13
77	Structure and variation of root-associated bacterial communities of Cyperus rotundus L. in the contaminated soils around Pb/Zn mine sites. Environmental Science and Pollution Research, 2021, 28, 58523-58535.	2.7	13
78	Variation of nonylphenol-degrading gene abundance and bacterial community structure in bioaugmented sediment microcosm. Environmental Science and Pollution Research, 2015, 22, 2342-2349.	2.7	11
79	Stable-isotope probing coupled with high-throughput sequencing reveals bacterial taxa capable of degrading aniline at three contaminated sites with contrasting pH. Science of the Total Environment, 2021, 771, 144807.	3.9	11
80	Isolation and Identification of Uranium Tolerant Phosphate-Solubilizing Bacillus spp. and Their Synergistic Strategies to U(VI) Immobilization. Frontiers in Microbiology, 2021, 12, 676391.	1.5	11
81	Synergy between pyridine anaerobic mineralization and vanadium (V) oxyanion bio-reduction for aquifer remediation. Journal of Hazardous Materials, 2021, 418, 126339.	6.5	11
82	Primary Succession Changes the Composition and Functioning of the Protist Community on Mine Tailings, Especially Phototrophic Protists. ACS Environmental Au, 2022, 2, 396-408.	3.3	11
83	Profiling of Microbial Communities in the Sediments of Jinsha River Watershed Exposed to Different Levels of Impacts by the Vanadium Industry, Panzhihua, China. Microbial Ecology, 2021, 82, 623-637.	1.4	10
84	Colloidal stability of nanosized activated carbon in aquatic systems: Effects of pH, electrolytes, and macromolecules. Water Research, 2021, 203, 117561.	5.3	10
85	Identification of a Chlorodibenzo-p-dioxin Dechlorinating Dehalococcoides mccartyi by Stable Isotope Probing. Environmental Science & Technology, 2019, 53, 14409-14419.	4.6	9
86	Synergistic Impacts of Arsenic and Antimony Co-contamination on Diazotrophic Communities. Microbial Ecology, 2022, 84, 44-58.	1.4	9
87	Glomalin-related soil protein (GRSP) in metal sequestration at Pb/Zn-contaminated sites. Journal of Soils and Sediments, 2022, 22, 577-593.	1.5	9
88	Response and Dynamic Change of Microbial Community during Bioremediation of Uranium Tailings by Bacillus sp.. Minerals (Basel, Switzerland), 2021, 11, 967.	0.8	8
89	Citric acid and AMF inoculation combinationâ€“assisted phytoextraction of vanadium (V) by Medicago sativa in V mining contaminated soil. Environmental Science and Pollution Research, 2021, 28, 67472-67486.	2.7	7
90	Antimony reduction by a non-conventional sulfate reducer with simultaneous bioenergy production in microbial fuel cells. Chemosphere, 2022, 291, 132754.	4.2	7

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91	Characterizing sediment bacterial community and identifying the biological indicators in a seawater-freshwater transition zone during the wet and dry seasons. Environmental Science and Pollution Research, 2022, 29, 41219-41230.	2.7	7
92	Solar-driven, self-sustainable electrolysis for treating eutrophic river water: Intensified nutrient removal and reshaped microbial communities. Science of the Total Environment, 2021, 764, 144293.	3.9	6
93	Effects of perfluorooctanoic acid (PFOA) on activated sludge microbial community under aerobic and anaerobic conditions. Environmental Science and Pollution Research, 2022, 29, 63379-63392.	2.7	6
94	Energy and environmental impact assessment of a passive remediation bioreactor for antimony-rich mine drainage. Environmental Science and Pollution Research, 2020, 27, 35040-35050.	2.7	5
95	Isolation and Characterization of an Erythromycin-Degrading Strain and Application for Bioaugmentation in a Biological Aerated Filter. Water, Air, and Soil Pollution, 2015, 226, 1.	1.1	3
96	Stable Isotope Probing Implicates Pseudomonas as the Methanogenic Toluene Degrader in Gasoline-Contaminated Soil. Water, Air, and Soil Pollution, 2021, 232, 1.	1.1	3
97	Keystone taxa and functional analysis in arsenic and antimony co-contaminated rice terraces. Environmental Science and Pollution Research, 2022, 29, 61236-61246.	2.7	3
98	Microbial Transformations of Antimony. Advances in Environmental Microbiology, 2022, , 223-254.	0.1	3
99	Investigation of focal ratio degradation caused by stress in large-core astronomical fibers. , 2013, , .		1
100	Anaerobic Degradation of Aromatic Compounds. , 2015, , 5.1.3-1-5.1.3-14.		1
101	Effects of Cd on reductive transformation of lepidocrocite by Shewanella oneidensis MR-1. Acta Geochimica, 2017, 36, 479-481.	0.7	1
102	ACS Environmental Auâ”€Go Green and Go for Gold!. ACS Environmental Au, 2022, 2, 1-2.	3.3	0