## List of Publications by Year in descending order

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|                | 7561             | 8852                      |
|----------------|------------------|---------------------------|
| 26,545         | 77               | 145                       |
| citations      | h-index          | g-index                   |
|                |                  |                           |
|                |                  |                           |
|                |                  |                           |
| 325            | 325              | 19977                     |
| docs citations | times ranked     | citing authors            |
|                |                  |                           |
|                | citations<br>325 | citations h-index 325 325 |

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Molecular ecological network analyses. BMC Bioinformatics, 2012, 13, 113.   | 1.2 | 1,917     |
| 2  | The interconnected rhizosphere: High network complexity dominates rhizosphere assemblages.<br>Ecology Letters, 2016, 19, 926-936.   | 3.0 | 803       |
| 3  | Phylogenetic Molecular Ecological Network of Soil Microbial Communities in Response to Elevated<br>CO <sub>2</sub> . MBio, 2011, 2, .   | 1.8 | 771       |
| 4  | Functional Molecular Ecological Networks. MBio, 2010, 1, .  | 1.8 | 717       |
| 5  | Stochasticity, succession, and environmental perturbations in a fluidic ecosystem. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E836-45. | 3.3 | 595       |
| 6  | GeoChip: a comprehensive microarray for investigating biogeochemical, ecological and environmental processes. ISME Journal, 2007, 1, 67-77.   | 4.4 | 554       |
| 7  | Microbial mediation of carbon-cycle feedbacks to climate warming. Nature Climate Change, 2012, 2, 106-110.  | 8.1 | 502       |
| 8  | Global diversity and biogeography of bacterial communities in wastewater treatment plants. Nature<br>Microbiology, 2019, 4, 1183-1195.  | 5.9 | 491       |
| 9  | Temperature mediates continental-scale diversity of microbes in forest soils. Nature Communications, 2016, 7, 12083.  | 5.8 | 419       |
| 10 | Reproducibility and quantitation of amplicon sequencing-based detection. ISME Journal, 2011, 5, 1303-1313.  | 4.4 | 412       |
| 11 | High-Throughput Metagenomic Technologies for Complex Microbial Community Analysis: Open and<br>Closed Formats. MBio, 2015, 6, .   | 1.8 | 357       |
| 12 | Network succession reveals the importance of competition in response to emulsified vegetable oil amendment for uranium bioremediation. Environmental Microbiology, 2016, 18, 205-218.   | 1.8 | 339       |
| 13 | Metagenomic insights into evolution of a heavy metal-contaminated groundwater microbial community. ISME Journal, 2010, 4, 660-672.  | 4.4 | 332       |
| 14 | GeoChip 3.0 as a high-throughput tool for analyzing microbial community composition, structure and functional activity. ISME Journal, 2010, 4, 1167-1179.                               | 4.4 | 300       |
| 15 | Biodiversity and species competition regulate the resilience of microbial biofilm community.<br>Molecular Ecology, 2017, 26, 6170-6182.   | 2.0 | 299       |
| 16 | Stochastic Assembly Leads to Alternative Communities with Distinct Functions in a Bioreactor Microbial Community. MBio, 2013, 4, .  | 1.8 | 293       |
| 17 | Environmental filtering decreases with fish development for the assembly of gut microbiota.<br>Environmental Microbiology, 2016, 18, 4739-4754.   | 1.8 | 267       |
| 18 | Tundra soil carbon is vulnerable to rapid microbial decomposition under climate warming. Nature<br>Climate Change, 2016, 6, 595-600.  | 8.1 | 260       |

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|----|---|-----|-----------|
| 19 | Metagenomic analysis reveals a marked divergence in the structure of belowground microbial communities at elevated CO <sub>2</sub> . Ecology Letters, 2010, 13, 564-575.      | 3.0 | 252       |
| 20 | The microbial gene diversity along an elevation gradient of the Tibetan grassland. ISME Journal, 2014,<br>8, 430-440.   | 4.4 | 249       |
| 21 | Microbial gene functions enriched in the Deepwater Horizon deep-sea oil plume. ISME Journal, 2012, 6, 451-460.  | 4.4 | 240       |
| 22 | An integrated insight into the response of sedimentary microbial communities to heavy metal contamination. Scientific Reports, 2015, 5, 14266.                                | 1.6 | 235       |
| 23 | Functional microarray analysis of nitrogen and carbon cycling genes across an Antarctic latitudinal transect. ISME Journal, 2007, 1, 163-179.                                 | 4.4 | 232       |
| 24 | Loss of microbial diversity in soils is coincident with reductions in some specialized functions.<br>Environmental Microbiology, 2014, 16, 2408-2420.                         | 1.8 | 232       |
| 25 | Successional Trajectories of Rhizosphere Bacterial Communities over Consecutive Seasons. MBio, 2015, 6, e00746.   | 1.8 | 232       |
| 26 | Responses of the functional structure of soil microbial community to livestock grazing in the <scp>T</scp> ibetan alpine grassland. Global Change Biology, 2013, 19, 637-648. | 4.2 | 216       |
| 27 | Climate warming leads to divergent succession of grassland microbial communities. Nature Climate<br>Change, 2018, 8, 813-818.   | 8.1 | 208       |
| 28 | Small and mighty: adaptation of superphylum Patescibacteria to groundwater environment drives their genome simplicity. Microbiome, 2020, 8, 51.                               | 4.9 | 205       |
| 29 | Efficient Genome Editing in Clostridium cellulolyticum via CRISPR-Cas9 Nickase. Applied and Environmental Microbiology, 2015, 81, 4423-4431.                                  | 1.4 | 195       |
| 30 | Cultivation of seaweed Gracilaria in Chinese coastal waters and its contribution to environmental improvements. Algal Research, 2015, 9, 236-244.                             | 2.4 | 190       |
| 31 | Oral microbiota of periodontal health and disease and their changes after nonsurgical periodontal therapy. ISME Journal, 2018, 12, 1210-1224.                                 | 4.4 | 188       |
| 32 | GeoChip 4: a functional geneâ€arrayâ€based highâ€throughput environmental technology for microbial<br>community analysis. Molecular Ecology Resources, 2014, 14, 914-928.     | 2.2 | 183       |
| 33 | Functional gene diversity of soil microbial communities from five oil-contaminated fields in China.<br>ISME Journal, 2011, 5, 403-413.  | 4.4 | 178       |
| 34 | Long-term successional dynamics of microbial association networks in anaerobic digestion processes.<br>Water Research, 2016, 104, 1-10.                                       | 5.3 | 177       |
| 35 | Rate-specific responses of prokaryotic diversity and structure to nitrogen deposition in the Leymus chinensis steppe. Soil Biology and Biochemistry, 2014, 79, 81-90.         | 4.2 | 175       |
| 36 | Natural Bacterial Communities Serve as Quantitative Geochemical Biosensors. MBio, 2015, 6, e00326-15.   | 1.8 | 173       |

| #  | Article  | lF   | CITATIONS |
|----|--|------|-----------|
| 37 | How sulphate-reducing microorganisms cope with stress: lessons from systems biology. Nature<br>Reviews Microbiology, 2011, 9, 452-466.   | 13.6 | 169       |
| 38 | Microarray Applications in Microbial Ecology Research. Microbial Ecology, 2006, 52, 159-175.   | 1.4  | 164       |
| 39 | Elevated nitrate enriches microbial functional genes for potential bioremediation of complexly contaminated sediments. ISME Journal, 2014, 8, 1932-1944.   | 4.4  | 164       |
| 40 | Huanglongbing alters the structure and functional diversity of microbial communities associated with citrus rhizosphere. ISME Journal, 2012, 6, 363-383.   | 4.4  | 162       |
| 41 | Phylogenetic and functional gene structure shifts of the oral microbiomes in periodontitis patients.<br>ISME Journal, 2014, 8, 1879-1891.  | 4.4  | 157       |
| 42 | Empirical Establishment of Oligonucleotide Probe Design Criteria. Applied and Environmental<br>Microbiology, 2005, 71, 3753-3760.  | 1.4  | 155       |
| 43 | Salt Stress in Desulfovibrio vulgaris Hildenborough: an Integrated Genomics Approach. Journal of<br>Bacteriology, 2006, 188, 4068-4078.  | 1.0  | 155       |
| 44 | GeoChip-based analysis of metabolic diversity of microbial communities at the Juan de Fuca Ridge<br>hydrothermal vent. Proceedings of the National Academy of Sciences of the United States of America,<br>2009, 106, 4840-4845. | 3.3  | 139       |
| 45 | Environmental Factors Shape Water Microbial Community Structure and Function in Shrimp Cultural<br>Enclosure Ecosystems. Frontiers in Microbiology, 2017, 8, 2359.   | 1.5  | 137       |
| 46 | Warming enhances old organic carbon decomposition through altering functional microbial communities. ISME Journal, 2017, 11, 1825-1835.  | 4.4  | 136       |
| 47 | Architecture of thermal adaptation in an Exiguobacterium sibiricum strain isolated from 3 million year old permafrost: A genome and transcriptome approach. BMC Genomics, 2008, 9, 547.  | 1.2  | 134       |
| 48 | NCycDB: a curated integrative database for fast and accurate metagenomic profiling of nitrogen cycling genes. Bioinformatics, 2019, 35, 1040-1048.   | 1.8  | 134       |
| 49 | The Electron Transfer System of Syntrophically Grown <i>Desulfovibrio vulgaris</i> . Journal of Bacteriology, 2009, 191, 5793-5801.  | 1.0  | 133       |
| 50 | Soil Microbial Community Responses to a Decade of Warming as Revealed by Comparative<br>Metagenomics. Applied and Environmental Microbiology, 2014, 80, 1777-1786.   | 1.4  | 131       |
| 51 | Predicting taxonomic and functional structure of microbial communities in acid mine drainage. ISME<br>Journal, 2016, 10, 1527-1539.  | 4.4  | 130       |
| 52 | Impacts of the Three Gorges Dam on microbial structure and potential function. Scientific Reports, 2015, 5, 8605.  | 1.6  | 129       |
| 53 | Shifts of tundra bacterial and archaeal communities along a permafrost thaw gradient in<br><scp>A</scp> laska. Molecular Ecology, 2015, 24, 222-234.   | 2.0  | 127       |
| 54 | Functional Potential of Soil Microbial Communities in the Maize Rhizosphere. PLoS ONE, 2014, 9, e112609.   | 1.1  | 127       |

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|----|--|-----|-----------|
| 55 | Microbial community composition and functions are resilient to metal pollution along two forest soil gradients. FEMS Microbiology Ecology, 2015, 91, 1-11.   | 1.3 | 120       |
| 56 | Selection of optimal oligonucleotide probes for microarrays using multiple criteria, global alignment and parameter estimation. Nucleic Acids Research, 2005, 33, 6114-6123.   | 6.5 | 113       |
| 57 | The phylogenetic composition and structure of soil microbial communities shifts in response to elevated carbon dioxide. ISME Journal, 2012, 6, 259-272.  | 4.4 | 110       |
| 58 | Electron transport chains in organohalide-respiring bacteria and bioremediation implications.<br>Biotechnology Advances, 2018, 36, 1194-1206.  | 6.0 | 108       |
| 59 | Responses of Bacterial Communities to Simulated Climate Changes in Alpine Meadow Soil of the Qinghai-Tibet Plateau. Applied and Environmental Microbiology, 2015, 81, 6070-6077.   | 1.4 | 107       |
| 60 | Global Analysis of Heat Shock Response in Desulfovibrio vulgaris Hildenborough. Journal of<br>Bacteriology, 2006, 188, 1817-1828.  | 1.0 | 106       |
| 61 | Lateral Gene Transfer in a Heavy Metal-Contaminated-Groundwater Microbial Community. MBio, 2016,<br>7, e02234-15.  | 1.8 | 105       |
| 62 | Microbial community functional structure inÂresponse to antibiotics in pharmaceutical wastewater<br>treatment systems. Water Research, 2013, 47, 6298-6308.  | 5.3 | 103       |
| 63 | Microbial Communities and Functional Genes Associated with Soil Arsenic Contamination and the Rhizosphere of the Arsenic-Hyperaccumulating Plant <i>Pteris vittata</i> L. Applied and Environmental Microbiology, 2010, 76, 7277-7284. | 1.4 | 102       |
| 64 | Whole-genome sequencing reveals novel insights into sulfur oxidation in the extremophile<br>Acidithiobacillus thiooxidans. BMC Microbiology, 2014, 14, 179.  | 1.3 | 102       |
| 65 | Illumina sequencing-based analysis of free-living bacterial community dynamics during an Akashiwo<br>sanguine bloom in Xiamen sea, China. Scientific Reports, 2015, 5, 8476.   | 1.6 | 101       |
| 66 | Responses of microbial community functional structures to pilot-scale uranium <i>in situ</i> bioremediation. ISME Journal, 2010, 4, 1060-1070.   | 4.4 | 98        |
| 67 | The microbe-mediated mechanisms affecting topsoil carbon stock in Tibetan grasslands. ISME Journal, 2015, 9, 2012-2020.  | 4.4 | 98        |
| 68 | Random Sampling Process Leads to Overestimation of β-Diversity of Microbial Communities. MBio, 2013,<br>4, e00324-13.  | 1.8 | 96        |
| 69 | GeoChipâ€based analysis of functional microbial communities during the reoxidation of a bioreduced<br>uraniumâ€contaminated aquifer. Environmental Microbiology, 2009, 11, 2611-2626.  | 1.8 | 95        |
| 70 | Ecological stability of microbial communities in Lake Donghu regulated by keystone taxa. Ecological<br>Indicators, 2022, 136, 108695.  | 2.6 | 95        |
| 71 | Elevated Carbon Dioxide Alters the Structure of Soil Microbial Communities. Applied and Environmental Microbiology, 2012, 78, 2991-2995.   | 1.4 | 93        |
| 72 | Energetic Consequences of Nitrite Stress in Desulfovibrio vulgaris Hildenborough, Inferred from<br>Global Transcriptional Analysis. Applied and Environmental Microbiology, 2006, 72, 4370-4381.                                       | 1.4 | 92        |

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|----|---|-----|-----------|
| 73 | Impacts of <i>Shewanella oneidensis c</i> â€ŧype cytochromes on aerobic and anaerobic respiration.<br>Microbial Biotechnology, 2010, 3, 455-466.  | 2.0 | 91        |
| 74 | Functional Gene Differences in Soil Microbial Communities from Conventional, Low-Input, and Organic Farmlands. Applied and Environmental Microbiology, 2013, 79, 1284-1292.   | 1.4 | 90        |
| 75 | Genomic and microarray analysis of aromatics degradation in Geobacter metallireducens and comparison to a Geobacter isolate from a contaminated field site. BMC Genomics, 2007, 8, 180.   | 1.2 | 87        |
| 76 | The differentiation of soil bacterial communities along a precipitation and temperature gradient in the eastern Inner Mongolia steppe. Catena, 2017, 152, 47-56.  | 2.2 | 87        |
| 77 | Development of a Common Oligonucleotide Reference Standard for Microarray Data Normalization and Comparison across Different Microbial Communities. Applied and Environmental Microbiology, 2010, 76, 1088-1094.  | 1.4 | 83        |
| 78 | Responses of tundra soil microbial communities to half a decade of experimental warming at two<br>critical depths. Proceedings of the National Academy of Sciences of the United States of America, 2019,<br>116, 15096-15105.                                  | 3.3 | 83        |
| 79 | Climate warming accelerates temporal scaling of grassland soil microbial biodiversity. Nature Ecology and Evolution, 2019, 3, 612-619.  | 3.4 | 82        |
| 80 | Empirical Evaluation of a New Method for Calculating Signal-to-Noise Ratio for Microarray Data<br>Analysis. Applied and Environmental Microbiology, 2008, 74, 2957-2966.  | 1.4 | 81        |
| 81 | Sequencing of Multiple Clostridial Genomes Related to Biomass Conversion and Biofuel Production.<br>Journal of Bacteriology, 2010, 192, 6494-6496.  | 1.0 | 81        |
| 82 | Responses of Microbial Communities to Single-Walled Carbon Nanotubes in Phenol Wastewater<br>Treatment Systems. Environmental Science & Technology, 2015, 49, 4627-4635.  | 4.6 | 81        |
| 83 | Functional Gene Array-Based Analysis of Microbial Community Structure in Groundwaters with a<br>Gradient of Contaminant Levels. Environmental Science & Technology, 2009, 43, 3529-3534.  | 4.6 | 80        |
| 84 | Distinct responses of soil microbial communities to elevated CO2 and O3 in a soybean agro-ecosystem.<br>ISME Journal, 2014, 8, 714-726.   | 4.4 | 80        |
| 85 | Microbial sulfur metabolism and environmental implications. Science of the Total Environment, 2021, 778, 146085.  | 3.9 | 80        |
| 86 | Influence of geogenic factors on microbial communities in metallogenic Australian soils. ISME<br>Journal, 2012, 6, 2107-2118.   | 4.4 | 79        |
| 87 | Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase Activase Deficiency Delays Senescence of<br>Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase but Progressively Impairs Its Catalysis during<br>Tobacco Leaf Development. Plant Physiology, 1997, 115, 1569-1580. | 2.3 | 78        |
| 88 | Function of Periplasmic Hydrogenases in the Sulfate-Reducing Bacterium Desulfovibrio vulgaris<br>Hildenborough. Journal of Bacteriology, 2007, 189, 6159-6167.  | 1.0 | 78        |
| 89 | GeoChip-Based Analysis of the Functional Gene Diversity and Metabolic Potential of Microbial<br>Communities in Acid Mine Drainage. Applied and Environmental Microbiology, 2011, 77, 991-999.   | 1.4 | 78        |
| 90 | Comparative metagenomics reveals impact of contaminants on groundwater microbiomes. Frontiers in Microbiology, 2015, 6, 1205.   | 1.5 | 77        |

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|-----|--|-----|-----------|
| 91  | Geochip-Based Functional Gene Analysis of Anodophilic Communities in Microbial Electrolysis Cells<br>under Different Operational Modes. Environmental Science & Technology, 2010, 44, 7729-7735. | 4.6 | 76        |
| 92  | Biogeographic patterns of soil diazotrophic communities across six forests in the North America.<br>Molecular Ecology, 2016, 25, 2937-2948.  | 2.0 | 76        |
| 93  | Nearly a decadeâ€long repeatable seasonal diversity patterns of bacterioplankton communities in the<br>eutrophic Lake Donghu (Wuhan, China). Molecular Ecology, 2017, 26, 3839-3850.             | 2.0 | 76        |
| 94  | Microbial Mechanisms Mediating Increased Soil C Storage under Elevated Atmospheric N Deposition.<br>Applied and Environmental Microbiology, 2013, 79, 1191-1199.                                 | 1.4 | 75        |
| 95  | Responses of soil microbial functional genes to global changes are indirectly influenced by aboveground plant biomass variation. Soil Biology and Biochemistry, 2017, 104, 18-29.                | 4.2 | 75        |
| 96  | Warming-induced permafrost thaw exacerbates tundra soil carbon decomposition mediated by microbial community. Microbiome, 2020, 8, 3.  | 4.9 | 75        |
| 97  | Development of an Efficient Genome Editing Tool in Bacillus licheniformis Using CRISPR-Cas9 Nickase.<br>Applied and Environmental Microbiology, 2018, 84, .                                      | 1.4 | 74        |
| 98  | Development of functional gene microarrays for microbial community analysis. Current Opinion in<br>Biotechnology, 2012, 23, 49-55.   | 3.3 | 73        |
| 99  | Strain/species identification in metagenomes using genome-specific markers. Nucleic Acids Research, 2014, 42, e67-e67.   | 6.5 | 72        |
| 100 | Responses of Aromatic-Degrading Microbial Communities to Elevated Nitrate in Sediments.<br>Environmental Science & Technology, 2015, 49, 12422-12431.  | 4.6 | 72        |
| 101 | Effects of Bacillus amyloliquefaciens ZM9 on bacterial wilt and rhizosphere microbial communities of tobacco. Applied Soil Ecology, 2016, 103, 1-12.   | 2.1 | 71        |
| 102 | Analysis of a Ferric Uptake Regulator (Fur) Mutant of <i>Desulfovibrio vulgaris</i> Hildenborough.<br>Applied and Environmental Microbiology, 2007, 73, 5389-5400.                               | 1.4 | 70        |
| 103 | Microarray-based analysis of microbial functional diversity along an oil contamination gradient in oil field. FEMS Microbiology Ecology, 2009, 70, 324-333.                                      | 1.3 | 70        |
| 104 | Microbial functional trait of rRNA operon copy numbers increases with organic levels in anaerobic digesters. ISME Journal, 2017, 11, 2874-2878.  | 4.4 | 70        |
| 105 | Improvement of Oligonucleotide Probe Design Criteria for Functional Gene Microarrays in<br>Environmental Applications. Applied and Environmental Microbiology, 2006, 72, 1688-1691.              | 1.4 | 68        |
| 106 | Diversity, function and assembly of mangrove root-associated microbial communities at a continuous fine-scale. Npj Biofilms and Microbiomes, 2020, 6, 52.  | 2.9 | 68        |
| 107 | Biogeographic patterns of microbial co-occurrence ecological networks in six American forests. Soil<br>Biology and Biochemistry, 2020, 148, 107897.  | 4.2 | 68        |
| 108 | Impact of elevated nitrate on sulfate-reducing bacteria: a comparative Study of <i>Desulfovibrio<br/>vulgaris</i> . ISME Journal, 2010, 4, 1386-1397.  | 4.4 | 67        |

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|-----|--|-----|-----------|
| 109 | Transcriptomic and proteomic analyses of Desulfovibrio vulgaris biofilms: Carbon and energy flow contribute to the distinct biofilm growth state. BMC Genomics, 2012, 13, 138.   | 1.2 | 67        |
| 110 | Gene-informed decomposition model predicts lower soil carbon loss due to persistent microbial adaptation to warming. Nature Communications, 2020, 11, 4897.  | 5.8 | 67        |
| 111 | Mechanisms of enhanced cellulosic bioethanol fermentation by co-cultivation of Clostridium and Thermoanaerobacter spp Bioresource Technology, 2011, 102, 9586-9592.  | 4.8 | 66        |
| 112 | Functional responses of methanogenic archaea to syntrophic growth. ISME Journal, 2012, 6, 2045-2055.   | 4.4 | 66        |
| 113 | GeoChip-based analysis of the functional gene diversity and metabolic potential of soil microbial communities of mangroves. Applied Microbiology and Biotechnology, 2013, 97, 7035-7048.   | 1.7 | 66        |
| 114 | Metagenomics Reveals Pervasive Bacterial Populations and Reduced Community Diversity across the<br>Alaska Tundra Ecosystem. Frontiers in Microbiology, 2016, 7, 579.   | 1.5 | 66        |
| 115 | Mangrove Sediment Microbiome: Adaptive Microbial Assemblages and Their Routed Biogeochemical<br>Processes in Yunxiao Mangrove National Nature Reserve, China. Microbial Ecology, 2019, 78, 57-69.  | 1.4 | 66        |
| 116 | Bacteria-driven phthalic acid ester biodegradation: Current status and emerging opportunities.<br>Environment International, 2021, 154, 106560.  | 4.8 | 66        |
| 117 | Global Transcriptional, Physiological, and Metabolite Analyses of the Responses of <i>Desulfovibrio<br/>vulgaris</i> Hildenborough to Salt Adaptation. Applied and Environmental Microbiology, 2010, 76,<br>1574-1586.                     | 1.4 | 64        |
| 118 | GeoChip-Based Analysis of Microbial Functional Gene Diversity in a Landfill Leachate-Contaminated<br>Aquifer. Environmental Science & Technology, 2012, 46, 5824-5833.   | 4.6 | 64        |
| 119 | Interconnection of Key Microbial Functional Genes for Enhanced Benzo[ <i>a</i> ]pyrene<br>Biodegradation in Sediments by Microbial Electrochemistry. Environmental Science & Technology,<br>2017, 51, 8519-8529.                           | 4.6 | 64        |
| 120 | Interdomain ecological networks between plants and microbes. Molecular Ecology Resources, 2019, 19, 1565-1577.   | 2.2 | 64        |
| 121 | Host development overwhelms environmental dispersal in governing the ecological succession of zebrafish gut microbiota. Npj Biofilms and Microbiomes, 2021, 7, 5.  | 2.9 | 64        |
| 122 | Microbial taxa and functional genes shift in degraded soil with bacterial wilt. Scientific Reports, 2017,<br>7, 39911.   | 1.6 | 63        |
| 123 | Metagenomic reconstruction of nitrogen cycling pathways in a CO2-enriched grassland ecosystem.<br>Soil Biology and Biochemistry, 2017, 106, 99-108.  | 4.2 | 63        |
| 124 | Response of <i>Desulfovibrio vulgaris</i> to Alkaline Stress. Journal of Bacteriology, 2007, 189,<br>8944-8952.  | 1.0 | 62        |
| 125 | Distinct mechanisms shape soil bacterial and fungal co-occurrence networks in a mountain ecosystem. FEMS Microbiology Ecology, 2020, 96, .   | 1.3 | 62        |
| 126 | Organohalide-Respiring Bacteria in Polluted Urban Rivers Employ Novel Bifunctional Reductive<br>Dehalogenases to Dechlorinate Polychlorinated Biphenyls and Tetrachloroethene. Environmental<br>Science & Technology, 2020, 54, 8791-8800. | 4.6 | 61        |

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|-----|--|-----|-----------|
| 127 | Alkaline phosphatase activity mediates soil organic phosphorus mineralization in a subalpine forest<br>ecosystem. Geoderma, 2021, 404, 115376.   | 2.3 | 60        |
| 128 | Use of Microarrays with Different Probe Sizes for Monitoring Gene Expression. Applied and Environmental Microbiology, 2005, 71, 5154-5162.   | 1.4 | 59        |
| 129 | Shifts of functional gene representation in wheat rhizosphere microbial communities under elevated ozone. ISME Journal, 2013, 7, 660-671.  | 4.4 | 59        |
| 130 | Cas9-Based Tools for Targeted Genome Editing and Transcriptional Control. Applied and<br>Environmental Microbiology, 2014, 80, 1544-1552.  | 1.4 | 59        |
| 131 | Declined soil suppressiveness to Fusarium oxysporum by rhizosphere microflora of cotton in soil sickness. Biology and Fertility of Soils, 2015, 51, 935-946.   | 2.3 | 58        |
| 132 | Temporal Transcriptomic Analysis as Desulfovibrio vulgaris Hildenborough Transitions into<br>Stationary Phase during Electron Donor Depletion. Applied and Environmental Microbiology, 2006, 72,<br>5578-5588. | 1.4 | 57        |
| 133 | Characterization of the Central Metabolic Pathways in <i>Thermoanaerobacter</i> sp. Strain X514 via<br>Isotopomer-Assisted Metabolite Analysis. Applied and Environmental Microbiology, 2009, 75, 5001-5008.   | 1.4 | 57        |
| 134 | Functional Biogeography as Evidence of Gene Transfer in Hypersaline Microbial Communities. PLoS<br>ONE, 2010, 5, e12919.   | 1.1 | 57        |
| 135 | Over 150ÂYears of Long-Term Fertilization Alters Spatial Scaling of Microbial Biodiversity. MBio, 2015, 6,   | 1.8 | 57        |
| 136 | Elevated carbon dioxide accelerates the spatial turnover of soil microbial communities. Global<br>Change Biology, 2016, 22, 957-964.   | 4.2 | 57        |
| 137 | Microbial Functional Gene Diversity Predicts Groundwater Contamination and Ecosystem<br>Functioning. MBio, 2018, 9, .  | 1.8 | 57        |
| 138 | Mechanistic insights into organic carbon-driven water blackening and odorization of urban rivers.<br>Journal of Hazardous Materials, 2021, 405, 124663.  | 6.5 | 56        |
| 139 | Pellicle formation in Shewanella oneidensis. BMC Microbiology, 2010, 10, 291.  | 1.3 | 55        |
| 140 | Applications of functional gene microarrays for profiling microbial communities. Current Opinion in<br>Biotechnology, 2012, 23, 460-466.   | 3.3 | 55        |
| 141 | Functional Gene Array-Based Ultrasensitive and Quantitative Detection of Microbial Populations in Complex Communities. MSystems, 2019, 4, .  | 1.7 | 54        |
| 142 | Ecogenomics Reveals Metals and Land-Use Pressures on Microbial Communities in the Waterways of a<br>Megacity. Environmental Science & Technology, 2015, 49, 1462-1471.   | 4.6 | 53        |
| 143 | Genetic Linkage of Soil Carbon Pools and Microbial Functions in Subtropical Freshwater Wetlands in<br>Response to Experimental Warming. Applied and Environmental Microbiology, 2012, 78, 7652-7661.           | 1.4 | 52        |
| 144 | The Diversity and Co-occurrence Patterns of N2-Fixing Communities in a CO2-Enriched Grassland<br>Ecosystem. Microbial Ecology, 2016, 71, 604-615.  | 1.4 | 52        |

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|-----|---|-----|-----------|
| 145 | SCycDB: A curated functional gene database for metagenomic profiling of sulphur cycling pathways.<br>Molecular Ecology Resources, 2021, 21, 924-940.  | 2.2 | 52        |
| 146 | Dynamics of Microbial Community Composition and Function during In Situ Bioremediation of a Uranium-Contaminated Aquifer. Applied and Environmental Microbiology, 2011, 77, 3860-3869.                                | 1.4 | 51        |
| 147 | Widespread Distribution of Soluble Di-Iron Monooxygenase (SDIMO) Genes in Arctic Groundwater<br>Impacted by 1,4-Dioxane. Environmental Science & Technology, 2013, 47, 9950-9958.                                     | 4.6 | 51        |
| 148 | Elevated CO2 and Warming Altered Grassland Microbial Communities in Soil Top-Layers. Frontiers in Microbiology, 2018, 9, 1790.  | 1.5 | 51        |
| 149 | Spatial Distribution, Bioconversion and Ecological Risk of PCBs and PBDEs in the Surface Sediment of Contaminated Urban Rivers: A Nationwide Study in China. Environmental Science & Technology, 2021, 55, 9579-9590. | 4.6 | 50        |
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