

Tian Zhang

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

66

papers

2,963

citations

26

h-index

54

g-index

70

ext. papers

3,559

ext. citations

7.8

avg, IF

5.59

L-index

| # | Paper | IF | Citations |
|----|---|------|-----------|
| 66 | Geobacter: the microbe electric's physiology, ecology, and practical applications. <i>Advances in Microbial Physiology</i> , 2011 , 59, 1-100 | 4.4 | 399 |
| 65 | Improved cathode materials for microbial electrosynthesis. <i>Energy and Environmental Science</i> , 2013 , 6, 217-224 | 35.4 | 260 |
| 64 | Stimulating the anaerobic degradation of aromatic hydrocarbons in contaminated sediments by providing an electrode as the electron acceptor. <i>Environmental Microbiology</i> , 2010 , 12, 1011-20 | 5.2 | 239 |
| 63 | The Rnf complex of <i>Clostridium ljungdahlii</i> is a proton-translocating ferredoxin:NAD ⁺ oxidoreductase essential for autotrophic growth. <i>MBio</i> , 2012 , 4, e00406-12 | 7.8 | 147 |
| 62 | Electrifying microbes for the production of chemicals. <i>Frontiers in Microbiology</i> , 2015 , 6, 201 | 5.7 | 133 |
| 61 | A novel mediatorless microbial fuel cell based on direct biocatalysis of <i>Escherichia coli</i> . <i>Chemical Communications</i> , 2006 , 2257-9 | 5.8 | 121 |
| 60 | Improved cathode for high efficient microbial-catalyzed reduction in microbial electrosynthesis cells. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 14290-4 | 3.6 | 120 |
| 59 | Extracellular Electron Uptake: Among Autotrophs and Mediated by Surfaces. <i>Trends in Biotechnology</i> , 2017 , 35, 360-371 | 15.1 | 112 |
| 58 | The direct electrocatalysis of <i>Escherichia coli</i> through electroactivated excretion in microbial fuel cell. <i>Electrochemistry Communications</i> , 2008 , 10, 293-297 | 5.1 | 112 |
| 57 | Improved performances of <i>E. coli</i> -catalyzed microbial fuel cells with composite graphite/PTFE anodes. <i>Electrochemistry Communications</i> , 2007 , 9, 349-353 | 5.1 | 106 |
| 56 | Performance of different <i>Sporomusa</i> species for the microbial electrosynthesis of acetate from carbon dioxide. <i>Bioresource Technology</i> , 2017 , 233, 184-190 | 11 | 86 |
| 55 | Electrosynthesis of acetate from CO ₂ by a highly structured biofilm assembled with reduced graphene oxide-tetraethylene pentamine. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 8395-8401 | 13 | 85 |
| 54 | Sulfide-driven microbial electrosynthesis. <i>Environmental Science & Technology</i> , 2013 , 47, 568-73 | 10.3 | 83 |
| 53 | Anaerobic benzene oxidation via phenol in <i>Geobacter metallireducens</i> . <i>Applied and Environmental Microbiology</i> , 2013 , 79, 7800-6 | 4.8 | 79 |
| 52 | Enhanced microbial electrosynthesis with three-dimensional graphene functionalized cathodes fabricated via solvothermal synthesis. <i>Electrochimica Acta</i> , 2016 , 217, 117-122 | 6.7 | 77 |
| 51 | Anaerobic benzene oxidation by <i>Geobacter</i> species. <i>Applied and Environmental Microbiology</i> , 2012 , 78, 8304-10 | 4.8 | 76 |
| 50 | Adaptation of the autotrophic acetogen <i>Sporomusa ovata</i> to methanol accelerates the conversion of CO ₂ to organic products. <i>Scientific Reports</i> , 2015 , 5, 16168 | 4.9 | 56 |

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| 49 | Effect of tungstate on acetate and ethanol production by the electrosynthetic bacterium <i>Sporomusa ovata</i> . <i>Biotechnology for Biofuels</i> , 2016 , 9, 163 | 7.8 | 52 |
| 48 | Freestanding and flexible graphene papers as bioelectrochemical cathode for selective and efficient CO conversion. <i>Scientific Reports</i> , 2017 , 7, 9107 | 4.9 | 44 |
| 47 | ARTIFICIAL PHOTOSYNTHESIS. More efficient together. <i>Science</i> , 2015 , 350, 738-9 | 33.3 | 44 |
| 46 | Increased carbon dioxide reduction to acetate in a microbial electrosynthesis reactor with a reduced graphene oxide-coated copper foam composite cathode. <i>Bioelectrochemistry</i> , 2019 , 128, 83-93 | 5.6 | 43 |
| 45 | Sulfur oxidation to sulfate coupled with electron transfer to electrodes by <i>Desulfuromonas</i> strain TZ1. <i>Microbiology (United Kingdom)</i> , 2014 , 160, 123-129 | 2.9 | 35 |
| 44 | Stimulating bioplastic production with light energy by coupling <i>Ralstonia eutropha</i> with the photocatalyst graphitic carbon nitride. <i>Green Chemistry</i> , 2019 , 21, 2392-2400 | 10 | 29 |
| 43 | Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process. <i>Bioresource Technology</i> , 2017 , 243, 30-36 | 11 | 28 |
| 42 | Nonmetallic Abiotic-Biological Hybrid Photocatalyst for Visible Water Splitting and Carbon Dioxide Reduction. <i>IScience</i> , 2020 , 23, 100784 | 6.1 | 28 |
| 41 | Constraint-based modeling of carbon fixation and the energetics of electron transfer in <i>Geobacter metallireducens</i> . <i>PLoS Computational Biology</i> , 2014 , 10, e1003575 | 5 | 27 |
| 40 | 3D Printing and Bioprinting Nerve Conduits for Neural Tissue Engineering. <i>Polymers</i> , 2020 , 12, | 4.5 | 26 |
| 39 | Highly Conductive Poly(3,4-ethylenedioxythiophene) Polystyrene Sulfonate Polymer Coated Cathode for the Microbial Electrosynthesis of Acetate From Carbon Dioxide. <i>Frontiers in Energy Research</i> , 2018 , 6, | 3.8 | 24 |
| 38 | Identification of genes specifically required for the anaerobic metabolism of benzene in <i>Geobacter metallireducens</i> . <i>Frontiers in Microbiology</i> , 2014 , 5, 245 | 5.7 | 23 |
| 37 | Hybrid photosynthesis-powering biocatalysts with solar energy captured by inorganic devices. <i>Biotechnology for Biofuels</i> , 2017 , 10, 249 | 7.8 | 22 |
| 36 | Photo-augmented PHB production from CO or fructose by <i>Cupriavidus necator</i> and shape-optimized CdS nanorods. <i>Science of the Total Environment</i> , 2021 , 753, 142050 | 10.2 | 19 |
| 35 | Harnessing light energy with a planar transparent hybrid of graphene/single wall carbon nanotube/n-type silicon heterojunction solar cell. <i>Electrochimica Acta</i> , 2015 , 178, 732-738 | 6.7 | 18 |
| 34 | Graphene: An Antibacterial Agent or a Promoter of Bacterial Proliferation?. <i>IScience</i> , 2020 , 23, 101787 | 6.1 | 18 |
| 33 | Efficient photocatalytic hydrogen evolution with high-crystallinity and noble metal-free red phosphorus-CdS nanorods. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 17354-17366 | 6.7 | 16 |
| 32 | Acute toxicity of chlorobenzenes in tetrahymena: estimated by microcalorimetry and mechanism. <i>Environmental Toxicology and Pharmacology</i> , 2012 , 33, 377-85 | 5.8 | 15 |

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| 31 | Preparation and properties of carboxymethyl chitosan/oxidized hydroxyethyl cellulose hydrogel. <i>International Journal of Biological Macromolecules</i> , 2020 , 162, 1692-1698 | 7.9 | 14 |
| 30 | The hidden chemolithoautotrophic metabolism of <i>Geobacter sulfurreducens</i> uncovered by adaptation to formate. <i>ISME Journal</i> , 2020 , 14, 2078-2089 | 11.9 | 13 |
| 29 | Accelerated H ₂ Evolution during Microbial Electrosynthesis with <i>Sporomusa ovata</i> . <i>Catalysts</i> , 2019 , 9, 166 | 4 | 11 |
| 28 | Joint toxicity of heavy metals and chlorobenzenes to pyriformis <i>Tetrahymena</i> . <i>Chemosphere</i> , 2014 , 104, 177-83 | 8.4 | 11 |
| 27 | Synthesis of a photocurable acrylated poly(ethylene glycol)-poly(xylitol sebacate) copolymers hydrogel 3D printing ink for tissue engineering.. <i>RSC Advances</i> , 2019 , 9, 18394-18405 | 3.7 | 9 |
| 26 | Effectively Improved Field Emission Properties of Multiwalled Carbon Nanotubes/Graphenes Composite Field Emitter by Covering on the Si Pyramidal Structure. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 4305-4312 | 2.9 | 9 |
| 25 | The action of norfloxacin complexes on <i>Tetrahymena</i> investigated by microcalorimetry. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012 , 109, 433-439 | 4.1 | 8 |
| 24 | Improved robustness of microbial electrosynthesis by adaptation of a strict anaerobic microbial catalyst to molecular oxygen. <i>Science of the Total Environment</i> , 2021 , 754, 142440 | 10.2 | 8 |
| 23 | <i>Escherichia coli</i> adaptation and response to exposure to heavy atmospheric pollution. <i>Scientific Reports</i> , 2019 , 9, 10879 | 4.9 | 7 |
| 22 | Crystalline CdS/MoS shape-controlled by a bacterial cellulose scaffold for enhanced photocatalytic hydrogen evolution. <i>Carbohydrate Polymers</i> , 2020 , 250, 116909 | 10.3 | 7 |
| 21 | The one-pot synthesis of a ZnSe/ZnS photocatalyst for H ₂ evolution and microbial bioproduction. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 21901-21911 | 6.7 | 7 |
| 20 | Fast removal of toxic hexavalent chromium from an aqueous solution by high-density <i>Geobacter sulfurreducens</i> . <i>Chemosphere</i> , 2021 , 263, 128281 | 8.4 | 7 |
| 19 | Genetic evidence that the degradation of para-cresol by <i>Geobacter metallireducens</i> is catalyzed by the periplasmic para-cresol methylhydroxylase. <i>FEMS Microbiology Letters</i> , 2015 , 362, | 2.9 | 6 |
| 18 | The facile and controllable synthesis of a bacterial cellulose/polyhydroxybutyrate composite by co-culturing <i>Gluconacetobacter xylinus</i> and <i>Ralstonia eutropha</i> . <i>Carbohydrate Polymers</i> , 2021 , 252, 117137 | 10.3 | 6 |
| 17 | Acute toxicity of heavy metals to <i>Tetrahymena</i> in an in vitro experiment and envelope damage study. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2013 , 91, 62-8 | 2.7 | 4 |
| 16 | Possible Industrial Applications for Microbial Electrosynthesis From Carbon Dioxide 2019 , 825-842 | | 4 |
| 15 | Impact of electron scavenging during electric current generation from propionate by a <i>Geobacter</i> co-culture. <i>Chemical Engineering Journal</i> , 2021 , 418, 129357 | 14.7 | 4 |
| 14 | Voices of biotech. <i>Nature Biotechnology</i> , 2016 , 34, 270-5 | 44.5 | 3 |

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| 13 | Synthetic Biology Strategies to Improve Electron Transfer Rate at the MicrobeAnode Interface in Microbial Fuel Cells 2019 , 187-208 | | 3 |
| 12 | An electrochemiluminescence resonance energy transfer biosensor for the detection of circulating tumor DNA from blood plasma. <i>IScience</i> , 2021 , 24, 103019 | 6.1 | 3 |
| 11 | The one-step hydrothermal synthesis of CdS nanorods modified with carbonized leaves from Japanese raisin trees for photocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2021 , | 6.7 | 3 |
| 10 | Anode Catalysts and Biocatalysts for Microbial Fuel Cells 2018 , 143-165 | | 2 |
| 9 | An Adaptive Laboratory Evolution Method to Accelerate Autotrophic Metabolism. <i>Methods in Molecular Biology</i> , 2018 , 1671, 149-161 | 1.4 | 2 |
| 8 | Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons 2017 , 1-21 | | 2 |
| 7 | Selective electrocatalytic reduction of carbon dioxide to formate by a trimetallic Sn-Co/Cu foam electrode. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 877, 114623 | 4.1 | 2 |
| 6 | Improved polyhydroxybutyrate production by <i>Cupriavidus necator</i> and the photocatalyst graphitic carbon nitride from fructose under low light intensity.. <i>International Journal of Biological Macromolecules</i> , 2022 , 203, 526-534 | 7.9 | 1 |
| 5 | Optimizing the electrical conductivity of polyacrylonitrile/polyaniline with nickel nanoparticles for the enhanced electrostimulation of Schwann cells proliferation. <i>Bioelectrochemistry</i> , 2021 , 140, 107750 | 5.6 | 1 |
| 4 | Fumarate disproportionation by <i>Geobacter sulfurreducens</i> and its involvement in biocorrosion and interspecies electron transfer.. <i>Science of the Total Environment</i> , 2022 , 827, 154251 | 10.2 | 1 |
| 3 | Enhanced hydrogen evolution under visible light by a ternary composite photocatalyst made of CdS and MoS ₂ modified with bacterial cellulose aerogel. <i>Cellulose</i> , 2022 , 29, 175 | 5.5 | 0 |
| 2 | Graphene Electrodes in Bioelectrochemical Systems 2020 , 422-443 | | |
| 1 | Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons 2020 , 233-253 | | |