

# Tian Zhang

## List of Publications by Year in Descending Order

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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	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> , <b>2022</b> , 203, 526-534	7.9	1
65	Enhanced hydrogen evolution under visible light by a ternary composite photocatalyst made of CdS and MoS <sub>2</sub> modified with bacterial cellulose aerogel. <i>Cellulose</i> , <b>2022</b> , 29, 175	5.5	0
64	Fumarate disproportionation by <i>Geobacter sulfurreducens</i> and its involvement in biocorrosion and interspecies electron transfer.. <i>Science of the Total Environment</i> , <b>2022</b> , 827, 154251	10.2	1
63	The one-pot synthesis of a ZnSe/ZnS photocatalyst for H <sub>2</sub> evolution and microbial bioproduction. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 21901-21911	6.7	7
62	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> , <b>2021</b> , 753, 142050	10.2	19
61	Fast removal of toxic hexavalent chromium from an aqueous solution by high-density <i>Geobacter sulfurreducens</i> . <i>Chemosphere</i> , <b>2021</b> , 263, 128281	8.4	7
60	Improved robustness of microbial electrosynthesis by adaptation of a strict anaerobic microbial catalyst to molecular oxygen. <i>Science of the Total Environment</i> , <b>2021</b> , 754, 142440	10.2	8
59	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> , <b>2021</b> , 252, 117137	19.3	6
58	Impact of electron scavenging during electric current generation from propionate by a <i>Geobacter</i> co-culture. <i>Chemical Engineering Journal</i> , <b>2021</b> , 418, 129357	14.7	4
57	Optimizing the electrical conductivity of polyacrylonitrile/polyaniline with nickel nanoparticles for the enhanced electrostimulation of Schwann cells proliferation. <i>Bioelectrochemistry</i> , <b>2021</b> , 140, 107750	5.6	1
56	An electrochemiluminescence resonance energy transfer biosensor for the detection of circulating tumor DNA from blood plasma. <i>IScience</i> , <b>2021</b> , 24, 103019	6.1	3
55	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> , <b>2021</b> ,	6.7	3
54	The hidden chemolithoautotrophic metabolism of <i>Geobacter sulfurreducens</i> uncovered by adaptation to formate. <i>ISME Journal</i> , <b>2020</b> , 14, 2078-2089	11.9	13
53	Efficient photocatalytic hydrogen evolution with high-crystallinity and noble metal-free red phosphorus-CdS nanorods. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 17354-17366	6.7	16
52	Graphene Electrodes in Bioelectrochemical Systems <b>2020</b> , 422-443		
51	Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons <b>2020</b> , 233-253		
50	Nonmetallic Abiotic-Biological Hybrid Photocatalyst for Visible Water Splitting and Carbon Dioxide Reduction. <i>IScience</i> , <b>2020</b> , 23, 100784	6.1	28

49	Crystalline CdS/MoS shape-controlled by a bacterial cellulose scaffold for enhanced photocatalytic hydrogen evolution. <i>Carbohydrate Polymers</i> , <b>2020</b> , 250, 116909	10.3	7
48	Graphene: An Antibacterial Agent or a Promoter of Bacterial Proliferation?. <i>IScience</i> , <b>2020</b> , 23, 101787	6.1	18
47	Selective electrocatalytic reduction of carbon dioxide to formate by a trimetallic Sn-Co/Cu foam electrode. <i>Journal of Electroanalytical Chemistry</i> , <b>2020</b> , 877, 114623	4.1	2
46	Preparation and properties of carboxymethyl chitosan/oxidized hydroxyethyl cellulose hydrogel. <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 162, 1692-1698	7.9	14
45	3D Printing and Bioprinting Nerve Conduits for Neural Tissue Engineering. <i>Polymers</i> , <b>2020</b> , 12,	4.5	26
44	Synthesis of a photocurable acrylated poly(ethylene glycol)-poly(xylitol sebacate) copolymers hydrogel 3D printing ink for tissue engineering.. <i>RSC Advances</i> , <b>2019</b> , 9, 18394-18405	3.7	9
43	Accelerated H <sub>2</sub> Evolution during Microbial Electrosynthesis with <i>Sporomusa ovata</i> . <i>Catalysts</i> , <b>2019</b> , 9, 166	4	11
42	Increased carbon dioxide reduction to acetate in a microbial electrosynthesis reactor with a reduced graphene oxide-coated copper foam composite cathode. <i>Bioelectrochemistry</i> , <b>2019</b> , 128, 83-93	5.6	43
41	Stimulating bioplastic production with light energy by coupling <i>Ralstonia eutropha</i> with the photocatalyst graphitic carbon nitride. <i>Green Chemistry</i> , <b>2019</b> , 21, 2392-2400	10	29
40	<i>Escherichia coli</i> adaptation and response to exposure to heavy atmospheric pollution. <i>Scientific Reports</i> , <b>2019</b> , 9, 10879	4.9	7
39	Synthetic Biology Strategies to Improve Electron Transfer Rate at the MicrobeAnode Interface in Microbial Fuel Cells <b>2019</b> , 187-208		3
38	Possible Industrial Applications for Microbial Electrosynthesis From Carbon Dioxide <b>2019</b> , 825-842		4
37	Anode Catalysts and Biocatalysts for Microbial Fuel Cells <b>2018</b> , 143-165		2
36	An Adaptive Laboratory Evolution Method to Accelerate Autotrophic Metabolism. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1671, 149-161	1.4	2
35	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> , <b>2018</b> , 6,	3.8	24
34	Performance of different <i>Sporomusa</i> species for the microbial electrosynthesis of acetate from carbon dioxide. <i>Bioresource Technology</i> , <b>2017</b> , 233, 184-190	11	86
33	Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process. <i>Bioresource Technology</i> , <b>2017</b> , 243, 30-36	11	28
32	Hybrid photosynthesis-powering biocatalysts with solar energy captured by inorganic devices. <i>Biotechnology for Biofuels</i> , <b>2017</b> , 10, 249	7.8	22

31	Freestanding and flexible graphene papers as bioelectrochemical cathode for selective and efficient CO conversion. <i>Scientific Reports</i> , <b>2017</b> , 7, 9107	4.9	44
30	Extracellular Electron Uptake: Among Autotrophs and Mediated by Surfaces. <i>Trends in Biotechnology</i> , <b>2017</b> , 35, 360-371	15.1	112
29	Functional Genomics of Metal-Reducing Microbes Degrading Hydrocarbons <b>2017</b> , 1-21		2
28	Enhanced microbial electrosynthesis with three-dimensional graphene functionalized cathodes fabricated via solvothermal synthesis. <i>Electrochimica Acta</i> , <b>2016</b> , 217, 117-122	6.7	77
27	Effect of tungstate on acetate and ethanol production by the electrosynthetic bacterium <i>Sporomusa ovata</i> . <i>Biotechnology for Biofuels</i> , <b>2016</b> , 9, 163	7.8	52
26	Voices of biotech. <i>Nature Biotechnology</i> , <b>2016</b> , 34, 270-5	44.5	3
25	Electrosynthesis of acetate from CO <sub>2</sub> by a highly structured biofilm assembled with reduced graphene oxide/tetraethylene pentamine. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 8395-8401	13	85
24	Electrifying microbes for the production of chemicals. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 201	5.7	133
23	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> , <b>2015</b> , 62, 4305-4312	2.9	9
22	Harnessing light energy with a planar transparent hybrid of graphene/single wall carbon nanotube/n-type silicon heterojunction solar cell. <i>Electrochimica Acta</i> , <b>2015</b> , 178, 732-738	6.7	18
21	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> , <b>2015</b> , 362,	2.9	6
20	Adaptation of the autotrophic acetogen <i>Sporomusa ovata</i> to methanol accelerates the conversion of CO <sub>2</sub> to organic products. <i>Scientific Reports</i> , <b>2015</b> , 5, 16168	4.9	56
19	ARTIFICIAL PHOTOSYNTHESIS. More efficient together. <i>Science</i> , <b>2015</b> , 350, 738-9	33.3	44
18	Joint toxicity of heavy metals and chlorobenzenes to pyriformis <i>Tetrahymena</i> . <i>Chemosphere</i> , <b>2014</b> , 104, 177-83	8.4	11
17	Sulfur oxidation to sulfate coupled with electron transfer to electrodes by <i>Desulfuromonas</i> strain TZ1. <i>Microbiology (United Kingdom)</i> , <b>2014</b> , 160, 123-129	2.9	35
16	Identification of genes specifically required for the anaerobic metabolism of benzene in <i>Geobacter metallireducens</i> . <i>Frontiers in Microbiology</i> , <b>2014</b> , 5, 245	5.7	23
15	Constraint-based modeling of carbon fixation and the energetics of electron transfer in <i>Geobacter metallireducens</i> . <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003575	5	27
14	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> , <b>2013</b> , 91, 62-8	2.7	4

13	Improved cathode for high efficient microbial-catalyzed reduction in microbial electrosynthesis cells. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 14290-4	3.6	120
12	Anaerobic benzene oxidation via phenol in <i>Geobacter metallireducens</i> . <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 7800-6	4.8	79
11	Improved cathode materials for microbial electrosynthesis. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 217-224	35.4	260
10	Sulfide-driven microbial electrosynthesis. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 568-73	10.3	83
9	Acute toxicity of chlorobenzenes in tetrahymena: estimated by microcalorimetry and mechanism. <i>Environmental Toxicology and Pharmacology</i> , <b>2012</b> , 33, 377-85	5.8	15
8	The action of norfloxacin complexes on <i>Tetrahymena</i> investigated by microcalorimetry. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2012</b> , 109, 433-439	4.1	8
7	The Rnf complex of <i>Clostridium ljungdahlii</i> is a proton-translocating ferredoxin:NAD <sup>+</sup> oxidoreductase essential for autotrophic growth. <i>MBio</i> , <b>2012</b> , 4, e00406-12	7.8	147
6	Anaerobic benzene oxidation by <i>Geobacter</i> species. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 8304-10	4.8	76
5	<i>Geobacter</i> : the microbe electric's physiology, ecology, and practical applications. <i>Advances in Microbial Physiology</i> , <b>2011</b> , 59, 1-100	4.4	399
4	Stimulating the anaerobic degradation of aromatic hydrocarbons in contaminated sediments by providing an electrode as the electron acceptor. <i>Environmental Microbiology</i> , <b>2010</b> , 12, 1011-20	5.2	239
3	The direct electrocatalysis of <i>Escherichia coli</i> through electroactivated excretion in microbial fuel cell. <i>Electrochemistry Communications</i> , <b>2008</b> , 10, 293-297	5.1	112
2	Improved performances of <i>E. coli</i> -catalyzed microbial fuel cells with composite graphite/PTFE anodes. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 349-353	5.1	106
1	A novel mediatorless microbial fuel cell based on direct biocatalysis of <i>Escherichia coli</i> . <i>Chemical Communications</i> , <b>2006</b> , 2257-9	5.8	121