Hao Song

List of Publications by Year
in descending order

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123	6,966	53794 45	62596 80
papers	citations	h-index	g-index

128	128	128	6632
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Macroporous and Monolithic Anode Based on Polyaniline Hybridized Three-Dimensional Graphene for High-Performance Microbial Fuel Cells. ACS Nano, 2012, 6, 2394-2400.	14.6	520
2	A synthetic Escherichia coli predatorâ€“prey ecosystem. Molecular Systems Biology, 2008, 4, 187.	7.2	425
3	Graphene/carbon cloth anode for high-performance mediatorless microbial fuel cells. Bioresource Technology, 2012, 114, 275-280.	9.6	307
4	Highly Active Bidirectional Electron Transfer by a Selfâ€Assembled Electroactive Reducedâ€Grapheneâ€Oxideâ€Hybridized Biofilm. Angewandte Chemie - International Edition, 2014, 53, 4480-4483.	13.8	296
5	3D Graphene Foam as a Monolithic and Macroporous Carbon Electrode for Electrochemical Sensing. ACS Applied Materials & Interfaces, 2012, 4, 3129-3133.	8.0	292
6	Enhancing Bidirectional Electron Transfer of Shewanella oneidensis by a Synthetic Flavin Pathway. ACS Synthetic Biology, 2015, 4, 815-823.	3.8	219
7	Synthesis of a MnO2â€“graphene foam hybrid with controlled MnO2 particle shape and its use as a supercapacitor electrode. Carbon, 2012, 50, 4865-4870.	10.3	214
8	Synthetic microbial consortia: from systematic analysis to construction and applications. Chemical Society Reviews, 2014, 43, 6954-6981.	38.1	184
9	Bioelectricity enhancement via overexpression of quorum sensing system in Pseudomonas aeruginosa-inoculated microbial fuel cells. Biosensors and Bioelectronics, 2011, 30, 87-92.	10.1	157
10	Microbial extracellular electron transfer and strategies for engineering electroactive microorganisms. Biotechnology Advances, 2021, 53, 107682.	11.7	130
11	Enhanced Shewanella biofilm promotes bioelectricity generation. Biotechnology and Bioengineering, 2015, 112, 2051-2059.	3.3	129
12	Modular engineering to increase intracellular NAD(H/+) promotes rate of extracellular electron transfer of Shewanella oneidensis. Nature Communications, 2018, 9, 3637.	12.8	116
13	Nitrogen doped carbon nanoparticles enhanced extracellular electron transfer for high-performance microbial fuel cells anode. Chemosphere, 2015, 140, 26-33.	8.2	110
14	Conductive artificial biofilm dramatically enhances bioelectricity production in Shewanella-inoculated microbial fuel cells. Chemical Communications, 2011, 47, 12825.	4.1	96
15	Enzyme-Assisted Microbial Electrosynthesis of Poly(3-hydroxybutyrate) via CO₂ Bioreduction by Engineered Ralstonia eutropha. ACS Catalysis, 2018, 8, 4429-4437.	11.2	95
16	Engineering quorum sensing signaling of Pseudomonas for enhanced wastewater treatment and electricity harvest: A review. Chemosphere, 2015, 140, 18-25.	8.2	94
17	Engineered Shewanella oneidensis-reduced graphene oxide biohybrid with enhanced biosynthesis and transport of flavins enabled a highest bioelectricity output in microbial fuel cells. Nano Energy, 2018, 50, 639-648.	16.0	92
18	A three-species microbial consortium for power generation. Energy and Environmental Science, 2017, 10, 1600-1609.	30.8	90

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19	Spatiotemporal modulation of biodiversity in a synthetic chemical-mediated ecosystem. Nature Chemical Biology, 2009, 5, 929-935.	8.0	89
20	Design, analysis and application of synthetic microbial consortia. Synthetic and Systems Biotechnology, 2016, 1, 109-117.	3.7	87
21	Metabolome Profiling Reveals Metabolic Cooperation between Bacillus megaterium and Ketogulonicigenium vulgare during Induced Swarm Motility. Applied and Environmental Microbiology, 2011, 77, 7023-7030.	3.1	86
22	Increase of riboflavin biosynthesis underlies enhancement of extracellular electron transfer of Shewanella in alkaline microbial fuel cells. Bioresource Technology, 2013, 130, 763-768.	9.6	86
23	Enhancement of extracellular electron transfer and bioelectricity output by synthetic porin. Biotechnology and Bioengineering, 2013, 110, 408-416.	3.3	77
24	CRISPRiâ€“sRNA: Transcriptionalâ€“Translational Regulation of Extracellular Electron Transfer in Shewanella oneidensis. ACS Synthetic Biology, 2017, 6, 1679-1690.	3.8	76
25	Modular Engineering Intracellular NADH Regeneration Boosts Extracellular Electron Transfer of Shewanella oneidensis MR-1. ACS Synthetic Biology, 2018, 7, 885-895.	3.8	74
26	Influence of outer membrane câ€type cytochromes on particle size and activity of extracellular nanoparticles produced by Shewanella oneidensis. Biotechnology and Bioengineering, 2013, 110, 1831-1837.	3.3	72
27	Construction of Functionally Compartmental Inorganic Photocatalystâ€“Enzyme System via Imitating Chloroplast for Efficient Photoreduction of CO₂ to Formic Acid. ACS Applied Materials & Interfaces, 2020, 12, 34795-34805.	8.0	71
28	Boosting the biosynthesis of betulinic acid and related triterpenoids in Yarrowia lipolytica via multimodular metabolic engineering. Microbial Cell Factories, 2019, 18, 77.	4.0	70
29	Enhance electron transfer and performance of microbial fuel cells by perforating the cell membrane. Electrochemistry Communications, 2012, 15, 50-53.	4.7	68
30	Dynamics of a Minimal Model of Interlocked Positive and Negative Feedback Loops of Transcriptional Regulation by cAMP-Response Element Binding Proteins. Biophysical Journal, 2007, 92, 3407-3424.	0.5	65
31	Engineering PQS Biosynthesis Pathway for Enhancement of Bioelectricity Production in Pseudomonas aeruginosa Microbial Fuel Cells. PLoS ONE, 2013, 8, e63129.	2.5	65
32	Engineering global transcription factor cyclic AMP receptor protein of Escherichia coli for improved 1-butanol tolerance. Applied Microbiology and Biotechnology, 2012, 94, 1107-1117.	3.6	64
33	Direct microbial electron uptake as a mechanism for stainless steel corrosion in aerobic environments. Water Research, 2022, 219, 118553.	11.3	63
34	Engineering Electrode-Attached Microbial Consortia for High-Performance Xylose-Fed Microbial Fuel Cell. ACS Catalysis, 2015, 5, 6937-6945.	11.2	61
35	Improving Ethanol Tolerance of Escherichia coli by Rewiring Its Global Regulator cAMP Receptor Protein (CRP). PLoS ONE, 2013, 8, e57628.	2.5	61
36	Increasing intracellular releasable electrons dramatically enhances bioelectricity output in microbial fuel cells. Electrochemistry Communications, 2012, 19, 13-16.	4.7	60

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37	Programmed Allee effect in bacteria causes a tradeoff between population spread and survival. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1969-1974.	7.1	59
38	Enhanced expression of genes involved in initial xylose metabolism and the oxidative pentose phosphate pathway in the improved xylose-utilizing Saccharomyces cerevisiae through evolutionary engineering. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 27-39.	3.0	59
39	Engineering Shewanella oneidensis enables xylose-fed microbial fuel cell. Biotechnology for Biofuels, 2017, 10, 196.	6.2	59
40	Microbial electro-fermentation for synthesis of chemicals and biofuels driven by bi-directional extracellular electron transfer. Synthetic and Systems Biotechnology, 2020, 5, 304-313.	3.7	58
41	Templateâ€Free Pseudomorphic Synthesis of Tungsten Carbide Nanorods. Small, 2012, 8, 3350-3356.	10.0	56
42	A Synthetic Plasmid Toolkit for Shewanella oneidensis MR-1. Frontiers in Microbiology, 2019, 10, 410.	3.5	51
43	Modular Pathway Engineering of Bacillus subtilis To Promote De Novo Biosynthesis of Menaquinone-7. ACS Synthetic Biology, 2019, 8, 70-81.	3.8	51
44	Initial pyrolysis mechanism and product formation of cellulose: An Experimental and Density functional theory(DFT) study. Scientific Reports, 2020, 10, 3626.	3.3	50
45	Combinational expression of sorbose/sorbosone dehydrogenases and cofactor pyrroloquinoline quinone increases 2-keto-l-gulonic acid production in Ketogulonigenium vulgareâ€“Bacillus cereus consortium. Metabolic Engineering, 2013, 19, 50-56.	7.0	49
46	Engineering Saccharomyces cerevisiae for high yield production of Î±-amyrin via synergistic remodeling of Î±-amyrin synthase and expanding the storage pool. Metabolic Engineering, 2020, 62, 72-83.	7.0	48
47	Enhancing E. coli isobutanol tolerance through engineering its global transcription factor cAMP receptor protein (CRP). Biotechnology and Bioengineering, 2014, 111, 700-708.	3.3	47
48	Synthetic Saccharomyces cerevisiaeâ€Shewanella oneidensis consortium enables glucoseâ€fed highâ€performance microbial fuel cell. AICHE Journal, 2017, 63, 1830-1838.	3.6	46
49	Adaptive bidirectional extracellular electron transfer during accelerated microbiologically influenced corrosion of stainless steel. Communications Materials, 2021, 2, .	6.9	46
50	Genome-scale target identification in Escherichia coli for high-titer production of free fatty acids. Nature Communications, 2021, 12, 4976.	12.8	44
51	Reductive formation of palladium nanoparticles by Shewanella oneidensis: role of outer membrane cytochromes and hydrogenases. RSC Advances, 2013, 3, 22498.	3.6	43
52	Engineering exoelectrogens by synthetic biology strategies. Current Opinion in Electrochemistry, 2018, 10, 37-45.	4.8	43
53	Metabolomic profiling elucidates community dynamics of the Ketogulonicigenium vulgareâ€“Bacillus megaterium consortium. Metabolomics, 2012, 8, 960-973.	3.0	42
54	Design and construction of synthetic microbial consortia in China. Synthetic and Systems Biotechnology, 2016, 1, 230-235.	3.7	42

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55	Productive Amyrin Synthases for Efficient Î±-Amyrin Synthesis in Engineered Saccharomyces cerevisiae. ACS Synthetic Biology, 2018, 7, 2391-2402.	3.8	40
56	The effect of external resistance on biofilm formation and internal resistance in Shewanella inoculated microbial fuel cells. RSC Advances, 2016, 6, 20317-20323.	3.6	38
57	Enhancing surfactin production by using systematic CRISPRi repression to screen amino acid biosynthesis genes in Bacillus subtilis. Microbial Cell Factories, 2019, 18, 90.	4.0	38
58	Improved performance of Pseudomonas putida in a bioelectrochemical system through overexpression of periplasmic glucose dehydrogenase. Biotechnology and Bioengineering, 2018, 115, 145-155.	3.3	37
59	Engineering Microbial Consortia for High-Performance Cellulosic Hydrolyzates-Fed Microbial Fuel Cells. Frontiers in Microbiology, 2019, 10, 409.	3.5	36
60	A synthetic biology challenge: making cells compute. Molecular BioSystems, 2007, 3, 343.	2.9	35
61	A thiophene-modified doubleshell hollow g-C₃N₄ nanosphere boosts NADH regeneration via synergistic enhancement of charge excitation and separation. Catalysis Science and Technology, 2019, 9, 1911-1921.	4.1	35
62	Improving Acetate Tolerance of Escherichia coli by Rewiring Its Global Regulator cAMP Receptor Protein (CRP). PLoS ONE, 2013, 8, e77422.	2.5	35
63	Bifurcation and Singularity Analysis of a Molecular Network for the Induction of Long-Term Memory. Biophysical Journal, 2006, 90, 2309-2325.	0.5	34
64	Programming microbial population dynamics by engineered cellâ€“cell communication. Biotechnology Journal, 2011, 6, 837-849.	3.5	34
65	Optimization of CDT-1 and XYL1 Expression for Balanced Co-Production of Ethanol and Xylitol from Cellobiose and Xylose by Engineered Saccharomyces cerevisiae. PLoS ONE, 2013, 8, e68317.	2.5	34
66	Activation Enhancement of Citric Acid Cycle to Promote Bioelectrocatalytic Activity of arcA Knockout Escherichia coli Toward High-Performance Microbial Fuel Cell. ACS Catalysis, 2012, 2, 1749-1752.	11.2	33
67	Synthetic Klebsiella pneumoniaeâ€Shewanella oneidensis Consortium Enables Glycerolâ€Fed Highâ€Performance Microbial Fuel Cells. Biotechnology Journal, 2018, 13, e1700491.	3.5	30
68	Enhancement of coulombic efficiency and salt tolerance in microbial fuel cells by graphite/alginate granules immobilization of Shewanella oneidensis MR-1. Process Biochemistry, 2013, 48, 1947-1951.	3.7	29
69	Partially oxidized titanium carbonitride as a non-noble catalyst for oxygen reduction reactions. International Journal of Hydrogen Energy, 2012, 37, 15135-15139.	7.1	28
70	A 3D mesoporous polysulfoneâ€“carbon nanotube anode for enhanced bioelectricity output in microbial fuel cells. Chemical Communications, 2013, 49, 10754.	4.1	28
71	Photocatalyst-enzyme hybrid systems for light-driven biotransformation. Biotechnology Advances, 2022, 54, 107808.	11.7	25
72	Deletion of d-ribulose-5-phosphate 3-epimerase (RPE1) induces simultaneous utilization of xylose and glucose in xylose-utilizing Saccharomyces cerevisiae. Biotechnology Letters, 2015, 37, 1031-1036.	2.2	22

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73	Metabolomic Analysis of Cooperative Adaptation between Co-Cultured Bacillus cereus and Ketogulonicigenium vulgare. PLoS ONE, 2014, 9, e94889.	2.5	21
74	Heterologous expression of EUGT11 from Oryza sativa in Pichia pastoris for highly efficient one-pot production of rebaudioside D from rebaudioside A. International Journal of Biological Macromolecules, 2020, 163, 1669-1676.	7.5	20
75	Neutrophil elastase enhances the proliferation and decreases apoptosis of leukemia cells via activation of PI3K/Akt signaling. Molecular Medicine Reports, 2016, 13, 4175-4182.	2.4	19
76	Enhancement of 2-keto-gulonic acid yield by serial subcultivation of co-cultures of Bacillus cereus and Ketogulonigenium vulgare. Bioresource Technology, 2013, 132, 370-373.	9.6	18
77	Electricity-driven 7Î±-hydroxylation of a steroid catalyzed by a cytochrome P450 monooxygenase in engineered yeast. Catalysis Science and Technology, 2019, 9, 4877-4887.	4.1	18
78	Signal Discrimination by Differential Regulation of Protein Stability in Quorum Sensing. Journal of Molecular Biology, 2008, 382, 1290-1297.	4.2	17
79	Error-prone PCR of global transcription factor cyclic AMP receptor protein for enhanced organic solvent (toluene) tolerance. Process Biochemistry, 2012, 47, 2152-2158.	3.7	17
80	Comparative Proteomic Analysis of Experimental Evolution of the Bacillus cereus-Ketogulonicigenium vulgare Co-Culture. PLoS ONE, 2014, 9, e91789.	2.5	17
81	Metabolic engineering of Bacillus subtilis for highâ€titer production of menaquinoneâ€7. AIChE Journal, 2020, 66, e16754.	3.6	16
82	The critical role of electrochemically activated adsorbates in neutral OER. Science China Materials, 2020, 63, 2509-2516.	6.3	16
83	Potential of Zymomonas mobilis as an electricity producer in ethanol production. Biotechnology for Biofuels, 2020, 13, 36.	6.2	16
84	Engineering phytosterol transport system in Mycobacterium sp. strain MS136 enhances production of 9Î±-hydroxy-4-androstene-3,17-dione. Biotechnology Letters, 2018, 40, 673-678.	2.2	15
85	Engineering mycobacteria artificial promoters and ribosomal binding sites for enhanced sterol production. Biochemical Engineering Journal, 2020, 162, 107739.	3.6	15
86	Threeâ€Dimensional Nâ€Doped Carbon Nanotube/Graphene Composite Aerogel Anode to Develop Highâ€Power Microbial Fuel Cell. Energy and Environmental Materials, 2023, 6, .	12.8	13
87	Bounds on Operating Conditions Leading to Melting during Olefin Polymerization. Industrial & Engineering Chemistry Research, 2004, 43, 270-282.	3.7	11
88	Engineering of bacterial electrochemical activity with global regulator manipulation. Electrochemistry Communications, 2018, 86, 117-120.	4.7	10
89	Synthetic sRNAâ€Based Engineering of Escherichia coli for Enhanced Production of Fullâ€Length Immunoglobulin G. Biotechnology Journal, 2020, 15, e1900363.	3.5	10
90	Thiophene-Conjugated Porous C3N4 Nanosheets for Boosted Photocatalytic Nicotinamide Cofactor Regeneration to Facilitate Solar-to-Chemical Enzymatic Reactions. Transactions of Tianjin University, 2021, 27, 42-54.	6.4	10

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91	Enhancing production of 9Î±-hydroxy-androst-4-ene-3,17-dione (9-OHAD) from phytosterols by metabolic pathway engineering of mycobacteria. Chemical Engineering Science, 2021, 230, 116195.	3.8	10
92	Co-immobilized recombinant glycosyltransferases efficiently convert rebaudioside A to M in cascade. RSC Advances, 2021, 11, 15785-15794.	3.6	10
93	Synthesis and characterization of diketopyrrolopyrrole-based conjugated molecules flanked by indenothiophene and benzoindenothiophene derivatives. Journal of Materials Chemistry C, 2015, 3, 11135-11143.	5.5	8
94	De Novo High-Titer Production of Delta-Tocotrienol in Recombinant Saccharomyces cerevisiae. Journal of Agricultural and Food Chemistry, 2020, 68, 7710-7717.	5.2	8
95	Depletion interaction forces contribute to erythrocyte-endothelial adhesion in diabetes. Biochemical and Biophysical Research Communications, 2019, 516, 144-148.	2.1	7
96	Engineering synthetic microbial consortium for efficient conversion of lactate from glucose and xylose to generate electricity. Biochemical Engineering Journal, 2021, 172, 108052.	3.6	7
97	Controlling Belousovâ€“Zhabotinskyâ€“continuous stirred tank reactor chaotic chemical reaction by discrete and continuous control strategies. Physical Chemistry Chemical Physics, 1999, 1, 813-819.	2.8	6
98	Evolving Sensitivity. ACS Chemical Biology, 2006, 1, 681-682.	3.4	6
99	Effects of LG268 on Cell Proliferation and Apoptosis of NB4 Cells. International Journal of Medical Sciences, 2016, 13, 517-523.	2.5	6
100	Development of Whole Genomeâ€Scale Base Editing Toolbox to Promote Efficiency of Extracellular Electron Transfer in Shewanella oneidensis MRâ€1. Advanced Biology, 2022, 6, e2101296.	2.5	6
101	CRISPR/dCas9-RpoD-Mediated Simultaneous Transcriptional Activation and Repression in Shewanella oneidensis MR-1. ACS Synthetic Biology, 2022, 11, 2184-2192.	3.8	6
102	Coupling riboflavin de novo biosynthesis and cytochrome expression for improving extracellular electron transfer efficiency in Shewanella oneidensis. Biotechnology and Bioengineering, 2022, 119, 2806-2818.	3.3	6
103	Dual-site supported metallocene catalyst design for bimodal polyolefin synthesis. AICHE Journal, 2007, 53, 687-694.	3.6	5
104	NLS-RARÎ± Inhibits the Effects of All-trans Retinoic Acid on NB4 Cells by Interacting with P38Î± MAPK. International Journal of Medical Sciences, 2016, 13, 611-619.	2.5	5
105	A membrane-free micro-fluidic microbial fuel cell for rapid characterization of exoelectrogenic bacteria. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	5
106	Laminar Flame Characteristics of Premixed Methanolâ€“Waterâ€“Air Mixture. Energies, 2020, 13, 6504.	3.1	5
107	sRNA-Based Screening Chromosomal Gene Targets and Modular Designing Escherichia coli for High-Titer Production of Aglycosylated Immunoglobulin G. ACS Synthetic Biology, 2020, 9, 1385-1394.	3.8	5
108	Type I-F CRISPR-PAIR platform for multi-mode regulation to boost extracellular electron transfer in Shewanella oneidensis. IScience, 2022, 25, 104491.	4.1	4

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109	Impact of Initiation and Deactivation on Melting during Gas-Phase Olefin Polymerization. Industrial & Engineering Chemistry Research, 2004, 43, 4789-4795.	3.7	3
110	A Whole More Than the Sum of Its Synthetic Parts. ACS Chemical Biology, 2008, 3, 27-29.	3.4	3
111	Construction of an Acetate Metabolic Pathway to Enhance Electron Generation of Engineered Shewanella oneidensis. Frontiers in Bioengineering and Biotechnology, 2021, 9, 757953.	4.1	3
112	Non-homologous End Joining-Mediated Insertional Mutagenesis Reveals a Novel Target for Enhancing Fatty Alcohols Production in Yarrowia lipolytica. Frontiers in Microbiology, 2022, 13, 898884.	3.5	3
113	Dataâ€Driven Temporal Charging Patterns of Electric Vehicles in China. Energy Technology, 2021, 9, 2100421.	3.8	2
114	Reconstructing the state space of chaotic BZ reaction system using power spectrum method. Science Bulletin, 1998, 43, 1447-1452.	1.7	1
115	A new method of controlling chemical chaos. Science in China Series B: Chemistry, 1999, 42, 624-630.	0.8	1
116	New chaotic behavior and its effective control in BelousovÂ–Zhabotinsky reaction. Canadian Journal of Chemistry, 2001, 79, 29-34.	1.1	1
117	Modeling Spatiotemporal Dynamics of Bacterial Populations. Methods in Molecular Biology, 2012, 880, 243-254.	0.9	1
118	An in silico erythropoiesis model rationalizing synergism between stem cell factor and erythropoietin. Bioprocess and Biosystems Engineering, 2013, 36, 1689-1702.	3.4	1
119	Synthetic genome with recoding. Science China Life Sciences, 2019, 62, 1096-1097.	4.9	1
120	Biochemical engineering in China. Reviews in Chemical Engineering, 2019, 35, 929-993.	4.4	1
121	New chaotic behavior and its effective control in Belousovâ€“Zhabotinsky reaction. Canadian Journal of Chemistry, 2001, 79, 29-34.	1.1	1
122	Editorial: Electrobiotechnology Towards Sustainable Bioeconomy: Fundamental, Optimization and Applications. Frontiers in Bioengineering and Biotechnology, 2022, 10, 901072.	4.1	1
123	Collaborative optimization for energy saving and service composition in multi-granularity heavy-duty equipment cloud manufacturing environment. Journal of Industrial and Management Optimization, 2022, .	1.3	0