Yuan Lu

List of Publications by Year
in descending order

91 papers	2,395 citations	218592 26 h-index	233338 45 g-index
96 all docs	96 docs citations	96 times ranked	2730 citing authors

#	Article	IF	Citations
1	States and challenges for high-value biohythane production from waste biomass by dark fermentation technology. Bioresource Technology, 2013, 135, 292-303.	4.8	186
2	Production and stabilization of the trimeric influenza hemagglutinin stem domain for potentially broadly protective influenza vaccines. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 125-130.	3.3	184
3	Cell-free synthetic biology: Engineering in an open world. Synthetic and Systems Biotechnology, 2017, 2, 23-27.	1.8	136
4	Assessing sequence plasticity of a virus-like nanoparticle by evolution toward a versatile scaffold for vaccines and drug delivery. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12360-12365.	3.3	117
5	Characteristics of hydrogen and methane production from cornstalks by an augmented two- or three-stage anaerobic fermentation process. Bioresource Technology, 2009, 100, 2889-2895.	4.8	94
6	Characteristics of hydrogen production of an Enterobacter aerogenes mutant generated by a new atmospheric and room temperature plasma (ARTP). Biochemical Engineering Journal, 2011, 55, 17-22.	1.8	80
7	Production of violet pigment by a newly isolated psychrotrophic bacterium from a glacier in Xinjiang, China. Biochemical Engineering Journal, 2009, 43, 135-141.	1.8	76
8	Compartmentalizing Cell-Free Systems: Toward Creating Life-Like Artificial Cells and Beyond. ACS Synthetic Biology, 2020, 9, 2881-2901.	1.9	71
9	Cloning and knockout of formate hydrogen lyase and H2-uptake hydrogenase genes in Enterobacter aerogenes for enhanced hydrogen production. International Journal of Hydrogen Energy, 2009, 34, 186-194.	3.8	69
10	Bioprocess engineering for biohythane production from low-grade waste biomass: technical challenges towards scale up. Current Opinion in Biotechnology, 2018, 50, 25-31.	3.3	62
11	Optimization of culture conditions for violacein production by a new strain of Duganella sp. B2. Biochemical Engineering Journal, 2009, 44, 119-124.	1.8	61
12	Virusâ€Like Particle Engineering: From Rational Design to Versatile Applications. Biotechnology Journal, 2018, 13, e1700324.	1.8	58
13	Advances in Cellâ€Free Biosensors: Principle, Mechanism, and Applications. Biotechnology Journal, 2020, 15, e2000187.	1.8	56
14	Advances and Challenges in Cell-Free Incorporation of Unnatural Amino Acids Into Proteins. Frontiers in Pharmacology, 2019, 10, 611.	1.6	52
15	Chemical constituents, biological functions and pharmacological effects for comprehensive utilization of Eucommia ulmoides Oliver. Food Science and Human Wellness, 2019, 8, 177-188.	2.2	50
16	Escherichia coliâ€based cell free production of flagellin and ordered flagellin display on virusâ€like particles. Biotechnology and Bioengineering, 2013, 110, 2073-2085.	1.7	49
17	Non-anticoagulant effects of low molecular weight heparins in inflammatory disorders: A review. Carbohydrate Polymers, 2017, 160, 71-81.	5.1	44
18	O₂ sensitivity and H₂ production activity of hydrogenasesâ€”A review. Biotechnology and Bioengineering, 2019, 116, 3124-3135.	1.7	43

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19	Enhanced biohydrogen production from corn stover by the combination of Clostridium cellulolyticum and hydrogen fermentation bacteria. Journal of Bioscience and Bioengineering, 2016, 122, 482-487.	1.1	41
20	Functional properties of flagellin as a stimulator of innate immunity. Scientific Reports, 2016, 6, 18379.	1.6	40
21	Perturbation of formate pathway for hydrogen production by expressions of formate hydrogen lyase and its transcriptional activator in wild Enterobacter aerogenes and its mutants. International Journal of Hydrogen Energy, 2009, 34, 5072-5079.	3.8	37
22	Alteration of hydrogen metabolism of ldh-deleted Enterobacter aerogenes by overexpression of NAD(+)-dependent formate dehydrogenase. Applied Microbiology and Biotechnology, 2010, 86, 255-262.	1.7	33
23	Phytophthora infestans effector <scp>SFI</scp>3 targets potato <scp>UBK</scp> to suppress early immune transcriptional responses. New Phytologist, 2019, 222, 438-454.	3.5	33
24	Effects of bioactive components of Pu-erh tea on gut microbiomes and health: A review. Food Chemistry, 2021, 353, 129439.	4.2	33
25	Impairment of NADH dehydrogenase and regulation of anaerobic metabolism by the small RNA RyhB and NadE for improved biohydrogen production in Enterobacter aerogenes. Biotechnology for Biofuels, 2017, 10, 248.	6.2	31
26	Untethered Microrobots for Active Drug Delivery: From Rational Design to Clinical Settings. Advanced Healthcare Materials, 2022, 11, e2102253.	3.9	30
27	Cellâ€free production of trimeric influenza hemagglutinin head domain proteins as vaccine antigens. Biotechnology and Bioengineering, 2012, 109, 2962-2969.	1.7	29
28	Studies on the Physical Characteristics of the Radio-Frequency Atmospheric-Pressure Glow Discharge Plasmas for the Genome Mutation of Methylosinus trichosporium. IEEE Transactions on Plasma Science, 2012, 40, 2853-2860.	0.6	25
29	Perturbation of formate pathway and NADH pathway acting on the biohydrogen production. Scientific Reports, 2017, 7, 9587.	1.6	24
30	Circular RNA: Biosynthesis in vitro. Frontiers in Bioengineering and Biotechnology, 2021, 9, 787881.	2.0	23
31	Efficient Incorporation of Unnatural Amino Acids into Proteins with a Robust Cell-Free System. Methods and Protocols, 2019, 2, 16.	0.9	22
32	Nutritional and medicinal characteristics of Chinese giant salamander (Andrias davidianus) for applications in healthcare industry by artificial cultivation: A review. Food Science and Human Wellness, 2018, 7, 1-10.	2.2	21
33	Hydrologic Evaluation of TRMM Multisatellite Precipitation Analysis for Nanliu River Basin in Humid Southwestern China. Scientific Reports, 2017, 7, 2470.	1.6	20
34	Disruption of lactate dehydrogenase and alcohol dehydrogenase for increased hydrogen production and its effect on metabolic flux in Enterobacter aerogenes. Bioresource Technology, 2015, 194, 99-107.	4.8	19
35	Detection of inorganic ions and organic molecules with cell-free biosensing systems. Journal of Biotechnology, 2019, 300, 78-86.	1.9	19
36	Bringing Light into Cell-Free Expression. ACS Synthetic Biology, 2020, 9, 2144-2153.	1.9	19

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37	Expression of NAD+-dependent formate dehydrogenase in Enterobacter aerogenes and its involvement in anaerobic metabolism and H2 production. Biotechnology Letters, 2009, 31, 1525-1530.	1.1	18
38	Improved hydrogen production under microaerophilic conditions by overexpression of polyphosphate kinase in Enterobacter aerogenes. Enzyme and Microbial Technology, 2011, 48, 187-192.	1.6	18
39	Insights into the global regulation of anaerobic metabolism for improved biohydrogen production. Bioresource Technology, 2016, 200, 35-41.	4.8	16
40	Development and comparison of cell-free protein synthesis systems derived from typical bacterial chassis. Bioresources and Bioprocessing, 2021, 8, 58.	2.0	16
41	Strategy exploration for developing robust lyophilized cell-free systems. Biotechnology Notes, 2021, 2, 44-50.	0.7	15
42	A heparin derivatives library constructed by chemical modification and enzymatic depolymerization for exploitation of non-anticoagulant functions. Carbohydrate Polymers, 2020, 249, 116824.	5.1	14
43	Development of a robust Escherichia coli-based cell-free protein synthesis application platform. Biochemical Engineering Journal, 2021, 165, 107830.	1.8	14
44	3D Magnetic Field-Controlled Synthesis, Collective Motion, and Bioreaction Enhancement of Multifunctional Peasecod-like Nanochains. ACS Applied Materials & Interfaces, 2021, 13, 36157-36170.	4.0	14
45	Modularize and Unite: Toward Creating a Functional Artificial Cell. Frontiers in Molecular Biosciences, 2021, 8, 781986.	1.6	14
46	High-Throughput and Controllable Fabrication of Helical Microfibers by Hydrodynamically Focusing Flow. ACS Applied Materials & Interfaces, 2021, 13, 59392-59399.	4.0	13
47	Impairment of NADH dehydrogenase for increased hydrogen production and its effect on metabolic flux redistribution in wild strain and mutants of Enterobacter aerogenes. International Journal of Hydrogen Energy, 2012, 37, 15875-15885.	3.8	12
48	Alteration of anaerobic metabolism in Escherichia coli for enhanced hydrogen production by heterologous expression of hydrogenase genes originating from Synechocystis sp. Biochemical Engineering Journal, 2012, 60, 81-86.	1.8	12
49	Flexible on-demand cell-free protein synthesis platform based on a tube-in-tube reactor. Reaction Chemistry and Engineering, 2020, 5, 270-277.	1.9	12
50	Magnetic-controlled dandelion-like nanocatalytic swarm for targeted biofilm elimination. Nanoscale, 2022, 14, 6497-6506.	2.8	12
51	Effects of Enzymatically Depolymerized Low Molecular Weight Heparins on CCl4-Induced Liver Fibrosis. Frontiers in Pharmacology, 2017, 8, 514.	1.6	11
52	Use of the Normalized Difference Road Landside Index (NDRLI)-based method for the quick delineation of road-induced landslides. Scientific Reports, 2018, 8, 17815.	1.6	11
53	Cell-free biology using remote-controlled digital microfluidics for individual droplet control. RSC Advances, 2020, 10, 26972-26981.	1.7	11
54	O2-Tuned Protein Synthesis Machinery in Escherichia coli-Based Cell-Free System. Frontiers in Bioengineering and Biotechnology, 2020, 8, 312.	2.0	11

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55	Improvement of Hydrogen Productivity by Introduction of NADH Regeneration Pathway in Clostridium paraputrificum. Applied Biochemistry and Biotechnology, 2012, 167, 732-742.	1.4	10
56	A Sustainable and Efficient Artificial Microgel System: Toward Creating a Configurable Synthetic Cell. Small, 2020, 16, 2002313.	5.2	10
57	Soft Magnetic Microrobot Doped with Porous Silica for Stability-Enhanced Multimodal Locomotion in a Nonideal Environment. ACS Applied Materials & Interfaces, 2022, 14, 10856-10874.	4.0	10
58	Advances, Challenges and Future Trends of Cell-Free Transcription-Translation Biosensors. Biosensors, 2022, 12, 318.	2.3	10
59	Physical stimuli-responsive cell-free protein synthesis. Synthetic and Systems Biotechnology, 2020, 5, 363-368.	1.8	9
60	Mapping determinants of rural poverty in Guangxi â€" a less developed region of China. Journal of Mountain Science, 2020, 17, 1749-1762.	0.8	8
61	Portable environment-signal detection biosensors with cell-free synthetic biosystems. RSC Advances, 2020, 10, 39261-39265.	1.7	8
62	Evaluation and Hydrological Validation of GPM Precipitation Products over the Nanliu River Basin, Beibu Gulf. Water (Switzerland), 2018, 10, 1777.	1.2	7
63	Textile-embedded cell-free biosensors. Nature Biomedical Engineering, 2022, 6, 225-226.	11.6	7
64	Discovery of enzymatically depolymerized heparins capable of treating Bleomycin-induced pulmonary injury and fibrosis in mice. Carbohydrate Polymers, 2017, 174, 82-88.	5.1	6
65	In silico Design of Linear DNA for Robust Cell-Free Gene Expression. Frontiers in Bioengineering and Biotechnology, 2021, 9, 670341.	2.0	6
66	Alteration of energy metabolism in Enterobacter aerogenes by external addition of pyrophosphates and overexpression of polyphosphate kinase for enhanced hydrogen production. Journal of Chemical Technology and Biotechnology, 2012, 87, 996-1003.	1.6	5
67	Design of Fusion Proteins for Efficient and Soluble Production of Immunogenic Ebola Virus Glycoprotein inEscherichia coli. Biotechnology Journal, 2018, 13, 1700627.	1.8	5
68	Creating a locally crowded environment with nanoclay hydrogels for cell-free biosynthesis. Soft Matter, 2020, 16, 5132-5138.	1.2	5
69	Honeycomb-like active microswarms for magnetically tunable cascade enzyme catalysis. Nanoscale, 2022, 14, 6535-6542.	2.8	5
70	Programmable protein topology via <scp>SpyCatcherâ€SpyTag</scp> chemistry in oneâ€pot cellâ€free expression system. Protein Science, 2022, 31, .	3.1	5
71	Exploration of the Tolerance Ability of a Cell-Free Biosynthesis System to Toxic Substances. Applied Biochemistry and Biotechnology, 2019, 189, 1096-1107.	1.4	4
72	Cell-free synthetic biology in the new era of enzyme engineering. Chinese Journal of Chemical Engineering, 2020, 28, 2810-2816.	1.7	4

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73	Exploration on the expression and assembly of virus-like particles. Biotechnology Notes, 2021, 2, 51-58.	0.7	4
74	A linear DNA template-based framework for site-specific unnatural amino acid incorporation. Synthetic and Systems Biotechnology, 2021, 6, 192-199.	1.8	4
75	A Temperature-Controlled Cell-Free Expression System by Dynamic Repressor. ACS Synthetic Biology, 2022, 11, 1408-1416.	1.9	4
76	Engineering Pollenâ€Derived Microstructures to Reveal Material Morphoâ€Performance Paradigm. Small, 2022, 18, e2200037.	5.2	4
77	A robust Escherichia coli cell-free expression toolbox driven by sigma factors. Biochemical Engineering Journal, 2021, 171, 108031.	1.8	3
78	Editorial: Cell-Free Synthetic Biology. Frontiers in Bioengineering and Biotechnology, 2021, 9, 799122.	2.0	3
79	Toward efficient multiple-site incorporation of unnatural amino acids using cell-free translation system. Synthetic and Systems Biotechnology, 2022, 7, 522-532.	1.8	3
80	Supramolecular protein assembly in cell-free protein synthesis system. Bioresources and Bioprocessing, 2022, 9, .	2.0	3
81	Advances in Cell-Free Biosynthetic Technology. , 2019, , 23-45.		2
82	CO2-elevated cell-free protein synthesis. Synthetic and Systems Biotechnology, 2022, 7, 911-917.	1.8	2
83	Cell-Free Synthetic Biology. SpringerBriefs in Applied Sciences and Technology, 2020, , .	0.2	1
84	Impact of Metalâ€“Organic Frameworks on Protein Expression. Chemical Research in Toxicology, 2021, 34, 1403-1408.	1.7	1
85	Clong and knochout of formate hydrogenlyase and H2-uptake hydrogenase genes in Enterobacter aerogenes for enhanced hydrogen production. Journal of Biotechnology, 2008, 136, S264.	1.9	0
86	pHâ€Driven Precise Control of Hybridization Reaction Kinetics for Rapid DNA Assay. ChemistrySelect, 2018, 3, 10646-10650.	0.7	0
87	Bifunctional Therapy by Zincâ€Cobalt Bimetalâ€Organic Framework with Encapsulated Doxorubicin to Overcome Drugâ€Resistance. ChemNanoMat, 2019, 5, 1531-1539.	1.5	0
88	Cell-Free Unnatural Protein Synthesis. SpringerBriefs in Applied Sciences and Technology, 2020, , 13-19.	0.2	0
89	A Way to Control Distortion of Metal Parts during Heat Treatment Process. , 0, , 201-207.		0
90	Other Emerging Development Trends. SpringerBriefs in Applied Sciences and Technology, 2020, , 31-35.	0.2	0

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91	Optical Sensing in Cell-Free. Methods in Molecular Biology, 2022, 2433, 343-349.	0.4	0