Yang Gu

List of Publications by Year
in descending order

53 papers	2,567 citations	172457 29 h-index	189892 50 g-index
57 all docs	57 docs citations	57 times ranked	2001 citing authors

#	Article	IF	Citations
1	CRISPR/Cas9-Based Efficient Genome Editing in <i>Clostridium ljungdahlii</i>, an Autotrophic Gas-Fermenting Bacterium. ACS Synthetic Biology, 2016, 5, 1355-1361.	3.8	171
2	Targeted gene disruption by use of a group II intron (targetron) vector in Clostridium acetobutylicum. Cell Research, 2007, 17, 963-965.	12.0	155
3	Identification and inactivation of pleiotropic regulator CcpA to eliminate glucose repression of xylose utilization in Clostridium acetobutylicum. Metabolic Engineering, 2010, 12, 446-454.	7.0	153
4	CRISPRâ€based genome editing and expression control systems in <i>Clostridium acetobutylicum</i> and <i>Clostridium beijerinckii</i>. Biotechnology Journal, 2016, 11, 961-972.	3.5	153
5	Confirmation and Elimination of Xylose Metabolism Bottlenecks in Glucose Phosphoenolpyruvate-Dependent Phosphotransferase System-Deficient Clostridium acetobutylicum for Simultaneous Utilization of Glucose, Xylose, and Arabinose. Applied and Environmental Microbiology, 2011, 77, 7886-7895.	3.1	129
6	Economical challenges to microbial producers of butanol: Feedstock, butanol ratio and titer. Biotechnology Journal, 2011, 6, 1348-1357.	3.5	108
7	Metabolic engineering of d-xylose pathway in Clostridium beijerinckii to optimize solvent production from xylose mother liquid. Metabolic Engineering, 2012, 14, 569-578.	7.0	105
8	Reconstruction of xylose utilization pathway and regulons in Firmicutes. BMC Genomics, 2010, 11, 255.	2.8	100
9	Comparative genomic and transcriptomic analysis revealed genetic characteristics related to solvent formation and xylose utilization in Clostridium acetobutylicum EA 2018. BMC Genomics, 2011, 12, 93.	2.8	75
10	Utilization of economical substrate-derived carbohydrates by solventogenic clostridia: pathway dissection, regulation and engineering. Current Opinion in Biotechnology, 2014, 29, 124-131.	6.6	69
11	Phosphoketolase Pathway for Xylose Catabolism in Clostridium acetobutylicum Revealed by ¹³ C Metabolic Flux Analysis. Journal of Bacteriology, 2012, 194, 5413-5422.	2.2	68
12	Ammonium acetate enhances solvent production by Clostridium acetobutylicum EA 2018 using cassava as a fermentation medium. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 1225-1232.	3.0	62
13	Pleiotropic functions of catabolite control protein CcpA in Butanol-producing Clostridium acetobutylicum. BMC Genomics, 2012, 13, 349.	2.8	60
14	Redox-Responsive Repressor Rex Modulates Alcohol Production and Oxidative Stress Tolerance in Clostridium acetobutylicum. Journal of Bacteriology, 2014, 196, 3949-3963.	2.2	60
15	Molecular modulation of pleiotropic regulator CcpA for glucose and xylose coutilization by solvent-producing Clostridium acetobutylicum. Metabolic Engineering, 2015, 28, 169-179.	7.0	58
16	Phage serine integrase-mediated genome engineering for efficient expression of chemical biosynthetic pathway in gas-fermenting Clostridium ljungdahlii. Metabolic Engineering, 2019, 52, 293-302.	7.0	58
17	Ribulokinase and Transcriptional Regulation of Arabinose Metabolism in Clostridium acetobutylicum. Journal of Bacteriology, 2012, 194, 1055-1064.	2.2	54
18	CRISPR-Cas12a-Mediated Gene Deletion and Regulation in <i>Clostridium ljungdahlii</i> and Its Application in Carbon Flux Redirection in Synthesis Gas Fermentation. ACS Synthetic Biology, 2019, 8, 2270-2279.	3.8	54

#	Article	IF	Citations
19	Improvement of xylose utilization in Clostridium acetobutylicum via expression of the talA gene encoding transaldolase from Escherichia coli. Journal of Biotechnology, 2009, 143, 284-287.	3.8	53
20	Enhanced alcohol titre and ratio in carbon monoxide-rich off-gas fermentation of Clostridium carboxidivorans through combination of trace metals optimization with variable-temperature cultivation. Bioresource Technology, 2017, 239, 236-243.	9.6	49
21	Developing an endogenous quorum-sensing based CRISPRi circuit for autonomous and tunable dynamic regulation of multiple targets in Streptomyces. Nucleic Acids Research, 2020, 48, 8188-8202.	14.5	46
22	Discovery of an ene-reductase for initiating flavone and flavonol catabolism in gut bacteria. Nature Communications, 2021, 12, 790.	12.8	46
23	A Flexible Binding Site Architecture Provides New Insights into CcpA Global Regulation in Gram-Positive Bacteria. MBio, 2017, 8, .	4.1	44
24	Clostridia: a flexible microbial platform for the production of alcohols. Current Opinion in Chemical Biology, 2016, 35, 65-72.	6.1	39
25	I-SceI-mediated scarless gene modification via allelic exchange in Clostridium. Journal of Microbiological Methods, 2015, 108, 49-60.	1.6	37
26	Combined overexpression of genes involved in pentose phosphate pathway enables enhanced d-xylose utilization by Clostridium acetobutylicum. Journal of Biotechnology, 2014, 173, 7-9.	3.8	32
27	Rapid Generation of Universal Synthetic Promoters for Controlled Gene Expression in Both Gas-Fermenting and Saccharolytic <i>Clostridium</i> Species. ACS Synthetic Biology, 2017, 6, 1672-1678.	3.8	32
28	Complete genome sequence of Clostridium carboxidivorans P7T, a syngas-fermenting bacterium capable of producing long-chain alcohols. Journal of Biotechnology, 2015, 211, 44-45.	3.8	31
29	A novel threeâ€component systemâ€based regulatory model for <scp>d</scp>â€xylose sensing and transport in <scp><i>C</i></scp><i>lostridium beijerinckii</i>. Molecular Microbiology, 2015, 95, 576-589.	2.5	30
30	Metabolic regulation in solventogenic clostridia: regulators, mechanisms and engineering. Biotechnology Advances, 2018, 36, 905-914.	11.7	30
31	Engineering Clostridium ljungdahlii as the gas-fermenting cell factory for the production of biofuels and biochemicals. Current Opinion in Chemical Biology, 2020, 59, 54-61.	6.1	28
32	Metabolic Engineering of Gas-Fermenting <i>Clostridium ljungdahlii</i> for Efficient Co-production of Isopropanol, 3-Hydroxybutyrate, and Ethanol. ACS Synthetic Biology, 2021, 10, 2628-2638.	3.8	28
33	Efficient isopropanol biosynthesis by engineered Escherichia coli using biologically produced acetate from syngas fermentation. Bioresource Technology, 2020, 296, 122337.	9.6	27
34	Effect of temperature and surfactant on biomass growth and higher-alcohol production during syngas fermentation by Clostridium carboxidivorans P7. Bioresources and Bioprocessing, 2020, 7, .	4.2	27
35	A novel regulatory pathway consisting of a two-component system and an ABC-type transporter contributes to butanol tolerance in Clostridium acetobutylicum. Applied Microbiology and Biotechnology, 2020, 104, 5011-5023.	3.6	26
36	A Novel Dual- <i>cre</i> Motif Enables Two-Way Autoregulation of CcpA in Clostridium acetobutylicum. Applied and Environmental Microbiology, 2018, 84, .	3.1	25

#	Article	IF	Citations
37	<scp>PTS</scp> regulation domainâ€containing transcriptional activator Cel<scp>R</scp> and sigma factor Ïƒ⁵⁴ control cellobiose utilization in <scp><i>C</i></scp><i>lostridium acetobutylicum</i>. Molecular Microbiology, 2016, 100, 289-302.	2.5	24
38	Ethanol Metabolism Dynamics in Clostridium ljungdahlii Grown on Carbon Monoxide. Applied and Environmental Microbiology, 2020, 86, .	3.1	24
39	Molecular mechanism of environmental <scp>d</scp> -xylose perception by a XylFII-LytS complex in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8235-8240.	7.1	22
40	Metabolic engineering of Escherichia coli carrying the hybrid acetone-biosynthesis pathway for efficient acetone biosynthesis from acetate. Microbial Cell Factories, 2019, 18, 6.	4.0	22
41	Generation of a fully erythromycin-sensitive strain of Clostridioides difficile using a novel CRISPR-Cas9 genome editing system. Scientific Reports, 2019, 9, 8123.	3.3	20
42	The SCIFFâ€Derived Ranthipeptides Participate in Quorum Sensing in Solventogenic Clostridia. Biotechnology Journal, 2020, 15, 2000136.	3.5	20
43	Development of an inducible transposon system for efficient random mutagenesis in<i>Clostridium acetobutylicum</i>. FEMS Microbiology Letters, 2016, 363, fnw065.	1.8	17
44	Roles of three AbrBs in regulating two-phase Clostridium acetobutylicum fermentation. Applied Microbiology and Biotechnology, 2016, 100, 9081-9089.	3.6	17
45	Improving the performance of solventogenic clostridia by reinforcing the biotin synthetic pathway. Metabolic Engineering, 2016, 35, 121-128.	7.0	16
46	The Metabolism of Clostridium ljungdahlii in Phosphotransacetylase Negative Strains and Development of an Ethanologenic Strain. Frontiers in Bioengineering and Biotechnology, 2020, 8, 560726.	4.1	12
47	Interactive Regulation of Formate Dehydrogenase during CO ₂ Fixation in Gas-Fermenting Bacteria. MBio, 2020, 11, .	4.1	11
48	Protein acetylation-mediated cross regulation of acetic acid and ethanol synthesis in the gas-fermenting Clostridium ljungdahlii. Journal of Biological Chemistry, 2022, 298, 101538.	3.4	10
49	Control of solvent production by sigmaâ€54 factor and the transcriptional activator AdhR in <i>Clostridium beijerinckii</i>. Microbial Biotechnology, 2020, 13, 328-338.	4.2	7
50	Ferrous-Iron-Activated Transcriptional Factor AdhR Regulates Redox Homeostasis in <i>Clostridium beijerinckii</i>. Applied and Environmental Microbiology, 2020, 86, .	3.1	6
51	Functional dissection and modulation of the BirA protein for improved autotrophic growth of gasâ€fermenting <i>ClostridiumÂljungdahlii</i>. Microbial Biotechnology, 2021, 14, 2072-2089.	4.2	6
52	Biofuels and Bioenergy: Acetone and Butanol. , 2019, , 79-100.		5
53	The Small RNA sr8384 Is a Crucial Regulator of Cell Growth in Solventogenic Clostridia. Applied and Environmental Microbiology, 2020, 86, .	3.1	3