Toshiharu Yakushi

List of Publications by Year
in descending order

70	1,500	411340 20	371746 37
papers	citations	h-index	g-index

70	70	70	1304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Potassium ion leakage impairs thermotolerance in Corynebacterium glutamicum. Journal of Bioscience and Bioengineering, 2022, 133, 119-125.	1.1	2
2	Dissection and Reconstitution Provide Insights into Electron Transport in the Membrane-Bound Aldehyde Dehydrogenase Complex of Gluconacetobacter diazotrophicus. Journal of Bacteriology, 2022, 204, jb0055821.	1.0	0
3	Characterization of 3 phylogenetically distinct membrane-bound <scp>d</scp>-gluconate dehydrogenases of Gluconobacter spp. and their biotechnological application for efficient 2-keto-<scp>d</scp>-gluconate production. Bioscience, Biotechnology and Biochemistry, 2022, 86, 681-690.	0.6	4
4	Mutations in degP and spoT Genes Mediate Response to Fermentation Stress in Thermally Adapted Strains of Acetic Acid Bacterium Komagataeibacter medellinensis NBRC 3288. Frontiers in Microbiology, 2022, 13, .	1.5	1
5	Periplasmic dehydroshikimate dehydratase combined with quinate oxidation in Gluconobacter oxydans for protocatechuate production. Bioscience, Biotechnology and Biochemistry, 2022, 86, 1151-1159.	0.6	1
6	The Auxiliary NADH Dehydrogenase Plays a Crucial Role in Redox Homeostasis of Nicotinamide Cofactors in the Absence of the Periplasmic Oxidation System in Gluconobacter oxydans NBRC3293. Applied and Environmental Microbiology, 2021, 87, .	1.4	9
7	Characterization of a cryptic, pyrroloquinoline quinone-dependent dehydrogenase of Gluconobacter sp. strain CHM43. Bioscience, Biotechnology and Biochemistry, 2021, 85, 998-1004.	0.6	3
8	Three ATP-dependent phosphorylating enzymes in the first committed step of dihydroxyacetone metabolism in Gluconobacter thailandicus NBRC3255. Applied Microbiology and Biotechnology, 2021, 105, 1227-1236.	1.7	3
9	Major aldehyde dehydrogenase AldFGH of Gluconacetobacter diazotrophicus is independent of pyrroloquinoline quinone but dependent on molybdopterin for acetic acid fermentation. Applied Microbiology and Biotechnology, 2021, 105, 2341-2350.	1.7	6
10	Thermal adaptation of acetic acid bacteria for practical high-temperature vinegar fermentation. Bioscience, Biotechnology and Biochemistry, 2021, 85, 1243-1251.	0.6	6
11	FNR-Type Regulator GoxR of the Obligatorily Aerobic Acetic Acid Bacterium Gluconobacter oxydans Affects Expression of Genes Involved in Respiration and Redox Metabolism. Applied and Environmental Microbiology, 2021, 87, .	1.4	4
12	Heterologous expression of membrane-bound alcohol dehydrogenaseâ€“encoding genes for glyceric acid production using Gluconobacter sp. CHM43 and its derivatives. Applied Microbiology and Biotechnology, 2021, 105, 6749-6758.	1.7	3
13	Relocation of dehydroquinate dehydratase to the periplasmic space improves dehydroshikimate production with Gluconobacter oxydans strain NBRC3244. Applied Microbiology and Biotechnology, 2021, 105, 5883-5894.	1.7	5
14	The 5-Ketofructose Reductase of Gluconobacter sp. Strain CHM43 Is a Novel Class in the Shikimate Dehydrogenase Family. Journal of Bacteriology, 2021, 203, e0055820.	1.0	1
15	In vitro thermal adaptation of mesophilic Acetobacter pasteurianus NBRC 3283 generates thermotolerant strains with evolutionary trade-offs. Bioscience, Biotechnology and Biochemistry, 2020, 84, 832-841.	0.6	5
16	5-Keto-D-fructose production from sugar alcohol by isolated wild strain Gluconobacter frateurii CHM 43. Bioscience, Biotechnology and Biochemistry, 2020, 84, 1745-1747.	0.6	3
17	Taro koji of Amorphophallus konjac enabling hydrolysis of konjac polysaccharides to various biotechnological interest. Bioscience, Biotechnology and Biochemistry, 2020, 84, 2160-2173.	0.6	2
18	The membrane-bound sorbosone dehydrogenase of Gluconacetobacter liquefaciens is a pyrroloquinoline quinone-dependent enzyme. Enzyme and Microbial Technology, 2020, 137, 109511.	1.6	8

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19	Comparative Genomic Analysis of Closely Related Acetobacter pasteurianus Strains Provides Evidence of Horizontal Gene Transfer and Reveals Factors Necessary for Thermotolerance. Journal of Bacteriology, 2020, 202, .	1.0	17
20	Superfine bacterial nanocellulose produced by reverse mutations in the bcsC gene during adaptive breeding of Komagataeibacter oboediens. Carbohydrate Polymers, 2019, 226, 115243.	5.1	11
21	Mutated fabG gene encoding oxidoreductase enhances the cost-effective fermentation of jasmine rice vinegar in the adapted strain of Acetobacter pasteurianus SKU1108. Journal of Bioscience and Bioengineering, 2019, 127, 690-697.	1.1	7
22	The effect of reactive oxygen species (ROS) and ROS-scavenging enzymes, superoxide dismutase and catalase, on the thermotolerant ability of Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2019, 103, 5355-5366.	1.7	42
23	In Vitro Thermal and Ethanol Adaptations to Improve Vinegar Fermentation at High Temperature of Komagataeibacter oboediens MSKU 3. Applied Biochemistry and Biotechnology, 2019, 189, 144-159.	1.4	15
24	Flagellum-mediated motility in Pelotomaculum thermopropionicum SI. Bioscience, Biotechnology and Biochemistry, 2019, 83, 1362-1371.	0.6	5
25	Diversity of NADH dehydrogenases in acetic acid bacteria: adaptation to modify their phenotype through gene expansions and losses and neo-functionalization. Microbiology (United Kingdom), 2019, 165, 287-291.	0.7	5
26	Aldopentoses as new substrates for the membrane-bound, pyrroloquinoline quinone-dependent glycerol (polyol) dehydrogenase of Gluconobacter sp.. Applied Microbiology and Biotechnology, 2018, 102, 3159-3171.	1.7	18
27	Improved heterologous expression of the membrane-bound quinoprotein quinate dehydrogenase from Gluconobacter oxydans. Protein Expression and Purification, 2018, 145, 100-107.	0.6	13
28	Role of a membrane-bound aldehyde dehydrogenase complex AldFGH in acetic acid fermentation with Acetobacter pasteurianus SKU1108. Applied Microbiology and Biotechnology, 2018, 102, 4549-4561.	1.7	16
29	A Single-Nucleotide Insertion in a Drug Transporter Gene Induces a Thermotolerance Phenotype in Gluconobacter frateurii by Increasing the NADPH/NADP + Ratio via Metabolic Change. Applied and Environmental Microbiology, 2018, 84, .	1.4	15
30	Pyrroloquinoline quinone-dependent dehydrogenases of acetic acid bacteria. Applied Microbiology and Biotechnology, 2018, 102, 9531-9540.	1.7	34
31	Complete genome sequencing of newly isolated thermotolerant Corynebacterium glutamicum N24 provides a new insights into its thermotolerant phenotype. Journal of Biotechnology, 2017, 247, 29-33.	1.9	3
32	Membrane-bound glycerol dehydrogenase catalyzes oxidation of D-pentonates to 4-keto-D-pentonates, D-fructose to 5-keto-D-fructose, and D-psicose to 5-keto-D-psicose. Bioscience, Biotechnology and Biochemistry, 2017, 81, 411-418.	0.6	22
33	Determination of Dehydrogenase Activities Involved in D-Glucose Oxidation in Gluconobacter and Acetobacter Strains. Frontiers in Microbiology, 2016, 7, 1358.	1.5	10
34	Analysis of the sexual development-promoting region ofSchizophyllum commune TRP1gene. Bioscience, Biotechnology and Biochemistry, 2016, 80, 2033-2044.	0.6	4
35	Complete Genome Sequencing and Comparative Genomic Analysis of the Thermotolerant Acetic Acid Bacterium, Acetobacter pasteurianus SKU1108, Provide a New Insight into Thermotolerance. Microbes and Environments, 2016, 31, 395-400.	0.7	13
36	Membrane-Bound Dehydrogenases of Acetic Acid Bacteria. , 2016, , 273-297.		7

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37	Genomic analyses of thermotolerant microorganisms used for high-temperature fermentations. Bioscience, Biotechnology and Biochemistry, 2016, 80, 655-668.	0.6	61
38	PqqE fromMethylobacterium extorquensAM1: a radicalS-adenosyl-l-methionine enzyme with an unusual tolerance to oxygen. Journal of Biochemistry, 2016, 159, 87-99.	0.9	14
39	Efficient Production of 2,5-Diketo- <scp>d</scp> -Gluconate via Heterologous Expression of 2-Ketogluconate Dehydrogenase in Gluconobacter japonicus. Applied and Environmental Microbiology, 2015, 81, 3552-3560.	1.4	31
40	A novel Na+(K+)/H+ antiporter plays an important role in the growth of Acetobacter tropicalis SKU1100 at high temperatures via regulation of cation and pH homeostasis. Journal of Biotechnology, 2015, 211, 46-55.	1.9	6
41	Construction of CoA-dependent 1-butanol synthetic pathway functions under aerobic conditions in Escherichia coli. Journal of Biotechnology, 2015, 204, 25-32.	1.9	10
42	Adaptive mutation related to cellulose producibility in Komagataeibacter medellinensis (Gluconacetobacter xylinus) NBRC 3288. Applied Microbiology and Biotechnology, 2015, 99, 7229-7240.	1.7	54
43	A functionally critical single nucleotide polymorphism in the gene encoding the membrane-bound alcohol dehydrogenase found in ethanol oxidation-deficient Gluconobacter thailandicus. Gene, 2015, 567, 201-207.	1.0	2
44	Overexpression of a type II 3-dehydroquinate dehydratase enhances the biotransformation of quinate to 3-dehydroshikimate in Gluconobacter oxydans. Applied Microbiology and Biotechnology, 2014, 98, 2955-2963.	1.7	17
45	The electron transfer pathway in direct electrochemical communication of fructose dehydrogenase with electrodes. Electrochemistry Communications, 2014, 38, 28-31.	2.3	69
46	Replacement of a terminal cytochrome c oxidase by ubiquinol oxidase during the evolution of acetic acid bacteria. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1810-1820.	0.5	27
47	Draft genome sequence of Gluconobacter thailandicus NBRC 3257. Standards in Genomic Sciences, 2014, 9, 614-623.	1.5	12
48	Cyanide-insensitive quinol oxidase (CIO) from Gluconobacter oxydans is a unique terminal oxidase subfamily of cytochrome bd. Journal of Biochemistry, 2013, 153, 535-545.	0.9	41
49	Adaptive mutation of Acetobacter pasteurianus SKU1108 enhances acetic acid fermentation ability at high temperature. Journal of Biotechnology, 2013, 165, 109-119.	1.9	55
50	Draft Genome Sequence of Dihydroxyacetone-Producing Gluconobacter thailandicus Strain NBRC 3255. Genome Announcements, 2013, 1, e0011813.	0.8	8
51	Heterologous Overexpression and Characterization of a Flavoprotein-Cytochrome c Complex Fructose Dehydrogenase of Gluconobacter japonicus NBRC3260. Applied and Environmental Microbiology, 2013, 79, 1654-1660.	1.4	85
52	Characterization of Genes Involved in<scp>D</scp>-Sorbitol Oxidation in ThermotolerantGluconobacter frateurii. Bioscience, Biotechnology and Biochemistry, 2012, 76, 1497-1505.	0.6	8
53	High-temperature sorbose fermentation with thermotolerant Gluconobacter frateurii CHM43 and its mutant strain adapted to higher temperature. Applied Microbiology and Biotechnology, 2012, 95, 1531-1540.	1.7	19
54	Genome-wide phylogenetic analysis of differences in thermotolerance among closely related Acetobacter pasteurianus strains. Microbiology (United Kingdom), 2012, 158, 229-239.	0.7	20

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55	Genome-wide phylogenetic analysis of Gluconobacter, Acetobacter, and Gluconacetobacter. FEMS Microbiology Letters, 2011, 315, 122-128.	0.7	36
56	Global Analysis of the Genes Involved in the Thermotolerance Mechanism of ThermotolerantAcetobacter tropicalisSKU1100. Bioscience, Biotechnology and Biochemistry, 2011, 75, 1921-1928.	0.6	38
57	Adaptive Evolution of Acetic Acid Bacteria and Application of the Adaptive Ability to Development of High Temparature Fermentation System. Journal of the Brewing Society of Japan, 2010, 105, 730-737.	0.1	2
58	Characterization of thermotolerant Acetobacter pasteurianus strains and their quinoprotein alcohol dehydrogenases. Applied Microbiology and Biotechnology, 2010, 85, 741-751.	1.7	38
59	Alcohol dehydrogenase of acetic acid bacteria: structure, mode of action, and applications in biotechnology. Applied Microbiology and Biotechnology, 2010, 86, 1257-1265.	1.7	142
60	Acetic Acid Fermentation ofAcetobacter pasteurianus: Relationship between Acetic Acid Resistance and Pellicle Polysaccharide Formation. Bioscience, Biotechnology and Biochemistry, 2010, 74, 1591-1597.	0.6	62
61	Conversion of Quinate to 3-Dehydroshikimate by Ca-Alginate-Immobilized Membrane ofGluconobacter oxydansIFO 3244 and Subsequent Asymmetric Reduction of 3-Dehydroshikimate to Shikimate by Immobilized Cytoplasmic NADP-Shikimate Dehydrogenase. Bioscience, Biotechnology and Biochemistry, 2010, 74, 2438-2444.	0.6	10
62	Production of 4-Keto-D-arabonate by Oxidative Fermentation with Newly IsolatedGluconacetobacter liquefaciens. Bioscience, Biotechnology and Biochemistry, 2010, 74, 2555-2558.	0.6	13
63	Disruption of the Membrane-Bound Alcohol Dehydrogenase-Encoding Gene Improved Glycerol Use and Dihydroxyacetone Productivity inGluconobacter oxydans. Bioscience, Biotechnology and Biochemistry, 2010, 74, 1391-1395.	0.6	31
64	Microbial Production of Glyceric Acid, an Organic Acid That Can Be Mass Produced from Glycerol. Applied and Environmental Microbiology, 2009, 75, 7760-7766.	1.4	108
65	Solubilization, Purification, and Properties of Membrane-BoundD-Glucono-Î´-lactone Hydrolase fromGluconobacter oxydans. Bioscience, Biotechnology and Biochemistry, 2009, 73, 241-244.	0.6	17
66	2P-207 Motility of the acetic acid bacterium Gluconobacter oxydans 621H(The 46th Annual Meeting of) Tj ETQq0 0 0 rgBT /Overlock 10	0.0	0
67	The Conserved Charged Residues of the C-terminal Region of FliG, a Rotor Component of the Na+-driven Flagellar Motor. Journal of Molecular Biology, 2003, 334, 567-583.	2.0	60
68	The quinohemoprotein alcohol dehydrogenase of Gluconobacter suboxydans has ubiquinol oxidation activity at a site different from the ubiquinone reduction site. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1409, 154-164.	0.5	18
69	Function of Multiple Heme c Moieties in Intramolecular Electron Transport and Ubiquinone Reduction in the Quinohemoprotein Alcohol Dehydrogenase-Cytochrome c Complex of Gluconobacter suboxydans. Journal of Biological Chemistry, 1996, 271, 4850-4857.	1.6	62
70	Membrane-bound <scp>d</scp>-mannose isomerase of acetic acid bacteria: finding, characterization, and application,. Bioscience, Biotechnology and Biochemistry, 0, , .	0.6	1