Masaaki Wachi

List of Publications by Year
in descending order

102	4,299	117571	114418
papers	citations	34 h-index	63 g-index

105	105	105	4130
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mining RNAâ€seq data reveals the massive regulon of GcvB small RNA and its physiological significance in maintaining amino acid homeostasis in Escherichia coli. Molecular Microbiology, 2022, 117, 160-178.	1.2	15
2	Requirement of the LtsA Protein for Formation of the Mycolic Acid-Containing Layer on the Cell Surface of Corynebacterium glutamicum. Microorganisms, 2021, 9, 409.	1.6	0
3	Growth promotion in Corynebacterium glutamicum by overexpression of the NCgl2986 gene encoding a protein homologous to peptidoglycan amidases. Journal of General and Applied Microbiology, 2020, 66, 1-7.	0.4	0
4	RNase E-dependent degradation of tnaA mRNA encoding tryptophanase is prerequisite for the induction of acid resistance in Escherichia coli. Scientific Reports, 2020, 10, 7128.	1.6	9
5	Amino Acid Exporters in Corynebacterium glutamicum. Microbiology Monographs, 2020, , 267-284.	0.3	2
6	RNase E/G-dependent degradation of metE mRNA, encoding methionine synthase, in Corynebacterium glutamicum. Journal of General and Applied Microbiology, 2019, 65, 47-52.	0.4	1
7	Effects of EGTA on cell surface structures of Corynebacterium glutamicum. Archives of Microbiology, 2018, 200, 281-289.	1.0	5
8	Polynucleotide Phosphorylase, RNase E/G, and YbeY Are Involved in the Maturation of 4.5S RNA in Corynebacterium glutamicum. Journal of Bacteriology, 2017, 199, .	1.0	6
9	Glutamate Fermentation-2: Mechanism of l-Glutamate Overproduction in Corynebacterium glutamicum. Advances in Biochemical Engineering/Biotechnology, 2016, 159, 57-72.	0.6	21
10	Degradation of benzotrifluoride via the dioxygenase pathway in Rhodococcus sp. 065240. Bioscience, Biotechnology and Biochemistry, 2015, 79, 496-504.	0.6	11
11	High crude violacein production from glucose by Escherichia coli engineered with interactive control of tryptophan pathway and violacein biosynthetic pathway. Microbial Cell Factories, 2015, 14, 8.	1.9	65
12	Characterization of a Corynebacterium glutamicum dnaB mutant that shows temperature-sensitive growth and mini-cell formation. Archives of Microbiology, 2014, 196, 871-879.	1.0	0
13	Isolation of oleaginous yeast (Rhodosporidium toruloides) mutants tolerant of sugarcane bagasse hydrolysate. Bioscience, Biotechnology and Biochemistry, 2014, 78, 336-342.	0.6	23
14	Double mutation of cell wall proteins CspB and PBP1a increases secretion of the antibody Fab fragment from Corynebacterium glutamicum. Microbial Cell Factories, 2014, 13, 56.	1.9	48
15	Amino Acid Exporters in Corynebacterium glutamicum. Microbiology Monographs, 2013, , 335-349.	0.3	6
16	Study on Plasma Agent Effect of a Direct-Current Atmospheric Pressure Oxygen-Plasma Jet on Inactivation of E. coli Using Bacterial Mutants. IEEE Transactions on Plasma Science, 2013, 41, 935-941.	0.6	34
17	A Secondary Structure in the 5' Untranslated Region ofadhEmRNA Required for RNase G-Dependent Regulation. Bioscience, Biotechnology and Biochemistry, 2013, 77, 2473-2479.	0.6	7
18	<scp>L</scp>-Glutamate Secretion by the N-Terminal Domain of theCorynebacterium glutamicumNCgl1221 Mechanosensitive Channel. Bioscience, Biotechnology and Biochemistry, 2013, 77, 1008-1013.	0.6	28

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19	A role of the transcriptional regulator LldR (NCgl2814) in glutamate metabolism under biotin-limited conditions in Corynebacterium glutamicum. Journal of General and Applied Microbiology, 2013, 59, 207-214.	0.4	1
20	Study on Inactivation Mechanism of an Atmospheric DBD Plasma Jet using <i>Escherichia coli</i> Mutants. IEEJ Transactions on Fundamentals and Materials, 2013, 133, 192-197.	0.2	1
21	3â€² Untranslated Region-Dependent Degradation of the aceA mRNA, Encoding the Glyoxylate Cycle Enzyme Isocitrate Lyase, by RNase E/G in Corynebacterium glutamicum. Applied and Environmental Microbiology, 2012, 78, 8753-8761.	1.4	29
22	Corynebacterium glutamicum RNase E/G-type endoribonuclease encoded by NCgl2281 is involved in the 5â€² maturation of 5S rRNA. Archives of Microbiology, 2012, 194, 65-73.	1.0	8
23	A Requirement of TolC and MDR Efflux Pumps for Acid Adaptation and GadAB Induction in Escherichia coli. PLoS ONE, 2011, 6, e18960.	1.1	45
24	Requirement of de novo synthesis of the OdhI protein in penicillin-induced glutamate production by Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2010, 86, 911-920.	1.7	56
25	Structure of the Heme Biosynthetic Pseudomonas aeruginosa Porphobilinogen Synthase in Complex with the Antibiotic Alaremycin. Antimicrobial Agents and Chemotherapy, 2010, 54, 267-272.	1.4	11
26	A Role of thecspAGene Encoding a Mycolyltransferase in the Growth under Alkaline Conditions ofCorynebacterium glutamicum. Bioscience, Biotechnology and Biochemistry, 2010, 74, 1617-1623.	0.6	11
27	TheCorynebacterium glutamicumNCgl2281 Gene Encoding an RNase E/G Family Endoribonuclease Can Complement theEscherichia coli rng::catMutation but Not therne-1Mutation. Bioscience, Biotechnology and Biochemistry, 2009, 73, 2281-2286.	0.6	5
28	Distinct roles of two anaplerotic pathways in glutamate production induced by biotin limitation in Corynebacterium glutamicum. Journal of Bioscience and Bioengineering, 2008, 106, 51-58.	1.1	73
29	TolC-Dependent Exclusion of Porphyrins in Escherichia coli. Journal of Bacteriology, 2008, 190, 6228-6233.	1.0	58
30	Structural and functional characterization of the LldR from Corynebacterium glutamicum: a transcriptional repressor involved in L-lactate and sugar utilization. Nucleic Acids Research, 2008, 36, 7110-7123.	6.5	62
31	Anti-infectious Effect of S-Benzylisothiourea Compound A22, Which Inhibits the Actin-Like Protein, MreB, in Shigella flexneri. Biological and Pharmaceutical Bulletin, 2008, 31, 1327-1332.	0.6	16
32	Structure-Activity Relationship Study of the Bacterial Actin-Like Protein MreB Inhibitors: Effects of Substitution of Benzyl Group inS-Benzylisothiourea. Bioscience, Biotechnology and Biochemistry, 2007, 71, 246-248.	0.6	21
33	Cytoplasmic Acidification May Occur in High-Pressure Carbon Dioxide-TreatedEscherichia coliK12. Bioscience, Biotechnology and Biochemistry, 2007, 71, 2522-2526.	0.6	16
34	Mechanism of Inhibition of DNA Gyrase by ESâ€1273, a Novel DNA Gyrase Inhibitor. Microbiology and Immunology, 2007, 51, 977-984.	0.7	14
35	Mutations of the Corynebacterium glutamicum NCgl1221 Gene, Encoding a Mechanosensitive Channel Homolog, Induce l -Glutamic Acid Production. Applied and Environmental Microbiology, 2007, 73, 4491-4498.	1.4	180
36	RNase E Is Required for Induction of the Glutamate-Dependent Acid Resistance System inEscherichia coli. Bioscience, Biotechnology and Biochemistry, 2007, 71, 158-164.	0.6	21

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37	Identification of two biologically crucial hydroxyl groups of (â˜)-epigallocatechin gallate in osteoclast culture. Biochemical Pharmacology, 2007, 73, 34-43.	2.0	29
38	Increased production of pyruvic acid by Escherichia coli RNase G mutants in combination with cra mutations. Applied Microbiology and Biotechnology, 2007, 76, 183-192.	1.7	17
39	Dark-induced mRNA instability involves RNase E/G-type endoribonuclease cleavage at the AU-box and SD sequences in cyanobacteria. Molecular Genetics and Genomics, 2007, 278, 331-346.	1.0	48
40	A 4â€Aminofurazan Derivativeâ€"A189â€"Inhibits Assembly of Bacterial Cell Division Protein FtsZ In Vitro and In Vivo. Microbiology and Immunology, 2006, 50, 759-764.	0.7	33
41	Temperature-sensitive cloning vector for Corynebacterium glutamicum. Plasmid, 2006, 56, 179-186.	0.4	24
42	Anucleate Cell Blue Assay: a Useful Tool for Identifying Novel Type II Topoisomerase Inhibitors. Antimicrobial Agents and Chemotherapy, 2006, 50, 348-350.	1.4	15
43	Synthesis of Alaremycin. Synlett, 2006, 2006, 0481-0483.	1.0	1
44	Actin homolog MreB and RNA polymerase interact and are both required for chromosome segregation in Escherichia coli. Genes and Development, 2006, 20, 113-124.	2.7	115
45	Transcriptional Analysis of theEscherichia coli mreBCDGenes Responsible for Morphogenesis and Chromosome Segregation. Bioscience, Biotechnology and Biochemistry, 2006, 70, 2712-2719.	0.6	14
46	Synthesis and antibacterial activity of a novel series of DNA gyrase inhibitors: 5-[(E)-2-arylvinyl]pyrazoles. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 4299-4303.	1.0	95
47	A decreased level of FtsZ is responsible for inviability of RNase E-deficient cells. Genes To Cells, 2005, 10, 733-741.	0.5	22
48	Synthesis and Antibacterial Activity of a Novel Series of DNA Gyrase Inhibitors: 5-[(E)-2-Arylvinyl]pyrazoles.. ChemInform, 2005, 36, no.	0.1	0
49	The CGL2612 Protein from Corynebacterium glutamicum Is a Drug Resistance-related Transcriptional Repressor. Journal of Biological Chemistry, 2005, 280, 38711-38719.	1.6	33
50	Fluorescent Phospholipid Analogs as Microscopic Probes for Detection of the Mycolic Acid-Containing Layer inCorynebacterium glutamicum: Detecting Alterations in the Mycolic Acid-Containing Layer Following Ethambutol Treatment. Bioscience, Biotechnology and Biochemistry, 2005, 69, 2051-2056.	0.6	12
51	Isolation of a New Antibiotic, Alaremycin, Structurally Related to 5-Aminolevulinic Acid fromStreptomycessp. A012304. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1721-1725.	0.6	9
52	MreB Actin-Mediated Segregation of a Specific Region of a Bacterial Chromosome. Cell, 2005, 120, 329-341.	13.5	354
53	Structure-Activity Relationship ofS-Benzylisothiourea Derivatives to Induce Spherical Cells inEscherichia coli. Bioscience, Biotechnology and Biochemistry, 2004, 68, 2265-2269.	0.6	31
54	Effects of high hydrostatic pressure on bacterial cytoskeleton FtsZ polymers in vivo and in vitro. Microbiology (United Kingdom), 2004, 150, 1965-1972.	0.7	86

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55	FtsZ-dependent localization of GroEL protein at possible division sites. Genes To Cells, 2004, 9, 765-771.	0.5	40
56	SulA-independent filamentation of Escherichia coli during growth after release from high hydrostatic pressure treatment. Applied Microbiology and Biotechnology, 2004, 64, 255-262.	1.7	51
57	Design, Synthesis and Structureâ€"Activity Relationship Studies of Novel Indazole Analogues as DNA Gyrase Inhibitors with Gram-Positive Antibacterial Activity.. ChemInform, 2004, 35, no.	0.1	0
58	Potent DNA Gyrase Inhibitors. Novel 5-Vinylpyrazole Analogues with Gram-Positive Antibacterial Activity.. ChemInform, 2004, 35, no.	0.1	0
59	Synthesis and antibacterial activity of novel and potent DNA gyrase inhibitors with azole ring. Bioorganic and Medicinal Chemistry, 2004, 12, 5515-5524.	1.4	125
60	Design, synthesis and structureâ€“activity relationship studies of novel indazole analogues as DNA gyrase inhibitors with Gram-positive antibacterial activity. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 2857-2862.	1.0	68
61	Potent DNA gyrase inhibitors; novel 5-vinylpyrazole analogues with Gram-positive antibacterial activity. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 2863-2866.	1.0	35
62	Transcriptional Analysis of theostA/impGene Involved in Organic Solvent Sensitivity inEscherichia coli. Bioscience, Biotechnology and Biochemistry, 2004, 68, 458-461.	0.6	10
63	Synthesis and Antibacterial Activity of a Novel Series of Potent DNA Gyrase Inhibitors. Pyrazole Derivatives. Journal of Medicinal Chemistry, 2004, 47, 3693-3696.	2.9	267
64	Generation of hydrogen peroxide primarily contributes to the induction of Fe(II)-dependent apoptosis in Jurkat cells by (-)-epigallocatechin gallate. Carcinogenesis, 2004, 25, 1567-1574.	1.3	216
65	RNase ES ofStreptomyces coelicolorA3(2) Can Complement therneandrngMutations inEscherichia coli. Bioscience, Biotechnology and Biochemistry, 2003, 67, 1767-1771.	0.6	5
66	ACorynebacterium glutamicum rnhA recGDouble Mutant Showing Lysozyme- sensitivity, Temperature-sensitive Growth, and UV-Sensitivity. Bioscience, Biotechnology and Biochemistry, 2003, 67, 2416-2424.	0.6	24
67	Isolation and Characterization of the dew Cluster from the Piezophilic Deep-Sea Bacterium Shewanella violacea. Journal of Biochemistry, 2002, 132, 183-188.	0.9	12
68	Actin Cytoskeleton Is Required for Early Apoptosis Signaling Induced by Anti-Fas Antibody but Not Fas Ligand in Murine B Lymphoma A20 Cells. Biochemical and Biophysical Research Communications, 2002, 290, 268-274.	1.0	27
69	RNase G-Dependent Degradation of theenomRNA Encoding a Glycolysis Enzyme Enolase inEscherichia coli. Bioscience, Biotechnology and Biochemistry, 2002, 66, 2216-2220.	0.6	46
70	NovelS-Benzylisothiourea Compound That Induces Spherical Cells inEscherichia coliProbably by Acting on a Rod-shape-determining Protein(s) Other Than Penicillin-binding Protein 2. Bioscience, Biotechnology and Biochemistry, 2002, 66, 2658-2662.	0.6	175
71	Extensive overproduction of the AdhE protein by rng mutations depends on mutations in the cra gene or in the Cra-box of the adhE promoter. Biochemical and Biophysical Research Communications, 2002, 295, 92-97.	1.0	16
72	Fenton Reaction Is Primarily Involved in a Mechanism of (â˜)-Epigallocatechin-3-gallate to Induce Osteoclastic Cell Death. Biochemical and Biophysical Research Communications, 2002, 292, 94-101.	1.0	149

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73	Characterization of the Porphyromonas gingivalis FtsZ Containing a Novel GTPase Activity. Current Microbiology, 2002, 44, 267-272.	1.0	2
74	A Novel RNase G Mutant That Is Defective in Degradation of adhE mRNA but Proficient in the Processing of 16S rRNA Precursor. Biochemical and Biophysical Research Communications, 2001, 289, 1301-1306.	1.0	21
75	Escherichia coli Ribonuclease G. Methods in Enzymology, 2001, 342, 55-63.	0.4	4
76	å§è…‚èŒRNase G. Nippon Nogeikagaku Kaishi, 2001, 75, 121-127.	0.0	0
77	Isolation of ftsI and murE genes involved in peptidoglycan synthesis from Corynebacterium glutamicum. Applied Microbiology and Biotechnology, 2001, 55, 466-470.	1.7	13
78	L-glutamate production by lysozyme-sensitive Corynebacterium glutamicum ltsA mutant strains. BMC Biotechnology, 2001, 1, 9.	1.7	17
79	Involvement of RNase G in in vivo mRNA metabolism in Escherichia coli. Genes To Cells, 2001, 6, 403-410.	0.5	72
80	A Mutation in the Corynebacterium glutamicum ltsA Gene Causes Susceptibility to Lysozyme, Temperature-Sensitive Growth, and l-Glutamate Production. Journal of Bacteriology, 2000, 182, 2696-2701.	1.0	58
81	fcsA29Mutation is an Allele ofpolAGene ofEscherichia coli. Bioscience, Biotechnology and Biochemistry, 1999, 63, 427-429.	0.6	10
82	Isolation of themurIgene fromBrevibacterium lactofermentumATCC 13869 encoding d-glutamate racemase. FEMS Microbiology Letters, 1999, 175, 193-196.	0.7	8
83	A murC gene from coryneform bacteria. Applied Microbiology and Biotechnology, 1999, 51, 223-228.	1.7	16
84	Irregular nuclear localization and anucleate cell production in Escherichia coli induced by a Ca2+ chelator, EGTA. Biochimie, 1999, 81, 909-913.	1.3	20
85	Escherichia coli cafA Gene Encodes a Novel RNase, Designated as RNase G, Involved in Processing of the 5â€² End of 16S rRNA. Biochemical and Biophysical Research Communications, 1999, 259, 483-488.	1.0	138
86	Overproduction of the Outer-Membrane Proteins FepA and FhuE Responsible for Iron Transport in Escherichia coli hfq::cat Mutant. Biochemical and Biophysical Research Communications, 1999, 264, 525-529.	1.0	21
87	Negative Regulatory Role of the Escherichia coli hfq Gene in Cell Division. Biochemical and Biophysical Research Communications, 1999, 266, 579-583.	1.0	24
88	Cloning, Sequencing, and Characterization of theftsZGene from Coryneform Bacteria. Biochemical and Biophysical Research Communications, 1997, 236, 383-388.	1.0	21
89	DNA Binding Properties of thehfqGene Product ofEscherichia coli. Biochemical and Biophysical Research Communications, 1997, 236, 576-579.	1.0	41
90	Diadenosine 5â€²,5â€²â€²-P1,P4-tetraphosphate (Ap4A) controls the timing of cell division inEscherichia coli. Genes To Cells, 1997, 2, 401-413.	0.5	51

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91	A Cryptic Plasmid pBL1 fromBrevibacterium lactofermentumCauses Growth Inhibition and Filamentation inEscherichia coli. Plasmid, 1996, 36, 62-66.	0.4	19
92	Cell Cycle Control: Prokaryotic Solutions to Eukaryotic Problems?. Journal of Theoretical Biology, 1994, 168, 227-230.	0.8	27
93	Fully Methylated oriC with Negative Superhelicity Forms an oriC-Membrane Complex before Initiation of Chromosome Replication. Biochemical and Biophysical Research Communications, 1993, 194, 1420-1426.	1.0	4
94	ATPase activity of SopA, a protein essential for active partitioning of F plasmid. Molecular Genetics and Genomics, 1992, 234, 346-352.	2.4	79
95	Change of the quantity of penicillin-binding proteins and other cytoplasmic and membrane proteins by mutations of the cell shape-determination genes mreB, mreC, and mreD of Escherichia coli.. Journal of General and Applied Microbiology, 1992, 38, 157-163.	0.4	2
96	The murG gene of the Escherichia coli chromosome encoding UDP-N-acetylgluco-samine: undecaprenyl-pyrophosphoryl-N-acetylmuramoyl-pentapeptide N-acetylglucosaminyl transferase.. Journal of General and Applied Microbiology, 1992, 38, 53-62.	0.4	9
97	Only oriC and its flanking region are recovered from the comlex formed at the time of initiation of chromosome replication in Escherichia coli. Research in Microbiology, 1991, 142, 155-159.	1.0	4
98	Homology among MurC, MurD, MurE and MurF proteins in Escherichia coli and that between E. coli MurG and a possible MurG protein in Bacillus subtilis.. Journal of General and Applied Microbiology, 1990, 36, 179-187.	0.4	42
99	Nucleotide sequence involving murG and murC in the mra gene cluster region of Escherichia coli. Nucleic Acids Research, 1990, 18, 4014-4014.	6.5	45
100	Nucleotide sequence involvingmurDand an open reading frame ORF-Y spacingmurFandftsWinEscherichia coli. Nucleic Acids Research, 1990, 18, 1058-1058.	6.5	35
101	Machinery for cell growth and division: Penicillin-binding proteins and other proteins. Research in Microbiology, 1990, 141, 89-103.	1.0	79
102	Evolution of an inducible penicillin-target protein in methicillin-resistantStaphylococcus aureusby gene fusion. FEBS Letters, 1987, 221, 167-171.	1.3	303