Hisaaki Mihara

List of Publications by Year
in descending order

74 papers	2,929 citations	172207 29 h-index	168136 53 g-index
78 all docs	78 docs citations	78 times ranked	2479 citing authors

#	Article	IF	Citations
1	Genetic analysis of tellurate reduction reveals the selenate/tellurate reductase genes ynfEF and the transcriptional regulation of moeA by NsrR in Escherichia coli. Journal of Biochemistry, 2021, 169, 477-484.	0.9	6
2	Medicinal plant extracts protect epithelial cells from infection and DNA damage caused by colibactinâ€producing Escherichia coli , and inhibit the growth of bacteria. Journal of Applied Microbiology, 2021, 130, 769-785.	1.4	15
3	Overexpression and characterization of Escherichia coli dihydropyrimidine dehydrogenase: a four iron-sulphur cluster containing flavoprotein. Journal of Biochemistry, 2021, 170, 511-520.	0.9	2
4	Complete Genome Sequence of Pseudomonas stutzeri Strain F2a, Isolated from Seleniferous Soil. Microbiology Resource Announcements, 2021, 10, e0063121.	0.3	1
5	Initial Step of Selenite Reduction via Thioredoxin for Bacterial Selenoprotein Biosynthesis. International Journal of Molecular Sciences, 2021, 22, 10965.	1.8	9
6	Apolipoprotein E-mediated regulation of selenoprotein P transportation via exosomes. Cellular and Molecular Life Sciences, 2020, 77, 2367-2386.	2.4	17
7	Characterization of a novel class of glyoxylate reductase belonging to the Î²-hydroxyacid dehydrogenase family in Acetobacter aceti. Bioscience, Biotechnology and Biochemistry, 2020, 84, 2303-2310.	0.6	2
8	Complete Genome Sequence of an Acetic Acid Bacterium, Acetobacter aceti JCM20276. Microbiology Resource Announcements, 2020, 9, .	0.3	0
9	Microbial fuel cell performance improvement based on FliC-deficient E. coli strain. Energy Reports, 2020, 6, 763-767.	2.5	9
10	Selenite uptake by outer membrane porin ExtI and its involvement in the subcellular localization of rhodanese-like lipoprotein ExtH in Geobacter sulfurreducens. Biochemical and Biophysical Research Communications, 2019, 516, 474-479.	1.0	8
11	Large expert-curated database for benchmarking document similarity detection in biomedical literature search. Database: the Journal of Biological Databases and Curation, 2019, 2019, .	1.4	15
12	Physiological Functions and Metabolisms of Essential Trace Element Selenium: Function of Selenoproteins and Selenium Metabolisms. Kagaku To Seibutsu, 2019, 57, 366-372.	0.0	0
13	Delivery of selenium to selenophosphate synthetase for selenoprotein biosynthesis. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2433-2440.	1.1	40
14	Characterization of a Novel Porin-Like Protein, ExtI, from Geobacter sulfurreducens and Its Implication in the Reduction of Selenite and Tellurite. International Journal of Molecular Sciences, 2018, 19, 809.	1.8	14
15	Bacteria Versus Selenium: A View from the Inside Out. Plant Ecophysiology, 2017, , 79-108.	1.5	3
16	Selective fluorescence detection method for selenide and selenol using monochlorobimane. Analytical Biochemistry, 2017, 532, 1-8.	1.1	5
17	A non-radioactive assay for selenophosphate synthetase activity using recombinant pyruvate pyrophosphate dikinase from Thermus thermophilus HB8. Bioscience, Biotechnology and Biochemistry, 2016, 80, 1970-1972.	0.6	0
18	Purification and properties of 4-methyl-5-hydroxyethylthiazole kinase from Escherichia coli. Bioscience, Biotechnology and Biochemistry, 2016, 80, 514-517.	0.6	5

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19	Purification and Properties of Glycine Oxidase from <i>Pseudomonas putida</i> KT2440. Journal of Nutritional Science and Vitaminology, 2015, 61, 506-510.	0.2	6
20	Functional expression of l-lysine Î±-oxidase from Scomber japonicus in Escherichia coli for one-pot synthesis of l-pipecolic acid from dl-lysine. Applied Microbiology and Biotechnology, 2015, 99, 5045-5054.	1.7	31
21	Heterologous expression of L-lysine Â-oxidase from Scomber japonicus in Pichia pastoris and functional characterization of the recombinant enzyme. Journal of Biochemistry, 2015, 157, 201-210.	0.9	11
22	Characterization of a thermostable 2,4-diaminopentanoate dehydrogenase from Fervidobacterium nodosum Rt17-B1. Journal of Bioscience and Bioengineering, 2014, 117, 551-556.	1.1	4
23	Glutathione contributes to the efflux of selenium from hepatoma cells. Bioscience, Biotechnology and Biochemistry, 2014, 78, 1376-1380.	0.6	7
24	Global Identification of Genes Affecting Iron-Sulfur Cluster Biogenesis and Iron Homeostasis. Journal of Bacteriology, 2014, 196, 1238-1249.	1.0	11
25	Novel Neogala-Series Glycosphingolipids with a Terminal Glucose Residue from the Fungus Mariannaea elegans. Bioscience, Biotechnology and Biochemistry, 2013, 77, 754-759.	0.6	6
26	Pseudomonas putida PydR, a RutR-like transcriptional regulator, represses the dihydropyrimidine dehydrogenase gene in the pyrimidine reductive catabolic pathway. Journal of Biochemistry, 2012, 152, 341-346.	0.9	7
27	Identification of novel mammalian phospholipids containing threonine, aspartate, and glutamate as the base moiety. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 3296-3302.	1.2	4
28	Mammalian Selenocysteine Lyase Is Involved in Selenoprotein Biosynthesis. Journal of Nutritional Science and Vitaminology, 2011, 57, 298-305.	0.2	32
29	Favourable effects of eicosapentaenoic acid on the late step of the cell division in a piezophilic bacterium, Shewanella violacea DSS12, at highâ€hydrostatic pressures. Environmental Microbiology, 2011, 13, 2293-2298.	1.8	32
30	Bacterial cysteine desulfurases: versatile key players in biosynthetic pathways of sulfur-containing biofactors. Applied Microbiology and Biotechnology, 2011, 91, 47-61.	1.7	95
31	Selenite Reduction by the Thioredoxin System: Kinetics and Identification of Protein-Bound Selenide. Bioscience, Biotechnology and Biochemistry, 2011, 75, 1184-1187.	0.6	16
32	Escherichia coli Dihydropyrimidine Dehydrogenase Is a Novel NAD-Dependent Heterotetramer Essential for the Production of 5,6-Dihydrouracil. Journal of Bacteriology, 2011, 193, 989-993.	1.0	35
33	Kenji Soda--researching enzymes with the spirit of an alpinist. Journal of Biochemistry, 2010, 148, 371-379.	0.9	0
34	IscS Functions as a Primary Sulfur-donating Enzyme by Interacting Specifically with MoeB and MoaD in the Biosynthesis of Molybdopterin in Escherichia coli. Journal of Biological Chemistry, 2010, 285, 2302-2308.	1.6	57
35	The Distribution of Phosphatidyl-D-serine in the Rat. Bioscience, Biotechnology and Biochemistry, 2010, 74, 1953-1955.	0.6	4
36	Reaction Mechanism and Molecular Basis for Selenium/Sulfur Discrimination of Selenocysteine Lyase. Journal of Biological Chemistry, 2010, 285, 12133-12139.	1.6	32

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37	Selenocysteine Is Selectively Taken Up by Red Blood Cells. Bioscience, Biotechnology and Biochemistry, 2009, 73, 2746-2748.	0.6	9
38	Crystal Structure of a Homolog of Mammalian Serine Racemase from Schizosaccharomyces pombe. Journal of Biological Chemistry, 2009, 284, 25944-25952.	1.6	81
39	Eicosapentaenoic Acid Plays a Beneficial Role in Membrane Organization and Cell Division of a Cold-Adapted Bacterium, Shewanella livingstonensis Ac10. Journal of Bacteriology, 2009, 191, 632-640.	1.0	82
40	Serine Racemase with Catalytically Active Lysinoalanyl Residue*. Journal of Biochemistry, 2009, 145, 421-424.	0.9	30
41	X-Ray Crystallographic and Mutational Studies of Fluoroacetate Dehalogenase from Burkholderia sp. Strain FA1. Journal of Bacteriology, 2009, 191, 2630-2637.	1.0	33
42	Occurrence of phosphatidyl-d-serine in the rat cerebrum. Biochemical and Biophysical Research Communications, 2009, 382, 415-418.	1.0	9
43	Identification of Proteins Interacting with Selenocysteine Lyase. Bioscience, Biotechnology and Biochemistry, 2009, 73, 1230-1232.	0.6	21
44	The iscS gene deficiency affects the expression of pyrimidine metabolism genes. Biochemical and Biophysical Research Communications, 2008, 372, 407-411.	1.0	14
45	Biochemical and Genetic Analysis of the Î³-Resorcylate (2,6-Dihydroxybenzoate) Catabolic Pathway in Rhizobium sp. Strain MTP-10005: Identification and Functional Analysis of Its Gene Cluster. Journal of Bacteriology, 2007, 189, 1573-1581.	1.0	28
46	Selenite Assimilation into Formate Dehydrogenase H Depends on Thioredoxin Reductase in Escherichia coli. Journal of Biochemistry, 2007, 143, 467-473.	0.9	21
47	Prediction of missing enzyme genes in a bacterial metabolic network. FEBS Journal, 2007, 274, 2262-2273.	2.2	30
48	Mining prokaryotic genomes for unknown amino acids: a stop-codon-based approach. BMC Bioinformatics, 2007, 8, 225.	1.2	17
49	Enzymatic synthesis of cyclic amino acids by N-methyl-l-amino acid dehydrogenase from Pseudomonas putida. Tetrahedron: Asymmetry, 2006, 17, 1775-1779.	1.8	33
50	Enzymatic Synthesis ofL-Pipecolic Acid by Î”1-Piperideine-2-carboxylate Reductase fromPseudomonas putida. Bioscience, Biotechnology and Biochemistry, 2006, 70, 2296-2298.	0.6	23
51	N-Methyl-l-amino acid dehydrogenase from Pseudomonas putida. FEBS Journal, 2005, 272, 1117-1123.	2.2	44
52	Crystal Structures of Î”1-Piperideine-2-carboxylate/Î”1-Pyrroline-2-carboxylate Reductase Belonging to a New Family of NAD(P)H-dependent Oxidoreductases. Journal of Biological Chemistry, 2005, 280, 40875-40884.	1.6	40
53	The Putative Malate/Lactate Dehydrogenase from Pseudomonas putida Is an NADPH-dependent Î”1-Piperideine-2-carboxylate/Î”1-Pyrroline-2-carboxylate Reductase Involved in the Catabolism of d-Lysine and d-Proline. Journal of Biological Chemistry, 2005, 280, 5329-5335.	1.6	65
54	A new family of NAD(P)H-dependent oxidoreductases distinct from conventional Rossmann-fold proteins. Journal of Bioscience and Bioengineering, 2005, 99, 541-547.	1.1	18

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55	Enzymatic synthesis of N-methyl-l-phenylalanine by a novel enzyme, N-methyl-l-amino acid dehydrogenase, from Pseudomonas putida. Tetrahedron: Asymmetry, 2004, 15, 2841-2843.	1.8	27
56	A novel regulatory function of selenocysteine lyase, a unique catalyst to modulate major urinary protein. Journal of Molecular Catalysis B: Enzymatic, 2003, 23, 367-372.	1.8	5
57	Assembly of ironâ€“sulfur clusters mediated by cysteine desulfurases, IscS, CsdB and CSD, from Escherichia coli. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2003, 1647, 303-309.	1.1	45
58	Enhanced Selenium Tolerance and Accumulation in Transgenic Arabidopsis Expressing a Mouse Selenocysteine Lyase. Plant Physiology, 2003, 131, 1250-1257.	2.3	111
59	The iscS gene is essential for the biosynthesis of 2-selenouridine in tRNA and the selenocysteine-containing formate dehydrogenase H. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6679-6683.	3.3	64
60	Characterization of a NifS-Like Chloroplast Protein from Arabidopsis. Implications for Its Role in Sulfur and Selenium Metabolism. Plant Physiology, 2002, 130, 1309-1318.	2.3	142
61	Network of Protein-Protein Interactions among Iron-Sulfur Cluster Assembly Proteins in Escherichia coli1. Journal of Biochemistry, 2002, 131, 713-719.	0.9	99
62	Selenocysteine Lyase from Mouse Liver. Methods in Enzymology, 2002, 347, 198-203.	0.4	1
63	Structure of External Aldimine of Escherichia coli CsdB, an IscS/Nifs Homolog: Implications for Its Specificity toward Selenocysteine. Journal of Biochemistry, 2002, 131, 679-685.	0.9	65
64	Bacterial cysteine desulfurases: their function and mechanisms. Applied Microbiology and Biotechnology, 2002, 60, 12-23.	1.7	256
65	Cys-328 of IscS and Cys-63 of IscU are the sites of disulfide bridge formation in a covalently bound IscS/IscU complex: Implications for the mechanism of iron-sulfur cluster assembly. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5948-5952.	3.3	118
66	Removal of soluble selenium by a selenateâ€reducing bacterium Bacillus sp. SFâ€1. BioFactors, 2001, 14, 261-265.	2.6	19
67	Kinetic and Mutational Studies of Three NifS Homologs from Escherichia coli: Mechanistic Difference between L-Cysteine Desulfurase and L-Selenocysteine Lyase Reactions. Journal of Biochemistry, 2000, 127, 559-567.	0.9	131
68	cDNA Cloning, Purification, and Characterization of Mouse Liver Selenocysteine Lyase. Journal of Biological Chemistry, 2000, 275, 6195-6200.	1.6	84
69	Gene Cloning, Purification, and Characterization of Two Cyanobacterial NifS Homologs Driving Iron-Sulfur Cluster Formation. Bioscience, Biotechnology and Biochemistry, 2000, 64, 2412-2419.	0.6	22
70	Escherichia coli NifS-like Proteins Provide Selenium in the Pathway for the Biosynthesis of Selenophosphate. Journal of Biological Chemistry, 2000, 275, 23769-23773.	1.6	78
71	Structure of a NifS Homologue:Â X-ray Structure Analysis of CsdB, anEscherichia coliCounterpart of Mammalian Selenocysteine Lyaseâ€,â€¡. Biochemistry, 2000, 39, 1263-1273.	1.2	95
72	A nifS-like Gene, csdB, Encodes anEscherichia coli Counterpart of Mammalian Selenocysteine Lyase. Journal of Biological Chemistry, 1999, 274, 14768-14772.	1.6	109

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73	Cysteine Sulfinate Desulfinase, a NIFS-like Protein ofEscherichia coli with Selenocysteine Lyase and Cysteine Desulfurase Activities. Journal of Biological Chemistry, 1997, 272, 22417-22424.	1.6	159
74	Multiple Proline Substitutions Cumulatively Thermostabilize Bacillus Cereus ATCC7064 Oligo-1,6-Glucosidase. Irrefragable Proof Supporting the Proline Rule. FEBS Journal, 1994, 226, 277-283.	0.2	158