Yasuhiro Takahashi

List of Publications by Year
in descending order

59 papers	2,932 citations	185998 28 h-index	182168 51 g-index
60 all docs	60 docs citations	60 times ranked	2098 citing authors

#	Article	IF	Citations
1	Structural diversity of cysteine desulfurases involved in iron-sulfur cluster biosynthesis. Biophysics and Physicobiology, 2022, 19, n/a.	0.5	6
2	Cycloserine enantiomers inhibit PLPâ€dependent cysteine desulfurase SufS via distinct mechanisms. FEBS Journal, 2022, 289, 5947-5970.	2.2	2
3	Analysis of cell death in <i>Bacillus subtilis</i> caused by sesquiterpenes from <i>Chrysopogon</i> <i>zizanioides</i> (L.) Roberty<i> </i>. Journal of General and Applied Microbiology, 2022, 68, 62-70.	0.4	0
4	Evidence for dynamic in vivo interconversion of the conformational states of IscU during ironâ€"sulfur cluster biosynthesis. Molecular Microbiology, 2021, 115, 807-818.	1.2	6
5	Sulfur-mobilizing Enzymes Involved in Iron-sulfur Cluster Biosynthesis: Shared Structural Features and Functional Diversity. Seibutsu Butsuri, 2021, 61, 180-182.	0.0	0
6	The Structure of the Dimeric State of IscU Harboring Two Adjacent [2Feâ€"2S] Clusters Provides Mechanistic Insights into Cluster Conversion to [4Feâ€"4S]. Biochemistry, 2021, 60, 1569-1572.	1.2	17
7	Snapshots of PLPâ€substrate and PLPâ€product external aldimines as intermediates in two types of cysteine desulfurase enzymes. FEBS Journal, 2020, 287, 1138-1154.	2.2	19
8	Identification of IscU residues critical for de novo ironâ€"sulfur cluster assembly. Molecular Microbiology, 2019, 112, 1769-1783.	1.2	13
9	Distinct roles for Uâ€type proteins in ironâ€"sulfur cluster biosynthesis revealed by genetic analysis of the <i>Bacillus subtilis sufCDSUB</i> operon. Molecular Microbiology, 2018, 107, 688-703.	1.2	20
10	Mapping the key residues of SufB and SufD essential for biosynthesis of iron-sulfur clusters. Scientific Reports, 2017, 7, 9387.	1.6	31
11	Zinc-Ligand Swapping Mediated Complex Formation and Sulfur Transfer between SufS and SufU for Ironâ€"Sulfur Cluster Biogenesis in <i>Bacillus subtilis</i>. Journal of the American Chemical Society, 2017, 139, 18464-18467.	6.6	26
12	A substrate-bound structure of cyanobacterial biliverdin reductase identifies stacked substrates as critical for activity. Nature Communications, 2017, 8, 14397.	5.8	9
13	Novel features of the <scp>ISC</scp> machinery revealed by characterization of <i>Escherichia coli</i> mutants that survive without ironâ€"sulfur clusters. Molecular Microbiology, 2016, 99, 835-848.	1.2	48
14	The Radical S-Adenosyl-l-methionine Enzyme QhpD Catalyzes Sequential Formation of Intra-protein Sulfur-to-Methylene Carbon Thioether Bonds. Journal of Biological Chemistry, 2015, 290, 11144-11166.	1.6	40
15	Response of Feâ€"S cluster assembly machinery of Escherichia coli to mechanical stress in a model of amino-acid crystal fermentation. Journal of Bioscience and Bioengineering, 2015, 120, 287-293.	1.1	2
16	Functional Dynamics Revealed by the Structure of the SufBCD Complex, a Novel ATP-binding Cassette (ABC) Protein That Serves as a Scaffold for Iron-Sulfur Cluster Biogenesis. Journal of Biological Chemistry, 2015, 290, 29717-29731.	1.6	77
17	é‰„ç¡«é»„ã‚¯ãƒ©ã‚¹ã‚¿ãƒ¼ç”Ÿåˆæˆãƒžã‚·ãƒŠãƒªãƒ¼ã®æ§‹é€ ã¨ä½œå‹•æ©Ÿæ§‹. Kagaku To Seibutsu, 2010, 48, 831-838.	0.1	1
18	The role of the Feâ€S cluster in the sensory domain of nitrogenase transcriptional activator VnfA from <i>Azotobacterâ€ƒvinelandii</i>. FEBS Journal, 2010, 277, 817-832.	2.2	12

#	Article	IF	Citations
19	Structural Insights into Vinyl Reduction Regiospecificity of Phycocyanobilin:Ferredoxin Oxidoreductase (PcyA). Journal of Biological Chemistry, 2010, 285, 1000-1007.	1.6	26
20	IscR Regulates RNase LS Activity by Repressing <i>rnlA</i> Transcription. Genetics, 2010, 185, 823-830.	1.2	20
21	Molecular Dynamism of Feâ€"S Cluster Biosynthesis Implicated by the Structure of the SufC2â€"SufD2 Complex. Journal of Molecular Biology, 2009, 387, 245-258.	2.0	39
22	The Asymmetric Trimeric Architecture of [2Feâ€"2S] IscU: Implications for Its Scaffolding during Ironâ€"Sulfur Cluster Biosynthesis. Journal of Molecular Biology, 2008, 383, 133-143.	2.0	88
23	Characterization and Crystallization of an IscU-type Scaffold Protein with Bound [2Fe 2S] Cluster from the Hyperthermophile, Aquifex aeolicus. Journal of Biochemistry, 2007, 142, 577-586.	0.9	24
24	Solvent Tuning of Electrochemical Potentials in the Active Sites of HiPIP Versus Ferredoxin. Science, 2007, 318, 1464-1468.	6.0	192
25	Crystal structure ofEscherichia coliSufC, an ABC-type ATPase component of the SUF iron-sulfur cluster assembly machinery. FEBS Letters, 2006, 580, 137-143.	1.3	39
26	Induced-fitting and electrostatic potential change of PcyA upon substrate binding demonstrated by the crystal structure of the substrate-free form. FEBS Letters, 2006, 580, 3823-3828.	1.3	21
27	Crystallization and preliminary X-ray crystallographic studies of the oxidative-stress sensor SoxR and its complex with DNA. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 1275-1277.	0.7	12
28	Crystal structure of phycocyanobilin:ferredoxin oxidoreductase in complex with biliverdin IXÂ, a key enzyme in the biosynthesis of phycocyanobilin. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 27-32.	3.3	93
29	Crystal structure of Escherichia coli YfhJ protein, a member of the ISC machinery involved in assembly of iron-sulfur clusters. Proteins: Structure, Function and Bioinformatics, 2005, 60, 566-569.	1.5	29
30	Identification of Variant Molecules ofBacillus thermoproteolyticusFerredoxin:Â Crystal Structure Reveals Bound Coenzyme A and an Unexpected [3Feâˆ'4S] Cluster Associated with a Canonical [4Feâˆ'4S] Ligand Motifâ€,â€¡. Biochemistry, 2005, 44, 12402-12410.	1.2	14
31	Crystal structure ofEscherichia coliSufA involved in biosynthesis of iron-sulfur clusters: Implications for a functional dimer. FEBS Letters, 2005, 579, 6543-6548.	1.3	42
32	Interchangeability and Distinct Properties of Bacterial Fe-S Cluster Assembly Systems: Functional Replacement of the isc and suf Operons in Escherichia coli with the nifSU-Like Operon from Helicobacter pylori. Journal of Biochemistry, 2004, 136, 199-209.	0.9	107
33	An Intestinal Parasitic Protist, Entamoeba histolytica, Possesses a Non-redundant Nitrogen Fixation-like System for Iron-Sulfur Cluster Assembly under Anaerobic Conditions. Journal of Biological Chemistry, 2004, 279, 16863-16874.	1.6	113
34	Characterization of Cluster N5 as a Fast-relaxing [4Fe-4S] Cluster in the Nqo3 Subunit of the Proton-translocating NADH-ubiquinone Oxidoreductase from Paracoccus denitrificans. Journal of Biological Chemistry, 2003, 278, 15514-15522.	1.6	42
35	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
36	A Third Bacterial System for the Assembly of Iron-Sulfur Clusters with Homologs in Archaea and Plastids. Journal of Biological Chemistry, 2002, 277, 28380-28383.	1.6	384

#	Article	IF	Citations
37	Network of Protein-Protein Interactions among Iron-Sulfur Cluster Assembly Proteins in Escherichia coli1. Journal of Biochemistry, 2002, 131, 713-719.	0.9	99
38	Atomic resolution structures of oxidized [4fe-4s] ferredoxin from Bacillus thermoproteolyticus in two crystal forms: systematic distortion of [4fe-4s] cluster in the protein. Journal of Molecular Biology, 2002, 315, 1155-1166.	2.0	41
39	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
40	Crystal Structure of Escherichia coli Fdx, an Adrenodoxin-Type Ferredoxin Involved in the Assembly of Ironâ˘'Sulfur Clusters. Biochemistry, 2001, 40, 11007-11012.	1.2	82
41	Primary Structure and Phylogenetic Analysis of the Coat Protein of a Toyama Isolate of Tobacco Necrosis Virus. Bioscience, Biotechnology and Biochemistry, 2001, 65, 719-724.	0.6	6
42	Iron-Sulfur Cluster Assembly. Journal of Biological Chemistry, 2001, 276, 22604-22607.	1.6	176
43	Crystal structure of tobacco necrosis virus at 2.25 Ã… resolution. Journal of Molecular Biology, 2000, 300, 153-169.	2.0	51
44	Functional Assignment of the ORF2-iscS-iscU-iscA-hscB-hscA-fdx-ORF3 Gene Cluster Involved in the Assembly of Fe-S Clusters in Escherichia coli. Journal of Biochemistry, 1999, 126, 917-926.	0.9	219
45	Three iron-sulfur proteins encoded by three ORFs in chloroplasts and cyanobacteria. Photosynthesis Research, 1995, 46, 107-115.	1.6	2
46	Iron-Sulfur Proteins Involved in Various Biological Reactions.. Seibutsu Butsuri, 1995, 35, 57-62.	0.0	0
47	The Light-Independent Reduction of Protochlorophyllide in the Cyanobacterium Plectonema Bomyanum. , 1992, , 67-70.		0
48	Evolutionary Aspects of Iron-Sulfur Proteins in Photosynthetic Apparatus. , 1992, , 491-498.		0
49	Cloning, Nucleotide Sequences and Differential Expression of the nifH and nifH-Like (frxC) Genes from the Filamentous Nitrogen-Fixing Cyanobacterium Plectonema boryanum. Plant and Cell Physiology, 1991, 32, 1093-1106.	1.5	64
50	Structure of a Co-Transcribed Gene Cluster, ndhl-frxB3-ndh6-ndh4L, Cloned from the Filamentous Cyanobacterium Plectonema boryanum4. Plant and Cell Physiology, 1991, 32, 969-981.	1.5	22
51	Formation of the Fe-S Cluster of Ferredoxin in Lysed Spinach Chloroplasts. Plant Physiology, 1991, 95, 97-103.	2.3	37
52	Roles of ATP and NADPH in Formation of the Fe-S Cluster of Spinach Ferredoxin. Plant Physiology, 1991, 95, 104-110.	2.3	33
53	The 9-kDa Polypeptide with Iron-Sulfur Centers A/B in Spinach Photosystem I with Special Reference to Its Structure and Topographic Consideration in Thylakoid Membrane. , 1990, , 261-270.		0
54	Identification of a novel nifH-like (frxC) protein in chloroplasts of the liverwort Marchantia polymorpha. Plant Molecular Biology, 1989, 13, 551-561.	2.0	39

#	Article	IF	Citations
55	Topological Considerations of the 9-kDa Polypeptide which Contains Centers A and B, Associated with the 14- and 19-kDa Polypeptides in the Photosystem I Complex of Spinach. Plant and Cell Physiology, 1989, 30, 869-875.	1.5	57
56	The Protein Responsible for Center A/B in Spinach Photosystem I: Isolation with Iron-Sulfur Cluster(s) and Complete Sequence Analysis1. Journal of Biochemistry, 1988, 103, 962-968.	0.9	112
57	The 8 kDa polypeptide in photosystem I is a probable candidate of an iron-sulfur center protein coded by the chloroplast genefrxA. FEBS Letters, 1987, 218, 52-54.	1.3	88
58	Amino Acid Sequence of Chlorogloeopsis fritschii Ferredoxin: Taxonomic and Evolutionary Aspects1. Journal of Biochemistry, 1982, 92, 1363-1368.	0.9	8
59	Amino acid sequence of ferredoxin from the cyanobacterium <i>Chlorogloeopsis fritschii</i>. Biochemical Society Transactions, 1981, 9, 327-327.	1.6	0