

Akihiko Yamagishi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/77715/publications.pdf>

Version: 2024-02-01

187
papers

4,152
citations

94433

37
h-index

161849

54
g-index

189
all docs

189
docs citations

189
times ranked

3964
citing authors

#	ARTICLE	IF	CITATIONS
1	Amino Acid Specificity of Ancestral Aminoacyl-tRNA Synthetase Prior to the Last Universal Common Ancestor Commonote commonote. <i>Journal of Molecular Evolution</i> , 2022, 90, 73-94.	1.8	2
2	In situ biochemical characterization of Venus cloud particles using a life-signature detection microscope. <i>Canadian Journal of Microbiology</i> , 2022, , 1-13.	1.7	7
3	Editorial: Astrobiology at the Interface: Interactions Between Biospheres, Geospheres, Hydrospheres and Atmospheres Under Planetary Conditions. <i>Frontiers in Microbiology</i> , 2021, 12, 629961.	3.5	0
4	あ@た@TMã«ãããã,ç”ÿã‘1/2ã...†ã€TMæŽcæÿ». <i>Bunseki Kagaku</i> , 2021, 70, 309-326.	0.2	1
5	Evolution of Superoxide Dismutases and Catalases in Cyanobacteria: Occurrence of the Antioxidant Enzyme Genes before the Rise of Atmospheric Oxygen. <i>Journal of Molecular Evolution</i> , 2021, 89, 527-543.	1.8	8
6	Scientific Targets of Tanpopo: Astrobiology Exposure and Micrometeoroid Capture Experiments at the Japanese Experiment Module Exposed Facility of the International Space Station. <i>Astrobiology</i> , 2021, 21, 1451-1460.	3.0	7
7	Space Radiation Dosimetry at the Exposure Facility of the International Space Station for the Tanpopo Mission. <i>Astrobiology</i> , 2021, 21, 1473-1478.	3.0	15
8	Four-Year Operation of Tanpopo: Astrobiology Exposure and Micrometeoroid Capture Experiments on the JEM Exposed Facility of the International Space Station. <i>Astrobiology</i> , 2021, 21, 1461-1472.	3.0	8
9	Comprehensive mutagenesis to identify amino acid residues contributing to the difference in thermostability between two originally thermostable ancestral proteins. <i>PLoS ONE</i> , 2021, 16, e0258821.	2.5	2
10	Mutation Analysis of the <i>rpoB</i> Gene in the Radiation-Resistant Bacterium <i>Deinococcus radiodurans</i> R1 Exposed to Space during the Tanpopo Experiment at the International Space Station. <i>Astrobiology</i> , 2021, 21, 1494-1504.	3.0	4
11	Space Exposure of Amino Acids and Their Precursors during the Tanpopo Mission. <i>Astrobiology</i> , 2021, 21, 1479-1493.	3.0	6
12	Molecular repertoire of <i>Deinococcus radiodurans</i> after 1 year of exposure outside the International Space Station within the Tanpopo mission. <i>Microbiome</i> , 2020, 8, 150.	11.1	29
13	DNA Damage and Survival Time Course of <i>Deinococcal</i> Cell Pellets During 3 Years of Exposure to Outer Space. <i>Frontiers in Microbiology</i> , 2020, 11, 2050.	3.5	48
14	Analyses of Interaction between Platinum Bonded LARFH and Gold Surface by Molecular Dynamics Simulation. , 2020, , .		0
15	Establishment of mesophilic-like catalytic properties in a thermophilic enzyme without affecting its thermal stability. <i>Scientific Reports</i> , 2019, 9, 9346.	3.3	24
16	Assessment of the probability of microbial contamination for sample return from Martian moons II: The fate of microbes on Martian moons. <i>Life Sciences in Space Research</i> , 2019, 23, 85-100.	2.3	21
17	Assessment of the probability of microbial contamination for sample return from Martian moons I: Departure of microbes from Martian surface. <i>Life Sciences in Space Research</i> , 2019, 23, 73-84.	2.3	15
18	Planktonic adaptive evolution to the sea surface temperature in the Neoproterozoic inferred from ancestral NDK of marine cyanobacteria. <i>Earth and Planetary Science Letters</i> , 2019, 522, 98-106.	4.4	4

#	ARTICLE	IF	CITATIONS
19	Proteomic and Metabolomic Profiling of <i>Deinococcus radiodurans</i> Recovering After Exposure to Simulated Low Earth Orbit Vacuum Conditions. <i>Frontiers in Microbiology</i> , 2019, 10, 909.	3.5	23
20	Detection of Biological Bricks in Space. The Case of Adenine in Silica Aerogel. <i>Life</i> , 2019, 9, 82.	2.4	2
21	Molecular response of <i>Deinococcus radiodurans</i> to simulated microgravity explored by proteometabolomic approach. <i>Scientific Reports</i> , 2019, 9, 18462.	3.3	20
22	Crystal structure of (S)-3-O-geranylgeranylgeranyl glycerol phosphate synthase from <i>Thermoplasma acidophilum</i> in complex with the substrate sn-glycerol 1-phosphate. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2019, 75, 470-479.	0.8	3
23	STXM-XANES analyses of Murchison meteorite samples captured by aerogel after hypervelocity impacts: A potential implication of organic matter degradation for micrometeoroid collection experiments. <i>Geochemical Journal</i> , 2019, 53, 53-67.	1.0	9
24	Temperature Measurement of Space Environment with Tanpopo Space Thermometer. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2019, 2019, J19101.	0.0	0
25	Comprehensive reduction of amino acid set in a protein suggests the importance of prebiotic amino acids for stable proteins. <i>Scientific Reports</i> , 2018, 8, 1227.	3.3	45
26	Draft Genome Sequence of the Radioresistant Bacterium <i>Deinococcus aerius</i> TR0125, Isolated from the High Atmosphere above Japan. <i>Genome Announcements</i> , 2018, 6, .	0.8	1
27	Selection of a platinum-binding sequence in a loop of a four-helix bundle protein. <i>Journal of Bioscience and Bioengineering</i> , 2018, 125, 192-198.	2.2	0
28	Creation of artificial protein-protein interactions using α -helices as interfaces. <i>Biophysical Reviews</i> , 2018, 10, 411-420.	3.2	9
29	LDM (Life Detection Microscope): In Situ Imaging of Living Cells on Surface of Mars. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2018, 16, 299-305.	0.2	5
30	Environmental Data and Survival Data of <i>Deinococcus aetherius</i> from the Exposure Facility of the Japan Experimental Module of the International Space Station Obtained by the Tanpopo Mission. <i>Astrobiology</i> , 2018, 18, 1369-1374.	3.0	41
31	Structural Analysis of Metal-Binding Peptides Using Molecular Dynamics. , 2018, , .		0
32	Coarse-Grained Molecular Dynamics Simulation of Sulerythrin and LARFH for Producing Protein Nanofibers. , 2018, , .		0
33	Reconstructed ancestral enzymes suggest long-term cooling of Earth's photic zone since the Archean. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4619-4624.	7.1	53
34	Characterization of a thermostable mutant of <i>Agaricus brasiliensis</i> laccase created by phylogeny-based design. <i>Journal of Bioscience and Bioengineering</i> , 2017, 124, 623-629.	2.2	9
35	Hydroxylation of a conserved tRNA modification establishes non-universal genetic code in echinoderm mitochondria. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 778-782.	8.2	18
36	Space as a Tool for Astrobiology: Review and Recommendations for Experimentations in Earth Orbit and Beyond. <i>Space Science Reviews</i> , 2017, 209, 83-181.	8.1	54

#	ARTICLE	IF	CITATIONS
37	Quest for Ancestors of Eukaryal Cells Based on Phylogenetic Analyses of Aminoacyl-tRNA Synthetases. <i>Journal of Molecular Evolution</i> , 2017, 84, 51-66.	1.8	21
38	Proteometabolomic response of <i>Deinococcus radiodurans</i> exposed to UVC and vacuum conditions: Initial studies prior to the Tanpopo space mission. <i>PLoS ONE</i> , 2017, 12, e0189381.	2.5	32
39	Archaeal and bacterial communities in deep-sea hydrothermal ferromanganese crusts on old seamounts of the northwestern Pacific. <i>PLoS ONE</i> , 2017, 12, e0173071.	2.5	30
40	Birth of Archaeal Cells: Molecular Phylogenetic Analyses of G1P Dehydrogenase, G3P Dehydrogenases, and Glycerol Kinase Suggest Derived Features of Archaeal Membranes Having G1P Polar Lipids. <i>Archaea</i> , 2016, 2016, 1-16.	2.3	13
41	LDM (Life Detection Microscope): In situ Imaging of Living Cells on Surface of Mars. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2016, 14, Pk_117-Pk_124.	0.2	5
42	Geomorphological View of the Environmental History of Mars and Candidate Habitable Environments. <i>Journal of Geography (Chigaku Zasshi)</i> , 2016, 125, 171-184.	0.3	4
43	Development of mechanical space thermometer for the Tanpopo mission. <i>Transactions of the JSME (in) Tj ETQq1 1 0,784314,rgBT /Over</i>	0,2	1
44	Development of a Planetary Protection Laboratory for Mars Missions. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2016, 14, Pv_1-Pv_6.	0.2	0
45	Investigation of the Interplanetary Transfer of Microbes in the Tanpopo Mission at the Exposed Facility of the International Space Station. <i>Astrobiology</i> , 2016, 16, 363-376.	3.0	47
46	A Strategy for Designing Thermostable Enzymes by Reconstructing Ancestral Sequences Possessed by Ancient Life. <i>Grand Challenges in Biology and Biotechnology</i> , 2016, , 581-596.	2.4	5
47	Epistasis effects of multiple ancestral-consensus amino acid substitutions on the thermal stability of glycerol kinase from <i>Cellulomonas</i> sp. NT3060. <i>Journal of Bioscience and Bioengineering</i> , 2016, 121, 497-502.	2.2	10
48	De novo design of protein-protein interactions through modification of inter-molecular helix-helix interface residues. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 479-487.	2.3	5
49	A novel large filamentous deltaproteobacterium on hydrothermally inactive sulfide chimneys of the Southern Mariana Trough. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2016, 110, 99-105.	1.4	6
50	Ultralow-density double-layer silica aerogel fabrication for the intact capture of cosmic dust in low-Earth orbits. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 77, 325-334.	2.4	14
51	Robustness of predictions of extremely thermally stable proteins in ancient organisms. <i>Evolution; International Journal of Organic Evolution</i> , 2015, 69, 2954-2962.	2.3	33
52	Silica Aerogel for Capturing Intact Interplanetary Dust Particles for the Tanpopo Experiment. <i>Origins of Life and Evolution of Biospheres</i> , 2015, 45, 225-229.	1.9	10
53	Ancestral amino acid substitution improves the thermal stability of recombinant lignin-peroxidase from white-rot fungi, <i>Phanerochaete chrysosporium</i> strain UAMH 3641. <i>Protein Engineering, Design and Selection</i> , 2015, 28, 221-230.	2.1	28
54	Potential for biogeochemical cycling of sulfur, iron and carbon within massive sulfide deposits below the seafloor. <i>Environmental Microbiology</i> , 2015, 17, 1817-1835.	3.8	42

#	ARTICLE	IF	CITATIONS
55	Intra-Field Variation of Prokaryotic Communities On and Below the Seafloor in the Back-Arc Hydrothermal System of the Southern Mariana Trough. , 2015, , 301-311.		3
56	Development of Hydrothermal and Frictional Experimental Systems to Simulate Sub-seafloor Waterâ€“Rockâ€“Microbe Interactions. , 2015, , 71-85.		2
57	3P087 Analysis of a platinum-binding amino acid sequence identified by phage display(01F. Protein:) Tj ETQq1 1 0.784314 rgBT /Over Butsuri, 2014, 54, S263.	0.1	0
58	Tanpopo: Astrobiology Exposure and Micrometeoroid Capture Experimentsâ€” Proposed Experiments at the Exposure Facility of ISS-JEM. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Tk_49-Tk_55.	0.2	11
59	Design of a Silica-aerogel-based Cosmic Dust Collector for the Tanpopo Mission Aboard the International Space Station. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Pk_29-Pk_34.	0.2	9
60	Evaluation of the protein interfaces that form an intermolecular four-helix bundle as studied by computer simulation. Molecular Simulation, 2014, 40, 498-503.	2.0	3
61	Fluorescence imaging of microbe-containing particles shot from a two-stage Light-gas gun into an aerogel. Origins of Life and Evolution of Biospheres, 2014, 44, 43-60.	1.9	8
62	Characterization of the low-temperature activity of Sulfolobus tokodaii glucose-1-dehydrogenase mutants. Journal of Bioscience and Bioengineering, 2014, 118, 367-371.	2.2	2
63	Addition of negatively charged residues can reverse the decrease in the solubility of an acidic protein caused by an artificially introduced non-polar surface patch. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 553-560.	2.3	10
64	Computer Simulation Analysis of the Protein Binding Interfaces that Form a 4-Helix Bundle Motif. , 2014, , .		0
65	MELOS Life Search Plan: Search for Microbes on the Mars Surface with Special Interest in Methane-oxidizing Bacteria. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Tk_41-Tk_48.	0.2	1
66	Cloning and Characterization of Laccase DNA from the Royal Sun Medicinal Mushroom, Agaricus brasiliensis (Higher Basidiomycetes). International Journal of Medicinal Mushrooms, 2014, 16, 375-393.	1.5	6
67	Space Exposure of Amino Acids and Their Precursors in the Tanpopo Mission Using the International Space Station. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Pp_1-Pp_6.	0.2	3
68	Coarse-Grained Molecular Dynamics Simulation of IPMDH Proteins. , 2014, , .		0
69	Experimental evidence for the thermophilicity of ancestral life. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11067-11072.	7.1	153
70	Distinct tRNA modifications in the thermoâ€“acidophilic archaeon, <i>Thermoplasma acidophilum</i>. FEBS Letters, 2013, 587, 3575-3580.	2.8	30
71	Comparative Genomics of Thermophilic Bacteria and Archaea. , 2013, , 331-349.		2
72	The Possible Interplanetary Transfer of Microbes: Assessing the Viability of Deinococcus spp. Under the ISS Environmental Conditions for Performing Exposure Experiments of Microbes in the Tanpopo Mission. Origins of Life and Evolution of Biospheres, 2013, 43, 411-428.	1.9	42

#	ARTICLE	IF	CITATIONS
73	Decoding Mechanism of Non-universal Genetic Codes in <i>Loligo bleekeri</i> Mitochondria. <i>Journal of Biological Chemistry</i> , 2013, 288, 7645-7652.	3.4	8
74	Elemental dissolution of basalts with ultra-pure water at 340°C and 40 Mpa in a newly developed flow-type hydrothermal apparatus. <i>Geochemical Journal</i> , 2013, 47, 89-92.	1.0	3
75	3P088 Addition of negatively charged residues can reverse the aggregation of a protein caused by an artificially introduced hydrophobic surface(01F. Protein: Engineering,Poster). <i>Seibutsu Butsuri</i> , 2013, 53, S226.	0.1	0
76	3P090 Creation of a platinum-binding loop on an artificial four-helix bundle protein(01F. Protein: Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 6	0.1	0
77	Characteristics of Microbial Communities in Crustal Fluids in a Deep-Sea Hydrothermal Field of the Suiyo Seamount. <i>Frontiers in Microbiology</i> , 2013, 4, 85.	3.5	24
78	Selection of Lichens Resistant to the Cosmic Environment—Thermal Cycle Treatment, UV Irradiation and Heavy Ion Beam Irradiation—Uchu <i>Seibutsu Kagaku</i> , 2013, 27, 9-18.	0.3	1
79	Life search projects of NASA/ESA and of MELOS project in Japan, on Mars. <i>Journal of the Geological Society of Japan</i> , 2012, 118, 675-682.	0.6	0
80	Prokaryotic Abundance and Community Composition in a Freshwater Iron-Rich Microbial Mat at Circumneutral pH. <i>Geomicrobiology Journal</i> , 2012, 29, 896-905.	2.0	33
81	Iron-Based Microbial Ecosystem on and Below the Seafloor: A Case Study of Hydrothermal Fields of the Southern Mariana Trough. <i>Frontiers in Microbiology</i> , 2012, 3, 89.	3.5	26
82	Formation, Alteration and Delivery of Exogenous High Molecular Weight Organic Compounds: Objectives of the Tanpopo Mission from the Point of View of Chemical Evolution. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2012, 10, Tp_7-Tp_11.	0.2	1
83	Constructing protein nano-fiber and estimation of the electronic state around metal ions. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 3750-3755.	2.0	4
84	Distribution and phylogenetic diversity of <i>cbbM</i> genes encoding RubisCO form II in a deep-sea hydrothermal field revealed by newly designed PCR primers. <i>Extremophiles</i> , 2012, 16, 277-283.	2.3	19
85	Stability of Heterochiral Hybrid Membrane Made of Bacterial <i>G3P</i> Lipids and Archaeal <i>G1P</i> Lipids. <i>Biochemistry</i> , 2011, 50, 4114-4120.	2.5	60
86	Substitutions of Coenzyme-Binding, Nonpolar Residues Improve the Low-Temperature Activity of Thermophilic Dehydrogenases. <i>Biochemistry</i> , 2011, 50, 8583-8593.	2.5	9
87	<i>Calditerricola satsumensis</i> gen. nov., sp. nov. and <i>Calditerricola yamamurae</i> sp. nov., extreme thermophiles isolated from a high-temperature compost. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2011, 61, 631-636.	1.7	42
88	Phylogeny-Based Design of a B-Subunit of DNA Gyrase and Its ATPase Domain Using a Small Set of Homologous Amino Acid Sequences. <i>Journal of Molecular Biology</i> , 2011, 412, 212-225.	4.2	27
89	Tanpopo Cosmic Dust Collector: Silica Aerogel Production and Bacterial DNA Contamination Analysis. <i>Uchu Seibutsu Kagaku</i> , 2011, 25, 7-12.	0.3	16
90	Archaeal diversity in a terrestrial acidic spring field revealed by a novel PCR primer targeting archaeal 16S rRNA genes. <i>FEMS Microbiology Letters</i> , 2011, 319, 34-43.	1.8	49

#	ARTICLE	IF	CITATIONS
91	Molecular characterization of the microbial community in hydrogenetic ferromanganese crusts of the Takuyo-Daigo Seamount, northwest Pacific. <i>FEMS Microbiology Letters</i> , 2011, 321, 121-129.	1.8	45
92	The GINS complex from the thermophilic archaeon, <i>Thermoplasma acidophilum</i> may function as a homotetramer in DNA replication. <i>Extremophiles</i> , 2011, 15, 529-539.	2.3	17
93	Roles for the two N-terminal (β -strands) modules in the folding of a TIM-barrel protein as studied by fragmentation analysis. <i>Proteins: Structure, Function and Bioinformatics</i> , 2011, 79, 221-231.	2.6	2
94	Genomic and proteomic characterization of the large <i>Myoviridae</i> bacteriophage ϕ -TMA of the extreme thermophile <i>Thermus thermophilus</i> . <i>Bacteriophage</i> , 2011, 1, 152-164.	1.9	25
95	Taurine-containing Uridine Modifications in tRNA Anticodons Are Required to Decipher Non-universal Genetic Codes in Ascidian Mitochondria. <i>Journal of Biological Chemistry</i> , 2011, 286, 35494-35498.	3.4	20
96	Partial Purification and Characterization of Polyphenoloxidase from Culinary-Medicinal Royal Sun Mushroom (the Himematsutake), <i>Agaricus brasiliensis</i> S. Wasser et al. (Agaricomycetidae). <i>International Journal of Medicinal Mushrooms</i> , 2011, 13, 73-82.	1.5	4
97	2P083 Characterization of catalytic properties of glycerol-1-phosphate dehydrogenase from <i>Thermoplasma acidophilum</i> (The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2010, 50, S96.	0.1	0
98	2P077 Selection and characterization of a simplified TIM-barrel enzyme with a restricted amino acid usage on its surface (The 48th Annual Meeting of the Biophysical Society of Japan). <i>Seibutsu Butsuri</i> , 2010, 50, S95.	0.1	0
99	1P075 Elucidation of the protein sequence-stability relationship by comparing designed ancestral proteins with reduced neutral mutations (Protein:Property, The 48th Annual Meeting of the) <i>Tj ETQq1 1 0.784314 rgBT /Overlock 10 T</i>		
100	Biogeography and Biodiversity in Sulfide Structures of Active and Inactive Vents at Deep-Sea Hydrothermal Fields of the Southern Mariana Trough. <i>Applied and Environmental Microbiology</i> , 2010, 76, 2968-2979.	3.1	88
101	<i>Deinococcus aetherius</i> sp. nov., isolated from the stratosphere. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2010, 60, 776-779.	1.7	39
102	Adaptation of a hyperthermophilic group II chaperonin to relatively moderate temperatures. <i>Protein Engineering, Design and Selection</i> , 2010, 23, 393-402.	2.1	6
103	Improvement of <i>Bacillus circulans</i> β -amylase activity attained using the ancestral mutation method. <i>Protein Engineering, Design and Selection</i> , 2010, 23, 519-528.	2.1	43
104	Mimicking the evolution of a thermally stable monomeric four-helix bundle by fusion of four identical single-helix peptides. <i>Journal of Biochemistry</i> , 2010, 147, 371-379.	1.7	21
105	Japan Astrobiology Mars Project (JAMP): Search for Microbes on The Mars Surface with Special Interest in Methane-Oxidizing Bacteria. <i>Uchu Seibutsu Kagaku</i> , 2010, 24, 67-82.	0.3	12
106	Assessing Panspermia Hypothesis by Microorganisms Collected from The High Altitude Atmosphere. <i>Uchu Seibutsu Kagaku</i> , 2009, 23, 151-163.	0.3	21
107	Tanpopo: Astrobiology Exposure and Micrometeoroid Capture Experiments. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Space Technology Japan</i> , 2009, 7, Tk_49-Tk_55.	0.2	11
108	<i>Deinococcus aerius</i> sp. nov., isolated from the high atmosphere. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2009, 59, 1862-1866.	1.7	46

#	ARTICLE	IF	CITATIONS
109	Gain and loss of an intron in a protein-coding gene in Archaea: the case of an archaeal RNA pseudouridine synthase gene. <i>BMC Evolutionary Biology</i> , 2009, 9, 198.	3.2	25
110	Microbial communities in iron- and silica-rich microbial mats at deep-sea hydrothermal fields of the Southern Mariana Trough. <i>Environmental Microbiology</i> , 2009, 11, 2094-2111.	3.8	124
111	Abundance of <i>Zetaproteobacteria</i> within crustal fluids in back-arc hydrothermal fields of the Southern Mariana Trough. <i>Environmental Microbiology</i> , 2009, 11, 3210-3222.	3.8	93
112	Bacterial survival in response to desiccation and high humidity at above zero and subzero temperatures. <i>Advances in Space Research</i> , 2009, 43, 1285-1290.	2.6	16
113	Spatial distribution, diversity and composition of bacterial communities in sub-seafloor fluids at a deep-sea hydrothermal field of the Suiyo Seamount. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2009, 56, 1844-1855.	1.4	21
114	Experimental Approach to Obtain a Comprehensive Understanding of the Biogeochemistry of a Seafloor Hydrothermal System. <i>Journal of Geography (Chigaku Zasshi)</i> , 2009, 118, 1131-1159.	0.3	1
115	Complete nucleotide sequences of mitochondrial genomes of two solitary entoprocts, <i>Loxocorone allax</i> and <i>Loxosomella aloxiata</i> : Implications for lophotrochozoan phylogeny. <i>Molecular Phylogenetics and Evolution</i> , 2008, 47, 612-628.	2.7	60
116	Experimental Evidence for the Existence of a Stable Half-Barrel Subdomain in the (12/12)-Barrel Fold. <i>Journal of Molecular Biology</i> , 2008, 382, 458-466.	4.2	22
117	Prebiotic Origin of Glycolytic Metabolism: Histidine and Cysteine can Produce Acetyl CoA from Glucose via Reactions Homologous to Non-phosphorylated Entner-Doudoroff Pathway. <i>Journal of Biochemistry</i> , 2008, 144, 383-388.	1.7	5
118	Effects of pH and Temperature on the Composition of Polar Lipids in <i>Thermoplasma acidophilum</i> HO-62. <i>Journal of Bacteriology</i> , 2008, 190, 5404-5411.	2.2	92
119	Random mutagenesis improves the low-temperature activity of the tetrameric 3-isopropylmalate dehydrogenase from the hyperthermophile <i>Sulfolobus tokodaii</i> . <i>Protein Engineering, Design and Selection</i> , 2008, 21, 721-727.	2.1	5
120	1P-021 Structure variation of a 24-residue peptide on solvent, and preferential solvation by trifluoroethanol by multicanonical sampling (The 46th Annual Meeting of the Biophysical Society of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		
121	Solvent Site-Dipole Field Accompanying Protein-Ligand Approach Process. <i>Chem-Bio Informatics Journal</i> , 2008, 8, 14-24.	0.3	5
122	UV-resistant bacteria isolated from upper troposphere and lower stratosphere. <i>Uchu Seibutsu Kagaku</i> , 2008, 22, 18-25.	0.3	49
123	The Effects of Mutations at Position 253 on the Thermostability of the <i>Bacillus subtilis</i> 3-Isopropylmalate Dehydrogenase Subunit Interface. <i>Journal of Biochemistry</i> , 2007, 141, 791-797.	1.7	4
124	An Actin Homolog of the Archaeon <i>Thermoplasma acidophilum</i> That Retains the Ancient Characteristics of Eukaryotic Actin. <i>Journal of Bacteriology</i> , 2007, 189, 2039-2045.	2.2	27
125	2P002 Conformational space of 50-residue protein segments constructed by residue-residue contact patterns (Proteins-structure and structure-function relationship, Oral Presentations). <i>Seibutsu Butsuri</i> , 2007, 47, S113.	0.1	0
126	3P131 Short-time and long-range correlative water flows around a protein investigated by molecular dynamics simulation (Cell biological problems-adhesion, mobility, cytoskeleton, signaling, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 57 T		

#	ARTICLE	IF	CITATIONS
127	1P011 Free-energy landscapes of humanin in water and in TFE/water using multicanonical molecular dynamics(Proteins-structure and structure-function relationship,Oral Presentations). Seibutsu Butsuri, 2007, 47, S26.	0.1	0
128	3P276 Hyperthermophilic translation system in the last common ancestor : ancestral mutants of Thermus thermophilus glycyl-tRNA synthetase(Proteins- protein engineering, and evolutionary) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 69.	0.1	0
129	3P132 Solvent Site-Dipole Field Mediating Docking of Biomolecules(Cell biological problems-adhesion,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 69.	0.1	0
130	Extremely Thermophilic Translation System in the Common Ancestor Commonote: Ancestral Mutants of Glycyl-tRNA Synthetase from the Extreme Thermophile Thermus thermophilus. Journal of Molecular Biology, 2007, 369, 1060-1069.	4.2	25
131	Mitochondrial genome structure and evolution in the living fossil vampire squid, Vampyroteuthis infernalis, and extant cephalopods. Molecular Phylogenetics and Evolution, 2007, 44, 898-910.	2.7	51
132	TANPOPO: Astrobiology Exposure and Micrometeoroid Capture Experiments. Uchu Seibutsu Kagaku, 2007, 21, 67-75.	0.3	15
133	Cloning, Expression, Purification and Characterization of Membrane Protein Di-geranylgeranyl-glycerol Phosphate Synthase from Archaea. Asian Journal of Biochemistry, 2007, 2, 152-156.	0.5	2
134	The effects of multiple ancestral residues on the Thermus thermophilus 3-isopropylmalate dehydrogenase. FEBS Letters, 2006, 580, 3867-3871.	2.8	11
135	Archaeal pre-mRNA splicing: A connection to hetero-oligomeric splicing endonuclease. Biochemical and Biophysical Research Communications, 2006, 346, 1024-1032.	2.1	30
136	Designing Thermostable Proteins: Ancestral Mutants of 3-Isopropylmalate Dehydrogenase Designed by using a Phylogenetic Tree. Journal of Molecular Biology, 2006, 355, 664-674.	4.2	93
137	1P145 Cold adaptation of the thermophilic enzyme 3-isopropylmalate dehydrogenase from Sulfolobus tokodaii(4. Protein engineering,Poster Session,Abstract,Meeting Program of EABS & BSJ 2006). Seibutsu Butsuri, 2006, 46, S183.	0.1	0
138	Transition state of a SH3 domain detected with principle component analysis and a charge-neutralized all-atom protein model. Proteins: Structure, Function and Bioinformatics, 2006, 64, 883-894.	2.6	9
139	Structural analysis of the plasmid pTA1 isolated from the thermoacidophilic archaeon Thermoplasma acidophilum. Extremophiles, 2006, 10, 327-335.	2.3	11
140	Cloning and Characterization of Polyphenoloxidase DNA from Agaricus brasiliensis S. Wasser et al. (Agaricomycetideae). International Journal of Medicinal Mushrooms, 2006, 8, 67-76.	1.5	6
141	1P144 Hyperthermophilic translation system in the common ancestor : Analysis of ancestral mutants of GlyRS of the Thermus thermophilus(4. Protein engineering,Poster Session,Abstract,Meeting) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 69.	0.1	0
142	Analysis of the archaeal sub-seafloor community at Suiyo Seamount on the Izu-Bonin Arc. Advances in Space Research, 2005, 35, 1634-1642.	2.6	15
143	Comparative study of flux redistribution of metabolic pathway in glutamate production by two coryneform bacteria. Metabolic Engineering, 2005, 7, 59-69.	7.0	59
144	Thermostability of ancestral mutants of Caldococcus noboribetuisocitrate dehydrogenase. FEMS Microbiology Letters, 2005, 243, 393-398.	1.8	26

#	ARTICLE	IF	CITATIONS
145	Characterization of the DNA Gyrase from the Thermoacidophilic Archaeon <i>Thermoplasma acidophilum</i> . <i>Journal of Bacteriology</i> , 2005, 187, 8531-8536.	2.2	11
146	Identification and Characterization of Key Substructures Involved in the Early Folding Events of a (β/β) ₈ -barrel Protein as Studied by Experimental and Computational Methods. <i>Journal of Molecular Biology</i> , 2005, 353, 1161-1170.	4.2	16
147	A detailed unfolding pathway of a (β/β) ₈ -barrel protein as studied by molecular dynamics simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 58, 538-546.	2.6	12
148	Thermal unfolding of ribonuclease T1 studied by multi-dimensional NMR spectroscopy. <i>Biological Chemistry</i> , 2004, 385, 1157-64.	2.5	9
149	Mapping of Unit Boundaries of a Protein: Exhaustive Search for Permissive Sites for Duplication by Complementation Analysis of Random Fragment Libraries of Tryptophan Synthase β Subunit. <i>Journal of Molecular Biology</i> , 2004, 335, 1093-1104.	4.2	11
150	Endosymbiotic <i>Methanobrevibacter</i> species Living in Symbiotic Protists of the Termite <i>Reticulitermes speratus</i> Detected by Fluorescent In Situ Hybridization. <i>Microbes and Environments</i> , 2004, 19, 120-127.	1.6	26
151	Characterization of the precursor of tetraether lipid biosynthesis in the thermoacidophilic archaeon <i>Thermoplasma acidophilum</i> . <i>Extremophiles</i> , 2003, 7, 235-243.	2.3	41
152	Metabolic characteristics of an isocitrate dehydrogenase defective derivative of <i>Escherichia coli</i> BL21(DE3). <i>Biotechnology and Bioengineering</i> , 2003, 84, 732-737.	3.3	21
153	A novel chiral thiol reagent for automated precolumn derivatization and high-performance liquid chromatographic enantioseparation of amino acids and its application to the aspartate racemase assay. <i>Analytical Biochemistry</i> , 2003, 315, 262-269.	2.4	28
154	Increased thermal stability against irreversible inactivation of 3-isopropylmalate dehydrogenase induced by decreased van der Waals volume at the subunit interface. <i>Protein Engineering, Design and Selection</i> , 2003, 16, 615-621.	2.1	8
155	Comparative Complete Genome Sequence Analysis of the Amino Acid Replacements Responsible for the Thermostability of <i>Corynebacterium efficiens</i> . <i>Genome Research</i> , 2003, 13, 1572-1579.	5.5	194
156	Continuous Cell-free Protein Synthesis Directed by Messenger DNA and Catalyzed by Extract of <i>Thermus thermophilus</i> HB27. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 639-642.	1.3	4
157	Purification and Characterization of Geranylgeranylglyceryl Phosphate Synthase from a Thermoacidophilic Archaeon, <i>Thermoplasma acidophilum</i> . <i>Journal of Biochemistry</i> , 2003, 133, 651-657.	1.7	28
158	Polypeptide Synthesis Directed by DNA as a Messenger in Cell-Free Polypeptide Synthesis by Extreme Thermophiles, <i>Thermus thermophilus</i> HB27 and <i>Sulfolobus tokodaii</i> Strain 7. <i>Journal of Biochemistry</i> , 2002, 131, 849-853.	1.7	10
159	Effects of a Squalene Epoxidase Inhibitor, Terbinafine, on Ether Lipid Biosyntheses in a Thermoacidophilic Archaeon, <i>Thermoplasma acidophilum</i> . <i>Journal of Bacteriology</i> , 2002, 184, 1395-1401.	2.2	21
160	Complete Polar Lipid Composition of <i>Thermoplasma acidophilum</i> HO-62 Determined by High-Performance Liquid Chromatography with Evaporative Light-Scattering Detection. <i>Journal of Bacteriology</i> , 2002, 184, 556-563.	2.2	68
161	Cold-adaptation mechanism of mutant enzymes of 3-isopropylmalate dehydrogenase from <i>Thermus thermophilus</i> . <i>Protein Engineering, Design and Selection</i> , 2002, 15, 471-476.	2.1	6
162	Phylogenetic Analysis of Symbiotic Archaea Living in the Gut of Xylophagous Cockroaches. <i>Microbes and Environments</i> , 2002, 17, 185-190.	1.6	30

#	ARTICLE	IF	CITATIONS
163	Introns in protein-coding genes in Archaea. FEBS Letters, 2002, 510, 27-30.	2.8	59
164	Sulfolobus tokodaii sp. nov. (f. Sulfolobus sp. strain 7), a new member of the genus Sulfolobus isolated from Beppu Hot Springs, Japan. Extremophiles, 2002, 6, 39-44.	2.3	126
165	Occurrence of α -Amino Acids and a Pyridoxal 5'-Phosphate-Dependent Aspartate Racemase in the Acidothermophilic Archaeon, Thermoplasma acidophilum. Biochemical and Biophysical Research Communications, 2001, 281, 317-321.	2.1	31
166	Methanogenic Symbionts and the Locality of their Host Lower Termites.. Microbes and Environments, 2001, 16, 43-47.	1.6	34
167	Selection of stabilized 3-isopropylmalate dehydrogenase of Saccharomyces cerevisiae using the host-vector system of an extreme thermophile, Thermus thermophilus. Extremophiles, 2001, 5, 17-22.	2.3	42
168	Quinone Profiles of Thermoplasma acidophilum HO-62. Journal of Bacteriology, 2001, 183, 1462-1465.	2.2	27
169	Adaptation of a thermophilic enzyme, 3-isopropylmalate dehydrogenase, to low temperatures. Protein Engineering, Design and Selection, 2001, 14, 85-91.	2.1	41
170	Crystal structures of mutants of Thermus thermophilus IPMDH adapted to low temperatures. Protein Engineering, Design and Selection, 2001, 14, 81-84.	2.1	5
171	Analysis of the effect of accumulation of amino acid replacements on activity of 3-isopropylmalate dehydrogenase from Thermus thermophilus. Protein Engineering, Design and Selection, 2001, 14, 601-607.	2.1	2
172	Phylogenetic Diversity of Symbiotic Methanogens Living in the Hindgut of the Lower Termite <i>Reticulitermes speratus</i> Analyzed by PCR and In Situ Hybridization. Applied and Environmental Microbiology, 1999, 65, 837-840.	3.1	82
173	An efficient gene replacement and deletion system for an extreme thermophile, Thermus thermophilus. FEMS Microbiology Letters, 1999, 173, 431-437.	1.8	41
174	Further improvement of the thermal stability of a partially stabilized <i>Bacillus subtilis</i> 3-isopropylmalate dehydrogenase variant by random and site-directed mutagenesis. FEBS Journal, 1999, 260, 499-504.	0.2	42
175	Urea-Induced Unfolding and Conformational Stability of 3-Isopropylmalate Dehydrogenase from the Thermophile Thermus thermophilus and Its Mesophilic Counterpart from Escherichia coli. Biochemistry, 1999, 38, 1332-1337.	2.5	26
176	An efficient gene replacement and deletion system for an extreme thermophile, Thermus thermophilus. FEMS Microbiology Letters, 1999, 173, 431-437.	1.8	3
177	Serial increase in the thermal stability of 3-isopropylmalate dehydrogenase from Bacillus subtilis by experimental evolution. Protein Science, 1998, 7, 698-705.	7.6	73
178	Microbes in Hydrothermal Environments. The History of Life: What We can Learn from Archaeobacteria.. Microbes and Environments, 1998, 13, 237-243.	1.6	0
179	Effect of polar side chains at position 172 on thermal stability of 3-isopropylmalate dehydrogenase from Thermus thermophilus. FEBS Letters, 1997, 410, 141-144.	2.8	14
180	Eubacteria-Type Isocitrate Dehydrogenase from an Archaeon: Cloning, Sequencing, and Expression of a Gene Encoding Isocitrate Dehydrogenase from a Hyperthermophilic Archaeobacterium, Caldococcus noboribetetus. Archives of Biochemistry and Biophysics, 1996, 336, 77-85.	3.0	11

#	ARTICLE	IF	CITATIONS
181	A stable intermediate in the thermal unfolding process of a chimeric 3- α -isopropylmalate dehydrogenase between a thermophilic and a mesophilic enzymes. <i>Protein Science</i> , 1996, 5, 511-516.	7.6	17
182	Improvement of thermal stability of proteins by evolutionary molecular engineering.. <i>Seibutsu Butsuri</i> , 1996, 36, 144-148.	0.1	0
183	Screening of stable proteins in an extreme thermophile, <i>Thermus thermophilus</i> . <i>Molecular Microbiology</i> , 1995, 16, 1031-1036.	2.5	50
184	The plasmids found in isolates of the acidothermophilic archaeobacterium <i>Thermoplasma acidophilum</i> . <i>FEMS Microbiology Letters</i> , 1995, 128, 157-161.	1.8	10
185	Hydrophobic interaction at the subunit interface contributes to the thermostability of 3-isopropylmalate dehydrogenase from an extreme thermophile, <i>Thermus thermophilus</i> . <i>FEBS Journal</i> , 1994, 220, 275-281.	0.2	116
186	Effects of Polyamines on a Continuous Cell-Free Protein Synthesis System of an Extreme Thermophile, <i>Thermus thermophilus</i> . <i>Journal of Biochemistry</i> , 1993, 114, 732-734.	1.7	17
187	Circular chromosomal DNA in the sulfur-dependent archaeobacterium <i>Sulfolobus acidocaldarius</i> . <i>Nucleic Acids Research</i> , 1990, 18, 1133-1136.	14.5	30