

# Masashi Miyano

## List of Publications by Year in descending order

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86  
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8,155  
citations

172386

29  
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58549

82  
g-index

86  
all docs

86  
docs citations

86  
times ranked

7362  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal Structure of Rhodopsin: A G Protein-Coupled Receptor. <i>Science</i> , 2000, 289, 739-745.	6.0	5,486
2	Cloning and Crystal Structure of Hematopoietic Prostaglandin D Synthase. <i>Cell</i> , 1997, 90, 1085-1095.	13.5	244
3	Structural Basis of the Substrate-specific Two-step Catalysis of Long Chain Fatty Acyl-CoA Synthetase Dimer. <i>Journal of Biological Chemistry</i> , 2004, 279, 31717-31726.	1.6	189
4	Crystal structure of a human membrane protein involved in cysteinyl leukotriene biosynthesis. <i>Nature</i> , 2007, 448, 609-612.	13.7	140
5	Crystal Structure of Squid Rhodopsin with Intracellularly Extended Cytoplasmic Region. <i>Journal of Biological Chemistry</i> , 2008, 283, 17753-17756.	1.6	122
6	Novel Features of Eukaryotic Photosystem II Revealed by Its Crystal Structure Analysis from a Red Alga. <i>Journal of Biological Chemistry</i> , 2016, 291, 5676-5687.	1.6	100
7	Structural and Functional Characterization of HQL-79, an Orally Selective Inhibitor of Human Hematopoietic Prostaglandin D Synthase. <i>Journal of Biological Chemistry</i> , 2006, 281, 15277-15286.	1.6	91
8	Structural Basis of the Sphingomyelin Phosphodiesterase Activity in Neutral Sphingomyelinase from <i>Bacillus cereus</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 16157-16167.	1.6	82
9	Na <sup>+</sup> -mimicking ligands stabilize the inactive state of leukotriene B4 receptor BLT1. <i>Nature Chemical Biology</i> , 2018, 14, 262-269.	3.9	80
10	Mechanism of metal activation of human hematopoietic prostaglandin D synthase. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 291-296.	3.6	64
11	cDNA Cloning, Expression, and Mutagenesis Study of Liver-type Prostaglandin F Synthase. <i>Journal of Biological Chemistry</i> , 1999, 274, 241-248.	1.6	61
12	Crystal structure of annexin V with its ligand K-201 as a calcium channel activity inhibitor. <i>Journal of Molecular Biology</i> , 1997, 274, 16-20.	2.0	60
13	Crystallographic Studies of a Calcium Binding Lysozyme from Equine Milk at 2.5 Å...Resolution. <i>Journal of Biochemistry</i> , 1992, 111, 141-143.	0.9	58
14	Structural Basis of Leukotriene B4 12-Hydroxydehydrogenase/15-Oxo-prostaglandin 13-Reductase Catalytic Mechanism and a Possible Src Homology 3 Domain Binding Loop. <i>Journal of Biological Chemistry</i> , 2004, 279, 22615-22623.	1.6	58
15	Structural Basis of Hematopoietic Prostaglandin D Synthase Activity Elucidated by Site-directed Mutagenesis. <i>Journal of Biological Chemistry</i> , 2000, 275, 31239-31244.	1.6	57
16	Leukotriene B4 Receptor and the Function of Its Helix 8. <i>Journal of Biological Chemistry</i> , 2005, 280, 32049-32052.	1.6	55
17	A Novel Induced-fit Reaction Mechanism of Asymmetric Hot Dog Thioesterase Paal. <i>Journal of Molecular Biology</i> , 2005, 352, 212-228.	2.0	54
18	Isolation and analysis of a genomic clone encoding a pokeweed antiviral protein. <i>Plant Molecular Biology</i> , 1992, 20, 879-886.	2.0	52

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19	Helix 8 of the Leukotriene B4 Receptor Is Required for the Conformational Change to the Low Affinity State after G-protein Activation. <i>Journal of Biological Chemistry</i> , 2003, 278, 41500-41509.	1.6	52
20	Leukotriene A4hydrolase, a bifunctional enzyme Distinction of leukotriene A4hydrolase and aminopeptidase activities by site-directed mutagenesis at Glu-297. <i>FEBS Letters</i> , 1992, 309, 353-357.	1.3	46
21	The First Crystal Structure of Archaeal Aldolase. <i>Journal of Biological Chemistry</i> , 2003, 278, 10799-10806.	1.6	42
22	Crystal Structure of a Novel FAD-, FMN-, and ATP-containing L-Proline Dehydrogenase Complex from <i>Pyrococcus horikoshii</i> . <i>Journal of Biological Chemistry</i> , 2005, 280, 31045-31049.	1.6	39
23	Human 5-lipoxygenase associates with phosphatidylcholine liposomes and modulates LTA4 synthetase activity. <i>Lipids and Lipid Metabolism</i> , 1994, 1215, 300-306.	2.6	38
24	Identification of the Intracellular Region of the Leukotriene B4 Receptor Type 1 That Is Specifically Involved in Gi Activation. <i>Journal of Biological Chemistry</i> , 2007, 282, 3998-4006.	1.6	38
25	Structural Basis of the Catalytic Mechanism Operating in Open-Closed Conformers of Lipocalin Type Prostaglandin D Synthase. <i>Journal of Biological Chemistry</i> , 2009, 284, 22344-22352.	1.6	38
26	Structure of aldolase from <i>Thermus thermophilus</i> HB8 showing the contribution of oligomeric state to thermostability. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 1816-1823.	2.5	36
27	Mutagenesis studies on the amino acid residues involved in the iron-binding and the activity of human 5-lipoxygenase. <i>Biochemical and Biophysical Research Communications</i> , 1992, 182, 1482-1490.	1.0	34
28	Crystal Structure of Purine Nucleoside Phosphorylase from <i>Thermus thermophilus</i> . <i>Journal of Molecular Biology</i> , 2004, 337, 1149-1160.	2.0	33
29	Crystal Structure of Novel NADP-dependent 3-Hydroxyisobutyrate Dehydrogenase from <i>Thermus thermophilus</i> HB8. <i>Journal of Molecular Biology</i> , 2005, 352, 905-917.	2.0	32
30	The Catalytic Architecture of Leukotriene C4 Synthase with Two Arginine Residues. <i>Journal of Biological Chemistry</i> , 2011, 286, 16392-16401.	1.6	29
31	Structure and implications for the thermal stability of phosphopantetheine adenylyltransferase from <i>Thermus thermophilus</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 97-104.	2.5	28
32	Helix 8 of leukotriene B4 type 2 receptor is required for the folding to pass the quality control in the endoplasmic reticulum. <i>FASEB Journal</i> , 2009, 23, 1470-1481.	0.2	28
33	<i>Escherichia coli</i> ribosome is inactivated by Mirabilis antiviral protein which cleaves the N-glycosidic bond at A2660 of 23 S ribosomal RNA. <i>Journal of Molecular Biology</i> , 1991, 221, 737-743.	2.0	26
34	X-ray Structure of a Pokeweed Antiviral Protein, Coded by a New Genomic Clone, at 0.23 nm Resolution. A Model Structure Provides a Suitable Electrostatic Field for Substrate Binding. <i>FEBS Journal</i> , 1994, 225, 369-374.	0.2	26
35	Oxyanion Hole-stabilized Stereospecific Isomerization in Ribose-5-phosphate Isomerase (Rpi). <i>Journal of Biological Chemistry</i> , 2003, 278, 49183-49190.	1.6	26
36	Nucleotide sequence of a genomic gene encoding tritin, a ribosome-inactivating protein from <i>Triticum aestivum</i> . <i>Plant Molecular Biology</i> , 1993, 22, 171-176.	2.0	25

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37	Physicochemical characterization of ATP binding to human 5-lipoxygenase. <i>Lipids</i> , 1996, 31, 367-371.	0.7	25
38	Interfacial kinetic reaction of human 5-lipoxygenase. <i>FEBS Journal</i> , 1994, 222, 285-292.	0.2	24
39	Crystallization and Preliminary X-ray Crystallographic Studies of Recombinant Human Leukotriene A4 Hydrolase Complexed with Bestatin. <i>Journal of Molecular Biology</i> , 1994, 238, 854-856.	2.0	24
40	Crystallization screening test for the whole-cell project on <i>Thermus thermophilus</i> HB8. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008, 64, 487-491.	0.7	24
41	Adenine depurination and inactivation of plant ribosomes by an antiviral protein of <i>Mirabilis jalapa</i> (MAP). <i>Plant Molecular Biology</i> , 1992, 20, 1111-1119.	2.0	21
42	Crystal Structure of Anti-Configuration of Indomethacin and Leukotriene B4 12-Hydroxydehydrogenase/15-Oxo-Prostaglandin 13-Reductase Complex Reveals the Structural Basis of Broad Spectrum Indomethacin Efficacy. <i>Journal of Biochemistry</i> , 2006, 140, 457-466.	0.9	21
43	Cloning, Expression, Crystallization, and Preliminary X-Ray Analysis of Recombinant Mouse Lipocalin-type Prostaglandin D Synthase, a Somnogen-Producing Enzyme. <i>Journal of Biochemistry</i> , 2003, 133, 29-32.	0.9	20
44	RVCaB, a Calcium-binding Protein in Radish Vacuoles, is Predominantly an Unstructured Protein with a Polyproline Type II Helix. <i>Journal of Biochemistry</i> , 2007, 142, 201-211.	0.9	20
45	A structural study of calcium-binding equine lysozyme by two-dimensional 1H-NMR. <i>BBA - Proteins and Proteomics</i> , 1991, 1078, 77-84.	2.1	18
46	A Plasma Membrane-associated Protein of <i>Arabidopsis thaliana</i> AtPCaP1 Binds Copper Ions and Changes Its Higher Order Structure. <i>Journal of Biochemistry</i> , 2008, 144, 487-497.	0.9	17
47	Internally bridging water molecule in transmembrane $\alpha$ -helical kink. <i>Current Opinion in Structural Biology</i> , 2010, 20, 456-463.	2.6	17
48	The catalytic efficiency (kcat/Km) of the class A $\beta$ -lactamase Toho-1 correlates with the thermal stability of its catalytic intermediate analog. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 684-691.	1.1	16
49	Nucleotide sequence of cDNA encoding $\beta$ -luffin, a ribosome-inactivating protein from <i>Luffa cylindrica</i> . <i>Plant Molecular Biology</i> , 1992, 18, 1199-1202.	2.0	14
50	Evaluation of protein crystallization states based on texture information derived from greyscale images. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 873-880.	2.5	14
51	Crystal structure of alanyl-tRNA synthetase editing-domain homolog (PH0574) from a hyperthermophile, <i>Pyrococcus horikoshii</i> OT3 at 1.45 Å... resolution. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005, 62, 1133-1137.	1.5	14
52	Expression of a pokeweed antiviral protein in <i>Escherichia coli</i> and its characterization. <i>FEBS Letters</i> , 1993, 320, 31-34.	1.3	13
53	A leukotriene C4 synthase inhibitor with the backbone of 5-(5-methylene-4-oxo-4,5-dihydrothiazol-2-ylamino) isophthalic acid. <i>Journal of Biochemistry</i> , 2013, 153, 421-429.	0.9	13
54	Nucleotide sequence of cDNA encoding $\beta$ -luffin, another ribosome-inactivating protein from <i>Luffa cylindrica</i> . <i>Plant Molecular Biology</i> , 1992, 19, 887-889.	2.0	12

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55	Protein-protein interactions of the hyperthermophilic archaeon <i>Pyrococcus horikoshii</i> OT3. <i>Genome Biology</i> , 2005, 6, R98.	13.9	12
56	Crystallization and preliminary crystallographic analysis of the human calcineurin homologous protein CHP2 bound to the cytoplasmic region of the Na <sup>+</sup> /H <sup>+</sup> -exchanger NHE1. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2005, 61, 956-958.	0.7	11
57	Evaluation of crystalline objects in crystallizing protein droplets based on line-segment information in greyscale images. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006, 62, 239-245.	2.5	11
58	Structure of a Hyperthermophilic Archaeal Homing Endonuclease, I-Tsp0611: Contribution of Cross-domain Polar Networks to Thermostability. <i>Journal of Molecular Biology</i> , 2007, 365, 362-378.	2.0	11
59	A genomic gene for MAP, a ribosome-inactivating protein from <i>Mirabilis jalapa</i> , contains an intron. <i>Nucleic Acids Research</i> , 1993, 21, 1035-1035.	6.5	10
60	Application of maximum-entropy maps in the accurate refinement of a putative acylphosphatase using 1.3 Å X-ray diffraction data. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2008, 64, 237-247.	2.5	9
61	Expression, purification and characterization of leukotriene B4 receptor, BLT1 in <i>Pichia pastoris</i> . <i>Protein Expression and Purification</i> , 2010, 72, 66-74.	0.6	9
62	Crystallization and preliminary X-ray crystallographic analysis of <i>Mirabilis</i> antiviral protein. <i>Journal of Molecular Biology</i> , 1992, 226, 281-283.	2.0	8
63	A 281 Tflops calculation for X-ray protein structure analysis with special-purpose computers MDGRAPE-3., 2007, , .		8
64	Structure of 3-oxoacyl-(acyl-carrier protein) synthase II from <i>Thermus thermophilus</i> HB8. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2008, 64, 358-366.	0.7	7
65	Seleno-detergent MAD phasing of leukotriene C <sub>4</sub> synthase in complex with dodecyl-β-D-selenomaltoside. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2011, 67, 1666-1673.	0.7	7
66	Crystal Structure of OXA-58 with the Substrate-Binding Cleft in a Closed State: Insights into the Mobility and Stability of the OXA-58 Structure. <i>PLoS ONE</i> , 2015, 10, e0145869.	1.1	7
67	Integrated state evaluation for the images of crystallization droplets utilizing linear and nonlinear classifiers. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006, 62, 1066-1072.	2.5	6
68	Germination and growth inhibition of acylornicotines from section repandae of the genus <i>Nicotiana</i> and synthetic acylornicotines.. <i>Agricultural and Biological Chemistry</i> , 1988, 52, 1899-1903.	0.3	5
69	Characterization of a Major Secretory Protein in the Cane Toad ( <i>Bufo marinus</i> ) Choroid Plexus as an Amphibian Lipocalin-type Prostaglandin D Synthase. <i>Journal of Biochemistry</i> , 2006, 141, 173-180.	0.9	5
70	1'-(6-Hydroxyoctanoyl) nornicotine and 1'-(7-Hydroxyoctanoyl) nornico-tine, Two New Alkaloids from Japanese Domestic Tobacco. <i>Agricultural and Biological Chemistry</i> , 1981, 45, 1029-1032.	0.3	4
71	Cloning and Crystal Structure of Hematopoietic Prostaglandin D Synthase. <i>Cell</i> , 1999, 96, 449.	13.5	4
72	The Flexible C-Terminal Region of <i>Aspergillus terreus</i> Blastocidin S Deaminase: Identification of Its Functional Roles with Deletion Enzymes. <i>Biochemical and Biophysical Research Communications</i> , 2002, 290, 421-426.	1.0	4

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73	Crystallization and preliminary diffraction studies of prostaglandin E <sub>2</sub> -specific monoclonal antibody Fab fragment in the ligand complex. Acta Crystallographica Section F: Structural Biology Communications, 2008, 64, 1027-1030.	0.7	3
74	Evaluation of protein crystallization state by sequential image classification. Sensor Review, 2008, 28, 242-247.	1.0	3
75	Neutralization of leukotriene C4 and D4 activity by monoclonal and single-chain antibodies. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 1625-1633.	1.1	3
76	Amphiphilic Helices Drive Signaling. Structure, 2005, 13, 946-947.	1.6	2
77	Functional expression of single-chain antibody to leukotriene C4. Biochemical and Biophysical Research Communications, 2010, 392, 421-425.	1.0	2
78	The leukotriene B4 receptor BLT1 is stabilized by transmembrane helix capping mutations. Biochemistry and Biophysics Reports, 2015, 4, 243-249.	0.7	2
79	Crystallization and preliminary X-ray crystallographic studies of NADP-dependent 3-hydroxyisobutyrate dehydrogenase from <i>Thermus thermophilus</i> HB8. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 2294-2296.	2.5	1
80	High Throughput Protein Crystallography at RIKEN Structural Genomic Beamlines. AIP Conference Proceedings, 2004, , .	0.3	1
81	Crystalline object evaluation by image processing. Sensor Review, 2008, 28, 143-149.	1.0	1
82	The Y54(L)W mutation of anti-leukotriene C4 single-chain antibody increases affinity to leukotriene E4. Journal of Biochemistry, 2017, 161, 79-86.	0.9	1
83	cDNA Cloning and Mutagenesis Study of Liver-Type Prostaglandin F Synthase, and Identification of the Prostaglandin F Producing Cells in the Liver. Advances in Experimental Medicine and Biology, 2002, 507, 263-268.	0.8	1
84	Recent Advances in Biology of Crysteinyl Leukotriene. Nihon Kessho Gakkaishi, 2010, 52, 69-75.	0.0	1
85	<i>N</i> - <sup>2</sup> -Isopropylornicotine in Burley Tobacco ( <i>Nicotiana tabacum</i> ). Agricultural and Biological Chemistry, 1979, 43, 2205-2206.	0.3	0
86	New Minor Alkaloids in Burley Tobacco ( <i>Nicotiana tabacum</i> ). Agricultural and Biological Chemistry, 1979, 43, 1607-1608.	0.3	0