Masafumi Odaka

List of Publications by Year
in descending order

45 papers	2,126 citations	279798 23 h-index	243625 44 g-index
47 all docs	47 docs citations	47 times ranked	1395 citing authors

#	Article	IF	Citations
1	Multiple Myelomaâ€“Associated Ig Light Chain Crystalline Cast Nephropathy. Kidney International Reports, 2020, 5, 1595-1602.	0.8	7
2	Comparative proteomic analysis of renal proteins from IgA nephropathy model mice and control mice. Clinical and Experimental Nephrology, 2020, 24, 666-679.	1.6	6
3	The Transitional Transmittance Response of ZIF-8 Gas Adsorption Observed Using Terahertz Waves. E-Journal of Surface Science and Nanotechnology, 2018, 16, 142-144.	0.4	3
4	Successful PEGylation of hollow encapsulin nanoparticles from Rhodococcus erythropolis N771 without affecting their disassembly and reassembly properties. Biomaterials Science, 2017, 5, 1082-1089.	5.4	16
5	HSP60 possesses a GTPase activity and mediates protein folding with HSP10. Scientific Reports, 2017, 7, 16931.	3.3	25
6	Improvement of enantioselectivity of the B-type halohydrin hydrogen-halide-lyase from Corynebacterium sp. N-1074. Journal of Bioscience and Bioengineering, 2016, 122, 270-275.	2.2	10
7	Structural and functional characterization of aspartate racemase from the acidothermophilic archaeon Picrophilus torridus. Extremophiles, 2016, 20, 385-393.	2.3	8
8	Catalytic Mechanism of Nitrile Hydratase Subsequent to Cyclic Intermediate Formation: A QM/MM Study. Journal of Physical Chemistry B, 2016, 120, 3259-3266.	2.6	14
9	Crystal structures of halohydrin hydrogenâ€halideâ€lyases from <i>Corynebacterium</i> sp. Nâ€1074. Proteins: Structure, Function and Bioinformatics, 2015, 83, 2230-2239.	2.6	11
10	Packaging guest proteins into the encapsulin nanocompartment from <i>Rhodococcus erythropolis</i> N771. Biotechnology and Bioengineering, 2015, 112, 13-20.	3.3	73
11	Timeâ€Resolved Crystallography of the Reaction Intermediate of Nitrile Hydratase: Revealing a Role for the Cysteinesulfenic Acid Ligand as a Catalytic Nucleophile. Angewandte Chemie - International Edition, 2015, 54, 10763-10767.	13.8	20
12	Spectroscopic and computational studies of nitrile hydratase: insights into geometric and electronic structure and the mechanism of amide synthesis. Chemical Science, 2015, 6, 6280-6294.	7.4	19
13	NADH oxidase and alkyl hydroperoxide reductase subunit C (peroxiredoxin) from<i>Amphibacillus xylanus</i> form an oligomeric assembly. FEBS Open Bio, 2015, 5, 124-131.	2.3	6
14	Two arginine residues in the substrate pocket predominantly control the substrate selectivity of thiocyanate hydrolase. Journal of Bioscience and Bioengineering, 2013, 116, 22-27.	2.2	6
15	Carbonyl Sulfide Hydrolase from <i>Thiobacillus thioparus</i> Strain THI115 Is One of the Î²-Carbonic Anhydrase Family Enzymes. Journal of the American Chemical Society, 2013, 135, 3818-3825.	13.7	82
16	Kinetic and structural studies on roles of the serine ligand and a strictly conserved tyrosine residue in nitrile hydratase. Journal of Biological Inorganic Chemistry, 2010, 15, 655-665.	2.6	26
17	Structural Basis for Catalytic Activation of Thiocyanate Hydrolase Involving Metal-Ligated Cysteine Modification. Journal of the American Chemical Society, 2009, 131, 14838-14843.	13.7	42
18	Novel catalytic activity of nitrile hydratase from Rhodococcus sp. N771. Journal of Bioscience and Bioengineering, 2008, 106, 174-179.	2.2	9

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19	Catalytic Mechanism of Nitrile Hydratase Proposed by Time-resolved X-ray Crystallography Using a Novel Substrate, tert-Butylisonitrile. Journal of Biological Chemistry, 2008, 283, 36617-36623.	3.4	57
20	Structure of Thiocyanate Hydrolase: A New Nitrile Hydratase Family Protein with a Novel Five-coordinate Cobalt(III) Center. Journal of Molecular Biology, 2007, 366, 1497-1509.	4.2	75
21	Mutational Study on Î±Gln90 of Fe-Type Nitrile Hydratase fromRhodococcussp. N771. Bioscience, Biotechnology and Biochemistry, 2006, 70, 881-889.	1.3	30
22	Sulfur K-Edge XAS and DFT Calculations on Nitrile Hydratase:Â Geometric and Electronic Structure of the Non-heme Iron Active Site. Journal of the American Chemical Society, 2006, 128, 533-541.	13.7	91
23	Thiocyanate Hydrolase Is a Cobalt-Containing Metalloenzyme with a Cysteine-Sulfinic Acid Ligand. Journal of the American Chemical Society, 2006, 128, 728-729.	13.7	48
24	Functional expression of thiocyanate hydrolase is promoted by its activator protein, P15K. FEBS Letters, 2006, 580, 4667-4672.	2.8	14
25	Protonation Structures of Cys-Sulfinic and Cys-Sulfenic Acids in the Photosensitive Nitrile Hydratase Revealed by Fourier Transform Infrared Spectroscopyâ€. Biochemistry, 2003, 42, 11642-11650.	2.5	65
26	Motif CXCC in nitrile hydratase activator is critical for NHase biogenesis in vivo. FEBS Letters, 2003, 553, 391-396.	2.8	46
27	A Novel Inhibitor for Fe-type Nitrile Hydratase:Â 2-Cyano-2-propyl Hydroperoxide. Journal of the American Chemical Society, 2003, 125, 11532-11538.	13.7	50
28	Studies on photoreactive enzyme --nitrile hydratase--. Progress in Biotechnology, 2002, 22, 159-168.	0.2	0
29	Fe-type nitrile hydratase. Journal of Inorganic Biochemistry, 2001, 83, 247-253.	3.5	126
30	What evidences were elucidated about photoreactive nitrile hydratase?. Journal of Molecular Catalysis B: Enzymatic, 2000, 10, 81-86.	1.8	15
31	Postâ€translational modification is essential for catalytic activity of nitrile hydratase. Protein Science, 2000, 9, 1024-1030.	7.6	156
32	Cobalt-substituted Fe-type nitrile hydratase ofRhodococcussp. N-771. FEBS Letters, 2000, 465, 173-177.	2.8	51
33	An enzyme controlled by light: the molecular mechanism of photoreactivity in nitrile hydratase. Trends in Biotechnology, 1999, 17, 244-248.	9.3	83
34	Tertiary and Quaternary Structures of Photoreactive Fe-Type Nitrile Hydratase fromRhodococcussp. N-771:Â Roles of Hydration Water Molecules in Stabilizing the Structures and the Structural Origin of the Substrate Specificity of the Enzymeâ€,â€¡. Biochemistry, 1999, 38, 9887-9898.	2.5	75
35	Novel non-heme iron center of nitrile hydratase with a claw setting of oxygen atoms. Nature Structural Biology, 1998, 5, 347-351.	9.7	342
36	Structure of the Photoreactive Iron Center of the Nitrile Hydratase from Rhodococcus sp. N-771. Journal of Biological Chemistry, 1997, 272, 29454-29459.	3.4	85

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37	Ligand-Binding Enhances the Affinity of Dimerization of the Extracellular Domain of the Epidermal Growth Factor Receptor. Journal of Biochemistry, 1997, 122, 116-121.	1.7	55
38	Activity Regulation of Photoreactive Nitrile Hydratase by Nitric Oxide. Journal of the American Chemical Society, 1997, 119, 3785-3791.	13.7	116
39	K+is an indispensable cofactor for GrpE stimulation of ATPase activity of DnaKÂ·DnaJ complex fromThermus thermophilus. FEBS Letters, 1997, 412, 633-636.	2.8	22
40	A single mutation at the catalytic site of TF1-Î±3Î²3Î³ complex switches the kinetics of ATP hydrolysis from negative to positive cooperativity. FEBS Letters, 1997, 413, 55-59.	2.8	5
41	Resonance Raman Evidence that Photodissociation of Nitric Oxide from the Non-Heme Iron Center Activates Nitrile Hydratase fromRhodococcussp. N-771â€. Biochemistry, 1996, 35, 16777-16781.	2.5	66
42	Location of the Non-Heme Iron Center on the Î± Subunit of Photoreactive Nitrile Hydratase fromRhodococcussp. N-771. Biochemical and Biophysical Research Communications, 1996, 221, 146-150.	2.1	31
43	Tyr-341 of the Î² Subunit Is a Major Km-Determining Residue of TF1-ATPase: Parallel Effect of Its Mutations on Kd(ATP) of the Î² Subunit and on Km(ATP) of the Î±3Î²3Î³ Complex1. Journal of Biochemistry, 1994, 115, 789-796.	1.7	19
44	In vivo affinity label of a protein expressed inEscherichia coli. FEBS Letters, 1993, 336, 231-235.	2.8	7
45	Aromatic rings of tyrosine residues at adenine nucleotide binding sites of the Î² subunits of F1-ATPase are not necessary for ATPase activity. Biochemical and Biophysical Research Communications, 1990, 168, 372-378.	2.1	13