

- [45] [2008]
 "State-sensitive Monitoring of Gold Nanoparticle Sites on Titania and the Interaction of the Positive Au site with O₂ by Au L α_1 -selecting X-ray Absorption Fine Structure"
 Y. Izumi, D. Obaid, K. Konishi, D. Masih, M. Takagaki, Y. Terada, H. Tanida, T. Uruga
 Inorganica Chimica Acta, **361**, (2008), 1149-1156
- [46] "Observation of Arsenic Transfer in Leaf Tissue of Hyperaccumulator Fern by Utilizing Synchrotron Radiation Micro-XRF Imaging"
 N. Kitajima, T. Kasiwabara, N. Fukuda, S. Endou, A. Hokura, Y. Terada, I. Nakai
 Chemistry Letters, **37**, (2008), 32-33

BL38B1

Refereed Journals

- [1] [2001]
 "Chemical Analysis for Fe in LiCoO₂ by XAFS Analysis"
 H. Ohzono, M. Kouno, H. Miyake, H. Ohyama
 Analytical Sciences, **17.Supplement**, (2001), i135-i137
- [2] [2002]
 "Determinants of the Inhibition of a Taiwan Habu Venom Metalloproteinase by Its Endogenous Inhibitors Revealed by X-ray Crystallography and Synthetic Inhibitor Analogues"
 K. Huang, S. Chiou, T. Ko, Andrew H.-J. Wang
 European Journal of Biochemistry, **269**, (2002), 3047-3056
- [3] "Relationship between the Li Ionic Conduction and the Local Structures in B-Site Substituted Perovskite Compounds, (Li_{0.1}La_{0.3})_{1+x}M_xNb_{1-x}O₃ (M=Zr, Ti; x=0, 0.05)"
 M. Nakayama, H. Ikuta, Y. Uchimoto, M. Wakihara, Y. Terada
 Applied Physics Letters, **81**, (2002), 2977-2979
- [4] "Local Structure around Mn in Ferromagnetic GaMnN Film Studied by X-Ray Absorption Fine Structure"
 M. Sato, H. Tanida, K. Kato, T. Sasaki, Y. Yamamoto, S. Sonoda, S. Shimizu, H. Hori
 Japanese Journal of Applied Physics, **41**, (2002), 4513-4514
- [5] "Crystal Structure of the RuvA-RuvB Complex: A Structural Basis for the Holliday Junction Migrating Motor Machinery"
 K. Yamada, T. Miyata, D. Tsuchiya, T. Oyama, Y. Fujiwara, T. Ohnishi, H. Iwasaki, H. Shinagawa, M. Ariyoshi, K. Mayanagi, K. Morikawa
 Molecular Cell, **10**, (2002), 671-681
- [6] [2003]
 "YAP Imager and Its Application with High-Energy X-Ray Beams up to 150 keV"
 K. Hirota, H. Toyokawa, M. Suzuki, T. Kubo, M. Nomachi, Y. Sugaya, M. Yosoi, A. Gorin, I. Manuilov, A. Riazantsev, K. Kuroda
 Nuclear Instruments and Methods in Physics Research Section A, **510**, (2003), 83-91
- [7] "A Fast Position Encoding System for a High-Energy X-Ray YAP Imager"
 K. Hirota, H. Toyokawa, M. Suzuki, T. Kudo, M. Nomachi, Y. Sugaya, M. Yosoi
 Nuclear Instruments and Methods in Physics Research Section A, **513**, (2003), 187-192
- [8] "Crystal Structure of *Escherichia coli* Thioesterase I/Protease I/Lysophospholipase L₁: Consensus Sequence Blocks Constitute the Catalytic Center of SGNH-hydrolases through a Conserved Hydrogen Bond Network"
 Y. Lo, S. Lin, J. Shaw, Y. Liaw
 Journal of Molecular Biology, **330**, (2003), 539-551
- [9] "Structural and Electronic Investigation of TbPdAl by Means of EXAFS and XANES Measurements"
 M. Mizumaki, K. Yoshii, H. Kitazawa, H. Tanida
 Journal of Solid State Chemistry, **171**, (2003), 291-294
- [10] "Changes in Local Structure during Electrochemical Li Insetion into A-Site Deficient Perovskite Oxides, La_{1/3}NbO₃"
 M. Nakayama, H. Ikuta, Y. Uchimoto, M. Wakihara, Y. Terada, T. Miyanaga, I. Watanabe
 The Journal of Physical Chemistry B, **107**, (2003), 10715-10721
- [11] "X-Ray and Biochemical Anatomy of an Archaeal XPF/RAD1/Mus81 Family Nuclease: Similarity between Its Endonuclease Domain and Restriction Enzyme"
 T. Nishino, K. Komori, Y. Ishino, K. Morikawa
 Structure, **11**, (2003), 445-457
- [12] "Preparation and Crystallization of Human Flap Endonuclease FEN-1 in Complex with Proliferating-Cell Nuclear Antigen, PCNA"
 S. Sakurai, K. Kitano, K. Okada, K. Hamada, H. Morioka, T. Hakoshima
 Acta Crystallographica Section D, **59**, (2003), 933-935

- [13] "A 128-Channel Microstrip Germanium Detector for Compton Scattering Experiments at SPring-8 Facility"
M. Suzuki, H. Toyokawa, K. Hirota, M. Itou, M. Mizumaki, Y. Sakurai, N. Hiraoka, N. Sakai
Nuclear Instruments and Methods in Physics Research Section A, **510**, (2003), 63-75
- [14] "Crystallization and Preliminary Crystallographic Study of the Outer-Membrane Lipoprotein Receptor LolB, a Member of the Lipoprotein Localization Factors"
K. Takeda, H. Miyatake, N. Yokota, S. Matsuyama, H. Tokuda, K. Miki
Acta Crystallographica Section D, **59**, (2003), 1224-1226
- [15] "Crystal Structures of Bacterial Lipoprotein Localization Factors, LolA and LolB"
K. Takeda, H. Miyatake, N. Yokota, S. Matsuyama, H. Tokuda, K. Miki
The EMBO Journal, **22**, (2003), 3199-3209
- [16] "A Practical Phasing Procedure using the MAD Method without the Aid of XAFS Measurements: Successful Solution in the Structure Determination of the Outer-Membrane Lipoprotein Carrier LolA"
K. Takeda, H. Miyatake, N. Yokota, S. Matsuyama, H. Tokuda, K. Miki
Acta Crystallographica Section D, **59**, (2003), 1440-1446
- [17] "Structure, Magnetism and Transport of $\text{La}_2\text{NiRuO}_6$ "
K. Yoshii, H. Abe, M. Mizumaki, H. Tanida, N. Kawamura
Journal of Alloys and Compounds, **348**, (2003), 236-240
- [18] "Catalytic Activity of Pd Loaded on $\text{WO}_3/\text{Al}_2\text{O}_3$ for $\text{NO}-\text{CH}_4-\text{O}_2$ in the Presence of Water Vapor"
R. Yoshimoto, K. Okumura, M. Niwa
Catalysis Today, **84**, (2003), 159-164
- [2004]
- [19] "Structural Basis for Ca^{2+} -induced Activation of Human PAD4"
K. Arita, H. Hashimoto, T. Shimizu, K. Nakashima, M. Yamada, M. Sato
Nature Structural and Molecular Biology, **11**, (2004), 777-783
- [20] "Crystallization and Preliminary X-ray Crystallographic Study of the Editing Domain of *Thermus thermophilus* Isoleucyl-tRNA Synthetase Complexed with Pre- and Post-Transfer Editing-Substrate Analogues"
R. Fukunaga, S. Yokoyama
Acta Crystallographica Section D, **60**, (2004), 1900-1902
- [21] "The Valence State of Yb Metal under High Pressure Determined by XANES Measurement up to 34.6 GPa"
A. Fuse, G. Nakamoto, M. Kurisu, N. Ishimatsu, H. Tanida
Journal of Alloys and Compounds, **376**, (2004), 34-37
- [22] "Chitobiose Phosphorylase from *Vibrio proteolyticus*, a Member of Glycosyl Transferase Family 36, Has a Clan GH-L-like (α/α)₆ Barrel Fold"
M. Hidaka, Y. Honda, M. Kitaoka, S. Nirasawa, K. Hayashi, H. Shoun, T. Wakagi, S. Fushinobu
Structure, **12**, (2004), 937-947
- [23] "Structural Basis for Channelling Mechanism of a Fatty Acid β -Oxidation Multienzyme Complex"
M. Ishikawa, D. Tsuchiya, T. Oyama, Y. Tsunaka, K. Morikawa
The EMBO Journal, **23**, (2004), 2745-2754
- [24] "Crystal Structure of Unsaturated Glucuronyl Hydrolase, Responsible for the Degradation of Glycosaminoglycan, from *Bacillus* sp. GL1 at 1.8 Å Resolution"
T. Itoh, S. Akao, W. Hashimoto, B. Mikami, K. Murata
The Journal of Biological Chemistry, **279**, (2004), 31804-31812
- [25] "Structure Analysis of PH1161 Protein, a Transcriptional Activator TenA Homologue from the Hyperthermophilic Archaeon *Pyrococcus horikoshii*"
H. Itou, M. Yao, N. Watanabe, I. Tanaka
Acta Crystallographica Section D, **60**, (2004), 1094-1100
- [26] "Crystal Structures and Electron Micrographs of Fungal Volvatoxin A2"
S. Lin, Y. Lo, J. Lin, Y. Liaw
Journal of Molecular Biology, **343**, (2004), 477-491
- [27] "Crystallization and Preliminary X-ray Diffraction Study of the Catalytic Subunit of Archaeal H^+ -transporting ATP Synthase from *Pyrococcus horikoshii* OT3"
Y. Maegawa, H. Morita, M. Yao, N. Watanabe, I. Tanaka
Acta Crystallographica Section D, **60**, (2004), 1484-1486
- [28] "Mutational and Structural Analysis of Cobalt-Containing Nitrile Hydratase on Substrate and Metal Binding"
A. Miyanaga, S. Fushinobu, K. Ito, H. Shoun, T. Wakagi
European Journal of Biochemistry, **271**, (2004), 429-438

- [29] "Expression, Purification, Crystallization and Preliminary X-ray Analysis of α -L-Arabinofuranosidase B from *Aspergillus kawachii*"
A. Miyanaga, T. Koseki, H. Matsuzawa, T. Wakagi, H. Shoun, S. Fushinobu
Acta Crystallographica Section D, **60**, (2004), 1286-1288
- [30] "Structural Insights into Substrate Specificity and Function of Glucodextranase"
M. Mizuno, T. Tonzuka, S. Suzuki, R. Uotsu-Tomita, S. Kamitori, A. Nishikawa, Y. Sakano
The Journal of Biological Chemistry, **279**, (2004), 10575-10583
- [31] "The N-Terminal Domain of the Replication Initiator Protein RepE is a Dimerization Domain Forming a Stable Dimer"
A. Nakamiura, H. Komori, G. Kobayashi, A. Kita, C. Wada, K. Miki
Biochemical and Biophysical Research Communications, **315**, (2004), 10-15
- [32] "Crystallization and Preliminary X-ray Analysis of *Escherichia coli* MutT in Binary and Ternary Complex Forms"
T. Nakamura, T. Doi, M. Sekiguchi, Y. Yamagata
Acta Crystallographica Section D, **60**, (2004), 1641-1643
- [33] "Development of a Portable Free-Air Ionization Chamber as an Absolute Intensity Monitor for High-Energy Synchrotron Radiation up to 150 keV"
N. Nariyama, N. Kishi, S. Ohnishi
Nuclear Instruments and Methods in Physics Research Section A, **524**, (2004), 324-331
- [34] "The Crystal Structure of Xanthine Oxidoreductase during Catalysis: Implications for Reaction Mechanism and Enzyme Inhibition"
K. Okamoto, K. Matsumoto, B. Eger, E. Pai, R. Hille, T. Nishino
Proceedings of the National Academy of Sciences of the United States of America, **101**, (2004), 7931-7936
- [35] "Structural Evidence for Direct Hydride Transfer from NADH to Cytochrome P450nor"
R. Oshima, S. Fushinobu, F. Su, L. Zhang, N. Takaya, H. Shoun
Journal of Molecular Biology, **342**, (2004), 207-217
- [36] "Transparent Ferromagnetic Semiconductor Fe-Zn-O Heteroepitaxial Films"
T. Shinagawa, M. Izaki, Y. Matsumura, K. Murase, Y. Awakura
Electrochemical and Solid-State Letters, **7**, (2004), G235-G237
- [37] "Chemical Speciation of Trace Zinc in Ordinary Portland Cement Using X-ray Absorption Fine Structure Analysis"
I. Tsuyumoto, H. Uchikawa
Journal of the American Ceramic Society, **87**, (2004), 2294-2296
- [38] "Crystallization and Preliminary X-ray Diffraction Studies of the Hyperthermophilic Archaeal Sulfoxidase Having the Unique Rieske [2Fe-2S] Cluster Environment"
T. Uchiyama, A. Kounosu, T. Sato, N. Tanaka, T. Iwasaki, T. Kumasaka
Acta Crystallographica Section D, **60**, (2004), 1487-1489
- [39] "A Large-Area CMOS Imager as an X-ray Detector for Synchrotron Radiation Experiments"
N. Yagi, M. Yamamoto, K. Uesugi, K. Inoue
Journal of Synchrotron Radiation, **11**, (2004), 347-352
- [40] "Crystallographic Structures of Two Bisphosphonate: 1-Deoxyxylulose-5-Phosphate Reductoisomerase Complexes"
S. Yajima, K. Hara, J. Sanders, F. Yin, K. Ohsawa, J. Wiesner, H. Jomaa, E. Oldfield
Journal of the American Chemical Society, **126**, (2004), 10824-10825
- [41] "Crystallization and Preliminary X-ray Analysis of Pyridoxal 4-Dehydrogenase, the Second Enzyme in Degradation Pathway I of Pyridoxine"
N. Yokochi, Y. Yoshikane, Y. Yagi, B. Mikami
Acta Crystallographica Section D, **D60**, (2004), 2061-2062
- [42] "Crystal Structure of Peptide Deformylase from *Staphylococcus aureus* in Complex with Actinonin, a Naturally Occurring Antibacterial Agent"
H. Yoon, H. Kim, S. Lee, H. Kim, J. Lee, B. Mikami, S. Se Won
Proteins: Structure, Function, and Bioinformatics, **57**, (2004), 639-642
- [43] "Neutron Diffraction and X-ray Absorption Study of $\text{CaMn}_{0.6}\text{Ru}_{0.4}\text{O}_3$ "
K. Yoshii, A. Nakamura, M. Mizumaki, H. Tanida, N. Kawamura, H. Abe, Y. Ishii, Y. Shimojo, Y. Morii
Journal of Magnetism and Magnetic Materials, **272-276**, (2004), E609-E611
[2005]
- [44] "Crystallization and Preliminary X-ray Diffraction Study of BchU, a Methyltransferase from *Chlorobium tepidum* Involved in Bacteriochlorophyll *c* Biosynthesis"
J. Harada, K. Wada, H. Yamaguchi, H. Oh-oka, H. Tamiaki, K. Fukuyama
Acta Crystallographica Section F, **61**, (2005), 712-714

- [45] "Crystallization of a 2:2 Complex of Granulocyte-Colony Stimulating Factor (GCSF) with the Ligand-Binding Region of GCSF Receptor"
E. Honjo, T. Tamada, T. Koshiba, S. Mine, Y. Matsukura, Y. Maeda, T. Okamoto, M. Ishibashi, M. Tokunaga, R. Kuroki
Acta Crystallographica Section F, **61**, (2005), 788-790
- [46] "XAFS Analyses of Zinc Compound in Corrosion Product for Magnesium Alloy of Super Plastic Processing"
T. Honma, H. Mori, K. Higashi, H. Okado, K. Maehara, I. Hirose, N. Umesaki
Physica Scripta, **T115**, (2005), 567-569
- [47] "The CGL2612 Protein from *Corynebacterium glutamicum* is a Drug Resistance-Related Transcriptional Repressor: Structural and Functional Analysis of a Newly Identified Transcription Factor from Genomic DNA Analysis"
H. Itoh, U. Okada, H. Suzuki, M. Yao, M. Wachi, N. Watanabe, I. Tanaka
The Journal of Biological Chemistry, **280**, (2005), 38711-38719
- [48] "Crystal Structure of a Human Kynurenine Aminotransferase II Homologue from *Pyrococcus horikoshii* OT3 at 2.20 Å Resolution"
S. Kanaya, H. Chon, H. Matsumura, Y. Koga, K. Takano
Proteins: Structure, Function, and Bioinformatics, **61**, (2005), 685-688
- [49] "Crystal Structures of RsbQ, a Stress-Response Regulator in *Bacillus subtilis*"
T. Kaneko, N. Tanaka, T. Kumasaka
Protein Science, **14**, (2005), 558-565
- [50] "Structural Analysis of Threonine 342 Mutants of Soybean β -Amylase: Role of a Conformational Change of the Inner Loop in the Catalytic Mechanism"
Y. Kang, A. Tanabe, M. Adachi, S. Utsumi, B. Mikami
Biochemistry, **44**, (2005), 5106-5116
- [51] "Crystal Structure of Acid Blue and Alkaline Purple Forms of Bacteriorhodopsin"
T. Kouyama, H. Okumura, M. Murakami
Journal of Molecular Biology, **351**, (2005), 481-495
- [52] "Structural Mechanism for Coordination of Proofreading and Polymerase Activities in Archaeal DNA Polymerases"
T. Kuroita, H. Matsumura, N. Yokota, M. Kitabayashi, H. Hashimoto, T. Inoue, T. Imanaka, Y. Kai
Journal of Molecular Biology, **351**, (2005), 291-298
- [53] "Crystal Structure of *Bacillus* sp. GL1 Xanthan Lyase Complexed with a Substrate: Insights into the Enzyme Reaction Mechanism"
Y. Maruyama, W. Hashimoto, B. Mikami, K. Murata
Journal of Molecular Biology, **350**, (2005), 974-986
- [54] "Structural Studies on a Human DEAD-box RNA Helicase, rck/p54"
T. Matsui
Doctor Thesis (Tokyo Institute of Technology), (2005), 1-82
- [55] "Structure of Aluminium-Bound Ovotransferrin at 2.15 Å Resolution"
K. Mizutani, B. Mikami, S. Aibara, M. Hirose
Acta Crystallographica Section D, **61**, (2005), 1636-1642
- [56] "NDA-binding Mode and the Significance of Intersubunit Contact Revealed by the Crystal Structure of *Mycobacterium tuberculosis* NDA Kinase-NDA Complex"
S. Mori, M. Yamasaki, Y. Maruyama, K. Momma, S. Kawai, W. Hashimoto, B. Mikami, K. Murata
Biochemical and Biophysical Research Communications, **327**, (2005), 500-508
- [57] "Conformational Dynamics of Complementary Determining Region H3 of an Anti-Dansyl Fv Fragment in the Presence of Its Hapten"
M. Nakasako, T. Oka, M. Mashumo, H. Takahashi, I. Shimada, Y. Yamaguchi, K. Kato, Y. Arata
Journal of Molecular Biology, **351**, (2005), 627-640
- [58] "Responses of GafChromic Films for Distribution of Extremely High Doses from Synchrotron Radiation"
N. Nariyama
Applied Radiation and Isotopes, **62**, (2005), 693-697
- [59] "Overexpression, Purification and Crystallization of an Archaeal DNA Ligase from *Pyrococcus furiosus*"
H. Nishida, D. Tsuchiya, Y. Ishino, K. Morikawa
Acta Crystallographica Section F, **61**, (2005), 1100-1102
- [60] "Crystal Structure and Functional Implications of *Pyrococcus furiosus* Hef Helicase Domain Involved in Branched DNA Processing"
T. Nishino, K. Komori, D. Tsuchiya, Y. Ishino, K. Morikawa
Structure, **13**, (2005), 143-153

- [61] "Mechanism of the Conversion of Xanthine Dehydrogenase to Xanthine Oxidase"
T. Nishino, K. Okamoto, T. Matsumura, Bryan T. Eger, Emil F. Pai, T. Nishino
The Journal of Biological Chemistry, **280**, (2005), 24888-24894
- [62] "Crystallization and Preliminary X-ray Crystallographic Analysis of Extracellular Giant Hemoglobin from Pogonophoran *Oligobranchia mashikoi*"
N. Numoto, T. Nakagawa, A. Kita, Y. Sasayama, Y. Fukumori, K. Miki
Biochimica et Biophysica Acta - Proteins and Proteomics, **1750**, (2005), 173-176
- [63] "Structure of an Extracellular Giant Haemoglobin of the Gutless Beard Worm *Oligobranchia mashikoi*"
N. Numoto, T. Nakagawa, A. Kita, Y. Sasayama, Y. Fukumori, K. Miki
Proceedings of the National Academy of Sciences of the United States of America, **102**, (2005), 14521-14526
- [64] "Crystal Structure of the Alginate (Poly α -L-guluronate) Lyase from *Corynebacterium* sp. at 1.2 Å Resolution"
T. Osawa, T. Muramatsu, M. Kimura, Y. Matsubara, Y. Kakuta
Journal of Molecular Biology, **345**, (2005), 1111-1118
- [65] "Structural Basis for Recruitment of Human Flap Endonuclease 1 to PCNA"
S. Sakurai, K. Kitano, H. Yamaguchi, K. Hamada, K. Okada, K. Fukuda, M. Uchida, E. Ohtsuka, H. Morioka, T. Hakoshima
The EMBO Journal, **24**, (2005), 683-693
- [66] "Localized Morphometric Deformations of Small Airways and Alveoli in Intact Mouse Lungs under Quasi-Static Inflation"
T. Sera, K. Uesugi, N. Yagi
Respiratory Physiology & Neurobiology, **147**, (2005), 51-63
- [67] "Refraction-Enhanced Tomography of Mouse and Rabbit Lungs"
T. Sera, K. Uesugi, N. Yagi
Medical Physics, **32**, (2005), 2787-2792
- [68] "Characterization of Transparent Ferromagnetic Fe:ZnO Semiconductor Films Chemically Prepared from Aqueous Solutions"
T. Shinagawa, M. Izaki, H. Inui, K. Murase, Y. Awakura
Journal of the Electrochemical Society, **152**, (2005), G736-G741
- [69] "Crystal Structure of a Biologically Functional Form of PriB from *Escherichia coli* Reveals a Potential Single-Stranded DNA-Binding Site"
S. Shioi, Y. Abe, T. Ose, K. Maenaka, M. Shiroishi, D. Kohda, T. Katayama, T. Ueda
Biochemical and Biophysical Research Communications, **326**, (2005), 766-776
- [70] "Crystallization of Δ^1 -tetrahydrocannabinolic Acid (THCA) Synthase from *Cannabis sativa*"
Y. Shoyama, A. Takeuchi, F. Taura, T. Tamada, M. Adachi, R. Kuroki, Y. Shoyama, S. Morimoto
Acta Crystallographica Section F, **61**, (2005), 799-801
- [71] "Molecular Basis of Alanine Discrimination in Editing Site"
M. Sokabe, A. Okada, M. Yao, T. Nakashima, I. Tanaka
Proceedings of the National Academy of Sciences of the United States of America, **102**, (2005), 11669-11674
- [72] "Structure of ATP-dependent Phosphoenolpyruvate Carboxykinase from *Thermus thermophilus* HB8 Showing the Structural Basis of Induced Fit and Thermostability"
M. Sugahara, N. Ohshima, Y. Ukita, M. Sugahara, N. Kunishima
Acta Crystallographica Section D, **61**, (2005), 1500-1507
- [73] "Identification of Single Mn²⁺ Binding Sites in the Mutant Proteins of *E. coli* RNase HI at Glu48 and/or Asp134 by X-ray Crystallography"
Y. Tsunaka, K. Takano, H. Matsumura, Y. Yamagata, S. Kanaya
Journal of Molecular Biology, **345**, (2005), 1171-1183
- [74] "Crystallization and Preliminary X-ray Analysis of Alginate Lyases A1-II and A1-II' from *Sphingomonas* sp.A1"
M. Yamasaki, K. Ogura, S. Moriwaki, W. Hashimoto, K. Murata, B. Mikami
Acta Crystallographica Section F, **61**, (2005), 288-290
[2006]
- [75] "Crystal Structure and Structure-based Mutational Analyses of RNase HIII from *Bacillus stearothermophilus*: A New Type 2 RNase H with TBP-like Substrate-binding Domain at the N Terminus"
H. Chon, H. Matsumura, Y. Koga, K. Takano, S. Kanaya
Journal of Molecular Biology, **356**, (2006), 165-178
- [76] "Induced-fitting and Electrostatic Potential Change of PcyA upon Substrate Binding Demonstrated by the Crystal Structure of the Substrate-free Form"
Y. Hagiwara, M. Sugishima, Y. Takahashi, K. Fukuyama
FEBS Letters, **580**, (2006), 3823-3828

- [77] "Structure Basis for Antitumor Effect of Aplyronine A"
K. Hirata, S. Muraoka, K. Suenaga, T. Kuroda, K. Kato, H. Tanaka, M. Yamamoto, M. Takata, K. Yamada, H. Kigoshi
Journal of Molecular Biology, **356**, (2006), 945-954
- [78] "D-3-Hydroxybutyrate Dehydrogenase from *Pseudomonas fragi*: Molecular Cloning of the Enzyme Gene and Crystal Structure of the Enzyme"
K. Ito, Y. Nakajima, E. Ichihara, K. Ogawa, N. Katayama, K. Nakashima, T. Yoshimoto
Journal of Molecular Biology, **355**, (2006), 722-733
- [79] "Substrate Recognition by Unsaturated Glucuronyl Hydrolase from *Bacillus* sp. GL1"
T. Itoh, W. Hashimoto, B. Mikami, K. Murata
Biochemical and Biophysical Research Communications, **344**, (2006), 253-262
- [80] "A Novel Glycoside Hydrolase Family 105: The Structure of Family 105 Unsaturated Rhamnogalacturonyl Hydrolase Complexed with a Disaccharide in Comparison with Family 88 Enzyme Complexed with the Disaccharide"
T. Itoh, A. Ochiai, B. Mikami, W. Hashimoto, K. Murata
Journal of Molecular Biology, **360**, (2006), 573-585
- [81] "Structure of Unsaturated Rhamnogalacturonyl Hydrolase Complexed with Substrate"
T. Itoh, A. Ochiai, B. Mikami, W. Hashimoto, K. Murata
Biochemical and Biophysical Research Communications, **347**, (2006), 1021-1029
- [82] "Crystal Structure of Unsaturated Glucuronyl Hydrolase Complexed with Substrate: Molecular Insights into Its Catalytic Reaction Mechanism"
T. Itoh, W. Hashimoto, B. Mikami, K. Murata
The Journal of Biological Chemistry, **281**, (2006), 29807-29816
- [83] "Crystallization and preliminary X-ray analysis of the complex of NADH and 3 α -hydroxysteroid Dehydrogenase from *Pseudomonas* sp. B-0831"
S. Kataoka, S. Nakamura, T. Ohkubo, S. Uchiyama, Y. Kobayashi, M. Oda
Acta Crystallographica Section F, **62**, (2006), 569-571
- [84] "Probing, Inhibition, and Crystallographic Characterization of Metallo- β -lactamase (IMP-1) with Fluorescent Agents Containing Dansyl and Thiol Groups"
H. Kurosaki, Y. Yamaguchi, H. Yasuzawa, W. Jin, Y. Yamagata, Y. Arakawa
ChemMedChem, **1**, (2006), 969-972
- [85] "Overexpression, Purification and Preliminary X-ray Analysis of Pullulanase from *Bacillus subtilis* Strain 168"
D. Malle, T. Itoh, W. Hashimoto, K. Murata, S. Utsumi, B. Mikami
Acta Crystallographica Section F, **62**, (2006), 381-384
- [86] "Purification, Crystallization and Preliminary X-ray Diffraction Studies of UDP-*N*-acetylglucosamine Pyrophosphorylase from *Candida albicans*"
D. Maruyama, Y. Nishitani, T. Nonaka, A. Kita, T. Fukami, T. Mio, H. Yamada-Okabe, T. Yamada-Okabe, K. Miki
Acta Crystallographica Section F, **62**, (2006), 1206-1208
- [87] "Endophilin BAR Domain Drives Membrane Curvature by Two Newly Identified Structure-based Mechanism"
M. Masuda, S. Takeda, M. Sone, T. Ohki, H. Mori, Y. Kamioka, N. Mochizuki
The EMBO Journal, **25**, (2006), 2889-2897
- [88] "Apo- and Holo-structures of 3 α -Hydroxysteroid Dehydrogenase from *Pseudomonas* sp. B-0831: Loop-Helix Transition Induced by Coenzyme Binding"
S. Nakamura, M. Oda, S. Kataoka, S. Ueda, S. Uchiyama, T. Yoshida, Y. Kobayashi, T. Ohkubo
The Journal of Biological Chemistry, **281**, (2006), 31876-31884
- [89] "Crystal Structure of Thioredoxin Peroxidase from Aerobic Hyperthermophilic Archaeon *Aeropyrum pernix* K1"
T. Nakamura, T. Yamamoto, T. Inoue, H. Matsumura, A. Kobayashi, Y. Hagihara, K. Uegaki, M. Ataka, Y. Kai, K. Ishikawa
Proteins: Structure, Function, and Bioinformatics, **62**, (2006), 822-826
- [90] "Crystallization and Preliminary X-ray Analysis of Human MTH1 Complexed with Two Oxidized Nucleotides, 8-oxo-dGMP and 2-oxo-dATP"
T. Nakamura, Y. Kitaguchi, M. Miyazawa, H. Kamiya, S. Toma, S. Ikemizu, M. Shirakawa, Y. Nakabeppu, Y. Yamagata
Acta Crystallographica Section F, **62**, (2006), 1283-1285
- [91] "Ion Recombination in Parallel-Plate Free-Air Ionization Chambers for Synchrotron Radiation"
N. Nariyama
Physics in Medicine and Biology, **51**, (2006), 5199-5209

- [92] "Crystallization and Preliminary X-ray Analysis of the tRNA Thiolation Enzyme MnmA from *Escherichia coli* Complexed with tRNA^{Glu}"
T. Numata, Y. Ikeuchi, S. Fukai, H. Adachi, H. Matsumura, K. Takano, S. Murakami, T. Inoue, Y. Mori, T. Sasaki, T. Suzuki, O. Nureki
Acta Crystallographica Section F, **42**, (2006), 368-371
- [93] "Crystallization and Preliminary X-ray Analysis of an Exotype Alginate lyase Atu3025 from *Agrobacterium tumefaciens* Strain C58, a Member of Polysaccharide Lyase Family 15"
A. Ochiai, M. Yamasaki, W. Hashimoto, B. Mikami, K. Murata
Acta Crystallographica Section F, **62**, (2006), 486-488
- [94] "Crystallization and Preliminary X-ray Analysis of the Complex of NADH and 3 α -hydroxysteroid Dehydrogenase from *Pseudomonas* sp. B-0831"
M. Oda, S. Kataoka, S. Nakamura, T. Ohkubo, S. Ueda, S. Uchiyama, Y. Kobayashi
Acta Crystallographica Section F, **62**, (2006), 569-571
- [95] "Crystallization and Preliminary Crystallographic Analysis of the N-terminal Domain of PriA from *Escherichia coli* "
K. Sasaki, T. Ose, K. Maenaka, T. Tanaka, T. Mizukoshi, T. Ishigaki, H. Masai, D. Kohda
Biochimica et Biophysica Acta - Protein and Proteomics, **1764**, (2006), 157-160
- [96] "Structural Basis for Histone N-terminal Recognition by Human Peptidylarginine Deiminase 4"
M. Sato, K. Arita, T. Shimizu, H. Hashimoto, Y. Hidaka, M. Yamada
Proceedings of the National Academy of Sciences of the United States of America, **103**, (2006), 5291-5296
- [97] "Thermal Phase Transformation of ZnO-Based Transparent Ferromagnetic Composite Films and the Change in Magnetic Characteristics"
T. Shinagawa, M. Izaki, Y. Matsumura, T. Uruga, T. Nakamura, K. Murase, Y. Awakura
Journal of the Electrochemical Society, **153**, (2006), G168-G174
- [98] "Crystal Structure of the Human Monocyte-Activating Receptor, "Group 2" Leukocyte Ig-like Receptor A5 (LILRA5/LIR9/ILT11)"
M. Shiroishi, M. Kajikawa, K. Kuroki, T. Ose, D. Kohda, K. Maenaka
The Journal of Biological Chemistry, **281**, (2006), 19536-19544
- [99] "Efficient Leukocyte Ig-like Receptor Signaling and Crystal Structure of Disulfide-linked HLA-G Dimer"
M. Shiroishi, I. Shiratori, K. Kuroki, T. Ose, L. Rasubala, D. Kohda, H. Arase, K. Tsumoto, I. Kumagai, K. Maenaka
The Journal of Biological Chemistry, **281**, (2006), 10439-10447
- [100] "Preparation and Crystallization of the Disulfide-Linked HLA-G Dimer"
M. Shiroishi, D. Kohda, K. Maenaka
Biochimica et Biophysica Acta - Protein and Proteomics, **1764**, (2006), 985-988
- [101] "Application of X-ray Absorption Near-Edge Structure (XANES) using Bent Crystal Analyzer to Speciation of Trace Os in Iron Meteorites"
Y. Takahashi, T. Uruga, H. Tanida, Y. Terada, S. Nakai, H. Shimizu
Analytica Chimica Acta, **558**, (2006), 332-336
- [102] "Homodimeric Cross-Over Structure of the Human Granulocyte Colony-Stimulating Factor (G-CSF) Receptor Signaling Complex"
T. Tamada, E. Honjo, Y. Maeda, T. Okamoto, M. Ishibashi, M. Tokunaga, R. Kuroki
Proceedings of the National Academy of Sciences of the United States of America, **108**, (2006), 3135-3140
- [103] "Self-assembled Octameric Cage Constructed by the Potassium Salt of *p*-*tert*-butylcalix[6]arene *p*-bromophenylalanine Derivative in the Solid State"
K. Tsukamoto, H. Ohishi, Y. Hiyama, N. Maezaki, T. Tanaka, T. Ishida
Chemical Communications, (2006), 3606-3608
- [104] "The Crystal Structure of L-lactate Oxidase from *Aerococcus viridans* at 2.1 Å Resolution Reveals the Mechanism of Strict Substrate Recognition"
Y. Umena, K. Yorita, T. Matsuoka, A. Kita, K. Fukui, Y. Morimoto
Biochemical and Biophysical Research Communications, **350**, (2006), 249-256
- [105] "Crystal Structures of BchU, a Methyltransferase Involved in Bacteriochlorophyll *c* Biosynthesis, and its Complex with S-adenosylhomocysteine: Implications for Reaction Mechanism"
K. Wada, H. Yamaguchi, J. Harada, K. Niimi, S. Osumi, Y. Saga, H. Oh-oka, H. Tamiaki, K. Fukuyama
Journal of Molecular Biology, **360**, (2006), 839-849
- [106] "XAFS Analysis of Molten Rare-Earth-Alkali Metal Fluoride Systems"
S. Watanabe, A. Adya, Y. Okamoto, N. Umesaki, T. Honma, H. Deguchi, M. Horiuchi, T. Yamamoto, S. Noguchi, K. Takase, A. Kajinami, T. Sakamoto, M. Hatcho, N. Kitamura, H. Akatsuka, H. Matsuura
Journal of Alloys and Compounds, **408-412**, (2006), 71-75

- [107] "Local Structural Analyses on Divalent or Trivalent Metal Fluoride Systems at High Temperature"
S. Watanabe
Doctor Thesis (Tokyo Institute of Technology), (2006), 1-183
- [108] "Crystallization and Preliminary X-ray Crystallographic Studies of Oxidative Stress Sensor SoxR and Its Complex with DNA"
S. Watanabe, A. Kita, K. Kobayashi, Y. Takahashi, K. Miki
Acta Crystallographica Section F, **62**, (2006), 1275-1277
- [109] "Crystal Structure of TBP-interacting Protein(*Tk*-TIP26) and Implications for Its Inhibition Mechanism of the Interaction between TBP and TATA-DNA"
T. Yamamoto, T. Inoue, H. Matsumura, T. Matsuda, S. Kanaya, M. Morikawa, Y. Kai
Protein Science, **15**, (2006), 152-161
- [110] "Strong Inhibition Effect of Sulfur Impurities in Alumina Supports on the Catalytic Activity of Rh in the CH₄-CO₂ Reforming Reaction"
S. Yokota, K. Okumura, M. Niwa
Applied Catalysis A: General, **310**, (2006), 122-126
[2007]
- [111] "Crystallization and Preliminary X-ray Crystallographic Study of [NiFe] Hydrogenase Maturation Factor HypE from *Thermococcus kodakaraensis* KOD1"
T. Arai, S. Watanabe, R. Matsumi, H. Atomi, T. Imanaka, K. Miki
Acta Crystallographica Section F, **63**, (2007), 765-767
- [112] "Conformational Contagion in a Protein: Structural Properties of a Chameleon Sequence"
S. Kanaya, K. Takano, Y. Katagiri, A. Mukaiyama, H. Chon, H. Matsumura, Y. Koga
Proteins: Structure, Function, and Bioinformatics, **68**, (2007), 617-625
- [113] "Crystallization and Preliminary X-ray Diffraction Study of Glycerol Kinase from the Hyperthermophilic Archaeon *Thermococcus kodakaraensis*"
R. Katsumi, Y. Koga, D. You, K. Takano, H. Matsumura, S. Kanaya
Acta Crystallographica Section F, **63**, (2007), 126-129
- [114] "Crystal Structures Reveal a Thiol Protease-like Catalytic Triad in the C-Terminal Region of *Pasteurella multocida* Toxin"
K. Kitadokoro, M. Miyazawa, S. Kamitani, M. Hanajima-Ozawa, A. Fukui, M. Miyake, Y. Horiguchi
Proceedings of the National Academy of Sciences of the United States of America, **104**, (2007), 5139-5144
- [115] "Crystal Structure of the HRDC Domain of Human Werner Syndrome Protein, WRN"
K. Kitano, N. Yoshihara, T. Hakoshima
The Journal of Biological Chemistry, **282**, (2007), 2717-2728
- [116] "Feedback System for Improving the Performance of Extended X-ray Absorption Fine Structure Measurements"
T. Kudo, H. Tanida
Review of Scientific Instruments, **78**, (2007), 0033104
- [117] "Crystallographic Study on the Interaction of L-lactate Oxidase with Pyruvate at 1.9 Å Resolution"
S. Li, Y. Umena, K. Yorita, T. Matsuoka, A. Kita, K. Fukui, Y. Morimoto
Biochemical and Biophysical Research Communications, **358**, (2007), 1002-1007
- [118] "Crystal Structures of Uridine-diphospho-*N*-acetylglucosamine Pyrophosphorylase from *Candida albicans* and Catalytic Reaction Mechanism"
D. Maruyama, Y. Nishitani, T. Nonaka, A. Kita, T. Fukami, T. Mio, H. Yamada-Okabe, T. Yamada-Okabe, K. Miki
The Journal of Biological Chemistry, **282**, (2007), 17221-17230
- [119] "Crystallographic Characterization of the Radixin FERM Domain Bound to the Cytoplasmic Tail of Adhesion Molecule CD44"
T. Mori, K. Kitano, S. Terawaki, R. Maesaki, T. Hakoshima
Acta Crystallographica Section F, **63**, (2007), 844-847
- [120] "Crystallization and Preliminary Crystallographic Study of DNA Polymerase from *Pyrococcus furiosus*"
H. Nishida, M. Tanabe, T. Oyama, K. Morikawa
Protein and Peptide Letters, **14**, (2007), 403-405
- [121] "Crystal Structures of Human MD-2 and Its Complex with Antiendotoxic Lipid IVa"
U. Ohto, K. Fukase, K. Miyake, Y. Satow
Science, **316**, (2007), 1632-1634
- [122] "Crystal Structure of the γ -Glutamyltranspeptidase Precursor Protein from *Escherichia coli*
STRUCTURAL CHANGES UPON AUTOCATALYTIC PROCESSING AND IMPLICATIONS FOR THE MATURATION MECHANISM "
T. Okada, H. Suzuki, K. Wada, H. Kumagai, K. Fukuyama
The Journal of Biological Chemistry, **282**, (2007), 2433-2439

- [123] "Crystal Structure and Functional Characterization of a D-Stereospecific Amino Acid Amidase from *Ochrobactrum anthropi* SV3, a New Member of the Penicillin-recognizing Proteins"
S. Okazaki, Y. Asano, A. Suzuki, H. Komeda, S. Yamaguchi, T. Yamane
Journal of Molecular Biology, **368**, (2007), 79-91
- [124] "Structural Basis of the 3'-end Recognition of a Leading Strand in Stalled Replication Forks by PriA"
K. Sasaki, T. Ose, N. Okamoto, K. Maenaka, T. Tanaka, H. Masai, M. Saito, T. Shirai, D. Kohda
The EMBO Journal, **26**, (2007), 2584-2593
- [125] "Preparation, Crystallization and Preliminary Crystallographic Analysis of Old Yellow Enzyme from *Trypanosoma cruzi*"
S. Sugiyama, K. Tokuoka, N. Okamoto, H. Matsumura, N. Uchiyama, Y. Okano, Y. Urade, K. Inaka, T. Inoue
Acta Crystallographica Section F, **63**, (2007), 896-898
- [126] "An Atomic Level Study of Rhenium and Radiogenic Osmium in Molybdenite"
Y. Takahashi, H. Tanida, T. Uruga, Y. Terada, K. Suzuki
Geochimica et Cosmochimica Acta, **71**, (2007), 5180-5190
- [127] "Crystal Structures of CbiL, a Methyltransferase Involved in Vitamin B₁₂ Biosynthesis, and CbiL in Complex with S-adenosylhomocysteine - Implications for the Reaction Mechanism"
K. Wada, J. Harada, Y. Yaeda, H. Tamiaki, H. Oh-oka, K. Fukuyama
The FEBS Journal, **274**, (2007), 563-573
- [128] "Crystal Structures of [NiFe] Hydrogenase Maturation Proteins, HypC, HypD and HypE: Insights into Cyanation Reaction by Thiol Redox Signaling"
S. Watanabe, R. Matsumi, T. Arai, H. Atomi, T. Imanaka, K. Miki
Molecular Cell, **27**, (2007), 29-40
- [129] ""Crystal Lattice Engineering" an Approach to Engineer Protein Crystal Contacts by Creating Intermolecular Symmetry: Crystallization and Structure Determination of a Mutant Human RNase 1 with a Hydrophobic Interface of Leucines"
H. Yamada, T. Tamada, M. Kosaka, K. Miyata, S. Fujiki, M. Tanou, M. Moriya, M. Yamanishi, E. Honjo, H. Murata, T. Ino, H. Yamaguchi, J. Futami, M. Seno, T. Nomoto, T. Hirata, M. Yoshimura, R. Kuroki
Protein Science, **16**, (2007), 1389-1397
- [130] "Crystal Structure of Type 1 Ribonuclease H from Hyperthermophilic Archaeon *Sulfolobus tokodaii*: Role of Arginine 118 and C-terminal Anchoring"
D. You, H. Chon, Y. Koga, K. Takano, S. Kanaya
Biochemistry, **46**, (2007), 11494-11503
- [2008]
- [131] "Structure and Quantum Chemical Analysis of NAD⁺-Dependent Isocitrate Dehydrogenase : Hydride Transfer and Co-factor Specificity"
K. Imada, T. Tamura, R. Takenaka, I. Kobayashi, K. Namba, K. Inagaki
Proteins: Structure, Function, and Bioinformatics, **70**, (2008), 63-71
- [132] "Novel Cation- π Interaction Revealed by Crystal Structure of Thermoalkalophilic Lipase"
H. Matsumura, T. Inoue, T. Yamamoto, T. Leow, T. Mori, A. Salleh, Y. Kai, R. Rahman
Proteins: Structure, Function, and Bioinformatics, **70**, (2008), 592-598
- [133] "Crystal Structures of D-amino Acid Amidase Complexed with L-phenylalanine and L-phenylalanine Amide: Insight into D-stereospecificity of D-amino Acid Amidase from *Ochrobactrum anthropi* SV3"
S. Okazaki, A. Suzuki, T. Mizushima, H. Komeda, Y. Asano, T. Yamane
Acta Crystallographica Section D, **64**, (2008), 331-334
- [134] "Crystal Structure of 5-methylthioribose 1-phosphate Isomerase Product Complex from *Bacillus Subtilis*: Implications for Catalytic Mechanism"
H. Tamura, T. Inoue, Y. Saito, Y. Kai, H. Ashida, A. Yokota, H. Matsumura
Protein Science, **17**, (2008), 126-135

BL39XU

Refereed Journals

- [1998]
- [1] "X-Ray Microprobe System for XRF Analysis and Spectroscopy at SPring-8 BL39XU"
S. Hayakawa, S. Goto, T. Shoji, E. Yamada, Y. Gohshi
Journal of Synchrotron Radiation, **5**, (1998), 1114-1116
- [2] "Atomic-Resolution X-Ray Fluorescence Holography of Zn(0.02wt%) in a GaAs Wafer"
K. Hayashi, T. Yamamoto, J. Kawai, M. Suzuki, S. Goto, S. Hayakawa, K. Sakurai, Y. Gohshi
Analytical Sciences, **14**, (1998), 987-990
- [3] "A Grazing-Incidence Reflectometer for BL-39XU at SPring-8"
K. Sakurai, S. Uehara, S. Goto
Journal of Synchrotron Radiation, **5**, (1998), 554-556