

## Refereed Journals

[1999]

- [1] "Crystallization and Preliminary X-Ray Diffraction Analysis of a Recombinant Bacterial Heme Oxygenase (Hmu O) from *Corynebacterium diphtheriae*"  
Grace C. Chu, S. Park, Y. Shiro, T. Yoshida, M. Ikeda-Saito  
Journal of Structural Biology, **126**, (1999), 171-174
- [2] "Crystallization and Preliminary X-Ray Diffraction Studies of Hyperthermostable Glutamate Dehydrogenase from *Thermococcus profundus*"  
S. Higuchi, M. Nakasako, T. Kudo  
Acta Crystallographica Section D, **55**, (1999), 1917-1919
- [3] "Three-Dimensional Structure of the Catalytic Domain of Chitinase AI from Bacillus Circulans WL-12 at a Very High Resolution"  
T. Matsumoto, T. Nonaka, M. Hashimoto, T. Watanabe, Y. Mitsui  
Proceedings of the Japan Academy, **75 Ser.B**, (1999), 269-274
- [4] "Dynamic Light-Scattering and Preliminary Crystallographic Studies of the Sensor Domain of the Haem-Based Oxygen Sensor FixL from *Rhizobium meliloti*"  
H. Miyatake, M. Kanai, S. Adachi, H. Nakamura, K. Tamura, H. Tanida, T. Tsuchiya, T. Iizuka, Y. Shiro  
Acta Crystallographica Section D, **55**, (1999), 1215-1218
- [5] "Magnesium(II) and Zinc(II)-Protoporphyrin IX's Stabilize the Lowest Oxygen Affinity State of Human Hemoglobin Even More Strongly than Deoxyheme"  
G. Miyazaki, H. Morimoto, K. Yun, S. Park, A. Nakagawa, H. Minagawa, N. Shibayama  
Journal of Molecular Biology, **292**, (1999), 1121-1136
- [2000]
- [6] "Structural Basis for Double-Sieve Discrimination of L-Valine from L-Isoleucine and L-Threonine by the Complex of tRNA<sup>Val</sup> and Valyl-tRNA Synthetase"  
S. Fukai, O. Nureki, S. Sekine, A. Shimada, J. Tao, Dmitry G. Vassylyev, S. Yokoyama  
Cell, **103**, (2000), 793-803
- [7] "X-Ray Crystal Structure and Catalytic Properties of Thr252Ile Mutant of Cytochrome P450cam: Roles of Thr252 and Water in the Active Center"  
T. Hishiki, H. Shimada, S. Nagano, T. Egawa, Y. Kanamori, R. Makino, S. Park, S. Adachi, Y. Shiro, Y. Ishimura  
The Journal of Biochemistry, **128**, (2000), 965-974
- [8] "How a Protein Generates a Catalytic Radical from Coenzyme B<sub>12</sub>: X-Ray Structure of a Diol-Dehydratase-Adeninylpentylcobalamin Complex"  
J. Masuda, N. Shibata, Y. Morimoto, T. Toraya, N. Yasuoka  
Structure, **8**, (2000), 775-788
- [9] "Sensory Mechanism of Oxygen Sensor FixL from *Rhizobium meliloti*: Crystallographic, Mutagenesis and Resonance Raman Spectroscopic Studies"  
H. Miyatake, M. Mukai, S. Park, S. Adachi, K. Tamura, H. Nakamura, K. Nakamura, T. Tsuchiya, T. Iizuka, Y. Shiro  
Journal of Molecular Biology, **301**, (2000), 415-431
- [10] "Mutation Effects of a Conserved Threonine(Thr2243) of Cytochrome P450nor on Its Structure and Function"  
E. Obayashi, H. Shimizu, S. Park, H. Shoun, Y. Shiro  
Journal of Inorganic Biochemistry, **82**, (2000), 103-111
- [11] "Crystallization and Preliminary X-Ray Diffraction Analysis of a Cytochrome P450(CYP119) from *Sulfolobus solfataricus*"  
S. Park, K. Yamane, S. Adachi, Y. Shiro, Kara E. Weiss, Stephen G. Sligar  
Acta Crystallographica Section D, **56**, (2000), 1173-1175
- [12] "Crystallization and the Crystal Properties of the Oxygen-Evolving Photosystem II from *Synechococcus vulcanus*"  
J. Shen, N. Kamiya  
Biochemistry, **39**, (2000), 14739-14744
- [13] "Proton Delivery in NO Reduction by Fungal Nitric-Oxide Reductase"  
H. Shimizu, E. Obayashi, Y. Gomi, H. Arakawa, S. Park, H. Nakamura, S. Adachi, H. Shoun, Y. Shiro  
The Journal of Biological Chemistry, **275-7**, (2000), 4816-4826

- [14] "Crystal Structures of Cytochrome P450nor and Its Mutants (Ser286→Val, Thr) in the Ferric Resting State at Cryogenic Temperature: a Comparative Analysis with Monooxygenase Cytochrome P450s"  
H. Shimizu, S. Park, D. Lee, H. Shoun, Y. Shiro  
Journal of Inorganic Biochemistry, **81**, (2000), 191-205
- [15] "Crystallization and Preliminary X-Ray Diffraction Analysis of a Rat Biliverdin Reductase"  
D. Sun, M. Sato, T. Yoshida, H. Shimizu, H. Miyatake, S. Adachi, Y. Shiro, A. Kikuchi  
Acta Crystallographica Section D, **56**, (2000), 1180-1182
- [16] "Crystal Structures of the Ribonuclease MC1 from Bitter Gourd Seeds, Complexed with 2'-UMP or 3'-UMP, Reveal Structural Basis for Uridine Specificity"  
A. Suzuki, M. Yao, I. Tanaka, T. Numata, S. Kikukawa, N. Yamasaki, M. Kimura  
Biochemical and Biophysical Research Communications, **275**, (2000), 572-576
- [17] "Crystal Structure of the Calcium Pump of Sarcoplasmic Reticulum at 2.6 Å Resolution"  
C. Toyoshima, M. Nakasako, H. Nomura, H. Ogawa  
Nature, **405**, (2000), 647-655
- [18] "Structure of Cytochrome  $c_6$  from the Red Alga *Porphyra Yezoensis* at 1.57 Å Resolution"  
S. Yamada, S. Park, Y. Koshizuka, K. Kadokura, T. Satoh, K. Suruga, M. Ogawa, Y. Isogai, H. Shimizu, Y. Shiro, T. Oku  
Acta Crystallographica Section D, **56**, (2000), 1577-1582  
[2001]
- [19] "The RIKEN Structural Biology Beamline II (BL44B2) at the SPring-8"  
S. Adachi, T. Oguchi, H. Tanida, S.-Y. Park, H. Shimizu, H. Miyatake, N. Kamiya, Y. Shiro, Y. Inoue, T. Ueki, T. Iizuka  
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 711-714
- [20] "Crystallization and Preliminary X-Ray Analysis of (*R*)-Specific Enoyl-CoA Hydratase from *Aeromonas caviae* Involved in Polyhydroxyalkanoate Biosynthesis"  
T. Hisano, T. Fukui, T. Iwata, Y. Doi  
Acta Crystallographica Section D, **57**, (2001), 145-147
- [21] "Crystallization and Preliminary X-Ray Analysis of the Archaeosine tRNA-Guanine Transglylase from *Pyrococcus horikoshii*"  
R. Ishitani, O. Nureki, T. Kijimoto, M. Watanabe, H. Kondo, N. Nameki, N. Okada, S. Nishimura, S. Yokoyama  
Acta Crystallographica Section D, **57**, (2001), 1659-1662
- [22] "The Crystal Structure of the ttCsaA Protein: an Export-Related Chaperone from *Thermus thermophilus*"  
S. Kawaguchi, J. Muller, D. Linde, S. Kuramitsu, T. Shibata, Y. Inoue, Dmitry G. Vassylyev, S. Yokoyama  
The EMBO Journal, **20**, (2001), 562-569
- [23] "Crystal Structure of Rat Biliverdin Reductase"  
A. Kikuchi, S. Park, H. Miyatake, D. Sun, M. Sato, T. Yoshida, Y. Shiro  
Nature Structural Biology, **8**, (2001), 221-225
- [24] "Crystal Structure of Thermostable DNA Photolyase: Pyrimidine-Dimer Recognition Mechanism"  
H. Komori, R. Masui, S. Kuramitsu, S. Yokoyama, T. Shibata, Y. Inoue, K. Miki  
Proceedings of the National Academy of Sciences of the United States of America, **98**, (2001), 13560-13565
- [25] "Crystallization and Preliminary X-Ray Studies of a Thermostable DNA Photolyase from *Thermus thermophilus* HB8"  
H. Komori, H. Tsujiuchi, R. Masui, S. Kuramitsu, S. Yokoyama, T. Shibata, Y. Inoue, K. Miki  
Protein and Peptide Letters, **8**, (2001), 495-498
- [26] "A Positively Charged Cluster Formed in the Heme-distal Pocket of Cytochrome P450nor Is Essential for Interaction with NADH"  
T. Kudo, N. Takaya, S. Park, Y. Shiro, H. Shoun  
The Journal of Biological Chemistry, **276**, (2001), 5020-5026
- [27] "Crystal Structure of Human AUH Protein, a Single-Stranded RNA Binding Homolog of Enoyl-CoA Hydratase"  
K. Kurimoto, S. Fukai, O. Nureki, S. Yokoyama  
Structure, **9**, (2001), 1253-1263
- [28] "Structural Characterization of *n*-Butyl-Isocyanide Complexes of Cytochromes P450nor and P450cam"  
D. Lee, S. Park, K. Yamane, E. Obayashi, H. Hori, Y. Shiro  
Biochemistry, **40**, (2001), 2669-2677

- [29] "Crystallization and Preliminary X-Ray Analysis of Aspartate Racemase from *Pyrococcus horikoshii* OT3"  
L. Liu, K. Iwata, Y. Kawarabayasi, H. Kikuchi, A. Kita, M. Yohda, K. Miki  
*Acta Crystallographica Section D*, **57**, (2001), 1674-1676
- [30] "Large-Scale Domain Movements and Hydration Structure Changes in the Active-Site Cleft of Unligated Glutamate Dehydrogenase from *Thermococcus profundus* Studied by Cryogenic X-Ray Crystal Structure Analysis and Small-Angle X-Ray Scattering"  
M. Nakasako, T. Fujisawa, S. Adachi, T. Kudo, S. Higuchi  
*Biochemistry*, **40**, (2001), 3069-3079
- [31] "Large-Scale Networks of Hydration Water Molecules Around Proteins Investigated by Cryogenic X-Ray Crystallography"  
M. Nakasako  
*Cellular and Molecular Biology*, **47**, (2001), 767-790
- [32] "Ribosomal Protein L5 has a Highly Twisted Concave Surface and Flexible Arms Responsible for rRNA Binding"  
T. Nakashima, M. Yao, S. Kawamura, K. Iwasaki, M. Kimura, I. Tanaka  
*RNA*, **7**, (2001), 692-701
- [33] "The Functional Similarity and Structural Diversity of Human and Cartilaginous Fish Hemoglobins"  
Y. Naoi, K. Chong, K. Yoshimatsu, G. Miyazaki, Jeremy R. H. Tame, S. Park, S. Adachi, H. Morimoto  
*Journal of Molecular Biology*, **307**, (2001), 259-270
- [34] "Diffracted X-Ray Tracking: New System for Single Molecular Detection with X-Rays"  
Y. C. Sasaki, Y. Okumura, S. Adachi, Y. Suzuki, N. Yagi  
*Nuclear Instruments and Methods in Physics Research Section A*, **467-468**, (2001), 1049-1052
- [35] "Picometer-Scale Dynamical X-Ray Imaging of Single DNA Molecule"  
Yuji C. Sasaki, Y. Okumura, S. Adachi, H. Suda, Y. Taniguchi, N. Yagi  
*Physical Review Letters*, **87**, (2001), 248102
- [36] "Crystallization and Preliminary X-Ray Study of Endopolygalacturonase from the Pathogenic Fungus *Stereum purpureum*"  
T. Shimizu, T. Nakatsu, K. Miyairi, T. Okuno, H. Kato  
*Acta Crystallographica Section D*, **57**, (2001), 1171-1173
- [37] "Crystallization and Preliminary X-Ray Analysis of the C/EBP  $\beta$  C-Terminal Region in Complex with DNA"  
Tahir H. Tahirov, T. Inoue-Bungo, M. Sasaki, A. Fujikawa, K. Kimura, K. Sato, S. Adachi, N. Kamiya, K. Ogata  
*Acta Crystallographica Section D*, **57**, (2001), 854-856
- [38] "Crystal Structure of the CENP-B Protein-DNA Complex: the DNA-Binding Domains of CENP-B Induce Kinks in the CENP-B Box DNA"  
Y. Tanaka, O. Nureki, H. Kurumizaka, S. Fukai, S. Kawaguchi, M. Ikuta, J. Iwahara, T. Okazaki, S. Yokoyama  
*The EMBO Journal*, **20**, (2001), 6612-6618
- [39] "Crystallization and Preliminary X-Ray Diffraction Analysis of the Light-Harvesting Protein Phycocyanin from the Thermophilic Cyanobacterium *Synechococcus Elongatus*"  
Y. Toriumi, S. Park, H. Hashimoto, H. Shimizu, M. Hirano, N. Kamiya  
*Acta Crystallographica Section D*, **57**, (2001), 1326-1328  
[2002]
- [40] "Conformational Strictness Required for Maximum Activity and Stability of Bovine Pancreatic Ribonuclease A as Revealed by Crystallographic Study of Three Phe120 Mutants at 1.4 Å Resolution"  
E. Chatani, R. Hayashi, H. Moriyama, T. Ueki  
*Protein Science*, **11**, (2002), 72-81
- [41] "Crystal Structure of Argininosuccinate Synthetase from *Thermus thermophilus* HB8"  
M. Goto, Y. Nakajima, K. Hirotsu  
*The Journal of Biological Chemistry*, **277**, (2002), 15890-15896
- [42] "The Crystal Structure of Human MRP14 (S100A9), a Ca<sup>2+</sup>-Dependent Regulator Protein in Inflammatory Process"  
H. Itou, M. Yao, I. Fujita, N. Watanabe, M. Suzuki, J. Nishihira, I. Tanaka  
*Journal of Molecular Biology*, **316**, (2002), 265-276

- [43] "X-Ray Snapshots of Quinone Cofactor Biogenesis in Bacterial Copper Amine Oxidase"  
M. Kim, T. Okajima, S. Kishishita, M. Yoshimura, A. Kawamori, K. Tanizawa, H. Yamaguchi  
*Nature Structural Biology*, **9**, (2002), 591-596
- [44] "Crystal Structure of the Complex between Calyculin A and the Catalytic Subunit of Protein Phosphatase 1"  
A. Kita, S. Matsunaga, A. Takai, H. Kataiwa, T. Wakimoto, N. Fusetani, M. Isobe, K. Miki  
*Structure*, **10**, (2002), 715-724
- [45] "Crystal Structure of the C-Terminal Half of Tropomodulin and Structural Basis of Actin Filament Pointed-End Capping"  
I. Krieger, A. Kosryukova, A. Yamashita, Y. Nitani, Y. Maeda  
*Biophysical Journal*, **83**, (2002), 2716-2725
- [46] "Crystallization and Preliminary X-Ray Diffraction Analysis of Fatty-Acid Hydroxylase Cytochrome P450BSbeta from *Bacillus subtilis*"  
D. Lee, A. Yamada, I. Matsunaga, K. Ichihara, S. Adachi, S. Park, Y. Shiro  
*Acta Crystallographica Section D*, **58**, (2002), 687-689
- [47] "Ultrahigh-Resolution Structure of High-Potential Iron-Sulfur Protein from *Thermochromatium Tepidum*"  
L. Liu, T. Nogi, M. Kobayashi, T. Nozawa, K. Miki  
*Acta Crystallographica Section D*, **58**, (2002), 1085-1091
- [48] "Structural Insight into Gene Duplication, Gene Fusion and Domain Swapping in the Evolution of PLP-Independent Amino Acid Racemases"  
L. Liu, K. Iwata, M. Youda, K. Miki  
*FEBS Letters*, , (2002), 114-118
- [49] "Crystal Structure of Aspartate Racemase from *Pyrococcus Horikoshii* OT3 and Its Implications for Molecular Mechanism of PLP-Independent Racemization"  
L. Liu, K. Iwata, A. Kita, Y. Kawarabayashi, M. Youda, K. Miki  
*Journal of Molecular Biology*, **319**, (2002), 479-489
- [50] "Specific Damage Induced by X-Ray Radiation and Structural Changes in the Primary Photoreaction of Bacteriorhodopsin"  
Y. Matsui, K. Sakai, M. Murakami, Y. Shiro, S. Adachi, H. Okumura, T. Kouyama  
*Journal of Molecular Biology*, **324**, (2002), 469-481
- [51] "Crystallization of Scytalone Dehydratase F162A Mutant in the Unligated State and a Preliminary X-Ray Diffraction Study at 37 K"  
T. Motoyama, M. Nakasako, I. Yamaguchi  
*Acta Crystallographica Section D*, **58**, (2002), 148-150
- [52] "An Enzyme with a Deep Trefoil Knot for the Active-Site Architecture"  
O. Nureki, M. Shirouzu, K. Hashimoto, R. Ishitani, T. Terada, M. Tamakoshi, T. Oshima, M. Chijimatsu, K. Takio, Dmitry G. Vassilyev, T. Shibata, Y. Inoue, S. Kuramitsu, S. Yokoyama  
*Acta Crystallographica Section D*, **58**, (2002), 1129-1137
- [53] "Structural Studies of the Carbon Monoxide Complex of [NiFe]Hydrogenase from *Desulfovibrio Vulgaris* Miyazaki F: Suggestion for the Initial Activation Site for Dehydrogen"  
H. Ogata, Y. Mizoguchi, N. Mizuno, K. Miki, S. Adachi, N. Yasuoka, T. Yagi, O. Yamauchi, S. Hirota, Y. Higuchi  
*Journal of the American Chemical Society*, **124**, (2002), 11628-11635
- [54] "Structure of the Carboxyl-Terminal Src Kinase, Csk"  
A. Ogawa, Y. Takayama, H. Sakai, K. Chong, S. Takeuchi, A. Nakagawa, S. Nada, M. Okada, T. Tsukihara  
*The Journal of Biological Chemistry*, **277**, (2002), 14351-14354
- [55] "Dispersive One-Dimensional (Mo/Si) Nanocrystals for Single Molecular Detection System Using X Rays"  
Y. Okumura, Y. Taniguchi, Yuji C. Sasaki  
*Journal of Applied Physics*, **92**, (2002), 7469-7474
- [56] "Thermophilic Cytochrome P450 (CYP119) from *Sulfolobus solfataricus*: High Resolution Structure Functional Properties"  
S. Park, K. Yamane, S. Adachi, Y. Shiro, Kara E. Weiss, Shelley A. Maves, Stephen G. Sligar  
*Journal of Inorganic Biochemistry*, **91**, (2002), 491-501
- [57] "Optical Monitoring of Freeze-Trapped Reaction Intermediates in Protein Crystals: A Microspectrophotometer for Cryogenic Protein Crystallography"  
K. Sakai, Y. Matsui, T. Kouyama, Y. Shiro, S. Adachi  
*Journal of Applied Crystallography*, **35**, (2002), 270-273

- [58] "Active-Site Architecture of Endopolygalacturonase I from *Stereum Purpureum* Revealed by Crystal Structures in Native and Ligand-Bound Forms at Atomic Resolution"  
T. Shimizu, T. Nakatsu, K. Miyairi, T. Okuno, H. Kato  
*Biochemistry*, **41**, (2002), 6651-6659
- [59] "X-Ray Structure of Nitric Oxide Reductase (Cytochrome P450nor) at Atomic Resolution"  
H. Shimizu, S. Park, Y. Shiro, S. Adachi  
*Acta Crystallographica Section D*, **58**, (2002), 81-89
- [60] "Overproduction, Crystallization and Preliminary X-ray Diffraction Analysis of a Quinone Oxidoreductase from *Thermus thermophilus* HB8"  
Y. Shimomura, K. Agari, R. Masui, S. Kuramitsu, K. Fukuyama  
*Acta Crystallographica Section D*, **58**, (2002), 1365-1367
- [61] "Purification, Crystallization and Initial Crystallographic Analysis of RNA Polymerase Holoenzyme from *Thermus thermophilus*"  
Marina N. Vassilyeva, J. Lee, S. Sekine, O. Laptenko, S. Kuramitsu, T. Shibata, Y. Inoue, Dmitry G. Vassilyev, S. Yokoyama  
*Acta Crystallographica Section D*, **58**, (2002), 1497-1500  
[2003]
- [62] "Direct Observation of Photolysis-Induced Tertiary Structural Changes in Hemoglobin"  
S. Adachi, S. Park, Jeremy R. H. Tame, Y. Shiro, N. Shibayama  
*Proceedings of the National Academy of Sciences of the United States of America*, **100**, (2003), 7039-7044
- [63] "Expression, Purification and Preliminary X-Ray Characterization of *N*-Acetyl- $\gamma$ -Glutamyl-Phosphate Reductase from *Thermus Thermophilus* HB8"  
M. Goto, Y. Agari, R. Omi, I. Miyahara, K. Hirotsu  
*Acta Crystallographica Section D*, **59**, (2003), 356-358
- [64] "Expression, Purification and Preliminary X-Ray Characterization of CTP Synthetase from *Thermus Thermophilus* HB8"  
M. Goto, R. Omi, J. Hoseki, N. Nakagawa, I. Miyahara, K. Hirotsu  
*Acta Crystallographica Section D*, **59**, (2003), 551-553
- [65] "Crystal Structure of the Conserved Protein TT1542 from *Thermus thermophilus* HB8"  
N. Handa, T. Terada, Y. Kamewari, H. Hamana, J. Tame, S. Park, K. Kinoshita, M. Ota, H. Nakamura, S. Kuramitsu, M. Shirouzu, S. Yokoyama  
*Protein Science*, **12**, (2003), 1621-1632
- [66] "Crystal Structure of the (R)-Specific Enoyl-CoA Hydratase from *Aeromonas Caviae* Involved in Polyhydroxyalkanoate Biosynthesis"  
T. Hisano, T. Tsuge, T. Fukui, T. Iwata, K. Miki, Y. Doi  
*The Journal of Biological Chemistry*, **278**, (2003), 617-624
- [67] "Minimization of Cavity Size Ensures Protein Stability and Folding: Structures of Phe46-Replaced Bovine Pancreatic RNase A"  
T. Kadonosono, E. Chatani, R. Hayashi, H. Moriyama, T. Ueki  
*Biochemistry*, **42**, (2003), 10651-10658
- [68] "Crystallization and Preliminary X-Ray Diffraction Analysis of Ribosomal Protein L11 Methyltransferase from *Thermus thermophilus* HB8"  
T. Kaminishi, H. Sakai, C. Takemoto-Hori, T. Terada, N. Nakagawa, N. Maoka, S. Kutimatsu, S. Yokoyama  
*Acta Crystallographica Section D*, **59**, (2003), 930-932
- [69] "Crystal Structure of the 2'-5' RNA Ligase from *Thermus thermophilus* HB8"  
M. Kato, M. Shirouzu, T. Terada, H. Yamaguchi, K. Murayama, H. Sakai, S. Kuramitsu, S. Yokoyama  
*Journal of Molecular Biology*, **329**, (2003), 933-911
- [70] "Crystallization and Preliminary X-ray Analysis of the Small Component of 4-Hydroxyphenyl-acetate 3-monooxygenase (HpaC) and Its Cofactor Complex from *Thermus thermophilus* HB8"  
S. Kim, H. Miyatake, T. Hisano, N. Ohtani, K. Miki  
*Acta Crystallographica Section D*, **59**, (2003), 2275-2278
- [71] "Structure and Catalytic Mechanism of 2-C-Methyl-D-Erythritol 2,4-Cyclodiphosphate (MECDP) Synthase, an Enzyme in the Non-Mevalonate Pathway of Isoprenoid Synthesis"  
H. Kishida, T. Wada, S. Unzai, T. Kazuyama, M. Takagi, S. Yokoyama, Jeremy R. H. Tame, S. Park  
*Acta Crystallographica Section D*, **59**, (2003), 23-31

- [72] "Role of Copper Ion in Bacterial Copper Amine Oxidase: Spectroscopic and Crystallographic Studies of Metal-Substituted Enzymes"  
S. Kishishita, T. Okajima, M. Kim, H. Yamaguchi, S. Hirota, S. Suzuki, S. Kuroda, K. Tanizawa, M. Mure  
Journal of the American Chemical Society, **125**, (2003), 1041-1055
- [73] "Substrate Recognition and Molecular Mechanism of Fatty Acid Hydroxylation by Cytochrome P450 from *Bacillus Subtilis*"  
D. Lee, A. Yamada, H. Sugimoto, I. Matsunaga, H. Ogura, K. Ichihara, S. Adachi, S. Park, Y. Shiro  
The Journal of Biological Chemistry, **278**, (2003), 9761-9767
- [74] "Crystal Structure of Dissimilatory Sulfite Reductase D(DsrD) Protein — Possible Interaction with B- and Z-DNA by Its Winged-Helix Motif"  
N. Mizuno, G. Voordouw, K. Miki, A. Sarai, Y. Higuchi  
Structure, **11**, (2003), 1133-1140
- [75] "Infrared Spectroscopic and Mutational Studies on Putidaredoxin-Induced Conformational Changes in Ferrous CO-P450cam"  
S. Nagano, H. Shimada, A. Tarumi, T. Hishiki, Y. Kimata-Arigo, T. Egawa, M. Suematsu, S. Park, S. Adachi, Y. Shiro, Y. Ishimura  
Biochemistry, **42**, (2003), 14507-14514
- [76] "Structure of *Thermus thermophilus* HB8 H-protein of the Glycine-Cleavage System, Resolved by a Six-Dimensional Molecular-Replacement Method"  
T. Nakai, J. Ishijima, R. Masui, S. Kuramitsu, N. Kamiya  
Acta Crystallographica Section D, **59**, (2003), 1610-1618
- [77] "Crystal Structure of Calcium-free  $\alpha$ -Amylase from *Bacillus* sp. Strain KSM-K38 (AmyK38) and Its Sodium Ion Binding Sites"  
T. Nonaka, M. Fujihashi, A. Kita, H. Hagihara, K. Ozaki, S. Ito, K. Miki  
The Journal of Biological Chemistry, **278**, (2003), 24818-24824
- [78] "Crystal Structures of the Ribonuclease MC1 Mutants N71T and N71S in Complex with 5'-GMP: Structural Basis for Alterations in Substrate Specificity"  
T. Numata, A. Suzuki, Y. Kakuta, K. Kimura, M. Yao, I. Tanaka, Y. Yoshida, T. Ueda, M. Kimura  
Biochemistry, **42**, (2003), 5270-5278
- [79] "Crystal Structures of Threonine Synthase from *Thermus thermophilus* HB8: Conformational Change, Substrate Recognition, and Mechanism"  
R. Omi, M. Goto, I. Miyahara, H. Mizuguchi, H. Hayashi, H. Kagamiyama, K. Hirotsu  
The Journal of Biological Chemistry, **278**, (2003), 46035-46045
- [80] "Structure of the Catalytic Domain of Human Phosphodiesterase 5 with Bound Drug Molecules"  
S. Park, B. Sung, K. Hwang, Y. Jeon, J. Lee, Y. Heo, J. Kim, J. Moon, J. Yoon, Y. Hyun, E. Kim, S. Eum, J. Lee, H. Lee, S. Ro, J. Cho  
Nature, **425**, (2003), 98-102
- [81] "Crystal Structure of a Lysine Biosynthesis Enzyme, LysX, from *Thermus thermophilus* HB8"  
H. Sakai, M. Vassilyeva, T. Matsuura, S. Sekine, K. Gotoh, M. Nishiyama, T. Terada, M. Shirouzu, S. Kuramitsu, D. Vassilyev, S. Yokoyama  
Journal of Molecular Biology, **332**, (2003), 729-740
- [82] "Crystal Structure of a Hypothetical Protein, TT1725, From *Thermus thermophilus* HB8 at 1.7 Å Resolution"  
A. Seto, M. Shirouzu, T. Terada, K. Murayama, S. Kuramitsu, S. Yokoyama  
Proteins: Structure, Function, and Genetics, **53**, (2003), 768-771
- [83] "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
- [84] "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
- [85] "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

- [86] "Structure of the Core Domain of Human Cardiac Troponin in the Ca<sup>2+</sup>-Saturated Form"  
S. Takeda, A. Yamashita, K. Maeda, Y. Maeda  
*Nature*, **424**, (2003), 35-41
- [87] "Crystal Structure of the Human Centromere Protein B (CENP-B) Dimerization Domain at 1.65-Å Resolution"  
M. Tawaramoto, S. Park, Y. Tanaka, O. Nureki, H. Kurumizaka, S. Yokoyama  
*The Journal of Biological Chemistry*, **278**, (2003), 51454-51461
- [88] "Structure of a Conserved CoA-Binding Protein Synthesized by a Cell-Free System"  
T. Wada, M. Shirouzu, T. Terada, Y. Ishizuka, T. Matsuda, T. Kigawa, S. Kuramitsu, S. Park, Jeremy R. H. Tame, S. Yokoyama  
*Acta Crystallographica Section D*, **59**, (2003), 1213-1218
- [89] "Crystal Structure of 4-(Cytidine 5'-diphospho)-2-C-methyl-D-erythritol kinase, an Enzyme in the Non-mevalonate Pathway of Isoprenoid Synthesis"  
T. Wada, T. Kuzuyama, S. Satoh, S. Kuramitsu, S. Yokoyama, S. Unzai, J. Tame, S. Park  
*The Journal of Biological Chemistry*, **278**, (2003), 30022-30027
- [90] "Crystal Structure of CapZ: Structural Basis for Actin Filament Barbed End Capping"  
A. Yamashita, K. Maeda, Y. Maeda  
*The EMBO Journal*, **22**, (2003), 1529-1538
- [91] "Overproduction, Crystallization and Preliminary Diffraction Data of ADP-ribose Pyrophosphatase from *Thermus thermophilus* HB8"  
S. Yoshiba, N. Nakagawa, R. Masui, T. Shibata, Y. Inoue, S. Yokoyama, S. Kuramitsu  
*Acta Crystallographica Section D*, **59**, (2003), 1840-1842  
[2004]
- [92] "Crystal Structures of CTP Synthetase Reveal ATP, UTP, and Glutamine Binding Sites"  
M. Goto, R. Omi, N. Nakagawa, I. Miyahara, K. Hirotsu  
*Structure*, **12**, (2004), 1413-1423
- [93] "Crystal Structure of the PsbP Protein of Photosystem II from *Nicotiana tabacum*"  
K. Ifuku, T. Nakatsu, H. Kato, F. Sato  
*EMBO Reports*, **5**, (2004), 362-367
- [94] "Crystallization and Preliminary X-ray Diffraction Analysis of Homing Endonuclease I-*Tsp0611*"  
T. Imagawa, H. Nakayama, N. Katunuma, H. Sakuraba, T. Ohshima, T. Itoh, Y. Sako, N. Nomura, H. Tsuge  
*Acta Crystallographica Section D*, **60**, (2004), 2006-2008
- [95] "Crystallization and Preliminary Crystallographic Analysis of 2-keto-3-deoxygluconate Kinase from *Thermus thermophilus*"  
E. Inagaki, Y. Ukita, M. Kumei, Y. Kajihara, T. Tahirov  
*Acta Crystallographica Section D*, **60**, (2004), 761-763
- [96] "Crystallization and Preliminary X-ray Crystallographic Studies on the Small Form of Glucose-Inhibited Division Protein A from *Thermus thermophilus* HB8"  
W. Iwasaki, H. Miyatake, A. Ebihara, K. Miki  
*Acta Crystallographica Section D*, **60**, (2004), 515-517
- [97] "Structural Basis for Octameric Ring Formation and DNA Interaction of the Human Homologous-Pairing Protein Dmc1"  
T. Kinebuchi, W. Kagawa, R. Enomoto, K. Tanaka, K. Miyagawa, T. Shibata, H. Kurumizaka, S. Yokoyama  
*Molecular Cell*, **14**, (2004), 363-374
- [98] "Crystal Structure of a Conserved Hypothetical Protein TT1751 From *Thermus thermophilus* HB8"  
S. Kishishita, A. Tatsuguchi, R. Ushikoshi-Nakayama, T. Terada, S. Kuramitsu, S. Park, J. Tame, M. Shirouzu, S. Yokoyama  
*Proteins: Structure, Function, and Bioinformatics*, **57**, (2004), 883-887
- [99] "DNA Apophotolyase from *Anacystis nidulans*: 1.8 Å Structure, 8-HDF Reconstitution and X-ray Induced FAD-Reduction"  
R. Kort, H. Komori, S. Adachi, K. Miki, Andre P. M. Eker  
*Acta Crystallographica Section D*, **60**, (2004), 1205-1213
- [100] "Crystal Structure of the L Intermediate of Bacteriorhodopsin: Evidence for Vertical Translocation of a Water Molecule during the Proton Pumping Cycle"  
T. Kouyama, T. Nishikawa, T. Tokuhisa, H. Okumura  
*Journal of Molecular Biology*, **335**, (2004), 531-546

- [101] "Crystal Structure of the GTP-Binding Protein Obg from *Thermus thermophilus* HB8"  
M. Kukimoto-Niino, K. Murayama, M. Inoue, T. Terada, Jeremy R. H. Tame, S. Kuramitsu, M. Shirouzu, S. Yokoyama  
Journal of Molecular Biology, **337**, (2004), 761-770
- [102] "Chemical Rescue of a Site-Specific Mutant of Bacterial Copper Amine Oxidase for Generation of the Topa Quinone Cofactor"  
H. Matsunami, T. Okajima, S. Hirota, H. Yamaguchi, H. Hori, S. Kuroda, M. Mure, K. Tanizawa  
Biochemistry, **43**, (2004), 2178-2187
- [103] "Ligand-induced Conformational Changes and a Reaction Intermediate in Branched-chain 2-Oxo Acid Dehydrogenase (E1) from *Thermus thermophilus* HB8, as Revealed by X-ray Crystallography"  
T. Nakai, N. Nakagawa, N. Maoka, R. Masui, S. Kuramitsu, N. Kamiya  
Journal of Molecular Biology, **337**, (2004), 1011-1033
- [104] "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
- [105] "The Crystal Structure of an Oxidatively Stable Subtilisin-Like Alkaline Serine Protease, KP-43, with a C-Terminal  $\beta$ -Barrel Domain"  
T. Nonaka, M. Fujihashi, A. Kita, K. Saeki, S. Ito, H. Horikoshi, K. Miki  
The Journal of Biological Chemistry, **279**, (2004), 47344-47351
- [106] "Structure of *Thermus thermophilus* 2-Keto-3-deoxygluconate Kinase: Evidence for Recognition of an Open Chain Substrate"  
N. Ohshima, E. Inagaki, K. Yasuike, K. Takio, T. Tahirov  
Journal of Molecular Biology, **340**, (2004), 477-489
- [107] "Expression, Purification and Preliminary X-ray Characterization of Histidinol Phosphate Phosphatase"  
R. Omi, M. Goto, N. Nakagawa, I. Miyahara, K. Hirotsu  
Acta Crystallographica Section D, **60**, (2004), 574-576
- [108] "Crystal Structure of Human Pirin: An Iron-Bonding Nuclear Protein and Transcription Cofactor"  
H. Pang, M. Bartlam, Q. Zeng, H. Miyatake, T. Hisano, K. Miki, L. Wong, George F. Gao, Z. Rao  
The Journal of Biological Chemistry, **279**, (2004), 1491-1498
- [109] "Crystallization and Preliminary X-ray Analysis of the Helicase Domains of Vasa Complexed with RNA and an ATP Analogue"  
T. Sengoku, O. Nureki, N. Dohmae, A. Nakamura, S. Yokoyama  
Acta Crystallographica Section D, **60**, (2004), 320-322
- [110] "Crystal Structures of the Group II Chaperonin from *Thermococcus* strain KS-1: Steric Hindrance by the Substituted Amino Acid, and Inter-subunit Rearrangement between Two Crystal Forms"  
Y. Shomura, T. Yoshida, R. Iizuka, T. Maruyama, M. Yohda, K. Miki  
Journal of Molecular Biology, **335**, (2004), 1265-1278
- [111] "Structural Basis of Human Cytoglobin for Ligand Binding"  
H. Sugimoto, M. Makino, H. Sawai, N. Kawada, K. Yoshizato, Y. Shiro  
Journal of Molecular Biology, **339**, (2004), 873-885
- [112] "Crystal Structure of a Novel Zinc-Binding ATP Sulfurylase from *Thermus thermophilus* HB8"  
Y. Taguchi, M. Sugishima, K. Fukuyama  
Biochemistry, **43**, (2004), 4111-4118
- [113] "Crystal Structure of the Conserved Hypothetical Protein TT1380 from *Thermus thermophilus* HB8"  
T. Wada, M. Shirouzu, T. Terada, Y. Kamewari, S. Park, J. Tame, S. Kuramitsu, S. Yokoyama  
Proteins: Structure, Function, and Bioinformatics, **55**, (2004), 778-780
- [114] "Crystal Structure of Ribosomal Protein L27 from *Thermus thermophilus* HB8"  
H. Wang, C. Takemoto, K. Murayama, H. Sakai, A. Tatsuguchi, T. Terada, M. Shirouzu, S. Kuramitsu, S. Yokoyama  
Protein Science, **13**, (2004), 2806-2810
- [115] "Structural Insights into the *Thermus thermophilus* ADP-ribose Pyrophosphatase Mechanism via Crystal Structures with the Bound Substrate and Metal"  
S. Yoshiba, T. Ooga, N. Nakagawa, T. Shibata, Y. Inoue, S. Yokoyama, S. Kuramitsu, R. Masui  
The Journal of Biological Chemistry, **279**, (2004), 37163-37174



[2005]

- [116] "Structural Determinants for Branched-Chain Aminotransferase Isozyme Specific Inhibition by the Anticonvulsant Drug Gabapentin"  
M. Goto, K. Hirotsu, I. Miyahara, M. Conway, N. Yennawar, Mohammad M. Islam, Susan M. Huston  
The Journal of Biological Chemistry, **280**, (2005), 37246-37256
- [117] "Crystal Structures of  $\Delta$ -Piperidine-2-carboxylate/ $\Delta$ <sup>1</sup>-Pyrroline-2-carboxylate Reductase Belonging to a New Family of NAD(P)H-dependent Oxidoreductases: Conformational Change, Substrate Recognition, and Stereochemistry of the Reaction"  
M. Goto, K. Hirotsu, I. Miyahara, R. Omi  
The Journal of Biological Chemistry, **280**, (2005), 40875-40884
- [118] "Crystal Structure of a Novel Polyisoprenoid-Binding Protein from *Thermus Thermophilus* HB8"  
N. Handa, T. Terada, Y. Doi-Katayama, H. Hirota, Jeremy R. H. Tame, S. Park, S. Kuramitsu, M. Shirouzu, S. Yokoyama  
Protein Science, **14**, (2005), 1004-1010
- [119] "Crystal Structure of the Small Form of Glucose-Inhibited Division Protein A from *Thermus thermophilus* HB8"  
W. Iwasaki, H. Miyatake, K. Miki  
Proteins: Structure, Function, and Bioinformatics, **61**, (2005), 1121-1126
- [120] "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
- [121] "A Novel Induced-fit Reaction Mechanism of Asymmetric Hot Dog Thioesterase Paal "  
N. Kunishima, Y. Asada, M. Sugahara, J. Ishijima, Y. Nodake, M. Sugahara, M. Miyano, S. Kuramitsu, S. Yokoyama, M. Sugahara  
Journal of Molecular Biology, **352**, (2005), 212-228
- [122] "Crystal Structure of the N-terminal RecA-like Domain of a DEAD-box RNA Helicase, the *Dugesia japonica vasa*-like Gene B Protein"  
K. Kurimoto, Y. Muto, N. Obayashi, T. Terada, M. Shirouzu, T. Yabuki, M. Aoki, E. Seki, T. Matsuda, T. Kigawa, H. Okumura, A. Tanaka, N. Shibata, M. Kashikawa, K. Agata, S. Yokoyama  
Journal of Structural Biology, **150**, (2005), 58-68
- [123] "Improved Expression, Purification, and Crystallization of a Putative *N*-acetyl- $\gamma$ -glutamyl-phosphate Reductase from Rice (*Oryza sativa*)"  
J. Miura-Ohnuma, T. Nonaka, S. Katoh, K. Murata, A. Kita, K. Miki, E. Katoh  
Acta Crystallographica Section F, **F61**, (2005), 1058-1061
- [124] "Crystal Structure of TT1662 From *Thermus thermophilus* HB8: A Member of the  $\alpha/\beta$  Hydrolase Fold Enzymes"  
K. Murayama, M. Shirouzu, T. Terada, S. Kuramitsu, S. Yokoyama  
Proteins: Structure, Function, and Bioinformatics, **58**, (2005), 982-984
- [125] "Structure of P-protein of the Glycine Cleavage System: Implications for Nonketotic Hyperglycinemia"  
T. Nakai, N. Nakagawa, N. Maoka, R. Masui, S. Kuramitsu, N. Kamiya  
The EMBO Journal, **24**, (2005), 1523-1536
- [126] "Crystal Structure of Pyruvate Phosphate Dikinase from Maize Revealed an Alternative Conformation in the Swiveling-Domain Motion"  
T. Nakanishi, T. Nakatsu, M. Matsuoka, K. Sakata, H. Kato  
Biochemistry, **44**, (2005), 1136-1144
- [127] "Recent Progress of Structural Biology of tRNA Processing and Modification"  
K. Nakanishi, O. Nureki  
Molecular Cell, **19**, (2005), 157-166
- [128] "Conformational Changes in the  $\alpha$ -Subunit Coupled to Binding of the  $\beta_2$ -Subunit of Tryptophan Synthase from *Escherichia coli*: Crystal Structure of the Tryptophan Synthase  $\alpha$ -Subunit Alone"  
K. Nishio, Y. Morimoto, M. Ishizuka, K. Ogasahara, T. Tsukihara, K. Yutani  
Biochemistry, **44**, (2005), 1184-1192
- [129] "Crystal Structure of Putative *N*-Acetyl- $\gamma$ -Glutamyl-Phosphate Reductase (AK071544) from Rice (*Oryza sativa*)"  
T. Nonaka, A. Kita, J. Miura-Ohnuma, E. Katoh, N. Inagaki, T. Yamazaki, K. Miki  
Proteins: Structure, Function, and Bioinformatics, **61**, (2005), 1137-1140

- [130] "Crystal Structures of the Signal Transducing Protein GlnK from *Thermus thermophilus* HB8"  
H. Sakai, H. Wang, C. Takemoto-Hori, T. Kaminishi, H. Yamaguchi, Y. Kamewari, T. Terada, S. Kuramitsu, M. Shirouzu, S. Yokoyama  
Journal of Structural Biology, **149**, (2005), 99-110
- [131] "Crystallization and Preliminary Crystallographic Analysis of Bacterial Fructosyl Amino Acid Oxidase"  
R. Sakaue, T. Nakatsu, Y. Yamaguchi, H. Kato, N. Kajiyama  
Acta Crystallographica Section F, **61**, (2005), 196-198
- [132] "ATP-Induced Structural Change of Dephosphocoenzyme A Kinase from *Thermus thermophilus* HB8"  
A. Seto, K. Murayama, M. Toyama, A. Ebihara, N. Nakagawa, S. Kuramitsu, M. Shirouzu, S. Yokoyama  
Proteins: Structure, Function, and Bioinformatics, **58**, (2005), 235-242
- [133] "Crystal Structure of Stilbene Synthase from *Arachis hypogaea*"  
Y. Shomura, I. Torayama, D. Suh, T. Xiang, A. Kita, U. Sankawa, K. Miki  
Proteins: Structure, Function, and Bioinformatics, **60**, (2005), 803-806
- [134] "Crystal Structure of Atypical Cytoplasmic ABC-ATPase SufC from *Thermus thermophilus* HB8"  
S. Watanabe, A. Kita, K. Miki  
Journal of Molecular Biology, **353**, (2005), 1043-1054
- [135] "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"  
B. Youssef, S. Takeda, M. Sugahara, M. Miyano, H. Mori, S. Wakabayashi  
Acta Crystallographica Section F, **61**, (2005), 956-958  
[2006]
- [136] "The Crystal Structure of Polyhydroxybutyrate Depolymerase from *Penicillium funiculosum* Provides Insights into the Recognition and Degradation of Biopolyesters"  
T. Hisano, K. Kasuya, Y. Tezuka, N. Ishii, T. Kobayashi, M. Shiraki, E. Oroudjev, H. Hansma, T. Iwata, Y. Doi, T. Saito, K. Miki  
Journal of Molecular Biology, **356**, (2006), 933-1004
- [137] "Purification, Crystallization, and Preliminary X-ray Diffraction Studies of *N*-Acetylglucosamine-phosphate Mutase from *Candida albicans*"  
Y. Nishitani, D. Maruyama, T. Nonaka, A. Kita, T. Fukami, T. Mio, H. Yamada-Okabe, T. Yamada-Okabe, K. Miki  
Acta Crystallographica Section F, **62**, (2006), 419-421
- [138] "Crystal Structure of Human Indoleamine 2,3-dioxygenase: Catalytic Mechanism of O<sub>2</sub> Incorporation by a Heme-Containing Dioxygenase"  
H. Sugimoto, S. Oda, T. Otsuki, T. Hino, T. Yoshida, Y. Shiro  
Proceedings of the National Academy of Sciences of the United States of America, **103**, (2006), 2611-2616

## BL45XU

## Refereed Journals

- [1995]
- [1] "Conceptual Design of SPring-8 Contract Beamline for Structural Biology"  
M. Yamamoto, T. Fujisawa, M. Nakasako, T. Tanaka, T. Uruga, H. Kimura, H. Yamaoka, Y. Inoue, H. Iwasaki, T. Ishikawa, H. Kitamura, T. Ueki  
Review of Scientific Instruments, **66**, (1995), 1833-1835
- [1998]
- [2] "Construction of a Vertical Undulator at SPring-8"  
T. Tanaka, X. Marechal, T. Hara, T. Tanabe, H. Kitamura  
Journal of Synchrotron Radiation, **5**, (1998), 414-416
- [3] "Trichromatic Concept at SPring-8 RIKEN Beamline I"  
M. Yamamoto, T. Kumasaka, T. Fujisawa, T. Ueki  
Journal of Synchrotron Radiation, **5**, (1998), 222-225
- [1999]
- [4] "Crystal Structure of the RNA-Dependent RNA Polymerase of Hepatitis C Virus"  
H. Ago, T. Adachi, A. Yoshida, M. Yamamoto, N. Habuka, K. Yatsunami, M. Miyano  
Structure, **7**, (1999), 1417-1426