

- [18] "Structural Transients of Contractile Proteins upon Sudden ATP Liberation in Skeletal Muscle Fibers"  
J. Wakayama, T. Tamura, N. Yagi, H. Iwamoto  
*Biophysical Journal*, **87**, (2004), 430-441
- [19] "X-ray Diffraction from a Left Ventricular Wall of Rat Heart"  
N. Yagi, J. Shimizu, S. Mohri, J. Araki, K. Nakamura, H. Okuyama, H. Toyota, T. Morimoto, Y. Morizane, M. Kurusu, T. Miura, K. Hashimoto, K. Tsujioka, H. Suga, F. Kajiya  
*Biophysical Journal*, **86**, (2004), 2286-2294
- [20] "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
- [21] "CCD-based X-ray Area Detector for Time-resolved Diffraction Experiments"  
N. Yagi, K. Inoue, T. Oka  
*Journal of Synchrotron Radiation*, **11**, (2004), 456-461  
[2005]
- [22] "Site Occupancy Determination for Manganese in Some Spinel-Type Oxides by  $K\beta$  X-Ray Fluorescence Spectra"  
H. Eba, K. Sakurai  
*Journal of Solid State Chemistry*, **178**, (2005), 370-375
- [23] "Structural Analysis of Single Wool Fibre by Scanning Microbeam SAXS"  
Y. Kajiura, Y. Shinohara, Y. Amemiya, T. Itou, S. Watanabe, A. Iida  
*Journal of Applied Crystallography*, **38**, (2005), 420-425
- [24] "Natural Water Specimen Preparation for TXRF Analysis Using a Johansson Wavelength-Dispersive Spectrometer"  
S. Kurunczi, K. Sakurai  
*X-Ray Spectrometry*, **34**, (2005), 56-58
- [25] "A Secondary Electron Emission Detector for Measuring the Intensity of Synchrotron Radiation"  
N. Nariyama, S. Tamiguchi  
*Review of Scientific Instruments*, **76**, (2005), 033302
- [26] "Structural Analysis of Cell Membrane Complex of a Hair Fibre by Micro-Beam X-ray Diffraction"  
N. Ohta, T. Oka, K. Inoue, N. Yagi, S. Kato, I. Hatta  
*Journal of Applied Crystallography*, **38**, (2005), 274-279
- [27] "Structural Transition of Bacteriorhodopsin is Preceded by Deprotonation of Schiff Base: Microsecond Time-Resolved X-ray Diffraction Study of Purple Membrane"  
T. Oka, K. Inoue, M. Kataoka, Y. Naoto  
*Biophysical Journal*, **88**, (2005), 436-442

## BL40B2

### Refereed Papers

[2000]

- [1] "Crystallization of the F41 Fragment of Flagellin and Data Collection from Extremely Thin Crystals"  
Fadel A. Samatey, K. Imada, F. Vonderviszt, Y. Shirakihara, K. Namba  
*Journal of Structural Biology*, **132**, (2000), 106-111  
[2001]
- [2] "Crystal Structure of *cis*-Prenyl Chain Elongating Enzyme, Undecaprenyl Diphosphate Synthase"  
M. Fujihashi, Y. Zhang, Y. Higuchi, X. Li, T. Koyama, K. Miki  
*Proceedings of the National Academy of Sciences of the United States of America*, **98**, (2001), 4337-4342
- [3] "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
- [4] "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

- [5] "Purification and Crystallization of Japanese Pear S-RNase Associated with Gametophytic Self-Incompatibility"  
T. Matsuura, M. Unno, H. Sakai, T. Tsukihara, S. Norioka  
*Acta Crystallographica Section D*, **57**, (2001), 172-173
- [6] "Crystallization and Preliminary X-Ray Diffraction Analysis of NADP-Dependent Glyceraldehyde-3-Phosphate Dehydrogenase of *Synechococcus* PCC 7942"  
Y. Nakamura, T. Tada, K. Wada, T. Kinoshita, M. Tamoi, S. Shigeoka, K. Nishimura  
*Acta Crystallographica Section D*, **57**, (2001), 879-881
- [7] "Crystal Structure of the Archaeal Holliday Junction Resolvase Hjc and Implications for DNA Recognition"  
T. Nishino, K. Komori, D. Tsuchiya, Y. Ishino, K. Morikawa  
*Structure*, **9**, (2001), 197-204
- [8] "Crystal Structure of *meso*-2,3-Butanediol Dehydrogenase in a Complex with NAD<sup>+</sup> and Inhibitor Mercaptoethanol at 1.7 Å Resolution for Understanding of Chiral Substrate Recognition Mechanisms"  
M. Otagiri, G. Kurisu, S. Ui, Y. Takusagawa, M. Ohkuma, T. Kudo, M. Kusunoki  
*The Journal of Biochemistry*, **129**, (2001), 205-208
- [9] "Crystallization and Preliminary X-ray Studies of *meso*-2,3-Butanediol Dehydrogenase from *Klebsiella pneumoniae* IAM1063"  
M. Otagiri, G. Kurisu, S. Swaminathan, S. Ui, S. Yoneda, M. Ohkuma, T. Kudo, M. Kusunoki  
*Acta Crystallographica Section D*, **57**, (2001), 857-859
- [10] "Atomic Structure of the Clamp Loader Small Subunit from *Pyrococcus furiosus*"  
T. Oyama, Y. Ishino, Isaac K. O. Cann, S. Ishino, K. Morikawa  
*Molecular Cell*, **8**, (2001), 455-463
- [11] "Polysaccharide-Polynucleotide Complexes. 2. Complementary Polynucleotide Mimic Behavior of the Natural Polysaccharide: Schizophyllan in the Macromolecular Complex with Single-Stranded RNA and DNA"  
K. Sakurai, M. Mizu, S. Shinkai  
*Biomacromolecules*, **2**, (2001), 641-650
- [12] "A Hexagonally Organized Elemental Supramolecular Structure of a Sugar-Appended Organogelator Observed by Synchrotron X-Ray Source (SPring-8)"  
K. Sakurai, T. Kimura, O. Gronwald, K. Inoue, S. Shinkai  
*Chemistry Letters*, **2001**, (2001), 746-747
- [13] "Role of Non-Glycine Residues in Left-Handed Helical Conformation for the Conformational Stability of Human Lysozyme"  
K. Takano, Y. Yamagata, K. Yutani  
*Proteins: Structure, Function, and Genetics*, **44**, (2001), 233-243
- [14] "Role of Amino Acid Residues in Left-handed Helical Conformation for the Conformational Stability of a Protein"  
K. Takano, Y. Yamagata, K. Yutani  
*Proteins: Structure, Function, and Genetics*, **45**, (2001), 274-280
- [15] "Crystallization and Preliminary X-Ray Analysis of Catalase-Peroxidase from the Halophilic Archeon *Haloartula marismortui*"  
N. Tanaka, Y. Yamada, N. Igarashi, S. Saijo, T. Sato, H. Usui, T. Fujiwara  
*Acta Crystallographica Section D*, **57**, (2001), 1157-1158
- [16] "Performance of a Micro-Strip Gas Chamber in Solution X-Ray Scattering"  
H. Toyokawa, T. Fujisawa, Y. Inoko, T. Nagayoshi, Y. Nishi, Y. Nishikawa, A. Ochi, M. Suzuki, T. Tanimori  
*Nuclear Instruments and Methods in Physics Research Section A*, **467-468**, (2001), 1144-1147  
[2002]
- [17] "Self-Organized Structures of Hydrogen Bonded Poly(4-vinylphenol) - Tertiary Amino Lipid Mixtures"  
I. Akiba, K. Sakurai  
e-Polymers (online <http://www.e-polymers.org>), , (2002), 1-6
- [18] "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

- [19] "Atomic Resolution Structures of Oxidized [4Fe-4S] Ferredoxin from *Bacillus thermoproteolyticus* in Two Crystal Forms: Systematic Distortion of [4Fe-4S] Cluster in the Protein"  
K. Fukuyama, T. Okada, Y. Kakuta, Y. Takahashi  
Journal of Molecular Biology, **315**, (2002), 1155-1166
- [20] "Positive Contribution of Hydration Structure on the Surface of Human Lysozyme to the Conformational Stability"  
J. Funahashi, K. Takano, Y. Yamagata, K. Yutani  
The Journal of Biological Chemistry, **277**, (2002), 21792-21800
- [21] "*Escherichia coli* B  $\gamma$ -Glutamylcysteine Synthetase: Modification, Purification, Crystallization and Preliminary Crystallographic Analysis"  
T. Hibi, H. Hisada, T. Nakatsu, H. Kato, J. Oda  
Acta Crystallographica Section D, **58**, (2002), 316-318
- [22] "Trimeric Crystal Structure of the Glycoside Hydrolase Family 42 Beta-Galactosidase from *Thermus thermophilus* A4 and the Structure of Its Complex with Galactose"  
M. Hidaka, S. Fushinobu, N. Ohtsu, H. Motoshima, H. Matsuzawa, H. Shoun, T. Wakagi  
Journal of Molecular Biology, **322**, (2002), 79-91
- [23] "Structural Hierarchy of Several Proteins Observed by Wide-Angle Solution Scattering"  
M. Hirai, H. Iwase, T. Hayakawa, K. Miura, K. Inoue  
Journal of Synchrotron Radiation, **9**, (2002), 202-205
- [24] "Three-Dimensional Structure of *Bacillus stearothermophilus* Neopullulanase"  
H. Hondoh, T. Kuriki, Y. Matsuura  
Biologia, Brastilava Section C, **57/Suppl.**, (2002), 77-82
- [25] "Crystal Structure of the Extracellular Domain of Mouse RANK Ligand at 2.2-Å Resolution"  
S. Ito, K. Wakabayashi, O. Ubukata, S. Hayashi, F. Okada, T. Hata  
The Journal of Biological Chemistry, **277**, (2002), 6631-6636
- [26] "Crystallization and Preliminary X-ray Diffraction Studies of HutP Protein: an RNA-Binding Protein that Regulates the Transcription of hut Operon in *Bacillus subtilis*"  
Thirumanenseri S. Kumarevel, Z. Fujimoto, B. Padmanabhan , P. Oda, S. Nishikawa, H. Mizuno, Penmecha K. R. Kumar  
Journal of Structural Biology, **138**, (2002), 237-240
- [27] "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
- [28] "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
- [29] "Crystal Structure of C<sub>4</sub> Form Maize and Quaternary Complex of *E.coli* Phosphoenolpyruvate Carboxylases"  
H. Matsumura, Y. Xie, S. Shirakata, T. Inoue, T. Yoshinaga, Y. Ueno, K. Izui, Y. Kai  
Structure, **10**, (2002), 1721-1730
- [30] "Structural Study of the Cleavage and the Sequence-Specific Recognition of the Double-Stranded DNA Substrate by VMA1-Derived Endonuclease"  
S. Miyamoto  
Doctor Thesis (The University of Tokyo),, (2002)
- [31] "Protein-Splicing Reaction via a Thiazolidine Intermediate: Crystal Structure of the VMA1-Derived Endonuclease Bearing the N- and C-Terminal Propeptides"  
R. Mizutani, S. Nogami, M. Kawasaki, Y. Ohya, Y. Anraku, Y. Satow  
Journal of Molecular Biology, **316**, (2002), 919-929
- [32] "Hexameric Ring Structure of the ATPase Domain of the Membrane-Integrated Metalloprotease FtsH from *Thermus thermophilus* HB8"  
H. Niwa, D. Tsuchiya, H. Makio, M. Yoshida, K. Morikawa  
Structure, **10**, (2002), 1415-1423
- [33] "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

- [34] "Light-Induced Unfolding of Photoactive Yellow Protein Mutant M100L"  
 J. Sasaki, M. Kumauchi, N. Hamada, T. Oka, F. Tokunaga  
*Biochemistry*, **41**, (2002), 1915-1922
- [35] "Substrate-Induced Conformational Change of a Coenzyme B<sub>12</sub>-Dependent Enzyme: Crystal Structure of the Substrate-Free Form of Diol Dehydratase"  
 N. Shibata, J. Masuda, Y. Morimoto, N. Yasuoka, T. Toraya  
*Biochemistry*, **41**, (2002), 12607-12617
- [36] "Crystal Structure of Rat Heme Oxygenase-1 in Complex with Heme Bound to Azide: Implication for Regiospecific Hydroxylation of Heme at  $\alpha$ -Meso Carbon"  
 M. Sugishima, H. Sakamoto, Y. Higashimoto, Y. Omata, S. Hayashi, M. Noguchi, K. Fukuyama  
*The Journal of Biological Chemistry*, **277**, (2002), 45086-45090
- [37] "Structural Views of the Ligand-Binding Cores of a Metabotropic Glutamate Receptor Complexed with an Antagonist and Both Glutamate and Gd<sup>3+</sup>"  
 D. Tsuchiya, N. Kunishima, N. Kamiya, H. Jingami, K. Morikawa  
*Proceedings of the National Academy of Sciences of the United States of America*, **99**, (2002), 2660-2665
- [38] "The 2.0 Å Crystal Structure of Catalase-Peroxidase from *Haloarcula marismortui*"  
 Y. Yamada, T. Fujiwara, T. Sato, N. Igarashi, N. Tanaka  
*Nature Structural Biology*, **9**, (2002), 691-695
- [39] "The Crystal Structure of Coenzyme B<sub>12</sub>-Dependent Glycerol Dehydratase in Complex with Cobalamin and Propane-1,2-diol"  
 M. Yamanishi, M. Yunoki, T. Tobimatsu, H. Sato, J. Matsui, A. Dokiya, Y. Iuchi, K. Oe, K. Suto, N. Shibata, Y. Morimoto, N. Yasuoka, T. Toraya  
*European Journal of Biochemistry*, **269**, (2002), 4484-4494
- [2003]
- [40] "Mesomorphic Organization and Phase Diagram of Mixtures of Polymer Terminated with Ionic Group and Oppositely Charged Surfactant"  
 I. Akiba, Y. Jeong, K. Sakurai  
*Macromolecules*, **36**, (2003), 8433-8439
- [41] "Nanoorganization of Reactive Mixtures of Mid-Functional Polystyrene with End-Functional Oligomer"  
 I. Akiba, K. Nomura, K. Shikasho, Y. Jeong, K. Sakurai  
*Macromolecules*, **36**, (2003), 8890-8893
- [42] "Cross-Beta Order and Diversity in Nanocrystals of an Amyloid-Forming Peptide"  
 R. Diaz-Avalos, C. Long, E. Fontano, M. Balbirnie, R. Grothe, D. Ensenberg, Donald L. D. Caspar  
*Journal of Molecular Biology*, **330**, (2003), 1165-1175
- [43] "Structures of Argininosuccinate Synthetase in Enzyme-ATP Substrates and Enzyme-AMP Product Forms: Stereochemistry of the Catalytic Reaction"  
 M. Goto, R. Omi, I. Miyahara, M. Sugawara, K. Hirotsu  
*Journal of Biological Chemistry*, **278**, (2003), 22964-22971
- [44] "Bilayer Structure of Ganglioside/Cholesterol Mixed System in the Presence of Ca<sup>2+</sup>"  
 T. Hayakawa, M. Hirai  
*Journal of Applied Crystallography*, **36**, (2003), 489-493
- [45] "Direct Evidence of Nucleation During the Induction Period of Polyethylene Crystallization by SAXS"  
 M. Hikosaka, S. Yamazaki, I. Wataoka, Narayan Ch. Das, K. Okada, A. Toda, K. Inoue  
*Journal of Macromolecular Science, Part B-Physics*, **42**, (2003), 847-865
- [46] "Three-Dimensional Structure and Substrate Binding of *Bacillus stearothermophilus* Neopullulanase"  
 H. Hondoh, T. Kuriki, Y. Matsuura  
*Journal of Molecular Biology*, **326**, (2003), 177-188
- [47] "Variation of Microfibril Angles and Chemical Composition: Implication for Functional Properties"  
 R. Hori, H. Suzuki, T. Kamiyama, J. Sugiyama  
*Journal of Materials Science Letters*, **22**, (2003), 963-966
- [48] "Crystallization and Preliminary X-ray Studies of Xylanase 10B from *Thermotoga maritima*"  
 I. Iis, T. Kumasaka, T. Kaneko, C. Morokuma, S. Nakamura, N. Tanaka  
*Acta Crystallographica Section D*, **59**, (2003), 1659-1661

- [49] "Mechanism of Metal Activation of Human Hematopoietic Prostaglandin D Synthase"  
T. Inoue, D. Irikura, N. Okazaki, S. Kinugasa, H. Matsumura, N. Uodome, M. Yamamoto, T. Kumasaka, M. Miyano, Y. Kai, Y. Urade  
*Nature Structural Biology*, **10**, (2003), 291-296
- [50] "Archaeal ADP-Dependent Phosphofructokinase: Expression, Purification, Crystallization and Preliminary Crystallographic Analysis"  
J. Jeong, S. Fushinobu, S. Ito, H. Shoun, T. Wakagi  
*Acta Crystallographica Section D*, **59**, (2003), 1327-1329
- [51] "Unique Amino Acids Cluster for Switching from the Dehydrogenase to Oxidase Form of Xanthine Oxidoreductase"  
Y. Kuwabara, T. Nishino, T. Matsumura, E. Pai, B. Eger, K. Okamoto, T. Nishino  
*Proceedings of the National Academy of Sciences of the United States of America*, **100**, (2003), 8170-8175
- [52] "Two Different Molecular Conformations Found in Chitosan Type II Salts"  
A. Lertworasirikul, S. Tsue, K. Noguchi, K. Okuyama, K. Ogawa  
*Carbohydrate Research*, **338**, (2003), 1229-1233
- [53] "Crystal Structure of a Full-Length LysR-Type Transcriptional Regulator, CbnR: Unusual Combination of Two Subunit Forms and Molecular Bases for Causing and Changing DNA Bend"  
S. Muraoka, R. Okumura, N. Ogawa, T. Nonaka, K. Miyashita, T. Senda  
*Journal of Molecular Biology*, **328**, (2003), 555-566
- [54] "Purification and Crystallization of a LysR-type Transcriptional Regulator CbnR from Ralstonia Eutropha NH9"  
S. Muraoka, R. Okumura, Y. Uragami, T. Nonaka, N. Ogawa, K. Miyashita, T. Senda  
*Protein and Peptide Letters*, **10**, (2003), 325-329
- [55] "In-situ Small-Angle X-Ray Scattering Experiment in Melt Spinning of High Density Polyethylene"  
H. Murase, G. Sakamoto, Y. Ohta, M. Kotera, K. Nakamae  
*Proceedings of 8th Japan International SAMPE Symposium*, , (2003), 369
- [56] "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
- [57] "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
- [58] "Dolastatin 11 Connects Two Long-Pitch Strands in F-Actin to Stabilize Microfilaments"  
T. Oda, Zackary D. Crane, Christopher W. Dicus, Bilal A. Sufi, Robert B. Bates  
*Journal of Molecular Biology*, **329**, (2003), 319-324
- [59] "An Extremely Potent Inhibitor of Xanthine Oxidoreductase. Crystal Structure of the Enzyme-Inhibitor Complex and Mechanism of Inhibition "  
K. Okamoto, Bryan T. Eger, T. Nishino, S. Kondo, Emil F. Pai, T. Nishino  
*The Journal of Biological Chemistry*, **278**, (2003), 1848-1855
- [60] "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  
*Journal of Biological Chemistry*, **278**, (2003), 46035-46045
- [61] "Supramolecular Structure of a Sugar-Appended Organogelator Explored with Synchrotron X-Ray Small Angle Scattering"  
K. Sakurai, Y. Jeong, K. Koumoto, A. Friggeri, O. Gronwald, S. Sakurai, S. Okamoto, K. Inoue, S. Shinkai  
*Langmuir*, **19**, (2003), 8211-8217
- [62] "A Swollen Gel Phase of DPPC Aqueous Solution with Small Amount of Ethanol Observed at Moderate Pressure and Temperature"  
H. Seto, H. Nobutou, Norifumi L. Yamada, T. Takeda, D. Ihara, M. Nagao, K. Inoue  
*Journal of Applied Crystallography*, **36**, (2003), 607-611
- [63] "Crystal Structures of Ferrous and CO-, CN<sup>-</sup>, and NO-Bound Forms of Rat Heme Oxygenase-1 (HO-1) in Complex with Heme: Structural Implications for Discrimination between CO and O<sub>2</sub> in HO-1"  
M. Sugishima, H. Sakamoto, M. Noguchi, K. Fukuyama  
*Biochemistry*, **42**, (2003), 9898-9905

- [64] "Crystal Structure of Rat Heme Oxygenase-1 in Complex with Biliverdin-Iron Chelate: Conformational Change of the Distal Helix during the Heme Cleavage Reaction"  
 M. Sugishima, H. Sakamoto, Y. Higashimoto, M. Noguchi, K. Fukuyama  
*The Journal of Biological Chemistry*, **278**, (2003), 32352-32358
- [65] "Buried Water Molecules Contribute to the Conformational Stability of a Protein"  
 K. Takano, Y. Yamagata, K. Yutani  
*Protein Engineering*, **16**, (2003), 5-9
- [66] "Crystallographic Characterization of the Radixin FERM Domain Bound to the C-Terminal Region of the Human Na<sup>+</sup>/H<sup>+</sup>-Exchanger Regulatory Factor (NHERF)"  
 S. Terawaki, R. Maesaki, K. Okada, T. Hakoshima  
*Acta Crystallographica Section D*, **59**, (2003), 177-179
- [67] "Crystallization and Preliminary X-ray Analysis of TBP-Interacting Protein from the Hyperthermophilic Archaeon *Thermococcus kodakaraensis* Starain KOD1"  
 T. Yamamoto, T. Matsuda, N. Sakamoto, H. Matsumura, T. Inoue, M. Morikawa, S. Kanaya, Y. Kai  
*Acta Crystallographica Section D*, **59**, (2003), 372-374
- [68] "Nucleation and Morphology of Polyethylene under Shear Flow"  
 S. Yamazaki, M. Hikosaka, A. Toda, I. Wataoka, K. Yamada, K. Tagashira  
*Journal of Macromolecular Science, Part B-Physics*, **42**, (2003), 874-865
- [69] "Superstructures of Mesoscopic Monomolecular Sheets of Thiacyanine J Aggregates in Solution"  
 H. Yao, Y. Kagoshima, S. Kitamura, T. Isohashi, Y. Ozawa, K. Kimura  
*Langmuir*, **19**, (2003), 8882-8887
- [2004]
- [70] "Self-Organization and Phase Behavior of Hydrogen-Bonded Mixtures of End-Functional Polymer with Surfactant"  
 I. Akiba, H. Masunaga, K. Sasaki, Y. Jeong, K. Sakurai, S. Hara, K. Yamamoto  
*Macromolecules*, **37**, (2004), 1152-1155
- [71] "Nanostructured Polymer Blend Formed from Poly(*N*-vinylpyrrolidone) and End-Functional Polystyrene"  
 I. Akiba, H. Masunaga, K. Sasaki, K. Shikasho, K. Sakurai  
*Polymer*, **45**, (2004), 5761-5764
- [72] "Structural and Enzymatic Properties of 1-Aminocyclopropane-1-Carboxylate Deaminase Homologue from *Pyrococcus horikoshii*"  
 A. Fujino, T. Ose, M. Yao, T. Tokiwano, M. Honma, N. Watabnabe, I. Tanaka  
*Journal of Molecular Biology*, **341**, (2004), 999-1013
- [73] "Y-700 [1-[3-Cyano-4-(2,2-dimethylpropoxy)phenyl]-1*H*-pyrazole-4-carboxylic acid]: A Potent Xanthine Oxidoreductase Inhibitor with Hepatic Excretion"  
 A. Fukunari, K. Okamoto, T. Nishino, E. Pai, B. Eger, M. Kamezawa, I. Yamada, N. Kato  
*The Journal of Pharmacology And Experimental Therapeutics*, **311**, (2004), 519-528
- [74] "Hierarchical Map of Protein Unfolding and Refolding at Thermal Equilibrium Revealed by Wide-Angle X-ray Scattering"  
 M. Hirai, M. Koizumi, T. Hayakawa, H. Hirai, H. Takahashi, S. Abe, H. Hirai, K. Miura, K. Inoue  
*Biochemistry*, **43**, (2004), 9036-9049
- [75] "Water-Mediated Interaction at a Protein-Protein Interface"  
 T. Ikura, Y. Urakubo, N. Ito  
*Chemical Physics*, **307**, (2004), 111-119
- [76] "Structural Basis for Channelling Mechanism of a Fatty Acid  $\beta$ -Oxidation Multienzyme Complex"  
 M. Ishikawa, D. Tsuchiya, T. Oyama, Y. Tsunaka, K. Morikawa  
*The EMBO Journal*, **23**, (2004), 2745-2754
- [77] " $\beta$ -Helix is a Likely Core Structure of Yeast Prion Sup35 Amyloid Fibers"  
 A. Kishimoto, K. Hasegawa, H. Suzuki, H. Taguchi, K. Namba, M. Yoshida  
*Biochemical and Biophysical Research Communications*, **315**, (2004), 739-745
- [78] "Estimation of Interlamellar Water Molecules in Sphingomyelin Bilayer Systems Studied by DSC and X-ray Diffraction"  
 M. Kodama, M. Abe, Y. Kawasaki, K. Hayashi, S. Ohira, H. Nozaki, C. Katagiri, K. Inoue, H. Takahashi  
*Thermochimica Acta*, **416**, (2004), 105-111

- [79] "Molecular and Crystal Structures of Chitosan/HI Type I Salt Determined by X-ray Fiber Diffraction"  
A. Lertworasirikul, S. Yokoyama, K. Noguchi, K. Ogawa, K. Okuyama  
*Carbohydrate Research*, **339**, (2004), 825-833
- [80] "Dynamic Heterogeneity in Interfacial Region of Microphase-Separated Polystyrene-*block*-poly(methyl acrylate) Studied by the ESR Spin-Label Technique"  
Y. Miwa, K. Tanida, K. Yamamoto, S. Okamoto, M. Sakaguchi, M. Sakai, S. Makita, S. Sakurai, S. Shimada  
*Macromolecules*, **37**, (2004), 3707-3716
- [81] "Crystal Structure of a Family 54  $\alpha$ -L-Arabinofuranosidase Reveals a Novel Carbohydrate-binding Module That can Bind Arabinose"  
A. Miyanaga, T. Koseki, H. Matsuzawa, T. Wakagi, H. Shoun, S. Fushinobu  
*The Journal of Biological Chemistry*, **279**, (2004), 44907-44914
- [82] "Protein Splicing of Yeast VMA1-Derived Endonuclease via Thiazolidine Intermediates"  
R. Mizutani, Y. Anraku, Y. Satow  
*Journal of Synchrotron Radiation*, **11**, (2004), 109-112
- [83] "Light-Induced Structural Changes of LOV Domain-Containing Polypeptides from *Arabidopsis* Phototropin 1 and 2 Studied by Small-Angle X-ray Scattering"  
M. Nakasako, T. Iwata, D. Matsuoka, S. Tokutomi  
*Biochemistry*, **43**, (2004), 14881-14890
- [84] "Preparation and Characterization of Core-Shell Nanoparticles Hardened by Gamma-Ray"  
T. Narita, K. Terao, T. Dobashi, N. Nagasawa, F. Yoshii  
*Colloids and Surfaces B: Biointerfaces*, **38**, (2004), 187-190
- [85] "The First Crystal Structure of the Novel Class of Fructose-1,6-Bisphosphatase Present in Thermophilic Archaea"  
H. Nishimasu, S. Fushinobu, H. Shoun, T. Wakagi  
*Structure*, **12**, (2004), 949-959
- [86] "Expression, Purification, Crystallization and Preliminary X-ray Studies of Geranylgeranyl Diphosphate Synthase from *Thermus thermophilus* HB8"  
K. Nishio, Y. Nodake, K. Hamada, K. Suto, N. Nakagawa, S. Kuramitsu, K. Miura  
*Acta Crystallographica Section D*, **60**, (2004), 178-180
- [87] "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
- [88] "Hydrolysis of Third-Generation Cephalosporins by Class C  $\beta$ -lactamases: Structures of a Transition-State Analog of Cefotaxime in Wild-Type and Extended-Spectrum Enzymes"  
M. Nukaga, S. Kumar, K. Nukaga, R. F. Pratt, James R. Knox  
*The Journal of Biological Chemistry*, **279**, (2004), 9344-9352
- [89] "Crystal Structures of Collagen Model Peptides with Pro-Hyp-Gly Repeating Sequence at 1.26 Å Resolution: Implications for Proline Ring Puckering"  
K. Okuyama, C. Hongo, R. Fukushima, G. Wu, H. Narita, K. Noguchi, Y. Tanaka, N. Nishino  
*Biopolymers*, **76**, (2004), 367-377
- [90] "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
- [91] "Structural Stability of Oligomeric Chaperonin 10: the Role of Two  $\beta$ -Strands at the N and C Termini in Structural Stabilization"  
I. Sakane, M. Ikeda, C. Matsumoto, T. Higurashi, K. Inoue, K. Hongo, T. Mizobata, Y. Kawata  
*Journal of Molecular Biology*, **344**, (2004), 1123-1133
- [92] "X-Ray Induced Reduction of the Crystal of High-Molecular Weight Cytochrome *c* Revealed by Microspectrophotometry"  
M. Satou, N. Shibata, Y. Morimoto, Y. Takayama, K. Ozawa, H. Akutsu, Y. Higuchi, N. Yasuoka  
*Journal of Synchrotron Radiation*, **11**, (2004), 113-116
- [93] "Structure of Human Translin at 2.2 Å Resolution"  
I. Sugiura, C. Sasaki, T. Hasegawa, T. Kohno, S. Sugio, H. Moriyama, M. Kasai, T. Matsuzaki  
*Acta Crystallographica Section D*, **60**, (2004), 674-679

- [94] "Substrate Recognition and Selectivity of Plant Glycerol-3-Phosphate Acyltransferases (GPATs) from *Cucurbita moscata* and *Spinacea oleracea*"  
T. Tamada, Michael D. Feese, Stefano R. Ferri, Y. Kato, R. Yajima, T. Toguri, R. Kuroki  
*Acta Crystallographica Section D*, **60**, (2004), 13-21
- [95] "Crystallization and Preliminary X-ray Diffraction Analysis of a Thermostable Endo-1,5- $\alpha$ -L-Arabinanase from *Bacillus thermodenitrificans* TS-3"  
A. Yamaguchi, T. Tada, T. Nakaniwa, T. Kitatani, M. Takao, T. Sakai, K. Nishimura  
*Acta Crystallographica Section D*, **60**, (2004), 1149-1151
- [96] "Gelation of Xyloglucan in Water/Alcohol Systems"  
Y. Yuguchi, T. Kumagai, M. Wu, T. Hirotsu, J. Hosokawa  
*Cellulose*, **11**, (2004), 203-208
- [2005]
- [97] "Crystal Structure of the Terminal Oxygenase Component of Cumene Dioxygenase Component of *Pseudomonas fluorescens* IP01"  
X. Dong, S. Fushinobu, E. Fukuda, T. Terada, S. Nakamura, K. Shimizu, H. Nojiri, T. Omori, H. Shoun, T. Wakagi  
*Journal of Bacteriology*, **187**, (2005), 2483-2490
- [98] "Small-angle X-ray Scattering from Multi-walled Carbon Nanotubes(CNTs) Dispersed in Polymeric Matrix"  
T. Inada, H. Masunaga, S. Kawasaki, M. Yamada, K. Kobori, K. Sakurai  
*Chemistry Letters*, **34**, (2005), 524-525
- [99] "Solvent/Gelator Interactions and Supramolecular Structure of Gel Fibers in Cyclic Bis-Urea/Primary Alcohol Organogels"  
Y. Jeong, K. Hanabusa, H. Masunaga, I. Akiba, K. Miyoshi, S. Sakurai, K. Sakurai  
*Langmuir*, **21**, (2005), 586-594
- [100] "Small-Angle X-ray Scattering from a Dual-Component Organogel to Exhibit a Charge Transfer Interaction"  
Y. Jeong, A. Friggeri, I. Akiba, H. Masunaga, K. Sakurai, S. Sakurai, S. Okamoto, K. Inoue, S. Shinkai  
*Journal of Colloid and Interface Science*, **283**, (2005), 113-122
- [101] "Direct Detection of Effective Glass Transitions in Miscible Polymer Blends by Temperature-Modulated Differential Scanning Calorimetry"  
Y. Miwa, K. Yamamoto, K. Usami, M. Sakaguchi, M. Sakai, S. Shimada  
*Macromolecules*, **38**, (2005), 2355-2361
- [102] "Light-Induced Global Structural Changes in Phytochrome A Regulating Photomorphogenesis in Plants"  
M. Nakasako, T. Iwata, K. Inoue, S. Tokutomi  
*The FEBS Journal*, **272**, (2005), 603-612
- [103] "Quaternary Structure of LOV-Domain Containing Polypeptide of *Arabidopsis* FKF1 Protein"  
M. Nakasako, D. Matsuoka, K. Zikihara, S. Tokutomi  
*FEBS Letters*, **579**, (2005), 1067-1071
- [104] "Probing the role of Asp-120(81) of Metallo- $\beta$ -lactamase (IMP-1) by Site-directed Mutagenesis, Kinetic Studies, and X-ray Crystallography"  
Y. Yamaguchi, T. Kuroki, H. Yasuzawa, T. Higashi, W. Jin, A. Kawanami, Y. Yamagata, Y. Arakawa, M. Goto, H. Kurosaki  
*The Journal of Biological Chemistry*, **280**, (2005), 20824-20832

## BL41XU

### Refereed Papers

[1995]

- [1] "Fundamental Design of the High Energy Undulator Pilot Beamline for Macromolecular Crystallography at the SPring-8"  
N. Kamiya, T. Uruga, H. Kimura, H. Yamaoka, M. Yamamoto, Y. Kawano, T. Ishikawa, H. Kitamura, T. Ueki, H. Iwasaki, Y. Kashiwara, N. Tanaka, H. Moriyama, K. Hamada, K. Miki, I. Tanaka  
*Review of Scientific Instruments*, **66**, (1995), 1703-1705