

- [101] "The Mixed States in the Unconventional Heavy Fermion Compound $\text{SmOs}_4\text{Sb}_{12}$ "
M. Mizumaki, S. Tsutsui, T. Uruga, H. Tanida, D. Kikuchi, H. Sugawara, H. Sato
Journal of the Physical Society of Japan, **76**, (2007), 053706
- [102] "Cu K Edge X-ray Magnetic Circular Dichroism of Amorphous $\text{Gd}_{68}\text{Cu}_{32}$ "
I. Nakai, H. Tanaka, A. Kitabatake, J. Fukuoka, S. Yamada, N. Ohnishi
Journal of Magnetism and Magnetic Materials, **310**, (2007), 1868-1870
- [103] "Characterization of $\text{SiN}_x/\text{Ga}_x\text{In}_{1-x}\text{As}$ Interface using Hard X-ray Photoemission Spectroscopy"
Y. Saito, M. Ito, M. Nakamura, A. Kimura, K. Yamaguchi
Japanese Journal of Applied Physics, **46**, (2007), 5771-5773
- [104] "Development of the Total-Reflection XAFS Method for the Liquid-liquid Interface"
H. Tanida, H. Nagatani, M. Harada
Journal of Physics: Conference Series, **83**, (2007), 012019-012023
[2008]
- [105] "Chemically Induced Permanent Magnetism in Au, Ag, and Cu Nanoparticles: Localization of the Magnetism by Element Selective Techniques"
J. Garitaonandia, M. Insausti, E. Goikolea, M. Suzuki, J. Cashion, N. Kawamura, H. Osawa, I. Muro, K. Suzuki, F. Plazaola, T. Rojo
Nano Letters, **8**, (2008), 661-667
- [106] "Can $K\beta$ " Bands be a Probe for State-Selective XAFS Measurements?"
H. Hayashi
X線分析の進歩 (Advances in X-ray Chemical Analysis, Japan), **39**, (2008), 129-136

BL40B2

Refereed Journals

- [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] "Crystal Structure at 1.5-Å Resolution of *Pyrus pyrifolia* Pistil Ribonuclease Responsible for Gametophytic Self-incompatibility"
T. Matsuura, H. Sakai, M. Unno, K. Ida, M. Sato, F. Sakiyama, S. Norioka
The Journal of Biological Chemistry, **276**, (2001), 45261-45269
- [7] "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
- [8] "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
- [9] "Crystal Structure of *meso*-2,3-Butanediol Dehydrogenase in a Complex with NAD^+ 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

- [10] "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
- [11] "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
- [12] "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
- [13] "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
- [14] "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
- [15] "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
- [16] "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
- [17] "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]
- [18] "Self-Organized Structures of Hydrogen Bonded Poly(4-vinylphenol) - Tertiary Amino Lipid Mixtures"
I. Akiba, K. Sakurai
e-Polymers, (2002), 1-6
- [19] "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
- [20] "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
- [21] "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
- [22] "*Escherichia coli* B γ -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
- [23] "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
- [24] "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
- [25] "Three-Dimensional Structure of *Bacillus stearothermophilus* Neopullulanase"
H. Hondoh, T. Kuriki, Y. Matsuura
Biologia, Bratislava Section C, **57/Suppl.**, (2002), 77-82

- [26] "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
- [27] "Study of Glycolipids/Globular Proteins Systems Using X-ray and Neutron Solution Scattering Methods"
H. Iwase
Doctor Thesis (Gunma University), (2002)
- [28] "Crystallization and Preliminary X-ray Diffraction Studies of HutP Protein: an RNA-Binding Protein that Regulates the Transcription of *hut* Operon in *Bacillus subtilis*"
Thirumanenari S. Kumarevel, Z. Fujimoto, B. Padmanabhan, P. Oda, S. Nishikawa, H. Mizuno, Penmecha K. R. Kumar
Journal of Structural Biology, **138**, (2002), 237-240
- [29] "Ultra-high-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
- [30] "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
- [31] "Crystal Structure of C₄ 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
- [32] "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)
- [33] "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
- [34] "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
- [35] "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
- [36] "Light-Induced Unfolding of Photoactive Yellow Protein Mutant M100L"
J. Sasaki, M. Kumauchi, N. Hamada, T. Oka, F. Tokunaga
Biochemistry, **41**, (2002), 1915-1922
- [37] "Contribution of Solvent Water to the Solution X-ray Scattering Profile of Proteins"
Y. Seki, T. Tomizawa, K. Nikolay, K. Soda
Biophysical Chemistry, **95**, (2002), 235-252
- [38] "Substrate-Induced Conformational Change of a Coenzyme B₁₂-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
- [39] "Crystal Structure of Rat Heme Oxygenase-1 in Complex with Heme Bound to Azide: Implication for Regiospecific Hydroxylation of Heme at α -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
- [40] "Structural Views of the Ligand-Binding Cores of a Metabotropic Glutamate Receptor Complexed with an Antagonist and Both Glutamate and Gd³⁺"
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
- [41] "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

- [42] "The Crystal Structure of Coenzyme B₁₂-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]
- [43] "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
- [44] "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
- [45] "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
- [46] "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
The Journal of Biological Chemistry, **278**, (2003), 22964-22971
- [47] "Bilayer Structure of Ganglioside/Cholesterol Mixed System in the Presence of Ca²⁺"
T. Hayakawa, M. Hirai
Journal of Applied Crystallography, **36**, (2003), 489-493
- [48] "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
- [49] "Three-Dimensional Structure and Substrate Binding of *Bacillus stearothermophilus* Neopullulanase"
H. Hondoh, T. Kuriki, Y. Matsuura
Journal of Molecular Biology, **326**, (2003), 177-188
- [50] "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
- [51] "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
- [52] "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
- [53] "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
- [54] "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
- [55] "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
- [56] "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
- [57] "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
- [58] "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

- [59] "Crystal Structure of Calcium-free α -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
- [60] "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
- [61] "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, **328**, (2003), 319-324
- [62] "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
- [63] "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
- [64] "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
- [65] "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
- [66] "Crystal Structures of Ferrous and CO-, CN⁻, and NO-Bound Forms of Rat Heme Oxygenase-1 (HO-1) in Complex with Heme: Structural Implications for Discrimination between CO and O₂ in HO-1"
M. Sugishima, H. Sakamoto, M. Noguchi, K. Fukuyama
Biochemistry, **42**, (2003), 9898-9905
- [67] "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
- [68] "Buried Water Molecules Contribute to the Conformational Stability of a Protein"
K. Takano, Y. Yamagata, K. Yutani
Protein Engineering, **16**, (2003), 5-9
- [69] "Crystallographic Characterization of the Radixin FERM Domain Bound to the C-Terminal Region of the Human Na⁺/H⁺-Exchanger Regulatory Factor (NHERF)"
S. Terawaki, R. Maesaki, K. Okada, T. Hakoshima
Acta Crystallographica Section D, **59**, (2003), 177-179
- [70] "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
- [71] "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
- [72] "Superstructures of Mesoscopic Monomolecular Sheets of Thiocyanine J Aggregates in Solution"
H. Yao, Y. Kagoshima, S. Kitamura, T. Isohashi, Y. Ozawa, K. Kimura
Langmuir, **19**, (2003), 8882-8887
- [2004]
- [73] "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
- [74] "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

- [75] "Structural Basis for Ca²⁺-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
- [76] "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
- [77] "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
- [78] "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
- [79] "Water-Mediated Interaction at a Protein-Protein Interface"
T. Ikura, Y. Urakubo, N. Ito
Chemical Physics, **307**, (2004), 111-119
- [80] "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
- [81] " β -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
- [82] "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
- [83] "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
- [84] "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
- [85] "Mutational Analysis of the Damage-recognition and Catalytic Mechanism of Human SMUG1 DNA Glycosylase"
M. Matsubara, T. Tanaka, H. Terato, E. Ohmae, S. Izumi, K. Katayanagi, H. Ide
Nucleic Acids Research, **32**, (2004), 5291-5302
- [86] "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
- [87] "Crystal Structure of a Family 54 α -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
- [88] "Protein Splicing of Yeast VMA1-Derived Endonuclease via Thiazolidine Intermediates"
R. Mizutani, Y. Anraku, Y. Satow
Journal of Synchrotron Radiation, **11**, (2004), 109-112
- [89] "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
- [90] "Ligh-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
- [91] "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

- [92] "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
- [93] "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
- [94] "The Crystal Structure of an Oxidatively Stable Subtilisin-Like Alkaline Serine Protease, KP-43, with a C-Terminal β -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
- [95] "Hydrolysis of Third-Generation Cephalosporins by Class C β -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
- [96] "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
- [97] "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
- [98] "Structural Stability of Oligomeric Chaperonin 10: the Role of Two β -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
- [99] "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
- [100] "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
- [101] "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
- [102] "How Oligomerization Contributes to the Thermostability of an archaeon Protein: Protein L-Isoaspartyl-O-methyltransferase from *Sulfolobus tokodai*"
Y. Tanaka, K. Tsumoto, Y. Yasutake, M. Umetsu, M. Yao, H. Fukada, I. Tanaka, I. Kumagai
The Journal of Biological Chemistry, **279**, (2004), 32957-32967
- [103] "Crystallization and Preliminary X-ray Diffraction Analysis of a Thermostable Endo-1,5- α -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
- [104] "Gelation of Xyloglucan in Water/Alcohol Systems"
Y. Yuguchi, T. Kumagai, M. Wu, T. Hirotsu, J. Hosokawa
Cellulose, **11**, (2004), 203-208
- [2005]
- [105] "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
- [106] "Repetitive Interactions Observed in the Crystal Structure of a Collagen-Model Peptide, [(Pro-Pro-Gly)₃]"
C. Hongo, K. Noguchi, O. Kenji, Y. Tanaka, N. Nishino
The Journal of Biochemistry, **138**, (2005), 135-144
- [107] "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

- [108] "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
- [109] "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
- [110] "Inclusion of DNA into Organic Gelator Fibers Made of Amphiphathic Molecules and Its Controlled Release"
R. Karinaga, Y. Jeong, S. Shinkai, K. Kaneko, K. Sakurai
Langmuir, **21**, (2005), 9398-9401
- [111] "Structure of the Complex of Porcine Pancreatic Elastase with a Trimacrocyclic Peptide Inhibitor FR901451"
T. Kinoshita, T. Kitatani, M. Warizaya, T. Tada
Acta Crystallographica Section F, **61**, (2005), 808-811
- [112] "Structure of a Cynobacterial BLUF Protein, TII0078, Containing a Novel FAD-binding Blue Light Sensor Domain"
A. Kita, K. Okajima, Y. Morimoto, M. Ikeuchi, K. Miki
Journal of Molecular Biology, **349**, (2005), 1-9
- [113] "Transition from a Normal to Inverted Cylinder for an Amidine-Bearing Lipid/pDNA Complex and Its Excellent Transfection"
K. Koiwai, K. Tokuhisa, R. Karinaga, Y. Kudo, S. Kusuki, Y. Takeda, K. Sakurai
Bioconjugate Chemistry, **16**, (2005), 1349-1351
- [114] "Structural and Mutational Analysis of *Trypanosoma brucei* Prostaglandin H₂ Reductase Provides Insight into the Catalytic Mechanism of Aldo-ketoreductases"
B. Kubata, T. Inoue, Y. Okano, Z. Kabutu, Samuel K. Martin, M. Lazarus, M. Duszenko, Y. Sumii, Y. Kusakari, H. Matsumura, Y. Kai, S. Sugiyama, K. Inaka, T. Inui, Y. Urade
The Journal of Biological Chemistry, **280**, (2005), 26371-26383
- [115] "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
- [116] "Role of Adsorbed Iodine into Poly(Vinyl Alcohol) Films Drawn in KI/I₂ Solution"
T. Miyazaki, S. Katayama, E. Funai, Y. Tsuji, S. Sakurai
Polymer, **46**, (2005), 7436-7442
- [117] "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
- [118] "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
- [119] "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
- [120] "Conformational Changes in the α -Subunit Coupled to Binding of the β ₂-Subunit of Tryptophan Synthase from *Escherichia coli*: Crystal Structure of the Tryptophan Synthase α -Subunit Alone"
K. Nishio, Y. Morimoto, M. Ishizuka, K. Ogasahara, T. Tsukihara, K. Yutani
Biochemistry, **44**, (2005), 1184-1192
- [121] "Molecular and Crystal Structure of Poly(Tetramethylene Adipate) Alpha Form Based on Synchrotron X-ray Fiber Diffraction"
K. Noguchi, H. Kondo, Y. Ichikawa, K. Okuyama, J. Washiyama
Polymer, **46**, (2005), 10823-10830
- [122] "Position and Orientation of Phalloidin in F-actin Determined by X-ray Fiber Diffraction Analysis"
T. Oda, K. Namba, Y. Maeda
Biophysical Journal, **88**, (2005), 2727-2736
- [123] "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

- [124] "Unexpected Puckering of Hydroxyproline in the Guest Triplets, Hyp-Pro-Gly and Pro-alloHyp-Gly Sandwiched between Pro-Pro-Gly Sequence"
K. Okuyama, N. Jiravanichanun, C. Hongo, G. Wu, K. Noguchi, N. Nishino, T. Silva
ChemBioChem, **6**, (2005), 1184-1187
- [125] "Crystal Structure of *Escherichia coli* YfhJ Protein, a Member of the ISC Machinery Involved in Assembly of Iron-Sulfur Clusters"
Y. Shimomura, Y. Takahashi, Y. Kakuta, K. Fukuyama
Proteins: Structure, Function, and Bioinformatics, **60**, (2005), 566-569
- [126] "Structure and Thermal History Dependant Phase Behavior of Hydrated Synthetic Sphingomyelin Analogue: 1,2-dimyristamido-1,2-deoxyphosphatidylcholine"
H. Takahashi, Y. Okumura, J. Sunamoto
Biochimica et Biophysica Acta - Biomembranes, **1713**, (2005), 40-50
- [127] "Crystallization and Preliminary X-ray Analysis of Methylthioribose-1-phosphate Isomerase from *Bacillus subtilis*"
H. Tamura, T. Inoue, H. Matsumura, H. Ashida, Y. Saito, A. Yokota, Y. Kai
Acta Crystallographica Section F, **61**, (2005), 595-598
- [128] "Elucidation of Stability Determinants of Cold-Adapted Monomeric Isocitrate Dehydrogenase from a Psychrophilic Bacterium, *Colwellia Maris*, by Construction of Chimeric Enzymes"
S. Watanabe, Y. Yasutake, I. Tanaka, Y. Takada
Microbiology, **151**, (2005), 1083-1094
- [129] "Physicochemical Characterization of the Reassembled Dimer of an Integral Membrane Protein OmpF Porin"
Y. Watanabe, Y. Inoko
The Protein Journal, **24**, (2005), 167-174
- [130] "SAXS, SANS and NSE Studies on "Unbound State" in DPPC/Water/CaCl₂ System"
N. Yamada, H. Seto, T. Takeda, M. Nagao, Y. Kawabata, K. Inoue
Journal of the Physical Society of Japan, **74**, (2005), 2853-2859
- [131] "Probing the Role of Asp-120(81) of Metallo-β-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
- [132] "Structural Basis for Thermostability of End-1,5-α-L-Arabinanase from *Bacillus thermodenitrificans* TS-3"
A. Yamaguchi, T. Tada, K. Wada, T. Nakaniwa, T. Kitatani, Y. Sogabe, T. Sakai, M. Takao, K. Nishimura
The Journal of Biochemistry, **137**, (2005), 587-592
- [133] "Crystal Structure of M-Ras Reveals a GTP-bound "Off" State Conformation of Ras Family Small GTPase"
M. Ye, F. Shima, S. Muraoka, J. Liao, H. Okamoto, M. Yamamoto, A. Tamura, N. Yagi, T. Ueki, T. Kataoka
The Journal of Biological Chemistry, **280**, (2005), 31267-31275
- [134] "Structural Characteristics of Xyloglucan — Congo Red Aggregates as Observed by Small Angle X-ray Scattering"
Y. Yuguchi, T. Hirotsu, J. Hosokawa
Cellulose, **12**, (2005), 469-477
- [2006]
- [135] "Formation of Mesoscopically Organized Phase Structures in Polymer Mixtures"
I. Akiba, S. Murata, H. Masunaga, K. Sasaki
Composite Interfaces, **13**, (2006), 415-421
- [136] "Coexistence of Two Domains in Intercellular Lipid Matrix of Stratum Corneum"
I. Hatta, N. Ohta, K. Inoue, N. Yagi
Biochimica et Biophysica Acta - Biomembranes, **1758**, (2006), 1830-1836
- [137] "Thermal Unfolding Process of Proteins Depending on Structural Hierarchy Clarified by Wide-Angle X-ray Scattering at a Third Generation Synchrotron Source"
M. Hirai, M. Koizumi, K. Inoue
分析化学 (Bunseki Kagaku), **55**, (2006), 411-418
- [138] "Crystal Structure of 3-Hydroxybenzoate Hydroxylase from *Comamonas testosteroni* Has a Large Tunnel for Substrate and Oxygen Access to the Active Site"
T. Hiromoto, S. Fujiwara, K. Hosokawa, H. Yamaguchi
Journal of Molecular Biology, **364**, (2006), 878-896

- [139] "The Thermal Expansion of Cellulose II and III_{II} Crystals"
R. Hori, M. Wada
Cellulose, **13**, (2006), 281-290
- [140] "Surface Density of Cellobiohydrolase on Crystalline Celluloses A Critical Parameter to Evaluate Enzymatic Kinetics at a Solid-Liquid Interface"
K. Igarashi, M. Wada, R. Hori, M. Samejima
The FEBS Journal, **273**, (2006), 2869-2878
- [141] "Supramolecular Structure of the Self-Assembled Aggregates Made from Low Molecular Weight Gelators"
Y. Jeong
Doctor Thesis (The University of Kitakyushu), (2006), 1-136
- [142] "Effects of Molecular Characteristics and Processing Conditions on Melt-Drawing Behavior of Ultrahigh Molecular Weight Polyethylene"
M. Kakiage, T. Yamanobe, S. Murakami, T. Komoto, H. Uehara
Journal of Polymer Science Part B: Polymer Physics, **44**, (2006), 2455-2467
- [143] "Transient Crystallization during Drawing from Ultra-High Molecular Weight Polyethylene Melts having Different Entanglement Characteristics"
M. Kakiage, T. Komoto, S. Murakami, T. Yamanobe, H. Uehara
Polymer, **47**, (2006), 8053-8060
- [144] "Completely Buried, Non-Ion-Paired Glutamic Acid Contributes Favorably to the Conformational Stability of Pyrrolidone Carboxyl Peptidases from Hyperthermophiles"
J. Kaushik, S. Iimura, K. Ogasahara, Y. Yamagata, S. Segawa, K. Yutani
Biochemistry, **45**, (2006), 7100-7112
- [145] "Structure of Apo-glyceraldehyde-3-phosphate Dehydrogenase from *Synechococcus* PCC7942"
T. Kitatani, Y. Nakamura, K. Wada, T. Kinoshita, T. Tada, S. Shigeoka, M. Tamoi
Acta Crystallographica Section F, **62**, (2006), 727-730
- [146] "Structural Study of Protein Folding and Amyloid Formation"
M. Koizumi
Doctor Thesis (Gunma University), (2006)
- [147] "SAXS Studies on Structural Changes in a Poly(vinyl alcohol) Film during Uniaxial Stretching in Water"
T. Miyazaki, A. Hoshiko, M. Akasaka, T. Shintani, S. Sakurai
Macromolecules, **39**, (2006), 2921-2929
- [148] "Single Nucleotide Polymorphism in the Cytotoxic Distending Toxin B Gene Confers Heterogeneity in the Cytotoxicity of *Actinobacillus actinomycetemcomitans*"
S. Nishikubo, M. Ohara, M. Ikura, K. Katayanagi, T. Fujiwara, H. Komatsuzawa, H. Kurihara, M. Sugai
Infection and Immunity, **74**, (2006), 7014-7020
- [149] "Effects of High Molecular Weight Component on Crystallization of Polyethylene under Shear Flow"
Y. Ogino, H. Fukushima, N. Takahashi, G. Matsuba, K. Nishida, T. Kanaya
Polymer, **47**, (2006), 5669-5667
- [150] "Crystallization of Isotactic Polypropylene under Shear Flow Observed in a Wide Spatial Scale"
Y. Ogino, H. Fukushima, N. Takahashi, G. Matsuba, K. Nishida, T. Kanaya
Macromolecules, **39**, (2006), 7617-7625
- [151] "High-Resolution Powder Diffraction Study of Purple Membrane with a Large Guinier-Type Camera"
T. Oka, K. Miura, K. Inoue, T. Ueki, N. Yagi
Journal of Synchrotron Radiation, **13**, (2006), 281-284
- [152] "Revision of Collagen Molecular Structure"
K. Okuyama, K. Noguchi, X. Xu, M. Iguchi
Biopolymers, **84**, (2006), 181-191
- [153] "Conformation of alloHyp in the Y Position in the Host-guest Peptide with the Pro-Pro-Gly Sequence: Implication of the Destabilization of (Pro-alloHyp-Gly)₁₀"
K. Okuyama, N. Jiravanichanun, N. Nishino
Biopolymers, **81**, (2006), 225-233
- [154] "The Crystal Structure of the R52Q Mutant Demonstrates a Role for R52 in Chromophore pK_a Regulation in Photoactive Yellow Protein"
N. Shimizu, H. Kamikubo, Y. Yamazaki, Y. Imamoto, M. Kataoka
Biochemistry, **45**, (2006), 3542-3547
- [155] "Characterization and Degradation Behavior of Segmented Poly(urethaneurea)s Prepared from Amino-acid Based Diisocyanate"
A. Takahara, S. Sasaki, M. Hadano, H. Otsuka, K. Aoi, T. Yamaguchi
日本ゴム協会誌 (Journal of the Society of Rubber Industry, Japan), **79**, (2006), 219-224

- [156] "Structural Transitions of Mono-olein Bicontinuous Cubic Phase Induced by Inclusion of Protein Lysozyme Solutions"
S. Tanaka, S. Maki, M. Ataka
Physical Review E, **73**, (2006), 061510
- [157] "Structural Basis for NHERF Recognition by ERM Proteins"
S. Terawaki, R. Maesaki, T. Hakoshima
Structure, **14**, (2006), 777-789
- [158] "Ligand-Induced Domain Rearrangement of Fatty Acid β -Oxidation Multienzyme Complex"
D. Tsuchiya, N. Shimizu, M. Ishikawa, Y. Suzuki, K. Morikawa
Structure, **14**, (2006), 237-246
- [159] "Phase Development Mechanism during Drawing from Highly Entangled Polyethylene Melts"
H. Uehara, M. Kakiage, T. Yamanobe, T. Komoto, S. Murakami
Macromolecular Rapid Communications, **27**, (2006), 966-970
- [160] "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
- [161] "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
- [162] "An ESR Spin-Label Study on Molecular Mobility in the Interface between Microphases of a Diblock Copolymer: Effects of Admixture of Homopolymers That Are Miscible with One of the Blocks"
K. Yamamoto, Y. Miwa, T. Tababe, S. Okamoto, S. Shimada, M. Sakai, M. Sakaguchi
The Journal of Physical Chemistry B, **110**, (2006), 4073-4082
[2007]
- [162] "Salt-concentration Dependence of the Structure and Form Factors for the Wormlike Micelle Made from a Dual Surfactant in Aqueous Solutions"
K. Eguchi, I. Kaneda, Y. Hiwatari, H. Masunaga, K. Sakurai
Journal of Applied Crystallography, **40**, (2007), s264-s268
- [163] "Membrane Properties of Dipalmitoyl Bis (monoacylglycero) Phosphate"
T. Hayakawa, A. Makino, S. Michaud, M. Lagarde, A. Douteau, M. Hirai, K. Ito, T. Kobayashi
膜 (Membrane), **32**, (2007), 221-228
- [164] "Permeability of Water through a Raft Model Membrane Clarified by Time-Resolved SANS and SAXS"
M. Hirai, T. Onai, M. Koizumi, H. Hirai, K. Kasahara, N. Suzuki, K. Yuyama, K. Inoue
Journal of Applied Crystallography, **40**, (2007), s159-s164
- [165] "Vortex Pinning by Gold Nanorods in $\text{GdBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Thin Films"
T. Horide, K. Matsumoto, A. Ichinose, M. Mukaida, Y. Yoshida, S. Horii
IEEE Transactions on Applied Superconductivity, **17**, (2007), 3729-3732
- [166] "Complex Made from Tetrasodium *N,N*-Bis(carboxylatomethyl) Glutamate and Sodium Oleate that Forms a Highly Ordered Lamella in Gel Phase"
Y. Jeong, K. Uezu, M. Kobayashi, S. Sakurai, H. Masunaga, K. Inoue, S. Sasaki, N. Shimada, Y. Takeda, K. Kaneko, K. Sakurai
Bulletin of the Chemical Society of Japan, **80**, (2007), 410-417
- [167] "Nonuniformity in Natural Rubber as Revealed by Small-Angle Neutron Scattering, Small-Angle X-ray Scattering, and Atomic Force Microscopy"
T. Karino, Y. Yasuda, S. Kohjiya, Y. Ikeda, M. Shibayama
Biomacromolecules, **8**, (2007), 693-699
- [168] "Crystallization and Melting Behaviour of Poly(L-lactic Acid)"
T. Kawai, N. Rahman, G. Matsuba, K. Nishida, T. Kanaya, M. Nakano, H. Okamoto, J. Kawada, A. Usuki, N. Honma, K. Nakajima, M. Matsuda
Macromolecules, **40**, (2007), 9463-9469
- [169] "Collapse of the Hydration Shell of a Protein Prior to Thermal Unfolding"
M. Koizumi, H. Hirai, T. Onai, K. Inoue, M. Hirai
Journal of Applied Crystallography, **40**, (2007), s175-s178
- [170] "Development of Synchrotron DSC/WAXD/SAXS Simultaneous Measurement System for Polymeric Materials at the BL40B2 in SPring-8 and Its Application to the Study of Crystal Phase Transitions of Fluorine Polymers"
H. Masunaga, S. Sasaki, K. Tashiro, M. Hanesaka, M. Takata, K. Inoue, N. Ohta, N. Yagi
Polymer Journal, **39**, (2007), 1281-1289

- [171] "Structure Model of a Poly(vinyl alcohol) Film Uniaxially Stretched in Water and the Role of Crystallites on the Stress-Strain Relationship"
T. Miyazaki, A. Hoshiko, M. Akasaka, M. Sakai, Y. Takeda, S. Sakurai
Macromolecules, **40**, (2007), 8277-8284
- [172] "Small-Angle X-ray Scattering from Polystyrene Polymacromonomers with Relatively Short Main Chains"
Y. Nakamura
Journal of Applied Crystallography, **40**, (2007), s577-s580
- [173] "Crystal Structure of TTTHA1657 (AT-rich DNA-binding protein; p25) from *Thermus thermophilus* HB8 at 2.16 Å Resolution"
A. Nakamura, A. Sosa, H. Komori, A. Kita, K. Miki
Proteins: Structure, Function, and Bioinformatics, **66**, (2007), 755-759
- [174] "Synchrotron Small-Angle X-ray Scattering from Polystyrene Polymacromonomers in Toluene"
Y. Nakamura, M. Sugiyama, K. Amitani, T. Norisuye
Polymer Journal, **39**, (2007), 1098-1104
- [175] "The Rare Crystallographic Structure of d(CGCGCG)₂: The Natural Spermidine Molecule Bound to the Minor Groove of Left-handed Z-DNA d(CGCGCG)₂ at 10° C"
H. Ohishi, D. Zhou, T. Ishida, K. Nakatani
Biochemical and Biophysical Research Communications, **358**, (2007), 24-28
- [176] "Size Distribution and Shape of Nano-nucleus of Polyethylene Simultaneously Determined by SAXS"
K. Okada, K. Watanabe, I. Wataoka, A. Toda, S. Sasaki, K. Inoue, M. Hikosaka
Polymer, **48**, (2007), 382-392
- [177] "Supercooling (ΔT) Dependence of Nano-nucleation of PE by SAXS and Proposal of a New Nucleation Theory"
K. Okada, K. Watanabe, A. Toda, S. Sasaki, K. Inoue, M. Hikosaka
Polymer, **48**, (2007), 1116-1126
- [178] "Nucleation Mechanism Solved by First Direct Observation by Small Angle X-ray Scattering on Polymers"
K. Okada
Doctor Thesis (Hiroshima University), (2007)
- [179] "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
- [180] "Unique Side Chain Conformation of a Leu Residue in a Triple-Helical Structure"
K. Okuyama, H. Narita, T. Kawaguchi, K. Noguchi, Y. Tanaka, N. Nishino
Biopolymers, **86**, (2007), 212-221
- [181] "Initial Process of Amyloid Formation of Apomyoglobin and Effect of Glycosphingolipid G_{M1}"
T. Onai, M. Koizumi, R. Kan, K. Inoue, M. Hirai
Journal of Applied Crystallography, **40**, (2007), s184-s189
- [182] "Higher-order Structure Analysis of Polyethylene Thin Films by *In-situ* Synchrotron Grazing-incidence Small-angle and Wide-angle X-ray Scattering Measurements"
S. Sasaki, H. Masunaga, H. Tajiri, H. Okuda, K. Inoue, A. Takahara, M. Takata
Transactions of the Materials Research Society of Japan, **32**, (2007), 193-197
- [183] "Global Structure Analysis of Acid-Unfolded Myoglobin with Consideration to Effects of Intermolecular Coulomb Repulsion on Solution X-ray Scattering"
Y. Seki, T. Tomizawa, Y. Hiragi, K. Soda
Biochemistry, **46**, (2007), 234-244
- [184] "Characterization of Two-Dimensional Ultra-Small-Angle X-ray Scattering Apparatus for Application to Rubber Filled with Spherical Silica under Elongation"
Y. Shinohara, H. Kishimoto, Y. Amemiya, N. Yagi, A. Takeuchi, K. Uesugi, Y. Suzuki, K. Inoue, K. Muraoka, T. Mizoguchi
Journal of Applied Crystallography, **40**, (2007), s397-s401
- [185] "Ultrasound-Induced Gelation of Organic Fluids with Metalated Peptides"
H. Takaya, K. Isozaki, T. Naota
Angewandte Chemie International Edition, **46**, (2007), 2855-2857
- [186] "Structural Development of Dynamically Asymmetric Polymer Blends under Uniaxial Stretching"
H. Takeno, H. Uehara, S. Murakami, M. Takenaka, M. Im, N. Nagasawa, S. Sasaki
Journal of Applied Crystallography, **40**, (2007), s656-s611
- [187] "Nano-Periodic Arrangement of Crystal/Amorphous Phases Induced by Tensile Drawing of Highly Entangled Polyethylene Solid"
H. Uehara, K. Takeuchi, M. Kakiage, T. Yamanobe, T. Komoto
Macromolecules, **40**, (2007), 5820-5826

- [188] "Structural and Property Development for Conventional Polymers Utilizing Molecular Anisotropy and Entanglement Characteristics"
H. Uehara
高分子論文集 (Japanese Journal of Polymer Science and Technology), **64**, (2007), 525-538
- [189] "Molecular Mobility of Chain Ends of Matrix Chains in Phase-separated Di-block Copolymers"
K. Yamamoto, N. Kota, Y. Miwa, H. Takagi, S. Hara, S. Shimada
高分子論文集 (Japanese Journal of Polymer Science and Technology), **64**, (2007), 286-293
- [190] "Grazing Incident Small Angle X-ray Scattering Study of Polymer Thin Films with Embedded Ordered Nanometer Cells"
H. Yokoyama, C. Dutriez, H. Masunaga, S. Sasaki, L. Lei, T. Nemoto, K. Sugiyama, M. Takata, H. Okuda
The Journal of Chemical Physics, **127**, (2007), 014904
[2008]
- [191] "Hydration Process of Multi-stacked Phospholipid Bilayers to Form Giant Vesicles"
M. Hishida, H. Seto, N. Yamada, K. Yoshikawa
Chemical Physics Letters, **455**, (2008), 297-302
- [192] "Phase Transitions upon Heating for Melt-Drawn Ultra-High Molecular Weight Polyethylenes Having Different Molecular Characteristics"
M. Kakiage, M. Sekiya, T. Yamanobe, T. Komoto, S. Sasaki, S. Murakami, H. Uehara
The Journal of Physical Chemistry B, **112**, (2008), 5311-5316
- [193] "Dilute-Solution Properties of Polystyrene Polymacromonomer Having Side Chains of over 100 Monomeric Units"
Y. Nakamura, M. Sugiyama, T. Norisuye
Polymer Journal, **40**, (2008), 109-115
- [194] "The Crystallographic Study of Left-handed Z-DNA d(CGCGCG)₂ and Thermine Complexes Crystallized at Various Temperatures and at Various Concentration of Cations"
H. Ohishi, M. Odoko, D. Zhou, K. Nakatani, T. Ishida, N. Okabe, Y. Tozuka, K. Grzeskowiak
Biochemical and Biophysical Research Communications, **368**, (2008), 382-387
- [195] "Polyamines Stabilize Left-handed Z-DNA: Using X-ray Crystallographic Analysis, We Have Found a New Type of Polyamine (PA) that Stabilizes Left-handed Z-DNA"
H. Ohishi, M. Odoko, K. Tsukamoto, D. Zhou, K. Fukuyama, K. Grzeskowiak, T. Ishida, Y. Hiyama, N. Maezaki, T. Tanaka, N. Okabe, K. Nakatani
Biochemical and Biophysical Research Communications, **366**, (2008), 275-280

BL40XU

Refereed Journals

- [1999]
- [1] "Muscle Contraction: Challenges for Synchrotron Radiation"
K. Wakabayashi, N. Yagi
Journal of Synchrotron Radiation, **6**, (1999), 875-890
- [2000]
- [2] "Measurement of Gas Bremsstrahlung at the SPring-8 Insertion Device Beamline using PWO Scintillator"
Y. Asano, H. Shimizu, T. Matsumura, R. Chiba, T. Hashimoto, A. Miura, Y. Tajima, H. Yuuki Yoshida
Nuclear Instruments and Methods in Physics Research Section A, **451**, (2000), 685-696
- [2001]
- [3] "In-Vacuum X-Ray Helical Undulator for High Flux Beamline at SPring-8"
T. Hara, T. Tanaka, T. Seike, T. Bizen, X. Marechal, T. Kohda, K. Inoue, T. Oka, T. Suzuki, N. Yagi, H. Kitamura
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 165-168
- [4] "Present Status of High Flux Beamline (BL40XU) at SPring-8"
K. Inoue, T. Oka, T. Suzuki, N. Yagi, K. Takeshita, S. Goto, T. Ishikawa
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 674-677
- [5] "Downsizing of Johansson Spectrometer for X-Ray Fluorescence Trace Analysis with Brilliant Undulator Source"
K. Sakurai, H. Eba, K. Inoue, N. Yagi
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 1549-1552
- [2002]
- [6] "Structural Development of Natural Rubber during Uniaxial Stretching by in situ Wide Angle X-Ray Diffraction Using a Synchrotron Radiation"
S. Murakami, K. Senoo, S. Toki, S. Kohjiya
Polymer, **43**, (2002), 2117-2120

BL40XU