

- [2005]
- [23] "Study of High-Field Magnetic Phases of the Low-Carrier-System CeP by Synchrotron Radiation X-ray Diffraction"
A. Hannan, D. Kawana, K. Kuwahara, M. Kohgi, Y. Narumi, Y. Tabata, S. Shimomura, Y. Tanaka, K. Katsumata
Journal of the Physical Society of Japan, **74**, (2005), 2301-2309
- [24] "Synchrotron X-ray Diffraction Studies of α -Gd₂S₃"
K. Katsumata, A. Kikkawa, Y. Tanaka, S. Shimomura, S. Ebisu, S. Nagata
Journal of the Physical Society of Japan, **74**, (2005), 1598-1601
- [25] "The Giant Magneto-Volume Effect in Solid Oxygen"
K. Katsumata, S. Kimura, U. Staub, Y. Narumi, Y. Tanaka, S. Shimomura, T. Nakamura, Stephen W. Lovesey, T. Ishikawa, H. Kitamura
Journal of Physics: Condensed Matter, **17**, (2005), L235-L239
- [26] "Charge Dynamics in Strongly Correlated One-Dimensional Cu-O Chain Systems Revealed by Inelastic X-ray Scattering"
S. Suga, S. Imada, A. Higashiya, A. Shigemoto, S. Kasai, M. Sing, H. Fujiwara, A. Sekiyama, A. Yamasaki, C. Kim, T. Nomura, J. Igarashi, M. Yabashi, T. Ishikawa
Physical Review B, **72**, (2005), 081101(R)
- [27] "On a Phase Problem of High-Resolution Fourier Transform X-ray Spectroscopy"
K. Tamasaku, M. Yabashi, T. Ishikawa
Journal of Synchrotron Radiation, **12**, (2005), 696-700
- [28] "Manipulating the Multipole Moments in CeB₆ by Magnetic Fields"
Y. Tanaka, K. Katsumata, S. Shimomura, Y. Onuki
Journal of the Physical Society of Japan, **74**, (2005), 2201-2204
[2006]
- [29] "Acoustic Pulse Echoes Probed with Time-Resolved X-ray Triple-Crystal Diffractometry"
Y. Hayashi, Y. Tanaka, T. Kirimura, N. Tsukuda, E. Kuramoto, T. Ishikawa
Physical Review Letters, **96**, (2006), 115505

BL26B1

Refereed Journals

[2003]

- [1] "Structural Insight into Modest Binding of a Non-PXXP Ligand to the Signal Transducing Adaptor Molecule-2 Src Homology 3 Domain"
T. Kaneko, T. Kumazaka, T. Ganbe, T. Sato, K. Miyazawa, N. Kitamura, N. Tanaka
The Journal of Biological Chemistry, **279**, (2003), 48162-48168
- [2] "Crystallization and Preliminary X-ray Crystallographic Studies of NADP-dependent 3-hydroxyisobutyrate Dehydrogenase from *Thermus thermophilus* HB8"
N. Lokanath, I. Shiromizu, Y. Nodake, M. Sugahara, S. Yokoyama, S. Kuramitsu, M. Miyano, N. Kunishima
Acta Crystallographica Section D, **59**, (2003), 2294-2296

[2004]

- [3] "Crystallization and Preliminary X-ray Crystallographic Study of the Editing Domain of *Thermus thermophilus* Isoleucyl-tRNA Synthetase Complexed with Pre- and Post-Transfer Editing-Substrate Analogues"
R. Fukunaga, S. Yokoyama
Acta Crystallographica Section D, **60**, (2004), 1900-1902
- [4] "Crystallization and Preliminary X-ray Crystallographic Study of Leucyl-tRNA Synthetase from the Archaeon *Pyrococcus horikoshii*"
R. Fukunaga, S. Yokoyama
Acta Crystallographica Section D, **60**, (2004), 1916-1918
- [5] "Structural Basis of the Substrate-Specific Two-Step Catalysis of Long Chain Fatty Acyl-CoA Synthetase Dimer"
Y. Hisanaga, H. Ago, N. Nakagawa, K. Hamada, K. Ida, M. Yamamoto, T. Hori, Y. Arii, M. Sugahara, S. Kuramitsu, S. Yokoyama, M. Miyano
The Journal of Biological Chemistry, **279**, (2004), 31717-31726
- [6] "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

- [7] "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
- [8] "Crystal Structures of Possible Lysine Decarboxylases from *Thermus thermophilus* HB8"
M. Kukimoto-Niino, K. Murayama, M. Kato-Murayama, M. Idaka, Y. Bessho, A. Tatsuguchi, R. Ushikoshi-Nakayama, T. Terada, S. Kuramitsu, M. Shirouzu, S. Yokoyama
Protein Science, **13**, (2004), 3038-3042
- [9] "Purification, Crystallization and Preliminary Crystallographic Analysis of the Glycine-Cleavage System Component T-protein from *Pyrococcus horikoshii* OT3"
N. Lokanath, C. Kuroishi, N. Okazaki, N. Kunishima
Acta Crystallographica Section D, **60**, (2004), 1450-1452
- [10] "Structure of Aldolase from *Thermus thermophilus* HB8 Showing the Contribution of Oligomeric State to Thermostability"
N. Lokanath, I. Shiromizu, N. Ohshima, Y. Nodake, M. Sugahara, S. Yokoyama, S. Kuramitsu, M. Miyano, N. Kunishima
Acta Crystallographica Section D, **60**, (2004), 1816-1823
- [11] "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
- [12] "Expression, Purification, Crystallization and Preliminary Crystallographic Analysis of Osmotically Inducible Protein C"
P. Rehse, Y. Nodake, C. Kuroishi, T. Tahirov
Acta Crystallographica Section D, **60**, (2004), 357-358
- [13] "Crystallographic Structure and Biochemical Analysis of the *Thermus thermophilus* Osmotically Inducible Protein C"
P. Rehse, N. Ohshima, Y. Nodake, T. Tahirov
Journal of Molecular Biology, **338**, (2004), 959-968
- [14] "Structure of the RNA-Processing Inhibitor RraA from *Thermus thermophilis*"
P. Rehse, C. Kuroishi, T. Tahirov
Acta Crystallographica Section D, **60**, (2004), 1997-2002
- [15] "Structure and Implications for the Thermal Stability of Phosphopantetheine Adenylyltransferase from *Thermus thermophilus*"
H. Takahashi, E. Inagaki, Y. Fujimoto, C. Kuroishi, Y. Nodake, Y. Nakamura, F. Arisaka, K. Yutani, S. Kuramitsu, S. Yokoyama, M. Yamamoto, M. Miyano, T. Tahirov
Acta Crystallographica Section D, **60**, (2004), 97-104
- [16] "Structure of the *Thermus thermophilus* Putative Periplasmic Glutamate/Glutamine-Binding Protein"
H. Takahashi, E. Inagaki, C. Kuroishi, T. Tahirov
Acta Crystallographica Section D, **60**, (2004), 1846-1854
- [17] "Structural Basis for Substrate Selection by T7 RNA Polymerase"
D. Temiakov, V. Patlan, M. Anikin, W. McAllister, S. Yokoyama, P. Vsevolod, D. Vassilyev
Cell, **116**, (2004), 381-391
- [18] "Sample Management System for a Vast amount of Frozen Crystals at SPring-8"
G. Ueno, R. Hirose, K. Ida, T. Kumashita, M. Yamamoto
Journal of Applied Crystallography, **37**, (2004), 867-873
- [19] "Crystal Structure of the C-terminal Clock-Oscillator Domain of the Cyanobacterial KaiA Protein"
T. Uzumaki, M. Fujita, T. Nakatsu, F. Hayashi, H. Shibata, N. Ito, H. Kato, M. Ishiura
Nature Structural and Molecular Biology, **11**, (2004), 623-631
- [20] "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
[2005]
- [21] "Crystal Structure of an Enhancer of Rudimentary Homologue (ERH) at 2.1 Å Resolution"
R. Arai, M. Kukimoto-Niino, H. Uda-Tochio, S. Morita, T. Uchikubo-Kamo, R. Akasaka, Y. Etou, Y. Hayashizaki, T. Kigawa, T. Terada, M. Shirouzu, S. Yokoyama
Protein Science, **14**, (2005), 1888-1893

- [22] "Stabilization Mechanism of the Tryptophan Synthase α -Subunit from *Thermus thermophilus* HB8: X-Ray Crystallographic Analysis and Calorimetry"
Y. Asada, M. Sawano, K. Ogasawara, J. Nakamura, M. Ota, C. Kuroishi, M. Sugahara, K. Yutani, N. Kunishima
The Journal of Biochemistry, **138**, (2005), 343-353
- [23] "Purification, Crystallization and Preliminary Crystallographic Analysis of the Biotin-Protein Ligase from *Pyrococcus horikoshii* OT3"
B. Bagautdin, C. Kuroishi, M. Sugahara, N. Kunishima
Acta Crystallographica Section F, **61**, (2005), 193-195
- [24] "Crystal Structures of Biotin Protein Ligase from *Pyrococcus horikoshii* OT3 and its Complexes: Structural Basis of Biotin Activation"
B. Bagautdinov, C. Kuroishi, M. Sugahara, N. Kunishima
Journal of Molecular Biology, **353**, (2005), 322-333
- [25] "Structure of *Pyrococcus horikoshii* NikR: Nickel Sensing and Implications for the Regulation of DNA Recognition"
P. Chivers, T. Tahirov
Journal of Molecular Biology, **348**, (2005), 597-607
- [26] "Crystal Structure of Leucyl-tRNA Synthetase from the Archaeon *Pyrococcus horikoshii* Reveals a Novel Editing Domain Orientation"
R. Fukunaga, S. Yokoyama
Journal of Molecular Biology, **346**, (2005), 57-71
- [27] "Crystallization of Leucyl-tRNA Synthetase Complexed with tRNA^{Leu} from the Archaeon *Pyrococcus horikoshii*"
R. Fukunaga, R. Ishitani, O. Nureki, S. Yokoyama
Acta Crystallographica Section F, **61**, (2005), 30-32
- [28] "Structural Basis for Non-Cognate Amino Acid Discrimination by the Valyl-tRNA Synthetase Editing Domain"
R. Fukunaga, S. Yokoyama
The Journal of Biological Chemistry, **280**, (2005), 29937-29945
- [29] "Aminoacylation Complex Structures of Leucyl-tRNA Synthetase and tRNA^{Leu} Reveal Two Modes of Discriminator-base Recognition"
R. Fukunaga, S. Yokoyama
Nature Structural and Molecular Biology, **12**, (2005), 915-922
- [30] "Crystallization and Avoiding the Problem of Hemihedral Twinning in Crystals of Δ^1 -pyrroline-5-carboxylate Dehydrogenase from *Thermus thermophilus*"
E. Inagaki, E. Inagaki, H. Takahashi, C. Kuroishi, T. Tahirov
Acta Crystallographica Section F, **61**, (2005), 609-611
- [31] "Crystal Structure of the tRNA 3' Processing Endoribonuclease tRNase Z from *Thermotoga maritima*"
R. Ishii, A. Minagawa, H. Takaku, M. Takagi, M. Nashimoto, S. Yokoyama
The Journal of Biological Chemistry, **280**, (2005), 14138-14144
- [32] "Structure of PIN-Domain Protein PH0500 from *Pyrococcus horikoshii*"
J. Jeyaraman, E. Inagaki, C. Kuroishi, T. Tahirov
Acta Crystallographica Section F, **61**, (2005), 463-468
- [33] "Purification, Crystallization and Preliminary X-ray Crystallographic Study of the L-fuculose-1-phosphate Aldolase (FucA) from *Thermus thermophilus* HB8"
J. Jeyaraman, J. Taka, A. Kikuchi, C. Kuroishi, K. Yutani, Y. Shiro
Acta Crystallographica Section F, **61**, (2005), 1075-1077
- [34] "Crystallization and Preliminary Crystallographic Analysis of the Nickel-Responsive Regulator NikR from *Pyrococcus horikoshii*"
T. Kitao, C. Kuroishi, T. Tahirov
Acta Crystallographica Section F, **61**, (2005), 43-45
- [35] "Crystal Structure of a Predicted Phosphoribosyltransferase(TT1426) from *Thermus thermophilus* HB8 at 2.01 Å Resolution"
M. Kukimoto-Niino, R. Shibata, K. Murayama, H. Hamana, M. Nishimoto, Y. Bessho, T. Terada, M. Shirouzu, S. Kuramitsu, S. Yokoyama
Protein Science, **14**, (2005), 823-827

- [36] "Crystal Structure of tRNA Adenosine Deaminase (TadA) from *Aquifex aeolicus*"
M. Kuratani, R. Ishii, Y. Bessho, R. Fukunaga, T. Sengoku, M. Shirouzu, S. Sekine, S. Yokoyama
The Journal of Biological Chemistry, **280**, (2005), 16002-16008
- [37] "Purification, Crystallization and Preliminary Crystallographic Analysis of the Vacuole-Type ATPase Subunit E from *Pyrococcus horikoshii* OT3"
N. Lokanath, Y. Ukita, M. Sugahara, N. Kunishima
Acta Crystallographica Section F, **61**, (2005), 56-58
- [38] "Crystal Structure of a Component of Glycine Cleavage System: T-Protein from *Pyrococcus horikoshii* OT3 at 1.5 Å Resolution"
N. Lokanath, C. Kuroishi, N. Okazaki, N. Kunishima
Proteins: Structure, Function, and Bioinformatics, **58**, (2005), 769-773
- [39] "Purification, Crystallization and Initial X-ray Crystallographic Analysis of the Putative GTPase PH0525 from *Pyrococcus horikoshii* OT3"
Neratur K. Lokanath, H. Yamamoto, E. Matsunaga, M. Sugahara, N. Kunishima
Acta Crystallographica Section F, **61**, (2005), 892-894
- [40] "Crystal Structure of Novel NADP-dependent 3-Hydroxyisobutyrate Dehydrogenase from *Thermus thermophilus* HB8"
N. Lokanath, N. Ohshima, K. Takio, I. Shiromizu, C. Kuroishi, N. Okazaki, S. Kuramitsu, S. Yokoyama, M. Miyano, N. Kunishima
Journal of Molecular Biology, **352**, (2005), 905-917
- [41] "Recent Progress of Structural Biology of tRNA Processing and Modification"
K. Nakanishi, O. Nureki
Molecular Cell, **19**, (2005), 157-166
- [42] "Structure of a Closed-Form Uroporphyrinogen-III C-methyltransferase from *Thermus thermophilus*"
R. Peter, T. Kitao, t. Tahirov
Acta Crystallographica Section D, **61**, (2005), 913-919
- [43] "Crystal Structure of a Purine/Pyrimidine Phosphoribosyltransferase-Related Protein from *Thermus thermophilus* HB8"
P. Rehse, T. Tahirov
Proteins: Structure, Function, and Bioinformatics, **61**, (2005), 658-665
- [44] "Crystallization and Preliminary X-ray Studies on the Reaction Center-Light-Harvesting 1 Core Complex from *Rhodopseudomonas viridis*"
S. Saijo, T. Sato, T. Kumasaka, N. Tanaka, K. Harata, T. Odahara
Acta Crystallographica Section F, **61**, (2005), 83-86
- [45] "Crystallization and Structural Studies of the Reaction Center-Light Harvesting 1Core Complex form *Rhodopseudomonas Viridis*"
S. Saijo
Doctor Thesis (Tokyo Institute of Technology), , (2005), 1-56
- [46] "Crystal Structure of Dehydroquinate Synthase From *Thermus thermophilus* HB8 Showing Functional Importance of the Dimeric State"
M. Sugahara, Y. Nodake, M. Sugahara, N. Kunishima
Proteins: Structure, Function, and Bioinformatics, **58**, (2005), 249-252
- [47] "Structure of ATP-dependent Phoshoenolpyruvate Carboxykinase from *Thermus thermophilus* HB8 Showing the Structural Basis of Induced Fit and Thermostability"
M. Sugahara, N. Ohshima, Y. Ukita, M. Sugahara, N. Kunishima
Acta Crystallographica Section D, **61**, (2005), 1500-1507
- [48] "Stabilization Due to Dimer Formation of Phosphoribosyl Anthranilate Isomerase from *Thermus thermophilus* HB8: X-ray Analysis and DSC Experiments "
J. Taka, K. Ogasahara, J. Jeyaraman, N. Kunishima, C. Kuroishi, M. Sugahara, S. Yokoyama, K. Yutani
The Journal of Biochemistry, **137**, (2005), 569-578
- [49] "Beamline Scheduling Software: Administration Software for Automatic Operation of the RIKEN Structural Genomics Beamlines at SPring-8"
G. Ueno, H. Kanda, M. Yamamoto, T. Kumasaka
Journal of Synchrotron Radiation, **12**, (2005), 380-384

- [50] "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
[2006]
- [51] "Crystal Structure of Alanyl-tRNA Synthetase Editing-Domain Homolog (PH0574) from a Hyperthermophile, *Pyrococcus horikoshii* OT3 at 1.45 Å Resolution"
J. Ishijima, Y. Uchida, C. Kuroishi, C. Tsuzuki, N. Takahashi, N. Okazaki, K. Yutani, M. Miyano
Proteins: Structure, Function, and Bioinformatics, **62**, (2006), 1133-1137
- [52] "Crystallization and Preliminary Crystallographic Studies of Human Indoleamine 2,3-dioxygenase"
S. Oda, H. Sugimoto, T. Yoshida, Y. Shiro
Acta Crystallographica Section F, **62**, (2006), 221-223
- [53] "Crystal Structure of Human Indoleamine 2,3-dioxygenase: Catalytic Mechanism of O₂ 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

BL26B2

Refereed Journals

[2003]

- [1] "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
[2004]
- [2] "Structural Basis of Leukotriene B₄ 12-Hydroxydehydrogenase/15-Oxo-prostaglandin 13-Reductase Catalytic Mechanism and a Possible Src Homology 3 Domain Binding Loop"
T. Hori, Y. Takehiko, H. Ago, M. Sugahara, G. Ueno, M. Yamamoto, T. Kumasaka, T. Shimizu, M. Miyano
The Journal of Biological Chemistry, **279**, (2004), 22615-22623
- [3] "Crystallization and Preliminary X-ray Crystallographic Analysis of Chitinase F1 (ChiF1) from the Alkaliphilic *Nocardiopsis* sp. strain F96"
T. Matsui, T. Kumasaka, K. Endo, T. Sato, S. Nakamura, N. Tanaka
Acta Crystallographica Section D, **60**, (2004), 2016-2018
- [4] "Crystallization and Preliminary X-ray Diffraction Studies of the Hyperthermophilic Archaeal Sulredoxin Having the Unique Rieske [2Fe-2S] Cluster Environment"
T. Uchiyama, A. Kounosu, T. Sato, N. Tanaka, T. Iwasaki, T. Kumasaka
Acta Crystallographica Section D, **60**, (2004), 1487-1489
- [5] "Sample Management System for a Vast amount of Frozen Crystals at SPring-8"
G. Ueno, R. Hirose, K. Ida, T. Kumasaka, M. Yamamoto
Journal of Applied Crystallography, **37**, (2004), 867-873
- [6] "Crystal Structure of the C-terminal Clock-Oscillator Domain of the Cyanobacterial KaiA Protein"
T. Uzumaki, M. Fujita, T. Nakatsu, F. Hayashi, H. Shibata, N. Ito, H. Kato, M. Ishiura
Nature Structural and Molecular Biology, **11**, (2004), 623-631
[2005]
- [7] "Structure of a Putative *Trans*-editing Enzyme for Prolyl-tRNA from *Aeropyrum pernix* K1 at 1.7 Å Resolution"
K. Murayama, M. Kato-Murayama, K. Katsura, T. Uchikubo-Kamo, M. Yamaguchi-Hirafuji, M. Kawazoe, R. Akasaka, K. Hanawa-Suetsugu, C. Hori-Takemoto, T. Terada, M. Shirouzu, S. Yokoyama
Acta Crystallographica Section F, **61**, (2005), 26-29
- [8] "A Norovirus Protease Structure Provides Insights into Active and Substrate Binding Site Integrity"
K. Nakamura, Y. Someya, T. Kumasaka, G. Ueno, M. Yamamoto, T. Sato, N. Takeda, T. Miyamura, N. Tanaka
Journal of Virology, **79**, (2005), 13685-13693
- [9] "Compact Reduced Thioredoxin Structure from the Thermophilic Bacteria *Thermus thermophilus*"
P. Rehse, M. Kumei, T. Tahirov
Proteins: Structure, Function, and Bioinformatics, **61**, (2005), 1032-1037