

## 発表論文リスト(スタッフ)

**Journals****Accelerator**

H. Saeki, and T. Momose  
 "Vacuum gauge self-compensating external environment in the SPring-8 storage ring"  
*J. Vac. Sci. Technol. A18-1* (2000) 244.

H. Saeki, and T. Momose  
 "Removal conditions for trapped microparticles in a stored electron beam using electrostatic electrodes"  
*J. Vac. Sci. Technol. A18-2* (2000) 492.

H. Saeki, T. Aoki, H. Yonehara, and T. Momose  
 "Vacuum gauge system with a self-compensator for photoelectrons produced in the SPring-8 storage ring"  
*J. Vac. Sci. Technol. A19-1* (2001) 349.

H. Suzuki, T. Aoki, H. Ego, M. Hara, N. Hosoda, Y. Kawashima, Y. Ohashi, T. Ohshima, N. Tani, M. Yabashi, and H. Yonehara  
 "Formation of a single-bunch beam in the booster synchrotron at SPring-8"  
*Nucl. Instr. Meth. A444* (2000) 515.

M. Hara  
 "Present status of the SPring-8 storage ring"  
*Nucl. Instr. Meth. A448* (2000) 12.

K. Soutome, H. Tanaka, M. Takao, H. Ohkuma, and N. Kumagai  
 "Estimation and measurement of effective beam position monitor offsets by using a stored beam"  
*Nucl. Instr. Meth. A459* (2001) 66.

**Experimental Facility and Synchrotron Radiation Experiments**

K. Tamasaku, and T. Ishikawa  
 "Quantitative determination of the spatial coherence from the visibility of equal-thickness fringes"  
*Acta Cryst. A57* (2001) 197.

T. Nogi, M. Kobayashi, Y. Nozawa, and K. Miki  
 "Crystallization and preliminary crystallographic

analysis of high-potential iron-sulfur protein from *Thermochromatium tepidum*"  
*Acta Cryst. D56* (2000) 656.

N. Mizuno, D. S. Hittel, K. Miki, G. Voordooaw, and Y. Higuchi  
 "Preliminary X-ray crystallographic studies of DsrD protein from the sulfate-reducing bacterium *Desulfovibrio vulgaris*"  
*Acta Cryst. D56* (2000) 754.

S. Y. Park, K. Yamane, S. Adachi, Y. Shiro, K. E. Weiss, and S. G. Sligar  
 "Crystallization and preliminary X-ray diffraction analysis of a cytochrome P450 (CYP119) from *Sulfolobus solfataricus*"  
*Acta Cryst. D56* (2000) 1173.

D. Sun, M. Sato, T. Yoshida, H. Shimizu, H. Miyatake, S. Adachi, Y. Shiro, and A. Kikuchi  
 "Crystallization and preliminary X-ray diffraction analysis of a rat biliverdin reductase"  
*Acta Cryst. D56* (2000) 1180.

S. Yamada, S. Y. Park, H. Shimizu, Y. Koshizuka, K. Kadokura, T. Satoh, K. Suruga, M. Ogawa, Y. Isogai, T. Nishio, Y. Shiro, and T. Oku  
 "Structure of cyochrome C<sub>6</sub> from the red alga *Porphyra yezoensis* at 1.57 Å resolution"  
*Acta Cryst. D56* (2000) 1577.

A. Shimada, O. Nureki, N. Dohmae, K. Takio, and S. Yokoyama  
 "Gene cloning, expression, crystallization and preliminary X-ray analysis of *Thermus thermophilus* arginyl-tRNA synthetase"  
*Acta Cryst. D57* (2001) 272.

T. Hori, T. Kumazaka, M. Yamamoto, T. Nonaka, N. Tanaka, Y. Hashimoto, T. Ueki, and K. Takio  
 "Structure of a new 'aspzincin' metalloendopeptidase from *Grifola frondosa*: Implications for the catalytic mechanism and substrate specificity based on several different crystal forms"  
*Acta Cryst. D57* (2001) 361.

- T. Nonaka, M. Fujihashi, A. Kita, K. Saeki, S. Ito, and K. Miki  
 "Crystallization and preliminary X-ray diffraction studies of a novel alkaline serine protease (KP-43) from alkaliphilic *Bacillus* sp. strain KSM-KP43"  
*Acta Cryst.* **D57** (2001) 717.
- I. Krieger, A. Kostyukova, and Y. Maeda  
 "Crystallization and preliminary characterization of crystals of the C-terminal half fragment of tropomodulin"  
*Acta Cryst.* **D57** (2001) 743.
- K. Kobayashi, Y. Kobayashi, A. Hashida-Okumura, S. Iimori, K. Nagai, and H. Nakashima  
 "Increase in peripheral blood flow due to extraocular direct irradiation of visible light in rats"  
*Am. J. Physiol. Heart Circ. Physiol.* **279** (2000) 1141.
- H. Endoh, T. Kaneko, H. Nakamura, K. Doi, and E. Takahashi  
 "Improved cardiac contractile functions in hypoxia-reoxygenation in rats treated with low concentration Co<sup>2+</sup>"  
*Am. J. Physiol. Heart Circ. Physiol.* **279** (2000) 2713.
- M. Ishii, Y. Tanaka, T. Ishikawa, S. Komuro, T. Morikawa, and Y. Aoyagi  
 "Site-selective X-ray absorption fine structure analysis of an optically active center in Er-doped semiconductor thin film using X-ray-excited optical luminescence"  
*Appl. Phys. Lett.* **78** (2001) 183.
- Y. Isogai, A. Ishii, T. Fujisawa, M. Ota, and K. Nishikawa  
 "Redesign of artificial globins: Effects of residue replacements at hydrophobic sites on the structural properties"  
*Biochemistry* **39** (2000) 5683.
- T. Noguchi and M. Sugiura  
 "Structure of an active water molecule in the water-oxidizing complex of photosystem II as studied by FTIR spectroscopy"  
*Biochemistry* **39** (2000) 10943.
- B. R. Gibney, Y. Isogai, F. Rabanal, K. S. Reddy, A. M. Grossset, C. C. Moser, and P. L. Dutton  
 "Self-assembly of heme A and heme B in a designed four-helix bundle: Implications for a cytochrome c oxidase maquette"  
*Biochemistry* **39** (2000) 11041.
- M. Mukai, K. Nakamura, H. Nakamura, T. Iizuka, and Y. Shiro  
 "Roles of Ile209 and Ile210 on the heme pocket structure and regulation of histidine kinase activity of oxygen sensor FixL from *Rhizobium meliloti*"  
*Biochemistry* **39** (2000) 13810.
- J. R. Shen and N. Kamiya  
 "Crystallization and the crystal properties of the oxygen-evolving photosystem II from *Synechococcus vulgaris*"  
*Biochemistry* **39** (2000) 14739.
- T. Noguchi and M. Sugiura  
 "Flash-induced fourier transform infrared detection of the structural changes during the S-state cycle of the oxygen-evolving complex in photosystem II"  
*Biochemistry* **40** (2001) 1497.
- T. Noguchi, T. Tomo, and C. Kato  
 "Triplet formation on a monomeric chlorophyll in the photosystem II reaction center as studied by time-resolved infrared spectroscopy"  
*Biochemistry* **40** (2000) 2176.
- D. S. Lee, S. Y. Park, K. Yamane, E. Obayashi, H. Hori, and Y. Shiro  
 "Structural characterization of n-butyl-isocyanide complexes of cytochromes P450nor and P450cam"  
*Biochemistry* **40** (2000) 2669.
- M. Nakasako, T. Fujisawa, S. Adachi, T. Kudo and S. Higuchi  
 "Large-Scale Domain Movements and Hydration Structure Changes in the Active-Site Cleft of Unligated Glutamate Dehydrogenase from *Thermococcus profundus* Studied by Cryogenic X-ray Crystal Structure Analysis and Small-Angle X-ray Scattering"  
*Biochemistry* **40** (2001) 3069.
- T. Oda, K. Makino, I. Yamashita, K. Namba, and Y. Maeda  
 "Distinct structural changes detected by X-ray fiber diffraction in stabilization of F-actin by lowering pH and increasing ionic strength",  
*Biophys. J.* **80** (2001) 841.
- S. Yamada, T. Nakamura, Y. Tanaka, Y. Isogai, T. Nishio, and T. Oku  
 "Characterization and amino acid sequences of cytochromes c<sub>6</sub> from two strains of the green alga *Chlorella vulgaris*"  
*Biosci. Biotechnol. Biochem.* **64** (2000) 628.
- M. Furuchi, E. Nishimoto, T. Koga, and S. Yamashita  
 "Time-resolved fluorescence studies on the internal motion of LHCII in lipid membranes"  
*Biosci. Biotechnol. Biochem.* **64** (2000) 1623.

S. Fukai, O. Nureki, S. Sekine, A. Shimada, J. Tao, D. G. Vassylyev, and S. Yokoyama  
"Structural basis for double-sieve discrimination of L-valine from L-isoleucine and L-threonine by the complex of tRNA and Valyl-tRNA synthetase"  
Cell **103** (2000) 793.

T. H. Tahirov, T. Inoue-Bungo, H. Morii, A. Fujikawa, M. Sasaki, K. Kimura, M. Shiina, K. Sato, T. Kumasaka, M. Yamamoto, S. Ishii, and K. Ogata  
"Structural analyses of DNA recognition by the AML1/Runx-1 runt domain and its allosteric control by CBF $\beta$ "  
Cell **104** (2001) 755.

J. Bolze, T. Fujisawa, T. Nagao, K. Norisada, H. Saito, and A. Naito  
"Small angle X-ray scattering and 31P NMR studies on the phase behavior of phospholipid bilayered mixed micelles"  
Chem. Phys. Lett. **329** (2000) 215.

T. Tsukihara and H. Aoyama  
"Membrane protein assemblies-towards atomic resolution analysis"  
Curr. Opin. Structural Biol. **10** (2000) 208.

M. Sugahara, T. Mikawa, T. Kumasaka, M. Yamamoto, R. Kato, K. Fukuyama, Y. Inoue, and S. Kuramitsu  
"Crystal structure of a repair enzyme of oxidatively damaged DNA, MutM (Fpg), from an extreme thermophile, *Thermus thermophilus* HB8"  
EMBO J. **19** (2000) 3857.

S. Kawaguchi, J. Müller, D. Linde, S. Kuramitsu, T. Shibata, Y. Inoue, D. G. Vassylyev, and S. Yokoyama  
"The crystal structure of the ttCsaA protein: An export-related chaperone from *Thermus thermophilus*"  
EMBO J. **20** (2001) 562.

L. Renault, P. Kerjan, S. Pasqualato, J. Ménétrey, J. C. Robinson, S. Kawaguchi, D. G. Vassylyev, S. Yokoyama, M. Miranda, and J. Cherfils  
"Structure of the EMAPII domain of human aminoacyl-tRNA synthetase complex reveals evolutionary dimer mimicry"  
EMBO J. **20** (2001) 570.

K. Sano, K. Maeda, H. Taniguchi, and Y. Maeda  
"Amino acid replacements in an internal region of tropomyosin alter the properties of the entire molecule"  
Eur. J. Biochem. **267** (2000) 4870.

A. Kostyukova, K. Maeda, E. Yamauchi, I. Krieger, and

Y. Maeda  
"Domain structure of tropomodulin: Distinct properties of the N-terminal and C-terminal halves"  
Eur. J. Biochem. **267** (2000) 6470.

H. Iwamoto, T. Suzuki, and T. Fujisawa  
"Time-resolved two-dimensional x-ray diffraction study of the effect of shortening on activation of contracting skeletal muscle"  
Eur. J. Physiol. **439** (2000) 646.

K. Katsumata, M. Hagiwara, Z. Honda, J. Satooka, A. Aharony, R. J. Birgeneau, F. C. Chou, O. Entin-Wohlman, A. B. Harris, M. A. Kastner, Y. J. Kim, and Y. S. Lee  
"Direct observation of the quantum energy gap in S=1/2 tetragonal cuprate antiferromagnets"  
Europhys. Lett. **54** (2001) 508.

R. Kato, M. Kataoka, T. Mikawa, R. Masui, N. Nakagawa, H. Kamikubo, and S. Kuramitsu  
"Observation of RecA Protein Monomer by Small Angle X-Ray Scattering with Synchrotron Radiation"  
FEBS Lett. **482** (2000) 159.

S. Sogabe and K. Miki  
"Crystal Structure of the oxidized cytochrome c<sub>2</sub> from *Blastochloris viridis*"  
FEBS Lett. **491** (2001) 174.

T. Ohnishi, H. Iwasaki, Y. Ishino, S. Kuramitsu, A. Nakata, and H. Shinagawa  
"Identification and Characterization of *Thermus thermophilus* HB8 RuvA Protein, the Subunit of the RuvAB Protein Complex that Promotes Branch Migration of Holliday Junctions"  
Genes Genet. Syst. **75** (2000) 233.

Y. Yoda, H. Igarashi, X. W. Zhang, Y. Imai, T. Mitsui, I. Koyama and S. Kikuta  
"Multiple nuclear Bragg scattering"  
Hyperfine Interaction. **126** (2000) 435.

K. Yoshii  
"Structural and magnetic studies of the lanthanide deficient perovskite Ce<sub>2/3</sub>TiO<sub>3</sub>"  
J. Alloys. Compd. **305** (2000) 72.

K. Yoshii, A. Nakamura and H. Abe  
"Magnetic behaviors of Pr<sub>1-x</sub>Nd<sub>x</sub>TiO<sub>3</sub>"  
J. Alloys Compd. **307** (2000) 25.

K. Yoshii  
"Structural and magnetic properties of the perovskites Sr<sub>n+1</sub>(Co<sub>0.5</sub>Nb<sub>0.5</sub>)nO<sub>3n+1</sub> (n= 1, 2 and 1)"  
J. Alloys Compd. **307** (2000) 119.

- T. Fujisawa, K. Inoue, T. Oka, H. Iwamoto, T. Uruga, T. Kumasaka, Y. Inoko, N. Yagi, M. Yamamoto, and T. Ueki  
 "Small-angle X-ray scattering station at the SPring-8 RIKEN beamline"  
*J. Appl. Crystallogr.* **33** (2000) 797.
- T. Tanaka, M. Oura, H. Ohashi, S. Goto, Y. Suzuki, and H. Kitamura  
 "Characterization of radiation from a figure-8 undulator by a gas-scattering method"  
*J. Appl. Phys.* **88** (2000) 2101.
- M. Sugahara, T. Mikawa, R. Katou, T. Kumasaka, M. Yamamoto, K. Fukuyama, Y. Inoue, and S. Kuramitsu  
 "Crystallization and preliminary X-ray crystallographic studies of *Thermus thermophilus* HB8 MutM protein involved in repairs of oxidative DNA damage"  
*J. Biochem.* **127** (2000) 9.
- M. Kukimoto, O. Nureki, M. Shirouzu, T. Katada, Y. Hirabayashi, H. Sugiya, S. Furuyama, S. Yokoyama, and M. Hara-Yokoyama  
 "Crystallization and preliminary X-ray diffraction analysis of the extracellular domain of the cell surface antigen CD38 complexed with ganglioside"  
*J. Biochem.* **127** (2000) 181.
- H. Uga, H. Komori, K. Miki, and C. Wada  
 "The iteron regions necessary for the RepE-iteron interaction *In vivo* in Mini-F plasmids of *Escherichia coli*"  
*J. Biochem.* **127** (2000) 537.
- M. Kimura, S. Sekido, Y. Isogai, and I. Yamaguchi  
 "Expression, purification, and characterization of blasticidin S deaminase (BSD) from *Aspergillus terreus*: The role of catalytic zinc in enzyme structure"  
*J. Biochem.* **127** (2000) 955.
- K. Sano, K. Maeda, T. Oda, and Y. Maeda  
 "The effect of single residue substitutions of serine-283 on the strength of head-to-tail interaction and actin binding properties of rabbit skeletal muscle -tropomyosin"  
*J. Biochem.* **127** (2000) 1095.
- H. Motoshima, K. Inagaki, T. Kumasaka, M. Furuichi, H. Inoue, T. Tamura, N. Esaki, K. Soda, N. Tanaka, M. Yamamoto, and H. Tanaka  
 "Crystal structure of the pyridoxal 5'-phosphate dependent L-methionine  $\gamma$ -lyase from *Pseudomonas putida*"  
*J. Biochem.* **128** (2000) 349.
- T. Hishiki, H. Shimada, S. Nagano, T. Egawa, Y. Kanamori, R. Makino, S. Y. Park, S. Adachi, Y. Shiro, and Y. Ishimura  
 "X-ray crystal structure and catalytic properties of thr252Ile mutant of cytochrome p450cam: Roles of thr252 and water in the active center"  
*J. Biochem.* **128** (2000) 965.
- H. Ura, K. Harata, I. Matsui, and S. Kuramitsu  
 "Temperature Dependence of the Enzyme-Substrate Recognition Mechanism"  
*J. Biochem.* **129** (2001) 173.
- H. Shimizu, E. Obayashi, Y. Gomi, H. Arakawa, S. Y. Park, H. Nakamura, S. Adachi, H. Shoun, and Y. Shiro  
 "Proton delivery in NO reduction by fungal nitric-oxide reductase"  
*J. Biol. Chem.* **275** (2000) 4816.
- S. Mitsuhashi, T. Mizushima, E. Yamashita, M. Yamamoto, T. Kumasaka, H. Moriyama, T. Ueki, S. Miyachi, and T. Tsukihara  
 "X-ray structure of b-carbonic anhydrase from the red alga, *Prophyridium purpureum*, reveals a novel catalytic site for CO<sub>2</sub> hydration"  
*J. Biol. Chem.* **275** (2000) 5521.
- A. Yamagata, R. Masui, R. Kato, N. Nakagawa, H. Ozaki, H. Sawai, S. Kuramitsu, and K. Fukuyama  
 "Interaction of UvrA and UvrB Proteins with a Fluorescent Single-Stranded DNA"  
*J. Biol. Chem.* **275** (2000) 13235.
- J. Ishijima, T. Nakai, S. Kawaguchi, K. Hirotsu, and S. Kuramitsu  
 "Free Energy Requirement for Domain Movement of an Enzyme"  
*J. Biol. Chem.* **275** (2000) 18939.
- P. Elena, M. Miyano, Y. Kanaoka, Y. Urade, and O. Hayaishi  
 "Structural basis of hematopoietic prostaglandin D synthase activity elucidated by site-directed mutagenesis"  
*J. Biol. Chem.* **275** (2000) 31239.
- H. Tachiki, R. Kato, and S. Kuramitsu  
 "DNA Binding and Protein-Protein Interaction Sites in MutS, a Mismatched DNA Recognition Protein from *Thermus thermophilus* HB8"  
*J. Biol. Chem.* **275** (2000) 40703.

- S. Sekine, A. Shimada, O. Nureki, J. Cavarelli, D. Moras, D. G. Vassylyev, and S. Yokoyama  
 "Crucial role of the HIGH-loop lysine for the catalytic activity of arginyl-tRNA synthetase"  
*J. Biol. Chem.* **276** (2001) 3723.
- H. Nakajima, Y. Honma, T. Tawara, T. Kato, S. Y. Park, H. Miyatake, Y. Shiro, and S. Aono  
 "Redox properties and coordination structure of the heme in the CO-sensing transcriptional activator CooA"  
*J. Biol. Chem.* **276** (2001) 7055.
- D. S. Lee  
 "Dibutyl phthalate, an  $\alpha$ -glucosidase inhibitor from *Streptomyces melanoporofaciens*"  
*J. Biosci. Bioeng.* **89** (2000) 271.
- D. S. Lee and S. H. Lee  
 "Biological activity of dihydrotanshinone I: Effect on apoptosis"  
*J. Biosci. Bioeng.* **89** (2000) 292.
- K. Kitano, R. Sasaki, T. Nogi, T. A. Fukami, A. Nakagawa, K. Miki, and I. Tanaka  
 "Utilization of microgravity to improve the crystal quality of biologically important proteins: Chaperonin-60, GrpE, B-subunit of V-type ATPase, and MIF"  
*J. Cryst. Growth* **210** (2000) 819.
- S. Urakawa, O. Ohtaka, K. Funakoshi, and W. Utsumi  
 "On the researchs of the high-pressure mineral physics experimental station at BL04B1 in SPring-8"  
*J. Crystallographic Soc. Jpn.* **42** (2000) 24. (in Japanese)
- K. Tamura, M. Inui, K. Tsuji, K. Funakoshi, and W. Utsumi  
 "Structural studies of metallic fluids at SPring-8"  
*J. Crystallographic Soc. Jpn.* **42** (2000) 33. (in Japanese)
- N. Hamaya and T. Watanuki  
 "Ultrahigh-pressure research with 8GeV-SR X-ray at BL10XU"  
*J. Crystallographic Soc. Jpn.* **42** (2000) 51. (in Japanese)
- W. Utsumi, Y. Katayama, T. Mizutani, O. Shimomura, M. Yamakata, M. Azuma, and T. Saito  
 "In situ X-ray diffraction experiments under high pressures and high temperatures at BL14B1 beamline"  
*J. Crystallographic Soc. Jpn.* **42** (2000) 59. (in Japanese)
- J. Mizuki, H. Konishi, Y. Nishihata, M. Takahashi, K. Suzuya, N. Matsumoto and Y. Yoneda  
 "Study of structural physics at BL-14B1 JAERI beamline"  
*J. Crystallographic Soc. Jpn.* **42** (2000) 68. (in Japanese)
- T. Monguchi, H. Fujioka, T. Uragami, H. Ohuchi, K. Ono, Y. Baba, and M. Oshima  
 "X-ray absorption studies of anodized monocrystalline 3C-SiC"  
*J. Electrochem. Soc.* **147** (2000) 741.
- K. Kanai, T. Kiss, T. Yokoya, G. Schmerber, J. P. Kappler, J. C. Parlebas, and S. Shin  
 "Ultrahigh-resolution photoemission and resonant-inverse photoemission spectroscopy on CePd<sub>3</sub>"  
*J. Electron Spectrosc. Relat. Phenom.* **114/116** (2001) 741.
- Y. Takata, T. Hatsui, N. Kosugi, A. Agui, M. Magnuson, C. Såhe, J. E. Rubensson, and J. Nordgren  
 "Valence excitations observed in resonant soft X-ray emission spectra of K<sub>2</sub>Ni(CN)<sub>4</sub>·OH<sub>2</sub>O at the Ni 2p edge"  
*J. Electron Spectrosc. Relat. Phenom.* **114/116** (2001) 909.
- Y. Harada, M. Watanabe, R. Eguchi, Y. Ishiwata, M. Matsubara, A. Kotani, A. Yagishita, and S. Shin  
 "Polarization dependence of the soft X-ray Raman scattering at the L edge of TiO<sub>2</sub>"  
*J. Electron Spectrosc. Relat. Phenom.* **114/116** (2001) 969.
- H. Hai, T. Miura, T. Kobayashi, Y. Maeda, and M. Miki  
 "Conformational changes of the troponin-tropomyosin complex on F-actin observed by fluorescence resonance energy transfer measurements",  
*J. Fluoresc.* **10** (2000) 193.
- M. Yamamoto, T. Kumazaka, E. Yamashita, H. Moriyama, M. Sato, and T. Ueki  
 "Prospects for X-ray crystal structure analysis of selenoproteins with SPring-8 synchrotron radiation"  
*J. Health Sci.* **46** (2000) 426.
- S. R. Piersma, M. Nojiri, M. Tsujimura, T. Noguchi, M. Odaka, M. Yohda, Y. Inoue, and I. Endo  
 "Arginine 56 mutation in the  $\beta$  subunit of nitrile hydratase: Importance of hydrogen bonding to the non-heme iron center"  
*J. Inorg. Biochem.* **80** (2000) 283.
- H. Shimizu, S. Y. Park, D. S. Lee, H. Shoun, and Y. Shiro  
 "Crystal structures of cytochrome P450nor and its mutants (Ser286 Val, Thr) in the ferric resting state at cryogenic temperature: A comparative analysis with monooxygenase cytochrome P450s"  
*J. Inorg. Biochem.* **81** (2000) 191.

- E. Obayashi, H. Shimizu, S. Y. Park, H. Shoun, and Y. Shiro  
 "Mutation effects of a conserved threonine (Thr243) of cytochrome P450nor on its structure and function"  
*J. Inorg. Biochem.* **82** (2000) 103.
- A. Y. Nikulin, K. Tamasaku, B. F. Usher, and T. Ishikawa  
 "Experimental studies of 90° Bragg reflection from a sub-micron  $In_x Ga_{1-x} As$  single-crystal film deposited on a GaAs substrate"  
*Jpn. J. Appl. Phys.* **40** (2001) 898.
- T. Sekiguchi and Y. Baba  
 "Soft X-ray photochemistry in solid surfaces"  
*J. Jpn. Soc. Synchrotron Rad. Res.* **13** (2000) 147. (in Japanese)
- Y. Kawano, T. Kumagai, K. Muta, Y. Matoba, J. Davis, and M. Sugiyama  
 "The 1.5 Å crystal structure of a bleomycin resistance determinant from bleomycin-producing *Streptomyces verticillus*"  
*J. Mol. Biol.* **295** (2000) 915.
- Y. Matuura, M. Stewart, M. Kawamoto, N. Kamiya, K. Saeki, T. Yasunaga, and T. Wakabayashi  
 "Structure basis for the higher  $Ca^{2+}$ -activation of the regulated actin-activated myosin ATPase observed with *Dictyostelium/Tetrahymena* actin chimeras"  
*J. Mol. Biol.* **296** (2000) 579.
- H. Miyatake, M. Mukai, S. Y. Park, S. Adachi, K. Tamura, H. Nakamura, K. Nakamura, T. Tsuchiya, T. Iizuka, and Y. Shiro  
 "Sensory mechanism of oxygen sensor FixL from *Rhizobium meliloti*: Crystallographic, mutagenesis and resonance Raman spectroscopic studies"  
*J. Mol. Biol.* **301** (2000) 415.
- S. J. Lee, N. Imamoto, H. Sakai, A. Nakagawa, S. Kose, M. Koike, M. Yamamoto, T. Kumasaka, Y. Yoneda, and T. Tsukihara  
 "The adoption of a twisted structure of importin- $\beta$  is essential for the protein-protein interaction required for nuclear transport"  
*J. Mol. Biol.* **302** (2000) 251.
- H. Iwamoto, K. Oiwa, T. Suzuki, and T. Fujisawa  
 "X-ray diffraction evidence for the lack of stereospecific protein interactions in highly activated actomyosin complex"  
*J. Mol. Biol.* **305** (2001) 863.
- R. Kato, M. Kataoka, H. Kamikubo, and S. Kuramitsu  
 "Direct Observation of Three Conformations of MutS Protein Regulated by Adenine Nucleotides"  
*J. Mol. Biol.* **309** (2001) 227.
- Y. Asano, T. Nakano, T. Hotta and Y. Ohashi  
 "Shielding design calculations for laser electron photon beamline of SPring-8"  
*J. Nucl. Sci. Technol., Suppl.* **1** (2000) 217.
- Y. Asano and N. Sasamoto  
 "Benchmark experiment for radiation shielding around the beam dump of the SPring-8 injector"  
*J. Nucl. Sci. Technol., Suppl.* **1** (2000) 535.
- T. Hirawake, H. Satoh, T. Ishimaru, Y. Yamaguchi, and M. Kishino  
 "Bio-optical relationship of case I water: The difference between the low- and mid-latitude waters and the Southern Ocean"  
*J. Oceanogr.* **56** (2000) 245.
- S. W. Kim, S. Saitoh, J. Ishizaka, Y. Isoda, and M. Kishino  
 "Temporal and spatial variability of phytoplankton pigment concentrations in the Japan Sea derived from CZCS images"  
*J. Oceanogr.* **56** (2000) 527.
- K. Hasegawa, T. Ono, and T. Noguchi  
 "Vibrational spectra and ab initio DFT calculations of 4-methylimidazole and its different protonation forms: Infrared and Raman markers of the protonation state of a histidine side chain"  
*J. Phys. Chem. B* **104** (2000) 4253.
- A. Q. R. Baron, Y. Tanaka, S. Goto, K. Takeshita, T. Matsushita, and T. Ishikawa  
 "An x-ray scattering beamline for studying dynamics"  
*J. Phys. Chem. Solid.* **61** (2000) 461.
- K. Kusaba, W. Utsumi, M. Yamakata, O. Shimomura and Y. Syono  
 "Second-order phase transition of FeS under high pressure and temperature"  
*J. Phys. Chem. Solid.* **61** (2000) 1483.
- K. Katsumata  
 "High-frequency electron spin resonance in magnetic systems"  
*J. Phys.: Condens. Matter* **12** (2000) R589.
- S. Kitao, T. Mitsui and M. Seto  
 "Nuclear resonant scattering of synchrotron radiation by  $^{121}Sb$  and  $^{149}Sm$ "  
*J. Phys. Soc. Jpn.* **69** (2000) 683.

- T. Uozumi, T. Okane, K. Yoshii, T.A. Sasaki and A. Kotani  
 "Theoretical and experimental study of resonant 3d X-ray photoemission and resonant  $L_{3}M_{4,5}M_{4,5}$  Auger transition of PdO"  
*J. Phys. Soc. Jpn.* **69** (2000) 1226.
- K. Yoshii  
 "Synthesis and magnetic properties of  $Ln_{2/3}TiO_3$  ( $Ln=Pr$  and  $Nd$ )"  
*J. Solid State Chem.* **149** (2000) 354.
- K. Yoshii  
 "Magnetic transition in the perovskite  $Ba_2CoNbO_6$ "  
*J. Solid State Chem.* **151** (2000) 294.
- K. Yoshii, M. Mizumaki, Y. Saitoh and A. Nakamura  
 "Magnetic order in perovskite  $Pr_{1-x}Ba_xCoO_3$  studied by magnetic circular dichroism (MCD) spectroscopy"  
*J. Solid State Chem.* **152** (2000) 577.
- K. Yoshii, A. Nakamura, H. Abe and Y. Morii  
 "Magnetic properties of  $Ce_{1-x}Nd_xTiO_3$  and some solid solution orthotitanates  $Ln_{1-x}Ln'_xTiO_3$  ( $Ln$  and  $Ln'=La$  to  $Sm$ ;  $0 < x < 1$ )"  
*J. Solid State Chem.* **153** (2000) 145.
- K. Yoshii  
 "Magnetic properties of perovskite  $GdCrO_3$ "  
*J. Solid State Chem.* **159** (2001) 204.
- H. Yamamoto and Y. Baba  
 "Non-destructive depth profile analysis of  $SiO_2/Si$  layer by high-energy XPS"  
*J. Surf. Anal.* **7** (2000) 122. (in Japanese)
- H. Yamaoka, N. Hiraoka, M. Ito, M. Mizumaki, Y. Sakurai, N. Kakutani, A. Koizumi, N. Sakai, and Y. Higashi  
 "Performance of bent *crystal* monochromators for high-energy synchrotron radiation"  
*J. Synchrotron Rad.* **7** (2000) 69.
- H. Kitamura  
 "Recent trends of insertion-device technology for X-ray sources"  
*J. Synchrotron Rad.* **7** (2000) 121.
- Y. Takata, E. Shigemasa, and N. Kosugi  
 "Mg and Al K-edge XAFS measurements with a KTP crystal monochromator"  
*J. Synchrotron Rad.* **8** (2001) 351.
- M. Suzuki, N. Kawamura, and T. Ishikawa  
 "Tuning of X-ray phase retarder for magnetic EXAFS spectroscopy in helicity modulation mode"  
*J. Synchrotron Rad.* **8** (2001) 357.
- N. Kawamura, T. Yamamoto, H. Maruyama, I. Harada, M. Suzuki, and T. Ishikawa  
 "Multielectron excitations probed by helicity-modulation XMCD at *K*-edge in 3d transition metal compounds"  
*J. Synchrotron Rad.* **8** (2001) 410.
- N. Kawamura, M. Suzuki, H. Maruyama, and T. Ishikawa  
 "Variation of XMCD spectrum with temperature at  $R_{2/3}$ -edges in  $R_3Fe_5O_{12}$  ( $R=Gd$  and  $Er$ )"  
*J. Synchrotron Rad.* **8** (2001) 425.
- S. Uemoto, H. Maruyama, N. Kawamura, S. Uemura, N. Kitamoto, H. Nakao, S. Hara, M. Suzuki, D. Fruchart, and H. Yamazaki  
 "Mn K-edge XMCD in  $Mn_3MC$  ( $M=Zn$  and  $Ga$ ) perovskite"  
*J. Synchrotron Rad.* **8** (2001) 449.
- S. Uemura, H. Maruyama, N. Kawamura, H. Yamazaki, S. Nagamatsu, and T. Fujikawa  
 "Electronic states in  $Cu_2MnX$  ( $X=Al$ ,  $In$ , and  $Sn$ ) Heusler alloy studied by XMCD and multiple scattering calculations"  
*J. Synchrotron Rad.* **8** (2001) 452.
- Y. Baba and T. Sekiguchi  
 "Desorption of fragment ions from condensed  $Si(OCH_3)_4$  by localized inner-shell electron excitation at the silicon, oxygen and carbon K-edges"  
*J. Vac. Sci. Technol.* **A18** (2000) 334.
- T. Higuchi, T. Tsukamoto, Y. Tezuka, K. Kobayashi, S. Yamaguchi, and S. Shin  
 "Photoemission study on protonic conductor  $CaZrO_3$ : Evidence of the exchange mechanism of proton and hole"  
*Jpn. J. Appl. Phys.* **39** (2000) L133.
- K. Yoshii, A. Nakamura and H. Abe  
 "Magnetism and transport of  $Ln_{0.5}Sr_{0.5}CoO_3$  ( $Ln = Pr$ ,  $Nd$ ,  $Sm$  and  $Eu$ )"  
*Mater. Res. Bull.* **36** (2001) 1447.
- T. Watanuki, A. Fujiwara, K. Ishii, Y. Matsuoka, H. Sueatsu, K. Ohwada, H. Nakao, Y. Fujii, T. Kodama, K. Kikuchi and Y. Achiba  
 "Structural phase transitions of endohedral metallofullerene  $La@C82$  studied by single crystal X-ray diffraction"  
*Mol. Cryst. Liq. Cryst.* **340** (2000) 639.

- Y. Katayama, T. Mizutani, W. Utsmi, O. Shimomura, M. Yamakata and K. Funakoshi  
 "A first-order liquid-liquid phase transition in phosphorus"  
*Nature* **403** (2000) 170.
- A. Sekiyama, T. Iwasaki, K. Matsuda, Y. Saitoh, Y. Onuki and S. Suga  
 "Probing bulk states of correlated electron systems by high-resolution resonance photoemission"  
*Nature* **403** (2000) 396.
- N. Kunishima, Y. Shimada, Y. Tsuji, T. Sato, M. Yamamoto, T. Kumazaka, S. Nakanishi, H. Jingami, and K. Morikawa  
 "Structural basis of glutamate recognition by a dimeric metabotropic glutamate receptor"  
*Nature* **407** (2000) 971.
- F. A. Samatey, K. Imada, S. Nagashima, F. Vonderviszt, T. Kumazaka, M. Yamamoto, and K. Namba  
 "Structure of the bacterial flagellar protofilament and implications for a switch for supercoiling"  
*Nature* **410** (2001) 331.
- S. Sekine, O. Nureki, A. Shimada, D. G. Vassilyev, and S. Yokoyama  
 "Structural basis for anticodon recognition by discriminating glutamyl-tRNA synthetase"  
*Nat. Struct. Biol.* **8** (2001) 203.
- A. Kikuchi, S. Y. Park, H. Miyatake, D. Sun, M. Sato, T. Yoshida, and Y. Shiro  
 "Crystal structure of rat biliverdin reductase"  
*Nat. Struct. Biol.* **8** (2001) 221.
- T. Tanaka and H. Kitamura  
 "Asymmetric figure-8 undulator as multipolarization light source"  
*Nucl. Instr. Meth. A* **449** (2000) 629.
- I. Enami, S. Yoshihara, A. Tohri, A. Okumura, H. Ohta, and J. R. Shen  
 "Cross-reconstitution of various extrinsic proteins and photosystem II complexes from cyanobacteria, red algae and higher plants"  
*Plant Cell Physiol.* **41** (2000) 1354.
- S. F. Al-Khalidi, J. Coker, J. R. Shen, and R. L. Burnap  
 "Characterization of site-directed mutants in manganese-stabilizing protein (MSP) of *Synechocystis* sp. PCC6803 unable to grow photoautotrophically in the absence of cytochrome c-550"  
*Plant Mol. Biol.* **43** (2000) 33.
- K. Yoshii and A. Nakamura  
 "Magnetic properties of  $\text{Pr}_{1-x}\text{Sr}_x\text{CoO}_3$ "  
*Physica* **B281-282** (2000) 514.
- V. Krishnamurthy, K. Nagamine, I. Watanabe, K. Nishiyama, S. Ohira, M. Ishikawa, D. H. Eom, and T. Ishikawa  
 "Non-Fermi liquid behavior in  $\text{CeCoGe}_{3-x}\text{Si}_x$  alloys"  
*Physica* **B289-290** (2000) 47.
- V. Krishnamurthy, I. Watanabe, K. Nagamine, H. Kuwahara, and Y. Tokura  
 "Spin dynamics in  $\text{Nd}_{1-x}\text{Sr}_x\text{MnO}_3$  with  $x = 0.5$ "  
*Physica* **B289-290** (2000) 56.
- K. Kobayashi, T. Ohta, K. Maehashi, H. Nakashima, Y. Ishiwata, and S. Shin  
 "Photoluminescence inner core excitation in semiconductor quantum structures"  
*Physica* **E7** (2000) 595.
- M. Oura, H. Yamaoka, K. Kawatsura, J. Kimata, T. Hayaishi, T. Takahashi, T. Koizumi, T. Sekioka, M. Terasawa, Y. Itoh, Y. Awaya, A. Yokoya, A. Agui, A. Yoshigoe, and Y. Saitoh  
 "Photoionization of  $\text{Ne}^{3+}$  ions in the region of the 1 s 2 p autoionizing resonance"  
*Phys. Rev. A* **63** (2001) 014704.
- T. Iwasaki, S. Suga, S. Imada, A. Sekiyama, K. Matsuda, M. Kotsugi, K.-S. An, T. Muro, S. Ueda, T. Matsushita, Y. Saitoh, T. Nakatani, H. Ishii, O. Sakai, R. Takayama, T. Suzuki, T. Oguchi, K. Kato and A. Ochiai  
 "Bulk and surface electronic structures of CePdX ( $X = \text{As}, \text{Sb}$ ) studied by 3d-4f resonance photoemission"  
*Phys. Rev. B* **61** (2000) 4621.
- M. Seto, Y. Kobayashi, S. Kitao, R. Haruki, T. Mitsui, Y. Yoda, S. Nasu and S. Kikuta,  
 "Local vibrational densities of states of dilute Fe atoms in Al and Cu metals"  
*Phys. Rev. B* **61** (2000) 11420.
- T. Inami, M. Nishiyama, S. Maegawa and Y. Oka  
 "Magnetic structure of the kagome lattice antiferromagnet potassium jarosite  $\text{KFe}_3(\text{OH})_6(\text{SO}_4)_2$ "  
*Phys. Rev. B* **61** (2000) 12181.
- Y. Harada, T. Kinugasa, R. Eguchi, M. Matsubara, A. Kotani, M. Watanabe, A. Yagishita, and S. Shin  
 "Polarization dependence of soft-X-ray Raman scattering at the L edge of  $\text{TiO}_2$ "  
*Phys. Rev. B* **61** (2000) 12854.

T. Higuchi, T. Tsukamoto, K. Kobayashi, Y. Ishiwata, M. Fujisawa, T. Yokoya, S. Yamaguchi, and S. Shin  
"Electronic structure in the band gap of lightly doped SrTiO<sub>3</sub> by high-resolution X-ray absorption spectroscopy"  
Phys. Rev. **B61** (2000) 12860.

Y. Tanaka, Y. Sakurai, A.T. Stewart, N. Shiotani, P. E. Mijnarens, S. Kaprzyk and A. Bansil  
"Reconstructed three-dimensional electron momentum density in lithium: A compton scattering study"  
Physical Rev. **B63** (2001) 045120.

K. Kanai and S. Shin  
"Resonant inverse photoemission spectroscopy at the prethreshold of the Ce-N<sub>4,5</sub> absorption edge in CePd<sub>3</sub>"  
Phys. Rev. **B63** (2001) 033106.

Z. Honda, K. Katsumata, Y. Nishiyama, and I. Harada  
"Field-induced long-range ordering in an S=1 quasi-one-dimensional Heisenberg antiferromagnet"  
Phys. Rev. **B63** (2001) 64420.

Y. C. Sasaki, Y. Suzuki, N. Yagi, S. Adachi, M. Ishibashi, H. Suda, K. Toyota, and M. Yanagihara  
"Tracking of individual nanocrystals using diffracted X-rays",  
Phys. Rev. **E62** (2000) 3843.

M. Seto, S. Kitao, Y. Kobayashi, R. Haruki, T. Mitsui, Y. Yoda, X. W. Zhang and Yu. Maeda  
"Nuclear resonant scattering of synchrotron radiation by 40K"  
Phys. Rev. Lett. **84** (2000) 566.

A. Chainani, T. Yokoya, T. Kiss, and S. Shin  
"Photoemission spectroscopy of the strong-coupling superconducting transitions in Lead and Niobium"  
Phys. Rev. Lett. **85** (2000) 1966.

T. Yokoya, T. Kiss, T. Watanabe, S. Shin, M. Nohara, H. Takagi, and T. Oguchi  
"Ultrahigh-resolution photoemission spectroscopy of Ni borocarbides: Direct observation of the superconducting gap and a change in gap anisotropy by impurity"  
Phys. Rev. Lett. **85** (2000) 4952.

Y. Isogai, A. Ishii, M. Ishida, M. Mukai, M. Ota, K. Nishikawa, and T. Iizuka  
"Structural and functional properties of designed globins"  
Proc. Ind. Acad. Sci.: Chem. Sci. **112** (2000) 215.

T. Nogi, I. Fathir, M. Kobayashi, Y. Nozawa, and K. Miki

"Crystal structures of photosynthetic reaction center and high-potential iron-sulfur protein from *Thermochromatium tepidum*: Thermostability and electron transfer"  
Proc. Natl. Acad. Sci. USA **97** (2000) 13561.

T. Oka, N. Yagi, T. Fujisawa, H. Kamikubo, F. Tokunaga, and M. Kataoka  
"Time-resolved X-ray diffraction reveals multiple conformations in the M-N transition of the bacteriorhodopsin photocycle"  
Proc. Natl. Acad. Sci. USA **97** (2000) 14278.

M. Fujihashi, Y. W. Zhang, Y. Higuchi, X. Y. Li, T. Koyama, and K. Miki  
"Crystal structure of cis-prenyl chain elongating enzyme, undecaprenyl diphosphate synthase"  
Proc. Natl. Acad. Sci. USA **98** (2001) 4337.

M. Oura, H. Yamaoka, K. Kawatsura, T. Hayaishi, J. Kimata, T. M. Kojima, M. Kimura, T. Sekioka, and M. Terasawa  
"Production of multiply charged ion target for photoionization studies using synchrotron radiation"  
Rev. Sci. Instrum. **71** (2000) 1206.

Y. Tanaka, T. Hara, H. Kitamura, and I. Ishikawa  
"Timing control of an intense picosecond pulse laser to the SPring-8 synchrotron radiation pulses"  
Rev. Sci. Instrum. **71** (2000) 1268.

T. Tanaka and H. Kitamura  
"Effective initial sorting of undulator magnets"  
Rev. Sci. Instrum. **71** (2000) 3010.

T. Hara, Y. Tanaka, H. Kitamura, and I. Ishikawa  
"Performance of a CsI photocathode in a hard X-ray streak camera"  
Rev. Sci. Instrum. **71** (2000) 3624.

T. Oda, K. Makino, I. Yamashita, K. Namba, and Y. Maeda  
"The helical parameters of F-actin precisely determined from X-ray fiber diffraction of well-oriented sols"  
Results and Problems in Cell Differentiation 32, edited by C. dos. Remedios,  
Springer-Verlag, Berlin (2001) 43.

T. Toyoda, O. F. Tin, K. Ito, T. Fujiwara, T. Kumasaka, M. Yamamoto, M. B. Garber, and Y. Nakamura  
"Crystal structure combined with genetic analysis of the *Thermus thermophilus* ribosome recycling factor shows that a flexible hinge may act as a functional switch"  
RNA **6** (2000) 1432.

K. Palczewski, T. Kumasaka, T. Hori, C. A. Behnke, H. Motoshima, B. A. Fox, I. Le Trong, D. C. Teller, T. Okada, R. E. Stenkamp, M. Yamamoto, and M. Miyano  
"Crystal structure of rhodopsin: A G protein-coupled receptor"  
Science **289** (2000) 739.

J. Kawai, Y. Mizutani, T. Sugimura, M. Sai, T. Higuchi, Y. Harada, Y. Ishiwata, A. Fukushima, M. Fujisawa, M. Watanabe, K. Maeda, S. Shin, and Y. Gohshi  
"High resolution soft X-ray absorption spectroscopy for the chemical state analysis of Mn"  
Spectrochim. Acta **B55** (2000) 1385.

T. Nakai, T. Hasegawa, E. Yamashita, M. Yamamoto, T. Kumasaka, T. Ueki, H. Nanba, Y. Ikenaka, S. Takahashi, M. Sato, and T. Tsukihara  
"Crystal structure of N carbamyl-D-amino acid amidohydrolase with a novel catalytic framework common to amidohydrolases"  
Structure **8** (2000) 729.

S.-i. Fujimori, Y. Saito, K. Yamaki, T. Okane, N. Sato, T. Komatsubara, S. Suzuki and S. Sato  
"Photoemission study of the U/Si (111) interface"  
Surf. Sci. **444** (2000) 180.

T. Sekiguchi, H. I. Sekiguchi and Y. Baba  
"Site-specific fragmentation of acetone adsorbates on Si (100) in the carbon 1s absorption edge"  
Surf. Sci. **454-456** (2000) 363.

H. I. Sekiguchi, T. Sekiguchi, M. Imamura, N. Matsubayashi, H. Shimada and Y. Baba  
"Site-specific ion desorption from formamide adsorbates near the carbon and nitrogen K-edge"  
Surf. Sci. **454-456** (2000) 407.

M. Takahasi, Y. Hayashi, J. Mizuki, K. Tamura, T. Kondo, H. Naohara and K. Uosaki  
"Pseudomorphic growth of Pd monolayer on Au(111) electrode surface"  
Surf. Sci. **461** (2000) 213.

H. Noma, H. Fujioka, Y. Baba and M. Oshima  
"Stress field dependence of the silicon oxidation rate"  
Trans. Mater. Res. Soc. Jpn. **25** (2000) 151.

K. Yoshii, A. Nakamura and H. Abe  
"Structural, magnetic and transport properties of Ce<sub>1-x</sub>TiO<sub>3</sub>"  
Trans. Mater. Res. Soc. Jpn. **25** (2000) 241.

# Proceedings

## *Accelerator*

K. Fukami, T. Aoki, T. Asaka, N. Hosoda, T. Ohshima, and H. Yonehara

"Beam Orbit, Tune and Chromaticity in the SPring-8 Booster Synchrotron"

Proc. of EPAC2000, Vienna, Austria (2000) 418.

H. Ohkuma, S. Daté, N. Kumagai, M. Masaki, T. Nakamura, T. Ohshima, K. Soutome, S. Takano, M. Takao, K. Tamura, and H. Tanaka

"Operation Status of the SPring-8 Storage ring"

Proc. of EPAC2000, Vienna, Austria (2000) 672.

M. Takao, K. Soutome, and H. Tanaka

"Perturbative Approach to Nonlinear Chromaticity of a Circular Accelerator"

Proc. of EPAC2000, Vienna, Austria (2000) 1083.

H. Tanaka, K. Kumagai, N. Kumagai, H. Ohkuma, K. Soutome, M. Takao, and J. Schimizu

"Optimization of Optics with Four Long Straight Sections of 30m for SPring-8 Storage Ring"

Proc. of EPAC2000, Vienna, Austria (2000) 1086.

M. Takao, K. Soutome, and H. Tanaka

"Touschek Lifetime and Momentum Aperture of the SPring-8 Storage Ring"

Proc. of EPAC2000, Vienna, Austria (2000) 1569.

M. Takao, and T. Shimada

"Long Term Variation of the Circumference of the SPring-8 Storage Ring"

Proc. of EPAC2000, Vienna, Austria (2000) 1572.

H. Tanaka, K. Kumagai, N. Kumagai, M. Masaki, H. Ohkuma, K. Soutome, and M. Takao

"Estimation of Vertical Emittance in an Electron Storage Ring with Vertical Dispersion as a Probe"

Proc. of EPAC2000, Vienna, Austria (2000) 1575.

K. Kumagai, H. Tanaka, K. Soutome, and N. Kumagai

"Development and Installation of Skew Quadrupole Magnets for SPring-8 Storage Ring"

Proc. of EPAC2000, Vienna, Austria (2000) 2104.

S. Daté

"Slow Ground Motion at SPring-8"

Proc. of the 22nd Advanced ICFA Beam Dynamics

Workshop on Ground Motion in Future Accelerators, SLAC, U.S.A., November 6-9 (2000) Report SLAC-WP-18.

S. Sharma, C. Doose, G. Portman, L. Zhang, K. Tsumaki, and D. J. Wang

"GROUND VIBRATION PROBLEMS AT THE LIGHT SOURCES"

Proc. of the 22nd Advanced ICFA Beam Dynamics Workshop on Ground Motion in Future Accelerators, SLAC, U.S.A. November 6-9 (2000) Report SLAC-WP-18, 39.

K. Yanagida, T. Asaka, H. Hanaki, T. Hori, T. Kobayashi, A. Mizuno, S. Suzuki, T. Takashima, and T. Taniuchi

"A BPM SYSTEM FOR THE SPring-8 LINAC"

Proc. of the 20th Int. Linac Conf., Monterey USA, Aug. (2000) 190.

Y. Arimoto, Y. Sato, H. Ohkuma, S. Suzuki, K. Tamura, and S. Okajima

"Generation of MeV Photons using an Optically-Pumped FIR Laser at SPring-8"

Proc. of International Workshop on Laser Electron Photons at SPring-8, SPring-8, Japan, October 14-15 (2000) 169.

H. Hanaki, T. Asaka, H. Dewa, T. Hori, T. Kobayashi, A. Mizuno, S. Suzuki, T. Taniuchi, H. Tomizawa, and K. Yanagida

"Status of the SPring-8 linac"

Proc. of 25th Linear Accelerator Meeting in Japan, Himeji, July (2000) 32.

K. Yanagida, T. Asaka, H. Hanaki, T. Hori, T. Kobayashi, A. Mizuno, S. Suzuki, T. Takashima, and T. Taniuchi

"SIGNAL PROCESSOR FOR BPM USING LOG AMPLIFIRE-DETECTOR"

Proc. of the 25th Linear Accelerator Meeting in Japan, Himeji, July (2000) 114.

T. Kobayashi

"Development of the Beam Deflector"

Proc. of the 25th Linear Accelerator Meeting in Japan, Himeji, July (2000) 171.

K. Tsumaki

"Deterioration of Magnet Flow Switch"

Proc. of the 6th Sympo. on Power Supply Technology for Accelerators, November, SPring-8, JAPAN (2000) 205.

T. Nakano, J. K. Ahn, H. Ejiri, M. Fujiwara, T. Hotta, N. Matsuoka, T. Matsumura, T. Mibe, M. Nomachi, H. Toki, C. W. Wang, S. C. Wang, H. Kawai, T. Ooba, T. Iwata, Y. Miyachi, T. Toyama, A. Wakai, K. Hicks, H. Akimune, Y. Asano, Y. Sugaya, S. Daté, N. Kumagai, Y. Ohashi, H. Toyokawa, K. Imai, M. Yosoi, A. Ichikawa, T. Kishimoto, A. Sakaguchi, M. Sumihama, S. Makino, and H. Shimizu  
"Experiment at SPring-8"  
The International Symposium on Physics of Hadrons and Nuclei, Tokyo, Japan, 14 December 1998, Nucl. Phys. **A670** (2000) 332.

### ***Experimental Facility and Synchrotron Radiation Experiments***

W. Utsumi, T. Okada, K. Funakoshi, and O. Shimomura  
"In situ x-ray observation of cubic BC<sub>2</sub>N formation under high pressures and temperatures"  
Proceeding of the 8th International Symposium on Advanced Materials (2001) 39.

Y. Asano  
"Estimation of synchrotron radiation dose outside the hutch of SPring-8 beamline"  
Proceeding of the 10th International Congress of the International Radiation Protection Association, Hiroshima, p6a-330 (1-6) (2000).

M. Suzuki, H. Toyokawa, M. Ito, M. Mizumaki, Y. Sakurai, N. Hiraoka, and N. Sakai  
"Development of a One-Dimensional Microstrip Demanum Detector for Compton Scattering Experiment at SPring-8"  
Proceeding of the 14<sup>th</sup> Workshop on radiation Detectors and their Uses, KEK Proceedings 2000-14, August (2000) 83.

T. Ishikawa, K. Tamasaku, M. Yabashi, S. Goto, Y. Tanaka, H. Yamazaki, K. Takeshita, H. Kimura, H. Ohashi, T. Matsushita, and T. Ohata  
"One kilometer beamline at SPring-8"  
Proc. SPIE-int. Soc. Opt. Eng. **4145** (2001) 1.

A. Y. Nikulin, J. R. Davis, B. F. Usher, A. K. Freund, and T. Ishikawa  
"90-degree Bragg reflection from a thin crystalline film"  
Proc. SPIE-Int. Soc. Opt. Eng. **4145** (2001) 129.

M. Suzuki, N. Kawamura, and T. Ishikawa  
"X-ray optics for modulation spectroscopy"  
Proc. SPIE-Int. Soc. Opt. Eng. **4145** (2001) 140.

K. Siu, A. Y. Nikulin, J. Hester, A. K. Freund, and T.

Ishikawa  
"Phase retrieval X-ray deffractometry (PRXRD: Refraction/small angle cattering data applications)"  
Proc. SPIE-Int. Soc. Opt. Eng. **4145** (2001) 157.

M. Kishino, A. Tanaka, T. Oishi, R. Doerffer, and H. Schiller  
"Temporal and spatial variability of chlorophyll a suspended solids and yellow substance in the Yellow Sea and East China Sea using Ocean Color Sensor"  
Proc. SPIE-Int. Soc. Opt. Eng. **4154** (2000) 179.

M. Kishino, A. Tanaka, T. Oishi, R. Doerffer, and H. Schiller  
"Remote sensing of river mouths and Asian coastal zone by ocean color sensor"  
PORSEC Proc. Vol. 2 Goa, India 2000-05 (2001) 718.

## Others

Y. Shimizu, O. Yoda, T. Sasuga, Y. Teraoka, A. Yokoya, and Y. Yanagihara

"Design and manufacture of a testing device for the evaluation of optical elements"

JAERI-Tech, 2000-021 (2000)

W. Utsumi

"Observation of the materials in the high pressure-temperature vessels-In situ observation with synchrotron radiation"

Mukizai Now **180** (2000) 5. (in Japanese)

S. Yokoyama, H. Hirota, T. Kigawa, T. Yabuki, M. Shirouzu, T. Terada, Y. Ito, Y. Matsuo, Y. Kuroda, Y. Nishimura, Y. Kyogoku, K. Miki, R. Masui, and S. Kuramitsu

"Structural genomics projects in Japan"

Nat. Struct. Biol. **7** Suppl. (2000) 943.

A. Tanaka, H. Kobayashi, M. Kishino, T. Oishi, R. Doerffer, H. Schiller, and T. Kubota

"Neural network algorithm for simultaneous retrieval of aerosol and water constituents based on atmosphere-ocean coupled radiative transfer model"

Ocean Optics XV (CD-ROM) Paper 1034 (2000).

T. Oishi, T. Hosaka, S. Kanegae, K. Aoki, A. Hinuma, M. Kishino, and T. Saino

"Light absorption of cultured phytoplankton in near infrared region"

Ocean Optics XV (CD-ROM) Paper 1035 (2000).

Y. Takahashi, T. Oishi, T. Hosaka, A. Tanaka, M. Oishi, M. Kishino, and T. Saino

"Wavelength dependence of spectral backward scattering coefficients due to cultured phytoplankton"

Ocean Optics XV (CD-ROM) Paper 1038 (2001).

H. Sasaki, S. Saitoh, and M. Kishino

"The optical environment in the NE subarctic Pacific: Summer 1997 and 1999"

Ocean Optics XV (CD-ROM) Paper 1169 (2001).

M. Kishino, J. Ishizaka, S. Saitoh, H. Sato, T. Hirawake, and J. Ishizaka

"Optical Properties of case 2 waters around Japanese Islands"

Ocean Optics XV (CD-ROM) Paper 1179 (2001).

H. Kobayashi, A. Tanaka, M. Kishino, T. Oishi, and O. Sachio

"Algorithm for estimation of coastal pollution using a

radiative transfer model for a coupled atmosphere-ocean system"

Ocean Optics XV (CD-ROM) Paper 1199 (2001).

S. Yokoyama, Y. Matsuo, H. Hirota, T. Kigawa, M. Shirouzu, Y. Kuroda, H. Kurumizaka, S. Kawaguchi, Y. Ito, T. Shibata, M. Kainosh, Y. Nishimura, Y. Inoue, and S. Kuramitsu

"Structural genomics projects in Japan"

Prog. Biophys. Mol. Biol. **73** (2000) 363.

M. Miyano

"Crystal structure of the RNA-dependent RNA polymerase of hepatitis C virus"

SPring-8 Res. Frontiers 1998/1999 (2000) 15.

Y. Teraoka, and A. Yoshigoe

"In situ photoemission spectroscopy of initial oxidation processes using synchrotron radiation on Si(001) induced by O<sub>2</sub> translational kinetic energy"

Surface Science **22** (2001). (in Japanese)

S. Trakhanov , 白水美香子

"Series : ゲノム解析プロトコール 14

タンパク質結晶解析と強力シンクロトロン放射光"

Mol. Med. **37** (2000) 836.

平譯 亨、鈴木光次、岸野元彰、古谷研、田口哲、齋藤誠一、才野敏郎

"植物プランクトン光吸収スペクトル測定法の検討：測定プロトコルの作成"

Otsuchi Marine Science **25** (2000) 43.

山本雅貴、熊坂崇、石川哲也

"SPring-8におけるダイヤモンドの放射光利用"

New Diamond **16** (3) (2000) 16.

鈴木昌世、豊川秀訓

"SPring-8におけるX線検出器開発"

応用物理 69 (2000) 380.

加藤博章

"アミラーゼの反応中間体がX線結晶解析で捕えられた！"

化学 No. 3 (2000) 59.

原雅弘

"放射光が拓く科学の未来"

科学技術ジャーナル2001年2月号 24.

足立伸一

"時間分解結晶構造解析"

基礎生化学実験法、日本生化学会（編）

東京化学同人、東京 3 (2001) 195.

- 城宜嗣  
"X線吸収分光法"  
基礎生化学実験法、日本生化学会（編）  
東京化学同人、東京 3 (2001) 239.
- 原雅弘  
"SPring-8における最近の成果 - ビームラインの充実により輝かしい成果が出はじめる - "  
きらめき燐No.40報告 8月 (2000).
- 山本雅貴、熊坂崇、石川哲也  
"SPring-8のダイヤモンド分光器"  
高圧力の科学と技術 10 (2000) 56.
- 吾郷日出夫、宮野雅司  
"C型肝炎ウィルス由来RNA依存RNAポリメラーゼの結晶構造"  
構造生物 6 (2000) 1.
- 安岡則武、神谷信夫  
"生体超分子システムに迫る"  
シリーズ・光が拓く生命科学、安岡則武、木原裕（編）共立出版、東京 8 (2000) 18.
- 松本治、三木邦夫  
"第I部 生体分子の構造と機能"  
生化学 分子から病態まで 香川靖雄（編）  
東京化学同人、東京 (2000) 7.
- 神谷信夫、坂部知平、坂部貴和子  
"構造生物学のための大型実験施設:つくばと播磨の放射光施設"  
蛋白質 核酸 酶素 45 (2000) 1279.
- 宮野雅司、熊坂崇、堀哲哉、山本雅貴  
"7回膜貫通型レセプター・ロドプシンの結晶構造: 7TMレセプター分子機構解明に向けて"  
蛋白質 核酸 酶素 46 (2001) 687.
- 望月哲朗、大石真也  
"SPring-8概要とビームラインの熱関連問題"  
伝熱 第39巻 第154号 (2000) 23.
- 原雅弘  
"大型放射光施設スプリングエイト 多分野で成果あがる "  
特殊鋼 49 (7) (2000) 59.
- 河本正秀、河野能顕、神谷信夫、山根隆、三木邦夫、森本幸生  
"生体高分子結晶構造解析ビームラインBL41XUの到達点とアンジュレータX線の拓く構造生物学"  
日本結晶学会誌 42 (2000) 87.
- 藤澤哲郎  
"理研ビームラインI(BL45XU)におけるX線溶液散乱を用いた構造研究"  
日本結晶学会誌 42 (2000) 97.
- 宮野雅司  
"応用からみた構造生物: 創薬を中心にして"  
日本結晶学会誌 42 (2000) 322.
- 喜田昭子、三木邦夫  
"カテコール 2,3-ジオキシゲナーゼ(メタピロカテカーゼ)の結晶構造"  
日本結晶学会誌 42 (2000) 361.
- 熊坂崇  
"タンパク質結晶解析のためのソフトウェア紹介"  
日本結晶学会誌 42 (2000) 474.
- 倉光成紀、三木邦夫、宮野雅司、神谷信夫、横山茂之  
"構造ゲノム科学"  
日本結晶学会誌 43 (2001) 45.
- 岸野元彰、大石友彦、田中昭彦  
"海中における放射伝達式"  
日本リモートセンシング学会誌 20 (2000) 530.
- 北野健、三木邦夫  
"蛋白質結晶化における微小重力利用"  
日本マイクログラビティ応用学会誌 17 (2000) 114.
- 原徹  
"ヘリカルアンジュレータ"  
放射光 13 (2000) 3.
- 原田慈久  
"軽い遷移金属化合物及びNa化合物による偏光軟X線共鳴ラマン散乱の研究"  
放射光 13 (2000) 327.
- 大熊春夫、米原博人  
"蓄積リングの改造とビーム性能"  
放射光 14 (2001) 3.
- 原徹、高橋直、矢橋牧名、玉作賢治、北村英男、石川哲也  
"SPring-8での25mアンジュレータビームライン建設と立上げ"  
放射光 14 (2001) 12.
- 宮野雅司  
"ICSG2000サテライト・播磨ワークショップ報告"  
放射光 14 (2001) 74.