

- [59] "Determination of the Chemical Properties of Residues Retained in Individual Cloud Droplets by XRF Microprobe at SPring-8"
 C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Nuclear Instruments and Methods in Physics Research Section B, **217**, (2004), 657-665
- [60] "Properties of Individual Asian Dust Storm Particles Collected at Kosan, Korea during ACE-Asia"
 C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Atmospheric Environment, **38**, (2004), 1133-1143
- [61] "Properties of the Size-Resolved and Individual Cloud Droplets Collected in the Western Japan during Asian Dust Storm Event"
 C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Atmospheric Environment, **38**, (2004), 4519-4529
- [62] "Measurement and Multiple-Scattering Calculation of Cu *K*-edge X-ray Magnetic Circular Dichroism Spectra from an Exchange-Coupled Co/Cu Multilayer"
 S. Nagamatsu, H. Matsumoto, T. Fujikawa, K. Ishiji, H. Hashizume
Physical Review B, **70**, (2004), 174442
- [63] "Induced Magnetic Polarization in Cu Layers of Gd/Cu Multilayers Studied by X-ray Magnetic Circular Dichroism"
 T. Ohkochi, N. Hosooito, K. Mibu, H. Hashizume
Journal of the Physical Society of Japan, **73**, (2004), 2212-2218
- [64] "X-Ray Magnetic Circular Dichroism and Structural Model for Co-Doped TiO₂ (Anatase) Thin Film"
 N. Shimizu, S. Sasaki, T. Hanashima, K. Yamawaki, H. Udagawa, N. Kawamura, M. Suzuki, H. Maruyama, M. Murakami, Y. Matsumoto, H. Koinuma
Journal of the Physical Society of Japan, **73**, (2004), 800-803
- [65] "Direct Observation of Ferromagnetic Spin Polarization in Gold Nanoparticles"
 Y. Yamamoto, T. Miura, M. Suzuki, N. Kawamura, H. Miyagawa, T. Nakamura, K. Kobayashi, T. Teranishi, H. Hori
Physical Review Letters, **93**, (2004), 116801
- [66] "Neutron Diffraction and X-ray Absorption Study of CaMn_{0.6}Ru_{0.4}O₃"
 K. Yoshii, A. Nakamura, M. Mizumaki, H. Tanida, N. Kawamura, H. Abe, Y. Ishii, Y. Shimojo, Y. Morii
Journal of Magnetism and Magnetic Materials, **272-276**, (2004), E609-E611
- [2005]
- [67] "Probing the Magnetic Polarizations of Delocalized Electrons in Exchange-coupled Co/CuNi Multilayers by X-ray Magnetic Circular Dichroism Measurements"
 K. Ishiji, H. Yamasaki, T. Masui, H. Hashizume
Journal of the Physical Society of Japan, **74**, (2005), 753-757
- [68] "Investigation of Structural and Electronic Properties in Ru Perovskite Oxides by XAFS Measurements"
 M. Mizumaki, K. Yoshii, Y. Hinatsu, T. Doi, T. Uruga
Physica Scripta, **T115**, (2005), 513-515

BL40XU

Refereed Papers

[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
- [7] "Future Investigations of Micro-Macro Level Cardiac Functions using X-ray Diffraction"
 J. Pearson, M. Shirai, N. Yagi, H. Suga
BME (日本工ム・イー学会誌, Bio Medical Engineering), **16**, (2002), 29-35
- [8] "Wavelength-Dispersive Total-Reflection X-ray Fluorescence with an Efficient Johansson Spectrometer and an Undulator X-ray Source: Detection of 10^{-16} g-level Trace Metals"
 K. Sakurai, H. Eba, K. Inoue, N. Yagi
Analytical Chemistry, **74**, (2002), 4532-4535
- [9] "New Insights into Structural Development in Natural Rubber during Uniaxial Deformation by In situ Synchrotron X-Ray Diffraction"
 S. Toki, I. Sics, S. Ran, L. Liu, Benjamin S. Hsiano, S. Murakami, K. Senoo, S. Kohjiya
Macromolecules, **35**, (2002), 6578-6584
 [2003]
- [10] "Chemical Characterization using Relative Intensity of Manganese K β' and K β_5 X-ray Fluorescence"
 K. Sakurai, H. Eba
Nuclear Instruments and Methods in Physics Research Section B, **199**, (2003), 391-395
- [11] "Changes in Photoluminescence of SrS:Ce Induced by Synchrotron Radiation"
 F. Sato, T. Nakamura, K. Tanaka, S. Aihara, N. Saito, K. Inoue, N. Yagi, J. Mizuki
Journal of Vacuum Science & Technology A, **21**, (2003), 14-18
- [12] "An X-Ray Diffraction Study on Early Structural Changes in Skeletal Muscle Contraction"
 N. Yagi
Biophysical Journal, **84**, (2003), 1093-1102
 [2004]
- [13] "Detection Limits of Trace Elements for Wavelength Dispersive Total X-Ray Fluorescence under High Flux Synchrotron Radiation"
 N. Awaji, M. Takemura, S. Ozaki, J. Iihara, K. Inoue, N. Yagi, S. Komiya, K. Nomura, S. Doi, Y. Kamimuta, M. Takahashi, M. Takahashi, K. Miyatake, N. Yamazaki
Japanese Journal of Applied Physics, **43**, (2004), 1644-1648
- [14] "Penetration of PBSU Spherulite into P(VDC-VC) Spherulite Observed with Microbeam- and Macrobeam-SAXS/WAXS Measurements"
 Y. Nozue, S. Hirano, N. Kawasaki, S. Ueno, N. Yagi, T. Nishi, Y. Amemiya
Polymer, **45**, (2004), 8593-8601
- [15] "In situ Measurements of Crossbridge Dynamics and Lattice Spacing in Rat Hearts by X-Ray Diffraction Sensitivity to Regional Ischemia"
 James T. Pearson, M. Shirai, H. Ito, N. Tokunaga, H. Tsuchimochi, N. Nishiura, Daryl O. Schwenke, H. Ishibashi-Ueda, R. Akiyama, H. Mori, K. Kangawa, H. Suga, N. Yagi
Circulation, **109**, (2004), 2983-2986
- [16] "The Role of Pigment Cells in the Brain of Ascidian Larva"
 D. Sakurai, M. Goda, Y. Kohmura, T. Horie, H. Iwamoto, H. Ohtsuki, M. Tsuda
The Journal of Comparative Neurology, **475**, (2004), 70-82
- [17] "X-ray Imaging Microscopy using Fresnel Zone Plate Objective and Quasimonochromatic Undulator Radiation"
 Y. Suzuki, A. Takeuchi, H. Takano, K. Uesugi, T. Oka, K. Inoue
Review of Scientific Instruments, **75**, (2004), 1155-1157

- [18] "Structural Transients of Contractile Proteins upon Sudden ATP Liberation in Skeletal Muscle Fibers"
J. Wakayama, T. Tamura, N. Yagi, H. Iwamoto
Biophysical Journal, **87**, (2004), 430-441
- [19] "X-ray Diffraction from a Left Ventricular Wall of Rat Heart"
N. Yagi, J. Shimizu, S. Mohri, J. Araki, K. Nakamura, H. Okuyama, H. Toyota, T. Morimoto, Y. Morizane, M. Kurusu, T. Miura, K. Hashimoto, K. Tsujioka, H. Suga, F. Kajiya
Biophysical Journal, **86**, (2004), 2286-2294
- [20] "A Large-Area CMOS Imager as an X-ray Detector for Synchrotron Radiation Experiments"
N. Yagi, M. Yamamoto, K. Uesugi, K. Inoue
Journal of Synchrotron Radiation, **11**, (2004), 347-352
- [21] "CCD-based X-ray Area Detector for Time-resolved Diffraction Experiments"
N. Yagi, K. Inoue, T. Oka
Journal of Synchrotron Radiation, **11**, (2004), 456-461
[2005]
- [22] "Site Occupancy Determination for Manganese in Some Spinel-Type Oxides by K β X-Ray Fluorescence Spectra"
H. Eba, K. Sakurai
Journal of Solid State Chemistry, **178**, (2005), 370-375
- [23] "Structural Analysis of Single Wool Fibre by Scanning Microbeam SAXS"
Y. Kajiura, Y. Shinohara, Y. Amemiya, T. Itou, S. Watanabe, A. Iida
Journal of Applied Crystallography, **38**, (2005), 420-425
- [24] "Natural Water Specimen Preparation for TXRF Analysis Using a Johansson Wavelength-Dispersive Spectrometer"
S. Kurunczi, K. Sakurai
X-Ray Spectrometry, **34**, (2005), 56-58
- [25] "A Secondary Electron Emission Detector for Measuring the Intensity of Synchrotron Radiation"
N. Nariyama, S. Tamiguchi
Review of Scientific Instruments, **76**, (2005), 033302
- [26] "Structural Analysis of Cell Membrane Complex of a Hair Fibre by Micro-Beam X-ray Diffraction"
N. Ohta, T. Oka, K. Inoue, N. Yagi, S. Kato, I. Hatta
Journal of Applied Crystallography, **38**, (2005), 274-279
- [27] "Structural Transition of Bacteriorhodopsin is Preceded by Deprotonation of Schiff Base: Microsecond Time-Resolved X-ray Diffraction Study of Purple Membrane"
T. Oka, K. Inoue, M. Kataoka, Y. Naoto
Biophysical Journal, **88**, (2005), 436-442

BL40B2

Refereed Papers

[2000]

- [1] "Crystallization of the F41 Fragment of Flagellin and Data Collection from Extremely Thin Crystals"
Fadel A. Samatey, K. Imada, F. Vonderviszt, Y. Shirakihara, K. Namba
Journal of Structural Biology, **132**, (2000), 106-111
[2001]
- [2] "Crystal Structure of *cis*-Prenyl Chain Elongating Enzyme, Undecaprenyl Diphosphate Synthase"
M. Fujihashi, Y. Zhang, Y. Higuchi, X. Li, T. Koyama, K. Miki
Proceedings of the National Academy of Sciences of the United States of America, **98**, (2001), 4337-4342
- [3] "Crystal Structure of Thermostable DNA Photolyase: Pyrimidine-Dimer Recognition Mechanism"
H. Komori, R. Masui, S. Kuramitsu, S. Yokoyama, T. Shibata, Y. Inoue, K. Miki
Proceedings of the National Academy of Sciences of the United States of America, **98**, (2001), 13560-13565
- [4] "Crystallization and Preliminary X-Ray Studies of a Thermostable DNA Photolyase from *Thermus thermophilus* HB8"
H. Komori, H. Tsujiuchi, R. Masui, S. Kuramitsu, S. Yokoyama, T. Shibata, Y. Inoue, K. Miki
Protein and Peptide Letters, **8**, (2001), 495-498