

## BL39XU

### Refereed Papers

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- [1] "X-Ray Microprobe System for XRF Analysis and Spectroscopy at SPring-8 BL39XU"  
S. Hayakawa, S. Goto, T. Shoji, E. Yamada, Y. Gohshi  
*Journal of Synchrotron Radiation*, **5**, (1998), 1114-1116
- [2] "Atomic-Resolution X-Ray Fluorescence Holography of Zn(0.02wt%) in a GaAs Wafer"  
K. Hayashi, T. Yamamoto, J. Kawai, M. Suzuki, S. Goto, S. Hayakawa, K. Sakurai, Y. Gohshi  
*Analytical Sciences*, **14**, (1998), 987-990
- [3] "A Grazing-Incidence Reflectometer for BL-39XU at SPring-8"  
K. Sakurai, S. Uehara, S. Goto  
*Journal of Synchrotron Radiation*, **5**, (1998), 554-556
- [4] "Helicity-Modulation Technique Using Diffractive Phase Retarder for Measurements of X-Ray Magnetic Circular Dichroism"  
M. Suzuki, N. Kawamura, M. Mizumaki, A. Urata, H. Maruyama, S. Goto, T. Ishikawa  
*Japanese Journal of Applied Physics*, **37**, (1998), L1488-L1490

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- [5] "Measurements of ATS Scattering from Magnetite near the Fe K-Absorption Edge in the Temperature Range 290K-80K"  
K. Hagiwara, M. Kanazawa, K. Horie, J. Kokubun, K. Ishida  
*Journal of the Physical Society of Japan*, **68**, (1999), 1592-1597
- [6] "A Wavelength Dispersive X-Ray Spectrometer for Small Area X-Ray Fluorescence Spectroscopy at SPring-8 BL39XU"  
S. Hayakawa, A. Yamaguchi, W. Hong, Y. Gohshi, T. Yamamoto, K. Hayashi, J. Kawai, S. Goto  
*Spectrochimica Acta Part B*, **54**, (1999), 171-177
- [7] "X-Ray Spectroscopic Study of Electronic States in 3d Transition Metal Compounds"  
N. Kawamura  
*Doctor Thesis (Okayama University)*, (1999)
- [8] "Polarization Tunability and Analysis for Observing Magnetic Effects on BL39XU at SPring-8"  
H. Maruyama, M. Suzuki, N. Kawamura, M. Ito, E. Arakawa, J. Kokubun, K. Hirano, K. Horie, S. Uemura, K. Hagiwara, M. Mizumaki Tokyo, S. Goto, H. Kitamura, K. Namikawa, T. Ishikawa  
*Journal of Synchrotron Radiation*, **6**, (1999), 1133-1137
- [9] "X-Ray Fluorescence Analysis with a Johansson-Type Spectrometer"  
K. Sakurai, H. Eba  
*Japanese Journal of Applied Physics*, **38 Suppl. 38-1**, (1999), 650-653
- [10] "Grazing Incidence X-Ray Fluorescence and Scattering Experiments at BL-39XU, SPring-8"  
K. Sakurai, H. Eba, S. Goto  
*Japanese Journal of Applied Physics*, **38 Suppl. 38-1**, (1999), 332-335
- [11] "Polarization-Modulation Technique with Diamond Phase Retarder to Improve the Accuracy of XMCD Measurements"  
M. Suzuki, N. Kawamura, M. Mizumaki, A. Urata, H. Maruyama, S. Goto, T. Ishikawa  
*Journal of Synchrotron Radiation*, **6**, (1999), 190-192
- [12] "Development and Application of Multi-Purpose X-Ray Fluorescence Analyzer Using Synchrotron and Conventional X-Ray Sources"  
Y. Terada, N. Kondo, M. Kataoka, M. Izumiya, I. Nakai, S. Goto  
*X-Ray Spectrometry*, **28**, (1999), 461-463

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- [13] "Fe K-Edge X-Ray Magnetic Circular Dichroism Study in  $R_6Fe_{23}$  ( $R=Ho$  and  $Y$ ) Compounds near Compensation Temperature"  
J. Chaboy, L. M. Garcia, F. Bartolome, H. Maruyama, S. Uemura, N. Kawamura, A. S. Markosyan  
*Journal of Applied Physics*, **88**, (2000), 336-338
- [14] "Trace Chemical Characterization Using Monochromatic X-Ray Undulator Radiation"  
H. Eba, C. Numako, J. Iihara, K. Sakurai  
*Analytical Chemistry*, **72**, (2000), 2613-2617

- [15] "Spectromicroscopy Using an X-Ray Microprobe at SPring-8 BL39XU"  
 S. Hayakawa, T. Hirokawa, Y. Gohshi, M. Suzuki, S. Goto  
 X-Ray Microscopy: Proceedings of the Sixth International Conference (AIP Conference Proceedings 507), **CP507**, (2000), 92-97
- [16] "Local Atomic Image of 0.02% Zn in GaAs Wafers Using X-Ray Holography"  
 K. Hayashi, T. Yamamoto, J. Kawai, M. Suzuki, S. Goto, S. Hayakawa, K. Sakurai, Y. Gohshi  
 Advances in X-Ray Analysis, **42**, (2000), 181-190
- [17] "Anomalous Magnetic Hysteresis of Gd and Fe Moments in a Gd/Fe Multilayer Measured by Hard X-Ray Magnetic Circular Dichroism"  
 A. Koizumi, M. Takagaki, M. Suzuki, N. Kawamura, N. Sakai  
 Physical Review B, **61**, (2000), R14909
- [18] "Mapping of a Particular Element Using an Absorption Edge with an X-Ray Fluorescence Imaging Microscope"  
 K. Yamamoto, N. Watanabe, A. Takeuchi, H. Takano, T. Aota, M. Fukuda, S. Aoki  
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- [19] "Elemental Mapping with an X-Ray Fluorescence Imaging Microscope"  
 K. Yamamoto, N. Watanabe, A. Takeuchi, H. Takano, T. Aota, M. Kumegawa, T. Ohigashi, R. Tanoue, H. Yokosuka, S. Aoki  
 X-Ray Microscopy: Proceedings of the Sixth International Conference (AIP Conference Proceedings 507), **CP507**, (2000), 259-262
- [2001]
- [20] "Distribution and Chemical States of Iron and Chromium Released from Orthopedic Implants into Human Tissues"  
 A. Ektessabi, S. Shikine, N. Kitamura, M. Rokkum, C. Johansson  
 X-Ray Spectrometry, **30**, (2001), 44-48
- [21] "Chemical State Analysis of Iron in Nerve Cells"  
 S. Fujisawa, A. M. Ektessabi, S. Yoshida  
 Application of Accelerators in Research and Industry: Sixteenth International Conference (AIP Conference Proceedings 576), **CP576**, (2001), 707-710
- [22] "Generation of an X-Ray Microbeam for Spectromicroscopy at SPring-8 BL39XU"  
 S. Hayakawa, N. Ikuta, M. Suzuki, M. Wakatsuki, T. Hirokawa  
 Journal of Synchrotron Radiation, **8**, (2001), 328-330
- [23] "Development of a Compact Beam Intensity Monitor for Micro X-Ray Absorption Fine Structure Measurements"  
 S. Hayakawa, M. Suzuki, M. Oshima, T. Hirokawa  
 Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 901-904
- [24] "Ultra Trace Characterization Using an X-Ray Microprobe at SPring-8 BL39XU"  
 S. Hayakawa, S. Tohno, K. Takagawa, A. Hamamoto, Y. Nishida, M. Suzuki, Y. Sato, T. Hirokawa  
 Analytical Sciences, **17 Supplement**, (2001), i115-i117
- [25] "Development of X-Ray Fluorescence Holography Method for Determination of Local Atomic Environment"  
 K. Hayashi, Y. Takahashi, E. Matsubara, S. Kishimoto, T. Mori, M. Tanaka, S. Hayakawa, M. Suzuki  
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- [26] "X-Ray Magnetic Circular Dichroism Studies of  $\text{Fe}_4\text{N}$  under High-Pressure"  
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- [27] " $\text{Ce } 5d$  and  $\text{Fe } 3d$  Magnetic Profiles in  $\text{CeH}_3/\text{Fe}$  Multilayers Probed by XRMS"  
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 Applied Physics A, **73**, (2001), 711-715
- [28] "Microbeam XANES and X-Ray Fluorescence Analysis of Cadmium in Kidney"  
 J. Kawai, K. Takagawa, S. Fujisawa, A. Ektessabi, S. Hayakawa  
 Journal of Trace and Microprobe Techniques, **19**, (2001), 541-546

- [29] "Multielectron Excitations Probed by Helicity-Modulation XMCD at *K*-Edge in 3d Transition Metal Compounds"  
 N. Kawamura, T. Yamamoto, H. Maruyama, I. Harada, M. Suzuki, T. Ishikawa  
*Journal of Synchrotron Radiation*, **8**, (2001), 410-412
- [30] "XAFS in a Single Macrophage Cell"  
 N. Kitamura, A. M. Ektessabi  
*Journal of Synchrotron Radiation*, **8**, (2001), 981-983
- [31] "Study of Magnetic Materials Using Helicity-Modulated X-Ray Magnetic Circular Dichroism"  
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*Journal of Synchrotron Radiation*, **8**, (2001), 125-128
- [32] "Development of a Wavelength Dispersive X-Ray Fluorescence Spectrometer Using an X-Ray CCD"  
 Y. Sato, S. Hayakawa, Y. Nishida, A. Hamamoto, M. Suzuki, T. Hirokawa  
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- [33] "Tuning of X-Ray Phase Retarder for Magnetic EXAFS Spectroscopy in Helicity Modulation Mode"  
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*Journal of Synchrotron Radiation*, **8**, (2001), 357-359
- [34] "Mn *K*-Edge XMCD in Mn<sub>3</sub>MC (*M*=Zn and Ga) Perovskite"  
 S. Uemoto, H. Maruyama, N. Kawamura, S. Uemura, N. Kitamoto, H. Nakao, S. Hara, M. Suzuki, D. Fruchart, H. Yamazaki  
*Journal of Synchrotron Radiation*, **8**, (2001), 449-451
- [35] "Study on Electronic States of 3d Magnetic Atoms in Local Environment ---Experiments of X-Ray Magnetic Circular Dichroism and Calculations Based on Multiple Scattering Theory---"  
 S. Uemura  
*Doctor Thesis (Okayama University)*, (2001)
- [36] "X-Ray Fluorescence Microtomography with a Wolter Mirror System"  
 N. Watanabe, K. Yamamoto, T. Ohigashi, H. Yokosuka, T. Aota, S. Aoki  
*Nuclear Instruments and Methods in Physics Research Section A*, **467-468**, (2001), 837-840
- [37] "XANES Spectroscopy of a Single Neuron from a Patient with Parkinson's Disease"  
 S. Yoshida, A. Ektessabi, S. Fujisawa  
*Journal of Synchrotron Radiation*, **8**, (2001), 998-1000  
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- [38] "Chemical State Imaging of Iron in Nerve Cells from a Patient with Parkinsonism-Dementia Complex"  
 A. Ektessabi, S. Fujisawa, S. Yoshida  
*Journal of Applied Physics*, **91**, (2002), 1613-1617
- [39] "Refinement of X-Ray Fluorescence Holography for Determination of Local Atomic Environment"  
 K. Hayashi, Y. Takahashi, E. Matsubara  
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- [40] "Photon Interference Effect in X-Ray Absorption Spectra over a Wide Energy Range"  
 Y. Nishino, T. Ishikawa, M. Suzuki, N. Kawamura, P. Kappen, P. Korecki, N. Haack, G. Materlik  
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- [41] "Elemental Analysis with a Full-Field X-Ray Fluorescence Microscope and a CCD Photon-Counting System"  
 T. Ohigashi, N. Watanabe, H. Yokosuka, T. Aota, H. Takano, A. Takeuchi, S. Aoki  
*Journal of Synchrotron Radiation*, **9**, (2002), 128-131
- [42] "Fast Multigrid Fluorescent Ion Chamber with 0.1 ms Time Response"  
 M. Suzuki, N. Kawamura, Farrel W. Lytle, T. Ishikawa  
*Journal of Synchrotron Radiation*, **9**, (2002), 99-102  
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- [43] "Relationship between Hydriding and Nd Magnetic Moment in Nd<sub>2</sub>Fe<sub>14</sub>B"  
 J. Chaboy, C. Piquer, N. Plugaru, M. Artigas, H. Maruyama, N. Kawamura, M. Suzuki  
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- [44] "Characterization of Individual Aerosol Particles Using an X-Ray Microprobe"  
 S. Hayakawa, S. Tohno, A. Hamamoto, M. Suzuki, T. Hirokawa  
*Journal de Physique IV France*, **104**, (2003), 309-312

- [45] "X-Ray Magnetic Circular Dichroism Study of Metamagnetic Behaviour in the Heavy-Fermion System CeRu<sub>2</sub>Si<sub>2</sub>"  
 T. Honma, N. Kawamura, M. Suzuki, M. Mizumaki, H. Maruyama, N. Ishimatsu, Y. Inada, Y. Onuki  
*Journal of Physics: Condensed Matter*, **15**, (2003), S2171-S2174
- [46] "Pressure-Induced Magnetic Transition in Fe<sub>4</sub>N Probed by Fe K-edge XMCD Measurement"  
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- [47] "Evolution of the K  $\alpha$  X-Ray Satellites for Fe, Ni and Zn : from Threshold to Saturation"  
 K. Kawatsura, T. Morikawa, K. Takahiro, M. Oura, H. Yamaoka, K. Maeda, S. Hayakawa, S. Ito, M. Terasawa, T. Mukoyama  
*Journal of Physics B: Atomic, Molecular and Optical Physics*, **36**, (2003), 4065-4072
- [48] "Magnetic X-Ray Absorption fine Structure for Ni-Mn Alloys"  
 T. Miyanaga, T. Okazaki, R. Maruko, K. Takegahara, S. Nagamatsu, T. Fujikawa, H. Kon, Y. Sakisaka  
*Journal of Synchrotron Radiation*, **10**, (2003), 113-119
- [49] "Element-Specified Observation of Surface-Influenced Magnetization Process in Gd/Fe Multilayer"  
 M. Takagaki, A. Koizumi, N. Kawamura, M. Suzuki, N. Sakai  
*Journal of the Physical Society of Japan*, **72**, (2003), 245-248
- [50] "Investigation of Spin Structure in Gd/Fe Artificial Lattices by Element-Selective X-Ray Magnetic Circular Dichroism Measurement"  
 M. Takagaki  
*Doctor Thesis (Himeji Institute of Technology)*, (2003)
- [51] "Polarized Total-Reflection X-Ray Absorption Fine Structure for Self-Assembled Monolayer of Zinc Porphyrin at Air-Water Interface"  
 H. Tanida, H. Nagatani, I. Watanabe  
*The Journal of Chemical Physics*, **118**, (2003), 10369-10371
- [52] "Application of Synchrotron Radiation in Neuromicrobiology: Role of Iron in Parkinson's Disease"  
 S. Yoshida, A. Ide-Ektessabi, S. Fujisawa  
*Structural Chemistry*, **14**, (2003), 85-95
- [53] "Structure, Magnetism and Transport of La<sub>2</sub>NiRuO<sub>6</sub>"  
 K. Yoshii, H. Abe, M. Mizumaki, H. Tanida, N. Kawamura  
*Journal of Alloys and Compounds*, **348**, (2003), 236-240
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 J. Chaboy, H. Maruyama, N. Kawamura, M. Suzuki  
*Physical Review B*, **69**, (2004), 014427
- [55] "Rare-Earth Orbital Contribution to the Fe K-edge X-ray Magnetic Circular Dichroism in Rare-Earth Transition Metal Intermetallic Compounds"  
 J. Chaboy, M. Laguna-Marco, M. Sanchez, H. Maruyama, N. Kawamura, M. Suzuki  
*Physical Review B*, **69**, (2004), 134421
- [56] "Measurement of Resonant X-ray Magnetic Scattering from Induced Cu Polarizations in Exchange-Coupled Co/Cu Multilayers"  
 Y. Hayasaki, K. Ishiji, H. Hashizume, N. Hosoi, K. Omote, M. Kurabayashi, G. Srager, J. C. Lang, D. Haskel  
*Journal of Physics: Condensed Matter*, **16**, (2004), 1915-1925
- [57] "Lifetime-Broadening-Suppressed Polarized Cu K X-ray Absorption Near Edge Structure of Nd<sub>2-x</sub>Ce<sub>x</sub>CuO<sub>4</sub> Measured by Resonant Inelastic X-ray Scattering Spectroscopy"  
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*Journal of Electron Spectroscopy and Related Phenomena*, **136**, (2004), 199-204
- [58] "Temperature Dependence of the Ho L<sub>2,3</sub>-edges XMCD Spectra in Ho<sub>6</sub>Fe<sub>23</sub>"  
 M. Laguna-Marco, J. Chaboy-Nalda, H. Maruyama  
*Physica B*, **345**, (2004), 197-200

- [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 TiO<sub>2</sub> (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<sub>0.6</sub>Ru<sub>0.4</sub>O<sub>3</sub>"  
 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

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- [1] "Muscle Contraction: Challenges for Synchrotron Radiation"  
 K. Wakabayashi, N. Yagi  
*Journal of Synchrotron Radiation*, **6**, (1999), 875-890

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- [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

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- [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  
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