

- [1995]
- [1] "An Elliptical Wiggler for SPring-8"
X. M. Marechal, T. Tanaka, H. Kitamura
Review of Scientific Instruments, **66**, (1995), 1937-1939
 - [2] "Design of an Elliptic Multipole Wiggler Beamline for High-Energy Inelastic Scattering at the SPring-8"
Y. Sakurai, H. Yamaoka, H. Kimura, Xavier M. Marechal, K. Ohtomo, T. Mochizuki, T. Ishikawa, H. Kitamura, Y. Kashihara, T. Harami, Y. Tanaka, H. Kawata, N. Shiotani, N. Sakai
Review of Scientific Instruments, **66**, (1995), 1774-1776
- [1998]
- [3] "Development of an Elliptical Multipole Wiggler at SPring-8"
X. Marechal, T. Hara, T. Tanabe, T. Tanaka, H. Kitamura
Journal of Synchrotron Radiation, **5**, (1998), 431-433
 - [4] "A 3 T Superconducting Magnet for Long-Run Magnetic Compton-Scattering Experiments"
N. Sakai, H. Ohkubo, Y. Nakamura
Journal of Synchrotron Radiation, **5**, (1998), 937-939
 - [5] "High-Energy Inelastic-Scattering Beamline for Electron Momentum Density Study"
Y. Sakurai
Journal of Synchrotron Radiation, **5**, (1998), 208-214
 - [6] "Focusing and Reflection by a Bent Crystal for High-Energy Synchrotron Radiation"
H. Yamaoka, K. Ohtomo, T. Ishikawa
Journal of Synchrotron Radiation, **5**, (1998), 687-689
 - [7] "Bent-Crystal Monochromators for High-Energy Synchrotron Radiation"
H. Yamaoka, T. Mochizuki, Y. Sakurai, H. Kawata
Journal of Synchrotron Radiation, **5**, (1998), 699-701
- [2000]
- [8] "Temperature Dependent Magnetic Compton Profiles of CeFe₂"
T. Ramesh, Babulal L. Ahuja, Balkrishna K. Sharma, P. Chaddah, S. B. Roy, Y. Sakurai, N. Sakai
Indian Journal of Engineering & Materials Sciences, **7**, (2000), 451-455
 - [9] "Enhancement of the Spin-Dependent Effect of $\pi/2$ -Angle Compton Scattering Using Elliptically Polarized Synchrotron Radiation"
N. Sakai, M. Seigo, Y. Kakutani, N. Hiraoka, A. Koizumi
Journal of Synchrotron Radiation, **7**, (2000), 326-332
 - [10] "The Study of Nondestructive Analysis for Archaeological Samples Using High Energy Synchrotron Radiation and Laser Electron"
Y. Sato
Doctor Thesis (The University of Tokyo), , (2000),
 - [11] "Performance of Bent-Crystal Monochromators for High-Energy Synchrotron Radiation"
H. Yamaoka, N. Hiraoka, M. Itou, M. Mizumaki, Y. Sakurai, Y. Kakutani, A. Koizumi, N. Sakai, Y. Higashi
Journal of Synchrotron Radiation, **7**, (2000), 69-77
- [2001]
- [12] "Probability of Nuclear Excitation by Electron Transition in Os Atoms"
K. Aoki, K. Hosono, K. Tanimoto, M. Terasawa, H. Yamaoka, M. Tosaki, Y. Ito, A. M. Vlaicu, K. Taniguchi, J. Tsuji
Physical Review C, **64**, (2001), 044609
 - [13] "Magnetic Compton Scattering Study of the Co₂FeGa Heusler Alloy: Experiment and Theory"
A. Deb, M. Itou, Y. Sakurai, N. Hiraoka, N. Sakai
Physical Review B, **63**, (2001), 064409
 - [14] "Spin-Dependent Electron Momentum Density in the Ni₂MnSn Heusler Alloy"
A. Deb, N. Hiraoka, M. Itou, Y. Sakurai, M. Onodera, N. Sakai
Physical Review B, **63**, (2001), 205115
 - [15] "Spin-Dependent Electron Momentum Densities in Co₂FeGa Studied by Compton Scattering"
A. Deb, M. Itou, Y. Sakurai, N. Hiraoka, N. Sakai
Radiation Physics and Chemistry, **61**, (2001), 545-546
 - [16] "A New X-Ray Spectrometer for High-Resolution Compton Profile Measurements at SPring-8"
N. Hiraoka, M. Itou, T. Ohata, M. Mizumaki, Y. Sakurai, N. Sakai
Journal of Synchrotron Radiation, **8**, (2001), 26-32

- [17] "Development and Application of a High Energy X-Ray Spectrometer for High Resolution Compton-Profile Measurements"
N. Hiraoka
Doctor Thesis (Himeji Institute of Technology), , (2001),
- [18] "Present Status of the Cauchois-Type Compton Scattering Spectrometer at SPring-8"
M. Itou, N. Hiraoka, T. Ohata, M. Mizumaki, A. Deb, Y. Sakurai, N. Sakai
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 1109-1112
- [19] "Study of the e_g Orbitals in the Bilayer Manganite $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ by Using Magnetic Compton-Profile Measurement"
A. Koizumi, S. Miyaki, Y. Kakutani, H. Koizumi, N. Hiraoka, K. Makoshi, N. Sakai, K. Hirota, Y. Murakami
Physical Review Letters, **86**, (2001), 5589-5592
- [20] "Temperature Dependence of Magnetic Compton Profile in DyCo_5 "
H. Miyagawa, Y. Watanabe, A. Koizumi, N. Sakai, M. Mizumaki, Y. Sakurai, T. Nakamura, S. Nanao
Materials Research Society Symposia Proceedings, **658**, (2001), GG5.10
- [21] "Use of Highly Energetic (116keV) Synchrotron Radiation for X-Ray Fluorescence Analysis of Trace Rare-Earth and Heavy Elements"
I. Nakai, Y. Terada, M. Itou, Y. Sakurai
Journal of Synchrotron Radiation, **8**, (2001), 1078-1081
- [22] "Background Noise in a Cauchois-Type High-Resolution Compton Scattering Spectrometer at SPring-8"
Y. Sakurai, N. Hiraoka, M. Itou, M. Mizumaki, T. Ohata, A. Deb, H. Toyokawa, M. Suzuki, N. Sakai
Journal of Physics and Chemistry of Solids, **62**, (2001), 2099-2102
- [23] "A YAP(Ce) Imager Operated in High Energy X-Ray Region"
M. Suzuki, H. Toyokawa, M. Mizumaki, Y. Ohashi, N. Yagi, H. Kamitsubo, K. Kuroda, A. Gorin, I. Manuilov, A. Riazantsuev, M. Nomachi, M. Yosoi, T. Ishikawa, K. Morimoto, F. Tokanai
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 1121-1124
- [24] "Development of a One-Dimensional Microstrip Germanium Detector for Compton Scattering Experiment at SPring-8"
H. Toyokawa, M. Itou, M. Mizumaki, Y. Sakurai, M. Suzuki, N. Hiraoka, N. Sakai
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 1132-1135
- [25] "Ancient Egyptian Glass Vessels from the New Kingdom: A Comparative Analysis with Roman Glass"
K. Yamahana
オリエント (Bulletin of the Society for Near Eastern Studies in Japan), **44**, (2001), 25-41
[2002]
- [26] "Temperature-Dependent Magnetic Compton Scattering Study of Spin Moments in $\text{Ce}(\text{Fe}_{0.96}\text{Ru}_{0.04})_2$ "
B. L. Ahuja, T. Ramesh, B. K. Sharma, P. Chaddah, S. B. Roy, Y. Kakutani, A. Koizumi, N. Hiraoka, M. Toutani, N. Sakai, Y. Sakurai, M. Itou
Physical Review B, **66**, (2002), 012411
- [27] "Magnetic Compton Scattering Study of Colossal Magnetoresistance Materials $\text{Fe}_{1-x}\text{Cu}_x\text{Cr}_2\text{S}_4$ "
A. Deb, N. Hiraoka, M. Itou, Y. Sakurai, H. M. Palmer, C. Greaves
Physical Review B, **66**, (2002), 100407
- [28] "Positron Annihilation in Single Crystalline Insulators"
K. Inoue
Doctor Thesis (The University of Tokyo), , (2002),
- [29] "Study of Magnetism in RE-TM Metallic Alloys by Means of X-Ray Magnetic Scattering"
H. Miyagawa
Doctor Thesis (The University of Tokyo), , (2002),
- [30] "Electron Momentum Distribution of Decagonal $\text{Al}_{72}\text{Ni}_{12}\text{Co}_{16}$ Studied by Compton Scattering"
J. Tamura-Okada, Y. Watanabe, Y. Yokoyama, N. Hiraoka, M. Itou, Y. Sakurai, S. Nanao
Journal of Physics: Condensed Matter, **14**, (2002), L43-L48
[2003]
- [31] "Fundamental Properties of YAP Imager"
A. Gorin, K. Kuroda, I. Manuilov, A. Riazantsev, T. Ishikawa, H. Kamikubo, M. Suzuki, H. Toyokawa
Nuclear Instruments and Methods in Physics Research Section A, **510**, (2003), 76-82

- [32] "Compton Scattering Study of the Electron Momentum Density in Sr_2RuO_4 "
N. Hiraoka, A. Deb, M. Ito, Y. Sakurai
Physical Review B, **67**, (2003), 094511
- [33] "Magnetic Compton Profiles of Fcc-Ni, Fcc- $\text{Fe}_{50}\text{Ni}_{50}$ and Hcp-Co"
Y. Kakutani, Y. Kubo, A. Koizumi, N. Sakai, B. L. Ahuja, B. K. Sharma
Journal of the Physical Society of Japan, **72**, (2003), 599-606
- [34] "Optimization for Magnetic Compton Scattering Measurement System Utilized High Energy Circular Polarized X-Rays and Study of Momentum Distributions of Magnetic Electrons"
Y. Kakutani,
Doctor Thesis (Himeji Institute of Technology), , (2003),
- [35] "Magnetic Compton Profiles of DyCo_4B and DyCo_3B_2 "
H. Miyagawa, Y. Watanabe, N. Hiraoka, Y. Sakurai, S. Nanao
Journal de Physique IV France, **104**, (2003), 503-506
- [36] "Electronic Structure of the Palladium Hydride Studied by Compton Scattering"
S. Mizusaki, N. Hiraoka, I. Yamamoto, M. Itou, Y. Sakurai, M. Yamaguchi
Journal of the Physical Society of Japan, **72**, (2003), 1145-1151
- [37] "Magnetic Compton Scattering Study of CeRh_3B_2 "
Y. Sakurai, M. Ito, J. Tanuma, S. Nanao, A. Thamizhavel, Y. Inada, A. Galatanu, E. Yamamoto, Y. Onuki
Journal of Physics: Condensed Matter, **15**, (2003), S2183-S2186
- [38] "A 128-Channel Microstrip Germanium Detector for Compton Scattering Experiments at SPring-8 Facility"
M. Suzuki, H. Toyokawa, K. Hirota, M. Itou, M. Mizumaki, Y. Sakurai, N. Hiraoka, N. Sakai
Nuclear Instruments and Methods in Physics Research Section A, **510**, (2003), 63-75
- [39] "Forensic Discrimination of Headlight Glass by Analysis of Trace Impurities with Synchrotron Radiation X-Ray Fluorescence Spectrometry and ICP-MS"
Y. Suzuki, M. Kasamatsu, R. Sugita, H. Ohta, S. Suzuki, Y. Marumo
分析化学 (Bunseki Kagaku), **52**, (2003), 469-474
- [40] "Electron Momentum Distribution of Icosahedral $\text{Cd}_{84}\text{Yb}_{16}$ Studied by Compton Scattering"
J. Tamura-Okada, Y. Watanabe, S. Nanao, R. Tamura, S. Takeuchi, Y. Yokoyama, N. Hiraoka, M. Itou, Y. Sakurai
Physical Review B, **68**, (2003), 132204
[2004]
- [41] "Evidence of Negative Spin Polarization in Ferromagnetic $\text{Sr}_2\text{FeMoO}_6$ as Observed in a Magnetic Compton Profile Study"
A. Deb, N. Hiraoka, M. Ito, Y. Sakurai, A. Koizumi, Y. Tomioka, Y. Tokura
Physical Review B, **70**, (2004), 104411
- [42] "Ru-O Orbital Hybridization and Orbital Occupation in SrRuO_3 : A Magnetic Compton-Profile Study"
N. Hiraoka, M. Itou, A. Deb, Y. Sakurai, Y. Kakutani, A. Koizumi, N. Sakai, S. Uzuhara, S. Miyaki, H. Koizumi, K. Makoshi, N. Kikugawa, Y. Maeno
Physical Review B, **70**, (2004), 054420
- [43] "Monte-Carlo Simulation on Compton Double Scattering of Polarized X-rays"
Y. Kakutani, N. Sakai
Journal of Physics and Chemistry of Solids, **65**, (2004), 2071-2076
- [44] "Change in Mn 3d Orbital State Related to a Metal-Insulator Transition in a Bilayer Manganite Studied by Magnetic Compton Profile Measurment"
A. Koizumi, T. Nagao, Y. Kakutani, N. Sakai, K. Hirota, Y. Murakami
Physical Review B, **69**, (2004), 060401(R)
- [45] "Direct Observation of the Multisheet Fermi Surface in the Strongly Correlated Transition Metal Compound ZrZn_2 "
Z. Major, S. B. Dugdale, R. J. Watts, G. Santi, M. A. Alam, S. M. Hayden, J. A. Duffy, J. W. Taylor, T. Jarlborg, E. Bruno, D. Benea, H. Ebert
Physical Review Letters, **92**, (2004), 107003
- [46] "Magnetic Compton Profiles of Fe Thin Film and Anisotropy of Co/Pd Multilayer"
M. Ota, H. Sakurai, F. Itoh, M. Itou, Y. Sakurai
Journal of Physics and Chemistry of Solids, **65**, (2004), 2065-2070
- [47] "A Cauchois-type X-ray Spectrometer for Momentum Density Studies on Heavy-Element Materials"
Y. Sakurai, M. Itou
Journal of Physics and Chemistry of Solids, **65**, (2004), 2061-2064

Overview 2006

- [48] "A Magnetic Compton Scattering Study of Double Perovskite $\text{Sr}_2\text{FeMoO}_6$ "
Y. Sakurai, A. Deb, M. Itou, N. Hiraoka, A. Koizumi, Y. Tomioka, Y. Tokura
Journal of Physics: Condensed Matter, **16**, (2004), S5717-S5720
- [49] "A High-Energy X-ray Imager with a [128 x 128] Matrix of $\text{YAlO}_3:\text{Ce}$ Crystals for Synchrotron Radiation Applications"
H. Toyokawa, K. Hirota, M. Itou, S. Kohara, Y. Sakurai, M. Suzuki
Nuclear Instruments and Methods in Physics Research Section A, **525**, (2004), 85-89
[2005]
- [50] "Experimental Study on Interlayer Magnetic Coupling in Sputtered Al/Fe/Al/Gd Magnetic Multilayer Films. I"
R. Chai-Ngam, N. Sakai, A. Koizumi, H. Kobayashi, T. Ishii
Journal of the Physical Society of Japan, **74**, (2005), 1843-1848
- [51] "Experimental Study on Interlayer Magnetic Coupling in Sputtered Al/Fe/Al/Gd Magnetic Multilayer Films. I"
R. Chai-Ngam, N. Sakai , A. Koizumi, H. Kobayashi, T. Ishii
Journal of the Physical Society of Japan, **74**, (2005), 1843-1848
- [52] "Compton Scattering Study of the Silicon Clathrate $\text{Ba}_8\text{Si}_{46}$: Experiment and Theory"
M. Itou, Y. Sakurai, M. Usuda, C. Cros, H. Fukuoka, S. Yamanaka
Physical Review B, **71**, (2005), 125125
- [53] "Hole Concentration Dependence of Mn e_g Orbital State in Bilayer Manganites Studied by Magnetic Compton Profile Measurement"
A. Koizumi, T. Nagao, Y. Kakutani, N. Hiraoka, N. Sakai, T. Arima, K. Hirota, Y. Murakami
Journal of Physics and Chemistry of Solids, **66**, (2005), 2183-2191
- [54] "Magnetic Compton Scattering Studies of Electrochemically Hydrobenated Nickel"
S. Mizusaki, T. Miyatake, N. Sato, I. Yamamoto, M. Itou, Y. Sakurai, M. Yamaguchi
Japanese Journal of Applied Physics, **44**, (2005), 3939-3944
- [55] "Experimental Determination of the $\text{PdH}_{0.84}$ Fermi Surface"
S. Mizusaki, T. Miyatake, N. Sato, M. Itou, I. Yamamoto, Y. Sakurai, M. Yamaguchi
Journal of Alloys and Compounds, **404-406**, (2005), 169-171
- [56] "Discrimination of Arsenous Acids with Comparison of Trace Elements Contained by using Synchrotron X-ray Fluorescence Spectrometry"
S. Suzuki, Y. Suzuki, H. Ohta, R. Sugita, M. Kasamatsu, Y. Marumo
Forensic Science International, **148**, (2005), 55-59
- [57] "Magnetic Compton Scattering Study of UCoAl"
S. Tsutsui, Y. Sakurai, M. Itou, T. Matsuda, Y. Haga, Y. Onuki
Physica B, **359-361**, (2005), 1117-1119
[2006]
- [58] "Observation of a Strongly Nested Fermi Surface in the Shape-Memory Alloy $\text{Ni}_{0.62}\text{Al}_{0.38}$ "
S. Dugdale, R. Watts, J. Laverock, Y. Sakurai, M. Itou, Zs. Major, M. A. Alam, M. Samsel-Czekala, G. Kontrym-Sznajd, D. Fort
Physical Review Letters, **96**, (2006), 046406
- [59] "Electron Momentum Density and the Fermi Surface of β - $\text{PdH}_{0.84}$ by Compton Scattering"
S. Mizusaki, T. Miyatake, N. Sato, I. Yamamoto, M. Yamaguchi, M. Itou, Y. Sakurai
Physical Review B, **73**, (2006), 113101
- [60] "Nondestructive Discrimination of Small Glass Fragments for Forensic Examination using High Energy Synchrotron Radiation X-ray Fluorescence Spectrometry"
Y. Nishiwaki, T. Nakanishi, Y. Terada, T. Ninomiya, I. Nakai
X-ray Spectrometry, **35**, (2006), 195-199
- [61] "Ion Hydration Studied by X-ray Compton Scattering"
K. Nygård, M. Hakala, K. Hääläinen, S. Manninen, M. Itou, A. Andrejczuk, Y. Sakurai
Physical Review B, **73**, (2006), 024208
- [62] "Anisotropies of Magnetic Compton Profiles in Co/Pd Multilayer System"
H. Sakurai, M. Ota, F. Itoh, Y. Sakurai, M. Itou, A. Koizumi
Applied Physics Letter, **88**, (2006), 062507

BL09XU

Refereed Journals

[1999]

- [1] "Inelastic Nuclear Resonant Scattering of FeCl_3 -Graphite Intercalation Compounds"
S. Kitao, T. Mitsui, T. Harami, Y. Yoda, M. Seto
Japanese Journal of Applied Physics, **38**, (1999), 535-537