

- [103] "Monitoring Trace Amounts of Lead and Arsenic Adsorption by X-ray Absorption Fine Structure Combined with Fluorescence Spectrometry"
Y. Izumi, F. Kiyotaki, T. Minato, D. Masih, Y. Seida
Physica Scripta, **T115**, (2005), 933-935
- [104] "Structural and Electrical Properties of Stoichiometric FeS Compounds under High Pressure at Low Temperature"
H. Kobayashi, T. Kamimura, Y. Ohishi, N. Takeshita, N. Mori
Physical Review B, **71**, (2005), 014110
- [105] "Charge Ordering in Eu_4As_3 under Pressure"
H. Kobayashi, Y. Kazekami, Y. Ohishi, M. Shirakawa, A. Ochiai
Journal of Physics: Condensed Matter, **17**, (2005), S895-S899
- [106] "Post-Perovskite Phase Transition and Mineral Chemistry in the Pyrolitic Lowermost Mantle"
M. Murakami, K. Hirose, N. Sata, Y. Ohishi
Geophysical Research Letters, **32**, (2005), L03304
- [107] "*In situ* X-ray Observation of Phase Transformation of Fe_2O_3 "
S. Ono, K. Funakoshi, Y. Ooishi, E. Takahashi
Journal of Physics: Condensed Matter, **17**, (2005), 269-276
- [108] "A High-Pressure and High-Temperature Synthesis of Platinum Carbide"
S. Ono, Y. Ooishi, T. Kikegawa
Solid State Communications, **133**, (2005), 55-59
- [109] "In situ X-ray Observations of Phase Assemblages in Peridotite and Basalt Compositions at Lower Mantle Conditions: Implications for Density of Subducted Oceanic Plate"
S. Ono, Y. Ohishi, M. Isshiki, T. Watanuki
Journal of Geophysical Research, **110**, (2005), B02208
- [110] "Post-Aragonite Phase Transformation in CaCO_3 at 40 GPa"
S. Ono, Y. Ooishi, T. Kikegawa, J. Tsuchiya
American Mineralogist, **90**, (2005), 667-671
- [111] "A New High-Pressure Phase of Strontium Carbonate"
S. Ono, M. Shirasaka, T. Kikegawa, Y. Ooishi
Physics and Chemistry of Minerals, **32**, (2005), 8-12
- [112] "X-ray Diffraction of Multiwalled Carbon Nanotube under High Pressure: Structural Durability on Static Compression"
H. Yusa, T. Watanuki
Carbon, **43**, (2005), 519-523

BL13XU

Refereed Papers

[2003]

- [1] "Evaluation of Internal Stresses in Single-, Double- and Multi-Layered TiN and TiAlN Thin Films by Synchrotron Radiation"
T. Hanabusa, K. Kusaka, T. Matsue, M. Nishida, O. Sakata, T. Sato
Proceedings of International Conference on Advanced Technology in Experimental Mechanics 2003, (2003)
- [2] "Crystal Orientation and Residual Stress in TiN Film by Synchrotron Radiation"
T. Hanabusa, K. Kusaka, M. Nishida, T. Matsue, O. Sakata
International Journal of Materials Research and Advanced Techniques (Zeitschrift für METALLKUNDE), **94**, (2003), 662-666
- [3] "Analysis of Aggregation States of Polymer Thin Films Based on Grazing Incidence X-ray Diffraction"
T. Koga, M. Morita, H. Ishida, H. Yakabe, S. Sasaki, O. Sakata, A. Takahara
Transactions of the Materials Research Society of Japan, **28**, (2003), 85-88
- [4] "Two Dimensional Metal-Oxianion Surface Complexes Formation During the Upd Process on a Au(111) Electrode Studied by in-situ Surface X-Ray Diffraction and Infrared Reflection Absorption Spectroscopy"
M. Nakamura, K. Matsunaga, K. Kitahara, M. Ito, O. Sakata
Journal of Electroanalytical Chemistry, **554-555**, (2003), 175-182

- [5] "Beamline for Surface and Interface Structures at SPring-8"
O. Sakata, Y. Furukawa, S. Goto, T. Mochizuki, T. Uruga, K. Takeshita, H. Ohashi, T. Ohata, T. Matsushita, S. Takahashi, H. Tajiri, T. Ishikawa, M. Nakamura, M. Ito, K. Sumitani, T. Takahashi, T. Shimura, A. Saito, M. Takahashi
Surface Review and Letters, **10**, (2003), 543-547
- [6] "Three-Dimensional Reconstruction of Atoms in Surface X-Ray Diffraction"
K. Sumitani, T. Takahashi, S. Nakatani, A. Nojima, O. Sakata, Y. Yoda, S. Koh, T. Irisawa, Y. Shiraki
Japanese Journal of Applied Physics, **42**, (2003), L189-L191
- [7] "Paracrystalline Lattice Distortion in the Near-Surface Region of Melt-Crystallized Polyethylene Films Evaluated by Synchrotron-Sourced Grazing-Incidence X-Ray Diffraction"
H. Yakabe, S. Sasaki, O. Sakata, A. Takahara, T. Kajiyama
Macromolecules, **36**, (2003), 5905-5907
- [2004]
- [8] "Evaluation of Internal Stresses in TiN Thin Films by Synchrotron Radiation"
T. Hanabusa, K. Kusaka, T. Matsue, M. Nishida, O. Sakata, T. Sato
Vacuum, **74**, (2004), 571-575
- [9] "Evaluation of Internal Stresses in Single-, Double- and Multi-Layered TiN and TiAlN Thin Films by Synchrotron Radiation"
T. Hanabusa, K. Kusaka, T. Matsue, M. Nishida, O. Sakata, T. Sato
JSME International Journal Series A, **47**, (2004), 312-317
- [10] "Residual Stress and Thermal Stress Observation in Thin Copper Films"
T. Hanabusa, K. Kusaka, O. Sakata
Thin Solid Films, **459**, (2004), 245-248
- [11] "Structure Analysis of Cu(001)-c(4×4)-In by Surface X-ray Diffraction"
S. Hatta, Walker J. Christopher, O. Sakata, T. Aruga, H. Okuyama
Surface Science, **565**, (2004), 144-150
- [12] "Disordered Structure of Pt(111)-p(2×2) Induced by Synchrotron X-ray Beam Irradiation"
M. Nakamura, K. Sumitani, M. Ito, T. Takahashi, O. Sakata
Surface Science, **563**, (2004), 199-205
- [13] "Structural Analysis of NiO Ultra-Thin Films Epitaxially Grown on Ultra-Smooth Sapphire Substrates by Synchrotron X-Ray Diffraction Measurements"
O. Sakata, M. Yi, A. Matsuda, J. Liu, S. Sato, S. Akiba, A. Sasaki, M. Yoshimoto
Applied Surface Science, **221**, (2004), 450-454
- [14] "High-Energy X-ray Scattering in Grazing Incidence from Nanometer-Scale Oxide Wires"
O. Sakata, M. Takata, H. Suematsu, A. Matsuda, S. Akiba, A. Sasaki, M. Yoshimoto
Applied Physics Letters, **84**, (2004), 4239-4241
- [15] "High-Quality As-Grown MgB₂ Thin-Film Fabrication at a Low Temperature using an in-Plane-Lattice Near-Matched Epitaxial-Buffer Layer"
O. Sakata, S. Kimura, M. Takata, S. Yata, T. Kato, K. Yamanaka, Y. Yamada, A. Matsushita, S. Kubo
Journal of Applied Physics, **96**, (2004), 3580-3582
- [16] "Applications of Femtosecond Laser Ablation of Metals to Microprocessing"
T. Sano
Doctor Thesis (Osaka University), (2004)
- [17] "Surface X-ray Diffraction in Transmission Geometry"
H. Tajiri, O. Sakata, T. Takahashi
Applied Surface Science, **234**, (2004), 403-408
- [18] "Metal/Semiconductor Interfaces Studied by Transmitted X-ray Reflectivity"
I. Takahashi, K. Inoue, A. Kitahara, H. Terauchi, O. Sakata
Japanese Journal of Applied Physics, **43**, (2004), 1561-1565
- [19] "Crystal Structure in the Near-Surface Region of Melt-Crystallized Polyethylene Films Investigated by Grazing Incidence X-ray Diffraction"
H. Yakabe, S. Sasaki, O. Sakata, A. Takahara, T. Kajiyama
Transactions of the Materials Research Society of Japan, **29**, (2004), 251-254

[2005]

- [20] "Study of Solid/Solid Interface by Transmitted X-ray Reflectivity"
K. Inoue, A. Kitahara, K. Matsushita, H. Kikkawa, F. Nakabayashi, N. Ageishi, H. Terauchi, O. Sakata, I. Takahashi
Surface and Interface Analysis, **37**, (2005), 185-189
- [21] "Dependence of the Molecular Aggregation State of Octadecylsiloxane Monolayers on Preparation Methods"
T. Koga, S. Sasaki, O. Sakata, M. Morita, H. Yakabe, H. Ishida, H. Otsuka, A. Takahara
Langmuir, **21**, (2005), 905-910
- [22] "Study on the Molecular Aggregaton Structure and Microfabrication of Organosilane Monolayers"
T. Koga
Doctor Thesis (Kyushu University), (2005)
- [23] "Monomer Structures of Water Adsorbed on $p(2 \times 2)$ -Ni(111)-O Surface at 25 and 140 K by Surface X-Ray Diffraction"
M. Nakamura, M. Ito
Physical Review Letters, **94**, (2005), 035501
- [24] "Reciprocal-Lattice Space Imaging of X-ray Intensities Diffracted from Nanowires"
O. Sakata, A. Kitano, W. Yashiro, K. Sakamoto, K. Miki, A. Matsuda, W. Hara, S. Akiba, M. Yoshimoto
Materials Research Society Symposium Proceedings, **840**, (2005), Q6.4.1-6
- [25] "Comparison of Ordered Structure in Buried Oxide Layers in High-Dose, Low-Dose, and Internal-Thermal-Oxidation Separation-by-Implanted-Oxygen Wafers"
T. Shimura, K. Fukuda, K. Yasutake, T. Hosoi, M. Umeno
Thin Solid Films, **476**, (2005), 125-129
- [26] "Study on the Structures and the Phase Transitions of Ag/Si(111) Surfaces by X-ray Diffraction"
K. Sumitani
Doctor Thesis (The University of Tokyo), (2005)
- [27] "Grazing Incidence X-ray Diffraction Study on Surface Crystal Structure of Polyethylene Thin Films"
H. Yakabe, K. Tanaka, T. Nagamura, S. Sasaki, O. Sakata, A. Takahara, T. Kajiyama
Polymer Bulletin, **53**, (2005), 213-222
- [28] "Study on Fine Structure Analysis of Crystalline Polymers in the Constrained State"
H. Yakabe
Doctor Thesis (Kyushu University), (2005), 1-68

BL19B2

Refereed Papers

[2003]

- [1] "The Study on the Materials for the All Solid Lithium Secondary Battery"
Y. Kobayashi
Doctor Thesis(Tohoku University), (2003)
- [2] "5 V Class All-Solid-State Composite Lithium Battery with Li_3PO_4 Coated $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ "
Y. Kobayashi, H. Miyashiro, K. Kakei, H. Shigemura, M. Tabushi, H. Kageyama, T. Iwahori
Journal of the Electrochemical Society, **150**, (2003), A1577-A1582
- [3] "Estimation of Spalling Stress in Thermal Barrier Coatings Using High-Energy X-Rays from a Synchrotron Source"
K. Suzuki, K. Tanaka, Y. Akiniwa
Proceedings of International Conference on Advanced Technology in Experimental Mechanics 2003, **1**, (2003), 1-6
- [4] "Applications on High-Energy X-Rays to Stress Measurements of Thermal Barrier Coatings"
K. Suzuki, K. Tanaka
Textures and Microstructures, **35**, (2003), 207-217

[2004]

- [5] "Crystallization Behavior of Linear Low Density Polyethylene in Its Blend with a Rubber Polymer as Revealed by Synchrotron SAXS/WAXS/Hv-SALS Simultaneous Measurements"
K. Hayashi, Y. Ejima, T. Shimizu, S. Kizaki, S. Hara, K. Yamamoto, S. Okamoto, S. Sakurai
日本レオロジー学会誌 (Journal of the Society of Rheology, Japan), **32**, (2004), 179-187