

- [179] "Phase Transition and Melting in the Deep Lower Mantle"
S. Tateno
Doctor Thesis (Tokyo Institute of Technology), (2007)
- [180] "Electron Density Topology of High-pressure Ba₈Si₄₆ from a Combined Rietveld and Maximum-entropy Analysis"
J. Tse, R. Flacau, S. Desgreniers, T. Iitaka, J. Jiang
Physical Review B, **76**, (2007), 174109
- [181] "Post-Rh₂O₃(II) Transition and the High Pressure-Temperature Phase Diagram of Gallia: A First-Principles and X-ray Diffraction Study"
T. Tsuchiya, H. Yusa, J. Tsuchiya
Physical Review B, **76**, (2007), 174108
- [182] "Rhombohedral (9R) and Hexagonal (6H) Perovskites in Barium Silicates under High Pressure"
H. Yusa, N. Sata, Y. Ohishi
American Mineralogist, **92**, (2007), 648-654
[2008]
- [183] "High-Pressure Phase Relation of MnSiO₃ up to 85 GPa: Existence of MnSiO₃ Perovskite"
K. Fujino, K. Suzuki, D. Hamane, Y. Seto, T. Nagai, N. Sata
American Mineralogist, **93**, (2008), 653-657
- [184] "Effect of FeAlO₃ Incorporation into MgSiO₃ on the Bulk Modulus of Perovskite"
D. Hamane, M. Seto, K. Fujino, T. Nagai
Physics of the Earth and Planetary Interiors, **166**, (2008), 219-225
- [185] "Simultaneous Volume Measurements of Post-perovskite and Perovskite in MgSiO₃ and Their Thermal Equations of State"
T. Komabayashi, K. Hirose, E. Sugimura, N. Sata, Y. Ohishi, L. Dubrovinsky
Earth and Planetary Science Letters, **265**, (2008), 515-524
- [186] "Phase Transitions in Pyrolyte and MORB at Lowermost Mantle Conditions: Implications for a MORB-rich Pile above the Core mantle Boundary"
K. Ohta, K. Hirose, T. Lay, N. Sata, Y. Ohishi
Earth and Planetary Science Letters, **267**, (2008), 107-117
- [187] "The Electrical Conductivity of Post-Perovskite in Earth's D" layer"
K. Ohta, S. Onoda, K. Hirose, R. Sinmyou, K. Shimizu, N. Sata, Y. Ohishi, A. Yasuhara
Science, **320**, (2008), 89-91
- [188] "Chemical Equilibrium between Ferropericlasite and Molten Iron to 134 GPa and Implications for Iron Content at the Bottom of the Mantle"
H. Ozawa, K. Hirose, M. Mitome, Y. Bando, N. Sata, Y. Ohishi
Geophysical Research Letters, **35**, (2008), L05308
- [189] "New High-Pressure B2 Phase of FeS above 180 GPa"
N. Sata, H. Ohfuji, K. Hirose, H. Kobayashi, Y. Ohishi, N. Hirao
American Mineralogist, **93**, (2008), 492-494
- [190] "Fate of Carbonates within Oceanic Plate Subducted to the Lower Mantle and a Possible Mechanism of Diamond Formation"
Y. Seto, D. Hamane, T. Nagai, K. Fujino
Physics and Chemistry of Minerals, **35**, (2008), 223-229
- [191] "Rh₂O₃(II)-type Structures in Ga₂O₃ and In₂O₃ under High Pressure: Experiment and Theory"
H. Yusa, T. Tsuchiya, N. Sata, Y. Ohishi
Physical Review B, **77**, (2008), 064107

BL13XU

Refereed Journals

- [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)
[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, C. Walker, 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] "Order-Disorder Transition in the Surface Charge-Density-Wave Phase of Cu(001)-c(4×4)-In"
S. Hatta, H. Okuyama, T. Aruga, O. Sakata
Physical Review B, **72**, (2005), 081406(R)

- [21] "Charge Density Wave and Order-disorder Transition on In/Cu(001)"
S. Hatta
Doctor Thesis (Kyoto University), (2005)
- [22] "Molecular Aggregation Structure of Poly(fluoroalkyl acrylate) Thin Films Evaluated by Synchrotron-sourced Grazing-incidence X-ray Diffraction"
K. Honda, H. Yakabe, T. Koga, S. Sasaki, O. Sakata, H. Otsuka, A. Takahara
Chemistry Letters, **34**, (2005), 1024-1025
- [23] "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
- [24] "Superconducting Properties and Crystallinity of As-Grown MgB₂ Thin Films Synthesized Using an In-Plane-Lattice Near-Matched Epitaxial Buffer Layer"
T. Kato, K. Yamanaka, S. Yata, Y. Yamada, S. Kubo, Y. Yamada, A. Matsushita, O. Sakata, S. Kimura, M. Takata
IEEE Transactions on Applied Superconductivity, **15**, (2005), 3257-3260
- [25] "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
- [26] "Study on the Molecular Aggregaton Structure and Microfabrication of Organosilane Monolayers"
T. Koga
Doctor Thesis (Kyushu University), (2005)
- [27] "Molecular Arrangement of Oriented Polymer Films by Friction-Transfer Technique"
S. Nagamatsu, M. Misaki, Y. Yoshida, N. Tanigaki, K. Yase
電子情報通信学会技術研究報告 (信学技報, IEICE Technical Report), **105**, (2005), 31-36
- [28] "Preparation and Characterization of Multi-Layered Polyfluorene Oriented Film"
S. Nagamatsu, M. Misaki, Y. Yoshida, R. Azumi, N. Tanigaki, K. Yase
電子情報通信学会技術研究報告 (信学技報, IEICE Technical Report), **107**, (2007), 11-15
- [29] "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
- [30] "Water Adsorption on a $p(2 \times 2)$ -Ni(111) O Surface Studied by Surface X-ray Diffraction and Infrared Reflection Absorption Spectroscopy at 25 and 140 K"
M. Nakamura, M. Tanaka, M. Ito, O. Sakata
The Journal of Chemical Physics, **122**, (2005), 224703
- [31] "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 Symposia Proceedings, **840**, (2005), Q6.4.1-6
- [32] "Encapsulation of Atomic-Scale Bi Wires in Epitaxial Silicon without Loss of Structure"
O. Sakata, W. Yashiro, David R. Bowler, A. Kitano, K. Sakamoto, K. Miki
Physical Review B, **72**, (2005), 121407(R)
- [33] "Femtosecond Laser Driven Shock Synthesis of the High-Pressure Phase of Iron"
T. Sano, O. Sakata, H. Mori, E. Ohmura, I. Miyamoto, A. Hirose, Kojiro F. Kobayashi
Applied Surface Science, **247**, (2005), 571-576
- [34] "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
- [35] "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)
- [36] "Residual Stresses Distribution in the Sub-Surface Region of Shot-Peened Ceramics"
K. Tanaka, Y. Akiniwa, Y. Morishita
日本機械学会論文集 A編 (Transactions of the Japan Society of Mechanical Engineers, Series A), **71**, (2005), 1714-1721
- [37] "Residual Stress Distribution in TiN Thin Films with Fiber Texture Measured by Grazing Incidence and Scattering Vector X-Ray Methods"
K. Tanaka, Y. Akiniwa, M. Kawai, T. Ito
材料 (Journal of the Society of Materials Science, Japan), **54**, (2005), 704-709

- [38] "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
- [39] "Study on Fine Structure Analysis of Crystalline Polymers in the Constrained State"
H. Yakabe
Doctor Thesis (Kyushu University), (2005), 1-68
- [40] "Dependence of Electrical Properties of Epitaxial Pb(Zr,Ti)O₃ Thick Films on Crystal Orientation and Zr/(Zr+Ti) Ratio"
S. Yokoyama, Y. Honda, H. Morioka, S. Okamoto, H. Funakubo, T. Iijima, H. Matsuda, K. Saito, T. Yamamoto, H. Okino, O. Sakata, K. Shigeru
Journal of Applied Physics, **98**, (2005), 094106
[2006]
- [41] "Analysis of Molecular Aggregation States in Pentacene Thin Films Prepared from Soluble Precursor"
T. Akinaga, S. Yasutake, S. Sasaki, O. Sakata, H. Otsuka, A. Takahara
Chemistry Letters, **35**, (2006), 1162-1163
- [42] "Surface Peierls Transitions on Cu(001) Covered with Heavier p-Block Metals"
T. Aruga
Surface Science Report, **61**, (2006), 283-302
- [43] "Thermal Stress Behavior in Nano-Size Thin Aluminum Films"
T. Hanabusa, K. Kusaka, S. Shingubara, O. Sakata
International Journal of Modern Physics B, **20**, (2006), 4691-4696
- [44] "Observation of Domain Switching in Fatigued Epitaxial Pb(Zr,Ti)O₃ Thin Films"
Y. Kim, S. Yokoyama, R. Ueno, H. Morioka, O. Sakata, S. Kimura, K. Saito, H. Funakubo
Materials Research Society Symposia Proceedings, **902E**, (2006), 67.1-67.6
- [45] "Structural Properties of CrN Buffers for GaN Growth"
W. Lee, I. H. Im, T. Minegishi, T. Hanada, M. Cho, T. Yao, D. C. Oh, C. S. Han, K. W. Koo, J. Kim, O. Sakata, K. Sumitani, S. J. Cho, H. Y. Lee, S. K. Hong, S. T. Kim
Journal of the Korean Physical Society, **49**, (2006), 928-933
- [46] "Alteration of Internal Stresses in SiO₂/Cu/TiN Thin Films by X-ray and Synchrotron Radiation Due to Heat Treatment"
T. Matsue, T. Hanabusa, Y. Ikeuchi, K. Kusaka, O. Sakata
Vacuum, **80**, (2006), 836-839
- [47] "ZnO Growth on 3C-SiC"
T. Minegishi, Y. Narita, S. Tokairin, K. Sumitani, O. Sakata, M. Cho, G. Fujimoto, T. Yao, H. Suzuki, Z. Vashaei, M. Suemitsu
Journal of the Korean Physical Society, **49**, (2006), 903-907
- [48] "Structural Analyses of Fractional Monolayer (GaAs)_m/(AlAs)_n Superlattices by X-ray Resonant/Off-Resonant Scattering"
H. Miyagawa, S. Koshiba, K. Takao, K. Fujii, M. Mizumaki, O. Sakata, S. Kimura, R. Ueji, N. Sumida
Japanese Journal of Applied Physics, **45**, (2006), 3548-3551
- [49] "Femtosecond Laser Synthesis of the High-Pressure Phase of Iron"
T. Sano, O. Sakata, E. Ohmura, I. Miyamoto, A. Hirose, K. Kobayashi
Materials Science Forum, **512**, (2006), 349-354
- [50] "Epitaxial Growth of Cu Nanodot Arrays Using an AAO Template on a Si Substrate"
T. Shimizu, M. Nagayanagi, T. Ishida, O. Sakata, T. Oku, H. Sakaue, T. Takahagi, S. Shingubara
Electrochemical and Solid-State Letters, **9**, (2006), J13-J16
- [51] "Thickness Dependence of Dielectric Properties in Bismuth Layer-Structured Dielectrics"
K. Takahashi, M. Suzuki, T. Kojima, T. Watanabe, Y. Sakashita, K. Kato, O. Sakata, K. Sumitani, H. Funakubo
Applied Physics Letters, **89**, (2006), 082901
- [52] "Growth of GaNAs/GaAs Multiple Quantum Well by Molecular Beam Epitaxy Using Modulated N Radical Beam Source"
K. Takao, K. Fujii, H. Miyagawa, M. Mizumaki, O. Sakata, N. Tsurumachi, H. Itoh, N. Sumida, S. Nakanishi, H. Akiyama, S. Koshiba
Japanese Journal of Applied Physics, **45**, (2006), 3540-3543
- [53] "Development of High-Angular-Resolution Microdiffraction System for Reciprocal Space Map Measurements"
S. Takeda, S. Kimura, O. Sakata, A. Sakai
Japanese Journal of Applied Physics, **45**, (2006), L1054-L1056

- [54] "Preparation and Structural Analysis of Micro-patterned Pb(Zr,Ti)O₃ Film by Metalorganic Chemical Vapor Deposition"
S. Yokoyama, K. Takahashi, S. Okamoto, A. Nagai, J. Minamidate, K. Saito, N. Ohashi, H. Haneda, O. Sakata, S. Kimura, K. Nishida, T. Katoda, H. Funakubo
Japanese Journal of Applied Physics, **45**, (2006), 5102-5106
[2007]
- [55] "Structural Characterization of Ar⁺-Irradiated SrTiO₃ Showing Room-Temperature Blue Luminescence"
D. Kan, O. Sakata, S. Kimura, M. Takano, Y. Shimakawa
Japanese Journal of Applied Physics, **46**, (2007), L471-L473
- [56] "Phase Transition of Alkylsilane Monolayers Studied by Temperature-Dependent Grazing Incidence X-ray Diffraction"
T. Koga, K. Honda, S. Sasaki, O. Sakata, A. Takahara
Langmuir, **23**, (2007), 8861-8865
- [57] "Structural Investigation of Nitrided c-sapphire Substrate by Grazing Incidence X-ray Diffraction and Transmission Electron Microscopy"
H. Lee, J. Ha, S. W. Lee, H. J. Lee, H. Goto, S. H. Lee, M. W. Cho, T. Minegishi, T. Hanada, S. K. Hong, O. Sakata, J. W. Lee, J. Y. Lee
Applied Physics Letters, **91**, (2007), 202116
- [58] "Stereocomplexation and Monolayer Morphologies of a Stereoregular Poly(methyl Methacrylate) Mixture Formed at the Air/Water Surface "
J. Liu, Y. Zhang, J. Zhang, D. Shen, Q. Guo, I. Takahashi, S. Yan
The Journal of Physical Chemistry C, **111**, (2007), 6488-6494
- [59] "Crystal Structure of Friction-Transferred Poly(2,5-dioctyloxy-1,4-phenylenevinylene)"
S. Nagamatsu, M. Misaki, Y. Yoshida, R. Azumi, N. Tanigaki, K. Yase
The Journal of Physical Chemistry B, **111**, (2007), 4349-4354
- [60] "Study of Chemical Analysis at the Surface of Organic Thin Films by Scanning Force Microscopy with Chemically Modified Cantilever Tip"
S. Nakahara, T. Koga, S. Sasaki, O. Sakata, A. Takahara
日本接着学会誌 (Journal of the Adhesion Society of Japan), **43**, (2007), 58-63
- [61] "In Situ Infrared Reflection Absorption Spectroscopy of Carbon Monoxide Adsorbed on Pt(S)-[*n*(100)×(110)] Electrodes"
A. Nakahara, M. Nakamura, K. Sumitani, O. Sakata, N. Hoshi
Langmuir, **23**, (2007), 9092-9097
- [62] "Multilayer Relaxation of Ru(0001)-(2 × 2)-O Studied by Surface X-ray Diffraction"
M. Nakamura, H. Katou, N. Hoshi, K. Sumitani, O. Sakata
The Journal of Physical Chemistry C, **111**, (2007), 977-980
- [63] "Measurement of In-plane and Depth Strain Profiles in Strained-Si Substrates"
A. Ogura, D. Kosemura, K. Yamasaki, S. Tanaka, Y. Kokemura, A. Kitano, I. Hirose
Solid State Electronic, **51**, (2007), 219-225
- [64] "Direct Observation of B-site Ordering in Multiferroic Bi₂NiMnO₆ Thin Film"
Y. Shimakawa, D. Kan, M. Kawai, M. Sakai, S. Inoue, M. Azuma, S. Kimura, O. Sakata
Japanese Journal of Applied Physics, **46**, (2007), L845-L847
- [65] "Structural Study of Si(111)-6×1-Ag Surface Using Surface X-ray Diffraction"
K. Sumitani, K. Masuzawa, T. Hoshino, R. Yoshida, S. Nakatani, T. Takahashi, H. Tajiri, K. Akimoto, H. Sugiyama, X. Zhang, H. Kawata
Surface Science, **601**, (2007), 5195-5199
- [66] "Polymorphism in Pentacene Thin Films on SiO₂ Substrate"
N. Yoshimoto, T. Kakudate, Y. Saito
Applied Physics Letters, **90**, (2007), 081903
- [67] "Thin-film Structure of Semiconducting End-capped Oligothiophenes"
N. Yoshimoto, W. Li, K. Omote, J. Ackermann, C. Videlot-Ackermann, H. Brisset, F. Fages
Journal of Physics: Conference Series, **83**, (2007), 012026
- [68] "Characterization of in-plane Structures of Vapor Deposited Thin-Films of Distyryl-Oligothiophenes by Grazing Incidence X-ray Diffractometry"
N. Yoshimoto, K. Aosawa, T. Tanisawa, K. Omote, J. Ackermann, C. Videlot-Ackermann, H. Brisset, F. Fages
Crystal Research and Technology, **42**, (2007), 1228-1231
- [69] "Thermal Behavior and Molecular Orientation of Poly(ethylene 2,6-naphthalate) in Thin Films "
Y. Zhang, S. Mukoyama, Y. Hu, C. Yan, Y. Ozaki, I. Takahashi
Macromolecules, **40**, (2007), 4009-4015

[2008]

- [70] "Atomic Structure of a Thallium Nanodot Lattice Formed on the Si(111)-7×7 Surface"
N. Kim, C. Hwang, J. Chung, Y. Kim, T. Kim, D. Noh, K. Sumitani, H. Tajiri, O. Sakata
Surface Science, **602**, (2008), 369-374
- [71] "Early Detection of Nanoparticle Growth from X-ray Reciprocal Space Mapping"
N. Zetsepın, R. Dilanian, A. Nikulin
Applied Physics Letters, **92**, (2008), 034101

BL19B2

Refereed Journals

[2003]

- [1] "Local Structure of Rare-Earth-Doped Diluted Magnetic Semiconductor GaGdN"
M. Hashimoto, S. Emura, R. Asano, H. Tanaka, N. Teraguchi, A. Suzuki, T. Honma, N. Umesaki, Y. Nanishi, H. Asahi
Physica Status Solidi C, **0**, (2003), 2650-2653
- [2] "The Study on the Materials for the All Solid Lithium Secondary Battery"
Y. Kobayashi
Doctor Thesis (Tohoku University), (2003)
- [3] "5 V Class All-Solid-State Composite Lithium Battery with Li₃PO₄ Coated LiNi_{0.5}Mn_{1.5}O₄"
Y. Kobayashi, H. Miyashiro, K. Kakei, H. Shigemura, M. Tabushi, H. Kageyama, T. Iwahori
Journal of the Electrochemical Society, **150**, (2003), A1577-A1582
- [4] "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
- [5] "Applications on High-Energy X-Rays to Stress Measurements of Thermal Barrier Coatings"
K. Suzuki, K. Tanaka
Textures and Microstructures, **35**, (2003), 207-217
- [6] "Magnetic Properties of the Rare-Earth-Doped Semiconductor GaEuN"
H. Tanaka, M. Hashimoto, S. Emura, R. Asano, Y. Zhou, T. Honma, N. Umesaki, A. Yanase, K. Akimoto, H. Asahi
Physica Status Solidi C, **0**, (2003), 2864-2868

[2004]

- [7] "Local Structural Change in GaCrN Grown by Radio Frequency Plasma-Assisted Molecular-Beam Epitaxy"
M. Hashimoto, S. Emura, H. Tanaka, M. Kim, Y. Zhou, T. Honma, N. Umesaki
Journal of Crystal Growth, **273**, (2004), 149-155
- [8] "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
- [9] "Grazing Incidence X-ray Scattering to Characterize the Thin Amorphous SiO_x Film on Silicon Substrate"
I. Hirose, Y. Uehara, M. Sato, N. Umesaki
日本セラミックス協会学術論文誌 (Journal of the Ceramic Society of Japan), **112**, (2004), S1476-S1478
- [10] "Oxidation of Doped Europium in BaMgAl₁₀O₁₇ by Annealing Studied by X-ray Absorption Fine-Structure Measurements"
I. Hirose, T. Honma, K. Kato, N. Kijima, Y. Shimomura
Journal of the Society for Information Display, **12**, (2004), 269-273
- [11] "X-ray Diffraction Study for Mg₄Pd Crystalline and Amorphous Alloys Using Synchrotron Radiation"
S. Nakano, S. Yamaura, A. Kitano, M. Sato, S. Uchinashi, T. Hamada, N. Umesaki, H. Kimura, A. Inoue
Materials Transactions, **45**, (2004), 3232-3234
- [12] "Structural Analysis by Synchrotron XRD of a Ag₅₂Sn₄₈ Nanocomposite Electrode for Advanced Li-Ion Batteries"
E. Rönnebro, T. Sakai, J. Yin, M. Wada, S. Tanase, A. Kitano
Journal of the Electrochemical Society, **151**, (2004), A1738-A1744
- [13] "Transparent Ferromagnetic Semiconductor Fe-Zn-O Heterostructured Films"
T. Shinagawa, M. Izaki, Y. Matsumura, K. Murase, Y. Awakura
Electrochemical and Solid-State Letters, **7**, (2004), G235-G237

BL19B2