

- [26] "Measurement of Residual Stress Distribution in Laser-Shock Peened Ti using Hard Synchrotron X-Rays"
K. Suzuki, T. Shobu, K. Tanaka
材料 (Journal of the Society of Materials Science, Japan), **56**, (2007), 217-222
- [27] "X-ray Induced Photoelectrochemistry on TiO₂"
K. Tamura, Y. Ohko, H. Kawamura, H. Yoshikawa, T. Tatsuma, A. Fujishima, J. Mizuki
Electrochimica Acta, **52**, (2007), 6938-6942

BL23SU

Refereed Journals

- [1998]
- [1] "Construction of the JAERI Soft X-Ray Beamline for Actinide Material Sciences"
T. Nakatani, Y. Saitoh, Y. Teraoka, T. Okane, A. Yokoya
Journal of Synchrotron Radiation, **5**, (1998), 536-538
- [2] "Soft X-Ray Beamline Specialized for Actinides and Radioactive Materials Equipped with a Variably Polarizing Undulator"
A. Yokoya, T. Sekiguchi, Y. Saitoh, T. Okane, T. Nakatani, T. Shimada, H. Kobayashi, M. Takao, Y. Teraoka, Y. Hayashi, S. Sasaki, Y. Miyahara, T. Harami, T. Sasaki
Journal of Synchrotron Radiation, **5**, (1998), 10-16
- [1999]
- [3] "Design of Surface Chemistry End-Station of BL23SU in SPring-8"
Y. Teraoka, A. Yoshigoe
Japanese Journal of Applied Physics, **38**, (1999), 642-645
- [2000]
- [4] "Photoionization of Ne³⁺ Ions in the Region of the 1s→2p Autoionizing Resonance"
M. Oura, H. Yamaoka, K. Kawatsura, J. Kimata, T. Hayaishi, T. Takahashi, T. Koizumi, T. Sekioka, M. Terasawa, Y. Itoh, Y. Awaya, A. Yokoya, A. Agui, A. Yoshigoe, Y. Saitoh
Physical Review A, **63**, (2000), 014704
- [5] "Influence of Translational Energy for Surface Reaction of Silicon with Oxygen Molecules"
Y. Teraoka, A. Yoshigoe, M. Sano
表面科学 (Journal of the Surface Science Society of Japan), **21**, (2000), 444-447
- [6] "Initial Oxidation of Si(001) Induced by the Translational Kinetic Energy of O₂ Supersonic Molecular Beams"
A. Yoshigoe, M. Sano, Y. Teraoka
Japanese Journal of Applied Physics, **39**, (2000), 7026-7030
- [2001]
- [7] "Soft X-Ray Absorption Spectra of Ilmenite Family"
A. Agui, M. Mizumaki, Y. Saitoh, T. Matsushita, T. Nakatani, A. Fukaya, E. Torikai
Journal of Synchrotron Radiation, **8**, (2001), 907-909
- [8] "First Operation of Circular Dichroism Measurements with Periodic Photon-Helicity Switching by a Variably Polarizing Undulator at BL23SU at SPring-8"
A. Agui, A. Yoshigoe, T. Nakatani, T. Matsushita, Y. Saitoh, A. Yokoya, H. Tanaka, Y. Miyahara, T. Shimada, M. Takeuchi, T. Bizen, S. Sasaki, M. Takao, H. Aoyagi, Togo P. Kudo, K. Satoh, S. Wu, Y. Hiramatsu, H. Ohkuma
Review of Scientific Instruments, **72**, (2001), 3191-3197
- [9] "X-Ray Absorption Near-Edge Structure (XANES) Spectral Changes of 2-Deoxy-D-Ribose by Irradiation within the Energy Region around the Oxygen K-shell Absorption Edge"
K. Akamatsu, A. Yokoya
Journal of Synchrotron Radiation, **8**, (2001), 1001-1002
- [10] "X-Ray Absorption Near Edge Structures of DNA or Its Components Around the Oxygen K-Shell Edge"
K. Akamatsu, A. Yokoya
Radiation Research, **155**, (2001), 449-452
- [11] "XAS and MCD Studies in Eu_{0.6}Sr_{0.4}MnO₃"
M. Mizumaki, Y. Saitoh, A. Agui, K. Yoshii, A. Fujimori, S. Nakamura
Journal of Synchrotron Radiation, **8**, (2001), 440-442
- [12] "First Results from the Actinide Science Beamline BL23SU at SPring-8"
Y. Saitoh, T. Nakatani, T. Matsushita, A. Agui, A. Yoshigoe, Y. Teraoka, A. Yokoya
Nuclear Instruments and Methods in Physics Research Section A, **474**, (2001), 253-258
- [13] "Oxygen K-Edge X-Ray Absorption Near Edge Structures (XANES) of Sublimated Films of Amino Acids"
M. Tanaka, K. Nakagawa, T. Koketsu, A. Agui, A. Yokoya
Journal of Synchrotron Radiation, **8**, (2001), 1009-1011

- [14] "Commissioning of Surface Chemistry End-Station in BL23SU of SPring-8"
Y. Teraoka, A. Yoshigoe
Applied Surface Science, **169-170**, (2001), 738-741
- [15] "In Situ Photoemission Spectroscopy Using Synchrotron Radiation for O₂ Translational Kinetic Energy Induced Oxidation Processes of Partially-Oxidized Si(001) Surfaces"
Y. Teraoka, A. Yoshigoe
表面科学 (Journal of the Surface Science Society of Japan), **22**, (2001), 530-536
- [16] "Photoionization of Singly and Doubly Charged Neon Ions Following Inner-Shell Excitation"
H. Yamaoka, M. Oura, K. Kawatsura, T. Hayaishi, T. Sekioka, A. Agui, A. Yoshigoe, F. Koike
Physical Review A, **65**, (2001), 012709
- [17] "EPR Spectrometer Installed in a Soft X-Ray Beamline at SPring-8 for Biophysical Studies"
A. Yokoya, K. Akamatsu
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 1333-1337
- [18] "A Grating Monochromator of BL23SU at SPring-8 Covering Silicon and Oxygen K-Edges"
A. Yoshigoe, A. Agui, T. Nakatani, T. Matsushita, Y. Saitoh, A. Yokoya
Journal of Synchrotron Radiation, **8**, (2001), 502-504
- [19] "'In-situ' Observation Using Synchrotron Radiation Photoemission Spectroscopy on Initial Si(001) Oxidation Caused by Translational Kinetic Energy of O₂"
A. Yoshigoe, Y. Teraoka
真空 (Journal of the Vacuum Society of Japan), **44**, (2001), 195-198
- [20] "In-situ Si-2p Core-Level Spectroscopy Using Synchrotron Radiation for Si(001) Initial Oxidation Induced by Translational Kinetic Energy of O₂ Molecules"
A. Yoshigoe, Y. Teraoka
Transactions of the Materials Research Society of Japan, **26**, (2001), 755-758
- [21] "Initial Oxidation States on Si(001) Surface Induced by Translational Kinetic Energy of O₂ at Room Temperature Studied by Si-2p Core-Level Spectroscopy Using Synchrotron Radiation"
A. Yoshigoe, Y. Teraoka
Surface Science, **482-485**, (2001), 189-195
- [22] [2002]
"High Energy Resolution Magnetic Circular Dichroism Measurement of the Ferrite Family"
A. Agui, Y. Saitoh, A. Yoshigoe, T. Nakatani, T. Matsushita, M. Mizumaki
Surface Review and Letters, **9**, (2002), 843-848
- [23] "The 1s-2p Resonance Photoionization Measurement of O⁺ Ions in Comparison with an Isoelectronic Species Ne³⁺"
K. Kawatsura, H. Yamaoka, M. Oura, T. Hayaishi, T. Sekioka, A. Agui, A. Yoshigoe, F. Koike
Journal of Physics B: Atomic, Molecular and Optical Physics, **35**, (2002), 4147-4153
- [24] "X-Ray Absorption Spectroscopy in NaCo₂O₄, LaCoO₃ and SrCoO₃"
T. Matsushita, M. Mizumaki, N. Ikeda, M. Nakazawa, A. Agui, Y. Saitoh, T. Nakatani, A. Yoshigoe, S. Nakamura
Surface Review and Letters, **9**, (2002), 1327-1331
- [25] "XAS and MCD Studies of CrFe₂O₄"
M. Mizumaki, A. Agui, Y. Saitoh, M. Nakazawa, T. Matsushita, A. Kotani
Surface Review and Letters, **9**, (2002), 849-853
- [26] "Si 2p and O 1s Photoemission from Oxidized Si(001) Surfaces Depending on Translational Kinetic Energy of Incident O₂ Molecules"
Y. Teraoka, A. Yoshigoe
Applied Surface Science, **190**, (2002), 75-79
- [27] "Photoemission Spectroscopic Study on Influence of O₂ Translational Kinetic Energy for Si(001) Initial Oxidation"
Y. Teraoka, A. Yoshigoe
Surface Science, **507-510**, (2002), 797-802
- [28] "Precise Control of Si(001) Initial Oxidation by Translational Kinetic Energy of O₂ Molecules"
Y. Teraoka, A. Yoshigoe
Japanese Journal of Applied Physics, **41**, (2002), 4253-4260
- [29] "Initial Oxidation Processes of Si(001) Surfaces by Supersonic O₂ Molecular Beams: Different Oxidation Mechanisms for Clean and Partially-Oxidized Surfaces"
Y. Teraoka, A. Yoshigoe
真空 (Journal of the Vacuum Society of Japan), **45**, (2002), 604-608
- [30] "Influence of Kinetic Energy for Initial Adsorption Probability of O₂ Molecules on Si(001) Surfaces and SiO Desorption Yield"
Y. Teraoka, A. Yoshigoe
表面科学 (Journal of the Surface Science Society of Japan), **23**, (2002), 519-523

- [31] "Real Time Analysis of Oxidation States on Si(001) Surfaces Caused by Translational Kinetic Energy of O₂ by Means of Synchrotron Radiation Photoemission Spectroscopy"
A. Yoshigoe, Y. Teraoka
真空 (Journal of the Vacuum Society of Japan), **45**, (2002), 204-207
- [32] "Real time Observation of Oxygen Chemisorption States on Si(001) -2 x 1 during Supersonic Oxygen Molecular Beam Irradiation"
A. Yoshigoe, Y. Teraoka
Applied Surface Science, **190**, (2002), 60-65
- [33] "In situ Analysis Using Synchrotron Radiation Photoemission Spectroscopy for Initial Oxidation of Oxygen Preadsorbed Si(001) Surfaces Induced by Supersonic O₂ Molecular Beams"
A. Yoshigoe, Y. Teraoka
Surface and Interface Analysis, **34**, (2002), 432-436
[2003]
- [34] "The Measurement of Molecular Fragment from DNA Components using Synchrotron Radiation"
K. Fujii, K. Akamatsu, A. Yokoya
Surface Science, **528**, (2003), 249-254
- [35] "X-Ray Absorption Near Edge Structure of DNA Bases Around Oxygen and Nitrogen K-Edge"
K. Fujii, K. Akamatsu, Y. Muramatsu, A. Yokoya
Nuclear Instruments and Methods in Physics Research Section B, **199**, (2003), 249-254
- [36] "Actively Controlled Oxidation of Cu{100} with Hyperthermal O₂ Molecular Beam"
M. Okada, K. Moritani, S. Goto, T. Kasai, A. Yoshigoe, Y. Teraoka
The Journal of Chemical Physics, **119**, (2003), 6994-6997
- [37] "Time-Resolved Photoelectron Spectroscopy of Oxidation on the Ti(0001) Surface"
Y. Takakuwa, S. Ishizuka, A. Yoshigoe, Y. Teraoka, Y. Mizuno, H. Tonda, T. Honma
Nuclear Instruments and Methods in Physics Research Section B, **200**, (2003), 376-381
- [38] "Real-Time Monitoring of Oxidation on the Ti(0001) Surface by Synchrotron Radiation Photoelectron Spectroscopy and RHEED-AES"
Y. Takakuwa, S. Ishizuka, A. Yoshigoe, Y. Teraoka, Y. Yamauchi, Y. Mizuno, H. Tonda, T. Homma
Applied Surface Science, **216**, (2003), 395-401
- [39] "In-situ Observation of Oxidation of Ti(0001) Surface by Real-Time Photoelectron Spectroscopy Using Synchrotron Radiation"
Y. Takakuwa, S. Ishizuka, A. Yoshigoe, Y. Teraoka, Y. Mizuno, H. Tonda, T. Homma
表面科学 (Journal of the Surface Science Society of Japan), **24**, (2003), 500-508
- [40] "Coexistence of Passive and Active Oxidation for O₂/Si(001) System Observed by SiO Mass Spectrometry and Synchrotron Radiation Photoemission Spectroscopy"
Y. Teraoka, K. Moritani, A. Yoshigoe
Applied Surface Science, **216**, (2003), 8-14
- [41] "SiO Mass Spectrometry and Si-2p Photoemission Spectroscopy for the Study of Oxidation Reaction Dynamics of Si(001) Surface by Supersonic O₂ Molecular Beams under 1000 K"
Y. Teraoka, A. Yoshigoe, K. Moritani
Japanese Journal of Applied Physics, **42**, (2003), 4671-4675
- [42] "Electron Paramagnetic Resonance Induced by K-Shell Resonance Excitation in DNA Bases in Solid State"
A. Yokoya, K. Akamatsu, K. Fujii
Nuclear Instruments and Methods in Physics Research Section B, **199**, (2003), 366-369
- [43] "Real-time Observation of Initial Stages of Thermal Oxidation on Si(001) Surface by Using Synchrotron Radiation Photoemission Spectroscopy"
A. Yoshigoe, K. Moritani, Y. Teraoka
真空 (Journal of the Vacuum Society of Japan), **46**, (2003), 424-428
- [44] "Time Resolved Photoemission Spectroscopy on Si(001)-2x1 Surface during Oxidation Controlled by Translational Kinetic Energy of O₂ at Room Temperature"
A. Yoshigoe, Y. Teraoka
Surface Science, **532-535**, (2003), 690-697
- [45] "Real Time Observation of Initial Thermal Oxidation Using O₂ Gas on Si(001) Surface by Means of Synchrotron Radiation Si-2p Photoemission Spectroscopy"
A. Yoshigoe, K. Moritani, Y. Teraoka
Applied Surface Science, **216**, (2003), 388-394
- [46] "Real-Time Observation of Initial Stage on Si(001) Oxidation Studied by O-1s Photoemission Spectroscopy Using Synchrotron Radiation"
A. Yoshigoe, K. Moritani, Y. Teraoka
Japanese Journal of Applied Physics, **42**, (2003), 4676-4679

- [47] "Oxidation of Aqueous HF-Treated Si(001) Surface Induced by Translational Kinetic Energy of O₂ at Room Temperature"
A. Yoshigoe, Y. Teraoka
Japanese Journal of Applied Physics, **42**, (2003), 5749-5750
- [48] "Real-Time Monitoring of Initial Thermal Oxidation on Si(001) Surface by Synchrotron Radiation Photoemission Spectroscopy"
A. Yoshigoe, K. Moritani, Y. Teraoka
Japanese Journal of Applied Physics, **42**, (2003), 3976-3982
[2004]
- [49] "Soft X-ray Magnetic Circular Dichroism Study of [Co/Pd] Multilayered Perpendicular Magnetic Films"
A. Agui, M. Mizumaki, T. Matsushita, T. Asahi, J. Kawaji, J. Sayama, T. Osaka
Journal of Applied Physics, **95**, (2004), 7825-8731
- [50] "Low-Energy Auger- and Photo-Electron Effects on the Degradation of Thymine by Ultrasoft X-Irradiation"
K. Akamatsu, K. Fujii, A. Yokoya
International Journal of Radiation Biology, **80**, (2004), 849-853
- [51] "Near-Edge X-ray Absorption Fine Structure of DNA Nucleobases Thin Film in the Nitrogen and Oxygen K-edge Region"
K. Fujii, K. Akamatsu, A. Yokoya
The Journal of Physical Chemistry B, **108**, (2004), 8031-8035
- [52] "Ion Desorption from DNA Components Irradiated with 0.5 keV Ultrasoft X-Ray Photons"
K. Fujii, K. Akamatsu, A. Yokoya
Radiation Research, **161**, (2004), 435-441
- [53] "Decomposition of 2-deoxy-D-ribose by Irradiation with 0.6 keV Electrons and by 0.5 keV Ultrasoft X-rays"
K. Fujii, K. Akamatsu, A. Yokoya
International Journal of Radiation Biology, **80**, (2004), 909-914
- [54] "Antiferromagnetic Domain Structure Imaging of Cleaved NiO(100) Surface Using Nonmagnetic Linear Dichroism at O K Edge: Essential Effect of Antiferromagnetic Crystal Distortion"
T. Kinoshita, T. Wakita, H. Sun, T. Tohyama, A. Harasawa, H. Kiwata, F. Ulrich Hillebrecht, K. Ono, T. Matsushima, M. Oshima, N. Ueno, T. Okuda, Y. Saitoh
Journal of the Physical Society of Japan, **73**, (2004), 2932-2935
- [55] "A New Approach for Three-Dimensional Atomic-Image Reconstruction from a Single-Energy Photoelectron Hologram"
T. Matsushita, A. Agui, A. Yoshigoe
Europhysics Letters, **65**, (2004), 207-213
- [56] "Investigation of the Electronic Structure in Eu_{1-x}Dy_xTiO₃ by means of Soft X-ray Absorption Spectroscopy"
M. Mizumaki, A. Agui, K. Yoshii, M. Nakazawa
Solid State Ionics, **172**, (2004), 565-568
- [57] "Photoemission Study of the Translational Energy Induced Oxidation Processes on Cu(111)"
K. Moritani, M. Okada, S. Sato, S. Goto, T. Kasai, A. Yoshigoe, Y. Teraoka
Journal of Vacuum Science & Technology A, **22**, (2004), 1625-1630
- [58] "Translational Energy Induced Reconstruction and Adsorption in the Oxidation Processes of Cu{111}"
K. Moritani, M. Okada, S. Sato, S. Goto, T. Kasai, A. Yoshigoe, Y. Teraoka
Thin Solid Films, **464-465**, (2004), 48-51
- [59] "Tuning of Dissociative-Adsorption Processes on Cu(100) by Controlling the Kinetic Energy of the Impinging O₂ Molecule"
M. Okada, K. Moritani, A. Yoshigoe, Y. Teraoka, H. Nakanishi, W. Dino, H. Kasai, T. Kasai
Chemical Physics, **301**, (2004), 315-320
- [60] "Oxidation State during Growth of Very Thin Oxide on Ti(0001) Surface"
Y. Takakuwa, S. Ishidzuka, A. Yoshigoe, Y. Teraoka, K. Moritani, S. Ogawa, Y. Mizuno, H. Tonda, T. Homma
真空 (Journal of the Vacuum Society of Japan), **47**, (2004), 457-461
- [61] "DNA Strand Breaks by Direct Energy Deposition by Auger and Photo-Electrons Ejected from DNA Constituent Atoms Following K-shell Photoabsorption"
R. Watanabe, A. Yokoya, K. Fujii, K. Saito
International Journal of Radiation Biology, **80**, (2004), 823-832
- [62] "'*In situ*' Observation of Guanine Radicals Induced by Ultrasoft X-ray Irradiation around the K-edge Region of Nitrogen and Oxygen"
A. Yokoya, K. Akamatsu, K. Fujii, M. Ukai
International Journal of Radiation Biology, **80**, (2004), 833-839

- [63] "Real-time Monitoring of Oxidation Processes on Si(001) Surface using O₂ Gas under 1000 K by Synchrotron Radiation Photoemission Spectroscopy"
A. Yoshigoe, K. Moritani, Y. Teraoka
Surface Science, **566-568**, (2004), 1124-1129
[2005]
- [64] "Characterization of Interface Defects Related to Negative-Bias Temperature Instability in Ultrathin Plasma-Nitrided SiON/Si<100> Systems"
S. Fujieda, Y. Miura, M. Saitoh, Y. Teraoka, A. Yoshigoe
Microelectronics Reliability, **45**, (2005), 57-64
- [65] "Synchrotron Radiation Photoemission Spectroscopy for Chemical Bonding of N Atoms in Oxynitride Films Formed at SiO₂/Si(001) by N⁺ Beam Irradiation"
S. Hachiue, Y. Teraoka
真空 (Journal of the Vacuum Society of Japan), **48**, (2005), 343-345
- [66] "Chemical Evolution of Amino Acid Induced by Soft X-ray with Synchrotron Radiation"
F. Kaneko, M. Tanaka, S. Narita, T. Matsui, K. Nakagawa, A. Agui, K. Fujii, A. Yokoya
Journal of Electron Spectroscopy and Related Phenomena, **144-147**, (2005), 291-294
- [67] "Three-Dimensional Atomic-Image Reconstruction from a Single Energy Si Photoelectron Hologram"
T. Matsushita, A. Agui, A. Yoshigoe
Journal of Electron Spectroscopy and Related Phenomena, **144-147**, (2005), 1175-1177
- [68] "Electron Holography: A Maximum Entropy Reconstruction Scheme"
T. Matsushita, A. Yoshigoe, A. Agui
Europhysics Letters, **71**, (2005), 597-603
- [69] "Admixture of Excited States and Ground States of Eu³⁺ Ion in Eu₃Fe₅O₁₂ by Means of Magnetic Circular Dichroism"
M. Mizumaki, T. Uozumi, A. Agui, N. Kawamura, M. Nakazawa
Physical Review B, **71**, (2005), 134416
- [70] "Natural Circular Dichroism of Amino Acid Films Observed in Soft X-ray and VUV Region using Polarizing Undulator"
K. Nakagawa, F. Kaneko, Y. Ohta, M. Tanaka, T. Kitada, A. Agui, K. Fujii, A. Yokoya, K. Yagi-Watanabe, T. Yamada
Journal of Electron Spectroscopy and Related Phenomena, **144-147**, (2005), 271-273
- [71] "Scheme for Precise Correction of Orbit Variation Caused by Dipole Error Field of Insertion Device"
T. Nakatani, A. Agui, H. Aoyagi, T. Matsushita, M. Takao, M. Takeuchi, A. Yoshigoe, H. Tanaka
Review of Scientific Instruments, **76**, (2005), 055105
- [72] "Synchrotron Radiation Photoelectron Emission Study of SiO₂ Film Formed by Hyperthermal O-Atom Beam at Room Temperature"
M. Tagawa, C. Sogoh, K. Yokota, S. Hachiue, A. Yoshigoe, Y. Teraoka
Japanese Journal of Applied Physics, **44**, (2005), 8300-8304
[2006]
- [73] "Study on N₂-added and B-doped Effect in Co/Pd Multilayered Films using Soft X-ray Absorption and Magnetic Circular Dichroism"
A. Agui, T. Asahi, J. Sayama, J. Kawaji, M. Mizumaki, M. Tanaka, T. Osaka
Journal of Physics D: Applied Physics, **39**, (2006), 2881-2885
- [74] "Incident Angle Dependence of MCD at the Dy M₅-edge of Perpendicular Magnetic Dy_xCo_{100-x} Films"
A. Agui, M. Mizumaki, T. Asahi, J. Sayama, K. Matsumoto, T. Morikawa, T. Matsushita, T. Osaka, Y. Miura
Journal of Alloys and Compounds, **408-412**, (2006), 741-745
- [75] "Itinerant U 5f Band States in the Layered Compound UFeGa₅ Observed by Soft X-ray Angle-Resolved Photoemission Spectroscopy"
S. Fujimori, K. Terai, Y. Takeda, T. Okane, Y. Saitoh, Y. Muramatsu, A. Fujimori, H. Yamagami, Y. Tokiwa, S. Ikeda, T. Matsuda, Y. Haga, E. Yamamoto, Y. Onuki
Physical Review B, **73**, (2006), 125109
- [76] "Detailed Structural Analysis and Dielectric Properties of Silicon Nitride Film Fabricated Using Pure Nitrogen Plasma Generated Near Atmospheric Pressure"
R. Hayakawa, M. Nakae, T. Yoshimura, A. Ashida, N. Fujimura, T. Uehara, M. Tagawa, Y. Teraoka
Journal of Applied Physics, **100**, (2006), 073710
- [77] "The Azimuthal Dependent Oxidation Process on Cu(100) by Energetic Oxygen Molecules"
K. Moritani, M. Okada, T. Fukuyama, Y. Teraoka, A. Yoshigoe, T. Kasai
The European Physical Journal D, **38**, (2006), 111-115
- [78] "Real-time Photoelectron Spectroscopy for Nitridation at Ti(0001) Surface Using Supersonic N₂ Molecular Beams"
S. Ogawa, Y. Takakuwa, S. Ishidzuka, A. Yoshigoe, Y. Teraoka, Y. Mizuno
真空 (Journal of the Vacuum Society of Japan), **49**, (2006), 775-779

- [79] "Protective Layer Formation during Oxidation of Cu₃Au(100) using Hyperthermal O₂ Molecular Beam"
M. Okada, M. Hashinokuchi, M. Fukuoka, T. Kasai, K. Moritani, Y. Teraoka
Applied Physics Letters, **89**, (2006), 201912
- [80] "Comparative Study of Oxidation on Cu and Cu₃Au Surfaces with a Hyperthermal O₂ Molecular Beam"
M. Okada, K. Moritani, T. Fukuyama, H. Mizutani, A. Yoshigoe, Y. Teraoka, T. Kasai
Surface Science, **600**, (2006), 4228-4232
- [81] "Real-Time Observation of Initial Thermal Oxidation on Si(110)-16×2 Surface by Photoemission Spectroscopy"
M. Suemitsu, A. Kato, H. Togashi, A. Konno, Y. Yamamoto, Y. Teraoka, A. Yoshigoe, Y. Enta, Y. Narita
ECS Transactions, **3**, (2006), 311-316
- [82] "Comparison of Initial Oxidation between Si(110) and Si(100) Surfaces — From Real-Time Photoemission Spectroscopy —"
M. Suemitsu, A. Kato, H. Togashi, A. Konno, Y. Yamamoto, Y. Teraoka, A. Yoshigoe, Y. Narita
電子情報通信学会技術研究報告 (信学技報, IEICE Technical Report), **SDM2006**, (2006), 61-63
- [83] "Oxidation of Si(001) with a Hyperthermal O-atom Beam at Room Temperature: Suboxide Distribution and Residual Order Structure"
M. Tagawa, C. Sogoh, K. Yokota, A. Yoshigoe, Y. Teraoka, T. Shimura
Applied Physics Letters, **88**, (2006), 133512
- [84] "Vibrationally Assisted Dissociative Adsorption of Oxygen on Ru(0001)"
S. Takahashi, Y. Fujimoto, Y. Teraoka, A. Yoshigoe, T. Aruga
Chemical Physics Letters, **433**, (2006), 58-61
- [85] "Soft X-ray Absorption Spectroscopy and Magnetic Circular Dichroism Study of Electroless-Deposited CoNiFe Ternary Alloy Soft Magnetic Films"
M. Tanaka, N. Nakamura, T. Asahi, T. Tsumori, A. Agui, M. Mizumaki, T. Osaka
Physica Status Solidi C, **3**, (2006), 2783-2786
- [86] "Initial Adsorption Dynamics of O₂ on Si(111)-7×7 Surface at Room Temperature"
A. Yoshigoe, E. Narihito, K. Moritani, Y. Teraoka
表面科学 (Journal of the Surface Science Society of Japan), **27**, (2006), 449-454
[2007]
- [87] "Microscopic Magnetic Property of Perpendicular Magnetic Films of Dy_xCo_{100-x} Measured Using Soft X-ray Magnetic Circular Dichroism"
A. Agui, M. Mizumaki, T. Asahi, K. Matsumoto, T. Morikawa, J. Sayama, T. Osaka
Journal of Physics and Chemistry of Solids, **68**, (2007), 2148-2152
- [88] "Bias Temperature Instability Characterization of Advanced Gate Stacks"
S. Fujieda, M. Terai, M. Saitoh, A. Toda, Y. Miura, Z. Liu, Y. Teraoka, A. Yoshigoe, M. Wilde, K. Fukutani
ECS Transactions, **6**, (2007), 185-202
- [89] "Itinerant to Localized Transition of *f* Electrons in the Antiferromagnetic Superconductor UPd₂Al₃"
S. Fujimori, Y. Saitoh, T. Okane, A. Fujimori, H. Yamagami, Y. Haga, E. Yamamoto, Y. Onuki
Nature Physics, **3**, (2007), 618-622
- [90] "Effects of Vibrational and Rotational Excitations on the Dissociative Adsorption of O₂ on Cu Surfaces"
K. Moritani, M. Tsuda, Y. Teraoka, M. Okada, A. Yoshigoe, T. Fukuyama, T. Kasai, H. Kasai
The Journal of Physical Chemistry C, **111**, (2007), 9961-9967
- [91] "Translational Kinetic Energy Induced Oxidation on Ti(0001) Surfaces Using a Supersonic O₂ Beam"
S. Ogawa, Y. Takakuwa, S. Ishidzuka, A. Yoshigoe, Y. Teraoka, K. Moritani, Y. Mizuno
電気学会論文誌C (IEEJ Transactions on Electronic, Information and Systems), **127**, (2007), 140-145
- [92] "Si(001) Surface Layer-by-Layer Oxidation Studied by Real-Time Photoelectron Spectroscopy using Synchrotron Radiation"
S. Ogawa, A. Yoshigoe, S. Ishidzuka, Y. Teraoka, Y. Takakuwa
Japanese Journal of Applied Physics, **46**, (2007), 3244-3254
- [93] "X-ray Photoemission Study of the Temperature-dependent CuO Formation on Cu(410) using an Energetic O₂ Molecular Beam"
M. Okada, K. Moritani, Y. Teraoka, T. Kasai, M. Rocca, L. Vattuone, L. Savio
Physical Review B, **75**, (2007), 233413
- [94] "Unravelling the Role of Steps in Cu₂O Formation via Hyperthermal O₂ Adsorption at Cu(410)"
M. Okada, L. Vattuone, A. Gerbi, L. Savio, M. Rocca, K. Moritani, Y. Teraoka, T. Kasai
Journal of Physical Chemistry C, **111**, (2007), 17340-17345

- [95] "Real-Time Observation of Initial Thermal Oxidation on Si(110)-16×2 Surfaces by O 1s Photoemission Spectroscopy Using Synchrotron Radiation"
M. Suemitsu, A. Kato, H. Togashi, A. Konno, Y. Yamamoto, Y. Teraoka, A. Yoshigoe, Y. Narita, Y. Enta
Japanese Journal of Applied Physics, **46**, (2007), 1888-1890
- [96] "Direct Insertion of Oxygen Atoms into the Backbonds of Subsurface Si Atoms using Translational Energies of Oxygen Atom Beams"
M. Tagawa, K. Yokota, S. Tsumamoto, C. Sogo, A. Yoshigoe, Y. Teraoka
Applied Physics Letters, **91**, (2007), 033504
- [97] "Space Environmental Effects on MoS₂ and Diamond-like Carbon Lubricating Films: Atomic Oxygen-induced Erosion and its Effect on Tribological Properties"
M. Tagawa, K. Yokota, K. Matsumoto, M. Suzuki, Y. Teraoka, A. Kitamura, M. Belin, J. Fontaine, J. Martin
Surface and Coatings Technology, **202**, (2007), 1003-1010
- [98] "Vibrationally-assisted Dissociative Adsorption of Oxygen on Ru(0001)-p(2x1)-O"
S. Takahashi, Y. Fujimoto, Y. Teraoka, A. Yoshigoe, H. Okuyama, T. Aruga
Surface Science, **601**, (2007), 3809-3812
- [99] "Mechanisms of Concurrent SiO Desorption with Oxide Layer Formation at Si(001) Surface"
Y. Teraoka, A. Yoshigoe, K. Moritani
電気学会論文誌C (IEEJ Transactions on Electronic, Information and Systems), **127**, (2007), 133-139

BL24XU

Refereed Journals

- [1998]
- [1] "Material Analysis End-Station of the Hyogo-Ken Beamline at SPring-8"
T. Kaneyoshi, T. Ishihara, H. Yoshioka, M. Motoyama, S. Fukushima, K. Hayashi, J. Kawai, K. Taniguchi, S. Hayakawa, Y. Gohshi
Journal of Synchrotron Radiation, **5**, (1998), 509-511
- [2] "In-Vacuum Figure-8 Undulator for Hard X-Ray with Both Horizontal and Vertical Polarization"
T. Tanaka, X. Marechal, T. Hara, T. Tanabe, H. Kitamura
Journal of Synchrotron Radiation, **5**, (1998), 412-413
- [1999]
- [3] "Phase-Contrast X-Ray Imaging Using Both Vertically and Horizontally Expanded Synchrotron Radiation X-Rays with Asymmetric Bragg Reflection"
Y. Kagoshima, Y. Tsusaka, K. Yokoyama, K. Takai, S. Takeda, J. Matsui
Japanese Journal of Applied Physics, **38**, (1999), L470-L472
- [4] "Characterization of Diamond Single Crystals for Synchrotron Radiation Monochromators"
Y. Tsusaka, S. Takeda, K. Takai, K. Yokoyama, Y. Kagoshima, J. Matsui, S. Sato, N. Toda, S. Kimura
Japanese Journal of Applied Physics, **38**, (1999), 616-619
- [5] "Recognition of a TG Mismatch: The Crystal Structure of Very Short Patch Repair Endonuclease in Complex with a DNA Duplex"
Susan E. Tsutakawa, H. Jingami, K. Morikawa
Cell, **99**, (1999), 615-623
- [2000]
- [6] "Expression, Purification and Crystallization of Human Tau-Protein Kinase I/Glycogen Synthase Kinase-3 β "
M. Aoki, M. Iwamoto-Sugai, I. Sugiura, C. Sasaki, T. Hasegawa, C. Okumura, S. Sugio, T. Kohno, T. Matsuzaki
Acta Crystallographica Section D, **56**, (2000), 1464-1465
- [7] "Amphipathic Structure of Theonellapeptolide-I_d, a Hydrophobic Tridecapeptide Lactone from the Okinawa Marine Sponge *Theonella swinhoei*"
M. Doi, T. Ishida, M. Kobayashi, Y. Katsuya, Y. Mezaki, M. Sasaki, A. Terashima, T. Taniguchi, C. Tanaka
Biopolymers, **54**, (2000), 27-34
- [8] "Unique Sodium-Caged Structure of a Potent Endothelin-1 Inhibitor: Crystal Structure of BQ123 Sodium Salt, *cyclo(-D-Trp-D-Asp⁻-Pro-D-Val-Leu-)-Na⁺*"
M. Doi, T. Ishida, Y. Katsuya, Y. Mezaki, M. Sasaki, A. Terashima, T. Taniguchi, H. Hasegawa, M. Shiono
Chemical Communications, (2000), 743-744
- [9] "500-nm-Resolution 10 keV X-Ray Imaging Transmission Microscope with Tantalum Phase Zone Plates"
Y. Kagoshima, T. Ibuki, K. Takai, Y. Yokoyama, N. Miyamoto, Y. Tsusaka, J. Matsui
Japanese Journal of Applied Physics, **39**, (2000), L433-L435