



List of Publication

LIST OF PUBLICATIONS (1996)

- M. Abe and K. Kan'no
Decay Kinetics of Exciton Luminescence from Two Coexisting Off-center Configurations in KCl:I
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 167.
- T. Abe, Y. Mizutani, M. Asano, T. Harada, M. Kawase, S.-I. Tanaka and M. Kamada
Carbon K Edge XANES Spectra of Stage 2 FeCl₃-graphite Intercalation Compound
Carbon , **34** (1996) 1160.
- I. Arakawa, D.E. Weibel, T. Nagai, M. Abo, T. Hirayama, M. Kanno, K. Mitsuke and M. Sakurai
Angular and kinetic energy distributions of the desorption of Ne metastable induced by excitons at the surface of solid Ne
Nucl. Instrum. Meth. Phys. Res. , **B101** (1995) 195.
- H. Aritani, T. Tanaka, T. Funabiki, S. Yoshida, M. Kudo and S. Hasegawa
Structure of Mo-Mg Binary Oxides in Oxidized/Reduced States Studied by X-ray Absorption Spectroscopy at the Mo K Edge and Mg K Edge
J. Phys. Chem. , **100** (1996) 5440.
- H. Aritani, T. Tanaka, T. Funabiki, S. Yoshida, K. Eda, N. Sotani, M. Kudo and S. Hasegawa
Study of the Local Structure of Molybdenum-Magnesium Binary Oxides by Means of Mo L₃-Edge XANES and UV-Vis Spectroscopy
J. Phys. Chem. , **100** (1996) 19495.
- S. I. Gheyas, T. Ogata, M. Nishio, T. Urisu and H. Ogawa
Synchrotron-Radiation-Assisted Surface Processes of Diethylzinc on GaAs(100)
Jpn. J. Appl. Phys. , **34** (1995) 6886.
- A. Ejiri, S. Kubota, A. Hatano and K. Arakaki
Vacuum UV Photoelectron Dynamics in Alkali Earth Fluorides: Yield, Auger Effect, and Luminescence
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 151.
- M. Fujita, K. Hayakawa, K. Fukui, M. Kitaura, H. Nakagawa and T. Miyanaga
Optical Spectra of SnI₂ Crystal
J. Phys. Soc. Jpn. , **65** (1996) 606.
- M. Fujita, N. Ohno, Y. Kiyama and K. Nakamura
Optical Spectra of Thallous Halides in 5d Core Exciton Region
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 59.

H. Hama, K. Kimura, J. Yamazaki, S. Takano, T. Kinoshita, M-E. Couprie
Microscopic Study on Lasing Characteristics of the UVSOR Storage Ring Free Electron Laser
Nucl. Instr. and Meth. in Phys. Res. , A **375** (1996) 32.

H. Hama
A Helical Optical Klystron for an UV-FEL Project at the UVSOR
Nucl. Instr. and Meth. in Phys. Res. , A **375** (1996) 57.

H. Hattori and K. Mitsuke
Autoionization of Acetylene Studied by Two-dimensional Photoelectron Spectroscopy
J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 1.

C. Hwang, C.-S. Hwang, C. Lee, S. W. Lee, I.-S. Jeong, H. H. Park, S. Tanaka and
M. Kamada
Fermi-level pinning of Ag on Si(111)-(7×7)
Phys. Rev. , B **52** (1996) 16325.

K. Hayashi, D. Kato and K. Shimakawa
Photoinduced Effects in Amorphous Chalcogenide Films by Vacuum Ultra-Violet Light
Journal of Non-Crystalline Solids , **198-200** (1996) 696.

Y. Hikosaka, H. Hattori, T. Hikida and K. Mitsuke
Formation of Autoionizing Atomic Nitrogen from Superexcited States of Nitric Oxide
J. Chem. Phys. , **105** (1996) 6367.

S. Hino, K. Iwasaki, K. Umishita, T. Miyazaki, K. Kikuchi and Y. Achiba
Photoelectron Spectra of Metal Fullerenes: Are Metal Fullerenes Molecular Crystals or not?
J. Electron Spectrosc. Relat. Phenom. , **78** (1996) 493.

S. Hino, K. Umishita, K. Iwasaki, T. Miyazaki, K. Kikuchi and Y. Achiba
Ultraviolet Photoelectron Spectra of C₈₆ and C₉₀
Phys. Rev. , B **53** (1996) 7496.

T. Hirayama, T. Nagai, M. Abo, I. Arakawa, K. Mitsuke and M. Sakurai
Excitonic energy transfer process in Ne-Kr alloy studied by photon stimulated desorption of metastable atoms
J. Elect. Spectr. Rel. Phen. , **80** (1886) 101.

S. Hirose and M. Kamada
Photon-Stimulated Desorption of Excited-State Sodium Atom from NaF and NaCl under Valence-Band and Core-Level Excitations
J. Phys. Soc. Jpn. , **65** (1996) 1849.

S. Hirose and M. Kamada
Photon-Energy Dependence of Excited-State Na Desorption from Na Halides by Synchrotron Radiation
J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 113.

H. Hosono, M. Mizuguchi, H. Kawazoe and J. Nishii
Correlation between Ge E' Centers and Optical Absorption Bands in SiO₂:GeO₂ Glasses
Jpn. J. Appl. Phys. , **35** (1996) L234.

S. Hosokawa, T. Kouchi, I. Ono, M. Taniguchi, Y. Takata and N. Kosugi
A Soft-x-ray Core Absorption Study on the Electronic States in Ag- and Cu-Photodissolved Amorphous GeSe₂ Using Synchrotron Radiation
J. Phys.: Condens. Matter **8** (1996) 1607.

T. Ibuki, A. Hiraya, T. N. Olney and C. E. Brion
Ionic Photofragmentation (11.5-160eV) and PIPICO Spectroscopy (40-130eV) of BrCN in the Valence Shell and Bromine 3d Regions
Chem. Phys. , **203** (1996) 359.

T. Ibuki, A. Kamamoto
Photoabsorption cross section and Radiative Processes of GeCl₄ in the Valence Region of 6-31 eV
Chem. Phys. Lett. , **260** (1996) 314.

T. Ibuki, K. Okada
Photoabsorption and Fluorescence Excitation Spectra of CF₃CN in the Region of 6-41 eV
Chem. Phys. Lett. , **263** (1996) 173.

H. Ishii, A. Yuyama, S. Narioka, S. Hasegawa, M. Fujino, H. Isaka, M. Fujiki, K. Furukawa, N. Matsumoto and K. Seki
Electronic Structures of Silicon-based Organic Compounds Studied by UV Photoemission
Mol. Cryst. Liq. Cryst. , **285** (1996) 205.

H. Ishii, S. Narioka, K. Edamatsu, K. Kamiya, S. Hasegawa, T. Ohta, N. Ueno and K. Seki
Angle-resolved Ultraviolet Photoelectron Spectroscopy of Oriented film of Model Compound of Poly(p-Phenylene): Wave Number (k) Conservation and k Blurring in a System with Small Number of Repeating Units
J. Electron Spectrosc. Relat. Phenom. , **76** (1996) 553.

H. Ishii, A. Yuyama, S. Narioka, K. Seki, S. Hasegawa, M. Fujino, H. Isaka, M. Fujiki and N. Matsumoto
Photoelectron Spectroscopy of Polysilanes, Polygermanes and Related Compounds
Synthetic Metals , **69** (1995) 595.

M. Itoh, N. Ohno, H. Yoshida, S. Hashimoto, K. Kan'no and M. Kamada
Auger-free Luminescence in Mixed Alkali Halides
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 117.

M. Kamada, N. Takahashi, S. Hirose, S. Ohara, M. A. Terekhin, S. S. Galaktionov and S. S. Galaktionov
Photoelectron and Luminescence Spectra of BaFCl, BaFBr, and CsTaF₆
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 143.

K. Kan'no
Time-Resolved Luminescence Study on Relaxation Dynamics and Morphology of Self-Trapped Excitons in Ionic Crystals
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 33.

T. Kawai, K. Risai and S. Shimanuki
Oblique-Incidence Reflection Spectra of Exciton Polariton in (CH₃NH₃)₃Bi₂Cl₉ Single Crystals
Excitonic Processes in Condensed Matter, (1996) 175.

J. W. Kim, S. Kim, J. M. Seo, S. Tanaka and M. Kamada
Angle-resolved Photoemission of InSb(111)-2×2
J. Phys.:Condens. Matter **8** (1996) 4189.

J. W. Kim, S. Kim, J. M. Seo, S. Tanaka and M. Kamada
Surface Core-level Shift of InSb(111)-2×2
Phys. Rev. B **54** (1996) 4476.

K. Kimura, J. Yamazaki, S. Takano, T. Kinoshita, H. Hama
Gain Narrowing of Spectral and Temporal Widths in the UVSOR-FEL
Nucl. Instr. and Meth. in Phys. Res. , **A 375** (1996) 62.

S. Kimura, M. Kamada, H. Hama, X. M. Marechal, T. Tanaka and H. Kitamura
Design of a Helical Undulator for UVSOR
J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 437-440.

S. Kimura
Optical Study of Low Carrier Concentration Systems
J. Phys. Soc. Jpn. , **65** (1996) Suppl. B 109.

S. Kimura, M. Ikezawa, A. Ochiai and T. Suzuki
Optical Study on Heavy Fermion and Mixed Valence in Yb₄As₃
J. Phys. Soc. Jpn. , **65** (1996) 3591.

S. Kimura, F. Arai and M. Ikezawa
Mixed Valence of Praseodymium Oxides
J. Electron Spectrosc. Relat. Phenom. , **78** (1996) 135.

T. Matsumoto, K. Kan'no, M. Itoh and N. Ohno
Lattice Relaxation Effect Associated with Core Holes in Ionic Crystals Studied by Time-Resolved Luminescence Spectroscopy
J. Phys. Soc. Jpn. , **65** (1996) 1195.

T. Masuoka, E. Nakamura and A. Hiraya
Kinetic-Energy Release in the Dissociation of CO₂²⁺
J. Chem. Phys. , **104** (1996) 6200.

T. Masuoka and S. Nagaoka
Dissociation Dynamics of Multiply Charged Molecular Ions Following Valence and Core-Level Photoexcitation and Photoionization
Trends in Chemical Physics, **3** (1994) 13.

T. Miyamae, D. Yoshimura, H. Ishii, Y. Ouchi, T. Miyazaki, T. Koike, T. Yamamoto and K. Seki
Photoemission Study on Poly(pyridine-2,5-diyl), Poly(2,2'-bipyridine-5,5'-diyl), and their K-doped States
J. Electron Spectrosc. Relat. Phenom. , **78** (1996) 399.

K. Mitsuke, Y. Hikosaka, T. Hikida and H. Hattori
Autoionization of NO in an Excited Valence State Affected by Perturbations from Valence-Rydberg Mixing
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 395.

K. Mitsuke, H. Hattori
Autoionizing Resonance in Photoionization from the 1π_u Level of Acetylene
J. Chem. Phys. , **102** (1995) 5288.

S. Nagaoka, T. Fujibuchi, U. Nagashima, S. Kato, K. Takano and I. Koyano
Si:2p Core-Level Photoexcitation and Photoionization of Organosilicon Molecules
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 499.

E. Nakamura, H. Hama, J. Yamazaki, T. Kinoshita, O. Matsudo, H. Yonehara, T. Kasuga, G. Isoyama and M. Watanabe
Construction and Commissioning of a Superconducting Wigglers for the UVSOR Storage Ring
J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 421.

- M. Nakamura, Y. Takata and N. Kosugi
Resonant Ni 3p and 3s Photoemission for the Ni 2p Core-excitation in NiO
J. Electron Spectrosc. Relat. Phenom. , **78** (1996) 115.
- S. Narioka, H. Ishii, K. Edamatsu, K. Kamiya, S. Hasegawa, T. Ohta, N. Ueno and K. Seki
Angle-resolved Photoelectron Spectroscopic Study of Oriented p-sexiphenyl: Wave-number Conservation and Blurring in a Short Model Compound of Poly(p-phenylene)
Phys. Rev. , **B52** (1996) 2362.
- S. Narioka, H. Ishii, D. Yoshimura, M. Sei, Y. Ouchi, K. Seki, S. Hasegawa, T. Miyazaki, Y. Harima and T. Yamashita
The Electronic Structure and Energy Level Alignment of Porphyrin/Metal Interface Studied by Ultraviolet Photoelectron Spectroscopy
Appl. Phys. Lett. , **67** (1996) 1899.
- H. Ohashi and K. Shobatake
Synchrotron Radiation Excited Etching of Silicon Surface Studied by Velocity Distribution Measurements of Desorbed Species
J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 73.
- H. Ohashi, E. Ishiguro, T. Sasano, K. Shobatake
Synchrotron Radiation Excited Etching of Diamond
Appl. Phys. Lett. , **68** (1996) 3713.
- A. Ohnishi, K. Kan'no, Y. Iwabuchi and N. Mori
Luminescence from Self-Trapped Excitons in BaFCl-BaFBr Solid Solutions
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 159.
- A. Ohnishi, T. Yamada, T. Yoshinari, I. Akimoto, K. Kan'no and T. Kamikawa
Emission Spectra and Decay Characteristics in Photo-Stimulated ($C_nH_{2n+1}NH_3$)_{2CdCl_{4:n=1,2,3}}
J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 163.
- I. Ouchi, I. Nakai, M. Kamada, S. Tanaka and T. Hagiwara
On the Assignment of Core Electron Absorption Spectra of the Films of Polyethylene Terephthalate and Polyethylene Naphthalate by Means of Total Electron Yield Method
Reports on Progress in Polymer Physics in Japan , **39** (1996) 505.
- I. Ouchi, I. Nakai, M. Kamada and S. Tanaka
Polarized Absorption Spectra of Polyethylene Terephthalate and Polyethylene Naphthalate Films in Soft X-ray Region
J. Electron Spectrosc. Relat. Phenom. , **78** (1996) 363.

M. Sakurai, T. Nagai, M. Abo, T. Hirayama and I. Arakawa
Angular distribution of Ne metastable desorption induced by exciton formation at the surface of solid Ne: Measurement and computer simulation
J. Vac. Soc. Jpn. , **38** (1995) 414.

S. Sato, S. Minoura, T. Urisu and Y. Takasu
IRAS and TDS Study on the Photolytic Decarbonylation of Iron Pentacarbonyl Absorbed on a SiO₂ Film with a Buried Metal Layer
Applied Surface Science , **90** (1995) 29.

K. Seki, A. Yuyama, S. Narioka, H. Ishii, S. Hasegawa, H. Isaka, M. Fujino, M. Fujiki and N. Matsumoto
UV Photoelectron Spectroscopy of Polysilanes and Polygermanes
ACS Symposium Series No. 579 Polymeric Materials for Microelectronic Applications: Science and Technology (1994) 398.

K. Seki, T. Tani and H. Ishii
Electronic Structures of Organic-inorganic Interfaces Studied by UV Photoemission
Thin Solid Films, **273** (1996) 20.

K. S. Seol, A. Ieki, Y. Ohki, H. Nishikawa and M. Tachimori
Photoluminescence Study on Point Defects in Buried SiO₂ Film Formed by Implantation of Oxygen
J. Appl. Phys. , **79** (1996) 412.

C. Shao, S. Morita, T. Soga, R. Inanami and S. Hattori
Synchrotron-Radiation-Induced Deposition of Etch-Protecting Film on Si in CF₄ Plasma
Jpn. J. Appl. Phys. , **35** (1996) 765.

K. Shibuya, S. Suzuki, T. Imamura and I. Koyano
Dissociation of State-Selected NO₂⁺Ions Studied by Threshold Photoelectron-Photoion Coincidence Techniques
J. Phys. Chem. A, **101** (1997) 685.

K. Sugiyama, D. Yoshimura, E. Ito, T. Miyazaki, Y. Hamatani, I. Kawamoto, Y. Ouchi, K. Seki and H. Ishii
UV Photoemission Study of 8-hydroxyquinoline Aluminum (ALQ₃)/metal Interfaces
Mol. Cryst. Liq. Cryst. , **286** (1996) 239.

N. Takahashi, S. Tanaka, M. Ichikawa, S. Ohara, Y. Fujii, K. Nakanishi and M. Kamada
Construction of a Compact Spin- and Angle-Resolved Photoelectron Spectrometer
Jpn. J. Appl. Phys. , **35** (1996) 6314.

Y. Tamenori, K. Inaoka and I. Koyano

Dissociative Photoionization of Hexacarbonyl Tungsten in the Range 30-120eV

J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 503.

M. Taniguchi, K. Tani and M. Katou

Spectroscopic and Dynamic Aspects on Luminescence of Tryptophan Powders

J. Electron Spectrosc. Relat. Phenom. , **87** (1996) 427.

T. Urisu, Y. Zhang, M. Nagasono, A. Yoshigoe, Y. Imaizumi, H. Ohshima, T. Hattori and S. Sato

Molecular Orientation and Photochemical Reaction of Organoaluminum Compounds

Investigated by Buried Metal Layer Infrared Reflection Absorption Spectroscopy

Jpn. J. Appl. Phys. , **33** (1994) 7123.

D. E. Weibel, T. Nagai, T. Hirayama, I. Arakawa and M. Sakurai

Electronic energy transfer in rare-gas solid alloys studied by photon stimulated desorption

Langmuir, **12** (1996) 193.

T. Yamanaka, T. Matsushima, S. Tanaka and M. Kamada

Orientation of Oxygen Admolecules on a Stepped Platinum (113) Surface

Surface Science , **349** (1996) 119.

T. Yamanaka, T. Matsushima, S. Tanaka and M. Kamada

Orientation and Desorption of Oxygen Admolecules on a Pt(113) Stepped Surface

J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 105.

A. Yoshida, K. Maeda, S. Ukeda and A. Ganjoo

Preparation of ZnO thin Films using Undulator and ArF Excimer Laser

J. Electron Spectrosc. Relat. Phenom. , **80** (1996) 97.

H. Yoshida and K. Mitsuke

Positive Ion-negative Ion Coincidence Spectroscopy of CO₂ for Observation of Doubly Excited Rydberg States

J. Electron Spectrosc. Relat. Phenom. , **79** (1996) 487.

A. Yoshigoe, M. Nagasono, K. Mase and T. Urisu

Synchrotron Radiation Irradiation Effects for SiH_n on Si(100) Surface in the

Synchrotron Radiation Stimulated Si Gas Source Molecular Beam Epitaxy

Jpn. J. Appl. Phys. , **34** (1995) 6894.

A. Yoshigoe, K. Mase, Y. Tsusaka, T. Urisu, Y. Kobayashi and T. Ogino
In Situ Observation of Silicon Hydrides on Si(100) Surfaces During Synchrotron-Radiation-Stimulated Si₂H₆ Gas Source Molecular Beam Epitaxy
Appl. Phys. Lett. , **67** (1995) 2364.

A. Yoshigoe, M. Nagasano, K. Mase, T. Urisu, S. Seki and Y. Nakagawa
In Situ Detection of Surface SiH_n in Synchrotron-Radiation-Induced Chemical Vapor Deposition of a-Si on an SiO₂ Substrate
J. Synchrotron Rad. , **2** (1995) 196.

D. Yoshimura, H. Ishii, S. Narioka, M. Seki, T. Miyazaki, Y. Ouchi, S. Hasegawa, Y. Harima, K. Yamashita and K. Seki
The Electronic Structure of Porphyrin/metal Interfaces Studied by Ultraviolet Photoelectron Spectroscopy
J. Electron Spectrosc. Relat. Phenom. , **76** (1996) 559.

Y. Zhang, S. Sato, H. Ohshima, T. Hattori and T. Urisu
Buried Metal Layer Enhanced Infrared Reflection Absorption Spectroscopy for Photoreactions Induced by Synchrotron Radiation on SiO₂ Surfaces
Applied Surface Science, **79/80** (1994) 422.

(Japanese)
M. Kobayashi
Phonon Spectroscopy under High Pressure at Low Temperature
Kotaibuturi, **30** (1996) 127.

H. Ohashi, E. Ishiguro, T. Sasano, T. Oguri, M. Kamada and K. Shobatake
Diamond Etching by Syncrotron Orbital Radiation
New Diamond, **12** (1996) 26.



Photo shows Director-General of IMS, Prof. M. Ito(right back), Director of UVSOR facility, Prof. N. Kosugi(left back), Mrs. Ito (left front), and Prof. I. Nenner(Lure: right front).