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## List of Publications 2004

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### Published Papers

Y. Akahama, H. Kawamura

#### **High-Pressure UV Spectroscopy on Oxygen up to 1.5 GPa**

Chem. Phys. Lett. **392** (2004) 476.

T. Gejo, E. Shigemasa, E. Nakamura, M. Hosaka, S. Koda, A. Mochihashi, M. Katoh, J. Yamazaki, K. Hayashi, Y. Takashima, H. Hama

#### **The Investigation of Excited States of Xe Atoms and Dimers by Synchronization of FEL and SR Pulses at UVSOR**

Nucl. Instr. and Meth. A **528** (2004) 627.

T. Hatsui, M. Nagasano, N. Kosugi

#### **Ar 2p Excited States of Argon in Non-polar Media**

J. Electron Spertrosc. and Relat. Phenom. **137-140** (2004) 435.

T. Hatsui, H. Setoyama, E. Shigemasa, N. Kosugi

#### **Design of a Novel Transmission-Grating Spectrometer for Soft X-Ray Emission Studies**

J. Electron Spertrosc. and Relat. Phenom. **144-147** (2005) 1059.

Y. Hikosaka, K. Mitsuke

#### **Autoionization and Neutral Dissociation of Superexcited HI Studied by Two-Dimensional Photoelectron Spectroscopy**

J. Chem. Phys. **121** (2004) 792.

Y. Hikosaka, E. Shigemasa

#### **Velocity Imaging Spectrometer for Negative Fragment Ions: Application to Dynamics of O<sub>2</sub> and N<sub>2</sub>O Ion-Paar Dissociation**

J. Electron Spertrosc. and Relat. Phenom. **148** (2005) 5.

S. Hino, N. Wanita, K. Iwasaki, D. Yoshimura, N. Ozawa, T. Kodama, K. Sakaguchi, H. Nishikawa, I. Ikemoto, K. Kikuchi

#### **Ultraviolet Photoelectron Spectra of Three Tm@C<sub>82</sub> Isomers**

Chem. Phys. Lett. **402** (2005) 217.

M. Hiyama, N. Kosugi

**Ad Inicio R-Matrix/MQDT Method for Near-Edge X-Ray Absorption Fine Structure**

Physica Scripta. **T115** (2005) 136.

M. Hosaka, M. Katoh, A. Mochihashi, J. Yamazaki, K. Hayashi, T. Takashima

**Upgrade of the UVSOR Storage Ring FEL**

Nucl. Instr. and Meth. A **528** (2004) 291.

T. Ibuki, K. Okada

**Mass-Selected Ion Spectroscopy of K-Shell Excited Polyatomic Molecules: Fragmentation Competing with Intramolecular Energy Relaxation**

Recent Res. Devel. Chem. Physics **5** (2004) 77.

K. Iwasaki, S. Hino, D. Yoshimura, B. Cao, T. Okazaki, H. Shinohara

**Ultraviolet Photoelectron Spectra of Ti<sub>2</sub>@C<sub>80</sub>**

Chem. Phys. Lett. **397** (2004) 169.

K. Iwasaki, N. Wanita, S. Hino, D. Yoshimura, T. Okazaki, H. Shinohara

**Ultraviolet Photoelectron Spectra of Tb@C<sub>82</sub>**

Chem. Phys. Lett. **398** (2004) 389.

S. Kimura, M. Okuno, H. Kitazawa, F. Ishiyama, O. Sakai

**Change of Electronic Structure Induced by Magnetic Transitions in CeBi**

J. Phys. Soc. Jpn. **73** (8) (2004) 2041.

S. Kimura, T. Nishi, J. Sichelschmidt, V. Voevodin, J. Ferstl, C. Geibel, F. Steglich

**Optical Conductivity of a Non-Fermi-Liquid Material YbRh<sub>2</sub>Si<sub>2</sub>**

J. Mag. Mag. Mater. **272-276** (2004) 36.

M. Kitaura, K. Mochizuki, Y. Inabe, M. Itoh, H. Nakagawa, S. Oishi

**Fundamental Optical Properties and Electronic Structure of Langasite La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub> Crystals**

Phys. Rev. B **69** (2004) 115120.

S. Kimura, T. Nishi, Y. Mori, Y. Sumida, T. Takahashi, Y. S. Kwon, H. J. Im,  
H. Kitazawa

**Infrared Study on CeSb Under High Pressures**

Physica B **359-361** (2005) 190.

N. Kosugi

**Spin-orbit and Exchange Interactions in Molecular Inner Shell Spectroscopy**

J. Electron Spectrosc. and Relat. Phenom. **137-140** (2004) 335.

J. Kou, T. Mori, Y. Kubozono, K. Mitsuke

**Photofragmentation of C<sub>60</sub> in the Extreme Ultraviolet: Statistical Analysis on the Appearance Energies of C<sub>60-2n</sub><sup>Z+</sup> (n ≥ 1, z = 1-3)**

Phys. Chem. Chem. Phys. **7** (2005) 119.

J. Kou, T. Mori, Y. Kubozono, K. Mitsuke

**Photofragmentation of C<sub>60</sub> in Valence Ionization**

J. Electron Spectrosc. and Relat. Phenom. **144-147** (2005) 247.

J. Kou, T. Mori, S. V. K. Kumar, Y. Haruyama, Y. Kubozono, K. Mitsuke

**Double Photoionization of C<sub>60</sub> and C<sub>70</sub> in the Valence Region**

J. Chem. Phys. **120** (2004) 6005.

K. Mitsuke

**Photofragmentation Mechanisms of H<sub>2</sub>O Studied by Ultraviolet Dispersed Spectroscopy**

J. Electron Spectrosc. and Relat. Phenom. **144-147** (2005) 131.

K. Mitsuke, T. Mori, J. Kou, Y. Haruyama, Y. Kubozono

**4d→4f Dipole Resonance of the Metal Atom Encapsulated in a Fullerene Cage: Ce@C<sub>82</sub>**

J. Chem. Phys. **122** (2005) 064304.

A. Mochihashi, M. Katoh, M. Hosaka, K. Hayashi, J. Yamazaki, Y. Takashima,  
Y. Hori

**Ion Trapping Phenomenon in UVSOR Electron Storage Ring**

Jpn. J. Appl. Phys. **44** (2005) 430.

T. Mori, J. Kou, M. Ono, Y. Haruyama, Y. Kubozono, K. Mitsuke  
**Absolute Photoabsorption Cross Section of C<sub>60</sub> in the Extreme Ultraviolet**  
J. Electron Spectrosc. and Relat. Phenom. **144-147** (2005) 243.

T. Naito, M. Tadano, N. Terunuma, J. Urakawa, E. Nakamura, M. Hasumoto, H. Sakai, T. Shibuya, F. Sakai, H. Ohgaki, N. Sei  
**Investigation of Carbon Contamination on SR-Irradiated Devices**  
Nucl. Instr. and Meth. A **527** (2004) 624.

Y. Nonogaki, M. Katoh, K. Matsushita, M. Suzui, T. Urisu  
**Construction of the Undulator Beamline Equipped with a UHV-STM for Observations of Synchrotron-Radiation-Stimulated Surface Reaction**  
J. Electron Spectrosc. and Relat. Phenom. **144-147** (2005) 1113.

K. Okada, S. Tanimoto, T. Ibuki, Y. Haga, T. Gejo, K. Saito, K. Ohno  
**Angle-resolved, Mass-Selected Ion Spectroscopy of Carbon K-Shell Excited CF<sub>3</sub>CCH**  
Chem. Phys. **304** (2004) 273.

H. Okamura, T. Koretsune, S. Kimura, T. Nanba, H. Imai, Y. Shimakawa, Y. Kubo  
**Carrier-Induced Magnetic Circular Dichroism in the Magnetoresistive Pyrochlore Tl<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub>**  
J. Phys. Soc. Jpn. **74** (3) (2005) 970.

M. Ono, H. Yamane, F. Katagiri, H. Fukagawa, S. Kera, D. Yoshimura, K. K. Okudaira, E. Morikawa, K. Seki, N. Ueno  
**UPS Study of VUV-Photodegradation of Polyfluoroethylene (PTFE) Ultrathin Film by Using Synchrotron Radiation**  
Nucl. Instr. and Meth. B, in press.

M. Ono, H. Yamane, H. Fukagawa, S. Kera, D. Yoshimura, E. Morikawa, K. Seki N. Ueno  
**Possibility of the Fermi Level Control by VUV-Induced Doping of an Organic Thin Film: Polytetrafluoroethylene**  
Submitted to IPAP Conference Proceedings.

I. Ouchi, I. Nakai, M. Ono, S. Kimura  
**Features of Fluorescence Spectra of Polyethylene Terephthalate Films**  
Jpn. J. Appl. Phys. **43** (12) (2004) 8407.

H. Setoyama, T. Hatsui, N. Kosugi

**S 2p Excited States of OCS in Rare Gas Matrices**

J. Electron Spectrosc. and Relat. Phenom. **144-147** (2005) 87.

K. Soda, K. Shimba, S. Yagi, M. Kato, T. Takeuchi, U. Mizutani, T. Zhang,  
M. Hasegawa, A. Inoue, T. Ito, S. Kimura

**Electronic Structure of Bul; Metallic Glass Zr<sub>55</sub>Al<sub>10</sub>Cu<sub>30</sub>Ni<sub>5</sub>**

J. Electron Spertrosc. and Relat. Phenom. **144-147** (2005) 585.

T. Tanaka, Y. Kume, S. Tokunaga, K. Hayashida, M. Nishio, Q. Guo, H. Ogawa

**Synchrotron Radiation-Excited Etching of ZnTe**

API Conference Proceedings **705** (2004) 1154.

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**Published Papers (before 2004)**

J. Kou, T. Mori, M. Ono, Y. Haruyama, Y. Kubozono, K. Mitsuke

**Molecular- and Atomic-Like Photoionization of C<sub>60</sub> in the Extreme Ultraviolet**

Chem. Phys. Lett. **374** (2003) 1.

T. Mori, J. Kou, M. Ono, Y. Haruyama, Y. Kubozono, K. Mitsuke

**Development of a Photoionization Spectrometer for Accurate Ion Yield Measurements from Gaseous Fullerenes**

Rev. Scientific Instrum. **74** (2003) 3769.

M. Ono, K. Mitsuke

**Kinetic Energy Distribution and Anisotropy of Fragment Ions from SF<sub>6</sub> by Photoexcitation of a Sulfur 2p-Electron**

Chem. Phys. Lett. **379** (2003) 248.