
List of Publication 2005

- H. Aritani, S. Shinohara, S. Koyama, K. Otsuki, T. Kubo and A. Nakahira
Mo L_{III}-Edge XANES Study of Catalytically Active Mo Species on Silica-Alumina Supports for Methane Dehydroaromatization
Chem. Lett. **35** (2006) 416.
- L. Chen, M. Matsunami, T. Nanba, T. Matsumoto, S. Nagata, Y. Ikemoto, T. Moriwaki, T. Hirono and H. Kimura
Far-Infrared Spectroscopy of Electronic States of CuIr₂Se₄ at High Pressure
J. Phys. Soc. Jpn. **74** (2005) 1099.
- L. Chen, M. Matsunami and T. Nanba
Infrared Spectroscopy on the Electronic State of Transition Metal Compounds Under High Pressure
Physica B **359-361** (2005) 1186.
- T. Fuyuki, K. Sasaki and N. Ohno
Time-Resolved Photoluminescence of Hydrogen-Bonded Ferroelectrics PbHPO₄
J. Lumin. **112** (2005) 250.
- T. Gejo, E. Nakamura and E. Shigemasa
Development of Symmetry-Resolved Zero-Kinetic-Energy Photoelectron Spectroscopy for Probing Multielectron Processes
Rev. Sci. Instrum. **77** (2006) 036112.
- Q. X. Guo, J. Ding, T. Tanaka, M. Nishio and H. Ogawa
X-ray Absorption Near-Edge Fine Structure Study of AlInN Semiconductors
Appl. Phys. Lett. **86** (2005) 111911.
- Q. X. Guo, Y. Hachiya, T. Tanaka, M. Nishio and H. Ogawa
Cathodoluminescence Study of Anodic Nanochannel Alumina
J. Lumin. **119-120** (2006) 253.
- T. Hatsui, H. Setoyama, N. Kosugi, B. Wassermann, I. L. Bradeanu and E. Rühl
Photoionization of Small Krypton Clusters in the Kr 3d Regime: Evidence for Site-Specific Photoemission
J. Chem. Phys. **123** (2005) 154304.

E. Hayashi, K. Ito, S. Yabashi, M. Yamaga, N. Kodama, S. Ono and N. Sarukura
Vacuum Ultraviolet and Ultraviolet Spectroscopy of BaMgF₄ Codoped with Ce³⁺ and Na⁺
J. Lumin. **119-120** (2006) 69.

E. Hayashi, K. Ito, S. Yabashi, M. Yamaga, N. Kodama, S. Ono and N. Sarukura
Ultraviolet Irradiation Effect of Ce³⁺-Doped BaMgF₄ Crystals
J. Alloys Compd. **408-412** (2006) 883.

Y. Hikosaka, P. Lablanquie and E. Shigemasa
Efficient Production of Metastable Fragments around the 1s Ionization Threshold in N₂
J. Phys. B **38** (2005) 3597.

Y. Hikosaka, E. Shigemasa
Anisotropic Fragment Emission on Valence Photoionization of CF₄
J. Electron Spectrosc. Relat. Phenom. **152** (2006) 29.

S. Hino, N. Wanita, K. Iwasaki, D. Yoshimura, T. Akachi, T. Inoue, Y. Ito, T. Sugai and H. Shinohara
Ultraviolet Photoelectron Spectra of (YC)₂ @ C₈₂ and Y₂ @ C₈₂
Phys. Rev. B **72** (2005) 195424.

S. Hino, N. Wanita, K. Iwasaki, D. Yoshimura, N. Ozawa, T. Kodama, K. Sakaguchi, H. Nishikawa, I. Ikemoto and K. Kikudhi
Electronic Structure of Metallofullerene, Tm@C₈₂(II)
Synthetic Metals **152** (2005) 357.

S. Hino, N. Wanita, M. Kato, K. Iwasaki, D. Yoshimura, T. Inoue, Y. Okazaki and H. Shinohara
Ultraviolet Photoelectron Spectroscopy of Multiple Atoms Encapsulated Fullerenes
J. Electron Spectrosc. Relat. Phenom. **144-147** (2005) 239.

T. Hirai, N. Ohno, S. Hashimoto and S. Sakuragi
Luminescence of NaGdF₄:Tb³⁺, Eu³⁺ under Vacuum Ultraviolet Excitation
J. Alloys Compd. **408-412** (2006) 894.

H. J. Im, T. Ito, J. B. Hong, S. Kimura and Y. S. Kwon
Continuity of Ce 4f Electronic Structure Across the Quantum Critical Point: A Resonant Photoemission Study on CeNi_{1-x}Co_xGe₂
Phys. Rev. B **72** (2005) 220405.

H. Ishikawa, T. Hirano, Y. Nagasaka, K. Kawakami, H. Ohta, T. Nanba, A. Hirano and R. Kanno
Reflectivity Measurements of Superionic Conductors for Li Ion Secondary Battery Materials
J. Phys. Chem. Solids **66** (2005) 2065.

M. Itoh, J. Azuma, T. Shimizu, M. Kamada, M. Kobayashi and Y. Usuki

Laser-induced Infrared Absorption in Lead Tungstate Observed by Laser-SR Combined Spectroscopy

J. Lumin. **119-120** (2006) 590.

T. Ito, M. Maeda, K. Nakamura, H. Kato and Y. Ohki

Similarities in Photoluminescence in Hafnia and Zirconia Induced by Ultraviolet Photons

J. Appl. Phys. **97** (2005) 054104.

K. Kanda, J. Igaki, Y. Kato, R. Kometani and S. Matsui

Characterization of Amorphous Carbon Nitride Films Formed by Plasma-Enhanced Chemical Vapor Deposition of CN Radicals Using C K-Edge X-Ray Absorption Fine Structure Spectroscopy

New Diamond and Frontier Carbon Technology **15** (2005) 123.

K. Kanda, M. Kono, K. Shobatake and T. Ibuki

Photodissociation Spectroscopy of Cyanogen Halides in the Extreme Vacuum Ultraviolet Region

J. Electron Spectrosc. Relat. Phenom. **144-147** (2005) 139.

H. S. Kato, M. Furukawa, M. Kawai, M. Taniguchi, T. Kawai, T. Hatsui and N. Kosugi

Electronic Structure of Bases in DNA Duplexes Characterized by Resonant Photoemission Spectroscopy Near the Fermi Level

Phys. Rev. Lett. **93** (2004) 086403.

H. Kobayashi, Y. Arachi, S. Emura, H. Kageyama, K. Tatsumi and T. Kamiyama

Investigation on Lithium De-Intercalation Mechanism for $\text{Li}_{1-y}\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$

J. Power Sources **146** (2005) 640.

M. Matsunami, L. Chen, M. Takimoto, H. Okamura, T. Nanba, C. Sekine and I. Shirotani

Metal-Insulator Transition in $\text{PrRu}_4\text{P}_{12}$ and $\text{SmRu}_4\text{P}_{12}$ Investigated by Optical Spectroscopy

Phys. Rev. B **72** (2005) 073105.

M. Matsunami, M. Takimoto, H. Okamura, T. Nanba, C. Sekine and I. Shirotani

Optical Response of a Filled Skutterudite Compound $\text{GdRu}_4\text{P}_{12}$ due to Magnetic Ordering

Physica B **359-361** (2005) 844.

M. Mogi, T. Yamamoto, T. Mizoguchi, K. Tatsumi, S. Yoshioka, S. Kameyama, I. Tanaka and H. Adachi

Theoretical Investigation of Al K-Rdge X-Ray Absorption Spectra of Al, AlN and Al_2O_3

Mat. Trans. **45** (7) (2004) 2031.

S. Nagaoka and K. Mase

Ion Desorption Caused by Nls Core-Level Photoexcitation of N₂O on Si(100) Surface

Surface Science **593** (2005) 276.

A. Nakahira, K. Konishi, K. Yokota, T. Honma, H. Aritani and K. Tanaka

Synthesis and Characterization of TiO₂ Doped with P Ions by Anodic Oxidation of Titanium in Acid Solution

J. Ceramic. Soc. Jpn. **114** (2006) 46.

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

Infrared Spectroscopy under Multiextreme Conditions: Direct Observation of Pseudogap Formation and Collapse in CeSb

Phys. Rev. B **71** (2005) 220401.

T. Nishi, S. Kimura, T. Takahashi, T. Ito, H. J. Im, Y.S. Kwon, K. Miyagawa, H. Taniguchi, A. Kawamoto and K. Kanoda

The Origin of the Phase Separation in Partially Deuterated κ -(ET)₂Cu[N(CN)₂]Br Studied by Infrared Magneto-Optical Imaging Spectroscopy

Solid State Commun. **134** (2005) 189.

H. Okamura, M. Matsubara, K. Tanaka, K. Fukui, M. Terakami, H. Nakagawa, Y. Ikemoto, T. Moriwaki, H. Kimura and T. Nanba

Photogenerated Carriers in SrTiO₃ Probed by Mid-Infrared Absorption

J. Phys. Soc. Jpn. **76** (2006) 023703.

H. Okamura, T. Michizawa, T. Nanba, S. Kimura, F. Iga and T. Takabatake

Indirect and Direct Energy Gaps in Kondo Semiconductor YbB₁₂

J. Phys. Soc. Jpn. **74** (2005) 1954 .

K. Saito, M. Igeta, T. Ejima, T. Hatano, A. Arai, M. Watanabe

Magnetic Rotation Spectra of Co/Pt and Co/Cu Multilayers in 50-90 eV Region

J. Electro Spectrosc. Relat. Phenom. **144-147** (2005) 757.

Y. Shibata, A. Motogaito, H. Miyake, K. Hiramatsu, Y. Ohuchi, H. Okagawa,

K. Tadatomo, T. Nomura, Y. Hamamura and K. Fukui

Fabrication and Characterization of UV Schottky Detectors by Using a Freestanding GaN Substrate

Mater. Res. Soc. Symp. Proc. **831** (2005) E3.12.1.

J. Sichelshmidt, V. Voevodin, V. Pacheco, Yu. Grin, F. Steglich, T. Nishi and S. Kimura

Optical Investigations of the Clathrate α -Eu₈Ga₁₆Ge₃₀

Eur. Phys. J. B **46** (2005) 363.

J. Sichelschmidt, V. Voevodin, H. J. Im, S. Kimura, H. Rosner, A. Leithe-Jasper, W. Schnelle, U. Burkhardt, J. A. Mydosh, Yu. Grin and F. Steglich

Optical Pseudogap from Iron States in Filled Skutterudites $A\text{Fe}_4\text{Sb}_{12}$ ($A=\text{Yb}, \text{Ca}, \text{Ba}$)

Phys. Rev. Lett. **96** (2006) 037406.

T. Suga, T. Mizoguchi, M. Kunisu, K. Tatsumi, T. Yamamoto, I. Tanaka and T. Sekine

X-Ray Absorption Near Edge Structures of Silicon Nitride Thin Film by Pulsed Laser Deposition

Mat. Trans. **45** (2004) 2039.

K. Takarabe, H. Doi, Y. Mori, K. Fukui, Y. Shim, N. Yamamoto, T. Yoshitake and K. Nagayama

Optical Properties of Nanocrystalline FeSi_2 and the Effects of Hydrogenation

Appl. Phys. Lett. **88** (2006) 061911.

Y. Takashima, M. Katoh, M. Hosaka, A. Mochihashi, S. Kimura and T. Takahashi

Observation of Intense Bursts of Terahertz Synchrotron Radiation at UVSOR-II

Jpn. J. Appl. Phys. **44** (2005) L1131.

T. Takeuchi, S. Nakano, K. Soda, H. Sato, M. Hasegawa, U. Mizutani, K. Itoh and T. Fukunaga

Free-Energy Estimation of the Zr-Ni-Al Bulk Metallic Glass from the Local Atomic Arrangements of the Relevant Crystals

Mat. Trans. **46** (2005) 2791.

I. Tanaka, T. Mizoguchi and T. Yamamoto

XANES and ELNES in Ceramic Science

J. Am. Ceram. Soc. **88** (2005) 2013.

T. Tsujibayashi, M. Itoh, J. Azuma, M. Watanabe, O. Arimoto, K. Toyoda, S. Nakanishi, H. Itoh and M. Kamada

Time-Resolved Study of Auger-Free Luminescence in Two-Photon Excited BaF_2 with Use of Synchrotron Radiation and Laser

Phys. Stat. Sol. **2** (2005) 228.

T. Tsujibayashi, M. Itoh, J. Azuma, M. Watanabe, O. Arimoto, S. Nakanishi, H. Itoh and

M. Kamada

Two-Photon Spectroscopy of Core Excitons in Barium Fluoride Using Synchrotron Radiation and Laser Light

Phys. Rev. Lett. **94** (2005) 076401.

K. Watamnabe, A. Kokalj, H. Horino, I. Rzeznicka, K. Takahashi, N. Nishi and T. Matsushima
Scanning-Tunneling Microscopy, Near-Edge X-Ray-Absorption Fine Structure, and Density-Functional Theory Studies of N₂O Orientation on Pd(110)
Jpn. J. Appl. Phys. **45** (2006) 2290.

M. Yamaga and N. Kodama
Fluorescence of Ce³⁺ in Fluorides and Long-lasting Phosphorescence of Ce³⁺ in Oxides
J. Alloys Compd. **408-412** (2006) 706.

I. Zerec, W. Carrillo-Cabrera, V. Voevodin, J. Sichelschmidt, F. Steglich, Y. Grin, A. Yaresko and S. Kimura
Influence of Cage Distortions on the Electronic Structure and Optical Properties of Ba₆Ge₂₅
Phys. Rev. B **72** (2005) 045122.

S. Nakano, T. Takeuchi, K. Soda, M. Hasegawa, U. Mizutani, H. Sato, K. Itoh and T. Fukunaga
Investigation of Stability of Zr-Ni-Al Bulk Amorphous Phase from Local Atomic Arrangements of the Relevant Crystals
J. Jpn. Soc. Powder Powder Metallurgy **53** (2006) 100. (in Japanese)

T. Suzuki, H. Miyazaki, K. Soda, T. Takeuchi, M. Hasegawa, H. Sato and U. Mizutani
Electronic Structure of Zr-TM-Al (TM=Ni, Cu) Bulk Metallic Glasses
J. Jpn. Soc. Powder Powder Metallurgy **53** (2006) 107. (in Japanese)