

IV

List of Publications

List of Publications

M. Aitani, Y. Sakamoto, T. Hirahara, M. Yamada, H. Miyazaki, M. Matsunami, S. Kimura and S. Hasegawa, “**Fermi-Level Tuning of Topological Insulator Thin Films**”, Jpn. J. Appl. Phys., **52** (2013) 110112.

T. Brandenburg, T. Petit, A. Neubauer, K. Atak, M. Nagasaka, R. Golnak, N. Kosugi and E. F. Aziz, “**Fluorination-dependent Molecular Orbital Occupancy in Ring-shaped Perfluorocarbons**”, Phys. Chem. Chem. Phys., **17** (2015) 18337.

K. Eguchi, T. Nakagawa, Y. Takagi and T. Yokoyama, “**Direct Synthesis of Vanadium Phthalocyanine and Its Electronic and Magnetic States in Monolayers and Multilayers on Ag(111)**”, J. Phys. Chem. C, **119** (2015) 9805.

P. K. Gogoi, L. Sponza, D. Schmidt, T. C. Asmara, C. Diao, J. C. W. Lim, S. M. Poh, S. Kimura, P. E. Trevisanutto, V. Olevano and A. Rusydi, “**Anomalous Excitons and Screenings Unveiling Strong Electronic Correlations in SrTi_{1-x}Nb_xO₃ (0 ≤ x ≤ 0.005)**”, Phys. Rev. B, **92** (2015) 035119.

T. Hajiri, T. Ito, M. Matsunami, B. H. Min, Y. S. Kwon, K. Kuroki and S. Kimura, “**Orbital-dependent Electron Correlation in LiFeAs Revealed by Angle-resolved Photoemission Spectroscopy**”, Phys. Rev. B, **93** (2016) 024503.

A. Hara and T. Awano, “**Mechanism of Formation of Ultrashallow Thermal Donors in Carbon-doped Oxygen-rich Monocrystalline Silicon Preannealed to Introduce Hydrogen**”, Jpn. J. Appl. Phys., **54** (2015) 101302.

M. Harima, T. Morimoto and Y. Ohki, “**Structural Change Induced in LaAlO₃ by Ion Implantation**”, IEEJ Transactions on Electrical and Electronic Engineering, **11** (2016) 5.

T. Hirahara, T. Shirai, T. Hajiri, M. Matsunami, K. Tanaka, S. Kimura, S. Hasegawa and K.

Kobayashi, “**Role of Quantum and Surface-State Effects in the Bulk Fermi-Level Position of Ultrathin Bi Films**”, Phys. Rev. Lett., **115** (2015) 106803.

A. Iguchi, T. Kawai and K. Mizoguchi, “**Energy Transfer between Tl⁺-type Impurities in NaCl Crystals**”, Phys. Status Solidi C, **13** (2016) 85.

H. J. Im, M. Iwataki, S. Yamazaki, T. Usui, S. Adachi, M. Tsunekawa, T. Watanabe, K. Takegahara, S. Kimura, M. Matsunami, H. Sato, H. Namatame and M. Taniguchi, “**Electronic Structure of Mott-insulator CaCu₃Ti₄O₁₂: Photoemission and Inverse Photoemission Study**”, Solid State Commun., **217** (2015) 17.

H. J. Im, T. Ito, H. Miyazaki, S. Kimura, Y. S. Kwon, Y. Saitoh, S.-I. Fujimori, A. Yasui and H. Yamagami, “**Fermi Surface Variation of Ce 4f-electrons in Hybridization Controlled Heavy-fermion Systems**”, Solid State Commun., **209–210** (2015) 45.

K. Imura, M. Saito, M. Kaneko, T. Ito, T. Hajiri, M. Matsunami, S. Kimura, K. Deguchi, H. S. Suzuki and N. K. Sato, “**Origin of the Black-golden Transition in Sm_{1-x}Y_xS**”, J. Phys.: Conf. Ser., **592** (2015) 012028.

T. Inoue, T. Morimoto and Y. Ohki, “**Experimental Observations on the Crystalline Structures of YAlO₃ Single Crystal at High Temperatures**”, Appl. Phys. A, **119** (2015) 1423.

S. Kaneko, T. Morimoto and Y. Ohki, “**Cause of the Appearance of Oxygen Vacancies in Yttria-stabilized Zirconia and Its Relation to 2.8 eV Photoluminescence**”, Jpn. J. Appl. Phys., **54** (2015) 06GC03.

T. Kaneyasu, M. Ito, K. Soejima, Y. Hikosaka and E. Shigemasa, “**Site-specific Formation of Metastable OCS²⁺ Studied by Auger-electron-**

- ion Coincidence Method”, J. Phys. B, **48** (2015) 125101.**
- S. Kimura, H. Tanida, M. Sera, Y. Muro, T. Takabatake, T. Nishioka, M. Matsumura and R. Kobayashi, “**Relation between *c-f* Hybridization and Magnetic Ordering in CeRu₂Al₁₀: An Optical Conductivity Study of Ce(Ru_{1-x}Rh_x)₂Al₁₀ ($x \leq 0.05$)**”, Phys. Rev. B, **91** (2015) 241120.
- M. Kitaura, S. Tanaka, M. Itoh, A. Ohnishi, H. Kominami and K. Hara, “**Excitation Process of Ce³⁺ and Eu²⁺ Ions Doped in SrGa₂S₄ Crystals under the Condition of Multiplication of Electronic Excitations**”, J. Lumin., **172** (2016) 243.
- T. Kondo, M. Nakayama, R. Chen, J. J. Ishikawa, E.-G. Moon, T. Yamamoto, Y. Ota, W. Malaeb, H. Kanai, Y. Nakashima, Y. Ishida, R. Yoshida, H. Yamamoto, M. Matsunami, S. Kimura, N. Inami, K. Ono, H. Kumigashira, S. Nakatsuji, L. Balents and S. Shin, “**Quadratic Fermi Node in a 3D Strongly Correlated Semimetal**”, Nature Commun., **6** (2015) 10042.
- K. R. Koswattage, H. Kinjo, Y. Nakayama and H. Ishii, “**Interface Electronic Structures of the L-Cysteine on Noble Metal Surfaces Studied by Ultraviolet Photoelectron Spectroscopy**”, e-J. Surf. Sci. Nanotech., **13** (2015) 373.
- A. Masuno, N. Nishiyama, F. Sato, N. Kitamura, T. Taniguchi and H. Inoue, “**Higher Refractive Index and Lower Wavelength Dispersion of SiO₂ Glass by Structural Ordering Evolution via Densification at a Higher Temperature**”, RSC Adv., **6** (2016) 19144.
- S. Mitsunobu, M. Zhu, Y. Takeichi, T. Ohigashi, H. Suga, M. Jinno, H. Makita, M. Sakata, K. Ono, K. Mase and Y. Takahashi, “**Direct Detection of Fe(II) in Extracellular Polymeric Substances (EPS) at the Mineral-Microbe Interface in Bacterial Pyrite Leaching**”, Microbes and Environments, **31** (2016) 63.
- T. Morimoto, M. Harima, Y. Horii and Y. Ohki, “**Involvement of Crystallinity in Various Luminescent Bands in Yttrium Aluminate**”, Nucl. Instrum. Meth. B, **366** (2016) 198.
- M. Nagasaka, H. Yuzawa and N. Kosugi, “**Development and Application of *in Situ/operando* Soft X-ray Transmission Cells to Aqueous Solutions and Catalytic and Electrochemical Reactions**”, J. Electron Spectrosc. Relat. Phenom., **200** (2015) 293.
- K. Nakayama, H. Kimizuka, Y. Tanaka, T. Sato, S. Souma, T. Takahashi, S. Sasaki, K. Segawa and Y. Ando, “**Observation of Two-dimensional Bulk Electronic States in the Superconducting Topological Insulator Heterostructure Cu_x(PbSe)₅(Bi₂Se₃)₆: Implications for Unconventional Superconductivity**”, Phys. Rev. B, **92** (2015) 100508(R).
- Y. Ohtsubo, J. Kishi, K. Hagiwara, P. L. Fèvre, F. Bertran, A. Taleb-Ibrahimi, H. Yamane, S. Ideta, M. Matsunami, K. Tanaka and S. Kimura, “**Surface Tomonaga-Luttinger Liquid State on Bi/InSb(001)**”, Phys. Rev. Lett., **115** (2015) 256404.
- J. Okabayashi, S. Miyasaka, K. Hemmi, K. Tanaka, S. Tajima, H. Wadati, A. Tanaka, Y. Takagi and T. Yokoyama “**Investigating Orbital Magnetic Moments in Spinel-Type MnV₂O₄ Using X-ray Magnetic Circular Dichroism**”, J. Phys. Soc. Jpn., **84** (2015) 104703.
- K. Ozaki, S. Aoki, K. Kamada, T. Kosaka, F. Mizutani, E. Shibayama, S. Takahashi, Y. Tateishi, S. Tawa and K. Yamada, “**Development of New-type Nuclear Emulsion for a Balloon-borne Emulsion Gamma-ray Telescope Experiment**”, JINST, **10** (2015) 12018.
- T. Petit, H. Yuzawa, M. Nagasaka, R. Yamanoi, E. Osawa, N. Kosugi and E. F. Aziz, “**Probing Interfacial Water on Nanodiamonds in Colloidal Dispersion**”, J. Phys. Chem. Lett., **6** (2015) 2909.
- P. V. Pikhitsa, C. Kim, S. Chae, S. Shin, S. Jung, M. Kitaura, S. Kimura, K. Fukui and M. Choi, “**Two-band Luminescence from an Intrinsic Defect in Spherical and Terraced MgO Nanoparticles**”, Appl. Phys. Lett., **106** (2015) 183106.
- S. Souma, Z. Wang, H. Kotaka, T. Sato, K. Nakayama, Y. Tanaka, H. Kimizuka, T. Takahashi, K. Yamauchi, T. Oguchi, K. Segawa and Y. Ando, “**Direct Observation of Nonequivalent**

Fermi-arc States of Opposite Surfaces in the Noncentrosymmetric Weyl Semimetal NbP”, Phys. Rev. B, **93** (2016) 161112.

H. Yagi, T. Miyazaki, S. Okita, T. Zaima, H. Okimoto, N. Izumi, Y. Nakanishi, H. Shinohara and S. Hino, “Ultraviolet Photoelectron Spectra of $\text{Sc}_3\text{C}_2@\text{C}_{80}$ ”, Chem. Phys. Lett., **643** (2015) 98.

M. Yoshida, Y. Mitsutomi, T. Mineo, M. Nagasaka, H. Yuzawa, N. Kosugi and H. Kondoh,

“Direct Observation of Active Nickel Oxide Cluster in Nickel–Borate Electrocatalyst for Water Oxidation by In Situ O K-Edge X-ray Absorption Spectroscopy”, J. Phys. Chem. C, **119** (2015) 19279.

H. Yuzawa, M. Nagasaka and N. Kosugi, “*In Situ* Soft X-ray Absorption Spectroscopy Applied to Solid–Liquid Heterogeneous Cyanopyrazine Hydration Reaction on Titanium Oxide Catalyst”, J. Phys. Chem. C, **119** (2015) 7738.

IMS Open to the public

