

Publication list (as of April 2025)

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Submitted manuscripts

- [1] Ryo Noguchi, Iliya Esin, Jun-Yi Shan, Xinwei Li, Carina Belvin, Jaena Park, Sungmin Lee, Je-Geun Park, Gil Refael, and David Hsieh*, “*Coherent phonon generation via spin-mediated impulsive stimulated Raman scattering*”, under review.

Refereed papers

- [2] Ryo Noguchi, Masaru Kobayashi, Kaishu Kawaguchi, Wataru Yamamori, Kohei Aido, Chun Lin, Hiroaki Tanaka, Kenta Kuroda, Ayumi Harasawa, Viktor Kandyba, Mattia Cattelan, Alexei Barinov, Makoto Hashimoto, Donghui Lu, Masayuki Ochi, Takao Sasagawa*, Takeshi Kondo*, “*Robust Weak Topological Insulator in the Bismuth Halide $\text{Bi}_4\text{Br}_2\text{I}_2$* ”, [Phys. Rev. Lett. **133**, 086602 \(2024\)](#).
- [3] Kaishu Kawaguchi, Kenta Kuroda*, Z Zhao, S Tani, A Harasawa, Y Fukushima, H Tanaka, R. Noguchi, T Iimori, K Yaji, M Fujisawa, S Shin, F Komori, Y Kobayashi, Takeshi Kondo*, “*Time-, spin-, and angle-resolved photoemission spectroscopy with a 1-MHz 10.7-eV pulse laser*”, [Rev. Sci. Instrum. **94**, 083902 \(2023\)](#).
- [4] Kenta Kuroda*, Koichiro Yaji*, Ryo Noguchi, Ayumi Harasawa, Shik Shin, Takeshi Kondo, Fumio Komori, “*Visualization of optical polarization transfer to photoelectron spin vector emitted from the spin-orbit coupled surface state*”, [Phys. Rev. B **105**, L121106 \(2022\)](#).
- [5] Hiroaki Tanaka, Shota Okazaki, Kenta Kuroda*, Ryo Noguchi, Yosuke Arai, Susumu Minami, Shinichiro Ideta, Kiyohisa Tanaka, Donghui Lu, Makoto Hashimoto, Viktor Kandyba, Mattia Cattelan, Alexei Barinov, Takayuki Muro, Takao Sasagawa, Takeshi Kondo*, “*Large anomalous Hall effect induced by weak ferromagnetism in the noncentrosymmetric antiferromagnet CoNb_3S_6* ”, [Phys. Rev. B **105**, L121102 \(2022\)](#).
- [6] Yuxuan Wan, Lihai Wang, Kenta Kuroda, Peng Zhang, Keisuke Koshiishi, Masahiro Suzuki, Jaewook Kim, Ryo Noguchi, Cédric Bareille, Koichiro Yaji, Ayumi Harasawa, Shik Shin, Sang-Wook Cheong, Atsushi Fujimori, Takeshi Kondo*, “*Selective observation of surface and bulk bands in polar WTe_2 by laser-based spin- and angle-resolved photoemission spectroscopy*”, [Phys. Rev. B **105**, 085421 \(2022\)](#).
- [7] R. Noguchi*, K. Kuroda, M. Kawamura, K. Yaji, A. Harasawa, T. Iimori, S. Shin, F. Komori, T. Ozaki, and T. Kondo*, “*Scaling law for the Rashba-type spin splitting in quantum well films*”, [Phys. Rev. B **104**, L180409 \(2021\)](#).
- [8] C. Lin, M. Ochi, R. Noguchi, K. Kuroda, M. Sakoda, A. Nomura, M. Tsubota, P. Zhang, C. Bareille, K. Kurokawa, Y. Arai, K. Kawaguchi, H. Tanaka, K. Yaji, A. Harasawa, M. Hashimoto, D. Lu, S. Shin, R. Arita, S. Tanda, and T. Kondo*, “*Visualization of the strain-induced topological phase transition in a quasi-one-dimensional superconductor TaSe_3* ”, [Nat. Mater. **20**, 1093-1099 \(2021\)](#).
- [9] P. Zhang*, R. Noguchi, K. Kuroda, C. Lin, K. Kawaguchi, K. Yaji, A. Harasawa, M. Lippmaa, S. Nie,

- H. Weng, V. Kandyba, A. Giampietri, A. Barinov, Q. Li, G. D. Gu, S. Shin, and T. Kondo*, “*Observation and control of the weak topological insulator state in ZrTe₅*”, [Nat. Commun. 12, 406 \(2021\)](#).
- [10] R. Noguchi, M. Kobayashi, Z. Jiang, K. Kuroda, T. Takahashi, Z. Xu, D. Lee, M. Hirayama, M. Ochi, T. Shirasawa, P. Zhang, C. Lin, C. Bareille, S. Sakuragi, H. Tanaka, S. Kunisada, K. Kurokawa, K. Yaji, A. Harasawa, V. Kandyba, A. Giampietri, A. Barinov, T. K. Kim, C. Cacho, M. Hashimoto, D. Lu, S. Shin, R. Arita, K. Lai, T. Sasagawa*, and T. Kondo*, “*Evidence for a higher-order topological insulator in a three-dimensional material built from van der Waals stacking of bismuth-halide chains*”, [Nat. Mater. 20, 473-479 \(2021\)](#).
- [11] S. Kunisada, S. Isono, Y. Kohama, S. Sakai, C. Bareille, S. Sakuragi, R. Noguchi, K. Kurokawa, K. Kuroda, Y. Ishida, S. Adachi, R. Sekine, T. K. Kim, C. Cacho, S. Shin, T. Tohyama, K. Tokiwa*, and T. Kondo*, “*Observation of small Fermi pockets protected by clean CuO₂ sheets of a high-T_c superconductor*”, [Science 369, 833 \(2020\)](#).
- [12] K. Kuroda*, Y. Arai, N. Rezaei, S. Kunisada, S. Sakuragi, M. Alaei, Y. Kinoshita, C. Bareille, R. Noguchi, M. Nakayama, S. Akebi, M. Sakano, K. Kawaguchi, M. Arita, S. Ideta, K. Tanaka, H. Kitazawa, K. Okazaki, M. Tokunaga, Y. Haga, S. Shin, H. S. Suzuki, R. Arita, and T. Kondo, “*Devil's staircase transition of the electronic structures in CeSb*”, [Nat. Commun. 11, 2888 \(2020\)](#).
- [13] H. Tanaka, Y. Fujisawa, K. Kuroda*, R. Noguchi, S. Sakuragi, C. Bareille, B. Smith, C. Cacho, S. Jung, T. Muro, Y. Okada, T. Kondo*, “*Three-dimensional electronic structure in ferromagnetic Fe₃Sn₂ with breathing kagome bilayers*”, [Phys. Rev. B 101, 161114 \(2020\)](#).
- [14] C. Bareille*, T. Nam, T. Takabatake, K. Kuroda, T. Yajima, M. Nakayama, S. Kunisada, S. Akebi, M. Sakano, S. Sakuragi, R. Noguchi, B. Il Min, S. Shin, T. Kondo, “*Strongly anisotropic high-temperature Fermi surface of the Kondo semimetal CeNiSn revealed by angle-resolved photoemission spectroscopy Heavy Fermi-liquid Kondo insulator Kondo semimetal*”. [Phys. Rev. B 100, 045133 \(2019\)](#).
- [15] R. Noguchi, T. Takahashi, K. Kuroda, M. Ochi, T. Shirasawa, M. Sakano, C. Bareille, M. Nakayama, M. D. Watson, K. Yaji, A. Harasawa, H. Iwasawa, P. Dudin, T. K. Kim, M. Hoesch, V. Kandyba, A. Giampietri, A. Barinov, S. Shin, R. Arita, T. Sasagawa*, and T. Kondo*, “*A weak topological insulator state in quasi-one-dimensional bismuth iodide*”. [Nature 566, 518–522 \(2019\)](#).
- [16] M. Nakayama, Takeshi Kondo*, K. Kuroda, C. Bareille, M. D. Watson, S. Kunisada, R. Noguchi, T. K. Kim, M. Hoesch, Y. Yoshida, and S. Shin, “*Orbital-selective metal-insulator transition lifting the t_{2g} band hybridization in the Hund metal Sr₃(Ru_{1-x}Mn_x)₂O₇*”. [Phys. Rev. B 98, 161102\(R\) \(2018\)](#).
- [17] K. Kuroda, K. Yaji, A. Harasawa, R. Noguchi, T. Kondo, F. Komori, S. Shin, “*Experimental Methods for Spin- and Angle-Resolved Photoemission Spectroscopy Combined with Polarization-Variable Laser*”, [J. Vis. Exp. \(136\), e57090 \(2018\)](#).
- [18] K. Kuroda, M. Ochi, H. S. Suzuki, M. Hirayama, M. Nakayama, R. Noguchi, C. Bareille, S. Akebi, S. Kunisada, T. Muro, M. D. Watson, H. Kitazawa, Y. Haga, T. K. Kim, M. Hoesch, S. Shin, R. Arita, and Takeshi Kondo, “*Experimental determination of the topological phase diagram in cerium monopnictides*”, [Phys. Rev. Lett. 120, 086402 \(2018\)](#).
- [19] K. Kuroda, T. Tomita, M.-T. Suzuki, C. Bareille, A. A. Nugroho, P. Goswami, M. Ochi, M. Ikhlas, M. Nakayama, S. Akebi, R. Noguchi, R. Ishii, N. Inami, K. Ono, H. Kumigashira, A. Varykhalov, T. Muro,

T. Koretsune, R. Arita, S. Shin, T. Kondo, and S. Nakatsuji*, “Evidence for magnetic Weyl fermions in a correlated metal”, [Nat. Mater. 16, 1090 \(2017\)](#).

- [20] Ryo Noguchi, Kenta Kuroda*, K. Yaji, K. Kobayashi, M. Sakano, A. Harasawa, T. Kondo, F. Komori, S. Shin, “Direct mapping of spin and orbital entangled wave functions under interband spin-orbit coupling of giant Rashba spin-split surface states”, [Phys. Rev. B 95, 041111\(R\) \(2017\)](#).

Preprints

- [21] S. Sakuragi*, S. Sasaki, R. Akashi, R. Sakagami, K. Kuroda, C. Bareille, T. Hashimoto, T. Nagashima, Y. Kinoshita, Y. Hirata, M. Shimozaawa, S. Asai, T. Yajima, S. Doi, N. Tsujimoto, S. Kunisada, [R. Noguchi](#), K. Kurokawa, N. Azuma, K. Hirata, Y. Yamasaki, H. Nakao, T. K. Kim, C. Cacho, T. Masuda, M. Tokunaga, H. Wadati, K. Okazaki, S. Shin, Y. Kamihara, M. Yamashita, T. Kondo*, “Spintronic superconductor in a bulk layered material with natural spin-valve structure”, [arXiv: 2001.07991 \(2020\)](#).

Books

- [22] Ryo Noguchi, “Designing Topological Phase of Bismuth Halides and Controlling Rashba Effect in Films Studied by ARPES”, [Springer Theses Book Series, Springer Nature \(2022\)](#).

Articles written in Japanese

- [23] (Review article) Ryo Noguchi, “Topological Electronic Structures of Quasi-one-dimensional Bismuth Halides Investigated by Angle-resolved Photoemission Spectroscopy” [Vacuum and Surface Science 10, 574 \(2023\)](#).