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Education

2010 B.S. (Science) Science, Osaka University, Japan.

2012 M.A. (Science) Engineering science, Osaka University, Japan.

2015 Ph.D. (Science) Engineering science, Osaka University, Japan.

Employment

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Committee service

Affiliated academic society: Physical Society of Japan, Japan Society of High Pressure Science and Technology

Editorial committee of the review of high pressure science and technology, 2020-2023.

Funding Information

KAKENHI (See https://nrid.nii.ac.jp/en/nrid/1000080757261/)

Murata science foundation (H29)

Murata science foundation (R06)

Publications

Journal Articles

1. Y. Ishii, T. Sakakura, Y. Ishikawa, R. Kiyanagi, J. Lustikova, T. Aoyama, K. Ohgushi, Y. Wakabayashi, H. Kimura, and Y. Noda, Nonferroelectric phase with loss of cycloidal magnetic structure in $Tb_{0.515}Gd_{0.485}Mn_2O_5$, Phys. Rev. B **110**, 184404 (2024).

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9. T. Zhu, X.-Z. Lu, T. Aoyama, K. Fujita, Y. Nambu, T. Saito, H. Takatsu, T. Kawasaki, T. Terauchi, S. Kurosawa, A. Yamaji, H.-B. Li, C. Tassel, K. Ohgushi, J. M. Rondinelli, and H. Kageyama, Thermal multiferroics in all-inorganic quasi-two-dimensional halide perovskites, Nat. Mater. **23**, 182 (2024).

10. T. Aoyama, R. Nojima, T. Yamauchi, Y. Imai, and K.Ohgushi, Pressure-induced switching of electronic nematicity in the iron-based ladder materials $BaFe_2(S_{1-x}Se_x)_3$ (x = 0 − 1), *Phys. Rev.* B, **108**, 094507 (2023).

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12. T. Aoyama, M. Kudo, K. Igarashi, K. Emi, S. Kimura, Y. Imai, and K. Ohgushi, Enhanced anisotropic magnetoresistance in the odd-parity multipole-ordered conductor $Ba_{1-x}K_xMn_2As_2$, *Phys. Rev.* B, **105**, 224422 (2022).

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14. H. Takahashi, R. Kikuchi, C. Kawashima, S. Imaizumi, T. Aoyama, and K. Ohgushi, Pressure-Induced Superconductivity in Iron-Based Spin-Ladder Compound $BaFe_{2+\delta}(S_{1-x}Se_x)_3$, Materials **15**, 1401 (2022).

15. Y. Imai, K. Nawa, Y. Shimizu, W. Yamada, H. Fujihara, T. Aoyama, R. Takahashi, D. Okuyama, T. Ohashi, M. Hagihala, S. Torii, D. Morikawa, M. Terauchi, T. Kawamata, M. Kato, H. Gotou, M. Itoh, T.J. Sato, and K. Ohgushi, Zigzag magnetic order in the Kitaev spin-liquid candidate material $RuBr_3$ with a honeycomb lattice, *Phys. Rev.* B, **105**, Lo41112 (2022).

16. K. Nawa, Y. Imai, Y. Yamaji, H. Fujihara, W. Yamada, R. Takahashi, T. Hiraoka, M. Hagihala, S. Torii, T. Aoyama, T. Ohashi, Y. Shimizu, H. Gotou, M. Itoh, K. Ohgushi, and T. J. Sato, Strongly Electron-Correlated Semimetal RuI_3 with a Layered Honeycomb Structure, *J. Phys. Soc. Jpn.*, **90**, 123703 (2021).

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18. M. Murase, K. Okada, Y. Kobayashi, Y. Hirata, K. Hashizume, T. Aoyama, K. Ohgushi, and M. Itoh, Successive magnetic transitions and spin structure in the two-leg ladder compound $CsFe_2Se_3$ observed by ^{133}Cs and ^{77}Se NMR, *Phys. Rev.* B **102**, 014433 (2020).

19. S. Imaizumi, T. Aoyama, R. Kimura, K. Sasaki, Y. Nambu, M. Avdeev, Y. Hirata, Y. Ikemoto, T. Moriwaki, Y. Imai, and K. Ohgushi, Structural, electrical, magnetic, and optical properties of iron-based ladder compounds $BaFe_2(S_{1-x}Se_x)_3$, *Phys. Rev.* B **102**, 035104 (2020).

20. Y. Imai, K. Sasaki, T. Aoyama, K. Shirasaki, T. Yamamura, and K. Ohgushi, High-pressure synthesis of heavily hole-doped cuprates $Mg_{1-x}Li_xCu_2O_3$ with quasi-one-dimensional structure, *Phys. Rev.* B **101**, 245112 (2020).

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