

Publication list

Superconductivity induced by interband nesting in the three-dimensional honeycomb lattice

Seiichiro Onari, Kazuhiko Kuroki, Ryotaro Arita, and Hideo Aoki

Physical Review B **65**, 184525_1-184525_6 (2002)

Effect of inter-band nesting on superconductivity in stacked honeycomb lattices

Seiichiro Onari, Kazuhiko Kuroki, Ryotaro Arita, and Hideo Aoki

Physica B **329**, 1437-1439 (2003)

Superconductivity in repulsive electron systems with three-dimensional disconnected Fermi surfaces

Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki

Physical Review B **68**, 024525_1-024525_7 (2003)

Off-site repulsion-induced triplet superconductivity:

A possibility for chiral p_{xy} -wave pairing in Sr_2RuO_4

Ryotaro Arita, Seiichiro Onari, Kazuhiko Kuroki, and Hideo Aoki

Physical Review Letters **92**, 247006_1-247006_4 (2004)

Phase diagram of the two-dimensional extended Hubbard model: Phase transitions between different pairing symmetries when charge and spin fluctuations coexist

Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki

Physical Review B **70**, 094523_1-094523_6 (2004)

Phase diagram of the two-dimensional extended Hubbard model: pairing from charge and spin fluctuations

Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki

Physica B **359-361**, 518-520 (2005)

Off-site repulsion-induced triplet pairing: DCA and FLEX study for Sr_2RuO_4

Ryotaro Arita, Seiichiro Onari, Kazuhiko Kuroki, and Hideo Aoki

Physica B **359-361**, 584-586 (2005)

Spin-Triplet Superconductivity Induced by Charge Fluctuations in Extended Hubbard Model

Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki

Journal of the Physical Society of Japan **74**, 2579-2585 (2005)

Superconductivity from a long-range interaction: a crossover between the electron gas and the lattice model

Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki

Physical Review B **73**, 014526_1-014526_5 (2006)

Extended s-wave pairing originating from the a_{1g} band in Na_xCoO₂·yH₂O: Single-band U-V model with fluctuation exchange method

Kazuhiko Kuroki, Seiichiro Onari, Yukio Tanaka, Ryotaro Arita, and Takumi Nojima

Physical Review B **73**, 184503_1-184503_6 (2006)

Transport phenomena in a three-dimensional system close to the magnetic quantum critical point: The conserving approximation with current vertex corrections

Seiichiro Onari, Hiroshi Kontani, and Yukio Tanaka

Physical Review B **73**, 224434_1-224434_10 (2006)

Anomalous transport phenomena in CeCoIn₅ close to quantum critical point

Seiichiro Onari, Hiroshi Kontani, and Yukio tanaka

Journal of Magnetism and Magnetic Materials **310**, 359-361 (2007)

Theory of Superconductivity of Carbon Nanotubes and Graphene

Ken-ichi Sasaki, Jie Jiang, Riichiro Saito, Seiichiro Onari, and Yukio Tanaka

Journal of Physical Society of Japan **76**, 033702_1-033702_4 (2007)

Unified Origin for the 3D Magnetism and Superconductivity in Na_xCoO₂

Kazuhiko Kuroki, Shuhei Ohkubo, Takumi Nojima, Ryotaro Arita, Seiichiro Onari, and Yukio Tanaka

Physical Review Letters **98**, 136401_1-136401_4 (2007)

Local density of states at zigzag edges of carbon nanotubes and graphene

Ken-ichi Sasaki, Kentaro Sato, Riichiro Saito, Jie Jiang, Seiichiro Onari, and Yukio Tanaka

Physical Review B **75**, 235430_1-235430_7 (2007)

Superconductivity due to spin fluctuations originating from multiple Fermi surfaces in the double chain superconductor $\text{Pr}_2\text{Ba}_4\text{Cu}_7\text{O}_{15-\delta}$

Tsuguhito Nakano, Kazuhiko Kuroki, and Seiichiro Onari

Physical Review B **76**, 014515_1-014515_7 (2007)

Phase diagram of half-filled square lattice for frustrated Hubbard model

Seiichiro Onari, Hisatoshi Yokoyama, and Yukio Tanaka

Physica C **463–465**, 120–122 (2007)

Quasiparticle density of states in high-Tc superconductors in the superconducting state

Tetsuya Hata, Seiichiro Onari, Syuta Honda, Hiroyoshi Itoh, Yukio Tanaka, and Jun-ichiro Inoue

Physica C **463–465**, 123–125 (2007)

Variational Monte Carlo study of pairing symmetry in Sr_2RuO_4

Shogo Fujita, Tsutomu Watanabe, Seiichiro Onari, Hisatoshi Yokoyama, Yukio Tanaka, and Jun-ichiro Inoue

Physica C **463–465**, 134–137 (2007)

Enhanced triplet superconductivity in noncentrosymmetric systems

Takehito Yokoyama, Seiichiro Onari, and Yukio Tanaka

Physical Review B **75**, 172511_1-172511_4 (2007)

Spin-dependent Mass Enhancement under a Magnetic Field in the Periodic Anderson Model

Seiichiro Onari, Hiroshi Kontani, and Yukio Tanaka

Journal of the Physical Society of Japan **77**, 023703_1-023703_4 (2008)

Theory of Fulde-Ferrell-Larkin-Ovchinnikov state of superconductors with and without inversion symmetry: Hubbard model approach

Takehito Yokoyama, Seiichiro Onari, and Yukio Tanaka

Journal of the Physical Society of Japan **77**, 064711_1-064711_8 (2008)

Unified origin for superconductivity and 3D magnetism in Na_xCoO_2

Kazuhiko Kuroki, Ryotaro Arita, Shuhei Okubo, Takumi Nojima, Hidetomo Usui, Seiichiro Onari, and Yukio Tanaka

Physica B **403**, 1151-1153 (2008)

Fluctuation exchange study on the double chain superconductor $\text{Pr}_2\text{Ba}_4\text{Cu}_7\text{O}_{15-\delta}$

Tsuguhito Nakano, Kazuhiko Kuroki, and Seiichiro Onari

Physica B **403**, 1159-1161 (2008)

Unconventional Pairing Originating from the Disconnected Fermi Surfaces of Superconducting $\text{LaFeAsO}_{1-x}\text{F}_x$

Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki

Physical Review Letters **101**, 087004_1-087004_4 (2008)

Intrinsic spin Hall effect in graphene: Numerical calculations in a multiorbital model

Seiichiro Onari, Yasuhito Ishikawa, Hiroshi Kontani, and Jun-ichiro Inoue

Physical Review B **78**, 121403_1-121403_4(R) (2008)

Roles of spin fluctuation and frustration in the superconductivity of beta-(BDA-TTP) $_2$ X (X=SbF $_6$,AsF $_6$) under uniaxial compression

Hiroshi Ito, Tetsuo Ishihara, Hisaaki Tanaka, Shin-ichi Kuroda, Takeo Suzuki, Seiichiro Onari, Yukio Tanaka, Jun-ichi Yamada, and Koichi Kikuchi

Physical Review B **78**, 172506_1- 172506_4 (2008)

Odd-frequency superconductivity on the Hubbard model using the FLEX approximation

Yuichiro Shimokaji, Seiichiro Onari, Yukio Tanaka, and Kazumasa Miyake

Journal of Physics and Chemistry of Solids **69**, 3280-3282 (2008)

Electronic state on the surface in the strongly correlated electron systems

Seiichiro Onari, Tetsuya Hata, Yukio Tanaka, and Jun-ichiro Inoue

Journal of Physics and Chemistry of Solids **69**, 3307-3309 (2008)

Spin-triplet superconductivity induced by off-site Coulomb interaction in a triangular lattice

Hiroshi Kimura, Seiichiro Onari, and Yukio Tanaka

Journal of Physics and Chemistry of Solids **69**, 3310-3312 (2008)

Odd-frequency superconductivity in the 2D extended Hubbard model

Keiji Yada, Yuichiro Shimokaji, Seiichiro Onari, Yukio Tanaka and Kazumasa Miyake

Journal of Physics and Chemistry of Solids **69**, 3321-3323 (2008)

Exact diagonalization study on the extended Hubbard model in an anisotropic triangular lattice

Ken Kanada, Tsutomu Watanabe, Seiichiro Onari, and Yukio Tanaka

Journal of Physics and Chemistry of Solids **69**, 3334-3336 (2008)

Unified origin for superconductivity, magnetism, and large thermopower in Na_xCoO_2

Kazuhiko Kuroki, Shuhei Okubo, Takumi Nojima, Hidetomo Usui, Ryotaro Arita, Seiichiro Onari, and Yukio Tanaka

Journal of Physics and Chemistry of Solids **69**, 3360-3364 (2008)

Unconventional Superconductivity Originating from Disconnected Fermi Surfaces in the Iron-Based Oxypnictide

Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki

Journal of the Physical Society of Japan **77**, Supplement C 96-98 (2008)

Unconventional pairing originating from disconnected Fermi surfaces in the iron-based superconductor

Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki

New Journal of Physics **11**, 025017_1-025017_8 (2009)

Theory of odd-frequency pairings on a quasi-one-dimensional lattice in the Hubbard model

Keisuke Shigeta, Seiichiro Onari, Keiji Yada, and Yukio Tanaka

Physical Review B **79**, 174507_1-174507_6 (2009)

Surface density of states of $s\pm$ -wave Cooper pairs in a two-band superconductor model

Seiichiro Onari and Yukio Tanaka

Physical Review B **79**, 174526_1-174526_6 (2009)

Pnictogen height as a possible switch between high- T_c nodeless and low- T_c nodal pairings in the iron-based superconductors

Kazuhiko Kuroki, Hidetomo Usui, Seiichiro Onari, Ryotaro Arita, and Hideo Aoki

Physical Review B **79**, 224511_1-224511_16 (2009)

Theory of tunneling spectroscopy in $\text{LaFeAsO}_{1-x}\text{F}_x$

Seiichiro Onari and Yukio Tanaka

Physica C **469**, 912-914 (2009)

Superconductivity under uniaxial compression in beta-(BDA-TTP) salts

Takeo Suzuki, Seiichiro Onari, Hiroshi Ito, and Yukio Tanaka

Physica C **469**, 979-981 (2009)

Odd-frequency superconductivity on quasi-one-dimensional triangular lattice in the Hubbard model

Keisuke Shigeta, Seiichiro Onari, Keiji Yada, and Yukio Tanaka

Physica C **469**, 988-990 (2009)

Odd-frequency pairings in a non-centrosymmetric system

Keiji Yada, Seiichiro Onari, and Yukio Tanaka

Physica C **469**, 991-994 (2009)

Minimal model for study on superconductivity in $\text{LaFeAsO}_{1-x}\text{F}_x$ based on ab-initio downfolding

Ryotaro Arita, Seiichiro Onari, Hidetomo Usui, Kazuhiko Kuroki, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki

Journal of Physics: Conference Series **150**, 052010_1-052010_4 (2009)

Electrically controlled superconducting states at the heterointerface $\text{SrTiO}_3/\text{LaAlO}_3$

Keiji Yada, Seiichiro Onari, Yukio Tanaka, and Jun-ichiro Inoue

Physical Review B **80**, 140509_1-140509_4(R) (2009)

Violation of Anderson's Theorem for the Sign-Reversing s -Wave State of Iron-Pnictide Superconductors

Seiichiro Onari and Hiroshi Kontani

Physical Review Letters **103**, 177001_1-177001_4 (2009)

Structure of neutron-scattering peaks in both s_{++} -wave and $s_{\pm}$ -wave states of an iron pnictide superconductor

Seiichiro Onari, Hiroshi Kontani, and Masatoshi Sato

Physical Review B **81**, 060504_1-060504_4(R) (2010)

Orbital-Fluctuation-Mediated Superconductivity in Iron Pnictides: Analysis of the Five-Orbital Hubbard-Holstein Model

Hiroshi Kontani and Seiichiro Onari

Physical Review Letters **104**, 157001_1-157001_4 (2010)

Superconductivity of β -type salts under uniaxial compression

Hiroshi Ito, Tetsuo Ishihara, Masafumi Niwa, Takeo Suzuki, Seiichiro Onari, Yukio Tanaka,
Jun-ichi Yamada, Hideki Yamochi, Gunzi Saito

Physica B **405**, S262–S264 (2010)

Spin Hall effect in a curved graphene with spin-orbit interaction

Takashi Kato, Seiichiro Onari, Jun-ichiro Inoue

Physica E **42**, 729-731 (2010)

Nonmagnetic impurity effects and neutron scattering spectrum in iron pnictides

Seiichiro Onari and Hiroshi Kontani

Physica C **470**, 1007-1009 (2010)

Orbital fluctuation theory in iron pnictides: Effects of As-Fe-As bond angle, isotope substitution, and Z^2 -orbital pocket on superconductivity

Tetsuro Saito, Seiichiro Onari, and Hiroshi Kontani

Physical Review B **82**, 144510_1-144510_10 (2010)

Pnictogen height as a switch between high- T_c nodeless and low- T_c nodal pairings in the iron-based superconductors

Kazuhiko Kuroki, Hidetomo Usui, Seiichiro Onari, Ryotaro Arita and Hideo Aoki

Physica C **470**, S416-S417 (2010)

Theory of Josephson Effect in Strongly Correlated Electron Systems

Takehito Yokoyama, Seiichiro Onari and Yukio Tanaka

Physica C **470**, S884-S885 (2010)

Density of state in the odd-frequency superconducting state in a quasi-one-dimensional system

Keisuke Shigeta, Seiichiro Onari, Keiji Yada and Yukio Tanaka

Physica C **470**, S959-S961 (2010)

Competition of pairing symmetries and a mechanism for Berezinskii pairing in quasi-one-dimensional systems

Keisuke Shigeta, Yukio Tanaka, Kazuhiko Kuroki, Seiichiro Onari, and Hirohito Aizawa

Physical Review B **83**, 140509_1-140509_4(R) (2011)

Emergence of fully gapped s_{++} -wave and nodal d -wave states mediated by orbital and spin fluctuations in a ten-orbital model of KFe_2Se_2

Tetsuro Saito, Seiichiro Onari, and Hiroshi Kontani

Physical Review B **83**, 140512_1-140512_4(R) (2011)

Origin of orthorhombic transition, magnetic transition, and shear-modulus softening in iron pnictide superconductors: Analysis based on the orbital fluctuations theory

Hiroshi Kontani, Tetsuro Saito, and Seiichiro Onari

Physical Review B **84**, 024528_1-024528_17 (2011)

Theory of the β -Type Organic Superconductivity under Uniaxial Compression

Takeo Suzuki, Seiichiro Onari, Hiroshi Ito, and Yukio Tanaka

Journal of the Physical Society of Japan **80**, 094704_1-094704_8 (2011)

Study of non-Fermi-liquid-like state and pairing symmetry in iron pnictides based on the multiorbital Hubbard-Holstein model

Seiichiro Onari and Hiroshi Kontani

Physica C **471**, 670-674 (2011)

Neutron inelastic scattering peak by dissipationless mechanism in the s_{++} -wave state in iron-based superconductors

Seiichiro Onari and Hiroshi Kontani

Physical Review B **84**, 144518_1-144518_9 (2011)

Non-Fermi-liquid transport phenomena and superconductivity driven by orbital fluctuations in iron pnictides: Analysis by fluctuation-exchange approximation

Seiichiro Onari and Hiroshi Kontani

Physical Review B **85**, 134507_1-134507_6 (2012)

Orbital fluctuation theory in iron-based superconductors: s_{++} -wave superconductivity, structure transition, and impurity-induced nematic order

Hiroshi Kontani, Yoshio Inoue, Tetsuro Saito, Youichi Yamakawa, Seiichiro Onari

Solid State Communications **152**, Issue 8, 718-727 (2012)

Symmetry of superconducting pairing state in a staggered field

Keisuke Shigeta, Seiichiro Onari, and Yukio Tanaka

Physical Review B **85**, 224509_1-224509_13 (2012)

Effect of inelastic scattering on the nuclear magnetic relaxation rate $1/T_1T$ in iron-based superconductors

Youichi Yamakawa, Seiichiro Onari and Hiroshi Kontani

Superconductor Science and Technology **25**, 084006_1-084006_9 (2012)

**Self-Consistent Vertex Correction Analysis for Iron-Based Superconductors:
Mechanism of Coulomb-Interaction-Driven Orbital Fluctuations**

Seiichiro Onari and Hiroshi Kontani

Physical Review Letters **109**, 137001_1-137001_5 (2012)

Observation of the hole state symmetry of MgB_2 by inelastic scattering of fast electrons accompanied by boron K-shell excitation

Koh Saitoh, Kota Momonoi, Nobuo Tanaka, and Seiichiro Onari

Journal of Applied Physics **112**, 113920_1-113920_5 (2012)

Spin-Fluctuation-Driven Orbital Nematic Order in Ru-Oxides: Self-Consistent Vertex Correction Analysis for Two-Orbital Model

Yusuke Ohno, Masahisa Tsuchiizu, Seiichiro Onari, and Hiroshi Kontani

Journal of the Physical Society of Japan **82**, 013707_1-013707_4 (2013)

Superconducting Pairing Symmetry on the Extended Hubbard Model in the Presence of the Rashba-Type Spin-Orbit Coupling

Keisuke Shigeta, Seiichiro Onari, and Yukio Tanaka

Journal of the Physical Society of Japan **82**, 014702_1-014702_9 (2013)

Effect of realistic finite-size impurities on T_c in Fe-based superconductors based on the five-orbital tight-binding model

Youichi Yamakawa, Seiichiro Onari and Hiroshi Kontani

Physical Review B **87**, 195121_1- 195121_10 (2013)

Orbital Nematic Instability in Two-Orbital Hubbard Model: Renormalization-Group + Constrained RPA Analysis

Masahisa Tsuchiizu, Yusuke Ohno, Seiichiro Onari, Hiroshi Kontani

Physical Review Letters **111**, 057003_1-057003_5 (2013)

Zigzag chain structure transition and orbital fluctuations in Ni-based superconductors

Youichi Yamakawa, Seiichiro Onari, Hiroshi Kontani

Journal of the Physical Society of Japan **82**, 094704_1-094704_6 (2013)

Nodal gap structure in Fe-based superconductors due to the competition between orbital and spin fluctuations

Tetsuro Saito, Seiichiro Onari, Hiroshi Kontani

Physical Review B **88**, 045115_1- 045115_11 (2013)

Phase diagram and superconducting states in $\text{LaFeAsO}_{1-x}\text{H}_x$ based on the multiorbital extended Hubbard model

Youichi Yamakawa, Seiichiro Onari, Hiroshi Kontani, Naoki Fujiwara, Soshi Iimura, Hideo Hosono

Physical Review B **88**, 041106(R)_1- 041106(R)_5 (2013)

Possible Odd-Frequency Pairing in Quasi-One-Dimensional Organic Superconductors $(\text{TMTSF})_2\text{X}$

Keisuke Shigeta, Seiichiro Onari, and Yukio Tanaka

Journal of the Physical Society of Japan **82**, 104702_1-104702_5 (2013)

Superconductivity in $\text{Ca}_{1-x}\text{La}_x\text{FeAs}_2$: A Novel 112-Type Iron Pnictide with Arsenic Zigzag Bonds

Naoyuki Katayama, Kazutaka Kudo, Seiichiro Onari, Tasuku Mizukami, Kento Sugawara, Yuki Sugiyama, Yutaka Kitahama, Keita Iba, Kazunori Fujimura, Naoki Nishimoto, Minoru Nohara, Hiroshi Sawa

Journal of the Physical Society of Japan **82**, 123702_1-123702_4 (2013)

**High- T_c Superconductivity near the Anion Height Instability in Fe-Based Superconductors:
Analysis of $\text{LaFeAsO}_{1-x}\text{H}_x$**

Seiichiro Onari, Youichi Yamakawa, and Hiroshi Kontani

Physical Review Letters **112**, 187001_1-187001_5 (2014)

Reproduction of experimental gap structure in LiFeAs based on orbital-spin fluctuation theory: s_{++} -wave, $s_{\pm}$ -wave, and hole- $s_{\pm}$ -wave states

Tetsuro Saito, Seiichiro Onari, Youichi Yamakawa, Hiroshi Kontani, Sergey V. Borisenko, and Volodymyr B. Zabolotnyy

Physical Review B **90**, 035104_1- 035104_10 (2014)

Anisotropy of the superconducting gap in the iron-based superconductor $\text{BaFe}_2(\text{As}_{1-x}\text{P}_x)_2$

T. Yoshida, S. Ideta, T. Shimojima, W. Malaeb, K. Shinada, H. Suzuki, I. Nishi, A. Fujimori, K. Ishizaka, S. Shin, Y. Nakashima, H. Anzai, M. Arita, A. Ino, H. Namatame, M. Taniguchi, H. Kumigashira, K. Ono, S. Kasahara, T. Shibauchi, T. Terashima, Y. Matsuda, M. Nakajima, S. Uchida, Y. Tomioka, T. Ito, K. Kihou, C. H. Lee, A. Iyo, H. Eisaki, H. Ikeda, R. Arita, T. Saito, S. Onari, and H. Kontani

Scientific Reports **4**, 7292_1-7292_6 (2014)

Eilenberger theory for nuclear magnetic relaxation rate in superconducting vortex lattice state

Kenta Tanaka, Masanori Ichioka, Seiichiro Onari, Noriyuki Nakai, and Kazushige Machida

Physical Review B **91**, 014509_1- 014509_8 (2015)

Spin-triplet superconductivity in Sr_2RuO_4 due to orbital and spin fluctuations: Analyses by two-dimensional renormalization group theory and self-consistent vertex-correction method

Masahisa Tsuchiizu, Youichi Yamakawa, Seiichiro Onari, Yusuke Ohno, and Hiroshi Kontani

Physical Review B **91**, 155103_1-155103_8 (2015)

Superconductivity in MgPtSi : An orthorhombic variant of MgB_2

Kazutaka Kudo, Kazunori Fujimura, Seiichiro Onari, Hiromi Ota, Minoru Nohara

Physical Review B **91**, 174514_1-174514_5 (2015)

Revisiting orbital-fluctuation-mediated superconductivity in LiFeAs : Nontrivial spin-orbit interaction effects on the band structure and superconducting gap function

Tetsuro Saito, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani

Physical Review B **92**, 134522_1- 134522_11 (2015)

Sign-Reversing Orbital Polarization in the Nematic Phase of FeSe due to the C_2 Symmetry Breaking in the Self-Energy

Seiichiro Onari, Youichi Yamakawa, and Hiroshi Kontani

Physical Review Letters **116**, 227001_1-227001_6 (2016)

Nematicity and Magnetism in FeSe and Other Families of Fe-Based Superconductors

Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani

Physical Review X **6**, 021032_1-021032_15 (2016)

Site-selective NMR for odd-frequency Cooper pairs around vortex in chiral p -wave superconductors

Kenta Tanaka, Masanori Ichioka, and Seiichiro Onari

Physical Review B **93**, 094507_1- 094507_5 (2016)

Iron arsenides with three-dimensional FeAs layer networks:

$\text{Ca}_{n(n+1)/2}(\text{Fe}_{1-x}\text{Pt}_x)_{(2+3n)}\text{Pt}_{n(n-1)/2}\text{As}_{(n+1)(n+2)/2}$ ($n = 2, 3$)

Naoyuki Katayama, Seiichiro Onari, Kazuyuki Matsubayashi, Yoshiya Uwatoko, and Hiroshi Sawa

Scientific Reports **6**, 39280_1-39280_6 (2016)

Spin-polarized local density of states in the vortex state of helical p -wave superconductors

Kenta K. Tanaka, Masanori Ichioka, and Seiichiro Onari

Physical Review B **95**, 134502_1-134502_6 (2017)

Electronic structures and spin states of BaFe_2As_2 and SrFe_2As_2 probed by x-ray emission spectroscopy at Fe and As K-absorption edges

Hitoshi Yamaoka, Yoshiya Yamamoto, Jung-Fu Lin, Junjie J. Wu, Xiancheng Wang, Changqing Jin, Masahiro Yoshida, Seiichiro Onari, Shigeyuki Ishida, Yoshinori Tsuchiya, Nao Takeshita, Nozomu Hiraoka, Hirofumi Ishii, Ku-Ding Tsuei, Paul Chow, Yuming Xiao, and Jun'ichiro Mizuki

Physical Review B **96**, 085129_1-085129_12 (2017)

Pair breaking of multigap superconductivity under parallel magnetic fields in the electric-field-induced surface metallic state

Masahiro Nabeta, Kenta K. Tanaka, Seiichiro Onari, and Masanori Ichioka

Physical Review B **96**, 094522_1-094522_8 (2017)

In-plane anisotropy of transport coefficients in electronic nematic states: Universal origin of nematicity in Fe-based superconductors

Seiichiro Onari and Hiroshi Kontani

Physical Review B **96**, 094527_1-094527_8 (2017)

Orbital Order in Two-Orbital Hubbard Model

Kojiro Honkawa and Seiichiro Onari

Journal of the Physical Society of Japan **87**, 034703_1-034703_5 (2018)

Local NMR relaxation rates T_1^{-1} and T_2^{-1} depending on the d -vector symmetry in the vortex state of chiral and helical p -wave superconductors

Kenta K. Tanaka, Masanori Ichioka, and Seiichiro Onari

Physical Review B **97**, 134507_1-134507_10 (2018)

Paramagnetic Pair-Breaking in Spin-Triplet Superconductors with Spin-Orbit Coupling: Application to Sr_2RuO_4

Koushi Oda, Kenta K. Tanaka, Seiichiro Onari, and Masanori Ichioka

Journal of the Physical Society of Japan **88**, 064707_1-064707_10 (2019)

Study of the Pressure-Induced Second Superconducting Phase of $(\text{NH}_3)_y\text{Cs}_{0.4}\text{FeSe}$ with Double-Dome Superconductivity

Yoshiya Yamamoto, Hitoshi Yamaoka, Seiichiro Onari, Masahiro Yoshida, Naohisa Hirao, Saori Kawaguchi, Yasuo Oishi, Xiao Miao, Yoshihiro Kubozono, Jung-Fu Lin, Nozomu Hiraoka, Hirofumi Ishii, Yen-Fa Liao, Ku-Ding Tsuei, and Jun'ichiro Mizuki

Journal of the Physical Society of Japan **88**, 074704_1-074704_5 (2019)

Origin of diverse nematic orders in Fe-based superconductors: 45 degrees rotated nematicity in AFe_2As_2 ($\text{A}=\text{Cs}, \text{Rb}$)

Seiichiro Onari and Hiroshi Kontani

Physical Review B **100**, 020507(R)_1- 020507(R)_5 (2019)

Superconductivity in 5d transition metal Laves phase SrIr_2

R. Horie, K. Horigane, S. Nishiyama, M. Akimitsu, K. Kobayashi, S. Onari, T. Kambe, Y. Kubozono, J. Akimitsu

Journal of Physics: Condensed Matter **32**, 175703_1- 175703_8 (2020)

Doping effects on electronic states in electron-doped FeSe: Impact of self-energy and vertex corrections

Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani
Physical Review B **102**, 081108(R)_1-081108(R)_6 (2020).

Hidden antiferromagnetic order in Fe-based superconductor BaFe₂As₂ and NaFeAs above T_S

Seiichiro Onari and Hiroshi Kontani
Physical Review Research **2**, 042005(R)_1- 042005(R)_6 (2020)

Spin-fluctuation-driven B_{1g} and B_{2g} Bond Order and Induced In-plane Anisotropy in Magnetic Susceptibility in Cuprate Superconductors: Impact of Hot-/Cold-spot Structure on Bond-order Symmetry

Kawaguchi Kouki, Onari Seiichiro, and Kontani Hiroshi
Journal of the Physical Society of Japan **89**, 124704_1-124704_9 (2020)

Odd-parity spin-loop-current order mediated by transverse spin fluctuations in cuprates and related electron systems

Hiroshi Kontani, Youichi Yamakawa, Rina Tazai, and Seiichiro Onari,
Physical Review Research **3**, 013127_1-013127_12 (2021).

Development of Spin Fluctuations under the Presence of d-wave Bond Order in Cuprate Superconductors

Satoshi Ando, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani,
Journal of the Physical Society of Japan **90**, 063704_1-063704_5 (2021).

Electronic and crystal structures of LnFeAsO_{1-x}H_x (Ln = La, Sm) studied by x-ray absorption spectroscopy, x-ray emission spectroscopy, and x-ray diffraction (part I: carrier-doping dependence)

Yoshiya Yamamoto, Hitoshi Yamaoka, Takayuki Uozumi, Atsushi Hariki, Seiichiro Onari, Jun-ichi Yamaura, Kenji Ishii, Takuma Kawai, Masahiro Yoshida, Munetaka Taguchi, Kensuke Kobayashi, Jung-Fu Lin, Nozomu Hiraoka, Hirofumi Ishii, Ku-Ding Tsuei, Hiroshi Okanishi, Soshi Iimura, Satoru Matsuishi, Hideo Hosono and Jun'ichiro Mizuki
Journal of Physics: Condensed Matter **33** 255602_1-255602_11 (2021).

Electronic and crystal structures of $\text{LnFeAsO}_{1-x}\text{H}_x$ ($\text{Ln} = \text{La, Sm}$) studied by x-ray absorption spectroscopy, x-ray emission spectroscopy, and x-ray diffraction (part II: pressure dependence)

Yoshiya Yamamoto, Hitoshi Yamaoka, Takuma Kawai, Masahiro Yoshida, Jun-ichi Yamaura, Kenji Ishii, Seiichiro Onari, Takayuki Uozumi, Atsushi Hariki, Munetaka Taguchi, Kensuke Kobayashi, Jung-Fu Lin, Nozomu Hiraoka, Hirofumi Ishii, Ku-Ding Tsuei, Hiroshi Okanishi, Soshi Iimura, Satoru Matsuishi, Hideo Hosono and Jun'ichiro Mizuki,
Journal of Physics: Condensed Matter **33** 255603_1-255603_10 (2021).

Unconventional orbital charge density wave mechanism in the transition metal dichalcogenide 1T-TaS_2

Toru Hirata, Youichi Yamakawa, Seiichiro Onari, Hiroshi Kontani,
Physical Review Research **3**, L032053_1-L032053_6 (2021).

Discovery of mesoscopic nematicity wave in iron-based superconductors

T. Shimojima, Y. Motoyui, T. Taniuchi, C. Bareille, S. Onari, H. Kontani, M. Nakajima, S. Kasahara, T. Shibauchi, Y. Matsuda, S. Shin,
Science **373**, 1122-1125 (2021)

SU(4) Valley + Spin Fluctuation Interference Mechanism for Nematic Order in Magic-Angle Twisted Bilayer Graphene: The Impact of Vertex Corrections

Seiichiro Onari and Hiroshi Kontani
Physical Review Letters **128**, 066401_1-066401_6 (2022)

Mechanism of exotic density-wave and beyond-Migdal unconventional superconductivity in kagome metal AV_3Sb_5 ($\text{A} = \text{K, Rb, Cs}$)

Rina Tazai, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani
Science Advances **8**, eabl4108_1-eabl4108_9 (2022)

Diverse Exotic Orders and Fermiology in Fe-Based Superconductors: A Unified Mechanism for B_{1g}/B_{2g} Nematicity in $\text{FeSe}/(\text{Cs,Rb})\text{Fe}_2\text{As}_2$ and Smectic Order in BaFe_2As_2

Seiichiro Onari and Hiroshi Kontani
Frontiers in Physics **10**, 915619_1-915619_15 (2022)

Correlation-driven electronic nematicity in the Dirac semimetal BaNiS₂

Christopher John Butler, Yuhki Kohsaka, Youichi Yamakawa, Mohammad Saeed Bahramy, Seiichiro Onari, Hiroshi Kontani, Tetsuo Hanaguri, and Shinichi Shamoto
Proceedings of the National Academy of Sciences of the United States of America **119**, e2212730119_1-e2212730119_8 (2022).

A Rigorous Formalism of Unconventional Symmetry Breaking in Fermi Liquid Theory and Its Application to Nematicity in FeSe

Rina Tazai, Shun Matsubara, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani
Physical Review B **107**, 035137_1-035137_16 (2023).

Unconventional density waves and superconductivities in Fe-based superconductors and other strongly correlated electron systems

Hiroshi Kontani, Rina Tazai, Youichi Yamakawa, and Seiichiro Onari
Advances in Physics **70**, 355-443 (2021).

Three-dimensional bond-order instability in infinite-layer nickelates due to nonlocal quantum interference

Seiichiro Onari and Hiroshi Kontani
Physical Review B **108**, L241119_1-L241119_6 (2023).

Low temperature phase transitions inside the CDW phase in the kagome metals AV₃Sb₅ (A=Cs, Rb, K): Significance of mixed-type Fermi surface electron correlations

Jianxin Huang, Rina Tazai, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani,
Physical Review B **109**, L041110_1- L041110_6 (2024).

Real-Space Loop Current Pattern in Time-Reversal-Symmetry Breaking Phase in Kagome Metals

Koki Shimura, Rina Tazai, Youichi Yamakawa, Seiichiro Onari, and Hiroshi Kontani,
Journal of the Physical Society of Japan **93**, 033704_1-033704_5 (2024).

Robust *T*-linear resistivity due to SU(4) valley and spin fluctuation mechanism in magic-angle twisted bilayer graphene

Daisuke Inoue, Seiichiro Onari, and Hiroshi Kontani,
Physical Review B **109**, 205102_1-205102_10 (2024).