

## A list of publications by Hideo Aoki

July 2017

### [Refereed journals]

#### [2017]

1. Motoharu Kitatani, Naoto Tsuji and Hideo Aoki: Interplay of Pomeranchuk instability and superconductivity in the two-dimensional repulsive Hubbard model,  
*Phys. Rev. B* **95**, 075109 (2017).
2. Yuta Murotani, Naoto Tsuji and Hideo Aoki: Theory of light-induced resonances with collective Higgs and Leggett modes in multiband superconductors,  
*Phys. Rev. B* **95**, 104503 (2017).
3. Ryusuke Matsunaga, Naoto Tsuji, Kazumasa Makise, Hirotaka Terai, Hideo Aoki, and Ryo Shimano: Polarization-resolved terahertz third-harmonic generation in a superconductor NbN: dominance of Higgs mode beyond the BCS approximation,  
to be published in *Phys. Rev. B* rapid commun. (arXiv:1703.02815).
4. Sota Kitamura, Takashi Oka and Hideo Aoki: Probing and controlling spin chirality in Mott insulators by circularly polarized laser,  
*Phys. Rev. B* **96**, 014406 (2017).
5. Daisuke Ogura, Hideo Aoki and Kazuhiko Kuroki: Possible high- $T_c$  superconductivity due to incipient narrow bands originating from hidden ladders in Ruddlesden-Popper compounds,  
submitted (arXiv:1706.01711).

#### [2016]

6. Masahiko G. Yamada, Tomohiro Soejima, Naoto Tsuji, Daisuke Hirai, Mircea Dinca and Hideo Aoki: First-principles design of a half-filled flat band of the Kagome lattice in two-dimensional metal-organic frameworks,  
*Phys. Rev. B* **94**, 081102(R) (2016).

7. Mikito Koshino and Hideo Aoki: Dirac electrons on three-dimensional graphitic zeolites — a scalable mass gap,  
*Phys. Rev. B* **93**, 041412(R) (2016).
8. Yuta Murakami, Philipp Werner, Naoto Tsuji and Hideo Aoki: Multiple amplitude modes in strongly-coupled phonon-mediated superconductors,  
*Phys. Rev. B* **93**, 094509 (2016).
9. Takahiro Mikami, Sota Kitamura, Kenji Yasuda, Naoto Tsuji, Takashi Oka and Hideo Aoki: Brillouin-Wigner theory for high-frequency expansion in periodically driven systems — Application to Floquet topological insulators,  
*Phys. Rev. B* **93**, 144307 (2016).
10. Y. Murakami, P. Werner, N. Tsuji and H. Aoki: Damping of the collective amplitude mode in superconductors with strong electron-phonon coupling,  
*Phys. Rev. B* **94**, 115126 (2016).
11. Naoto Tsuji, Yuta Murakami and Hideo Aoki: Nonlinear light-Higgs coupling in superconductors beyond BCS: Effects of the retarded phonon-mediated interaction,  
*Phys. Rev. B* **94**, 224519 (2016).
12. Keita Kobayashi, Masahiko Okumura, Susumu Yamada, Masahiko Machida, and Hideo Aoki: Superconductivity in repulsively interacting fermions on a diamond chain — flat-band induced pairing,  
*Phys. Rev. B* **94**, 214501 (2016).
13. Tohru Kawarabayashi, Hideo Aoki and Yasuhiro Hatsugai: Lattice realization of the generalized chiral symmetry in two dimensions,  
*Phys. Rev. B* **94**, 235307 (2016).
14. Yoichi Tanabe, Yoshikazu Ito, Katsuaki Sugawara, Daisuke Hojo, Mikito Koshino, Takeshi Fujita, Tsutomu Aida, Xiandong Xu, Khuong Kim Huynh, Hidekazu Shimotani, Tadafumi Adschiri, Takashi Takahashi, Katsumi Tanigaki, Hideo Aoki, and Mingwei Chen: Electric properties of Dirac fermions captured into 3D nanoporous graphene networks,  
*Advanced Materials* **28**, 10304 (2016).
15. Sota Kitamura and Hideo Aoki:  $\eta$ -pairing superfluid in periodically-driven fermionic Hubbard model with strong attraction,  
*Phys. Rev. B* **94**, 174503 (2016).

[2015]

16. Yuta Murakami, Philipp Werner, Naoto Tsuji and Hideo Aoki: Interaction quench in the Holstein model: Thermalization crossover from electron- to phonon-dominated relaxation, *Phys. Rev. B* **91**, 045128 (2015).
17. Yasuhiro Hatsugai, Tohru Kawarabayashi and Hideo Aoki: Survival of sharp  $n = 0$  Landau levels in massive tilted Dirac fermions — Role of the generalized chiral operator, *Phys. Rev. B* **91**, 085112 (2015).
18. Y. Hatsugai, K. Shiraishi and H. Aoki: Flat bands in Weaire-Thorpe model and silicene, *New J. Phys.* **17**, 025009 (2015).
19. Sota Kitamura, Naoto Tsuji and Hideo Aoki: An interaction-driven topological insulator in fermionic cold atoms on an optical lattice — A design with a density functional formalism, *Phys. Rev. Lett.* **115**, 045304 (2015).
20. Motoharu Kitatani, Naoto Tsuji and Hideo Aoki: FLEX+DMFT approach to the d-wave superconducting phase diagram of the two-dimensional Hubbard model, *Phys. Rev. B* **92**, 085104 (2015).
21. Naoto Tsuji and Hideo Aoki: Theory of Anderson pseudospin resonance with Higgs mode in a superconductor, *Phys. Rev. B* **92**, 064508 (2015).
22. Masataka Watanabe, Hisato Komatsu, Naoto Tsuji and Hideo Aoki: Electronic structure of helicoidal graphene — massless Dirac particles on a curved surface with a screw symmetry, *Phys. Rev. B* **92**, 205425 (2015).
23. A. V. Stier, C. T. Ellis, J. Kwon, H. Xing, H. Zhang, D. Eason, G. Strasser, T. Morimoto, H. Aoki, H. Zeng, B. D. McCombe, and J. Cerne: Terahertz dynamics of a topologically protected state: Quantum Hall effect plateaus near the cyclotron resonance of a two-dimensional electron gas, *Phys. Rev. Lett.* **115**, 247401 (2015).

[2014]

24. Shintaro Takayoshi, Hideo Aoki and Takashi Oka: Many-body Floquet theory of laser-induced phase transition in quantum magnets, *Phys. Rev. B* **90**, 085150 (2014).
25. Yuta Murakami, Philipp Werner, Naoto Tsuji and Hideo Aoki: Supersolid phase accompanied by a quantum critical point in the intermediate coupling regime of the Holstein model,

*Phys. Rev. Lett.* **113**, 266404 (2014).

26. Hideo Aoki and Yasuhiro Hatsugai: Polarization as a topological quantum number in graphene,  
*Phys. Rev. B* **90**, 045206 (2014).
27. Naoto Tsuji, Peter Barmettler, Hideo Aoki and Philipp Werner: Nonequilibrium dynamical cluster theory,  
*Phys. Rev. B* **90**, 075117 (2014).
28. Hirofumi Sakakibara, Katsuhiko Suzuki, Hidetomo Usui, Satoaki Miyao, Isao Maruyama, Koichi Kusakabe, Ryotaro Arita, Hideo Aoki, and Kazuhiko Kuroki: Orbital mixture effect on the Fermi surface- $T_c$  correlation in the cuprate superconductors — bilayer vs single layer,  
*Phys. Rev. B* **89**, 224505 (2014).
29. Ryusuke Matsunaga, Naoto Tsuji, Hiroyuki Fujita, Arata Sugioka, Kazumasa Makise, Yoshinori Uzawa, Hirotaka Terai, Zhen Wang, Hideo Aoki, and Ryo Shimano: Light-induced collective pseudospin precession resonating with Higgs mode in a superconductor,  
*Science* **345**, 1145 (2014).

[2013]

30. R. Shimano, G. Yumoto, J. Y. Yoo, R. Matsunaga, S. Tanabe, H. Hibino, T. Morimoto and H. Aoki: Quantum Faraday and Kerr rotations in graphene,  
*Nature Commun.* **4**, 1841 (2013).
31. Yuta Murakami, Takashi Oka and Hideo Aoki: Supersolid states in a spin system — phase diagram and collective excitations,  
*Phys. Rev. B* **88**, 224404 (2013).
32. Y. Hatsugai, T. Morimoto, T. Kawarabayashi, Y. Hamamoto and H. Aoki: Chiral symmetry and its manifestation in optical responses in graphene: interaction and multi-layers, an invited article in *New J. Phys.* **15**, 035023 (2013).
33. Yuta Murakami, Philipp Werner, Naoto Tsuji and Hideo Aoki: Ordered phases in the Holstein-Hubbard model: Interplay of strong Coulomb interaction and electron-phonon coupling,  
*Phys. Rev. B* **88**, 125126 (2013).
34. Yuji Hamamoto, Tohru Kawarabayashi, Hideo Aoki and Yasuhiro Hatsugai: Spin-resolved chiral condensate as a spin-unpolarized  $\nu = 0$  quantum Hall state in graphene,  
*Phys. Rev. B* **88**, 195141 (2013).

35. Shintaro Takayoshi, Hosho Katsura, Noriaki Watanabe and Hideo Aoki: Phase diagram and pair Tomonaga-Luttinger liquid in a Bose-Hubbard model with flat bands,  
*Phys. Rev. A* **88**, 063613 (2013).
36. P.A. Maksym and H. Aoki: Magnetic field controlled vacuum charge in graphene quantum dots with a mass gap,  
*Phys. Rev. B* **88**, 081406(R) (2013).
37. Kazutaka Nishiguchi, Kazuhiko Kuroki, Ryotaro Arita, Takashi Oka and Hideo Aoki: Superconductivity assisted by inter-layer pair hopping in multi-layered cuprates,  
*Phys. Rev. B* **88**, 014509 (2013).

[2012]

38. Sudhakar Pandey, Hiroshi Kontani, Dai S. Hirashima, Ryotaro Arita and Hideo Aoki: Spin Hall effect in iron-based superconducting materials — An effect of Dirac point,  
*Phys. Rev. B* **86**, 060507(R) (2012).
39. Naoto Tsuji, Takashi Oka, Hideo Aoki and Philipp Werner: Repulsion-to-attraction transition in correlated electron systems triggered by a mono-cycle pulse,  
*Phys. Rev. B* **85**, 155124 (2012).
40. Tohru Kawarabayashi, Yasuhiro Hatsugai and Hideo Aoki: Topologically protected Landau levels in bilayer graphene in finite electric fields,  
*Phys. Rev. B* **85**, 165410 (2012).
41. H. Sakakibara, H. Usui, K. Kuroki, R. Arita and H. Aoki: Origin of the material dependence of  $T_c$  in the single-layered cuprates,  
*Phys. Rev. B* **85**, 064501 (2012) (Editor's Suggestion).
42. Qian Xin, Steffen Duhm, Fabio Bussolotti, Kouki Akaike, Yoshihiro Kubozono, Hideo Aoki, Taichi Kosugi, Satoshi Kera and Nobuo Ueno: Accessing the surface Brillouin zone and the band structure of picene single crystals,  
*Phys. Rev. Lett.* **108**, 226401 (2012).
43. D. Maryenko, J. Falson, Y. Kozuka, A. Tsukazaki, M. Onoda, H. Aoki and M. Kawasaki: Temperature dependent magnetotransport around  $\nu = 1/2$  in ZnO heterostructures,  
*Phys. Rev. Lett.* **108**, 186803 (2012).
44. Hirofumi Sakakibara, Katsuhiko Suzuki, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita, Douglas J. Scalapino and Hideo Aoki: Multiorbital analysis of the effects of uniaxial and hydrostatic pressure on  $T_C$  in the single-layered cuprate superconductors,

*Phys. Rev. B* **86**, 134520 (2012).

45. Takahiro Morimoto, Mikito Koshino and Hideo Aoki: Faraday rotation in bilayer and trilayer graphene in the quantum Hall regime,  
*Phys. Rev. B* **86**, 155426 (2012).
46. Takashi Koretsune, Ryotaro Arita and Hideo Aoki: Magneto-orbital effect without spin-orbit interactions — noncentrosymmetric zeolite-templated carbon structure,  
*Phys. Rev. B* **86**, 125207 (2012).
47. Yuji Hamamoto, Hideo Aoki and Yasuhiro Hatsugai: Chiral condensate with topological degeneracy in graphene and its manifestation in edge states,  
*Phys. Rev. B* **86**, 205424 (2012).
48. Takashi Kambe, Xuexia He, Yosuke Takahashi, Yusuke Yamanari, Kazuya Teranishi, Hiroki Mitamura, Seizi Shibasaki, Keitaro Tomita, Ritsuko Eguchi, Hidenori Goto, Yasuhiro Takabayashi, Takashi Kato, Akihiko Fujiwara, Toshikaze Kariyado, Hideo Aoki and Yoshihiro Kubozono: Synthesis and physical properties of metal-doped picene solids,  
*Phys. Rev. B* **86**, 214507 (2012) (Editors' Suggestion).

[2011]

49. M. Okumura, S. Yamada, M. Machida and H. Aoki: Phase-separated ferromagnetism in spin-imbalanced Fermi atoms loaded on an optical ladder: a DMRG study,  
*Phys. Rev. A* **83**, 031606(R) (2011).
50. Yukihiro Ota, Masahiko Machida, Tomio Koyama and Hideo Aoki: Leggett's collective modes in multiband superfluids and superconductors — Multiple dynamical classes,  
*Phys. Rev. B* **83**, 060507(R) (2011).
51. Naoto Tsuji, Takashi Oka, Philipp Werner and Hideo Aoki: Changing the interaction of lattice fermions dynamically from repulsive to attractive in ac fields,  
*Phys. Rev. Lett.* **106**, 236401 (2011). (Editors' Suggestion; Viewpoint)
52. Tohru Kawarabayashi, Yasuhiro Hatsugai, Takahiro Morimoto and Hideo Aoki: Generalized chiral symmetry and stability of zero modes for tilted Dirac cones,  
*Phys. Rev. B* **83**, 153414 (2011).
53. Yoshihiro Kubozono, Hiroki Mitamura, Xuesong Lee, Xexia He, Yusuke Yamanari, Yosuke Takahashi, Yumiko Kaji, Ritsuko Eguchi, Koki Akaike, Takashi Kambe, Hideki Okamoto, Akihiko Fujiwara, Takashi Kato, Taichi Kosugi, and Hideo Aoki: Metal-intercalated aromatic hydrocarbons — a new class of carbon-based superconductors,  
*Phys. Chem. Chem. Phys.* **13**, 16476 (2011).

54. Taichi Kosugi, Takashi Miyake, Shoji Ishibashi, Ryotaro Arita and Hideo Aoki: Electronic structure of solid coronene: differences and commonalities to picene,  
*Phys. Rev. B* **84**, 020507(R) (2011) (Editors' Suggestion).
55. Takahiro Morimoto and Hideo Aoki: Two parameter flow of  $\sigma_{xx}(\omega) - \sigma_{xy}(\omega)$  for the graphene quantum Hall system in ac regime,  
*Phys. Rev. B* **85**, 165445 (2012).
56. Taichi Kosugi, Takashi Miyake, Shoji Ishibashi, Ryotaro Arita and Hideo Aoki: First-principles structural optimization and electronic structure of picene superconductor for various potassium-doping levels,  
*Phys. Rev. B* **84**, 214506 (2011).

[2010]

57. Y. Ikebe, T. Morimoto, R. Masutomi, T. Okamoto, H. Aoki and R. Shimano: Optical Hall effect in the integer quantum Hall regime,  
*Phys. Rev. Lett.* **104**, 256802 (2010).
58. Hirofumi Sakakibara, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: Two orbital model explains why the single-layer Hg cuprate have higher superconducting transition temperature than the La cuprate,  
*Phys. Rev. Lett.* **105**, 057003 (2010).
59. Takashi Oka and Hideo Aoki: Dielectric breakdown in a Mott Insulator: many-body Schwinger-Landau-Zener mechanism studied with a generalized Bethe ansatz,  
*Phys. Rev. B* **81**, 033103 (2010).
60. Shimpei Endo, Takashi Oka and Hideo Aoki: Realization of tight-binding photonic bands in metallophotonic waveguide networks with application to a flat band in kagome lattice,  
*Phys. Rev. B* **81**, 113104 (2010).
61. Takahiro Morimoto, Yshai Avishai and Hideo Aoki: Dynamical scaling analysis of the optical Hall conductivity in the quantum Hall regime,  
*Phys. Rev. B* **82**, 081404(R) (2010).
62. Tohru Kawarabayashi, Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Anomalous criticality in the quantum Hall transition at  $n = 0$  Landau level of graphene with chiral-symmetric disorders,  
*Phys. Rev. B* **82**, 195426 (2010).

63. Haruki Watanabe, Yasuhiro Hatsugai and Hideo Aoki: Half-integer contributions to the quantum Hall conductivity from single Dirac cones,  
*Phys. Rev. B* **82**, 241403(R) (2010).
64. Takashi Oka, Hideo Aoki: Nonequilibrium magnetic and superconducting phases in the two-dimensional Hubbard model coupled to electrodes,  
*Phys. Rev. B* **82**, 064516 (2010).
65. Yuji Suwa, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: First-principles study of ferromagnetism for an organic polymer dimethylaminopyrrole — a realization of organic periodic Anderson model,  
*Phys. Rev. B* **82**, 235127 (2010).

[2009]

66. Taichi Kosugi, Takashi Miyake, Shoji Ishibashi, Ryotaro Arita and Hideo Aoki: First-principles electronic structure of solid picene,  
*J. Phys. Soc. Jpn* **78**, 113704 (2009).
67. Kazuhiko Kuroki and Hideo Aoki: Unconventional pairing originating from disconnected Fermi surfaces in the iron-based superconductor,  
*Physica C* **469**, 635 (2009).
68. Tohru Kawarabayashi, Yasuhiro Hatsugai and Hideo Aoki: Quantum Hall plateau transition in graphene with correlated random hopping,  
*Phys. Rev. Lett.* **103**, 156804 (2009).
69. Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Optical Hall conductivity in ordinary and graphene QHE systems,  
*Phys. Rev. Lett.* **103**, 116803 (2009).
70. Kazuhiko Kuroki, Hidetomo Usui, Seiichiro Onari, Ryotaro Arita and Hideo Aoki: Pnictogen height as a possible switch between high- $T_c$  nodeless and low- $T_c$  nodal pairings in the iron based superconductors,  
*Phys. Rev. B* **79**, 224511 (2009) (Editors' Suggestion; Featured in *Physics*).
71. Naoto Tsuji, Takashi Oka, and Hideo Aoki: Nonequilibrium steady state in photoexcited correlated electrons with dissipation,  
*Phys. Rev. Lett.* **103**, 047403 (2009).



72. P.A. Maksym, Y. Nishi, D.G. Austing, T. Hatano, L.P. Kouwenhoven, H. Aoki and S. Tarucha: Accurate model of a vertical pillar quantum dot,  
*Phys. Rev. B* **79**, 115314 (2009).

73. Takashi Oka and Hideo Aoki: Photovoltaic Hall effect in graphene,  
*Phys. Rev. B* **79**, 081406(R) (2009) [erratum: *Phys. Rev. B* **79**, 169901(E) (2009)].

[2008]

74. Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani and Hideo Aoki: Unconventional superconductivity originating from disconnected Fermi surfaces in  $\text{LaO}_{1-x}\text{F}_x\text{FeAs}$ ,  
*Phys. Rev. Lett.* **101**, 087004 (2008) [erratum: *Phys. Rev. Lett.* **102**, 109902(E) (2009)].

75. Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Cyclotron radiation and emission in graphene,  
*Phys. Rev. B* **78**, 073406 (2008).

76. Mitsuhiro Arikawa, Yasuhiro Hatsugai and Hideo Aoki: Edge states in graphene in magnetic fields — a speciality of the edge mode embedded in the  $n = 0$  Landau band,  
*Phys. Rev. B* **78**, 205401 (2008).

77. Walid Malaeb, Teppei Yoshida, Takashi Kataoka, Atsushi Fujimori, Masato Kubota, Kanta Ono, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita, Hideo Aoki, Yoichi Kamihara, Masahiro Hirano, and Hideo Hosono: Electronic structure and electron correlation in  $\text{LaFeAsO}_{1-x}\text{F}_x$  and  $\text{LaFePO}_{1-x}\text{F}_x$ ,  
*J. Phys. Soc. Japan* **77**, 093714 (2008).

78. Naoto Tsuji, Takashi Oka, and Hideo Aoki: Correlated electron systems periodically driven out of equilibrium — Floquet + DMFT formalism,  
*Phys. Rev. B* **78**, 235124 (2008).

79. Takashi Oka and Hideo Aoki: Photo-induced Tomonaga-Luttinger-like liquid in a Mott insulator,  
*Phys. Rev. B* **78**, 241104(R) (2008).

80. Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani and Hideo Aoki: Unconventional pairing originating from disconnected Fermi surfaces in the iron-based superconductor,

*New J. Phys.* **11**, 025017 (2009).

[2007]

81. Naoto Tsuji, Shigehiro Takajo and Hideo Aoki: Large orbital magnetic moments in carbon nanotubes generated by resonant transport,  
*Phys. Rev. B* **75**, 153406 (2007).
82. Masaki Tezuka, Ryotaro Arita and Hideo Aoki: Phase diagram for the half-filled one-dimensional Hubbard-Holstein model,  
*Phys. Rev. B* **76**, 155114 (2007).
83. Shiro Sakai, Ryotaro Arita and Hideo Aoki: Itinerant ferromagnetism in the multiorbital Hubbard model — a dynamical mean-field study,  
*Phys. Rev. Lett.* **99**, 216402 (2007).

[2006]

84. Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: Superconductivity from a long-range interaction: A crossover between the electron gas and the lattice model,  
*Phys. Rev. B* **73**, 014526 (2006).
85. Y. Nishi, P. A. Maksym, D. G. Austin, T. Hatano, L. P. Kouwenhoven, H. Aoki and S. Tarucha: Intermediate low spin states in a few-electron quantum dot in the  $\nu \leq 1$  regime,  
*Phys. Rev. B* **74**, 033306 (2006).
86. Hosho Katsura and Hideo Aoki: Exact supersymmetry in the relativistic hydrogen atom in general dimensions — supercharge and the generalized Johnson-Lippmann operator,  
*J. Math. Phys.* **47**, 032301 (2006).
87. Shiro Sakai, Ryotaro Arita, Karsten Held and Hideo Aoki: Quantum Monte Carlo study for multiorbital systems with preserved spin and orbital rotational symmetries,  
*Phys. Rev. B* **74**, 155102 (2006).
88. Yasuhiro Hatsugai, Takahiro Fukui and Hideo Aoki: Topological analysis of the quantum Hall effect in graphene: Dirac-Fermi transition across van Hove singularities and the edge vs bulk quantum numbers,

*Phys. Rev. B* **74**, 205414 (2006).

[2005]

89. Takashi Oka, Norio Konno, Ryotaro Arita and Hideo Aoki: Breakdown of an electric-field driven system — a mapping to a quantum walk,

*Phys. Rev. Lett.* **94**, 100602 (2005).

90. Manabu Kiguchi, Ryotaro Arita, Genki Yoshikawa, Yoshiaki Tanida, Susumu Ikeda, Shiro Entani, Ikuyo Nakai, Hiroshi Kondoh, Toshiaki Ohta, Koichiro Saiki, and Hideo Aoki: Metal-induced gap states in epitaxial organic-insulator/metal interfaces,

*Phys. Rev. B* **72**, 075446 (2005).

91. M. Koshino and H. Aoki: Electronic structure of an electron on the gyroid surface, a helical labyrinth,

*Phys. Rev. B* **71**, 73405 (2005).

92. Takashi Oka and Hideo Aoki: Ground-state decay rate for the Zener breakdown in band and Mott insulators,

*Phys. Rev. Lett.* **95**, 137601 (2005).

93. Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: The spin-triplet superconductivity induced by the charge fluctuation in extended Hubbard model,

*J. Phys. Soc. Jpn* **74**, 2579-2585 (2005).

94. Masaki Tezuka, Ryotaro Arita and Hideo Aoki: Density-matrix renormalization group study of pairing when electron-electron and electron-phonon interactions coexist — an effect of the electronic band structure,

*Phys. Rev. Lett.* **95**, 226401 (2005).

[2004]

95. Ryotaro Arita, Kazuhiko Kuroki, and Hideo Aoki: Magnetic-field induced triplet superconductivity in the Hubbard model on a triangular lattice,

*J. Phys. Soc. Jpn* **73**, 533 (2004).

96. Ryotaro Arita, Takashi Miyake, Takao Kotani, Mark van Schilfhaarde, Takashi Oka, Kazuhiko Kuroki, Yasuo Nozue and Hideo Aoki: Electronic properties of alkali-metal loaded zeolites — a “supercrystal” Mott insulator,

*Phys. Rev. B* **69**, 195106 (2004).

97. Takashi Kimura, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: Possibility of superconductivity in the repulsive Hubbard model on the Shastry-Sutherland lattice,  
*Phys. Rev. B* **69**, 054501 (2004).
98. Mikito Koshino and Hideo Aoki: Integer quantum Hall effect and Hofstadter's butterfly spectra in three-dimensional metals in external periodic modulations,  
*Phys. Rev. B* **69**, 081303(R) (2004).
99. Ryotaro Arita, Yoshiaki Tanida, Kazuhiko Kuroki, and Hideo Aoki: Electronic properties of metal induced gap states at insulator/metal interfaces — dependence on the alkali halide and the possibility of excitonic mechanism of superconductivity,  
*Phys. Rev. B* **69**, 115424 (2004).
100. Ryotaro Arita, Seiichiro Onari, Kazuhiko Kuroki and Hideo Aoki: Off-site repulsion-induced triplet superconductivity: A possibility for chiral  $p_{x+y}$ -wave pairing in  $\text{Sr}_2\text{RuO}_4$ ,  
*Phys. Rev. Lett.* **92**, 247006 (2004).
101. Seiichiro Onari, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: Phase diagram of the two-dimensional extended Hubbard model — Quantum phase transitions between different pairing symmetries when charge and spin fluctuations coexist,  
*Phys. Rev. B* **70**, 94523 (2004).
102. Ryotaro Arita, Yoshiaki Tanida, Shiro Entani, Manabu Kiguchi, Koichiro Saiki and Hideo Aoki: Polar surface engineering in ultra-thin  $\text{MgO}(111)/\text{Ag}(111)$  — possibility of metal-insulator transition and magnetism,  
*Phys. Rev. B* **69**, 235423 (2004).
103. Susumu Okada, Ryotaro Arita, Atsushi Oshiyama, Yutaka Matsuo, Eiichi Nakamura and Hideo Aoki: Electronic Structure of Stacked  $\text{C}_{60}$  Shuttlecocks,  
*Chem. Phys. Lett.* **399**, 157 (2004).
104. Shiro Sakai, Ryotaro Arita, and Hideo Aoki: Numerical algorithm for the double-orbital Hubbard model — Hund-coupled pairing symmetry in the doped case,  
*Phys. Rev. B* **70**, 172504 (2004).

[2003]

105. M. Koshino and H. Aoki: Integer quantum Hall effect in isotropic 3D crystals,  
*Phys. Rev. B* **67**, 195336 (2003).

106. Manabu Kiguchi, Ryotaro Arita, Genki Yoshikawa, Yoshiaki Tanida, Masao Katayama, Koichiro Saiki, Atsushi Koma and Hideo Aoki: Metal-induced gap states at well defined alkali-halide/metal Interfaces,  
*Phys. Rev. Lett.* **90**, 196803 (2003).
107. S. Onari, R. Arita, K. Kuroki and H. Aoki: Superconductivity in repulsive electron systems having three-dimensional disconnected Fermi surfaces,  
*Phys. Rev. B* **68**, 024525 (2003).
108. Takashi Oka, Ryotaro Arita and Hideo Aoki: Breakdown of a Mott insulator — non-adiabatic tunneling mechanism,  
*Phys. Rev. Lett.* **91**, 066406 (2003).
109. Ryotaro Arita, Yuji Suwa, Kazuhiko Kuroki and Hideo Aoki: Flat-band ferromagnetism in undoped and doped polyaminotriazole crystal,  
*Phys. Rev. B* **68**, 140403(R) (2003).
110. Yuji Suwa, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: Flat-band ferromagnetism in organic polymers designed by a computer simulation,  
*Phys. Rev. B* **68**, 174419 (2003).

[2002]

111. R. Arita, Y. Suwa, K. Kuroki and H. Aoki: Gate-induced band ferromagnetism in an organic polymer,  
*Phys. Rev. Lett.* **88**, 127202 (2002).
112. M. Koshino, H. Aoki, T. Osada, K. Kuroki and S. Kagoshima: Phase diagram for the Hofstadter butterfly and integer quantum Hall effect in three dimensions,  
*Phys. Rev. B* **65**, 045310 (2002).
113. S. Onari, K. Kuroki, R. Arita and H. Aoki: Superconductivity induced by interband nesting in the three-dimensional honeycomb lattice,  
*Phys. Rev. B* **65**, 184525 (2002).
114. M. Koshino, H. Aoki and T. Osada: Field-induced SDW and butterfly spectrum in three dimensions,  
*Phys. Rev. B* **65**, 205311 (2002).

115. Y. Tanuma, K. Kuroki, Y. Tanaka, R. Arita, S. Kashiwaya and H. Aoki: Tomography of pairing symmetry from magnetotunneling spectroscopy — a case study for quasi-1D organic superconductors,  
*Phys. Rev. B* **66**, 094507 (2002).
116. Mikito Koshino, Hideo Aoki and Bertrand I. Halperin: Wrapping current versus bulk integer quantum Hall effect in three dimensions,  
*Phys. Rev. B* **66**, 081301(R) (2002).
117. Takashi Kimura, Yuji Zenitani, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: Hybridization-induced superconductivity from the electron repulsion on a tetramer lattice having a disconnected Fermi surface,  
*Phys. Rev. B* **66**, 212505 (2002).

[2001]

118. K. Kuroki, M. Ogata, R. Arita and H. Aoki: Crib-shaped triplet-pairing gap function for an orthogonal pair of quasi-one-dimensional Fermi surfaces in  $\text{Sr}_2\text{RuO}_4$ ,  
*Phys. Rev. B* **63**, 60506(R) (2001).
119. K. Kuroki, R. Arita and H. Aoki: Spin-triplet f-wave-like pairing proposed for an organic superconductor  $(\text{TMTSF})_2\text{PF}_6$ ,  
*Phys. Rev. B* **63**, 94509 (2001).
120. M. Koshino, H. Aoki, K. Kuroki, S. Kagoshima and T. Osada: Hofstadter butterfly and integer quantum Hall effect in three dimensions,  
*Phys. Rev. Lett.* **86**, 1062 (2001).
121. M. Onoda, T. Mizusaki and H. Aoki, Effective mass staircase and the Fermi liquid parameters for the fractional quantum Hall composite fermions,  
*Phys. Rev. B* **64**, 235315 (2001).
122. H. Aoki, M. Koshino, H. Morise, D. Takeda and K. Kuroki: Electronic structure of periodic surfaces — ‘topological band structure’,  
*Phys. Rev. B* **65**, 035102 (2001).
123. R. Arita, Y. Tanida, K. Kuroki and H. Aoki: Image-potential band-gap narrowing at a metal/semiconductor interface,

*Phys. Rev. B* **64**, 245112 (2001).

[2000]

124. R. Arita, K. Kuroki and H. Aoki:  $d$ - and  $p$ -wave superconductivity mediated by spin fluctuations in two- and three-dimensional single-band repulsive Hubbard model, *J. Phys. Soc. Japan* **69**, 1181-1191 (2000).
125. R. Arita, S. Onoda, K. Kuroki and H. Aoki: Magnetic properties of the Hubbard model on three-dimensional lattices: fluctuation-exchange and two-particle self-consistent studies, *J. Phys. Soc. Japan* **69**, 785-795 (2000).
126. R. Arita, K. Kuroki and H. Aoki: Electron-correlation-originated negative magnetoresistance in a system having a partly flat band, *Phys. Rev. B* **61**, 3207-3210 (2000).
127. R. Arita and H. Aoki: Relationship between spiral and ferromagnetic states in the Hubbard model in the thermodynamic limit, *Phys. Rev. B* **61** 12261-12270 (2000).
128. Masaru Onoda, Takahiro Mizusaki, Takaharu Otsuka and Hideo Aoki: Excitation spectrum and effective mass of the even-fraction quantum Hall liquid, *Phys. Rev. Lett.* **84**, 3942-3945 (2000).
129. S. Muto and H. Aoki: Persistence of vibrational modes in a classical two-dimensional electron liquid, *J. Phys. Condensed Matter* **12**, L83-L86 (2000).

[1999]

130. H. Imamura, P. A. Maksym and H. Aoki: Vertically coupled double quantum dots in magnetic fields, *Phys. Rev. B* **59**, 5817-5825 (1999).
131. S. Muto and H. Aoki: Crystallization of a classical two-dimensional electron system — Positional and orientational orders, *Phys. Rev. B* **59**, 14911-14914 (1999).

132. K. Kuroki and H. Aoki: Superconductivity and spin correlation in organic conductors: a quantum Monte Carlo study,  
*Phys. Rev. B* **60**, 3060-3063 (1999).
133. K. Kuroki, R. Arita and H. Aoki: Link between the spin fluctuation and Fermi surface in high  $T_C$  cuprates — A consistent description within the single-band Hubbard model,  
*Phys. Rev. B* **60**, 9850-9854 (1999).
134. R. Arita, K. Kuroki and H. Aoki: Spin-fluctuation exchange study of superconductivity in two- and three-dimensional single-band Hubbard model,  
*Phys. Rev. B* **60**, 14585-14588 (1999).

[1998]

135. T. Kimura, K. Kuroki and H. Aoki: Pairing correlation in the three-leg Hubbard ladder — Renormalization group and quantum Monte Carlo studies,  
*J. Phys. Soc. Japan* **67**, 1377-1390 (1998).
136. K. Kuroki and H. Aoki: A consistent description of the pairing symmetry in hole and electron doped cuprates within the two-dimensional Hubbard model,  
*J. Phys. Soc. Japan* **67**, 1533-1536 (1998).
137. R. Arita, K. Kuroki, H. Aoki and M. Fabrizio: DMRG study of the spin gap in a one-dimensional Hubbard model — effect of the distant transfer and exchange coupling,  
*Phys. Rev. B* **57**, 10324-10327 (1998).
138. R. Arita, Y. Shimoi, K. Kuroki and H. Aoki: Flat-band ferromagnetism induced by off-site repulsions,  
*Phys. Rev. B* **57**, 10609-10612 (1998).
139. R. Arita, K. Kuroki, H. Aoki, A. Yajima, M. Tsukada, S. Watanabe, M. Ichimura, T. Onogi, T. Hashizume: Ferromagnetism in a Hubbard model for an atomic quantum wire: A realization of flat-band magnetism from even-membered rings,  
*Phys. Rev. B* **57**, R6854-6857 (1998).
140. H. Imamura, H. Aoki and P. A. Maksym: Spin-blockade in single and double quantum dots in magnetic fields — a correlation effect,  
*Phys. Rev. B* **57**, R4257-4260 (1998).



141. R. Arita, K. Kusakabe, K. Kuroki and H. Aoki: Spectral function of the spiral spin state in the trestle and ladder Hubbard model,  
*Phys. Rev. B* **58**, R11833-11836 (1998).

[1997]

142. K. Kuroki, H. Aoki, T. Hotta and Y. Takada: Detection of pairing correlation in the two-dimensional Hubbard model,  
*Phys. Rev. B* **55**, 2764-2767 (1997).
143. T. Kimura, K. Kuroki and H. Aoki: Superconductivity in the three-leg Hubbard ladder — a Quantum Monte Carlo study,  
*J. Phys. Soc. Japan* **66**, 1599-1602 (1997).
144. R. Arita, K. Kusakabe, K. Kuroki and H. Aoki: Extended Aharonov-Bohm period analysis of strongly correlated electron systems,  
*J. Phys. Soc. Japan* **66**, 2086-2096 (1997).
145. K. Kuroki, R. Arita and H. Aoki: Numerical study of a superconductor-insulator transition in a half-filled Hubbard chain with distant transfers,  
*J. Phys. Soc. Japan* **66**, 3371-3374 (1997).
146. K. Kuroki and H. Aoki: Enhancement of the  $d_{x^2-y^2}$  pairing correlation in the two-dimensional Hubbard model — a quantum Monte Carlo study,  
*Phys. Rev. B* **56**, R14287-14290 (1997).
147. T. Nakajima and H. Aoki: Spin-squeezed ground states in the bilayer quantum Hall ferromagnet,  
*Phys. Rev. B* **56**, R15549-15552 (1997).

[1996]

148. T. Kimura, K. Kuroki and H. Aoki: Generation of spin-polarized currents in Zeeman-split Tomonaga-Luttinger models,  
*Phys. Rev. B* **53**, 9572-9575 (1996).
149. H. Imamura, P. A. Maksym and H. Aoki: Magic numbers and optical absorption spectrum in vertically coupled quantum dots in the fractional quantum Hall regime,  
*Phys. Rev. B* **53**, 12 613-12 616 (1996).

150. T. Kimura, K. Kuroki and H. Aoki: Correlation functions in the three-chain Hubbard ladder,  
*Phys. Rev. B* **54**, R9608-9611 (1996).
151. K. Kuroki, T. Kimura and H. Aoki: Quantum Monte Carlo study of the pairing correlation in the Hubbard ladder,  
*Phys. Rev. B* **54**, R15 641-15 644 (1996).
152. T. Terao, T. Nakayama and H. Aoki: Multifractality of the quantum Hall wave functions in higher Landau levels,  
*Phys. Rev. B* **54**, 10 350-10 353 (1996).
153. K. Kusakabe and H. Aoki: Detection of pairing from the extended Aharonov-Bohm period in strongly correlated electron systems,  
*J. Phys. Soc. Japan* **65**, 2772-2775 (1996).
154. K. Kuroki and H. Aoki: Quantum Monte Carlo evidence for superconductivity in the three-band Hubbard model in two dimensions,  
*Phys. Rev. Lett.* **76**, 4400-4403 (1996); [K. Kuroki and H. Aoki: Kuroki and Aoki reply, *Phys. Rev. Lett.* **78**, 161 (1997)].
155. H. Aoki, M. Ando and H. Matsumura: Hofstadter butterflies for flat bands,  
*Phys. Rev. B* **54**, R17296-17299 (1996).

[1995]

156. T. Nakajima and H. Aoki, Manifestation of spin degrees of freedom in the double fractional quantum Hall system,  
*Phys. Rev. B* **51**, 7874-7877 (1995).
157. T. Nakajima and H. Aoki, Composite-fermion picture for the double fractional quantum Hall system,  
*Phys. Rev. B* **52**, 13780-13783 (1995).
158. T. Kimura, K. Kuroki and H. Aoki, Transport properties of coupled one-dimensional interacting electron systems with impurities,  
*Phys. Rev. B* **51**, R13860-13863 (1995).
159. K. Ishida, H. Aoki and T. Ogawa: One-dimensional biexciton in a tight-binding model and its optical properties,

*Phys. Rev. B* **52**, 8980-8991 (1995).

[1994]

160. K. Kusakabe and H. Aoki: Ferromagnetic spin wave theory in the multiband Hubbard model having a flat band,  
*Phys. Rev. Lett.* **72**, 144-147 (1994).
161. K. Kuroki and H. Aoki: Superconductivity in a repulsively interacting two-band Fermi gas,  
*Phys. Rev. Lett.* **72**, 2947-2950 (1994).
162. K. Kuroki, K. Kusakabe and H. Aoki: Phase diagram of the extended attractive Hubbard model in one dimension,  
*Phys. Rev. B* **50**, 575-578 (1994).
163. T. Kimura, K. Kuroki, H. Aoki and M. Eto: Conductivity of an interacting two-channel Tomonaga-Luttinger model,  
*Phys. Rev. B* **49**, R16852-16855 (1994).
164. K. Kusakabe and H. Aoki: Scaling properties of the ferromagnetic states in the Hubbard model,  
*Phys. Rev. B* **50**, 12991-12994 (1994).
165. K. Kusakabe and H. Aoki: Spin-twist driven persistent current in a strongly correlated two-dimensional electron system: a manifestation of the gauge field,  
*Phys. Rev. B* **52**, R8684-8687 (1994).
166. T. Nakajima and H. Aoki, Composite-fermion picture for the spin-wave excitation in the fractional quantum Hall system,  
*Phys. Rev. Lett.* **73**, 3568-3571 (1994).

[1993]

167. K. Ishida, T. Chikyū and H. Aoki: One-dimensional exciton in a two-band tight-binding model with long-range interactions,  
*Phys. Rev. B*, **47**, 7594-7597 (1993).
168. K. Kuroki and H. Aoki: Superconductivity in metal-insulator composite bands: A realization of negative- $U$  pairing in purely repulsive systems,  
*Phys. Rev. B* **48**, 7598-7617 (1993).

169. N. Shima and H. Aoki: Electronic structure of super-honeycomb systems: a peculiar realization of semimetal/semiconductor classes and ferromagnetism,  
*Phys. Rev. Lett.* **71**, 4389-4392 (1993).

[1991-1992]

170. K. Kusakabe and H. Aoki: Low-lying excitations in the half-filled and doped Hubbard model in one dimension,  
*Phys. Rev. B* **44**, 7863-7869 (1991).
171. K. Kusakabe and H. Aoki: High-spin states in the Hubbard model: generalized Hund's coupling and a crossover to strong  $U$  regime,  
*J. Phys. Soc. Japan* **61**, 1165-1168 (1992).
172. K. Kuroki, H. Aoki and Y. Takada: Superconductivity due to interband attraction: competition between diagonal and off-diagonal long-range orders,  
*J. Phys. Soc. Japan*, **61**, 1161-1164 (1992).
173. H. Aoki and H. Suezawa: Landau quantization of electrons on a sphere,  
*Phys. Rev. A* **46**, R1163-1166 (1992).
174. K. Kuroki and H. Aoki: Realization of negative- $U$  superconductivity in a class of purely repulsive systems: interacting carrier and insulating bands,  
*Phys. Rev. Lett.* **69**, 3820-3823 (1992).

[1989-1990]

175. S. Tsuneyuki, Y. Matsui, H. Aoki and M. Tsukada: New pressure-induced structural transformations in silica obtained by computer simulation,  
*Nature* **339**, 209-211 (1989).
176. H. Aoki and S. Tsuneyuki: Silica polymorphs,  
*Nature* **340**, 193 (1989).
177. S. Tsuneyuki, H. Aoki, M. Tsukada and Y. Matsui: Molecular-dynamics study of the  $\alpha$  to  $\beta$  structural phase transition of quartz,  
*Phys. Rev. Lett.* **64**, 776-779 (1990).

178. K. Kuroki and H. Aoki: Cooper pairing in a two-band Hubbard model: a quantum Monte Carlo study,  
*Solid State Commun.* **73**, 563-567 (1990).
179. H. Aoki and K. Kuroki: Superconductivity in a two-band Hubbard model,  
*Phys. Rev. B* **42**, 2125-2136 (1990).
180. H. Aoki: Quantum Hall effect in a self-similar system,  
*Phys. Rev. B* **42**, 6869-6872 (1990).

[1987-1988]

181. H. Aoki and H. Kamimura: Jahn-Teller-effect mediated superconductivity in oxides,  
*Solid State Commun.* **63**, 665-669 (1987).
182. C. Itoh, T. Miyazaki, K. Aizawa, H. Aoki and M. Okazaki, Monte Carlo study of lattice-mismatched epitaxy,  
*J. Phys. C: Solid State Phys.* **21**, 4527-4544 (1988).
183. S. Tsuneyuki, M. Tsukada, H. Aoki and Y. Matsui: First-principles interatomic potential of silica applied to molecular dynamics,  
*Phys. Rev. Lett.* **61**, 869-872 (1988).

[1986]

184. A. Shimizu, H. Aoki and H. Kamimura: Decimation study of the interplay of strong electron-electron interactions and disorder,  
*J. Phys. C: Solid State Phys.* **19**, 725-738 (1986).
185. H. Aoki: Fractal dimensionality of wave functions at the mobility edge: quantum fractal in the Landau levels,  
*Phys. Rev. B* **33**, 7310-7313 (1986).
186. H. Aoki: A novel Landau-level laser in the quantum Hall regime,  
*Appl. Phys. Lett.* **48**, 559-560 (1986).
187. H. Aoki and T. Ando: Universality of quantum Hall effect: topological invariant and observable,

*Phys. Rev. Lett.* **57**, 3093-3096 (1986).

[1985]

188. H. Aoki: Electronic structure of disordered systems with multi-orbitals,  
*J. Phys. C: Solid State Phys.* **18**, 2109-2118 (1985).
189. H. Aoki: Two-dimensional electrons in magnetic fields in a multiply-connected Aharonov-Bohm geometry,  
*J. Phys. C: Solid State Phys.* **18**, 1885-1890 (1985).
190. H. Aoki: Two-dimensional localisation of electrons on a lattice in magnetic fields,  
*J. Phys. C: Solid State Phys.* **18**, L67-71 (1985).
191. H. Aoki and T. Ando: Critical localization in two-dimensional Landau quantization,  
*Phys. Rev. Lett.* **54**, 831-834 (1985).
192. T. Ando and H. Aoki: Finite-size scaling study of localization in Landau levels,  
*J. Phys. Soc. Japan* **54**, 2238-2249 (1985).
193. H. Aoki: Aharonov-Bohm effect for the quantum Hall conduction on a disordered lattice,  
*Phys. Rev. Lett.* **55**, 1136-1139 (1985).

[1982-1984]

194. H. Aoki: Gauge-transformation study of the quantised Hall effect,  
*J. Phys. C: Solid State Phys.* **15**, L1227-1233 (1982).
195. H. Aoki: Gauge-transformation study of two-dimensional localisation in magnetic fields,  
*J. Phys. C: Solid State Phys.* **16**, 1893-1900 (1983).
196. H. Aoki: Critical behaviour of extended states in disordered systems,  
*J. Phys. C: Solid State Phys.* **16**, L205-208 (1983).
197. H. Aoki: Structure of the wavefunction in disordered systems in magnetic fields,  
*J. Phys. C: Solid State Phys.* **17**, 1875-1883 (1984).

198. H. Aoki: Electronic structure of disordered systems with periodic lattice distortion,  
*J. Phys. C: Solid State Phys.* **17**, 1885-1895 (1984).

[1981]

199. H. Aoki: Anderson localisation in anisotropic systems,  
*Solid State Commun.* **37**, 677-680 (1981).
200. H. Aoki: Electronic structure of disordered intrinsic semiconductor and s-d systems: Two-band localisation,  
*J. Phys. C: Solid State Phys.* **14**, 2771-2784 (1981).
201. H. Aoki and T. Ando: Effect of localization on the Hall conductivity in the two-dimensional system in strong magnetic fields,  
*Solid State Commun.* **38**, 1079-1082 (1981).  
(reprinted as *Solid State Commun.* **88**, 951-954 (1993) in a celebratory issue to commemorate 30 years of *Solid State Communications*).

[1980]

202. H. Aoki: Real-space renormalisation-group theory for Anderson localisation: Decimation method for electron systems,  
*J. Phys. C: Solid State Phys.* **13**, 3369-3386 (1980).
203. C.R. Lee, H. Aoki and H. Kamimura: Lattice-gas theory of order-disorder transition in the first-stage graphite-alkali intercalation compounds,  
*J. Phys. Soc. Japan* **49**, 870-877 (1980).

[1979]

204. H. Aoki: Effect of coexistence of random potential and electron-electron interaction in two-dimensional systems: Wigner glass,  
*J. Phys. C: Solid State Phys.* **12**, 633-645 (1979).
205. E. Yamaguchi, H. Aoki and H. Kamimura: Intra- and inter-state interactions in Anderson-localised states,  
*J. Phys. C: Solid State Phys.* **12**, 4801-4815 (1979).

206. H. Aoki: Real-space renormalisation approach to the Anderson localisation,  
*Solid State Commun.* **31**, 999-1002 (1979).

[1975-1978]

207. H. Aoki: Transport properties of two-dimensional disordered electron systems in strong magnetic fields,  
*J. Phys. C: Solid State Phys.* **11**, 3823-3834 (1978).
208. H. Aoki and H. Kamimura: Anderson localization in a two-dimensional electron system under strong magnetic fields,  
*Solid State Commun.* **21**, 45-47 (1977).
209. H. Aoki: Computer simulation for two-dimensional disordered electron systems in strong magnetic fields,  
*J. Phys. C: Solid State Phys.* **10**, 2583-2593 (1977).
210. H. Aoki and H. Kamimura: The Hubbard model for the structurally random systems,  
*J. Phys. Soc. Japan* **40**, 6-12 (1976).
211. H. Aoki and H. Kamimura: Properties of the Hubbard model for the arbitrary numbers of up and down spin electrons,  
*J. Phys. Soc. Japan* **39**, 1169-1174 (1975).

[Conference Proceedings — Invited talks]

[2000-]

212. Hideo Aoki and Toshikaze Kariyado: Pressure effects and orbital characters in cuprate and carbon-based superconductors,  
Proc. Int. Conf. Superstripes, Ischia, 27 May-1 June 2013 [J. Superconductivity and Novel Magnetism **27**, 995 (2014)].
213. Hideo Aoki: A perspective of superconductivity as multiband phenomena: Cuprate, iron and aromatic systems,  
*Proc. STRIPE2011*, Rome, 2011 [J. Superconductivity and Novel Magnetism **25**, 1243 (2012)].



214. Hideo Aoki: Unconventional superconductivity originating from disconnected Fermi surfaces in the iron-based compound,  
*Proc.  $\mu$ SR2008*, Tsukuba, 2008 [*Physica B* **404**, 700-705 (2009)].
215. Hideo Aoki: Model construction and pairing symmetry for the iron-based oxypnictides,  
*Proc. 21st Int. Symposium on Superconductivity*, Tsukuba, Oct. 2008 [*Physica C* **469**, 890-893 (2009)].
216. Hideo Aoki, Takahiro Fukui and Yasuhiro Hatsugai: Topological aspects of quantum Hall effect in graphene,  
*Proc. 17th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Würzburg, 31 July- 4 Aug. 2006 [*Int. J. Modern Phys. B* **21**, 1133 (2007)].
217. Naoto Tsuji, Shigehiro Takajo and Hideo Aoki: Large magnetic moments generated from loop currents in carbon nanotube attached to electrodes · a theoretical picture,  
*Proc. 17th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Würzburg, 31 July- 4 Aug. 2006 [*Int. J. Modern Phys. B* **21**, 1198 (2007)].
218. Hideo Aoki: Triplet superconductivity — spin vs charge fluctuations and fermiology,  
*Proc. 10th Int. Conf. on Muon Spin Rotation, Relaxation and Resonance*, Oxford, Aug. 2005 [*Physica B* **374-375**, 229-234 (2006)].
219. Hideo Aoki: Fermiology and interaction in unconventional superconductors — triplet versus singlet pairs,  
*Physica C* **437-438**, 11-16 (2006).
220. Hideo Aoki: Design of electron correlation effects in interfaces and nanostructures,  
*Proc. 7th Int. Conf. on Atomically Controlled Surfaces, Interfaces and Nanostructures*, Nara, Nov. 2003 [*Applied Surf. Sci.* **237**, 2-12 (2004)].
221. Hideo Aoki: Fermiology in correlated electron systems, in Raymond F. Bishop et al. (ed.):  
*Recent progress in many-body theories* ('Advances in quantum many-body theory' Vol. 6) (World Scientific, New Jersey, 2002), pp.13-22 [also published in *Int. J. Mod. Phys. B* **17**, 4953 (2003)].
222. Hideo Aoki: Interaction and dimensionality in the quantum Hall physics  
in *Proc. Int. Workshop on quantum Hall effect — past, present and future* ed. by D. Weiss and R. Haug [*Physica E* **20**, 149-159 (2003)].

[1983-1999]

223. H. Aoki: Gauge invariance of the Hall current in two- dimensional systems,  
in *Application of High Magnetic Fields in Semiconductor Physics* (Lecture Notes in Physics 177) ed. by G. Landwehr (Springer, 1983), pp.11-22.
224. H. Aoki: Localization in the quantum Hall regime,  
*Proc 7th Int. Conf. on Electronic Properties of Two-Dimensional Systems*, Santa Fe, 1987  
[*Surf. Sci.* **196**, 107-119 (1988)].
225. H. Aoki: An overview of the numerical studies of the quantum Hall effect,  
in *High Magnetic Fields in Semiconductor Physics III — Quantum Hall Effect*, ed. by G. Landwehr (Springer, Berlin, 1992), pp.17-26.
226. H. Aoki: Internal degrees of freedom in 0D, 1D and 2D electron gases in strong magnetic fields,  
in *High Magnetic Fields in the Physics of Semiconductors* ed. by G. Landwehr and W. Ossau (World Scientific, Singapore, 1997) pp. 63-72.
227. H. Aoki: Double quantum dots in the fractional quantum Hall regime,  
*Proc. Int. Workshop on Novel Physics in Low-Dimensional Electron Systems* ed. by T. Chakraborty [*Physica E* **1**, 198-203 (1997)].

[Conference proceedings — contributed papers]

[2000-]

228. Yuta Murakami, Philipp Werner, Naoto Tsuji, Hideo Aoki: Dynamical mean-field analysis of ordered phases in the half-filled Holstein-Hubbard model,  
*Proc. Int. Conf. Strongly Correlated Electron Systems (SCES2013)* [JPS Conf. Proc. **3**, 016023 (2014)].
229. H. Sakakibara, K. Suzuki, H. Usui, K. Kuroki, R. Arita and H. Aoki: Theoretical study of the chemical pressure effect on  $T_c$  in the cuprate superconductors,  
*Proc. ISS 2013* [*Physics Procedia* **58**, 34 (2014)].
230. Hiroki Sakamoto, Yasuhiro Hatsugai, Hideo Aoki and Tohru Kawarabayashi: Sharp zero-energy Landau levels in multilayer graphene,  
*Proc. 12th Asia Pacific Physics Conf.* [JPS Conf. Proc. **1**, 012069 (2014)].

231. H. Sakakibara, K. Suzuki, H. Usui, K. Kuroki, R. Arita, D.J. Scalapino and H. Aoki: Three-orbital study on the orbital distillation effect in the high  $T_c$  cuprates, *Proc. ISS 2012 [Physics Procedia* **45**, 13 (2013)].
232. Hirofumi Sakakibara, Katsuhiko Suzuki, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita, Douglas J. Scalapino and Hideo Aoki: First-principles band structure and FLEX approach to the pressure effect on  $T_c$  of the cuprate superconductors, *Proc. CCP 2012 [J. Phys.: Conf. Ser.* **454**, 012021 (2013)].
233. Tohru Kawarabayashi, Takahiro Honda, Hideo Aoki and Yasuhiro Hatsugai: Chiral symmetry and fermion doubling in the zero-mode Landau levels of massless Dirac fermions with disorder, *Proc. ICPS 2012, Zürich, Aug 2012 [AIP Conference Proceedings* **1566**, 283 (2013)].
234. T. Kawarabayashi, Y. Hatsugai, T. Morimoto and H. Aoki: Generalization of chiral symmetry for tilted Dirac cones, *Proc. Localisation 2011, Pohang, Aug 2011 [Int. J. Modern Phys.: Conf. Series* **11**, 145 (2012)] .
235. Tohru Kawarabayashi, Yasuhiro Hasugai and Hideo Aoki: Stability of zero-mode Landau levels in bilayer graphene against disorder in the presence of the trigonal warping, *Proc. HMF 2012, Chamonix [J. Phys.: Conf. Series* **456**, 012020 (2013)].
236. Yuji Hamamoto, Tohru Kawarabayashi, Hideo Aoki and Yasuhiro Hatsugai: Chiral symmetry and many-body effect in multilayer graphene, *Proc. HMF 2012, Chamonix [J. Phys.: Conf. Series* **456**, 012013 (2013)].
237. P. A. Maksym and H. Aoki: Magnetic field induced rearrangement of the vacuum charge in a graphene quantum dot with a mass gap, *Proc. HMF 2012, Chamonix [J. Phys.: Conf. Series* **456**, 012026 (2013)].
238. Takahiro Morimoto and Hideo Aoki: Flow diagram of the longitudinal and Hall conductivities in ac regime in the disordered graphene quantum Hall system, *Proc. 26th Int. Conf. on Low Temperature Physics (LT26) [J. Phys.: Conf. Ser.* **400**, 042047 (2012)].
239. Y. Hamamoto, Y. Hatsugai and H. Aoki: Chiral symmetry and electron-electron interaction in many-body gap formation in graphene, *Proc. 26th Int. Conf. on Low Temperature Physics (LT26) [J. Phys.: Conf. Ser.* **400**, 042015 (2012)].

240. Hirofumi Sakakibara, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: Two-orbital view on the origin of the material dependence of  $T_c$  in the single-layer cuprates, *Proc. LT26 [J. Phys.: Conf. Series* **400**, 022100 (2012)].
241. Takashi Oka, and Hideo Aoki: All optical measurement proposed for the photovoltaic Hall effect, *Proc. HMF-19*, Fukuoka, July 2010 [*J. Phys.: Conf. Ser.* **334**, 012060 (2011)].
242. Takahiro Morimoto, Yshai Avishai and Hideo Aoki: Dynamical scaling analysis of the optical Hall conductivity in the graphene quantum Hall system with various types of disorder, *Proc. HMF-19*, Fukuoka, July 2010 [*J. Phys.: Conf. Ser.* **334**, 012045 (2011)].
243. H. Watanabe, Y. Hatsugai and H. Aoki: Manipulation of the Dirac cones and the anomaly in the graphene related quantum Hall effect, *Proc. HMF-19*, Fukuoka, July 2010 [*J. Phys.: Conf. Ser.* **334**, 012044 (2011)].
244. Mitsuhiro Arikawa, Hideo Aoki, Yasuhiro Hatsugai: Edge states in graphene quantum Hall system with bond vs potential disorder, *Proc. HMF-19*, Fukuoka, July 2010 [*J. Phys.: Conf. Ser.* **334**, 012043 (2011)].
245. Mitsuhiro Arikawa, Hideo Aoki and Yasuhiro Hatsugai: Entanglement entropy of the bond order phase in graphene in magnetic fields, *Proc. ICPS 2010 [AIP Conf. Proc.* **1399**, 823 (2011)].
246. Tohru Kawarabayashi, Yasuhiro Hatsugai, Hideo Aoki: Landau level broadening in graphene with long-range disorder — Robustness of the  $n = 0$  level, *Proc. EP2DS 2009 [Physica E* **42**, 759 (2010)].
247. P. A. Maksym, M. Roy, M. F. Craciun, S. Russo, M. Yamamoto, S. Tarucha and H. Aoki: Proposal for a magnetic field induced graphene dot, *Proc. Quantum Dot 2010 [J. Phys.: Conf. Ser.* **245**, 012030 (2010)].
248. Naoto Tsuji, Takashi Oka, and Hideo Aoki: Nonequilibrium steady states in correlated electron systems — Photoinduced insulator-metal transition and optical response, *J. Phys.: Conf. Ser.* **200**, 012212 (2010).
249. Takashi Oka and Hideo Aoki: Photovoltaic Berry curvature in the honeycomb lattice, *Proc. Int. Conf. Magnetism*, 2009 [*J. Phys.: Conf. Ser.* **200**, 062017 (2010)].
250. Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Optical Hall conductivity in 2DEG and graphene QHE systems, *Proc. Int. Conf. Electronic Properties of Two-Dimensional Systems*, Kobe, 2009 [*Physica E* **42**, 751 (2010)].

251. Kazuhiko Kuroki, Hidetomo Usui, Seiichiro Onari, Ryotaro Arita and Hideo Aoki: Pnictogen height as a switch between high  $T_c$  nodeless and low  $T_c$  nodal pairings in the iron based superconductors,  
*Proc. 9th Int. Conf. on Materials and Mechanisms of Superconductivity (M2S)*, Tokyo, 2009 [*Physica C* **207**, S416 (2010)].
252. Hirokazu Takashima, Ryotaro Arita, Kazuhiko Kuroki and Hideo Aoki: Functional renormalization group beyond the static approximation and its application to the two-dimensional Hubbard model,  
*Proc. 9th Int. Conf. on Materials and Mechanisms of Superconductivity (M2S)*, Tokyo, 2009 [*Physica C* **207**, S35 (2010)].
253. Takashi Oka and Hideo Aoki: Non-equilibrium superconductivity in a correlated electron system studied with the Keldysh+FLEX approach,  
*Proc. 9th Int. Conf. on Materials and Mechanisms of Superconductivity (M2S)*, Tokyo, 2009 [*Physica C* **207**, S928 (2010)].
254. Kazuhiko Kuroki, Seiichiro Onari, Ryotaro Arita, Hidetomo Usui, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki: Unconventional superconductivity originating from disconnected Fermi surfaces in the iron-based oxypnictide,  
*Proc. Int. Symp. Fe-Pnictide Superconductors*, Tokyo, 2008 [*J. Phys. Soc. Jpn* **77**, Suppl. C, 96 (2008)].
255. Walid Malaeb, Teppei Yoshida, Takashi Kataoka, Atsushi Fujimori, Masato Kubota, Kanta Ono, Hidetomo Usui, Kazuhiko Kuroki, Ryotaro Arita, Hideo Aoki, Yoichi Kamihara, Masahiro Hirano, and Hideo Hosono: Photoemission study of the electronic structure of  $\text{LaFeAsO}_{1-x}\text{F}_x$  and  $\text{LaFePO}_{1-x}\text{F}_x$ ,  
*Proc. Int. Symp. Fe-Pnictide Superconductors*, Tokyo, 2008 [*J. Phys. Soc. Jpn* **77**, Suppl. C, 69 (2008)].
256. Takashi Oka and Hideo Aoki: Photo-induced Hall effect in graphene — effect of boundary types,  
*Proc. 3rd Int. Conf. on Photo-Induced Phase Transitions and Cooperative Phenomena*, Osaka, Nov 2008 [*J. Phys.: Conf. Series* **148**, 012061 (2009)].
257. N. Tsuji, T. Oka and H. Aoki: Photoinduced insulator-metal transition and nonlinear optical response of correlated electrons - a DMFT analysis,  
*Proc. 3rd Int. Conf. on Photo-Induced Phase Transitions and Cooperative Phenomena*, Osaka, Nov 2008 [*J. Phys.: Conf. Series* **148**, 012058 (2009)].
258. T. Oka and H. Aoki: Photo-induced metallic liquid in a one-dimensional Mott insulator in AC fields,

- Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 042152 (2009)].
259. Ryotaro Arita, Seiichiro Onari, Hidetomo Usui, Kazuhiko Kuroki, Yukio Tanaka, Hiroshi Kontani, and Hideo Aoki: Minimal Model for Study on Superconductivity in  $\text{LaFeAsO}_{1-x}\text{F}_x$  Based on *ab-initio* Downfolding,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 052010 (2009)].
260. Hirokazu Takashima, Ryotaro Arita, Kazuhiko Kuroki, Hideo Aoki: An improved algorithm for the functional renormalization group and its application to the 2D Hubbard model,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 052261 (2009)].
261. Naoto Tsuji, Takashi Oka and Hideo Aoki: Photoinduced insulator-metal transition in correlated electrons — a Floquet analysis with the dynamical mean-field theory,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 042216 (2009)].
262. N. Horiguchi, T. Oka and H. Aoki: Non-equilibrium dynamics in Mott-to-superfluid transition in Bose-Einstein condensation in optical lattices,  
*Proc. 25th Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 032007 (2009)].
263. Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Cyclotron radiation and emission in graphene — a possibility of Landau-level laser,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 022059 (2009)].
264. Takahiro Morimoto, Yasuhiro Hatsugai and Hideo Aoki: Optical Hall conductivity in QHE systems,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 022060 (2009)].
265. Mitsuhiro Arikawa, Yasuhiro Hatsugai and Hideo Aoki: Edge states for the  $n = 0$  Landau level in graphene,  
*Proc. Int. Conf. Low Temperature Physics*, Amsterdam 2008 [*J. Phys.: Conf. Series* **150**, 022003 (2009)].
266. Yasuhiro Hatsugai, Takahiro Fukui and Hideo Aoki: Topological low-energy modes in  $N = 0$  Landau levels of graphene — a possibility of a quantum-liquid ground state,  
*Proc. 17th Int. Conf. on Electronic Properties of Two-Dimensional Systems*, Genova, July 2007 [*Physica E* **40**, 1530 (2008)].

267. Tatsuya Nakajima and Hideo Aoki: Landau quantization of graphene including diamagnetic shift and shrinkage of wave function,  
*Proc. 17th Int. Conf. on Electronic Properties of Two-Dimensional Systems*, Genova, July 2007 [*Physica E* **40**, 1354-1356 (2008)].
268. Y. Hatsugai, T. Fukui and H. Aoki: Topological aspects of graphene — Dirac fermions and the bulk-edge correspondence in magnetic fields,  
*Proc. Int. Conf. on Graphene*, Dresden, 2006 [*Eur. Phys. J. Special Topics* **148**, 133-141 (2007)].
269. Peter A. Maksym, Ryotaro Arita and Hideo Aoki: Spin configuration in the electron molecule in few-electron quantum dots in strong magnetic fields — superposition of multiple configurations,  
*Proc. 17th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Würzburg, 30 July- 4 Aug 2006 [*Int. J. Modern Phys. B* **21**, 1643 (2007)].
270. Masaki Tezuka, Ryotaro Arita and Hideo Aoki: Density-matrix renormalization group study of phase diagram in systems with strong electron-electron and electron-phonon interactions,  
*Proc. 24th Int. Conf. on Low Temperature Physics*, Florida, 10-17 August 2005 [*AIP Conf. Proc.* **850**, 551 (2006)].
271. S. Onari, R. Arita, K. Kuroki and H. Aoki: Superconductivity from a long-range repulsive interaction,  
*Proc. 24th Int. Conf. on Low Temperature Physics*, Florida, 10-17 August 2005 [*AIP Conf. Proc.* **850**, 559 (2006)].
272. M. Kiguchi, G. Yoshikawa, K. Saiki, R. Arita, H. Aoki: Metal Induced Gap States at tetratetracontane/Cu Interface,  
*Proc. Int. Conf. on Formation of Semiconductor Interfaces*, ed. by C. Girardeaux, et al [*Journal de Phys.* **IV 132**, 199-203 (2006)].
273. P. A. Maksym and H. Aoki: Electron-molecules in quantum dots — Transitions between electron-molecule states in electrostatic quantum dots,  
*Proc. Int. Conf. on Quantum Dots*, Chamonix, 2006 [*Phys. stat. sol. (c)* **3**, 3798-3801 (2006)].
274. S. Sakai, R. Arita, H. Aoki: Application of the perturbation series expansion quantum Monte Carlo method to multiorbital systems having Hund's coupling,  
*Proc. SCES 2005*, Vienna, July 2005 [*Physica B* **378-380**, 288-289 (2006)].

275. R. Arita, S. Onari, K. Kuroki and H. Aoki: Off-site repulsion-induced triplet pairing: DCA and FLEX study for  $\text{Sr}_2\text{RuO}_4$ ,  
*Physica B* **359-361**, 584-586 (2005).
276. S. Onari, R. Arita, K. Kuroki, and H. Aoki: Phase diagram of the two-dimensional extended Hubbard model: pairing from charge and spin fluctuations,  
*Physica B* **359-361**, 518-520 (2005).
277. Takashi Oka, Ryotaro Arita, and Hideo Aoki: Nonlinear transport in one dimensional Mott insulator in strong electric fields,  
*Physica B* **359-361**, 759-761 (2005).
278. M. Tezuka, R. Arita and H. Aoki: A DMRG study of correlation functions in the Holstein-Hubbard model,  
*Physica B* **359-361**, 708 (2005).
279. S. Sakai, R. Arita and H. Aoki: Superconductivity in multi-orbital systems: a dynamical mean field + quantum Monte Carlo study,  
*Physica B* **359-361**, 554 (2005).
280. K. Kimura, K. Kuroki, R. Arita and H. Aoki: Superconductivity in the Hubbard model on the Shastry-Sutherland lattice,  
*J. Low Temp. Phys.* **134**, 805 (2004).
281. M. Koshino and H. Aoki: Integer quantum Hall effect in isotropic 3D systems,  
*Physica E* **22**, 214 (2004).
282. H. Aoki, M. Koshino, D. Takeda, H. Morise and K. Kuroki: Electronic structure of periodic curved surfaces — continuous surface versus graphitic sponge,  
*Physica E* **22**, 696 (2004).
283. Y. Tanuma, K. Kuroki, Y. Tanaka, R. Arita, S. Kashiwaya and H. Aoki: Theoretical study on the tunneling spectrum of quasi-one dimensional organic superconductors  $(\text{TMTSF})_2\text{X}$ ,  
*Synthetic Metals* **133-134**, 37 (2003).
284. Y. Tanuma, K. Kuroki, Y. Tanaka, R. Arita, S. Kashiwaya and H. Aoki: How to determine pairing symmetry fo quasi-1D organic superconductors through magnetotunneling spectroscopy,  
*Physica C* **388-389**, 587 (2003).
285. M. Koshino, H. Aoki, T. Osada: Butterfly spectrum and quantum Hall effect in three-dimensional FISDW,  
*Synthetic Metals* **133-134**, 79 (2003).



286. Masaru Onoda, Takahiro Mizusaki and Hideo Aoki: How heavy and how strongly interacting are composite fermions?,  
*Physica E* **12**, 101 (2002).
287. Masaru Onoda, Takahiro Mizusaki and Hideo Aoki: Interaction and pairing mechanism in even-denominator systems at higher Landau levels,  
*Proc. 15th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Oxford, 2002, A50.
288. M. Koshino, H. Aoki and T. Osada: Three dimensional integer quantum Hall effect and the wrapping current in three dimensional FISDW,  
*Proc. Int. Conf. on Physics of Semiconductors*, Edinburgh, 2002, D215.
289. R. Arita, Y. Suwa, K. Kuroki and H. Aoki: Flat-band ferromagnetism in an organic polymer,  
*Proc. Int. Conf. on Physics of Semiconductors*, Edinburgh, 2002, D211.
290. R. Arita, Y. Suwa, K. Kuroki and H. Aoki: Possible flat-band ferromagnetism in an organic polymer,  
*Proc. Int. Conf. on Molecule-based Magnets*, Valencia, Oct. 2003) [*Polyhedron* **22**, 1883 (2003)].
291. Takashi Kimura, Yuji Zenitani, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: A possibility of high- $T_C$  superconductivity on a disconnected Fermi surface in a decorated square lattice,  
*Physica B* **328**, 20 (2003).
292. Seiichiro Onari, Kazuhiko Kuroki, Ryotaro Arita and Hideo Aoki: Effect of inter-band nesting on superconductivity in stacked honeycomb lattices,  
*Physica B* **329-333**, 1437-1439 (2003).
293. M. Koshino, H. Aoki, T. Osada: Field-induced SDW and integer quantum Hall effect in anisotropic three-dimensional electron systems,  
*Physica E* **12**, 157 (2002).
294. Y. Tanuma, K. Kuroki, Y. Tanaka, R. Arita, S. Kashiwaya and H. Aoki: Zero energy peak and pairing symmetry of quasi-one-dimensional organic superconductor  $(\text{TMTSF})_2\text{X}$ ,  
*J. Phys. Chem. Solids* **63**, 1273-1276 (2002).
295. R. Arita, K. Kuroki and H. Aoki: Fluctuation exchange study of singlet and triplet superconductivity in 2D and 3D single-band Hubbard model,  
*J. Phys. Chem. Solids* **62**, 249 (2001).

296. M. Onoda, T. Mizusaki, T. Otsuka and H. Aoki: How the composite-fermion picture describes the excitation spectrum of the even-fraction quantum Hall liquid,  
*Proc. 25th Int. Conf. on Physics of Semiconductors* ed. by N. Miura and T. Ando (Springer, Berlin, 2001), p. 939.
297. M. Onoda, T. Mizusaki, T. Otsuka and H. Aoki: Composite fermion picture and the spin states in the fractional quantum Hall system — a numerical study,  
*Proc. 14th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Matsue, 2000 [*Physica B* **298**, 173-176 (2001)].
298. M. Koshino, H. Aoki, K. Kuroki, S. Kagoshima and T. Osada: Butterfly spectrum and integer quantum Hall effect in three dimensions — a mapping between 2D and 3D Hofstadter problems  
*Proc. 14th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Matsue, 2000 [*Physica B* **298**, 97-100 (2001)].
299. S. Muto and H. Aoki: Molecular dynamics study of a classical two-dimensional electron system — positional and orientational orders,  
in *Proc. 13th Int. Conf. Electronic Properties of Two-Dimensional Systems* [*Physica E* **6**, 116-119 (2000)].

[1990's]

300. K. Kuroki, R. Arita and H. Aoki: A link between the spin fluctuation and Fermi surface in high  $T_C$  cuprates — A description within the single-band Hubbard model,  
*Proc. Int. Conf. on Physics & Chemistry of Molecular & Oxide Superconductors 99* [*J. Low Temp. Phys.* **117**, 247-251 (1999)].
301. H. Imamura, P. A. Maksym and H. Aoki: Symmetry of 'molecular' configurations of interacting electrons in a quantum dot in strong magnetic fields,  
*Physica B* **249-251**, 214-219 (1998).
302. T. Nakajima and H. Aoki: Coherent states in the bilayer fractional quantum Hall ferromagnet,  
*Physica B* **249-251**, 828-831 (1998).
303. H. Imamura, H. Aoki and P. A. Maksym: Spin blockade in quantum dots in high magnetic fields,  
*Physica B* **256-258**, 194-197 (1998).

304. T. Terao, T. Nakayama and H. Aoki: Multifractality of the quantum Hall wavefunctions in higher Landau levels,  
*High Magnetic Fields in the Physics of Semiconductors* ed. by G. Landwehr and W. Ossau (World Scientific, Singapore, 1997) p. 39-42.
305. H. Aoki, M. Ando and H. Matsumura: Electronic structure of 2D lateral superstructures in strong magnetic fields,  
*High Magnetic Fields in the Physics of Semiconductors* ed. by G. Landwehr and W. Ossau (World Scientific, Singapore, 1997) pp.331-334.
306. K. Kusakabe and H. Aoki: Extended AB period study of the electron pairing transition in  $t - J$  ladders,  
*Proc. Int. Conf. on Physics and Chemistry of Molecular and Oxide Superconductors*, Karlsruhe, 1996 [*J. Low Temp. Phys.* **105**, 609-614 (1996)].
307. T. Nakajima and H. Aoki, Composite-fermion picture for the double-layer fractional quantum Hall effect,  
*Proc. 11th Int. Conf. on Electronic Properties of Two-Dimensional Systems* ed. by L. Eaves and P.C. Main [*Surf. Sci.* **361/362**, 83-86 (1996)].
308. K. Kuroki and H. Aoki: Superconductivity in the charge-transfer and Mott-Hubbard regimes of the three-band Hubbard model,  
*Proc. Int. Conf. on Physics and Chemistry of Molecular and Oxide Superconductors*, Karlsruhe, 1996 [*J. Low Temp. Phys.* **105**, 603-608 (1996)].
309. T. Kimura, K. Kuroki and H. Aoki: Spin-polarized current from a Zeeman-split Tomonaga-Luttinger liquid in quantum wires,  
*Proc. 23rd Int. Conf. on Physics of Semiconductors*, ed. by M. Scheffler and R. Zimmermann (World Scientific, Singapore, 1996), pp.1225-1228.
310. P. A. Maksym, H. Imamura and H. Aoki: Vertically coupled double quantum dot in the fractional quantum Hall regime — magic numbers and optical absorption,  
*Proc. 23rd Int. Conf. on Physics of Semiconductors*, ed. by M. Scheffler and R. Zimmermann (World Scientific, Singapore, 1996), pp.1613-1616.
311. H. Aoki and T. Nakajima, Composite-fermion picture for the spin-wave excitation in the fractional quantum Hall system,  
*Proc. 11th Int. Conf. on the Application of High Magnetic Fields in Semiconductor Physics*, ed by D. Heiman (World Scientific, 1995), pp.58-61.
312. H. Aoki and N. Shima: Electronic structures of lateral superlattices — metal/ semimetal/ semiconductor classes and ferromagnetism,

- Proc. 7th Int. Conf. on Superlattices, Microstructures and Microdevices*, Banff, 1994 [*Superlattices and Microstructures* **15**, 247-251 (1994)].
313. K. Kusakabe and H. Aoki: Robustness of the ferromagnetism in flat bands,  
*Proc. 20th Int. Conf. on Low Temperature Physics*, Oregon, 1993 [*Physica B* **194-196**, 215-216 (1994)].
314. K. Kusakabe and H. Aoki: Metallic ferromagnetism in the two-band Hubbard model,  
*Proc. 20th Int. Conf. on Low Temperature Physics*, Oregon, 1993 [*Physica B* **194-196**, 217-218 (1994)].
315. T. Nakajima and H. Aoki: Spin waves in double fractional quantum Hall systems,  
*Proc. ISSP Int. Symposium 'Frontiers in high magnetic fields'*, Tokyo, 1993 [*Physica B* **201**, 327-330 (1994)].
316. K. Kuroki and H. Aoki: Multiband superconductivity — a mapping to the extended attractive Hubbard model,  
*Proc. Int. Conf. on Physics & Chemistry of Molecular & Oxide Superconductors* [*J. of Superconductivity* **7**, 577-579 (1994)].
317. K. Kusakabe and H. Aoki: Magnetism in two-band systems with electron correlation,  
*Proc. Int. Symposium on Chemistry and Physics of Molecular Based Magnetic Materials*, 1992 [*Mol. Cryst. Liq. Cryst.* **233**, 71-80 (1993)].
318. T. Ando and H. Aoki: Quantum Hall conduction in quantum wires,  
*Physica B* **184**, 365-368 (1993).
319. T. Nakajima and H. Aoki: Electronic structure of a double fractional quantum Hall system of spin 1/2 electrons,  
*Physica B* **184**, 91-94 (1993).
320. H. Aoki: The quantum Hall effect in anomalous band structures,  
*Proc. 9th Int. Conf. on Electronic Properties of Two-Dimensional Systems*, Nara, 1991) [*Surf. Sci.* **263**, 137-140 (1992)].
321. K. Ishida and H. Aoki: Study of one-dimensional biexciton in a two-band model with long-range interactions,  
*Proc. Int. Conf. on Physics of Semiconductors* Beijing, 1992, pp.213-216.
322. S. Tsuneyuki, H. Aoki and Y. Matsui: New crystal structures of SiO<sub>2</sub> predicted by molecular dynamics study,  
*Proc. Int. Conf. on Computer Aided Innovation of New Materials*, Tokyo, 1990, ed. by M Doyama et al (North-Holland, Amsterdam, 1991), pp.381-384.

323. K. Kuroki, H. Aoki and Y. Takada: Superconductivity in a two-band Hubbard system with inter-band attraction,  
*Proc. Int. Conf. on Materials and Mechanisms of Superconductivity, High-Temperature Superconductors*, (Kanazawa, 1991) [*Physica C* **185-189**, 1453-1454 (1991)].
324. K. Kusakabe and H. Aoki: Magnetism in the single and two-band Hubbard models: generalized Hund's coupling,  
*Proc. Int. Conf. on Materials and Mechanisms of Superconductivity, High-Temperature Superconductors*, (Kanazawa, 1991) [*Physica C* **185-189**, 1505-1506 (1991)].
325. K. Kuroki and H. Aoki: Two-band Hubbard model for copper oxide superconductors,  
*Proc. 19th Int. Conf. on Low Temperature Physics*, Brighton, 1990 [*Physica B* **165&166**, 1011-1012 (1990)].
326. S. Tsuneyuki, H. Aoki, M. Tsukada and Y. Matsui: Molecular-dynamics study of pressure-induced structural transformations in silica,  
*Proc. Int. Conf. on Physics of Semiconductors*, Thessaloniki, 1990, ed. by E.M. Anastasakis and J.D. Joannopoulos, (World Scientific, Singapore, 1990), p.2221-2224.

[1970's-1980's]

327. H. Aoki: Numerical study of two-dimensional Wigner glass in strong magnetic fields,  
*Proc. 2nd Int. Conf. on the Electronic Properties of Two-Dimensional Systems* (Berchtesgaden, 1977) ed. by J.F. Koch and G. Landwehr (North-Holland: Amsterdam, 1978) [*Surf. Sci.* **73**, 281-290 (1978)].
328. E. Yamaguchi, H. Aoki and H. Kamimura: Intra- and inter-state interactions in Anderson localised states,  
*Proc. 8th Int. Conf. on Amorphous and Liquid Semiconductors* (Cambridge, USA, 1979) ed. by W. Paul and M. Kastner (North-Holland: Amsterdam, 1980) [*J. Non-cryst. Solids* **35/36**, 47-52 (1980)].
329. H. Aoki: Anderson localisation in two-band systems,  
*Proc. 9th Int. Conf. on Amorphous and Liquid Semiconductors* (Grenoble, 1981) ed. by B.K. Chakraverty and D. Kaplan (Les Editions de Physique: Les Ulis, 1981) [*J. de Phys.* **42**, Colloque C-4, 51-54 (1981)].
330. H. Aoki and T. Ando: Effect of Landau-band structure on the quantized Hall conductivity in two dimensions,  
*Proc. 4th Int. Conf. on Electronic Properties of Two-dimensional Systems* (New London, 1981) ed. by F. Stern [*Surf. Sci.* **113**, 27-31 (1982)].

331. H. Aoki: Decimation method of real-space renormalisation for electron systems with application to random systems,  
*Proc. 10th Int. Colloquium on Group-Theoretical Methods in Physics* (Canterbury, 1981) ed. by L.L. Boyle and A.P. Cracknell (North-Holland: Amsterdam, 1982) [*Physica A* **114**, 538-542 (1982)].
332. H. Aoki: Gauge-transformation study of quantised Hall effect,  
*Proc. Int. Symposium on Foundations of Quantum Mechanics* (Tokyo, 1983) ed. by S. Kamefuchi (Phys. Soc. Japan, Tokyo, 1984), 346-352.
333. H. Aoki and T. Ando: Critical localisation and low- temperature transport in two-dimensional Landau quantisation,  
*Surf. Sci.* **170**, 249-255 (1986).
334. H. Aoki: Aharonov-Bohm effect in the quantised Hall effect,  
*Proc. 2nd Int. Symposium on Foundations of Quantum Mechanics* (Tokyo, 1986) ed. by M. Namiki et al (Physical Society of Japan, Tokyo, 1987), 155-164.
335. H. Aoki and T. Ando: Quantised Hall effect: from the winding number to the flow diagram, in *The Application of High Magnetic Fields in Semiconductor Physics* ed. by G. Landwehr, (Springer, Berlin, 1987), pp.45-48.
336. H. Aoki: Quantum fluctuations in the quantum Hall effect,  
*Proc. 18th Int. Conf. on Low Temperature Physics* (Kyoto, 1987) ed Y. Nagaoka [*Japn. J. Appl. Phys.* **26**, Suppl.3 pp.699-700 (1987)].
337. T. Miyazaki, K. Aizawa, H. Aoki, C. Itoh and M. Okazaki: Monte Carlo study of the epitaxial overlayer with substantial lattice mismatch,  
*Proc. 3rd Int. Conf. on Modulated Semiconductor Structures* (Montpellier, 1987) [*J. de Phys.* **48**, Colloque C5, 199- 202 (1987)].

**[Review articles]**

338. H. Aoki: Quantised Hall effect,  
*Rep. Progr. Phys.* **50**, 655-730 (1987).
339. S. Tsuneyuki, H. Aoki and Y. Matsui: Pressure-induced structural transformations in framework crystal structures: a molecular dynamics study for silica,  
*Molecular Simulations* **6**, 227-238 (1991).

340. S. Tsuneyuki, M. Tsukada, H. Aoki and Y. Matsui: Molecular-dynamics simulation of silica with a first-principles interatomic potential,  
in *Dynamic Processes of Material Transport and Transformation in the Earth's Interior*, ed. by F. Marumo (Terra Scientific Publishing, Tokyo, 1990), pp.1-21.
341. H. Aoki: Two-band models of superconductivity,  
in *New horizons in low-dimensional electron systems*, ed. by H. Aoki, M. Tsukada, M. Schlüter and F. Lévy (Kluwer Academic Publishers, Dordrecht, 1992), pp.261-280.
342. K. Kuroki and H. Aoki: Quantum Monte Carlo simulation of multiband fermion systems and its application to superconductivity  
in *Quantum Monte Carlo Methods in Condensed Matter Physics* ed. by M. Suzuki (World Scientific, Singapore, 1993), pp.205-219.
343. P. A. Maksym, H. Imamura, G. Mallon and H. Aoki: Molecular aspects of electron correlation in quantum dots,  
*J. Phys.: Condensed Matter* **12**, R299-R334 (2000).
344. H. Aoki, Y. Syono and R. J. Hemley: Physics and mineralogy — the current confluence,  
in *Physics Meets Mineralogy — Condensed-Matter Physics in Geosciences*, ed. by H. Aoki, Y. Syono and R. J. Hemley (Cambridge Univ. Press, 2000), p. 3.
345. Hideo Aoki: Opportunities in the diversity of crystal structures — a view from condensed-matter physics,  
in *Physics Meets Mineralogy — Condensed-Matter Physics in Geosciences*, ed. by H. Aoki, Y. Syono and R. J. Hemley (Cambridge Univ. Press, 2000), pp.259-298.
346. Hideo Aoki: Transport around criticalities — localisation-delocalisation and paramagnetic-ferromagnetic transitions, in Michael Pollak Festschrift (ed. by Allen Hunt),  
*Phil. Mag.* **81**, 859-874 (2001).
347. Hideo Aoki: Superconductivity from the repulsive electron interaction — from 1D to 3D,  
in *The Anderson Transition and its Ramifications — Localisation, Quantum Interference, and Interactions (Lecture Notes in Physics 630)* ed. by Tobias Brandes et al. (Springer Verlag, 2003), pp. 219-243.
348. Hideo Aoki: Superconductivity in frustrated systems,  
a Viewpoint article in *J. Phys.: Condensed Matter*, **16**, V1 - V5 (2004).
349. Hideo Aoki: Triplet superconductivity — spin vs charge fluctuations and fermiology,  
*Physica B* **374-375**, 229-234 (2006).

350. Hideo Aoki, Naoto Tsuji, Martin Eckstein, Marcus Kollar, Takashi Oka and Philipp Werner: Nonequilibrium dynamical mean-field theory and its applications, *Rev. Mod. Phys.* **86**, 779 (2014).
351. Hideo Aoki and Hideo Hosono: A superconducting surprise comes of age, *Physics World*, Feb. 2015, p.31.

[Books]

352. H. Kamimura and H. Aoki: *Physics of Interacting Electrons in Disordered Systems* (International Series of Monographs on Physics 76), Oxford University Press, Oxford, 1989.
353. H. Aoki, M. Tsukada, M. Schlüter and F. Lévy (editors): *New Horizons in Low-Dimensional Electron Systems* (in the series *Physics and Chemistry of Materials with Low-Dimensional Structures*), Kluwer Academic Publishers, Dordrecht, 1992.
354. H. Aoki and S. Komiyama (editors): *Proc. 12th Int. Conf. on Electronic Properties of Two-Dimensional Systems*, *Physica B* **249-251** (1998).
355. Hideo Aoki, Yasuhiko Syono and Russell J. Hemley (editors): *Physics Meets Mineralogy — Condensed-Matter Physics in Geosciences*, Cambridge Univ. Press, 2000.
356. H. Aoki: Spin states and transport in correlated electron systems  
in *Low-Dimensional Systems — Interactions and Quantum Transport Properties* ed. by T. Brandes (Springer Series ‘Lecture Notes in Physics’ **544**, Springer, 2000), p. 167.
357. H. Aoki: Composite fermions — excitation spectra in the odd- and even-fraction quantum Hall liquids  
in *Dynamics of Gauge Fields* ed. by A. Chodos et al. (Universal Academy Press, 2000), pp. 371-384.
358. G. Kido, T. Takamasu, H. Aoki and K. Takita (editors): *Proc. 14th Int. Conf. on High Magnetic Fields in Semiconductor Physics*, Matsue, 2000, *Physica B* **298** (2001).
359. G. Saito, S. Kagoshima, K. Kanoda, H. Aoki, T. Mori, Y. Misaki and H. Yamochi (editors): *Proc. 4th Int. Symposium on Crystalline Organic Metals, Superconductors and Ferromagnetism*, Hokkaido, 2001, *Synthetic Metals* **133-134** (2003).
360. Hideo Aoki: Superconductivity in highly correlated systems,  
in *Condensed Matter Theories* **21** ed. by Hisazumi Akai, Atsushi Hosaka, Hiroshi Toki and F. Bary Malik (Nova Science, 2007), pp.147-161.



361. Takashi Oka and Hideo Aoki: Nonequilibrium quantum breakdown in a strongly correlated electron system,  
in *Quantum Percolation and Breakdown [Lecture Notes in Physics 762]*, pp. 251-285 (Springer Verlag, 2009).
362. Hideo Aoki: Integer quantum Hall effect in P. Bhattacharya, R. Fornari and H. Kamimura (ed.): *Comprehensive Semiconductor Science & Technology*, Vol. 1: Physics and Fundamental Theory (Elsevier, 2011), pp.175-209.
363. Hideo Aoki and Mildred S. Dresselhaus (ed.): *Physics of Graphene* (Springer, 2014).
364. Yasuhiro Hatsugai and Hideo Aoki: Graphene — topological properties, chiral symmetry and their manipulation,  
in Hideo Aoki and Mildred S. Dresselhaus (ed.): *Physics of Graphene* (Springer, 2014), Ch.7, pp. 213-250.