

Publication and presentation list of Yasuhiro Tokura¹

A. LIST OF PUBLICATIONS

1. Kazuyuki Kuroyama, Sadashige Matsuo, Jo Muramoto, Shunsuke Yabunaka, Sasha R. Valentin, Arne Ludwig, Andreas D. Wieck, **Yasuhiro Tokura**, and Seigo Tarucha, “Real-time Observation of Charge-spin Cooperative Dynamics Driven by a Nonequilibrium Phonon Environment”, arXiv:2106.01576. Accepted for publication to Phys. Rev. Lett.
2. Hiroto Kasai, Yuki Takeuchi, Hideaki Hakoshima, Yuichiro Matsuzaki, **Yasuhiro Tokura**, “Anonymous quantum sensing”, J. Phys. Soc. Jpn. **91**, 074005 (2022). arXiv:2105.05585.
3. S. Kamimura, H. Hakoshima, Y. Matsuzaki, K. Yoshida, **Y. Tokura**, “Quantum enhanced heat engine by superabsorption”, Phys. Rev. Lett. **128**, 180602 (2022). arXiv:2106.10813.
4. T. Hatano, T. Kubo, S. Amaha, **Y. Tokura**, and S. Tarucha, “Coexistence of parallel and series current paths in parallel-coupled double quantum dots in nonlinear transport regime”, Appl. Phys. Express **14**, 105001 (2021).
5. G. Giavaras and **Yasuhiro Tokura**, “Microwave spectroscopy of spin-orbit coupled states: energy detuning versus interdot coupling modulation”, J. Appl. Phys. **128**, 154304 (2020).
6. G. Giavaras and **Yasuhiro Tokura**, “Probing the singlet-triplet splitting in double quantum dots: Implications of the ac field amplitude”, Phys. Rev. B. **100**, 195421-1-10 (2019); DOI: <https://doi.org/10.1103/PhysRevB.100.195421>, arXiv:2003.07056.
7. **Yasuhiro Tokura**, “Quantum adiabatic pumping in Rashba-Dresselhaus-Aharonov-Bohm interferometer”, Entropy **21**, 828-1-22 (2019); <https://doi.org/10.3390/e21090828>, becoming a cover story.
8. Toshihiro Kubo and **Yasuhiro Tokura**, “Indirect Acquisition of Aharonov-Bohm Phase via the Coulomb Interaction and Breakdown of Onsager-Buttiker Symmetry”, J. Phys. Soc. Jpn., **88**, 054717-1-7 (2019); <https://doi.org/10.7566/JPSJ.88.054717>.
9. Yosuke Sato, Sadashige Matsuo, Chen-Hsuan Hsu, Peter Stano, Kento Ueda, Yuusuke Takeshige, Hiroshi Kamata, Joon Sue Lee, Borzoyeh Shojaei, Kaushini Wickramasinghe, Javad Shabani, Chris Palmstrom, **Yasuhiro Tokura**, Daniel Loss, and Seigo Tarucha, “Strong electron-electron interactions of a Tomonaga-Luttinger liquid observed in InAs quantum wires”, Phys. Rev. B **99**, 155304-1-14 (2019); DOI: [10.1103/PhysRevB.99.155304](https://doi.org/10.1103/PhysRevB.99.155304).
10. H. Shibata, T. Hiraki, T. Tsuchizawa, K. Yamada, **Y. Tokura**, and S. Matsuo, “A waveguide-integrated superconducting nanowire single-photon detector with a spot-size converter on a Si photonics platform”, Superconductor Science and Technology, **32**, 034001 Mar. (2019).
11. G. Giavaras and **Y. Tokura**, “Spectroscopy of double quantum dot two-spin states by tuning the interdot barrier”, Phys. Rev. B **99**, 075412-1-5 (2019); DOI: [10.1103/PhysRevB.99.075412](https://doi.org/10.1103/PhysRevB.99.075412).
12. T. Hayashi, **Y. Tokura**, and A. Fujiwara, “Field-dependent hopping conduction”, Physica B: Condensed Matter **541**, 19-23 (2018); <https://doi.org/10.1016/j.physb.2018.04.019>.
13. Aleksandr E. Svetogorov, Masahiko Taguchi, **Yasuhiro Tokura**, and Denis M. Basko, “Theory of coherent quantum phase-slip in Josephson junction chains with periodic spatial modulations”, Phys. Rev. B **97**, 104514-1-14 (2018); DOI: [10.1103/PhysRevB.97.104514](https://doi.org/10.1103/PhysRevB.97.104514), arXiv:1711.09755v1
14. Ken-ichi Sasaki and **Yasuhiro Tokura**, “Theory of a Carbon-Nanotube Polarization Switch”, Phys. Rev. Applied **9**, 034018-1-10 (2018); DOI: [10.1103/PhysRevApplied.9.034018](https://doi.org/10.1103/PhysRevApplied.9.034018) Editor’s suggestion, arXiv:1712.05557.
15. Masahi Inui, Tatsuki Tojo, Kyozauro Takeda, and **Yasuhiro Tokura**, “Spin-flip quantum transition driven by the time-oscillating Rashba field”, J. Phys. Commun., **2** 015021-1-28 (2018); <https://doi.org/10.1088/2399-6528/aaa38e>.
16. Satoshi Nakajima and **Yasuhiro Tokura**, “Excess entropy production in quantum system: Quantum master equation approach”, J. Stat. Phys, **169**, 902-928 (2017); <https://doi.org/10.1007/s10955-017-1895-7>, arXiv:1612.03527v2.

¹updated on July 27, 2022

17. Tatsuki Tojo, Masashi Inui, Ryo Ooi, Kyozauro Takeda, and **Yasuhiro Tokura**, “Effect of isotropy and anisotropy of the confinement potential on the Rashba spin-orbit interaction for an electron in two-dimensional quantum system”, *Jpn. J. Appl. Phys* **56**, 075201-1-15 (2017); <https://doi.org/10.7567/JJAP.56.075201>.
18. T. Shimo-Oka, **Y. Tokura**, Y. Suzuki, and N. Mizuochi, “Fast Phase-manipulation of the Single Nuclear Spin Induced by an Electric Field”, *Phys. Rev. A* **95**, 032316-1-8 (2017), arXiv:1512.07765; DOI: 10.1103/PhysRevA.95.032316.
19. A. Ueda, Y. Utsumi, **Y. Tokura**, O. Entin-Wohlman, A. Aharony, “AC transport and full-counting statistics of molecular junctions in the weak electron-vibration coupling regime”, *The Journal of Chemical Physics* **146**, 092313-1-14 (2017); doi: <http://dx.doi.org/10.1063/1.4973707>, arXiv:1610.04961.
20. Yuichiro Matsuzaki, Takaaki Shimooka, Hirotaaka Tanaka, **Yasuhiro Tokura**, Kouichi Semba, Norikazu Mizuochi, “Hybrid quantum magnetic field sensor with an electron spin and a nuclear spin in diamond”, *Phys. Rev. A*, **94**, 052330-1-6 (2016); DOI: 10.1103/PhysRevA.94.052330, arXiv:1608.06717.
21. Masahiko Taguchi, Satoshi Nakajima, Toshihiro Kubo and **Yasuhiro Tokura**, “Quantum adiabatic pumping by modulating tunnel phase in quantum dots”, *J. Phys. Soc. Jpn*, **85**, 084704-1-8 (2016); <http://doi.org/10.7566/JPSJ.85.084704>, arXiv:1504.00059.
22. Daichi Morita, Toshihiro Kubo, **Yasuhiro Tokura**, Makoto Yamashita, “Spin-1 Quantum Walk”, *Phys. Rev. A* **96**, 063625-1-10 (2016); DOI: 10.1103/PhysRevA.93.063625.
23. Ken-ichi Sasaki, Shuichi Murakami, **Yasuhiro Tokura**, and Hideki Yamamoto, “Determination of intrinsic lifetime of edge magnetoplasmons”, *Phys. Rev B* **93**, 125402-1-6 (2016); DOI: 10.1103/PhysRevB.93.125402.
24. Stella Bevilacqua, Evgenii Novoselov, Sergey Cherednichenko, Hiroyuki Shibata and **Yasuhiro Tokura**, “Wideband MgB₂ Hot-Electron Bolometer Mixers: IF Impedance Characterisation and Modeling”, *IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY*, **26**, 2300105 (2016).
25. Evgenii Novoselov, Stella Bevilacqua, Sergey Cherednichenko, Hiroyuki Shibata, and **Yasuhiro Tokura**, “Effect of the Critical and Operational Temperatures on the Sensitivity of MgB₂ HEB Mixers”, *IEEE TRANSACTIONS ON TERAHERTZ SCIENCE AND TECHNOLOGY*, **6**, 238-244, (2016).
26. Akiko Ueda, Yasuhiro Utsumi, Hiroshi Imamura, and **Yasuhiro Tokura**, “Phonon-Induced Electron-Hole Excitation and ac Conductance in Molecular Junction”, *J. Phys. Soc. Jpn.* **85**, 043703-1-5 (2016).
27. Hiroyuki Shibata, Kaoru Shimizu, Toshimori Honjo, Hiroki Takesue, and **Yasuhiro Tokura**, “Superconducting Single-Photon Detector with the Highest Figure of Merit Using Cold Band-pass Filters and Long Distance QKD”, *The IEICE Transaction on Electronics (Japanese Edition)*, Vol. bf J99-C No.3 pp. 51-58, (2016).
28. Takuma Yamagami, Kota Ido, Kyozauro Takeda, and **Yasuhiro Tokura**, “Reconsideration of the spin-orbit interaction for an electron confined in a quasi-two-dimensional quantum dot: II. Bulkiness and in-plane spin-orbit coupling”, *Jpn. J. Appl. Phys.* **55**, 045201 (2016).
29. K. Washio, R. Nakazawa, M. Hashisaka, K. Muraki, **Y. Tokura**, and T. Fujisawa, “Long-lived binary tunneling spectrum in a quantum-Hall Tomonaga-Luttinger liquid”, *Phys. Rev. B* **93**, 075304 (2016).
30. Kaoru Shimizu and **Yasuhiro Tokura**, “Identifying a correlated spin fluctuation in an entangled spin chain subject to a quantum phase transition”, *Phys. Rev. E* **92**, 062143 (2015).
31. Y. Utsumi, O. Entin-Wohlman, A. Aharony, T. Kubo and **Y. Tokura**, “Fluctuation theorem for a two-terminal conductor connected to a thermal probe”, *Physica Scripta* **T165**, 014021 (2015).
32. Satoshi Nakajima, Masahiko Taguchi, Toshihiro Kubo, and **Yasuhiro Tokura**, “Interaction effect on adiabatic pump of charge and spin in quantum dot”, *Phys. Rev. B* **92**, 195420-1-17 (2015).

33. Hiroyuki Shibata, Kaoru Shimizu, Hiroki Takesue, and **Yasuhiro Tokura**, “Superconducting nanowire single-photon detector with ultimate low dark count rate”, *Optics Letters* **40**, 3428 (2015).
34. Michihisa Yamamoto, **Yasuhiro Tokura**, Yoshiro Hirayama, and Seigo Tarucha, “Band Shift, Band Filling and Electron Localization in a Quantum Wire Detected by Tunneling between Parallel Quantum Wires”, *J. Phys. Soc. Jpn.* **84**, 033710 (2015).
35. Stella Bevilacqua, Evgenii Novoselov, Sergey Cherednichenko, Hiroyuki Shibata, and **Yasuhiro Tokura**, “MgB2 Hot-Electron Bolometer Mixers at Terahertz Frequencies”, *IEEE Transactions on Applied Superconductivity* **25**, 2301104 (2015).
36. Ken-ichi Sasaki, **Yasuhiro Tokura**, and Hideki Gotoh, “Valley-asymmetric potential in graphene under dynamical deformation”, *Physical Review B* **90**, 205402-1-8 (2014).
37. Y. Utsumi, O. Entin-Wohlman, A. Aharony, T. Kubo and **Y. Tokura**, “Fluctuation theorem for heat transport probed by a thermal electrode”, *Phys. Rev. B* **89**, 205314-1-14 (2014).
38. Takahiro Yokozuka, Kota Ido, Richard Clark, Kyozauro Takeda and **Yasuhiro Tokura**, “Reconsideration of the relativistic corrections for an electron confined in 2D quantum dot. I. spin-orbit coupling and Rashba effect”, *Jpn J. Appl. Phys.* **53**, 031801 (2014).
39. Toshihiro Kubo and **Yasuhiro Tokura**, “Backaction Dephasing by a Quantum Dot Detector”, *Phys. Rev. B* **88**, 155402-1-11 (2013).
40. Nobuyuki Matsuda, Hiroshi Fukuda, Tai Tsuchizawa, Willam John Munro, Kaoru Shimizu, Koji Yamada, **Yasuhiro Tokura** and Hiroki Takesue, “Monolithic Integration of Polarization-entangled Photon Pair Source Using Silicon Photonics”, *NTT Technical Review*, Vol.11 No.8 Aug. 2013.
41. Hiroyuki Shibata, Kaoru Shimizu, Hiroki Takesue and **Yasuhiro Tokura**, “Superconducting Nanowire Single-Photon Detector with Ultralow Dark Count Rate Using Cold Optical Filters”, *Appl. Phys. Express* **6**, 072801 (2013).
42. Stella Bevilacqua, Sergey Cherednichenko, Vladimir Drakinskiy, Hiroyuki Shibata, **Yasuhiro Tokura** and Jan Stake, “Study of IF Bandwidth of MgB2 Phonon-Cooled Hot-Electron Bolometer Mixers”, *IEEE Trans. Terahertz Science and Technology*, **3**, 409 (2013).
43. T. Hatano, **Y. Tokura**, T. Kubo, S. Amaha, S. Teraoka, and S. Tarucha, “Excitation spectroscopy of few-electron states in artificial diatomic molecules”, *Phys. Rev. B* **87**, 241414(R) (2013).
44. Nobuyuki Matsuda, Hiroki Takesue, Kaoru Shimizu, **Yasuhiro Tokura**, Eiichi Kuramochi, and Masaya Notomi, “Slow light enhanced correlated photon pair generation in photonic-crystal coupled-resonator optical waveguides”, *Optics Express* **21**, 8596-8604 (2013).
45. Hiroyuki Shibata, Tatsushi Akazaki, **Yasuhiro Tokura**, “Fabrication of MgB2 nanowire single-photon detector with meander structure”, *APEX* **6**, 023101 (2013).
46. Ken-ichi Sasaki, **Yasuhiro Tokura**, and Tetsuomi Sogawa, “The origin of Raman D Band: Bonding and Antibonding Orbitals in Graphene”, *Crystals* **3**, 120 (2013).
47. Hiroyuki Shibata, Tatsushi Akazaki and **Yasuhiro Tokura**, “Ultrathin MgB2 films fabricated by molecular beam epitaxy and rapid annealing”, *Supercond. Sci. Technol.* **26** 035005 (2013).
48. H. Shibata, N. Kaina, T. Seki, **Y. Tokura**, N. Imoto, “NbN superconducting single-photon detector bilayer structure”, *Physics Procedia* **36**, 324-329 (2012).
49. Toshiaki Obata, Michel Pioro-Ladriere, **Yasuhiro Tokura** and Seigo Tarucha, “The photon-assisted dynamic nuclear polarization effect in a double quantum dot”, *New J. Phys.* **14**, 123013-1-11 (2012).
50. Ken-ichi Sasaki, Keiko Kato, **Yasuhiro Tokura**, Satoru Suzuki, and Tetsuomi Sogawa, “Dirac Cone Migration -Decay and Frequency Shift of Inter and Intravalley Phonons in Graphene-”, *Phys. Rev. B (RC)* **86**, 201403 (2012).

51. Nobuyuki Matsuda, Hanna Le Jeannic, Hiroshi Fukuda, Tai Tsuchizawa, William John Munro, Kaoru Shimizu, Koji Yamada, **Yasuhiro Tokura**, Hiroki Takesue, “A monolithically integrated polarization entangled photon pair source on a silicon chip”, *Scientific Reports*, **2** 817 (2012).
52. Makoto Kohda, Shuji Nakamura, Yoshitaka Nishihara, Kensuke Kobayashi, Teruo Ono, Junichiro Ohe, **Yasuhiro Tokura**, Taiki Mineno and Junsaku Nitta, “Spin-orbit induced electronic spin separation in semiconductor nanostructures”, *Nature Communications* **3**, 1082, doi:10.1038/ncomms2080 (2012).
53. Amnon Aharony, Shmuel Gurvitz, **Yasuhiro Tokura**, Ora Entin-Wohlman, and Sushanta Dattagupta, “Partial decoherence in mesoscopic system”, *Physica Scripta* **T151**, 014018-1-7 (2012).
54. K. Sasaki, K. Kato, **Y. Tokura**, S. Suzuki, and T. Sogawa, “Pseudospin for Raman D Band in Armchair Graphene Nanoribbons”, *Phys. Rev. B* **85**, 075437 (2012).
55. S. Amaha, T. Hatano, H. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, D. G. Austing, and S. Tarucha, “Resonance-Hybrid States in Triple Quantum Dot”, *Phys. Rev. B* **85**, 081301(R) (2012).
56. S. Bevilacqua, S. Cherednichenko, V. Drakinskiy, J. Stake, H. Shibata, and **Y. Tokura**, “Low noise MgB₂ terahertz hot-electron bolometer mixers”, *Appl. Phys. Lett.* **100**, 033504 (2012).
57. K. Yamada, M. Stopa, T. Hatano, T. Yamaguchi, T. Ota, **Y. Tokura** and S. Tarucha, “Geometric blockade in quantum dot coupled to two-dimensional and three-dimensional electron gases”, *Phys. Rev. B* **84**, 201303(R) (2011).
58. Xiaobo Zhu, Shiro Saito, Alexander Kemp, Kosuke Kakuyanagi, Shinichi Karimoto, Hayato Nakano, William J. Munro, **Yasuhiro Tokura**, Mark Everitt, Kae Nemoto, Makoto Kasu, Norikazu Mizuochi, Kouichi Semba, “Coherent coupling of a superconducting flux-qubit to an electron spin ensemble in diamond”, *Nature* **478**, 221-224 (2011).
59. R. Brunner, Y. -S. Shin, T. Obata, M. Pioro-Laderiere, **Y. Tokura**, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Realization of a spin two-qubit gate with semiconductor quantum dots using an inhomogeneous Zeeman field”, *Phys. Rev. Lett.* **107**, 146801-1-4 (2011).
60. K. Sasaki, K. Kato, **Y. Tokura**, K. Oguri and T. Sogawa, “Theory of optical transitions in graphene nanoribbons”, *Phys. Rev. B*, **84**, 085458 (2011).
61. Amnon Aharony, **Yasuhiro Tokura**, Guy Z. Cohen, Ora Entin-Wohlman, Shingo Katsumoto, “Filtering and analyzing mobile qubit information via Rashba-Dresselhaus-Aharonov-Bohm interferometers”, *Phys. Rev. B* **84**, 035323-1-12 (2011).
62. Y. Kanai, R. S. Deacon, S. Takahashi, A. Oiwa, K. Yoshida, K. Shibata, K. Hirakawa, **Y. Tokura**, and S. Tarucha, “Electrically tuned spin-orbit interaction in an InAs self-assembled quantum dot”, *Nature Nanotechnology* **6** 511, (2011).
63. R. S. Deacon, Y. Kanai, S. Takahashi, A. Oiwa, K. Yoshida, K. Shibata, K. Hirakawa, **Y. Tokura** and S. Tarucha, “Electrically tuned g-tensor in an InAs self-assembled quantum dot”, *Phys. Rev. B* **84**, 041302(R) (2011).
64. M. Sasaki, M. Fujiwara, H. Ishizuka, W. Klaus, K. Wakui, M. Takeoka, A. Tanaka, K. Yoshino, Y. Nambu, S. Takahashi, A. Tajima, A. Tomita, T. Domeki, T. Hasegawa, Y. Sakai, H. Kobayashi, T. Asai, K. Shimizu, T. Tokura, T. Tsurumaru, M. Matsui, T. Honjo, K. Tamaki, H. Takesue, **Y. Tokura**, J. F. Dynes, A. R. Dixon, A. W. Sharpe, Z. L. Yuan, A. J. Shields, S. Uchikoga, M. Legré, S. Robyr, P. Trinkler, L. Monat, J.-B. Page, G. Ribordy, A. Poppe, A. Allacher, O. Maurhart, T. Länger, M. Peev, and A. Zeilinger, “Field test of quantum key distribution in the Tokyo QKD Network”, *Opt. Exp.* **19**, 10387-10409 (2011).
65. K. Harada, H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura** and S. Itabashi, “Indistinguishable photon pair generation using two independent silicon wire waveguide”, *New J. Phys.* **13**, 065005 (2011).
66. N. Namekata, H. Takesue, T. Honjo, **Y. Tokura**, and S. Inoue, “Sinusoidally Gated InGaAs/InP Avalanche Photodiode Breaks New Ground in a Long-Distance and High-Rate Quantum Key Distribution”, *Opt. Exp.* **19**, 10632 (2011).

67. Toshihiro Kubo, Yuki Ichigo, and **Yasuhiro Tokura**, “Phase and amplitude of Aharonov-Bohm oscillations in nonlinear three-terminal transport through a double quantum dot”, *Phys. Rev. B* **83**, 235310-1-12 (2011).
68. Shiu-Ming Huang, **Yasuhiro Tokura**, Hikota Akimoto, Kimitoshi Kono, Juhn-Jong Lin, Seigo Tarucha, and Keiji Ono, “Level broadening effect in electron tunneling through double quantum dots with different g factors”, *Jpn J. Appl. Phys.* **50** (2011) 04DJ02.
69. Toshihiro Kubo, **Yasuhiro Tokura**, and Seigo Tarucha, “Kondo effects and shot noise enhancement in a laterally coupled double quantum dot”, *Phys. Rev. B* **83**, 115310 (2011).
70. Yun-Sok Shin, Roland Brunner, Akihiro Shibatomi, Toshiaki Obata, Tomohiro Otsuka, Jun Yoneda, Yasuhiro Shiraki, Kentarou Sawano, **Yasuhiro Tokura**, Yuichi Harada, Koji Ishibashi, and Seigo Tarucha, “Aluminum oxide for an effective gate in Si/SiGe two-dimensional electron gas system”, *Semicond. Sci. Technol.* **26** (2011) 055004.
71. Shinichi Amaha, Tetsuo Kodera, Tsuyoshi Hatano, Keiji Ono, **Yasuhiro Tokura**, Seigo Tarucha, James A. Gupta and David Guy Austing, “Pauli Spin Blockade and Influence of Hyperfine Interaction in Vertical Quantum Dot Molecule with Six-electrons”, *J. Phys. Soc. Jpn.* **80**, (2011) 023701.
72. T. Hatano, T. Kubo, **Y. Tokura**, S. Amaha, S. Teraoka, and S. Tarucha, “Aharonov-Bohm oscillations changed by indirect interdot tunneling via electrons in parallel-coupled vertical double quantum dots”, *Phys. Rev. Lett.* **106**, 076801 (2011).
73. H. Shibata, H. Takesue, T. Honjo, T. Akazaki, and **Y. Tokura**, “Single-photon detection using magnesium diboride superconducting nanowires”, *Appl. Phys. Lett.* **97**, 212504 (2010).
74. H. Shibata, T. Akazaki, and **Y. Tokura**, “Nano-fabrication processes for magnesium diboride”, *Physica C* **470**, S1005-S1006 (2010).
75. T. Seki, H. Shibata, H. Takesue, **Y. Tokura** and N. Imoto, ”Comparison of timing jitter between NbN superconducting single-photon detector and avalanche photodiode”, *Physica C* **470** (2010) 1534-1537.
76. T. Hatano, S. Amaha, T. Kubo, S. Teraoka, **Y. Tokura**, J. A. Gupta, D. G. Austing, and S. Tarucha, “Transport properties of two laterally coupled vertical quantum dots in series with tunable inter-dot coupling”, *Appl. Phys. Lett.* **97**, 062108 (2010).
77. S. Takahashi, R. S. Deacon, K. Yoshida, A. Oiwa, K. Shibata, K. Hirakawa, **Y. Tokura** and S. Tarucha, “Large anisotropy of spin-orbit interaction in a single InAs self-assembled quantum dot”, *Phys. Rev. Lett.* **104**, 246801 (2010).
78. Toshihiro Kubo, **Yasuhiro Tokura**, and Seigo Tarucha, “Dephasing in an Aharonov-Bohm interferometer containing a lateral double quantum dot induced by coupling with a quantum dot charge sensor”, *J. Phys. A:Math. Theor.* **43**, 354020-1-11 (2010).
79. H. Takesue, K. Harada, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Entanglement generation using silicon photonic wire waveguide”, *J. Nanosci. Nanotechnol.* **10**, 1814-1818 (2010) (invited paper).
80. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura** and S. Itabashi, “Entanglement generation using silicon wire waveguide”, *Optics and Spectroscopy*, **108**, 160 (2010).
81. Ken-chi Harada, Hiroki Takesue, Hiroshi Fukuda, Tai Tsuchizawa, Toshifumi Watanabe, Koji Yamada, **Yasuhiro Tokura**, and Sei-ichi Itabashi, “Frequency and Polarization Characteristics of Correlated Photon-Pair Generation Using a Silicon Wire Waveguide”, *IEEE J. Selected Topics in Quantum Electronics*, **16**, 325 (2010).
82. O. Entin-Wohlman, A. Aharony, **Y. Tokura** and Y. Avishai, “Spin-polarized electric currents in quantum transport”, *Phys. Rev. B* **81**, 075439-1-6 (2010).
83. T. Obata, M. Pioro-Ladrière, **Y. Tokura**, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Coherent manipulation of individual electron spin in a double quantum dot integrated with a micromagnet”, *Phys. Rev. B* **81** 085317 (2010).

84. Yun-Sok Shin, Toshiaki Obata, **Yasuhiro Tokura**, Michel Pioro-Ladriere, Roland Brunner, Toshihiro Kubo, Katsuharu Yoshida, and Seigo Tarucha, “Single-spin readout in a double quantum dot integrated with a micromagnet”, *Phys. Rev. Lett.* **104**, 046802-1-4 (2010).
85. T. Kobayashi, S. Tsurtuta, S. Sasaki, T. Fujisawa, **Y. Tokura** and T. Akazaki, “Kondo effect in a semiconductor quantum dot with a spin-accumulated lead”, *Phys. Rev. Lett.* **104**, 036804 (2010).
86. S. M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J. J. Lin, S. Tarucha, and K. Ono, “Spin bottleneck in resonant tunneling through double quantum dots with different Zeeman splittings”, *Phys. Rev. Lett.* **104**, 136801-1-4 (2010).
87. T. Kubo, **Y. Tokura**, and S. Tarucha, “Quantum interference and Kondo effects in an Aharonov-Bohm-Casher interferometer containing a laterally coupled double quantum dot”, *Physics Procedia* **3**, 1225 (2010).
88. **Y. Tokura**, T. Kubo, Y. -S. Shin, K. Ono, and S. Tarucha, “Quantum spin transport in magnetic-field-engineered nano-structures”, *Physica E* **42**, 994-998 (2010).
89. Y. -S. Shin, T. Obata, M. Pioro-Ladriere, **Y. Tokura**, R. Brunner, T. Kubo, K. Yoshida, and S. Tarucha, “Single Electron Addressing by using Photon-assisted-tunneling in a Double Quantum Dot including a Micro-Magnet”, *Physica E* **42**, 825-829 (2010).
90. T. Kubo, **Y. Tokura**, T. Hatano, S. Amaha, S. Teraoka, and S. Tarucha, “Quantum interference effects in a laterally coupled triple quantum dot containing a quantum dot charge sensor”, *Physica E* **42**, 852-855 (2010).
91. S. Amaha, T. Hatano, H. Tamura, T. Kubo, S. Teraoka, **Y. Tokura**, D. G. Austing, and S. Tarucha, “Charge States of a Collinearly and Laterally Coupled Vertical Triple Quantum Dot Device”, *Physica E*, **42**, 899-901 (2010).
92. A. Aharony, O. Entin-Wohlman, **Y. Tokura**, and S. Katsumoto, “Spin filtering due to quantum interference in periodic mesoscopic networks”, *Physica E* **42**, 629-833 (2010).
93. H. Shibata, M. Asahi, T. Maruyama, T. Akazaki, H. Takesue, T. Honjo, and **Y. Tokura**, “Optical Response and Fabrication of MGB2 Nanowire Detectors”, *IEEE Trans. Appl. Superconductivity*, **19**, 358-360 (2009).
94. H. Takesue, T. Honjo, K. Tamaki, and **Y. Tokura**, “Differential phase shift quantum key distribution,” *IEEE Communications Magazine* **47**, 102 (2009) [invited paper].
95. T. Honjo, A. Uchida, K. Amano, K. Hirano, H. Someya, H. Okumura, K. Yoshimura, P. Davis, and **Y. Tokura**, “Differential-phase-shift quantum key distribution experiment using fast physical random bit generator with chaotic semiconductor lasers”, *Opt. Express* **17**, No. 11 9053-9061 (2009).
96. Q. Zhang, H. Takesue, T. Honjo, K. Wen, T. Hirohata, M. Suyama, Y. Takiguchi, H. Kamada, **Y. Tokura**, O. Tadanaga, Y. Nishida, M. Asobe, and Y. Yamamoto, “Megabits secure key rate quantum key distribution”, *New J. Phys.* **11**, 045010 (2009).
97. T. Kodera, K. Ono, Y. Kitamura, **Y. Tokura**, Y. Arakawa, S. Tarucha, “Quantitative estimation of exchange interaction energy using two-electron vertical double quantum dots”, *Phys. Rev. Lett.* **102**, 146802 (2009).
98. H. Sanada, T. Sogawa, H. Gotoh, **Y. Tokura**, H. Yamaguchi, H. Nakano and H. Kamada, “Magneto-optical spectroscopy of excitons and trions in charge-tunable quantum dots”, *Phys. Rev. B* **79**, 121303(R) (2009).
99. S. Amaha, T. Hatano, T. Kubo, S. Teraoka, **Y. Tokura**, D. G. Austing, and S. Tarucha, “Stability diagrams of laterally coupled triple vertical quantum dots in triangular arrangement”, *Appl. Phys. Lett.* **94**, 092103 (2009).
100. **Yasuhiro Tokura**, Keiji Ono, and Seigo Tarucha, “Tunneling current through g-factor engineered series quantum dots”, *phys. stat. solidi (b)* **246**, No. 4, 740-743 (2009).
101. S. Amaha, T. Kubo, T. Hatano, S. Teraoka, A. Shibatomi, **Y. Tokura** and S. Tarucha, “Rectifying Behavior in Laterally Coupled Self-assembled Quantum Dots with Asymmetric Tunneling Barriers”, *APEX* **2**, 014501 (2009).

102. **Yasuhiro Tokura**, “Electric spin orchestra”, *Nature Physics* **5**, 12 (2009).
103. M. Pioro-Ladrière, T. Obata, **Y. Tokura**, Y.-S. Shin, T. Kubo, K. Yoshida, T. Taniyama and S. Tarucha, “Selective manipulation of electron spins with electric fields”, *Progress in Theoretical Physics Suppl.* **176**, 322 (2008).
104. K. Harada, H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Generation of high-purity entangled photon pairs using silicon wire waveguide”, *Opt. Express* **16** 20368 (2008).
105. Amnon Aharony, Ora Entin-Wohlman, **Yasuhiro Tokura**, and Shingo Katsumoto “Spin filtering by a periodic nanospintronic device”, *Phys. Rev. B* **78**, 125328-1-5 (2008) and selected as an Editor’s Suggestion.
106. H. Shibata, T. Maruyama, T. Akazaki, H. Takesue, T. Honjo, and **Y. Tokura**, “Photon detection and fabrication of MgB2 nanowire”, *Physica C* **468**, 1992 (2008).
107. M. Pioro-Ladrière, T. Obata, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Electrically Driven Single Electron Spin Resonance in a Slanting Zeeman Field”, *Nature Physics*, **4**, 776-779 (2008).
108. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo, Y. Nishi, Y. Hirayama and S. Tarucha, “Manipulation of exchange coupling energy in a few-electron double dot”, *Phys. Rev. B* **77**, 241301(R) (2008) also being selected as an Editor’s selection.
109. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Generation of polarization entangled photon pairs using silicon wire waveguide”, *Opt. Express* **16**, 5721 (2008).
110. H. Kamada, M. Asobe, T. Honjo, H. Takesue, **Y. Tokura**, Y. Nishida, O. Tadanaga, and H. Miyazawa, “Efficient and low-noise single-photon detection in 1550 nm communication band by frequency upconversion in periodically poled LiNbO3 waveguides”, *Opt. Lett.*, **33**, 639 (2008).
111. N. Lambert, I. Mahboob, M. Pioro-Ladrière, **Y. Tokura**, S. Tarucha, and H. Yamaguchi, “Electron-Spin Manipulation and Resonator Readout in a Double-Quantum-Dot Nanoelectromechanical System”, *Phys. Rev. Lett.*, **100**, 136802-1-4 (2008).
112. **Yasuhiro Tokura**, Toshihiro Kubo, Shin’ichi Amaha, Tetsuo Kodera, and Seigo Tarucha, “Phonon induced coherence in multi-level quantum dot system”, *Physica E* **40**, 1690 (2008).
113. Tsuyoshi Hatano, **Yasuhiro Tokura**, Shinichi Amaha, Toshihiro Kubo and Seigo Tarucha, “Observation of anti-bonding excited state in charging diagram of a few-electron double dot”, *Physica E* **40**, 1238 (2008).
114. Tetsuo Kodera, Keiji Ono, Shinichi Amaha, **Yasuhiro Tokura** and Seigo Tarucha, “Singlet-triplet transition induced by Zeeman energy in weakly coupled vertical double quantum dots”, *Physica E* **40**, 1139 (2008).
115. T. Kubo, **Y. Tokura**, and S. Tarucha, “Coherent pseudo-spin dynamics in Aharonov-Bohm interferometer containing a laterally coupled double quantum dot”, *Physica E* **40**, 1243 (2008).
116. S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, D. G. Austing and S. Tarucha, “Fabrication and characterization of a laterally coupled vertical triple quantum dot device”, *Physica E* **40**, 1322 (2008).
117. Toshihiro Kubo, **Yasuhiro Tokura**, and Seigo Tarucha, “Exotic pseudo-spin Kondo effect in laterally coupled double quantum dots”, *Phys. Rev. B*, **77** 041305(R) (2008).
118. T. Kodera, K. Ono, S. Amaha, **Y. Tokura**, Y. Arakawa, and S. Tarucha, “Elastic and inelastic tunneling through one-electron and two-electron states in a vertical double quantum dot”, *phys. stat. sol. (c)* **5**, No. 9, 2854 (2008).
119. S. Amaha, C. Payette, J. A. Gupta, T. Hatano, K. Ono, T. Kodera, **Y. Tokura**, S. Tarucha and D. G. Austing, “Two level mixing effects probed by resonant tunneling through vertically coupled quantum dots”, *physica status solidi (c)* **5**, 174 (2008).
120. T. Kubo, **Y. Tokura** and S. Tarucha, “Coherent pseudo-spin resonance in a laterally coupled double quantum dot”, *physica status solidi (c)* **5**, 170 (2008).

121. T. Kobayashi, S. Sasaki, T. Fujisawa, **Y. Tokura**, and T. Akazaki, “Energy distribution of the ballistic hot electrons and holes emitted from a quantum point contact and probed by a quantum dot”, *physica status solidi (c)* **5**, 162 (2008).
122. T. Obata, M. Piore-Ladrière, T. Kubo, K. Yoshida, **Y. Tokura**, and S. Tarucha, “On-chip micro-coil technique for single electron spin resonance with quantum dot”, *Physica E: Low-dimensional Systems and Nanostructures* **40**, 351 (2007).
123. M. Piore-Ladrière, **Y. Tokura**, T. Obata, T. Kubo, K. Yoshida, and S. Tarucha, “Spin-charge qubit resonance readout in lateral quantum dots”, *Physica E: Low-dimensional Systems and Nanostructures* **40**, 347 (2007).
124. H. Takesue, **Y. Tokura**, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, and S. Itabashi, “Entanglement generation using silicon wire waveguide”, *Appl. Phys. Lett.* **91**, 201108 (2007).
125. T. Obata, M. Piore-Ladrière, **Y. Tokura**, and S. Tarucha, “Microwave band on-chip coil technique for single electron spin resonance in a quantum dot”, *Review of Scientific Instruments* **78**, 104704 (2007).
126. **Yasuhiro Tokura**, Hiromasa Nakano, and Toshihiro Kubo, “Interference through quantum dots”, *New J. Phys.* **9** 113-1-15 (2007) .
127. Yoshifumi Nishi, **Yasuhiro Tokura**, James Gupta, Guy Austing, and Seigo Tarucha, “Ground-state transitions beyond the singlet-triplet transitions for a two-electron quantum dot”, *Phys. Rev. B* **75** 121301(R) (2007).
128. M. Piore-Ladrière, **Y. Tokura**, T. Obata, T. Kubo, and S. Tarucha, “Micro-magnets for coherent electron spin control in quantum dots”, *Appl. Phys. Lett.* **90** 024105 (2007).
129. Toshihiro Kubo, **Yasuhiro Tokura**, Tsuyoshi Hatano, and Seigo Tarucha, “Electron transport through Aharonov-Bohm interferometer with laterally coupled double quantum dots”, *Phys. Rev. B* **74**, 205310-1-10 (2006).
130. M. Yamamoto, M. Stopa, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Negative Coulomb drag in a one-dimensional wire”, *Science*, **313**, 204 (2006).
131. **Yasuhiro Tokura**, Wilfred G. van der Wiel, Toshiaki Obata, and Seigo Tarucha, “Coherent single electron spin control in a slanting Zeeman field”, *Phys. Rev. Lett.* **96**, 047202-1-4 (2006).
132. Toshihiro Kubo and **Yasuhiro Tokura**, “Electron transport in magnetic-field-induced quasi-one-dimensional electron system in semiconductor nanowhiskers”, *Physica E* **29**, 525 (2005).
133. Toshihiro Kubo and **Yasuhiro Tokura**, “Many-body effects on tunneling of electrons in magnetic-field-induced quasi one-dimensional electron systems in semiconductor nanowhiskers”, *J. Phys. Soc. Jpn.* **74**, 519 (2005).
134. H. Yamaguchi, **Y. Tokura**, S. Miyashita, and Y. Hirayama, “Quantum interference effects in the magnetopiezoresistance of InAs/AlGaSb quasi-one-dimensional electron systems “, *Phys. Rev. Lett.* **93**, 36603 (2004).
135. **Y. Tokura**, “Current Noise in a Quantum Point Contact”, *Physica E: Low-dimensional Systems and Nanostructures* **22**, 284 (2004).
136. T. Itakura and **Y. Tokura**, “Dephasing of a coupled qubits system during gate operations due to background fluctuations”, *Superlattices and Microstructures* **34**, 497 (2003).
137. T. Itakura and **Y. Tokura**, “Effect of multiple charge traps on dephasing rates of a Josephson charge qubit system”, *Journal of the Physical Society of Japan* **72**, 2726 (2003).
138. J. Anderberg, M. S. Colclough, D. B. Crum, **Y. Tokura**, D. N. Paulson, R. L. Fagaly, “LTS SQUID Microscope with Micron Spatial Resolution”, *IEEE Trans. on Applied Superconductivity*, **13**, 231-234 (2003).
139. T. Fujisawa, D. G. Austing, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Electrical pulse measurement, inelastic relaxation, and non-equilibrium transport in a quantum dot”, *J. Phys.: Condens. Matter* **15**, R1395 (2003).

140. K. Ono, D. G. Austing, **Y. Tokura**, and S. Tarucha, “Spin selective tunneling and blockade in two-electron double quantum dot”, *Physica status solidi B-Basic Research* **238** (2003) 335.
141. T. Itakura and **Y. Tokura**, “Dephasing due to background charge fluctuations”, *Physical Review B* **67**, 195320-1-9 (2003).
142. T. Fujisawa, D. G. Austing, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Allowed and forbidden transitions in artificial hydrogen and helium atoms”, *Nature*, **419**, 278-281 (2002).
143. K. Ono, D. G. Austing, **Y. Tokura**, S. Tarucha, “Current Rectification by Pauli Exclusion in a Weakly Coupled Double Quantum Dot System”, *Science*, **297**, 1313-1317 (2002).
144. T. Fujisawa, D. G. Austing, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Nonequilibrium Transport through a Vertical Quantum Dot in the Absence of Spin-Flip Energy Relaxation”, *Physical Review Letters* **88**, 236802-1-4 (2002).
145. **Y. Tokura** and A. Khaetskii, “Towards a microscopic theory of the 0.7 anomaly”, *Physica E: Low-dimensional Systems and Nanostructures*, **12/1-4** (2002) 711.
146. M. Yamamoto, M. Stopa, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Coulomb drag between quantum wires: magnetic field effects and negative anomaly”, *Physica E: Low-dimensional Systems and Nanostructures*, **12/1-4** (2002) 726.
147. T. Asayama, **Y. Tokura**, S. Miyashita, M. Stopa and S. Tarucha, “1D Bragg reflector in the Tomonaga-Luttinger liquid regime and Fermi liquid regimes”, *Physica E: Low-dimensional Systems and Nanostructures*, **12/1-4** (2002) 186.
148. K. Ono, D. G. Austing, **Y. Tokura** and S. Tarucha, “Angular momentum selectivity in tunneling between two quantum dots”, *Physica B: Condensed Matter*, **314** (2002) 450.
149. T. Fujisawa, **Y. Tokura**, D. G. Austing, Y. Hirayama, and S. Tarucha, “Spin-dependent energy relaxation inside a quantum dot”, *Physica B: Condensed Matter*, **314** (2002) 224.
150. Y. Avishai and **Y. Tokura**, “Resonant electron transmission through a finite quantum spin chain”, *Physical Review Letters* **87** (2001) 197203.
151. K. Kanisawa, M. J. Butcher, **Y. Tokura**, H. Yamaguchi, and Y. Hirayama, “Local Density of States in Zero-Dimensional Semiconductor Structures”, *Physical Review Letters* **87** (2001) 196804.
152. D. G. Austing, **Y. Tokura**, S. Tarucha, P. Matagne, J. P. Leburton, “Addition energy spectrum of a quantum dot disk up to the third shell”, *Physica E: Low-dimensional Systems and Nanostructures* **11** (2001) 63.
153. A. Kawaharazuka, T. Saku, **Y. Tokura**, Y. Horikoshi, and Y. Hirayama, “Transport characteristics of electrons in weak short-period two-dimensional potential arrays”, *Applied Physics Letters*, **79** (2001) 427.
154. S. Tarucha, D. G. Austing, S. Sasaki, T. Fujisawa, **Y. Tokura**, J. M. Elzerman, W. van der Wiel, S. de Franceschi, L. P. Kouwenhoven, “Novel Kondo anomaly in quantum dots”, *Materials Science and Engineering B* **84** (2001) 10.
155. S. Amaha, D. G. Austing, **Y. Tokura**, K. Muraki, K. Ono, and S. Tarucha, “Magnetic field induced transitions in the few-electron ground states of artificial molecules”, *Solid State Communications*, **119** (2001) 183.
156. D. G. Austing, H. Tamura, **Y. Tokura**, K. Muraki, S. Amaha, K. Ono, and S. Tarucha, “Single dot and strongly coupled double dots at high magnetic fields”, *Physica E: Low-dimensional Systems and Nanostructures* **10** (2001) 112.
157. S. Tarucha, D. G. Austing, S. Sasaki, **Y. Tokura**, J. M. Elzerman, W. van der Wiel, S. de Franceschi, L. P. Kouwenhoven “Spin effects in semiconductor quantum dot structure”, *Physica E: Low-dimensional Systems and Nanostructures* **10** (2001) 45.
158. **Y. Tokura**, S. Sasaki, D. G. Austing, and S. Tarucha, “Excitation spectra and exchange interactions in circular and elliptical quantum dots”, *Physica B: Condensed Matter*, **298** (2001) 260.

159. T. Fujisawa, **Y. Tokura**, and Y. Hirayama, “Energy relaxation process in a quantum dot studied by DC current and pulse-excited current measurements”, *Physica B: Condensed Matter*, **298** (2001) 573.
160. T. Fujisawa, **Y. Tokura**, and Y. Hirayama, “Transient current spectroscopy of a quantum dot in the Coulomb blockade regime”, *Physical Review B* **63** (2001) 81304(R).
161. G. Tataru and **Y. Tokura**, “Electronic pressure on ferromagnetic domain wall”, *Solid State Communications* **116** (2000) 533.
162. A. A. Odintsov and **Y. Tokura**, “Contact Phenomena and Mott Transition in Carbon Nanotubes”, *Journal of Low Temperature Physics* **118** (2000) 509.
163. A. A. Odintsov and **Y. Tokura**, “Contact phenomena in carbon nanotubes”, *Physica B: Condensed Matter*, **284-288** (2000) 1752.
164. S. Tarucha, D. G. Austing, S. Sasaki, **Y. Tokura**, W. van der Wiel, and L. P. Kouwenhoven, “Effects of Coulomb interactions on spin states in vertical semiconductor quantum dots”, *Applied Physics A* **71** (2000) 367.
165. **Y. Tokura**, S. Sasaki, D. G. Austing, and S. Tarucha, “Single electron tunneling through two vertically coupled quantum dots”, *Physica E: Low-dimensional Systems and Nanostructures*, **6** (2000) 676.
166. D. G. Austing, **Y. Tokura**, S. Tarucha, T. H. Oosterkamp, J. W. Janssen, M. W. S. Danoesastro, L. P. Kouwenhoven, “Vertical quantum dots at high magnetic fields beyond the few-electron limit”, *Physica E: Low-dimensional Systems and Nanostructures*, **6** (2000) 358.
167. S. Tarucha, D. G. Austing, **Y. Tokura**, W. G. van der Wiel, and L. P. Kouwenhoven, “Direct Coulomb and Exchange Interaction in Artificial Atoms”, *Physical Review Letters* **84** (2000) 2485.
168. **Y. Tokura**, D. G. Austing, and S. Tarucha, “Single electron tunneling in two vertically coupled quantum dots”, *Journal of Physics Condensed Matters* **11** (1999) 6023.
169. D. G. Austing, **Y. Tokura**, T. Honda, and S. Tarucha, “Several- and many-electron artificial-atoms at filling factors between 2 and 1”, *Jpn. J. Appl. Phys. P.1* **38 (1B)** (1999) 372.
170. **Y. Tokura**, L. P. Kouwenhoven, D. G. Austing, and S. Tarucha, “Many-body effect in an artificial atom”, *Physica B: Condensed Matter* **246** (1998) 83.
171. **Y. Tokura**, “Two-dimensional electron transport with anisotropic scattering potentials”, *Phys. Rev. B* **58** (1998) 7151.
172. D. G. Austing, T. Honda, K. Muraki, **Y. Tokura**, and S. Tarucha, “Quantum dot molecules”, *Physica B: Condensed Matter* **249-251** (1998) 206.
173. S. Tarucha, T. Honda, D. G. Austing, **Y. Tokura**, K. Muraki, T. H. Oosterkamp, J. W. Janssen, L. P. Kouwenhoven, “Electronic states in quantum dot atoms and molecules”, *Physica E: Low-dimensional Systems and Nanostructures* **3** (1998) 112.
174. **Y. Tokura**, “Quantum Hall ferromagnet in a parabolic quantum wire”, *Physical Review B* **58** (1998) 12597.
175. A. A. Odintsov, **Y. Tokura**, and S. Tarucha, “Precursors of Mott insulator in modulated quantum wires”, *Physical Review B* **56** (1997) R12729.
176. **Y. Tokura**, S. Tarucha, “Roughness scattering in a finite-length wire”, *Physical Review B* **55** (1997) 15740.
177. **Y. Tokura**, T. Honda, K. Tsubaki, and S. Tarucha, “Non-invasive determination of ballistic electron current” *Physical Review B* **54** (1996) 1947.
178. **Y. Tokura** and S. Tarucha, “Quasi-one-dimensional transport near the ballistic limit” *Physical Review B* **53** (1996) 16403.
179. **Y. Tokura**, T. Saku, and Y. Horikoshi, “Electron scattering by steps in a vicinal heterointerface” *Physical Review B* **53** (1996) 10528.

180. Y. Takagaki and **Y. Tokura**, “Transmission resonances in a semiconductor-superconductor junction quantum interference structure” *Physical Review B* **54** (1996) 6587.
181. Y. Takagaki, **Y. Tokura**, and S. Tarucha, “Transmission of interacting electrons through a one-dimensional periodic potential” *Physical Review B* **53** (1996) 15462.
182. T. Saku, Y. Horikoshi, and **Y. Tokura**, “Limit of Electron Mobility in AlGaAs/GaAs Modulation-doped Heterostructures” *Japanese Journal of Applied Physics, Part 1 (Regular Papers & Short Notes)* **35** (1996) 34.
183. T. Honda, S. Tarucha, T. Saku, and **Y. Tokura**, “Quantized conductance observed in quantum wires 2 to 10 μm long” *Japanese Journal of Applied Physics, Part 2 (Letters)* **34** (1995) L72.
184. D. G. Austing, T. Honda, **Y. Tokura**, and S. Tarucha, “Sub-micron vertical AlGaAs/GaAs resonant tunneling single electron transistor” *Japanese Journal of Applied Physics, Part 1 (Regular Papers & Short Notes)* **34** (1995) 1320.
185. **Y. Tokura** and S. Tarucha, “Exchange interaction in quantum-wire subbands” *Physical Review B* **50** (1994) 10981.
186. Y. Hirayama, **Y. Tokura**, A. D. Wieck, S. Koch, R. J. Haug, and K. von. Klitzing, “Transport characteristics of a window-coupled in-plane-gated wire system,” *Physical Review B* **48** (1994) 7991.
187. S. Tarucha, T. Honda, T. Saku, and **Y. Tokura**, “Charging effects in small-area modulation-doped double-barrier heterostructures” *Surface Science* **305** (1994) 547.
188. S. Tarucha, T. Saku, **Y. Tokura** and Y. Hirayama, “Sharvin resistance and its breakdown observed in long ballistic channels,” *Physical Review B* **47** (1993) (R)4064.
189. H. Saito, K. Uwai, **Y. Tokura**, and T. Fukui, “Step ordering during fractional layer superlattice growth on GaAs(001) vicinal surfaces by metalorganic chemical vapor deposition” *Applied Physics Letters* **63** (1993) 72.
190. Y. K. Fukai, S. Tarucha, Y. Hirayama, **Y. Tokura**, and T. Saku, “Reflection and refraction of ballistic electrons through different carrier concentration regions” *Applied Physics Letters* **60** (1992) 106.
191. K. Tsubaki, T. Honda, and **Y. Tokura**, “Aharonov-Bohm effect under high magnetic field in a Corbino disk anti-dot channel” *Surface Science* **263** (1992) 392.
192. **Y. Tokura**, T. Saku, S. Tarucha, and Y. Horikoshi, “Anisotropic roughness scattering at a heterostructure interface,” *Physical Review B* **46** (1992) 15558.
193. S. Tarucha, **Y. Tokura**, and Y. Hirayama, “Resonant tunneling of three-dimensional electrons into degenerate zero-dimensional levels” *Physical Review B* **44** (1992) 13815.
194. S. Tarucha, Y. Hirayama, and **Y. Tokura**, “Resonant tunneling through one-dimensional states constricted by $\text{Al}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}/\text{Al}_x\text{Ga}_{1-x}\text{As}$ heterojunctions and high-resistance regions induced by focused Ga ion beam implantation”, *Superlattices and Microstructures* **9** (1991) 341.
195. T. Fukui, S. Ando, **Y. Tokura**, and T. Toriyama, “GaAs tetrahedral quantum dot structures fabricated using selective area metalorganic chemical vapor deposition,” *Applied Physics Letters* **58** (1991) 2018.
196. S. Tarucha, Y. Hirayama, and **Y. Tokura**, “Subband mixing effect in double-barrier diodes with a restricted lateral dimension” *Applied Physics Letters* **58** (1991) 1623.
197. K. Tsubaki, **Y. Tokura**, N. Susa, “Density of states of an AlAs/GaAs fractional superlattice in a modulation-doped structure”, *Applied Physics Letters* **57** (1991) 2101.
198. **Y. Tokura**, K. Tsubaki and N. Susa, “Electronic states in an AlGaAs-GaAs modulation-doped hetero-interface with a 10 nm-order periodic structure,” *Surface Science* **228** (1990) 280.
199. T. Fukui, H. Saito, **Y. Tokura**, K. Tsubaki and N. Susa, “ $(\text{AlAs})_{1/2}(\text{GaAs})_{1/2}$ fractional-layer superlattices grown on (001) vicinal GaAs substrates by MOCVD,” *Surface Science* **228** (1990) 20.

200. **Y. Tokura** and N. Susa, “Electron effective-mass modulation transistor,” *Journal of Applied Physics* **67** (1990) 2171.
201. K. Tsubaki, **Y. Tokura**, and N. Susa, “Mobility modulation on a modulation-doped structure with an AlAs/GaAs fractional layer superlattice,” *Applied Physics Letters* **57** (1990) 804.
202. K. Tsubaki, **Y. Tokura**, and N. Susa, “Density of states of an AlAs/GaAs fractional superlattice in a modulation-doped structure,” *Applied Physics Letters* **57** (1990) 2101.
203. **Y. Tokura**, K. Tsubaki, and N. Susa, “Electronic states in lateral structures on modulation-doped heterointerfaces”, *Applied Physics Letters* **55** (1990) 1403.
204. K. Tsubaki, **Y. Tokura**, T. Fukui, H. Saito, and N. Susa, “ 10^5 times biasing current improvement in an electron wave interference device with vertical superlattices”, *IEEE Transactions on Electron Devices* **36** (1990) 2618.
205. T. Fukui, H. Saito, and **Y. Tokura**, “Lateral interface mixing in GaAs quantum well wire arrays” *Applied Physics Letters* **55** (1989) 1958.
206. **Y. Tokura**, H. Saito and T. Fukui, “Terrace width ordering mechanism during epitaxial growth on a slightly tilted substrate,” *Journal of Crystal Growth* **94** (1989) 46.
207. K. Tsubaki, T. Fukui, **Y. Tokura**, H. Saito, and N. Susa, “New field-effect transistor with quantum wire and modulation-doped heterostructures” *Electronics Letters* **24** (1989) 1267.
208. K. Tsubaki, **Y. Tokura**, T. Fukui, H. Saito, and N. Susa, “Electron wave interference device with vertical superlattices working in large current region” *Electronics Letters* **25** (1989) 728.
209. T. Fukui, H. Saito and **Y. Tokura**, “Superlattice structure observation for $(\text{AlAs})_{1/2}(\text{GaAs})_{1/2}$ growth on (001) vicinal GaAs substrates,” *Japanese Journal of Applied Physics* **27** (1988) L1320.
210. K. Tsubaki and **Y. Tokura**, “Coherence length in quantum interference devices having periodic potential,” *Applied Physics Letters* **53** (1988) 859.
211. **Y. Tokura** and K. Tsubaki, “Conductivity oscillation due to quantum interference in a proposed wash-board transistor,” *Applied Physics Letters* **51** (1987) 1807.

B. LIST OF INT. CONFERENCE PROCEEDINGS

1. Sadashige Matsuo, Kazuyuki Kuroyama, Jo Muramoto, Sascha R. Valentin, Arne Ludwig, Andreas D. Wieck, **Yasuhiro Tokura**, and Seigo Tarucha, “Breakdown of Pauli spin blockade by phonon irradiation in a GaAs double quantum dot”, 2019 Compound Semiconductor Week (CSW), 29 August 2019, DOI: 10.1109/ICIPRM.2019.8819040.
2. Ken-ichi Sasaki, **Yasuhiro Tokura**, and Tetsuomi Sogawa, “Mechanism of the Doping Dependence of Raman 2D Band - Dirac-Cone Migration -”, *JPS Conf. Proc.* **4**, 012003 (2015).
3. **Yasuhiro Tokura**, Toshihiro Kubo and William John Munro, “Power dependence of electric dipole spin resonance”, *JPS Conference Proceedings* **1**, 012022 (2014).
4. Y. Kanai, R. S. Deacon, S. Takahashi, A. Oiwa, K. Yoshida, K. Shibata, **Y. Tokura**, K. Hirakawa, and S. Tarucha, “Spin-orbit interaction detection using Kondo effect in single self-assembled InAs quantum dots”, *AIP Conf. Proc.* **1399**, 355 (2011).
5. S. M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J.J. Lin, S. Tarucha, and K. Ono, “Spin Bottleneck in Resonance Tunneling through InGaAs/GaAs Vertical Double Quantum Dots”, *AIP Conf. Proc.* **1399**, 735-736 (2011).
6. S. Tarucha, T. Obata, M. Pioro-Ladriere, R. Brunner, Y. -S. Shin, T. Kubo and **Y. Tokura**, “Coherent control of two individual electron spins and influence of hyperfine coupling in a double quantum dot”, *J. Phys.: Conf. Ser.* **334**, 012009 (2011).
7. M. Sasaki, M. Fujiwara, H. Ishizuka, W. Klaus, K. Wakui, M. Takeoka, A. Tanaka, K. Yoshino, Y. Nambu, S. Takahashi, A. Tajima, A. Tomita, T. Domeki, T. Hasegawa, Y. Sakai, H. Kobayashi, T. Asai, K. Shimizu, T. Tokura, T. Tsurumaru, M. Matsui, T. Honjo, K. Tamaki, H. Takesue, **Y. Tokura**, J. F. Dynes, A. R. Dixon, A. W. Sharpe, Z. L. Yuan, A. J. Shields, S. Uchikoga, M. Legré, S. Robyr, P. Trinkler, L. Monat, J.-B. Page, G. Ribordy, A. Poppe, A. Allacher, O. Maurhart, T. Länger, M. Peev, and A. Zeilinger, “Tokyo QKD Network and the evolution to Secure Photonic Network”, *IEEE Conference Publications, 2011 Conference on Lasers and Electro-Optics (CLEO)* **1-3** (2011).

8. T. Obata, M. Piore-Ladrière, **Y. Tokura**, T. Kubo, K. Yoshida, T. Taniyama and S. Tarucha, “Selective Addressing of Single Electron Spins in a Semiconductor Double Quantum Dot Integrated with a Micro-Magnet”, AIP Conf. Proc., **1199**, 381 (2010).
9. K. Hitachi, A. Inoue, A. Oiwa, M. Yamamoto, M. Piore-Ladrière, **Y. Tokura**, and S. Tarucha, “Negative differential conductance in a quantum dot and possible application to ESR detection”, J. Phys.: Conf. Ser. **150**, 022026 (2009).
10. **Yasuhiro Tokura**, Keiji Ono, and Seigo Tarucha, “Transient current in spin blockade condition”, J. Phys.: Conf. Ser. **193** (2009) 012102.
11. T. Obata, M. Piore-Ladrière, **Y. Tokura**, R. Brunner, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Dynamical polarization effect of nuclear spin bath dragged by electron spin resonance in double quantum dot integrated with micro-magnet”, J. Phys.: Conf. Ser., **193** (2009) 012046.
12. T. Kubo, **Y. Tokura**, S. Amaha, T. Hatano and S. Tarucha, “Electron transport through a laterally coupled triple quantum dot forming Aharonov-Bohm Interferometer”, Proceedings of the 9th International Symposium on Foundations of Quantum Mechanics in the Light of New Technology (ISQM-TOKYO’08), World Scientific Pub Co Inc, Edited by S. Ishioka and K. Fujikawa.
13. T. Hatano, T. Kubo, S. Amaha, S. Teraoka, **Y. Tokura** and S. Tarucha, “Aharonov-Bohm oscillations in parallel coupled vertical double quantum dot”, Proceedings of the 9th International Symposium on Foundations of Quantum Mechanics in the Light of New Technology (ISQM-TOKYO’08), World Scientific Pub Co Inc, Edited by S. Ishioka and K. Fujikawa.
14. S. Amaha, T. Hatano, T. Kubo, S. Teraoka, A. Shibatomi, **Y. Tokura**, and S. Tarucha, “Laterally Coupled Triple Self-Assembled Quantum Dots”, Proceedings of the 9th International Symposium on Foundations of Quantum Mechanics in the Light of New Technology (ISQM-TOKYO’08), World Scientific Pub Co Inc, Edited by S. Ishioka and K. Fujikawa.
15. Seigo Tarucha, Y. Tokura, M. Piore-Ladrière, Toshiaki Obata, T. Kubo, and W. van der Wiel, “New scheme of spin qubits driven by ac electric field”, IEEE, Nanotechnology Materials and Devices Conference, 2006 (NMDC), (2006) 222.
16. T. Kubo, **Y. Tokura**, and S. Tarucha, “Pseudo-spin Kondo effect in Aharonov-Bohm interferometer containing laterally coupled double quantum dots”, AIP Conference Proceedings 893, 765 (2007), 28th Int. Conf. on the Phys. of Semicond. - ICPS 2006 Vienna, Austria.
17. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo, and S. Tarucha, “Observation of the singlet and triplet states in a hybrid vertical-lateral double dot”, AIP Conference Proceedings 893, 853 (2007), 28th Int. Conf. on the Phys. of Semicond. - ICPS 2006 Vienna, Austria.
18. T. Kubo, **Y. Tokura**, T. Hatano, and S. Tarucha, “Electron transport through laterally coupled double quantum dots”, Controllable Quantum States: Mesoscopic Superconductivity & Spintronics (Ms+s2006), World Scientific Pub Co Inc, Proceedings of the Intl. Symposium, NTT Basic Res. Lab., Japan 27 Feb - 2 Mar 2006, Ed. H. Takayanagi, J. Nitta, and H. Nakano.
19. S. Amaha, T. Hatano, S. Sasaki, T. Kubo, and **Y. Tokura**, “Manipulation of Kondo effect by tuning orbital degeneracy”, Controllable Quantum States: Mesoscopic Superconductivity & Spintronics (Ms+s2006), World Scientific Pub Co Inc, Proceedings of the Intl. Symposium, NTT Basic Res. Lab., Japan 27 Feb - 2 Mar 2006, Ed. H. Takayanagi, J. Nitta, and H. Nakano.
20. S. Amaha, T. Hatano, S. Sasaki, T. Kubo, **Y. Tokura** and S. Tarucha, “Coulomb blockade properties of 4-gated quantum dot”, Controllable Quantum States: Mesoscopic Superconductivity & Spintronics (Ms+s2006), World Scientific Pub Co Inc, Proceedings of the Intl. Symposium, NTT Basic Res. Lab., Japan 27 Feb - 2 Mar 2006, Ed. H. Takayanagi, J. Nitta, and H. Nakano.
21. K. Yamada, M. Stopa, **Y. Tokura**, T. Hatano, T. Ota, T. Yamaguchi, and S. Tarucha, “Tunnel coupling blockade in vertical/lateral hybrid dot to study many body states for electron number $N=1,2$ and 3 ”, AIP Conf. Ser. **772**, 785 (2005).
22. M. Yamamoto, **Y. Tokura**, Y. Hirayama, M. Stopa, K. Ono, and S. Tarucha, “Tunneling between Parallel Quantum Wires”, AIP Conf. Ser. **772**, 925 (2005).

23. H. Yamaguchi, S. Miyashita, **Y. Tokura**, and Y. Hirayama, “InAs-based Micromechanical Two-dimensional Electron Systems”, AIP Conference Proceedings **772**, 1251-1254 (2005), 27th Int. Conf. on the Phys. of Semicond. -ICPS 2004 Flagstaff, Arizona, USA.
24. A. Kawaguchi, K. Shimizu, **Y. Tokura** and N. Imoto, “Quantum Circuit Simulation Using the Density Matrix Renormalization Group”, AIP Conf. Proc, **734** (2004) 187.
25. T. Fujisawa, D. G. Austing, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Spin selection rules in single-electron transport through a few-electron quantum dot”, Physics of semiconductors 2002, Proceedings institute of Physics conference series, **171** (2003) 245.
26. K. Kanisawa, M. Butcher, **Y. Tokura**, H. Yamaguchi, and Y. Harayama, “Imaging of zero-dimensional states in a semiconductor nanostructures using scanning tunneling microscopy”, Nanoscale Spectroscopy and its Applications to Semiconductor Research, Lecture notes in Physics, **588**, 263-268 (2002).
27. S. Tarucha, K. Ono, D. G. Austing, S. Sasaki, T. Fujisawa, **Y. Tokura**, and L. P. Kouwenhoven, “Tunable two-electron spin states in quantum dot structures and the applicability for making spin qubits”, IEEE Conference Publications, Device Research Conference, 2001, 125-128 (2001).
28. Y. Hirayama, K. Kanisawa, **Y. Tokura**, H. Yamaguchi, T. Fujisawa, “Temporal and spatial characterization of quantum dots’, Experimental implementation of quantum computation, 55-66 (2001).
29. K. Tsubaki, **Y. Tokura**, and N. Susa, “Electronic state of AlAs/GaAs vertical superlattice in modulation doped structure”, Institute of physics conference series, **106** (1990) 869.

C. LIST OF INTERNATIONAL CONFERENCES

1. T. Hayashi, **Y. Tokura**, and K. Nishiguchi, “Temperature Dependence of Low-frequency Capacitance Due to Variablerange Hopping”, ISNTT2021 Symposium, online Dec. 14-17 (2021) P1-07.
2. S. Kamimura, H. Hakoshima, Y. Matsuzaki, K. Yoshida, and **Y. Tokura**, “Quantum Enhanced Heat Engine by Superabsorption”, ISNTT2021 Symposium, online Dec. 14-17 (2021) P1-27.
3. Y. Ueki, S. Kamimura, Y. Matsuzaki, K. Yoshida, and **Y. Tokura**, “Quantum Battery with Superabsorption Quantum Heat Engine”, ISNTT2021 Symposium, online Dec. 14-17 (2021) P1-28.
4. H. Kasai, Y. Takeuchi, H. Hakoshima, Y. Matsuzaki, and Y. Tokura, “Anonymous Quantum Sensing”, ISNTT2021 Symposium, online Dec. 14-17 (2021) P1-38.
5. S. Ozawa, K. Yoshida and **Y. Tokura**, “Interaction-induced thermodynamics cycle in chiral edge channels”, Joint Conference: EP2DS-24/MSS-20, online, Oct. 31-Nov. 5 (2021) E-PS-2-08.
6. G. Giavaras, K. Ono, and **Y. Tokura**, “Double quantum dot physics in a Si MOSFET”, Workshop of Silicon Quantum Electronics, 2021, online Oct. 25-31 (2021).
7. **Yasuhiro Tokura**, “Quantum adiabatic pumping with modulating electron phase”, 2019 Workshop on Innovative Nanoscale Devices and Systems (WINDS), The Fairmont Orchid Hotel, Kohala Coast, Hawaii, USA Dec. 4, (2019).
8. G. Giavaras and **Y. Tokura**, “AC spectroscopy of the singlet-triplet spin-orbit gap in double quantum dots”, International Symposium on Hybrid Quantum Systems 2019 (HQS2019), Matsue, Japan, Dec. 1-4, (2019) Wed-A2-2.
9. K. Kuroyama, S. Matsuo, S. R. Valentin, A. Ludwig, A. D. Wieck, **Y. Tokura**, and S. Tarucha, “Real-time observation of spin-flip tunneling processes driven by a nearby phonon source”, International Symposium on Hybrid Quantum Systems 2019 (HQS2019), Matsue, Japan, Dec. 1-4, (2019) Wed-A2-3.
10. S. Kamimura, **Y. Tokura**, and K. Yoshida “Fluctuation Theorems for an Arbitrary CPTP Map”, International School and Symposium on Nanoscale Transport and phoTonics 2019 (IS-NTT2019) NTT Atsugi R&D Center, JAPAN, Nov. 18 - 22 (2019).

11. S. Ozawa, K. Yoshida, and **Y. Tokura**, “Relaxation in the Interacting Edge Channels”, International School and Symposium on Nanoscale Transport and phoTonics 2019 (ISNTT2019) NTT Atsugi R&D Center, JAPAN, Nov. 18 - 22 (2019).
12. G. Giavaras and **Y. Tokura**, “Probing the Singlet-triplet Splitting in Double Quantum Dots with ac Fields”, International School and Symposium on Nanoscale Transport and phoTonics 2019 (ISNTT2019) NTT Atsugi R&D Center, JAPAN, Nov. 18 - 22 (2019).
13. **Yasuhiro Tokura**, Kazuyuki Kuroyama, Sadashige Matsuo and Seigo Tarucha, “Enhanced spin flip rate by two-phonon processes from a hot spot”, Conference Frontiers of Quantum and Mesoscopic Thermodynamics (FQMT) 2019, Pyramida Hotel, Prague, Czech Republic, 14 - 20 July (2019).
14. G. Giavaras and **Y. Tokura**, “Spin resonance in double quantum dot by tuning the interdot barrier”, Tenth International School and Conference on Spintronics and Quantum Information Technology (SpintechX), Hotel InterContinental Chicago, Chicago IL, USA June 24-27, (2019).
15. **Yasuhiro Tokura**, “Fidelity of strongly driven electric dipole spin resonance”, APS March Meeting 2019, Boston, Massachusetts, USA March 4-8 (2019).
16. **Yasuhiro Tokura**, “Adiabatic and diabatic dynamics in quantum systems”, Int. Symp. Frontiers of Quantum Transport in Nano Science (QTNS), Kashiwa, Japan, Nov 7-10 (2018) (Invited).
17. **Yasuhiro Tokura**, “Strongly driven electric dipole spin resonance”, 4th School and Conference on Spin-Based Quantum Information Processing (Spin-Qubit 4), Konstanz, Germany, Sep. 10-14 (2018).
18. Y. Sato, S. Matsuo, C.H. Hsu, P. Stano, D. Loss, K. Ueda, Y. Takesige, H. Kamata, J.S. Lee, B. Shojaei, J. Shabani, C. Parmström, **Y. Tokura**, S. Tarucha, “Tomonaga-Luttinger liquid behaviour in 1D electron system fabricated from InAs Quantum well holding strong spin-orbit interaction”, 34th International Conference on the Physics of Semiconductors (ICPS2018), Montpellier, France, July 29-Aug. 3 (2018) Quantum transport in heterostructures - 4.
19. T. Hayashi, L. Cong Duy, **Y. Tokura**, H. Murata, and A. Fujiwara, “Low-frequency capacitance of hopping transport materials”, 34th International Conference on the Physics of Semiconductors (ICPS2018), Montpellier, France, July 29-Aug. 3 (2018) P1.149.
20. Giorgos Giavaras and **Yasuhiro Tokura**, “Current antiresonance in spin-orbit coupled double quantum dots”, The 19th International Symposium on the Physics of Semiconductors and Applications, Jeju, Korea, July 1-5 (2018).
21. R. Suzuki, S. Kato, K. Yoshida and **Y. Tokura**, “Quantum diffusive analysis of two electron spins in double quantum dots”, 10th Biannual Conference on Quantum Dots (QD2018), Toronto, Canada, June 25-29 (2018).
22. Giorgos Giavaras and **Yasuhiro Tokura**, “Current antiresonance in spin-orbit coupled double quantum dots”, 10th Biannual Conference on Quantum Dots (QD2018), Toronto, Canada, June 25-29 (2018).
23. **Yasuhiro Tokura**, “Excess entropy production in quantum systems”, APS March Meeting 2018, Los Angeles, California, USA March 5-9 (2018).
24. G. Giavaras, **Y. Tokura** and K. Ono, “Spin resonance in spin-orbit-coupled quantum dots in the weak and strong driving regimes” 2017 Workshop on Innovative Nanoscale Devices and Systems (WINDS), Hapuna Beach Prince Hotel, Hawaii, USA, Nov.30 (2017).
25. **Yasuhiro Tokura**, “Binary energy spectrum of counter-propagating Tomonaga-Luttinger liquid”, 28th Int. Conf. on Low Temperature Physics (LT-28), Gotherburg, Sweden Aug. 9-16 (2017).
26. **Yasuhiro Tokura**, “The Coherence of a Photo-Generated Electron Spin in a Electrostatically-Confined Quantum Dot”, 22nd Int. Conf. on Electronic Properties of Two Dimensional Systems (EP2DS-22), Pennsylvania State University, USA, July 31-Aug. 4 (2017).

27. **Yasuhiro Tokura**, Yuta Ohyama and Taichi Furuya, “Coherence of the photo-generated spins and effective Bell measurement”, 2016 Workshop on Innovative Nanoscale Devices and Systems (WINDS), Hapuna Beach Prince Hotel, Kohala Coast, Hawaii, USA, Dec. 4-9 (2016) (invited).
28. **Yasuhiro Tokura**, “Coherent control of single electron spin in a semiconductor quantum dot”, The 55th Annual Meeting of the Society of Electron Spin Science and Technology, Osaka City University, Osaka, Nov. 10-12 (2016) (invited).
29. **Yasuhiro Tokura**, “Dynamical quantum transport in nanostructures”, 6th Int. Quantum Science Symposium Europe-2016 Meeting, Peterhouse, Univ. Cambridge, UK, Nov. 1-2 (2016) (invited).
30. **Yasuhiro Tokura**, “Quantum adiabatic spin pump in Rashba-Aharonov-Bohm interferometer”, 9th Int. Conf. on Physics and Applications of Spin-Related Phenomena in Solids (PASPS9), Kobe Int. Conf. Center, Kobe, Aug 8-11 (2016).
31. Y. Ohyama and **Y. Tokura**, “Pseudomode quantum jump and memory effect of non-Markovian dynamics”, Resonance and Non-Hermitian Quantum Mechanics 2016, Arata Hall, Osaka University, Aug. 3-5 (2016).
32. T. Furuya and **Y. Tokura**, “Entanglement dynamics in simultaneously coupling system: Toward the Bell measurement”, The 9th Int. Conf. on Quantum Dot (QD2016), Jeju, Korea, May 22-27 (2016).
33. **Yasuhiro Tokura**, “Microwave amplitude dependence of electric dipole spin resonance”, China-Japan International Workshop on Quantum Technologies (QTech2016), May 13th-14th, 2016, Beijing (2016) (invited).
34. D. Morita, T.Kubo, **Y. Tokura**, and M. Yamashita “Spin-1 Quantum walks”, Int. Symposium on Nanoscale Transport and Technology (ISNTT-2015), NTT Basic Research Laboratories, Atsugi, Japan, Nov. 17-20 (2015), PWe-08.
35. T. Furuya and **Y. Tokura**, “Entanglement dynamics in simultaneously coupling system”, Int. Symposium on Nanoscale Transport and Technology (ISNTT-2015), NTT Basic Research Laboratories, Atsugi, Japan, Nov. 17-20 (2015), PWe-10.
36. Masahiko Taguchi, Denis M. Basko, Frank W. J. Hekking and **Yasuhiro Tokura**, “Quantum engineering with a one-dimensional superconducting system”, Int. Symposium on Nanoscale Transport and Technology (ISNTT-2015), NTT Basic Research Laboratories, Atsugi, Japan, Nov. 17-20 (2015), PWe-31.
37. Satoshi Nakajima and **Yasuhiro Tokura**, “Formulation of non-Markovian time-continuous quantum measurement using the Mensky’s restricted path integral”, 15th Asian Quantum Information Science Conference (AQIS’15), KIAS Seoul, Korea, Aug. 24-30 (2015), PA27.
38. Toshihiro Kubo and **Yasuhiro Tokura**, “Coulomb Interaction Induced Aharonov-Bohm Oscillations”, 21st International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-21), Sendai, Japan, July 26-31, Th-PE-17 (2015).
39. Satoshi Nakajima and **Yasuhiro Tokura**, “Quantum adiabatic and diabatic pump in quantum dot : quantum master approach”, 21st International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-21), Sendai, Japan, July 26-31, Tu-PE-26 (2015).
40. Daichi Morita, Toshihiro Kubo, **Yasuhiro Tokura**, and Makoto Yamashita, “Spin-1 Quantum Walk”, Joint Quantum Center (JQC) Durham-Newcastle, Mini-conference, Non-equilibrium Quantum Dynamics in Low Dimensions, Durham, UK, 20 July (2015).
41. **Yasuhiro Tokura**, “Quantum pumping in mesoscopic systems”, New Perspectives in Spintronic and Mesoscopic Physics, Kashiwa, Japan, June 3, (2015).
42. M. Taguchi, D. M. Basko, F. W. J. Hekking, and **Y. Tokura**, “Quantum fluctuations of a superconducting loop embedded in an inhomogeneous electromagnetic environment”, Frontiers of Condensed Matter, San Sebastian/Spain, Aug. (2014).
43. Masahiko Taguchi, Satoshi Nakajima, Toshihiro Kubo and **Yasuhiro Tokura**, “Quantum Adiabatic Pumping with Tunneling Phase in Quantum Dot System”, 32nd Int. Conf. Physics of Semiconductors, Austin, Texas, USA, Aug. 14, (2014).

44. Toshihiro Kubo and **Yasuhiro Tokura**, “Non-local Aharonov-Bohm Effects in Transport through a Quantum Dot Capacitively Coupled to a Non-equilibrium Aharonov-Bohm Interferometer”, QD2014, Pisa, Italy, May (2014).
45. **Yasuhiro Tokura**, “Strongly excited electric dipole spin resonance with field gradient”, APS March Meeting, T36.03, March 6, 2014, Denver, Colorado, USA.
46. H. Shibata, K. Shimizu, T. Honjo, H. Takesue, and **Y. Tokura**, “Fabrication of ultraslow noise SSPD and long distance QKD experiment”, Int. Symp. on Nanoscale Transport and Technology (ISNTT), Nov. 26 2013, Atsugi, Japan.
47. T. Kubo and **Y. Tokura**, “Non-local Aharonov-Bohm effects in transport through a quantum dot capacitively coupled to a non-equilibrium interferometer”, Int. Symp. on Nanoscale Transport and Technology (ISNTT), Nov. 26 2013, Atsugi, Japan.
48. M. Taguchi, S. Nakajima, T. Kubo and **Y. Tokura**, “Quantum pumping in quantum dot system”, Int. Symp. on Nanoscale Transport and Technology (ISNTT), Nov. 26 2013, Atsugi, Japan.
49. C. M. Peutter, S. Konabe, Y. Hatsugai, K. Shiraishi, and **Y. Tokura**, “Semiclassical electron dynamics in grapheme-like materials”, Int. Symp. on Nanoscale Transport and Technology (ISNTT), Nov. 27 2013, Atsugi, Japan.
50. S. Nakajima, M. Taguchi, T. Kubo and **Y. Tokura**, “Spin current induced by an adiabatic pump of quantum dots”, Int. Symp. on Nanoscale Transport and Technology (ISNTT), Nov. 27 2013, Atsugi, Japan.
51. **Yasuhiro Tokura**, “Electron spins and magnetic field”, FIRST Quantum Spin Information and Technology, School for spin and quantum information, Sep. 24, 2013, Takeda Hall, Univ. of Tokyo (invited).
52. Ken-ichi Sasaki, **Yasuhiro Tokura** and Tetsuomi Sogawa, “Dirac-cone Migration: Self-energies of Phonons in Graphene”, 5th Int. Conf. on Recent Progress in Graphene Research (RPGR2013), Sep. 9-13, 2013, Tokyo, Japan, 11p-P2-33.
53. **Yasuhiro Tokura**, Xiaobo Zhu, Shiro Saito, Robert Amsuss, A. Kemp, K. Kakuyanagi, S. Karimoto, H. Nakano, William. J. Munro, M. S. Everitt, Kae Nemoto, M. Kasu, Y. Matsuzaki, Norikazu Mizuochi and K. Semba, “Coherent Coupling of a Superconducting Flux Qubit”, IXth Rencontres du Vietnam (VietNam 2013), Nanophysics: from fundamentals to applications (the return), August 4-10, 2013. Quy-Nhon Vietnam. (Invited, Plenary)
54. **Yasuhiro Tokura**, Toshihiro Kubo and William John Munro, “Strongly driven spin qubit in a magnetic field gradient”, IXth Rencontres du Vietnam (VietNam 2013), Nanophysics: from fundamentals to applications (the return), August 4-10, 2013. Quy-Nhon Vietnam.
55. Yasuhiro Utsumi, Ora Entin-Wohlman, Amnon Aharony, Toshihiro Kubo, and **Yasuhiro Tokura**, “Fluctuation theorem for a two-terminal conductor connected to a voltage or a thermal probe”, Frontiers of Quantum and Mesoscopic Thermodynamics, 29 July - 3 August 2013, Prague, Czech Republic.
56. **Yasuhiro Tokura**, “Power Dependence of Electric Dipole Spin Resonance”, The 12th Asia Pacific Physics Conference (APPC12), July 14-10 2013, Int Conf. Halls, Makuhari Messe, Japan.
57. Nobuyuki Matsuda, Hanna Le Jeannic, Hiroshi Fukuda, Tai Tsuchizawa, William John Munro, Kaoru Shimizu, **Yasuhiro Tokura**, Koji Yamada and Hiroki Takesue, “Monolithic source of telecom-band polarization entanglement on a silicon photonic chip”, CLEO-Pacific Rim & OECC/PS 2013, ThM1-1, 30 June-4 July, Kyoto, Japan. (Invited)
58. **Y. Tokura** and T. Kubo, “Initialization of multiple quantum spins with non-equilibrium bias”, 20th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-20), MoP53, 1-5 July 2013, Wroclaw, Poland.
59. T. Kubo and **Y. Tokura**, “Spin current and asymmetric Andreev bound state in an interferometer containing a quantum dot with superconducting lead”, 16th International Conference on Modulated Semiconductor Structures (MSS-16), WeOM5, 1-5 July 2013, Wroclaw, Poland.

60. N. Matsuda, H. Takesue, K. Shimizu, **Y. Tokura**, E. Kuramochi and M. Notomi, “Slow-Light-Enhanced Correlated Photon Pair Generation in a Silicon Photonic Crystal Coupled-Resonator Optical Waveguide”, CLEO/EUROPE-IQEC 2013, IA-6.4 WED, 12-16 May 2013, Munich, Germany.
61. N. Matsuda, E. Kuramochi, H. Takesue, K. Shimizu, **Y. Tokura** and M. Notomi, “Ultra-Narrowband Nonlinear Wavelength Conversion Using Coupled Photonic Crystal Nanocavities”, CLEO/EUROPE-IQEC 2013, CK-1.5 SUN, 12-16 May 2013, Munich, Germany. (Invited)
62. Toshihiro Kubo and **Yasuhiro Tokura**, “Non-Local Aharonov-Bohm Effects in Transport through a Quantum Dot Capacitively Coupled to an Aharonov-Bohm Interferometer out of Equilibrium”, Workshop on Interferometry and Interaction in Non-equilibrium Meso- and Nano-systems”, ICTP Trieste, Italy, 8-12 April (2013).
63. Toshihiro Kubo and **Yasuhiro Tokura**, “Backaction Dephasing induced by a Quantum Dot Detector”, APS March Meeting, Baltimore, USA, 18-22 March (2013).
64. K. Sasaki, **Y. Tokura**, S. Suzuki, and T. Sogawa, “Understanding of the 2D Raman Band with Shifted Dirac Cones”, APS March Meeting, Baltimore, USA, 18-22 March (2013) G7-12.
65. **Yasuhiro Tokura** and Toshihiro Kubo, “Initialization of quantum spins under non-equilibrium bias condition”, 3rd Japan-Israel Binational Workshop on Quantum Phenomena, Okinawa, Japan, 11-14, March (2013) (Invited).
66. **Yasuhiro Tokura** and Shun Takahashi, “Anisotropy of the Spin-Orbit interaction in an InAs Quantum Dot”, the sixth International Conference on Advanced Materials and Nanotechnology, (AMN6), Auckland, New Zealand, 11-15 February (2013).
67. T. Kubo and **Y. Tokura**, “Thermoelectric transport in partially coherent three-terminals”, International Workshop on Quantum Noise and Measurement in Engineered Electronic Systems (QNM12) Dresden, Germany, 8 - 12 October (2012).
68. N. Matsuda, H. Le Jeannic, H. Fukuda, T. Tsuchizawa, K. Yamada, **Y. Tokura**, H. Takesue, “Polarization-entangled photon pair source on a chip”, 2012 IEEE 9th International Conference on Group IV Photonics (GFP), ThP9, Aug 30, 2012, San Diego, CA.
69. A. Oiwa, Y. Kanai, R. S. Deacon, S. Takahashi, K. Yoshida, K. Hirakawa, **Y. Tokura**, and S. Tarucha, “Electrically tunable spin-orbit interaction in self-assembled InAs quantum dots”, 31st International Conference on the Physics of Semiconductors (ICPS 2012), ETH Zurich, Switzerland, July 29th to August 3rd (2012) 7.5 (Invited).
70. M. Kohda, S. Nakamura, Y. Nishihara, K. Kobayashi, T. Ono, J. Ohe, **Y. Tokura**, and J. Nitta, “Electronic Stern-Gerlach experiments by Rashba spin orbit interaction”, 31st International Conference on the Physics of Semiconductors (ICPS 2012), ETH Zurich, Switzerland, July 29th to August 3rd (2012) 66.2.
71. Hanna Le Jeannic, Nobuyuki Matsuda, Hiroki Takesue, Hiroshi Fukuda, Tai Tsuchizawa, Toshifumi Watanabe, Koji Yamada, Sei-ichi Itabashi, and **Yasuhiro Tokura**, “Monolithically-integrated polarization-entangled photon pair source on a silicon-on-insulator photonic circuit”, The Conference on Lasers and Electro-Optics (CLEO) 2012, San Jose Convention Center, San Jose, CA, USA, May 6-11 (2012) QF2F.2.
72. Xiaobo Zhu, Shiro Saito, Alexander Kemp, Kosuke Kakuyanagi, Shinichi Karimoto, Hayato Nakano, William J. Munro, **Yasuhiro Tokura**, Mark Everitt, Kae Nemoto, Makoto Kasu, Norikazu Mizuochi, Kouichi Semba, “Coherent coupling of a superconducting flux-qubit to an electron spin ensemble in diamond”, APS March meeting, Boston, USA, Feb. 27-Mar. 3 (2012) A29.8.
73. **Yasuhiro Tokura**, “Coherent control and detection of spin qubits in semiconductor with magnetic field engineering”, APS March meeting, Boston, USA, Feb. 27-Mar. 3 (2012) L29.1 (invited).
74. K. Sasaki, K. Kato, **Y. Tokura** and T. Sogawa, “Optical selection rules for graphene nanoribbons”, SSDM 2011, Sep. 28-30, Nagoya, Japan P-9-18.
75. **Yasuhiro Tokura**, “Spin Orbit Interaction and Spin Accumulation in Quantum Dot System”, The 30th PIERS in Suzhou, China, Sep. 12-16 (2011) (Invited).

76. T. Kubo and **Y. Tokura**, “Backaction dephasing induced by coupling with an environment containing a quantum dot detector out of equilibrium”, Quantum Information Processing and Communication (QIPC) 2011, ETH Zurich, Sep. 5-9 (2011).
77. M. Kohda, S. Nakamura, K. Kobayashi, **Y. Tokura**, and J. Nitta, “Spin generation due to Rashba spin orbit interaction in InGaAs quantum point contacts”, SPINTECH6, Aug. 1-5, Matsue, Japan, O-18 (2011).
78. S. Sasaki, G. Zhang, K. Tateno, Y. Harada, **Y. Tokura**, T. Sogawa, and K. Muraki, “Modulation of Rashba spin-orbit interaction by radial external electric field in InAs nanowires”, SPINTECH6, Aug. 1-5, Matsue, Japan, WP-14.
79. M. Kohda, S. Nakamura, **Y. Tokura**, Y. Nishihara, K. Kobayashi, T. Ono, J. Nitta, “Zero field spin polarization by Rashba spin orbit interaction in quantum point contacts”, 5th International Workshop on Spin Currents, July 25-28, Sendai, Japan, BA-2 2011 (Invited).
80. R. Brunner, Y.-S. Shin, T. Obata, M. Pioro-Ladrière, T. Kubo, K. Yoshida, T. Taniyama, **Y. Tokura**, S. Tarucha, “Probing spin entanglement in a semiconductor/micro-magnet two-qubit gate”, EP2DS19, July 25-20 (2011), Tallahassee, Florida, USA.
81. T. Kubo, Y. Ichigo, and **Y. Tokura**, “Nonlinear transport through a three-terminal Aharonov-Bohm interferometer containing a double quantum dot”, EP2DS19, July 25-20 (2011), Tallahassee, Florida, USA.
82. **Yasuhiro Tokura**, “Coherent spin and charge transport through laterally coupled double quantum dots”, 2nd Advanced Workshop on Spin & Charge Properties of Low Dimensional Systems, July 17-22 (2011) Brasov, Romania.
83. Naoto Namekata, Hiroki Takesue, Yoshimori Honjo, **Yasuhiro Tokura**, and Shunichiro Inoue, “Practical Quantum Key Distribution Over 100 km Using Sinusoidally Gated InGaAs/InP Avalanche Photodiodes”, the Conference on Lasers and Electro-Optics (CELO:2011), May 1-6 (2011), Baltimore, USA.
84. S. Amaha, T. Hatano, W. Izumida, K. Ono, K. Kono, T. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, J. A. Gupta, D. G. Austing, and S. Tarucha, “Laterally and vertically coupled triple vertical quantum dots”, 2011 Frontiers in Nanoscale Science and Technology Workshop (2011 FNST), Jan. 5-7, Wako, Japan, P-10.
85. S. Amaha, W. Izumida, **Y. Tokura**, T. Hatano, R. Takahashi, K. Kono, J. A. Gupta, D. G. Austing, S. Tarucha, K. Ono, “Quartet Spin Blockade Mechanisms in Vertical Double Quantum Dots”, Int. Symp. on Nanoscale Transport and Technology (ISNTT2011), Jan. 11-14 (2011), Atsugi, Japan, Th-11.
86. S. M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J. J. Lin, S. Tarucha, K. Ono, “Electron Spin Resonance Tunneling in Vertical Double Quantum Dots with Different G-factors”, Int. Symp. on Nanoscale Transport and Technology (ISNTT2011), Jan. 11-14 (2011), Atsugi, Japan, PWe-27.
87. T. Kubo, **Y. Tokura**, “Backaction Dephasing Induced by Coupling with an Environment Containing a Quantum Dot Detector”, Int. Symp. on Nanoscale Transport and Technology (ISNTT2011), Jan. 11-14 (2011), Atsugi, Japan, PWe-25.
88. **Yasuhiro Tokura**, “Quantum key distribution/communication research in NTT”, Updating Quantum Cryptography and Communication 2010 (UQCC2010) Oct. 18-20 (2010), Tokyo [Invited].
89. S. Teraoka, S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, Y. Ohno, H. Ohno, and S. Tarucha, “Spin resonance and spin-orbit coupling effects in two dimensional hole systems in GaAs/AlGaAs₍₃₁₁₎A heterostructures”, The 6th Int. Conf. on the Physics and Applications of Spin Related Phenomena in Semiconductors (PASPS-VI), Tokyo, Japan, August 2-4 (2010), P1-61.
90. S. M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J. J. Lin, S. Tarucha, and K. Ono, “Spin resonant tunnelling through vertical double quantum dots with different g factors”, The 6th Int. Conf. on the Physics and Applications of Spin Related Phenomena in Semiconductors (PASPS-VI), Tokyo, Japan, August 2-4 (2010), B-3.

91. Y.-S. Shin, R. Brunner, A. Shibatomi, T. Obata, **Y. Tokura**, Y. Shiraki, K. Sawano, Y. Harada, K. Ishibashi, and S. Tarucha, "Aluminum oxide for an effective Schottky gate in Si / SiGe two dimensional electron gas systems", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), P2-076.
92. R. Brunner, Y.-S. Shin, T. Obata, **Y. Tokura**, T. Kubo, M. Pioro-Ladriere, K. Yoshida, T. Taniyama, and S. Tarucha, "Towards the Realization of a Multiple Qubit system by using a Split Micromagnet Design", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), P2-069.
93. **Y. Tokura**, T. Kubo, R. Brunner, Y. -S. Shin, and S. Tarucha, "Nuclear spin diffusion and electron spin decoherence in an inhomogeneous magnetic field", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), P1-398.
94. T. Kubo, **Y. Tokura**, and S. Tarucha, "Controlled dephasing in an Aharonov-Bohm interferometer containing a laterally coupled double quantum dot due to a coupling with a quantum dot charge sensor", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), P1-086.
95. S. M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J. J. Lin, S. Tarucha, and K. Ono, "Spin bottleneck in resonance tunneling through In_{0.04}Ga_{0.96}As/GaAs vertical double quantum dots", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), ThA3-3.
96. S. Amaha, T. Hatano, W. Izumida, K. Ono, T. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, J. A. Gupta, D. G. Austing, and S. Tarucha, "Laterally and vertically coupled triple vertical quantum dots", The 30th Int. Conf. on Physics of Semiconductors (ICPS-30), Seoul, Korea, July 26-30 (2010), MoB1-7.
97. **Y. Tokura**, T. Kubo, K. Ono, and S. Tarucha, "Leakage current at the spin blockade in g-factor controlled series quantum dots", Quantum Dot 2010 (QD2010), Nottingham, UK, April 26-30 (2010), PI-28.
98. T. Kubo, Y. Ichigo, **Y. Tokura**, and S. Tarucha, "Coherent electron transport through a double quantum dot coupled to three reservoirs", Quantum Dot 2010 (QD2010), Nottingham, UK, April 26-30 (2010), PI-27.
99. T. Hatano, S. Amaha, T. Kubo, S. Teraoka, **Y. Tokura**, J. A. Gupta, D. G. Austing, and S. Tarucha, "Electrical properties of two laterally coupled vertical quantum dots in series with tunable inter-dot coupling", Quantum Dot 2010 (QD2010), Nottingham, UK, April 26-30 (2010), PI-26.
100. R. Brunner, Y. -S. Shin, T. Obata, T. Kubo, **Y. Tokura**, M. Pioro-Ladriere, K. Yoshida, T. Taniyama, and S. Tarucha, "Spin SWAP in a Scalable Qubit System including a Split Micro-Magnet", Quantum Dot 2010 (QD2010), Nottingham, UK, April 26-30 (2010), S12-3.
101. **Y. Tokura**, R. Brunner, Y. -S. Shin, T. Obata, M. Pioro-Ladriere, and S. Tarucha, "Single-electron spin manipulation and detection using slanting-field", CREST 2010 International Symposium on Physics of Quantum Technology, Tokyo Japan, April 6-9 (2010), 8TH-09.
102. S.M. Huang, **Y. Tokura**, H. Akimoto, K. Kono, J.J. Lin, S. Tarucha, and K. Ono, "Electron resonance tunneling through double quantum dot with different g-factors", Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) ThA-2.
103. T. Hatano, S. Amaha, T. Kubo, S. Teraoka, **Y. Tokura**, and S. Tarucha, "Transport Properties of Coupled Vertical Quantum Dots", Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) ThM-3.
104. **Y. Tokura**, M. Pioro-Ladriere, R. Brunner, Y. -S. Shin, T. Obata, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, "Scalable spin qubits in quantum dot system using micro-magnet technology", Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komada, Tokyo, Mar. 9-11 (2010) ThM-1.

105. Toshihiro Kubo, **Yasuhiro Tokura**, Tsuyoshi Hatano, and Seigo Tarucha, “Dephasing in an Aharonov-Bohm interferometer containing a laterally coupled double quantum dot due to a coupling with a quantum dot charge sensor”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P40.
106. S. Takahashi, R. S. Deacon, K. Yoshida, A. Oiwa, K. Shibata, K. Hirakawa, **Y. Tokura**, and S. Tarucha, “Large anisotropy of spin-orbit interaction in a single InAs self-assembled quantum dot”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P38.
107. T. Obata, K. Suzuki, Y. -S. Shin, **Y. Tokura**, R. Brunner, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Overhauser effect for single electron spin in an electric dipole spin resonance experiment by using a double quantum dot integrated with a micro-magnet”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P37.
108. R. Brunner, Y. -S. Shin, T. Obata, T. Kubo, **Y. Tokura**, M. Pioro-Ladriere, K. Yoshida, T. Taniyama, and S. Tarucha, “Coherent control of the coupling between two electron spins in a scalable qubit with split micro-magnet design”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P33.
109. Y.-S. Shin, **Y. Tokura**, T. Obata, R. Brunner, M. Pioro-Ladriere, and S. Tarucha, “Both spins readout in a double quantum dot including a micromagnet”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P30.
110. S. Amaha, T. Hatano, W. Izumida, K. Ono, T. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, J. A. Gupta, D.G. Austing, and S. Tarucha, “Laterally and vertically coupled triple vertical quantum dots”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P26.
111. S. Teraoka, S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, Y. Ohno, H. Ohno, S. Tarucha, “Spin resonance and spin-orbit coupling effects in two dimensional hole systems in a GaAs/AlGaAs (311)A heterostructure”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) P2.
112. M. Yamamoto, T. Kodera, Y. Kondo, K. Kimura, K. Ono, **Y. Tokura**, Y. Arakawa, and S. Tarucha, “Hyperfine interaction in a vertical double quantum dot”, Int. Symposium on Quantum Nanostructures and Spin-related Phenomena (QNSP), Komaba, Tokyo, Mar. 9-11 (2010) TuM-3.
113. O. Entin-Wohlman, A. Aharony, **Y. Tokura** and Y. Avishai, “Spin-polarized Electric Currents through the Constriction with Spin-orbit Interaction”, 6th RIEC Int. Workshop on Spintronics, 5-6 Feb. 2010, Sendai Japan (P-11).
114. S. Teraoka, S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, Y. Ohno, H. Ohno, and S. Tarucha, “Hole Spin Resonance and Spin-orbit Interaction in p-GaAs/AlGaAs (311)A Heterostructure”, 6th RIEC Int. Workshop on Spintronics, 5-6 Feb. 2010, Sendai Japan (P-10).
115. T. Kubo, **Y. Tokura**, and S. Tarucha, “Electron Transport through an Aharonov-Bohm-Casher Interferometer Containing a Laterally Coupled Double Quantum Dot”, 6th RIEC Int. Workshop on Spintronics, 5-6 Feb. 2010, Sendai Japan (P-5).
116. S. Amaha, T. Hatano, **Y. Tokura**, K. Ono, T. Kodera, J. A. Gupta, D. G. Austing, and S. Tarucha, “Spin blockade properties of weakly coupled quantum dots in the presence of near orbital degeneracy”, International Symposium on Advanced Nanostructures and nano-Devices, Nov. 30- Dec. 4, 2009 Kaanapali, Maui, Hawaii.
117. **Y. Tokura**, T. Kubo, and S. Tarucha, “Detection of zero field spin accumulation by nuclear spins”, International Symposium on Advanced Nanostructures and nano-Devices, Nov. 30- Dec. 4, 2009 Kaanapali, Maui, Hawaii.
118. T. Kubo, **Y. Tokura**, and S. Tarucha, “Dephasing in an Aharonov-Bohm interferometer containing a laterally coupled double quantum dot due to a coupling with a quantum dot charge sensor”, A research workshop of the Israel Science Foundation, 50 years of the Aharonov-Bohm Effect, Concepts and Applications, Tel Aviv, Israel, Oct. 11-14, 2009.

119. K. Yamada, T. Tsuchizawa, T. Watanabe, H. Fukuda, H. Shinojima, H. Nishi, K. Harada, H. Takesue, **Y. Tokura**, and S. Itabashi, “Nonlinear functions and quantum entanglement generation using silicon photonic wire waveguides”, ECOC 2009, session 7.2, September 23, 2009, Vienna [invited].
120. **Yasuhiro Tokura**, Keiji Ono, and Seigo Tarucha, “Transient current in spin blockade condition”, 16th International Conference on Electron Dynamics In Semiconductors, Optoelectronics and Nanostructures (Edison16), August 24-28 2009 Montpellier, France Mo-C5.
121. T. Obata, M. Pioro-Ladrière, **Y. Tokura**, R. Brunner, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Dynamical polarization effect of nuclear spin bath dragged by electron spin resonance in double quantum dot integrated with micro-magnet”, 16th International Conference on Electron Dynamics In Semiconductors, Optoelectronics and Nanostructures (Edison16), August 24-28 2009 Montpellier, France Th-P22.
122. H. Sanada, T. Sogawa, H. Gotoh, **Y. Tokura**, H. Yamaguchi, H. Nakano, H. Kamada, “Excited-state spectroscopy of charged quantum dots in magnetic field”, The 14th International Conference on Modulated Semiconductor structures (MSS-14), July 19-24 2009, Koba, Japan M4e.
123. M. Pioro-Ladrière, R. Brunner, **Y. Tokura**, T. Obata, Y.-S. Shin, T. Kubo, K. Yoshida, T. Taniyama, S. Tarucha, “Manipulating single electron spins with micro-magnets”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan E9a [invited].
124. R. Brunner, M. Pioro-Ladrière, **Y. Tokura**, T. Obata, Y.-S. Shin, T. Kubo, K. Yoshida, T. Taniyama, S. Tarucha, “Coherent Single Electron Manipulation in a Double Quantum Dot Specially De-signed for Scalable Qubits”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Th-eP84.
125. **Y. Tokura**, T. Kubo, Y. -S. Shin, K. Ono, S. Tarucha, “Quantum spin transport in magnetic-field-engineered nano-structures”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Th-eP82.
126. S. Amaha, T. Hatano, H. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, D. G. Austing, S. Tarucha, “Electronic states in laterally coupled vertical triple quantum dots”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Th-eP40.
127. Y.-S. Shin, M. Pioro-Ladrière, T. Obata, **Y. Tokura**, R. Brunner, T. Kubo, K. Yoshida, S. Tarucha, “Single Electron Spin Addressing by Photon-assisted-tunneling for a Double Quantum Dot Integrated with a Micro-magnet”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Th-eP36.
128. S. Teraoka, S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, Y. Ohno, H. Ohno, S. Tarucha, “Spin resonance of two dimensional hole system”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Tu-eP71.
129. T. Hatano, T. Kubo, S. Amaha, S. Teraoka, **Y. Tokura**, S. Tarucha, “Phases and periods of Aharonov-Bohm oscillations in parallel coupled double quantum dot”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Tu-eP39.
130. T. Kubo, **Y. Tokura**, T. Hatano, S. Amaha, S. Teraoka, S. Tarucha, “Quantum interference effects in a laterally coupled triple quantum dot containing a quantum dot charge sensor”, The 18th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-18), July 19-24 2009, Kobe, Japan Mo-eP26.
131. T. Kubo, **Y. Tokura** and S. Tarucha, “Spin-dependent transport through an Aharonov-Bohm-Casher interferometer containing a laterally coupled double quantum dot with spin-orbit interaction” , 14th International Conference on Narrow Gap Semiconductors and Systems, July 13-17 2009, Sendai, Japan PTh-13.
132. M. Yamashita, M.W. Jack, K. Inaba, K. Igeta and **Y. Tokura**, “Gutzwiller study of Bose-Fermi mixtures trapped in three-dimensional optical lattices”, LPHYS’09, 6.10.4, Barcelona, Spain, July 13-17 2009 [Invited].

133. T. Honjo, A. Uchida, K. Amano, K. Hirano, H. Someya, H. Okumura, K. Yoshimura, P. Davis and **Y. Tokura**, “Differential-phase-shift quantum key distribution experiment using fast physical random bit generator with chaotic semiconductor lasers”, LPHYS’09, 7.5.6, Barcelona, Spain, July 13-17 2009 [Invited].
134. A. Uchida, T. Honjo, K. Amano, K. Hirano, H. Someya, H. Okumura, S. Yoshimori, K. Yoshimura, P. Davis and **Y. Tokura**, “Fast physical random bit generator based on chaotic semiconductor lasers: Application to quantum cryptography”, CLEO/Europe-ECOC, CB.P.1, Munich, Germany, 2009.
135. Q. Zhang, H. Takesue, T. Honjo, K. Wen, T. Hirohata, M. Suyama, Y. Takiguchi, H. Kamada, **Y. Tokura**, O. Tadanaga, Y. Nishida, M. Asobe and Y. Yamamoto, “Megabits secure key rate quantum key distribution”, CLEO/IQEC 2009, ITul1, June 2, 2009, Baltimore.
136. H. Takesue, K. Harada, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Silicon photonics in quantum communications”, CLEO/IQEC 2009, CMAA1, June 1, 2009, Baltimore [invited].
137. **Y. Tokura**, S. Amaha, R. Takahashi, K. Ono, and S. Tarucha, “Nuclear spin pumping in asymmetrical double dots”, Frontiers in Nanoscale Science and Technology Workshop (FNST-2009), May 29-31, Boston, USA.
138. R. Brunner, M. Pioro-Ladrière, T. Obata, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Microwave Circuit Design for Precise Pulse Control and Arbitrary Electrically Driven Single Spin Rotation in Double Quantum Dot Devices”, nanoPhys09, Feb. 23-25, 2009, Tokyo, Japan (P1-12).
139. T. Obata, M. Pioro-Ladrière, **Y. Tokura**, R. Brunner, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Dynamical polarization effect of nuclear spin bath dragged by electron spin resonance in double quantum dot integrated with micro-magnet”, nanoPhys09, Feb. 23-25, 2009, Tokyo, Japan (P2-14).
140. T. Kubo, **Y. Tokura**, S. Amaha, and S. Tarucha, “Nonlinear transport through an asymmetrically parallel coupled double quantum dot”, nanoPhys09, Feb. 23-25, 2009, Tokyo, Japan (P2-6).
141. T. Kubo, **Y. Tokura**, S. Amaha, T. Hatano, and S. Tarucha, “Spin and pseudospin Kondo effects in a laterally coupled double quantum dot”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PTu-13).
142. M. Pioro-Ladrière, T. Obata, R. Brunner, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Charge Detection of electrically Driven Single-Electron Resonance in a Slanting Zeeman Field”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (We-09).
143. T. Hatano, T. Kubo, **Y. Tokura**, S. Amaha, S. Teraoka, and S. Tarucha, “Aharonov-Bohm Oscillation in Parallel Coupled Vertical Double Dot”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PTu-16).
144. S. Amaha, T. Hatano, S. Teraoka, T. Kubo, **Y. Tokura**, C. Payette, J. A. Guppa, D. G. Austing, and S. Tarucha, “Wave Function Imaging in Vertical Quantum Dots Using Resonant Tunneling Spectroscopy”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PTu-17).
145. K. Harada, H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Frequency and Polarization Characteristics of Correlated Photon-Pair Generation in Silicon Wire Waveguide”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PWe-10).
146. S. Teraoka, S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, Y. Ohno, H. Ohno, and S. Tarucha, “Spin Resonance of Two Dimensional Hole System and B=0 Spin Splitting”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PWe-13).
147. T. Kubo, **Y. Tokura**, and S. Tarucha, “Quantum Interference Effects in a Laterally Coupled Double Quantum Dot with a Capacitively Coupled Quantum Dot Charge Sensor”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PWe-25).
148. S. Amaha, T. Hatano, D. G. Austing, H. Tamura, S. Teraoka, T. Kubo, **Y. Tokura**, and S. Tarucha, “Electronic Charge and Spin States in Laterally Coupled Triple Quantum Dots”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PWe-26).

149. R. Brunner, M. Pioro-Ladrière, T. Obata, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “Circuit Design to Perform Arbitrary Single Electron Spin Rotations in Double Quantum Dots”, ISNTT2009, Jan. 20-23, Kanagawa, Japan (PWe-28).
150. T. Hatano, T. Kubo, **Y. Tokura**, S. Amaha, S. Teraoka, and S. Tarucha, “Aharonov-Bohm Phases for Bonding and Anti-Bonding States in Parallel Coupled Vertical Double Dot”, Int. Sympo. on Foundation of Quantum Mechanics in the Light of New Technology (ISQM-Tokyo’08), PII-4.
151. T. Kubo, **Y. Tokura**, S. Amaha, S. Teraoka, and S. Tarucha, “Electron Transport through a Laterally Coupled Triple Quantum Dot Forming Aharonov-Bohm Interferometer”, Int. Sympo. on Foundation of Quantum Mechanics in the Light of New Technology (ISQM-Tokyo’08), PII-3.
152. S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, S. Teraoka, D. G. Austing, S. Tarucha, Y. Nakata, T. Miyazawa, T. Oshima, T. Usuki, and N. Yokoyama, “Inter-Dot Coupling Effects Observed for Multiple Self-Assembled Quantum Dots in 4-Gated Vertical Tunnel Diodes”, Int. Sympo. on Foundation of Quantum Mechanics in the Light of New Technology (ISQM-Tokyo’08), PII-2.
153. S. Amaha, T. Hatano, **Y. Tokura**, K. Ono, T. Kubo, D. G. Austing, and S. Tarucha, “Spin Blockade Properties of Weakly Coupled Quantum Dots with Orbital Degeneracy”, Int. Sympo. on Foundation of Quantum Mechanics in the Light of New Technology (ISQM-Tokyo’08), PII-1.
154. H. Shibata, M. Asahi, T. Maruyama, T. Akazaki, H. Takesue, T. Honjo, and **Y. Tokura**, “Optical Response and Fabrication of MgB₂ Nanowire Detectors”, 2008 Applied Superconductivity Conference, Aug. 17-22, 2008, Chicago (3EPD02).
155. H. Shibata, M. Asahi, T. Maruyama, T. Akazaki, H. Takesue, T. Honjo, **Y. Tokura**, “Optical response of MgB₂ nanowire”, 21st International Symposium on Superconductivity, Oct. 27-29, 2008, Tsukuba (FDP-32).
156. K. Harada, H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “High-purity entanglement generation using silicon wire waveguide”, International Symposium on Physics of Quantum Technology 2008, TH-E3, November 27, 2008, Nara.
157. Q. Zhang, H. Takesue, T. Honjo, K. Wen, T. Hirohata, M. Suyama, Y. Takiguchi, H. Kamada, **Y. Tokura**, O. Tadanaga, Y. Nishida, M. Asobe, S. W. Nam, R. H. Hadfield, K. Tamaki, K. Inoue, and Y. Yamamoto, “Experimental research status of differential phase shifted quantum key distribution”, International Symposium on Physics of Quantum Technology 2008, TH-E6, November 27, 2008, Nara.
158. K. Yamada, T. Tsuchizawa, T. Watanabe, H. Fukuda, H. Shinojima, H. Nishi, H. Takesue, T. Tanabe, A. Shinya, E. Kuramochi, M. Notomi, **Y. Tokura**, and S. Itabashi, “Applications of nonlinear effects in silicon wire waveguides: all-optical modulation, wavelength conversion, and quantum entanglement”, SPIE Asia-Pacific Optical Communications, APOC 2008, Paper 7134-64, October 28, 2008, Hangzhou, China [invited].
159. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Entanglement generation using silicon photonic wire waveguide”, The 2nd IEEE Nanotechnology Materials and Devices Conference, NMDC 2008, MoC II-3, October 20, 2008, Kyoto [invited].
160. H. Takesue, K. Harada, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura** and S. Itabashi, “Entanglement generation using silicon wire waveguide”, XII International Conference on Quantum Optics and Quantum Information, ICQO 2008, September 22, 2008, Vilnius, Lithuania [invited].
161. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Entanglement generation using silicon wire waveguide”, 5th International Conference on Group IV Photonics, GFP 2008, FD1, September 19, 2008, Sorrento, Italy [invited].
162. M. Yamashita, M. W. Jack, K. Igeta, and **Y. Tokura**, “Numerical Study of Bose-Fermi mixtures in a 3D optical lattice based on the Gutzwiller approximation”, XXI International Conference on Atomic Physics (ICAP2008), Storrs, Connecticut, USA, July 27-August 1, 2008.
163. T. Honjo, H. Takesue, H. Kamada, K. Tamaki, H. Shibata, K. Shimizu, **Y. Tokura**, S. Yamamoto, T. Yamamoto, Y. Nishida, O. Tadanaga, M. Asobe, and K. Inoue, “Field trial of differential-phase-shift QKD using polarization independent frequency up-conversion detectors”, SECOQC, Oct 10, 2008, Vienna, Austria, 2008.

164. **Y. Tokura**, “Latest progress in QKD experiments at NTT”, Updating Quantum Cryptography 2008, Dec. 1-2, Akihabara, Tokyo, Lecture (X).[Invited]
165. **Y. Tokura**, “Quantum spin transport in magnetic-field-engineered nano-structures”, The 23rd Nishinomiya-Yukawa Memorial International Workshop, Spin Transport in Condensed Matter (STCM-Kyoto) Oct. 27 - Nov. 28 (2008) Yukawa Institute for Theoretical Physics, Kyoto University. [Invited]
166. T. Obata, M. Pioro-Ladrière, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, S. Tarucha, “Selective Addressing of single electron spins in a semiconductor double quantum dot integrated With a micro-magnet”, 29th International Conference on the Physics of Semiconductors, Rio de Janeiro, Brazil July 27th-August 1st 2008, (Tu-M1e-2).
167. T. Kodera, K. Ono, Y. Kitamura, S. Amaha, **Y. Tokura**, Y. Arakawa, and S. Tarucha, “Lifting of Pauli-Spin Blockade in Few-Electron Vertical Double Quantum Dots”, 25th International Conference on Low Temperature Physics, Amsterdam, Netherlands August 6-13, 2008 (PD-Th250).
168. T. Kubo, **Y. Tokura**, S. Amaha, and S. Tarucha, “Kondo effects in a laterally coupled double quantum dot”, 25th International Conference on Low Temperature Physics, Amsterdam, Netherlands August 6-13, 2008 (PD-Th251).
169. M. Pioro-Ladrière, T. Obata, **Y. Tokura**, Y. -S. Shin, T. Kubo, K. Yoshida, T. Taniyama, and S. Tarucha, “selective manipulation of electron spins with electric field”, 25th International Conference on Low Temperature Physics, Amsterdam, Netherlands August 6-13, 2008 (OTuA4-2 Invited).
170. T. Hatano, **Y. Tokura**, S. Amaha, S. Teraoka, T. Kubo, and S. Tarucha, “Transport properties of parallel coupled double dots under microwave irradiation”, 25th International Conference on Low Temperature Physics, Amsterdam, Netherlands August 6-13, 2008 (PD-Tu270).
171. **Y. Tokura**, T. Kubo, Y. -S. Shin, M. Pioro-Ladrière, T. Obata, and S. Tarucha, “Photon Assisted Current and Spin Measurement in Series Double Dots with a Field Gradient”, Fifth International Conference on Physics and Applications of Spin-related Phenomena in Semiconductors, Foz do Iguaçu, Brazil, Aug. 03-06, 2008 (Mon 35).
172. **Y. Tokura**, “Electric field driven spin resonance using magnetic field gradient and its decoherence process”, The workshop on Quantum Decoherence and Quantum Information Science, Leiden, The Netherlands, Aug. 11-15, 2008.
173. K. Harada, H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “High-purity entanglement generation using silicon wire waveguide”, 8th Asian Conference on Quantum Information Science, AQIS 2008, August 30, 2008, Seoul.
174. H. Takesue, T. Honjo, K. Tamaki, and **Y. Tokura**, “Differential phase shift quantum key distribution”, ITU-T Kaleidoscope Academic Conference: Innovations in NGN - Future Network and Services, S8.2, May 13, 2008, Geneva.
175. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura**, and S. Itabashi, “Generation of 1.5-um band polarization entanglement using silicon wire waveguide”, CLEO/QELS 2008, QFE3, May 9, 2008, San Jose.
176. **Yasuhiro Tokura**, Kieji Ono, and Seigo Tarucha, “Tunneling current through g-factor engineered series quantum dots”, The 5th International Conference on Semiconductor Quantum Dots, Gyeongju, Korea (May, 2008).
177. **Y. Tokura**, S. Amaha, T. Kodera, K. Ono and S. Tarucha, “Coherent transport in a series quantum dot system”, Frontiers in Nanoscale Science and Technology Workshop (FNST2008), Basel Switzerland (Jan, 2008).
178. **Y. Tokura**, M. Pioro-Ladrière, and S. Tarucha, “Single spin manipulation by electric field in a quantum dot”, 21st Century COE Program, Awaji, Japan, (Dec. 2007)[Invited].
179. S. Amaha, T. Hatano, **Y. Tokura**, T. Kubo, D. G. Austing, and S. Tarucha, “Electronic properties of three collinear laterally coupled vertical quantum dots”, Yukawa Int. Seminar 2007 (YKIS2007), Interaction and Nanostructural Effects in Low-Dimensional Systems (Nov. 22 2007) PS-1.

180. T. Kubo, **Y. Tokura**, and S. Tarucha, “Many-body effect on coherent pseudo-spin dynamics in Aharonov-Bohm interferometer containing a laterally coupled double quantum dot”, Yukawa Int. Seminar 2007 (YKIS2007), Interaction and Nanostructural Effects in Low-Dimensional Systems (Nov. 22 2007) PS-2.
181. **Y. Tokura**, “Latest Achievement in QKD Experiments at NTT”, Updating Quantum Cryptography 2007, Akihabara Tokyo, Japan (Oct. 2007)[Invited].
182. H. Takesue, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, **Y. Tokura** and S. Itabashi, “Entanglement generation using silicon wire waveguide,” Eur. Conf. Opt. Commun. ECOC 2007, postdeadline paper 2.3, September 20, 2007, Berlin.
183. T. Kodera, S. Amaha, K. Ono, **Y. Tokura**, and S. Tarucha, “Pauli-Spin Blockade in Few-Electron Vertical Double Quantum Dots”, The 15th International Conference on Nonequilibrium Carrier Dynamics in Semiconductors (HCIS15), FrA-3 Tokyo Japan, July 2007.
184. T. Kubo, **Y. Tokura**, and S. Tarucha, “Coherent pseudo-spin dynamics in a laterally coupled double quantum dots”, The 15th International Conference on Nonequilibrium Carrier Dynamics in Semiconductors (HCIS15), MoP-23 Tokyo Japan, July 2007.
185. T. Kobayashi, S. Sasaki, T. Fujisawa, **Y. Tokura**, and T. Akazaki, “Local Accumulation and Depletion of Nonequilibrium Ballistic Electrons Probed by a Semiconductor Quantum Dot”, The 15th International Conference on Nonequilibrium Carrier Dynamics in Semiconductors (HCIS15), ThA-5 Tokyo, Japan July 2007.
186. S. Amaha, T. Kodera, T. Hatano, K. Ono, **Y. Tokura**, S. Tarucha, J.A. Gupta, C. Payette, and D. G. Austing, “Resonant Tunneling Spectroscopy in Weakly Coupled Vertical Quantum Dots”, The 15th International Conference on Nonequilibrium Carrier Dynamics in Semiconductors (HCIS15), TuP-22 Tokyo, Japan July 2007.
187. S. Amaha, T. Hatano, S. Sasaki, T. Kubo, **Y. Tokura**, and S. Tarucha, “Manipulation of Kondo effect by tuning orbital degeneracy”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE42, Genova, Italy, July 2007.
188. S. Amaha, D. G. Austing, T. Hatano, T. Kubo, **Y. Tokura**, and S. Tarucha, “Stability diagram of laterally coupled vertical triple quantum dots”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE43, Genova, Italy, July 2007.
189. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo, and S. Tarucha, “Observation of tunnel-coupled bonding and anti-bonding states and exchange-coupled singlet and triplet states in the excitation spectrum of double quantum dot”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE73, Genova, Italy, July 2007.
190. T. Kubo, **Y. Tokura**, and S. Tarucha, “Coherent pseudo-spin dynamics in Aharonov-Bohm interferometer containing a laterally coupled double quantum dot”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE78, Genova, Italy, July 2007.
191. M. Pioro-ladriere, **Y. Tokura**, T. Obata, T. Kubo, K. Yoshida, and S. Tarucha, “Manipulating spin-charge qubit in lateral quantum dots”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE117, Genova, Italy, July 2007.
192. T. Kodera, K. Ono, S. Amaha, **Y. Tokura**, and S. Tarucha, “Singlet-Triplet transition induced by Zeeman energy in weakly coupled vertical double quantum dots”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE43, Genova, Italy, July 2007.
193. **Y. Tokura**, T. Kubo, S. Amaha, T. Kodera, and S. Tarucha, “Phonon induced coherence in multi-level quantum dot system”, Int. Conf. on Electronic properties of two-dimensional systems (EP2DS-17), PE23, Genova, Italy, July 2007.
194. T. Kobayashi, S. Sasaki, T. Fujisawa, **Y. Tokura**, and T. Akazaki, “Tunable local electron distribution in a reservoir for mesoscopic devices”, FNST2007, Tokyo, Japan (Mar. 2007) A16.
195. S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, and S. Tarucha, “Orbital anisotropy and Hund’s coupling manipulation of a few electron four-gated quantum dot”, FNST2007, Tokyo, Japan (Mar. 2007) A18.

196. T. Kubo, **Y. Tokura**, and S. Tarucha, “Suppression of spin Kondo effect in a laterally coupled double quantum dot”, FNST2007, Tokyo, Japan (Mar. 2007) A22.
197. **Y. Tokura**, H. Nakano, and T. Kubo, “Anomalous enhancement of a shot noise in the coherent transport”, FNST2007, Tokyo, Japan (Mar. 2007) A28.
198. M. Yamamoto, M. Stopa, Y. Hirayama, **Y. Tokura**, and S. Tarucha, “Direction controlled Coulomb drag in coupled one-dimensional wires”, FNST2007, Tokyo, Japan (Mar. 2007) A29.
199. S. Amaha, T. Hatano, **Y. Tokura**, D. G. Austing, and S. Tarucha, “Stability diagram of laterally coupled vertical triple quantum dot devices”, FNST2007, Tokyo, Japan (Mar. 2007) B14.
200. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo, and S. Tarucha, “Excitation spectroscopy of a few-electron double quantum dot”, FNST2007, Tokyo, Japan (Mar. 2007) B16.
201. K. Hitachi, M. Pioro-Ladrière, C. Buizert, E. Totoki, A. Pioda, A. Oiwa, **Y. Tokura**, and S. Tarucha, “Single electron spin resonance with a quantum dot under a dc current induced slanting Zeeman field”, FNST2007, Tokyo, Japan (Mar. 2007) B17.
202. T. Kodera, K. Ono, S. Amaha, **Y. Tokura**, and S. Tarucha, “Zeeman-induced singlet-triplet transition in vertical double quantum dots”, FNST2007, Tokyo, Japan (Mar. 2007) B21.
203. T. Kubo, **Y. Tokura**, and S. Tarucha, “Pseudo-spin dynamics in Aharonov-Bohm interferometer containing a laterally coupled double quantum dot”, FNST2007, Tokyo, Japan (Mar. 2007) B22.
204. T. Obata, M. Pioro-Ladrière, T. Kubo, K. Yoshida, **Y. Tokura**, and S. Tarucha, “Microwave-band on-chip coil technique for single electron spin resonance with quantum dots”, FNST2007, Tokyo, Japan (Mar. 2007) B23.
205. Y. S. Shin, T. Hatano, S. Amaha, T. Kubo, **Y. Tokura**, and S. Tarucha, “Aharonov-Bohm oscillations in laterally coupled vertical double quantum dots”, FNST2007, Tokyo, Japan (Mar. 2007) B26.
206. K. Yamada, M. Stopa, **Y. Tokura**, T. Hatano, and S. Tarucha, “Geometric effect in a hybrid vertical/lateral quantum dot”, FNST2007, Tokyo, Japan (Mar. 2007).
207. T. Kodera, K. Ono, S. Amaha, **Y. Tokura**, and S. Tarucha, “Inter-dot tunneling through two-electron states under the influence of environments”, NNCI2007, Atsugi, Japan (Feb. 2007).
208. T. Kobayashi, S. Tsuruta, S. Kang, S. Sasaki, H. Tamura, T. Fujisawa, **Y. Tokura**, and T. Akazaki, “Ballistic current injection into a semiconductor quantum dot”, NNCI2007, Atsugi, Japan (Feb. 2007).
209. T. Kubo, **Y. Tokura**, and S. Tarucha, “Suppression of Kondo effect in laterally coupled double quantum dots”, NNCI2007, Atsugi, Japan (Feb. 2007).
210. M. Yamamoto, M. Stopa, Y. Hirayama, **Y. Tokura**, and S. Tarucha, “Direction controlled coupled Coulomb drag in coupled one-dimensional quantum wires”, NNCI2007, Atsugi, Japan (Feb. 2007).
211. **Y. Tokura**, “Anomalous enhancement of a shot noise in the coherent transport”, AMN-3, Wellington, New Zealand (Feb. 2007).
212. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo, and S. Tarucha, “Excitation spectroscopy of bonding and anti-bonding states in a few-electron double dot”, nanoPHYS’07, Tokyo, Japan (Jan. 2007).
213. S. Amaha, T. Hatano, T. Kubo, **Y. Tokura**, and S. Tarucha, “Stability diagram of laterally coupled triple vertical quantum dots”, nanoPHYS’07, Tokyo, Japan (Jan. 2007).
214. T. Kubo, **Y. Tokura**, and S. Tarucha, “Asymmetric pseudo-spin Kondo effect in laterally coupled double quantum dots”, nanoPHYS’07, Tokyo, Japan (Jan. 2007).
215. M. Pioro-Ladrière, **Y. Tokura**, T. Obata, T. Kubo, K. Yoshida, and S. Tarucha, “Micro-magnets for coherent control of spin-charge qubit in lateral quantum dots”, nanoPHYS’07, Tokyo, Japan (Jan. 2007).

216. T. Obata, M. Pioro-Ladrière, T. Kubo, K. Yoshida, **Y. Tokura** and S. Tarucha, “On-chip micro-coil technique for single electron spin resonance with quantum dot”, nanoPHYS’07, Tokyo, Japan (Jan. 2007).
217. **Y. Tokura**, “Coherent transport through coupled quantum dots”, MTI & CNM Int. Argonne Fall Workshop on Nanophysics VI, Nanoscale Superconductivity and Magnetism, Argonne National Laboratory, 2006 [Invited].
218. **Y. Tokura**, “Coherent single electron spin control with micro-magnets”, 4th Int. Conf. on Physics and Applications of Spin-related Phenomena in Semiconductors (PASPS-IV), Sendai Japan, 2006 LN-4.
219. S. Tarucha, **Y. Tokura**, M. Pioro-Ladriere, T. Obata, T. Kubo and W. van der Wiel, “New scheme of spin qubits driven by ac electric field”, Nanotechnology Materials and Devices Conference, 2006 (NMDC 2006. IEEE, Gyeongju, South Korea, 22-25 Oct. 2006.
220. T. Hatano, **Y. Tokura**, S. Amaha, T. Kubo and S. Tarucha, “Observation of the singlet and triplet states in a hybrid vertical-lateral double dot”, The 28th Int. Conf. Physics of Semiconductors, Viena, Austria, 2006.
221. T. Kubo, **Y. Tokura**, and S. Tarucha, “Pseudo-spin Kondo effect in Aharonov-Bohm interferometer containing laterally coupled double-quantum dots”, The 28th Int. Conf. Physics of Semiconductors, Viena, Austria, 2006.
222. S. Amaha, T. Hatano, S. Sasaki, T. Kubo, **Y. Tokura**, and S. Tarucha, “Manipulation of the Kondo Effect in Vertical Single Quantum Dot with Multiple Gates”, A workshop on Imaging at the Nanoscale, Quantum Information Processing, Nanophotonics, Nanoelectronics (Frontiers in Nanoscale Science and Technology Workshop FNST), A16, San Francisco USA (Jan. 2006).
223. T. Kubo, **Y. Tokura**, T Hatano, and S. Tarucha, “Quantum Phase Coherence through Aharonov-Bohm Interferometer Containing Laterally Coupled Double Quantum Dots”, A workshop on Imaging at the Nanoscale, Quantum Information Processing, Nanophotonics, Nanoelectronics (Frontiers in Nanoscale Science and Technology Workshop FNST), B17, San Francisco USA (Jan. 2006).
224. **Yasuhiro Tokura**, “Coherent Single Electron Spin Control in a Slanting Zeeman Field”, A workshop on Imaging at the Nanoscale, Quantum Information Processing, Nanophotonics, Nanoelectronics (Frontiers in Nanoscale Science and Technology Workshop FNST), San Francisco USA (Jan. 2006).[Invited]
225. S. Amaha, T. Hatano, S. Sasaki, T. Kubo, **Y. Tokura**, “Manipulation of Kondo Effect by tuning orbital degeneracy”, International Symposium on Mesoscopic Superconductivity and Spintronics 2006 (MS+S2006), PMo-4, Atsugi Japan (Feb. 2006).
226. T. Kubo, **Y. Tokura**, T. Hatano, S. Tarucha, “Quantum Phase Coherence through Aharonov-Bohm Interferometer Containing Laterally Coupled Double Quantum Dots”, International Symposium on Mesoscopic Superconductivity and Spintronics 2006 (MS+S2006), PMo-6, Atsugi Japan (Feb. 2006).
227. **Yasuhiro Tokura**, “Electron spin manipulation in quantum dot systems”, International Workshop on “Electron spin resonance and related phenomena in low dimensional structures”, Villa Nobel, Sanremo, Italy (Mar. 2006).[Invited]
228. **Yasuhiro Tokura**, “Interaction and interference effect in the electron current through laterally coupled quantum dots”, Int. Seminar and Workshop on Non-equilibrium Dynamics in Interacting Systems, Dresden, Germany (Apr. 2006).[Invited]
229. **Y. Tokura**, W. van der Wiel, T. Obata, and S. Tarucha, “Single electron spin resonance with a slanted magnetic field”, International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS), P-C-9, Albuquerque, USA (July 2005).
230. M. Yamamoto, A. Kashifuku, M. Stopa, Y. Hirayama, **Y. Tokura** and S. Tarucha, “Hydrodynamic electronic motion in coupled quantum wires”, International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS), P-B-2, Albuquerque, USA (July 2005).

231. T. Hatano, **Y. Tokura**, S. Amaha, Y. Nishi, Y. Hirayama and S. Tarucha, “Manipulation of tunnel and exchange couplings in a few-electron double dot”, International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS), P-B-6, Albuquerque, USA (July 2005).
232. **Y. Tokura**, “Electron spin resonance and two qubit operation in a slanting Zeeman field”, International Argonne Fall Workshop on Nanophysics V: Nanoscale Superconductivity and Magnetism, Argonne, USA (Nov. 2005).[Invited]
233. **Y. Tokura**, “Scattering and manipulation of electron spins in one dimensional structures”, 2nd Int. Workshop on Spin-FET Based Quantum Information Processing (Spin-FET-QIP), Jülich, Germany 2005 [Invited].
234. T. Kubo and **Y. Tokura**, “Interaction Effects on Tunneling Conductance in Magnetic-Field-Induced Quasi-One-Dimensional Electron Systems in Semiconductor Nanowhiskers”, Int. Conf. on Nanoelectronics, Nanostructures and Carrier Interactions (NNCI 2005), Atsugi Japan, 2005.
235. **Y. Tokura**, H. Nakano, and K. Kanisawa, “Electronic structure of triangular quantum dots”, Int. Conf. on Nanoelectronics, Nanostructures and Carrier Interactions (NNCI 2005), Atsugi Japan, 2005.
236. M. Yamamoto, M. Stopa, **Y. Tokura**, Y. Hirayama, and S. Tarucha, “Negative Drag in Parallel Quantum Wires”, Int. Conf. on Nanoelectronics, Nanostructures and Carrier Interactions (NNCI 2005), Atsugi Japan, 2005.
237. **Y. Tokura**, “Scattering and Interaction of 1-D Electrons with Spin-orbit interaction and Magnetic Field” 2nd Int. Conf. on Advanced Materials and Nanotechnology (AMN-2), Queens town, New Zealand, 2005 (Fr A2.2).
238. H. Yamaguchi, S. Miyashita, **Y. Tokura** and Y. Hirayama, “InAs-based Micromechanical Two-dimensional Electron Systems”, The 27th Int. Conf. Physics of Semiconductors, Flagstaff, Arizona, 2004.
239. T. Kubo and **Y. Tokura**, “Many-Body Effects on Tunneling of Electrons in Magnetic-Field-Induced Quasi One-Dimensional Systems in Quantum Wells”, The 27th Int. Conf. Physics of Semiconductors, Flagstaff, Arizona, 2004.
240. M. Yamamoto, **Y. Tokura**, Y. Hirayama, M. Stopa, K. Ono, and S. Tarucha, “Tunneling between Parallel Quantum Wires”, The 27th Int. Conf. Physics of Semiconductors, Flagstaff, Arizona, 2004.
241. K. Yamada, M. Stopa, **Y. Tokura**, T. Hatano, T. Ota, T. Yamaguchi, and S. Tarucha, “Tunnel-coupling blockade in vertical/lateral hybrid dot to study many-body states for electron number $N=1,2$ and 3 ”, The 27th Int. Conf. Physics of Semiconductors, Flagstaff, Arizona, 2004.
242. A. Khaetskii and **Y. Tokura**, “A paramagnon theory of the 0.7 anomaly”, Rencontres de Moriond, La Thuile, Italy, 2004.
243. A. Kawaguchi, K. Shimizu, **Y. Tokura** and N. Imoto, “Quantum circuit simulation using the density matrix renormalization group”, The Seventh International Conference on Quantum Communication, Measurement and Computing (QCMC7) Glasgow, United Kingdom July 25-29, 2004
244. T. Kubo and **Y. Tokura**, “Many-body effects on tunneling of electrons in magnetic-field-induced quasi one-dimensional systems in quantum wells”, ‘International Symposium on Mesoscopic Superconductivity and Spintronics (MS+S2004) - In the light of quantum computation -’ Atsugi (2004).
245. **Y. Tokura**, “Spin-Effects in a Transport through a Point Contact”, ‘International Workshop on Spin-FET Based Quantum Information Processing 2004’, Tsukuba (2004).[Invited]
246. **Y. Tokura**, “Spin structures in quantum dot systems”, ‘Workshop on Computational Approaches Toward the Electronic Properties of Quantum Dots’, Chicago (2003).[Invited]
247. **Y. Tokura**, “Current Noise in a Quantum Point Contact”, ‘The 15th International Conference on Electronic Properties of Two-Dimensional Systems’, Nara (2003).

248. **Y. Tokura**, “Interaction effects in a transport through a point contact”, ISSP International Workshop ‘International Summer School for Young Researchers on Quantum Transport in Mesoscopic Scale & Low Dimensions’, Kashiwa (2003).[Invited]
249. T. Itakura, A. Kawaguchi, N. Kawakami, and **Y. Tokura**, “Dephasing of a Spin Qubit Coupled to a Spin Chain with Long-Range Interactions”, Carrier Interactions and Spintronics in Nanostructures (CISN 2003), Atsugi (2003).
250. **Y. Tokura**, “Spin fluctuation and transport anomaly in a quantum point contact”, ‘The 26th International Conference on the Physics of Semiconductors’ Edinburgh (2002).
251. T. Itakura and **Y. Tokura**, “Dephasing for spin qubit systems”, ‘Perspective in Decoherence Control and Quantum Computing’, Michigan (2002).
252. **Y. Tokura** and A. Khaetskii, “Slow spin fluctuation and transport anomaly in a quantum point contact”, International Conference on Theoretical Physics (ICTP-2002), Trieste (2002).
253. **Y. Tokura** and G. Tatara, “Electronic pressure on ferromagnetic domain wall”, International Symposium on Carrier Interactions in Mesoscopic Systems (CIM2001), Atsugi (2001).
254. T. Itakura and **Y. Tokura**, “Decoherence due to background charge fluctuations”, The August ERATO mini-Symposium on Quantum Computing, principal and implementations, Tokyo (2001).
255. **Y. Tokura** and A. Khaetskii, “Towards a microscopic theory of the 0.7 anomaly”, The 14th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-14), Prague (2001).
256. **Y. Tokura**, S. Sasaki, D. G. Austing, and S. Tarucha, “Excitation spectra and exchange interactions in circular and elliptical quantum dots”, The 14th International Conference on High Magnetic Fields in Semiconductor Physics (Semimag-2000), Matsue (2000).
257. **Y. Tokura**, S. Sasaki, D. G. Austing, and S. Tarucha, “Single electron tunneling through two vertically coupled quantum dots”, The 13th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-13), Ottawa (1999).
258. **Y. Tokura**, A. A. Odintsov, and S. Tarucha, “Interaction Effects in One-Dimensional Semiconductor Systems”, ‘International Workshop on Low-Dimensional Systems, Interactions and Transport Properties’, Hamburg (1999) [Invited].
259. **Y. Tokura**, S. Sasaki, D. G. Austing, and S. Tarucha, “Tunneling properties of vertically coupled quantum dots”, XXXIVth Rencontres de Moriond, ‘International workshop on Quantum Physics at Mesoscopic Scale’, Les Arcs (1999).[Invited]
260. **Y. Tokura**, A. A. Odintsov, and S. Tarucha, “Bragg reflections in a Tomonaga-Luttinger liquid”, 24th International Conference on The Physics of Semiconductors (Jerusalem), World Scientific, Singapore. Editor David Gershoni (1999).
261. **Y. Tokura**, D. G. Austing, and S. Tarucha, “Quantum blockade in two vertically coupled quantum dots”, 24th International Conference on The Physics of Semiconductors, World Scientific (Jerusalem), Singapore. Editor David Gershoni (1999).
262. **Y. Tokura**, D. G. Austing, and S. Tarucha, “Single electron tunneling in two vertically coupled quantum dots”, International Workshop on Nanophysics and Electronics (NPE98), Lecce 1998.[Invited]
263. **Y. Tokura** and S. Tarucha, “Spin configurations of interacting electrons in confined structures”, Japan-Israeli binational workshop on Interaction and Disorder in Low-dimensional electronic Systems’, Beer-Sheva (1997) [Invited].
264. **Y. Tokura** and S. Tarucha, “Many-body effect of electrons in a quantum dot”, ‘Proc. of the 5th International Symposium on Research in High Magnetic Fields’ (RHMF-97), Sydney Ed. R. G. Clark, 132 (1997).[Invited]
265. S. Tarucha, T. Honda, T. Saku, and **Y. Tokura**, “Random potential scattering and mutual Coulomb interaction in long quantum wires” Extended Abstracts of 2nd Int. Workshop on Quantum Functional Devices **II-2**, 8 (1995).

266. **Y. Tokura**, T. Honda, K. Tsubaki, and S. Tarucha, "Lateral distribution of electron current near a point contact" Proc. 22nd Int. Conf. Phys. Semiconductors (Van Couver), Ed. D. J. LookWood, **2**, 1783 (1994).
267. K. Tsubaki, T. Honda, and **Y. Tokura**, "Electron wave interference in a Mach-Zehnder type channel", Gallium Arsenide and Related Compounds 1992. Proceedings of the Nineteenth International Symposium, Ed. T. Ikegami, F. Hasegawa, Y. Takeda, xxv+963, 293 (1993).
268. H. Saito, K. Uwai, and **Y. Tokura**, "Step ordering during fractional-layer superlattice growth on GaAs(001) vicinal surfaces by metalorganic chemical vapor deposition" Extended Abstracts of the 1992 International Conference on Solid State Devices and Materials, xxviii+772, 82 (1993).
269. H. Saito, K. Uwai and **Y. Tokura**, "Step ordering during fractional-layer superlattice growth on GaAs(001) vicinal surfaces by metalorganic chemical vapor deposition," Extended Abstracts of the 1992 international Conference on Solid State Devices and Materials, Tsukuba, 82 (1992).
270. **Y. Tokura**, T. Saku, S. Tarucha, and Y. Horikoshi, "Anisotropic interface roughness and high mobility two-dimensional electron transport," 21st Int. Conf. on the Physics of Semiconductors, Beijing Thp-071 (1992).
271. M. P. Stopa and **Y. Tokura**, "Capacitance in single electron tunneling" Science and Technology of Mesoscopic Structures, Ed. S. Namba, C. Hamaguchi, T. Ando, xviii+469, 297 (1992).
272. S. Tarucha, Y. Hirayama, T. Saku, and **Y. Tokura**, "One- and zero-dimensional tunneling diodes fabricated by focused ion beam implantation" Science and Technology of Mesoscopic Structures, Ed. S. Namba, C. Hamaguchi, T. Ando, xviii+469, 243 (1992).
273. T. Fukui, S. Ando, **Y. Tokura**, T. Toriyama, "GaAs tetrahedral quantum dots: towards a zero-dimensional electron-hole system", Extended Abstracts of the 22nd (1990 International) Conference on Solid State Devices and Materials, p. xiii+1247, 99-102 (1991).
274. K. Tsubaki, T. Honda, and **Y. Tokura**, "Aharonov-Bohm Effect under High Magnetic Field in a Corbino Disk Anti-Dot Channel", Yamada Conference XXX, 9th International Conference on Electronic Properties of Two-dimensional Systems (EP2DS-9), Nara (1991).
275. T. Fukui, S. Ando, **Y. Tokura**, and T. Toriyama, "GaAs tetrahedral quantum dots: Towards a zero-dimensional electron-hole system," Extended Abstracts of the 22nd (1990 international) Conference on Solid State Devices and Materials, Sendai, 99 (1990).
276. K. Tsubaki, **Y. Tokura**, and N. Susa, "Electronic state of AlAs/GaAs vertical superlattice in modulation doped structure" Gallium Arsenide and Related Compounds 1989. Proceedings of the Sixteenth International Symposium, Ed. T. Ikoma, H. Watanabe, p. xxiv+924, 869 (1990).
277. **Y. Tokura**, K. Tsubaki, and N. Susa, "Electronic states in lateral structures on modulation-doped heterointerfaces", The 4th International Conference on Modulated Semiconductor Structures (MSS-4), Ann-Arber (1989).
278. K. Tsubaki and **Y. Tokura**, "Coherence length in quantum interference devices having periodic potential", JSAP-MRS International conference on electronic materials, 99 (1989).
279. K. Tsubaki and **Y. Tokura**, "Coherence length in quantum interference devices having periodic potential" Proceedings of the First International Conference on Electronic Materials. New Materials and New Physical Phenomena for Electronics of the 21st Century (ICEM '88), Ed. T. Sugano, R. P. H. Chang, H. Kamimura, I. Hayashi, T. Kamiya, (1988).

D. LIST OF BOOKS

1. D. G. Austing, **Y. Tokura**, S. Tarucha, P. Matagne, J.-P. Leburton, "Addition Energy Spectrum of a Quantum Dot Disk up to the Third Shell", Chap. 21, "Physical Models for Quantum Dots", Jenny Stanford Publishing, Ed. J. -P. Leburton, 2021.
2. Seigo Tarucha, Michihisa Yamamoto, Akira Oiwa, Byung-Soo Choi and **Yasuhiro Tokura**, "Spin qubits with semiconductor quantum dots", Chapter 25, 541-567, "Principles and Methods of Quantum Information Technologies", Springer Lecture Notes in Physics 911 (2016), Ed. Y. Yamamoto and K. Semba, DOI 10.1007/978-4-431-55756-2_25.

3. Seigo Tarucha and **Yasuhiro Tokura**, “Control over single electron spins in quantum dots”, Comprehensive Semiconductor Science and Technology (SEST), (2011 Feb.), Elsevier Vol. 2, pp.23-67, Ed. Pallab Bhattacharya, Roberto Fornari and Hiroshi Kamimura, ISBN: 978-0-444-53153-7.
4. **Yasuhiro Tokura**, Toshiaki Obata, Tsuyoshi Hatano and Seigo Tarucha, “Electron spin manipulation in quantum dot systems”, Electron Spin Resonance and Related Phenomena in Low-Dimensional Structures, chap. 2, pp. 15-34, in the Topic in Applied Physics, Springer Vol. 115, pp.13-31, Ed. Marco Fanciulli, (2009 Sep.) ISBN-13:978-3540793649.
5. **Y. Tokura** and M. Morita, “Fast and long-distance quantum key distribution with differential phase shift protocol and up-conversion type single photon detector”, Quantum Information and Communication Ed. by M. Sasaki and M. Matsuoka, Optronics pp. 164 (2006) Nov. (in Japanese).
6. **Y. Tokura**, A. A. Odintsov, and S. Tarucha, “Interaction Effects in One-Dimensional Semiconductor Systems”, Springer Lecture Notes in Physics (LNP 544), “Low-Dimensional Systems, Interactions and Transport Properties”, (2000) pp. 79-95, Ed. Tobias Brandes.

E. LIST OF REPORTS

1. **Yasuhiro Tokura** “Quantum Phase Transition of a Spin Coupled with an Engineered Bosonic Reservoir”, JPSJ News and Comments 16, 15 (2019); <https://doi.org/10.7566/JPSJNC.16.15>.
2. **Y. Tokura**, “Quantum entanglement, a road to quantum cryptography”, Suurikagaku, vol. 2 27-32 (2014).
3. **Yasuhiro Tokura**, “Phonon Cavity Quantum Electrodynamics and Phonon Microlaser”, PSJ Online: News and Comments [January 18, 2013].
4. **Yasuhiro Tokura**, “Quantum Key Distribution Technology”, NTT Technical Review September 2011 Volume 9 No. 9.
5. **Yasuhiro Tokura** and Toshimori Honjo, “Differential Phase Shift Quantum Key Distribution (DPS-QKD) Experiments”, NTT Technical Review September 2011 Volume 9 No. 9.
6. **Yasuhiro Tokura**, “Quantum cryptography technology”, NTT Gijyutsu Journal, Vol.23, No.6, 40-44. (in Japanese)
7. Toshimori Honjo and **Yasuhiro Tokura**, “Differential Phase Shift Quantum Key Distribution Experiments”, NTT Gijyutsu Journal, Vol.23, No.6, 49-52. (in Japanese)
8. H. Takesue, K. Harada, **Y. Tokura**, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, S. Itabashi, “Quantum entanglement generation using silicon waveguide”, Optronics 30(2) 130-133, 2011-02.
9. S. Takahashi, R. S. Deacon, K. Yoshida, A. Oiwa, S. Tarucha, K. Shibata, K. Hirakawa and **Y. Tokura**, “Anisotropy of the spin-orbit interaction in a single InAs self-assembled quantum dot”, Kotaibutsuri (Solid State Physics) 45 (9), 41 (2010) (in Japanese).
10. **Yasuhiro Tokura**, “Electrical control of spin qubits in quantum dots”, Kotaibutsuri (Solid State Physics) 45 (9), 29 (2010) (in Japanese).
11. **Yasuhiro Tokura**, “Controlling single electron spin by electric field”, Kotai butsurei Vol. 44, No.1, 17 (2009) in Japanese.
12. Donna Dodson, Mikio Fujiwara, Philippe Grangier, Masahito Hayashi, Kentaro Imafuku, Ken-ichi Kitayama, Prem Kumar, Christian Kurtsiefer, Gaby Lenhart, Norbert Luetkenhaus, Tsutomu Matsumoto, William J. Munro, Tsuyoshi Nishioka, Momtchil Peev, Masahide Sasaki, Yutaka Sata, Atsushi Takada, Masahiro Takeoka, Kiyoshi Tamaki, Hidema Tanaka, **Yasuhiro Tokura**, Akihisa Tomita, Morio Toyoshima, Rodney van Meter, Atsuhiko Yamagishi, Yoshihisa Yamamoto, Akihiro Yamamura, “Updating Quantum Cryptography Report ver. 1”, quant-ph/arXiv:0905.4325.
13. H. Takesue, K. Harada, **Y. Tokura**, H. Fukuda, T. Tsuchizawa, T. Watanabe, K. Yamada, S. Itabashi, “Generation of quantum entangled photon pair using silicon waveguide”, NTT Gijyutsu Journal 21 (12), 32-35, 2009.

14. **Yasuhiro Tokura**, “Electric spin orchestra”, *Nature Physics* 5, 12 (2009).
15. M. Yamamoto, M. Stopa, Y. Hirayama, **Y. Tokura**, and S. Tarucha, “Coulomb Drag in Coupled Quantum Wires”, *Solid State Physics*, **41** (2006) 679 (in Japanese).
16. **Y. Tokura**, “Report on Int. Conf. on Electron Properties of Two-dimensional Systems”, *Kotaibutsuri* 38 (2003) 707 (in Japanese).
17. **Y. Tokura**, “Conductance anomaly in a quantum point contact”, *Kotaibutsuri* 37 No. 6 (2002) 363 (in Japanese).
18. **Y. Tokura**, “Physics of one-dimensional Tomonaga-Luttinger liquid”, *Suurikagaku*, 464 (2002) 24 (in Japanese).
19. K. Kanisawa, M. J. Butcher, **Y. Tokura**, H. Yamaguchi, and Y. Hirayama, “Direct observation of local density of states of quantized conduction electrons”, *Kotai Butsuri*, 37. (2002) 81 (in Japanese).
20. **Y. Tokura**, “Single electron device - new phenomena and perspective”, *Kinzoku*, **71**, (2001) 165. (in Japanese).
21. **Y. Tokura**, “Artificial atoms - single electron device”, *Kinzoku*, **68** no. 6, (2001). (in Japanese).