

Original papers (原著論文)

1. H. Du, T. Kadowaki, N. Tate, Y. Oki, M. Ohtsu, and K. Hayashi, “Wavelength- and polarization-dependent enhancement of the magneto-optical effect with Al-doped 4H-SiC,” *Opt. Lett.*, **50** (2025) pp.6237-6240.
2. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Non-adiabatic relaxation process that lies behind the adiabatic relaxation of dressed-photon-phonon transfer,” *Off-shell Archive* (December, 2025) Offshell: 2512O.001.v1. **DOI:** 10.14939/2512O.001.v1
https://rodrep.or.jp/en/off-shell/original_2512O.001.v1.html
3. M. Ohtsu, E. Segawa, K. Yuki, S. Saito, and S. Sangu, “Speed of dressed-photon-phonon transfer among a small number of particles,” *Off-shell Archive* (September, 2025) Offshell: 2509O.001.v1. **DOI:** 10.14939/2509O.001.v1
https://rodrep.or.jp/en/off-shell/original_2509O.001.v1.html
4. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Bright and dark walks for dressed-photon-phonon transfer,” *Off-shell Archive* (January, 2025) Off-shell: 2501O.001.v1. **DOI:** 10.14939/2501O.001.v1,
https://rodrep.or.jp/en/off-shell/original_2501O.001.v1.html
5. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Quantum walk analyses of the off-shell scientific features of dressed-photon-phonon transfers among a small number of nanometer-sized particles,” *Off-shell Archive* (July, 2024) Offshell: 2407O.001.v1,
DOI10.14939/2407O.001.v1, https://rodrep.or.jp/en/off-shell/original_2407O.001.v1.html
6. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Optimum dissipation for governing the autonomous transfer of dressed photons,” *Off-shell Archive* (May, 2024) Offshell: 2405O.001.v1.
DOI10.14939/2405O.001.v1 https://rodrep.or.jp/en/off-shell/original_2405O.001.v1.html
7. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Analyses of photon breeding with respect to photon spin by using a three-dimensional quantum walk model,” *Off-shell Archive* (November, 2023) Offshell: 2311O.001.v1. **DOI**10.14939/2311O.001.v1
https://rodrep.or.jp/en/off-shell/original_2311O.001.v1.html
8. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “A quantum walk model with energy dissipation for a dressed-photon-phonon confined by an impurity atom-pair in a crystal,” *Off-shell Archive* (April, 2023) Offshell: 2304O.001.v1. **DOI** 10.14939/2304O.001.v1
https://rodrep.or.jp/en/off-shell/original_2304O.001.v1.html
9. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Spatial distribution of dressed-photon-phonon confined by an impurity atom-pair in a crystal,” *Off-shell Archive* (January, 2023) Offshell: 2301O.001.v1.
DOI 10.14939/2301O.001.v1 https://rodrep.or.jp/en/off-shell/original_2301O.001.v1.html
10. M. Ohtsu, E. Segawa, K. Yuki, and S. Saito, “Dressed-photon—phonon creation probability on the tip of a fiber probe calculated by a quantum walk model,” *Off-shell Archive* (December, 2022) OffShell: 2212O.001.v1. **DOI** 10.14939/2212O.001.v1 https://rodrep.or.jp/en/off-shell/original_2212O.001.v1.html
11. M. Ohtsu, E. Segawa, and K. Yuki, “Numerical calculation of a dressed photon energy transfer based on a quantum walk model,” *Off-shell Archive* (June, 2022) OffShell: 2206O.001.v1. **DOI** 10.14939/2206O.001.v1 https://rodrep.or.jp/en/off-shell/original_2206O.001.v1.html
12. T. Kadowaki, T. Kawazoe, and M. Ohtsu, “SiC transmission-type polarization rotator using a large magneto-optical effect boosted and stabilized by dressed photons,” *Sci. Reports*, (2020) 10: 12967.
<https://doi.org/10.1038/s41598-020-69971-3>

13. H. Sakuma, I. Ojima, M. Ohtsu, and H. Ochiai, “Off-Shell Quantum Fields to Connect Dressed Photons with Cosmology,” *Symmetry*, vol.12, no.8 (2020) 1244. DOI:10.3390/sym12081244
14. M. Ohtsu and T. Kawazoe, “Nutation in energy transfer of dressed photons between nano-particles,” *Off-shell Archive* (May, 2020) OffShell: 2005O.001.v1. **DOI** 10.14939/2005O.001.v1, <http://offshell.rodrep.org/?p=274>
15. I. Banno, M. Ohtsu, “Logical Fallacy of using the Electric Field in Non-resonant Near-field Optics,” *Off-shell Archive* (August 2018), OffShell: 1808O.001.v1. **DOI**: 10.14939/1808O.001.v1
16. M. Ohtsu, T. Kawazoe, “High-Power Infrared Silicon Light-emitting Diodes Fabricated and Operated using Dressed Photons,” *Off-shell Archive* (April 2018), OffShell: 1804O.001.v1. **DOI**: 10.14939/1804O.001.v1
17. H. Sakuma, I. Ojima, and M. Ohtsu, “Gauge symmetry breaking and emergence of Clebsch-dual electromagnetic field as a model of dressed photons,” *Appl. Phys.A* (2017) 123:750.
18. H.Saigo, I. Ojima, and M. Ohtsu, “Dressed photons from the viewpoint of photon localization: the entrance to the off-shell science,” *Appl. Phys.A* (2017) 123:724.
19. J.H. Kim, T. Kawazoe, and M.Ohtsu, "Dependences of emission intensity of Si light-emitting diodes on dressed-photon—phonon-assisted annealing conditions,” *Appl. Phys.A* (2017) 123:606.
20. M. Naruse, S.J. Kim, T. Takahashi, M. Aono, K. Akahane, M. D’Acunto, H. Hori, L. Thylen, and M. Ohtsu, “Percolation of optical excitation mediated by near-field interactions,” *Physica A* (2017) pp.162-168.
21. J. Lee, F. Peper, S.D. Cotofana, M. Naruse, M. Ohtsu, T. Kawazoe, Y. Takahashi, T. Simokawa, L.B. Kish, and T. Kubota, "Brownian Circuits: Designs,” *Int. Journ. of Unconventional Computing*, Vol.12, No.5-6, 2016, pp.341-362.
22. T. Ishii, T. Kawazoe, Y. Hashimoto, H. Terada, I. Muneta, M. Ohtsu, M. Tanaka, and S. Ohya, “Electric structure near the Fermi level in the ferromagnetic semiconductor GaMnAs studied by ultrafast time-resolved light-induced reflectivity measurements,” *Phys. Rev. B* **93**, June 2016, 241303(R)
23. H. Tanaka, T. Kawazoe, M. Ohtsu, K. Akahane, and N.Yamamoto, “Evaluation of optical amplification properties using dressed photons in a silicon waveguide,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1377-1381.
24. N. Tate, M. Naruse, T. Matsumoto, M. Hoga, Y. Ohyagi, S. Nishio, W. Nomura, and M. Ohtsu, “Non-scanning optical near-field microscopy for nanophotonic security,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1383-1387.
25. M. Yamaguchi, T. Kawazoe, T. Yatsui, and M. Ohtsu, “Spectral properties of a lateral p-n homojunction-structured visible silicon light-emitting diode fabricated by dressed-photon—phonon-assisted annealing,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1389-1394.
26. J.H. Kim, T. Kawazoe, and M. Ohtsu, “Optimization of dressed-photon—phonon-assisted annealing for fabricating GaP light-emitting diodes,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1395-1401.
27. W. Nomura, T.Yatsui, T. Kawazoe, N. Tate, and M. Ohtsu, “High-speed flattening of crystalized glass substrates by dressed-photon—phonon etching,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1403-1407.
28. T. Kawazoe, K. Nishioka, and M. Ohtsu, “Polarization control of an infrared silicon light-emitting diode by dressed photons and analyses of the spatial distribution of doped boron atoms,” *Applied Physics A*, Vol.121, Issue 4, December 2015, pp.1409-1415.
29. N. Tate, T. Kawazoe, W. Nomura, M. Ohtsu, “Current-induced giant polarization rotation using ZnO single crystal doped with nitrogen ions,” *Sci. Reports*, DOI 10.1038/srep12762, August 2015.
30. K. Takahashi, M. Katori, M. Naruse, and Motoichi Ohtsu, “Stochastic model showing a transition to self-controlled particle-deposition state induced by optical near-fields,” *Applied Physics B*, Vol.120, No.2, July 2015, pp.247-254.

31. H. Tanaka, T. Kawazoe, M. Ohtsu, and K. Akahane, "Decreasing the threshold current density in Si lasers fabricated by using dressed-photons," *Fluorescent Materials*, Vol. 1, Issue 1, April 2015, pp.1-7.
32. R. Hirayama, M. Naruse, H. Nakayama, N. Tate, A. Shiraki, T. Kakue, T. Shimobaba, M. Ohtsu, and T. Ito, "Design, Implementation and Characterization of a Quantum-Dot-Based Volumetric Display," *Scientific Reports*, Vol. 5, February 2015, Article number: 8472 (6 pages).
33. J. H. Kim, T. Kawazoe, and M. Ohtsu, "GaP Homojunction LEDs Fabricated by Dressed-Photon-Phonon-Assisted Annealing," *Advances in Opt. Technol.*, Article ID 236014, (2014) pp.1-8.
34. T. Yatsui, W. Nomura, and M. Ohtsu, "Realization of Ultraflat Plastic Film using Dressed-Photon-Phonon-Assisted Selective Etching of Nanoscale Structures," *Advances in Optical Technologies*, February 2015, Article ID 701802 (5 pages).
35. T. Kawazoe, N. Wada, and M. Ohtsu, "Emission Spectral Control of a Silicon Light Emitting Diode Fabricated by Dressed-Photon-Phonon Assisted Annealing Using a Short Pulse Pair," *Advances in Optical Technologies*, Vol.2014, July 2014, Article ID 958327 (8 pages).
36. W. Nomura, M. Naruse, M. Aono, S.-J. Kim, T. Kawazoe, T. Yatsui, and M. Ohtsu, "Demonstration of Controlling the Spatiotemporal Dynamics of Optical Near-field Excitation Transfer in Y-Junction Structure Consisting of Randomly Distributed Quantum Dots," *Advances in Optical Technologies*, Vol.2014, April 2014, Article ID 569684 (8 pages).
37. M. Naruse, W. Nomura, M. Aono, M. Ohtsu, Y. Sonnefraud, A. Drezet, S. Huant, and S.-J Kim, "Decision making based on optical excitation transfer via near-field interactions between quantum dots," *Journal of Applied Physics*, Vol. 116, No. 15, October 2014, pp.154303-1~8.
38. M. Naruse, H. Hori, S. Ishii, A. Drezet, S. Huant, M. Hoga, Y. Ohyagi, T. Matsumoto, N. Tate, and M. Ohtsu "Unidirectional light propagation through two-layer nanostructures based on optical near-field interactions," *Journal of Optical Society of America B* Vol. 31, No. 10, October 2014, pp. 2404-2413.
39. T. H. H. Le, K. Mawatari, Y. Pihosh, T. Kawazoe, T. Yatsui, M. Ohtsu and T. Kitamori "Novel sub-100 nm surface chemical modification by optical near-field induced photocatalytic reaction," *Microfluidics and Nanofluidics*, Vol. 17, Issue 4, September 2014, pp. 751-758.
40. P. N. Hai, T. Yatsui, M. Ohtsu, and M. Tanaka, "High-field electroluminescence in semiconductor tunnel junctions with a Mn-doped GaAs layer," *Journal of Applied Physics*, Vol. 116, Issue 11, September 2014, Article ID 113905 (6 pages).
41. T. Matsumoto, M. Hoga, Y. Ohyagi, M. Ishikawa, M. Naruse, K. Hanaki, R. Suzuki, D. Sekiguchi, N. Tate, and M. Ohtsu, "Nano-artifact metrics based on random collapse of resist," *Scientific Reports*, Vol.4, February 2015, Article number: 6142 (5 pages).
42. W. Nomura, T. Kawazoe, T. Yatsui, M. Naruse and M. Ohtsu, "Observation and analysis of structural changes in fused silica by continuous irradiation with femtosecond laser light having an energy density below the laser-induced damage threshold," *Beilstein Journal of Nanotechnology*, Vol. 5, August 2014, 1334-1340.
43. M. Naruse, T. Tani, H. Yasuda, N. Tate, M. Ohtsu and M. Naya, "Randomness in highly reflective silver nanoparticles and their localized optical fields" *Scientific Reports* 4, August 2014, Article number 6077.
44. M. Naruse, Song-Ju Kim, M. Aono, H. Hori and M. Ohtsu, "Chaotic oscillation and random-number generation based on nanoscale optical-energy transfer," *Scientific Reports* 4, August 2014, Article number 6039.
45. H. Matsui, W. Badalawa, T. Hasebe, S. Furuta, W. Nomura, T. Yatsui, M. Ohtsu and H. Tabata, *Scientific Reports* "Coupling of Er light emissions to plasmon modes on In₂O₃:Sn nanoparticle sheets in the near-infrared range," *Appl. Phys. Lett.*, Vol. 105, Issue 4, July 2014, 041903. (5 pages)
46. T. Kawazoe, N. Wada, and M. Ohtsu, "Emission Spectral Control of a Silicon Light Emitting Diode Fabricated by Dressed-Photon-Phonon Assisted Annealing Using a Short Pulse Pair," *Advances in Optical Technologies*, Vol. 2014, July 2014, Article ID 958327.

47. W. Nomura, M. Naruse, M. Aono, S.-J. Kim, T. Kawazoe, T. Yatsui, and M. Ohtsu, "Demonstration of Controlling the Spatiotemporal Dynamics of Optical Near-Field Excitation Transfer in Y-Junction Structure Consisting of Randomly Distributed Quantum Dots," *Advances in Optical Technologies*, Vol. 2014, April 2014, Article ID 569684
48. N. Tate, W. Nomura, T. Kawazoe, and M. Ohtsu, "Novel wavelength conversion with nanophotonic droplet consisting of coupled quantum dots," *Optics Express*, Vol. 22, Issue 9, pp. 10262-10269, April 2014.
49. M. Naruse, K. Akahane, N. Yamamoto, P. Holmstrom, L. Thylen, S. Huant, and M. Ohtsu : Analysis of optical near-field energy transfer by stochastic model unifying architectural dependencies, *Journal of Applied Physics*, Vol. 115, pp. 154306 1-7, April 2014.
50. T. Kawazoe, and M. Ohtsu, "Bulk crystal SiC blue LED with p-n homojunction structure fabricated by dressed-photon-phonon-assisted annealing," *Appl. Phys. A*, Volume 115, Issue 1, April 2014, pp. 127-133 (Invited Paper)
51. M. Yamaguchi, T. Kawazoe, and M. Ohtsu, "Evaluating the coupling strength of electron-hole pairs and phonons in a 0.9 μm -wavelength silicon light emitting diode using dressed-photon-phonons," *Appl. Phys. A*, Volume 115, Issue 1, April 2014, pp. 119-125 (Invited Paper)
52. N. Wada, M. A. Tran, T. Kawazoe, and M. Ohtsu, "Measurement of multimode coherent phonons in nanometrics spaces in a homojunction-structured silicon light emitting diode," *Appl. Phys. A*, Volume 115, Issue 1, April 2014, pp. 113-118 (Invited Paper)
53. M. A. Tran, T. Kawazoe, and M. Ohtsu, "Fabrication of a bulk silicon p-n homojunction-structured light-emitting diode showing visible electroluminescence at room temperature," *Appl. Phys. A*, Volume 115, Issue 1, April 2014, pp. 105-111 (Invited Paper)
54. T. Yatsui, W. Nomura, T. Mano, H. T. Miyazaki, K. Sakoda, T. Kawazoe, and M. Ohtsu, "Emission from a dipole-forbidden energy state in a GaAs quantum-ring induced by dressed photon," *Appl. Phys. A*, Volume 115, Issue 1, April 2014, pp. 1-4 (Invited Paper)
55. M. Naruse, N. Tate, Y. Ohyagi, M. Hoga, T. Matsumoto, H. Hori, A. Drezet, S. Huant, and M. Ohtsu, "Optical near-field-mediated polarization asymmetry induced by two-layer nanostructures," *Opt. Express* Vol. 21, Issue 19, September 2013, pp. 21857-21870..
56. S.-J. Kim, M. Naruse, M. Aono, M. Ohtsu, and M. Hara, "Decision Maker based on Nanoscale Photo-excitation Transfer," *Scientific Report*, Vol. 3, Article number 2370, August 2013, pp. 1-6.
57. Y. Miyauchi, M. Iwamura, S. Mouri, T. Kawazoe, M. Ohtsu, and K. Matusda, "Brightening of excitons in carbon nanotubes on dimensionality modification," *Nature Photonics*, Vol. 7, September 2013, pp. 715-719.
58. N. Tate, M. Naruse, Y. Liu, T. Kawazoe, T. Yatsui, and M. Ohtsu, "Experimental demonstration and stochastic modeling of autonomous formation of nanophotonic droplets," *Appl. Phys. B- Lasers and Optics*, Vol. 112, Issue 4, September 2013, pp. 587-592
59. M. Aono, M. Naruse, S-J. Kim, M. Wakabayashi, H. Hori, M. Ohtsu, and M. Hara, "Amoeba-Inspired Nanoarchitectonic Computing: Solving Intractable Computational Problems Using Nanoscale Photoexcitation Transfer Dynamics," *Langmuir*, Vol. 29, April 2013, pp. 7557-7564.
60. M. Naruse, N. Tate, M. Aono, and M. Ohtsu, "Information physics fundamentals of nanophotonics," *Rep. Prog. Phys.*, Vol. 76, No. 5, April 2013, pp. 1-50.
[Invited paper]
61. N. Tate, Y. Liu, T. Kawazoe, M. Naruse, T. Yatsui, and M. Ohtsu, "Nanophotonic droplet: a nanometric optical device consisting of size- and number-selective coupled quantum dots," *Appl. Phys. B- Lasers and Optics*, Vol. 110, Issue 3, March 2013, pp. 293-297.
62. M. Naruse, T. Yatsui, W. Nomura, T. Kawazoe, and M. Aida, and M. Ohtsu, "Unveiling the mechanisms of dressed-photon-phonon etching based on hierarchical surface roughness measure," *Appl. Phys. Lett.*, Vol. 102, No. 7, February 2013, pp. 07603 1-5.

63. N. Tate, Y. Liu, T. Kawazoe, M. Naruse, T. Yatsui, and M. Ohtsu, "Fixed-distance coupling and encapsulation of heterogeneous quantum dots using phonon-assisted photo-curing," *Appl. Phys. B- Lasers and Optics*, Vol. 110, Issue 1, January 2013, pp. 39-45.
64. P. N. Hai, W. Nomura, T. Yatsui, M. Ohtsu, and M. Tanaka, "Effects of laser irradiation on the self-assembly of MnAs nanoparticles in a GaAs matrix," *Appl. Phys. Lett.*, Vol. 101, Issue 19, November 2012, pp. 193102-1-4.
65. T. Yatsui, W. Nomura, M. Naruse, and M. Ohtsu, "Realization of an atomically flat surface of diamond using dressed photon-phonon etching," *J. Phys. D*, Vol. 45, No. 47, November 2012, 475302-1-4.
66. Y. Liu, T. Yatsui, and M. Ohtsu, "Controlling the sizes of ZnO quantum dots using the dressed photon-phonon assisted sol-gel method," *Appl. Phys. B- Lasers and Optics*, Vol. 108, Issue 4, September 2012, pp. 707-711.
67. M. Naruse, M. Aono, S-J. Kim, T. Kawazoe, W. Nomura, H. Hori, M. Hara, and M. Ohtsu, "Spatiotemporal dynamics in optical energy transfer on the nanoscale and its application to constraint satisfaction problems," *Physical Review B*, Vol. 86, Issue 12, September 2012, pp. 125407-1-10.
68. N. Wada, T. Kawazoe, and M. Ohtsu, "An optical and electrical relaxation oscillator using a Si homojunction structured light emitting diode" *Appl. Phys. B-Lasers and Optics*, Vol. 108, No.1, July 2012, pp. 25-29.
69. H. Tanaka, T. Kawazoe, and M. Ohtsu, "Increasing Si photodetector photosensitivity in near-infrared region and manifestation of optical amplification by dressed photons" *Appl. Phys. B-Lasers and Optics*, Vol. 108, No.1, July 2012, pp. 51-56.
70. M. Ohtsu, "Dressed photon technology," *Nanophotonics*, Vol. 1, Issue 1, July 2012, pp. 83-97.
[Invited paper]
71. M. Naruse, N. Tate, and M. Ohtsu, "Optical security based on near-field processes at the nanoscale," *Journal of Optics*, Vol. 14, No. 9, July 2012, pp. 094002 1-13.
[Invited paper]
72. T. Yatsui, K. Nakanishi, K. Kitamura, and M. Ohtsu, "Room-temperature growth of high-quality ZnO nanocrystals using a dressed-photon-assisted near-field process," *Appl. Phys. B-Lasers and Optics*, Vol. 107, No.3, June 2012, pp. 637-641.
73. T. Yatsui, A. Ishikawa, K. Kobayashi, A. Shojiguchi, S. Sangu, T. Kawazoe, M. Ohtsu, J. Yoo, and G.-C. Yi, "Superradiance from one-dimensionally aligned ZnO nanorod multiple-quantum-well structures," *Appl. Phys. Lett.*, Vol. 100, Issue 23, June 2012, pp. 233118 1-4.
74. T. Kawazoe, M. Ohtsu, K. Akahane, and N. Yamamoto, "Si homojunction structured near-infrared laser based on a phonon-assisted process," *Appl. Phys. B-Lasers and Optics*, Vol. 107, No.3, June 2012, pp. 659-663.
75. M. Naruse, P. Holmstrom, T. Kawazoe, K. Akahane, N. Yamamoto, L. Thylen, and M. Ohtsu, "Energy dissipation in energy transfer mediated by opticalnear-field interactions and their interfaces with optical far-fields," *Appl. Phys. Lett.*, Vol. 100, Issue 24, June 2012, pp. 241102 1-4.
76. K. Kitamura, T. Kawazoe, and M. Ohtsu, "Homojunction-structured ZnO light-emitting diodes fabricated by dressed-photon assisted annealing," *Appl. Phys. B-Lasers and Optics*, Vol. 107, No. 2, May 2012, pp. 293-299.
77. T. Yatsui, M. Tsuji, Y. Liu, T. Kawazoe, and M. Ohtsu, "Emission from a dipole-forbidden energy state in a ZnO quantum dot induced by a near-field interaction with a fiber probe," *Appl. Phys. Lett.*, Vol. 100, Issue 22, May 2012, pp. 223110 1-4.
78. M. Naruse, Y. Liu, W. Nomura, T. Yatsui, M. Aida, L. B. Kish, and M. Ohtsu, "Stochastic processes in light-assisted nanoparticle formation," *Appl. Phys. Lett.*, Vol. 100, No. 19, May 2012, pp. 193106 1-5.
79. W. Nomura, T. Yatsui, T. Kawazoe, E. Runge, and C. Lienau, and M. Ohtsu, "Direct observation of optical excitation transfer based on resonant optical near-field interaction," *Appl. Phys. B Lasers and Optics*, Vol. 107, Number 2, May 2012, pp. 257-262.

80. M. Mascheck, S. Schmidt, M. Silies, T. Yatsui, K. Kitamura, M. Ohtsu, D. Leipold, E. Runge, and C. Lienau, "Observing the localization of light in space and time by ultrafast second-harmonic microscopy," *Nature Photonics*, Vol. 6, May 2012, pp. 293-298.
81. M. Naruse, F. Peper, K. Akahane, N. Yamamoto, T. Kawazoe, N. Tate, and M. Ohtsu, "Skew Dependence of Nanophotonic Devices based on Optical Near-Field Interactions," *ACM Journal on Emerging Technologies in Computing Systems*, Vol. 8, No. 1, February 2012, pp. 4:1-4:12.
82. T. H. H. Le, K. Mawatari, Y. Pihosh, T. Kawazoe, T. Yatsui, M. Ohtsu, M. Tosa, and T. Kitamori, "Optical near-field induced visible response photoelectrochemical water splitting on nanorod TiO_2 ," *Appl. Phys. Lett.*, Vol. 99, Issue 21, November 2011, pp. 213105 1-3.
83. M. Naruse, K. Leibnitz, F. Peper, N. Tate, W. Nomura, T. Kawazoe, M. Murata, and M. Ohtsu, "Autonomy in excitation transfer via optical near-field interactions and its implications for information networking," *Nano Communication Networks*, Vol. 2, No. 4, December 2011, pp. 189-195.
84. M. Naruse, T. Kawazoe, T. Yatsui, N. Tate, and M. Ohtsu, "A Stochastic Modeling of Morphology Formation by Optical Near-Field Processes," *Appl. Phys. B Lasers and Optics*, Vol. 105, Number 4, October 2011, pp. 185-190.
85. H. Matsui, W. Nomura, T. Yatsui, M. Ohtsu, and M. Tabata, "Optical dynamics of energy-transfer from a CdZnO quantum well to a proximal Ag nanostructure," *Optics Letters*, Vol. 36, Issue. 19, September 2011, pp. 3735-3737.
86. T. Kawazoe, M. A. Mueed, and M. Ohtsu, "Highly efficient and broadband Si homojunction structured near-infrared light emitting diodes based on the phonon-assisted optical near-field process," *Appl. Phys. B Lasers and Optics*, Vol. 104, Number 4, September 2011, pp. 747-754.
87. N. Tate, M. Naruse, W. Nomura, T. Kawazoe, T. Yatsui, M. Hoga, Y. Ohyagi, Y. Sekine, H. Fujita, and M. Ohtsu, "Demonstration of modulatable optical near-field interactions between dispersed resonant quantum dots," *Optics Express*, Vol. 19, Issue. 19, September 2011, pp. 18260-18271.
88. T. Yatsui, K. Hirata, Y. Tabata, Y. Miyake, Y. Akita, M. Yoshimoto, W. Nomura, T. Kawazoe, M. Naruse, and M. Ohtsu, "Self-organized near-field etching of the sidewalls of glass corrugations," *Appl. Phys. B- Lasers and Optics*, Vol. 103, No. 3, June 2011, pp. 527-530.
89. T. Kawazoe, M. Ohtsu, S. Aso, Y. Sawado, Y. Hosoda, K. Yoshizawa, K. Akahane, N. Yamamoto, and M. Naruse, "Two-dimensional array of room-temperature nanophotonic logic gates using InAs quantum dots in mesa structures," *Appl. Phys. B- Lasers and Optics*, Vol. 103, No. 3, June 2011, pp. 537-546.
90. K. Akahane, N. Yamamoto, M. Naruse, T. Kawazoe, T. Yatsui, and M. Ohtsu, "Energy Transfer in Multi-Stacked InAs Quantum Dots," *Jap. J. Appl. Phys.*, Vol. 50, No.4, April 2011, pp. 04DH05 1-4.
91. Y. Liu, T. Morishima, T. Yatsui, T. Kawazoe, and M. Ohtsu, "Size control of sol-gel-synthesized ZnO quantum dots using photo-induced desorption," *Nanotechnology*, Vol. 22, No. 21, March 2011, pp. 215605 1-5.
92. M. Naruse, H. Hori, K. Kobayashi, T. Kawazoe, and M. Ohtsu, "Optical pulsation mechanism based on optical near-field interactions," *Appl. Phys. B- Lasers and Optics*, Vol. 102, No. 4, March 2011, pp. 717-723.
93. J. Lin, A. Mohammadizadeh, A. Neogi, H. Morkoc, and M. Ohtsu, "Surface plasmon enhanced UV emission in AlGaIn/GaN quantum well," *Appl. Phys. Lett.*, Vol. 97, No. 22, December 2010, pp. 221104 1-3.
94. S. Schmidt, M. Mascheck, M. Silies, T. Yatsui, K. Kitamura, M. Ohtsu, and C. Lienau, "Distinguishing between ultrafast optical harmonic generation and multi-photon-induced luminescence from ZnO thin films by frequency-resolved interferometric autocorrelation microscopy," *Optics Express*, Vol. 18, Issue 24, November 2010, pp. 25016-25028.
95. M. Naruse, H. Hori, K. Kobayashi, P. Holmström, L. Thylén, and M. Ohtsu, "Lower bound of energy dissipation in optical excitation transfer via optical near-field interactions," *Opt. Express*, Vol. 18, No. S4, November 2010, pp. A544-A553.

96. M. Naruse, E. Runge, K. Kobayashi, and M. Ohtsu, "Efficient optical excitation transfer in layered quantum dot nanostructures networked via optical near-field interactions," *Phys. Rev. B*, Vol. 82, No. 12, September 2010, pp. 125417 1-8..
97. T. Yatsui, K. Hirata, Y. Tabata, W. Nomura, T. Kawazoe, M. Naruse, and M. Ohtsu, "*In situ* real-time monitoring of changes in the surface roughness during nonadiabatic optical near-field etching," *Nanotechnology*, Vol. 21, No. 35, August 2010, pp. 355303 1-5.
98. H. Fujiwara, T. Kawazoe, and M. Ohtsu, "Nonadiabatic nondegenerate excitation by optical near-field and its application to optical pulse-shape measurement," *Appl. Phys. B- Lasers and Optics*, Vol. 100, No. 1, July 2010, pp. 85-91.
99. W. Nomura, T. Yatsui, T. Kawazoe, M. Naruse, and M. Ohtsu, "Structural dependency of optical excitation transfer via optical near-field interactions between semiconductor quantum dots," *Appl. Phys. B- Lasers and Optics*, Vol. 100, No. 1, July 2010, pp. 181-187.
100. K. Kitamura, T. Yatsui, T. Kawazoe, M. Sugiyama, and M. Ohtsu, "Site-selective deposition of gold nanoparticles using non-adiabatic reaction induced by optical near-fields," *Nanotechnology*, Vol. 21, No. 28, July 2010, pp. 285302 1-4.
101. S. Yukutake, T. Kawazoe, T. Yatsui, W. Nomura, K. Kitamura, and M. Ohtsu, "Selective photocurrent generation in the transparent wavelength range of a semiconductor photovoltaic device using a phonon-assisted optical near-field process," *Appl. Phys. B- Lasers and Optics*, Vol. 99, No. 3, May 2010, pp. 415-422.
102. N. Tate, M. Naruse, T. Yatsui, T. Kawazoe, M. Hoga, Y. Ohyagi, T. Fukuyama, M. Kitamura and M. Ohtsu, "Nanophotonic code embedded in embossed hologram for hierarchical information retrieval," *Optics Exp.*, Vol. 18, No. 7, March 2010, pp. 7497-7505.
103. T. Yatsui, Y. Ryu, T. Morishima, W. Nomura, T. Kawazoe, T. Yonezawa, M. Washizu, H. Fujita, and M. Ohtsu, "Self-assembly method of linearly aligning ZnO quantum dots for a nanophotonic signal transmission device," *Appl. Phys. Lett.*, Vol. 96, No.13, March 2010, pp. 133106 1-3.
104. W. Nomura, T. Yatsui, Y. Yanase, K. Suzuki, M. Fujita, A. Kamata, M. Naruse, and M. Ohtsu, "Repairing nanoscale scratched grooves on polycrystalline ceramics using optical near-field assisted sputtering," *Appl. Phys. B- Lasers and Optics*, Vol. 99, No. 1-2, April 2010, pp. 75-78.
105. N. Tate, H. Tokoro, K. Takeda, W. Nomura, T. Yatsui, T. Kawazoe, M. Naruse, S-I, Ohkoshi, .and M. Ohtsu, "Transcription of optical near-fields by photoinduced structural change in single crystal metal complexes for parallel nanophotonic" *Appl. Phys. B- Lasers and Optics*, Vol. 98, No. 4, March 2010, pp. 685-689.
106. H. Fujiwara, T. Kawazoe, and M. Ohtsu, "Nonadiabatic multi-step excitation for the blue-green light emission from dye grains induced by the near-infrared optical near-field," *Appl. Phys. B- Lasers and Optics*, Vol. 98, No. 2-3, February 2010, pp. 283-289.
107. T. Kawazoe, T. Takahashi and M. Ohtsu, "Evaluation of the dynamic range and spatial resolution of nonadiabatic optical near-field lithography through fabrication of Fresnel zone plates," *Appl. Phys. B- Lasers and Optics*, Vol. 98, No. 1, January 2010, pp. 5-11 .
108. K. Kitamura, T. Yatsui, and M. Ohtsu, "Observation of quantum confinement in ZnO nanorods fabricated using a two-temperature growth method," *Appl. Phys. B- Lasers and Optics*, Vol. 97, No. 4, December 2009, pp. 825-828.
109. T. Yatsui, S. Yamazaki, K. Ito, H. Kawamura, M. Mizumura, T. Kawazoe, and M. Ohtsu, "Increased spatial homogeneity in a light-emitting InGaN thin film using optical near-field desorption," *Appl. Phys. B- Lasers and Optics*, Vol. 97, No. 2, October 2009, pp. 375-378.
110. K. Nishibayashi, T. Kawazoe, M. Ohtsu, K. Akahane, and N. Yamamoto, "Observation of energy transfer between InAs quantum dots by pump-and-probe micro-photoluminescence measurement," *J. of Luminescence*, Vol. 129, Issue 12, December 2009, pp. 1912-1915.

111. T. Kawazoe, H. Fujiwara, K. Kobayashi, and M. Ohtsu, "Visible light emission from dye molecular grains via infrared excitation based on the nonadiabatic transition induced by the optical near field," *Journal of Selected Topics in Quantum Electronics, Nanophotonics and Optical MEMS* Vol. 15, Issue 5, September-October 2009, pp. 1380-1386.
112. M. Naruse, T. Kawazoe, R. Ohta, W. Nomura, and M. Ohtsu, "Optimal mixture of randomly dispersed quantum dots for optical excitation transfer via optical near-field interactions," *Physical Review B*, Vol. 80, No. 12, September 2009, (pp. 125325 1-7).
(selected for *Virtual Journal of Nanoscale Science & Technology*-- September 5, 2009, Vol. 20, Issue 14).
113. M. Naruse, H. Hori, K. Kobayashi, M. Ishikawa, K. Leibnitz, M. Murata, N. Tate, and M. Ohtsu, "Information theoretical analysis of hierarchical nano-optical systems in the subwavelength regime," *Journal of the Optical Society of America B*, Vol. 26, No. 9, September 2009, pp. 1772-1779.
114. T. Yatsui and M. Ohtsu, "Production of size-controlled Si nanocrystals using self-organized optical near-field chemical etching," *Appl. Phys. Lett.*, Vol. 95, No. 4, July 2009, 043104 1-3, (selected for *Virtual Journal of Nanoscale Science & Technology* -- August 10, 2009, Vol. 20, Issue 6).
115. K. Kobayashi, A. Sato, T. Yatsui, T. Kawazoe, and M. Ohtsu, "New Aspects in Nanofabrication Using Near-Field Photo-Chemical Vapor Deposition," *Appl. Phys. Exp.*, Vol. 2, No. 7, July 2009, pp. 075504 1-3.
(selected for *Virtual Journal of Nanoscale Science & Technology* -- July 20, 2009, Vol. 20, Issue 3).
116. N. Tate, W. Nomura, T. Yatsui, M. Naruse, and M. Ohtsu, "Hierarchy in optical near-fields based on compositions of nanomaterials," *Appl. Phys. B, Lasers and Optics*, Vol. 96, No. 1, July. 2009, pp. 1-4 .
117. N. Tate, H. Sugiyama, M. Naruse, W. Nomura, T. Yatsui, T. Kawazoe, and M. Ohtsu, "Quadrupole-Dipole Transform based on Optical Near-Field Interactions in Engineered Nanostructures," *Optics Express*, Vol. 17, Issue 13, June. 2009 pp. 11113-11121 .
118. M. Naruse, T. Yatsui, W. Nomura, K. Hirata, Y. Tabata, M. Ohtsu, "Analysis of surface roughness of optical elements planarized by nonadiabatic optical near-field etching," *J. of Appl. Phys.*, Vol. 105, No. 6, March. 2009, p .063516 1-3 .
119. S. Yamazaki, T. Yatsui, and M. Ohtsu, "Room-Temperature Growth of UV-Emitting Dendritic GaN Fractal Nanostructures Using Photochemical Vapor Deposition," *Appl. Phys. Express*, Vol. 2, No. 3, March. 2009, 031004 1-3.
The paper was also highlighted in *Nature Photonics*.
120. T. Yatsui, S. Sangu, K. Kobayashi, T. Kawazoe, M. Ohtsu, J. Yoo, and G.-C. Yi, "Nanophotonic energy up conversion using ZnO nanorod double-quantum-well structures," *Appl. Phys. Lett.*, Vol. 94, No. 8 February 2009, pp. 083113 1-3, (selected for *Virtual Journal of Nanoscale Science & Technology* -- March 16, 2009, Vol. 19, Issue 11).
121. T. Kawazoe, and M. Ohtsu, "Dependence of the Deposition Rate on Probe-Substrate Separation in Nonadiabatic Near-Field Optical CVD," *Journal of Photopolymer Science and Technology*, Vol. 21, No. 6 December 2008, pp. 741-745 .
122. M. Ohtsu, T. Kawazoe, T. Yatsui, and M. Naruse, "Nanophotonics: Application of Dressed Photons to Novel Photonic Devices, and Systems," *IEEE Journal of Selected Topics in Quantum Electronics*, Vol. 14, No. 6, December 2008, pp. 1404-1417, **[Invited paper]**
123. T. Kawazoe, S. Tanaka, and M. Ohtsu, "A single-photon emitter using excitation energy transfer between quantum dots," *J. Nanophoton.* Vol. 2, 029502, October 2008, pp. 029502 1-6 .

124. M. Naruse, T. Yatsui, T. Kawazoe, N. Tate, H. Sugiyama, and M. Ohtsu, "Nanophotonic Matching by Optical Near-Fields between Shape-Engineered Nanostructures," *Appl. Phys. Exp.*, Vol. 1, No. 112101, October 2008, pp. 112101 1-3.
125. T. Yatsui, K. Hirata, W. Nomura, Y. Tabata, and M. Ohtsu, "Realization of an ultra-flat silica surface with angstrom-scale average roughness using nonadiabatic optical near-field etching," *Appl. Phys. B*, Vol. 93, No. 5, August 2008, pp. 55-57 .
126. T. Yatsui, H. Jeong, and M. Ohtsu, "Controlling the energy transfer between near-field optically coupled ZnO quantum dots," *Appl. Phys. B*, Vol. 93, No. 5, August 2008, pp. 199-202 .
127. K. Kitamura, T. Yatsui, and M. Ohtsu, "Optical and Structural Properties of ZnO Nanorods Grown on Polyimide Films," *Appl. Phys. Exp.* Vol. 1, No. 8, 081202 1-3, August 2008, pp. 081202 1-3 .
128. K. Nishibayashi, T. Kawazoe, K. Akahane, N. Yamamoto, and M. Ohtsu, "Observation of interdot energy transfer between InAs quantum dots," *Appl. Phys. Lett.*, Vol. 93, Issue 4, July 2008, pp. 042101 1-3.
129. M. Naruse, K. Nishibayashi, T. Kawazoe, K. Akahane, N. Yamamoto, and M. Ohtsu, "Scale-dependent Optical Near-fields in InAs Quantum Dots and Their Application to Non-Pixelated Memory Retrieval," *Appl. Phys. Exp.*, Vol. 1, No. 6, June 2008, pp. 072101 1-3.
130. M. Naruse, T. Yatsui, H. Hori, M. Yasui, and M. Ohtsu, "Polarization in optical near and far fields and its relation to shape and layout of nanostructures," *J. Appl. Phys.*, Vol. 103, No. 11, June 2008, pp. 113525 1-8.
131. M. Naruse, T. Yatsui, J. H. Kim, and M. Ohtsu, "Hierarchy in Optical Near-fields by Nano-scale Shape Engineering and its Application to Traceable Memory," *Appl. Phys. Exp.*, Vol. 1, No. 6, June 2008, pp. 062004 1-3.
132. S. Yamazaki, T. Yatsui, and M. Ohtsu, "Room-Temperature Growth of UV-Emitting GaN with a Hexagonal Crystal-Structure Using Photochemical Vapor Deposition," *Appl. Phys. Exp.*, Vol. 1, No. 6, June 2008, pp. 061102 1-3.
133. K. Hirose, Y. Mita, Y. Imai, F. Marty, T. Bourouina, K. Asada, S. Sakai, T. Kawazoe, and M. Ohtsu, "Polarization-transmissive photovoltaic film device consisting of an Si photodiode wire-grid," *J. Opt. A : Pure and Applied Optics*, Vol. 10, April 2008, pp. 044014 1-9.
134. K. Kitamura, T. Yatsui, M. Ohtsu, and G.-C. Yi, "Fabrication of vertically aligned ultrafine ZnO nanorods using metal-organic vapor phase epitaxy with a two-temperature growth method," *Nanotech.*, Vol. 19, No. 17, April 2008, pp. 175305 1-3.
135. M. Naruse, T. Yatsui, T. Kawazoe, Y. Akao, and M. Ohtsu, "Design and Simulation of a Nanophotonic Traceable Memory Using Localized Energy Dissipation and Hierarchy of Optical Near-Field Interactions," *IEEE Trans. Nanotech.*, Vol. 7, No. 1, January 2008, pp. 14-19.
136. N. Tate, W. Nomura, T. Yatsui, M. Naruse, and M. Ohtsu, "Hierarchical hologram based on optical near- and far-field responses," *Opt. Exp.*, Vol. 16, No. 2, January 2008, pp. 607-612
137. T. Kawazoe, M. Ohtsu, Y. Inao. And R. Kuroda, "Exposure dependence of the developed depth in nonadiabatic photolithography using visible optical near fields," *J. Nanophot.*, Vol. 1, December 2007, pp. 011595 1-9
138. W. Nomura, T. Yatsui, T. Kawazoe, and M. Ohtsu, "The observation of dissipated optical energy transfer between CdSe quantum dots," *J. Nanophoto.*, Vol. 1, November 2007, pp. 011591 1-7
139. T. Yatsui, T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Near-field components and evaluation of photoluminescence in silicon nanostructures," *J. Nanophoto.*, Vol. 1, September 2007, pp. 011550 1-5
140. T. Yatsui, W. Nomura, and M. Ohtsu, "Metallized slit-shaped pyramidal Si probe with extremely high resolution for 1.5-Tbit/in² density near-field optical storage," *J. Nanophoto.*, Vol. 1, September 2007, pp. 011570 1-7

141. M. Naruse, T. Yatsui, H. Hori, K. Kitamura, and M. Ohtsu, "Generating small-scale structures from large-scale ones via optical near-field interactions," *Opt. Exp.*, Vol. 15, No. 19, August 2007, pp. 11790-11797
142. S. Mononobe, and M. Ohtsu, "Electroless Nickel Plating Aqueous Solution Containing Additive Ammonium Chloride to Fabricate a Near-Field Optical Probe with a Tip Protruding from Nickel Film," *Jpn. J. Appl. Phys.*, Vol. 46, No. 9B, September. 2007, pp. 6258-6259
143. T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Initial Growth Process of a Zn Nanodot Fabricated using Nonadiabatic Near-field Optical CVD," *Journal of Photopolymer Science and Technology*, Vol. 20, No. 1, June 2007, pp. 129-131
144. M. Naruse, H. Hori, K. Kobayashi, and M. Ohtsu, "Tamper resistance in optical excitation transfer based on optical near-field interactions," *Optics Letters*, Vol. 32, Issue 12, June 2007, pp. 1761-1763
145. T. Yatsui, S. Sangu, T. Kawazoe, M. Ohtsu, S. J. An, J. Yoo, and G.-C. Yi, "Nanophotonic switch using ZnO nanorod double-quantum-well structures," *Applied Physics Letters*, Vol. 90, Issue 22, May 2007, pp.223110 1-3
[selected for the June 11, 2007 issue of the Virtual Journal of Nanoscale Science & Technology]
[selected for the July, 2007 issue of the Virtual Journal of Ultrafast Science (Vol. 6, Issue 7)]
146. T. Yatsui, J. Lim, T. Nakamata, K. Kitamura, M. Ohtsu, and G.-C. Yi, "Low-temperature (~270 °C) growth of vertically aligned ZnO nanorods using photoinduced metal organic vapour phase epitaxy," *Nanotechnology*, Vol. 18, Issue 6, February 2007, pp 065606 1-4
147. Y. Inao, S. Nakasato, R. Kuroda, and M. Ohtsu, "Near-field lithography as prototype nano-fabrication tool," *Microelectronic Engineering*, Vol. 84, January 2007, pp. 705-710
148. H. Yonemitsu, T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Nonadiabatic photochemical reaction and application to photolithography," *Journal of Photoluminescence*, Vol.122-123, January 2007, pp.230-233
149. Y. Saito, S. Mononobe, M. Ohtsu, and H. Honma, "Electroless Nickel Plating under Continuous Ultrasonic Irradiation to Fabricate a Near-Field Probe Whose Metal Coat Decreases in Thickness toward the Tip," *Optical Review*, Vol.13, No.4, July/August 2006, pp. 225-227
150. K. Kitamura, T. Yatsui, and M. Ohtsu, "Near-Field Evaluation of a Quantum Size Effect in Self-Aligned GaN Whiskers Fabricated Using Photochemical Etching," *Optical Review*, Vol. 13, No. 4, July/August 2006, pp. 222-224
151. T. Yatsui, M. Ohtsu, S. J. An, J. Yoo, and G.-C. Yi, "Evaluating the Quantum Confinement Effect of Isolated ZnO Nanorod Single-Quantum-Well Structures Using Near-Field Ultraviolet Photoluminescence Spectroscopy," *Optical Review*, Vol. 13, No. 4, July/August 2006, pp. 218-221
152. T. Kawazoe, T. Yatsui, and M. Ohtsu, "Nanophotonics using optical near fields," *Journal of Non-Crystalline Solids*, Vol. 352, Issues 23-25, July 2006, pp. 2492–2495 **[Invited paper]**
153. T. Kawazoe, K. Kobayashi, K. Akahane, M. Naruse, N.Yamamoto and M. Ohtsu," Demonstration of nanophotonic NOT gate using near-field optically coupled quantum dots," *Applied Physics B: Lasers and Optics*, Vol. 84, No.1-2, July 2006 , pp.243–246
154. T. Kawazoe, K. Kobayashi, and M. Ohtsu," Near-field optical chemical vapor deposition using Zn(acac)₂ with a non-adiabatic photochemical process ," *Applied Physics B: Lasers and Optics*, Vol. 84, No.1-2 July 2006 , pp.247–251
155. W. Nomura, T. Yatsui, and M. Ohtsu, "Efficient optical near-field energy transfer along an Au nanodot coupler with size-dependent resonance," *Applied Physics B: Lasers and Optics*, Vol. 84, No.1-2, July 2006, pp.257–259

156. T. Yatsui, Y. Nakajima, W. Nomura, and M. Ohtsu, "High-resolution capability of optical near-field imprint lithography," *Applied Physics B: Lasers and Optics*, Vol. 84, No.1-2, July 2006, pp.265–267
157. E.-S. Jang, J. Y. Bae, J. Yoo, W. I. Park, D.-W. Kim, G.-C. Yi, T. Yatsui, and M.Ohtsu, "Quantum confinement effect in ZnO/Mg_{0.2}Zn_{0.8}O multishell nanorod heterostructures," *Applied Physics Letters*, Vol. 88, No. 2, January 2006, pp.023102-1–023102-3
158. M. Naruse, T. Kawazoe, S. Sangu, K. Kobayashi, and M. Ohtsu, "Optical interconnects based on optical far- and near-field interactions for high-density data broadcasting," *Optics Express* Vol.14, No. 1, January 2006, pp.306-313
159. T. Yatsui, W. Nomura, and M. Ohtsu, "Self-Assembly of Size- and Position-Controlled Ultralong Nanodot Chains using Near-Field Optical Desorption," *Nano Letters*, Vol. 5, No. 12, December 2005, pp.2548–2551
160. M. Naruse, T. Yatsui, W. Nomura, N. Hirose, and M. Ohtsu, "Hierarchy in optical near-fields and its application to memory retrieval," *Optics Express*, Vol. 13, No. 23, November 2005, pp.9265–9271
161. T. Kawazoe, S.Maruyama, K. Kobayashi, and M. Ohtsu, "Observation of Faraday Rotation and Magnetic Circular Dichroism in an Optical Near-Field Probe Coated with Fe," *IEICE Transactions on Electronics*, Vol.E 88-C, No.9, September 2005, pp.1850-1852
162. T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Anti-Parallel Dipole Coupling of Quantum Dots via an Optical Near-Field Interaction," *IEICE Transactions on Electronics* , Vol.E88-C, No.9, September 2005, pp.1845-1849
163. J. Lim, T. Yatsui, and M. Ohtsu, "Observation of Size-Dependent Resonance of Near-Field Coupling between a Deposited Zn Dot and the Probe Apex during Near-Field Optical Chemical Vapor Deposition," *IEICE Transactions on Electronics*, Vol. E88-C, No. 9, September 2005, pp.1832–1835
164. S. Sangu, K. Kobayashi, and M. Ohtsu, "Nanophotonic Devices and Fundamental Functional Operations," *IEICE Transactions on Electronics*, Vol.E 88-C, No.9, September 2005, pp.1824-1831
165. M. Naruse, T. Miyazaki, T. Kawazoe, S. Sangu, K. Kobayashi, F. Kubota, and M. Ohtsu, "Nanophotonic Computing Based on Optical Near-Field Interactions between Quantum Dots," *IEICE Transactions on Electronics*, Vol.E 88-C, No.9, September 2005, pp.1817-1823
166. T. Yatsui, W. Nomura, and M. Ohtsu, "Size-, Position-, and Separation-Controlled One-Dimensional Alignment of Nanoparticles Using an Optical Near Field," *IEICE Transactions on Electronics*, Vol. E 88-C, No. 9, September 2005, pp.1798–1802
167. K. Kobayashi, T. Kawazoe, and M. Ohtsu, "Importance of Multiple-Phonon Interactions in Molecular Dissociation and Nanofabrication Using Optical Near Fields," *IEEE Transactions on Nanotechnology* , Vol.4, No.5, September 2005, pp. 517-522
168. T. Yatsui, M. Ohtsu, J. Yoo, S.-J. An, and G.-C. Yi, "Near-field measurement of spectral anisotropy and optical absorption of isolated ZnO nanorod single-quantum-well structures", *Appl. Phys. Lett.*, Vol.87, No.3, July 2005, pp.033101-1 –3
169. W. Nomura, M. Ohtsu, and T. Yatsui, "Nanodot coupler with a surface plasmon polariton condenser for optical far/near-field conversion", *Appl. Phys. Lett.*, Vol.86, No.18, May 2005, pp.181108-1 –3
170. K. Kobayashi, S. Sangu, T. Kawazoe, and M. Ohtsu, "Exciton dynamics and logic operations in a near-field optically coupled quantum-dot system", *J. Luminescence*, Vol.112, No.1-4, April 2005, pp.117-121
171. T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Optical nanofountain: A biomimetic device that concentrates optical energy in a nanometric region", *Appl. Phys. Lett.*, Vol.86, No.10, March 2005, pp.103102-1 –3
172. T. Kawazoe, K. Kobayashi, and M. Ohtsu, "Anti-parallel coupling of Quantum Dots with an Optical

Near-Field Interaction”, e-J. Surf.Sci. & Nanotech., Vol.3, March 2005, pp.74-78

173. A. Neogi, H. Morkoc, T. Kuroda, A. Takeuchi, T. Kawazoe, and M. Ohtsu, “Exciton Localization in Vertically and Laterally Coupled GaN/AlN Quantum Dots”, Nano Letters, Vol.5, No.2, February 2005, pp.213-217
174. T. Yatsui, M. Gunji, S.-C. Yang, H. Suematsu, W. Jiang, T. Yatsui, and M. Ohtsu, “Blue Light Emission from Ultrafine Nanosized Powder of Silicon Produced by Intense Pulsed Ion-Beam Evaporation”, Jpn. J. Appl. Phys., Vol.44, No.2, February 2005, pp.L92-L94
175. T.-W. Kim, T. Kawazoe, S. Yamazaki, and M. Ohtsu, “Low-temperature synthesis and room temperature ultraviolet lasing of nanocrystalline ZnO films”, Appl. Phys. A, Vol.80, No.5, February 2005, pp.1049-1051
176. M. Naruse, T. Miyazaki, F. Kubota, T. Kawazoe, K. Kobayashi, S. Sangu, and M. Ohtsu, “Nanometric summation architecture based on optical near-field interaction between quantum dots”, Opt. Lett., Vol.30, No.2, January 2005, pp.201-203
177. A. Neogi, B.P.Gorman, H. Morkoc, T. Kawazoe, and M. Ohtsu, “Near-field optical spectroscopy and microscopy of self-assembled GaN/AlN nanostructures”, Appl. Phys. Lett., Vol.86, No.4, January 2005, pp.043103-1 –3
178. T. Kawazoe, K. Kobayashi, S. Takubo, and M. Ohtsu, “Nonadiabatic photodissociation process using an optical near field”, J. Chem. Phys., Vol.122, No.2, January 2005, pp.024715-1 –5
179. G.H. Lee, T. Kawazoe, and M. Ohtsu, “Room temperature near-field photoluminescence of zinc-blend and wurtzite ZnO structures”, Appl. Surf. Sci., Vol.239, No.3-4, January 2005, pp.394-397
180. S. Yamazaki, T. Yatsui, M. Ohtsu, T.-W. Kim, and H. Fujioka, “Room-temperature synthesis of ultraviolet-emitting nanocrystalline GaN films using photochemical vapor deposition”, Appl. Phys. Lett., Vol.85, No.15, October 2004, pp.3059-3061
181. A. Takamizawa, H. Ito, S. Yamada, and M. Ohtsu, “Observation of cold atom output from an evanescent-light funnel”, Appl. Phys. Lett., Vol.85, No.10, September 2004, pp.1790-1792
182. T. Yatsui, J. Lim, M. Ohtsu, S.J. An, and G.-C. Yi, “Evaluation of the discrete energy levels of individual ZnO nanorod single-quantum-well structures using near-field ultraviolet photoluminescence spectroscopy”, Appl. Phys. Lett., Vol.85, No.5, August 2004, pp.727-729
183. S. Mononobe, Y. Sato, M. Ohtsu, and H. Honma, “Fabrication of a Near-Field Optical Fiber Probe Based on Electroless Nickel Plating under Ultrasonic Irradiation”, Jpn. J. Appl. Phys., Vol.43, No.5B, May 2004, pp.2862-2863
184. T.-W. Kim, T. Kawazoe, S. Yamazaki, M. Ohtsu, and T. Sekiguchi, “Low-temperature orientation-selective growth and ultraviolet emission of single-crystal ZnO nanowires”, Appl. Phys. Lett., Vol.84, No.17, April 2004, pp.3358-3360
185. S. Sangu, K. Kobayashi, A. Shojiguchi, and M. Ohtsu, “Logic and functional operations using a near-field coupled quantum-dot system”, Phys.B, Vol.69, No.11, March 2004, pp.115334-1-115334-13
186. H. Kubota, R. Takahashi, T.-W. Kim, T. Kawazoe, M. Ohtsu, N. Arai, M. Yoshimura, H. Nakao, H. Furuya, Y. Mori, T. Sasaki, Y. Matsumoto, and H. Koinuma, “Combinatorial synthesis and luminescent characteristics of RECa₄O(BO₃)₃ epitaxial thin films”, Applied Surface Science, Vol.223, 2004, pp.241-244
187. T. Yatsui, S. Takubo, J. Lim, W. Nomura, M. Kourogi, and M. Ohtsu, “Regulating the size and position of deposited Zn nanoparticles by optical near-field desorption using size-dependent resonance”, Appl. Phys. Lett., Vol.83, No.9, September 2003, pp.1716-1718
188. A. Shojiguchi, K. Kobayashi, S. Sangu, K. Kitahara, and M. Ohtsu, “Superradiance and Dipole Ordering of an N Two-Level System Interacting with Optical Near Fields”, J. Phys. Soc. Jpn., Vol.72, No.11,

November 2003, pp.2984-3001

189. S. Sangu, K. Kobayashi, T. Kawazoe, A. Shojiguchi, and M. Ohtsu, "Quantum-Coherence Effect in a Quantum Dot System Coupled by Optical Near Fields", *Trans. Material Res. Soc. Jpn.*, Vol.28, No.4, August 2003, pp.1035-1038
190. A. Shojiguchi, K. Kobayashi, S. Sangu, K. Kitahara, and M. Ohtsu, "Superradiant multiple pulses from excitons interacting with optical near fields", *Trans. Material Res. Soc. Jpn.*, Vol.28, No.4, August 2003, pp.1031-1034
191. T.-W. Kim, T. Kawazoe, S. Yamazaki, J. Lim, T. Yatsui, and M. Ohtsu, "Room temperature ultraviolet emission from ZnO nanocrystallites fabricated by the low temperature oxidation of metallic Zn precursors", *Solid State Commun.*, vol.127, 2003, pp.21-24
192. K. Kobayashi, S. Sangu, T. Kawazoe, A. Shojiguchi, K. Kitahara, and M. Ohtsu, "Excitation dynamics in a three-quantum dot system driven by optical near field interaction: towards a nanometric photonic device", *J. Microscopy*, Vol.210, Pt 3, June 2003, pp.247-251A.
193. A. Shojiguchi, K. Kitahara, K. Kobayashi, and M. Ohtsu, "A method for controlling the spins of atoms using optical near-fields", *J. Microscopy*, Vol.210, Pt 3, June 2003, pp.301-306
194. A. Takamizawa, H. Ito, S. Yamada, and M. Ohtsu, "Accumulative Atom Detection by Magneto-Optical Trap for Near-Field Optical Funnel", *Jpn. J. Appl. Phys.*, Vol.42, Part 1, No.6A, June 2003, pp.3658-3661
195. T. Kawazoe, K. Kobayashi, S. Sangu, and M. Ohtsu, "Demonstration of a nanophotonic switching operation by optical near-field energy transfer", *Appl. Phys. Lett.*, Vol.82, No.18, May 2003, pp.2957-2959
196. S. Sangu, K. Kobayashi, A. Shojiguchi, T. Kawazoe, and M. Ohtsu, "Excitation energy transfer and population dynamics in a quantum dot system induced by optical near-field interaction", *J. Appl. Phys.*, Vol.93, No.5, March 2003, pp.2937-2945
197. T. Kawazoe, K. Kobayashi, S. Sangu, and M. Ohtsu, "Demonstrating nanophotonic switching using near-field pump-probe photoluminescence spectroscopy of CuCl quantum cubes", *J. Microscopy*, Vol.209, Pt 3, March 2003, pp.261-266
198. K. Totsuka, H. Ito, K. Suzuki, K. Yamada, M. Ohtsu, and T. Yatsui, "A slit-type atom deflector with near-field light", *Appl. Phys. Lett.*, Vol.82, No.10, March 2003, pp.1616-1618
199. J. Lim, T. Kawazoe, T. Yatsui, and M. Ohtsu, "Fabrication of a Ferromagnetic-Coated Fiber Probe with a Double-Layer Structure", *IEICE Trans. Electron.*, Vol.E85-C, No.12, December 2002, pp.2077-2080
200. Y. Yamamoto, M. Kourogi, M. Ohtsu, G.-H. Lee, and T. Kawazoe, "Lateral Integration of Zn and Al Dots with Nanometer-Scale Precision by Near Field Optical Chemical Vapor Deposition Using a Sharpened Optical Fiber Probe", *IEICE Trans. Electron.*, Vol.E85-C, No.12, December 2002, pp.2081-2085
201. K. Totsuka, H. Ito, and M. Ohtsu, "Fluorescence Spectroscopy of Rb Atoms with Two-Color Optical Near Fields for a High-Resolution Slit-Type Detector", *IEICE Trans. Electron.*, Vol.E85-C, No.12, December 2002, pp.2093-2096
202. A. Shojiguchi, K. Kobayashi, S. Sangu, K. Kitahara, and M. Ohtsu, "Coherent dipole oscillation induced by localized photons", *Nonlinear Optics*, Vol.29 (10-12), 2002, pp.563-569
203. T. Yatsui, T. Kawazoe, M. Ueda, Y. Yamamoto, M. Kourogi, and M. Ohtsu, "Fabrication of nanometric single zinc and zinc oxide dots by the selective photodissociation of adsorption-phase diethylzinc using a nonresonant optical near field", *Appl. Phys. Lett.*, Vol.81, No.19, November 2002, pp.3651-3653
204. A. Takamizawa, H. Ito, and M. Ohtsu, "Multireflection of Cold Atoms in a Near-Field Optical Funnel", *Jpn. J. Appl. Phys.*, Vol.41, Part 1, No.10, October 2002, pp.6215-6218

205. M. Ohtsu, K. Kobayashi, T. Kawazoe, S. Sangu, and T. Yatsui, "Nanophotonics: Design, Fabrication, and Operation of Nanometric Devices Using Optical Near Fields", IEEE J. of Selected Topics in Quantum Electron., Vol.8, No.4, July/August 2002, pp.839-862, **[Invited paper]**
206. T. Yatsui, K. Itsumi, M. Kourogi, and M. Ohtsu, "Metallized pyramidal silicon probe with extremely high throughput and resolution capability for optical near-field technology", Appl. Phys. Lett., Vol.80, No.13, April 2002, pp.2257-2259
207. K. Totsuka, H. Ito, T. Kawamura, and M. Ohtsu, "High spatial resolution atom detector with two-color optical near fields", Jpn. J. Appl. Phys., Vol.41, part 1, No.3A, March 2002, pp.1566-1571
208. T. Yatsui, T. Kawazoe, T. Shimizu, Y. Yamamoto, M. Ueda, M. Kourogi, M. Ohtsu, and G.H. Lee, "Observation of size-dependent features in the photoluminescence of zinc oxide nanocrystallites by near-field ultraviolet spectroscopy", Appl. Phys. Lett., Vol.80, No.8, February 2002, pp.1444-1446
209. T. Kawazoe, K. Kobayashi, J. Lim, Y. Narita, and M. Ohtsu, "Direct Observation of Optically Forbidden Energy Transfer between CuCl Quantum Cubes via Near-Field Optical Spectroscopy", Phys. Rev. Lett., Vol.88, No.6, February 2002, pp.067404-1—067404-4
210. T. Yatsui, M. Kourogi, and M. Ohtsu, "Plasmon waveguide for optical far/near-field conversion", Appl. Phys. Lett., Vol.79, No.27, December 2001, pp.4583-4585
211. H. N. Aiyer, T. Kawazoe, J. Lim, Y. Echigo, and M. Ohtsu, "Mercury treatment of optical near-field fibre probes for smoother tips with reduced light leakage", Nanotechnology, Vol.12, 2001, pp.368-371
212. T. Kawazoe, T. Shimizu, and M. Ohtsu, "Second-harmonic generation in a near-field optical-fiber probe", Opt. Lett., Vol.26, No.21, November 2001, pp.1687-1689
213. T. Yatsui, T. Shimizu, Y. Yamamoto, M. Kourogi, M. Ohtsu, and G.H. Lee, "Near-field ultraviolet photoluminescence spectroscopy for evaluating the crystallinity of polycrystalline zinc oxide", Appl. Phys. Lett., Vol.79, No.15, October 2001, pp.2369-2371
214. 物部秀二、大津元一、「化学エッチングに基づく石英系光ファイバの評価法」、電子情報通信学会論文誌、第J 8 4-C巻、第9号、2001年9月、pp.894-895
215. T. Kawazoe, Y. Yamamoto, and M. Ohtsu, "Fabrication of a nanometric Zn dot by nonresonant near-field optical chemical-vapor deposition", Appl. Phys. Lett., Vol.79, No.8, August 2001, pp.1184-1186
216. H. Fukuda, T. Saiki, and M. Ohtsu, "Diagnostics of Semiconductor Devices beyond the Diffraction Limit of Light", Sensors and Materials, Vol.13, No.8, August 2001, pp.445-460
217. S. Sangu, K. Kobayashi, and M. Ohtsu, "Optical near fields as photon-matter interacting systems," J. Microscopy, Vol.202, Part 2, May 2001, pp.279-285
218. G. H. Lee, Y. Yamamoto, M. Kourogi, and M. Ohtsu, "Blue shift in room temperature photoluminescence from photo-chemical vapor deposited ZnO films," Thin Solid Films, Vol.386, May 2001, pp.117-120
219. H. Fukuda and M. Ohtsu, "Near-field photocurrent measurements of Si p-n junction under the reverse-bias condition," Jpn. J. Appl. Phys., Vol.40, Part 2, No.3B, March 2001, pp.L286-L288
220. K. Kurihara, M. Ohtsu, T. Yoshida, T. Abe, H. Hisamoto, and K. Suzuki, "Micrometer-sized lithium ion-selective microoptodes based on a "tailed" neutral ionophore and a fluorescent anionic dye," Analytica Chimica Acta, Vol.426, 2001, pp.11-18
221. K. Kobayashi, S. Sangu, H. Ito, and M. Ohtsu, "Near-field optical potential for a neutral atom," Phys. Rev. A, Vol.63, No.1, January 2001, pp.013806-1—013806-9
222. S-J. Lee, B. Widiyatmoko, M. Kourogi, and M. Ohtsu, "Ultrahigh scanning speed optical coherence tomography using optical frequency comb generators," Jpn. J. Appl. Phys., Vol.40, No.8B, August 2001, pp.L878-L880

223. Y. Yamamoto, G.H. Lee, K. Matsuda, T. Shimizu, M. Kourogi, and M. Ohtsu, "Fabrication of an ultraviolet light-emitting functional probe of sub-micron size by photochemical vapor deposition," *Opt. Rev.*, Vol.7, No.6, December 2000, pp.486-488
224. 栗原一嘉、大津元一、久本秀明、鈴木孝治、「超微細化イオン選択性オプトード」、*分析化学*、第 49 卷、第 12 号、2000 年 12 月、pp.961-967
225. M. Ohtsu, K. Kobayashi, H. Ito, and G.H. Lee, "Nanofabrication and atom manipulation by optical near-field and relevant quantum optical theory," *Proc. IEEE*, Vol.88, No.9, September 2000, pp.1499-1518
(Invited Paper)
226. T. Yatsui, M. Kourogi, K. Tsutsui, J. Takahashi, and M. Ohtsu, "High density/speed optical near field recording/reading with a pyramidal silicon probe on a contact slider," *Opt. Lett.*, Vol.25, No.17, September 2000, pp. 1279-1281
227. Y. Yamamoto, M. Kourogi, M. Ohtsu, V. Polonski, and G. H. Lee, "Fabrication of nanometric zinc pattern with photodissociated gas-phase diethylzinc by optical near field," *Appl. Phys. Lett.*, Vol.76, No.16, April 2000, pp.2173-2175
228. T. Kobayashi, J. Ishibashi, S. Mononobe, M. Ohtsu, and H. Honma, "Electroless nickel plating for nanofabrication in optics," *J. Electrochemical Soc.*, Vol.147, No.3, March 2000, pp.1046-1049
229. 小林健、石橋純一、稲葉裕之、物部秀二、大津元一、本間英夫、「微小領域への無電解ニッケルめっき」、*表面技術*、第 51 巻、第 2 号、2002 年 2 月、pp.193-198
230. A. Takamizawa, H. Ito, and M. Ohtsu, "High efficiency excitation of cylindrical optical near fields for atom guidance," *Jpn. J. Appl. Phys.*, Vol.39, Part 1, No.12A, December 2000, pp.6737-6742
231. U. Maheswari Rajagopalan, S. Mononobe, K. Yoshida, M. Yoshimoto, and M. Ohtsu, "Nanometer level resolving near field optical microscope under optical feedback in the observation of a single-string deoxyribo nucleic acid," *Jpn. J. Appl. Phys.*, Vol.38, Part 1, No.12A, December 1999, pp.6713-6720
232. M. B. Lee, N. Atoda, K. Tsutsui, and M. Ohtsu, "Nanometric aperture arrays fabricated by wet and dry etching of silicon for near-field optical storage application," *J. Vac. Sci. Technol. B*, Vol.17, No.6, November/December 1999, pp.2462-2466
233. T. Matsumoto, M. Ohtsu, K. Matsuda, T. Saiki, H. Saito, and K. Nishi, "Low-temperature near-field nonlinear absorption spectroscopy of InGaAs single quantum dots," *Appl. Phys. Lett.*, Vol.75, No.21, November 1999, pp.3246-3248
234. K. Kurihara, M. Ohtsu, T. Yoshida, T. Abe, H. Hisamoto, and K. Suzuki, "Micrometer-sized sodium ion-selective optodes based on a "tailed" neutral ionophore," *Analytical Chemistry*, Vol.71, No.16, August 1999, pp.3558-3566
235. V. V. Polonski, Y. Yamamoto, J. D. White, M. Kourogi, and M. Ohtsu, "Vacuum shear force microscopy application to high resolution work", *Jpn. J. Appl. Phys.*, Vol.38, Part 2, No.7B, July 1999, pp.L826-L829
236. M. B. Lee, M. Kourogi, T. Yatsui, K. Tsutsui, N. Atoda, and M. Ohtsu, "Silicon planar-apertured probe array for high-density near-field optical storage," *Appl. Opt.*, Vol.38, No.16, June 1999, pp.3566-3571
237. K. Kobayashi and M. Ohtsu, "Quantum theoretical approach to a near-field optical system," *J. Microscopy*, Vol.194, Part.2/3, May/June 1999, pp.249-254
238. V. V. Polonski, Y. Yamamoto, M. Kourogi, H. Fukuda, and M. Ohtsu, "Nanometric patterning of zinc by optical near-field photochemical vapour deposition," *J. Microscopy*, Vol.194, Part.2/3, May/June 1999, pp.545-551
239. H. Fukuda, Y. Kadota, and M. Ohtsu, "Estimation of the minority carrier diffusion length by near-field

photocurrent measurement of p-n junction in silicon using multiwavelength excitation," Jpn. J. Appl. Phys., Vol.38, Part 2, no.5B, May 1999, pp.L571-L573

240. K. Nikawa, T. Saiki, S. Inoue, and M. Ohtsu, "Imaging of current paths and defects in Al and TiSi interconnects on very-large-scale integrated-circuit chips using near-field optical-probe stimulation and resulting resistance change," Appl. Phys. Lett., Vol.74, No.7, February 1999, pp.1048-1050
241. K. Imai, B. Widyatmoko, M. Kourogi, and M. Ohtsu, "12-THz frequency difference measurements and noise analysis of an optical frequency comb in optical fibers," IEEE J. Quantum Electron., Vol.35, No.4, April 1999, pp.559-564
242. B. Widyatmoko, M. Kourogi, and M. Ohtsu, "Linking two optical frequency combs by heterodyne optical phase locking between diode lasers at 2.6-THz frequency-difference," IEEE Photonics Technol. Lett., Vol.11, No.4, April 1999, pp.460-462
243. B. Widyatmoko, K. Imai, M. Kourogi, and M. Ohtsu, "Second-harmonic generation of an optical frequency comb at 1.55 μ m with periodically poled lithium niobate," Opt. Lett., Vol.24, No.5, March 1999, pp.315-317
244. K. Imai, Y. Zhao, M. Kourogi, B. Widyatmoko, and M. Ohtsu, "Accuracy of optical frequency comb generation in optical fiber," Opt. Lett., Vol.24, No.4, February 1999, pp.214-216
245. T. Matsumoto, T. Ichimura, T. Yatsui, M. Kourogi, T. Saiki, and M. Ohtsu, "Fabrication of a near-field optical fiber probe with a nanometric metallized protrusion," Opt. Rev., Vol.5, No.6, December 1998, pp.369-373
246. T. Yatsui, M. Kourogi, and M. Ohtsu, "Increasing throughput of a near-field optical fiber probe over 1000 times by the use of a triple-tapered structure," Appl. Phys. Lett., Vol.73, No.15, October 1998, pp.2090-2092
247. Y. Narita, T. Tadokoro, T. Ikeda, T. Saiki, S. Mononobe, and M. Ohtsu, "Near-field Raman spectral measurement of polydiacetylene," Appl. Spectroscopy, Vol.52, No.9, September 1998, pp.1141-1144
248. M. Ashino and M. Ohtsu, "Fabrication and evaluation of a localized plasmon resonance probe for near-field optical microscopy/spectroscopy," Appl. Phys. Lett., Vol.72, No.11, March 1998, pp.1299-1301
249. T. Saiki, K. Nishi, and M. Ohtsu, "Low temperature near-field photoluminescence spectroscopy of InGaAs single quantum dots," Jpn. J. Appl. Phys., Vol.37, Part 1, No.3B, March 1998, pp.1638-1642
250. S. Mononobe, T. Saiki, T. Suzuki, S. Koshihara, and M. Ohtsu, "Fabrication of a triple tapered probe for near-field optical spectroscopy in UV region based on selective etching of a multistep index fiber," Opt. Commun., Vol.146, January 1998, pp.45-48
251. S. Mononobe and M. Ohtsu, "Development of a fiber used for fabricating application oriented near-field optical probes," IEEE Photonics Technol. Lett., Vol.10, No.1, January 1998, pp.99-101
252. T. Nayuki, T. Fujii, K. Nemoto, M. Kozuma, M. Kourogi, and M. Ohtsu, "Continuous wavelength sweep of external cavity 630nm laser diode without antireflection coating on output facet," Opt. Rev., Vol.5, No.5, October 1998, pp.267-270
253. T. Saito, S. Mattori, S. Kinugawa, K. Miyagi, A. Taniguchi, M. Kourogi, and M. Ohtsu, "Modulation characteristics of waveguide-type optical frequency comb generator," J. Lightwave Technol., Vol.16, No.5, May 1998, pp.824-832
254. S. Sayama and M. Ohtsu, "Tunable UV CW generation at 276 nm wavelength by frequency conversion of laser diodes," Opt. Commun., Vol.145, January 1998, pp.95-97
255. K. Imai, M. Kourogi, and M. Ohtsu, "30-THz span optical frequency comb generation by self-phase modulation in an optical fiber," IEEE J. Quantum Electron., Vol.34, No.1, January 1998, pp.54-60

256. M. Kozuma, K. Nakagawa, W. Jhe, and M. Ohtsu, "Phase change of a probe due to oscillation of cold atoms in an optical standing wave," *Phys. Rev. A*, Vol.57, No.1, January 1998, pp.R24-R27
257. V. Zvyagin, J. D. White, M. Kourogi, M. Kozuma, and M. Ohtsu, "Solution to the bistability problem in shear force distance regulation encountered in scanning force and near-field optical microscopes," *Appl. Phys. Lett.*, Vol.71, No.17, October 1997, pp.2541-2543
258. S. Mononobe, R. Uma Maheswari, and M. Ohtsu, "Fabrication of a pencil-shaped fiber probe with a nanometric protrusion from a metal film for near-field optical microscopy," *Optics Express*, Vol.1, No.8, October 1997, pp.229-233
259. T. Yastui, M. Kourogi, and M. Ohtsu, "Highly efficient excitation of optical near-field on an apertured fiber probe with an asymmetric structure," *Appl. Phys. Lett.*, Vol.71, No.13, September 1997, pp.1756-1758
260. T. Saiki, N. Saito, and M. Ohtsu, "Near-field optical study of semiconductor photonic devices," *Material Science & Engineering B*, Vol.B48, 1997, pp.162-168
261. N. Saito, F. Sato, K. Takizawa, J. Kusano, H. Okumura, T. Aida, T. Saiki, and M. Ohtsu, "Spatially resolved detection of electroluminescence from lateral p-n Junctions on GaAs(111)A patterned substrates using a near-field scanning optical microscope," *Jpn. J. Appl. Phys.*, Vol.36, Part 2, No.7B, July 1997, pp.L896-L898
262. V. Zvyagin, J. D. White, and M. Ohtsu, "Near-field optical microscope image formation: a theoretical and experimental study," *Opt. Lett.*, Vol.22, No.13, July 1997, pp.955-957
263. S. Mononobe and M. Ohtsu, "A model based on geometrical construction in designing a pencil-shaped fiber probe for near-field optics," *J. Lightwave Technol.*, Vol.15, No.6, June 1997, pp.1051-1055
264. M. Naya, R. Micheletto, S. Mononobe, R. Uma Maheswari, and M. Ohtsu, "Near-field optical imaging of flagellar filaments of salmonella in water with optical feedback control," *Appl. Opt.*, Vol.36, No.7, March 1997, pp.1681-1683
265. S. Mononobe, M. Naya, T. Saiki, and M. Ohtsu, "Reproducible fabrication of a fiber probe with a nanometric protrusion for near-field optics," *Appl. Opt.*, Vol.36, No.7, March 1997, pp.1496-1500
266. Zvyagin and M. Ohtsu, "Near-field optical microscope for true surface topography: theoretical study," *Opt. Commun.*, Vol.133, January 1997, pp.328-338
267. H. Ito, K. Sakaki, W. Jhe, and M. Ohtsu, "Evanescent-light induced atom-guidance using a hollow optical fiber with light coupled sideways," *Opt. Commun.*, Vol.141, August 1997, pp.43-47
268. H. Ito, K. Sakaki, W. Jhe, and M. Ohtsu, "Atomic funnel with evanescent light," *Phys. Rev. A*, Vol.56, No.1, July 1997, pp.712-718
269. H. Ito, K. Sakaki, M. Ohtsu, and W. Jhe, "Evanescent-light guiding of atoms through hollow optical fiber for optically controlled atomic deposition," *Appl. Phys. Lett.*, Vol.70, No.19, May 1997, pp.2496-2498
270. J. A. Kim, K. I. Lee, H. R. Noh, W. Jhe, and M. Ohtsu, "Atom trap in an axicon mirror," *Opt. Lett.*, Vol.22, No.2, January 1997, pp.117-119
271. S. Sayama and M. Ohtsu, "Tunable UV CW generation by frequency tripling of a Ti:sapphire laser," *Opt. Commun.*, Vol.137, May 1997, pp.295-298
272. M. Kozuma, K. Nakagawa, W. Jhe, and M. Ohtsu, "Reply to the Comment on "Observation of temporal behavior on an atomic wave packet localized in an optical potential," *Phys. Rev. Lett.*, Vol.78, No.13, March 1997, p.2676-
273. R. Uma Maheswari, S. Mononobe, and M. Ohtsu, "Deducing structural variations of the apex of probes used in near-field optical microscopy through simultaneous measurement of shear force and evanescent

intensity," Appl. Opt., Vol.35, No.34, December 1996, pp.6740-6743

- 274. S. -K. Eah, W. Jhe, T. Saiki, and M. Ohtsu, "Near-field photoluminescence of Si-doped GaAs," Opt. Rev., Vol.3, No.6B, November 1996, pp.450-453
- 275. R. Uma Maheswari, S. Mononobe, H. Tatsumi, Y. Katayama, and M. Ohtsu, "Observation of subcellular structure of neurons by an illumination mode near-field optical microscope under an optical feedback control," Opt. Rev., Vol.3, No.6B, November 1996, pp.463-467
- 276. T. Matsumoto and M. Ohtsu, "Fabrication of a fiber probe with a nanometric protrusion for near-field optical microscopy by a novel technique of three-dimensional nanophotolithography," J. Lightwave Technol., Vol.14, No.10, October 1996, pp.2224-2230
- 277. S. Mononobe and M. Ohtsu, "Fabrication of a pencil-shaped fiber probe for near-field optics by selective chemical etching," J. Lightwave Technol., Vol.14, No.10, October 1996, pp.2231-2235
- 278. Y. Toda, M. Kourogi, M. Ohtsu, Y. Nagamune, and Y. Arakawa, "Spatially and spectrally resolved imaging of GaAs quantum-dot structures using near-field optical technique," Appl. Phys. Lett., Vol.69, No.6, August 1996, pp.827-829
- 279. T. Saiki, N. Saito, J. Kusano, and M. Ohtsu, "Determination of slant angle of p-n interface by multiwavelength near-field photocurrent measurement," Appl. Phys. Lett., Vol.69, No.5, July 1996, pp.644-646
- 280. T. Saiki, S. Mononobe, M. Ohtsu, N. Saito, and J. Kusano, "Tailoring a high-transmission fiber probe for photon scanning tunneling microscope," Appl. Phys. Lett., Vol.68, No.19, May 1996, pp.2612-2614
- 281. T. Saiki, M. Ohtsu, K. Jang, and W. Jhe, "Direct observation of size-dependent features of the optical near field on a subwavelength spherical surface," Opt. Lett., Vol.21, No.9, May 1996, pp.674-676
- 282. M. Naya, S. Mononobe, R. Uma Maheswari, T. Saiki, and M. Ohtsu, "Imaging of biological samples by a collection-mode photon scanning tunneling microscope with an apertured probe," Opt. Commun., Vol.124, February 1996, pp.9-15
- 283. R. Uma Maheswari, H. Kadono, and M. Ohtsu, "Power spectral analysis for evaluating optical near-field images of 20 nm gold particles," Opt. Commun., Vol.131, October 1996, pp.133-142
- 284. H. Ito, T. Nakata, K. Sakaki, M. Ohtsu, K. I. Lee, and W. Jhe, "Laser spectroscopy of atoms guided by evanescent waves in micron-sized hollow optical fibers," Phys. Rev. Lett., Vol.76, No.24, June 1996, pp.4500-4503
- 285. T. Fujii, T. Nayuki, K. Nemoto, M. Kozuma, M. Kourogi, and M. Ohtsu, "Accurate frequency control of external-cavity laser diode by sideband locking technique," Jpn. J. Appl. Phys., Vol.35, Part 1, No.12A, December 1996, pp.6090-6094
- 286. M. Kourogi, T. Enami, and M. Ohtsu, "A coupled-cavity monolithic optical frequency comb generator," IEEE Photonics Technol. Lett., Vol.8, No.12, December 1996, pp.1698-1700
- 287. T. Saitoh, M. Kourogi, and M. Ohtsu, "An optical frequency synthesizer using a waveguide-type optical frequency comb generator at 1.5- μ m wavelength," IEEE Photonics Technol. Lett., Vol.8, No.11, November 1996, pp.1543-1545
- 288. T. Saitoh, M. Kourogi, and M. Ohtsu, "Expansion of span-width of an optical frequency comb using a higher harmonic wave modulation," IEEE Photonics Technol. Lett., Vol.8, No.10, October 1996, pp.1379-1381
- 289. K. Tanaka, Y. Arikawa, M. Sekine, M. Ohtsu, Y. Harada, and M. Danerud, "Highly sensitive and wideband optical detection in patterned YBa₂Cu₃O₇ thin films," Appl. Phys. Lett., Vol.68, No.22, May 1996, pp.3174-3176

290. M. Kourogi, B. Widiyatmoko and M. Ohtsu, "3.17-THz frequency-difference measurement between lasers using two optical frequency combs," *IEEE Photonics Technol. Lett.*, Vol.8, No.4, April 1996, pp.560-562
291. M. Kozuma, K. Nakagawa, W. Jhe, and M. Ohtsu, "Observation of temporal behavior of an atomic wave packet localized in an optical potential," *Phys. Rev. Lett.*, Vol.76, No.14, April 1996, pp.2428-2431
292. T. Saitoh, E. Durand, M. Kourogi, and M. Ohtsu, "Proposal of a multiplex optical frequency comb generation system," *IEEE Photonics Technol. Lett.*, Vol.8, No.2, February 1996, pp.287-289
293. E. Durand, T. Saitoh, M. Kourogi, and M. Ohtsu, "0.4-THz frequency offset locking between two optical frequency combs," *IEEE Photonics Technol. Lett.*, Vol.8, No.1, January 1996, pp.163-165
294. T. Fujii, T. Nayuki, K. Nemoto, M. Kozuma, M. Kourogi, and M. Ohtsu, "Accurate frequency control of external-cavity laser diode by sideband locking technique," *Jpn. J. Appl. Phys.*, Vol.35, Part 1, No.12A, December 1996, pp.6090-6094
295. M. Kourogi, T. Enami, and M. Ohtsu, "A coupled-cavity monolithic optical frequency comb generator," *IEEE Photonics Technol. Lett.*, Vol.8, No.12, December 1996, pp.1698-1700
296. T. Saitoh, M. Kourogi, and M. Ohtsu, "An optical frequency synthesizer using a waveguide-type optical frequency comb generator at 1.5- μ m wavelength," *IEEE Photonics Technol. Lett.*, Vol.8, No.11, November 1996, pp.1543-1545
297. R. Uma Maheswari, S. Mononobe, and M. Ohtsu, "Control of apex shape of the fiber probe employed in photon scanning tunneling microscope by a multistep etching method," *J. Lightwave Technol.*, Vol.13, No.12, December 1995, pp.2308-2313
298. R. Uma Maheswari, H. Tatsumi, Y. Katayama, and M. Ohtsu, "Observation of subcellular nanostructure of single neurons with an illumination mode photon scanning tunneling microscope," *Opt. Commun.*, Vol.120, November 1995, pp.325-334
299. T. Saiki, S. Mononobe, M. Ohtsu, N. Saito, and J. Kusano, "Spatially resolved photoluminescence spectroscopy of lateral p-n junctions prepared by Si-doped GaAs using a photon scanning tunneling microscope," *Appl. Phys. Lett.*, Vol.67, No.15, October 1995, pp.2191-2193
300. R. Micheletto, H. Fukuda, and M. Ohtsu, "A simple method for the production of a two-dimensional, ordered array of small latex particles," *Langmuir*, Vol.11, No.9, September 1995, pp.3333-3336
301. Y. Toda and M. Ohtsu, "High spatial resolution diagnostics of optical waveguides using a photon-scanning tunneling microscope," *IEEE Photonics Technol. Lett.*, Vol.7, No.1, January 1995, pp.84-86
302. H. Ito, K. Sakaki, T. Nakata, W. Jhe, and M. Ohtsu, "Optical potential for atom guidance in a cylindrical-core hollow fiber," *Opt. Commun.*, Vol.115, March 1995, pp.57-64
303. H. Ito, K. Sakaki, T. Nakata, W. Jhe, and M. Ohtsu, "Optical guidance of neutral atoms using evanescent waves in a cylindrical-core hollow fiber: theoretical approach," *Ultramicroscopy*, Vol.61, 1995, pp.91-97
304. M. Kourogi, B. Widiyatmoko, Y. Takeuchi, and M. Ohtsu, "Limit of optical-frequency comb generation due to material dispersion," *IEEE J. Quantum Electron.*, Vol.31, No.12, December 1995, pp.2120-2126
305. M. Kozuma, Y. Imai, K. Nakagawa, and M. Ohtsu, "Observation of a transient response of recoil-induced resonance: a method for the measurement of atomic motion in an optical standing wave," *Phys. Rev. A*, Vol.52, No.5, November 1995, pp.R3421-R3424
306. Y. Awaji, K. Nakagawa, M. de Labashellerie, M. Ohtsu, and H. Sasada, "Optical frequency measurement of the H¹²C¹⁴N Lamb-dip-stabilized 1.5- μ m diode laser," *Opt. Lett.*, Vol.20, No.19, October 1995, pp.2024-2026

307. M. Ohtsu, "Progress of high-resolution photon scanning tunneling microscopy due to a nanometric fiber probe," *J. Lightwave Technol.*, Vol.13, No.7, July 1995, pp.1200-1221
(Invited Paper)
308. W. Wang, and M. Ohtsu, "Generation of frequency-tunable light and frequency reference grids using diode lasers for one-petahertz optical frequency sweep generator," *IEEE J. Quantum Electron.*, Vol.31, No.3, March 1995, pp.456-467
309. M. de Labachellerie, K. Nakagawa, Y. Awaji, and M. Ohtsu, "High-frequency-stability laser at 1.5 μ m using Doppler-free molecular lines," *Opt. Lett.*, Vol.20, No.6, March 1995, pp.572-574
310. T. Saito, M. Kourogi, and M. Ohtsu, "A waveguide-type optical-frequency comb generator," *IEEE Photonics Technol. Lett.*, Vol.7, No.2, February 1995, pp.197-199
311. K. Nakagawa, M. de Labachellerie, Y. Awaji, M. Kourogi, T. Enami, and M. Ohtsu, "Highly precise 1-THz optical frequency-difference measurement of 1.5- μ m molecular absorption lines," *Opt. Lett.*, Vol.20, No.4, February 1995, pp.410-412
312. T. Pangaribuan, S. Jiang, and M. Ohtsu, "Highly controllable fabrication of fiber probe for photon scanning tunneling microscope," *Scanning*, Vol.16, No.6, December 1994, pp.362-367
313. S. Jiang, J. Ichihashi, H. Monobe, M. Fujihira, and M. Ohtsu, "Highly localized photochemical processes in LB films of photochromic material by using a photon scanning tunneling microscope," *Opt. Commun.*, Vol.106, No.4,5,6, March 1994, pp.173-177
314. S. Jiang, K. Nakagawa, and M. Ohtsu, "Reflection-resonance-type photon scanning tunneling microscope," *Jpn. J. Appl. Phys.*, Vol.33, No.1A, January 1994, pp.L55-L58
315. W. Jhe, M. Ohtsu, H. Hori, and S. R. Friberg, "Atomic waveguide using evanescent waves near optical fibers," *Jpn. J. Appl. Phys.*, Vol.33, Part 2, No.12A, December 1994, pp.L1680-L1682
316. M. Akulshin, K. Nakagawa, and M. Ohtsu, "Frequency chain towards the Ca intercombination line based on laser diodes: first step," *Appl. Phys.*, Vol.B58, 1994, pp.529-532
317. K. Nakagawa, A. S. Shelkovnikov, T. Katsuda, and M. Ohtsu, "Absolute frequency stability of a diode-laser-pumped Nd:YAG laser stabilized to a high-finesse optical cavity," *Appl. Opt.*, Vol.33, No.27, September 1994, pp.6383-6386
318. M. Akulshin and M. Ohtsu, "Pulling of the emission frequency of an injection laser by Doppler-free absorption resonances in an intracavity cell," *Quantum Electronics*, Vol.24, No.7, 1994, pp.613-614
319. M. de Labachellerie, K. Nakagawa, and M. Ohtsu, "Ultrannarrow $^{13}\text{C}_2\text{H}_2$ saturated-absorption lines at 1.5 μ m," *Opt. Lett.*, Vol.19, No.11, June 1994, pp.840-842
320. N. Nakagawa, T. Katsuta, A. S. Shelkovnikov, M. de Labachellerie, and M. Ohtsu, "Highly sensitive detection of molecular absorption using a high finesse optical cavity," *Opt. Commun.*, Vol.107, May 1994, pp.369-372
321. K. Nakagawa, Y. Shimizu, and M. Ohtsu, "High power diode-laser-pumped twisted-mode Nd:YAG laser," *IEEE Photonics Technol. Lett.*, Vol.6, No.4, April 1994, pp.499-501
322. M. Musha, A. Zvyagin, K. Nakagawa, and M. Ohtsu, "Development of all-semiconductor laser sources for studies of $^{88}\text{Sr}^+$ ions confined in RF trap," *Jpn. J. Appl. Phys.*, Vol.33, No.3B, March 1994, pp.1603-1607
323. J. Kawasaki, M. Kourogi, and M. Ohtsu, "Computer-controlled narrow-linewidth and frequency-stabilized AlGaAs laser system with unmodulated output," *Jpn. J. Appl. Phys.*, Vol.33, No.3B, March 1994, pp.1623-1627
324. W. Wang and M. Ohtsu, "Iodine absorption-line-stabilized frequency-tunable green light using

- sum-frequency generation of diode lasers," *Jpn. J. Appl. Phys.*, Vol.33, No.3B, March 1994, pp.1648-1651
325. M. Kourogi, T. Enami, and M. Ohtsu, "A monolithic optical frequency comb generator," *IEEE Photonics Technol. Lett.*, Vol.6, No.2, February 1994, pp.214-217
 326. K. Tanaka, M. Kawasaki, K. Fumito, Y. Harada, M. Sano, K. Mizobushi, Y. Higashino, H. Koinuma, M. Sekine, and M. Ohtsu, "Optical response of single crystal and bicrystal $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ thin films," *Physica B*, Vol.194-196, 1994, pp.2323-2324
 327. W. Wang, A. M. Akulshin, and M. Ohtsu, "Pump-probe spectroscopy in potassium using an AlGaAs laser and the second-harmonic generation of an InGaAsP laser for frequency stabilization and linking," *IEEE Photonics Technol. Lett.*, Vol.6, No.1, January 1994, pp.95-97
 328. T. Pangaribuan, S. Jiang, and M. Ohtsu, "Two-step etching method for fabrication of fiber probe for photon scanning tunneling microscope," *Electron. Lett.*, Vol.29, No.22, October 1993, pp.1978-1979
 329. K. Nakagawa and M. Ohtsu, "Proposal of a frequency-synthesis chain between the microwave and optical frequencies of the Ca intercombination line at 657 nm using diode lasers," *Appl. Phys.*, Vol.B57, No.6, December 1993, pp.3452-3430
 330. M. Kourogi, K. Nakagawa, and M. Ohtsu, "Wide-span optical frequency comb generation for accurate optical frequency difference measurement," *IEEE J. Quantum Electron.*, Vol.29, No.10, October 1993, pp.2693-2701
 331. W. Wang and M. Ohtsu, "Frequency-tunable sum-and-difference- frequency generation by using two diode lasers in a KTP crystal," *Opt. Commun.*, Vol.102, October 1993, pp.304-308
 332. Y. Toda, T. Enami, and M. Ohtsu, "Frequency stabilization of $1.5 \mu\text{m}$ diode laser using nonlinear optical frequency conversion in organic fiber," *Jpn. J. Appl. Phys.*, Vol.32, No.9A, September 1993, pp.L1233-L1235
 333. M. Akulshin, A. S. Celicov, M. Ohtsu, K. Nakagawa, and V. Velichansky, "Sub-MHz doppler-free spectral line of 51S_0 - 53P_1 intercombination transition in strontium," *Jpn. J. Appl. Phys.*, Vol.32, No.9B, September 1993, pp.L1356-L1358
 334. M. Ohtsu, K. Nakagawa, M. Kourogi, and W. Wang, "Frequency control of semiconductor lasers," *J. Appl. Phys.*, Vol.73, Vol.12, June 1993, pp.R1-R17
 335. W. Wang and M. Ohtsu, "Continuous-wave optical parametric amplifier that uses a diode laser for a wideband coherent optical frequency sweep generator," *Opt. Lett.*, Vol.18, No.11, June 1993, pp.876-878
 336. Y. Awaji, S. Sayama, H. Suzuki, M. Ohtsu, and Y. Teramachi, "Generation of phase conjugate wave from a visible InGaAlP laser," *Jpn. J. Appl. Phys.*, Vol.32, Part 1, No.3A, March 1993, pp.1107-1111
 337. C.-H. Shin and M. Ohtsu, "Homodyne optical phase locking of resonant cavity coupled semiconductor lasers," *IEEE J. Quantum Electron.*, Vol.29, No.2, February 1993, pp.374-385
 338. T. Pangaribuan, K. Yamada, S. Jiang, H. Ohsawa, and M. Ohtsu, "Reproducible fabrication technique of nanometric tip diameter fiber probe for photon scanning tunneling microscope," *Jpn. J. Appl. Phys.*, Vol.31, Part 2, No.9A, September 1992, pp.L1302-L1304
 339. S. Jiang, H. Ohsawa, K. Yamada, T. Pangaribuan, M. Ohtsu, K. Imai, and A. Imai, "Nanometric scale biosample observation using a photon scanning tunneling microscope," *Jpn. J. Appl. Phys.*, Vol.31, No.7, July 1992, pp.2282-2287
 340. W. Wang, K. Nakagawa, S. Sayama, and M. Ohtsu, "Coherent addition of injection-locked high-power AlGaAs diode lasers," *Opt. Lett.*, Vol.17, No.22, November 1992, pp.1593-1595
 341. W. Wang, K. Nakagawa, Y. Toda, and M. Ohtsu, " $1.5 \mu\text{m}$ diode laser-based nonlinear frequency conversions by using potassium titanyl phosphate," *Appl. Phys. Lett.*, Vol.61, No.16, October 1992,

pp.1886-1888

- 342. M. Kozuma, M. Kourogi, and M. Ohtsu, "Frequency stabilization, linewidth reduction, and fine detuning of a semiconductor laser by using velocity-selective optical pumping of atomic resonance line," *Appl. Phys. Lett.*, Vol.61, No.16, October 1992, pp.1895-1897
- 343. K. Nakagawa, M. Kourogi, and M. Ohtsu, "Frequency noise reduction of a diode laser by using the FM sideband technique," *Opt. Lett.*, Vol.17, No.13, July 1992, pp.934-936
- 344. T. Senoh, Y. Fujino, Y. Tanabe, M. Hirano, M. Ohtsu and K. Nakagawa, "Direct modulation of blue radiation from frequency-doubled AlGaAs laser diode using the electrooptics effect in a KNbO₃ nonlinear crystal," *Appl.Phys.Lett.*, Vol.60, No.10, March 1992, pp.1172-1174
- 345. S. Jiang, N. Tomita, H. Ohsawa, and M. Ohtsu, "A photon scanning tunneling microscope using an AlGaAs laser," *Jpn. J. Appl. Phys.*, Vol.30, No.9A, September 1991, pp.2107-2111
- 346. K. Nakagawa, M. Teshima and M. Ohtsu, "Injection locking of a highly coherent and high-power diode laser at 1.5 μ m," *Opt. Lett.*, Vol.16, No.20, October 1991, pp.1590-1592
- 347. M. Kourogi, C.-H. Shin and M. Ohtsu, "A 250 Hz spectral linewidth 1.5 μ m MQW-DFB laser diode with negative-electrical-feedback," *IEEE Photonics Technol.Lett.*, Vol.3, No.6, June 1991, pp.496-498
- 348. M. Kourogi, C.-H. Shin and M. Ohtsu, "A 134 MHz bandwidth homodyne optical phase-locked-loop of semiconductor laser diodes", *IEEE Photon. Technol.Lett.*, Vol.3, No.3, 1991, pp.270-272
- 349. M. Kourogi and M. Ohtsu, "Novel optical frequency discriminator for FM noise reduction of semiconductor lasers," *Opt. Commun.*, Vol.81, February 1991, pp.204-208
- 350. H. Furuta and M. Ohtsu, "Estimation of frequency accuracy and stability in a diode laser-pumped rubidium beam atomic clock using a novel microwave resonant method," *Jpn. J. Appl. Phys.*, Vol.30, No.11A, November 1991, pp.2921-2931
- 351. H. Furuta, H. Suzuki, and M. Ohtsu, "Observation of Ramsey-type resonant fringe using a cylindrical microwave cavity for a diode laser-pumped Rb beam atomic clock," *Jpn. J. Appl. Phys.*, Vol.30, No.3, March 1991, pp.596-602
- 352. C.-H. Shin and M. Ohtsu, "Stable semiconductor laser with a 7-Hz linewidth by an optical-electrical double-feedback technique," *Opt. Lett.*, Vol.15, No.24, December 1990, pp.1455-1457
- 353. M. Ohtsu, I. Koshiishi and Y. Teramachi, "A semiconductor laser as a stable phase conjugate mirror for linewidth reduction of another semiconductor laser", *Jpn. J. Appl. Phys.*, Vol.29, No.11, November 1990, pp.L2060- L2062
- 354. K. Kuboki and M. Ohtsu, "An Allan variance real-time processing system for frequency stability measurements of semiconductor lasers," *IEEE Trans. on Instrum. and Meas.*, Vol.39, No.4, August 1990, pp.637-641
- 355. M. Ohtsu, H. Suzuki, K. Nemoto and Y. Teramachi, "Narrow-linewidth tunable visible InGaAlP laser, application to spectral measurements of lithium, and power amplification," *Jpn. J. Appl. Phys.*, Vol.29, No.8, August 1990, pp.L1463-L1465
- 356. 大津元一、申哲浩、楠沢英夫、興梠元伸、鈴木宏昌、「半導体レーザの周波数・位相制御」、電子情報通信学会誌、第 J-73-C-1 巻、第 5 号、1990 年 5 月、pp.277-285
(Invited Paper)
- 357. C.-H. Shin and M. Ohtsu, "Heterodyne optical phase-locked loop by confocal Fabry-Perot cavity coupled AlGaAs lasers," *IEEE Photonics Technol. Lett.*, Vol.2, No.4, April 1990, pp.167-169
- 358. C.-H. Shin, M. Teshima M. Ohtsu, T. Imai, J. Yoshida and K. Nishide, "FM characteristics and compact modules for coherent semiconductor lasers coupled to an external cavity," *IEEE Photonics Technol.Lett.*,

359. M. Ohtsu, M. Murata and M. Kourogi, "FM noise reduction and subkilohertz linewidth of an AlGaAs laser by negative electrical feedback," IEEE J. Quantum Electron., Vol.26, No.2, February 1990, pp.231-241
360. M. Hashimoto and M. Ohtsu, "A novel method to compensate for the effect of light shift in a rubidium atomic clock pumped by a semiconductor laser," IEEE Trans. Instrum. and Meas., Vol.39, No.3, June 1990, pp.458-462
361. C.-H. Shin and M. Ohtsu, "Improved Allan variance real-time processing system to measure frequency tracking error of heterodyne optical phase-locked loops," Electron. Lett., Vol.26, No.19, September 1990, pp. 1571-1572
362. K.Kuboki and M.Ohtsu, "A synthesized method to improve coherence in semiconductor lasers by electrical feedback", IEEE J. Quantum Electron., Vol.25, No.10, October 1989, pp.2084-2090
363. T. Ikegami, S. Ohshima and M. Ohtsu, "Frequency stabilization of laser diodes to the Cs-D2 line with the Zeeman modulation method," Jpn. J. Appl. Phys., Vol.28, No.10, October 1989, pp.L1839-L1841
364. H. Furuta and M. Ohtsu, "Evaluations of frequency shift and stability in rubidium vapor stabilized semiconductor lasers", Appl. Opt., Vol.28, No.17, September 1989, pp.3737-3743
365. M. Ohtsu and E. Ikegami, "Frequency stabilization of 1.5 μ m DFB laser using internal second harmonic generation and atomic 87Rb line," Electron. Lett., Vol.25, No.1, January 1989, pp.22-23
366. M. Mashimoto and M. Ohtsu, "Modulation transfer and optical stark effect in a rubidium atomic clock pumped by a semiconductor laser," J. Opt. Soc. Am. B, Vol.6, No.10, October 1989, pp.1777-1789
367. K.-Y. Liou, M. Ohtsu, C. A. Burrus, Jr., U. Koren, and T. L. Koch, "Power partition fluctuations in two-mode-degenerate distributed-feedback lasers," J. Lightwave Technol., Vol.7, No.4, April 1989, pp.632-63
368. M. Ohtsu, K.-Y. Liou, E. C. Burrows, C. A. Burrus, Jr., and G. Eisenstein, "A simple interferometric method for monitoring mode hopping in tunable external-cavity semiconductor lasers," J. Lightwave Technol., Vol.7, No.1, January 1989, pp.68-76
369. M. Ohtsu and Y. Teramachi, "Analysis of mode partition and mode hopping in semiconductor lasers," IEEE J. Quantum Electron., Vol.25, No.1, January 1989, pp.31-38
370. C.-H. Shin, M. Teshima, and M. Ohtsu, "Novel measurement method of linewidth enhancement factor in semiconductor lasers by optical self- locking," Electron. Lett., Vol. 25, No.1, January 1989, pp.27-28
371. L. Hollberg and M. Ohtsu, "Modulatable narrow-linewidth semiconductor lasers," Appl. Phys. Lett., Vol.53, No.11, September 1988, pp.944-946
372. 申哲浩、久保木勝彦、大津元一、「半導体レーザによるヘテロダイン形光位相同期ループの実現のためのシュミレーション」、電気学会論文誌、 第 108-C 巻、第 9 号、1988 年, pp.678-684
373. M. Ohtsu and N. Tabuchi, "Electrical feedback and its network analysis for linewidth reduction of semiconductor laser," J. Lightwave Technol., Vol.6, No.3, March 1988, pp.357-369
374. M. Ohtsu and K.-Y. Liou, "Correlated spontaneous emission between two longitudinal modes in an extended-cavity semiconductor laser," Appl. Phys. Lett., Vol.52, No.1, January 1988, pp.10-12
375. M. Ohtsu, Y. Teramachi, and T. Miyazaki, "Mode stability analysis of nearly single-longitudinal-mode semiconductor lasers," IEEE J. Quantum Electron., Vol.24, No.5, May 1988, pp.716-723
376. M. Ohtsu and K.-Y. Liou, "Mode stability of a two-wavelength Fabry-Perot/distributed feedback laser," J. Lightwave Technol., Vol.6, No.1, January 1988, pp.47-51

377. M. Ohtsu, "Realization of ultrahigh coherence in semiconductor laser by negative electrical feedback," J. Lightwave Technol., Vol. 6, No. 2, February 1988, pp. 245-256
(Invited Paper)
378. K. Kuboki and M. Ohtsu, "Frequency offset locking of AlGaAs semiconductor lasers", IEEE J. Quantum Electron., Vol.QE-23, No.4, April 1987, pp.388-394
379. M. Mashimoto and M. Ohtsu, "Experiments on a semiconductor laser pumped rubidium atomic clock," IEEE J. Quantum Electron., Vol.QE-23, No.4, April 1987, pp.446-451
380. M. Ohtsu and S. Araki, "Using a $1.5\ \mu\text{m}$ DFB InGaAsP laser in a passive ring cavity-type fiber gyroscope," Appl. Opt., Vol. 26, No.3, February 1987, pp.464-470
381. M. Ohtsu, K.-Y. Liou, E. C. Burrows, C. A. Burrus, and G. Einstein, "Interferometric method for preventing mode-hopping in tunable external-cavity semiconductor lasers," Electron. Lett., Vol.23, No.21, October 1987, pp.1111-1113
382. M. Ohtsu, Y. Teramachi, and T. Miyazaki, "Analyses of suppression of mode-hopping in an AlGaAs laser by saturable absorber," Optics Commun., Vol.61, No.3, February 1987, pp.203-207
383. M. Ohtsu, Y. Teramachi, Y. Otsuka, and A. Osaki, "Analyses of mode-hopping phenomena in an AlGaAs laser," IEEE J. Quantum Electron., Vol.QE-22, No.4, April 1986, pp.535-543
384. M. Ohtsu and S. Kotajima, "Linewidth reduction of a semiconductor laser by electrical feedback," IEEE J. Quantum Electron., Vol.QE-21, No.12, December 1985, pp.1905-1912
385. M. Ohtsu and S. Kotajima, "Linewidth reduction of a $1.5\ \mu\text{m}$ InGaAsP laser by electrical feedback," Jpn. J. Appl. Phys., Vol.24, No.4, April 1985, pp.L256-L258
386. 大津元一、大塚祥広、大崎昭雄、寺町康昌、「 $1.5\ \mu\text{m}$ InGaAsP レーザーのモードホッピング現象の解析」、レーザー研究、第 13 巻、第 5 号、1985 年 5 月、pp.416-425
387. M. Ohtsu, Y. Otsuka, and Y. Teramachi, "Precise measurements and computer simulations of mode-hopping phenomena in semiconductor lasers," Appl. Phys. Lett., Vol.46, No.2, January 1985, pp.108-110
388. 中村拓男、大津元一、田幸敏治、「シュタルク吸収線による導波路型 CO_2 レーザーの周波数安定化と掃引」、分光研究、第 34 巻、第 1 号、1985 年、pp.23-28
389. 岡崎博之、大津元一、田幸敏治、「半導体レーザの周波数の計算機制御」、電子通信学会論文誌、第 J67-C 巻、第 9 号、1984 年 9 月、pp.651-655
390. M. Ohtsu and S. Kotajima, "Derivation of the spectral width of a $0.8\ \mu\text{m}$ AlGaAsP laser considering $1/f$ noise," Jpn. J. Appl. Phys., Vol.23, No.6, June 1984, pp.760-764
391. K. Hukuoka, M. Ohtsu, and T. Tako, "Accurate wavelength measurements of the absorption lines in H_2O Vapor by a $0.8\ \mu\text{m}$ AlGaAs laser," Jpn. J. Appl. Phys., Vol.23, No.2, February 1984, pp.L117-L120
392. T. Kunikane, M. Ohtsu, T. Nakamura, and T. Tako, "A simple technique for obtaining a stable frequency sweep in a waveguide CO_2 laser," Jpn. J. Appl. Phys., Vol.23, No.5, May 1984, pp.L600-L605
393. 椎尾一郎、アヌソークスノボ、大津元一、田幸敏治、「シュタルクスペクトルを用いた高分解能分光用周波数安定化レーザー」、分光研究、第 33 巻、第 3 号、1984 年 7 月、pp.172-178
394. M. Ohtsu, H. Fukada, T. Tako and H. Tsuchida, "Estimation of the ultimate frequency stability of semiconductor lasers," Jpn. J. Appl. Phys., Vol.22, No.7, July 1983, pp.L1157-L1166
395. S. Sampei, H. Tsuchida, M. Ohtsu and T. Tako, "Frequency stabilization of AlGaAs semiconductor lasers with external grating feedback," Jpn. J. Appl. Phys., Vol.22, No.4, April 1983, pp.L258-L260

396. M. Ohtsu, H. Kotani, and H. Tagawa, "Spectral measurements of NH_3 and H_2O for pollutant gas monitoring by $1.5 \mu\text{m}$ InGaAsP/InP lasers," Jpn. J. Appl. Phys., Vol.22, No.10, October 1983, pp.1553-1557
397. M. Ohtsu, H. Tagawa, and H. Kotani, "Accurate measurements of the wavelengths and material constants of $1.5 \mu\text{m}$ InGaAsP/InP lasers," Jpn. J. Appl. Phys., Vol.22, No.12, December 1983, pp.1876-1882
398. Shiio A. Kusnowo, M. Ohtsu, and T. Tako, "An optical alignment equipment for laser system," BULL. P.M.E. (T.I.T.), No.52, September 1983, pp.51-54
399. M. Ohtsu, H. Kotani, and H. Tagawa, "The alternating quarter-wavelength layers coating on $1.55 \mu\text{m}$ GaInAsP/InP laser facets," Jpn. J. Appl. Phys., Vol.22, No.5, May 1983, pp.815-820
400. 椎尾一郎、アヌノクスノボ、大津元一、田幸敏治、「マイクロコンピュータを用いたレーザー光軸調整」、レーザー研究、第11巻、第4号、1983年4月、pp.306-309
401. H. Tsuchida, T. Tako, and M. Ohtsu, "A novel technique for measuring the frequency deviation of semiconductor lasers under direct modulation," Jpn. J. Appl. Phys., Vol.22, No.1, January 1983, pp.L19-L21
402. H. Tsuchida, M. Ohtsu, T. Tako, N. Kuramochi and N. Oura, "Frequency stabilization of AlGaAs semiconductor laser based on the $^{85}\text{Rb-D}_2$ Line," Jpn. J. Appl. Phys., Vol.21, No.9, September 1982, pp.L561-L563
403. H. Tsuchida, M. Ohtsu and T. Tako, "Frequency stabilization of AlGaAs semiconductor laser to the absorption line of water vapor," Jpn. J. Appl. Phys., Vol.21, No.1, January 1982, pp.L1-L3
404. H. Tsuchida, M. Ohtsu and T. Tako, "Improvements in the short-term frequency stability of AlGaAs DH laser," Trans. IECE., Vol.E65, No.1, January 1982, pp.L65-L66
405. Shiio, M. Ohtsu, and T. Tako, "High resolution stark spectroscopy of H_2CO at $3.51 \mu\text{m}$ by saturated absorption," Jpn. J. Appl. Phys., Vol. 21, No.6, June 1982, pp.L813-L816
406. M. Ohtsu and T. Tako, "Frequency stabilization of a $\text{He-}^{22}\text{Ne}$ laser by intracavity polarization spectroscopy of CH_4 .II," Jpn. J. Appl. Phys., Vol.21, No.5, May 1982, pp.L722-L724
407. H. Tsuchida, M. Ohtsu and T. Tako, "Frequency stabilization of AlGaAs DH lasers," Jpn. J. Appl. Phys., Vol.20, No.6, June 1981, pp.L403-L406
408. 椎尾一郎、大津元一、田幸敏治、「レーザ周波数安定度の実時間測定装置の試作」、電子通信学会論文誌、第J64-C巻、第3号、1981年3月、pp.204-208
409. M. Ohtsu and T. Tako, "Saturated dispersion spectral shape in CH_4 for frequency stabilization," Jpn. J. Appl. Phys., Vol.29, No.11, November 1981, pp.L2133- L2143
410. M. Ohtsu, S. Ohta, and T. Tako, "Frequency stabilization of a $\text{He-}^{22}\text{Ne}$ laser by intracavity polarization spectroscopy of CH_4 ," Jpn. J. Appl. Phys., Vol.20, No.9, September 1981, pp.L1701-L1707
411. I. Shiio, M. Ohtsu, and T. Tako, "Frequency stabilization of a He-Xe laser using a stark spectrum in H_2CO ," Jpn. J. Appl. Phys., Vol.20, No.7, July 1981, L508-L510
412. M. Ohtsu, S. Katsuragi, and T. Tako, "Performances of a frequency offset locked He-Xe laser system at $3.51 \mu\text{m}$," IEEE J. of Quantum Electron., Vol.QE-17, No.6, June 1981, pp.1100-1106
413. H. Tsuchida, S. Sampei, M. Ohtsu and T. Tako, "Frequency stability measurement of feedback stabilized AlGaAs DH laser," Jpn. J. Appl. Phys., Vol.19, No.12, December 1980, pp.L721-L724
414. T. Tako, M. Ohtsu, S. Katsuragi, M. Ohi, and Y. Akimoto, "Wavelength measurement of an H_2CO -stabilized He-Xe Laser at $3.51 \mu\text{m}$," Jpn. J. Appl. Phys., Vol.19, No.9, September 1980,

pp.1683-1688

- 415. 大津元一、田幸敏治、「3.51 μ m 周波数オフセットロック He-Xe レーザー」、レーザー研究、第 8 巻、第 5 号、1980 年 9 月、pp.769-776
- 416. A. Kusnowo, M. Ohtsu, N. Kobayashi, and T. Tako, "Measurement of the saturated absorption signal of CH₄ at 3.39 μ m using a He-Xe laser and a multipath cell," Appl. Opt. Vol.19, No.8, 1980, pp.L1227-L1229
- 417. M. Ohtsu, R. Koyama, A. Kusnowo, and T. Tako, "Development of a frequency-offset-locked He-Xe laser at 3.51 μ m," Jpn. J. Appl. Phys., Vol.18, No.8, 1979, pp.L1619-L1620
- 418. M. Ohtsu, R. Koyama, and T. Tako, "Improvements in the long-term frequency stability of the He-Xe laser at 3.51 μ m," Jpn. J. Appl. Phys., Vol.18, No.8, 1979, pp.1621-1622
- 419. 大津元一、三田村一郎、田幸敏治、「3.51 μ m He-Xe レーザーの発振特性 —ファブリー・ペロー共振器型および導波路型—」、分光研究、第 28 巻、第 6 号、1979 年、pp.327-336
- 420. M. Ohtsu and T. Tako, "Measurement of the width of the inverted Lamb dip in H₂CO at 3.51 μ m," J. Appl. Phys., Vol.50, No.2, 1979, pp.599-601
- 421. M. Ohtsu and T. Tako, "Frequency stability of an H₂CO-Stabilized He-Xe laser in an axial magnetic field," Jpn. J. Appl. Phys., Vol.17, No.12, 1978, pp.L2169-L2170
- 422. M. Ohtsu and T. Tako, "Mode competition in the 3.51 μ m He-Xe laser in an axial magnetic field," Jpn. J. Appl. Phys., Vol.17, No.1, January 1978, pp.L177-L182
- 423. M. Ohtsu, T. Akahane, and T. Tako, "Birefringence of n-type nematic liquid crystals due to electrically induced deformations of vertical alignment," Jpn. J. Appl. Phys., Vol.13, No.4, April 1974, pp.621-629