

List of publications

(1) Papers

1. K. Imasaki, D. Li, S. Miyamoto, S. Amano T. Mochizuki, and Y. Asano
"Gamma-ray Beam Transmutation"
Energy Conversion and Management **49** , pp.1922-1927 (2008).
2. Shuji Miyamoto
"Laser Compton Gamma-ray Generation"
ICFA Panel on Advanced and Novel Accelerators Newsletter, Dec. 2009, pp.17-22(2009).
3. D. Li, K. Imasaki, S. Miyamoto, K. Horikawa, S. Amano, and T. Mochizuki
"Positron generation through laser Compton scattering gamma ray"
Appl. Phys. Lett., **94**, 091112, March (2009).
4. Akihisa Nagano, Sho Amano, Shuji Miyamoto, Takayasu Mochizuki
"Extream Ultraviolet Source Using Laser-Produced Li Plasma"
EEJ Transactions on Electronics, Information and Systems, C, vol. **129**, No.2, pp. 249- 252 (2009) (Japanese).
5. Sho Amano, Ken Horikawa, Kazuki Ishihara, Shuji Miyamoto, Takehito Hayakawa, Toshiyuki Shizuma, and Takayasu Mochizuki
"Several-MeV γ -ray generation in NewSUBARU by laser Compton backscattering"
Nuclear Instruments and Methods in Physics Research A, Vol. **602**, Issue 2, 21 April 2009, Pages 337-341(2009).
6. Akira Heya, Yasuyuki Takanashi, Sho Amano, Naoto Matsuo, Shuji Miyamoto, and Takayasu Mochizuki
"Effect of Laser Plasma X-ray Irradiation on Nucleation in Amorphous Silicon Film"
Japan. J. Appl. Phys., Vol. **48**, 050208 (2009).
7. Dazhi Li, Kazuo Imasaki, Ken Horikawa, Shuji Miyamoto, Sho Amano and Takayasu Mochizuki
"Iodine Transmutation through Laser Compton Scattering Gamma Rays"
J. Nuclear Science and Technology, Vo. **46**, No.8, pp.831-835(2009).
8. Yoshihiko Shoji
"Generating coherent THz radiation in electron storage rings using an ac sextupole magnet and a vertical kicker magnet"
Phys. Rev. ST Accel. Beams **13**, 060702 (2010).
9. Yoshihiko Shoji,
"Design of a Multi-Element Corrector Magnet for the Storage Ring NewSUBARU"
IEEE Transactions on Applied Superconductivity, Vol.**20**, No.3, pp.230-233 (2010).
10. Yoshihiko Shoji
"Transient bunch lengthening by a betatron motion along bending sections",
Nuclear Instr.& Meth. in Physics Research A, in press (available online 10 Feb. 2010).
11. S. Amano, Y. Inaoka, H. Hiraishi, S. Miyamoto, T. Mochizuki
"Laser-plasma debris from a rotating cryogenic-solid-Xe target"
Rev.Sci.Instrum., Vol.**81**, 023104 (2010)
12. Mitsuyoshi Kishihara, Yoshiaki Ukita, Shigeaki Yamamoto, Isao Ohta, Yuichi Utsumi
"SR Direct Etching of PTFE and Its Application to Millimeter-Wave PTFE-Filled Waveguide"
IEEJ Transactions on Electronics, Information and Systems, **129**, 2, pp. 259-266 (2009).
13. Saki Kondo, Yoshiaki Ukita, Kuniyo Fujiwara, Yuichi Utsumi
"A Novel Micromixer with Three-Dimensionally Cross-Linked Capillary Array Structure Fabricated by

Deep X-ray Lithography

IEEJ Transactions on Electronics, Information and Systems, **129**, 2, pp. 277-281 (2009).

14. Tsunamasa Saiki, Katsuhide Okada, Yuichi Utsumi
“Fabrication and Estimation of Novel Micro Liquid Rotor that Operates with Surface-Acoustic-Wave”
IEEJ Transactions on Electronics, Information and Systems, **129**, 2, 219-224 (2009).
15. Shigeaki Yamamoto, Yoshiaki Ukita, Kozo Mochiji, Yuichi Utsumi
“Microfabrication of Poly(tetrafluoroethylene) Using SR Direct Etching”
IEEJ Transactions on Electronics, Information and Systems, **129**, 2, 244-248 (2009).
16. Daisuke Fukuoka, Tomohiro Ikeda, Yuichi Utsumi
“Development of Multi-Analytes DNA Microchip by Using 3-D Nanoprototyping Fabrication Method”
IEEJ Transactions on Electronics, Information and Systems, **129**, 2, 272-276 (2009).
17. Akinobu Yamaguchi, Keiichi Motoi, Hideki Miyajima, Atsufumi Hirohata, Takehiro Yamaoka, Tsuyoshi Uchiyama, and Yuichi Utsumi
“Current manipulation of a vortex confined in a micron-sized Fe19Ni81 disk”
Applied Physics Letters, **95**, 122506-112508 (2009).
18. Yuichi Utsumi, Shigeaki Yamamoto, Tomoyuki Kuroki, and Masaaki Okubo
“Direct bonding of PFTF sheets assisted by synchrotron radiation induced surface modification”
Microsystem Technologies, **16**, 8-9, pp.1495-1500 (2010).
19. Yoshiaki Ukita, Saki Kondo, Chiwa Kataoka, Masahiro Takeo, Seiji Negoro, and Yuichi Utsumi
“Immunoassay using poly-tetrafluoroethylene microstructure in organic solvent”
Microsystem Technologies, **16**, 8-9, pp.1465-1470 (2010).
20. Tsunemasa Saiki, Katsuhide Okada and Yuichi Utsumi
“Micro liquid rotor operated by surface-acoustic-wave”
Microsystem Technologies, **16**, 8-9, pp.1589-1594 (2010).
21. Saki Kondo, Tsukasa Azeta, Yoshiaki Ukita, Yuichi Utsumi
“Vertical Liquid Transportation Through Capillary Bundle Structure Using Centrifugal Force”
Microsystem Technologies, **16**, 8-9, pp.1577-1580 (2010).
22. Yuichi Utsumi, (Invited paper)
“Proposal of 3D Micro prototyping Using Synchrotron Radiation and Its Application to Bio-Microsystems”
Service Robotics and Mechatronics (Springer), 7-14, (2010).
23. Akinobu Yamaguchi, Keiichi Motoi, Hideki Miyajima, Tsuyoshi Uchiyama, and Yuichi Utsumi
“Detection of Nonlinear Spin Dynamics in Artificial magnets Using Rectification of Planar Hall Effect”
Journal of the Magnetism Society of Japan , **34**, 73-77 (2010).
24. Tsuyoshi Uchiyama, Akinobu Yamaguchi, and Yuichi Utsumi
“Noise Characterization of Coil Detection Type Magnetic Field Sensor Utilizing Pulse Excitation Amorphous Wire Magneto-Impedance Element”
Journal of the Magnetism Society of Japan , **34**, 533-536 (2010).
25. Makoto Okada, Masayuki Iwasa, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui,
“Nanoimprinting using Release-agent-coated Resins”
Microelectronic Engineering, **86**, 673-675 (2009).
26. Makoto Okada, Masayuki Iwasa, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui,
“Durability of Antisticking Layer Against Heat in Nanoimprinting Evaluated using Scanning Probe Microscopy”
Microelectronic Engineering, **86**, 657-660 (2009).

27. Makoto Okada, Ken-ichiro Nakamatsu, Yuji Kang, Kanda Kanda, Yuichi Haruyama, and Shinji Matsui, ***“Characteristics of Antisticking Layer Formed by CHF_3 Plasma Irradiation for Nanoimprint Molds”*** Jpn. J. Appl. Phys., **48**, 06FH15-1 – 06FH15-4 (2009).
28. Makoto Okada, Yuji Kang, Ken-ichiro Nakamatsu, Masayuki Iwasa, Kazuhiro Kanda, Yuichi. Haruyama, and Shinji Matsui, ***“Characterization of Nanoimprint Resin and Antisticking Layer by Scanning Probe Microscopy”*** J. Photopolym. Sci. Tech, **22**, 167-169 (2009).
29. Yuji Kang, Makoto Oakada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui, ***“Room-temperature nanoimprint using sol-gel ITO film”*** J. Photopolym. Sci. Tech, **22**, 189-192 (2009).
30. Yuji Kang, Makoto Oakada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui, ***“Room-temperature nanoimprint using liquid-phase hydrogen silsesquioxane with PDMS mold”*** J. Photopolym. Sci. Tech, **22**, 193-194 (2009).
31. Yuji Kang, Makoto Okada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui, iroshi Hirohsima, ***“UV irradiation effect on sol-gel indium tin oxide nanopatterns replicated by room-temperature nanoimprint”*** J. Vac. Sci. Technol. B, **27(6)**, 2805-2809 (2009).
32. Kazuhiro Kanda, Jun-ya Igaki, Noriko Yamada, Reo Kometani, and Shinji Matsui ***“Graphitization of thin films formed by focused-ion-beam chemical-vapor-deposition”*** Diamond & Related Materials **18** (2009) 490-492.
33. Ken-ichiro Nakamatsu, Toshinari Ichihashi, Kazuhiro Kanda, Yuichi Haruyama, Takashi Kaito, and Shinji Matsui, ***“Nanostructure Analysis of Nanosprings Fabricated by Focused-Ion-Beam Chemical Vapor Deposition”*** Japanese Journal of Applied Physics **48** (2009) 105001.
34. Y. Haruyama, M. Tagawa, K. Yokota, and S. Matsui ***“Photoemission Study of Hydrogenated Amorphous Carbon Thin Films as a Function of Annealing Temperature”*** Jpn. J. Appl. Phys. Vol. **48**, 055505-3 (2009).
35. Y. Haruyama, T. Kitagawa, S. Matsui, N. Toyoda, and I. Yamada ***“Photoelectron Spectroscopy Study of the Valence Band Region in Diamond-like Carbon Thin Films”*** Jpn. J. Appl. Phys. Vol. **48**, 092301-4 (2009).
36. Keigo Koida and Masahito Niibe: ***“Study on contamination of projection optics surface for extreme ultraviolet lithography”*** Appl. Surf. Sci., **256**, 1171-1175 (2009).
37. Masahito Niibe and Keigo Koida: ***“Competitive reaction of carbon deposition and oxidation on the surface of Mo/Si multilayer mirrors by EUV irradiation”*** SPIE Vol. **7361**, 73610L-1-8 (2009).
38. Daiji Noda, Hiroshi Tsujii, Naoki Takahashi, and Tadashi Hattori, ***“Fabrication of X-ray Grating Using X-ray Lithography Technique for X-ray Talbot Interferometer”*** Journal of the Electrochemical Society, Vol. 156, No.5, pp. H299-H302, 2009
39. Yoshitaka Sawa, Kyo Tanabiki, Daiji Noda, and Tadashi Hattori, ***“Fabrication of the 3 Dimension Resist “Microstructure Using X-ray Diffraction and Applying to LIGA Process”*** Journal of Solid Mechanics and Materials Engineering, Vol. 3, No. 5, pp. 721-728, 2009
40. Yoshitaka Sawa, Kenji Yamashita, Takeshi Kitadani, Daiji Noda, and Tadashi Hattori, ***“Development of High “Hardness Micro Metal Mold by Double Layered Electroforming”***

Journal of the Society of Plant Engineers Japan, Vol. **21**, No. 1, pp. 7-12, 2009

41. Hiroaki Miyake, Kazufumi Nishimoto, Hiroyasu Ueda, Hiroshi Ueno, Koichi Itoigawa, Satoshi Nishida, Daiji Noda, and Tadashi Hattori
"Fabrication of a Micro Capacitive Inclination Sensor by Resin Molding"
IEEJ Transaction on Sensors and Micromachines, Vol. **129**, No.9, pp. 283-288, 2009
42. Yoshitaka Sawa, Kenji Yamashita, Takeshi Kitadani, Daiji Noda, and Tadashi Hattori
"Fabrication of High Hardness Micro Metal Mold by Nickel-Boron Electroless Plating Method"
Journal of the Society of Plant Engineers Japan, Vol. **21**, No. 2, pp. 21-25, 2009
43. Daiji Noda, Kazufumi Nishimoto, Hiroaki Miyake, Satoshi Nishida, and Tadashi Hattori
"Fabrication of Micro Capacitive Inclination Sensor"
Journal of the Society of Plant Engineers Japan, Vol. **21**, No. 2, pp. 26-30, 2009
44. Kenji Yamashita, Yoshitaka Sawa, Daiji Noda, and Tadashi Hattori
"Fabrication of Ultraviolet Range Light Guide Plate and Applies to Photocatalyst Source of Light"
Journal of the Society of Plant Engineers Japan, Vol. **21**, No. 2, pp. 38-42, 2009
45. Teppei Kimura, Tomohiro Ishida, and Tadashi Hattori
"Mechanical Characteristics Evaluation of MEMS Probe"
Journal of the Society of Plant Engineers Japan, Vol. **21**, No. 2, pp. 49-53, 2009
46. Yoshitaka Sawa, Kenji Yamashita, Takeshi Kitadani, and Tadashi Hattori
"Fabrication of High Hardness Micro Metal Mold by Double Layer Nickel Electroforming"
Transactions of the Japan Society of Mechanical Engineers, Vol. **75**, No. 759, pp. 3076-3081, 2009
47. Tadashi Hattori
"Fabrication of Micro Structure Surface by Etching Method"
Journal of Japanese Society of Tribologists, Vol. **55**, No. 2, pp. 83-88, 2010

(2) International Meetings

1. S.Miyamoto, K. Horikawa, S. Amano, S. Hashimoto, D. Li, K. Imasaki, T. Hayakawa, T. Shizuma, T. Shima, H. Utsunomiya, H. Akimune, Y. Asano, H. Ohkuma, Y. Takagi and T. Mochizuki
"Laser Compton Scattering Gamma-ray Source on NewSUBARU"(oral)
Int'l Conf. on Ultra-Short Electron & Photon Beams: Techniques and Applications, September 7-11 in Shaanxi-Xi'an, China (2009).
2. Y. Shoji
"Transient Bunch Lengthening by a Betatron Motion Along Bending Sections"
Int'l Conf. on Ultra-Short Electron & Photon Beams: Techniques and Applications, September 7-11 in Shaanxi-Xi'an, China (2009).
3. Yoshihiko Shoji
"Design of a Multi-Element Corrector Magnet for the Storage Ring NewSUBARU"
21th Int'l Conf. on Magnet Technology, Oct. 18-23, Hefei, China (2009).
4. S.Amano, K.Horikawa, S.Miyamoto, and T. Mochizuki
"Laser-Compton Gamma-Ray Source at Beamline (BL1) in NewSUBARU"
10th Int'l Conf. on Synchrotron Radiation Instrumentation (SRI09), Melbourne, #363 (2009).
5. S.Isoda, A.Heya, S.Amano, S.Miyamoto, N.Matsuo and T. Mochizuki,
"Low-Temperature Thermal Crystallization of a-Si Film Irradiated by Laser Plasma Soft X-ray"
6th Int'l Thin-Film Transistor Conference (ITC'10), (Himeji,2010) , P4.

6. Akinobu Yamaguchi, Keiichi Motoi, Hideki Miyajima, Atsufumi Hirohata, Takehiro Yamaoka, Tsuyoshi Uchiyama, and Yuichi Utsumi
“Current manipulation of a vortex confined in a micron-sized Fe19Ni81 disk”
 Applied Physics Letters, 95, 122506-112508 (2009).
7. Munehiko Kato, Eric Blasius, Yoshiaki Ukita, Kunihiko Mabuchi, and Yuichi Utsumi
“Fabrication of stacked electrodes for multiplex neural interface”
 Int’l Conf. on Electronics Packaging 2009 (ICEP2009), pp955-958, (2009), April 14-16, Kyoto, JAPAN
8. Akinobu Yamaguchi, Keiichi Motoi, Hideki Miyajima, Tsuyoshi Uchiyama and Yuichi Utsumi
“Permeability and permittivity of single layered Ni81Fe19 micron-scale wire in ferromagnetic resonance state”
 IEE Int’l Magnetic Conference (INTERMAG009), May4-8, Sacramento, California, USA (2009)
9. Yuichi Utsumi, Shigeaki Yamamoto, Tomoyuki Kuroki, and Masaaki Okubo
”Direct bonding of PFTF sheets assisted by synchrotron radiation induced surface modification”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp151-152, June 25-28, (2009),Saskatoon, Canada
10. Yoshiaki Ukita, Saki Kondo, Chiwa Kataoka, Masahiro Takeo, Seiji Negoro, and Yuichi Utsumi
“Immunoassay using poly-tetrafluoroethylene microstructure in organic solvent”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp143-144 , June 25-28, (2009), Saskatoon, Canada
11. Yoshiaki Ukita, Shigeaki Yamamoto, and Yuichi Utsumi
“Synchrotron radiation induced smoothing effect of poly-tetrafluoroethylene”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp97-98 , June 25-28, (2009), Saskatoon, Canada
12. Yoshiaki Ukita, and Yuichi Utsumi
“Fluoroplastic mold for UV embossing fabricated by synchrotron radiation (SR) direct etching process”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp123-124, June 25-28, (2009), Saskatoon, Canada
13. Tsunemasa Saiki, Katsuhide Okada and Yuichi Utsumi
“Micro liquid rotor operated by surface-acoustic-wave”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp233-234 , June 25-28, (2009), Saskatoon, Canada
14. Saki Kondo, Tsukasa Azeta, Yoshiaki Ukita, Tomoya Omukai and Yuichi Utsumi
“Vertical Liquid Transportation Through Capillary Bundle Structure Using Centrifugal Force”
 8th Int’l Workshop on High-Aspect-Ratio Micro-Structure Technology 2009 (HARMST2009), pp207-208 , June 25-28, (2009), Saskatoon, Canada
15. Yuichi Utsumi
“Development of 3D Micro Prototyping Process using Synchrotron Radiation and Its Application to Bio-Micro-Systems”
 Int’l Symposium of East Asian Young Scientists Follow-up Program on Environmental- and Bio-Engineering 2009, pp7, September 7-8, (2009), Himeji, Japan.
16. Yuichi Utsumi, Tsukasa Azeta, Saki Kondo, Yoshiaki Ukita, Masahiro Takeo, and Seiji Negoro
“High Sensitive Detection of Endocrine Disrupter Using Enzyme Linked Immunosorbent Assay with Vertical Flow Operation”
 19th Academic Symposium of MRS-Japan 2009, pp79, September 7-9, (2009), Tokyo, Japan
17. Yoshiaki Ukita, Saki Kondo, Tsukasa Azeta, Chiwa Kataoka, Masahiro Takeo, Seiji Negoro, and Yuichi Utsumi
“Enzyme-Linked Immunosorbent Assay using Antibody Bound Fluoroplastic Microstructure”
 19th Academic Symposium of MRS-Japan 2009, pp80, September 7-9, (2009), Tokyo, Japan

18. Saki Kondo, oshiaki Ukita, Tsukasa Azeta, and Yuichi Utsumi
“Fluid Flow Behaviors of Threedimensional Micro Fluidics Device Using Centrifugal Force”
 19th Academic Symposium of MRS-Japan 2009, pp74, September 7-9, (2009), Tokyo, Japan.
19. Tomoya Omukai, Atsushi Kinoshita, Fusao Komada, and Yuichi Utsumi
“Usefulness of PMMA Micro 3D Scaffold by Deep X-ray lithography for High Density Cell Culture”
 19th Academic Symposium of MRS-Japan 2009, pp73, September7-9, (2009), Tokyo, Japan
20. Munehiko Kato, Mitsuhiro Yoshida, Eric Blasius, Yoshiaki Ukita, Kunihiko Mabuchi, and Yuichi Utsumi
“Fabrication of stacked electrodes for multiplex nerval interface”
 19th Academic Symposium of MRS-Japan 2009, pp80, September7-9, (2009), Tokyo, Japan
21. Tsunemasa Saiki, Takeshi Komoto, and Yuichi Utsumi
“High efficiency Liquid Flow Actuator Operated by Surface Acoustic Waves”
 19th Academic Symposium of MRS-Japan 2009, pp74, September7-9, (2009), Tokyo, Japan
22. Tsunemasa Saiki, Katsuhide Okada, and Yuichi Utsumi
“High efficiency mixing and pumping of continuous liquid flow using surface acoustic wave”
 13th Int’l Conf. on Miniaturized Systems for Chemistry and Life Sciences 2009 (μTAS2009) , pp58-60,
 Jeju, Korea, November 1-5 (2009) .
23. Yoshiaki Ukita, Saki Kondo, Chiwa Kataoka, Masahiro Takeo, Seiji Negoro, and Yuichi Utsumi
“Environmental analysis by using antibody-bound fluoroplastic 3D capillary bundle microstructures”
 13th Int’l Conf. on Miniaturized Systems for Chemistry and Life Sciences 2009 (μTAS2009) , pp1931-
 19332, Jeju, Korea, November 1-5 (2009).
24. Tomoya Omukai, Atsushi Kinoshita, Fusao Komada, and Yuichi Utsumi
“High density cell culture using 3D scaffold with capillary bundle structure”
 Digest of Papers, 2009 Int’l Microprocess and Nanotechnology Conference (MNC2009), pp40-41,
 November 16-19, (2009).
25. Tsunemasa Saiki, Katsuhide Okada, and Yuichi Utsumi
“High Efficiency Micro Reactor Operated by Surface Acoustic Wave”
 Digest of Papers, 2009 Int’l Microprocess and Nanotechnology Conference (MNC2009), pp388-389,
 November 16-19, (2009).
26. Munehiko Kato, Eric Blasius, Yoshiaki Ukita, Kunihiko Mabuchi, and Yuichi Utsumi
“Fabrication of electrodes for multiplex nerval interface”
 Digest of Papers, 2009 Int’l Microprocess and Nanotechnology Conference (MNC2009), pp708-709,
 November 16-19, (2009).
27. Yoshiaki Ukita, Saki Kondo, Chiwa Kataoka, Masahiro Takeo, Seiji Negoro, and Yuichi Utsumi
“Immunoassay using antibody-bound poly-tetrafluoroethylene capillary-bundle structure for environmental analysis”
 Digest of Papers, 2009 Int’l Microprocess and Nanotechnology Conference (MNC2009), pp712-713,
 November 16-19, (2009).
28. Shinji Matsui,
“Room Temperature Nanoimprint using HSQ and SOG”
 The 2nd Asian Symposium on Nanoimprint Lithography (Taipei), Oct.7(2009).
29. Yuji Kang, Makoto Okada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“Effect of UV Irradiation on Sol-Gel ITO Nanopatterns Replicated by Room-Temperature Nanoimprint”
 54th Int’l Conf. on Electron, Ion and Photon Beam Technology and Nanofabrication(EIPBN2009), (Florida,
 USA), May 28 (2009).
30. Makoto Okada, Yuji Kang, Ken-ichiro Nakamatsu, Masayuki Iwasa, Kazuhiro Kanda, Yuichi Haruyama, and
 Shinji Matsui
“Characterization of Nanoimprint Resin and Antisticking Layer by Scanning Probe Microscopy”
 The 27th Int’l Conf. of Photopolymer Science and Technology (Chiba), Jul.2(2009).

31. Yuji Kang, Makoto Okada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui, ***“Room-temperature nanoimprint using sol-gel ITO film”***
27th Int’l Conf. of Photopolymer Science and Technology (Chiba), Jul.2(2009).
32. Yuji Kang, Makoto Okada, Ken-ichiro Nakamatsu, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui, ***“Room-temperature nanoimprint using liquid-phase hydrogen silsesquioxane with PDMS mold”***
27th Int’l Conf. of Photopolymer Science and Technology (Chiba), Jul.2(2009).
33. Makoto Okada, Shinichi Nakano, Shinichiro Kawahara, and Shinji Matsui
“Nanoimprint using side chain crystalline polymer”
22nd Int’l Microprocesses and Nanotechnology Conference (MNC2009), (Hokkaido, Sapporo), Nov.17(2009).
34. Makoto Okada, Ken-ichiro Nakamatsu, Yuji Kang, Yuichi Haruyama, Kazuhiro Kanda, and Shinji Matsui
“Characteristics of Antisticking Layer Formed by Plasma Irradiation using Mixture Gas with CHF₃ and O₂ for Nanoimprint”
54th Int’l Conf. on Electron, Ion and Photon Beam Technology and Nanofabrication(EIPBN2009), (Florida, USA), May.27(2009).
35. Makoto Okada, Takshi Kishiro, Kori Yanagihara, Masahi Ataka, Norimichi Anazawa, and Shinji Matsui
“Fabrication of Large Area Mold by Electron Beam Stepper”
35th Int’l Conference on Micro and Nano Engineering(MNE2009), (Ghent, Belgium), Sep.29(2009).
36. Makoto Okada, Mayuko Shibata, Kazuhiro Kanda, Yuichi Haruyama, Yoshihiko Hirai, and Shinji Matsui
“Cross-sectional Observation of Nanoimprint Resins Filled in SiO₂/Si Mold Pattern by Scanning Electron Microscopy”
35th Int’l Conf. on Micro and Nano Engineering(MNE2009), (Ghent, Belgium), Sep.30(2009).
37. Makoto Okada, Yuji Kang, Takahiro Nakayama, Yuichi Haruyama, Kazuhiro Kanda, and Sshinji Matsui
“Direct Patterning on Sol-Gel Low-k Porous Silica by Nanoimprint”
Asian Symposium on Nano Imprint Lithography 2009 (ASNIL2009), (Taipei, Taiwan), Oct.7(2009).
38. Makoto Okada, Shinichi Nakano, Shinichiro Kawahara, and S. Matsui
“Characteristics of side Chain Crystalline Polymer in Nanoimprint”
Asian Symposium on Nano Imprint Lithography 2009 (ASNIL2009), (Taipei, Taiwan), Oct.7(2009).
39. Yuji Kang, Makoto Okada, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“Room-temperature nanoimprint using liquid-phase HSQ with h-PDMS mold”
Asian Symposium on Nano Imprint Lithography 2009 (ASNIL2009), (Taipei, Taiwan), Oct.7(2009).
40. Yasuki Nakai, Yuji Kang, Makoto Okada, Yuichi Haruyama, Kazuhiro Kanda, and Shinji Matsui
“Thermal durability of antisticking layer formed by fluorinated-trichlorosilane in nanoimprint”
Asian Symposium on Nano Imprint Lithography 2009 (ASNIL2009), (Taipei, Taiwan), Oct.7(2009).
41. Shinya Omoto, Makoto Okada, Yuji Kang, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“UV nanoimprinting using a template with HSQ patterned fabricated by electron beam lithography”
Asian Symposium on Nano Imprint Lithography 2009 (ASNIL2009), (Taipei, Taiwan), Oct.7(2009).
42. Makoto Okada, Hiroto Miyake, Kei Kuramoto, Masayuki Iwasa, Yuichi Haruyama, Kazuhiro Kanda, and Shinji Matsui
“Adhesion Evaluation of Radical-, Cation-, and Hybrid-UV Nanoimprint Resins”
8th Int’l Conf. on Nanoimprint and Nanoprint Technology 2009 (NNT2009), (California, USA), Nov.12(2009).
43. Yuji Kang, Makoto Okada, Chiaki Minari, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“Nanostructure fabrication by room-temperature nanoimprint using liquid-phase HSQ with PDMS mold”
8th Int’l Conf. on Nanoimprint and Nanoprint Technology 2009 (NNT2009), (California, USA), Nov.12(2009).

44. Yuji Kang, Makoto Okada, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“Large area Room-Temperature Nanoimprint using Liquid-Phase HSQ with PDMS mold”
 American Vacuum Society 56th international symposium & exhibition, (California, USA), Nov.10(2009).
45. Makoto Okada, Yuji Kang, Takahiro Nakayama, Yuichi Haruyama, Kazuhiro Kanda, and Shinji Matsui
“Nanoimprint on Sol-Gel Low-k Porous Silica”
 22nd Int’l Microprocesses and Nanotechnology Conference (MNC2009), (Hokkaido, Sapporo),
 Nov.19(2009).
46. Yuji Kang, Makoto Okada, Chiaki Minari, Kazuhiro Kanda, Yuichi Haruyama, and Shinji Matsui
“Room-temperautre nanoimprint using liquid-phase HSQ with h-PDMS mold”
 22nd Int’l Microprocesses and Nanotechnology Conference (MNC2009), (Hokkaido, Sapporo),
 Nov.19(2009).
47. Kazuhiro Kanda, Makoto Okada, Yuji Kang, Tsuneo Suzuki, and Shinji Matsui,
***“Departure Process of Ga from DLC Films Fabricated using Ga Focused Ion Beam Assisted Deposition
 by Heat Treatment”***
 16th Int’l Conf. on Surface Modification of Materials by Ion Beams (SMMIB2009), (Odaiba, Tokyo) Sep. 13
 - 18, (2009).
48. Kazuhiro Kanda, Makoto Okada, Yuji Kang, Masahito Niibe, Tsuneo Suzuki, and Shinji Matsui,
***“Structural Changes in the DLC Films Fabricated using Ga Focused Ion Beam Assisted Deposition by
 Heat Treatment”***
 22nd Int’l Microprocesses and Nanotechnology Conference (MNC2009), (Hokkaido, Sapporo), Nov.19,
 (2009).
49. T. Kaito, H. Oba, Y. Sugiyama, A. Yasaka, J. Fujita, T. Suzuki, K. Kanda, and S. Matsui,
“Deposition yield and physical property of carbon deposited by FIB-CVD”
 22nd Int’l Microprocesses and Nanotechnology Conference (MNC2009), (Hokkaido, Sapporo), Nov.19,
 (2009).
50. Kazuhiro Kanda, Makoto Okada, Yuji Kang, Masahito Niibe, and Shinji. Matsui,
***“NEXAFS study of the annealing effect on the DLC films fabricated using Ga focused ion beam assisted
 deposition”***
 23rd Diamond Symposium, (Tsudanuma, Chiba), Nov. 18-20 (2009).
51. Y. Haruyama, M. Tagawa, K. Yokota, and S. Matsui
“NEXAFS study on annealing temperature dependence of hydrogenated amorphous carbon films”
 14th Int’l Conf. on Xay Absorption Fine Structure (XAFS 2009), July, PS1.36, Camerino, Italy
52. Y. Haruyama, Y. Teraoka, and S. Matsui
***“Electronic structure near the surface region in the ternary transition metal alloy $Ti_{35}V_{25}Cr_{40}$ by
 photoemission spectroscopy”***
 The 11-th Int’l Conference on Electronic Spectroscopy & Structure (ICESS11), 6AP09, October, Nara, Japan
53. M. Niibe, K. Koida, T. Nakayama, S. Terashima, A. Miyake, H. Kubo, Y. Kakutani, S. Matsunari, T. Aoki, S.
 Kawata
***“Inhibition of deposition and removal of carbon films on the multilayer surface by EUV irradiation in the
 presence of water vapor, oxygen and ozone gases”***
 2009 Int’l Symposium Extreme Ultraviolet Lithography, Prague, Czech Republic, Oct. 19-Oct. 21 (2009).
54. K. Kanda, M. Okada, Y. Kang, M. Niibe, S. Matsui:
***“Electronic structure near the surface region in the ternary transition metal alloy $Ti_{35}V_{25}Cr_{40}$ by
 photoemission spectroscopy”***
 23rd Diamond Symposium (2009).
55. Masahito Niibe, Masanori Kayahara, and Shozo Inoue
***“Electronic structure and photocatalytic activity of titania thin films prepared by magnetron sputtering
 with glancing angle deposition technique”***
 11th Int’l. Conf. Electron Spectroscopy and Structure, Nara, Japan, Oct. 6-10 (2009).

56. R. Kawakami, T. Inaoka, K. Tominaga, M. Niibe, T. Mukai, A. Takeichi and T. Fukudome:
"Synergy Effect of Xenon Plasma Ions and Ultraviolet Lights on GaN Etch Surface Damage and Modification"
 16th Int'l Conf. on Surface Modification of Materials by Ion Beams (SMMIB2009), Tokyo, Sept. 13-18 (2009).
57. Masahito Niibe and Keigo Koida:
"Competitive reactions of carbon deposition and oxidation on the surface of Mo/Si multilayer mirrors by EUV irradiation"
 SPIE Europe 2009, Prague, Czech Republic, 20-23 Apr. (2009).
58. Yasuyuki Fukushima, Takeo Watanabe, Testuo Harada, and Hiroo Kinoshita
"The Photo-absorption Coefficient Measurement of EUV Resist"
 26th Int'l Conf. of Photopolymer Science and Technology, Chiba, Japan, June 30- July 3 (2009).
59. Takeo Watanabe and Hiroo Kinoshita
"Actinic Defect Inspection Technology for EUVL Masks" (Panelist, Invited Panelist)
 2009 Int'l Workshop on EUV Lithography, Waikiki, Hawaii, USA, Jul. 13-17 (2009).
60. Hiroo Kinoshita, Nagata Yutaka, Tetsuo Harada, and Takeo Watanabe
"Development of Ultra-Fine Structure Metrology System Using Coherent EUV Source"
 2009 Int'l Workshop on EUV Lithography, Waikiki, Hawaii, USA, Jul. 13-17 (2009).
61. Hiroo Kinoshita, Yoshito Kamaji, Kei Takase, Takashi Sugiyama, Toshiyuki Uno, Tetsuo Harada, and Takeo Watanabe
"Study of Critical Dimensions of Printable Phase Defects Using an Extreme Ultraviolet microscope"
 2009 Int'l Workshop on EUV Lithography, Waikiki, Hawaii, USA, Jul. 13-17 (2009).
62. Takeo Watanabe, Tae Geun Kim, Tetsuo Harada, Yasuyuki Fukushima, and Hiroo Kinoshita
"EUV Interference Lithography in NewSUBARU"
 2009 Int'l Workshop on EUV Lithography, Waikiki, Hawaii, USA, Jul. 13-17 (2009).
63. Daiju Shiono, Hideo Hada, Kazufumi Sato, Yasuyuki Fukushima, Takeo Watanabe and Hiroo Kinoshita
"Decomposition and Roughness Analysis of Chemically Amplified Molecular Resist for Reducing LWR"
 21th Microprocesses and Nanotechnology Conference, Sapporo, Hokkaido, Japan, Nov.16-19, 2009.
64. I. Aratani, S. Matsunaga, T. Kajiyashiki, T. Watanabe, and H. Kinoshita
"Evaluation of Novel Resist Materials for EUV Lithography"
 SPIE's 34th Annual Int'l Symposium on Advanced Lithography, San Jose, CA, USA, Feb. 22 - Feb. 27 (2009).
65. D. Shiono, T. Watanabe, and H. Kinoshita
"Decomposition analysis of molecular resists to further CD control"
 SPIE's 34th Annual Int'l Symposium on Advanced Lithography, San Jose, CA, USA, Feb. 22 - Feb. 27, 2009.
66. Tetsuo Harada, Junki Kishimoto, Takeo Watanabe, Hiroo Kinoshita, and Dong Gun Lee
"Mask observation results using coherent EUV scattering microscope at NewSUBARU"
 The 53rd Int'l Conference on Electron, Ion and Photon Beam technology and Nanofabrication, Marco Island, FL, USA, May 25-31, 2009.
67. Takeo Watanabe, Yasuyuki Fukushima, Tetsuo Harada, and Hiroo Kinoshita
"Resist Transmission Measurement using EUV Light"
 2009 Int'l Workshop on EUV Lithography, Waikiki, Hawaii, USA, Jul. 13-17, 2009.
68. H. Kinoshita, N. Yutaka, T. Harada, T. Watanabe, D.Lee
"Development of Ultra-Fine Structure Metrology System using Coherent EUV Source"

- 8th EUVL Int'l Symposium 2009, Prague, Oct. 18-21, 2009.
69. T. Watanabe, Y. Fukushima, N. Sakagami, Y. Kamaji, T. Iguchi, Y. Yamaguchi, M. Tada, T. Harada, T. Mochizuki, H. Kinoshita
“EUV Interference Lithography in New SUBARU”
 8th EUVL Int'l Symposium 2009, Prague, Oct. 18-21, 2009.
 70. Y. Fukushima, T. Watanabe, T. Harada, H. Kinoshita
“Resist Transmittance Measurement using EUV Light”
 8th EUVL Int'l Symposium 2009, Prague, Oct. 18-21, 2009.
 71. N. Sakagami, Y. Fukushima, Y. Kamaji, T. Iguchi, Y. Yamaguchi, M. Tada, T. Harada, T. Watanabe and H. Kinoshita
“Development of the Extreme Ultraviolet Interference Lithography System”
 21th Microprocesses and Nanotechnology Conference, Sapporo, Hokkaido, Japan, Nov. 16-19, 2009.
 72. Daiji Noda, Hiroshi Tsujii, Naoki Takahashi, and Tadashi Hattori
“Fabrication of High Precision X-ray Mask for X-ray Grating of X-ray Talbot Interferometer”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 88. Naoki Takahashi, Hiroshi Tsujii, Megumi Katori, Kenji Yamashita, Daiji Noda, and Tadashi Hattori
“Fabrication of X-rays Mask with Carbon Membrane for Diffraction Gratings”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 89. Hiroaki Miyake, Kazufumi Nishimoto, Satoshi Nishida, Daiji Noda, and Tadashi Hattori
“Fabrication of Micro Capacitive Inclination Sensor by Resin Molding”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 90. Yashitaka Sawa, Kenji Yamashita, Takeshi Kitadani, Daiji Noda, and Tadashi Hattori
“Fabrication of High Hardness Ni Mold with Electroless Nickel-Boron Thin Layer”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 91. Daiji Noda, Masaru Setomoto, Yuki Kobayashi, and Tadashi Hattori
“Fabrication of Microcoils with Narrow and High Aspect Ratio Coil Lines”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 92. Yuta Okayama, Kenji Yamashita, Yoshitaka Sawa, Daiji Noda, and Tadashi Hattori
“Fabrication of Ultraviolet Range Light Guide Plate”
 8th Int'l Workshop on High-Aspect-Ratio Micro-Structure Technology (HARMST 2009), Saskatoon, Canada, June 25-28, 2009
 93. Daiji Noda, Masaru Setomoto, and Tadashi Hattori
“Fabrication of High Aspect Ratio Microcoils for Electromagnetic Actuators”
 2009 IEEE Int'l Symposium on Micro-Nano Mechatronics and Human Science (MHS 2009), Nagoya, Japan, November 8-11, 2009
 94. Takaya Fujimoto, Yuta Okayama, Kenji Yamashita, Satoshi Nishida, Yoshitaka Sawa, Daiji Noda, and Tadashi Hattori
“Examination of High Luminance Light Guide Plate by Accumulating Method”
 2009 IEEE Int'l Symposium on Micro-Nano Mechatronics and Human Science (MHS 2009), Nagoya, Japan, November 8-11, 2009
 95. Daiji Noda and Tadashi Hattori
“Development of a New Nano-Micro Solid Processing Technology Based on a LIGA Process and a Next-

Generatic Micro Actuator"

3rd Int'l Symposium on Next-Generation Actuators Leading Breakthroughs, Tokyo, Japan, January 25-26, 2010

(3) Awards

1. Professor Hiroo Kinoshita
"Lifetime Achievement Award"
"2009 International Workshop on EUV Lithography", Sheraton Waikiki Beach, Honolulu, Hawaii, USA, July 15, 2009.