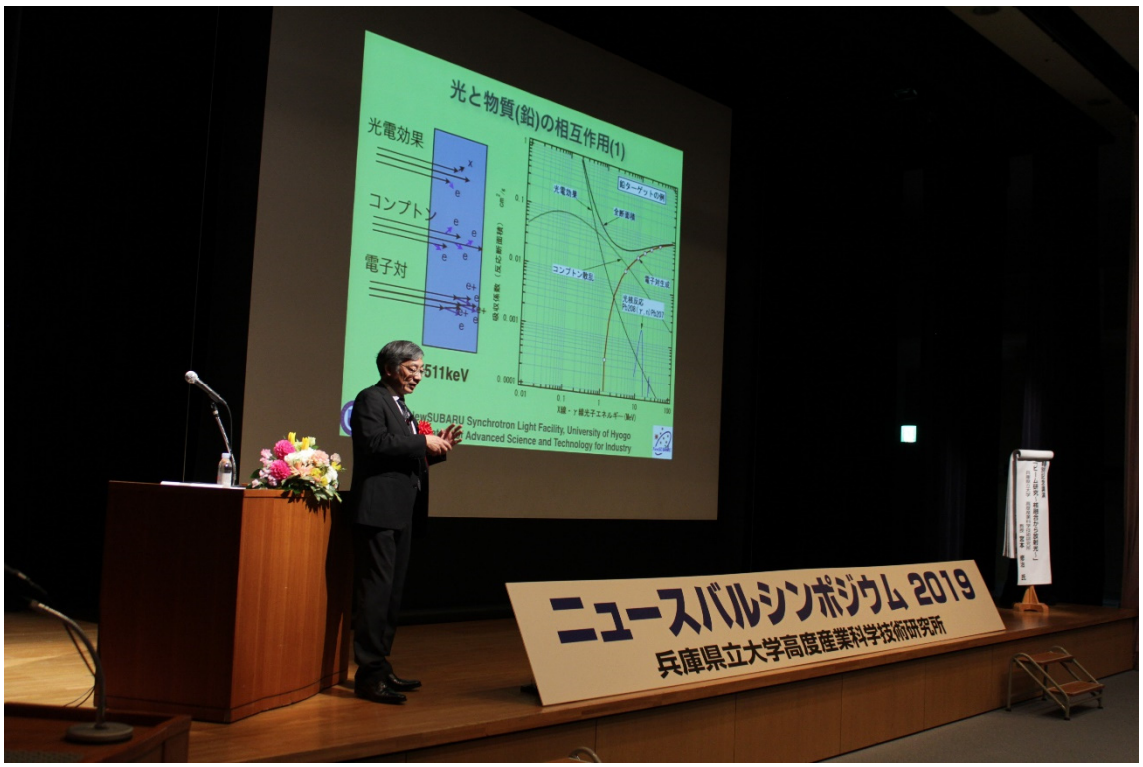
Part 3. List of Publications



Retirement memorial lecture of Prof. Shuji Miyamoto

List of publications

(1) Papers

1. **"Performance measurement of HARPO: A time projection chamber as a gamma-ray telescope and polarimeter"**
P. Gros, S. Amano, D. Attié, P. Baron, D. Baudin, D. Bernard, P. Bruel, D. Calvet, P. Colas, S. Daté, A. Delbart, M. Frotin, Y. Geerebaert, B. Giebels, D. Götz, S. Hashimoto, D. Horan, T. Kotaka, M. Louzir, F. Magniette, Y. Minamiyama, S. Miyamoto, H. Ohkuma, P. Poilleux, I. Semeniouk, P. Sizun, A. Takemoto, M. Yamaguchi, R. Yonamine, S. Wang
Astroparticle Physics, 97, pp.10-18 (2018).

2. **"Development of positron annihilation measurement system with fast positron created by laser Compton scattering γ-ray at NewSUBARU synchrotron facility"**
Fuminobu Hori, Kento Sugita, Akihiro Iwase, Mititaka Terasawa, Shuji Miyamoto
日本陽電子科学会「陽電子科学」第 10 号, ISSN 2188-0107 pp.21-28(2018).

3. **"Photon-flux determination by the Poisson-fitting technique with quenching corrections"**
H.Utsunomiya, T. Watanabe, T. Ari-izumi　Daiki Takenaka, T. Araki, K. Tsuji, I. Gheorghe, D. M. Filipescu, S. Belyshev, K. Stopani, D. Symochko, H. Wang, G. Fan, T. Renstrøm, G. M. Tveten, Y.-W. Lui, K. Sugita, S.Miyamoto
Nuclear Instruments and Methods in Physics Research A, 896, pp.103-107 (2018).

4. **"Measurements of Neutrons from Photonuclear Reactions using Laser Compton Scattering Gamma rays"**
S. Miyamoto, A. Takemoto, M. Yamaguchi, K. Sugita, S. Hashimoto, S. Amano
Plasma and Fusion Research, 13, 2404066 (2018).

5. **"A Comprehensive Analysis of Polarized γ-ray Beam Data with the HARPO Demonstrator"**
R.Yonamine, S. Amano, D. Atti´e, P. Baron, D. Baudin, D. Bernard, P. Bruel, D. Calvet, P. Colas, S. Dat´e, A. Delbart, M. Frotin, Y. Geerebaert, B. Giebels, D. G¨otz, P. Gros, S. Hashimoto, D. Horan, T. Kotaka, M. Louzir, F. Magniette, Y. Minamiyama, S. Miyamoto, H. Ohkuma, P. Poilleux, I. Semeniouk, P. Sizun, A. Takemoto, M. Yamaguchi, and S. Wang
Proceedings of International Conference on Technology and Instrumentation in Particle Physics 2017, pp. 27-30 (2018).

6. **"Photoneutron cross sections for Ni isotopes: Toward understanding (n, gamma) cross sections relevant to the weak s-process nucleosynthesis"**
H. Utsunomiya, T. Renstrøm, G. M Tveten, S. Goriely, S. Katayama, T. Ari-izumi, D. Takenaka, D. Symochko, B. V. Kheswa, V.W. Ingeberg, T. Glodariu†, Y.-W. Lui, S. Miyamoto, A. C. Larsen, J. E. Midtbø, A. G¨orgen, S. Siem, L. Crespo Campo, M. Guttormsen, S. Hilaire, S. P´eru, and A. J. Koning
Physical Review C, 98, 054619 (2018).

7. **"The γ-ray Strength Function for Thallium Isotopes relevant to the ^{205}Pb-^{205}Tl Chronometry"**
H. Utsunomiya, T. Renstrøm, G. M Tveten, S. Goriely, T. Ari-izumi, D. Filipescu, I. Gheorghe, Y.-W. Lui, W. Luo, S. Miyamoto, A. C. Larsen, S. Hilaire, S. P´eru, and A. J. Koning
Phys. Rev. C 99, 024609 (2019).

8. **"レーザーコンプトン散乱ガンマ線による高速陽電子を用いた材料欠陥検査システムの開発"**
杉田健人, 森本悠介, 橋本智, 天野壮, 堀 史説, 岩瀬彰宏, 寺澤倫孝, 宮本修治
日本物理学会第 73 回年次大会予稿集, 25aK606-4 (2018).

9. **"γ線 Tracking 検出器の開発と性能評価"**
甲田 旭, 青井 考, 山本康嵩, 井手口栄治, MUKHI KUMAR RAJU, Hoang Thi Ha, Tung Thanh Pham, 嶋達志, 柳原陸斗, Viljamaa Topi Benjamin, 宮本修治, 静間俊行
日本物理学会第 73 回年次大会予稿集, 25aK302-10 (2018).

10. **"NewSUBARU BL01 ビームラインの整備と実験"**
宮本 修治

原子力学会春の年会(2018)予稿集, 放射線工学部会セッション, 2H_PL03
「レーザー逆コンプトン放射線場による放射線工学の新たな展開」

11. **"帯域可変ガンマ線分光器のための櫛歯結晶の設計と試作"**
羽島良一, 早川岳人, 静間俊行, 沢村勝, 永井良治, 宮本修治, 松葉俊哉
原子力学会春の年会(2018)予稿集,2018.3.26-28 大阪大学吹田キャンパス.

12. **"巨大共鳴領域で金から発生する光中性子の非等方性パラメータ"**
波戸 芳仁, 桐原 陽一, 佐波 俊哉, 糸賀 俊朗, 中島 宏, 宮本 修治, 浅野 芳裕
原子力学会春の年会(2018)予稿集, 2018.3.26-28 大阪大学吹田キャンパス.

13. **"光中性子エネルギースペクトルに対する入射光子エネルギー依存性の測定"**
佐波俊哉, 桐原陽一, 波戸芳仁, 糸賀俊朗, 中島宏, 宮本修治, 浅野芳裕
原子力学会春の年会(2018)予稿集, 2018.3.26-28 大阪大学吹田キャンパス.

14. **"Development of a variable-bandwidth monochromator for next-generation gamma sources"**
Ryoichi Hajima, Takehito Hayakawa, Toshiyuki Shizuma, Masaru Sawamura, Ryoji Nagai, Shuji Miyamoto, Shunya Matsuba
Proceedings of the 15th Annual Meetings of Particle Society of Japan, THP021 (2018).

15. **"Study of laser Compton gamma-ray source using laser diode array"**
Sho Amano, Taku Yoshikawa, Shuji Miyamoto
Proceedings of the 15th Annual Meetings of Particle Society of Japan, THP107 (2018).

16. **"Material Inspection by positron generated by LCS gamma-ray"**
Shuji Miyamotoi, Kento Sugita, Fuminobu Hori, Mititaka Terasawa, Akihiro Iwase, Sho Amano, Satoshi Hashimoto
Proceedings of the 15th Annual Meetings of Particle Society of Japan, THP108 (2018).

17. **"Present status of the NewSUBARU synchrotron light facility"**
Shuji Miyamoto, Yoshihiko Shoji, Satoshi Hashimoto, Yasuyuki Minagawa, Kazuyuki Kajimoto, Yousuke Hamada
Proceedings of the 15th Annual Meetings of Particle Society of Japan, FSP025 (2018).

18. **"How Students Understand the Visual Grade Report"**
Yoshihiko Shoji and Yoshihiro Kokubo
Proc. of 7th International Conference on Learning Technologies and Learning Environments (LTLE2018), IEEE Explore.

19. **"Erosion of fluorinated diamond-like carbon films by exposure to soft X-rays"**
Kazuhiro Kanda, Hiroki Takamatsu, Eri Miura-Fujiwara, Hiroki Akasaka, Akihiro Saiga, and Koji Tamada
Japanese Journal of Applied Physics 57, 045501 (2018)

20. **"Low-temperature activation of boron ion in silicon substrate using B10H14+ cluster and by soft X-ray irradiation"**
Akira Heya, Naoto Matsuo, and Kazuhiro Kanda
Japanese Journal of Applied Physics 57 (2018) 116502,
https://doi.org/10.7567/JJAP.57.116502.

21. **"Semimetallicity of free-standing hydrogenated monolayer boron from MgB_2"**
I. Tateishi, N. T. Cuong, C. A. S. Moura, M. Cameau, R. Ishibiki, A. Fujino, S. Okada, A. Yamamoto, M. Araki, S. Ito, S. Yamamoto, M. Niibe, T. Tokushima, D. E. Weibel, T. Kondo, M. Ogata, and I. Matsuda
Phys. Rev. Mater., 3, 024004 (2019) DOI: 10.1103/PhysRevMaterials.3.024004.

22. **"Removal of carbon contamination on oxidation-prone metal-coated mirrors using atomic hydrogen"**
Masahito Niibe, Tetsuo Harada, Akira Heya, Takeo Watanabe, Naoto Matsuo
AIP Conf. Proc. 2054, 060010 (2019). DOI: 10.1063/1.5084641

23. **"Effects of ultraviolet wavelength and intensity on AlGaN thin film surfaces irradiated simultaneously with CF4 plasma and ultraviolet"**
Retsuo Kawakamia, Masahito Niibe, Yoshitaka Nakano, Shin-ichiro Yanagiya, Yuki Yoshitani, Chisato Azuma, Takashi Mukai
Vacuum, 159, 45-50 (2018). doi.org/10.1016/j.vacuum.2018.10.017

24. **"Electron Structure of Boron Doped HOPG: Selective Observation of Carbon and Trace Dope Boron by Means of X-ray Emission and Absorption Spectroscopy"**
Masahito Niibe, Noritaka Takehira, Takashi Tokushima
e-J. Surf. Sci. Nanotech, 16, 122-126 (2018). doi: 10.1380/ejssnt.2018.122

25. **"Laser plasma soft X-ray source in the water window based on cryogenic targets"**
S.Amano
Electronics and Communications in Japan, Vol.101, Issue 1, 55- 60(2018)

26. **"Laser plasma vacuum ultraviolet light source using solid rare-gas targets"**
S.Amano
Jpn. J. Appl. Phys., Vol. 57, 086201(2018)

27. **"Water-window soft X-ray source using cryogenic Ar laser plasma"**
S.Amano
Jpn. J. Appl. Phys., Vol. 57, 126201(2018)

28. **"Plasmon confinement by carrier density modulation in graphene"**
Ngoc Han Tu, Makoto Takamura, Yui Ogawa, Satoru Suzuki, and Norio Kumada
Japanese Journal of Applied Physics 57, 110307 (2018).

29. **"Surface structures of graphene covered Cu(103)"**
Yui Ogawa, Yuya Murata, Satoru Suzuki, Hiroki Hibino, Stefan Heun, Yoshitaka Taniyasu, and Kazuhide Kumakura
Japanese Journal of Applied Physics 57, 100301 (2018).

30. **"Quasi-free-standing monolayer hexagonal boron nitride on Ni "**
Satoru Suzuki, Yuichi Haruyama, Masahito Niibe, Takashi Tokushima, Akinobu Yamaguchi, Yuichi Utsumi, Atsushi Ito, Ryo Kadowaki, Akane Maruta and Tadashi Abukawa
Materials Research Express, Volume 6, Number 1, 016304, 2019

31. **"H2O/O2 Vapor Annealing Effect on Spin Coating Alumina Thin Films for Passivation of Silicon Solar Cells"**
Abdullah Uzum, Hiroyuki Kanda, Takuma Noguchi, Yuya Nakazawa, Shota Taniwaki, Yasushi Hotta, Yuichi Haruyama, Naoyuki Shibayama, and Seigo Ito
International Journal of Photoenergy, Volume 2019, Article ID 4604932, 7 pages
https://doi.org/10.1155/2019/4604932

32. **"Water Electrolysis using Flame-Annealed Pencil Graphite Rods"**
Ryuki Tsuji, Hideaki Masutani, Yuichi Haruyama, Masahiro Niibe, Satoru Suzuki, Shin-ichi Honda, Yoshiaki Matsuo, Akira Heya, Naoto Matsuo and Seigo Ito
ACS sustainable chemistry engineering, 7, 5681-5689, 2019

Takeo Watanabe
HORIBA Technical Journal, Readout, 1, 50-55, 2018.

34. **"Reflectance measurement of EUV mirrors with s- and p-polarization light using polarization control unit"**
Tetsuo Harada, Takeo Watanabe
Proc. SPIE 10809 (2018) 108091T.

35. **"Development of Absorption-Coefficient-Measurement Method of EUV Resist by Direct-Resist Coating on a Photodiode"**
Shota Niihara, Tetsuo Harada, Takeo Watanabe
Proc. SPIE 10809 (2018) 108091Y.

36. **"Fabrication of High-Aspect-Ratio Transmission Grating Using DDR Process for 10-nm EUV Resist Evaluation by EUV Interference Lithography"**
Mana Yoshifuji, Shota Niihara, Tetsuo Harada, and Takeo Watanabe
J. Photopolym. Sci. Technol. 31 (2018) pp. 215-220.

37. **"Synthesis and Property of Tannic Acid Derivatives and Their Application for Extreme Ultraviolet Lithography System"**
Hiroto Kudo, Shizuya Ohori, Hiroya Takeda, Hiroki Ogawa, Takeo Watanabe, Hiroki Yamamoto, Takahiro Kozawa
J. Photopolym. Sci. Technol., 31, 221-225 (2018).

38. **"In-Situ Measurement of Outgassing Generated from EUV Metal Oxide Nanoparticles Resist During Electron Irradiation"**
Seiji Takahashi, Hiroko Minami, Yoko Matsumoto, Yoichi Minami, Mikio Kadoi, Atsushi Sekiguchi, Takeo Watanabe
J. Photopolym. Sci. Technol., 31, 257-260 (2018).

39. **“Synthesis of Hyperbranched Polyacetals Containing C-(4-t-butylbenz)calix[4]resorcinarene: Resist Properties for Extreme Ultraviolet (EUV) Lithography”**
Hiroto Kudo, Mari Fukunaga, Kohei Shiotsuki, Hiroya Takeda, Hiroki Yamamoto, Takahiro Kozawa, Takeo Watanabe
Reactive and Functional Polymers, 131, 361–367 (2018).

40. **"Ferromagnetic resonance of Ni wires fabricated on ferroelectric $LiNbO_3$ substrate for studying magnetic anisotropy induced by the heterojunction"**
Akinobu Yamaguchi, Akiko Nakao, Takuo Ohkochi, Akira Yasui, Toyohiko Kinoshita, Yuichi Utsumi, Tsunemasa Saiki and Keisuke Yamada
AIP Advances 8, 056411 (2018).

41. **"Heterojunction-induced magnetic anisotropy and magnetization reversal of Ni wires on $LiNbO_3$ substrate"**
Akinobu Yamaguchi, Takuo Ohkochi, Akira Yasui, Toyohiko Kinoshita, and Keisuke Yamada
Journal of Magnetism and Magnetic Materials, 453, 107-113 (2018).

42. **"環境分析や食品安全のための高次ナノ構造体を用いた微量分子検出システムの検討"**
山口明啓，福岡隆夫，内海裕一
電気学会誌 E 部門誌 Vol. 138, No. 5, pp. 191‐197 (2018).
IEEJ Transaction on Sensors and Micromachines Vol. 138, No. 5, pp. 191‐197 (2018).

43. **"Study on fabrication of moleculer sensing system using higher-order nanostructure for environmental analysis and food safety"**
Akinobu Yamaguchi, Takao Fukuoka, Yuichi Utsumi

Electron Comm. Jpn. Vol. 101, pp. 38-44 (2018).

44. **"5.8 GHz (2.45 GHz) Microwave Applicator Using Post-Wall Waveguide"**
"ポスト壁導波路を用いた 5.8 GHz (2.45 GHz)マイクロ波アプリケータ**"**
Yu Nishie, Mitsuyoshi Kishihara, Akinobu Yamaguchi, Yuichi Utsumi
Journal of Japan Society of Electromagnetic Wave Energy Applications, Vol. 2, pp. 18–25 (2018)
日本電磁波エネルギー応用学会論文誌, Vol. 2, pp. 18–25 (2018)

45. **"Fabrication of Integrated PTFE-Filled Waveguide Butler Matrix for Short Millimeter-Wave by SR Direct Etching"**
Mitsuyoshi Kishihara, Masaya Takeuchi, Akinobu Yamaguchi, Yuichi Utsumi, Isao Ohta
IEICE Transactions on Electronics, Vol.E101-C, No.6, pp.416-422 (2018)

46. **"Development of a high-sensitive electrochemical detector with micro-stirrer driven by surface acoustic waves"**
Hiroaki Sakamoto, Hiroki Kitanishi, Satoshi Amaya, Tsunemasa Saiki, Yuichi Utsumi, Shin-ichiro Suye
Sensors and Actuators B: Chemical, Volume 260, 1 May 2018, Pages 705-709 (2018)

47. **"Nano-polycrystalline diamond synthesized from neutron-irradiated highly oriented pyrolytic graphite (HOPG),"**
Mititaka Terasawa, Shin-ichi Honda, Keisuke Niwase, Masahito Niibe, Tomohiko Hisakuni, Tadao Iwata, Yuji Higo, Toru Shinmei, Hiroaki Ohfuji, Tetsuo Irifune, Diamond & Related Materials, 82, 132-136 (2018).

48. **"Quenchable compressed graphite synthesized from neutron-irradiated highly oriented pyrolytic graphite in high pressure treatment at 1500 ℃"**
Keisuke Niwase, Mititaka Terasawa, Shin-ichi Honda, masahiti Niibe, Tomohiko Hisakuni, Tadao Iwata, Yuji Higo, Takeshi Hirai, Toru Shinmei, Hiroaki Ohfuji, Tetsuo Irifune, Journal of Applied Physics, 123, 16 (2018).

(2) International meetings

1. **"Photoneutron measurements for IAEA CRP on updating the current photonuclear data library"** (Oral)
   I. Gheorghe, H. Utsunomiya, T. Ari-izumi, D. Takenaka, S. Belyshev, K. Stopani, V. Varlamov, D. Filipescu, M. Krzysiek, G. Tveten, T. Renstrøm, D. Symochko, H. Wang, G. Fan, S. Miyamoto
   Nuclear Photonics 2018, 24-29 June 2018, Brasov, Romania.

2. **"Research Project on Laser-Driven Neutron sources and applications at ILE, Osaka University"** (Poster)
   M. Nakai, Y. Arikawa, A. Yogo, Y. Abe, Y. Kato, S. Matsubara, S. Tosaki, K. Koga, N. Iwata, H. Nagatomo, A. Moracel, K. Mima, Y. Otake, S. Miyamoto, H. Nihsimura, S. Sakabe and S. Inoue
   Nuclear Photonics 2018, 24-29 June 2018, Brasov. Romania.

3. **"Non-distractive Inspection of Material Defect by Positron Generated by Laser Compton Scattering Gamma-ray Beam"** (Oral)
   S. Miyamoto, K. Sugita, M. Terasawa, F. Hori, A. Iwase, S. Amano and S. Hashimoto
   Nuclear Photonics 2018, 24-29 June 2018, Brasov, Romania.

4. **"Development of a positron annihilation measurement system by implantation of 17 MeV gamma beam into bulk materials"** (Oral)
   K. Sugita1, S. Miyamoto, M. Terasawa, A. Iwase, K. Umezawa, F. Hori
   International Conference on Positron Annihilation, ICPA18, Orlando, August 19-24 (2018).

5. **"Photoneutron Cross Section Measurements for 165Ho by Direct Neutron-Multiplicity Sorting at NewSUBARU"** (Oral)
   M. Krzysiek, H. Utsunomiya, I. Gheorghe, D. M. Filipescu, T. Renstrøm, G. M. Tveten, S. Belyshev, K. Stopani, H. Wang, G. Fan, Y-W. Lui, D. Symochko, S. Goriely, A-C. Larsen, S. Siem, V. Varlamov, B. Ishkhanov, T. Ari-izumi, S. Miyamoto
   Zakopane Conference on Nuclear Physics, 26th August to 2nd September 2018, Zakopane, Poland.

6. **"γ-ray Strength Functions and Partial GDR Cross Sections in the IAEA Photonuclear Data Project"**
   H. Utsunomiya, I. Gheorghe, D.M. Filipescu, K. Stopani, S. Belyshev, T. Renstrøm, G.M. Tveten, S. Goriely, Y.-W. Lui, T. Ari-izumi, S. Miyamoto, V. Varlamov, B. Ishkhanov, A.C. Larsen, S. Siem
   6th International Workshop on Compound-Nuclear Reactions and Related Topics, CNR18, Berkeley, September 24-28 (2018).

7. **"NewSUBARU BL05 - A industrial analysis beam line in soft and tender X-ray region"** [2P059]
   Takayuki Hasegawa, Masaharu Uemura, Tohru Awane, Noboru Fukada, Kazuhiro Kanda, Sei Fukushima
   ICG Annual Meeting, 2018.9.23-26, Pacifico Yokohama

8. **"Local structure analysis of Si-containing DLC films by X-ray absorption spectroscopy"** [key note]
   Kazuhiro Kanda
   The 3rd SLRI-NUT-SIAT Colloquium 2018, 2018.11.21, Synchrotron Light Research Institute, NakhonRatchasima, Thailand

9. **"1H NMR Detection on Nitrogen Terminated Diamond by Shallow Nitrogen Vacancy Centers"** **[**EP09.03.03]
   Takahiro Sonoda, Sora Kawai, Hayate Yamano, Jorge J. Buendia, Taisuke Kageura, Yu Ishii, Kiro Nagaoka, Ryosuke Fukuda, Takashi Tanii, Moriyoshi Haruyama, Keisuke Yamada, Shinobu Onoda, Wataru Kada, Osamu Hanaizumi, Alastair Stacey, Kazuhiro Kanda, Masaharu Uemura, Tokuyuki Teraji, Junichi Isoya, Shozo Kono and Hiroshi Kawarada

MRS Fall Meeting & Exhibit, 2018.11.25-30, the Hynes Convention Center Boston, Massachusetts, USA

10. **"Development of On-site Cleaning Method of Carbon Contamination with Atomic Hydrogen"**
Masahito Niibe, Takashi Tokushima, Tomohiko Kono, Yusuke Hashimoto, Yuka Horikawa, and Hiroaki Yoshida
The 23rd Hiroshima International Symposium on Synchrotron Radiation, Higashi-Hiroshima, 7-8, March 2019.

11. **"Effect of Atmospheric-Pressure O2 Plasma-Assisted Annealing on Photocatalytic Activity of TiO2 Nanoparticles"**
Yuki Yoshitani, Retsuo Kawakami, Hirofumi Koide, Naoki Takami, Masahito Niibe, Yoshitaka Nakano, Chisato Azuma and Takashi Mukai
Proceedings of International Symposium of Dry Process 2018, 255-256, Nagoya, Nov. 2018.

12. **"Hydrophilic Modification of Polypropylene Film Surfaces Treated by Atmospheric-Pressure Air Plasma Jet"**
Retsuo Kawakami, Yuki Yoshitani, Kimiaki Mitani, Naoki Takami, Hirofumi Koide, Norihiro Sugimoto, Masahito Niibe, Yoshitaka Nakano, Chisato Azuma and Takashi Mukai
Proceedings of International Symposium of Dry Process 2018, 253-254, Nagoya, Nov. 2018.

13. **"Water Electrolyzing Catalyst of Pt and Fe, Ni, Ru-O Catalysts Deposited by Flame-Annealing on Carbon Electrode"**
R. Tsuji, H. Masutani, M. Niibe, Y. Haruyama, A. Heya, S. Nakajima, N. Matsuo, H. Fujisawa, S. Honda, S. Ito
2018 Annual Nanotechnology Conf., Viena, Austria, Sep. 3-5 2018.

14. **"Water Electrolysis using Flame-Annealed Pencil Carbon Electrode"**
H. Masutani, R. Tsuji, M. Niibe, A. Heya, N. Matsuo, Y. Matsuo, S. Honda, S. Ito
2018 Annual Nanotechnology Conf., Viena, Austria, Sep. 3-5 2018.

15. **"Removal of carbon contamination on easily-oxidizable-metal coated mirrors for synchrotron radiation beamlone using atomic hydrogen"**
Masahito Niibe, Tetsuo Harada, Akira Heya, Takeo Watanabe, Naoto Matsuo
Inter'l. Conf. Hot Wire & Initiated Chemical Vapor Deposition (HWCVD10), Kitakyushu, Japan, 3-6, Sep. 2018.

16. **"Removal of carbon contamination on oxidation-prone metal-coated mirrors using atomic hydrogen"**
Masahito Niibe, Tetsuo Harada, Akira Heya, Takeo Watanabe, Naoto Matsuo
Inter'l. Conf. Synchrotron Rad. Instrumentation (SRI 2018), Taipei Taiwan, 10-15, June 2018.

17. **"Cryogenic-Ar laser-plasma-source"**
S.Amano (Invited)
World Congress on Plasma Science and Technology (WCPST2018), Stockholm, Sweden, November 4-7, 2018.

18. **"Growth Process of Hexagonal Boron Nitride in the Diffusion and Precipitation Method Studied by X-ray Photoelectron Spectroscopy"**
Satoru Suzuki, Yuichi Haruyama
14th Int. Conf. Atomically Controlled Surfaces and Interfaces (ACSIN14), Sendai, October 22, 2018.

19. **"Quasi-Free-Standing Monolayer Hexagonal Boron Nitride on Ni Studied by XAS, XES, and PEEM"**
Satoru Suzuki, Yuichi Haruyama, Masahito Niibe, Takashi Tokushima, Akinobu Yamaguchi, Yuichi Utsumi, Atsushi Ito, Ryo Kadowaki, Akane Maruta, and Tadashi Abukawa
International Workshop on Trends in Advanced Spectroscopy in Materials Science (TASPEC), Hiroshima, October 6, 2018.

20. **"Evaluation on the molecular orientation in photoreactive liquid crystalline polymer films by NEXAFS spectroscopy"**
Y. Haruyama, M. Okada, M. Kondo, and N. Kawatsuki
14th International Conference on Electron Spectroscopy and Structure (ICESS-14), ShanhaiTech University, Shanhai, China, October 8, 2018

21. **"EUV Application Research at NewSUBARU"**
T. Watanabe and T. Harada
Optics and Photonics International Congress, Yokohama, 2018/4/23-27. (Invited)

22. **"Synthesis and Property of Tannic Acid Derivatives and Their Application for Extreme Ultraviolet Lithography System"**
Hiroto Kudo, Shizuya Ohori, Hiroya Takeda, Hiroki Ogawa, Takeo Watanabe, Hiroki Yamamoto, Takahiro Kozawa
The 35th International Conference of Photopolymer Science and Technology, Makuhari Messe, Chiba, Japan, 2018/6/25-28. (Invited)

23. **"In-Situ Measurement of Outgassing Generated from EUV Metal Oxide Nanoparticles Resist During Electron Irradiation"**
Seiji Takahashi, Hiroko Minami, Yoko Matsumoto, Yoichi Minami, Mikio Kadoi, Atsushi Sekiguchi, Takeo Watanabe
The 35th International Conference of Photopolymer Science and Technology, Makuhari Messe, Chiba, Japan, 2018/6/25-28.

24. **"Fabrication of High-Aspect-Ratio Transmission Grating Using DDR Process for 10-nm EUV Resist Evaluation by EUV Interference Lithography"**
Mana Yoshifuji, Shota Niihara, Tetsuo Harada, and Takeo Watanabe
ICPST35, Chiba, Japan, 2018/6/25-28.

25. **"Photopolymer Technology for Extreme Ultraviolet Lithography"**
Takeo Watanabe, Tetsuo Harada
Polymer World Congress, Stockholm, Sweden, 2018/9/3-6. (Invited)

26. **"Reflectance measurement of EUV mirrors with s- and p-polarization light using polarization control unit"**
Tetsuo Harada, Takeo Watanabe
EUV Lithography Symposium 2018, Monterey, USA, 2018/9/18.

27. **"Development of Absorption-Coefficient-Measurement Method of EUV Resist by Direct-Resist Coating on a Photodiode"**
Shota Niihara, Tetsuo Harada, Takeo Watanabe
EUV Lithography Symposium 2018, Monterey, USA, 2018/9/18.

28. **"Research Activities of Extreme Ultraviolet Lithography at University of Hyogo"**

Takeo Watanabe, Tetsuo Harada
Micro Nano Engineering 2018, Copenhagen, 2018/9/24-27.

29. **"Research activity of evaluation tools including soft X-ray optics for the research of EUV lithography at University of Hyogo"**
Takeo Watanabe, Tetsuo Harada
Physics of X-Ray and Neutron Multilayer Structures (PXRNMS) 2018, Paris, 2018/11/7-9.

30. **"Development of EUV Phase Imaging Microscope for Mask-3D-Effect and Defect Evaluation"**
Tetsuo Harada, Takeo Watanabe
MNC2018, Sapporo, Japan, 2018/11/14. (Invited)

31. **"Fabrication of High-Aspect-Ratio Transmission Grating Using DDR Process for 10-nm EUV Resist Evaluation by EUV Interference Lithography"**
Mana Yoshifuji, Tetsuo Harada, Takeo Watanabe
MNC2018, Sapporo, Japan, 2018/11/14.

32. **"Magnetic field dependence of ferromagnetic resonance of Ni wires fabricated on ferroelectric LiNbO3 substrate for studying magnetic anisotropy induced by the heterojunction"**
A. Yamaguchi, A. Nakao, Y. Utsumi, T. Saiki, Y. Takizawa, T. Ogasawara, K. Yamada
INTERMAG 2018 Conference, Singapore, April 23-27, 2018

33. **"Heterojunction-induced Magnetic Anisotropy of Ni Wires on LiNbO3 Substrate"**
Akinobu Yamaguchi
5th International Conference of Asian Union of Magnetics Societies (IcAUMS 2018), Jeju, Korea, June 3-7, 2018, (INVITED)

34. **"Dielectrophoresis-controllable aggregation and dispersion of Aunanoparticles-decorated polystyrene beads with SERS-activity"**
Akinobu Yamaguchi, Yuichi Utsumi, Takao Fukuoka
International Conference on Advancing Molecular Spectroscopy, Nishinomiya Campus of Kwansei Gakuin University, Hyogo, Japan, June 30 - July 1, 2018

35. **"The Self-assembly of Gold Nanoparticles is Available to SERS Nanobeacons"**
Takao Fukuoka, Yasushige Mori, Akinobu Yamaguchi
International Conference on Advancing Molecular Spectroscopy, Nishinomiya Campus of Kwansei Gakuin University, Hyogo, Japan, June 30 - July 1, 2018

36. **"The study on magnetization reversal of zebra-stripe domain structure in Ni wires fabricated on a LiNbO3 substrate"**
A. Yamaguchi, K. Yamada, A. Nakao, T. Saiki, Y. Utsumi and T. Ogasawara
21st International Conference on Magnetism (ICM2018), San Francisco, USA, July 15-20, 2018

37. **"Wire width dependence of ferromagnetic resonance in Ni wires on ferroelectric LiNbO3 substrate for studying heterojenction-induced magnetic characteristics"**
A. Yamaguchi, A. Nakao, T. Saiki, Y. Utsumi, T. Ogasawara and K. Yamada
21st International Conference on Magnetism (ICM2018), San Francisco, USA, July 15-20, 2018

38. **"The Study on the Generation of Magnetic Anisotropy Induced by the Heterojunction between Ferromagnetic and Ferroelectric Materials"**
A. Yamaguchi, T. Ogasawara, Y. Utsumi, K. Yamada, A. Nakao

23rd International Colloquium on Magnetic Films and Surfaces (ICMFS 2018), UC Santa Cruz, USA, July 22-27, 2018

39. **"Study on magnetic characteristics modulated by Ferromagnetic/Ferro electric heterojunction"**
A. Yamaguchi
The 34th International Conference of Photopolymer Science and Technology
9th JEMS Conference 2018, Mainz, Germany, September 3-7, 2018

40. **"Ferromagnetic resonance study on Ni wire"**
Akinobu Yamaguchi
The 34th International Conference of Photopolymer Science and Technology
Micro Nano Engineering 2018, Copenhagen, Denmark, September 24-27, 2018

41. **"Study on surface acoustic wave actuator utilizing gravity for feeding various kinds of micro-powders"**
T. Saiki, K. Iimura, A. Yamaguchi, M. Takeo, Y. Utsumi, M. Suzuki
Micro Nano Engineering 2018, Copenhagen, Denmark, September 24-27, 2018

42. **"Study on fabrication system of 3D printing or additive manufacturing process using X-ray radiolysis"**
A. Yamaguchi, I. Sakurai, I. Okada, A. Yamaguchi, M. Ishihara, T. Fukuoka, S. Suzuki, Y. Utsumi
Micro Nano Engineering 2018, Copenhagen, Denmark, September 24-27, 2018

43. **"Characteristics of new deep X-ray lithography beamline (BL11) at new SUBARU"**
Masaya Takeuchi, Akinobu Yamaguchi, Yuichi Utsumi
JCK MEMS/NEMS 2018 Conference, Dalian, China, July 13-15, 2018

44. **"Anisotropic pyrochemical etching of PTFE induced by synchrotron radiation irradiation"**
Masaya Takeuchi, Akinobu Yamaguchi, and Yuichi Utsumi
29th Micromechanics and Microsystems Europe Workshop, 28, Smolenice, Slovakia, August 26-29, 2018