

研究業績目録 2017年1月～2017年12月

青 柳 充

a. 論文

Katayama, Yumi; **Aoyagi, Mitsuru**; Matsumoto, Takuya; Harada, Hiroyuki; Egashira, Naoyoshi; Mitoma, Yoshiharu; Simion, Alina M; Simion, Cristian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst. *Environmental Science and Pollution Research International* (2017), **24**(1), p.591-597.

Matsumoto, Takuya; Ishizaki, Yui; Mochizuki, Keika; **Aoyagi, Mitsuru**; Mitoma, Yoshiharu; Ishizaki, Shoichiro; Nagashima, Yuji. Urinary Excretion of Tetrodotoxin Modeled in a Porcine Renal Proximal Tubule Epithelial Cell Line, LLC-PK1. *Marine Drugs* (2017), **15**(7), 225; doi: 10.3390/md15070225.

c. 國際会議

Sara Inoue, Tomoyuki Yoshino and **Mitsuru Aoyagi**; Influence of Condensed Structures in Native Lignin Derivatives on Photo-relaxation Processes, IUMRS-ICA2017, *The 15th International Conference on Advanced Materials*, 2017. 京都大学, 平成 29 年 8 月 31 日 .

Masaki Yamamoto, Toshihito Otake, **Mitsuru Aoyagi**; Contribution of Condensed Structures in Native Lignin Derivatives on Photo-excited Electron Transfers, IUMRS-ICA2017, *The 15th International Conference on Advanced Materials*, 2017. 京都大学, 平成 29 年 8 月 31 日 .

Nobuhiro Watanabe, Yoshiharu Mitoma, Takuya Matsumoto, **Mitsuru Aoyagi**, Selective chemical modification of residual lignin on alkaline pulp, IUMRS-ICA2017, *The 15th International Conference on Advanced Materials*, 2017. 京都大学, 平成 29 年 9 月 1 日 .

Takuya Matsumoto, Yui Ishizaki, Keika Mochizuki, **Mitsuru Aoyagi**, Yoshiharu Mitoma, Shoichiro Ishizaki, Yuji Nagashima; Carrier-mediated transport of tetrodotoxin in porcine renal proximal tubule epithelial cell line LLC-PK1 monolayers, *The JSFS 85th Anniversary-Commemorative International Symposium*, 2017. 東京海洋大学, 平成 29 年 9 月 22 日 .

e. 招待講演

青柳充, 天然リグニン由來の熱可塑性循環型高分子, 日本接着学会関西支部, 第4回岡山講演会, 3月 14 日, 岡山

青柳充, 自生草本植物の素材としての活用～親水性高分子複合体の調製, 高分子学会, エコマテリアル研究会, 10月 6 日, 京都

阿 部 靖 之

a. 論文

Ichiko Wakasa, Mizuki Hayashi, **Yasuyuki Abe**, Hiroshi Suzuki; Distribution of follicles in canine ovarian tissues and xenotransplantation of cryopreserved ovarian tissues with even distribution of follicles,

Reproduction in Domestic Animals. 52 (Suppl. 2), p. 219-223, 2017.

Asako J. Nakamura, Masatoshi Suzuki, Christophe E. Redon, Yoshikazu Kuwahara, Hideaki Yamashiro,
Yasuyuki Abe, Shintaro Takahashi, Tomokazu Fukuda, Emiko Isogai, William M. Bonner, Manabu
Fukumoto; The Causal Relationship between DNA Damage Induction in Bovine Lymphocytes and the
Fukushima Nuclear Power Plant Accident, *Radiation Research.* 187 (5), p. 630-636, 2017.

Motoko Morimoto, Ayaka Kato, Jin Kobayashi, Kei Okuda, Yoshikazu Kuwahara, Yasushi Kino, Yasuyuki
Abe, Tsutomu Sekine, Tomokazu Fukuda, Emiko Isogai, Manabu Fukumoto; Gene expression
analyses of the small intestine of pigs in the ex-evacuation zone of the Fukushima Daiichi Nuclear
Power Plant, *BMC Veterinary Research.* 13 (1), 337, 2017.

Yasuyuki Abe, Sakimi Yokozawa, Rika Umemiya-Shirafuji, Paul Franck Adjou Moumouni, Yoshinori
Suwa, Hiroshi Suzuki; Fertilizing ability of canine spermatozoa cryopreserved with skim milk based
extender in a retrospective study, *Reproduction in Domestic Animals.* (Accepted)

大竹才人

a. 論文

Toshihito Ohtake and Ken-ichiro Iijima; Surface oxide protection of Si(111) in solution by the surfactant
molecules, *Journal of Surface Engineered Materials and Advanced Technology.* 7, (4), p.61-68, 2017.
大竹才人; 太陽光を利用した水分解による水素生成, 生命環境学術誌(県立広島大学), (9), p.64-65,
2017.

荻田信二郎

a. 論文

Shinjiro Ogita; Hamako Sasamoto; In vitro bioassay of allelopathy in four bamboo species; *Bambusa*
multiplex, *Phyllostachys bambusoides*, *P. nigra*, *Sasa kurilensis*, using sandwich method and
protoplast co-culture method with digital image analysis. *American Journal of Plant Sciences.* (2017),
8(7), 1699-1710.

Taiji Nomura; Ayaka Ueno; Shinjiro Ogita; Yasuo Kato; Molecular diversity of tuliposide B-converting
enzyme in tulip (*Tulipa gesneriana*): identification of the root-specific isozyme. *Bioscience,*
Biotechnology, and Biochemistry. (2017), 81(6), 1185-1193.

b. 招待講演

Shinjiro Ogita; Taiji Nomura; Yasuo Kato; A new concept of plant cell, tissue and organ culture approach
for practical manipulation of plant stem cells. *The 5th International Symposium on Plant Signaling*
and Behavior. (2017), 52-53. (Invited speaker, Matsue, Japan).

加 藤 一 生

a. 論文

加藤一生 ; 中国地方で採取した苔中の福島第一原発事故由来の放射性セシウム, *生命環境学術誌*, (9), p.9–25, 2017.

Kazuo Kato : Radioactive cesium concentrations in purchased tea leaves and the other plant materials for brewing tea, *Journal of Life and Environmental Sciences*, (9), p.27–35, 2017.

上水流 久 彦

a. 論文

上水流久彦 ; 中華民国の台灣化にみる金門の位置づけに関する一考察, 『アジア社会文化研究』, 18, p.65-88, 2017.

b. 図書

上水流久彦 · 太田心平 · 尾崎孝宏 · 川口幸大編著 ; 東アジアで学ぶ文化人類学, 昭和堂, 272p., 2017.

上水流久彦 · 村上和弘 · 西村一之編著 ; 『境域の人類学 八重山・対馬にみる「越境」』, 風響社, 480p., 2017.

河 村 和 也

a. 論文

河村和也 · 馬本勉 · 松岡博信 · 小篠敏明 ; 明治期～昭和期の英語教科書のリーダビリティ分析 : 女学校教科書を中心として, 日本言語教育 ICT 学会紀要 (4), pp.71-85, 2017.

楠 堀 誠 司

c. 國際会議

Kusubori S., Kanayama K., and Ishikawa K. : How did the participants experience the SHIMANAMI-Walk?- quantitative and qualitative analyses.- . 45th International Conference of Association for Experiential Education, Montreal, Canada, 2017.

甲 村 浩 之

a. 論文

伊達英代, 中島安基江, 平本春絵, 井原紗弥香, 新井 清, 高尾信一, 野下俊朗, 甲村浩之, 2016, 日本薬局方「サイコ」の5種サイコサポニン含量の実態調査. 広島県立総合技術研究所保健環境センター研究報告, 24:27-31

b. 図書

Kohmura, H., 2017, 28. Japanese shallot (*Allium wakegi Araki*), Vitrification. Manual of cryopreservation methods using cryo-plate. Plant Tissue Culture and Cryopreservation Group. Niino, T.

ed. : 90-91 ISBN 978-4-924843-85-1

Kohmura, H., 2017, 29. Chrysanthemum Multiple Shoot Clusters, Vitrification. Manual of cryopreservation methods using cryo-plate. Plant Tissue Culture and Cryopreservation Group. Niino, T. ed. : 92-93 ISBN 978-4-924843-85-1

Kohmura, H., 2017, 30. Multiple Bud Clusters of Asparagus, Vitrification. Manual of cryopreservation methods using cryo-plate. Plant Tissue Culture and Cryopreservation Group. Niino, T. ed. : 94-95 ISBN 978-4-924843-85-1

d. 国内会議

甲村浩之, 新村千聰, 出雲聖奈, 澤井亮人, 菅野明, 2017, アスパラガスの袋利用株養成, 促成栽培における袋のまま伏せ込みの可能性, 園芸学会中四国支部会要旨, 56 : 25

甲村浩之, 横井直人, 諸橋修一, 田村隆幸, 由井秀紀, 安永真, 白石豊, 矢野孝喜, 野下俊朗, 五十嵐元子, 渕野裕之, 安食菜穂子, 林茂樹, 菱田敦之, 川原信夫, 大渴直樹, 川嶋浩樹, 2017, トウキ及びミシマサイコの本州以南における栽培適性の解明と持続的栽培技術の開発 第1報 栽培1年目の各地の生育状況・品質の比較. 日本生薬学会第64回年会, 千葉市 2P-66 : 281

甲村浩之, 村上満理奈, 澤井亮人, 前田智雄, 2017, ホワイトアスパラガスの長期採り栽培におけるプロトディオシン含量の時期別・方法別差異, 園芸学研究, 16別1 : 361

北條怜子, 染谷美和, 鈴木玲美, 横口洋子, 関哲也, 青木理佐, 岩崎美和, 萩原綾乃, 藤尾拓也, 吉田泰, 甲村浩之, 山初仁志, 加藤正一, 松永邦則, 元木悟, 2017, 異なる地域におけるソバージュ栽培が露地夏秋どりミニトマトのアミノ酸含量および糖含量に及ぼす影響, 園芸学研究, 16別1 : 343

甲村浩之, 高下翔太, 2017, さくら色アスパラガスの長期採り栽培の改良法, 園芸学研究, 16別2: 470

小林謙介

b. 図書

稻葉敦、伊坪徳宏、栗島英明、小林謙介、芝池成人、田畠智博、田原聖隆、成田暢彦、八木田浩史 2017 「演習で学ぶ LCA- ライフサイクル施行から LCA の実務まで -」 第3刷、一般財団法人未踏科学技術協会

齋藤靖和

a. 論文

Ohwada, Ryouhei; Ozeki, Yu; Saitoh, Yasukazu; High-dose ascorbic acid induces carcinostatic effects through hydrogen peroxide and superoxide anion radical generation-induced cell death and growth arrest in human tongue carcinoma cells. *Free Radical Research.* (2017), 51(7-8), 684-692.

菅 裕

a. 論文

- X. Grau-Bové, G. Torruella, S. Donachie, **H. Suga**, G. Leonard, T. A. Richards, I. Ruiz-Trillo, Dynamics of genomic innovation in the unicellular ancestry of animals. *eLife* 6, e26036 (2017).
- E. Gentekaki, B. A. Curtis, C. W. Stairs, V. Klimes, M. Elias, D. E. Salas-Leiva, E. K. Herman, L. Eme, M. C. Arias, B. Henrissat, F. Hilliou, M. J. Klute, **H. Suga**, S. B. Malik, A. W. Pightling, M. Kolisko, R. A. Rachubinski, A. Schlacht, D. M. Soanes, A. D. Tsatsou, J. M. Archibald, S. G. Ball, J. B. Dacks, C. G. Clark, M. van der Giezen, A. J. Roger; Extreme genome diversity in the hyper-prevalent parasitic eukaryote *Blastocystis*. *PLoS Biology* 15, e2003769 (2017).

内 藤 佳奈子

a. 論文

内藤佳奈子; 檀上志帆; 清田忠志; 河尻義孝; 坂本節子; 阿部和雄; 吉永郁生; 広島湾海水中の植物プランクトン増殖に及ぼす鉄溶出施肥材の影響, *生命環境学術誌*, 9, 1-7, 2017.

Kai, Nodoka; **Naito, Kanako**; Mito, Saeko; Miyahara, Kazutaka; Sakamoto Setsuko. Distribution and behavior of harmful algae and trace metals in Harima-Nada, Japan. *The JSFS 85th Anniversary Commemorative International Symposium “Fisheries Science for Future Generations” Symposium Proceedings*, 04006, 2017.

西 村 和 之

a. 論文

Shogo Sakita; Jun Nishimoto; **Kazuyuki Nishimura**; Porous Structure of Municipal Solid Waste Incineration Bottom Ash in Initial Stage of Landfill, *Journal of Geoscience and Environment Protection*, 5, 9-20, 2017

西 本 潤

a. 論文

今井昭二; 山本祐平; 佐名川洋右; 来見祐哉; 黒谷功; 西本潤; 菊地洋一; 四国・高知県の梶ヶ森山頂の樹氷と降雪中のカドミウム, 鉛, 非海塞性硫酸イオンの 2014 年から 2008 年の冬季における長距離輸送機構, *分析化学*, 66, (2), p.95 – 113, 2017.

Sakita, Shogo; **Nishimoto, Jun**; Nishimura, Kazuyuki; Porous Structure of Municipal Solid Waste Incineration Bottom Ash in Initial Stage of Landfill, *Journal of Geoscience and Environment Protection*, 5, (9), p.9 – 20, 2017.

野 下 俊 朗

a. 論文

- Miyakawa Takuya; Miyauchi Yumiko; Tanokura Masaru; Kumazawa Ayane; Fuke Yoko; Noshita Toshiro; Okada Masahiro; Preparation of the Extracellular Domain of Recombinant Human Toll-like Receptor 6. *The Protein Journal*, 36(1), 28-35 (2017).
- Noshita Toshiro; Tai Akihiro; Matsumoto Takuya; Miura Kaori; Ikeda Kaoru; Hamada Yoshitomo; Structure-activity relationship of flavanone. Anti-degranulation activity of 7-O-substituted hesperetin. *Natural Product Research*, 31(18), 2137-2142 (2017).
- Noshita Toshiro; Matsumoto Kohei; Nishikawa Hikaru; Ouchi Hidekazu; Hamada Yoshitomo; Saito Akiko; Yamada Teiko; The structure proposed for apteniol D is different from that of the compound obtained by total synthesis. *Natural Product Research*, 31(2), 163-168 (2017).

橋 本 温

a. 論文

- 橋本温, 土岡宏彰, 泉山信司, 中野勲, 遠藤卓郎; 最確数法を用いた簡便なクリプトスピリジウム計数法の開発, *環境技術*, 46, (11), p.37-44, 2017
- 横内朝香, 中野勲, 橋本温; 抗菌剤の異なる 2 種のハンドフォード改良培地の河川水および下水流入水からの嫌気性芽胞菌の検出・定量性, *水道協会雑誌*, 86, (10), p.2-10, 2017
- 東和之, 大田直友, 橋本温, 大谷壮介, 上月康則; ニホンスナモグリの生物攪拌による底質環境の変改と底生生物相への影響, *土木学会論文集 B3(海洋開発)*, 73, (2), p.857-862, 2017.

- A. Hashimoto**, H. Tsuchioka, K. Higashi, N. Ota and H. Harada; Distribution of enterotoxin-positive Clostridium perfringens is a potential source tracking indicator of human fecal pollution in aquatic environments, *Journal of Water and Environmental Technology*, 14, (6), 447-454, 2016.

原 田 浩 幸

a. 論文

- Hari Paudyal; Bimala Pangeni; Katsutoshi Inoue; **Hiroyuki Harada**; Hidetaka Kawakita; Keisuke Ohto; Shafiq Alam; Adsorptive Removal of Trace Concentration of Fluoride Using Orange Waste Treated Using Concentrated Sulfuric Acid, *International Journal of Materials Science and Applications* Volume 6, Issue 4, July 2017, Pages: 212-222
- Hiroyuki Harada**; Yumi Katayama; Asmak Afriliana; Minori Inoue; Ryota Teranaka; Yoshiharu Mitoma; Effects of Co-Existing Ions on the Phosphorus Potassium Ratio of the Precipitate Formed in the Potassium Phosphate Crystallization Process, *Journal of Environmental Protection*, 2017, 8, 1424-1434

- Katayama, Yumi; Aoyagi, Mitsuru; Matsumoto, Takuya; **Harada, Hiroyuki**; Egashira, Naoyoshi; Mitoma, Yoshiharu; Simion, Alina M; Simion, Cristian. Hydrodehalogenation of hexachloro- and

hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst. *Environmental Science and Pollution Research International* (2017), 24(1), p.591-597.

- A. Hashimoto, H. Tsuchioka, K. Higashi, N. Ota and **H. Harada**; Distribution of enterotoxin-positive Clostridium perfringens is a potential source tracking indicator of human fecal pollution in aquatic environments, *Journal of Water and Environmental Technology*, 14, (6), 447-454, 2016.

福 永 健 二

a. 論文

福永健二; アワの起源と作物進化 雜草ネコジャラシはどのようにして雑穀アワになったのか?
化学と生物 ,55(2), p.98-104, 2017.

b. 図書

Fukunaga, Kenji; Genetic structure of foxtail millet landraces. In *The Foxtail Millet Genome* (ed. Manoj Prasad). P.77-83. Springer International Publishing AG, 2017.

藤 井 宣 彰

a. 論文

藤井宣彰; 小学校専科指導に関する施策, *教育学研究紀要 (CD-ROM 版)*, 62, p.232-237, 2017 年.

松 崎 秀 紀

a. 論文

Megumi Maeda, Ying Chen, Suni Lee, Naoko Kumagai-Takei, Kei Yoshitome, **Hidegoro Matsuzaki**, Shoko Yamamoto, Tamayo Hatayama, Miho Ikeda, Yasumitsu Nishimura, Takemi Otsuki; Induction of IL-17 production from human peripheral blood CD4+ cells by asbestos exposure, *International Journal of Oncology*, 50, (6), p.2024-2032, 2017

Suni Lee, Hiroaki Hayashi, Naoko Kumagai-Takei, **Hidegoro Matsuzaki**, Kei Yoshitome, Yasumitsu Nishimura, Kozo Uragami, Masayasu Kusaka, Shoko Yamamoto, Miho Ikeda, Tamayo Hatayama, Wataru Fujimoto, Takemi Otsuki; Clinical evaluation of CENP-B and Scl-70 autoantibodies in silicosis patients, *Experimental and Therapeutic Medicine*, 13, (6), p.2616-2622, 2017

松 本 拓 也

a. 論文

Toshiro Noshita, Akihiro Tai, **Takuya Matsumoto**, Kaori Miura, Kaoru Ikeda, Yoshitomo Hamada; Structure-activity relationship of flavanone. Anti-degranulation activity of 7-O-substituted hesperetin, *Natural Product Research*, 31, (18), p.2137-2142, 2017.

Yumi Katayama, Mitsuru Aoyagi, **Takuya Matsumoto**, Hiroyuki Harada, Alina M. Simion, Naoyoshi Egashira, Yoshiharu Mitoma; Hydrodehalogenation of hexachloro- and hexabromobenzene by

metallic calcium in ethanol, in the presence of Rh/C catalyst, *Environmental Science and Pollution Research*, 24, (1), p.591-597, 2017.

御堂岡あにせ, 川口 修, 工藤孝也, 飯田悦左, 長尾則男, 松本拓也; 低塩分飼育が外傷のある海産魚の生残性に与える影響について, 日本水産学会誌, 83, (1), p.77-79, 2017

Takuya Matsumoto, Yui Ishizaki, Keika Mochizuki, Mitsuru Aoyagi, Yoshiharu Mitoma, Shoichiro Ishizaki, Yuji Nagashima; Urinary excretion of tetrodotoxin modeled in a porcine renal proximal tubule epithelial cell line, LLC-PK₁, *Marine Drugs*, 15, (7), 225, 2017.

c. 国際会議

Nobuhiro Watanabe, Yoshiharu Mitoma, **Takuya Matsumoto**, Mitsuru Aoyagi, Selective chemical modification of residual lignin on alkaline pulp, *The 15th International Conference on Advanced Materials*, 2017. 京都大学, 平成 29 年 9 月 1 日 .

Takuya Matsumoto, Yui Ishizaki, Keika Mochizuki, Mitsuru Aoyagi, Yoshiharu Mitoma, Shoichiro Ishizaki, Yuji Nagashima; Carrier-mediated transport of tetrodotoxin in porcine renal proximal tubule epithelial cell line LLC-PK1 monolayers, *The JSFS 85th Anniversary-Commemorative International Symposium*, 2017. 東京海洋大学, 平成 29 年 9 月 22 日 .

Rieko Ohki, **Takuya Matsumoto**, Shoichiro Ishizaki, Yuji Nagashima; In vitro uptake of tetrodotoxin into marine gastropods by tissue culture, *The JSFS 85th Anniversary-Commemorative International Symposium*, 2017. 東京海洋大学, 平成 29 年 9 月 22 日 .

三 苦 好 治

a. 論文

Mallampati, Srinivasa, Reddy; Lee, Byoung Ho; **Mitoma, Yoshiharu**; Simion, Cristian; Heterogeneous nano-Fe/Ca/CaO catalytic ozonation for selective surface hydrophilization of plastics containing brominated and chlorinated flame retardants (B/CFRs): separation from automobile shredder residue by froth flotation. *Environmental Science and Pollution Research International* (2017), 24(5), p.4469-4479.

Katayama, Yumi; Aoyagi, Mitsuru; Matsumoto, Takuya; Harada, Hiroyuki; Egashira, Naoyoshi; **Mitoma, Yoshiharu**; Simion, Alina M; Simion, Cristian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst. *Environmental Science and Pollution Research International* (2017), 24(1), p.591-597.

Mallampati, Srinivasa, Reddy; Lee, Byoung Ho; **Mitoma, Yoshiharu**; Simion, Cristian; Selective sequential separation of ABS/HIPS and PVC from automobile and electronic waste shredder residue by hybrid nano-Fe/Ca/CaO assisted ozonisation process. *Waste Management (Oxford, United Kingdom)* (2017), 60, p.428-438.

Matsumoto, Takuya; Ishizaki, Yui; Mochizuki, Keika; Aoyagi, Mitsuru; **Mitoma, Yoshiharu**; Ishizaki, Shoichiro; Nagashima, Yuji; Urinary Excretion of Tetrodotoxin Modeled in a Porcine Renal Proximal

Tubule Epithelial Cell Line, LLC-PK1. *Marine Drugs* (2017), 15(7), 225; doi: 10.3390/md15070225.

e. 招待講演

Mitoma, Yoshiharu; Effective remediation of radioactive cesium-contaminated dry soils with a functional magnetite and intrinsic performances. *International Conference & Exhibition on Advanced & Nano Materials (ICANM-2017)*. August 7, Toronto, Canada.

三苫好治：機能性マグネタイトを土壤分級助剤として用いる常温乾式除染方法とその装置、電気学会、10月14日、福島

八木俊樹

b. 図書

Yagi Toshiki, Kamiya Ritsu. Genetic approaches to axonemal dynein function in *Chlamydomonas* and other organisms. "Dyneins (2nd edition)" (King SM, editor) Chapter 7. Elsevier, Amsterdam. (2017), 219-249.

e. 招待講演

Yagi, Toshiki, Identification of nine novel Chlamydomonas mutants missing a single species of five major-type or four minor-type inner-arm dyneins. *International Workshop "Dynein 2017"* Awajishima-island, Japan, (2017), Oct. 30.

山本幸弘

a. 論文

Yukihiro Yamamoto, Hiroki Yoshida, Yoshiharu Nagai, Setsuko Hara, Preparation of chiral triacylglycerols, sn-POO and sn-OOP, via lipase-mediated acidolysis reaction. *Journal of Oleo Science, accepted.*