

## 研究業績目録 2016年1月～12月

青 柳 充

Katayama, Yumi; Aoyagi, Mitsuru; Takuya, Matsumoto; Harada, Hiroyuki; Simion, Akina M; Egashira, Naoyoshi; Mitoma, Yoshiharu Simion, Christian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst, *Environ. Sci. Pollut. Res.* (2017), 24, 591-597.

Funaoka, Masamitsu; Mikame, Keigo; Aoyagi, Mitsuru. Lignin-Based Polymers (Ligno-phenol, Pyronedicalboxylic acid), *Encyclopedia of Polymeric Nanomaterials*, Springer-Verlag, Berlin Heidelberg (2016), 401-420

大 草 輝 政

大草輝政訳, 2016, 「感情」スクリブナー思想史大事典翻訳編集委員会編『スクリブナー思想史大事典(全10巻)』丸善出版(第2巻), 577-579. (Robert C. Solomon, "Emotions," in Marianne Cline Horowitz ed., 2004, *New Dictionary of the History of Ideas*, 649-651.)

大草輝政訳, 2016, 「ソフィスト」スクリブナー思想史大事典翻訳編集委員会編『スクリブナー思想史大事典(全10巻)』丸善出版(第6巻), 2153-2155. (David D. Corey, "Sophists," in Marianne Cline Horowitz ed., 2004, *New Dictionary of the History of Ideas*, 2241-2243.)

荻 田 信 二 郎

Shinjiro, Ogita; Takao, Kishimoto; Taiji, Nomura; Yasuo, Kato. Chapter 7: Plant cell, tissue, and organ culture approaches to explore the functional cell differentiation in *Phyllostachys* and *Bambusa bamboo* plants. In *Fiber Plants: Biology, Biotechnology and Applications* (Edited by Ramawat KG and Ahuja MR) Springer (2016) ISBN: 9783319445694

加 藤 一 生

加藤一生, 永吉竜太郎, 2016, 「西日本で採取した土・腐葉土・枯葉中の放射性セシウム濃度」『生命環境学雑誌』(県立広島大学生命環境学部) 8: 47-62.

加藤一生, 2016, 「東京都で2013年4月以降に採取した飲料水中の放射性セシウム濃度の測定」『生命環境学雑誌』(県立広島大学生命環境学部) 8: 69-76.

甲 村 浩 之

甲村浩之, 王丹, 小川裕貴, 大地有城, 熊本孝司, 長尾則男, 関哲也, 2016, 「茎レタス(チシャトウ)の広島県北部での栽培における生育と品質特性」『生命環境学術誌』, 8: 29-45.

甲村浩之, 2016, 「第6章 北半球のオフシーズンをターゲットに, オセアニアのアスパラガス生産」, 「第7章 アメリカとの自由貿易協定で拡大したメキシコのアスパラガス生産」他, 元木悟編『世界と日本のアスパラガス 国際化時代の日本のアスパラガス栽培』養賢堂, 68-89

甲村浩之, 久保田絢香, 村上満理奈, 大前良美, 前田智雄, 2016, 「ホワイトアスパラガスの夏秋

期長期採り栽培におけるプロトディオシン等品質成分」『園芸学研究』, 15 別 1 : 161.

甲村浩之, 出雲聖奈, 前野智帆, 村上満理奈, 小次啓二, 2016, 「アスパラガスの袋利用株養成, 促成栽培の品種間差および根部内生菌の有効性」『園芸学研究』, 15 別 2 : 388.

甲村浩之, 宮永竣介, 加來朋子, 村上慈, 徳政かおり, 2016, 「夏秋トマトの袋利用栽培における単為結果性品種の利用と不織布袋とじによる保水効果」, 日本園芸学会中四国支部会, 岡山市 55 : 37.

甲村浩之, 京極歩実, 野下俊朗, 伊達英代, 中島安基江, 2016, 「ヤマトトウキおよびミシマサイコの育苗移植栽培における固化培土セル成型苗の利用可能性」, 日本生薬学会第 63 回年会, 富山市 1P-73 : 212.

伊達英代, 安部かおり, 中島安基江, 平本春絵, 新井 清, 高尾信一, 野下俊朗, 京極歩実, 甲村浩之, 2016, 「平成 27 年度ミシマサイコ試験栽培品の品質評価 —栽培条件, 根重及び成分含量の比較—」, 第 53 回全国薬事指導協議会総会, 埼玉市.

三好省三, 田村幸吉, 新穂大介, 甲村浩之, 2016, 「甘草種子由来株の生育・成分のばらつきおよびクローン株利用の可能性」, 日本生薬学会第 63 回年会, 富山市 1P-69 : 208.

#### 小林 謙 介

小林謙介, 若林國久, 2016, 「建築における環境面からの木材の有効利活用に関する研究 全国及び広島県の動態分析」『日本建築学会環境系論文集』 720:255-261

細井里紗, 井上隆, 高瀬幸造, 菅原清峻, 松木義也, 山浦賢, 小林謙介, 2016, 「集合住宅の電力・ガス・水道消費量データを用いた用途別エネルギー消費量分析 首都圏の住宅を対象とした電力・ガス用途推計と実態把握 (その 1)」『日本建築学会環境系論文集』 730:1155-1162

#### 斉 藤 靖 和

Saitoh, Yasukazu; Ohta, Hiroaki; Hyoudou Sayuri. Protective effects of polyvinylpyrrolidone-wrapped fullerene against intermittent ultraviolet-A irradiation-induced cell injury in HaCaT cells. *J Photochem Photobiol B.* (2016), 163, 22-29.

Li, Qiang; Tanaka, Yoshiharu; Saitoh, Yasukazu; Miwa, Nobuhiko. Effects of Platinum Nanocolloid in Combination with Gamma Irradiation on Normal Human Esophageal Epithelial Cells. *J Nanosci Nanotechnol.*(2016), 16, 5345-5352.

Saitoh, Yasukazu; Ikeshima, Minoru; Kawasaki, Naho; Masumoto, Aoi; Miwa, Nobuhiko. Transient generation of hydrogen peroxide is responsible for carcinostatic effects of hydrogen combined with platinum nanocolloid, together with increases intracellular ROS, DNA cleavages, and proportion of G2/M-phase. *Free Radical Res.* (2016), 50(4), 385-395.

#### 崎 田 省 吾

Sakita, Shogo; Nishimoto, Jun; Nishimura, Kazuyuki. A survey on characteristics of leachate pond in an offshore municipal solid waste disposal site. *J Mater. Cycles Waste Manag.* (2016), 18, 348-355.

Sakita, Shogo; Nishimura, Kazuyuki. Physical containment of municipal solid waste incineration bottom ash by accelerated carbonation. *J Mater. Cycles Waste Manag.* (2016), 18, 687-694.

菅 裕

Tatsuka, M., Fujiwara, M., Okamoto, M., Hori, M., Sugihara, Y., Jikihara, H., Nakaoji, K., Hamada, K., Suga, H., and Shimamoto, F. Possibility of RhoGDI $\beta$  as a molecular target for biomedical applications (in Japanese) *J Life Environ Sci* (2016) 8, 1-12.

Fujiwara, M., Okamoto, M., Hori, M., Suga, H., Jikihara, H., Sugihara, Y., Shimamoto, F., Mori, T., Nakaoji, K., Hamada, K., Ota, T., Wiedemuth, R., Temme, A., and Tatsuka, M. Radiation-induced RhoGDI $\beta$  cleavage leads to perturbation of cell polarity: a possible link to cancer spreading. *J Cell Physiol* (2016) 231, 2493-2505.

菅裕 単細胞生物が持つ「多細胞的な」遺伝子の機能 第18回日本進化学会年会 2016年8月25日 東京工業大学

Hiroshi Suga. "Unicellular holozoans: new models revealing the mechanisms of multicellularity evolution" The Joing meeting of the 22<sup>nd</sup> International Congress of Zoology and the 87<sup>th</sup> Meeting of the Zoological Society of Japan. November 17, (2016) Okinawa Institute of Science and Technology, Okinawa, Japan.

内藤佳奈子

内藤佳奈子, 2016, 「有害赤潮プランクトンによる鉄の利用特性」今井一郎・山口峰生・松岡数充編『有害有毒プランクトンの科学』恒星社厚生閣, 73-81.

西村和之

Sakita, Shogo; Nishimoto, Jun; Nishimura, Kazuyuki. A survey on characteristics of leachate pond in an offshore municipal solid waste disposal site. *J Mater. Cycles Waste Manag.* (2016), 18, 348-355.

Sakita, Shogo; Nishimura, Kazuyuki. Physical containment of municipal solid waste incineration bottom ash by accelerated carbonation. *J Mater. Cycles Waste Manag.* (2016), 18, 687-694.

原田浩幸

Katayama, Yumi; Aoyagi, Mitsuru; Matsumoto, Takuya; Harada, Hiroyuki; Simion, Alina M.; Egashira, Naoyoshi; Mitoma, Yoshiharu; Simion, Cristian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst, *Environmental Science and Pollution Research* (2016) DOI:10.1007/s11356-016-7785-8

福永健二

Fukunaga, Kenji. Genetic differentiation and crop evolution of foxtail millet. *In Genetics and Genomics of Setaria*

(eds. Doust, Andrew; Diao, Xianmin). (Springer International Publishing) (2016) e-book ISBN: 978-3-319-45105-3

Masumoto, Hisato; Takagi, Hiroki; Mukainari, Yohei; Terauchi, Ryohei; Fukunaga, Kenji. Genetic analysis of *NEKODE1* gene involved in panicle branching of foxtail millet, *Setaria italica* (L.) P. Beauv., and mapping by using QTL-seq. *Molecular Breeding* (Springer, Netherlands) (2016), 36(5), 1-8.

瀧野佑希・石田ゆき・向成洋平・福永健二, 2016, 「アワゲノムシークエンス情報に基づく SSR マーカーの開発と、台湾品種・日本品種の間の F2 集団における連鎖地図作成」『生命環境学雑誌』(県立広島大学生命環境学部) 8: 13-27.

藤井 宣 彰

藤井宣彰, 2016, 「学力研究における計量的レビューの可能性」『教育学研究紀要 (CD-ROM 版)』 61: 644-649.

松本 拓也

Kiriake, Aya; Ohta, Akira; Suga, Emi; Matsumoto, Takuya; Ishizaki, Shoichiro; Nagashima, Yuji. Comparison of tetrodotoxin uptake and gene expression in the liver between juvenile and adult tiger pufferfish, *Takifugu rubripes*. *Toxicon* (2016), 111, 6-12.

Katayama, Yumi; Aoyagi, Mitsuru; Matsumoto, Takuya; Harada, Hiroyuki; Simion, Alina M.; Egashira, Naoyoshi; Mitoma, Yoshiharu; Simion, Cristian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst. *Environmental Science and Pollution Research* (2016), DOI:10.1007/s11356-016-7785-8. [Epub ahead of print]

三 苦 好 治

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* (2016), Ahead of Print. DOI: 10.1007/s11356-016-8074-2.

Katayama, Yumi; Aoyagi, Mitsuru; Matsumoto, Takuya; Harada, Hiroyuki; Simion, Alina M.; Egashira, Naoyoshi; Mitoma, Yoshiharu; Simion, Cristian. Hydrodehalogenation of hexachloro- and hexabromobenzene by metallic calcium in ethanol, in the presence of Rh/C catalyst. *Environmental Science and Pollution Research* (2016), Ahead of Print. DOI:10.1007/s11356-016-7785-8

Mitoma, Yoshiharu; Katayama, Yumi; Simion, Alina M.; Harada, Hiroyuki; Kakeda, Mitsunori; Egashira, Naoyoshi; Simion, Cristian. Considerations on the mechanism of Ca/ethanol/Pd/C assisted hydrodechlorination of chlorinated aromatic substrates. *Chemosphere* (2016), 164, 92-97.

Mallampati, Srinivasa Reddy; Lee, Byoung Ho; Mitoma, Yoshiharu; Simion, Cristian. Dual

mechanochemical immobilization of heavy metals and decomposition of halogenated compounds in automobile shredder residue using a nano-sized metallic calcium reagent. *Environmental Science and Pollution Research* (2016), 23(22), 22783-22792.

Mallampati, Srinivasa Reddy; Simion, Cristian; Mitoma, Yoshiharu. Novel separation and immobilization of heavy metals in municipal solid waste fly ash by grinding with nano-Fe/Ca/CaO/[PO<sub>4</sub>] mixture. *Environmental Progress & Sustainable Energy* (2016), 35(6), 1693-1698.

Katayama, Yumi; Ohgi, Takayuki; Mitoma, Yoshiharu; Hifumi, Emi; Egashira, Naoyoshi. Detection of influenza virus by a biosensor based on the method combining electrochemiluminescence on binary SAMs modified Au electrode with an immunoliposome encapsulating Ru(II) complex. *Analytical and Bioanalytical Chemistry* (2016), 408(22), 5963-5971.

Mitoma, Yoshiharu; Simion, Alina M.; Mallampati, Srinivasa Reddy; Miyata, Hideaki; Kakeda, Mitsunori; Simion, Cristian. Hydrodechlorination of PCDD/PCDF/PCB contaminants by simple grinding of contaminated soils with a nanosize calcium reagent. *Environmental Progress & Sustainable Energy* (2016), 35(1), 34-40.

Yoshiharu, Mitoma; Srinivasa, Reddy, Mallampati, Tetsuji, Okuda; Cristian, Simion, 2016, "Metal Nanoparticles: Metallic Nanoparticles Used in Soil Remediation Procedures," *CRC press*, 481-493.

Yoshiharu, Mitoma; Alina M, Simion; Cristian, Simion, 2016, Chapter 12, "Dual Soil Decontamination Procedures," *InTech*, 233-251. ISBN 978-953-51-2816-8.

三苦好治, 2016, 「ナノ粒子化したカルシウム/鉄系ハイブリッド無機材料による放射性セシウム汚染土壌の乾式分級技術」梶原鳴雪 監修『先進無機高分子材料の開発』シーエムシー出版, 120-128.

#### 八 木 俊 樹

Kamimura, Shinji; Fujita, Yhosuke; Wada, Yuko; Yagi, Toshiki; Iwamoto, Hiroyuki. X-ray fiber diffraction analysis shows dynamic changes in axial tubulin repeats in native microtubules depending on paclitaxel content, temperature and GTP-hydrolysis. *Cytoskeleton* (Hoboken): (2016), 73(3):131-44.

Yagi, Toshiki; Kamiya, Ritsu. Genetic approaches to axonemal dynein function in *Chlamydomonas* and other organisms. "Dyneins (Second Edition)" (King; M. Stephen, editor) Chapter 9. Elsevier, (Amsterdam, Netherlands) in press.

Yagi, Toshiki; Kamiya, Ritsu. Functional Diversity of Axonemal Dyneins. "Dynein Handbook (Second Edition)" (Hirose, Keiko; Amos, Linda; editors) Chapter 12. Pan Stanfrod, (Singapore) in press.

八木俊樹、2016、「鞭毛・繊毛運動を担うモータータンパク質ダイニンの多様性」『化学と生物』54(6): 439-444.

#### 山 本 幸 弘

Dote, Shinsuke; Yamamoto, Yukihiro; Hara Setsuko. Effects of triacylglycerol molecular species on oxidation

behavior of oils containing  $\alpha$ -linolenic acid. *Journal of Oleo Science* (2016), 65 (3), 193-199.