

2012 水環境制御研究室 研究業績一覧

○ 学術雑誌論文/Peer-reviewed papers

* 英文雑誌

- (1) Kim J., Nagano Y., Furumai H. (2012) Runoff load estimation of particulate and dissolved nitrogen in Lake Inba watershed using continuous monitoring data on turbidity and electric conductivity, Water Science and Technology, 66(5), pp.1015-1021.
- (2) Jinyoung Kim and Hiroaki Furumai (2012) Assessment of rainwater availability by building type and water use through GIS-based scenario analysis, Water Resource Management, Vol.26, No.6, pp.1499-1511. (DOI:10.1007/s11269-011-9969-9)
- (3) Kitajima M., Haramoto E., Phanuwat C., Katayama H., Furumai H. (2012) Molecular detection and genotyping of human noroviruses in influent and effluent water at a wastewater treatment plant in Japan, Journal of Applied Microbiology, 112(3), pp.605-613.
- (4) Tomohiro Tobino, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2012) Specificity of randomly generated genomic DNA fragment probes on a DNA array. FEMS Microbiology Letters, 328(1), 86-89.
- (5) Hiroki Masumoto, Futoshi Kurisu, Ikuro Kasuga, Dieter M. Tourlousse, and Hiroaki Furumai (2012) Complete mineralization of benzene by a methanogenic enrichment culture and effect of putative metabolites on the degradation, Chemosphere, 86(8), 822-828.

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- (1) 舛本弘毅, 栗栖太, 春日郁朗, 古米弘明(2012)メタン生成嫌気ベンゼン分解集積培養系に及ぼす有機酸と温度の影響, 水環境学会誌, Vol.35, No.12, pp.197–204.
- (2) 小島啓輔, 佐野翔一, 古米弘明(2012)住宅地道路排水由来の重金属および窒素の汚濁負荷に対する路面堆積物および大気降下物の寄与, 水環境学会誌, Vol.35, No.8, pp.119–126.
- (3) 金 鎮英, 古米 弘明 (2012) 建物用途別の雑用水需要量を考慮した雨水利用ポテンシャルの評価, 用水と廃水, Vol.54, No.2, pp.127–135.
- (4) 端昭彦, 稲葉愛美, 片山浩之, 古米弘明. 2012. 震災後の石巻沿岸域における腸管系ウイルス及び指標微生物の検出と検出阻害評価. 土木学会論文集 G (環境). 68 (7)(環境工学研究論文集. 49): III-285-III-296.
- (5) 中山 雄之, 川瀬 優治, 柳村 盛司, 古米 弘明 (2012) 水道事業体における原水水質障害への対応についての事例調査, 水道協会雑誌, 81(11), pp.18–29.
- (6) 吉本 健太郎, 矢神 卓也, 荒木 千博, 藤原 直樹, 此島 健男子, 渡邊 晓人, 石川 美宏, 古米 弘明 (2012) 簡易な流出解析モデルによる河川水中の放射性物質濃度の推定, 水道協会雑誌, 81(4), pp.28–38.
- (7) 村上道夫, 稲葉愛美, 原本英司, 韋希聞, 中村高志, 屋井裕幸, 片山浩之, 古米弘明, 中谷隼, 佐野 翔一(2012)低炭素型住宅へ向けた雨水利用の可能性—住宅における用途別雨水利用を目的とした屋根排水の水質評価—, 住総研 研究論文集 2011 年版, 38, pp.235–1244.

○ 国際学会発表/Presentations at International Conferences

- (1) A. Hata, H. Katayama, H. Furumai. 2012. Improvement of virus detection efficiency by removing organic matters in virus concentrate. The 4th Asia-Pacific Young Water Professionals Conference 2012. (7-10 December, Tokyo, Japan) [Oral]
- (2) Rajendra Khanal, Hiroaki Furumai, Fumiuki Nakajima (2012) Assessment of urban road dust toxicity as a non-point pollution source contaminating water environment, The 4th IWA Asia-Pacific Young Water Professionals Conference, pp.97-100. (7-10 December, Tokyo, Japan) [Oral]
- (3) Manami Inaba, Hiroyuki Katayama, Tran Thi Viet Nga, Hiroaki Furumai (2012) Detection of genus Kobuvirus for evaluation as virus indicator for fecal contamination source tracking from Nhue River in Hanoi, Vietnam, The 10th International Symposium on Southeast Asian Water Environment, pp.203-209. (8-10 November, Hanoi, Vietnam) [Oral]
- (4) Sengyun Kim, Iwato Amano, Kyoungjin An, Jatuwat Sangsanont (2012) Access to basic human needs in times of emergency: The case of the 2011 Thailand flood, The 10th International Symposium on Southeast Asian Water Environment, pp.26-33. (8-10 November, Hanoi, Vietnam) [Poster] [Poster Award]
- (5) A.Hata, M. Inaba, H. Katayama, H. Furumai.2012. Quantitative detection of enteric viruses and effect of organic matter in concentrated coastal water in Ishinomaki, Japan. 3rd Food and Environmenal Virology Conference. Lisbon.
- (6) Rajendra Khanal, Hiroaki Furumai, Fumiuki Nakajima (2012) Evaluation of toxicity change of urban road dust under wet condition using ostracod *Heterocypris incongruens*, SETAC Asia Pacific 2012 Meeting, A_0449 (1C-1-3). (24-27 September, Kumamoto, Japan) [Oral]
- (7) Yuki Kido, Ikuro Kasuga, Futoshi Kurisu, Hiroaki Furumai (2012) DNA stable isotope probing of activated sludge treating domestic wastewater to identify glucose and acetate degrading bacteria, The 28th Annual Meeting of the Japanese Society of Microbial Ecology (The 4th Japan-Korea International Symposium on Microbial Ecology), PC02. (19-22 September, Toyohashi, Japan) [Poster]
- (8) Parinda Thayanukul, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai (2012) Characterization of biodegradable organic matter in reclaimed organic matter by bacterial isolates, IWA World Water Congress & Exhibition, IWA-8185R1. (16-21 September 2012, Busan, Korea) [Oral]
- (9) Rajendra Khanal, Hiroaki Furumai, Fumiuki Nakajima (2012) Toxicity assessment of size-fractionated urban road dust using ostrakod *Heterocypris incongruens*, IWA World Water Congress & Exhibition, IWA-8258 (Poster No. 143). (16-21 September 2012, Busan, Korea) [Poster]
- (10) Yu Yang, Keisuke Kojima, Hiroaki Furumai, Kyoungjin An (2012) Characterizing behaviours of combined sewer overflows induced by different types of rainfall in an urban drainage by cluster analysis, IWA World Water Congress & Exhibition, IWA-8260 (Poster No.348). (16-21 September 2012, Busan, Korea) [Poster]
- (11) Dieter Toulousse, Futoshi Kurisu, Tomohiro Tobino, Hiroaki Furumai (2012) Community isotope arrays for sensitive resolution of substrate-species linkages in natural microbial communities, 14th International Symposium on Microbial Ecology, 509B. (19-24 Aug, Copenhagen, Denmark)
- (12) Mana Noguchi, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai (2012) The detection of benzene-assimilating bacteria in methanogenic enrichment culture originated from river sediment using Stable Isotope Probing, 14th International Symposium on Microbial Ecology, 171B. (19-24

- Aug, Copenhagen, Denmark)
- (13) Niu Jia, Ikuro Kasuga, Furoshi Kurisu, Hiroaki Furumai (2012) Abundances and diversity of ammonia-oxidizing microorganisms associated with granular activated carbon in different full-scale drinking water purification plants in Japan, 14th International Symposium on Microbial Ecology, 035B. (19-24 Aug, Copenhagen, Denmark)
- (14) Ikuro Kasuga, Suwat Soonglerdsongpha, Futoshi Kurisu, Hiroaki Furumai (2012) Role of Hyphomicrobium-like bacteria associated with granular activated carbon filter in drinking water purification plants in the removal of assimilable organic carbon, 14th International Symposium on Microbial Ecology, 423B. (19-24 Aug, Copenhagen, Denmark)
- (15) Parinda Thayanukul, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai (2012), A novel method to characterize biodegradable organic matter in reclaimed water using bacterial growth fingerprint, 14th International Symposium on Microbial Ecology, 459B. (19-24 Aug, Copenhagen, Denmark)
- (16) Dieter M. Tournousse, Futoshi Kurisu, and Hiroaki Furumai (2012) A thin polymer film microwell chip for isolation and in situ cultivation of 'difficult-to-culture' environmental microorganisms, Water and Environment Technology Conference 2012, 29-1B-04, p.10. (29-30 June, Tokyo) [Poster]
- (17) Yuichiro Mikami, Tadashi Nittami, and Futoshi Kurisu (2012) Effect of endogenous carbon source on biological denitrification rate, Water and Environment Technology Conference 2012, 29-2A-06, p.20. (29-30 June, Tokyo) [Poster] [Best Paper Award]
- (18) Yang Yu, Keisuke Kojima, and Hiroaki Furumai (2012) Characterization of CSO behaviors and rainfalls affecting them for an urban drainage area in Tokyo by cluster analysis, Water and Environment Technology Conference 2012, 30-1A-12, p.40. (29-30 June, Tokyo) [Poster] [Best Presentation Award]
- (19) G.G. Tushara Chaminda, Fumiuki Nakajima, Hiroaki Furumai, Ikuro Kasuga, and Futoshi Kurisu (2012) Metal (Zn, Cu, Cd, Ni) complexation by dissolved organic matter (DOM) in wastewater treatment plant effluent, Water and Environment Technology Conference 2012, 29-1A-13, p.7. (29-30 June, Tokyo) [Poster] [Best Presentation Award]
- (20) Yuichi Nagano, Keisuke Kojima, Hiroaki Furumai, Jinyoung Kim, and Ikuro Kasuga (2012) Hydraulic characteristics and water pollution in drainage channels and ponds in the Citadel area of Hue city, Water and Environment Technology Conference 2012, 29-2B-15, p.33. (29-30 June, Tokyo) [Poster]
- (21) Yukihiko Osaka, Ikuro Kasuga, Futoshi Kurisu, and Hiroaki Furumai (2012) The influence of drinking water stagnation on water quality and microbial growth at faucet, Water and Environment Technology Conference 2012, 30-1B-01, p.41. (29-30 June, Tokyo) [Poster]
- (22) Mana Noguchi, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2012) The community analysis of a methanogenic benzene-degrading enrichment culture using stable isotope probing and pyrosequencing, Water and Environment Technology Conference 2012, 29-2A-02, p.18. (29-30 June, Tokyo) [Poster] [Best Presentation Award]
- (23) Hiroaki Furumai (2012) Well-balanced urban water use system adapted for climate change, INSA Lyon-JSPS Workshop "Water and Urban Environment", pp.6-7. (19-20 June, Lyon, France) [Oral]
- (24) Ikuro Kasuga (2012) Functional characterization of microbial community in biological activated carbon process for water purification, INSA Lyon-JSPS Workshop "Water and Urban Environment", pp.22-23. (19-20 June, Lyon, France) [Oral]
- (25) Ikuro Kasuga, Parinda Thayanukul, Futoshi Kurisu, and Hiroaki Furumai (2012) Influence of assimilable organic carbon and residual chlorine on biological stability of reclaimed water in Japan, p.8. (4-5 June 2012, San Diego, CA) [Oral]

- (26) Futoshi Kurisu, Hiroyuki Nakamoto, Ikuro Kasuga, and Hiroaki Furumai (2012) Molecular composition analysis of organic matter in reclaimed wastewater by Fourier Transform Mass Spectrometry, 16th Annual Water Reuse & Desalination Research Conference, p.9. (4-5 June 2012, San Diego, CA) [Oral]
- (27) Wei Xiwen, Ikuro Kasuga, and Hiroaki Furumai (2012) Effects of temperature and chlorination on microbial growth in harvested rainwater, The 3rd IWA-RWHM Conference & Exhibition. (20-24 May 2012, Goseong, Korea)

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- (1) 端昭彦, 片山浩之, 古米弘明. 2012. ウイルス濃縮過程における共存有機物の濃縮とウイルス検出阻害. 第15回日本水環境学会シンポジウム. 佐賀【口頭】(オルガノ賞)
- (2) 稲葉愛美, 片山浩之, 植木洋, 端昭彦. 2012. 被災後の沿岸環境における衛生微生物調査. 第15回日本水環境学会シンポジウム. 佐賀【ポスター】
- (3) 端昭彦, 稲葉愛美, 片山浩之, 古米弘明. 2012. 震災後の石巻沿岸域における腸管系ウイルス及び指標微生物の検出と検出阻害評価. 第49回環境工学研究フォーラム. 京都【口頭】(論文奨励賞)
- (4) 高橋惇太, 栗栖太, 永井宏征, 春日郁朗, 古米弘明(2012)岩手・青森県境不法投棄現場地下水における嫌気的ベンゼン分解の可能性, 第18回地下水・土壤汚染とその防止対策に関する研究集会, p.119-122. (6.14-15, さいたま)【口頭】
- (5) 大坂幸弘, 春日郁朗, 栗栖太, 古米弘明(2012)給水栓における滞留に伴う水質変化と細菌再増殖との関係, 第63回全国水道研究発表会, pp.512-513.(5.16-18, 松江)
- (6) 中許寛之, 栗栖太, 春日郁朗, 古米弘明(2012)フーリエ変換質量分析計を用いた下水処理工程水中溶存有機物の網羅的解析, 第46回日本水環境学会年会講演集, p.180. (14-16 March, 東京)【口頭】
- (7) 本多了, 飛野智宏, Chaminda Tushara, 渡部徹, 真砂佳史, 大村達夫, 片山浩之, 福士謙介, 古米弘明(2012)タイの大規模洪水における糞便由来汚染, 第46回日本水環境学会年会講演集, p.183. (14-16 March, 東京)【口頭】
- (8) 新宮大地, 斎藤利晃, 小沼晋, 小島啓輔, 端昭彦, 古米弘明. 2012. 神田川における雨天時越流水に伴う大腸菌濃度の変動調査, 第46回日本水環境学会年会講演集, p.183. (14-16 March, 東京)【口頭】
- (9) 端昭彦, 片山浩之, 古米弘明(2012)ウイルス濃縮過程における共存有機物の濃縮と核酸定量阻害, 第46回日本水環境学会年会講演集, p.184. (14-16 March, 東京)【口頭】
- (10) 野口愛, 栗栖太, 春日郁朗, 古米弘明(2012)河川底泥由来メタン生成集積系におけるベンゼン分解微生物の安定同位体プローブ法による検出, 第46回日本水環境学会年会講演集, p.191. (14-16 March, 東京)【口頭】
- (11) Tran Thi Thu Huong, 稲葉愛美, 片山浩之, 古米弘明(2012)ポリ鉄凝集剤を用いた下水簡易処理法による消毒効果の向上, 第46回日本水環境学会年会講演集, p.253. (14-16 March, 東京)【口頭】(ライオン賞)
- (12) Niu Jia, 春日郁朗, 栗栖太, 古米弘明(2012)Comparison of ammonia-oxidizing potential and microorganisms at biological activated carbon process in full-scale drinking water purification plants in Tokyo, 第46回日本水環境学会年会講演集, p.384. (14-16 March, 東京)【口頭】
- (13) 稲葉愛美, 片山浩之, Nga Tran Thi Viet, 古米弘明(2012)ウイルス指標を用いたハノイ近郊 Nhue 川における糞便起源の推定, 第46回日本水環境学会年会講演集, p.438. (14-16 March, 東京)【口頭】

○ 招待講演/Invited Speech

- (1) Hiroaki Furumai (2012) Significance of rainwater and reclaimed water use with appropriate water quality management, The 3rd IWA-RWHM Conference & Exhibition (Goseong, Korea, 22 May)

○ 著書/Books

- (1) 古米弘明・川上智規・酒井憲司編、河川環境管理財団企画 (2012) 森林の窒素飽和と流域管理, 技法堂出版 / まえがき、序章 pp.1-8、「5.3 流域の窒素管理へ向けた提言」pp.128-136
- (2) 古米弘明・佐藤 和明・山本 晃一 (2012) ケイ酸—その由来と行方, 技法堂出版

○ その他記事/Other Articles

- (1) 古米弘明 (2012) [巻頭言] 協会雑誌の今後の方向性, 水道協会雑誌, 81(8), p.1.
- (2) 古米弘明 (2012) [巻頭言] 水環境の健全性と生物多様性, 水環境学会誌, 35(4), p.103.
- (3) 古米弘明 (2012) 第9回水道技術国際シンポジウムへの期待, 水道技術ジャーナル, 第63号, p.12.
- (4) 古米弘明 (2012) 復興まちづくりにおける水インフラ, Ace 建設業界, 2(2), p.35.

○ マスコミ/Other Media

- (1) 水道産業新聞(2012年7月9日)「第16回水再生・脱塩研究年次大会」における栗栖准教授、春日助教、Pham Ngoc Bao 研究員の成果発表の紹介

○ 受賞/Award

- (1) 第49回環境工学研究フォーラム 論文奨励賞:端昭彦 (震災後の石巻沿岸域における腸管系ウイルス及び指標微生物の検出と検出阻害評価に対して)(2012年11月)
- (2) 博士研究奨励賞(オルガノ賞):端昭彦(第15回日本水環境学会シンポジウムに際し投稿した論文及び口頭発表に対して)