

2008 水環境制御研究室 研究業績一覧

○ 学術雑誌論文/Peer-reviewed papers

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- (1) N. Hayashi, H. Yokota, H. Furumai, and M. Fujiwara (2008) Evaluation of source water quality for selection of drinking water purification systems, Water Science & Technology: Water Supply, Vol.8, No.3, pp.271-278.
- (2) G.G.T. Chaminda, Fumiuki Nakajima, and Hiroaki Furumai (2008) Heavy metal (Zn and Cu) complexation and molecular size distribution in wastewater treatment plant effluent, Water Science & Technology, Vol.58, No.6, pp.1207-1213.
- (3) Yoshimura, C., Gessner, M.O., Tockner, K., and Furumai, H. (2008) Chemical properties, microbial respiration, and decomposition of fine particulate organic matter (FPOM) in streams, Journal of North American Benthological Society, Vol.27, No.3, pp.664-673.
- (4) Zang Kaisai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2008) Analysis of the phylogenetic diversity of estrone-degrading bacteria in activated sewage sludge using microautoradiography-fluorescence in situ hybridization, Systematic Applied Microbiology, Vol.31, No.3-4, pp.206-214.
- (5) Shoko Iwai, Futoshi Kurisu, Hidetoshi Urakawa, Osami Yagi, Ikuro Kasuga, and Hiroaki Furumai (2008) Development of an oligonucleotide microarray to detect di- and monooxygenase genes for benzene degradation in soil, FEMS Microbiology Letters, Vol.285, No.1, pp.111-121.
- (6) Michio Murakami, Nobuyuki Sato, Aya Anegawa, Norihide Nakada, Arata Harada, Toshiya Komatsu, Hideshige Takada, Hiroaki Tanaka, Yoshio Ono, and Hiroaki Furumai (2008) Multiple evaluations of the removal of pollutants in road runoff by soil infiltration, Water Research, Vol.142, No.10-11, pp.2745-2755.
- (7) Hiroaki Furumai (2008) Rainwater and reclaimed wastewater for sustainable urban water use, Physics and Chemistry of the Earth, Vol.33, pp.340-346.
- (8) Nyein Nyein Aung, Fumiuki Nakajima, and Hiroaki Furumai (2008) Trace metal speciation during dry and wet weather flows in the Tama River, Japan, by using diffusive gradients in thin films (DGT), Journal of Environmental Monitoring, Vol.10, pp.219-230.
- (9) Michio Murakami, Fumiuki Nakajima, and Hiroaki Furumai (2008) The sorption of heavy metal species by sediments in soakways receiving urban road runoff, Chemosphere, Vol. 70, No.11, pp.2099-2109.

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- (1) 辻幸志, 藤田昌史, 古米弘明, 坂本康(2008)洗濯洗剤を添加した都市下水を処理する活性汚泥中のポリリン酸蓄積細菌群の嫌気的有機物摂取, 水環境学会誌, Vol.31, No.12, pp.755-762.
- (2) 渡部春奈, 中島典之, 春日郁朗, 古米弘明(2008)カイミジンコを用いたバイオアッセイによる都市河川底泥の毒性要因の推定, 水環境学会誌, Vol.31, No.11, pp.671-676. (平成 20 年度日本水環境学会年間優秀論文賞(メタウォーター賞))
- (3) 藤田誠, 村上道夫, 古米弘明, 春日郁朗, 栗栖太(2008)道路排水中重金属の吸脱着に及ぼす雨水浸透樹堆積物の特性評価, 水環境学会誌, Vol.31, No.11, pp.685-689.

- (4) 林野, 横田治雄, 古米弘明, 藤原正弘(2008)水道原水の水質類型と総合汚濁指標に関する研究, 水道協会雑誌, Vol.77, No.11, pp.15–24.
- (5) 村上道夫, 古米弘明, 中島典之, Haltota K.P.K. Jinadasa, Rupak K. Aryal(2008)降雨特性の異なる 66 降雨における雨水浸透施設からの浸透量の評価, 用水と廃水, Vol.50, No.3, pp.227–233.
- (6) 金元載, 古米弘明, 真名垣聰, 中島典之(2008)合流式下水道小排水区における晴天時下水の濃度と負荷量の時間変動特性評価, 下水道協会誌, Vol.45, No.543, pp.135–146. (2008 年度下水道協会誌優秀論文(有功賞))

○ 国際学会発表/Presentations at International Conferences

- (1) Pham Van Quan, Hiroaki Furumai, Ikuro Kasuga, and Futoshi Kurisu (2008) Surface water pollution due to discharging from sewerage system in downtown of Hanoi, The 6th International Symposium on Southeast Asian Water Environment, pp.223-233. (29-31 Oct., Bandung, Indonesia) [Oral]
- (2) Weon-Je Kim, Satoshi Managaki, Hiroaki Furumai, Fumiuki Nakajima (2008) Simulation of the behavior of indicator microorganisms in combined sewer system, 11th International Conference on Urban Drainage, Paper No. 392 in CD. (31 Aug - 5 Sep, Edinburgh, UK) [Oral]
- (3) Rupak Kumar Aryal, Hiroaki Furumai, Fumiuki Nakajima, and Mohammed Abed Hossain (2008) Spatial distribution and speciation of heavy metals in soakway sediment, 11th International Conference on Urban Drainage, Paper No. 404 in CD. (31 Aug - 5 Sep, Edinburgh, UK) [Oral]
- (4) Mohammed Abed Hossain, Hiroaki Furumai, Fumiuki Nakajima, and Ikuro Kasuga (2008) Accumulated sediments within soakaways in an old infiltration facility: source or sink for heavy metals?, 11th International Conference on Urban Drainage, Paper No. 409 in CD (31 Aug - 5 Sep, Edinburgh, UK) [Oral]
- (5) Satoshi Managaki, Hideshige Takada, Hiroaki Furumai (2008) The difference of diurnal behavior of pharmaceuticals and gross organic pollutants in combined sewer system, 11th International Conference on Urban Drainage, Paper No. 515 in CD. (31 Aug - 5 Sep, Edinburgh, UK) [Oral]
- (6) Jin-Yong Kim, Hiroaki Furumai, Fumiuki Nakajima, and Futoshi Kurisu (2008) Advanced estimation of rainfall loss considering detailed distribution of urban surfaces classified by reflectance spectra of IKONOS satellite imagery, 11th International Conference on Urban Drainage, Paper No. 552 in CD. (31 Aug - 5 Sep, Edinburgh, UK) [Oral]
- (7) Zang Kaisai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2008) Identification of bacteria degrading estrone at concentrations of microgram- to submicrogram-per-liter in activated sludge using microautoradiography-fluorescence in situ hybridization, The 12th International Symposium on Microbial Ecology, PO12-0416. (17-22 Aug, Cairns, Australia) [Poster]
- (8) Ikuro Kasuga, Hiroyuki Saito, Futoshi Kurisu, and Hiroaki Furumai (2008) Characterization of actively respiring bacterial community responding to organic matter in biological drinking water treatment, The 12th International Symposium on Microbial Ecology, PO02-0151. (17-22 Aug, Cairns, Australia) [Poster]
- (9) Tomohiro Tobino, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2008) New application of the isotope array using random genomic DNA probes derived from a microbial community, The 12th International Symposium on Microbial Ecology, PO20-0266. (17-22 Aug, Cairns, Australia) [Poster]
- (10) Nahoko Sakai, Futoshi Kurisu, Fumiuki Nakajima, Kazuo Yamamoto, and Osami Yagi (2008)

Detection and quantification of novel Syntrophobacterales bacteria in methanogenic benzene degrading enrichment culture, The 12th International Symposium on Microbial Ecology, PO12-0391. (17-22 Aug, Cairns, Australia) [Poster]

- (11) Michio Murakami, Makoto Fujita, Hiroaki Furumai, Ikuro Kasuga, and Futoshi Kurisu (2008) Sorption behavior of heavy metal species by soakway sediment under mixing conditions with different road runoff, 12th International Conference on Integrated Diffuse Pollution Management: Book of Abstract, pp.42-43. (25-29 Aug., Khon Kaen, Thailand) [Oral]
- (12) Manish Kumar, Hiroaki Furumai, Futoshi Kurisu, and Ikuro Kasuga (2008) Sorption behavior of heavy metal species by soakway sediment under mixing conditions with different road runoff, 12th International Conference on Integrated Diffuse Pollution Management: Book of Abstract, pp.74-75. (25-29 Aug., Khon Kaen, Thailand) [Oral]

○ 国内学会発表/Presentations at Domestic Conferences

- (1) 小島啓輔, 春日郁朗, 古米弘明, 栗栖太(2008)合流式下水道管渠内堆積物の重金属含有量とその存在形態評価, 第 45 回環境工学研究フォーラム(自由投稿セッション), pp..17–19.(11.28–30, 大阪) [ポスター]
- (2) 端昭彦, 片山浩之, 真名垣聰, 大垣眞一郎(2008)降雨後の東京湾沿岸域におけるウイルス及び指標微生物の消長, 第 63 回土木学会年次学術講演会, pp.275–276.(9.10–12, 仙台) [口頭]
- (3) 長岩明弘, 古米弘明(2008.)合流改善を目的とした施設運転におけるオンライン流量予測も出るの適用性評価, 第 45 回下水道研究発表会, pp.380–382. (7.22–24, 横浜) [口頭]
- (4) 金鎮英, 塚本幸太郎, 古米弘明(2008.7.22–24)衛星画像と都市計画地理情報を用いた地表面の詳細分類と雨水流出解析への適用, 第 45 回下水道研究発表会, pp.398–400. (7.22–24, 横浜) [口頭]
- (5) G.G.Tushara Chaminda, 中島典之, 古米弘明, 春日郁朗, 栗栖太(2008)Zinc complexation by dissolved organic matter from wastewater treatment plant (WWTP) effluent, 第 17 回環境化学討論会, pp.884–885 (6.11–13, 神戸) [ポスター]
- (6) 渡部春奈, 春日郁朗, 古米弘明, 中島典之(2008)カイミジンコを用いた底質毒性試験における都市河川底泥及び道路塵埃の毒性要因の推定, 第 42 回日本水環境学会年会講演集, p.3. (3.19–21, 名古屋) [口頭]
- (7) 藤田誠, 春日郁朗, 栗栖太, 古米弘明(2008)異なる雨水浸透樹堆積物による道路排水中重金属の吸脱着特性の比較, 第 42 回日本水環境学会年会講演集, p.5.(3.19–22, 名古屋) [口頭]
- (8) 中垣宏隆, 春日郁朗, 栗栖太, 古米弘明, 国包章一(2008)生物活性炭上のアンモニア酸化細菌・古細菌の多様性解析, 第 42 回日本水環境学会年会講演集, p.54.(3.19–22, 名古屋) [口頭]
- (9) 斎藤寛之, 春日郁朗, 栗栖太, 古米弘明(2008)同化性有機炭素の除去に関する生物活性炭付着微生物の CTC-FISH 法による解析, 第 42 回日本水環境学会年会講演集, p.55.(3.19–22, 名古屋) [口頭]
- (10) 真名垣聰, 古米弘明, 高田秀重, 岡城孝雄, 吉野邦治(2008)合併処理浄化槽への流入下水中の医薬品濃度の時間変動, 第 42 回日本水環境学会年会講演集, p.217.(3.19–22, 名古屋) [口頭]
- (11) 坂井田健司, 片山浩之, Pham Van Quan, Cao The Ha, 古米弘明, 大垣眞一郎(2008)ハノイ市内の水環境における指標微生物と腸管系ウイルスの定量評価, 第 42 回日本水環境学会年会講演集, p.248. (3.19–22, 名古屋) [口頭]
- (12) Zang Kaisai, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai, and Osami Yagi (2008) Analysis of estrone-3-sulfate-conjugate-degrading bacteria in activated sludge by MAR-FISH, Proc. of 42nd annual conference of JSWE, p.371. (19–22 Mar, Nagoya) [口頭]
- (13) 辻幸志, 山田馨, 藤田昌史, 赤司昭, 古米弘明(2008)酢酸を基質とした嫌気好気運転におけるポリリ

ン酸蓄積細菌群とグリコーゲン蓄積細菌群の競合過程, 第 42 回日本水環境学会年会講演集, p.491.

(3.19–22, 名古屋) [口頭]

- (14) 山田馨, 辻幸志, 藤田昌史, 古米弘明(2008)酢酸濃度とポリリン酸蓄積細菌群およびグリコーゲン蓄積細菌群の活性との関係, 第 42 回日本水環境学会年会講演集, p.492.(3.19–22, 名古屋) [口頭]

○ 著書/Books

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- (2) Futoshi Kurisu (2008) 11. Bioremediation of Groundwater and Soil in Urban Areas: *In* Groundwater Management in Asian Cities (Ed. S. Takizawa), cSUR-UT Series: Library for Sustainable Urban Regeneration, Vol.2, pp.207-221, Springer.
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○ 総説・解説/Reviews & Commentaries

- (1) 古米弘明(2008)都市における浸水のシミュレーション, 科学, Vol.78, No.10, pp.1134–1137.

○ その他記事/Other Articles

- (1) 古米弘明 (2008) [巻頭言] 水源環境の保全・再生に向けた予見的な行動へ, 水環境学会誌, 31(4), p.1.