

研究論文目録 (2010)

地球資源学科

応用地球科学講座

「学会論文集 (誌) ・学協会誌」

- 西谷忠師, 赤羽根万里江 (2010) : 残留磁気特性に及ぼす焚き火加熱の効果, 文化財と探査, 11 巻, 3-4 号, 25-32 頁.
- 西谷忠師, 赤羽根万里江 (2010) : 磁気探査による焚き火加熱の影響調査, 文化財と探査, 11 巻, 3-4 号, 33-41 頁.
- 西谷忠師, 庄内昭男, 河野輝樹, 大本将行 (2010) : 白岩焼窯跡の磁気探査と電気探査による調査, 文化財と探査, 11 巻, 3-4 号, 43-50 頁.
- 佐藤比奈子, 石山大三, 水田敏夫, 松葉谷治, 村上史一 (2010) : 秋田県玉川温泉の温泉水と温泉沈殿物の地球化学的特徴, 60 巻, 1-10 頁.
- 佐藤時幸 (2010) : パナマ地峡の成立と世界的な寒冷化—第四紀の新しい定義と関連して—, 第四紀研究, 49 巻, 5 号, 283-92 頁.
- 筒井智樹, 森 健彦 (2010) : 火山性微動を用いた火山体の S 波反射断面の推定, 物理探査, 63 巻, 467-84 頁.
- 筒井智樹, 西谷忠師, 坂中伸也 (2010) : 秋田大学体験学習教室の理念と物理探査学習教材の開発, 物理探査, 63 巻, 141-52 頁.
- 筒井智樹, 井口正人, 為栗 健, 他 33 名 (2010) : 桜島火山における反復地震探査 (一回目), 京都大学防災研究所年報, 53 号 B, 241-59 頁.
- Yamazaki, T., Takahashi, M., Iryu, Y., Sato, T., Oda, M., Takayanagi, H., Chiyonobu, S., Nishimura, A., Nakazawa, T. and Ooka, T. (2010) : Phillipine Sea Plate motion since Eocene estimated from paleomagnetism of seafloor drill cores and gravity cores, *Earth, Planets and Space*, Vol.62, p.495-502.
- Channel, J.E.T., Sato, T., Kanamatsu, T., Stein, R. and Alvarez-Zarikian, C. (2010) : Expedition 303/306 synthesis: North Atlantic climate, *Proc. IODP, Vol.303/306: College Station, TX (Integrated Ocean Drilling Program Management International, Inc.)*, p.1-26.
- Iryu, Y., Takahashi, Y., Fujita, K., Camoin, G., Cabioch, G., Matsuda, H., Sato, T., Sugihara, K., Webster, J.M. and Westphal, H. (2010) : Sea-level history recorded in the Pleistocene carbonate sequence in IODP hole 310-M0005D, off Tahiti, *Island Arc*, Vol.19, p.690-706.

Tanaka, T., Imai, A., Egashira, S., Sakomoto, S. and Yasunaga, K. (2010) : Petrological and geochemical characteristics of intrusive rocks related to porphyry copper mineralization and the implication for the genesis of deposits in the Namosi area, Viti Levu, *Republic of the Fiji Islands Resource Geology*, Vol.60, p.35-51.

Tohma, Y., Imai, A., Sanematsu, K., Yonezu, K., Takahashi, R., Koyama, M., Sekine, R., Duncan, R. and Watanabe, K. (2010) : Characteristics and mineralization age of the Fukusen No.1 vein, Hishikari epithermal gold deposit, southern Kyushu, Japan, *Resource Geology*, Vol.60, p.348-58.

八木原寛, 井口正人, 為栗 健, 筒井智樹, 及川 純, 大倉敬宏, 宮町宏樹 (2010) : 諏訪之瀬島の火山体浅部 3 次元 P 波速度構造と爆発発生場, 火山, 55 巻, 75-88 頁.

「学術関係誌」

佐藤時幸, 神崎 裕, 奥山貴男, 千代延俊 (2010) : 北陸〜東北日本に分布する中新統石灰質ナンノ化石層序, 秋田大学大学院工学資源学研究科研究報告, 31 巻, 37-45 頁.

Harijoko, A., Htun, T.M., Saputra, R., Warmada, I.W., Setijadji, L.D., Imai, A. and Watanabe, K. (2010) : Mercury and arsenic contamination from small scale gold mining activities at Selogiri area, Central Java, Indonesia, *Jour. Southeast Asian Applied Geology*, Vol.2, p.56-64.

「国際会議報告集等」

Gabo, J.A.S., Imai, A., Watanabe, K., Schersten, A. and Page, L. (2010) : Petrochemistry and $^{40}\text{Ar}/^{39}\text{Ar}$ dating of igneous rocks hosting high sulfidation style gold mineralization in Sibutad, Zamboanga del Norte (Philippines), *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.139-44.

Ikuno, T., Imai, A., Yonezu, K., Sanematsu, K., Setijadji, L.D., Sitha, K., Dimara, A., Pistha-Arnord, V. and Nakapadungrat, S. (2010) : Concentration and geochemical behavior of REE in hydrothermally-altered and weathered granitic rocks in southern Thailand and Bangka Island, Indonesia, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.269-74.

Nur, I., Idrus, A., Pramumijoyo, S., Harijoko, A., Juyanagi, Y., Takahashi, R., Watanabe, K. and Imai, A. (2010) : Geochemistry, mineralogy and fluid inclusion study of the Baturappe epithermal silver-base metal deposit, South Sulawesi, Indonesia, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.283-8.

Sagapoa, C.V., Imai, A. and Watanabe, K. (2010) : Laterization process of ultramafic rocks in Siruka, Solomon Islands, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.293-300.

Maulana, A. Christy, A., Ellis, D., Imai, A. and Watanabe, K. (2010) : The characteristic of serpentinised ultramafic

rocks from South Sulawesi, Indonesia: constraint from petrology and geochemistry data, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.301-6.

Gedikile, H., Imai, A. and Watanabe, K. (2010) : Petrology of the Gold Ridge epithermal Au deposit, Guadalcanal, Solomon Islands, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.307-12.

Tanaka, T., Imai, A. and Watanabe, K. (2010) : Mineral paragenesis at the Victoria epithermal gold deposit, northern Luzon, Philippines, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.313-8.

Goto, N., Imai, A., Takahashi, R. and Tanaka, T. (2010) : Mineralization characteristics at Nagtalay and Laburan prospects, Vista Alegre Gold Zone, Negros Occidental, Philippines, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.319-22.

Aye, M.T., Pramumijoyo, S., Idrus, A., Setijadji, L.D., Imai, A., Araki, N. and Arif, J. (2010) : Ore mineral assemblage and fluid inclusion study of skarn, mineralization at the Batu Hijau Cu-Au porphyry deposit, Sumbawa Island, Indonesia, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.323-6.

Shingo, Y., Imai, A., Takahashi, R., Watanabe, K., Harijoko, A., Warmada, I.W., Idrus, A., Phoumephone, P. and Schersten, A. (2010) : Outline of gold ore forming conditions at Trenggalek prospects, East Java, Indonesia, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.411-14.

Mitani, A., Imai, A., Takahashi, R., Tanaka, T., Watanabe, K. and Schersten, A. (2010) : Outline of copper mineralization at Tapaya prospect, northern Luzon, Philippines, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.415-20.

Idrus, S.A., Pramumijoyo, S., Warmada, I.W., Yonezu, K. and Imai, A. (2010) : Characterisation and leaching behavior of minerals by sulphuric acid in the Soroako nickeliferous laterite ores, Sulawesi, Indonesia, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.421-6.

Tindell, T., Imai, A., Takahashi, R. and Boyce, A. (2010) : Variations in geochemical conditions of the Kasuga high-sulphidation deposit basement veins, Kagoshima, Japan, *Proceedings of International Symposium on Earth Science and Technology* (Fukuoka), p.429-34.

地球システム工学講座

「学会論文集（誌）・学協会誌」

Imai, T., Kamoshida, N., Yamaguchi, S. and Sugimoto, F. (2010) : New permeability test based on falling head method in rock core, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.1, p.78-85.

- 今井忠男, 平澤祐介, 杉本文男 (2010) : 砕石による骨材の必要な粒度特性とその一貫的な生産法, 建設用原材料, 18 巻, 1 号, 9-16 頁.
- 今井忠男, 片山潤一, 杉本文男 (2010) : 路盤の応力分散性能に及ぼす砕石の実積率の影響, 砕石の研究, 25 巻, 1 号, 1-14 頁.
- Okawa, H., Saito, T., Hosokawa, R., Nakamura, T., Kawamura, Y. and Sugawara, K. (2010) : Effects of different ultrasound irradiation frequencies and water temperatures on extraction rate of bitumen from oil sand, *Japanese Journal of Applied Physics*, Vol.49, 07HE12.
- 「国際会議報告集等」
- Kamiyama, N., Sato, I. and Sato, H. (2009) : Pipeline design of settling slurries containing mixed sized particles by using the wasp method, *6th Inter. Conf. on Mater. Eng. for Resources* (Akita, Japan), AP-1 (CD-ROM).

環境応用化学科

素材プロセス工学講座

「学術論文集（誌）・学協会誌」

- Tongamp, W., Takasaki, Y. and Shibayama, A. (2010) : Precipitation of arsenic as Na_3AsS_4 from Cu_3AsS_4 -NaHS-NaOH leach solutions, *Hydrometallurgy*, Vol.105, p.42-6.
- Haga, K., Kobayashi, M., Umeda, H., Takahashi, K., Sasaki, A., Takasaki, Y. and Shibayama, A. (2010) : Investigation of a two-step process for treatment of effluent water to recovery valuable metals, *International Journal of Ion Exchange*, Vol.21, No.3, p.310-5.
- Oya, K., Wajima, T. and Shibayama, A. (2010) : Synthesis of hydrocalumite-type compound from steel converter slug using alkali fusion, *International Journal of Ion Exchange*, Vol.21, No.3, p.185-8.
- Haga, K., Umeda, H., Takahashi, K., Sasaki, A., Takasaki, Y. and Shibayama, A. (2010) : Comparative study of metals recovery process from effluent water of a metallurgical refining process, *International Journal of the Society of Materials Engineering for Resources*, Vol.12, No.2, p.131-5.
- Rabatho, J.P., Tongamp, W., Takasaki, Y. and Shibayama, A. (2010) : Recovery of Pt and Pd from PGM mine talings by magnetic separation, *International Journal of the Society of Materials Engineering for Resources*, Vol.12, No.2, p.168-72.
- Wang, L.P., Sato, D., Okaya, K., Dodbiba, G., Sadaki, J., Fujita, T., Shibayama, A. and Hishida, H. (2010) : A preliminary study on employing high-voltage impulse for the exploitation of cobalt rich crust, *International Journal of the Society of Materials Engineering for Resources*, Vol.12, No.2, p.126-30.
- 梅田久義, 佐々木敦, 高橋国彦, 高崎康志, 柴山 敦 (2010) : 強酸性廃液中の微量貴金属の回収, 化学工学論文集, 36 巻, 4 号, 343-50 頁.
- Shibayama, A., Takasaki, Y., Tongamp, W., Yamatodani, A., Higuchi, Y., Sunagawa, S. and Ono, E. (2010) : Treatment of smelting residue for arsenic removal and recovery of copper using pyro-hydrometallurgical process, *Journal of Hazardous Materials*, Vol.181, p.1016-23.
- Amamoto, I., Kofuji, H., Myochin, M., Takasaki, Y., Yano, T. and Terai, T. (2010) : Precipitation behaviors of fission products by phosphate conversion in LiCl-KCl medium, *NUCLEAR TECHNOLOGY*, Vol.171, No.3, p.316-24.
- 柴山 敦, 芳賀一寿, 梅田久義 (2010) : セメンテーションと中和沈殿-溶融処理を利用した貴金属を含む強酸性廃液からの金属回収, ケミカルエンジニアリング, 55 巻, 10 号, 749-54 頁 (依頼原稿).
- 寺境光俊, 柿本雅明 (2010) : ハイパーブランチポリマー, 新訂最新ポリイミド-基礎と応用-, 日本ポリ

イミド・芳香族高分子研究会編, エヌティーエス, 210-21 頁.

寺境光俊, 松本和也 (2010) : 分岐度を制御したハイパーブランチポリマーの合成, 未来材料, エヌティーエス, 10 巻, 11 号, 33-8 頁.

「国際会議報告集等」

Shibayama, A., Rabatho, J.P., Takasaki, Y. and Kato, J. (2010) : Application of flotation to concentrate copper and molybdenum lost in flotation tailings from Cu-Mo flotation, *14th Conference on Environment and Mineral Processing* (Ostrava, Czech Republic), Part II, p.121-7.

Shibayama, A., Tongamp, W., Haga, K. and Takasaki, Y. (2010) : Removal of arsenic in enargite from copper ores by flotation and leaching in NaHS media, *Congress Proceedings XXV International Mineral Processing Congress (IMPC2010)* (Brisbane, Australia), p.1603-11.

Rabatho, J.P., Tongamp, W., Shibayama, A., Kato, J. and Takasaki, Y. (2010) : Retreating Cu-Mo rougher tailing by flotation for concentration of copper and molybdenum, *Proceedings, XXV International Mineral Processing Congress (IMPC 2010)* (Brisbane, QLD, Australia), p.2271-7.

Amamoto, I., Mitamura, N., Tsuzuki, T., Takasaki, Y., Shibayama, A., Yano, T., Nakada, M. and Okamoto, Y. (2010) : Removal of fission products in the spent electrolyte using iron phosphate glass as a sorbent, *Proceedings of the ASME 13th International Conference on Environmental Remediation and Radioactive Waste Management (ICME2010)* (Tsukuba, Japan), p.1-6 (*ICME2010-40272).

環境・素材設計工学講座

「学術論文集 (誌) ・学協会誌」

Sugawara, K. and Nonaka, R. (2010) : Selective recovery of rare metals by chlorination, *Chemical Engineering*, Vol.55, No.3, p.1-6.

村上賢治, 加藤貴宏, 菅原勝康 (2010) : 重油灰/廃プラスチック混合物の燃焼特性, 日本エネルギー学会誌, 89 巻, 10 号, 1006-11 頁.

Nakamura, T., Okawa, H., Hosokawa, R., Saito, T., Kawamura, Y. and Sugawara, K. (2010) : The sterilization of suspensions contaminated with microorganisms using ultrasound irradiation, *Japanese Journal of Applied Physics*, Vol.49, 07HE11.

Munakata, K., Wajima, T., Hara, K., Wada, K., Takeishi, T., Shinozaki, Y., Mochizuki, K., Katekari, K., Kobayashi, K., Iwai, Y., Hayashi, T. and Yamanishi, T. (2010) : Tritium release experiments with CATS and numerical simulation, *Fusion Engineering and Design*, Vol.85, No.7-9, p.1250-4.

Wajima, T., Munakata, K., Takeishi, T., Hara, K., Wada, K., Katekari, K., Inoue, K., Shinozaki, Y., Mochizuki, K., Tanaka, M. and Uda, T. (2010) : Adsorption characteristics of water vapor on honeycomb adsorbents,

Fusion Engineering and Design, Vol.85, No.7-9, p.1164-7.

Mochizuki, K., Munakata, K., Wajima, T., Hara, K., Wada, K., Shiomori, T., Takeishi, T., Knitter, R., Bekris, N. and Okuno, K. (2010) : Study of isotope exchange reaction on ceramic breeder materials deposited with noble metal, *Fusion Engineering and Design*, Vol.85, No.7-9, p.1185-9.

Wajima, T. and Munakata, K. (2010) : Conversion of waste sandstone cake into crystalline zeolite x using alkali fusion, *Materials Transactions*, Vol.51, No.5, p.849-54.

Wajima, T. and Munakata, K. (2010) : Synthesis of 11A tobermorite from blast furnace slag using EDTA, *Journal of Ion Exchange*, Vol.21, No.3, p.171-4.

Hirai, T., Wajima, T. and Yoshizuka, K. (2010) : Preparation and cation exchange properties of zeolitic adsorbents using fused flying ash and seawater, *Journal of Ion Exchange*, Vol.21, No.4, p.382-7 (in Japanese).

Wajima, T., Murakami, K., Kato, T. and Sugawara, K. (2010) : Preparation of carbonaceous heavy metal adsorbent from coal using sulfur impregnation, *Energy Sources A*, Vol.32, p.442-9.

Wajima, T., Shimizu, T., Yamato, T. and Ikegami, Y. (2010) : Removal of NaCl from seawater using natural zeolite, *Toxicological & Environmental Chemistry*, Vol.91, No.1, p.21-6.

Wajima, T. (2010) : Removal of boron from geothermal water using hydrotalcite, *Toxicological & Environmental Chemistry*, Vol.92, No.5, p.879-84.

Wajima, T. and Sugawara, K. (2010) : Material conversion from various incinerated ashes using alkali fusion method, *International Journal of the Society of Materials Engineering for Resources*, Vol.17, No.1, p.47-52.

Wajima, T. (2010) : Preparation of functional material from waste sandstone cake, *Chemical Engineering*, Vol.55, No.7, p.13-6 (in Japanese).

「国際会議報告集等」

Sugawara, K., Kato, T., Murakami, K., Mochizuki, Y. and Sugawara, T. (2010) : Zinc recovery from molten fly ashes, *The 13th Asia Pacific Confederation of Chemical Engineering Congress (APPChE)* (Taipei, Taiwan), No.10349.

Murakami, K., Yu, X., Watanabe, S., Kato, T., Inoue, Y. and Sugawara, K. (2010) : Synthesis and ion-exchange property of thermosensitive polymer / mesoporous silica composite, *The 13th Asia Pacific Confederation of Chemical Engineering Congress (APPChE)* (Taipei, Taiwan), No.10541.

Mochizuki, Y., Kato, T., Sugawara, K. and Enda, Y. (2010) : Study of release behavior of boron during pyrolysis and gasification of coal, *2nd International Symposium on gasification and its application (iSGA 2010)* (Fukuoka, Japan), B12.

- Sugawara, K., Kato, T., Murakami, K. and Mochizuki, Y. (2010) : Effective utilization of heavy oil ash produced from power plant, *Seminar National Thermo-fluid 2010* (Jogjakarta, Indonesia).
- Munakata, K., Hara, K., Wajima, T., Wada, K., Katekari, K., Mochizuki, K., Takeishi, T., Tanaka, M. and Uda, T. (2010) : Detritation system based on honeycomb catalyst and adsorbent, *Proceedings of 3rd China-Japan Workshop on the Tritium and Breeding Blanket Technology* (Kunming, China).
- Wada, K., Munakata, K., Sato, Y., Wajima, T., Hara, K., Nakamichi, M. and Nishitani, T. (2010) : Oxidation resistance of titanium beryllide fabricated by plasma sintering method, *Proceedings of 3rd China-Japan Workshop on the Tritium and Breeding Blanket Technology* (Kunming, China).
- Hara, K., Munakata, K., Wajima, T., Wada, K., Katekari, K., Mochizuki, K., Takeishi, T., Tanaka, M. and Uda, T. (2010) : Application of honeycomb catalyst to tritium removal system, *Proceedings of 3rd China-Japan Workshop on the Tritium and Breeding Blanket Technology* (Kunming, China).
- Munakata, K. (2010) : Chemical stability of titanium beryllide as neutron multiplier at high temperatures under water vapor, *Proceedings of JSPS Asian Core Program Winter School Seminar on Fusion Blanket & liquid metal Technology*, p.33.
- Wajima, T. and Munakata, K. (2010) : Preparation of Ca-P zeolite from paper sludge ash via acid leaching for simultaneous removal of NH_4^+ and PO_4^{3-} , *Proceedings of 3rd International conference on Engineering for waste and biomass valorization (Waste Eng10)* (Beijing, China), 6 pages.
- Wajima, T. (2010) : The acid leaching process for the synthesis of zeolitic material from paper sludge ash, *Proceedings of the XXV International Mineral Processing Congress (IMPC2010)* (Brisbane, Australia), p.3983-9.

化学システム学講座

「学術論文集 (誌) ・学協会誌」

- Gotoh, T., Awa, H., Kikuchi, K.-I., Nirasawa, S. and Takahashi, S. (2010) : Prorenin processing enzyme (PPE) produced by baculovirus-infected Sf-9 insect cells: PPE is the cysteine protease encoded in the AcMNPV gene, *Biosci. Biotechnol. Biochem.*, Vol.74, No.2, p.370-4.
- Takahashi, S., Hori, K., Hokari, M., Gotoh, T. and Sugiyama, H. (2010) : Inhibition of human renin activity by saponins, *Biomed. Res.*, Vol.31, No.2, p.155-9.
- Gotoh, T., Kikuchi, K.-I. and Takahashi, S. (2010) : Active human renin production using a baculovirus expression vector system: An effective method for preventing excessive proteolytic degradation of recombinant proteins, *J. Chem. Eng. Jpn.*, Vol.43, No.7, p.603-7.

- Takahashi, S., Tokiwano, T., Hata, K., Kodama, I., Hokari, M., Suzuki, N., Yoshizawa, Y. and Gotoh, T. (2010) : The occurrence of renin inhibitor in rice: Isolation, identification, and structure-function relationship, *Biosci. Biotechnol. Biochem.*, Vol.74, No.8, p.1713-5.
- Gotoh, T., Kikuchi, K.-I., Kagaya, A. and Inoue, S. (2010) : Direct production of L-ornithine from casein by commercial digestive enzymes and *in situ* activated arginase, *Bioprocess Biosys. Eng.*, Vol.33, No.6, p.773-7.
- Gotoh, T., Ono, H., Kikuchi, K.-I., Nirasawa, S. and Takahashi, S. (2010) : Purification and characterization of aspartic protease derived from Sf9 insect cell, *Biosci. Biotechnol. Biochem.*, Vol.74, No.10, p.2154-7.
- Takahashi, S., Tokiwano, T., Suzuki, N., Kodama, I., Yoshizawa, Y. and Gotoh, T. (2010) : Renin inhibitory activity in rice and cereals, *J. Biol. Macromol.*, Vol.10, No.3, p.83-91.
- 高橋 博, 菊地賢一 (2010) : 陰イオン交換膜におけるリン酸の収着, *J. Ion-Exch.*, 21 巻, 4 号, 392-6 頁.
- Yasui, H.M., Hongo, T., Hayashi, H., Takaishi, T., Nataka, S. and Yamazaki, A. (2010) : Phase transition and thermal behavior change of low silica x zeolite at [Al] = 90, *Chem. Lett.*, Vol.39, No.12, p.1242-4.
- Yamashiro, T., Narita, K., Sato, K., Nomura, M. and Nakata, S. (2010) : Synthesis of chalcone and flavanone derivatives from condensation of 2'-hydroxyacetophenones and benzaldehyde over basic β -zeolites, *J. Jpn. Petrol. Inst.*, Vol.53, No.6, p.351-4.

生命化学科

基礎生命化学講座

「学会論文集 (誌) ・学協会誌」

Kubota, H., Yamamoto, S., Itoh, E., Abe, Y., Nakamura, A., Izumi, Y., Okada, H., Iida, M., Nanjo, H., Itoh, H. and Yamamoto, Y. (2010) : Increased expression of co-chaperone HOP with HSP90 and HSC70 and complex formation in human colonic carcinoma, *Cell Stress Chaperones*, Vol.15, p.1003-11.

Yamamoto, S., Nakano, S., Owari, K., Fuziwara, K., Ogawa, N., Otaka, M., Tamaki, K., Watanabe, S., Komatsuda, A., Wakui, H., Sawada, K.I., Kubota, H. and Itoh, H. (2010) : Gentamicin inhibits HSP70-assisted protein folding by interfering with substrate recognition, *FEBS Lett.*, Vol.584, p.645-51.

Hoseki, J., Sasakawa, H., Yamaguchi, Y., Maeda, M., Kubota, H., Kato, K. and Nagata, K. (2010) : Solution structure and dynamics of mouse ARMET, *FEBS Lett.*, Vol.584, p.1536-42.

Kitamura, A. and Kubota, H. (2010) : Amyloid oligomers: dynamics and toxicity in the cytosol and nucleus (review), *FEBS J.*, Vol.277, p.1369-79.

Kubota, H., Kitamura, A., Itoh, H., Kinjo, M. and Nagata, K. (2010) : Fluorescently labeled proteins as a tool for analyzing the dynamics of protein quality control in living cells (review), *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, p.1-4.

Takada, M., Otaka, M., Takahashi, T., Izumi, Y., Tamaki, K., Shibuya, T., Sakamoto, N., Osada, T., Yamamoto, S., Ishida, R., Odashima, M., Itoh, H. and Watanabe, S. (2010) : Overexpression of a 60-kDa heat shock protein enhances cytoprotective function of small intestinal epithelial cells, *Life. Sci.*, Vol.86, p.499-504.

Watanabe, T., Hata, K., Hiwatashi, K., Hori, K., Suzuki, N. and Itoh, H. (2010) : Suppression of murine preadipocyte differentiation and reduction of visceral fat accumulation by a petasites japonicus ethanol extract in mice fed a high-fat diet, *Biosci. Biotech. Bioch.*, Vol.74, p.499-503.

「国際会議報告集等」

Kubota, H., Yamamoto, S., Yamamoto, Y. and Itoh, H. (2010) : Formation of HOP-containing chaperone complexes and the effect of 17-AAG, an HSP90 inhibitor, on colon cancer cells, *The 3rd International Symposium on Protein Community* (Nara, Japan), p.88.

Yamamoto, S., Subedi, G.P., Hanashima, S., Satoh, T., Yamaguchi, Y., Kubota, H. and Itoh, H. (2010) : Co-chaperone HOP (HSP70/HSP90 organizing protein) has ATPase activity and changes its conformation in the presence of ATP, *The 3rd International Symposium on Protein Community* (Nara, Japan), p88-9.

Ishida, R., Oka, T., Takahashi, H., Kubota, H. and Itoh, H. (2010) : ATP-dependent transition of Hsp60 from single to double rings in the presence of cochaperonin Hsp10, *The 3rd International Symposium on Protein*

Community (Nara, Japan), p.89.

応用生命化学講座

「学会論文集（誌）・学協会誌」

Yamada, M., Shimakawa, Y., Kondo, Y. and Hamada, F. (2010) : Thiacalix[4]arene-rubidium assembly: supramolecular architecture based on alkali metal coordination and cation- π interactions, *CrystEngComm*, Vol.12, p.1311-25.

Takeda, A., Akimoto, K., Kondo, Y. and Hamada, F. (2010) : Double stranded DNA discrimination by di-pyrene modified γ -cyclodextrin, *Bioorg. Med. Chem. Lett.*, Vol.20, p.3240-3.

Itoh, S., Li, C., Yamada, M., Akama, M., Shimakawa, Y., Kondo Y. and Hamada, F. (2010) : Selective extraction ability of thiacalix[6]arene derivatives from rare metal mixture solution, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, p.211-5.

Amatatsu, Y. (2010) : Theoretical study on the photochemical behavior of 4-dimethylamino-4'-cyanodiphenylacetylene, *J. Phys. Chem. A*, Vol.114, p.543-51.

Amatatsu, Y. (2010) : Theoretical characterizations of electronically excited silaazulene skeletons, *Photochem. Photobiol. A Chem.*, Vol.213, p.180-8.

高崎史進, 小川信明, 渡辺 巖, 鈴木敏久, 中島 靖, 脇田宗弘, 鈴木理沙 (2010) : 線吸収微細構造分析によるジルコニウム水溶液中のジルコニウム (IV) の溶存構造の研究, 分析化学, 59 巻, 447-54 頁.

Kikuchi, R., Sasaki, M., Sato, A., Takada, M., Ozeki, T. and Ogawa, N. (2010) : Increase of pollutants in radiation fog by fumigation at Takanosu basin in northern Japan, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, p.69-72.

Kikuchi, R., Sasaki, Y., Oba, A., Sato, A., Takada, M. Fujiwara, K., Kimoto, T., Toru Ozeki, T., Sera, K. and Ogawa, N. (2010) : Origin and transportation course of heavy metal elements in the particulate matter (PM) at the Hachimantai mountain range in northern Japan, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, p.177-81.

「国際会議報告集等」

Hamada, F., Takeda, A. and Kondo, Y. (2010) : Double stranded DNA discrimination by di-pyrene modified γ -cyclodextrin, *The 15th International Cyclodextrins Symposium* (Vienna, Austria).

Kondo, Y., Hashitani Y. and Hamada, F. (2010) : Extraction ability for precious metals based on diethylphosphatethiacalix[6]arene, *5th International Symposium on Macrocyclic and Supramolecular Chemistry* (Nara, Japan), p.249.

Ito, S., Yamada, M., Kondo, Y. and Hamada, F. (2010) : A hexameric wheel-shaped assembly based on bromo modified propoxy thiacalix[4]arene, *5th International Symposium on Macrocyclic and Supramolecular Chemistry* (Nara, Japan), p.250.

材料工学科

材料物性学講座

「学術論文集（誌）・学協会誌」

Wang, D., Kodama, N., Zhao, L. and Wang, Y. (2010) : Photoluminescence properties of $\text{Na}_2\text{GdF}_2\text{PO}_4:\text{Re}$ ($\text{Re}=\text{Eu}^{3+}$ and Tb^{3+}) under VUV-UV excitation, *J. Electrochem. Soc.*, Vol.157, p.J233-7.

Kodama, N., Saito, K., Nakaya, T., Takahashi, T., Shibata, D. and Takeda, H. (2010) : Formation of periodic surface nanostructures on $\text{Ti}^{3+}:\text{Al}_2\text{O}_3$ crystals using femtosecond laser pulses, *Appl. Surf. Sci.*, Vol.257, p.685-90.

Tsujiuchi, Y., Furuya, K., Matsumoto, J., Makino, Y., Masumoto, H. and Goto, T. (2010) : Surface structural comparison of composite film of bacteriorhodopsin and phosphatidylcholine fabricated on amorphous silicon dioxide, crystal silicon dioxide and hydrogenated amorphous silicon, *Japanese Journal of Applied Physics*, Vol.49, 01AE15.

「研究機関報告等」

Tsujiuchi, Y., Ito, R., Masumoto, H. and Goto, T. (2010) : Fabrication of bio-polymer constituent thin film on hydrogenated amorphous silicon film, *Annual Report on Collaborative Researches Advanced Research Center of Metallic Glasses, Institute for Materials Research, Tohoku University*, p.105-6.

「国際会議報告集等」

Kodama, N., Tamaru, H. and Takahashi, T. (2010) : Energy transfer from self-trapped exciton to Gd^{3+} and Pr^{3+} ions in $\text{LaSc}_3(\text{BO}_3)_4$, *11th Europhysical Conference on Defects in Insulating Materials* (Pecs, Hungary), p.90.

Tsujiuchi, Y. and Makino, Y. (2010) : An observation of diamond-shaped particle structure in a soya phosphatidylcholine and bacteriorhodopsin composite Langmuir Blodgett film fabricated by multilayer molecular thin film, *The 9th International Conference on Nano-Molecular Electronics* (Kobe), p.49.

Tsujiuchi, Y., Hiramitsu, Y., Takahashi, T., Ichikawa, T., Masumoto, H. and Goto, T. (2010) : Interfacial ion conductivity between gels dispersed amino acid molecules, and an effect of hydrogenated amorphous silicon on a rectification property of laminated gel films, *The 9th International Conference on Nano-Molecular Electronics* (Kobe), p.161.

知能材料学講座

「学会論文集（誌）・学協会誌」

石尾俊二, Wang, T., Pei, W. (2010) : 磁気力顕微鏡を用いたドット・パターンの磁化反転過程の研究（解説）, まぐね, 5巻, 3号, 134-41頁.

Wang, Y., Ariake, J., Wang, T., Watanabe, S., Honda, N., Li, F.S., Ouchi, K. and Ishio, S. (2010) : The effect of

Co-TiO₂ soft layer and Pt interlayer on the magnetic properties of exchange-coupled composite recording media, *J. Appl. Phys.*, Vol.107, p.103925.

Yamane, H., Narisawa, T., Hasegawa, T. and Ishio S. (2010) : Structural characterization for L1₀-ordered FePt films with (001) texture by x-ray diffraction with (001) texture by x-ray diffraction, *J. Appl. Phys.*, Vol.108, p.113923.

長谷川崇, 石尾俊二 (2010) : L1₀ FePtRh 薄膜における強磁性-反強磁性相変化を利用したパターンニング, 電子情報通信学会技術研究報告, 110 巻, 225 号, 19-23 頁.

Hirade, M., Sato, Y. and Hara, M. (2010) : Improvement of cyclic oxidation resistance of Fe-23 mass% Cr alloy by molten salt electrodeposition of lanthanum, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.205-10.

加藤辰仁, 佐藤芳幸, 原 基 (2010) : 光照射された TiO₂-Fe 対のガルバニ挙動, 材料と環境, 59 巻, 7 号, 259-64 頁.

Fukumoto, M., Ono, T., Meguro, T., Hara, M. and Narita, T. (2010) : Formation of Ni aluminide containing Hf by synchronous electrodeposition of Al and Hf and cyclic-oxidation resistance, *Mater. Trans.*, Vol.51, p.720-6.

福本倫久, 横田剛志, 原 基, 成田敏夫 (2010) : Al と Zr の同時電析法による Zr を含む Ni アルミナイド表面層の形成とその耐サイクル酸化性, 日本金属学会誌, 74 巻, 9 号, 584-91 頁.

Tada, E., Ohguchi, K., Musha, G., Hadehara, G. and Miura, Y. (2010) : Electrochemical preparation and mechanical properties of dog-bone Cu foils, *Electrochemistry*, Vol.78, p.153-6.

Tada, E. and Kaneko, H. (2010) : Optical visualization of concentration field of Zn²⁺ during galvanic corrosion of a Zn/steel couple, *Corros. Sci.*, Vol.52, p.3421-7.

「国際会議報告集等」

Ishio, S., Narisawa, T., Takahashi, S., Hasegawa, T., Yamane, H., Kondo, Y. and Ariake, J. (2010) : L1₀ FePt thin film with [001] crystalline growth fabricated by SiO₂ addition/RTA process and dot patterning, *Digests of the 9th Perpendicular Magnetic Recording Conference (PMRC2010)* (Sendai, Japan), p.198-9 (invited).

Ishio, S., Narisawa, T., Hasegawa, T. and Yamane, H. (2010) : L1₀ FePt thin film with [001] crystalline growth fabricated by SiO₂ addition and RTA process, *Digests of the 2nd International Symposium on Advanced Magnetic Materials and Applications (ISAMMA2010)* (Sendai, Japan), p.259.

Yan, Z.J., Takahashi, S., Hasegawa, T., Liu, X., Sakon, T., Kondo, Y., Ariake, J., Xue, D.S. and Ishio, S. (2010) : Magnetic properties of FePt bit patterned media investigated by MFM, *Digests of the 2nd International Symposium on Advanced Magnetic Materials and Applications (ISAMMA2010)* (Sendai, Japan), p.48.

- Ishio, S., Yan, Z., Pei, W., Wang, T., Takahashi, S., Hasegawa, T., Ariake, J. and Kondo, Y. (2010) : Effect of surface layer on magnetization switching in CoPt and FePt dot arrays studied by magnetic force microscopy, *Digests of the 55th Annual Conference on Magnetism and Magnetic Materials (MMM2010)* (Atlanta, U.S.A.), p.55.
- Ishio, S., Liu, X., Narisawa, T., Hasegawa, T. and Yamane, H. (2010) : Mechanism of low temperature ordering of $L1_0$ FePt films by ZnO addition and rapid thermal annealing, *Digests of the 55th Annual Conference on Magnetism and Magnetic Materials (MMM2010)* (Atlanta, U.S.A.), p.189.
- Hasegawa, T., Tomioka, T., Kondo, Y., Yamane, H. and Ishio, S. (2010) : Study on nanoscale patterning using ferro-antiferromagnetic transition in [001]-oriented $L1_0$ FePtRh film, *Digests of the 55 Annual Conference on Magnetism and Magnetic Materials (MMM2010)* (Atlanta, U.S.A.), p.149.
- Fukumoto, M., Yokota, T., Hara, M. and Toshio, N. (2010) : Formation of Ni aluminide coating containing reactive elements by simultaneous electrodeposition and cyclic oxidation resistance, *International Symposium on High-temperature Oxidation and Corrosion 2010* (Zushi, Japan), p.35.
- Sato, N., Kaneta, T., Fukumoto, M. and Hara, M. (2010) : High temperature corrosion resistance of siliconized stainless steel under continuous deposition of salt, *International Symposium on High-temperature Oxidation and Corrosion 2010* (Zushi, Japan), p.100.

エネルギー材料学講座

「学会論文集（誌）・学協会誌」

- Nino, A., Tanaka, A., Sugiyama, S. and Taimatsu, H. (2010) : Indentation size effect for the hardness of refractory carbides, *Materials Transactions*, Vol.51, p.1621-6.
- Taguchi, M., Nakayama J., Itou, K. and Nagai, N. (2010) : Methanol oxidation activities of Pt oxide thin films prepared by reactive sputtering, *Int. J. Soc. Mater. Eng. Resor.*, Vol.17, p.15-9.
- Lu, X.Y., Yi, D., Chen, H., Nagata, A. and Sugawara, K. (2010) : Microstructure and superconducting properties of Bi-2223/Ag tapes fabricated in the pressing-melting-sintering process, *Physica C*, Vol.470, p.1388-91.

「研究機関報告等」

- Lu, X.Y., Sugawara, K., Watanabe, K. and Nojima, T. (2010) : Effect of the magnetic fields on microstructure and critical current properties of the Bi-2223 tapes, *Annual Report on High Field Laboratory for Superconducting Materials, Institute for Materials Research, Tohoku University*, p.43-5.

「国際会議報告集等」

- Lu, X.Y., Yi, D., Chen, H., Nagata, A. and Sugawara, K. (2010) : Effect of the variation-temperature-sintering on microstructure and superconducting properties of Bi-2223/Ag tapes in high magnetic fields, *23rd International Symposium on Superconductivity* (Tsukuba, Japan), p.234.

材料開発工学講座

「学会論文集 (誌) ・学協会誌」

Himemiya, T., Ohsasa, K. and Saga, T. (2010) : Eutectic growth model using cell-automaton method, *Materials Transactions*, Vol.51, No.1, p.110-5.

Wei, L.L. and Ohsasa, K. (2010) : Supercooling and solidification behavior of phase change material, *ISIJ International*, Vol.49, No.9, p.1265-9.

Ohguchi, K. and Sasaki, K. (2010) : Investigation of effect of creep strain on low-cycle fatigue of lead-free solder by cyclic loading using stepped ramp waves, *Transactions of ASME, Journal of Electronic Packaging*, Vol.132, p.041010-1-7.

Ohguchi, K. and Sasaki, K. (2010) : Time-independent and time-dependent inelastic strain analysis of lead-free solder by cyclic loading test using stepped ramp waves, *Transactions of ASME, Journal of Electronic Packaging*, Vol.132, p.041003-1-7.

大口健一, 多田英司, 三浦裕太, 八木輝明, 井口 裕 (2010) : 電解めっき銅箔の非弾性変形におけるクリープ変形の効果, 日本機械学会論文集 A 編, 76 巻, 770 号, 1351-8 頁.

大口健一 (2010) : はんだ接続部の変形解析用ソルバの開発, 溶接学会誌, 79 巻, 3 号, 215-9 頁.

「国際会議報告集等」

Aso, S., Ike, H., Ohguchi, K., Komatsu, Y. and Konishi, N. (2010) : Bending strength of cast materials reinforced with hard particles, *Proceedings of the Science and Processing of Cast Iron IX (SPCI-9)* (Luxor, Egypt), p.404-9.

情報工学科

人間情報工学講座

「学会論文集（誌）・学協会誌」

- 景山陽一, 東海林佳昭, 西田 眞 (2010) : NOAA-AVHRR データにおける地上基準点自動抽出アルゴリズム, 映像情報メディア学会誌, 64 巻, 1 号, 124-7 頁.
- 佐藤慶幸, 成田純一, 景山陽一, 西田 眞 (2010) : 口唇の形状情報を用いた口唇領域自動抽出処理の改善, 電気学会論文誌 C, 130 巻, 5 号, 873-81 頁.
- 景山陽一, 高野亜惟, 西田 眞 (2010) : 情景画像の特徴を考慮した円形道路標識の抽出アルゴリズム, 電気学会論文誌 C, 130 巻, 10 号, 1865-72 頁.
- 石沢千佳子, 安藤 優, 西田 眞 (2010) : ディレクトリの変更履歴およびハッシュ値に基づいた残留ファイルの検出手法, 電気学会論文誌 C, 130 巻, 11 号, 2074-83 頁.
- 藤原克哉, 藤原秀雄, オビエン・マリー・エンジェリン, 玉本英夫 (2010) : セキュアスキャン設計のためのシフトレジスタ等価回路の列挙と合成, 電子情報通信学会論文誌 D-I, J93-D 巻, 11 号, 2426-36 頁.

「国際会議報告集等」

- Kageyama, Y., Shibata, C. and Nishida, M. (2010) : Detection and feature analysis of groundwater discharge points in coastal regions around Mt. Chokaisan, Japan by Using ALOS AVNIR-2 Data, *Remote Sensing and Hydrology 2010 Sympo.* (Jackson Hole, U.S.A), P-22.
- Fujiwara, K., Fujiwara, H., Obien, M.E.J. and Tamamoto, H. (2010) : SREEP: shift register equivalents enumeration and synthesis program for secure scan design, *Proceedings of the 13th IEEE International Symposium on Design and Diagnostics of Electronic Circuits and Systems* (Vienna, Austria), p.193-6.
- Fujiwara, K., Fujiwara, H. and Tamamoto, H. (2010) : SREEP-2: SR-equivalent generator for secure and testable scan design, *Proceedings of the 11th IEEE Workshop on RTL and High Level Testing* (Shanghai, China), p.7-12.
- Yokoyama, H., Saluja, K.K. and Tamamoto, H. (2010) : Controlling peak power consumption for scan based multiple weighted random BIST, *Proc. of ATS2010, The Nineteenth IEEE Asian Test Symposium* (Shanghai, China), p.147-52.

「学術関係誌」

- Ishii, M. and Nishida, M. (2010) : Generation of emotional feature space for facial expression recognition using self-mapping, *Self-Organizing Maps*, p.289-305.
- 景山陽一, 西田 眞 (2010) : NOAA-AVHRR データにおける地上基準点の自動抽出～ランレングス行列お

よび近傍領域の特徴利用～, 画像ラボ, 21 巻, 8 号, 27-32 頁.

産業情報工学講座

「学会論文集 (誌) ・学協会誌」

Kawakami, H. and Tsuchiya, M. (2010) : Uniqueness in shape identification of a time-varying domain and related parabolic equations on non-cylindrical domains, *Inverse Problems*, Vol.26, 125007, 34 pages, doi:10.1088/0266-5611/26/12/125007.

Takahashi, A., Igarashi, R., Ueda, H., Iwaya, Y. and Kinoshita, T. (2010) : Network anomaly detection based on R/S pox diagram, *International Journal of the Society of Materials Engineering for Resources*, Vol.17, No.2, p.186-92.

機械工学科

機械物理工学講座

「学会論文集（誌）・学協会誌」

Uegaki, E. and Abe, Y. (2010) : Resonances of nuclear molecule ^{28}Si - ^{28}Si , *Nucl. Phys. A*, Vol.834, p.796c-8c.

Shibuya, Y. and Sekine, H. (2010) : Multi-scale analysis of viscoelastic behavior of laminated composite structures, *Key Engineering Materials*, Vol.430, p.115-32.

Muraoka, M. and Sanada, S. (2010) : Displacement amplifier for piezoelectric actuator based on honeycomb link mechanism, *Sens. Actuator A: Physical*, Vol.157, p.84-90.

Toku, Y. and Muraoka, M. (2010) : Helical formation of coated nanowires by viscous flow of core material, *Nanosci. Nanotechnol. Lett.*, Vol.2, No.3, p.197-202.

出水康仁, 梅原徳次, 村岡幹夫, 今井 潤, 赤上陽一, 神田慎吾 (2010) : 二酸化チタン含有ポリカーボネート基板へのイオンビーム照射による DNA 付着強度向上, 日本機械学会論文集 C 編, 76 巻, 768 号, 2142-7 頁.

「研究機関報告等」

左近拓男, 長塩仁志, 遠藤慶太, 鹿又 武 (2010) : 高機能遷移金属磁性材料の強磁場磁性の研究, 東北大学金属材料研究所強磁場超伝導材料研究センター平成 21 年度年次報告書, 84-6 頁.

左近拓男 (2010) : 磁場誘起型新規マルテンサイト合金の探索と磁性の研究 "定常強磁場科学における日本の展望", 物質・材料研究機構, 東北大学金属材料研究所, 169-70 頁.

「国際会議報告集等」

Toku, Y. and Muraoka, M. (2010) : Enhanced bending of coated nanowires using viscous flow of core material: production of nanoinductance, *Proc. 12th Int. Conf. Elect. Mater. Pack.* (Singapore), 4 pages (CD-ROM).

機械ダイナミクス工学講座

「学会論文集（誌）・学協会誌」

Nakamura, M., Ishimi, Y., Tamura, O. and Sugiyama, W. (2010) : Numerical study on the influence of the oscillating surface oxygen concentration on the bioconvection in a two-dimensional deep chamber, *Journal of Fluid Science and Technology*, Vol.5, No.2, p.247-58.

中村雅英, 吉原未紗, 田村オリエ, 杉山 渉 (2010) : 誘導場による感性の評価 (視線の集中に関する考察), 日本機械学会論文集 C 編, 76 巻, 767 号, 1728-34 頁.

Nakamura, M. (2010) : Study on the generating mechanism of the intermittency by using the feedback linearization,

Journal of System Design and Dynamics, Vol.4, No.5, p.754-64.

Hasegawa, H. and Kumagai, S. (2010) : Active boundary layer control system using vortex generating jets and operating by the detection of precursor of flow separation, *International Journal of Flow Control*, Vol.2, No.3, p.155-67.

長谷川裕晃, 三瀬 陽, 松内一雄 (2010) : 泳者の手を模擬した三次元振動翼における渦の生成とその挙動, *ながれ*, 29 巻, 5 号, 373-82 頁.

Hasegawa, H., Watanabe, J. and Matsuuchi, K. (2010) : Effect of 3-dimensional airfoil shape on unsteady fluid forces in pitching motion, *Journal of Fluid Science and Technology*, Vol.5, No.2, p.270-80.

足立高弘, 佐藤直也, 小針直人, 堀紀 弘 (2010) : 回転円すい体の外表面を上昇する液膜流れ, *日本機械学会論文集B編*, 76 巻, 761 号, 161-3 頁.

Adachi, T., Sato, N., Kobari, N. and Hori, T (2010) : Liquid film flow rising along the outer surface of the rotating cone, *Heat Transfer-Asian Research*, Vol.39, p.492-6.

足立高弘, 新井晶大 (2010) : 回転円すいの外表面を上昇する液膜流れ, [特集] 注目研究 in 年会 2010, *ながれ*, 29 巻, 6 号, 451-3 頁.

「研究機関報告等」

Adachi, T. (2010) : Heat transfer characteristics of condensate film flow along vertical plate with microscopic grooves, *Activity Report 2009 of Supercomputer Center, Institute for Solid State Physics, University of Tokyo*, p.189-90.

「国際会議報告集等」

Hasegawa, H. and Otsu, S. (2010) : Experimental study on behavior of microbubbles with different ζ -potentials and its application to seawater desalination, *Proc. of the 5th International Symposium on Advanced Science and Technology in Experimental Mechanics (Kyoto, Japan) (CD-ROM)*.

Kitta, S., Hasegawa, H., Obayashi, S. and Murakami, M. (2010) : Shuttlecock aerodynamics and dynamic behavior just after Impact, *Proc. of the 7th International Conference on Flow Dynamics (Miyagi, Japan) (CD-ROM)*.

Hasegawa, H. and Takahashi, K. (2010) : Effect of excitation frequency of synthetic jet on generation of longitudinal vortex, *Proc. of the 3rd International Conference on Jets, Wakes, and Separated Flows (Cincinnati, USA) (CD-ROM)*.

Hasegawa, H. and Nakagawa, K. (2010) : Dynamic behavior of vortex shedding from an oscillating three-dimensional airfoil, *Proc. of the 27th Congress of the International Council of the Aeronautical Sciences (Nice, France) (CD-ROM)*.

システム設計講座

「学会論文集（誌）・学協会誌」

- Tanaka, M. and Kato, R. (2010) : Fractal analysis of fracture surfaces in materials crept at high temperatures or fatigued by repeated bending (S.N.), *ISIJ International*, Vol.50, No.5, p.774-6.
- Tanaka, M. and Kato, R. (2010) : The effect of heat treatments on the creep-rupture properties of a wrought Ni-Cr heat-resistant alloy at 973 K, *Journal of Materials Science*, Vol.45, No.15, p.4029-35.
- Miura, K. (2010) : Reflection response of the transient wave from a finite plane crack lying in elastic half-space subjected to SH periodic impact load, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.141-6.
- Miyano, Y., Fujii, H., Sun, Y., Katada, Y., Kuroda, S. and Kamiya, O. (2010) : Mechanical properties of friction stir butt welds of high nitrogen-containing austenitic stainless steel, *Materials Science and Engineering A*, Vol.528, p.2917-21.
- Kamiya, O., Miyano, Y., Takahashi, M., Kawase, H., Sekiguchi, K., Oga, Y. and Suto, M. (2010) : Development of new wire bonded with diamond grains using metal solder, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.182-5.
- Miyano, Y., Fujii, H., Sun, Y., Ieko, K., Katada, Y. and Kamiya, O. (2010) : The possibility of friction stir welding of high nitrogen-containing austenitic stainless steel, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.197-200.
- 久保内達郎, 神谷 修 (2010) : アルミニウム電解コンデンサのリード線溶接における接合界面のミクロ構造に及ぼす Sn メッキの影響, *素材物性学雑誌*, 23 巻, 1 号, 13-8 頁.
- 高橋 護, 佐々木祐一, 斎藤絃次, 神谷 修, 大好 直 (2010) : 高純度アセチレンガスを用いた燃焼炎法によるダイヤモンド皮膜合成に対する N₂ 添加の影響, *日本機械学会論文集 A 編*, 76 巻, 772 号, 1748-55 頁.
- 小松喜美, 菅原征洋, 久保淳司, 藤田 忠 (2010) : 円筒容器内で回転する水平氷円柱の温度・濃度複合融解, *日本機械学会論文集 B 編*, 76 巻, 768 号, 1265-72 頁.
- Sugawara, M., Komatsu, Y., Makabe, T. and Beer, H. (2010) : Three dimensional freezing around a coolant-carrying tube, *Heat and Mass Transfer*, Vol.46, No.11-12, p.1307-14.

「著書」

- Tanaka, M. and Kato, R. (2010) : Control of microstructures by heat treatments and high-temperature properties in high-tungsten cobalt-base superalloys, *Handbook of Materials Science Research*, edited by Charles René and Eugene Turcotte, *Nova Science Publishers, New York*, Chapter 13, p.445-58,

ISBN:978-1-60741-798-9.

ロボティクス・福祉工学講座

「学会論文集 (誌) ・学協会誌」

Mori, S., Sato, Y., Sakurada, A., Naganawa, A., Shibuya, Y. and Obinata, G. (2010) : 2D nano-motion actuator for precise track following, *Journal of Advanced Mechanical Design, Systems, and Manufacturing*, Vol.4, No.1, p.301-14.

関 健史, 長縄明大, 岡 潔, 芳野純治 (2010) : イレウスチューブを用いた小腸全域検査のためのバルーン内圧制御, 日本コンピュータ外科学会, 12 巻, 1 号, 33-42 頁.

関 健史, 長縄明大, 岡 潔, 千葉敏雄 (2010) : 双胎間輸血症候群における胎児鏡レーザー照射制御—In vivo 実験による血流遮断の検証—, 計測自動制御学会産業論文集, 9 巻, 10 号, 70-5 頁.

Oka, K., Seki, T., Naganawa, A., Yamashita, H. and Chiba, T. (2010) : The development of composite-type optical fiberscope system for fetoscopic laser photocoagulation of chorionic plate anastomosing vessels (FLPC), *Minimally Invasive Therapy & Allied Technologies*, Vol.19, No.2, p.94-9.

関 健史, 長縄明大, 岡 潔, 石川信治, 芳野純治 (2010) : シリンジを用いたイレウスチューブのバルーン内圧制御, 日本機械学会論文集 C 編, 76 巻, 766 号, 1645-7 頁.

長縄明大, 山尾拓也, 佐藤生馬, 岡 正人, 田中幹也, 正宗 賢 (2010) : MRI 対応穿刺治療ナビゲーションロボットの高精度制御, 日本 AEM 学会誌, 18 巻, 2 号, 79-85 頁.

長縄明大, 古谷将人, 森 英季, 櫻田 陽, 渋谷 嗣, 大日方五郎 (2010) : 高速高精度な位置決めを実現するナノモーションアクチュエータ, 日本 AEM 学会誌, 18 巻, 2 号, 86-92 頁.

Seki, T., Oka, K., Naganawa, A., Yamashita, H., Kim, K. and Chiba, T. (2010) : Laser distance measurement using a newly developed composite-type optical fiberscope for fetoscopic laser surgery, *Optics and Lasers in Engineering*, Vol.48, p.974-7.

廣瀬 圭, 土岐 仁 (2010) : スノーボード・ターンの運動計測と解析に関する研究, スキー研究, 7 巻, 1 号, 27-34 頁.

「国際会議報告集等」

Ito, M., Naganawa, A., Oka, K. and Sunakoda, K. (2010) : Development of a laser processing head to inspect and repair the damage inside of a half inch pipe, *2010 IEEE/SICE International Symposium on System Integration*, p.126-31 (CD-ROM).

「学術関係誌」

長縄明大, 佐藤生馬, 岡 正人, 正宗 賢 (2010) : オープン MRI 下穿刺治療ナビゲーションロボットの制御, ライフサポート, 22 巻, 2 号, 13-8 頁.

電気電子工学科

電気エネルギー工学講座

「学会論文集 (誌) ・学協会誌」

Rahman M.M., Mitobe, K., Suzuki, M. and Yoshimura, N. (2010) : Analysis of finger movements of a pianist using magnetic motion capture system with six dimensional position sensors, *Trans. Virtual. Real. Soc. Jp.*, Vol.15, No.2, p.243-50.

Kabir, M., Suzuki, M. and Yoshimura, N. (2010) : Reduction of excess activated sludge by ferrite particles: methods for practical use, *Int. J.Soc. Mater. Engg. Resour.*, Vol.17, No.2, p.120-5.

「学術関係誌」

小野田勝 (2010) : 量子輸送現象における幾何学的位相の効果, *物性研究*, 93 巻, 6 号, 715-52 頁.

「国際会議報告集等」

Zhang, H., Mitobe, K., Suzuki, M. and Yoshimura, N. (2010) : Continuous wave terahertz imaging method for ion migration detection, *International Conference on Condition Monitoring and Diagnosis 2010 (CMD2010), Proceedings of CMD 2010 Tokyo* (Tokyo, Japan), Vol.2, p.770-3.

Kabir, M., Suzuki, M., Yoshimura, N., Shiozawa, K., Ogishima, M. and Andoh, H. (2010) : Study on electrical characteristics of ZnO micro particles used in air bushings, *International Conference on Condition Monitoring and Diagnosis 2010 (CMD2010), Proceedings of CMD 2010 Tokyo* (Tokyo, Japan), Vol.1, p.562-5.

Mitobe, K., Saitoh, M. and Yoshimura, N. (2010) : Analysis of dexterous finger movements for writing using a hand motion capture system, *International Conference on Virtual Environments, Human-Computer Interfaces and Measurement Systems (VECIMS2010)* (Taranto, Italy), p.60-3.

Mitobe, K., Kodama, J., Miura, T., Tamamoto, H., Suzuki, M. and Yoshimura, N. (2010) : Developments of the learning assist system for dexterous finger movements, *ACM SIGGRAPH ASIA 2010* (Seoul, Korea) (CD-ROM).

Soga, M., Ishihara, S., Ota, S., Majima, Y., Maekawa, Y., Mitobe, K. and Hirokazu, T. (2010) : Analysis of erhu playing and design of learning environment for novice erhu player, *Proceedings of the 9th international conference on ITHET'10* (Cappadocia, Turkey), p.297-304.

Seki, Y., Iwaya, Y., Chiba, T., Yairi, S., Otani, M., Oh-uchi, M., Munekata, T., Mitobe, K. and Honda, A. (2010) : Auditory orientation training system developed for blind people using PC-based wide-range 3-D sound technology, *Extended paper of IWPASH 2009* (in press).

「著書」

Mitobe, K., (2010) : Business opportunities in personal transportation -Traffic safety for older adults, *The Silver*

Market Phenomenon -Second Edition-, edited by Kohlbacher, F. and Herstatt, C., *Springer, Heidelberg*, p.371-81.

光・電子デバイス工学講座

「学会論文集（誌）・学協会誌」

Sato, Y., Hatori, H., Igarashi, S., Arai, M., Ito, K. and Kikuchi, S. (2010) : Vacuum evaporation of CdTe thin films on Ni, Mo, Ti and TiN-deposited sapphire single-crystal substrates, *Current Applied Physics*, Vol.10, p.S499-501.

Sato, Y., Otake, F. and Hatori, H. (2010) : A dependence of crystallinity of In₂O₃ thin films by a two-step heat treatment of indium films on the heating atmosphere, *J. Mod. Phys.*, Vol.1, p.360-3.

Sato, Y., Kodate, T. and Arai, M. (2010) : Thin film depositions of CdTe semiconductors on amorphous and single crystal substrates and comparisons of their properties, *Materials Science Forum*, Vol.638-42, p.2909-14.

Matsumura, T. and Sato, Y. (2010) : A theoretical study on van der Pauw measurement values of inhomogeneous compound semiconductor thin films, *J. Mod. Phys.*, Vol.1, p.340-7.

松村 透, 佐藤祐一 (2010) : 有限要素シミュレーションによる不均質半導体の van der Pauw 測定における異常値の発現と緩和に関する検討, 電子情報通信学会論文誌 C, J93-C 巻, 8 号, 256-63 頁.

松村 透, 佐藤祐一 (2010) : 半導体の van der Pauw 測定における不均質領域の影響の有限要素法によるシミュレーション, 日本材料科学会誌, 47 巻, 1 号, 36-41 頁.

Yamaguchi, R. and Sato, S. (2010) : Liquid crystal material dependence on rubbed PVCi alignment properties, *Molecular Crystals and Liquid crystals*, Vol.516, p.32-7.

Yamaguchi, R. and Xiong, L. (2010) : Reverse mode liquid crystal gels with twisted orientation, *Japanese Journal of Applied Physics*, Vol.49, p.06023-1-3.

Kawamura, M., Goto, H. and Yumoto, E. (2010) : Improvement of negative lens property of liquid crystal device, *Japanese Journal of Applied Physics*, Vol.49, No.11, p.118002-1-2.

Honma, M., Nose, T., Yanase, S., Yamaguchi, R. and Sato, S. (2010) : Liquid-crystal blazed gratings with spatially distributed pretilt angle, *Japanese Journal of Applied Physics*, Vol.49, p.06023-1-3.

「研究機関報告等」

河村希典, 山田潤一, 斎藤和敬, 佐藤正人, 甲本亮太, 柴田 理 (2010) : 発光ダイオードを用いた種苗生産における稚魚の蝸集, 秋田大学工学資源学部研究報告, 31 号, 1-8 頁.

「国際会議報告集等」

- Horiguchi, S. (2010) : Theoretical investigation of ultra-thin SOI MOSFET and single electron transistor, *IEEE Special Open Lectures on 'Beyond CMOS'* (Aizu, Japan), F-2 (Invited).
- Horiguchi, S. (2010) : Characteristics of Si nanodevices (ultra-thin SOI MOSFET and single-electron transistor), *2010 Workshop on Semiconductor Nanodevices* (Beijing, China), p.1-6 (Invited).
- Sato, Y., Otake, F. and Hatori, H. (2010) : Crystallinity of In_2O_3 thin films on sapphire substrates obtained by a two-step heat treatment of metal indium thin films, *The 16th International Conference on Crystal Growth* (Beijing, China), PA186, p.109.
- Matsumura, T. and Sato, Y. (2010) : Apparent increase in hall mobility of inhomogeneous compound semiconductor thin films by the van der Pauw method, *The 16th International Conference on Crystal Growth* (Beijing, China), PA173, p.108.
- Arai, M., Ito, K., Hatori, H., Igarashi, S. and Sato, Y. (2010) : Properties of CdS and CdTe thin films vacuum evaporated on several epitaxially grown under layers, *5th World Conference on Photovoltaic Energy Conversion* (Valencia, Spain), 3BV.2.135, p.154.
- Yamaguchi, R. (2010) : Numerical analysis of threshold anchoring strength in twist -homogeneous oriented liquid crystal grating, *The 22nd International Liquid Crystal Conference* (Krakow, Poland), P-2.43, p.384.
- Yamaguchi, R. (2010) : Change of alignment surface by photo-excited liquid crystal molecules, *The 22nd International Liquid Crystal Conference* (Krakow, Poland), P-1.136, p.198.
- Yamaguchi, R. (2010) : Selection of easy axis by liquid crystal on rubbed PVCi surface, *17th International Display Workshops* (Fukuoka, Japan), LCTp2-10L, p.107-8.
- Kawamura, M. and Toshima, K. (2010) : Shape measurements by using a liquid crystal lens, *Abstracts of The 23rd International Liquid Crystal Conference* (Krakow, Poland), P-2.161 (502).
- Kawamura, M. and Ito, Y. (2010) : Liquid crystal lens with double circularly hole-patterned electrodes, *Abstracts of The 23rd International Liquid Crystal Conference* (Krakow, Poland), P-2.162 (503).
- Kawamura, M. and Goto, H (2010) : Liquid crystal lens with two divided and double circularly hole-patterned electrodes, *ISOT 2010 International Symposium on Optomechatronic Technologies* (Toronto, Canada), PS-5, p.1-5 (CD-ROM).
- Ohzono, T., Monobe, H., Yamaguchi, R., Shimizu, Y. and Yokoyama, H. (2010) : Nematic liquid crystal on dynamically tunable microwrinkles, *The 22nd International Liquid Crystal Conference* (Krakow, Poland), Oral 14(2), p.32.

知能情報通信工学講座

「学会論文集（誌）・学協会誌」

- Inoue, H., Miura, H., Kayano, Y. and Miyanaga, K. (2010) : Current noise up to GHz band generated by slowly breaking silver-compound contacts with external DC magnetic field, *European Physical Journal Applied Physics*, Vol.49, No.2, 22908, p.1-8.
- Komakine, T., Kurosawa, K. and Inoue, H. (2010) : A novel estimation method of electric field measurement by using spherical dielectric scatterer, 電気学会論文誌 A, 130 巻, 5 号, 462-6 頁.
- Yanagisawa, R., Kayano, Y. and Inoue, H. (2010) : Left hand mode transmission line characteristics made by F-SIR structure on PCB, *IEICE Transaction on Communications*, Vol.E93-B, No.7, p.1855-7.
- Miyanaga, K., Kayano, Y., Takagi, T. and Inoue, H. (2010) : Effect of holder heat capacity on bridge shape at low speed breaking contact, *IEICE Transaction on Electronics*, Vol.E93-C, No.9, p.1456-9.
- Kayano, Y. and Inoue, H. (2010) : Identifying EM radiation from a printed circuit board driven by differential-signaling, *Transactions of The Japan Institute of Electronics Packaging*, Vol.3, No.1, p.24-30.
- Fukuda, M. and Imano, K. (2010) : A novel double-layered piezoelectric transducer for detecting second harmonic ultrasonic pulse waves, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.1, p.73-7.
- 今野和彦 (2010) : 非線形超音波成分検出による固体接合部の一評価法, 素材物性学雑誌, 23 巻, 1 号, 19-24 頁.
- Imano, K. (2010) : Experimental study on the mode conversion of Lamb wave in a metal plate of stepped thickness using optical detection, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.201-4.

「学術関係誌」

- 萱野良樹, 井上 浩 (2010) : 情報機器筐体の EMC 設計, 電磁環境工学情報 EMC, 261 巻, 67-79 頁.
- 萱野良樹, 井上 浩 (2010) : SX-8i による大規模電磁界シミュレーション, 秋田大学総合情報処理センター広報, 13 号, 3-13 頁.
- 今野和彦, 福田 誠 (2010) : 二層型圧電振動子を用いた非線形超音波検出 = 閉じた亀裂から発生する Lamb 波の 2 次高調波の検出 =, 超音波 TECHNO, 22 巻, 3 号, 72-4 頁.
- 今野和彦, 福田 誠 (2010) : 超音波を用いた新しいボルト締結状態評価法の提案, 検査技術, 15 巻, 6 号, 1-6 頁.

福田 誠, 今野和彦 (2010) : 二層型圧電振動子を用いた非線形超音波検出法とその応用, 非破壊検査, 59 巻, 11 号, 567-72 頁.

「国際会議報告集等」

Zhou, F., Wu, S., Pommerenke, D., Fan, J., Kayano, Y., Inoue, H. and Tan, K. (2010) : Measuring IC switching current waveforms using a GMI probe for power integrity studies, *Proceedings of Asia-Pacific Symposium on Electromagnetic Compatibility (2010APEMC)* (Beijing, China), TU-PM-F1-2, p.321-4.

Kayano, Y., Yanagisawa, R. and Inoue, H. (2010) : Negative group delay circuit fabricated in an integrated circuit chip, *Proceedings of Asia-Pacific Symposium on Electromagnetic Compatibility (2010APEMC)* (Beijing, China), TH-AM-E2-5, p.1126-9.

Kayano, Y., Hashiya, Y. and Inoue, H. (2010) : The correlation between imbalance current and EM radiation from a printed circuit board driven by differential-signaling, *Proceedings of International Conference on Electrical Packaging 2010 (ICEP2010)* (Sapporo, Japan), FB4-3, p.608-13 (CD-ROM).

Yanagisawa, R., Kayano, Y. and Inoue, H. (2010) : Equivalent circuit analysis of F-SIR structure with negative group time delay, *Proceedings of Pan-Pacific EMC Joint Meeting '10* (Sendai, Japan), TH-AM2-1, p.31-4.

Hayashi, Y., Sugawara, T., Kayano, K., Homma, N., Mizuki, T., Satoh, A., Aoki, T., Minegishi, M., Sone, S. and Inoue, H. (2010) : Information leakage from cryptographic hardware via common-mode current, *Proceedings of IEEE Symposium on Electromagnetic Compatibility* (Fort Lauderdale, USA), p.109-14 (CD-ROM).

Zhou, F., Wu, S., Pommerenke, D., Kayano, K., Inoue, H., Tan, K. and Fan, J. (2010) : Improvements in GMI probe design for time-domain transient current measurements, *Proceedings of IEEE Symposium on Electromagnetic Compatibility* (Fort Lauderdale, USA), p.340-3 (CD-ROM).

Kayano, Y. and Inoue, H. (2010) : Predicting CM radiation from strip line structure by equivalent circuit model, *Proceedings of IEEE Symposium on Electromagnetic Compatibility* (Fort Lauderdale, USA), p.748-53 (CD-ROM).

Kayano, Y., Miyanaga, K. and Inoue, H. (2010) : Voltage fluctuation of short-time arc at slowly separating silver-based contacts, *Proceedings of Joint Meeting 25th International Conference on Electrical Contacts (ICEC2010) and 56th IEEE Holm Conference on Electrical Contacts* (Charleston, USA), No.1-3, p.18-23.

Miyanaga, K., Kayano, Y., Takagi, T. and Inoue, H. (2010) : The contribution of heat conduction to bridge length and diameter, *Proceedings of Joint Meeting 25th International Conference on Electrical Contacts (ICEC2010) and 56th IEEE Holm Conference on Electrical Contacts* (Charleston, USA), No.2, p.153-7.

- Miyanaga, K., Kayano, K., Inoue, H. and Takagi, T. (2010) : A study on generation and break of bridge at different material contact pairs, *Proceedings of 10th International Session on Electro-Mechanical Devices (IS-EMD2010)* (Xi'an, China), *IEICE Technical Report EMD2010-112*, p.189-92.
- Ozawa, S., Miyanaga, K., Kayano, Y. and Inoue, H. (2010) : A measurement of waveform at slowly separating silver-based contacts with heated holder, *Proceedings of 10th International Session on Electro-Mechanical Devices (IS-EMD2010)* (Xi'an, China), *IEICE Technical Report EMD2010-112*, p.193-6.
- Komakine, T., Kurosawa, T. and Inoue, H. (2010) : A novel measurement method of permittivity by using scattering wave, *Proceedings of the 2010 Asia-Pacific Radio Science Conference (AP-RASC'10)* (Toyama, Japan), B5a-1.
- Kayano, Y. and Inoue, H. (2010) : A study on characteristics of EM radiation from strip line structure, *Proceedings of the 2010 Asia-Pacific Radio Science Conference (AP-RASC'10)* (Toyama, Japan), E2-1.
- Fukuda, M., Yonai, O., Yoshida, K. and Imano, K. (2010) : Second harmonic ultrasonic pulse waves generated from bolts fastened with nuts at various axial forces, *The International Conference on Experimental Mechanics 2010 (ICEM2010)* (Kuala Lumpur, Malaysia), P2.7, p.157.

「著書」

- 井上 浩 (2010) : EMC 原理と技術, EMI/EMC 測定の電磁気と回路, 高木相監修, 三松株式会社出版事業部 (分担執筆).

制御システム工学講座

「学会論文集 (誌) ・学協会誌」

- 田島克文, 佐藤 忠 (2010) : 磁気抵抗回路網解析を用いたコンデンサモータの一損失推定法, *日本磁気学会誌*, 34 巻, 3 号, 367-73 頁.
- 田島克文, 佐藤 忠, 坂本禎智 (2010) : 磁気抵抗回路網解析におけるパラメトリックモータの解析精度向上の検討, *日本磁気学会誌*, 34 巻, 4 号, 543-7 頁.
- Miura, T., Mitobe, K., Yukawa, T., Kaiga, T., Taniguchi, T. and Tamamoto, H. (2010) : Extraction of motion characteristics in dances by statistical analysis of joint motions, *Journal of Information Processing*, Vol.18, p.49-62.
- Miura, T., Mitobe, K., Yukawa, T., Kaiga, T., Taniguchi, T. and Tamamoto, H. (2010) : Adaptation of grouping structure analysis in GTTM to hierarchical segmentation of dance motion, *Journal of Information Processing*, Vol.18, p.263-83.

「学術関係誌」

田島克文 (2010) : パワーマグネティックス, 解析技術Ⅱ (磁気回路法による解析), まぐね, 日本磁気学会, 5 巻, 8 号, 390-7 頁 (分担執筆).

「国際会議報告集等」

Tajima, K. (2010) : Reluctance network analysis of a linear parametric induction motor, *The 2nd International Symposium on Advanced Magnetic Materials and Applications* (Sendai, Japan), QF-18.

Miura, T., Mitobe, K., Kaiga, T., Yukawa, T., Taniguchi, T., Tamamoto, H. and Yoshimura, N. (2010) : Multi-level segmentation of dance motion by piecewise regression, *ACM SIGGRAPH 2010* (Los Angeles, USA), Posters, Article No.14.

Miura, T., Mitobe, K., Kaiga, T., Yukawa, T., Tajima, K. and Tamamoto, H. (2010) : Derivation of dance similarity from balance characteristics, *ACM SIGGRAPH ASIA 2010* (Seoul, S. Korea), *Technical Sketches*, Article No.31.

「著書」

田島克文 (2010) : 磁気応用におけるシミュレーション技術, 6.2 RNA によるパラメトリックモータの解析, 7.1 SPICE による非線形リアクトルの解析, 電気学会技術報告第 1201 号, 磁気応用におけるシミュレーション技術調査専門委員会編, 47-50 頁, 54-7 頁 (分担執筆).

土木環境工学科

福祉環境工学講座

「学会論文集（誌）・学協会誌」

田口秀男, 木村一裕, 日野 智 (2010) : 観光ボランティアガイドによる対話型情報提供の意義とその評価, 土木計画学研究・論文集, 27 巻, 2 号, 249-56 頁.

Hagiwara, T., Hamaoka, H., Tabata, Y. and Morishita, M. (2010) : Effect of headlight swivel-angle on driver's avoidance behavior of conflict with pedestrians approaching from the right, *Journal of Transportation Research Board*, No.2138, p.102-11.

Hagita, K., Shimamura, M., Hashimoto, H., Hagiwara, T. and Hamaoka, H. (2010) : Evaluation of traffic fatality countermeasures implemented in Japan from 1992 to 2007, *Asian Transport Studies*, Vol.1, Issue 2, p.122-36.

Hamaoka, H., Nakamura, Y., and Suzuki, T. (2010) : Evaluating safety based on driver decisions upon acquiring signal change information, *Asian Transport Studies*, Vol.1, Issue 2, p.153-64.

Hagiwara, T., Tabata, Y., Hamaoka, H., Nakabayashi, S., Hamaguchi, M. and Suzuki, K. (2010) : Data transmission performance of DSRC (5.8GHz) typed pedestrian-vehicle communication to avoid conflict between right-turn vehicles and pedestrians, *Technical Papers of the Conference of Intelligent Transport Systems*, Vol.17, 11 pages (CD-ROM).

「国際会議報告集等」

Hamaoka, H. and Sasaki, M. (2010) : Design of shared-use sidewalks to avoid crossing conflicts between bicycles and motor vehicles at small intersection, *Proceedings of the World Conference on Transportation Research (Lisbon, Portugal)*, (CD-ROM).

環境構造工学講座

「学会論文集（誌）・学協会誌」

松岡 智, 川上 洵, 綾野克紀 (2010) : プレキャストコンクリート製品に適用する高炉スラグを用いた耐硫酸性セメント硬化体の力学的特性, 材料, 59 巻, 10 号, 757-62 頁.

松岡 智, 竹村和晃, 川上 洵 (2010) : 定点繰返し荷重を受ける無鉄筋コンクリート床版の強度特性に関する研究, セメント・コンクリート論文集, 63 号, 515-22 頁.

池谷純一, 塚越英夫, 川上 洵 (2010) : 炭素繊維シートと CF アンカーを用いた耐震補強工法における CF アンカー扇部の接着耐力および耐久性, コンクリートの補修, 補強, アップグレードに関する論文報告集, 10 巻, 43-50 頁.

松岡 智, 細谷多慶, 綾野克紀, 川上 洵 (2010) : 高炉水砕スラグを用いたセメント硬化体のプレキャスト製品への実用化に関する研究, コンクリートの補修, 補強, アップグレードに関する論

文報告集, 10 巻, 221-8 頁.

城門義嗣, 加賀谷誠, 布施陽介, 齋藤憲寿 (2010) : ニオイセンサにより評価したコンクリートの養生効果と長期強度の関係, コンクリート工学年次論文集, 32 巻, 1 号, 557-62 頁 (CD-ROM).

Kagaya, M., Shirokado, Y., Saito, N. and Sato, J. (2010) : Experimental studies on evaluation of curing effect of blast-furnace slag cement concrete by odor sensor, *Int. J. Soc. Mater. Eng. Resour.*, Vol.17, No.2, p.147-51.

徳重英信, 木村哲士, 篠村篤史, 川上 洵 (2010) : 秋田県沿岸部の飛来塩分に及ぼす風波の影響と 10 年間暴露した供試体の塩分浸透, コンクリート工学年次論文集, 32 巻, 809-14 頁.

徳重英信, 古村 崇, 川上 洵 (2010) : 酸化チタン粉末混和高強度モルタルの付着特性に関する研究, セメント・コンクリート論文集, 63 号, 142-7 頁.

亀島博之, 徳重英信, 川上 洵, 鈴木弘美 (2010) : 天然ゼオライトを骨材および混和材として用いたポーラスコンクリートの強度特性に関する研究, セメント・コンクリート論文集, 63 号, 261-7 頁.

古村 崇, 徳重英信, 川上 洵 (2010) : 酸化チタン混和高強度セメントモルタルの窒素酸化物除去機能とその機構, 土木学会論文集 E, 66 巻, 3 号, 301-10 頁.

千田知弘, 佐々木貴信, 薄木征三, 後藤文彦, 篠原義則, 豊田 淳 (2010) : 歩道橋用木製防護柵の基礎的研究, 構造工学論文集, 56A, 858-67 頁 (CD-ROM).

城門義嗣, 加賀谷誠, 布施陽介, 齋藤憲寿 (2010) : ニオイセンサにより評価したコンクリートの養生効果と長期強度の関係, コンクリート工学年次論文集, 32 巻, 1 号, 557-62 頁 (CD-ROM).

「学術関係誌」

川上 洵 (2010) : 海外におけるプレキャストコンクリートの事例, コンクリートテクノ, 29 巻, 2 号, 15-23 頁.

加賀谷誠 (2010) : 秋田産火山礫の使用によるコンクリートへの環境調和特性の付与, コンクリート工学, 48 巻, 1 号, 62-4 頁.

加賀谷誠 (2010) : 超硬練りコンクリートの凍結融解抵抗性, 建設機械, 46 巻, 10 号, 24-7 頁.

「国際会議報告集等」

Kawakami, M., Omata, F. and Matsuoka, S. (2010) : Advanced seismic countermeasures for concrete bridges by using polymer in Japan, *Proceedings of the 13th International Congress on Polymers in Concrete* (Funchal-Madeira, Portugal), p.635-42.

- Okuyama, Y., Kawakami, M. and Matsuoka, S. (2010) : Strength of steel free concrete slabs using ultra high strength fiber reinforced mortar and stainless steel plate or carbon reinforced polymers as strap, *Proceedings of the 6th CCC Congress, MARIANSKE LAZNE 2010* (Marianske Lazne, Czech), p.103-9.
- Iketani, J., Tsukagoshi, H. and Kawakami, M. (2010) : Seismic strengthening of I-shaped cross section pier with carbon fiber reinforced polymer, *Proceedings of the 13th International Congress on Polymers in Concrete* (Funchal-Madeira, Portugal), p.673-80.
- Kagaya, M. and Shirokado, Y. (2010) : Environmental friendly material characteristics of concrete using lapilli and its application for a check dam construction in cold region, *Proc.of ISCORD* (Yakutsk, R.of Sakha), p.27-31.
- Gotou, H., Daikokuya, M., Sasaki, T. and Hasebe K. (2010) : Shear characteristics of steel-plate-inserted glulam beams, *WCTE 2010, Conference Proceedings, 10th World Conference on Timber Engineering* (CD-ROM).

地域環境工学講座

「学会論文集（誌）・学協会誌」

- 三田地利之, 山添誠隆, 林 宏親, 荻野俊寛 (2010) : 泥炭性軟弱地盤の変形解析への各種構成モデル・解析手法の適用性, *土木学会論文集 C*, 66 卷, 1 号, 1-20 頁.
- Ogino, T., Mitachi, T., Oikawa, H., Takahashi, T. and Tsushima, M. (2010) : Frequency response characteristics of bender element test system identified by frequency-swept signal input - influence on accuracy of received waveform reconstruction -, *Soils and Foundations*, Vol.50, No.5, p.717-25.
- 松富英夫, 原田賢治 (2010) : 建物周りの津波痕跡分布とその活用—2009 年サモア地震津波を例に—, *土木学会論文集 B2 (海岸工学)*, B2-66 卷, 1 号, 271-5 頁.
- Matsutomi, H. and Okamoto, K. (2010) : Inundation flow velocity of tsunami on land, *Island Arc*, Vol.19, Issue 3, p.443-57.

「研究機関報告」

- 松富英夫, 原田賢治 (2010) : 建物周りの津波痕跡分布とその活用, *秋田大学工学資源学部附属地域防災力研究センター報告*, 4 号, 12-8 頁.

「国際会議報告集等」

- Tsushima, M., Komatsu, J., Oikawa, H. and Ogino, T. (2009) : Ground improvement material obtained by mixing waste melting slag and rock muck with slaked lime, *The 20th International Offshore and Polar Engineering Conference 2010*.

附属環境資源学研究所センター

「学会論文集 (誌) ・学協会誌」

- Boomeri, M., Ishiyama, D., Mizuta, T., Matsubaya, O. and Lentz, D.R. (2010) : Carbon and oxygen isotopic systematics in calcite and dolomite from the Sangan Iron skarn deposit, Northeastern Iran, *Journal of Sciences, Islamic Republic of Iran*, Vol.21, No.3, p.213-24.
- Lu, W., Li, Z., Hatakeyama, K., Egawa, G., Yoshimura, S. and Saito, H. (2010) : High resolution magnetic imaging of perpendicular magnetic recording head using frequency-modulated magnetic force microscopy with a hard magnetic tip, *Applied Physics Letter*, Vol.96, p.143104-1-3.
- Saito, H., Lu, W., Hatakeyama, K., Egawa, G. and Yoshimura, S. (2010) : High frequency magnetic field imaging by frequency modulated magnetic force microscopy, *Journal of Applied Physics*, Vol.107, p.09D309-1-3.
- Lu, W., Hatakeyama, K., Egawa, G., Yoshimura, S. and Saito, H. (2010) : Characterization of magnetic field distribution in a trailing-edge shielded head by frequency-modulated magnetic force microscopy, *IEEE Transactions on Magnetics*, Vol.46, No.6, p.1479-82.
- 大宮翔吾, 吉村 哲, 江川元太, 齊藤 準 (2010) : 垂直磁気異方性制御が可能な L10 型 Fe(PdxPt1-x)合金を用いたスピン注入書き込み MRAM 用 FePt 基 TMR 積層膜の作製, 信学技報, 110 巻, 225 号, 31-6 頁.
- Yamamoto, O. and Fukuda, M. (2010) : Effect of carbon coating on biocompatibility of titanium - in vitro cytotoxicity evaluation using human bone marrow cells -, *TANSO*, No.245, p.183-7.
- Yamamoto, O., Ohira, T., Alvarez, K. and Fukuda, M. (2010) : Antibacterial characteristics of CaCO₃-MgO composites, *Materials Science and Engineering B*, Vol.173, No.8, p.208-12.
- Alvarez, K., Fukuda, M. and Yamamoto, O. (2010) : Titanium implants after alkali heating treatment with a [Zn(OH)₄]²⁻ complex: analysis of interfacial bond strength using push-out tests, *Clinical Implant Dentistry and Related Research*, Vol.12, p.114-25.
- Ohira, T., Kawamura, M., Fukuda, M., Alvarez, K., ÖZKAL, B. and Yamamoto, O. (2010) : Extension of the optical absorption range in Zn-doped MgO powders and its effect on antibacterial activity, *Journal of Materials Engineering and Performance*, Vol.19, p.374-9.
- Yamamoto, O. and Fukuda, M. (2010) : In vivo evaluation of the bonding strength between bone and Zn-modified Ti, *Archives of Bioceramics Researches*, Vol.10, p.46-9.
- Yamamoto, O., Ohira, T., Alvarez, K. and Fukuda, M. (2010) : Antibacterial characteristics of CaCO₃-MgO composites, *Materials Science and Engineering B*, Vol.173, p.208-12.

成田王彦, 大平俊明, 田中清志, 古谷博子, 高野裕史, 中田 憲, 福田雅幸 (2010) : 歯科用樹脂と CaCO₃-MgO 粉末から製作された義歯における in vitro 細菌付着の改善, 日本歯科技工学会雑誌, 30 巻, 2 号, 78-85 頁.

「学術関係誌」

吉村 哲 (2010) : 薄膜磁気デバイスの高性能化に向けた新磁性材料開発・高品位薄膜作製技術<解説>, 化学工業, 61 巻, 7 号, 1-6 頁.

「国際会議報告集等」

Ohira, T. and Yamamoto, O. (2010) : Antibacterial characteristics of ZnO-doped MgO ceramics having visible-light sensitivity, *Proceedings, The Tenth Asian BioCeramics Symposium (ABC2010)* (Yogyakarta, Indonesia), p.126-9.

「研究機関報告等」

福山繭子, 小笠原正継, 石山大三, 佐藤比奈子 (2010) : スカルン中のガーネットの希土類元素組成と資源としての可能性, 月刊地球, 32 巻, 8 号, 476-83 頁.

石山大三, 佐藤比奈子, 水田敏夫, 世良耕一郎 (2010) : 休廃止鉱山から流出する酸性水の流量と元素濃度の特徴, NMCC 共同利用成果報文集, 15 巻, 36-41 頁.

川原谷浩, 石山大三, 世良耕一郎 (2010) : 秋田市太平川の溶存成分および懸濁成分の特徴と水質形成機構, NMCC 共同利用成果報文集, 15 巻, 28-35 頁.

川原谷浩, 三浦理司, 松葉谷治, 石山大三 (2010) : 岩手県北部の大規模トンネルで観測される湧水の地球化学的特徴とその起源, 秋田大学大学院工学資源学研究科研究報告, 31 号, 47-53 頁.

専攻共通

「研究機関報告等」

坪井ひろみ (2010) : Safe drinking -water for the poor: initiative of Grameen veolia water Ltd, 秋田大学工学資源学部研究報告, 31 号, 21-7 頁.

坪井ひろみ (2010) : グラミン銀行と貧困女性の自立支援, 世界と議会, 547 号, 16-20 頁.

坪井ひろみ (王菁, 中国語訳) (2010) : スペインのマイクロクレジットは“手段”か“目的”か, 小額信貸扶貧, 68 期, 15-9 頁.

「著書」

坪井ひろみ (2010) : 秋大留学生の日本・秋田論 (編), 三文舎.