

5. Research Results (FY2009)

1) Research Articles/Authoried Books

● Research Articles—Research Paper (Peer Reviewed)

- N. Takagi, M. Mukaidono, “Some properties on multi-interval truth values and functions over the truth values-A study of non-convex fuzzy truth values”, Proceedings of International Conference on Quantitative Logic and Quantification of Software, pp.13-24 (2009)
- T. Ninomiya, M. Mukaidono, “Clarifying the Systems of Axioms Based on the Method of Indeterminate Coefficients”, Proceedings of 39th International Symposium on Multiple-Valued Logic, pp.280-285 (2009)
- Furuta, H. Mori, “Application of parallel tabu search-based hierarchical optimization to distribution system service restoration”, Electrical Engineering in Japan (Wiley Inter Science), Vol. 166, Issue 2, pp. 15-23 (2009)
- S. Urano, H. Mori, “電力系統の状態推定におけるトポロジー可観測のための擬似観測値の決定手法”, IEEJ Transactions of Power and Energy, 129 巻 4 号, pp.541-547 (2009)
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- K. Okawa, H. Mori, “非線形燃料コスト関数を考慮した利益最大化のための発電機の起動停止計画”, IEEJ Transactions of Power and Energy, 129 巻 12 号, pp.1567-1575 (2009)
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- Tero, T. Nakagaki, T. Kazutaka, Y. Kenji, R. Kobayashi, “A method inspired by Physarum for solving the Steiner problem”, International Journal of Unconventional Computing, 6, pp.109-123 (2010)
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- Y. Katsuyama, K. Arakawa, “Impulsive Noise Removal in Color Image Using Interactive Evolutionary Computing”, Proc. International Workshop on Smart Info-Media Systems in Asia, pp.73-77 (2009)
- K. Chishima, K. Arakawa, “A Method of Scratch Removal from Old Movie Film Using Variant Window by Hough Transform”, Proc. IEEE ISCIT 2009, pp.1559-1563 (2009)
- N. Kyoya, K. Arakawa, “A Method for Impact Noise Reduction from Speech Using a Stationary-Nonstationary Separating Filter”, Proc. IEEE ISCIT 2009, pp.33-37 (2009)

- M. Katou, K. Arakawa, “Blind Source Separation in Noisy and Reverberating Environment using Genetic Algorithm”, Proc. APSIPA ASC, pp.485-489 (2009)
- M. Fujii, A. Awazu, H. Nishimori, “Counter Chemotactic Flow in Quasi-One-Dimensional Path”, J.Pys.Soc.Jpn, 78, 073801-1-073801-4 (2009)
- H. Nishimori, A. Kastuki and H. Sakamoto, “Coupled ODEs model for the Collision Process of Barchan Dunes”, Thoretical and Applied Mechanics Japan 57, 174-184(2009)
- S. Matsuoka, T. Shibata, M. Ueda, “Statistical analysis of lateral diffusion and multistate kinetics in single-molecule imaging”, Biophys Journal, 97(4), pp.1115-1124 (2009)
- K. Hibino, T. Shibata, T. Yanagida, Y. Sako, “A RasGTP-induced conformational change in C-RAF is essential for accurate molecular recognition”, Biophys Journal, 97(5), pp.1277-1287 (2009)
- J. Y. Wakano, M. A. Nowak, C. Hauert, “Spatial dynamics of ecological public goods”, Proceedings of the National Academy of Sciences of the United States of America, 106, pp.7910-7914 (2009)
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- M. Itoh, M. Kotani, H. Naito, T. Sunada, Y. Kawazoe, and T. Adschiri, “New metallic carbon crystal”, Phys. Rev. Lett., No.5, pp.102 (2009)
- X.-C. Chen, S.-I. Ei and M. Mimura, “Self-motion of camphor discs: Model and Analysis”, Networks and Heterogeneous Media 4, pp.1-17 (2009)
- D. Hilhorst, R. van der Hout, M. Mimura and I. Ohnishi, “A mathematical study of the one dimensional Keller and Rubinow model for Liesegang bands”, J. Statistical Physics, 135, pp.107-132 (2009)
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- R. Kataoka, T. Ebisuzaki, K. Kusano, D. Shiota, S. Inoue, T. Yamamoto, M. Tokumaru, “Three-dimensional MHD modeling of the solar wind structures associated with 13 December 2006 coronal mass ejection”, *Journal of Geophysical Research (Space Physics)*, 114, pp.10102, (2009)
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- K. Sugihara, A. Okabe, T. Satoh, “Computational method for the point cluster analysis on networks”, *Geoinformatica*, Online version DOI 10.1007/s10707-009-0092-5 (2009) (will be published in 2010)
- T. Nishida, K. Sugihara, “Boat-sail Voronoi diagram and its application”, *International Journal of Computational Geometry and Applications*, 19, pp.425-440 (2009)
- D. Ueyama, “AUTOによる大域ダイナミクスの解析の試み”, *数学*, 第 61 巻第 3 号, pp.316-326 (2009)

● Research Articles—Research Paper (Not Peer Reviewed)

- M. Mukaidono, “安全技術の現代的課題と社会的受容性”, *精密工学会誌*, 75(9), pp.1041-1044 (2009)

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- T. Kariya, “価値創造 ERM と企業の組織精神性資産—プロセスの人的要素の重要性”, 監査研究 December Issue, 35(13), pp.10-25 (2009)
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- M. Mimura, “グローバル COE プログラム(2)現象数学の形成と発展/Meiji Institute for Advanced Study of Mathematical Sciences”, 数学セミナー, Vol.48, No.8, pp58-63 (2009)
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- K. Kusano, “太陽活動は回復するか?”, パリティ, Vol.25-January Issue, pp.50-52 (2010)
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- K. Kusano, “小特集：連結階層モデルによって見えてきたプラズマシミュレーションの新たな展開 1. はじめに”, Journal Plasma and Fusion Research, Vol.85, No.9, pp. 577-579 (2009)
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- T. Michigami, M. Mukaidono, “信頼性・安全性工学”, Ohmsha, Ltd., Tokyo, Japan, p.205, (2009)
- M. Mukaidono (Co-Writing), “ものづくりと安全, 安全は競争力 (Supervising Editor: S.Kurihara)”, Edited by The Japan Machinery Federation, The Nikkan Kogyo Shimbun,LTD, Tokyo, Japan, pp.24-43, (2009)
- M. Mukaidono (Co-Writing), “ファジィ理論, 景観学への道 (Complier: K.Fujisawa)”, Nihon Kezai Hyouronsha Ltd., Tokyo, Japan, pp.115-118, (2009)
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