

平成 24 年度研究業績 (2012 年 4 月～2013 年 3 月)

電気電子工学科

【論文】

Abdul Motin Howlader, Naomitsu Urasaki, Tomonobu Senjyu, Atsushi Yona, and Ahmed Y. Saber, To Reduce Power Fluctuation of a Pitch-Regulated MW-Class PMSG Based WTG System by Controlling Kinetic Energy, Journal of International Conference on Electrical Machines and Systems, Vol. 1, No. 2, pp.116-124, 2012

Abdul Motin Howlader, Naomitsu Urasaki, Atsushi Yona, Tomonobu Senjyu, and Ahmed Y. Saber, A Fuzzy Controller Based Pulse Amplitude Modulation Control for a Permanent Magnet Synchronous Motor, International Journal of Emerging Electric Power Systems, Vol. 13, No. 1, pp.Article 5, 2012

Alok Pratap, Abdul Motin Howlader, Tomonobu Senjyu, Atsushi Yona, Naomitsu Urasaki, and Toshihisa Funabashi, Different Strategies for Controlling Output Power Smoothing of a PMSG-Based Wind Energy Conversion Systems, International Journal of Emerging Electric Power Systems, Vol. 13, No. 4, pp.Article 4, 2012

Abdul Motin Howlader, Yuya Izumi, Akie Uehara, Naomitsu Urasaki, Atsushi Yona, Tomonobu Senjyu, and Ahmed Yousuf Saber, A Minimal Order Observer Based Frequency Control Strategy for an Integrated Wind-Battery-Diesel Power System, Energy, Vol. 46, No. 1, pp.168-178, 2012

Masato Saito, Shuhei Haraguchi, and Minoru Okada, Dual-Hop Non-regenerative OFDM Relay Systems with Chunk-Based Power Allocation, Wireless Personal Communications, Vol. 64, No. 1, pp.51-64, 2012

Mohamad Sofian Abu Talip, Takayuki Akamine, Yasunori Osana, Naoyuki Fujita and Hideharu Amano, Partial Reconfiguration of Flux Limiter Functions in MUSCL Scheme Using FPGA, IEICE Transaction on Information and Systems, Vol. E95-D, No. 10, pp.2369-2376, 2012

Aiko Takahara, Ryoji Oshiro, and Eiji Kaneko, Lightning Induced Surge on the Distribution Lines in the House near by the Lightning Point, Journal of Energy and

Power Engineering, Vol. 6, pp.840-844, 2012

M. A. Hossain, Y. Namihira, S.M.A. Razzak, M.A. Islam, J. Liu, S.F. Kaijage, and Y. Hirako, "Design of all normal dispersion highly nonlinear photonic crystal fibers for supercontinuum light sources: applications to optical coherence tomography systems," Optics & Laser Technology, vol. 44, No. 4, pp.976-80, 2012

M. A. Hossain, Y. Namihira, M.A. Islam, and Y. Hirako, Polarization maintaining highly nonlinear photonic crystal fiber for supercontinuum generation at 1.55 μm , Optics & Laser Technology, vol. 44, No.5, pp.1261-1269, 2012

M. A. Hossain, Y. Namihira, M. A. Islam, S. M. A. Razzak, Y. Hirako, K. Miyagi, S. F. Kaijage, H. Higa, Tailoring supercontinuum generation using highly nonlinear photonic crystal fiber, Optics & Laser Technology, vol. 44, No.6, pp.1889-1896, 2012

J. Higa, Y. Namihira, M. A. Hossain and Y. Hirako, Design of highly numerical aperture hexagonal photonic crystal fiber for medical applications, ICIC Express Letters, vol.6, No.9, pp.2315-2318, 2012

M. A. Hossain, Y. Namihira, and J. Wang, Optimal Wavelength Broadband Light Source for Optical Coherence Tomography Applications at 1.0 μm , ICIC Express Letters, vol.6, No.9, pp.2441-2446, 2012

Shinya Nozaki, Atsushi Kinjo, Shinsuke Fujioka, Rumiko Azuma, Yen-wei Chen, and Yoshinori Namihira, A New De-Noising Method of Laser-Produced Plasma Penumbra Images by Principal Component Analysis, Plasma and Fusion Research, Vol. 7, pp. 240120 1-4, 2012

M. A. Hossain, Y. Namihira, S. M. A. Razzak, Supercontinuum generation at 1.55 μm using highly nonlinear photonic crystal fiber for telecommunication and medical applications, Optical review, vol. 19, No. 5, pp.315-319, 2012

Y. Namihira, M. A. Hossain, T. Koga, M.A. Islam, S.M.A. Razzak, S.F. Kaijage, Y. Hirako and H. Higa, Design of highly nonlinear dispersion flattened hexagonal photonic crystal fibers for dental optical coherence tomography applications, Optical Review, vol. 19, No.2, pp. 78-81, 2012

Shigeo Sato, Mitsunaga Kinjo, Quantum Neurocomputing and Its Applications, Journal of the Society of Instrument and Control Engineers 51(4), 364-369, 2012

【著書】

S. M. A. Razzak and Y. Namihira, Photonic Crystal Fibers Design and Applications, Lambert Academic Publishing (LAP), Germany, 2012 [ISBN: 978-3-8383-6935-8]

【口頭発表・その他】

T. Mukae, K. Sugihara, T. Sugihara, K. Shirai, T. Okada, T. Noguchi, and T. Ohachi, Proposal of μ -Poly Si TFT for Advanced FPD with High Photo-Sensitive PIN-Diode by BLDA, The 12th International Meeting on Information Display (Eaegu, Korea, August 28-31, 2012), 2012

K. Shirai, J. D. Mugiraneza, T. Okada, T. Suzuki, and T. Noguchi, Uniform Micro Poly-Si Grains in Smooth Films with (111) Preferred Orientation by Blue-Multi-Laser-Diode Annealing (BLDA), The 12th International Meeting on Information Display (Eaegu, Korea, August 28-31, 2012), 2012

T. Okada, J. D. Mugiraneza, K. Shirai, T. Nishinohara, T. Mukae, K. Yagi, and T. Noguchi, Crystallization of a-Si Films with Smooth Surface Using Blue-Multi-Laser-Diode-Annealing, 2012 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices (June 27-29, 2012, Naha), 2012

T. Nishinohara, J. D. Mugiraneza, K. Shirai, T. Okada, and T. Noguchi, Characterization of Optimized Sputtered Poly-Si Films by Blue-Multi-Laser-Diode Annealing for High Performance Displays, 2012 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices (June 27-29, 2012, Naha), 2012

T. Noguchi, T. Nishinohara, J. D. Mugiraneza, K. Shirai, and T. Okada, Effective Annealing of Si Films as an advanced LTPS, 2012 Asia-Pacific Workshop on Fundamentals and Applications of Advanced Semiconductor Devices (June 27-29, 2012, Naha), 2012

T. Noguchi, T. Nishinohara, J. D. Mugiraneza, K. Shirai, T. Okada, T. Itoh, Crystallization of amorphous silicon films on flexible glass by Blue-Multi-Diode-Laser

Annealing as a new LTPS, Information Display's Display Week 2012 (Boston, Massachusetts USA, June 3-8, 2012), 2012

Abdul Motin Howlader, Naomitsu Urasaki, Atsushi Yona, Tomonobu Senjyu, and Ahmed Yousuf Saber, An Online Fuzzy Adaptive Pulse Amplitude Modulation Control for a PMSM Drive, The 7th IEEE Conference on Industrial Electronics and Applications(ICIEA2012), 2012

Abdul Motin Howlader, Naomitsu Urasaki, Atsushi Yona, Tomonobu Senjyu, and Ahmed Yousuf Saber, A New Robust Controller Approach for a Wind Energy Conversion System Under High Turbulence Wind Velocity, The 7th IEEE Conference on Industrial Electronics and Applications(ICIEA2012), 2012

Shoken Sunagawa and Naomitsu Urasaki, A Strategic Load Allocation for Hybrid Power Source Consisting of EDLC and Battery, the 15th International Conference on Electrical Machines and Systems (ICEMS2012), 2012

Yasuhiro Matsumura and Naomitsu Urasaki, Comparison between PAM Control and Flux Weakening Control for PMSM Drive, the 15th International Conference on Electrical Machines and Systems (ICEMS2012), 2012

砂川翔賢, 浦崎直光, 電気二重層キャパシタと蓄電池によるハイブリッド電源システムの戦略的負荷配分, 平成 24 年電気学会産業応用部門大会, 2012

大城優也, 小野晃, 浦崎直光, 独立型太陽光発電システムにおける部分影を考慮した MPPT 制御法, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

小野晃, 大城優也, 浦崎直光, 太陽電池によるバッテリー充電コントローラの開発, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

松村康弘, 浦崎直光, PM モータにおける速度制御可能範囲拡大に関する研究, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

大城友佳, 浦崎直光, 低次元 H_{∞} オブザーバを用いた埋込磁石同期電動機の磁極位置センサレス制御, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

砂川翔賢, 浦崎直光, 電気二重層キャパシタと蓄電池によるハイブリッド電源システムの周波数分離に基づく負荷配分, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

Abdul Motin Howlader, Naomitsu Urasaki, Atsushi Yona, and Tomonobu Senjy, Wake Effects and Power Smoothing of a Wind Farm, 平成 24 年度電気学会九州支部沖縄支所講演会, 2012

Masato Saito , Application of compressed sensing to inter-symbol interference cancellation in OFDM systems , The 9th IEEE VTS Asia Pacific Wireless Communications Symposium, 2012

Wataru Arita, Masato Saito, Novel receive diversity scheme using ESPAR antenna and arbitrary frequency band, 2012 IEEE 76th Vehicular Technology Conference, 2012

有田 渉, 齋藤 将人, ESPAR アンテナを用いた ダイバーシチ受信に関する研究, 2013 年電子情報通信学会総合大会, 2013

Yusuke Kuroki, Seibo Miyamoto and Eiji Kaneko, Studies on Transient Response in a Small DC Current Vacuum Arc, 開閉保護研究会予稿集, 2012

Kohei Gaja, Yuta Okano, Eiji Kaneko, Studies on Insulators in Air Circuit Breaker, 開閉保護研究会予稿集, 2012

Miyaguni Yuya, Takahara Aiko and Eiji Kaneko, Simulation Study of the Surge on Low Voltage Distribution Lines Nearbay the Lightning Point, ICEE2012, 2012

Aiko Takahara, Yuya Miyaguni and Eiji Kaneko, Analysus of Induced Surges in a House Modeled with Considering the Earth Resistivity., ICEE2012, 2012

Yusuke Kuroki, Seibo Miyamoto and Eiji Kaneko, Investigation on Quenching by Transient or Instability Phenomena in a Small DC Current Vacuum Arc, ICEE2012, 2012

Yusuke Kuroki. Seibo Miyamoto and Eiji Kaneko, Investigation on Quenching by Transient or Instability Phenomena in a Small DC Current Vacuum Arc, Proc. ISDEIV, 2012

宮國祐也, 高原愛子, 新屋佑典, 金子英治, 近傍雷撃による低圧挿電系統への誘導雷サー
ジ解析, 電気学会支所講演会予稿, 2012

高原愛子, 宮國祐也, 金子英治, 大地の抵抗率を考慮した家屋モデルでの近傍雷撃時に生
じる誘導現象の解析, 電気学会支所講演会予稿, 2012

黒木祐良, 宮本晴望, 金子英治, 直流小電流真空アークに対する過渡的な応答に
関する研究, 電気学会支所講演会予稿, 2012

岡野雄太, 我謝航平, 金子英治, 林田丈博, 西隆文, 気中遮断器用証拠材の研究, 電気学
会支所講演会予稿, 2012

十川雄一郎, 金城光永, 島袋勝彦, Verilog HDL を用いた万量子論理ゲートのエミュレ
ータ回路設計に関する考察, 電子情報通信学会ソサイエティ大会講演論文集, 2012

諸見里貴徳, 比嘉孝昌, 金城光永, 島袋勝彦, ダイヤモンドを用いた量子効果デバイスの
計算機応用に関する考察, 電子情報通信学会ソサイエティ大会講演論文集, 2012

比嘉孝昌, 諸見里貴徳, 金城光永, 島袋勝彦, 量子ビットデバイスに基づく NAQC におけ
る最終 Hamiltonian 構成法の検討, 電子情報通信学会ソサイエティ大会講演論文集, 2012

沖田嘉大, 金城光永, 島袋勝彦, Hamiltonian の性質に基づく断熱的量子計算エミュレ
ータ実現に向けた計算手法の検討, 電子情報通信学会ソサイエティ大会講演論文集, 2012

Yoshinori Namihira, Key technologies and international standardization of optical fiber
measurements for DWDM optical amplifier transmission systems and photonic crystal
fibers for transmission and medical applications, 1st International Conference on
Electrical, Computer and Telecommunication Engineering (ICECTE2012), Keynotes
Session-I, Rajshahi University of Engineering & Technology (RUET), 2012[Keynote
Speech Award of ICECTE2012]

M. A. Hossain, Y. Namihira, T. Yasui, Tailoring nonlinear coefficient using highly
nonlinear Ge-doped hexagonal photonic crystal fiber, ICECTE-2012, PI-0069, RUET,
2012

T. Yasui, Y. Namihira, and M. A.Hossain, Highly nonlinear hexagonal PCF for optical coherence tomography light source in medical imaging application at 1.06 micro meter, ICECTE-2012, PI-0070, RUET, 2012

T. Yasui, Y. Namihira, Y. Mekaru, M. A.Hossain, Y. Hirako, J. Higa, Highly nonlinear dispersion flattened hexagonal photonic crystal fiber for medical applications, The 5th Joint Forefront Wireless & Optical Communications and Network Technology International Workshop 2013 (FWOCNT2013), pp.1-6, 2013

J. Higa, Y. Namihira, and Y. Hirako, Design of highly numerical aperture hexagonal photonic crystal fiber for medical applications, FWOCNT2013, pp.15-19, March 23-24, 2013

Y. Namihira, M. D. Hossain, K. Miyagi and Y. Hirako, Comparison of measurement and simulation results of Ge-doped photonic crystal fiber, FWOCNT2013, pp.261-265, March 23-24, 2013

M. D. Hossain, Y. Namihira Y. Hirako and J. Wang, Optimal wavelength broadband light source for medical imaging, FWOCNT2013, pp.266-269, 2013

M. D. Hossain, Y. Namihira Y. Hirako and J. Wang, Supercontinuum light sources for enhancing number of channels of CWDM systems, FWOCNT2013, pp.270-273, 2013

【学外活動】

なし

【受賞学術賞】

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