

ORAL SESSIONS

Nov. 12, (Mon.) 16:25-18:30

Control Techniques for Green Energy Systems (I)

Room: Sapphire

1. Choosing the Efficient Tracking Method for Real Time Tracking System in Jordan and it's neighbors to Get Maximum Gained Power Based on Experimental Data
Nadia AL-Rousan* (Personal)* Mohammad AL-Rousan (JUST) Adnan Shariah (JUST) Hazem AL-Najjar (Taibah University)
2. Multi-Inverter Control Technique with Current Sharing Control for Back-up Power System Applications
Yen-Shin Lai* (NTUT)* Shao-Jay Lu (NTUT)
3. Fuzzy-PI Controller Design for PM Wind Generator to Improve Fault Ride Through of Wind Farm
Marwan Rosyadi* (Kitami Institute of Technology)* Muyeen S. M. (The Petroleum Institute, Abu Dhabi. UAE) Rion Takahashi (Kitami Institute of technology) Junji Tamura (Kitami Institute of Technology)
4. Sliding Mode Control of Dynamic Voltage Restorer by using a new Adaptive Reaching Law
BISWAROOP SARKAR* (GSITS, Indore, INDIA)* Achala Pandey (G. S. Inst. of Tech. & Sc.) Rekha Agrawal (G. S. Inst. of Tech. & Sc.) Ravindra Mandloi (G. S. Inst. of Tech. & Sc.)
5. A Wind Energy Conversion Control System Simulation
Kadir Atilla Toker* (Izmir University)* Numan Sabit Çetin (Ege University)

Energy Transformation from Green Energy System to Grid (I) Room: Sweet

1. Comprehensive Modeling and Control Strategies for a Three-Phase Dual-Active Bridge
Nils Soltau* (PGS, E.ON ERC, RWTH Aachen)* Hafiz Abu Bakar Siddique (PGS, E.ON ERC, RWTH Aachen) Rik De Doncker (PGS, E.ON ERC, RWTH Aachen)
2. Sine Amplitude Converters for Efficient Datacenter DC Power Distribution
Eduardo Oliveira * (Vicor Corporation)* Arthur Russell (Vicor Corporation)
3. Effects of high penetration levels of residential photovoltaic generation:

Observations from field data

Amir Toliyat* (UT-Austin)* Alexis Kwasinski (UT-Austin) Fabian Uriarte (UT-Austin)

4. Back-to-back Converter Design and Control for Synchronous Generator-based Wind Turbines

Loic Queval* (The University of Tokyo)* Hiroyuki Ohsaki (The University of Tokyo)

5. A Novel Method of Suppressing Inrush Currents of Squirrel-cage Induction Machine using Matrix Converter in Wind Power Generation Systems

Hiroaki Yamada* (Kyushu Institute of Technology)* Tsuyoshi Hanamoto (Kyushu Institute of Technology)

Green (Renewable) Energy Sources and Systems (I)

Room: Amethyst

1. Effectiveness of Subterranean Heat Use in Earth Tube Houses: A Detached Model House Located in Japan

Hiroo Tarumi* (Kanazawa Inst. of Tech.)*

2. High safe large format lithium ion battery

Yusuke Kuzushima* (ELIYY Power Co., Ltd.)* Takayasu Iguchi (ELIYY Power) Tomitaro Hara (ELIYY Power) Hideyuki Sugiyama (ELIYY Power) Takao Fukunaga (ELIYY Power Co., Ltd) Kiyomoto Kawakami (ELIYY Power Co., Ltd.)

3. System Efficiency Estimation of Redundant Cascaded-Cell Converters in Applications with High-Power Battery Energy Storage Systems

Marco Stieneker* (PGS, E.ON ERC, RWTH Aachen)* Rik De Doncker (PGS, E.ON ERC, RWTH Aachen)

4. Sn-modified Ni-nanowire array films prepared by electrodeposition and their electrochemical properties as an anode material of lithium-ion batteries

Takeo Hyodo* (Nagasaki University)* Masayoshi Kanno (Nagasaki University) Toru Kaijima (Nagasaki University) Takeshi Ohgai (Nagasaki University) Yasuhiro Shimizu (Nagasaki University)

5. Ripple Current Effect on Output Power of Solar-Cell Panel

Shin-Li Lin (National Sun Yat-sen University) Gwo-Bin Wu* (National Sun Yat-sen University)* Chin-Sien Moo (National Sun Yat-sen University) Wei-Chen Liu (NSYSU)

Power Electronics for Energy Saving (I)

Room: Topaz & Jade

1. New IPT-Wireless EV Charger Using Single-Ended Quasi-Resonant Converter With Power Factor Correction
Hideki OMORI* (Osaka Institute of Technology)* Yuichi IGA (Osaka Institute of Technology) Toshimitsu MORIZANE (Osaka Institute of Technology) Noriyuki KIMURA (Osaka Institute of Technology) Yoshimichi NAKAMURA (Smart Energy Laboratory) Mutsuo NAKAOKA (Kyungnam University)
2. Various Improvements of Voltage Equalizer for EDLCs
Keiju Matsui* (Chubu University)* Hlaing Kyi Pyar Khant (Chubu University) Masaru Hasegawa (Chubu University)
3. A Novel Type High-Efficiency High-Frequency-Linked Full-Bridge DC-DC Converter Operating under Secondary-Side Series Resonant Principle for High-Power PV Generation
Daisuke Tsukiyama* (Daihen Corporation)* Yasuhiko Fukuda (Daihen Corporation) Shuji Miyake (Daihen Corporation) Saad Mekhilef (University of Malaya) Soon-Kurl Kwon (Kyungnam University) Mutsuo Nakaoka (University of Malaya, Kyungnam University)
4. Optimum Reduction of Switching Losses Based on the Two-Phase PWM Modulation Method
Toshiji Kato* (Doshisha University)* Kaoru Inoue (Doshisha University) Yoshitaka Taniyama (Doshisha University) Kazunari Yamada (Doshisha University)
5. FPGA-based Digital-controlled Power Converter with Universal Input Meeting 80 Plus Platinum Efficiency Code and Standby Power Code for Sever Power Applications
Yen-Shin Lai* (NTUT)* Kung-Min Ho (NTUT)

Green Energy Systems (I)

Room: Emerald

1. Monitoring Parameters of Synchronous Motor Via Internet
RAMAZAN BAYINDIR* (GAZI UNIVERSITY)* Seyfettin Vadi (Gazi University)
2. Single Phase Grid Interactive PV System With MPPT Capability Based on Type-2 Fuzzy Logic Systems
Necmi ALTIN* (Gazi University)*
3. FPGA Based Parallel Connection System of Separate Voltage Sources Using Cuk

Converters

Erdal Irmak* (Gazi University)* İlhami Colak (Gazi University) Halil İbrahim Bülbül (Gazi University) Naki Güler (Gazi University) Ayberk Calpbınici (Gazi University)

4. Vulnerabilities and Measures on Smart Grid Application in Renewable Energy
Seref SAGIROGLU* (Gazi University)* Alper OZBILEN (Technologies Authority)
İlhami COLAK (Gazi University)
5. Fuzzy Logic for Smart Utilisation of Storage Devices in A Typical Microgrid
Thair MAHMOUD* (Edith Cowan University)* Daryoush HABIBI (Edith Cowan University) Octavian BASS (Edith Cowan University)

Nov. 13, (Tue.) 8:20-10:00

Applications for GESSs (I)

Room: Topaz

1. In-Space Transportation of a Solar Power Satellite Using a Hall Thruster Propulsion System
Yuki ITO* (The University of Tokyo)* Masakatsu NAKANO (Tokyo Metropolitan College of Industrial Technology) Tony SCHÖNHERR (The University of Tokyo) Shinatora CHO (The University of Tokyo) Kimiya KOMURASAKI (The University of Tokyo) Hiroyuki KOIZUMI (The University of Tokyo)
2. Eco-friendly Bearing for Tidal Power Generation
Yoshitaka NAKANISHI* (Kumamoto University)* Kenryo SHIMAZU (Kumamoto University) Yasuaki MATSUMOTO (Kumamoto University) Shintaro KAI (Kumamoto University) Hidehiko HIGAKI (Kyushu Sangyo University) Yuichi OKA (Kumamoto University)
3. System Design and Control Algorithm for A 150W Portable Fuel Cell Power Pack
DongGyun Woo* (Sungkyunkwan University)* YunSung Kim (Sungkyunkwan University) DongMyoung Joo (Sungkyunkwan University) HongJoo Kang (Sungkyunkwan University) Byoungkuk Lee (Sungkyunkwan Univ)
4. Effect of Heat Pipes to Suppress Heat Leakage for Thermoelectric Generator of Energy Harvesting
Toshihiko Ishiyama* (Kushiro National College of Technology)* Hiroaki Yamada (Kyushu Institute of Technology)

Green Energy Systems (II)

Room: Emerald

1. Optimal Operation of Power Systems with Power Players
Wang Mengyan* (University of the Ryukyus)* Shota Higa (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus)
2. Energy Conversion of Parametric Pendulum under Multifrequency Excitation
Yuichi Yokoi* (Nagasaki University)* Tsuyoshi Higuchi (Nagasaki University)
3. A Thermoelectric Power Generation System with Ultra low Input Voltage Boost Converter with Maximum power Point Tracking
Akira Hidaka* (Kyusyu institute of technology)* Takuro Tsuji (Kyushu Institute of Technology) Satoshi Matsumoto (Kyushu Institute of Technology)
4. An Output Degradation of Photovoltaic Module by Fine Particles Deposition
MATSUOKA TAKAYUKI* (TOKYO UNIVERSITY OF SCIENCE)* Toshiaki Yachi (Tokyo University of Science)

Performance Analysis of Renewable Energy Systems (I)

Room: Gold

1. Generator Design and Characteristics in Direct-Link Wave Power Generating System Considering Appearance Probability of Waves
Masayuki Sanada* (Osaka Prefecture University)* Yukinori Inoue (Osaka Prefecture University) Shigeo Morimoto (Osaka Prefecture University)
2. Modeling and Simulation of a Horizontal Axis Wind Turbine Using S4WT
Sanem Evren (Sabanci University) Mustafa Unel* (Sabanci University)* Omer Adak (Sabanci University) Kemalettin Erbatur (Sabanci University) Mahmut Aksit (Sabanci University)
3. Inverter based Testbench for Photovoltaic Inverters in Compliance with Medium-Voltage Grid Codes
Matthias Biskoping* (RWTH University)* Sebastian Richter (RWTH University) Rik De Doncker (RWTH Aachen University)
4. Optimized Day-ahead Hydrothermal Wind Energy Systems Scheduling Using Parallel PSO
Ali Mourad (Kerman University) Mamdouh Abdel-Akher* (Aswan University)* Wang Mengyan (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus)

Power Electronics for Energy Saving (II)

Room: Jade

1. Dynamic Stability Improvement of Grid Connected Converter using Fuzzy Compensator Control
Marwan Rosyadi* (Kitami Institute of Technology)* Muyeen S. M. (The Petroleum Institute, Abu Dhabi. UAE) Rion Takahashi (Kitami Institute of technology) Junji Tamura (Kitami Institute of Technology)
2. Clamping of Switch Peak Voltage with Diode and Transformer at Output of Class E Amplifier
Tadashi Suetsugu* (Fukuoka University)* Xiuqin Wei (Fukuoka University)
3. Current Balance Performance Evaluations for Transformer-Linked Three Phase DC-DC LLC Resonant Converter
MASAYOSHI KOBAYASHI* (Shimane University)* Masayoshi Yamamoto (Shimane University)
4. Analysis of a Segment Type Switched Reluctance Generator for Wind Power Generation
Takashi Iwanaga* (Nagasaki University)* Sho Fukumoto (Nagasaki University) Tsuyoshi Higuchi (Nagasaki University) Yuichi Yokoi (Nagasaki University) Takashi Abe (Nagasaki University)

Nov. 13, (Tue.) 10:25-12:30

Vehicular Technology for Energy Saving (I)

Room: Emerald

1. Research and Development of High-Efficiency Hall-Type Ion Engines for Small Spacecrafts
Tomoyuki Ikeda* (Osaka Institute of Technology)* Naru Sugimoto (Osaka Institute of Technology) Kazuya Togawa (Osaka Institute of Technology) Yohei Mito (Osaka Institute of Technology) Hirokazu Tahara (Osaka Institute of Technology)
2. Development of Highly-Functional Nano-Satellites with Pulsed Plasma Engines
Shuya Kisaki* (Osaka Institute of Technology)* Tomoyuki Ikeda (Osaka Institute of Technology) Yoichi Inoue (Osaka Institute of Technology) Naoki Egami (Osaka Institute of Technology) Hirokazu Tahara (Osaka Institute of Technology)

3. Comparison of a Single-Phase and a Three-Phase Dual Active Bridge with Low-Voltage, High-Current Output
Hauke Van Hoek* (RWTH Aachen University)* Markus Neubert (RWTH Aachen University) Albert Kroeber (RWTH Aachen University) Rik De Doncker (RWTH Aachen University)
4. H-bridge step-down converter applied proposed switching transient waveform modification to reduce specific harmonics
Takao Mori* (Utsunomiya University)* Hirohito Funato (Utsunomiya University) Satoshi OGASAWARA (Hokkaido University) Fumihiro Okazaki (Calsonic Kansei) Yukitsugu Hirota (Calsonic Kansei)
5. A Small Power Transmission Prototype for Electric Vehicle Wireless Battery Charge Applications
A. O. Di Tommaso* (University of Palermo)* F. Genduso (University of Palermo) Rosario Miceli (University of Palermo)

Green (Renewable) Energy Sources and Systems (II)

Room: Gold

1. Energy management in the Decentralized Generation Systems based on Renewable Energy Sources
Abdallah Tani (Université Le Havre) Mamadou Bailo CAMARA (Université Le Havre) Dakyo Brayima* (Université Le Havre)*
2. Impedance Estimation and Total Harmonic Distortion Methods for Islanding Detection
Bohan Liu* (Nottingham University)* Ke Jia (Nottingham University) David Thomas (Nottingham University)
3. Analysis of the Heat Transfer Characteristics in a Thermoelectric Conversion Device
Kohei Kawabuchi* (Tokyo University of Science)* Toshiaki Yachi (Tokyo University of Science)
4. The Development of A New Type Rooftop Turbine Ventilator
David King Jair* (Kun Shan University)* Huann Ming Chou (Kun Shan University) Ming Chun Hsieh (Kun Shan University) Yi Chi Chiu (Kun Shan University) Dong Chuan Chen (Kun Shan University)
5. The Effect of Winding Design on Transformer Frequency Response with Application on Offshore Wind Farm Energization
Amir Hayati Soloot* (NTNU)* Hans Hoidalén (NTNU) Bjorn Gustavsen (SINTEF)

energy research)

Renewable Energy Research and Applications for Industries (I) Room: Topaz

1. A High Head Pumped Storage Power Plant Rehabilitation Project
Kazuyuki Nakamura* (TOSHIBA Corporation)* Sho Harada (TOSHIBA Corporation) Takashi SHIGENOBU (Kyushu Electric Power Co., INC.) Takaaki MURAKI (Kyushu Electric Power Co., INC.)
2. Voltage Stability Assessment of Photovoltaic Energy Systems with Voltage Control Capabilities
Mohamed Aly (South Valley University) Mamdouh Abdel-Akher* (University of the Ryukyus)* Zakaria ZIADI (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus)
3. RAPID FACILE BIOFUEL SYNTHESIS BY MICROWAVE IRRADIATION
Armando Quitain* (Kumamoto University)* Shunsaku Katoh (Kagawa Industry Support Foundation) Mitsuru Sasaki (Kumamoto University) Motonobu Goto (Nagoya University)
4. Potentials, Peculiarities and Prospects of Solar Power Generation on the Railway Premises
Hayashiya Hitoshi* (East Japan Railway Company)* Takayuki Furukawa (East Japan Railway Company) Hiroshi Itagaki (East Japan Railway Company) Takuya Kuraoka (East Japan Railway Company) Yuichi Morita (East Japan Railway Company) Yuta Fukasawa (East Japan Railway Company) Yoshihisa Mitoma (East Japan Railway Company) Takatoshi Oikawa (East Japan Railway Company)
5. Design and Control Method for Critical Load Supply Equipment using Molten Carbonate Fuel Cell Generation Systems
Donghee Kim* (Sungkyunkwan Univ.)* Jongsoo Kim (Samsung Advance Institute of Technology) Seunghee Ruy (Sungkyunkwan Univ.) Byoungkuk Lee (Sungkyunkwan Univ)

Power Electronics for Energy Saving (III)

Room: Jade

1. A Novel Compact Single Phase Inverter using Transformer-Linked Interleaved Flyback Converter
Yasuki Kanazawa* (Shimane University)* Masayoshi Yamamoto (Shimane University)
2. Performance Characteristics of Quick Response Digital Peak-Current-Mode 380V DC-DC Converter for Green IT System
Fujio Kurokawa (Nagasaki University) Kazuhiro Kajiwara* (Nagasaki University)* Yuichiro Shibata (Nagasaki University) Yoshihiko Yamabe (Nagasaki University) Toru Tanaka (NTT Facilities) Keiichi Hirose (NTT Facilities)
3. A Secondary-side Phase-shifted Zero Voltage and Zero Current Full-Range Soft-Switching PWM DC-DC Converter for EV Battery Chargers
Kouhei Akamatsu* (Kobe University)* Tomokazu Mishima (Kobe University) Mutsuo Nakaoka (Kyungnam University)
4. Surge Snubber Design for High Power-Density DC-DC Converters in HVDC Power Distribution Systems
Kazuhide Domoto* (Nagasaki University)* Tamotsu Ninomiya (Nagasaki University) Yoichi Ishizuka (Nagasaki University) Seiya ABE (The International Centre for the Study of East Asian Development) Hiroshi Yamaguchi (National Institute of Advanced Industrial Science and Technology) Rejeki Simanjorang (National Institute of Advanced Industrial Science and Technology) Masato Kaga (NTT Facilities, Inc)
5. Comparative Study about Efficiency and Switching Noise of Bridgeless PFC Circuits
KIYOSHI MASUMOTO* (Kyushu University)* MASAHITO SHOYAMA (Kyushu University)

Nov. 13, (Tue.) 14:00-16:05

Applications for GESSs (II)

Room: Topaz

1. A Compact Single-Phase Bidirectional Buck-Boost-Inverter Topology
Minsoo Jang* (UNSW)* Mihai Ciobotaru (UNSW) Vassilios Agelidis (UNSW)
2. Optimal Operation of Controllable Loads in DC Smart House with EV
Akihiro Yoza* (University of The Ryukyus)* Kosuke Uchida (University of the Ryukyus) Atsushi Yona (University of The Ryukyus) Tomonobu Senjyu (University of The Ryukyus)

3. Hydrogenation of Si(110) Surface due to Hydrogen Plasma Exposure, investigated with In-situ MIR-IRAS
Yuya Takaki (Nagasaki Univ.) Yoshiki Takami (Nagasaki Univ.) MASANORI SHINOHARA* (NAGASAKI UNIV.)* Yoshinobu Matsuda (Nagasaki Univ.) Hiroshi Fujiyama (Nagasaki Univ.)
4. The Design and Implementation of Power Service Discovery System in Distributed Generation Environment
Kei Yonekawa* (The University of Tokyo)* Shigemi Ishida (The University of Tokyo) Makoto Suzuki (The University of Tokyo) Hiroyuki MORIKAWA (The University of Tokyo)
5. A Fuzzy Logic Model of a Tracking System for Solar Panels in Northern Jordan Based on Experimental Data
Nadia AL-Rousan* (Personal)* Mohammad AL-Rousan (JUST) Adnan Shariah (JUST)

Green Energy Systems (III)

Room: Emerald

1. Evaluation and Verification of an Intelligent Control System with Modelling of Green Energy Devices by Constructing a Micro-Grid System in University Campus (report I)
Yuji Mizuno* (Nagasaki Institute of Applied Science)* Yoshito Tanaka (Nagasaki Institute of Applied Science) Haruo Hinata (Nagasaki Institute of Applied Science) Tadahiro Kishikawa (Nagasaki Institute of Applied Science) Masahiro Ikeda (Nagasaki Institute of Applied Science) Ryo Tanaka (Nagasaki Institute of Applied Science) Koji Kiyoyama (Nagasaki Institute of Applied Science) Makoto Shimojima (Nagasaki Institute of Applied Science) Shinichi Kamohara (Nagasaki Institute of Applied Science) Kazuaki Tanimoto (Nagasaki Institute of Applied Science) Takashi Hiyama (Kumamoto University)
2. Accelerating Velocity of Hydrogen Generation from Sodium Borohydride by Citric Acid Catalyst
Keisuke Tomoda* (Tokyo University of Science)* Nobukazu Hoshi (Tokyo University of Science) Junnosuke Haruna (Tokyo University of Science) Meifen Cao (Tokyo Metropolitan College of Industrial Technology) Atuhiko Yoshizaki (Hydric Power Systems) Keiichi Hirata (Hydric Power Systems)
3. Optimal Operation Method of Wind Farm with Demand Response

Kazuki Ogimi* (University of the Ryukyus)* Kosuke Uchida (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus) Toshihisa Funabashi (Meidensha Corporation)

4. Decentralized Controllable Loads Control in Small Power System

Yoshihisa Kinjyo* (University of the Ryukyus)* Miyagi Masaya (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus) Atsushi Yona (University of the Ryukyus)

5. Experimental Results and Comparison of Two Structures for a Fuel cell-Supercapacitor Hybrid System

Alireza PAYMAN* (Le Havre University)* Majid Zandi (Université Le Havre) serge Pierfederici (Université Le Havre) Farid Meibody-Tabar (Université Le Havre) brayima DAKYO (Université Le Havre)

Performance Analysis of Renewable Energy Systems (II)

Room: Gold

1. A Novel Reference Modification DC-DC Converter with Reactor Current Sensing Method

Fujio Kurokawa (Nagasaki University) Akihiro Yamanishi* (Nagasaki University)*

2. Basic Sensitivity Analysis of Conversion Losses in a DC Microgrid

Hiroaki Kakigano* (Osaka University)* Yushi Miura (Osaka University) Toshifumi Ise (Osaka University) Juan Van Roy (KU Leuven) Johan Driesen (KU Leuven)

3. Optimal Operation Scheduling of Nam Ngum-1 and Nam Leuk Hydropower Plants

Phengsouk Deevanhxay (Chiang Mai University) Suttichai Premrudeepreechacharn* (Chiang Mai University)* Kanchit Ngamsanroj (Electricity Generation Authority of Thailand)

4. Effect of Fuel Mass Distribution on Ethanol Combustion in Diesel Engine

Shohei Yamamoto* (Nagasaki University)* Daisaku Sakaguchi (Nagasaki University) Hironobu Ueki (Nagasaki University) Masahiro Ishida (Nagasaki University)

5. Analysing the Efficient Use of Energy in a Small Smart Grid System

Ilhami Colak* (European Commission)* Heinz Wilkening (European Commission) Gianluca Fulli (European Commission) Julija Vasiljevska (European Commission) Fatih Issi (Gazi University) Orhan Kaplan (Gazi University)

Power Electronics for Energy Saving (IV)

Room: Jade

1. Multilevel Cascaded Z source Inverter for PV Power Generation System
Yara Fayyad* (Qatar University)* Lazhar Ben-brahim (Qatar University)
2. High-Speed Switching Operation of MOSFETs Using Auxiliary Circuit Shorting Load
Toshihiko Noguchi* (Shizuoka University)* Tomohiro Mizuno (Shizuoka University)
3. Direct Grid Connection of Matrix Converter with Transition Control for Flywheel UPS
Jun-ichi Itoh (Nagaoka University of Tec.) Hisakatsu Igarashi* (Nagaoka University of Tech.)*
4. DC-DC Type High-Frequency Link DC for Improved Power Quality of Cascaded Multilevel Inverter
Muhammad Sadikin* (University of the Ryukyus)* Tomonobu Senjyu (University of the Ryukyus) Atsushi Yona (University of the Ryukyus)
5. Analysis and Optimization Design of Snubber Circuit for Isolated DC-DC Converters in DC Power Grid
Koji Orikawa* (Nagaoka University of Technology)* Jun-ichi Itoh (Nagaoka University of Tec.)

Nov. 13, (Tue.) 16:30-18:10 (Room Gold: -18:35)

Control Techniques for Green Energy Systems (II)

Room: Topaz

1. A New Pitch Control System of Wind Turbine to Damp Power System Frequency Fluctuations
Junqiao Liu, Marwan Rosyadi (Kitami Institute of Technology) Rion Takahashi (Kitami Institute of technology) Junji Tamura (Kitami Institute of Technology) Tomoyuki Fukushima (Hokkaido Electric Power Co, Japan) Atsushi Sakahara (Hokkaido Electric Power Co, Japan) Koji Shinya (Hokkaido Electric Power Co, Japan) Kazuki Yosioka (Hokkaido Electric Power Co, Japan)
2. Control of a Grid Connected Variable Speed Wind Energy Conversion System
Mahmoud Hussein* (University of the Ryukyus)* Tomonobu Senjyu (University of the Ryukyus) Mohamed Orabi (South Valley University, Aswan, Egypt) Mohamed

Abdel-Wahab (Minia University, Minia, Egypt) Mohamed Hamada (Minia University, Minia, Egypt)

3. Uninterruptable All-Electrification Smart House

Miyagi Masaya* (University of the Ryukyus)* HAYATO YAMAUCHI (University of the Ryukyus) Atsushi Yona (University of The Ryukyus) Tomonobu Senjyu (University of the Ryukyus)

4. Cooperative control of power system with battery and solar cell for a satellite

Soichiro Nakamura* (Sojo University)* Minoru Iwasa (JAXA) Masatoshi Nakahara (Sojo University)

Artificial Intelligence Studies in Renewable Energy Systems Room: Gold

1. Fault Location in DC Marine Power System Using Multiple Injections

Ke Jia* (Nottingham University)* David Thomas (Nottingham University) Mark Sumner (Nottingham University) Edward Christopher (Nottingham University)

2. Pattern Sequence-based Energy Demand Forecast Using Photovoltaic Energy Records

Yu Fujimoto* (Waseda University)* Yasuhiro Hayashi (Waseda University)

3. Performance Comparison of Saturated Tubular Linear Permanent Magnet Generators by Simplified FEAs

Mauro Andriollo (University of Padova) Luca Dall'Ora* (University of Padova)* Giovanni Martinelli (University of Padova) Andrea Tortella (Università di Padova)

4. New Development Method of Control Software for Smart Energy Applications dealing with Multi Sample Rate Controller

Hitoshi KIDOKORO* (DSPACE Japan K.K.)* Masatoshi NAKAHARA (Energy Electronics Laboratory, Sojo University)

5. Applying Hydraulic Micro Turbine to Water Heat Storage Type Air-Conditioning System

Yuuji Tanaka* (Hitachi Industrial Equipment Systems)* Yukihiro Fujita (Hitachi Industrial Equipment Systems) Takatoshi Sakai (Hitachi Industrial Equipment Systems)

Energy Transformation from Green Energy System to Grid (II) Room: Jade

1. A Three-Level MPPT Capability Rectifier For High Power Direct Drive WECS

- Necmi ALTIN* (Gazi University)* Saban Ozdemir (Gazi University)
2. Behaviour of Multi-Terminal Grid Topologies in Renewable Energy Systems Under Multiple Loads
Stavros Lazarou* (European Commission)* Catalin-Felix Covrig (European Commission) Ilhami Colak (Gazi University) Phillip Minnebo (European Commission) Heinz Wilkening (European Commission) Gianluca Fulli (European Commission)
 3. Overview of battery energy storage systems for stabilization of renewable energy in Japan
Noriko Kawakami* (TMEIC)* Yukihsa Iijima (TMEIC)
 4. Automatic Extraction of Basic Electricity Consumption Patterns in Households
Haoyang Shen* (Waseda University)* Hideitsu Hino (Waseda University) Noboru Murata (Waseda University) Shinji Wakao (Waseda University) Yasuhiro Hayashi (Waseda University)

New Approaches in Lightings

Room: Emerald

1. Assessment of energy-efficient LED street lighting through large-scale demonstration
Su-Chin Huang (ITRI) Li-Ling Lee (ITRI) Ming-Shan Jeng (ITRI) Yao-Ching Hsieh* (National Dong Hwa University)*
2. Single-Stage High Power-Factor Bridgeless AC-LED Driver for Lighting Applications
Guan-Chi Tseng (National Taiwan Tech.) Kuan-Hung Wu (National Taiwan Tech.) HUANG-JEN CHIU* (National Taiwan Tech.)* Yu-Kang Lo (National Taiwan Tech.)
3. High-Efficiency LED Driver for Street Light Applications
GUAN-CI ZENG (National Taiwan Tech.) Jiun-Jie Su (National Taiwan Tech.) HUANG-JEN CHIU* (National Taiwan Tech.)* Yu-Kang Lo (National Taiwan Tech.)
4. Renewable Energy and Lightings - logically or artificially?
Falk Wieland* (TU Dresden)* Henry Güldner (TU Dresden) Olaf Hild (Fraunhofer IPMS, COMEDD)

Nov. 14, (Wed.) 8:20-10:00

Control Techniques for Green Energy Systems (III)

Room: Topaz

1. Two Controls of Novel Buck-Boost Converter for Solar Photovoltaics
Sergey Ryvkin* (Trapeznikov Institute of Contr)* Felix Himmelstoss (University of Applied Science Technikum Wien)
2. Transient Response of Proposed Quick Response Peak Current Control DC-DC Converter
Fujio Kurokawa (Nagasaki University) Haruki Tamenaga* (Nagasaki University)* Yuichiro Shibata (Nagasaki University) Yoshihiko Yamabe (Nagasaki University)
3. Control of Power Leveling Unit with Super Capacitor using Bidirectional Buck/boost DC/DC Converter
Shin-ichi Hamasaki (Nagasaki University) Ryosuke Mukai* (Nagasaki University)* MINEO TSUJI (Nagasaki University)
4. Real Time Voltage Control of Unbalanced Distribution Systems with Photovoltaic Generation
Zakaria ZIADI* (University of the Ryukyus)* Mamdouh Abdel-Akher (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus) Toshihisa Funabashi (Meidensha Corporation)

Electric Machinery and Control for Energy Saving

Room: Emerald

1. Characteristics of Novel Flux Barrier Type Outer Rotor IPM Motor with Rare-earth and Ferrite Magnets
Soichi Ishii* (Tohoku University)* Kenji Nakamura (Tohoku University) Osamu Ichinokura (Tohoku University)
2. Consideration of Instantaneous Space Vector for Permanent Magnet Synchronous Machine
MINEO TSUJI* (Nagasaki University)*
3. Monitoring the Quality of Electrical Energy and Improving It Using Thyristor Controlled Reactor
Erdal Irmak* (Gazi University)* Ilhami Colak (Gazi University) Seref Sagiroglu (Gazi University) Ali Köse (Gazi University) Ersan Kabalcı (Nevsehir University)
4. Simulation and Analysis of a Variable Speed Permanent Magnet Synchronous

Generator with Flux Weakening Control

Miao Dong-Min* (Zhejiang University)* Shen Jian-Xin (Zhejiang University)

Energy Savings

Room: Gold

1. Energy Saving in Social Housing: an Innovative ICT Service for Occupant Behaviour
Mariapia Martino* (Politecnico di Torino)* Alessandra Guerrisi (Politecnico di Torino) Michele Tartaglia (Politecnico di Torino)
2. Energy Saving by Minimizing Total Power Loss in Power Systems
Volkan YAMACLI* (Mersin University)* Kadir ABACI (Mersin University)
3. Optimum Design of PV and SWH for All-Electric House
Kosuke Uchida* (University of the Ryukyus)* Tomonobu Senjyu (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Naomitsu Urasaki (University of the Ryukyus)
4. An effective monitoring of indoor comfort and evaluation of energy consumption in an complex urban energy system
Paolo Lazzeroni* (Politecnico di Torino)* Alessandra Guerrisi (Politecnico di Torino) Michele Tartaglia (Politecnico di Torino) Luca Giaccone (Politecnico di Torino) Mariapia Martino (Politecnico di Torino)

Green (Renewable) Energy Sources and Systems (III)

Room: Sapphire

1. Hidden Wind Farms in Residential Areas of Old Desert-edge Towns in Iran
AMIN AMINI* (Power and Water Univ. of Technology)* Iman Amini (Islamic Azad University) Ken Nagasaka (Tokyo Univ. of A&T)
2. Operational Planning Strategy Applying Demand Response to Large PV/Battery System
Atsushi Yona* (University of the Ryukyus)* Tomonobu Senjyu (University of the Ryukyus) Toshihisa Funabashi (Meidensha Corporation) Chul-Hwan Kim (Sungkyunkwan University) Paras Mandal (University of Texas)
3. Development and standardization of higher-voltage direct current power feeding system
Tadatoshi Babasaki* (NTT)

4. Influence of Wind Conditions on Siting, Design and Performance Considerations for Offshore Wind Turbines in the Gulf of Mexico Region
Fabian Wendt* (University of Houston)* Su Su Wang (University of Houston) King Him Lo (University of Houston)

Power Electronics for Energy Saving (V)

Room: Jade

1. Constant Voltage Constant Frequency Control for Single Phase Three Level Inverter
Nihat Ozturk (Gazi Univ.) Ridvan Canbaz* (Gazi Univ.)* Emre Celik (Gazi Univ.)
2. Investigation of Optimal Operation Method for Permanent Magnet Synchronous Motor Drive System with 3-level Inverter
Jun-ichi Itoh (Nagaoka University of Tec.) Daisuke Sato* (Nagaoka Univ. of Technology)* Takaaki Tanaka (Nagaoka University of Technology)
3. Power Efficiency Improvement at Light Load for POL Power Supply Employing Two Stage Coupled Inductor Converter
Satoshi Goto* (University)* Terukazu Sato (Oita University) Kimihiro Nishijima (Oita University) Takashi Nabeshima (Oita University)
4. AC Analysis of Symmetry and Asymmetry Bi-directional Current Resonant Converter
Seiya ABE* (The International Centre for the Study of East Asian Development)* Toshiyuki ZAITSU (Texas Instruments) Junichi Yamamoto (Texas Instruments Japan Ltd.) Sihun Yang (Kyushu University) MASAHITO SHOYAMA (Kyushu University) Tamotsu Ninomiya (Nagasaki University)

Applications for GESSs (III)

Room: Sweet

1. Design Principles of and Modelling Self-Sufficient Green Houses
Mustafa Engin BAŞOĞLU* (Kocaeli University)* Bekir ÇAKIR (Kocaeli University)
2. Investigation of Spectrally Decomposed Concentrated Solar Energy Systems
Canan Kandilli* (Usak University)* Gurhan Kulahli (Usak University)
3. Country Study on Renewable Energy Sources in Turkey
Orhan KAPLAN* (Gazi University)* Uraz Yavanoglu (Gazi University) Fatih ISSI

(Gazi University)

4. Stability Analysis of LCL-type Grid-connected Inverter in Weak Grid Systems

Xin Chen* (NUAA)* Chun Yin GONG (NUAA) Hui Zhen WANG (NUAA) Lin
CHENG (NUAA)

Nov. 14, (Wed.) 10:25-12:30

Control Techniques for Green Energy Systems (IV)

Room: Topaz

1. Intelligent Operations of Distribution System with Distributed Generators
HAYATO YAMAUCHI* (University of the Ryukyus)* Kosuke Uchida (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus)
2. Advanced Smart House with An Electric Vehicle
HAYATO YAMAUCHI* (University of the Ryukyus)* Masaya Miyagi (University of the Ryukyus) Kosuke Uchida (University of the Ryukyus) Atsushi Yona (University of the Ryukyus) Tomonobu Senjyu (University of the Ryukyus)
3. Investigation Over/Under-Voltage Protection of Passive Islanding Detection Method of Distributed Generations in Electrical Distribution Systems
Manop Yingrum (Chiang Mai University) Suttichai Premrudeepreechacharn* (Chiang Mai University)*
4. Microgrid using Parallel Processing Uninterruptible Power Supply
Tomohito Ushirokawa* (NTT Facilities Inc.)* Keiichi Hirose (NTT Facilities Inc.) Kazuto Yukita (Aichi Institute of Technology) Katsuhiko Ichiyanagi (Aichi Institute of Technology) Yoshiaki Okui (SANYO DENKI CO., LTD.) Hisaaki Takabayashi (Shin-Kobe Electric Machinery Co., Ltd.)
5. Verification of Container Data Center using 380 V dc Power Distribution System
Masato Kaga* (NTT Facilities, Inc.)* Masatoshi Noritake (NTT Facilities, Inc.) Keiichi Hirose (NTT Facilities Inc.) Masato Mino (NTT Facilities, Inc.)

Vehicular Technology for Energy Saving (II)

Room: Sweet

1. Energy management based on Two-phase interleaved Buck-boost and Boost converters for Electric Vehicles Applications - Using Lithium-battery and Fuel cell
Mamadou Baïlo CAMARA* (Université Le Havre)* Brayima DAKYO (Université Le Havre) hamid GUALOUS (IUT Cherbourg- Université de Caen)
2. Effect of Al loading on CaO catalysts for biodiesel production
Takakazu Takata (Nagasaki University) Osamu Nakagoe (Nagasaki University) Shuji Tanabe* (Nagasaki University)*
3. SuperCapacitors and Fuel Cell Energetic Assistance for the Transport Applications

– Energy management in the traction situations

Mamadou Baïlo CAMARA* (Université Le Havre)* Brayima DAKYO (Université Le Havre)

4. Feasible Evaluation of High-Frequency Link AC-AC Contact-less Power Supply System in Parking Tower

Eiji HIRAKI* (Yamaguchi University)* Shingo KAWANO (Yamaguchi Univ)
Toshihiko TANAKA (Yamaguchi Univ) Masayuki OKAMOTO (Ube National College of Technology)

5. A Study on the Rotor Side Control of DFIG-based Wind Turbine during Voltage Sags Without Crowbar System

Maurício Salles* (University of São Paulo)* Alfeu Sguarezi (Universidade Federal do ABC - UFABC) Ahda Grilo (Universidade Federal do ABC - UFABC)

Renewable Energy Research and Applications for Industries (II)

Room: Sapphire

1. A Study of Hydrogen Production in Stand-alone Wind Farm

Kenta Koiwa* (Kitami Institute of Technology)* Rion Takahashi (Kitami Institute of Technology) Junji Tamura (Kitami Institute of Technology)

2. Optimization of Operating Conditions of Photovoltaic Systems: A Case Study

RAMAZAN BAYINDIR* (GAZİ ÜNİVERSİTESİ)* Ersan Kabalcı (Nevşehir University) Halil İbrahim Bülbül (Gazi University) Celal Can (Nevşehir University)

3. An Experimental Investigation of Thermoelectric Cooling with Solar Panel

Dilek Esen* (Kocaeli University)* Elif Balta (Kocaeli University) Aykut Kaman (Gural Electrical)

4. Testing of a Gyroscopic Wave Energy Converter

Michele Pastorelli* (Politecnico di Torino)* Giuliana Mattiazzo (Politecnico di Torino) Ermanno Giorcelli (Politecnico di Torino) Mattia Raffero (Politecnico di Torino) Giovanni Bracco (Politecnico di Torino)

5. Hydrogen production from oxidative steam reforming of ethanol on pyrochlore-typed metal oxide, $\text{La}_2\text{Ce}_{2-x}\text{Ni}_{0.5x}\text{O}_{7-1.5x}$ ($x=0.1-0.9$)

Sheng-Feng Weng* (National Chiao Tung University)* Chi-Shen Lee (National

Chiao Tung University)

Power Devices for Green Energy Systems

Room: Gold

1. Design Taking Inductive Load into Consideration on a PFC CV/CC AC Power Supply Having Variable Capacitance Devices
Akihiko Katsuki* (Kyushu Institute of Technology)* Yuichi Sugimoto (Kyushu Institute of Technology)
2. Oxygen reduction selectivity at Co-C-N prepared by reactive sputtering for direct methanol fuel cell
Sayoko Shironita* (Nagaoka University of Technology)* Yosuke Matsumoto (Nagaoka University of Technology) Minoru Umeda (Nagaoka University of Technology)
3. 376nm Ultra-Violet Laser Diode Annealing of Si Thin-Films
Wenchang Yeh* (Shimane University)* Ryota Morioka (Shimane University)
4. Verification of Novel Recovery-Less Boost Converter with Saturable Inductor
Kimihiro Nanamori* (Shimane University)* Kouno Kenta (Shimane University) jun Imaoka (Shimane University) Hideharu Tsukamoto (Shimane University) Masayoshi Yamamoto (Shimane University)
5. Basic Examination of Magnetic Circuit Model Incorporating Micromagnetic Simulation
Hideaki Tanaka* (Tohoku University)* Kenji Nakamura (Tohoku University) Osamu Ichinokura (Tohoku University)

Power Electronics for Energy Saving (VI)

Room: Jade

1. Characteristic Analysis of Choke-Input-Type Diode Rectifier Circuit for Three-Phase Rectangular-Voltage-Fed Distribution System
TOMOAKI IMAEDA* (Nagoya Institute of Technology)* Takaharu Takeshita (Nagoya Institute of Technology) Yasuyuki Nishida (Chiba Institute of Technology)
2. Improved Transient Response of Digitally Controlled Buck Converter Employing Predictive PID Control
Tomita Hikaru* (Oita University)* Takashi Nabeshima (Oita University) Terukazu Sato (Oita University) Kimihiro Nishijima (Oita University)

3. A New Modified FIR Filter Digitally Controlled Full Bridge Converter
Koji Murata* (Nagasaki University)* Fujio Kurokawa (Nagasaki University)
4. A Study of High-Frequency Photovoltaic Pulse Charger for Lead-Acid Battery Guided by PI-INC MPPT
Hung-I Hsieh* (National Chiayi University)* Jen-Hao Hsieh (Chung Yuan Christian University) Sheng-Fang Shih (National Chiayi University) Guan-Chyun Hsieh (Chung Yuan Christian University)
5. Numerical Analysis of Medium Scale PV Plants and Their Power-Flow Control System With a Simple Three Phase Inverter
O. Di Tommaso* (University of Palermo)* F. Genduso (University of Palermo) Rosario Miceli (University of Palermo) G. Ricco Galluzzo (University of Palermo)

Green Energy Systems(IV)

Room: Emerald

1. A Wind Speed Forecasting Approach Based on 2-Dimensional Input Space
Mehmet Yesilbudak* (Nevsehir University)* Seref Sagiroglu (Gazi University) Ilhami Colak (Gazi University)
2. Prediction of Solar Radiation Using Meteorological Data
Mehmet Demirtas (Faculty of Technology, Gazi University) Mehmet Yesilbudak* (Nevsehir University)* Seref Sagiroglu (Gazi University) Ilhami Colak (Gazi University)
3. Modeling a Permanent Magnet Synchronous Generator Used in Wind Turbine and the Realization of Voltage Control on the Model with Artificial Neural Networks
Ilhami Colak* (Gazi University)* Halil İbrahim Bülbül (Gazi University) Seref Sagiroglu (Gazi University) Murat Sahin (Roketsan CO.)
4. 72HR FORECAST OF WIND POWER IN MANİSA, TURKEY BY USING THE WRF MODEL COUPLED TO WINDSIM
Bahtiyar Efe, Emel Unal, Sibel Menten, Tuncay Ozdemir, Yurdanur Unal, Burak Barutcu, Elcin Tan, Baris Onol, Sema Topcu (Istanbul Technical University State Meteorological Office)
5. Harvesting Solar and Energy Management System for Light Electric Vehicles (LEVs)
Farid Azidin* (UTeM)* Mahammad Abdul Hannan (UKM)

POSTER SESSIONS

Nov. 13, (Tue.) 8:20-10:20

Poster session (I)

1. Self-Tunable Fuzzy Logic Controller for the Optimization of Heaving Wave Energy Converters
Mohammed Jama* (UAE University)* Ali Assi (Lebanese International Univ) Addy Wahyudie (UAE University) Hassan Noura (UAE University)
2. Output Characteristics of Wind Power Turbine According to the Position of Stator Groove
Myunghwan Ku* (Soonchunhyang Univ.)* Kyoungho Paik (Soonchunhyang Univ.) guesoo Cha (Soonchunhyang Univ.) Youngmin Kim (Mirtech R&D) Jinseouk Oh (Mirtech R&D) Heejoon Lee (Mirtech R&D) Myunghun Kang (Soonchunhyang Univ.)
3. A Solar-Cell Based Power Conversion Circuit for LED Lighting
Wen-Hsuan Chang* (National Sun Yat-sen University)* Tsung-Hsi Wu (National Sun Yat-sen University) Chin-Sien Moo (National Sun Yat-sen University)
4. Technical Losses Reduction of Electrical Distribution System in Vientiane Capital
Vassana Phetlamphanh (Chiang Mai University) Suttichai Premrudeepreechacharn* (Chiang Mai University)* Kanchit Ngamsanroj (Electricity Generation Authority of Thailand)
5. Improvement for EMF and Efficiency used Fractional Slot Winding of Permanent Magnet Type Synchronous Generator for Wind Power
MIYAMOTO YASUHIRO* (System Engineering Division YA)* Daisuke MORISHITA (System Engineering Division YA) Tsuyoshi HIGUCHI (Nagasaki University) Takashi ABE (Nagasaki University)
6. DC Microgrid Operation Planning
Ching-Chih Huang* (Sun Yat-sen University)* Min-Jui Chen (Sun Yat-sen University) Yung-Tang Liao (Sun Yat-sen University) Chan-nan Lu (Sun Yat-sen University)
7. Analysis of Short Circuit Faults in a System Fed by Wind Turbine
Ahmet Nayir* (Fatih Univ.)* Eugeniusz Rosolowski (Wroclaw University of Technology) Leszek Jedut (Wroclaw University of Technology)

8. Performance Verification of High-Speed Frequency Shift Anti-Islanding for Utility-Scaled Photovoltaic Inverters
Rubén Inzunza* (Toshiba Mitsubishi-Electric Industrial Systems Corporation)*
Takeshi Sumiya (Toshiba Mitsubishi-Electric Industrial Systems Corporation)
Kenichi Kimoto (Toshiba Mitsubishi-Electric Industrial Systems Corporation)
Eiichi Ikawa (Toshiba Mitsubishi-Electric Industrial Systems Corporation)

Nov. 13, (Tue.) 11:00-13:00

Poster session (II)

1. Development of In-situ MIR-IRAS monitoring system for reactions induced by solution plasma generation
AKIHIRO FUKAE (NAGASAKI UNIV) Katsuhiko Amano (Nagasaki Univ.)
MASANORI SHINOHARA* (NAGASAKI UNIV.)* Yoshinobu Matsuda
(NAGASAKI UNIV) Hiroshi Fujiyama (NAGASAKI UNIV)
2. Intelligent Control of PMSM Drives Using Type-2 Fuzzy
Said WAHSH* (ERI)* Y. Ahmed (ERI) M. Abd El Aziz (Cairo University)
3. Real-time and Synchronous Simulation in Microgrid Control Center
Ying Yi Hong* (Chung Yuan University)*, Yu-Ting Yeh (Chung Yuan University)
Fu-Yuan Hsu (Chung Yuan University) Ya-Li Chiu (Chung Yuan University)
Shi-Lin Chen (Chung Yuan University)
4. Li-ion Battery Model Exploring by Intermittent Discharging
Yao-Ching Hsieh* (National Dong Hwa University)* Tin-Da Lin (National Dong Hwa University) Ruei-Ji Chen (National Dong Hwa University)
5. Development of Photovoltaic Cell Booster Using Flyback Converter
Teruhiko Kohama* (Fukuoka University)* Satoshi Tsuji (Fukuoka University) Taku Yamabe (Fukuoka University)
6. A New Control Method in Startup Progress for a Super Turbo Generator as a Shipboard Waste Heat Recovery System
Nobumasa Matsui* (MHI Control Systems)* Takahiro Matsuo (MHI Control Systems) Yoshihiro Ichiki (Mitsubishi Heavy Industries) Takayuki Kanaboshi (Mitsubishi Heavy Industries)
7. On-line Identification of Synchronous Generator Mathematical Model
Mato Miskovic* (HEP Hydro-power Dubrovnik)* Marija Mirosevic (University of

- Dubrovnik) Ivan Miskovic (Brodarski Institut)
8. Power Efficiency Improvement of the Composite Resonant DC-DC Converter
Hisatsugu Kato* (Tabuchi Electric CO., LTD)* Yoichi Ishizuka (Nagasaki University)
 9. PHEV Battery Module Modeling Based on Statistical Averaging Method
Tae-Hoon Kim* (KATECH)* Jin-Beom Jeong (KATECH) Baek-Haeng Lee (KATECH) Dong-Hyun Shin (KATECH) Hyun-Sik Song (Korea University)
 10. Hydrogen production from steam reforming of woody biomass with cobalt catalyst
Osamu Nakagoe (Nagasaki University) Yuta Furukawa (Nagasaki University)
Shuji Tanabe* (Nagasaki University)*

Nov. 13, (Tue.) 13:30-15:30

Poster session (III)

1. Research and Development of High-Power High-Efficiency Hall-Type Ion Engines for Space Exploration
Yohei Mito* (Osaka Institute of Technology)* Tomoyuki Ikeda (Osaka Institute of Technology) Naru Sugimoto (Osaka Institute of Technology) Kazuya Togawa (Osaka Institute of Technology) Hirokazu Tahara (Osaka Institute of Technology)
2. Evaluations of Grid Currents of an Ion Engine by particle analyses
Takeshi Miyasaka* (Gifu University)* Katsuo Asato (Gifu University) Hitoshi Sugiyama (Gifu University)
3. Development of Small Scale Microwave Discharge Ion Thruster with Variable Magnetic Field
Yoshiyuki Takao* (Nishinippon Institute of Tech)* I. Iwata (Nishinippon Institute of Tech) N. Chou (Nishinippon Institute of Tech)
4. A Wavelet-Based Passive Islanding Detection Technique
Yara Fayyad* (Qatar University)* Lazhar Ben-brahim (Qatar University)
5. Fine-tuning GA for PV-PEMFC Hybrid System Optimization
Mustapha Hatti* (UDES, Bou Ismail Tipaza)*
6. Medium Frequency High Power Transformers, State of the Art and Challenges
Edris Agheb* (NTNU University)* Hans Høidalen (NTNU University)
7. Examination of maximization of the photovoltaics electric power use by power distribution system control
Takamasa Miyagawa* (East Japan Railway Company)* Hitoshi Hayashiya (East

- Japan Railway Company) Hiroshi Yoshizumi (East Japan Railway Company)
Takayuki Furukawa (East Japan Railway Company) Tetsuro Iwakami (East Japan
Railway Company) Atsushi Egami (East Japan Railway Company)
8. Comparative study for using Chlorophyll extracted from green leaves for solar cell
fabrication after treatment with other materials
Mahmoud ElShenawy* (NanoTech Egypt)* Badran ElShenawy (NanoTech Egypt)
 9. Hybrid Wind-Diesel Energy System with Hydrogen Production
Mamadou Lamine Doumbia* (University of Quebec)* Kodjo Agbossou (University
of Quebec) Karim Belmokhtar (University of Quebec)
 10. Analysis of Local Smoothing Effect on the PV on Tokyo Station
Yuichi Morita* (East Japan Railway Company)* Masahiko Honda (East Japan
Railway Company) Takuya Kuraoka (East Japan Railway Company) Yuta
Fukazawa (East Japan Railway Company) Yoshihisa Mitoma (East Japan Railway
Company) Hiroshi Yoshizumi (East Japan Railway Company) Hayashiya Hitoshi
(East Japan Railway Company)
 11. A New Digital Soft-Start Method for Current Mode DC-DC Converter
Fujio Kurokawa (Nagasaki University) Suguru Sagara* (Nagasaki University)*

Nov. 13, (Tue.) 16:00-18:00

Poster session (IV)

1. A Stand-Alone Power Supply System Using Single Photovoltaic Cell with
Maximum Power Point Tracking
Takuro Tsuji* (Kyushu Institute of Technology)* Akira Hidaka (Kyusyu institute of
technology) Yutaro Kashima (Kyushu Institute Of Technology) Satoshi Matsumoto
(Kyushu Institute of Technology)
2. Performance Verification of New Active Islanding Detection Methods for PV
System by Simulation
Yoshida Yoshiaki* (Doshisha University)* Fujiwara Koji (Doshisha University)
Ishihara Yoshiyuki (Doshisha University) Suzuki Hirokazu (The University of
Tokyo)
3. Overview of High Power Wind Turbine Generators
Huguette TIEGNA (GREAH, Université du Havre) Yacine AMARA* (GREAH,

Université du Havre)* Georges Barakat (GREAH, Université du Havre) Brayima DAKYO (Université Le Havre)

4. Synthesis and Catalytic Performance of $\text{Y}_2\text{Ce}_{2-x}\text{Ru}_x\text{O}_7$ ($x=0\sim 0.4$) on Autothermal Ethanol Steam Reforming Reaction
Yun-Sheng Chen* (National Chiao Tung University)* Chi-Shen Lee (National Chiao Tung University)
5. A Novel Tapped-Inductor Buck Converter for Home DC Power Supply System
Takahiro Urabe* (Oita University)* Kimihiro Nishijima (Oita University) Terukazu Sato (Oita University) Takashi Nabeshima (Oita University)
6. A New Wide-Range Soft-Switching PWM Boost DC-DC Converter with an Edge-Resonant Switched Capacitor in Continuous Conduction Mode
Tomokazu Mishima (Kobe University) Hiroaki Itoh* (Kobe University)* Mutsuo Nakaoka (Kyungnam University)
7. Performance Characteristics Digital Boundary Current Control AC-DC Converter
Fujio Kurokawa (Nagasaki University) Kota Ueno* (Nagasaki University)*
8. Digital Controlled Integral Gain Switchover Method DC-DC Converter
Shun Higuchi* (Nagasaki University)* Fujio Kurokawa (Nagasaki University)
9. Analyzing Effects of Pole/Slot Combination of IPM Type BLDC Motor under Stator-Turn Fault Condition
Kyung-Tae Kim* (University of Ulsan)* Byeong-Woo Kim (University of Ulsan) Jin Hur (University of Ulsan)
10. A Study on Infrastructure and Operation of energy transformation from Green to Grid
Byoung-Hoon Kim* (Korea University)* Jin-Beom Jeong (KATECH) Dong-Hyun Shin (KATECH) Hyun-Sik Song (Korea University) Tae-Hoon Kim (KATECH) Hee Jun Kim (School of Electrical Engineering and Computer Science, Hanyang University) Ji Yoon Yoo (School of Electrical Engineering, the University of the Korea) *