

| NO | ID | Title  | Authors  | PRESENTED | NON-PRESENTED |          |
|----|----|--|--|-----------|---------------|----------|
| 1  | 9  | Design of Fault-Tolerant Cascaded H-Bridge Multilevel Inverter with Output-Side Transformers Using Bidirectional Switches                | Muhammet Biberoglu, Kayhan Ince, Filiz Karaosmanoglu                           | PRESENTED |               | PAID     |
| 2  | 11 | Application of Brushless Excitation System in Wind Power Generation  | Sarmistha Mishra, Akshay Kumar   | PRESENTED |               | PAID     |
| 3  | 13 | Distributed Control of Photovoltaic-Based Microgrid  | Khalid Ateea, Ashraf Khalil  |           | NON-PRESENTED | PAID     |
| 4  | 14 | Single Phase Multilevel String Inverter for Solar Applications   | Ersan Kabalci, Yasin Kabalci, Ridvan Canbaz, Goksel Gokkus                     | PRESENTED |               | PAID     |
| 5  | 15 | Dual DC-DC Converter Design for String Inverters Used in Solar Plants  | Ersan Kabalci, Yasin Kabalci, Goksel Gokkus                                    | PRESENTED |               | PAID     |
| 6  | 17 | Impact of Fill Factor on Input Current Ripple of Photovoltaic System   | Ahmad El Khateb, Nasrudin Abd Rahim, Barry Williams                            | PRESENTED |               | PAID     |
| 7  | 22 | Analytical Estimation in APF Sizing for Networks of Analogous Loads  | Mohamed Tarnini, Alaaeddine Abdallah   | PRESENTED |               | NOT PAID |
| 8  | 23 | Substation switching arrangements using Compact Hybrid Modules   | Jorge Quintina, Benjamin Marin   | PRESENTED |               | PAID     |
| 9  | 24 | Impact of Photovoltaic Integration on Voltage Variation of Brazilian Secondary Network Distribution System                               | Leonardo Bitencourt, Annelys Schetinger, Bruno Borba, Daniel Dias, Rena Maciel | PRESENTED |               | PAID     |
| 10 | 28 | Determination the Relation Between the Target Regulations about End of Life Vehicles, (Elvs) and Greenhouse Gas Emissions in Turkey      | Burcu Onat   | PRESENTED |               | PAID     |
| 11 | 29 | Extending Flight Endurance of Electric Unmanned Aerial Vehicles through Photovoltaic System Integration                                  | Gustavo Bertoli, Gefeson Pacheco, Geraldo Adabo                                | PRESENTED |               | PAID     |
| 12 | 30 | A Straight Forward Method: Biochemical Methane Potential Assay   | Vedat Yilmaz   | PRESENTED |               | PAID     |
| 13 | 35 | An Investigation of Physical and Energy Properties of Briquette Fuel Mixed with Cotton Dust (CD) and Carbonized Cotton Dust (CCD)        | Borvorn Israngkura Na Ayudhya, Boonsri Kusuktham, Siripol Suvunnapob           |           | NON-PRESENTED | PAID     |
| 14 | 37 | Design and Development of Canal Ship Based on Overhead Wires   | Jianglong Wan, Xiping Yan, Qizhi Yin, Yupeng Yuan, Kai Wang, Qizhen Jiang      | PRESENTED |               | PAID     |
| 15 | 40 | Local Demand Response and Load Planning System for Intelligent Domestic Appliances   | Karl Stephan Stille, Joachim Böcker  | PRESENTED |               | PAID     |
| 16 | 43 | Electro Thermal Model of IGBT Three-Level Neutral-Point-Clamped Rectifier for Synchronous Reluctance Generator in Wind Power Application | Mohammed Alnajjar, Dieter Gerling  | PRESENTED |               | PAID     |
| 17 | 46 | Neural-Network Based Vector Control of VSCHVDC Transmission Systems  | Eduardo Alonso   | PRESENTED |               | PAID     |
| 18 | 52 | Hydropower Plants Tail Water Energy Production and Optimization  | Kerim Mehmet Murat Tunc  | PRESENTED |               | PAID     |
| 19 | 54 | Improvement of Transient Response to Islanding Control of Microgrid with Bidirectional Inverter  | Hsiang Lin Huang, Yih-Der  | PRESENTED |               | PAID     |

NO PARTICIPATION

|    |    |   |   |           |  |      |
|----|----|---|---|-----------|--|------|
|    |    |   | Lee, Yung-Ruei<br>Chang   |           |  |      |
| 20 | 55 | A Hybrid Low-Power System Used to Supply a Local Consumer   | Dan Gabriel Stanescu, Mircea Emilian Ardeleanu, Remus Constantin Popescu  | PRESENTED |  | PAID |
| 21 | 56 | Analysis of Solar Inverter THD According to PWM's Carrier Frequency   | Hasan Cangi, Suleyman Adak  | PRESENTED |  | PAID |
| 22 | 57 | Power Monitoring Based Photovoltaic Installation Fault Detection  | Yves Stauffer, Andreas Hutter, Damien Ferrario, Emmanuel Onillon  | PRESENTED |  | PAID |
| 23 | 59 | Markov Process Reliability Model for Photovoltaic Module Encapsulation Failures   | Mohamed Khalil, Loredana Cristaldi, Marco Faifer, Payam Soulatiantork   | PRESENTED |  | PAID |
| 24 | 60 | Multi-Time Series and -Time Scale Modeling for Wind Speed and Wind Power Forecasting Part I: Statistical Methods, Very Short-Term and Short-Term Applications | Ilhami Colak, Seref Sagiroglu, Mehmet Yesilbudak, Ersan Kabalci, Halil Ibrahim Bulbul                                   | PRESENTED |  | PAID |
| 25 | 61 | Multi-Time Series and -Time Scale Modeling for Wind Speed and Wind Power Forecasting Part II: Medium-Term and Long-Term Applications                          | Ilhami Colak, Seref Sagiroglu, Mehmet Yesilbudak, Ersan Kabalci, Halil Ibrahim Bulbul                                   | PRESENTED |  | PAID |
| 26 | 62 | Electric and Magnetic Emission in Near Field Region and Thermal Behaviour of Power Module for Photovoltaic Application  | Giovanni Tine, Antonio Cataliotti, Rosario Miceli, Dario Di Cara, Giuseppe Marsala, Antonino Pecoraro, Antonella Ragusa | PRESENTED |  | PAID |
| 27 | 63 | State Estimation on Stand-Alone DC Microgrids through Distributed Intelligence  | Wesley Doorsamy, Willem Cronje  | PRESENTED |  | PAID |
| 28 | 64 | Contact-Less Electromagnetic Recharging System for Heavy-Duty Bus Flywheel Storage  | Andrea Tortella, Mauro Andriollo, Fabio Graziottin  | PRESENTED |  | PAID |
| 29 | 65 | Overvoltage Mitigation in Open Winding AC Motor Drives  | Giacomo Scelba, Giuseppe Scarcella, Antonio Testa, Salvatore Foti, Mario Cacciato, Salvatore De Caro                    | PRESENTED |  | PAID |
| 30 | 68 | Evaluating Method of Effectiveness of Light Energy's Utilization Based on Service Requirement   | Bingzhuo Zhong, Xiaolong Li, Ziyang Zou   | PRESENTED |  | PAID |
| 31 | 69 | Hybrid Solar Gas Reliability Optimization Using Cat Swarm Optimization under Performance and Cost Constraints   | Meziane Rachid  | PRESENTED |  | PAID |
| 32 | 70 | Distributed Renewable Generation and Storage Systems Sizing in Deregulated Energy Markets   | Raji Atia, Noboru Yamada  | PRESENTED |  | PAID |
| 33 | 73 | Influence of Axial Direction on Performance of Biomimetic Sealing System  | Yoshitaka Nakanishi, Jason Sanderson, Takuro Honda, Keiji Kasamura, Yuta Nakashima, Hidehiko Higaki                     | PRESENTED |  | PAID |

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|----|-----|--|--|-----------|--|----------|
| 34 | 74  | A Novel Topology and Its Control of Single-Phase Electric Springs  | Wang Qingsong, Ming Cheng, Zhe Chen, Giuseppe Buja   | PRESENTED |  | PAID     |
| 35 | 77  | An Aerodynamic Modelling Methodology for an Offshore Floating Vertical Axis Wind Turbine   | Brian Hand, Andrew Cashman, Ger Kelly  | PRESENTED |  | PAID     |
| 36 | 79  | Validation of Hydroelectric Power Plant Model for Speed Governor Development Studies   | Derya Murat, Ilhan Koşalay, Dogan Gezer, Cem Şahin   | PRESENTED |  | PAID     |
| 37 | 81  | Strategy Photovoltaic Pumping System in Scattered Area   | Moulay-Idriss Chergui  | PRESENTED |  | NOT PAID |
| 38 | 86  | Feasibility of Heat Recovery for District Heating Based on Cloud Computing Industrial Park   | Feng Huang, Jun Lu, Jie Zheng, Jean-Michel Baleynaud   | PRESENTED |  | PAID     |
| 39 | 88  | Harvesting Electric Power with a Cane for Radio Communications   | Hiroki Sato, Toshiaki Yachi  | PRESENTED |  | PAID     |
| 40 | 89  | SM-MRAS Based Sensorless MPPT Control for Dual Power Flow Wind Energy Conversion System  | Ying Zhu, Ming Cheng, Wang Qingsong  | PRESENTED |  | PAID     |
| 41 | 90  | Design of an Energy Storage Converter for Microgrid Applications   | Li Yuan Liu, Ming Chih Tsai, Chia Lun Hsu, Kuo Yuan Lo, Yung-Ruei Chang                          | PRESENTED |  | PAID     |
| 42 | 91  | Performance of a DC-Based Microgrid System in Okinawa  | Taichiro Sakagami, Yoshiyuki Asai, Annette Werth, Daisuke Kawamoto, Mario Tokoro, Hiroaki Kitano | PRESENTED |  | PAID     |
| 43 | 93  | Analysis of Fuel Supply in Zigzag-Type DMFC with Channels by Three-Dimensional Simulation  | Mio Iijima, Toshiaki Yachi   | PRESENTED |  | PAID     |
| 44 | 95  | Winding Reconstruction Based on Magnetic Flux Density in Air-Gap of IM   | Radoslav Cipin, Petr Prochazka, Ivo Pazdera  | PRESENTED |  | PAID     |
| 45 | 97  | Battery-Supercapacitor Hybrid Energy Storage System with Reduced Low Frequency Input Current Ripple                                    | Damith Wickramasighe Abeywardana, Branislav Hredzak, Vassilios Agelidis                          | PRESENTED |  | PAID     |
| 46 | 99  | Smart Net Metering Models for Smart Grid in India  | Jagruti Thakur, Basab Chakraborty  | PRESENTED |  | PAID     |
| 47 | 101 | Experimental Investigation of Two Modified Energy-Saving Constructions of Solar Greenhouses  | Vladimir Ermuratskii, Valentin Oleschuk, Frede Blaabjerg   | PRESENTED |  | PAID     |
| 48 | 102 | Analysis and Optimization on a Novel High-Temperature Thermoelectric Generator System  | Haoyu Xu, Xiaolong Gou, Shaowei Qing, Huifeng Ping   | PRESENTED |  | PAID     |
| 49 | 104 | Class-E <sup>2</sup> Inductive Power Transfer System with Pre- and Post-Regulators   | Tomoharu Nagashima, Xiuqin Wei, Hiroo Sekiya   | PRESENTED |  | PAID     |
| 50 | 105 | A DP Based Scheme for Real-Time Reconfiguration of Solar Cell Arrays Exposed to Dynamic Changing Inhomogeneous Illuminations           | Liping Shi, Robert Brehm   | PRESENTED |  | PAID     |
| 51 | 108 | The Proposed Design of Co-Combustion Stoker for Şırnak Agricultural Biomass Waste and Şırnak Asphaltite in 35MW Electricity Production | Yildirim Tosun   | PRESENTED |  | PAID     |

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|----|-----|--|---|-----------|--|------|
| 52 | 110 | Comparison of Different Carbon-Free Near Surface Heating and Cooling Sources Usability in Low Energy Network                             | Anne Mäkiranta, Birgitta Martinkauppi, Erkki Hiltunen, Mauri Lieskoski        | PRESENTED |  | PAID |
| 53 | 112 | A Switched Reluctance Motor Drive Using Photovoltaic Transistors: Principle, Prototype, Experimental and Numerical Results               | Loic Queval, Alain Coty, Lionel Vido, Raimund Gottkehaskamp, Bernard Multon   | PRESENTED |  | PAID |
| 54 | 113 | Green Energy from the Ocean  | Stefan Balluff, Jörg Bendfeld, Stefan Krauter                                 | PRESENTED |  | PAID |
| 55 | 114 | Short Term Wind And Energy Prediction for Offshore Wind Farms Using Neural Networks  | Stefan Balluff, Jörg Bendfeld, Stefan Krauter                                 | PRESENTED |  | PAID |
| 56 | 115 | Multi-Agent Based Power and Energy Management System for Hybrid Ships  | Daogui Tang, Xiping Yan, Yupeng Yuan, Kai Wang, Liqiang Qiu                   | PRESENTED |  | PAID |
| 57 | 119 | Study on Effect of Ship Low Frequency Vibration on the Output Characteristics of PV Cells under Different Solar Irradiation              | Yan Zhang, Yuwei Sun, Hu Luo, Yang Wang                                       | PRESENTED |  | PAID |
| 58 | 120 | Design, Implementation and Testing of Theft and Maintenance Monitoring of Batteries of Stand-Alone SPV Systems                           | Dakshayani Jangamshetti, Suresh Jangamshetti                                  | PRESENTED |  | PAID |
| 59 | 121 | Research on the Transient Characteristic of Photovoltaics-Ship Power System Based on PSCAD/EMTDC   | Yuwei Sun, Yuanchao Qiu, Chengqing Yuan, Xujing Tang, Yang Wang, Qizhen Jiang | PRESENTED |  | PAID |
| 60 | 122 | The I-V Characteristics of Solar Cell under the Marine Environment: Experimental Research  | Yuwei Sun, Xiping Yan, Chenqing Yuan, Hu Luo, Qizhen Jiang                    | PRESENTED |  | PAID |
| 61 | 124 | Optimal Placement and Sizing of Active In-Line Voltage Regulators in Flemish LV Distribution Grids                                       | Nikolaos Efkarpidis, Tom De Rybel, Johan Driesen                              | PRESENTED |  | PAID |
| 62 | 125 | A Constant-Current Constant-Voltage Charging Based Control and Design Approach for the Parallel Resonant Converter                       | Taha Gucin, Muhammet Biberoglu, Bekir Fincan                                  | PRESENTED |  | PAID |
| 63 | 127 | Experimental Noise and Vibration Analysis of Switched Reluctance Machines - Comparison of Soft and Hard Chopping in Transient Conditions | Yves Mollet, Mathieu Sarrazin, Herman Van Der Auweraer, Johan Gyselinck       | PRESENTED |  | PAID |
| 64 | 128 | Energy Storage Sizing by Stochastic Optimization for a Combined Wind-Wave-Diesel Supplied System   | Héctor Marañón Ledesma, Elisabetta Tedeschi                                   | PRESENTED |  | PAID |
| 65 | 129 | Effect of Damping Coefficient on Power Generated & Comfort Index in Energy Regenerative Damper for Automobile Suspension System          | Prashant Todmal, Stefano Melzi  | PRESENTED |  | PAID |
| 66 | 131 | Hybrid AC-DC Electrical Installations on Low- Voltage Level  | Abdulah Aksamovic   | PRESENTED |  | PAID |
| 67 | 132 | Research on Power Load Flow Calculation for Photovoltaic-Ship Power System Based on PSAT   | Chang Guo, Yuwei Sun, Chengqing Yuan, Xiping Yan, Yang Wang, Qizhen Jiang     | PRESENTED |  | PAID |
| 68 | 133 | Modelling and Experimentation of Grid-Forming Inverters for Standalone Hybrid Wind-Battery Systems                                       | Leong Kit Gan, Jonathan K.H. Shek, Markus Mueller                             | PRESENTED |  | PAID |

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| 69 | 134 | Thermodynamic Evaluation for a Small Scale Compressed Air Energy Storage System by Integrating Renewable Energy Sources                      | Alexandru Ciocan, Mohand Tazerout, Tudor Prisecaru, Jean-Felix Durastanti                    | PRESENTED |               | PAID     |
| 70 | 135 | Improved Integration of Medium Scale PV Plants on the Distribution Network   | Amro Tabari, Charlotte Higgins, Philip Bale  | PRESENTED |               | PAID     |
| 71 | 136 | Mathematical & CFD Analysis of Free Floating Heave-Only Body   | Ken O Connell, Andrew Cashman  | PRESENTED |               | PAID     |
| 72 | 138 | Verification of Consumer's Benefits for Different Area Ratio of PV Array and Solar Thermal Water Heater Considering Regional Characteristics | Yusuke Yoshida, Yuzuru Ueda  | PRESENTED |               | PAID     |
| 73 | 139 | Reactive-Power Balancing Scheme for Inverter-Based Distributed Generations with Different Line Impedances                                    | Hyun-Jun Kim, Byung-Moon Han, Han-ju Cha   | PRESENTED |               | PAID     |
| 74 | 140 | A New Approach of Improvement of a Dissipation Caused by Capacitance Between Primary and Secondary Windings of LLC Transformer               | Toshiyuki Watanabe, Tetsuya Oshikata, Kimihiro Nishijima, Fujio Kurokawa                     | PRESENTED |               | PAID     |
| 75 | 141 | Study on the Light Receiving Capacity of a Plant Shoot Light Receiving System with Simulated Trees   | Takuya Adachi, Shin'ya Obara, Osamu Kawae  | PRESENTED |               | PAID     |
| 76 | 142 | Planning of the Optimal Distribution of Renewable Energy in Hokkaido, Japan  | Yuta Utsugi, Shin'ya Obara, Okada Masaki, Yuji Ito   | PRESENTED |               | PAID     |
| 77 | 143 | Investigation of the Heat Cycle of a CO <sub>2</sub> Hydrate Using Plate Type Heat Exchangers  | Kyosuke Ishikawa, Shin'ya Obara, Masamitsu Takabatake, Ryo Kawai                             | PRESENTED |               | PAID     |
| 78 | 145 | Research on Reduction of Fuel Consumption in the Showa Base Microgrid by Using Distributed Diesel Generators                                 | Takuya Kanai, Shin'ya Obara, Kenji Ishizawa, Taiki Ouchi, Ryo Hamanaka                       | PRESENTED |               | PAID     |
| 79 | 146 | Contribution of a Hydrogen Storage-Transportation System to the Frequency Regulation of a Microgrid  | Jorge Morel, Shin'ya obara, Katsuaki Sato, Daisuke Mikawa, Hiroshi Watanabe, Tsunashi Tanaka | PRESENTED |               | PAID     |
| 80 | 147 | Six-Phase Vehicular Drive with Renewable DC Sources and Hybrid PWM Control of Four Inverters   | Valentin Oleschuk, Vladimir Ermuratskii, Frede Blaabjerg                                     | PRESENTED |               | PAID     |
| 81 | 149 | New Approaches in Street Lightings in Turkey   | Erdeniz Erol, Emrah Kalkan, Deren Atli   | PRESENTED |               | PAID     |
| 82 | 150 | A Novel Topology for Improved DC Bus Utilization in PMSG Based Wind Energy Generation System   | Ramachandra Sekhar Kondapalli, Rohan Barot, Prashant Patel, Vinoth Kumar N                   | PRESENTED |               | PAID     |
| 83 | 151 | Effects of Low and High-Frequency Current Ripple on Proton Exchange Membrane Fuel Cells: State-of-the-art and Remaining Challenges           | Damien Guilbert, Abdoul N'diaye, Arnaud Gaillard, Abdesslem Djerdir                          | PRESENTED |               | NOT PAID |
| 84 | 152 | Stator Current Signature Analysis in Permanent Magnet Synchronous Wind Generators Fault Diagnosis  | Luigi Pio Di Noia, Cosimo Pisani, Andre Del Pizzo  |           | NON-PRESENTED | PAID     |

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| 85  | 153 | The Compliant Integration of (Renewable) Power Sources in MV or LV Grids and the Impact on Grid Reliability                              | Florian Javernik, Elisabeth Hufnagl, Maria Aigner, Ernst Schmutzner                        | PRESENTED |               | PAID |
| 86  | 154 | Enhanced Carrier Extraction in Bandgap Engineered Quantum Dot Solar Cells  | Sohee Jeong, Won Seok Chang, Seung Jae Baik  |           | NON-PRESENTED | PAID |
| 87  | 156 | The Effect of Technological Innovations on the Cost of the Photovoltaic Electricity  | Girolamo Di Francia  | PRESENTED |               | PAID |
| 88  | 157 | An Analysis on Smart Grid Applications and Grid Integration of Renewable Energy Systems in Smart Cities                                  | Hulya Akinc, Tugrul Atasoy, Ozden Ercin  | PRESENTED |               | PAID |
| 89  | 158 | Simulation and Design of a Fast Charging Battery Station in a Parking Lot of an E-Carsharing System                                      | Konstantinos Genikomsakis, Ignacio Angulo Gutierrez, Dimitrios Thomas, Christos Ioakimidis | PRESENTED |               | PAID |
| 90  | 160 | Evaluation of Hydrogen Energy Production of Mining Waste Waters and Pools  | Oyku Bilgin  | PRESENTED |               | PAID |
| 91  | 162 | OLTC Selection and Switching Reduction in Multiple-Feeder LV Distribution Networks   | Louis Gevaert, Tine Vandoorn, Christof Deckmyn, Jan Van De Vyver, Lieven Vandevelde        | PRESENTED |               | PAID |
| 92  | 164 | Daily Global Solar Radiation Forecasting over a Desert Area Using NAR Neural Networks Comparison with Conventional Methods               | Kacem Gairaa, Abdallah Khellaf, Farouk Chellali, Youcef Messlem, Said Benkacali            | PRESENTED |               | PAID |
| 93  | 167 | Implementation of an E-Bike Sharing System: The Effect on Low Voltage Network Using PV and Smart Charging Stations                       | Dimitrios Thomas, Vasiliki Klonari, Francois Vallee, Christos Ioakimidis                   | PRESENTED |               | PAID |
| 94  | 168 | Amelioration of a Greenhouse through Energy Storage System Case Study: Ghardaïa Region (Algeria)   | Salah Bezari, Sidi Mohamed Elamine Bekkouche, Ahmed Benchatti, Hocine Benssaha             | PRESENTED |               | PAID |
| 95  | 170 | 5MW Power Generation Co-ORC with Agriculture and Forestry Biomass Waste Incineration in Stoker and Subsequent Solar Panel, (CSP) Station | Yildirim Tosun   | PRESENTED |               | PAID |
| 96  | 174 | State Estimation of Exhaust Valve Position by Kalman Filter in PEM Fuel Cell Systems   | Christian Hähnel, Vitali Aul, Martin Schultze, Joachim Horn                                | PRESENTED |               | PAID |
| 97  | 175 | An Ideal Generation System for Streamflow, Tidal and Ocean Currents -Installation of Biomimetic Sealing System-                          | Takuro Honda, Yoshitaka Nakanishi, Hidehiko Higaki   | PRESENTED |               | PAID |
| 98  | 179 | Thermal Performance of a Hybrid Photovoltaic-Thermal Collector with a Modified Absorber  | Sameer Simms, Jean-Francois Dorville   | PRESENTED |               | PAID |
| 99  | 180 | Implementation of an Agent Based Distributed FLISR Algorithm Using IEC 61850 in Active Distribution Grids                                | Pouya Jamborsalamati, Abhinav Sadu, Ferdinanda Ponci, Antonello Monti                      | PRESENTED |               | PAID |
| 100 | 181 | Voltage Based Droop Control in an Islanded Microgrid with Wind Turbines and Battery Storage  | Jan Van De Vyver, Thibaut Feremans, Tine Vandoorn, Jeroen De                               | PRESENTED |               | PAID |

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|     |     |  | Kooning, Lieven<br>Vandevelde  |           |               |      |                  |
| 101 | 182 | Estimation of Harvestable Energy from Vehicle Waste Heat   | G Reddy, Utsav Maniyar, Vivek Venkatesan   | PRESENTED |               | PAID |                  |
| 102 | 184 | Comparison of Thermal and Optical Performance of Linear Fresnel and Parabolic Trough Concentrator  | Fabio Montagnino, Mohamed Ahmed, Mohamed Rady, Amr Amin, Filippo Paredes             | PRESENTED |               | PAID |                  |
| 103 | 185 | A Day-a Head Real Net Transfer Capacity (NTC) Forecast Based on the Prediction of the Real Cooling Conditions for Interconnection Overhead Lines                     | Danka Todorović, Željko Đurišić, Jovana Tuševljak                                    | PRESENTED |               | PAID |                  |
| 104 | 187 | A Review and Comparison of Renewable Energy Strategies or Policies of Some Countries   | A. Ziya Aktas  | PRESENTED |               | PAID |                  |
| 105 | 188 | Sustainability of Decentralized Renewable Energy Systems in Sub-Saharan Africa   | Wesley Doorsamy, Willem Cronje   | PRESENTED |               | PAID |                  |
| 106 | 189 | Trading of Pumped Storage Hydropower Plants on Energy Only and Ancillary Services Markets  | Sebastian Braun, Michael Burkhardt   | PRESENTED |               | PAID |                  |
| 107 | 191 | Coordination of Over Current Relay for Sudden Rise of Input Energy in Renewable Power System   | Jaeho Choi, Yeonho Ok, Jaewon Kim  | PRESENTED |               | PAID |                  |
| 108 | 192 | Solar Irradiance Forecasting Using Sequential Monte Carlo Method and GOES Satellite Images   | Laurent Linguet, Jamal Atif  |           | NON-PRESENTED | PAID | NO PARTICIPATION |
| 109 | 195 | Centralized Controller Tuning for MIMO Process with Time Delay   | Thirunavukkarasu Indiran, Shanmugapriya Selvanathan, Vinayambika S Bhat, Majaaz Khan | PRESENTED |               | PAID |                  |
| 110 | 196 | Nonlinear Backstepping Control of a Double-Fed Induction Generator   | M'hamed Doumi, Abdel Ghani Aissaoui, Ahmed Tahour, Mohamed Abid                      | PRESENTED |               | PAID |                  |
| 111 | 198 | Maximum Power Point Tracking of PMSG Based Grid Connected WECS Using Quadrature Axis Current   | Damodharan P, Rajin Linus  | PRESENTED |               | PAID |                  |
| 112 | 200 | Control System of Voltage Source Converter to Interconnect Offshore AC Hub with Multiple Onshore Grids   | Muhammad Raza, Oriol Gomis-Bellmunt  | PRESENTED |               | PAID |                  |
| 113 | 202 | Eco-Communal Management, Transition Engagement, and Connectedness a Moderated Mediation Model for the Performance of Renewable Energy Projects in Emerging Economies | Yohannes Haile, Christopher Laszlo, Kathleen Buse, James Gaskin, Roger Saillant      | PRESENTED |               | PAID |                  |
| 114 | 203 | Fast and Cheap Stepper Motor Drive   | Mohamed Tarnini  | PRESENTED |               | PAID |                  |
| 115 | 204 | An Improved Dynamic Battery Model Suitable for Photovoltaic Applications   | Samir Moulahoum, Sid-Ali Blaifi, Nadir Kabache, Ilhami Colak                         | PRESENTED |               | PAID |                  |
| 116 | 209 | A Generalized and Flexible Control Scheme for Photovoltaic Grid-Tie Microinverters   | Serkan Ozturk, Isik Cadirci  | PRESENTED |               | PAID |                  |
| 117 | 210 | Data Mining Based Performance Analysis for Solar PV Power System Data – UCAS Case Study  | Mohamed Almadhoun  |           | NON-PRESENTED | PAID | NO PARTICIPATION |

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| 118 | 211 | H2020 STORM Project: Self-Organising Thermal Operational Resource Management                                     | Dirk Vanhoudt, Johan Desmedt, Bert Claessens, Christian Johansson  | PRESENTED |               | PAID |                  |
| 119 | 212 | High Power Density STATCOM with Extended Reactive Power Control Range  | Peng Li, Grain Adam, Derrick Holliday, Barry Williams  | PRESENTED |               | PAID |                  |
| 120 | 214 | Parallel-Input Series-Output Interleaved Flyback Based Solar PV Module Integrated Micro-Inverter                 | Nataraj Pragallapati, Tirthasarathi Lodh, Vivek Agarwal  | PRESENTED |               | PAID |                  |
| 121 | 215 | Stochastic Optimization of an Electric Vehicle Fleet Charging with Uncertain Photovoltaic Production             | Roman Le Goff Latimier, Bernard Multon, Hamid Ben Ahmed, Franck Baraer, Mickael Acquitter                                  | PRESENTED |               | PAID |                  |
| 122 | 217 | CFD Based Wind Assessment in West of Turkey  | Melike Ayaz, Ilhami Colak, Kurtulus Boran  | PRESENTED |               | PAID |                  |
| 123 | 218 | Compensator Design Considerations for the LED Driver Circuits with PWM Dimming Capability                        | Chen-Wei Yeh, Dan Chen, Sheng-Fu Hsiao, Frank Shih   | PRESENTED |               | PAID |                  |
| 124 | 219 | Disc-Type PM Machine for the Electromagnetic Conversion/Suspension of a Flywheel System                          | Andrea Tortella, Mauro Andriollo, Franco Bortot  | PRESENTED |               | PAID |                  |
| 125 | 220 | the Chances and Challenges for Renewable Energy in Libya   | Ashraf Khalil, Ali Asheibi   |           | NON-PRESENTED | PAID | NO PARTICIPATION |
| 126 | 223 | Novel Power Generation from Microalgae: Application of Different Gasification Technologies                       | Aziz Muhammad, Takuya Oda, Takao Kashiwagi   | PRESENTED |               | PAID |                  |
| 127 | 226 | Daily Cost Minimization for an Off-Grid Renewable Microhybrid System Installed to a Residential Home             | Nedim Tutkun, Ozay Can, Ender San  | PRESENTED |               | PAID |                  |
| 128 | 227 | Parameter Extraction from a Typical PV Module Using a Metaheuristic Technique                                    | Nedim Tutkun, Erdem Elibol, Melih Aktas  | PRESENTED |               | PAID |                  |
| 129 | 228 | Energy Performance of Concentrator and Flat Plate Photovoltaics in The Mediterranean Area                        | Alfonso Damiano, Carla Sanna, Malgorzata Gawronska   | PRESENTED |               | PAID |                  |
| 130 | 232 | Effect of Voltage Deviations on Power Distribution Losses in Presence of DG Technology                           | Jaser Sa'ed, Nasser Ismail, Salvatore Favuzza, Fabio Massaro, Mariano Ippolito   | PRESENTED |               | PAID |                  |
| 131 | 233 | Development of Simple Estimation Model for Aggregated Residential Load by Using Temperature Data in Multi-Region | Eiki Arai, Yuzuru Ueda   | PRESENTED |               | PAID |                  |
| 132 | 234 | A Fuzzy Tracking Control Design Strategy for Wind Energy Conversion System                                       | Djamel Ounnas, Messaoud Ramdani, Salah Chenikher, Tarek Bouktir  | PRESENTED |               | PAID |                  |
| 133 | 235 | Dual Input-Dual Output Single Inductor DC-DC Converter for Renewable Energy Applications                         | Zubair Rehman, Ibrahim Al Bahadly, Subhas Mukhopadhyay   | PRESENTED |               | PAID |                  |
| 134 | 239 | Improvement Of Solar Radiation Model Based On Physical Parametrization   | Yuji Mizuno, Yoshito Tanaka, Koji Kiyoyama, Tadahiro Kishikawa, Makoto Shimojima, Nobumasa Matsui, Haruo Hinata, Ken Oyama | PRESENTED |               | PAID |                  |



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| 135 | 241 | Assessment of the Effects of Medium Composition on Growth, Lipid Accumulation and Lipid Profile of Chlorella Vulgaris as a Biodiesel Feedstock | Ecem Kaplan, Ceren Gencoglu, Dogan Can Kirman, Orkun Pinar, Dilek Kazan, Ahmet Alp Sayar                              | PRESENTED |               | PAID |                  |
| 136 | 242 | Combination of Input/Output Control Using Matrix Converter for Islanded Operation for AC Generator   | Jun-Ichi Itoh, Takuya Kataoka, Hiroki Takahashi   | PRESENTED |               | PAID |                  |
| 137 | 243 | Experimental Validation of a Dynamic Energy Model of a Battery Electric Vehicle  | Alfonso Damiano, Claudia Musio, Ignazio Marongiu  | PRESENTED |               | PAID |                  |
| 138 | 247 | High Step-Up Interleaved Converter for Renewable Energy and Automotive Applications  | Wilmar Martinez, Jun Imaoka, Masayoshi Yamamoto, Kazuhiro Umetani   | PRESENTED |               | PAID |                  |
| 139 | 249 | Socioeconomic Return on Community Biogas Investment Tamano District, Thailand  | Apichart Kongpann   |           | NON-PRESENTED | PAID | NO PARTICIPATION |
| 140 | 250 | An Optimized Fuzzy Controller To Capture Optimal Power From Wind Turbine   | Hadjer Dari, Lamine Meheuaoui, Messaoud Ramdani   | PRESENTED |               | PAID |                  |
| 141 | 251 | Performance Enhancement of Vapor Compression Cycle Using Nano Materials  | Aly Soliman, Ali Abdel-Rahman, Sherif Taher, Shinichi Ookawara  | PRESENTED |               | PAID |                  |
| 142 | 252 | Voltage Control of Microgrid Systems Based on 3L-NPC Inverters with LCL-Filter in Islanding Operation  | Rosa Anna Mastromauro, Francesco Antonio Gervasio, Silvio Stasi, Emilio Bueno, Marco Liserre                          | PRESENTED |               | PAID |                  |
| 143 | 253 | Design, Optimization and Analysis of the Axial C-Core Switched Reluctance Generator for Wind Power Application                                 | Vanessa Teixeira, Adson Moreira, Tarcio Barros, Ernesto Ruppert Filho   | PRESENTED |               | PAID |                  |
| 144 | 256 | Model-Based Analysis of a High Temperature Proton Exchange Membrane Fuel Cell Micro-Cogeneration System  | Myalelo Nomnqa, Daniel Ikhu-Omoregbe, Ademola Rabiou  |           | NON-PRESENTED | PAID |                  |
| 145 | 257 | Design and Experimental Implementation of Single Phase Power Factor Correction Converter Based on Fuzzy Logic Controls Techniques              | Samir Moulahoum, Abderrahmen Benyamina, Ilhami Colak, Nadir Kabache, Hamza Houassine                                  | PRESENTED |               | PAID |                  |
| 146 | 258 | Technical and Economic Analysis of Energy Storage Systems Integration into the Distribution Network with Photovoltaic Generation               | Annelys Schetinger, Daniel Dias, Bruno Borba  | PRESENTED |               | PAID |                  |
| 147 | 259 | Behavior of a Photovoltaic Inverter Under Sudden Increase in Irradiance due to Reflection in Clouds  | Ruben Inzunza, Yoshihiro Tawada, Motoko Furukawa, Takeshi Sumiya, Tsuguhiro Tanaka, Masahiro Kinoshita, Naoya Shibata | PRESENTED |               | PAID |                  |
| 148 | 260 | Energy Management of Hybrid Microgrid with Hybrid Energy Storage System  | Srikanth Kotra, Mahesh Mishra   | PRESENTED |               | PAID |                  |
| 149 | 261 | Mixed-Integer Linear Program for an Optimal Hybrid Energy Network Topology   | Wiet Mazairac, Robbe Salenbien, Bauke De Vries  | PRESENTED |               | PAID |                  |

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|-----|-----|--|--|-----------|--|------|
| 150 | 264 | Design of the Solar Energy System in ITU Faculty of Electric and Electronics   | Aydin Isik, Sule Erden, Murat Imeryuz  | PRESENTED |  | PAID |
| 151 | 265 | A Non-Linear Dynamic Electrical Model of Sodium-Nickel Chloride Batteries  | Maura Musio, Alfonso Damiano   | PRESENTED |  | PAID |
| 152 | 266 | A Microgrid Energy Management System Supported by a Hysteresis Vehicle to Grid Controller  | Alfonso Damiano, Claudia Musio, Carla Sanna, Malgorzata Gawronska                    | PRESENTED |  | PAID |
| 153 | 269 | Electrostatic Synchronous Generator Model of an Inverter-Based Distributed Generators  | Hakam Shehadeh, Salvatore Favuzza, Eleonora Riva Sanseverino                         | PRESENTED |  | PAID |
| 154 | 270 | Design of Series Inductances for High-Power DC-DC Converters   | Nils Soltau, Zhan Shen, Rik De Doncker   | PRESENTED |  | PAID |
| 155 | 271 | Experts Agents in PEM Fuel Cell Control  | Wilton Edixon Agila Galvez, Ricardo Alfredo Cajo Diaz, Douglas Antonio Plaza Guingla | PRESENTED |  | PAID |
| 156 | 272 | Graphical Analysis Method to Identify Power -Balanced Grid Areas for Intended Islanding Operation                                  | Maik Plenz, Florian Grumm, Gesa Kaatz  | PRESENTED |  | PAID |
| 157 | 273 | Optimal Design of Cascaded Control Scheme for PV System Using BFO Algorithm  | Rahila Naseeha, Muyeen S.M., Hany Hasenien, Khaled Al Wahedi, Ahamed Al Durra        | PRESENTED |  | PAID |
| 158 | 274 | Predicting the Thermal Impact of Light Pipe on Air Temperature Using Ordinary Least Squared Regression                             | Dudley Williams, Jean-Francois Dorville  | PRESENTED |  | PAID |
| 159 | 276 | Parallelization of Medium Voltage Generator-Side Converters for Multi-MW Wind Turbines: Comparison of Two Topological Alternatives | Luca Costanzo, Ignacio Zubimendi, Abel Taffese, Elisabetta Tedeschi                  | PRESENTED |  | PAID |
| 160 | 278 | Combined Hydrogen Production and Power Generation from Microalgae  | Aziz Muhammad, Takuya Oda, Takashi Mitani, Atsuki Uetsuji, Takao Kashiwagi           | PRESENTED |  | PAID |
| 161 | 279 | A PV Panel Simulator Based on a Two Quadrant DC/DC Power Converter with a Sliding Mode Controller                                  | Armando Cordeiro, Daniel Foito, V. Fernao Pires                                      | PRESENTED |  | PAID |
| 162 | 280 | Fault Detection and Diagnosis in a PV Grid Connected T-Type Three Level Inverter   | V. Fernao Pires, Daniel Foito, Tito Amaral   | PRESENTED |  | PAID |
| 163 | 281 | Seamless Star-Delta Winding Changeover Circuit for AC Generators   | Jun-Ichi Itoh, Kazuma Tanimukai  | PRESENTED |  | PAID |
| 164 | 282 | Class-D Inverter with MOSFET Nonlinear Parasitic Capacitance   | Koyo Yonekura, Xiuqin Wei, Tomoharu Nagashima, Hiroo Sekiya, Tadashi Suetsugu        | PRESENTED |  | PAID |
| 165 | 283 | Low-Loss, High-Compression of Energy Profiles  | Anna Clements, Malcolm Mcculloch, Kenneth Nixon                                      | PRESENTED |  | PAID |
| 166 | 284 | A Case Study on the Investigation of Solar Regime in Van, Turkey   | Naci Genc, Mehmet Yesilbudak, Medine Colak   | PRESENTED |  | PAID |
| 167 | 286 | Wind Energy Conversion System Control Using Distinct Controllers for Different Operating Regions                                   | Carla Viveiros, Rui Melicio, Jose  | PRESENTED |  | PAID |

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|-----|-----|---|---|-----------|---------------|------|
|     |     |   | Igreja, Victor Mendes   |           |               |      |
| 168 | 287 | One Day Ahead Prediction of Wind Speed Class  | Silvia Nunnari, Luigi Fortuna, Giorgio Guariso                                      | PRESENTED |               | PAID |
| 169 | 288 | A New FPGA Based Green Controller Using FBD and HLS   | Kenichi Morimoto, Fujio Kurokawa  | PRESENTED |               | PAID |
| 170 | 289 | Dynamic Diagnostic and Reconfiguration for a New FPGA Based Green Controller  | Kenichi Morimoto, Fujio Kurokawa  | PRESENTED |               | PAID |
| 171 | 290 | Operation of Rural Distribution Grids with Intermittent Generation in Connected and Island Mode Using the Open Source EMS Solver SCIP     | Francesc Girbau-Llistuella, Andreas Sumper, Volker Buehner, Ramon Gallart-Fernandez | PRESENTED |               | PAID |
| 172 | 292 | Frequency-Dependent Modeling of Grounding System in EMTP for Lightning Transient Studies of Grid-Connected PV Systems                     | Adel Nasiri, Hesam Sadeghi  | PRESENTED |               | PAID |
| 173 | 293 | Development of a Real-Time Hardware-in-the-loop Platform for Complex Microgrids   | Adel Nasiri, Abedalsalam Bani-Ahmed   | PRESENTED |               | PAID |
| 174 | 295 | Design and Simulation of Solar and Wind Energy Conversion System in Isolated Mode of Operation  | Ciji Pearl Kurian, Lakshman Rao Paragond, B.K. Singh                                | PRESENTED |               | PAID |
| 175 | 296 | Experimental Performances of a DMPPT Multitopology Converter  | Giorgio Graditi, Giovanna Adinolfi, Antonio Del Giudice                             |           | NON-PRESENTED | PAID |
| 176 | 297 | An Advanced Measurement Equipment for the Tracing of Photovoltaic Panel I-V Curves  | Francesco Riganti Fulginei, Alessandro Salvini, Antonino Laudani, Stefano Gaiotto   | PRESENTED |               | PAID |
| 177 | 298 | Control of Generator- and Grid-Side Converter for the Interior Permanent Magnet Synchronous Generator                                     | Tin Bariša, Damir Sumina, Martina Kutija  | PRESENTED |               | PAID |
| 178 | 299 | Battery Energy Storage System with Isolated Single-Phase Matrix Converter Using Center-Tapped Transformer for Power Decoupling Capability | Nagisa Takaoka, Jun-Ichi Itoh   | PRESENTED |               | PAID |
| 179 | 300 | Input-Current-Harmonics Suppression of a Matrix Converter under High Load-Power-Factor  | Shinya Takida, Takaharu Takeshita   | PRESENTED |               | PAID |
| 180 | 301 | A Comprehensive Data Processing Approach to the Future Smart Grid   | Jiro Yamazaki, Daishi Yoshino, Hideyuki Fukuhara, Takafumi Hayashi                  | PRESENTED |               | PAID |
| 181 | 302 | Optimal Cost Analysis of Wind-Solar Hybrid System Powered AC and DC Irrigation Pumps Using HOMER  | Basanagouda Ronad, Suresh Jangamshetti  | PRESENTED |               | PAID |
| 182 | 303 | Digital Peak Current Mode DC-DC Converter with Overcurrent Limitation Function  | Kazuhiro Kajiwara, Tatsuya Ueki, Yuichiro Shibata, Fujio Kurokawa                   | PRESENTED |               | PAID |
| 183 | 304 | Integral Gain Switchover Digital Control Boost Converter to Improve Light Load Characteristics  | Kazuhiro Kajiwara, Hidenobu Tajima, Fujio Kurokawa                                  | PRESENTED |               | PAID |
| 184 | 305 | Power Curve Modelling of a Wind Turbine for Monitoring Its Behaviour  | Miguel Angel Sanz Bobi, Rodrigo Jose Andrade Vieira                                 | PRESENTED |               | PAID |
| 185 | 306 | Improvement of Current Balanced Parallel Soft-Start Operation for DC-DC Converters with Current Prediction                                | Hidenori Maruta, Tsutomu Sakai, Fujio Kurokawa                                      | PRESENTED |               | PAID |

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| 186 | 309 | Node Voltage Control and Line Loss Suppression Using Unified Power Flow Controller on Distribution System                            | Takuya Maekawa, Takaharu Takeshita, Yasuyuki Kunii   | PRESENTED |  | PAID |
| 187 | 310 | Performance Evaluation of MPPT Techniques for PV Array Incorporated into Electric Vehicle Roof                                       | Athanasios Sarigiannidis, Spyridon Stathis, Antonios Kladas                                | PRESENTED |  | PAID |
| 188 | 312 | Impact Of The Battery Depth Of Discharge On The Performance Of Photovoltaic Hydrogen Production Unit With Energy Management Strategy | Hammou Tebibel   | PRESENTED |  | PAID |
| 189 | 313 | A New Quick Response Digital Control DC-DC Converter with Dynamic Unstable Gain  | Yudai Furukawa, Takuya Shirakawa, Fujio Kurokawa, Haruhi Eto, Ilhami Colak                 | PRESENTED |  | PAID |
| 190 | 314 | Quantum Photovoltaic Effect: Two Photon Process in Solar Cell  | Dilan Alp  | PRESENTED |  | PAID |
| 191 | 315 | Green Data Centres Providing Ancillary Services to Power Grid  | Diego Arnone, Antonino Barberi, Diego La Cascia, Eleonora Riva Sanseverino, Gaetano Zizzo  | PRESENTED |  | PAID |
| 192 | 317 | Comparative Analysis of P&O, a Modified Hill-Climbing-FLC and Adaptive P&O-FLC Mppts for Microgrids Standalone PV System             | Rachid Boukenoui, Rafik Bradai, Adel Mellit, Malek Ghanes, Hacem Salhi                     | PRESENTED |  | PAID |
| 193 | 318 | Miniaturization of Buck-Boost DC-DC Converter with Fast P Control  | Yudai Furukawa, Ippei Sugimoto, Fujio Kurokawa, Haruhi Eto, Tsuyoshi Higuchi, Ilhami Colak | PRESENTED |  | PAID |
| 194 | 319 | Improvement in Transient Response of Fast P Control DC-DC Converter with Static Model  | Yudai Furukawa, Shingo Watanabe, Fujio Kurokawa, Haruhi Eto, Nobumasa Matsui, Ilhami Colak | PRESENTED |  | PAID |
| 195 | 320 | Development of an Economical Model for a Hybrid System of Grid, PV and Energy Storage Systems  | Adel Nasiri, Hamid Seifoddini, Mohammad Hassan Balalinarjes Nouri                          | PRESENTED |  | PAID |
| 196 | 321 | Suppression of the Switching Frequency Variation for Current Sensor-Less Hysteretic Current Mode Switching Supply                    | Kazuki Yoshimura, Fujio Kurokawa   | PRESENTED |  | PAID |
| 197 | 322 | System Specification for a DC Community Microgrid and Living Laboratory Embedded in an Urban Environment                             | Robert Cuzner, Karthik Palaniappan, John Shen  | PRESENTED |  | PAID |
| 198 | 323 | An Adaptive Repetitive Controller for Three-Phase PWM Regenerative Rectifiers  | Rabia Nazir, Alan Wood, Hamish Laird, Neville Watson                                       | PRESENTED |  | PAID |
| 199 | 326 | A Consideration of Signal Frequency Detector in Digital Peak Current Mode DC-DC Converter  | Yudai Furukawa, Shusuke Maeda, Shunsuke Tsuruoka, Fujio Kurokawa, Haruhi Eto, Ilhami Colak | PRESENTED |  | PAID |
| 200 | 327 | A Consideration of Loss Component in Model Control DC-DC Converter   | Yudai Furukawa, Shingo Watanabe, Nobumasa Matsui, Fujio Kurokawa, Ilhami Colak,            | PRESENTED |  | PAID |

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| 201 | 328 | Accurate Modelling of Hysteretic Systems for an Efficient Energetic Conversion  | Pietro Burrascano, Stafano Laureti, Marco Ricci, Luca Senni   | PRESENTED |  | PAID |
| 202 | 329 | Artificial Neural Network Modelling for Performance Prediction of Solar Energy System   | Wahiba Yaici, Evgueniy Entchev, Michela Longo, Morris Brenna, Federica Foiadelli                                    | PRESENTED |  | PAID |
| 203 | 330 | Performance Analysis and Simulation of Unbalanced Dc Sources Five Level Inverter Topology   | Concettina Buccella, Carlo Cecati, M. Gabriella Cimoroni  | PRESENTED |  | PAID |
| 204 | 331 | Electrotechnical Investigation of Zinc-Air Cells for Determination of Cell-Parameters for a Battery Management System                 | Erol Şanal, Philip Dost, Constantinos Sourkounis  | PRESENTED |  | PAID |
| 205 | 333 | Charging Behaviour of Users Utilising Battery Electric Vehicles and Extended Range Electric Vehicles within the Scope of a Field Test | Philip Dost, Philipp Spichartz, Constantinos Sourkounis   | PRESENTED |  | PAID |
| 206 | 334 | Utilisation of Battery Electric Vehicles and Extended Range Electric Vehicles in a Field Test   | Philipp Spichartz, Philip Dost, Constantinos Sourkounis   | PRESENTED |  | PAID |
| 207 | 335 | Development of a Testing Device for Electric Vehicles Chargers  | Abdoulkarim Bouabana, Constantinos Sourkounis   | PRESENTED |  | PAID |
| 208 | 336 | Reactive Current Control of a Multi-DC-Voltage Cascade STATCOM  | Yu Sugahara, Takaharu Takeshita   | PRESENTED |  | PAID |
| 209 | 338 | Design of Power Control Unit for Heat Recovery Device Used in Renewable Energy System   | Mehmet Akif Senol, Fulya Solak, Haluk Gozde, Cengiz Taplamacioglu   | PRESENTED |  | PAID |
| 210 | 339 | Hedging Strategies for Risk Reduction through Weather Derivatives in Renewable Energy Markets   | Saptarshi Bhattacharya, Aparna Gupta, Koushik Kar   | PRESENTED |  | PAID |
| 211 | 340 | Preliminary Study on a Fabric-Covered Wind Turbine Blade  | Jae-Sung Bae, Dong-Guk Choi, Soo-Yong Lee, Dae-Jin Kim, Cheol Yoo   | PRESENTED |  | PAID |
| 212 | 341 | Comparative Study of Two Control Methods for a Boost Converter with LC Input Filter: Indirect Sliding-Mode and Flatness Based Control | Matheepot Phattanasak, Roghayeh Gavagsaz-Ghoachani, Jean-Philippe Martin, Babak Nahid-Mobarakeh, Serge Pierfederici | PRESENTED |  | PAID |
| 213 | 343 | Shape Optimization of Cantilever Beam for Wind Energy Harvesting  | Giuseppe Acciani, Filomena Di Modugno, Giancarlo Gelao, Ernesto Mininno   | PRESENTED |  | PAID |
| 214 | 344 | Performance Comparison Between Scheduling Strategies for Pevs Charging in Smart Grids   | Giuseppe Graber, Giovanni Massa, Vincenzo Galdi, Vito Calderaro, Antonio Piccolo                                    | PRESENTED |  | PAID |
| 215 | 345 | FPGA Implementation of a Lead-Acid Battery for Photovoltaic Applications  | Nadir Kabache, Samir Moulahoum, Amine Laidi, Mohamed  | PRESENTED |  | PAID |

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|     |     |   | Bouaissa, Hamza<br>Houassine   |           |  |      |
| 216 | 346 | Energy Management of Auxiliary Battery Substation Supporting High-Speed Train on 3 Kv DC Systems                        | Vito Calderaro,<br>Vincenzo Galdi,<br>Giuseppe Graber,<br>Antonio Piccolo,<br>Regina Lamedica,<br>Alfonso Capasso,<br>Alessandro Ruvio | PRESENTED |  | PAID |
| 217 | 347 | A Day-Ahead Wind Speed Forecasting Using Data-Mining Model - A Feed-Forward Nn Algorithm                                | Antonella Rosalia Finamore, Vito Calderaro,<br>Vincenzo Galdi,<br>Antonio Piccolo,<br>Gaspere Conio,<br>Salvatore Grasso               | PRESENTED |  | PAID |
| 218 | 348 | Methodology for the Volume Minimization in Non-Isolated Sic Based PV Inverters  | Wei Fu, Qianqian Jiao, Rasoul Hosseini, Robert Cuzner, Andrew Lemmon   | PRESENTED |  | PAID |
| 219 | 350 | Load and Short-Circuit Analyses of the Electricity Transmission System for Industry Regions in Ankara                   | Ramazan Bayindir, Mehmet Yesilbudak, Umut Cetinkaya  | PRESENTED |  | PAID |
| 220 | 351 | Short-Circuit Fault Analysis on Microgrid   | Ramazan Bayindir, Erdal Irmak, Fatih Issi, Naki Guler  | PRESENTED |  | PAID |
| 221 | 355 | A Techno-Economical Analysis of Charge Management in Electrical Vehicles  | Luigi Schirone,<br>Michele Macellari   | PRESENTED |  | PAID |
| 222 | 357 | Comparison of Current Control Strategies Applied to a Boost-Rectifier Connected to a Direct Drive Wave Energy Converter | Hugo Mendonça,<br>Sergio Martinez,<br>Dionisio Ramirez   | PRESENTED |  | PAID |
| 223 | 359 | Peak and Energy Contributions of Distributed PV to PJM  | Philip Diefenderfer,<br>Edward Prescott,<br>Peter Mark Jansson   | PRESENTED |  | PAID |
| 224 | 362 | Robust UDE Controller for Energy Storage Application  | Ilan Aharon,<br>Doron Shmilovitz,<br>Alon Kuperman   | PRESENTED |  | PAID |
| 225 | 364 | Optimal Energy Management of Smart Grids with Plug-In Hybrid Electric Vehicles  | Rosario Miceli,<br>Valeria Boscaino,<br>Marco Caruso,<br>Maurizio Cellura,<br>Ciro Spataro   | PRESENTED |  | PAID |
| 226 | 365 | Grid Connected High Power Medium Voltage Wind Energy Conversion System with Reduced Line Harmonics                      | Mostafa Hamad,<br>Khaled Ahmed,<br>Ayman Abdel-Khalik  | PRESENTED |  | PAID |
| 227 | 366 | Improvement of Optimizing Operation Method for Energy Saving of Large Electric Machine in Combined Heat and Power Plant | Nobumasa Matsui  | PRESENTED |  | PAID |
| 228 | 367 | LCOE for Zero-Energy Greenhouse   | Silvano Vergura,<br>Giuliano Patrono,<br>Alessandro Massi Pavan  | PRESENTED |  | PAID |
| 229 | 368 | Switching Command Based on Lyapunov Function for a Boost Converter with an LC Input Filter in Dc Microgrid Application  | Matheepot Phattanasak,<br>Roghayeh Gavagsaz-Ghoachani,<br>Jean-Philippe Martin, Babak Nahid-Mobarakeh,<br>Serge                        | PRESENTED |  | PAID |

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|-----|-----|--|---|-----------|--|------|
|     |     |  | Pierfederici,<br>Pierre Riedinger   |           |  |      |
| 230 | 369 | A Study of Communication Protocols and Wireless Networking Systems for Lighting Control Application                                  | Susan Varghese,<br>George V. I., Ciji Pearl Kurian  | PRESENTED |  | PAID |
| 231 | 370 | A Study on Transient Response of Digital PID Control for DC-DC Converter with Weighted Predictions of Neural Network                 | Hidenori Maruta,<br>Hironobu Taniguchi, Fujio Kurokawa  | PRESENTED |  | PAID |
| 232 | 373 | Distribution Grid Analysis through PSAT Open Source Tools  | Antonino Barberi,<br>Luigi Francesco Solarino, Diego La Cascia,<br>Rosario Miceli,<br>Gaetano Zizzo | PRESENTED |  | PAID |
| 233 | 376 | Efficiency Improvement of Pumped Storage System for MW Scale Off-Grid PV Plants  | Andreea Busca-Forcus, Dezso Sera, Cristian Busca, Corneliu Marinescu,<br>Remus Teodorescu           | PRESENTED |  | PAID |
| 234 | 377 | Optimization Design of Novel Zero-Crossing Point Detection Method for Boundary Current Mode PFC Converter                            | Jizhe Wang,<br>Kazuki Yoshimura, Fujio Kurokawa   | PRESENTED |  | PAID |
| 235 | 378 | A Multifunctional Current Source Inverter Control for Wind Turbine Grid Interfacing  | Mostafa Hamad,<br>Khaled Ahmed  | PRESENTED |  | PAID |
| 236 | 381 | Grid Connected Solar Photovoltaic in Island States: Challenges, Opportunities & Waste Management                                     | Ngalula Mubenga   | PRESENTED |  | PAID |
| 237 | 384 | Processing Infrared Image of PV Modules for Defects Classification   | Silvano Vergura,<br>Francescomaria Marino, Mario Carpentieri  | PRESENTED |  | PAID |
| 238 | 385 | Assessment of the Technical and Economic Potential of Offshore Wind Energy via a GIS Application: A Case Study for the Sicily Region | Marco Beccali,<br>Jose Massimiliano Galletto,<br>Leonardo Noto,<br>Roberto Provenza                 | PRESENTED |  | PAID |
| 239 | 386 | The Energy System of Sicilian Region in Italy; 2014 Situation and Evolutionary Trends  | Edoardo Moreci,<br>Giuseppina Ciulla, Valerio Lo Brano  | PRESENTED |  | PAID |
| 240 | 388 | Physiological Compatibility of Wireless Chargers for Electric Bicycles   | Filippo Pellitteri,<br>Guido Ala,<br>Salvatore Ganci,<br>Rosario Miceli,<br>Massimo Caruso          | PRESENTED |  | PAID |
| 241 | 391 | Dynamic Stator-Flux-Oriented Induction Machine Control for Electric Vehicle Application  | Volker Staudt,<br>Axel Rothstein,<br>Daniel Meyer,<br>Carsten Heising                               | PRESENTED |  | PAID |
| 242 | 392 | Dynamic Four-Quadrant Converter Control for Grid Connection of Renewable Energy Sources  | Volker Staudt,<br>Axel Rothstein,<br>Daniel Meyer,<br>Carsten Heising                               | PRESENTED |  | PAID |
| 243 | 393 | Simplified Feedback Linearization Control of a Single-Phase Photovoltaic NPC Converter in Direct-Quadrature Rotating Reference Frame | Sante Pugliese,<br>Rosa Anna Mastromauro,<br>Silvio Stasi   | PRESENTED |  | PAID |

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|-----|-----|--|---|-----------|---------------|----------|
| 244 | 394 | A Review of Multiple Faults Diagnosis Methods in Voltage Source Inverters  | Fabio Genduso, Antonino Oscar Di Tommaso, Rosario Miceli, Giuseppe Ricco Galluzzo     | PRESENTED |               | PAID     |
| 245 | 396 | Control of a Grid Connected Photovoltaic System  | Djamila Rekioua, Toufik Rekioua, Youcef Soufi   | PRESENTED |               | PAID     |
| 246 | 397 | A Laboratory Setup for the Evaluation of the Effects of BACS and TBM Systems on Lighting                                   | Gaetano Zizzo, Mariano Ippolito, Marco Beccali, Marina Bonomolo, Alessandra Galatioto | PRESENTED |               | PAID     |
| 247 | 398 | Assessment of Potential Energy Produccible from Agricultural Biomass in the Municipalities of the Novara Plain             | Mariapia Martino, Guglielmina Mutani, Ilaria Carlucci                                 | PRESENTED |               | PAID     |
| 248 | 399 | A Model for the Evaluation of Thermal and Electric Energy Consumptions in Residential Buildings                            | Michele Pastorelli, Guglielmina Mutani, Federico De Bosio                             | PRESENTED |               | PAID     |
| 249 | 400 | Transient Behaviour and Active Damping of Vibrations in DFIG-Based Wind Turbines During Grid Disturbances                  | Alexander Broy, Pavlos Tourou, Constantinos Sourkounis                                | PRESENTED |               | PAID     |
| 250 | 401 | Ring DC Node Configurations for Enhanced DC Fault Protection in Multiterminal HVDC Networks                                | Azmy Gowaid, Grain Adam, Barry Williams, John Fletcher                                | PRESENTED |               | PAID     |
| 251 | 402 | Impact of PSS and STATCOM on Transient Stability of Multi-Machine Power System Connected to PV Generation                  | Selwa Fetissi, Djamel Labeled, Imen Labeled, Hassiba Serghine                         | PRESENTED |               | PAID     |
| 252 | 403 | Optimal Power Flow Study Using Conventional and Neural Networks Methods  | Labeled Imen, Djamel Labeled, Hassiba Serghine, Selwa Fetissi                         | PRESENTED |               | PAID     |
| 253 | 405 | Automatic Solar Photovoltaic Panel Detection in Satellite Imagery  | Jordan Malof, Rui Hou, Kyle Bradbury, Richard Newell, Leslie Collins                  | PRESENTED |               | PAID     |
| 254 | 406 | Improved Control Strategy of Full-Bridge Modular Multilevel Converter  | Grain Adam  | PRESENTED |               | PAID     |
| 255 | 414 | Power Management Based on the Operating Conditions of Grid, Mircogrid and Hybrid Storage                                   | Nikhil Korada, Mahesh Mishra, Srikanth Kotra  | PRESENTED |               | PAID     |
| 256 | 415 | Design of Sensors for a Smart Power Substation   | L.P. Di Noia, R. Rizzo, M. Vilaragut Llanes   |           | NON-PRESENTED | PAID     |
| 257 | 416 | An Advanced System for Power Supply and Power Quality Improvement of Isolated AC Passive Networks                          | Luigi Pio Di Noia, R. Rizzo   |           | NON-PRESENTED | NOT PAID |
| 258 | 419 | A Comprehensive Model for the Optimal Design and Management of Distributed Generation Systems                              | Michele Anatone, Valentina Panone   | PRESENTED |               | PAID     |
| 259 | 420 | Smart Urban Electric Transport System: An Innovative Real Model  | Luigi Mingrone, Gianbattista Pignataro, Mariacristina Roscia                          | PRESENTED |               | PAID     |
| 260 | 422 | Solar Energy Potential of Konya and Architectural Design Criterias for Solar Energy Efficiency                             | Bilgehan Yilmaz Cakmak  | PRESENTED |               | PAID     |
| 261 | 423 | Multi-Criterion Design and 2D Cosimulation Model of 4 Kw PM Synchronous Generator for Standalone Run-of-the-river Stations | Yucel Cetinceviz, Durmus Uygun, Huseyin Demirel                                       | PRESENTED |               | PAID     |



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| 262 | 425 | Grid Parity in the Italian Domestic PV Market: A Sensitivity Analysis   | Francesco Pauli, Vanni Lughì, Giorgio Sulligoi, Alessandro Massi Pavan                             | PRESENTED |               | PAID     |
| 263 | 426 | Overview of Small Scale Electric Energy Storage Systems Suitable for Dedicated Coupling with Renewable Micro Sources            | Alessandro Fraleoni Morgera, Vanni Lughì   | PRESENTED |               | PAID     |
| 264 | 430 | Sizing and Simulation of an Inverter-Fed Permanent-Magnet Linear Synchronous Drive for Servo-Assistance of a Ship Steering Gear | Claudio Bruzzese, Damiano Zito, Andrea Raimo, Ezio Santini, Alberto Tessarolo                      | PRESENTED |               | PAID     |
| 265 | 431 | Mobility Scenarios in the Valley of the Temples   | Maurizio Cellura, Francesco Guarino, Sonia Longo, Rosario Miceli, Marina Mistretta                 | PRESENTED |               | PAID     |
| 266 | 432 | Smart Campus-An Energy Integrated Approach  | George Cristian Lazaroiu, Virgil Dumbrava, Mihnea Costoiu, Mihaela Teliceanu, Mariacristina Roscia | PRESENTED |               | NOT PAID |
| 267 | 433 | SCUOLA PROJECT: The "Hub of Smart Services" for Cities and Communities  | Dario Zaninelli, Maurizio Delfanti, Valeria Olivieri, Giuseppe Esposito                            | PRESENTED |               | PAID     |
| 268 | 434 | Building DC Microgrids - Planning of an Experimental Platform with Power Hardware in the Loop Features                          | Mario Pagano, Andrea Scalfati, Maurizio Fantauzzi, Diego Iannuzzi, Mariacristina Roscia            | PRESENTED |               | PAID     |
| 269 | 437 | A Semi-Analytical Model for the Analysis of a Permanent Magnet Tubular Linear Generator   | R. Rizzo, Antonino Musolino, Marco Raugi   | PRESENTED |               | PAID     |
| 270 | 438 | Technical and Economical Comparison between Ndfeb and Hard Ferrites Linear Electrical Generators from Sea Waves                 | Marco Trapanese, G. Cipriani, M. Corpora, Vincenzo Di Dio, Rosario Miceli, Ciro Spataro            | PRESENTED |               | PAID     |
| 271 | 439 | An Electromagnetic Generator for MAGLEV Transportation Systems  | G. Cipriani, M. Corpora, D. Curto, V. Di Dio, V. Franzitta, Marco Trapanese                        | PRESENTED |               | PAID     |
| 272 | 441 | Comparison Four Topologies for Three-Phase Dynamic Voltage Restorer   | Ebrahim Babaei, Mohammad Kangarlu  | PRESENTED |               | PAID     |
| 273 | 444 | Low Inductive Test Bench for Resonant Converters  | Unnikrishnan Raveendran Nair, Pramod Kumar Prasobhu, Stig Munk-Nielsen, Ramkrishan Maheshwari      |           | NON-PRESENTED | NOT PAID |
| 274 | 446 | Performance and Efficiency Improvements of a Hydraulic Ship Steering Gear by a Permanent Magnet Linear Synchronous Servo Motor  | Claudio Bruzzese, Damiano Zito, Andrea Raimo, Ezio Santini, Alberto Tessarolo                      | PRESENTED |               | PAID     |
| 275 | 447 | Reliability Assessment of Grid Connected Photovoltaic Generation Systems  | Ahmed Mustafa  | PRESENTED |               | PAID     |

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| 276 | 448 | Combination of Optimal DC Power Flow and Generalized Voltage Droop Control for Automation of Multi-Terminal DC Grids     | Kumars Rouzbehi, Elyas Rakhshani, Alvaro Luna, Pedro Rodriguez  | <b>WITHDRAWN</b> |                      | PAID |
| 277 | 449 | Sensorless Load Monitoring and Management in Electric Power Grid through Energy Harvesting                               | Kaloyan Mihaylov, Stanimir Valtchev, Rumen Arnaudov   | PRESENTED        |                      | PAID |
| 278 | 450 | Generalized Voltage Droop Control with Inertia Mimicry Capability – Step Towards Automation of Multi-Terminal HVDC Grid  | Kumars Rouzbehi, Weiyi Zhang, G.B. Gharehpetian, Alvaro Luna, Pedro Rodriguez   | PRESENTED        |                      | PAID |
| 279 | 451 | Study on the Hybrid GCHP System with a Desuperheater   | Ping Cui  | PRESENTED        |                      | PAID |
| 280 | 455 | Generalized Voltage Droop Strategy for Power Synchronization Control in Multi-Terminal DC Grids - An Analytical Approach | Kumars Rouzbehi, Weiyi Zhang, Jose Ignacio Candela, Alvaro Luna, Pedro Rodriguez  | PRESENTED        |                      | PAID |
| 281 | 456 | Measurements and Verification of Ground-Based Lidar in Complex Terrain   | Kyunghnam Ko, Dae Young Kim   | PRESENTED        |                      | PAID |
| 282 | 457 | Dual DC-DC Converter and Monitoring Interface for Asymmetrical String Inverters  | Ersan Kabalci, Ramazan Bayindir, Goksel Gokkus, Yasin Kabalci   | PRESENTED        |                      | PAID |
| 283 | 460 | Advanced Forecasting Method to the Optimal Management of a DC Microgrid in Presence of Uncertain Generation              | Giorgio Graditi, Roberto Ciavarella, Maria Valenti, Antonio Bracale, Pierluigi Caramia  |                  | <b>NON-PRESENTED</b> | PAID |
| 284 | 461 | Joint Probability Distributions for Wind Speed and Direction: A Case Study in Sicily                                     | Salvatore Basile, Riccardo Burlon, Francesca Morales  | PRESENTED        |                      | PAID |
| 285 | 462 | Electrical Characterization of Low Power Cigsse Photovoltaic Modules   | Alessandro Busacca, Fabio Cardona, Massimo Caruso, Maurizio Cellura, Alfonso Cino, Rosario Miceli, Antonino Parisi, Riccardo Pernice, Fabio Ricco Galluzzo, Fabio Viola | PRESENTED        |                      | PAID |
| 286 | 463 | Urban Morphology and Energy Consumption in Italian Residential Buildings   | C. Delmastro, G. Mutani, M. Pastorelli, G. Vicentini  | PRESENTED        |                      | PAID |
| 287 | 464 | On the Design of Observers Robust to Load Variations for Synchronous Converters  | Rosario Miceli, Lucio Ciabattani, Gionata Cimini, Francesco Ferracuti, Gianluca Ippoliti, Sauro Longhi, Giuseppe Orlando  | PRESENTED        |                      | PAID |
| 288 | 465 | Energy Transport Modeling of PV/T Collectors   | Istvan Ervin Haber  | PRESENTED        |                      | PAID |
| 289 | 466 | Power Electronics – The Key Technology for Renewable Energy System Integration   | Frede Blaabjerg, Yongheng Yang, Ke Ma, Xiongfei Wang  | PRESENTED        |                      | PAID |
| 290 | 467 | ABB Smart Lab: Simulating Future Applications with Present Equipment   | Diego Pagnoncelli, Paolo Perani, Enrico Ragaini   | PRESENTED        |                      | PAID |

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| 291 | 468 | Choice of the Most Suitable Wind Turbine in the Installation Site: A Case Study  | Filippo Spertino, Valeria Cocina, Paolo Di Leo, Michele Pastorelli  | PRESENTED |  | PAID |
| 292 | 469 | A Back to Back Method for the Temperature Rise Test of Prefabricated Substations: A Case Study                             | Giovanni Cangemi, Giovanni Cipriani, Vincenzo Di Dio, Rosario Miceli, Salvatore Nuccio, Dario Di Cara, Giovanni Tinè, Mario Melodia             | PRESENTED |  | PAID |
| 293 | 470 | Identification of the Parameters of the Equivalent Electric Circuit of Electromagnetic Harvesters                          | Marco Balato, Luigi Costanzo, Massimo Vitelli   | PRESENTED |  | PAID |
| 294 | 471 | Multi-Objective Optimization of PV Arrays Performances by Means of the Dynamical Reconfiguration of PV Modules Connections | Marco Balato, Luigi Costanzo, Massimo Vitelli   | PRESENTED |  | PAID |
| 295 | 472 | Comparison on the Use of PV Systems in the Vertical Walls  | Rosario Miceli, Pietro Romano, Fabio Viola, Ciro Spataro, Giuseppe Schettino, Massimo Caruso, Alessandro Busacca, Antonino Parisi, Alfonso Cino | PRESENTED |  | PAID |
| 296 | 473 | Economic Benefits of the Use of a PV Plants Reconfiguration Systems  | Fabio Viola, Pietro Romano, Rosario Miceli, Ciro Spataro, Giuseppe Schettino, Federico Fantò  | PRESENTED |  | PAID |
| 297 | 474 | Experimentation of Sustainable Energy Microsystems: The DE.DU.ENER.T. Research Project                                     | S. Ben Mabrouk, A. Ben Mabrouk, K. Harzli, D. La Cascia, H. Oueslati, G. Zizzo, L. Dusonchet, S. Favuzza, M.G. Ippolito, F. Massaro             | PRESENTED |  | PAID |
| 298 | 475 | Survey on Power Increase of Power by Employment of PV Reconfigurator   | Fabio Viola, Pietro Romano, Rosario Miceli, Ciro Spataro, Giuseppe Schettino  | PRESENTED |  | PAID |
| 299 | 476 | Novel Energy Modelling and Forecasting Tools for Smart Energy Networks   | Ganesh Sauba, Jos Van der Burgt, Anthony Schoofs, Ciro Spataro, Massimo Caruso, Fabio Viola, Rosario Miceli                                     | PRESENTED |  | PAID |