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| 388 | Analyzing the Role of Microgrids to Mitigate the Effects of Forecasting Error of Renewable Distributed Generators | J.M. Lujano-Rojas; José A. Domínguez-Navarro; Jose Maria Yusta Loyo; Gerardo J. Osório; Sérgio F Santos; Mohamed Lotfi; João P Catalão* | 1662 |
| 389 | Optimal Spinning Reserve Allocation in Presence of Electrical Storage and Renewable Energy Sources | Mohammad Sadegh Javadi Estahbanati*; Mohamed Lotfi; Matthew Gough; Ali Esmaeel Nezhad; Sérgio F Santos; Joao Catalao | 1668 |
| 392 | Multiobjective Congestion Management and Transmission Switching Ensuring System Reliability | Morteza Sheikh; Jamshid Aghaei; Mohammad Rajabdorri ; Miadreza Shafie-Khah; Mohamed Lotfi; Mohammad Sadegh Javadi Estahbanati; Joao Catalao* | 1674 |
| 393 | Distribution System Reliability Evaluation in Presence of DG | Amged Halim*; Samah Elsafty; Ahmed Helal | 1679 |
| 396 | Planning of Smart Microgrids with High Renewable Penetration Considering Electricity Market Conditions | Seyed Mehdi Hakimi; Hamed Bagheri Tabar; Arezoo Hasankhani; Miadreza Shafie-Khah; Mohamed Lotfi; João P Catalão* | 1685 |
| 399 | Stochastic Security Constrained Unit Commitment with High Penetration of Wind Farms | Mohsen Kia; Seyed Hamid Hosseini; Alireza Heidari; Mohamed Lotfi; João P Catalão*; Miadreza Shafie-Khah; Gerardo J. Osório; Sérgio F Santos | 1690 |
| 401 | Residential Load Forecasting for Flexibility Prediction Using Machine Learning-Based Regression | Roya Ahmadi* | 1695 |
| 402 | A Bi-Level Optimization Modeling Framework for Investigating the Role of Flexible Demand in Deregulated Electricity Systems | Dimitrios Papadaskalopoulos*; Yujian Ye; Temitayo Oderinwale; Dawei Qiu | 1699 |
| 403 | Reliability Improvement and Energy Saving At Internet Data Center Microgrids | Ilhan Keskin*; Gurkan Soykan | 1705 |
| 404 | Understanding Causes of Low Voltage (LV) Faults in Electricity Distribution Network Using Association Rule Mining and Text Clustering | Charith Silva*; Mohamad (Mo) Saraee | 1710 |
| 405 | Vegetation Recognition Based on UAV Image Color Index | Fatima Zahra Bassine*; Ahmed Errami; Mohammed Khaldoun | 1716 |
| 406 | Modeling, simulation and optimization of people traffic in elevators | Clebes A Silva*; Danilo Silva; Luiza Vitor; Daywes Neto; Leandro K Tsuruda; Wesley Pacheco Calixto | 1720 |
| 407 | AI-based Power Control of an All-Electric Aircraft | Brook Abegaz* | 1726 |
| 408 | An Event Driven Approach for the Power Systems Energy Storage Monitoring | Saeed Mian Qaisar*; Amani Alshaiban | 1732 |
| 409 | New Brushless and Dynamic de-excitation Structure for Brushless Synchronous Generators | Seif Eddine Chouaba* | N/A |

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| 410 | Co-Simulation of Improved AIMD Algorithm for Decentralized Charging of Electric Vehicles | Samy G. Faddel; Osama Mohammed* | 1742 |
| 411 | Online Fault Location in Monopolar LCC-HVDC links With Metallic Return Using Modal Transient Data | Mani Ashouri*; Filipe Faria Da Silva; Claus Leth Bak | 1748 |
| 413 | Non-parametric Regression Model for Continuous-time Day Ahead Load Forecasting with Bernstein Polynomial | Roya Nikjoo; Abouzar Estebsari*; Mohammad Nazari | 1754 |
| 414 | ZVS Operation Range Analysis and Deadband Conditions of A dual H-bridge Bidirectional DC-DC Converter with Phase Shift Control | Ahmed Hamed Ahmed Adam*; Shuaicheng Hou; Jiawei Chen | 1759 |
| 415 | Analysis, Design, and Performance of Isolated Three-Port UPS Converter for High-Power Applications | Ahmed Hamed Ahmed Adam*; Shuaicheng Hou; Jiawei Chen | 1765 |
| 416 | Optimal Thermal Energy Storage Configuration Model for CSP Units | Chenjia Feng*; Chengcheng Shao; Shen Zhang | 1772 |
| 420 | Design of $\Delta\Sigma$ Based PID Controller for Wind Energy Systems | Chathura~ Wanigasekara; Dhafar Almakhles; Lv Zhou; Akshya Swain; Umashankar Subramaniyan; Sanjeevikumar Padmanaban* | 1777 |
| 421 | Performance of Neural Network Based Controllers and $\Delta\Sigma$ -Based PID Controllers for Networked Control Systems: A Comparative Investigation | Chathura~ Wanigasekara; Dhafar Almakhles; Sing Kiong Nguang; Akshya Swain; Umashankar Subramaniyan; Sanjeevikumar Padmanaban* | 1783 |
| 422 | A Hybrid Particle Swarm Optimization-Fuzzy Logic Controlled Photovoltaic Approach | Neeraj Priyadarshi; Sanjeevikumar Padmanaban; Sagar Bhaskar Mahajan*; Umashankar Subramaniam; Dhafar Almakhles | 1789 |
| 423 | Sliding Mode Control of Grid-connected Inverters Using Inverter Output Current | Zakaria Afshar*; Mahmoud Molla Yousefi Zadeh; Seyed Mohammad Taghi Bathaee | 1794 |
| 425 | Hybrid Sensing of Partial Discharge Faults in Air Insulated Switchgear | Ghulam Amjad Hussain*; Detlef Hummes; Ashraf Zaher; Madia Safdar; Matti Lehtonen | 1799 |
| 427 | An Adaptive Protection Scheme for AC Microgrids Using micro PMU Based Topology Processor | Mahamad Nabab Alam*; Prof. Saikat Chakrabarti; Prof. Ankush Sharma; S.C. Srivastava | 1805 |
| 428 | Economic Load Dispatch Using an Improved Particle Swarm Optimization based on functional constriction factor and functional inertia weight | Tankut Yalcinoz* | 1811 |
| 429 | Coordinated Frequency Control of Flywheel Energy Storage and Diesel Generator in Amirkabir University of Technology (AUT) Microgrid | Saeed Mahdavi; Mehdi Bagheri*; Gevork B. Gharehpetian | 1816 |
| 430 | Designing of static VAR compensators with voltage regulators | Ivan I Zhuravlev* | 1822 |
| 431 | Agile Development Process and User-centric Data Driven Design for an Integrated Energy System | Muhammad Babar; Martijn Roos*; P.H. Nguyen | 1827 |
| 432 | Cogent Assessment of Safety Parameters in Design of Microgrid Grounding System | Krishnav Bhatia*; Pranav Darji; H. R. Jariwala | 1833 |

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| 433 | Evaluation of different grounding grid designs for Microgrid | Gauri S. Bendale*; Krishnav Bhatia | 1839 |
| 434 | Decentralized measurement of multi-phase fluid into gas refinery by soft sensor using differential mean value theorem | Abolfazl Varvani Farahani* | N/A |
| 435 | Medium and Long-term Power System Development Planning Considering Carbon Dioxide Mitigation | Jiajie Fan*; Xiuli Wang; Qihang Huang; Zhidong Wang; Chengzhi Zhu | 1851 |
| 436 | Performance Evaluation of Some Industrial Loss of Field Protection Schemes Using a Realistic Model in The RTDS | Abbas Hasani*; Farhad Haghjoo; Claus Leth Bak; Filipe Faria Da Silva | 1857 |
| 437 | A DC Power-Based Scheme to Detect Loss of Field in Synchronous Generators | Abbas Hasani*; Farhad Haghjoo; Claus Leth Bak; Filipe Faria Da Silva | 1862 |
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| 440 | Multi-functional Smart Electricity Metering System | Assilkhan Amankhan*; Mehdi Bagheri; Askat Zh Kural; Islambek Temirbek; Darkhan A Mukashov; Kuanysh Kudaibergenov; Azat Azamat; Aishabibi Abukhan | 1872 |
| 441 | Optical properties of GaAs thin film with embedded plasmonic nanoparticles: A novel analytical modeling | Zahra Arefinia; Mohammad Fazel Vafadar* | 1878 |
| 442 | A hybrid traffic control framework for urban network management | Stefano De Luca; Roberta Di Pace*; Silvio Memoli; Facundo Storani | 1883 |
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| 449 | A New Charging Strategy for PHEVs Based on Maximum Employment of Renewable Energy Resources in Microgrid | Ehsan Fouladi; Hamid Reza Bagahee; Mehdi Bagheri*; Gevork B. Gharehpetian | 1923 |
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| 455 | ROGI with FsLMS Based Control Technique for Solar PV System under Weak Grid | Abhishek Kumar; Seema Kewat*; Bhim Singh; Rashmi Jain | 1941 |
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| 466 | Failure prediction of PV inverters under operational stresses | Mohamed Khalil* | 1974 |
| 469 | Design Novel Fuzzy Logic Controller of Photovoltaic Conversion Cascade Based Five Levels Inverter for Stand-Alone Applications | Thameur Abdelkrim*; Nouredine Bouarroudj ; Abdelkader Lakhdari ; BOUALAM Benlahbib; Abdelhalim Borni; Karima Benamrane | 1979 |
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| 472 | Energy Storage Emulation in Islanded Low Voltage Grid | Nora Sagatun*; Santiago Sanchez; Elisabetta Tedeschi | 1990 |
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| 483 | 2L-2L Converter: Switched Inductor Based High Voltage Step-up Converter for Fuel Cell Vehicular Applications | Sagar Bhaskar Mahajan*; Sanjeevikumar Padmanaban; Jens Bo Holm-Nielsen; John K. Pedersen; Zbigniew M Leonowicz | 2051 |
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